



Friday, February 19, 2010

REQUEST NUMBER: 10-1950

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8260B		1	RE15-10-8315	R	2/15/2010	
		1	RE15-10-8334	S	2/15/2010	
		1	RE15-10-8302	R	2/15/2010	
SW-846:8270C		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	
		1	RE15-10-8315	R	2/15/2010	
		1	RE15-10-8302	R	2/15/2010	
SW-846:8321A_MOD		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	
		1	RE15-10-8315	R	2/15/2010	

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Friday, February 19, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1950

**LOS ALAMOS**

REQUEST NUMBER: 10-1950

**NATIONAL LABORATORY**

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/21/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

**LAB REQUEST COMMENTS:**

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8334	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8314	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8314	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8313	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8313	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8312	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8312	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8315	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8315	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8311	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8311	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8310	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8310	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8303	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8303	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8302	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8302	1	SEPTUM AMBER GLASS	8260B	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: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8302

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA:	QBT3	32/2/15/10	
TIME COLLECTED (HH:MM)		0845		SUB-MEDIA:	TUFF 1	Att Fill	
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:	HA	NA	
LOCATION ID:	15-610830	↓		FIELD QC TYPE:	NA	DC	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA	OK	
TOP DEPTH:	0	7.0		SAMPLE USAGE:	INV	↓	
BOTTOM DEPTH:	0	8.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED:	YES/NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NA			WATER FLOWING: 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	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:

Pinkish brown weathered Tuff and silty sand

FTB: RE 15-10-8334

SAMPLE COMMENTS:

NA

LOCATION DESC:

73m 2/15/10  
Below R45 Tank inlet, 9b-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  5 dpm  
Beta/Gamma  $\leq$  1983 dpmPID  $\frac{\text{Ambient Reading}}{0.0} = 0.0$  ppm

COLLECTED BY (PRINT)

TLMcfarland

REVIEWED BY (PRINT)

JonRobertson

RELINQUISHED BY (Printed Name) Estevan Lucian (Signature) <i>E. Lucian</i>	Date/Time 2/16/10 08:22 AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) <i>Sheri Sherwood</i>	Date/Time 2/16/10 0822
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time



# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8303

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/15/2010	MEDIA:	OBT3	JR2/15/10 Attn: Fill
TIME COLLECTED (HH:MM)		0900	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-009(b)	OK	SAMPLE TECH CODE:	HA	DC
LOCATION ID:	15-610830	↓	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	12.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	13.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	S	EXCAVATED:	YES/NO/NA	
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION: NA

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

SAMPLE DESC:

Pinkish brown weathered tuff and sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

5 ft below R45 tank inlet, 9b-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 11 dpm  
Beta/Gamma = 1879 dpm

PID  $\frac{\text{Ambient Reading}}{2.2} = 0.0$  ppm

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

Jim Robertson

RELINQUISHED BY (Printed Name) Estevan Lujan (Signature)	Date/Time 2/16/10 08:22 AM	RECEIVED BY (Printed Name) Sherin Sherwood (Signature)	Date/Time 2/16/10 0822
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8310

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA: OBT3		FILL	
TIME COLLECTED (HH:MM)		0935		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE: HA		DC	
LOCATION ID:	15-610834	↓		FIELD QC TYPE: NA		OK	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	15.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	16.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC:

Pinkish gray weathered tuff fill

SAMPLE COMMENTS:

NA

LOCATION DESC:

Below Tank, 9b-3

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha =  $\frac{27}{2120}$  dpm  
 Beta/Gamma =  $\frac{2120}{2120}$  dpm

PID  $\frac{\text{Ambient Reading } 0.0}{0.6}$  ppm

COLLECTED BY (PRINT)

JLMcFarlane

REVIEWED BY (PRINT)

Riley Evans

RELINQUISHED BY (Printed Name) Estevan Lopez (Signature) <i>E Lopez</i>	Date/Time 2/16/10 08:23 AM	RECEIVED BY (Printed Name) Sherin Sherwood (Signature) <i>Sherin Sherwood</i>	Date/Time 2/16/10 0823
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8311

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		0949		SUB-MEDIA:		TUFF 1	
PRS ID: 15-009(b)		OK		SAMPLE TECH CODE: HA		DC	
LOCATION ID: 15-610834		↓		FIELD QC TYPE: NA		OK	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		17.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		18.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: Pinkish gray tuff

Bingside collected: RE15-10-8329

SAMPLE COMMENTS:

NA

LOCATION DESC:

2  
5 feet below tank  
17M  
2/15/10

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 11 dpm  
Beta/Gamma = 2080 dpmPID  $\frac{\text{Ambient Reading}}{0.0} = 0.0$  ppm

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

Riley Evans

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Lujan	2/16/10	(Printed Name) Sheri Sherwood	2/16/10
(Signature) <i>E. Lujan</i>	08:23 AM	(Signature) <i>Sheri Sherwood</i>	0823
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8312

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA:	QBT3	3R2/15/10	Fill
TIME COLLECTED (HH:MM)		0850		SUB-MEDIA:	TUFF 1	NA	
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:	HA	DC	
LOCATION ID:	15-610835			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		
TOP DEPTH:	0	7.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	8.0		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	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+ NO3+pH	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray weathered

SAMPLE COMMENTS:

NA

LOCATION DESC:

Below inlet pipe, 9b-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  16 dpm  
Beta/Gamma  $\leq$  1976 dpm

PID  $\frac{\text{Ambient Reading}}{6.3} = 0.0$  ppm

COLLECTED BY (PRINT)

TLMCFarkid

REVIEWED BY (PRINT)

JanRoberson

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estwan Lujan	2/16/10	(Printed Name) Sherri Sherwood	2/16/10
(Signature)	08:25 AM	(Signature)	0825
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8313

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA: QBT3		JR 2/15/10	
TIME COLLECTED (HH:MM)		0910		SUB-MEDIA: TUFF 1		Att Fill	
PRS ID: 15-009(b)		OK		SAMPLE TECH CODE: HA		NA	
LOCATION ID: 15-610835		↓		FIELD QC TYPE: NA		DC	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		OK	
TOP DEPTH: 0		12.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		13.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC:

Pinkish brown weathered tuff and sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

5' Below inlet pipe, 9b-1

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq 22$  dpm  
Beta/Gamma  $\leq 2120$  dpm

PID  $\frac{\text{Ambient Reading}}{0.8} \frac{0.0}{0.8}$  ppm

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT)

Jo. Robinson

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estwan Lujan	2/16/10	(Printed Name) Sherri Sherwood	2/16/10
(Signature)	08:26 AM	(Signature)	0826
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8314

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA:	OBT3	73m - Att FILL	
TIME COLLECTED (HH:MM)		0915		SUB-MEDIA:	TUFF 1	215/10	NA
PRS ID:	15-009(b)	OK		SAMPLE TECH CODE:	HA		OC
LOCATION ID:	15-610836			FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	7.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	8.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED:	YES/NO/NA		
COMPOSITE TYPE:	NA	File 8 13m 215/10		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	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:

Pinkish gray weathered tuff fill and tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

Below outlet, 9b-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  22 dpmBeta/Gamma  $\leq$  2280 dpmPID  $\frac{\text{Ambient Reading}}{0.1} = 0.0$  ppm

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

Riley Evans

RELINQUISHED BY (Printed Name) E. Lujan (Signature)	Date/Time 2/16/10 08:26 AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature)	Date/Time 2/16/10 0826
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8315

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA:	OBT3	12m 2/15/10	12m 2/15/10
TIME COLLECTED (HH:MM)		0921		SUB-MEDIA:	TUFF 1		Attn FILL
PRS ID:	15-009(b)	ok		SAMPLE TECH CODE:	HA		NA
LOCATION ID:	15-610836			FIELD QC TYPE:	NA		DC
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		ok
TOP DEPTH:	0	12.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	13.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S FILL 12m 2/15/10		EXCAVATED:	YES/NO/NA		
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	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:

Pinkish gray weathered tuff fill and tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

5 ft below tank outlet, 9b-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha  $\leq$  11 dpm  
Beta/Gamma  $\leq$  2140 dpm

PID  $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.2}$  ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

Riley Evans

RELINQUISHED BY (Printed Name) E. Lujan (Signature)	Date/Time 2/16/10 08:26AM	RECEIVED BY (Printed Name) Sheri Sherwood (Signature)	Date/Time 2/16/10 0826
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time

## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8329

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA: NA		OK	
TIME COLLECTED (HH:MM)		10:50		SUB-MEDIA: OTHER			
PRS ID: 15-009(b)		OK		SAMPLE TECH CODE: DC			
LOCATION ID: UNK				FIELD QC TYPE: FR			
LOCATION TYPE: GENERIC				FIELD PREP: UF			
TOP DEPTH: 0				SAMPLE USAGE: QC			
BOTTOM DEPTH: 0				SCREEN/PORT DESC:			
FIELD MATRIX: W				EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:		COMPOSITE TIME INTERVAL:		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:		BOREHOLE DIRECTION:			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	y	
1		NO3NO2	250 ML POLY	Sulfuric Acid (Hydrogen Sulfate)	no	
1	normal	SW-846:6850	250 ML POLY	Ice	y	
1	↓	TCN	500 ML POLY	Sodium Hydroxide	y	

SAMPLE DESC: QC Sample of RE15-10-834

SAMPLE COMMENTS: none

LOCATION DESC: R44 tank

FIELD SCREENING/MEASUREMENT RESULTS:

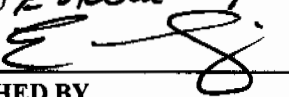
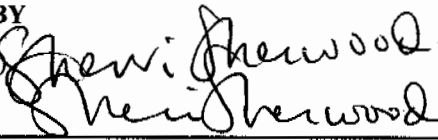
NA

COLLECTED BY (PRINT)

Jon Roberson

REVIEWED BY (PRINT)

Nicholas Gallegos

RELINQUISHED BY (Printed Name) Estevan Lyman (Signature) 	Date/Time 2/16/10 05:21AM	RECEIVED BY (Printed Name) Shewi Shewood (Signature) 	Date/Time 2/16/10 0821
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



## SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2506

EVENT NAME: 4th Qtr. FY09 - SWMU 15-009(b) - Threemile Canyon

SAMPLE ID: RE15-10-8334

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/15/2010		MEDIA: NA		ok	
TIME COLLECTED (HH:MM)		0840		SUB-MEDIA: OTHER			
PRS ID: 15-009(b)		OK		SAMPLE TECH CODE: DC			
LOCATION ID: UNK		15-610 830		FIELD QC TYPE: FTB			
LOCATION TYPE: GENERIC		OK		FIELD PREP: NA			
TOP DEPTH: 0				SAMPLE USAGE: QC			
BOTTOM DEPTH: 0				SCREEN/PORT DESC:		NA	
FIELD MATRIX: S				EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

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

SAMPLE DESC: QC Sample of RE 15-10-8307

SAMPLE COMMENTS:

FTB

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

T. McFarlane

REVIEWED BY (PRINT)

Riley Evans

RELINQUISHED BY (Printed Name) Estwan Lujan (Signature) [Signature]	Date/Time 2/16/10 08:28 AM	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) [Signature]	Date/Time 2/16/10 0828
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time



2609 North River Road, Port Allen, Louisiana 70767  
1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-10-00262  
Analysis Description: Gross Alpha/Beta in (Soil, Sludge, Waste, Sediment [SO])  
Analysis Test Method: GPC-A-003

Request or PO Number: N/A  
Date Received: 2/17/2010  
Report Date: 02/18/10 12:34

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Trace/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00262-001	RE15-10-8302	GROSS ALPHA	6.817	4.732	14.397	4.405	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-001	RE15-10-8302	GROSS BETA	25.125	4.841	7.848	3.393	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-002	RE15-10-8303	GROSS ALPHA	5.392	3.976	12.127	3.443	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-002	RE15-10-8303	GROSS BETA	32.960	5.742	8.016	3.483	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-003	RE15-10-8310	GROSS ALPHA	4.815	3.949	13.061	3.913	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-003	RE15-10-8310	GROSS BETA	28.560	5.211	7.666	3.298	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-004	RE15-10-8311	GROSS ALPHA	16.706	6.638	13.740	4.170	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-004	RE15-10-8311	GROSS BETA	31.065	5.505	7.578	3.274	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-005	RE15-10-8312	GROSS ALPHA	9.299	5.281	13.981	4.169	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-005	RE15-10-8312	GROSS BETA	41.326	6.770	7.991	3.448	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-006	RE15-10-8313	GROSS ALPHA	7.489	4.853	13.949	4.119	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-006	RE15-10-8313	GROSS BETA	43.056	6.963	7.921	3.412	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-007	RE15-10-8314	GROSS ALPHA	5.109	4.119	13.539	4.037	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-007	RE15-10-8314	GROSS BETA	24.911	4.797	7.864	3.408	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-008	RE15-10-8315	GROSS ALPHA	-4.587	0.925	16.695	5.307	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-008	RE15-10-8315	GROSS BETA	41.335	6.715	8.074	3.495	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-009	RE15-10-8254	GROSS ALPHA	9.792	5.119	12.801	3.634	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-009	RE15-10-8254	GROSS BETA	24.323	4.794	8.108	3.525	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-010	RE15-10-8268	GROSS ALPHA	8.073	5.086	14.434	4.219	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-010	RE15-10-8268	GROSS BETA	26.329	5.062	8.262	3.585	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-011	RE15-10-8253	GROSS ALPHA	3.451	3.582	13.138	3.819	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-011	RE15-10-8253	GROSS BETA	32.688	5.715	7.891	3.407	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-012	RE15-10-8252	GROSS ALPHA	2.746	3.546	13.798	4.188	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-012	RE15-10-8252	GROSS BETA	35.047	6.091	8.879	3.904	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-013	RE15-10-8264	GROSS ALPHA	18.758	7.035	13.380	3.990	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-013	RE15-10-8264	GROSS BETA	37.384	6.327	7.991	3.459	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-014	RE15-10-8251	GROSS ALPHA	9.207	4.947	12.428	3.572	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-014	RE15-10-8251	GROSS BETA	28.501	5.280	8.199	3.569	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-015	RE15-10-8250	GROSS ALPHA	9.265	5.182	13.645	4.049	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-015	RE15-10-8250	GROSS BETA	36.111	6.111	7.756	3.345	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-016	RE15-10-8249	GROSS ALPHA	3.355	4.301	16.569	5.426	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-016	RE15-10-8249	GROSS BETA	27.286	5.120	8.204	3.568	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-017	RE15-10-8248	GROSS ALPHA	2.496	3.730	14.783	4.559	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-017	RE15-10-8248	GROSS BETA	31.617	5.622	8.177	3.548	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-018	RE15-10-8247	GROSS ALPHA	3.909	4.426	16.310	5.230	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS1-10-00262-018	RE15-10-8247	GROSS BETA	30.943	5.717	9.264	4.075	U	pCi/g	2/18/2010	CR	N/A	SO	



2609 North River Road, Port Allen, Louisiana 70767  
1 (800) 401-6277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS-10-00262

Request or PO Number: N/A

Analysis Description: Gross Alpha/Beta in (Soil, Sludge, Waste, Sediment [SO])

Date Received: 2/17/2010

Analysis Test Method: GPC-A-003

Report Date: 02/18/10 12:34


ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery	Sample Matrix	Collection Date
ARS-10-00262-019	RE15-10-8894	GROSS ALPHA	7.676	5.176	15.661	5.050	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-019	RE15-10-8894	GROSS BETA	23.779	4.717	7.870	3.391	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-020	RE15-10-8349	GROSS ALPHA	14.120	6.531	15.732	5.045	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-020	RE15-10-8349	GROSS BETA	38.731	6.505	8.084	3.491	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-021	RE15-10-8348	GROSS ALPHA	12.891	6.315	15.594	5.082	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-021	RE15-10-8348	GROSS BETA	42.571	6.852	7.546	3.242	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-022	RE16-10-1514	GROSS ALPHA	1.837	3.758	15.319	4.839	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-022	RE16-10-1514	GROSS BETA	45.190	7.195	8.022	3.465	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-023	RE16-10-1314	GROSS ALPHA	-1.251	2.802	15.097	5.002	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-023	RE16-10-1314	GROSS BETA	26.989	4.999	7.752	3.346	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-024	RE16-10-1314	GROSS ALPHA	9.142	5.361	14.808	4.762	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-024	RE16-10-1314	GROSS BETA	35.501	6.042	7.756	3.343	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-025	RE16-10-1314	GROSS ALPHA	8.291	5.673	16.892	5.656	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-025	RE16-10-1314	GROSS BETA	37.273	6.288	7.960	3.444	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-026	RE16-10-1314	GROSS ALPHA	5.527	5.069	17.198	6.082	U	pCi/g	2/18/2010	CR	N/A	SO	
ARS-10-00262-026	RE16-10-1314	GROSS BETA	32.272	5.756	8.540	3.729	U	pCi/g	2/18/2010	CR	N/A	SO	
NOTES:													

Project Manager Review

Warning: 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.

LEAP Certificate # 01949


NEAP Certificate # E87558

DATA VALIDATION COVER SHEET	
<b>5114-1</b>  <div style="text-align: center; padding-top: 20px;">Data Validation Cover Sheet</div>	Records Use only  

Section I.	
REQUEST NUMBER: <u>10-1950</u>	VALIDATION DATE: <u>04/08/10</u> LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>	
VALIDATOR: <u>Ellen McEntee</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>	
ANALYTICAL SUITE (CHECK ALL THAT APPLY):	
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY
<input type="checkbox"/> DIOXIN FURANS	<input type="checkbox"/> PCB CONGENERS
<input type="checkbox"/> LCMSMS PERCHLORATES	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS	
<input checked="" type="checkbox"/> OTHER (DESCRIBE): <u>VOCs</u>	

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):  <ol style="list-style-type: none"> <li>1. In the FTB, sample RE15-10-8334, which was associated with samples -8302 and -8303, acetone was detected. The acetone result for sample -8303 was a detect <math>\leq 10X</math> the blank concentration and, thus, was qualified U,V4d. The associated result for sample -8302 was a detect <math>&gt; 10X</math> the blank concentration and, thus, was not qualified.</li> <li>2. The ICV/CCV %Ds were <math>&gt; 20\%</math> for 2-hexanone, isopropylbenzene, and n-propylbenzene. The associated sample results were NDs and, thus, were qualified UJ,V7c.</li> <li>3. It should be noted that the 2-hexanone results exceeded the calibration range in the ICV, CCV, and LCS. No sample data were qualified as a result.</li> <li>4. The MS and MSD %Rs for 2-hexanone were below the laboratory LAL. The MS/MSD RPDs for dichlorodifluoromethane and isopropylbenzene were above the laboratory acceptance limit. Since MS/MSD analyses are not required, no sample results were qualified.</li> </ol>							
Reviewed by: <u>ETM</u>				Level: <u>1</u>		Date: <u>4/8/10</u>	

VALIDATOR'S SIGNATURE: <u><i>John McEntee</i></u> DATE: <u>04/08/10</u>	
Form 5114-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project

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

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

# **VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST**


5114-2

## **Volatile Organic Compound (VOC) Analytical Data Validation Checklist**

Records Use only




Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$ (10X for common laboratory contaminants).	N/A	J, V4a
<input checked="" type="checkbox"/>	<input 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	
<b>5114-2</b>  <b>Volatile Organic Compound (VOC) Analytical Data Validation Checklist</b>	Records Use only _____  

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



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

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

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

SDG Number: 10-1950  
 Lab Sample ID: 247562009

Client ID: RE15-10-8302  
 Batch ID: 957839  
 Run Date: 02/27/2010 10:02  
 Prep Date: 02/26/2010 14:59  
 Data File: 7a543.d

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AX01  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.359	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.316	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.316	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.316	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.316	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.316	1.05
67-64-1	Acetone		131	ug/kg	1.75	5.27
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
74-88-4	Iodomethane	U	5.27	ug/kg	1.69	5.27
75-09-2	Methylene chloride	J	2.40	ug/kg	2.11	5.27
75-15-0	Carbon disulfide	U	5.27	ug/kg	1.32	5.27
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.316	1.05
78-93-3	2-Butanone	J	2.40	ug/kg	1.58	5.27
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.316	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.348	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.316	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.316	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.316	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.316	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.316	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.348	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.316	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.316	1.05
108-10-1	4-Methyl-2-pentanone	U	5.27	ug/kg	1.32	5.27
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
108-88-3	Toluene		10.2	ug/kg	0.316	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.316	1.05
591-78-6	2-Hexanone	U	5.27	ug/kg	1.58	5.27 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.316	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.316	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.316	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.316	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.316	1.05

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562009	Date Received: 02/20/2010 08:55	%Moisture: 5.2
Client ID: RE15-10-8302	Client: LANL010	Project: LANL01004
Batch ID: 957839	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 02/27/2010 10:02	Inst: VOA7.I	Dilution: 1
Prep Date: 02/26/2010 14:59	Analyst: AX01	Purge Vol: 5 mL
Data File: 7a543.d	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.316	1.05
179601-23-1	m,p-Xylenes	J	0.702	ug/kg	0.316	2.11
95-47-6	o-Xylene	J	0.574	ug/kg	0.316	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.316	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.316	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.316	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.316	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.316	1.05 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.316	1.05 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.316	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.316	1.05
95-63-6	1,2,4-Trimethylbenzene	J	0.538	ug/kg	0.316	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.316	1.05
99-87-6	4-Isopropyltoluene		3.16	ug/kg	0.316	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.316	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.316	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.27	ug/kg	1.69	5.27
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Hydrocarbon	19.65	48.7	ug/kg		J
	Unknown Hydrocarbon	19.97	5.45	ug/kg		J
	Unknown Hydrocarbon	20.24	6.23	ug/kg		J
	Unknown Hydrocarbon	20.62	58.9	ug/kg		J

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

Page 1 of 2

SDG Number: 10-1950  
 Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8303  
 Batch ID: 957839  
 Run Date: 02/27/2010 09:27  
 Prep Date: 02/26/2010 14:57  
 Data File: 7a542.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.351	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone		8.89	ug/kg	1.71	5.16 U,V4d
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.16	ug/kg	1.65	5.16
75-09-2	Methylene chloride	U	5.16	ug/kg	2.07	5.16
75-15-0	Carbon disulfide	U	5.16	ug/kg	1.29	5.16
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.16	ug/kg	1.55	5.16
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.16	ug/kg	1.29	5.16
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	J	0.504	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.16	ug/kg	1.55	5.16 U,V7c
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03

Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950  
Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA7.I  
Analyst: AXO1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 3.2  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL  
Level: LOW

Client ID: RE15-10-8303  
Batch ID: 957839  
Run Date: 02/27/2010 09:27  
Prep Date: 02/26/2010 14:57  
Data File: 7a542.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	J	0.314	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.16	ug/kg	1.65	5.16
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Hydrocarbon	19.65	9.19	ug/kg		J

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

SDG Number: 10-1950  
 Lab Sample ID: 247562007

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone		22.6	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	J	0.704	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

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

SDG Number: 10-1950  
 Lab Sample ID: 247562007

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Allquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromofom	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene		1.09	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Hydrocarbon	19.65	22.8	ug/kg		J
	Unknown Hydrocarbon	20.62	14.4	ug/kg		J
	Unknown Siloxane	21.55	5.73	ug/kg		J

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

SDG Number: 10-1950  
 Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8311  
 Batch ID: 957839  
 Run Date: 02/27/2010 08:17  
 Prep Date: 02/26/2010 14:53  
 Data File: 7a540.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04	
67-64-1	Acetone	J	4.28	ug/kg	1.72	5.19	
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19	
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19	
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19	
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04	
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
108-88-3	Toluene	J	0.321	ug/kg	0.311	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04	



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

SDG Number: 10-1950  
 Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	14.1	ug/kg		J
	Unknown Siloxane	21.55	5.65	ug/kg		J

**Volatile  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562004	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 5.2
<b>Client ID:</b> RE15-10-8312	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 957839	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Run Date:</b> 02/27/2010 07:08	<b>Inst:</b> VOA7.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 02/26/2010 14:49	<b>Analyst:</b> AXO1	<b>Purge Vol:</b> 5 mL
<b>Data File:</b> 7a538.d	<b>Allquot:</b> 5 g	<b>Final Volume:</b> 5 mL
	<b>Column:</b> DB-624	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.358	1.05	
74-87-3	Chloromethane	U	1.05	ug/kg	0.316	1.05	
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.316	1.05	
74-83-9	Bromomethane	U	1.05	ug/kg	0.316	1.05	
75-00-3	Chloroethane	U	1.05	ug/kg	0.316	1.05	
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.316	1.05	
67-64-1	Acetone		36.0	ug/kg	1.75	5.27	
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.316	1.05	
74-88-4	Iodomethane	U	5.27	ug/kg	1.69	5.27	
75-09-2	Methylene chloride	U	5.27	ug/kg	2.11	5.27	
75-15-0	Carbon disulfide	U	5.27	ug/kg	1.32	5.27	
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05	
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.316	1.05	
78-93-3	2-Butanone	U	5.27	ug/kg	1.58	5.27	
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05	
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05	
67-66-3	Chloroform	U	1.05	ug/kg	0.316	1.05	
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.348	1.05	
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.316	1.05	
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.316	1.05	
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.316	1.05	
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.316	1.05	
71-43-2	Benzene	U	1.05	ug/kg	0.316	1.05	
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.348	1.05	
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05	
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.316	1.05	
74-95-3	Dibromomethane	U	1.05	ug/kg	0.316	1.05	
108-10-1	4-Methyl-2-pentanone	U	5.27	ug/kg	1.32	5.27	
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05	
108-88-3	Toluene		4.45	ug/kg	0.316	1.05	
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05	
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.316	1.05	
591-78-6	2-Hexanone	U	5.27	ug/kg	1.58	5.27	UJ.V7c
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.316	1.05	
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.316	1.05	
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.316	1.05	
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.316	1.05	
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.316	1.05	

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562004	Date Received: 02/20/2010 08:55	%Moisture: 5.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8312	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 07:08	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:49	Allquot: 5 g	Final Volume: 5 mL
Data File: 7a538.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.316	1.05
179601-23-1	m,p-Xylenes	J	0.470	ug/kg	0.316	2.11
95-47-6	o-Xylene	J	0.349	ug/kg	0.316	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.316	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.316	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.316	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.316	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.316	1.05 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.316	1.05 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.316	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.316	1.05
95-63-6	1,2,4-Trimethylbenzene	J	0.651	ug/kg	0.316	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.316	1.05
99-87-6	4-Isopropyltoluene		6.10	ug/kg	0.316	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.316	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.316	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.27	ug/kg	1.69	5.27
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	9.44	12.1	ug/kg		J
	Unknown Hydrocarbon	19.65	112	ug/kg		J
	Unknown Hydrocarbon	19.96	10.5	ug/kg		J
	Unknown Hydrocarbon	20.24	12.8	ug/kg		J
	Unknown Hydrocarbon	20.33	9.12	ug/kg		J
	Unknown Hydrocarbon	20.62	144	ug/kg		J

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1950  
Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA7.1  
Analyst: AXO1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 3.6  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL  
Level: LOW

Client ID: RE15-10-8313  
Batch ID: 957839  
Run Date: 02/27/2010 06:33  
Prep Date: 02/26/2010 14:47  
Data File: 7a537.d

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04	
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04	
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04	
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04	
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04	
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04	
67-64-1	Acetone		22.1	ug/kg	1.72	5.19	
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19	
75-09-2	Methylene chloride	U	5.19	ug/kg	2.07	5.19	
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19	
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19	
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04	
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04	
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04	
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04	
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04	
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04	
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04	
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04	
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04	
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04	
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19	
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
108-88-3	Toluene		2.76	ug/kg	0.311	1.04	
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04	
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04	
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19	UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04	
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04	
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04	
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04	
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04	

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

SDG Number: 10-1950  
 Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AX01  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoforn	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene		1.59	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.65	29.5	ug/kg		J
	Unknown Hydrocarbon	20.62	13	ug/kg		J

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562002	Date Received: 02/20/2010 08:55	%Moisture: 2.7
Client ID: RE15-10-8314	Client: LANL010	Project: LANL01004
Batch ID: 957839	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 02/27/2010 05:58	Inst: VOA7.I	Dilution: 1
Prep Date: 02/26/2010 14:41	Analyst: AXO1	Purge Vol: 5 mL
Data File: 7a536.d	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.350	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	U	5.14	ug/kg	1.71	5.14
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.14	ug/kg	1.65	5.14
75-09-2	Methylene chloride	U	5.14	ug/kg	2.06	5.14
75-15-0	Carbon disulfide	U	5.14	ug/kg	1.29	5.14
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.14	ug/kg	1.54	5.14
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.14	ug/kg	1.29	5.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.14	ug/kg	1.54	5.14
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

UJ,V7c

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1950  
Lab Sample ID: 247562002

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA7.I  
Analyst: AXO1  
Allquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 2.7  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.06	ug/kg	0.308	2.06
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromofonn	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	J	0.427	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	U	5.14	ug/kg	1.65	5.14
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Siloxane	19.69	25.9	ug/kg		J
	Unknown Hydrocarbon	20.62	10.6	ug/kg		J

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

SDG Number: 10-1950  
 Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.352	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone	U	5.17	ug/kg	1.72	5.17
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.17	ug/kg	1.66	5.17
75-09-2	Methylene chloride	U	5.17	ug/kg	2.07	5.17
75-15-0	Carbon disulfide	U	5.17	ug/kg	1.29	5.17
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.17	ug/kg	1.55	5.17
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.17	ug/kg	1.29	5.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	J	0.323	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.17	ug/kg	1.55	5.17 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03



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

SDG Number: 10-1950  
 Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AX01  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8315  
 Batch ID: 957839  
 Run Date: 02/27/2010 07:43  
 Prep Date: 02/26/2010 14:51  
 Data File: 7a539.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03 UJ,V7c
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.17	ug/kg	1.66	5.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	5.98	ug/kg		J

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

SDG Number: 10-1950  
 Lab Sample ID: 247562001

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AX01  
 Allquot: 5 g  
 Column: DB-624

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

Client ID: RE15-10-8334  
 Batch ID: 957839  
 Run Date: 02/27/2010 05:23  
 Prep Date: 02/26/2010 14:39  
 Data File: 7a535.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	3.01	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 UJ,V7c
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: 10-1950  
Lab Sample ID: 247562001

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55

Matrix: S

Client ID: RE15-10-8334  
Batch ID: 957839  
Run Date: 02/27/2010 05:23  
Prep Date: 02/26/2010 14:39  
Data File: 7a535.d


Client: LANL010  
Method: SW846 8260B  
Inst: VOA7.I  
Analyst: AXO1  
Allquot: 5 g  
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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 UJ,V7c
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 UJ,V7c
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	Flt	Qual
No Tentatively Identified Compounds Found				ug/kg		

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

Section I.		
REQUEST NUMBER: <u>10-1950</u>	VALIDATION DATE: <u>04/08/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Ellen McEntee</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
		<input type="checkbox"/> LCMSMS PERCHLORATES
		<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
<input checked="" type="checkbox"/> OTHER (DESCRIBE): <u>SVOCs</u>		

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):  <ol style="list-style-type: none"> <li>The ICV/CCV %Ds were &gt;20% for pyridine; 2-methyl-4,6-dinitrophenol; and 2,4-dinitrophenol. The associated sample results were NDs and, thus, were qualified UJ,SV7c.</li> <li>The MSD %R for di-n-octylphthalate was above the laboratory UAL and the MS/MSD RPD for hexachlorocyclopentadiene was above the laboratory acceptance limit. Since MS/MSD analyses are not required, no sample results were qualified.</li> </ol>							
Reviewed by: <u>ETM</u> Level: <u>1</u> Date: <u>4/8/10</u>							

VALIDATOR'S SIGNATURE: <u>Ellen McEntee</u>	DATE: <u>04/08/10</u>
Form 5115-1, Revision 0.0	
LOS ALAMOS Environmental Restoration Project	

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

Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, 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				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, SV7f	R, SV7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, SV4	J, V4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was greater than 5X (10X for common laboratory contaminants).	N/A	J, SV4a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, SV4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV4e	R, SV4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The IS retention time has shifted by more than 30 seconds.	UJ, SV0	J, SV0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, SV0a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV0b	R, SV0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. The quantitating IS area count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, SV1a	J, SV1a

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

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

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

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



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

SDG Number: 10-1950  
Lab Sample ID: 247562009

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Allquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8302  
Batch ID: 956677  
Run Date: 03/05/2010 20:44  
Prep Date: 02/23/2010 21:09  
Data File: s3c0531.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	70.0	350	
108-95-2	Phenol	U	350	ug/kg	70.0	350	
95-57-8	2-Chlorophenol	U	350	ug/kg	70.0	350	
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	70.0	350	
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	70.0	350	
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	70.0	350	
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0	
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350	
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350	
87-86-5	Pentachlorophenol	U	350	ug/kg	87.5	350	
129-00-0	Pyrene		256	ug/kg	10.5	35.0	
110-86-1	Pyridine	U	350	ug/kg	70.0	350	UJ,SV7c
62-53-3	Aniline	U	350	ug/kg	105	350	
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	70.0	350	
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	70.0	350	
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350	
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	70.0	350	
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	70.0	350	
95-48-7	o-Cresol	U	350	ug/kg	70.0	350	
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350	
67-72-1	Hexachloroethane	U	350	ug/kg	70.0	350	
98-95-3	Nitrobenzene	U	350	ug/kg	70.0	350	
78-59-1	Isophorone	U	350	ug/kg	70.0	350	
88-75-5	2-Nitrophenol	U	350	ug/kg	70.0	350	
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350	
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	70.0	350	
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	70.0	350	
65-85-0	Benzoic acid	U	700	ug/kg	175	700	
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0	
106-47-8	4-Chloroaniline	U	350	ug/kg	70.0	350	
87-68-3	Hexachlorobutadiene	U	350	ug/kg	70.0	350	
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	7.00	35.0	
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	70.0	350	
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	70.0	350	
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	70.0	350	
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0	
88-74-4	2-Nitroaniline	U	350	ug/kg	70.0	350	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	350	ug/kg	70.0	350	

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562009	Date Received: 02/20/2010 08:55	%Moisture: 5.2
Client ID: RE15-10-8302	Client: LANL010	Project: LANL01004
Batch ID: 956677	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/05/2010 20:44	Inst: MSD3.I	Dilution: 1
Prep Date: 02/23/2010 21:09	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3c0531.d	Aliquot: 30.15 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	350	ug/kg	70.0	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	J	20.3	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	700	ug/kg	133	700 UJ,SV7c
132-64-9	Dibenzofuran	U	350	ug/kg	70.0	350
84-66-2	Diethylphthalate	U	350	ug/kg	70.0	350
86-73-7	Fluorene	J	16.4	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	70.0	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	70.0	350 UJ,SV7c
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	350	ug/kg	70.0	350
122-66-7	Azobenzene	U	350	ug/kg	70.0	350
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	70.0	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	70.0	350
85-01-8	Phenanthrene		182	ug/kg	10.5	35.0
120-12-7	Anthracene		40.6	ug/kg	7.00	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	70.0	350
206-44-0	Fluoranthene		299	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	70.0	350
56-55-3	Benzo(a)anthracene		128	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene		122	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	70.0	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	70.0	350
205-99-2	Benzo(b)fluoranthene		269	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene		136	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene		65.2	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene		63.7	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	70.0	350

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.74	2150	ug/kg		JA
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	858	ug/kg	93	NJ

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562009	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 5.2
<b>Client ID:</b> RE15-10-8302	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 956677	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 03/05/2010 20:44	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 02/23/2010 21:09	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s3c0531.d	<b>Aliquot:</b> 30.15 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
1197-01-9	Benzenemethanol, .alpha.,.alpha.,4-trime	4.51	343	ug/kg	80	NJ
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	4.64	494	ug/kg	98	NJ
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	4.93	419	ug/kg	99	NJ
	Unknown	7.14	588	ug/kg		J
	Unknown	7.24	582	ug/kg		J
	Unknown	7.27	290	ug/kg		J
81038-44-0	3-Bromo-4-hydroxy-5-methoxyphenylacetoni	7.36	738	ug/kg	90	NJ
	Unknown	7.42	789	ug/kg		J
1000197-84-7	5-Isopropylidene-6-methyldeca-3,6,9-trie	7.47	512	ug/kg	91	NJ
	Unknown	7.52	266	ug/kg		J
	Unknown	7.58	571	ug/kg		J
	Unknown	7.61	258	ug/kg		J
	Unknown	7.78	276	ug/kg		J
	Unknown	7.87	732	ug/kg		J
	Unknown	7.92	317	ug/kg		J
	Unknown	8.05	577	ug/kg		J
17974-57-1	(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	8.11	725	ug/kg	83	NJ
	Unknown	8.14	625	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.41	815	ug/kg	86	NJ
	Unknown	8.55	577	ug/kg		J
	Unknown	8.64	412	ug/kg		J
	Unknown	8.79	302	ug/kg		J
	Unknown	8.85	227	ug/kg		J
	Unknown	8.98	160	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8303  
Batch ID: 956677  
Run Date: 03/05/2010 20:21  
Prep Date: 02/23/2010 21:09  
Data File: s3c0530.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.5	342	
108-95-2	Phenol	U	342	ug/kg	68.5	342	
95-57-8	2-Chlorophenol	U	342	ug/kg	68.5	342	
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.5	342	
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.5	342	
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.5	342	
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2	
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342	
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342	
87-86-5	Pentachlorophenol	U	342	ug/kg	85.6	342	
129-00-0	Pyrene		92.6	ug/kg	10.3	34.2	
110-86-1	Pyridine	U	342	ug/kg	68.5	342	UJ,SV7c
62-53-3	Aniline	U	342	ug/kg	103	342	
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.5	342	
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.5	342	
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342	
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.5	342	
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.5	342	
95-48-7	o-Cresol	U	342	ug/kg	68.5	342	
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342	
67-72-1	Hexachloroethane	U	342	ug/kg	68.5	342	
98-95-3	Nitrobenzene	U	342	ug/kg	68.5	342	
78-59-1	Isophorone	U	342	ug/kg	68.5	342	
88-75-5	2-Nitrophenol	U	342	ug/kg	68.5	342	
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342	
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.5	342	
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.5	342	
65-85-0	Benzoic acid	U	685	ug/kg	171	685	
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2	
106-47-8	4-Chloroaniline	U	342	ug/kg	68.5	342	
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.5	342	
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.85	34.2	
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.5	342	
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.5	342	
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.5	342	
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2	
88-74-4	2-Nitroaniline	U	342	ug/kg	68.5	342	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	342	ug/kg	68.5	342	

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

SDG Number: 10-1950  
Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.2  
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
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	342	ug/kg	68.5	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2
51-28-5	2,4-Dinitrophenol	U	685	ug/kg	130	685 UJ,SV7c
132-64-9	Dibenzofuran	U	342	ug/kg	68.5	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.5	342
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.5	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.5	342 UJ,SV7c
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.5	342
122-66-7	Azobenzene	U	342	ug/kg	68.5	342
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.5	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.5	342
85-01-8	Phenanthrene		61.7	ug/kg	10.3	34.2
120-12-7	Anthracene	J	11.9	ug/kg	6.85	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.5	342
206-44-0	Fluoranthene		119	ug/kg	10.3	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.5	342
56-55-3	Benzo(a)anthracene		51.2	ug/kg	10.3	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342
218-01-9	Chrysene		46.3	ug/kg	10.3	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.5	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.5	342
205-99-2	Benzo(b)fluoranthene		99.3	ug/kg	10.3	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2
50-32-8	Benzo(a)pyrene		50.0	ug/kg	10.3	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	J	25.2	ug/kg	10.3	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2
191-24-2	Benzo(ghi)perylene	J	24.6	ug/kg	10.3	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.5	342

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1090	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.28	165	ug/kg	98	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562008	Date Received: 02/20/2010 08:55	%Moisture: 3.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8303	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 20:21	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.17 g	Final Volume: 1 mL
Data File: s3c0530.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
25269-17-4	Thunbergol	7.42	154	ug/kg	87	NJ
301-02-0	9-Octadecenamide, (Z)-	7.99	142	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	146	ug/kg	98	NJ
	Unknown	8.97	232	ug/kg		J
	Unknown	15.51	335	ug/kg		J

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950  
Lab Sample ID: 247562007

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Allquot: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8310  
Batch ID: 956677  
Run Date: 03/05/2010 19:58  
Prep Date: 02/23/2010 21:09  
Data File: s3c0529.d

CAS No.	Parmname	Qualfler	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	345	ug/kg	69.0	345	
108-95-2	Phenol	U	345	ug/kg	69.0	345	
95-57-8	2-Chlorophenol	U	345	ug/kg	69.0	345	
106-46-7	1,4-Dichlorobenzene	U	345	ug/kg	69.0	345	
621-64-7	N-Nitrosodipropylamine	U	345	ug/kg	69.0	345	
59-50-7	4-Chloro-3-methylphenol	U	345	ug/kg	69.0	345	
83-32-9	Acenaphthene		38.9	ug/kg	11.4	34.5	
121-14-2	2,4-Dinitrotoluene	U	345	ug/kg	34.5	345	
100-02-7	4-Nitrophenol	U	345	ug/kg	114	345	
87-86-5	Pentachlorophenol	U	345	ug/kg	86.3	345	
129-00-0	Pyrene		430	ug/kg	10.4	34.5	
110-86-1	Pyridine	U	345	ug/kg	69.0	345	UJ,SV7c
62-53-3	Aniline	U	345	ug/kg	104	345	
111-44-4	bis(2-Chloroethyl) ether	U	345	ug/kg	69.0	345	
541-73-1	1,3-Dichlorobenzene	U	345	ug/kg	69.0	345	
100-51-6	Benzyl alcohol	U	345	ug/kg	104	345	
95-50-1	1,2-Dichlorobenzene	U	345	ug/kg	69.0	345	
108-60-1	bis(2-Chloroisopropyl)ether	U	345	ug/kg	69.0	345	
95-48-7	o-Cresol	U	345	ug/kg	69.0	345	
65794-96-9	m,p-Cresols	U	345	ug/kg	104	345	
67-72-1	Hexachloroethane	U	345	ug/kg	69.0	345	
98-95-3	Nitrobenzene	U	345	ug/kg	69.0	345	
78-59-1	Isophorone	U	345	ug/kg	69.0	345	
88-75-5	2-Nitrophenol	U	345	ug/kg	69.0	345	
105-67-9	2,4-Dimethylphenol	U	345	ug/kg	121	345	
111-91-1	bis(2-Chloroethoxy)methane	U	345	ug/kg	69.0	345	
120-83-2	2,4-Dichlorophenol	U	345	ug/kg	69.0	345	
65-85-0	Benzoic acid	U	690	ug/kg	173	690	
91-20-3	Naphthalene	J	33.7	ug/kg	10.4	34.5	
106-47-8	4-Chloroaniline	U	345	ug/kg	69.0	345	
87-68-3	Hexachlorobutadiene	U	345	ug/kg	69.0	345	
91-57-6	2-Methylnaphthalene	J	8.64	ug/kg	6.90	34.5	
77-47-4	Hexachlorocyclopentadiene	U	345	ug/kg	69.0	345	
88-06-2	2,4,6-Trichlorophenol	U	345	ug/kg	69.0	345	
95-95-4	2,4,5-Trichlorophenol	U	345	ug/kg	69.0	345	
91-58-7	2-Chloronaphthalene	U	34.5	ug/kg	11.4	34.5	
88-74-4	2-Nitroaniline	U	345	ug/kg	69.0	345	
99-09-2	3-Nitroaniline	U	345	ug/kg	69.0	345	

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562007	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.7
<b>Client ID:</b> RE15-10-8310	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Batch ID:</b> 956677	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Run Date:</b> 03/05/2010 19:58	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Prep Date:</b> 02/23/2010 21:09	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Data File:</b> s3c0529.d	<b>Aliquot:</b> 30.07 g	<b>Final Volume:</b> 1 mL
	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	345	ug/kg	69.0	345
606-20-2	2,6-Dinitrotoluene	U	345	ug/kg	34.5	345
208-96-8	Acenaphthylene	U	34.5	ug/kg	10.4	34.5
51-28-5	2,4-Dinitrophenol	U	690	ug/kg	131	690 UJ,SV7c
132-64-9	Dibenzofuran	U	345	ug/kg	69.0	345
84-66-2	Diethylphthalate	U	345	ug/kg	69.0	345
86-73-7	Fluorene		36.2	ug/kg	10.4	34.5
7005-72-3	4-Chlorophenylphenylether	U	345	ug/kg	69.0	345
534-52-1	2-Methyl-4,6-dinitrophenol	U	345	ug/kg	69.0	345 UJ,SV7c
100-01-6	4-Nitroaniline	U	345	ug/kg	104	345
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	345	ug/kg	69.0	345
122-66-7	Azobenzene	U	345	ug/kg	69.0	345
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	345	ug/kg	69.0	345
118-74-1	Hexachlorobenzene	U	345	ug/kg	69.0	345
85-01-8	Phenanthrene		302	ug/kg	10.4	34.5
120-12-7	Anthracene		93.7	ug/kg	6.90	34.5
84-74-2	Di-n-butylphthalate	U	345	ug/kg	69.0	345
206-44-0	Fluoranthene		456	ug/kg	10.4	34.5
85-68-7	Butylbenzylphthalate	U	345	ug/kg	69.0	345
56-55-3	Benzo(a)anthracene		211	ug/kg	10.4	34.5
91-94-1	3,3'-Dichlorobenzidine	U	345	ug/kg	104	345
218-01-9	Chrysene		210	ug/kg	10.4	34.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	345	ug/kg	69.0	345
117-84-0	Di-n-octylphthalate	U	345	ug/kg	69.0	345
205-99-2	Benzo(b)fluoranthene		419	ug/kg	10.4	34.5
207-08-9	Benzo(k)fluoranthene	U	34.5	ug/kg	10.4	34.5
50-32-8	Benzo(a)pyrene		227	ug/kg	10.4	34.5
193-39-5	Indeno(1,2,3-cd)pyrene		86.7	ug/kg	10.4	34.5
53-70-3	Dibenzo(a,h)anthracene	U	34.5	ug/kg	10.4	34.5
191-24-2	Benzo(ghi)perylene		90.3	ug/kg	10.4	34.5
120-82-1	1,2,4-Trichlorobenzene	U	345	ug/kg	69.0	345

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.75	3520	ug/kg		JA
	Unknown	7.79	277	ug/kg		J



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562007	Date Received: 02/20/2010 08:55	%Moisture: 3.7
Client ID: RE15-10-8310	Client: LANL010	Project: LANL01004
Batch ID: 956677	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/05/2010 19:58	Inst: MSD3.I	Dilution: 1
Prep Date: 02/23/2010 21:09	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3c0529.d	Aliquot: 30.07 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Flt	Qual
2381-21-7	Pyrene, 1-methyl-	7.86	213	ug/kg	96	NJ
	Unknown	7.91	262	ug/kg		J
	Unknown	7.99	387	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	153	ug/kg	97	NJ
	Unknown	8.04	153	ug/kg		J
	Unknown	8.06	345	ug/kg		J
	Unknown	8.16	339	ug/kg		J
	Unknown	8.2	485	ug/kg		J
	Unknown	8.29	455	ug/kg		J
	Unknown	8.32	265	ug/kg		J
	Unknown	8.36	234	ug/kg		J
	Unknown	8.52	231	ug/kg		J
	Unknown	8.57	172	ug/kg		J
	Unknown	8.6	167	ug/kg		J
	Unknown	8.66	158	ug/kg		J
	Unknown	8.73	242	ug/kg		J
	Unknown	8.77	156	ug/kg		J
	Unknown	8.81	157	ug/kg		J
	Unknown	8.9	203	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	378	ug/kg	93	NJ
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	9.04	217	ug/kg	92	NJ
	Unknown	9.1	435	ug/kg		J
	Unknown	9.19	374	ug/kg		J
	Unknown	9.28	432	ug/kg		J
	Unknown	9.44	445	ug/kg		J
198-55-0	Perylene	9.64	394	ug/kg	96	NJ
	Unknown	10.02	403	ug/kg		J
	Unknown	10.3	494	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8311  
Batch ID: 956677  
Run Date: 03/05/2010 19:35  
Prep Date: 02/23/2010 21:09  
Data File: s3c0528.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	345	ug/kg	69.0	345	
108-95-2	Phenol	U	345	ug/kg	69.0	345	
95-57-8	2-Chlorophenol	U	345	ug/kg	69.0	345	
106-46-7	1,4-Dichlorobenzene	U	345	ug/kg	69.0	345	
621-64-7	N-Nitrosodipropylamine	U	345	ug/kg	69.0	345	
59-50-7	4-Chloro-3-methylphenol	U	345	ug/kg	69.0	345	
83-32-9	Acenaphthene	U	34.5	ug/kg	11.4	34.5	
121-14-2	2,4-Dinitrotoluene	U	345	ug/kg	34.5	345	
100-02-7	4-Nitrophenol	U	345	ug/kg	114	345	
87-86-5	Pentachlorophenol	U	345	ug/kg	86.3	345	
129-00-0	Pyrene	J	30.1	ug/kg	10.4	34.5	
110-86-1	Pyridine	U	345	ug/kg	69.0	345	UJ,SV7c
62-53-3	Aniline	U	345	ug/kg	104	345	
111-44-4	bis(2-Chloroethyl) ether	U	345	ug/kg	69.0	345	
541-73-1	1,3-Dichlorobenzene	U	345	ug/kg	69.0	345	
100-51-6	Benzyl alcohol	U	345	ug/kg	104	345	
95-50-1	1,2-Dichlorobenzene	U	345	ug/kg	69.0	345	
108-60-1	bis(2-Chloroisopropyl)ether	U	345	ug/kg	69.0	345	
95-48-7	o-Cresol	U	345	ug/kg	69.0	345	
65794-96-9	m,p-Cresols	U	345	ug/kg	104	345	
67-72-1	Hexachloroethane	U	345	ug/kg	69.0	345	
98-95-3	Nitrobenzene	U	345	ug/kg	69.0	345	
78-59-1	Isophorone	U	345	ug/kg	69.0	345	
88-75-5	2-Nitrophenol	U	345	ug/kg	69.0	345	
105-67-9	2,4-Dimethylphenol	U	345	ug/kg	121	345	
111-91-1	bis(2-Chloroethoxy)methane	U	345	ug/kg	69.0	345	
120-83-2	2,4-Dichlorophenol	U	345	ug/kg	69.0	345	
65-85-0	Benzoic acid	U	690	ug/kg	173	690	
91-20-3	Naphthalene	U	34.5	ug/kg	10.4	34.5	
106-47-8	4-Chloroaniline	U	345	ug/kg	69.0	345	
87-68-3	Hexachlorobutadiene	U	345	ug/kg	69.0	345	
91-57-6	2-Methylnaphthalene	U	34.5	ug/kg	6.90	34.5	
77-47-4	Hexachlorocyclopentadiene	U	345	ug/kg	69.0	345	
88-06-2	2,4,6-Trichlorophenol	U	345	ug/kg	69.0	345	
95-95-4	2,4,5-Trichlorophenol	U	345	ug/kg	69.0	345	
91-58-7	2-Chloronaphthalene	U	34.5	ug/kg	11.4	34.5	
88-74-4	2-Nitroaniline	U	345	ug/kg	69.0	345	
	o-Nitroaniline						
99-09-2	3-Nitroaniline	U	345	ug/kg	69.0	345	

Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-1950  
Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
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	345	ug/kg	69.0	345
606-20-2	2,6-Dinitrotoluene	U	345	ug/kg	34.5	345
208-96-8	Acenaphthylene	U	34.5	ug/kg	10.4	34.5
51-28-5	2,4-Dinitrophenol	U	690	ug/kg	131	690 UJ,SV7c
132-64-9	Dibenzofuran	U	345	ug/kg	69.0	345
84-66-2	Diethylphthalate	U	345	ug/kg	69.0	345
86-73-7	Fluorene	U	34.5	ug/kg	10.4	34.5
7005-72-3	4-Chlorophenylphenylether	U	345	ug/kg	69.0	345
534-52-1	2-Methyl-4,6-dinitrophenol	U	345	ug/kg	69.0	345 UJ,SV7c
100-01-6	4-Nitroaniline	U	345	ug/kg	104	345
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	345	ug/kg	69.0	345
122-66-7	Azobenzene	U	345	ug/kg	69.0	345
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	345	ug/kg	69.0	345
118-74-1	Hexachlorobenzene	U	345	ug/kg	69.0	345
85-01-8	Phenanthrene	U	34.5	ug/kg	10.4	34.5
120-12-7	Anthracene	U	34.5	ug/kg	6.90	34.5
84-74-2	Di-n-butylphthalate	U	345	ug/kg	69.0	345
206-44-0	Fluoranthene		36.5	ug/kg	10.4	34.5
85-68-7	Butylbenzylphthalate	U	345	ug/kg	69.0	345
56-55-3	Benzo(a)anthracene	J	22.7	ug/kg	10.4	34.5
91-94-1	3,3'-Dichlorobenzidine	U	345	ug/kg	104	345
218-01-9	Chrysene	J	15.3	ug/kg	10.4	34.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	345	ug/kg	69.0	345
117-84-0	Di-n-octylphthalate	U	345	ug/kg	69.0	345
205-99-2	Benzo(b)fluoranthene		38.6	ug/kg	10.4	34.5
207-08-9	Benzo(k)fluoranthene	U	34.5	ug/kg	10.4	34.5
50-32-8	Benzo(a)pyrene	J	18.9	ug/kg	10.4	34.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.5	ug/kg	10.4	34.5
53-70-3	Dibenzo(a,h)anthracene	U	34.5	ug/kg	10.4	34.5
191-24-2	Benzo(ghi)perylene	U	34.5	ug/kg	10.4	34.5
120-82-1	1,2,4-Trichlorobenzene	U	345	ug/kg	69.0	345

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1200	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.54	204	ug/kg	99	NJ

**Semi-Volatile  
Certificate of Analysis  
Sample Summary****SDG Number:** 10-1950  
**Lab Sample ID:** 247562006**Date Collected:** 02/15/2010 12:00**Matrix:** R**Date Received:** 02/20/2010 08:55**%Moisture:** 3.7**Client:** LANL010**Project:** LANL01004**Client ID:** RE15-10-8311**Method:** SW846 8270C**SOP Ref:** GL-OA-E-009**Batch ID:** 956677**Inst:** MSD3.I**Dilution:** 1**Run Date:** 03/05/2010 19:35**Analyst:** JLD1**Inj. Vol:** .5 uL**Prep Date:** 02/23/2010 21:09**Allquot:** 30.09 g**Final Volume:** 1 mL**Data File:** s3c0528.d**Column:** J&W DB-5MS**Level:** LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	7.98	269	ug/kg		J
	Unknown	8.09	149	ug/kg		J
	Unknown	8.27	205	ug/kg		J
	Unknown	8.32	179	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	231	ug/kg	93	NJ
	Unknown	15.5	198	ug/kg		J
	Unknown	16.14	141	ug/kg		J

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950  
Lab Sample ID: 247562004

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.16 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8312  
Batch ID: 956677  
Run Date: 03/05/2010 18:49  
Prep Date: 02/23/2010 21:09  
Data File: s3c0526.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	69.9	350	
108-95-2	Phenol	U	350	ug/kg	69.9	350	
95-57-8	2-Chlorophenol	U	350	ug/kg	69.9	350	
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	69.9	350	
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	69.9	350	
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	69.9	350	
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0	
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350	
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350	
87-86-5	Pentachlorophenol	U	350	ug/kg	87.4	350	
129-00-0	Pyrene		286	ug/kg	10.5	35.0	
110-86-1	Pyridine	U	350	ug/kg	69.9	350	UJ,SV7c
62-53-3	Aniline	U	350	ug/kg	105	350	
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	69.9	350	
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	69.9	350	
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350	
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	69.9	350	
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	69.9	350	
95-48-7	o-Cresol	U	350	ug/kg	69.9	350	
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350	
67-72-1	Hexachloroethane	U	350	ug/kg	69.9	350	
98-95-3	Nitrobenzene	U	350	ug/kg	69.9	350	
78-59-1	Isophorone	U	350	ug/kg	69.9	350	
88-75-5	2-Nitrophenol	U	350	ug/kg	69.9	350	
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350	
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	69.9	350	
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	69.9	350	
65-85-0	Benzoic acid	U	699	ug/kg	175	699	
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0	
106-47-8	4-Chloroaniline	U	350	ug/kg	69.9	350	
87-68-3	Hexachlorobutadiene	U	350	ug/kg	69.9	350	
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	6.99	35.0	
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	69.9	350	
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	69.9	350	
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	69.9	350	
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0	
88-74-4	2-Nitroaniline	U	350	ug/kg	69.9	350	
	<i>o</i> -Nitroaniline						
99-09-2	3-Nitroaniline	U	350	ug/kg	69.9	350	

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

SDG Number: 10-1950  
Lab Sample ID: 247562004

Client ID: RE15-10-8312  
Batch ID: 956677  
Run Date: 03/05/2010 18:49  
Prep Date: 02/23/2010 21:09  
Data File: s3c0526.d

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Allquot: 30.16 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	350	ug/kg	69.9	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	J	22.0	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	699	ug/kg	133	699 UJ,SV7c
132-64-9	Dibenzofuran	U	350	ug/kg	69.9	350
84-66-2	Diethylphthalate	U	350	ug/kg	69.9	350
86-73-7	Fluorene	J	24.3	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	69.9	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	69.9	350 UJ,SV7c
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	350	ug/kg	69.9	350
122-66-7	Azobenzene	U	350	ug/kg	69.9	350
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	69.9	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	69.9	350
85-01-8	Phenanthrene		238	ug/kg	10.5	35.0
120-12-7	Anthracene		47.5	ug/kg	6.99	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	69.9	350
206-44-0	Fluoranthene		368	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	69.9	350
56-55-3	Benzo(a)anthracene		133	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene		154	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	69.9	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	69.9	350
205-99-2	Benzo(b)fluoranthene		269	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene		134	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene		56.7	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene		57.1	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	69.9	350

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	2260	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.27	360	ug/kg	98	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562004

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.16 g  
Column: J&W DB-SMS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-	3.66	318	ug/kg	97	NJ
832-64-4	Phenanthrene, 4-methyl-	7.14	189	ug/kg	97	NJ
1000152-38-2	Pentacyclo[9.1.0.0(2,4).0(5,7).0(8,10)]d	7.43	351	ug/kg	70	NJ
	Unknown	7.8	290	ug/kg		J
2381-21-7	Pyrene, 1-methyl-	7.87	333	ug/kg	92	NJ
243-17-4	11H-Benzo[b]fluorene	7.91	291	ug/kg	91	NJ
	Unknown	7.97	512	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	165	ug/kg	99	NJ
	Unknown	8.04	209	ug/kg		J
	Unknown	8.09	433	ug/kg		J
	Unknown	8.14	259	ug/kg		J
	Unknown	8.18	260	ug/kg		J
	Unknown	8.26	603	ug/kg		J
	Unknown	8.29	200	ug/kg		J
	Unknown	8.33	324	ug/kg		J
	Unknown	8.4	320	ug/kg		J
	Unknown	8.51	159	ug/kg		J
	Unknown	8.57	151	ug/kg		J
	Unknown	8.6	242	ug/kg		J
	Unknown	8.68	160	ug/kg		J
	Unknown	8.76	180	ug/kg		J
	Unknown	8.85	299	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	317	ug/kg	89	NJ
	Unknown	9.1	372	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8313  
Batch ID: 956677  
Run Date: 03/05/2010 18:26  
Prep Date: 02/23/2010 21:09  
Data File: s3c0525.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.4	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	114	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.0	344
129-00-0	Pyrene		201	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344 UJ,SV7c
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl) ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.4	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	344	ug/kg	68.8	344



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

Page 2 of 3

SDG Number: 10-1950  
Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8313  
Batch ID: 956677  
Run Date: 03/05/2010 18:26  
Prep Date: 02/23/2010 21:09  
Data File: s3c0525.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	J	16.3	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688 UJ,SV7c
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	J	10.5	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344 UJ,SV7c
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene		130	ug/kg	10.3	34.4
120-12-7	Anthracene	J	29.9	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene		244	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene		103	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene		104	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene		217	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene		106	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene		50.4	ug/kg	10.3	34.4
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene		50.7	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.74	3420	ug/kg		JA
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	214	ug/kg	83	NJ

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562003	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.6
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8313	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 18:26	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.15 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0525.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
25269-17-4	Thunbergol	7.43	163	ug/kg	83	NJ
	Unknown	7.6	203	ug/kg		J
	Unknown	7.78	142	ug/kg		J
2381-21-7	Pyrene, 1-methyl-	7.86	209	ug/kg	91	NJ
	Unknown	7.97	219	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	7.99	162	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	167	ug/kg	96	NJ
	Unknown	8.04	174	ug/kg		J
	Unknown	8.14	553	ug/kg		J
	Unknown	8.21	312	ug/kg		J
	Unknown	8.29	335	ug/kg		J
	Unknown	8.32	276	ug/kg		J
	Unknown	8.4	220	ug/kg		J
	Unknown	8.63	165	ug/kg		J
	Unknown	8.83	208	ug/kg		J
	Unknown	8.97	299	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	9.04	139	ug/kg	92	NJ
	Unknown	9.11	209	ug/kg		J
	Unknown	15.51	282	ug/kg		J
	Unknown	16.14	226	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562002

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 2.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8314  
Batch ID: 956677  
Run Date: 03/05/2010 18:03  
Prep Date: 02/23/2010 21:09  
Data File: s3c0524.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.3	342
108-95-2	Phenol	U	342	ug/kg	68.3	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.3	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.3	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.3	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.3	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.4	342
129-00-0	Pyrene	U	34.2	ug/kg	10.2	34.2
110-86-1	Pyridine	U	342	ug/kg	68.3	342 UJ,SV7c
62-53-3	Aniline	U	342	ug/kg	102	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.3	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.3	342
100-51-6	Benzyl alcohol	U	342	ug/kg	102	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.3	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.3	342
95-48-7	o-Cresol	U	342	ug/kg	68.3	342
65794-96-9	m,p-Cresols	U	342	ug/kg	102	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.3	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.3	342
78-59-1	Isophorone	U	342	ug/kg	68.3	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.3	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.3	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.3	342
65-85-0	Benzoic acid	U	683	ug/kg	171	683
91-20-3	Naphthalene	U	34.2	ug/kg	10.2	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.3	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.3	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.83	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.3	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.3	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.3	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.3	342
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	342	ug/kg	68.3	342

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950  
Lab Sample ID: 247562002

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-SMS

Matrix: R  
%Moisture: 2.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8314  
Batch ID: 956677  
Run Date: 03/05/2010 18:03  
Prep Date: 02/23/2010 21:09  
Data File: s3c0524.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	342	ug/kg	68.3	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.2	34.2
51-28-5	2,4-Dinitrophenol	U	683	ug/kg	130	683 UJ,SV7c
132-64-9	Dibenzofuran	U	342	ug/kg	68.3	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.3	342
86-73-7	Fluorene	U	34.2	ug/kg	10.2	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.3	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.3	342 UJ,SV7c
100-01-6	4-Nitroaniline	U	342	ug/kg	102	342
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.3	342
122-66-7	Azobenzene	U	342	ug/kg	68.3	342
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.3	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.3	342
85-01-8	Phenanthrene	U	34.2	ug/kg	10.2	34.2
120-12-7	Anthracene	U	34.2	ug/kg	6.83	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.3	342
206-44-0	Fluoranthene	U	34.2	ug/kg	10.2	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.3	342
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.2	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	102	342
218-01-9	Chrysene	U	34.2	ug/kg	10.2	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.3	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.3	342
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.2	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.2	34.2
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.2	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.2	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.2	34.2
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.2	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.3	342

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.74	430	ug/kg		JA
7785-70-8	IR-.alpha.-Pinene	3.28	172	ug/kg	98	NJ

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562002	Date Received: 02/20/2010 08:55	%Moisture: 2.7
Client ID: RE15-10-8314	Client: LANL010	Project: LANL01004
Batch ID: 956677	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/05/2010 18:03	Inst: MSD3.I	Dilution: 1
Prep Date: 02/23/2010 21:09	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3c0524.d	Aliquot: 30.1 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	7.98	258	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	324	ug/kg	93	NJ
	Unknown	15.51	293	ug/kg		J
	Unknown	16.13	243	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Allquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8315  
Batch ID: 956677  
Run Date: 03/05/2010 19:12  
Prep Date: 02/23/2010 21:09  
Data File: s3c0527.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	343	ug/kg	68.5	343	
108-95-2	Phenol	U	343	ug/kg	68.5	343	
95-57-8	2-Chlorophenol	U	343	ug/kg	68.5	343	
106-46-7	1,4-Dichlorobenzene	U	343	ug/kg	68.5	343	
621-64-7	N-Nitrosodipropylamine	U	343	ug/kg	68.5	343	
59-50-7	4-Chloro-3-methylphenol	U	343	ug/kg	68.5	343	
83-32-9	Acenaphthene	U	34.3	ug/kg	11.3	34.3	
121-14-2	2,4-Dinitrotoluene	U	343	ug/kg	34.3	343	
100-02-7	4-Nitrophenol	U	343	ug/kg	113	343	
87-86-5	Pentachlorophenol	U	343	ug/kg	85.7	343	
129-00-0	Pyrene	J	31.5	ug/kg	10.3	34.3	
110-86-1	Pyridine	U	343	ug/kg	68.5	343	UJ,SV7c
62-53-3	Aniline	U	343	ug/kg	103	343	
111-44-4	bis(2-Chloroethyl) ether	U	343	ug/kg	68.5	343	
541-73-1	1,3-Dichlorobenzene	U	343	ug/kg	68.5	343	
100-51-6	Benzyl alcohol	U	343	ug/kg	103	343	
95-50-1	1,2-Dichlorobenzene	U	343	ug/kg	68.5	343	
108-60-1	bis(2-Chloroisopropyl)ether	U	343	ug/kg	68.5	343	
95-48-7	o-Cresol	U	343	ug/kg	68.5	343	
65794-96-9	m,p-Cresols	U	343	ug/kg	103	343	
67-72-1	Hexachloroethane	U	343	ug/kg	68.5	343	
98-95-3	Nitrobenzene	U	343	ug/kg	68.5	343	
78-59-1	Isophorone	U	343	ug/kg	68.5	343	
88-75-5	2-Nitrophenol	U	343	ug/kg	68.5	343	
105-67-9	2,4-Dimethylphenol	U	343	ug/kg	120	343	
111-91-1	bis(2-Chloroethoxy)methane	U	343	ug/kg	68.5	343	
120-83-2	2,4-Dichlorophenol	U	343	ug/kg	68.5	343	
65-85-0	Benzoic acid	U	685	ug/kg	171	685	
91-20-3	Naphthalene	U	34.3	ug/kg	10.3	34.3	
106-47-8	4-Chloroaniline	U	343	ug/kg	68.5	343	
87-68-3	Hexachlorobutadiene	U	343	ug/kg	68.5	343	
91-57-6	2-Methylnaphthalene	U	34.3	ug/kg	6.85	34.3	
77-47-4	Hexachlorocyclopentadiene	U	343	ug/kg	68.5	343	
88-06-2	2,4,6-Trichlorophenol	U	343	ug/kg	68.5	343	
95-95-4	2,4,5-Trichlorophenol	U	343	ug/kg	68.5	343	
91-58-7	2-Chloronaphthalene	U	34.3	ug/kg	11.3	34.3	
88-74-4	2-Nitroaniline	U	343	ug/kg	68.5	343	
99-09-2	<i>o</i> -Nitroaniline						
	3-Nitroaniline	U	343	ug/kg	68.5	343	

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

SDG Number: 10-1950  
Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Allquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.4  
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
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	343	ug/kg	68.5	343
606-20-2	2,6-Dinitrotoluene	U	343	ug/kg	34.3	343
208-96-8	Acenaphthylene	U	34.3	ug/kg	10.3	34.3
51-28-5	2,4-Dinitrophenol	U	685	ug/kg	130	685 UJ,SV7c
132-64-9	Dibenzofuran	U	343	ug/kg	68.5	343
84-66-2	Diethylphthalate	U	343	ug/kg	68.5	343
86-73-7	Fluorene	U	34.3	ug/kg	10.3	34.3
7005-72-3	4-Chlorophenylphenylether	U	343	ug/kg	68.5	343
534-52-1	2-Methyl-4,6-dinitrophenol	U	343	ug/kg	68.5	343 UJ,SV7c
100-01-6	4-Nitroaniline	U	343	ug/kg	103	343
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	343	ug/kg	68.5	343
122-66-7	Azobenzene	U	343	ug/kg	68.5	343
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	343	ug/kg	68.5	343
118-74-1	Hexachlorobenzene	U	343	ug/kg	68.5	343
85-01-8	Phenanthrene	U	34.3	ug/kg	10.3	34.3
120-12-7	Anthracene	U	34.3	ug/kg	6.85	34.3
84-74-2	Di-n-butylphthalate	U	343	ug/kg	68.5	343
206-44-0	Fluoranthene		39.0	ug/kg	10.3	34.3
85-68-7	Butylbenzylphthalate	U	343	ug/kg	68.5	343
56-55-3	Benzo(a)anthracene	U	34.3	ug/kg	10.3	34.3
91-94-1	3,3'-Dichlorobenzidine	U	343	ug/kg	103	343
218-01-9	Chrysene	U	34.3	ug/kg	10.3	34.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	343	ug/kg	68.5	343
117-84-0	Di-n-octylphthalate	U	343	ug/kg	68.5	343
205-99-2	Benzo(b)fluoranthene		42.1	ug/kg	10.3	34.3
207-08-9	Benzo(k)fluoranthene	U	34.3	ug/kg	10.3	34.3
50-32-8	Benzo(a)pyrene	J	20.2	ug/kg	10.3	34.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.3	ug/kg	10.3	34.3
53-70-3	Dibenzo(a,h)anthracene	U	34.3	ug/kg	10.3	34.3
191-24-2	Benzo(ghi)perylene	U	34.3	ug/kg	10.3	34.3
120-82-1	1,2,4-Trichlorobenzene	U	343	ug/kg	68.5	343

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.74	1190	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.28	5320	ug/kg	97	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 3 of 3

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562005	Date Received: 02/20/2010 08:55	%Moisture: 3.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8315	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 19:12	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.19 g	Final Volume: 1 mL
Data File: s3c0527.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
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	461	ug/kg	91	NJ
1120-21-4	Undecane	4.04	396	ug/kg	87	NJ
	Unknown	4.19	202	ug/kg		J
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	4.64	416	ug/kg	98	NJ
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	4.93	364	ug/kg	98	NJ
	Unknown	7.24	240	ug/kg		J
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	7.37	285	ug/kg	92	NJ
	Unknown	7.47	304	ug/kg		J
	Unknown	7.59	190	ug/kg		J
	Unknown	7.63	140	ug/kg		J
	Unknown	7.8	208	ug/kg		J
	Unknown	7.86	269	ug/kg		J
	Unknown	7.91	159	ug/kg		J
	Unknown	7.97	261	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	515	ug/kg	99	NJ
	Unknown	8.05	282	ug/kg		J
	Unknown	8.3	2640	ug/kg		J
	Unknown	8.41	535	ug/kg		J
	Unknown	8.56	1160	ug/kg		J
	Unknown	8.85	180	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.98	162	ug/kg	90	NJ
	Unknown	9.14	725	ug/kg		J
	Unknown	9.27	484	ug/kg		J
	Unknown	9.45	582	ug/kg		J
	Unknown	15.52	624	ug/kg		J



## DATA VALIDATION COVER SHEET

5122-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1950 VALIDATION DATE: 04/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Ellen McEntee 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         |

☐ 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):


1. The ICAL RF associated with sample RE15-10-8312 was  $<0.05$  but  $\geq 0.01$  for p-nitrotoluene. The associated result was an ND and, thus, was qualified UJ,HE7b.
2. The CCV %Ds associated with sample -8312 were  $>20\%$  with positive bias for RDX and HMX, and the ICV/CCV %Ds associated with all samples except -8312 were  $>20\%$  with positive bias for RDX. The associated sample results were NDs and, thus, were not qualified.
3. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate retention time criteria could not be evaluated. No sample data were qualified as a result.
4. The LCS %R was  $<$  the laboratory LAL but  $\geq 10\%$  for tetryl. The associated sample results were NDs and, thus, were qualified UJ,HE12a.
5. The MS and MSD %Rs were  $<$  the laboratory LAL but  $\geq 10\%$  for tetryl. The associated sample results were NDs and, thus, were qualified UJ,HE12e. It should be noted that the MS/MSD was performed on a LANL sample from another RN. No sample data was qualified as a result.

Reviewed by: ETM


Level: 1

Date: 4/8/10


VALIDATOR'S SIGNATURE: <u><i>John McEntee</i></u>		DATE: <u>04/08/10</u>
Form 5122-1, Revision 0.0	LOS ALAMOS Environmental Restoration Project	

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

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

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

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

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

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

**LC/MS/MS HIGH EXPLOSIVE ANALYTICAL DATA VALIDATION CHECKLIST****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: RE15-10-8314

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319051a

Date Analyzed: 20-MAR-10 17:29

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE15-10-8314

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100033.wiff

Date Analyzed: 10-MAR-10 23:53

Units: ug/kg

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

\*Concentration =

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: RE15-10-8313

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562003

Sample Amount 2

Molsture: 3.6

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319052a

Date Analyzed: 20-MAR-10 17:58

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8313

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562003

Sample Amount 2

Moisture: 3.6

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100034.wiff

Date Analyzed: 11-MAR-10 00:09

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8312

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562004

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323013a

Date Analyzed: 23-MAR-10 15:02

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene UJ,HE7b	500	U

\*Concentration =

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: RE15-10-8312

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562004

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100035.wiff

Date Analyzed: 11-MAR-10 00:25

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8315

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562005

Sample Amount 2

Moisture: 3.4

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319054a

Date Analyzed: 20-MAR-10 18:57

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE15-10-8315

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562005

Sample Amount 2

Moisture: 3.4

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100036.wiff

Date Analyzed: 11-MAR-10 00:41

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: RE15-10-8311

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562006

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319055a

Date Analyzed: 20-MAR-10 19:27

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE15-10-8311

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562006

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100040.wiff

Date Analyzed: 11-MAR-10 01:43

Units: ug/kg

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

\*Concentration =

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



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8310

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562007

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319056a

Date Analyzed: 20-MAR-10 19:56

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	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: RE15-10-8310

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562007

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100041.wiff

Date Analyzed: 11-MAR-10 01:59

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	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8303

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562008

Sample Amount 2

Moisture: 3.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319057a

Date Analyzed: 20-MAR-10 20:26

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE15-10-8303

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562008

Sample Amount 2

Moisture: 3.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100042.wiff

Date Analyzed: 11-MAR-10 02:15

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: RE15-10-8302

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562009

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319058a

Date Analyzed: 20-MAR-10 20:55

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE12a	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: RE15-10-8302

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562009

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100043.wiff

Date Analyzed: 11-MAR-10 02:31

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

## DATA VALIDATION COVER SHEET

5116-1

## Data Validation Cover Sheet

Records Use only



## Section I.

REQUEST NUMBER: 10-1950 VALIDATION DATE: 04/08/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Ellen McEntee ORGANIZATION: Analytical Quality Associates

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

## Section II. Completeness Check

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

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

- The MS/MSD RPD for aroclor 1260 was above the laboratory acceptance limit. Since MS/MSD analyses are not required, no sample results were qualified. It should be noted that the MS/MSD was performed on a LANL sample from another RN. No sample data was qualified as a result.

Reviewed by: ETM

Level: 1

Date: 4/8/10

VALIDATOR'S SIGNATURE: Ellen McEntee DATE: 04/08/10

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

5116-2


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

Records Use only



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



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

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

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


5116-2

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

Records Use only



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

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

Yes   No   N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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: 10-1950  
Lab Sample ID: 247562009Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 5.2  
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	3.51	ug/kg	1.17	3.51	1
11104-28-2	Aroclor-1221	U	3.51	ug/kg	1.17	3.51	1
11141-16-5	Aroclor-1232	U	3.51	ug/kg	1.17	3.51	1
53469-21-9	Aroclor-1242		27.2	ug/kg	1.17	3.51	2
12672-29-6	Aroclor-1248	U	3.51	ug/kg	1.17	3.51	1
11097-69-1	Aroclor-1254		31.2	ug/kg	1.17	3.51	1
11096-82-5	Aroclor-1260	P	13.1	ug/kg	1.17	3.51	1

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1950  
Lab Sample ID: 247562008Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.07 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 3.2  
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	3.43	ug/kg	1.14	3.43	1
11104-28-2	Aroclor-1221	U	3.43	ug/kg	1.14	3.43	1
11141-16-5	Aroclor-1232	U	3.43	ug/kg	1.14	3.43	1
53469-21-9	Aroclor-1242	U	3.43	ug/kg	1.14	3.43	1
12672-29-6	Aroclor-1248	U	3.43	ug/kg	1.14	3.43	1
11097-69-1	Aroclor-1254	U	3.43	ug/kg	1.14	3.43	1
11096-82-5	Aroclor-1260	U	3.43	ug/kg	1.14	3.43	1

Friday, February 19, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1950

LOS ALAMOS

REQUEST NUMBER: 10-1950

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/21/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2475621

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8334	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8314	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8314	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8313	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8313	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8312	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8312	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8315	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8315	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8311	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8311	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8310	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8310	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8303	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8303	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8302	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8302	1	SEPTUM AMBER GLASS	8260B	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

Friday, February 19, 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: 10-1950  
Per Agreement Number: 128310011  
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples  
according to the schedule indicated:

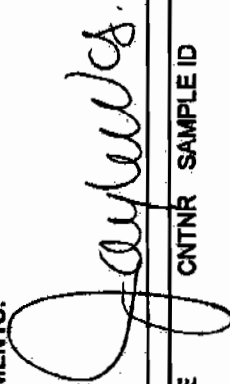
SHIP DATE: 2/19/2010  
TURNAROUND/REPORT DUE: 3/21/2010  
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
	SW-846:8260B	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	

Friday, February 19, 2010

REQUEST NUMBER: 10-1950

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-8315	R	2/15/2010	
		1	RE15-10-8334	S	2/15/2010	
	SW-846:8270C	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	
		1	RE15-10-8315	R	2/15/2010	
	SW-846:8321A_MOD	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	
		1	RE15-10-8315	R	2/15/2010	

Final Page of REQUEST NUMBER 10-1950





February 24, 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: 247562  
SDG: 10-1950

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 20, 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: 10-1950  
Enclosures

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

**LANL ER Project**

**Work Order #: 247562**

**SDG: 10-1950**

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# Case Narrative

**Case Narrative for  
Los Alamos National Laboratory (72733-001-09)  
LANL ER Project  
Workorder #: 247562  
SDG # : 10-1950**

**February 24, 2010**

**Laboratory Identification:**

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

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on February 20, 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:

<b><u>Laboratory ID</u></b>	<b><u>Client ID</u></b>
247562001	RE15-10-8334
247562002	RE15-10-8314
247562003	RE15-10-8313
247562004	RE15-10-8312
247562005	RE15-10-8315
247562006	RE15-10-8311
247562007	RE15-10-8310
247562008	RE15-10-8303
247562009	RE15-10-8302

**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 24 February 2010**

<b>State</b>	<b>Certification</b>
Arizona	AZ0668
Arkansas	88-0651
CLIA	42D0904046
California – NELAP	01151CA
Colorado	GEL
Connecticut	PH-0169
Dept. of Navy	NFESC 413
EPA Region 5	WG-15J
Florida – NELAP	E87156
Georgia	E87156 (FL/NELAP)
Georgia DW	967
Hawaii	N/A
ISO 17025	2567.01
Idaho	SC00012
Illinois – NELAP	200029
Indiana	C-SC-01
Kansas – NELAP	E-10332
Kentucky	90129
Louisiana – NELAP	03046
Maryland	270
Massachusetts	M-SC012
Nevada	SC00012
New Jersey – NELAP	SC002
New Mexico	FL NELAP E87156
New York – NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania – NELAP	68-00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas – NELAP	T104704235-07B-TX
U.S. Dept. of Agriculture	S-52597
Utah – NELAP	GEL
Vermont	VT87156
Virginia	00151
Washington	C1641

# **Chain of Custody and Supporting Documentation**



Friday, February 19, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1950

LOS ALAMOS

REQUEST NUMBER: 10-1950

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/21/2010

General Engineering Laboratories, Inc.,  
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2475627.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8334	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-8314	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8314	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8313	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8313	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8312	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8312	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8315	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8315	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8311	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8311	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8310	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8310	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-8303	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8303	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-8302	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-8302	1	SEPTUM AMBER GLASS	8260B	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

2/19/10 1400

Printed Name

Signature

Greg Tyler 2-20-10 0855

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date Time

Remarks:

Printed Name

Signature

Friday, February 19, 2010

**LOS ALAMOS**  
NATIONAL LABORATORY

ATTN: Valerie Davis

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

Please analyse the enclosed samples  
according to the schedule indicated:

**SHIP DATE: 2/19/2010**

**TURNAROUND/REPORT DUE: 3/21/2010**

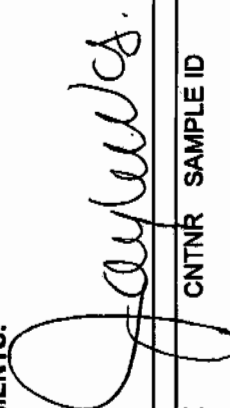
**TURNAROUND REQ'D: 30 Days**

**RAD SCREENING: Yes, Below Background**

**LAB REQUEST COMMENTS:**

LANL ER SMO CONTACT:

Signature:



These Samples are on:  
LANL Request Number: 10-1950  
Per Agreement Number: 126310011  
Project Cost Code: MR3A05529E00

Page 1 of 2  
REQUEST NUMBER: 10-1950

PRIORITY	METHOD CODE	CNTR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
	SW-846:8260B	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	

Friday, February 19, 2010

Page 2 of 2

REQUEST NUMBER: 10-1950

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-8315	R	2/15/2010	
		1	RE15-10-8334	S	2/15/2010	
	SW-846:8270C	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	
		1	RE15-10-8315	R	2/15/2010	
	SW-846:8321A_MOD	1	RE15-10-8302	R	2/15/2010	
		1	RE15-10-8303	R	2/15/2010	
		1	RE15-10-8310	R	2/15/2010	
		1	RE15-10-8311	R	2/15/2010	
		1	RE15-10-8312	R	2/15/2010	
		1	RE15-10-8313	R	2/15/2010	
		1	RE15-10-8314	R	2/15/2010	
		1	RE15-10-8315	R	2/15/2010	

Final Page of REQUEST NUMBER 10-1950



Laboratories LLC

## SAMPLE RECEIPT &amp; REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-1950	
Received By: Greg Tyler		Date Received: 2/20/10	
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 2-6C    12C
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken    damaged container    leaking container    other (describe)
5 Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?		X		Sample ID's affected: <b>No time on Chain of Custody.</b>
11 Number of containers received match number indicated on COC?	X			Sample ID's affected:
12 COC form is properly signed in relinquished/received sections?	X			

## Comments:

## Fed Ex Tracking Numbers:

7209 7850 1448 2C    7209 7850 1404 12C  
 7209 7850 1426 2C  
 7209 7850 1437 3C  
 7209 7850 1460 4C  
 7209 7850 1470 6C  
 7209 7850 1459 6C  
 7209 7850 1415 5C  
 7209 7850 1390 12C

ORIGIN ID: SAFA (005) 005-0069  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TRSS BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 10FEB10  
ACTNGT: 85.0 LB MON  
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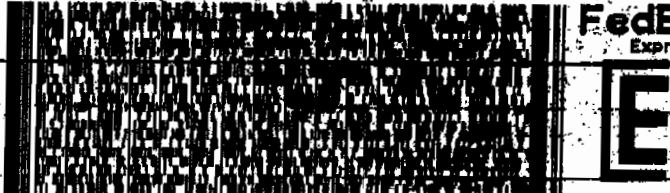
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TRSS BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

ACTNGT: 85.0 LB MON  
CAD: 0014176/CAFE2450  
BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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

0014176/CAFE2450



2 of 2  
MPN 7209 7850 1448  
Matr# 7209 7850 1437  
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CHS

X0 CHSA



ORIGIN ID: SAFA (005) 005-0069  
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TRSS BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 10FEB10  
ACTNGT: 85.0 LB MON  
CAD: 0014176/CAFE2450  
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TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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

0014176/CAFE2450



1 of 2  
MPN 7209 7850 1437  
Matr# 7209 7850 1437  
### SATURDAY ###  
PRIORITY OVERNIGHT  
29407  
SC-US  
CHS

X0 CHSA

Page 9 of 1259

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

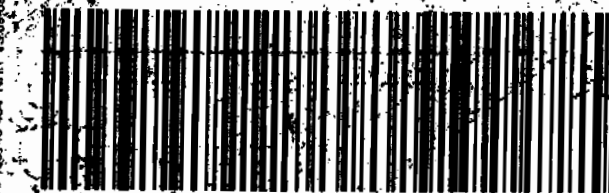
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CHS

X0 CHSA



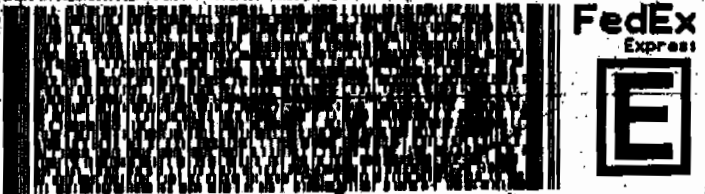
JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TRSS BLDG 1237 DPU 03  
LOS ALAMOS, NM 87545  
UNITED STATES US

ACTNGT: 85.0 LB MON  
CAD: 0014176/CAFE2450  
BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

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

0014176/CAFE2450



2 of 2  
MPN 7209 7850 1460  
Matr# 7209 7850 1459  
### SATURDAY ###  
PRIORITY OVERNIGHT  
29407  
SC-US  
CHS

X0 CHSA



LOS ALAMOS NM 87545  
UNITED STATES US

SHIP DATE: 19FEB10  
ACTNGT: 52.0 LB MAN  
CAD: 0014176/CAFE2450

**BILL SENDER**

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-9171

REF: 6B010AMR3A0532VA00

**FedEx****E**

TRK# 7209 7850 1470  
0201

### SATURDAY ### A1  
PRIORITY OVERNIGHT

**XO CHSA**

29407  
SC-US  
CHS

JOYLENE VALDEZ  
LOS ALAMOS NATL LAB  
TA00 BLDG 1237 DPU 03

LOS ALAMOS NM 87545  
UNITED STATES US

SHIP DATE: 198210  
ACTWGT: 59.0 LB MAN  
CAD: 0814176/CAFE2450

**BILL: SENDER**

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(943), 656-8171

REF: 68010AMR3A0532VA00

**FedEx**

**E**

TRK# 7209 7850 1470  
0201

### SATURDAY ### A1  
PRIORITY OVERNIGHT

**XO CHSA**

29407  
SC-US  
CHS

1 of 2  
7209 7850 1459

### SATURDAY ### A1  
PRIORITY OVERNIGHT

**XO CHSA**

29407  
SC-US  
CHS

JOYCE VALDEZ (505) 565-9968  
LOS ALAMOS NATL LAB  
TRUSS BLDG 100-200 RT

LOS ALAMOS, NM 87545  
UNITED STATES US

VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AWR3A05528E00

SHIP DATE: 10 FEB 10  
ACTWGT: 59.0 LB MAN  
CAD: 0014176/CAFE2450

**BILLY SINGER**

**FedEx**  
EXPRESS  


1 of 2  
TRK# 7209 7850 1415  
0204

MM MASTER MM

**X0 CHSA**

### SATURDAY ### A1  
PRIORITY OVERNIGHT

29407  
SC-US  
CHS

VALERIE DAVIS (505) 655-0000  
JOYLINE VALDEZ  
LOS ALAMOS NATL LAB  
TAGS BLDG 1207 DPU 03

LOS ALAMOS, NM 87545  
UNITED STATES US

SHIP DATE: 10 FEB 10  
ACTNGT: 58.0 LB MAN  
CAD: 0014178/CAPE2450

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

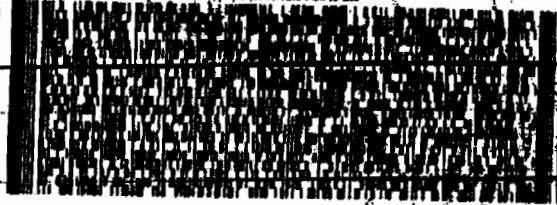
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(505) 556-8171

REF: 68810AMR3A05529E00

12°

UNITED STATES MAIL



FedEx  
Express



100000011002223

2 of 3

### SATURDAY ### A1

MPSH  
0263

7209 7850 1390

PRIORITY OVERNIGHT

Matr# 7209 7850 1388 0261

X0 CHSA

29407  
SC-US  
CHS

100000011002223



LOS ALAMOS, NM 87545  
UNITED STATES US

BILL SENDER

TO VALERIE DAVIS  
GENERAL ENGINEERING LAB  
2040 SAVAGE RD

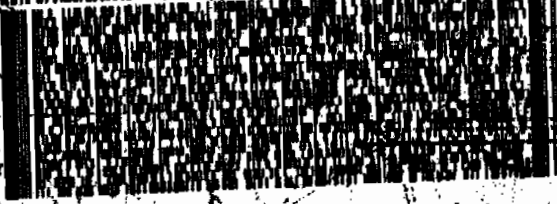
CHARLESTON SC 29407

(505) 556-8171

REF: 68810AMR3A05529E00

12°

UNITED STATES MAIL



FedEx  
Express



100000011002223

3 of 3

### SATURDAY ### A1

MPSH  
0263

7209 7850 1404

PRIORITY OVERNIGHT

Matr# 7209 7850 1388 0261

X0 CHSA

29407  
SC-US  
CHS

100000011002223



# **Data Review Qualifier Flag Definition Sheet**



## Data Review Qualifier Definitions

Qualifier    Explanation

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

# **GC/MS Volatile Analysis**

**GC/MS Volatile Organics  
Los Alamos National Laboratory (LANL)  
SDG 10-1950**

**Method/Analysis Information**

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer  
Analytical Method: SW846 8260B  
Prep Method: SW846 5030  
Analytical Batch Number: 957839  
Prep Batch Number: 957837

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
247562001	RE15-10-8334
247562002	RE15-10-8314
247562003	RE15-10-8313
247562004	RE15-10-8312
247562005	RE15-10-8315
247562006	RE15-10-8311
247562007	RE15-10-8310
247562008	RE15-10-8303
247562009	RE15-10-8302
1202053898	Method Blank (MB)
1202053901	Laboratory Control Sample (LCS)
1202053902	Laboratory Control Sample (LCS)
1202053899	247562002(RE15-10-8314) Post Spike (PS)
1202053900	247562002(RE15-10-8314) Post Spike Duplicate (PSD)

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

Samples 247562 002, 003, 004, 005, 006, 007, 008 and 009 in this SDG were analyzed on an "dry weight" basis. Sample 247562 001 in this SDG were analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

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

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 19.1.2.

**Calibration Information**

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

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have

surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

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

#### **Initial Calibration**

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

#### **Continuing Calibration Verification Requirements**

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

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

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

The MB analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

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

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

The LCS spike recoveries met the acceptance limits.

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

Sample 247562002 (RE15-10-8314) was designated for spike analysis in this SDG.

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

The spike recoveries were not all within the acceptance limits. The spike duplicate recovered in a similar manner. The results are reported. See DER 803957.

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

The spike duplicate recoveries were not all within the acceptance limits. The spike recovered in a similar manner. The results are reported. See DER 803957.

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

The RPD between the matrix spike pair were not all within the acceptance limits. The results are reported. See DER 803957.

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

The internal standard responses in all client and quality control samples met the required acceptance criteria.

#### **Technical Information**

##### **Holding Time Specifications**

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

sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

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

All samples met the sample preservation and integrity requirements.

#### **Sample Dilutions**

The samples in this SDG did not require dilutions.

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

Re-analyses were not required for samples in this SDG.

#### **Miscellaneous Information**

##### **Electronic Package Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

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

DER # 803957 was generated for this SDG.

##### **Manual Integrations**

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

##### **TIC Comment**

Tentatively identified compounds (TIC) were required for this SDG.

##### **Additional Comments**

Additional comments were not required for this SDG.

##### **Residual Chlorine**

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

##### **System Configuration**

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

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>	<b>P &amp; T Trap</b>
VOA7.I	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5973N	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

##### **Certification Statement**

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

## **GEL LABORATORIES LLC**

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: 10-1950 GEL Work Order: 247562

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

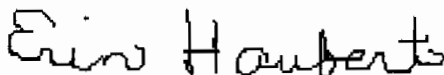
- \* A quality control analyte recovery is outside of specified acceptance criteria
- \*\* Analyte is a surrogate compound
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA,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

**Review/Validation**

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

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

**Signature:**



**Name: Erin Haubert**

**Date: 18 MAR 2010**

**Title: Data Validator**

## Roadmap for LANL 10-1950 VOA

This roadmap was analyzed by ale01592 on 03-15-2010, 07:29.

Sample

exclude	manual	datafile	smid	clientid	injdate	injtime	sublist	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a535.d	247562001	RE15-10-8334	27-FEB-2010	05:23	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a536.d	247562002	RE15-10-8314	27-FEB-2010	05:58	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a537.d	247562003	RE15-10-8313	27-FEB-2010	06:33	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a538.d	247562004	RE15-10-8312	27-FEB-2010	07:08	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a539.d	247562005	RE15-10-8315	27-FEB-2010	07:43	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a540.d	247562006	RE15-10-8311	27-FEB-2010	08:17	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a541.d	247562007	RE15-10-8310	27-FEB-2010	08:53	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a542.d	247562008	RE15-10-8303	27-FEB-2010	09:27	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a543.d	247562009	RE15-10-8302	27-FEB-2010	10:02	10-1950.sub	1	957839	<input type="text"/>

QC Sample

exclude	manual	datafile	smid	clientid	sampletype	injdate	injtime	sublist	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a525LL.d	1202053901	LCS	lcs	26-FEB-2010	23:32	all.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a526LL.d	1202053902	SLCS	lcs	27-FEB-2010	00:07	all.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a527LL.d	1202053898	BLANK	mb	27-FEB-2010	00:42	all.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a544.d	1202053899	RE15-10-8314MS	ms	27-FEB-2010	10:36	10-1950.sub	1	957839	<input type="text"/>
<input type="checkbox"/>	N	/chem/VOA7.i/022610v7/7a545.d	1202053900	RE15-10-8314MSD	msd	27-FEB-2010	11:10	10-1950.sub	1	957839	<input type="text"/>

# Sample Data Summary



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562009	Date Received: 02/20/2010 08:55	%Moisture: 5.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8302	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 10:02	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a543.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.359	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.316	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.316	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.316	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.316	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.316	1.05
67-64-1	Acetone		131	ug/kg	1.75	5.27
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
74-88-4	Iodomethane	U	5.27	ug/kg	1.69	5.27
75-09-2	Methylene chloride	J	2.40	ug/kg	2.11	5.27
75-15-0	Carbon disulfide	U	5.27	ug/kg	1.32	5.27
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.316	1.05
78-93-3	2-Butanone	J	2.40	ug/kg	1.58	5.27
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.316	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.348	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.316	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.316	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.316	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.316	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.316	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.348	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.316	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.316	1.05
108-10-1	4-Methyl-2-pentanone	U	5.27	ug/kg	1.32	5.27
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
108-88-3	Toluene		10.2	ug/kg	0.316	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.316	1.05
591-78-6	2-Hexanone	U	5.27	ug/kg	1.58	5.27
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.316	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.316	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.316	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.316	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.316	1.05

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562009	Date Received: 02/20/2010 08:55	%Moisture: 5.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8302	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 10:02	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a543.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.316	1.05
179601-23-1	m,p-Xylenes	J	0.702	ug/kg	0.316	2.11
95-47-6	o-Xylene	J	0.574	ug/kg	0.316	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.316	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.316	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.316	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.316	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.316	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.316	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.316	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.316	1.05
95-63-6	1,2,4-Trimethylbenzene	J	0.538	ug/kg	0.316	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.316	1.05
99-87-6	4-Isopropyltoluene		3.16	ug/kg	0.316	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.316	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.316	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.27	ug/kg	1.69	5.27
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	19.65	48.7	ug/kg		J
	Unknown Hydrocarbon	19.97	5.45	ug/kg		J
	Unknown Hydrocarbon	20.24	6.23	ug/kg		J
	Unknown Hydrocarbon	20.62	58.9	ug/kg		J

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562008	Date Received: 02/20/2010 08:55	%Moisture: 3.2
Client ID: RE15-10-8303	Client: LANL010	Project: LANL01004
Batch ID: 957839	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 02/27/2010 09:27	Inst: VOA7.I	Dilution: 1
Prep Date: 02/26/2010 14:57	Analyst: AXO1	Purge Vol: 5 mL
Data File: 7a542.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.351	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone		8.89	ug/kg	1.71	5.16
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.16	ug/kg	1.65	5.16
75-09-2	Methylene chloride	U	5.16	ug/kg	2.07	5.16
75-15-0	Carbon disulfide	U	5.16	ug/kg	1.29	5.16
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.16	ug/kg	1.55	5.16
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.16	ug/kg	1.29	5.16
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	J	0.504	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.16	ug/kg	1.55	5.16
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03

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

SDG Number: 10-1950  
 Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	J	0.314	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.16	ug/kg	1.65	5.16
630-20-6	Trichlorotrifluoroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	19.65	9.19	ug/kg		J

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562007	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.7
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8310	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 957839	<b>Inst:</b> VOA7.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/27/2010 08:53	<b>Analyst:</b> AXO1	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 02/26/2010 14:55	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 7a541.d	<b>Column:</b> DB-624	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone		22.6	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	J	0.704	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1950  
Lab Sample ID: 247562007

Client ID: RE15-10-8310  
Batch ID: 957839  
Run Date: 02/27/2010 08:53  
Prep Date: 02/26/2010 14:55  
Data File: 7a541.d

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA7.I  
Analyst: AXO1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene		1.09	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
630-20-6	Trichlorotrifluoroethane					
	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	19.65	22.8	ug/kg		J
	Unknown Hydrocarbon	20.62	14.4	ug/kg		J
	Unknown Siloxane	21.55	5.73	ug/kg		J

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1950  
Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA7.I  
Analyst: AXO1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL  
Level: LOW

Client ID: RE15-10-8311  
Batch ID: 957839  
Run Date: 02/27/2010 08:17  
Prep Date: 02/26/2010 14:53  
Data File: 7a540.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	J	4.28	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	J	0.321	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

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

SDG Number: 10-1950  
 Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AX01  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	14.1	ug/kg		J
	Unknown Siloxane	21.55	5.65	ug/kg		J



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

SDG Number: 10-1950  
 Lab Sample ID: 247562004

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.358	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.316	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.316	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.316	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.316	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.316	1.05
67-64-1	Acetone		36.0	ug/kg	1.75	5.27
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
74-88-4	Iodomethane	U	5.27	ug/kg	1.69	5.27
75-09-2	Methylene chloride	U	5.27	ug/kg	2.11	5.27
75-15-0	Carbon disulfide	U	5.27	ug/kg	1.32	5.27
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.316	1.05
78-93-3	2-Butanone	U	5.27	ug/kg	1.58	5.27
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.316	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.348	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.316	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.316	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.316	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.316	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.316	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.348	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.316	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.316	1.05
108-10-1	4-Methyl-2-pentanone	U	5.27	ug/kg	1.32	5.27
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
108-88-3	Toluene		4.45	ug/kg	0.316	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.316	1.05
591-78-6	2-Hexanone	U	5.27	ug/kg	1.58	5.27
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.316	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.316	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.316	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.316	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.316	1.05

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

SDG Number: 10-1950  
 Lab Sample ID: 247562004

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8312  
 Batch ID: 957839  
 Run Date: 02/27/2010 07:08  
 Prep Date: 02/26/2010 14:49  
 Data File: 7a538.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.316	1.05
179601-23-1	m,p-Xylenes	J	0.470	ug/kg	0.316	2.11
95-47-6	o-Xylene	J	0.349	ug/kg	0.316	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.316	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.316	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.316	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.316	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.316	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.316	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.316	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.316	1.05
95-63-6	1,2,4-Trimethylbenzene	J	0.651	ug/kg	0.316	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.316	1.05
99-87-6	4-Isopropyltoluene		6.10	ug/kg	0.316	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.316	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.316	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.27	ug/kg	1.69	5.27
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.44	12.1	ug/kg		J
	Unknown Hydrocarbon	19.65	112	ug/kg		J
	Unknown Hydrocarbon	19.96	10.5	ug/kg		J
	Unknown Hydrocarbon	20.24	12.8	ug/kg		J
	Unknown Hydrocarbon	20.33	9.12	ug/kg		J
	Unknown Hydrocarbon	20.62	144	ug/kg		J

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562003	Date Received: 02/20/2010 08:55	%Moisture: 3.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8313	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 06:33	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:47	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a537.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone		22.1	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.07	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene		2.76	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

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

SDG Number: 10-1950  
 Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8313  
 Batch ID: 957839  
 Run Date: 02/27/2010 06:33  
 Prep Date: 02/26/2010 14:47  
 Data File: 7a537.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene		1.59	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.65	29.5	ug/kg		J
	Unknown Hydrocarbon	20.62	13	ug/kg		J

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

SDG Number: 10-1950  
 Lab Sample ID: 247562002

Client ID: RE15-10-8314  
 Batch ID: 957839  
 Run Date: 02/27/2010 05:58  
 Prep Date: 02/26/2010 14:41  
 Data File: 7a536.d

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 2.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.350	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	U	5.14	ug/kg	1.71	5.14
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.14	ug/kg	1.65	5.14
75-09-2	Methylene chloride	U	5.14	ug/kg	2.06	5.14
75-15-0	Carbon disulfide	U	5.14	ug/kg	1.29	5.14
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.14	ug/kg	1.54	5.14
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.14	ug/kg	1.29	5.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.14	ug/kg	1.54	5.14
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562002	Date Received: 02/20/2010 08:55	%Moisture: 2.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8314	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7I	Dilution: 1
Run Date: 02/27/2010 05:58	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:41	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a536.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.06	ug/kg	0.308	2.06
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	J	0.427	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.14	ug/kg	1.65	5.14
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	25.9	ug/kg		J
	Unknown Hydrocarbon	20.62	10.6	ug/kg		J

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562005	Date Received: 02/20/2010 08:55	%Moisture: 3.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8315	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 07:43	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:51	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a539.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.352	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone	U	5.17	ug/kg	1.72	5.17
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.17	ug/kg	1.66	5.17
75-09-2	Methylene chloride	U	5.17	ug/kg	2.07	5.17
75-15-0	Carbon disulfide	U	5.17	ug/kg	1.29	5.17
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.17	ug/kg	1.55	5.17
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.17	ug/kg	1.29	5.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	J	0.323	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.17	ug/kg	1.55	5.17
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03

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

SDG Number: 10-1950  
 Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8315  
 Batch ID: 957839  
 Run Date: 02/27/2010 07:43  
 Prep Date: 02/26/2010 14:51  
 Data File: 7a539.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.17	ug/kg	1.66	5.17
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	5.98	ug/kg		J



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

SDG Number: 10-1950  
 Lab Sample ID: 247562001

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

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

Client ID: RE15-10-8334  
 Batch ID: 957839  
 Run Date: 02/27/2010 05:23  
 Prep Date: 02/26/2010 14:39  
 Data File: 7a535.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	3.01	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: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: S
Lab Sample ID: 247562001	Date Received: 02/20/2010 08:55	
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8334	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 05:23	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:39	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a535.d	Column: DB-624	Level: LOW

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

# QC Summary

Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1950

Matrix Type: SOLID

CAP Column (1) : DB-624

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202053901	LCS for batch 957837	100	94	92
1202053902	LCS for batch 957837	100	99	91
1202053898	MB for batch 957837	107	98	95
247562001	RE15-10-8334	95	97	88
247562002	RE15-10-8314	99	99	85
247562003	RE15-10-8313	97	96	85
247562004	RE15-10-8312	96	96	84
247562005	RE15-10-8315	100	98	86
247562006	RE15-10-8311	100	96	89
247562007	RE15-10-8310	96	95	87
247562008	RE15-10-8303	98	95	84
247562009	RE15-10-8302	100	96	86
1202053899	RE15-10-8314PS	99	94	88
1202053900	RE15-10-8314PSD	102	96	92

## 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: 10-1950

Sample Type: Post Spike

Client ID: RE15-10-8314PS

Matrix: R

Lab Sample ID: 1202053899

%Moisture: 2.7

Instrument: VOA7.I

Analysis Date: 02/27/2010 10:36

Dilution: 1

Analyst: AXO1

Prep Batch ID: 957837

Purge Vol: 5 mL

Batch ID: 957839

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS Dichlorodifluoromethane	50.0	0.00	U 33.1	66	39-148
74-87-3	PS Chloromethane	50.0	0.00	U 33.3	67	42-131
75-01-4	PS Vinyl chloride	50.0	0.00	U 37.2	74	50-127
74-83-9	PS Bromomethane	50.0	0.00	U 32.6	65	26-135
75-00-3	PS Chloroethane	50.0	0.00	U 35.0	70	54-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 32.8	66	55-138
67-64-1	PS Acetone	250	0.00	U 132	53	20-144
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 34.2	68	55-128
74-88-4	PS Iodomethane	250	0.00	U 165	66	47-132
75-09-2	PS Methylene chloride	50.0	0.00	U 37.2	74	56-123
75-15-0	PS Carbon disulfide	250	0.00	U 171	69	53-133
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 33.0	66	57-119
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 36.4	73	62-125
78-93-3	PS 2-Butanone	250	0.00	U 125	50	30-150
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 34.8	70	60-124
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 28.4	57	56-129
67-66-3	PS Chloroform	50.0	0.00	U 38.7	77	62-120
74-97-5	PS Bromochloromethane	50.0	0.00	U 39.0	78	51-135
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 34.5	69	58-129
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 33.9	68	59-126
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 33.3	67	55-132
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 37.4	75	54-121

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 2 of 6

SDG Number: 10-1950

Sample Type: Post Spike

Client ID: RE15-10-8314PS

Matrix: R

Lab Sample ID: 1202053899

%Moisture: 2.7

Instrument: VOA7.I

Analysis Date: 02/27/2010 10:36

Dilution: 1

Analyst: AXO1

Prep Batch ID: 957837

Purge Vol: 5 mL

Batch ID: 957839

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	35.8	72	58-120
79-01-6	PS Trichloroethylene	50.0	0.00 U	37.0	74	54-130
78-87-5	PS 1,2-Dichloropropane	50.0	0.00 U	37.7	75	59-121
75-27-4	PS Bromodichloromethane	50.0	0.00 U	36.5	73	57-130
74-95-3	PS Dibromomethane	50.0	0.00 U	40.0	80	57-124
108-10-1	PS 4-Methyl-2-pentanone	250	0.00 U	104	42	40-137
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00 U	28.1	56	50-131
108-88-3	PS Toluene	50.0	0.00 U	34.8	70	54-119
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00 U	29.2	58	47-133
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00 U	36.7	73	60-130
591-78-6	PS 2-Hexanone	250	0.00 U	35.6	14 *	30-139
142-28-9	PS 1,3-Dichloropropane	50.0	0.00 U	36.2	72	59-125
127-18-4	PS Tetrachloroethylene	50.0	0.00 U	30.5	61	50-126
124-48-1	PS Dibromochloromethane	50.0	0.00 U	35.6	71	54-131
106-93-4	PS 1,2-Dibromoethane	50.0	0.00 U	36.8	74	55-127
108-90-7	PS Chlorobenzene	50.0	0.00 U	32.5	65	50-130
100-41-4	PS Ethylbenzene	50.0	0.00 U	30.1	60	50-121
179601-23-1	PS m,p-Xylenes	100	0.00 U	62.5	63	47-125
95-47-6	PS o-Xylene	50.0	0.00 U	33.4	67	51-127
100-42-5	PS Styrene	50.0	0.00 U	22.9	46	41-136
75-25-2	PS Bromoform	50.0	0.00 U	35.2	70	48-143
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00 U	31.8	64	52-129

Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1950

Sample Type: Post Spike

Client ID: RE15-10-8314PS

Matrix: R

Lab Sample ID: 1202053899

%Moisture: 2.7

Instrument: VOA7.I

Analysis Date: 02/27/2010 10:36

Dilution: 1

Analyst: AXO1

Prep Batch ID: 957837

Purge Vol: 5 mL

Batch ID: 957839

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	34.8	70	56-139
108-86-1	PS Bromobenzene	50.0	0.00 U	30.1	60	54-125
103-65-1	PS n-Propylbenzene	50.0	0.00 U	24.2	48	46-127
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	27.8	56	47-130
98-82-8	PS Isopropylbenzene	50.0	0.00 U	45.3	91	42-126
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	27.9	56	44-132
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	30.3	61	46-127
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	28.1	56	48-136
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00 U	27.9	56	42-132
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	24.4	49	47-130
99-87-6	PS 4-Isopropyltoluene	50.0	0.416 J	22.7	45	36-142
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	27.0	54	41-130
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	27.2	54	41-126
104-51-8	PS n-Butylbenzene	50.0	0.00 U	23.4	47	37-136
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	36.5	73	42-143
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	35.8	72	58-127
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	29.1	58	42-128

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 4 of 6

SDG Number: 10-1950

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8314PSD

Matrix: R

Lab Sample ID: 1202053900

%Moisture: 2.7

Instrument: VOA7.I

Analysis Date: 02/27/2010 11:10

Dilution: 1

Analyst: AXO1

Pren Batch II 957837

Purge Vol: 5 mL

Batch ID: 957839

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 40.7	81	39-148	20 *	0-19
74-87-3	PSD Chloromethane	50.0	0.00	U 38.4	77	42-131	14	0-23
75-01-4	PSD Vinyl chloride	50.0	0.00	U 42.5	85	50-127	13	0-23
74-83-9	PSD Bromomethane	50.0	0.00	U 37.4	75	26-135	14	0-22
75-00-3	PSD Chloroethane	50.0	0.00	U 41.2	82	54-128	16	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 38.2	76	55-138	15	0-21
67-64-1	PSD Acetone	250	0.00	U 138	55	20-144	4	0-22
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 38.5	77	55-128	12	0-20
74-88-4	PSD Iodomethane	250	0.00	U 186	74	47-132	12	0-20
75-09-2	PSD Methylene chloride	50.0	0.00	U 40.1	80	56-123	7	0-20
75-15-0	PSD Carbon disulfide	250	0.00	U 198	79	53-133	14	0-22
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 38.2	76	57-119	15	0-20
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 41.3	83	62-125	13	0-20
78-93-3	PSD 2-Butanone	250	0.00	U 124	50	30-150	1	0-21
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 38.6	77	60-124	10	0-20
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 33.9	68	56-129	18	0-20
67-66-3	PSD Chloroform	50.0	0.00	U 39.4	79	62-120	2	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 41.7	83	51-135	7	0-20
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 38.9	78	58-129	12	0-20
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 39.2	78	59-126	14	0-20
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 37.0	74	55-132	11	0-20
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 39.2	78	54-121	5	0-20



Volatile  
Quality Control Summary  
Spike Recovery Report

Page 5 of 6

SDG Number: 10-1950

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8314PSD

Matrix: R

Lab Sample ID: 1202053900

%Moisture: 2.7

Instrument: VOA7.I

Analysis Date: 02/27/2010 11:10

Dilution: 1

Analyst: AXO1

Prep Batch ID: 957837

Purge Vol: 5 mL

Batch ID: 957839

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	39.2	78	58-120	9 0-20
79-01-6	PSD Trichloroethylene	50.0	0.00	U	40.7	81	54-130	9 0-23
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00	U	41.5	83	59-121	10 0-20
75-27-4	PSD Bromodichloromethane	50.0	0.00	U	39.6	79	57-130	8 0-20
74-95-3	PSD Dibromomethane	50.0	0.00	U	41.6	83	57-124	4 0-20
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00	U	99.2	40	40-137	4 0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00	U	29.6	59	50-131	5 0-20
108-88-3	PSD Toluene	50.0	0.00	U	36.6	73	54-119	5 0-23
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00	U	32.3	65	47-133	10 0-24
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00	U	38.5	77	60-130	5 0-20
591-78-6	PSD 2-Hexanone	250	0.00	U	32.5	13 *	30-139	9 0-21
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00	U	38.5	77	59-125	6 0-20
127-18-4	PSD Tetrachloroethylene	50.0	0.00	U	34.3	69	50-126	12 0-20
124-48-1	PSD Dibromochloromethane	50.0	0.00	U	37.5	75	54-131	5 0-23
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00	U	37.1	74	55-127	1 0-23
108-90-7	PSD Chlorobenzene	50.0	0.00	U	35.9	72	50-130	10 0-24
100-41-4	PSD Ethylbenzene	50.0	0.00	U	33.5	67	50-121	11 0-24
179601-23-1	PSD m,p-Xylenes	100	0.00	U	71.0	71	47-125	13 0-25
95-47-6	PSD o-Xylene	50.0	0.00	U	36.6	73	51-127	9 0-24
100-42-5	PSD Styrene	50.0	0.00	U	24.7	49	41-136	7 0-24
75-25-2	PSD Bromoform	50.0	0.00	U	36.1	72	48-143	3 0-20
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00	U	32.9	66	52-129	3 0-20

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 6 of 6

SDG Number: 10-1950

Sample Type: Post Spike Duplicate

Client ID: RE15-10-8314PSD

Matrix: R

Lab Sample ID: 1202053900

%Moisture: 2.7

Instrument: VOA7.I

Analysis Date: 02/27/2010 11:10

Dilution: 1

Analyst: AXO1

Prep Batch ID: 957837

Purge Vol: 5 mL

Batch ID: 957839

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	37.6	75	56-139	8	0-34
108-86-1	PSD Bromobenzene	50.0	0.00	U	34.0	68	54-125	12	0-22
103-65-1	PSD n-Propylbenzene	50.0	0.00	U	27.7	55	46-127	14	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U	31.3	63	47-130	12	0-24
98-82-8	PSD Isopropylbenzene	50.0	0.00	U	29.5	59	42-126	42 *	0-22
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U	31.8	64	44-132	13	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U	30.4	61	46-127	0	0-26
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U	32.1	64	48-136	13	0-24
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U	30.6	61	42-132	9	0-26
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U	28.2	56	47-130	14	0-27
99-87-6	PSD 4-Isopropyltoluene	50.0	0.416	J	22.4	44	36-142	1	0-27
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U	29.4	59	41-130	9	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U	30.1	60	41-126	10	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U	26.7	53	37-136	13	0-29
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U	35.6	71	42-143	3	0-21
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U	38.6	77	58-127	8	0-20
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U	31.0	62	42-128	6	0-24

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 1 of 3

SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 957837

Matrix: SOIL

Lab Sample ID: 1202053901

Instrument: VOA7.I

Analysis Date: 02/26/2010 23:32

Dilution: 1

Analyst: AXO1

Pren Batch II 957837

Purge Vol: 5 mL

Batch ID: 957839

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	45.5	91	52-151
74-87-3	LCS Chloromethane	50.0	0.0	43.5	87	56-130
75-01-4	LCS Vinyl chloride	50.0	0.0	45.3	91	66-130
74-83-9	LCS Bromomethane	50.0	0.0	48.2	96	70-126
75-00-3	LCS Chloroethane	50.0	0.0	46.1	92	67-129
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	44.7	89	73-143
67-64-1	LCS Acetone	250	0.0	213	85	30-140
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	44.2	88	71-129
74-88-4	LCS Iodomethane	250	0.0	236	94	72-125
75-09-2	LCS Methylene chloride	50.0	0.0	44.5	89	64-121
75-15-0	LCS Carbon disulfide	250	0.0	233	93	70-133
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	44.3	89	73-120
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	46.5	93	73-120
78-93-3	LCS 2-Butanone	250	0.0	219	88	32-145
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	44.5	89	74-124
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	42.5	85	73-134
67-66-3	LCS Chloroform	50.0	0.0	45.0	90	74-120
74-97-5	LCS Bromochloromethane	50.0	0.0	47.8	96	73-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	46.5	93	74-132
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	44.7	89	79-128
56-23-5	LCS Carbon tetrachloride	50.0	0.0	43.7	87	75-135
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	46.0	92	65-120

Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 957837

Matrix: SOIL

Lab Sample ID: 1202053901

Instrument: VOA7.I

Analysis Date: 02/26/2010 23:32

Dilution: 1

Analyst: AXO1

Prep Batch ID: 957837

Purge Vol: 5 mL

Batch ID: 957839

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	46.2	92	77-124
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	46.1	92	73-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	48.0	96	75-128
74-95-3	LCS Dibromomethane	50.0	0.0	50.3	101	75-120
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	224	90	63-133
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	48.4	97	78-127
108-88-3	LCS Toluene	50.0	0.0	42.8	86	74-120
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	45.5	91	70-125
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	43.6	87	75-120
591-78-6	LCS 2-Hexanone	250	0.0	191	77	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	41.9	84	72-126
124-48-1	LCS Dibromochloromethane	50.0	0.0	45.9	92	74-126
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	45.9	92	79-120
108-90-7	LCS Chlorobenzene	50.0	0.0	43.4	87	76-120
100-41-4	LCS Ethylbenzene	50.0	0.0	40.5	81	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	86.9	87	76-120
95-47-6	LCS o-Xylene	50.0	0.0	45.8	92	76-122
100-42-5	LCS Styrene	50.0	0.0	46.2	92	75-125
75-25-2	LCS Bromoform	50.0	0.0	47.3	95	68-135
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	42.2	84	72-122

Volatile  
Quality Control Summary  
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 957837

Matrix: SOIL

Lab Sample ID:1202053901

Instrument: VOA7.I

Analysis Date: 02/26/2010 23:32

Dilution: 1

Analyst: AXO1

Pre Batch II 957837

Purge Vol: 5 mL

Batch ID: 957839

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	43.1	86	72-129
108-86-1	LCS Bromobenzene	50.0	0.0	43.8	88	74-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	39.0	78	70-120
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	40.8	82	70-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	39.7	79	60-121
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	40.9	82	71-121
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	40.8	82	71-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	41.9	84	75-123
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	41.3	83	73-120
135-98-8	LCS sec-Butylbenzene	50.0	0.0	40.4	81	74-123
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	41.8	84	76-127
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	41.7	83	75-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	42.1	84	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	40.2	80	73-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	47.9	96	69-136
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	46.8	94	75-124
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	42.6	85	75-120

Volatile

Page 1 of 1

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 957837

Matrix: SOIL

Lab Sample ID: 1202053902

Instrument: VOA7.I

Analysis Date: 02/27/2010 00:07

Dilution: 1

Analyst: AXO1

Prep Batch ID: 957837

Purge Vol: 5 mL

Batch ID: 957839

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	243	97	67-140

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1950	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 957837	Instrument ID:	VOA7.I	Data File:	7a527LL.d
Lab Sample ID:	1202053898	Prep Date:	02/26/2010 15:00	Analyzed:	02/27/10 00:42
Column:	DB-624	Heated Purge:	Yes		

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 957837	1202053901	7a525LL.d	02/26/10	2332
02 LCS for batch 957837	1202053902	7a526LL.d	02/27/10	0007
03 RE15-10-8334	247562001	7a535.d	02/27/10	0523
04 RE15-10-8314	247562002	7a536.d	02/27/10	0558
05 RE15-10-8313	247562003	7a537.d	02/27/10	0633
06 RE15-10-8312	247562004	7a538.d	02/27/10	0708
07 RE15-10-8315	247562005	7a539.d	02/27/10	0743
08 RE15-10-8311	247562006	7a540.d	02/27/10	0817
09 RE15-10-8310	247562007	7a541.d	02/27/10	0853
10 RE15-10-8303	247562008	7a542.d	02/27/10	0927
11 RE15-10-8302	247562009	7a543.d	02/27/10	1002
12 RE15-10-8314PS	1202053899	7a544.d	02/27/10	1036
13 RE15-10-8314PSD	1202053900	7a545.d	02/27/10	1110

## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1950

Instrument ID: VOA7.I

Injection Date/Time: 17-FEB-10 15:29

Column Description: db624

Lab File ID /021710v7/7z309.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	30.8
75	30.0 - 60.0% of mass 95	54.2
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	63
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.2
177	5.0 - 9.0% of mass 176	6.9

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD001	W7VM100217-06	7z310.d	17-FEB-10 16:02
VSTD002	W7VM100217-07	7z311.d	17-FEB-10 16:35
VSTD005	W7VM100217-08	7z312.d	17-FEB-10 17:09
VSTD010	W7VM100217-09	7z313.d	17-FEB-10 17:44
VSTD020	W7VM100217-10	7z314.d	17-FEB-10 18:20
VSTD050	W7VM100217-11	7z315.d	17-FEB-10 18:55
VSTD100	W7VM100217-12	7z316.d	17-FEB-10 19:30
VSTD0005	W7VM100217-13	7z318.d	17-FEB-10 20:39
VSTD005S	W7VM100217-14	7z319.d	17-FEB-10 21:14
VSTD010S	W7VM100217-15	7z320.d	17-FEB-10 21:49
VSTD025S	W7VM100217-16	7z321.d	17-FEB-10 22:24
VSTD050S	W7VM100217-17	7z322.d	17-FEB-10 22:59
VSTD100S	W7VM100217-18	7z323.d	17-FEB-10 23:33
VSTD250S	W7VM100217-19	7z324.d	18-FEB-10 00:08
VSTD500S	W7VM100217-20	7z325.d	18-FEB-10 00:42
ICV	W7VM100217-22	7z328.d	18-FEB-10 02:27
SICV	W7VM100217-23	7z329.d	18-FEB-10 03:03



## Instrument Performance Check

## BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1950

Instrument ID: VOA7.I

Injection Date/Time: 26-FEB-10 23:32

Column Description: db624

Lab File ID /022610v7/7a525BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	28.8
75	30.0 - 60.0% of mass 95	52
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	65.6
175	5.0 - 9.0% of mass 174	7
176	95.0 - 101.0% of mass 174	98.5
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
VSTD050	W7VM100226-07	7a525.d	26-FEB-10 23:32
LCS	1202053901	7a525LL.d	26-FEB-10 23:32
VSTD250S	W7VM100226-08	7a526.d	27-FEB-10 00:07
SLCS	1202053902	7a526LL.d	27-FEB-10 00:07
BLANK	1202053898	7a527LL.d	27-FEB-10 00:42
RE15-10-8334	247562001	7a535.d	27-FEB-10 05:23
RE15-10-8314	247562002	7a536.d	27-FEB-10 05:58
RE15-10-8313	247562003	7a537.d	27-FEB-10 06:33
RE15-10-8312	247562004	7a538.d	27-FEB-10 07:08
RE15-10-8315	247562005	7a539.d	27-FEB-10 07:43
RE15-10-8311	247562006	7a540.d	27-FEB-10 08:17
RE15-10-8310	247562007	7a541.d	27-FEB-10 08:53
RE15-10-8303	247562008	7a542.d	27-FEB-10 09:27
RE15-10-8302	247562009	7a543.d	27-FEB-10 10:02
RE15-10-8314MS	1202053899	7a544.d	27-FEB-10 10:36
RE15-10-8314MSD	1202053900	7a545.d	27-FEB-10 11:10

### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1950

Instrument: VOA7.I

STD Analysis Time: 26-FEB-10 23:32

GC Column: DB-624

Data File: 7a525.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	901765		15.3	697207		18.7	359502		21.0
Upper Limit	1803530		15.8	1394414		19.2	719004		21.5
Lower Limit	450883		14.8	348604		18.2	179751		20.5
Sample ID									
BLK01LCS	901765		15.3	697207		18.7	359502		21.0
BLK01SLCS	978123		15.3	699713		18.7	362046		21.0
BLK01	924749		15.3	680214		18.7	323960		21.0
RE15-10-8334	698914		15.3	520249		18.7	251353		21.0
RE15-10-8314	513858		15.3	381406		18.7	188458		21.0
RE15-10-8313	677723		15.3	516135		18.7	257327		21.0
RE15-10-8312	659174		15.3	490384		18.7	249657		21.0
RE15-10-8315	726019		15.3	533920		18.7	277081		21.0
RE15-10-8311	726643		15.3	544519		18.7	263048		21.0
RE15-10-8310	705997		15.3	530404		18.7	265946		21.0
RE15-10-8303	726013		15.3	537604		18.7	267981		21.0
RE15-10-8302	712413		15.3	535620		18.7	273984		21.0
RE15-10-8314MS	739611		15.3	576703		18.7	316338		21.0
RE15-10-8314MSD	842933		15.3	651089		18.7	345803		21.0

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: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562009	Date Received: 02/20/2010 08:55	% Moisture: 5.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8302	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 10:02	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a543.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.359	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.316	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.316	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.316	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.316	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.316	1.05
67-64-1	Acetone		131	ug/kg	1.75	5.27
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
74-88-4	Iodomethane	U	5.27	ug/kg	1.69	5.27
75-09-2	Methylene chloride	J	2.40	ug/kg	2.11	5.27
75-15-0	Carbon disulfide	U	5.27	ug/kg	1.32	5.27
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.316	1.05
78-93-3	2-Butanone	J	2.40	ug/kg	1.58	5.27
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.316	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.348	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.316	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.316	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.316	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.316	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.316	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.348	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.316	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.316	1.05
108-10-1	4-Methyl-2-pentanone	U	5.27	ug/kg	1.32	5.27
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
108-88-3	Toluene		10.2	ug/kg	0.316	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.316	1.05
591-78-6	2-Hexanone	U	5.27	ug/kg	1.58	5.27
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.316	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.316	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.316	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.316	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.316	1.05

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

SDG Number: 10-1950  
 Lab Sample ID: 247562009

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8302  
 Batch ID: 957839  
 Run Date: 02/27/2010 10:02  
 Prep Date: 02/26/2010 14:59  
 Data File: 7a543.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.316	1.05
179601-23-1	m,p-Xylenes	J	0.702	ug/kg	0.316	2.11
95-47-6	o-Xylene	J	0.574	ug/kg	0.316	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.316	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.316	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.316	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.316	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.316	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.316	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.316	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.316	1.05
95-63-6	1,2,4-Trimethylbenzene	J	0.538	ug/kg	0.316	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.316	1.05
99-87-6	4-Isopropyltoluene		3.16	ug/kg	0.316	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.316	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.316	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.27	ug/kg	1.69	5.27
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	19.65	48.7	ug/kg		J
	Unknown Hydrocarbon	19.97	5.45	ug/kg		J
	Unknown Hydrocarbon	20.24	6.23	ug/kg		J
	Unknown Hydrocarbon	20.62	58.9	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a543.d

Lab Smp Id: 247562009

Client Smp ID: RE15-10-8302

Inj Date : 27-FEB-2010 10:02

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562009|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 43

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.18340	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.316	(1.000)	712413	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	535620	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	273984	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	307328	49.9307	52.7
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	840137	48.1930	50.8
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	309424	42.9335	45.3
13 Acetone	43	10.423	10.413	(0.681)	592198	124.101	131
22 Methylene chloride	86	11.449	11.438	(0.747)	6618	2.27379	2.4(a)
31 2-Butanone	43	13.733	13.723	(0.897)	12123	2.27784	2.4(a)
65 Toluene	92	17.215	17.215	(0.922)	93066	9.65077	10.2
79 m,p-Xylenes	106	18.870	18.870	(1.011)	4514	0.66578	0.70(aQ)
80 o-Xylene	106	19.286	19.286	(1.033)	3907	0.54401	0.57(a)
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	7563	0.51024	0.54(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ug/l)	FINAL (ug/Kg)
99 4-Isopropyltoluene	119	20.859	20.859	(0.994)	42272	2.99330	3.2

#### 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

## VOA REPORT

Data file: 7a543.d

Report Date: 03/01/2010 07:17

Lab. ID: 247562009

SampleType: SAMPLE

Injection Date: 27-FEB-2010 10:02

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562009|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
13	Acetone		CAS#: 67-64-1			
43	592198	10.42	10.41	80-120	100	( )
58	169471	10.42	10.41	0- 58	29	( )
-----						
22	Methylene chloride		CAS#: 75-09-2			
86	6618	11.45	11.44	80-120	100	( )
84	9908	11.45	11.44	131-191	150	( )
49	19258	11.44	11.44	262-322	291	( )
-----						
31	2-Butanone		CAS#: 78-93-3			
43	12123	13.73	13.72	80-120	100	( )
72	800	13.72	13.72	0- 51	7	( )
-----						
63	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	10767	17.13	16.94	80-120	100	(T)
43	6476	17.13	16.93	217-277	60	(QT)
100	583907	17.13	16.94	0- 56	5423	(QT)
-----						
65	Toluene		CAS#: 108-88-3			
92	93066	17.21	17.21	80-120	100	( )
91	152887	17.21	17.21	132-192	164	( )
-----						
73	1,2-Dibromoethane		CAS#: 106-93-4			
107	21622	18.62	18.22	80-120	100	(T)
109	15022	18.62	18.22	66-126	69	(T)
-----						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
77	1,1,1,2-Tetrachloroethane			CAS#: 630-20-6		
131	3251	18.62	18.76	80-120	100	(T)
133	16194	18.61	18.76	69-129	498	(QT)
119	190310	18.67	18.76	41-101	5853	(QT)
-----						
78	Ethylbenzene			CAS#: 100-41-4		
91	10980	18.87	18.77	80-120	100	(T)
106	4514	18.87	18.77	1- 61	41	(T)
-----						
80	o-Xylene			CAS#: 95-47-6		
106	3907	19.29	19.29	80-120	100	( )
91	8110	19.29	19.29	172-232	208	( )
-----						
79	m,p-Xylenes			CAS#:		
106	4514	18.87	18.87	80-120	100	( )
91	10980	18.87	18.87	167-227	243	(Q)
-----						
82	Bromoform			CAS#: 75-25-2		
173	948	19.82	19.54	80-120	100	(T)
175	17186	19.81	19.54	20- 80	1811	(QT)
-----						
83	Isopropylbenzene			CAS#: 98-82-8		
105	49284	19.65	19.63	80-120	100	( )
120	2041	19.65	19.63	0- 57	4	( )
-----						
89	1,2,3-Trichloropropane			CAS#: 96-18-4		
110	648	19.70	19.97	80-120	100	(T)
75	3122	19.69	19.97	304-364	482	(QT)
77	164182	19.65	19.97	89-149	25327	(QT)
-----						
91	n-Propylbenzene			CAS#: 103-65-1		
91	12371	20.02	20.03	80-120	100	( )
120	5875	20.24	20.03	0- 52	47	(T)
-----						
92	1,3,5-Trimethylbenzene			CAS#: 108-67-8		
105	7563	20.57	20.17	80-120	100	(T)
120	3032	20.57	20.17	18- 78	40	(T)
-----						
96	1,2,4-Trimethylbenzene			CAS#: 95-63-6		
105	7563	20.57	20.56	80-120	100	( )
120	3032	20.57	20.56	23- 83	40	( )
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
95 tert-Butylbenzene				CAS#: 98-06-6		
119	18736	20.62	20.53	80-120	100	(T)
91	199392	20.62	20.52	50-110	1064	(QT)
134	2853	20.61	20.53	0- 53	15	(T)
-----						
98 sec-Butylbenzene				CAS#: 135-98-8		
105	47558	20.62	20.75	80-120	100	(T)
134	2853	20.61	20.75	0- 50	6	(T)
-----						
99 4-Isopropyltoluene				CAS#: 99-87-6		
119	42272	20.86	20.86	80-120	100	( )
134	10963	20.86	20.86	0- 59	26	( )
91	19014	20.86	20.86	0- 58	45	( )
-----						
104 n-Butylbenzene				CAS#: 104-51-8		
91	6340	21.55	21.30	80-120	100	(T)
92	1309	21.55	21.30	27- 87	21	(QT)
134	408	21.55	21.30	0- 54	6	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA7.i/022610v7/7a543.d  
Lab Smp Id: 247562009 Client Smp ID: RE15-10-8302  
Inj Date : 27-FEB-2010 10:02  
Operator : AX01 Inst ID: VOA7.i  
Smp Info : |247562009|957839|1|VOAF|1|  
Misc Info : LANL 5g N/A  
Comment :  
Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
Als bottle: 43  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.18340	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 75 Chlorobenzene-d5	18.667	2665492	50.000
* 101 1,4-Dichlorobenzene-d4	20.991	1967789	50.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Hydrocarbon				CAS #:			
19.651	2461654	46.1763520	48.7	0		0	75

RT	AREA	CONCENTRATIONS		QUAL	LIBRARY	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)			LIB ENTRY		
=====	=====	=====	=====	=====	=====	=====		=====
Unknown Hydrocarbon					CAS #:			
19.966	203215	5.16353379	5.4	0		0		101
Unknown Hydrocarbon					CAS #:			
20.240	232526	5.90830610	6.2	0		0		101
Unknown Hydrocarbon					CAS #:			
20.616	2199529	55.8883288	58.9	0		0		101

Data File: /chem/V067.i/022610v7/7a543.d

Date : 27-FEB-2010 10:02

Client ID: REIS-10-8302

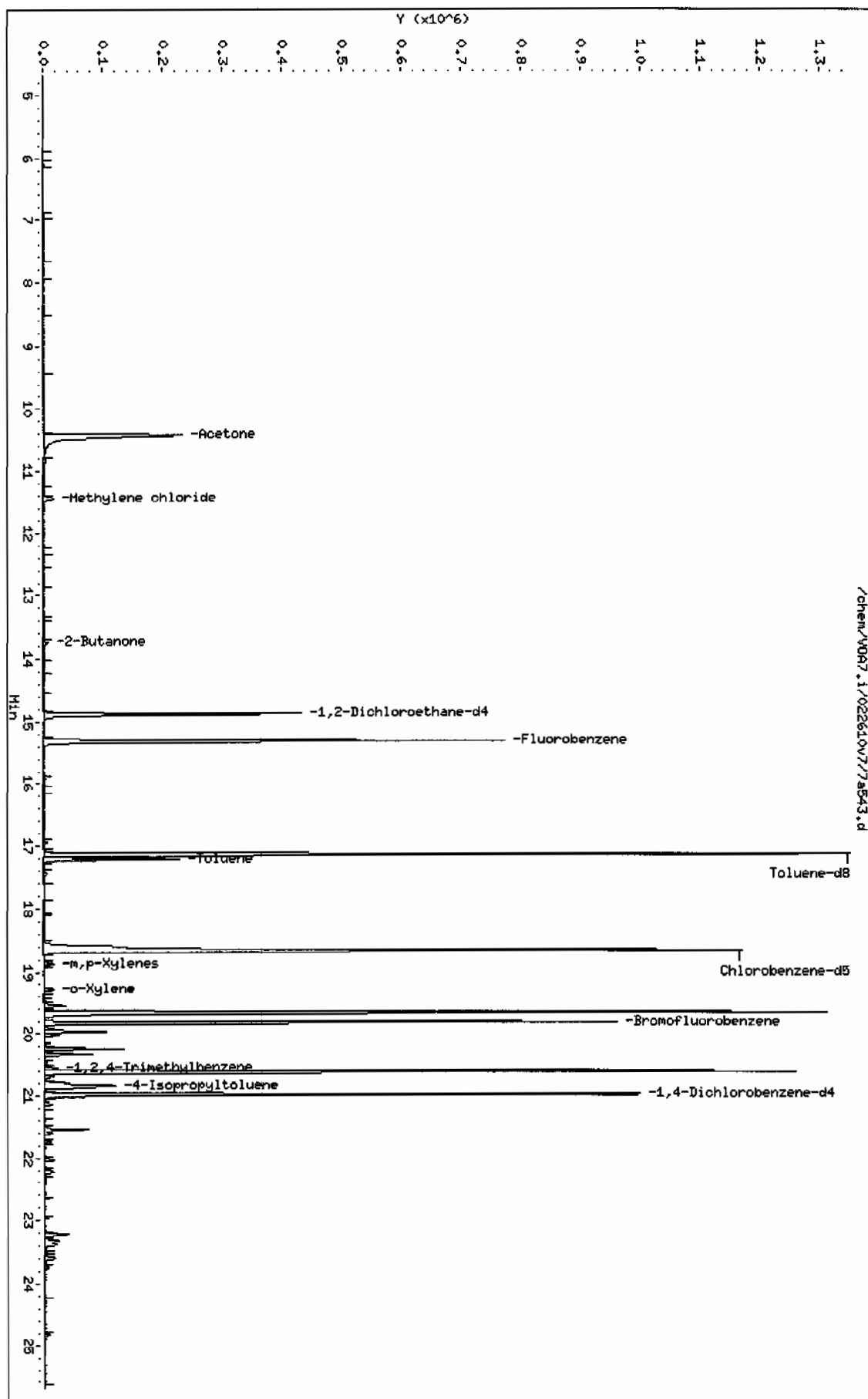
Sample Info: 1247562009195783911|V06F11.1

Column phase: DB-624

Instrument: V067.1

Operator: AX01

Column diameter: 0.25



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: V0A7.i

Sample Info: I247562009I957839I1I\V0AFI1I

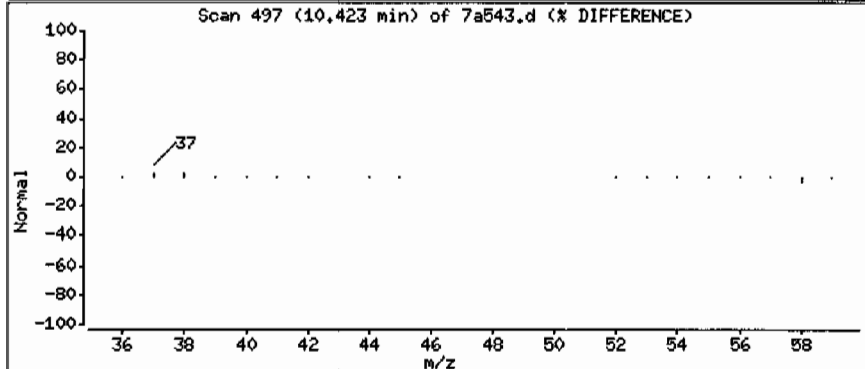
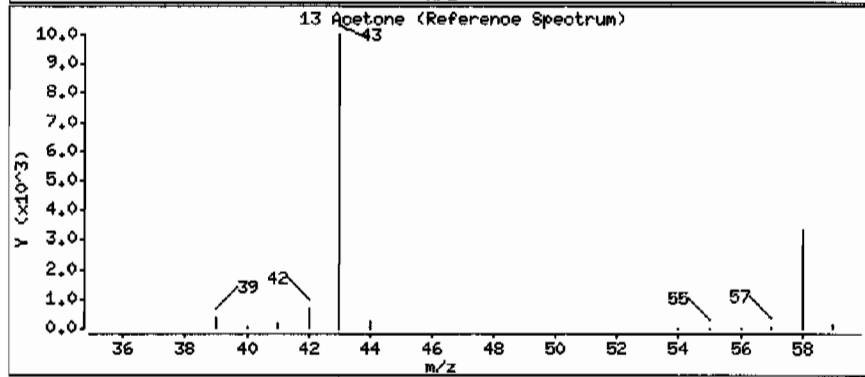
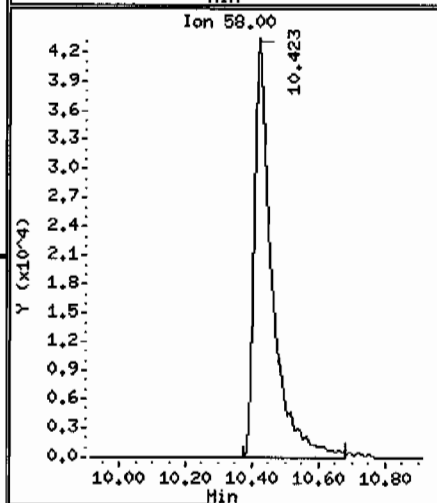
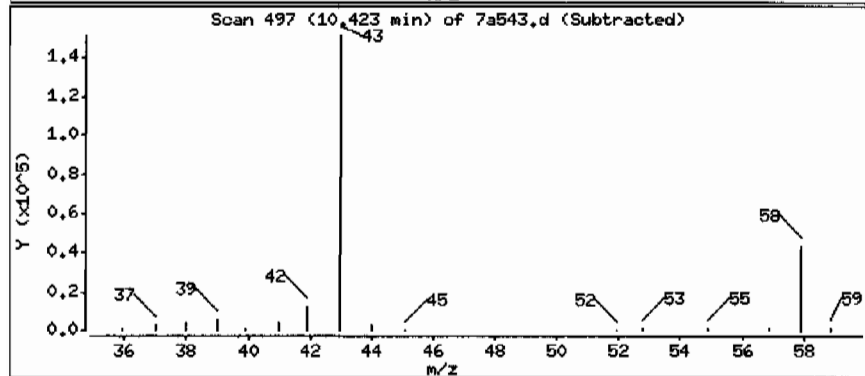
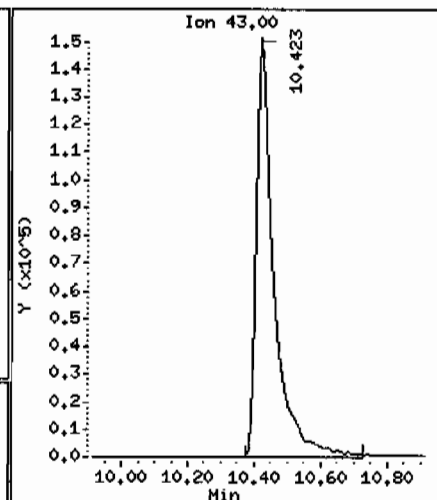
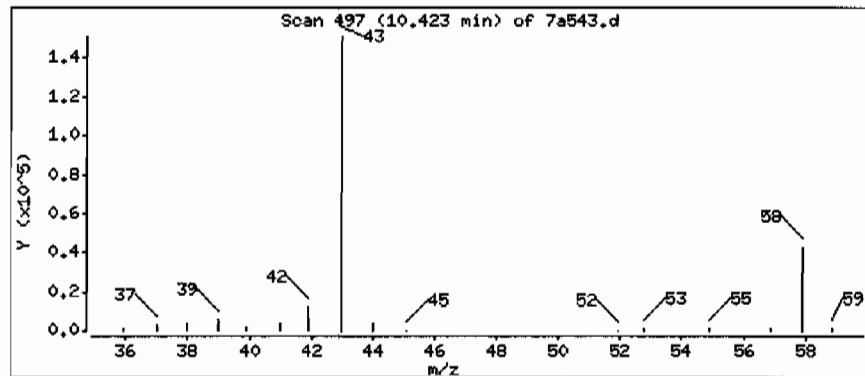
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 131 ug/Kg



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: V0A7.i

Sample Info: I247562009I957839I1IIV0AFI1I

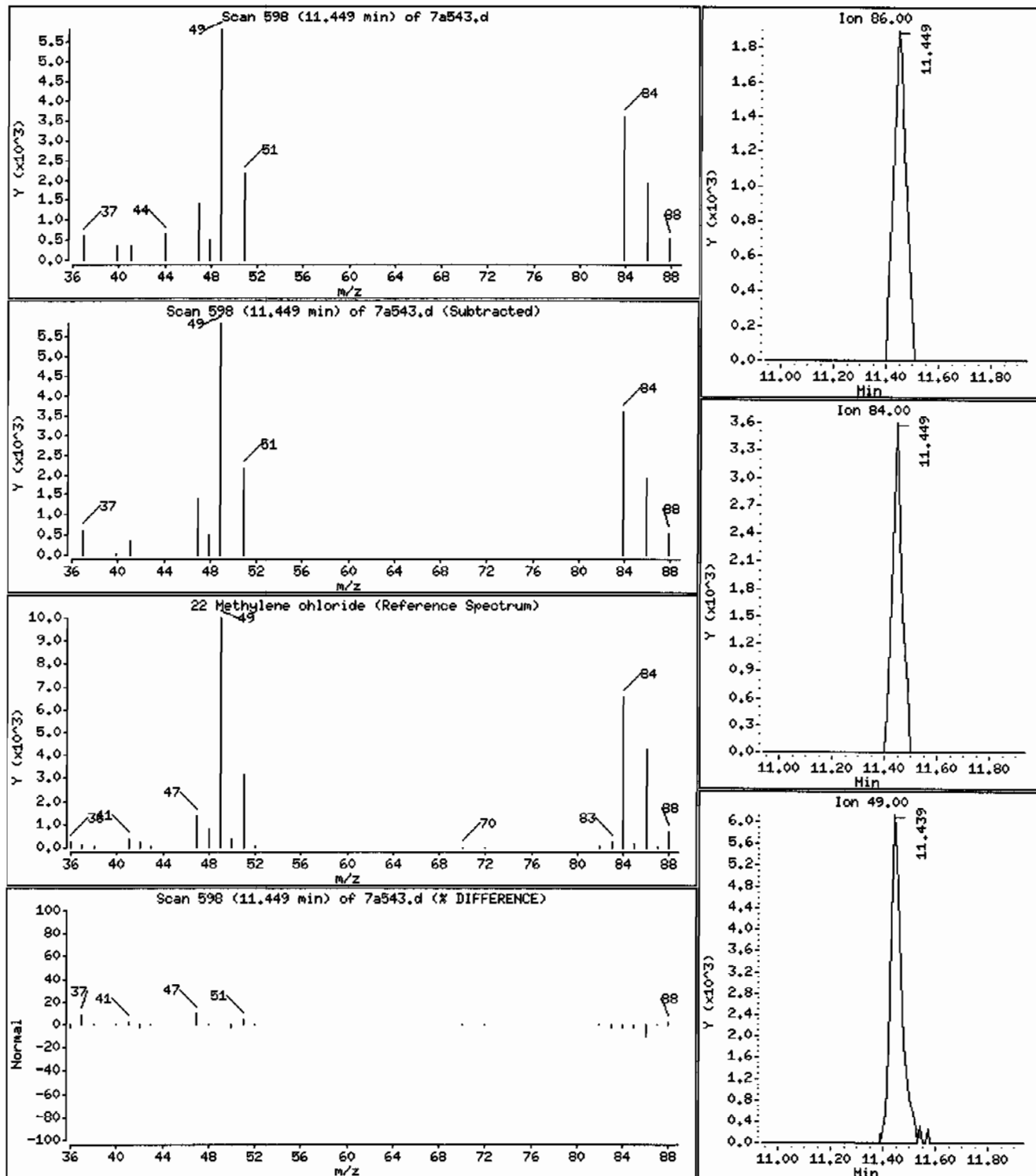
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

22 Methylene chloride

Concentration: 2.4 ug/Kg



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: V0A7.i

Sample Info: 1247562009195783911V0AF111

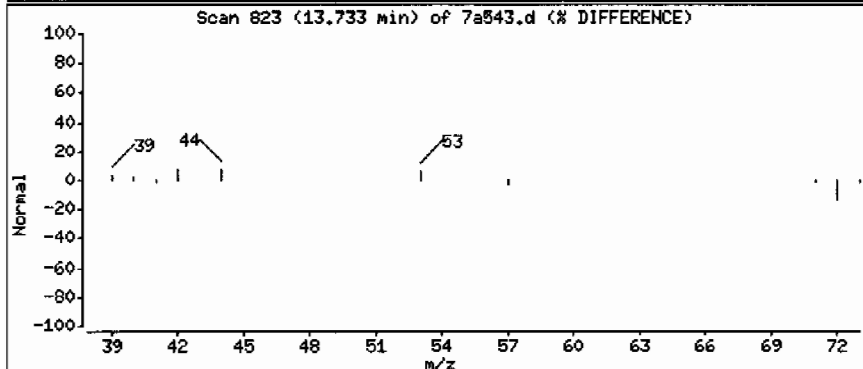
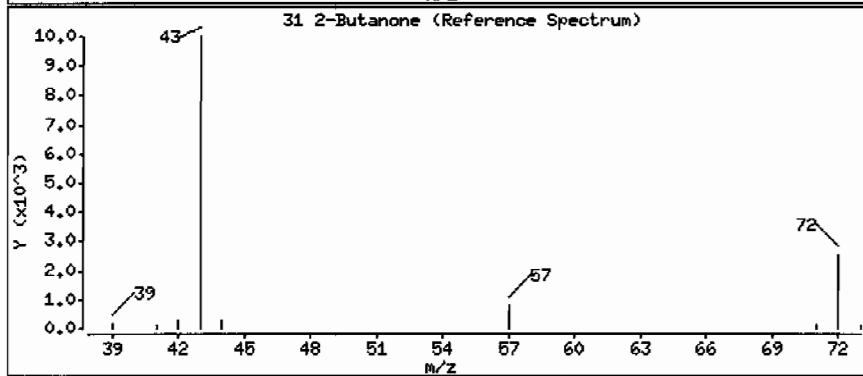
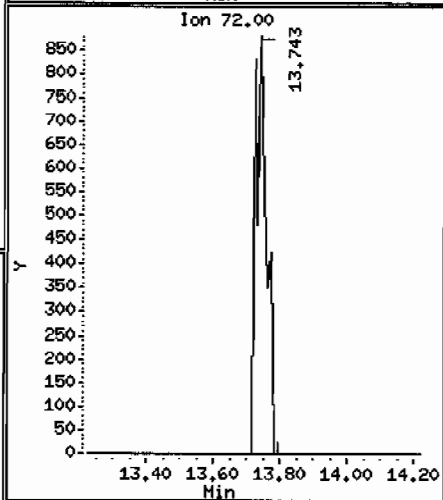
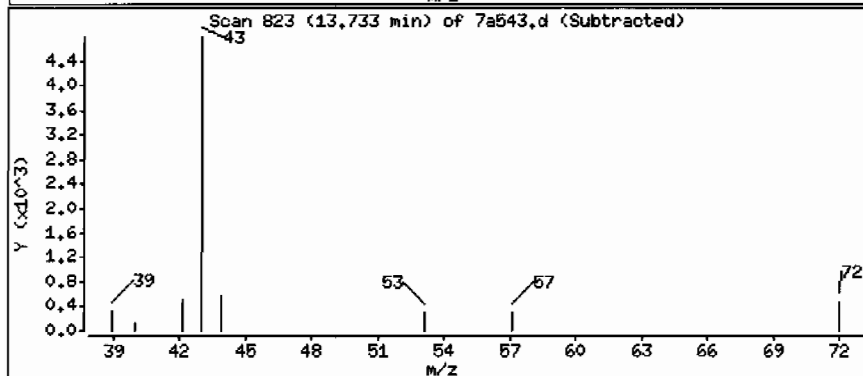
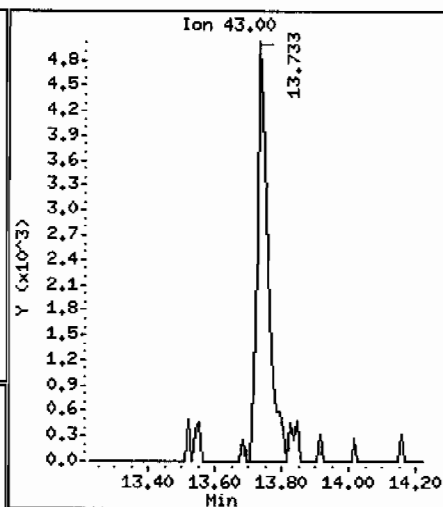
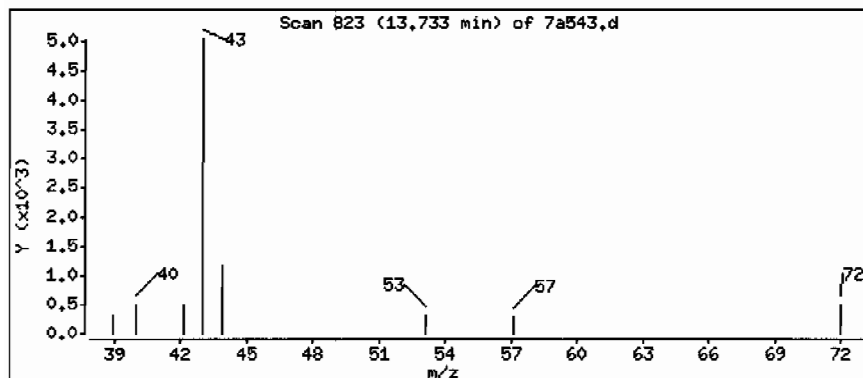
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

31 2-Butanone

Concentration: 2.4 ug/Kg





Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: VOA7.i

Sample Info: I247562009I957839I11VOAF11I

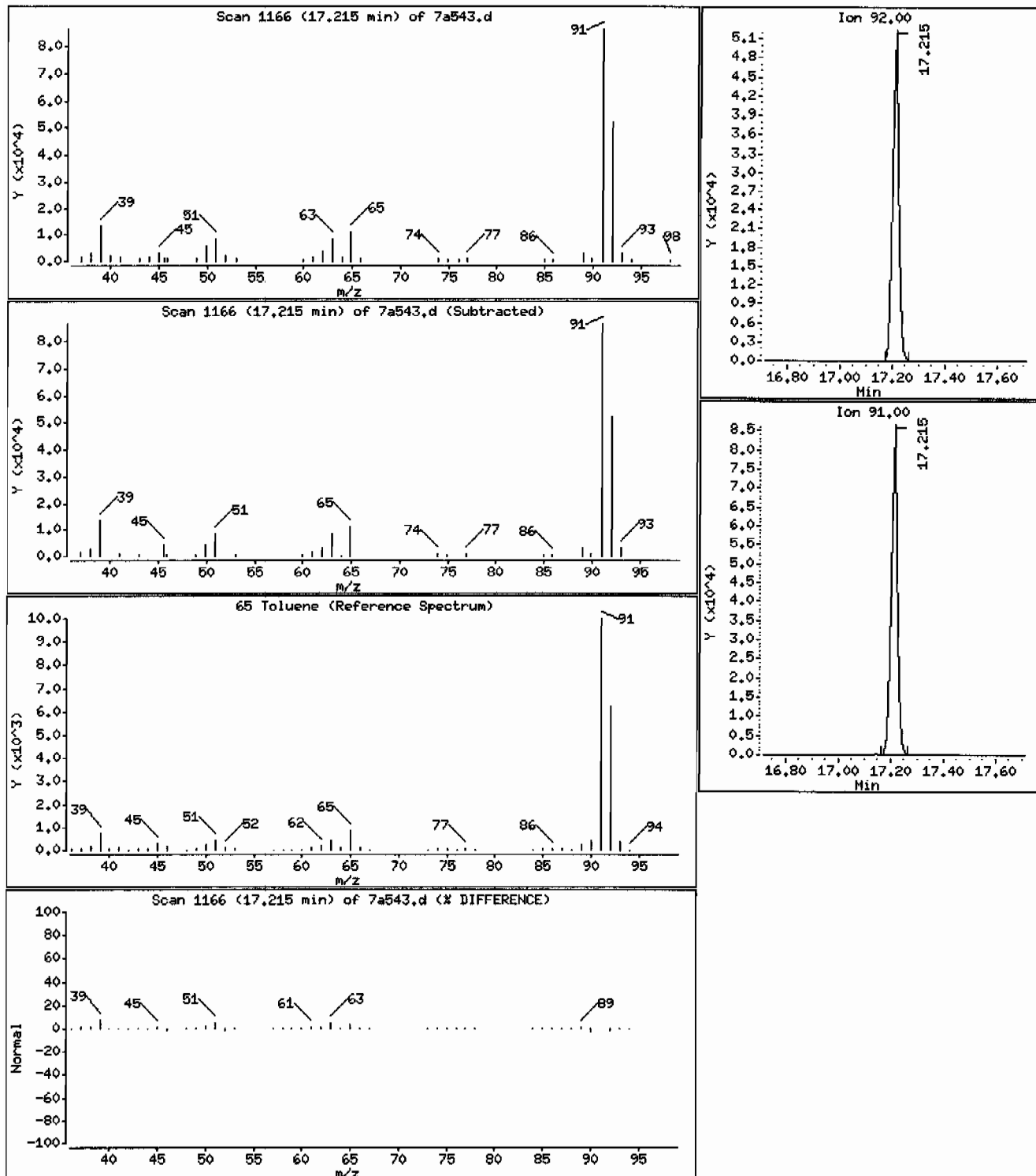
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

65 Toluene

Concentration: 10.2 ug/Kg



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: VOA7.i

Sample Info: 1247562009195783911\VOAF111

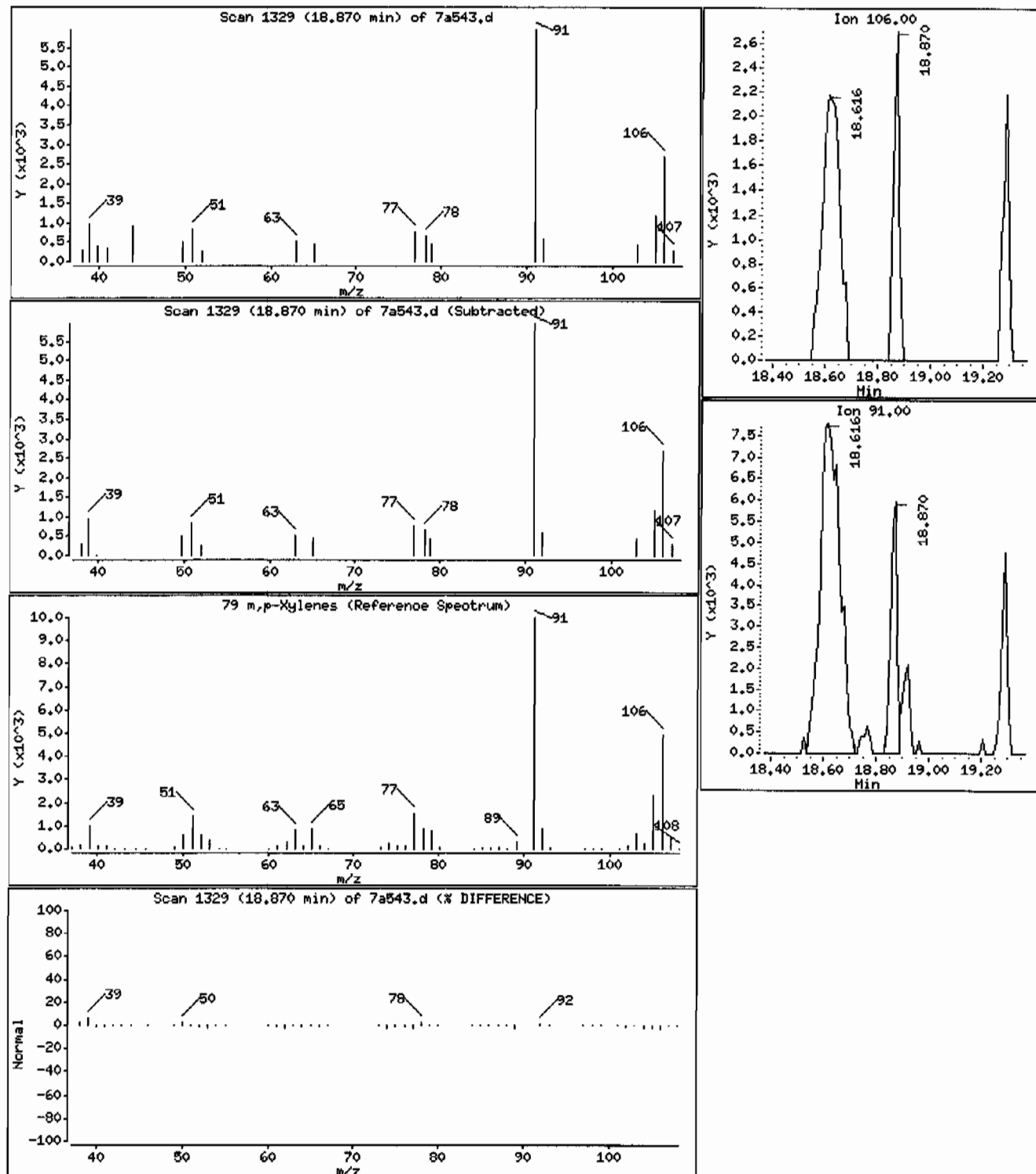
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

79 m,p-Xylenes

Concentration: 0.70 ug/Kg



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: VOA7.i

Sample Info: I2475620091957839111VOAF111

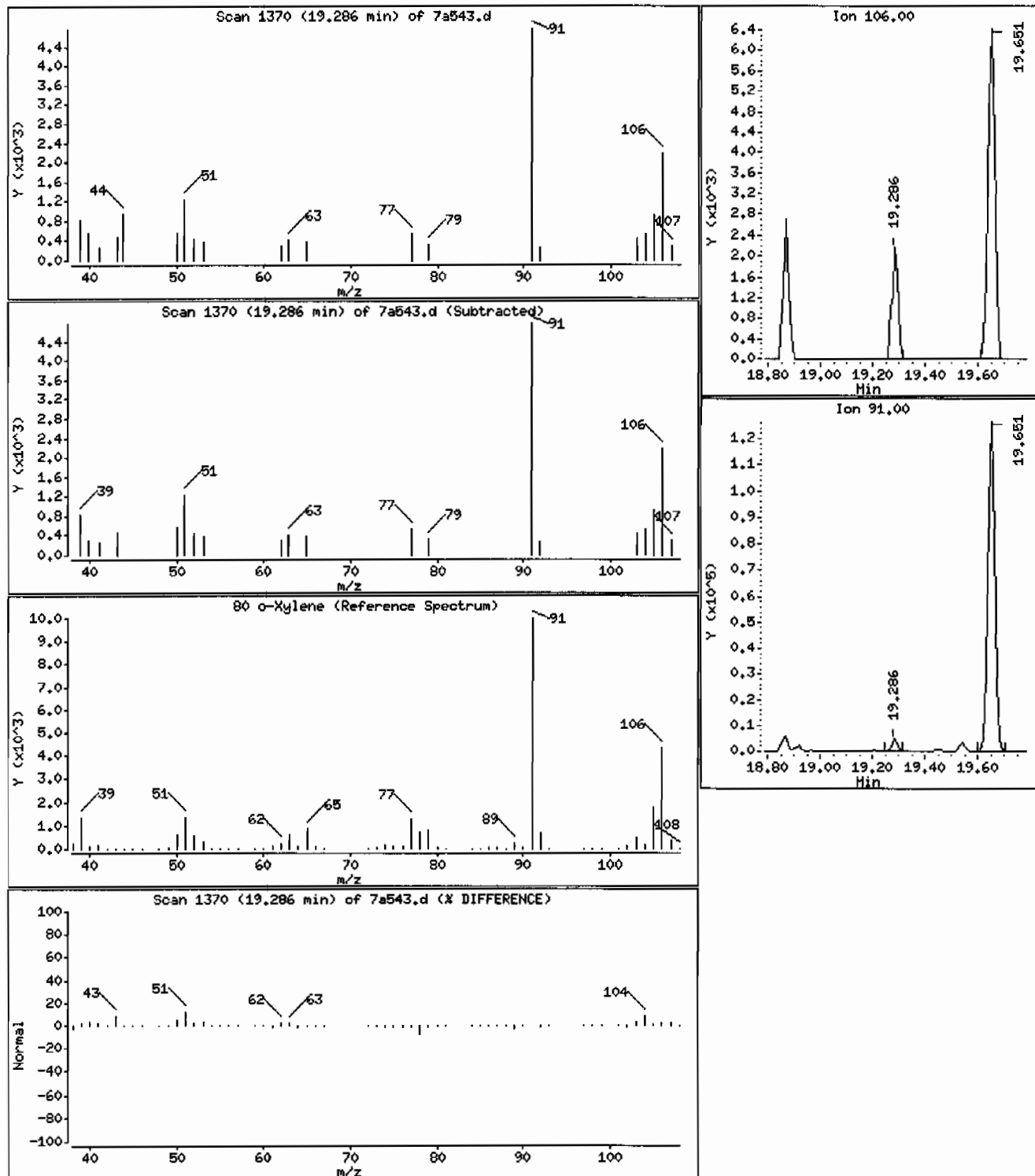
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

80 o-Xylene

Concentration: 0.57 ug/Kg



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: V0A7,i

Sample Info: I247562009I957839I1I\VOAFI1I

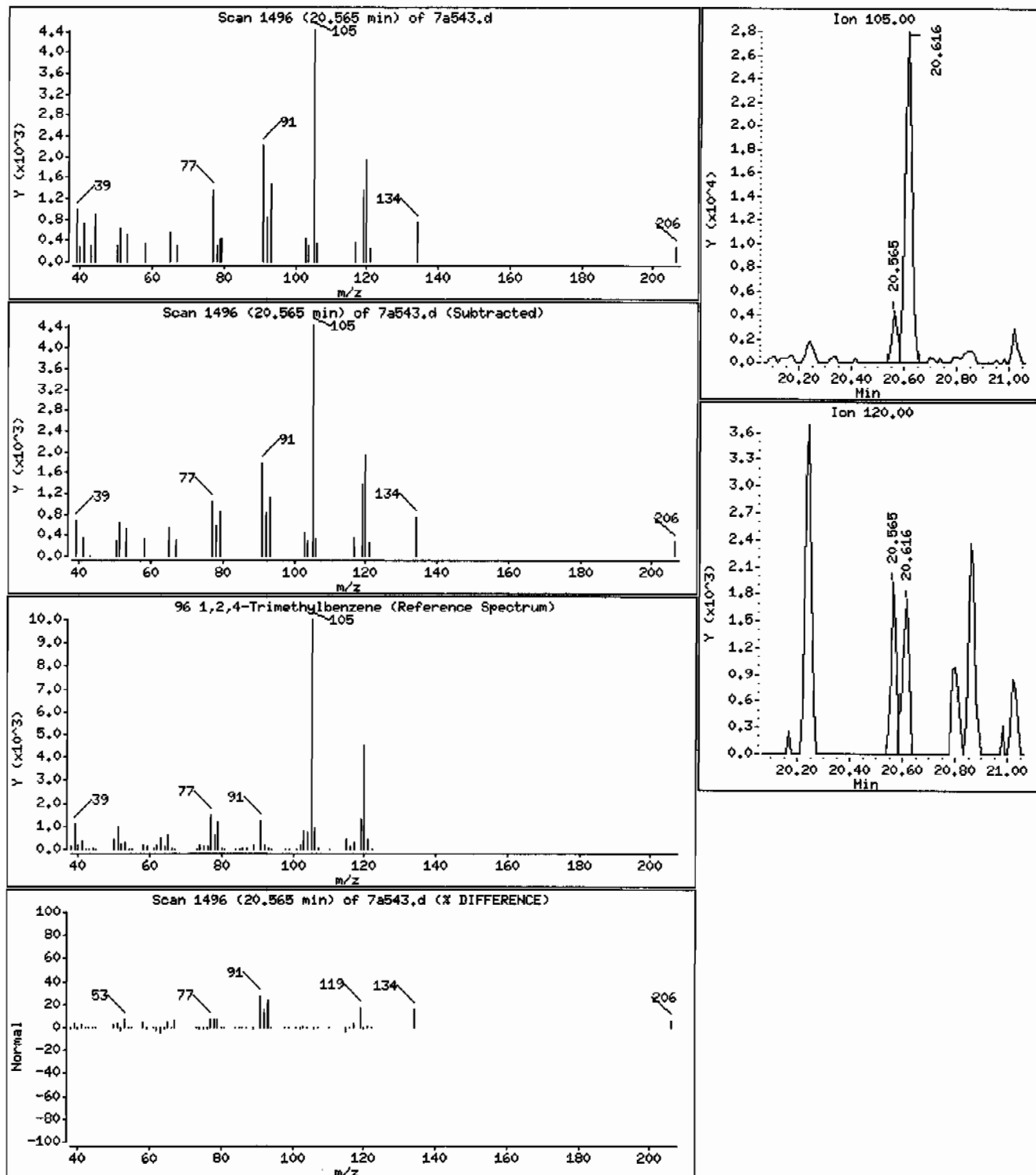
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

96 1,2,4-Trimethylbenzene

Concentration: 0.54 ug/Kg



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: V0A7.i

Sample Info: I247562009I957839I1I1V0AF11I

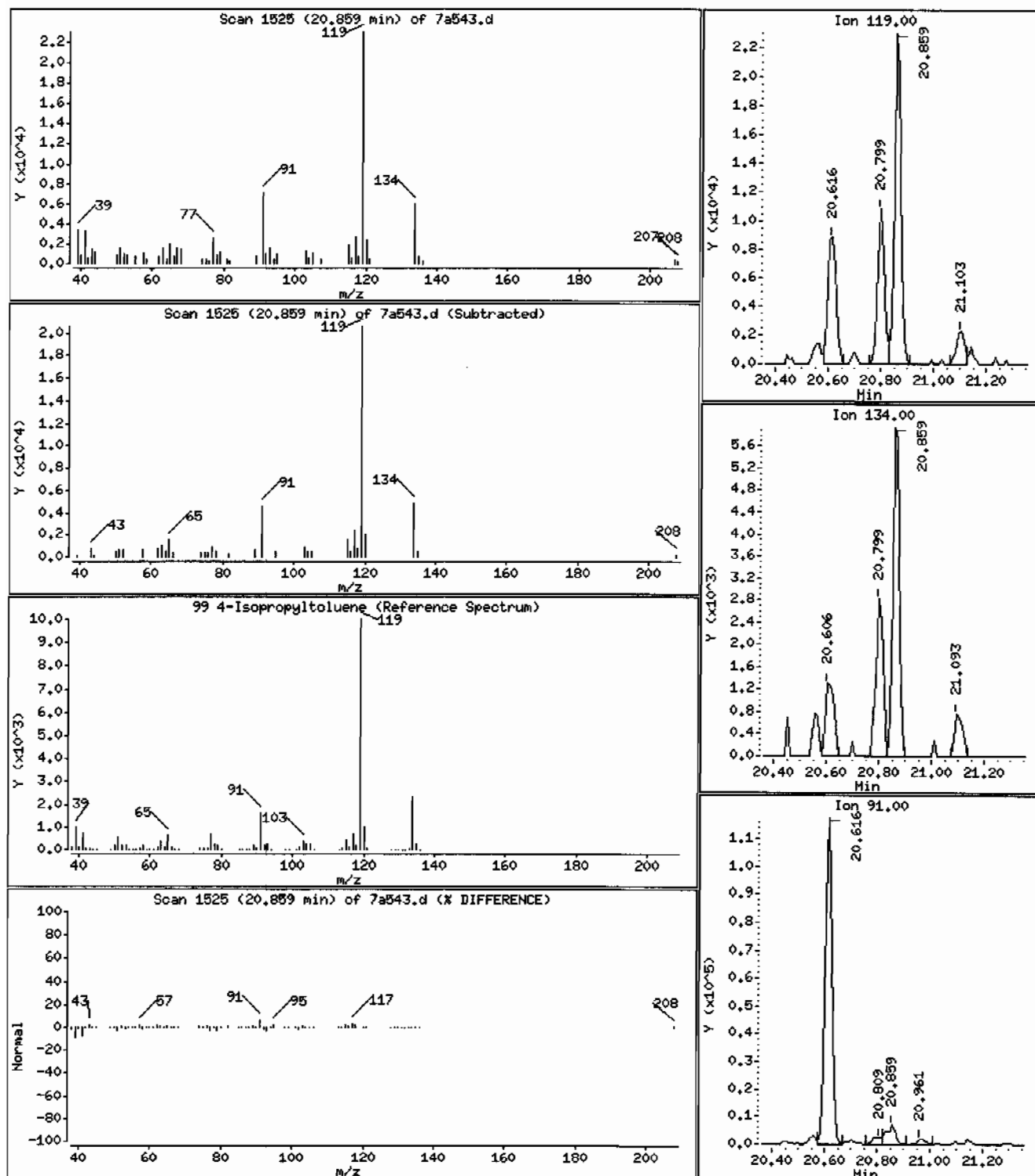
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

99 4-Isopropyltoluene

Concentration: 3.2 ug/Kg



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: V0A7.i

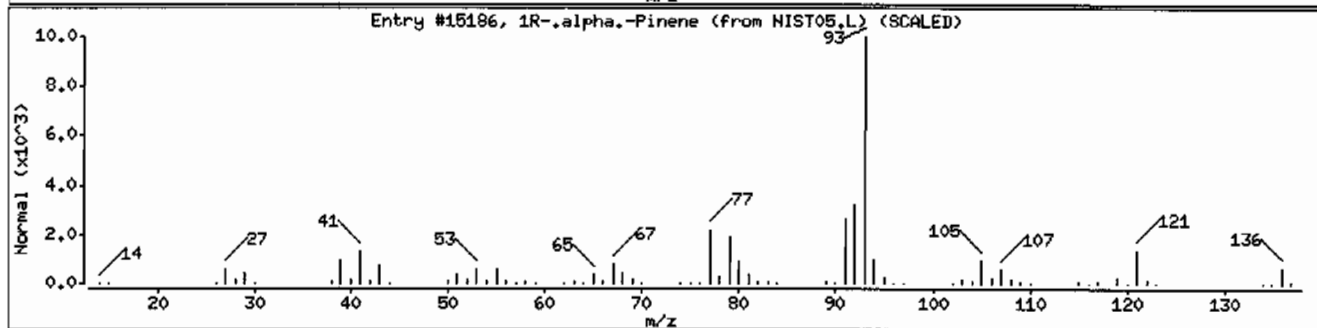
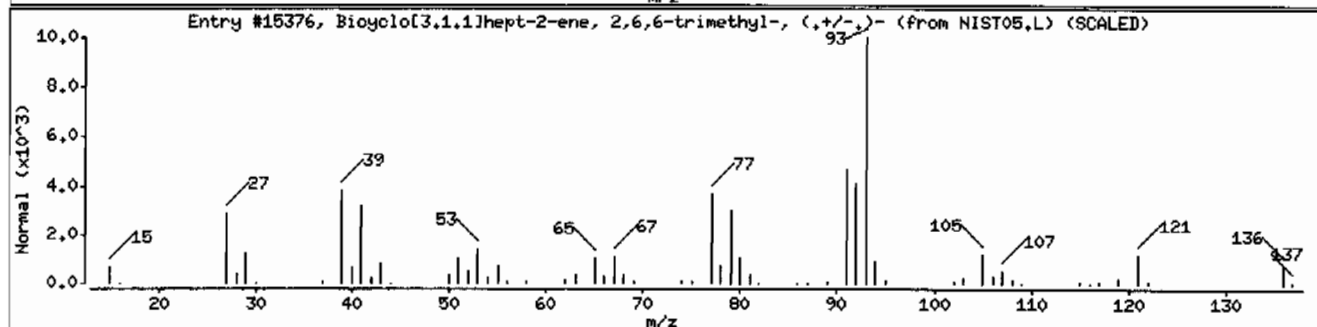
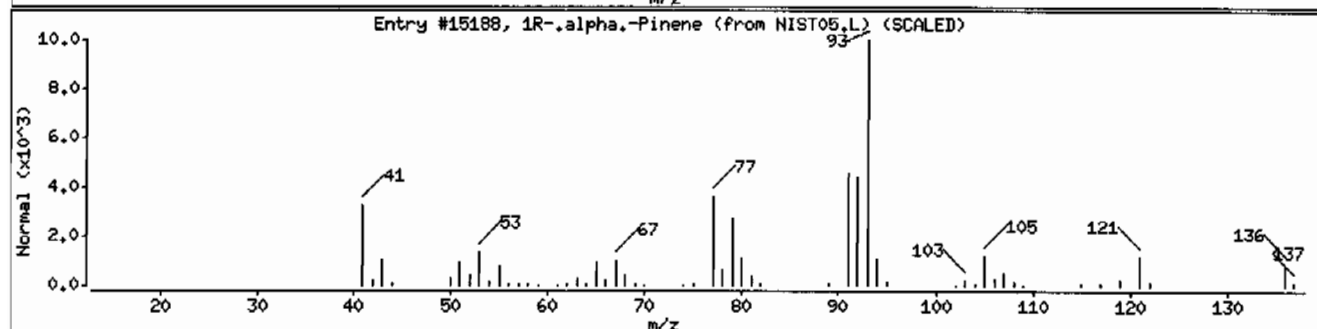
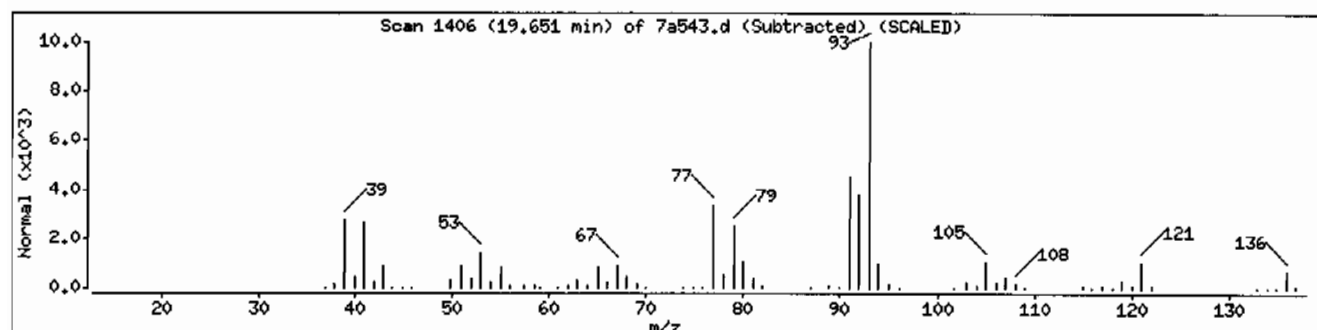
Sample Info: I247562009I957839I1V0AF11I

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1R-,alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	2437-95-8	NIST05.L	15376	96	C10H16	136
1R-,alpha.-Pinene	7785-70-8	NIST05.L	15186	95	C10H16	136



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: VOA7.i

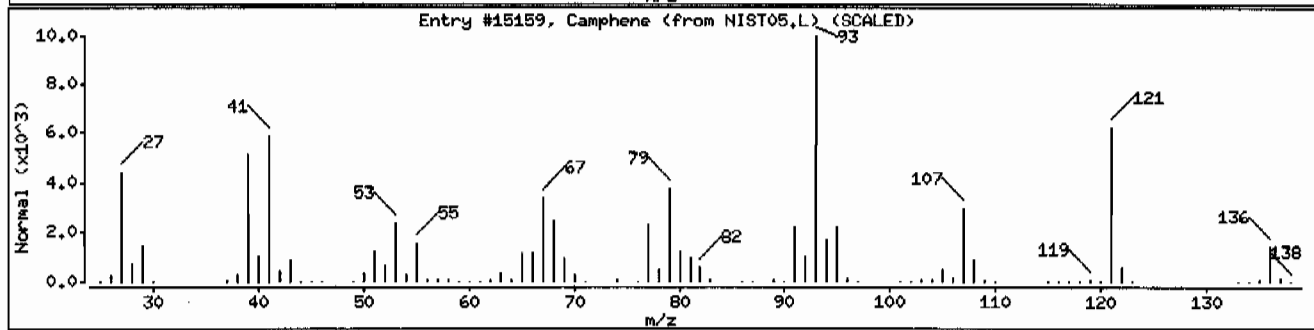
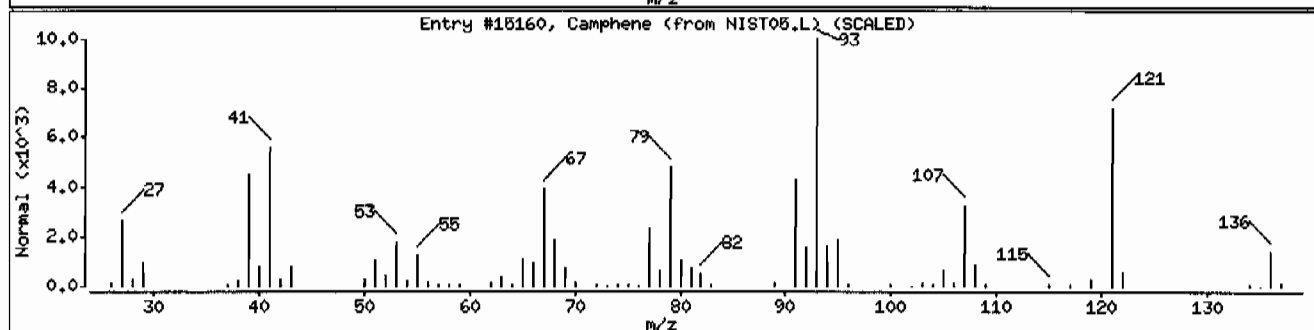
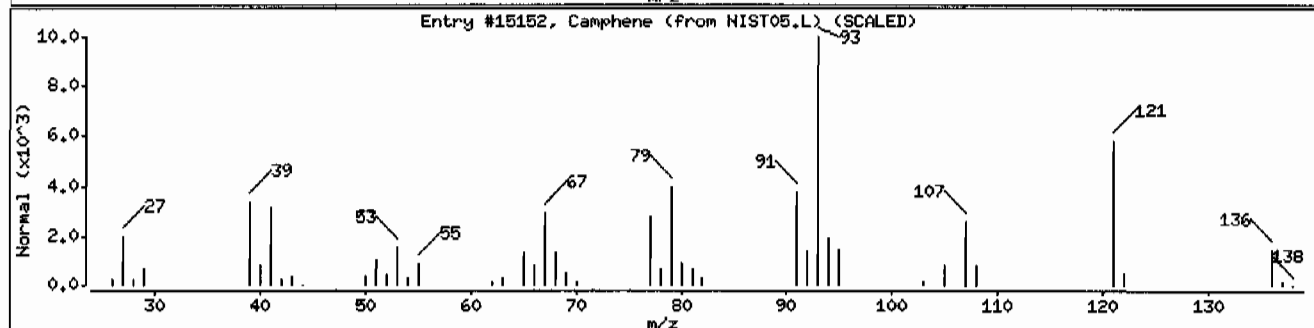
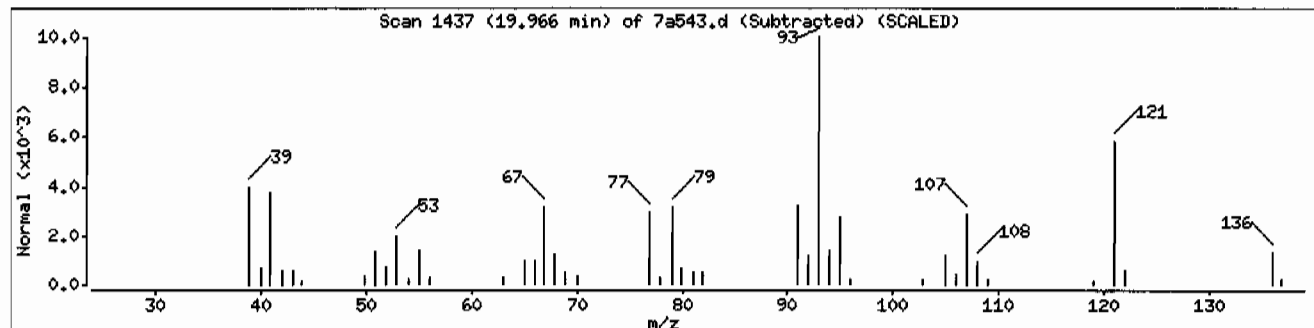
Sample Info: I247562009I957839I1VOAFI1I

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Camphene	79-92-5	NIST05.L	15152	95	C10H16	136
Camphene	79-92-5	NIST05.L	15160	92	C10H16	136
Camphene	79-92-5	NIST05.L	15159	91	C10H16	136



Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: VOA7.i

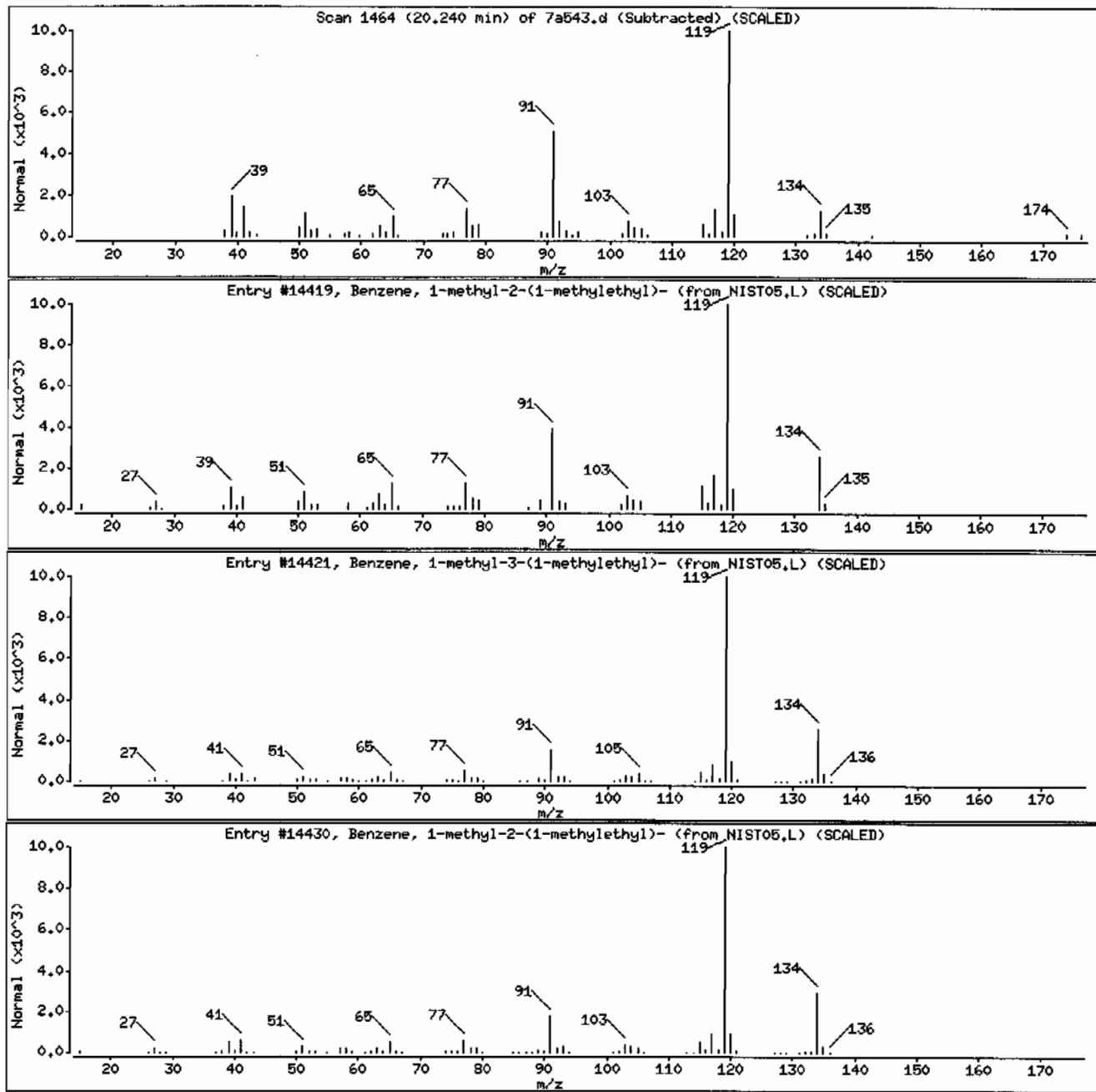
Sample Info: I247562009195783911VOAF111

Operator: AXD1

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14419	91	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14421	90	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14430	90	C10H14	134





Date : 27-FEB-2010 10:02

Client ID: RE15-10-8302

Instrument: VOA7.i

Sample Info: 1247562009195783911V0AF111

Operator: AXD1

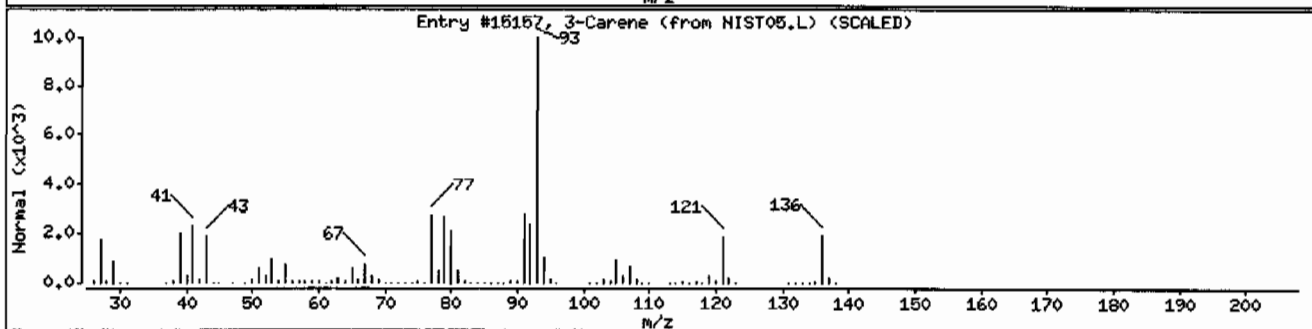
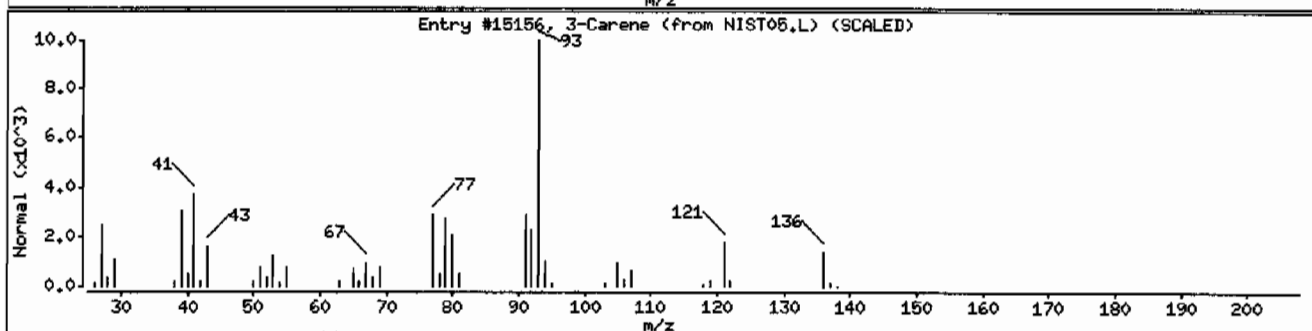
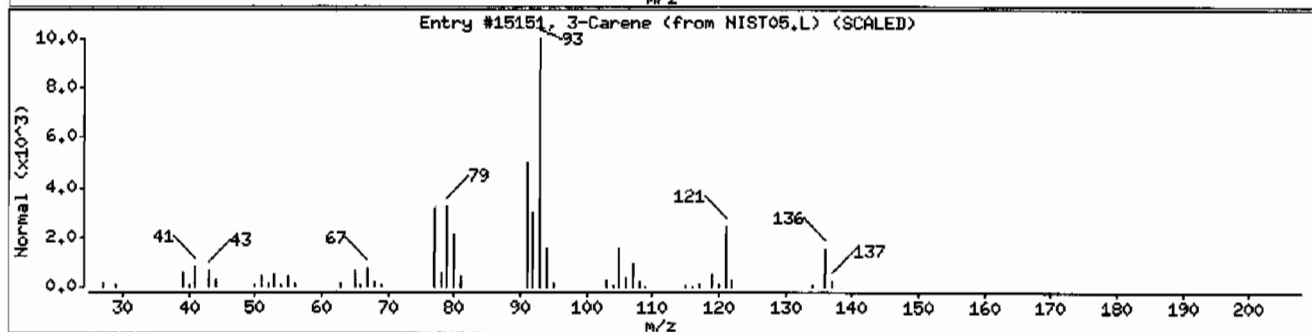
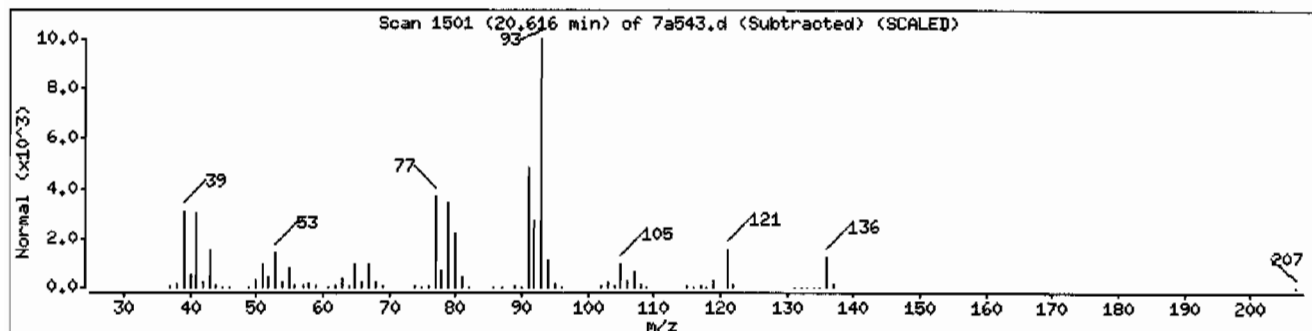
Column phase: DB-624

Column diameter: 0.25

## Library Search Compound Match

Unknown Hydrocarbon

	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15151	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



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

SDG Number: 10-1950  
 Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.351	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone		8.89	ug/kg	1.71	5.16
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.16	ug/kg	1.65	5.16
75-09-2	Methylene chloride	U	5.16	ug/kg	2.07	5.16
75-15-0	Carbon disulfide	U	5.16	ug/kg	1.29	5.16
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.16	ug/kg	1.55	5.16
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.16	ug/kg	1.29	5.16
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	J	0.504	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.16	ug/kg	1.55	5.16
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1950  
Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8260B  
Inst: VOA7.I  
Analyst: AXO1  
Aliquot: 5 g  
Column: DB-624

Matrix: R  
%Moisture: 3.2  
Project: LANL01004  
SOP Ref: GL-OA-E-038  
Dilution: 1  
Purge Vol: 5 mL  
Final Volume: 5 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	J	0.314	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.16	ug/kg	1.65	5.16
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	19.65	9.19	ug/kg		J

Data File: /chem/VOA7.i/022610v7/7a542.d  
Report Date: 17-Mar-2010 16:21

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a542.d

Lab Smp Id: 247562008

Client Smp ID: RE15-10-8303

Inj Date : 27-FEB-2010 09:27

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562008|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 42

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.17440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
	=====	==	=====	=====	=====		( ug/l)	(ug/Kg)
* 51 Fluorobenzene	96	15.317	15.316	(1.000)	726013		50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	537604		50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	267981		50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	307694		49.0538	50.7
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	832098		47.5556	49.1
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	295188		41.8757	43.2
13 Acetone	43	10.454	10.413	(0.683)	41858		8.60742	8.9
65 Toluene	92	17.205	17.215	(0.922)	4722		0.48785	0.50 (a)
99 4-Isopropyltoluene	119	20.860	20.859	(0.994)	4194		0.30363	0.31 (a)

QC Flag Legend

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

## ION RATIO REPORT

## VOA REPORT

Data file: 7a542.d

Report Date: 03/01/2010 07:17

Lab. ID: 247562008

SampleType: SAMPLE

Injection Date: 27-FEB-2010 09:27

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562008|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
13	Acetone		CAS#: 67-64-1			
43	41858	10.45	10.41	80-120	100	( )
58	9928	10.46	10.41	0- 58	24	( )
-----						
63	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	9865	17.13	16.94	80-120	100	(T)
43	5641	17.13	16.93	217-277	57	(QT)
100	570695	17.13	16.94	0- 56	5785	(QT)
-----						
65	Toluene		CAS#: 108-88-3			
92	4722	17.20	17.21	80-120	100	( )
91	8060	17.22	17.21	132-192	171	( )
-----						
73	1,2-Dibromoethane		CAS#: 106-93-4			
107	3655	18.60	18.22	80-120	100	(T)
109	4096	18.61	18.22	66-126	112	(T)
-----						
78	Ethylbenzene		CAS#: 100-41-4			
91	8833	18.66	18.77	80-120	100	(T)
106	1231	18.66	18.77	1- 61	14	(T)
-----						
79	m,p-Xylenes		CAS#:			
106	3240	18.62	18.87	80-120	100	(T)
91	11928	18.62	18.87	167-227	368	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
82 Bromoform		CAS#: 75-25-2				
173	1150	19.81	19.54	80-120	100	(T)
175	15875	19.81	19.54	20- 80	1380	(QT)
<hr/>						
89 1,2,3-Trichloropropane		CAS#: 96-18-4				
110	680	19.68	19.97	80-120	100	(T)
75	2677	19.69	19.97	304-364	393	(QT)
77	16880	19.65	19.97	89-149	2479	(QT)
<hr/>						
91 n-Propylbenzene		CAS#: 103-65-1				
91	24006	19.65	20.03	80-120	100	(T)
120	566	20.24	20.03	0- 52	2	(T)
<hr/>						
93 2-Chlorotoluene		CAS#: 95-49-8				
91	13271	20.62	20.17	80-120	100	(T)
126	264	19.70	20.17	0- 59	2	(T)
<hr/>						
95 tert-Butylbenzene		CAS#: 98-06-6				
119	7011	20.24	20.53	80-120	100	(T)
91	4492	20.24	20.52	50-110	64	(T)
134	852	20.24	20.53	0- 53	12	(T)
<hr/>						
99 4-Isopropyltoluene		CAS#: 99-87-6				
119	4194	20.86	20.86	80-120	100	( )
134	1148	20.87	20.86	0- 59	27	( )
91	1246	20.86	20.86	0- 58	30	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA7.i/022610v7/7a542.d  
Lab Smp Id: 247562008 Client Smp ID: RE15-10-8303  
Inj Date : 27-FEB-2010 09:27  
Operator : AX01 Inst ID: VOA7.i  
Smp Info : |247562008|957839|1|VOAF|1|  
Misc Info : LANL 5g N/A  
Comment :  
Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
Als bottle: 42  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.17440	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 75 Chlorobenzene-d5	18.667	2206814	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL ( ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Hydrocarbon					CAS #:		
19.652	392760	8.89880216	9.2	0		0	75



Data File: /chem/V0A7.1/022610v7/7a542.d  
Date : 27-FEB-2010 09:27  
Client ID: RE15-10-8303  
Sample Info: 1247562008195783911V0A7.1

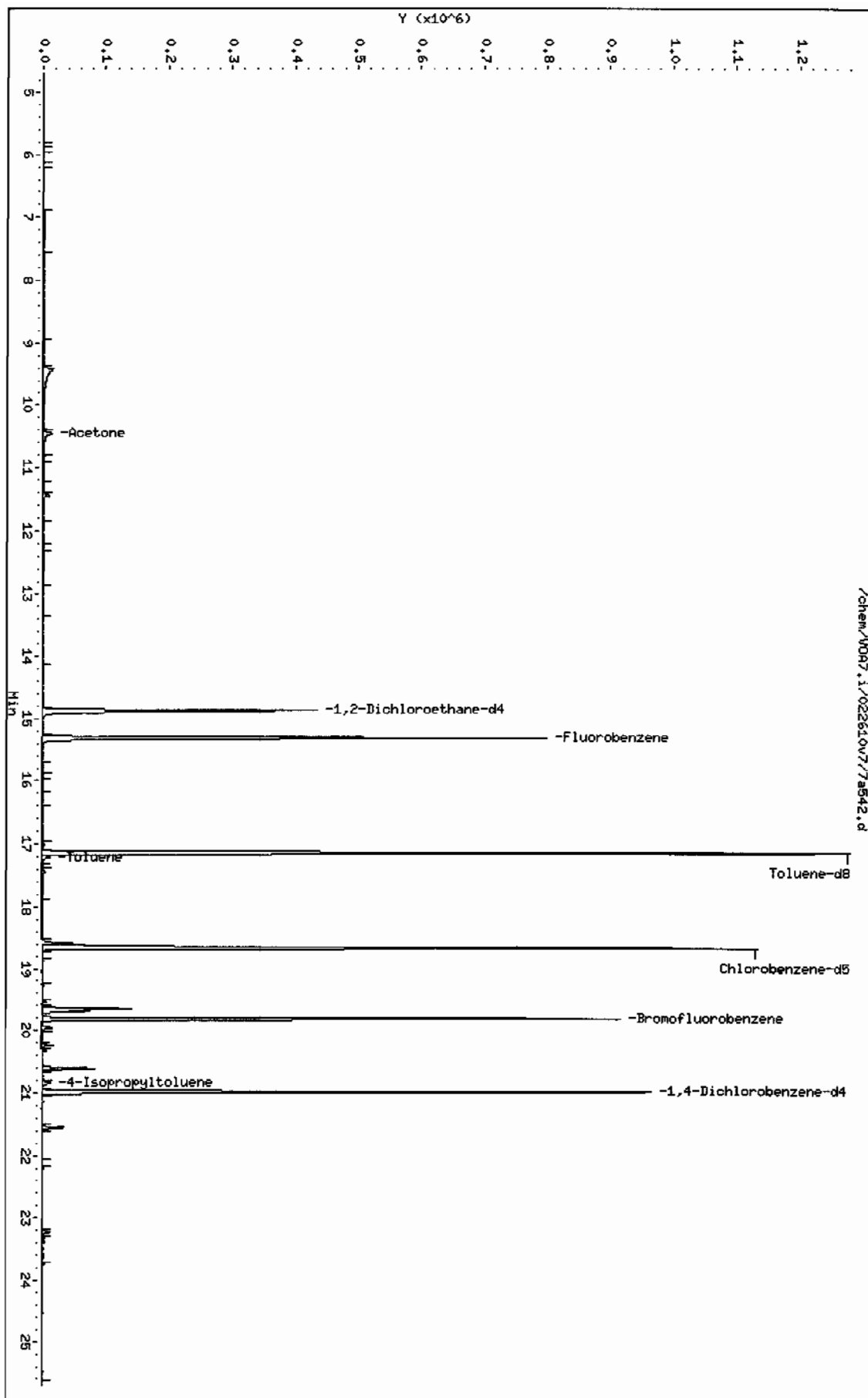
Column Phase: DB-624

Instrument: V0A7.i

Operator: AK01

Column diameter: 0.25

Page 1





Date : 27-FEB-2010 09:27

Client ID: RE15-10-8303

Instrument: V0A7.i

Sample Info: I247562008I957839I1IIV0AFI1I

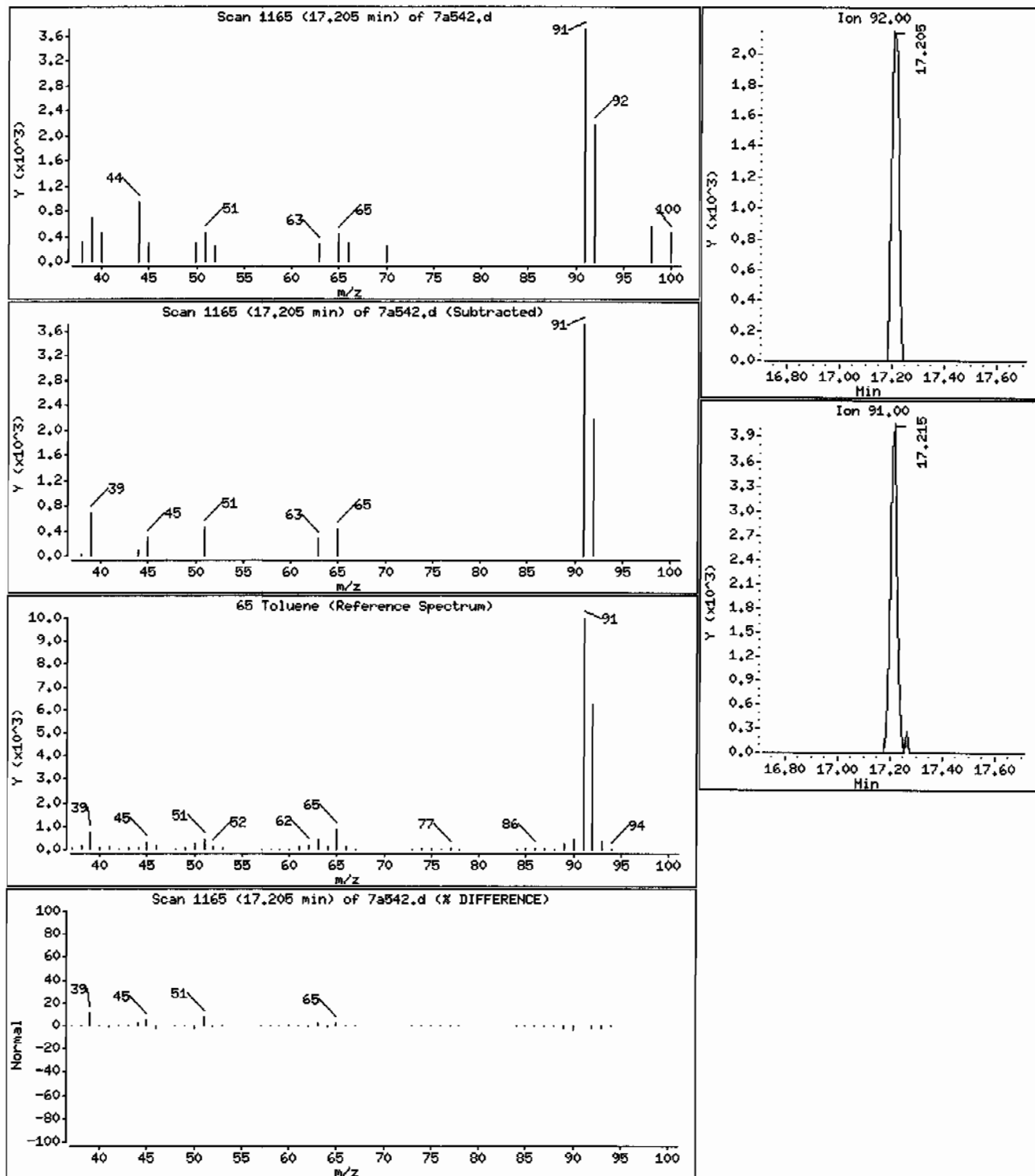
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

65 Toluene

Concentration: 0.50 ug/Kg



Date : 27-FEB-2010 09:27

Client ID: RE15-10-8303

Instrument: V0A7.1

Sample Info: I247562008I957839I1IV0AFI1I

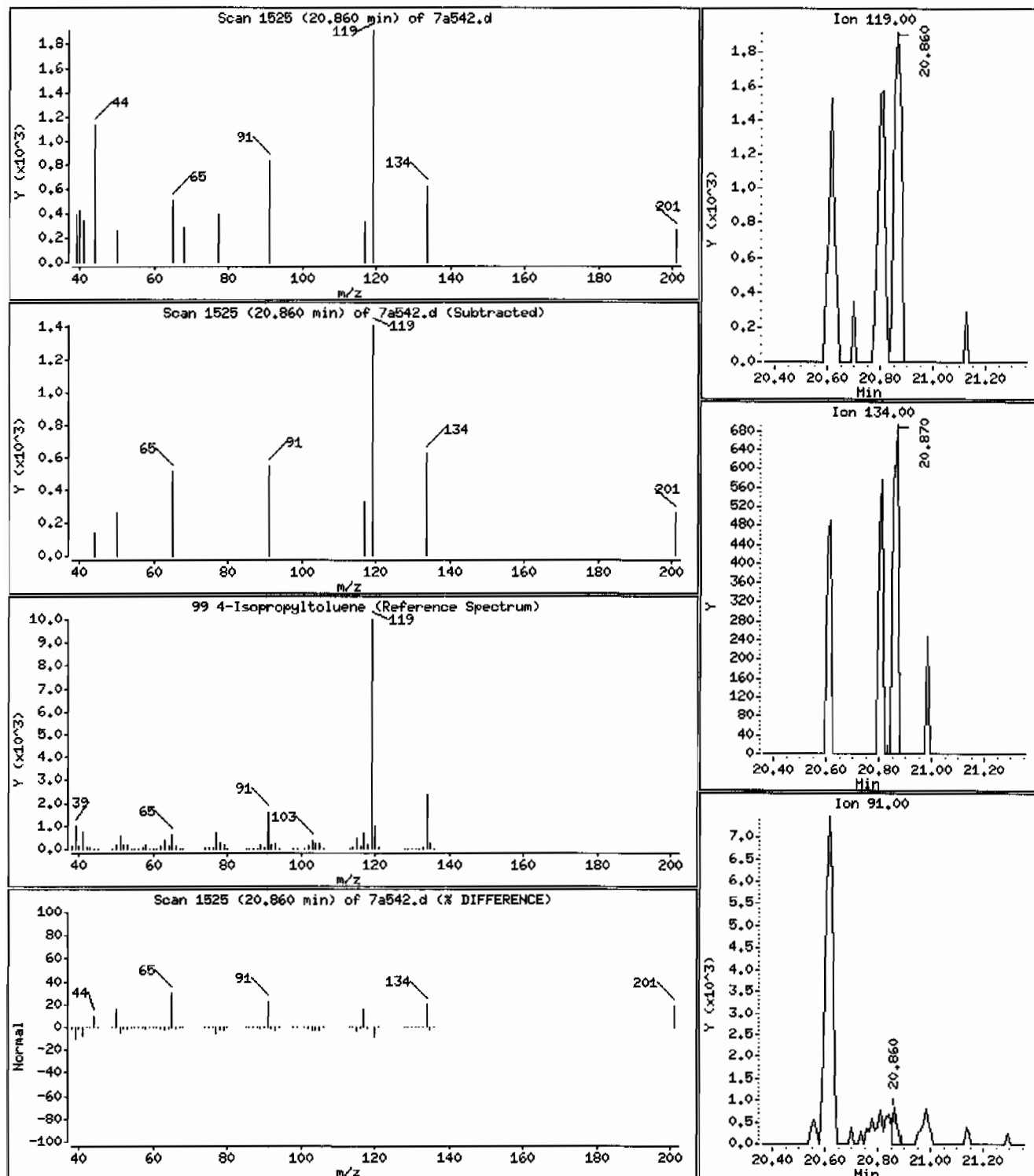
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

99 4-Isopropyltoluene

Concentration: 0.31 ug/Kg



Date : 27-FEB-2010 09:27

Client ID: RE15-10-8303

Instrument: V0A7.i

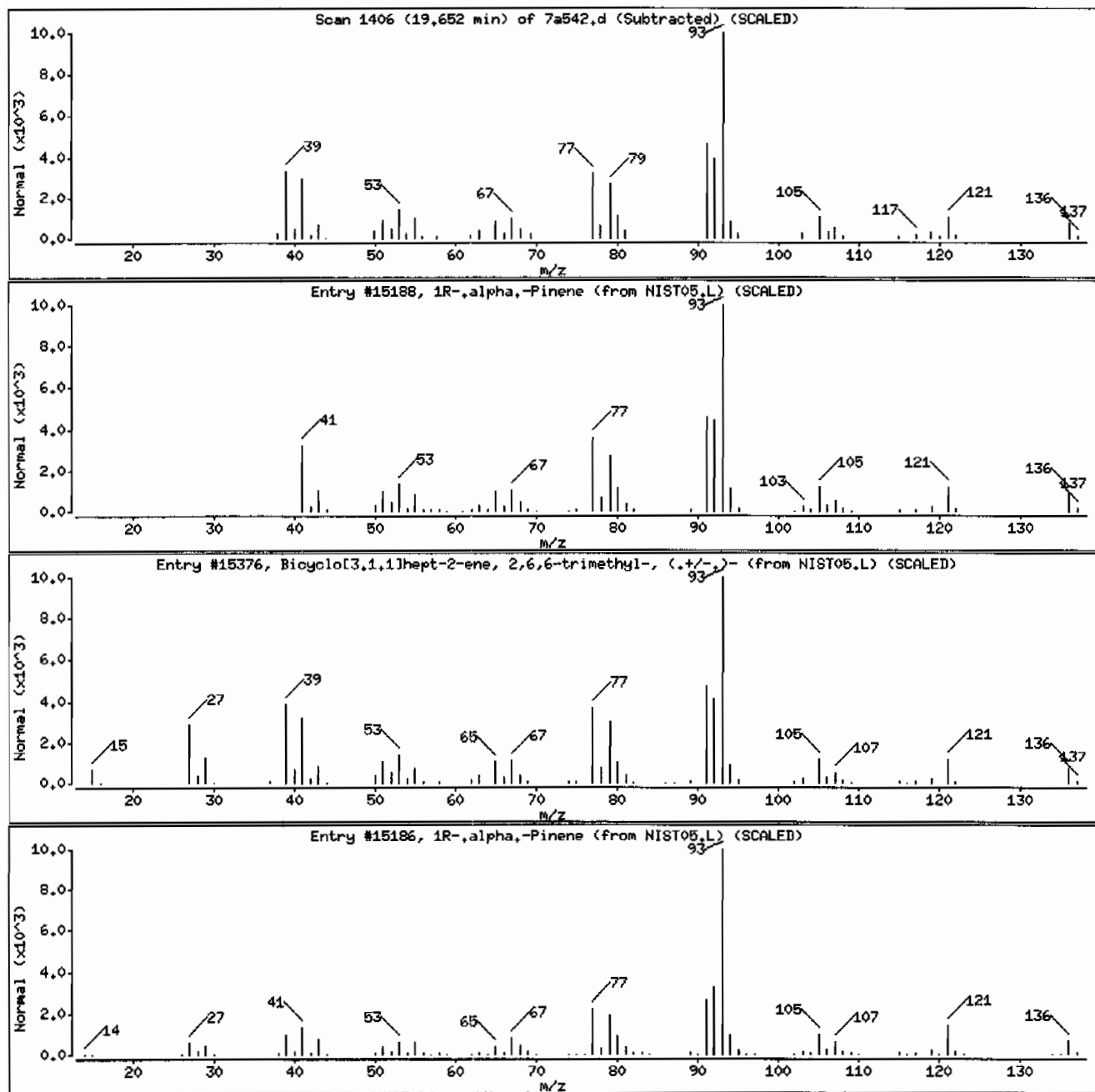
Sample Info: I247562008I957839I1V0AFI1I

Operator: AXD1

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	2437-95-8	NIST05.L	15376	96	C10H16	136
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562007	Date Received: 02/20/2010 08:55	%Moisture: 3.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8310	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.1	Dilution: 1
Run Date: 02/27/2010 08:53	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:55	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a541.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone		22.6	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	J	0.704	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562007	Date Received: 02/20/2010 08:55	%Moisture: 3.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8310	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 08:53	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:55	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a541.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene		1.09	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Hydrocarbon	19.65	22.8	ug/kg		J
	Unknown Hydrocarbon	20.62	14.4	ug/kg		J
	Unknown Siloxane	21.55	5.73	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a541.d

Lab Smp Id: 247562007

Client Smp ID: RE15-10-8310

Inj Date : 27-FEB-2010 08:53

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562007|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 41

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.65070	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.316	(1.000)	705997	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	530404	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	265946	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	292476	47.9496	49.8
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	819025	47.4439	49.2
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	304200	43.4843	45.1
13 Acetone	43	10.444	10.413	(0.682)	102794	21.7372	22.6
65 Toluene	92	17.215	17.215	(0.922)	6477	0.67825	0.70 (a)
99 4-Isopropyltoluene	119	20.859	20.859	(0.994)	14353	1.04705	1.1



QC Flag Legend

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

## ION RATIO REPORT

## VOA REPORT

Data file: 7a541.d

Report Date: 03/01/2010 07:16

Lab. ID: 247562007

SampleType: SAMPLE

Injection Date: 27-FEB-2010 08:53

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562007|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
13 Acetone		CAS#: 67-64-1				
43	102794	10.44	10.41	80-120	100	( )
58	29768	10.43	10.41	0- 58	29	( )
-----						
63 4-Methyl-2-pentanone		CAS#: 108-10-1				
58	10189	17.13	16.94	80-120	100	(T)
43	5660	17.14	16.93	217-277	56	(QT)
100	567902	17.13	16.94	0- 56	5573	(QT)
-----						
65 Toluene		CAS#: 108-88-3				
92	6477	17.21	17.21	80-120	100	( )
91	11700	17.21	17.21	132-192	181	( )
-----						
73 1,2-Dibromoethane		CAS#: 106-93-4				
107	11227	18.62	18.22	80-120	100	(T)
109	6362	18.63	18.22	66-126	57	(QT)
-----						
78 Ethylbenzene		CAS#: 100-41-4				
91	23563	18.62	18.77	80-120	100	(T)
106	5298	18.62	18.77	1- 61	22	(T)
-----						
80 o-Xylene		CAS#: 95-47-6				
106	4023	19.65	19.29	80-120	100	(T)
91	67783	19.65	19.29	172-232	1684	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
79 m,p-Xylenes			CAS#:			
106	5298	18.62	18.87	80-120	100	(T)
91	23563	18.62	18.87	167-227	445	(QT)
<hr/>						
82 Bromoform			CAS#: 75-25-2			
173	1072	19.81	19.54	80-120	100	(T)
175	16008	19.81	19.54	20- 80	1493	(QT)
<hr/>						
83 Isopropylbenzene			CAS#: 98-82-8			
105	15614	19.65	19.63	80-120	100	( )
120	676	19.65	19.63	0- 57	4	( )
<hr/>						
89 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	1468	19.69	19.97	80-120	100	(T)
75	5927	19.69	19.97	304-364	404	(QT)
77	49048	19.65	19.97	89-149	3340	(QT)
<hr/>						
91 n-Propylbenzene			CAS#: 103-65-1			
91	22933	20.24	20.03	80-120	100	(T)
120	4409	20.24	20.03	0- 52	19	(T)
<hr/>						
92 1,3,5-Trimethylbenzene			CAS#: 108-67-8			
105	9675	20.62	20.17	80-120	100	(T)
120	884	20.62	20.17	18- 78	9	(QT)
<hr/>						
96 1,2,4-Trimethylbenzene			CAS#: 95-63-6			
105	11872	20.62	20.56	80-120	100	( )
120	884	20.62	20.56	23- 83	7	(Q)
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95 tert-Butylbenzene			CAS#: 98-06-6			
119	6794	20.62	20.53	80-120	100	(T)
91	50271	20.62	20.52	50-110	740	(QT)
134	1029	20.62	20.53	0- 53	15	(T)
<hr/>						
98 sec-Butylbenzene			CAS#: 135-98-8			
105	11872	20.62	20.75	80-120	100	(T)
134	1029	20.62	20.75	0- 50	9	(T)
<hr/>						
99 4-Isopropyltoluene			CAS#: 99-87-6			
119	14353	20.86	20.86	80-120	100	( )
134	3989	20.87	20.86	0- 59	28	( )
91	5786	20.86	20.86	0- 58	40	( )
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
104	n-Butylbenzene			CAS#: 104-51-8		
91	5786	20.86	21.30	80-120	100	(T)
92	559	20.84	21.30	27- 87	10	(QT)
134	3989	20.87	21.30	0- 54	69	(QT)

-----

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
 Data file : /chem/VOA7.i/022610v7/7a541.d  
 Lab Smp Id: 247562007 Client Smp ID: RE15-10-8310  
 Inj Date : 27-FEB-2010 08:53  
 Operator : AX01 Inst ID: VOA7.i  
 Smp Info : |247562007|957839|1|VOAF|1|  
 Misc Info : LANTL 5g N/A  
 Comment :  
 Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
 Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
 Als bottle: 41  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.sub  
 Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.65070	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 75 Chlorobenzene-d5	18.667	2301043	50.000
* 101 1,4-Dichlorobenzene-d4	20.991	1880775	50.000

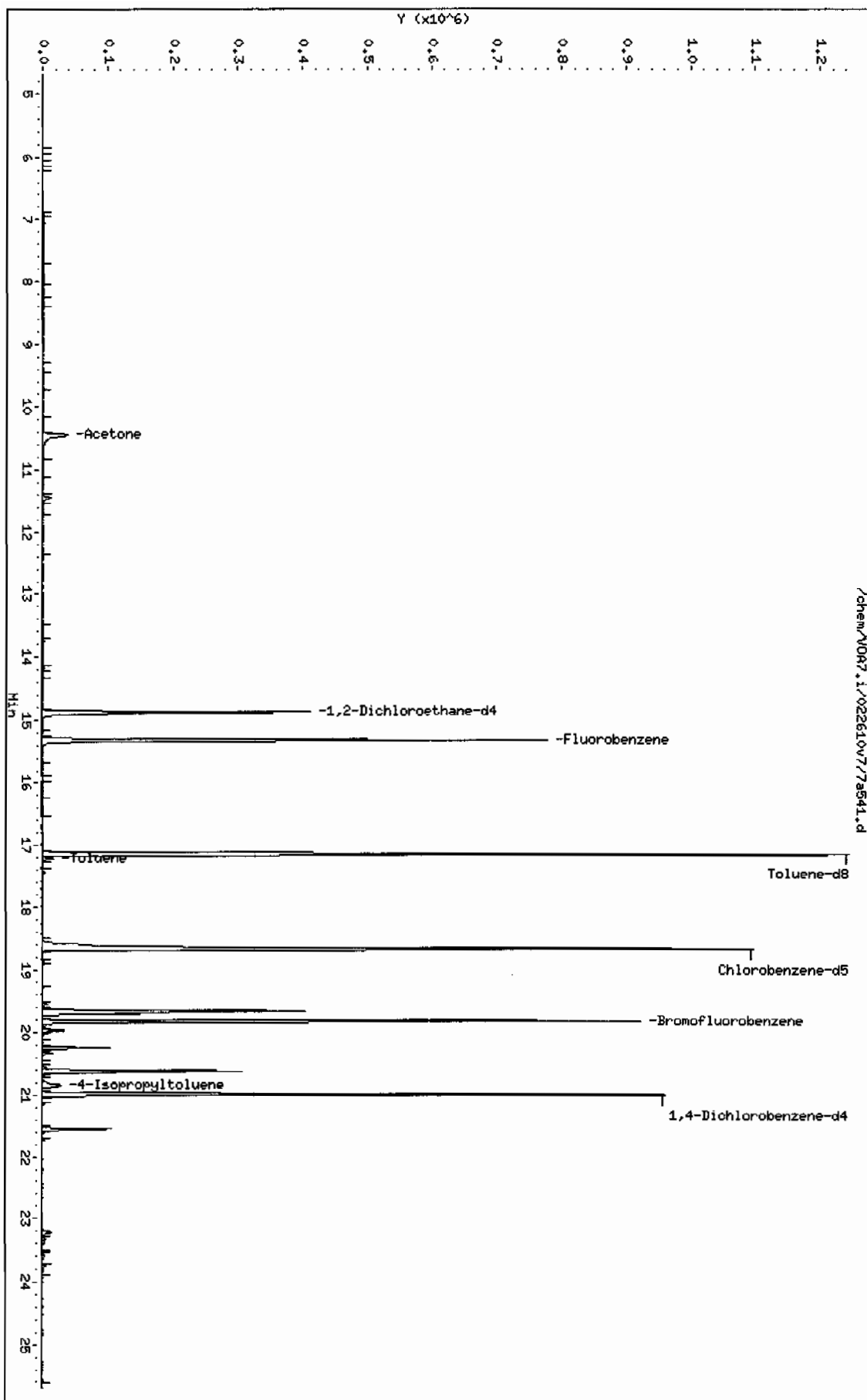
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

Unknown Hydrocarbon				CAS #:			
19.651	1011894	21.9877244	22.8	0		0	75

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL ( ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Hydrocarbon				CAS #:			
20.616	521904	13.8747067	14.4	0	0	101	
Unknown Siloxane				CAS #:			
21.550	207498	5.51628265	5.7	0	0	101	

Data File: /chem/V067.i/022610v7/7a541.d  
Date: 27-FEB-2010 08:53  
Client ID: RE15-10-8310  
Sample Info: 1247562007195783911.V067.i.1  
Column phase: DB-624

Instrument: V067.i  
Operator: AX01  
Column diameter: 0.25



Date : 27-FEB-2010 08:53

Client ID: RE15-10-8310

Instrument: V0A7.i

Sample Info: I247562007195783911V0AFI11

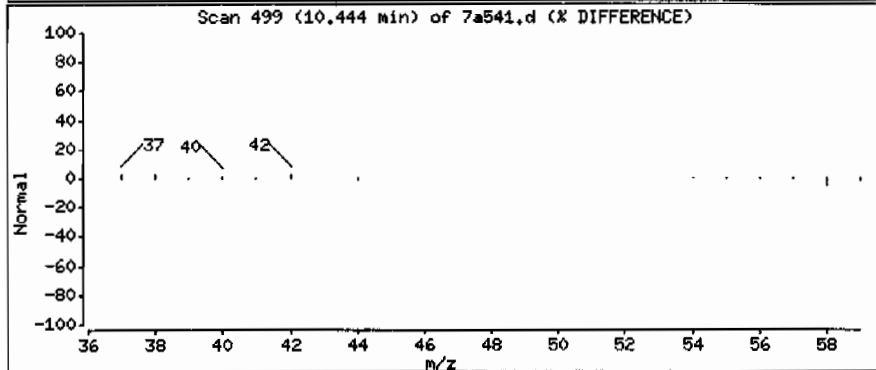
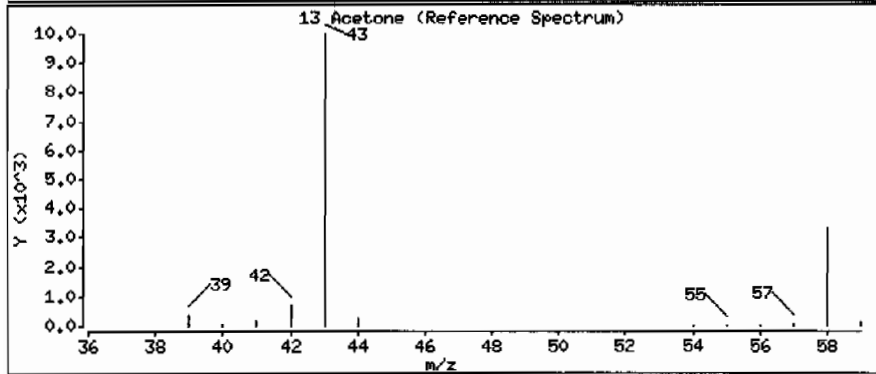
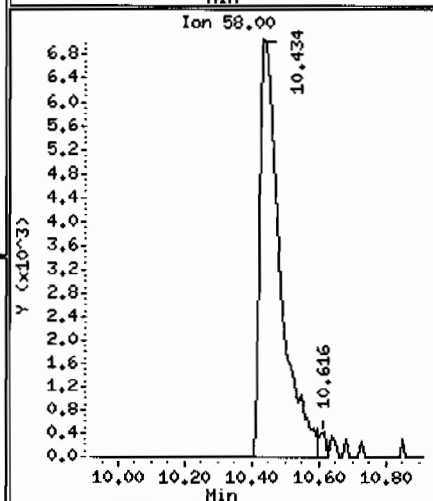
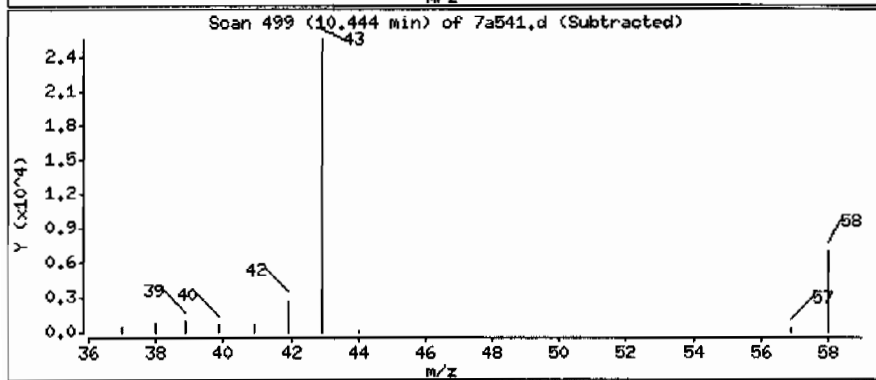
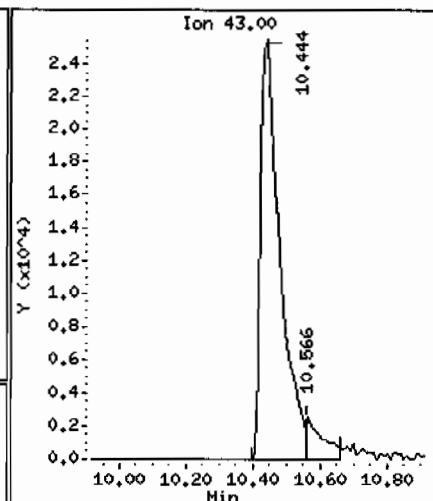
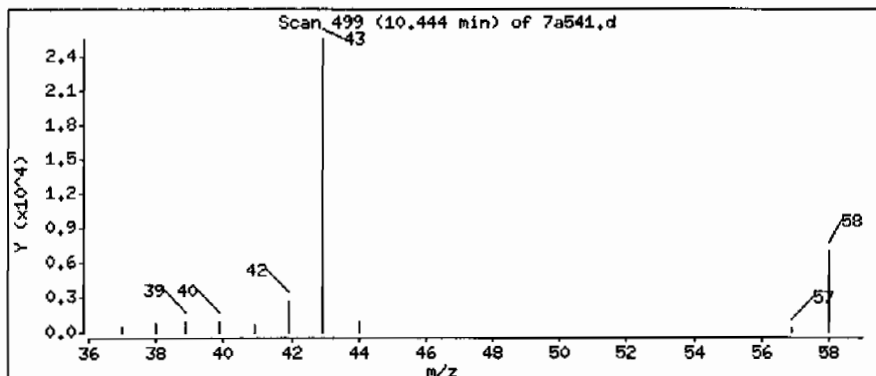
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 22.6 ug/Kg





Date : 27-FEB-2010 08:53

Client ID: RE15-10-8310

Instrument: V0A7.i

Sample Info: I247562007I957839I1IV0AFI1I

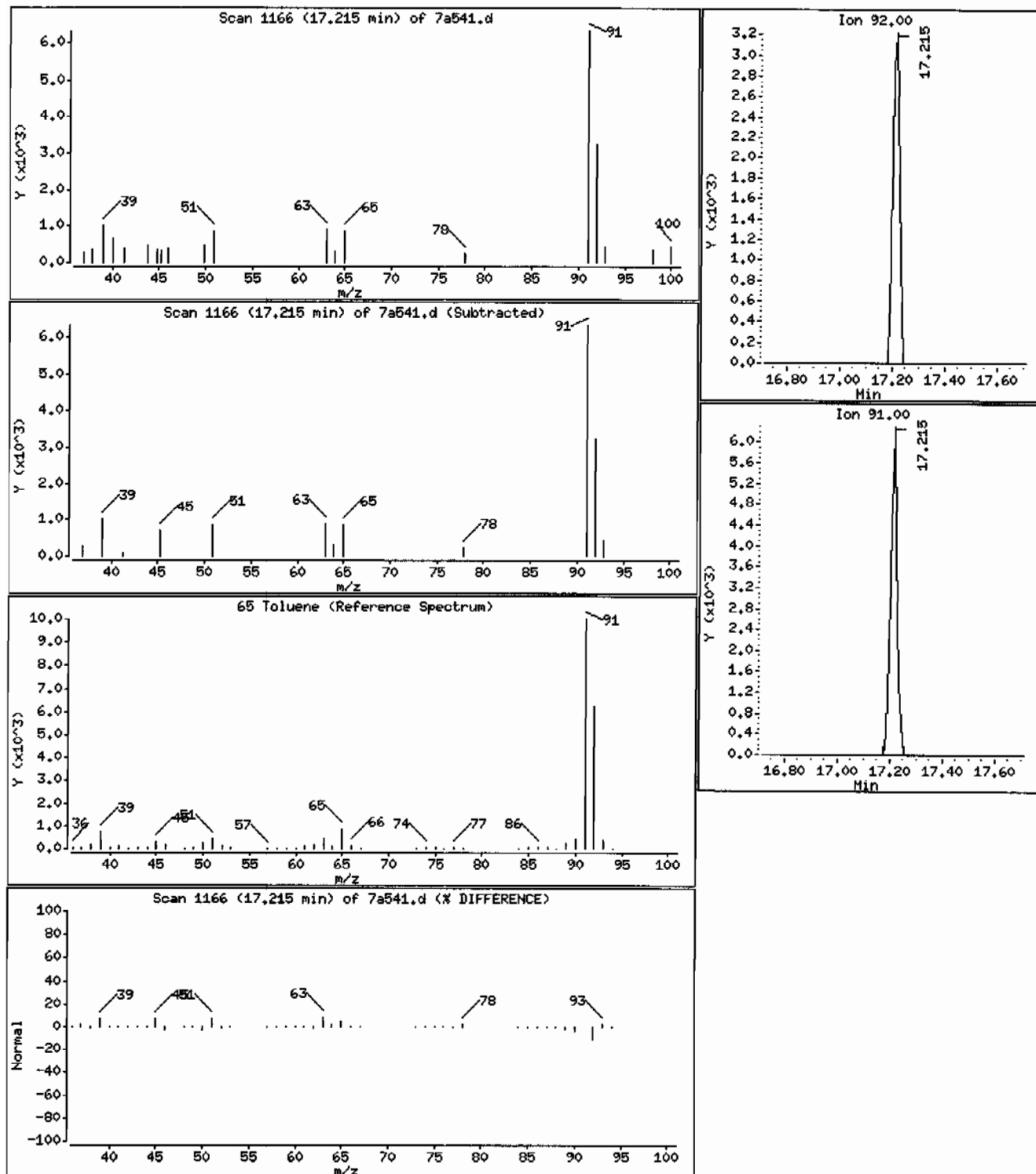
Operator: AXD1

Column phase: DB-624

Column diameter: 0.25

65 Toluene

Concentration: 0.70 ug/Kg



Date : 27-FEB-2010 08:53

Client ID: RE15-10-8310

Instrument: V0A7.1

Sample Info: 1247562007195783911V0AF111

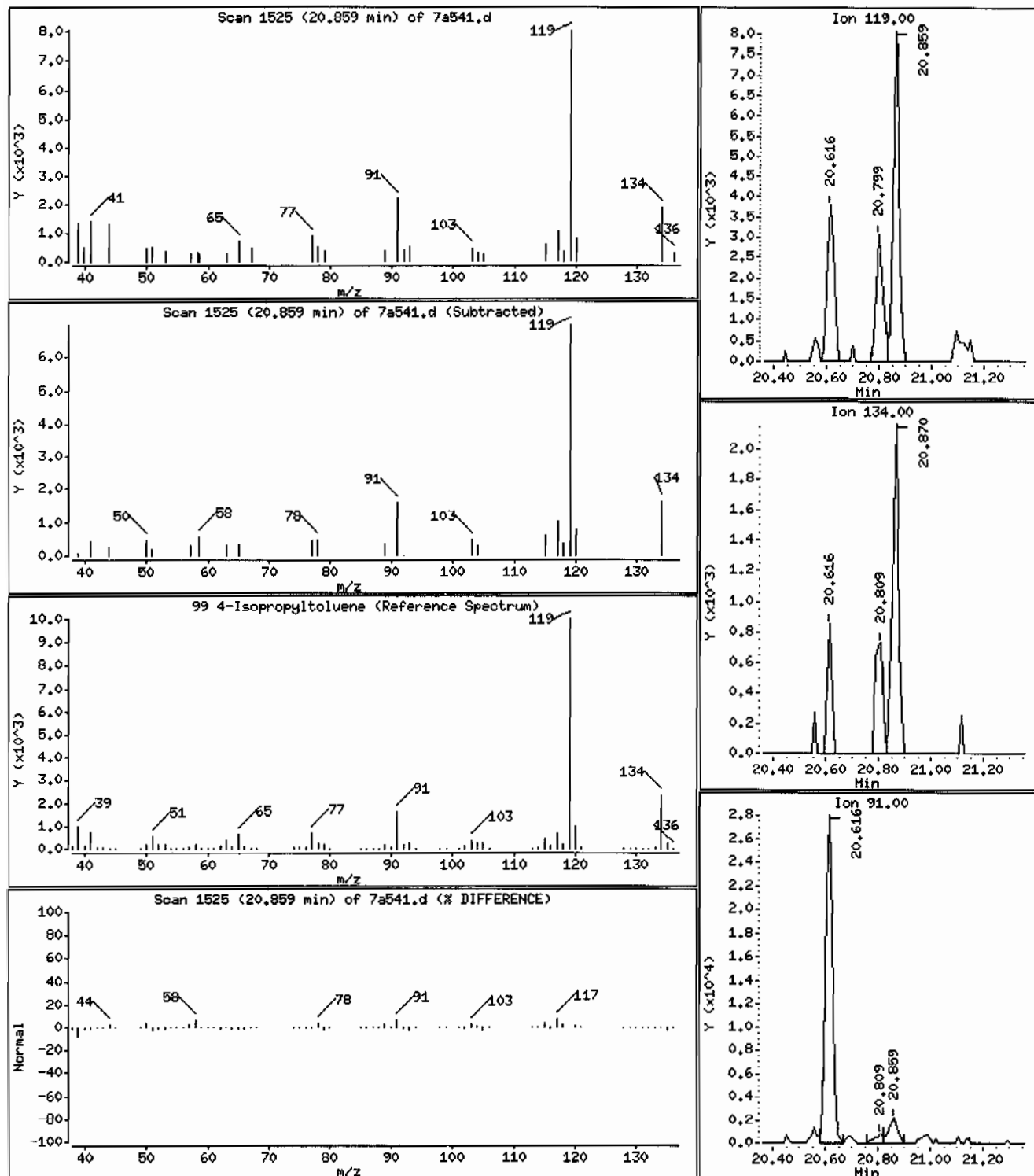
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

99 4-Isopropyltoluene

Concentration: 1.1 ug/Kg



Date : 27-FEB-2010 08:53

Client ID: RE15-10-8310

Instrument: V0A7.i

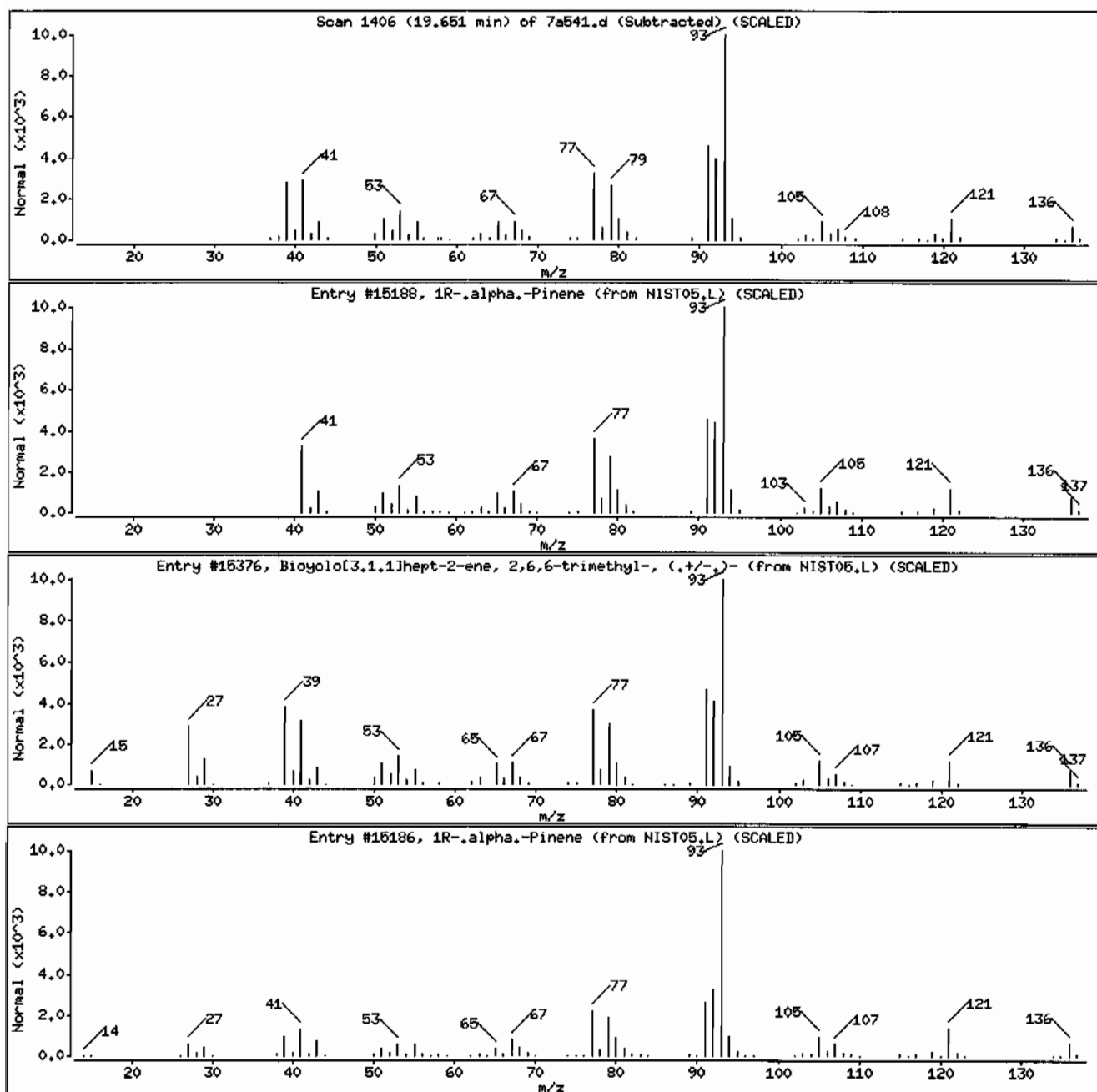
Sample Info: I247562007195783911V0AF11I

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	2437-95-8	NIST05.L	15376	96	C10H16	136
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136



Date : 27-FEB-2010 08:53

Client ID: RE15-10-8310

Instrument: VOA7.i

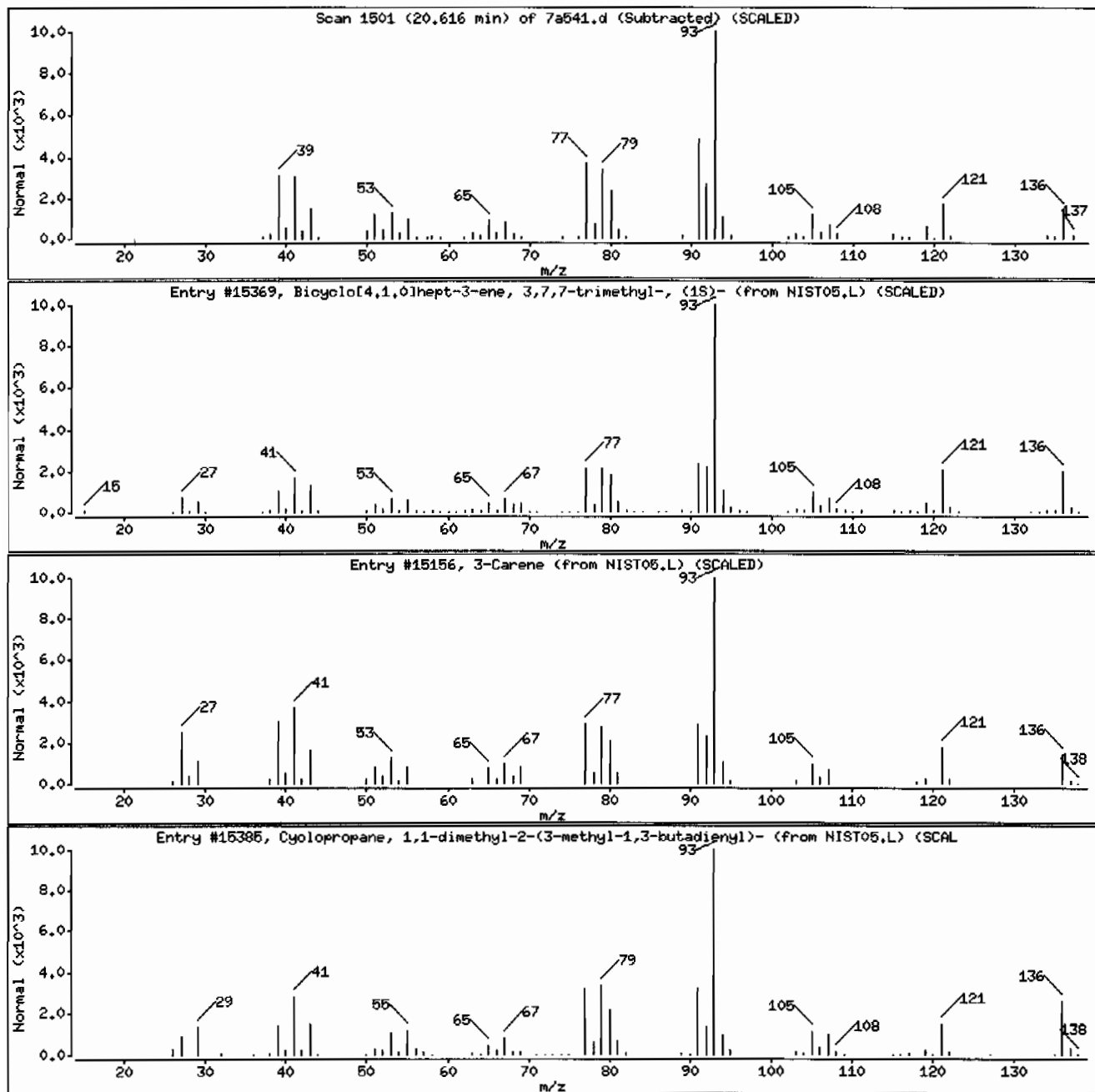
Sample Info: 1247562007195783911\VOAF111

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-	498-15-7	NIST05.L	15369	96	C <sub>10</sub> H <sub>16</sub>	136
3-Carene	13466-78-9	NIST05.L	15156	96	C <sub>10</sub> H <sub>16</sub>	136
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST05.L	15385	94	C <sub>10</sub> H <sub>16</sub>	136



Date : 27-FEB-2010 08:53

Client ID: RE15-10-8310

Instrument: VOA7.i

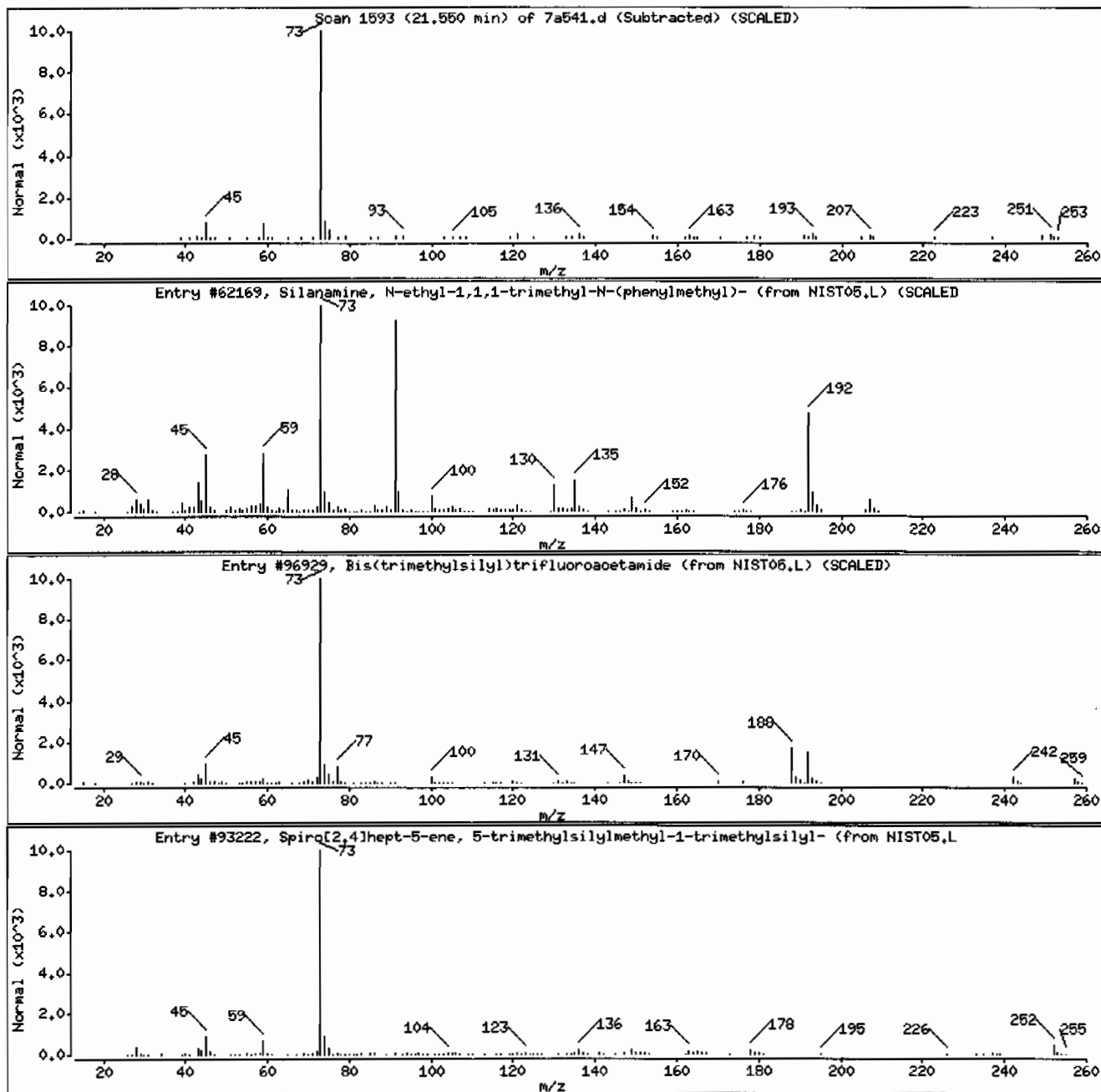
Sample Info: 12475620071957839111VOAF111

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Silaname, N-ethyl-1,1,1-trimethyl-N-(p	14629-66-4	NIST05.L	62169	42	C <sub>12</sub> H <sub>21</sub> NSi	207
Bis(trimethylsilyl)trifluoroacetamide	25561-30-2	NIST05.L	96929	38	C <sub>8</sub> H <sub>18</sub> F <sub>3</sub> NO <sub>2</sub> Si <sub>2</sub>	257
Spiro[2.4]hept-5-ene, 5-trimethylsilylme	1000153-96-9	NIST05.L	93222	37	C <sub>14</sub> H <sub>28</sub> Si <sub>2</sub>	252



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

SDG Number: 10-1950  
 Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8311  
 Batch ID: 957839  
 Run Date: 02/27/2010 08:17  
 Prep Date: 02/26/2010 14:53  
 Data File: 7a540.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone	J	4.28	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.08	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.343	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.343	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene	J	0.321	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04

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

SDG Number: 10-1950  
 Lab Sample ID: 247562006

Client ID: RE15-10-8311  
 Batch ID: 957839  
 Run Date: 02/27/2010 08:17  
 Prep Date: 02/26/2010 14:53  
 Data File: 7a540.d

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.08	ug/kg	0.311	2.08
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene	U	1.04	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	14.1	ug/kg		J
	Unknown Siloxane	21.55	5.65	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a540.d

Lab Smp Id: 247562006

Client Smp ID: RE15-10-8311

Inj Date : 27-FEB-2010 08:17

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562006|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 40

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.67620	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.316	(1.000)	726643	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	544519	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	263048	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	312905	49.8413	51.7
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	850551	47.9929	49.8
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	309450	44.7221	46.4
13 Acetone	43	10.464	10.413	(0.683)	20057	4.12082	4.3(a)
65 Toluene	92	17.215	17.215	(0.922)	3030	0.30907	0.32(aQ)

QC Flag Legend

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



QC Flag Legend

Q - Qualifier signal failed the ratio test.

## ION RATIO REPORT

## VOA REPORT

Data file: 7a540.d

Report Date: 03/01/2010 07:19

Lab. ID: 247562006

SampleType: SAMPLE

Injection Date: 27-FEB-2010 08:17

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562006|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
13	Acetone		CAS#: 67-64-1			
43	20057	10.46	10.41	80-120	100	( )
58	4927	10.47	10.41	0- 58	25	(T)
-----						
63	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	10079	17.13	16.94	80-120	100	(T)
43	6487	17.13	16.93	217-277	64	(QT)
100	584848	17.13	16.94	0- 56	5802	(QT)
-----						
65	Toluene		CAS#: 108-88-3			
92	3030	17.21	17.21	80-120	100	( )
91	5907	17.21	17.21	132-192	195	(Q)
-----						
73	1,2-Dibromoethane		CAS#: 106-93-4			
107	1389	18.62	18.22	80-120	100	(T)
109	1150	18.63	18.22	66-126	83	(T)
-----						
89	1,2,3-Trichloropropane		CAS#: 96-18-4			
110	1699	19.70	19.97	80-120	100	(T)
75	5871	19.69	19.97	304-364	345	(T)
77	10308	19.65	19.97	89-149	606	(QT)
-----						
91	n-Propylbenzene		CAS#: 103-65-1			
91	14892	19.65	20.03	80-120	100	(T)
120	502	19.69	20.03	0- 52	3	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA7.i/022610v7/7a540.d  
Lab Smp Id: 247562006 Client Smp ID: RE15-10-8311  
Inj Date : 27-FEB-2010 08:17  
Operator : AX01 Inst ID: VOA7.i  
Smp Info : |247562006|957839|1|VOAF|1|  
Misc Info : LANL 5g N/A  
Comment :  
Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
Als bottle: 40  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.67620	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 75 Chlorobenzene-d5	18.667	2095321	50.000
* 101 1,4-Dichlorobenzene-d4	20.991	1878108	50.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane							
19.692	568615	13.5686751	14.1	0		0	75

Data File: /chem/VOA7.i/022610v7/7a540.d  
Report Date: 15-Mar-2010 06:20

Page 2

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL ( ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
21.550	204411	5.44193221	5.6	0	0	101	

Unknown Siloxane CAS #:

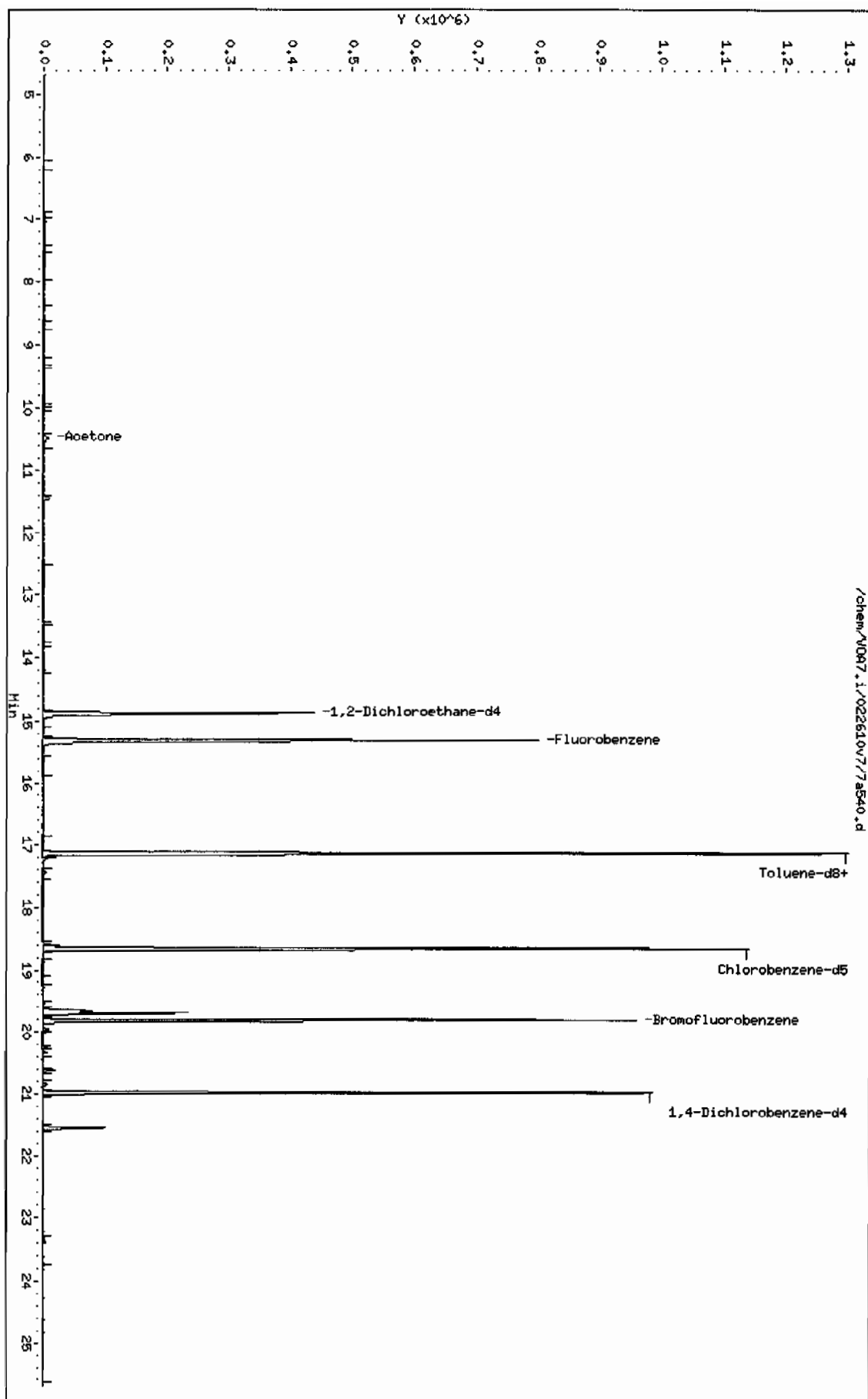
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Date: 27-FEB-2010 08:17  
Client ID: RE15-10-8314  
Sample Info: 1247562006195783911.V06F141

Column phase: DB-624

Instrument: V067.1

Operator: AXD1

Column diameter: 0.25



Date : 27-FEB-2010 08:17

Client ID: RE15-10-8311

Instrument: VOA7.i

Sample Info: 12475620061957839111VOAF111

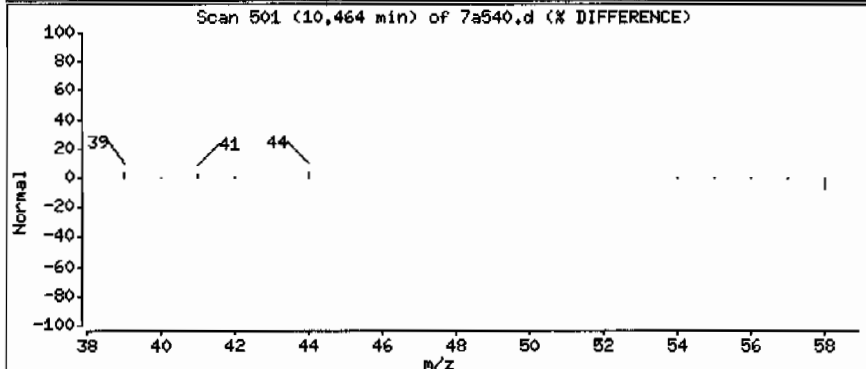
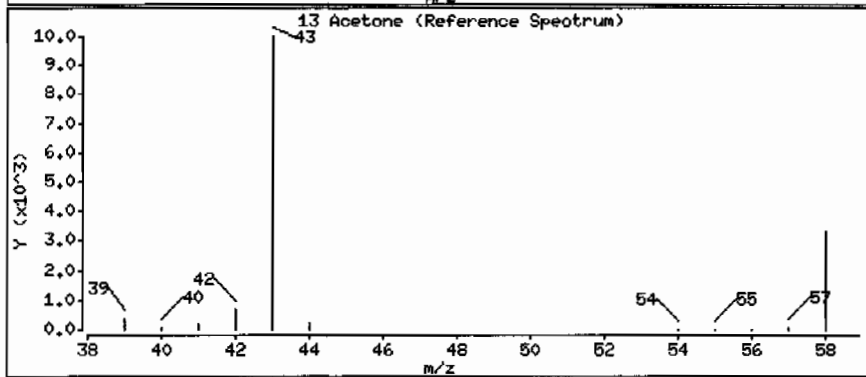
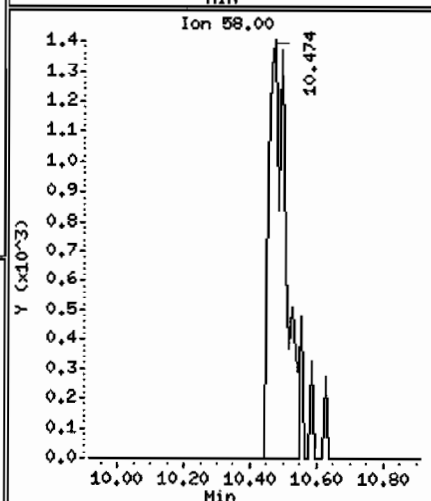
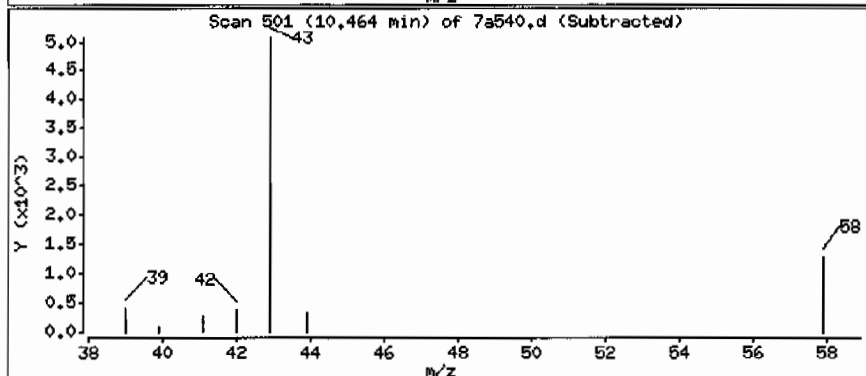
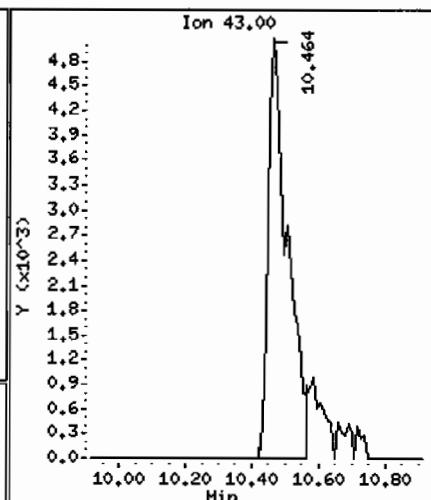
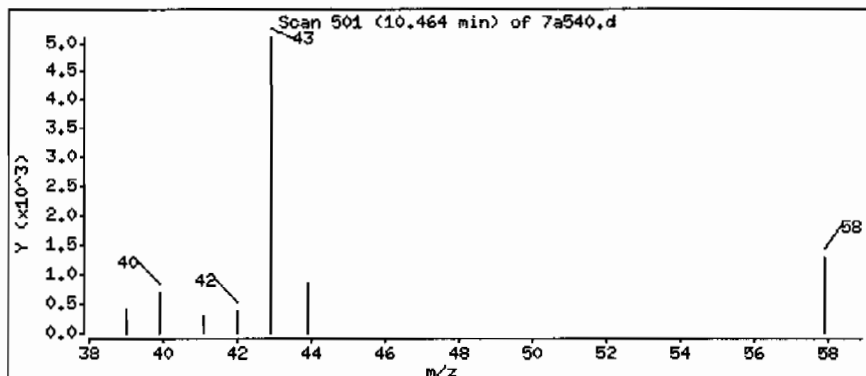
Operator: AX01

Column phase: DB-624

Column diameter: 0,25

13 Acetone

Concentration: 4,3 ug/Kg



Date : 27-FEB-2010 08:17

Client ID: RE15-10-8311

Instrument: VOA7.i

Sample Info: 12475620061957839111VOAF111

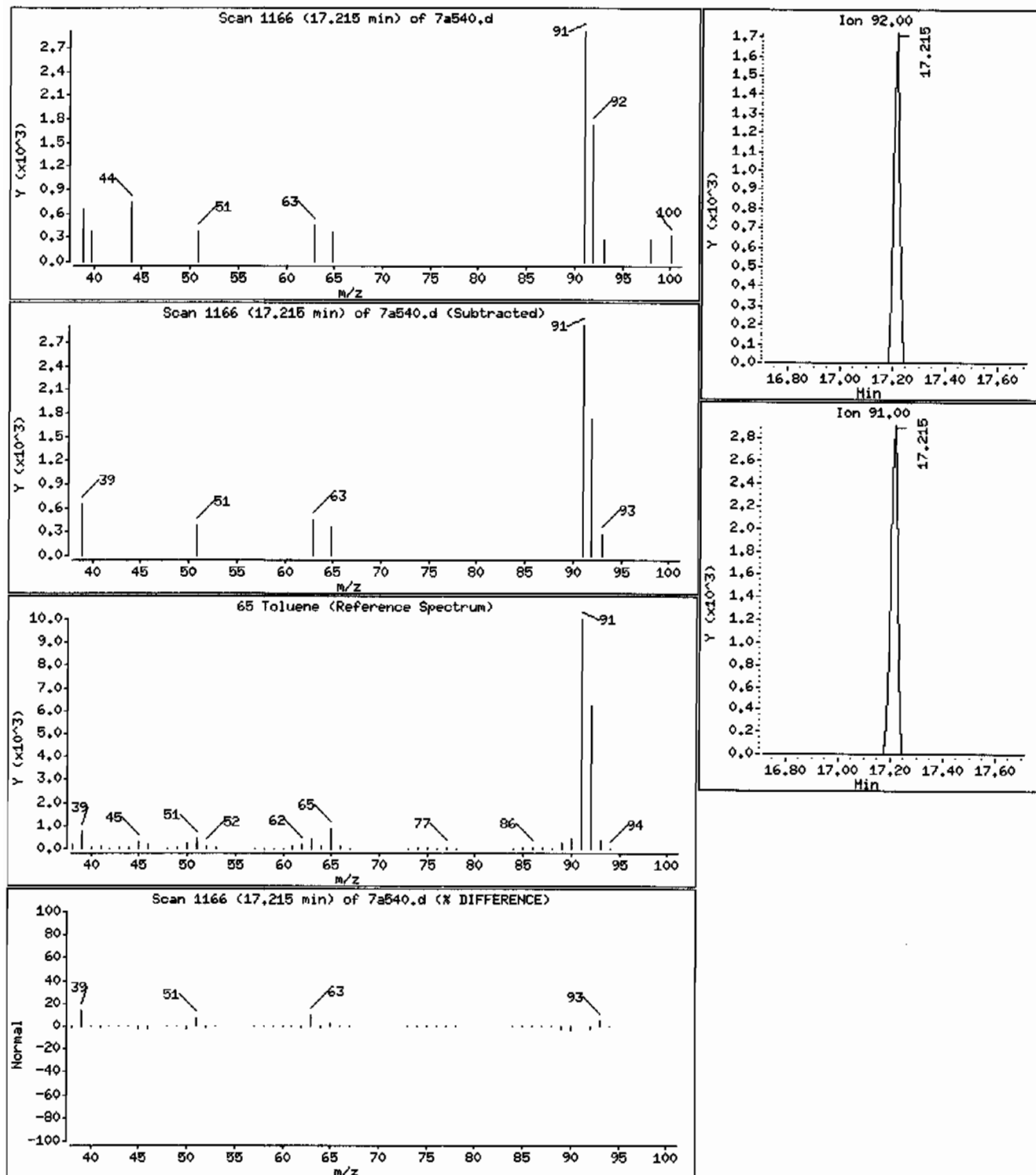
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

65 Toluene

Concentration: 0.32 ug/Kg



Date : 27-FEB-2010 08:17

Client ID: RE15-10-8311

Instrument: V0A7.i

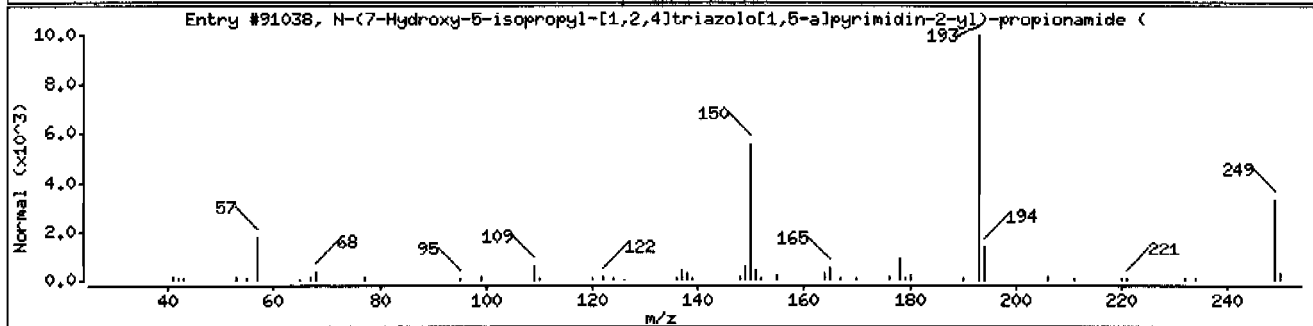
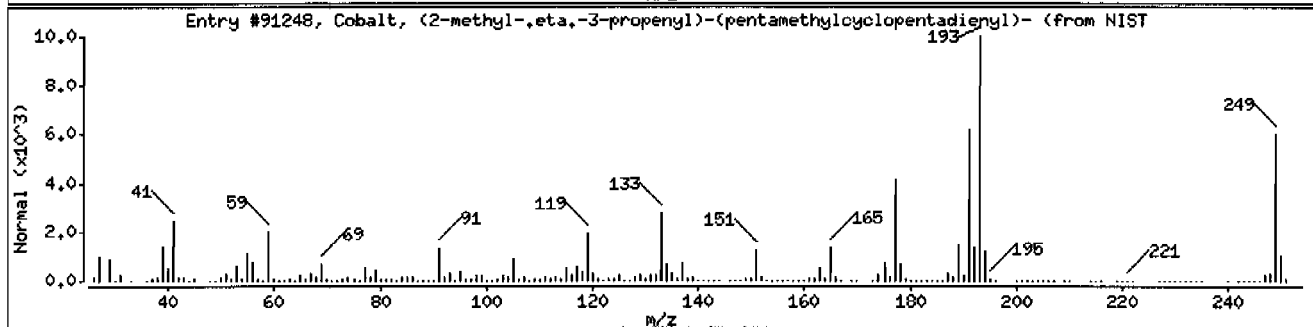
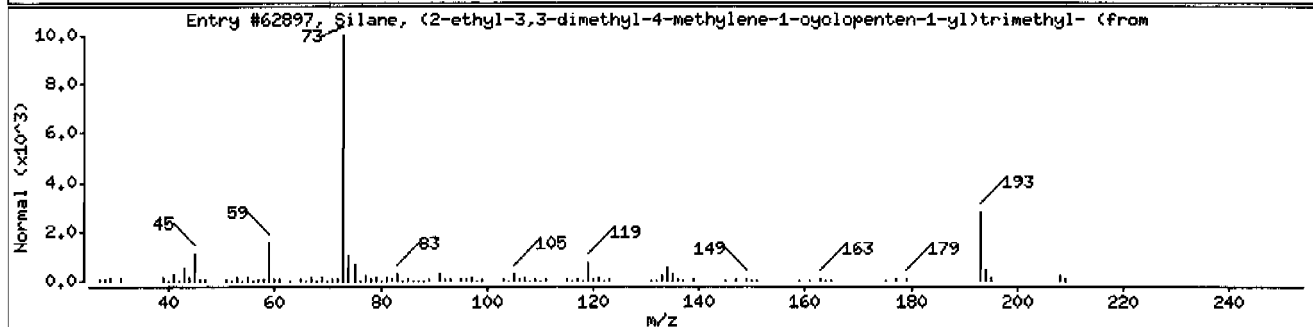
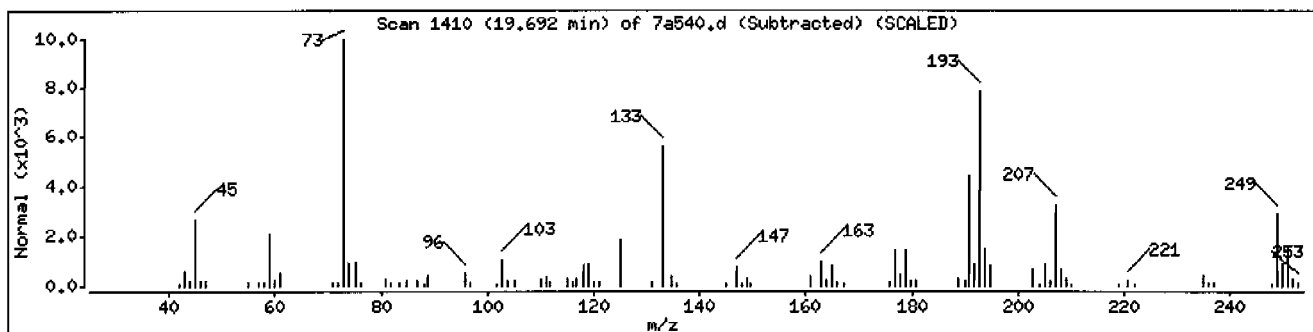
Sample Info: 1247562006195783911|V0AF11|

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Silane, (2-ethyl-3,3-dimethyl-4-methylen	95798-13-3	NIST05.L	62897	43	C13H24Si	208
Cobalt, (2-methyl-eta,-3-propenyl)-(pen	1000157-04-3	NIST05.L	91248	38	C14H22Co	249
N-(7-Hydroxy-5-isopropyl-[1,2,4]triazolo	1000296-64-7	NIST05.L	91038	27	C11H15N5O2	249





Date : 27-FEB-2010 08:17

Client ID: RE15-10-8311

Instrument: VOA7.i

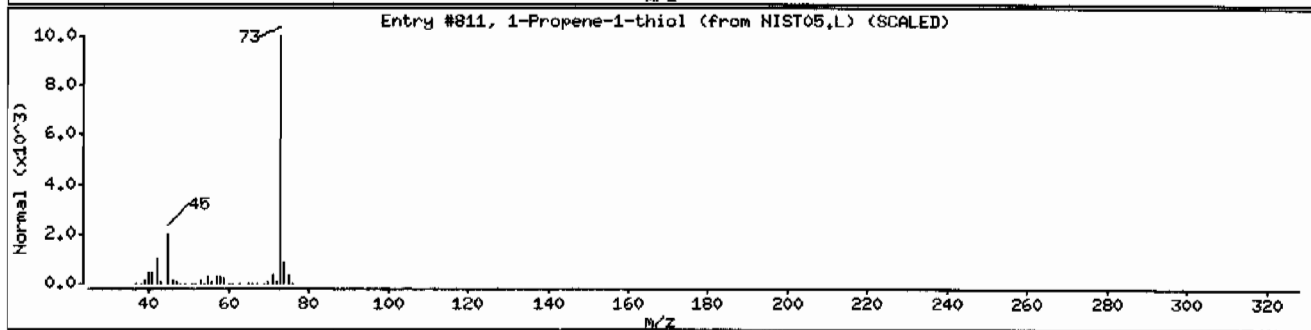
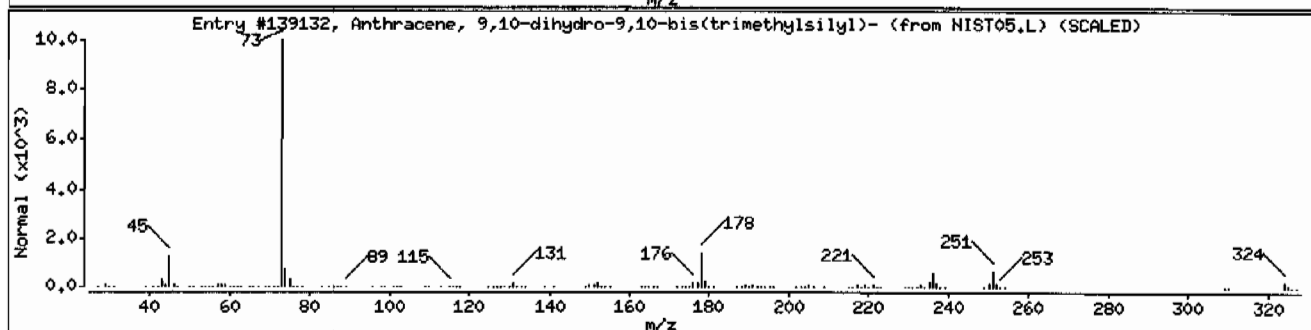
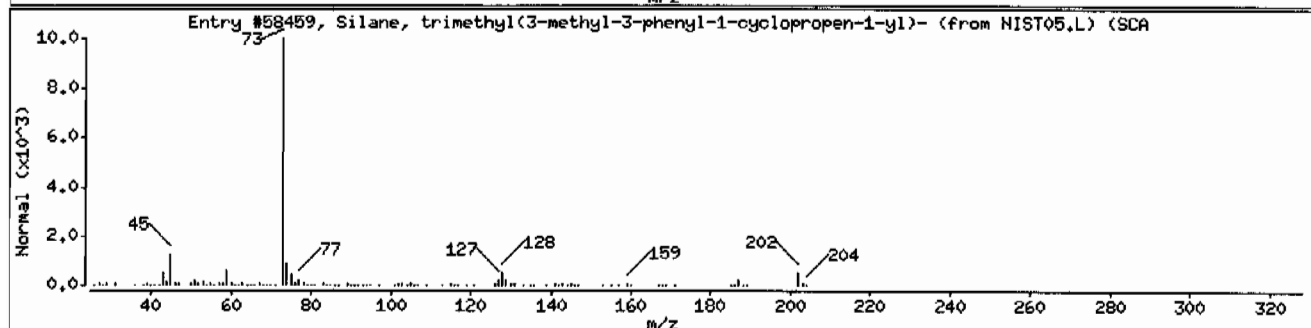
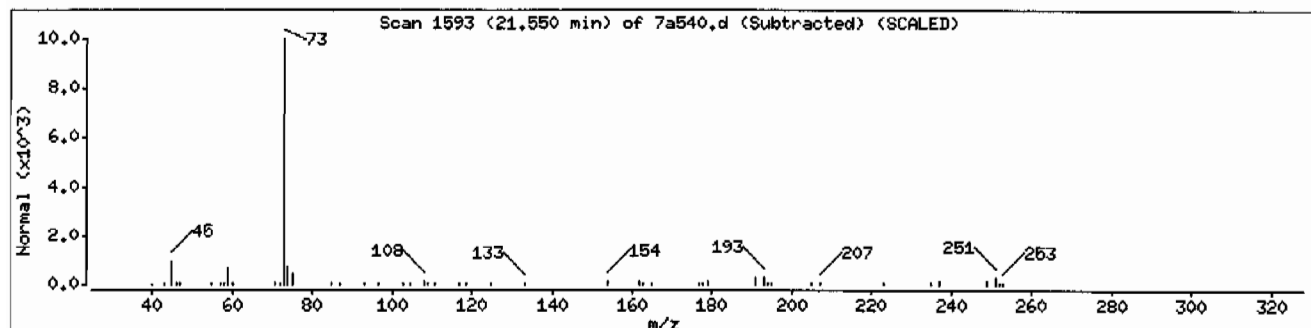
Sample Info: I247562006I957839I1I\VOAFI1I

Operator: AX01

Column phase: DB-624

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Silane, trimethyl(3-methyl-3-phenyl-1-cy	128889-54-3	NIST05.L	58459	40	C <sub>13</sub> H <sub>18</sub> Si	202
Anthracene, 9,10-dihydro-9,10-bis(trimet	18586-37-3	NIST05.L	139132	40	C <sub>20</sub> H <sub>28</sub> Si <sub>2</sub>	324
1-Propene-1-thiol	925-89-3	NIST05.L	811	38	C <sub>3</sub> H <sub>6</sub> S	74



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

SDG Number: 10-1950  
 Lab Sample ID: 247562004

Client ID: RE15-10-8312  
 Batch ID: 957839  
 Run Date: 02/27/2010 07:08  
 Prep Date: 02/26/2010 14:49  
 Data File: 7a538.d

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.05	ug/kg	0.358	1.05
74-87-3	Chloromethane	U	1.05	ug/kg	0.316	1.05
75-01-4	Vinyl chloride	U	1.05	ug/kg	0.316	1.05
74-83-9	Bromomethane	U	1.05	ug/kg	0.316	1.05
75-00-3	Chloroethane	U	1.05	ug/kg	0.316	1.05
75-69-4	Trichlorofluoromethane	U	1.05	ug/kg	0.316	1.05
67-64-1	Acetone		36.0	ug/kg	1.75	5.27
75-35-4	1,1-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
74-88-4	Iodomethane	U	5.27	ug/kg	1.69	5.27
75-09-2	Methylene chloride	U	5.27	ug/kg	2.11	5.27
75-15-0	Carbon disulfide	U	5.27	ug/kg	1.32	5.27
156-60-5	trans-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
75-34-3	1,1-Dichloroethane	U	1.05	ug/kg	0.316	1.05
78-93-3	2-Butanone	U	5.27	ug/kg	1.58	5.27
156-59-2	cis-1,2-Dichloroethylene	U	1.05	ug/kg	0.316	1.05
594-20-7	2,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
67-66-3	Chloroform	U	1.05	ug/kg	0.316	1.05
74-97-5	Bromochloromethane	U	1.05	ug/kg	0.348	1.05
71-55-6	1,1,1-Trichloroethane	U	1.05	ug/kg	0.316	1.05
563-58-6	1,1-Dichloropropene	U	1.05	ug/kg	0.316	1.05
56-23-5	Carbon tetrachloride	U	1.05	ug/kg	0.316	1.05
107-06-2	1,2-Dichloroethane	U	1.05	ug/kg	0.316	1.05
71-43-2	Benzene	U	1.05	ug/kg	0.316	1.05
79-01-6	Trichloroethylene	U	1.05	ug/kg	0.348	1.05
78-87-5	1,2-Dichloropropane	U	1.05	ug/kg	0.316	1.05
75-27-4	Bromodichloromethane	U	1.05	ug/kg	0.316	1.05
74-95-3	Dibromomethane	U	1.05	ug/kg	0.316	1.05
108-10-1	4-Methyl-2-pentanone	U	5.27	ug/kg	1.32	5.27
10061-01-5	cis-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
108-88-3	Toluene		4.45	ug/kg	0.316	1.05
10061-02-6	trans-1,3-Dichloropropylene	U	1.05	ug/kg	0.316	1.05
79-00-5	1,1,2-Trichloroethane	U	1.05	ug/kg	0.316	1.05
591-78-6	2-Hexanone	U	5.27	ug/kg	1.58	5.27
142-28-9	1,3-Dichloropropane	U	1.05	ug/kg	0.316	1.05
127-18-4	Tetrachloroethylene	U	1.05	ug/kg	0.316	1.05
124-48-1	Dibromochloromethane	U	1.05	ug/kg	0.316	1.05
106-93-4	1,2-Dibromoethane	U	1.05	ug/kg	0.316	1.05
108-90-7	Chlorobenzene	U	1.05	ug/kg	0.316	1.05

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

SDG Number: 10-1950  
 Lab Sample ID: 247562004

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 5.2  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.05	ug/kg	0.316	1.05
179601-23-1	m,p-Xylenes	J	0.470	ug/kg	0.316	2.11
95-47-6	o-Xylene	J	0.349	ug/kg	0.316	1.05
100-42-5	Styrene	U	1.05	ug/kg	0.316	1.05
75-25-2	Bromoform	U	1.05	ug/kg	0.316	1.05
79-34-5	1,1,2,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
96-18-4	1,2,3-Trichloropropane	U	1.05	ug/kg	0.316	1.05
108-86-1	Bromobenzene	U	1.05	ug/kg	0.316	1.05
103-65-1	n-Propylbenzene	U	1.05	ug/kg	0.316	1.05
95-49-8	2-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-82-8	Isopropylbenzene	U	1.05	ug/kg	0.316	1.05
108-67-8	1,3,5-Trimethylbenzene	U	1.05	ug/kg	0.316	1.05
106-43-4	4-Chlorotoluene	U	1.05	ug/kg	0.316	1.05
98-06-6	tert-Butylbenzene	U	1.05	ug/kg	0.316	1.05
95-63-6	1,2,4-Trimethylbenzene	J	0.651	ug/kg	0.316	1.05
135-98-8	sec-Butylbenzene	U	1.05	ug/kg	0.316	1.05
99-87-6	4-Isopropyltoluene		6.10	ug/kg	0.316	1.05
541-73-1	1,3-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
106-46-7	1,4-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05
104-51-8	n-Butylbenzene	U	1.05	ug/kg	0.316	1.05
96-12-8	1,2-Dibromo-3-chloropropane	U	1.05	ug/kg	0.316	1.05
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.27	ug/kg	1.69	5.27
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.05	ug/kg	0.316	1.05
95-50-1	1,2-Dichlorobenzene	U	1.05	ug/kg	0.316	1.05

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.44	12.1	ug/kg		J
	Unknown Hydrocarbon	19.65	112	ug/kg		J
	Unknown Hydrocarbon	19.96	10.5	ug/kg		J
	Unknown Hydrocarbon	20.24	12.8	ug/kg		J
	Unknown Hydrocarbon	20.33	9.12	ug/kg		J
	Unknown Hydrocarbon	20.62	144	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a538.d

Lab Smp Id: 247562004

Client Smp ID: RE15-10-8312

Inj Date : 27-FEB-2010 07:08

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562004|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592

Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 38

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.15630	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.316	(1.000)	659174	50.0000
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	490384	50.0000
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	249657	50.0000
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	272353	47.8222 50.4
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	767915	48.1135 50.7
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	274626	41.8182 44.1
13 Acetone	43	10.433	10.413	(0.681)	150948	34.1874 36.0
65 Toluene	92	17.215	17.215	(0.922)	37231	4.21690 4.4
79 m,p-Xylenes	106	18.880	18.870	(1.011)	2769	0.44603 0.47(aQ)
80 o-Xylene	106	19.276	19.286	(1.033)	2176	0.33087 0.35(a)
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	8342	0.61762 0.65(a)
99 4-Isopropyltoluene	119	20.859	20.859	(0.994)	74502	5.78950 6.1

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

## VOA REPORT

Data file: 7a538.d

Report Date: 03/01/2010 07:16

Lab. ID: 247562004

SampleType: SAMPLE

Injection Date: 27-FEB-2010 07:08

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562004|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
13	Acetone		CAS#: 67-64-1			
43	150948	10.43	10.41	80-120	100	( )
58	45062	10.44	10.41	0- 58	30	( )
-----						
63	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	9430	17.13	16.94	80-120	100	(T)
43	6171	17.13	16.93	217-277	65	(QT)
100	521807	17.13	16.94	0- 56	5533	(QT)
-----						
65	Toluene		CAS#: 108-88-3			
92	37231	17.21	17.21	80-120	100	( )
91	60719	17.21	17.21	132-192	163	( )
-----						
73	1,2-Dibromoethane		CAS#: 106-93-4			
107	7723	18.62	18.22	80-120	100	(T)
109	6107	18.63	18.22	66-126	79	(T)
-----						
77	1,1,1,2-Tetrachloroethane		CAS#: 630-20-6			
131	1229	18.65	18.76	80-120	100	(T)
133	11465	18.63	18.76	69-129	933	(QT)
119	164890	18.67	18.76	41-101	13413	(QT)
-----						
78	Ethylbenzene		CAS#: 100-41-4			
91	8248	18.87	18.77	80-120	100	(T)
106	2769	18.88	18.77	1- 61	34	(T)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
-----						
80 o-Xylene			CAS#: 95-47-6			
106	2176	19.28	19.29	80-120	100	( )
91	4644	19.29	19.29	172-232	213	( )
-----						
79 m,p-Xylenes			CAS#:			
106	2769	18.88	18.87	80-120	100	( )
91	8248	18.87	18.87	167-227	298	(Q)
-----						
81 Styrene			CAS#: 100-42-5			
104	7549	19.65	19.29	80-120	100	(T)
78	55348	19.65	19.29	23- 83	733	(QT)
-----						
82 Bromoform			CAS#: 75-25-2			
173	802	19.81	19.54	80-120	100	(T)
175	13732	19.81	19.54	20- 80	1712	(QT)
-----						
83 Isopropylbenzene			CAS#: 98-82-8			
105	97941	19.65	19.63	80-120	100	( )
120	4643	19.65	19.63	0- 57	5	( )
-----						
89 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	865	19.68	19.97	80-120	100	(T)
75	2071	19.69	19.97	304-364	239	(QT)
77	327927	19.65	19.97	89-149	37905	(QT)
-----						
91 n-Propylbenzene			CAS#: 103-65-1			
91	16404	20.02	20.03	80-120	100	( )
120	11285	20.24	20.03	0- 52	69	(QT)
-----						
92 1,3,5-Trimethylbenzene			CAS#: 108-67-8			
105	6796	20.24	20.17	80-120	100	(T)
120	11285	20.24	20.17	18- 78	166	(QT)
-----						
96 1,2,4-Trimethylbenzene			CAS#: 95-63-6			
105	8342	20.56	20.56	80-120	100	( )
120	3748	20.56	20.56	23- 83	45	( )
-----						
95 tert-Butylbenzene			CAS#: 98-06-6			
119	3706	20.54	20.53	80-120	100	( )
91	467012	20.62	20.52	50-110	12598	(QT)
134	1540	20.55	20.53	0- 53	42	( )
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
98 sec-Butylbenzene				CAS#: 135-98-8		
105	6147	20.86	20.75	80-120	100	(T)
134	20302	20.86	20.75	0- 50	330	(QT)
-----						
99 4-Isopropyltoluene				CAS#: 99-87-6		
119	74502	20.86	20.86	80-120	100	( )
134	20302	20.86	20.86	0- 59	27	( )
91	32428	20.86	20.86	0- 58	44	( )
-----						
104 n-Butylbenzene				CAS#: 104-51-8		
91	8986	21.14	21.30	80-120	100	(T)
92	2588	21.13	21.30	27- 87	29	(T)
134	385	21.14	21.30	0- 54	4	(T)
-----						
Q qualifier indicates ion failed ratio requirement						



GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA7.i/022610v7/7a538.d  
Lab Smp Id: 247562004 Client Smp ID: RE15-10-8312  
Inj Date : 27-FEB-2010 07:08  
Operator : AX01 Inst ID: VOA7.i  
Smp Info : |247562004|957839|1|VOAF|1|  
Misc Info : LANL 5g N/A  
Comment :  
Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
Als bottle: 38  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	5.15630	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 51 Fluorobenzene	15.316	1560831	50.000
* 75 Chlorobenzene-d5	18.667	2270357	50.000
* 101 1,4-Dichlorobenzene-d4	20.991	1843399	50.000

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

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
9.439	358221	11.4753359	12.1	0		0	51
Unknown Hydrocarbon					CAS #:		
19.651	4826019	106.283266	112	0		0	75
Unknown Hydrocarbon					CAS #:		
19.956	368003	9.98163777	10.5	0		0	101
Unknown Hydrocarbon					CAS #:		
20.240	446294	12.1051831	12.8	0		0	101
Unknown Hydrocarbon					CAS #:		
20.331	319017	8.65296390	9.1	0		0	101
Unknown Hydrocarbon					CAS #:		
20.616	5048290	136.928831	144	0		0	101

Data File: /chem/V0A7.1/022610v7/7a538.d

Date: 27-FEB-2010 07:08

Client ID: RE15-10-8312

Sample Info: 1247562004195783911.V0A7.1.1

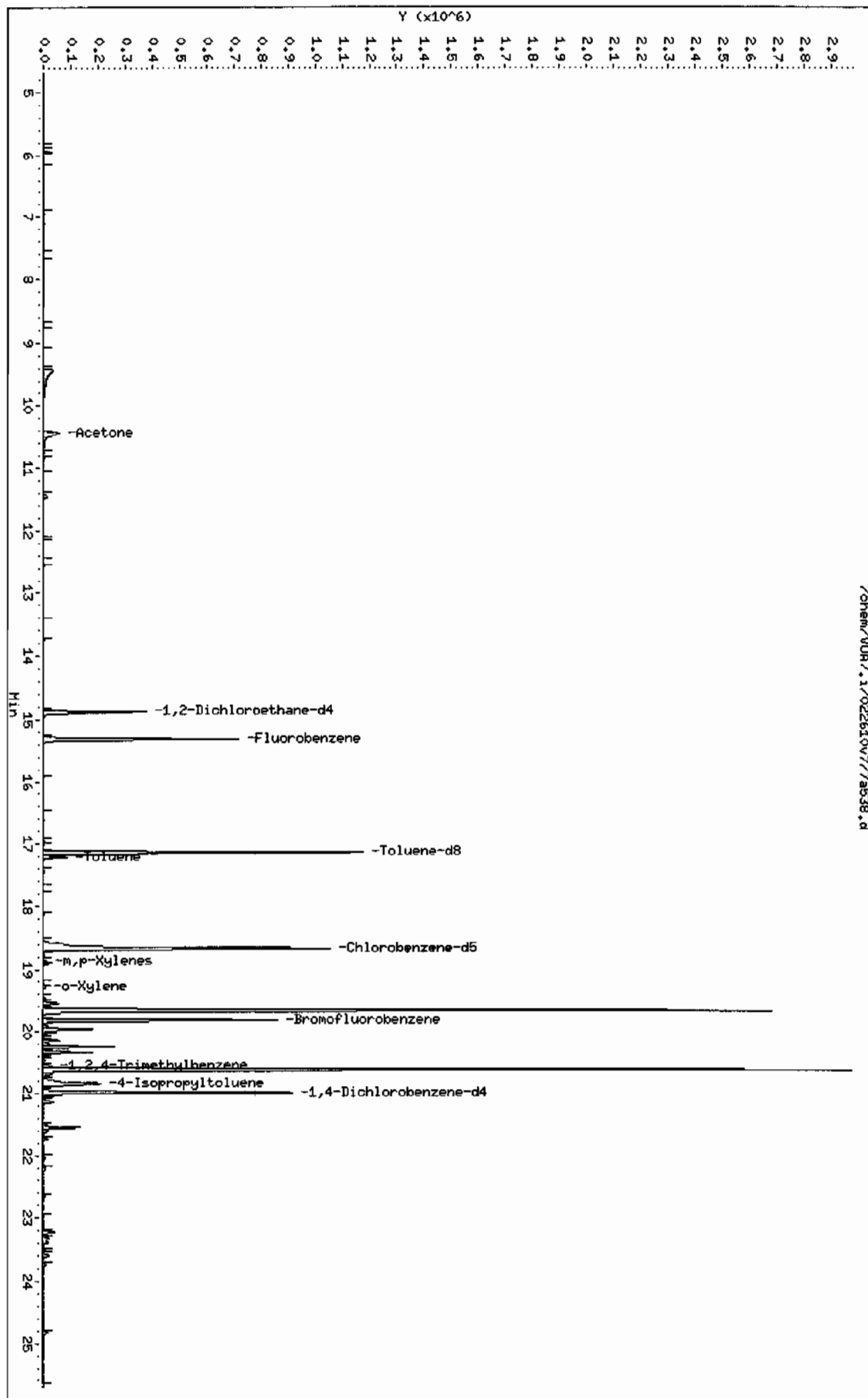
Column phase: DB-624

Instrument: V0A7.1

Operator: AX01

Column diameter: 0.25

/chem/V0A7.1/022610v7/7a538.d



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: VOA7.i

Sample Info: 12475620041957839111VOAF111

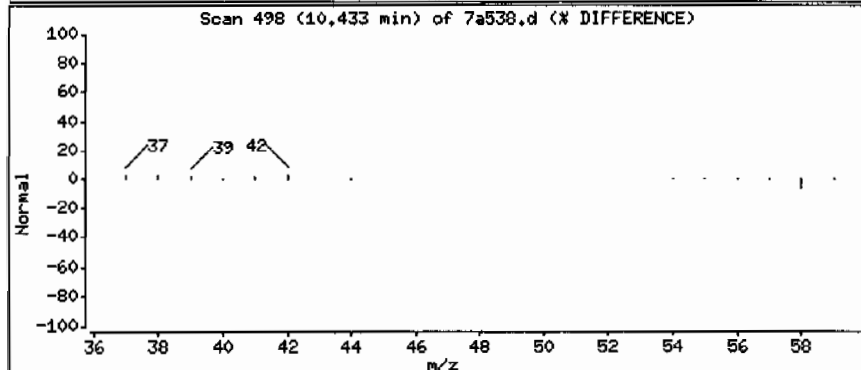
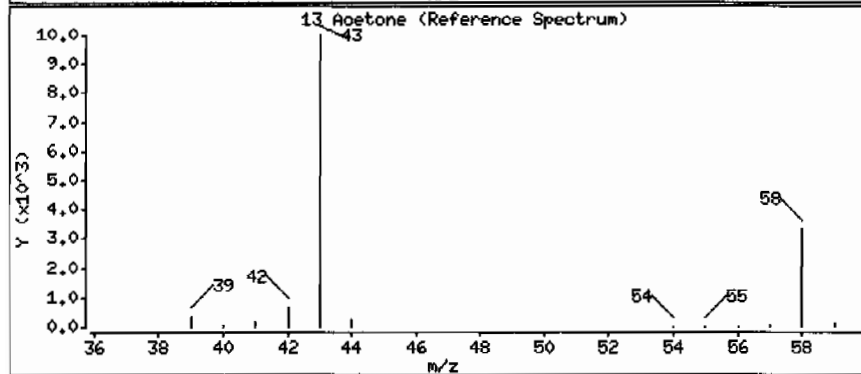
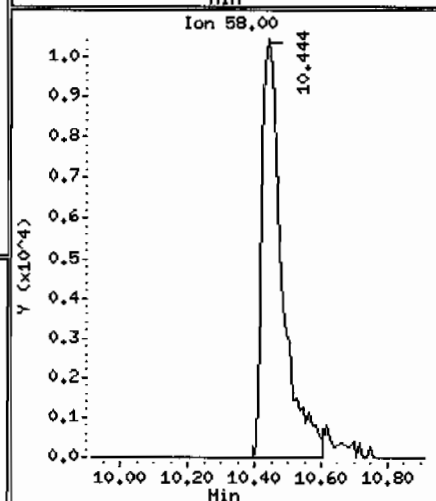
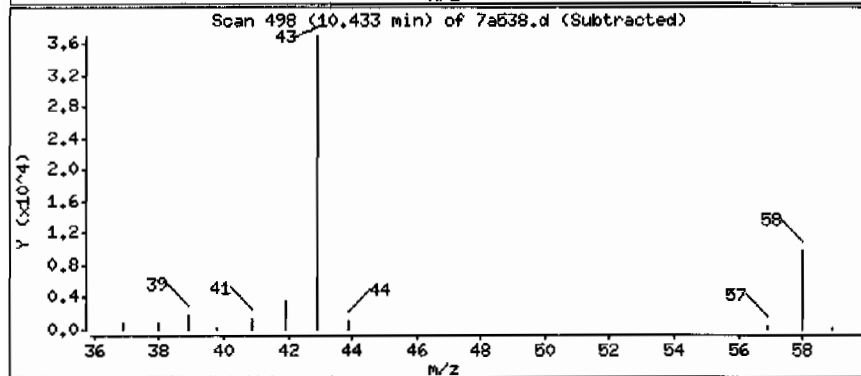
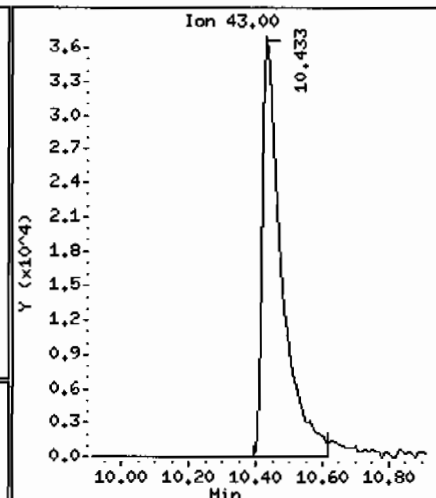
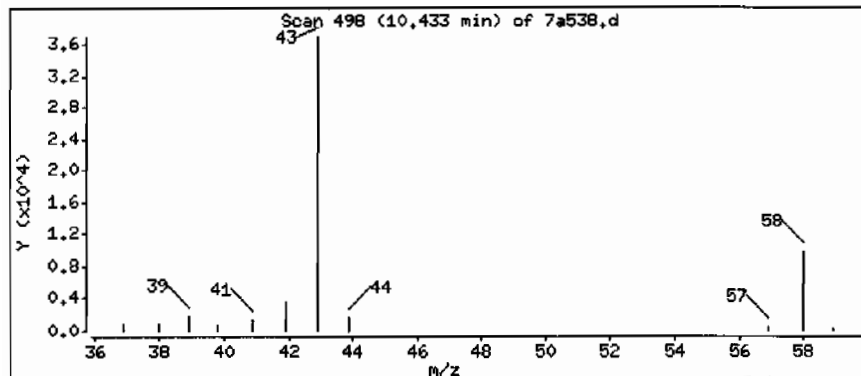
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 36.0 ug/Kg



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: VOA7.i

Sample Info: I247562004I957839I1I\VOAFI1I

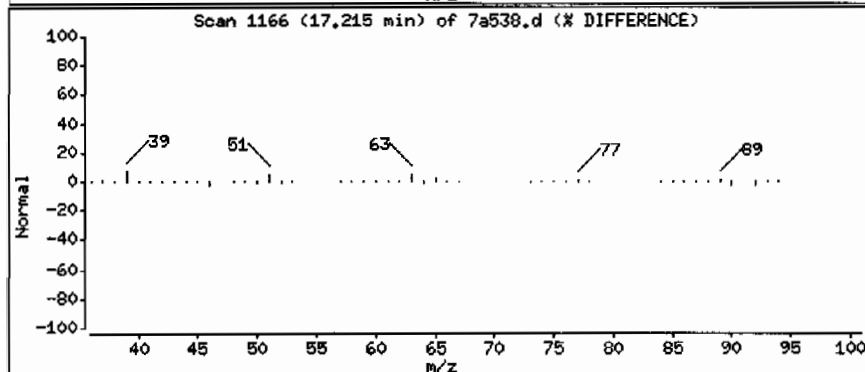
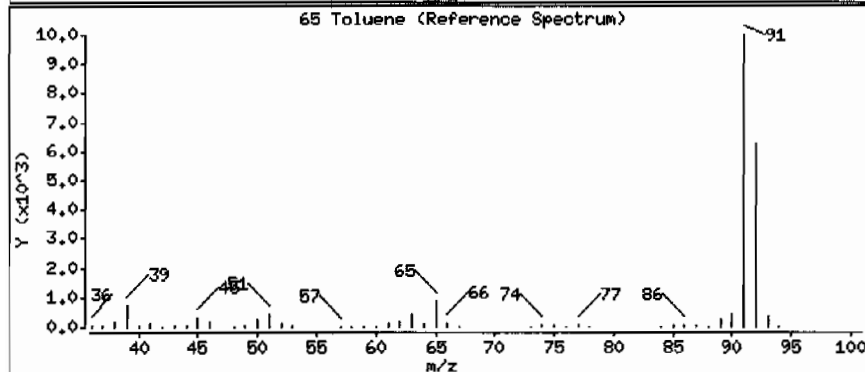
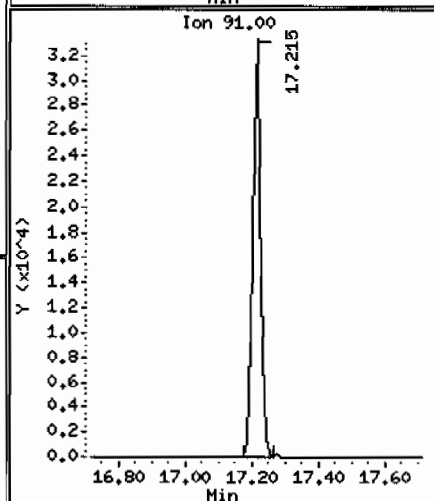
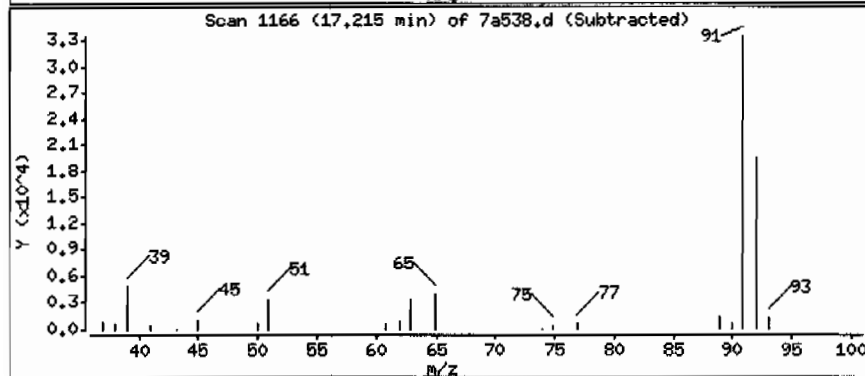
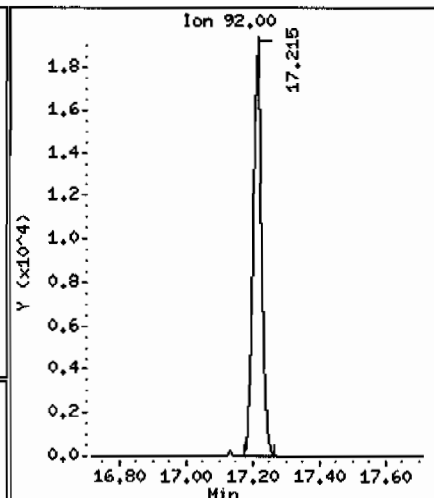
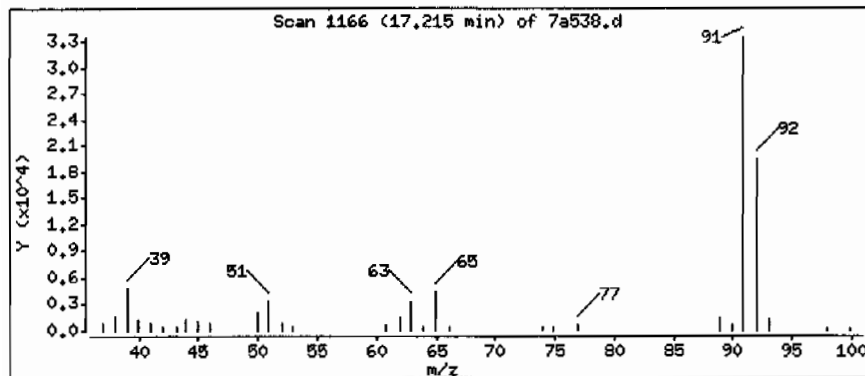
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

65 Toluene

Concentration: 4.4 ug/Kg



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: VOA7.i

Sample Info: 1247562004195783911\VOAF11

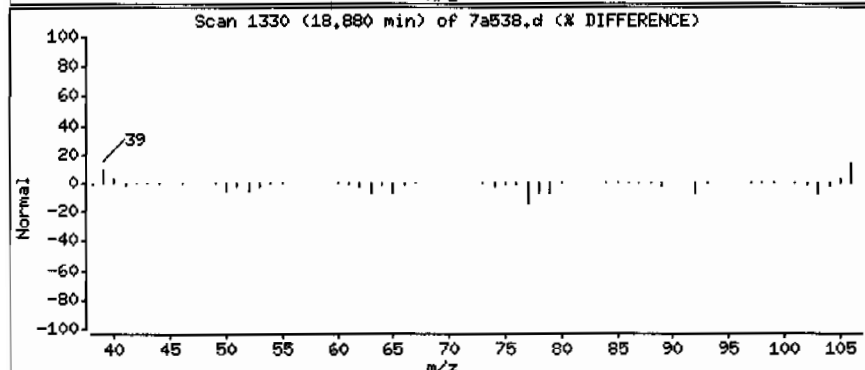
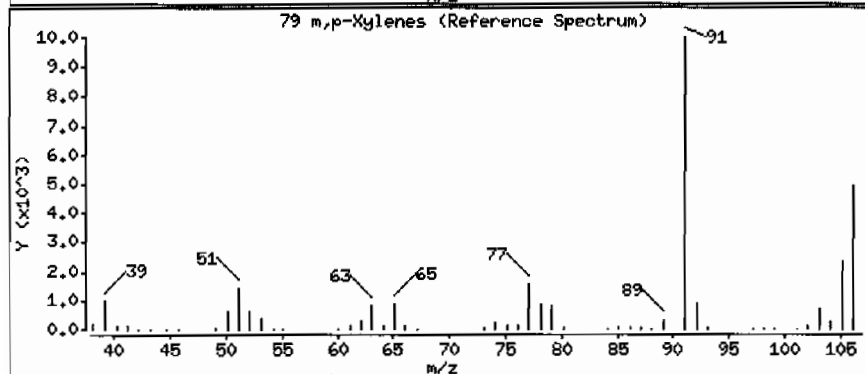
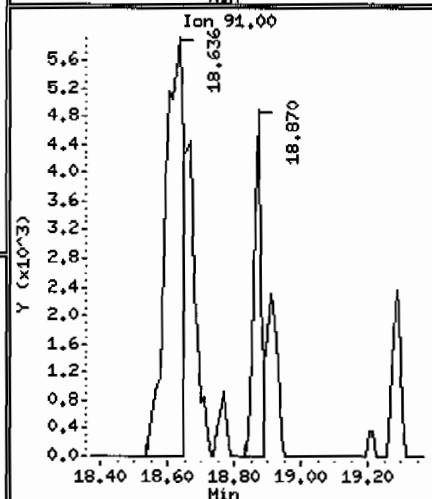
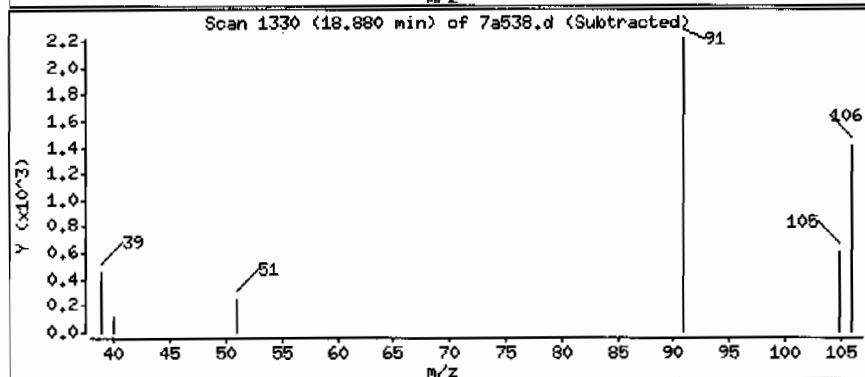
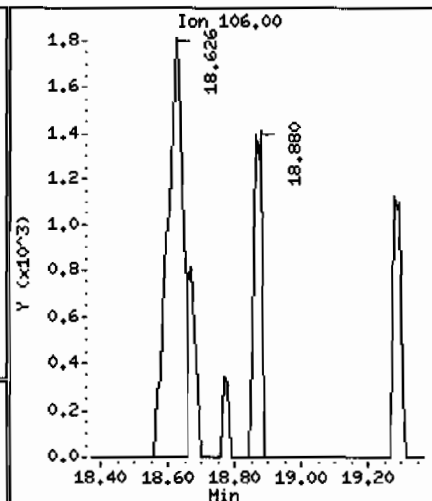
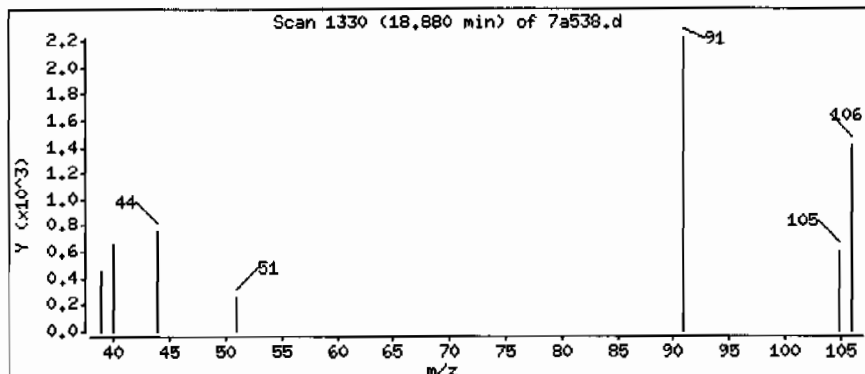
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

79 m,p-Xylenes

Concentration: 0.47 ug/Kg



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: V0A7.i

Sample Info: 1247562004195783911V0AF111

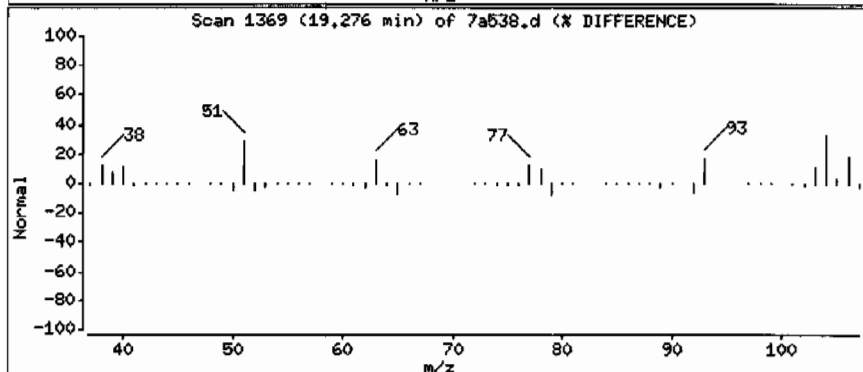
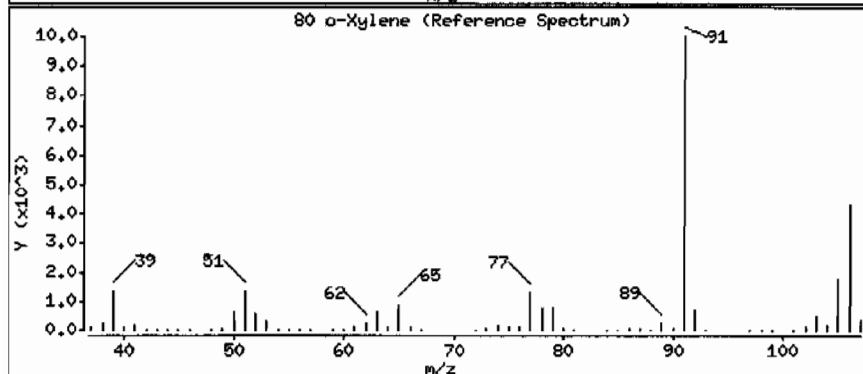
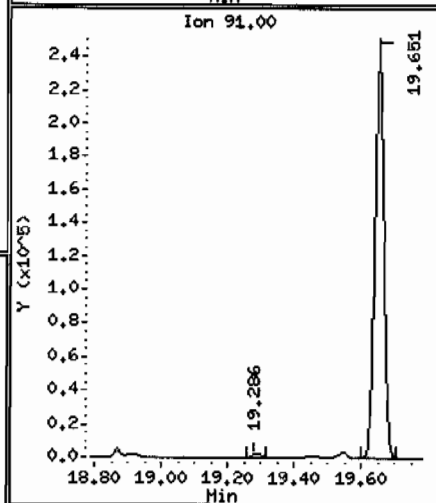
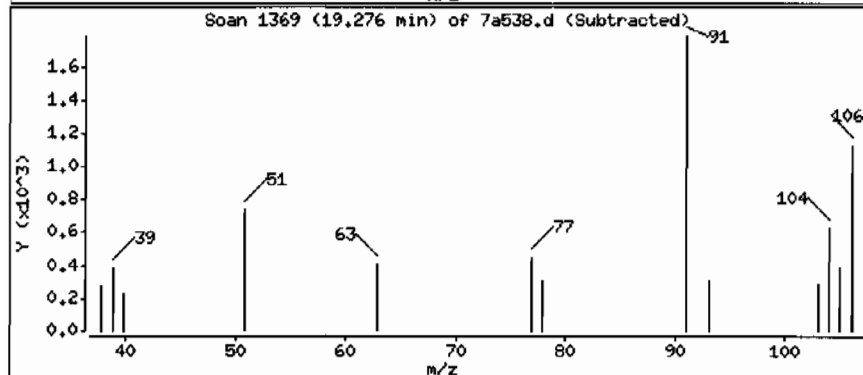
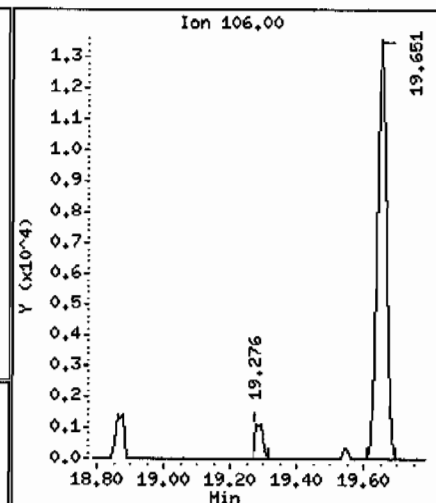
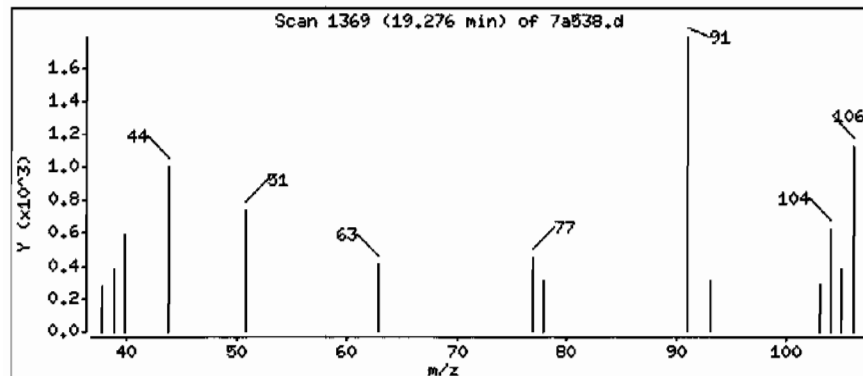
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

80 o-Xylene

Concentration: 0.35 ug/Kg



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: V0A7.i

Sample Info: I247562004I957839I1V0AFI1I

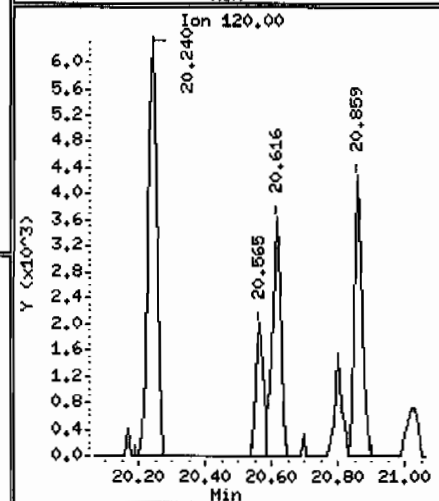
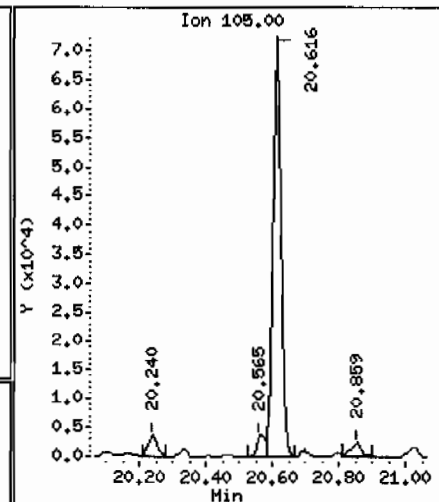
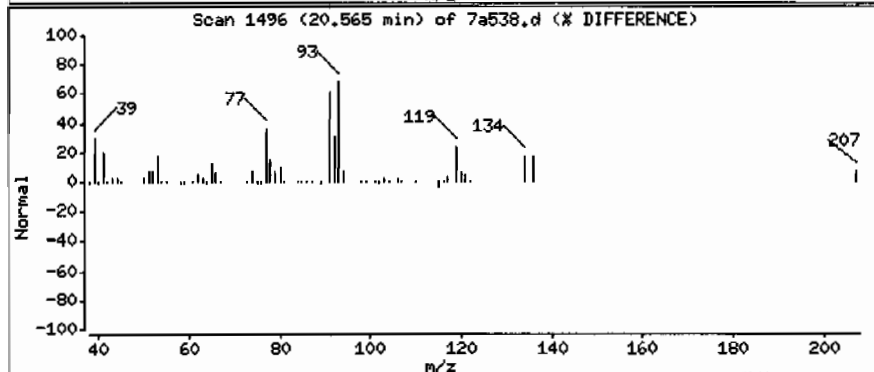
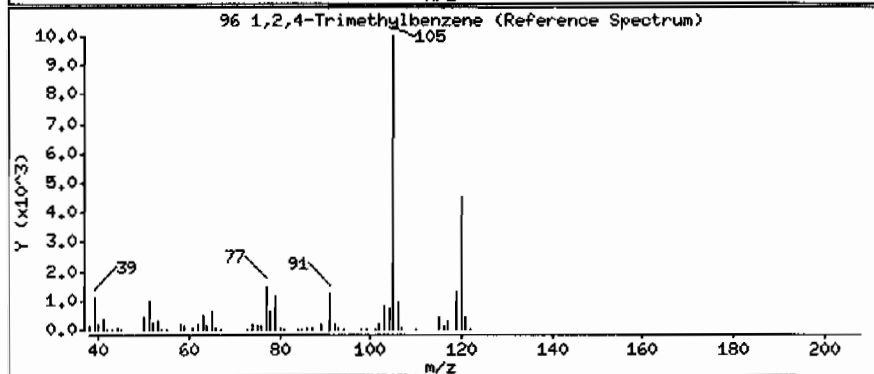
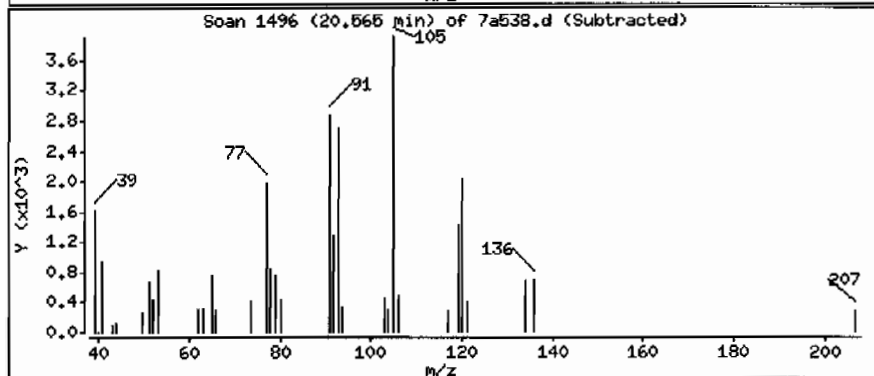
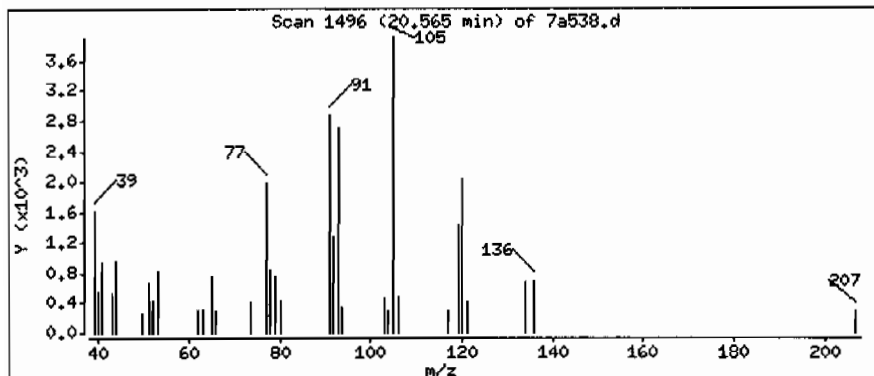
Operator: AX01

Column phase: DB-624

Column diameter: 0,25

96 1,2,4-Trimethylbenzene

Concentration: 0.65 ug/Kg





Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: VOA7.i

Sample Info: 12475620041957839111VOAF111

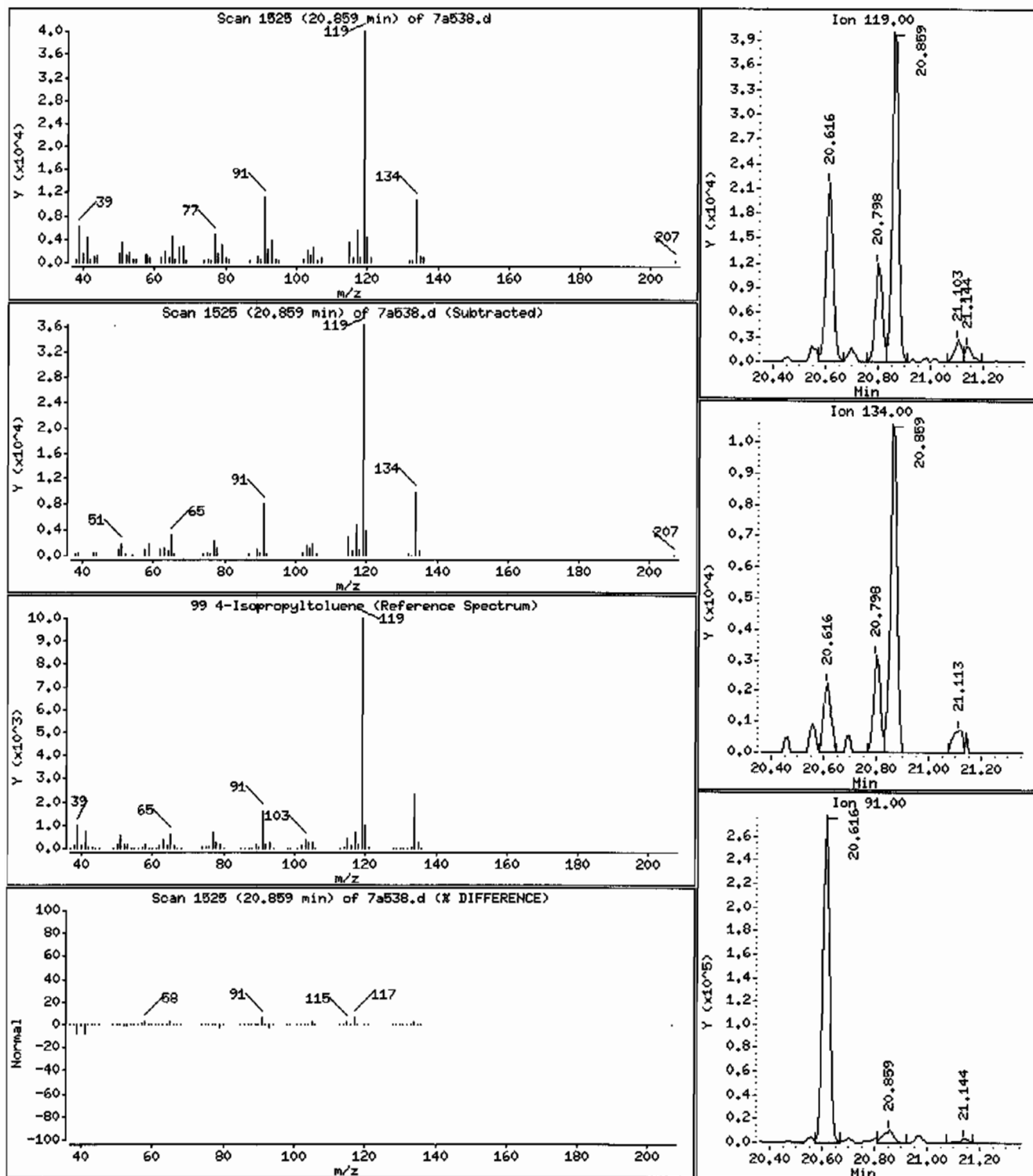
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

99 4-Isopropyltoluene

Concentration: 6.1 ug/Kg



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: V0A7.i

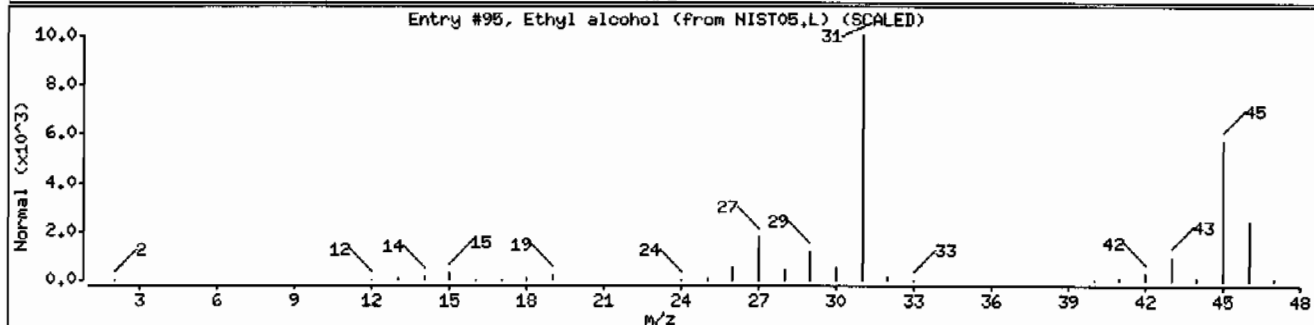
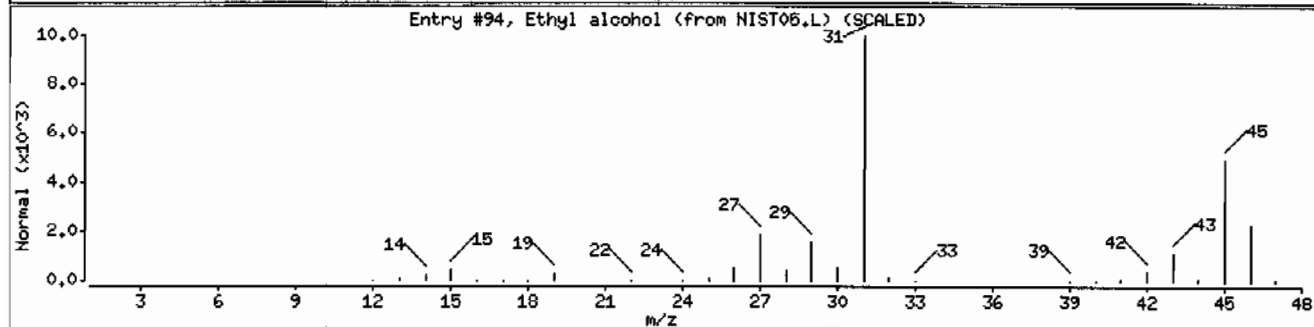
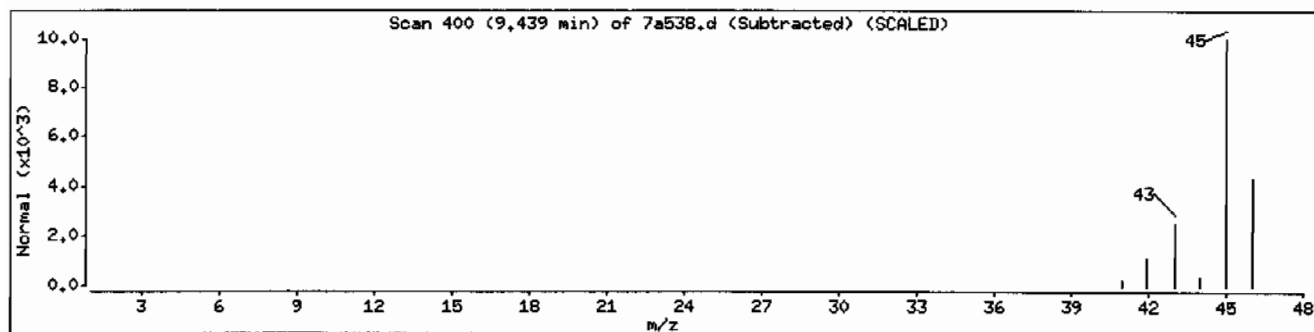
Sample Info: I247562004I957839I1I1V0AFI1I

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethyl alcohol	64-17-5	NIST05.L	94	74	C <sub>2</sub> H <sub>6</sub> O	46
Ethyl alcohol	64-17-5	NIST05.L	95	74	C <sub>2</sub> H <sub>6</sub> O	46



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: VOA7.i

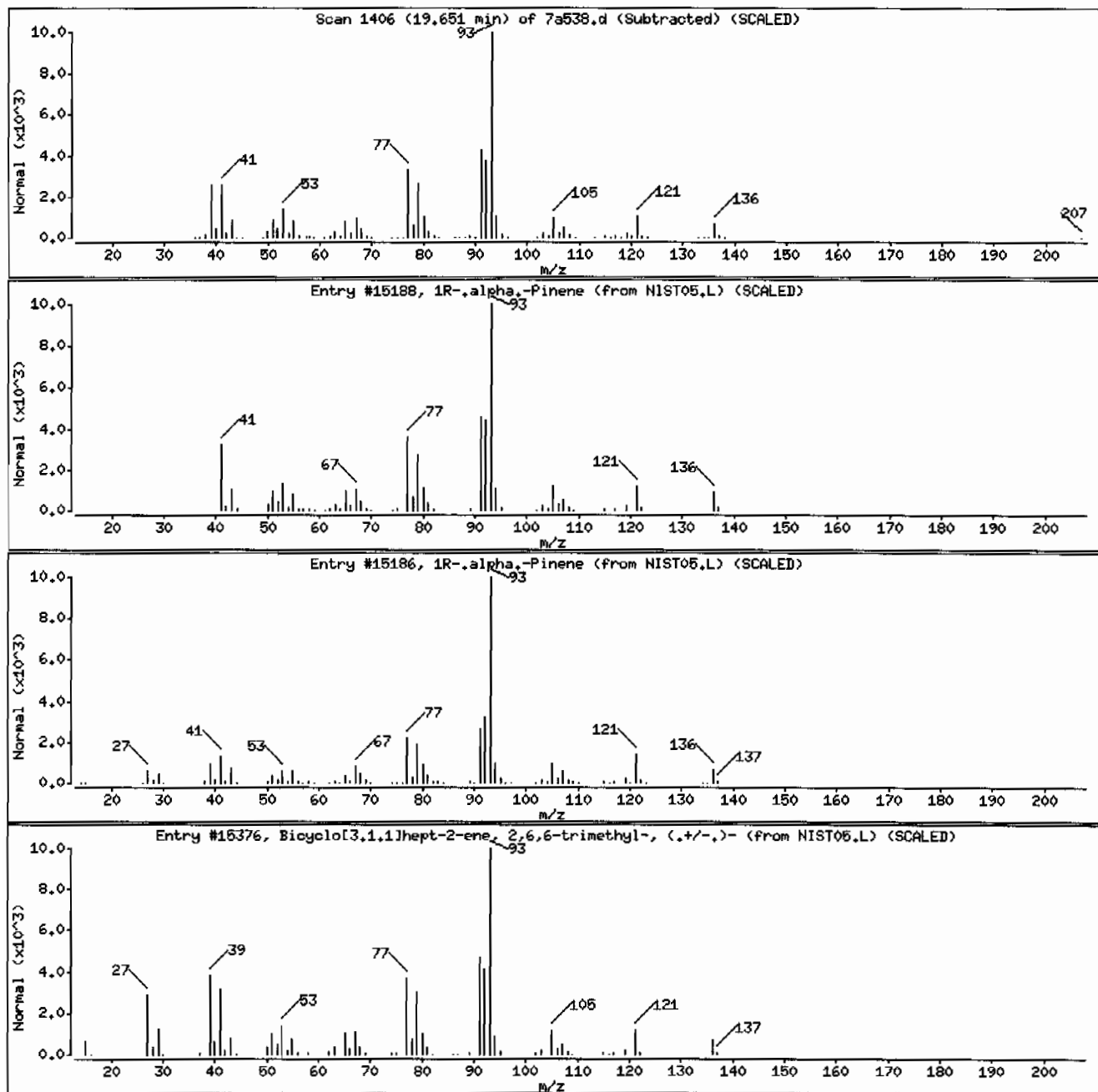
Sample Info: 12475620041957839111VOAFI11

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST05.L	15376	95	C10H16	136



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: V0A7.1

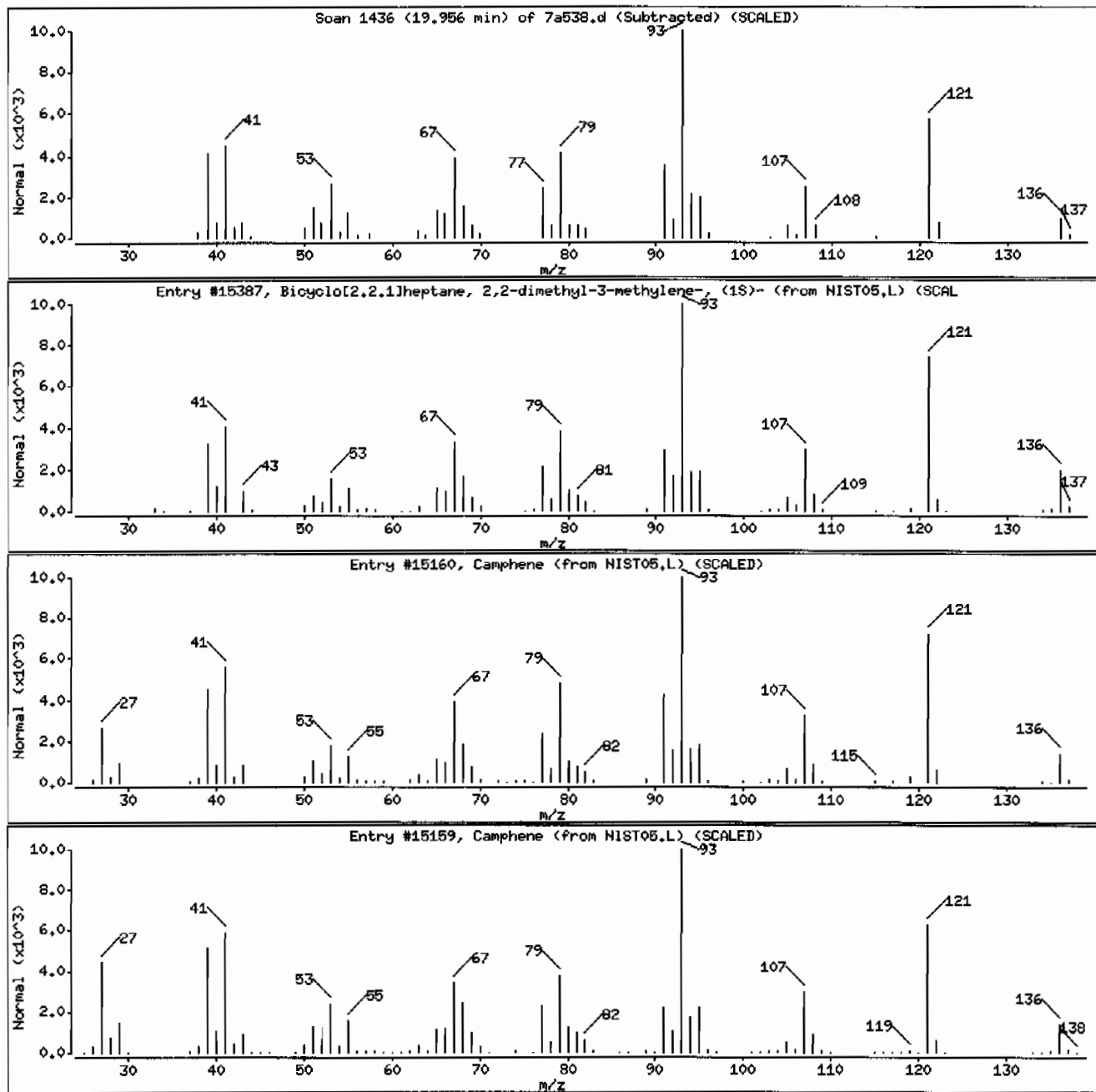
Sample Info: 1247562004195783911(V0AF11)

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-04-7	NIST05.L	15387	91	C10H16	136
Camphene	79-92-5	NIST05.L	15160	91	C10H16	136
Camphene	79-92-5	NIST05.L	15159	90	C10H16	136



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: VOA7.i

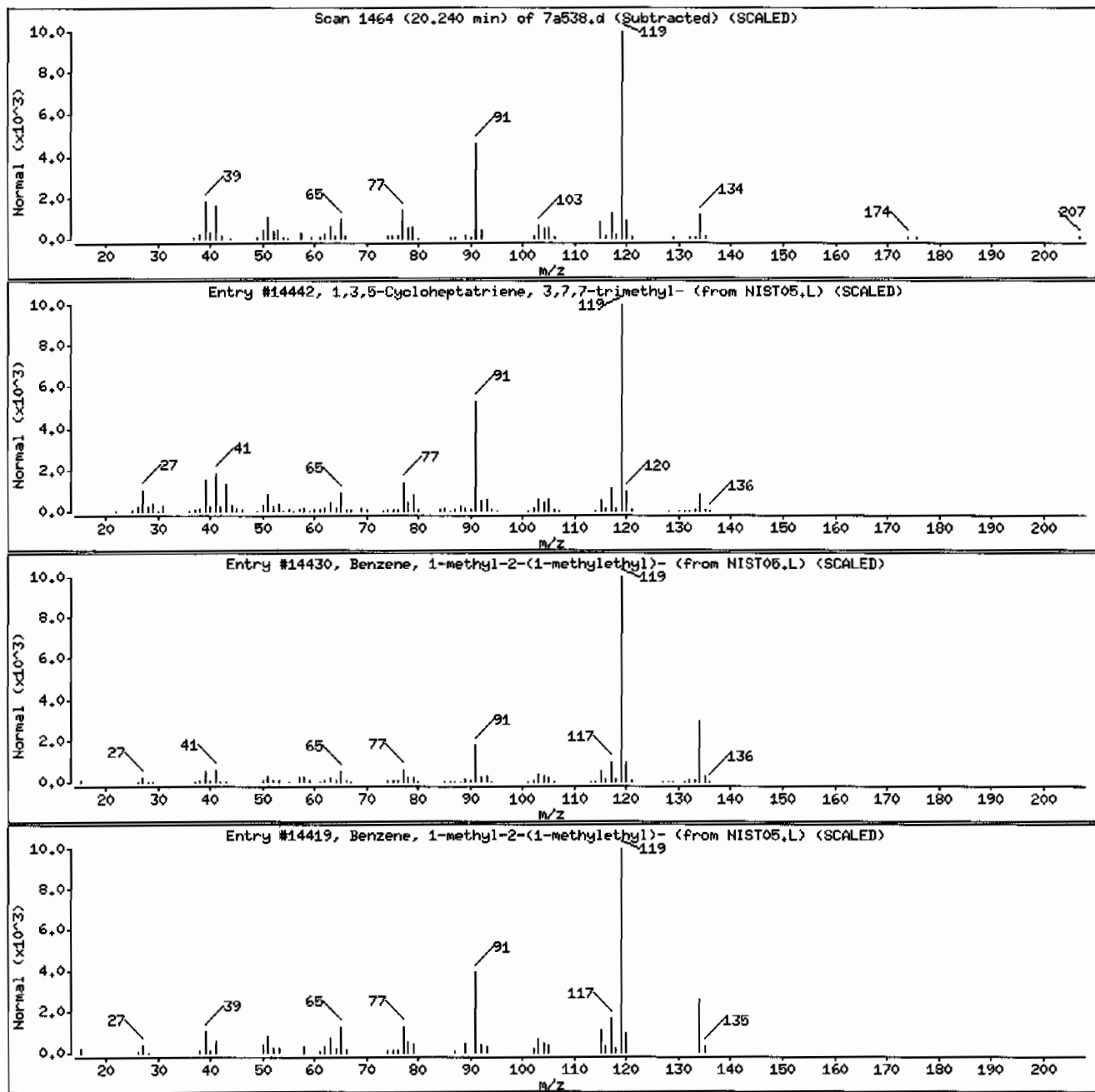
Sample Info: 1247562004195783911|VOAF11

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3479-89-8	NIST05.L	14442	94	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14430	94	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14419	91	C10H14	134



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: V0A7.i

Sample Info: 1247562004195783911V0AF111

Operator: AX01

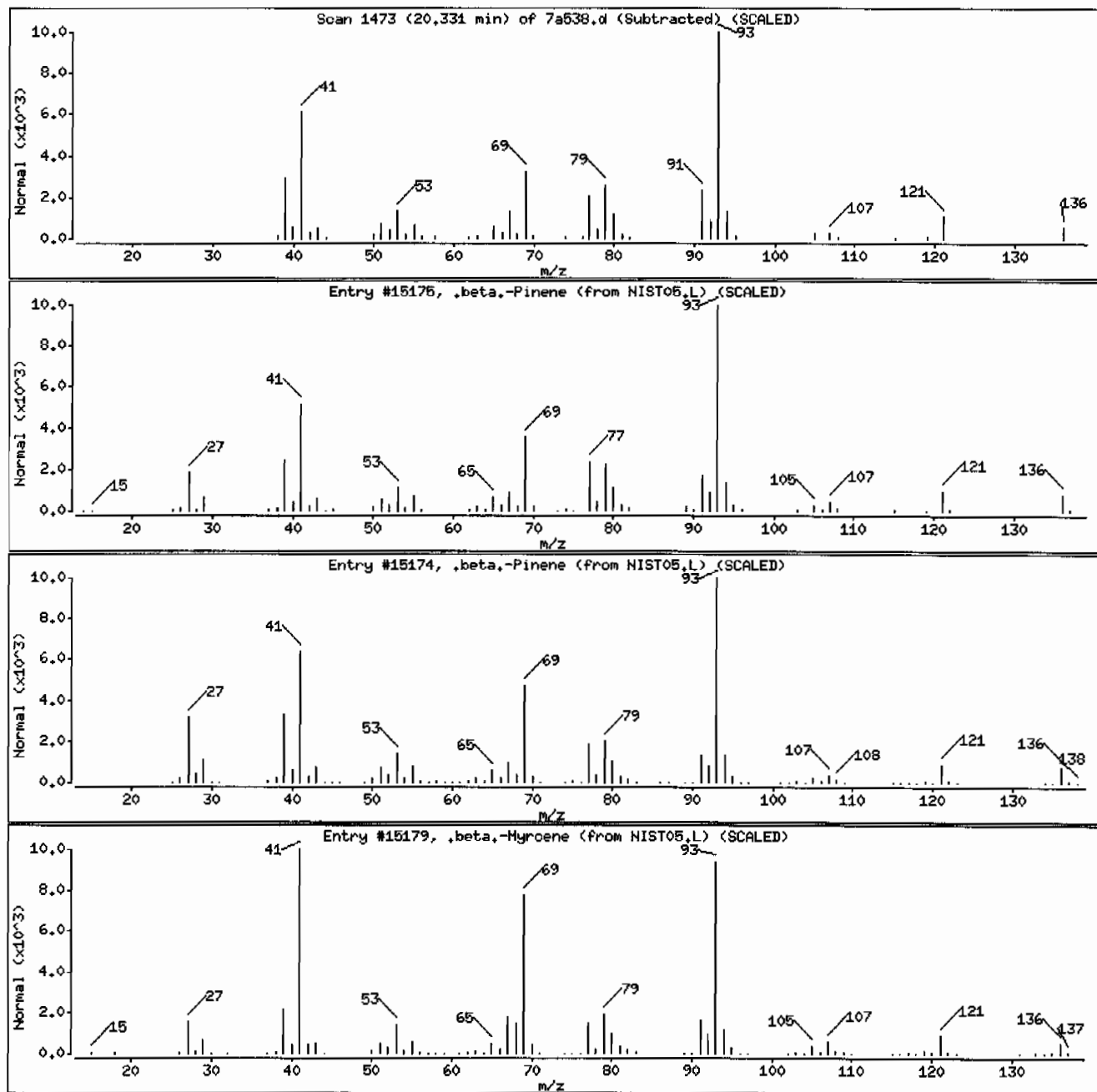
Column phase: DB-624

Column diameter: 0.25

## Library Search Compound Match

Unknown Hydrocarbon

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Pinene	127-91-3	NIST05.L	15175	90	C10H16	136
.beta.-Pinene	127-91-3	NIST05.L	15174	87	C10H16	136
.beta.-Myrcene	123-35-3	NIST05.L	15179	87	C10H16	136



Date : 27-FEB-2010 07:08

Client ID: RE15-10-8312

Instrument: V0A7.i

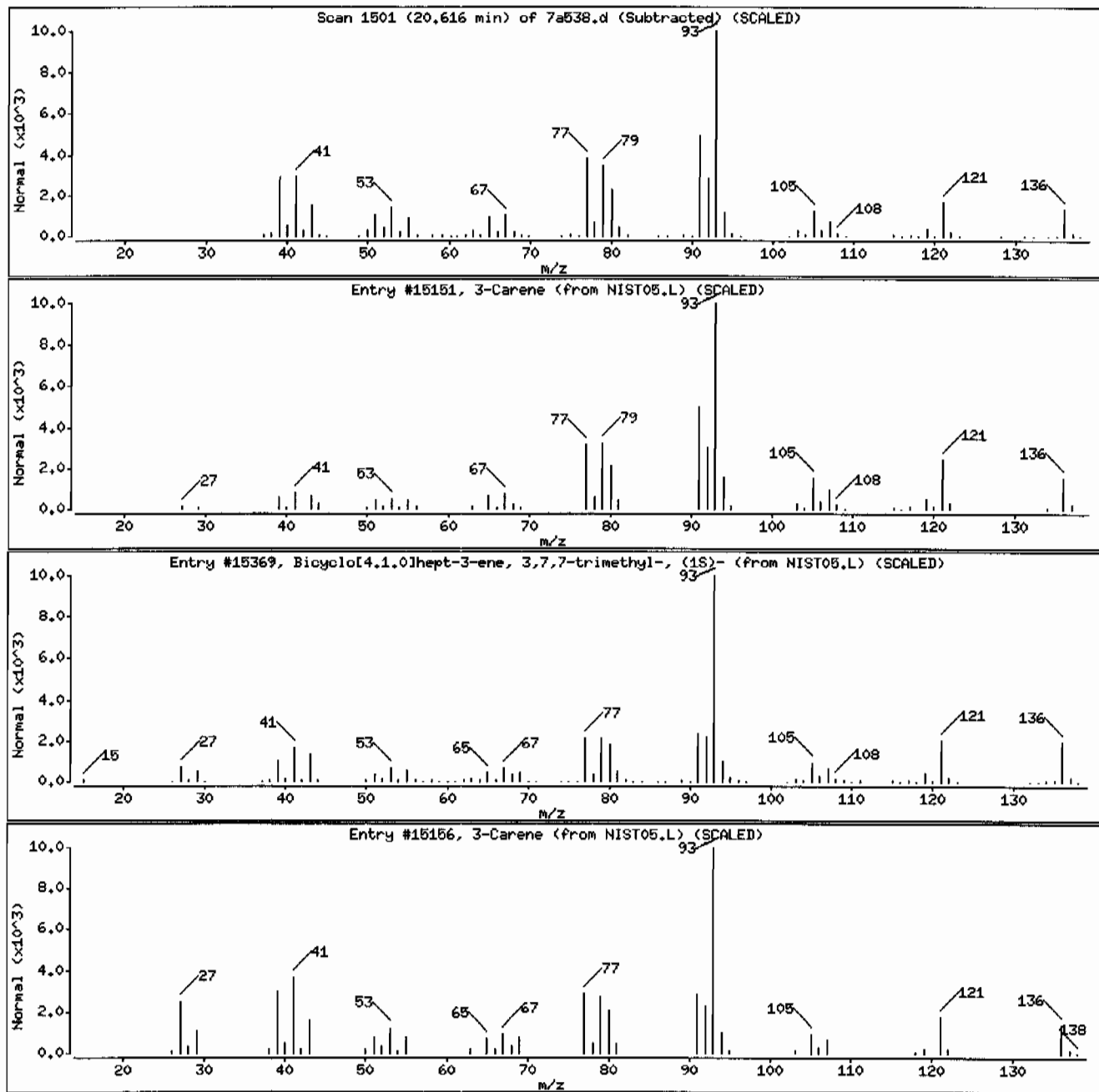
Sample Info: 1247562004195783911V0AF111

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
3-Carene	13466-78-9	NIST05.L	15151	97	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-	498-15-7	NIST05.L	15369	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136



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

SDG Number: 10-1950  
 Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.04	ug/kg	0.353	1.04
74-87-3	Chloromethane	U	1.04	ug/kg	0.311	1.04
75-01-4	Vinyl chloride	U	1.04	ug/kg	0.311	1.04
74-83-9	Bromomethane	U	1.04	ug/kg	0.311	1.04
75-00-3	Chloroethane	U	1.04	ug/kg	0.311	1.04
75-69-4	Trichlorofluoromethane	U	1.04	ug/kg	0.311	1.04
67-64-1	Acetone		22.1	ug/kg	1.72	5.19
75-35-4	1,1-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
74-88-4	Iodomethane	U	5.19	ug/kg	1.66	5.19
75-09-2	Methylene chloride	U	5.19	ug/kg	2.07	5.19
75-15-0	Carbon disulfide	U	5.19	ug/kg	1.30	5.19
156-60-5	trans-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
75-34-3	1,1-Dichloroethane	U	1.04	ug/kg	0.311	1.04
78-93-3	2-Butanone	U	5.19	ug/kg	1.56	5.19
156-59-2	cis-1,2-Dichloroethylene	U	1.04	ug/kg	0.311	1.04
594-20-7	2,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
67-66-3	Chloroform	U	1.04	ug/kg	0.311	1.04
74-97-5	Bromochloromethane	U	1.04	ug/kg	0.342	1.04
71-55-6	1,1,1-Trichloroethane	U	1.04	ug/kg	0.311	1.04
563-58-6	1,1-Dichloropropene	U	1.04	ug/kg	0.311	1.04
56-23-5	Carbon tetrachloride	U	1.04	ug/kg	0.311	1.04
107-06-2	1,2-Dichloroethane	U	1.04	ug/kg	0.311	1.04
71-43-2	Benzene	U	1.04	ug/kg	0.311	1.04
79-01-6	Trichloroethylene	U	1.04	ug/kg	0.342	1.04
78-87-5	1,2-Dichloropropane	U	1.04	ug/kg	0.311	1.04
75-27-4	Bromodichloromethane	U	1.04	ug/kg	0.311	1.04
74-95-3	Dibromomethane	U	1.04	ug/kg	0.311	1.04
108-10-1	4-Methyl-2-pentanone	U	5.19	ug/kg	1.30	5.19
10061-01-5	cis-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
108-88-3	Toluene		2.76	ug/kg	0.311	1.04
10061-02-6	trans-1,3-Dichloropropylene	U	1.04	ug/kg	0.311	1.04
79-00-5	1,1,2-Trichloroethane	U	1.04	ug/kg	0.311	1.04
591-78-6	2-Hexanone	U	5.19	ug/kg	1.56	5.19
142-28-9	1,3-Dichloropropane	U	1.04	ug/kg	0.311	1.04
127-18-4	Tetrachloroethylene	U	1.04	ug/kg	0.311	1.04
124-48-1	Dibromochloromethane	U	1.04	ug/kg	0.311	1.04
106-93-4	1,2-Dibromoethane	U	1.04	ug/kg	0.311	1.04
108-90-7	Chlorobenzene	U	1.04	ug/kg	0.311	1.04



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

SDG Number: 10-1950  
 Lab Sample ID: 247562003

Client ID: RE15-10-8313  
 Batch ID: 957839  
 Run Date: 02/27/2010 06:33  
 Prep Date: 02/26/2010 14:47  
 Data File: 7a537.d

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.6  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.04	ug/kg	0.311	1.04
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.311	2.07
95-47-6	o-Xylene	U	1.04	ug/kg	0.311	1.04
100-42-5	Styrene	U	1.04	ug/kg	0.311	1.04
75-25-2	Bromoform	U	1.04	ug/kg	0.311	1.04
79-34-5	1,1,2,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
96-18-4	1,2,3-Trichloropropane	U	1.04	ug/kg	0.311	1.04
108-86-1	Bromobenzene	U	1.04	ug/kg	0.311	1.04
103-65-1	n-Propylbenzene	U	1.04	ug/kg	0.311	1.04
95-49-8	2-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-82-8	Isopropylbenzene	U	1.04	ug/kg	0.311	1.04
108-67-8	1,3,5-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
106-43-4	4-Chlorotoluene	U	1.04	ug/kg	0.311	1.04
98-06-6	tert-Butylbenzene	U	1.04	ug/kg	0.311	1.04
95-63-6	1,2,4-Trimethylbenzene	U	1.04	ug/kg	0.311	1.04
135-98-8	sec-Butylbenzene	U	1.04	ug/kg	0.311	1.04
99-87-6	4-Isopropyltoluene		1.59	ug/kg	0.311	1.04
541-73-1	1,3-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
106-46-7	1,4-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04
104-51-8	n-Butylbenzene	U	1.04	ug/kg	0.311	1.04
96-12-8	1,2-Dibromo-3-chloropropane	U	1.04	ug/kg	0.311	1.04
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.19	ug/kg	1.66	5.19
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.04	ug/kg	0.311	1.04
95-50-1	1,2-Dichlorobenzene	U	1.04	ug/kg	0.311	1.04

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.65	29.5	ug/kg		J
	Unknown Hydrocarbon	20.62	13	ug/kg		J

Data File: /chem/VOA7.i/022610v7/7a537.d  
 Report Date: 17-Mar-2010 16:15

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GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a537.d

Lab Smp Id: 247562003

Client Smp ID: RE15-10-8313

Inj Date : 27-FEB-2010 06:33

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562003|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 37

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

Processing Host: prdsrv07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.58770	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.316	(1.000)	677723		50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	516135		50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	257327		50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.972)	284675		48.6177	50.4
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	806797		48.0276	49.8
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	288267		42.5870	44.2
13 Acetone	43	10.434	10.413	(0.681)	96796		21.3228	22.1
65 Toluene	92	17.215	17.215	(0.922)	24723		2.66050	2.8
99 4-Isopropyltoluene	119	20.860	20.859	(0.994)	20367		1.53553	1.6

## ION RATIO REPORT

## VOA REPORT

Data file: 7a537.d

Report Date: 03/01/2010 07:16

Lab. ID: 247562003

SampleType: SAMPLE

Injection Date: 27-FEB-2010 06:33

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562003|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
13	Acetone		CAS#: 67-64-1			
43	96796	10.43	10.41	80-120	100	( )
58	25927	10.44	10.41	0- 58	27	( )
-----						
63	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	9561	17.13	16.94	80-120	100	(T)
43	5546	17.13	16.93	217-277	58	(QT)
100	552966	17.13	16.94	0- 56	5783	(QT)
-----						
65	Toluene		CAS#: 108-88-3			
92	24723	17.22	17.21	80-120	100	( )
91	41961	17.22	17.21	132-192	170	( )
-----						
73	1,2-Dibromoethane		CAS#: 106-93-4			
107	2917	18.62	18.22	80-120	100	(T)
109	2697	18.62	18.22	66-126	92	(T)
-----						
78	Ethylbenzene		CAS#: 100-41-4			
91	5216	18.66	18.77	80-120	100	(T)
106	781	18.67	18.77	1- 61	15	(T)
-----						
80	o-Xylene		CAS#: 95-47-6			
106	4187	19.65	19.29	80-120	100	(T)
91	72825	19.65	19.29	172-232	1739	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
82 Bromoform		CAS#: 75-25-2				
173	847	19.81	19.54	80-120	100	(T)
175	15106	19.81	19.54	20- 80	1783	(QT)
-----						
83 Isopropylbenzene		CAS#: 98-82-8				
105	16460	19.65	19.63	80-120	100	( )
120	1346	19.65	19.63	0- 57	8	( )
-----						
89 1,2,3-Trichloropropane		CAS#: 96-18-4				
110	1328	19.69	19.97	80-120	100	(T)
75	6371	19.69	19.97	304-364	480	(QT)
77	52730	19.65	19.97	89-149	3968	(QT)
-----						
91 n-Propylbenzene		CAS#: 103-65-1				
91	7966	20.02	20.03	80-120	100	( )
120	2621	20.24	20.03	0- 52	33	(T)
-----						
92 1,3,5-Trimethylbenzene		CAS#: 108-67-8				
105	7539	20.62	20.17	80-120	100	(T)
120	349	20.61	20.17	18- 78	5	(QT)
-----						
96 1,2,4-Trimethylbenzene		CAS#: 95-63-6				
105	10596	20.62	20.56	80-120	100	( )
120	199	20.63	20.56	23- 83	2	(QT)
-----						
95 tert-Butylbenzene		CAS#: 98-06-6				
119	5973	20.62	20.53	80-120	100	(T)
91	42035	20.62	20.52	50-110	704	(QT)
134	1323	20.61	20.53	0- 53	22	(T)
-----						
98 sec-Butylbenzene		CAS#: 135-98-8				
105	10596	20.62	20.75	80-120	100	(T)
134	1323	20.61	20.75	0- 50	12	(T)
-----						
99 4-Isopropyltoluene		CAS#: 99-87-6				
119	20367	20.86	20.86	80-120	100	( )
134	5291	20.86	20.86	0- 59	26	( )
91	6114	20.86	20.86	0- 58	30	( )
-----						
104 n-Butylbenzene		CAS#: 104-51-8				
91	6114	20.86	21.30	80-120	100	(T)
92	1020	20.86	21.30	27- 87	17	(QT)
134	5291	20.86	21.30	0- 54	87	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/VOA7.i/022610v7/7a537.d  
Report Date: 17-Mar-2010 16:15

Page 1

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA7.i/022610v7/7a537.d  
Lab Smp Id: 247562003 Client Smp ID: RE15-10-8313  
Inj Date : 27-FEB-2010 06:33  
Operator : AX01 Inst ID: VOA7.i  
Smp Info : |247562003|957839|1|VOAF|1|  
Misc Info : LANL 5g N/A  
Comment :  
Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
Als bottle: 37  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.58770	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 75 Chlorobenzene-d5	18.667	2011092	50.000
* 101 1,4-Dichlorobenzene-d4	20.992	1808212	50.000

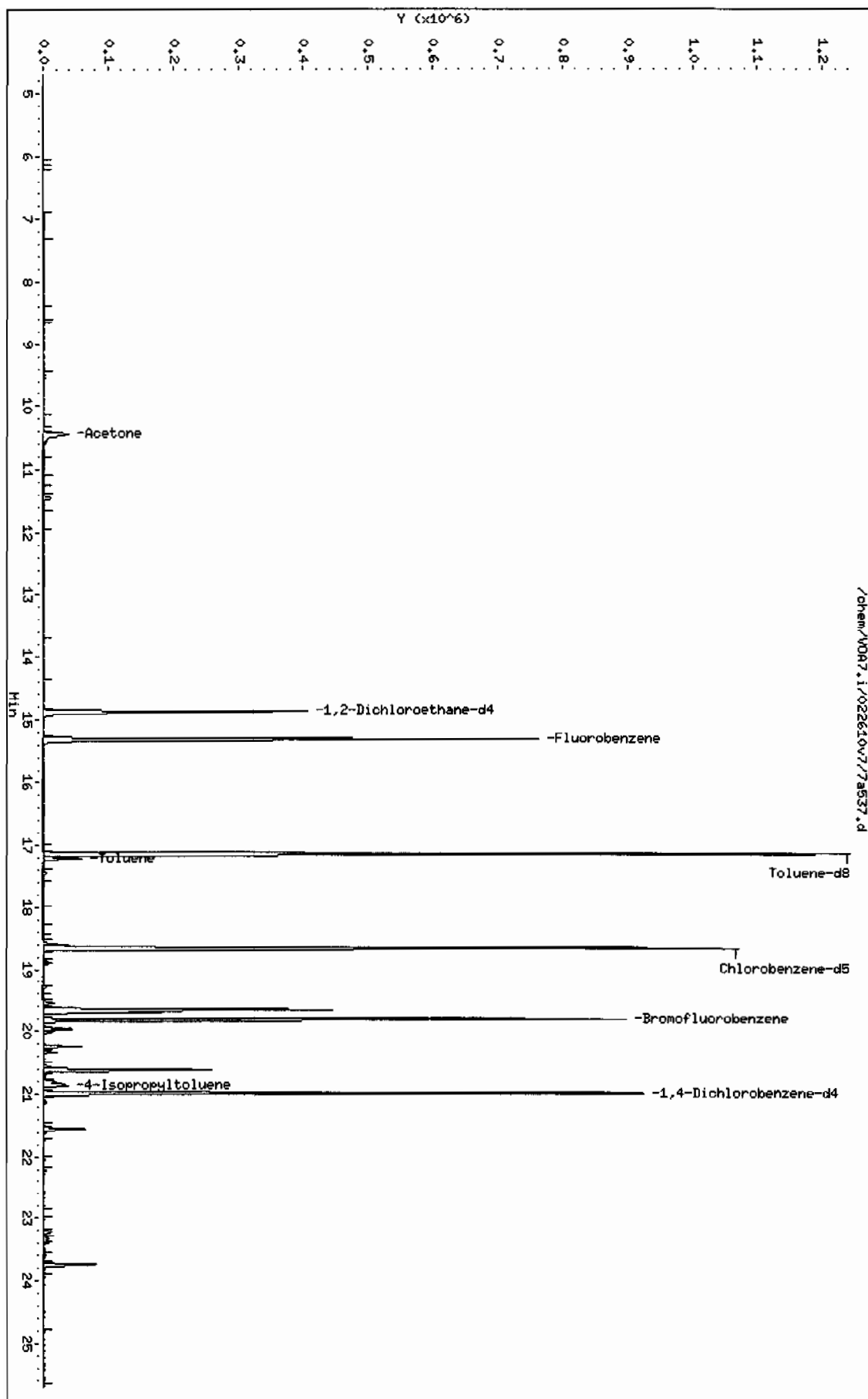
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane					CAS #:		
19.652	1145671	28.4837953	29.5	0		0	75

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL ( ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown Hydrocarbon					CAS #:		
20.616	452121	12.5018816	13.0	0		0	101

Data File: /chem/V007.i/022610v7/7a537.d  
Date : 27-FEB-2010 06:33  
Client ID: RELS-10-8313  
Sample Info: 124756203196783911.V00711

Column phase: DB-624

Instrument: V007.i  
Operator: AK01  
Column diameter: 0.25



Date : 27-FEB-2010 06:33

Client ID: RE15-10-8313

Instrument: V0A7.i

Sample Info: 1247562003195783911V0AF111

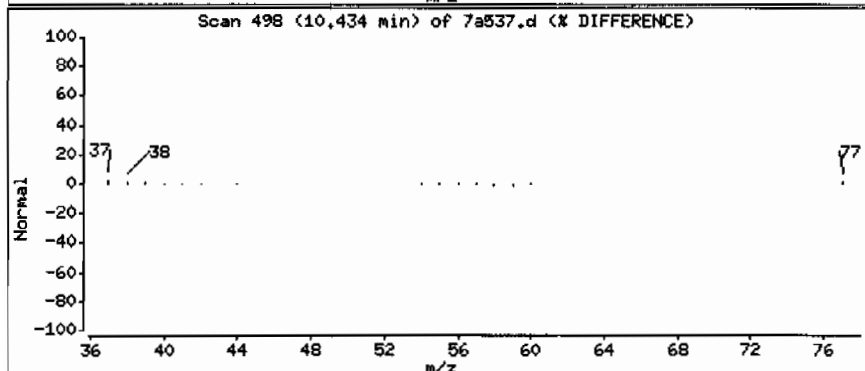
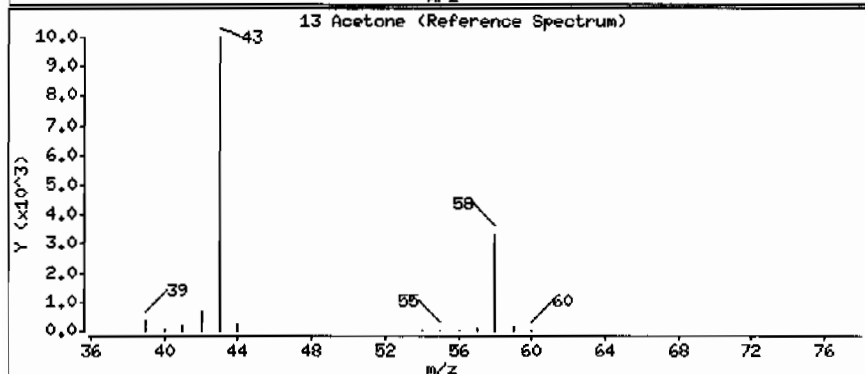
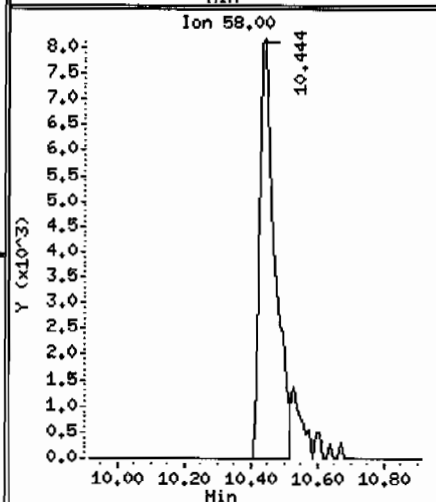
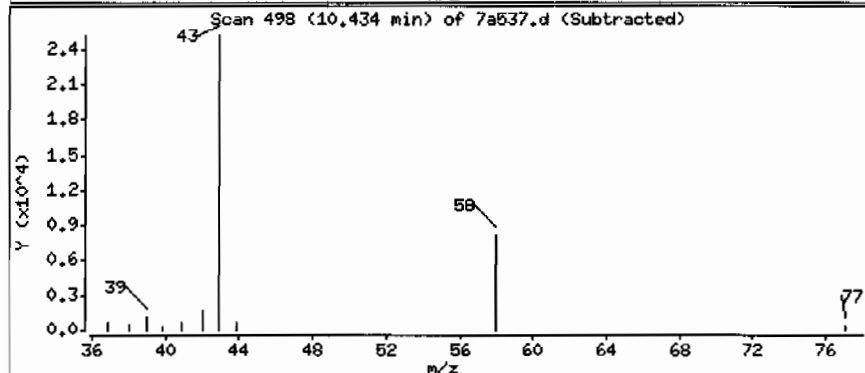
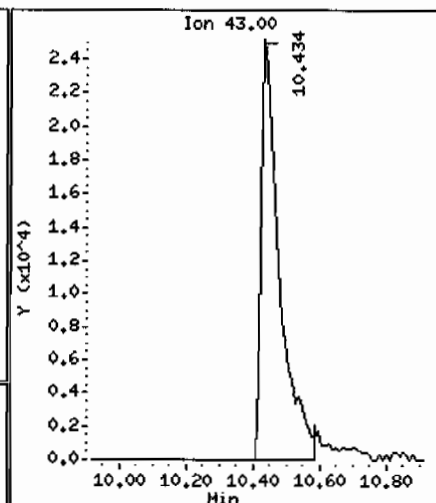
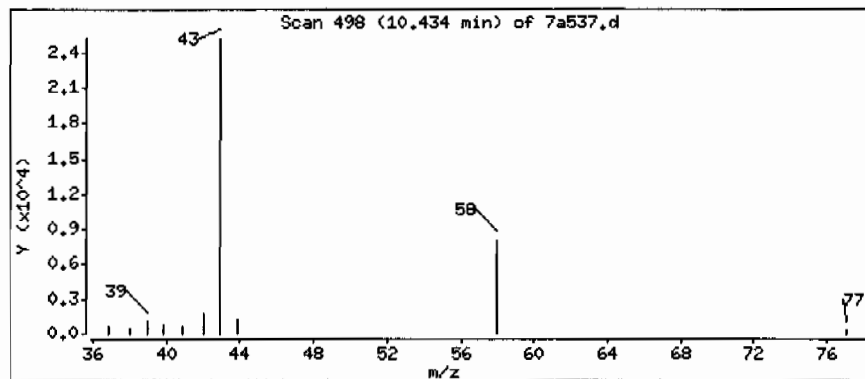
Operator: AX01

Column phase: DB-624

Column diameter: 0,25

13 Acetone

Concentration: 22,1 ug/Kg





Date : 27-FEB-2010 06:33

Client ID: RE15-10-8313

Instrument: V0A7.i

Sample Info: 1247562003195783911V0AF111

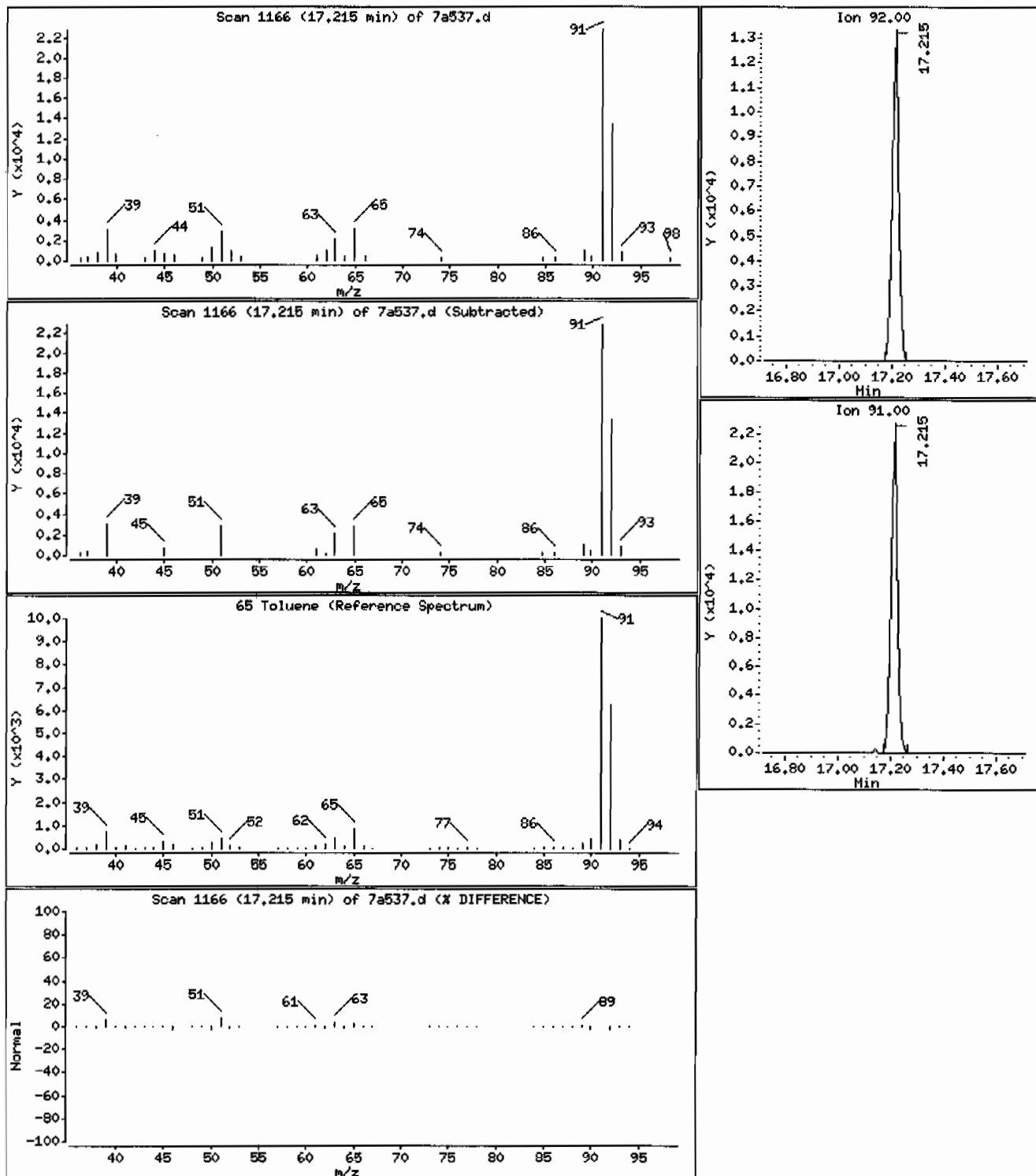
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

65 Toluene

Concentration: 2.8 ug/Kg



Date : 27-FEB-2010 06:33

Client ID: RE15-10-8313

Instrument: V0A7.i

Sample Info: 1247562003195783911V0AF111

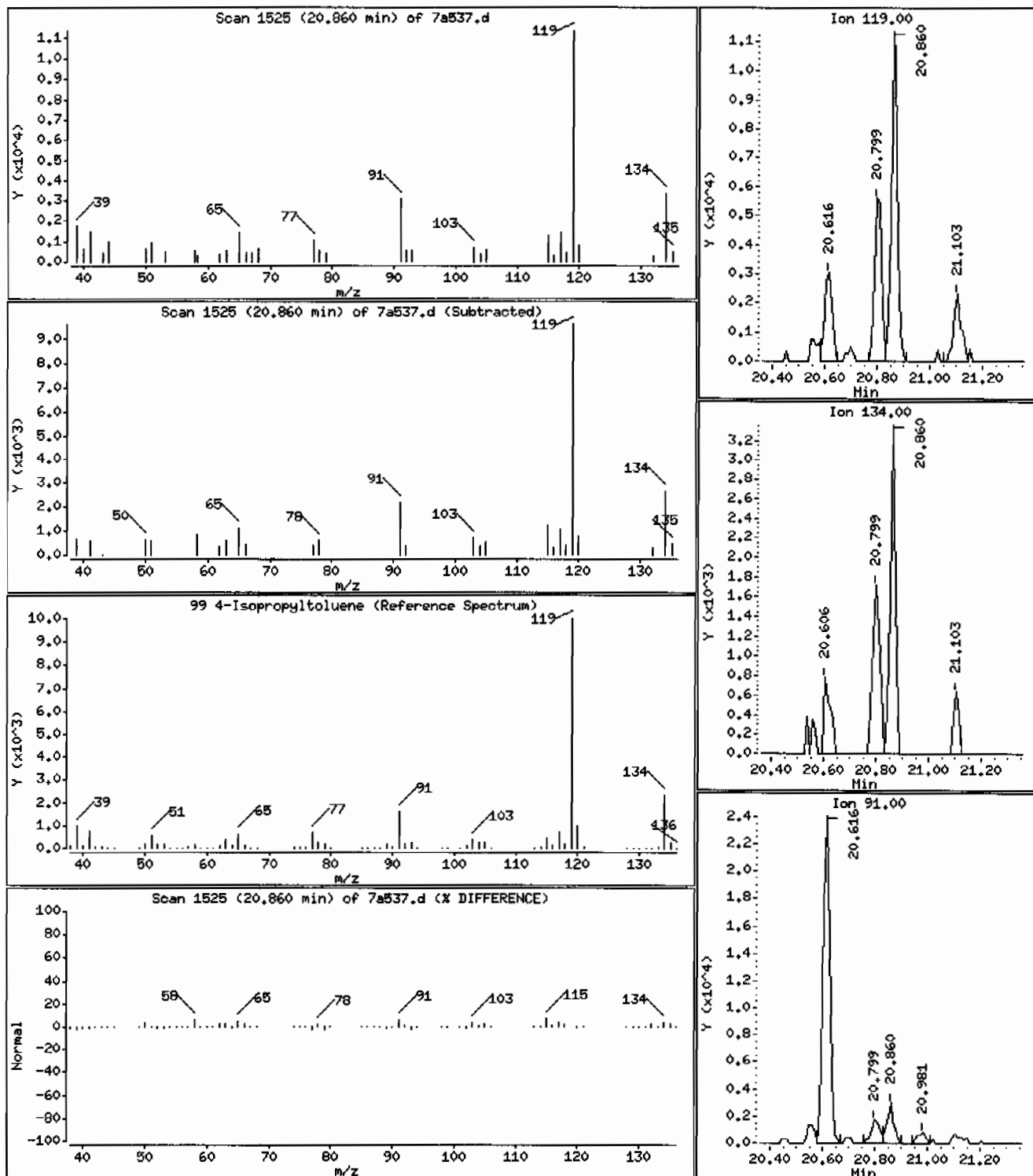
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

99 4-Isopropyltoluene

Concentration: 1.6 ug/Kg



Date : 27-FEB-2010 06:33

Client ID: RE15-10-8313

Instrument: VOA7.i

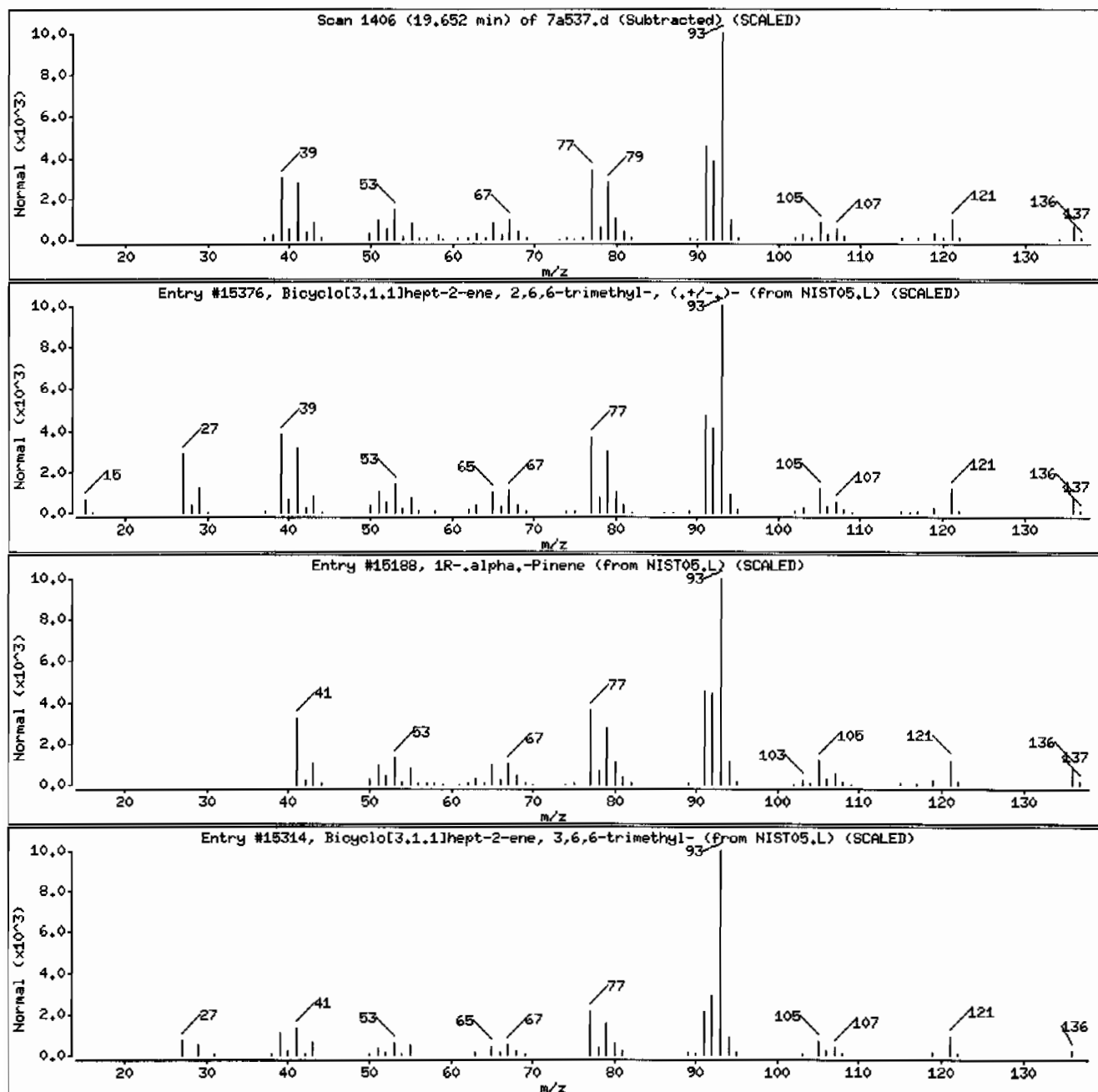
Sample Info: 1247862003195783911VOAF111

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	2437-95-8	NIST05.L	15376	96	C <sub>10</sub> H <sub>16</sub>	136
1R- $\alpha$ -Pinene	7785-70-8	NIST05.L	15188	96	C <sub>10</sub> H <sub>16</sub>	136
Bicyclo[3.1.1]hept-2-ene, 3,6,6-trimethyl	4889-83-2	NIST05.L	15314	91	C <sub>10</sub> H <sub>16</sub>	136



Date : 27-FEB-2010 06:33

Client ID: RE15-10-8313

Instrument: V0A7.i

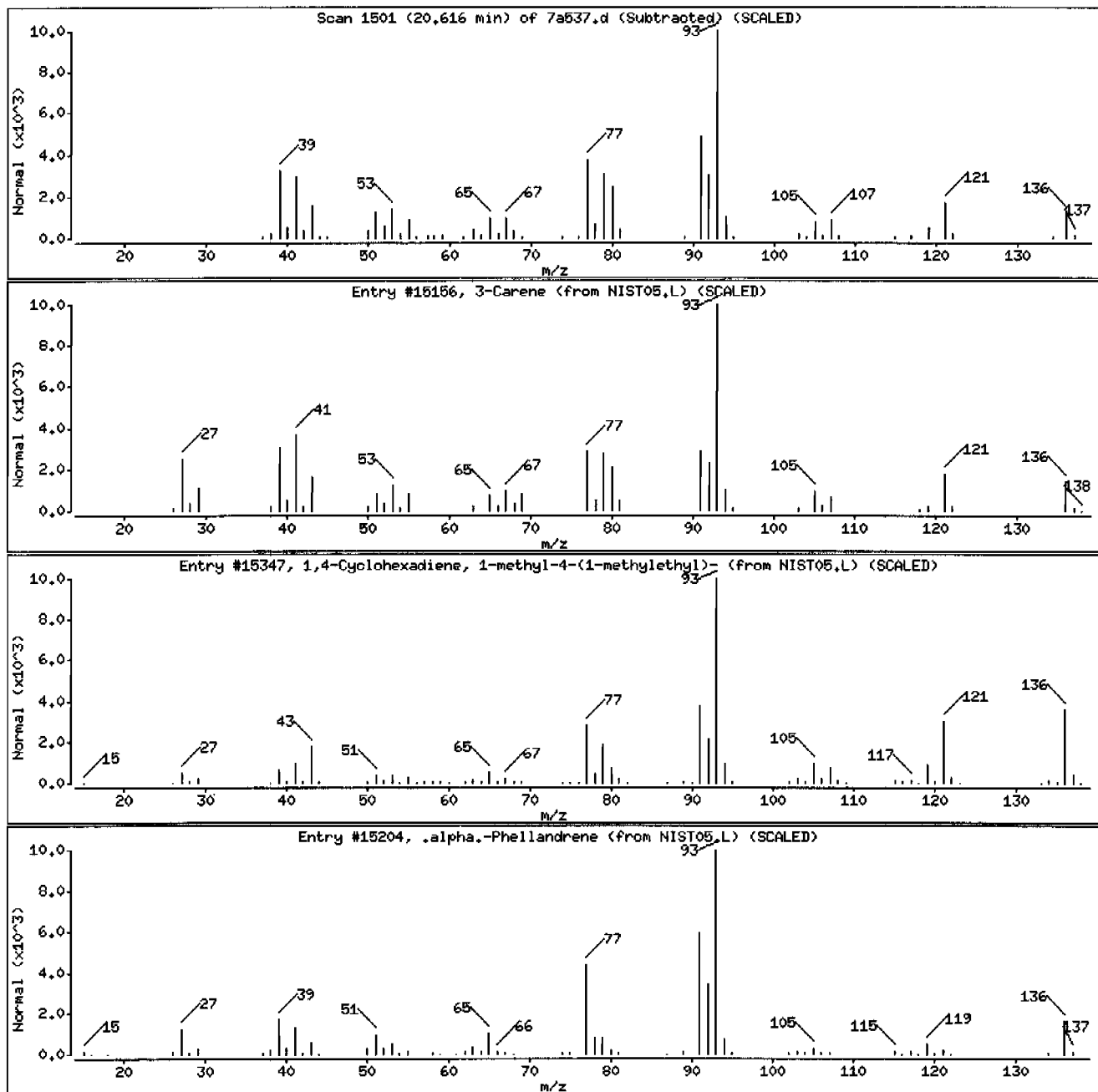
Sample Info: I247562003195783911\VOAF11

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
3-Carene	13466-78-9	NIST05.L	15156	95	C <sub>10</sub> H <sub>16</sub>	136
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NIST05.L	15347	94	C <sub>10</sub> H <sub>16</sub>	136
.alpha.-Phellandrene	99-83-2	NIST05.L	15204	93	C <sub>10</sub> H <sub>16</sub>	136



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

SDG Number: 10-1950  
 Lab Sample ID: 247562002

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 2.7  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8314  
 Batch ID: 957839  
 Run Date: 02/27/2010 05:58  
 Prep Date: 02/26/2010 14:41  
 Data File: 7a536.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.350	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.308	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.308	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.308	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.308	1.03
67-64-1	Acetone	U	5.14	ug/kg	1.71	5.14
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
74-88-4	Iodomethane	U	5.14	ug/kg	1.65	5.14
75-09-2	Methylene chloride	U	5.14	ug/kg	2.06	5.14
75-15-0	Carbon disulfide	U	5.14	ug/kg	1.29	5.14
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.308	1.03
78-93-3	2-Butanone	U	5.14	ug/kg	1.54	5.14
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.308	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.308	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.308	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.308	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone	U	5.14	ug/kg	1.29	5.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
108-88-3	Toluene	U	1.03	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.308	1.03
591-78-6	2-Hexanone	U	5.14	ug/kg	1.54	5.14
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.308	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.308	1.03

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562002	Date Received: 02/20/2010 08:55	%Moisture: 2.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8314	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 05:58	Analyst: AX01	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:41	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a536.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes	U	2.06	ug/kg	0.308	2.06
95-47-6	o-Xylene	U	1.03	ug/kg	0.308	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.308	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.308	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene	J	0.427	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.14	ug/kg	1.65	5.14
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.308	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	25.9	ug/kg		J
	Unknown Hydrocarbon	20.62	10.6	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a536.d

Lab Smp Id: 247562002

Client Smp ID: RE15-10-8314

Inj Date : 27-FEB-2010 05:58

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562002|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 36

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.73760	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.316 (1.000)	513858	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667 (1.000)	381406	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991 (1.000)	188458	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880 (0.971)	219287	49.3932	50.8
\$ 64 Toluene-d8	98	17.144	17.134 (0.918)	612515	49.3423	50.7
\$ 86 Bromofluorobenzene	95	19.814	19.814 (0.944)	210875	42.5381	43.7
99 4-Isopropyltoluene	119	20.860	20.859 (0.994)	4038	0.41569	0.43(a)

QC Flag Legend

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

## ION RATIO REPORT

## VOA REPORT

Data file: 7a536.d

Report Date: 03/01/2010 07:16

Lab. ID: 247562002

SampleType: SAMPLE

Injection Date: 27-FEB-2010 05:58

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562002|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
63	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	7313	17.14	16.94	80-120	100	(T)
43	4320	17.13	16.93	217-277	59	(QT)
100	411130	17.14	16.94	0- 56	5622	(QT)
-----						
80	o-Xylene			CAS#: 95-47-6		
106	1602	19.65	19.29	80-120	100	(T)
91	30270	19.65	19.29	172-232	1888	(QT)
-----						
82	Bromoform			CAS#: 75-25-2		
173	655	19.81	19.54	80-120	100	(T)
175	11370	19.81	19.54	20- 80	1735	(QT)
-----						
89	1,2,3-Trichloropropane			CAS#: 96-18-4		
110	2225	19.70	19.97	80-120	100	(T)
75	7604	19.69	19.97	304-364	342	(T)
77	22064	19.65	19.97	89-149	992	(QT)
-----						
92	1,3,5-Trimethylbenzene			CAS#: 108-67-8		
105	5817	20.62	20.17	80-120	100	(T)
120	722	20.62	20.17	18- 78	12	(QT)
-----						
96	1,2,4-Trimethylbenzene			CAS#: 95-63-6		
105	6601	20.62	20.56	80-120	100	( )
120	721	20.62	20.56	23- 83	11	(Q)
-----						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
95	tert-Butylbenzene			CAS#: 98-06-6		
119	4411	20.62	20.53	80-120	100	(T)
91	25227	20.62	20.52	50-110	572	(QT)
134	573	20.61	20.53	0- 53	13	(T)
-----						
98	sec-Butylbenzene			CAS#: 135-98-8		
105	6601	20.62	20.75	80-120	100	(T)
134	573	20.61	20.75	0- 50	9	(T)
-----						
99	4-Isopropyltoluene			CAS#: 99-87-6		
119	4038	20.86	20.86	80-120	100	( )
134	1143	20.87	20.86	0- 59	28	( )
91	1384	20.86	20.86	0- 58	34	( )
-----						
Q qualifier indicates ion failed ratio requirement						

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
 Data file : /chem/VOA7.i/022610v7/7a536.d  
 Lab Smp Id: 247562002 Client Smp ID: RE15-10-8314  
 Inj Date : 27-FEB-2010 05:58  
 Operator : AX01 Inst ID: VOA7.i  
 Smp Info : |247562002|957839|1|VOAF|1|  
 Misc Info : LANL 5g N/A  
 Comment :  
 Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
 Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
 Als bottle: 36  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.sub  
 Target Version: 3.50  
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.73760	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 75 Chlorobenzene-d5	18.667	1393727	50.000
* 101 1,4-Dichlorobenzene-d4	20.992	1316274	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane					CAS #:		
19.692	703111	25.2241236	25.9	0		0	75

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Hydrocarbon					CAS #:		
20.616	271449	10.3112677	10.6	0		0	101

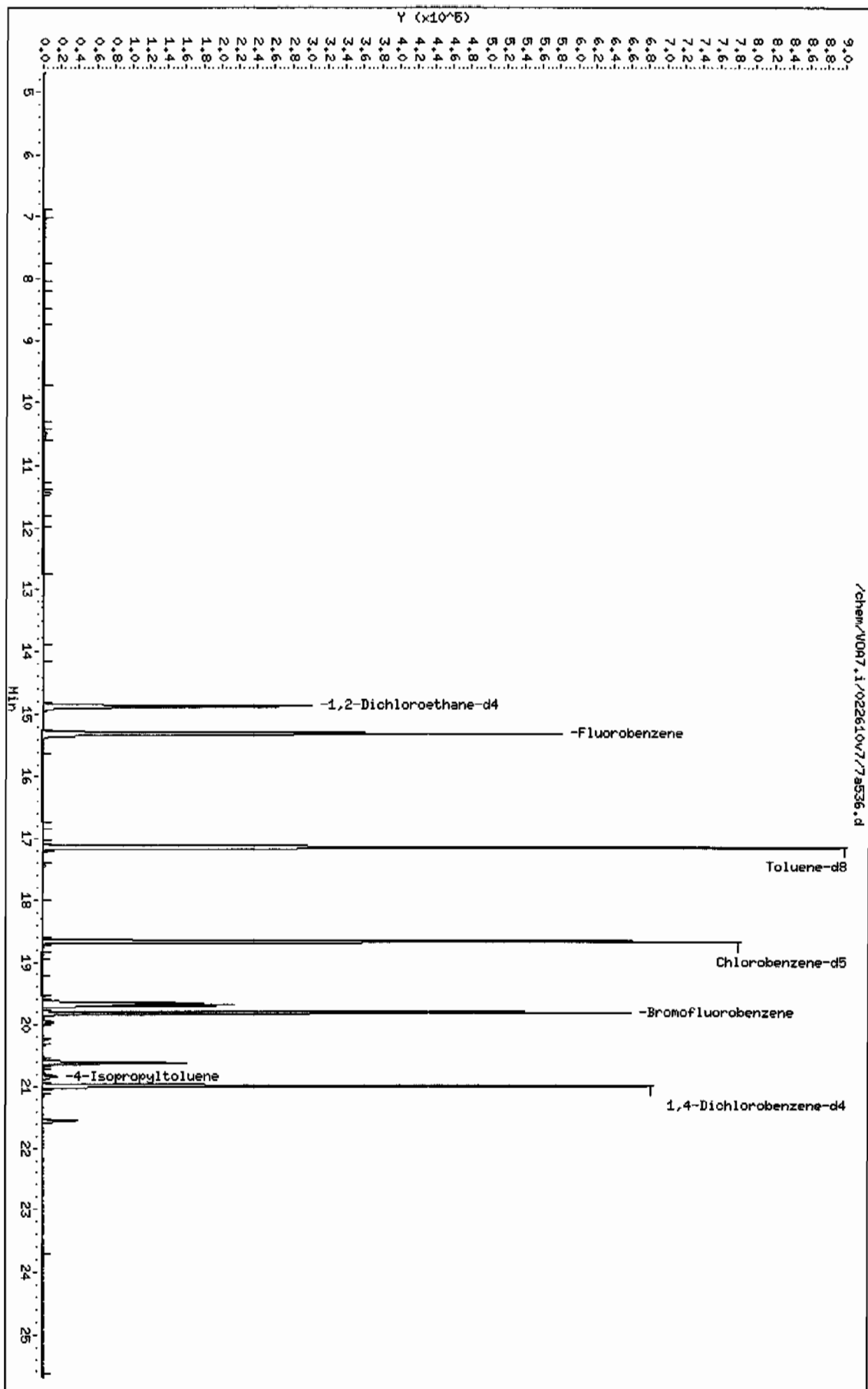
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Date: 27-FEB-2010 05:58  
Client ID: RE15-10-8314  
Sample Info: 1247562002195783911V007.1.1

Column phase: DB-624

Instrument: V007.1

Operator: AXD1

Column diameter: 0.25



Date : 27-FEB-2010 05:58

Client ID: RE15-10-8314

Instrument: V0A7.i

Sample Info: 12475620021957839111V0AF111

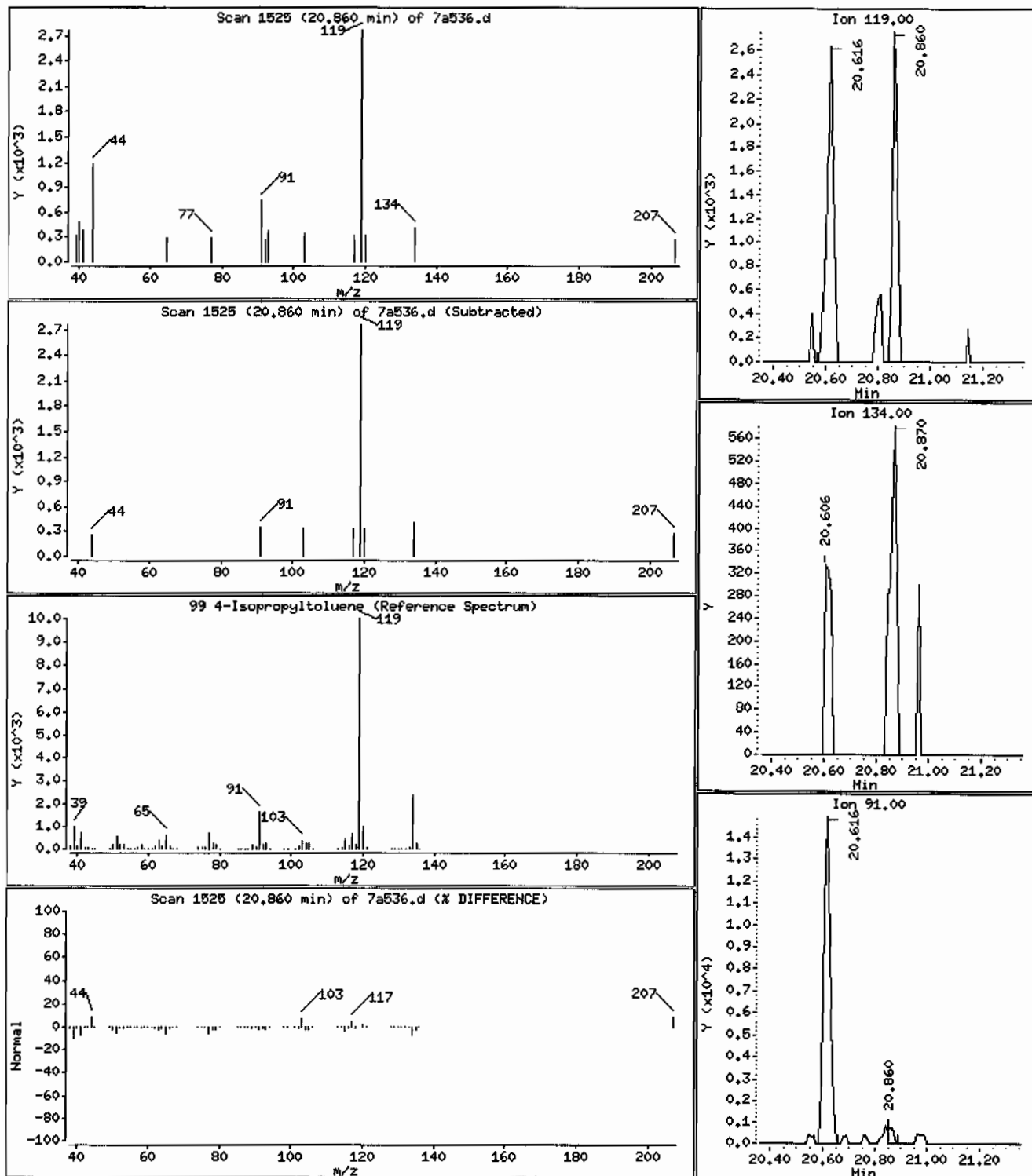
Operator: AX01

Column phase: DB-624

Column diameter: 0,25

99 4-Isopropyltoluene

Concentration: 0.43 ug/Kg



Date : 27-FEB-2010 05:58

Client ID: RE15-10-8314

Instrument: V0A7.i

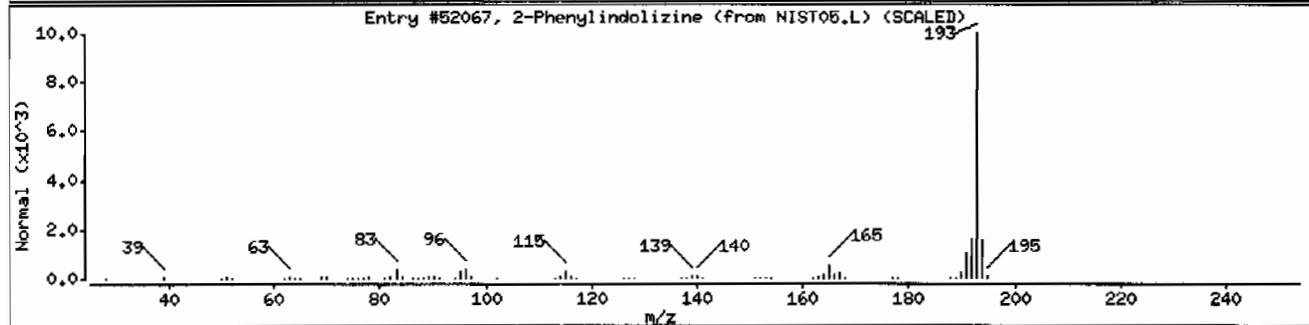
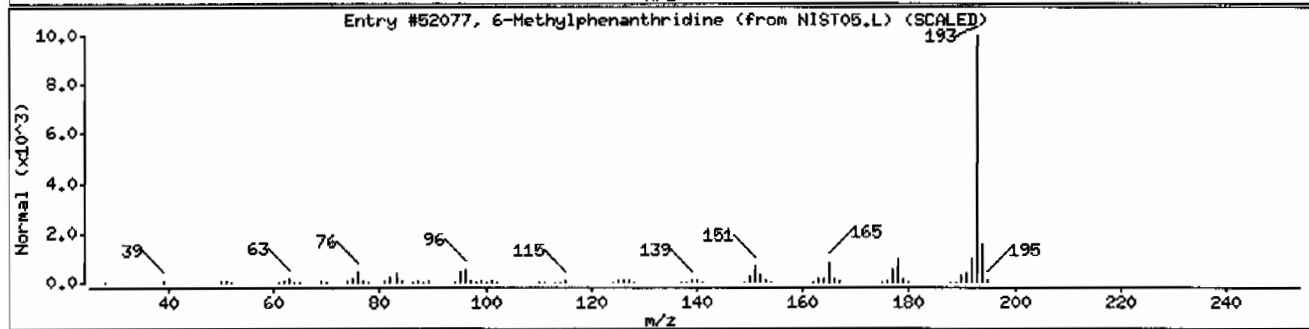
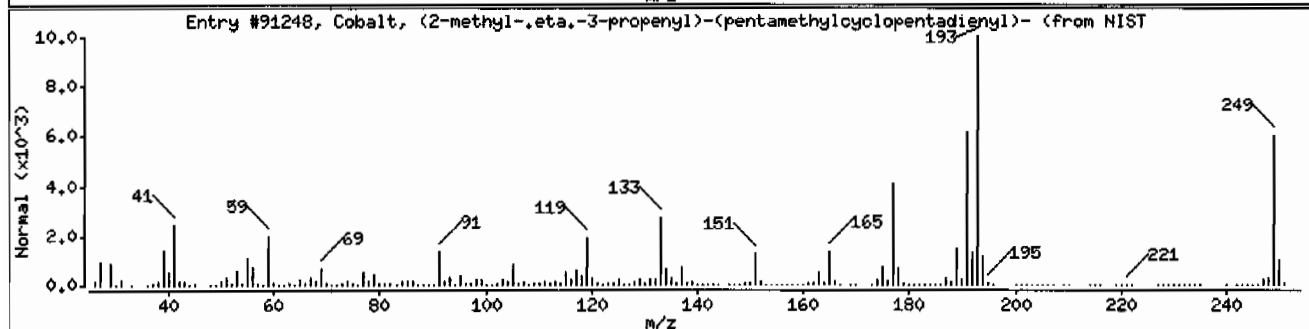
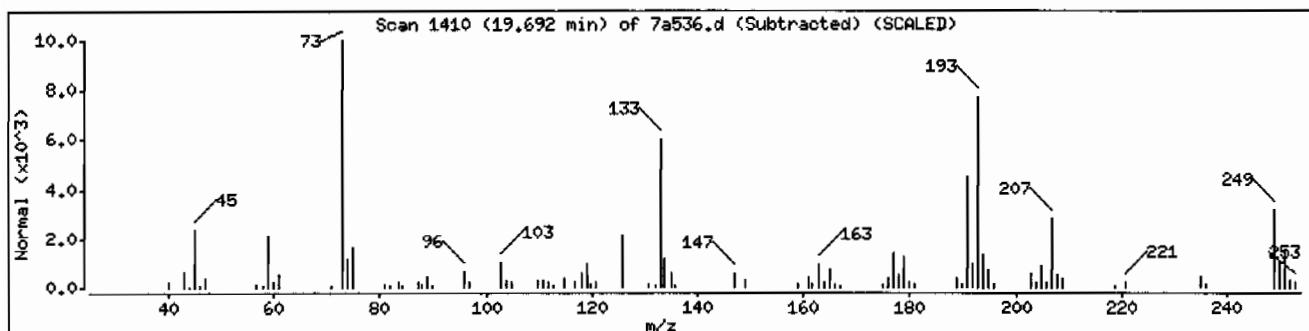
Sample Info: 12475620021957839111V0AF111

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cobalt, (2-methyl-.eta.-3-propenyl)-(pen	1000157-04-3	NIST05.L	91248	52	C14H22Co	249
6-Methylphenanthridine	3955-65-5	NIST05.L	52077	30	C14H11N	193
2-Phenylindolizine	25379-20-8	NIST05.L	52067	30	C14H11N	193



Date : 27-FEB-2010 05:58

Client ID: RE15-10-8314

Instrument: VOA7.i

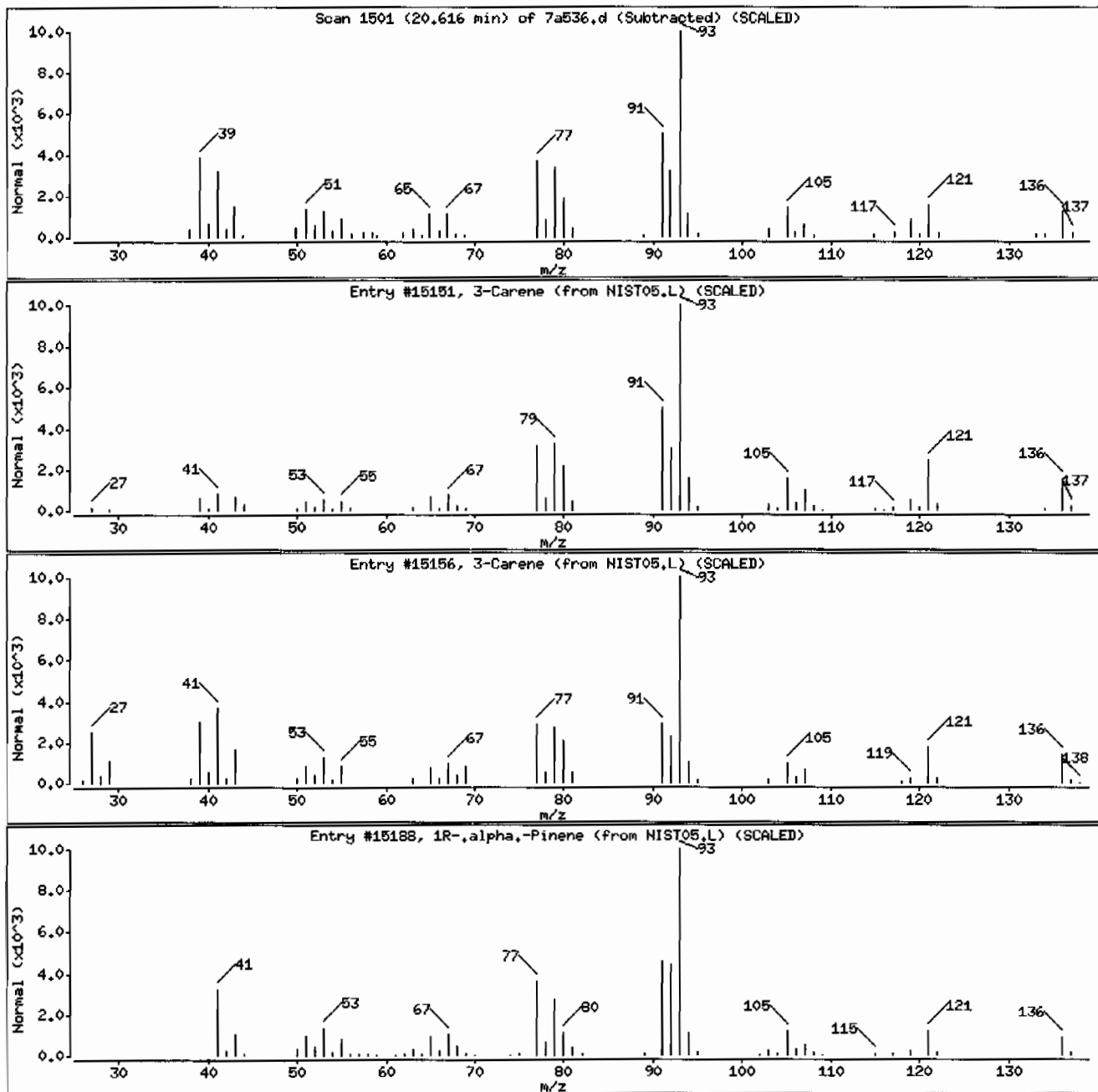
Sample Info: 1247562002195783911\VOAF111

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
3-Carene	13466-78-9	NIST05.L	15151	95	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	94	C10H16	136
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15188	94	C10H16	136



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562005	Date Received: 02/20/2010 08:55	%Moisture: 3.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8315	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.1	Dilution: 1
Run Date: 02/27/2010 07:43	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:51	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a539.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.03	ug/kg	0.352	1.03
74-87-3	Chloromethane	U	1.03	ug/kg	0.310	1.03
75-01-4	Vinyl chloride	U	1.03	ug/kg	0.310	1.03
74-83-9	Bromomethane	U	1.03	ug/kg	0.310	1.03
75-00-3	Chloroethane	U	1.03	ug/kg	0.310	1.03
75-69-4	Trichlorofluoromethane	U	1.03	ug/kg	0.310	1.03
67-64-1	Acetone	U	5.17	ug/kg	1.72	5.17
75-35-4	1,1-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
74-88-4	Iodomethane	U	5.17	ug/kg	1.66	5.17
75-09-2	Methylene chloride	U	5.17	ug/kg	2.07	5.17
75-15-0	Carbon disulfide	U	5.17	ug/kg	1.29	5.17
156-60-5	trans-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
75-34-3	1,1-Dichloroethane	U	1.03	ug/kg	0.310	1.03
78-93-3	2-Butanone	U	5.17	ug/kg	1.55	5.17
156-59-2	cis-1,2-Dichloroethylene	U	1.03	ug/kg	0.310	1.03
594-20-7	2,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
67-66-3	Chloroform	U	1.03	ug/kg	0.310	1.03
74-97-5	Bromochloromethane	U	1.03	ug/kg	0.341	1.03
71-55-6	1,1,1-Trichloroethane	U	1.03	ug/kg	0.310	1.03
563-58-6	1,1-Dichloropropene	U	1.03	ug/kg	0.310	1.03
56-23-5	Carbon tetrachloride	U	1.03	ug/kg	0.310	1.03
107-06-2	1,2-Dichloroethane	U	1.03	ug/kg	0.310	1.03
71-43-2	Benzene	U	1.03	ug/kg	0.310	1.03
79-01-6	Trichloroethylene	U	1.03	ug/kg	0.341	1.03
78-87-5	1,2-Dichloropropane	U	1.03	ug/kg	0.310	1.03
75-27-4	Bromodichloromethane	U	1.03	ug/kg	0.310	1.03
74-95-3	Dibromomethane	U	1.03	ug/kg	0.310	1.03
108-10-1	4-Methyl-2-pentanone	U	5.17	ug/kg	1.29	5.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
108-88-3	Toluene	J	0.323	ug/kg	0.310	1.03
10061-02-6	trans-1,3-Dichloropropylene	U	1.03	ug/kg	0.310	1.03
79-00-5	1,1,2-Trichloroethane	U	1.03	ug/kg	0.310	1.03
591-78-6	2-Hexanone	U	5.17	ug/kg	1.55	5.17
142-28-9	1,3-Dichloropropane	U	1.03	ug/kg	0.310	1.03
127-18-4	Tetrachloroethylene	U	1.03	ug/kg	0.310	1.03
124-48-1	Dibromochloromethane	U	1.03	ug/kg	0.310	1.03
106-93-4	1,2-Dibromoethane	U	1.03	ug/kg	0.310	1.03
108-90-7	Chlorobenzene	U	1.03	ug/kg	0.310	1.03



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

SDG Number: 10-1950  
 Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
 Date Received: 02/20/2010 08:55  
 Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.I  
 Analyst: AXO1  
 Aliquot: 5 g  
 Column: DB-624

Matrix: R  
 %Moisture: 3.4  
 Project: LANL01004  
 SOP Ref: GL-OA-E-038  
 Dilution: 1  
 Purge Vol: 5 mL  
 Final Volume: 5 mL  
 Level: LOW

Client ID: RE15-10-8315  
 Batch ID: 957839  
 Run Date: 02/27/2010 07:43  
 Prep Date: 02/26/2010 14:51  
 Data File: 7a539.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.03	ug/kg	0.310	1.03
179601-23-1	m,p-Xylenes	U	2.07	ug/kg	0.310	2.07
95-47-6	o-Xylene	U	1.03	ug/kg	0.310	1.03
100-42-5	Styrene	U	1.03	ug/kg	0.310	1.03
75-25-2	Bromoform	U	1.03	ug/kg	0.310	1.03
79-34-5	1,1,2,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
96-18-4	1,2,3-Trichloropropane	U	1.03	ug/kg	0.310	1.03
108-86-1	Bromobenzene	U	1.03	ug/kg	0.310	1.03
103-65-1	n-Propylbenzene	U	1.03	ug/kg	0.310	1.03
95-49-8	2-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-82-8	Isopropylbenzene	U	1.03	ug/kg	0.310	1.03
108-67-8	1,3,5-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
106-43-4	4-Chlorotoluene	U	1.03	ug/kg	0.310	1.03
98-06-6	tert-Butylbenzene	U	1.03	ug/kg	0.310	1.03
95-63-6	1,2,4-Trimethylbenzene	U	1.03	ug/kg	0.310	1.03
135-98-8	sec-Butylbenzene	U	1.03	ug/kg	0.310	1.03
99-87-6	4-Isopropyltoluene	U	1.03	ug/kg	0.310	1.03
541-73-1	1,3-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
106-46-7	1,4-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03
104-51-8	n-Butylbenzene	U	1.03	ug/kg	0.310	1.03
96-12-8	1,2-Dibromo-3-chloropropane	U	1.03	ug/kg	0.310	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.17	ug/kg	1.66	5.17
630-20-6	1,1,1,2-Tetrachloroethane	U	1.03	ug/kg	0.310	1.03
95-50-1	1,2-Dichlorobenzene	U	1.03	ug/kg	0.310	1.03

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	19.69	5.98	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a539.d

Lab Smp Id: 247562005

Client Smp ID: RE15-10-8315

Inj Date : 27-FEB-2010 07:43

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562005|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592

Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 39

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.35200	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.316	15.316 (1.000)	726019	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667 (1.000)	533920	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991 (1.000)	277081	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880 (0.971)	312966	49.8938	51.6
\$ 64 Toluene-d8	98	17.134	17.134 (0.918)	849937	48.9103	50.6
\$ 86 Bromofluorobenzene	95	19.814	19.814 (0.944)	312454	42.8693	44.4
65 Toluene	92	17.215	17.215 (0.922)	3001	0.31219	0.32(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

## VOA REPORT

Data file: 7a539.d

Report Date: 03/01/2010 07:16

Lab. ID: 247562005

SampleType: SAMPLE

Injection Date: 27-FEB-2010 07:43

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562005|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
63	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	10326	17.13	16.94	80-120	100	(T)
43	6586	17.13	16.93	217-277	64	(QT)
100	585133	17.13	16.94	0- 56	5666	(QT)
-----						
65	Toluene			CAS#: 108-88-3		
92	3001	17.21	17.21	80-120	100	( )
91	6567	17.21	17.21	132-192	219	(Q)
-----						
73	1,2-Dibromoethane			CAS#: 106-93-4		
107	30149	18.62	18.22	80-120	100	(T)
109	18974	18.63	18.22	66-126	63	(QT)
-----						
77	1,1,1,2-Tetrachloroethane			CAS#: 630-20-6		
131	3786	18.64	18.76	80-120	100	(T)
133	10652	18.65	18.76	69-129	281	(QT)
119	191968	18.67	18.76	41-101	5070	(QT)
-----						
78	Ethylbenzene			CAS#: 100-41-4		
91	60497	18.64	18.77	80-120	100	(T)
106	14653	18.63	18.77	1- 61	24	(T)
-----						
79	m,p-Xylenes			CAS#:		
106	14653	18.63	18.87	80-120	100	(T)
91	60497	18.64	18.87	167-227	413	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
82	Bromoform		CAS#: 75-25-2			
173	887	19.82	19.54	80-120	100	(T)
175	15880	19.81	19.54	20- 80	1790	(QT)
-----						
89	1,2,3-Trichloropropane		CAS#: 96-18-4			
110	1265	19.69	19.97	80-120	100	(T)
75	3478	19.69	19.97	304-364	275	(QT)
77	8739	19.65	19.97	89-149	691	(QT)

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

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
 Data file : /chem/VOA7.i/022610v7/7a539.d  
 Lab Smp Id: 247562005 Client Smp ID: RE15-10-8315  
 Inj Date : 27-FEB-2010 07:43  
 Operator : AX01 Inst ID: VOA7.i  
 Smp Info : |247562005|957839|1|VOAF|1|  
 Misc Info : LANL 5g N/A  
 Comment :  
 Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
 Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
 Als bottle: 39  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.sub  
 Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	3.35200	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 75 Chlorobenzene-d5	18.667	2959529	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL ( ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane					CAS #:		
19.692	341854	5.77548480	6.0	0		0	75

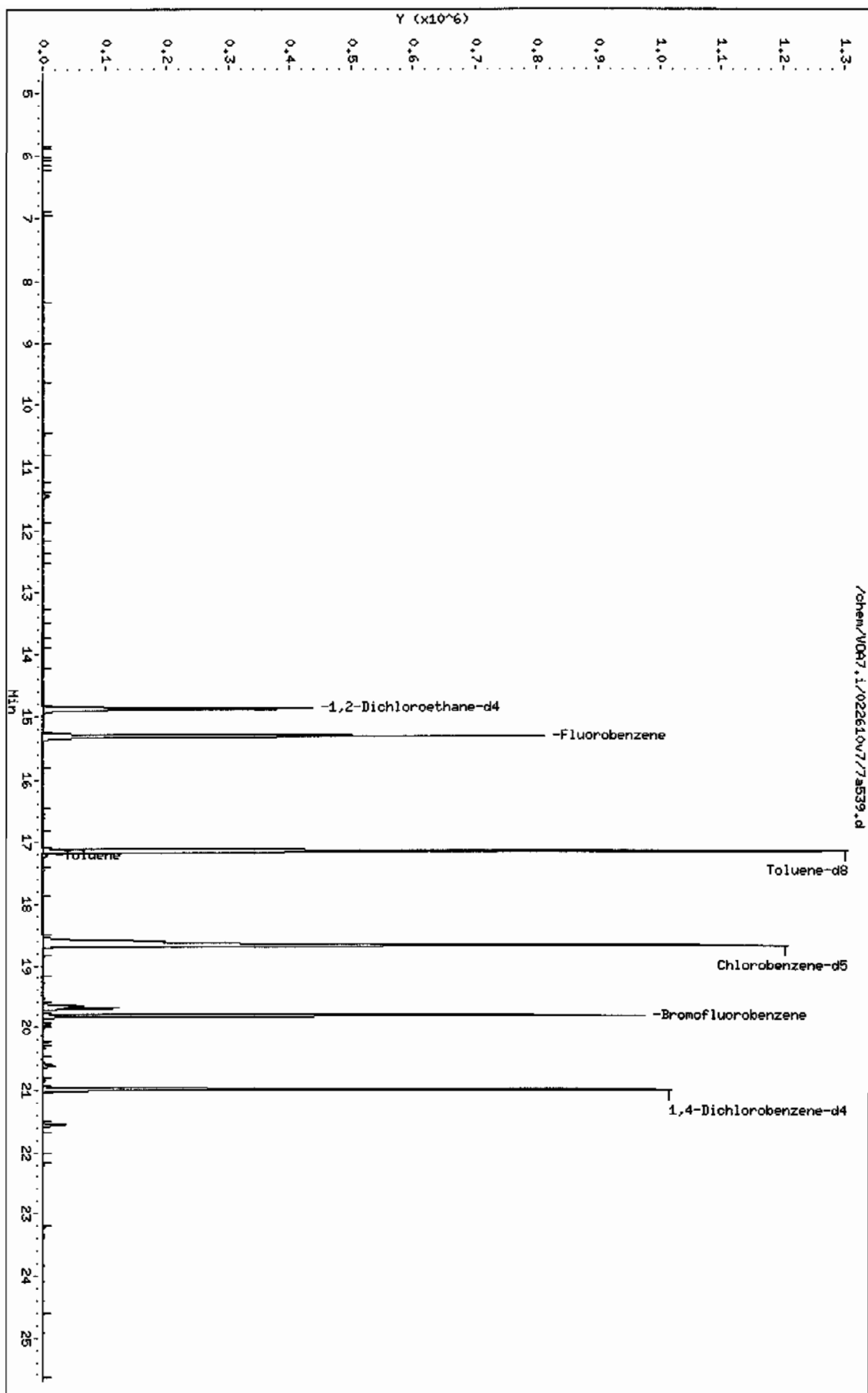
Data File: /chem/V067.i/022610v7/7a539.d  
Date : 27-FEB-2010 07:43  
Client ID: RE15-10-8315  
Sample Info: 1247562005195783911V067.i.1

Column phase: DB-624

Instrument: V067.i

Operator: RXD1

Column diameter: 0.25



Date : 27-FEB-2010 07:43

Client ID: RE15-10-8315

Instrument: V0A7.i

Sample Info: 1247562005195783911V0AF11

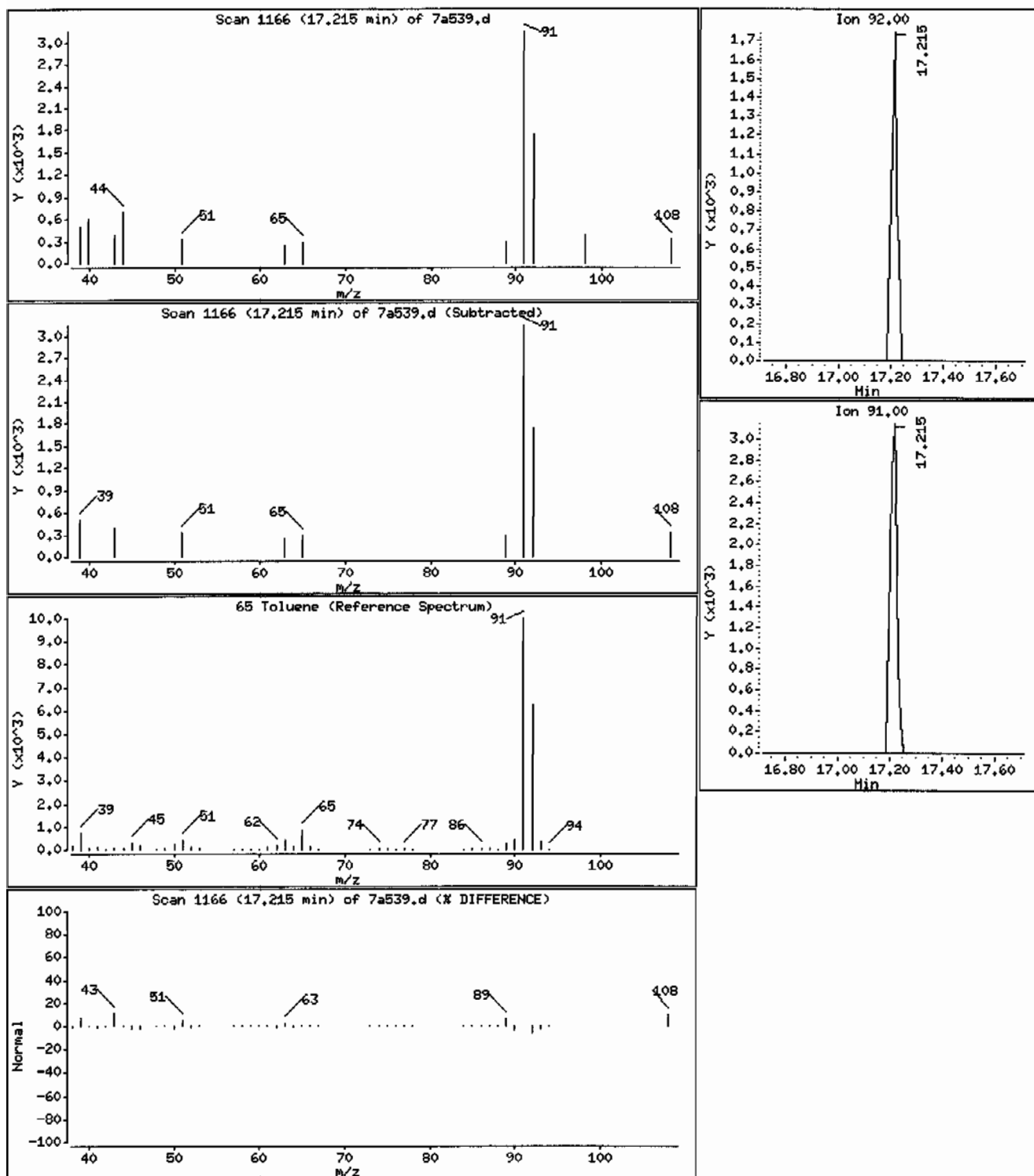
Operator: AX01

Column phase: DB-624

Column diameter: 0,25

65 Toluene

Concentration: 0.32 ug/Kg



Date : 27-FEB-2010 07:43

Client ID: RE15-10-8318

Instrument: V0A7.i

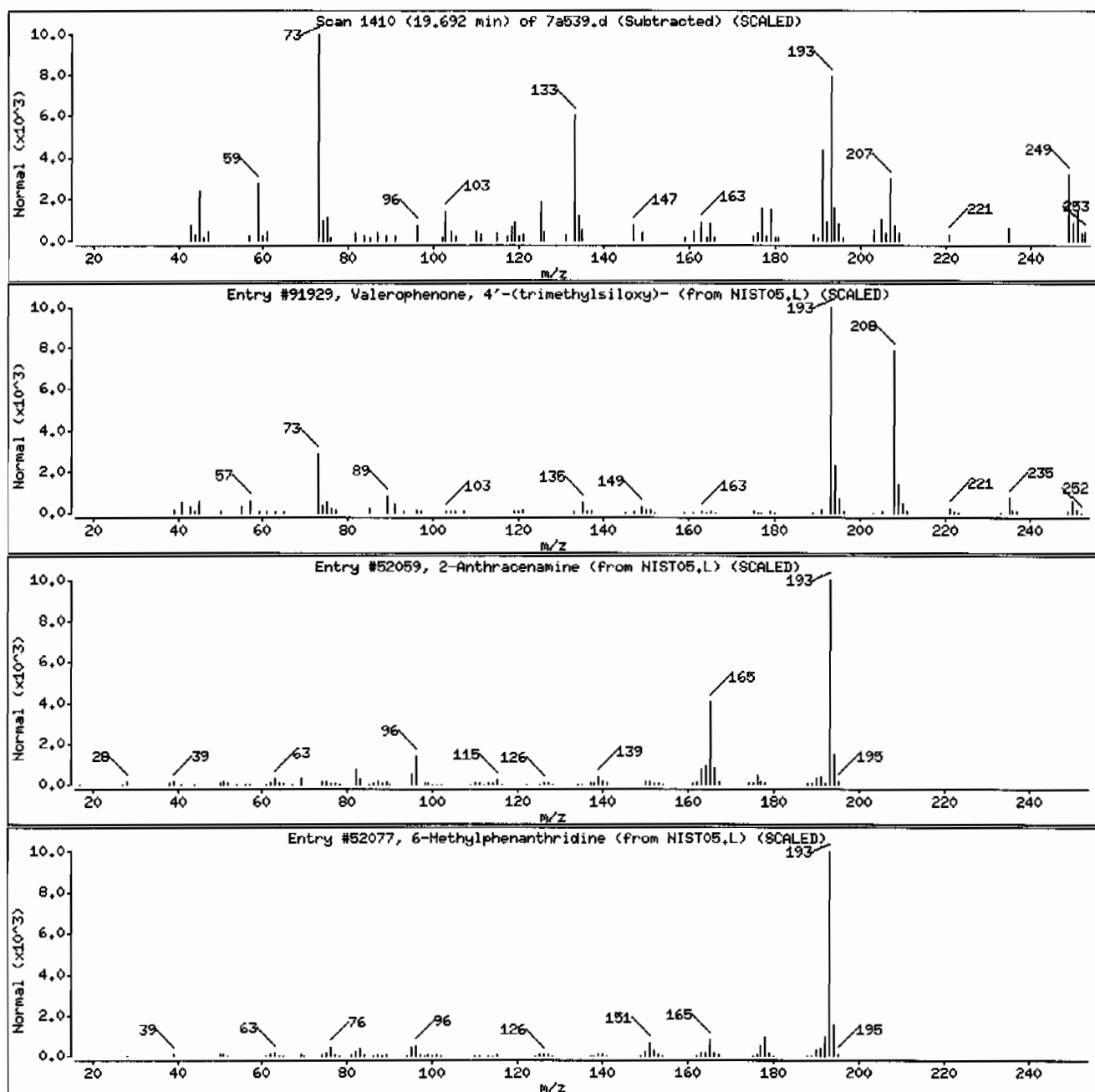
Sample Info: 1247562005195783911V0AF111

Operator: AX01

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Valerophenone, 4'-(trimethylsiloxy)-	33342-92-6	NIST05.L	91929	30	C <sub>14</sub> H <sub>22</sub> O <sub>2</sub> Si	250
2-Anthracenamine	613-13-8	NIST05.L	52059	25	C <sub>14</sub> H <sub>11</sub> N	193
6-Methylphenanthridine	3955-65-5	NIST05.L	52077	25	C <sub>14</sub> H <sub>11</sub> N	193





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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: S
Lab Sample ID: 247562001	Date Received: 02/20/2010 08:55	
Client ID: RE15-10-8334	Client: LANL010	Project: LANL01004
Batch ID: 957839	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 02/27/2010 05:23	Inst: VOA7.I	Dilution: 1
Prep Date: 02/26/2010 14:39	Analyst: AXO1	Purge Vol: 5 mL
Data File: 7a535.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	3.01	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: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: S
Lab Sample ID: 247562001	Date Received: 02/20/2010 08:55	
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8334	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 05:23	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:39	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a535.d	Column: DB-624	Level: LOW

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

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a535.d

Lab Smp Id: 247562001

Client Smp ID: RE15-10-8334

Inj Date : 27-FEB-2010 05:23

Operator : AX01

Inst ID: VOA7.i

Smp Info : |247562001|957839|1|VOAF|1|

Misc Info : LANL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 35

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

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

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

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN ( ug/l)	FINAL (ug/Kg)
* 51 Fluorobenzene	96	15.317	15.316 (1.000)	698914	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667 (1.000)	520249	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991 (1.000)	251353	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880 (0.971)	285544	47.2876	47.3
\$ 64 Toluene-d8	98	17.134	17.134 (0.918)	825052	48.7259	48.7
\$ 86 Bromofluorobenzene	95	19.814	19.814 (0.944)	292219	44.1969	44.2
13 Acetone	43	10.474	10.413 (0.684)	14090	3.00972	3.0(a)

QC Flag Legend

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

## ION RATIO REPORT

## VOA REPORT

Data file: 7a535.d

Report Date: 03/01/2010 07:16

Lab. ID: 247562001

SampleType: SAMPLE

Injection Date: 27-FEB-2010 05:23

Operator: AX01

Instrument: VOA7.i

Sample Info: |247562001|957839|1|VOAF|1|

Miscellaneous Info: LANL 5g N/A

Comment:

Method used: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
13	Acetone		CAS#: 67-64-1			
43	14090	10.47	10.41	80-120	100	(T)
58	3157	10.47	10.41	0- 58	22	(T)
-----						
63	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	9096	17.13	16.94	80-120	100	(T)
43	6247	17.13	16.93	217-277	69	(QT)
100	562170	17.13	16.94	0- 56	6180	(QT)
-----						
82	Bromoform		CAS#: 75-25-2			
173	1011	19.81	19.54	80-120	100	(T)
175	16799	19.81	19.54	20- 80	1660	(QT)

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

Data File: /chem/VOA7.i/022610v7/7a535.d  
Report Date: 15-Mar-2010 06:12

Page 1

GEL Laboratories LLC

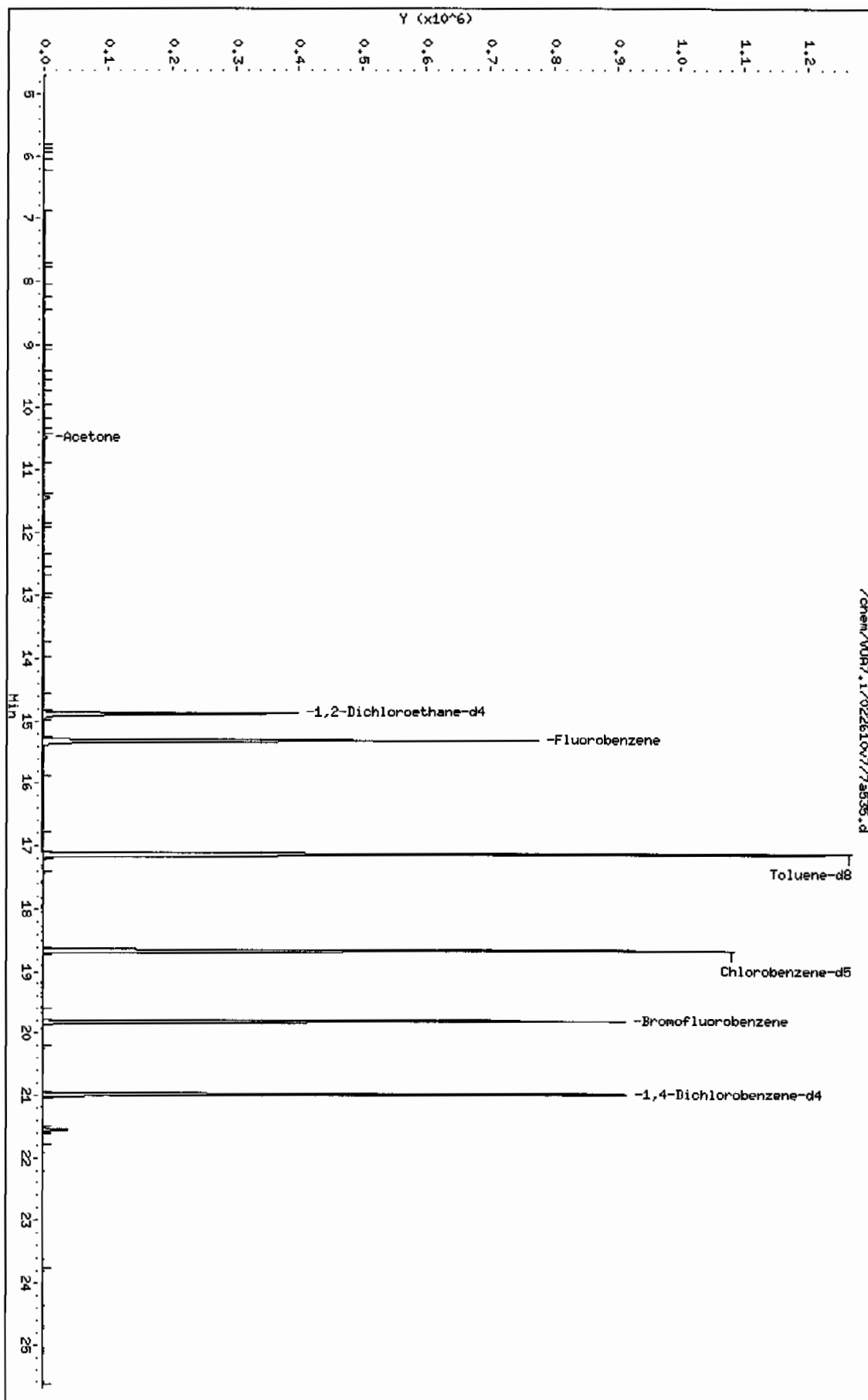
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
Data file : /chem/VOA7.i/022610v7/7a535.d  
Lab Smp Id: 247562001 Client Smp ID: RE15-10-8334  
Inj Date : 27-FEB-2010 05:23  
Operator : AX01 Inst ID: VOA7.i  
Smp Info : |247562001|957839|1|VOAF|1|  
Misc Info : LANL 5g N/A  
Comment :  
Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
Als bottle: 35  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/V007.i/022610v7/7a535.d  
Date : 27-FEB-2010 05:23  
Client ID: REL5-10-8334  
Sample Info: 124756200196783911.V00F11

Column phase: DB-624

Instrument: V007.i  
Operator: AK01  
Column diameter: 0.25



Data File: /chem/V0A7.i/022610v7/7a535.d

Page 2

Date : 27-FEB-2010 05:23

Client ID: RE15-10-8334

Instrument: V0A7.i

Sample Info: I247562001I957839I1I1V0AF11I

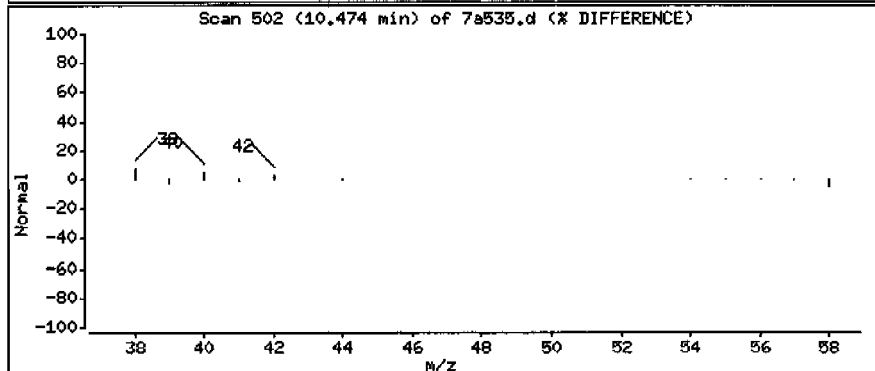
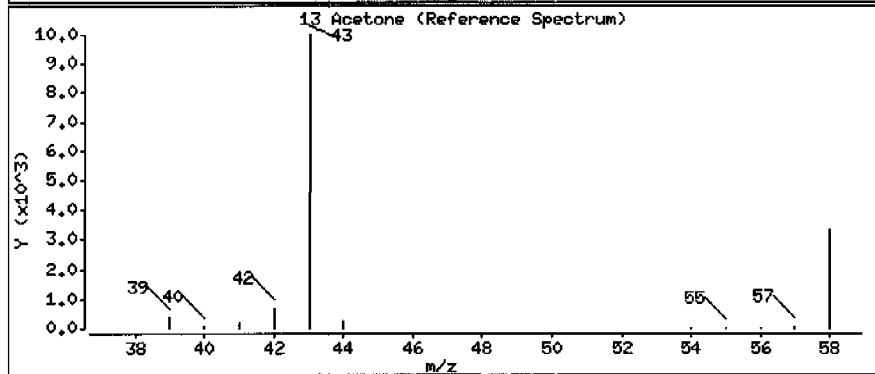
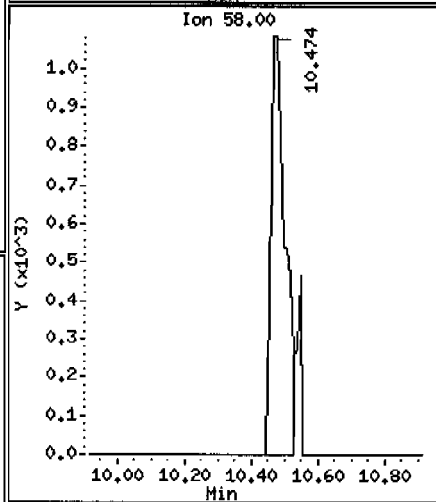
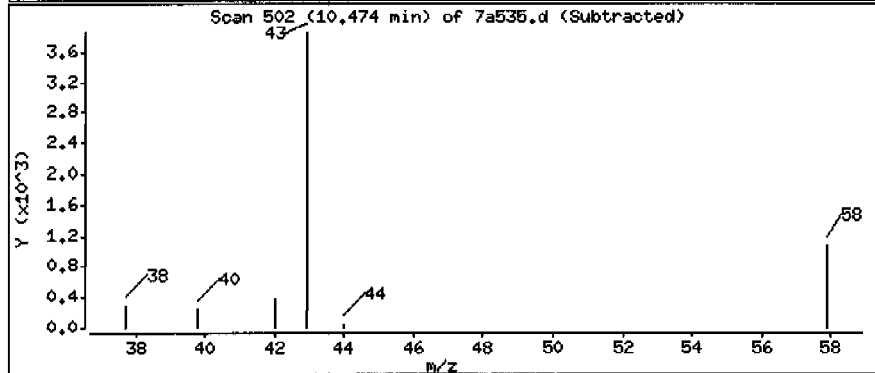
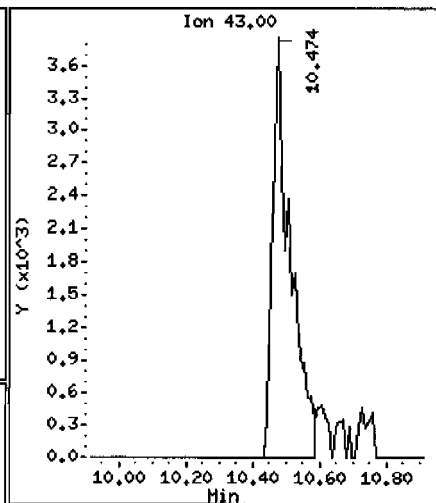
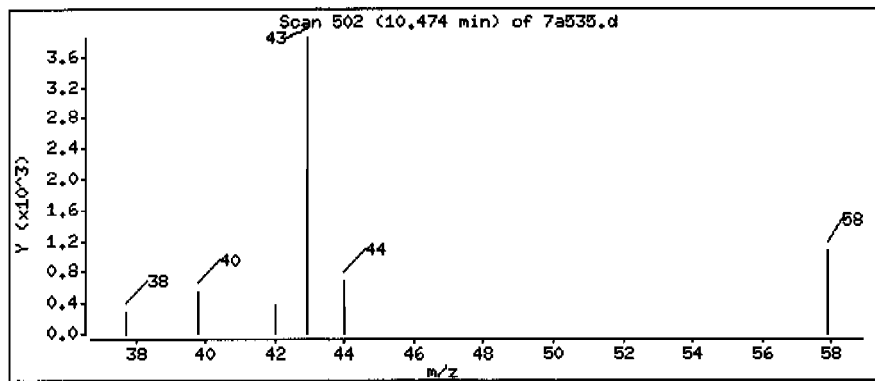
Operator: AX01

Column phase: DB-624

Column diameter: 0.25

13 Acetone

Concentration: 3.0 ug/Kg



# Standard Data



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

## Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
1,2-Dichloroethane-d4(surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	250	500
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	250	500

tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Report Date: 01-Mar-2010 08:49

### Calibration History

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Start Cal Date: 17-FEB-2010 16:02

End Cal Date : 18-FEB-2010 00:42

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
17-FEB-2010 21:14	ICALsubS	/chem/VOA7.i/021710v7/7z319.d
17-FEB-2010 16:02	ICALsubL+	/chem/VOA7.i/021710v7/7z310.d
Cal Level: 2 , Cal Amount: 2.00000		
17-FEB-2010 21:49	ICALsubS	/chem/VOA7.i/021710v7/7z320.d
17-FEB-2010 16:35	ICALsubL+	/chem/VOA7.i/021710v7/7z311.d
Cal Level: 3 , Cal Amount: 5.00000		
17-FEB-2010 22:24	ICALsubS	/chem/VOA7.i/021710v7/7z321.d
17-FEB-2010 17:09	ICALsubL+	/chem/VOA7.i/021710v7/7z312.d
Cal Level: 4 , Cal Amount: 10.00000		
17-FEB-2010 22:59	ICALsubS	/chem/VOA7.i/021710v7/7z322.d
17-FEB-2010 17:44	ICALsubL+	/chem/VOA7.i/021710v7/7z313.d
Cal Level: 5 , Cal Amount: 20.00000		
17-FEB-2010 23:33	ICALsubS	/chem/VOA7.i/021710v7/7z323.d
17-FEB-2010 18:20	ICALsubL+	/chem/VOA7.i/021710v7/7z314.d
Cal Level: 6 , Cal Amount: 50.00000		
18-FEB-2010 00:08	ICALsubS	/chem/VOA7.i/021710v7/7z324.d
17-FEB-2010 18:55	ICALsubL+	/chem/VOA7.i/021710v7/7z315.d
Cal Level: 7 , Cal Amount: 100.00000		
18-FEB-2010 00:42	ICALsubS	/chem/VOA7.i/021710v7/7z325.d
17-FEB-2010 19:30	ICALsubL+	/chem/VOA7.i/021710v7/7z316.d
Cal Level: 8 , Cal Amount: 200.00000		
17-FEB-2010 20:39	BENZENE+	/chem/VOA7.i/021710v7/7z318.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
26-FEB-2010 23:32	CALsubL+	/chem/VOA7.i/022610v7/7a525.d
Ccal Level: 6 , Ccal Amount: 50.0		
27-FEB-2010 00:07	CALsubS+SS	/chem/VOA7.i/022610v7/7a526.d

GEL Laboratories LLC

## INITIAL CALIBRATION DATA

```

Start Cal Date      : 17-FEB-2010 16:02
End Cal Date       : 18-FEB-2010 00:42
Quant Method       : ISTD
Target Version     : 3.50
Integrator         : HP RTE
Method file        : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m
Cal Date          : 01-Mar-2010 08:47 ale01592

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## Calibration File Names:

Level	1:	/chem/VOA7.i/021710v7/7z319.d
Level 2:	/chem/VOA7.i/021710v7/7z320.d	
Level 3:	/chem/VOA7.i/021710v7/7z321.d	
Level 4:	/chem/VOA7.i/021710v7/7z322.d	
Level 5:	/chem/VOA7.i/021710v7/7z323.d	
Level 6:	/chem/VOA7.i/021710v7/7z324.d	
Level 7:	/chem/VOA7.i/021710v7/7z325.d	
Level 8:	/chem/VOA7.i/021710v7/7z318.d	

Compound	1		2		5		10		20		50		Coefficients		%RSD or R^2
	Level 1	Level 2	Level 2	Level 3	Level 3	Level 4	Level 4	Level 5	Level 5	Level 6	Curve	b	m1	m2	
	100	200													
	Level 7	Level 8													
M 1 1,3-Dichloropropylene	0.42063	0.42665	0.45952	0.44593	0.48874	0.44785									5.45519
	0.47574	++++				AVRG							0.45215		
M 2 Xylenes (total)	0.62830	0.67143	0.66860	0.64173	0.68474	0.59685									
	0.62692	++++				AVRG							0.64551		4.80271
M 3 1,2-Dichloroethylene (total)	0.54927	0.50779	0.53933	0.49776	0.47859	0.45089									
	0.46213	++++				AVRG							0.49511		6.90087
147 Chlorotrifluoroethylene	++++	0.10076	0.12210	0.09704	0.11905	0.10241									
	++++	++++				AVRG							0.10627		8.51602
148 2-Chloro-1,1-trifluoroethane	++++	0.23271	0.22089	0.21365	0.20617	0.20476									
	0.18804	++++				AVRG							0.21104		7.23518

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 16:02  
 End Cal Date : 18-FEB-2010 00:42  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Cal Date : 01-Mar-2010 08:47 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	200									
	Level 7	Level 8									
4 Dichlorodifluoromethane	0.14689 0.14671	0.16337 ++++	0.17771	0.15010	0.15669	0.14834	AVRG		0.15569		7.36086
5 Chloromethane	0.52870 0.38772	0.50818 ++++	0.48152	0.45665	0.48246	0.42873	AVRG		0.46771		10.25591
6 Vinyl chloride	0.50952 0.32494	0.46079 ++++	0.43218	0.40625	0.41055	0.36375	AVRG		0.41543		14.62877
7 Bromomethane	0.25780 0.22760	0.23623 ++++	0.23278	0.22734	0.24344	0.23277	AVRG		0.23685		4.53392
8 Chloroethane	0.22734 0.20451	0.22323 ++++	0.21132	0.20164	0.21135	0.20785	AVRG		0.21246		4.47108
9 Trichlorofluoromethane	0.35996 0.28982	0.35068 ++++	0.30112	0.30563	0.31443	0.30426	AVRG		0.31799		8.38225
10 Ethyl Ether	0.28008 0.29597	0.32062 ++++	0.28724	0.29016	0.29781	0.29886	AVRG		0.29582		4.32385
11 Acrolein	0.04418 0.06092	0.03949 ++++	0.04544	0.04756	0.04531	0.05365	AVRG		0.04808		14.70368
12 Trichlorotrifluoroethane	0.10245 0.07720	0.09727 ++++	0.09404	0.09075	0.07953	0.07034	AVRG		0.08737		13.51328

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 16:02  
 End Cal Date : 18-FEB-2010 00:42  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Cal Date : 01-Mar-2010 08:47 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	SRSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
13 Acetone	0.37122  0.30889	0.36279  ++++	0.32383  	0.32614  	0.34124  	0.31027  	AVRG		0.33491		7.33338
14 1,1-Dichloroethylene	0.23466  0.20998	0.22304  ++++	0.23525  	0.21218  	0.20855  	0.19843  	AVRG		0.21744		6.41898
15 Isopropyl Alcohol	0.03379  0.03385	0.02848  ++++	0.03362  	0.03382  	0.03438  	0.02970  	AVRG		0.03252		7.32915
16 Iodomethane	0.39608  0.38094	0.36645  ++++	0.40560  	0.38566  	0.35788  	0.35975  	AVRG		0.37891		4.84456
17 Acetonitrile	0.06193  0.05095	0.06381  ++++	0.05756  	0.05797  	0.05730  	0.06594  	AVRG		0.05935		8.41770
18 Methyl acetate	0.35515  0.27857	0.29749  ++++	0.32852  	0.31506  	0.29869  	0.29447  	AVRG		0.30971		8.25337
19 Carbon disulfide	0.89266  0.65599	0.79048  ++++	0.83100  	0.78713  	0.71568  	0.68163  	AVRG		0.76494		11.07438
20 Allyl chloride	0.53968  0.39621	0.50526  ++++	0.50958  	0.48676  	0.45362  	0.42965  	AVRG		0.47439		10.59305
21 tert-Butyl Alcohol	0.05167  0.04776	0.04139  ++++	0.04764  	0.04767  	0.05022  	0.04265  	AVRG		0.04700		7.96307

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-2010 16:02  
 End Cal Date : 18-FEB-2010 00:42  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Cal Date : 01-Mar-2010 08:47 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
22 Methylene chloride	++++ 0.19549	0.23820 ++++	0.21441 +	0.20090 +	0.19068 +	0.18593 +	AVRG		0.20428		9.44493
23 Acrylonitrile	0.13731 0.13157	0.12635 ++++	0.14147 +	0.13774 +	0.13619 +	0.13170 +	AVRG		0.13462		3.74591
24 tert-Butyl methyl ether	0.80994 0.78981	0.81750 ++++	0.75450 +	0.77254 +	0.73118 +	0.73829 +	AVRG		0.77339		4.39216
25 trans-1,2-Dichloroethylene	0.50384 0.42206	0.46689 ++++	0.48692 +	0.46195 +	0.45327 +	0.42294 +	AVRG		0.45970		6.61934
26 Vinyl acetate	0.77450 0.60197	0.85406 ++++	0.75761 +	0.81966 +	0.81586 +	0.69432 +	AVRG		0.75971		11.40322
27 Isopropyl ether	++++ 1.18690	1.28662 ++++	1.29461 +	1.35198 +	1.29488 +	1.24203 +	AVRG		1.27617		4.38816
28 1,1-Dichloroethane	0.61604 0.58003	0.62372 ++++	0.63881 +	0.58962 +	0.58167 +	0.55743 +	AVRG		0.59819		4.80576
29 2-Chloro-1,3-butadiene	0.41421 0.37943	0.42657 ++++	0.42523 +	0.41666 +	0.39568 +	0.39845 +	AVRG		0.40803		4.26210
30 Ethyl tert-butyl ether	++++ 0.90285	0.84231 ++++	0.83069 +	0.85509 +	0.90158 +	0.89776 +	AVRG		0.87171		3.75724



## GEL Laboratories LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	MSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
31 2-Butanone	0.38771 0.34266	0.40391 ++++	0.35922	0.36946	0.40769	0.34405	AVRG		0.37353		7.19573
32 Ethyl acetate	0.44278 0.33414	0.41784 ++++	0.45125	0.42632	0.40256	0.35807	AVRG		0.40471		10.77753
33 cis-1,2-Dichloroethylene	0.59471 0.50219	0.54869 ++++	0.55173	0.53357	0.50390	0.47885	AVRG		0.53052		7.33716
34 2,2-Dichloropropane	0.29938 0.25653	0.24188 ++++	0.25597	0.23681	0.21790	0.23089	AVRG		0.24848		10.56617
35 Propionitrile	0.07002 0.05642	0.05258 ++++	0.06457	0.05980	0.05683	0.05325	AVRG		0.05907		10.68190
36 Methacrylonitrile	0.25818 0.21528	0.24456 ++++	0.27034	0.26013	0.24380	0.22478	AVRG		0.24530		8.04738
37 Bromochloromethane	0.40223 0.37692	0.39817 ++++	0.41300	0.40043	0.38909	0.36555	AVRG		0.39220		4.15023
38 Chloroform	0.58519 0.47062	0.49407 ++++	0.49340	0.48912	0.49932	0.45410	AVRG		0.49798		8.35869
39 Tetrahydrofuran	0.47764 0.35812	0.44454 ++++	0.45944	0.42050	0.41053	0.36338	AVRG		0.41916		10.93258

## GEL Laboratories LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
41 1,1,1-Trichloroethane	0.33463 0.34747	0.35201 ++++	0.35980	0.33703	0.33680	0.32438	AVRG		0.34173		3.50911
42 Isobutyl alcohol	0.01894 0.01640	0.01694 ++++	0.01962	0.01852	0.01823	0.01675	AVRG		0.01791		6.84459
43 Cyclohexane	0.66684 0.48668	0.57907 ++++	0.60139	0.53233	0.53775	0.48436	AVRG		0.55549		11.78390
44 1,1-Dichloropropene	0.37354 0.33295	0.38678 ++++	0.36871	0.36553	0.35185	0.32521	AVRG		0.35780		6.23018
45 Carbon tetrachloride	0.30369 0.27553	0.24799 ++++	0.29060	0.26048	0.26806	0.25705	AVRG		0.27191		7.21748
47 1,2-Dichloroethane	0.54033 0.47861	0.47238 ++++	0.50508	0.49698	0.49337	0.45253	AVRG		0.49133		5.66795
48 Benzene	1.15482 0.99723	1.06364 1.32285	1.13097	1.06471	1.03320	0.97886	AVRG		1.09329		10.11080
49 Methyl tert-amyl ether	0.72584 0.56390	0.62391 ++++	0.62516	0.64841	0.70561	0.68979	AVRG		0.66978		6.46614
50 Cyclohexene	0.48987	0.50610 ++++	0.54171	0.51654	0.51454	0.47290	AVRG		0.51508		5.92603

## GEL Laboratories LLC

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 Cal Date : 01-Mar-2010 08:47 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
52 n-Butyl alcohol	0.01179  0.01388	0.01241  0.01234	0.01216	0.01341	0.01403	0.01399  AVRG			0.01300		7.09548
53 Trichloroethylene	0.27430  0.25637	0.26438  ++++	0.27397	0.26519	0.27618	0.24387  AVRG			0.26489		4.39586
54 Methyl methacrylate	0.22336  0.20756	0.20671  ++++	0.22931	0.22055	0.21809	0.21228  AVRG			0.21684		3.87232
55 Methylcyclohexane	0.49966  0.42078	0.43861  ++++	0.44481	0.44006	0.43612	0.40383  AVRG			0.44055		6.73024
56 1,2-Dichloropropane	0.39245  0.33677	0.36897  ++++	0.38177	0.37142	0.36583	0.33120  AVRG			0.36406		6.16845
57 1,4-Dioxane	0.00348  0.00359	0.00250  ++++	0.00354	0.00334	0.00323	0.00313  AVRG			0.00326		11.42936
58 Dibromomethane	0.19196  0.19944	0.13723  ++++	0.19939	0.19727	0.19889	0.19046  AVRG			0.19638		1.86881
59 Bromodichloromethane	0.39732  0.39410	0.36909  ++++	0.39631	0.38593	0.41432	0.37605  AVRG			0.39044		3.84034
60 2-Nitropropane	0.13385  0.14680	0.11919  ++++	0.14652	0.14531	0.14750	0.14329  AVRG			0.14035		7.43854

## GEL Laboratories LLC

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Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	SRSD or R^2
61 2-Chloroethylvinyl ether	0.13828 0.14819	0.13131 ++++	0.13224	0.14312	0.14531	0.15383	AVRG		0.14176		5.85520
62 cis-1,3-Dichloropropylene	0.44683 0.48927	0.46424 ++++	0.48235	0.47289	0.50753	0.46544	AVRG		0.47551		4.13438
63 4-Methyl-2-pentanone	0.24889 0.23121	0.25775 ++++	0.24134	0.24113	0.27708	0.22508	AVRG		0.24607		7.06681
65 Toluene	0.99540 0.84445	0.91525 ++++	0.94675	0.88594	0.89959	0.81410	AVRG		0.90021		6.75427
66 Ethyl methacrylate	0.58277 0.50204	0.54247 ++++	0.62302	0.60387	0.58118	0.57129	AVRG		0.57238		6.98256
67 trans-1,3-Dichloropropylene	0.57975 0.62680	0.56956 ++++	0.63061	0.60000	0.66595	0.59758	AVRG		0.61004		5.45435
68 1,1,2-Trichloroethane	0.34428 0.30944	0.35523 ++++	0.35299	0.34101	0.36031	0.31095	AVRG		0.33917		6.14376
69 2-Hexanone	0.73685 0.50687	0.78422 ++++	0.70044	0.68470	0.76383	0.58953	AVRG		0.68092		14.65103
70 1,3-Dichloropropane	0.69293 0.63986	0.71194 ++++	0.70218	0.70482	0.75363	0.66338	AVRG		0.69553		5.22166

## GEL Laboratories LLC

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 Method file : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Cal Date : 01-Mar-2010 08:47 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
71 Tetrachloroethylene	0.28354 0.24094	0.25342 ++++	0.26414	0.23364	0.24287	0.22289	AVRG		0.24878		8.14204
72 Dibromochloromethane	0.33269 0.39353	0.34579 ++++	0.36231	0.35639	0.40520	0.36488	AVRG		0.36583		6.98702
73 1,2-Dibromoethane	0.36328 0.37253	0.35222 ++++	0.36077	0.36799	0.40005	0.35812	AVRG		0.36785		4.25309
74 1-Chlorohexane	0.34706 0.30890	0.30121 ++++	0.31913	0.33191	0.32325	0.30402	AVRG		0.31936		5.13508
76 Chlorobenzene	1.01098 0.86362	0.95127 ++++	0.95000	0.91236	0.96965	0.82857	AVRG		0.92664		6.81260
77 1,1,1,2-Tetrachloroethane	0.30146 0.35239	0.31109 ++++	0.30197	0.30384	0.34945	0.31502	AVRG		0.31932		6.94131
78 Ethylbenzene	1.85154 1.43524	1.82479 ++++	1.76134	1.68668	1.76608	1.44831	AVRG		1.68200		10.24073
79 m,p-Xylenes	0.62114 0.60453	0.67062 ++++	0.65895	0.62920	0.66820	0.57827	AVRG		0.63299		5.50638
80 o-Xylene	0.64264 0.67170	0.67305 ++++	0.68788	0.66680	0.71782	0.63403	AVRG		0.67056		4.16006

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 Cal Date : 01-Mar-2010 08:47 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
	100	200									
	Level 7	Level 8									
81 Styrene	1.03480	1.05435	1.09579	1.08161	1.17767	1.02490	AVRG		1.07382		4.85533
	1.04761	++++									
82 Bromoform	0.44800	0.46729	0.45445	0.44703	0.54809	0.46991	AVRG		0.47906		8.15291
	0.51866	++++									
83 Isopropylbenzene	3.49497	3.66615	3.43580	3.19632	3.44542	2.75679	AVRG		3.23464		12.06581
	2.64705	++++									
84 cis-1,4-Dichloro-2-butene	0.38069	0.31673	0.41215	0.40845	0.41138	0.39737	AVRG		0.38900		8.67306
	0.39623	++++									
85 Cyclohexanone	0.03195	0.02350	0.02895	0.02863	0.02827	++++	AVRG		0.02826		10.75061
	++++	++++									
87 1,1,2,2-Tetrachloroethane	1.19265	1.21572	1.15731	1.10829	1.25926	1.00651	AVRG		1.13151		9.31719
	0.98082	++++									
88 trans-1,4-Dichloro-2-butene	0.31891	0.31312	0.36778	0.36391	0.36234	0.36318	AVRG		0.35107		6.86595
	0.36821	++++									
89 1,2,3-Trichloropropane	0.28647	0.24666	0.22625	0.24828	0.25953	0.22210	AVRG		0.24620		8.97349
	0.23411	++++									
90 Bromobenzene	0.76034	0.78745	0.77871	0.75408	0.80267	0.68660	AVRG		0.75737		5.14118
	0.73175	++++									

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 Cal Date : 01-Mar-2010 08:47 ale01592

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1 m2	%RSD or R <sup>2</sup>
	100	200								
	Level 7	Level 8								
91 n-Propylbenzene	4.68347	4.56352	4.37500	4.07800	4.36558	3.44795				
	3.27290	++++					AVRG		4.11235	13.35638
92 1,3,5-Trimethylbenzene	2.81587	2.87105	2.68849	2.60394	2.92918	2.42595				
	2.37547	++++					AVRG		2.67285	8.07975
93 2-Chlorotoluene	3.05461	3.13194	2.82160	2.73305	3.05604	2.48242				
	2.42881	++++					AVRG		2.81550	10.07173
94 4-Chlorotoluene	2.83303	2.73655	2.57278	2.45072	2.69458	2.22008				
	2.18348	++++					AVRG		2.52732	10.03292
95 tert-Butylbenzene	2.54254	2.53348	2.52529	2.35277	2.63624	2.17076				
	2.18802	++++					AVRG		2.42130	7.65601
96 1,2,4-Trimethylbenzene	2.83048	2.81952	2.78705	2.63535	2.97059	2.45445				
	2.43799	++++					AVRG		2.70506	7.47088
97 Pentachloroethane	0.26106	0.28148	0.29783	0.29968	0.26523	0.29207				
	0.27493	++++					AVRG		0.28176	5.48711
98 sec-Butylbenzene	3.89578	3.94634	3.68073	3.52735	3.87381	3.06099				
	2.97444	++++					AVRG		3.56563	11.26370
99 4-Isopropyltoluene	2.79121	2.68596	2.60196	2.47043	2.87417	2.31964				
	2.29722	++++					AVRG		2.57723	8.71312

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
100 1,3-Dichlorobenzene	1.693731	1.540281	1.500003	1.426581	1.579541	1.288051	AVRG		1.479581		9.643861
	1.328871	++++									
102 1,4-Dichlorobenzene	1.537701	1.536661	1.496331	1.392351	1.506861	1.302621	AVRG		1.444721		6.770701
	1.340551	++++									
103 Benzyl chloride	1.175871	1.119391	1.306631	1.306781	1.281361	1.263591	AVRG		1.239041		5.728891
	1.219701	++++									
104 n-Butylbenzene	3.348191	3.216491	3.034661	2.893141	3.283921	2.614641	AVRG		2.985641		11.024341
	2.508441	++++									
105 1,2-Dichlorobenzene	1.500831	1.589061	1.517281	1.499691	1.607991	1.323361	AVRG		1.486201		7.159291
	1.365211	++++									
106 bis(2-Chloroisopropyl)ether	0.830071	0.633251	0.754411	0.700731	0.688671	0.641531	AVRG		0.699511		10.208441
	0.647891	++++									
107 1,2-Dibromo-3-chloropropane	5841	22751	54811	113541	298441	733621	LINR	0.021021	0.191091		0.998381
	1767131	++++									
108 1,2,4-Trichlorobenzene	1.008201	0.985391	0.922391	0.882041	1.011611	0.843371	AVRG		0.931091		7.590681
	0.864641	++++									
109 Hexachlorobutadiene	0.504971	0.578661	0.516701	0.476931	0.537271	0.427641	AVRG		0.499911		10.160331
	0.457201	++++									



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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	RSD or R <sup>2</sup>
	100	200									
	Level 7	Level 8									
110 Naphthalene	2.39039  2.29053	2.32801  ++++	2.24690	2.18867	2.66812	2.25278					
							AVRG		2.33792		6.80664
111 1,2,3-Trichlorobenzene	0.99358  0.80769	0.85784  ++++	0.84533	0.78975	0.93501	0.79611					
							AVRG		0.86076		8.92879
46 1,2-Dichloroethane-d4	0.42538  0.43397	0.44520  ++++	0.42789	0.43782	0.42368	0.42998					
							AVRG		0.43199		1.75777
64 Toluene-d8	1.62293  1.55870	1.66865  ++++	1.68737	1.64500	1.61861	1.59016					
							AVRG		1.62735		2.72640
86 Bromofluorobenzene	1.29606  1.27105	1.36624  ++++	1.35275	1.32744	1.29510	1.29800					
							AVRG		1.31523		2.62999

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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: VOA7.i Injection Date: 18-FEB-2010 02:27  
Lab File ID: 7z328.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: WATER Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100217-22 Quant Type: ISTD  
Method: /chem/VOA7.i/021710v7/VOA7-8260B-021710.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 2 Xylenes (total)	0.64551	0.62451	0.62451	0.050	-3.25377	30.00000	Averaged
M 3 1,2-Dichloroethylene (total)	0.49511	0.45815	0.45815	0.050	-7.46472	30.00000	Averaged
M 1 1,3-Dichloropropylene	0.45215	0.46016	0.46016	0.050	1.77148	30.00000	Averaged
4 Dichlorodifluoromethane	0.15569	0.13873	0.13873	0.050	-10.89039	30.00000	Averaged
5 Chloromethane	0.46771	0.40064	0.40064	0.100	-14.34049	30.00000	Averaged spcc
6 Vinyl chloride	0.41543	0.34912	0.34912	0.050	-15.96116	20.00000	Averaged ccc
7 Bromomethane	0.23685	0.22892	0.22892	0.050	-3.35016	30.00000	Averaged
8 Chloroethane	0.21246	0.20582	0.20582	0.010	-3.12447	30.00000	Averaged
9 Trichlorofluoromethane	0.31799	0.29248	0.29248	0.050	-8.02212	30.00000	Averaged
10 Ethyl Ether	0.29582	0.29735	0.29735	0.001	0.51656	30.00000	Averaged
13 Acetone	0.33491	0.29721	0.29721	0.050	-11.25680	40.00000	Averaged
17 Acetonitrile	0.05935	0.07072	0.07072	0.010	19.15195	30.00000	Averaged
14 1,1-Dichloroethylene	0.21744	0.19489	0.19489	0.050	-10.37135	20.00000	Averaged ccc
18 Methyl acetate	0.30971	0.30162	0.30162	0.010	-2.61040	40.00000	Averaged
16 Iodomethane	0.37891	0.36309	0.36309	0.050	-4.17398	30.00000	Averaged
22 Methylene chloride	0.20428	0.19326	0.19326	0.050	-5.39206	30.00000	Averaged
19 Carbon disulfide	0.76494	0.70918	0.70918	0.050	-7.28904	30.00000	Averaged
24 tert-Butyl methyl ether	0.77339	0.77741	0.77741	0.050	0.51971	30.00000	Averaged
25 trans-1,2-Dichloroethylene	0.45970	0.42331	0.42331	0.050	-7.91447	30.00000	Averaged
26 Vinyl acetate	0.75971	0.65453	0.65453	0.010	-13.84562	40.00000	Averaged
28 1,1-Dichloroethane	0.59819	0.58345	0.58345	0.100	-2.46329	30.00000	Averaged spcc
31 2-Butanone	0.37353	0.32999	0.32999	0.030	-11.65784	40.00000	Averaged
33 cis-1,2-Dichloroethylene	0.53052	0.49299	0.49299	0.050	-7.07501	30.00000	Averaged
34 2,2-Dichloropropane	0.24848	0.22525	0.22525	0.050	-9.35079	30.00000	Averaged
38 Chloroform	0.49798	0.47145	0.47145	0.010	-5.32731	20.00000	Averaged ccc
37 Bromochloromethane	0.39220	0.37710	0.37710	0.010	-3.84914	30.00000	Averaged
41 1,1,1-Trichloroethane	0.34173	0.33281	0.33281	0.010	-2.61185	30.00000	Averaged
43 Cyclohexane	0.55549	0.48819	0.48819	0.010	-12.11548	30.00000	Averaged
44 1,1-Dichloropropene	0.35780	0.33377	0.33377	0.010	-6.71432	30.00000	Averaged
52 n-Butyl alcohol	0.01300	0.01560	0.01560	0.001	20.00901	40.00000	Averaged
45 Carbon tetrachloride	0.27191	0.26041	0.26041	0.010	-4.22921	30.00000	Averaged
46 1,2-Dichloroethane-d4	0.43199	0.41602	0.41602	0.010	-3.69539	30.00000	Averaged
47 1,2-Dichloroethane	0.49133	0.47654	0.47654	0.010	-3.00919	30.00000	Averaged
48 Benzene	1.09329	1.01770	1.01770	0.010	-6.91346	30.00000	Averaged
50 Cyclohexene	0.51508	0.47503	0.47503	0.010	-7.77517	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 18-FEB-2010 02:27  
Lab File ID: 7z328.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: WATER Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100217-22 Quant Type: ISTD  
Method: /chem/VOA7.i/021710v7/VOA7-8260B-021710.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
53 Trichloroethylene	0.26489	0.25884	0.25884	0.010	-2.28485	30.00000	Averaged
56 1,2-Dichloropropane	0.36406	0.34276	0.34276	0.010	-5.85033	20.00000	Averaged ccc
55 Methylcyclohexane	0.44055	0.40776	0.40776	0.010	-7.44328	30.00000	Averaged
59 Bromodichloromethane	0.39044	0.39204	0.39204	0.010	0.40888	30.00000	Averaged
58 Dibromomethane	0.19638	0.19614	0.19614	0.010	-0.12043	30.00000	Averaged
61 2-Chloroethylvinyl ether	0.14176	0.13312	0.13312	0.010	-6.08895	30.00000	Averaged
63 4-Methyl-2-pentanone	0.24607	0.23847	0.23847	0.010	-3.08660	40.00000	Averaged
62 cis-1,3-Dichloropropylene	0.47551	0.47478	0.47478	0.010	-0.15161	30.00000	Averaged
64 Toluene-d8	1.62735	1.59462	1.59462	0.010	-2.01081	30.00000	Averaged
65 Toluene	0.90021	0.86882	0.86882	0.010	-3.48730	20.00000	Averaged ccc
67 trans-1,3-Dichloropropylene	0.61004	0.62998	0.62998	0.010	3.26982	30.00000	Averaged
68 1,1,2-Trichloroethane	0.33917	0.33086	0.33086	0.010	-2.45158	30.00000	Averaged
69 2-Hexanone	0.68092	0.56308	0.56308	0.010	-17.30573	40.00000	Averaged
70 1,3-Dichloropropane	0.69553	0.70217	0.70217	0.010	0.95395	30.00000	Averaged
71 Tetrachloroethylene	0.24878	0.23181	0.23181	0.010	-6.82091	30.00000	Averaged
72 Dibromochloromethane	0.36583	0.38883	0.38883	0.010	6.28730	30.00000	Averaged
73 1,2-Dibromoethane	0.36785	0.38653	0.38653	0.010	5.07802	30.00000	Averaged
76 Chlorobenzene	0.92664	0.90044	0.90044	0.300	-2.82685	30.00000	Averaged spcc
77 1,1,1,2-Tetrachloroethane	0.31932	0.33458	0.33458	0.010	4.77841	30.00000	Averaged
78 Ethylbenzene	1.68200	1.51733	1.51733	0.010	-9.78969	20.00000	Averaged ccc
79 m,p-Xylenes	0.63299	0.60842	0.60842	0.010	-3.88083	30.00000	Averaged
80 o-Xylene	0.67056	0.65668	0.65668	0.010	-2.06991	30.00000	Averaged
81 Styrene	1.07382	1.07422	1.07422	0.010	0.03737	30.00000	Averaged
82 Bromoform	0.47906	0.50547	0.50547	0.100	5.51185	30.00000	Averaged spcc
83 Isopropylbenzene	3.23464	2.86304	2.86304	0.010	-11.48816	30.00000	Averaged
87 1,1,2,2-Tetrachloroethane	1.13151	1.04885	1.04885	0.300	-7.30521	30.00000	Averaged spcc
86 Bromofluorobenzene	1.31523	1.28244	1.28244	0.010	-2.49352	30.00000	Averaged
89 1,2,3-Trichloropropane	0.24620	0.24376	0.24376	0.010	-0.99197	30.00000	Averaged
90 Bromobenzene	0.75737	0.73368	0.73368	0.010	-3.12821	30.00000	Averaged
91 n-Propylbenzene	4.11235	3.55350	3.55350	0.010	-13.58941	30.00000	Averaged
93 2-Chlorotoluene	2.81550	2.61345	2.61345	0.010	-7.17611	30.00000	Averaged
92 1,3,5-Trimethylbenzene	2.67285	2.53769	2.53769	0.010	-5.05667	30.00000	Averaged
94 4-Chlorotoluene	2.52732	2.34633	2.34633	0.010	-7.16112	30.00000	Averaged
95 tert-Butylbenzene	2.42130	2.26973	2.26973	0.010	-6.25993	30.00000	Averaged
96 1,2,4-Trimethylbenzene	2.70506	2.55659	2.55659	0.010	-5.48856	30.00000	Averaged
98 sec-Butylbenzene	3.56563	3.18076	3.18076	0.010	-10.79408	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 18-FEB-2010 02:27  
Lab File ID: 7z328.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: WATER Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100217-22 Quant Type: ISTD  
Method: /chem/VOA7.i/021710v7/VOA7-8260B-021710.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
99 4-Isopropyltoluene	2.57723	2.40283	2.40283	0.010	-6.76672	30.00000	Averaged
100 1,3-Dichlorobenzene	1.47958	1.37420	1.37420	0.010	-7.12232	30.00000	Averaged
102 1,4-Dichlorobenzene	1.44472	1.35364	1.35364	0.010	-6.30431	30.00000	Averaged
104 n-Butylbenzene	2.98564	2.67527	2.67527	0.010	-10.39534	30.00000	Averaged
105 1,2-Dichlorobenzene	1.48620	1.41959	1.41959	0.010	-4.48214	30.00000	Averaged
107 1,2-Dibromo-3-chloropropane	53.98003	50.00000	0.20228	0.010	7.96006	30.00000	Linear
108 1,2,4-Trichlorobenzene	0.93109	0.87331	0.87331	0.010	-6.20563	30.00000	Averaged
109 Hexachlorobutadiene	0.49991	0.45648	0.45648	0.010	-8.68867	30.00000	Averaged
110 Naphthalene	2.33792	2.47041	2.47041	0.010	5.66713	30.00000	Averaged
111 1,2,3-Trichlorobenzene	0.86076	0.87276	0.87276	0.010	1.39435	30.00000	Averaged

Average %D / Drift Results.  
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Calculated Average %D/Drift =	7.69699
Maximum Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

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GEL Laboratories LLC

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

Data file : /chem/VOA7.i/021710v7/7z328.d

Lab Smp Id: W7VM100217-22

Client Smp ID: ICV

Inj Date : 18-FEB-2010 02:27

Operator : AX01

Inst ID: VOA7.i

Smp Info : |W7VM100217-22|ICV|1|VOAF|1|

Misc Info : GEL 5mL N/A UVM100126-01E/IVM100214-01

Comment :

Method : /chem/VOA7.i/021710v7/VOA7-8260B-021710.m

Meth Date : 18-Feb-2010 06:55 ale01592

Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 21

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubL+.sub

Target Version: 3.50

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

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

Cpnd Variable

Local Compound Variable

		QUANT SIG				AMOUNTS	
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
M 2 Xylenes (total)	106				1553189	150.000	145
M 3 1,2-Dichloroethylene (total)	96				1074106	100.000	92.5
M 1 1,3-Dichloropropylene	75				1078824	100.000	102
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	162626	50.0000	44.6
5 Chloromethane	50	5.757	5.757	(0.376)	469635	50.0000	42.8
6 Vinyl chloride	62	6.187	6.187	(0.404)	409246	50.0000	42.0
7 Bromomethane	94	7.418	7.418	(0.484)	268342	50.0000	48.3
8 Chloroethane	64	7.845	7.845	(0.512)	241269	50.0000	48.4
9 Trichlorofluoromethane	101	8.789	8.789	(0.574)	342848	50.0000	46.0
10 Ethyl Ether	59	9.703	9.692	(0.633)	348559	50.0000	50.2
13 Acetone	43	10.413	10.413	(0.680)	1741994	250.000	222
17 Acetonitrile	41	11.073	11.073	(0.723)	1657956	1000.00	1190
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	228453	50.0000	44.8
18 Methyl acetate	43	11.215	11.215	(0.732)	1767842	250.000	243
16 Iodomethane	142	10.667	10.667	(0.696)	2128132	250.000	240
22 Methylene chloride	86	11.439	11.439	(0.747)	226549	50.0000	47.3

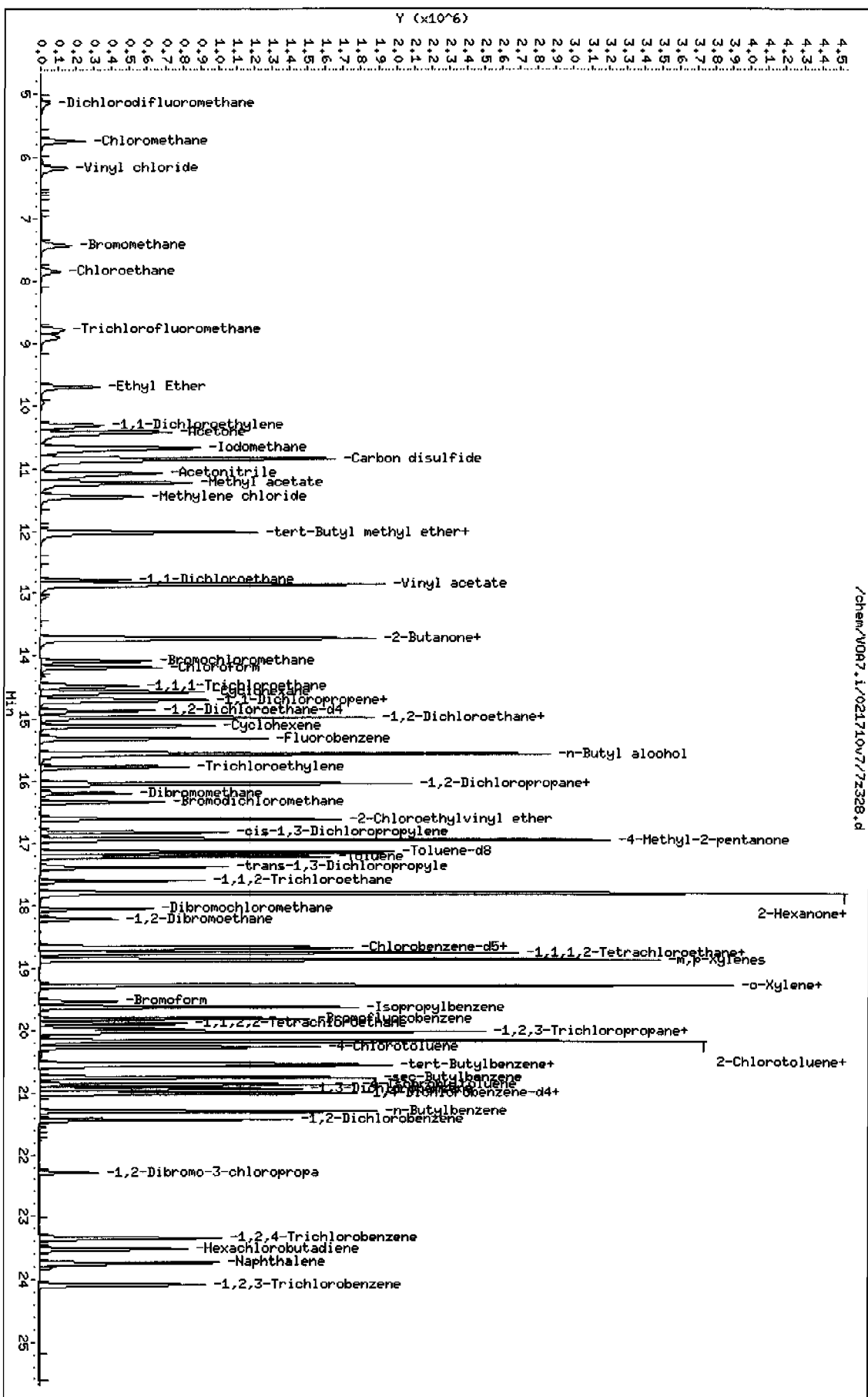
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====	=====
19 Carbon disulfide	76	10.840	10.840	(0.708)	4156596	250.000	232
24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	911300	50.0000	50.2
25 trans-1,2-Dichloroethylene	61	12.027	12.017	(0.785)	496217	50.0000	46.0
26 Vinyl acetate	43	12.860	12.860	(0.840)	3836252	250.000	215
28 1,1-Dichloroethane	63	12.799	12.789	(0.836)	683938	50.0000	48.8
31 2-Butanone	43	13.723	13.723	(0.896)	1934081	250.000	221
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	577889	50.0000	46.5
34 2,2-Dichloropropane	77	13.743	13.743	(0.897)	264039	50.0000	45.3
38 Chloroform	83	14.190	14.190	(0.926)	552641	50.0000	47.3
37 Bromochloromethane	49	14.088	14.088	(0.920)	442048	50.0000	48.1
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	390122	50.0000	48.7
43 Cyclohexane	56	14.586	14.586	(0.952)	572266	50.0000	43.9
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	391255	50.0000	46.6
52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1829150	5000.00	6000
45 Carbon tetrachloride	117	14.718	14.718	(0.961)	305263	50.0000	47.9
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	487674	50.0000	48.2
47 1,2-Dichloroethane	62	14.982	14.982	(0.978)	558613	50.0000	48.5
48 Benzene	78	14.982	14.982	(0.978)	1192975	50.0000	46.5
50 Cyclohexene	67	15.114	15.114	(0.987)	556844	50.0000	46.1
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1172223	50.0000	
53 Trichloroethylene	95	15.763	15.763	(1.029)	303421	50.0000	48.8
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	401792	50.0000	47.1
55 Methylcyclohexane	83	16.027	16.027	(1.046)	477986	50.0000	46.3
59 Bromodichloromethane	83	16.332	16.332	(1.066)	459560	50.0000	50.2
58 Dibromomethane	93	16.179	16.179	(1.056)	229919	50.0000	49.9
61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	780259	250.000	235
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	988490	250.000	242
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	556553	50.0000	49.9
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	1321978	50.0000	49.0
65 Toluene	92	17.215	17.215	(0.922)	720271	50.0000	48.2
67 trans-1,3-Dichloropropylene	75	17.388	17.388	(0.931)	522271	50.0000	51.6
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	274288	50.0000	48.8
69 2-Hexanone	43	17.804	17.794	(0.954)	2334037	250.000	207
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	582114	50.0000	50.5
71 Tetrachloroethylene	164	17.814	17.814	(0.954)	192175	50.0000	46.6
72 Dibromochloromethane	129	18.058	18.058	(0.967)	322348	50.0000	53.1
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	320442	50.0000	52.5
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	829022	50.0000	
76 Chlorobenzene	112	18.697	18.697	(1.002)	746485	50.0000	48.6
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	277371	50.0000	52.4
78 Ethylbenzene	91	18.768	18.758	(1.005)	1257903	50.0000	45.1
79 m,p-Xylenes	106	18.870	18.870	(1.011)	1008788	100.000	96.1
80 o-Xylene	106	19.286	19.286	(1.033)	544401	50.0000	49.0
81 Styrene	104	19.286	19.286	(1.033)	890551	50.0000	50.0
82 Bromoform	173	19.540	19.540	(0.931)	209984	50.0000	52.8
83 Isopropylbenzene	105	19.631	19.631	(0.935)	1189382	50.0000	44.2
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	435719	50.0000	46.3

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	532758	50.0000	48.8
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	101263	50.0000	49.5
90 Bromobenzene	156	20.017	20.017	(0.954)	304789	50.0000	48.4
91 n-Propylbenzene	91	20.027	20.027	(0.954)	1476217	50.0000	43.2
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	1085697	50.0000	46.4
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	1054223	50.0000	47.5
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	974728	50.0000	46.4
95 tert-Butylbenzene	119	20.535	20.524	(0.978)	942904	50.0000	46.9
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	1062075	50.0000	47.2
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1321369	50.0000	44.6
99 4-Isopropyltoluene	119	20.859	20.859	(0.994)	998200	50.0000	46.6
100 1,3-Dichlorobenzene	146	20.931	20.930	(0.997)	570879	50.0000	46.4
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	415426	50.0000	
102 1,4-Dichlorobenzene	146	21.012	21.012	(1.001)	562339	50.0000	46.8
104 n-Butylbenzene	91	21.296	21.296	(1.014)	1111378	50.0000	44.8
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	589734	50.0000	47.8
107 1,2-Dibromo-3-chloropropane	157	22.301	22.291	(1.062)	84034	50.0000	54.0
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	362796	50.0000	46.9
109 Hexachlorobutadiene	225	23.529	23.529	(1.121)	189632	50.0000	45.6
110 Naphthalene	128	23.743	23.743	(1.131)	1026272	50.0000	52.8
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	362567	50.0000	50.7



Data File: /chem/V0A7.1/021710v7/7z328.d  
 Date: 18-FEB-2010 02:27  
 Client ID: ICV  
 Sample Info: 147VH100217-221ICV11V0A7.1  
 Purge Volume: 5.0  
 Column phase: DB-624

Instrument: V0A7.1  
 Operator: AK01  
 Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 18-FEB-2010 03:03  
Lab File ID: 7z329.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: WATER Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100217-23 Quant Type: ISTD  
Method: /chem/VOA7.i/021710v7/VOA7-8260B-021710.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
147 Chlorotrifluoroethylene	0.10627	0.08440	0.08440	0.010	-20.57911	30.00000	Averaged
148 2-Chloro-1,1,1-trifluoroeth	0.21104	0.19071	0.19071	0.010	-9.63206	30.00000	Averaged
11 Acrolein	0.04808	0.06342	0.06342	0.001	31.90544	30.00000	Averaged
12 Trichlorotrifluoroethane	0.08737	0.09264	0.09264	0.010	6.03207	30.00000	Averaged
15 Isopropyl Alcohol	0.03252	0.03340	0.03340	0.010	2.69600	40.00000	Averaged
20 Allyl chloride	0.47439	0.45060	0.45060	0.010	-5.01522	30.00000	Averaged
21 tert-Butyl Alcohol	0.04700	0.04729	0.04729	0.001	0.60763	40.00000	Averaged
23 Acrylonitrile	0.13462	0.13550	0.13550	0.010	0.65548	30.00000	Averaged
27 Isopropyl ether	1.27617	1.16451	1.16451	0.010	-8.74982	30.00000	Averaged
29 2-Chloro-1,3-butadiene	0.40803	0.40855	0.40855	0.010	0.12766	30.00000	Averaged
30 Ethyl tert-butyl ether	0.87171	0.84896	0.84896	0.010	-2.60957	30.00000	Averaged
35 Propionitrile	0.05907	0.05400	0.05400	0.010	-8.58473	30.00000	Averaged
32 Ethyl acetate	0.40471	0.34558	0.34558	0.010	-14.60985	40.00000	Averaged
36 Methacrylonitrile	0.24530	0.22257	0.22257	0.010	-9.26511	30.00000	Averaged
39 Tetrahydrofuran	0.41916	0.38326	0.38326	0.010	-8.56559	30.00000	Averaged
42 Isobutyl alcohol	0.01791	0.01700	0.01700	0.005	-5.09066	40.00000	Averaged
49 Methyl tert-amyl ether	0.66978	0.66370	0.66370	0.010	-0.90825	30.00000	Averaged
54 Methyl methacrylate	0.21684	0.20990	0.20990	0.010	-3.19904	30.00000	Averaged
66 Ethyl methacrylate	0.57238	0.56268	0.56268	0.010	-1.69472	30.00000	Averaged
74 1-Chlorohexane	0.31936	0.29112	0.29112	0.010	-8.83992	30.00000	Averaged
57 1,4-Dioxane	0.00326	0.00349	0.00349	0.001	7.06816	40.00000	Averaged
60 2-Nitropropane	0.14035	0.14903	0.14903	0.010	6.18586	30.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.38900	0.41782	0.41782	0.010	7.40931	30.00000	Averaged
85 Cyclohexanone	0.02826	0.03489	0.03489	0.010	23.43653	40.00000	Averaged
88 trans-1,4-Dichloro-2-butene	0.35107	0.38019	0.38019	0.010	8.29533	30.00000	Averaged
97 Pentachloroethane	0.28176	0.23364	0.23364	0.010	-17.07604	30.00000	Averaged
103 Benzyl chloride	1.23904	1.13837	1.13837	0.010	-8.12535	30.00000	Averaged
106 bis(2-Chloroisopropyl)ether	0.69951	0.66981	0.66981	0.010	-4.24580	30.00000	Averaged
\$ 46 1,2-Dichloroethane-d4	0.43199	0.41798	0.41798	0.010	-3.24324	30.00000	Averaged
\$ 64 Toluene-d8	1.62735	1.64351	1.64351	0.010	0.99350	30.00000	Averaged
\$ 86 Bromofluorobenzene	1.31523	1.27368	1.27368	0.010	-3.15966	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i                      Injection Date: 18-FEB-2010 03:03  
Lab File ID: 7z329.d                      Init. Cal. Date(s): 17-FEB-2010    18-FEB-2010  
Analysis Type: WATER                      Init. Cal. Times:    16:02                      00:42  
Lab Sample ID: W7VM100217-23 Quant Type: ISTD  
Method: /chem/VOA7.i/021710v7/VOA7-8260B-021710.m

Average %D / Drift Results.	
=====	
Calculated Average %D/Drift =	7.69699
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/021710v7/7z329.d

Lab Smp Id: W7VM100217-23

Client Smp ID: SICV

Inj Date : 18-FEB-2010 03:03

Operator : AX01

Inst ID: VOA7.i

Smp Info : |W7VM100217-23|SICV|1|VOAF|1|

Misc Info : GEL 5mL N/A UVM091216-08B/UVM100125-08C

Comment :

Method : /chem/VOA7.i/021710v7/VOA7-8260B-021710.m

Meth Date : 18-Feb-2010 06:55 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 22

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubS+SS.sub

Target Version: 3.50

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

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

Cpnd Variable

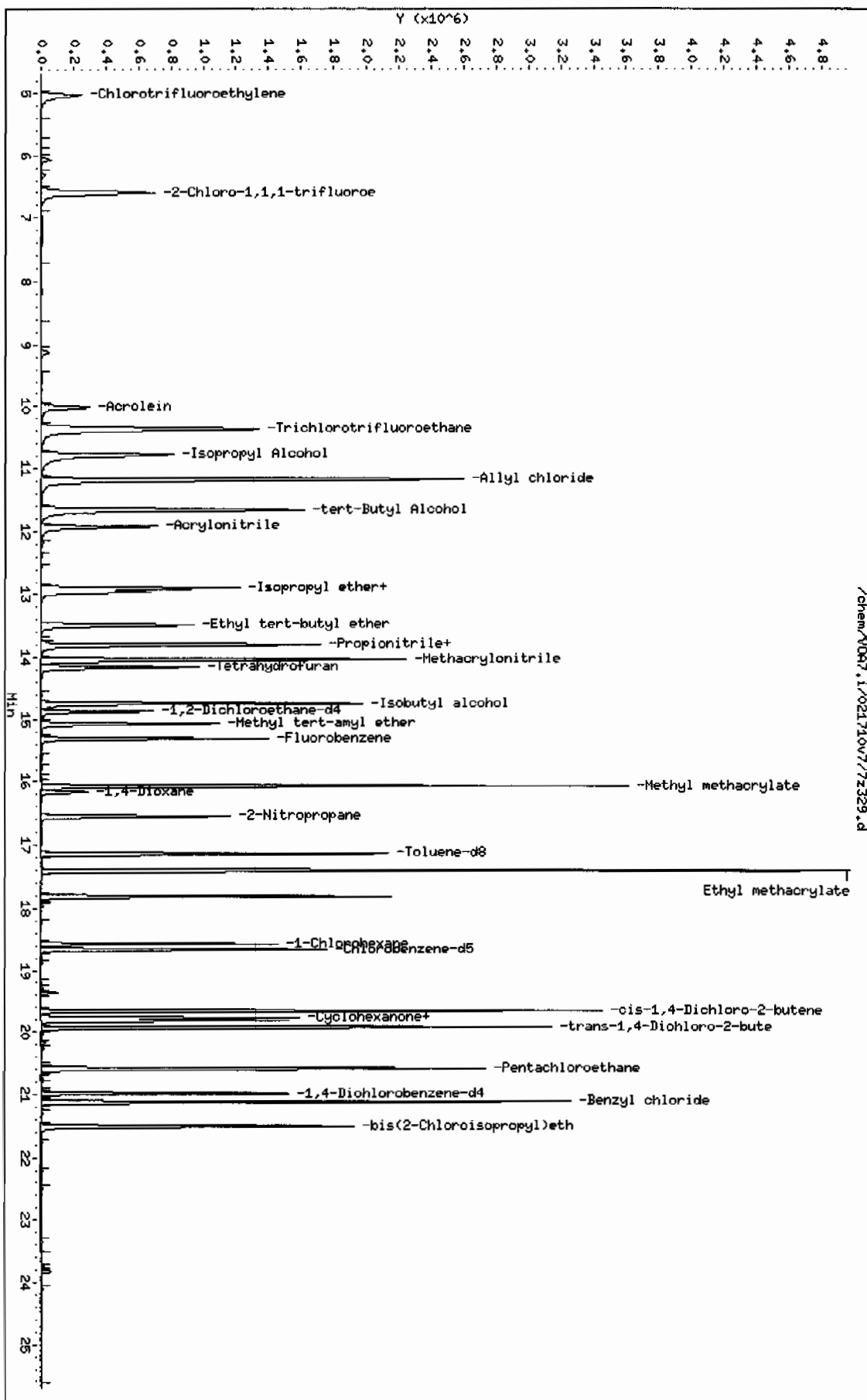
Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
147 Chlorotrifluoroethylene	116	5.029	5.029	(0.328)	321831	150.000	119
148 2-Chloro-1,1,1-trifluoroethane	118	6.604	6.604	(0.431)	727177	150.000	136
11 Acrolein	56	10.017	10.017	(0.654)	403023	250.000	330
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	588697	250.000	265
15 Isopropyl Alcohol	45	10.779	10.779	(0.704)	2122372	2500.00	2570
20 Allyl chloride	41	11.185	11.185	(0.730)	2863564	250.000	237
21 tert-Butyl Alcohol	59	11.662	11.662	(0.761)	3005064	2500.00	2520
23 Acrylonitrile	53	11.926	11.926	(0.779)	861102	250.000	252
27 Isopropyl ether	45	12.901	12.901	(0.842)	1480087	50.0000	45.6
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	519270	50.0000	50.1
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	1079030	50.0000	48.7
35 Propionitrile	54	13.804	13.804	(0.901)	343144	250.000	228
32 Ethyl acetate	43	13.804	13.804	(0.901)	2196159	250.000	213
36 Methacrylonitrile	41	14.038	14.038	(0.916)	1414418	250.000	227
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	797978	250.000	228
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	1080518	2500.00	2370

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
49 Methyl tert-amyl ether	73	15.073	15.073	(0.984)	843562	50.0000	49.5
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1333906	250.000	242
66 Ethyl methacrylate	69	17.408	17.408	(0.933)	2383055	250.000	246
74 1-Chlorohexane	55	18.575	18.575	(1.213)	370019	50.0000	45.6
57 1,4-Dioxane	88	16.159	16.159	(1.055)	221750	2500.00	2680
60 2-Nitropropane	43	16.555	16.555	(1.081)	947088	250.000	265
84 cis-1,4-Dichloro-2-butene	53	19.662	19.662	(0.937)	869937	250.000	268
85 Cyclohexanone	55	19.773	19.773	(1.059)	738736	1250.00	1540
88 trans-1,4-Dichloro-2-butene	53	19.926	19.926	(0.949)	791580	250.000	271
97 Pentachloroethane	167	20.596	20.596	(0.981)	486462	250.000	207
103 Benzyl chloride	91	21.124	21.124	(1.006)	2370168	250.000	230
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1394590	250.000	239
* 51 Fluorobenzene	96	15.317	15.317	(1.000)	1270997	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	847043	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	416415	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	531249	50.0000	48.4
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	1392127	50.0000	50.5
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	530378	50.0000	48.4

Data File: /chem/V007.1/021710v7/72329.d  
 Date: 18-FEB-2010 03:03  
 Client ID: SICV  
 Sample Info: 147VH100217-231SICV11V00F11  
 Purge Volume: 5.0  
 Column phase: DB-624

Instrument: V007.1  
 Operator: AX01  
 Column diameter: 0.25



Data File: /chem/VOA7.i/022610v7/7a525.d  
Report Date: 15-Mar-2010 06:00

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 26-FEB-2010 23:32  
Lab File ID: 7a525.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: SOIL Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100226-07 Quant Type: ISTD  
Method: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
			RRF50	RRF  %D / %DRIFT	%D / %DRIFT	
M 2 Xylenes (total)	0.64551	0.57120	0.57120 0.050	-11.51248	30.00000	Averaged
M 3 1,2-Dichloroethylene (total)	0.49511	0.43973	0.43973 0.050	-11.18565	30.00000	Averaged
M 1 1,3-Dichloropropylene	0.45215	0.44477	0.44477 0.050	-1.63333	30.00000	Averaged
4 Dichlorodifluoromethane	0.15569	0.14153	0.14153 0.050	-9.09441	30.00000	Averaged
5 Chloromethane	0.46771	0.40681	0.40681 0.100	-13.02072	30.00000	Averaged spcc
6 Vinyl chloride	0.41543	0.37644	0.37644 0.050	-9.38453	20.00000	Averaged ccc
7 Bromomethane	0.23685	0.22811	0.22811 0.050	-3.68984	30.00000	Averaged
8 Chloroethane	0.21246	0.19609	0.19609 0.010	-7.70712	30.00000	Averaged
9 Trichlorofluoromethane	0.31799	0.28443	0.28443 0.050	-10.55163	30.00000	Averaged
10 Ethyl Ether	0.29582	0.27644	0.27644 0.001	-6.55182	30.00000	Averaged
13 Acetone	0.33491	0.28579	0.28579 0.050	-14.66773	40.00000	Averaged
17 Acetonitrile	0.05935	0.07073	0.07073 0.010	19.17329	30.00000	Averaged
14 1,1-Dichloroethylene	0.21744	0.19218	0.19218 0.050	-11.61564	20.00000	Averaged ccc
18 Methyl acetate	0.30971	0.29761	0.29761 0.010	-3.90489	40.00000	Averaged
16 Iodomethane	0.37891	0.35769	0.35769 0.050	-5.60064	30.00000	Averaged
22 Methylene chloride	0.20428	0.18200	0.18200 0.050	-10.90587	30.00000	Averaged
19 Carbon disulfide	0.76494	0.71378	0.71378 0.050	-6.68751	30.00000	Averaged
24 tert-Butyl methyl ether	0.77339	0.75956	0.75956 0.050	-1.78791	30.00000	Averaged
25 trans-1,2-Dichloroethylene	0.45970	0.40746	0.40746 0.050	-11.36402	30.00000	Averaged
26 Vinyl acetate	0.75971	0.67020	0.67020 0.010	-11.78190	40.00000	Averaged
28 1,1-Dichloroethane	0.59819	0.55607	0.55607 0.100	-7.04080	30.00000	Averaged spcc
31 2-Butanone	0.37353	0.32718	0.32718 0.030	-12.40784	40.00000	Averaged
33 cis-1,2-Dichloroethylene	0.53052	0.47200	0.47200 0.050	-11.03110	30.00000	Averaged
34 2,2-Dichloropropane	0.24848	0.21141	0.21141 0.050	-14.92058	30.00000	Averaged
38 Chloroform	0.49798	0.44824	0.44824 0.010	-9.98716	20.00000	Averaged ccc
37 Bromochloromethane	0.39220	0.37487	0.37487 0.010	-4.41821	30.00000	Averaged
41 1,1,1-Trichloroethane	0.34173	0.31756	0.31756 0.010	-7.07418	30.00000	Averaged
43 Cyclohexane	0.55549	0.47675	0.47675 0.010	-14.17458	30.00000	Averaged
44 1,1-Dichloropropene	0.35780	0.31980	0.31980 0.010	-10.61819	30.00000	Averaged
52 n-Butyl alcohol	0.01300	0.01602	0.01602 0.001	23.18114	40.00000	Averaged
45 Carbon tetrachloride	0.27191	0.23746	0.23746 0.010	-12.67000	30.00000	Averaged
\$ 46 1,2-Dichloroethane-d4	0.43199	0.43087	0.43087 0.010	-0.25881	30.00000	Averaged
47 1,2-Dichloroethane	0.49133	0.45183	0.45183 0.010	-8.03976	30.00000	Averaged
48 Benzene	1.09329	0.98535	0.98535 0.010	-9.87303	30.00000	Averaged
50 Cyclohexene	0.51508	0.45188	0.45188 0.010	-12.27000	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 26-FEB-2010 23:32  
Lab File ID: 7a525.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: SOIL Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100226-07 Quant Type: ISTD  
Method: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
53 Trichloroethylene	0.26489	0.24489	0.24489	0.010	-7.55334	30.00000	Averaged
56 1,2-Dichloropropane	0.36406	0.33578	0.33578	0.010	-7.76830	20.00000	Averaged ccc
55 Methylcyclohexane	0.44055	0.39750	0.39750	0.010	-9.77189	30.00000	Averaged
59 Bromodichloromethane	0.39044	0.37481	0.37481	0.010	-4.00455	30.00000	Averaged
58 Dibromomethane	0.19638	0.19746	0.19746	0.010	0.55407	30.00000	Averaged
61 2-Chloroethylvinyl ether	0.14176	0.15259	0.15259	0.010	7.64143	30.00000	Averaged
63 4-Methyl-2-pentanone	0.24607	0.22041	0.22041	0.010	-10.42523	40.00000	Averaged
62 cis-1,3-Dichloropropylene	0.47551	0.45997	0.45997	0.010	-3.26705	30.00000	Averaged
\$ 64 Toluene-d8	1.62735	1.53514	1.53514	0.010	-5.66609	30.00000	Averaged
65 Toluene	0.90021	0.77127	0.77127	0.010	-14.32393	20.00000	Averaged ccc
67 trans-1,3-Dichloropropylene	0.61004	0.55560	0.55560	0.010	-8.92436	30.00000	Averaged
68 1,1,2-Trichloroethane	0.33917	0.29553	0.29553	0.010	-12.86757	30.00000	Averaged
69 2-Hexanone	0.68092	0.52148	0.52148	0.010	-23.41488	40.00000	Averaged
70 1,3-Dichloropropane	0.69553	0.64059	0.64059	0.010	-7.89936	30.00000	Averaged
71 Tetrachloroethylene	0.24878	0.20863	0.20863	0.010	-16.14006	30.00000	Averaged
72 Dibromochloromethane	0.36583	0.33610	0.33610	0.010	-8.12724	30.00000	Averaged
73 1,2-Dibromoethane	0.36785	0.33765	0.33765	0.010	-8.21039	30.00000	Averaged
76 Chlorobenzene	0.92664	0.80515	0.80515	0.300	-13.11069	30.00000	Averaged spcc
77 1,1,1,2-Tetrachloroethane	0.31932	0.29886	0.29886	0.010	-6.40552	30.00000	Averaged
78 Ethylbenzene	1.68200	1.36177	1.36177	0.010	-19.03816	20.00000	Averaged ccc
79 m,p-Xylenes	0.63299	0.54989	0.54989	0.010	-13.12704	30.00000	Averaged
80 o-Xylene	0.67056	0.61380	0.61380	0.010	-8.46429	30.00000	Averaged
81 Styrene	1.07382	0.99231	0.99231	0.010	-7.59077	30.00000	Averaged
82 Bromoform	0.47906	0.45322	0.45322	0.100	-5.39332	30.00000	Averaged spcc
83 Isopropylbenzene	3.23464	2.56704	2.56704	0.010	-20.63915	30.00000	Averaged
87 1,1,2,2-Tetrachloroethane	1.13151	0.95485	0.95485	0.300	-15.61271	30.00000	Averaged spcc
\$ 86 Bromofluorobenzene	1.31523	1.21652	1.21652	0.010	-7.50504	30.00000	Averaged
89 1,2,3-Trichloropropane	0.24620	0.21234	0.21234	0.010	-13.75465	30.00000	Averaged
90 Bromobenzene	0.75737	0.66330	0.66330	0.010	-12.42090	30.00000	Averaged
91 n-Propylbenzene	4.11235	3.20888	3.20888	0.010	-21.96971	30.00000	Averaged
93 2-Chlorotoluene	2.81550	2.29697	2.29697	0.010	-18.41694	30.00000	Averaged
92 1,3,5-Trimethylbenzene	2.67285	2.18810	2.18810	0.010	-18.13596	30.00000	Averaged
94 4-Chlorotoluene	2.52732	2.06476	2.06476	0.010	-18.30214	30.00000	Averaged
95 tert-Butylbenzene	2.42130	2.03144	2.03144	0.010	-16.10111	30.00000	Averaged
96 1,2,4-Trimethylbenzene	2.70506	2.23291	2.23291	0.010	-17.45423	30.00000	Averaged
98 sec-Butylbenzene	3.56563	2.88163	2.88163	0.010	-19.18330	30.00000	Averaged



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 26-FEB-2010 23:32  
 Lab File ID: 7a525.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
 Analysis Type: SOIL Init. Cal. Times: 16:02 00:42  
 Lab Sample ID: W7VM100226-07 Quant Type: ISTD  
 Method: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
			RRF50	RRF	%D / %DRIFT	%D / %DRIFT
99 4-Isopropyltoluene	2.57723	2.15509	2.15509	0.010	-16.37957	30.00000
100 1,3-Dichlorobenzene	1.47958	1.23424	1.23424	0.010	-16.58161	30.00000
102 1,4-Dichlorobenzene	1.44472	1.21773	1.21773	0.010	-15.71220	30.00000
104 n-Butylbenzene	2.98564	2.40256	2.40256	0.010	-19.52942	30.00000
105 1,2-Dichlorobenzene	1.48620	1.26670	1.26670	0.010	-14.76919	30.00000
107 1,2-Dibromo-3-chloropropane	47.89573	50.00000	0.17903	0.010	-4.20854	30.00000
108 1,2,4-Trichlorobenzene	0.93109	0.78023	0.78023	0.010	-16.20206	30.00000
109 Hexachlorobutadiene	0.49991	0.38984	0.38984	0.010	-22.01892	30.00000
110 Naphthalene	2.33792	2.13640	2.13640	0.010	-8.61959	30.00000
111 1,2,3-Trichlorobenzene	0.86076	0.77049	0.77049	0.010	-10.48754	30.00000

Average %D / Drift Results.

Calculated Average %D/Drift = 11.27754

Maximum Average %D/Drift = 20.00000

\* Passed Average %D/Drift Test.

Data File: /chem/VOA7.i/022610v7/7a525.d  
 Report Date: 15-Mar-2010 06:00

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GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a525.d

Lab Smp Id: W7VM100226-07 Client Smp ID: VSTD050

Inj Date : 26-FEB-2010 23:32

Operator : AX01 Inst ID: VOA7.i

Smp Info : |W7VM100226-07|BFB/CCV/LCS|1|VOAF|1|

Misc Info : GEL 5g N/A UVM100220-01B/IVM100224-01

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d

Als bottle: 25 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE Compound Sublist: CALsubL+.sub

Target Version: 3.50

Processing Host: prdsvr07

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

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

Cpnd Variable Local Compound Variable

		QUANT SIG			AMOUNTS	
Compounds		MASS	RT	EXP RT REL RT	CAL-AMT ( ug/l)	ON-COL ( ug/l)
M 2 Xylenes (total)		106			1194725	150.000 133
M 3 1,2-Dichloroethylene (total)		96			793060	100.000 88.8
M 1 1,3-Dichloropropylene		75			802150	100.000 98.4
4 Dichlorodifluoromethane		85	5.147	5.147 (0.336)	127626	50.0000 45.4
5 Chloromethane		50	5.757	5.757 (0.376)	366846	50.0000 43.5
6 Vinyl chloride		62	6.187	6.187 (0.404)	339461	50.0000 45.3
7 Bromomethane		94	7.418	7.418 (0.484)	205704	50.0000 48.2
8 Chloroethane		64	7.845	7.845 (0.512)	176823	50.0000 46.1
9 Trichlorofluoromethane		101	8.789	8.789 (0.574)	256492	50.0000 44.7
10 Ethyl Ether		59	9.703	9.703 (0.633)	249283	50.0000 46.7
13 Acetone		43	10.413	10.413 (0.680)	1288570	250.000 213
17 Acetonitrile		41	11.073	11.073 (0.723)	1275657	1000.00 1190

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	173304	50.0000	44.2
18 Methyl acetate	43	11.215	11.215	(0.732)	1341885	250.000	240
16 Iodomethane	142	10.667	10.667	(0.696)	1612751	250.000	236
22 Methylene chloride	86	11.438	11.438	(0.747)	164122	50.0000	44.5
19 Carbon disulfide	76	10.839	10.839	(0.708)	3218323	250.000	233
24 tert-Butyl methyl ether	73	12.017	12.017	(0.785)	684949	50.0000	49.1
25 trans-1,2-Dichloroethylene	61	12.017	12.017	(0.785)	367429	50.0000	44.3
26 Vinyl acetate	43	12.860	12.860	(0.840)	3021834	250.000	220
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	501446	50.0000	46.5
31 2-Butanone	43	13.723	13.723	(0.896)	1475214	250.000	219
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	425631	50.0000	44.5
34 2,2-Dichloropropane	77	13.743	13.743	(0.897)	190639	50.0000	42.5
38 Chloroform	83	14.190	14.190	(0.926)	404209	50.0000	45.0
37 Bromochloromethane	49	14.088	14.088	(0.920)	338045	50.0000	47.8
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	286361	50.0000	46.5
43 Cyclohexane	56	14.586	14.586	(0.952)	429917	50.0000	42.9
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	288388	50.0000	44.7
52 n-Butyl alcohol	56	15.560	15.560	(1.016)	1444318	5000.00	6160
45 Carbon tetrachloride	117	14.718	14.718	(0.961)	214135	50.0000	43.7
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	388544	50.0000	49.9
47 1,2-Dichloroethane	62	14.981	14.981	(0.978)	407440	50.0000	46.0
48 Benzene	78	14.981	14.981	(0.978)	888551	50.0000	45.1
50 Cyclohexene	67	15.124	15.124	(0.987)	407490	50.0000	43.9
* 51 Fluorobenzene	96	15.316	15.316	(1.000)	901765	50.0000	
53 Trichloroethylene	95	15.763	15.763	(1.029)	220830	50.0000	46.2
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	302793	50.0000	46.1
55 Methylcyclohexane	83	16.027	16.027	(1.046)	358453	50.0000	45.1
59 Bromodichloromethane	83	16.332	16.332	(1.066)	337990	50.0000	48.0
58 Dibromomethane	93	16.179	16.179	(1.056)	178066	50.0000	50.3
61 2-Chloroethylvinyl ether	63	16.606	16.606	(1.084)	687994	250.000	269
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	768369	250.000	224
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	414785	50.0000	48.4
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	1070310	50.0000	47.2
65 Toluene	92	17.215	17.215	(0.922)	537733	50.0000	42.8
67 trans-1,3-Dichloropropylene	75	17.387	17.387	(0.931)	387365	50.0000	45.5
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	206045	50.0000	43.6
69 2-Hexanone	43	17.794	17.794	(0.953)	1817910	250.000	191
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	446625	50.0000	46.0
71 Tetrachloroethylene	164	17.814	17.814	(0.954)	145455	50.0000	41.9
72 Dibromochloromethane	129	18.057	18.057	(0.967)	234329	50.0000	45.9
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	235411	50.0000	45.9
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	697207	50.0000	
76 Chlorobenzene	112	18.697	18.697	(1.002)	561354	50.0000	43.4
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	208370	50.0000	46.8
78 Ethylbenzene	91	18.768	18.768	(1.005)	949439	50.0000	40.5
79 m,p-Xylenes	106	18.870	18.870	(1.011)	766779	100.000	86.9
80 o-Xylene	106	19.286	19.286	(1.033)	427946	50.0000	45.8

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
81 Styrene	104	19.286	19.286	(1.033)	691843	50.0000	46.2
82 Bromoform	173	19.540	19.540	(0.931)	162935	50.0000	47.3
83 Isopropylbenzene	105	19.631	19.631	(0.935)	922856	50.0000	39.7
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	343270	50.0000	42.2
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	437343	50.0000	46.2
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	76335	50.0000	43.1
90 Bromobenzene	156	20.017	20.017	(0.954)	238457	50.0000	43.8
91 n-Propylbenzene	91	20.027	20.027	(0.954)	1153597	50.0000	39.0
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	825765	50.0000	40.8
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	786627	50.0000	40.9
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	742287	50.0000	40.8
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	730308	50.0000	41.9
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	802737	50.0000	41.3
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	1035951	50.0000	40.4
99 4-Isopropyltoluene	119	20.859	20.859	(0.994)	774759	50.0000	41.8
100 1,3-Dichlorobenzene	146	20.930	20.930	(0.997)	443713	50.0000	41.7
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	359502	50.0000	
102 1,4-Dichlorobenzene	146	21.012	21.012	(1.001)	437775	50.0000	42.1
104 n-Butylbenzene	91	21.296	21.296	(1.014)	863726	50.0000	40.2
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	455382	50.0000	42.6
107 1,2-Dibromo-3-chloropropane	157	22.291	22.291	(1.062)	64362	50.0000	47.9
108 1,2,4-Trichlorobenzene	180	23.357	23.357	(1.113)	280496	50.0000	41.9
109 Hexachlorobutadiene	225	23.529	23.529	(1.121)	140147	50.0000	39.0
110 Naphthalene	128	23.742	23.742	(1.131)	768039	50.0000	45.7
111 1,2,3-Trichlorobenzene	180	24.098	24.098	(1.148)	276991	50.0000	44.8

Data File: /chem/V0047.i/022610v7/7a525.d

Date: 26-FEB-2010 23:32

Client ID: VSTD050

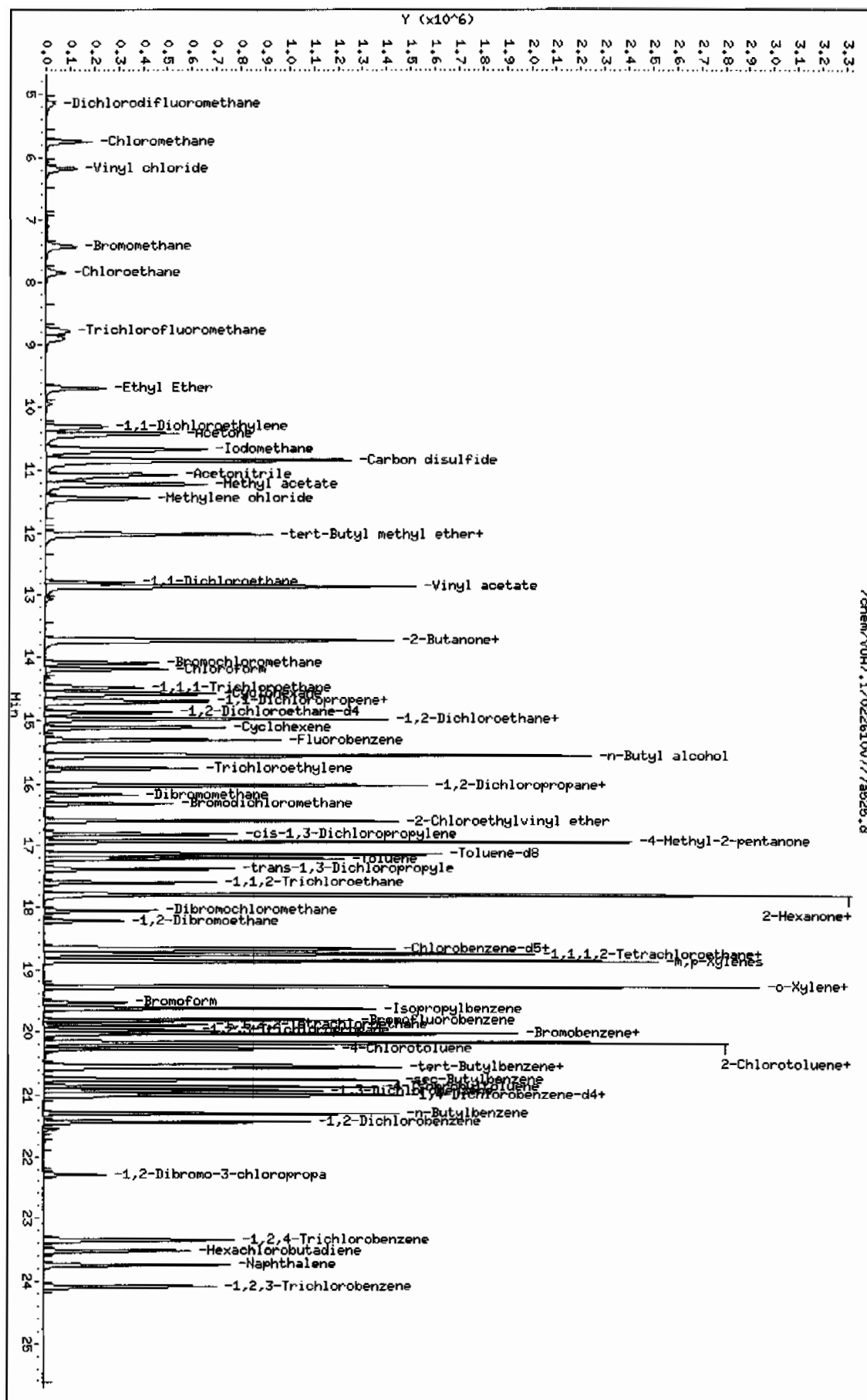
Sample Info: 1M7VH100226-071BFB/CCV/LCS111V0047.1

Column phase: DB-624

Instrument: V0047.i

Operator: AK01

Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 27-FEB-2010 00:07  
Lab File ID: 7a526.d Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: SOIL Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100226-08 Quant Type: ISTD  
Method: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
147 Chlorotrifluoroethylene	0.10627	0.08395	0.08395	0.010	-21.00366	30.00000	Averaged
148 2-Chloro-1,1,1-trifluoroeth	0.21104	0.19894	0.19894	0.010	-5.73478	30.00000	Averaged
11 Acrolein	0.04808	0.05744	0.05744	0.001	19.47251	30.00000	Averaged
12 Trichlorotrifluoroethane	0.08737	0.08475	0.08475	0.010	-2.99378	30.00000	Averaged
15 Isopropyl Alcohol	0.03252	0.03516	0.03516	0.010	8.13013	40.00000	Averaged
20 Allyl chloride	0.47439	0.42168	0.42168	0.010	-11.11253	30.00000	Averaged
21 tert-Butyl Alcohol	0.04700	0.05035	0.05035	0.001	7.13045	40.00000	Averaged
23 Acrylonitrile	0.13462	0.14177	0.14177	0.010	5.31130	30.00000	Averaged
27 Isopropyl ether	1.27617	1.19902	1.19902	0.010	-6.04540	30.00000	Averaged
29 2-Chloro-1,3-butadiene	0.40803	0.42833	0.42833	0.010	4.97341	30.00000	Averaged
30 Ethyl tert-butyl ether	0.87171	0.92630	0.92630	0.010	6.26240	30.00000	Averaged
35 Propionitrile	0.05907	0.05894	0.05894	0.010	-0.20721	30.00000	Averaged
32 Ethyl acetate	0.40471	0.35015	0.35015	0.010	-13.48076	40.00000	Averaged
36 Methacrylonitrile	0.24530	0.22447	0.22447	0.010	-8.48902	30.00000	Averaged
39 Tetrahydrofuran	0.41916	0.35475	0.35475	0.010	-15.36710	30.00000	Averaged
42 Isobutyl alcohol	0.01791	0.01729	0.01729	0.005	-3.46460	40.00000	Averaged
49 Methyl tert-amyl ether	0.66978	0.73550	0.73550	0.010	9.81220	30.00000	Averaged
54 Methyl methacrylate	0.21684	0.22038	0.22038	0.010	1.63337	30.00000	Averaged
66 Ethyl methacrylate	0.57238	0.55510	0.55510	0.010	-3.01890	30.00000	Averaged
74 1-Chlorohexane	0.31936	0.30928	0.30928	0.010	-3.15533	30.00000	Averaged
57 1,4-Dioxane	0.00326	0.00351	0.00351	0.001	7.74269	40.00000	Averaged
60 2-Nitropropane	0.14035	0.14697	0.14697	0.010	4.71556	30.00000	Averaged
84 cis-1,4-Dichloro-2-butene	0.38900	0.37446	0.37446	0.010	-3.73757	30.00000	Averaged
85 Cyclohexanone	0.02826	0.05872	0.05872	0.010	108	40.00000	Averaged<
88 trans-1,4-Dichloro-2-butene	0.35107	0.34034	0.34034	0.010	-3.05405	30.00000	Averaged
97 Pentachloroethane	0.28176	0.25465	0.25465	0.010	-9.61990	30.00000	Averaged
103 Benzyl chloride	1.23904	1.18516	1.18516	0.010	-4.34907	30.00000	Averaged
106 bis(2-Chloroisopropyl)ether	0.69951	0.62122	0.62122	0.010	-11.19149	30.00000	Averaged
\$ 46 1,2-Dichloroethane-d4	0.43199	0.43321	0.43321	0.010	0.28185	30.00000	Averaged
\$ 64 Toluene-d8	1.62735	1.61616	1.61616	0.010	-0.68756	30.00000	Averaged
\$ 86 Bromofluorobenzene	1.31523	1.19315	1.19315	0.010	-9.28205	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i                      Injection Date: 27-FEB-2010 00:07  
Lab File ID: 7a526.d                      Init. Cal. Date(s): 17-FEB-2010 18-FEB-2010  
Analysis Type: SOIL                      Init. Cal. Times: 16:02 00:42  
Lab Sample ID: W7VM100226-08 Quant Type: ISTD  
Method: /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Average %D / Drift Results.	
=====	
Calculated Average %D/Drift =	11.27754
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a526.d

Lab Smp Id: W7VM100226-08

Client Smp ID: VSTD250S

Inj Date : 27-FEB-2010 00:07

Operator : AX01

Inst ID: VOA7.i

Smp Info : |W7VM100226-08|SHORT/SLCS|1|VOAF|1|

Misc Info : GEL 5g N/A UVM091216-08B/UVM100125-08D

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 01-Mar-2010 08:47 ale01592 Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 26

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubS+SS.sub

Target Version: 3.50

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

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

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT ( ug/l)	ON-COL ( ug/l)
147 Chlorotrifluoroethylene	116	5.029	5.029	(0.328)	246348	150.000	118
148 2-Chloro-1,1,1-trifluoroethane	118	6.603	6.603	(0.431)	583749	150.000	141
11 Acrolein	56	10.017	10.017	(0.654)	280921	250.000	299
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	414479	250.000	242
15 Isopropyl Alcohol	45	10.779	10.779	(0.704)	1719744	2500.00	2700
20 Allyl chloride	41	11.185	11.185	(0.730)	2062256	250.000	222
21 tert-Butyl Alcohol	59	11.662	11.662	(0.761)	2462549	2500.00	2680
23 Acrylonitrile	53	11.926	11.926	(0.779)	693332	250.000	263
27 Isopropyl ether	45	12.900	12.900	(0.842)	1172791	50.0000	47.0
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	418955	50.0000	52.5
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	906037	50.0000	53.1
35 Propionitrile	54	13.804	13.804	(0.901)	288274	250.000	249
32 Ethyl acetate	43	13.794	13.794	(0.901)	1712450	250.000	216



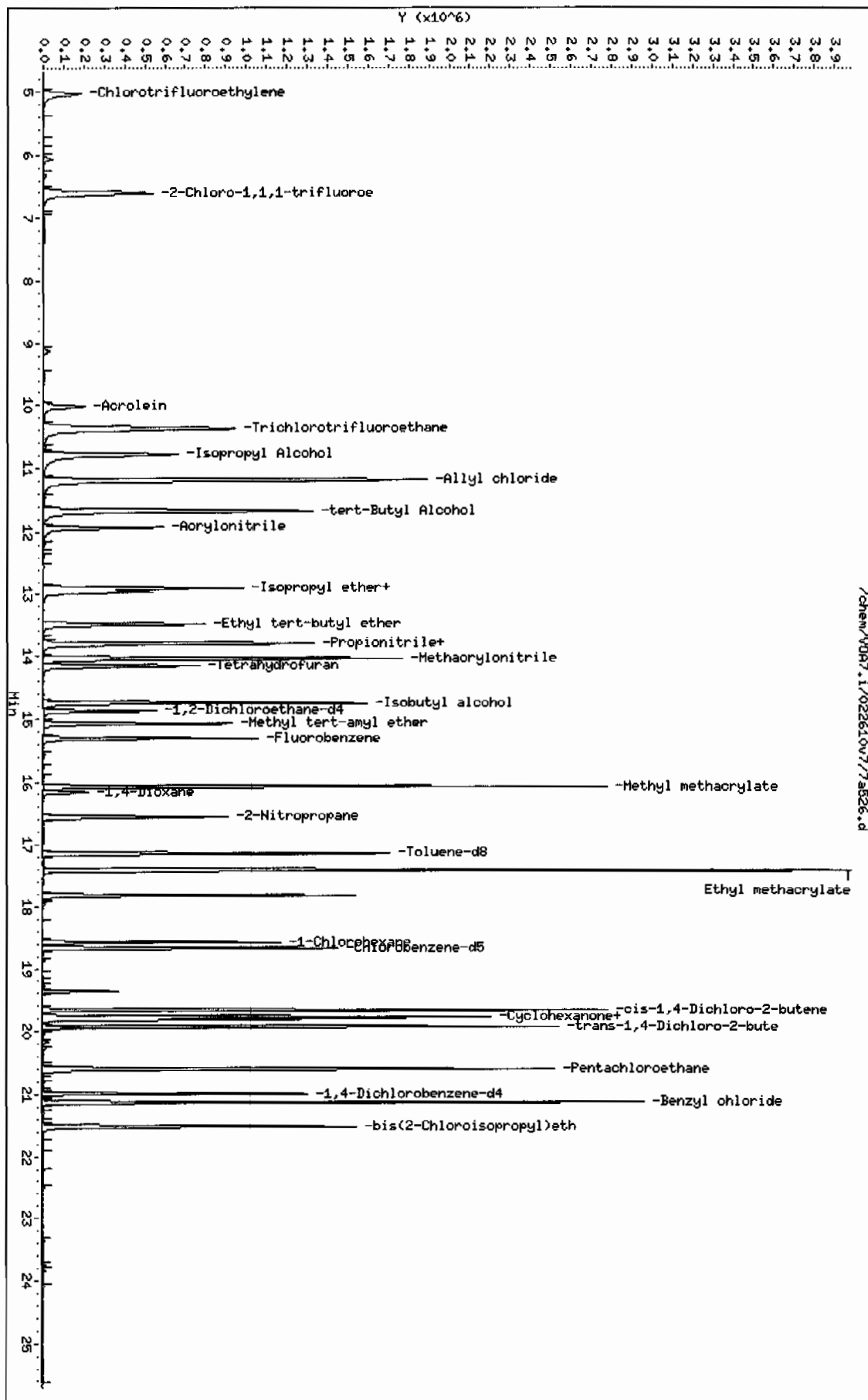
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ( ug/l)	ON-COL ( ug/l)
=====	=====	==	=====	=====	=====	=====	=====
36 Methacrylonitrile	41	14.037	14.037	(0.916)	1097806	250.000	229
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	642182	250.000	212
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	845783	2500.00	2410
49 Methyl tert-amyl ether	73	15.073	15.073	(0.984)	719414	50.0000	54.9
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1077782	250.000	254
66 Ethyl methacrylate	69	17.408	17.408	(0.933)	1942044	250.000	242
74 1-Chlorohexane	55	18.575	18.575	(1.213)	302513	50.0000	48.4
57 1,4-Dioxane	88	16.159	16.159	(1.055)	171727	2500.00	2690
60 2-Nitropropane	43	16.555	16.555	(1.081)	718760	250.000	262
84 cis-1,4-Dichloro-2-butene	53	19.661	19.661	(0.937)	677861	250.000	241
85 Cyclohexanone	55	19.773	19.773	(1.059)	1027239	1250.00	2600 (A)
88 trans-1,4-Dichloro-2-butene	53	19.925	19.925	(0.949)	616102	250.000	242
97 Pentachloroethane	167	20.595	20.595	(0.981)	460977	250.000	226
103 Benzyl chloride	91	21.123	21.123	(1.006)	2145412	250.000	239
106 bis(2-Chloroisopropyl)ether	45	21.509	21.509	(1.025)	1124556	250.000	222
* 51 Fluorobenzene	96	15.316	15.316	(1.000)	978123	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	699713	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	362046	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	423729	50.0000	50.1
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	1130847	50.0000	49.6
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	431977	50.0000	45.4

#### QC Flag Legend

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

Data File: /chem/V007.1/022610v7/7a526.d  
 Date: 27-FEB-2010 00:07  
 Client ID: VSTR2505  
 Sample Info: 1M7VHT00226-081SHORT/SLCS11V0AF111  
 Column phase: DB-624

Instrument: V007.1  
 Operator: PK01  
 Column diameter: 0.25



# QC Data

Data File: /chem/VOA7.i/021710v7/7z309.d

Page 1

Date : 17-FEB-2010 15:29

Client ID: BFB01

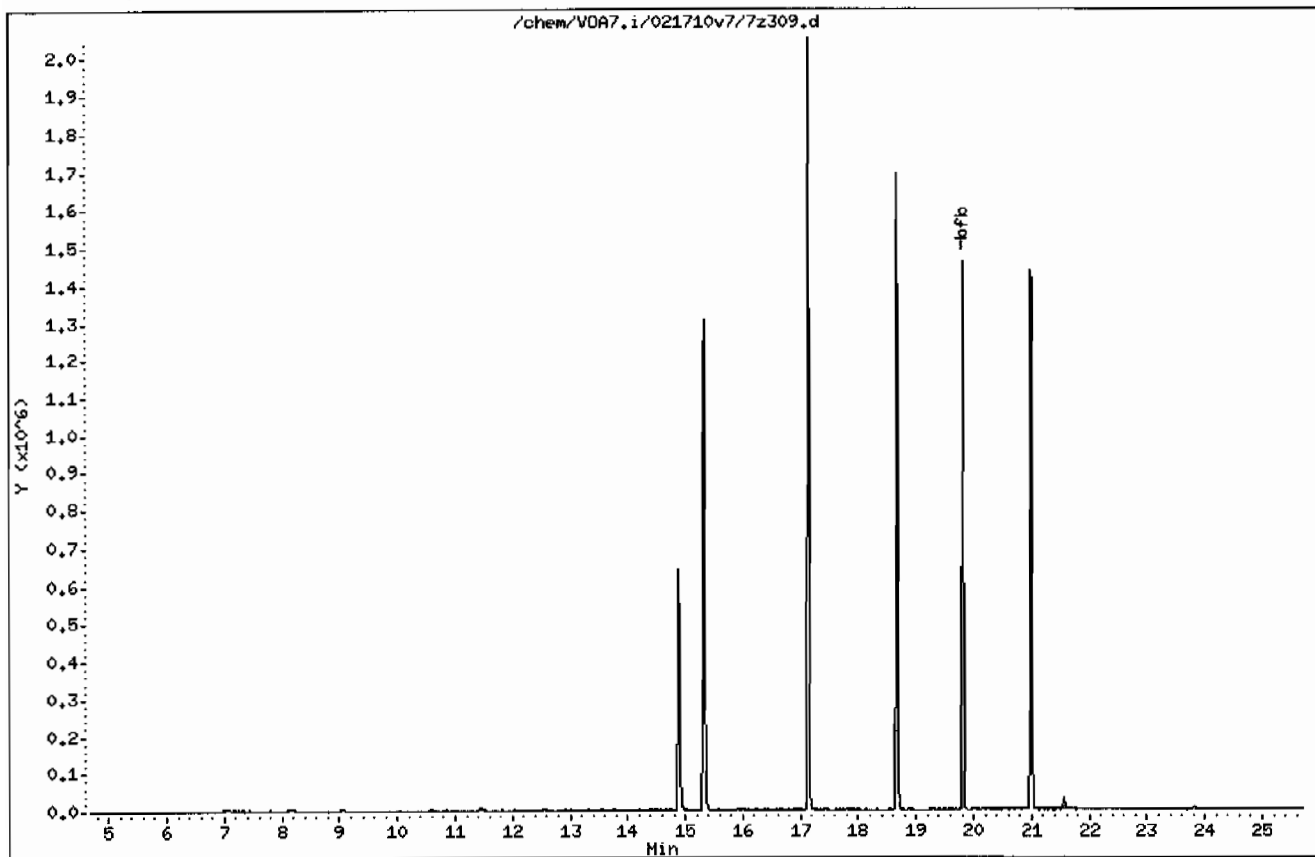
Instrument: VOA7.i

Sample Info: I120200-----IRINSEI11VOAF111

Operator: CDS1

Column phase: db624

Column diameter: 0.25



Date : 17-FEB-2010 15:29

Client ID: BFB01

Instrument: VOA7.i

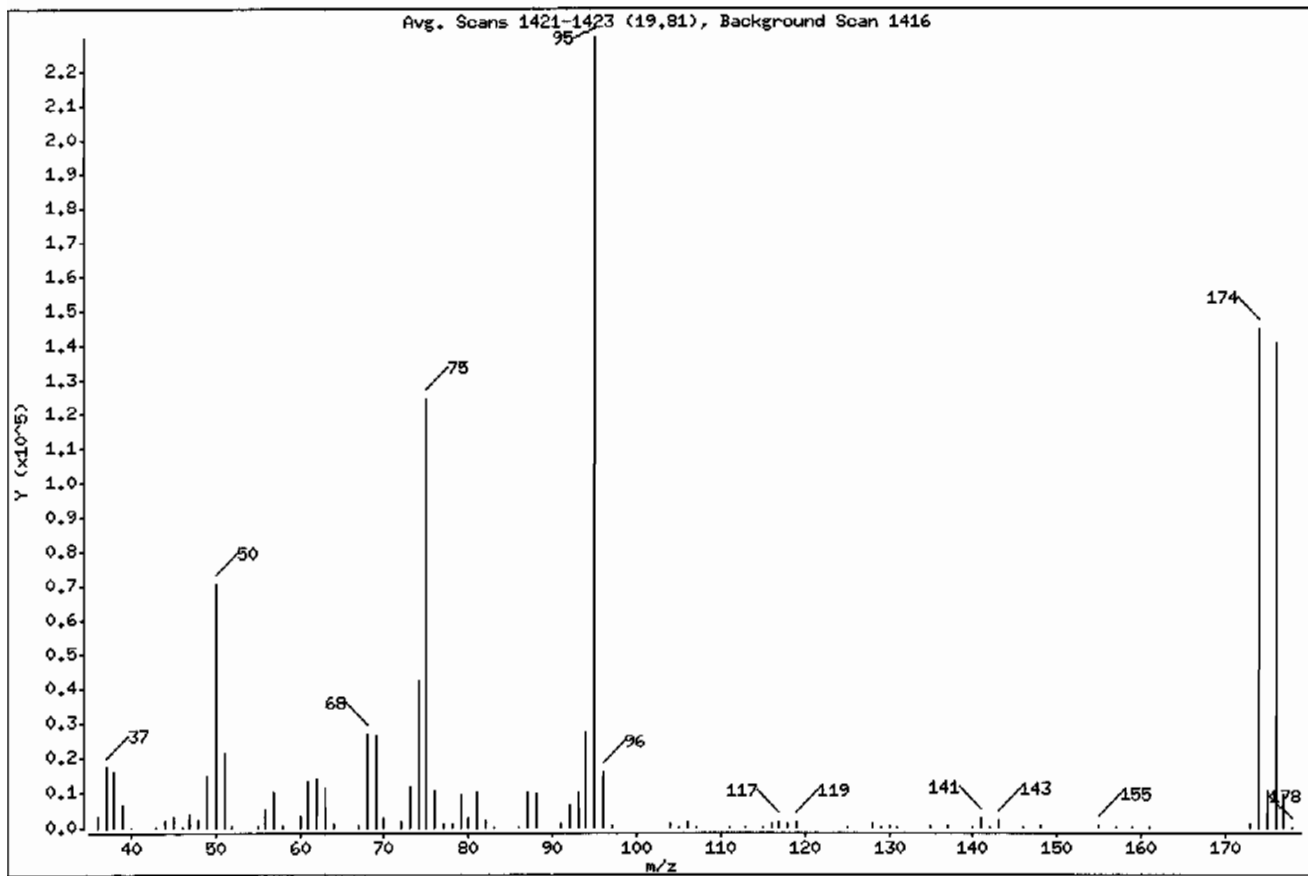
Sample Info: I120200-----IRINSE11|VOAF11|

Operator: CDS1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	30.76
75	30.00 - 60.00% of mass 95	54.23
96	5.00 - 9.00% of mass 95	6.98
173	Less than 2.00% of mass 174	0.36 ( 0.57)
174	50.00 - 100.00% of mass 95	63.04
175	5.00 - 9.00% of mass 174	4.53 ( 7.18)
176	95.00 - 101.00% of mass 174	61.26 ( 97.17)
177	5.00 - 9.00% of mass 176	4.24 ( 6.92)

Date : 17-FEB-2010 15:29

Client ID: BFB01

Instrument: VOA7.i

Sample Info: I120200-----IRINSEI1/VOAFI1I

Operator: CDS1

Column phase: db624

Column diameter: 0,25

Data File: 7z309.d

Spectrum: Avg. Scans 1421-1423 (19,81), Background Scan 1416

Location of Maximum: 95,00

Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
36,00	3286	63,00	11103	92,00	6546	135,00	493
37,00	17472	64,00	947	93,00	9939	137,00	490
38,00	16055	67,00	680	94,00	27256	140,00	87
39,00	6161	68,00	26752	95,00	229440	141,00	2431
40,00	202	69,00	26480	96,00	16004	142,00	224
-----							
43,00	96	70,00	2378	97,00	507	143,00	2362
44,00	2000	72,00	1351	104,00	1056	146,00	133
45,00	3186	73,00	11623	105,00	224	148,00	278
46,00	155	74,00	42264	106,00	1400	155,00	331
47,00	3534	75,00	124432	107,00	195	157,00	97
-----							
48,00	1953	76,00	10309	111,00	126	159,00	99
49,00	14857	77,00	1286	113,00	145	161,00	134
50,00	70568	78,00	973	115,00	130	173,00	824
51,00	20904	79,00	9389	116,00	905	174,00	144640
52,00	786	80,00	2629	117,00	1450	175,00	10392
-----							
55,00	762	81,00	10002	118,00	842	176,00	140544
56,00	5200	82,00	2048	119,00	1357	177,00	9727
57,00	9767	83,00	119	125,00	98	178,00	196
58,00	507	86,00	242	128,00	824		
60,00	2962	87,00	10165	129,00	258		
-----							
61,00	13385	88,00	9659	130,00	689		
62,00	13596	91,00	822	131,00	232		
-----							

Data File: /chem/V0A7.i/022610v7/7a525BFB.d

Page 1

Date : 26-FEB-2010 23:32

Client ID: BFB01

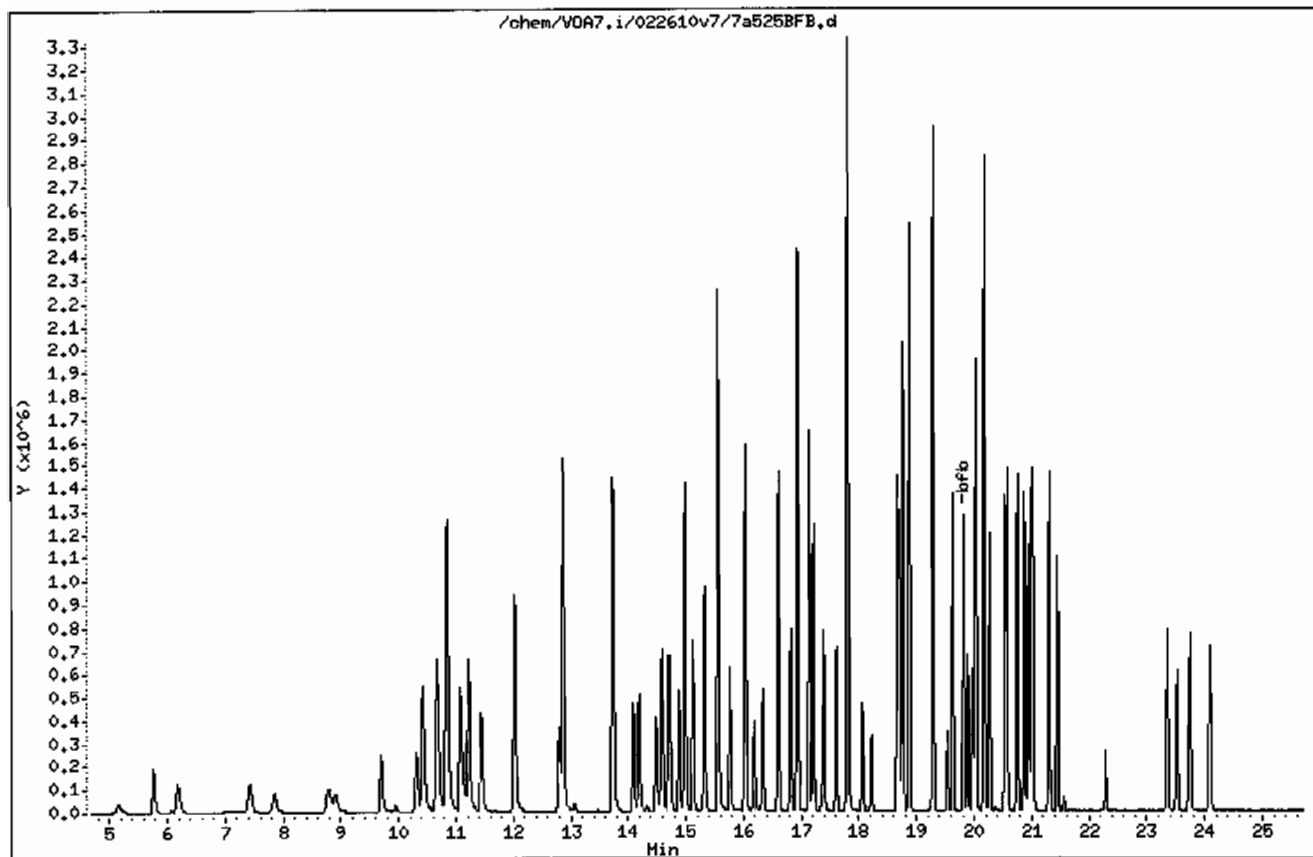
Instrument: V0A7.i

Sample Info: IW7VM100226-07/BFB/CCV/LCS11/V0AF11

Operator: AX01

Column phase: db624

Column diameter: 0.25



Date : 26-FEB-2010 23:32

Client ID: BFB01

Instrument: VOA7.i

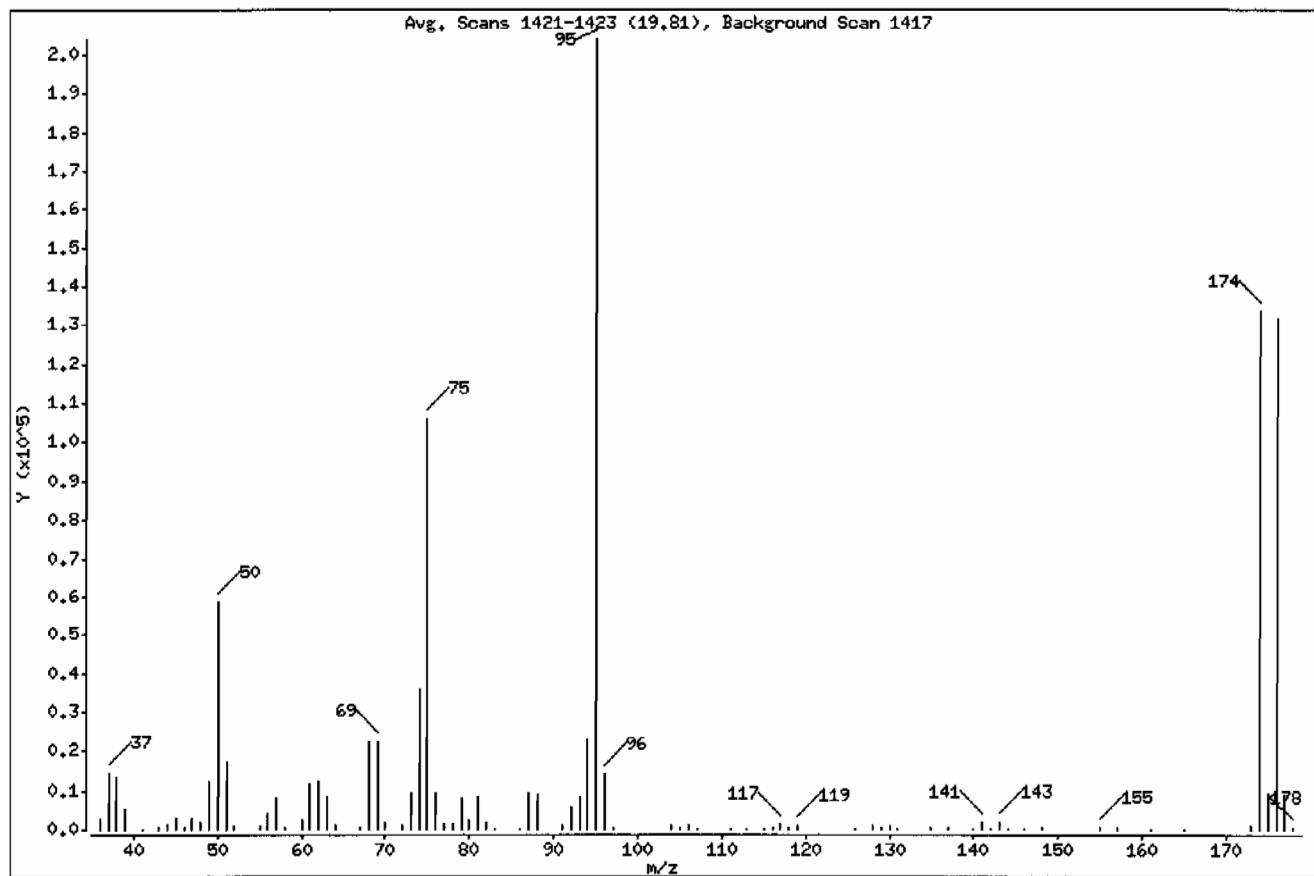
Sample Info: 1W7VM100226-071BFB/CCV/LCS111VOAF111

Operator: AX01

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	28.79
75	30.00 - 60.00% of mass 95	52.03
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.39 ( 0.59)
174	50.00 - 100.00% of mass 95	65.57
175	5.00 - 9.00% of mass 174	4.56 ( 6.96)
176	95.00 - 101.00% of mass 174	64.56 ( 98.47)
177	5.00 - 9.00% of mass 176	4.28 ( 6.62)



Date : 26-FEB-2010 23:32

Client ID: BFB01

Instrument: VOA7.i

Sample Info: IW7VH100226-071BFB/CCV/LCS111VOAF111

Operator: AX01

Column phase: db624

Column diameter: 0.25

Data File: 7a525BFB.d

Spectrum: Avg. Scans 1421-1423 (19.81), Background Scan 1417

Location of Maximum: 95.00

Number of points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
36.00	2628	63.00	8647	92.00	5541	135.00	413
37.00	14286	64.00	797	93.00	8637	137.00	353
38.00	13633	67.00	555	94.00	22880	140.00	99
39.00	5222	68.00	22280	95.00	203712	141.00	1778
41.00	97	69.00	22688	96.00	14044	142.00	193
-----							
43.00	255	70.00	1909	97.00	305	143.00	2045
44.00	1449	72.00	1057	104.00	1039	144.00	83
45.00	2708	73.00	9149	105.00	390	146.00	94
46.00	446	74.00	35592	106.00	962	148.00	303
47.00	2736	75.00	106000	107.00	86	155.00	302
-----							
48.00	1836	76.00	9154	111.00	220	157.00	276
49.00	12276	77.00	1217	113.00	221	161.00	99
50.00	58656	78.00	1200	115.00	92	165.00	96
51.00	17440	79.00	8168	116.00	596	173.00	786
52.00	833	80.00	2397	117.00	1193	174.00	133568
-----							
55.00	751	81.00	8415	118.00	637	175.00	9297
56.00	4080	82.00	2009	119.00	1155	176.00	131520
57.00	7918	83.00	123	126.00	130	177.00	8711
58.00	349	86.00	94	128.00	824	178.00	338
60.00	2305	87.00	9334	129.00	351		
-----							
61.00	11700	88.00	8741	130.00	776		
62.00	12128	91.00	925	131.00	113		
-----							

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

SDG Number: 10-1950

Matrix: SOIL

Lab Sample ID: 1202053898

Client Sample: QC for batch 957837

Client: LANL010

Project: QC

Client ID: MB for batch 957837

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 957839

Inst: VOA7.I

Dilution: 1

Run Date: 02/27/2010 00:42

Analyst: AXO1

Purge Vol: 5 mL

Prep Date: 02/26/2010 15:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 7a527LL.d

Column: DB-624

Level: LOW

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

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

Page 2 of 2

SDG Number: 10-1950

Matrix: SOIL

Lab Sample ID: 1202053898

Client Sample: QC for batch 957837

Client: LANL010

Project: QC

Client ID: MB for batch 957837

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 957839

Inst: VOA7.1

Dilution: 1

Run Date: 02/27/2010 00:42

Analyst: AXO1

Purge Vol: 5 mL

Prep Date: 02/26/2010 15:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 7a527LL.d

Column: DB-624

Level: LOW

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

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026  
 Data file : /chem/VOA7.i/022610v7/7a527LL.d  
 Lab Smp Id: 1202053898 Client Smp ID: BLANK  
 Inj Date : 27-FEB-2010 00:42  
 Operator : AX01 Inst ID: VOA7.i  
 Smp Info : |1202053898|957839|1|VOAF|1|  
 Misc Info : GEL 5g N/A  
 Comment :  
 Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
 Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
 Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
 Als bottle: 27 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: all.sub  
 Target Version: 3.50  
 Processing Host: prdsvr07

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
	=====	=====	=====	=====	=====	( ug/l)	(ug/Kg)	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	426551	53.3881	53.4	
* 51 Fluorobenzene	96	15.317	15.316	(1.000)	924749	50.0000		
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	1087340	49.1145	49.1	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	680214	50.0000		
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	405844	47.6250	47.6	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	323960	50.0000		

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a527LL.d

Lab Smp Id: 1202053898

Client Smp ID: BLANK

Inj Date : 27-FEB-2010 00:42

Operator : AX01

Inst ID: VOA7.i

Smp Info : |1202053898|957839|1|VOAF|1|

Misc Info : GEL 5g N/A

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592

Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 27

QC Sample: BLANK

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

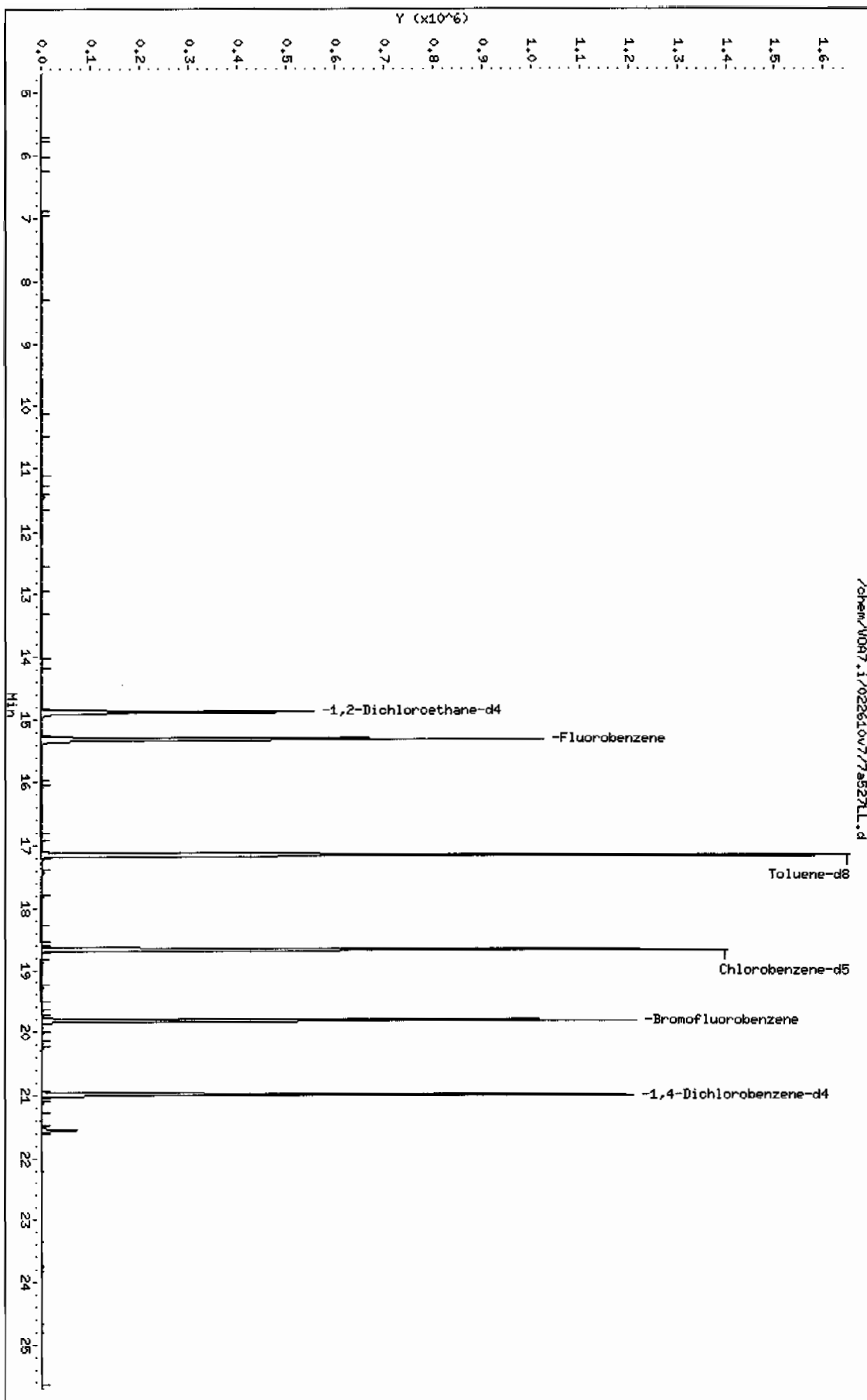
Target Version: 3.50

Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/V067.i/022610v7/7a527L.d  
Date : 27-FEB-2010 00:42  
Client ID: BLANK  
Sample Info: 11202053898195783911V067I11  
Column phase: DB-624

Instrument: V067.i  
Operator: RK01  
Column diameter: 0.25



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

SDG Number: 10-1950  
 Lab Sample ID: 1202053901  
 Client Sample: QC for batch 957837  
 Client ID: LCS for batch 957837  
 Batch ID: 957839  
 Run Date: 02/26/2010 23:32  
 Prep Date: 02/26/2010 15:00  
 Data File: 7a525LL.d

Client: LANL010  
 Method: SW846 8260B  
 Inst: VOA7.1  
 Analyst: AXO1  
 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  
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		45.5	ug/kg	0.340	1.00
74-87-3	Chloromethane		43.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.3	ug/kg	0.300	1.00
74-83-9	Bromomethane		48.2	ug/kg	0.300	1.00
75-00-3	Chloroethane		46.1	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		44.7	ug/kg	0.300	1.00
67-64-1	Acetone		213	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		44.2	ug/kg	0.300	1.00
74-88-4	Iodomethane		236	ug/kg	1.60	5.00
75-09-2	Methylene chloride		44.5	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		233	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		44.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		46.5	ug/kg	0.300	1.00
78-93-3	2-Butanone		219	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		44.5	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		42.5	ug/kg	0.300	1.00
67-66-3	Chloroform		45.0	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		47.8	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		46.5	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		44.7	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		43.7	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		46.0	ug/kg	0.300	1.00
71-43-2	Benzene		45.1	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		46.2	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		46.1	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		48.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		50.3	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		224	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		48.4	ug/kg	0.300	1.00
108-88-3	Toluene		42.8	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		45.5	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		43.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone	E	191	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		46.1	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		41.9	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		45.9	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		45.9	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		43.4	ug/kg	0.300	1.00

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

SDG Number: 10-1950

Matrix: SOIL

Lab Sample ID: 1202053901

Client Sample: QC for batch 957837

Client: LANL010

Project: QC

Client ID: LCS for batch 957837

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 957839

Inst: VOA7.I

Dilution: 1

Run Date: 02/26/2010 23:32

Analyst: AXO1

Purge Vol: 5 mL

Prep Date: 02/26/2010 15:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 7a525LL.d

Column: DB-624

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		40.5	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		86.9	ug/kg	0.300	2.00
95-47-6	o-Xylene		45.8	ug/kg	0.300	1.00
100-42-5	Styrene		46.2	ug/kg	0.300	1.00
75-25-2	Bromoform		47.3	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		42.2	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		43.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		43.8	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		39.0	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		40.8	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		39.7	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		40.9	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		40.8	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		41.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		41.3	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		40.4	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		41.8	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		41.7	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		42.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		40.2	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.9	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		46.8	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		42.6	ug/kg	0.300	1.00



GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a525LL.d  
Lab Smp Id: 1202053901 Client Smp ID: LCS  
Inj Date : 26-FEB-2010 23:32  
Operator : AX01 Inst ID: VOA7.i  
Smp Info : |1202053901|957839|1|VOAF|1|  
Misc Info : GEL 5g N/A UVM100220-01B/IVM100224-01  
Comment :  
Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m  
Meth Date : 15-Mar-2010 06:00 ale01592 Quant Type: ISTD  
Cal Date : 18-FEB-2010 00:08 Cal File: 7z324.d  
Als bottle: 25 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: prdsvr07

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

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

Cpnd Variable Local Compound Variable

		QUANT SIG				CONCENTRATIONS	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN
		=====	==	=====	=====	=====	FINAL
						( ug/l)	(ug/Kg)
						=====	=====
M	1 1,3-Dichloropropylene	75				802150	98.3667
M	2 Xylenes (total)	106				1194725	132.641
M	3 1,2-Dichloroethylene (total)	96				793060	88.8024
	4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	127626	45.4528
	5 Chloromethane	50	5.757	5.757	(0.376)	366846	43.4896
	6 Vinyl chloride	62	6.187	6.187	(0.404)	339461	45.3077
	7 Bromomethane	94	7.418	7.418	(0.484)	205704	48.1551
	8 Chloroethane	64	7.845	7.845	(0.512)	176823	46.1464
	9 Trichlorofluoromethane	101	8.789	8.789	(0.574)	256492	44.7242
	10 Ethyl Ether	59	9.703	9.703	(0.633)	249283	46.7241
	13 Acetone	43	10.413	10.413	(0.680)	1288570	213.331
	14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	173304	44.1922

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							( ug/l)	(ug/Kg)
16 Iodomethane		142	10.667	10.667	(0.696)	1612751	235.998	236
17 Acetonitrile		41	11.073	11.073	(0.723)	1275657	1191.73	1190
18 Methyl acetate		43	11.215	11.215	(0.732)	1341885	240.238	240
19 Carbon disulfide		76	10.839	10.839	(0.708)	3218323	233.281	233
22 Methylene chloride		86	11.438	11.438	(0.747)	164122	44.5471	44.5
24 tert-Butyl methyl ether		73	12.017	12.017	(0.785)	684949	49.1060	49.1
25 trans-1,2-Dichloroethylene		61	12.017	12.017	(0.785)	367429	44.3180	44.3
26 Vinyl acetate		43	12.860	12.860	(0.840)	3021834	220.545	220
28 1,1-Dichloroethane		63	12.799	12.799	(0.836)	501446	46.4796	46.5
31 2-Butanone		43	13.723	13.723	(0.896)	1475214	218.980	219
33 cis-1,2-Dichloroethylene		61	13.733	13.733	(0.897)	425631	44.4845	44.5
34 2,2-Dichloropropane		77	13.743	13.743	(0.897)	190639	42.5397	42.5
37 Bromochloromethane		49	14.088	14.088	(0.920)	338045	47.7909	47.8
38 Chloroform		83	14.190	14.190	(0.926)	404209	45.0064	45.0
41 1,1,1-Trichloroethane		97	14.484	14.484	(0.946)	286361	46.4629	46.5
43 Cyclohexane		56	14.586	14.586	(0.952)	429917	42.9127	42.9
44 1,1-Dichloropropene		75	14.697	14.697	(0.960)	288388	44.6909	44.7
45 Carbon tetrachloride		117	14.718	14.718	(0.961)	214135	43.6650	43.7
\$ 46 1,2-Dichloroethane-d4		65	14.880	14.880	(0.971)	388544	49.8706	49.9
47 1,2-Dichloroethane		62	14.981	14.981	(0.978)	407440	45.9801	46.0
48 Benzene		78	14.981	14.981	(0.978)	888551	45.0635	45.1
50 Cyclohexene		67	15.124	15.124	(0.987)	407490	43.8650	43.9
* 51 Fluorobenzene		96	15.316	15.316	(1.000)	901765	50.0000	
52 n-Butyl alcohol		56	15.560	15.560	(1.016)	1444318	6159.06	6160
53 Trichloroethylene		95	15.763	15.763	(1.029)	220830	46.2233	46.2
55 Methylcyclohexane		83	16.027	16.027	(1.046)	358453	45.1141	45.1
56 1,2-Dichloropropane		63	16.037	16.037	(1.047)	302793	46.1158	46.1
58 Dibromomethane		93	16.179	16.179	(1.056)	178066	50.2770	50.3
59 Bromodichloromethane		83	16.332	16.332	(1.066)	337990	47.9977	48.0
61 2-Chloroethylvinyl ether		63	16.606	16.606	(1.084)	687994	269.104	269
62 cis-1,3-Dichloropropylene		75	16.819	16.819	(1.098)	414785	48.3665	48.4
63 4-Methyl-2-pentanone		58	16.941	16.941	(0.908)	768369	223.937	224
\$ 64 Toluene-d8		98	17.134	17.134	(0.918)	1070310	47.1670	47.2
65 Toluene		92	17.215	17.215	(0.922)	537733	42.8380	42.8
67 trans-1,3-Dichloropropylene		75	17.387	17.387	(0.931)	387365	45.5378	45.5
68 1,1,2-Trichloroethane		83	17.611	17.611	(0.943)	206045	43.5662	43.6
69 2-Hexanone		43	17.794	17.794	(0.953)	1817910	191.463	191(A)
70 1,3-Dichloropropane		76	17.794	17.794	(0.953)	446625	46.0503	46.0
71 Tetrachloroethylene		164	17.814	17.814	(0.954)	145455	41.9300	41.9
72 Dibromochloromethane		129	18.057	18.057	(0.967)	234329	45.9364	45.9
73 1,2-Dibromoethane		107	18.220	18.220	(0.976)	235411	45.8948	45.9
* 75 Chlorobenzene-d5		117	18.667	18.667	(1.000)	697207	50.0000	
76 Chlorobenzene		112	18.697	18.697	(1.002)	561354	43.4447	43.4
77 1,1,1,2-Tetrachloroethane		131	18.758	18.758	(1.005)	208370	46.7972	46.8
78 Ethylbenzene		91	18.768	18.768	(1.005)	949439	40.4809	40.5
79 m,p-Xylenes		106	18.870	18.870	(1.011)	766779	86.8730	86.9
80 o-Xylene		106	19.286	19.286	(1.033)	427946	45.7679	45.8

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							( ug/l)	(ug/Kg)
=====		=====	=====	=====	=====	=====	=====	=====
81 Styrene		104	19.286	19.286	(1.033)	691843	46.2046	46.2
82 Bromoform		173	19.540	19.540	(0.931)	162935	47.3033	47.3
83 Isopropylbenzene		105	19.631	19.631	(0.935)	922856	39.6804	39.7
\$ 86 Bromofluorobenzene		95	19.814	19.814	(0.944)	437343	46.2475	46.2
87 1,1,2,2-Tetrachloroethane		83	19.885	19.885	(0.947)	343270	42.1936	42.2
89 1,2,3-Trichloropropane		110	19.966	19.966	(0.951)	76335	43.1227	43.1
90 Bromobenzene		156	20.017	20.017	(0.954)	238457	43.7895	43.8
91 n-Propylbenzene		91	20.027	20.027	(0.954)	1153597	39.0151	39.0
92 1,3,5-Trimethylbenzene		105	20.169	20.169	(0.961)	786627	40.9320	40.9
93 2-Chlorotoluene		91	20.169	20.169	(0.961)	825765	40.7915	40.8
94 4-Chlorotoluene		91	20.271	20.271	(0.966)	742287	40.8489	40.8
95 tert-Butylbenzene		119	20.535	20.535	(0.978)	730308	41.9494	41.9
96 1,2,4-Trimethylbenzene		105	20.565	20.565	(0.980)	802737	41.2729	41.3
98 sec-Butylbenzene		105	20.748	20.748	(0.988)	1035951	40.4084	40.4
99 4-Isopropyltoluene		119	20.859	20.859	(0.994)	774759	41.8102	41.8
100 1,3-Dichlorobenzene		146	20.930	20.930	(0.997)	443713	41.7092	41.7
* 101 1,4-Dichlorobenzene-d4		152	20.991	20.991	(1.000)	359502	50.0000	
102 1,4-Dichlorobenzene		146	21.012	21.012	(1.001)	437775	42.1439	42.1
104 n-Butylbenzene		91	21.296	21.296	(1.014)	863726	40.2353	40.2
105 1,2-Dichlorobenzene		146	21.438	21.438	(1.021)	455382	42.6154	42.6
107 1,2-Dibromo-3-chloropropane		157	22.291	22.291	(1.062)	64362	47.8957	47.9
108 1,2,4-Trichlorobenzene		180	23.357	23.357	(1.113)	280496	41.8990	41.9
109 Hexachlorobutadiene		225	23.529	23.529	(1.121)	140147	38.9905	39.0
110 Naphthalene		128	23.742	23.742	(1.131)	768039	45.6902	45.7
111 1,2,3-Trichlorobenzene		180	24.098	24.098	(1.148)	276991	44.7562	44.8

## QC Flag Legend

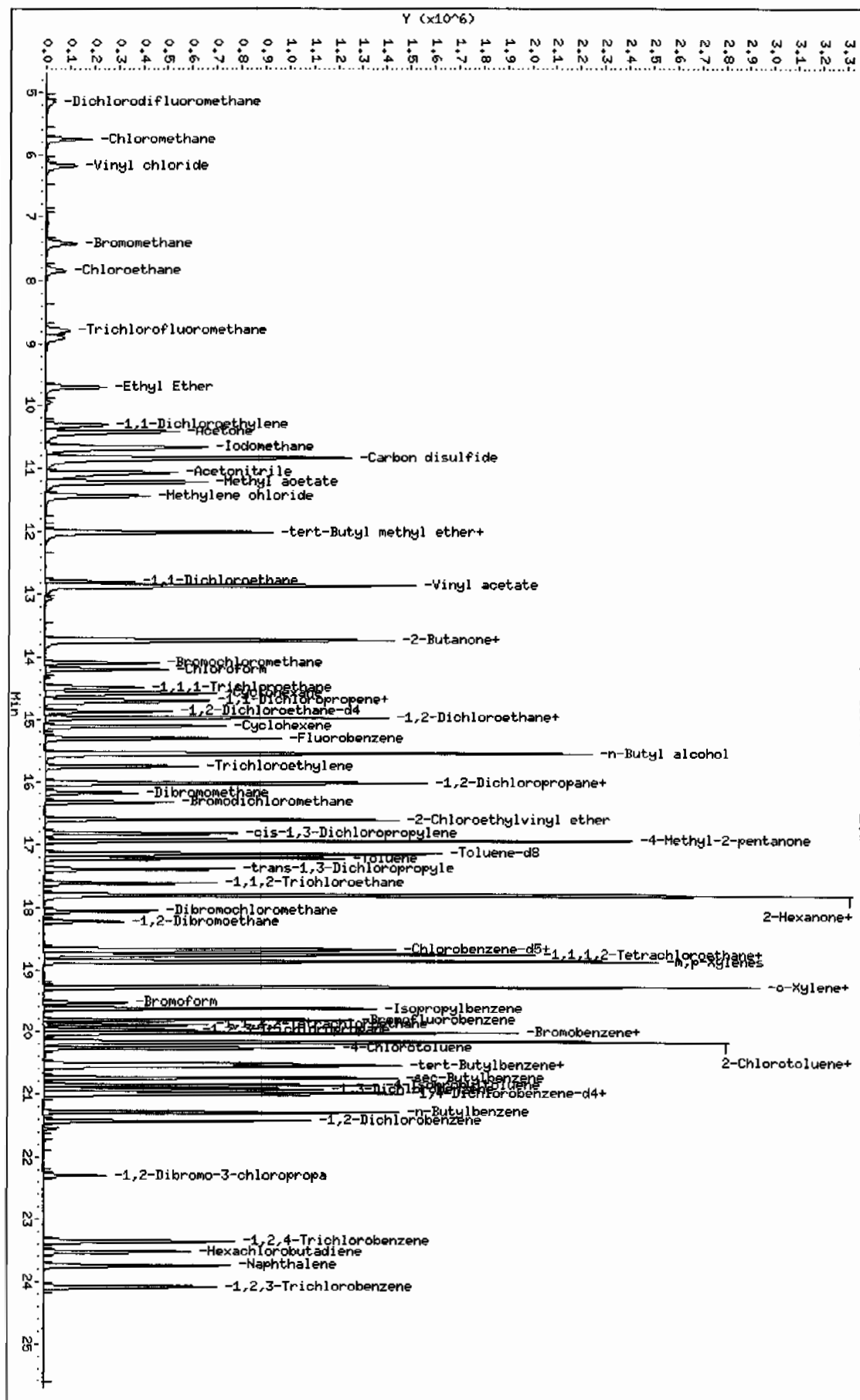
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/V0A7.1/022610v77a525L.d  
 Date: 26-FEB-2010 23:32  
 Client ID: LCS  
 Sample Info: 1202053901195783911V0A7.1

Instrument: V0A7.1  
 Operator: RKD1  
 Column diameter: 0.25

Column phase: DB-624

/chem/V0A7.1/022610v77a525L.d



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

Page 1 of 2

SDG Number: 10-1950

Matrix: SOIL

Lab Sample ID: 1202053902

Client Sample: QC for batch 957837

Client: LANL010

Project: QC

Client ID: LCS for batch 957837

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 957839

Inst: VOA7.1

Dilution: 1

Run Date: 02/27/2010 00:07

Analyst: AXO1

Purge Vol: 5 mL

Prep Date: 02/26/2010 15:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 7a526LL.d

Column: DB-624

Level: LOW

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

**Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number: 10-1950

Matrix: SOIL

Lab Sample ID: 1202053902

Client Sample: QC for batch 957837

Client: LANL010

Project: QC

Client ID: LCS for batch 957837

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 957839

Inst: VOA7.1

Dilution: 1

Run Date: 02/27/2010 00:07

Analyst: AXO1

Purge Vol: 5 mL

Prep Date: 02/26/2010 15:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 7a526LL.d

Column: DB-624

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		243	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a526LL.d

Lab Smp Id: 1202053902

Client Smp ID: SLCS

Inj Date : 27-FEB-2010 00:07

Operator : AX01

Inst ID: VOA7.i

Smp Info : |1202053902|957839|1|VOAF|1|

Misc Info : GEL 5g N/A UVM091216-08B/UVM100125-08D

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592

Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 26

QC Sample: LCS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

Processing Host: prdsvr07

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

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

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							( ug/l)	(ug/Kg)
147 Chlorotrifluoroethylene	116	5.029	5.029	(0.328)	246348	118.495		118
148 2-Chloro-1,1,1-trifluoroethane	118	6.603	6.603	(0.431)	583749	141.398		141
11 Acrolein	56	10.017	10.017	(0.654)	280921	298.681		299
12 Trichlorotrifluoroethane	85	10.373	10.373	(0.677)	414479	242.515		242
15 Isopropyl Alcohol	45	10.779	10.779	(0.704)	1719744	2703.25		2700
20 Allyl chloride	41	11.185	11.185	(0.730)	2062256	222.219		222
21 tert-Butyl Alcohol	59	11.662	11.662	(0.761)	2462549	2678.26		2680
23 Acrylonitrile	53	11.926	11.926	(0.779)	693332	263.278		263
27 Isopropyl ether	45	12.900	12.900	(0.842)	1172791	46.9773		47.0
29 2-Chloro-1,3-butadiene	53	12.961	12.961	(0.846)	418955	52.4867		52.5
30 Ethyl tert-butyl ether	59	13.489	13.489	(0.881)	906037	53.1312		53.1
32 Ethyl acetate	43	13.794	13.794	(0.901)	1712450	216.298		216

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
35 Propionitrile	54	13.804	13.804	(0.901)	288274	249.482	249
36 Methacrylonitrile	41	14.037	14.037	(0.916)	1097806	228.777	229
39 Tetrahydrofuran	42	14.159	14.159	(0.675)	642182	211.582	212
42 Isobutyl alcohol	41	14.748	14.748	(0.963)	845783	2413.39	2410
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	423729	50.1409	50.1
49 Methyl tert-amyl ether	73	15.073	15.073	(0.984)	719414	54.9061	54.9
* 51 Fluorobenzene	96	15.316	15.316	(1.000)	978123	50.0000	
54 Methyl methacrylate	69	16.078	16.078	(1.050)	1077782	254.083	254
57 1,4-Dioxane	88	16.159	16.159	(1.055)	171727	2693.56	2690
60 2-Nitropropane	43	16.555	16.555	(1.081)	718760	261.789	262
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	1130847	49.6562	49.6
66 Ethyl methacrylate	69	17.408	17.408	(0.933)	1942044	242.453	242
74 1-Chlorohexane	55	18.575	18.575	(1.213)	302513	48.4223	48.4
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	699713	50.0000	
84 cis-1,4-Dichloro-2-butene	53	19.661	19.661	(0.937)	677861	240.656	241
85 Cyclohexanone	55	19.773	19.773	(1.059)	1027239	2597.30	2600 (AR)
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	431977	45.3591	45.4
88 trans-1,4-Dichloro-2-butene	53	19.925	19.925	(0.949)	616102	242.365	242
97 Pentachloroethane	167	20.595	20.595	(0.981)	460977	225.950	226
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	362046	50.0000	
103 Benzyl chloride	91	21.123	21.123	(1.006)	2145412	239.128	239
106 bis(2-Chloroisopropyl) ether	45	21.509	21.509	(1.025)	1124556	222.021	222

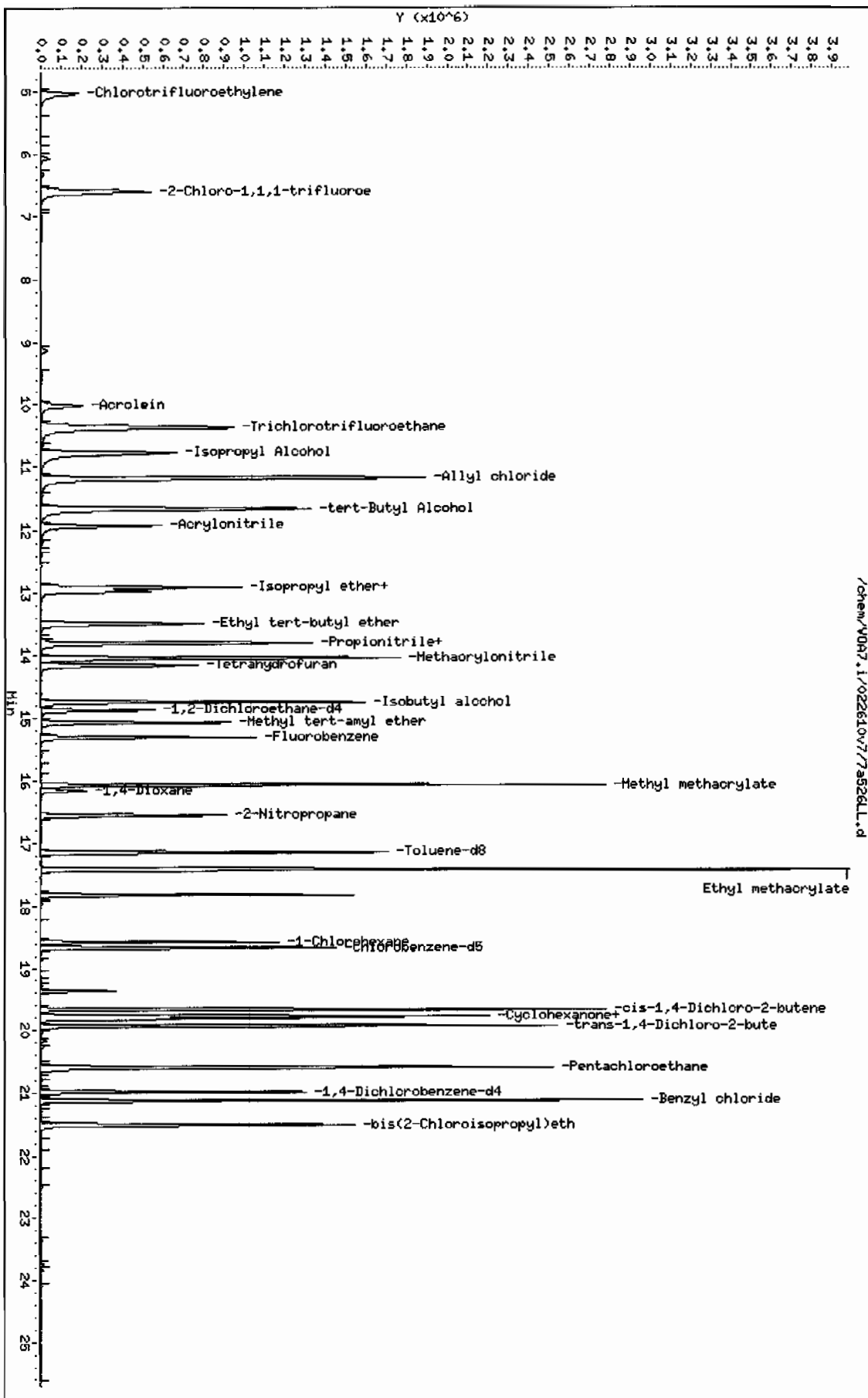
#### QC Flag Legend

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



Data File: /chem/V0A7.i/022610v7/7a526LL.d  
 Date : 27-FEB-2010 00:07  
 Client ID: SLCS  
 Sample Info: 11202053902195783911V0A7.11  
 Column phase: DB-624

Instrument: V0A7.1  
 Operator: AK01  
 Column diameter: 0.25



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 1202053899	Date Received: 02/20/2010 08:55	%Moisture: 2.7
Client Sample: QC for batch 957837	Client: LANL010	Project: QC
Client ID: RE15-10-8314PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.1	Dilution: 1
Run Date: 02/27/2010 10:36	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:43	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a544.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		34.1	ug/kg	0.350	1.03
74-87-3	Chloromethane		34.3	ug/kg	0.308	1.03
75-01-4	Vinyl chloride		38.3	ug/kg	0.308	1.03
74-83-9	Bromomethane		33.5	ug/kg	0.308	1.03
75-00-3	Chloroethane		36.0	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane		33.7	ug/kg	0.308	1.03
67-64-1	Acetone		136	ug/kg	1.71	5.14
75-35-4	1,1-Dichloroethylene		35.2	ug/kg	0.308	1.03
74-88-4	Iodomethane		170	ug/kg	1.65	5.14
75-09-2	Methylene chloride		38.3	ug/kg	2.06	5.14
75-15-0	Carbon disulfide		176	ug/kg	1.29	5.14
156-60-5	trans-1,2-Dichloroethylene		34.0	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane		37.4	ug/kg	0.308	1.03
78-93-3	2-Butanone		129	ug/kg	1.54	5.14
156-59-2	cis-1,2-Dichloroethylene		35.8	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane		29.2	ug/kg	0.308	1.03
67-66-3	Chloroform		39.8	ug/kg	0.308	1.03
74-97-5	Bromochloromethane		40.1	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane		35.5	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene		34.9	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride		34.2	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane		38.4	ug/kg	0.308	1.03
71-43-2	Benzene		36.9	ug/kg	0.308	1.03
79-01-6	Trichloroethylene		38.1	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane		38.7	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane		37.5	ug/kg	0.308	1.03
74-95-3	Dibromomethane		41.1	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone		107	ug/kg	1.29	5.14
10061-01-5	cis-1,3-Dichloropropylene		28.9	ug/kg	0.308	1.03
108-88-3	Toluene		35.8	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene		30.0	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane		37.7	ug/kg	0.308	1.03
591-78-6	2-Hexanone		36.6	ug/kg	1.54	5.14
142-28-9	1,3-Dichloropropane		37.2	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene		31.3	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane		36.6	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane		37.9	ug/kg	0.308	1.03
108-90-7	Chlorobenzene		33.4	ug/kg	0.308	1.03

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 1202053899	Date Received: 02/20/2010 08:55	%Moisture: 2.7
Client Sample: QC for batch 957837	Client: LANL010	Project: QC
Client ID: RE15-10-8314PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 10:36	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:43	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a544.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		30.9	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes		64.3	ug/kg	0.308	2.06
95-47-6	o-Xylene		34.3	ug/kg	0.308	1.03
100-42-5	Styrene		23.6	ug/kg	0.308	1.03
75-25-2	Bromoform		36.2	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane		32.7	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane		35.8	ug/kg	0.308	1.03
108-86-1	Bromobenzene		31.0	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene		24.9	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene		28.6	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene		46.6	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene		28.7	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene		31.2	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene		28.9	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene		28.7	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene		25.1	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene		23.4	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene		27.7	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene		27.9	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene		24.1	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane		37.5	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.14	ug/kg	1.65	5.14
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		36.8	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene		29.9	ug/kg	0.308	1.03

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a544.d

Lab Smp Id: 1202053899

Client Smp ID: RE15-10-8314MS

Inj Date : 27-FEB-2010 10:36

Operator : AX01

Inst ID: VOA7.i

Smp Info : |1202053899|957839|1|VOAF|1|

Misc Info : LANL 5g N/A MS 24756002

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592

Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 44

QC Sample: MS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.73760	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						( ug/l)	(ug/Kg)
* 51 Fluorobenzene	96	15.317	15.316	(1.000)	739611	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	576703	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.992	20.991	(1.000)	316338	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	316022	49.4552	50.8
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	878057	46.7800	48.1
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	364670	43.8244	45.0
4 Dichlorodifluoromethane	85	5.148	5.147	(0.336)	76306	33.1337	34.1
5 Chloromethane	50	5.757	5.757	(0.376)	230612	33.3330	34.3
6 Vinyl chloride	62	6.188	6.187	(0.404)	228812	37.2350	38.3
7 Bromomethane	94	7.419	7.418	(0.484)	114307	32.6259	33.5
8 Chloroethane	64	7.845	7.845	(0.512)	110136	35.0444	36.0
9 Trichlorofluoromethane	101	8.799	8.789	(0.574)	154259	32.7951	33.7

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
13 Acetone	43	10.424	10.413	(0.681)	653959	132.004	136
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	109974	34.1914	35.2
102 1,4-Dichlorobenzene	146	21.012	21.012	(1.001)	248423	27.1785	27.9
16 Iodomethane	142	10.667	10.667	(0.696)	925100	165.052	170
22 Methylene chloride	86	11.439	11.438	(0.747)	112479	37.2232	38.3
19 Carbon disulfide	76	10.840	10.839	(0.708)	1940094	171.460	176
25 trans-1,2-Dichloroethylene	61	12.028	12.017	(0.785)	224549	33.0223	34.0
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	321819	36.3697	37.4
31 2-Butanone	43	13.723	13.723	(0.896)	692285	125.293	129
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	273369	34.8349	35.8
100 1,3-Dichlorobenzene	146	20.931	20.930	(0.997)	252297	26.9520	27.7
34 2,2-Dichloropropane	77	13.743	13.743	(0.897)	104403	28.4044	29.2
38 Chloroform	83	14.190	14.190	(0.926)	285435	38.7495	39.8
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	273714	29.1097	29.9
37 Bromochloromethane	49	14.088	14.088	(0.920)	226116	38.9755	40.1
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	174469	34.5144	35.5
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	179649	33.9435	34.9
45 Carbon tetrachloride	117	14.718	14.718	(0.961)	133778	33.2599	34.2
47 1,2-Dichloroethane	62	14.982	14.981	(0.978)	271693	37.3831	38.4
48 Benzene	78	14.982	14.981	(0.978)	579763	35.8495	36.8
53 Trichloroethylene	95	15.763	15.763	(1.029)	145062	37.0209	38.1
56 1,2-Dichloropropane	63	16.038	16.037	(1.047)	202959	37.6880	38.7
59 Bromodichloromethane	83	16.332	16.332	(1.066)	210917	36.5190	37.5
58 Dibromomethane	93	16.180	16.179	(1.056)	116214	40.0071	41.1
63 4-Methyl-2-pentanone	58	16.931	16.941	(0.907)	294462	103.752	107
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	197544	28.0851	28.9
65 Toluene	92	17.215	17.215	(0.922)	361358	34.8025	35.8
67 trans-1,3-Dichloropropylene	75	17.388	17.387	(0.931)	205305	29.1784	30.0
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	143590	36.7047	37.7
69 2-Hexanone	43	17.794	17.794	(0.953)	279923	35.6418	36.6 (R)
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	290202	36.1743	37.2
71 Tetrachloroethylene	164	17.814	17.814	(0.954)	87458	30.4793	31.3
72 Dibromochloromethane	129	18.058	18.057	(0.967)	150061	35.5638	36.6
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	156293	36.8371	37.9
76 Chlorobenzene	112	18.697	18.697	(1.002)	347530	32.5163	33.4
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	131731	35.7670	36.8
78 Ethylbenzene	91	18.758	18.768	(1.005)	583133	30.0580	30.9
79 m,p-Xylenes	106	18.870	18.870	(1.011)	456393	62.5119	64.3
80 o-Xylene	106	19.286	19.286	(1.033)	258320	33.3994	34.3
81 Styrene	104	19.286	19.286	(1.033)	284032	22.9327	23.6
82 Bromoform	173	19.540	19.540	(0.931)	106580	35.1644	36.2
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	227526	31.7828	32.7
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	54215	34.8058	35.8 (Q)
90 Bromobenzene	156	20.017	20.017	(0.954)	144419	30.1394	31.0
91 n-Propylbenzene	91	20.027	20.027	(0.954)	629382	24.1904	24.9
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	496006	27.8452	28.6
83 Isopropylbenzene	105	19.631	19.631	(0.935)	927976	45.3450	46.6

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	471621	27.8893	28.7
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	484933	30.3278	31.2
95 tert-Butylbenzene	119	20.525	20.535	(0.978)	430485	28.1014	28.9
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	477888	27.9234	28.7
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	550899	24.4205	25.1
99 4-Isopropyltoluene	119	20.860	20.859	(0.994)	370593	22.7281	23.4
104 n-Butylbenzene	91	21.296	21.296	(1.014)	441964	23.3974	24.0
107 1,2-Dibromo-3-chloropropane	157	22.291	22.291	(1.062)	42822	36.4710	37.5

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
 R - Spike/Surrogate failed recovery limits.

Data File: /chem/V007.1/022610v7/7a544.d  
 Date: 27-FEB-2010 10:36  
 Client ID: RE15-10-8314MS  
 Sample Info: 11202053899195783911.V007.1.1

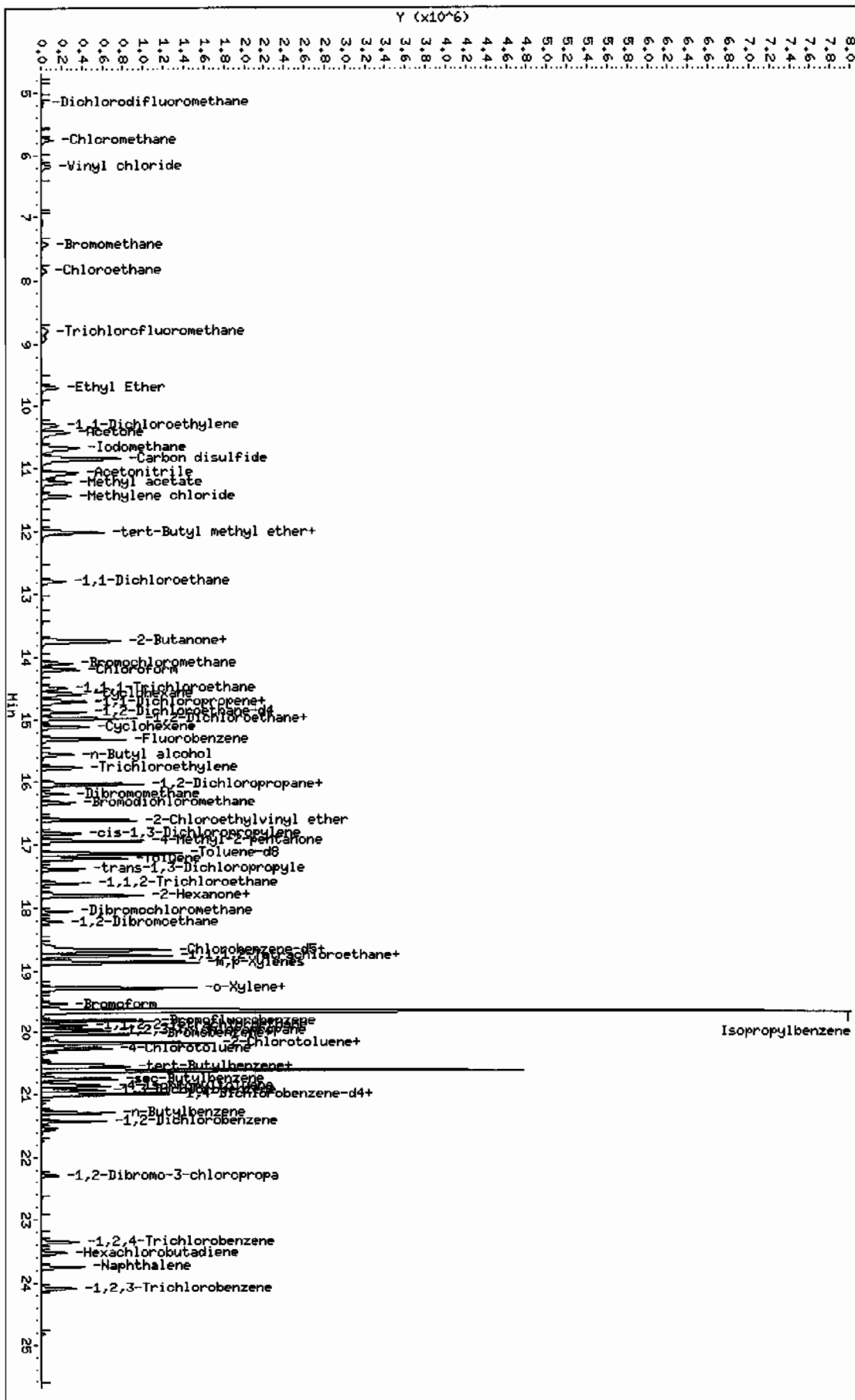
Column phase: DB-624

Instrument: V007.1

Operator: AX01

Column diameter: 0.25

/chem/V007.1/022610v7/7a544.d



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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 1202053900	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 2.7
<b>Client Sample:</b> QC for batch 957837	<b>Client:</b> LANL010	<b>Project:</b> QC
<b>Client ID:</b> RE15-10-8314PSD	<b>Method:</b> SW846 8260B	<b>SOP Ref:</b> GL-OA-E-038
<b>Batch ID:</b> 957839	<b>Inst:</b> VOA7.I	<b>Dilution:</b> 1
<b>Run Date:</b> 02/27/2010 11:10	<b>Analyst:</b> AXO1	<b>Purge Vol:</b> 5 mL
<b>Prep Date:</b> 02/26/2010 14:45	<b>Aliquot:</b> 5 g	<b>Final Volume:</b> 5 mL
<b>Data File:</b> 7a545.d	<b>Column:</b> DB-624	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		41.8	ug/kg	0.350	1.03
74-87-3	Chloromethane		39.4	ug/kg	0.308	1.03
75-01-4	Vinyl chloride		43.7	ug/kg	0.308	1.03
74-83-9	Bromomethane		38.4	ug/kg	0.308	1.03
75-00-3	Chloroethane		42.4	ug/kg	0.308	1.03
75-69-4	Trichlorofluoromethane		39.3	ug/kg	0.308	1.03
67-64-1	Acetone		141	ug/kg	1.71	5.14
75-35-4	1,1-Dichloroethylene		39.6	ug/kg	0.308	1.03
74-88-4	Iodomethane		191	ug/kg	1.65	5.14
75-09-2	Methylene chloride		41.2	ug/kg	2.06	5.14
75-15-0	Carbon disulfide		204	ug/kg	1.29	5.14
156-60-5	trans-1,2-Dichloroethylene		39.3	ug/kg	0.308	1.03
75-34-3	1,1-Dichloroethane		42.4	ug/kg	0.308	1.03
78-93-3	2-Butanone		127	ug/kg	1.54	5.14
156-59-2	cis-1,2-Dichloroethylene		39.7	ug/kg	0.308	1.03
594-20-7	2,2-Dichloropropane		34.8	ug/kg	0.308	1.03
67-66-3	Chloroform		40.5	ug/kg	0.308	1.03
74-97-5	Bromochloromethane		42.9	ug/kg	0.339	1.03
71-55-6	1,1,1-Trichloroethane		40.0	ug/kg	0.308	1.03
563-58-6	1,1-Dichloropropene		40.3	ug/kg	0.308	1.03
56-23-5	Carbon tetrachloride		38.0	ug/kg	0.308	1.03
107-06-2	1,2-Dichloroethane		40.3	ug/kg	0.308	1.03
71-43-2	Benzene		40.3	ug/kg	0.308	1.03
79-01-6	Trichloroethylene		41.8	ug/kg	0.339	1.03
78-87-5	1,2-Dichloropropane		42.7	ug/kg	0.308	1.03
75-27-4	Bromodichloromethane		40.8	ug/kg	0.308	1.03
74-95-3	Dibromomethane		42.8	ug/kg	0.308	1.03
108-10-1	4-Methyl-2-pentanone		102	ug/kg	1.29	5.14
10061-01-5	cis-1,3-Dichloropropylene		30.4	ug/kg	0.308	1.03
108-88-3	Toluene		37.6	ug/kg	0.308	1.03
10061-02-6	trans-1,3-Dichloropropylene		33.2	ug/kg	0.308	1.03
79-00-5	1,1,2-Trichloroethane		39.5	ug/kg	0.308	1.03
591-78-6	2-Hexanone		33.4	ug/kg	1.54	5.14
142-28-9	1,3-Dichloropropane		39.6	ug/kg	0.308	1.03
127-18-4	Tetrachloroethylene		35.3	ug/kg	0.308	1.03
124-48-1	Dibromochloromethane		38.6	ug/kg	0.308	1.03
106-93-4	1,2-Dibromoethane		38.1	ug/kg	0.308	1.03
108-90-7	Chlorobenzene		37.0	ug/kg	0.308	1.03



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 1202053900	Date Received: 02/20/2010 08:55	%Moisture: 2.7
Client Sample: QC for batch 957837	Client: LANL010	Project: QC
Client ID: RE15-10-8314PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 957839	Inst: VOA7.I	Dilution: 1
Run Date: 02/27/2010 11:10	Analyst: AXO1	Purge Vol: 5 mL
Prep Date: 02/26/2010 14:45	Aliquot: 5 g	Final Volume: 5 mL
Data File: 7a545.d	Column: DB-624	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		34.5	ug/kg	0.308	1.03
179601-23-1	m,p-Xylenes		73.0	ug/kg	0.308	2.06
95-47-6	o-Xylene		37.6	ug/kg	0.308	1.03
100-42-5	Styrene		25.4	ug/kg	0.308	1.03
75-25-2	Bromoform		37.1	ug/kg	0.308	1.03
79-34-5	1,1,2,2-Tetrachloroethane		33.8	ug/kg	0.308	1.03
96-18-4	1,2,3-Trichloropropane		38.6	ug/kg	0.308	1.03
108-86-1	Bromobenzene		34.9	ug/kg	0.308	1.03
103-65-1	n-Propylbenzene		28.5	ug/kg	0.308	1.03
95-49-8	2-Chlorotoluene		32.2	ug/kg	0.308	1.03
98-82-8	Isopropylbenzene		30.4	ug/kg	0.308	1.03
108-67-8	1,3,5-Trimethylbenzene		32.7	ug/kg	0.308	1.03
106-43-4	4-Chlorotoluene		31.3	ug/kg	0.308	1.03
98-06-6	tert-Butylbenzene		33.0	ug/kg	0.308	1.03
95-63-6	1,2,4-Trimethylbenzene		31.4	ug/kg	0.308	1.03
135-98-8	sec-Butylbenzene		29.0	ug/kg	0.308	1.03
99-87-6	4-Isopropyltoluene		23.0	ug/kg	0.308	1.03
541-73-1	1,3-Dichlorobenzene		30.2	ug/kg	0.308	1.03
106-46-7	1,4-Dichlorobenzene		31.0	ug/kg	0.308	1.03
104-51-8	n-Butylbenzene		27.5	ug/kg	0.308	1.03
96-12-8	1,2-Dibromo-3-chloropropane		36.6	ug/kg	0.308	1.03
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.14	ug/kg	1.65	5.14
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		39.7	ug/kg	0.308	1.03
95-50-1	1,2-Dichlorobenzene		31.9	ug/kg	0.308	1.03

GEL Laboratories LLC

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

Data file : /chem/VOA7.i/022610v7/7a545.d

Lab Smp Id: 1202053900

Client Smp ID: RE15-10-8314MSD

Inj Date : 27-FEB-2010 11:10

Operator : AX01

Inst ID: VOA7.i

Smp Info : |1202053900|957839|1|VOAF|1|

Misc Info : LANL 5g N/A MSD 24756002

Comment :

Method : /chem/VOA7.i/022610v7/VOA7-8260B-021710PM.m

Meth Date : 15-Mar-2010 06:00 ale01592

Quant Type: ISTD

Cal Date : 18-FEB-2010 00:08

Cal File: 7z324.d

Als bottle: 45

QC Sample: MSD

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1950.sub

Target Version: 3.50

Processing Host: prdsrv07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	2.73760	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						( ug/l)	(ug/Kg)
* 51 Fluorobenzene	96	15.316	15.316	(1.000)	842933	50.0000	
* 75 Chlorobenzene-d5	117	18.667	18.667	(1.000)	651089	50.0000	
* 101 1,4-Dichlorobenzene-d4	152	20.991	20.991	(1.000)	345803	50.0000	
\$ 46 1,2-Dichloroethane-d4	65	14.880	14.880	(0.971)	370924	50.9319	52.4
\$ 64 Toluene-d8	98	17.134	17.134	(0.918)	1013924	47.8470	49.2
\$ 86 Bromofluorobenzene	95	19.814	19.814	(0.944)	420273	46.2030	47.5
4 Dichlorodifluoromethane	85	5.147	5.147	(0.336)	106739	40.6673	41.8
5 Chloromethane	50	5.757	5.757	(0.376)	302411	38.3531	39.4
6 Vinyl chloride	62	6.187	6.187	(0.404)	297341	42.4559	43.6
7 Bromomethane	94	7.429	7.418	(0.485)	149245	37.3766	38.4
8 Chloroethane	64	7.845	7.845	(0.512)	147557	41.1964	42.4
9 Trichlorofluoromethane	101	8.789	8.789	(0.574)	204811	38.2052	39.3

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
13 Acetone	43	10.423	10.413	(0.681)	776746	137.570	141
14 1,1-Dichloroethylene	96	10.312	10.312	(0.673)	141058	38.4800	39.6
102 1,4-Dichlorobenzene	146	21.012	21.012	(1.001)	300994	30.1241	31.0
16 Iodomethane	142	10.667	10.667	(0.696)	1189101	186.149	191
22 Methylene chloride	86	11.449	11.438	(0.747)	137969	40.0621	41.2
19 Carbon disulfide	76	10.840	10.839	(0.708)	2552861	197.960	204
25 trans-1,2-Dichloroethylene	61	12.027	12.017	(0.785)	296104	38.2077	39.3
28 1,1-Dichloroethane	63	12.799	12.799	(0.836)	416153	41.2659	42.4
31 2-Butanone	43	13.723	13.723	(0.896)	779783	123.830	127
33 cis-1,2-Dichloroethylene	61	13.733	13.733	(0.897)	345298	38.6073	39.7
100 1,3-Dichlorobenzene	146	20.930	20.930	(0.997)	300886	29.4038	30.2
34 2,2-Dichloropropane	77	13.743	13.743	(0.897)	141860	33.8644	34.8
38 Chloroform	83	14.190	14.190	(0.926)	330861	39.4107	40.5
105 1,2-Dichlorobenzene	146	21.438	21.438	(1.021)	319018	31.0369	31.9
37 Bromochloromethane	49	14.088	14.088	(0.920)	275662	41.6915	42.9
41 1,1,1-Trichloroethane	97	14.484	14.484	(0.946)	224111	38.9006	40.0
44 1,1-Dichloropropene	75	14.697	14.697	(0.960)	236223	39.1620	40.3
45 Carbon tetrachloride	117	14.718	14.718	(0.961)	169409	36.9558	38.0
47 1,2-Dichloroethane	62	14.981	14.981	(0.978)	324584	39.1863	40.3
48 Benzene	78	14.981	14.981	(0.978)	721905	39.1672	40.3
53 Trichloroethylene	95	15.763	15.763	(1.029)	181639	40.6736	41.8
56 1,2-Dichloropropane	63	16.037	16.037	(1.047)	254764	41.5090	42.7
59 Bromodichloromethane	83	16.332	16.332	(1.066)	260921	39.6393	40.8
58 Dibromomethane	93	16.179	16.179	(1.056)	137676	41.5860	42.8
63 4-Methyl-2-pentanone	58	16.941	16.941	(0.908)	317891	99.2100	102 (R)
62 cis-1,3-Dichloropropylene	75	16.819	16.819	(1.098)	237121	29.5796	30.4
65 Toluene	92	17.215	17.215	(0.922)	428856	36.5844	37.6
67 trans-1,3-Dichloropropylene	75	17.387	17.387	(0.931)	256242	32.2570	33.2
68 1,1,2-Trichloroethane	83	17.611	17.611	(0.943)	169868	38.4610	39.5
69 2-Hexanone	43	17.804	17.794	(0.954)	288040	32.4852	33.4 (R)
70 1,3-Dichloropropane	76	17.794	17.794	(0.953)	348959	38.5288	39.6
71 Tetrachloroethylene	164	17.814	17.814	(0.954)	111193	34.3237	35.3
72 Dibromochloromethane	129	18.057	18.057	(0.967)	178724	37.5176	38.6
73 1,2-Dibromoethane	107	18.220	18.220	(0.976)	177691	37.0957	38.1
76 Chlorobenzene	112	18.697	18.697	(1.002)	433771	35.9486	37.0
77 1,1,1,2-Tetrachloroethane	131	18.758	18.758	(1.005)	160691	38.6454	39.7
78 Ethylbenzene	91	18.758	18.768	(1.005)	734804	33.5487	34.5
79 m,p-Xylenes	106	18.870	18.870	(1.011)	585097	70.9845	73.0
80 o-Xylene	106	19.286	19.286	(1.033)	319406	36.5794	37.6
81 Styrene	104	19.286	19.286	(1.033)	344968	24.6705	25.4
82 Bromoform	173	19.540	19.540	(0.931)	119515	36.0722	37.1
87 1,1,2,2-Tetrachloroethane	83	19.885	19.885	(0.947)	257265	32.8749	33.8
89 1,2,3-Trichloropropane	110	19.966	19.966	(0.951)	63949	37.5568	38.6
90 Bromobenzene	156	20.017	20.017	(0.954)	177979	33.9783	34.9
91 n-Propylbenzene	91	20.027	20.027	(0.954)	787573	27.6912	28.5
93 2-Chlorotoluene	91	20.169	20.169	(0.961)	609363	31.2941	32.2
83 Isopropylbenzene	105	19.631	19.631	(0.935)	660876	29.5417	30.4

Compounds	QUANT SIG			CONCENTRATIONS			
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
92 1,3,5-Trimethylbenzene	105	20.169	20.169	(0.961)	587346	31.7732	32.7
94 4-Chlorotoluene	91	20.271	20.271	(0.966)	531703	30.4194	31.3
95 tert-Butylbenzene	119	20.535	20.535	(0.978)	537092	32.0731	33.0
96 1,2,4-Trimethylbenzene	105	20.565	20.565	(0.980)	571926	30.5706	31.4
98 sec-Butylbenzene	105	20.748	20.748	(0.988)	694875	28.1781	29.0
99 4-Isopropyltoluene	119	20.859	20.859	(0.994)	399567	22.4170	23.0
104 n-Butylbenzene	91	21.296	21.296	(1.014)	552347	26.7495	27.5
107 1,2-Dibromo-3-chloropropane	157	22.301	22.291	(1.062)	45605	35.5587	36.6

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/V007.i/022610v7/7a545.d  
 Date: 27-FEB-2010 11:10  
 Client ID: REL6-10-8314MSD  
 Sample Info: 112020539001957839111V007.11

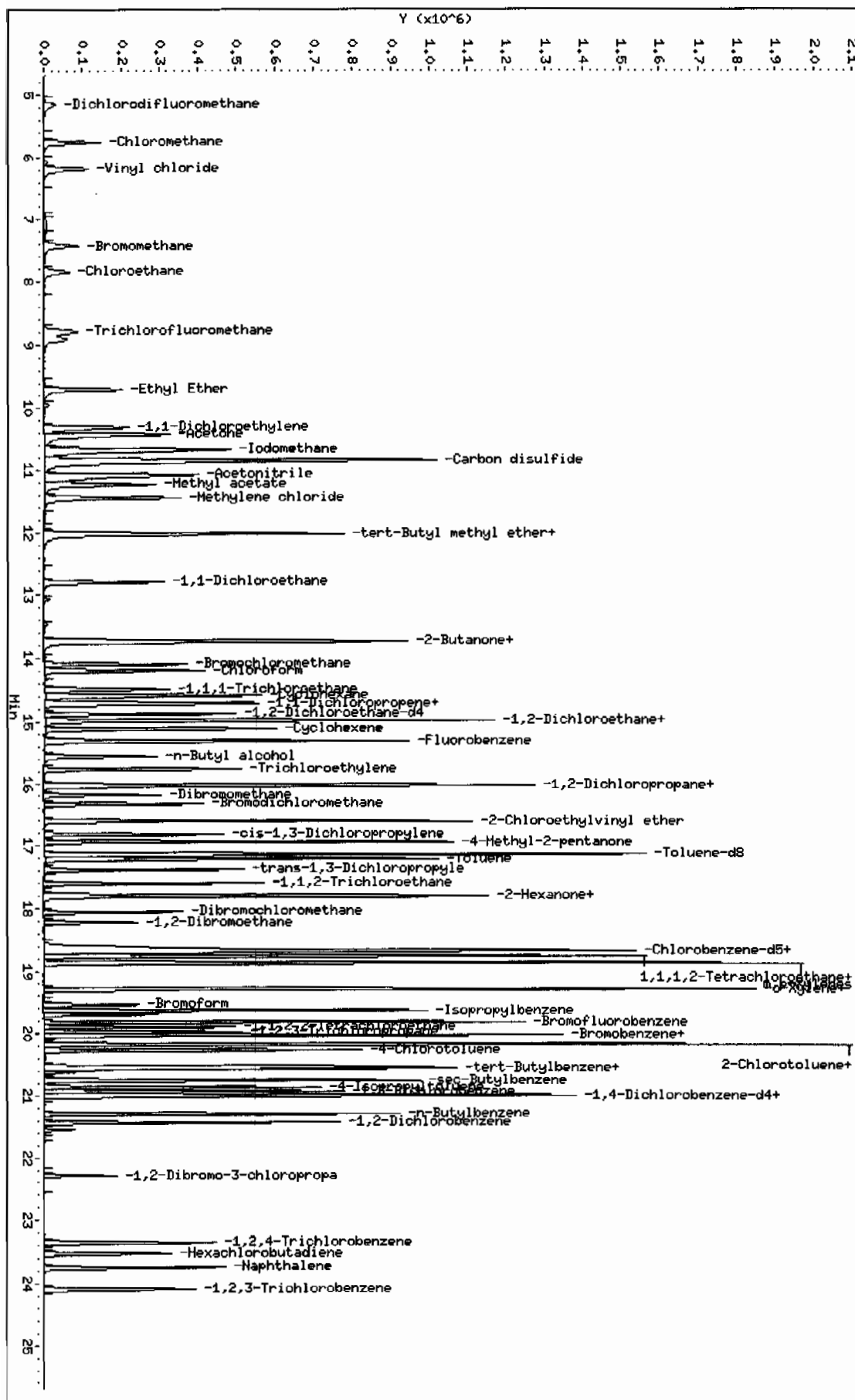
Column phase: DB-624

Instrument: V007.1

Operator: AX01

Column diameter: 0.25

/chem/V007.i/022610v7/7a545.d



# Miscellaneous Data

Prep Logbook

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

Batch ID: 957837  
Analyst: Alex Olson  
Method: SW846 5030  
Lab SOP: GL-OA-E-038 REV# 14  
Instrument: Sartorius Balance B-001

Verified by:

TypeSample IdDescriptionSerial NumberSpike AmountSpike Units

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
247562001	26-FEB-2010 14:39:00	Misc Solid	5	5	1	N/A
247562002	26-FEB-2010 14:41:00	Soil	5	5	1	N/A
1202053899 PS (247562002)	26-FEB-2010 14:43:00	Soil	5	5	1	N/A
1202053900 PSD (247562002)	26-FEB-2010 14:45:00	Soil	5	5	1	N/A
247562003	26-FEB-2010 14:47:00	Soil	5	5	1	N/A
247562004	26-FEB-2010 14:49:00	Soil	5	5	1	N/A
247562005	26-FEB-2010 14:51:00	Soil	5	5	1	N/A
247562006	26-FEB-2010 14:53:00	Soil	5	5	1	N/A
247562007	26-FEB-2010 14:55:00	Soil	5	5	1	N/A
247562008	26-FEB-2010 14:57:00	Soil	5	5	1	N/A
247562009	26-FEB-2010 14:59:00	Soil	5	5	1	N/A
1202053898 MB	26-FEB-2010 15:00:00	Soil	5	5	1	N/A
1202053901 LCS	26-FEB-2010 15:00:00	Soil	5	5	1	N/A
1202053902 LCS	26-FEB-2010 15:00:00	Soil	5	5	1	N/A

Reagent/Solvent Lot ID	Description	Amount	Comments:
------------------------	-------------	--------	-----------

Date: 2/17/2010 Method 8260B/624 Operator: AXO1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Multiplier Voltage: 1941

Daily Instrument Readings:

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/17/2010  
(See pg. 43 for ICAL Std. Sci. Ids)  
NaHSO4 lot # N/A  
CI test lot # N/A  
Sequence Number: 021710V7

Daily Standard Solution ID# Volume Added for Purge (ul) MS/ Bk/ LCS BFB  
LONG ICV W7VM100203-01 1 1 1 5+5  
SS UVM100203-02 1 1 1  
SHORT ICV W7VM100217-23 5+5  
BFB UVM100203-02 1

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.	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable (Q/X)	Comments
2/17/2010	8:37	7Z301.D	120200-----		RINSE	5mL	1	N/A	1	w	AXO1	N/A	O	
2/17/2010	9:12	7Z302.D	W7VM100217-01		OCV	5mL	1	N/A	2	w	AXO1	N/A	X	UVM100106-07C/UVM100202-07C
2/17/2010	9:47	7Z303.D	W7VM100217-02		LCS	5mL	1	N/A	3	w	AXO1	N/A	X	UVM100126-01D/UVM100214-01
2/17/2010	10:22	7Z304.D	W7VM100217-03		LCS	5g	1	N/A	4	s	AXO1	N/A	X	UVM100126-01D/UVM100214-01
2/17/2010	11:21	7Z305.D	W7VM100217-04		LCS	5mL	1	N/A	5	w	AXO1	N/A	X	UVM100126-02C/UVM100214-01
2/17/2010	12:21	7Z306.D	120200-----		RINSE	5mL	1	N/A	1	w	AXO1	N/A	X	
2/17/2010	12:54	7Z307.D	W7VM100217-05		LCS	5mL	1	N/A	2	w	AXO1	N/A	X	UVM100126-01D/UVM100214-01
2/17/2010	14:55	7Z308.D	120200-----		RINSE	5mL	1	N/A	1	w	AXO1	N/A	X	
2/17/2010	15:29	7Z309.D	UVM100203-02		BFB01	5mL	1	N/A	2	w	AXO1	N/A	O	
2/17/2010	16:02	7Z310.D	W7VM100217-06		VSTD001	5mL	1	N/A	3	w	AXO1	N/A	O	UVM100106-02C/UVM100202-02C
2/17/2010	16:35	7Z311.D	W7VM100217-07		VSTD002	5mL	1	N/A	4	w	AXO1	N/A	O	UVM100106-03C/UVM100202-03C
2/17/2010	17:09	7Z312.D	W7VM100217-08		VSTD005	5mL	1	N/A	5	w	AXO1	N/A	O	UVM100106-04C/UVM100202-04C
2/17/2010	17:44	7Z313.D	W7VM100217-09		VSTD010	5mL	1	N/A	6	w	AXO1	N/A	O	UVM100106-05C/UVM100202-05C
2/17/2010	18:20	7Z314.D	W7VM100217-10		VSTD020	5mL	1	N/A	7	w	AXO1	N/A	O	UVM100106-06C/UVM100202-06C
2/17/2010	18:55	7Z315.D	W7VM100217-11		VSTD050	5mL	1	N/A	8	w	AXO1	N/A	O	UVM100106-07C/UVM100202-07C
2/17/2010	19:30	7Z316.D	W7VM100217-12		VSTD100	5mL	1	N/A	9	w	AXO1	N/A	O	UVM100106-08C/UVM100202-08C
2/17/2010	20:05	7Z317.D	120200-----		RINSE	5mL	1	N/A	10	w	AXO1	N/A	X	
2/17/2010	20:39	7Z318.D	W7VM100217-13		VSTD005	5mL	1	N/A	11	w	AXO1	N/A	O	UVM100106-01C/UVM100202-01C
2/17/2010	21:14	7Z319.D	W7VM100217-14		VSTD005S	5mL	1	N/A	12	w	AXO1	N/A	O	UVM100215-01/UVM100125-01D
2/17/2010	21:49	7Z320.D	W7VM100217-15		VSTD010S	5mL	1	N/A	13	w	AXO1	N/A	O	UVM100215-02/UVM100125-02D
2/17/2010	22:24	7Z321.D	W7VM100217-16		VSTD020S	5mL	1	N/A	14	w	AXO1	N/A	O	UVM100215-03/UVM100125-03D
2/17/2010	22:59	7Z322.D	W7VM100217-17		VSTD050S	5mL	1	N/A	15	w	AXO1	N/A	O	UVM100215-04/UVM100125-04D
2/17/2010	23:33	7Z323.D	W7VM100217-18		VSTD100S	5mL	1	N/A	16	w	AXO1	N/A	O	UVM100215-05/UVM100125-05D
2/18/2010	0:08	7Z324.D	W7VM100217-19		VSTD250S	5mL	1	N/A	17	w	AXO1	N/A	O	UVM100215-06/UVM100125-06D
2/18/2010	0:42	7Z325.D	W7VM100217-20		VSTD500S	5mL	1	N/A	18	w	AXO1	N/A	O	UVM100215-07/UVM100125-07D
2/18/2010	1:17	7Z326.D	120200-----		RINSE	5mL	1	N/A	19	w	AXO1	N/A	X	
2/18/2010	1:52	7Z327.D	W7VM100217-21		ICV	5mL	1	N/A	20	w	AXO1	N/A	X	UVM100126-02C/UVM100214-01
2/18/2010	2:27	7Z328.D	W7VM100217-22		ICV	5mL	1	N/A	21	w	AXO1	N/A	O	UVM100126-01E/UVM100214-01
2/18/2010	3:03	7Z329.D	W7VM100217-23		SICV	5mL	1	N/A	22	w	AXO1	N/A	O	UVM091216-08B/UVM100125-08C
2/18/2010	3:38	7Z330.D	120200-----		RINSE	5mL	1	N/A	23	w	AXO1	N/A	X	



ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 2/26/2010 Method 8260B/624 Operator: AXO1  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
Daily Instrument Readings: Multiplier Voltage: 1941

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 2/17/2010  
 (See pg. 43 for ICAL Std. Std. Ids) N/A  
 NaHSO4 lot # 81710  
 CI test lot # 81710  
 Sequence Number: 022610V7PM  
 Daily Standard Solution ID# W7VM100226-07  
 CCV IS UVM100203-01 1 1 1  
 SS UVM100203-02 1 1 1  
 LCS/MS W7VM100226-07 5+5  
 BFB UVM100203-02 1  
 SHORT W7VM100226-08 5+5  
 DHEC N/A 5+5  
 Purge Amount  
 5 Water Purge Vol: 5g  
 Soil Purge Wt: N  
 Mid level ext. MeOH Vol: N/A  
 ul  
 Methanol Lot #: N/A  
 Heated Purge: x

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 Acceptable (Y/N)	Comments
2/26/2010	22:20	7A523.D	120200-....		GEL	RINSE	5mL	1	N/A	23	AXO1	N/A	X
2/26/2010	22:56	7A524.D	W7VM100226-06		GEL	CCV	5g	1	N/A	24	AXO1	N/A	X
2/26/2010	23:32	7A525.D	W7VM100226-07		GEL	BFB/CCV/LCS	5g	1	N/A	25	AXO1	N/A	O
2/27/2010	0:07	7A526.D	W7VM100226-08		GEL	SHORT/SLCS	5g	1	N/A	26	AXO1	N/A	O
2/27/2010	0:42	7A527.D	120200-....		GEL	BLANK	5g	1	N/A	27	AXO1	N/A	O
2/27/2010	1:17	7A528.D	247775011		LANL	958036	5g	1	N/A	28	AXO1	N/A	O
2/27/2010	1:52	7A529.D	247775012		LANL	958036	5g	1	N/A	29	AXO1	N/A	O
2/27/2010	2:27	7A530.D	247775013		LANL	958036	5g	1	N/A	30	AXO1	N/A	O
2/27/2010	3:02	7A531.D	247775014		LANL	958036	5g	1	N/A	31	AXO1	N/A	O
2/27/2010	3:37	7A532.D	247775015		LANL	958036	5g	1	N/A	32	AXO1	N/A	O
2/27/2010	4:12	7A533.D	247775016		LANL	958036	5g	1	N/A	33	AXO1	N/A	O
2/27/2010	4:47	7A534.D	247775017		LANL	958036	5g	1	N/A	34	AXO1	N/A	O
2/27/2010	5:23	7A535.D	247562001		LANL	957839	5g	1	N/A	35	AXO1	N/A	O
2/27/2010	5:58	7A536.D	247562002		LANL	957839	5g	1	N/A	36	AXO1	N/A	O
2/27/2010	6:33	7A537.D	247562003		LANL	957839	5g	1	N/A	37	AXO1	N/A	O
2/27/2010	7:08	7A538.D	247562004		LANL	957839	5g	1	N/A	38	AXO1	N/A	O
2/27/2010	7:43	7A539.D	247562005		LANL	957839	5g	1	N/A	39	AXO1	N/A	O
2/27/2010	8:17	7A540.D	247562006		LANL	957839	5g	1	N/A	40	AXO1	N/A	O
2/27/2010	8:53	7A541.D	247562007		LANL	957839	5g	1	N/A	41	AXO1	N/A	O
2/27/2010	9:27	7A542.D	247562008		LANL	957839	5g	1	N/A	42	AXO1	N/A	O
2/27/2010	10:02	7A543.D	247562009		LANL	957839	5g	1	N/A	43	AXO1	N/A	O
2/27/2010	10:36	7A544.D	1202053899		LANL	957839	5g	1	N/A	44	AXO1	N/A	O
2/27/2010	11:10	7A545.D	1202053900		LANL	957839	5g	1	N/A	45	AXO1	N/A	O

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 15-MAR-10	<b>Division:</b> Industrial	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> VOA GC/MS	<b>Test / Method:</b> SW846 8260B	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 957839	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG): 247562(10-1950)</b> <b>Application Issues:</b> Failed Recovery for MS/PS Failed RPD for MS/MSD, or PS/PSD Failed Recovery for MSD/PSD			
<b>Specification and Requirements</b> <b>Exception Description:</b>		<b>DER Disposition:</b>	
1. The Matrix Spike (1202053899) did not meet acceptance criteria for the following target analytes:  2-Hexanone recovered at 14.3%. The limits are 30%-139%.  2. The Matrix Spike and Duplicate (1202053899&1202053900) did not meet RPD acceptance criteria for the following target analytes:  Dichlorodifluoromethane recovered at 20.4%. The limits are 0%-19%. Isopropylbenzene recovered at 42.2%. The limits are 0%-22%.  3. The Matrix Spike Duplicate 1202053900 did not meet acceptance criteria for the following target analytes:  2-Hexanone recovered at 13%. The limits are 30%-139%. 4-Methyl-2-pentanone recovered at 39.7%. The limits are 40%-137%.		1.,2.,3., The Matrix Spike and Matrix Spike Duplicate did not meet acceptance criteria for Recovery and RPD. However, as the MS and MSD displayed similar recoveries, the failures were attributed to sample matrix interference and the data have been reported.	

**Originator's Name:**

Alex Olson

15-MAR-10

**Data Validator/Group Leader:**

Kelle Bellamy

17-MAR-10

# **GC/MS Semivolatile Analysis**

**Semi-Volatile Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1950**

**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: 956677

Prep Batch Number: 956676

**Sample Analysis**

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

<b>Sample ID</b>	<b>Client ID</b>
247562002	RE15-10-8314
247562003	RE15-10-8313
247562004	RE15-10-8312
247562005	RE15-10-8315
247562006	RE15-10-8311
247562007	RE15-10-8310
247562008	RE15-10-8303
247562009	RE15-10-8302
1202051280	Method Blank (MB)
1202051281	Laboratory Control Sample (LCS)
1202051282	247551001(RE15-10-8349) Matrix Spike (MS)
1202051283	247551001(RE15-10-8349) Matrix Spike Duplicate (MSD)

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

**Preparation/Analytical Method Verification**

**SOP Reference**

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

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

**Calibration Information**

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

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

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

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

#### **Initial Calibration**

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

#### **CCV Requirements**

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

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

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

The MB analyzed with this SDG met the acceptance criteria.

##### **Surrogate Recoveries**

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

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

The LCS spike recoveries met the acceptance limits.

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

The non-SDG sample 247551001 (RE15-10-8349) was selected for analysis as the matrix spike and matrix spike duplicate. Please see the associated raw data files located in the Miscellaneous Section of the data report.

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

The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**

The MSD(1202051283) recovered Di-n-octylphthalate at 145%. The limits are 31%-143%. Since the MS(1202051282) displayed a similarly high (but passing) recovery for Di-n-octylphthalate to the MS, the failure was attributed to matrix interference and the data were reported.

**MS/MSD Relative Percent Difference (RPD) Statement**

The MS(1202051282)/MSD(1202051283) RPD value for Hexachlorocyclopentadiene was 40%. The limit is 30%. Because Hexachlorocyclopentadiene was individually within the acceptance limits for the MS and MSD, the data were reported.

**Internal Standard (ISTD) Acceptance**

The internal standard responses were outside of the acceptance criteria for the following sample: 247562003 (RE15-10-8313). The sample was re-analyzed and the failures were confirmed. The first analysis data are reported. The re-analysis raw data are in the Miscellaneous Section.

**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**

A DER was not required for the samples reported with this SDG.

**Manual Integrations**

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

**Additional Comments**

Additional comments were not required for this SDG.

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The

data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**System Configuration**

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD3.I	HP Mass Spectrometer	HP7890A/HP5975C	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

**Certification Statement**

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

**Review Validation:**

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

Reviewer: Alan Beachum Date: 3-19-10



# **Sample Data Summary**

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562009	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 5.2
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8302	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 20:44	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.15 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0531.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	70.0	350
108-95-2	Phenol	U	350	ug/kg	70.0	350
95-57-8	2-Chlorophenol	U	350	ug/kg	70.0	350
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	70.0	350
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	70.0	350
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	70.0	350
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350
87-86-5	Pentachlorophenol	U	350	ug/kg	87.5	350
129-00-0	Pyrene		256	ug/kg	10.5	35.0
110-86-1	Pyridine	U	350	ug/kg	70.0	350
62-53-3	Aniline	U	350	ug/kg	105	350
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	70.0	350
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	70.0	350
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	70.0	350
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	70.0	350
95-48-7	o-Cresol	U	350	ug/kg	70.0	350
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350
67-72-1	Hexachloroethane	U	350	ug/kg	70.0	350
98-95-3	Nitrobenzene	U	350	ug/kg	70.0	350
78-59-1	Isophorone	U	350	ug/kg	70.0	350
88-75-5	2-Nitrophenol	U	350	ug/kg	70.0	350
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	70.0	350
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	70.0	350
65-85-0	Benzoic acid	U	700	ug/kg	175	700
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0
106-47-8	4-Chloroaniline	U	350	ug/kg	70.0	350
87-68-3	Hexachlorobutadiene	U	350	ug/kg	70.0	350
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	7.00	35.0
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	70.0	350
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	70.0	350
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	70.0	350
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0
88-74-4	2-Nitroaniline	U	350	ug/kg	70.0	350
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	350	ug/kg	70.0	350

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

SDG Number: 10-1950  
Lab Sample ID: 247562009

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8302  
Batch ID: 956677  
Run Date: 03/05/2010 20:44  
Prep Date: 02/23/2010 21:09  
Data File: s3c0531.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	350	ug/kg	70.0	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	J	20.3	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	700	ug/kg	133	700
132-64-9	Dibenzofuran	U	350	ug/kg	70.0	350
84-66-2	Diethylphthalate	U	350	ug/kg	70.0	350
86-73-7	Fluorene	J	16.4	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	70.0	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	70.0	350
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	350	ug/kg	70.0	350
122-66-7	Azobenzene	U	350	ug/kg	70.0	350
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	70.0	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	70.0	350
85-01-8	Phenanthrene		182	ug/kg	10.5	35.0
120-12-7	Anthracene		40.6	ug/kg	7.00	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	70.0	350
206-44-0	Fluoranthene		299	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	70.0	350
56-55-3	Benzo(a)anthracene		128	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene		122	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	70.0	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	70.0	350
205-99-2	Benzo(b)fluoranthene		269	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene		136	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene		65.2	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene		63.7	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	70.0	350

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	2150	ug/kg		JA
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	858	ug/kg	93	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562009

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1197-01-9	Benzenemethanol, .alpha.,.alpha.,4-trime	4.51	343	ug/kg	80	NJ
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	4.64	494	ug/kg	98	NJ
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	4.93	419	ug/kg	99	NJ
	Unknown	7.14	588	ug/kg		J
	Unknown	7.24	582	ug/kg		J
	Unknown	7.27	290	ug/kg		J
81038-44-0	3-Bromo-4-hydroxy-5-methoxyphenylacetoni	7.36	738	ug/kg	90	NJ
	Unknown	7.42	789	ug/kg		J
1000197-84-7	5-Isopropylidene-6-methyldeca-3,6,9-trie	7.47	512	ug/kg	91	NJ
	Unknown	7.52	266	ug/kg		J
	Unknown	7.58	571	ug/kg		J
	Unknown	7.61	258	ug/kg		J
	Unknown	7.78	276	ug/kg		J
	Unknown	7.87	732	ug/kg		J
	Unknown	7.92	317	ug/kg		J
	Unknown	8.05	577	ug/kg		J
17974-57-1	(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	8.11	725	ug/kg	83	NJ
	Unknown	8.14	625	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.41	815	ug/kg	86	NJ
	Unknown	8.55	577	ug/kg		J
	Unknown	8.64	412	ug/kg		J
	Unknown	8.79	302	ug/kg		J
	Unknown	8.85	227	ug/kg		J
	Unknown	8.98	160	ug/kg		J

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562008	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.2
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8303	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 20:21	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.17 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0530.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.5	342
108-95-2	Phenol	U	342	ug/kg	68.5	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.5	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.5	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.5	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.5	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.6	342
129-00-0	Pyrene		92.6	ug/kg	10.3	34.2
110-86-1	Pyridine	U	342	ug/kg	68.5	342
62-53-3	Aniline	U	342	ug/kg	103	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.5	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.5	342
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.5	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.5	342
95-48-7	o-Cresol	U	342	ug/kg	68.5	342
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.5	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.5	342
78-59-1	Isophorone	U	342	ug/kg	68.5	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.5	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.5	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.5	342
65-85-0	Benzoic acid	U	685	ug/kg	171	685
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.5	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.5	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.85	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.5	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.5	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.5	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.5	342
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	342	ug/kg	68.5	342

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562008	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.2
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8303	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 20:21	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.17 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0530.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	342	ug/kg	68.5	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2
51-28-5	2,4-Dinitrophenol	U	685	ug/kg	130	685
132-64-9	Dibenzofuran	U	342	ug/kg	68.5	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.5	342
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.5	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.5	342
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.5	342
122-66-7	Azobenzene	U	342	ug/kg	68.5	342
	<i>l</i> ,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.5	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.5	342
85-01-8	Phenanthrene		61.7	ug/kg	10.3	34.2
120-12-7	Anthracene	J	11.9	ug/kg	6.85	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.5	342
206-44-0	Fluoranthene		119	ug/kg	10.3	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.5	342
56-55-3	Benzo(a)anthracene		51.2	ug/kg	10.3	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342
218-01-9	Chrysene		46.3	ug/kg	10.3	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.5	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.5	342
205-99-2	Benzo(b)fluoranthene		99.3	ug/kg	10.3	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2
50-32-8	Benzo(a)pyrene		50.0	ug/kg	10.3	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	J	25.2	ug/kg	10.3	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2
191-24-2	Benzo(ghi)perylene	J	24.6	ug/kg	10.3	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.5	342

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1090	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.28	165	ug/kg	98	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562008	Date Received: 02/20/2010 08:55	%Moisture: 3.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8303	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 20:21	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.17 g	Final Volume: 1 mL
Data File: s3c0530.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
25269-17-4	Thunbergol	7.42	154	ug/kg	87	NJ
301-02-0	9-Octadecenamide, (Z)-	7.99	142	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	146	ug/kg	98	NJ
	Unknown	8.97	232	ug/kg		J
	Unknown	15.51	335	ug/kg		J

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562007	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.7
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8310	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 19:58	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.07 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0529.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	345	ug/kg	69.0	345
108-95-2	Phenol	U	345	ug/kg	69.0	345
95-57-8	2-Chlorophenol	U	345	ug/kg	69.0	345
106-46-7	1,4-Dichlorobenzene	U	345	ug/kg	69.0	345
621-64-7	N-Nitrosodipropylamine	U	345	ug/kg	69.0	345
59-50-7	4-Chloro-3-methylphenol	U	345	ug/kg	69.0	345
83-32-9	Acenaphthene		38.9	ug/kg	11.4	34.5
121-14-2	2,4-Dinitrotoluene	U	345	ug/kg	34.5	345
100-02-7	4-Nitrophenol	U	345	ug/kg	114	345
87-86-5	Pentachlorophenol	U	345	ug/kg	86.3	345
129-00-0	Pyrene		430	ug/kg	10.4	34.5
110-86-1	Pyridine	U	345	ug/kg	69.0	345
62-53-3	Aniline	U	345	ug/kg	104	345
111-44-4	bis(2-Chloroethyl) ether	U	345	ug/kg	69.0	345
541-73-1	1,3-Dichlorobenzene	U	345	ug/kg	69.0	345
100-51-6	Benzyl alcohol	U	345	ug/kg	104	345
95-50-1	1,2-Dichlorobenzene	U	345	ug/kg	69.0	345
108-60-1	bis(2-Chloroisopropyl)ether	U	345	ug/kg	69.0	345
95-48-7	o-Cresol	U	345	ug/kg	69.0	345
65794-96-9	m,p-Cresols	U	345	ug/kg	104	345
67-72-1	Hexachloroethane	U	345	ug/kg	69.0	345
98-95-3	Nitrobenzene	U	345	ug/kg	69.0	345
78-59-1	Isophorone	U	345	ug/kg	69.0	345
88-75-5	2-Nitrophenol	U	345	ug/kg	69.0	345
105-67-9	2,4-Dimethylphenol	U	345	ug/kg	121	345
111-91-1	bis(2-Chloroethoxy)methane	U	345	ug/kg	69.0	345
120-83-2	2,4-Dichlorophenol	U	345	ug/kg	69.0	345
65-85-0	Benzoic acid	U	690	ug/kg	173	690
91-20-3	Naphthalene	J	33.7	ug/kg	10.4	34.5
106-47-8	4-Chloroaniline	U	345	ug/kg	69.0	345
87-68-3	Hexachlorobutadiene	U	345	ug/kg	69.0	345
91-57-6	2-Methylnaphthalene	J	8.64	ug/kg	6.90	34.5
77-47-4	Hexachlorocyclopentadiene	U	345	ug/kg	69.0	345
88-06-2	2,4,6-Trichlorophenol	U	345	ug/kg	69.0	345
95-95-4	2,4,5-Trichlorophenol	U	345	ug/kg	69.0	345
91-58-7	2-Chloronaphthalene	U	34.5	ug/kg	11.4	34.5
88-74-4	2-Nitroaniline	U	345	ug/kg	69.0	345
99-09-2	3-Nitroaniline	U	345	ug/kg	69.0	345



Semi-Volatile  
Certificate of Analysis  
Sample Summary

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SDG Number: 10-1950  
Lab Sample ID: 247562007

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8310  
Batch ID: 956677  
Run Date: 03/05/2010 19:58  
Prep Date: 02/23/2010 21:09  
Data File: s3c0529.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	345	ug/kg	69.0	345
606-20-2	2,6-Dinitrotoluene	U	345	ug/kg	34.5	345
208-96-8	Acenaphthylene	U	34.5	ug/kg	10.4	34.5
51-28-5	2,4-Dinitrophenol	U	690	ug/kg	131	690
132-64-9	Dibenzofuran	U	345	ug/kg	69.0	345
84-66-2	Diethylphthalate	U	345	ug/kg	69.0	345
86-73-7	Fluorene		36.2	ug/kg	10.4	34.5
7005-72-3	4-Chlorophenylphenylether	U	345	ug/kg	69.0	345
534-52-1	2-Methyl-4,6-dinitrophenol	U	345	ug/kg	69.0	345
100-01-6	4-Nitroaniline	U	345	ug/kg	104	345
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	345	ug/kg	69.0	345
122-66-7	Azobenzene	U	345	ug/kg	69.0	345
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	345	ug/kg	69.0	345
118-74-1	Hexachlorobenzene	U	345	ug/kg	69.0	345
85-01-8	Phenanthrene		302	ug/kg	10.4	34.5
120-12-7	Anthracene		93.7	ug/kg	6.90	34.5
84-74-2	Di-n-butylphthalate	U	345	ug/kg	69.0	345
206-44-0	Fluoranthene		456	ug/kg	10.4	34.5
85-68-7	Butylbenzylphthalate	U	345	ug/kg	69.0	345
56-55-3	Benzo(a)anthracene		211	ug/kg	10.4	34.5
91-94-1	3,3'-Dichlorobenzidine	U	345	ug/kg	104	345
218-01-9	Chrysene		210	ug/kg	10.4	34.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	345	ug/kg	69.0	345
117-84-0	Di-n-octylphthalate	U	345	ug/kg	69.0	345
205-99-2	Benzo(b)fluoranthene		419	ug/kg	10.4	34.5
207-08-9	Benzo(k)fluoranthene	U	34.5	ug/kg	10.4	34.5
50-32-8	Benzo(a)pyrene		227	ug/kg	10.4	34.5
193-39-5	Indeno(1,2,3-cd)pyrene		86.7	ug/kg	10.4	34.5
53-70-3	Dibenzo(a,h)anthracene	U	34.5	ug/kg	10.4	34.5
191-24-2	Benzo(ghi)perylene		90.3	ug/kg	10.4	34.5
120-82-1	1,2,4-Trichlorobenzene	U	345	ug/kg	69.0	345

## Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.75	3520	ug/kg		JA
	Unknown	7.79	277	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562007

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8310  
Batch ID: 956677  
Run Date: 03/05/2010 19:58  
Prep Date: 02/23/2010 21:09  
Data File: s3c0529.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
2381-21-7	Pyrene, 1-methyl-	7.86	213	ug/kg	96	NJ
	Unknown	7.91	262	ug/kg		J
	Unknown	7.99	387	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	153	ug/kg	97	NJ
	Unknown	8.04	153	ug/kg		J
	Unknown	8.06	345	ug/kg		J
	Unknown	8.16	339	ug/kg		J
	Unknown	8.2	485	ug/kg		J
	Unknown	8.29	455	ug/kg		J
	Unknown	8.32	265	ug/kg		J
	Unknown	8.36	234	ug/kg		J
	Unknown	8.52	231	ug/kg		J
	Unknown	8.57	172	ug/kg		J
	Unknown	8.6	167	ug/kg		J
	Unknown	8.66	158	ug/kg		J
	Unknown	8.73	242	ug/kg		J
	Unknown	8.77	156	ug/kg		J
	Unknown	8.81	157	ug/kg		J
	Unknown	8.9	203	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	378	ug/kg	93	NJ
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	9.04	217	ug/kg	92	NJ
	Unknown	9.1	435	ug/kg		J
	Unknown	9.19	374	ug/kg		J
	Unknown	9.28	432	ug/kg		J
	Unknown	9.44	445	ug/kg		J
198-55-0	Perylene	9.64	394	ug/kg	96	NJ
	Unknown	10.02	403	ug/kg		J
	Unknown	10.3	494	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8311  
Batch ID: 956677  
Run Date: 03/05/2010 19:35  
Prep Date: 02/23/2010 21:09  
Data File: s3c0528.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	345	ug/kg	69.0	345
108-95-2	Phenol	U	345	ug/kg	69.0	345
95-57-8	2-Chlorophenol	U	345	ug/kg	69.0	345
106-46-7	1,4-Dichlorobenzene	U	345	ug/kg	69.0	345
621-64-7	N-Nitrosodipropylamine	U	345	ug/kg	69.0	345
59-50-7	4-Chloro-3-methylphenol	U	345	ug/kg	69.0	345
83-32-9	Acenaphthene	U	34.5	ug/kg	11.4	34.5
121-14-2	2,4-Dinitrotoluene	U	345	ug/kg	34.5	345
100-02-7	4-Nitrophenol	U	345	ug/kg	114	345
87-86-5	Pentachlorophenol	U	345	ug/kg	86.3	345
129-00-0	Pyrene	J	30.1	ug/kg	10.4	34.5
110-86-1	Pyridine	U	345	ug/kg	69.0	345
62-53-3	Aniline	U	345	ug/kg	104	345
111-44-4	bis(2-Chloroethyl) ether	U	345	ug/kg	69.0	345
541-73-1	1,3-Dichlorobenzene	U	345	ug/kg	69.0	345
100-51-6	Benzyl alcohol	U	345	ug/kg	104	345
95-50-1	1,2-Dichlorobenzene	U	345	ug/kg	69.0	345
108-60-1	bis(2-Chloroisopropyl)ether	U	345	ug/kg	69.0	345
95-48-7	o-Cresol	U	345	ug/kg	69.0	345
65794-96-9	m,p-Cresols	U	345	ug/kg	104	345
67-72-1	Hexachloroethane	U	345	ug/kg	69.0	345
98-95-3	Nitrobenzene	U	345	ug/kg	69.0	345
78-59-1	Isophorone	U	345	ug/kg	69.0	345
88-75-5	2-Nitrophenol	U	345	ug/kg	69.0	345
105-67-9	2,4-Dimethylphenol	U	345	ug/kg	121	345
111-91-1	bis(2-Chloroethoxy)methane	U	345	ug/kg	69.0	345
120-83-2	2,4-Dichlorophenol	U	345	ug/kg	69.0	345
65-85-0	Benzoic acid	U	690	ug/kg	173	690
91-20-3	Naphthalene	U	34.5	ug/kg	10.4	34.5
106-47-8	4-Chloroaniline	U	345	ug/kg	69.0	345
87-68-3	Hexachlorobutadiene	U	345	ug/kg	69.0	345
91-57-6	2-Methylnaphthalene	U	34.5	ug/kg	6.90	34.5
77-47-4	Hexachlorocyclopentadiene	U	345	ug/kg	69.0	345
88-06-2	2,4,6-Trichlorophenol	U	345	ug/kg	69.0	345
95-95-4	2,4,5-Trichlorophenol	U	345	ug/kg	69.0	345
91-58-7	2-Chloronaphthalene	U	34.5	ug/kg	11.4	34.5
88-74-4	2-Nitroaniline	U	345	ug/kg	69.0	345
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	345	ug/kg	69.0	345

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562006	Date Received: 02/20/2010 08:55	% Moisture: 3.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8311	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 19:35	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s3c0528.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	345	ug/kg	69.0	345
606-20-2	2,6-Dinitrotoluene	U	345	ug/kg	34.5	345
208-96-8	Acenaphthylene	U	34.5	ug/kg	10.4	34.5
51-28-5	2,4-Dinitrophenol	U	690	ug/kg	131	690
132-64-9	Dibenzofuran	U	345	ug/kg	69.0	345
84-66-2	Diethylphthalate	U	345	ug/kg	69.0	345
86-73-7	Fluorene	U	34.5	ug/kg	10.4	34.5
7005-72-3	4-Chlorophenylphenylether	U	345	ug/kg	69.0	345
534-52-1	2-Methyl-4,6-dinitrophenol	U	345	ug/kg	69.0	345
100-01-6	4-Nitroaniline	U	345	ug/kg	104	345
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	345	ug/kg	69.0	345
122-66-7	Azobenzene	U	345	ug/kg	69.0	345
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	345	ug/kg	69.0	345
118-74-1	Hexachlorobenzene	U	345	ug/kg	69.0	345
85-01-8	Phenanthrene	U	34.5	ug/kg	10.4	34.5
120-12-7	Anthracene	U	34.5	ug/kg	6.90	34.5
84-74-2	Di-n-butylphthalate	U	345	ug/kg	69.0	345
206-44-0	Fluoranthene		36.5	ug/kg	10.4	34.5
85-68-7	Butylbenzylphthalate	U	345	ug/kg	69.0	345
56-55-3	Benzo(a)anthracene	J	22.7	ug/kg	10.4	34.5
91-94-1	3,3'-Dichlorobenzidine	U	345	ug/kg	104	345
218-01-9	Chrysene	J	15.3	ug/kg	10.4	34.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	345	ug/kg	69.0	345
117-84-0	Di-n-octylphthalate	U	345	ug/kg	69.0	345
205-99-2	Benzo(b)fluoranthene		38.6	ug/kg	10.4	34.5
207-08-9	Benzo(k)fluoranthene	U	34.5	ug/kg	10.4	34.5
50-32-8	Benzo(a)pyrene	J	18.9	ug/kg	10.4	34.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.5	ug/kg	10.4	34.5
53-70-3	Dibenzo(a,h)anthracene	U	34.5	ug/kg	10.4	34.5
191-24-2	Benzo(ghi)perylene	U	34.5	ug/kg	10.4	34.5
120-82-1	1,2,4-Trichlorobenzene	U	345	ug/kg	69.0	345

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1200	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.54	204	ug/kg	99	NJ

Semi-Volatile  
Certificate of Analysis  
Sample SummarySDG Number: 10-1950  
Lab Sample ID: 247562006Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MSMatrix: R  
%Moisture: 3.7  
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
	Unknown	7.98	269	ug/kg		J
	Unknown	8.09	149	ug/kg		J
	Unknown	8.27	205	ug/kg		J
	Unknown	8.32	179	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	231	ug/kg	93	NJ
	Unknown	15.5	198	ug/kg		J
	Unknown	16.14	141	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562004

Client ID: RE15-10-8312  
Batch ID: 956677  
Run Date: 03/05/2010 18:49  
Prep Date: 02/23/2010 21:09  
Data File: s3c0526.d

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.16 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	69.9	350
108-95-2	Phenol	U	350	ug/kg	69.9	350
95-57-8	2-Chlorophenol	U	350	ug/kg	69.9	350
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	69.9	350
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	69.9	350
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	69.9	350
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350
87-86-5	Pentachlorophenol	U	350	ug/kg	87.4	350
129-00-0	Pyrene		286	ug/kg	10.5	35.0
110-86-1	Pyridine	U	350	ug/kg	69.9	350
62-53-3	Aniline	U	350	ug/kg	105	350
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	69.9	350
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	69.9	350
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	69.9	350
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	69.9	350
95-48-7	o-Cresol	U	350	ug/kg	69.9	350
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350
67-72-1	Hexachloroethane	U	350	ug/kg	69.9	350
98-95-3	Nitrobenzene	U	350	ug/kg	69.9	350
78-59-1	Isophorone	U	350	ug/kg	69.9	350
88-75-5	2-Nitrophenol	U	350	ug/kg	69.9	350
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	69.9	350
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	69.9	350
65-85-0	Benzoic acid	U	699	ug/kg	175	699
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0
106-47-8	4-Chloroaniline	U	350	ug/kg	69.9	350
87-68-3	Hexachlorobutadiene	U	350	ug/kg	69.9	350
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	6.99	35.0
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	69.9	350
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	69.9	350
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	69.9	350
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0
88-74-4	2-Nitroaniline	U	350	ug/kg	69.9	350
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	350	ug/kg	69.9	350

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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562004	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 5.2
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8312	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.1	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 18:49	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.16 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0526.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	350	ug/kg	69.9	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	J	22.0	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	699	ug/kg	133	699
132-64-9	Dibenzofuran	U	350	ug/kg	69.9	350
84-66-2	Diethylphthalate	U	350	ug/kg	69.9	350
86-73-7	Fluorene	J	24.3	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	69.9	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	69.9	350
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	350	ug/kg	69.9	350
122-66-7	Azobenzene	U	350	ug/kg	69.9	350
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	69.9	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	69.9	350
85-01-8	Phenanthrene		238	ug/kg	10.5	35.0
120-12-7	Anthracene		47.5	ug/kg	6.99	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	69.9	350
206-44-0	Fluoranthene		368	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	69.9	350
56-55-3	Benzo(a)anthracene		133	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene		154	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	69.9	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	69.9	350
205-99-2	Benzo(b)fluoranthene		269	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene		134	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene		56.7	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene		57.1	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	69.9	350

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	2260	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.27	360	ug/kg	98	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562004

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.16 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8312  
Batch ID: 956677  
Run Date: 03/05/2010 18:49  
Prep Date: 02/23/2010 21:09  
Data File: s3c0526.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-	3.66	318	ug/kg	97	NJ
832-64-4	Phenanthrene, 4-methyl-	7.14	189	ug/kg	97	NJ
1000152-38-2	Pentacyclo[9.1.0.0(2,4).0(5,7).0(8,10)]d	7.43	351	ug/kg	70	NJ
	Unknown	7.8	290	ug/kg		J
2381-21-7	Pyrene, 1-methyl-	7.87	333	ug/kg	92	NJ
243-17-4	11H-Benzo[b]fluorene	7.91	291	ug/kg	91	NJ
	Unknown	7.97	512	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	165	ug/kg	99	NJ
	Unknown	8.04	209	ug/kg		J
	Unknown	8.09	433	ug/kg		J
	Unknown	8.14	259	ug/kg		J
	Unknown	8.18	260	ug/kg		J
	Unknown	8.26	603	ug/kg		J
	Unknown	8.29	200	ug/kg		J
	Unknown	8.33	324	ug/kg		J
	Unknown	8.4	320	ug/kg		J
	Unknown	8.51	159	ug/kg		J
	Unknown	8.57	151	ug/kg		J
	Unknown	8.6	242	ug/kg		J
	Unknown	8.68	160	ug/kg		J
	Unknown	8.76	180	ug/kg		J
	Unknown	8.85	299	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	317	ug/kg	89	NJ
	Unknown	9.1	372	ug/kg		J



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

SDG Number: 10-1950  
Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8313  
Batch ID: 956677  
Run Date: 03/05/2010 18:26  
Prep Date: 02/23/2010 21:09  
Data File: s3c0525.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.4	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	114	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.0	344
129-00-0	Pyrene		201	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl)ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.4	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	344	ug/kg	68.8	344

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

SDG Number: 10-1950  
Lab Sample ID: 247562003

Client ID: RE15-10-8313  
Batch ID: 956677  
Run Date: 03/05/2010 18:26  
Prep Date: 02/23/2010 21:09  
Data File: s3c0525.d

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.6  
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	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	J	16.3	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	J	10.5	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene		130	ug/kg	10.3	34.4
120-12-7	Anthracene	J	29.9	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene		244	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene		103	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene		104	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene		217	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene		106	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene		50.4	ug/kg	10.3	34.4
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene		50.7	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	3420	ug/kg		JA
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	214	ug/kg	83	NJ

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562003	Date Received: 02/20/2010 08:55	%Moisture: 3.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8313	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 18:26	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.15 g	Final Volume: 1 mL
Data File: s3c0525.d	Column: J&W DB-SMS	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	Flt	Qual		
25269-17-4	Thunbergol		7.43	163	ug/kg	83	NJ	
	Unknown		7.6	203	ug/kg		J	
	Unknown		7.78	142	ug/kg		J	
2381-21-7	Pyrene, 1-methyl-		7.86	209	ug/kg	91	NJ	
	Unknown		7.97	219	ug/kg		J	
301-02-0	9-Octadecenamide, (Z)-		7.99	162	ug/kg	90	NJ	
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4		8.02	167	ug/kg	96	NJ	
	Unknown		8.04	174	ug/kg		J	
	Unknown		8.14	553	ug/kg		J	
	Unknown		8.21	312	ug/kg		J	
	Unknown		8.29	335	ug/kg		J	
	Unknown		8.32	276	ug/kg		J	
	Unknown		8.4	220	ug/kg		J	
	Unknown		8.63	165	ug/kg		J	
	Unknown		8.83	208	ug/kg		J	
	Unknown		8.97	299	ug/kg		J	
	288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif		9.04	139	ug/kg	92	NJ
		Unknown		9.11	209	ug/kg		J
Unknown			15.51	282	ug/kg		J	
Unknown			16.14	226	ug/kg		J	

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

SDG Number: 10-1950  
Lab Sample ID: 247562002

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 2.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8314  
Batch ID: 956677  
Run Date: 03/05/2010 18:03  
Prep Date: 02/23/2010 21:09  
Data File: s3c0524.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.3	342
108-95-2	Phenol	U	342	ug/kg	68.3	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.3	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.3	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.3	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.3	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.4	342
129-00-0	Pyrene	U	34.2	ug/kg	10.2	34.2
110-86-1	Pyridine	U	342	ug/kg	68.3	342
62-53-3	Aniline	U	342	ug/kg	102	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.3	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.3	342
100-51-6	Benzyl alcohol	U	342	ug/kg	102	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.3	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.3	342
95-48-7	o-Cresol	U	342	ug/kg	68.3	342
65794-96-9	m,p-Cresols	U	342	ug/kg	102	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.3	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.3	342
78-59-1	Isophorone	U	342	ug/kg	68.3	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.3	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.3	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.3	342
65-85-0	Benzoic acid	U	683	ug/kg	171	683
91-20-3	Naphthalene	U	34.2	ug/kg	10.2	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.3	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.3	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.83	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.3	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.3	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.3	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.3	342
99-09-2	<i>o</i> -Nitroaniline	U	342	ug/kg	68.3	342
	3-Nitroaniline					

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562002	Date Received: 02/20/2010 08:55	%Moisture: 2.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8314	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 18:03	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.1 g	Final Volume: 1 mL
Data File: s3c0524.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	342	ug/kg	68.3	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.2	34.2
51-28-5	2,4-Dinitrophenol	U	683	ug/kg	130	683
132-64-9	Dibenzofuran	U	342	ug/kg	68.3	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.3	342
86-73-7	Fluorene	U	34.2	ug/kg	10.2	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.3	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.3	342
100-01-6	4-Nitroaniline	U	342	ug/kg	102	342
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.3	342
122-66-7	Azobenzene	U	342	ug/kg	68.3	342
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.3	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.3	342
85-01-8	Phenanthrene	U	34.2	ug/kg	10.2	34.2
120-12-7	Anthracene	U	34.2	ug/kg	6.83	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.3	342
206-44-0	Fluoranthene	U	34.2	ug/kg	10.2	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.3	342
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.2	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	102	342
218-01-9	Chrysene	U	34.2	ug/kg	10.2	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.3	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.3	342
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.2	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.2	34.2
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.2	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.2	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.2	34.2
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.2	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.3	342

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	430	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.28	172	ug/kg	98	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562002  
  
Client ID: RE15-10-8314  
Batch ID: 956677  
Run Date: 03/05/2010 18:03  
Prep Date: 02/23/2010 21:09  
Data File: s3c0524.d

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 2.7  
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
301-02-0	Unknown		7.98	258	ug/kg		J
	9-Octadecenamide, (Z)-		8.97	324	ug/kg	93	NJ
	Unknown		15.51	293	ug/kg		J
	Unknown		16.13	243	ug/kg		J

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

SDG Number: 10-1950  
Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8315  
Batch ID: 956677  
Run Date: 03/05/2010 19:12  
Prep Date: 02/23/2010 21:09  
Data File: s3c0527.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	343	ug/kg	68.5	343
108-95-2	Phenol	U	343	ug/kg	68.5	343
95-57-8	2-Chlorophenol	U	343	ug/kg	68.5	343
106-46-7	1,4-Dichlorobenzene	U	343	ug/kg	68.5	343
621-64-7	N-Nitrosodipropylamine	U	343	ug/kg	68.5	343
59-50-7	4-Chloro-3-methylphenol	U	343	ug/kg	68.5	343
83-32-9	Acenaphthene	U	34.3	ug/kg	11.3	34.3
121-14-2	2,4-Dinitrotoluene	U	343	ug/kg	34.3	343
100-02-7	4-Nitrophenol	U	343	ug/kg	113	343
87-86-5	Pentachlorophenol	U	343	ug/kg	85.7	343
129-00-0	Pyrene	J	31.5	ug/kg	10.3	34.3
110-86-1	Pyridine	U	343	ug/kg	68.5	343
62-53-3	Aniline	U	343	ug/kg	103	343
111-44-4	bis(2-Chloroethyl) ether	U	343	ug/kg	68.5	343
541-73-1	1,3-Dichlorobenzene	U	343	ug/kg	68.5	343
100-51-6	Benzyl alcohol	U	343	ug/kg	103	343
95-50-1	1,2-Dichlorobenzene	U	343	ug/kg	68.5	343
108-60-1	bis(2-Chloroisopropyl)ether	U	343	ug/kg	68.5	343
95-48-7	o-Cresol	U	343	ug/kg	68.5	343
65794-96-9	m,p-Cresols	U	343	ug/kg	103	343
67-72-1	Hexachloroethane	U	343	ug/kg	68.5	343
98-95-3	Nitrobenzene	U	343	ug/kg	68.5	343
78-59-1	Isophorone	U	343	ug/kg	68.5	343
88-75-5	2-Nitrophenol	U	343	ug/kg	68.5	343
105-67-9	2,4-Dimethylphenol	U	343	ug/kg	120	343
111-91-1	bis(2-Chloroethoxy)methane	U	343	ug/kg	68.5	343
120-83-2	2,4-Dichlorophenol	U	343	ug/kg	68.5	343
65-85-0	Benzoic acid	U	685	ug/kg	171	685
91-20-3	Naphthalene	U	34.3	ug/kg	10.3	34.3
106-47-8	4-Chloroaniline	U	343	ug/kg	68.5	343
87-68-3	Hexachlorobutadiene	U	343	ug/kg	68.5	343
91-57-6	2-Methylnaphthalene	U	34.3	ug/kg	6.85	34.3
77-47-4	Hexachlorocyclopentadiene	U	343	ug/kg	68.5	343
88-06-2	2,4,6-Trichlorophenol	U	343	ug/kg	68.5	343
95-95-4	2,4,5-Trichlorophenol	U	343	ug/kg	68.5	343
91-58-7	2-Chloronaphthalene	U	34.3	ug/kg	11.3	34.3
88-74-4	2-Nitroaniline	U	343	ug/kg	68.5	343
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	343	ug/kg	68.5	343

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

SDG Number: 10-1950  
Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.4  
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
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	343	ug/kg	68.5	343
606-20-2	2,6-Dinitrotoluene	U	343	ug/kg	34.3	343
208-96-8	Acenaphthylene	U	34.3	ug/kg	10.3	34.3
51-28-5	2,4-Dinitrophenol	U	685	ug/kg	130	685
132-64-9	Dibenzofuran	U	343	ug/kg	68.5	343
84-66-2	Diethylphthalate	U	343	ug/kg	68.5	343
86-73-7	Fluorene	U	34.3	ug/kg	10.3	34.3
7005-72-3	4-Chlorophenylphenylether	U	343	ug/kg	68.5	343
534-52-1	2-Methyl-4,6-dinitrophenol	U	343	ug/kg	68.5	343
100-01-6	4-Nitroaniline	U	343	ug/kg	103	343
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	343	ug/kg	68.5	343
122-66-7	Azobenzene	U	343	ug/kg	68.5	343
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	343	ug/kg	68.5	343
118-74-1	Hexachlorobenzene	U	343	ug/kg	68.5	343
85-01-8	Phenanthrene	U	34.3	ug/kg	10.3	34.3
120-12-7	Anthracene	U	34.3	ug/kg	6.85	34.3
84-74-2	Di-n-butylphthalate	U	343	ug/kg	68.5	343
206-44-0	Fluoranthene		39.0	ug/kg	10.3	34.3
85-68-7	Butylbenzylphthalate	U	343	ug/kg	68.5	343
56-55-3	Benzo(a)anthracene	U	34.3	ug/kg	10.3	34.3
91-94-1	3,3'-Dichlorobenzidine	U	343	ug/kg	103	343
218-01-9	Chrysene	U	34.3	ug/kg	10.3	34.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	343	ug/kg	68.5	343
117-84-0	Di-n-octylphthalate	U	343	ug/kg	68.5	343
205-99-2	Benzo(b)fluoranthene		42.1	ug/kg	10.3	34.3
207-08-9	Benzo(k)fluoranthene	U	34.3	ug/kg	10.3	34.3
50-32-8	Benzo(a)pyrene	J	20.2	ug/kg	10.3	34.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.3	ug/kg	10.3	34.3
53-70-3	Dibenzo(a,h)anthracene	U	34.3	ug/kg	10.3	34.3
191-24-2	Benzo(ghi)perylene	U	34.3	ug/kg	10.3	34.3
120-82-1	1,2,4-Trichlorobenzene	U	343	ug/kg	68.5	343

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1190	ug/kg		JA
7785-70-8	1R- $\alpha$ -Pinene	3.28	5320	ug/kg	97	NJ



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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562005	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.4
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8315	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 19:12	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.19 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0527.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	461	ug/kg	91	NJ
1120-21-4	Undecane	4.04	396	ug/kg	87	NJ
	Unknown	4.19	202	ug/kg		J
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	4.64	416	ug/kg	98	NJ
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	4.93	364	ug/kg	98	NJ
	Unknown	7.24	240	ug/kg		J
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	7.37	285	ug/kg	92	NJ
	Unknown	7.47	304	ug/kg		J
	Unknown	7.59	190	ug/kg		J
	Unknown	7.63	140	ug/kg		J
	Unknown	7.8	208	ug/kg		J
	Unknown	7.86	269	ug/kg		J
	Unknown	7.91	159	ug/kg		J
	Unknown	7.97	261	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	515	ug/kg	99	NJ
	Unknown	8.05	282	ug/kg		J
	Unknown	8.3	2640	ug/kg		J
	Unknown	8.41	535	ug/kg		J
	Unknown	8.56	1160	ug/kg		J
	Unknown	8.85	180	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.98	162	ug/kg	90	NJ
	Unknown	9.14	725	ug/kg		J
	Unknown	9.27	484	ug/kg		J
	Unknown	9.45	582	ug/kg		J
	Unknown	15.52	624	ug/kg		J

# QC Summary

Semi-Volatile  
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1950

Matrix Type: SOLID

CAP Column (1) : J&amp;W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202051280	MB for batch 956676	75	72	71	79	83	101
1202051281	LCS for batch 956676	72	69	72	77	99	101
247562002	RE15-10-8314	68	69	69	75	92	95
247562003	RE15-10-8313	66	70	71	77	67	101
247562004	RE15-10-8312	59	61	61	68	67	88
247562005	RE15-10-8315	64	65	63	70	86	93
247562006	RE15-10-8311	74	73	74	80	94	101
247562007	RE15-10-8310	64	67	66	75	62	96
247562008	RE15-10-8303	59	59	60	66	78	85
247562009	RE15-10-8302	66	69	66	75	76	107

**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: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 956676

Matrix: SOIL

Lab Sample ID: 1202051281

Instrument: MSD3.I

Analysis Date: 03/04/2010 22:25

Dilution: 1

Analyst: JLD1

Prep Batch ID: 956676

Inj. Vol: .5 uL

Batch ID: 956677

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	994	60	22-114
108-95-2	LCS Phenol	1670	0.0	1240	74	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	1170	70	33-108
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1220	73	34-113
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1410	85	42-114
83-32-9	LCS Acenaphthene	1670	0.0	1310	79	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1400	84	49-112
100-02-7	LCS 4-Nitrophenol	1670	0.0	1250	75	24-113
87-86-5	LCS Pentachlorophenol	1670	0.0	1470	88	27-116
129-00-0	LCS Pyrene	1670	0.0	1410	85	42-113
110-86-1	LCS Pyridine	1670	0.0	933	56	8-125
62-53-3	LCS Aniline	1670	0.0	1070	64	18-126
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1060	64	32-103
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1130	68	32-108
100-51-6	LCS Benzyl alcohol	1670	0.0	995	60	27-108
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1270	76	35-111
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1140	68	28-117
95-48-7	LCS o-Cresol	1670	0.0	1420	85	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1400	84	45-121
67-72-1	LCS Hexachloroethane	1670	0.0	1150	69	30-109
98-95-3	LCS Nitrobenzene	1670	0.0	1220	73	33-116

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 956676

Matrix: SOIL

Lab Sample ID: 1202051281

Instrument: MSD3.I

Analysis Date: 03/04/2010 22:25

Dilution: 1

Analyst: JLD1

Prep Batch ID: 956676

Inj. Vol: .5 uL

Batch ID: 956677

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	1160	70	35-113
88-75-5	LCS 2-Nitrophenol	1670	0.0	1330	80	31-117
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1330	80	32-112
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1120	67	34-110
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1260	76	34-116
65-85-0	LCS Benzoic acid	3330	0.0	3070	92	22-138
91-20-3	LCS Naphthalene	1670	0.0	1130	68	35-103
106-47-8	LCS 4-Chloroaniline	1670	0.0	1020	61	20-118
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1300	78	31-117
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1200	72	38-115
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1540	93	22-140
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1390	83	40-110
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1330	80	43-113
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1120	67	37-111
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1300	78	41-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1280	77	34-125
131-11-3	LCS Dimethylphthalate	1670	0.0	1400	84	48-122
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1370	82	47-107
208-96-8	LCS Acenaphthylene	1670	0.0	1240	74	44-110
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	2110	127	18-127
132-64-9	LCS Dibenzofuran	1670	0.0	1380	83	49-115
84-66-2	LCS Diethylphthalate	1670	0.0	1430	86	51-126

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 956676

Matrix: SOIL

Lab Sample ID: 1202051281

Instrument: MSD3.I

Analysis Date: 03/04/2010 22:25

Dilution: 1

Analyst: JLD1

Pre Batch II 956676

Inj. Vol: .5 uL

Batch ID: 956677

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	1190	72	43-109
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1480	89	45-115
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1660	100	32-117
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1550	93	33-148
122-39-4	LCS Diphenylamine	1670	0.0	1330	80	46-114
122-66-7	LCS Azobenzene <i>1,2-Diphenylhydrazine</i>	1670	0.0	1270	76	38-123
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1270	76	40-119
118-74-1	LCS Hexachlorobenzene	1670	0.0	1330	80	43-111
85-01-8	LCS Phenanthrene	1670	0.0	1210	73	46-107
120-12-7	LCS Anthracene	1670	0.0	1250	75	46-110
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1330	80	52-132
206-44-0	LCS Fluoranthene	1670	0.0	1320	79	51-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1670	100	47-137
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1250	75	50-108
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1370	82	36-103
218-01-9	LCS Chrysene	1670	0.0	1380	83	48-111
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1510	90	48-139
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1740	105	42-141
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1650	99	49-114
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1740	104	50-116
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1560	93	54-114
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1430	86	53-120

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 956676

Matrix: SOIL

Lab Sample ID:1202051281

Instrument: MSD3.I

Analysis Date: 03/04/2010 22:25

Dilution: 1

Analyst: JLD1

Pren Batch II 956676

Inj. Vol: .5 uL

Batch ID: 956677

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS Dibenzo(a,h)anthracene	1670	0.0	1480	89	53-121
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1380	83	50-121
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1260	76	32-114

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1950

Sample Type: Matrix Spike

Client ID: RE15-10-8349MS

Matrix: R

Lab Sample ID: 1202051282

% Moisture: 6.9

Instrument: MSD3.I

Analysis Date: 03/05/2010 06:43

Dilution: 1

Analyst: JLD1

Pren Batch II 956676

Inj. Vol: .5 uL

Batch ID: 956677

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	1780	0.00 U	1060	59	27-98
108-95-2	MS Phenol	1780	0.00 U	1280	72	33-94
95-57-8	MS 2-Chlorophenol	1780	0.00 U	1360	77	29-96
106-46-7	MS 1,4-Dichlorobenzene	1780	0.00 U	1280	72	27-96
621-64-7	MS N-Nitrosodipropylamine	1780	0.00 U	1290	72	29-102
59-50-7	MS 4-Chloro-3-methylphenol	1780	0.00 U	1410	79	29-110
83-32-9	MS Acenaphthene	1780	0.00 U	1320	74	17-109
121-14-2	MS 2,4-Dinitrotoluene	1780	0.00 U	1350	76	33-107
100-02-7	MS 4-Nitrophenol	1780	0.00 U	1260	70	15-110
87-86-5	MS Pentachlorophenol	1780	0.00 U	1270	71	23-110
129-00-0	MS Pyrene	1780	19.8 J	1730	96	24-118
110-86-1	MS Pyridine	1780	0.00 U	943	53	25-102
62-53-3	MS Aniline	1780	0.00 U	1190	67	18-109
111-44-4	MS bis(2-Chloroethyl) ether	1780	0.00 U	1130	63	29-96
541-73-1	MS 1,3-Dichlorobenzene	1780	0.00 U	1220	68	26-97
100-51-6	MS Benzyl alcohol	1780	0.00 U	726	41	19-112
95-50-1	MS 1,2-Dichlorobenzene	1780	0.00 U	1370	77	30-97
108-60-1	MS bis(2-Chloroisopropyl)ether	1780	0.00 U	1180	66	28-103
95-48-7	MS o-Cresol	1780	0.00 U	1620	91	32-107
65794-96-9	MS m,p-Cresols	1780	0.00 U	1560	88	33-115
67-72-1	MS Hexachloroethane	1780	0.00 U	1120	63	25-100
98-95-3	MS Nitrobenzene	1780	0.00 U	1320	74	27-106



Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1950

Sample Type: Matrix Spike

Client ID: RE15-10-8349MS

Matrix: R

Lab Sample ID: 1202051282

%Moisture: 6.9

Instrument: MSD3.I

Analysis Date: 03/05/2010 06:43

Dilution: 1

Analyst: JLD1

Pred Batch II 956676

Inj. Vol: .5 uL

Batch ID: 956677

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	1780	0.00 U	1230	69	29-104
88-75-5	MS 2-Nitrophenol	1780	0.00 U	1230	69	26-102
105-67-9	MS 2,4-Dimethylphenol	1780	0.00 U	1390	78	22-104
111-91-1	MS bis(2-Chloroethoxy)methane	1780	0.00 U	1200	67	27-101
120-83-2	MS 2,4-Dichlorophenol	1780	0.00 U	1300	73	26-103
65-85-0	MS Benzoic acid	3560	0.00 U	1780	50	13-131
91-20-3	MS Naphthalene	1780	0.00 U	1210	68	23-103
106-47-8	MS 4-Chloroaniline	1780	0.00 U	1030	58	26-103
87-68-3	MS Hexachlorobutadiene	1780	0.00 U	1420	80	28-101
91-57-6	MS 2-Methylnaphthalene	1780	0.00 U	1270	71	27-106
77-47-4	MS Hexachlorocyclopentadiene	1780	0.00 U	706	40	24-117
88-06-2	MS 2,4,6-Trichlorophenol	1780	0.00 U	1380	78	26-105
95-95-4	MS 2,4,5-Trichlorophenol	1780	0.00 U	1450	81	30-110
91-58-7	MS 2-Chloronaphthalene	1780	0.00 U	1220	68	28-102
88-74-4	MS 2-Nitroaniline <i>o</i> -Nitroaniline	1780	0.00 U	1340	75	33-106
99-09-2	MS 3-Nitroaniline <i>m</i> -Nitroaniline	1780	0.00 U	1330	74	33-116
131-11-3	MS Dimethylphthalate	1780	0.00 U	1480	83	38-113
606-20-2	MS 2,6-Dinitrotoluene	1780	0.00 U	1350	76	29-107
208-96-8	MS Acenaphthylene	1780	0.00 U	1290	73	25-108
51-28-5	MS 2,4-Dinitrophenol	1780	0.00 U	797	45	14-102
132-64-9	MS Dibenzofuran	1780	0.00 U	1430	80	35-112
84-66-2	MS Diethylphthalate	1780	0.00 U	1530	86	36-122

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1950

Sample Type: Matrix Spike

Client ID: RE15-10-8349MS

Matrix: R

Lab Sample ID: 1202051282

%Moisture: 6.9

Instrument: MSD3.I

Analysis Date: 03/05/2010 06:43

Dilution: 1

Analyst: JLD1

Preo Batch II 956676

Inj. Vol: .5 uL

Batch ID: 956677

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	1780	0.00 U	1220	69	33-105
7005-72-3	MS 4-Chlorophenylphenylether	1780	0.00 U	1550	87	30-110
534-52-1	MS 2-Methyl-4,6-dinitrophenol	1780	0.00 U	657	37	26-97
100-01-6	MS 4-Nitroaniline <i>p</i> -Nitroaniline	1780	0.00 U	1580	89	28-135
122-39-4	MS Diphenylamine	1780	0.00 U	1490	84	33-109
122-66-7	MS Azobenzene <i>1,2</i> -Diphenylhydrazine	1780	0.00 U	1420	80	31-113
101-55-3	MS 4-Bromophenylphenylether	1780	0.00 U	1420	80	31-109
118-74-1	MS Hexachlorobenzene	1780	0.00 U	1420	80	37-99
85-01-8	MS Phenanthrene	1780	0.00 U	1400	78	29-109
120-12-7	MS Anthracene	1780	0.00 U	1290	72	19-118
84-74-2	MS Di-n-butylphthalate	1780	0.00 U	1450	81	39-123
206-44-0	MS Fluoranthene	1780	23.0 J	1220	67	33-114
85-68-7	MS Butylbenzylphthalate	1780	0.00 U	2040	114	35-131
56-55-3	MS Benzo(a)anthracene	1780	0.00 U	1320	74	30-111
91-94-1	MS 3,3'-Dichlorobenzidine	1780	0.00 U	1690	95	30-124
218-01-9	MS Chrysene	1780	0.00 U	1410	79	32-108
117-81-7	MS bis(2-Ethylhexyl)phthalate	1780	0.00 U	1880	106	37-129
117-84-0	MS Di-n-octylphthalate	1780	0.00 U	2290	129	31-143
205-99-2	MS Benzo(b)fluoranthene	1780	22.2 J	1640	91	29-118
207-08-9	MS Benzo(k)fluoranthene	1780	0.00 U	1830	103	32-118
50-32-8	MS Benzo(a)pyrene	1780	11.7 J	1680	94	33-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	1780	0.00 U	1520	85	29-114

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1950

Client ID: RE15-10-8349MS

Lab Sample ID: 1202051282

Instrument: MSD3.I

Analyst: JLD1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 6.9

Analysis Date: 03/05/2010 06:43

Dilution: 1

Pren Batch II 956676

Batch ID: 956677

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	1780	0.00 U	1620	91	27-119
191-24-2	MS Benzo(ghi)perylene	1780	0.00 U	1400	79	28-112
120-82-1	MS 1,2,4-Trichlorobenzene	1780	0.00 U	1370	77	28-99

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1950

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8349MSD

Matrix: R

Lab Sample ID: 1202051283

% Moisture: 6.9

Instrument: MSD3.I

Analysis Date: 03/05/2010 07:05

Dilution: 1

Analyst: JLD1

Pren Batch II 956676

Inj. Vol: .5 uL

Batch ID: 956677

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
62-75-9	MSD N-Methyl-N-nitrosomethylam	1790	0.00 U	1040	58	27-98	2	0-30
108-95-2	MSD Phenol	1790	0.00 U	1300	73	33-94	1	0-30
95-57-8	MSD 2-Chlorophenol	1790	0.00 U	1370	77	29-96	0	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1790	0.00 U	1290	72	27-96	1	0-30
621-64-7	MSD N-Nitrosodipropylamine	1790	0.00 U	1300	73	29-102	1	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1790	0.00 U	1480	83	29-110	5	0-30
83-32-9	MSD Acenaphthene	1790	0.00 U	1330	74	17-109	0	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1790	0.00 U	1360	76	33-107	0	0-30
100-02-7	MSD 4-Nitrophenol	1790	0.00 U	1270	71	15-110	1	0-30
87-86-5	MSD Pentachlorophenol	1790	0.00 U	1230	69	23-110	3	0-30
129-00-0	MSD Pyrene	1790	19.8 J	1620	90	24-118	7	0-30
110-86-1	MSD Pyridine	1790	0.00 U	961	54	25-102	2	0-30
62-53-3	MSD Aniline	1790	0.00 U	1240	69	18-109	4	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1790	0.00 U	1120	63	29-96	0	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1790	0.00 U	1230	69	26-97	1	0-30
100-51-6	MSD Benzyl alcohol	1790	0.00 U	636	36	19-112	13	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1790	0.00 U	1380	77	30-97	1	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1790	0.00 U	1220	68	28-103	3	0-30
95-48-7	MSD o-Cresol	1790	0.00 U	1820	102	32-107	12	0-30
65794-96-9	MSD m,p-Cresols	1790	0.00 U	1630	91	33-115	4	0-30
67-72-1	MSD Hexachloroethane	1790	0.00 U	1050	59	25-100	7	0-30
98-95-3	MSD Nitrobenzene	1790	0.00 U	1310	74	27-106	1	0-30

Semi-Volatile  
Quality Control Summary  
Spike Recovery Report

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SDG Number: 10-1950

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8349MSD

Matrix: R

Lab Sample ID: 1202051283

%Moisture: 6.9

Instrument: MSD3.I

Analysis Date: 03/05/2010 07:05

Dilution: 1

Analyst: JLD1

Pren Batch II 956676

Inj. Vol: .5 uL

Batch ID: 956677

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	1790	0.00	U	1240	69	29-104	1	0-30
88-75-5	MSD 2-Nitrophenol	1790	0.00	U	1120	63	26-102	9	0-30
105-67-9	MSD 2,4-Dimethylphenol	1790	0.00	U	1370	77	22-104	1	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1790	0.00	U	1180	66	27-101	1	0-30
120-83-2	MSD 2,4-Dichlorophenol	1790	0.00	U	1330	74	26-103	2	0-30
65-85-0	MSD Benzoic acid	3570	0.00	U	1640	46	13-131	8	0-30
91-20-3	MSD Naphthalene	1790	0.00	U	1200	67	23-103	1	0-30
106-47-8	MSD 4-Chloroaniline	1790	0.00	U	1330	75	26-103	25	0-30
87-68-3	MSD Hexachlorobutadiene	1790	0.00	U	1410	79	28-101	1	0-30
91-57-6	MSD 2-Methylnaphthalene	1790	0.00	U	1270	71	27-106	1	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1790	0.00	U	471	26	24-117	40 *	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1790	0.00	U	1360	76	26-105	1	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1790	0.00	U	1510	84	30-110	4	0-30
91-58-7	MSD 2-Chloronaphthalene	1790	0.00	U	1200	67	28-102	1	0-30
88-74-4	MSD 2-Nitroaniline <i>o</i> -Nitroaniline	1790	0.00	U	1370	77	33-106	3	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -Nitroaniline	1790	0.00	U	1420	80	33-116	7	0-30
131-11-3	MSD Dimethylphthalate	1790	0.00	U	1490	83	38-113	1	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1790	0.00	U	1380	77	29-107	2	0-30
208-96-8	MSD Acenaphthylene	1790	0.00	U	1320	74	25-108	2	0-30
51-28-5	MSD 2,4-Dinitrophenol	1790	0.00	U	700	39	14-102	13	0-30
132-64-9	MSD Dibenzofuran	1790	0.00	U	1430	80	35-112	0	0-30
84-66-2	MSD Diethylphthalate	1790	0.00	U	1570	88	36-122	2	0-30

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1950

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8349MSD

Matrix: R

Lab Sample ID: 1202051283

%Moisture: 6.9

Instrument: MSD3.I

Analysis Date: 03/05/2010 07:05

Dilution: 1

Analyst: JLD1

Prep Batch ID: 956676

Inj. Vol: .5 uL

Batch ID: 956677

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	1790	0.00	U	1210	68	33-105	1	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1790	0.00	U	1570	88	30-110	1	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1790	0.00	U	538	30	26-97	20	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	1790	0.00	U	1580	88	28-135	0	0-30
122-39-4	MSD Diphenylamine	1790	0.00	U	1520	85	33-109	2	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	1790	0.00	U	1420	79	31-113	0	0-30
101-55-3	MSD 4-Bromophenylphenylether	1790	0.00	U	1450	81	31-109	2	0-30
118-74-1	MSD Hexachlorobenzene	1790	0.00	U	1440	81	37-99	2	0-30
85-01-8	MSD Phenanthrene	1790	0.00	U	1370	76	29-109	2	0-30
120-12-7	MSD Anthracene	1790	0.00	U	1300	73	19-118	1	0-30
84-74-2	MSD Di-n-butylphthalate	1790	0.00	U	1510	84	39-123	4	0-30
206-44-0	MSD Fluoranthene	1790	23.0	J	1270	70	33-114	4	0-30
85-68-7	MSD Butylbenzylphthalate	1790	0.00	U	2080	117	35-131	2	0-30
56-55-3	MSD Benzo(a)anthracene	1790	0.00	U	1350	76	30-111	2	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1790	0.00	U	1820	102	30-124	7	0-30
218-01-9	MSD Chrysene	1790	0.00	U	1410	79	32-108	0	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1790	0.00	U	1970	110	37-129	5	0-30
117-84-0	MSD Di-n-octylphthalate	1790	0.00	U	2580	145 *	31-143	12	0-30
205-99-2	MSD Benzo(b)fluoranthene	1790	22.2	J	1750	97	29-118	6	0-30
207-08-9	MSD Benzo(k)fluoranthene	1790	0.00	U	1820	102	32-118	1	0-30
50-32-8	MSD Benzo(a)pyrene	1790	11.7	J	1690	94	33-115	0	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1790	0.00	U	1450	81	29-114	5	0-30

## Semi-Volatile

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Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1950

Client ID: RE15-10-8349MSD

Lab Sample ID: 1202051283

Instrument: MSD3.I

Analyst: JLD1

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 6.9

Analysis Date: 03/05/2010 07:05

Dilution: 1

Prep Batch ID: 956676

Batch ID: 956677

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1790	0.00 U	1540	86	27-119	5	0-30
191-24-2	MSD Benzo(ghi)perylene	1790	0.00 U	1320	74	28-112	6	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1790	0.00 U	1350	75	28-99	2	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1950	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 956676	Instrument ID:	MSD3.I	Data File:	s3c0426-1.d
Lab Sample ID:	1202051280	Prep Date:	02/23/2010 21:09	Analyzed:	03/04/10 22:02
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 956676	1202051281	s3c0427-1.d	03/04/10	2225
04 RE15-10-8314	247562002	s3c0524.d	03/05/10	1803
05 RE15-10-8313	247562003	s3c0525.d	03/05/10	1826
06 RE15-10-8312	247562004	s3c0526.d	03/05/10	1849
07 RE15-10-8315	247562005	s3c0527.d	03/05/10	1912
08 RE15-10-8311	247562006	s3c0528.d	03/05/10	1935
09 RE15-10-8310	247562007	s3c0529.d	03/05/10	1958
10 RE15-10-8303	247562008	s3c0530.d	03/05/10	2021
11 RE15-10-8302	247562009	s3c0531.d	03/05/10	2044



## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1950

Instrument ID: MSD3.I

Injection Date/Time: 01-MAR-10 16:17

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

Lab File ID /chem/MSD3.i/s030110.b/s3c0101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	46.3
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	41.2
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	47.8
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	25.1
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	75.9
442	Greater than 40% of mass 198	98.6
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
MEGAICAL	WBN100225-08	s3c0103.d	01-MAR-10 16:52
MEGAICAL	WBN100225-07	s3c0104.d	01-MAR-10 17:19
MEGAICAL	WBN100225-06	s3c0105.d	01-MAR-10 17:47
MEGAICAL	WBN100225-05.1	s3c0106.d	01-MAR-10 18:15
MEGAICAL	WBN100225-04	s3c0107.d	01-MAR-10 18:43
MEGAICAL	WBN100225-03	s3c0108.d	01-MAR-10 19:11
MEGAICAL	WBN100225-02	s3c0109.d	01-MAR-10 19:39
MEGAICAL	WBN100225-01	s3c0110.d	01-MAR-10 20:07
MEGAICV	WBN100225-09.1	s3c0112.d	01-MAR-10 20:56
APICAL010	WBN100218-01	s3c0113.d	01-MAR-10 21:24
APICAL020	WBN100218-02	s3c0114.d	01-MAR-10 21:45
APICAL040	WBN100218-03.1	s3c0115.d	01-MAR-10 22:06
APICAL050	WBN100218-04	s3c0116.d	01-MAR-10 22:28
APICAL080	WBN100218-05	s3c0117.d	01-MAR-10 22:49
APICAL100	WBN100218-06	s3c0118.d	01-MAR-10 23:10
APICAL120	WBN100218-07	s3c0119.d	01-MAR-10 23:31

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1950

Instrument ID: MSD3.I

Injection Date/Time: 01-MAR-10 16:17

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

Lab File ID /chem/MSD3.i/s030110.b/s3c0101.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	46.3
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	41.2
70	Less than 2% of mass 69	0.4
127	40 - 60% of mass 198	47.8
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	25.1
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	75.9
442	Greater than 40% of mass 198	98.6
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
APICV	WBN100218-08.1	s3c0127.d	02-MAR-10 02:19

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1950

Instrument ID: MSD3.I

Injection Date/Time: 04-MAR-10 20:40

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

Lab File ID /chem/MSD3.i/s030410a.b/s3c0422.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	48.8
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	45
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	24.4
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	68.1
442	Greater than 40% of mass 198	93.5
443	17 - 23% of mass 442	22

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	WBN100225-09.4	s3c0423.d	04-MAR-10 20:52
APCVS	WBN100218-08.3	s3c0424.d	04-MAR-10 21:16
SBLK01	1202051280	s3c0426-1.d	04-MAR-10 22:02
SBLK01LCS	1202051281	s3c0427-1.d	04-MAR-10 22:25

## Instrument Performance Check

## DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1950

Instrument ID: MSD3.I

Injection Date/Time: 05-MAR-10 08:48

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

Lab File ID /chem/MSD3.i/s030510.b/s3c0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	51.4
68	Less than 2% of mass 69	1.6
69	Mass 69 Relative Abundance	47.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	51.9
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	24.6
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	70.4
442	Greater than 40% of mass 198	98.1
443	17 - 23% of mass 442	21.6

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	WBN100225-09.2	s3c0503.d	05-MAR-10 09:42
APCVS	WBN100218-08.2	s3c0505.d	05-MAR-10 10:33
RE15-10-8314	247562002	s3c0524.d	05-MAR-10 18:03
RE15-10-8313	247562003	s3c0525.d	05-MAR-10 18:26
RE15-10-8312	247562004	s3c0526.d	05-MAR-10 18:49
RE15-10-8315	247562005	s3c0527.d	05-MAR-10 19:12
RE15-10-8311	247562006	s3c0528.d	05-MAR-10 19:35
RE15-10-8310	247562007	s3c0529.d	05-MAR-10 19:58
RE15-10-8303	247562008	s3c0530.d	05-MAR-10 20:21
RE15-10-8302	247562009	s3c0531.d	05-MAR-10 20:44

### Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1950

Instrument: MSD3.I

STD Analysis Time: 01-MAR-10 20:56

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

Data File: s3c0112-BOE.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	277036		3.87	1098770		4.74	573689		6	872941		6.99	705848		8.66	653140		10.1
Upper Limit	554072		4.37	2197540		5.24	1147378		6.5	1745882		7.49	1411696		9.16	1306280		10.6
Lower Limit	138518		3.37	549385		4.24	286845		5.5	436471		6.49	352924		8.16	326570		9.63
Sample ID																		

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: 10-1950

Instrument: MSD3.I

STD Analysis Time: 04-MAR-10 20:52

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

Data File: s3c0423.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	310566		3.72	1248243		4.58	665833		5.83	1064221		6.83	692525		8.46	558482		9.8
Upper Limit	621132		4.22	2496486		5.08	1331666		6.33	2128442		7.33	1385050		8.96	1116964		10.3
Lower Limit	155283		3.22	624122		4.08	332917		5.33	532111		6.33	346263		7.96	279241		9.3
Sample ID																		
BLK01	287052		3.71	1107759		4.58	624331		5.83	989866		6.83	632239		8.45	436182		9.8
BLK01LCS	268241		3.71	1108940		4.58	615803		5.83	1046429		6.83	739603		8.46	558236		9.8

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: 10-1950

Instrument: MSD3.I

STD Analysis Time: 05-MAR-10 09:42

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

Data File: s3c0503.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	230288		3.7	943721		4.56	514118		5.81	894626		6.82	791776		8.44	694468		9.76
Upper Limit	460576		4.2	1887442		5.06	1028236		6.31	1789252		7.32	1583552		8.94	1388936		10.3
Lower Limit	115144		3.2	471861		4.06	257059		5.31	447313		6.32	395888		7.94	347234		9.26
Sample ID																		
RE15-10-8314	335861		3.7	1318249		4.56	760480		5.81	1345708		6.82	910717		8.44	528877		9.76
RE15-10-8313	205132		3.7	837424		4.56	484116		5.81	852245		6.82	576291		8.43	338764	*	9.76
RE15-10-8312	251190		3.7	1001347		4.56	581474		5.81	1009592		6.82	707791		8.44	406827		9.76
RE15-10-8315	287804		3.7	1149286		4.56	682678		5.81	1213902		6.82	861219		8.44	441394		9.77
RE15-10-8311	215557		3.7	863798		4.56	499778		5.81	910469		6.82	624497		8.43	368019		9.76
RE15-10-8310	289946		3.7	1153569		4.56	665409		5.81	1131265		6.82	712942		8.43	405568		9.76
RE15-10-8303	283063		3.7	1146552		4.56	652759		5.81	1161234		6.82	823835		8.44	498741		9.77
RE15-10-8302	272449		3.7	1095530		4.56	625822		5.81	1093315		6.82	727421		8.44	363613		9.77

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: 10-1950  
Lab Sample ID: 247562009

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	350	ug/kg	70.0	350
108-95-2	Phenol	U	350	ug/kg	70.0	350
95-57-8	2-Chlorophenol	U	350	ug/kg	70.0	350
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	70.0	350
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	70.0	350
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	70.0	350
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350
87-86-5	Pentachlorophenol	U	350	ug/kg	87.5	350
129-00-0	Pyrene		256	ug/kg	10.5	35.0
110-86-1	Pyridine	U	350	ug/kg	70.0	350
62-53-3	Aniline	U	350	ug/kg	105	350
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	70.0	350
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	70.0	350
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	70.0	350
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	70.0	350
95-48-7	o-Cresol	U	350	ug/kg	70.0	350
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350
67-72-1	Hexachloroethane	U	350	ug/kg	70.0	350
98-95-3	Nitrobenzene	U	350	ug/kg	70.0	350
78-59-1	Isophorone	U	350	ug/kg	70.0	350
88-75-5	2-Nitrophenol	U	350	ug/kg	70.0	350
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	70.0	350
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	70.0	350
65-85-0	Benzoic acid	U	700	ug/kg	175	700
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0
106-47-8	4-Chloroaniline	U	350	ug/kg	70.0	350
87-68-3	Hexachlorobutadiene	U	350	ug/kg	70.0	350
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	7.00	35.0
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	70.0	350
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	70.0	350
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	70.0	350
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0
88-74-4	2-Nitroaniline	U	350	ug/kg	70.0	350
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	350	ug/kg	70.0	350

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562009	Date Received: 02/20/2010 08:55	%Moisture: 5.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8302	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 20:44	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.15 g	Final Volume: 1 mL
Data File: s3c0531.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	350	ug/kg	70.0	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	J	20.3	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	700	ug/kg	133	700
132-64-9	Dibenzofuran	U	350	ug/kg	70.0	350
84-66-2	Diethylphthalate	U	350	ug/kg	70.0	350
86-73-7	Fluorene	J	16.4	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	70.0	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	70.0	350
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	350	ug/kg	70.0	350
122-66-7	Azobenzene	U	350	ug/kg	70.0	350
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	70.0	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	70.0	350
85-01-8	Phenanthrene		182	ug/kg	10.5	35.0
120-12-7	Anthracene		40.6	ug/kg	7.00	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	70.0	350
206-44-0	Fluoranthene		299	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	70.0	350
56-55-3	Benzo(a)anthracene		128	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene		122	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	70.0	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	70.0	350
205-99-2	Benzo(b)fluoranthene		269	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene		136	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene		65.2	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene		63.7	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	70.0	350

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	2150	ug/kg		JA
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	858	ug/kg	93	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562009

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
% Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8302  
Batch ID: 956677  
Run Date: 03/05/2010 20:44  
Prep Date: 02/23/2010 21:09  
Data File: s3c0531.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
1197-01-9	Benzenemethanol, .alpha.,.alpha.,4-trime	4.51	343	ug/kg	80	NJ
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	4.64	494	ug/kg	98	NJ
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	4.93	419	ug/kg	99	NJ
	Unknown	7.14	588	ug/kg		J
	Unknown	7.24	582	ug/kg		J
	Unknown	7.27	290	ug/kg		J
81038-44-0	3-Bromo-4-hydroxy-5-methoxyphenylacetoni	7.36	738	ug/kg	90	NJ
	Unknown	7.42	789	ug/kg		J
1000197-84-7	5-Isopropylidene-6-methyldeca-3,6,9-trie	7.47	512	ug/kg	91	NJ
	Unknown	7.52	266	ug/kg		J
	Unknown	7.58	571	ug/kg		J
	Unknown	7.61	258	ug/kg		J
	Unknown	7.78	276	ug/kg		J
	Unknown	7.87	732	ug/kg		J
	Unknown	7.92	317	ug/kg		J
	Unknown	8.05	577	ug/kg		J
17974-57-1	(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	8.11	725	ug/kg	83	NJ
	Unknown	8.14	625	ug/kg		J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.41	815	ug/kg	86	NJ
	Unknown	8.55	577	ug/kg		J
	Unknown	8.64	412	ug/kg		J
	Unknown	8.79	302	ug/kg		J
	Unknown	8.85	227	ug/kg		J
	Unknown	8.98	160	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0531.d  
Lab Smp Id: 247562009 Client Smp ID: RE15-10-8302  
Inj Date : 05-MAR-2010 20:44  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562009|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 30  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.15000	weight of sample
M	5.18340	% 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	3.704	3.703 (1.000)	272449	40.0000	
* 29 Naphthalene-d8	136	4.560	4.564 (1.000)	1095530	40.0000	
* 46 Acenaphthene-d10	164	5.811	5.811 (1.000)	625822	40.0000	
* 67 Phenanthrene-d10	188	6.817	6.816 (1.000)	1093315	40.0000	
* 91 Chrysene-d12	240	8.443	8.437 (1.000)	727421	40.0000	
* 98 Perylene-d12	264	9.775	9.763 (1.000)	363613	40.0000	
\$ 3 2-Fluorophenol	112	2.907	2.896 (0.785)	495767	65.9162	2300
\$ 5 Phenol-d5	99	3.426	3.420 (0.925)	664081	69.2200	2420
\$ 20 Nitrobenzene-d5	82	4.062	4.062 (0.891)	308072	32.8186	1150
\$ 39 2-Fluorobiphenyl	172	5.303	5.302 (0.913)	601534	37.3276	1300
\$ 60 2,4,6-Tribromophenol	329	6.357	6.356 (1.094)	147511	75.5832	2640
\$ 81 p-Terphenyl-d14	244	7.742	7.741 (0.917)	666187	53.6595	1880

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
79 Pyrene	202	7.689	7.688	(0.911)	167012	7.31559	256
45 Acenaphthylene	152	5.710	5.714	(0.982)	13990	0.58065	20.3(a)
53 Fluorene	166	6.191	6.196	(1.065)	8751	0.46933	16.4(a)
68 Phenanthrene	178	6.833	6.832	(1.002)	152298	5.19347	182
69 Anthracene	178	6.865	6.864	(1.007)	31901	1.15964	40.6
76 Fluoranthene	202	7.550	7.549	(1.107)	220668	8.55656	299
89 Benzo(a)anthracene	228	8.437	8.426	(0.999)	68695	3.65249	128
92 Chrysene	228	8.464	8.453	(1.003)	62219	3.47652	122
95 Benzo(b)fluoranthene	252	9.352	9.341	(0.957)	63898	7.69914	269
97 Benzo(a)pyrene	252	9.710	9.699	(0.993)	27539	3.89322	136
99 Indeno(1,2,3-cd)pyrene	276	11.245	11.239	(1.150)	11624	1.86520	65.2
101 Benzo(ghi)perylene	276	11.711	11.694	(1.198)	9463	1.82026	63.7(Q)

#### 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: s3c0531.d

Report Date: 03/07/2010 15:50

Lab. ID: 247562009

SampleType: SAMPLE

Injection Date: 05-MAR-2010 20:44

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562009|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	33946	3.43	3.49	80-120	100	(T)
93	69920	3.47	3.49	238-298	206	(Q)
-----						
6	Phenol	CAS#: 108-95-2				
94	151124	3.28	3.43	80-120	100	(T)
66	28496	3.28	3.43	17- 77	19	(T)
65	113965	3.28	3.43	0- 30	75	(QT)
-----						
7	bis(2-Chloroethyl) ether	CAS#: 111-44-4				
63	31027	3.66	3.51	80-120	100	(T)
93	1096489	3.66	3.51	92-152	3534	(QT)
95	17077	3.66	3.51	5- 65	55	(T)
-----						
12	Benzyl alcohol	CAS#: 100-51-6				
108	18517	3.66	3.77	80-120	100	(T)
79	371259	3.66	3.77	104-164	2005	(QT)
77	387664	3.66	3.77	54-114	2094	(QT)
-----						
15	o-Cresol	CAS#: 95-48-7				
107	83252	3.66	3.82	80-120	100	(T)
108	18517	3.66	3.82	93-153	22	(QT)
77	391038	3.66	3.82	20- 80	470	(QT)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	46219	4.06	3.94	80-120	100	(T)
42	33878	4.06	3.94	58-118	73	(T)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
22 Isophorone		CAS#: 78-59-1				
82	316663	4.06	4.23	80-120	100	(T)
138	187	4.07	4.23	0- 49	0	(T)
-----						
25 bis(2-Chloroethoxy)methane		CAS#: 111-91-1				
93	24600	4.36	4.36	80-120	100	( )
123	10576	4.37	4.36	0- 48	43	( )
95	58565	4.37	4.36	3- 63	238	(Q)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	18057	4.37	4.34	80-120	100	( )
122	3680	4.37	4.34	51-111	20	(Q)
77	32548	4.37	4.34	41-101	180	(Q)
-----						
40 2-Chloronaphthalene		CAS#: 91-58-7				
162	87514	5.54	5.41	80-120	100	(T)
164	5484	5.54	5.41	3- 63	6	(T)
127	5716	5.54	5.41	11- 71	7	(QT)
-----						
42 o-Nitroaniline		CAS#: 88-74-4				
65	12296	5.39	5.47	80-120	100	(T)
92	6640	5.39	5.47	32- 92	54	(T)
138	1785	5.40	5.47	67-127	15	(QT)
-----						
41 m-Nitroaniline		CAS#: 99-09-2				
138	9891	5.54	5.77	80-120	100	(T)
92	122902	5.54	5.76	87-147	1243	(QT)
108	166345	5.54	5.77	0- 40	1682	(QT)
-----						
43 Dimethylphthalate		CAS#: 131-11-3				
163	42571	5.54	5.58	80-120	100	( )
164	5484	5.54	5.58	0- 40	13	( )
-----						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	82615	5.81	5.63	80-120	100	(T)
63	1873	5.81	5.63	64-124	2	(QT)
-----						
45 Acenaphthylene		CAS#: 208-96-8				
152	13990	5.71	5.71	80-120	100	( )
151	4942	5.71	5.71	0- 50	35	( )
153	1773	5.71	5.71	0- 44	13	( )
-----						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	82615	5.81	5.93	80-120	100	(T)
89	1271	5.81	5.92	48-108	2	(QT)
63	1688	5.81	5.92	25- 85	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
52 4-Nitrophenol		CAS#: 100-02-7				
139	242	5.86	5.86	80-120	100	( )
109	6046	5.80	5.86	41-101	2489	(Q)
65	1122	5.87	5.86	80-140	462	(Q)
<hr/>						
53 Fluorene		CAS#: 86-73-7				
166	8751	6.19	6.20	80-120	100	( )
165	7993	6.19	6.20	62-122	91	( )
167	1735	6.20	6.20	0- 44	20	( )
<hr/>						
55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	675	6.36	6.21	80-120	100	(T)
105	3724	6.37	6.21	16- 76	551	(QT)
51	1231	6.36	6.21	52-112	182	(QT)
<hr/>						
68 Phenanthrene		CAS#: 85-01-8				
178	152298	6.83	6.83	80-120	100	( )
179	25319	6.83	6.83	0- 45	17	( )
176	28343	6.83	6.83	0- 49	19	( )
<hr/>						
69 Anthracene		CAS#: 120-12-7				
178	31901	6.86	6.86	80-120	100	( )
179	5849	6.86	6.86	0- 45	18	( )
176	5938	6.86	6.86	0- 48	19	( )
<hr/>						
76 Fluoranthene		CAS#: 206-44-0				
202	220668	7.55	7.55	80-120	100	( )
203	38651	7.55	7.55	0- 47	18	( )
101	28333	7.55	7.55	0- 43	13	( )
<hr/>						
79 Pyrene		CAS#: 129-00-0				
202	167012	7.69	7.69	80-120	100	( )
200	36969	7.69	7.69	0- 51	22	( )
101	26100	7.69	7.69	0- 45	16	( )
<hr/>						
85 Butylbenzylphthalate		CAS#: 85-68-7				
149	51803	7.96	7.99	80-120	100	( )
91	226676	7.96	7.99	48-108	438	(Q)
206	1227	7.96	7.99	0- 52	2	( )
<hr/>						
89 Benzo(a)anthracene		CAS#: 56-55-3				
228	68695	8.44	8.43	80-120	100	( )
226	23421	8.44	8.43	0- 57	34	( )
229	22069	8.43	8.43	0- 50	32	( )
<hr/>						
92 Chrysene		CAS#: 218-01-9				
228	62219	8.46	8.45	80-120	100	( )
229	18924	8.46	8.45	0- 50	30	( )
226	22796	8.46	8.45	0- 60	37	( )
<hr/>						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
-----						
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	43156	8.34	8.33	80-120	100	( )
167	142326	8.29	8.33	3- 63	330	(Q)
-----						
94 Di-n-octylphthalate				CAS#: 117-84-0		
149	25155	8.70	8.82	80-120	100	(T)
43	86784	8.69	8.82	0- 44	345	(QT)
-----						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	63898	9.35	9.34	80-120	100	( )
253	14547	9.35	9.34	0- 52	23	( )
125	9774	9.35	9.34	0- 43	15	( )
-----						
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	63898	9.35	9.37	80-120	100	( )
253	15332	9.35	9.37	0- 52	24	( )
125	9758	9.35	9.37	0- 42	15	( )
-----						
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	27539	9.71	9.70	80-120	100	( )
253	6208	9.71	9.70	0- 52	23	( )
125	3616	9.71	9.70	0- 30	13	( )
-----						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	11624	11.25	11.24	80-120	100	( )
138	3106	11.25	11.24	4- 64	27	( )
-----						
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	3477	11.25	11.24	80-120	100	( )
139	210	11.17	11.24	0- 30	6	(T)
-----						
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	9463	11.71	11.69	80-120	100	( )
138	2906	11.71	11.69	0- 30	31	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0531.d  
 Lab Smp Id: 247562009 Client Smp ID: RE15-10-8302  
 Inj Date : 05-MAR-2010 20:44  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562009|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270 S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
 Als bottle: 30  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.15000	weight of sample
M	5.18340	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.704	1831939	40.000
* 29 Naphthalene-d8	4.560	2765179	40.000
* 67 Phenanthrene-d10	6.817	3317301	40.000
* 91 Chrysene-d12	8.443	12812828	40.000

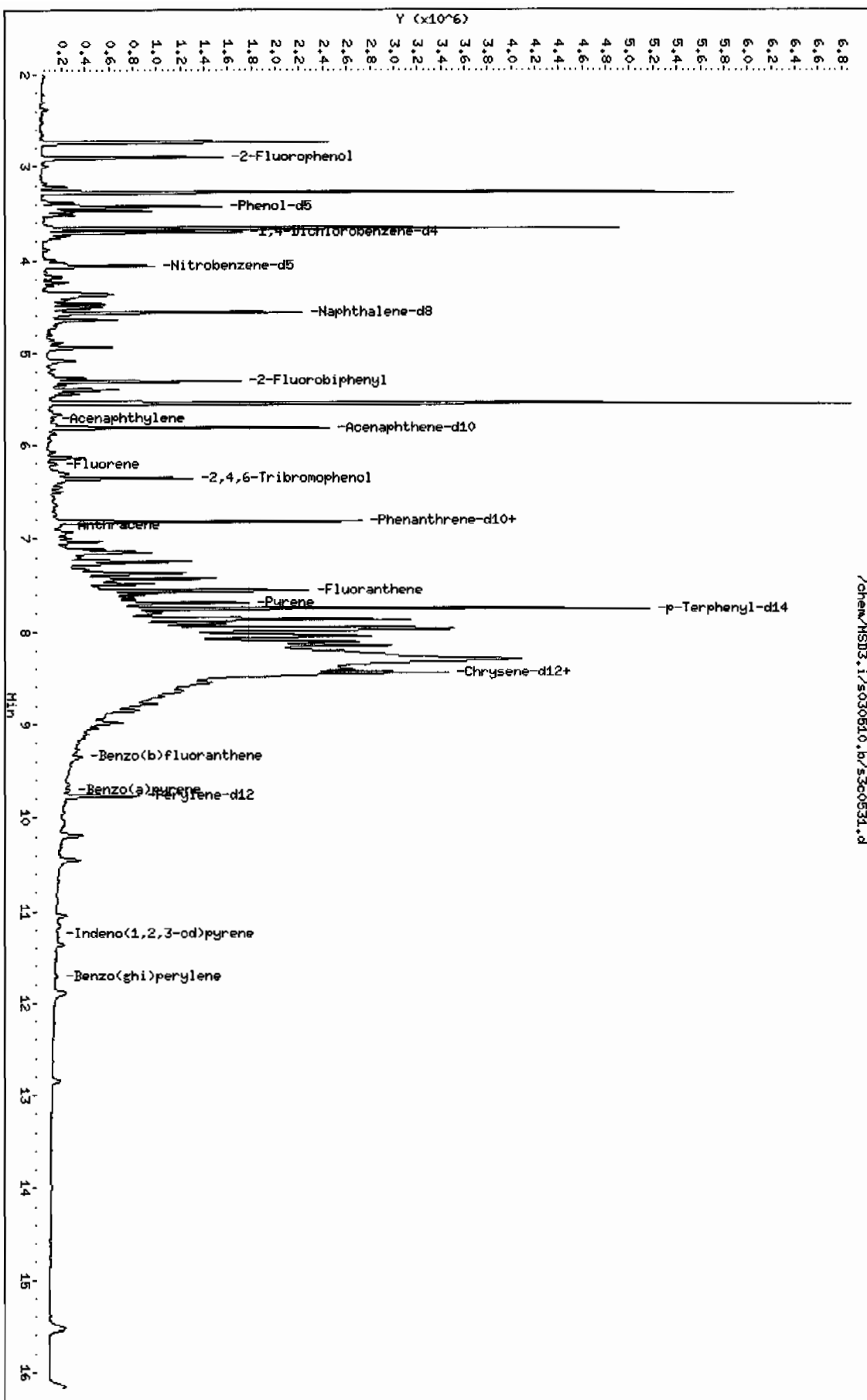
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.741	2818777	61.5473927	2150	0		0	10
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-					CAS #: 3479-89-8		
3.474	1122926	24.5188518	858	93	NIST05.L	14442	10
Benzenemethanol, .alpha.,.alpha.,4-trime					CAS #: 1197-01-9		
4.506	678469	9.81446608	343	80	NIST05.L	22878	29
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri					CAS #: 1196-01-6		
4.640	975356	14.1091239	494	98	NIST05.L	22922	29
Acetic acid, 1,7,7-trimethyl-bicyclo[2.2					CAS #: 92618-89-8		
4.934	828281	11.9815923	419	99	NIST05.L	54323	29
Unknown					CAS #:		
7.143	1393974	16.8085296	588	0		0	67
Unknown					CAS #:		
7.239	1378800	16.6255531	582	0		0	67
Unknown					CAS #:		
7.266	688221	8.29856450	290	0		0	67
3-Bromo-4-hydroxy-5-methoxyphenylacetoni					CAS #: 81038-44-0		
7.362	1748841	21.0875160	738	90	NIST05.L	86161	67
Unknown					CAS #:		
7.421	1870652	22.5563025	789	0		0	67
5-Isopropylidene-6-methyldeca-3,6,9-trie					CAS #: 1000197-84-7		
7.475	1214716	14.6470317	512	91	NIST05.L	59742	67
Unknown					CAS #:		
7.523	630372	7.60102486	266	0		0	67
Unknown					CAS #:		
7.582	1352723	16.3111234	570	0		0	67
Unknown					CAS #:		
7.608	612334	7.38352393	258	0		0	67
Unknown					CAS #:		
7.785	2525137	7.88315262	276	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
7.865	6705545	20.9338490	732	0		0	91
Unknown					CAS #:		
7.919	2899670	9.05239481	317	0		0	91
Unknown					CAS #:		
8.047	5284379	16.4971501	577	0		0	91
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1					CAS #: 17974-57-1		
8.106	6637787	20.7223168	725	83	NIST05.L	97615	91
Unknown					CAS #:		
8.143	5720734	17.8593945	625	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
8.405	7462057	23.2955819	815	86	NIST05.L	125037	91
Unknown					CAS #:		
8.550	5282897	16.4925223	577	0		0	91
Unknown					CAS #:		
8.641	3772910	11.7785402	412	0		0	91
Unknown					CAS #:		
8.785	2763882	8.62848442	302	0		0	91
Unknown					CAS #:		
8.849	2082831	6.50232969	227	0		0	91
Unknown					CAS #:		
8.983	1465641	4.57554235	160	0		0	91

Data File: /chem/MSD3.i/s030510.b/s300531.d  
 Date: 05-MAR-2010 20:44  
 Client ID: RE15-10-8302  
 Sample Info: 12475620919667711SVWF11.LANL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

Volume Injected (uL): 0.5

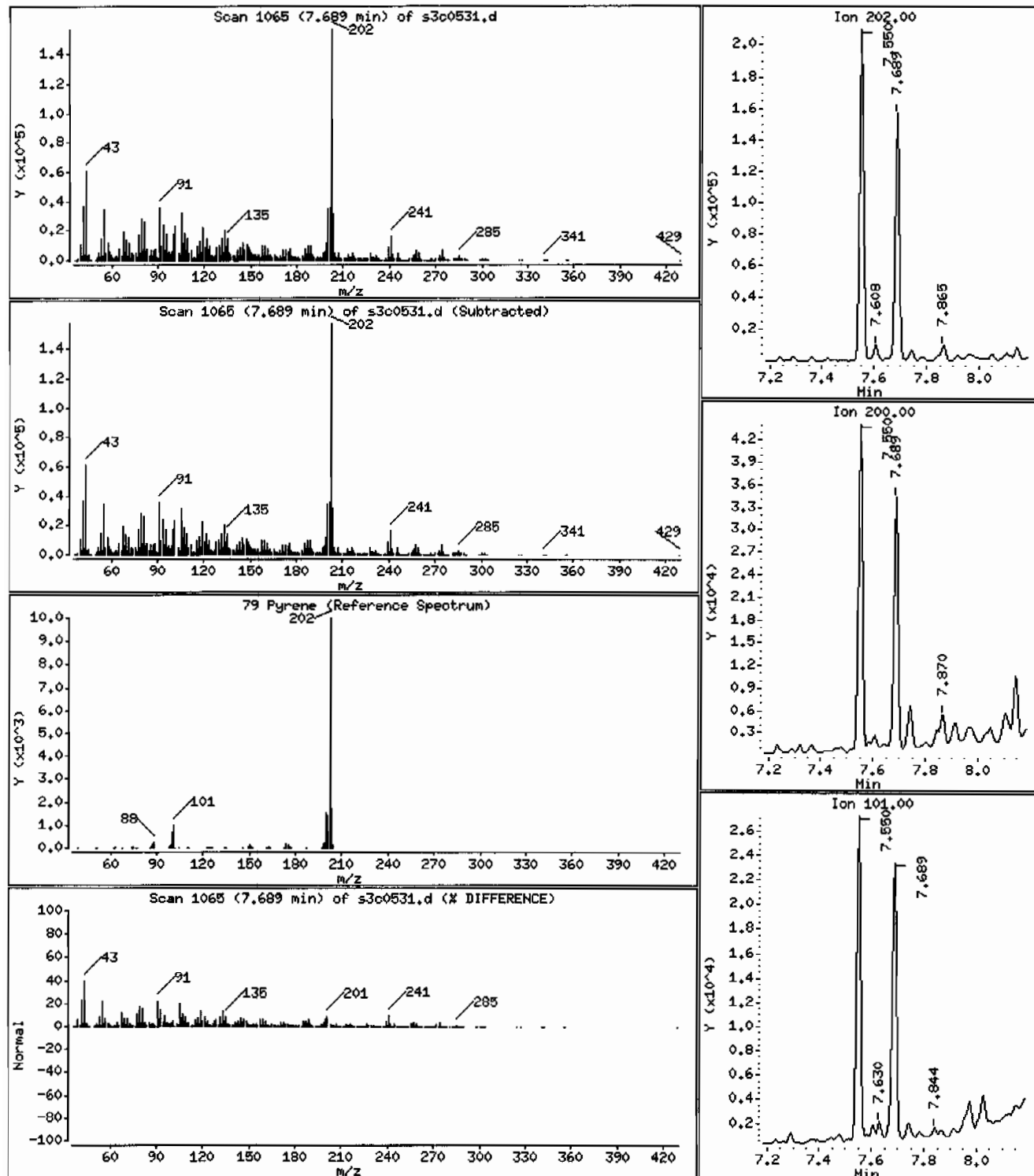
Operator: JLD1

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

Column diameter: 0.20

79 Pyrene

Concentration: 256 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

Volume Injected (uL): 0.5

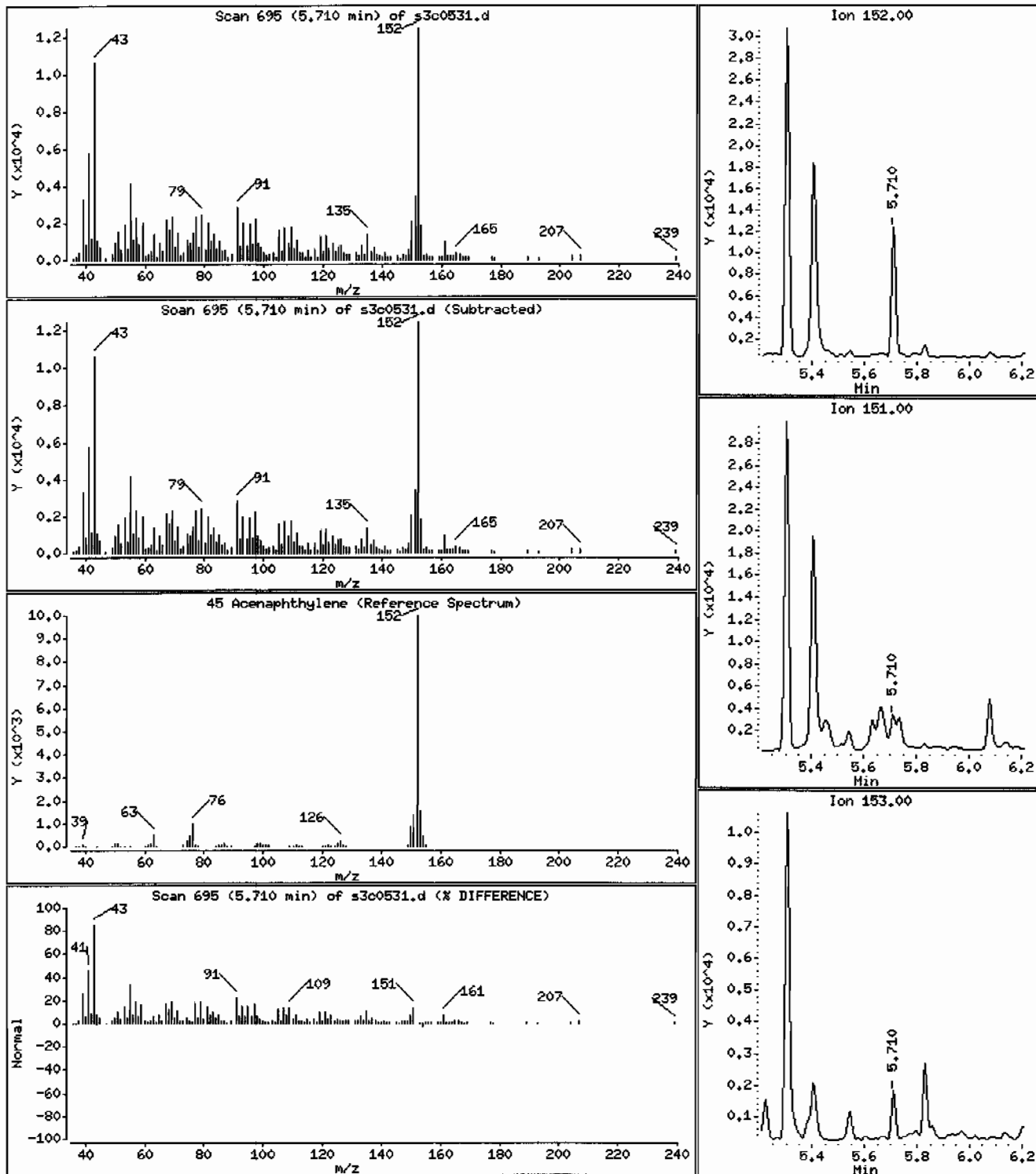
Operator: JLD1

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

Column diameter: 0.20

45 Acenaphthylene

Concentration: 20.3 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF11ILANL

Volume Injected (uL): 0.5

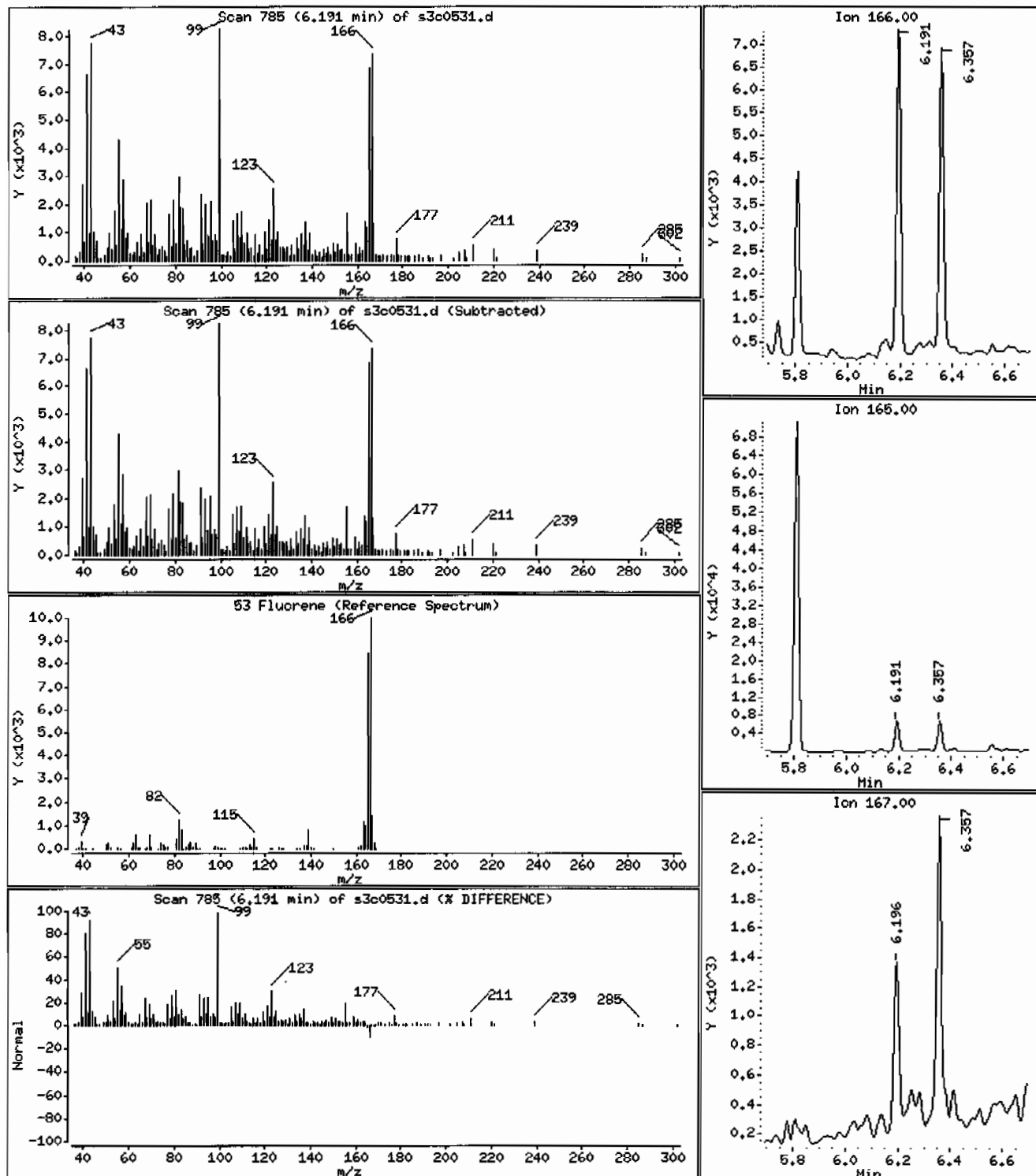
Operator: JLD1

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

Column diameter: 0.20

53 Fluorene

Concentration: 16.4 ug/Kg





Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF11ILANL

Volume Injected (uL): 0.5

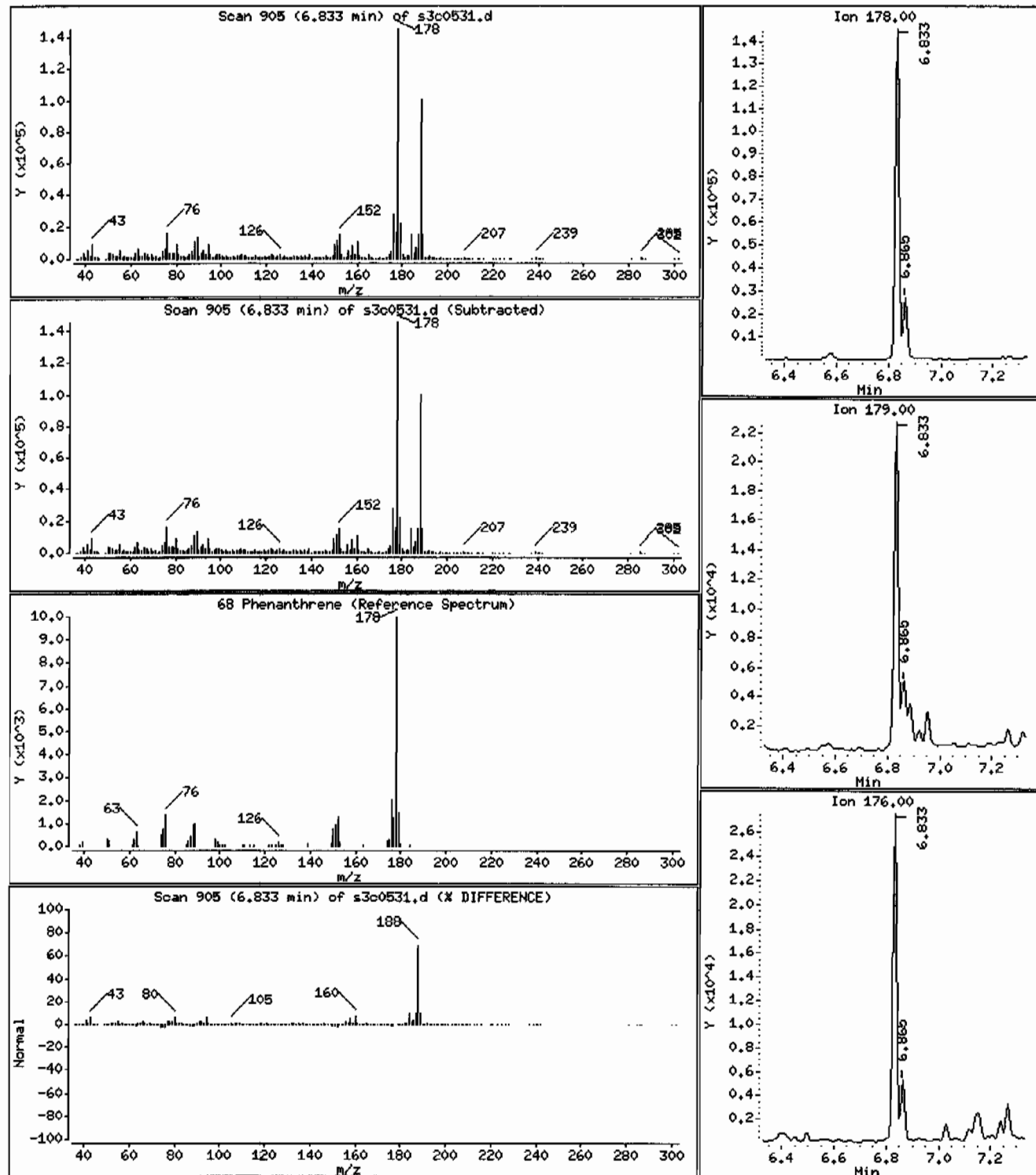
Operator: JLD1

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

Column diameter: 0.20

68 Phenanthrene

Concentration: 182 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.1

Sample Info: 1247562009195667711SVHF111LANL

Volume Injected (uL): 0.5

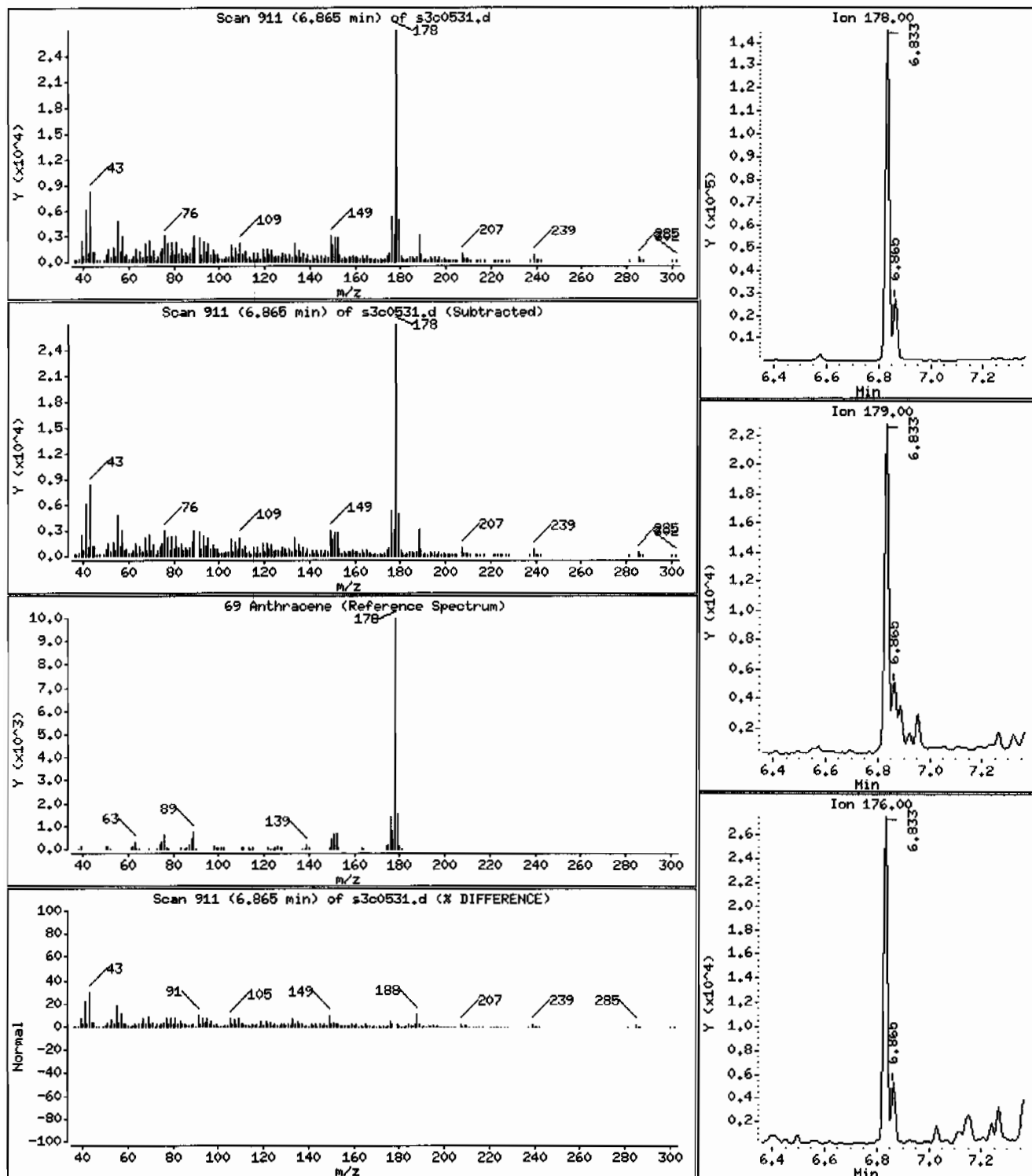
Operator: JLD1

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

Column diameter: 0.20

69 Anthracene

Concentration: 40,6 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.1

Sample Info: 1247562009195667711SVHF111LANL

Volume Injected (uL): 0.5

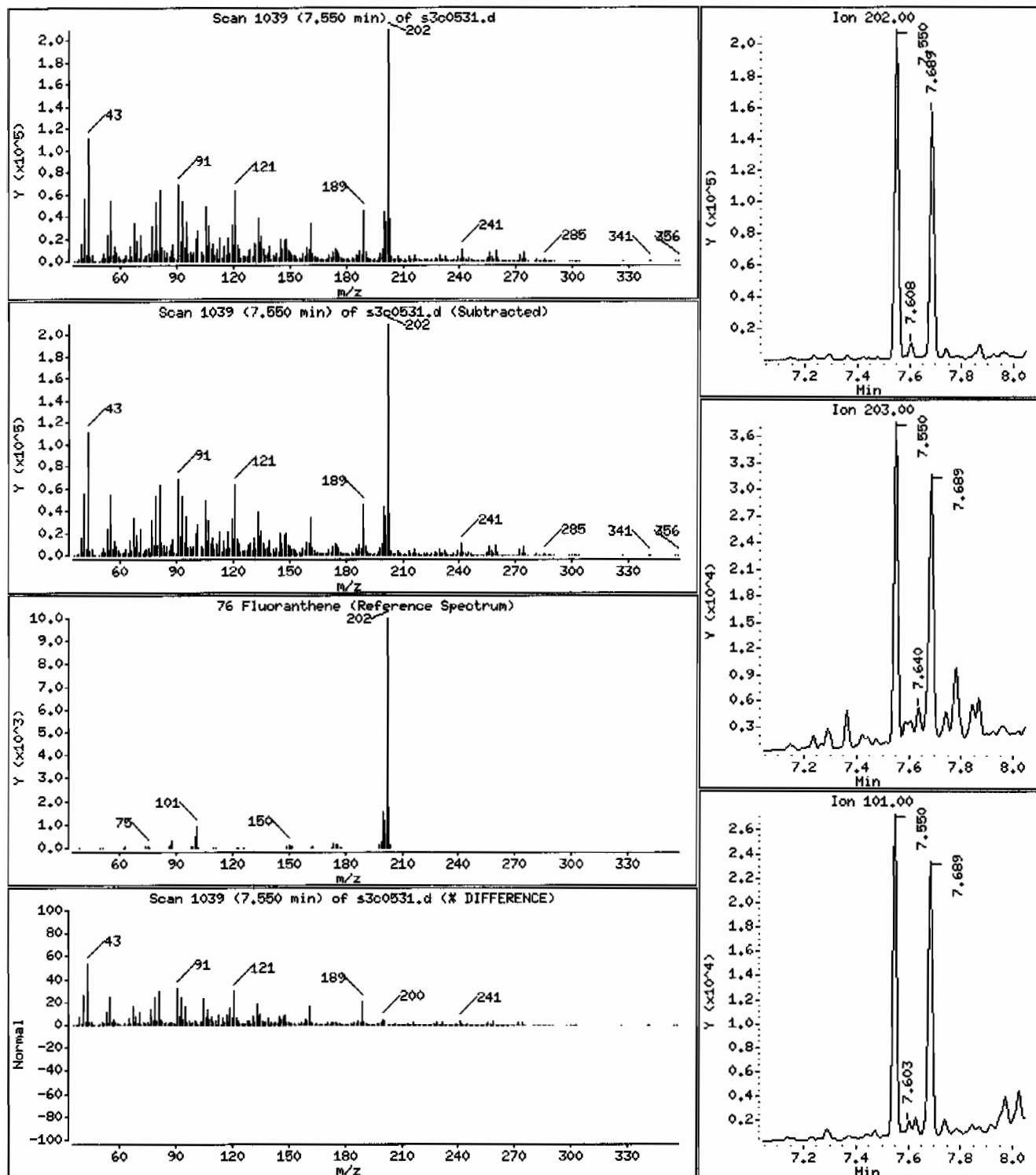
Operator: JLD1

Column phase: J&amp;W DB-SMS

Column diameter: 0.20

76 Fluoranthene

Concentration: 299 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF111LANL

Volume Injected (uL): 0.5

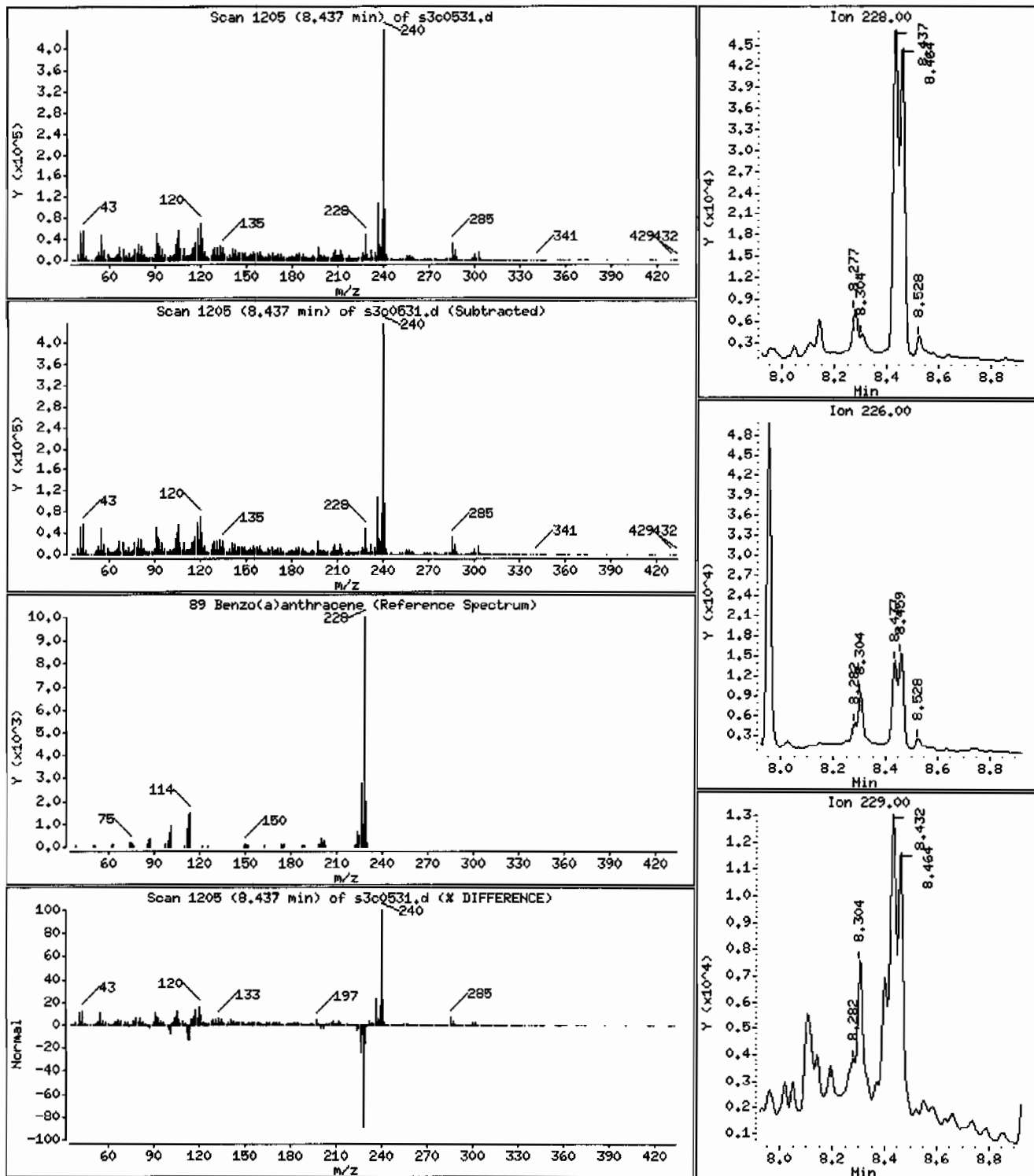
Operator: JLD1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 128 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 12475620091956677111SVHF111LANL

Volume Injected (uL): 0.5

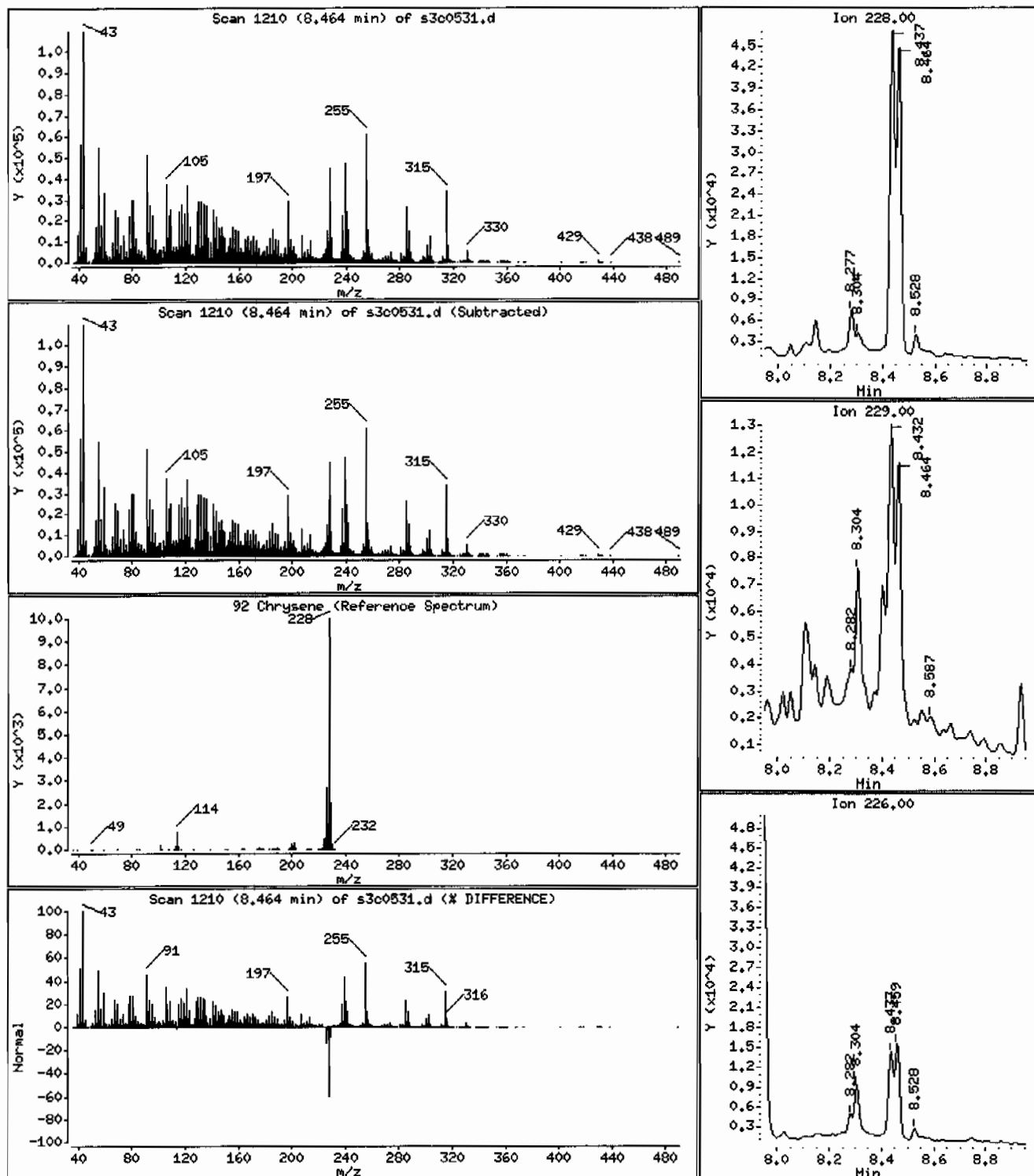
Operator: JLD1

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

Column diameter: 0.20

92 Chrysene

Concentration: 122 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: HSD3.i

Sample Info: 1247562009|95667711|SVHF11|LANL

Volume Injected (uL): 0.5

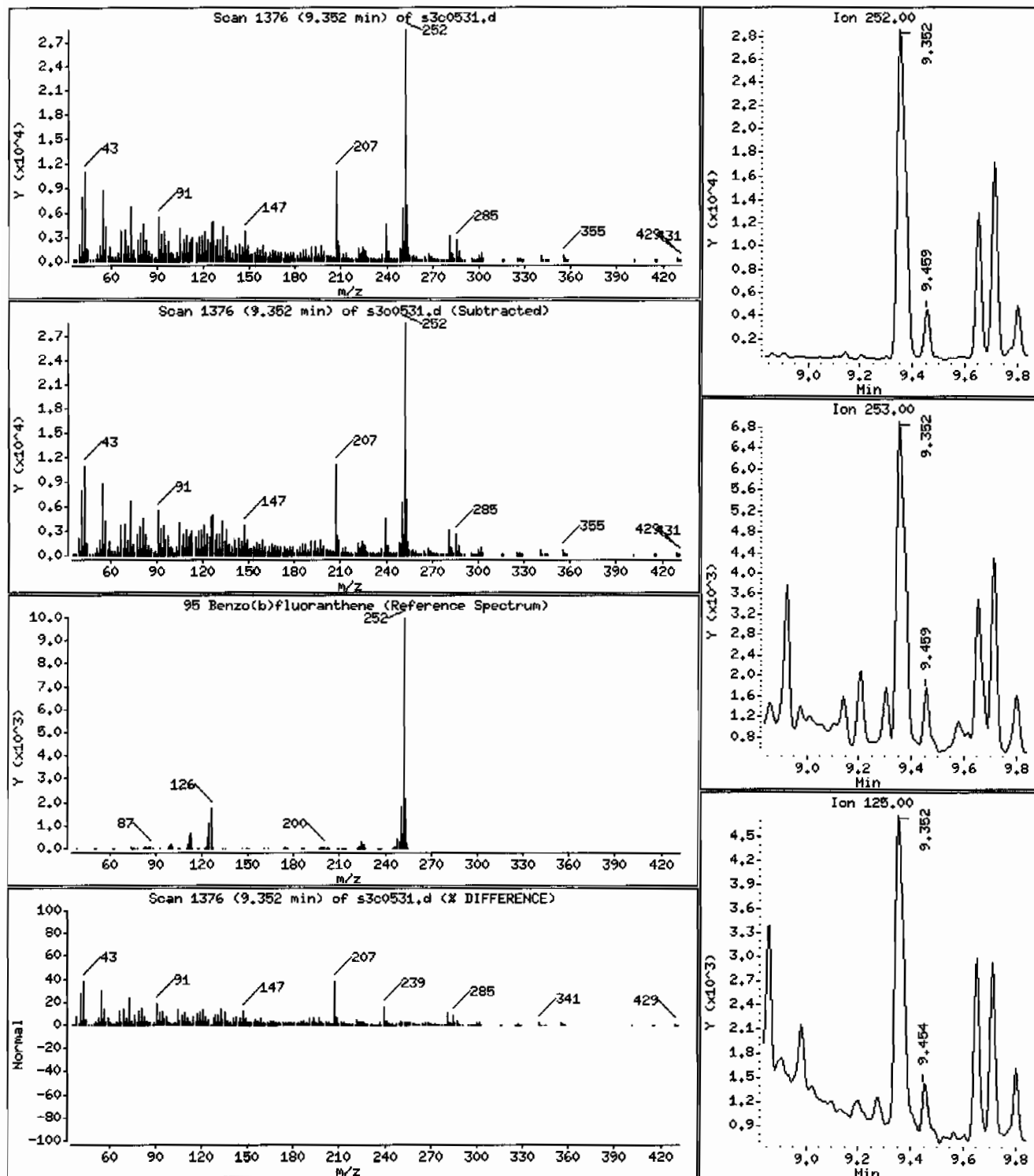
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 269 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF11LANL

Volume Injected (uL): 0.5

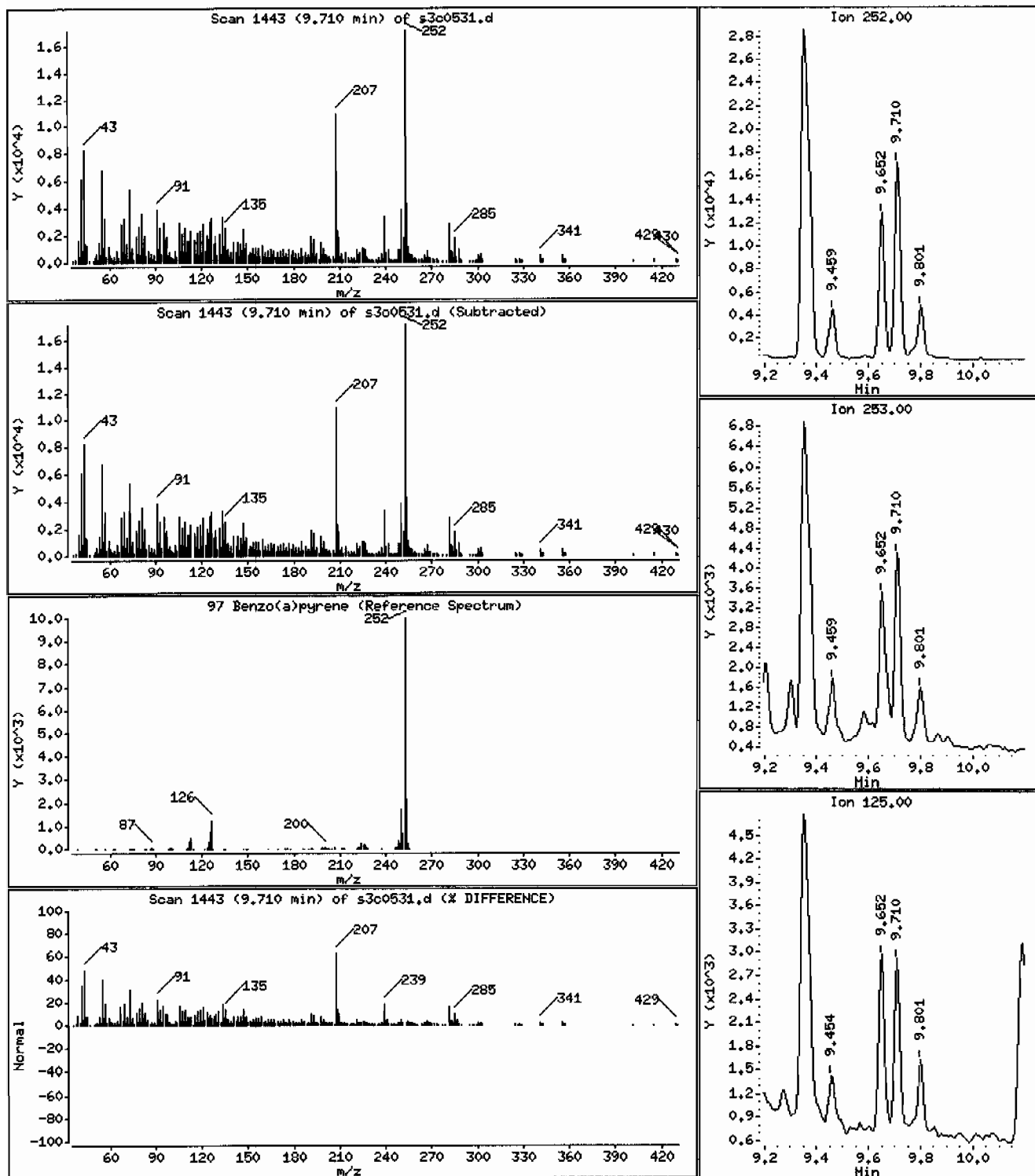
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 136 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

Volume Injected (uL): 0.5

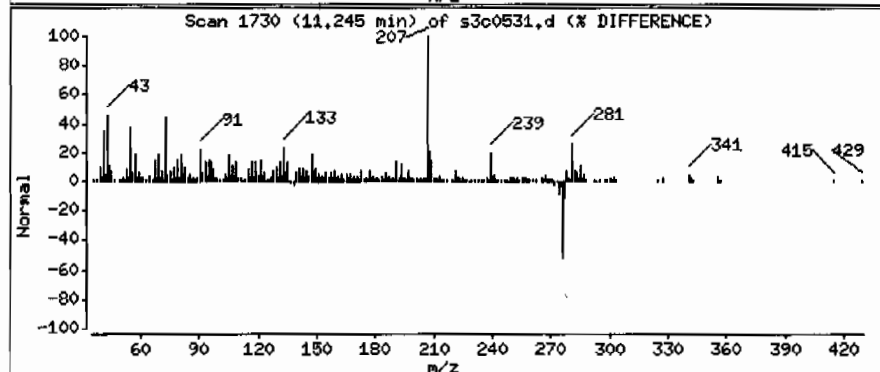
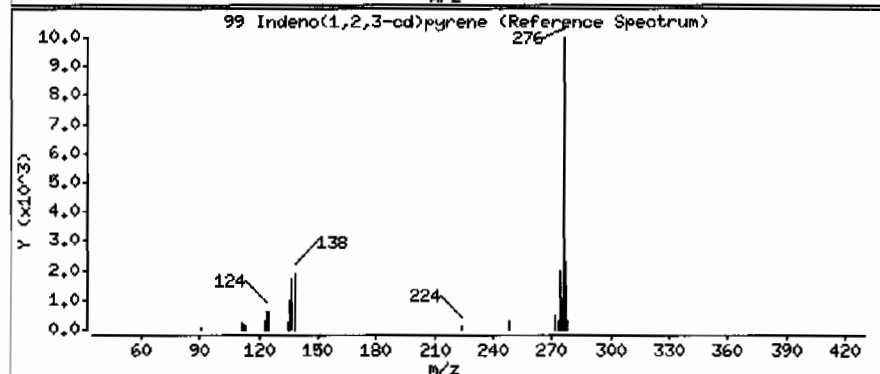
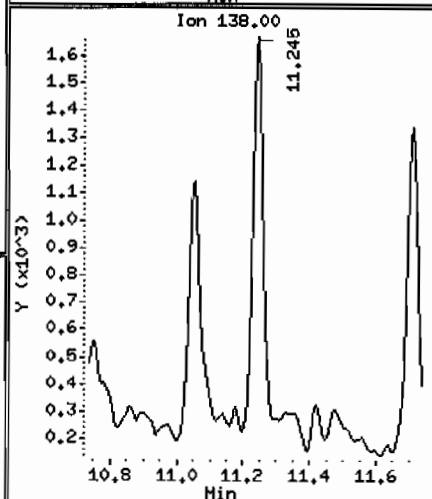
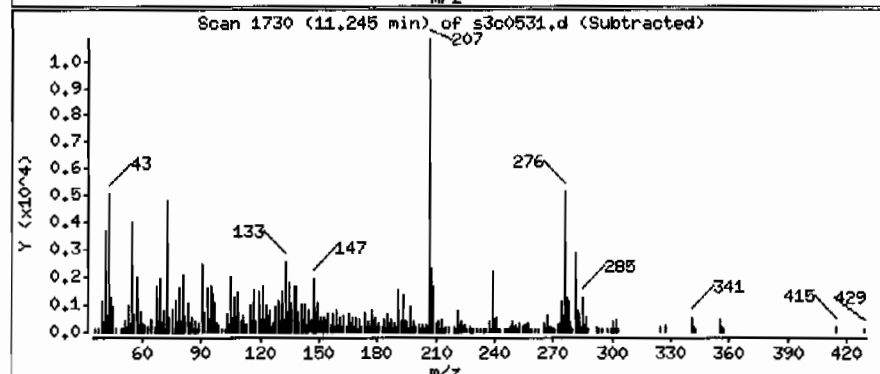
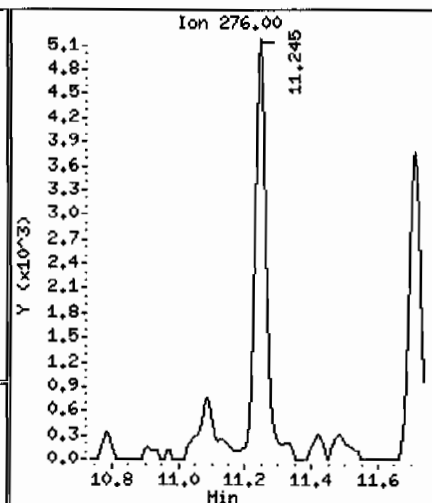
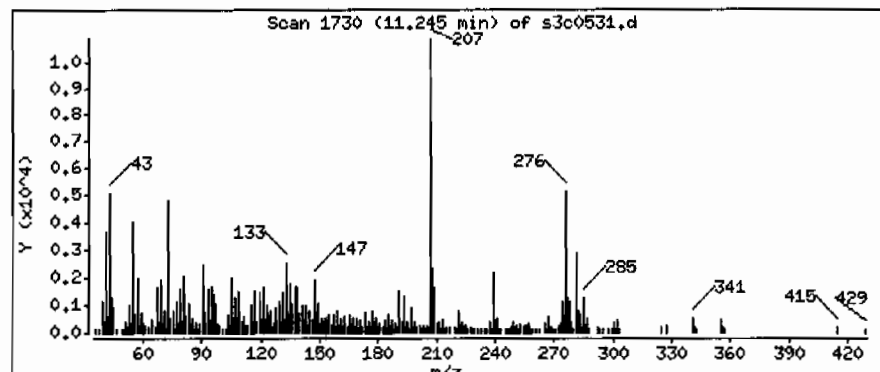
Operator: JLD1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 65.2 ug/Kg





Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711ISVHF11ILANL

Volume Injected (uL): 0.5

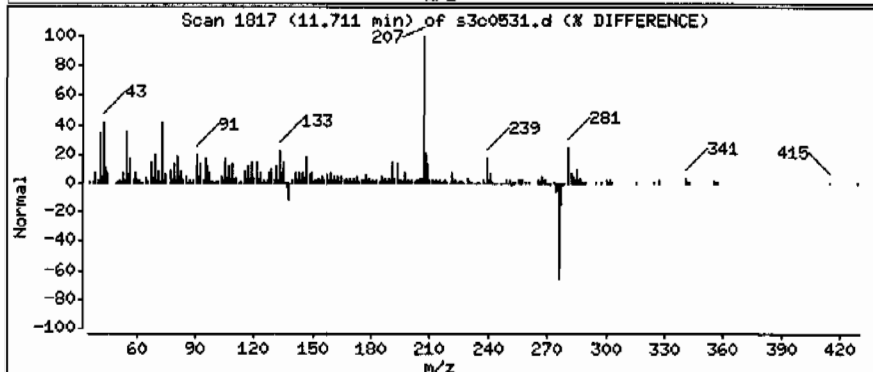
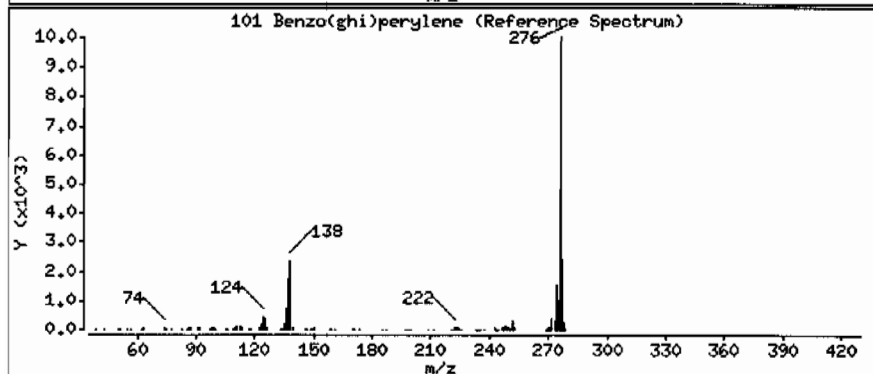
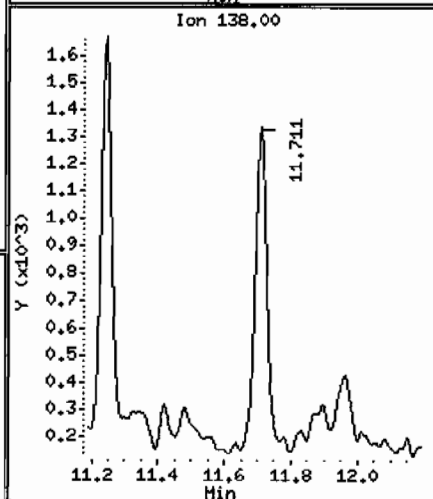
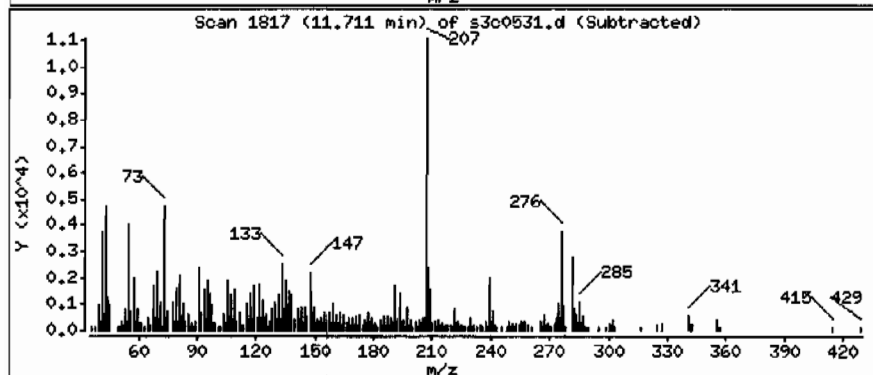
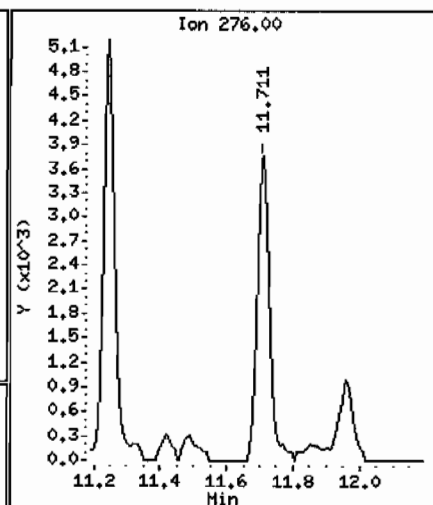
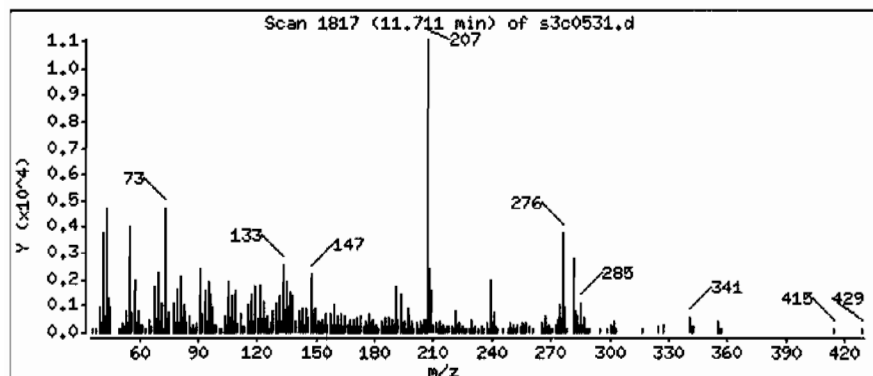
Operator: JLD1

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

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 63.7 ug/Kg



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

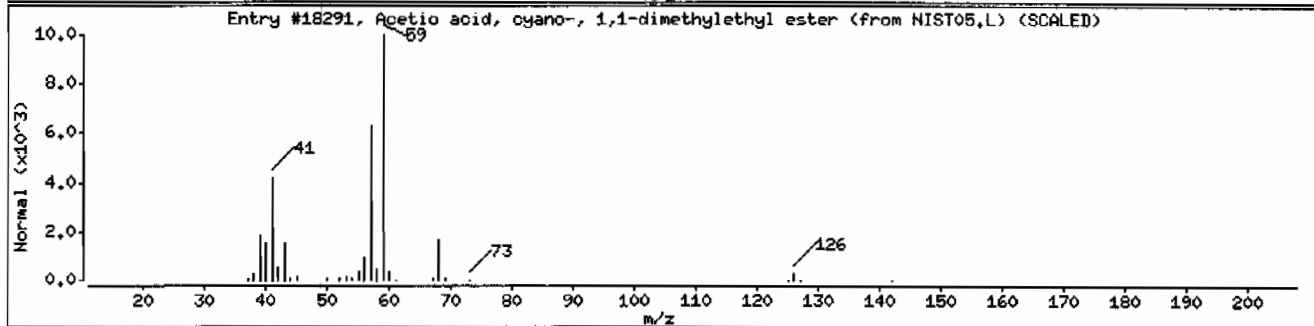
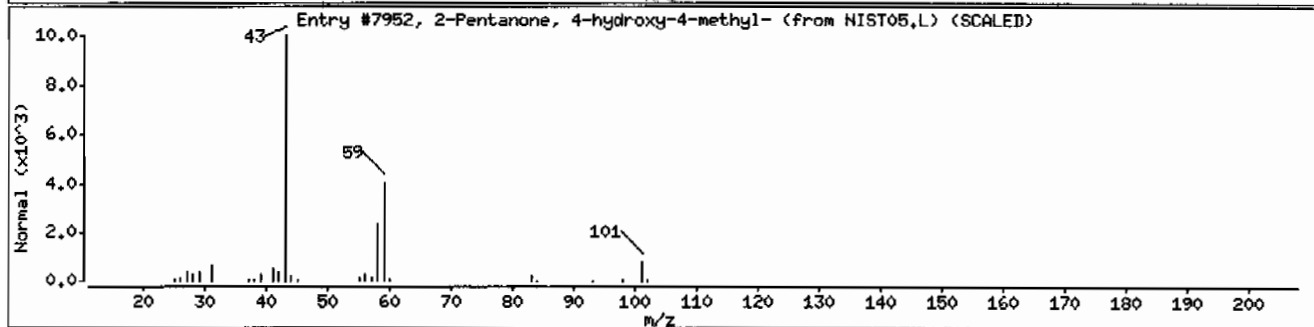
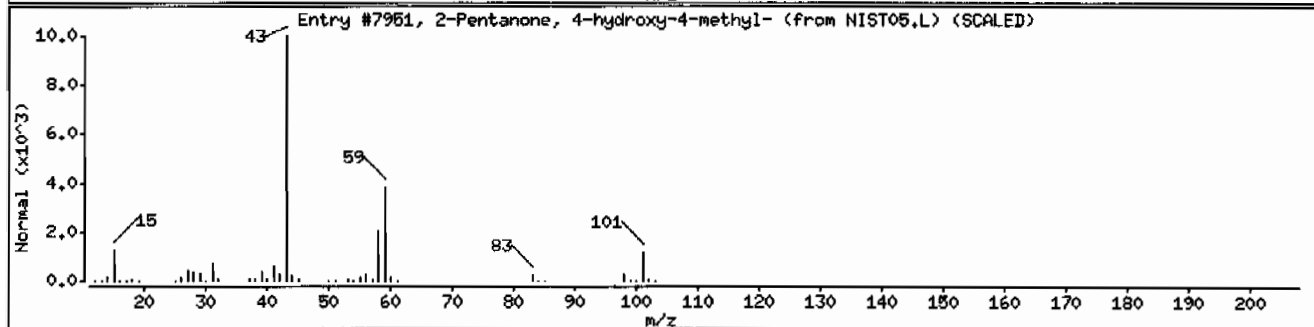
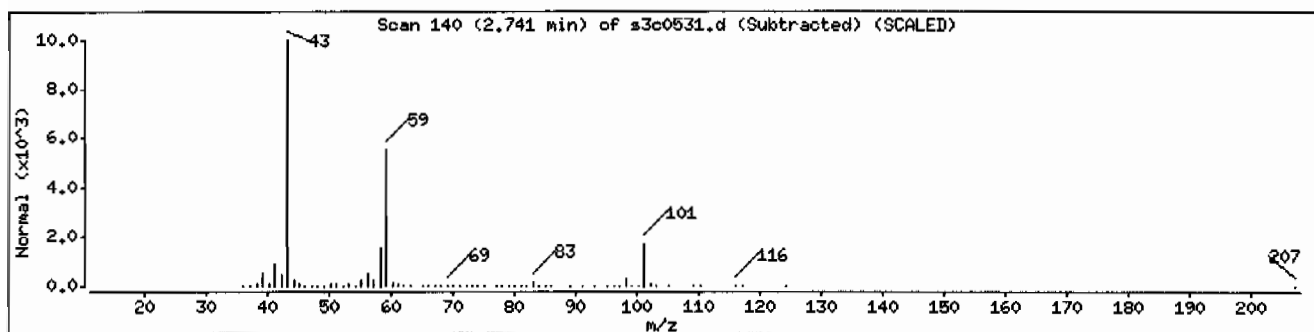
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF11ILANL

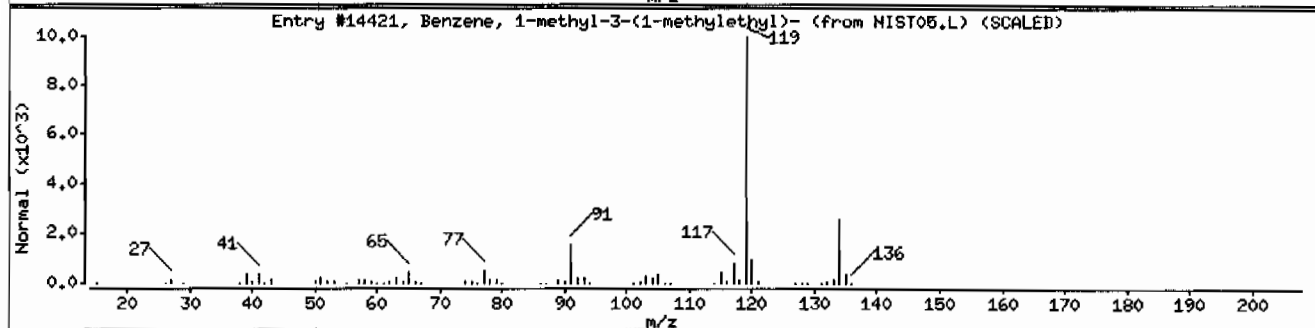
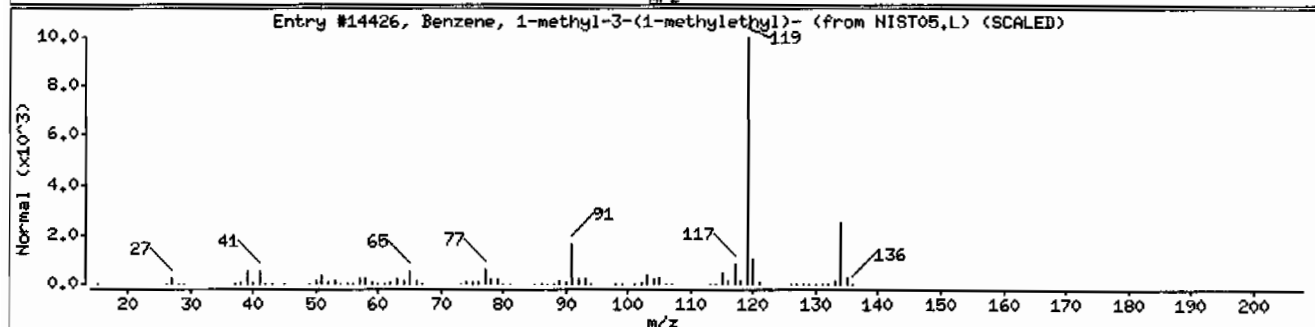
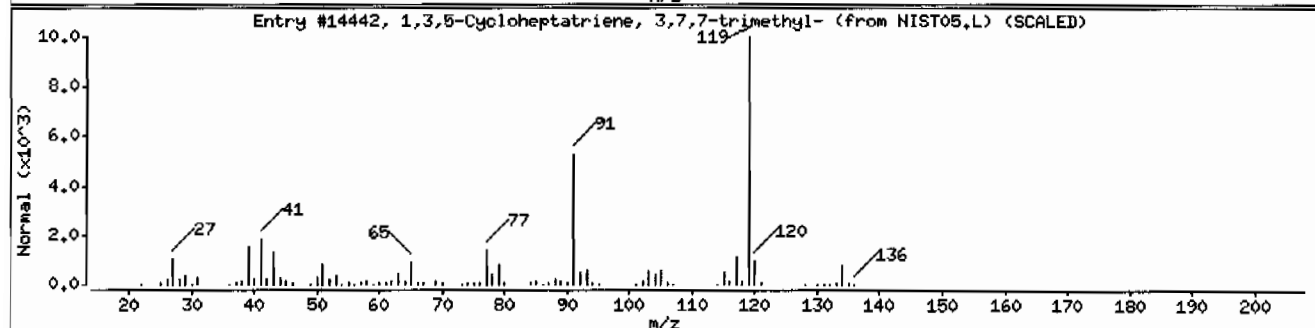
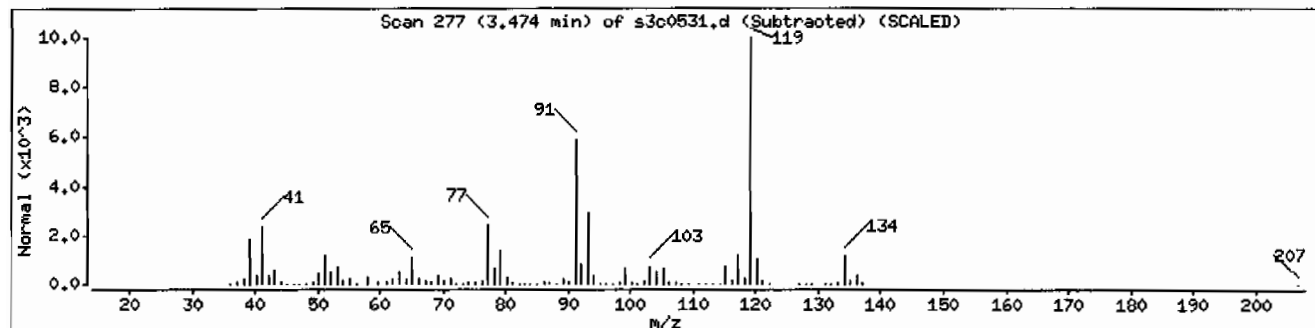
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3479-89-8	NIST05.L	14442	93	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14426	90	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14421	90	C10H14	134



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.1

Sample Info: 1247562009195667711SVHF111LANL

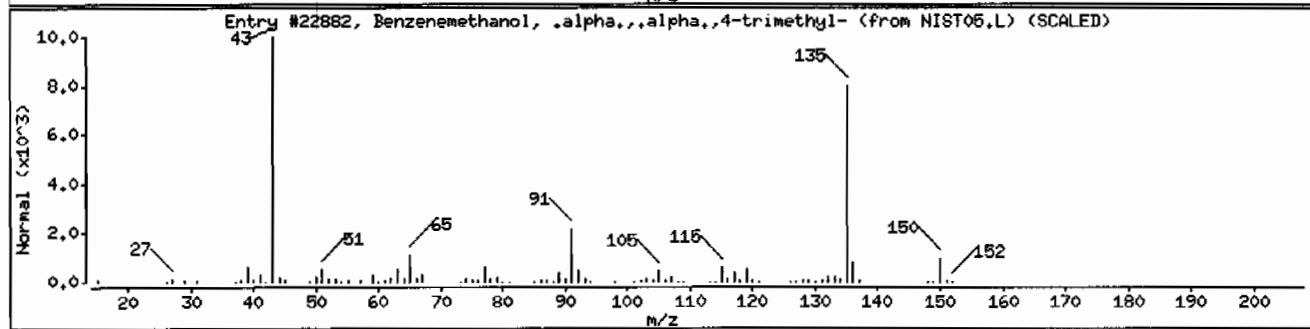
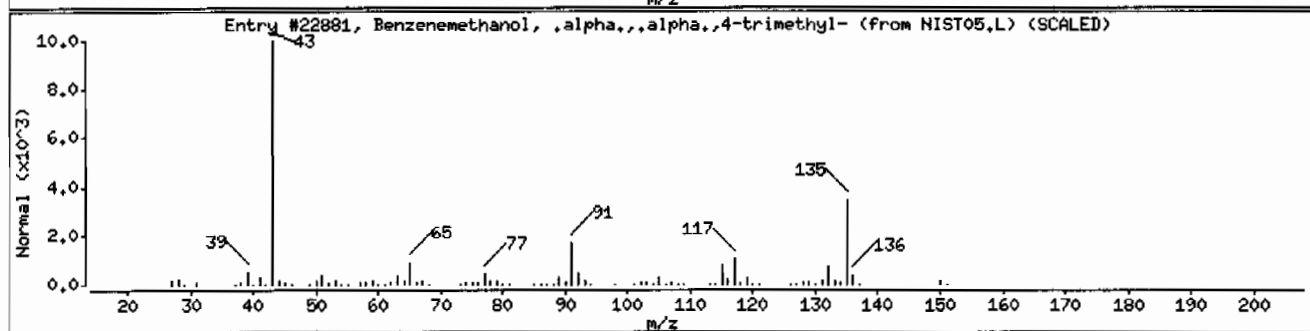
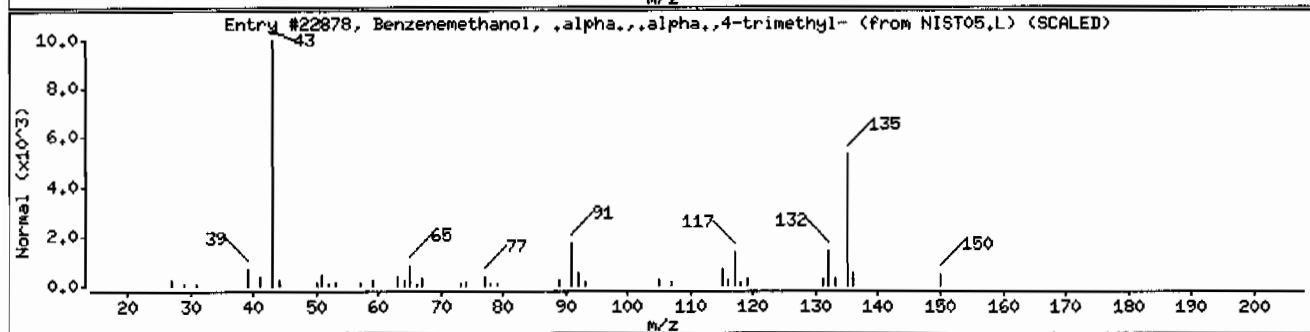
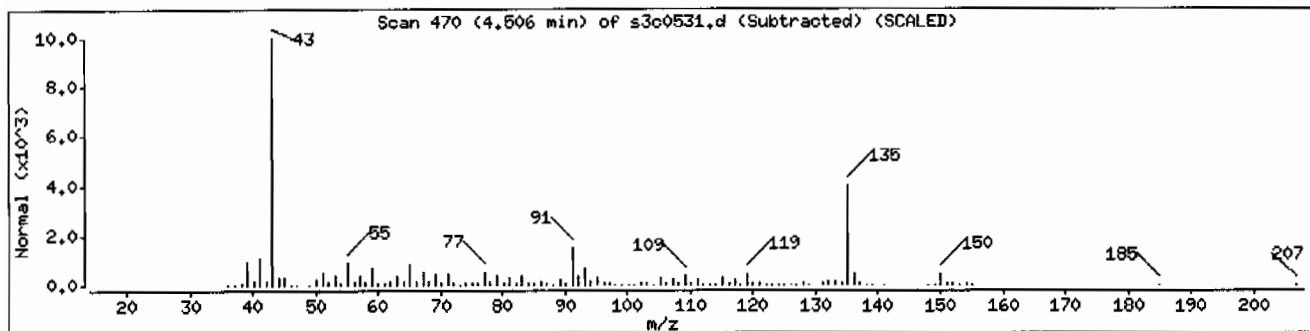
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzenemethanol, .alpha.,.alpha.,4-trime	1197-01-9	NIST05.L	22878	80	C10H14O	150
Benzenemethanol, .alpha.,.alpha.,4-trime	1197-01-9	NIST05.L	22881	72	C10H14O	150
Benzenemethanol, .alpha.,.alpha.,4-trime	1197-01-9	NIST05.L	22882	70	C10H14O	150



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF11|LANL

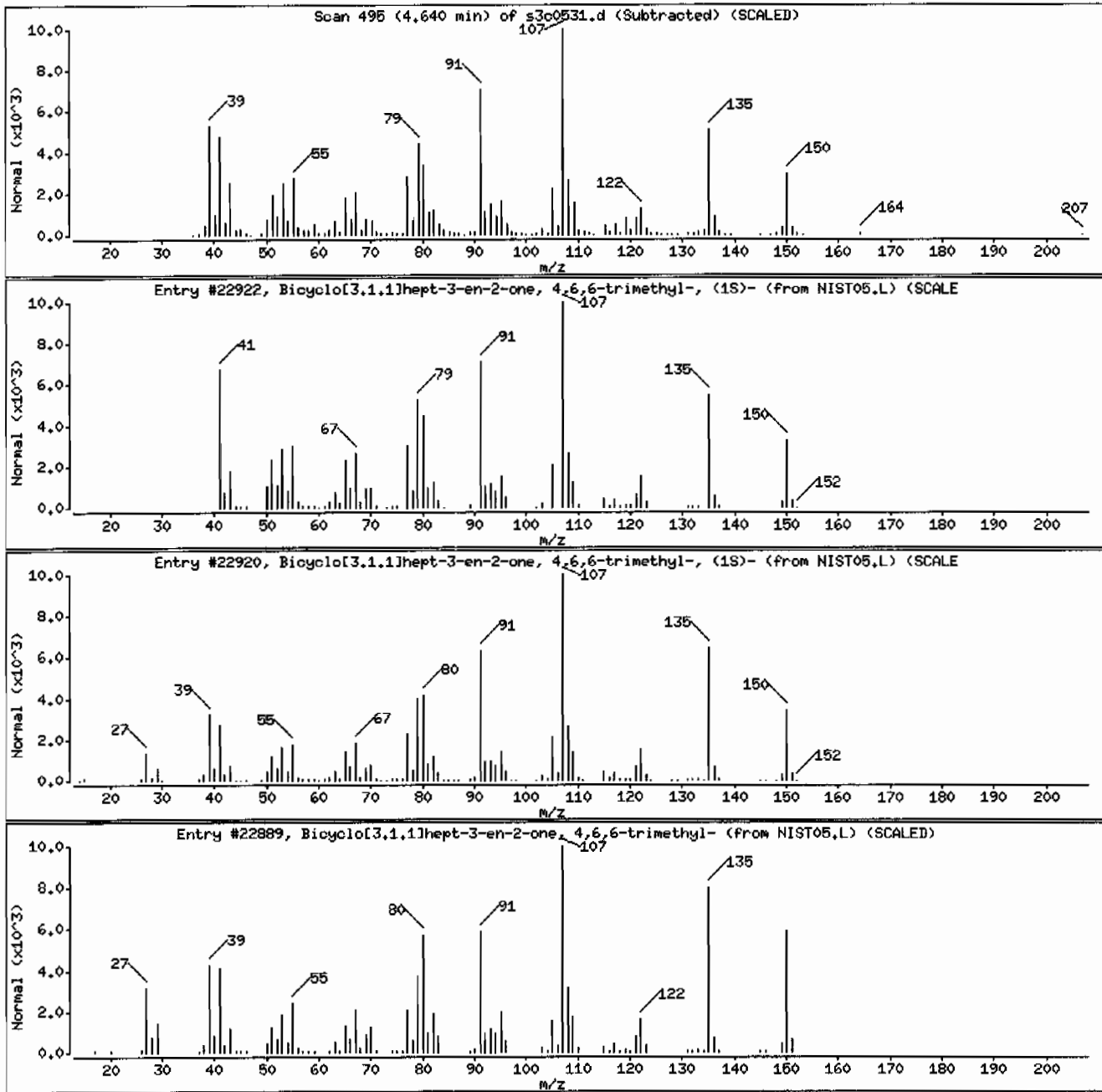
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	1196-01-6	NIST05.L	22922	98	C10H14O	150
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	1196-01-6	NIST05.L	22920	97	C10H14O	150
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	80-57-9	NIST05.L	22889	70	C10H14O	150



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

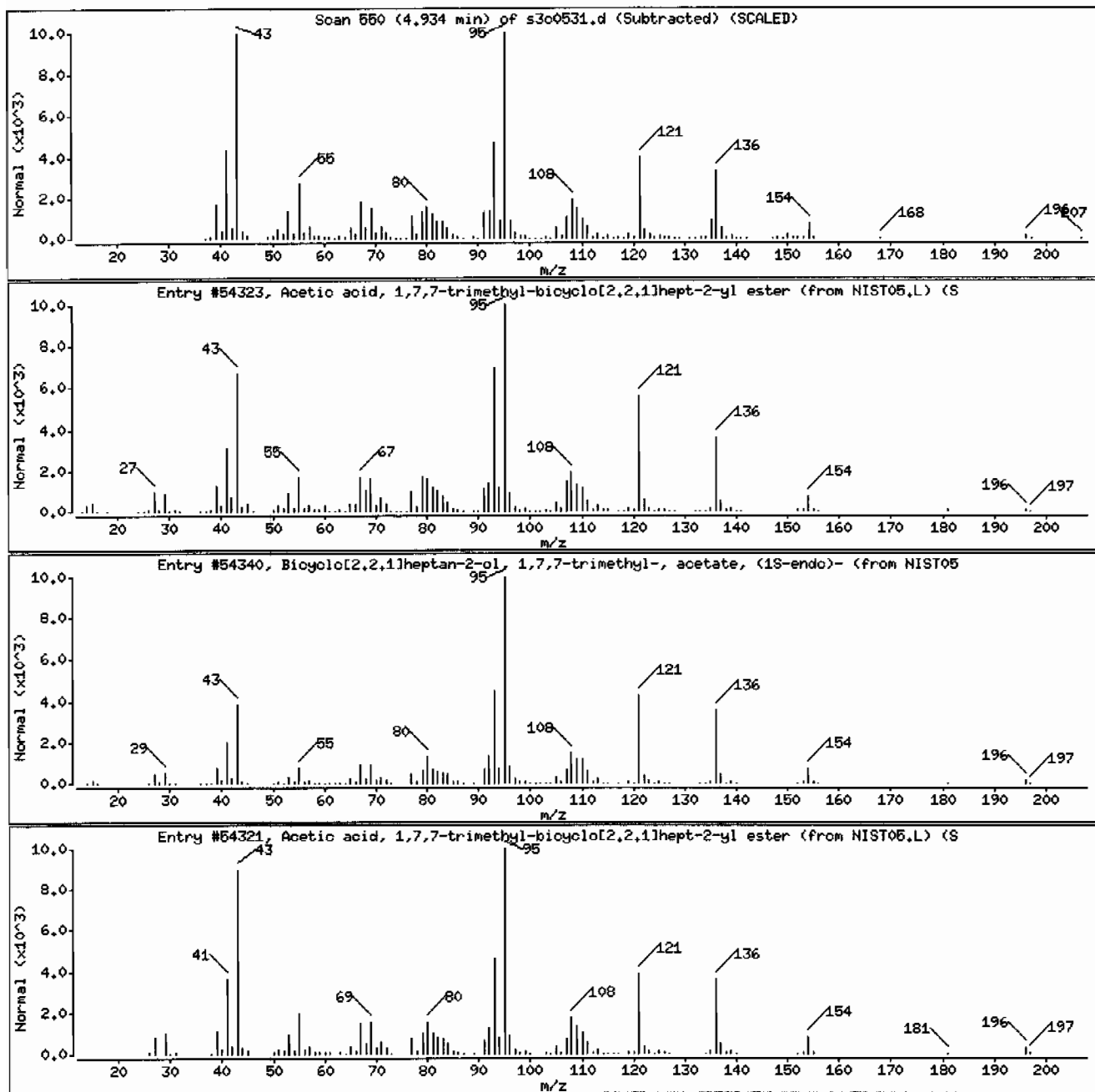
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetic acid, 1,7,7-trimethyl-bicyclo[2,2	92618-89-8	NIST05.L	54323	99	C12H20O2	196
Bicyclo[2,2,1]heptan-2-ol, 1,7,7-trimeth	5655-61-8	NIST05.L	54340	98	C12H20O2	196
Acetic acid, 1,7,7-trimethyl-bicyclo[2,2	92618-89-8	NIST05.L	54321	98	C12H20O2	196



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: I247562009195667711SVHFI11LANL

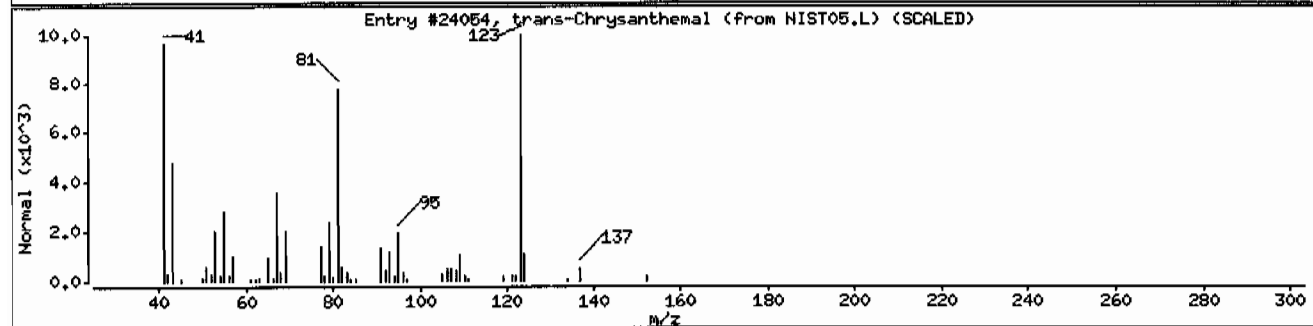
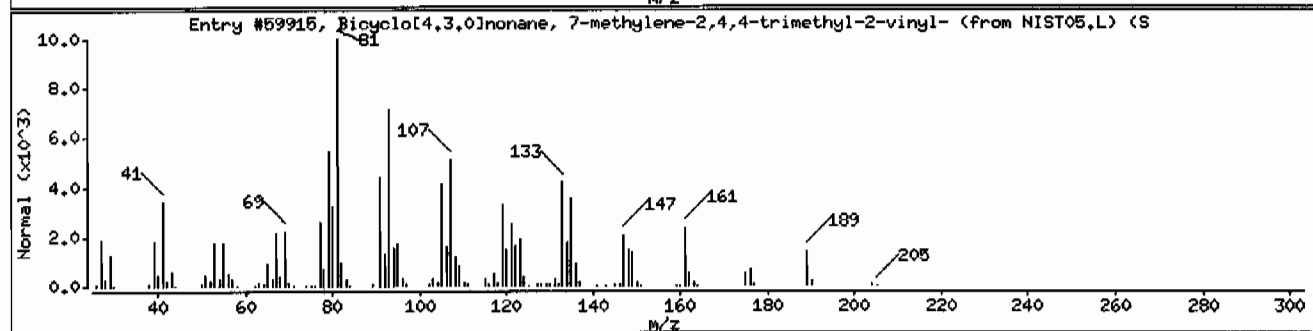
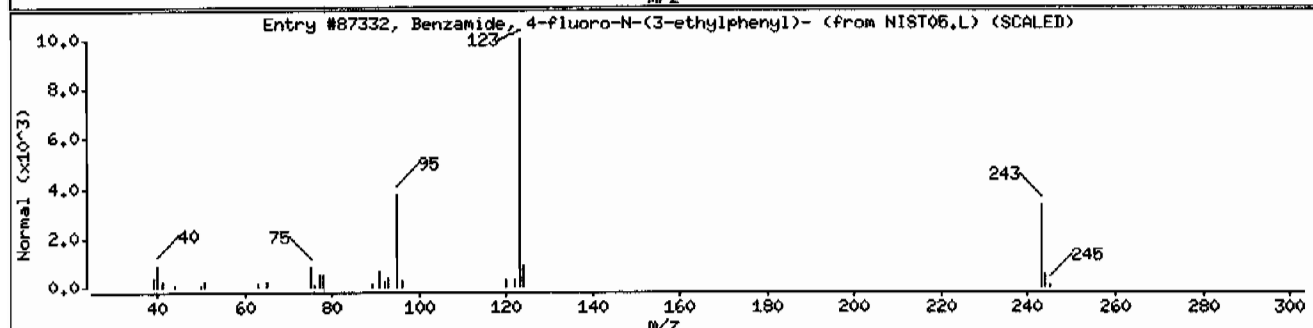
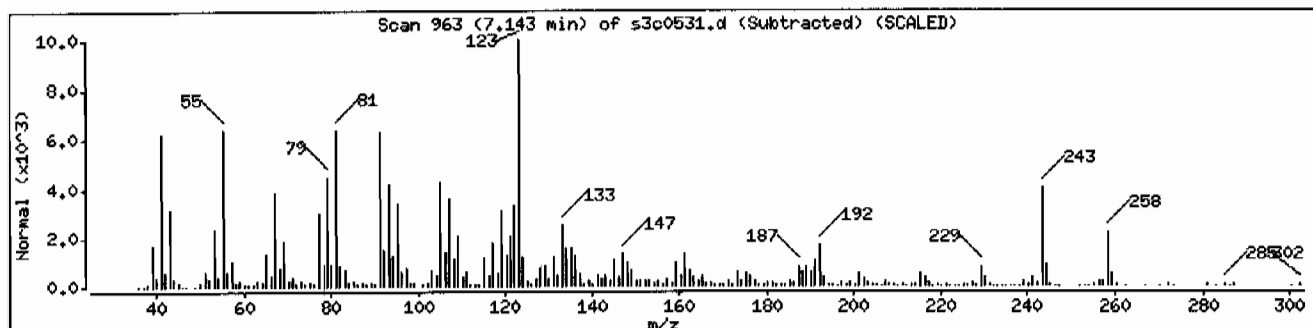
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzamide, 4-fluoro-N-(3-ethylphenyl)-	101398-05-4	NIST05.L	87332	46	C15H14FN0	243
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	44	C15H24	204
trans-Chrysanthemal	20104-05-6	NIST05.L	24054	30	C10H16O	152



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF11ILANL

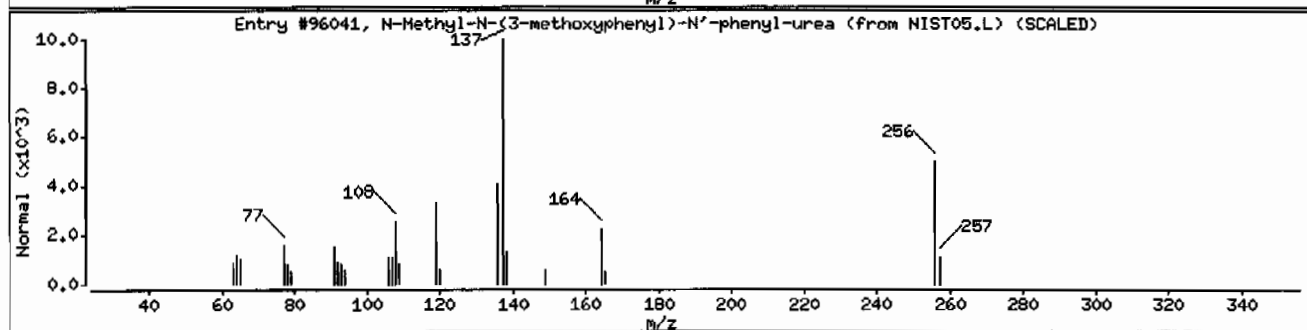
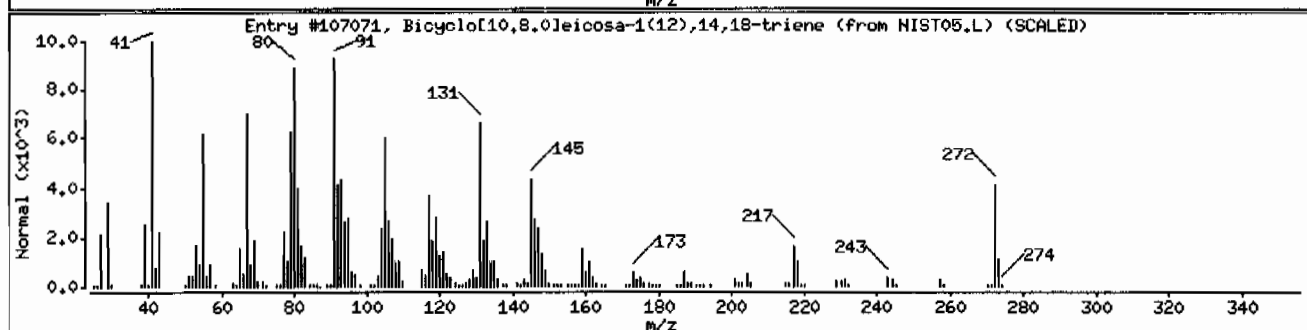
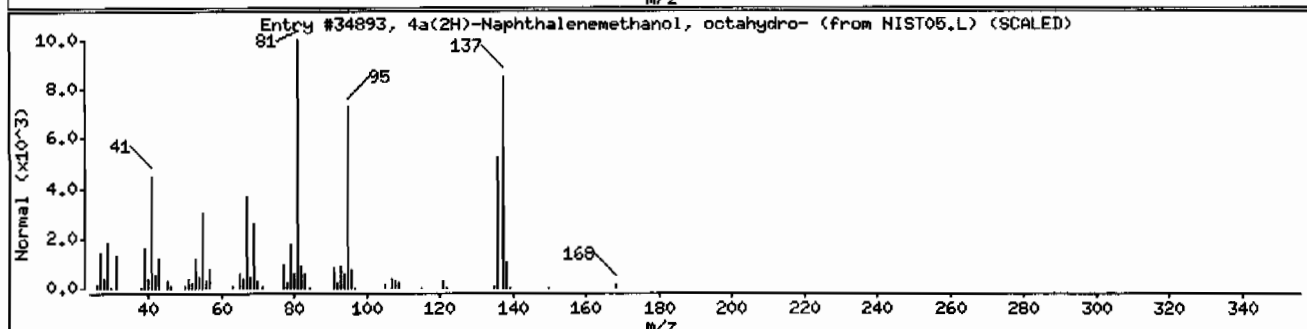
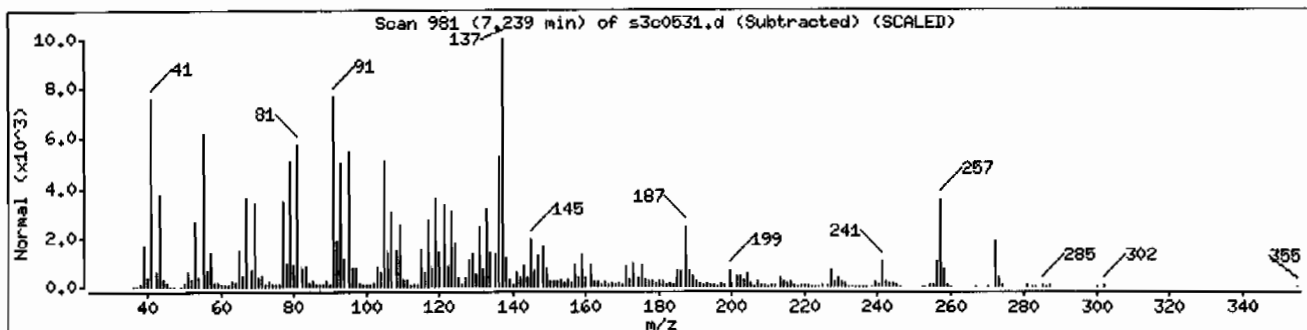
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4a(2H)-Naphthalenemethanol, octahydro-	99992-19-5	NIST05.L	34893	43	C11H20O	168
Bicyclo[10.8.0]heptacos-1(12),14,18-triene	1000155-83-0	NIST05.L	107071	41	C20H32	272
N-Methyl-N-(3-methoxyphenyl)-N'-phenyl-u	67309-71-1	NIST05.L	96041	38	C15H16N2O2	256





Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF111LANL

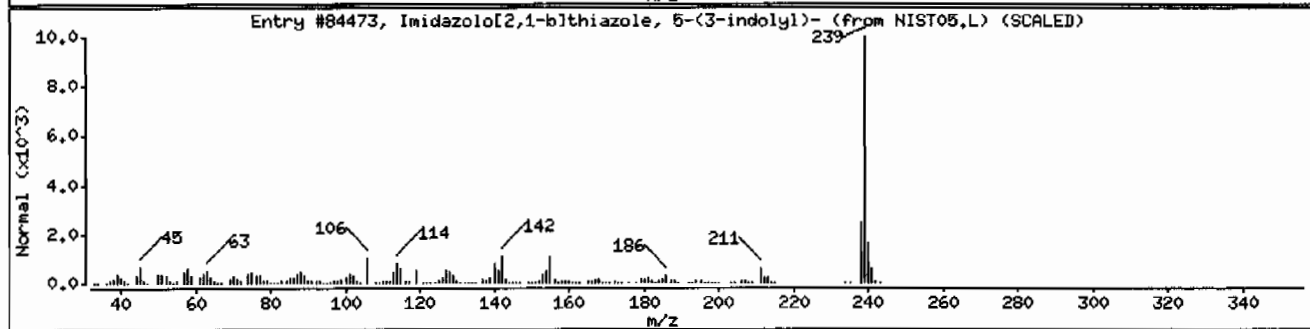
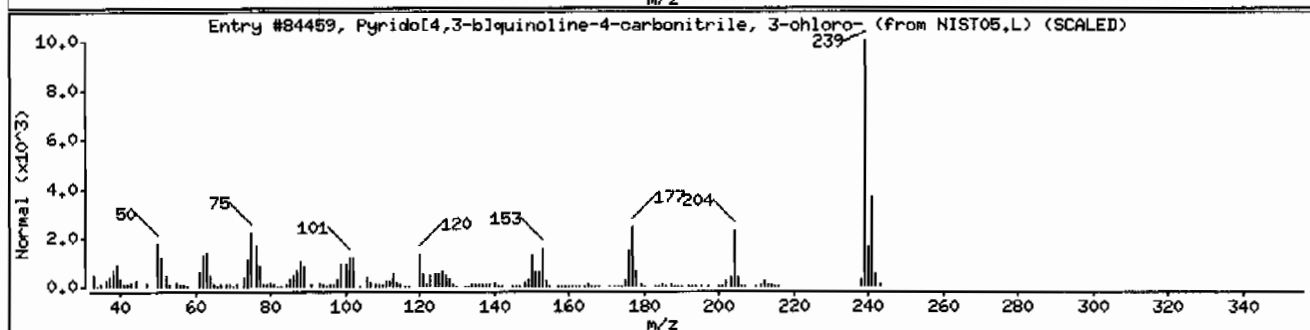
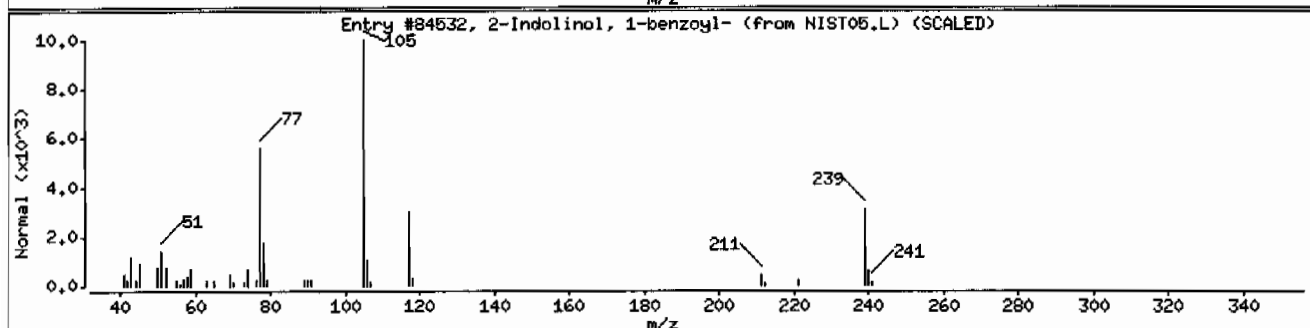
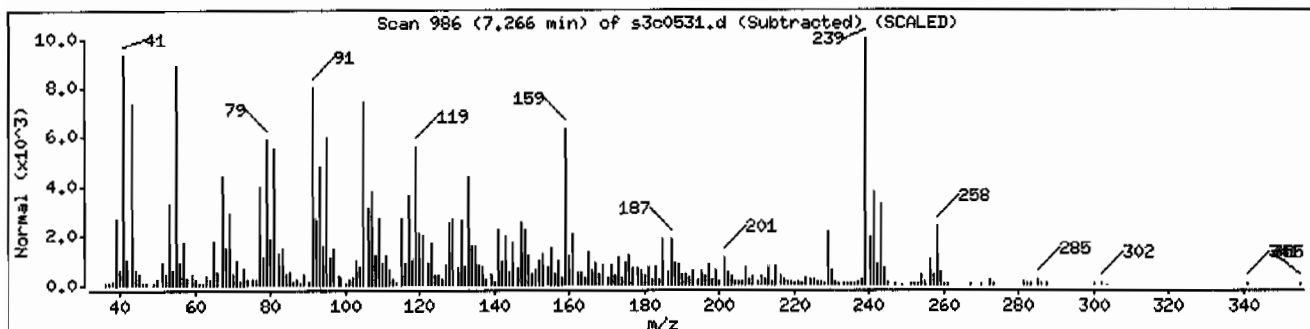
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Indolinol, 1-benzoyl-	22397-24-6	NIST05.L	84532	26	C15H13NO2	239
Pyrido[4,3-b]quinoline-4-carbonitrile, 3	104802-98-4	NIST05.L	84459	20	C13H6ClN3	239
Imidazolo[2,1-b]thiazole, 5-(3-indolyl)-	327097-37-0	NIST05.L	84473	18	C13H9N3S	239



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

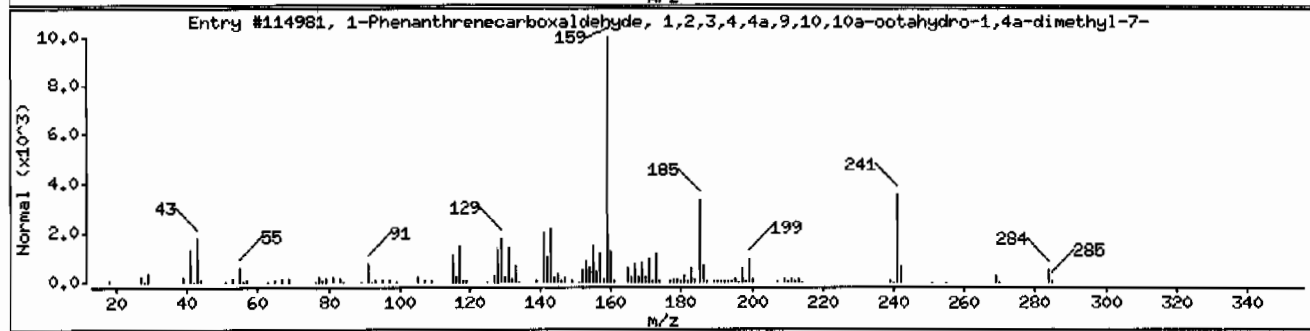
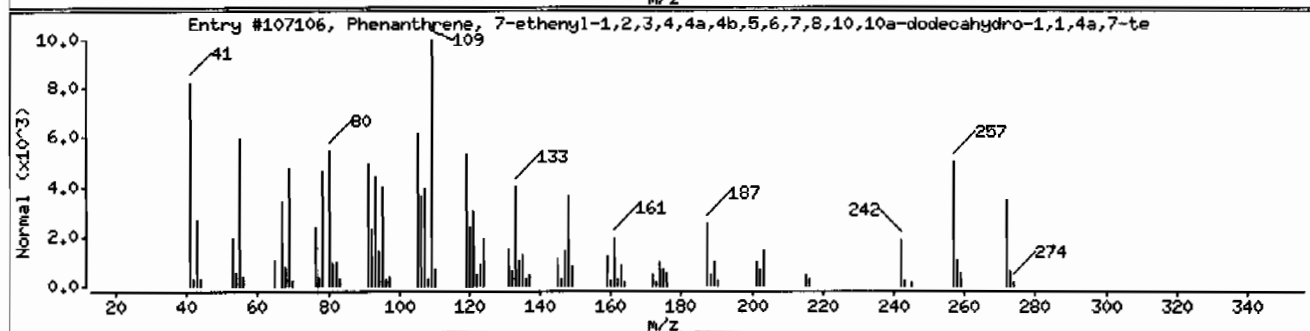
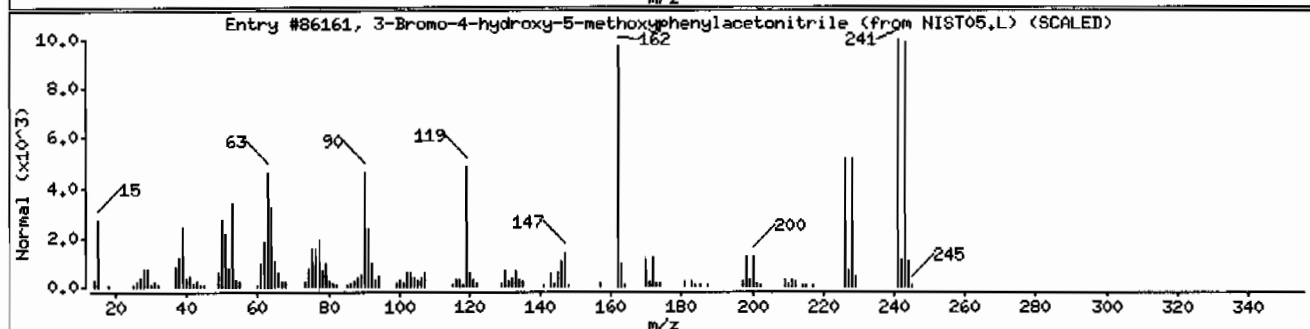
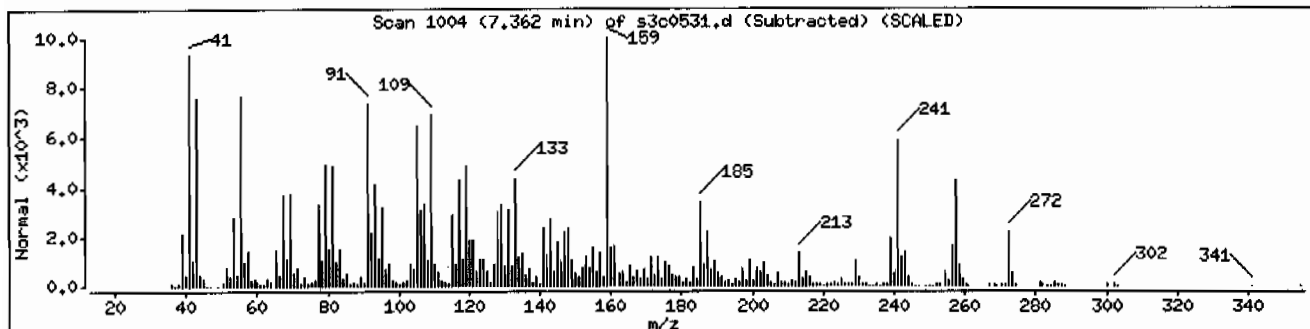
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Bromo-4-hydroxy-5-methoxyphenylacetoni	81038-44-0	NIST05.L	86161	90	C9H8BrNO2	241
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	1686-66-4	NIST05.L	107106	51	C20H32	272
1-Phenanthrenecarboxaldehyde, 1,2,3,4,4a	24035-50-5	NIST05.L	114981	42	C20H28O	284



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

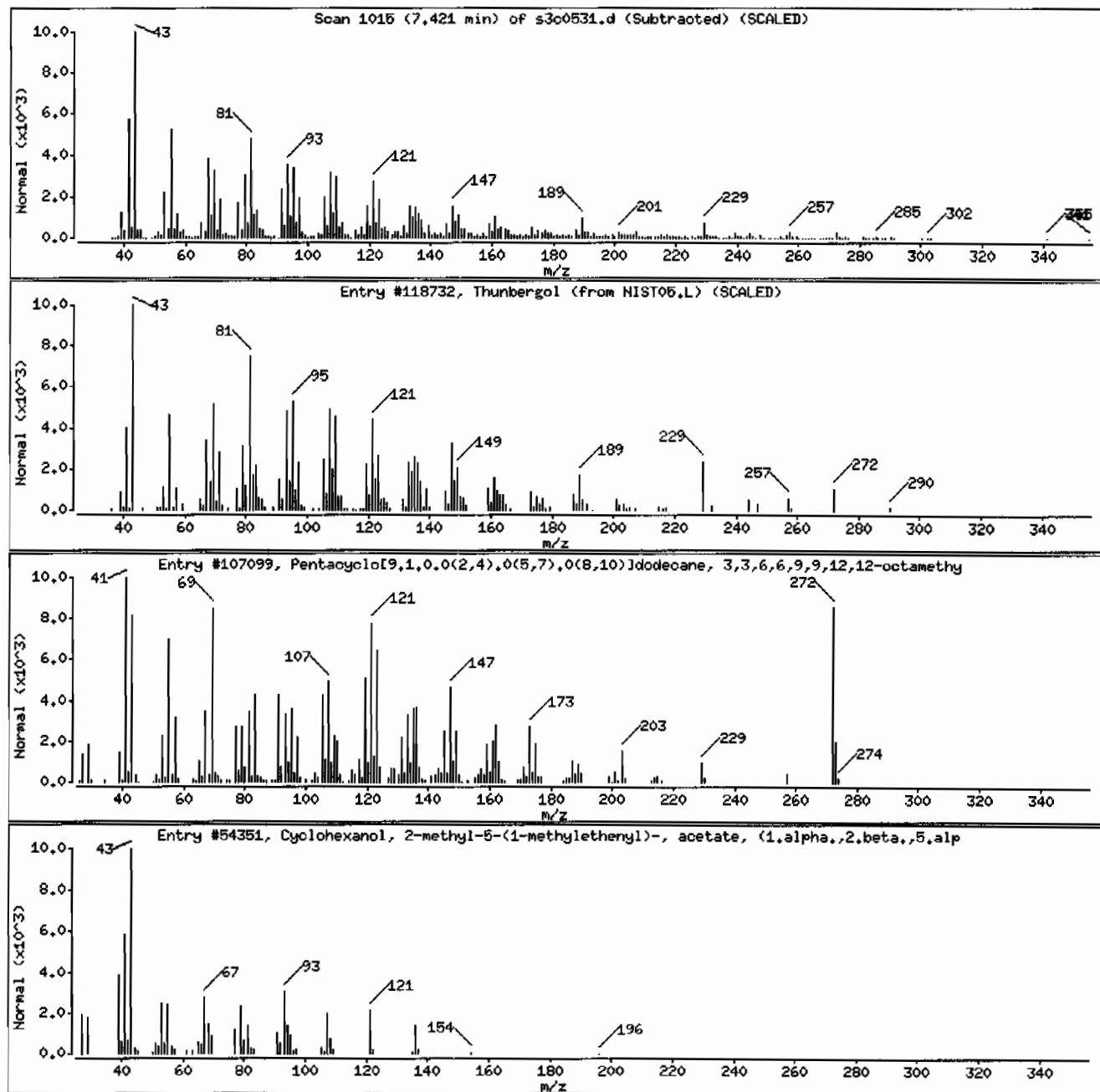
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Thunbergol	25269-17-4	NIST05.L	118732	64	C20H34O	290
Pentacyclo[9,1,0,0(2,4),0(5,7),0(8,10)]d	1000152-38-2	NIST05.L	107099	53	C20H32	272
Cyclohexanol, 2-methyl-5-(1-methylethenyl)	20777-49-5	NIST05.L	54351	42	C12H20O2	196



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF11ILANL

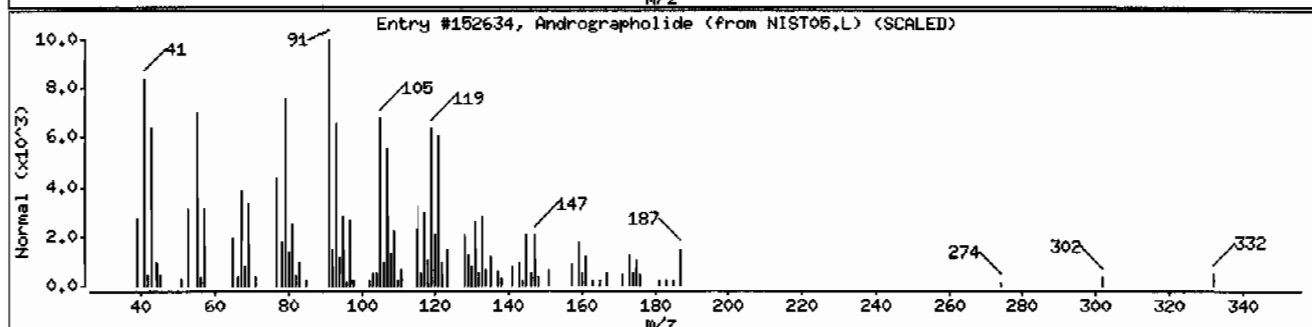
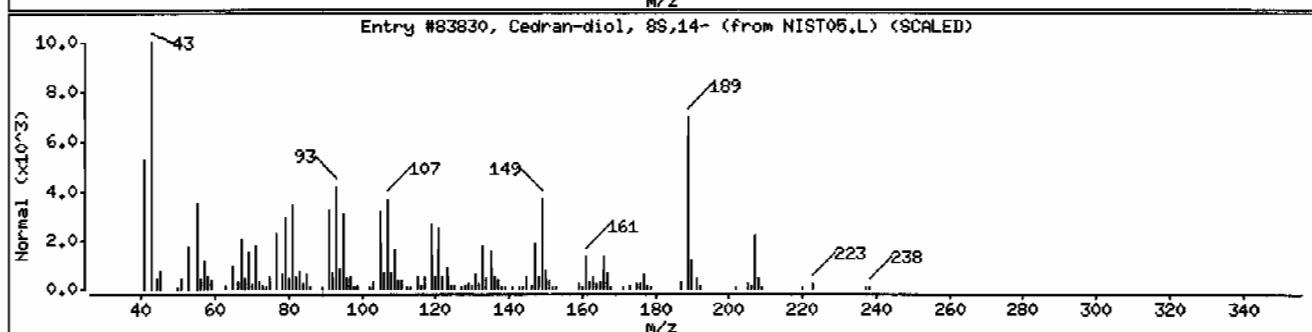
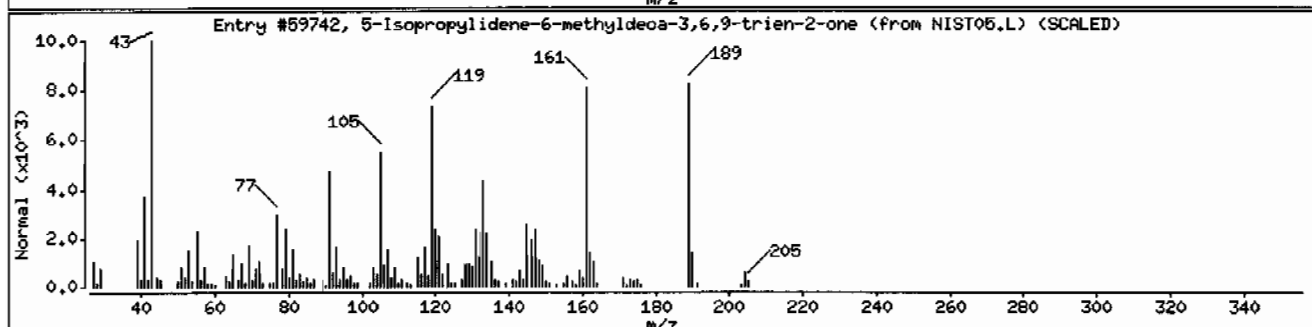
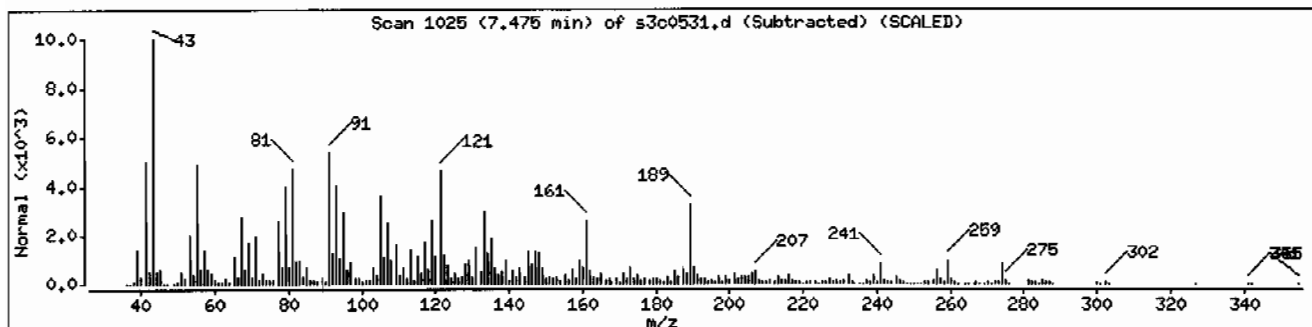
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5-Isopropylidene-6-methyldeca-3,6,9-trien	1000197-84-7	NIST05.L	59742	91	C14H20O	204
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	53	C15H26O2	238
Andrographolide	5508-58-7	NIST05.L	152634	35	C20H30O5	350



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 12475620091956677111SVHF111LANL

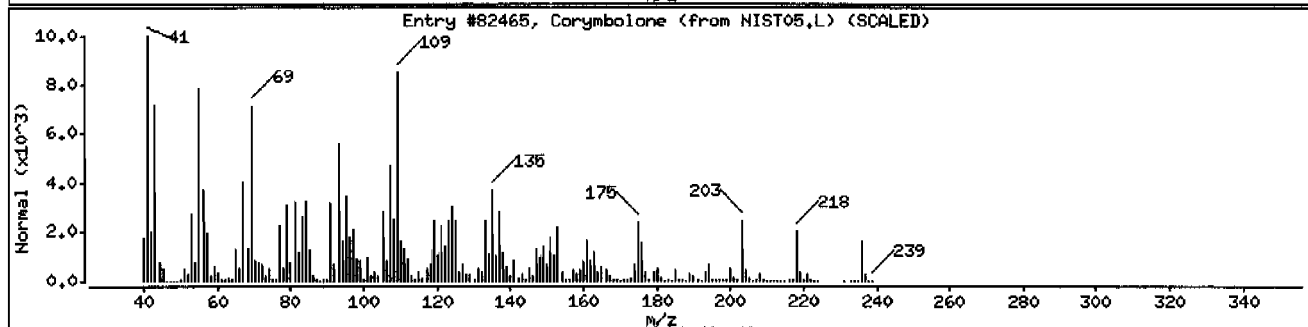
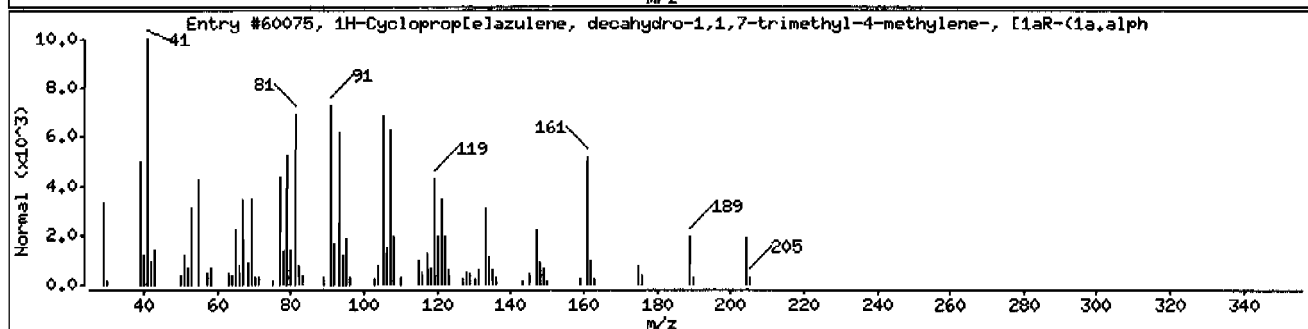
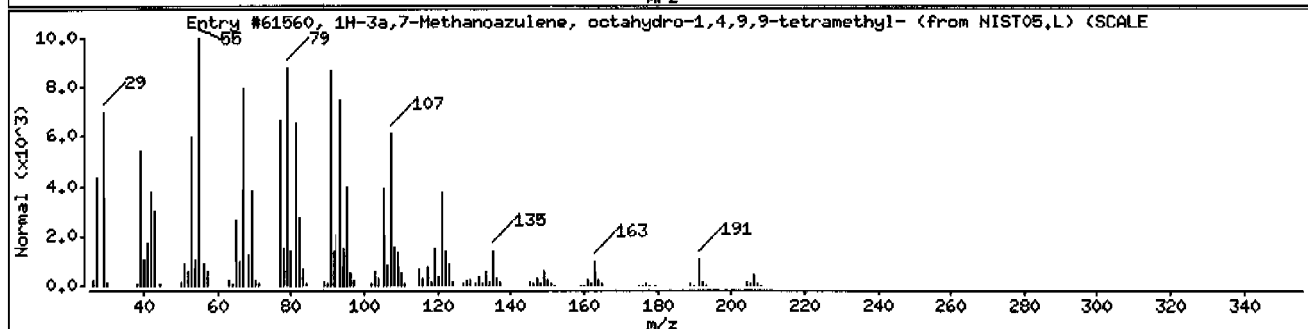
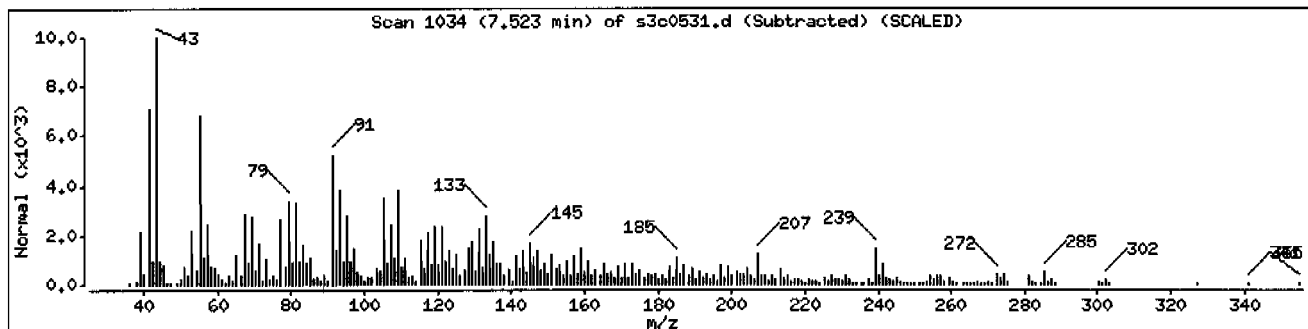
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-3a,7-Methanoazulene, octahydro-1,4,9,	25491-20-7	NIST05.L	61560	70	C15H26	206
1H-Cycloprop[elazulene, decahydro-1,1,7-	25246-27-9	NIST05.L	60075	66	C15H24	204
Corymbolone	97094-19-4	NIST05.L	82465	60	C15H24O2	236



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.1

Sample Info: 1247562009195667711SVHF111LANL

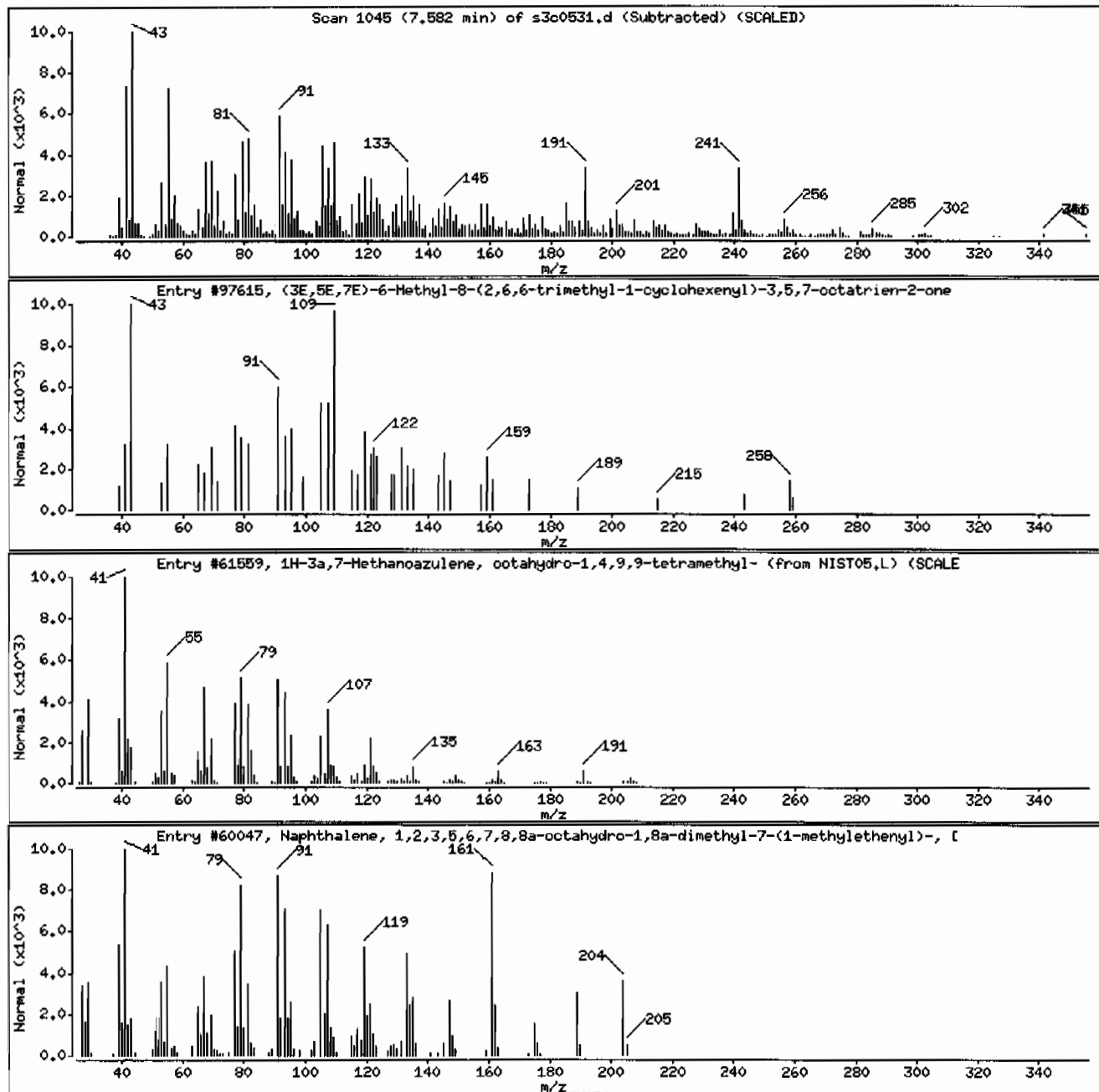
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	35	C18H26O	258
1H-3a,7-Methanoazulene, octahydro-1,4,9,	19078-35-4	NIST05.L	61559	25	C15H26	206
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60047	22	C15H24	204



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: I247562009195667711SVHF11LANL

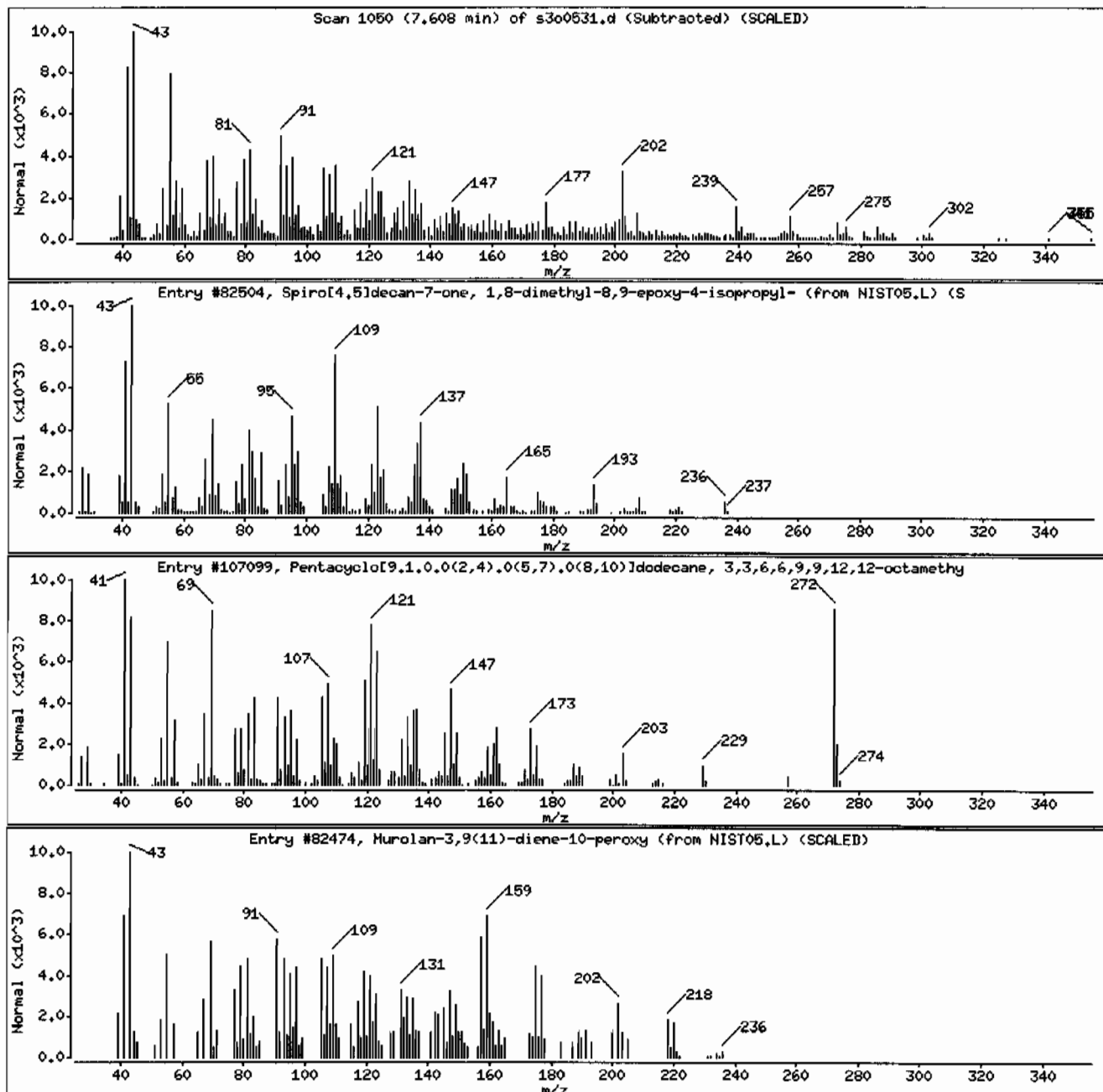
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Spiro[4,5]decan-7-one, 1,8-dimethyl-8,9-	61050-91-7	NIST05.L	82504	59	C <sub>16</sub> H <sub>24</sub> O <sub>2</sub>	236
Pentacyclo[9,1,0,0(2,4),0(5,7),0(8,10)]d	1000152-38-2	NIST05.L	107099	55	C <sub>20</sub> H <sub>32</sub>	272
Murolan-3,9(11)-diene-10-peroxy	1000140-33-3	NIST05.L	82474	50	C <sub>15</sub> H <sub>24</sub> O <sub>2</sub>	236



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF11ILANL

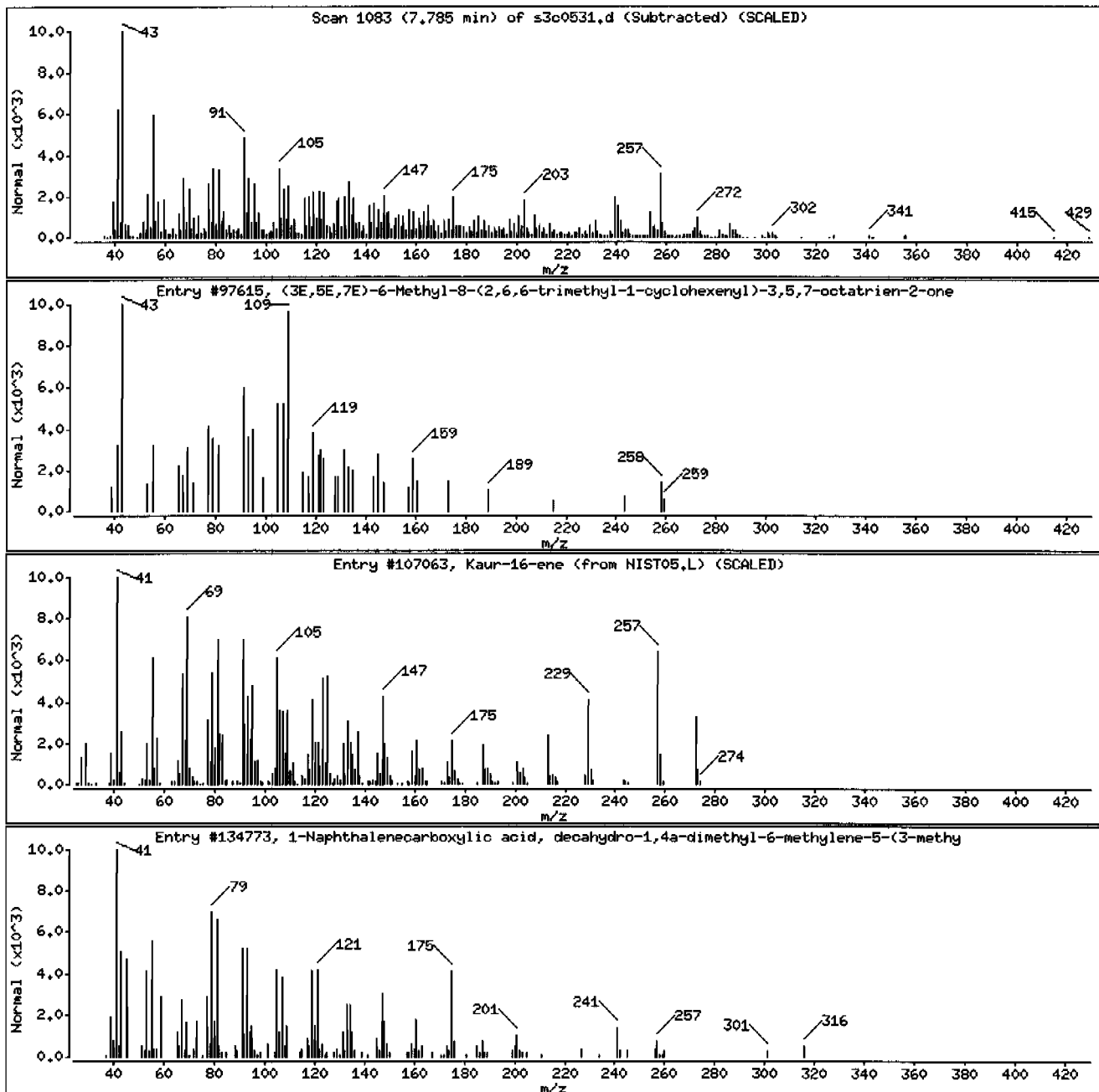
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	C18H26O	258
Kaur-16-ene	562-28-7	NIST05.L	107063	20	C20H32	272
1-Naphthalenecarboxylic acid, decahydro-	10178-35-5	NIST05.L	134773	15	C21H32O2	316





Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF11ILANL

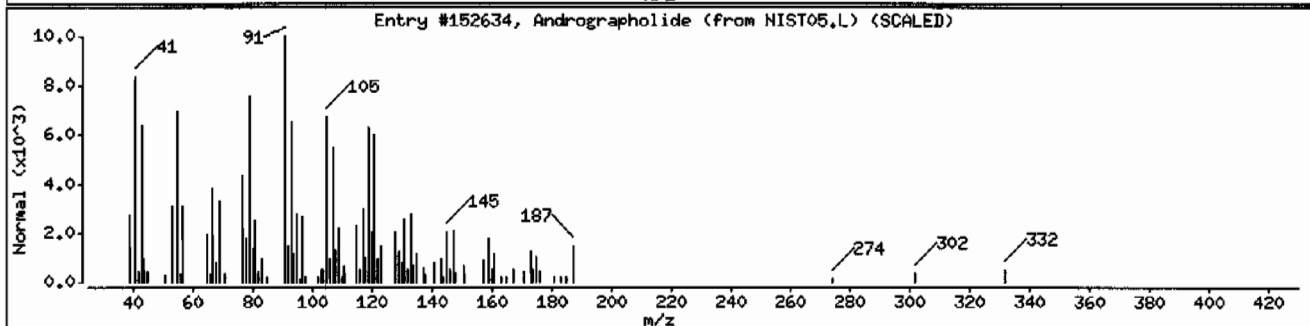
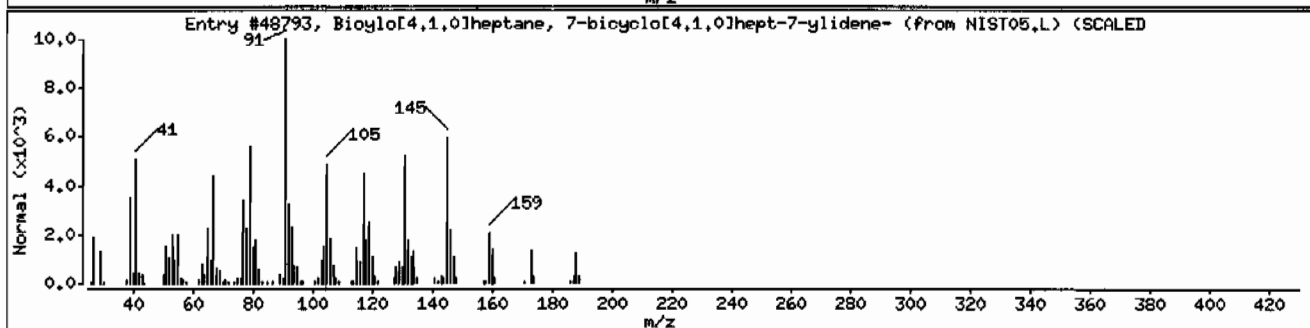
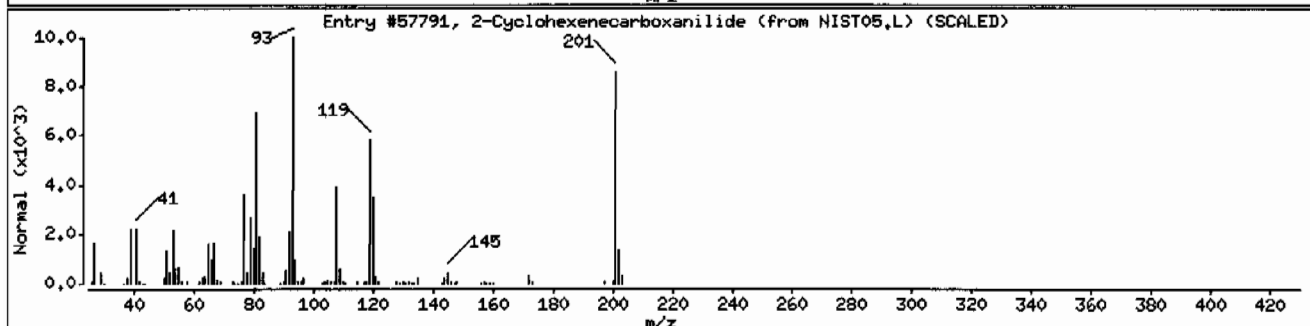
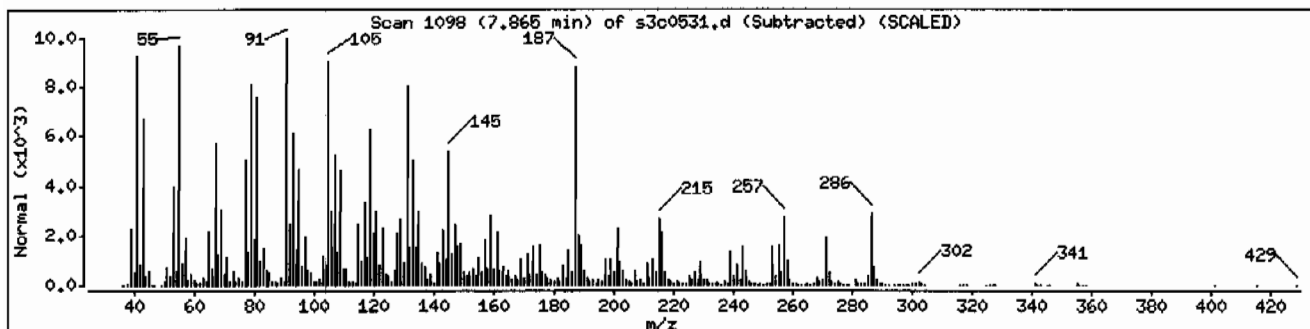
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Cyclohexenecarboxanilide	1000160-08-2	NIST05.L	57791	22	C13H15NO	201
Bicyclo[4.1.0]heptane, 7-bicyclo[4.1.0]he	1000152-39-9	NIST05.L	48793	15	C14H20	188
Andrographolide	5508-58-7	NIST05.L	152634	15	C20H30O5	350



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

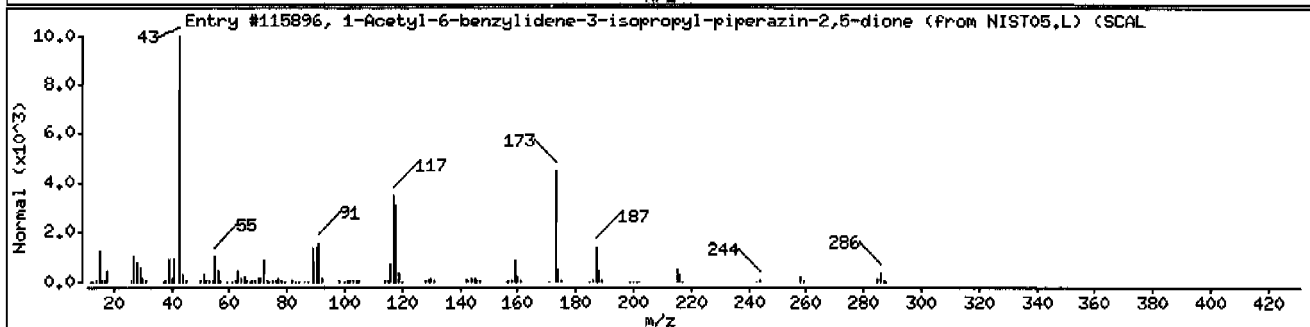
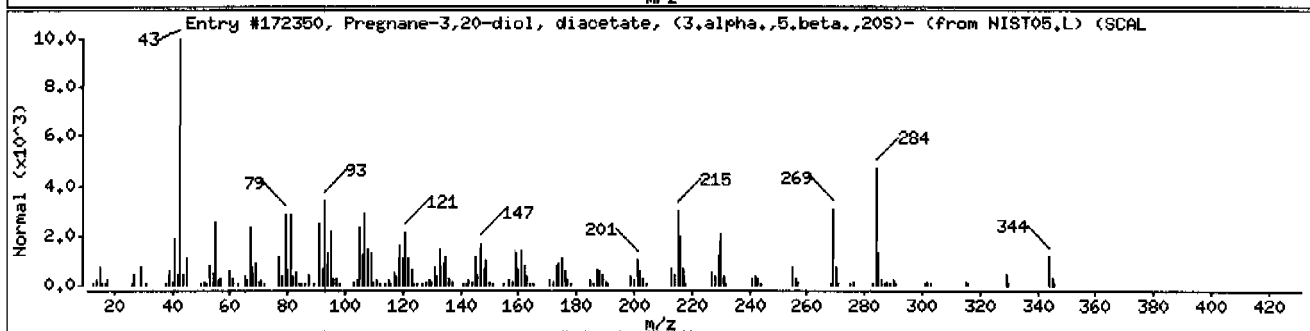
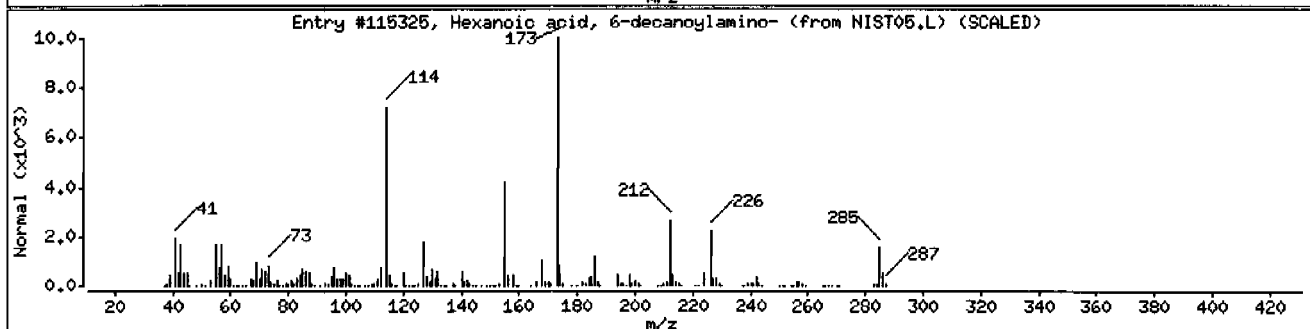
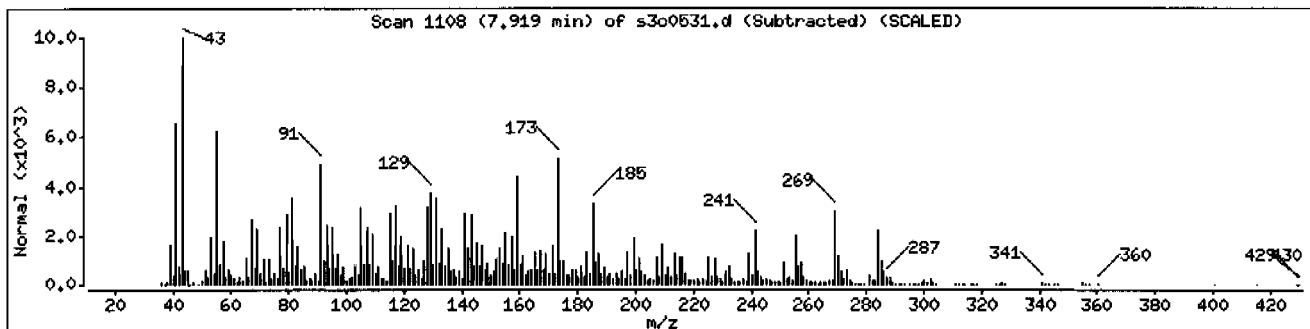
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hexanoic acid, 6-decanoylamino-	69242-01-9	NIST05.L	115325	15	C16H31NO3	285
Pregnane-3,20-diol, diacetate, (3.alpha.,	1174-69-2	NIST05.L	172350	15	C25H40O4	404
1-Acetyl-6-benzylidene-3-isopropyl-piper	1000287-36-5	NIST05.L	115896	11	C16H18N2O3	286



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF111LANL

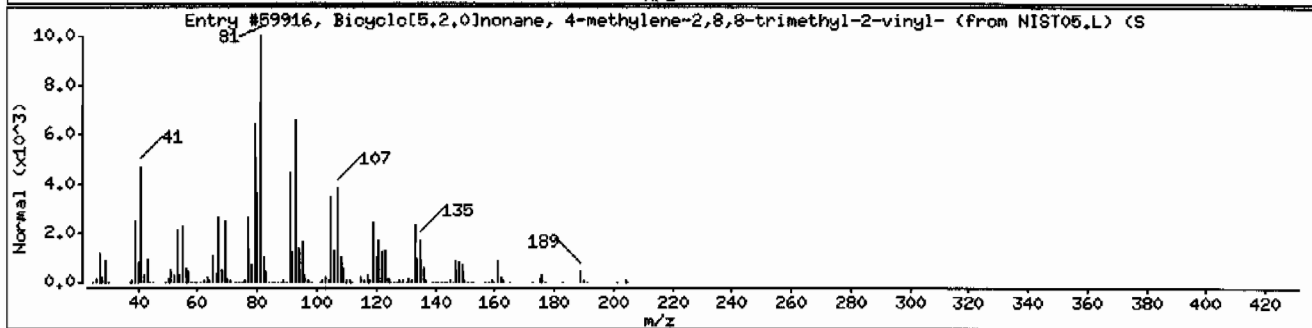
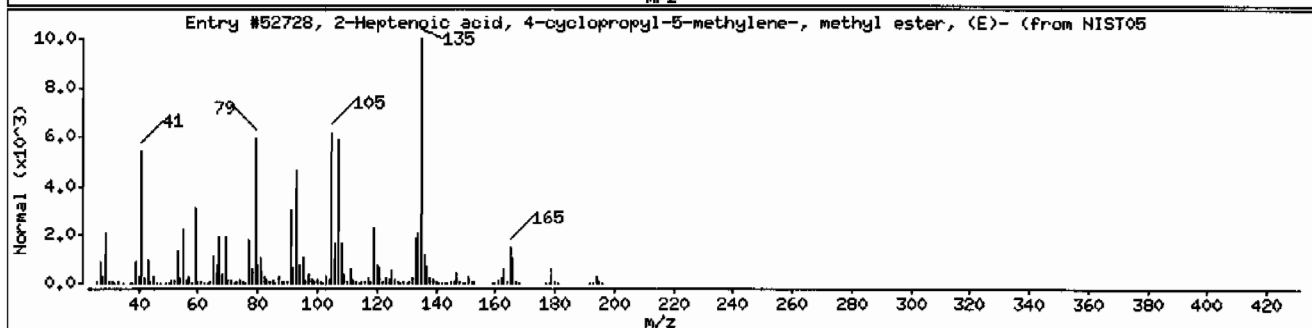
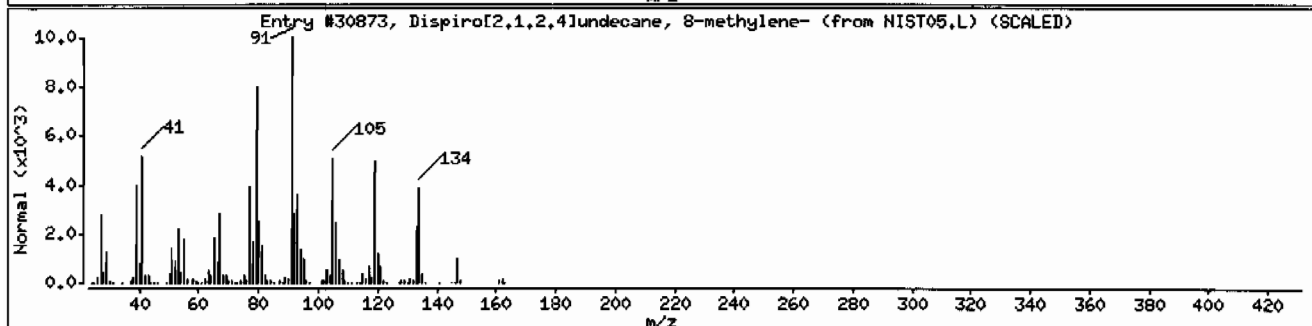
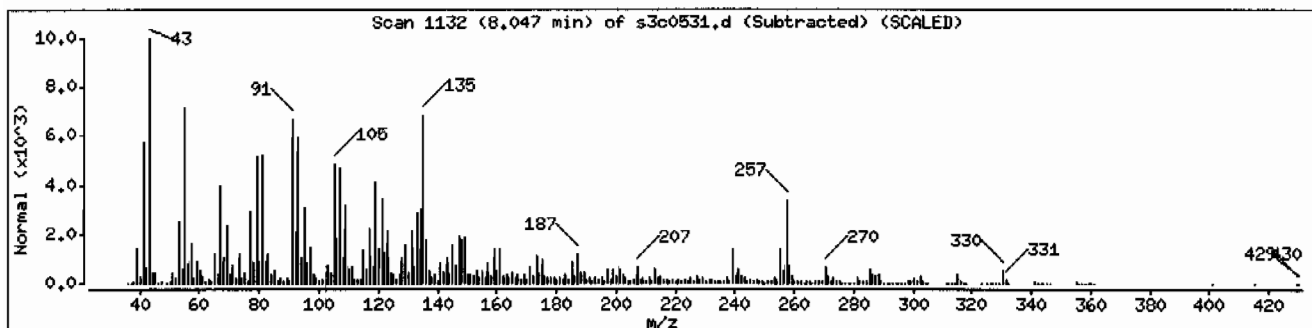
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	35	C <sub>12</sub> H <sub>18</sub>	162
2-Heptenoic acid, 4-cyclopropyl-5-methyl	74793-23-0	NIST05.L	52728	30	C <sub>12</sub> H <sub>18</sub> O <sub>2</sub>	194
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	30	C <sub>15</sub> H <sub>24</sub>	204



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF11ILANL

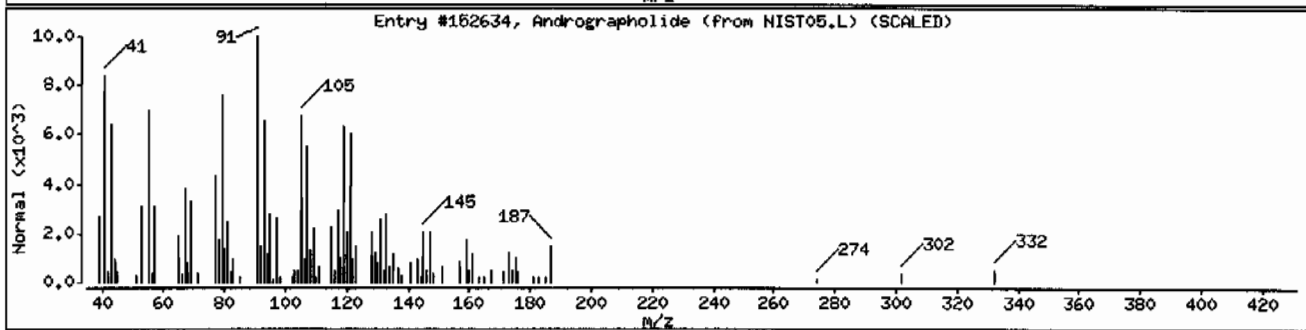
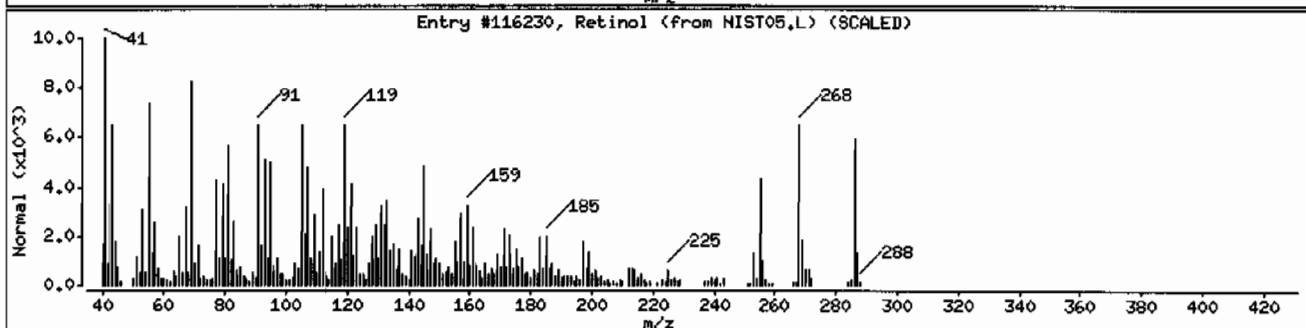
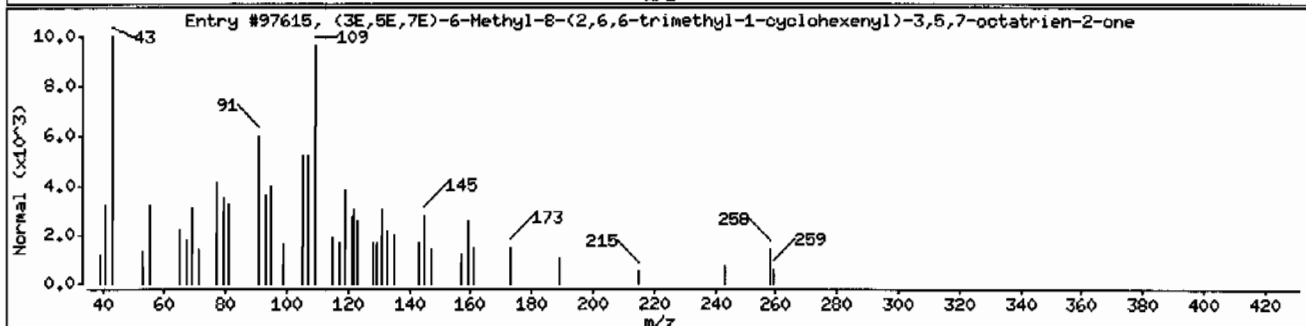
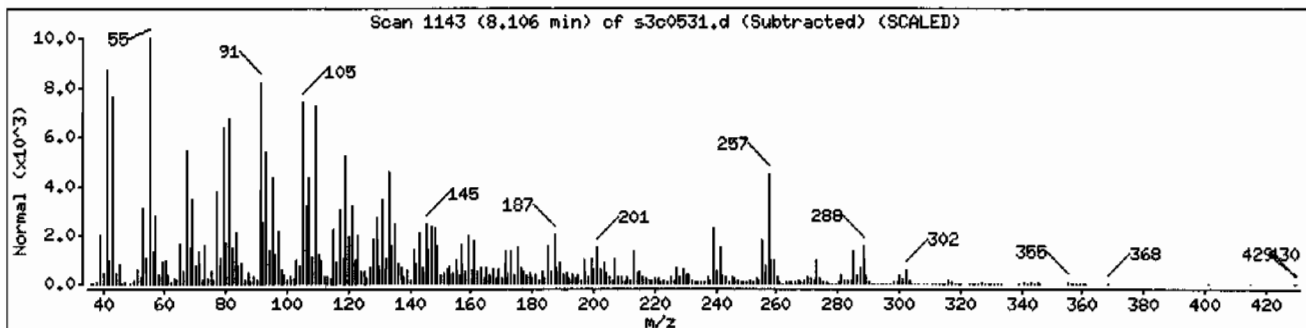
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	83	C18H26O	258
Retinol	68-26-8	NIST05.L	116230	49	C20H30O	286
Andrographolide	5508-58-7	NIST05.L	152634	46	C20H30O5	350



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: HSD3,i

Sample Info: 1247562009195667711SVMF111LANL

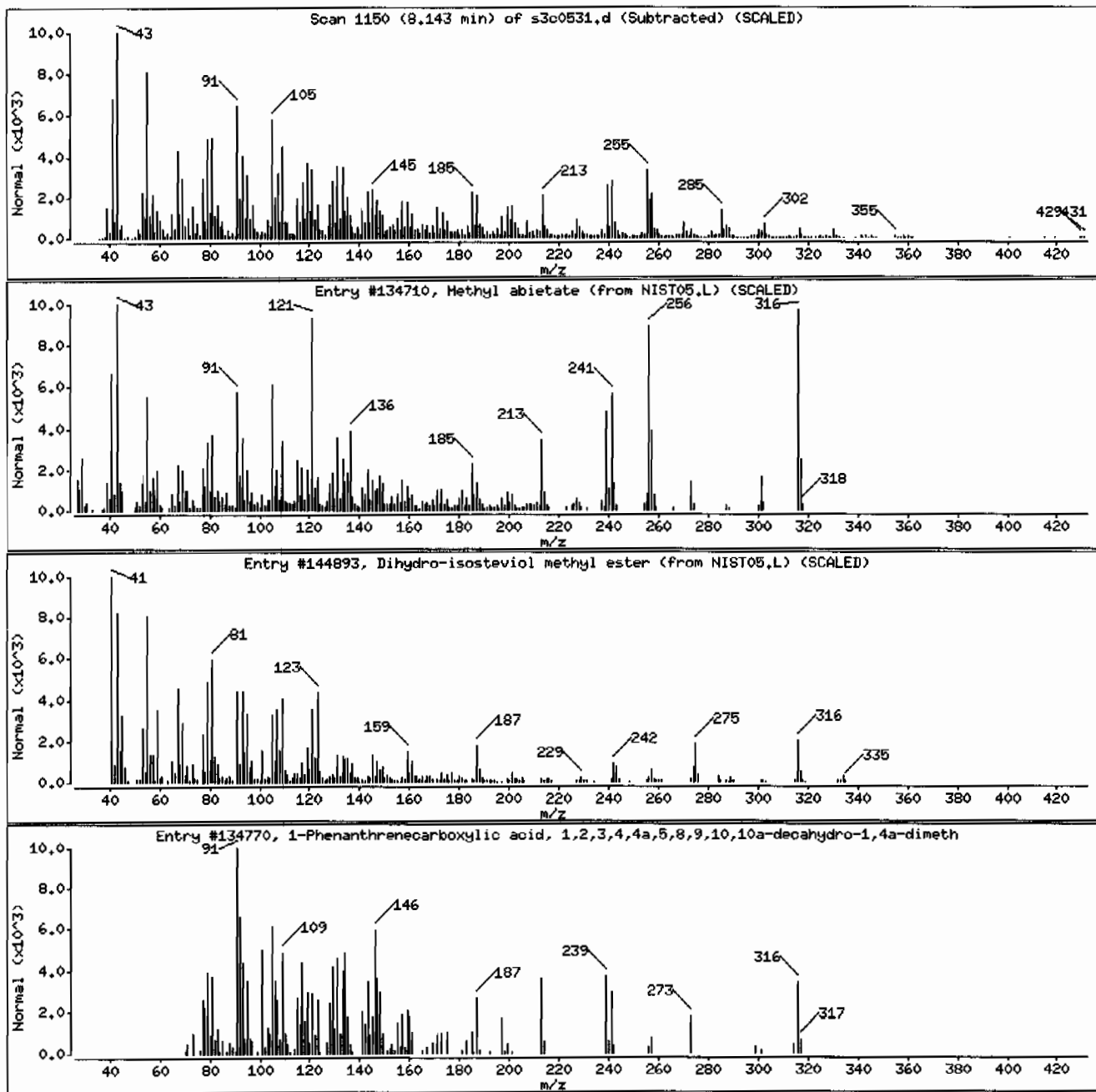
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	134710	62	C21H32O2	316
Dihydro-isosteviol methyl ester	1000256-06-8	NIST05.L	144893	18	C21H34O3	334
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	33892-22-7	NIST05.L	134770	12	C21H32O2	316



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: I247562009195667711SVHF11ILANL

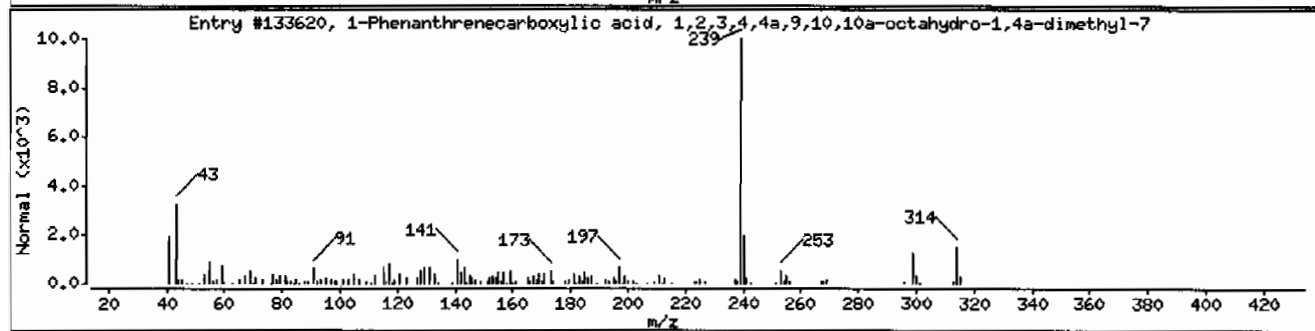
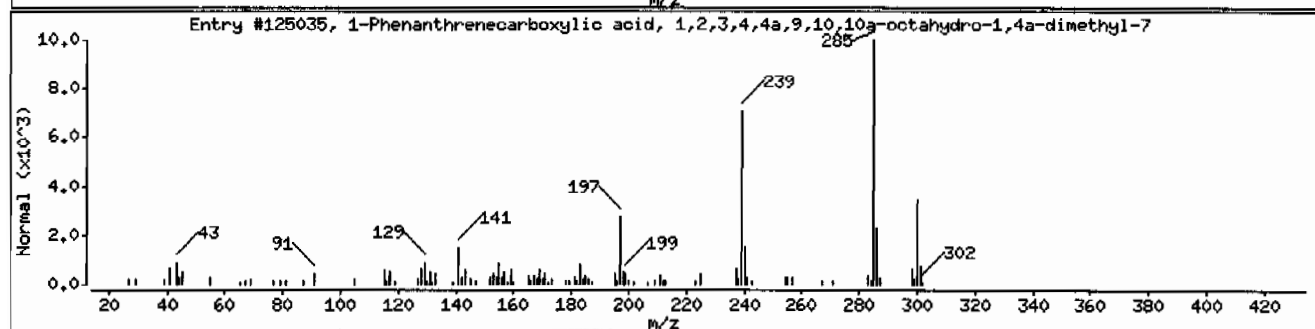
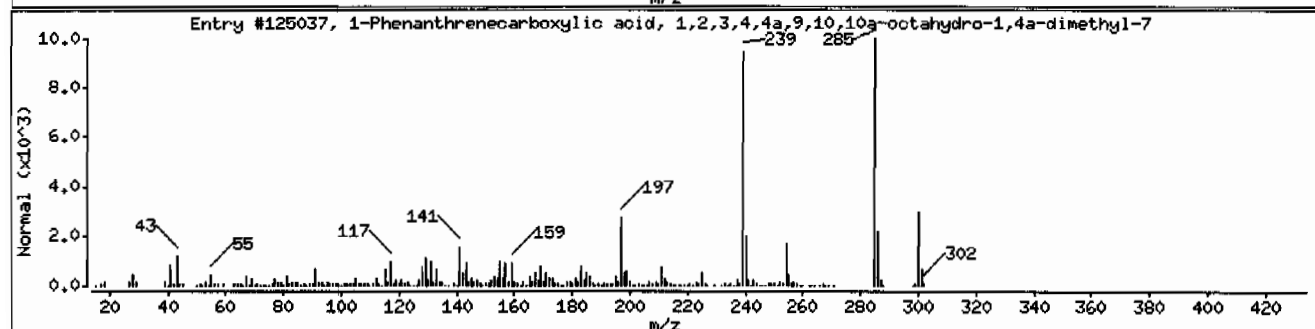
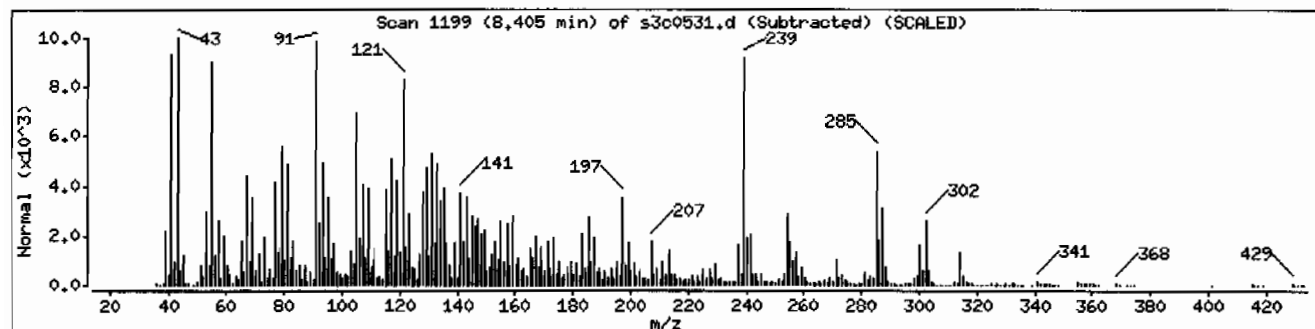
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	86	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	70	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	53	C21H30O2	314



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVMF111LANL

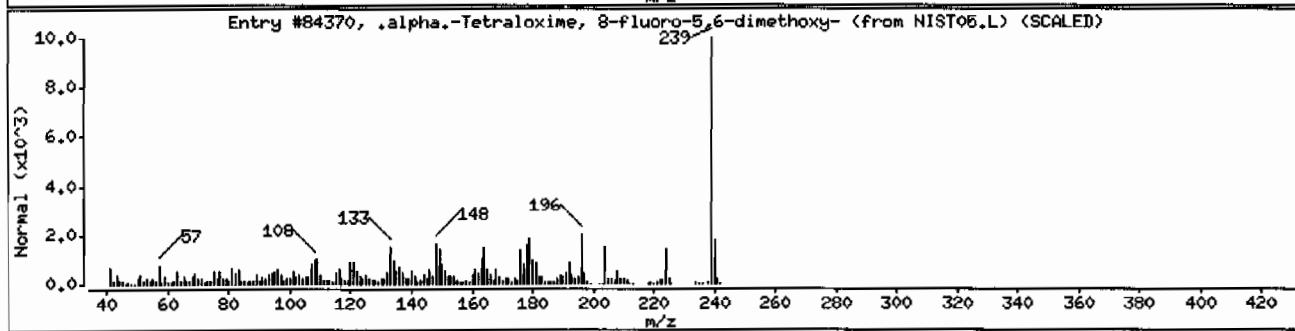
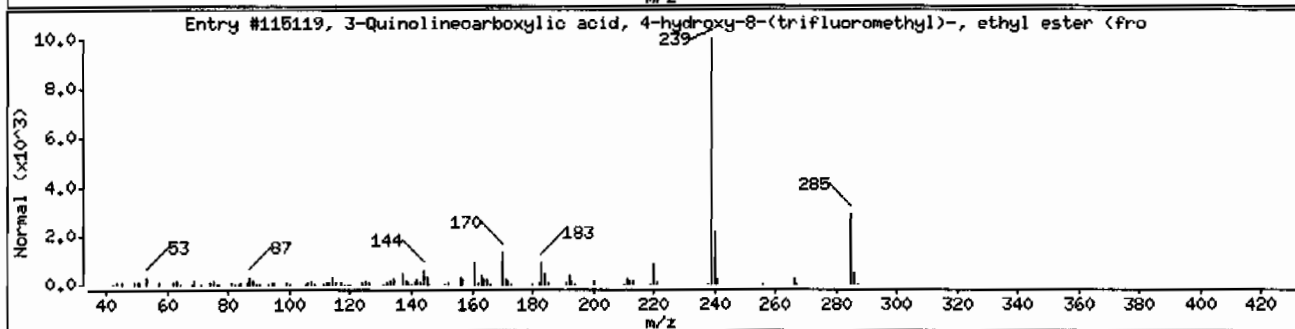
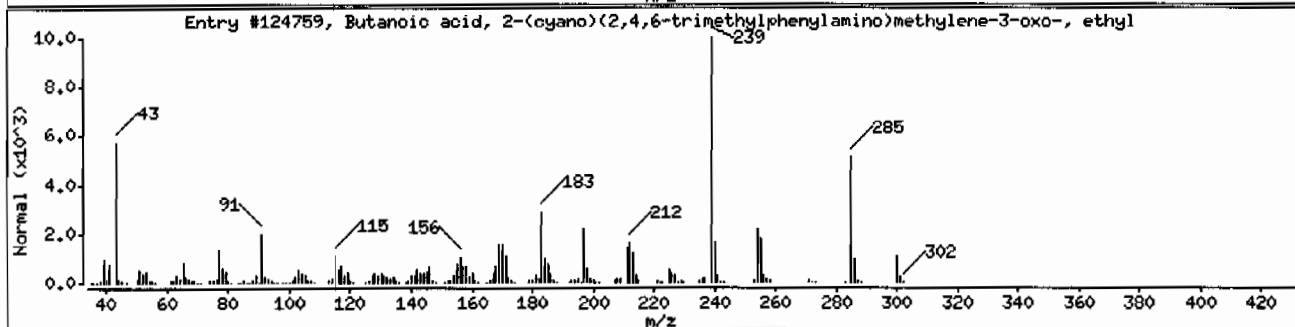
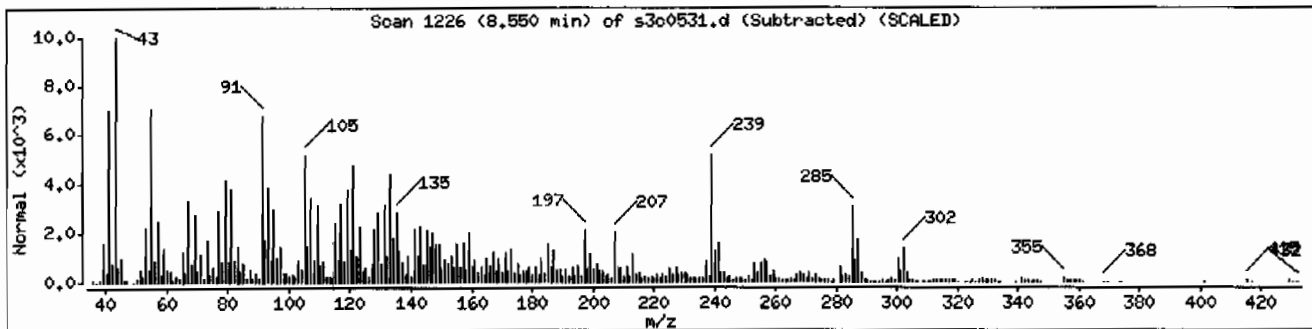
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	41	C17H20N2O3	300
3-Quinolincarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	25	C13H10F3NO3	285
,alpha,-Tetraloxime, 8-fluoro-5,6-dimeth	1000125-88-0	NIST05.L	84370	25	C12H14FN03	239



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

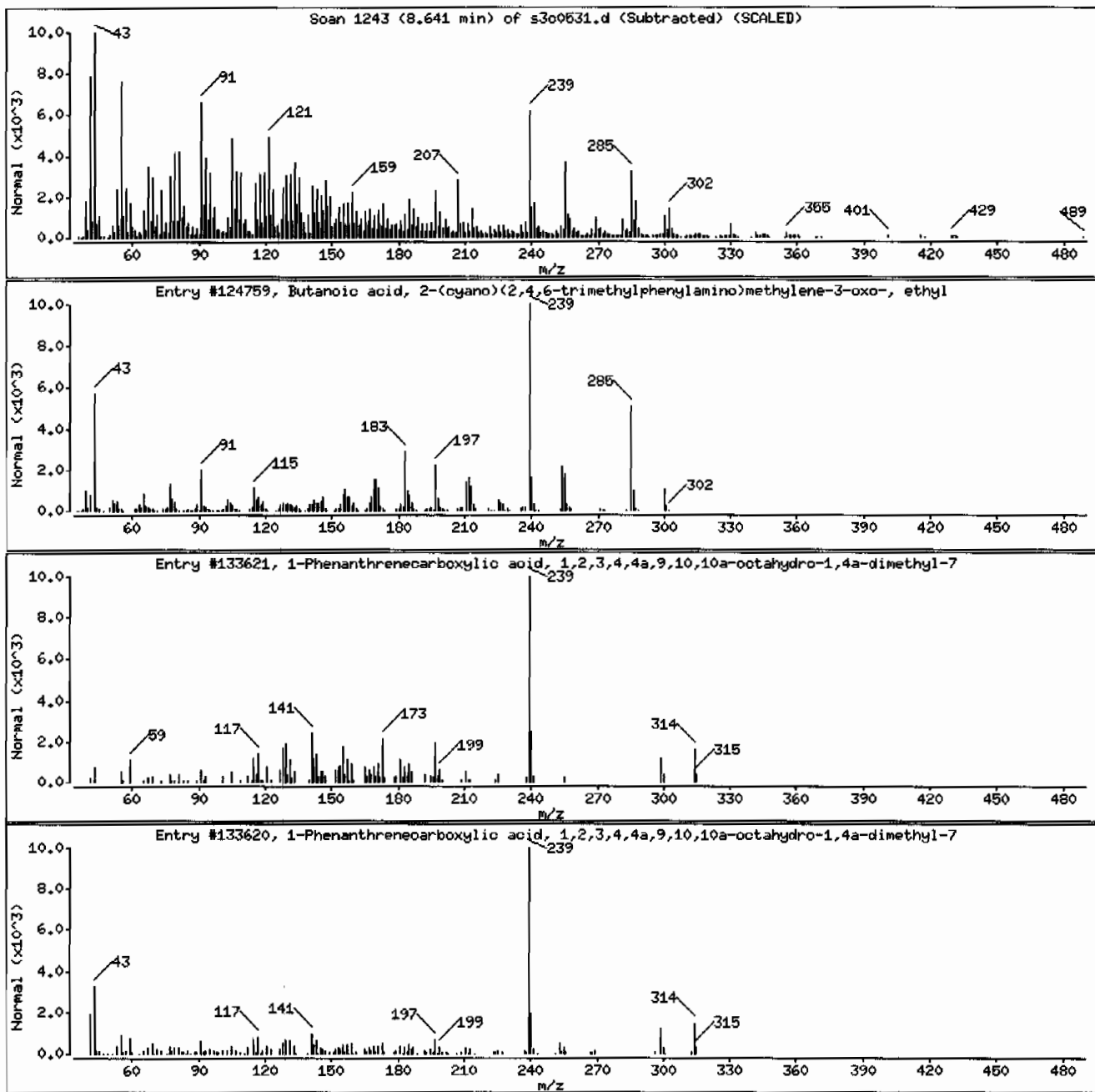
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	70	C17H20N2O3	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	64	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	30	C21H30O2	314





Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF11ILANL

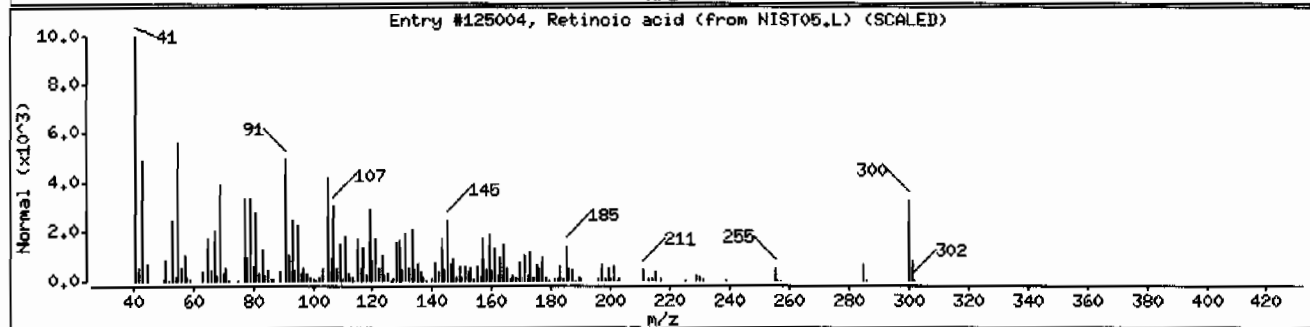
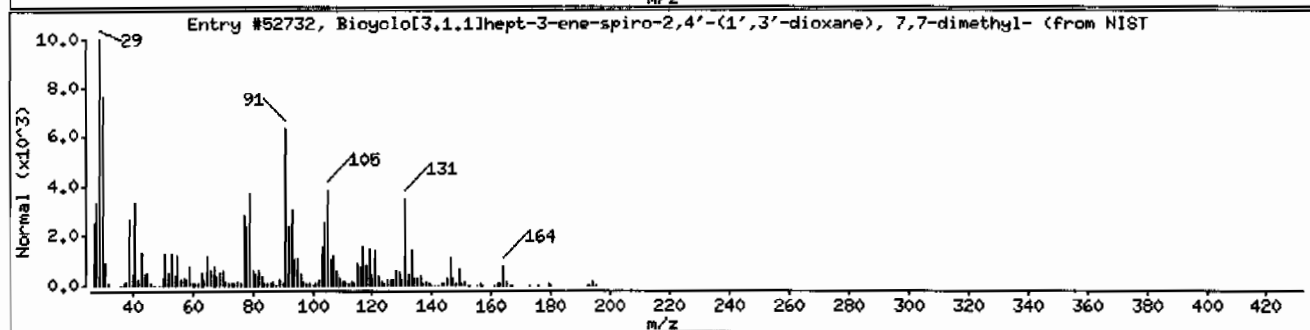
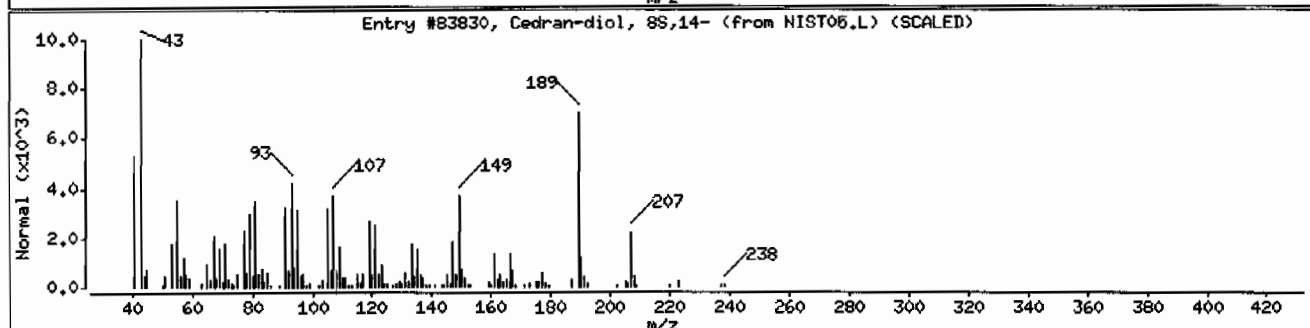
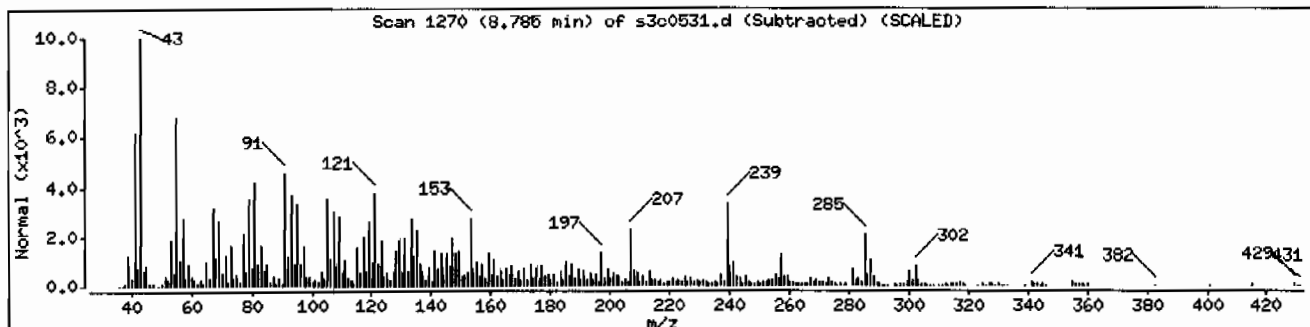
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	45	C15H26O2	238
Bicyclo[3.1.1]hept-3-ene-spiro-2,4'-(1',	1000149-76-2	NIST05.L	52732	10	C12H18O2	194
Retinoic acid	302-79-4	NIST05.L	125004	9	C20H28O2	300



Date : 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF111LANL

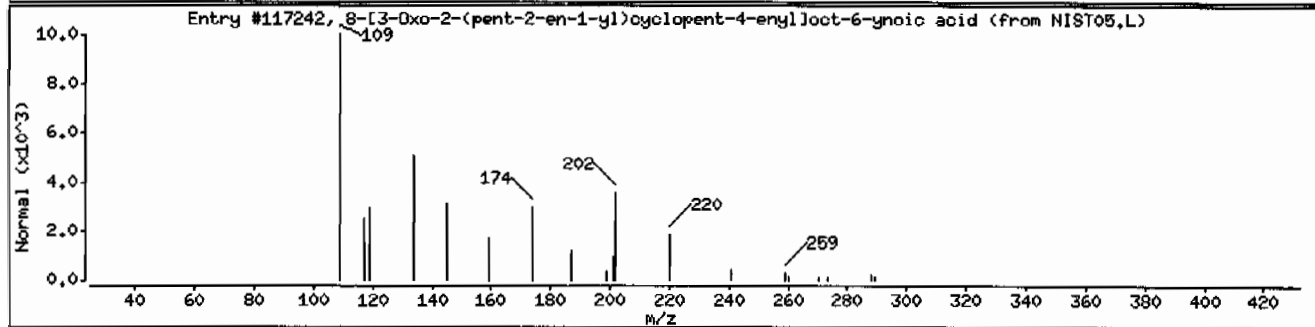
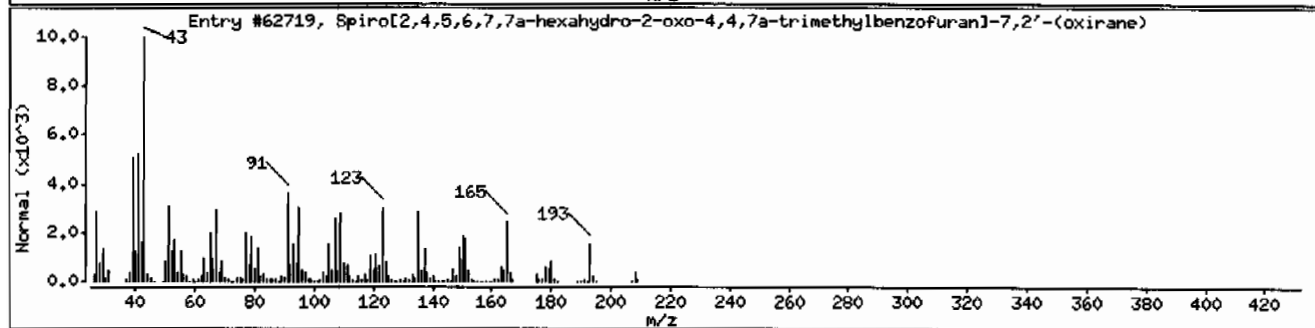
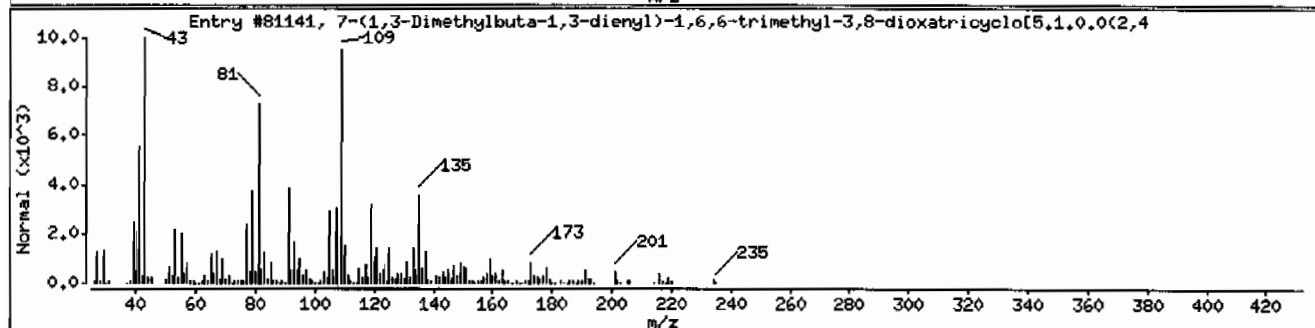
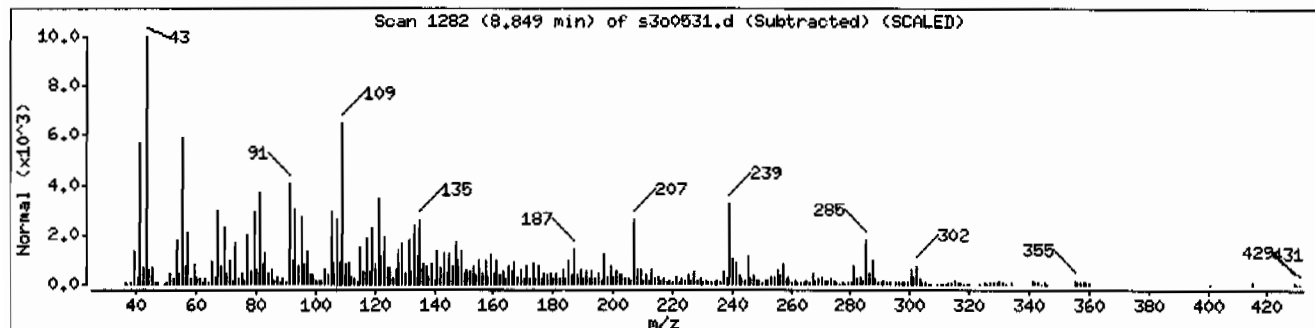
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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-trimethyl-3,8-dioxatricyclo[5.1.0.0(2,4)]nonane	1000190-22-7	NIST05.L	81141	64	C15H22O2	234
Spiro[2.4,5,6,7,7a-hexahydro-2-oxo-4,4,7a-trimethylbenzofuran]-7,2'-(oxirane)	1000197-10-9	NIST05.L	62719	25	C12H16O3	208
8-[3-Oxo-2-(pent-2-en-1-yl)cyclopent-4-enyl]oct-6-ynoic acid	1000105-22-0	NIST05.L	117242	25	C18H24O3	288



Date: 05-MAR-2010 20:44

Client ID: RE15-10-8302

Instrument: MSD3.i

Sample Info: 1247562009195667711SVHF11ILANL

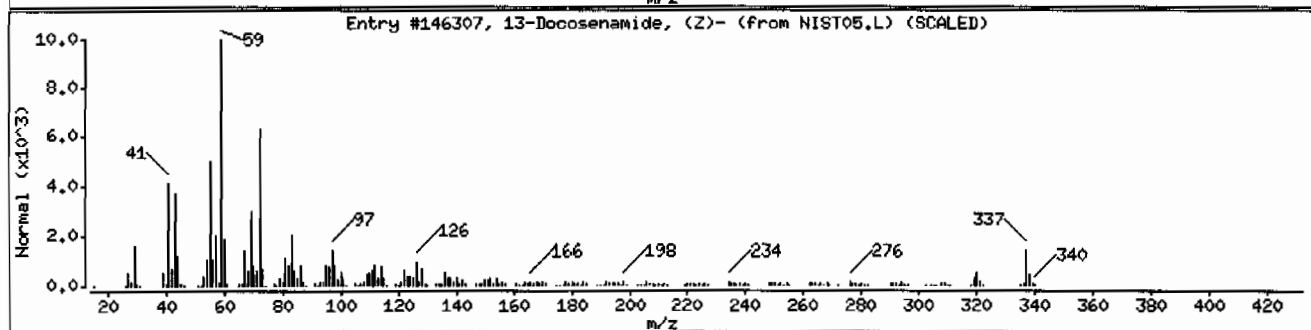
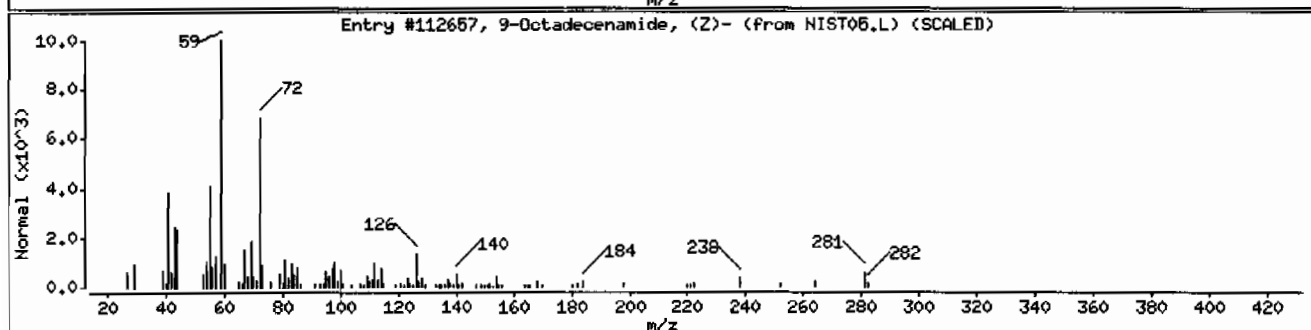
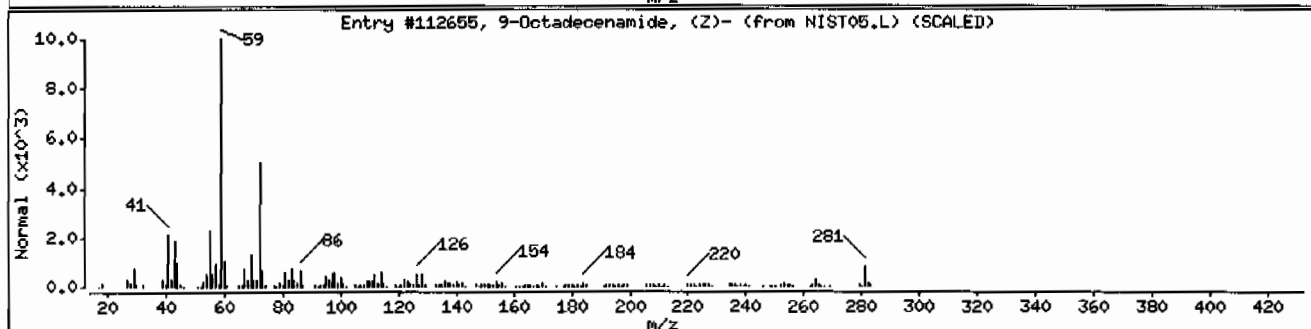
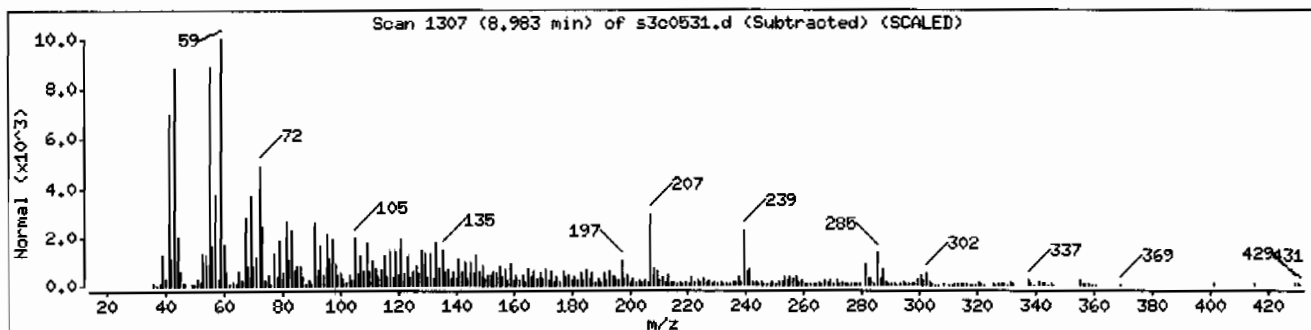
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	70	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	64	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	46	C22H43NO	337



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

SDG Number: 10-1950  
Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.5	342
108-95-2	Phenol	U	342	ug/kg	68.5	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.5	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.5	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.5	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.5	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.6	342
129-00-0	Pyrene		92.6	ug/kg	10.3	34.2
110-86-1	Pyridine	U	342	ug/kg	68.5	342
62-53-3	Aniline	U	342	ug/kg	103	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.5	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.5	342
100-51-6	Benzyl alcohol	U	342	ug/kg	103	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.5	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.5	342
95-48-7	o-Cresol	U	342	ug/kg	68.5	342
65794-96-9	m,p-Cresols	U	342	ug/kg	103	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.5	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.5	342
78-59-1	Isophorone	U	342	ug/kg	68.5	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.5	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.5	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.5	342
65-85-0	Benzoic acid	U	685	ug/kg	171	685
91-20-3	Naphthalene	U	34.2	ug/kg	10.3	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.5	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.5	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.85	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.5	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.5	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.5	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.5	342
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	342	ug/kg	68.5	342

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562008	Date Received: 02/20/2010 08:55	%Moisture: 3.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8303	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.1	Dilution: 1
Run Date: 03/05/2010 20:21	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.17 g	Final Volume: 1 mL
Data File: s3c0530.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	342	ug/kg	68.5	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.3	34.2
51-28-5	2,4-Dinitrophenol	U	685	ug/kg	130	685
132-64-9	Dibenzofuran	U	342	ug/kg	68.5	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.5	342
86-73-7	Fluorene	U	34.2	ug/kg	10.3	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.5	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.5	342
100-01-6	4-Nitroaniline	U	342	ug/kg	103	342
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.5	342
122-66-7	Azobenzene	U	342	ug/kg	68.5	342
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.5	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.5	342
85-01-8	Phenanthrene		61.7	ug/kg	10.3	34.2
120-12-7	Anthracene	J	11.9	ug/kg	6.85	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.5	342
206-44-0	Fluoranthene		119	ug/kg	10.3	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.5	342
56-55-3	Benzo(a)anthracene		51.2	ug/kg	10.3	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	103	342
218-01-9	Chrysene		46.3	ug/kg	10.3	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.5	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.5	342
205-99-2	Benzo(b)fluoranthene		99.3	ug/kg	10.3	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.3	34.2
50-32-8	Benzo(a)pyrene		50.0	ug/kg	10.3	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	J	25.2	ug/kg	10.3	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.3	34.2
191-24-2	Benzo(ghi)perylene	J	24.6	ug/kg	10.3	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.5	342

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1090	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.28	165	ug/kg	98	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562008

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.17 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8303  
Batch ID: 956677  
Run Date: 03/05/2010 20:21  
Prep Date: 02/23/2010 21:09  
Data File: s3c0530.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
25269-17-4	Thunbergol	7.42	154	ug/kg	87	NJ
301-02-0	9-Octadecenamide, (Z)-	7.99	142	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	146	ug/kg	98	NJ
	Unknown	8.97	232	ug/kg		J
	Unknown	15.51	335	ug/kg		J

Data File: /chem/MSD3.i/s030510.b/s3c0530.d  
Report Date: 07-Mar-2010 15:49

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0530.d  
Lab Smp Id: 247562008 Client Smp ID: RE15-10-8303  
Inj Date : 05-MAR-2010 20:21  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562008|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 29  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.17000	weight of sample
M	3.17440	% 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	3.704	3.703 (1.000)	283063	40.0000	
* 29 Naphthalene-d8	136	4.560	4.564 (1.000)	1146552	40.0000	
* 46 Acenaphthene-d10	164	5.811	5.811 (1.000)	652759	40.0000	
* 67 Phenanthrene-d10	188	6.817	6.816 (1.000)	1161234	40.0000	
* 91 Chrysene-d12	240	8.437	8.437 (1.000)	823835	40.0000	
* 98 Perylene-d12	264	9.769	9.763 (1.000)	498741	40.0000	
\$ 3 2-Fluorophenol	112	2.902	2.896 (0.783)	459436	58.7952	2010
\$ 5 Phenol-d5	99	3.426	3.420 (0.925)	592026	59.3955	2030
\$ 20 Nitrobenzene-d5	82	4.062	4.062 (0.891)	295523	30.0809	1030
\$ 39 2-Fluorobiphenyl	172	5.303	5.302 (0.913)	558595	33.2326	1140
\$ 60 2,4,6-Tribromophenol	329	6.362	6.356 (1.095)	157888	77.5618	2660
\$ 81 p-Terphenyl-d14	244	7.742	7.741 (0.918)	598432	42.5609	1460

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ng/ul) (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
79 Pyrene		202	7.689	7.688	(0.911)	69958	2.70573 92.6
68 Phenanthrene		178	6.833	6.832	(1.002)	62319	1.80163 61.7
69 Anthracene		178	6.865	6.864	(1.007)	10190	0.34875 11.9(a)
76 Fluoranthene		202	7.550	7.549	(1.107)	94960	3.46678 119
89 Benzo(a)anthracene		228	8.427	8.426	(0.999)	31850	1.49527 51.2
92 Chrysene		228	8.453	8.453	(1.002)	27425	1.35305 46.3
95 Benzo(b)fluoranthene		252	9.341	9.341	(0.956)	33007	2.89951 99.2
97 Benzo(a)pyrene		252	9.705	9.699	(0.993)	14162	1.45965 50.0
99 Indeno(1,2,3-cd)pyrene		276	11.240	11.239	(1.151)	6290	0.73584 25.2(a)
101 Benzo(ghi)perylene		276	11.700	11.694	(1.198)	5131	0.71957 24.6(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: s3c0530.d

Report Date: 03/07/2010 15:08

Lab. ID: 247562008

SampleType: SAMPLE

Injection Date: 05-MAR-2010 20:21

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562008|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	33146	3.43	3.49	80-120	100	(T)
93	4906	3.47	3.49	238-298	15	(Q)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	41598	4.06	3.94	80-120	100	(T)
42	29374	4.06	3.94	58-118	71	(T)
-----						
27	Benzoic acid	CAS#: 65-85-0				
105	206	4.37	4.34	80-120	100	( )
122	336	4.56	4.34	51-111	163	(QT)
77	951	4.43	4.34	41-101	462	(QT)
-----						
40	2-Chloronaphthalene	CAS#: 91-58-7				
162	10266	5.54	5.41	80-120	100	(T)
164	606	5.54	5.41	3- 63	6	(T)
127	805	5.54	5.41	11- 71	8	(QT)
-----						
42	o-Nitroaniline	CAS#: 88-74-4				
65	14029	5.54	5.47	80-120	100	(T)
92	16761	5.54	5.47	32- 92	119	(QT)
138	1130	5.54	5.47	67-127	8	(QT)
-----						
43	Dimethylphthalate	CAS#: 131-11-3				
163	118456	5.81	5.58	80-120	100	(T)
164	656739	5.81	5.58	0- 40	554	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	86619	5.81	5.63	80-120	100	(T)
63	998	5.81	5.63	64-124	1	(QT)
<hr/>						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	86619	5.81	5.93	80-120	100	(T)
89	1357	5.81	5.92	48-108	2	(QT)
63	1000	5.81	5.92	25- 85	1	(QT)
<hr/>						
52 4-Nitrophenol		CAS#: 100-02-7				
139	695	5.96	5.86	80-120	100	(T)
109	253	5.95	5.86	41-101	37	(QT)
65	109	5.97	5.86	80-140	16	(QT)
<hr/>						
53 Fluorene		CAS#: 86-73-7				
166	8432	6.36	6.20	80-120	100	(T)
165	8675	6.36	6.20	62-122	103	(T)
167	3456	6.36	6.20	0- 44	41	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	532	6.36	6.21	80-120	100	(T)
105	1182	6.36	6.21	16- 76	222	(QT)
51	1068	6.36	6.21	52-112	201	(QT)
<hr/>						
68 Phenanthrene		CAS#: 85-01-8				
178	62319	6.83	6.83	80-120	100	( )
179	10269	6.83	6.83	0- 45	16	( )
176	12110	6.83	6.83	0- 49	19	( )
<hr/>						
69 Anthracene		CAS#: 120-12-7				
178	10190	6.86	6.86	80-120	100	( )
179	2395	6.86	6.86	0- 45	24	( )
176	1968	6.86	6.86	0- 48	19	( )
<hr/>						
76 Fluoranthene		CAS#: 206-44-0				
202	94960	7.55	7.55	80-120	100	( )
203	16481	7.55	7.55	0- 47	17	( )
101	12932	7.55	7.55	0- 43	14	( )
<hr/>						
79 Pyrene		CAS#: 129-00-0				
202	69958	7.69	7.69	80-120	100	( )
200	14729	7.69	7.69	0- 51	21	( )
101	11404	7.69	7.69	0- 45	16	( )
<hr/>						
89 Benzo(a)anthracene		CAS#: 56-55-3				
228	31850	8.43	8.43	80-120	100	( )
226	8106	8.43	8.43	0- 57	25	( )
229	9804	8.43	8.43	0- 50	31	( )
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
92 Chrysene		CAS#: 218-01-9				
228	27425	8.45	8.45	80-120	100	( )
229	6636	8.45	8.45	0- 50	24	( )
226	10538	8.45	8.45	0- 60	38	( )
-----						
95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	33007	9.34	9.34	80-120	100	( )
253	7705	9.34	9.34	0- 52	23	( )
125	4970	9.34	9.34	0- 43	15	( )
-----						
96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	33007	9.34	9.37	80-120	100	( )
253	7763	9.34	9.37	0- 52	24	( )
125	4970	9.34	9.37	0- 42	15	( )
-----						
97 Benzo(a)pyrene		CAS#: 50-32-8				
252	14162	9.71	9.70	80-120	100	( )
253	3536	9.71	9.70	0- 52	25	( )
125	2002	9.70	9.70	0- 30	14	( )
-----						
99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	6290	11.24	11.24	80-120	100	( )
138	1819	11.23	11.24	4- 64	29	( )
-----						
101 Benzo(ghi)perylene		CAS#: 191-24-2				
276	5131	11.70	11.69	80-120	100	( )
138	1987	11.70	11.69	0- 30	39	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0530.d  
 Lab Smp Id: 247562008 Client Smp ID: RE15-10-8303  
 Inj Date : 05-MAR-2010 20:21  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562008|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
 Als bottle: 29  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.sub  
 Target Version: 3.50  
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	3.17440	% moisture

Cpnd Variable Local Compound Variable

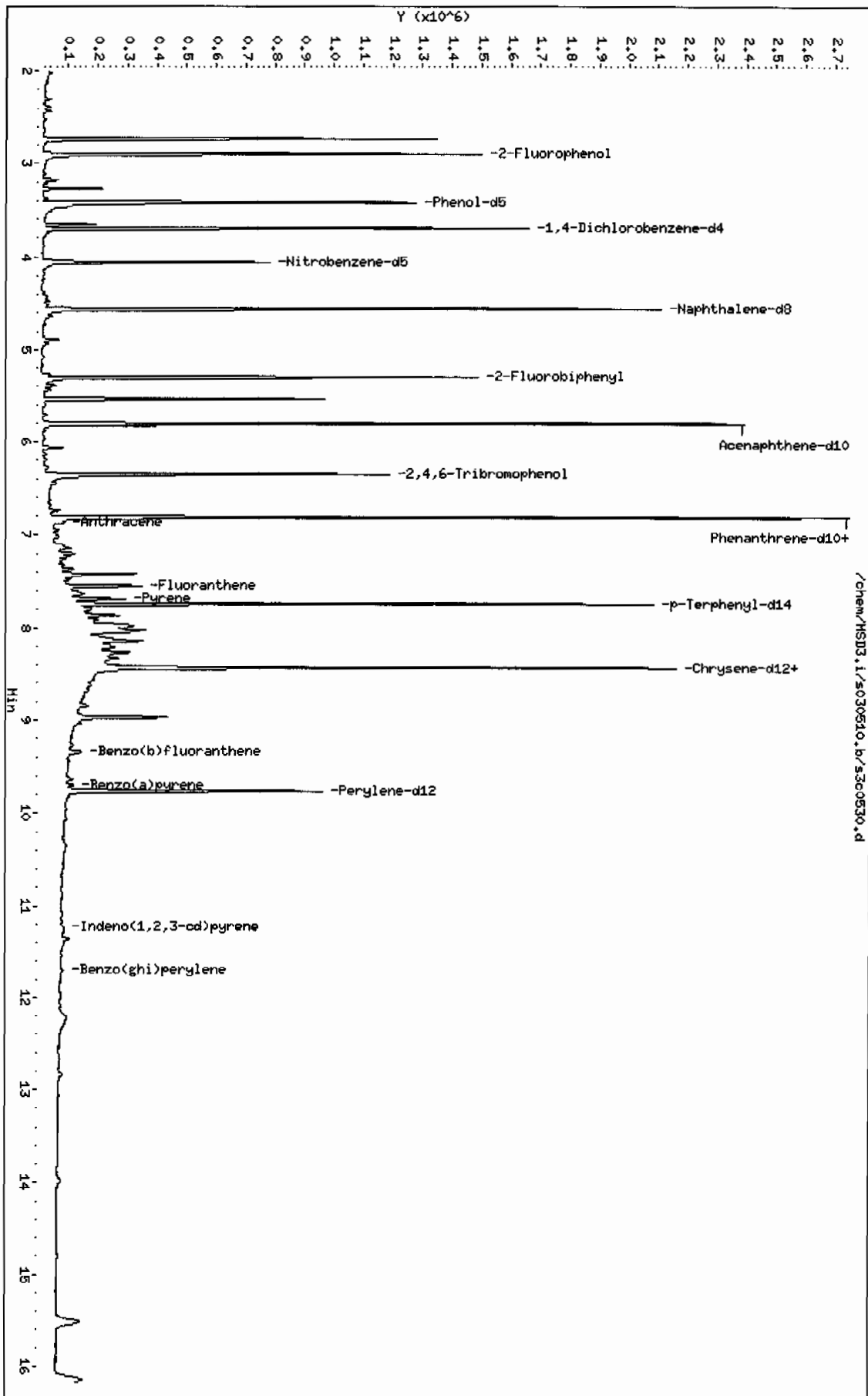
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.704	1903749	40.000
* 67 Phenanthrene-d10	6.817	3218492	40.000
* 91 Chrysene-d12	8.437	2642379	40.000
* 98 Perylene-d12	9.769	1379740	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	L1B ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.741	1516694	31.8675041	1090	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.276	229151	4.81473567	165	98	NIST05.L	15188	10
Thunbergol					CAS #: 25269-17-4		
7.421	360824	4.48439118	154	87	NIST05.L	118732	67
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
7.988	273738	4.14380708	142	90	NIST05.L	112655	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.020	281443	4.26045110	146	98	NIST05.L	133618	91
Unknown					CAS #:		
8.972	446777	6.76324646	232	0		0	91
Unknown					CAS #:		
15.514	337894	9.79587301	335	0		0	98

Data File: /chem/HSD3.1/s030510.b/s3c0530.d  
 Date: 05-MAR-2010 20:24  
 Client ID: RE15-10-8303  
 Sample Info: 124756200819566711SVHF11LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: HSD3.1  
 Operator: JLD1  
 Column diameter: 0.20



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF11ILANL

Volume Injected (uL): 0.5

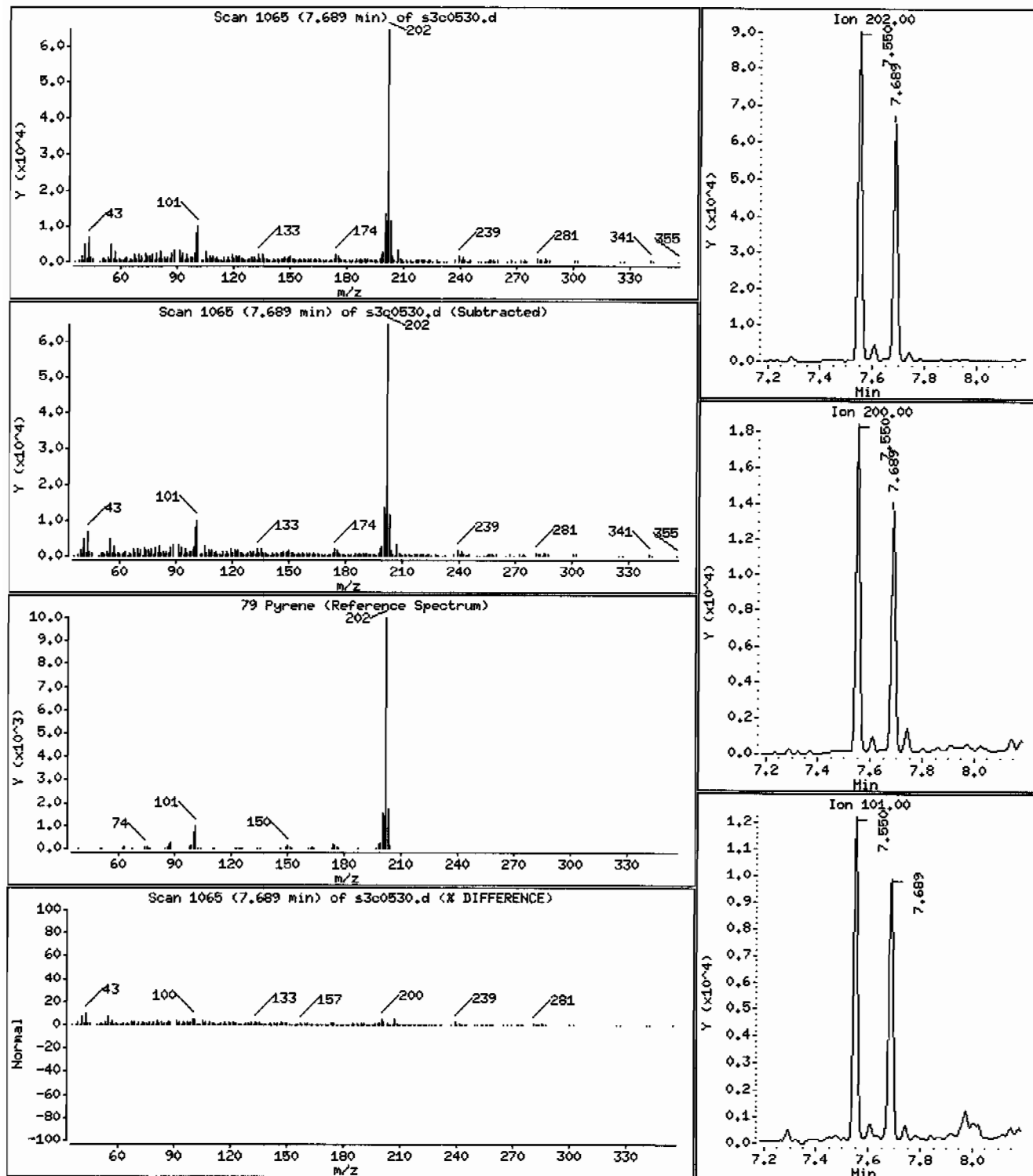
Operator: JLD1

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

Column diameter: 0.20

79 Pyrene

Concentration: 92.6 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF11LANL

Volume Injected (uL): 0,5

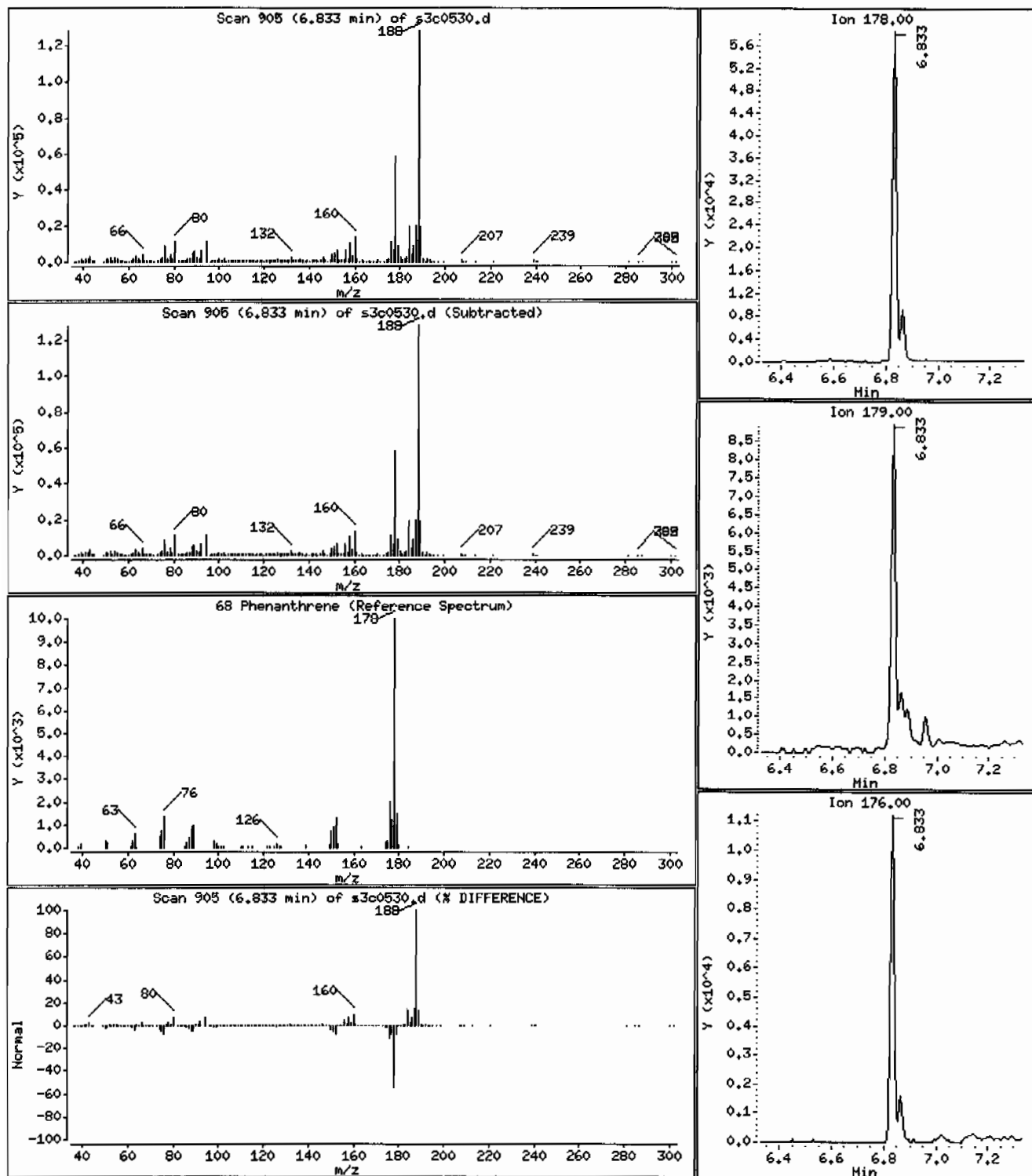
Operator: JLD1

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

Column diameter: 0,20

68 Phenanthrene

Concentration: 61,7 ug/Kg





Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF111LANL

Volume Injected (uL): 0.5

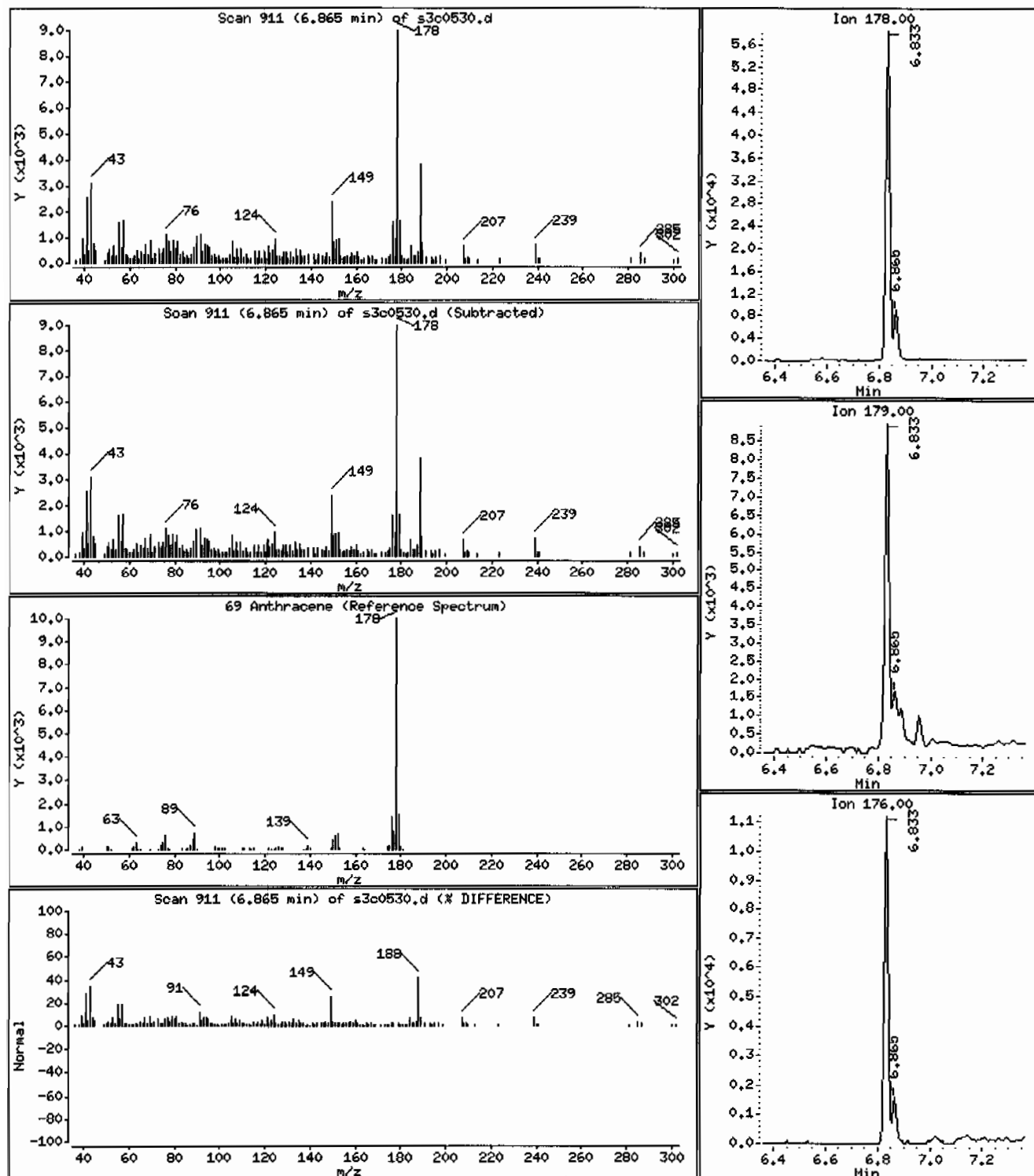
Operator: JLD1

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

Column diameter: 0.20

69 Anthracene

Concentration: 11.9 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF111LANL

Volume Injected (uL): 0.5

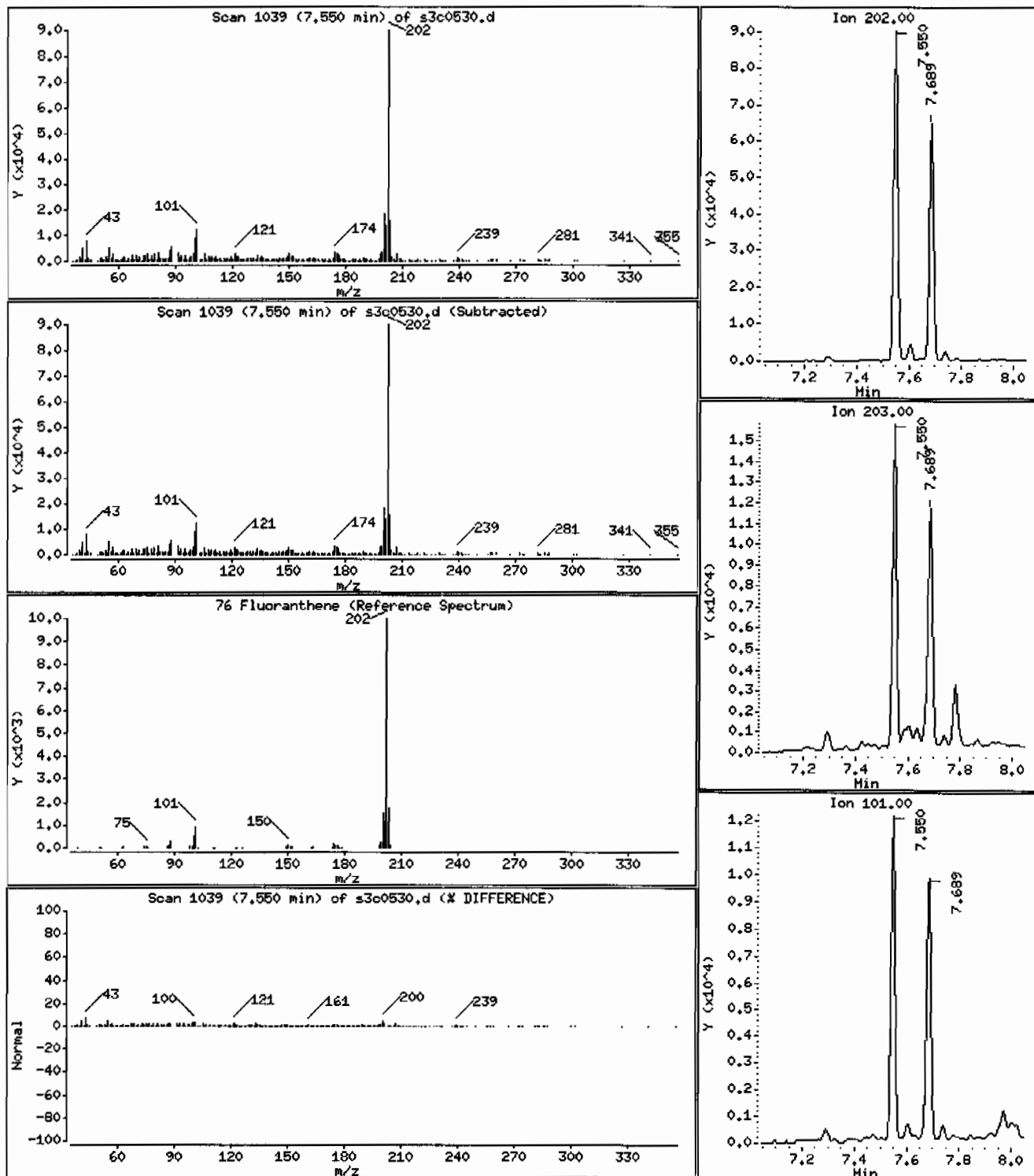
Operator: JLD1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 119 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVMF111LANL

Volume Injected (uL): 0.5

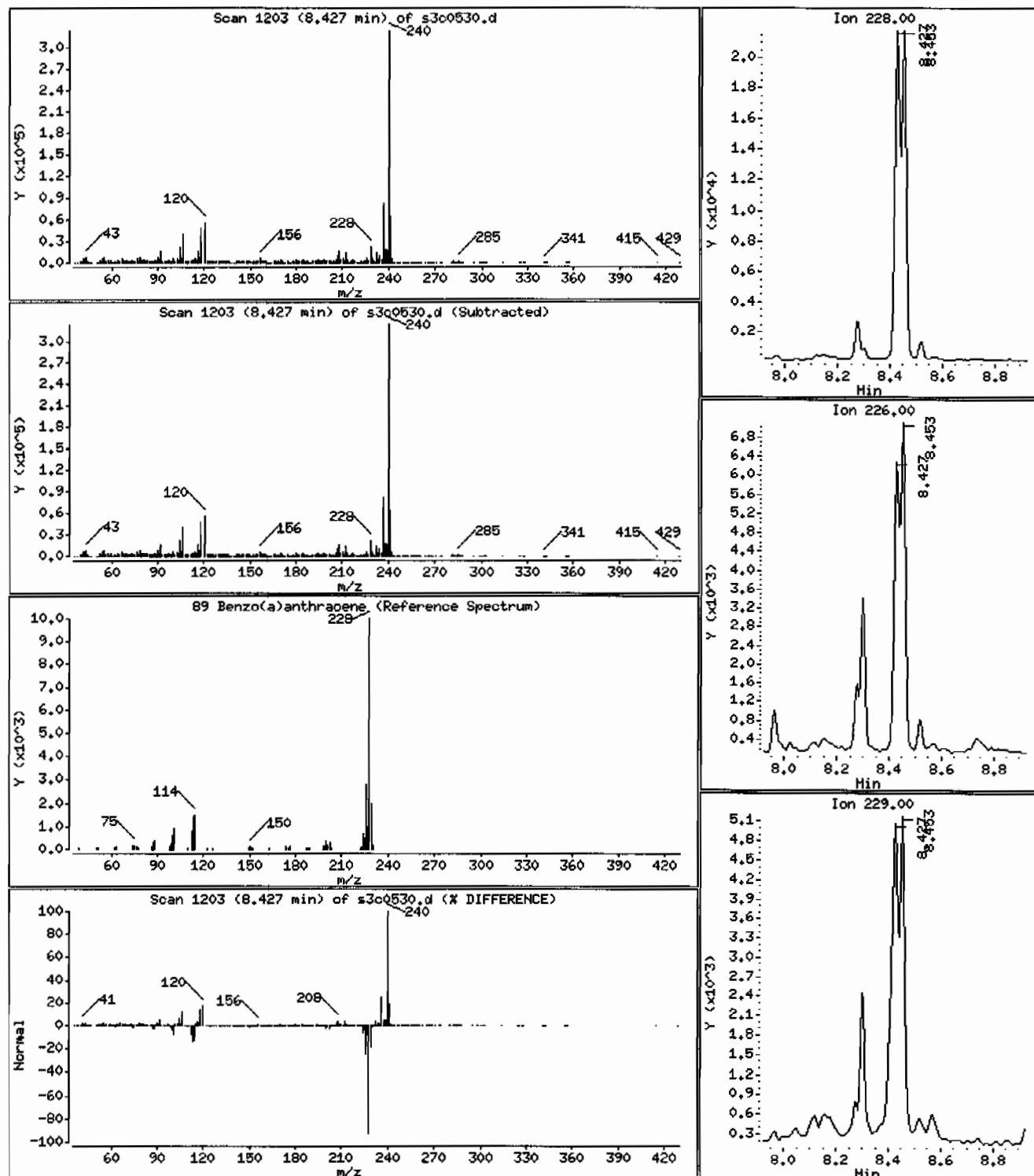
Operator: JLD1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 51.2 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF11ILANL

Volume Injected (uL): 0.5

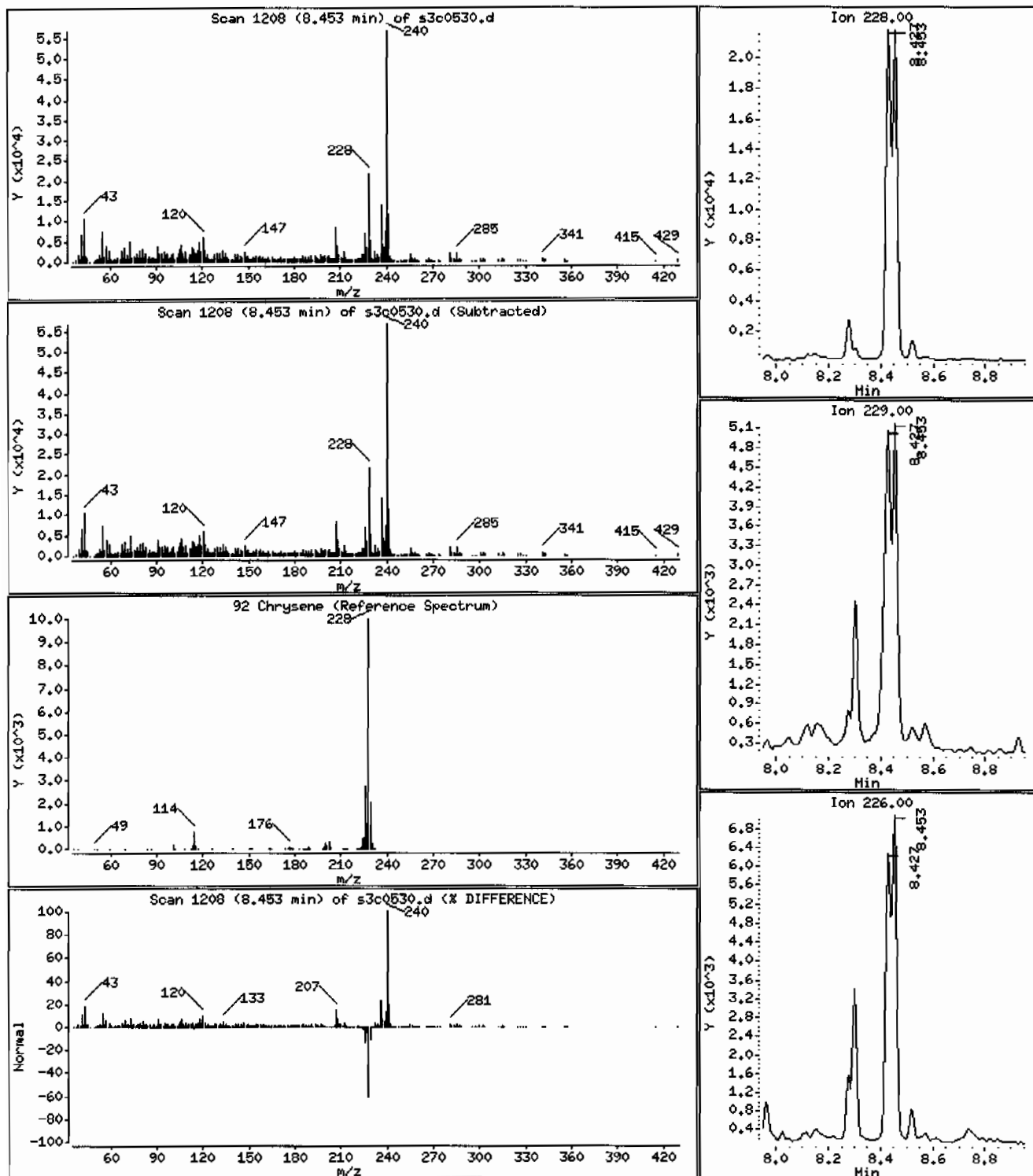
Operator: JLD1

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

Column diameter: 0.20

92 Chrysene

Concentration: 46.3 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: HSD3.i

Sample Info: 1247562008195667711SVHF111LANL

Volume Injected (uL): 0.5

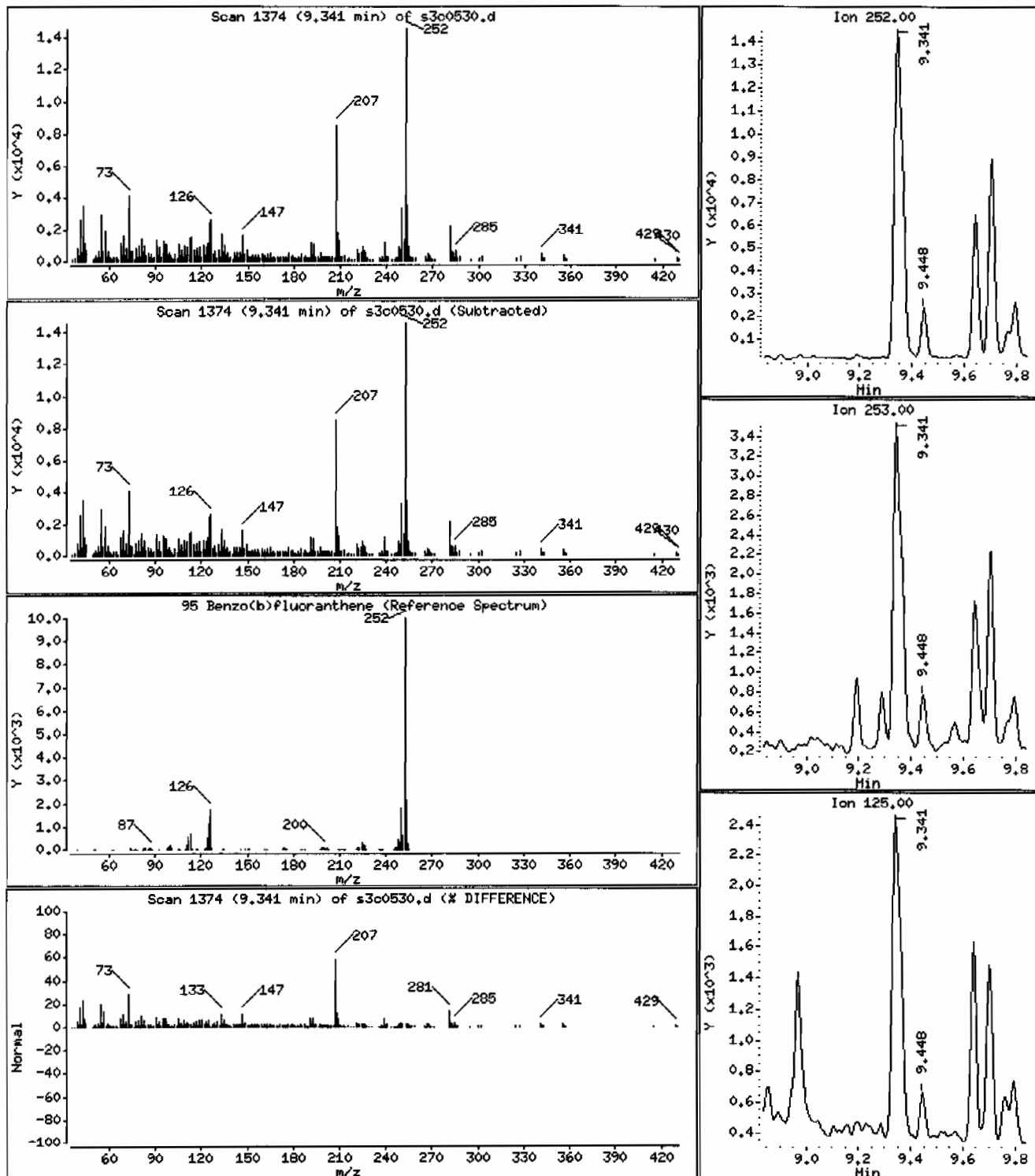
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 99.2 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF111LANL

Volume Injected (uL): 0.5

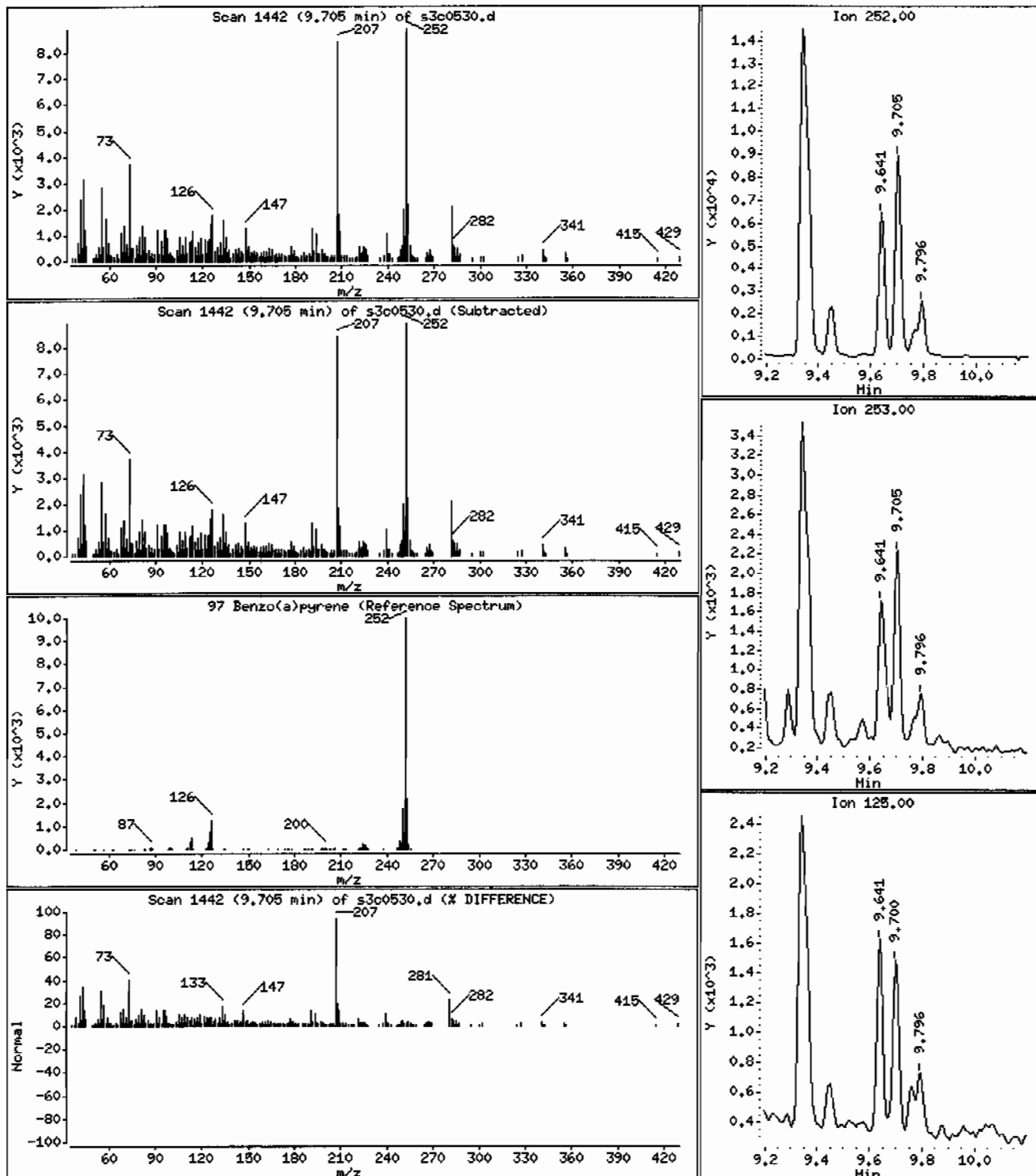
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 50.0 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF11ILANL

Volume Injected (uL): 0.5

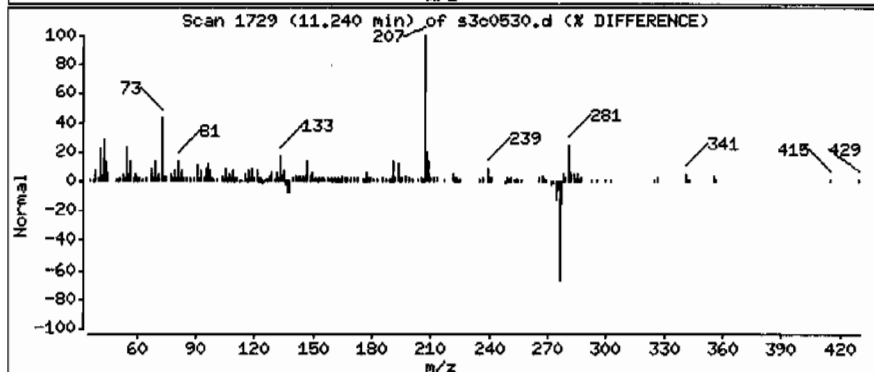
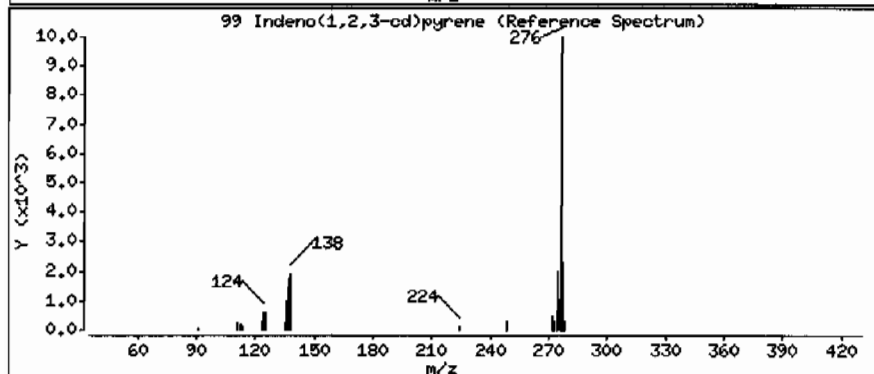
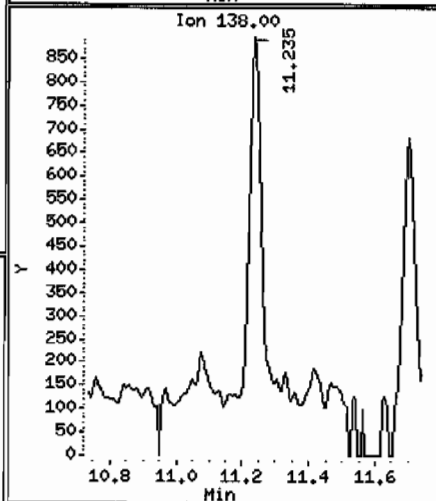
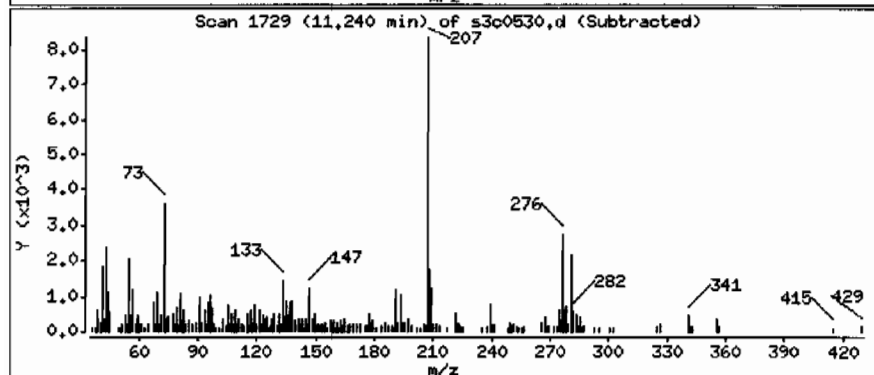
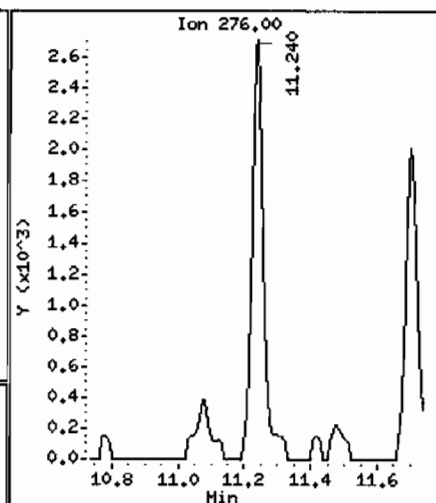
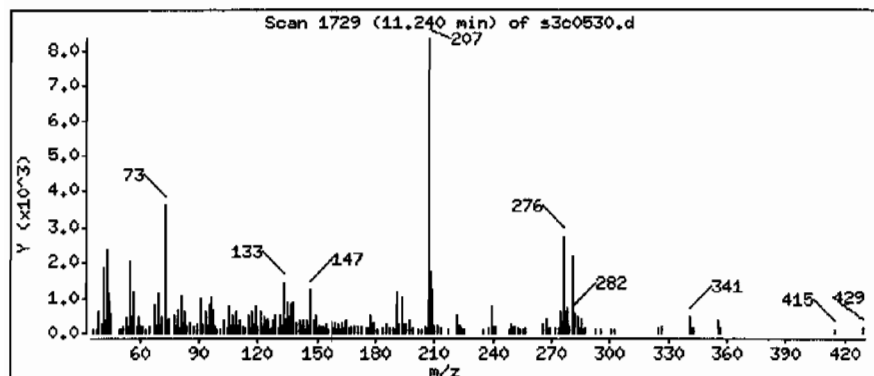
Operator: JLD1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 25.2 ug/Kg



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711ISVMF111LANL

Volume Injected (uL): 0.5

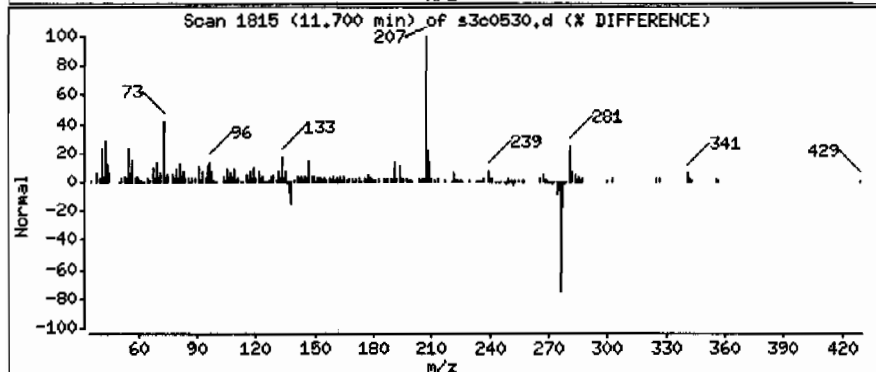
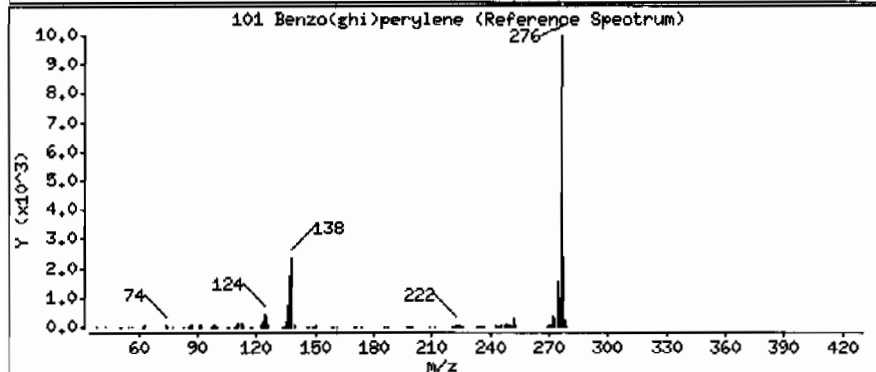
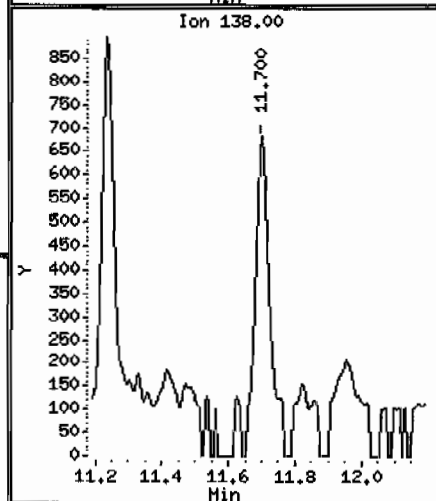
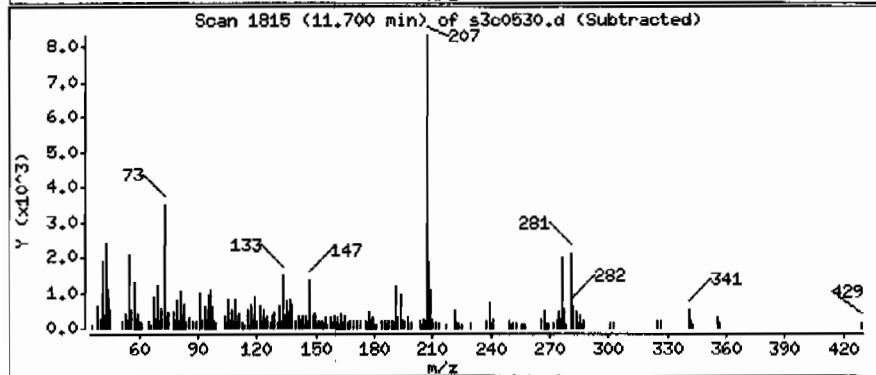
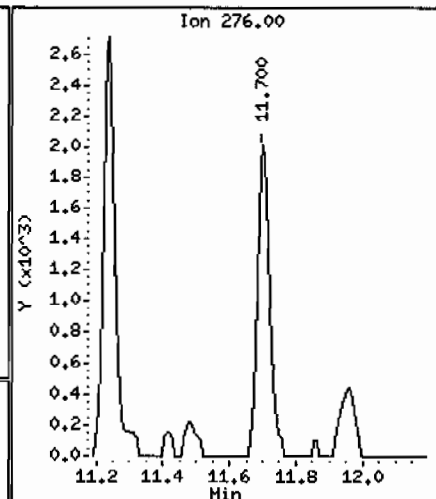
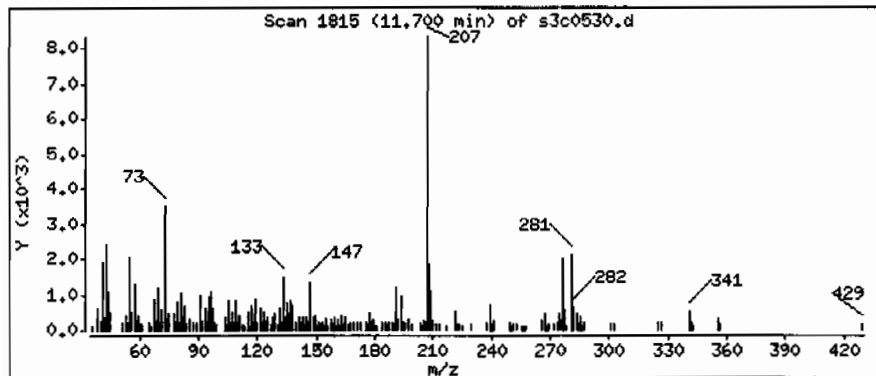
Operator: JLD1

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

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 24.6 ug/Kg





Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.1

Sample Info: 1247562008195667711ISVMFI11LANL

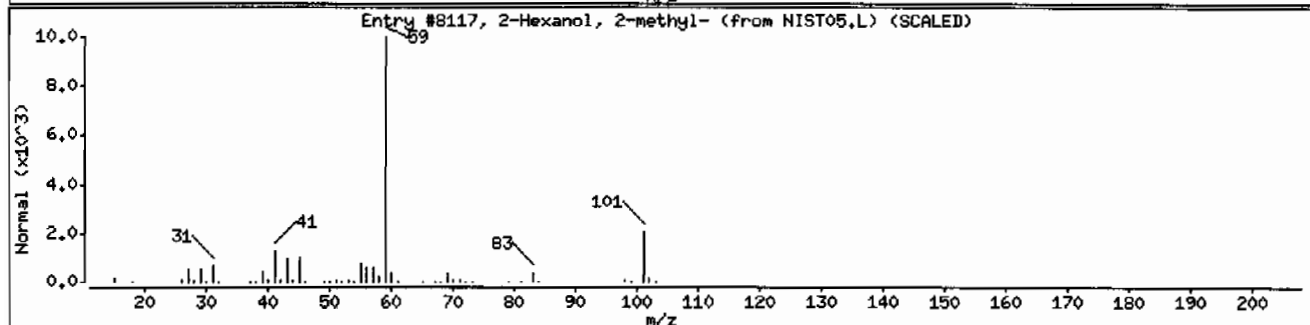
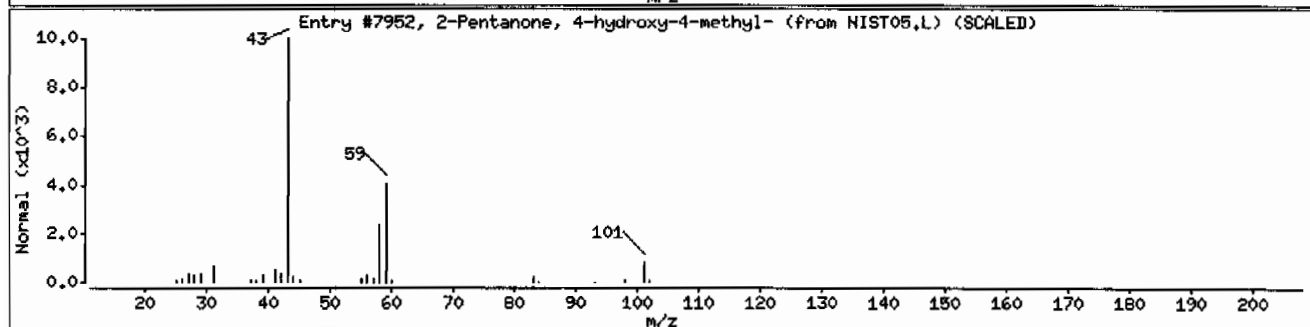
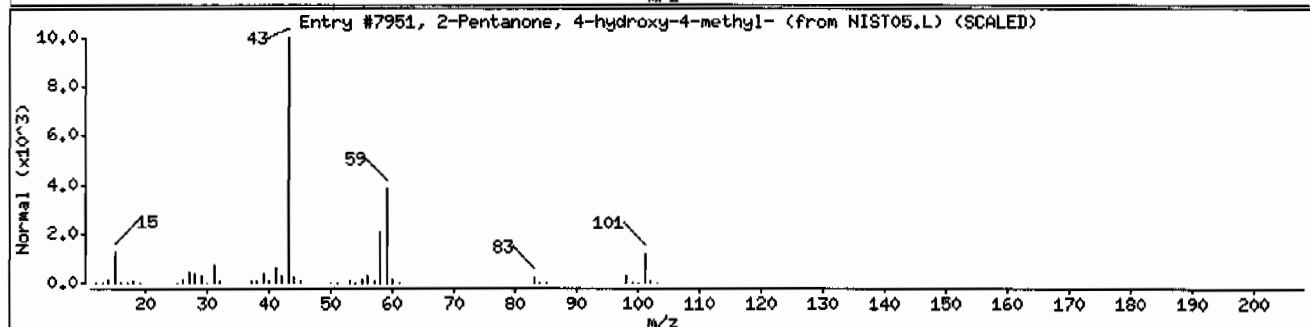
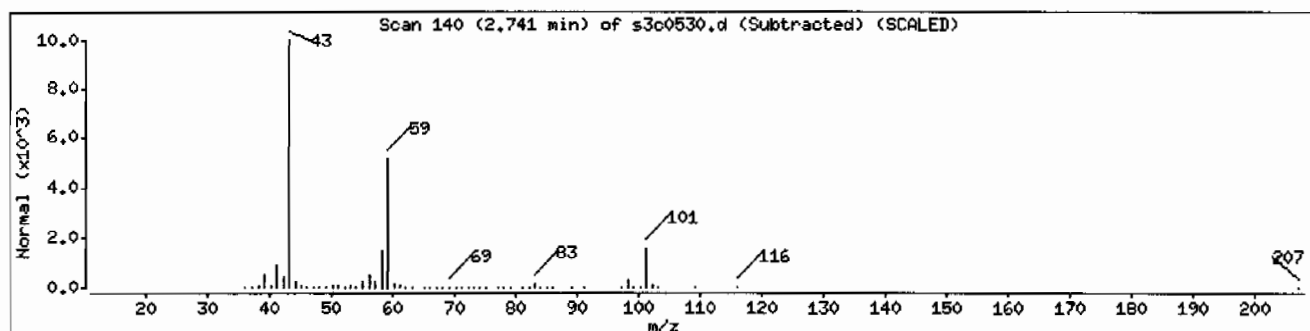
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Hexanol, 2-methyl-	625-23-0	NIST05.L	8117	28	C7H16O	116



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 12475620081956677111SVHF111LANL

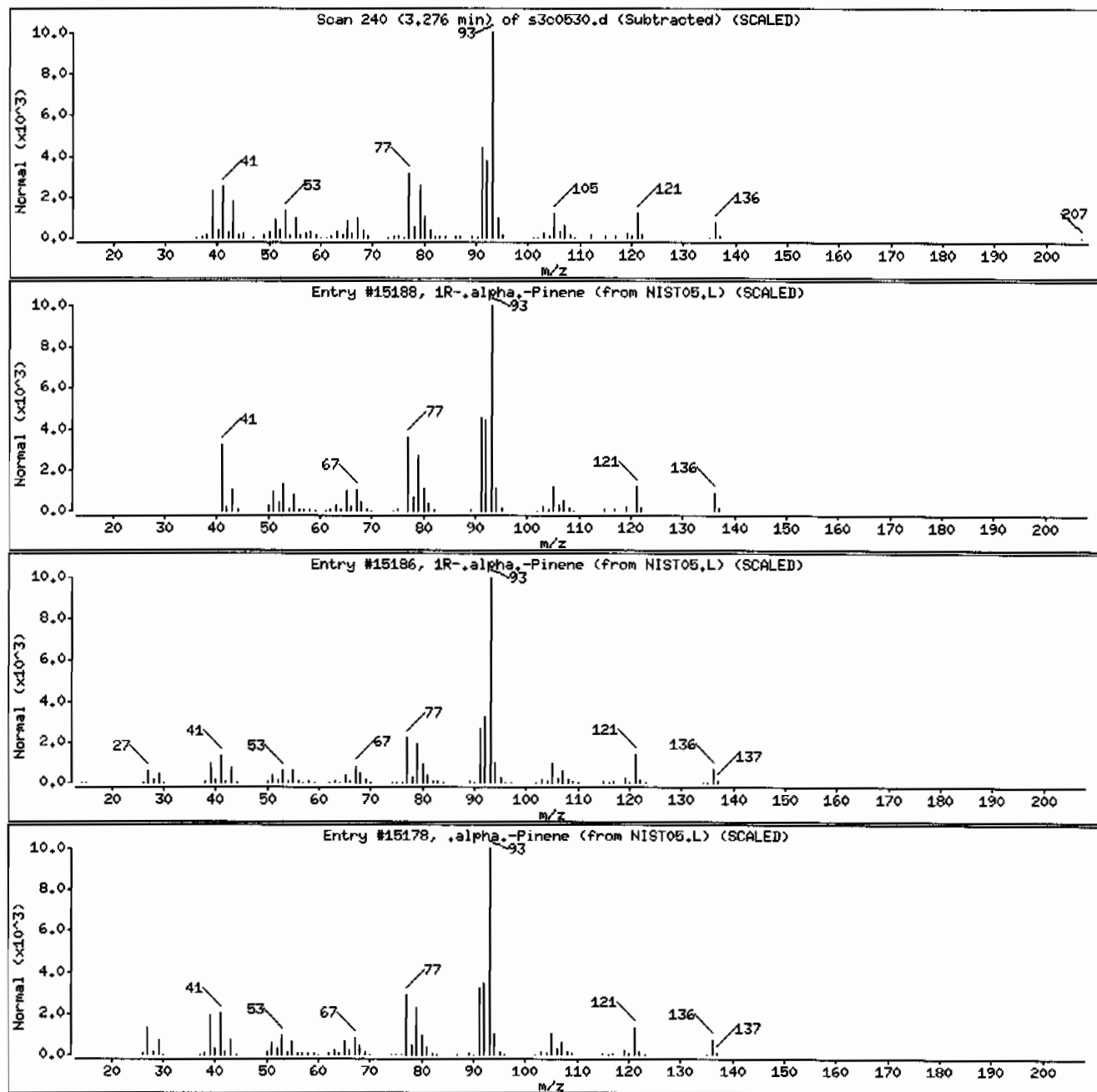
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	98	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 : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.1

Sample Info: 1247562008195667711SVMF111LANL

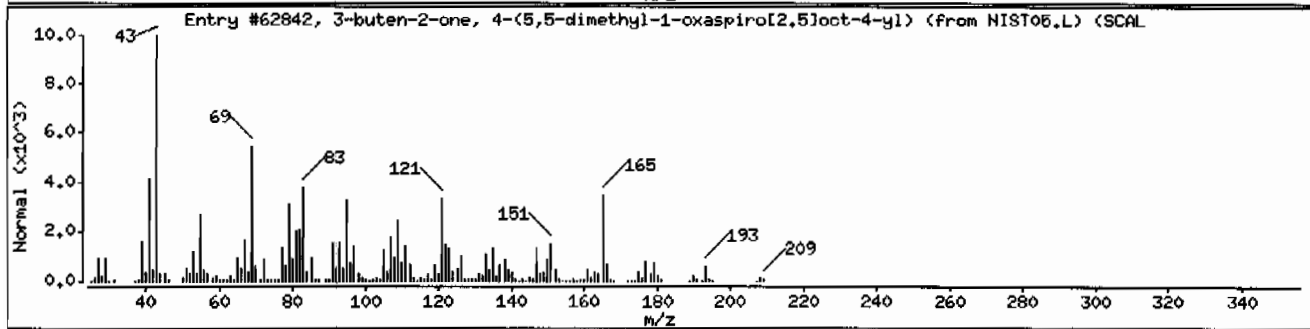
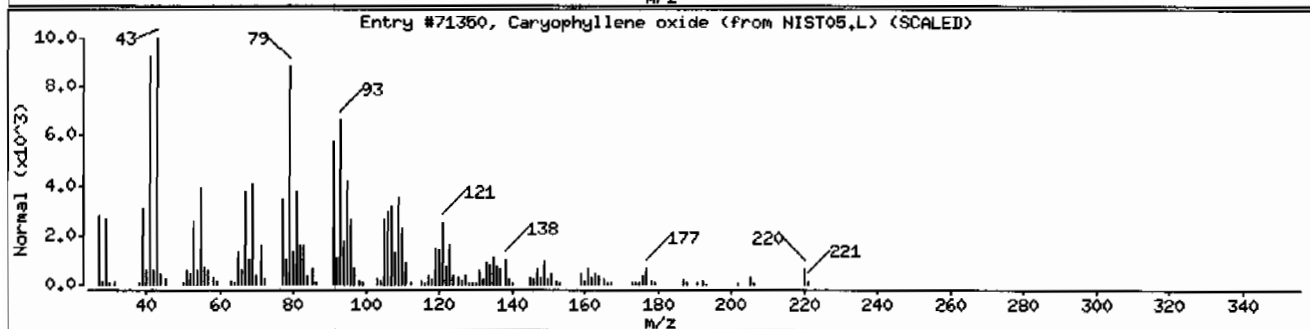
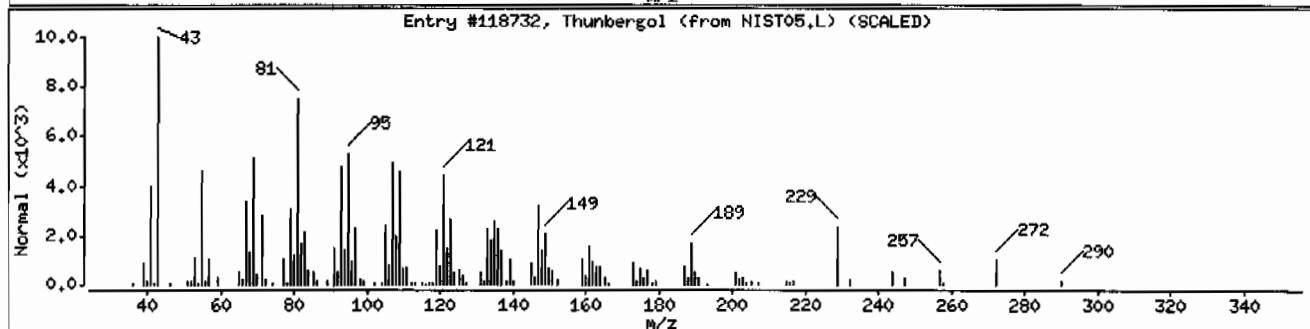
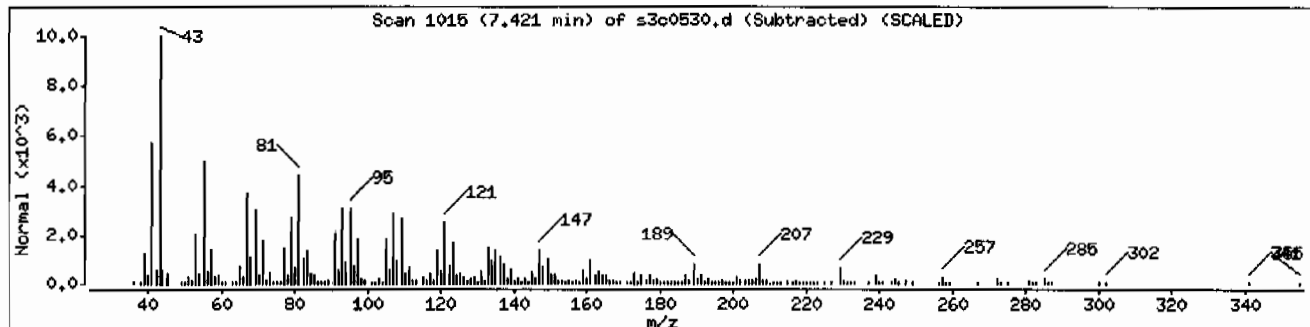
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thunbergol	25269-17-4	NIST05.L	118732	87	C20H34O	290
Caryophyllene oxide	1139-30-6	NIST05.L	71350	49	C15H24O	220
3-buten-2-one, 4-(5,5-dimethyl-1-oxaspiro	1000196-66-5	NIST05.L	62842	49	C13H20O2	208



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF111LANL

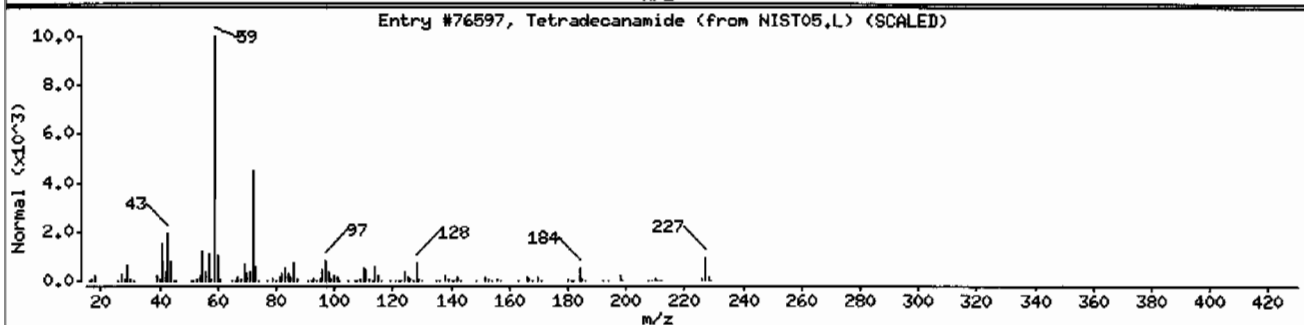
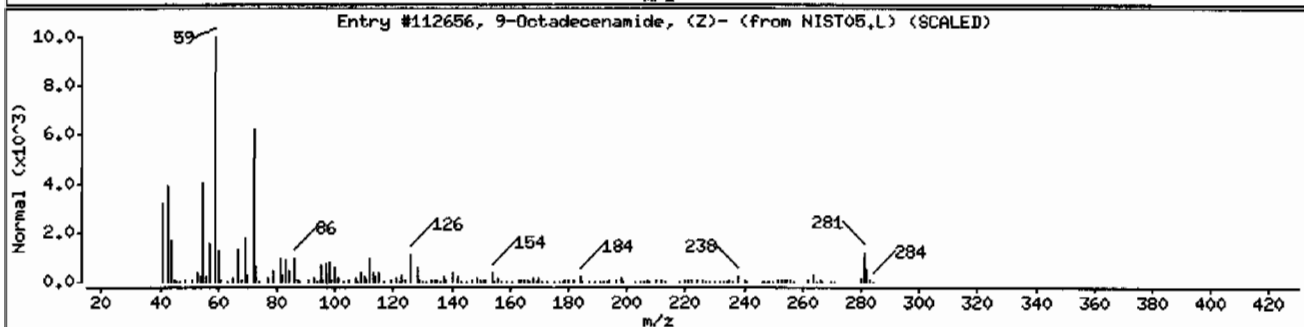
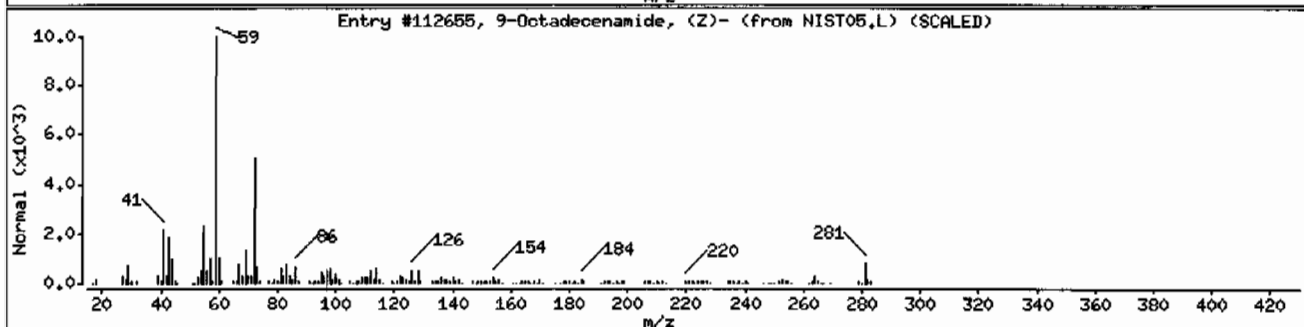
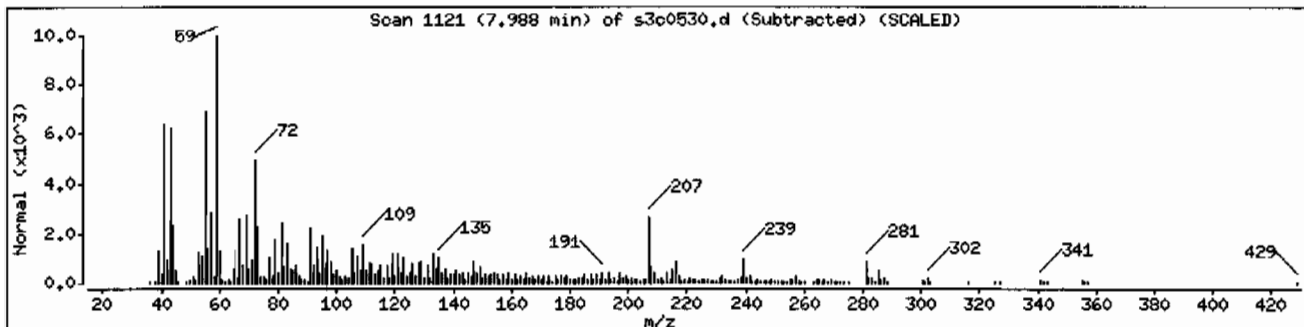
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	90	C18H35NO	281
Tetradecanamide	638-58-4	NIST05.L	76597	55	C14H29NO	227



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF111LANL

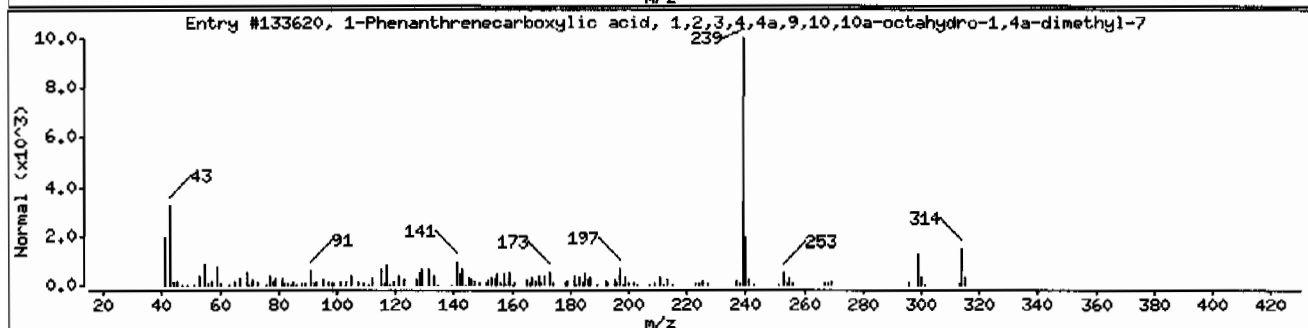
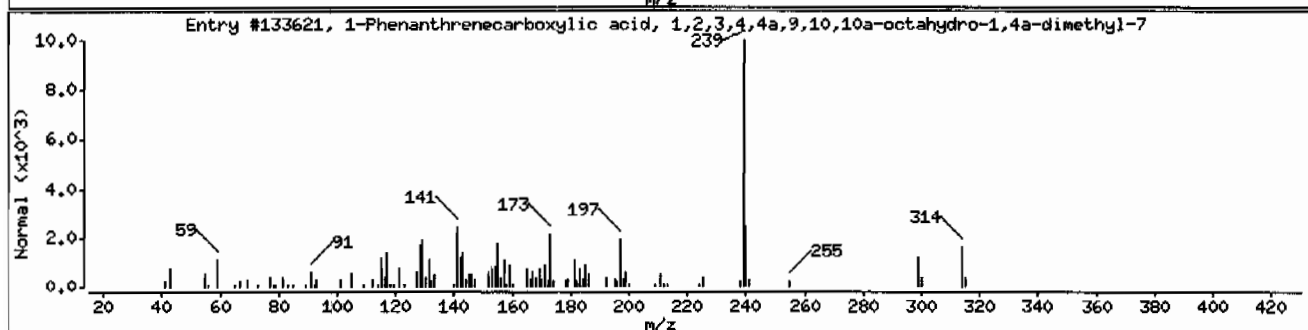
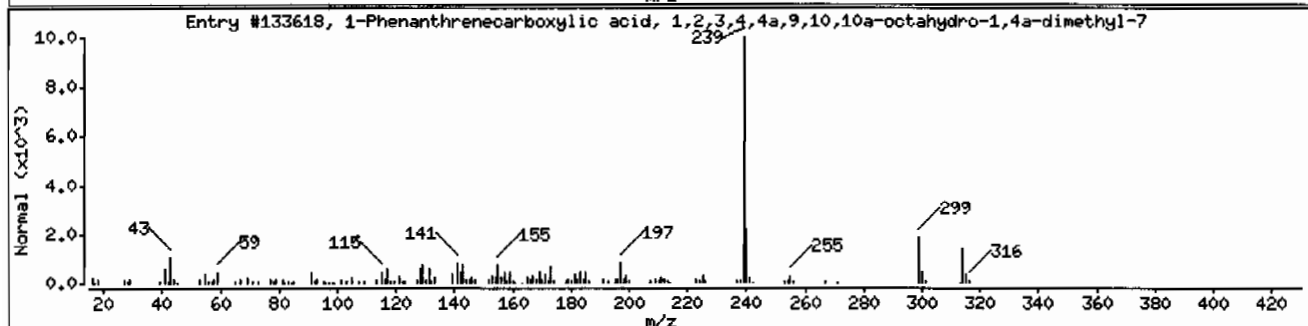
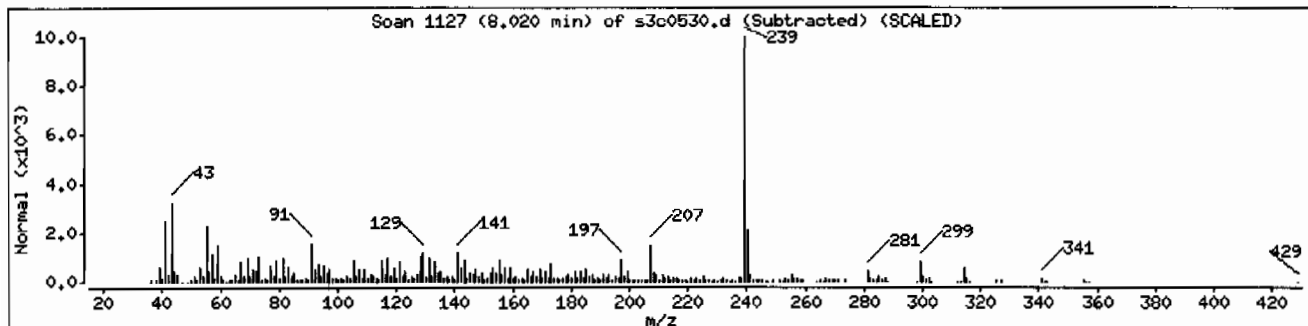
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05,L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05,L	133621	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05,L	133620	93	C21H30O2	314



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: HSD3.i

Sample Info: 1247562008195667711SVHF11ILANL

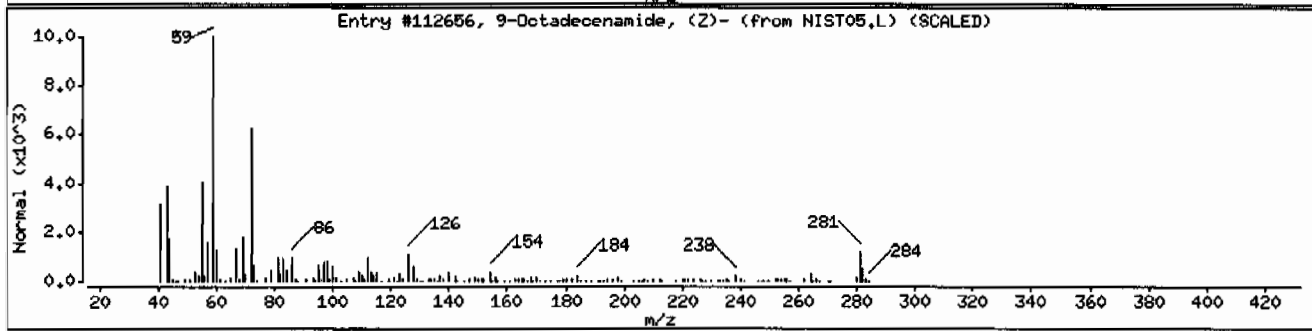
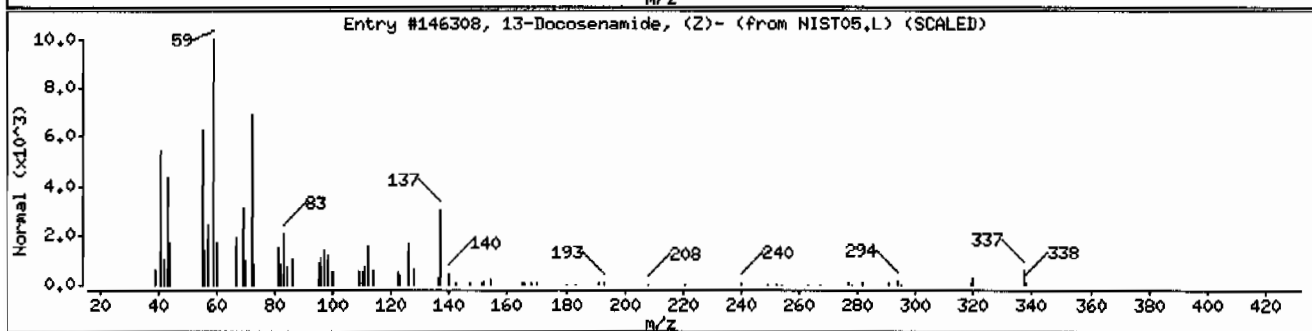
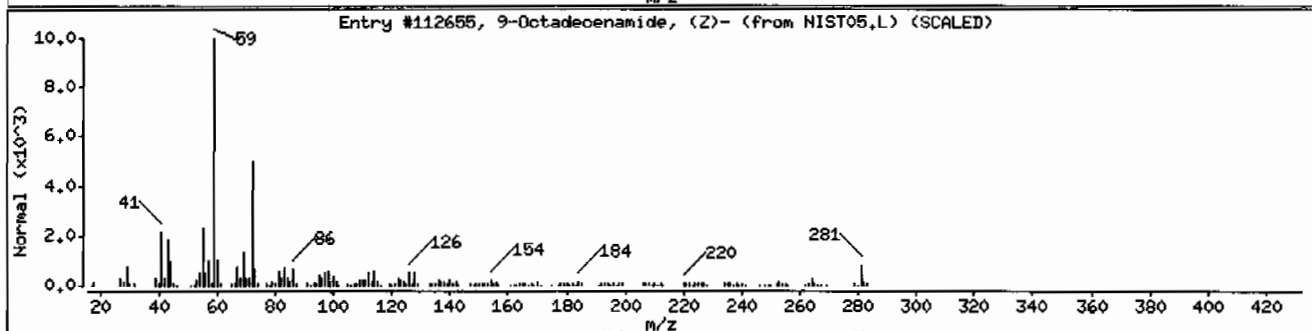
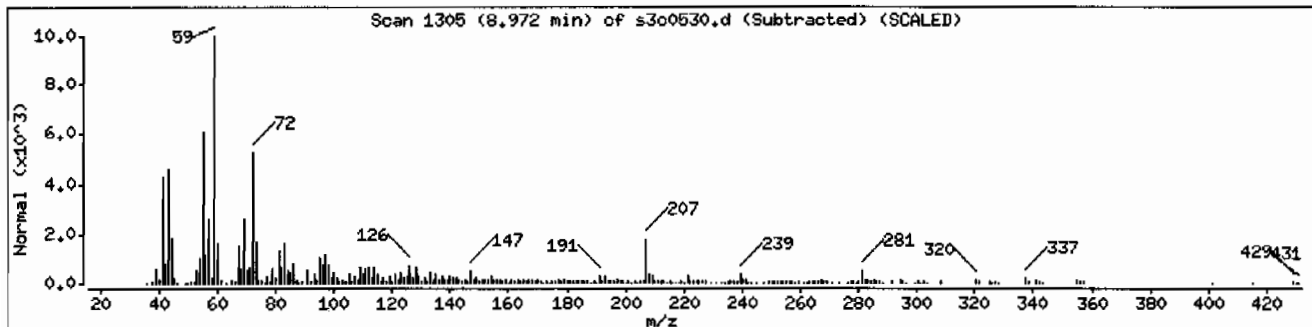
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	89	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	70	C18H35NO	281



Date : 05-MAR-2010 20:21

Client ID: RE15-10-8303

Instrument: MSD3.i

Sample Info: 1247562008195667711SVHF111LANL

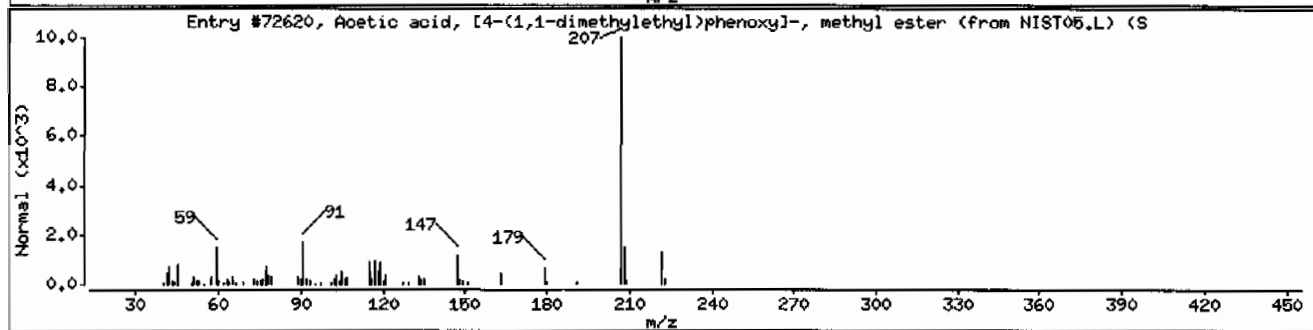
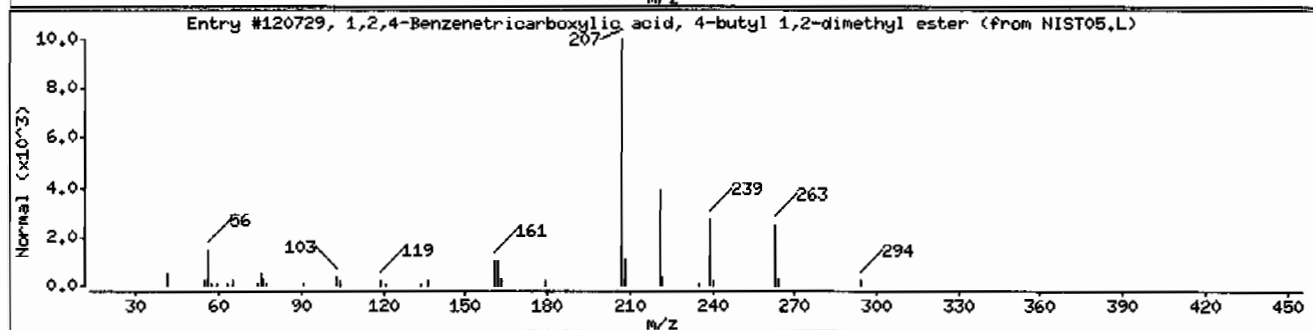
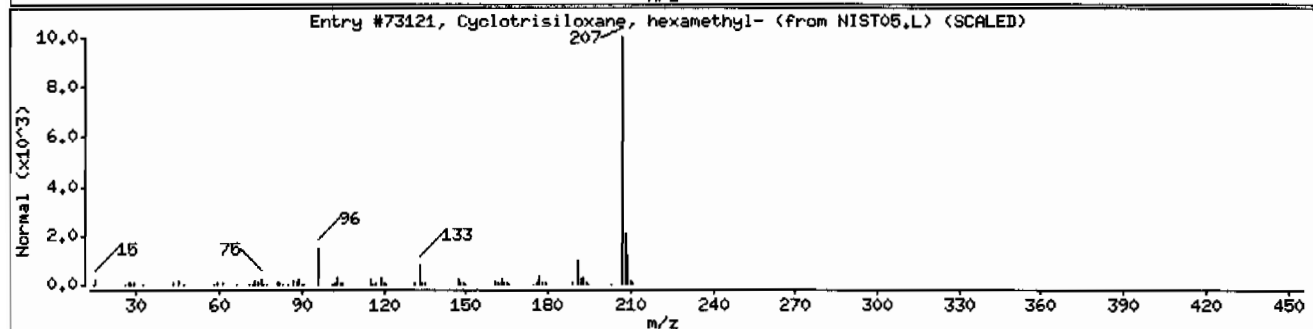
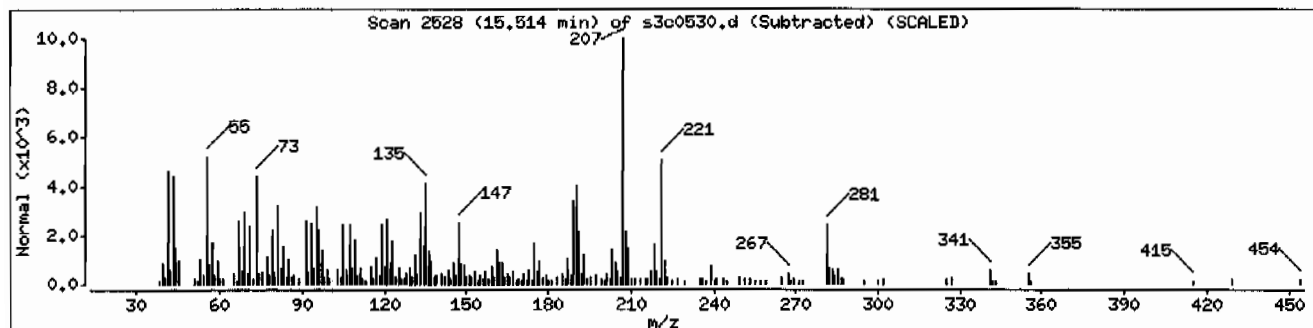
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-6MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	30	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
1,2,4-Benzenetricarboxylic acid, 4-butyl	43049-07-6	NIST05.L	120729	27	C <sub>15</sub> H <sub>18</sub> O <sub>6</sub>	294
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	27	C <sub>13</sub> H <sub>18</sub> O <sub>3</sub>	222



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

SDG Number: 10-1950  
Lab Sample ID: 247562007

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.07 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8310  
Batch ID: 956677  
Run Date: 03/05/2010 19:58  
Prep Date: 02/23/2010 21:09  
Data File: s3c0529.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	345	ug/kg	69.0	345
108-95-2	Phenol	U	345	ug/kg	69.0	345
95-57-8	2-Chlorophenol	U	345	ug/kg	69.0	345
106-46-7	1,4-Dichlorobenzene	U	345	ug/kg	69.0	345
621-64-7	N-Nitrosodipropylamine	U	345	ug/kg	69.0	345
59-50-7	4-Chloro-3-methylphenol	U	345	ug/kg	69.0	345
83-32-9	Acenaphthene		38.9	ug/kg	11.4	34.5
121-14-2	2,4-Dinitrotoluene	U	345	ug/kg	34.5	345
100-02-7	4-Nitrophenol	U	345	ug/kg	114	345
87-86-5	Pentachlorophenol	U	345	ug/kg	86.3	345
129-00-0	Pyrene		430	ug/kg	10.4	34.5
110-86-1	Pyridine	U	345	ug/kg	69.0	345
62-53-3	Aniline	U	345	ug/kg	104	345
111-44-4	bis(2-Chloroethyl) ether	U	345	ug/kg	69.0	345
541-73-1	1,3-Dichlorobenzene	U	345	ug/kg	69.0	345
100-51-6	Benzyl alcohol	U	345	ug/kg	104	345
95-50-1	1,2-Dichlorobenzene	U	345	ug/kg	69.0	345
108-60-1	bis(2-Chloroisopropyl)ether	U	345	ug/kg	69.0	345
95-48-7	o-Cresol	U	345	ug/kg	69.0	345
65794-96-9	m,p-Cresols	U	345	ug/kg	104	345
67-72-1	Hexachloroethane	U	345	ug/kg	69.0	345
98-95-3	Nitrobenzene	U	345	ug/kg	69.0	345
78-59-1	Isophorone	U	345	ug/kg	69.0	345
88-75-5	2-Nitrophenol	U	345	ug/kg	69.0	345
105-67-9	2,4-Dimethylphenol	U	345	ug/kg	121	345
111-91-1	bis(2-Chloroethoxy)methane	U	345	ug/kg	69.0	345
120-83-2	2,4-Dichlorophenol	U	345	ug/kg	69.0	345
65-85-0	Benzoic acid	U	690	ug/kg	173	690
91-20-3	Naphthalene	J	33.7	ug/kg	10.4	34.5
106-47-8	4-Chloroaniline	U	345	ug/kg	69.0	345
87-68-3	Hexachlorobutadiene	U	345	ug/kg	69.0	345
91-57-6	2-Methylnaphthalene	J	8.64	ug/kg	6.90	34.5
77-47-4	Hexachlorocyclopentadiene	U	345	ug/kg	69.0	345
88-06-2	2,4,6-Trichlorophenol	U	345	ug/kg	69.0	345
95-95-4	2,4,5-Trichlorophenol	U	345	ug/kg	69.0	345
91-58-7	2-Chloronaphthalene	U	34.5	ug/kg	11.4	34.5
88-74-4	2-Nitroaniline	U	345	ug/kg	69.0	345
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	345	ug/kg	69.0	345



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562007	Date Received: 02/20/2010 08:55	%Moisture: 3.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8310	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 19:58	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s3c0529.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	345	ug/kg	69.0	345
606-20-2	2,6-Dinitrotoluene	U	345	ug/kg	34.5	345
208-96-8	Acenaphthylene	U	34.5	ug/kg	10.4	34.5
51-28-5	2,4-Dinitrophenol	U	690	ug/kg	131	690
132-64-9	Dibenzofuran	U	345	ug/kg	69.0	345
84-66-2	Diethylphthalate	U	345	ug/kg	69.0	345
86-73-7	Fluorene		36.2	ug/kg	10.4	34.5
7005-72-3	4-Chlorophenylphenylether	U	345	ug/kg	69.0	345
534-52-1	2-Methyl-4,6-dinitrophenol	U	345	ug/kg	69.0	345
100-01-6	4-Nitroaniline	U	345	ug/kg	104	345
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	345	ug/kg	69.0	345
122-66-7	Azobenzene	U	345	ug/kg	69.0	345
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	345	ug/kg	69.0	345
118-74-1	Hexachlorobenzene	U	345	ug/kg	69.0	345
85-01-8	Phenanthrene		302	ug/kg	10.4	34.5
120-12-7	Anthracene		93.7	ug/kg	6.90	34.5
84-74-2	Di-n-butylphthalate	U	345	ug/kg	69.0	345
206-44-0	Fluoranthene		456	ug/kg	10.4	34.5
85-68-7	Butylbenzylphthalate	U	345	ug/kg	69.0	345
56-55-3	Benzo(a)anthracene		211	ug/kg	10.4	34.5
91-94-1	3,3'-Dichlorobenzidine	U	345	ug/kg	104	345
218-01-9	Chrysene		210	ug/kg	10.4	34.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	345	ug/kg	69.0	345
117-84-0	Di-n-octylphthalate	U	345	ug/kg	69.0	345
205-99-2	Benzo(b)fluoranthene		419	ug/kg	10.4	34.5
207-08-9	Benzo(k)fluoranthene	U	34.5	ug/kg	10.4	34.5
50-32-8	Benzo(a)pyrene		227	ug/kg	10.4	34.5
193-39-5	Indeno(1,2,3-cd)pyrene		86.7	ug/kg	10.4	34.5
53-70-3	Dibenzo(a,h)anthracene	U	34.5	ug/kg	10.4	34.5
191-24-2	Benzo(ghi)perylene		90.3	ug/kg	10.4	34.5
120-82-1	1,2,4-Trichlorobenzene	U	345	ug/kg	69.0	345

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.75	3520	ug/kg		JA
	Unknown	7.79	277	ug/kg		J

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562007	Date Received: 02/20/2010 08:55	%Moisture: 3.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8310	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 19:58	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s3c0529.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
2381-21-7	Pyrene, 1-methyl-	7.86	213	ug/kg	96	NJ
	Unknown	7.91	262	ug/kg		J
	Unknown	7.99	387	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	153	ug/kg	97	NJ
	Unknown	8.04	153	ug/kg		J
	Unknown	8.06	345	ug/kg		J
	Unknown	8.16	339	ug/kg		J
	Unknown	8.2	485	ug/kg		J
	Unknown	8.29	455	ug/kg		J
	Unknown	8.32	265	ug/kg		J
	Unknown	8.36	234	ug/kg		J
	Unknown	8.52	231	ug/kg		J
	Unknown	8.57	172	ug/kg		J
	Unknown	8.6	167	ug/kg		J
	Unknown	8.66	158	ug/kg		J
	Unknown	8.73	242	ug/kg		J
	Unknown	8.77	156	ug/kg		J
	Unknown	8.81	157	ug/kg		J
	Unknown	8.9	203	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	378	ug/kg	93	NJ
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	9.04	217	ug/kg	92	NJ
	Unknown	9.1	435	ug/kg		J
	Unknown	9.19	374	ug/kg		J
	Unknown	9.28	432	ug/kg		J
	Unknown	9.44	445	ug/kg		J
198-55-0	Perylene	9.64	394	ug/kg	96	NJ
	Unknown	10.02	403	ug/kg		J
	Unknown	10.3	494	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0529.d  
Lab Smp Id: 247562007 Client Smp ID: RE15-10-8310  
Inj Date : 05-MAR-2010 19:58  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562007|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 28  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.07000	weight of sample
M	3.65070	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.704	3.703	(1.000)	289946	40.0000	
* 29 Naphthalene-d8	136	4.559	4.564	(1.000)	1153569	40.0000	
* 46 Acenaphthene-d10	164	5.811	5.811	(1.000)	665409	40.0000	
* 67 Phenanthrene-d10	188	6.817	6.816	(1.000)	1131265	40.0000	
* 91 Chrysene-d12	240	8.432	8.437	(1.000)	712942	40.0000	
* 98 Perylene-d12	264	9.764	9.763	(1.000)	405568	40.0000	
\$ 3 2-Fluorophenol	112	2.907	2.896	(0.785)	515722	64.4315	2220
\$ 5 Phenol-d5	99	3.426	3.420	(0.925)	688973	67.4809	2330
\$ 20 Nitrobenzene-d5	82	4.062	4.062	(0.891)	328523	33.2365	1150
\$ 39 2-Fluorobiphenyl	172	5.303	5.302	(0.913)	642223	37.4816	1290
\$ 60 2,4,6-Tribromophenol	329	6.357	6.356	(1.094)	128276	61.8171	2130
\$ 81 p-Terphenyl-d14	244	7.742	7.741	(0.918)	582592	47.8792	1650

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
47 Acenaphthene	154	5.832	5.832	(1.004)	23549	1.12752	38.9
79 Pyrene	202	7.688	7.688	(0.912)	278867	12.4632	430
30 Naphthalene	128	4.576	4.575	(1.004)	26073	0.97542	33.7 (a)
34 2-Methylnaphthalene	142	5.057	5.056	(1.109)	4150	0.25032	8.6 (a)
53 Fluorene	166	6.191	6.196	(1.065)	20815	1.04993	36.2
68 Phenanthrene	178	6.833	6.832	(1.002)	258977	8.74354	302
69 Anthracene	178	6.865	6.864	(1.007)	77270	2.71463	93.7
76 Fluoranthene	202	7.549	7.549	(1.107)	352351	13.2043	456
89 Benzo (a) anthracene	228	8.427	8.426	(0.999)	112524	6.10437	211
92 Chrysene	228	8.453	8.453	(1.003)	106750	6.08585	210
95 Benzo (b) fluoranthene	252	9.341	9.341	(0.957)	112459	12.1486	419
97 Benzo (a) pyrene	252	9.700	9.699	(0.993)	51942	6.58348	227
99 Indeno (1,2,3-cd) pyrene	276	11.235	11.239	(1.151)	17455	2.51110	86.7
101 Benzo (ghi) perylene	276	11.700	11.694	(1.198)	15162	2.61479	90.2 (Q)

#### 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: s3c0529.d

Report Date: 03/07/2010 15:08

Lab. ID: 247562007

SampleType: SAMPLE

Injection Date: 05-MAR-2010 19:58

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562007|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	39754	3.43	3.49	80-120	100	(T)
93	5592	3.47	3.49	238-298	14	(Q)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	48267	4.06	3.94	80-120	100	(T)
42	34744	4.06	3.94	58-118	72	(T)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	3183	4.40	4.34	80-120	100	( )
122	288	4.38	4.34	51-111	9	(Q)
77	5790	4.40	4.34	41-101	182	(QT)
-----						
30 Naphthalene		CAS#: 91-20-3				
128	26073	4.58	4.58	80-120	100	( )
129	3097	4.58	4.58	0- 41	12	( )
127	3428	4.58	4.60	0- 30	13	( )
-----						
34 2-Methylnaphthalene		CAS#: 91-57-6				
142	4150	5.06	5.06	80-120	100	( )
141	3556	5.06	5.06	55-115	86	( )
-----						
40 2-Chloronaphthalene		CAS#: 91-58-7				
162	7081	5.54	5.41	80-120	100	(T)
164	469	5.54	5.41	3- 63	7	(T)
127	800	5.54	5.41	11- 71	11	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
43 Dimethylphthalate				CAS#: 131-11-3		
163	118996	5.81	5.58	80-120	100	(T)
164	667619	5.81	5.58	0- 40	561	(QT)
<hr/>						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	86247	5.81	5.63	80-120	100	(T)
63	1000	5.81	5.63	64-124	1	(QT)
<hr/>						
45 Acenaphthylene				CAS#: 208-96-8		
152	10012	5.83	5.71	80-120	100	(T)
151	3803	5.83	5.71	0- 50	38	(T)
153	23758	5.83	5.71	0- 44	237	(QT)
<hr/>						
47 Acenaphthene				CAS#: 83-32-9		
154	23549	5.83	5.83	80-120	100	( )
153	23632	5.83	5.83	68-128	100	( )
152	10010	5.83	5.83	13- 73	43	( )
<hr/>						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	86247	5.81	5.93	80-120	100	(T)
89	1862	5.81	5.92	48-108	2	(QT)
63	1000	5.81	5.92	25- 85	1	(QT)
<hr/>						
52 4-Nitrophenol				CAS#: 100-02-7		
139	171	5.86	5.86	80-120	100	( )
109	1758	5.81	5.86	41-101	1027	(Q)
65	3072	5.81	5.86	80-140	1794	(Q)
<hr/>						
53 Fluorene				CAS#: 86-73-7		
166	20815	6.19	6.20	80-120	100	( )
165	19173	6.19	6.20	62-122	92	( )
167	3261	6.19	6.20	0- 44	16	( )
<hr/>						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	441	6.36	6.21	80-120	100	(T)
105	1053	6.36	6.21	16- 76	239	(QT)
51	1122	6.36	6.21	52-112	255	(QT)
<hr/>						
68 Phenanthrene				CAS#: 85-01-8		
178	258977	6.83	6.83	80-120	100	( )
179	42273	6.83	6.83	0- 45	16	( )
176	49539	6.83	6.83	0- 49	19	( )
<hr/>						
69 Anthracene				CAS#: 120-12-7		
178	77270	6.86	6.86	80-120	100	( )
179	15030	6.86	6.86	0- 45	19	( )
176	13851	6.86	6.86	0- 48	18	( )
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
76 Fluoranthene		CAS#: 206-44-0				
202	352351	7.55	7.55	80-120	100	( )
203	61014	7.55	7.55	0- 47	17	( )
101	45432	7.55	7.55	0- 43	13	( )
<hr/>						
79 Pyrene		CAS#: 129-00-0				
202	278867	7.69	7.69	80-120	100	( )
200	58902	7.69	7.69	0- 51	21	( )
101	46960	7.68	7.69	0- 45	17	( )
<hr/>						
89 Benzo(a)anthracene		CAS#: 56-55-3				
228	112524	8.43	8.43	80-120	100	( )
226	31468	8.43	8.43	0- 57	28	( )
229	32038	8.43	8.43	0- 50	28	( )
<hr/>						
92 Chrysene		CAS#: 218-01-9				
228	106750	8.45	8.45	80-120	100	( )
229	25363	8.45	8.45	0- 50	24	( )
226	32420	8.45	8.45	0- 60	30	( )
<hr/>						
95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	112459	9.34	9.34	80-120	100	( )
253	25923	9.34	9.34	0- 52	23	( )
125	14479	9.34	9.34	0- 43	13	( )
<hr/>						
96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	113197	9.34	9.37	80-120	100	( )
253	26404	9.34	9.37	0- 52	23	( )
125	14479	9.34	9.37	0- 42	13	( )
<hr/>						
97 Benzo(a)pyrene		CAS#: 50-32-8				
252	51942	9.70	9.70	80-120	100	( )
253	12809	9.70	9.70	0- 52	25	( )
125	7039	9.70	9.70	0- 30	14	( )
<hr/>						
99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	17455	11.23	11.24	80-120	100	( )
138	5104	11.23	11.24	4- 64	29	( )
<hr/>						
100 Dibenzo(a,h)anthracene		CAS#: 53-70-3				
278	5663	11.23	11.24	80-120	100	( )
139	1147	11.23	11.24	0- 30	20	( )
<hr/>						
101 Benzo(ghi)perylene		CAS#: 191-24-2				
276	15162	11.70	11.69	80-120	100	( )
138	4686	11.69	11.69	0- 30	31	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0529.d  
Lab Smp Id: 247562007 Client Smp ID: RE15-10-8310  
Inj Date : 05-MAR-2010 19:58  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562007|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 28  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.07000	weight of sample
M	3.65070	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.704	1955106	40.000
* 91 Chrysene-d12	8.432	4519476	40.000
* 98 Perylene-d12	9.764	1702824	40.000

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

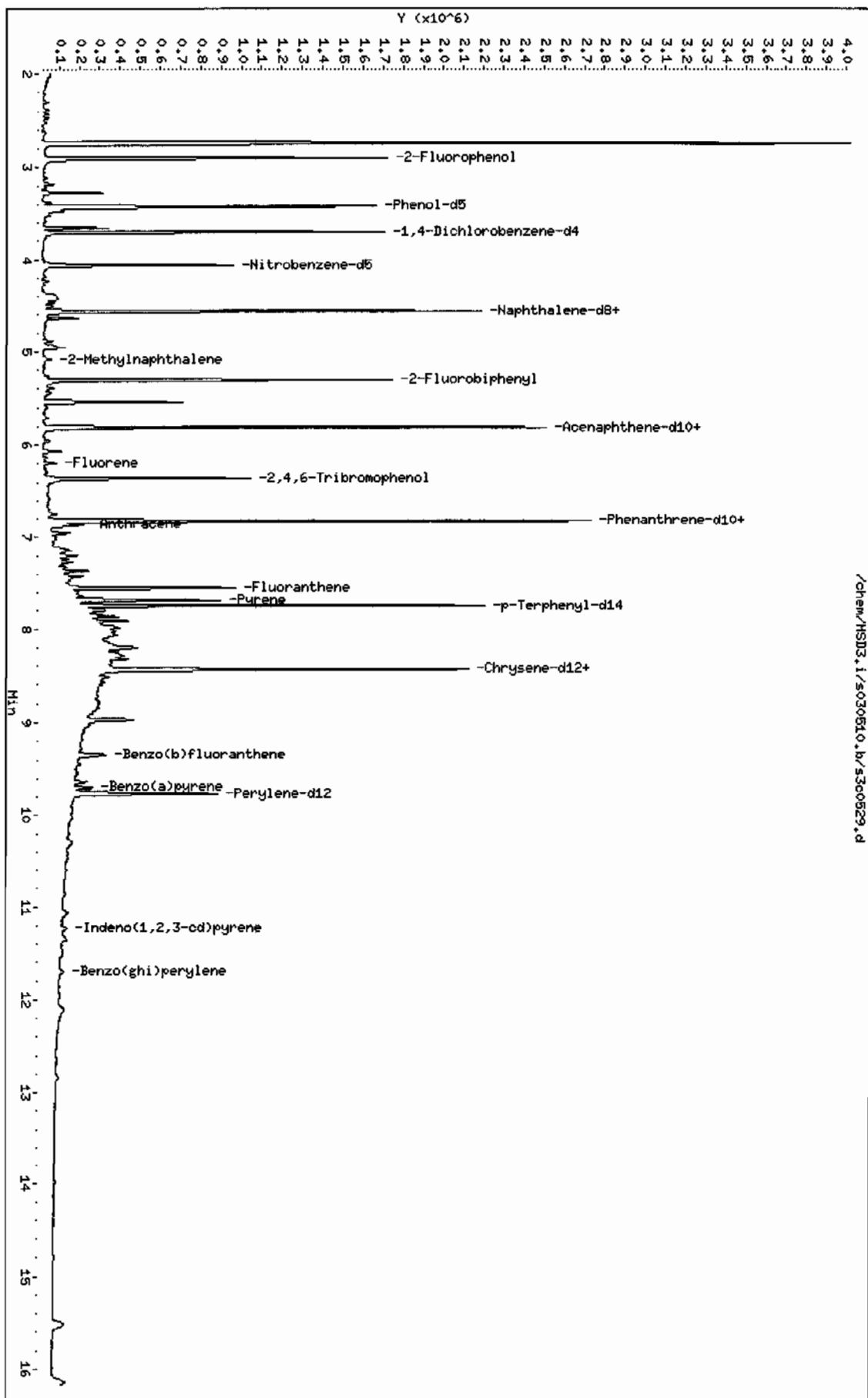


RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.746	4988392	102.058739	3520	0		0	10
Unknown					CAS #:		
7.790	906542	8.02342282	277	0		0	91
Pyrene, 1-methyl-					CAS #: 2381-21-7		
7.865	697045	6.16925774	213	96	NIST05.L	68688	91
Unknown					CAS #:		
7.908	857024	7.58516175	262	0		0	91
Unknown					CAS #:		
7.988	1267829	11.2210279	387	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.020	500298	4.42792964	153	97	NIST05.L	133618	91
Unknown					CAS #:		
8.041	499447	4.42039743	152	0		0	91
Unknown					CAS #:		
8.063	1129043	9.99268923	345	0		0	91
Unknown					CAS #:		
8.164	1108668	9.81235437	339	0		0	91
Unknown					CAS #:		
8.202	1587390	14.0493291	485	0		0	91
Unknown					CAS #:		
8.293	1490247	13.1895533	455	0		0	91
Unknown					CAS #:		
8.325	867339	7.67645555	265	0		0	91
Unknown					CAS #:		
8.357	765215	6.77259684	234	0		0	91
Unknown					CAS #:		
8.517	756755	6.69772132	231	0		0	91
Unknown					CAS #:		
8.571	562424	4.97778326	172	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
8.603	547097	4.84212553	167	0		0	91
Unknown					CAS #:		
8.657	516494	4.57126826	158	0		0	91
Unknown					CAS #:		
8.726	792164	7.01111316	242	0		0	91
Unknown					CAS #:		
8.769	509973	4.51356070	156	0		0	91
Unknown					CAS #:		
8.806	514695	4.55535252	157	0		0	91
Unknown					CAS #:		
8.897	666023	5.89468931	203	0		0	91
9-Octadecenamamide, (Z)-					CAS #: 301-02-0		
8.967	1238754	10.9636896	378	93	NIST05.L	112655	91
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
9.036	709577	6.28016843	217	92	NIST05.L	112295	91
Unknown					CAS #:		
9.100	536458	12.6015966	435	0		0	98
Unknown					CAS #:		
9.186	460930	10.8274253	374	0		0	98
Unknown					CAS #:		
9.277	532957	12.5193491	432	0		0	98
Unknown					CAS #:		
9.443	548910	12.8941111	445	0		0	98
Perylene					CAS #: 198-55-0		
9.641	486008	11.4165221	394	96	NIST05.L	93574	98
Unknown					CAS #:		
10.020	496825	11.6706112	403	0		0	98
Unknown					CAS #:		
10.304	609649	14.3208823	494	0		0	98

Data File: /chem/MSD3.i/s030510.b/s300529.d  
 Date : 05-MAR-2010 19:58  
 Client ID: REIS-10-8310  
 Sample Info: 1247562007195667711SVHF11.LANL  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: MSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3.i

Sample Info: 1247562007195667711SVHF11ILANL

Volume Injected (uL): 0.5

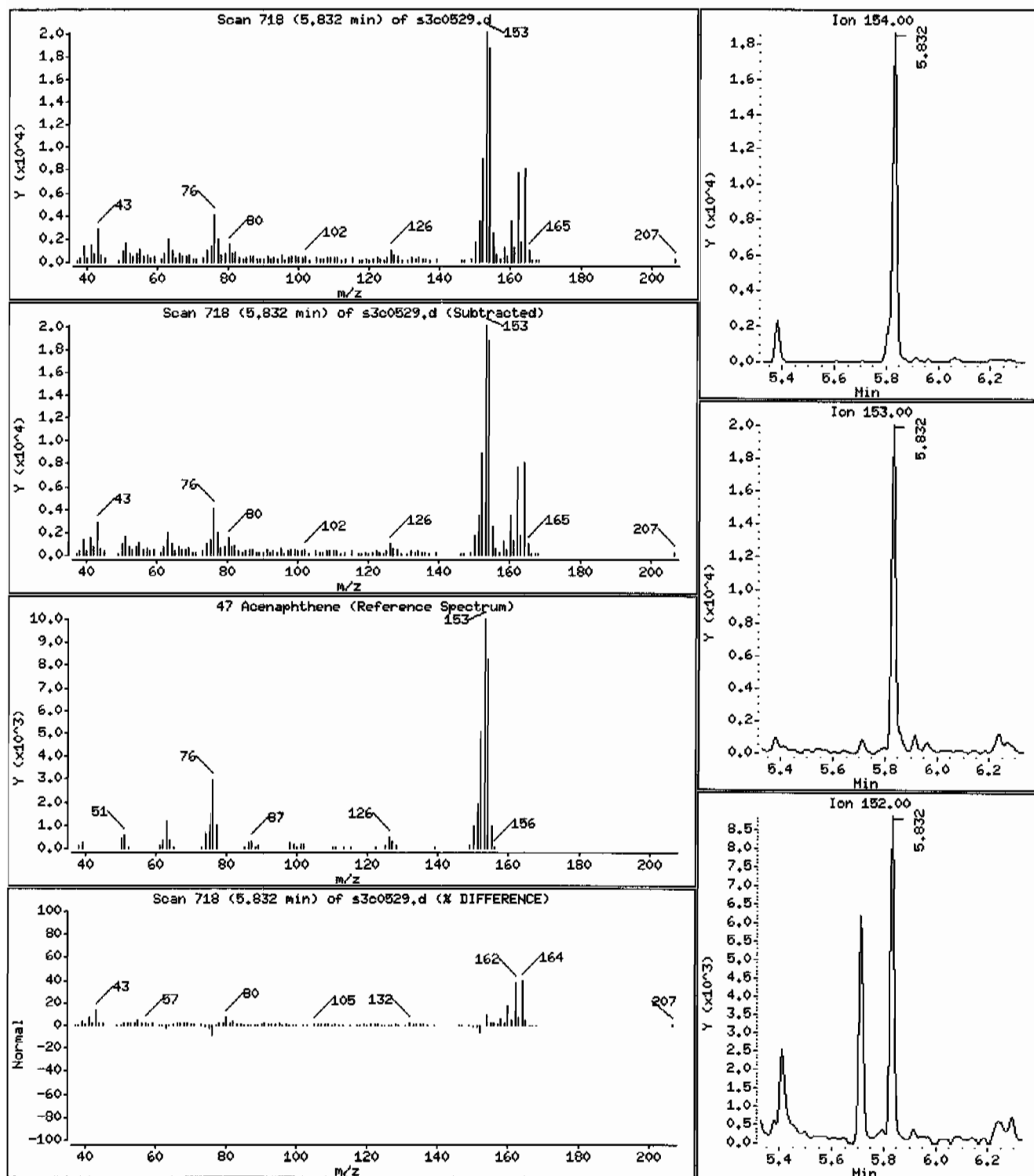
Operator: JLD1

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

Column diameter: 0.20

47 Acenaphthene

Concentration: 38.9 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF11LANL

Volume Injected (uL): 0.5

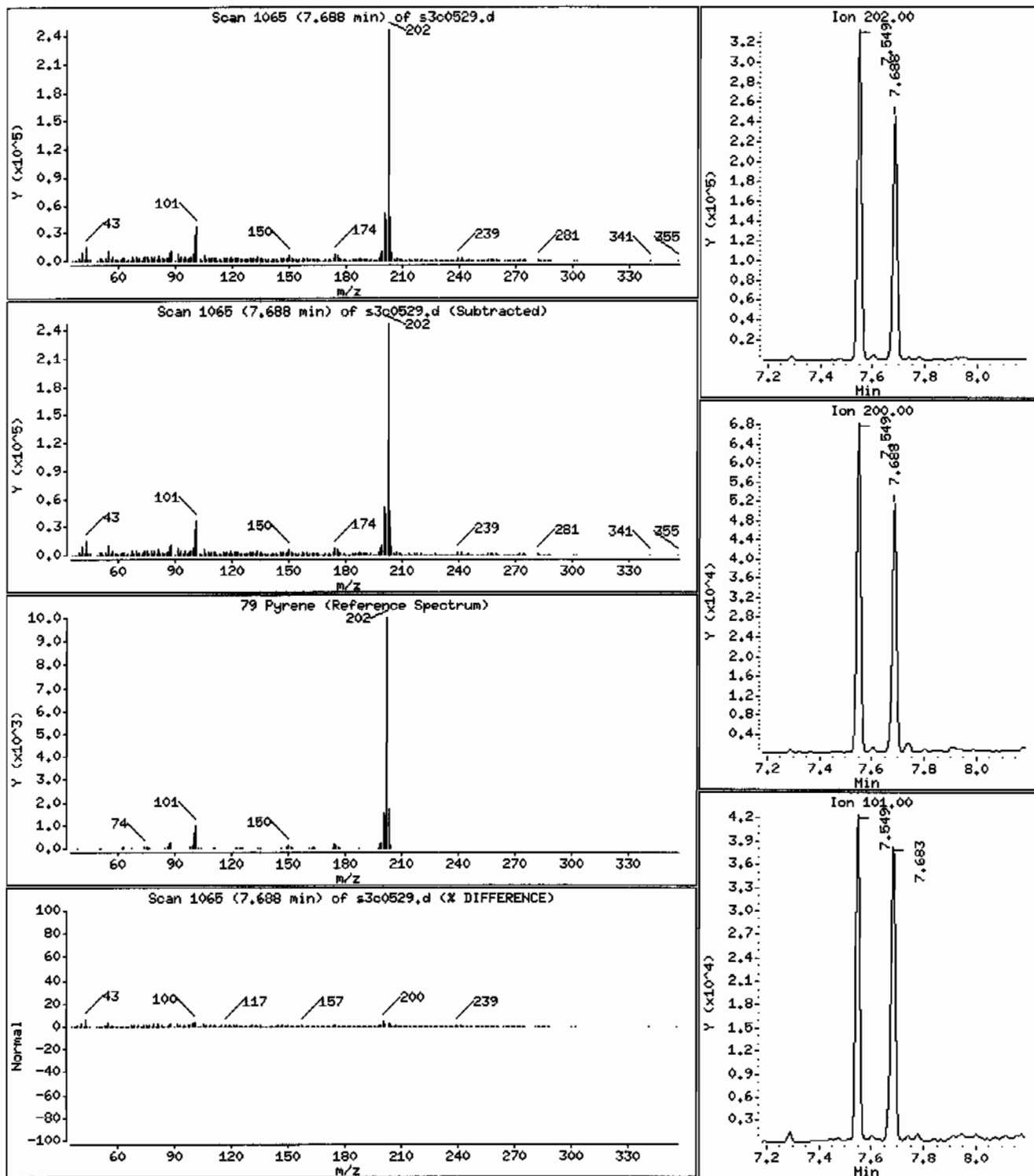
Operator: JLD1

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

Column diameter: 0.20

79 Pyrene

Concentration: 430 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

Volume Injected (uL): 0,5

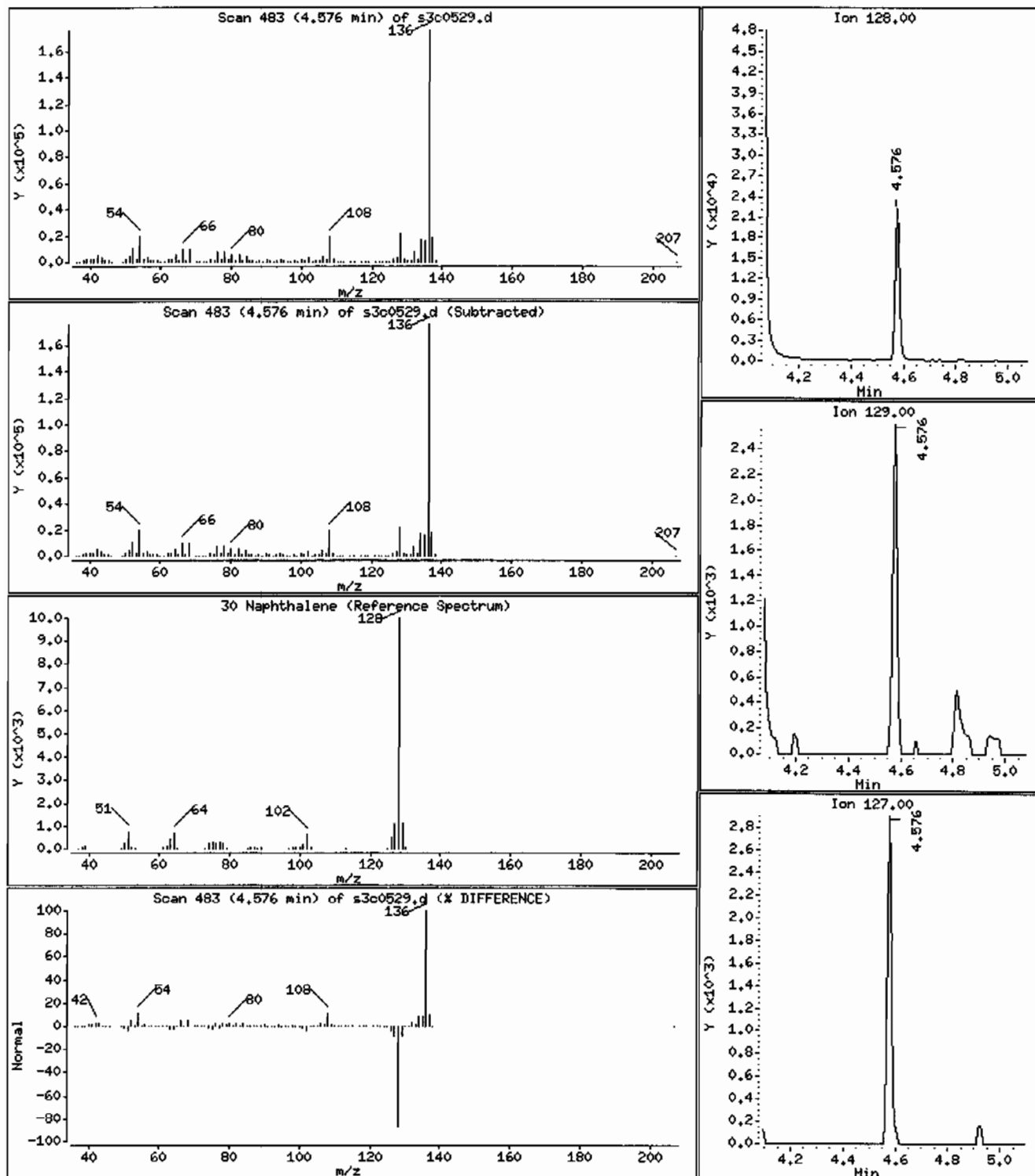
Operator: JLD1

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

Column diameter: 0,20

30 Naphthalene

Concentration: 33,7 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

Volume Injected (uL): 0.5

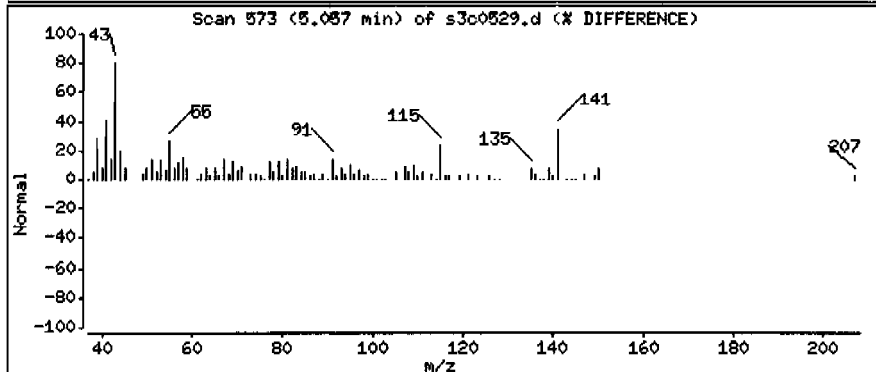
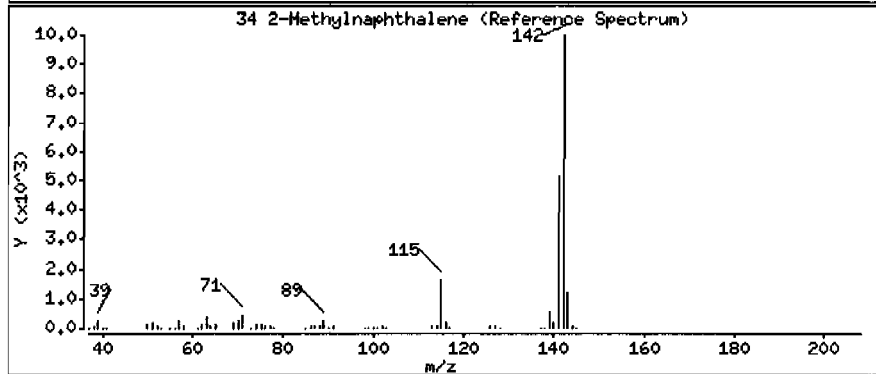
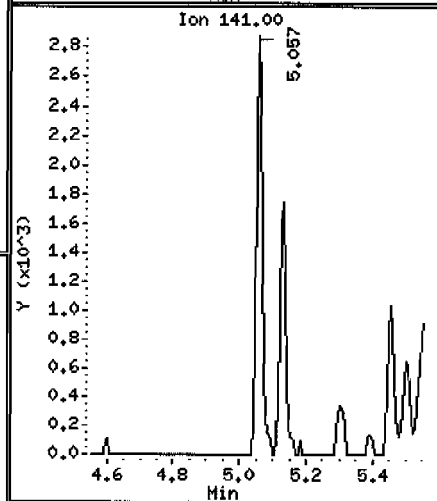
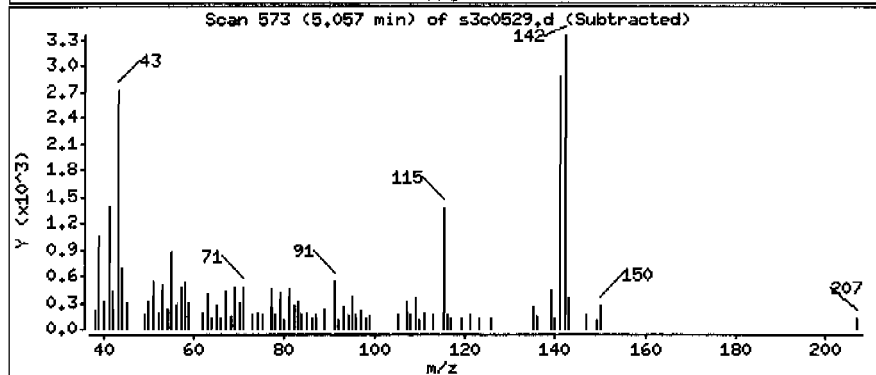
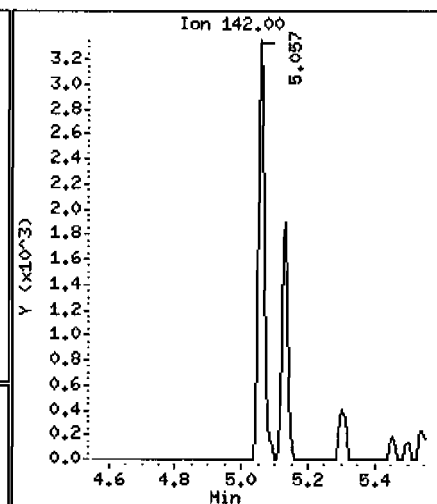
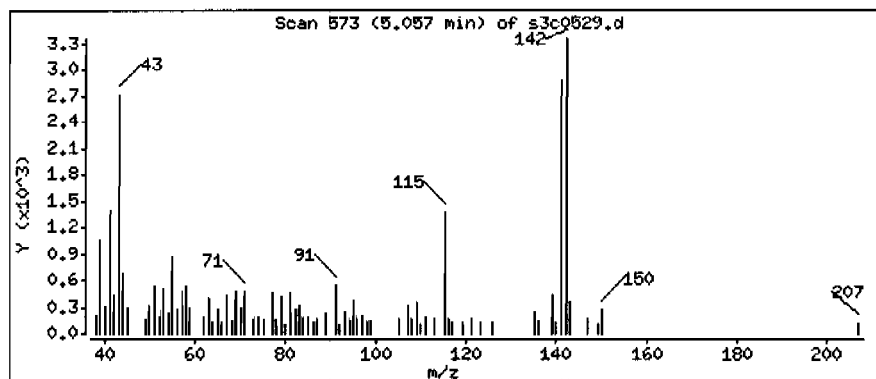
Operator: JLD1

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

Column diameter: 0.20

34 2-Methylnaphthalene

Concentration: 8.6 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF11LANL

Volume Injected (uL): 0.5

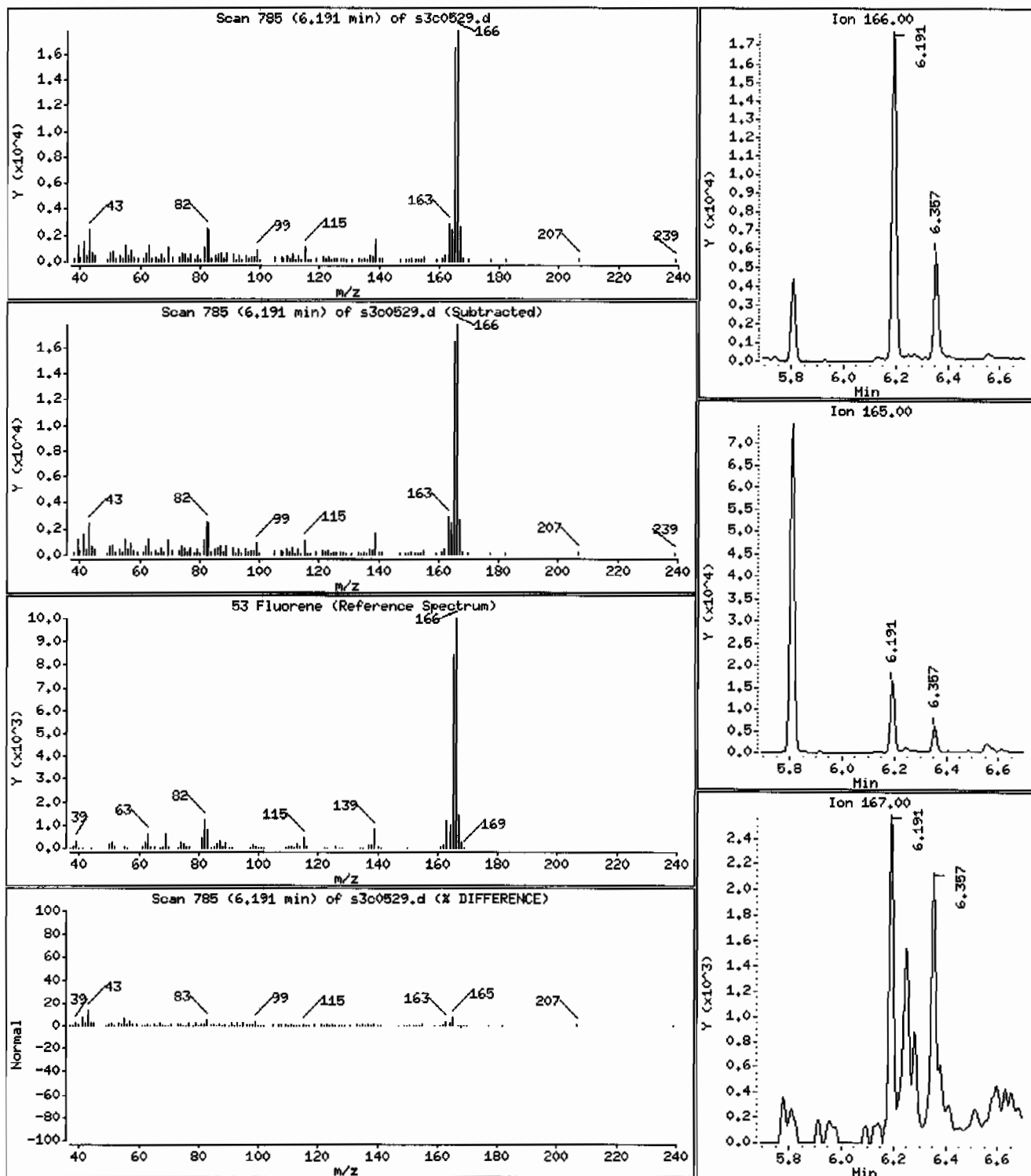
Operator: JLD1

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

Column diameter: 0.20

53 Fluorene

Concentration: 36,2 ug/Kg





Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3,i

Sample Info: 1247562007195667711SVMF111LANL

Volume Injected (uL): 0.5

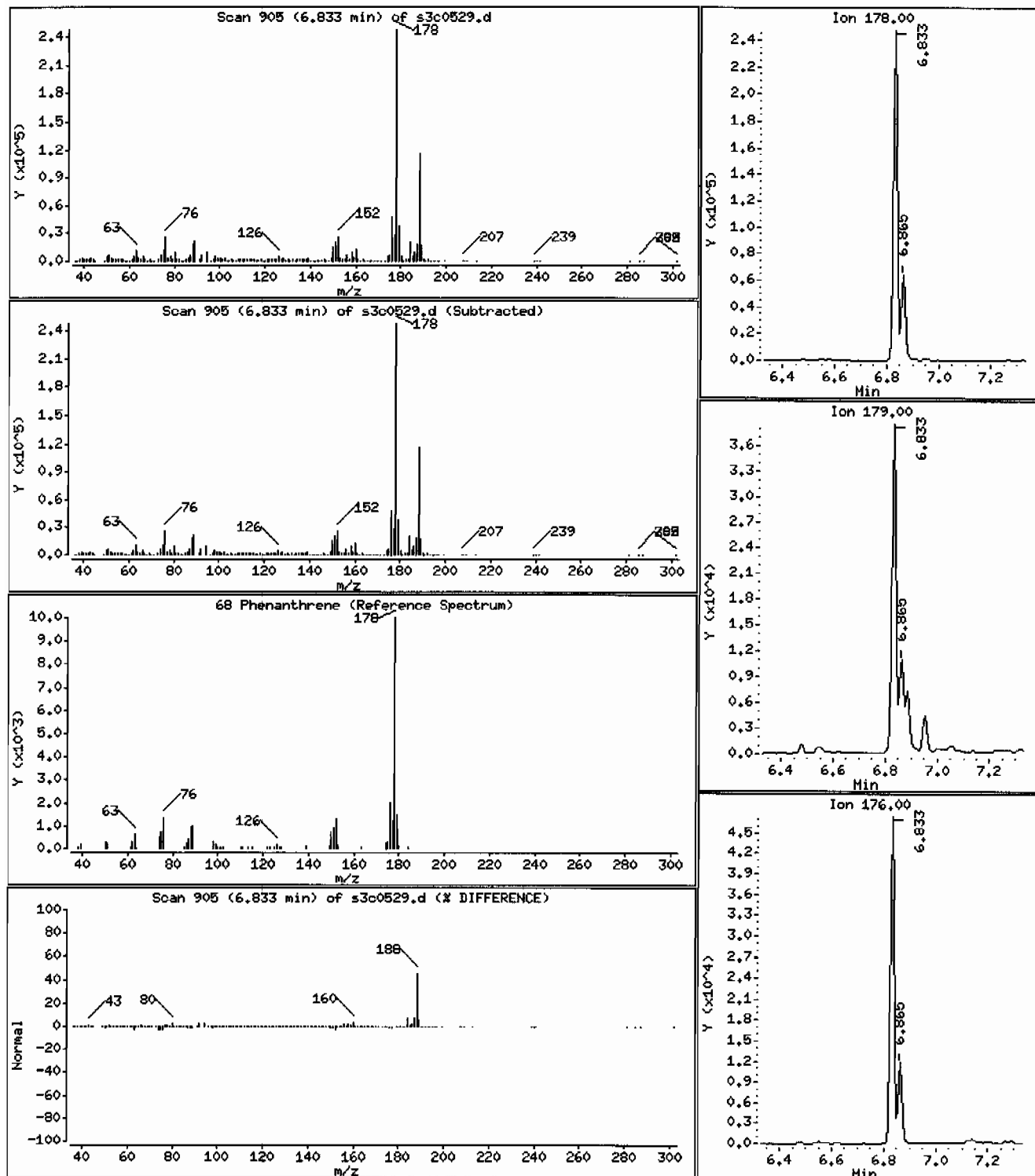
Operator: JLD1

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

Column diameter: 0.20

68 Phenanthrene

Concentration: 302 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711ISVMF11ILANL

Volume Injected (uL): 0.5

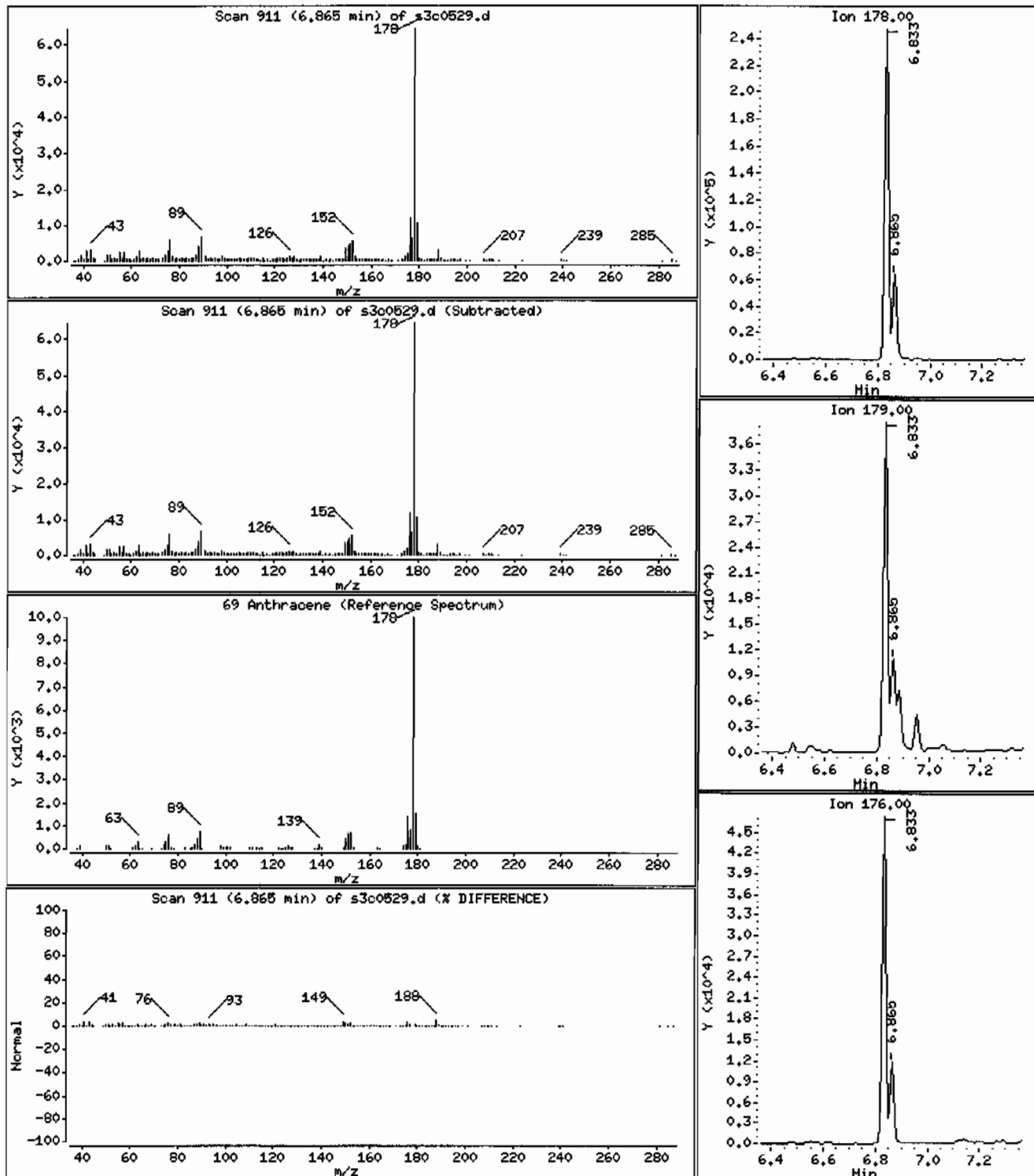
Operator: JLD1

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

Column diameter: 0.20

69 Anthracene

Concentration: 93.7 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.1

Sample Info: 1247562007195667711SVHF111LANL

Volume Injected (uL): 0.5

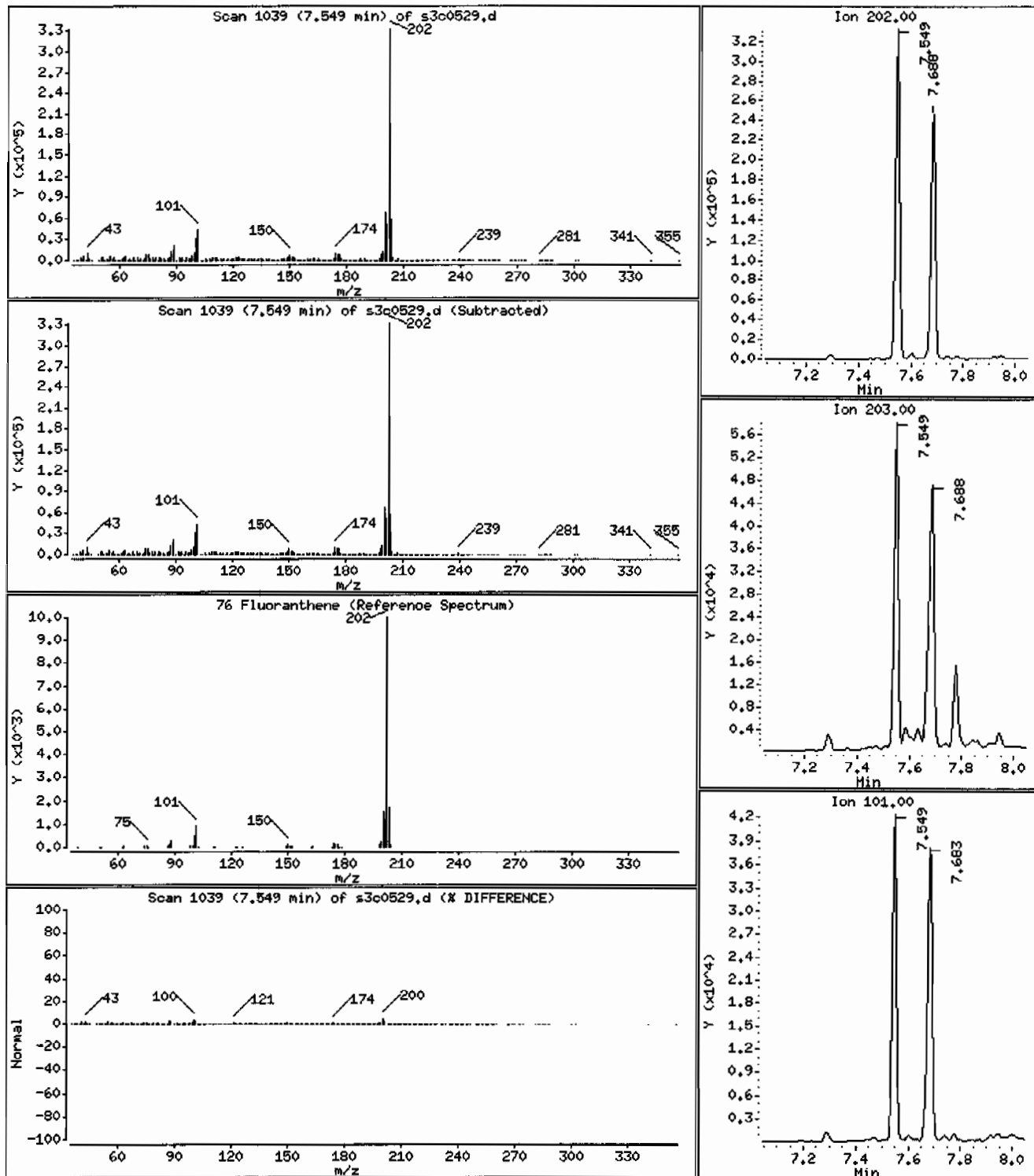
Operator: JLD1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 456 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF11LANL

Volume Injected (uL): 0.5

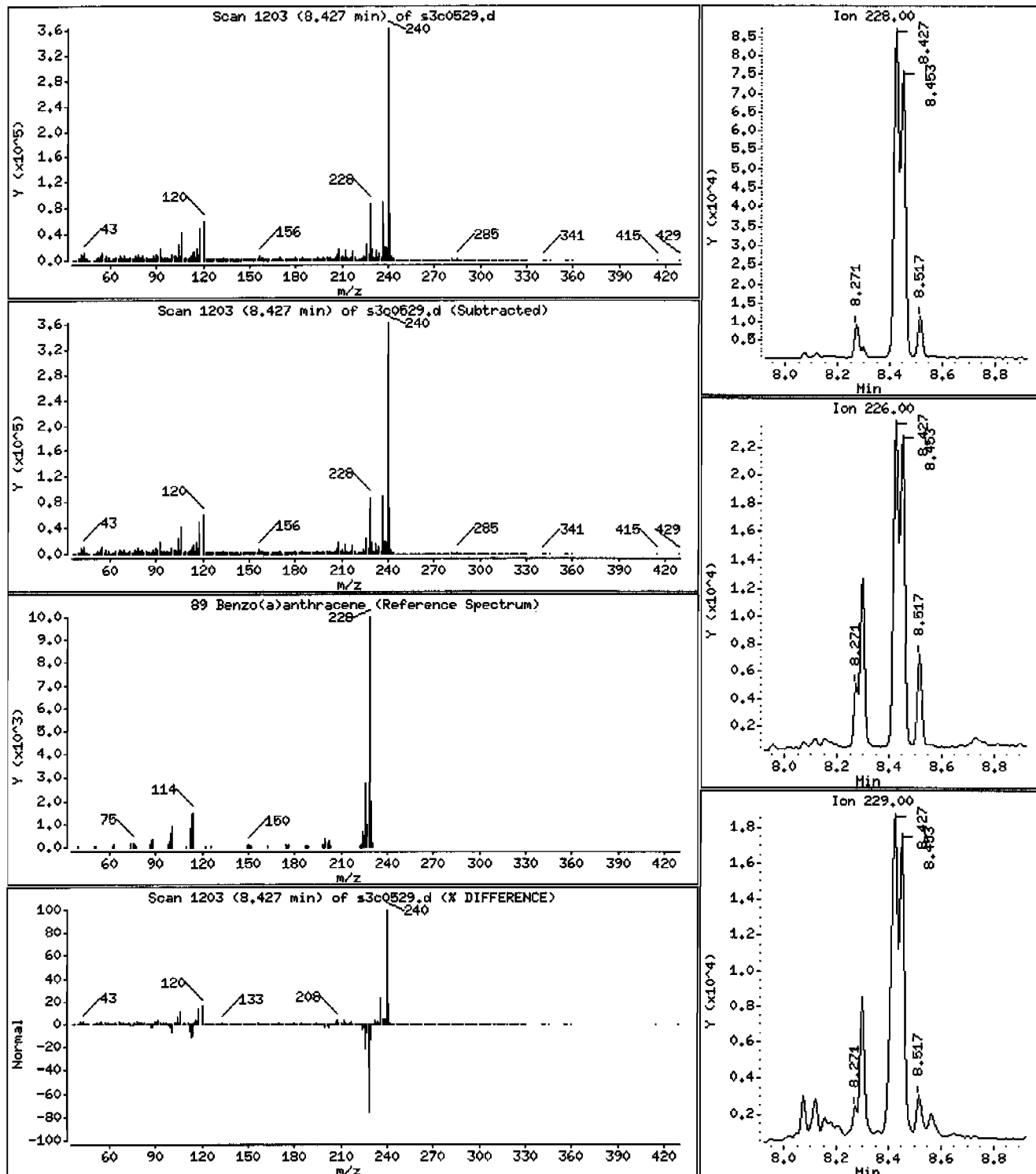
Operator: JLD1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 211 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

Volume Injected (uL): 0.5

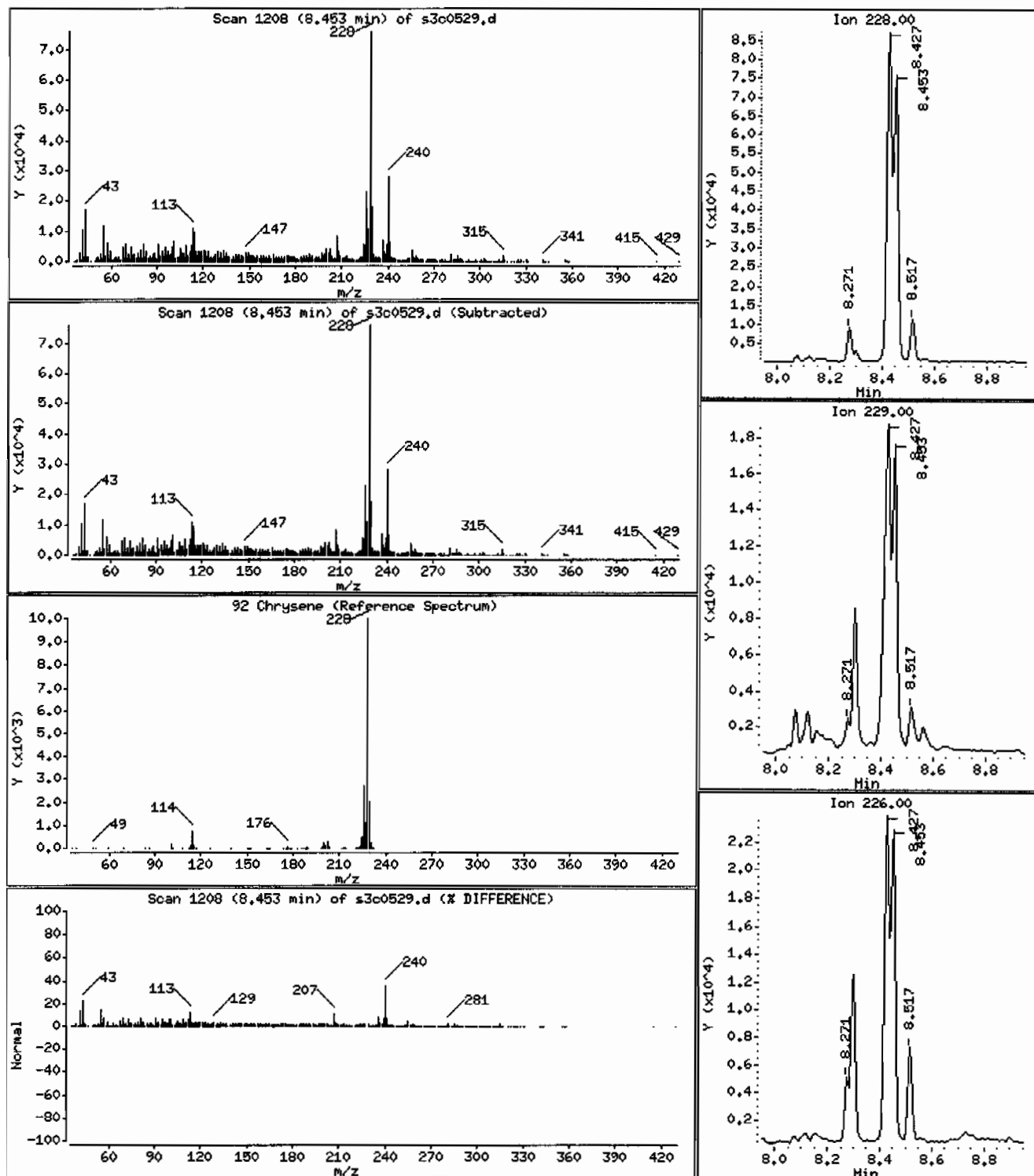
Operator: JLD1

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

Column diameter: 0.20

92 Chrysene

Concentration: 210 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711ISVMFI11LANL

Volume Injected (uL): 0.5

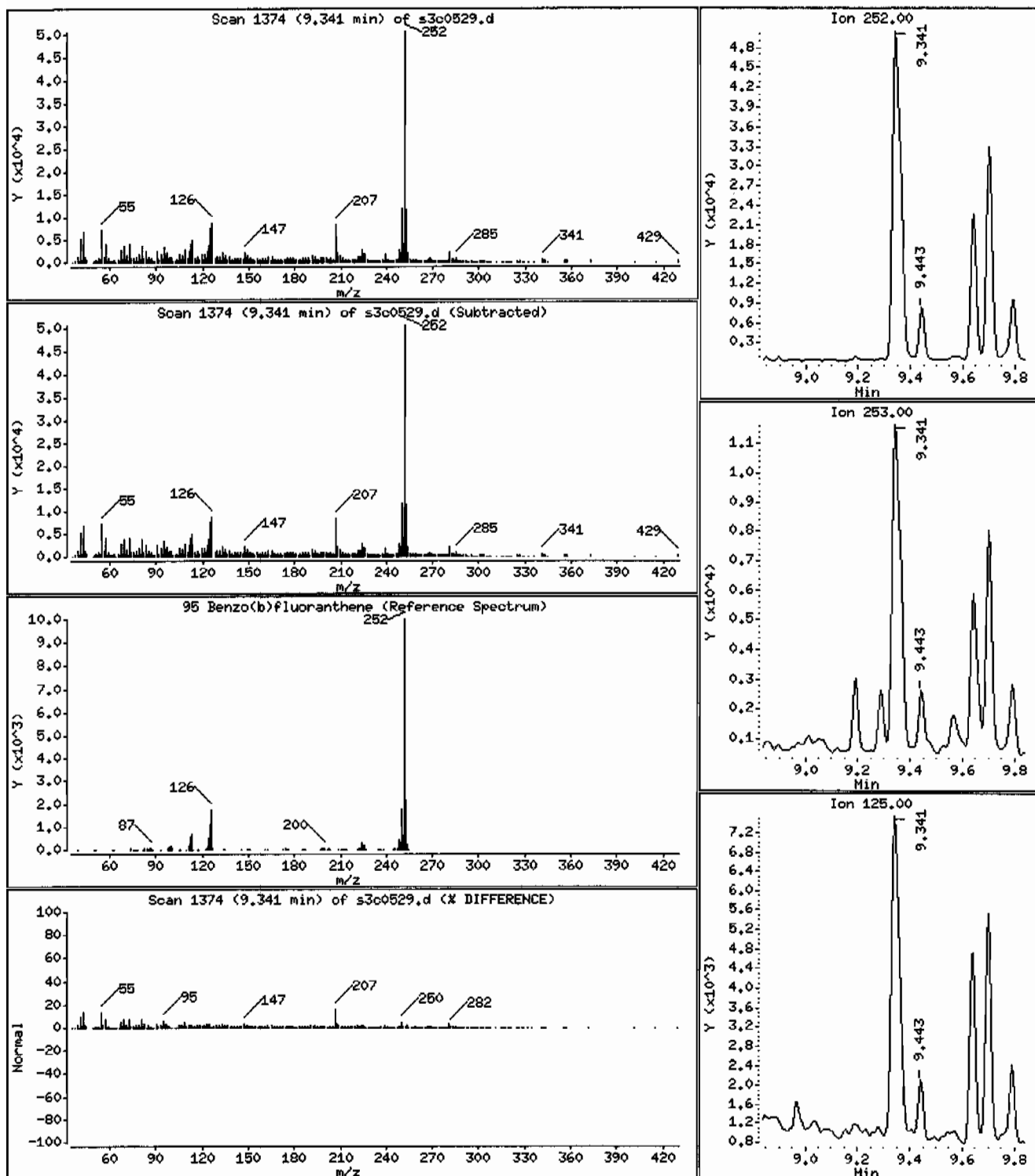
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 419 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

Volume Injected (uL): 0.5

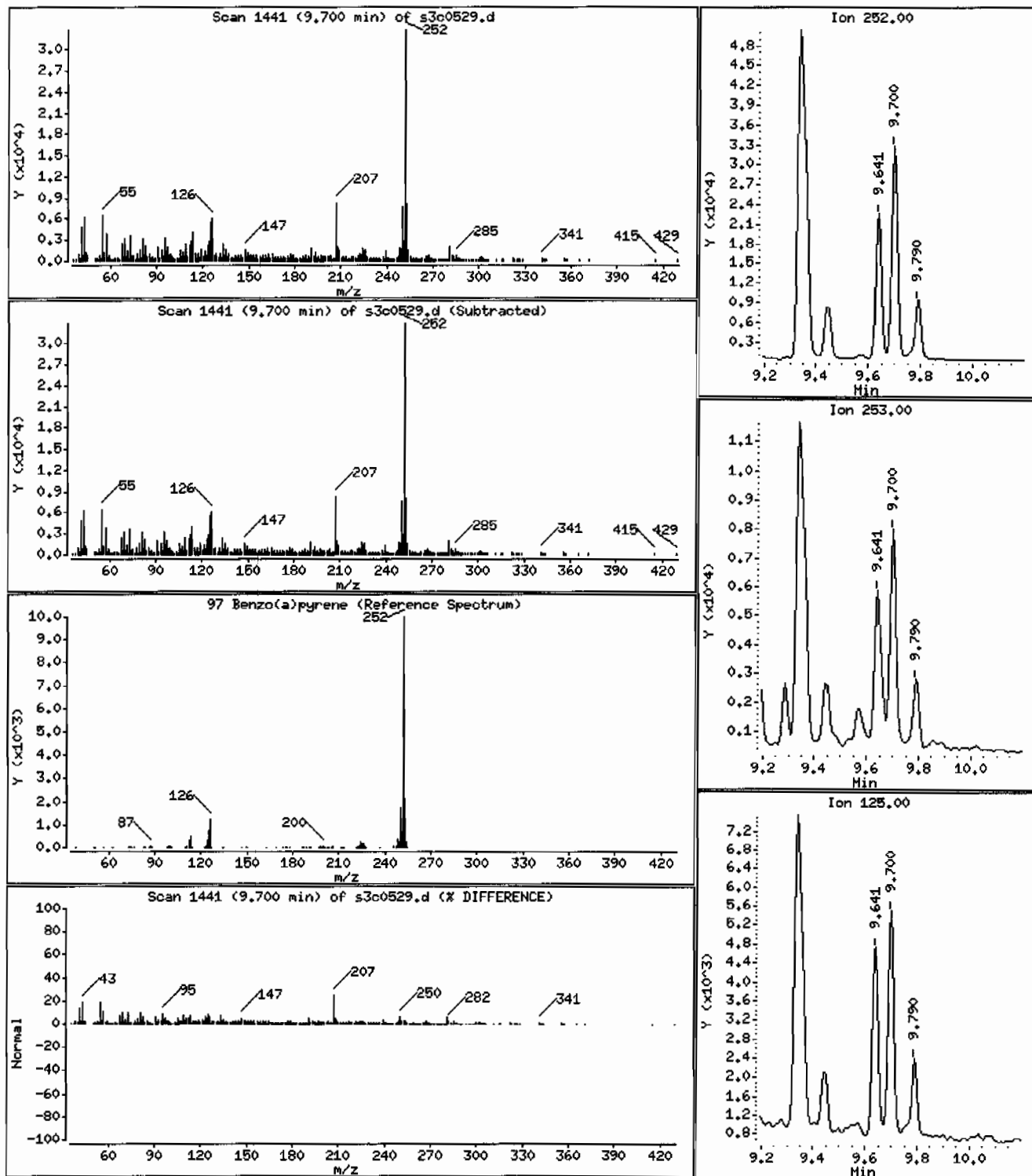
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 227 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVMF11ILANL

Volume Injected (uL): 0.5

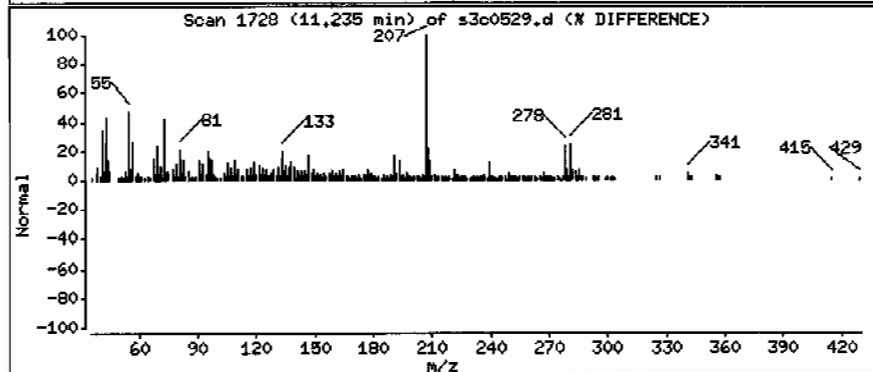
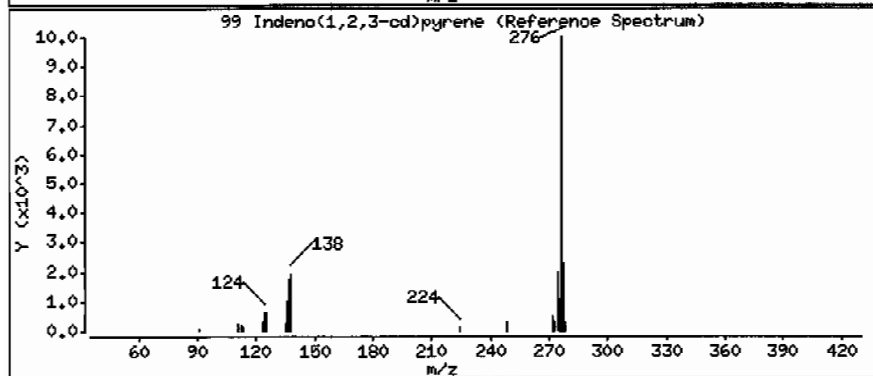
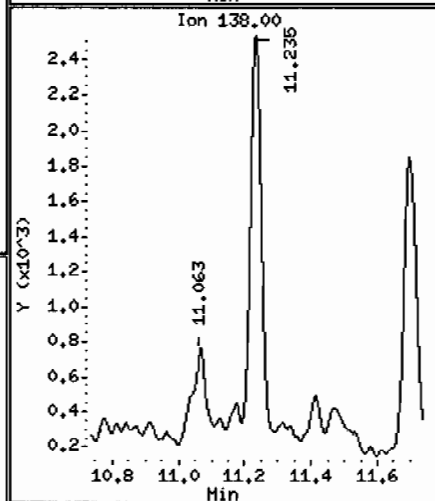
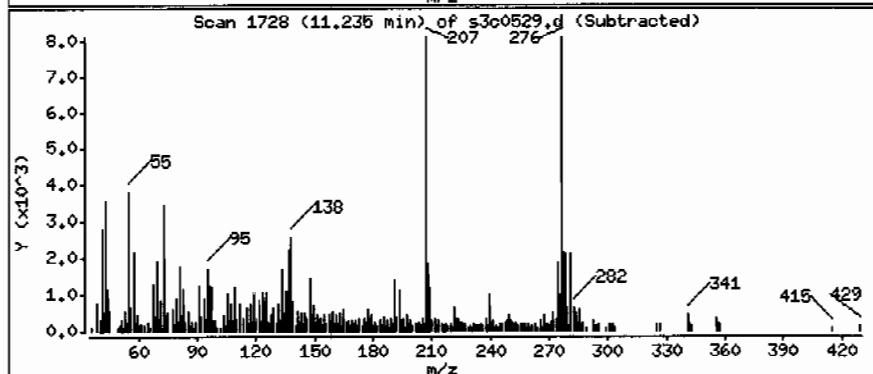
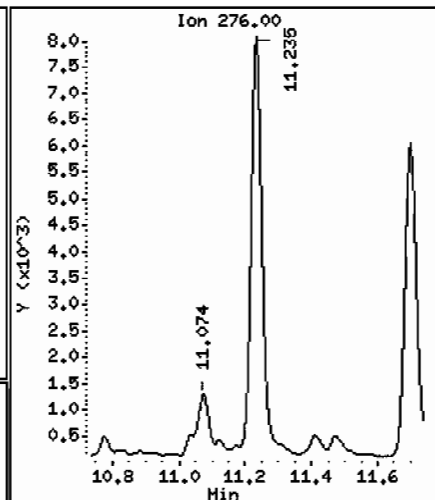
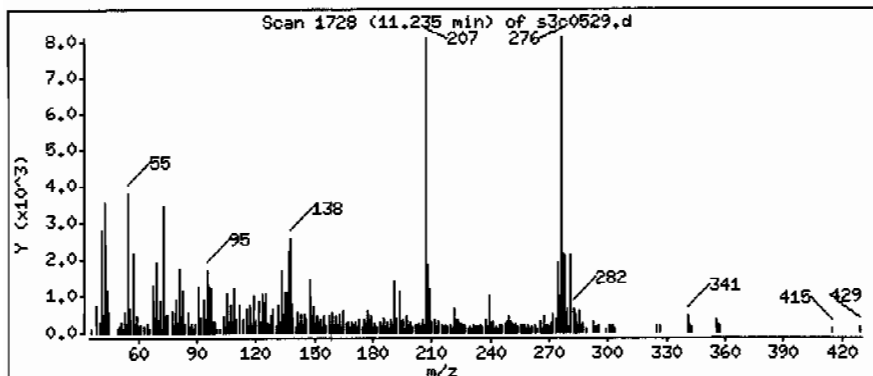
Operator: JLD1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 86.7 ug/Kg





Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: I247562007I956677I1ISVMFI1ILANL

Volume Injected (uL): 0.5

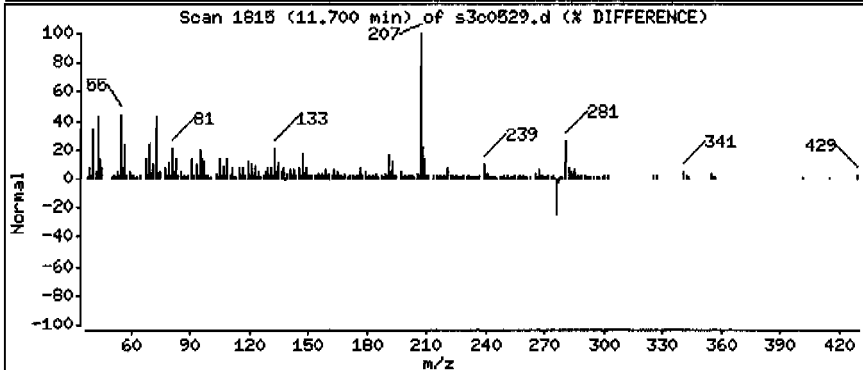
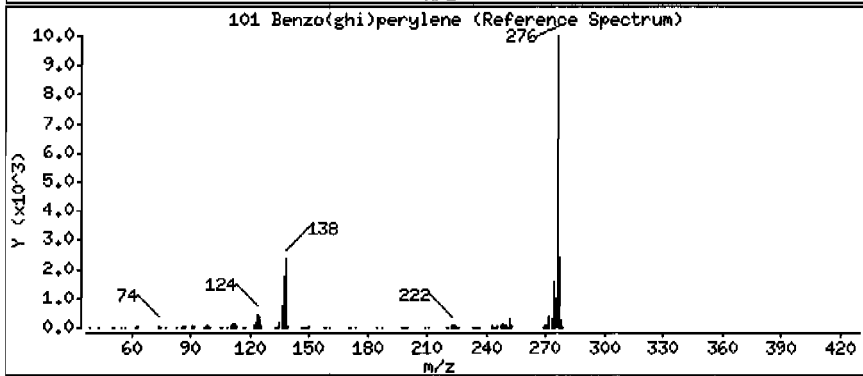
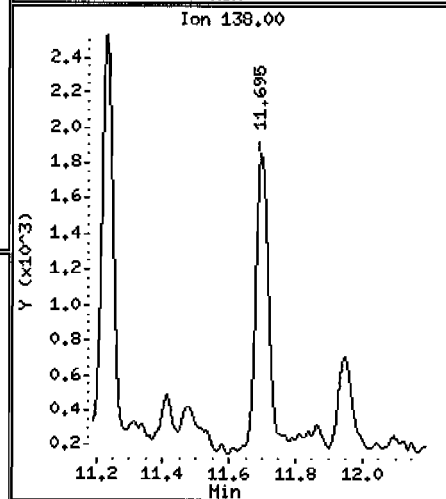
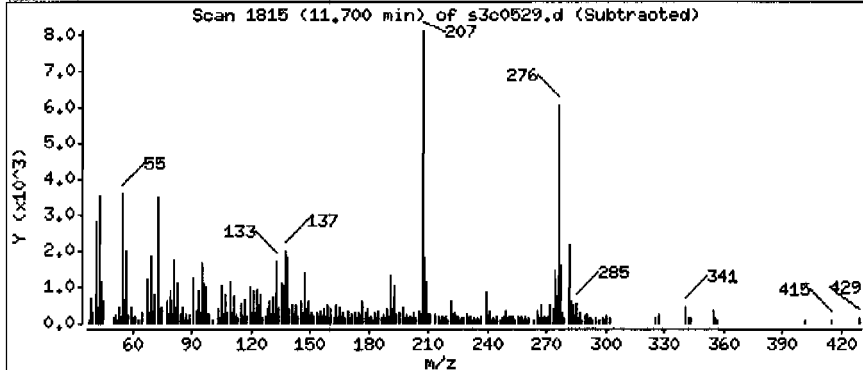
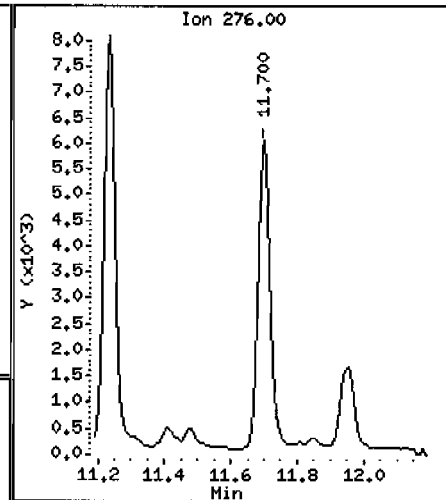
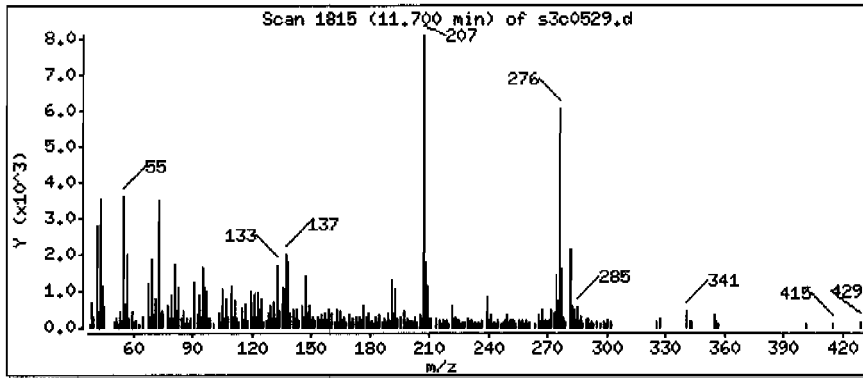
Operator: JLD1

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

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 90.2 ug/Kg



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVMF111LANL

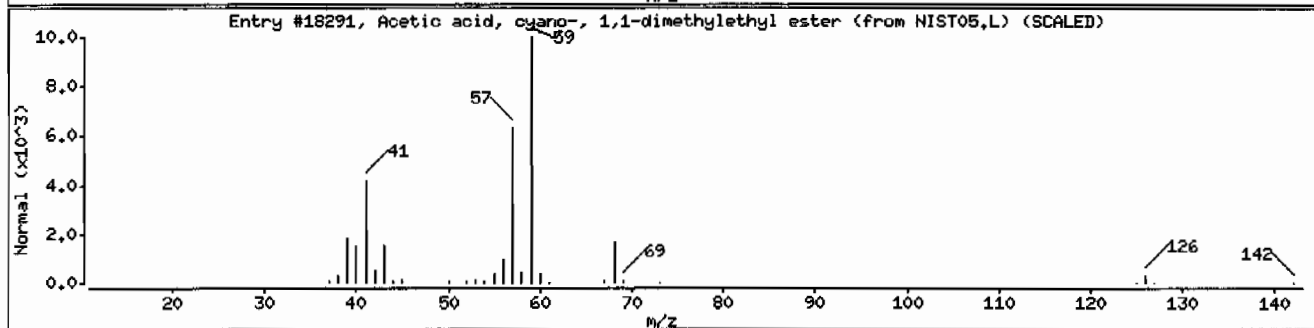
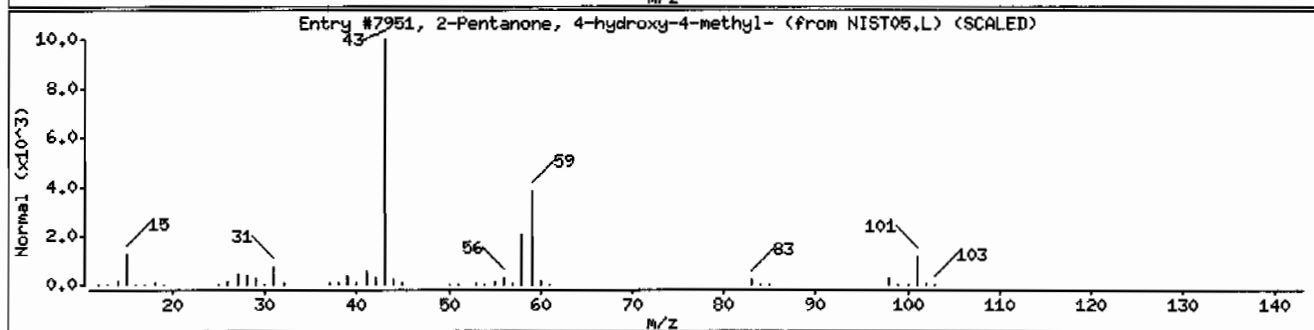
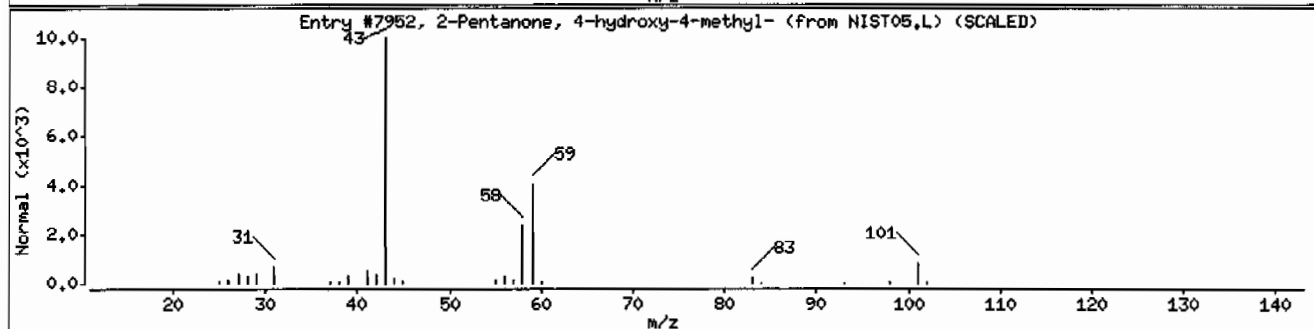
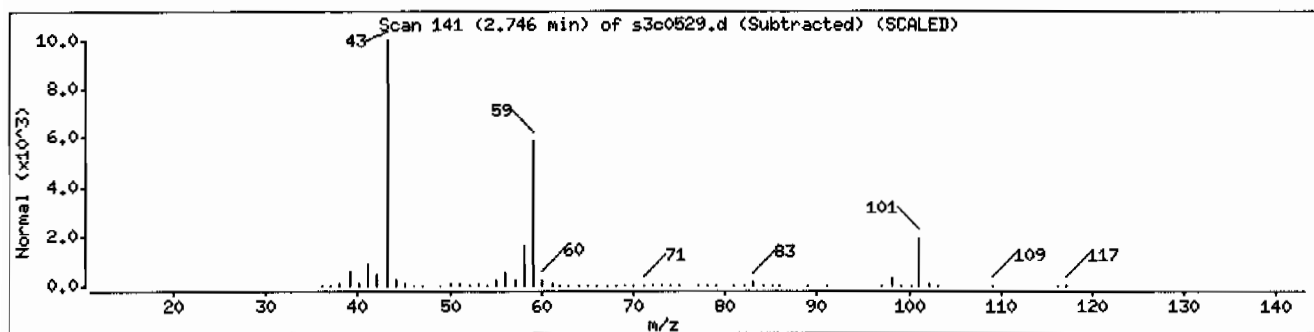
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	23	C7H11NO2	141



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVMF11ILANL

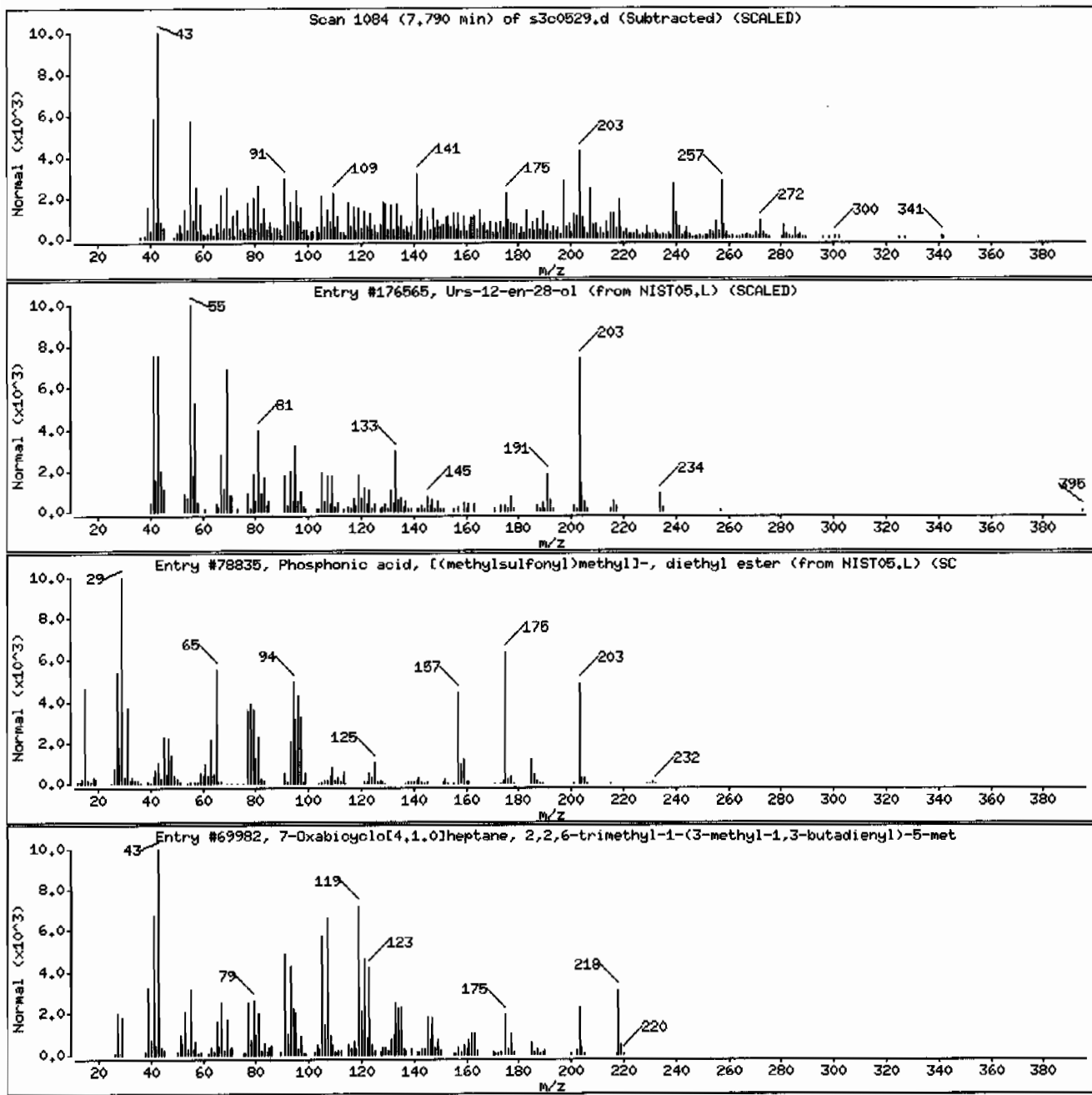
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Urs-12-en-28-ol	10153-88-5	NIST05.L	176565	15	C30H50O	426
Phosphonic acid, [(methylsulfonyl)methyl	40137-11-9	NIST05.L	78835	9	C6H15O5PS	230
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	9	C15H22O	218



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: I247562007195667711SVHF11LANL

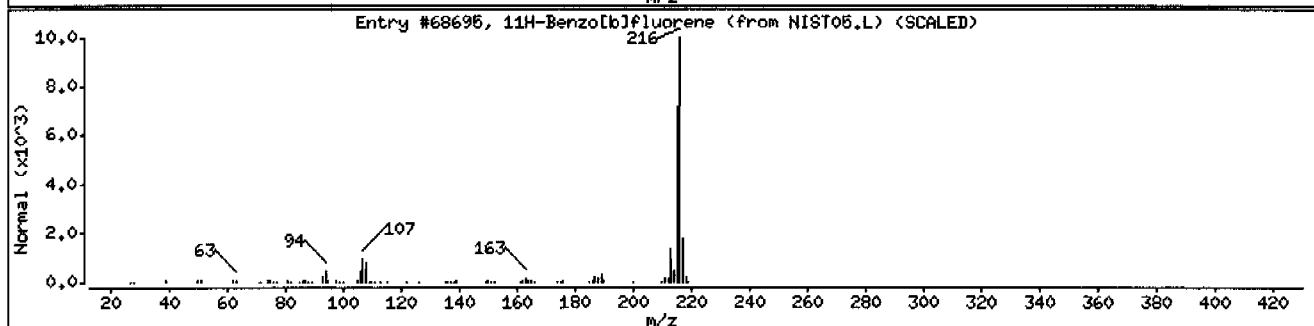
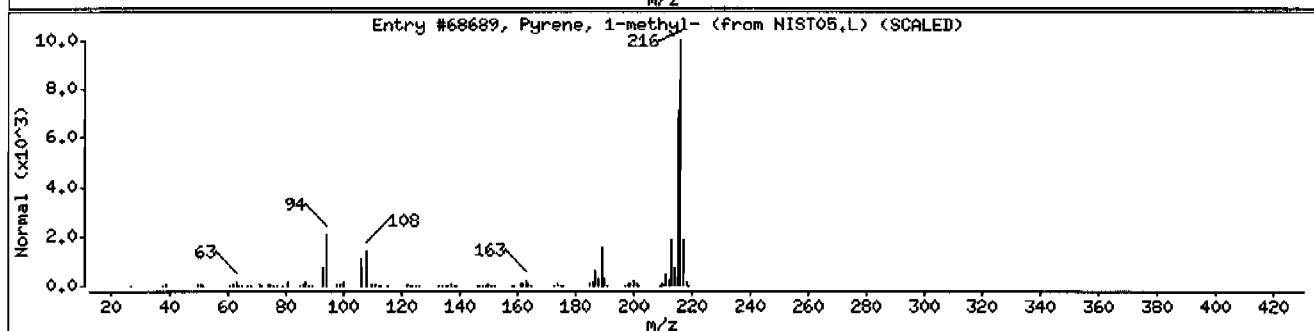
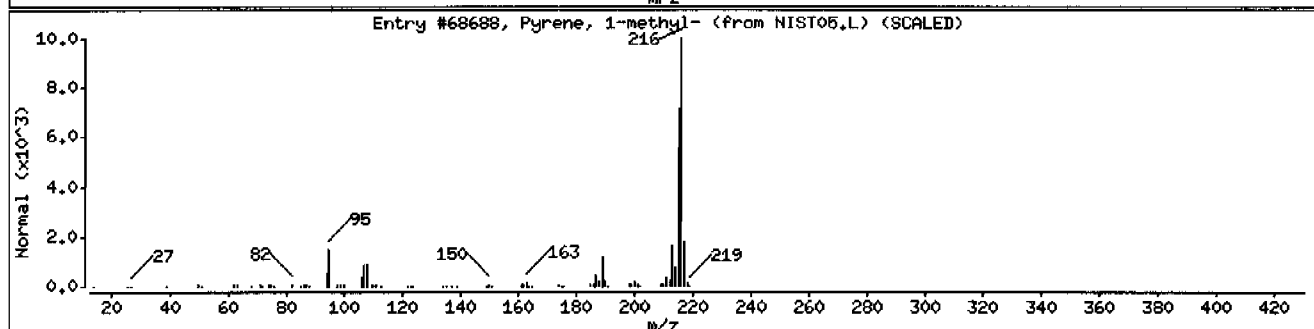
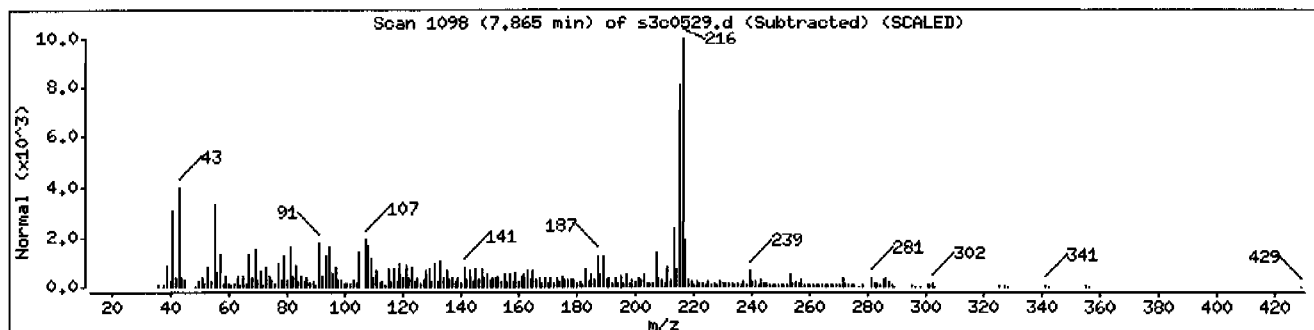
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68688	96	C17H12	216
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68689	95	C17H12	216
11H-Benzo[b]fluorene	243-17-4	NIST05.L	68695	95	C17H12	216



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

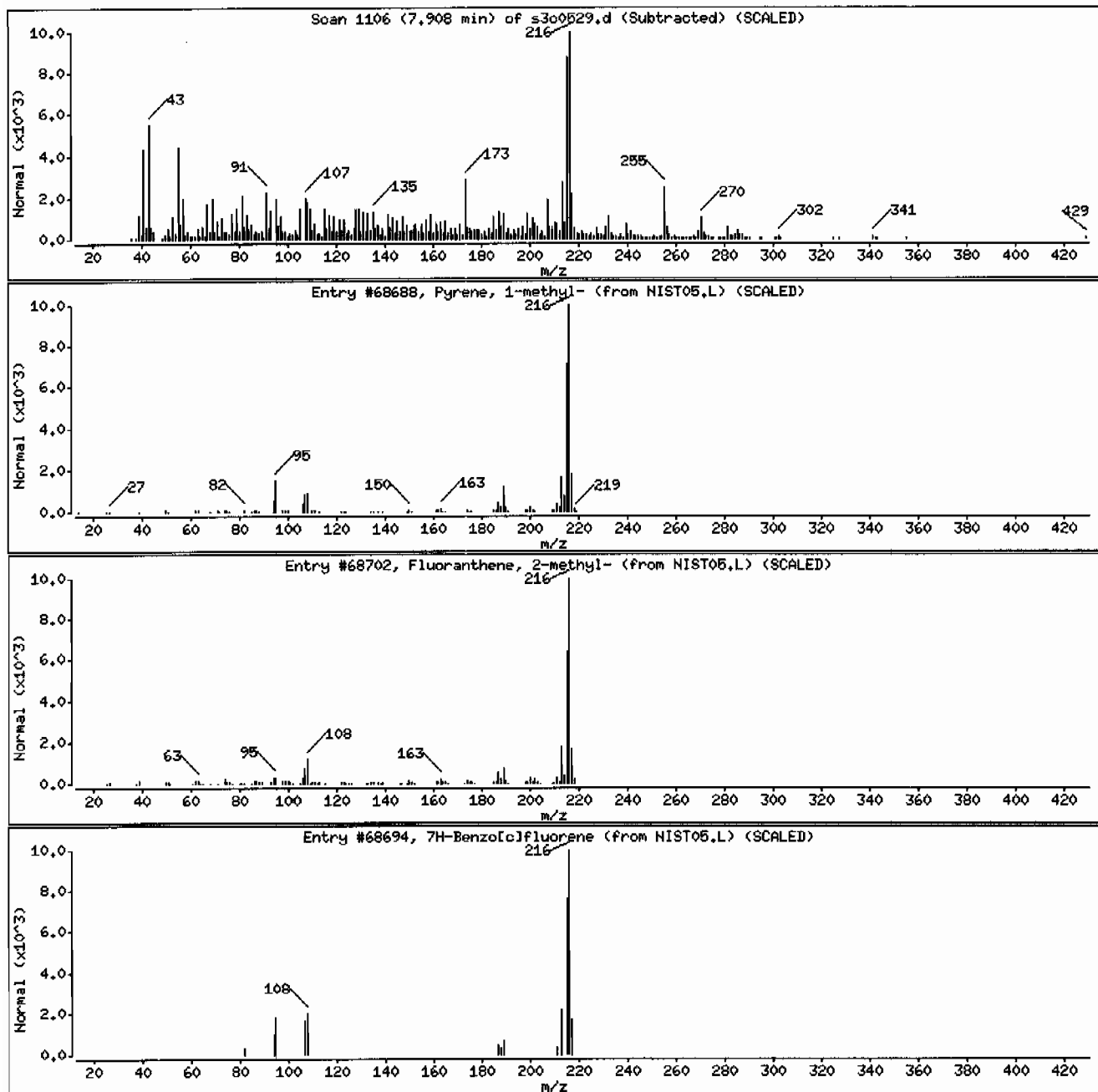
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68688	70	C17H12	216
Fluoranthene, 2-methyl-	33543-31-6	NIST05.L	68702	70	C17H12	216
7H-Benzo[ <i>a</i> ]fluorene	205-12-9	NIST05.L	68694	70	C17H12	216



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF11ILANL

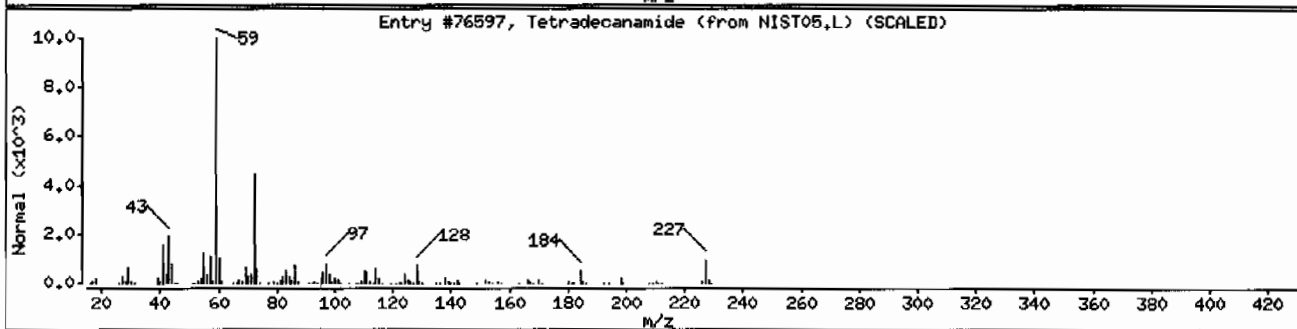
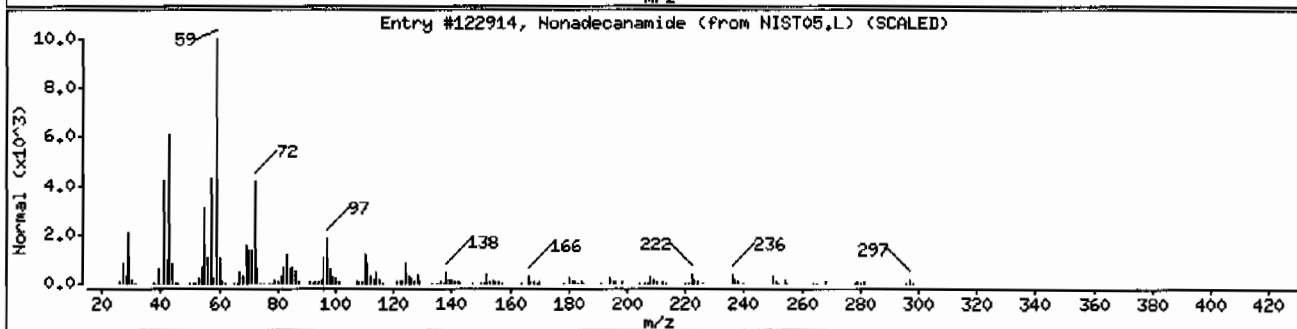
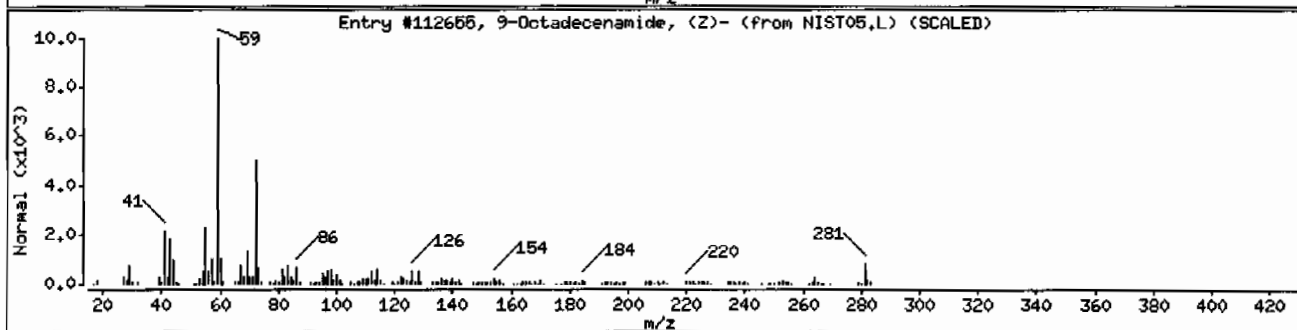
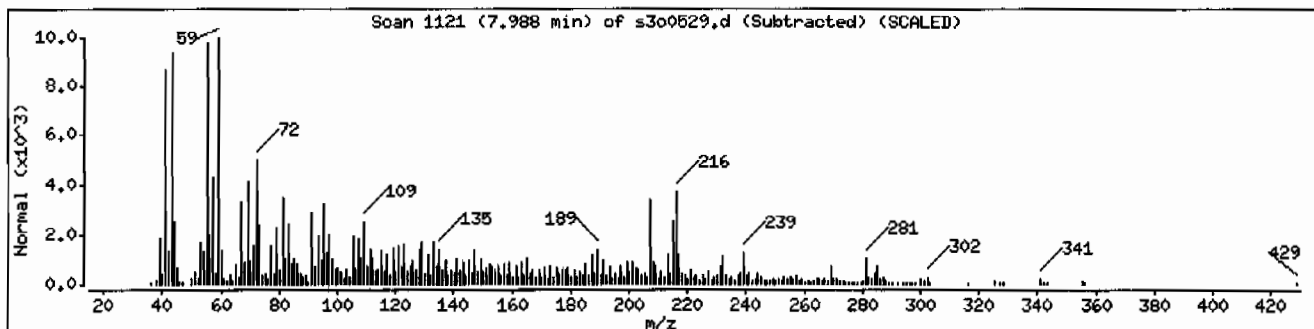
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	64	C18H35NO	281
Nonadecanamide	58185-32-3	NIST05.L	122914	50	C19H39NO	297
Tetradecanamide	638-58-4	NIST05.L	76597	46	C14H29NO	227



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3,i

Sample Info: 1247562007195667711SVMF111LANL

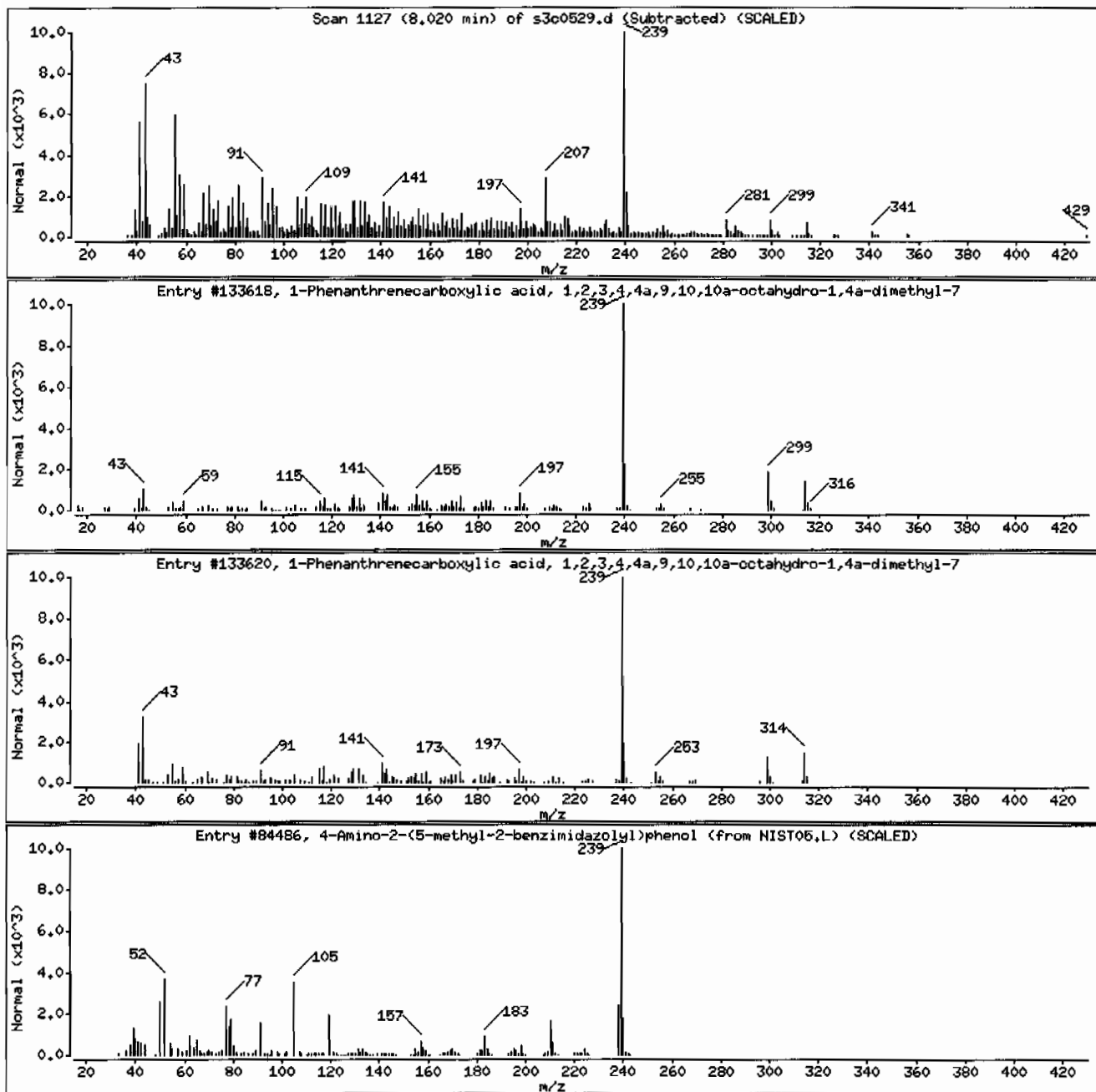
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05,L	133618	97	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05,L	133620	95	C21H30O2	314
4-Amino-2-(5-methyl-2-benzimidazolyl)phe	1000258-88-5	NIST05,L	84486	45	C14H13N3O	239



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

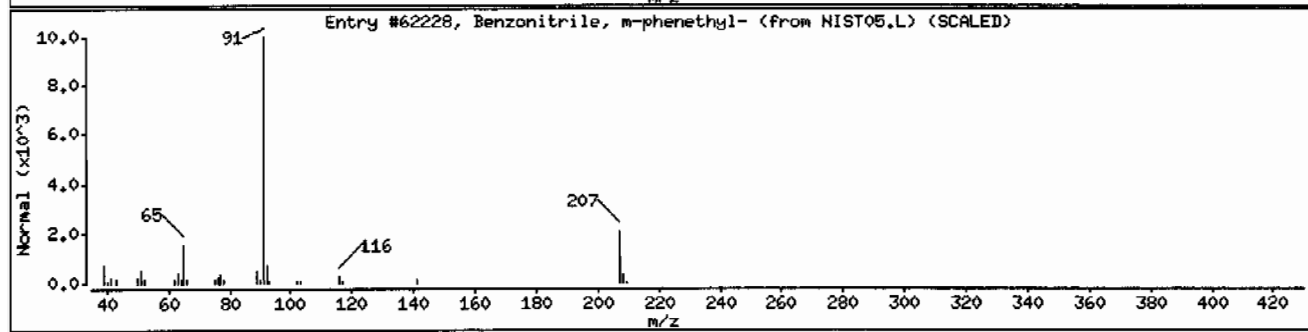
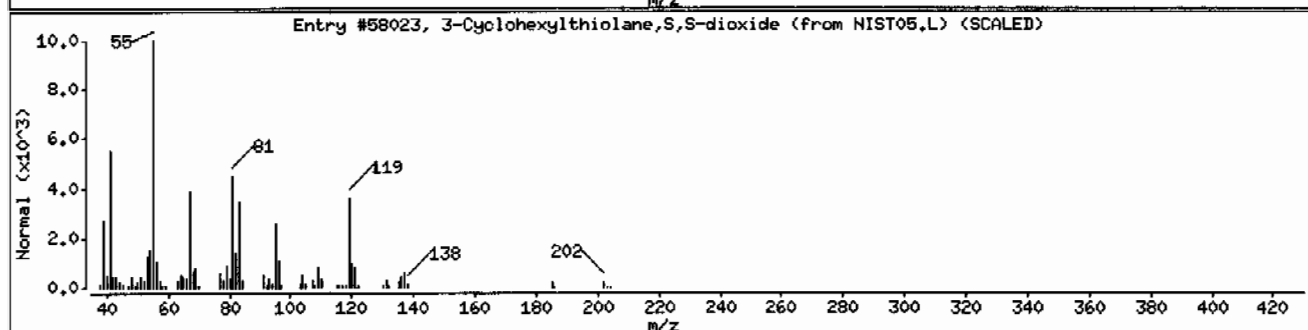
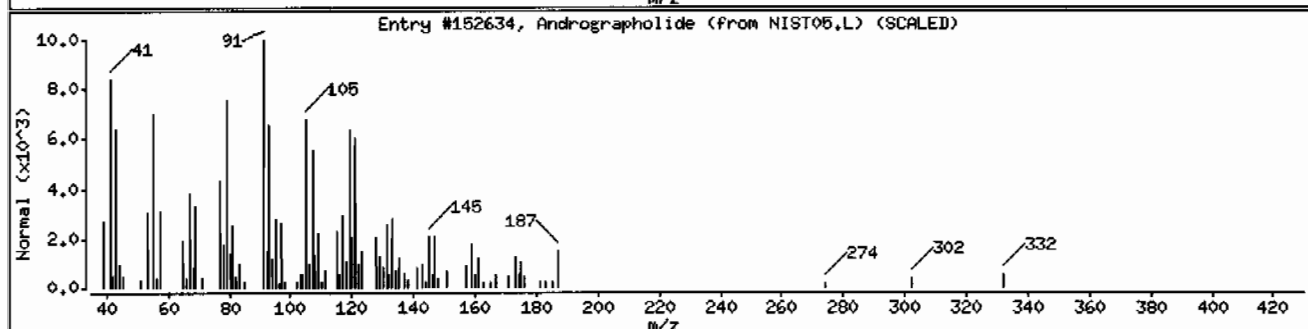
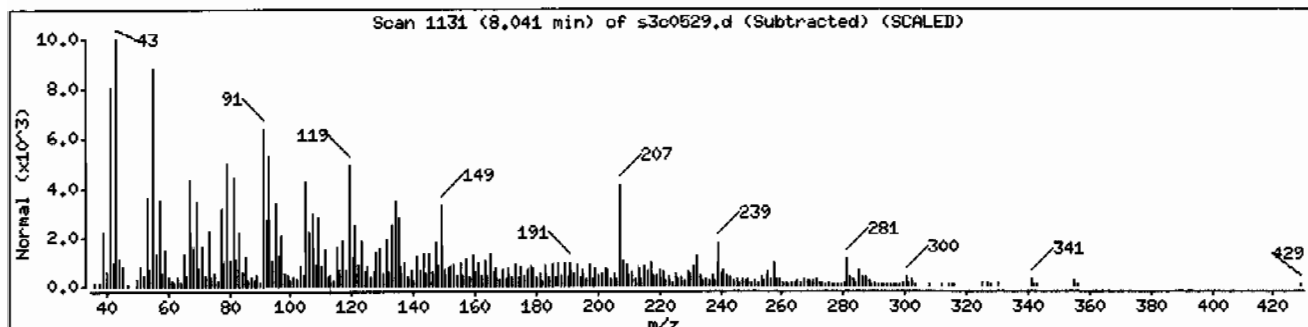
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Andrographolide	5508-58-7	NIST05.L	152634	35	C <sub>20</sub> H <sub>30</sub> O <sub>5</sub>	350
3-Cyclohexylthiolane,S,S-dioxide	71053-08-2	NIST05.L	58023	25	C <sub>10</sub> H <sub>18</sub> O <sub>2</sub> S	202
Benzonitrile, m-phenethyl-	34176-91-5	NIST05.L	62228	15	C <sub>15</sub> H <sub>13</sub> N	207





Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

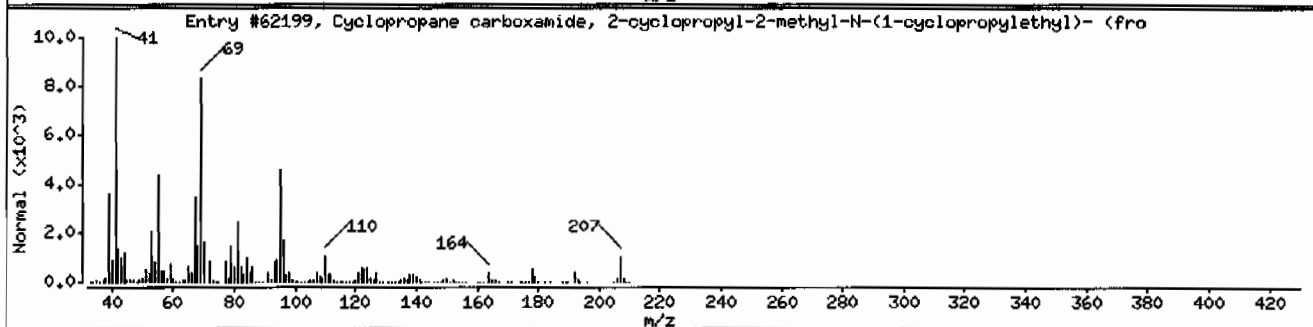
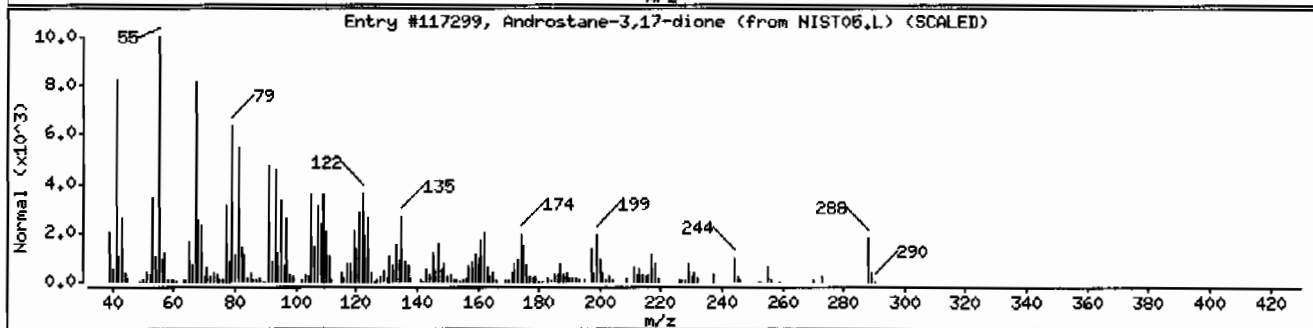
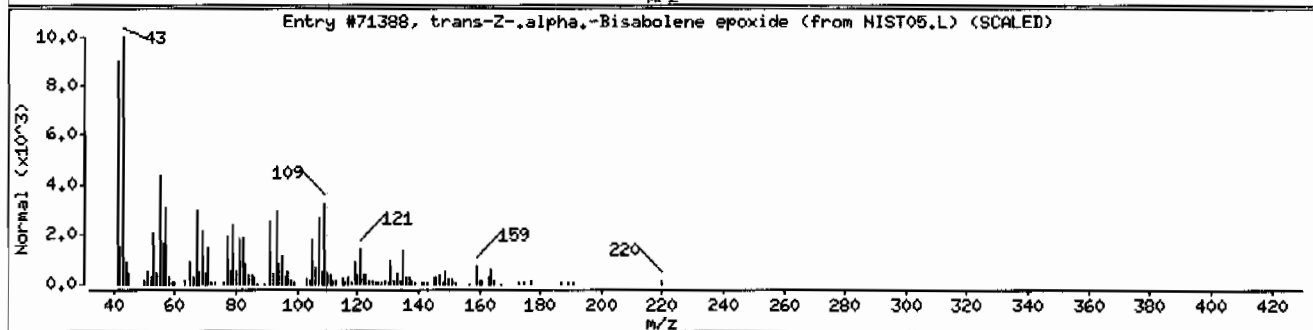
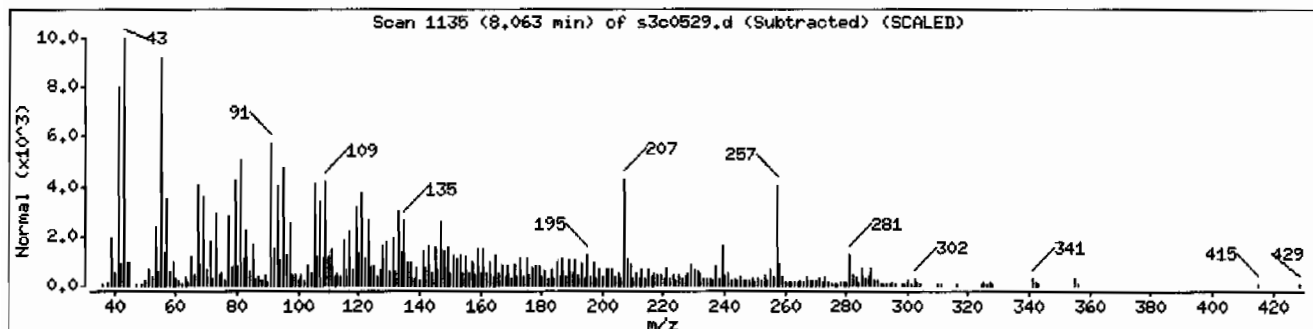
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-2-,alpha,-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	51	C15H24O	220
Androstane-3,17-dione	5982-99-0	NIST05.L	117299	35	C19H28O2	288
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	30	C13H21NO	207



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF11|LANL

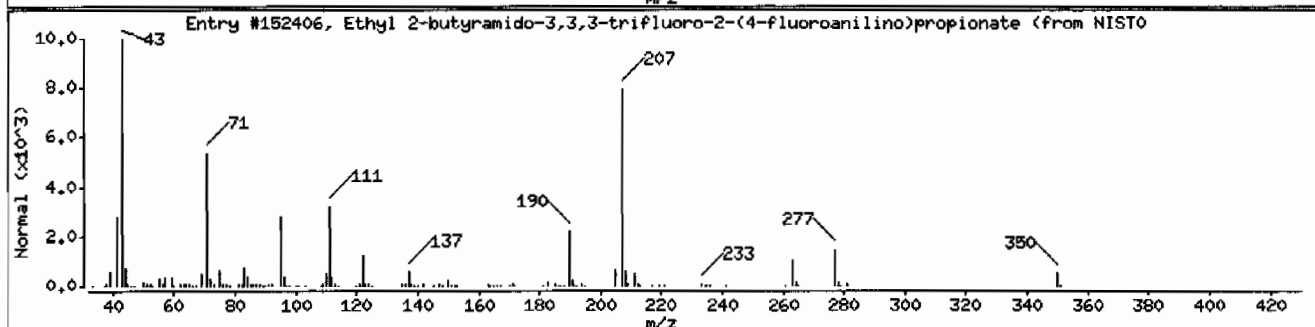
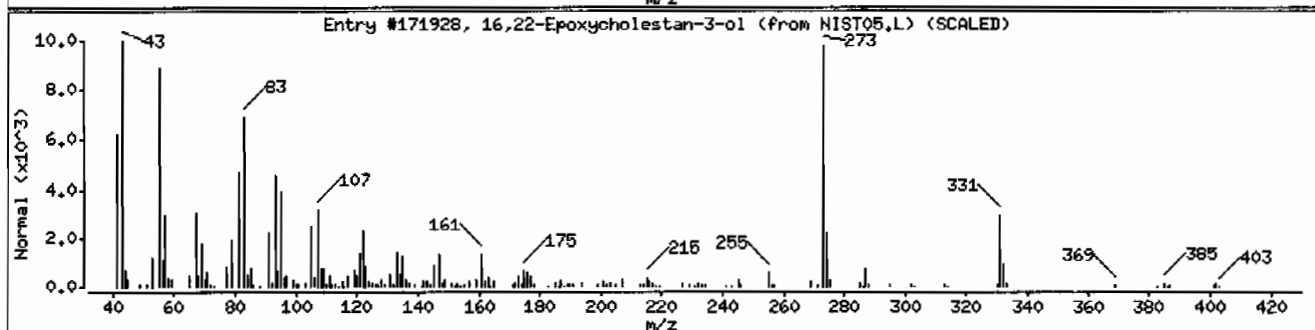
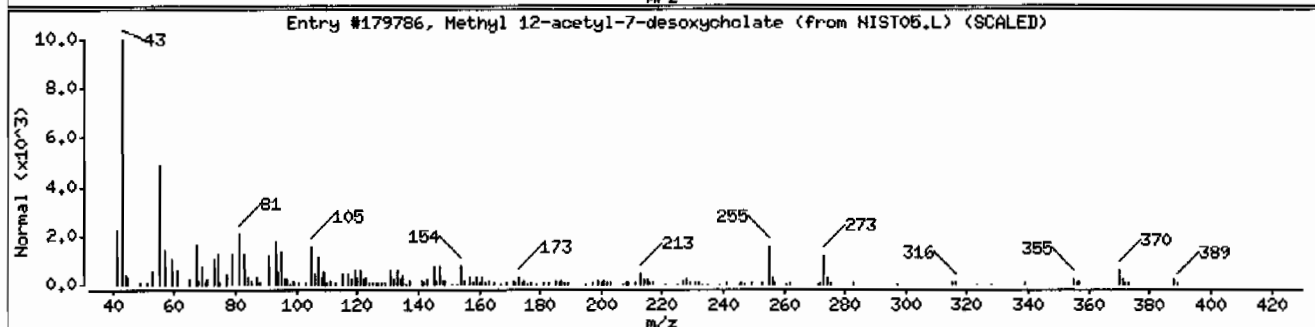
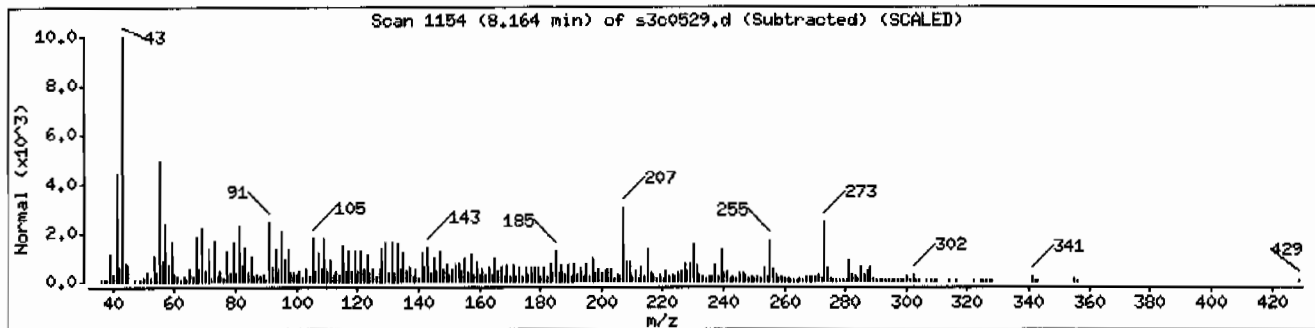
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyl 12-acetyl-7-desoxycholate	55547-48-3	NIST05.L	179786	27	C27H44O6	448
16,22-Epoxycholestan-3-ol	1000252-58-8	NIST05.L	171928	14	C27H46O2	402
Ethyl 2-butylamido-3,3,3-trifluoro-2-(4-	1000224-16-2	NIST05.L	152406	12	C15H18F4N2O3	350



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3.i

Sample Info: 1247562007195667711SVHF111LANL

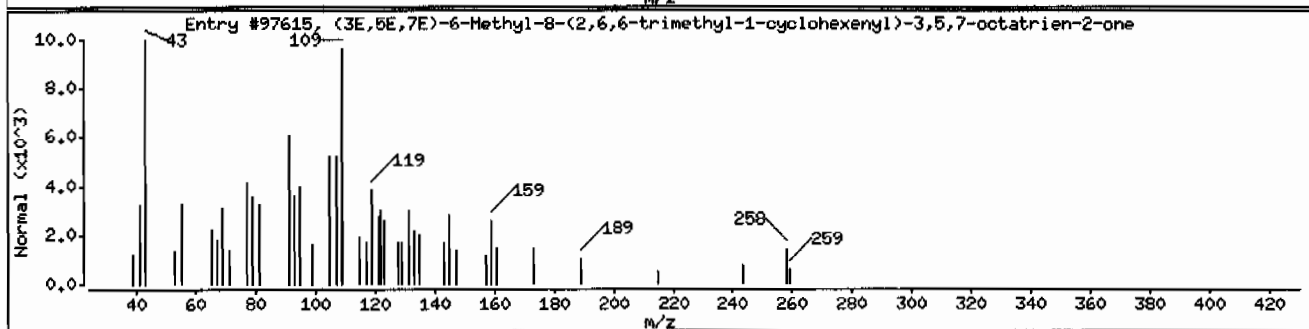
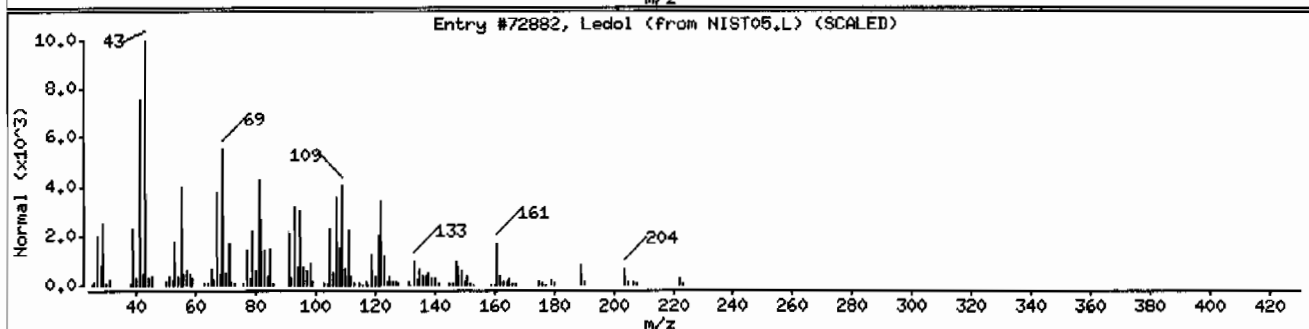
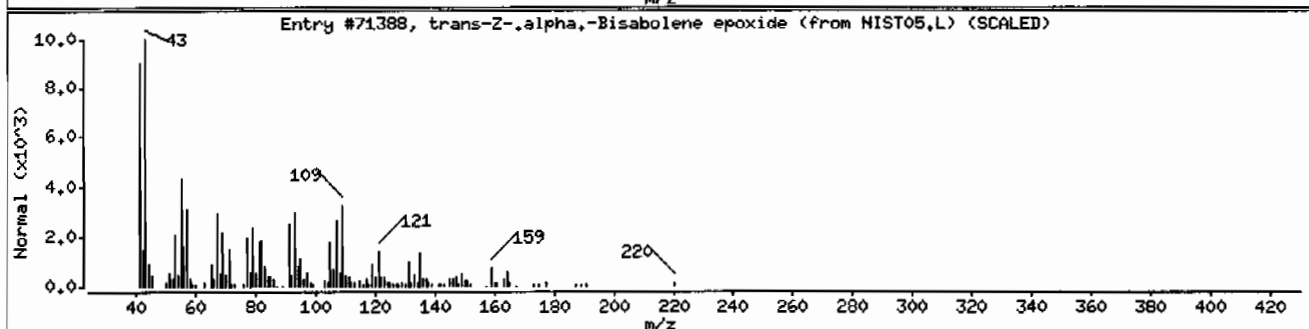
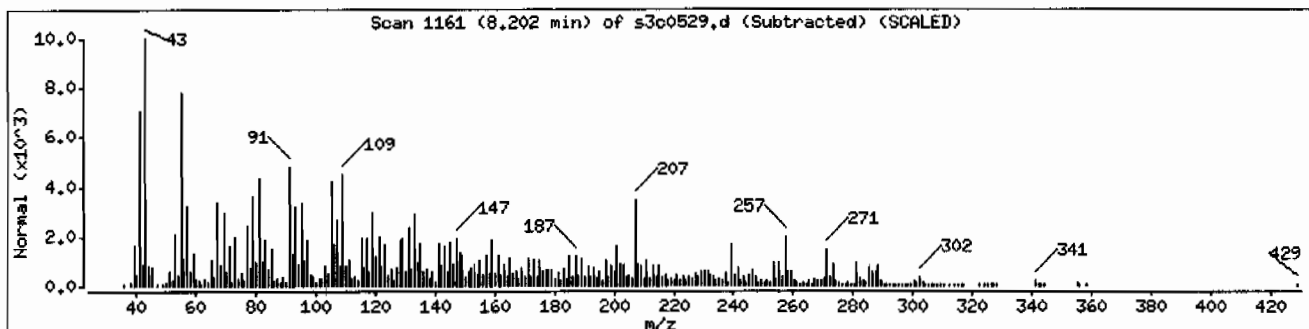
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-2-,alpha,-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	38	C15H24O	220
Ledol	577-27-5	NIST05.L	72882	30	C15H26O	222
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	30	C18H26O	258



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

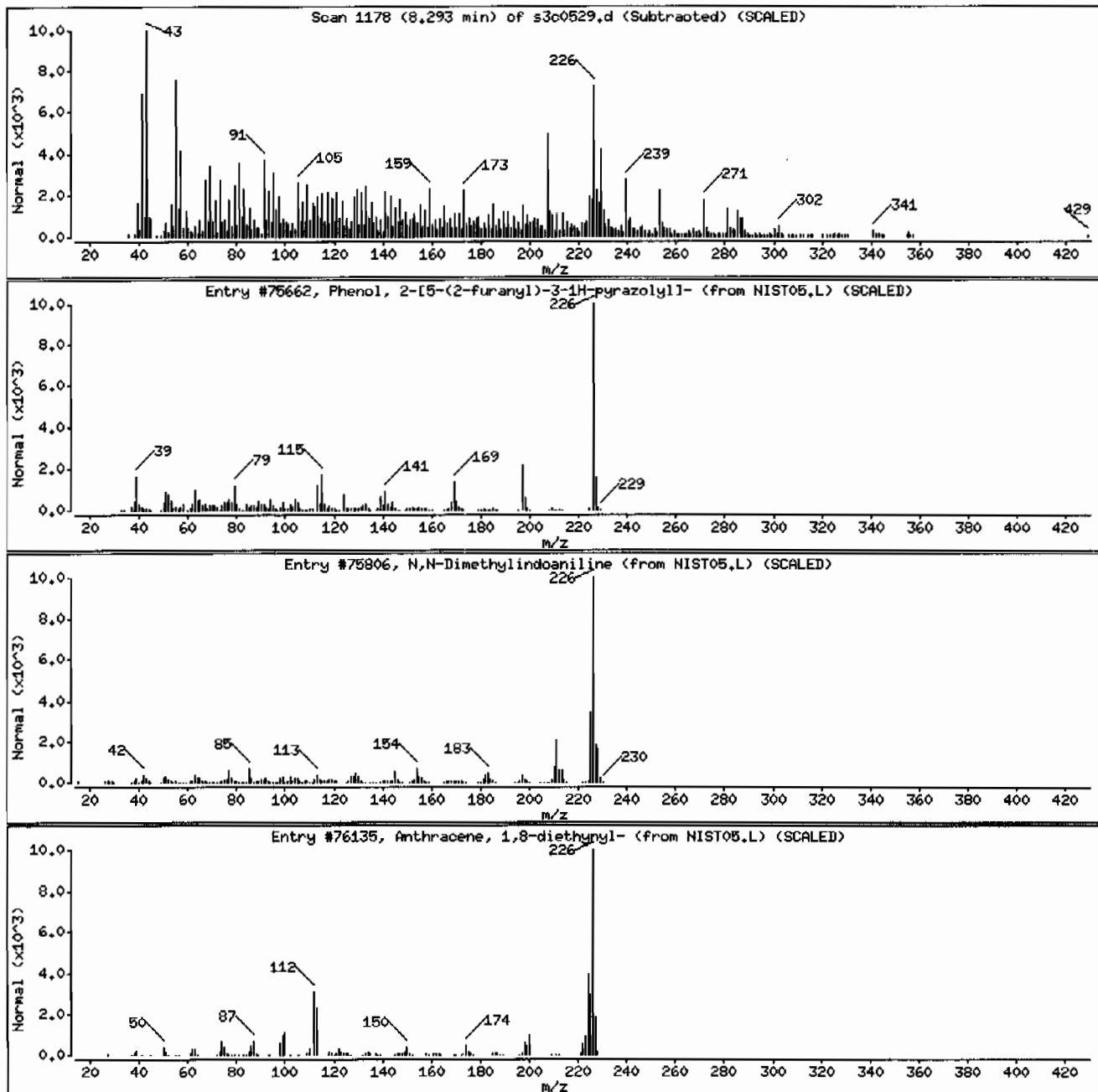
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenol, 2-[5-(2-furanyl)-3-1H-pyrazolyl]	38371-84-5	NIST05.L	75662	53	C13H10N2O2	226
N,N-Dimethyldioaniline	2180-58-5	NIST05.L	75806	25	C14H14N2O	226
Anthracene, 1,8-diethynyl-	78053-58-4	NIST05.L	76135	25	C18H10	226



Date: 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

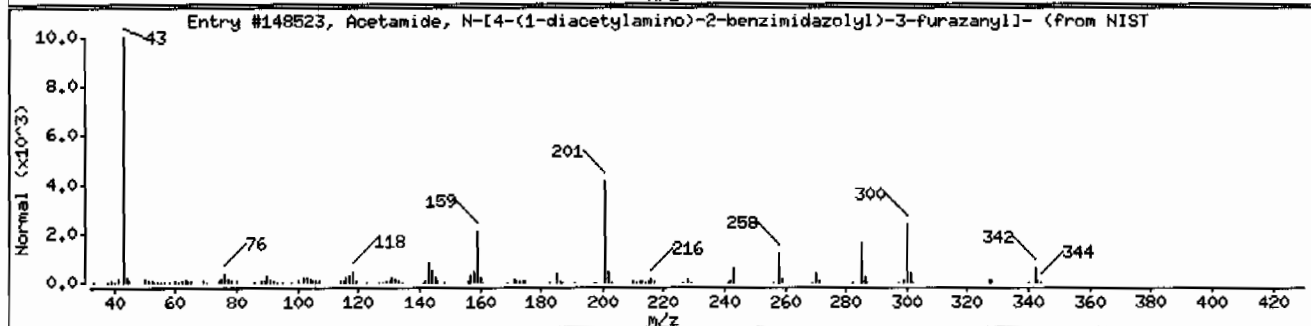
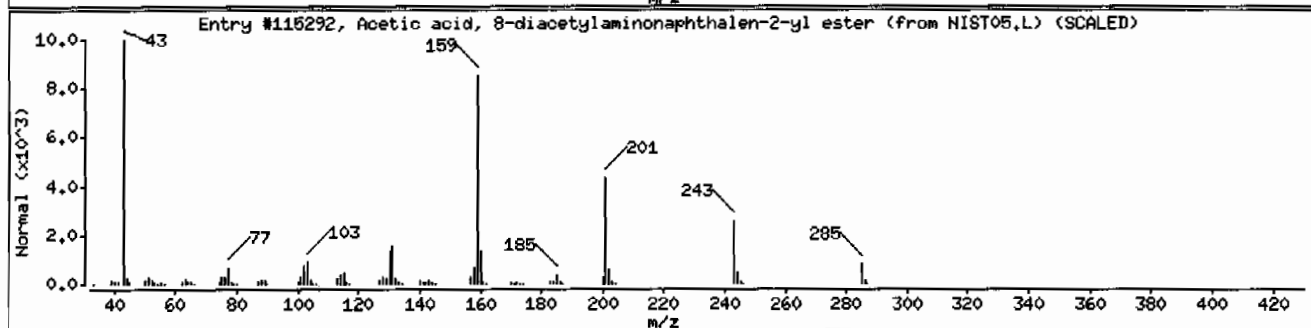
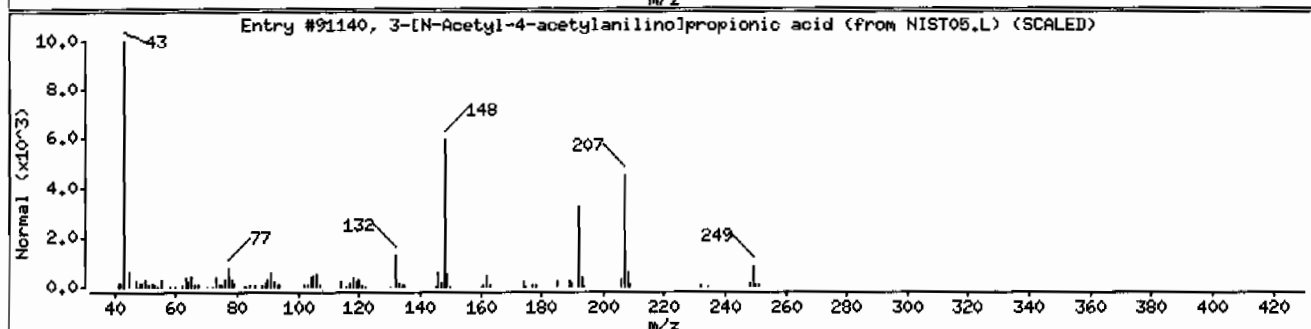
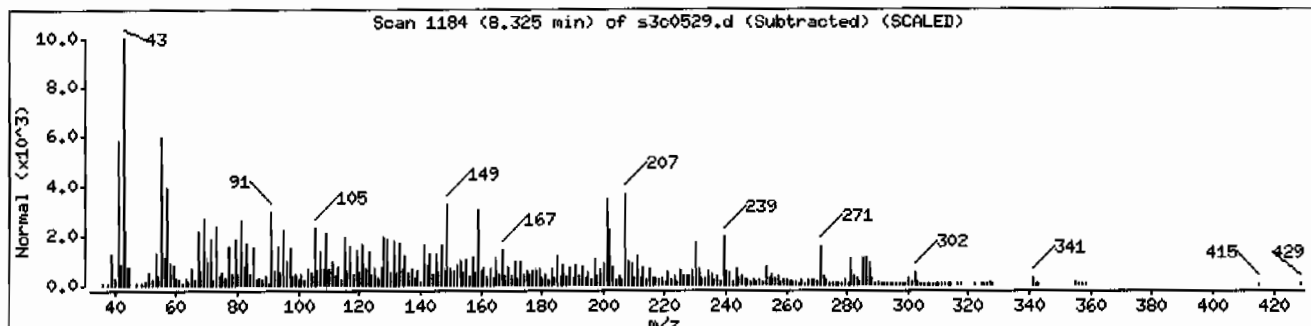
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-[N-Acetyl-4-acetylanilino]propionic ac	31399-36-7	NIST05.L	91140	10	C13H15NO4	249
Acetic acid, 8-diacetylaminoanthralen-2	1000315-85-9	NIST05.L	115292	9	C16H15NO4	285
Acetamide, N-[4-(1-diacetylamino)-2-benz	299923-18-5	NIST05.L	148523	9	C15H14N6O4	342



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVMF111LANL

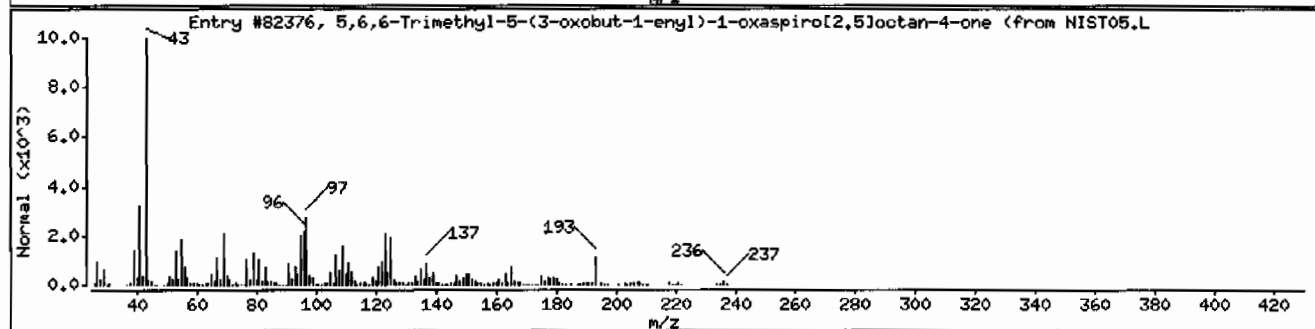
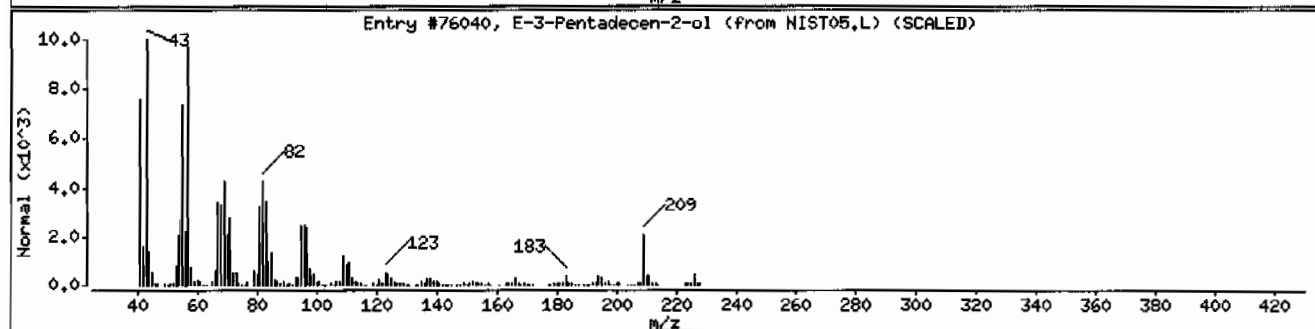
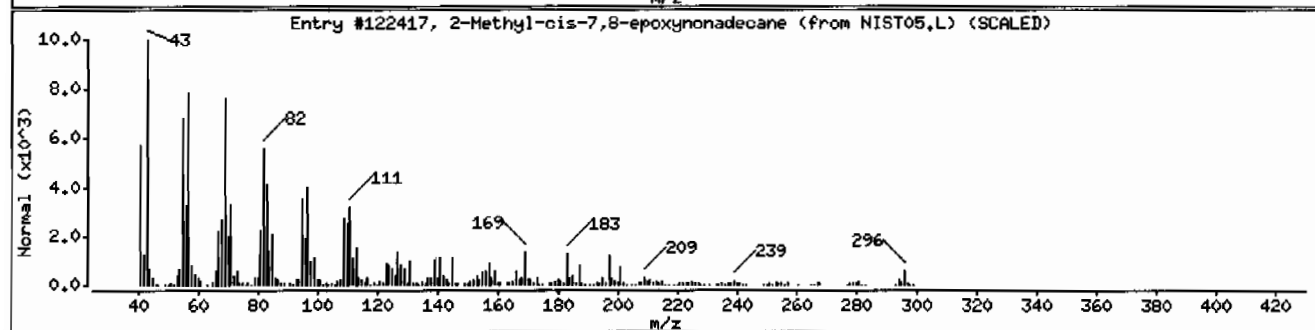
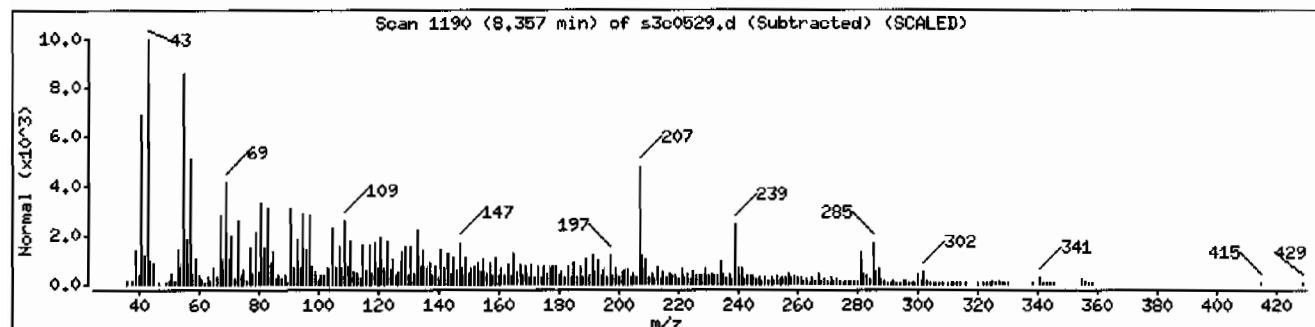
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-cis-7,8-epoxynonadecane	1000130-93-3	NIST05.L	122417	15	C20H40O	296
E-3-Pentadecen-2-ol	1000130-83-8	NIST05.L	76040	15	C15H30O	226
5,6,6-Trimethyl-5-(3-oxobut-1-enyl)-1-ox	1000192-73-9	NIST05.L	82376	15	C14H20O3	236



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3.i

Sample Info: 1247562007195667711SVHF111LANL

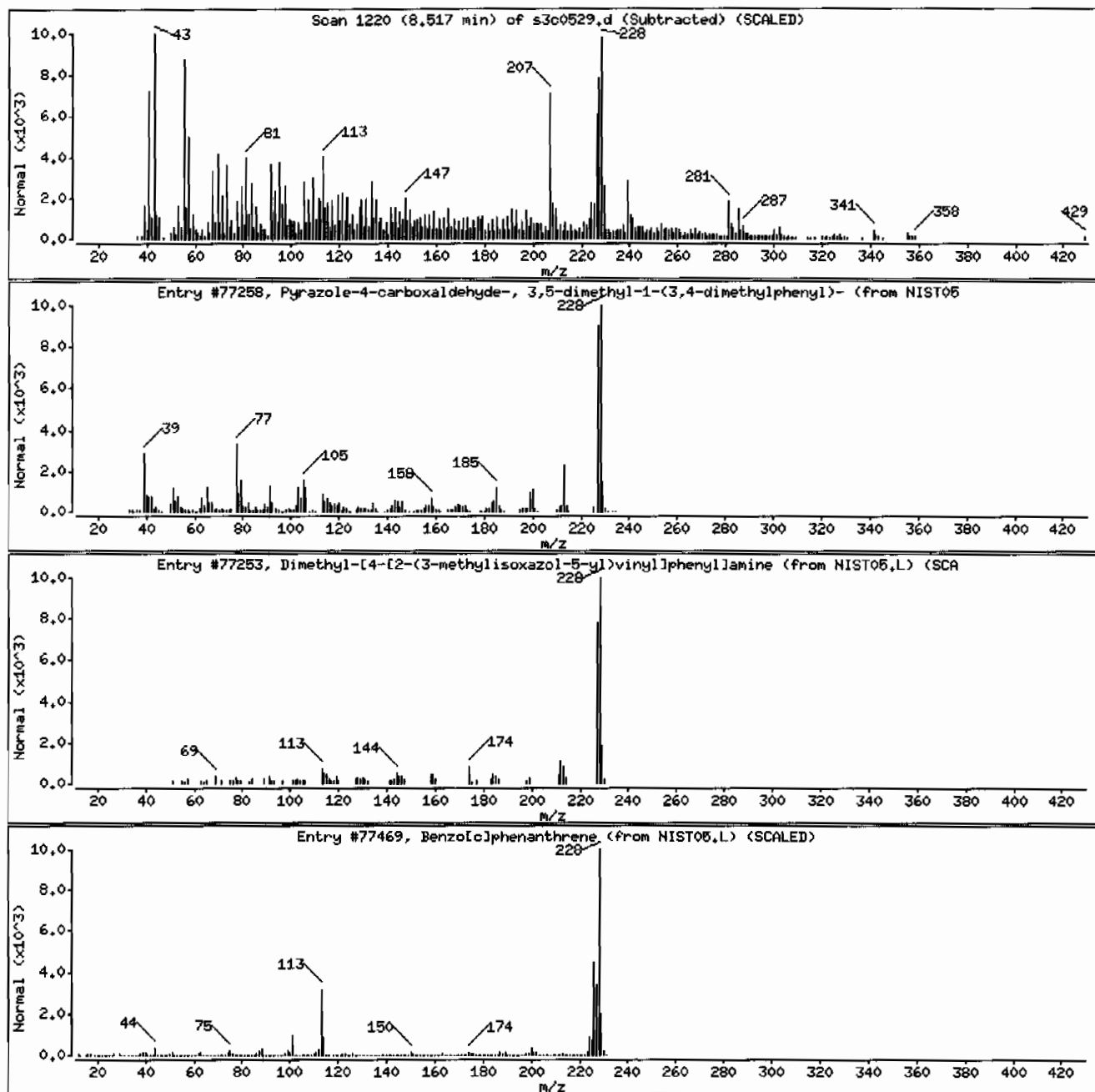
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrazole-4-carboxaldehyde-, 3,5-dimethyl	1000272-54-8	NIST05.L	77258	46	C14H16N2O	228
Dimethyl-[4-[2-(3-methylisoxazol-5-yl)vi	1000306-39-6	NIST05.L	77253	43	C14H16N2O	228
Benzo[c]phenanthrene	195-19-7	NIST05.L	77469	42	C18H12	228



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3.i

Sample Info: 1247562007195667711SVHF11ILANL

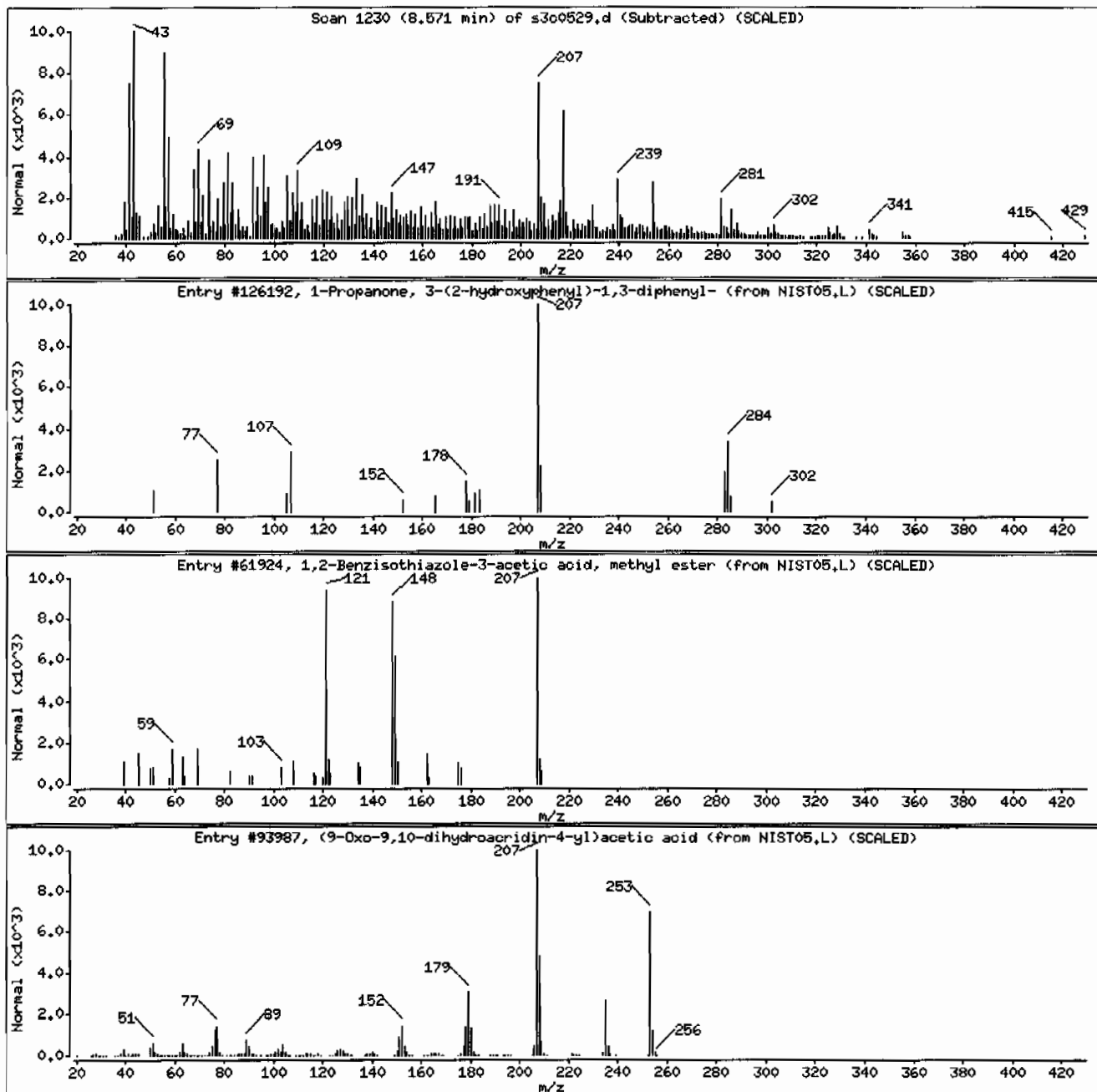
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip	4376-83-4	NIST05.L	126192	38	C21H18O2	302
1,2-Benzisothiazole-3-acetic acid, methy	29876-70-8	NIST05.L	61924	35	C10H9NO2S	207
(9-Oxo-9,10-dihydroacridin-4-yl)acetic a	145447-90-1	NIST05.L	93987	25	C15H11NO3	253





Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

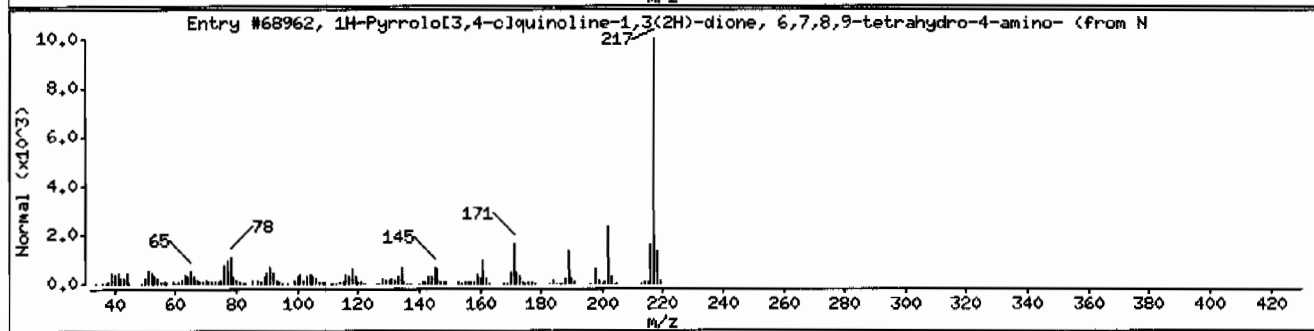
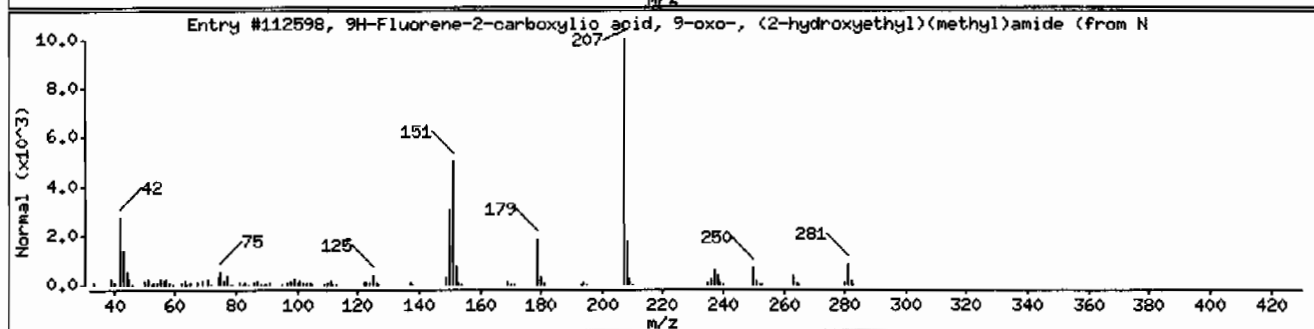
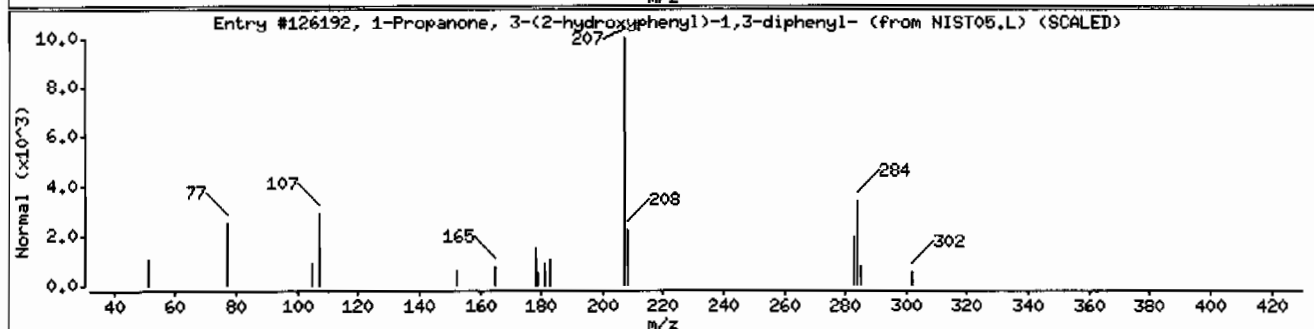
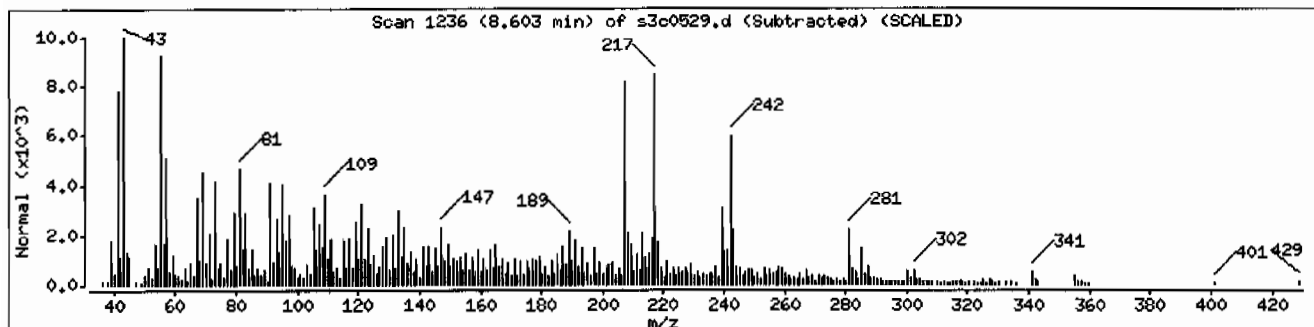
Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip	4376-83-4	NIST05.L	126192	35	C21H18O2	302
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	30	C17H15NO3	281
1H-Pyrrolo[3,4-c]quinoline-1,3(2H)-dione	298688-31-0	NIST05.L	68962	25	C11H11N3O2	217



Date: 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

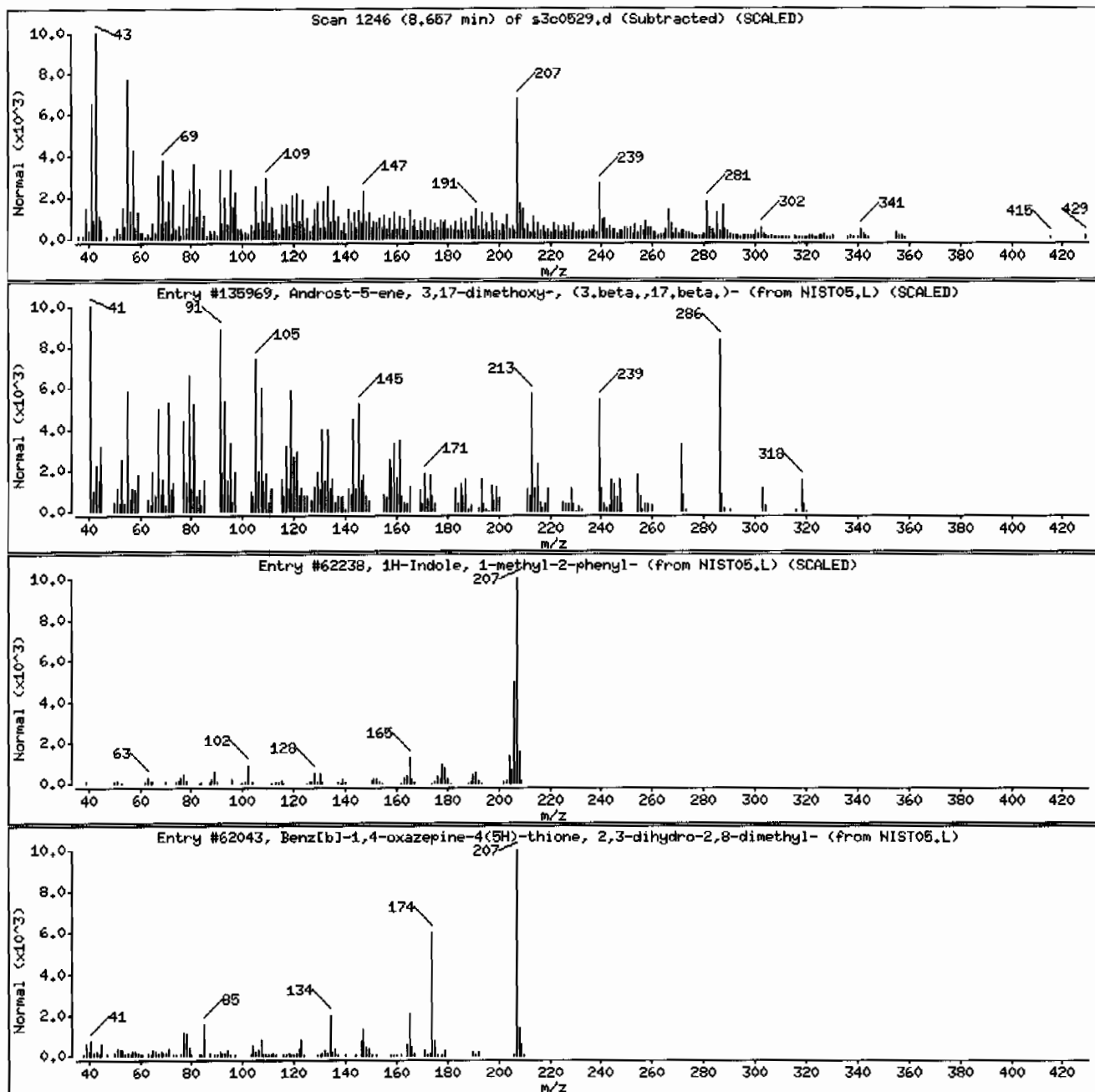
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-5-ene, 3,17-dimethoxy-, (3,β.	88870-26-2	NIST05.L	135969	25	C21H34O2	318
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62238	20	C15H13N	207
Benz[bl-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	20	C11H13NOS	207



Date: 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

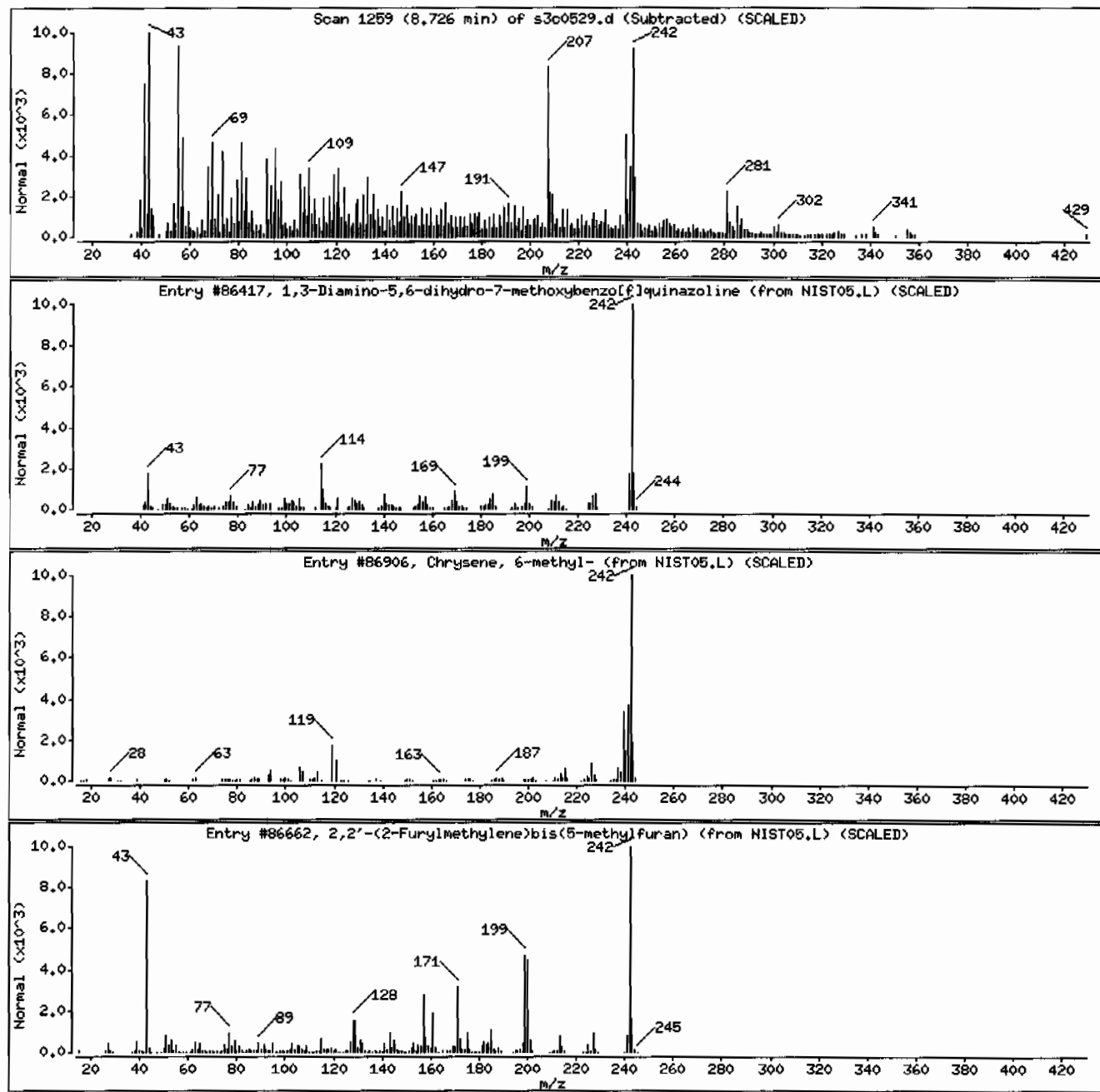
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Diamino-5,6-dihydro-7-methoxybenzof	37436-49-0	NIST05.L	86417	47	C13H14N4O	242
Chrysene, 6-methyl-	1705-85-7	NIST05.L	86906	43	C19H14	242
2,2'-(2-Furylmethylene)bis(5-methylfuran	59212-78-1	NIST05.L	86662	41	C15H14O3	242



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3.i

Sample Info: 12475620071956677111SVHF111LANL

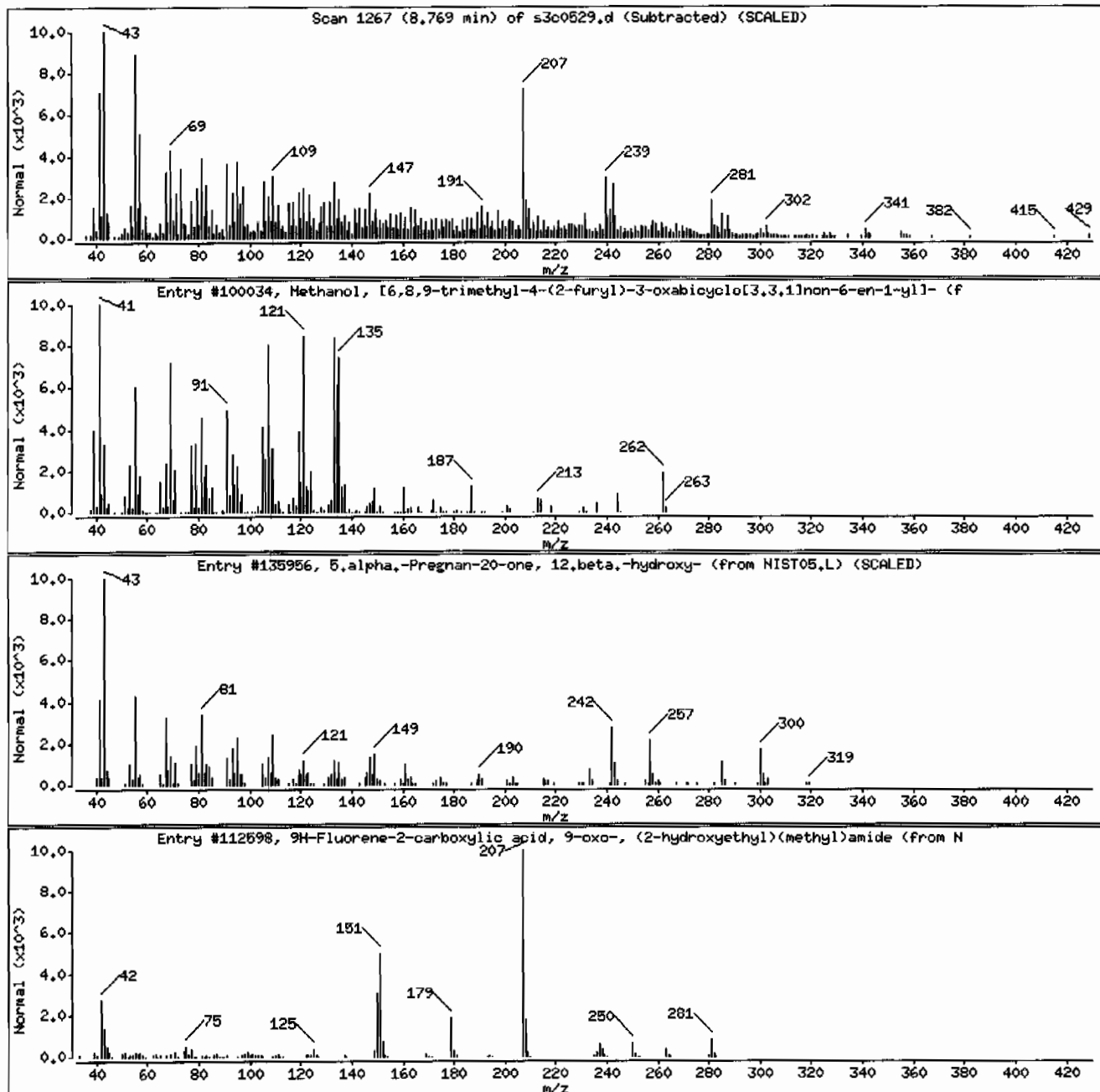
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methanol, [6,8,9-trimethyl-4-(2-furyl)-3	307924-24-9	NIST05.L	100034	44	C16H22O3	262
5.alpha.-Pregnan-20-one, 12.beta.-hydrox	5618-22-4	NIST05.L	135956	44	C21H34O2	318
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	35	C17H15NO3	281



Date: 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3.i

Sample Info: 1247562007195667711SVHF111LANL

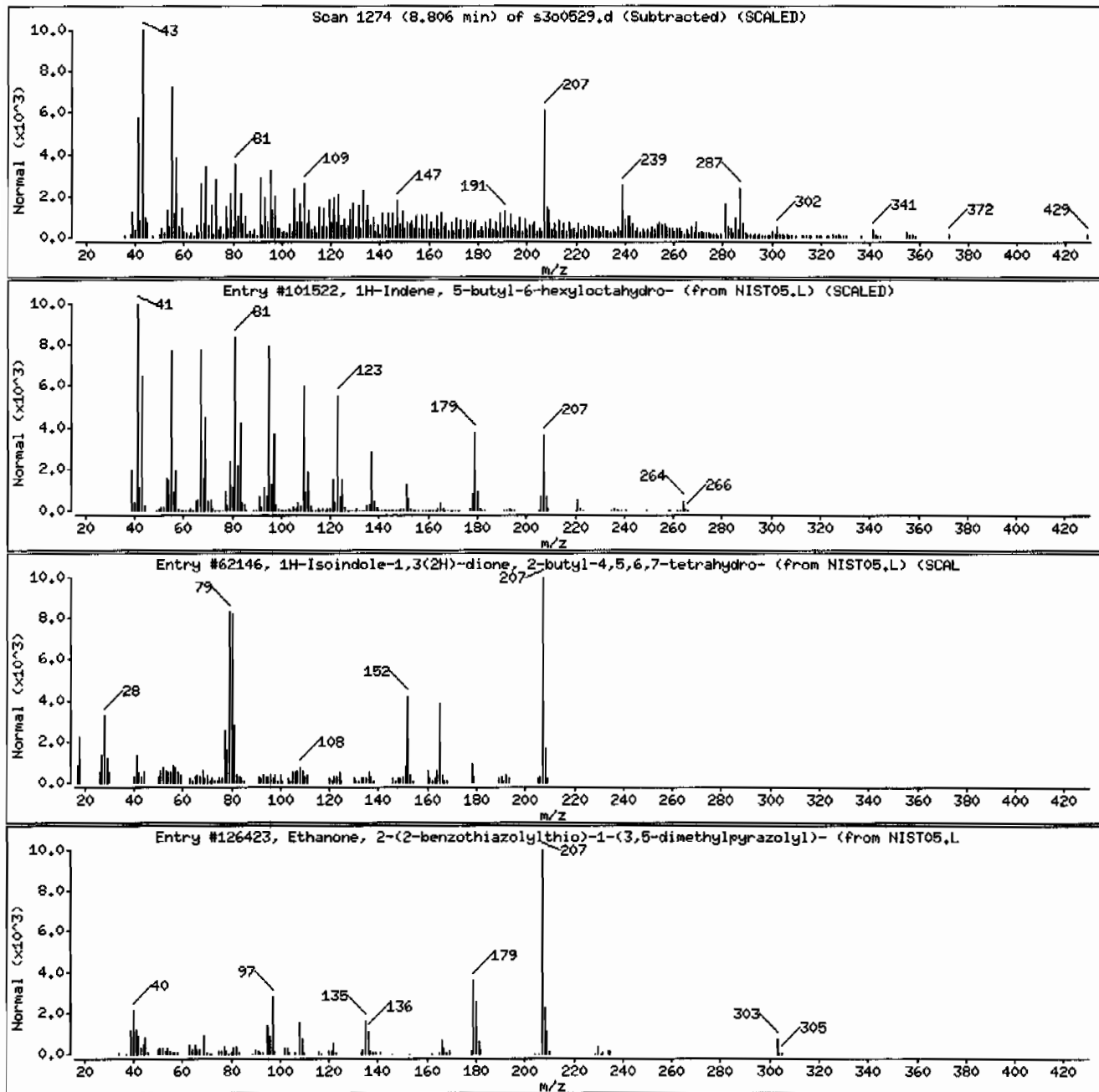
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	59	C19H36	264
1H-Isindole-1,3(2H)-dione, 2-butyl-4,5,	54934-85-9	NIST05.L	62146	41	C12H17NO2	207
Ethanone, 2-(2-benzothiazolylthio)-1-(3,	155670-84-1	NIST05.L	126423	38	C14H13N3OS2	303



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.1

Sample Info: 1247562007195667711SVHF111LANL

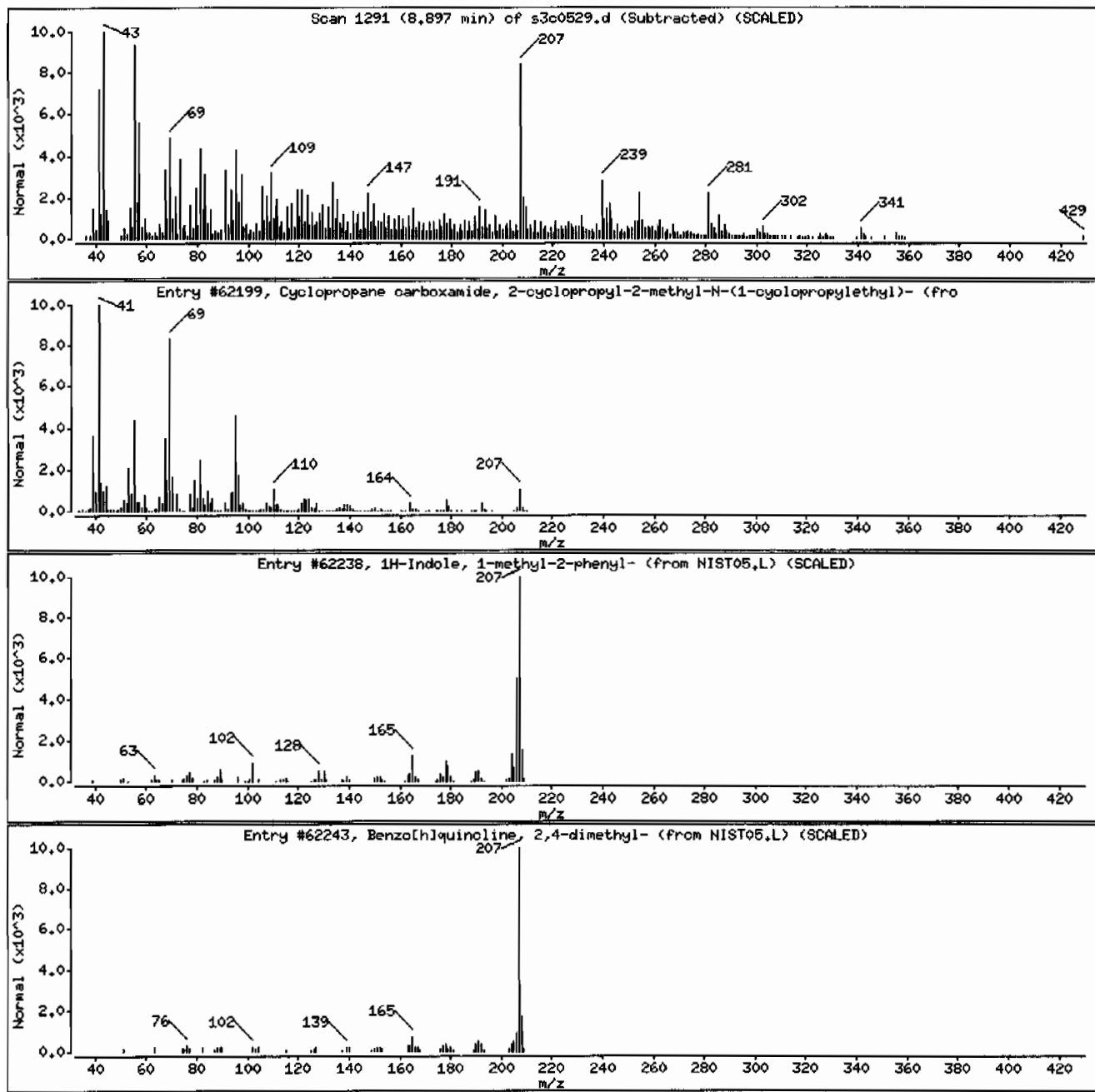
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	38	C13H21NO	207
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62238	30	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 12475620071956677111SVHF111LANL

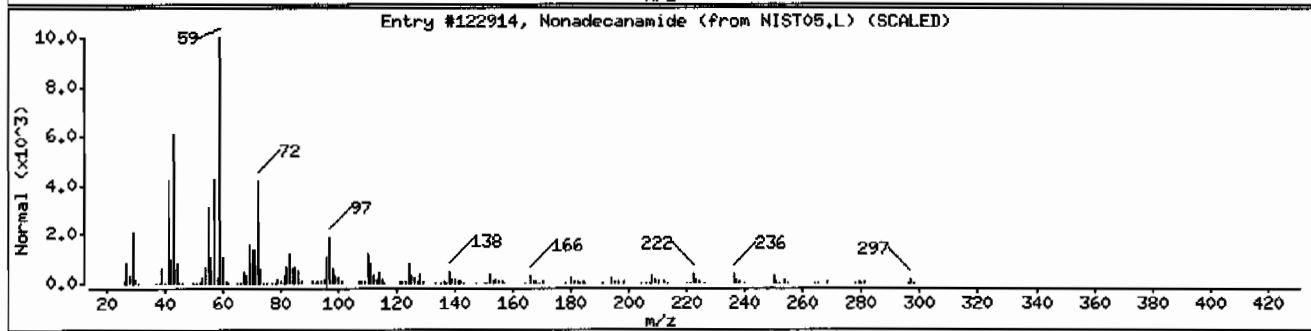
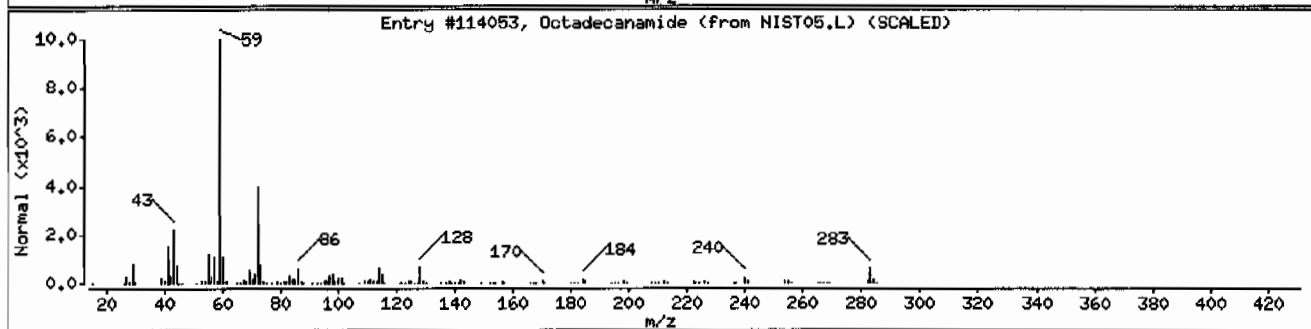
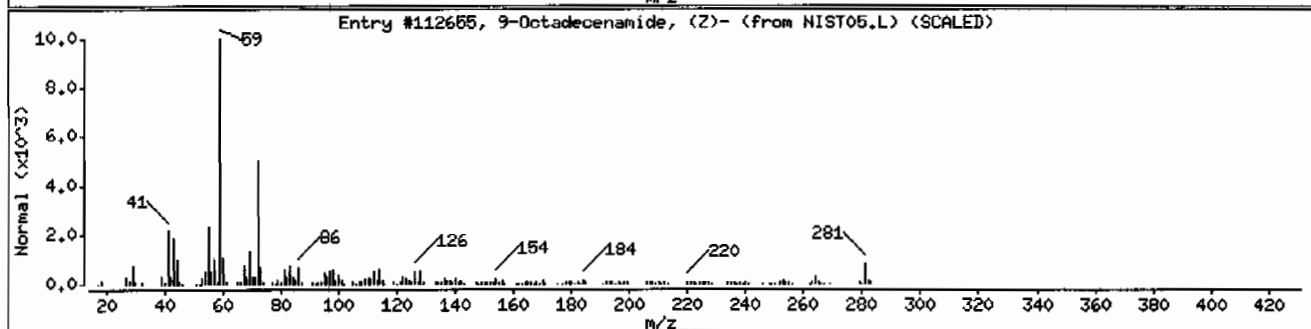
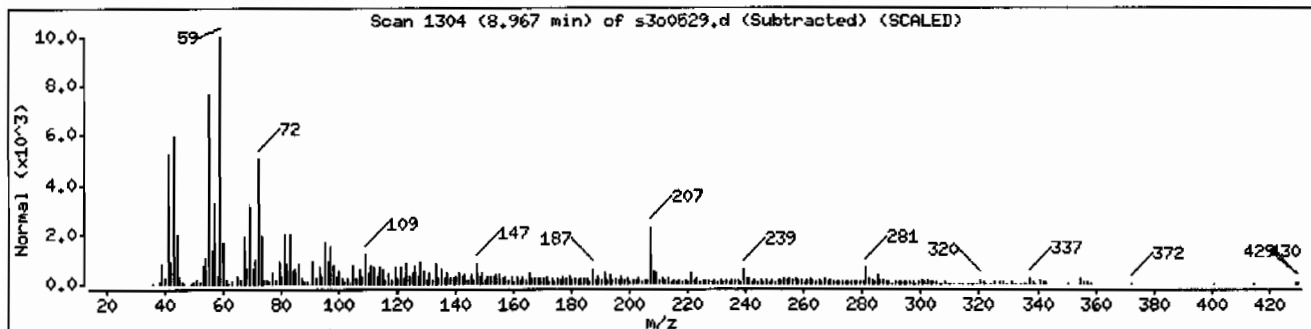
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	93	C18H35NO	281
Octadecanamide	124-26-5	NIST05.L	114053	90	C18H37NO	283
Nonadecanamide	58185-32-3	NIST05.L	122914	83	C19H39NO	297



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

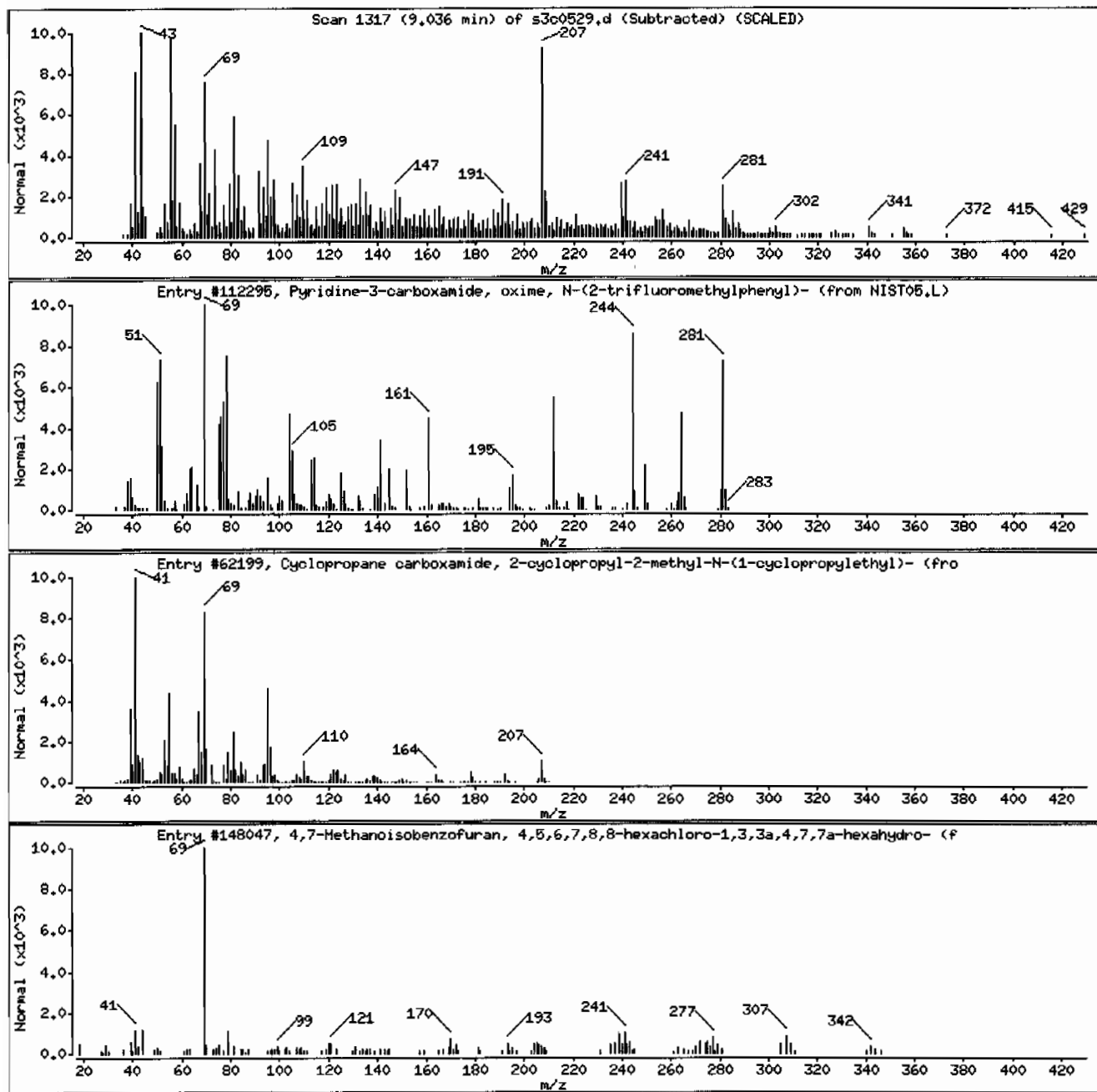
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	92	C13H10F3N3O	281
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	49	C13H21NO	207
4,7-Methanoisobenzofuran, 4,5,6,7,8,8-he	3369-52-6	NIST05.L	148047	44	C9H6Cl6O	340





Date: 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

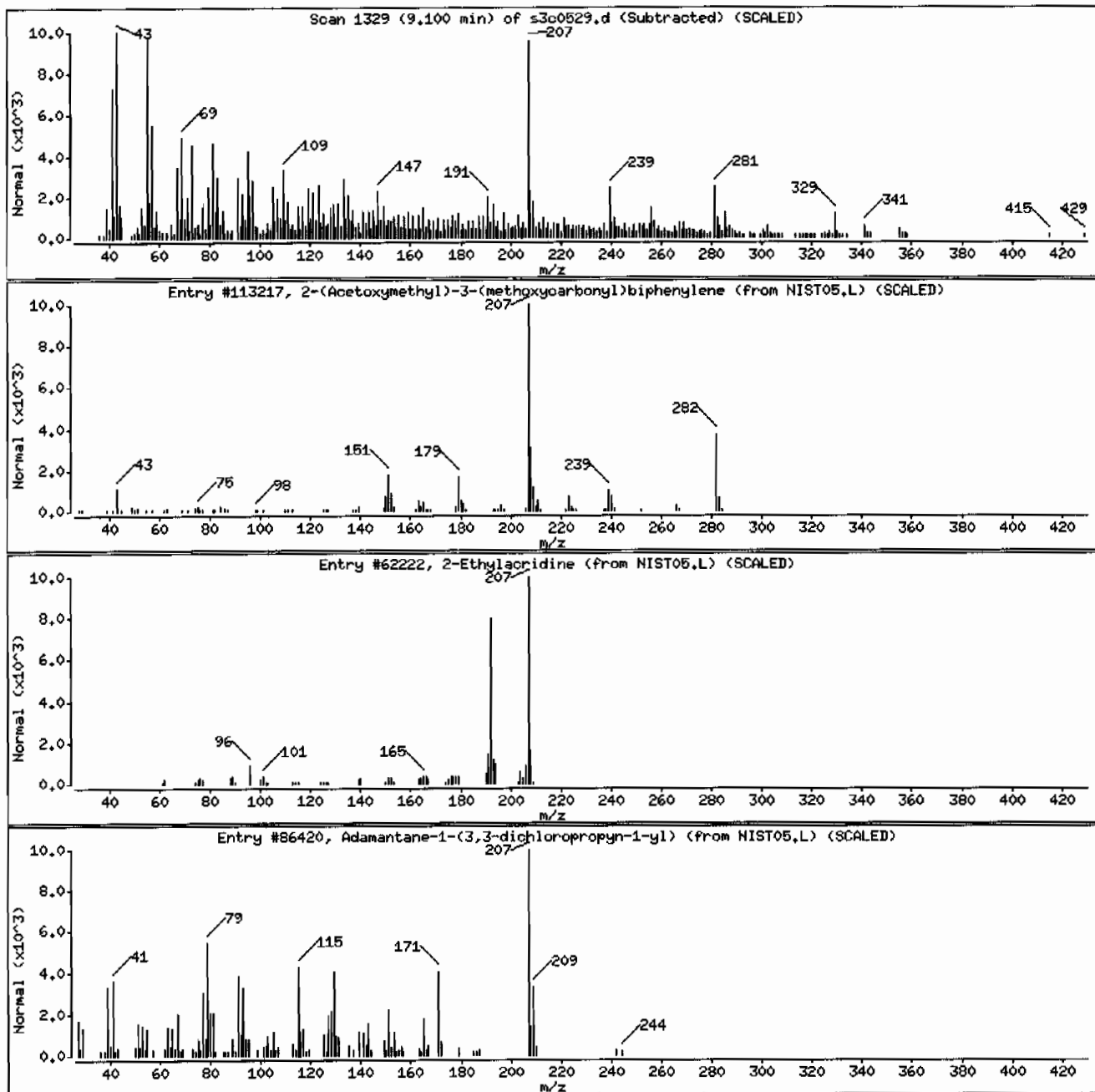
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	46	C17H14O4	282
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
Adamantane-1-(3,3-dichloropropyn-1-yl)	139185-48-1	NIST05.L	86420	38	C13H16Cl2	242



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

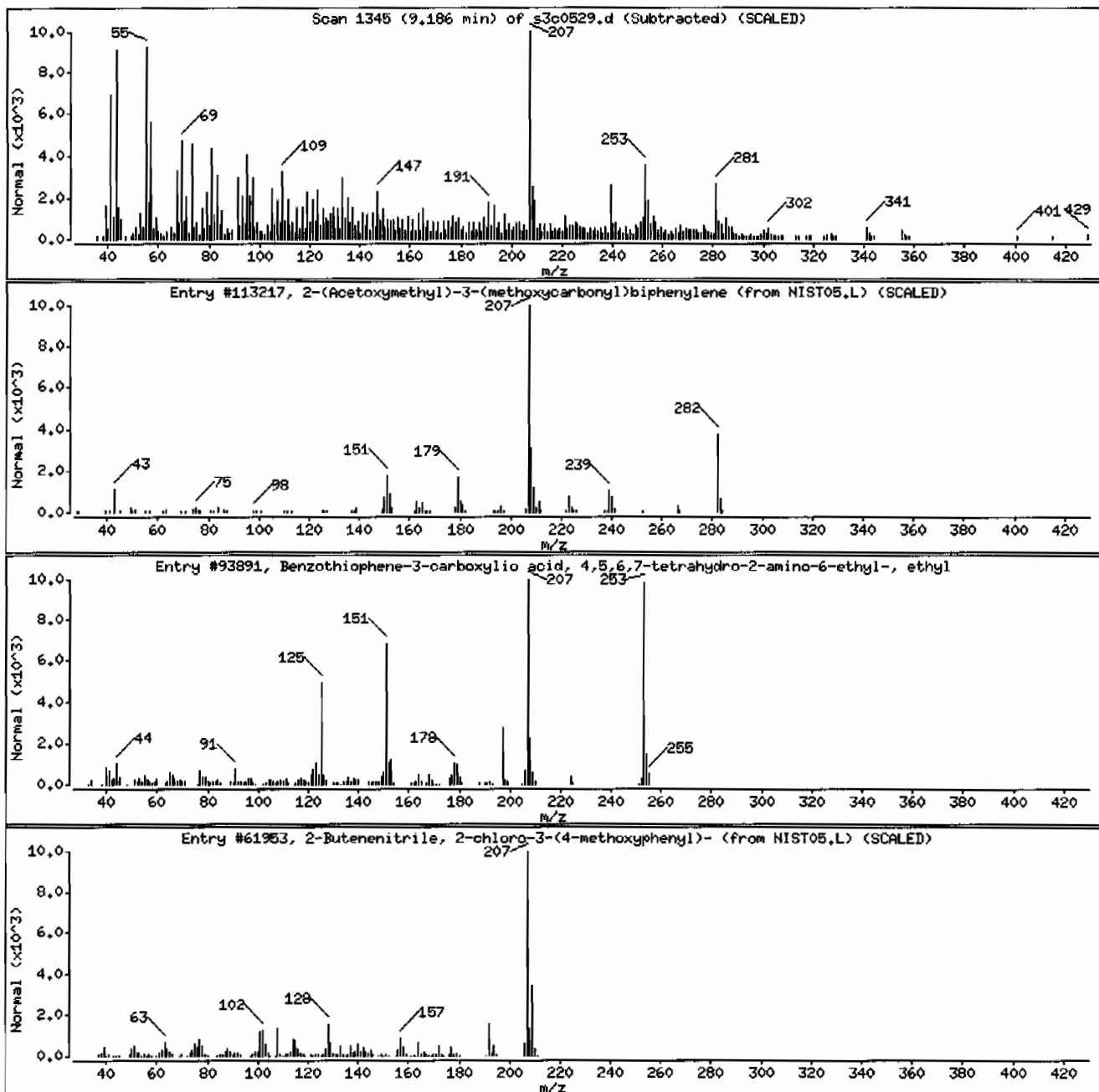
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	42	C17H14O4	282
Benzothiophene-3-carboxylic acid, 4,5,6,	329222-94-8	NIST05.L	93891	35	C13H9NO2S	253
2-Butenenitrile, 2-chloro-3-(4-methoxyph	1000305-66-7	NIST05.L	61953	30	C11H10ClNO	207



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVMF11ILANL

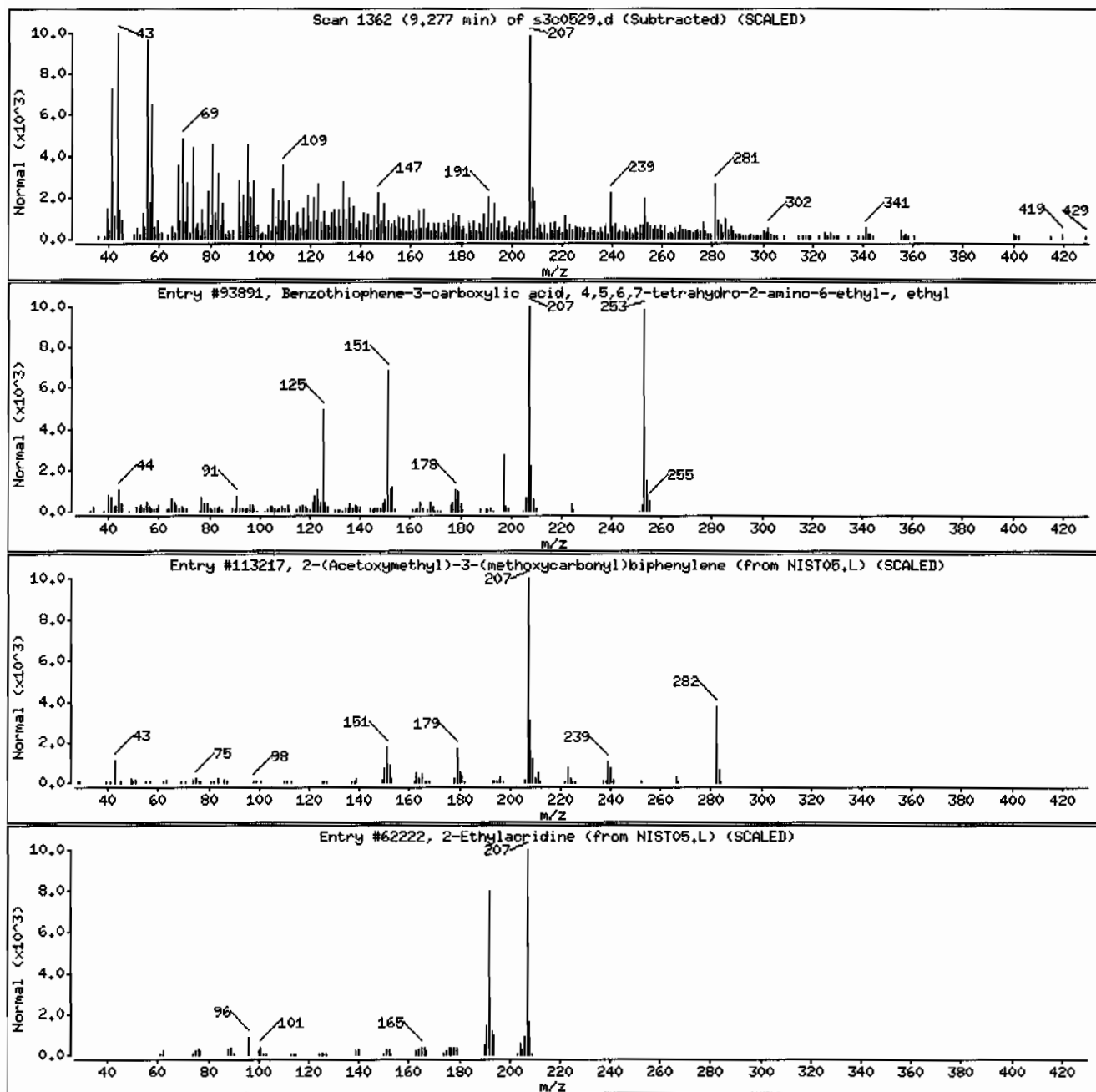
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzothiophene-3-carboxylic acid, 4,5,6,	329222-94-8	NIST05.L	93891	41	C13H19NO2S	253
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	38	C17H14O4	282
2-Ethylacridine	55751-83-2	NIST05.L	62222	30	C15H13N	207



Date: 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3.i

Sample Info: 1247562007195667711SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

## Library Search Compound Match

Unknown

3-Benzo[gl]quinoxalin-2-yl-propionic acid

CAS Number

25470-39-7

Library

NIST05.L

Entry

93242

Quality

60

Formula

C15H12N2O2

Weight

252

Benzo[a]pyrene

50-32-8

NIST05.L

93582

53

C20H12

252

1-Benzazirene-1-carboxylic acid, 2,2,5a-

1000197-90-8

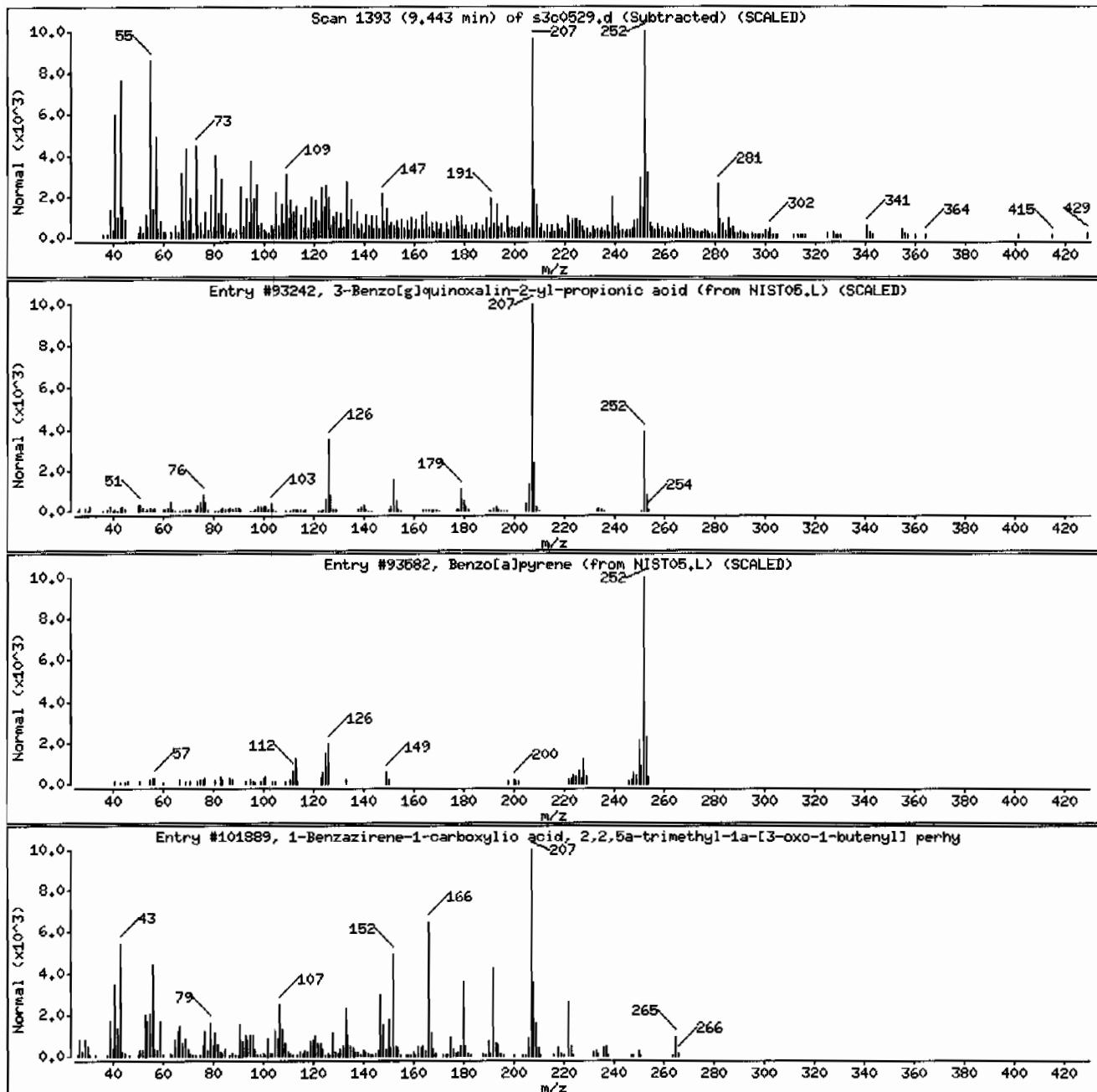
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42

C15H23NO3

265



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: HSD3,i

Sample Info: 12475620071956677111SVMF111LANL

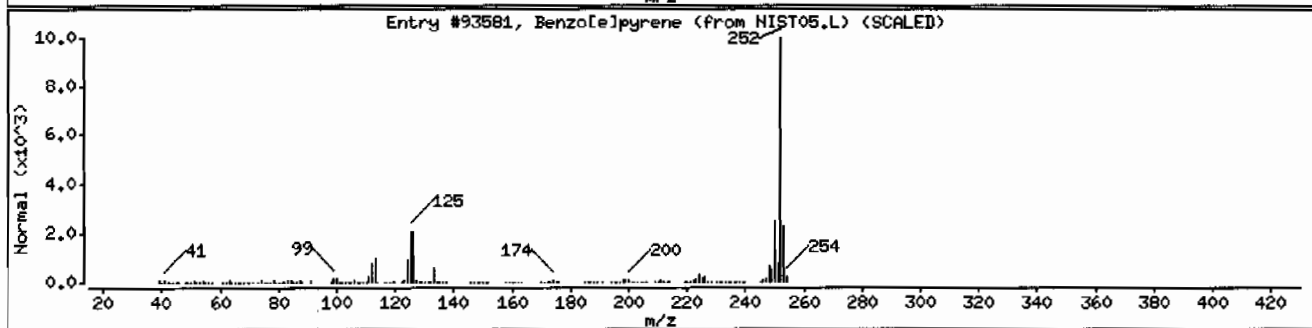
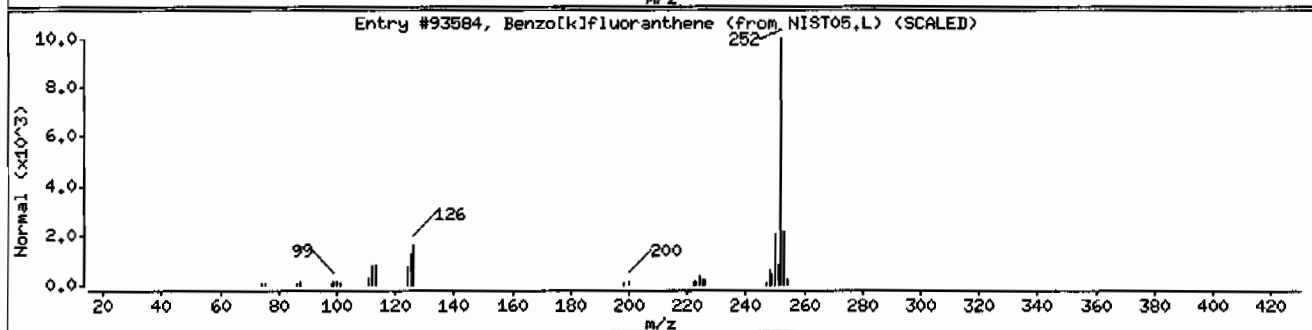
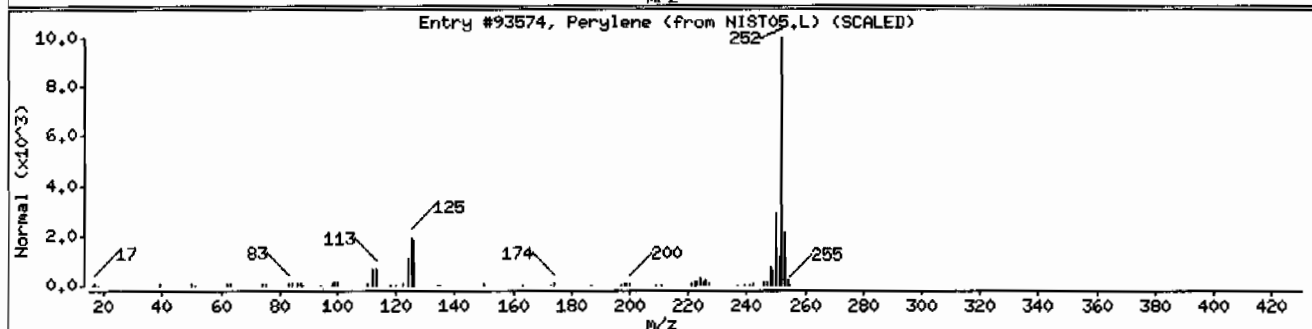
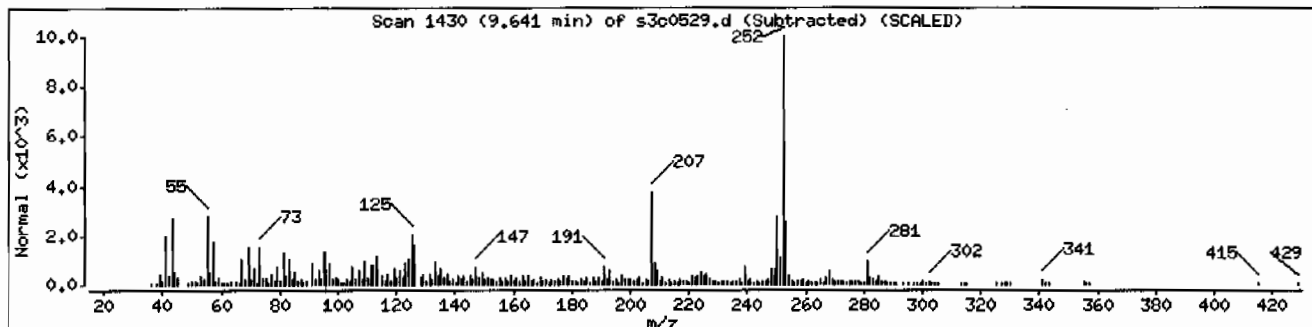
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Perylene	198-55-0	NIST05.L	93574	96	C20H12	252
Benzo[k]fluoranthene	207-08-9	NIST05.L	93584	96	C20H12	252
Benzo[e]pyrene	192-97-2	NIST05.L	93581	96	C20H12	252



Date : 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711SVHF111LANL

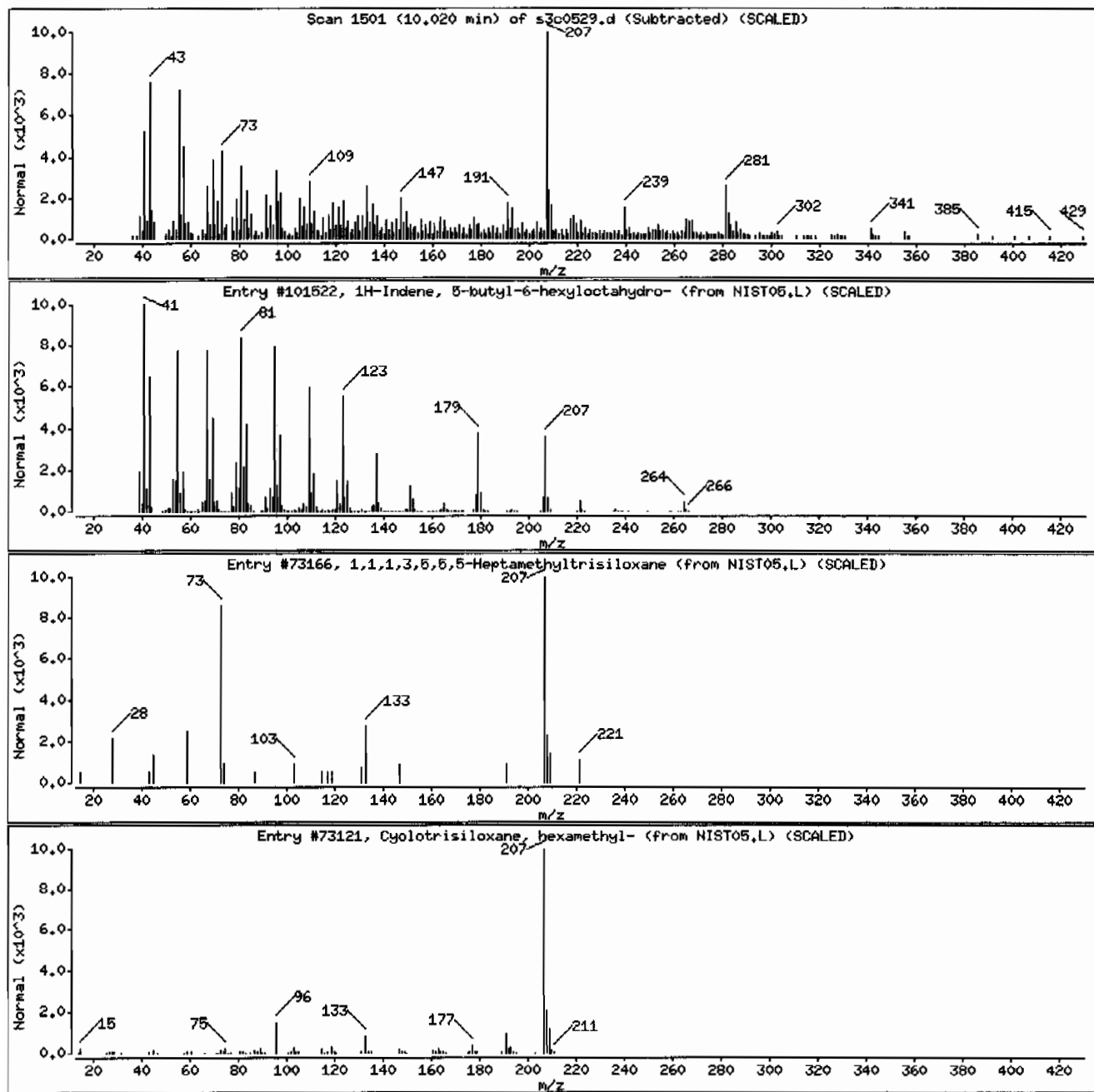
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	46	C19H36	264
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	35	C7H22O2Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	35	C6H18O3Si3	222



Date: 05-MAR-2010 19:58

Client ID: RE15-10-8310

Instrument: MSD3.i

Sample Info: 1247562007195667711(SVMF11)LANL

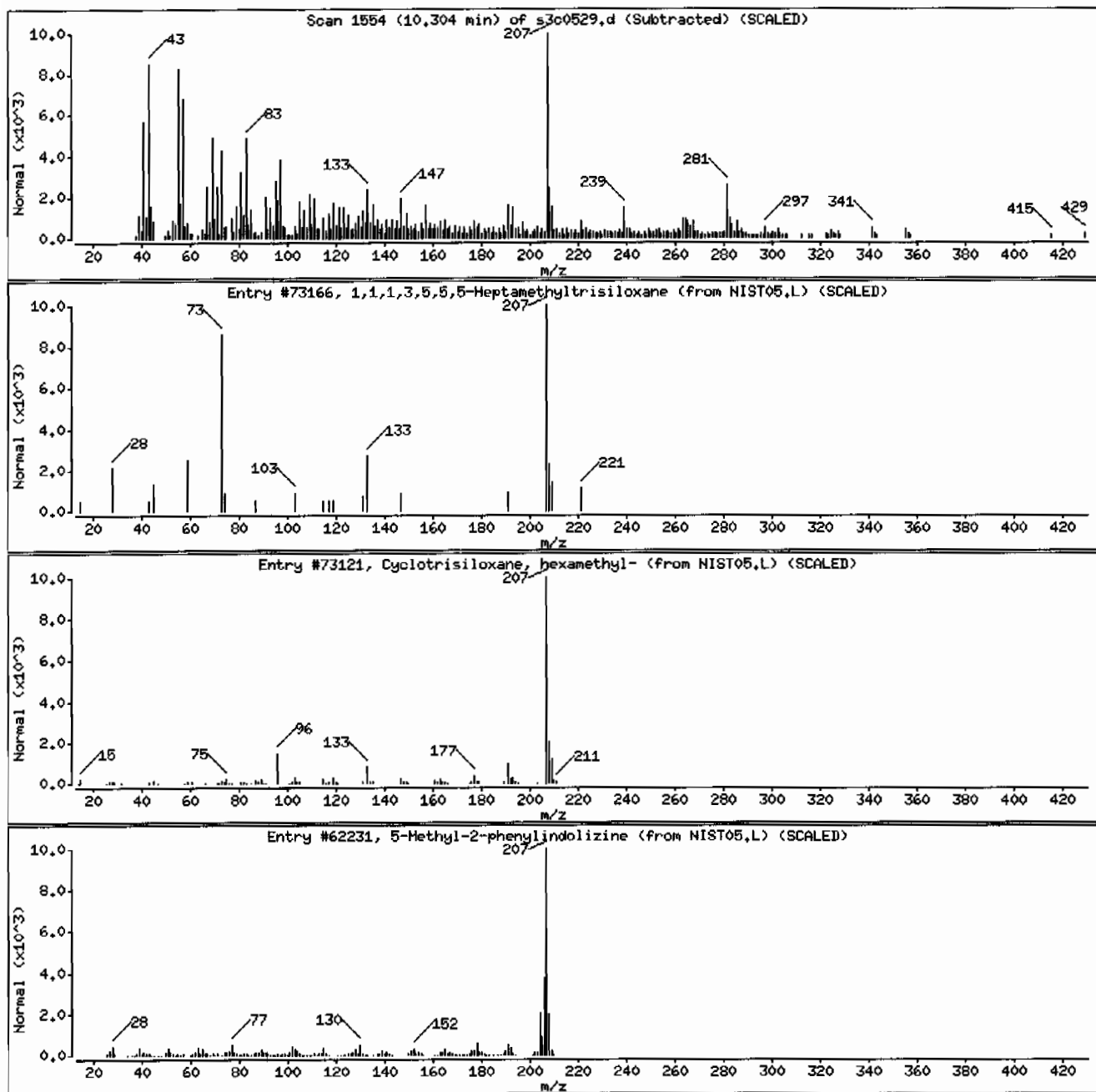
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	38	C7H22O2Si3	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	35	C6H18O3Si3	222
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	30	C15H13N	207



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

SDG Number: 10-1950  
Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8311  
Batch ID: 956677  
Run Date: 03/05/2010 19:35  
Prep Date: 02/23/2010 21:09  
Data File: s3c0528.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	345	ug/kg	69.0	345
108-95-2	Phenol	U	345	ug/kg	69.0	345
95-57-8	2-Chlorophenol	U	345	ug/kg	69.0	345
106-46-7	1,4-Dichlorobenzene	U	345	ug/kg	69.0	345
621-64-7	N-Nitrosodipropylamine	U	345	ug/kg	69.0	345
59-50-7	4-Chloro-3-methylphenol	U	345	ug/kg	69.0	345
83-32-9	Acenaphthene	U	34.5	ug/kg	11.4	34.5
121-14-2	2,4-Dinitrotoluene	U	345	ug/kg	34.5	345
100-02-7	4-Nitrophenol	U	345	ug/kg	114	345
87-86-5	Pentachlorophenol	U	345	ug/kg	86.3	345
129-00-0	Pyrene	J	30.1	ug/kg	10.4	34.5
110-86-1	Pyridine	U	345	ug/kg	69.0	345
62-53-3	Aniline	U	345	ug/kg	104	345
111-44-4	bis(2-Chloroethyl) ether	U	345	ug/kg	69.0	345
541-73-1	1,3-Dichlorobenzene	U	345	ug/kg	69.0	345
100-51-6	Benzyl alcohol	U	345	ug/kg	104	345
95-50-1	1,2-Dichlorobenzene	U	345	ug/kg	69.0	345
108-60-1	bis(2-Chloroisopropyl)ether	U	345	ug/kg	69.0	345
95-48-7	o-Cresol	U	345	ug/kg	69.0	345
65794-96-9	m,p-Cresols	U	345	ug/kg	104	345
67-72-1	Hexachloroethane	U	345	ug/kg	69.0	345
98-95-3	Nitrobenzene	U	345	ug/kg	69.0	345
78-59-1	Isophorone	U	345	ug/kg	69.0	345
88-75-5	2-Nitrophenol	U	345	ug/kg	69.0	345
105-67-9	2,4-Dimethylphenol	U	345	ug/kg	121	345
111-91-1	bis(2-Chloroethoxy)methane	U	345	ug/kg	69.0	345
120-83-2	2,4-Dichlorophenol	U	345	ug/kg	69.0	345
65-85-0	Benzoic acid	U	690	ug/kg	173	690
91-20-3	Naphthalene	U	34.5	ug/kg	10.4	34.5
106-47-8	4-Chloroaniline	U	345	ug/kg	69.0	345
87-68-3	Hexachlorobutadiene	U	345	ug/kg	69.0	345
91-57-6	2-Methylnaphthalene	U	34.5	ug/kg	6.90	34.5
77-47-4	Hexachlorocyclopentadiene	U	345	ug/kg	69.0	345
88-06-2	2,4,6-Trichlorophenol	U	345	ug/kg	69.0	345
95-95-4	2,4,5-Trichlorophenol	U	345	ug/kg	69.0	345
91-58-7	2-Chloronaphthalene	U	34.5	ug/kg	11.4	34.5
88-74-4	2-Nitroaniline	U	345	ug/kg	69.0	345
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	345	ug/kg	69.0	345



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

SDG Number: 10-1950  
Lab Sample ID: 247562006

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.09 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8311  
Batch ID: 956677  
Run Date: 03/05/2010 19:35  
Prep Date: 02/23/2010 21:09  
Data File: s3c0528.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	345	ug/kg	69.0	345
606-20-2	2,6-Dinitrotoluene	U	345	ug/kg	34.5	345
208-96-8	Acenaphthylene	U	34.5	ug/kg	10.4	34.5
51-28-5	2,4-Dinitrophenol	U	690	ug/kg	131	690
132-64-9	Dibenzofuran	U	345	ug/kg	69.0	345
84-66-2	Diethylphthalate	U	345	ug/kg	69.0	345
86-73-7	Fluorene	U	34.5	ug/kg	10.4	34.5
7005-72-3	4-Chlorophenylphenylether	U	345	ug/kg	69.0	345
534-52-1	2-Methyl-4,6-dinitrophenol	U	345	ug/kg	69.0	345
100-01-6	4-Nitroaniline	U	345	ug/kg	104	345
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	345	ug/kg	69.0	345
122-66-7	Azobenzene	U	345	ug/kg	69.0	345
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	345	ug/kg	69.0	345
118-74-1	Hexachlorobenzene	U	345	ug/kg	69.0	345
85-01-8	Phenanthrene	U	34.5	ug/kg	10.4	34.5
120-12-7	Anthracene	U	34.5	ug/kg	6.90	34.5
84-74-2	Di-n-butylphthalate	U	345	ug/kg	69.0	345
206-44-0	Fluoranthene		36.5	ug/kg	10.4	34.5
85-68-7	Butylbenzylphthalate	U	345	ug/kg	69.0	345
56-55-3	Benzo(a)anthracene	J	22.7	ug/kg	10.4	34.5
91-94-1	3,3'-Dichlorobenzidine	U	345	ug/kg	104	345
218-01-9	Chrysene	J	15.3	ug/kg	10.4	34.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	345	ug/kg	69.0	345
117-84-0	Di-n-octylphthalate	U	345	ug/kg	69.0	345
205-99-2	Benzo(b)fluoranthene		38.6	ug/kg	10.4	34.5
207-08-9	Benzo(k)fluoranthene	U	34.5	ug/kg	10.4	34.5
50-32-8	Benzo(a)pyrene	J	18.9	ug/kg	10.4	34.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.5	ug/kg	10.4	34.5
53-70-3	Dibenzo(a,h)anthracene	U	34.5	ug/kg	10.4	34.5
191-24-2	Benzo(ghi)perylene	U	34.5	ug/kg	10.4	34.5
120-82-1	1,2,4-Trichlorobenzene	U	345	ug/kg	69.0	345

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1200	ug/kg		JA
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.54	204	ug/kg	99	NJ

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562006	Date Received: 02/20/2010 08:55	%Moisture: 3.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8311	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 19:35	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s3c0528.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	7.98	269	ug/kg		J
	Unknown	8.09	149	ug/kg		J
	Unknown	8.27	205	ug/kg		J
	Unknown	8.32	179	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	231	ug/kg	93	NJ
	Unknown	15.5	198	ug/kg		J
	Unknown	16.14	141	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0528.d  
Lab Smp Id: 247562006 Client Smp ID: RE15-10-8311  
Inj Date : 05-MAR-2010 19:35  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562006|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 27  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	3.67620	% moisture

Cpnd Variable Local Compound Variable

						CONCENTRATIONS	
QUANT SIG						ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.704	3.703	(1.000)	215557	40.0000	
* 29 Naphthalene-d8	136	4.560	4.564	(1.000)	863798	40.0000	
* 46 Acenaphthene-d10	164	5.811	5.811	(1.000)	499778	40.0000	
* 67 Phenanthrene-d10	188	6.817	6.816	(1.000)	910469	40.0000	
* 91 Chrysene-d12	240	8.432	8.437	(1.000)	624497	40.0000	
* 98 Perylene-d12	264	9.764	9.763	(1.000)	368019	40.0000	
\$ 3 2-Fluorophenol	112	2.901	2.896	(0.783)	440270	73.9872	2550
\$ 5 Phenol-d5	99	3.426	3.420	(0.925)	555046	73.1245	2520
\$ 20 Nitrobenzene-d5	82	4.062	4.062	(0.891)	273175	36.9081	1270
\$ 39 2-Fluorobiphenyl	172	5.303	5.302	(0.913)	513967	39.9373	1380
\$ 60 2,4,6-Tribromophenol	329	6.357	6.356	(1.094)	146720	94.1377	3250
\$ 81 p-Terphenyl-d14	244	7.742	7.741	(0.918)	538779	50.5495	1740

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
79 Pyrene		202	7.688	7.688	(0.912)	17090	0.87197	30.1(a)
76 Fluoranthene		202	7.549	7.549	(1.107)	22708	1.05735	36.5
89 Benzo(a)anthracene		228	8.427	8.426	(0.999)	10639	0.65890	22.7(a)
92 Chrysene		228	8.453	8.453	(1.003)	6809	0.44316	15.3(a)
95 Benzo(b)fluoranthene		252	9.341	9.341	(0.957)	9388	1.11763	38.6
97 Benzo(a)pyrene		252	9.700	9.699	(0.993)	3921	0.54768	18.9(a)

#### QC Flag Legend

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

## ION RATIO REPORT

## SV REPORT

Data file: s3c0528.d

Report Date: 03/07/2010 15:06

Lab. ID: 247562006

SampleType: SAMPLE

Injection Date: 05-MAR-2010 19:35

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562006|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	30601	3.43	3.49	80-120	100	(T)
93	2223	3.47	3.49	238-298	7	(Q)
-----						
17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	37660	4.06	3.94	80-120	100	(T)
42	27789	4.06	3.94	58-118	74	(T)
-----						
27 Benzoic acid		CAS#: 65-85-0				
105	448	4.40	4.34	80-120	100	( )
122	230	4.56	4.34	51-111	52	(T)
77	843	4.40	4.34	41-101	188	(QT)
-----						
43 Dimethylphthalate		CAS#: 131-11-3				
163	91328	5.81	5.58	80-120	100	(T)
164	502798	5.81	5.58	0- 40	551	(QT)
-----						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	65900	5.81	5.63	80-120	100	(T)
63	998	5.81	5.63	64-124	2	(QT)
-----						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	65900	5.81	5.93	80-120	100	(T)
89	1058	5.81	5.92	48-108	2	(QT)
63	998	5.81	5.92	25- 85	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
52 4-Nitrophenol		CAS#: 100-02-7				
139	174	5.96	5.86	80-120	100	(T)
109	561	5.93	5.86	41-101	321	(QT)
65	176	5.91	5.86	80-140	101	( )
<hr/>						
53 Fluorene		CAS#: 86-73-7				
166	8109	6.36	6.20	80-120	100	(T)
165	8116	6.36	6.20	62-122	100	(T)
167	2741	6.36	6.20	0- 44	34	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	440	6.36	6.21	80-120	100	(T)
105	1084	6.36	6.21	16- 76	246	(QT)
51	1058	6.36	6.21	52-112	240	(QT)
<hr/>						
61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	8970	6.36	6.51	80-120	100	(T)
141	66591	6.36	6.51	62-122	742	(QT)
250	17744	6.36	6.51	66-126	198	(QT)
<hr/>						
69 Anthracene		CAS#: 120-12-7				
178	13252	6.83	6.86	80-120	100	( )
179	2744	6.83	6.86	0- 45	21	( )
176	2415	6.83	6.86	0- 48	18	( )
<hr/>						
76 Fluoranthene		CAS#: 206-44-0				
202	22708	7.55	7.55	80-120	100	( )
203	3891	7.55	7.55	0- 47	17	( )
101	3151	7.55	7.55	0- 43	14	( )
<hr/>						
79 Pyrene		CAS#: 129-00-0				
202	17090	7.69	7.69	80-120	100	( )
200	3657	7.69	7.69	0- 51	21	( )
101	3408	7.68	7.69	0- 45	20	( )
<hr/>						
89 Benzo(a)anthracene		CAS#: 56-55-3				
228	10639	8.43	8.43	80-120	100	( )
226	2537	8.43	8.43	0- 57	24	( )
229	2549	8.43	8.43	0- 50	24	( )
<hr/>						
92 Chrysene		CAS#: 218-01-9				
228	6809	8.45	8.45	80-120	100	( )
229	1929	8.45	8.45	0- 50	28	( )
226	2619	8.45	8.45	0- 60	38	( )
<hr/>						
95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	9388	9.34	9.34	80-120	100	( )
253	1965	9.34	9.34	0- 52	21	( )
125	1206	9.34	9.34	0- 43	13	( )
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	9388	9.34	9.37	80-120	100	( )
253	1965	9.34	9.37	0- 52	21	( )
125	1206	9.34	9.37	0- 42	13	( )

-----						
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	3921	9.70	9.70	80-120	100	( )
253	816	9.70	9.70	0- 52	21	( )
125	543	9.70	9.70	0- 30	14	( )

-----

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0528.d  
Lab Smp Id: 247562006 Client Smp ID: RE15-10-8311  
Inj Date : 05-MAR-2010 19:35  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562006|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 27  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	3.67620	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.704	1482249	40.000
* 46 Acenaphthene-d10	5.811	2191626	40.000
* 91 Chrysene-d12	8.432	2382923	40.000
* 98 Perylene-d12	9.764	1026537	40.000

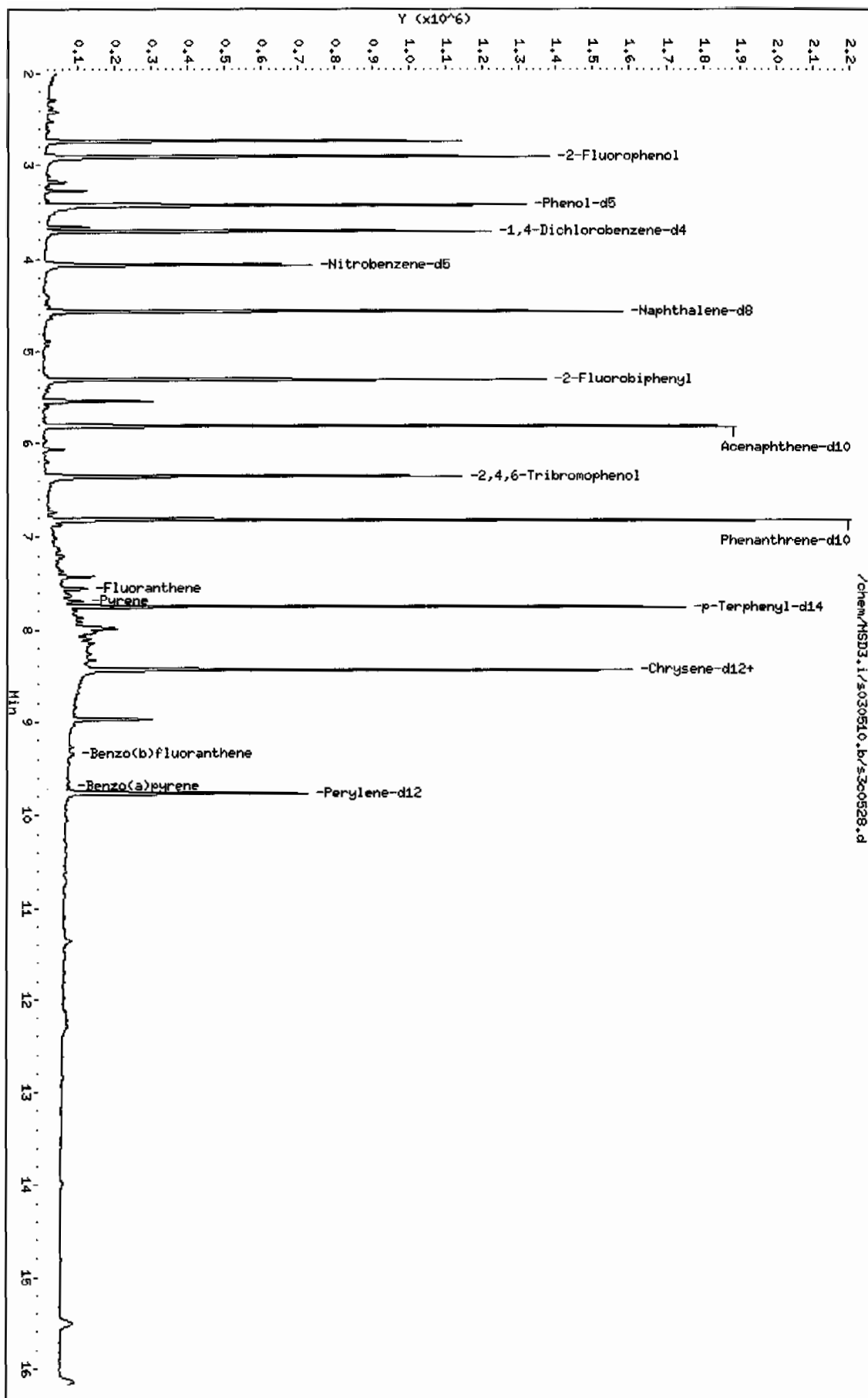
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====



RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.736	1284792	34.6714139	1200	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.538	324268	5.91831320	204	99	NIST05.L	60018	46
Unknown					CAS #:		
7.983	464782	7.80188242	269	0		0	91
Unknown					CAS #:		
8.095	257812	4.32766322	149	0		0	91
Unknown					CAS #:		
8.266	353225	5.92926407	204	0		0	91
Unknown					CAS #:		
8.325	308263	5.17454120	178	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.972	398263	6.68527687	231	93	NIST05.L	112655	91
Unknown					CAS #:		
15.503	147048	5.72987917	198	0		0	98
Unknown					CAS #:		
16.139	105071	4.09417663	141	0		0	98

Data File: /chem/HSD3.i/s030510.b/s300528.d  
 Date: 05-MAR-2010 19:35  
 Client ID: RE15-10-8311  
 Sample Info: 1247562006195667711.SMF11.LNL  
 Volume Injected (uL): 0.5  
 Column phase: JMN DB-SMS

Instrument: HSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.1

Sample Info: 1247562006196677111SVHF111LANL

Volume Injected (uL): 0.5

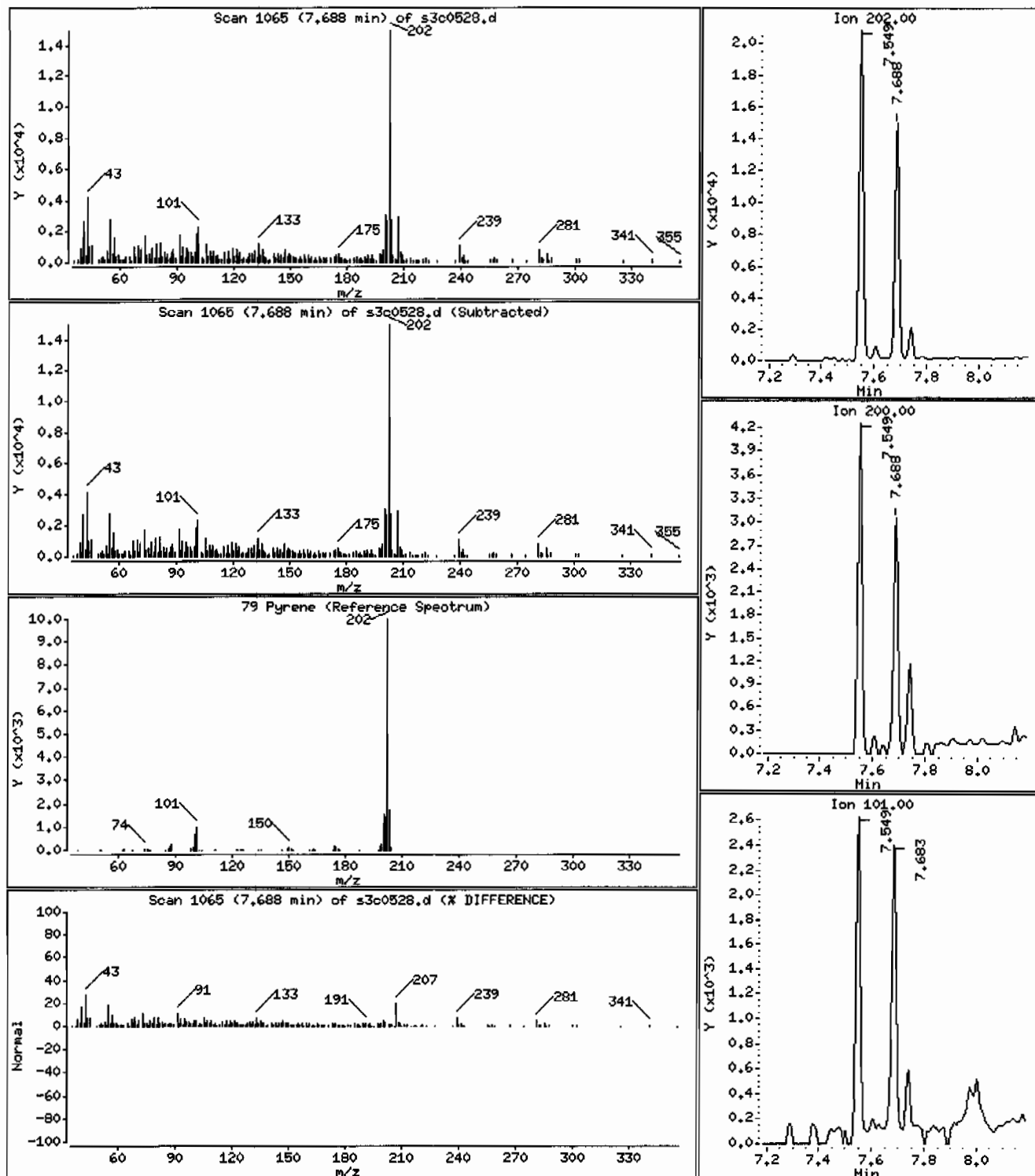
Operator: JLD1

Column phase: J&amp;W DB-SMS

Column diameter: 0.20

79 Pyrene

Concentration: 30.1 ug/Kg



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: HSD3.i

Sample Info: 1247562006195667711ISVMF11ILANL

Volume Injected (uL): 0.5

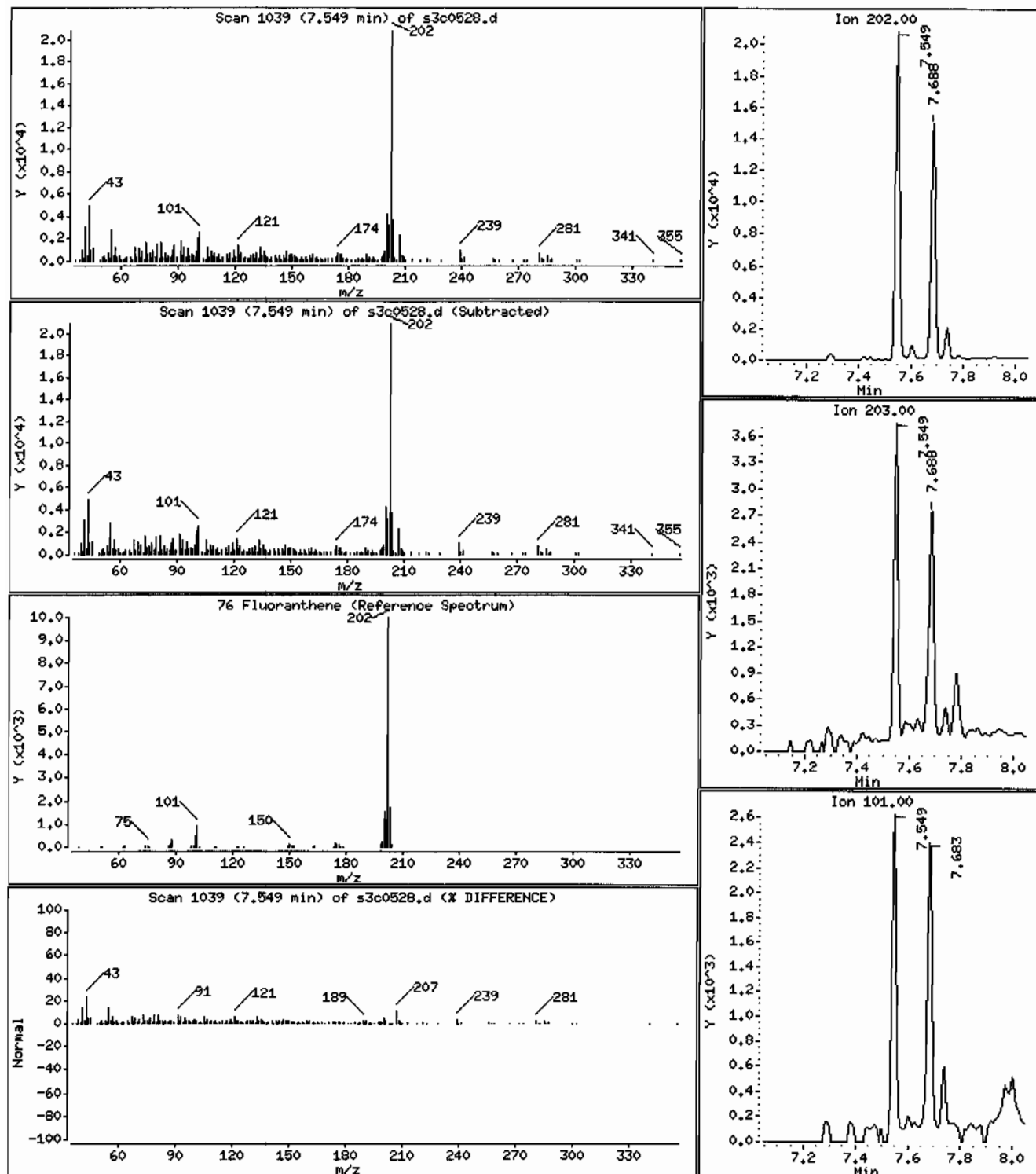
Operator: JLD1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 36.5 ug/Kg



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.1

Sample Info: 1247562006195667711ISVHF11ILANL

Volume Injected (uL): 0.5

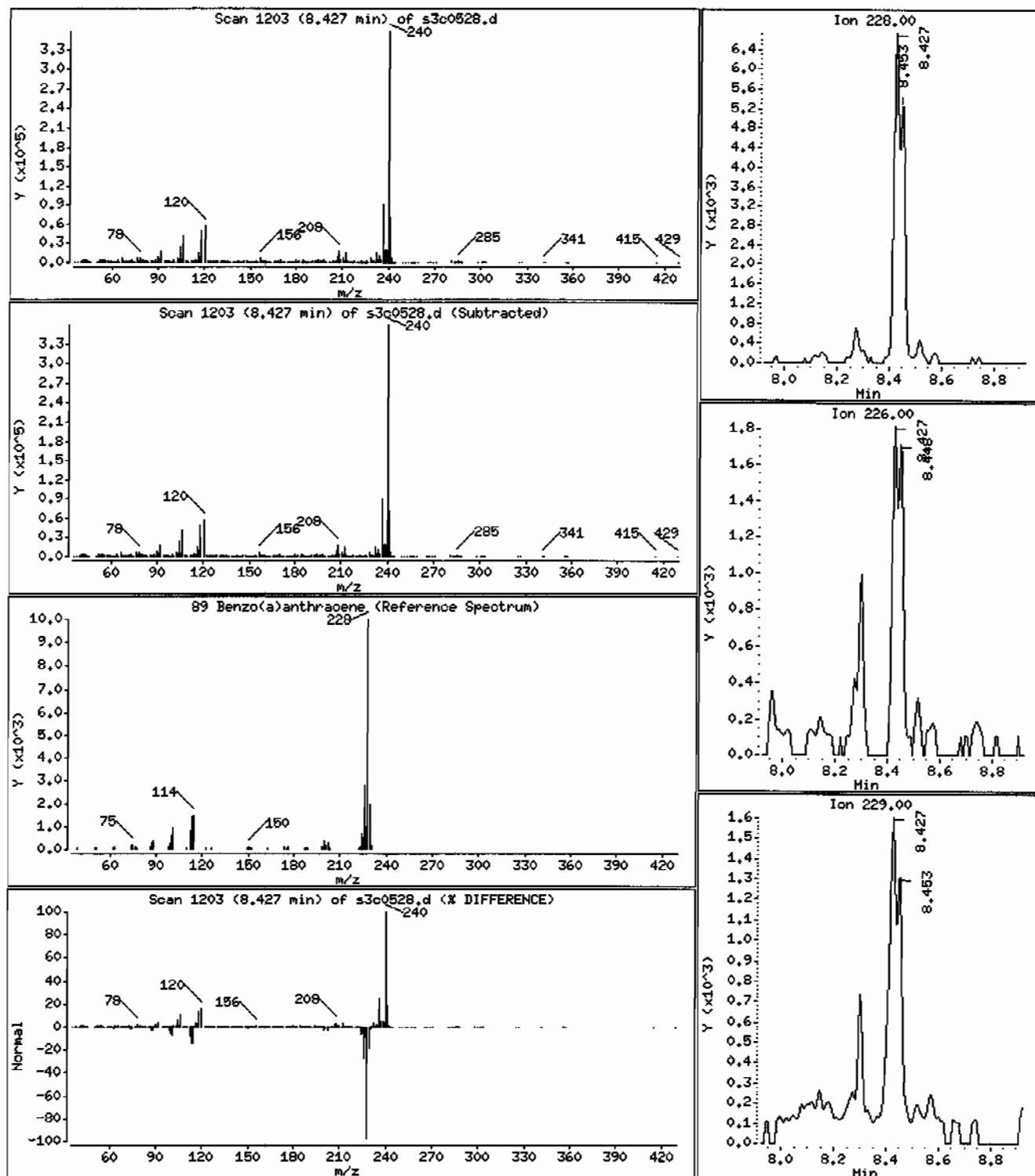
Operator: JLD1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 22.7 ug/Kg



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: HSD3.i

Sample Info: 1247562006195667711SVHF111LANL

Volume Injected (uL): 0.5

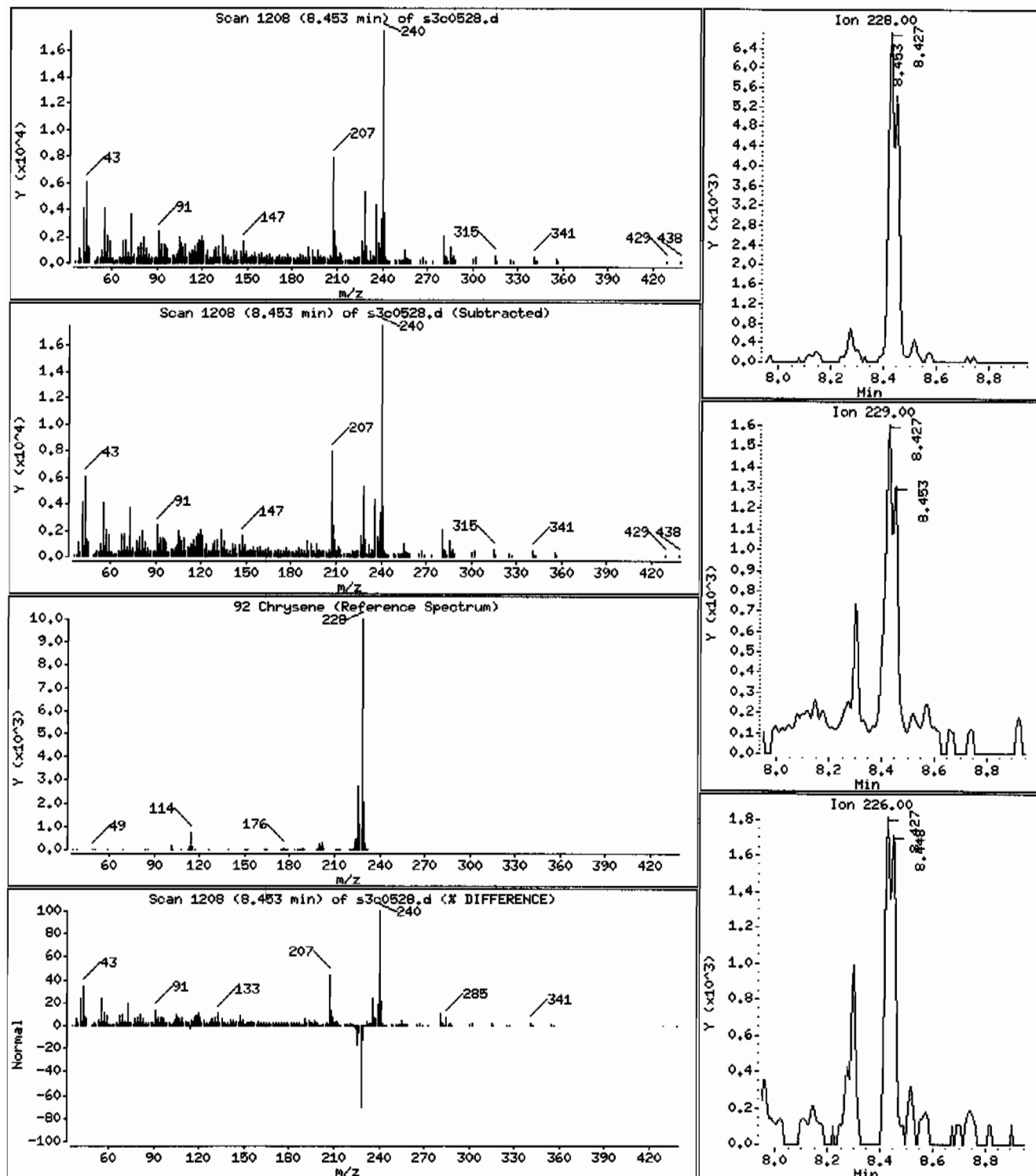
Operator: JLD1

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

Column diameter: 0.20

92 Chrysene

Concentration: 15.3 ug/Kg



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711|SVMF11|LANL

Volume Injected (uL): 0.5

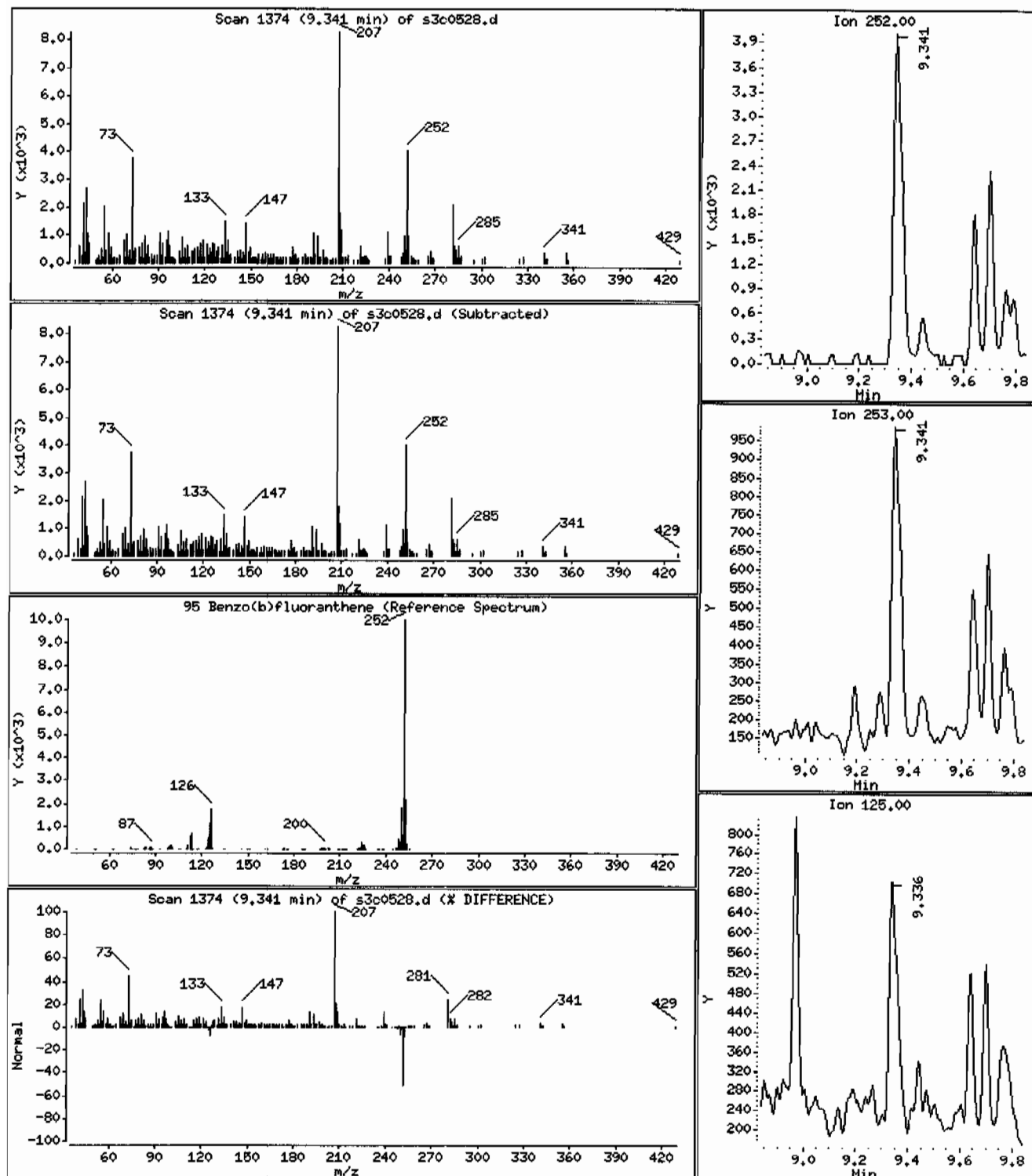
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 38,6 ug/Kg



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.1

Sample Info: 1247562006195667711SVHF11ILANL

Volume Injected (uL): 0.5

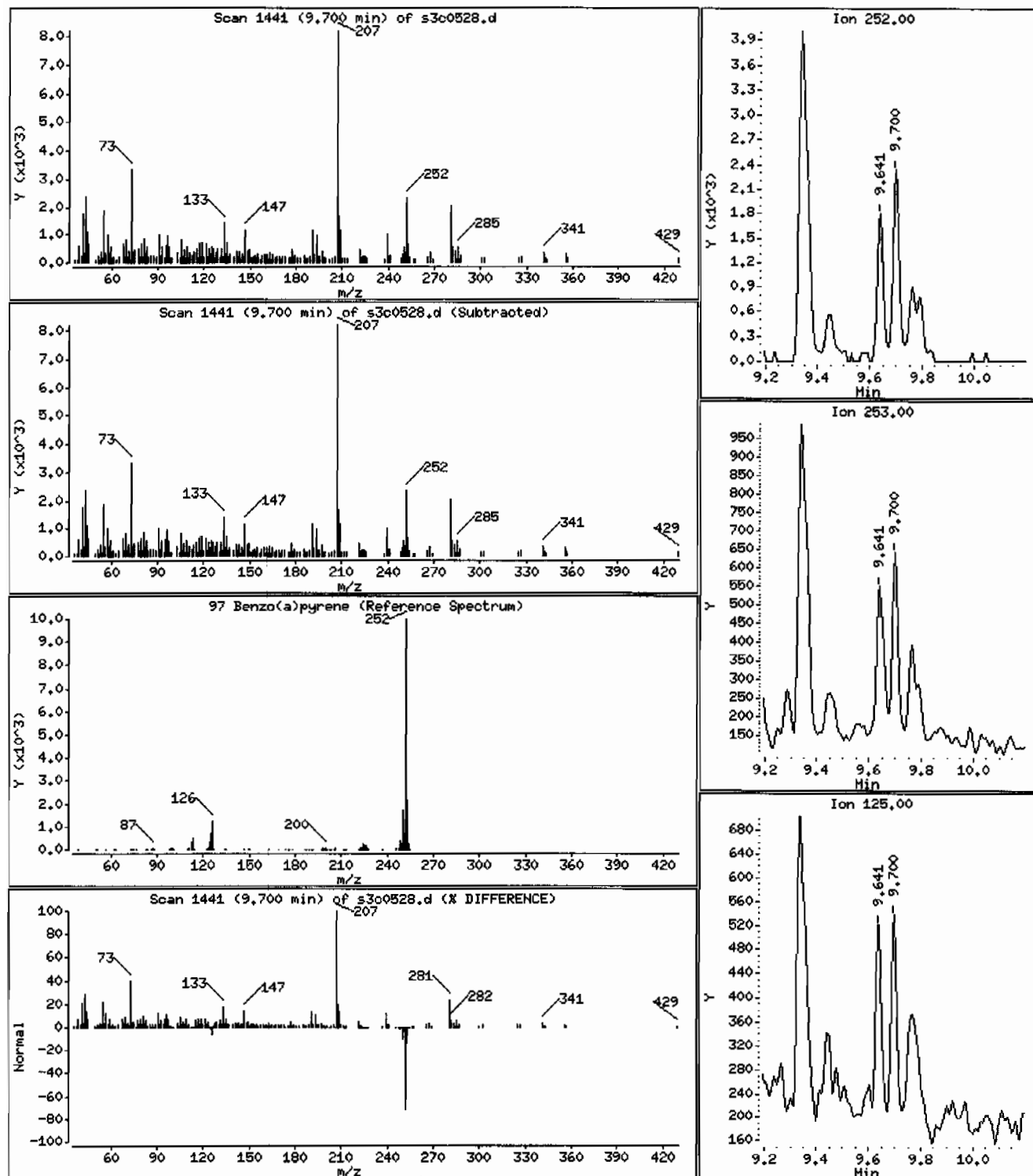
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 18.9 ug/Kg





Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: I247562006195667711SVHF111LANL

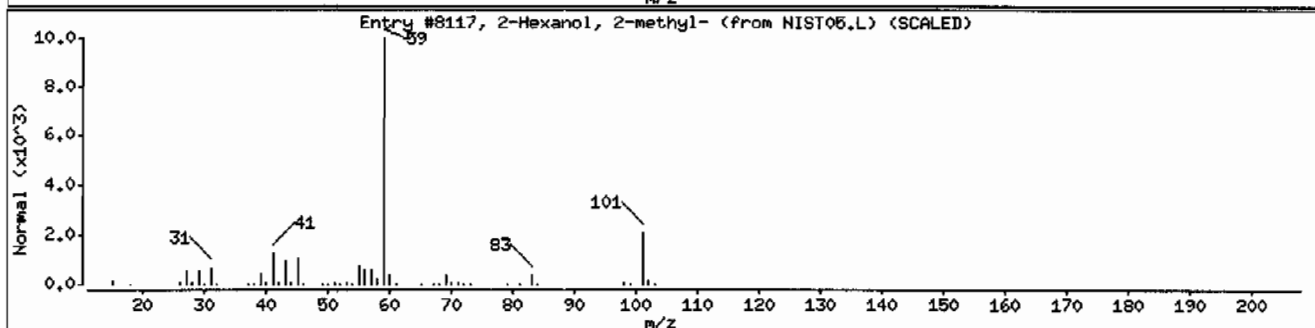
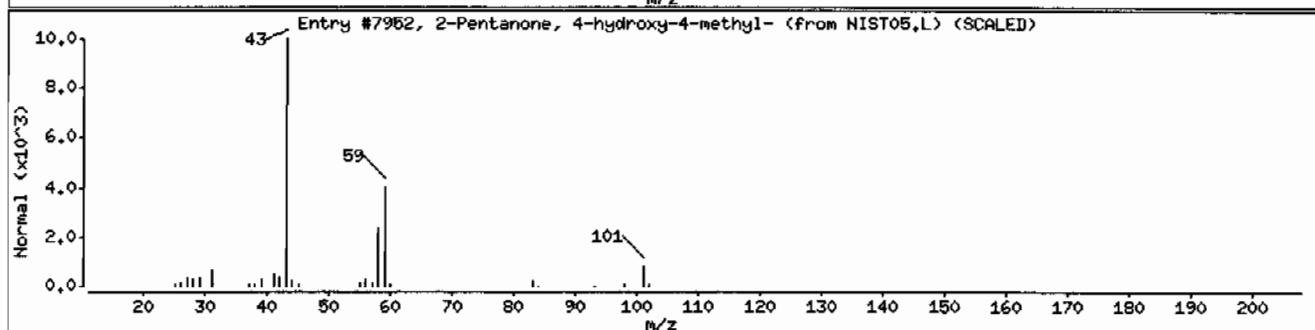
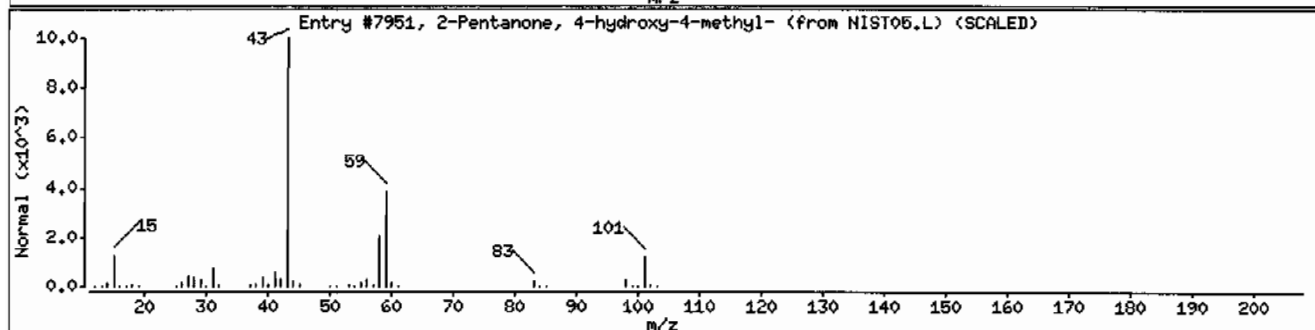
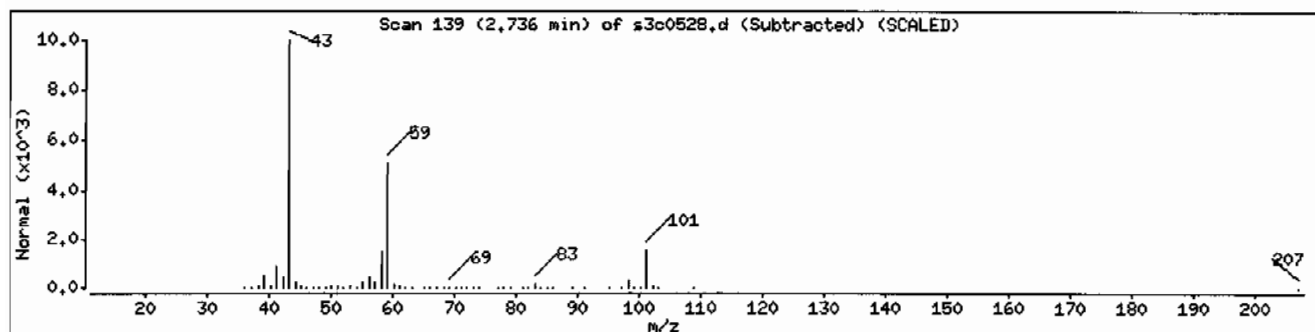
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	116
2-Hexanol, 2-methyl-	625-23-0	NIST05.L	8117	28	C <sub>7</sub> H <sub>16</sub> O	116



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHF11LANL

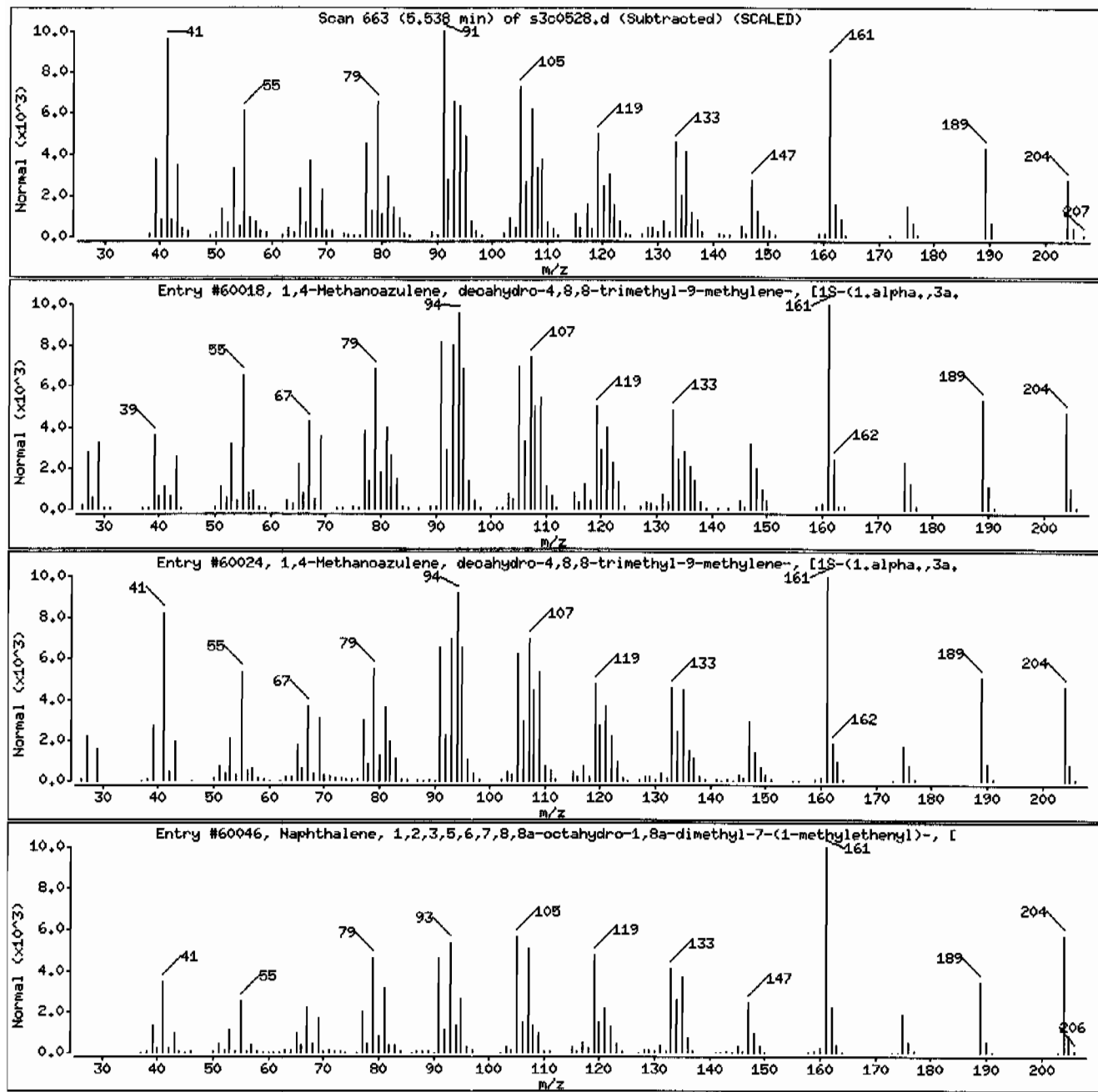
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	99	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	97	C15H24	204



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHF111LANL

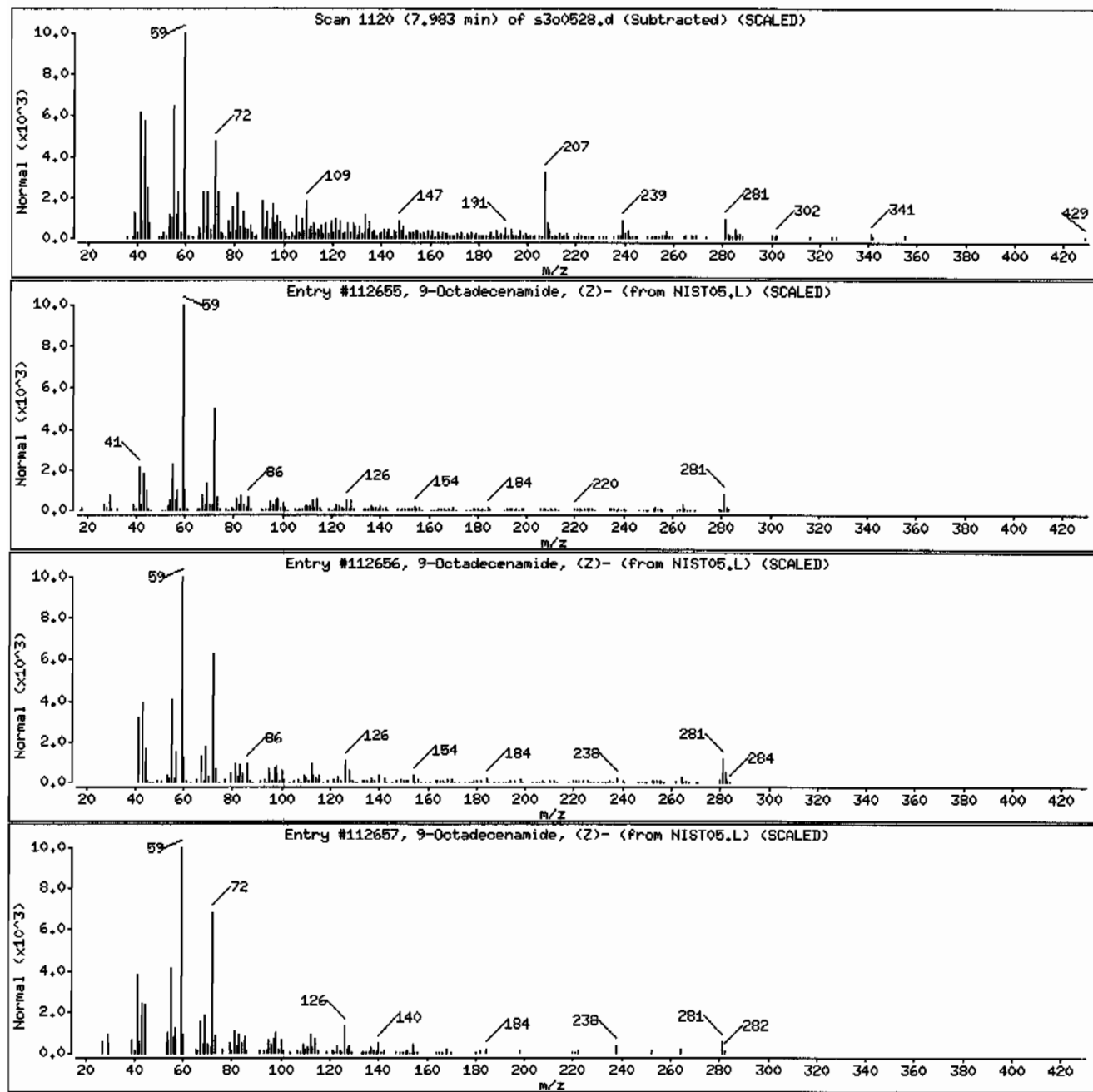
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	90	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	60	C18H35NO	281



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

## Library Search Compound Match

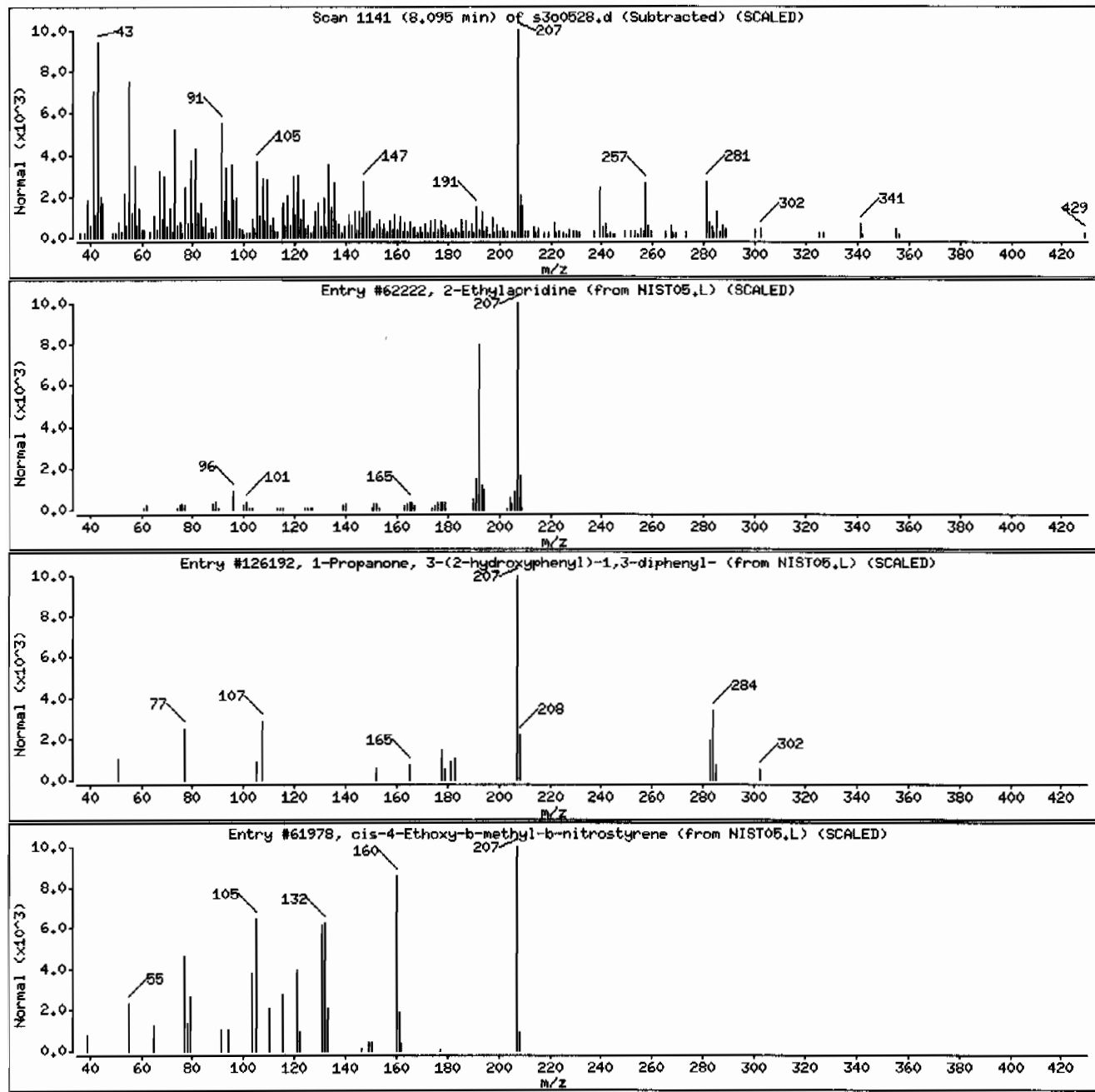
Unknown

2-Ethylacridine

CAS Number	Library	Entry	Quality	Formula	Weight
55751-83-2	NIST05.L	62222	38	C15H13N	207
4376-83-4	NIST05.L	126192	38	C21H18O2	302
1000120-36-6	NIST05.L	61978	35	C11H13NO3	207

1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip

cis-4-Ethoxy-b-methyl-b-nitrostyrene



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHF11ILANL

Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

## Library Search Compound Match

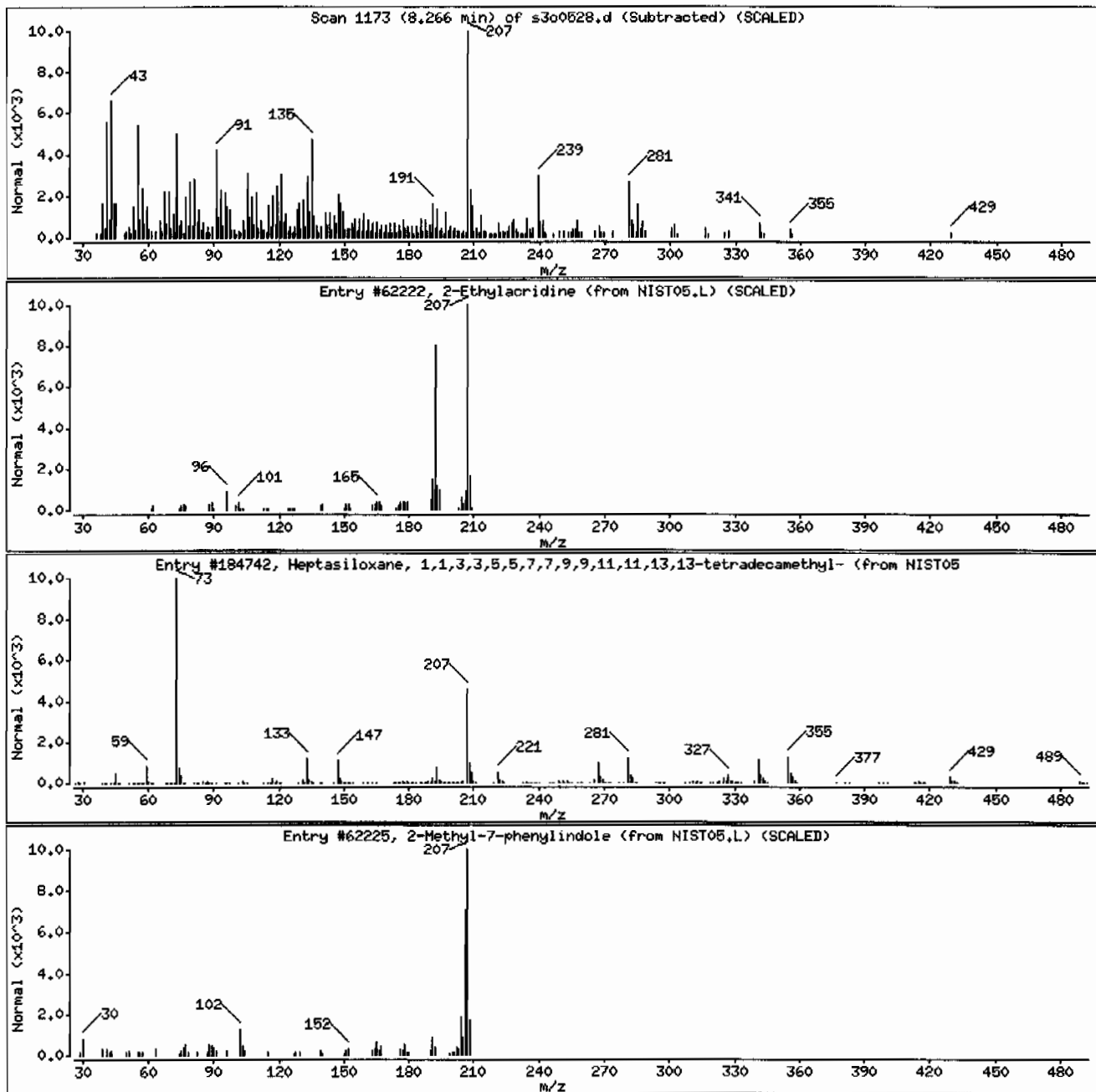
Unknown

2-Ethylacridine

CAS Number	Library	Entry	Quality	Formula	Weight
55751-83-2	NIST05.L	62222	47	C15H13N	207
19098-23-9	NIST05.L	184742	35	C14H44O6Si7	504
1140-08-5	NIST05.L	62225	30	C15H13N	207

Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11

2-Methyl-7-phenylindole



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHFI11LANL

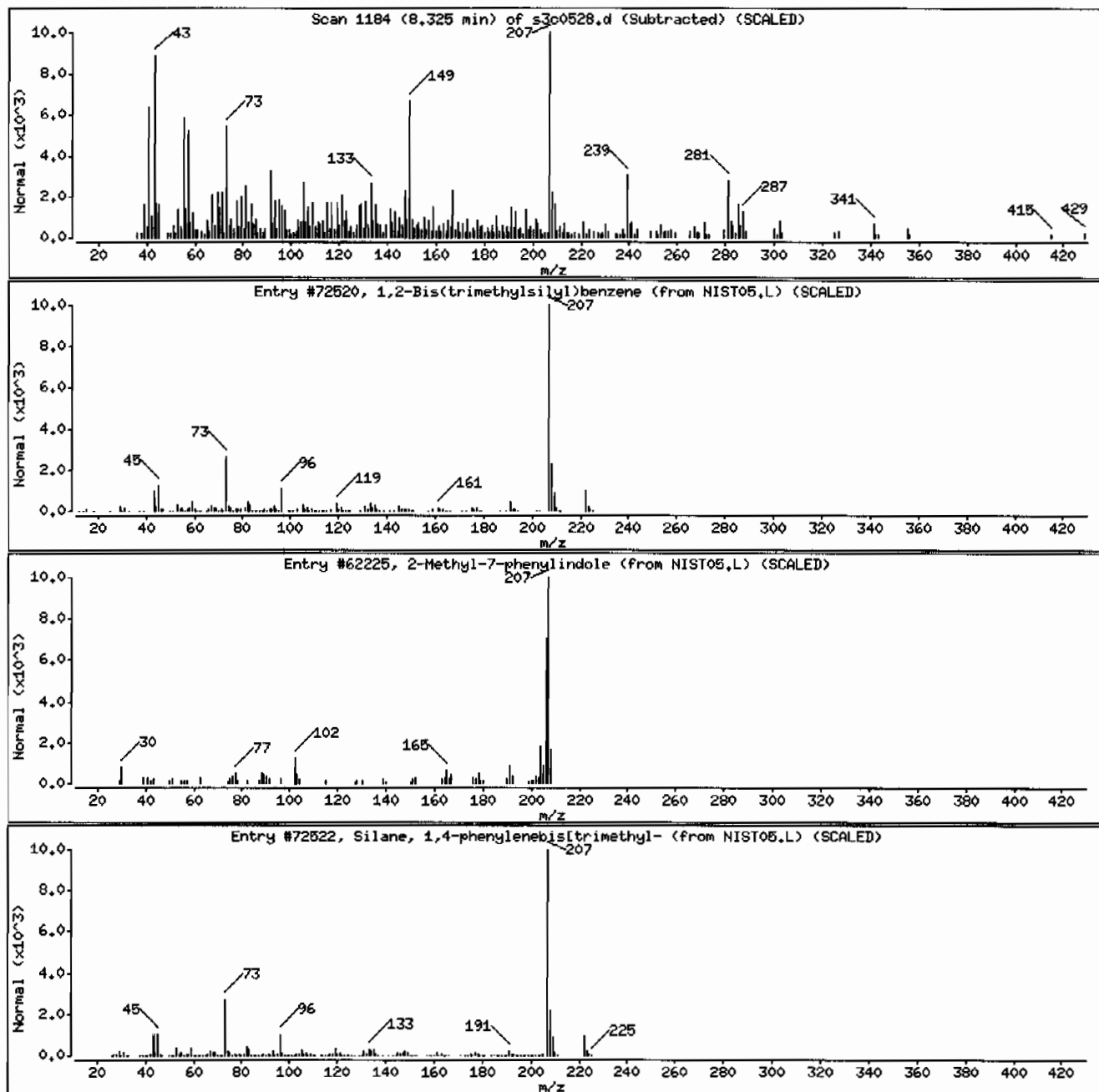
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	46	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	42	C <sub>15</sub> H <sub>13</sub> N	207
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	42	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHF111LANL

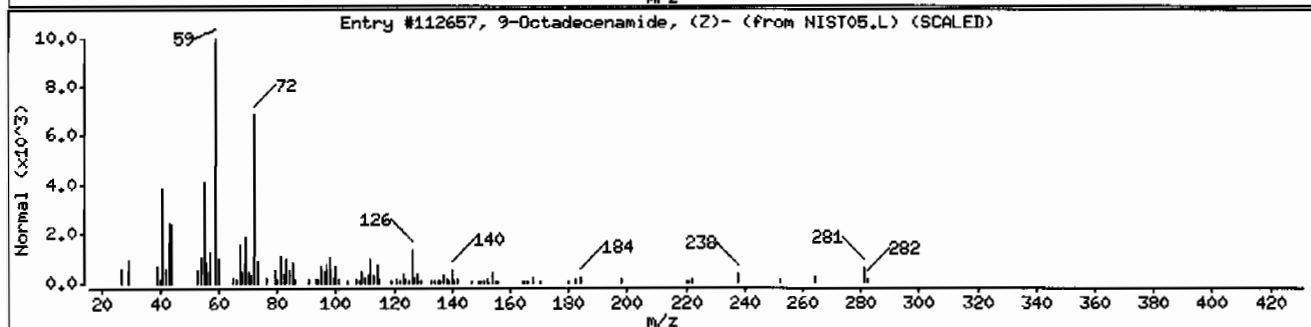
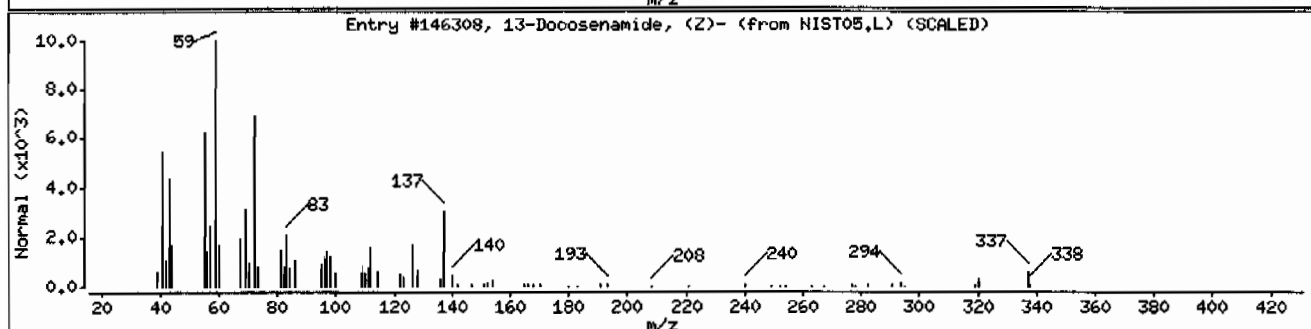
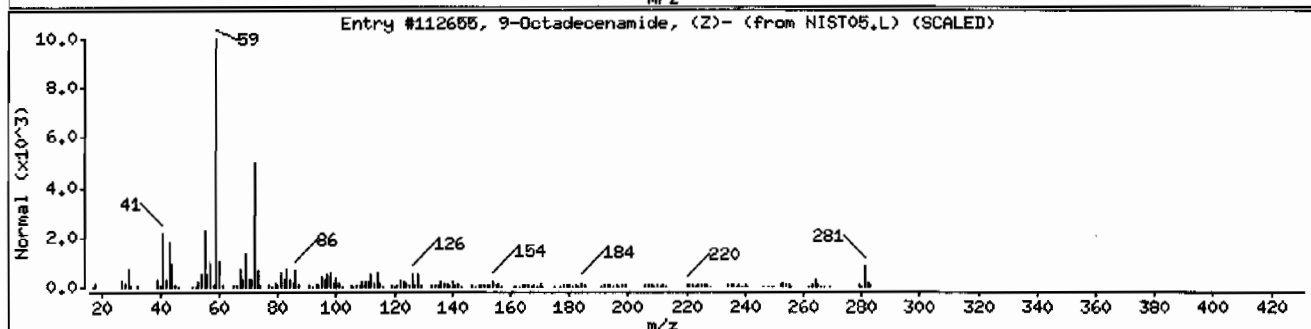
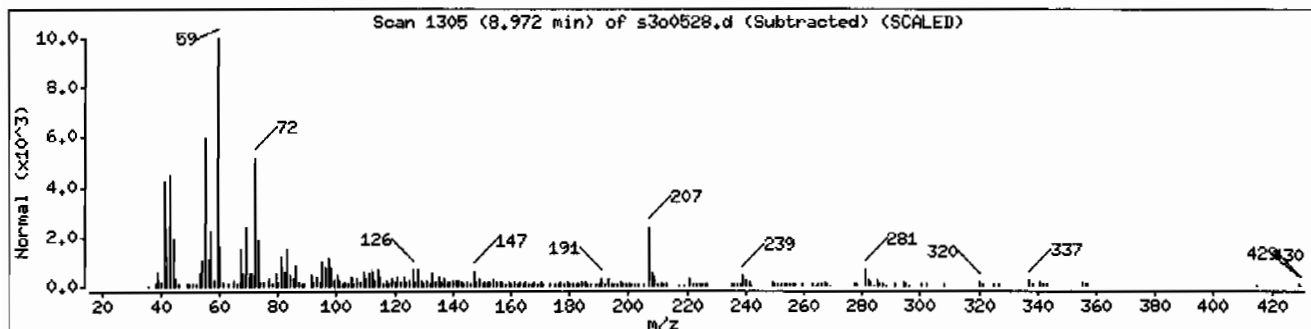
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	93	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	86	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	64	C18H35NO	281



Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHF11ILANL

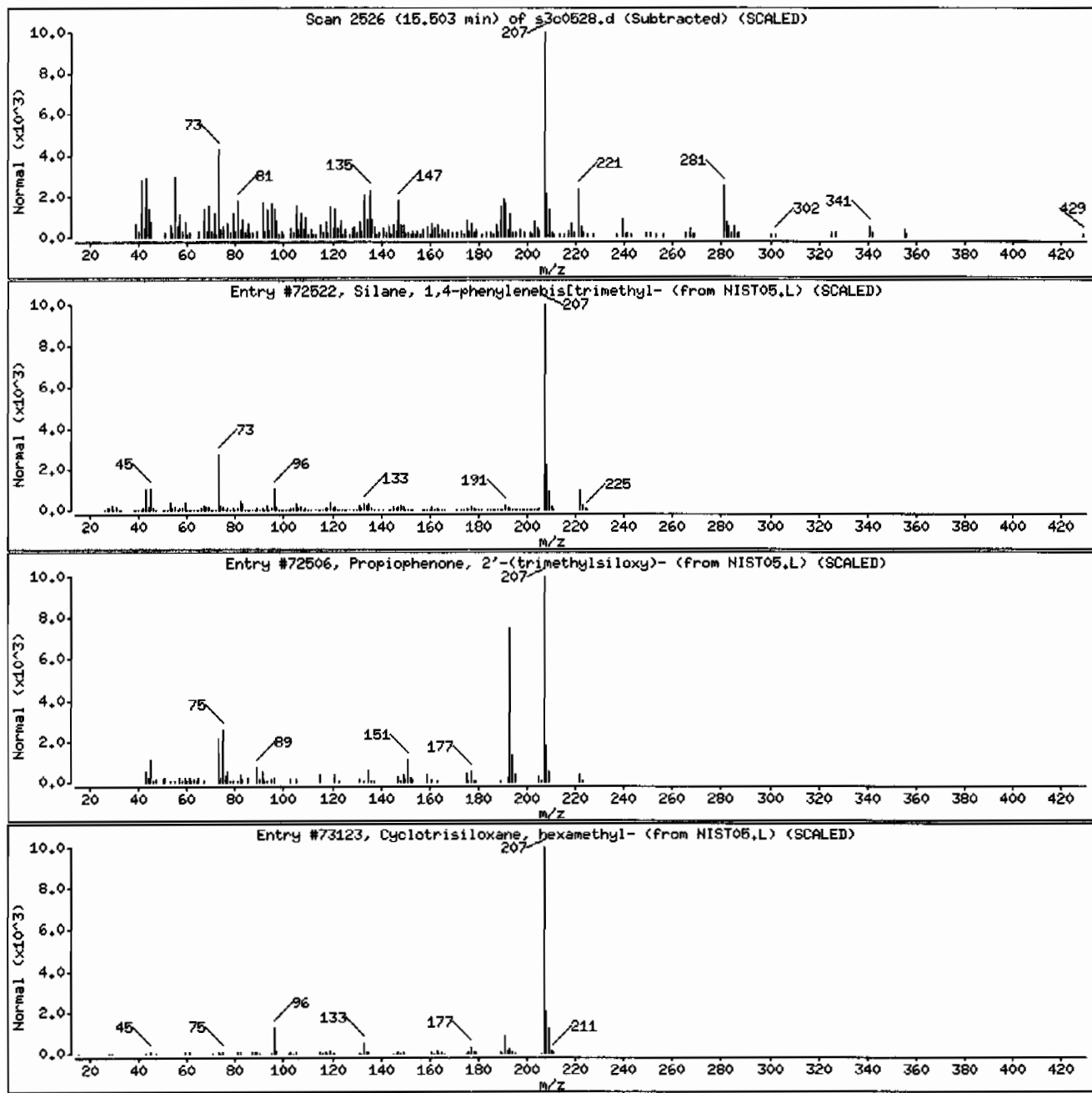
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	45	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
Propiophenone, 2'-(trimethylsiloxy)-	33342-87-9	NIST05.L	72506	43	C <sub>12</sub> H <sub>18</sub> O <sub>2</sub> Si	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	43	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222





Date : 05-MAR-2010 19:35

Client ID: RE15-10-8311

Instrument: MSD3.i

Sample Info: 1247562006195667711SVHF111LANL

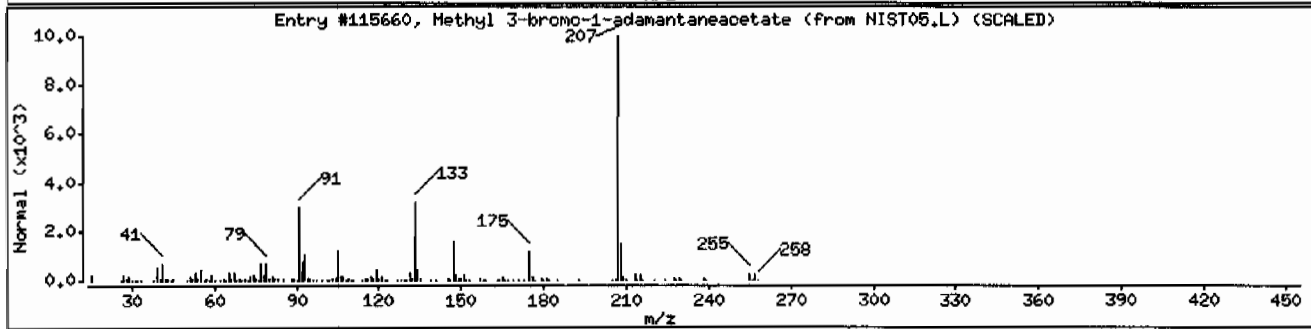
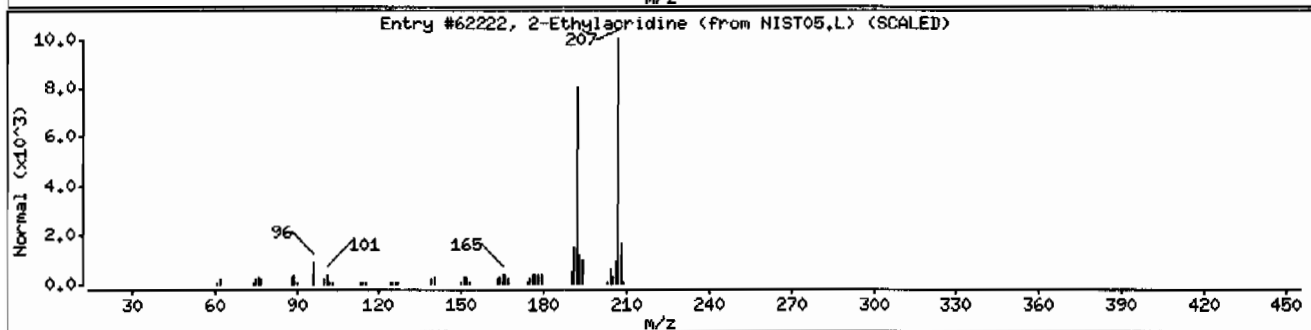
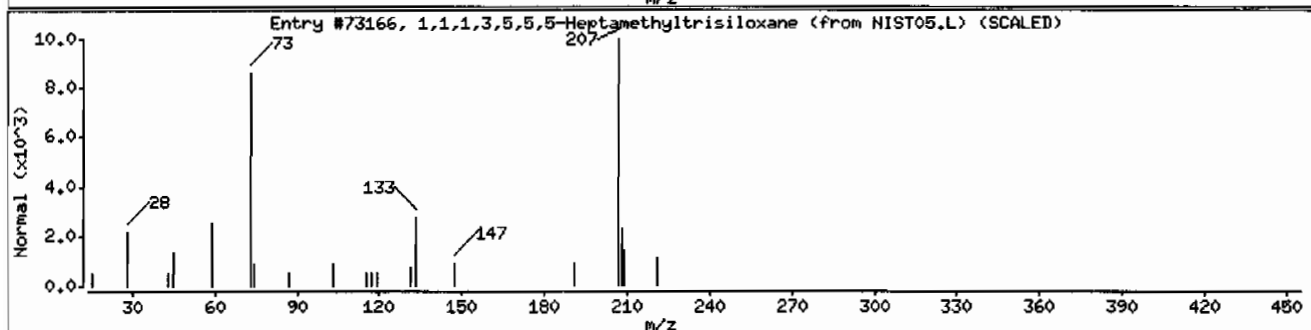
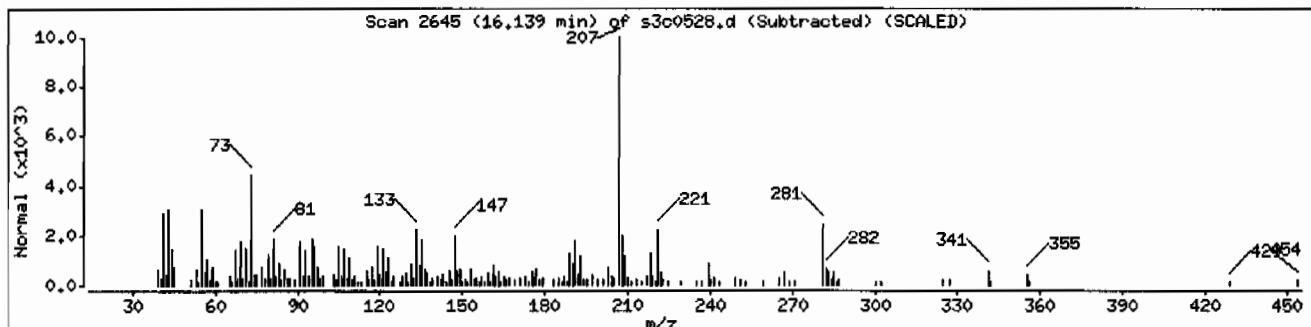
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	50	C7H22O2Si3	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	45	C15H13N	207
Methyl 3-bromo-1-adamantaneacetate	14575-01-0	NIST05.L	115660	43	C13H19BrO2	286



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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562004	Date Received: 02/20/2010 08:55	%Moisture: 5.2
Client ID: RE15-10-8312	Client: LANL010	Project: LANL01004
Batch ID: 956677	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 03/05/2010 18:49	Inst: MSD3.I	Dilution: 1
Prep Date: 02/23/2010 21:09	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3c0526.d	Aliquot: 30.16 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	350	ug/kg	69.9	350
108-95-2	Phenol	U	350	ug/kg	69.9	350
95-57-8	2-Chlorophenol	U	350	ug/kg	69.9	350
106-46-7	1,4-Dichlorobenzene	U	350	ug/kg	69.9	350
621-64-7	N-Nitrosodipropylamine	U	350	ug/kg	69.9	350
59-50-7	4-Chloro-3-methylphenol	U	350	ug/kg	69.9	350
83-32-9	Acenaphthene	U	35.0	ug/kg	11.5	35.0
121-14-2	2,4-Dinitrotoluene	U	350	ug/kg	35.0	350
100-02-7	4-Nitrophenol	U	350	ug/kg	115	350
87-86-5	Pentachlorophenol	U	350	ug/kg	87.4	350
129-00-0	Pyrene		286	ug/kg	10.5	35.0
110-86-1	Pyridine	U	350	ug/kg	69.9	350
62-53-3	Aniline	U	350	ug/kg	105	350
111-44-4	bis(2-Chloroethyl) ether	U	350	ug/kg	69.9	350
541-73-1	1,3-Dichlorobenzene	U	350	ug/kg	69.9	350
100-51-6	Benzyl alcohol	U	350	ug/kg	105	350
95-50-1	1,2-Dichlorobenzene	U	350	ug/kg	69.9	350
108-60-1	bis(2-Chloroisopropyl)ether	U	350	ug/kg	69.9	350
95-48-7	o-Cresol	U	350	ug/kg	69.9	350
65794-96-9	m,p-Cresols	U	350	ug/kg	105	350
67-72-1	Hexachloroethane	U	350	ug/kg	69.9	350
98-95-3	Nitrobenzene	U	350	ug/kg	69.9	350
78-59-1	Isophorone	U	350	ug/kg	69.9	350
88-75-5	2-Nitrophenol	U	350	ug/kg	69.9	350
105-67-9	2,4-Dimethylphenol	U	350	ug/kg	122	350
111-91-1	bis(2-Chloroethoxy)methane	U	350	ug/kg	69.9	350
120-83-2	2,4-Dichlorophenol	U	350	ug/kg	69.9	350
65-85-0	Benzoic acid	U	699	ug/kg	175	699
91-20-3	Naphthalene	U	35.0	ug/kg	10.5	35.0
106-47-8	4-Chloroaniline	U	350	ug/kg	69.9	350
87-68-3	Hexachlorobutadiene	U	350	ug/kg	69.9	350
91-57-6	2-Methylnaphthalene	U	35.0	ug/kg	6.99	35.0
77-47-4	Hexachlorocyclopentadiene	U	350	ug/kg	69.9	350
88-06-2	2,4,6-Trichlorophenol	U	350	ug/kg	69.9	350
95-95-4	2,4,5-Trichlorophenol	U	350	ug/kg	69.9	350
91-58-7	2-Chloronaphthalene	U	35.0	ug/kg	11.5	35.0
88-74-4	2-Nitroaniline	U	350	ug/kg	69.9	350
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	350	ug/kg	69.9	350

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562004	Date Received: 02/20/2010 08:55	%Moisture: 5.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8312	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 18:49	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.16 g	Final Volume: 1 mL
Data File: s3c0526.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	350	ug/kg	69.9	350
606-20-2	2,6-Dinitrotoluene	U	350	ug/kg	35.0	350
208-96-8	Acenaphthylene	J	22.0	ug/kg	10.5	35.0
51-28-5	2,4-Dinitrophenol	U	699	ug/kg	133	699
132-64-9	Dibenzofuran	U	350	ug/kg	69.9	350
84-66-2	Diethylphthalate	U	350	ug/kg	69.9	350
86-73-7	Fluorene	J	24.3	ug/kg	10.5	35.0
7005-72-3	4-Chlorophenylphenylether	U	350	ug/kg	69.9	350
534-52-1	2-Methyl-4,6-dinitrophenol	U	350	ug/kg	69.9	350
100-01-6	4-Nitroaniline	U	350	ug/kg	105	350
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	350	ug/kg	69.9	350
122-66-7	Azobenzene	U	350	ug/kg	69.9	350
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	350	ug/kg	69.9	350
118-74-1	Hexachlorobenzene	U	350	ug/kg	69.9	350
85-01-8	Phenanthrene		238	ug/kg	10.5	35.0
120-12-7	Anthracene		47.5	ug/kg	6.99	35.0
84-74-2	Di-n-butylphthalate	U	350	ug/kg	69.9	350
206-44-0	Fluoranthene		368	ug/kg	10.5	35.0
85-68-7	Butylbenzylphthalate	U	350	ug/kg	69.9	350
56-55-3	Benzo(a)anthracene		133	ug/kg	10.5	35.0
91-94-1	3,3'-Dichlorobenzidine	U	350	ug/kg	105	350
218-01-9	Chrysene		154	ug/kg	10.5	35.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	350	ug/kg	69.9	350
117-84-0	Di-n-octylphthalate	U	350	ug/kg	69.9	350
205-99-2	Benzo(b)fluoranthene		269	ug/kg	10.5	35.0
207-08-9	Benzo(k)fluoranthene	U	35.0	ug/kg	10.5	35.0
50-32-8	Benzo(a)pyrene		134	ug/kg	10.5	35.0
193-39-5	Indeno(1,2,3-cd)pyrene		56.7	ug/kg	10.5	35.0
53-70-3	Dibenzo(a,h)anthracene	U	35.0	ug/kg	10.5	35.0
191-24-2	Benzo(ghi)perylene		57.1	ug/kg	10.5	35.0
120-82-1	1,2,4-Trichlorobenzene	U	350	ug/kg	69.9	350

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	2260	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.27	360	ug/kg	98	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562004

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.16 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

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

Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.66	318	ug/kg	97	NJ
832-64-4	Phenanthrene, 4-methyl-	7.14	189	ug/kg	97	NJ
1000152-38-2	Pentacyclo[9.1.0.0(2,4).0(5,7).0(8,10)]d	7.43	351	ug/kg	70	NJ
	Unknown	7.8	290	ug/kg		J
2381-21-7	Pyrene, 1-methyl-	7.87	333	ug/kg	92	NJ
243-17-4	11H-Benzo[b]fluorene	7.91	291	ug/kg	91	NJ
	Unknown	7.97	512	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	165	ug/kg	99	NJ
	Unknown	8.04	209	ug/kg		J
	Unknown	8.09	433	ug/kg		J
	Unknown	8.14	259	ug/kg		J
	Unknown	8.18	260	ug/kg		J
	Unknown	8.26	603	ug/kg		J
	Unknown	8.29	200	ug/kg		J
	Unknown	8.33	324	ug/kg		J
	Unknown	8.4	320	ug/kg		J
	Unknown	8.51	159	ug/kg		J
	Unknown	8.57	151	ug/kg		J
	Unknown	8.6	242	ug/kg		J
	Unknown	8.68	160	ug/kg		J
	Unknown	8.76	180	ug/kg		J
	Unknown	8.85	299	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	317	ug/kg	89	NJ
	Unknown	9.1	372	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0526.d  
Lab Smp Id: 247562004 Client Smp ID: RE15-10-8312  
Inj Date : 05-MAR-2010 18:49  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562004|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 25  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.16000	weight of sample
M	5.15630	% 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	3.704	3.703	(1.000)	251190	40.0000	
* 29 Naphthalene-d8		136	4.560	4.564	(1.000)	1001347	40.0000	
* 46 Acenaphthene-d10		164	5.811	5.811	(1.000)	581474	40.0000	
* 67 Phenanthrene-d10		188	6.817	6.816	(1.000)	1009592	40.0000	
* 91 Chrysene-d12		240	8.437	8.437	(1.000)	707791	40.0000	
* 98 Perylene-d12		264	9.764	9.763	(1.000)	406827	40.0000	
\$ 3 2-Fluorophenol		112	2.902	2.896	(0.783)	407563	58.7750	2050
\$ 5 Phenol-d5		99	3.426	3.420	(0.925)	536582	60.6638	2120
\$ 20 Nitrobenzene-d5		82	4.062	4.062	(0.891)	261611	30.4905	1060
\$ 39 2-Fluorobiphenyl		172	5.303	5.302	(0.913)	506736	33.8432	1180
\$ 60 2,4,6-Tribromophenol		329	6.357	6.356	(1.094)	121876	67.2109	2350
\$ 81 p-Terphenyl-d14		244	7.742	7.741	(0.918)	534274	44.2278	1550

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	7.689	7.688	(0.911)	181857	8.18677	286
45 Acenaphthylene	152	5.710	5.714	(0.982)	14069	0.62847	22.0(a)
53 Fluorene	166	6.191	6.196	(1.065)	12058	0.69601	24.3(a)
68 Phenanthrene	178	6.833	6.832	(1.002)	181716	6.80518	238
69 Anthracene	178	6.865	6.864	(1.007)	34524	1.35906	47.5
76 Fluoranthene	202	7.550	7.549	(1.107)	250607	10.5233	368
89 Benzo(a)anthracene	228	8.427	8.426	(0.999)	69873	3.81816	133
92 Chrysene	228	8.453	8.453	(1.002)	76919	4.41709	154
95 Benzo(b)fluoranthene	252	9.341	9.341	(0.957)	71405	7.68977	269
97 Benzo(a)pyrene	252	9.700	9.699	(0.993)	30422	3.84395	134
99 Indeno(1,2,3-cd)pyrene	276	11.235	11.239	(1.151)	11317	1.62304	56.7
101 Benzo(ghi)perylene	276	11.695	11.694	(1.198)	9508	1.63465	57.1

#### QC Flag Legend

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

## ION RATIO REPORT

## SV REPORT

Data file: s3c0526.d

Report Date: 03/07/2010 15:05

Lab. ID: 247562004

SampleType: SAMPLE

Injection Date: 05-MAR-2010 18:49

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562004|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	29165	3.43	3.49	80-120	100	(T)
93	11813	3.47	3.49	238-298	41	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	37162	4.06	3.94	80-120	100	(T)
42	27049	4.06	3.94	58-118	73	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	705	4.44	4.34	80-120	100	(T)
122	381	4.43	4.34	51-111	54	(T)
77	2322	4.43	4.34	41-101	329	(QT)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	11612	5.54	5.41	80-120	100	(T)
164	689	5.54	5.41	3- 63	6	(T)
127	1138	5.54	5.41	11- 71	10	(QT)
-----						
42	o-Nitroaniline		CAS#: 88-74-4			
65	16594	5.54	5.47	80-120	100	(T)
92	18563	5.54	5.47	32- 92	112	(QT)
138	1380	5.54	5.47	67-127	8	(QT)
-----						
43	Dimethylphthalate		CAS#: 131-11-3			
163	103793	5.81	5.58	80-120	100	(T)
164	583520	5.81	5.58	0- 40	562	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	74660	5.81	5.63	80-120	100	(T)
63	1094	5.81	5.63	64-124	1	(QT)
<hr/>						
45	Acenaphthylene			CAS#: 208-96-8		
152	14069	5.71	5.71	80-120	100	( )
151	3268	5.71	5.71	0- 50	23	( )
153	2301	5.71	5.71	0- 44	16	( )
<hr/>						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	74660	5.81	5.93	80-120	100	(T)
89	1106	5.81	5.92	48-108	1	(QT)
63	1072	5.81	5.92	25- 85	1	(QT)
<hr/>						
52	4-Nitrophenol			CAS#: 100-02-7		
139	3015	5.96	5.86	80-120	100	(T)
109	310	5.96	5.86	41-101	10	(QT)
65	156	5.87	5.86	80-140	5	(Q)
<hr/>						
53	Fluorene			CAS#: 86-73-7		
166	12058	6.19	6.20	80-120	100	( )
165	10980	6.19	6.20	62-122	91	( )
167	2090	6.19	6.20	0- 44	17	( )
<hr/>						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	390	6.36	6.21	80-120	100	(T)
105	1048	6.36	6.21	16- 76	268	(QT)
51	1034	6.36	6.21	52-112	265	(QT)
<hr/>						
68	Phenanthrene			CAS#: 85-01-8		
178	181716	6.83	6.83	80-120	100	( )
179	29197	6.83	6.83	0- 45	16	( )
176	34244	6.83	6.83	0- 49	19	( )
<hr/>						
69	Anthracene			CAS#: 120-12-7		
178	34524	6.86	6.86	80-120	100	( )
179	7982	6.86	6.86	0- 45	23	( )
176	5862	6.86	6.86	0- 48	17	( )
<hr/>						
76	Fluoranthene			CAS#: 206-44-0		
202	250607	7.55	7.55	80-120	100	( )
203	42783	7.55	7.55	0- 47	17	( )
101	32867	7.55	7.55	0- 43	13	( )
<hr/>						
79	Pyrene			CAS#: 129-00-0		
202	181857	7.69	7.69	80-120	100	( )
200	37372	7.69	7.69	0- 51	21	( )
101	27818	7.68	7.69	0- 45	15	( )
<hr/>						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	69873	8.43	8.43	80-120	100	( )
226	20377	8.43	8.43	0- 57	29	( )
229	22193	8.43	8.43	0- 50	32	( )
-----						
92 Chrysene				CAS#: 218-01-9		
228	76919	8.45	8.45	80-120	100	( )
229	18386	8.45	8.45	0- 50	24	( )
226	23970	8.45	8.45	0- 60	31	( )
-----						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	71405	9.34	9.34	80-120	100	( )
253	16302	9.34	9.34	0- 52	23	( )
125	9759	9.34	9.34	0- 43	14	( )
-----						
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	71405	9.34	9.37	80-120	100	( )
253	16666	9.34	9.37	0- 52	23	( )
125	9759	9.34	9.37	0- 42	14	( )
-----						
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	30422	9.70	9.70	80-120	100	( )
253	7015	9.70	9.70	0- 52	23	( )
125	4166	9.70	9.70	0- 30	14	( )
-----						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	11317	11.23	11.24	80-120	100	( )
138	3047	11.23	11.24	4- 64	27	( )
-----						
100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	2734	11.23	11.24	80-120	100	( )
139	726	11.23	11.24	0- 30	27	( )
-----						
101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	9508	11.69	11.69	80-120	100	( )
138	2522	11.69	11.69	0- 30	27	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0526.d  
Lab Smp Id: 247562004 Client Smp ID: RE15-10-8312  
Inj Date : 05-MAR-2010 18:49  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562004|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270 S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 25  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.16000	weight of sample
M	5.15630	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.704	1683418	40.000
* 67 Phenanthrene-d10	6.817	3177439	40.000
* 91 Chrysene-d12	8.437	3834321	40.000
* 98 Perylene-d12	9.764	1243394	40.000

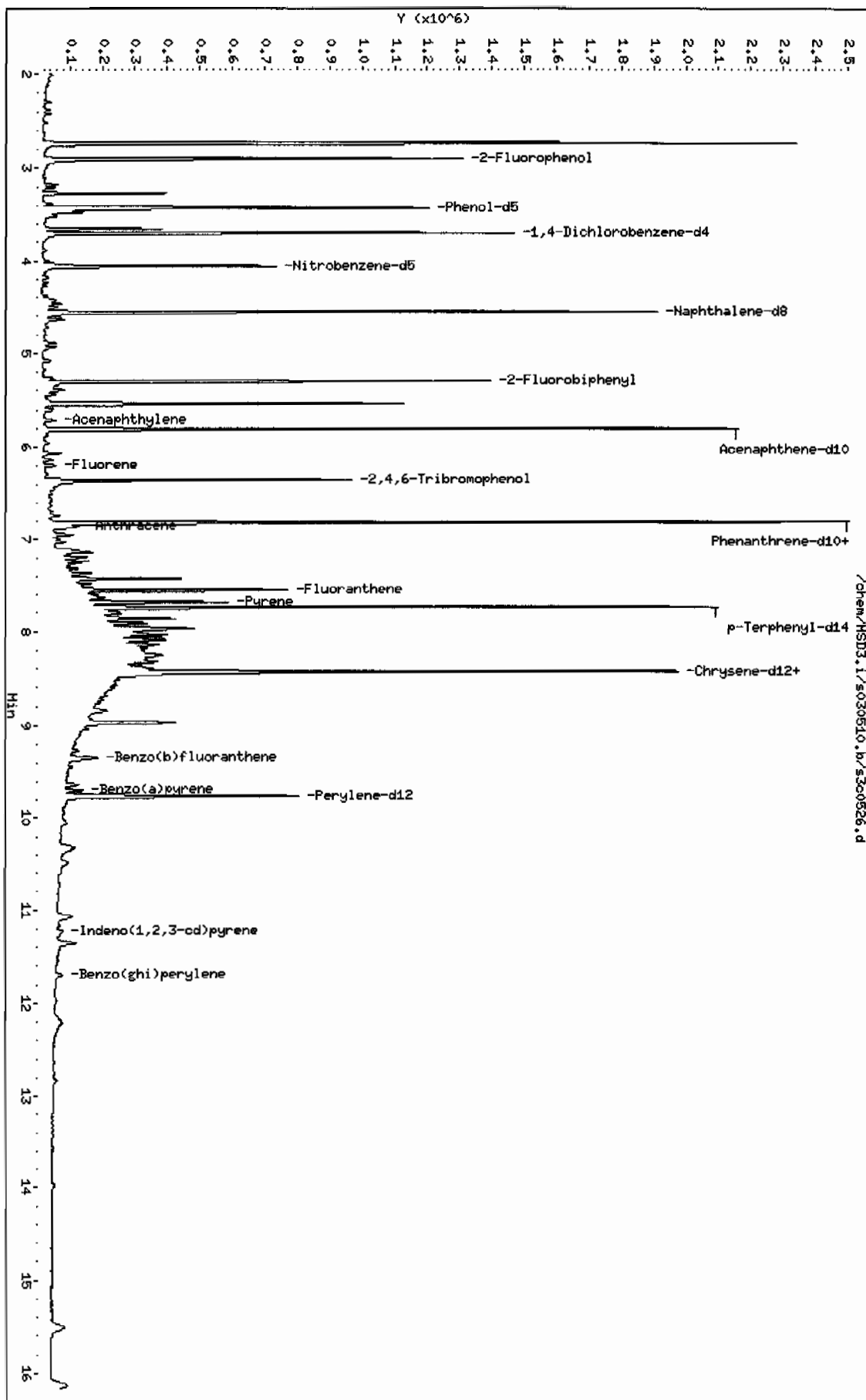
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS				QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:			
2.741	2720580	64.6441786	2260	0		0	10
1R-.alpha.-Pinene				CAS #: 7785-70-8			
3.271	432947	10.2873372	360	98	NIST05.L	15188	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy				CAS #: 498-15-7			
3.656	382248	9.08267071	318	97	NIST05.L	15369	10
Phenanthrene, 4-methyl-				CAS #: 832-64-4			
7.138	429987	5.41300073	189	97	NIST05.L	51413	67
Pentacyclo[9.1.0.0(2,4).0(5,7).0(8,10)]d				CAS #: 1000152-38-2			
7.427	797953	10.0452299	351	70	NIST05.L	107099	67
Unknown				CAS #:			
7.801	794813	8.29156403	290	0		0	91
Pyrene, 1-methyl-				CAS #: 2381-21-7			
7.865	914239	9.53742901	333	92	NIST05.L	68688	91
11H-Benzo[b]fluorene				CAS #: 243-17-4			
7.908	796769	8.31196756	290	91	NIST05.L	68695	91
Unknown				CAS #:			
7.967	1405171	14.6588723	512	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4				CAS #: 1235-74-1			
8.020	453462	4.73056078	165	99	NIST05.L	133618	91
Unknown				CAS #:			
8.042	573797	5.98590548	209	0		0	91
Unknown				CAS #:			
8.090	1186194	12.3744838	433	0		0	91
Unknown				CAS #:			
8.143	708981	7.39615988	258	0		0	91
Unknown				CAS #:			
8.181	714021	7.44873119	260	0		0	91
Unknown				CAS #:			
8.256	1652108	17.2349467	602	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
8.293	548729	5.72439529	200	0		0	91
Unknown				CAS #:			
8.325	887087	9.25417547	324	0		0	91
Unknown				CAS #:			
8.400	877238	9.15142598	320	0		0	91
Unknown				CAS #:			
8.512	435609	4.54431282	159	0		0	91
Unknown				CAS #:			
8.571	412808	4.30645082	150	0		0	91
Unknown				CAS #:			
8.603	663619	6.92293931	242	0		0	91
Unknown				CAS #:			
8.683	438009	4.56935593	160	0		0	91
Unknown				CAS #:			
8.764	494875	5.16258108	180	0		0	91
Unknown				CAS #:			
8.849	819567	8.54979676	299	0		0	91
9-Octadecenamide, (Z)-				CAS #: 301-02-0			
8.972	868059	9.05567496	316	89	NIST05.L	112656	91
Unknown				CAS #:			
9.101	330967	10.6471977	372	0		0	98

Data File: /chem/HSD3.1/s030510.b/s300526.d  
 Date : 05-MAR-2010 18:49  
 Client ID: RELB-10-8312  
 Sample Info: 124756200419667711|SVHF11|LANL  
 Volume Injected (uL): 0.5  
 Column phase: J&H DB-5MS

Instrument: HSD3.1  
 Operator: JLD1  
 Column diameter: 0.20



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF111LANL

Volume Injected (uL): 0.5

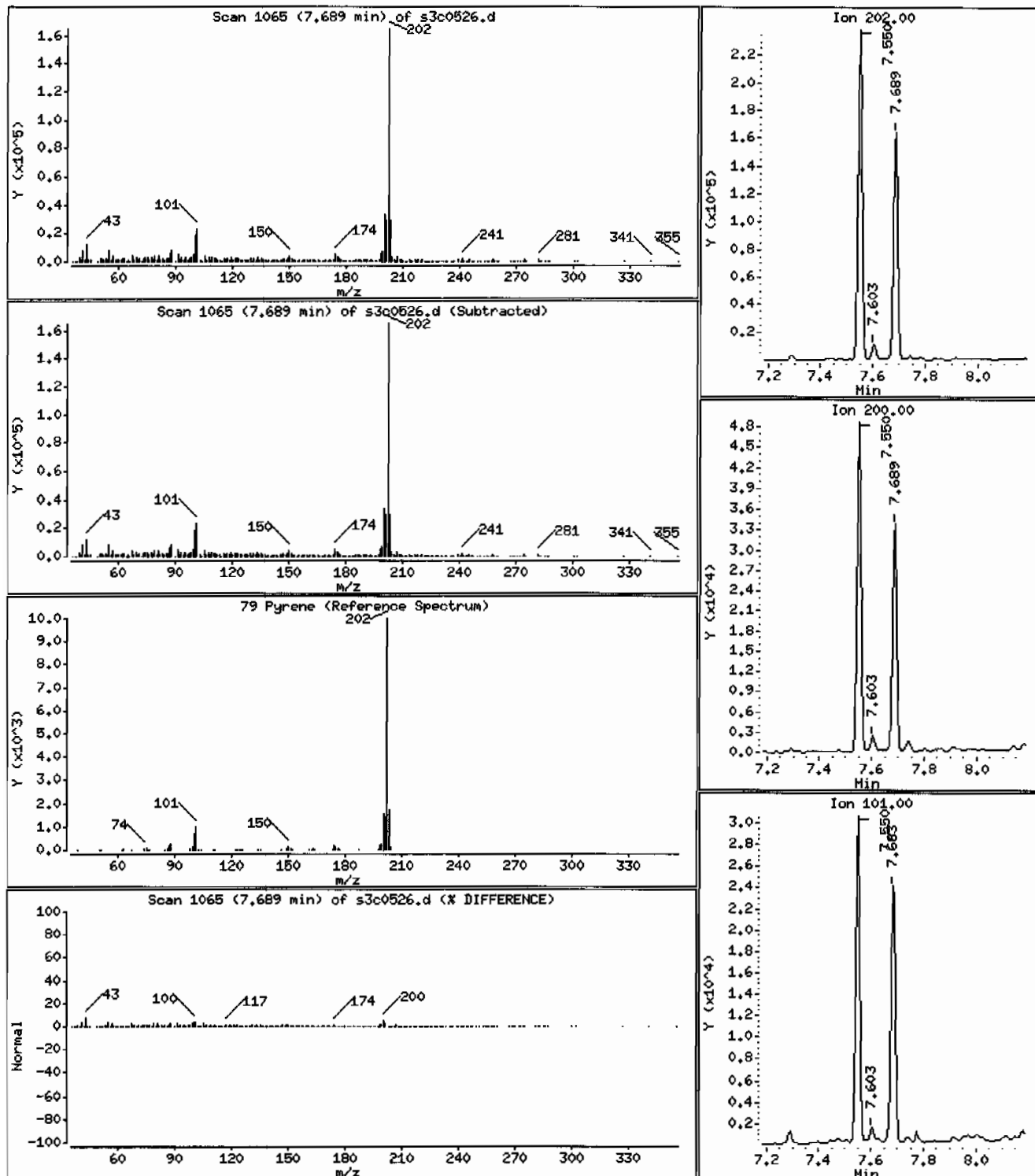
Operator: JLD1

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

Column diameter: 0.20

79 Pyrene

Concentration: 286 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: HSD3.1

Sample Info: 1247562004195667711SVHF111LANL

Volume Injected (uL): 0.5

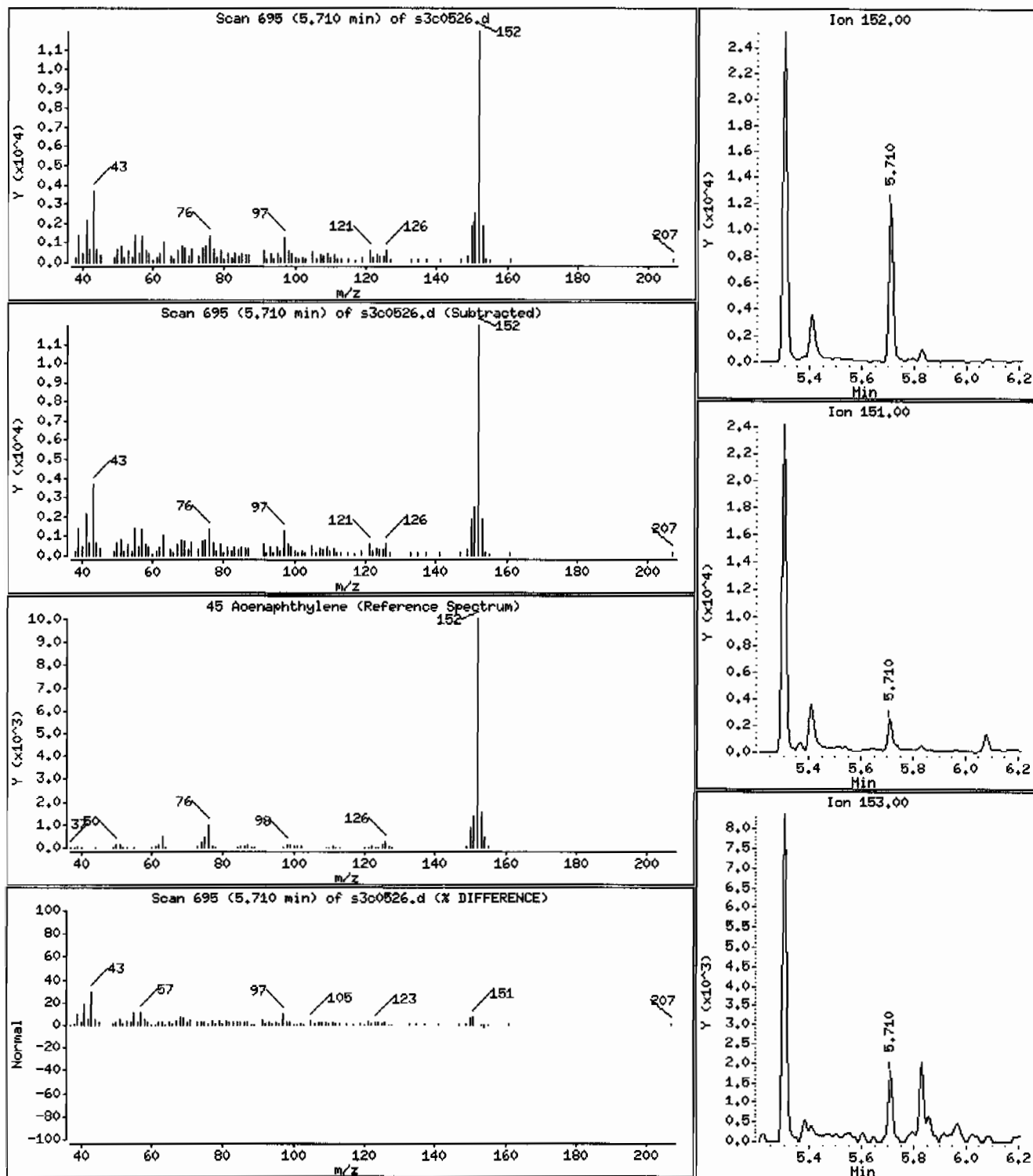
Operator: JLD1

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

Column diameter: 0.20

45 Acenaphthylene

Concentration: 22.0 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.1

Sample Info: 12475620041986677111SVHF111LANL

Volume Injected (uL): 0.5

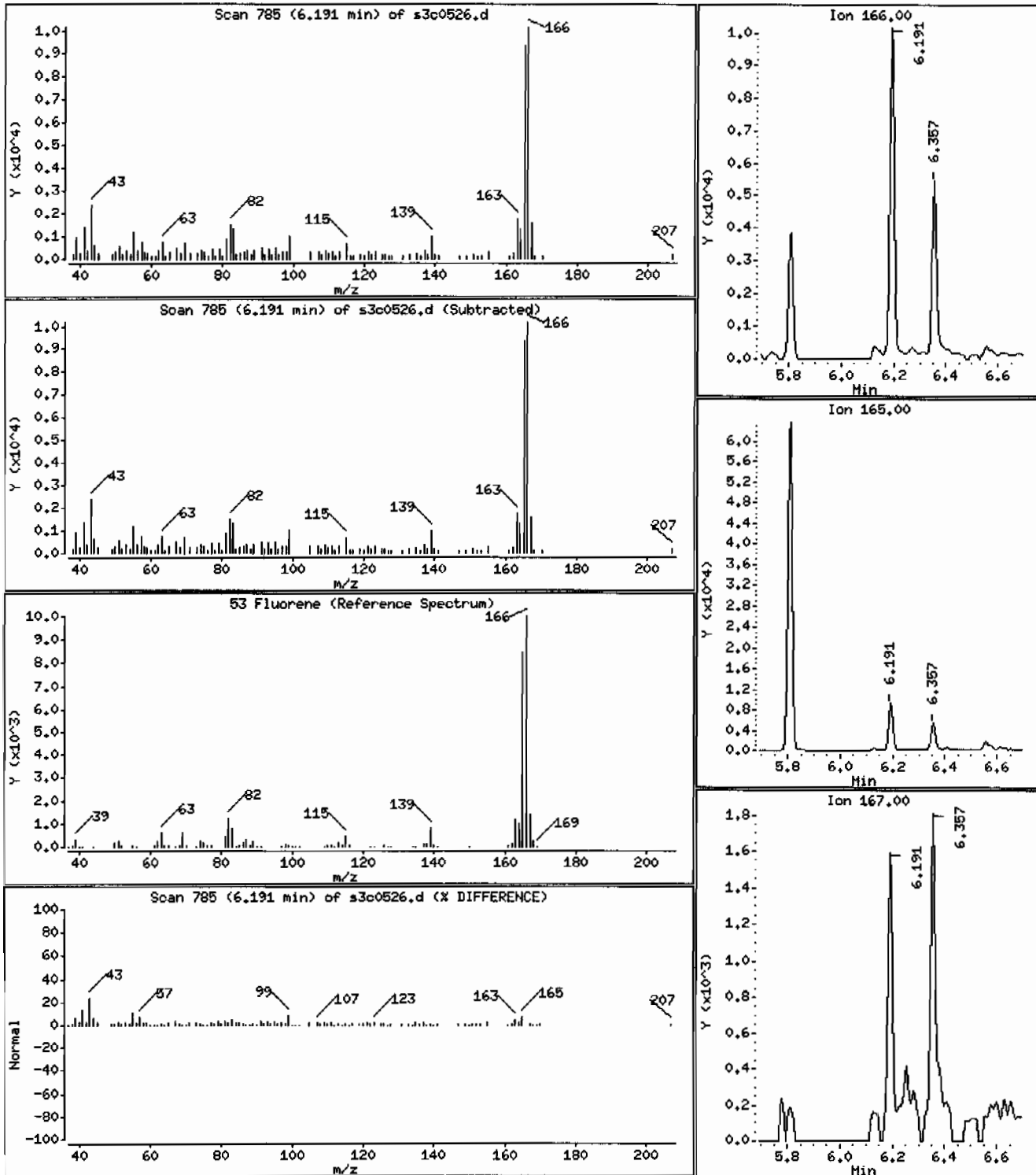
Operator: JLD1

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

Column diameter: 0.20

53 Fluorene

Concentration: 24.3 ug/Kg





Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.1

Sample Info: 1247562004195667711ISVMFI1ILANL

Volume Injected (uL): 0.5

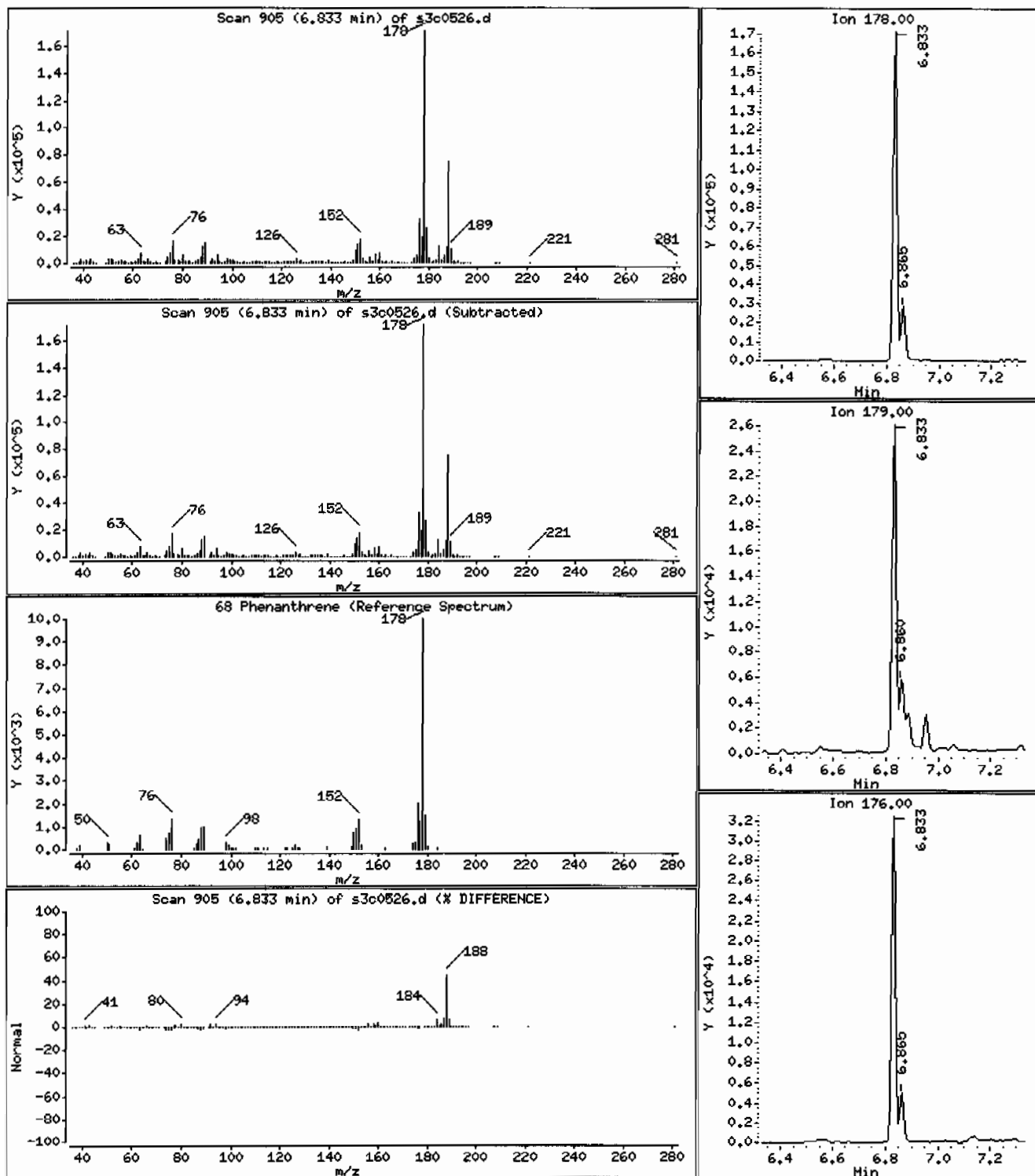
Operator: JLD1

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

Column diameter: 0.20

68 Phenanthrene

Concentration: 238 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11/LANL

Volume Injected (uL): 0.5

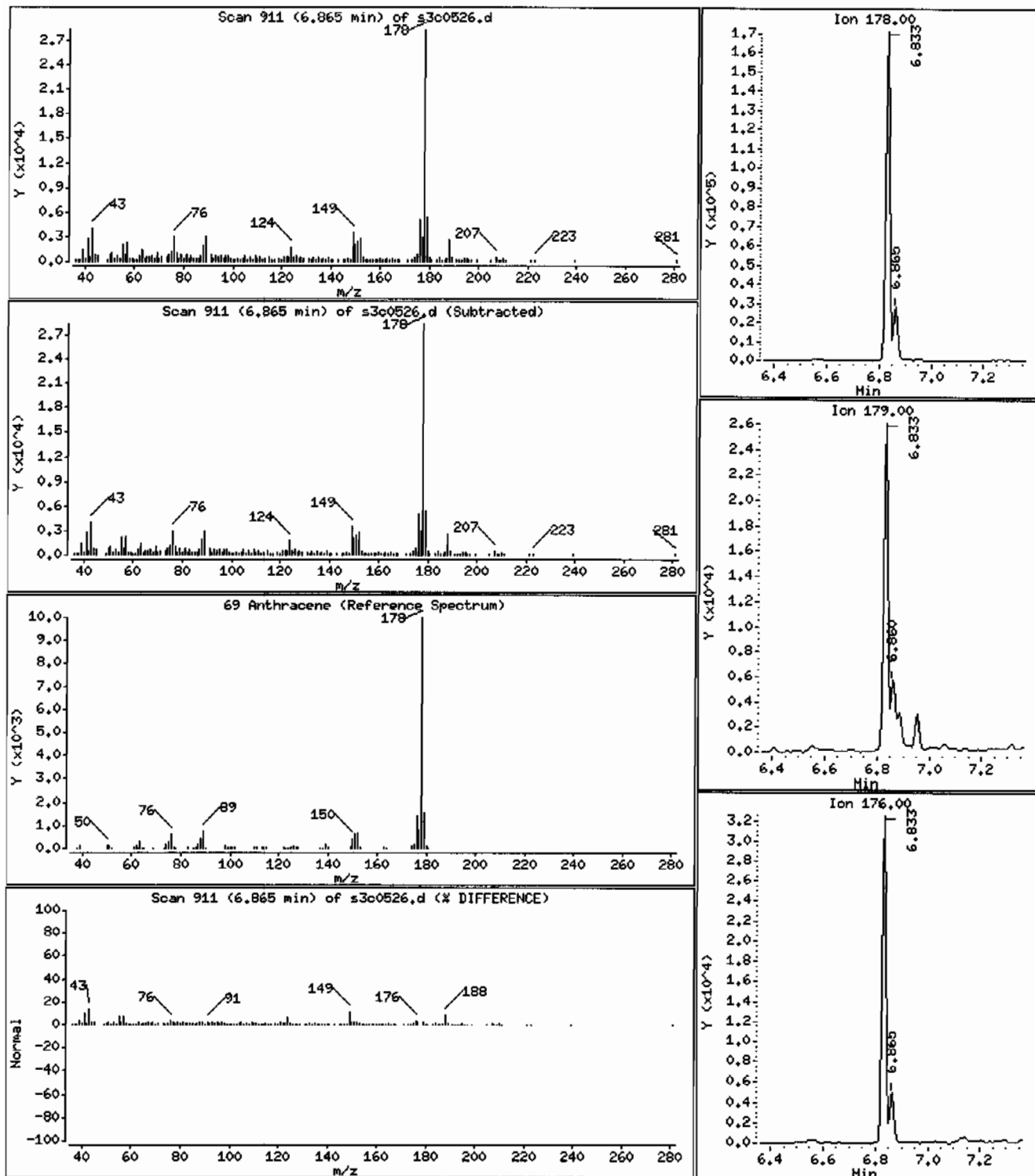
Operator: JLD1

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

Column diameter: 0.20

69 Anthracene

Concentration: 47.5 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711ISVHF11ILANL

Volume Injected (uL): 0.5

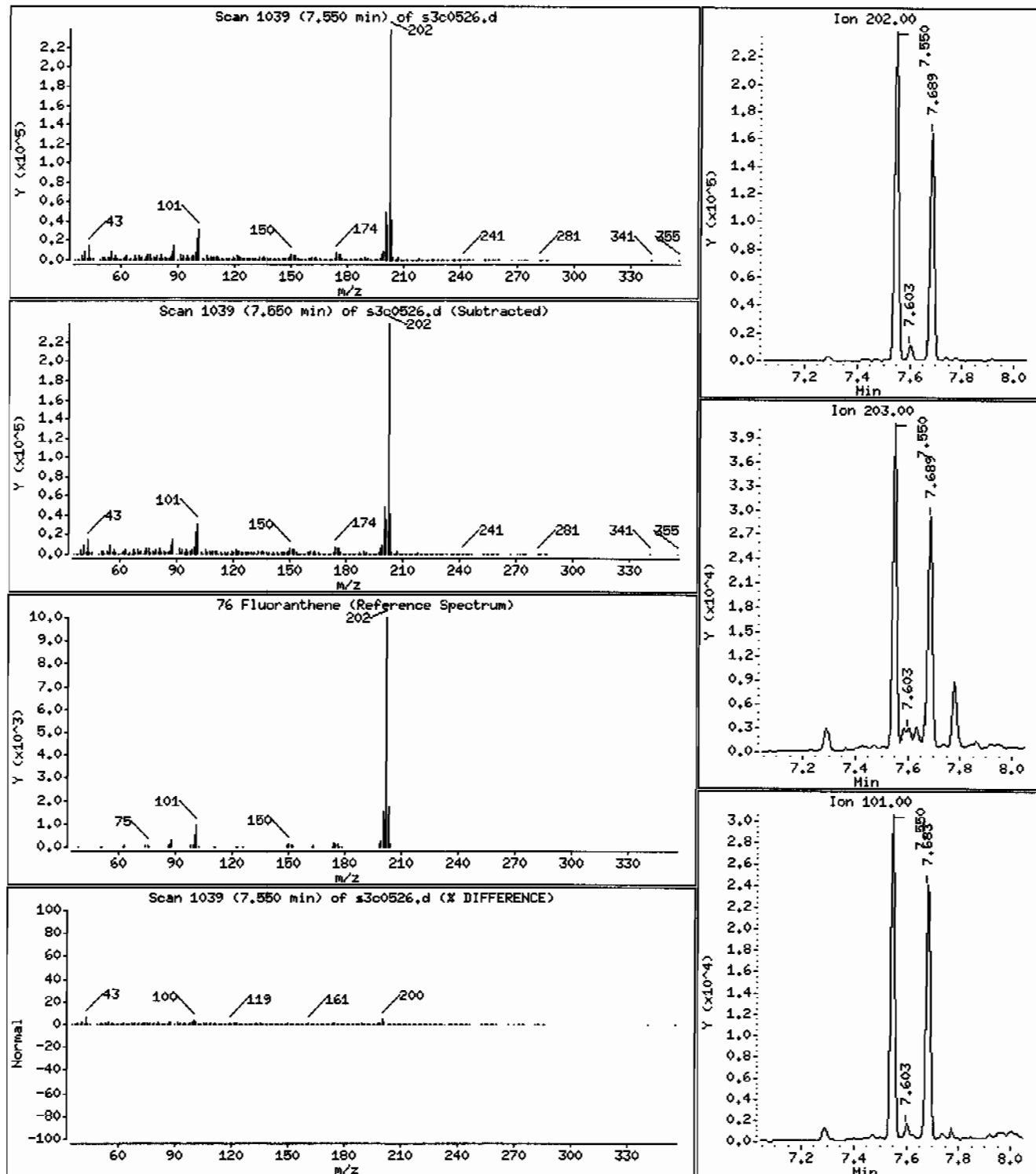
Operator: JLD1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 368 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF111LANL

Volume Injected (uL): 0.5

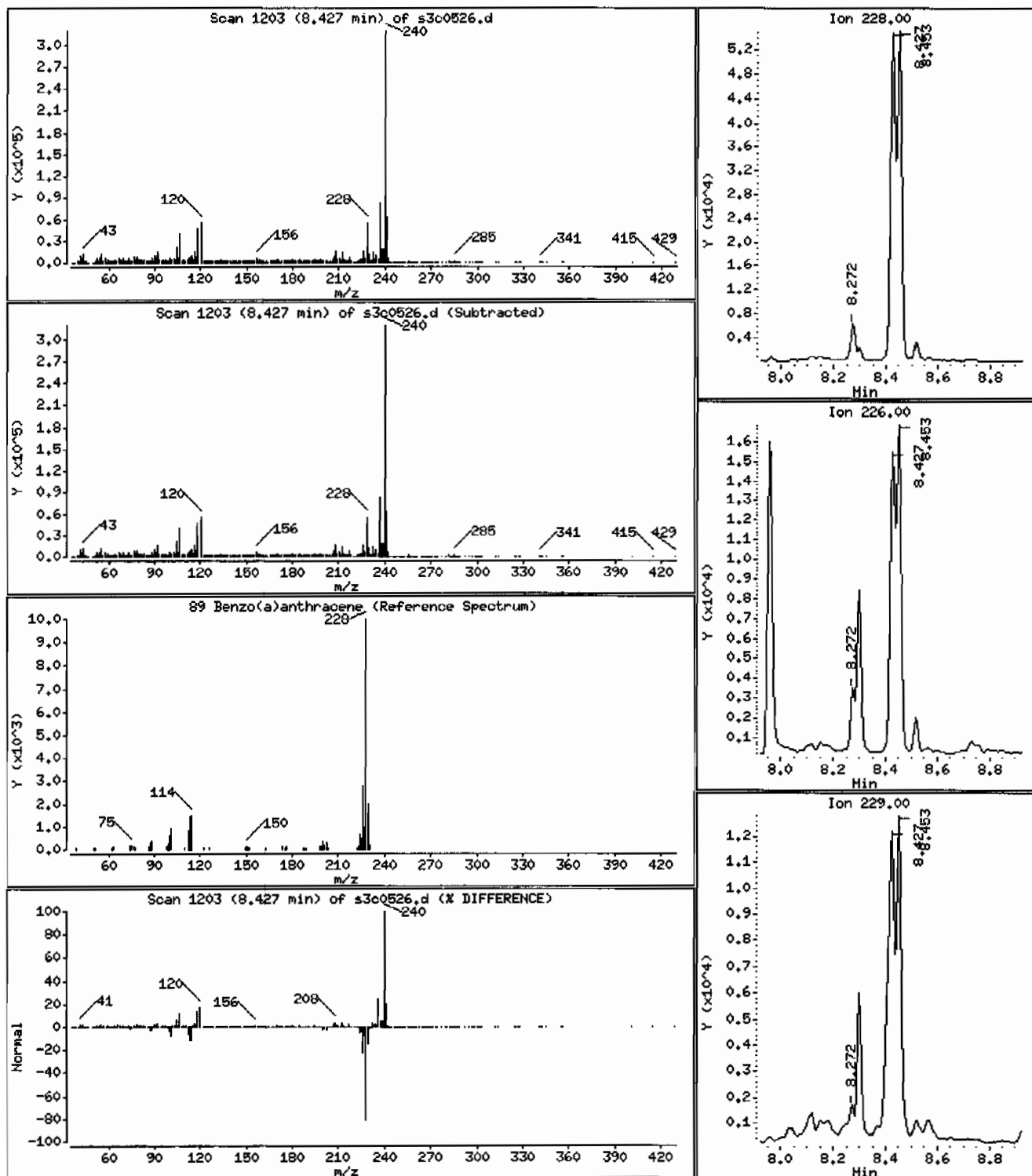
Operator: JLD1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 133 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: HSD3.i

Sample Info: 1247562004198667711/SVHF11/LANL

Volume Injected (uL): 0.5

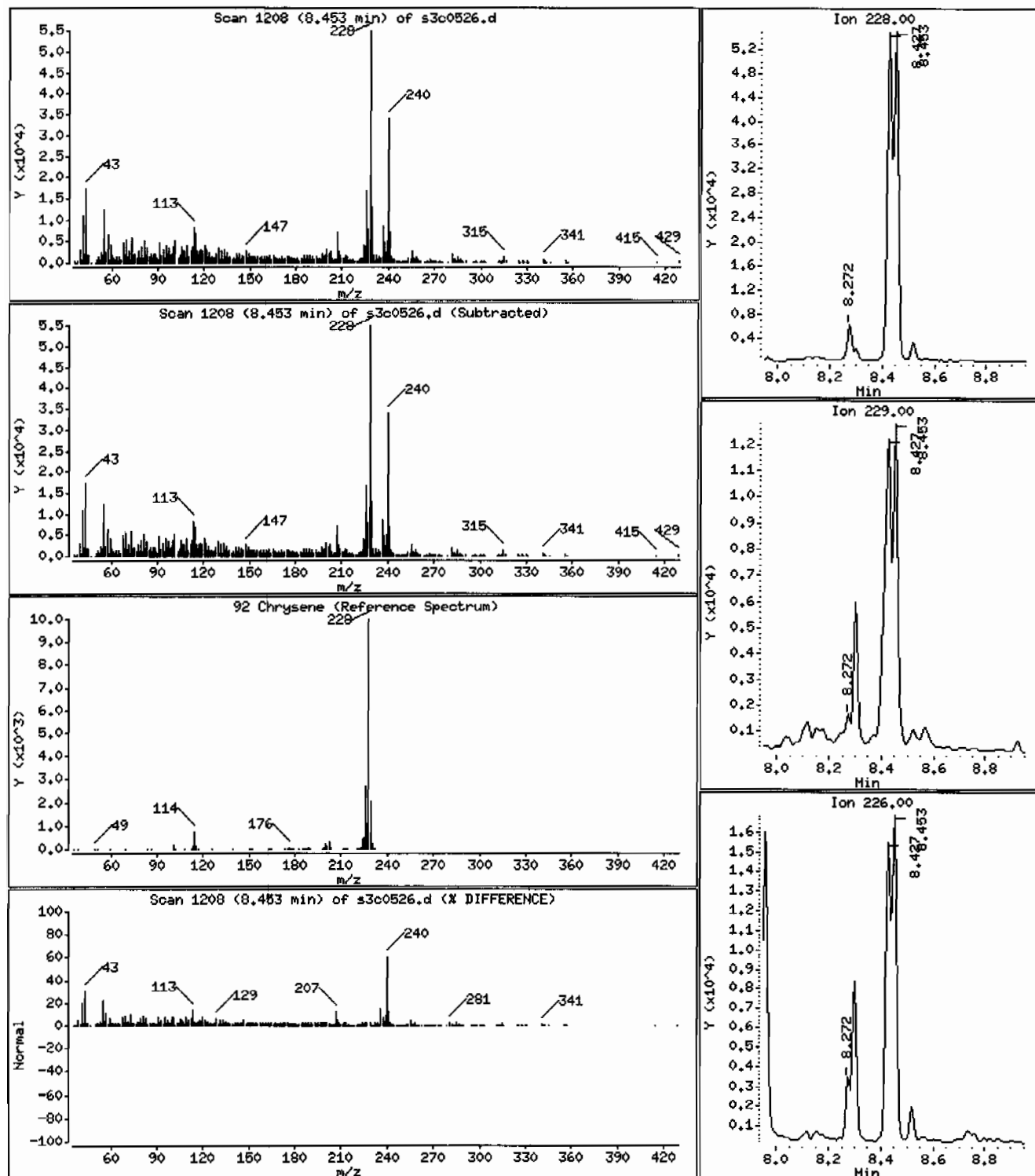
Operator: JLD1

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

Column diameter: 0.20

92 Chrysene

Concentration: 154 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004|9566771|1SVHF11|LANL

Volume Injected (uL): 0.5

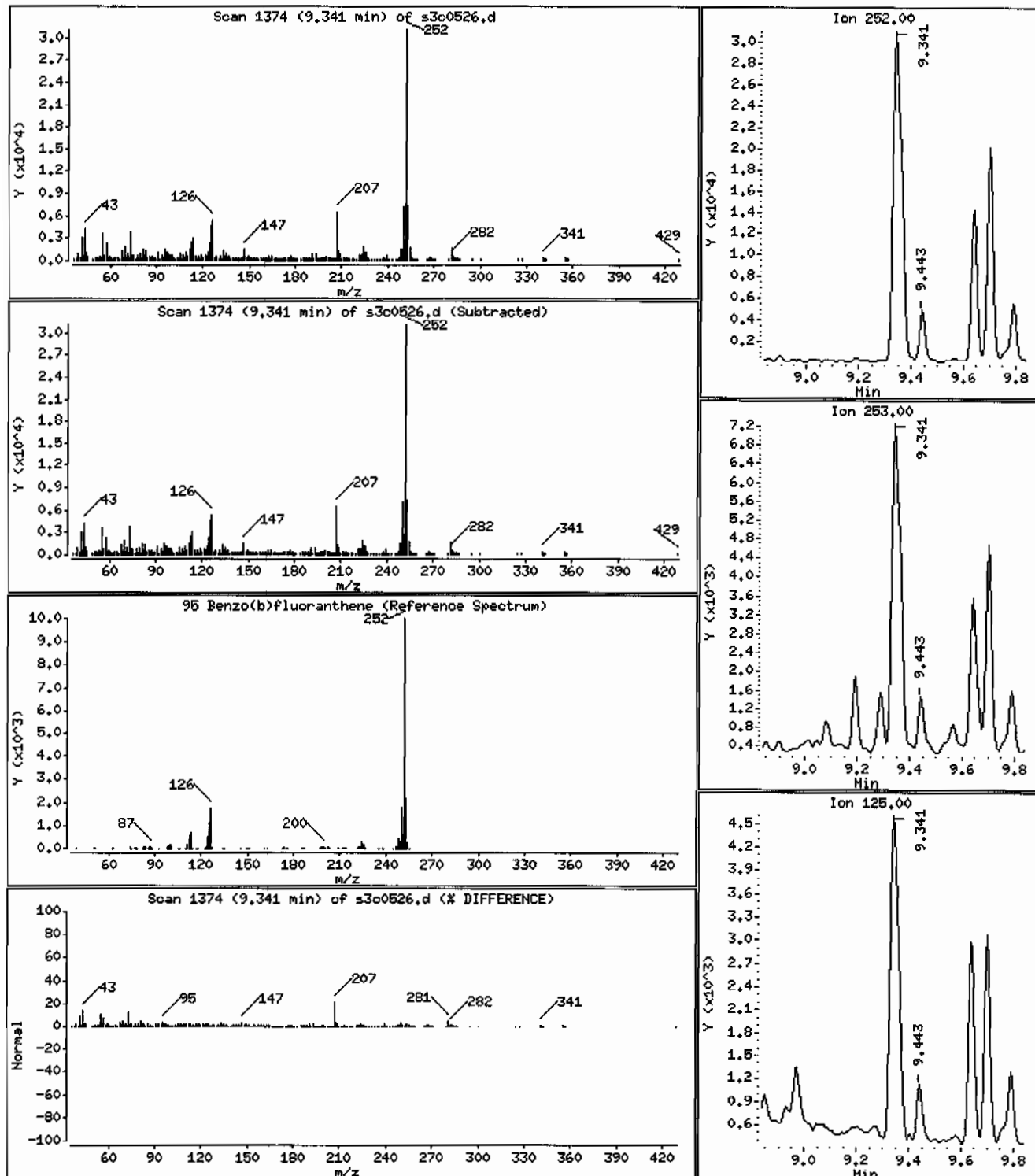
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 269 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: I2475620041956677111SVHF111LANL

Volume Injected (uL): 0.5

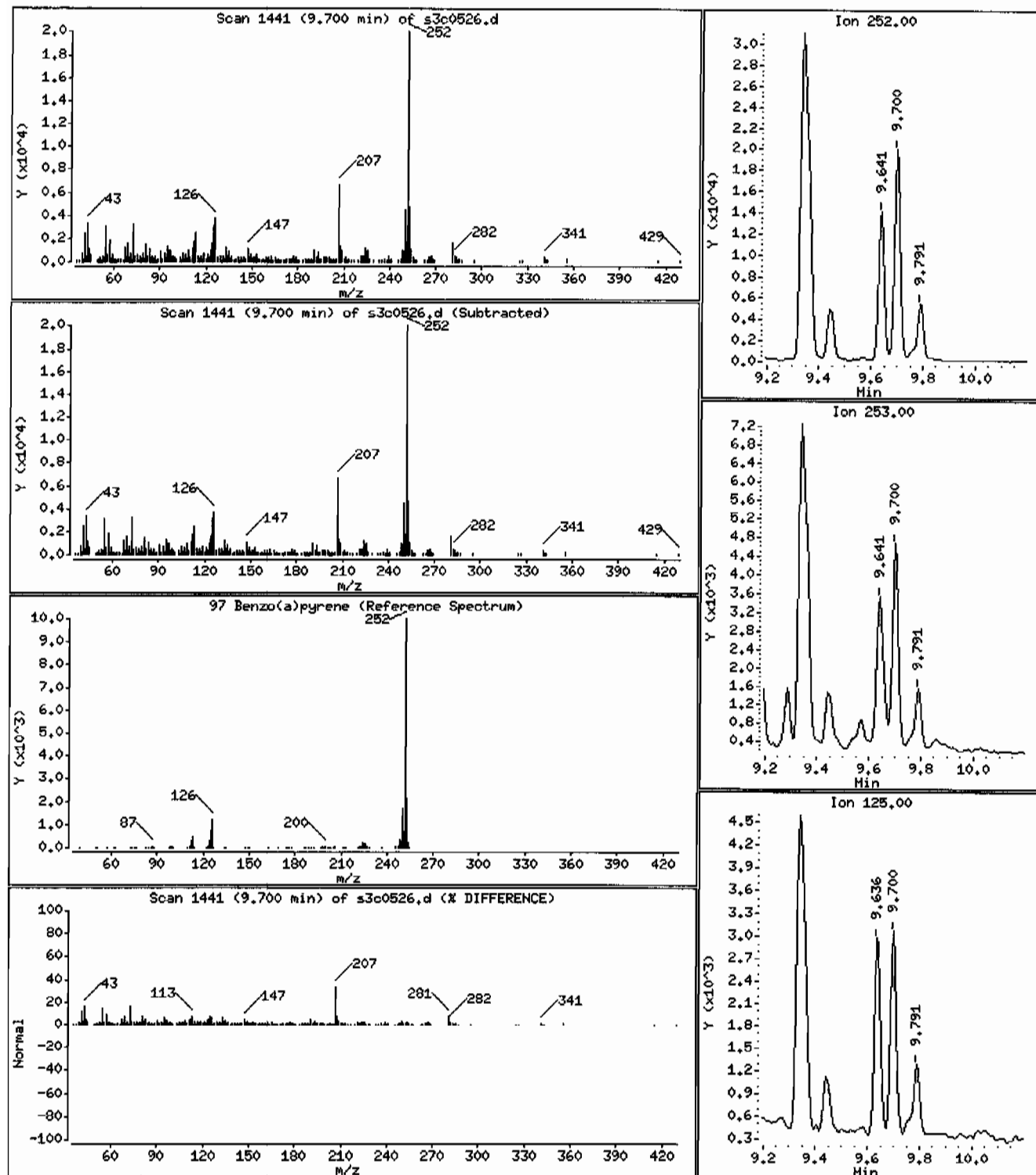
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 134 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF11ILANL

Volume Injected (uL): 0.5

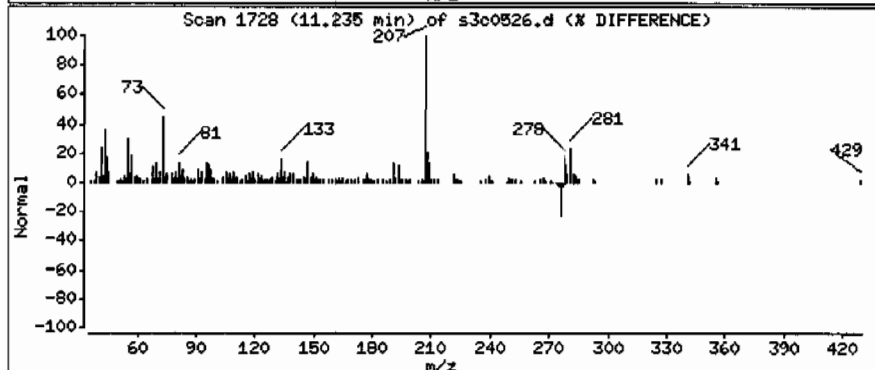
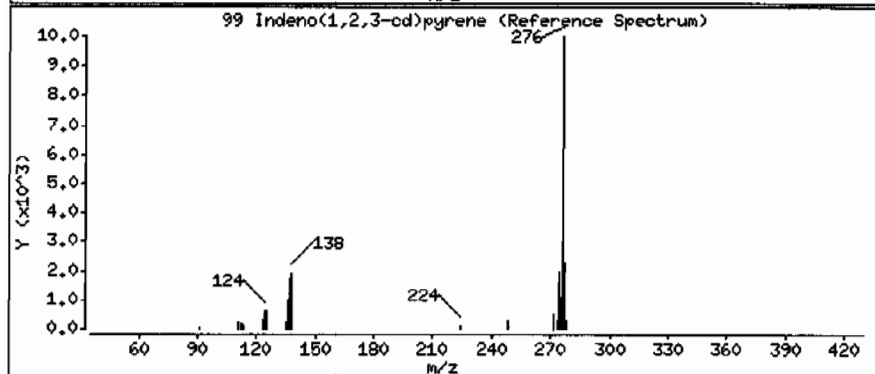
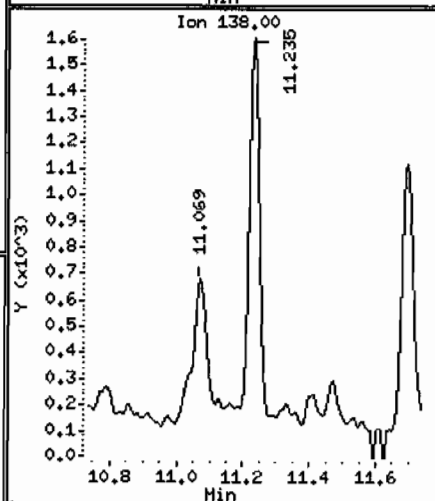
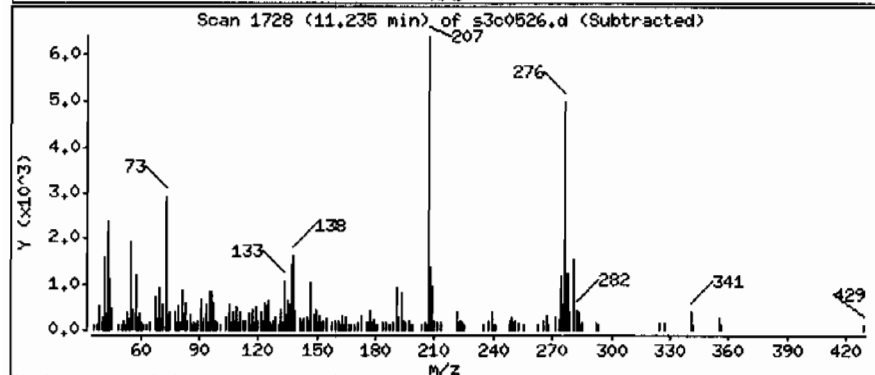
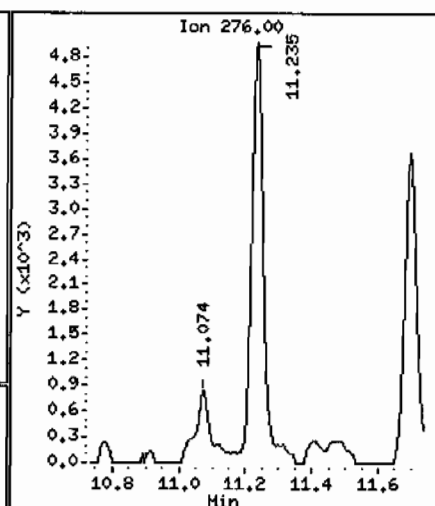
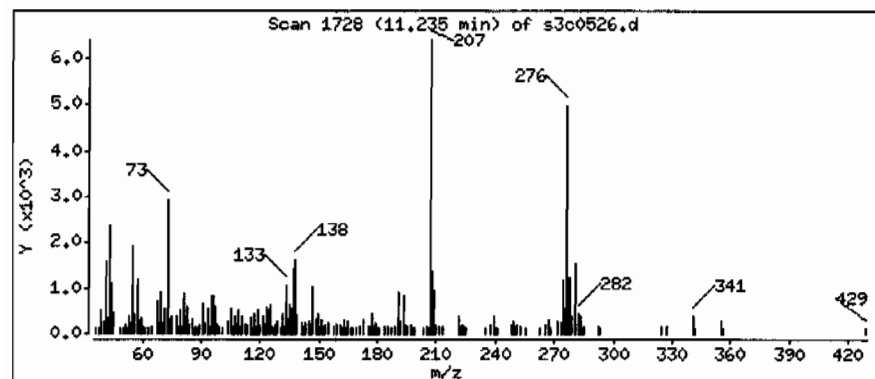
Operator: JLD1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 56.7 ug/Kg





Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711ISVMF11ILANL

Volume Injected (uL): 0.5

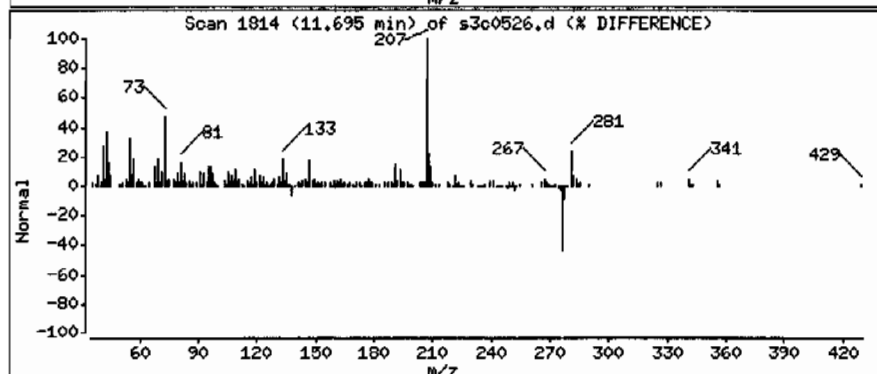
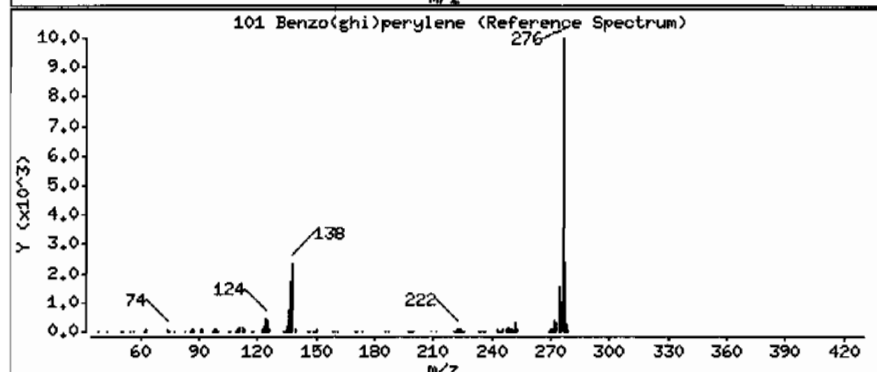
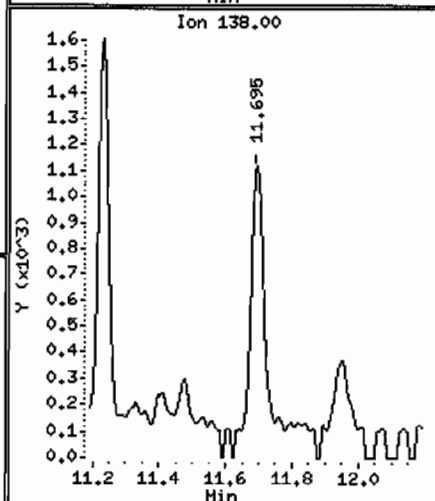
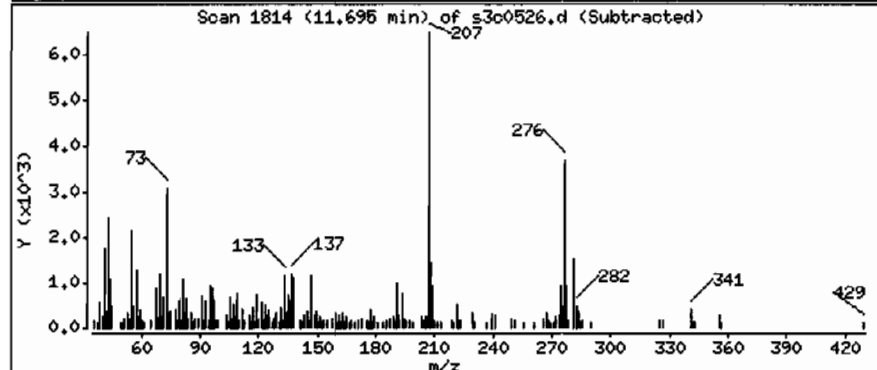
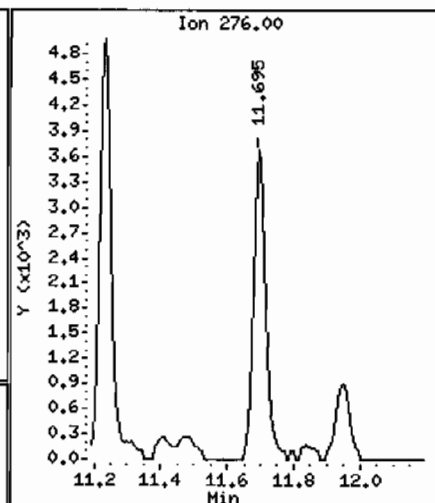
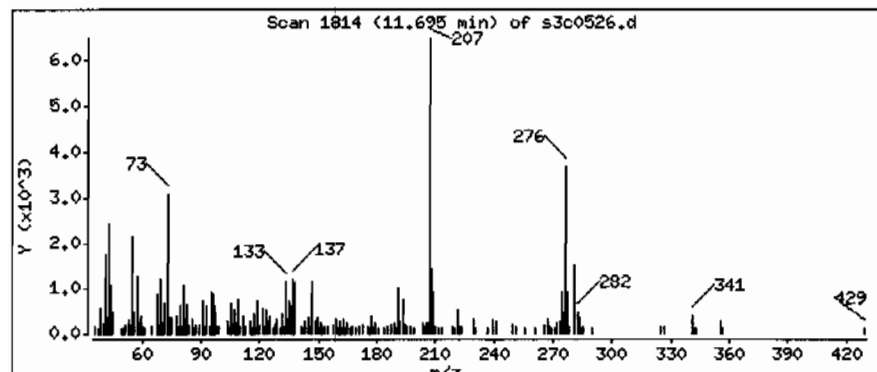
Operator: JLD1

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

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 57.1 ug/Kg



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF111LANL

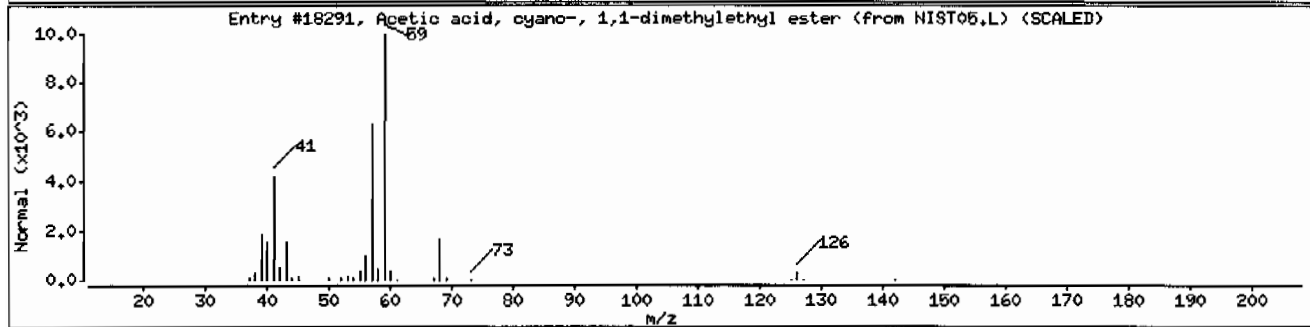
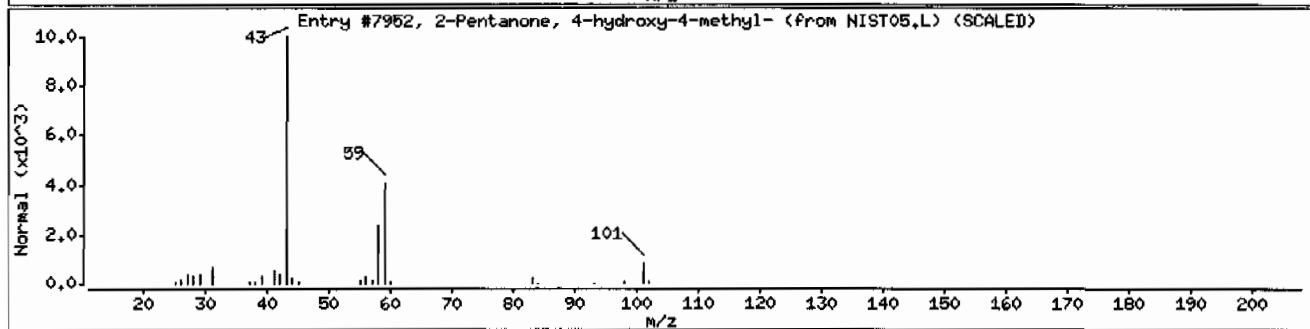
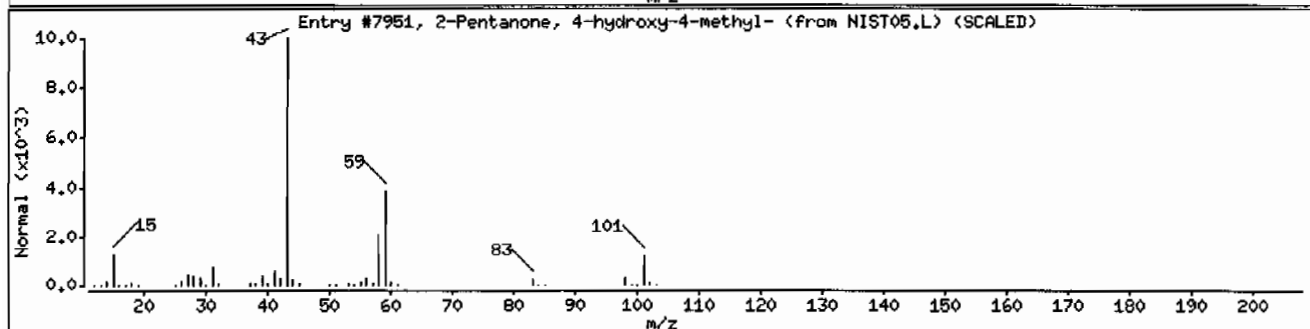
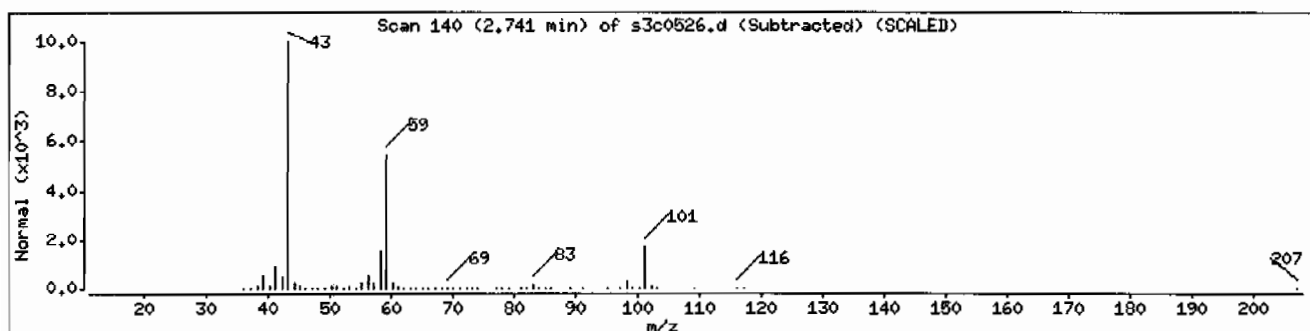
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11ILANL

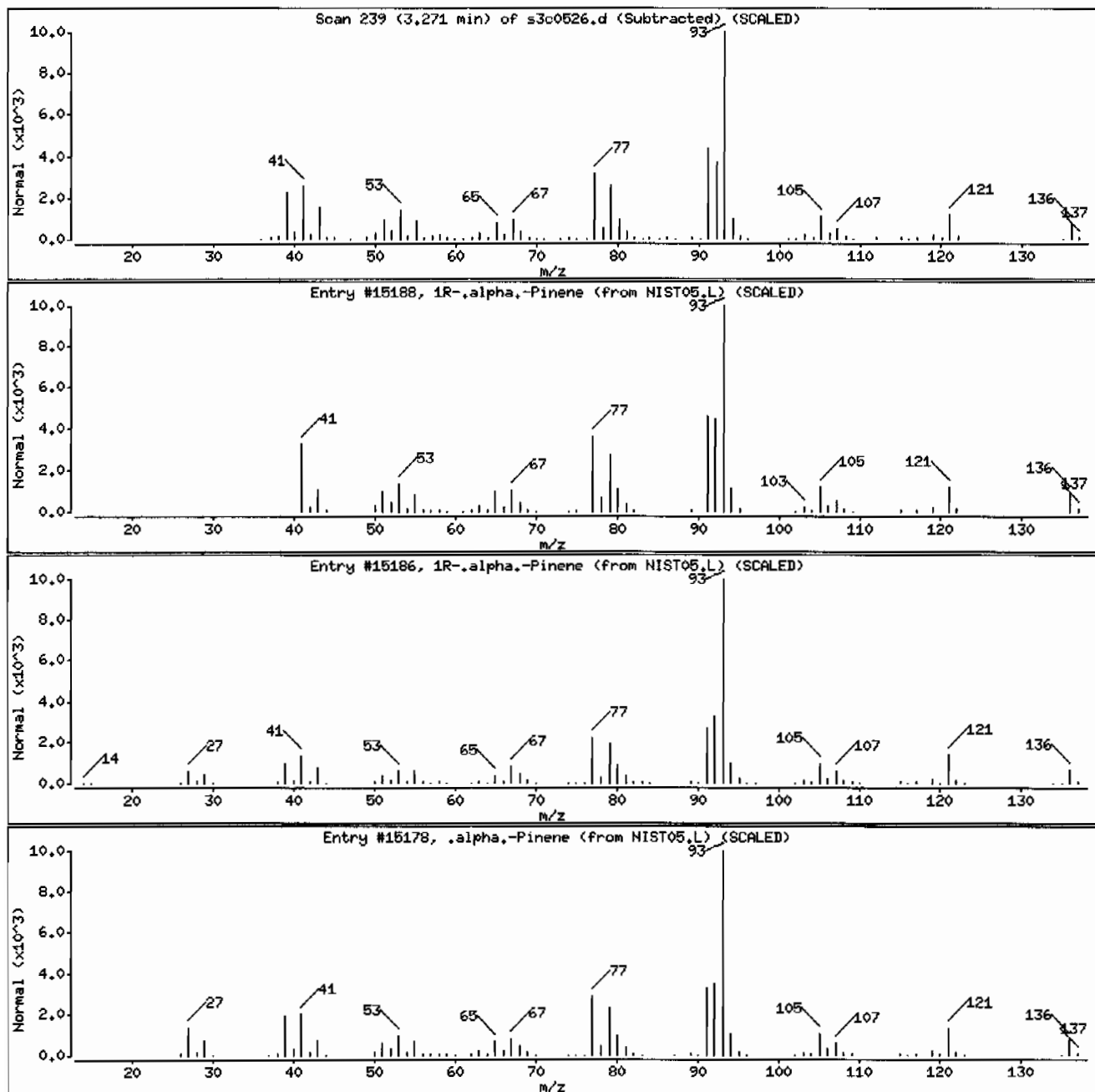
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-,alpha,-Pinene	7785-70-8	NIST05.L	15188	98	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 : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF111LANL

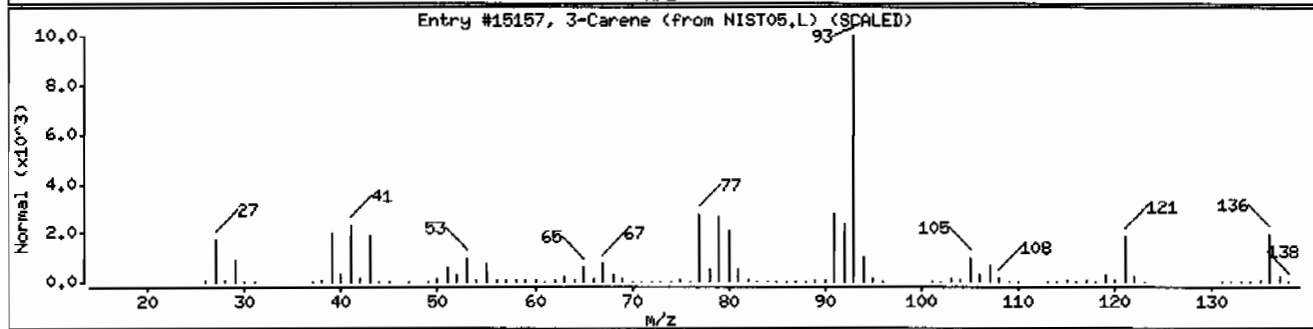
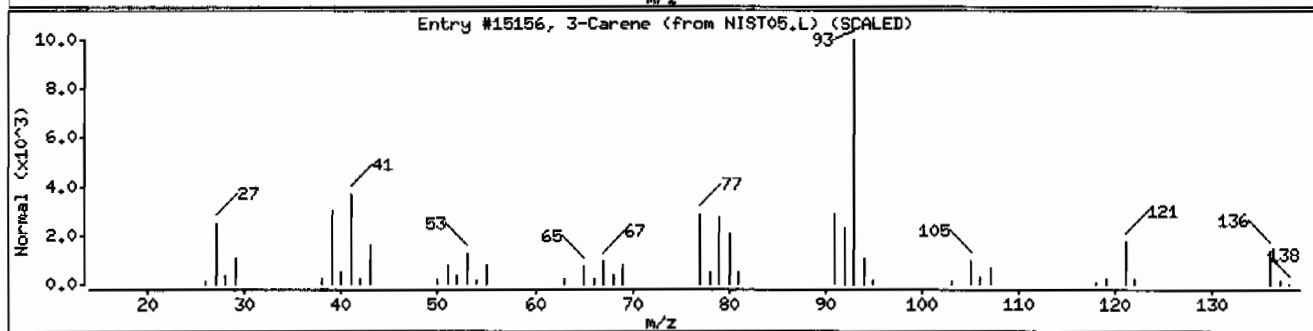
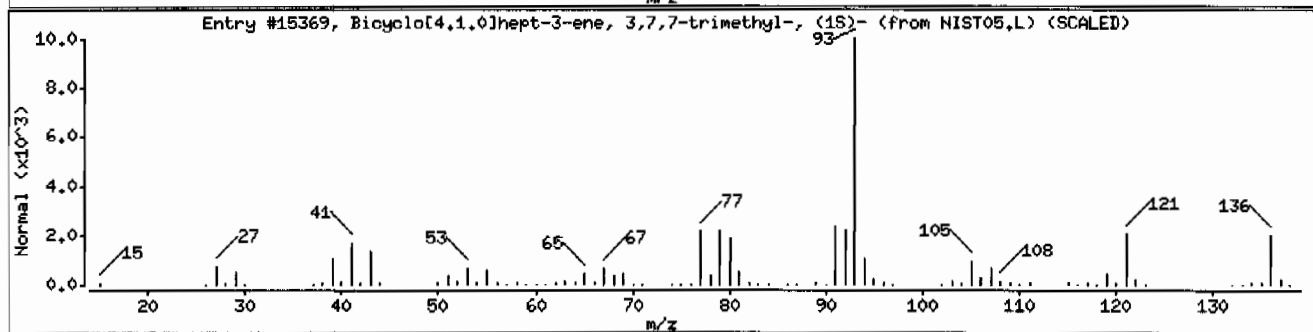
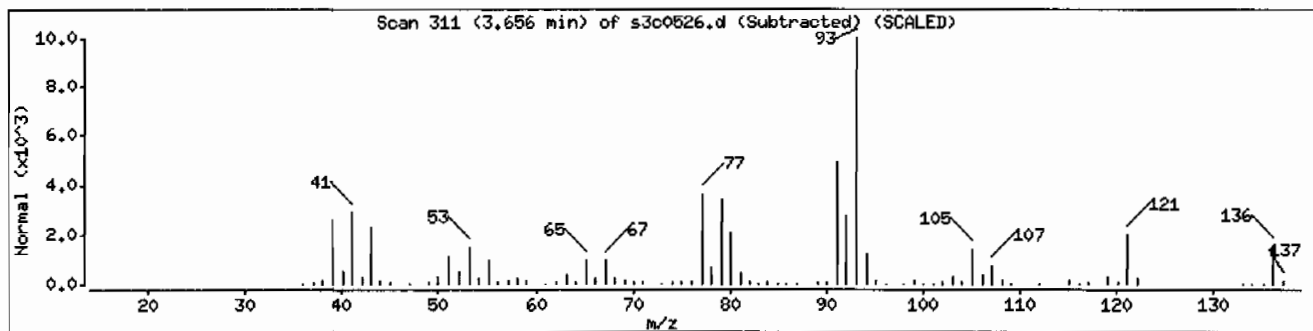
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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 : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3,i

Sample Info: 1247562004195667711SVMF11ILANL

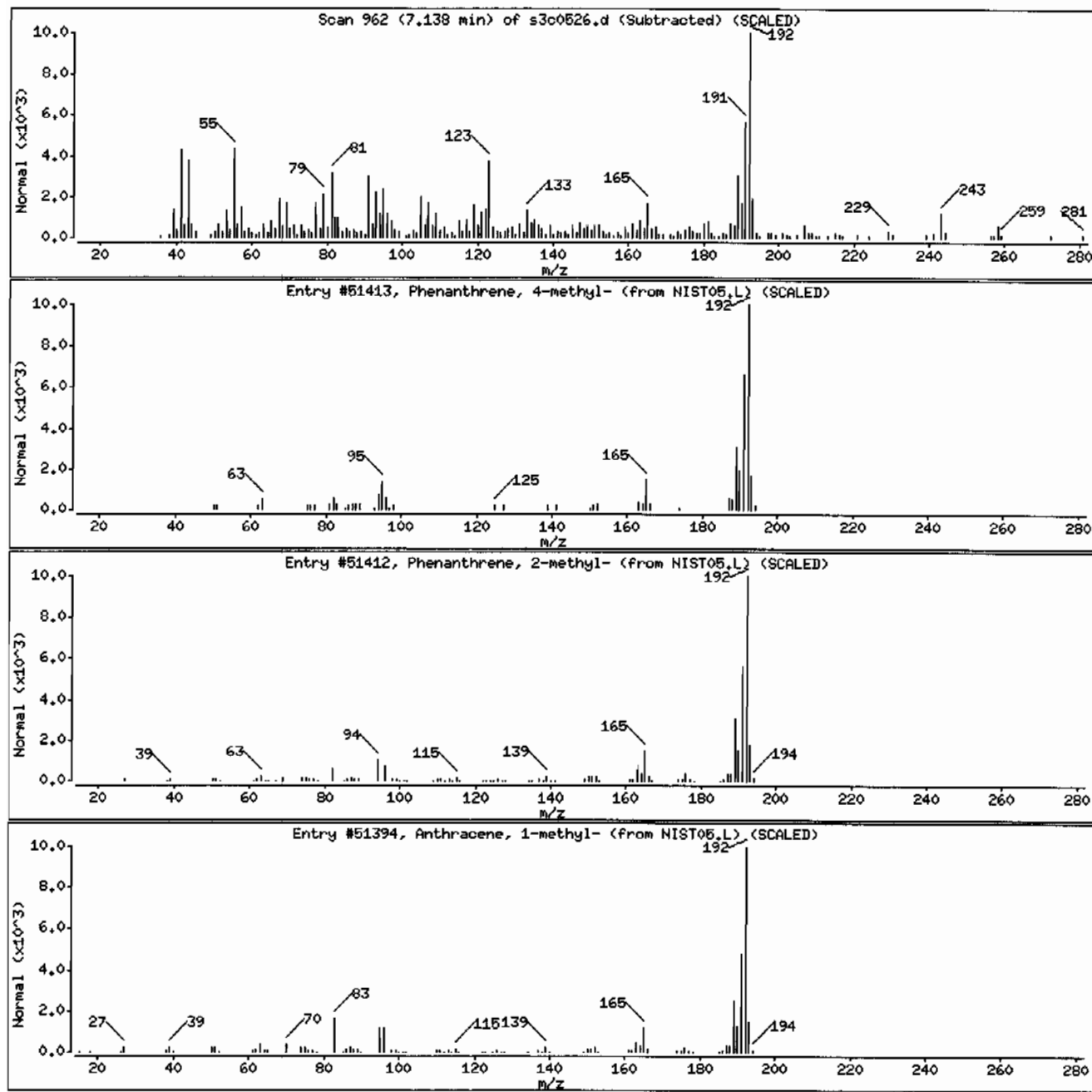
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phenanthrene, 4-methyl-	832-64-4	NIST05.L	51413	97	C15H12	192
Phenanthrene, 2-methyl-	2531-84-2	NIST05.L	51412	96	C15H12	192
Anthracene, 1-methyl-	610-48-0	NIST05.L	51394	94	C15H12	192



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711/SVHF11/LANL

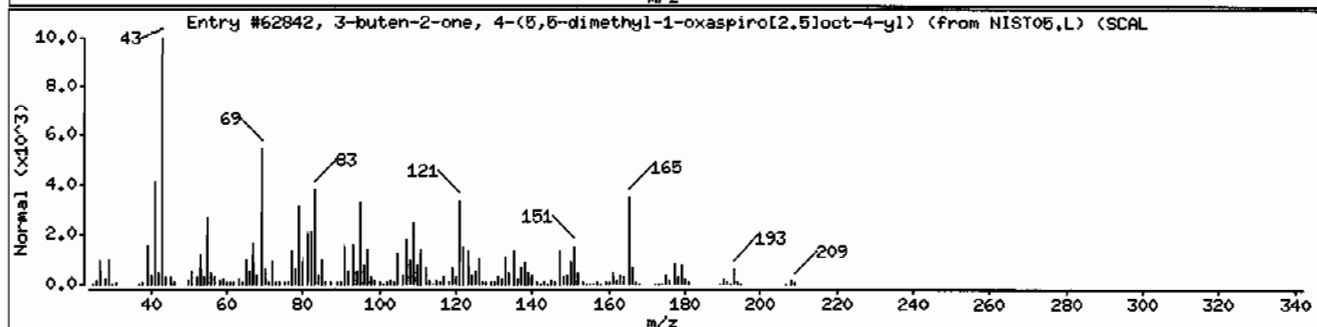
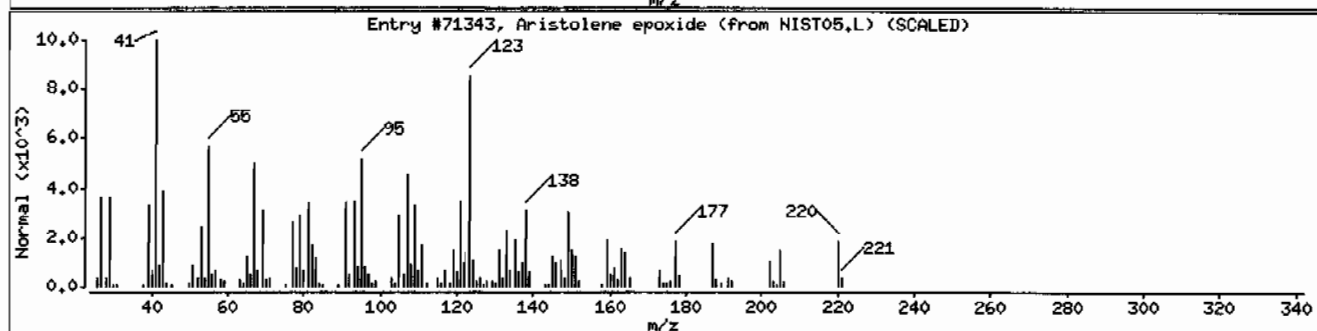
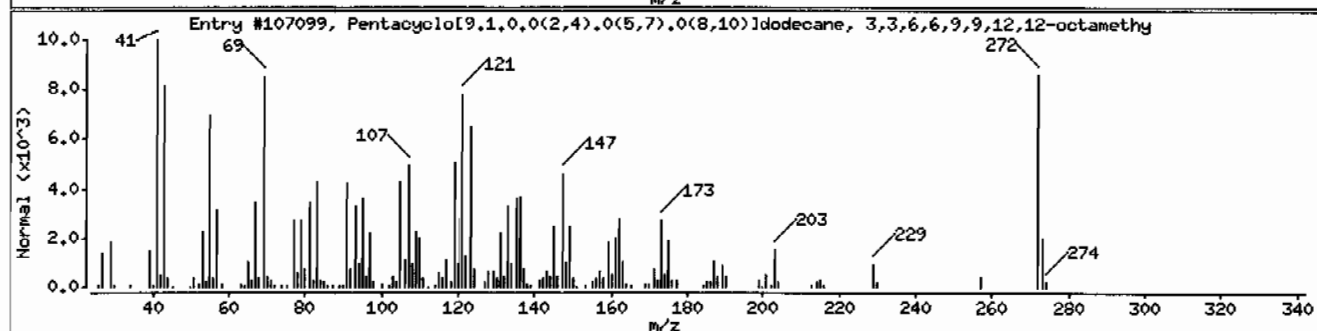
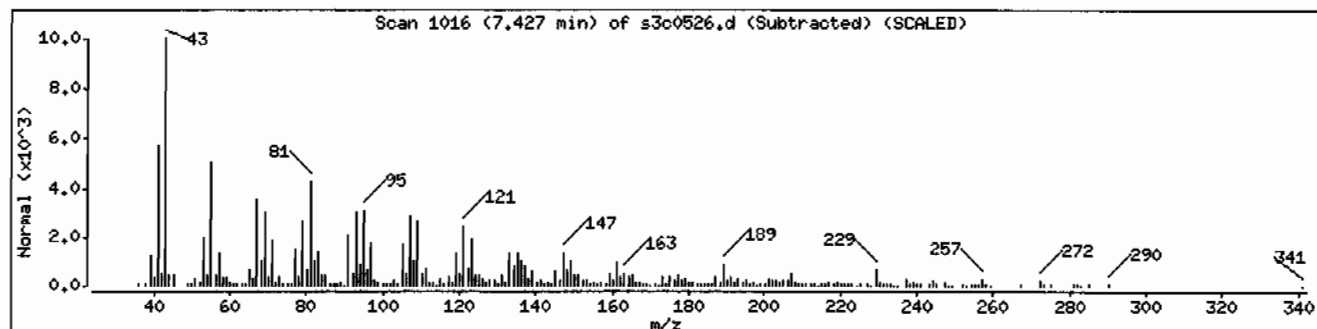
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentacyclo[9.1.0.0(2,4).0(5,7).0(8,10)]d	1000152-38-2	NIST05.L	107099	70	C20H32	272
Aristolene epoxide	1000151-48-9	NIST05.L	71343	62	C15H24O	220
3-buten-2-one, 4-(5,5-dimethyl-1-oxaspiro	1000196-66-5	NIST05.L	62842	58	C13H20O2	208



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: HSD3.i

Sample Info: 1247562004195667711SVMF11ILANL

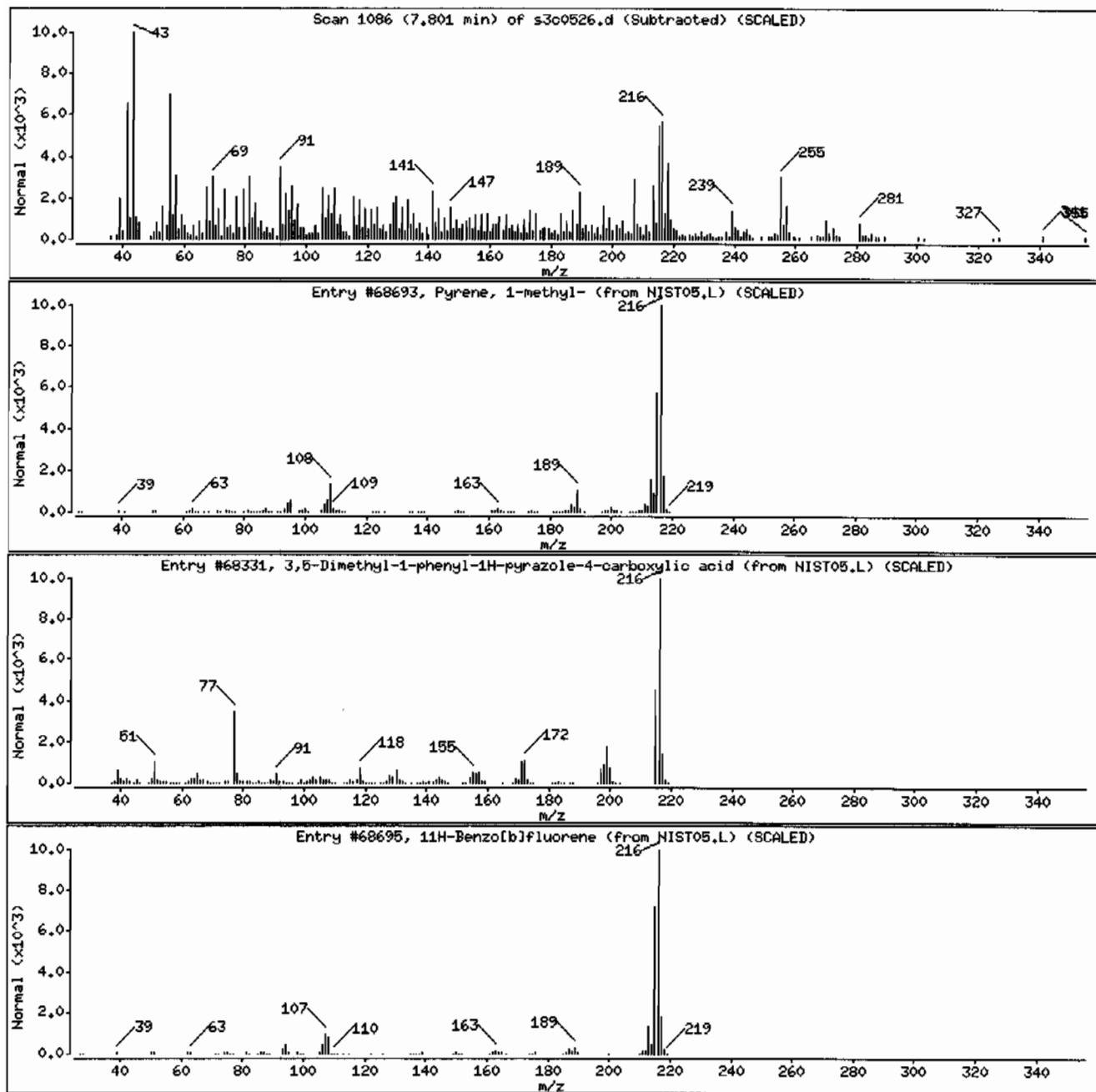
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68693	62	C17H12	216
3,5-Dimethyl-1-phenyl-1H-pyrazole-4-carb	61226-19-5	NIST05.L	68331	44	C12H12N2O2	216
11H-Benzo[b]fluorene	243-17-4	NIST05.L	68695	42	C17H12	216



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711ISVHF111LANL

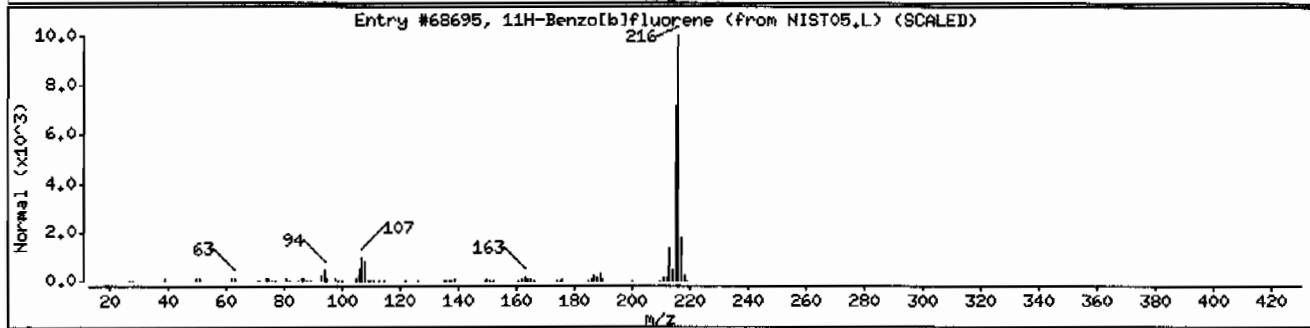
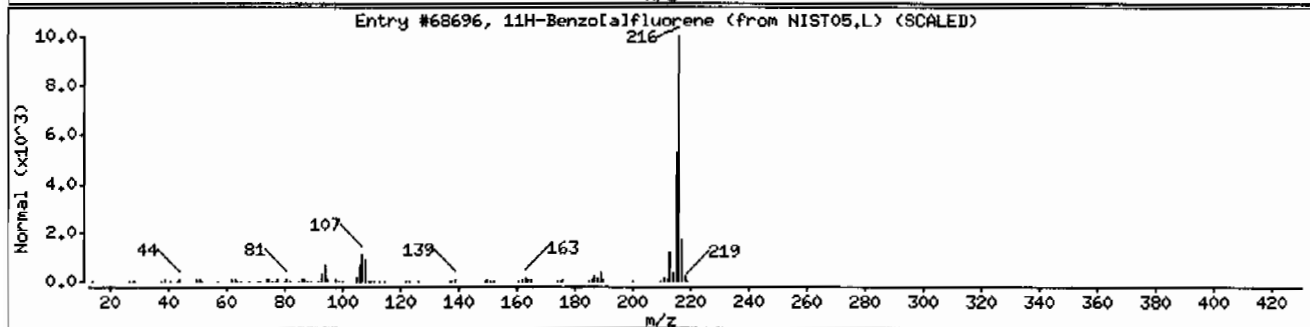
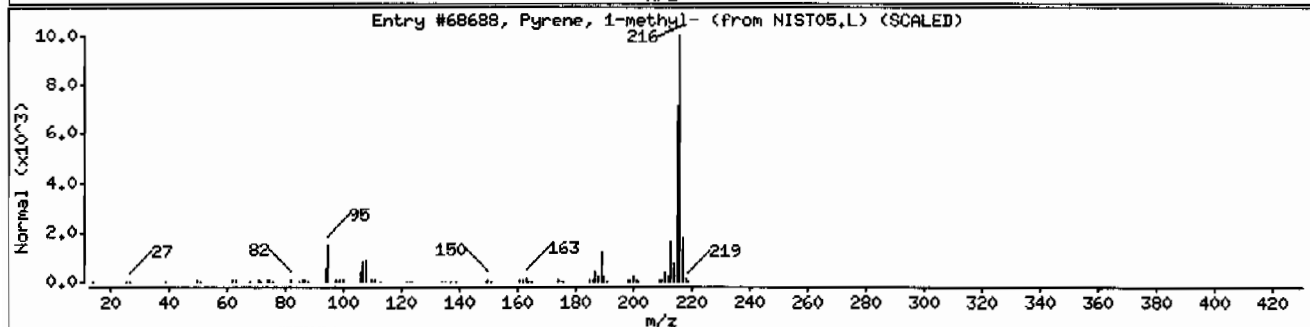
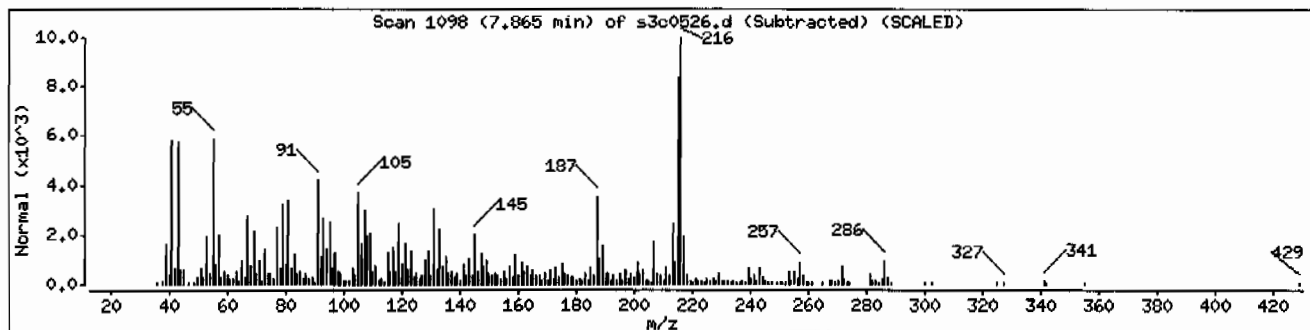
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68688	92	C17H12	216
11H-Benzo[a]fluorene	238-84-6	NIST05.L	68696	92	C17H12	216
11H-Benzo[b]fluorene	243-17-4	NIST05.L	68695	86	C17H12	216





Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11ILANL

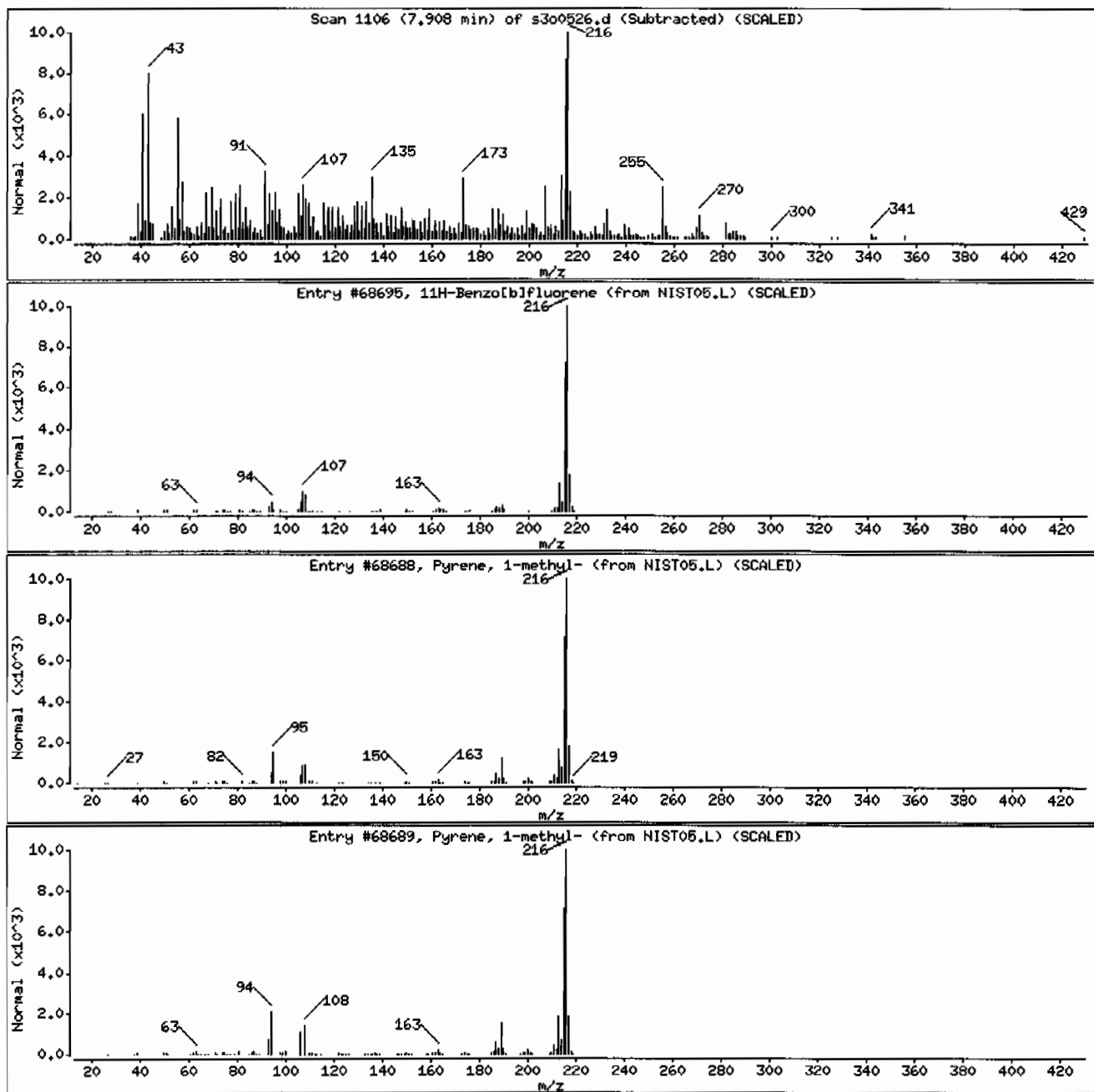
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
11H-Benzo[b]fluorene	243-17-4	NIST05.L	68695	91	C17H12	216
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68688	83	C17H12	216
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68689	83	C17H12	216



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 12475620041956677111SVHF111LANL

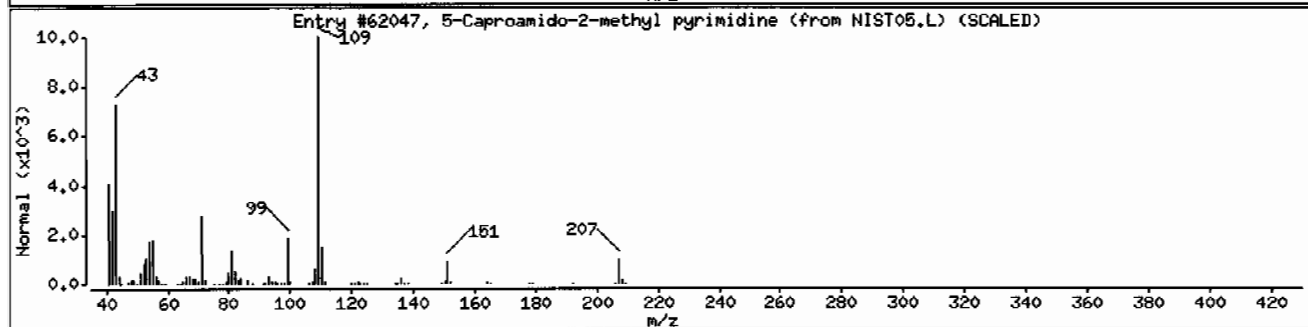
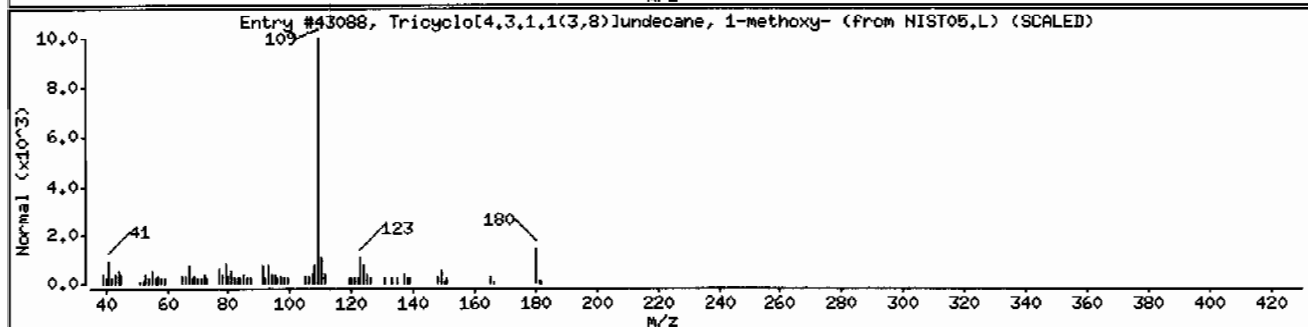
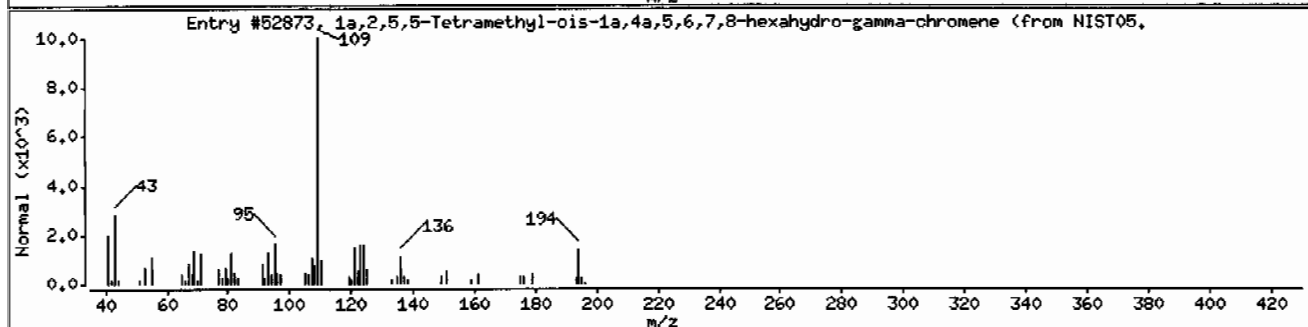
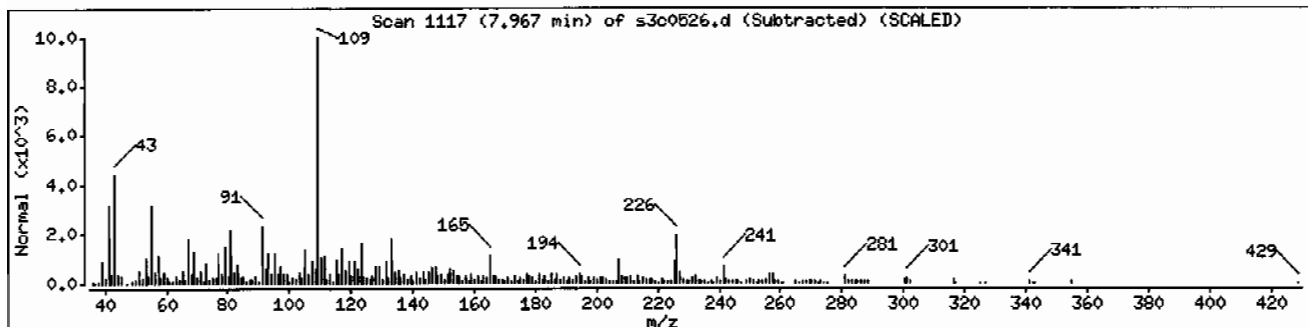
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1a,2,5,5-Tetramethyl-ois-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	46	C13H22O	194
Tricyclo[4.3.1.1(3,8)]undecane, 1-methox	21898-95-3	NIST05.L	43088	46	C12H20O	180
5-Caproamido-2-methyl pyrimidine	1000213-95-8	NIST05.L	62047	43	C11H17N3O	207



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11/LANL

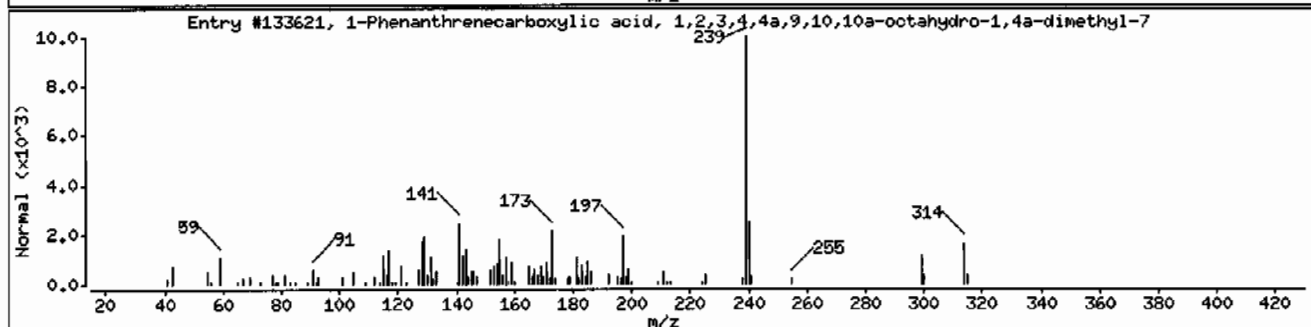
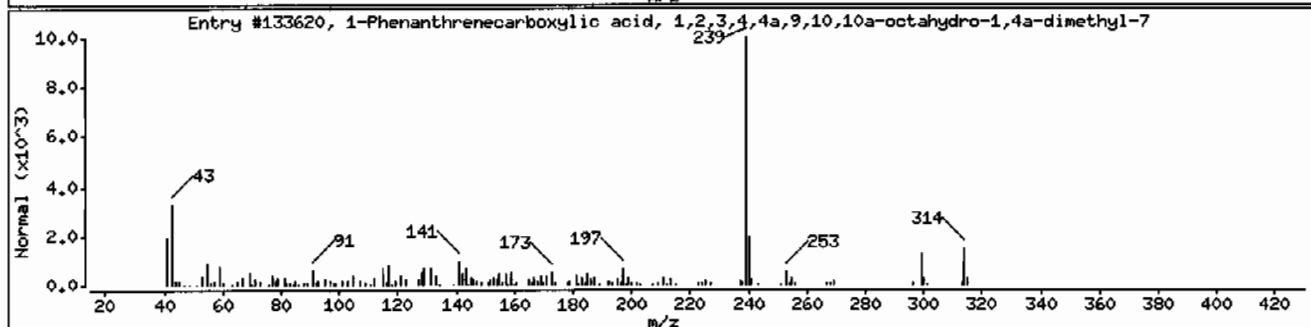
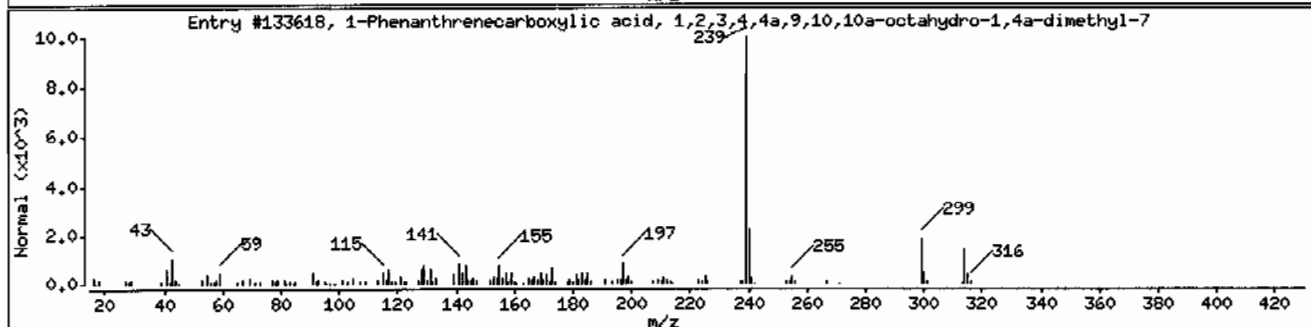
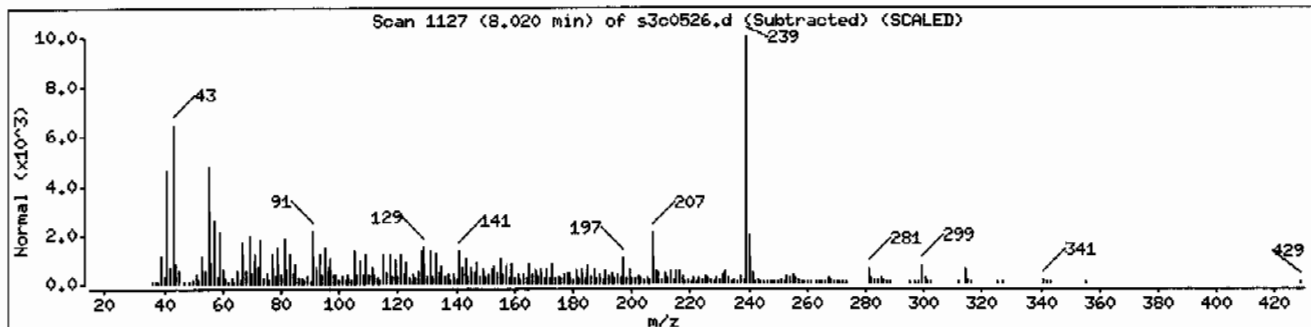
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	99	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	90	C21H30O2	314



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004198667711SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

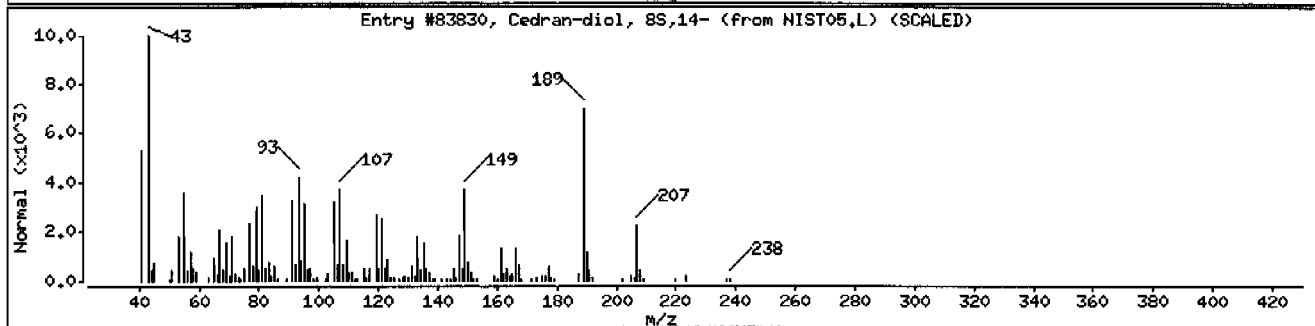
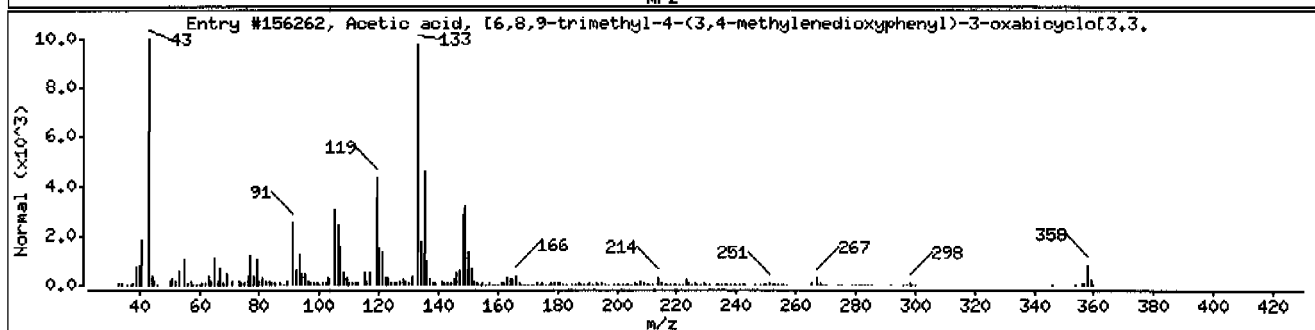
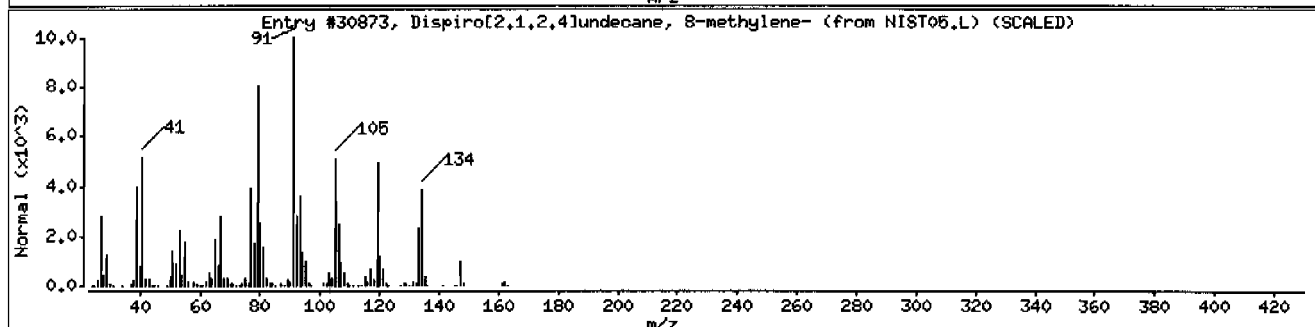
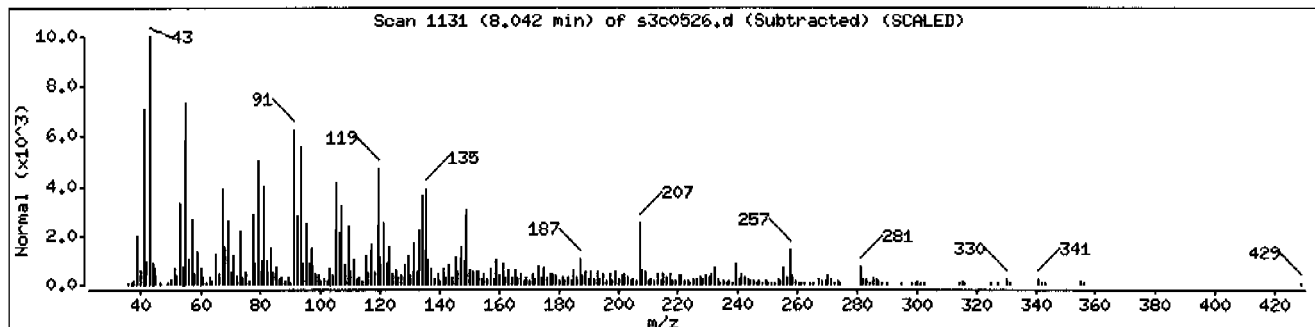
Column phase: J&amp;W DB-5MS

Column diameter: 0.20

## Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Dispiro[2.1,2,4]undecane, 8-methylene-	61667-08-9	NIST05.L	30873	62	C <sub>12</sub> H <sub>18</sub>	162
Acetic acid, [6,8,9-trimethyl-4-(3,4-met	1000265-64-7	NIST05.L	156262	43	C <sub>21</sub> H <sub>26</sub> O <sub>5</sub>	358
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	38	C <sub>15</sub> H <sub>26</sub> O <sub>2</sub>	238



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF111LANL

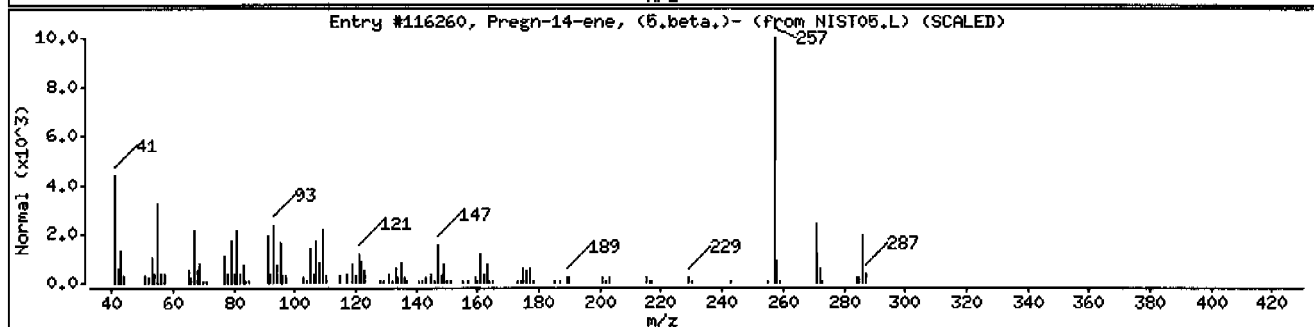
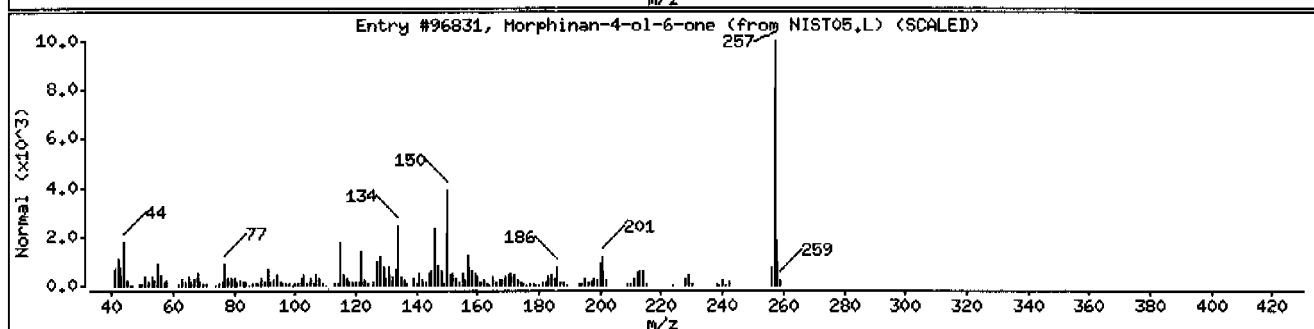
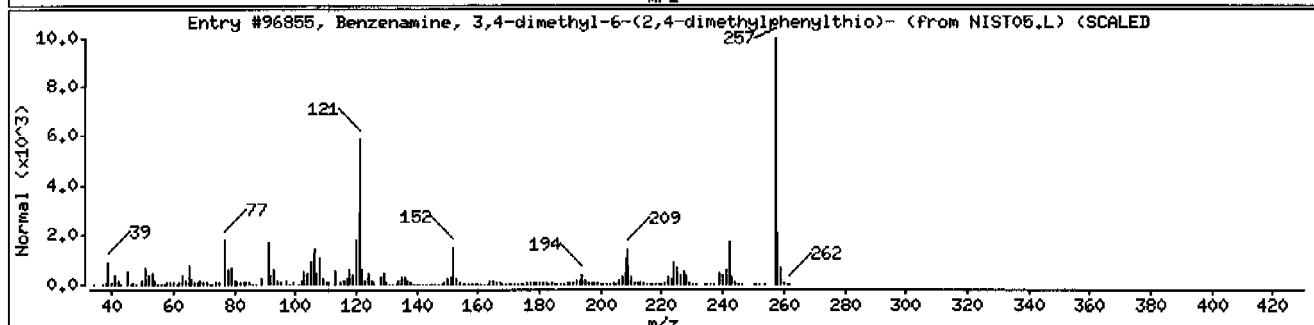
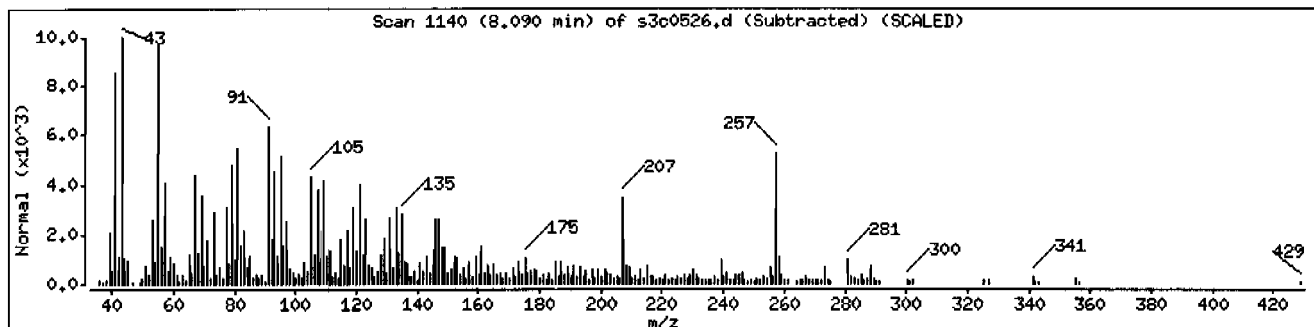
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenamine, 3,4-dimethyl-6-(2,4-dimethyl	1000266-21-4	NIST05.L	96855	53	C16H19NS	257
Morphinan-4-ol-6-one	1000129-29-0	NIST05.L	96831	44	C16H19NO2	257
Pregn-14-ene, (5,6,eta.)-	54411-80-2	NIST05.L	116260	38	C21H34	286



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3,i

Sample Info: 1247562004195667711SVHF111LANL

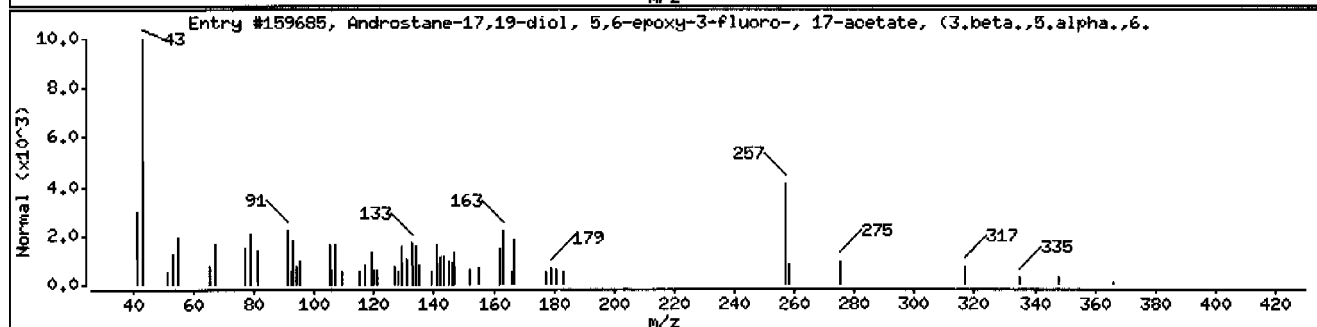
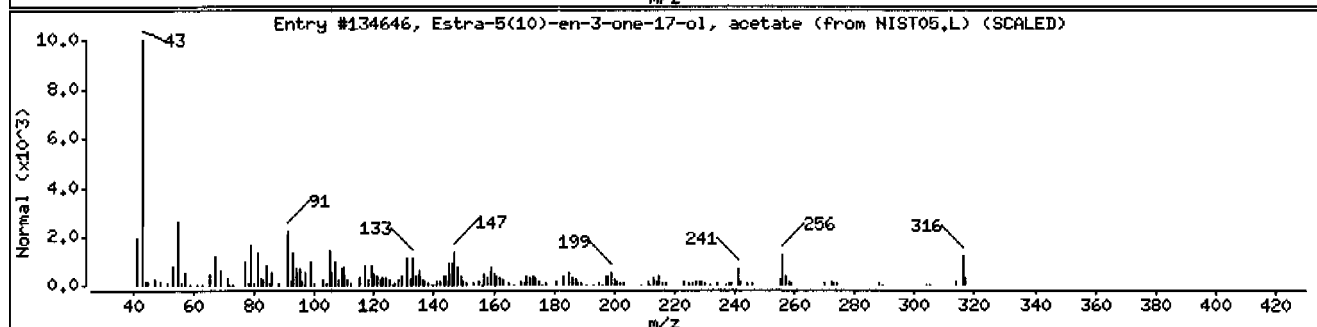
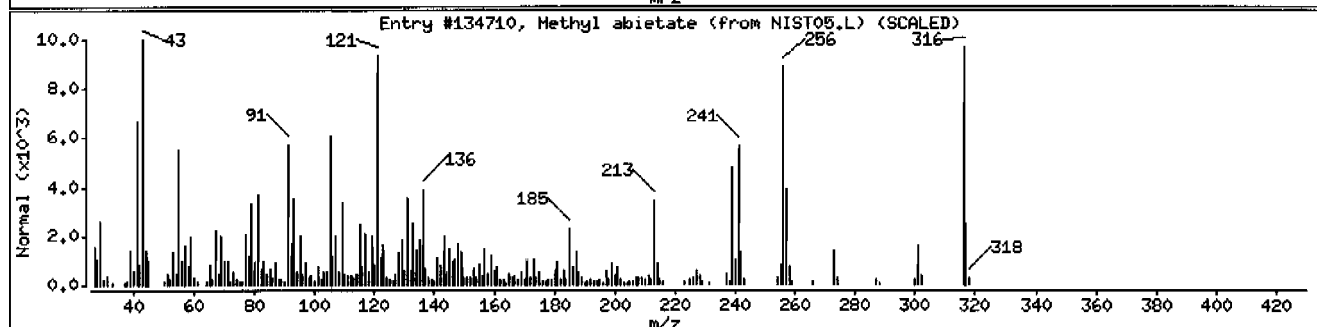
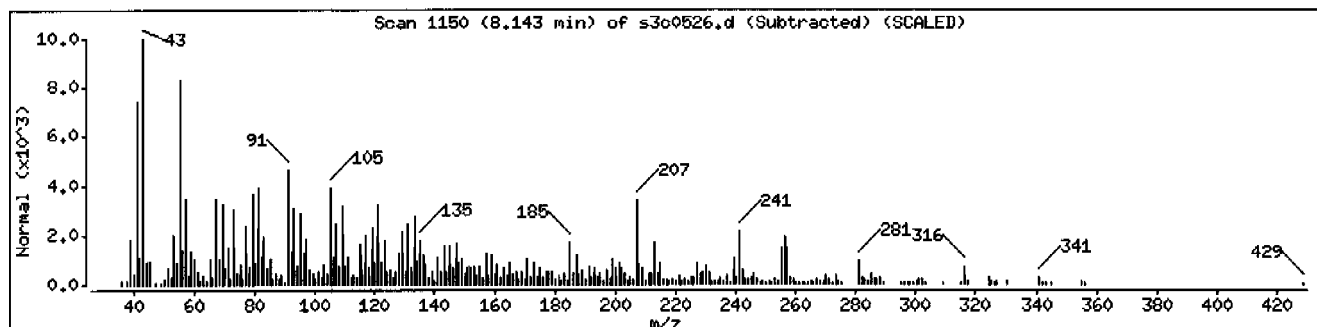
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyl abietate	127-26-3	NIST05.L	134710	38	C <sub>21</sub> H <sub>32</sub> O <sub>2</sub>	316
Estra-5(10)-en-3-one-17-ol, acetate	19906-32-2	NIST05.L	134646	20	C <sub>20</sub> H <sub>28</sub> O <sub>3</sub>	316
Androstane-17,19-diol, 5,6-epoxy-3-fluor	40242-94-2	NIST05.L	159685	12	C <sub>21</sub> H <sub>31</sub> FO <sub>4</sub>	366



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11ILANL

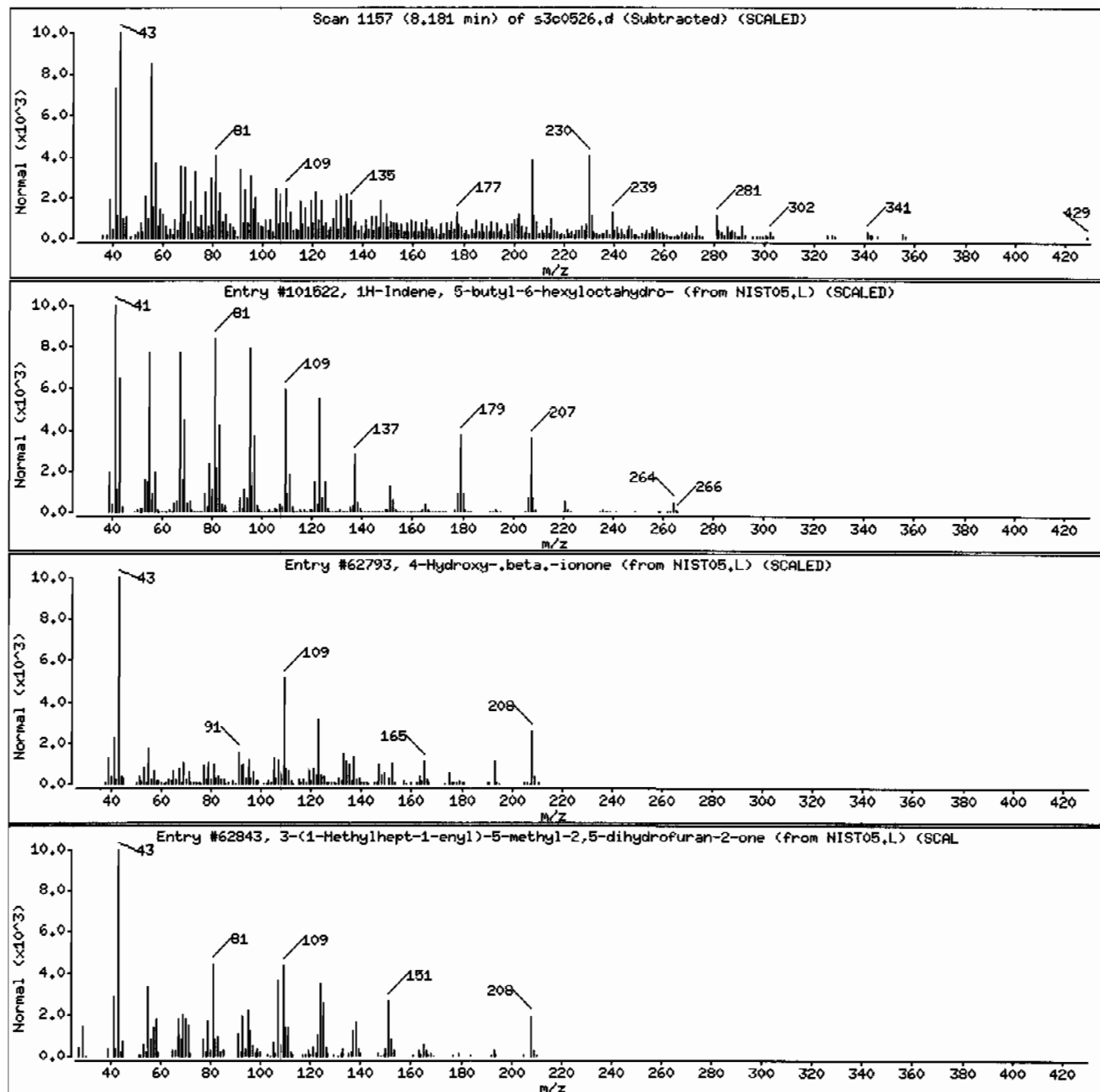
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	11	C19H36	264
4-Hydroxy-.beta.-ionone	15401-34-0	NIST05.L	62793	11	C13H20O2	208
3-(1-Methylhept-1-enyl)-5-methyl-2,5-dih	1000284-50-5	NIST05.L	62843	11	C13H20O2	208



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF111LANL

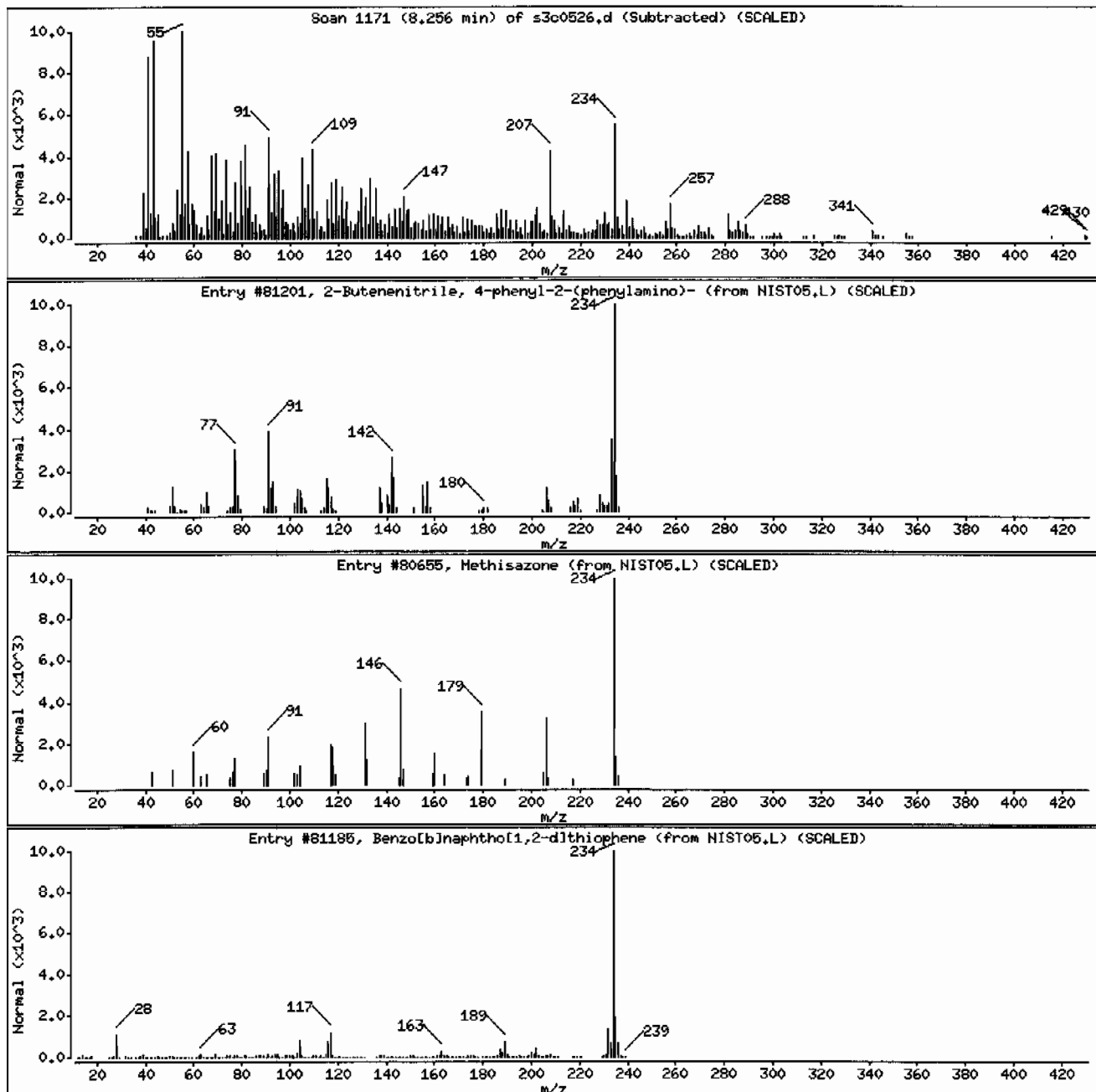
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butenenitrile, 4-phenyl-2-(phenylamino)	14627-90-8	NIST05.L	81201	25	C16H14N2	234
Methisazone	1910-68-5	NIST05.L	80655	25	C10H10N4O5	234
Benzo[b]naphtho[1,2-d]thiophene	205-43-6	NIST05.L	81185	25	C16H10S	234





Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: HSD3.i

Sample Info: 1247562004195667711SVHF111LANL

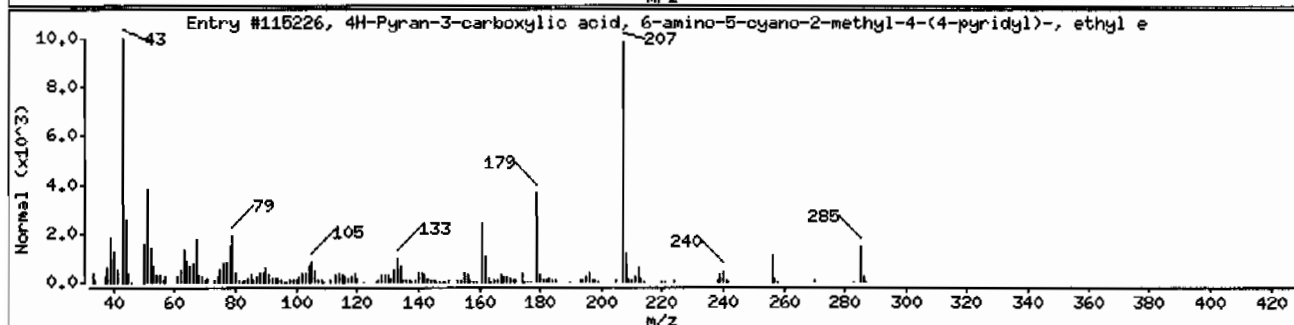
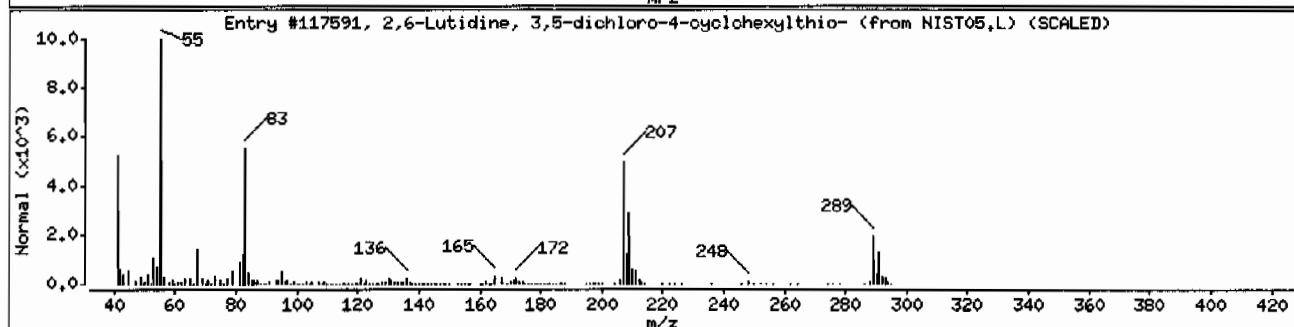
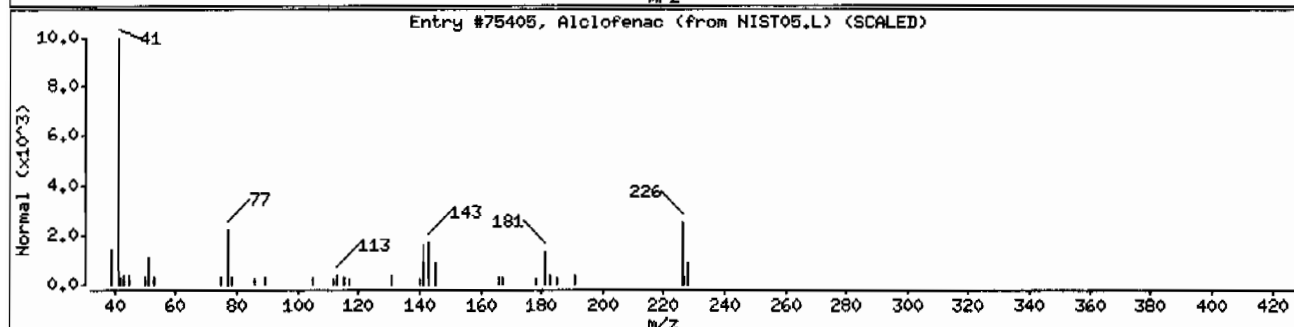
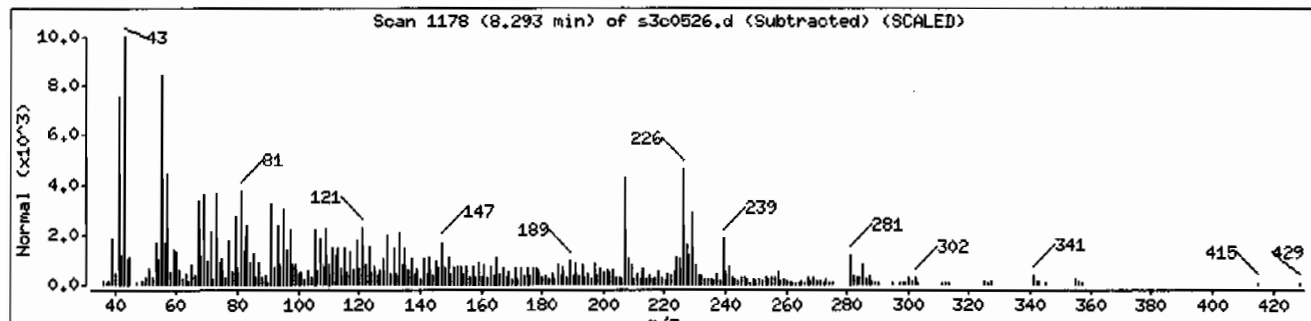
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Aloclufenac	22131-79-9	NIST05.L	75405	15	C11H11ClO3	226
2,6-Lutidine, 3,5-dichloro-4-cyclohexylt	1000252-29-1	NIST05.L	117591	10	C13H17Cl2NS	289
4H-Pyran-3-carboxylic acid, 6-amino-5-cy	227177-00-6	NIST05.L	115226	10	C15H15N3O3	285



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: I247562004195667711SVHF11ILANL

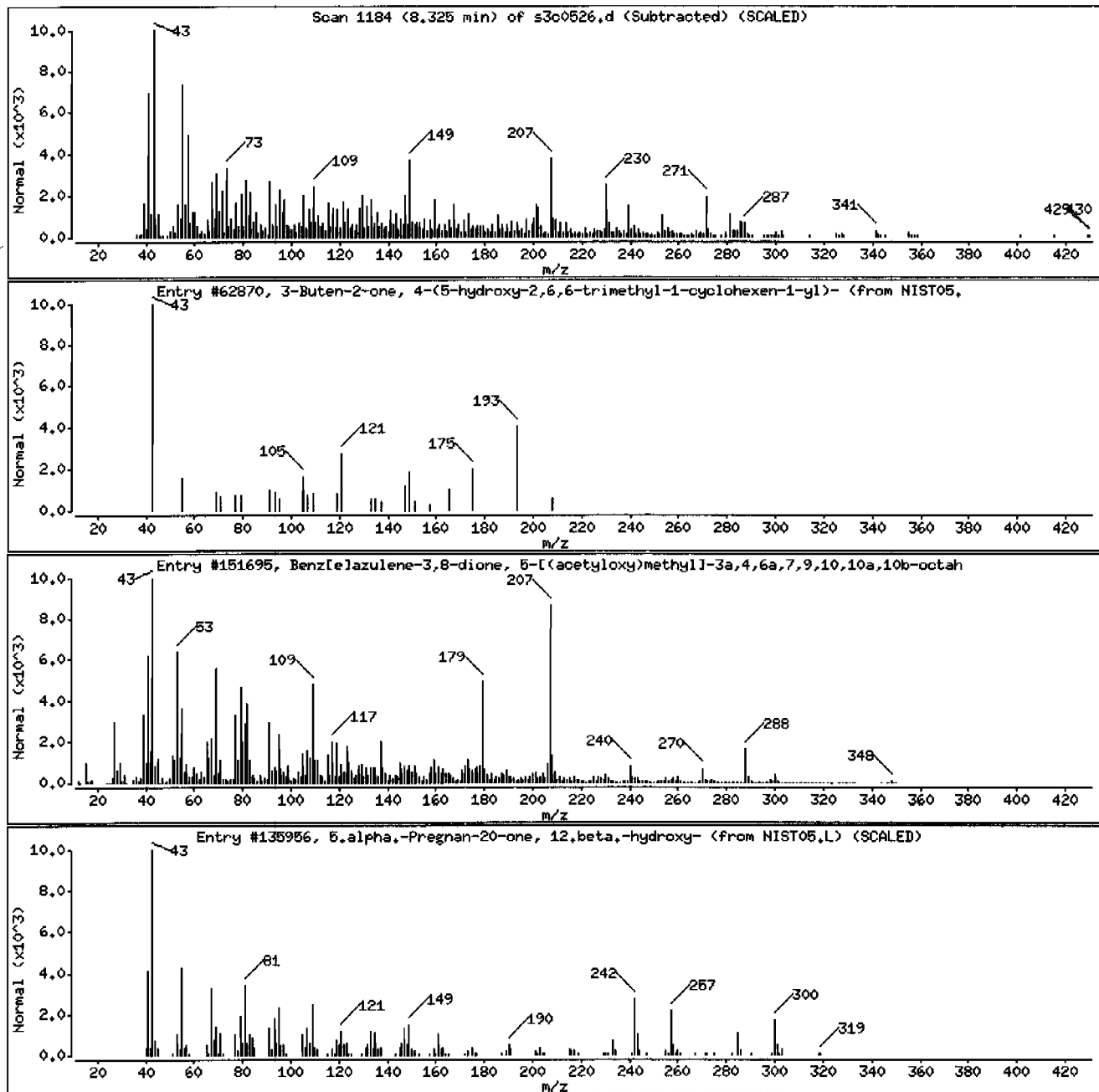
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Buten-2-one, 4-(5-hydroxy-2,6,6-trimet	69050-59-5	NIST05.L	62870	18	C13H20O2	208
Benzofelazulene-3,8-dione, 5-[(acetyloxy)	25536-74-7	NIST05.L	151695	14	C19H24O6	348
5.alpha.-Pregnan-20-one, 12.beta.-hydrox	5618-22-4	NIST05.L	135956	14	C21H34O2	318



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11ILANL

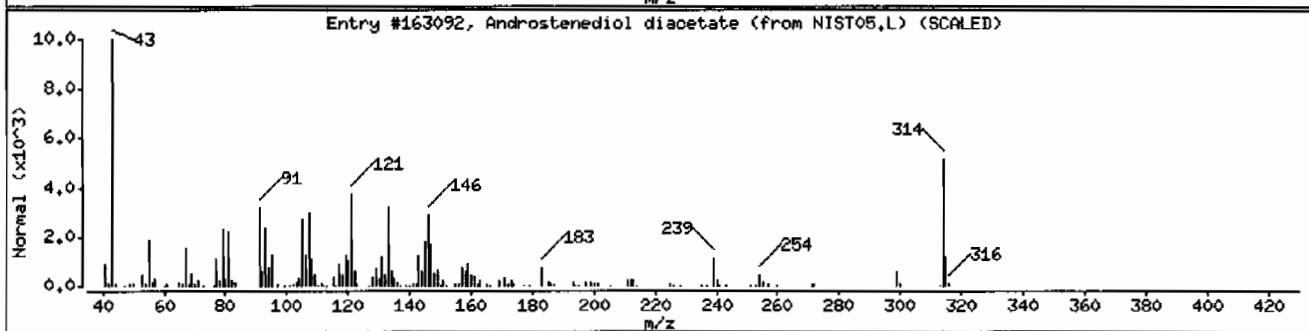
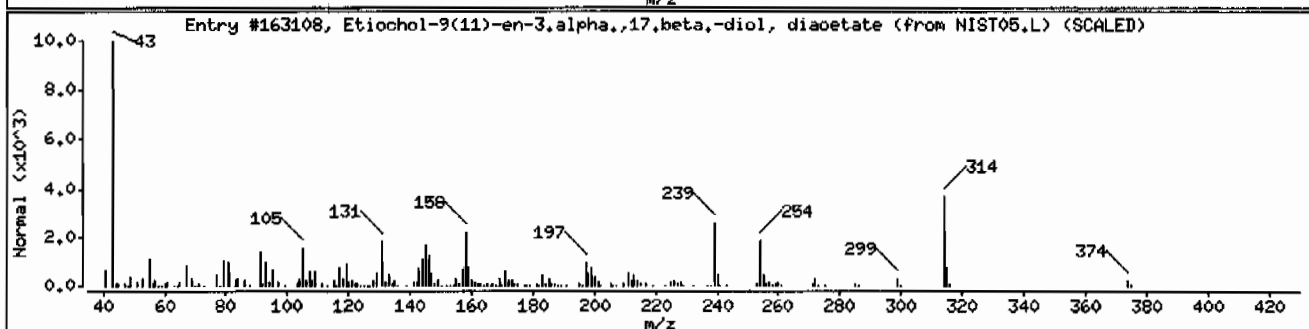
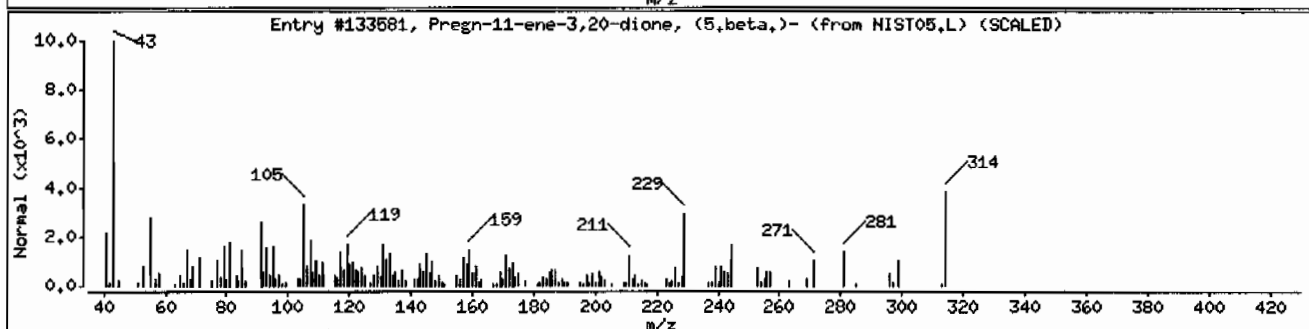
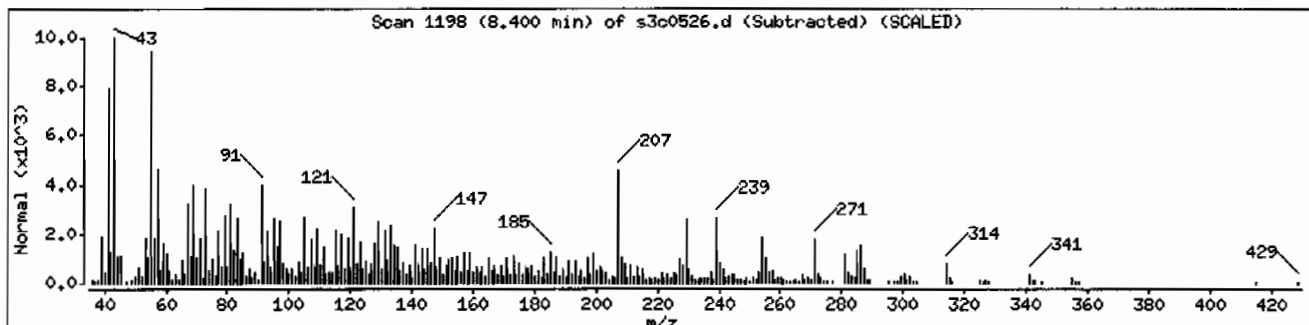
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pregn-11-ene-3,20-dione, (5,β)-	1096-39-5	NIST05.L	133581	25	C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	314
Etiochol-9(11)-en-3,α,17,β,-diol	1000128-32-5	NIST05.L	163108	11	C <sub>23</sub> H <sub>34</sub> O <sub>4</sub>	374
Androstenediol diacetate	116262-99-8	NIST05.L	163092	10	C <sub>23</sub> H <sub>34</sub> O <sub>4</sub>	374



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF111LANL

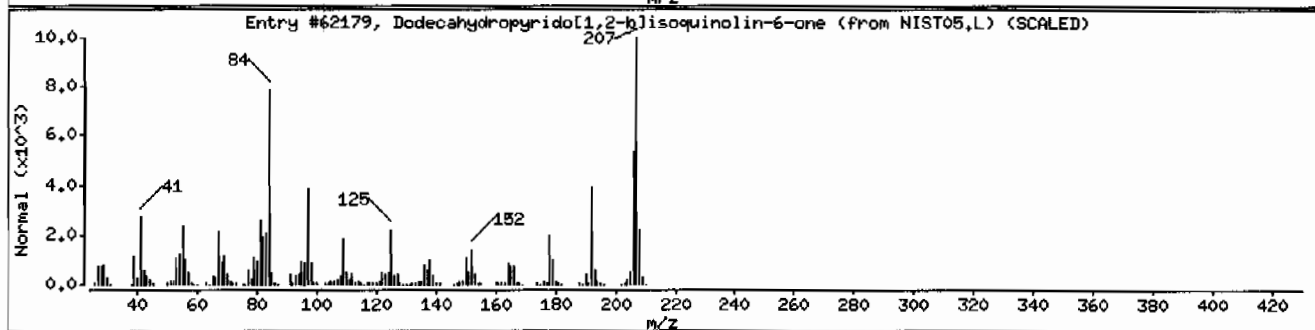
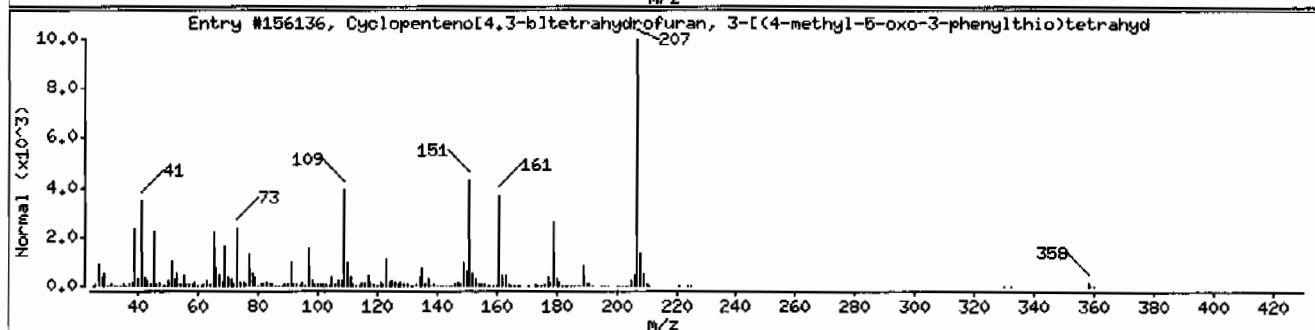
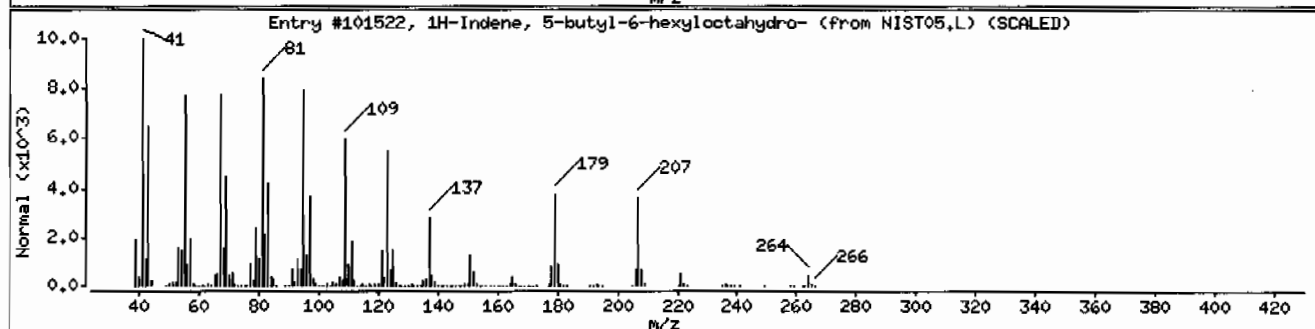
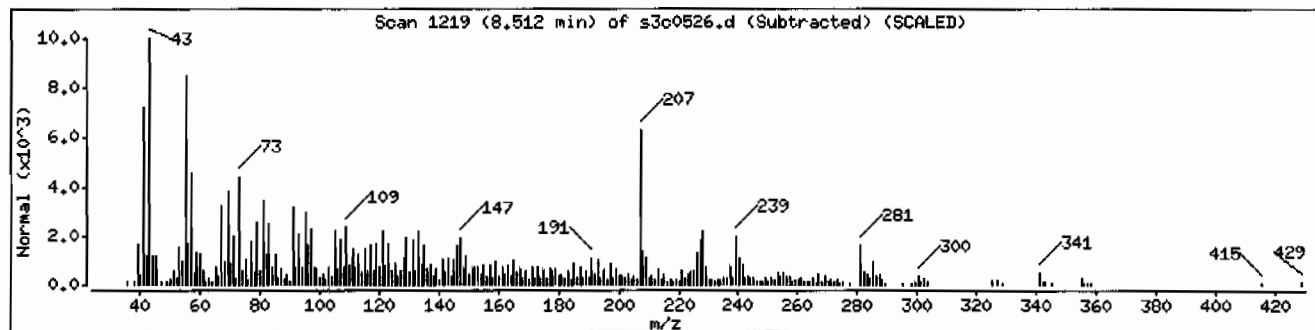
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	44	C19H36	264
Cyclopenteno[4.3-b]tetrahydrofuran, 3-[(	1000211-22-7	NIST05.L	156136	38	C19H18O5S	358
Dodecahydropyrido[1,2-b]isoquinolin-6-on	108873-36-5	NIST05.L	62179	30	C13H21NO	207



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF111LANL

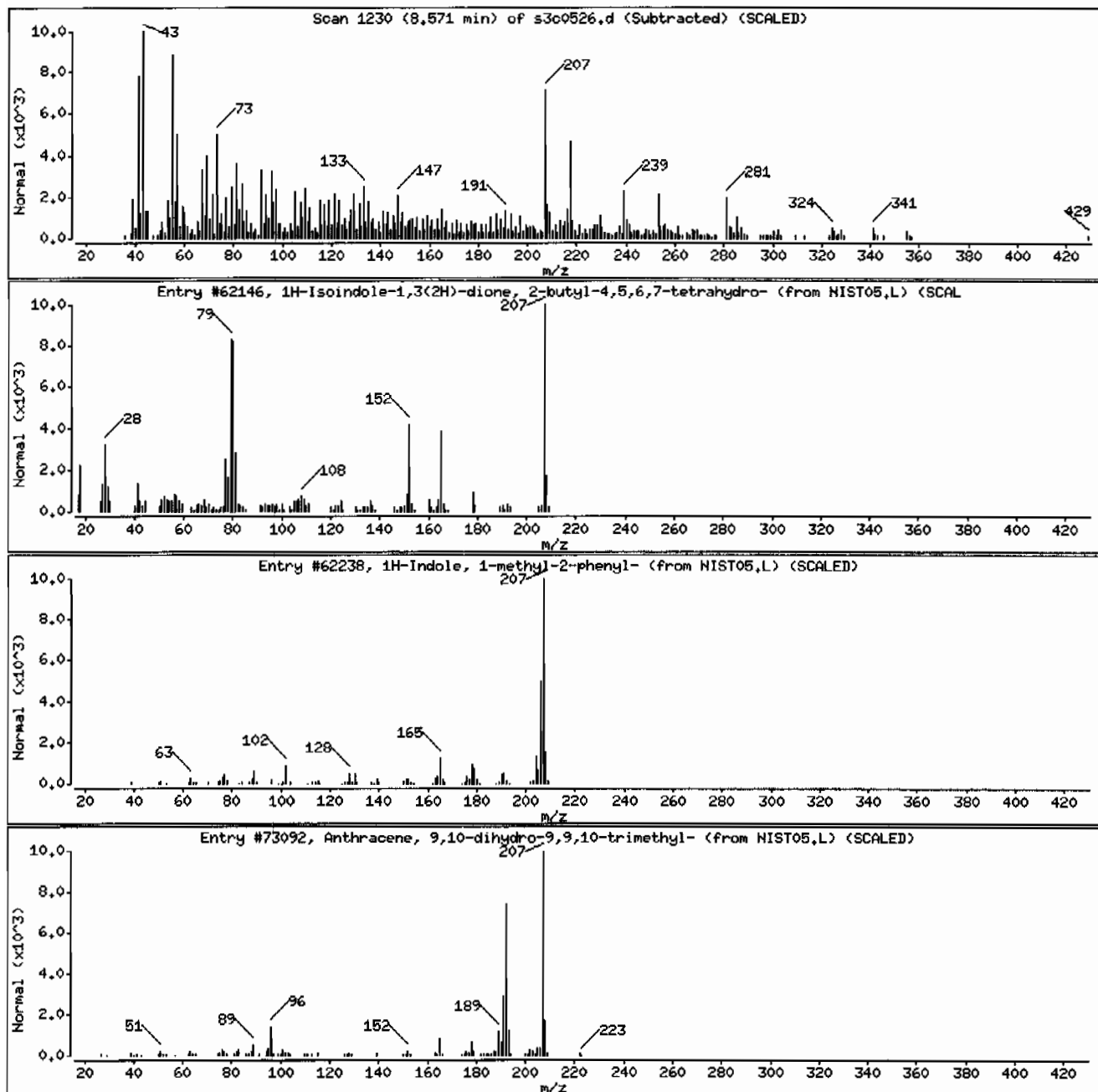
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Isoindole-1,3(2H)-dione, 2-butyl-4,6,	54934-85-9	NIST05.L	62146	44	C12H17N02	207
1H-Indole, 1-methyl-2-phenyl-	3858-24-5	NIST05.L	62238	25	C15H13N	207
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	25	C17H18	222



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711ISVMF111LANL

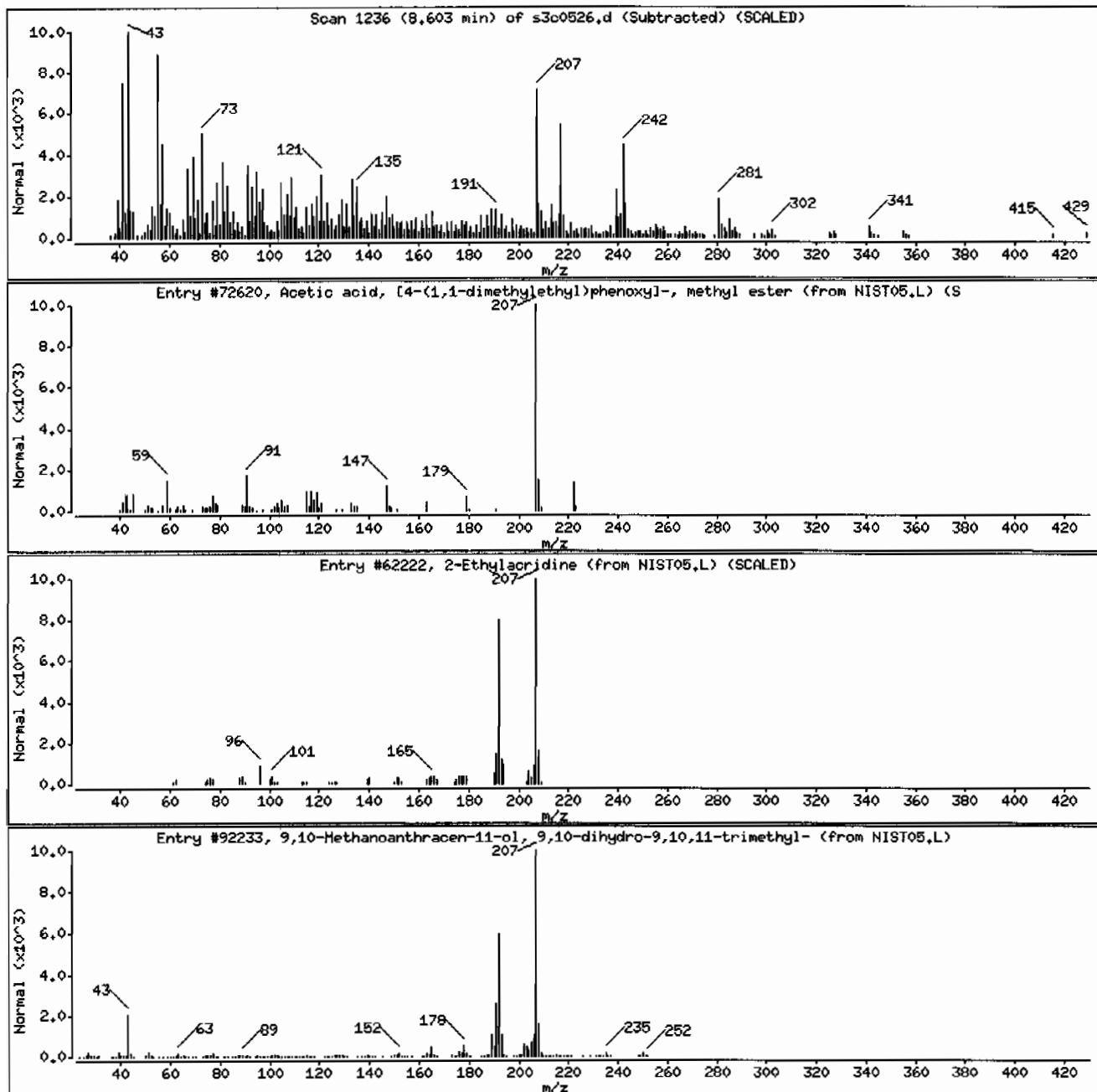
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	38	C13H18O3	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	25	C15H13N	207
9,10-Methanoanthracen-11-ol, 9,10-dihydr	126615-74-5	NIST05.L	92233	25	C18H18O	250



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF111LANL

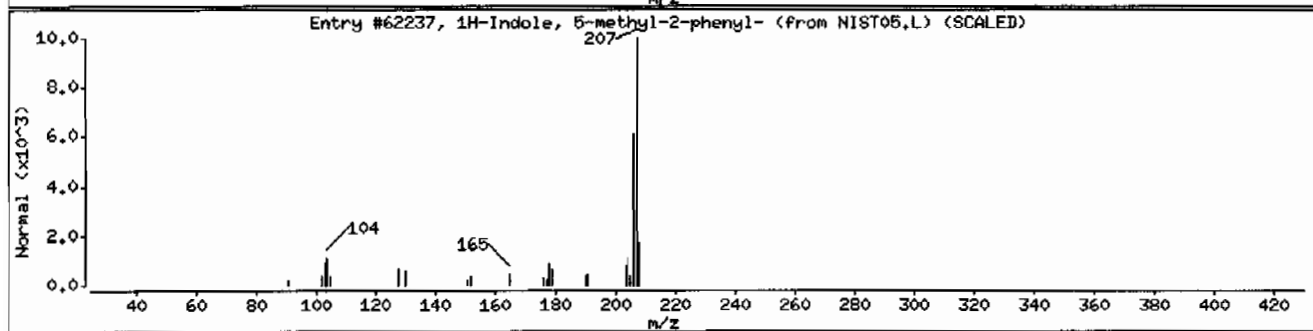
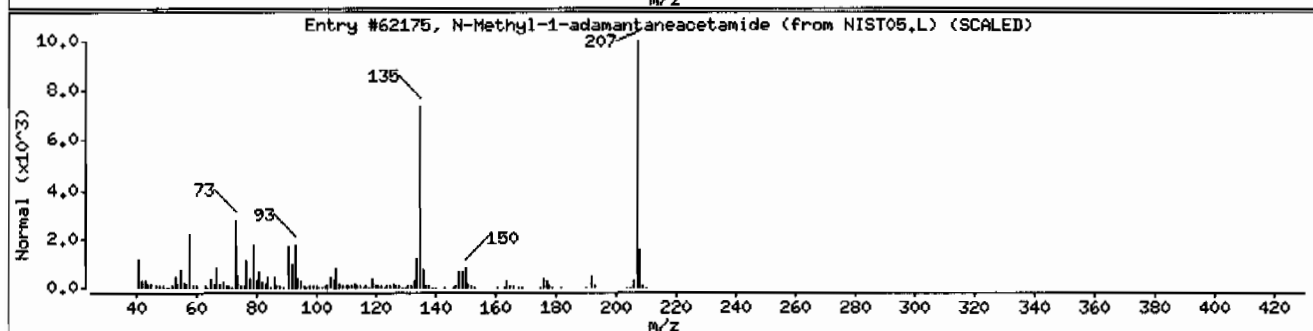
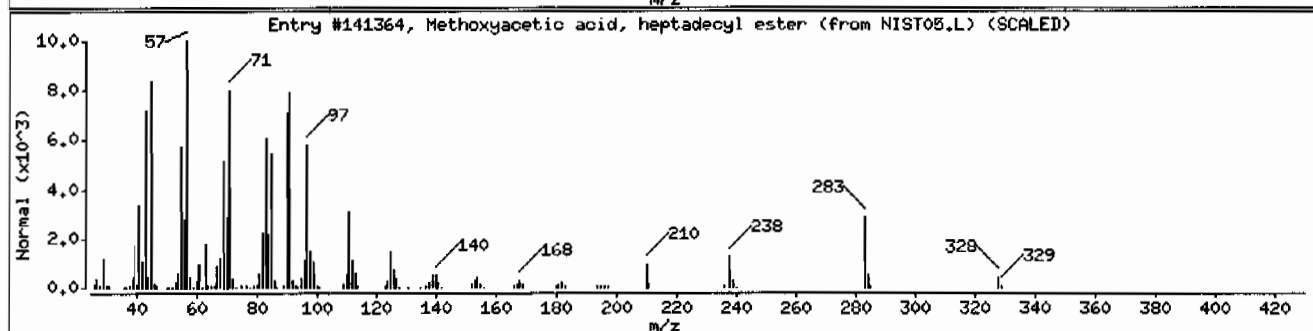
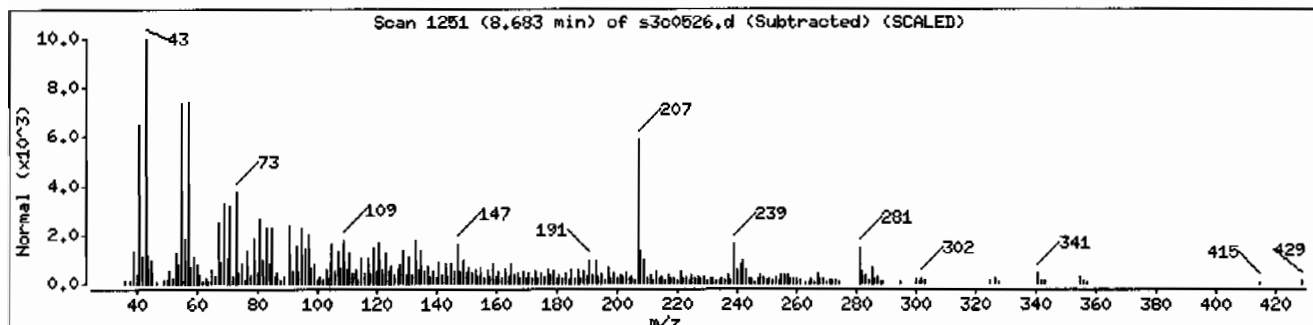
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methoxyacetic acid, heptadecyl ester	1000282-99-1	NIST05.L	141364	46	C20H40O3	328
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	38	C15H13N	207



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF111LANL

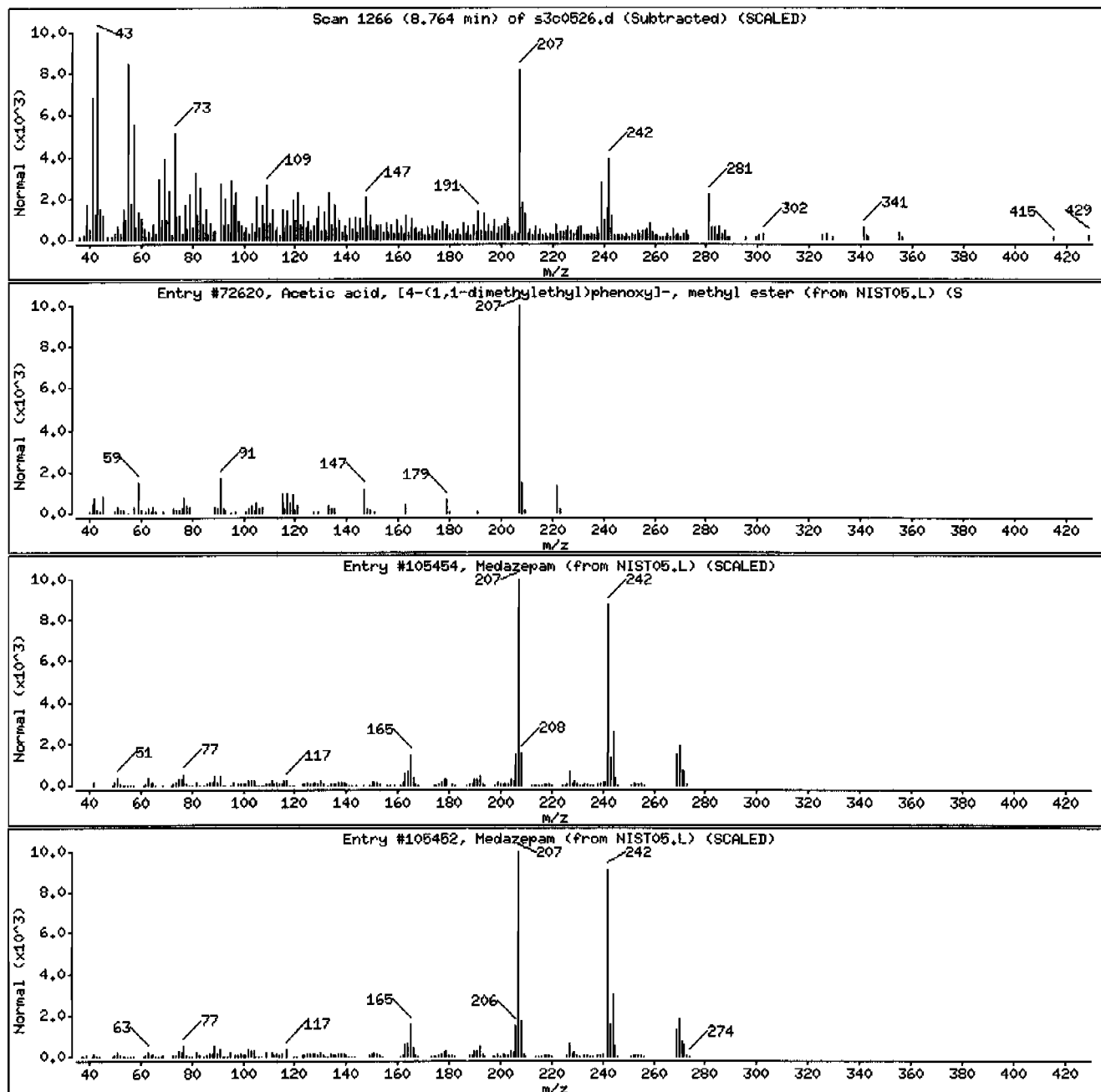
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	46	C13H18O3	222
Medazepam	2898-12-6	NIST05.L	105454	45	C16H15ClN2	270
Medazepam	2898-12-6	NIST05.L	105452	38	C16H15ClN2	270





Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11ILANL

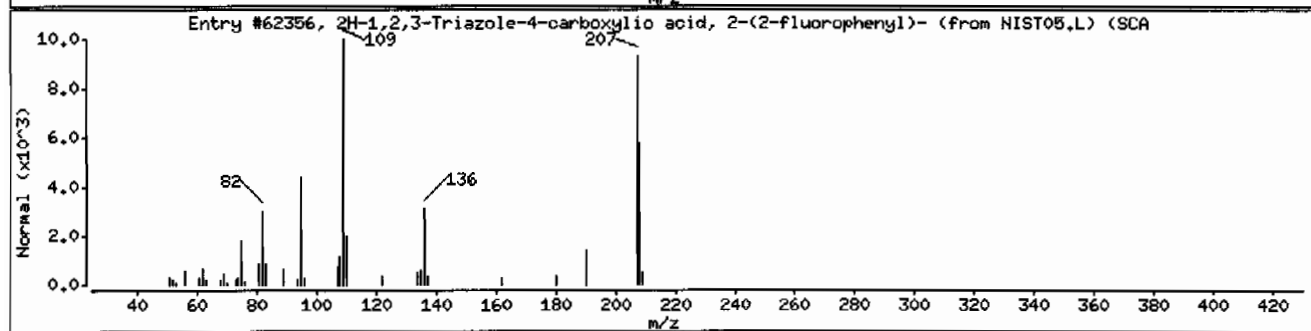
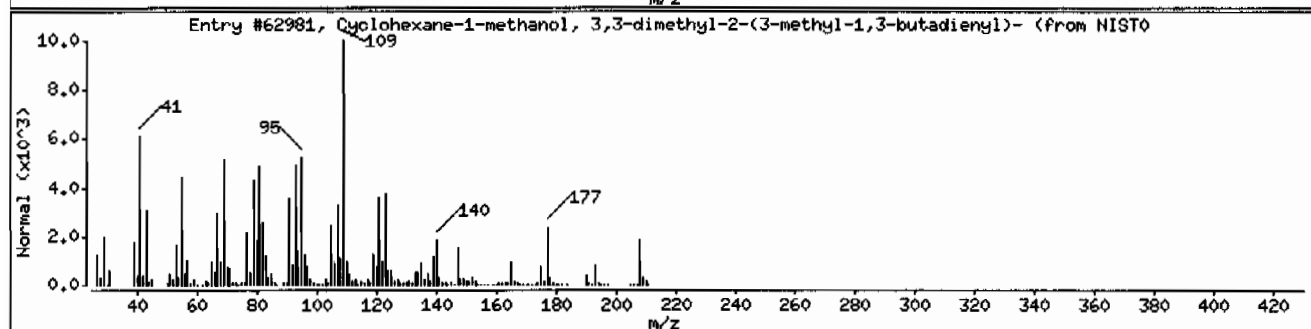
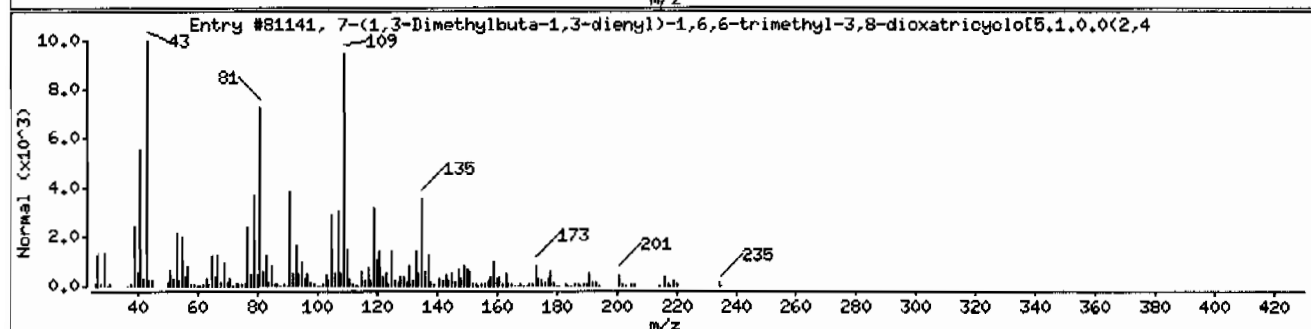
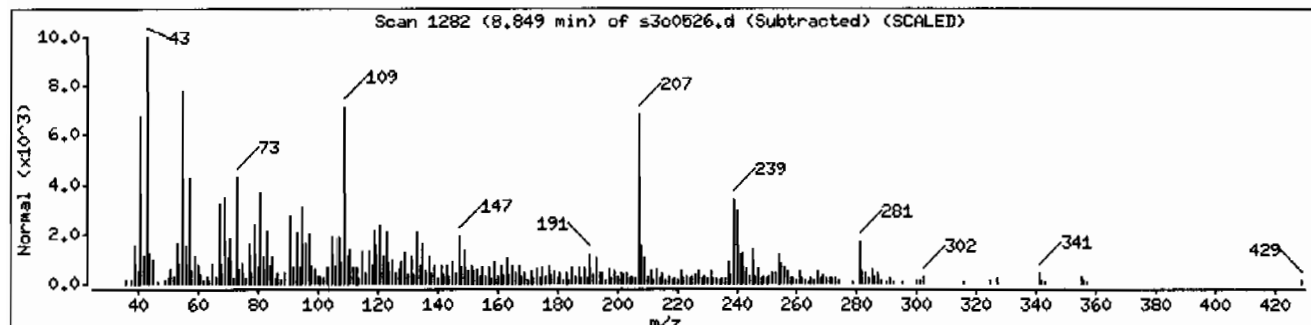
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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-trimethyl-3,8-dioxatricyclo[5.1.0.0(2,4)]	1000190-22-7	NIST05.L	81141	46	C15H22O2	234
Cyclohexane-1-methanol, 3,3-dimethyl-2-(3-methyl-1,3-butadienyl)-	1000196-01-5	NIST05.L	62981	42	C14H24O	208
2H-1,2,3-Triazole-4-carboxylic acid, 2-(2-fluorophenyl)-	51306-44-6	NIST05.L	62356	38	C9H6FN3O2	207



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVMF111LANL

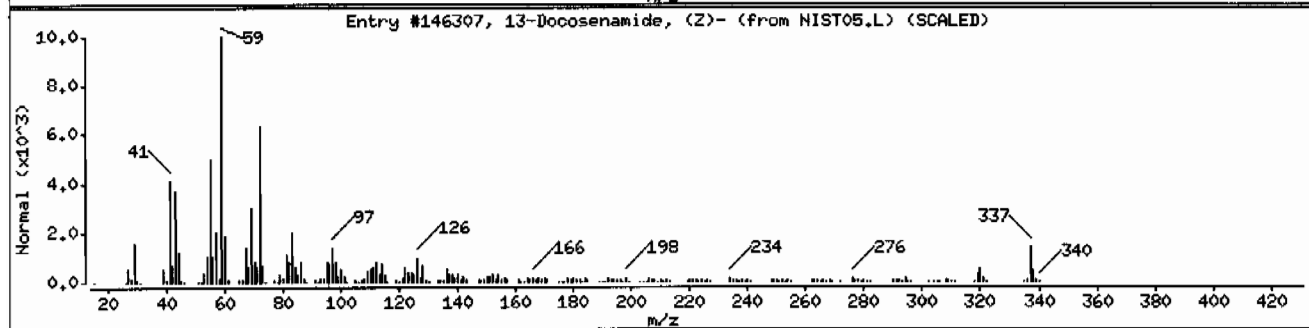
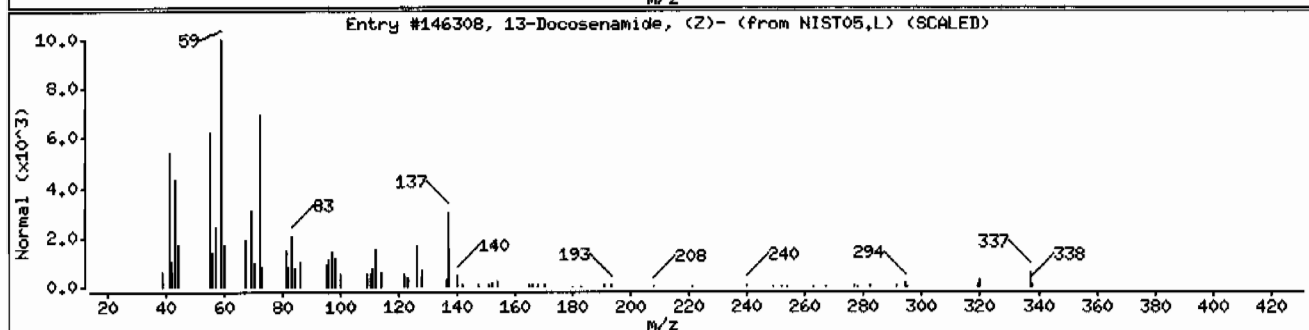
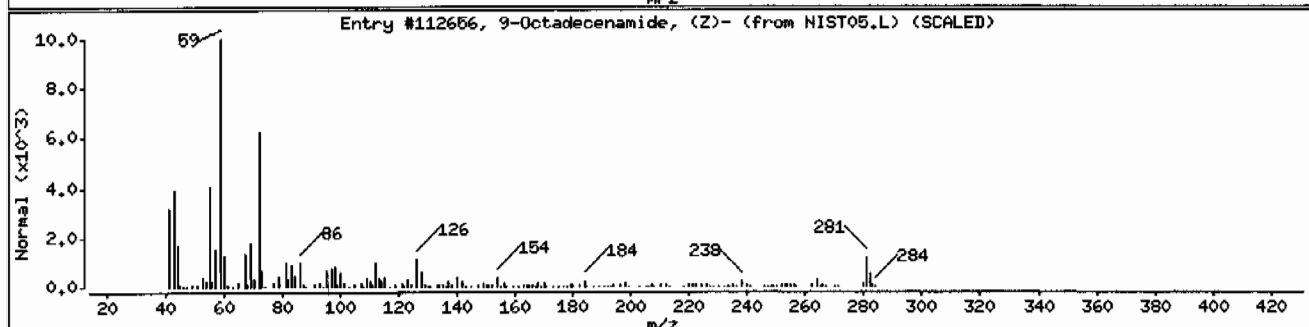
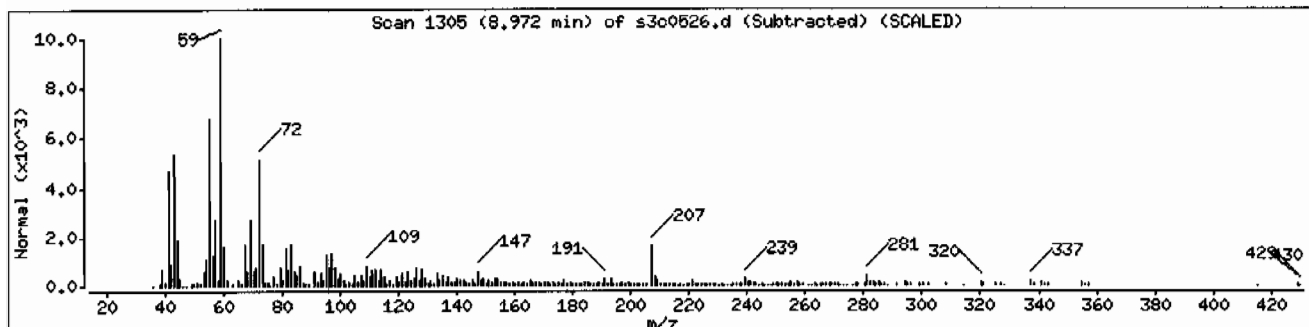
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	89	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	89	C22H43NO	337
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	89	C22H43NO	337



Date : 05-MAR-2010 18:49

Client ID: RE15-10-8312

Instrument: MSD3.i

Sample Info: 1247562004195667711SVHF11ILANL

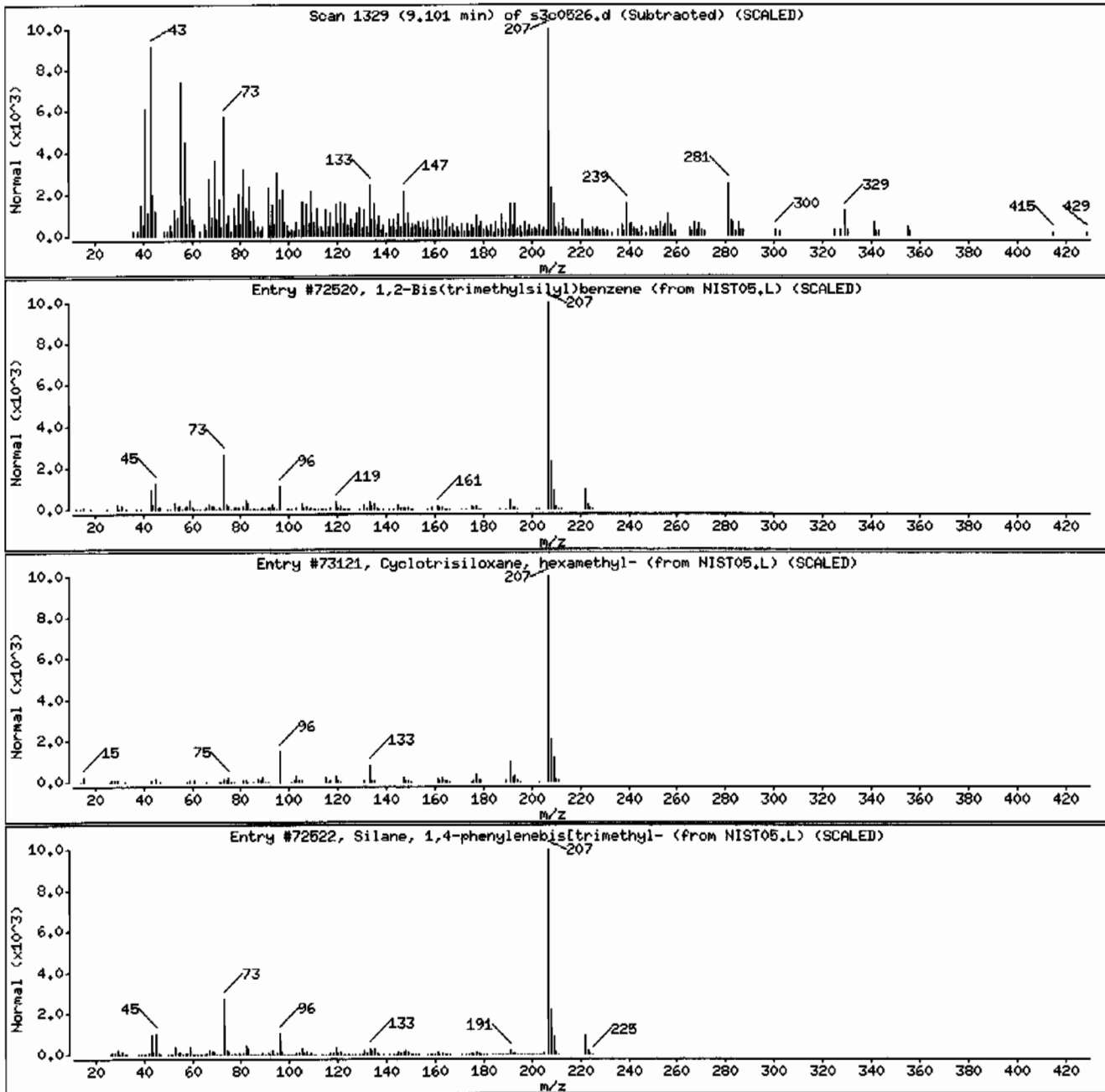
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	41	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	38	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222



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

<b>SDG Number:</b> 10-1950	<b>Date Collected:</b> 02/15/2010 12:00	<b>Matrix:</b> R
<b>Lab Sample ID:</b> 247562003	<b>Date Received:</b> 02/20/2010 08:55	<b>%Moisture:</b> 3.6
	<b>Client:</b> LANL010	<b>Project:</b> LANL01004
<b>Client ID:</b> RE15-10-8313	<b>Method:</b> SW846 8270C	<b>SOP Ref:</b> GL-OA-E-009
<b>Batch ID:</b> 956677	<b>Inst:</b> MSD3.I	<b>Dilution:</b> 1
<b>Run Date:</b> 03/05/2010 18:26	<b>Analyst:</b> JLD1	<b>Inj. Vol:</b> .5 uL
<b>Prep Date:</b> 02/23/2010 21:09	<b>Aliquot:</b> 30.15 g	<b>Final Volume:</b> 1 mL
<b>Data File:</b> s3c0525.d	<b>Column:</b> J&W DB-5MS	<b>Level:</b> LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	344	ug/kg	68.8	344
108-95-2	Phenol	U	344	ug/kg	68.8	344
95-57-8	2-Chlorophenol	U	344	ug/kg	68.8	344
106-46-7	1,4-Dichlorobenzene	U	344	ug/kg	68.8	344
621-64-7	N-Nitrosodipropylamine	U	344	ug/kg	68.8	344
59-50-7	4-Chloro-3-methylphenol	U	344	ug/kg	68.8	344
83-32-9	Acenaphthene	U	34.4	ug/kg	11.4	34.4
121-14-2	2,4-Dinitrotoluene	U	344	ug/kg	34.4	344
100-02-7	4-Nitrophenol	U	344	ug/kg	114	344
87-86-5	Pentachlorophenol	U	344	ug/kg	86.0	344
129-00-0	Pyrene		201	ug/kg	10.3	34.4
110-86-1	Pyridine	U	344	ug/kg	68.8	344
62-53-3	Aniline	U	344	ug/kg	103	344
111-44-4	bis(2-Chloroethyl) ether	U	344	ug/kg	68.8	344
541-73-1	1,3-Dichlorobenzene	U	344	ug/kg	68.8	344
100-51-6	Benzyl alcohol	U	344	ug/kg	103	344
95-50-1	1,2-Dichlorobenzene	U	344	ug/kg	68.8	344
108-60-1	bis(2-Chloroisopropyl)ether	U	344	ug/kg	68.8	344
95-48-7	o-Cresol	U	344	ug/kg	68.8	344
65794-96-9	m,p-Cresols	U	344	ug/kg	103	344
67-72-1	Hexachloroethane	U	344	ug/kg	68.8	344
98-95-3	Nitrobenzene	U	344	ug/kg	68.8	344
78-59-1	Isophorone	U	344	ug/kg	68.8	344
88-75-5	2-Nitrophenol	U	344	ug/kg	68.8	344
105-67-9	2,4-Dimethylphenol	U	344	ug/kg	120	344
111-91-1	bis(2-Chloroethoxy)methane	U	344	ug/kg	68.8	344
120-83-2	2,4-Dichlorophenol	U	344	ug/kg	68.8	344
65-85-0	Benzoic acid	U	688	ug/kg	172	688
91-20-3	Naphthalene	U	34.4	ug/kg	10.3	34.4
106-47-8	4-Chloroaniline	U	344	ug/kg	68.8	344
87-68-3	Hexachlorobutadiene	U	344	ug/kg	68.8	344
91-57-6	2-Methylnaphthalene	U	34.4	ug/kg	6.88	34.4
77-47-4	Hexachlorocyclopentadiene	U	344	ug/kg	68.8	344
88-06-2	2,4,6-Trichlorophenol	U	344	ug/kg	68.8	344
95-95-4	2,4,5-Trichlorophenol	U	344	ug/kg	68.8	344
91-58-7	2-Chloronaphthalene	U	34.4	ug/kg	11.4	34.4
88-74-4	2-Nitroaniline	U	344	ug/kg	68.8	344
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	344	ug/kg	68.8	344

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562003	Date Received: 02/20/2010 08:55	%Moisture: 3.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8313	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 18:26	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.15 g	Final Volume: 1 mL
Data File: s3c0525.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	344	ug/kg	68.8	344
606-20-2	2,6-Dinitrotoluene	U	344	ug/kg	34.4	344
208-96-8	Acenaphthylene	J	16.3	ug/kg	10.3	34.4
51-28-5	2,4-Dinitrophenol	U	688	ug/kg	131	688
132-64-9	Dibenzofuran	U	344	ug/kg	68.8	344
84-66-2	Diethylphthalate	U	344	ug/kg	68.8	344
86-73-7	Fluorene	J	10.5	ug/kg	10.3	34.4
7005-72-3	4-Chlorophenylphenylether	U	344	ug/kg	68.8	344
534-52-1	2-Methyl-4,6-dinitrophenol	U	344	ug/kg	68.8	344
100-01-6	4-Nitroaniline	U	344	ug/kg	103	344
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	344	ug/kg	68.8	344
122-66-7	Azobenzene	U	344	ug/kg	68.8	344
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	344	ug/kg	68.8	344
118-74-1	Hexachlorobenzene	U	344	ug/kg	68.8	344
85-01-8	Phenanthrene		130	ug/kg	10.3	34.4
120-12-7	Anthracene	J	29.9	ug/kg	6.88	34.4
84-74-2	Di-n-butylphthalate	U	344	ug/kg	68.8	344
206-44-0	Fluoranthene		244	ug/kg	10.3	34.4
85-68-7	Butylbenzylphthalate	U	344	ug/kg	68.8	344
56-55-3	Benzo(a)anthracene		103	ug/kg	10.3	34.4
91-94-1	3,3'-Dichlorobenzidine	U	344	ug/kg	103	344
218-01-9	Chrysene		104	ug/kg	10.3	34.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	344	ug/kg	68.8	344
117-84-0	Di-n-octylphthalate	U	344	ug/kg	68.8	344
205-99-2	Benzo(b)fluoranthene		217	ug/kg	10.3	34.4
207-08-9	Benzo(k)fluoranthene	U	34.4	ug/kg	10.3	34.4
50-32-8	Benzo(a)pyrene		106	ug/kg	10.3	34.4
193-39-5	Indeno(1,2,3-cd)pyrene		50.4	ug/kg	10.3	34.4
53-70-3	Dibenzo(a,h)anthracene	U	34.4	ug/kg	10.3	34.4
191-24-2	Benzo(ghi)perylene		50.7	ug/kg	10.3	34.4
120-82-1	1,2,4-Trichlorobenzene	U	344	ug/kg	68.8	344

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	3420	ug/kg		JA
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	214	ug/kg	83	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562003

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.15 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.6  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

Client ID: RE15-10-8313  
Batch ID: 956677  
Run Date: 03/05/2010 18:26  
Prep Date: 02/23/2010 21:09  
Data File: s3c0525.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
25269-17-4	Thunbergol	7.43	163	ug/kg	83	NJ
	Unknown	7.6	203	ug/kg		J
	Unknown	7.78	142	ug/kg		J
2381-21-7	Pyrene, 1-methyl-	7.86	209	ug/kg	91	NJ
	Unknown	7.97	219	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	7.99	162	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	167	ug/kg	96	NJ
	Unknown	8.04	174	ug/kg		J
	Unknown	8.14	553	ug/kg		J
	Unknown	8.21	312	ug/kg		J
	Unknown	8.29	335	ug/kg		J
	Unknown	8.32	276	ug/kg		J
	Unknown	8.4	220	ug/kg		J
	Unknown	8.63	165	ug/kg		J
	Unknown	8.83	208	ug/kg		J
	Unknown	8.97	299	ug/kg		J
	Pyridine-3-carboxamide, oxime, N-(2-trif	9.04	139	ug/kg	92	NJ
	Unknown	9.11	209	ug/kg		J
	Unknown	15.51	282	ug/kg		J
	Unknown	16.14	226	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0525.d  
Lab Smp Id: 247562003 Client Smp ID: RE15-10-8313  
Inj Date : 05-MAR-2010 18:26  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562003|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 24  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.15000	weight of sample
M	3.58770	% 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	3.704	3.703	(1.000)	205132		40.0000	
* 29 Naphthalene-d8	136	4.559	4.564	(1.000)	837424		40.0000	
* 46 Acenaphthene-d10	164	5.811	5.811	(1.000)	484116		40.0000	
* 67 Phenanthrene-d10	188	6.817	6.816	(1.000)	852245		40.0000	
* 91 Chrysene-d12	240	8.432	8.437	(1.000)	576291		40.0000	
* 98 Perylene-d12	264	9.764	9.763	(1.000)	338764		40.0000	
\$ 3 2-Fluorophenol	112	2.901	2.896	(0.783)	375720		66.3484	2280
\$ 5 Phenol-d5	99	3.426	3.420	(0.925)	504458		69.8373	2400
\$ 20 Nitrobenzene-d5	82	4.062	4.062	(0.891)	254307		35.4410	1220
\$ 39 2-Fluorobiphenyl	172	5.303	5.302	(0.913)	477803		38.3283	1320
\$ 60 2,4,6-Tribromophenol	329	6.357	6.356	(1.094)	101686		67.3540	2320
\$ 81 p-Terphenyl-d14	244	7.742	7.741	(0.918)	495490		50.3766	1730

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng/ul)	(ug/Kg)	
79 Pyrene	202	7.688	7.688	(0.912)	105481	5.83203	201	
45 Acenaphthylene	152	5.709	5.714	(0.982)	8823	0.47339	16.3(a)	
53 Fluorene	166	6.191	6.196	(1.065)	4414	0.30602	10.5(a)	
68 Phenanthrene	178	6.833	6.832	(1.002)	88284	3.77906	130	
69 Anthracene	178	6.865	6.864	(1.007)	18656	0.87000	29.9(a)	
76 Fluoranthene	202	7.549	7.549	(1.107)	142583	7.09265	244	
89 Benzo(a)anthracene	228	8.426	8.426	(0.999)	44687	2.99909	103	
92 Chrysene	228	8.453	8.453	(1.003)	42878	3.02413	104	
95 Benzo(b)fluoranthene	252	9.341	9.341	(0.957)	48690	6.29705	217	
97 Benzo(a)pyrene	252	9.699	9.699	(0.993)	20383	3.09294	106	
99 Indeno(1,2,3-cd)pyrene	276	11.235	11.239	(1.151)	8514	1.46637	50.4	
101 Benzo(ghi)perylene	276	11.694	11.694	(1.198)	7138	1.47375	50.7(Q)	

#### 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: s3c0525.d

Report Date: 03/07/2010 15:05

Lab. ID: 247562003

SampleType: SAMPLE

Injection Date: 05-MAR-2010 18:26

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562003|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	27909	3.43	3.49	80-120	100	(T)
93	7710	3.47	3.49	238-298	28	(Q)
-----						
6	Phenol	CAS#: 108-95-2				
94	18818	3.27	3.43	80-120	100	(T)
66	3930	3.27	3.43	17- 77	21	(T)
65	15858	3.27	3.43	0- 30	84	(QT)
-----						
15	o-Cresol	CAS#: 95-48-7				
107	9184	3.66	3.82	80-120	100	(T)
108	2044	3.66	3.82	93-153	22	(QT)
77	42388	3.66	3.82	20- 80	462	(QT)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	36821	4.06	3.94	80-120	100	(T)
42	26271	4.06	3.94	58-118	71	(T)
-----						
27	Benzoic acid	CAS#: 65-85-0				
105	234	4.27	4.34	80-120	100	(T)
122	228	4.44	4.34	51-111	97	(T)
77	595	4.24	4.34	41-101	253	(QT)
-----						
40	2-Chloronaphthalene	CAS#: 91-58-7				
162	10295	5.54	5.41	80-120	100	(T)
164	510	5.54	5.41	3- 63	5	(T)
127	857	5.54	5.41	11- 71	8	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
42 o-Nitroaniline		CAS#: 88-74-4				
65	14568	5.54	5.47	80-120	100	(T)
92	16725	5.54	5.47	32- 92	115	(QT)
138	1210	5.54	5.47	67-127	8	(QT)
<hr/>						
43 Dimethylphthalate		CAS#: 131-11-3				
163	86767	5.81	5.58	80-120	100	(T)
164	486547	5.81	5.58	0- 40	561	(QT)
<hr/>						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	62746	5.81	5.63	80-120	100	(T)
63	958	5.81	5.63	64-124	2	(QT)
<hr/>						
45 Acenaphthylene		CAS#: 208-96-8				
152	8823	5.71	5.71	80-120	100	( )
151	1992	5.71	5.71	0- 50	23	( )
153	1189	5.71	5.71	0- 44	13	( )
<hr/>						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	62746	5.81	5.93	80-120	100	(T)
89	871	5.81	5.92	48-108	1	(QT)
63	958	5.81	5.92	25- 85	2	(QT)
<hr/>						
52 4-Nitrophenol		CAS#: 100-02-7				
139	1027	5.96	5.86	80-120	100	(T)
109	189	5.94	5.86	41-101	18	(QT)
65	116	5.95	5.86	80-140	11	(QT)
<hr/>						
53 Fluorene		CAS#: 86-73-7				
166	4414	6.19	6.20	80-120	100	( )
165	4400	6.20	6.20	62-122	100	( )
167	660	6.19	6.20	0- 44	15	( )
<hr/>						
55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	324	6.36	6.21	80-120	100	(T)
105	641	6.36	6.21	16- 76	198	(QT)
51	879	6.36	6.21	52-112	271	(QT)
<hr/>						
68 Phenanthrene		CAS#: 85-01-8				
178	88284	6.83	6.83	80-120	100	( )
179	14666	6.83	6.83	0- 45	17	( )
176	16598	6.83	6.83	0- 49	19	( )
<hr/>						
69 Anthracene		CAS#: 120-12-7				
178	18656	6.86	6.86	80-120	100	( )
179	3879	6.86	6.86	0- 45	21	( )
176	3521	6.86	6.86	0- 48	19	( )
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
76 Fluoranthene		CAS#: 206-44-0				
202	142583	7.55	7.55	80-120	100	( )
203	25211	7.55	7.55	0- 47	18	( )
101	18761	7.55	7.55	0- 43	13	( )
<hr/>						
79 Pyrene		CAS#: 129-00-0				
202	105481	7.69	7.69	80-120	100	( )
200	21636	7.69	7.69	0- 51	21	( )
101	16790	7.68	7.69	0- 45	16	( )
<hr/>						
89 Benzo(a)anthracene		CAS#: 56-55-3				
228	44687	8.43	8.43	80-120	100	( )
226	12727	8.43	8.43	0- 57	28	( )
229	14064	8.42	8.43	0- 50	31	( )
<hr/>						
92 Chrysene		CAS#: 218-01-9				
228	42878	8.45	8.45	80-120	100	( )
229	10360	8.45	8.45	0- 50	24	( )
226	13656	8.45	8.45	0- 60	32	( )
<hr/>						
95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	48690	9.34	9.34	80-120	100	( )
253	11175	9.34	9.34	0- 52	23	( )
125	7025	9.34	9.34	0- 43	14	( )
<hr/>						
96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	48690	9.34	9.37	80-120	100	( )
253	11358	9.34	9.37	0- 52	23	( )
125	7025	9.34	9.37	0- 42	14	( )
<hr/>						
97 Benzo(a)pyrene		CAS#: 50-32-8				
252	20383	9.70	9.70	80-120	100	( )
253	5128	9.70	9.70	0- 52	25	( )
125	3277	9.70	9.70	0- 30	16	( )
<hr/>						
99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	8514	11.23	11.24	80-120	100	( )
138	2310	11.23	11.24	4- 64	27	( )
<hr/>						
100 Dibenzo(a,h)anthracene		CAS#: 53-70-3				
278	2050	11.23	11.24	80-120	100	( )
139	596	11.23	11.24	0- 30	29	( )
<hr/>						
101 Benzo(ghi)perylene		CAS#: 191-24-2				
276	7138	11.69	11.69	80-120	100	( )
138	2411	11.69	11.69	0- 30	34	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0525.d  
 Lab Smp Id: 247562003 Client Smp ID: RE15-10-8313  
 Inj Date : 05-MAR-2010 18:26  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562003|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270 S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
 Als bottle: 24  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.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	30.15000	weight of sample
M	3.58770	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.704	1386225	40.000
* 67 Phenanthrene-d10	6.817	2471985	40.000
* 91 Chrysene-d12	8.432	2787769	40.000
* 98 Perylene-d12	9.764	976914	40.000

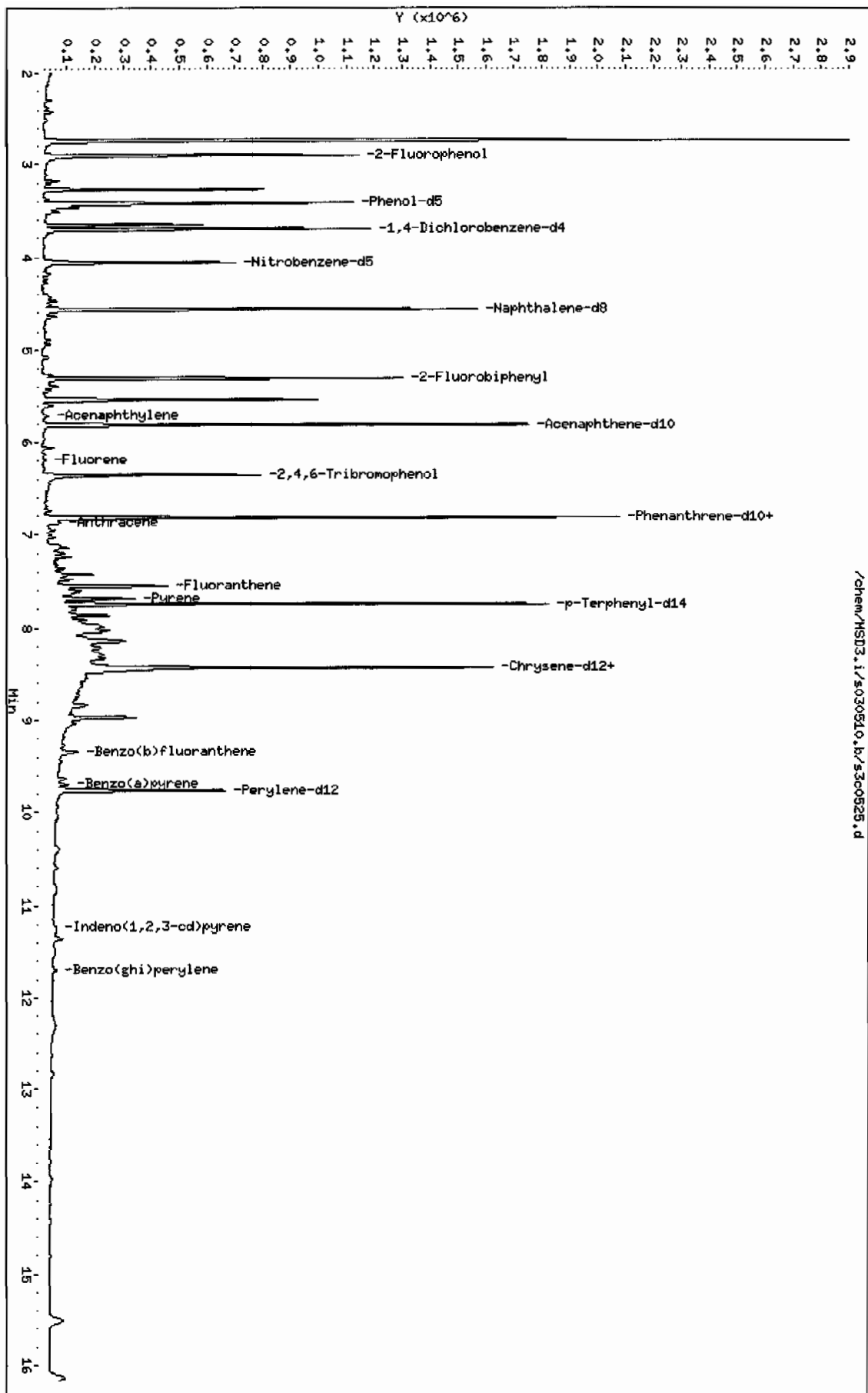
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL(ng/ul)	FINAL(ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.741	3450080	99.5532192	3420	0		0	10
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-					CAS #: 3479-89-8		
3.474	215785	6.22653764	214	83	NIST05.L	14442	10
Thunbergol					CAS #: 25269-17-4		
7.426	292337	4.73039551	163	83	NIST05.L	118732	67
Unknown					CAS #:		
7.603	363794	5.88667471	202	0		0	67
Unknown					CAS #:		
7.785	287351	4.12301843	142	0		0	91
Pyrene, 1-methyl-					CAS #: 2381-21-7		
7.865	423821	6.08114910	209	91	NIST05.L	68688	91
Unknown					CAS #:		
7.972	443908	6.36936174	219	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
7.988	327910	4.70498646	162	90	NIST05.L	112655	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.020	339277	4.86807466	167	96	NIST05.L	133618	91
Unknown					CAS #:		
8.041	353112	5.06659034	174	0		0	91
Unknown					CAS #:		
8.138	1120148	16.0723200	553	0		0	91
Unknown					CAS #:		
8.213	631413	9.05975107	312	0		0	91
Unknown					CAS #:		
8.293	678860	9.74054426	335	0		0	91
Unknown					CAS #:		
8.325	558792	8.01776819	276	0		0	91
Unknown					CAS #:		
8.400	446609	6.40812415	220	0		0	91

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	L1B ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
8.630	334202	4.79525386	165	0		0	91
Unknown				CAS #:			
8.833	421340	6.04554780	208	0		0	91
Unknown				CAS #:			
8.967	605346	8.68574395	299	0		0	91
Pyridine-3-carboxamide, oxime, N-(2-trif				CAS #: 288246-53-7			
9.042	282125	4.04803558	139	92	NIST05.L	112295	91
Unknown				CAS #:			
9.106	148386	6.07570967	209	0		0	98
Unknown				CAS #:			
15.513	199924	8.18592112	282	0		0	98
Unknown				CAS #:			
16.139	160728	6.58106296	226	0		0	98

Data File: /chem/MSD3.i/s030510.b/s300525.d  
 Date : 05-MAR-2010 18:26  
 Client ID: RE15-10-8313  
 Sample Info: 1247562003195667711SYMF11.LANL  
 Volume Injected (uL): 0.5  
 Column phase: JMW DB-BMS

Instrument: MSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (uL): 0.5

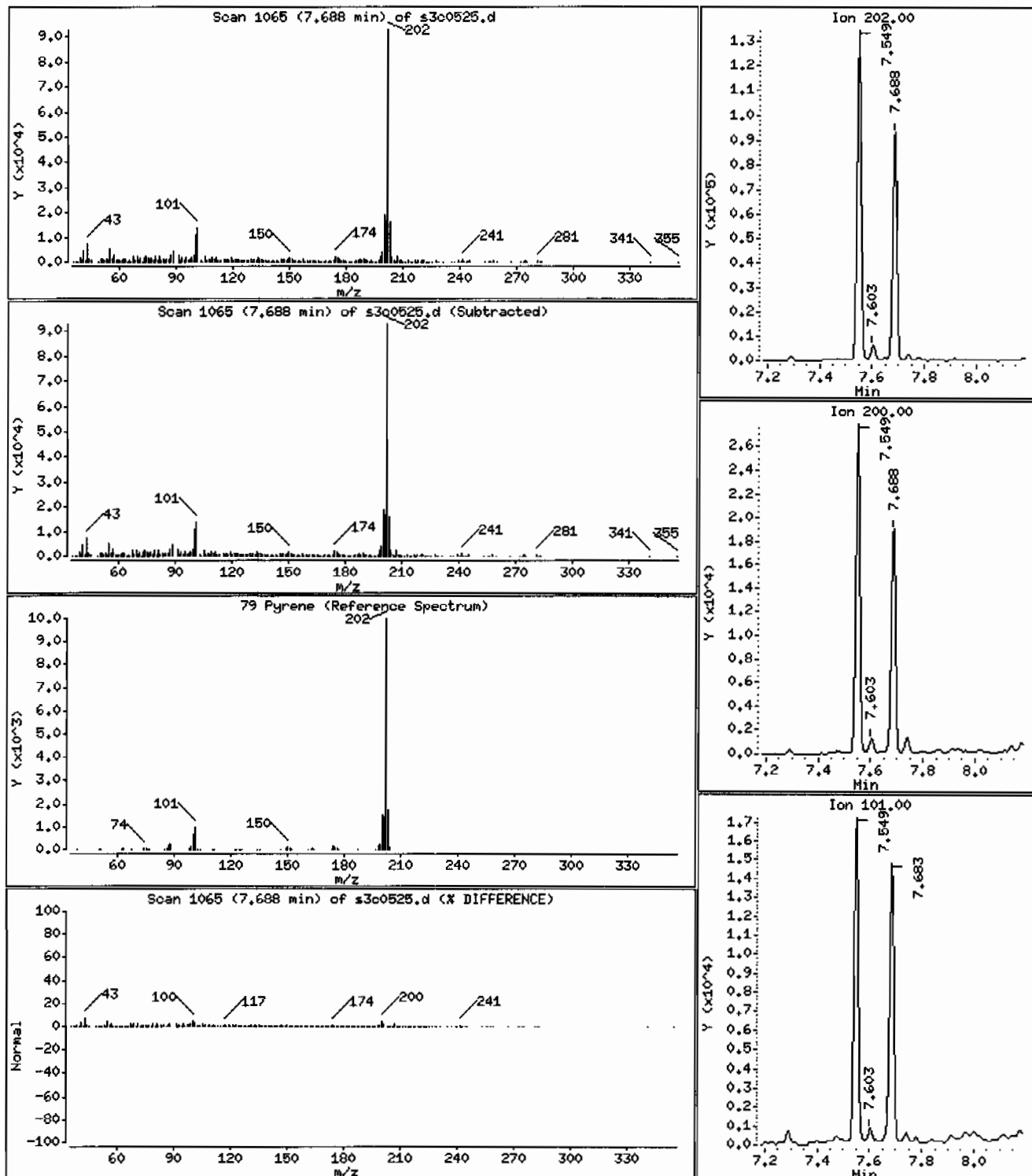
Operator: JLD1

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

Column diameter: 0.20

79 Pyrene

Concentration: 201 ug/Kg





Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

Volume Injected (uL): 0.5

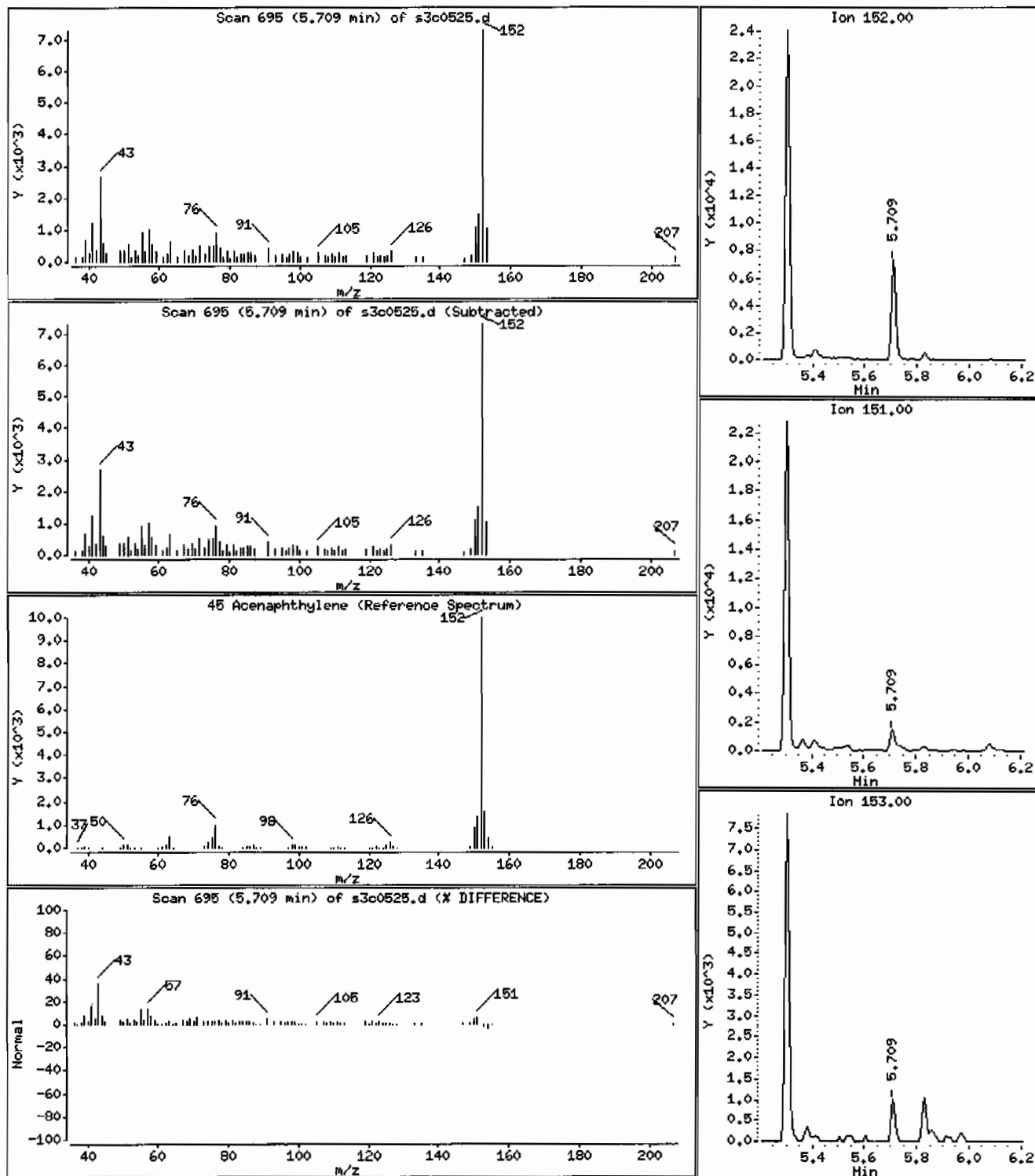
Operator: JLD1

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

Column diameter: 0.20

45 Acenaphthylene

Concentration: 16.3 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 12475620031956677111SVMF111LANL

Volume Injected (uL): 0.5

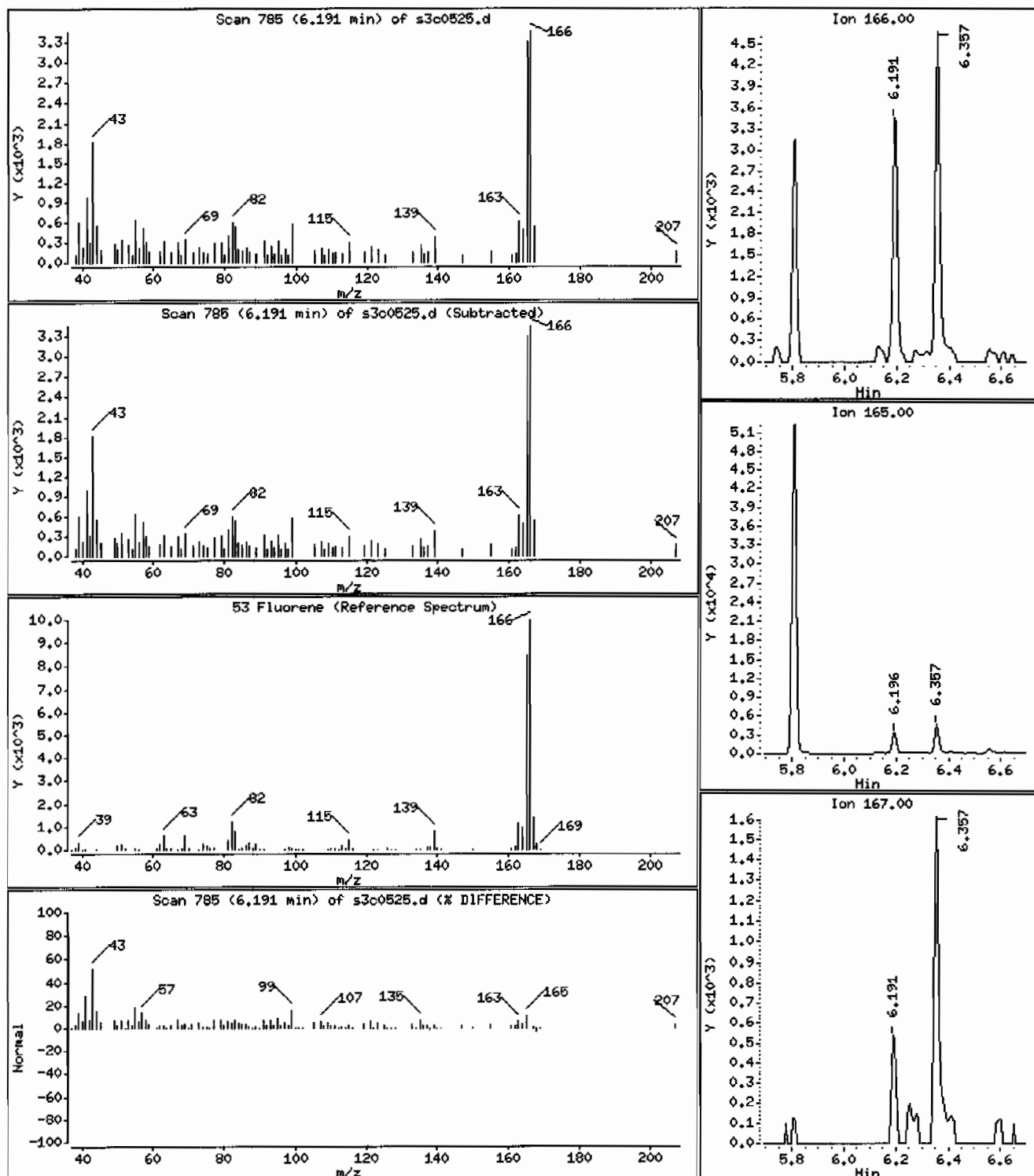
Operator: JLD1

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

Column diameter: 0.20

53 Fluorene

Concentration: 10.5 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (uL): 0.5

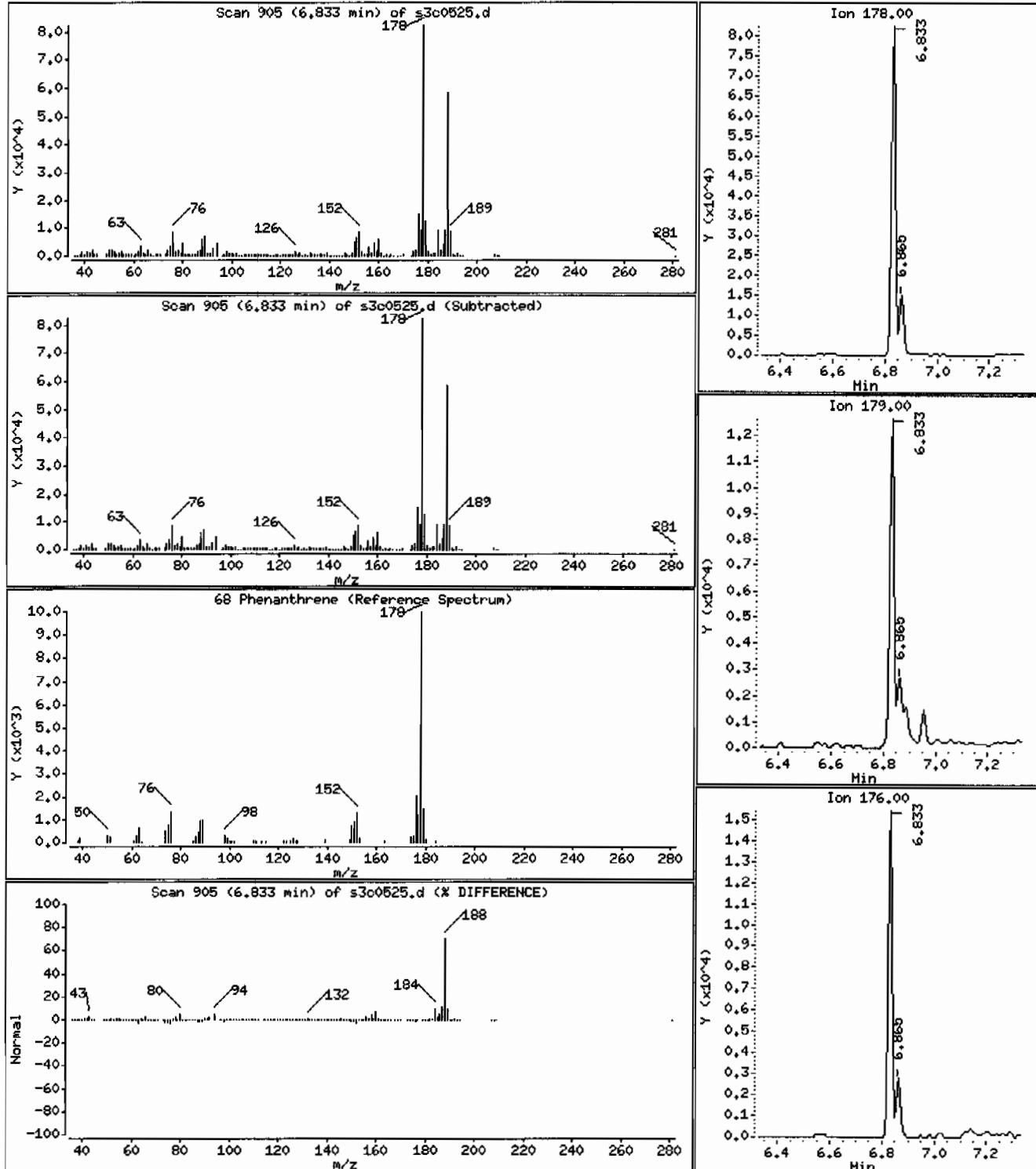
Operator: JLD1

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

Column diameter: 0.20

68 Phenanthrene

Concentration: 130 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 12475620031956677111SVHF111LANL

Volume Injected (uL): 0.5

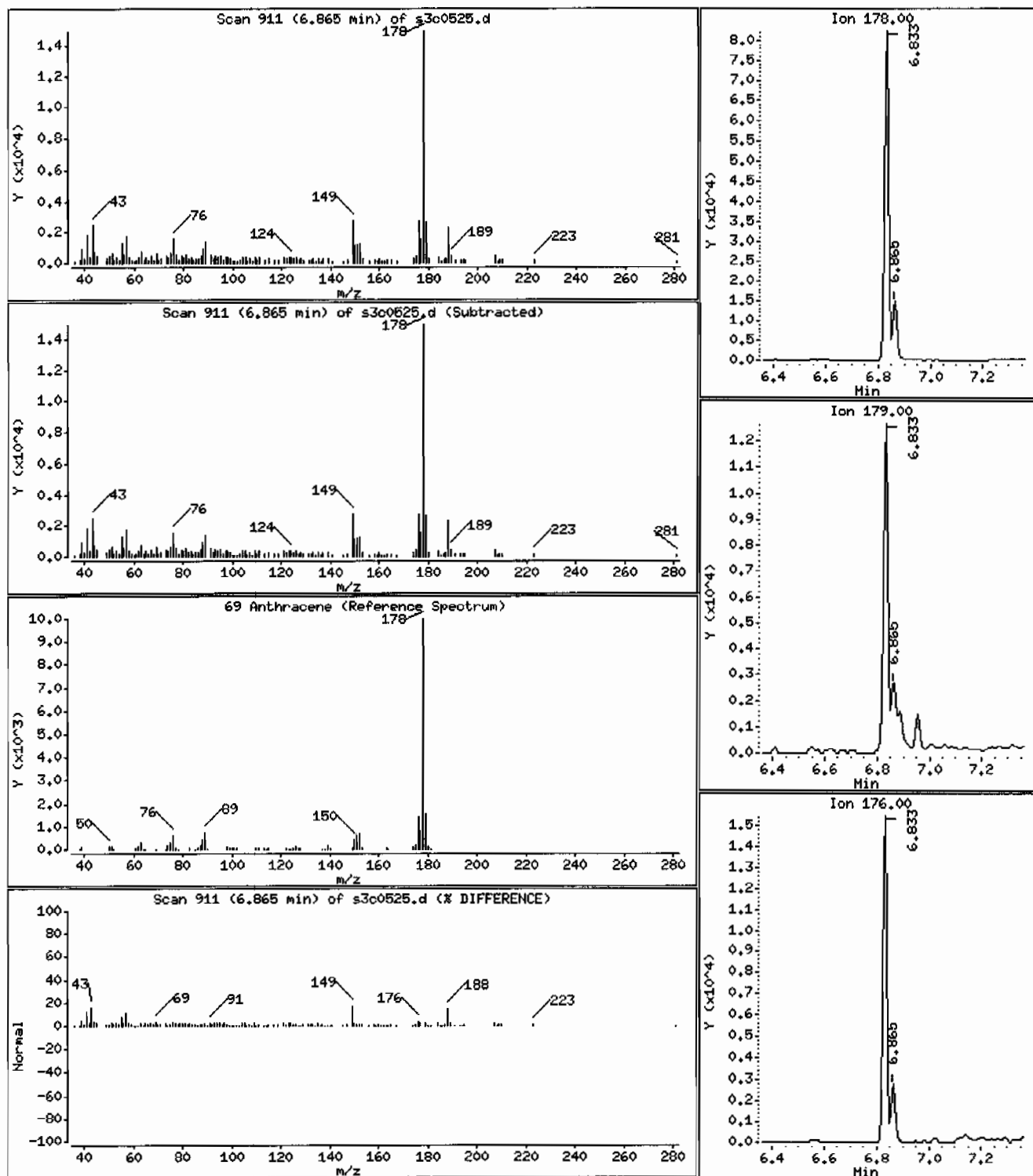
Operator: JLD1

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

Column diameter: 0.20

69 Anthracene

Concentration: 29.9 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

Volume Injected (uL): 0.5

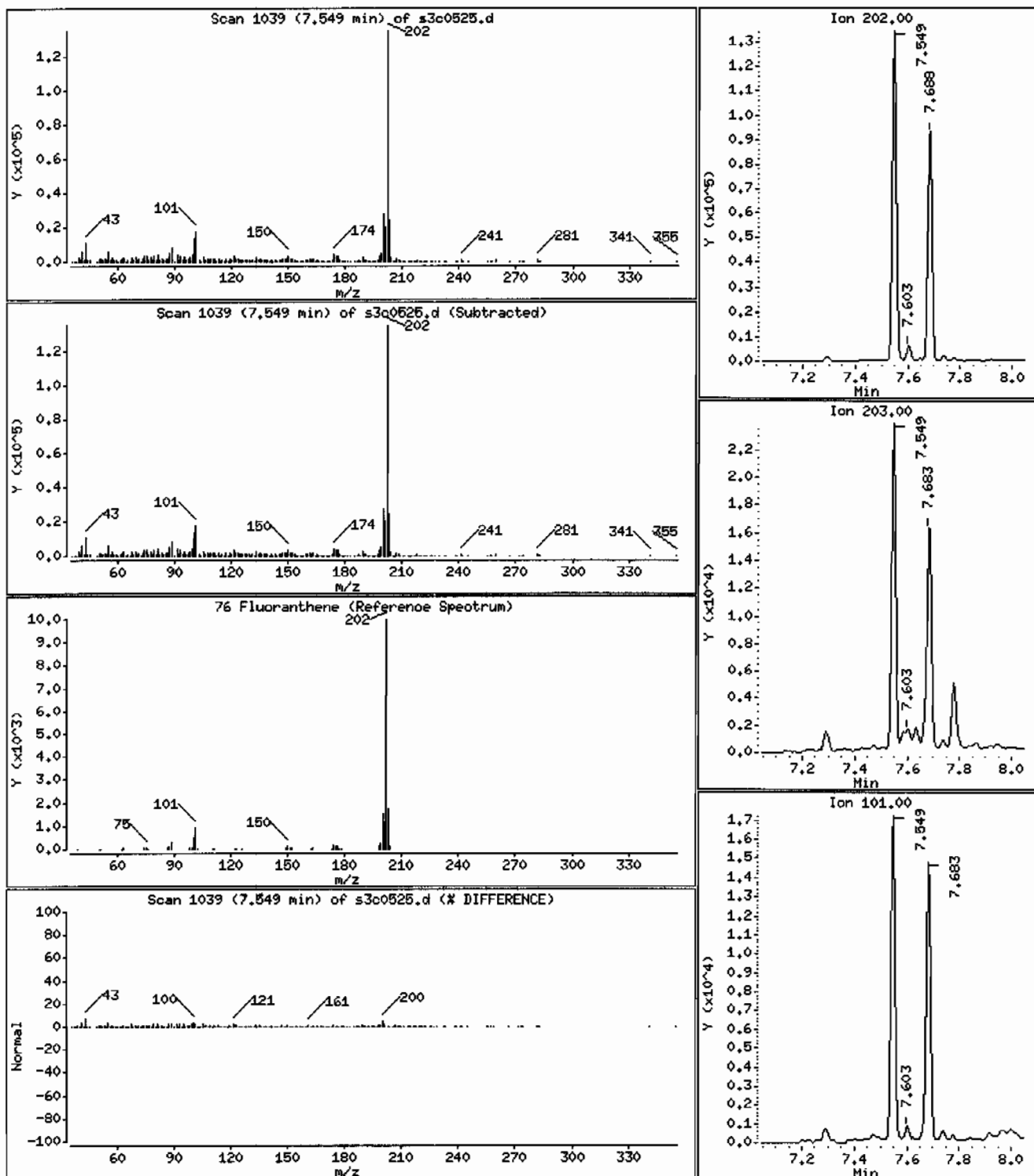
Operator: JLD1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 244 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.1

Sample Info: I247562003195667711|SVHF11|LANL

Volume Injected (uL): 0.5

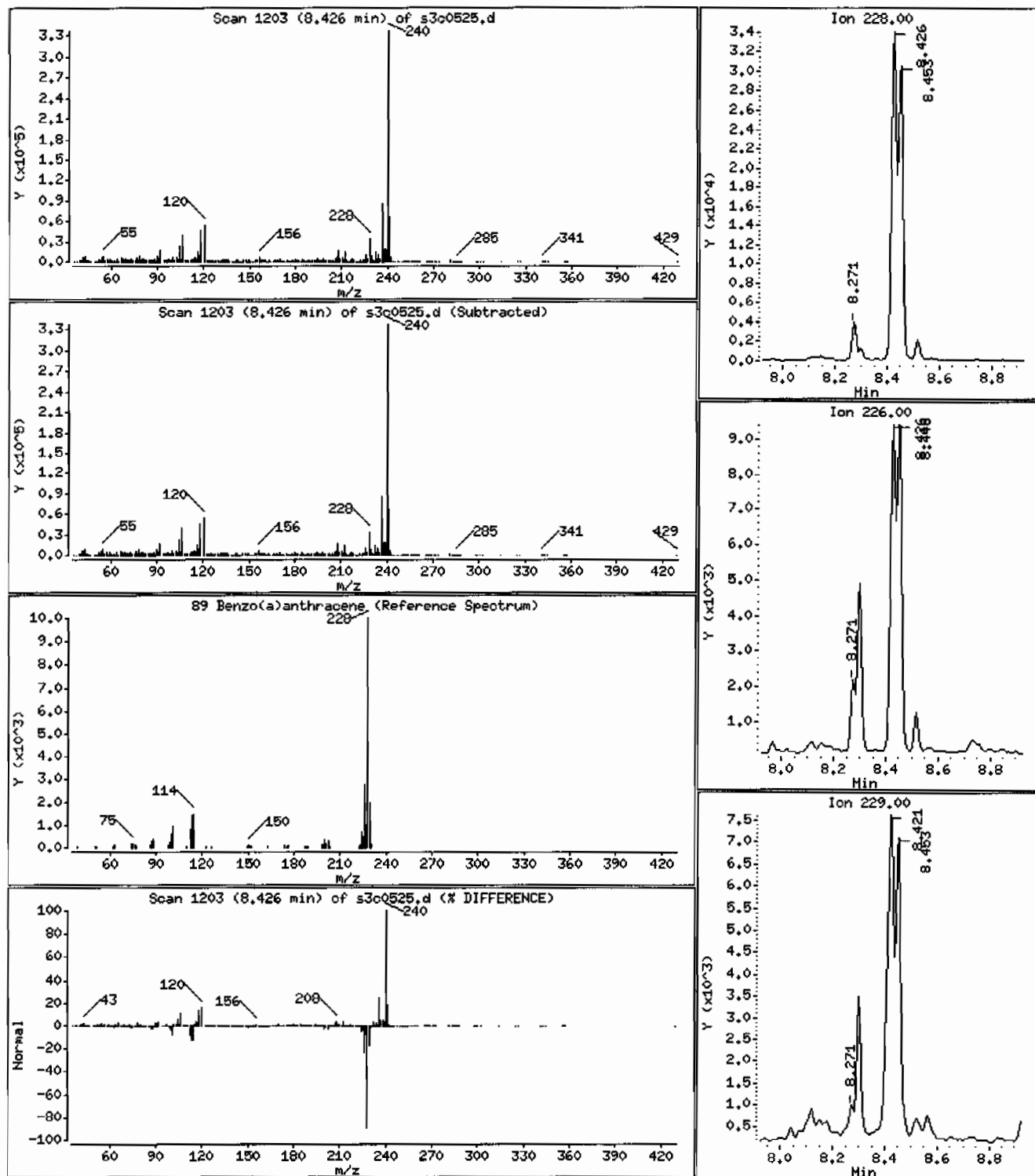
Operator: JLD1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 103 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: HSD3.1

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (uL): 0.5

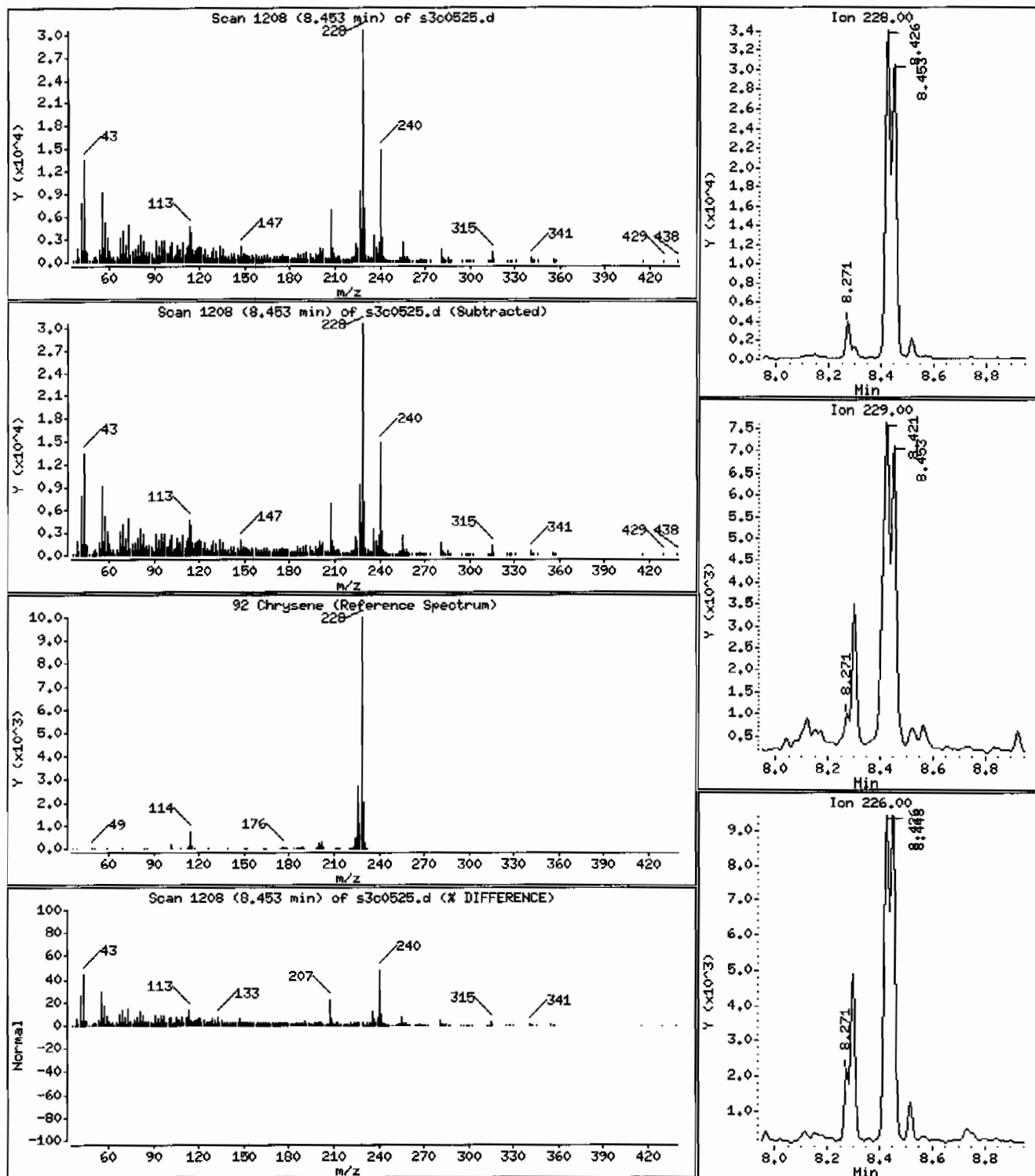
Operator: JLD1

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

Column diameter: 0.20

92 Chrysene

Concentration: 104 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.1

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (uL): 0.5

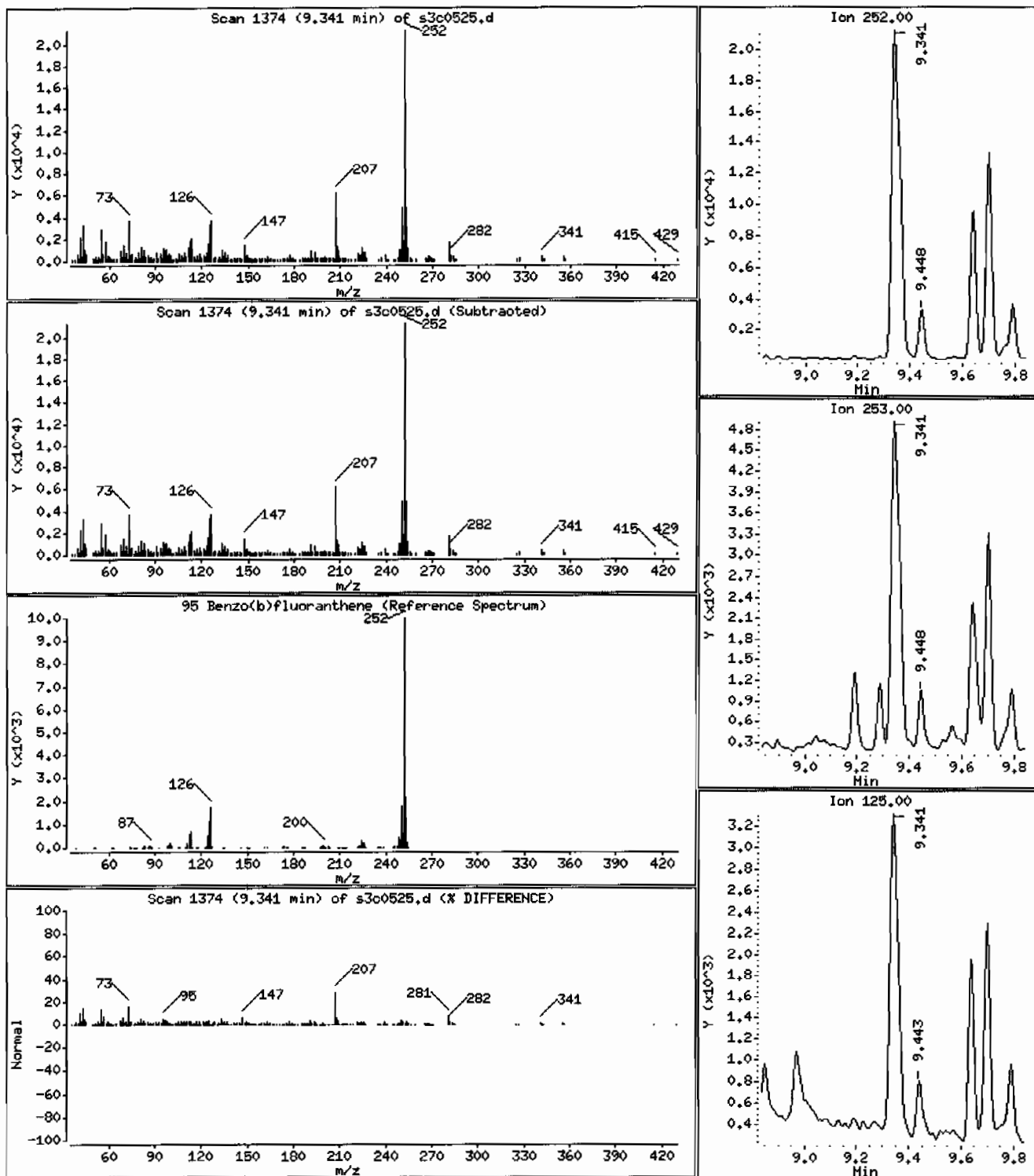
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 217 ug/Kg





Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003193667711SVHF111LANL

Volume Injected (uL): 0.5

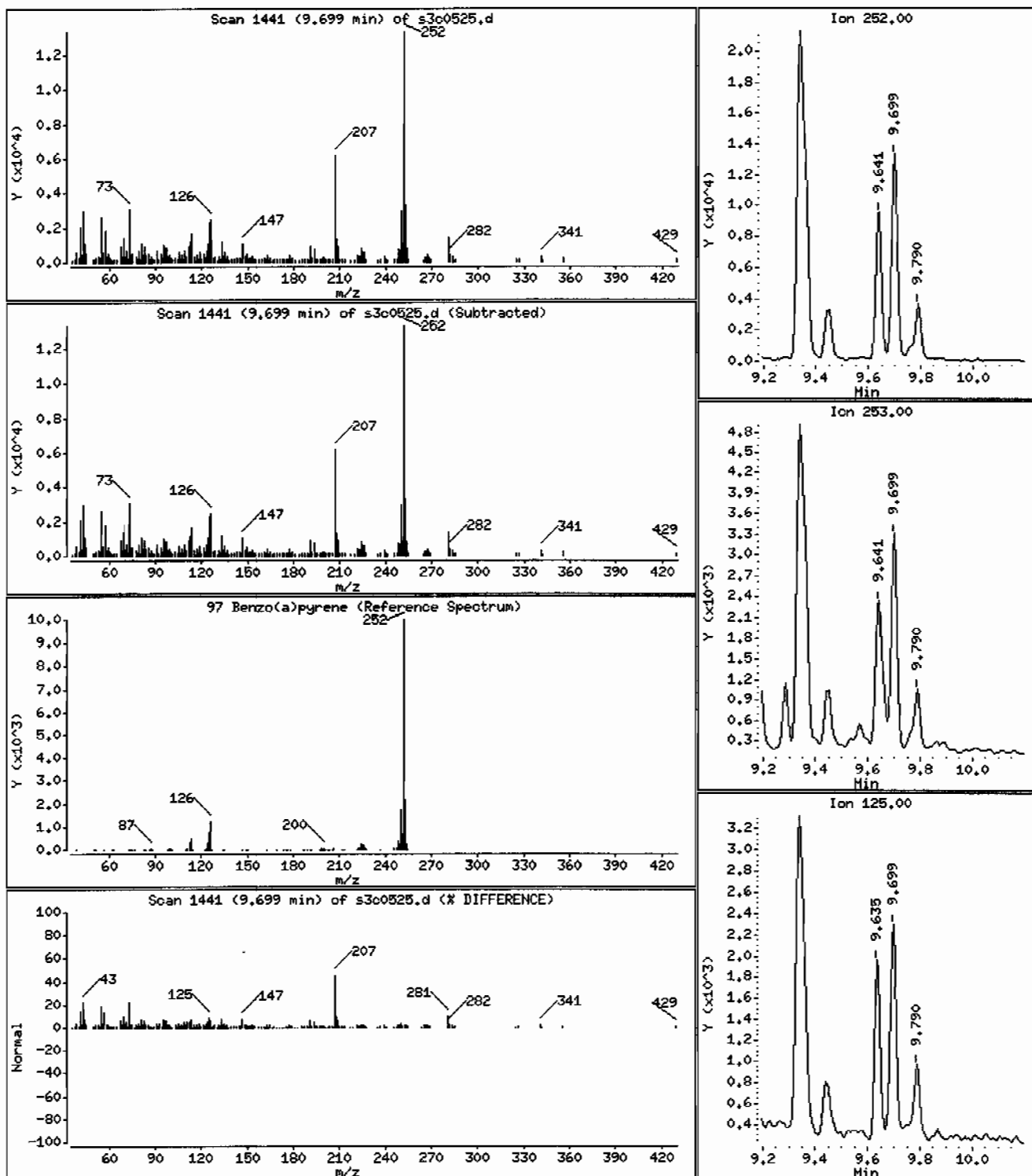
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 106 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (uL): 0.5

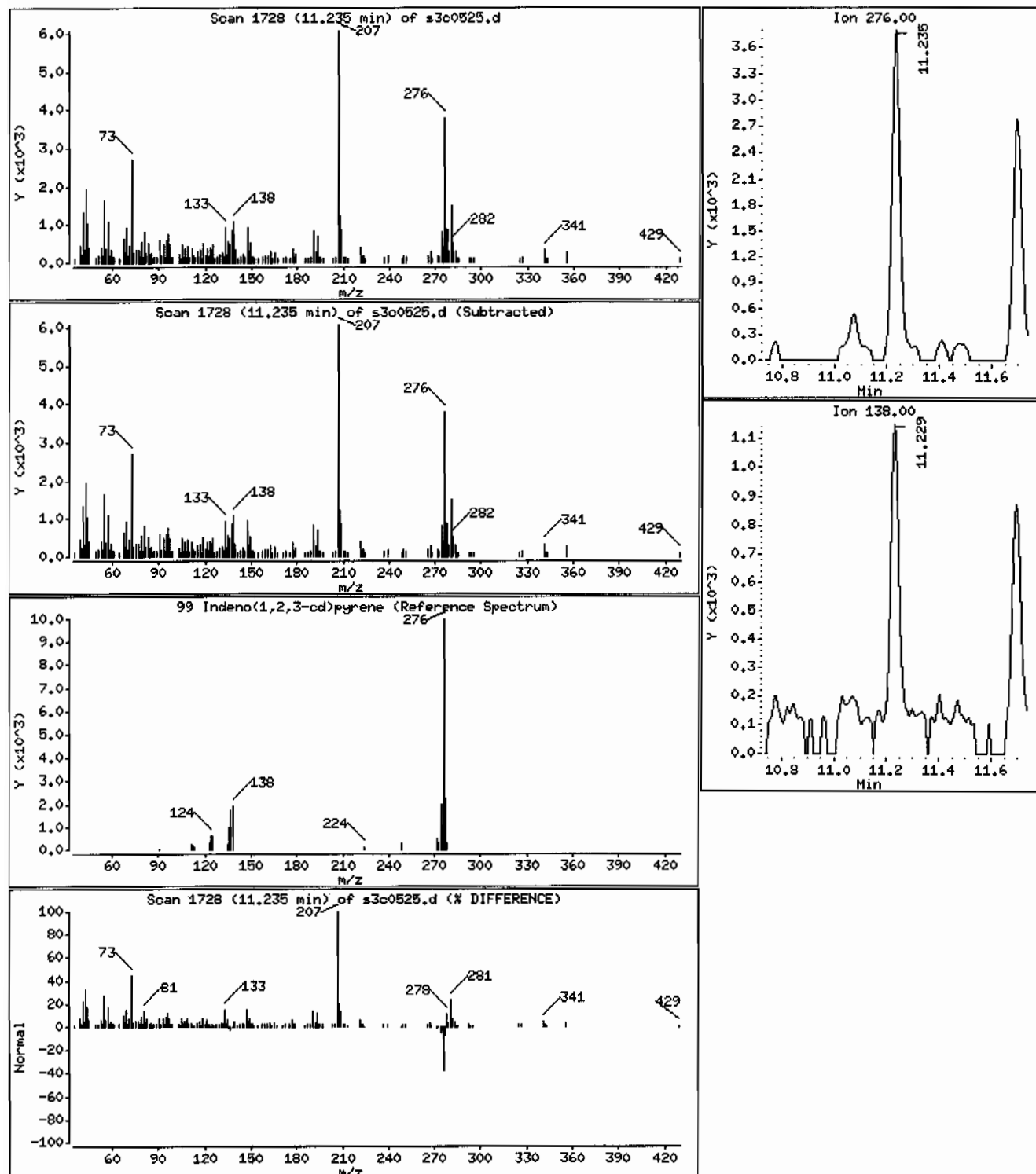
Operator: JLD1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 50.4 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 12475620031956677111SVHF111LANL

Volume Injected (uL): 0.5

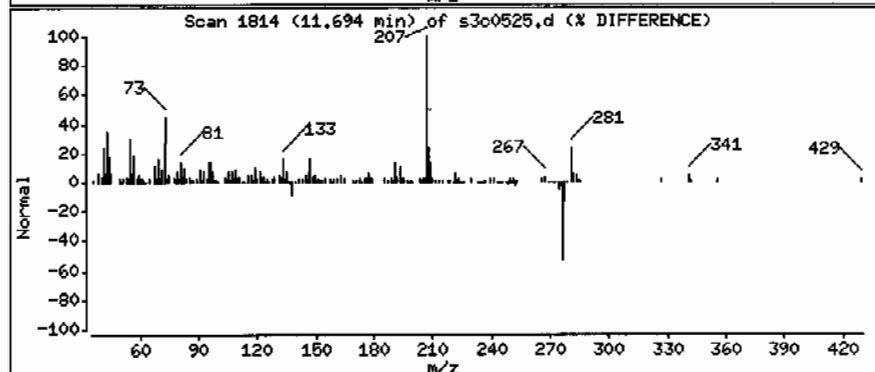
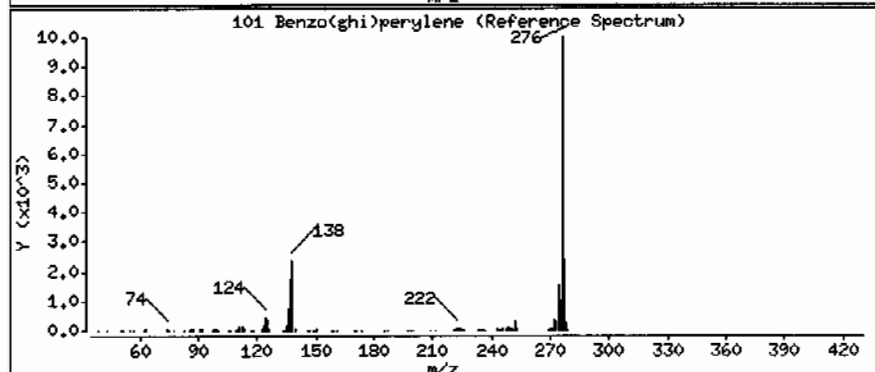
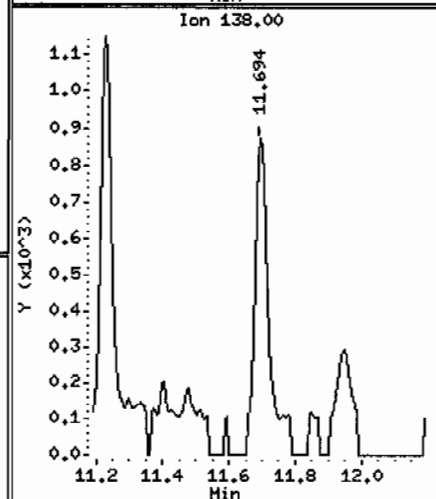
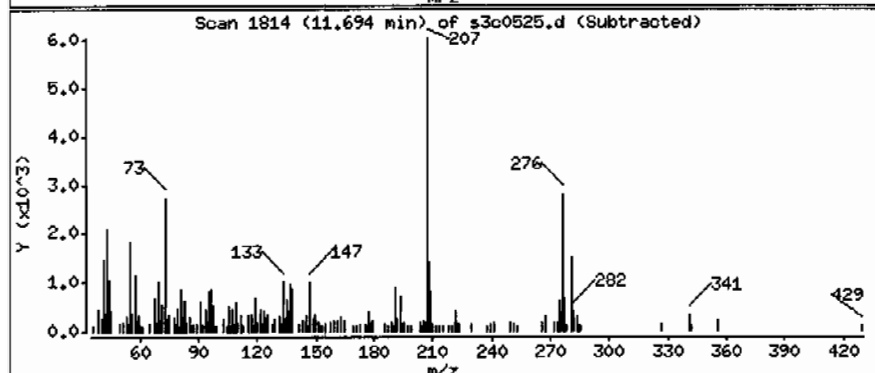
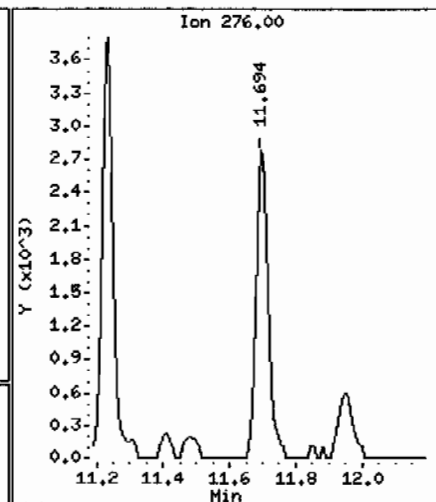
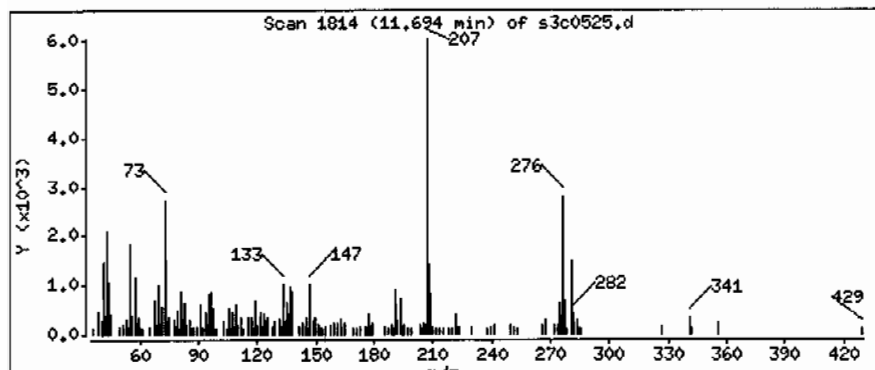
Operator: JLD1

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

Column diameter: 0.20

101 Benzo(ghi)perylene

Concentration: 50.7 ug/Kg



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

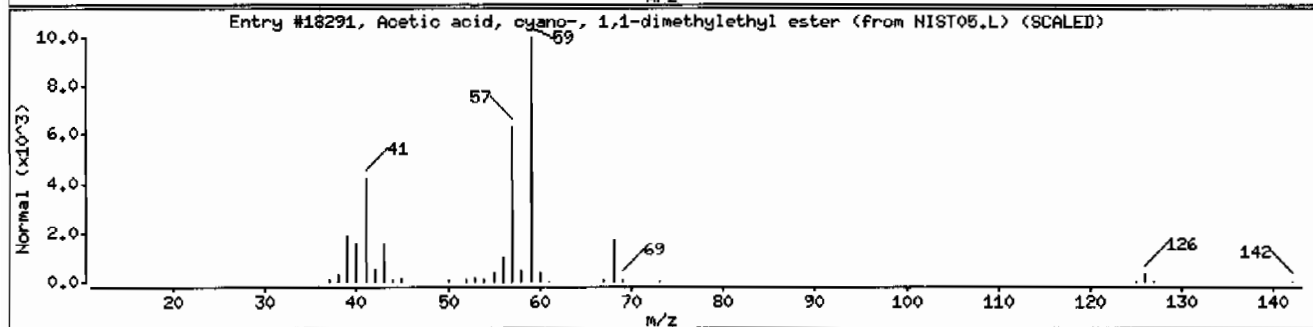
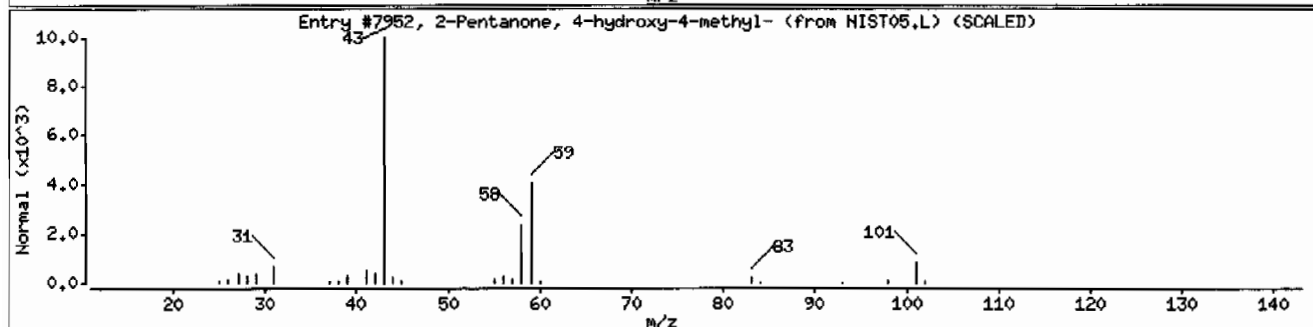
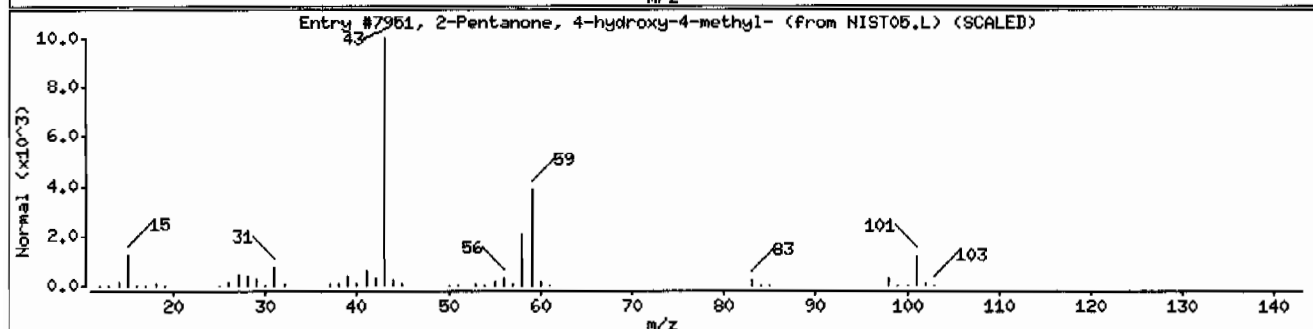
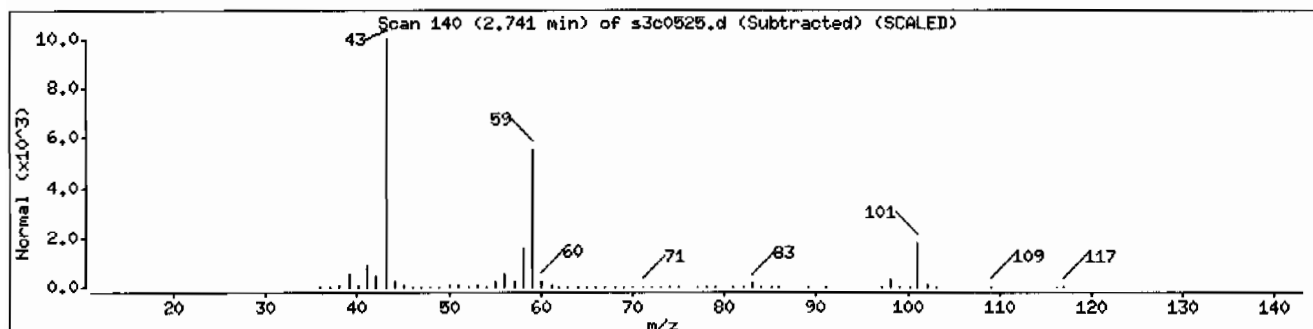
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

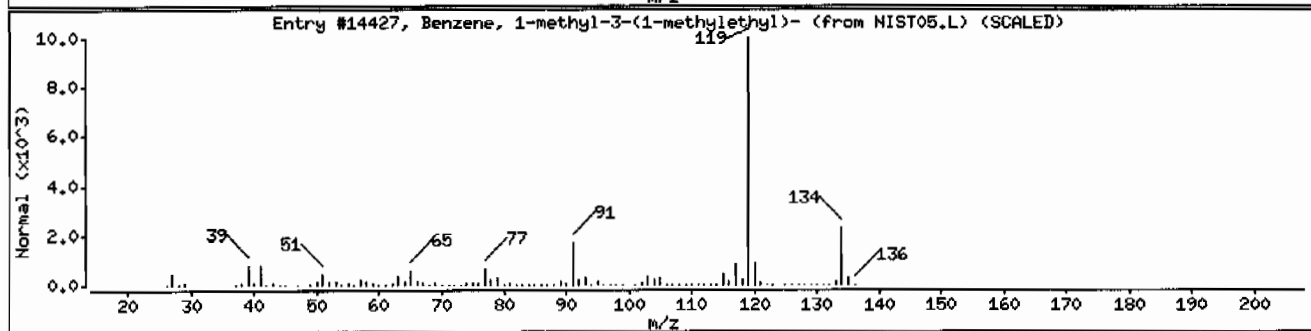
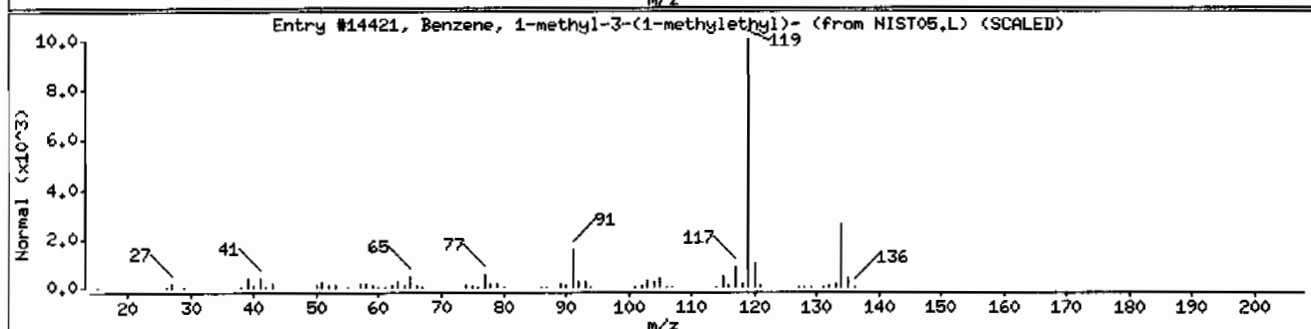
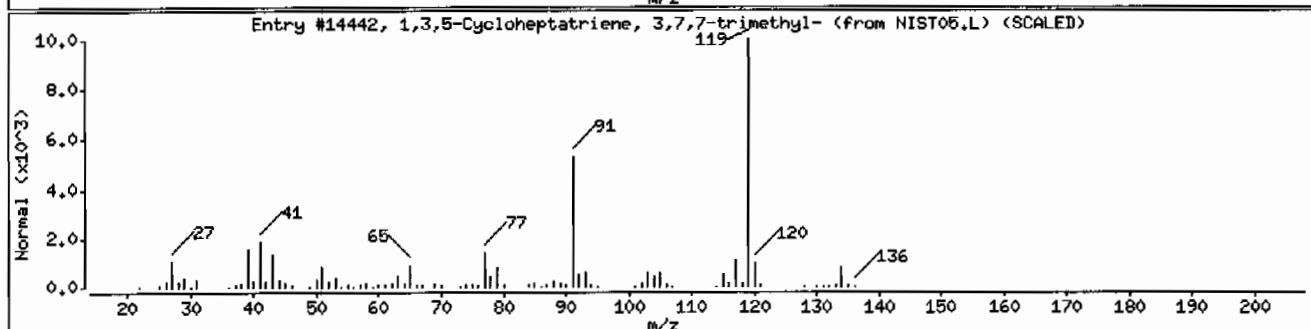
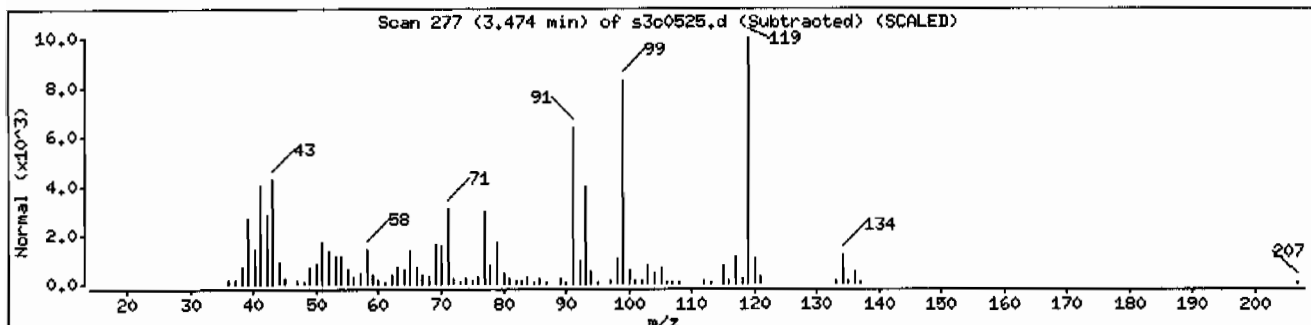
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3479-89-8	NIST05.L	14442	83	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14421	62	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14427	53	C10H14	134



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

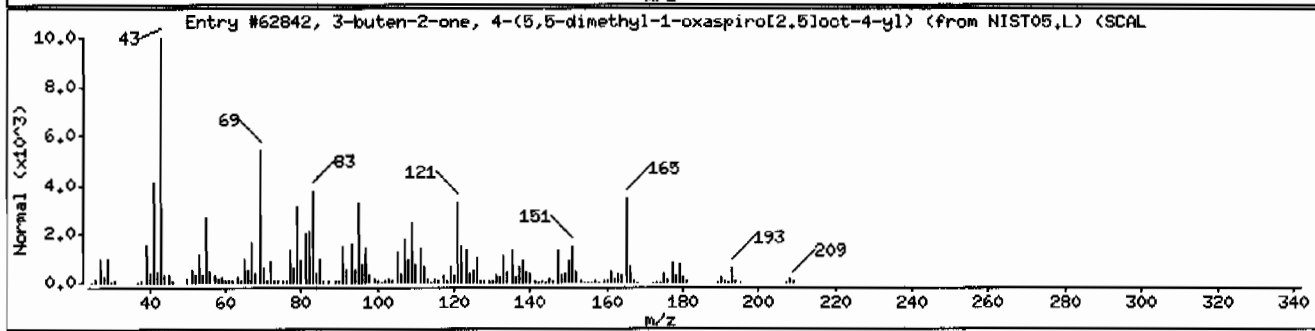
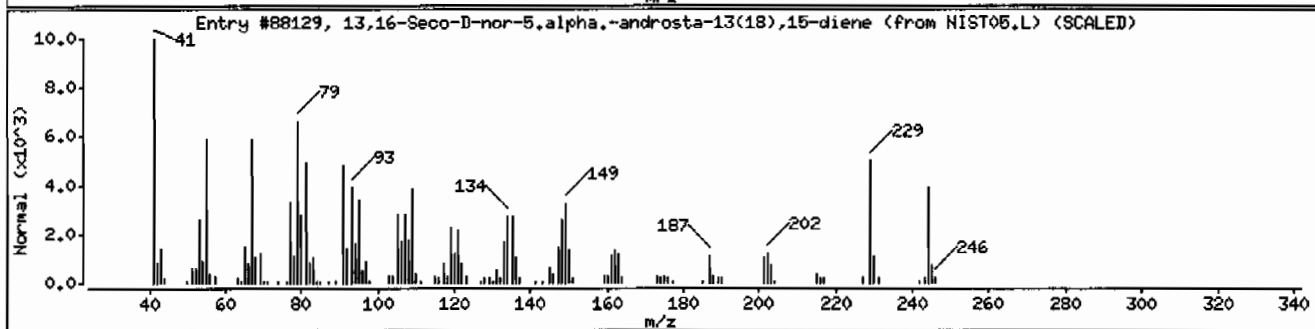
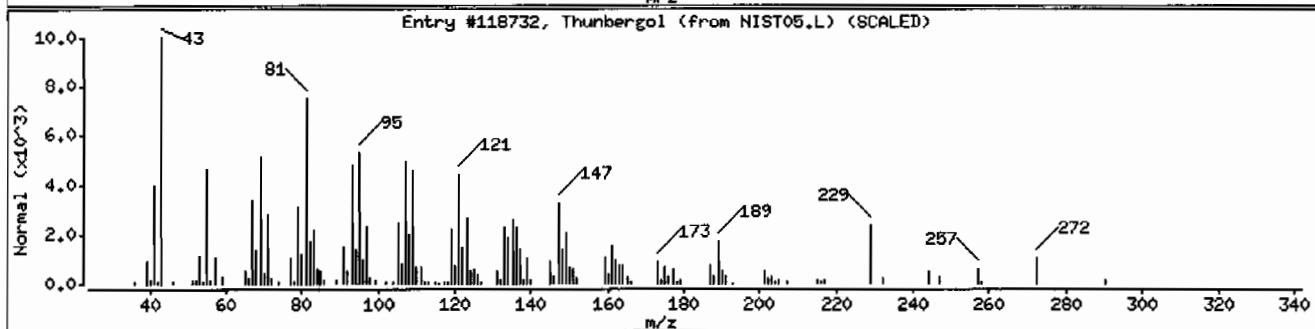
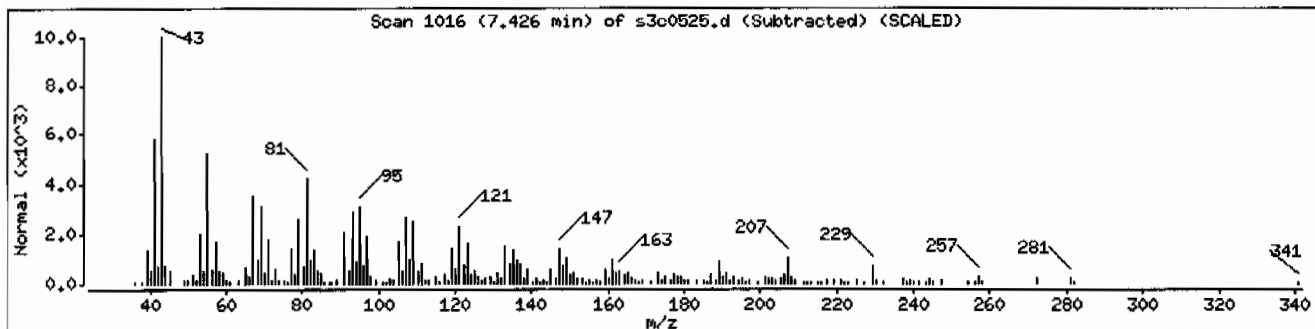
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thunbergol	25269-17-4	NIST05.L	118732	83	C20H34O	290
13,16-Seco-D-nor-5.alpha.-androsta-13(18)	31239-26-6	NIST05.L	88129	51	C18H28	244
3-buten-2-one, 4-(5,5-dimethyl-1-oxaspiro	1000196-66-5	NIST05.L	62842	49	C13H20O2	208



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

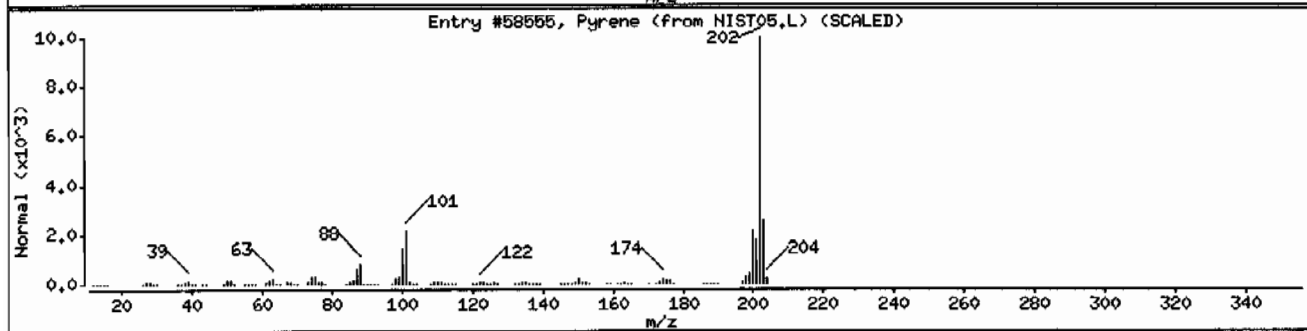
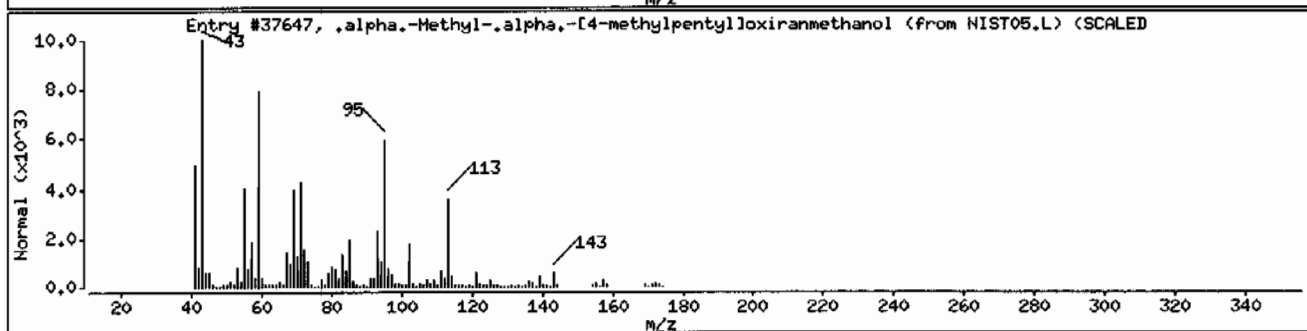
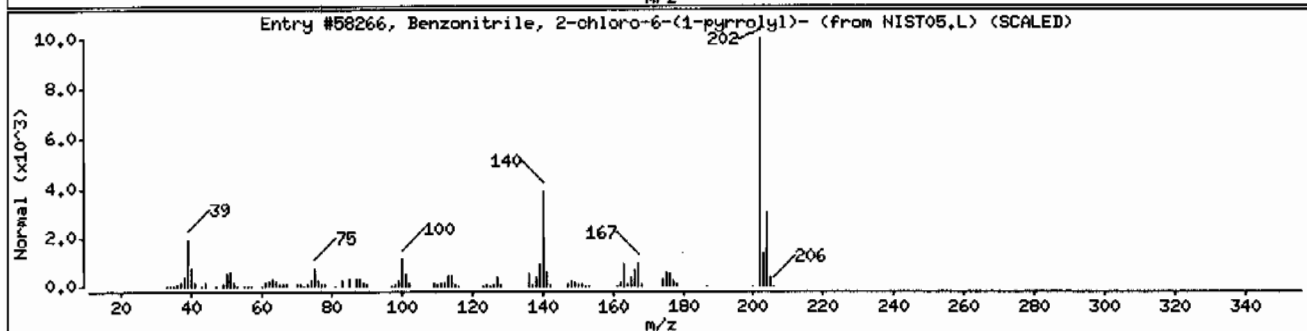
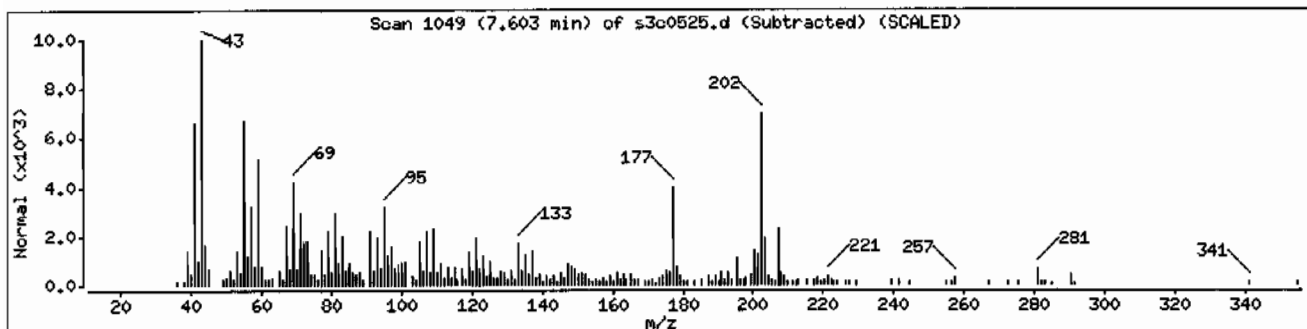
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzonitrile, 2-chloro-6-(1-pyrrolyl)-	1000262-46-7	NIST05.L	58266	25	C11H7ClN2	202
,alpha.-Methyl-,alpha,-[4-methylpentyl]o	107358-86-5	NIST05.L	37647	15	C10H20O2	172
Pyrene	129-00-0	NIST05.L	58555	15	C16H10	202



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11LANL

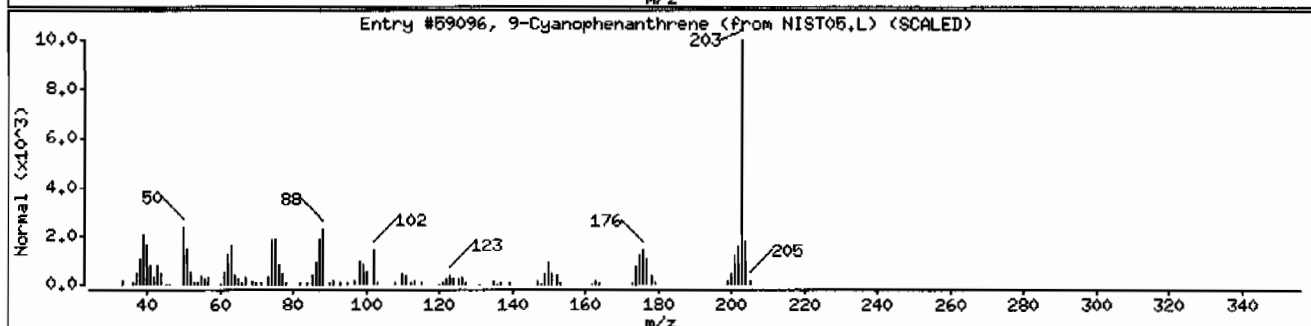
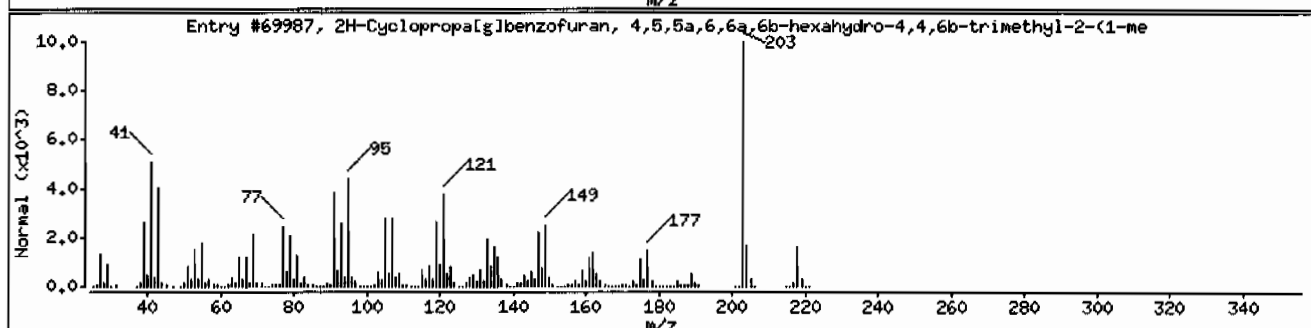
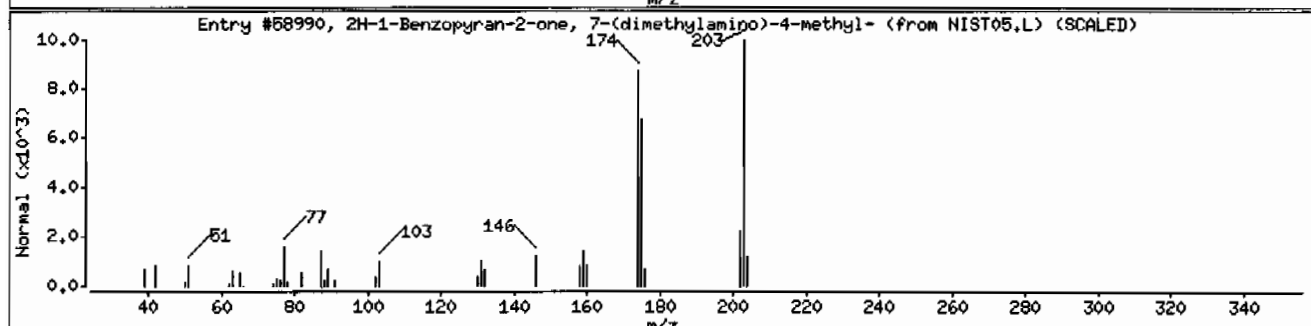
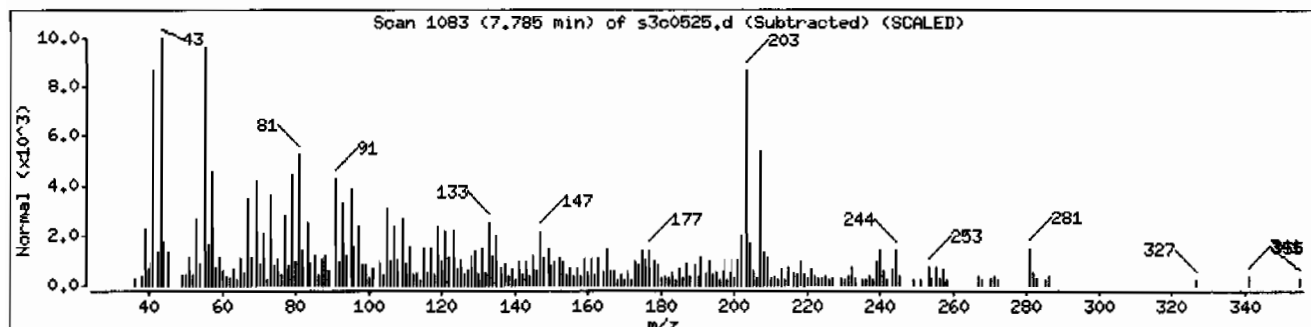
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2H-1-Benzopyran-2-one, 7-(dimethylamino)	87-01-4	NIST05.L	58990	52	C <sub>12</sub> H <sub>13</sub> N <sub>02</sub>	203
2H-Cyclopropa[ <i>g</i> ]benzofuran, 4,5,5a,6,6a,	102681-49-2	NIST05.L	69987	50	C <sub>15</sub> H <sub>22</sub> O	218
9-Cyanophenanthrene	2510-55-6	NIST05.L	59096	47	C <sub>15</sub> H <sub>9</sub> N	203





Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

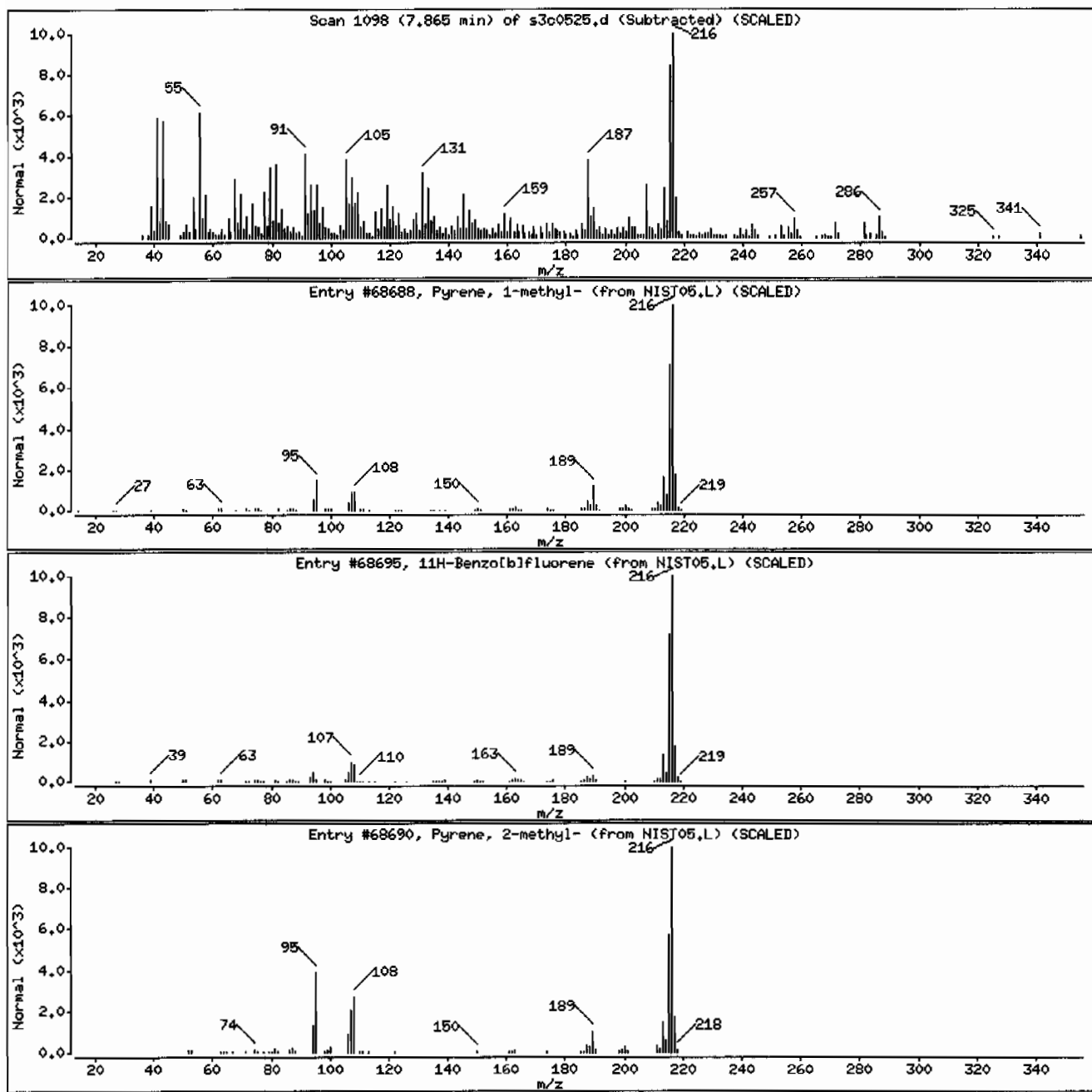
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68688	91	C17H12	216
11H-Benzo[b]fluorene	243-17-4	NIST05.L	68695	91	C17H12	216
Pyrene, 2-methyl-	3442-78-2	NIST05.L	68690	83	C17H12	216



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVHF111LANL

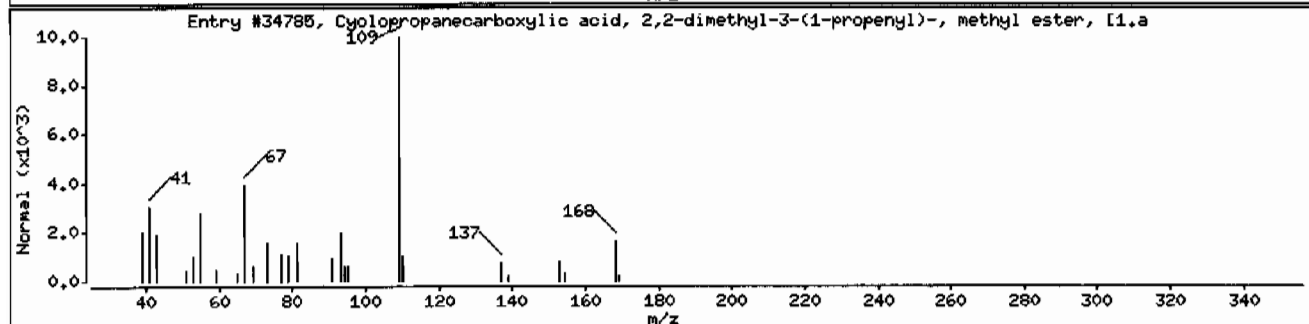
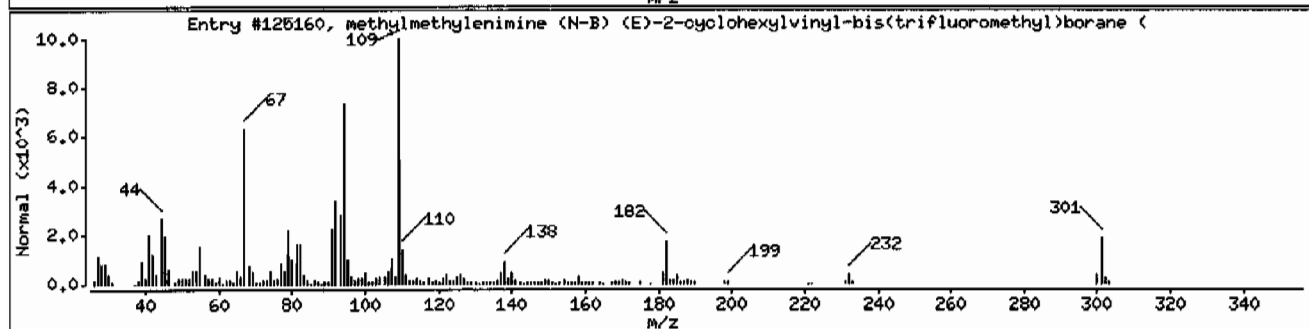
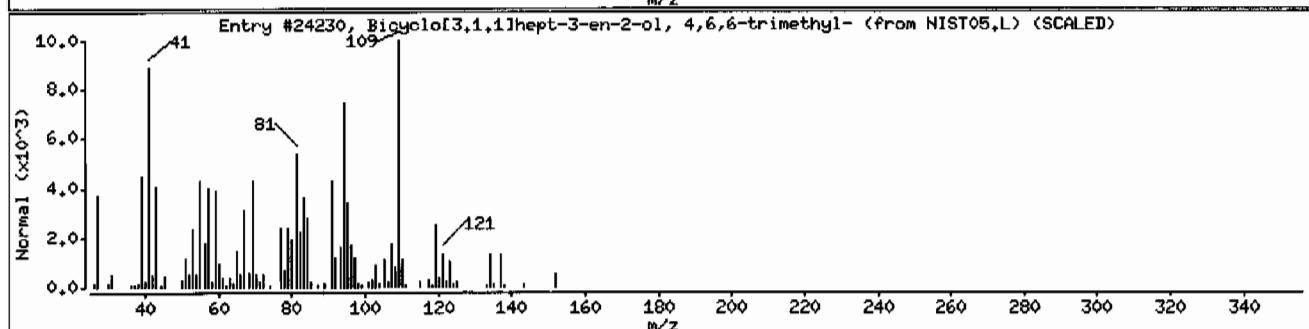
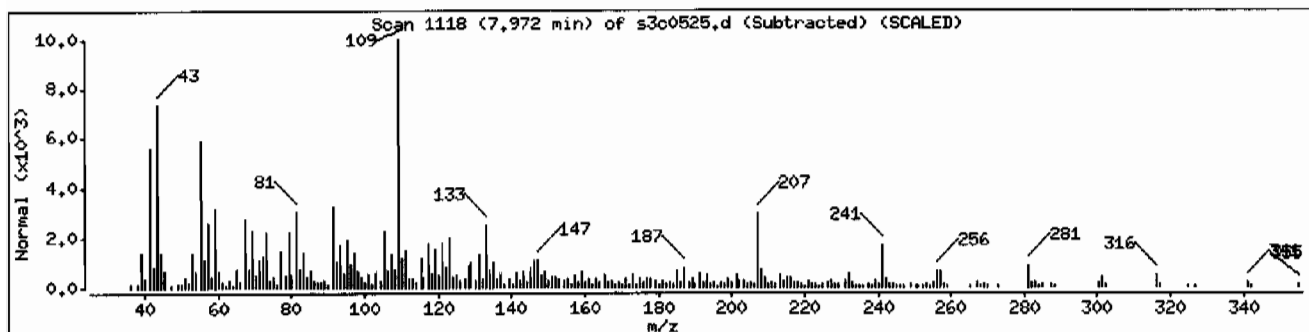
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3,1,1]hept-3-en-2-ol, 4,6,6-trimethyl-	473-67-6	NIST05.L	24230	38	C10H16O	152
methylmethylenimine (N-B) (E)-2-cyclohex	1000160-02-7	NIST05.L	125160	38	C12H18BF6N	301
Cyclopropanecarboxylic acid, 2,2-dimethy	33383-56-1	NIST05.L	34785	35	C10H16O2	168



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVHF111LANL

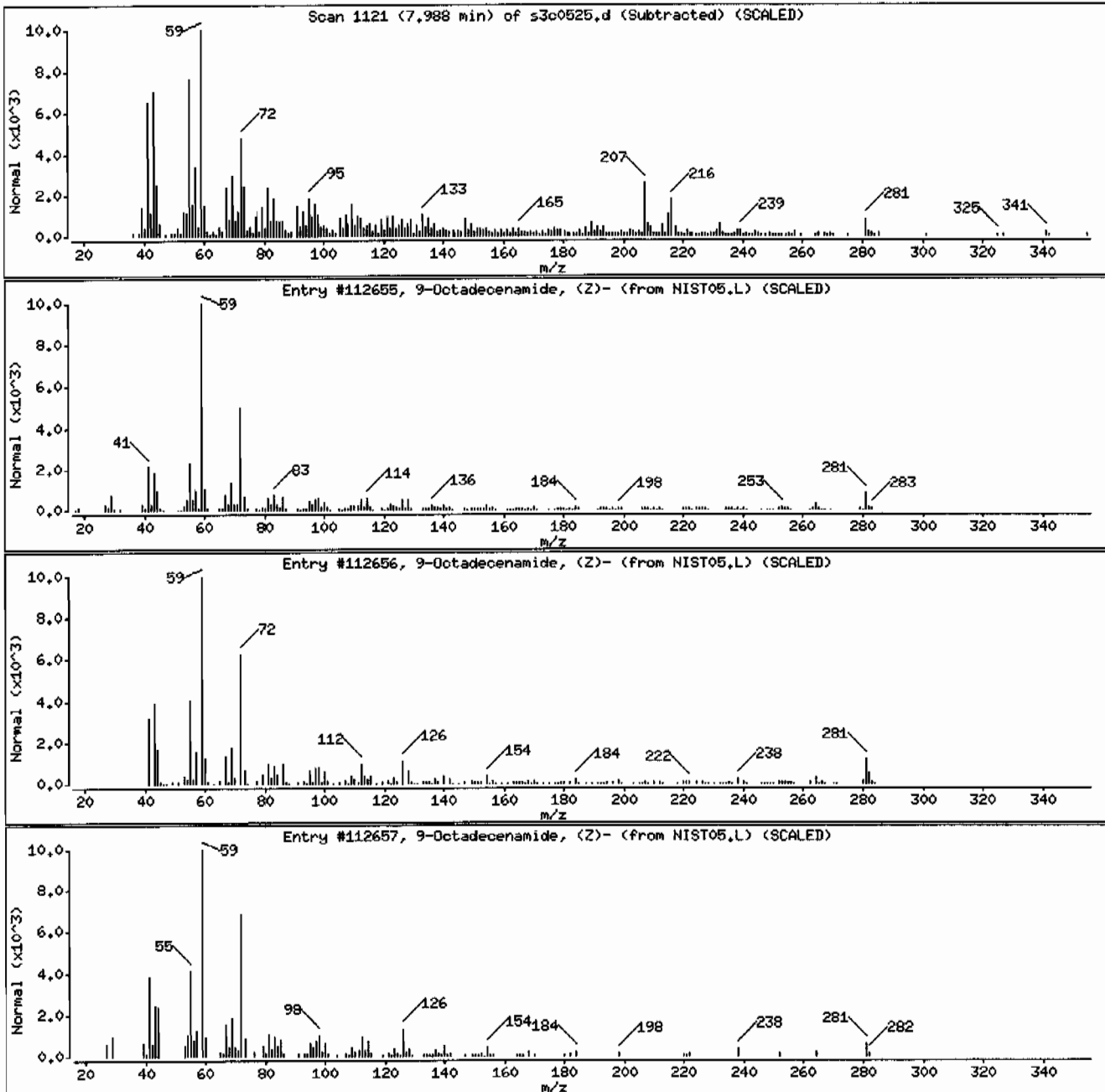
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	81	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	78	C18H35NO	281



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.1

Sample Info: I247562003I956677I1ISVHF11ILANL

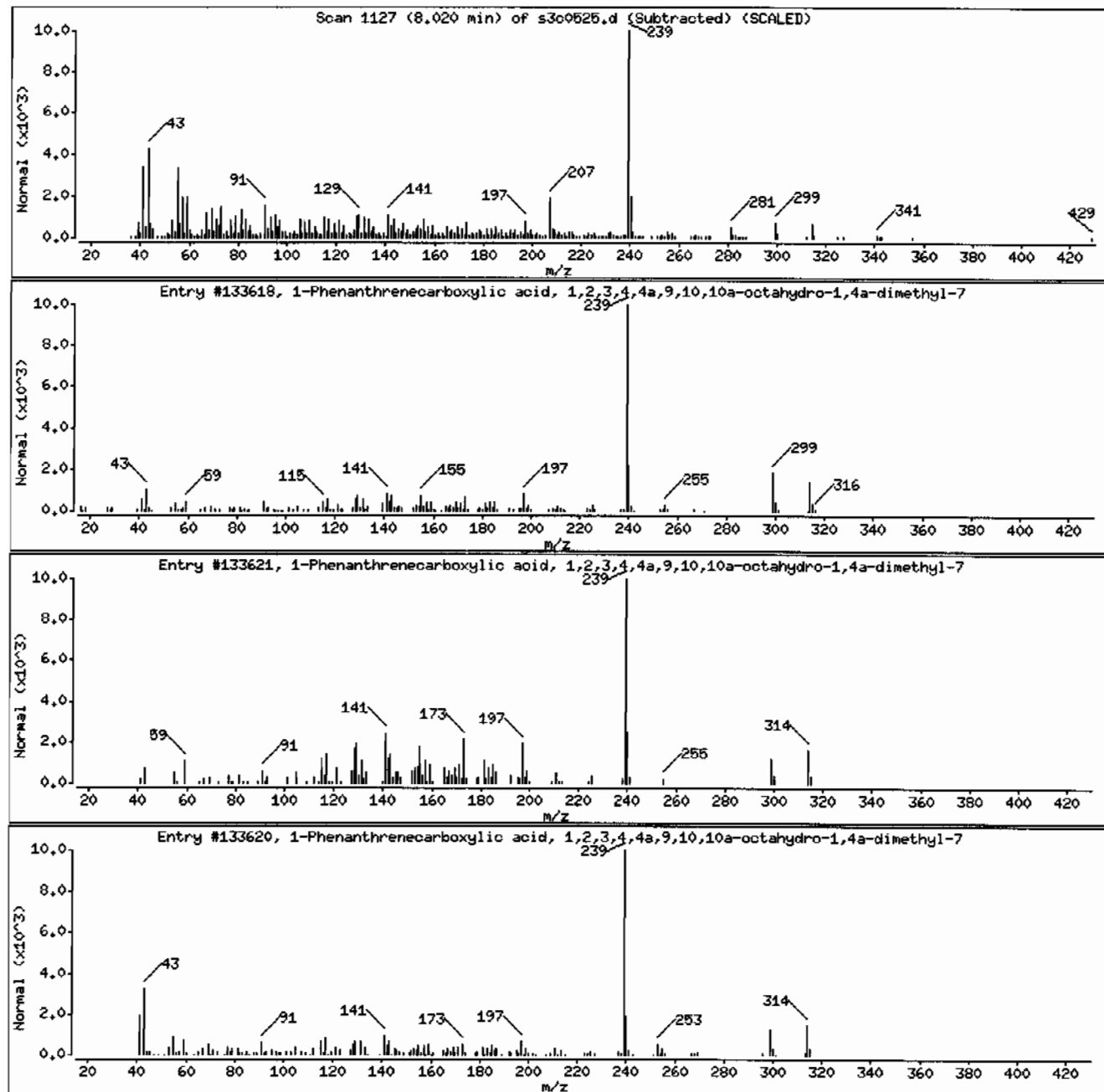
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	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: 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

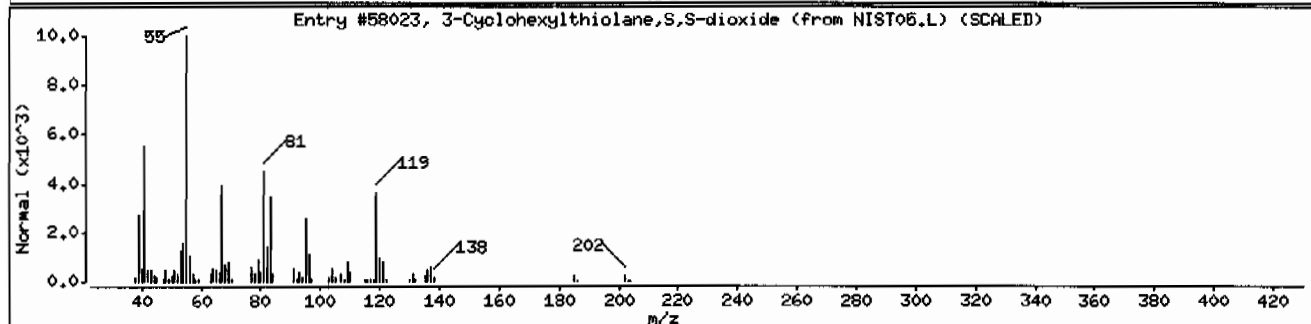
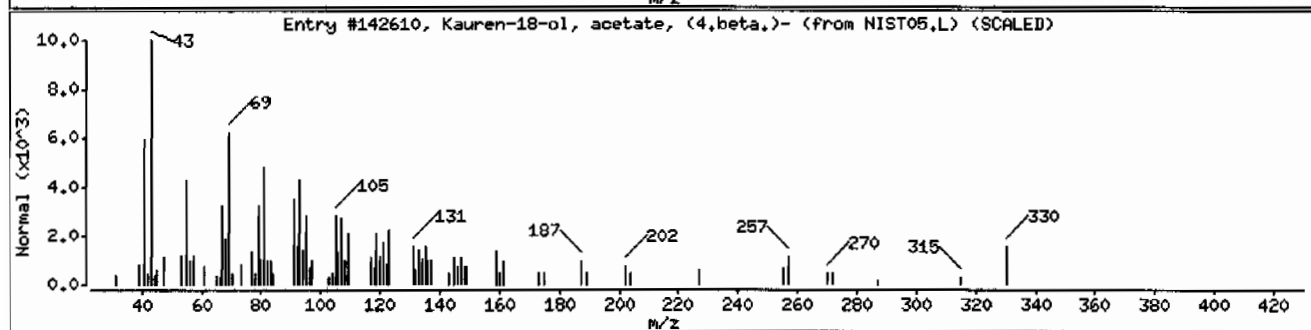
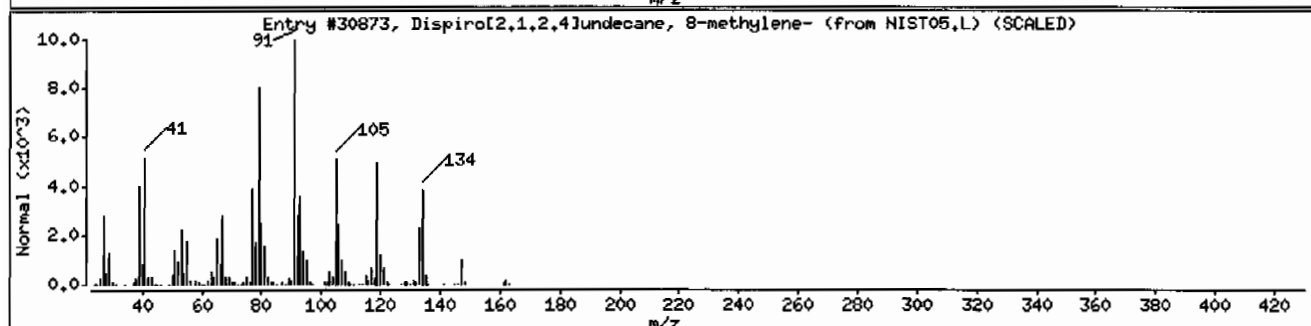
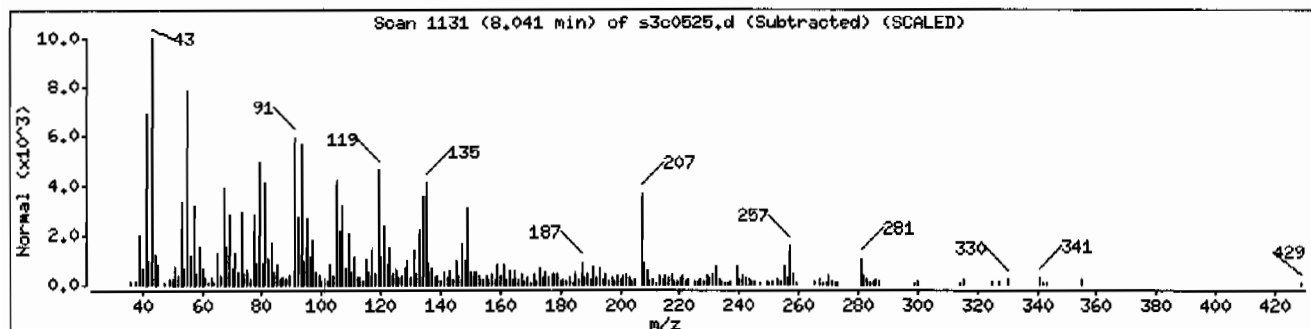
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	38	C12H18	162
Kauren-18-ol, acetate, (4,beta.)-	72150-74-4	NIST05.L	142610	27	C22H34O2	330
3-Cyclohexylthiolane,S,S-dioxide	71053-08-2	NIST05.L	58023	25	C10H18O2S	202



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

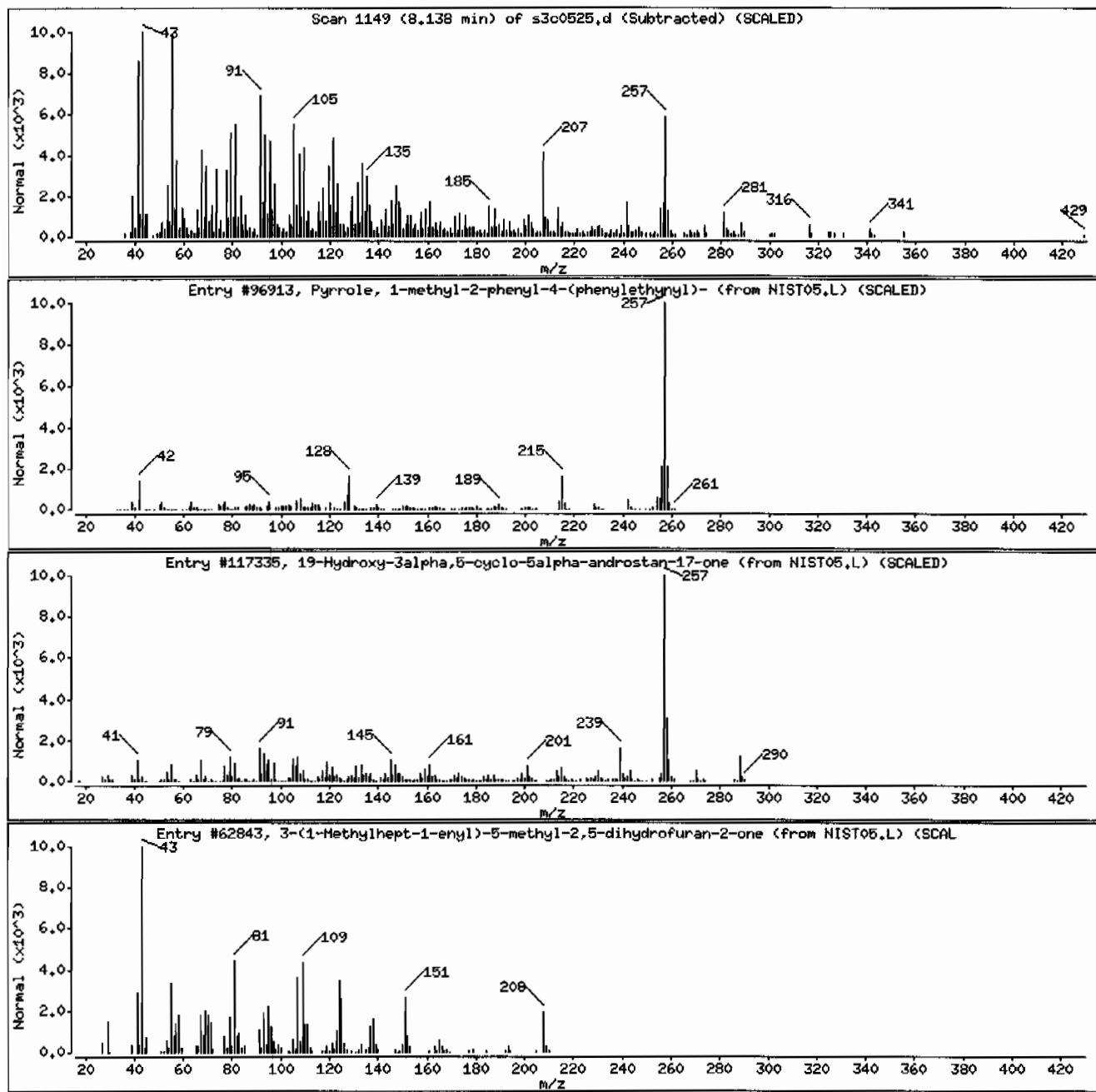
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrrole, 1-methyl-2-phenyl-4-(phenylethy	66463-26-1	NIST05.L	96913	44	C19H15N	257
19-Hydroxy-3alpha,5-cyclo-5alpha-androst	1000240-61-9	NIST05.L	117335	38	C19H28O2	288
3-(1-Methylhept-1-enyl)-5-methyl-2,5-dih	1000284-50-5	NIST05.L	62843	30	C13H20O2	208



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

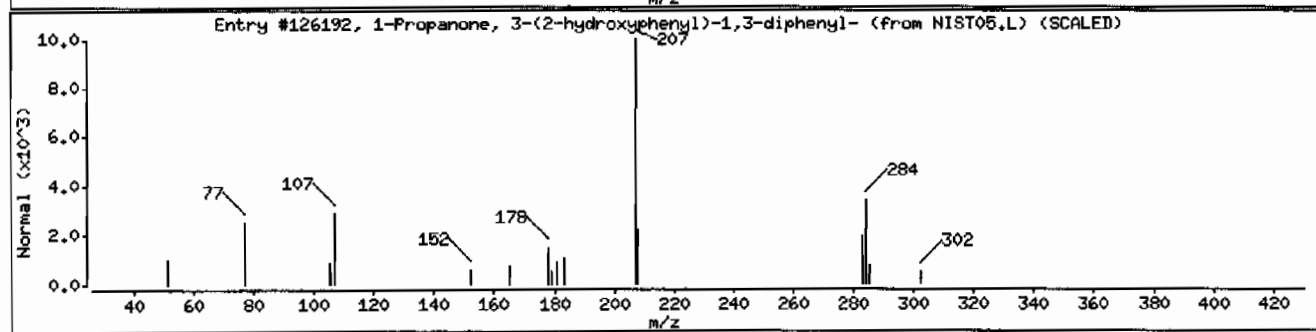
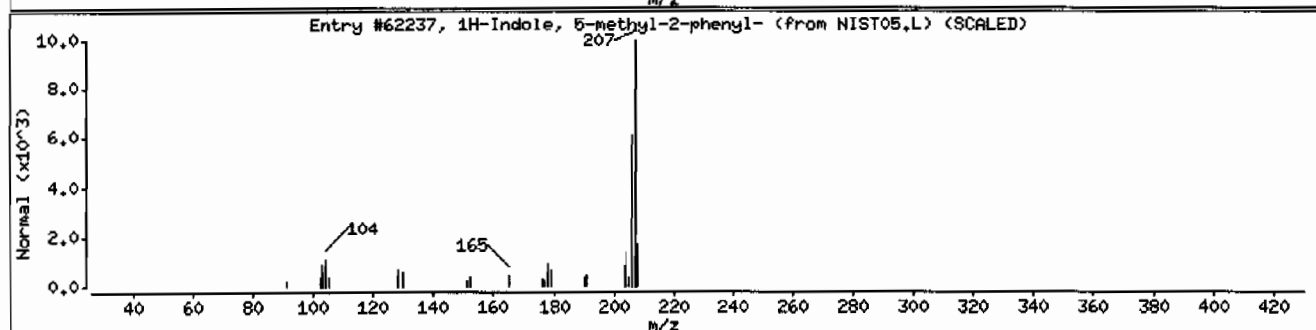
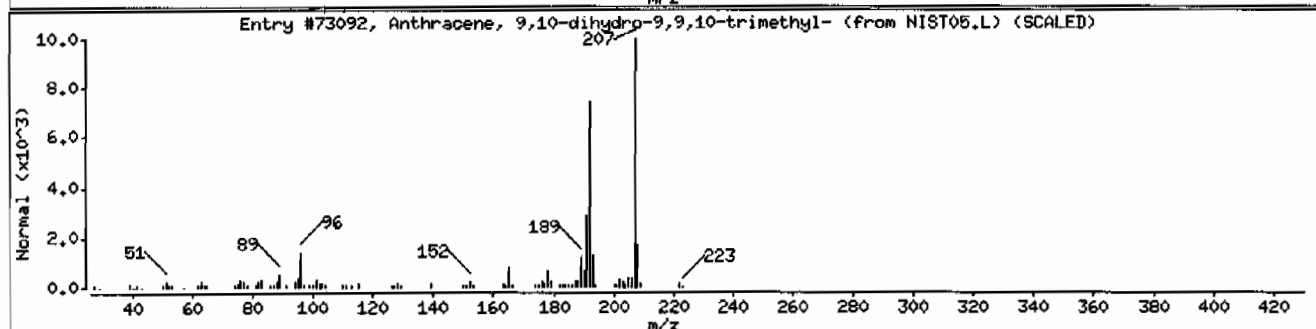
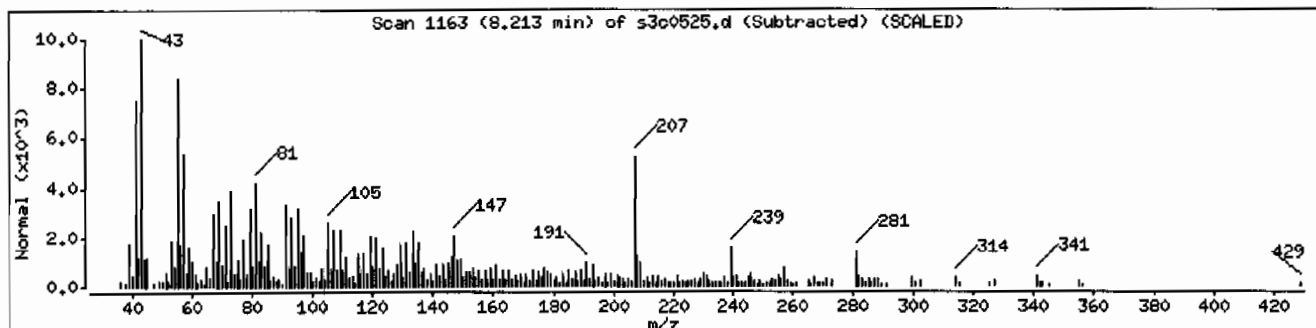
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	44	C17H18	222
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	25	C15H13N	207
1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip	4376-83-4	NIST05.L	126192	18	C21H18O2	302



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVMF111LANL

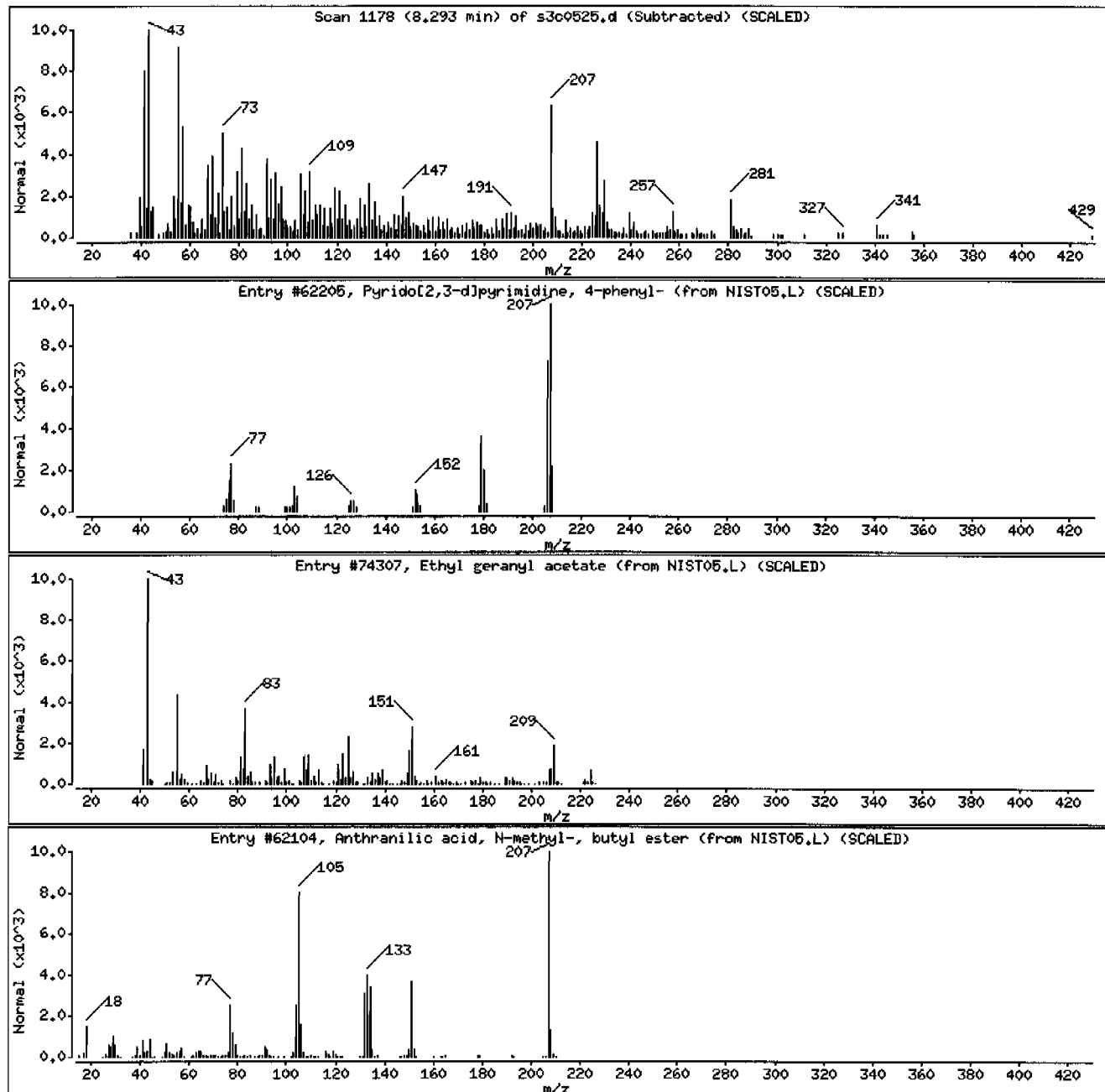
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrido[2,3-d]pyrimidine, 4-phenyl-	28732-75-4	NIST05.L	62205	26	C13H9N3	207
Ethyl geranyl acetate	91418-26-7	NIST05.L	74307	25	C14H24O2	224
Anthranilic acid, N-methyl-, butyl ester	15236-34-7	NIST05.L	62104	18	C12H17NO2	207





Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

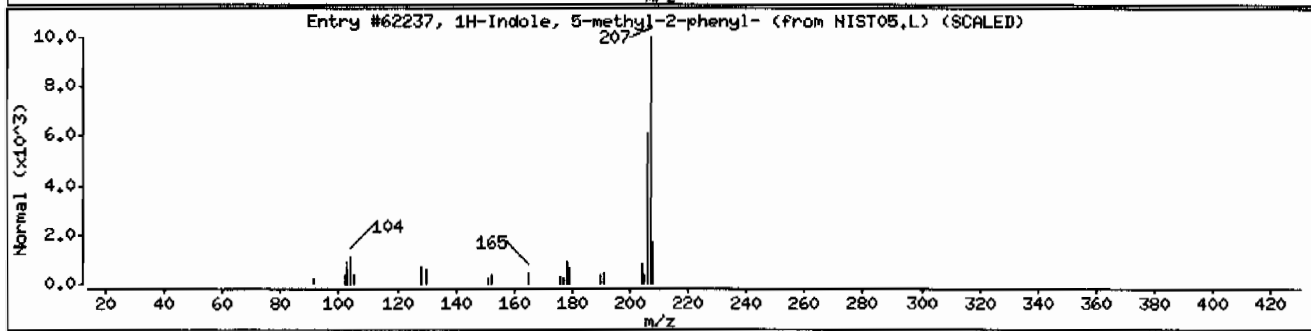
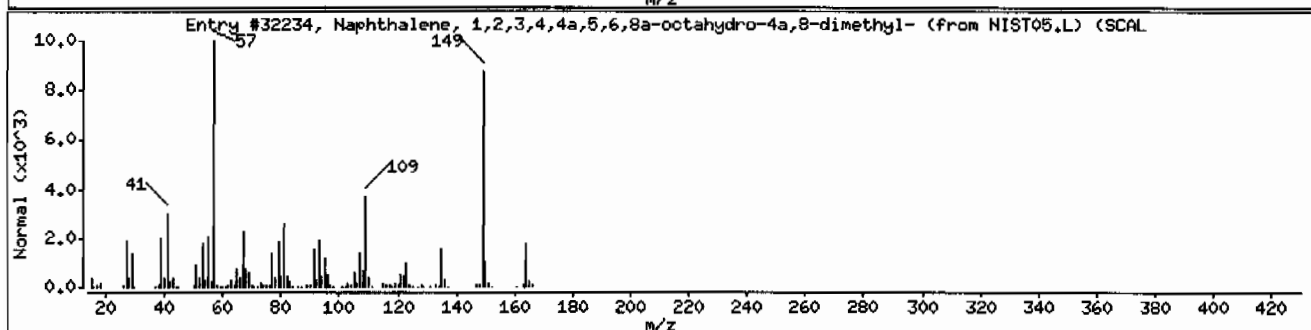
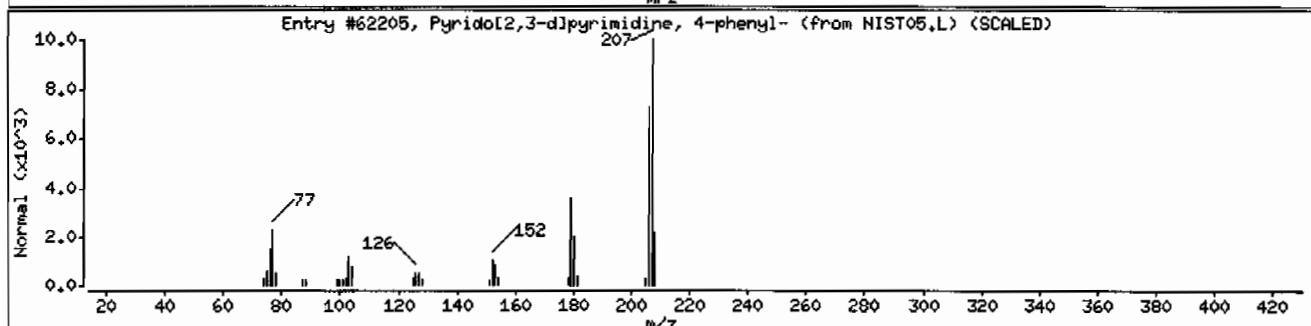
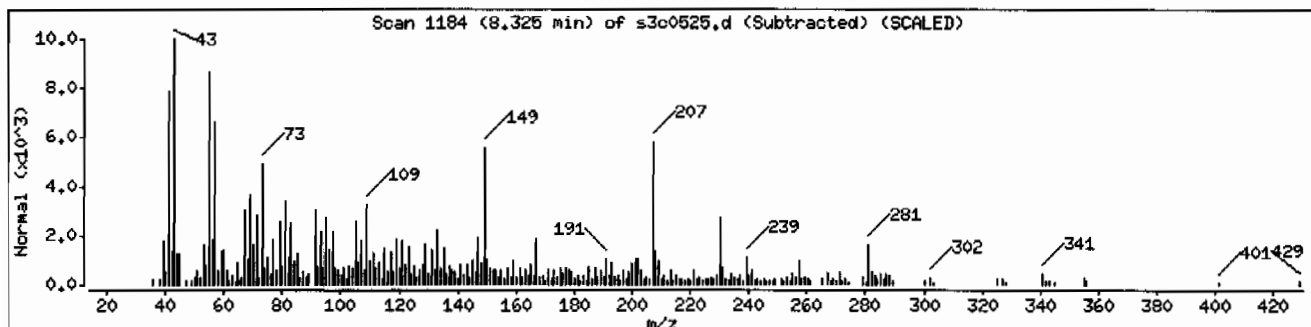
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrido[2,3-d]pyrimidine, 4-phenyl-	28732-75-4	NIST05.L	62205	44	C13H9N3	207
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	55976-09-5	NIST05.L	32234	35	C12H20	164
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	25	C15H13N	207



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

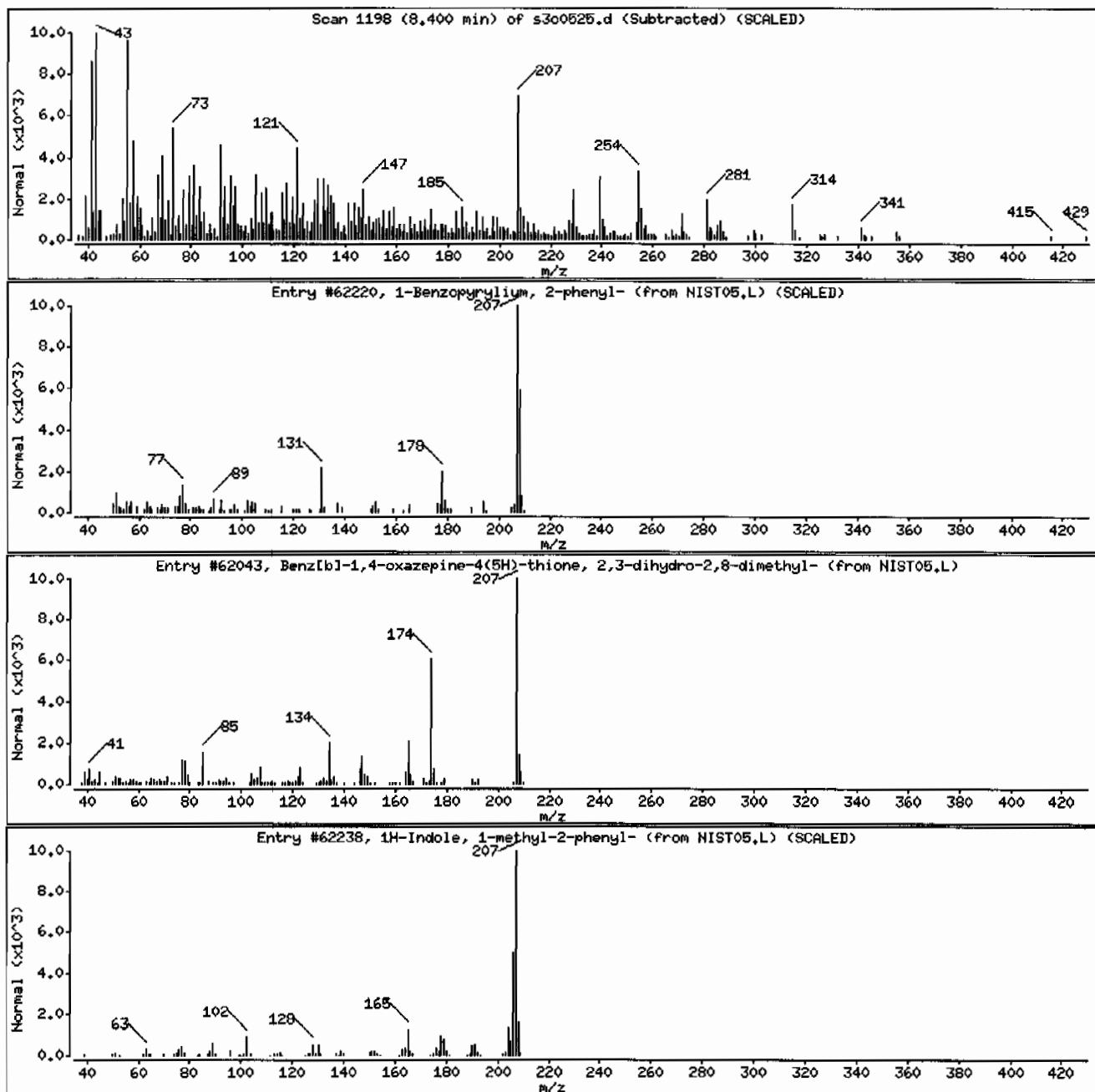
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Benzopyrylium, 2-phenyl-	14051-53-7	NIST05.L	62220	25	C15H11O	207
Benz[bl]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	25	C11H13NOS	207
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62238	25	C15H13N	207



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11/LANL

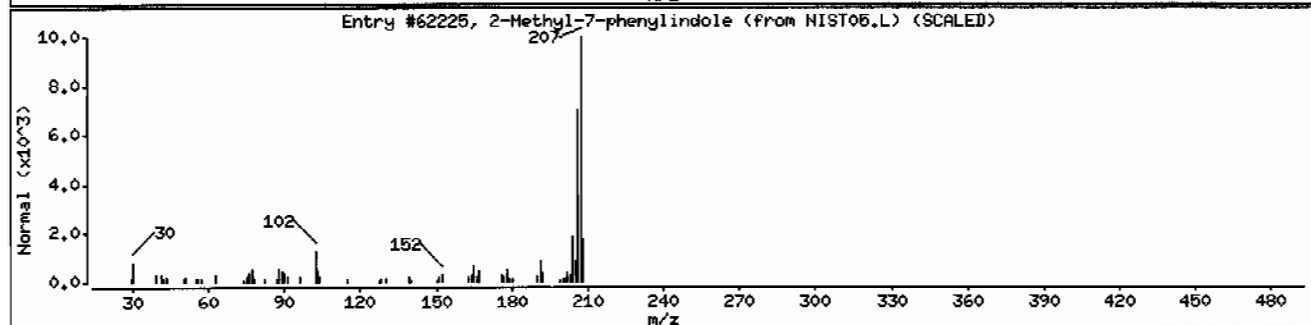
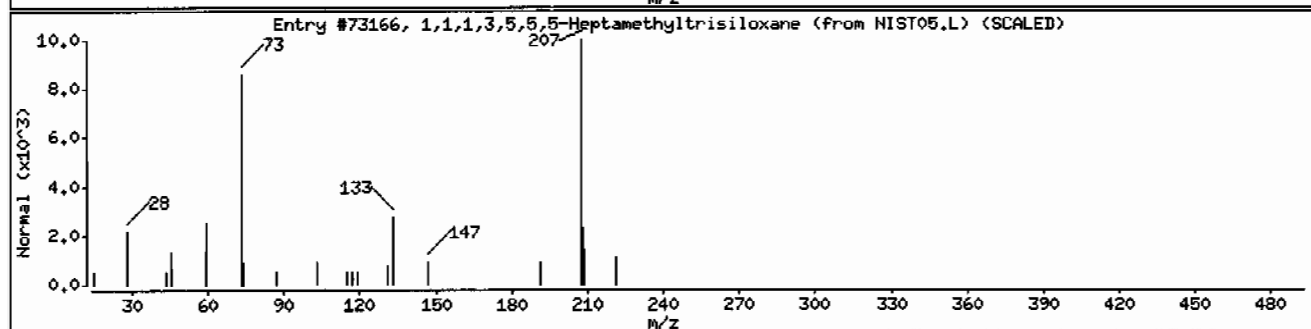
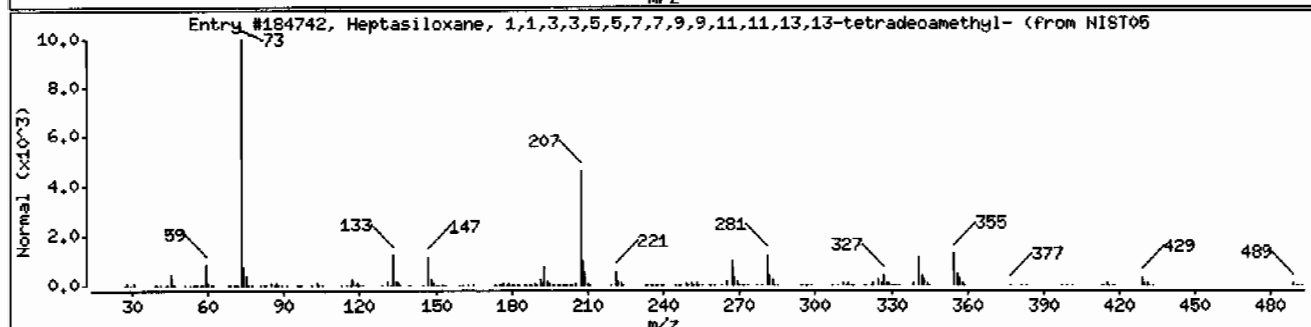
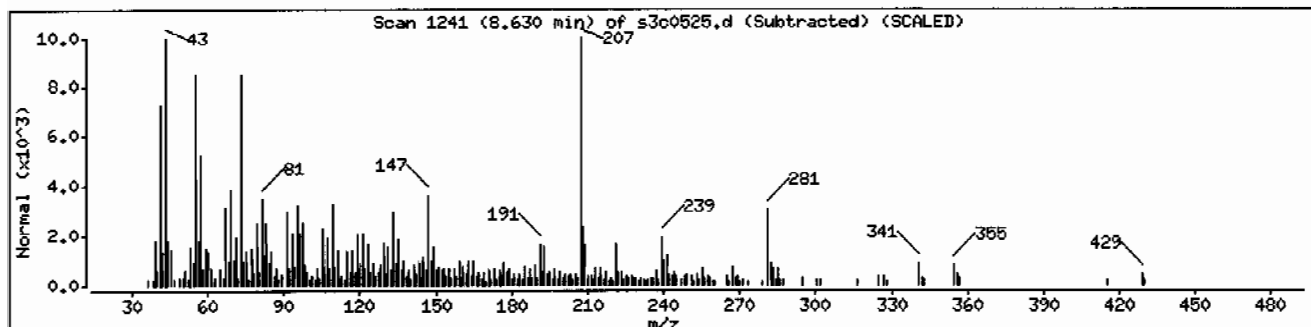
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11	19095-23-9	NIST05.L	184742	52	C14H44O6Si7	504
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C7H22O2Si3	222
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	38	C10H13N	207



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

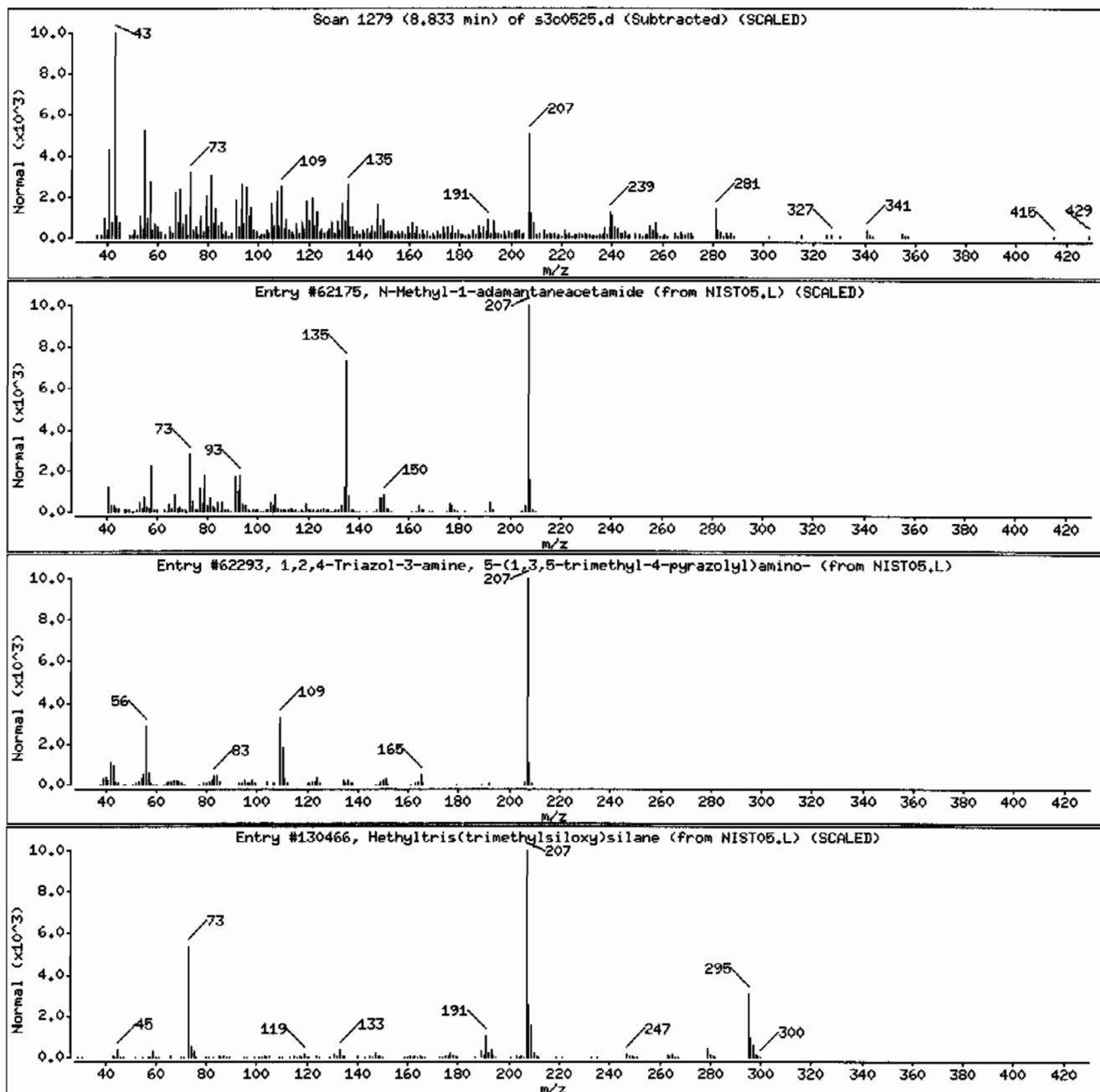
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	35	C13H21NO	207
1,2,4-Triazol-3-amine, 5-(1,3,5-trimethy	1000264-16-7	NIST05.L	62293	30	C8H13N7	207
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	27	C10H30O3Si4	310



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.1

Sample Info: 1247562003195667711SVMF111LANL

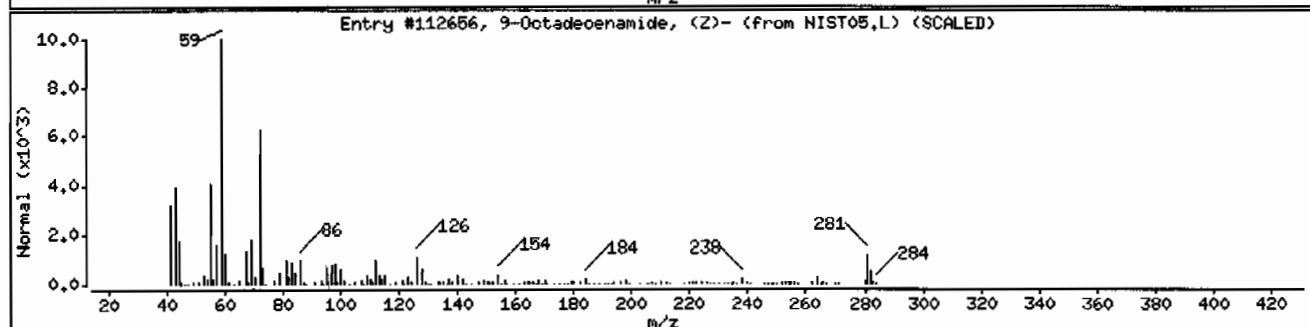
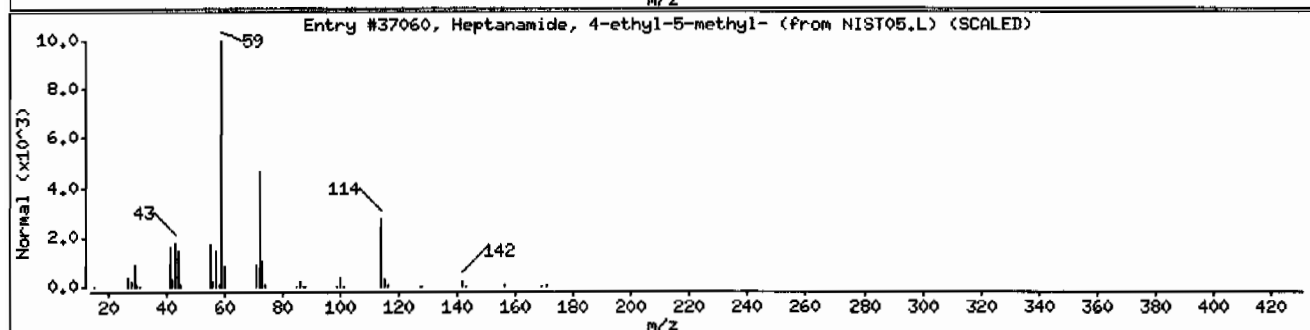
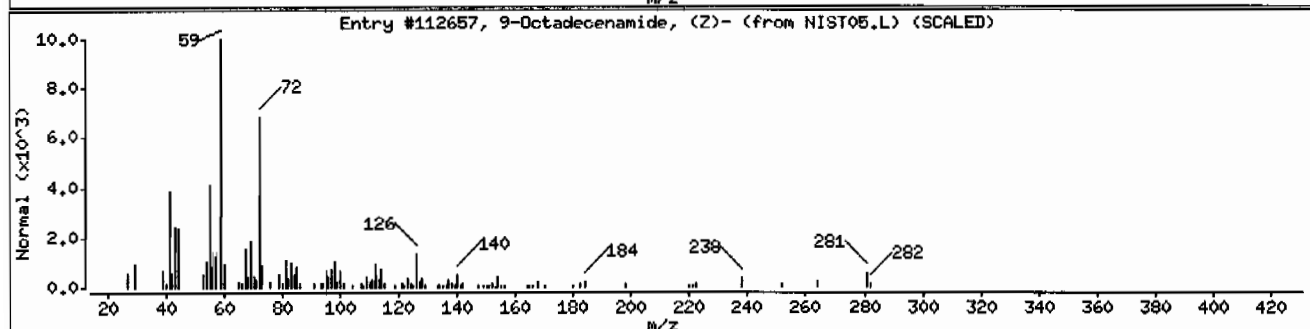
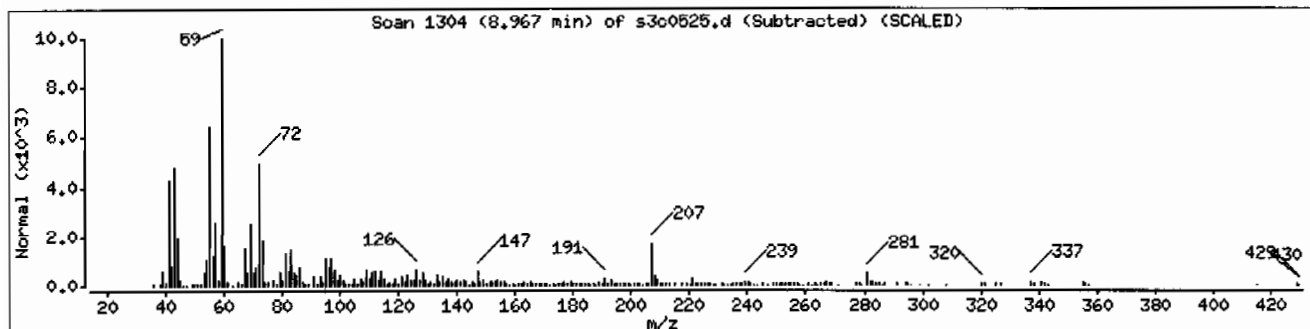
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	76	C18H35NO	281
Heptanamide, 4-ethyl-5-methyl-	54789-40-1	NIST05.L	37060	64	C10H21NO	171
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	62	C18H35NO	281



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

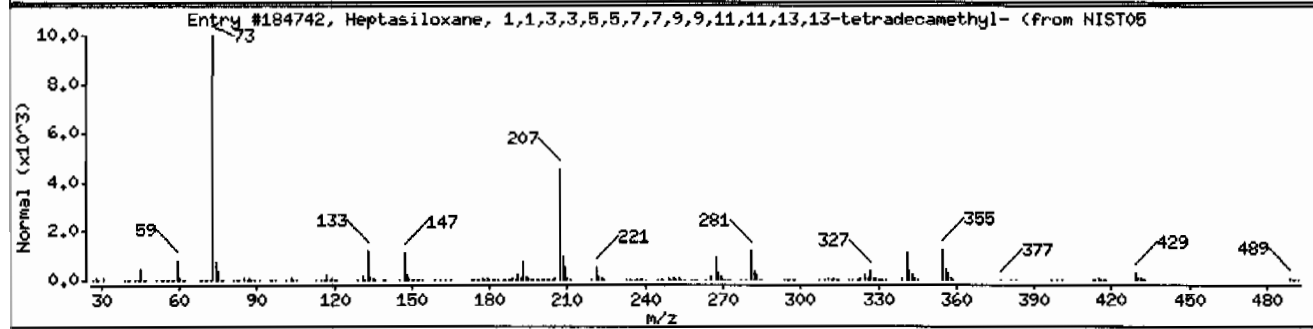
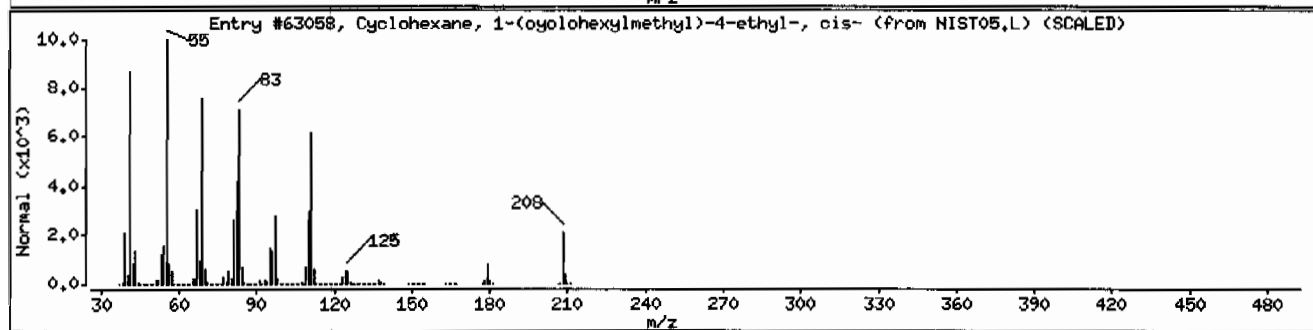
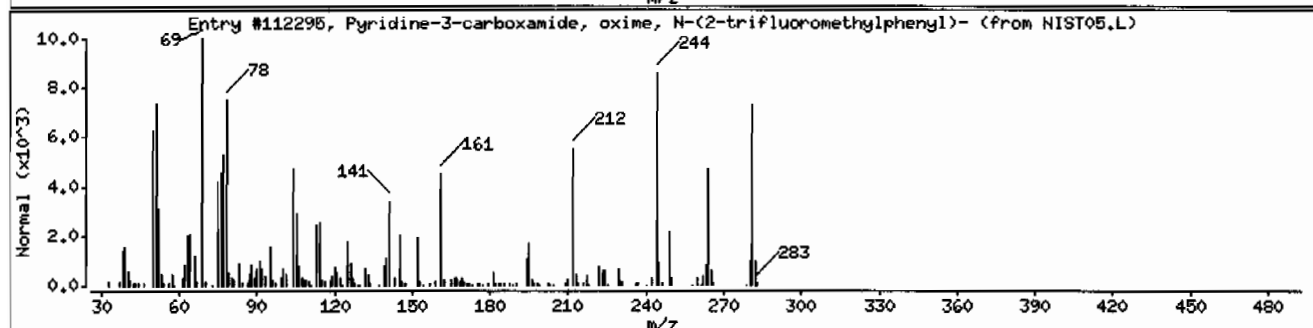
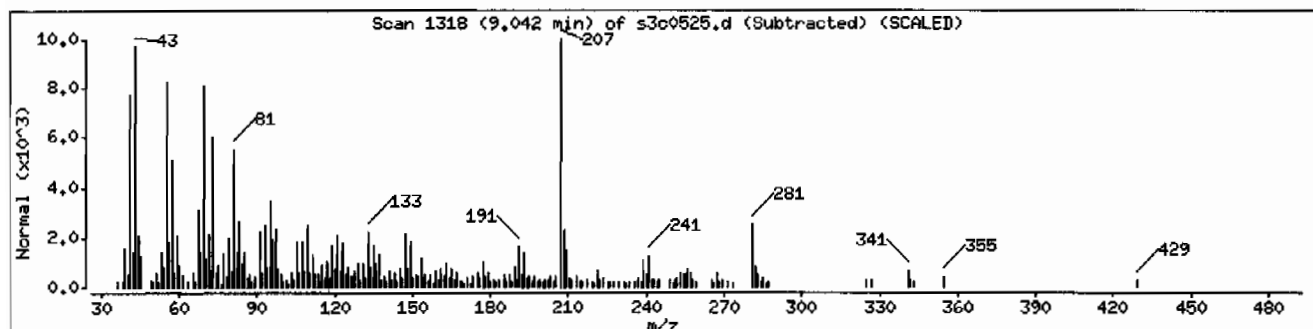
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-63-7	NIST05.L	112295	92	C13H10F3N3O	281
Cyclohexane, 1-(cyclohexylmethyl)-4-ethy	54934-95-1	NIST05.L	63058	38	C15H28	208
Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11	19095-23-9	NIST05.L	184742	38	C14H44O6Si7	504



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.1

Sample Info: 1247562003195667711SVHF111LANL

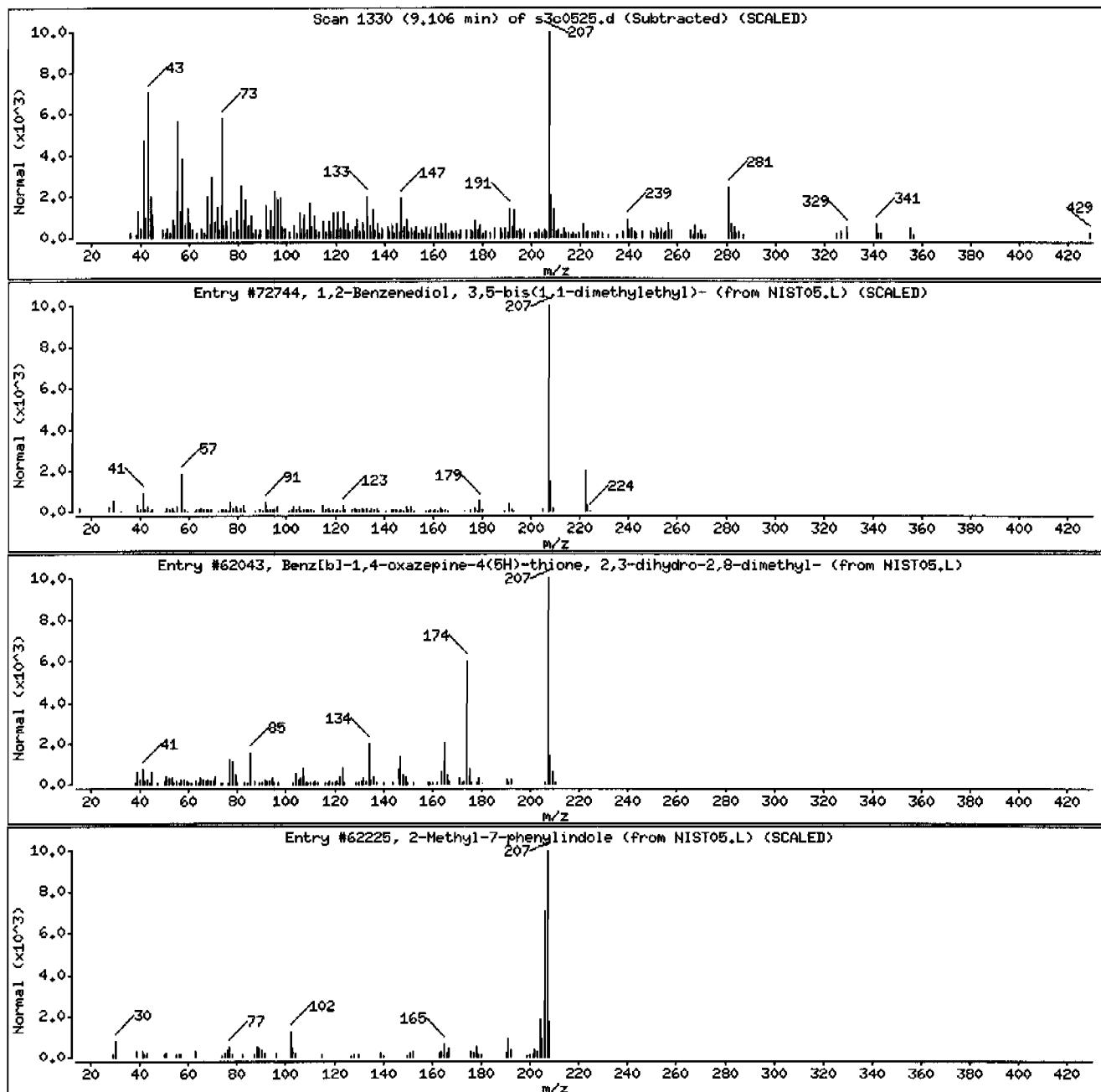
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Benzenediol, 3,5-bis(1,1-dimethylethyl)	1020-31-1	NIST05.L	72744	49	C <sub>14</sub> H <sub>22</sub> O <sub>2</sub>	222
Benz[bl-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	46	C <sub>11</sub> H <sub>13</sub> NOS	207
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	46	C <sub>15</sub> H <sub>13</sub> N	207



Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

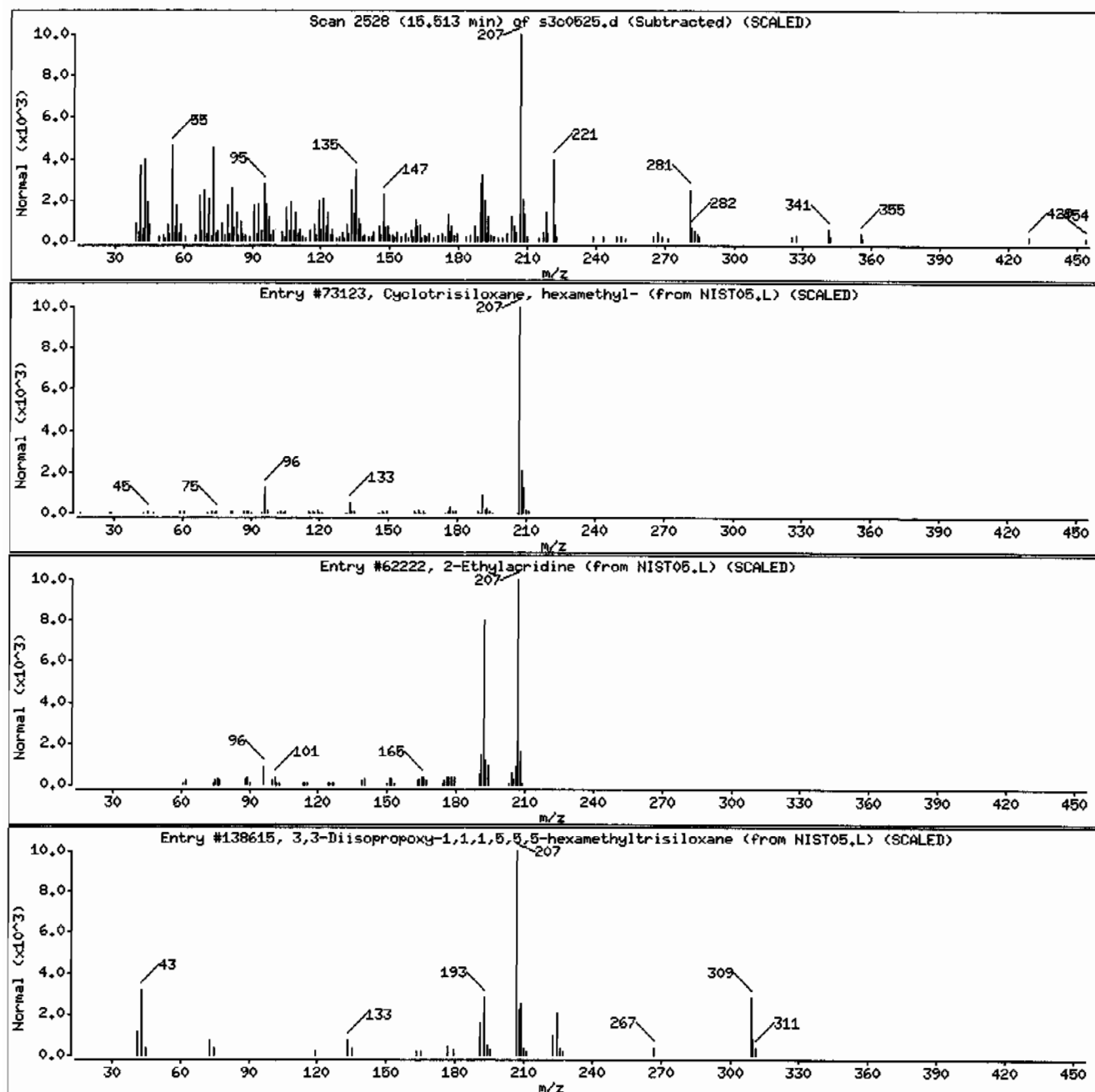
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	38	C6H18OSi3	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
3,3-Diisopropoxy-1,1,1,5,5,5-hexamethylt	18082-56-9	NIST05.L	138615	35	C12H32O4Si3	324





Date : 05-MAR-2010 18:26

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

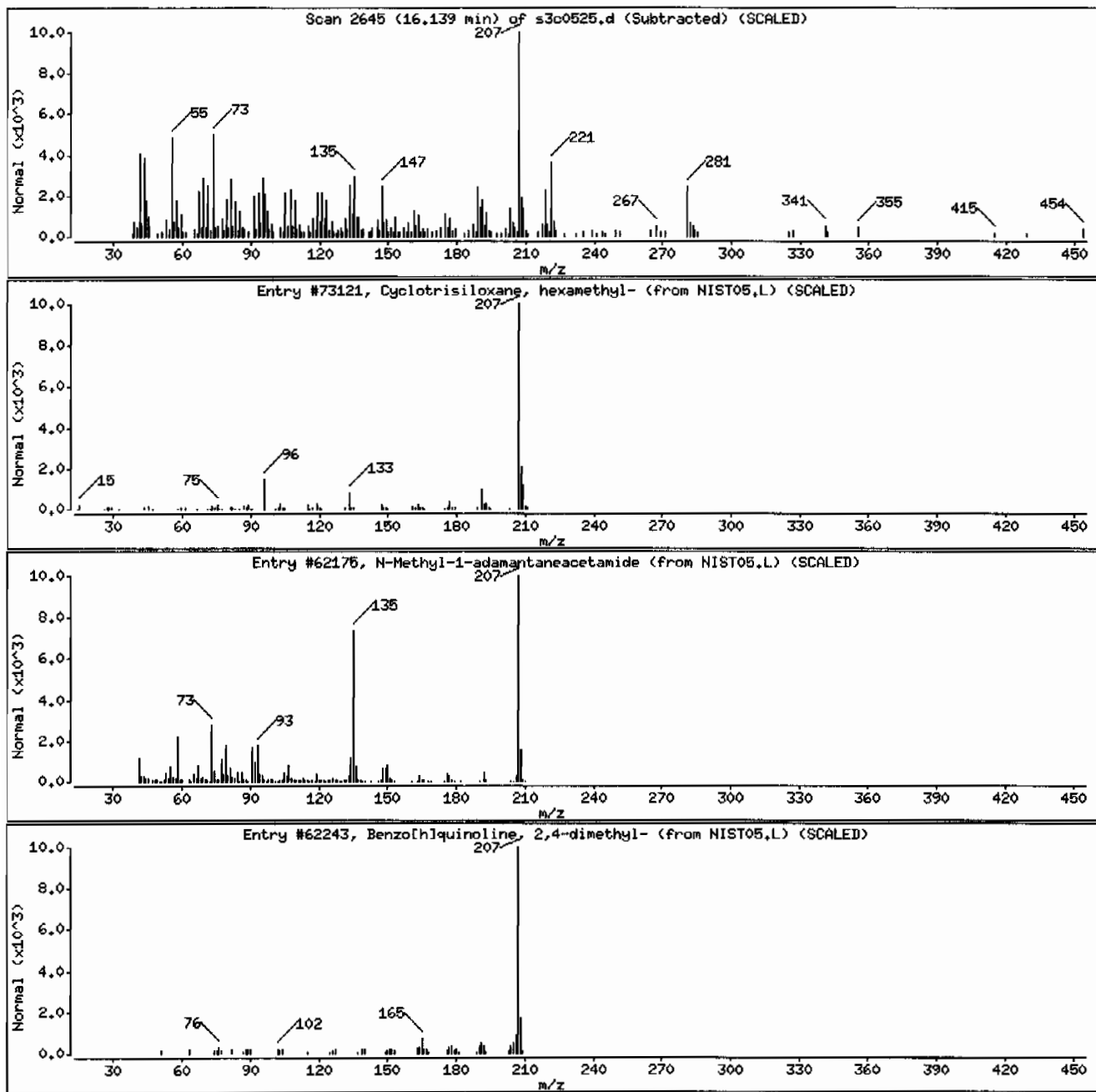
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	42	C <sub>13</sub> H <sub>21</sub> N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C <sub>15</sub> H <sub>13</sub> N	207



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

SDG Number: 10-1950  
Lab Sample ID: 247562002

Client ID: RE15-10-8314  
Batch ID: 956677  
Run Date: 03/05/2010 18:03  
Prep Date: 02/23/2010 21:09  
Data File: s3c0524.d

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.1 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 2.7  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	342	ug/kg	68.3	342
108-95-2	Phenol	U	342	ug/kg	68.3	342
95-57-8	2-Chlorophenol	U	342	ug/kg	68.3	342
106-46-7	1,4-Dichlorobenzene	U	342	ug/kg	68.3	342
621-64-7	N-Nitrosodipropylamine	U	342	ug/kg	68.3	342
59-50-7	4-Chloro-3-methylphenol	U	342	ug/kg	68.3	342
83-32-9	Acenaphthene	U	34.2	ug/kg	11.3	34.2
121-14-2	2,4-Dinitrotoluene	U	342	ug/kg	34.2	342
100-02-7	4-Nitrophenol	U	342	ug/kg	113	342
87-86-5	Pentachlorophenol	U	342	ug/kg	85.4	342
129-00-0	Pyrene	U	34.2	ug/kg	10.2	34.2
110-86-1	Pyridine	U	342	ug/kg	68.3	342
62-53-3	Aniline	U	342	ug/kg	102	342
111-44-4	bis(2-Chloroethyl) ether	U	342	ug/kg	68.3	342
541-73-1	1,3-Dichlorobenzene	U	342	ug/kg	68.3	342
100-51-6	Benzyl alcohol	U	342	ug/kg	102	342
95-50-1	1,2-Dichlorobenzene	U	342	ug/kg	68.3	342
108-60-1	bis(2-Chloroisopropyl)ether	U	342	ug/kg	68.3	342
95-48-7	o-Cresol	U	342	ug/kg	68.3	342
65794-96-9	m,p-Cresols	U	342	ug/kg	102	342
67-72-1	Hexachloroethane	U	342	ug/kg	68.3	342
98-95-3	Nitrobenzene	U	342	ug/kg	68.3	342
78-59-1	Isophorone	U	342	ug/kg	68.3	342
88-75-5	2-Nitrophenol	U	342	ug/kg	68.3	342
105-67-9	2,4-Dimethylphenol	U	342	ug/kg	120	342
111-91-1	bis(2-Chloroethoxy)methane	U	342	ug/kg	68.3	342
120-83-2	2,4-Dichlorophenol	U	342	ug/kg	68.3	342
65-85-0	Benzoic acid	U	683	ug/kg	171	683
91-20-3	Naphthalene	U	34.2	ug/kg	10.2	34.2
106-47-8	4-Chloroaniline	U	342	ug/kg	68.3	342
87-68-3	Hexachlorobutadiene	U	342	ug/kg	68.3	342
91-57-6	2-Methylnaphthalene	U	34.2	ug/kg	6.83	34.2
77-47-4	Hexachlorocyclopentadiene	U	342	ug/kg	68.3	342
88-06-2	2,4,6-Trichlorophenol	U	342	ug/kg	68.3	342
95-95-4	2,4,5-Trichlorophenol	U	342	ug/kg	68.3	342
91-58-7	2-Chloronaphthalene	U	34.2	ug/kg	11.3	34.2
88-74-4	2-Nitroaniline	U	342	ug/kg	68.3	342
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	342	ug/kg	68.3	342

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

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562002	Date Received: 02/20/2010 08:55	%Moisture: 2.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8314	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 18:03	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.1 g	Final Volume: 1 mL
Data File: s3c0524.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	342	ug/kg	68.3	342
606-20-2	2,6-Dinitrotoluene	U	342	ug/kg	34.2	342
208-96-8	Acenaphthylene	U	34.2	ug/kg	10.2	34.2
51-28-5	2,4-Dinitrophenol	U	683	ug/kg	130	683
132-64-9	Dibenzofuran	U	342	ug/kg	68.3	342
84-66-2	Diethylphthalate	U	342	ug/kg	68.3	342
86-73-7	Fluorene	U	34.2	ug/kg	10.2	34.2
7005-72-3	4-Chlorophenylphenylether	U	342	ug/kg	68.3	342
534-52-1	2-Methyl-4,6-dinitrophenol	U	342	ug/kg	68.3	342
100-01-6	4-Nitroaniline	U	342	ug/kg	102	342
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	342	ug/kg	68.3	342
122-66-7	Azobenzene	U	342	ug/kg	68.3	342
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	342	ug/kg	68.3	342
118-74-1	Hexachlorobenzene	U	342	ug/kg	68.3	342
85-01-8	Phenanthrene	U	34.2	ug/kg	10.2	34.2
120-12-7	Anthracene	U	34.2	ug/kg	6.83	34.2
84-74-2	Di-n-butylphthalate	U	342	ug/kg	68.3	342
206-44-0	Fluoranthene	U	34.2	ug/kg	10.2	34.2
85-68-7	Butylbenzylphthalate	U	342	ug/kg	68.3	342
56-55-3	Benzo(a)anthracene	U	34.2	ug/kg	10.2	34.2
91-94-1	3,3'-Dichlorobenzidine	U	342	ug/kg	102	342
218-01-9	Chrysene	U	34.2	ug/kg	10.2	34.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	342	ug/kg	68.3	342
117-84-0	Di-n-octylphthalate	U	342	ug/kg	68.3	342
205-99-2	Benzo(b)fluoranthene	U	34.2	ug/kg	10.2	34.2
207-08-9	Benzo(k)fluoranthene	U	34.2	ug/kg	10.2	34.2
50-32-8	Benzo(a)pyrene	U	34.2	ug/kg	10.2	34.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.2	ug/kg	10.2	34.2
53-70-3	Dibenzo(a,h)anthracene	U	34.2	ug/kg	10.2	34.2
191-24-2	Benzo(ghi)perylene	U	34.2	ug/kg	10.2	34.2
120-82-1	1,2,4-Trichlorobenzene	U	342	ug/kg	68.3	342

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	430	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.28	172	ug/kg	98	NJ

Semi-Volatile  
Certificate of Analysis  
Sample Summary

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562002	Date Received: 02/20/2010 08:55	%Moisture: 2.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8314	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/05/2010 18:03	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30.1 g	Final Volume: 1 mL
Data File: s3c0524.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	7.98	258	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.97	324	ug/kg	93	NJ
	Unknown	15.51	293	ug/kg		J
	Unknown	16.13	243	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0524.d  
Lab Smp Id: 247562002 Client Smp ID: RE15-10-8314  
Inj Date : 05-MAR-2010 18:03  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |247562002|956677|1|SVMF|1|LANL  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 23  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	30.10000	weight of sample
M	2.73760	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.698	3.703	(1.000)	335861	40.0000	
* 29 Naphthalene-d8	136	4.559	4.564	(1.000)	1318249	40.0000	
* 46 Acenaphthene-d10	164	5.811	5.811	(1.000)	760480	40.0000	
* 67 Phenanthrene-d10	188	6.817	6.816	(1.000)	1345708	40.0000	
* 91 Chrysene-d12	240	8.437	8.437	(1.000)	910717	40.0000	
* 98 Perylene-d12	264	9.764	9.763	(1.000)	528877	40.0000	
\$ 3 2-Fluorophenol	112	2.901	2.896	(0.785)	634956	68.4832	2340
\$ 5 Phenol-d5	99	3.426	3.420	(0.926)	813666	68.7990	2350
\$ 20 Nitrobenzene-d5	82	4.062	4.062	(0.891)	387343	34.2919	1170
\$ 39 2-Fluorobiphenyl	172	5.303	5.302	(0.913)	732757	37.4190	1280
\$ 60 2,4,6-Tribromophenol	329	6.357	6.356	(1.094)	217710	91.7999	3140
\$ 81 p-Terphenyl-d14	244	7.742	7.741	(0.918)	739449	47.5730	1620

## ION RATIO REPORT

## SV REPORT

Data file: s3c0524.d

Report Date: 03/07/2010 15:04

Lab. ID: 247562002

SampleType: SAMPLE

Injection Date: 05-MAR-2010 18:03

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562002|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	46248	3.43	3.49	80-120	100	(T)
93	4061	3.47	3.49	238-298	9	(Q)
-----						
17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	56192	4.06	3.94	80-120	100	(T)
42	40595	4.06	3.94	58-118	72	(T)
-----						
27	Benzoic acid		CAS#: 65-85-0			
105	188	4.38	4.34	80-120	100	( )
122	202	4.43	4.34	51-111	108	(T)
77	2198	4.44	4.34	41-101	1169	(QT)
-----						
40	2-Chloronaphthalene		CAS#: 91-58-7			
162	9008	5.54	5.41	80-120	100	(T)
164	512	5.54	5.41	3- 63	6	(T)
127	725	5.54	5.41	11- 71	8	(QT)
-----						
43	Dimethylphthalate		CAS#: 131-11-3			
163	137421	5.81	5.58	80-120	100	(T)
164	763168	5.81	5.58	0- 40	555	(QT)
-----						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	100558	5.81	5.63	80-120	100	(T)
63	1559	5.81	5.63	64-124	2	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	100558	5.81	5.93	80-120	100	(T)
89	1334	5.81	5.92	48-108	1	(QT)
63	1559	5.81	5.92	25- 85	2	(QT)
<hr/>						
53	Fluorene			CAS#: 86-73-7		
166	11681	6.36	6.20	80-120	100	(T)
165	12250	6.36	6.20	62-122	105	(T)
167	3986	6.36	6.20	0- 44	34	(T)
<hr/>						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	632	6.36	6.21	80-120	100	(T)
105	1715	6.36	6.21	16- 76	271	(QT)
51	1483	6.36	6.21	52-112	235	(QT)
<hr/>						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	13501	6.36	6.51	80-120	100	(T)
141	94342	6.36	6.51	62-122	699	(QT)
250	26670	6.36	6.51	66-126	198	(QT)
<hr/>						
85	Butylbenzylphthalate			CAS#: 85-68-7		
149	24631	8.04	7.99	80-120	100	( )
91	35389	8.04	7.99	48-108	144	(Q)
206	366	7.99	7.99	0- 52	1	( )

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0524.d  
 Lab Smp Id: 247562002 Client Smp ID: RE15-10-8314  
 Inj Date : 05-MAR-2010 18:03  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562002|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
 Als bottle: 23  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.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	30.10000	weight of sample
M	2.73760	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.698	2249444	40.000
* 91 Chrysene-d12	8.437	2649569	40.000
* 98 Perylene-d12	9.764	1470295	40.000

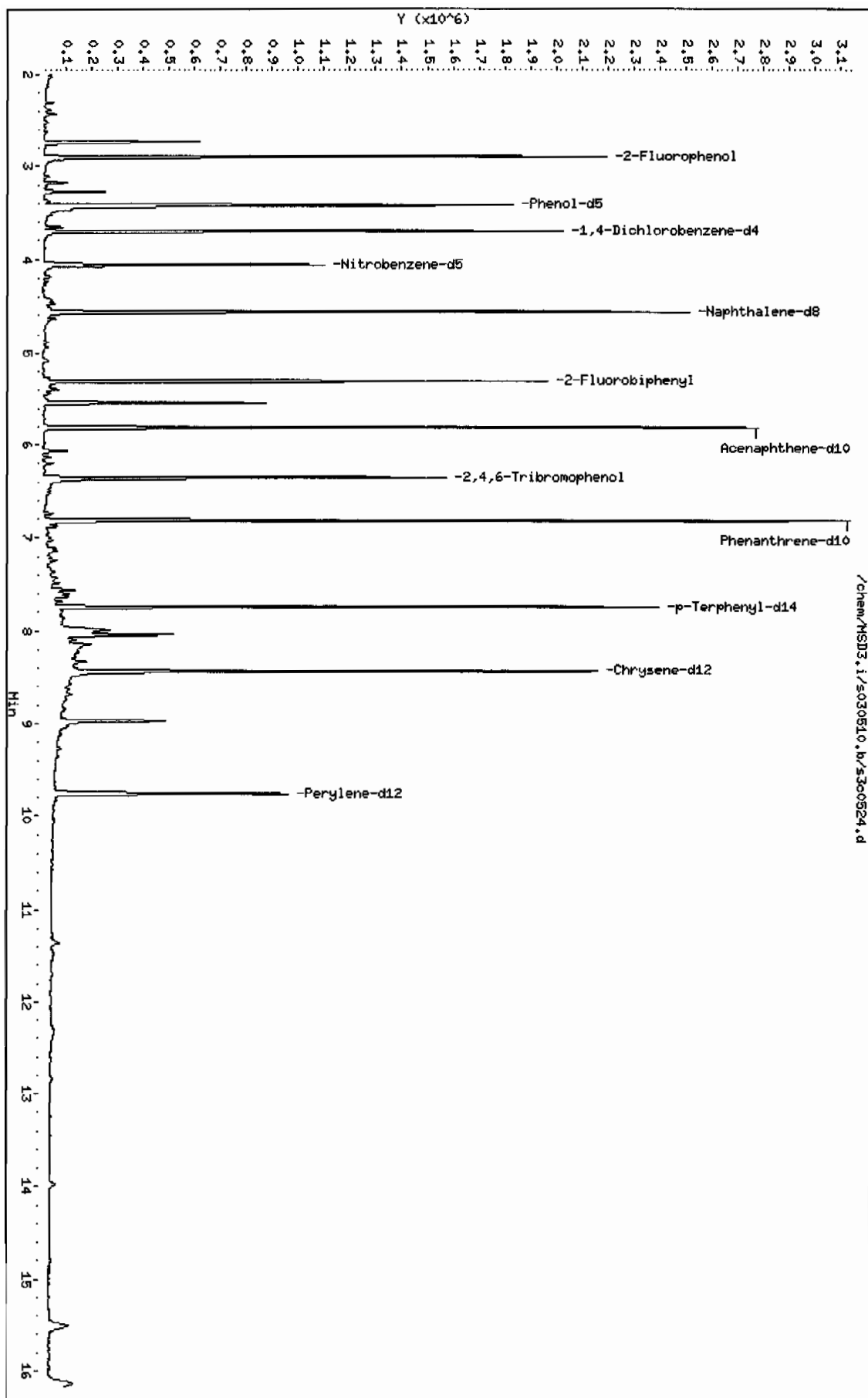
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====



RT	CONCENTRATIONS			QUAL	QUANT			CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY		
=====	=====	=====	=====	=====	=====	=====	=====	
Unknown Aldol Condensate					CAS #:			
2.741	707581	12.5823135	430	0		0	10	
1R-.alpha.-Pinene					CAS #: 7785-70-8			
3.276	283608	5.04317032	172	98	NIST05.L	15188	10	
Unknown					CAS #:			
7.983	499827	7.54577913	258	0		0	91	
9-Octadecenamide, (Z)-					CAS #: 301-02-0			
8.972	627686	9.47604047	324	93	NIST05.L	112655	91	
Unknown					CAS #:			
15.508	314980	8.56915857	293	0		0	98	
Unknown					CAS #:			
16.134	261935	7.12605649	243	0		0	98	

Data File: /chem/MSD3.i/s030510.b/s300524.d  
Date: 05-MAR-2010 18:03  
Client ID: RE15-10-8314  
Sample Info: 1247562002195667711.SMHF11LNL  
Volume Injected (uL): 0.5  
Column phase: J&W DB-SMS

Instrument: MSD3.i  
Operator: JLD1  
Column diameter: 0.20



Date: 05-MAR-2010 18:03

Client ID: RE15-10-8314

Instrument: MSD3.i

Sample Info: 1247562002195667711SVMF111LANL

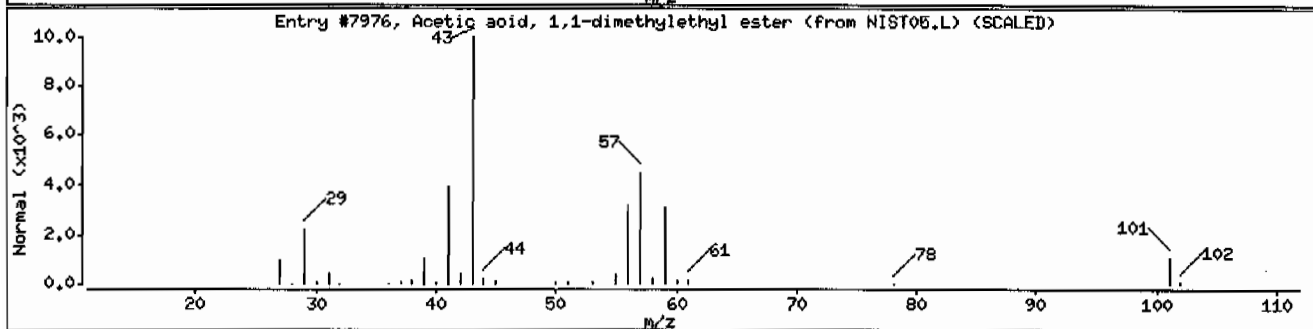
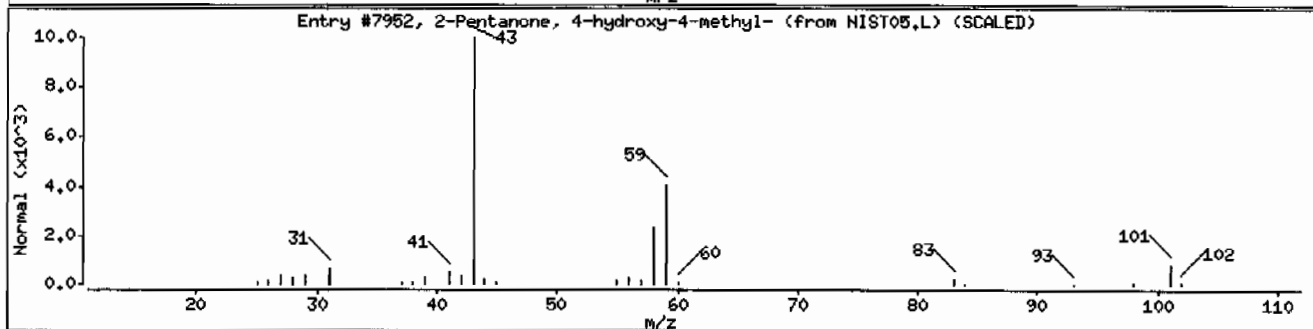
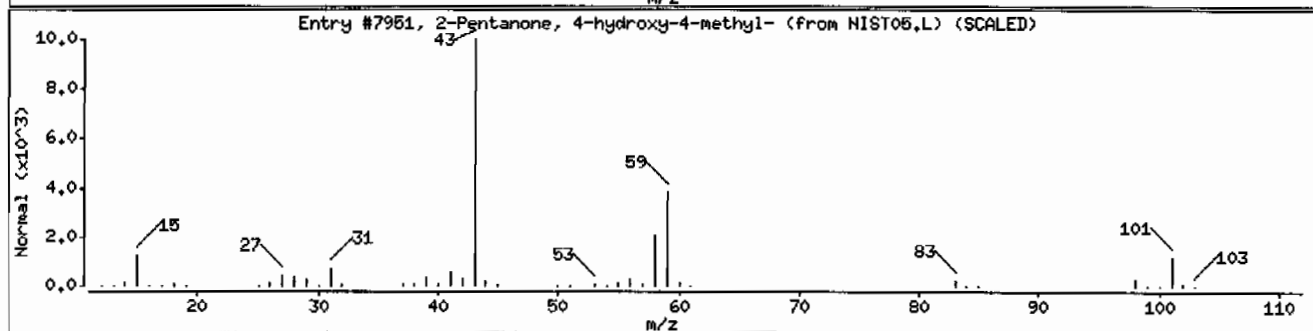
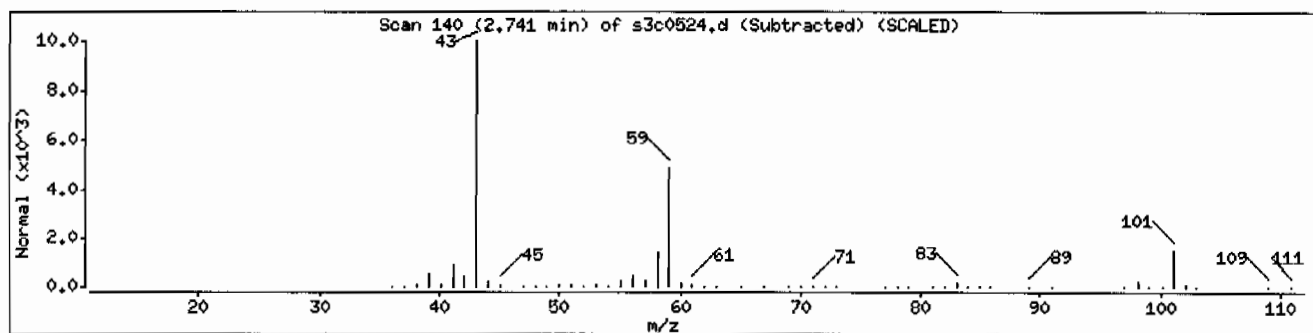
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	23	C6H12O2	116



Date : 05-MAR-2010 18:03

Client ID: RE15-10-8314

Instrument: MSD3.i

Sample Info: 1247562002195667711SVHF11ILANL

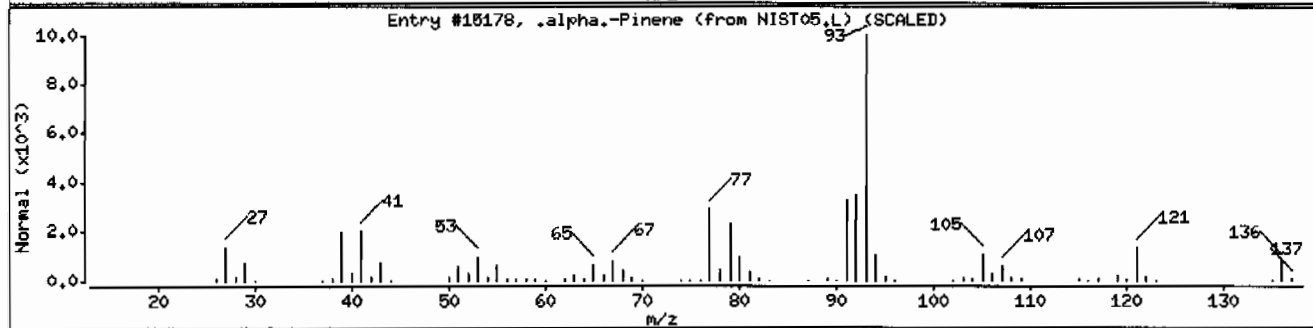
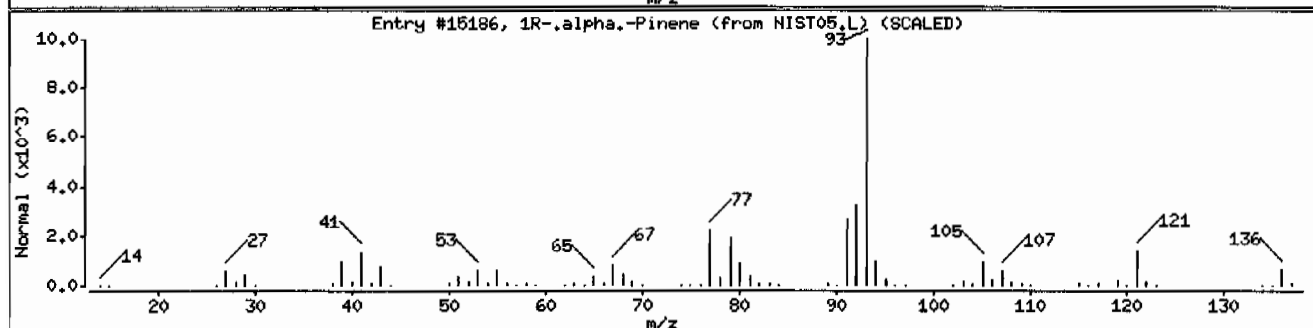
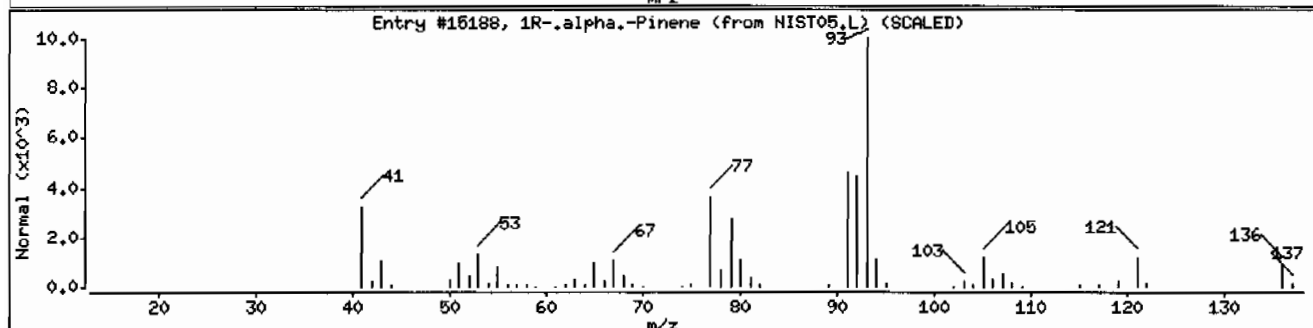
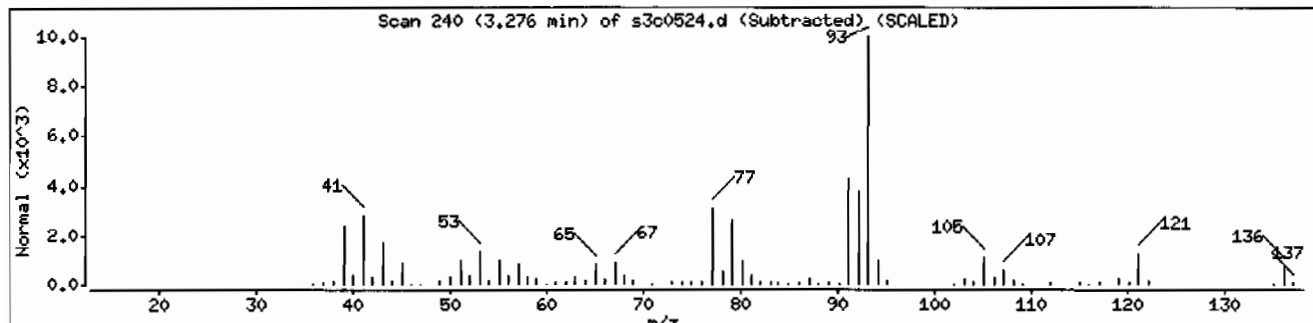
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	98	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 : 05-MAR-2010 18:03

Client ID: RE15-10-8314

Instrument: MSD3,i

Sample Info: 1247562002195667711SVHF11ILANL

Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

## Library Search Compound Match

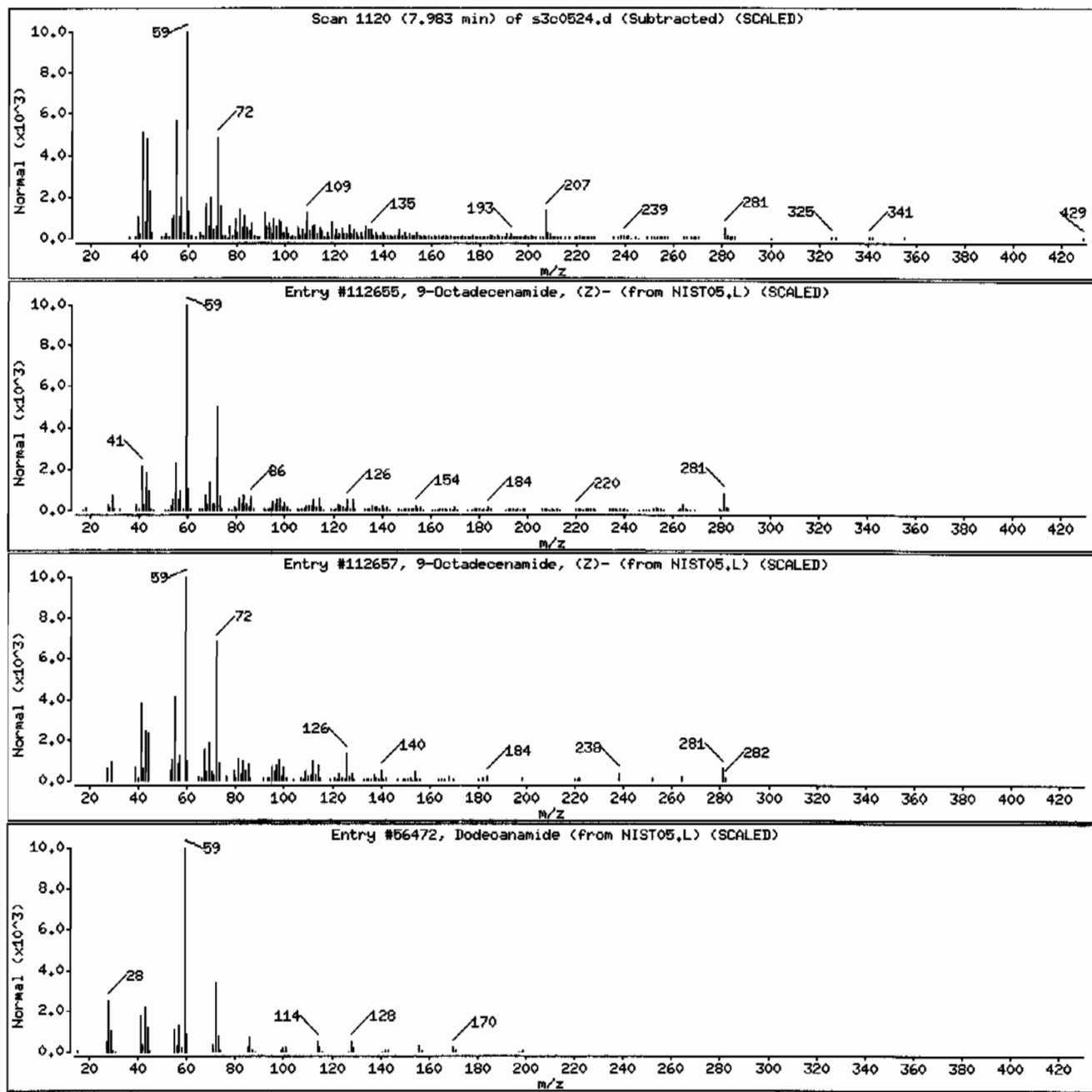
Unknown

9-Octadecenamide, (Z)-

CAS Number	Library	Entry	Quality	Formula	Weight
301-02-0	NIST05,L	112655	91	C18H35NO	281
301-02-0	NIST05,L	112657	64	C18H35NO	281
1120-16-7	NIST05,L	56472	64	C12H25NO	199

9-Octadecenamide, (Z)-

Dodecanamide



Date : 05-MAR-2010 18:03

Client ID: RE15-10-8314

Instrument: MSD3.i

Sample Info: 1247562002195667711SVMF111LANL

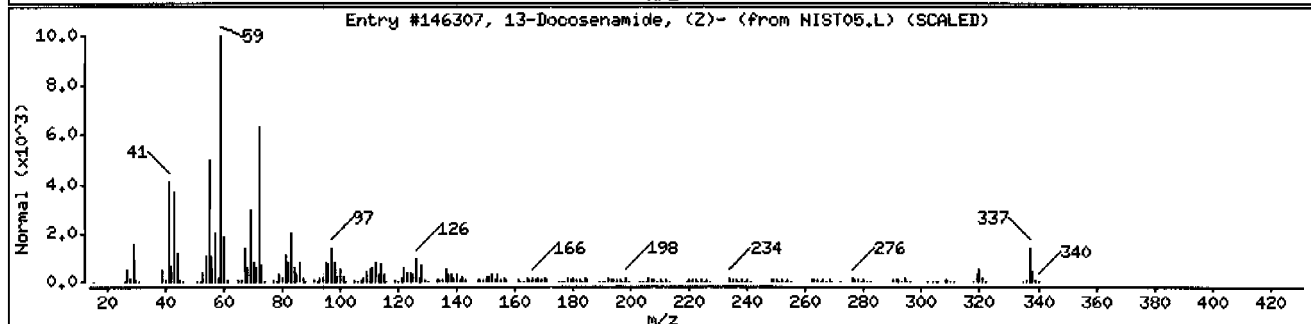
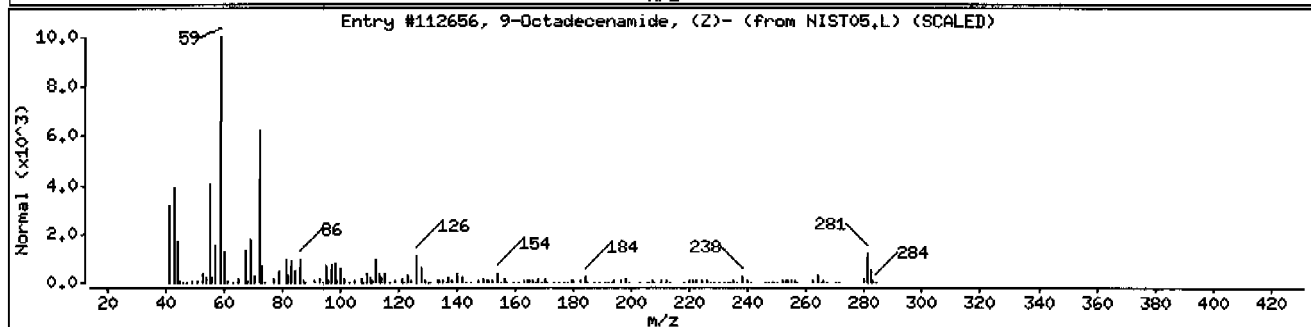
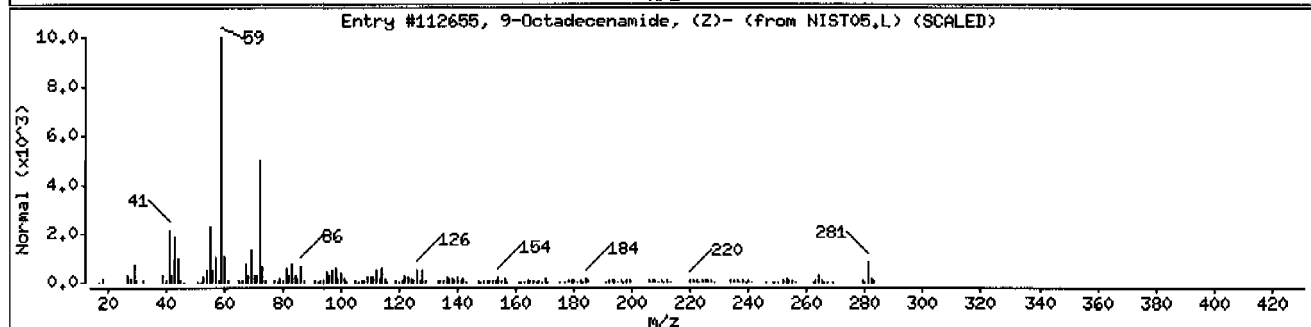
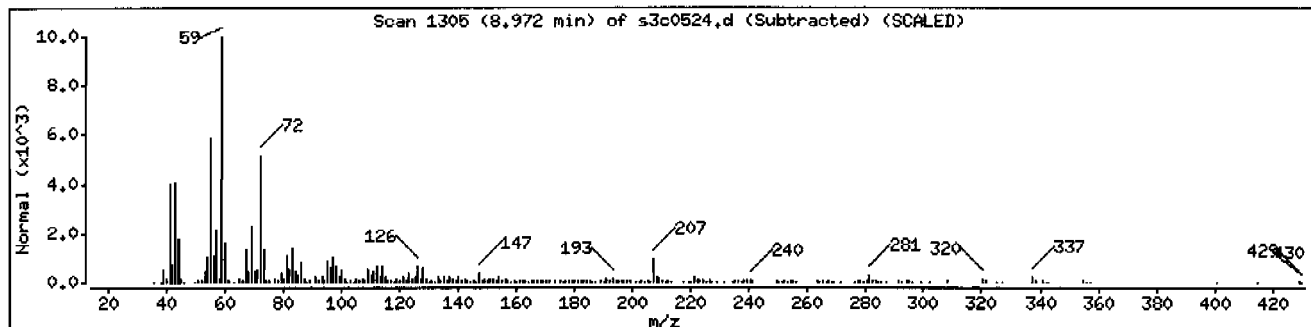
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	93	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	70	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	64	C22H43NO	337



Date : 05-MAR-2010 18:03

Client ID: RE15-10-8314

Instrument: MSD3.i

Sample Info: 1247562002195667711SVMF111LANL

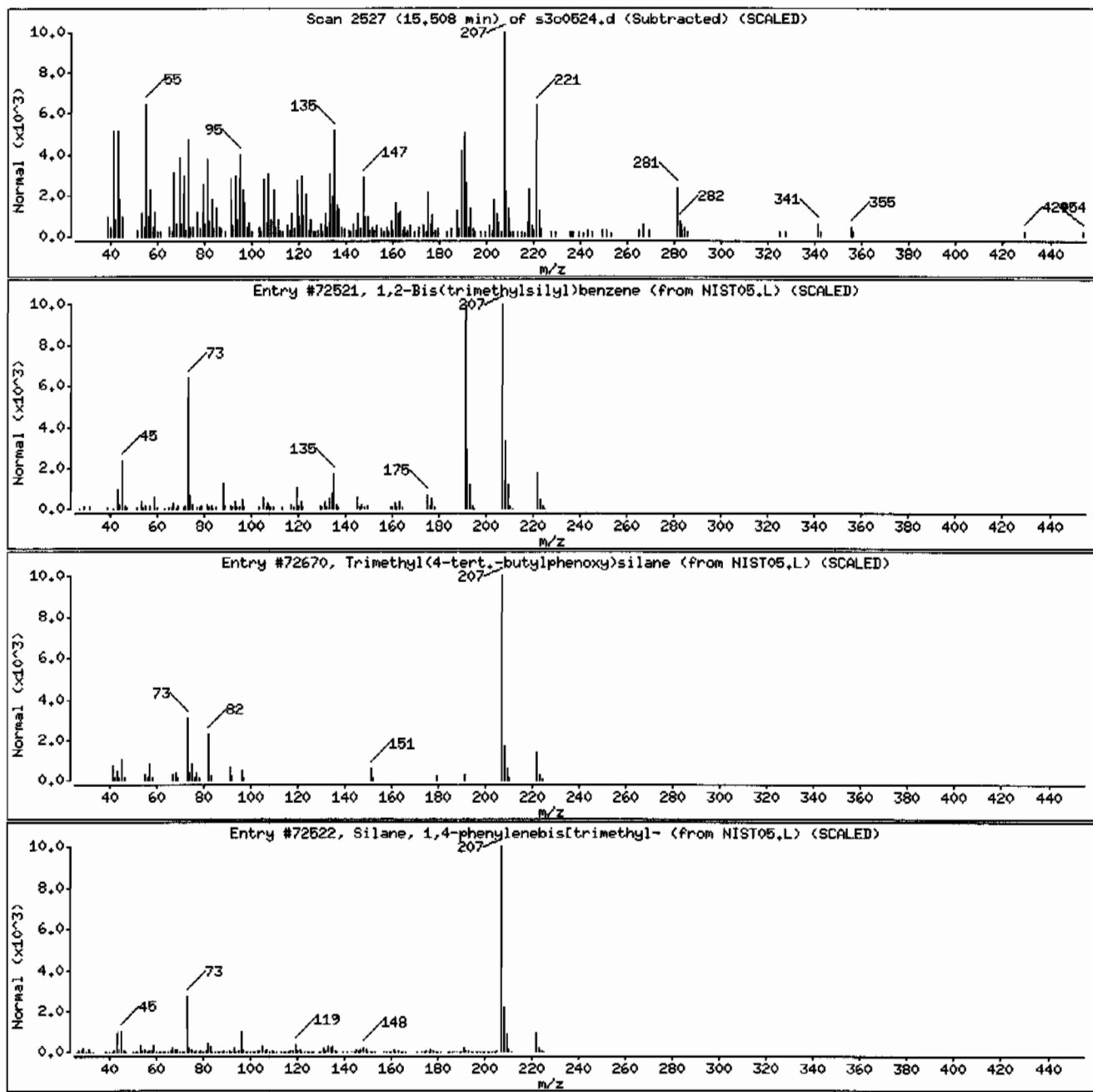
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;W DB-SMS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72521	25	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
Trimethyl(4-tert.-butylphenoxy)silane	25237-79-0	NIST05.L	72670	18	C <sub>13</sub> H <sub>22</sub> O <sub>Si</sub>	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	18	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222



Date: 05-MAR-2010 18:03

Client ID: RE15-10-8314

Instrument: HSD3.i

Sample Info: 1247562002195667711SVHF111LANL

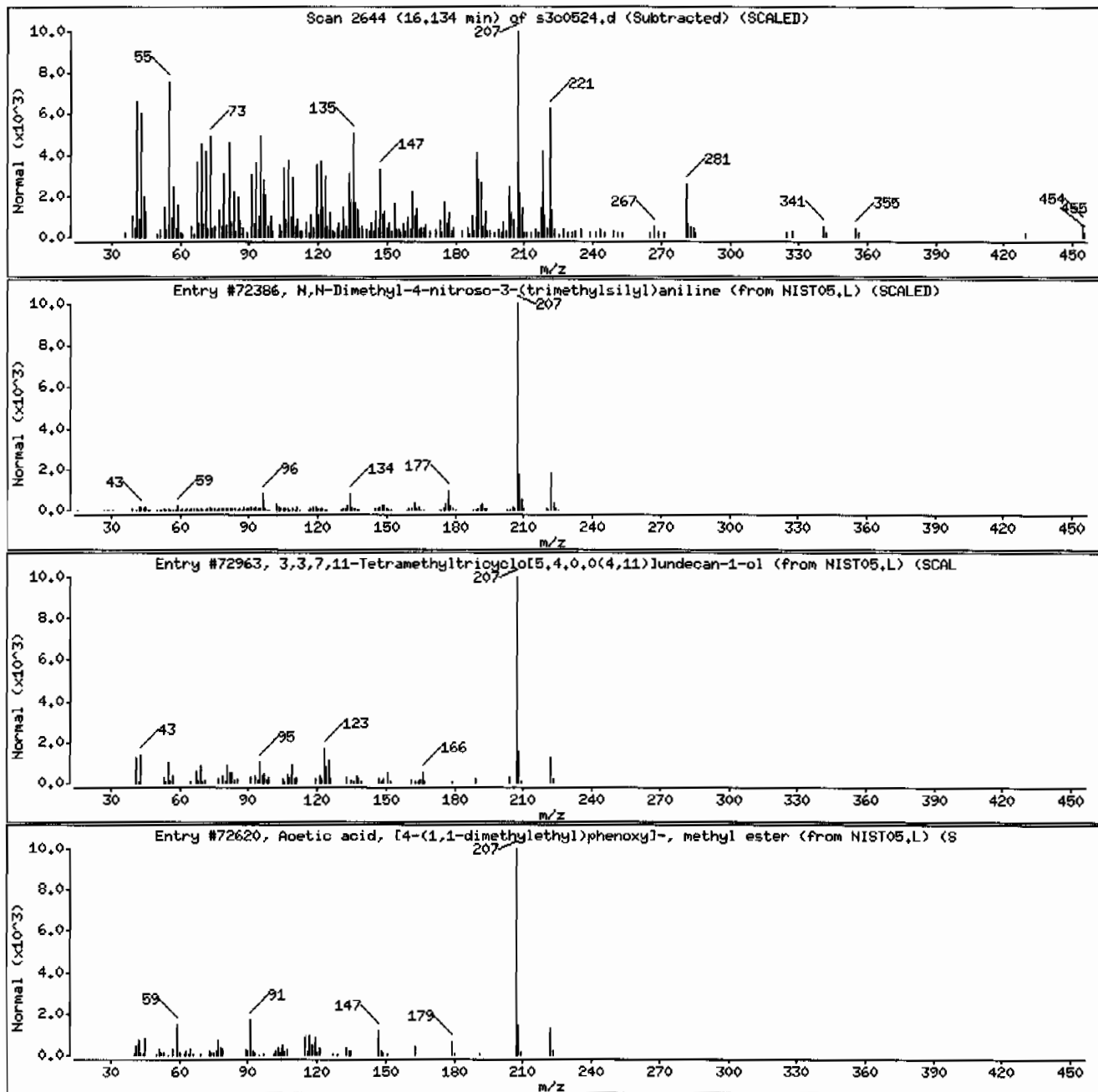
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	35	C11H18N2OSi	222
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1	117591-80-7	NIST05.L	72963	22	C15H26O	222
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	20	C13H18O3	222





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

SDG Number: 10-1950  
Lab Sample ID: 247562005

Client ID: RE15-10-8315  
Batch ID: 956677  
Run Date: 03/05/2010 19:12  
Prep Date: 02/23/2010 21:09  
Data File: s3c0527.d

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.4  
Project: LANL01004  
SOP Ref: GL-OA-E-009  
Dilution: 1  
Inj. Vol: .5 uL  
Final Volume: 1 mL  
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	343	ug/kg	68.5	343
108-95-2	Phenol	U	343	ug/kg	68.5	343
95-57-8	2-Chlorophenol	U	343	ug/kg	68.5	343
106-46-7	1,4-Dichlorobenzene	U	343	ug/kg	68.5	343
621-64-7	N-Nitrosodipropylamine	U	343	ug/kg	68.5	343
59-50-7	4-Chloro-3-methylphenol	U	343	ug/kg	68.5	343
83-32-9	Acenaphthene	U	34.3	ug/kg	11.3	34.3
121-14-2	2,4-Dinitrotoluene	U	343	ug/kg	34.3	343
100-02-7	4-Nitrophenol	U	343	ug/kg	113	343
87-86-5	Pentachlorophenol	U	343	ug/kg	85.7	343
129-00-0	Pyrene	J	31.5	ug/kg	10.3	34.3
110-86-1	Pyridine	U	343	ug/kg	68.5	343
62-53-3	Aniline	U	343	ug/kg	103	343
111-44-4	bis(2-Chloroethyl) ether	U	343	ug/kg	68.5	343
541-73-1	1,3-Dichlorobenzene	U	343	ug/kg	68.5	343
100-51-6	Benzyl alcohol	U	343	ug/kg	103	343
95-50-1	1,2-Dichlorobenzene	U	343	ug/kg	68.5	343
108-60-1	bis(2-Chloroisopropyl)ether	U	343	ug/kg	68.5	343
95-48-7	o-Cresol	U	343	ug/kg	68.5	343
65794-96-9	m,p-Cresols	U	343	ug/kg	103	343
67-72-1	Hexachloroethane	U	343	ug/kg	68.5	343
98-95-3	Nitrobenzene	U	343	ug/kg	68.5	343
78-59-1	Isophorone	U	343	ug/kg	68.5	343
88-75-5	2-Nitrophenol	U	343	ug/kg	68.5	343
105-67-9	2,4-Dimethylphenol	U	343	ug/kg	120	343
111-91-1	bis(2-Chloroethoxy)methane	U	343	ug/kg	68.5	343
120-83-2	2,4-Dichlorophenol	U	343	ug/kg	68.5	343
65-85-0	Benzoic acid	U	685	ug/kg	171	685
91-20-3	Naphthalene	U	34.3	ug/kg	10.3	34.3
106-47-8	4-Chloroaniline	U	343	ug/kg	68.5	343
87-68-3	Hexachlorobutadiene	U	343	ug/kg	68.5	343
91-57-6	2-Methylnaphthalene	U	34.3	ug/kg	6.85	34.3
77-47-4	Hexachlorocyclopentadiene	U	343	ug/kg	68.5	343
88-06-2	2,4,6-Trichlorophenol	U	343	ug/kg	68.5	343
95-95-4	2,4,5-Trichlorophenol	U	343	ug/kg	68.5	343
91-58-7	2-Chloronaphthalene	U	34.3	ug/kg	11.3	34.3
88-74-4	2-Nitroaniline	U	343	ug/kg	68.5	343
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	343	ug/kg	68.5	343

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

SDG Number: 10-1950  
Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.1  
Analyst: JLD1  
Aliquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.4  
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
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	343	ug/kg	68.5	343
606-20-2	2,6-Dinitrotoluene	U	343	ug/kg	34.3	343
208-96-8	Acenaphthylene	U	34.3	ug/kg	10.3	34.3
51-28-5	2,4-Dinitrophenol	U	685	ug/kg	130	685
132-64-9	Dibenzofuran	U	343	ug/kg	68.5	343
84-66-2	Diethylphthalate	U	343	ug/kg	68.5	343
86-73-7	Fluorene	U	34.3	ug/kg	10.3	34.3
7005-72-3	4-Chlorophenylphenylether	U	343	ug/kg	68.5	343
534-52-1	2-Methyl-4,6-dinitrophenol	U	343	ug/kg	68.5	343
100-01-6	4-Nitroaniline	U	343	ug/kg	103	343
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	343	ug/kg	68.5	343
122-66-7	Azobenzene	U	343	ug/kg	68.5	343
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	343	ug/kg	68.5	343
118-74-1	Hexachlorobenzene	U	343	ug/kg	68.5	343
85-01-8	Phenanthrene	U	34.3	ug/kg	10.3	34.3
120-12-7	Anthracene	U	34.3	ug/kg	6.85	34.3
84-74-2	Di-n-butylphthalate	U	343	ug/kg	68.5	343
206-44-0	Fluoranthene		39.0	ug/kg	10.3	34.3
85-68-7	Butylbenzylphthalate	U	343	ug/kg	68.5	343
56-55-3	Benzo(a)anthracene	U	34.3	ug/kg	10.3	34.3
91-94-1	3,3'-Dichlorobenzidine	U	343	ug/kg	103	343
218-01-9	Chrysene	U	34.3	ug/kg	10.3	34.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	343	ug/kg	68.5	343
117-84-0	Di-n-octylphthalate	U	343	ug/kg	68.5	343
205-99-2	Benzo(b)fluoranthene		42.1	ug/kg	10.3	34.3
207-08-9	Benzo(k)fluoranthene	U	34.3	ug/kg	10.3	34.3
50-32-8	Benzo(a)pyrene	J	20.2	ug/kg	10.3	34.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	34.3	ug/kg	10.3	34.3
53-70-3	Dibenzo(a,h)anthracene	U	34.3	ug/kg	10.3	34.3
191-24-2	Benzo(ghi)perylene	U	34.3	ug/kg	10.3	34.3
120-82-1	1,2,4-Trichlorobenzene	U	343	ug/kg	68.5	343

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.74	1190	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.28	5320	ug/kg	97	NJ

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

SDG Number: 10-1950  
Lab Sample ID: 247562005

Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
Aliquot: 30.19 g  
Column: J&W DB-5MS

Matrix: R  
%Moisture: 3.4  
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
<b>Tentatively Identified Compound Summary</b>						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3.47	461	ug/kg	91	NJ
1120-21-4	Undecane	4.04	396	ug/kg	87	NJ
	Unknown	4.19	202	ug/kg		J
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	4.64	416	ug/kg	98	NJ
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	4.93	364	ug/kg	98	NJ
	Unknown	7.24	240	ug/kg		J
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	7.37	285	ug/kg	92	NJ
	Unknown	7.47	304	ug/kg		J
	Unknown	7.59	190	ug/kg		J
	Unknown	7.63	140	ug/kg		J
	Unknown	7.8	208	ug/kg		J
	Unknown	7.86	269	ug/kg		J
	Unknown	7.91	159	ug/kg		J
	Unknown	7.97	261	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	8.02	515	ug/kg	99	NJ
	Unknown	8.05	282	ug/kg		J
	Unknown	8.3	2640	ug/kg		J
	Unknown	8.41	535	ug/kg		J
	Unknown	8.56	1160	ug/kg		J
	Unknown	8.85	180	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	8.98	162	ug/kg	90	NJ
	Unknown	9.14	725	ug/kg		J
	Unknown	9.27	484	ug/kg		J
	Unknown	9.45	582	ug/kg		J
	Unknown	15.52	624	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0527.d  
 Lab Smp Id: 247562005 Client Smp ID: RE15-10-8315  
 Inj Date : 05-MAR-2010 19:12  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562005|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
 Als bottle: 26  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.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	30.19000	weight of sample
M	3.35200	% 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	3.704	3.703	(1.000)	287804	40.0000	
* 29 Naphthalene-d8	136	4.559	4.564	(1.000)	1149286	40.0000	
* 46 Acenaphthene-d10	164	5.811	5.811	(1.000)	682678	40.0000	
* 67 Phenanthrene-d10	188	6.817	6.816	(1.000)	1213902	40.0000	
* 91 Chrysene-d12	240	8.443	8.437	(1.000)	861219	40.0000	
* 98 Perylene-d12	264	9.774	9.763	(1.000)	441394	40.0000	
\$ 3 2-Fluorophenol	112	2.901	2.896	(0.783)	508761	64.0349	2190
\$ 5 Phenol-d5	99	3.426	3.420	(0.925)	656905	64.8189	2220
\$ 20 Nitrobenzene-d5	82	4.062	4.062	(0.891)	309385	31.4169	1080
\$ 39 2-Fluorobiphenyl	172	5.303	5.302	(0.913)	613881	34.9212	1200
\$ 60 2,4,6-Tribromophenol	329	6.357	6.356	(1.094)	184037	86.4452	2960
\$ 81 p-Terphenyl-d14	244	7.742	7.741	(0.917)	685035	46.6053	1600

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	7.688	7.688	(0.911)	24825	0.91847	31.5 (a)
76 Fluoranthene	202	7.549	7.549	(1.107)	32603	1.13862	39.0
95 Benzo(b)fluoranthene	252	9.352	9.341	(0.957)	12378	1.22862	42.1
97 Benzo(a)pyrene	252	9.710	9.699	(0.993)	5058	0.58905	20.2 (a)

QC Flag Legend

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

## ION RATIO REPORT

## SV REPORT

Data file: s3c0527.d

Report Date: 03/07/2010 15:06

Lab. ID: 247562005

SampleType: SAMPLE

Injection Date: 05-MAR-2010 19:12

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562005|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	34390	3.43	3.49	80-120	100	(T)
93	51966	3.38	3.49	238-298	151	(QT)
-----						
6	Phenol	CAS#: 108-95-2				
94	65253	3.52	3.43	80-120	100	(T)
66	12295	3.52	3.43	17- 77	19	(T)
65	37763	3.52	3.43	0- 30	58	(QT)
-----						
7	bis(2-Chloroethyl) ether	CAS#: 111-44-4				
63	51262	3.66	3.51	80-120	100	(T)
93	1865544	3.66	3.51	92-152	3639	(QT)
95	29430	3.66	3.51	5- 65	57	(T)
-----						
12	Benzyl alcohol	CAS#: 100-51-6				
108	30959	3.66	3.77	80-120	100	(T)
79	623099	3.66	3.77	104-164	2013	(QT)
77	653566	3.66	3.77	54-114	2111	(QT)
-----						
15	o-Cresol	CAS#: 95-48-7				
107	144144	3.66	3.82	80-120	100	(T)
108	30959	3.66	3.82	93-153	21	(QT)
77	653566	3.66	3.82	20- 80	453	(QT)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	52631	4.06	3.94	80-120	100	(T)
42	44571	4.06	3.94	58-118	85	(T)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
22 Isophorone		CAS#: 78-59-1				
82	313807	4.06	4.23	80-120	100	(T)
138	127	4.07	4.23	0- 49	0	(T)
<hr/>						
25 bis(2-Chloroethoxy)methane		CAS#: 111-91-1				
93	31571	4.35	4.36	80-120	100	( )
123	13618	4.36	4.36	0- 48	43	( )
95	67707	4.36	4.36	3- 63	214	(Q)
<hr/>						
27 Benzoic acid		CAS#: 65-85-0				
105	22312	4.36	4.34	80-120	100	( )
122	3720	4.37	4.34	51-111	17	(Q)
77	52620	4.36	4.34	41-101	236	(Q)
<hr/>						
40 2-Chloronaphthalene		CAS#: 91-58-7				
162	53349	5.54	5.41	80-120	100	(T)
164	3172	5.54	5.41	3- 63	6	(T)
127	3884	5.54	5.41	11- 71	7	(QT)
<hr/>						
42 o-Nitroaniline		CAS#: 88-74-4				
65	69156	5.54	5.47	80-120	100	(T)
92	80785	5.54	5.47	32- 92	117	(QT)
138	5867	5.54	5.47	67-127	8	(QT)
<hr/>						
43 Dimethylphthalate		CAS#: 131-11-3				
163	122106	5.81	5.58	80-120	100	(T)
164	685304	5.81	5.58	0- 40	561	(QT)
<hr/>						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	87934	5.81	5.63	80-120	100	(T)
63	1378	5.81	5.63	64-124	2	(QT)
<hr/>						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	87934	5.81	5.93	80-120	100	(T)
89	1293	5.81	5.92	48-108	1	(QT)
63	1378	5.81	5.92	25- 85	2	(QT)
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52 4-Nitrophenol		CAS#: 100-02-7				
139	232	5.77	5.86	80-120	100	(T)
109	4677	5.80	5.86	41-101	2016	(Q)
65	4467	5.81	5.86	80-140	1926	(Q)
<hr/>						
53 Fluorene		CAS#: 86-73-7				
166	9688	6.36	6.20	80-120	100	(T)
165	9445	6.36	6.20	62-122	97	(T)
167	3827	6.36	6.20	0- 44	40	(T)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	602	6.36	6.21	80-120	100	(T)
105	2870	6.36	6.21	16- 76	476	(QT)
51	2152	6.36	6.21	52-112	357	(QT)
-----						
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	11064	6.36	6.51	80-120	100	(T)
141	79426	6.36	6.51	62-122	718	(QT)
250	22558	6.36	6.51	66-126	204	(QT)
-----						
69 Anthracene				CAS#: 120-12-7		
178	15820	6.83	6.86	80-120	100	( )
179	2991	6.83	6.86	0- 45	19	( )
176	3012	6.83	6.86	0- 48	19	( )
-----						
76 Fluoranthene				CAS#: 206-44-0		
202	32603	7.55	7.55	80-120	100	( )
203	5940	7.55	7.55	0- 47	18	( )
101	4462	7.55	7.55	0- 43	14	( )
-----						
79 Pyrene				CAS#: 129-00-0		
202	24825	7.69	7.69	80-120	100	( )
200	5900	7.69	7.69	0- 51	24	( )
101	4380	7.69	7.69	0- 45	18	( )
-----						
85 Butylbenzylphthalate				CAS#: 85-68-7		
149	80812	8.23	7.99	80-120	100	(T)
91	276419	8.23	7.99	48-108	342	(QT)
206	5338	8.24	7.99	0- 52	7	(T)
-----						
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	15112	8.44	8.43	80-120	100	( )
226	4300	8.44	8.43	0- 57	28	( )
229	5871	8.46	8.43	0- 50	39	( )
-----						
92 Chrysene				CAS#: 218-01-9		
228	12608	8.46	8.45	80-120	100	( )
229	5850	8.46	8.45	0- 50	46	( )
226	4196	8.46	8.45	0- 60	33	( )
-----						
93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	41950	8.34	8.33	80-120	100	( )
167	32479	8.34	8.33	3- 63	77	(Q)
-----						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	12378	9.35	9.34	80-120	100	( )
253	2987	9.35	9.34	0- 52	24	( )
125	1923	9.35	9.34	0- 43	16	( )
-----						



MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	12378	9.35	9.37	80-120	100	( )
253	2987	9.35	9.37	0- 52	24	( )
125	1923	9.35	9.37	0- 42	16	( )
-----						
97 Benzo(a)pyrene				CAS#: 50-32-8		
252	5058	9.71	9.70	80-120	100	( )
253	1247	9.71	9.70	0- 52	25	( )
125	663	9.70	9.70	0- 30	13	( )
-----						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	2317	11.24	11.24	80-120	100	( )
138	860	11.24	11.24	4- 64	37	( )
-----						
Q qualifier indicates ion failed ratio requirement						

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0527.d  
 Lab Smp Id: 247562005 Client Smp ID: RE15-10-8315  
 Inj Date : 05-MAR-2010 19:12  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562005|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270 S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
 Als bottle: 26  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.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	30.19000	weight of sample
M	3.35200	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.704	2060845	40.000
* 29 Naphthalene-d8	4.559	2965406	40.000
* 67 Phenanthrene-d10	6.817	3207964	40.000
* 91 Chrysene-d12	8.443	11653319	40.000
* 98 Perylene-d12	9.774	1354744	40.000

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

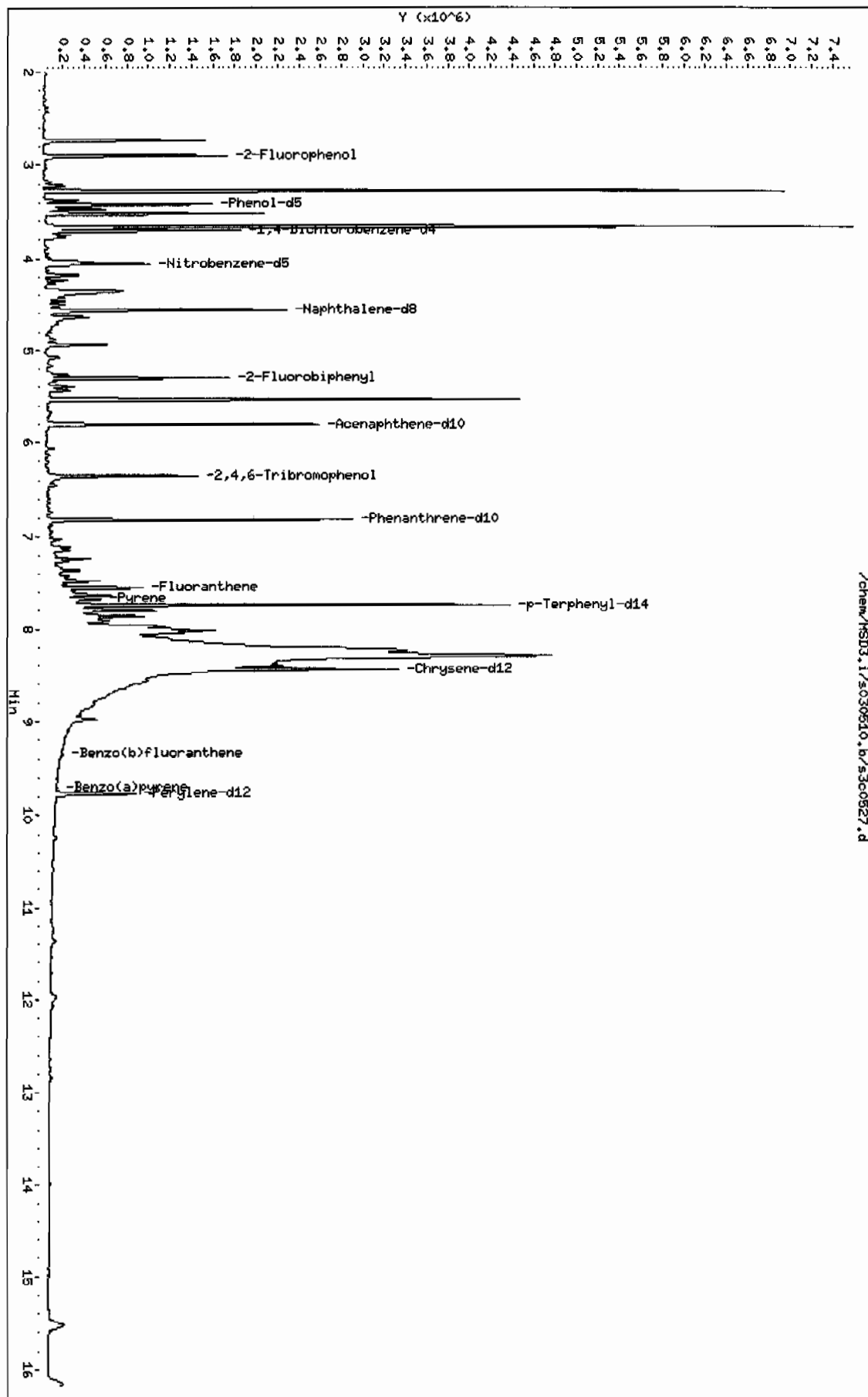
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.741	1782340	34.5943454	1180	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.276	8004544	155.364250	5320	97	NIST05.L	15188	10
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-					CAS #: 3479-89-8		
3.474	693183	13.4543464	461	91	NIST05.L	14442	10
Undecane					CAS #: 1120-21-4		
4.035	595566	11.5596375	396	87	NIST05.L	27237	10
Unknown					CAS #:		
4.185	436864	5.89280632	202	0		0	29
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri					CAS #: 1196-01-6		
4.640	898848	12.1244435	416	98	NIST05.L	22922	29
Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth					CAS #: 5655-61-8		
4.934	786480	10.6087341	364	98	NIST05.L	54340	29
Unknown					CAS #:		
7.239	562613	7.01520639	240	0		0	67
4b,8-Dimethyl-2-isopropylphenanthrene, 4					CAS #: 1000197-14-1		
7.367	667916	8.32821708	285	92	NIST05.L	96373	67
Unknown					CAS #:		
7.474	712442	8.88340832	304	0		0	67
Unknown					CAS #:		
7.587	444715	5.54513289	190	0		0	67
Unknown					CAS #:		
7.635	1192911	4.09466657	140	0		0	91
Unknown					CAS #:		
7.801	1764225	6.05569952	208	0		0	91
Unknown					CAS #:		
7.865	2284063	7.84004407	269	0		0	91
Unknown					CAS #:		
7.913	1348426	4.62846907	159	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
7.972	2218923	7.61645057	261	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
8.020	4380461	15.0359262	515	99	NIST05.L	133618	91
Unknown					CAS #:		
8.047	2398815	8.23392773	282	0		0	91
Unknown					CAS #:		
8.298	22454254	77.0741929	2640	0		0	91
Unknown					CAS #:		
8.405	4545035	15.6008272	535	0		0	91
Unknown					CAS #:		
8.560	9888415	33.9419695	1160	0		0	91
Unknown					CAS #:		
8.849	1534257	5.26633574	180	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.977	1380113	4.73723732	162	90	NIST05.L	112655	91
Unknown					CAS #:		
9.138	716456	21.1539931	725	0		0	98
Unknown					CAS #:		
9.272	478454	14.1267733	484	0		0	98
Unknown					CAS #:		
9.453	575107	16.9805139	582	0		0	98
Unknown					CAS #:		
15.519	616517	18.2031826	624	0		0	98

Data File: /chem/HSD3.i/s030510.b/s300527.d  
 Date: 05-MAR-2010 19:12  
 Client ID: RE15-10-8316  
 Sample Info: 124756200619667711SWH11.LANL  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-EHS

Instrument: HSD3.i  
 Operator: JLD1  
 Column diameter: 0.20

/chem/HSD3.i/s030510.b/s300527.d



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711ISVHF11ILANL

Volume Injected (uL): 0.5

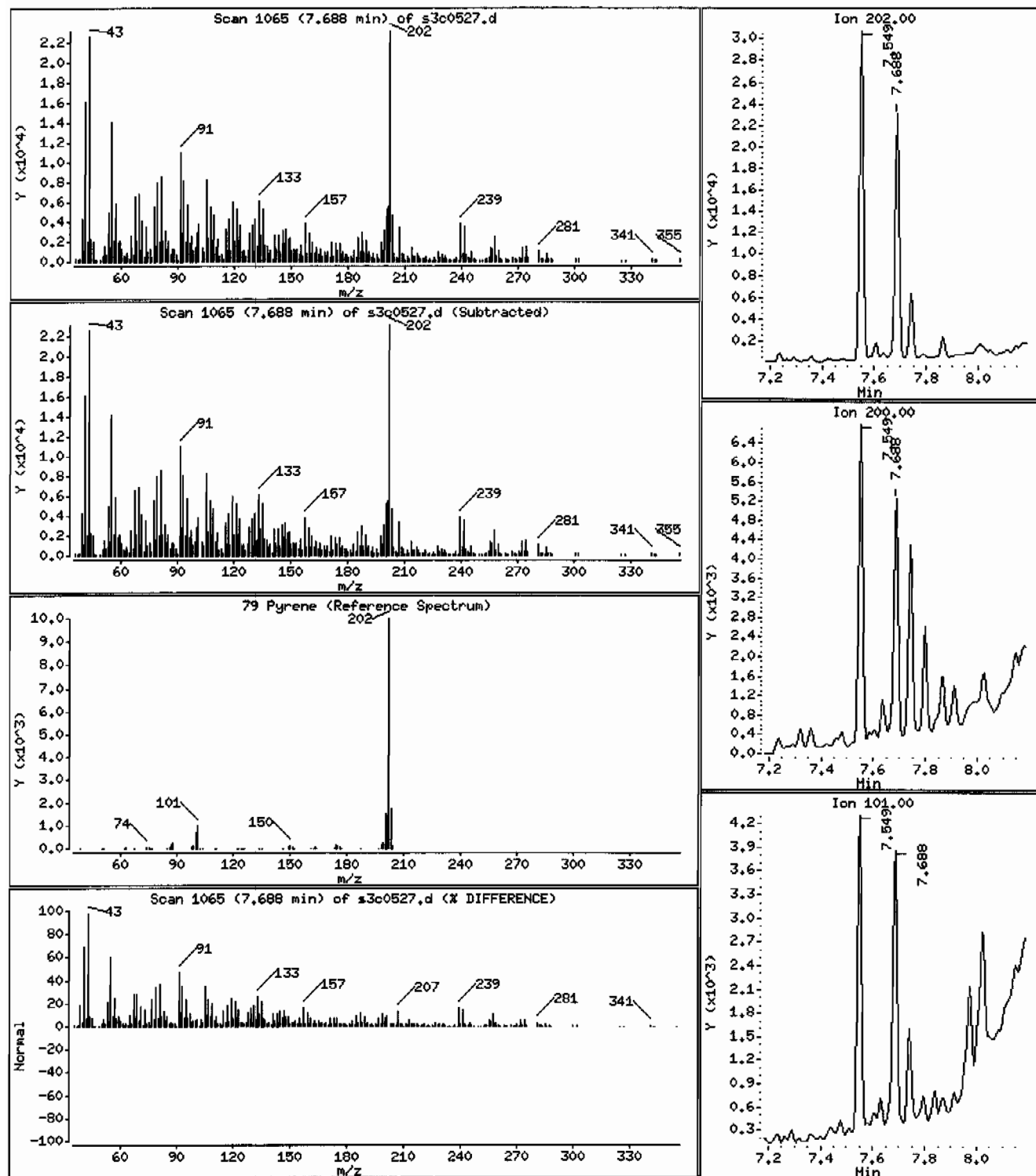
Operator: JLD1

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

Column diameter: 0.20

79 Pyrene

Concentration: 31.5 ug/Kg



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.1

Sample Info: 1247562005195667711SVHF111LANL

Volume Injected (uL): 0.5

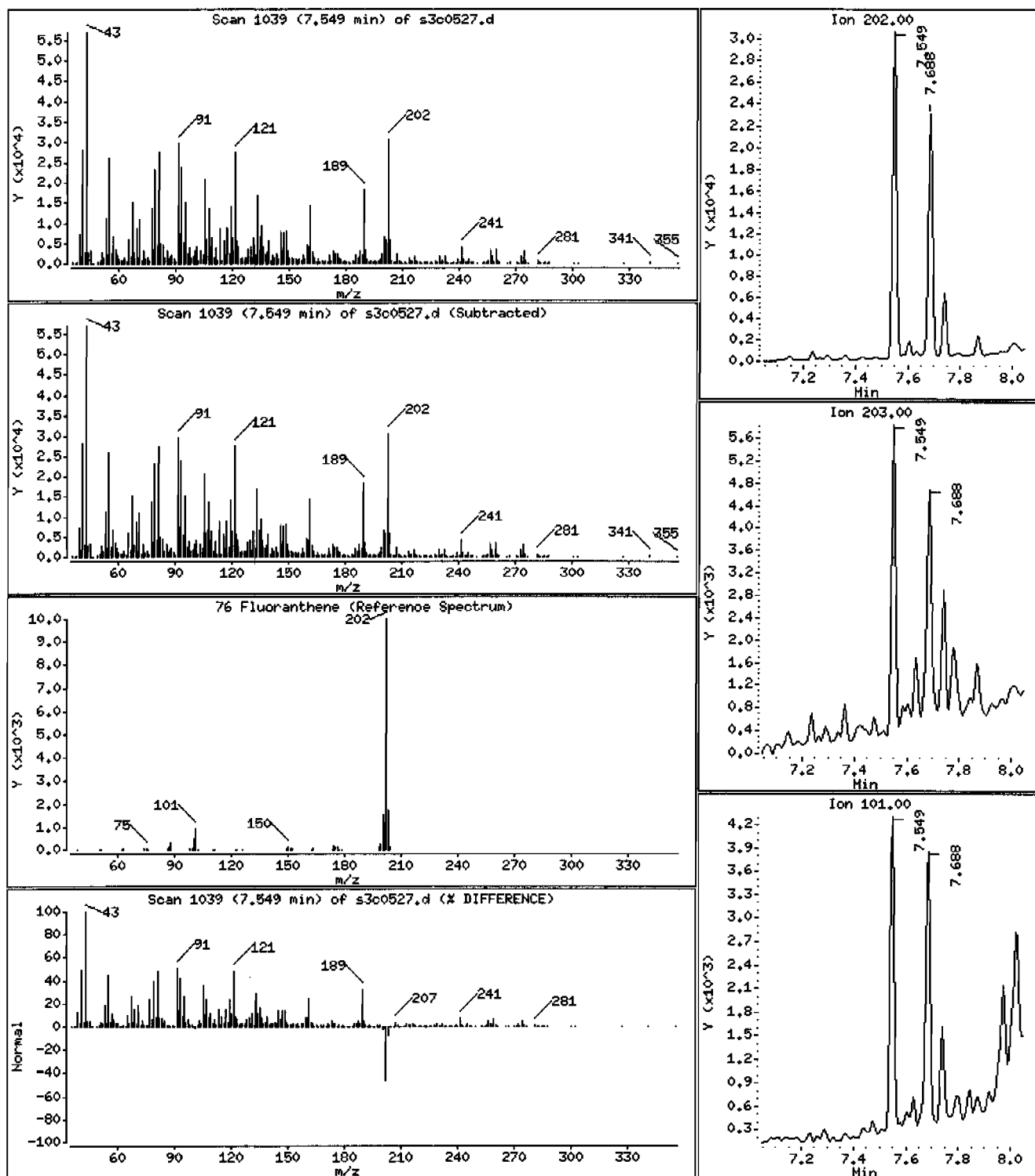
Operator: JLD1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 39.0 ug/Kg



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: HSD3.i

Sample Info: 1247562005195667711SVMF11ILANL

Volume Injected (uL): 0.5

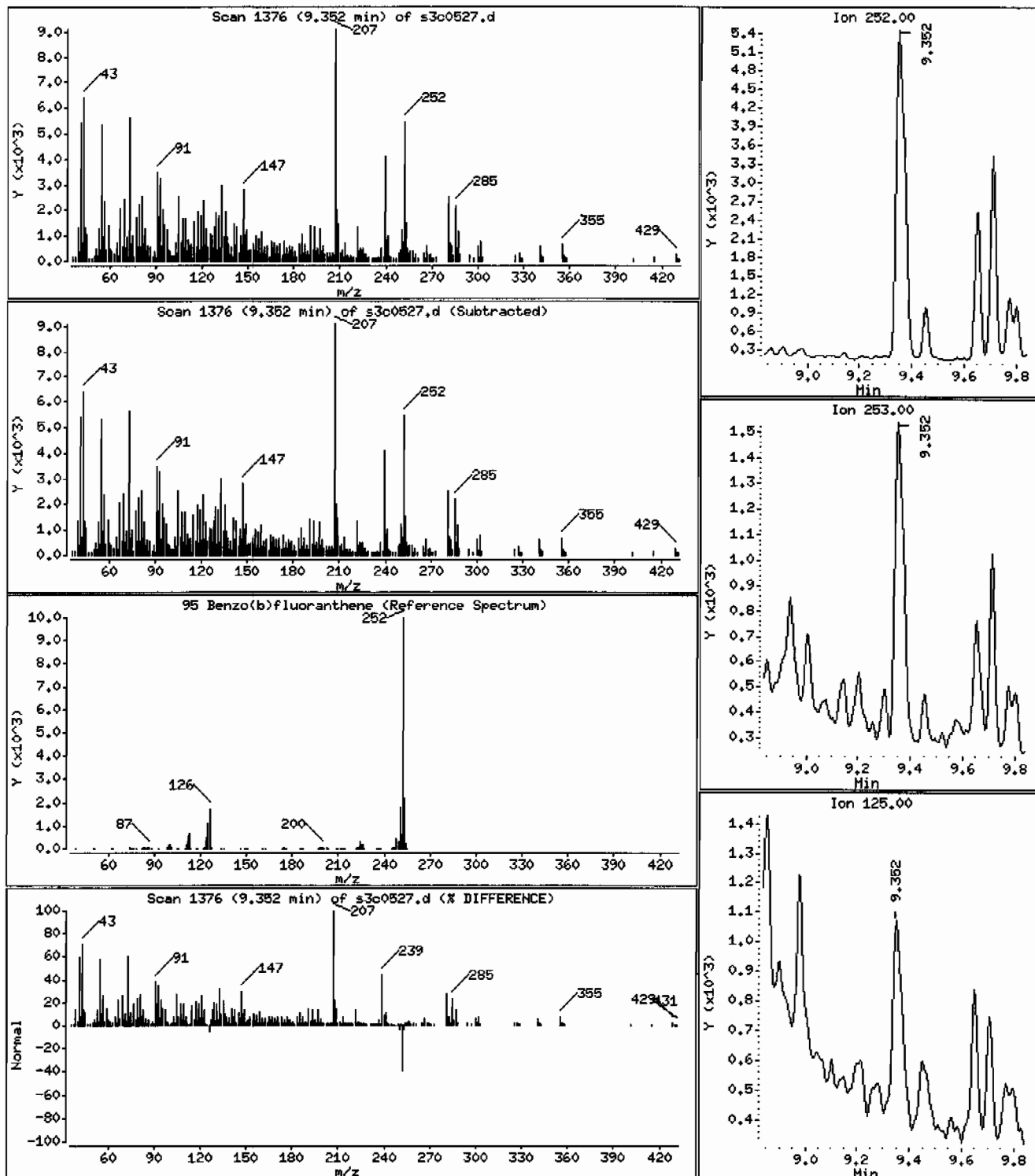
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 42.1 ug/Kg





Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF11ILANL

Volume Injected (uL): 0.5

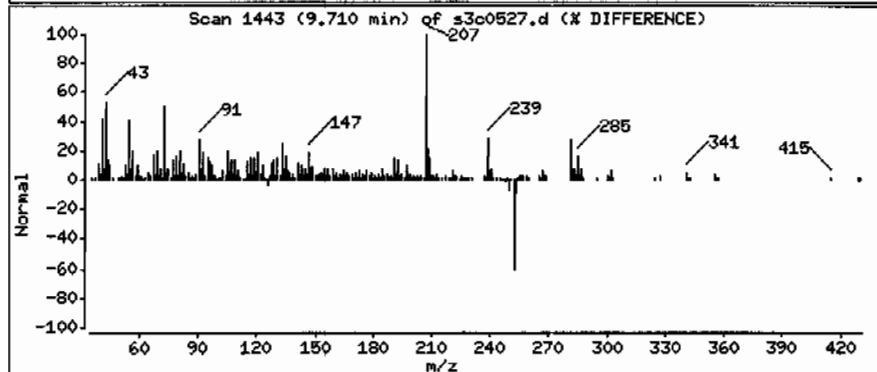
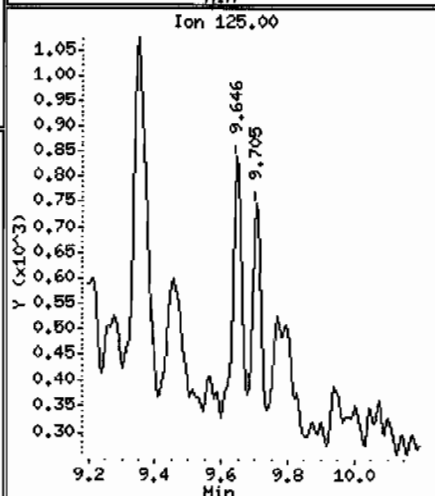
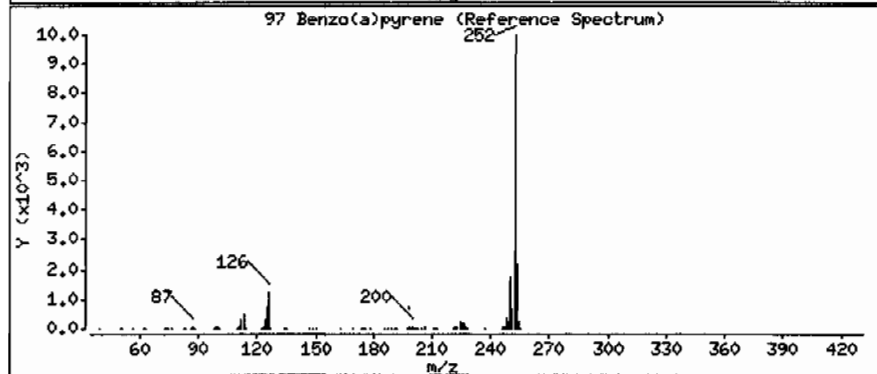
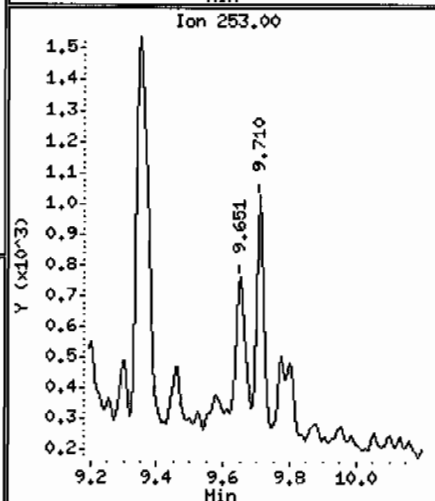
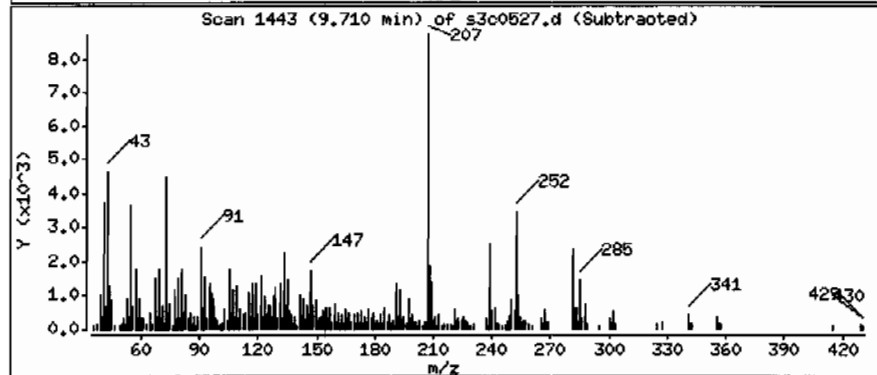
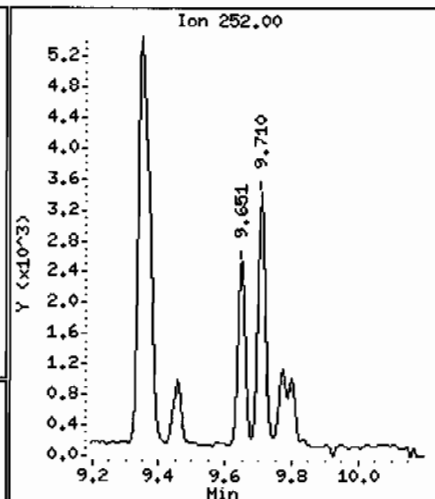
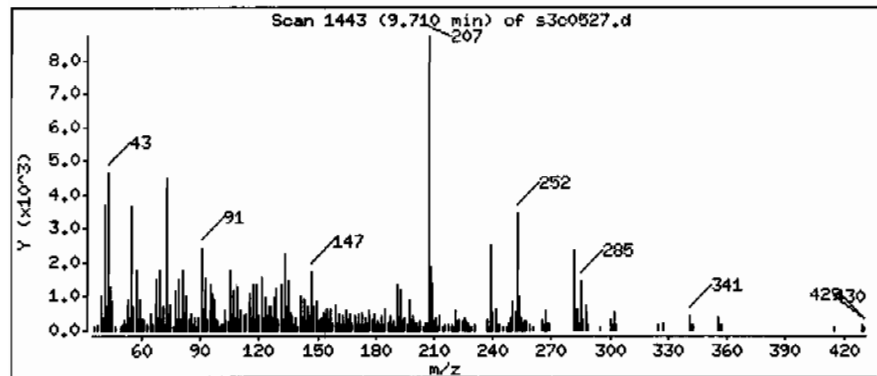
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 20.2 ug/Kg



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711|SVMF11|LANL

Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

## Library Search Compound Match

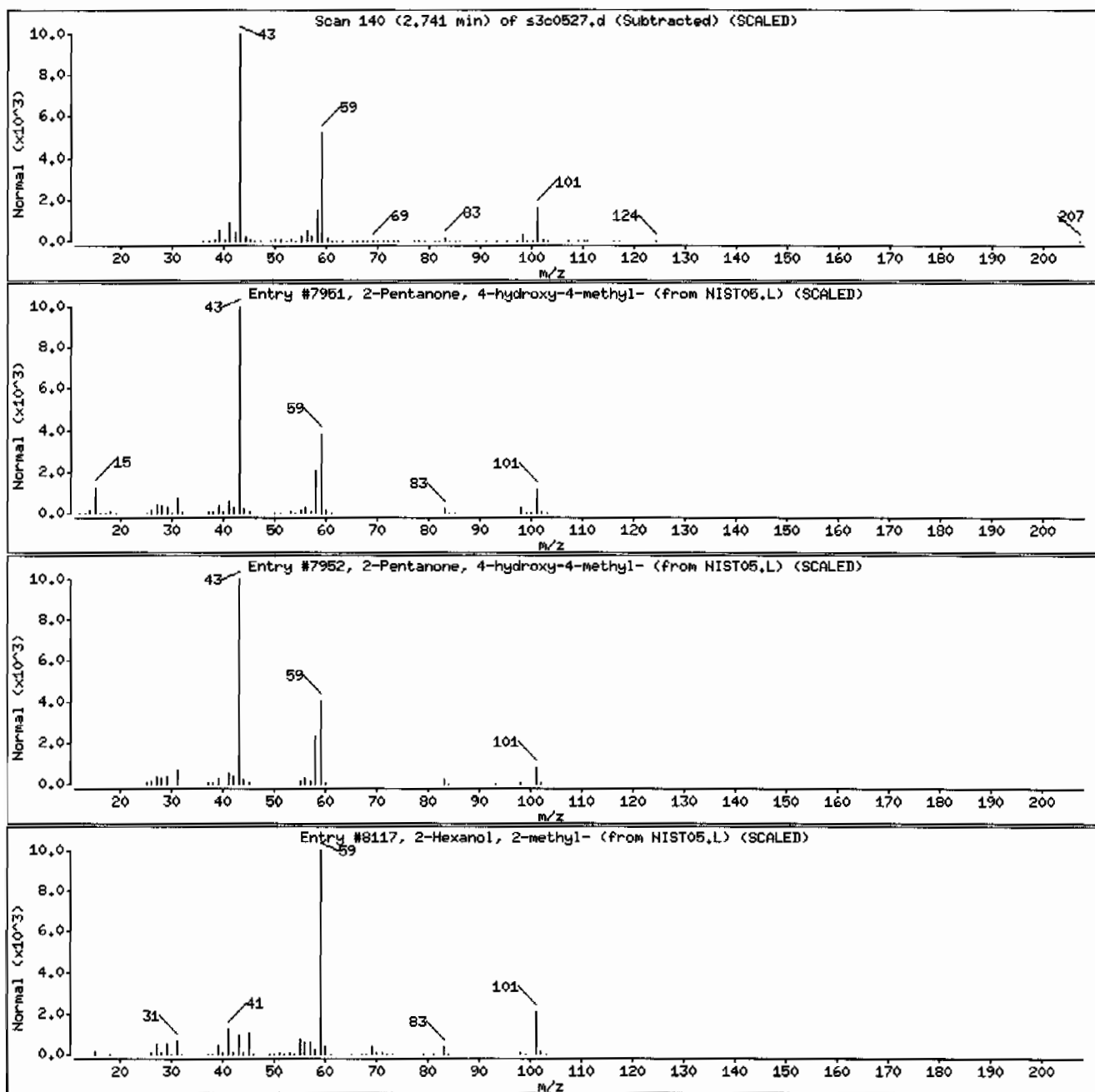
Unknown Aldol Condensate

2-Pentanone, 4-hydroxy-4-methyl-

2-Pentanone, 4-hydroxy-4-methyl-

2-Hexanol, 2-methyl-

CAS Number	Library	Entry	Quality	Formula	Weight
123-42-2	NIST05.L	7951	59	C6H12O2	116
123-42-2	NIST05.L	7952	50	C6H12O2	116
625-23-0	NIST05.L	8117	28	C7H16O	116



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: HSD3.i

Sample Info: 1247562005195667711ISVHF11ILANL

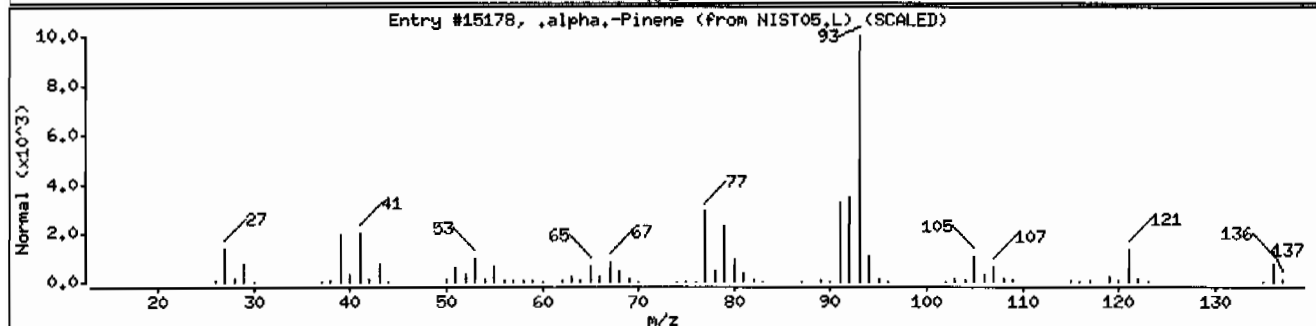
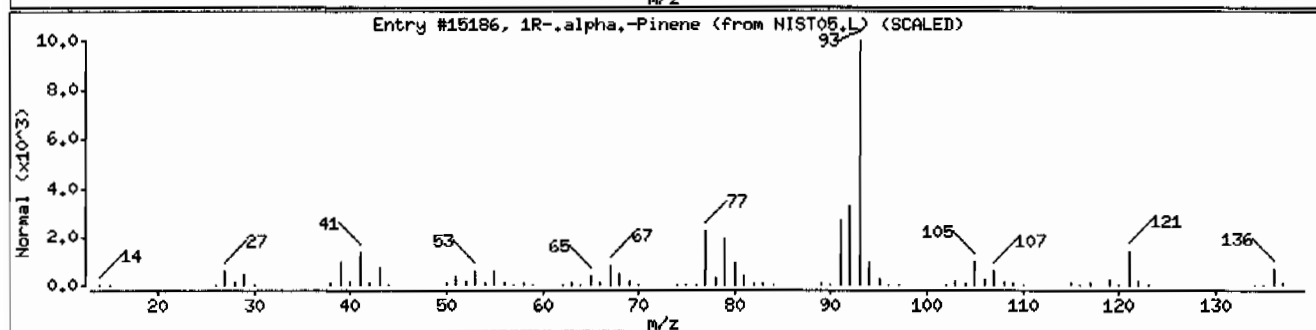
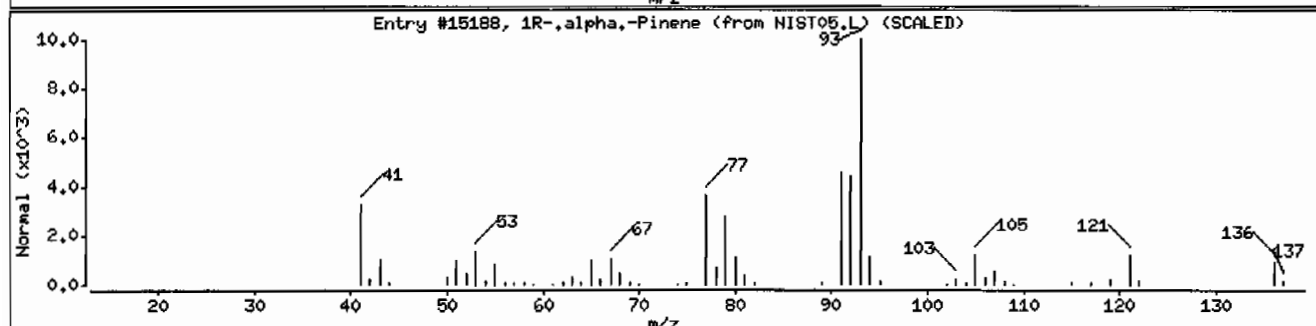
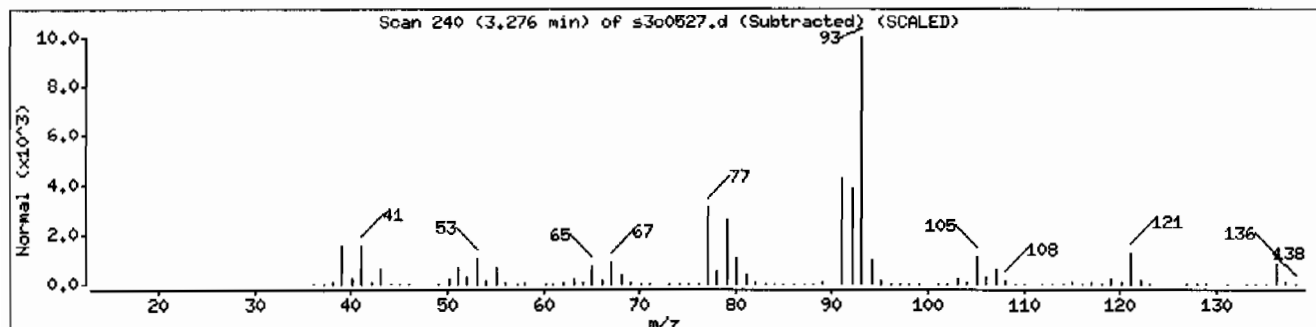
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: HSD3.i

Sample Info: 1247562005195667711SVMF111LANL

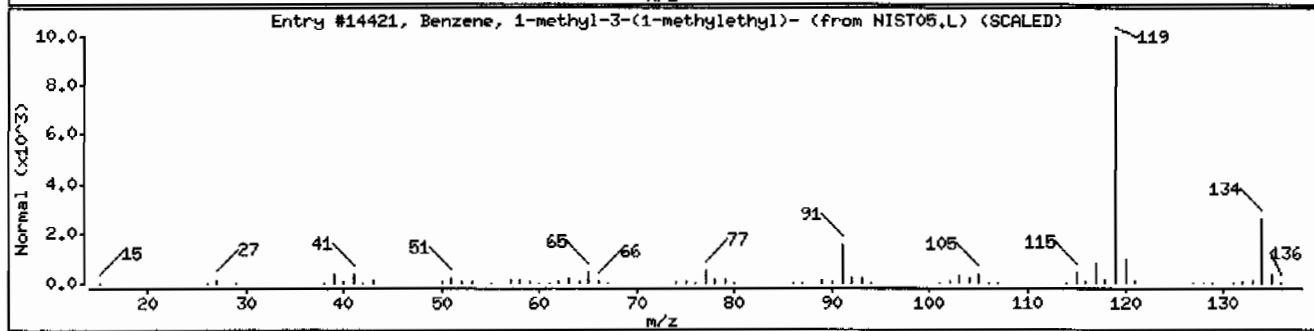
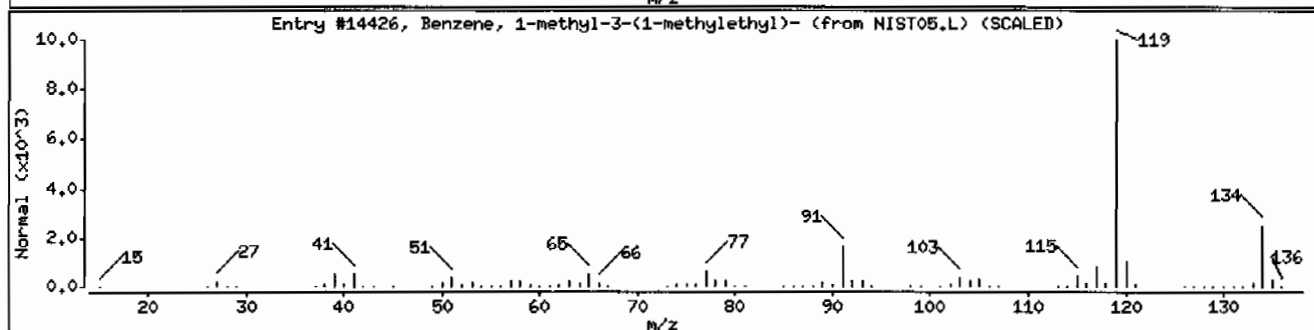
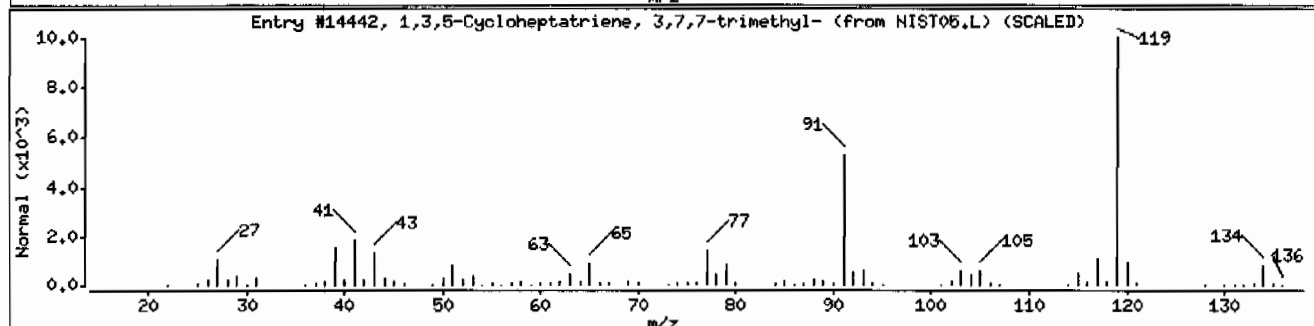
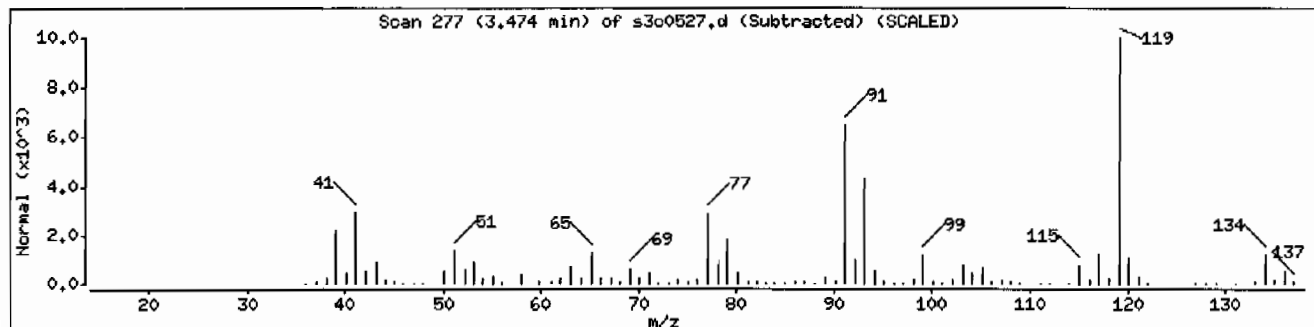
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3479-89-8	NIST05.L	14442	91	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14426	86	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14421	86	C10H14	134



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVMF11ILANL

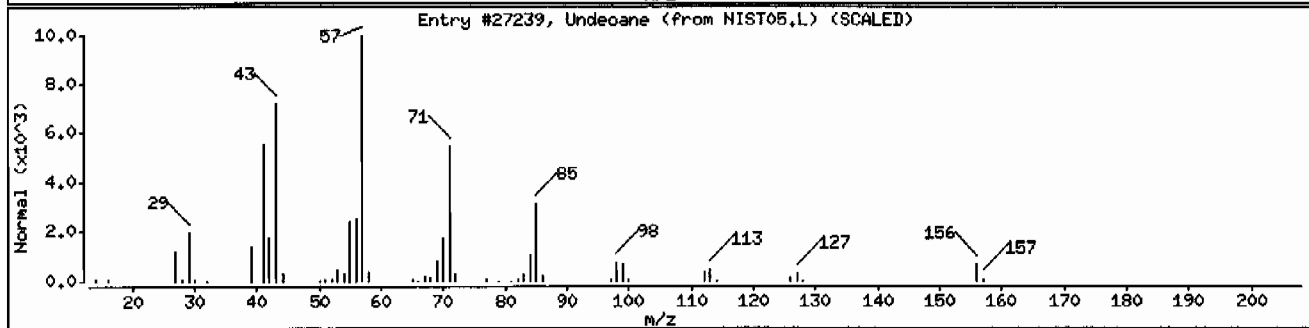
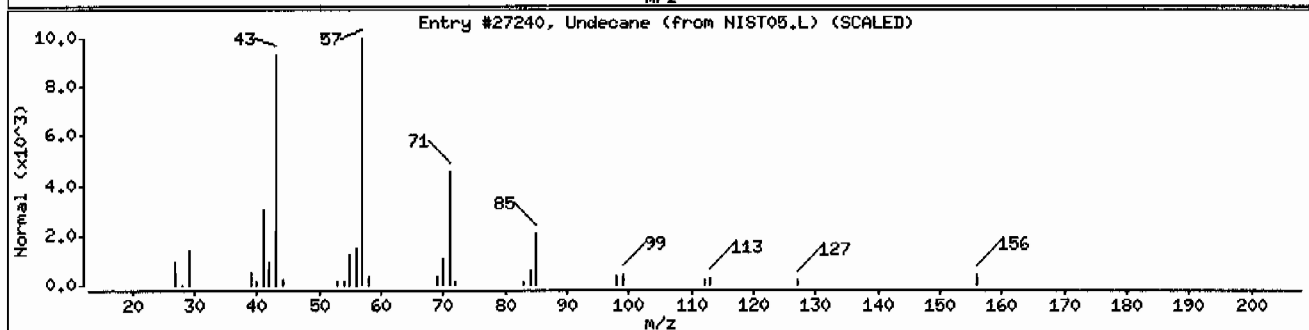
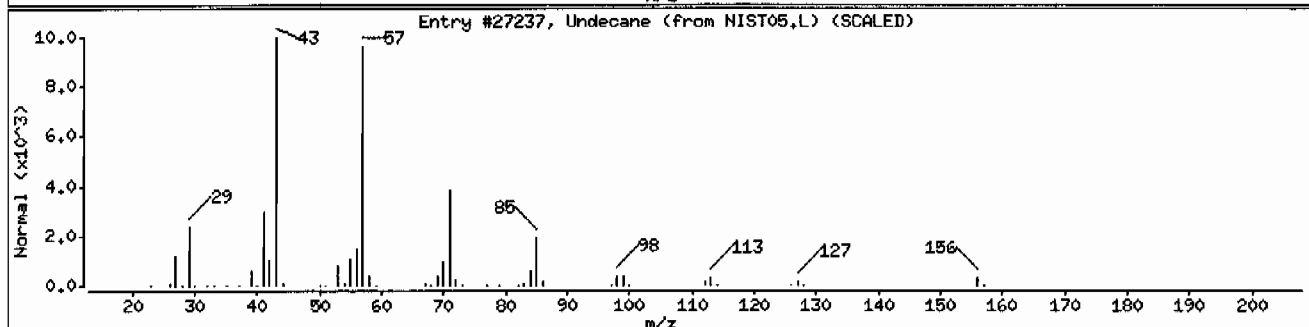
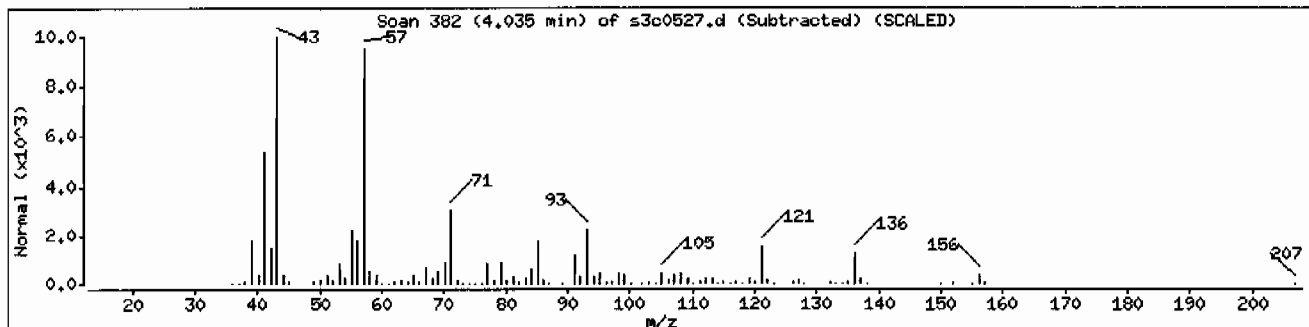
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Undecane	1120-21-4	NIST05.L	27237	87	C11H24	156
Undecane	1120-21-4	NIST05.L	27240	55	C11H24	156
Undecane	1120-21-4	NIST05.L	27239	46	C11H24	156



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.1

Sample Info: 1247562005195667711SVHF11LANL

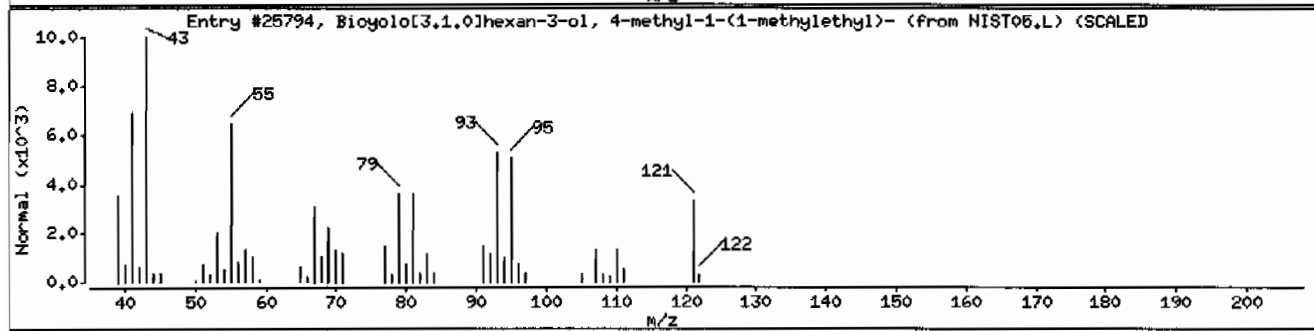
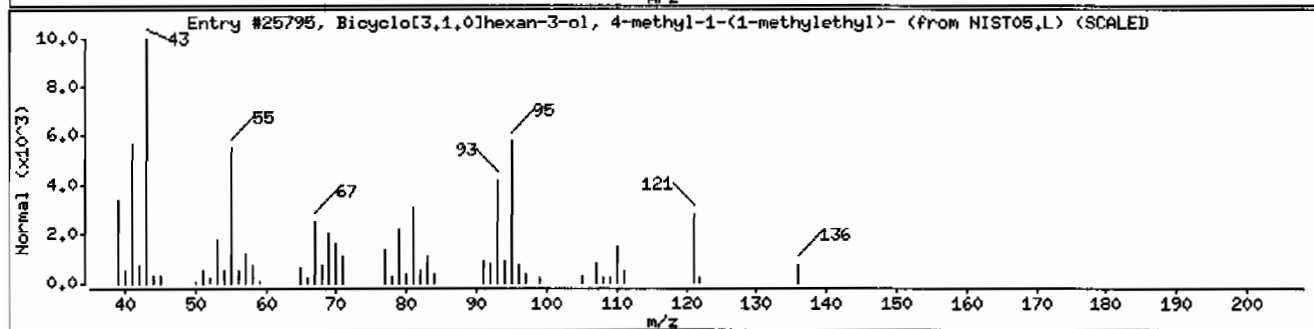
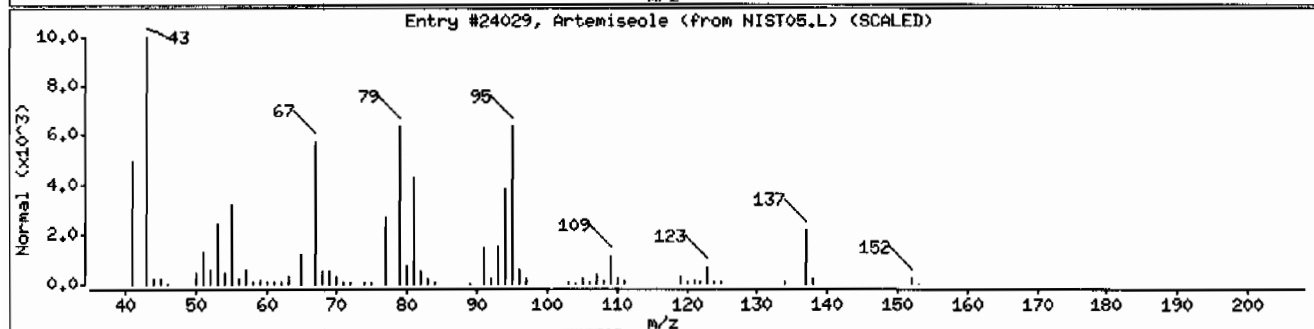
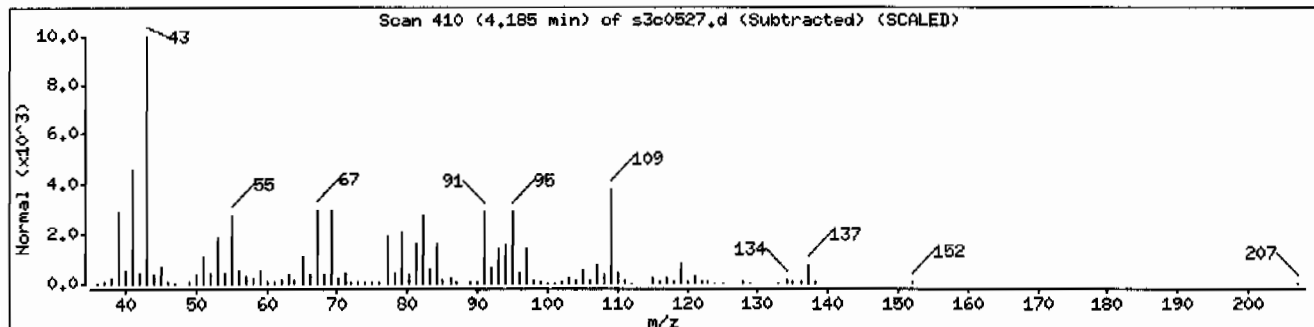
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Artemiseole	60486-46-3	NIST05.L	24029	35	C10H16O	152
Bicyclo[3.1.0]hexan-3-ol, 4-methyl-1-(1-	513-23-5	NIST05.L	25795	35	C10H18O	154
Bicyclo[3.1.0]hexan-3-ol, 4-methyl-1-(1-	513-23-5	NIST05.L	25794	27	C10H18O	154



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: I247562005195667711SVHF11ILANL

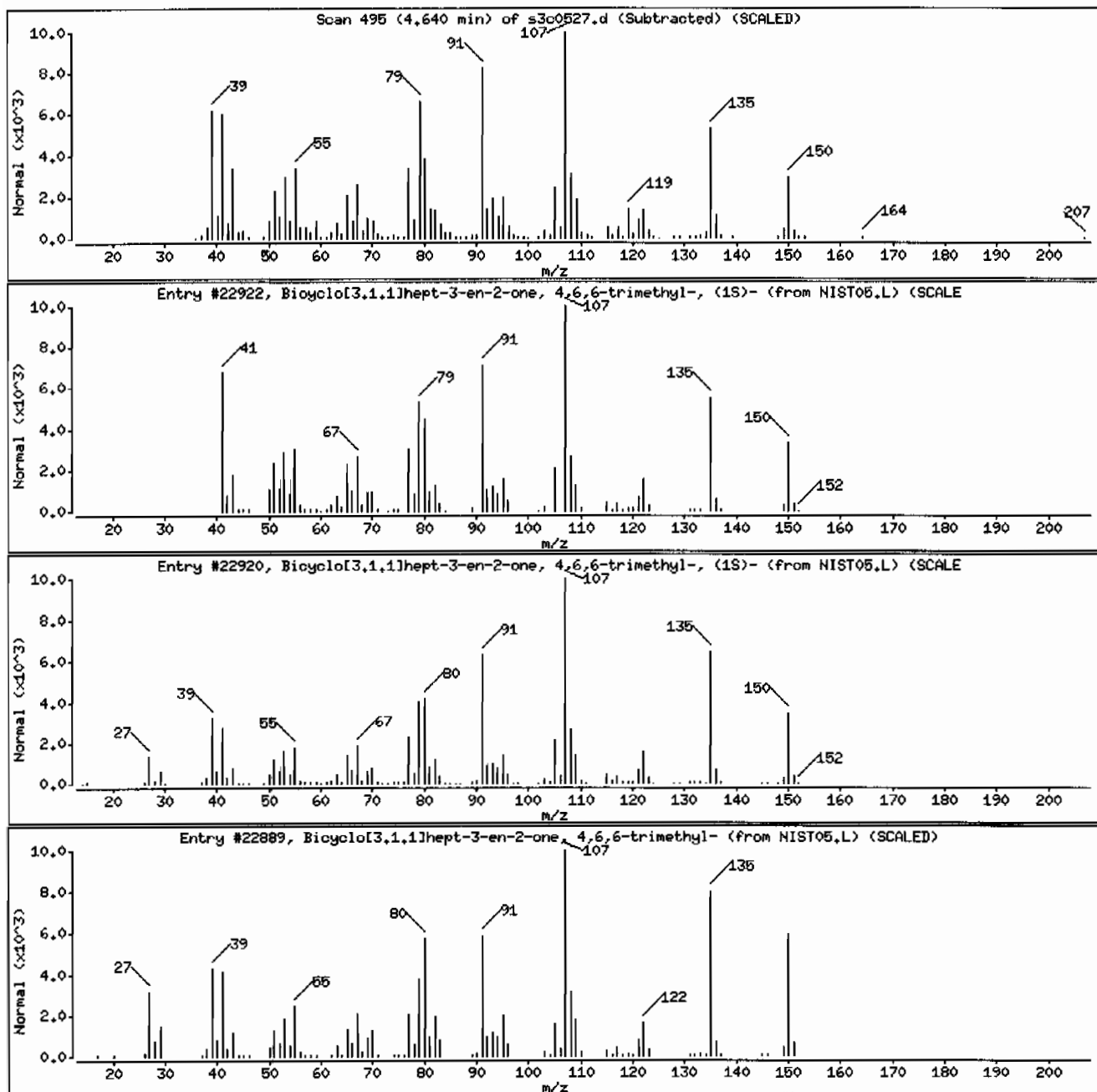
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	1196-01-6	NIST05.L	22922	98	C10H14O	150
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	1196-01-6	NIST05.L	22920	94	C10H14O	150
Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-tri	80-57-9	NIST05.L	22889	87	C10H14O	150



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247862005195667711SVMF111LANL

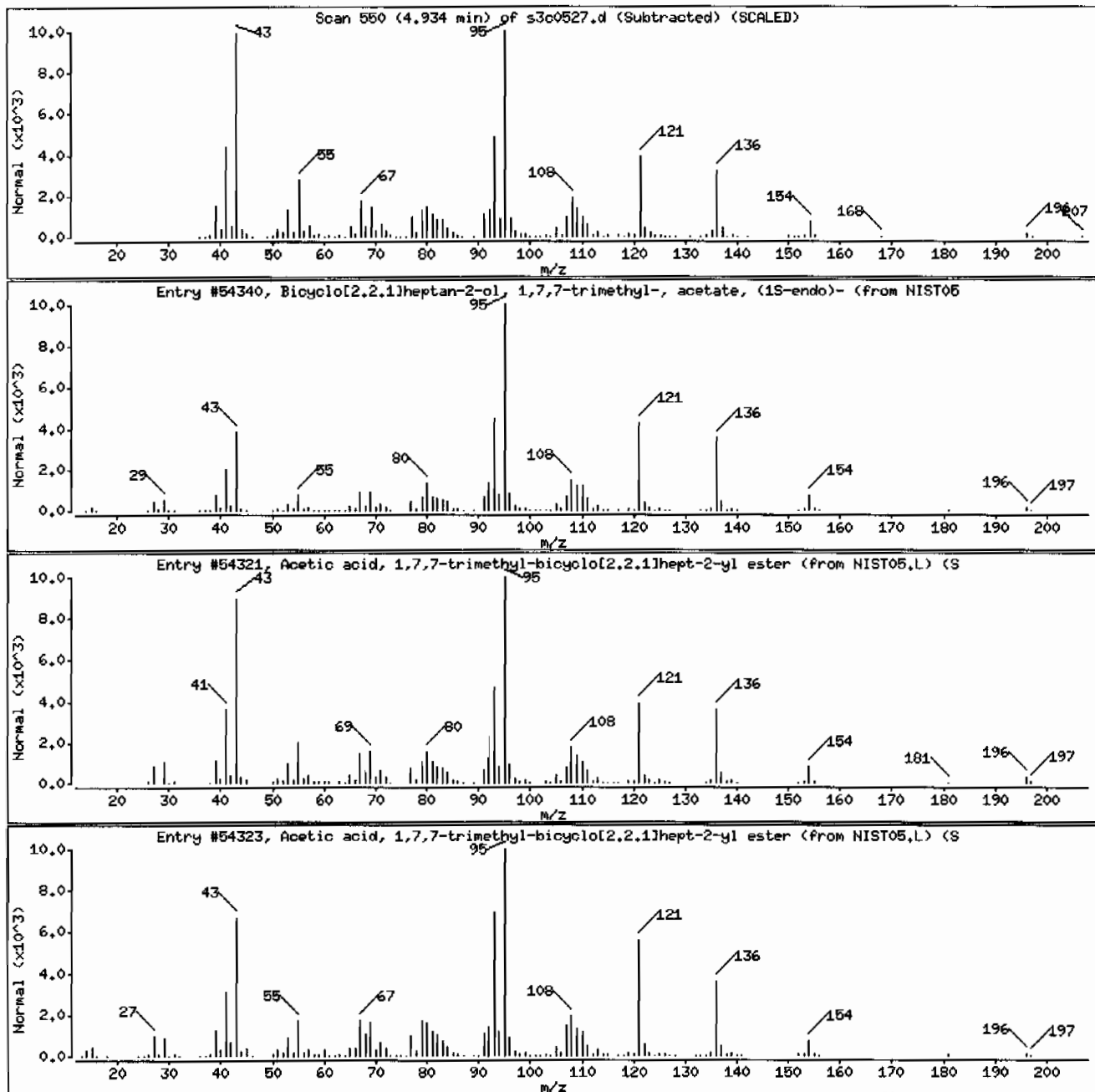
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	5655-61-8	NIST05.L	54340	98	C12H20O2	196
Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	92618-89-8	NIST05.L	54321	98	C12H20O2	196
Acetic acid, 1,7,7-trimethyl-bicyclo[2.2	92618-89-8	NIST05.L	54323	98	C12H20O2	196





Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 12475620051956677111SVHF111LANL

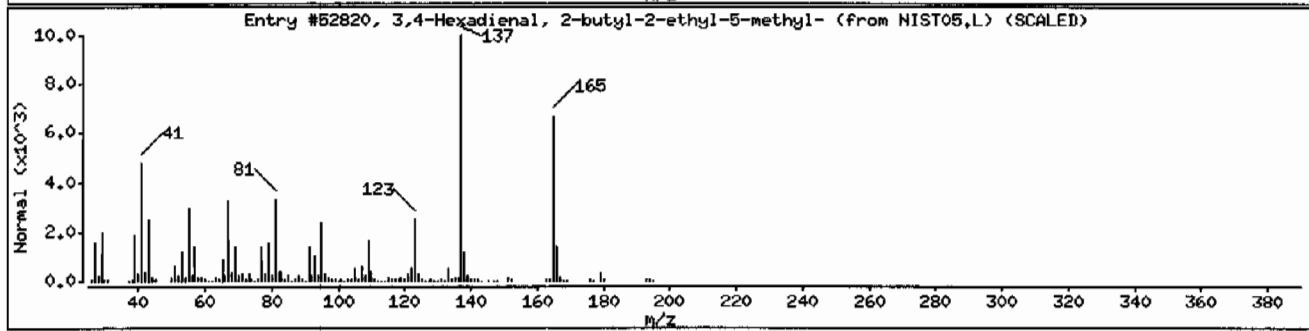
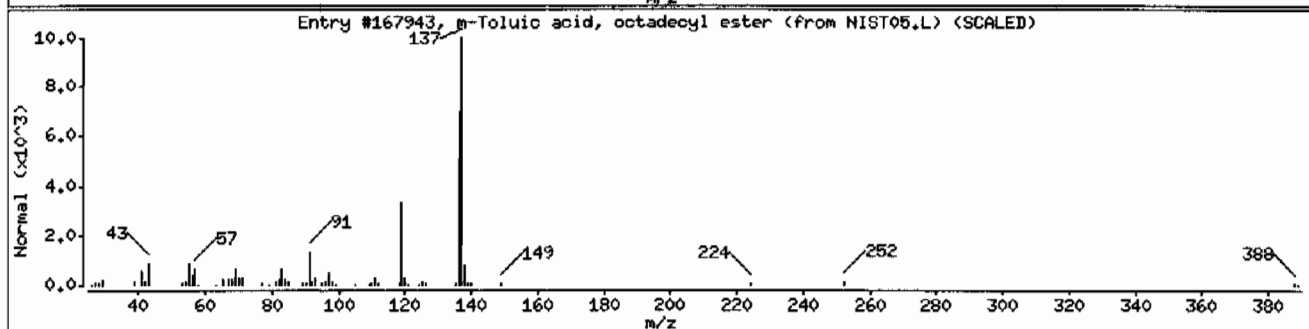
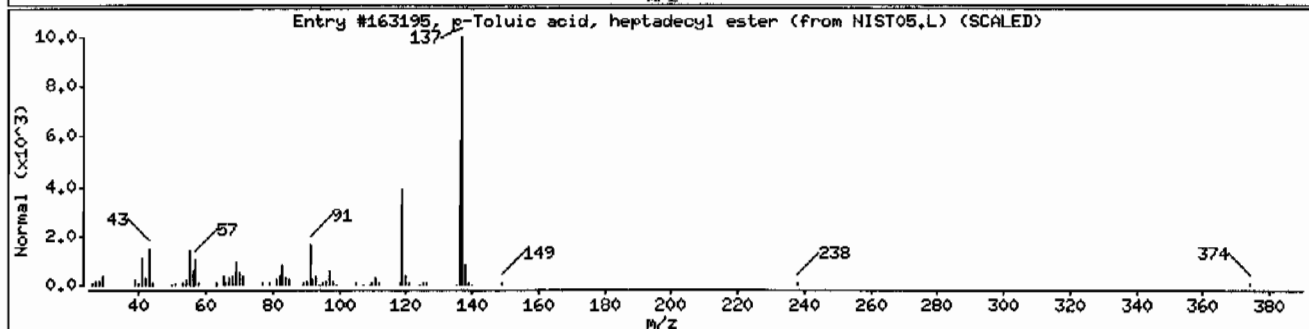
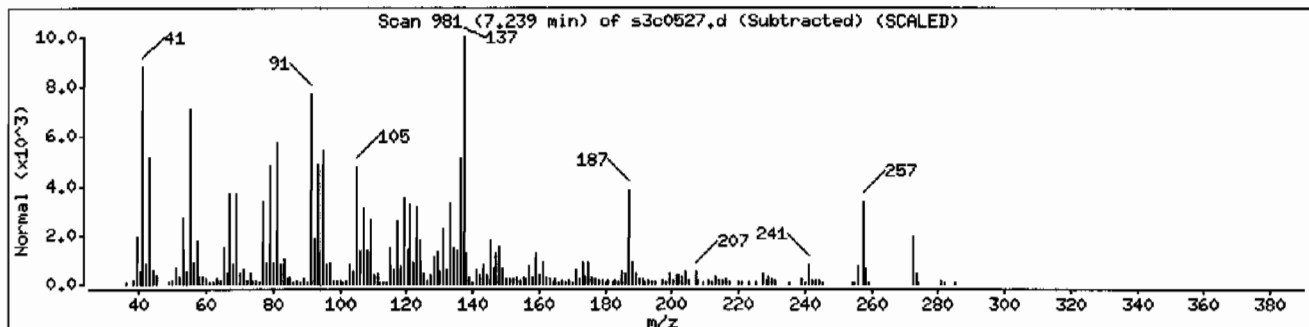
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
p-Toluic acid, heptadecyl ester	1000292-22-2	NIST05.L	163195	38	C <sub>26</sub> H <sub>42</sub> O <sub>2</sub>	374
m-Toluic acid, octadecyl ester	1000292-36-3	NIST05.L	167943	35	C <sub>26</sub> H <sub>44</sub> O <sub>2</sub>	388
3,4-Hexadienal, 2-butyl-2-ethyl-5-methyl	23739-80-2	NIST05.L	52820	30	C <sub>13</sub> H <sub>22</sub> O	194



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF11ILANL

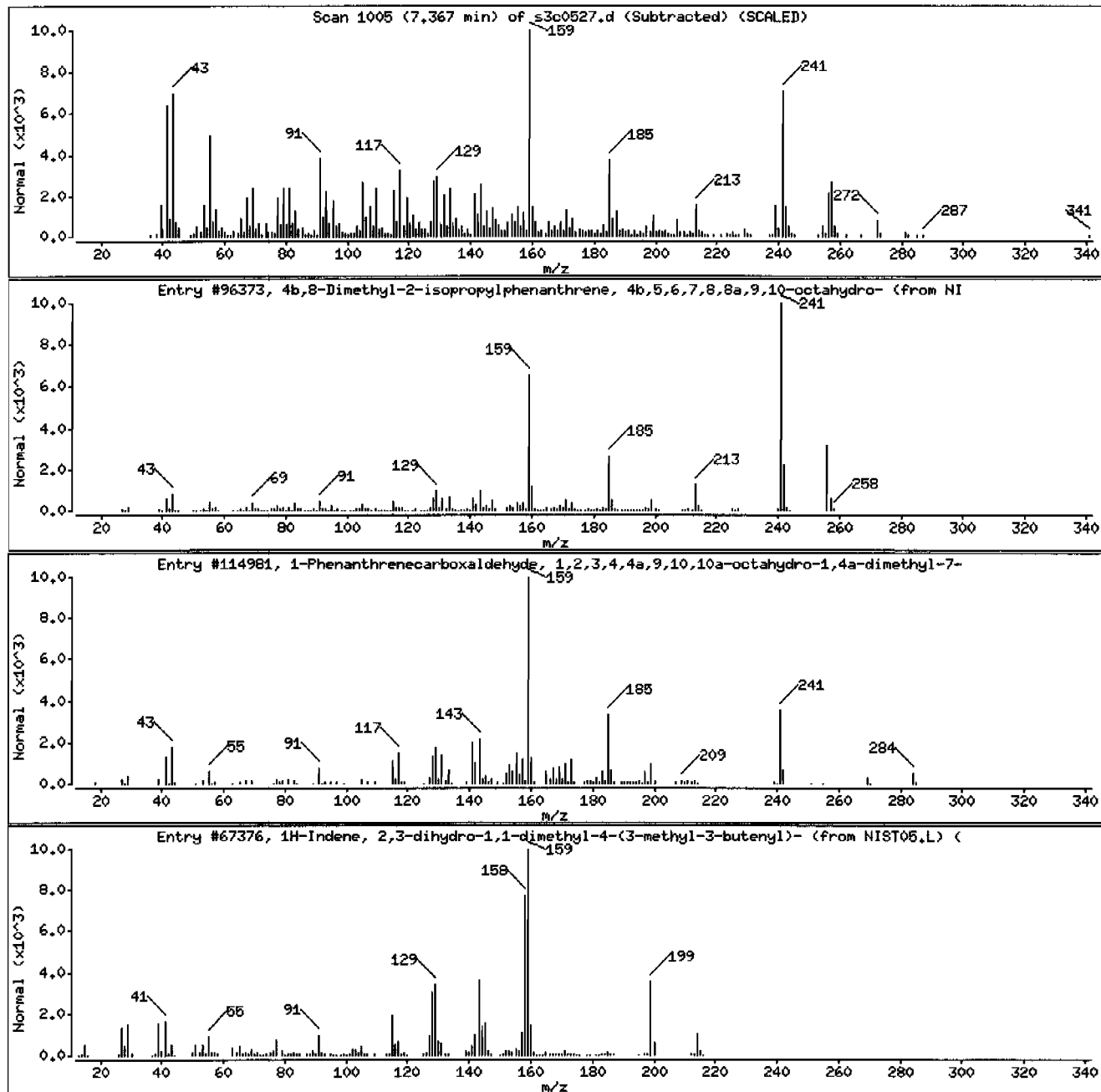
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4b,8-Dimethyl-2-isopropylphenanthrene, 4	1000197-14-1	NIST05.L	96373	92	C19H28	256
1-Phenanthrenecarboxaldehyde, 1,2,3,4,4a	24035-50-5	NIST05.L	114981	68	C20H28O	284
1H-Indene, 2,3-dihydro-1,1-dimethyl-4-(3	55030-58-5	NIST05.L	67376	48	C16H22	214



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: HSD3.i

Sample Info: 1247562005195667711ISVHF11ILANL

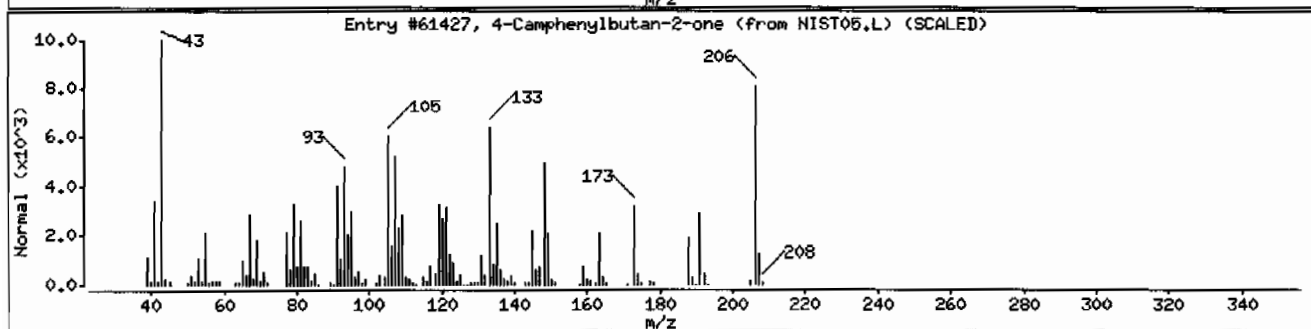
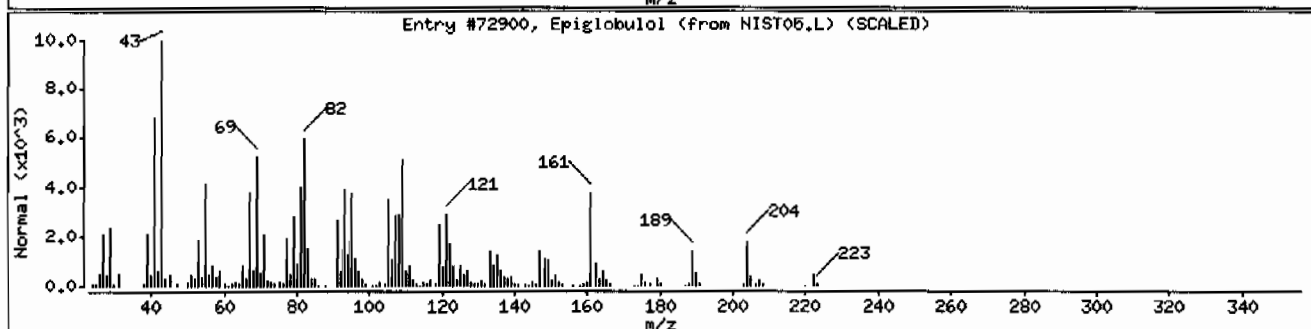
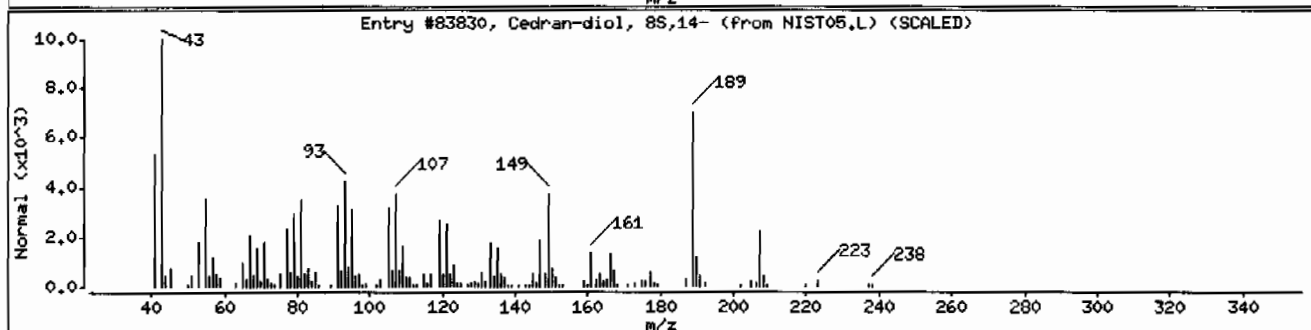
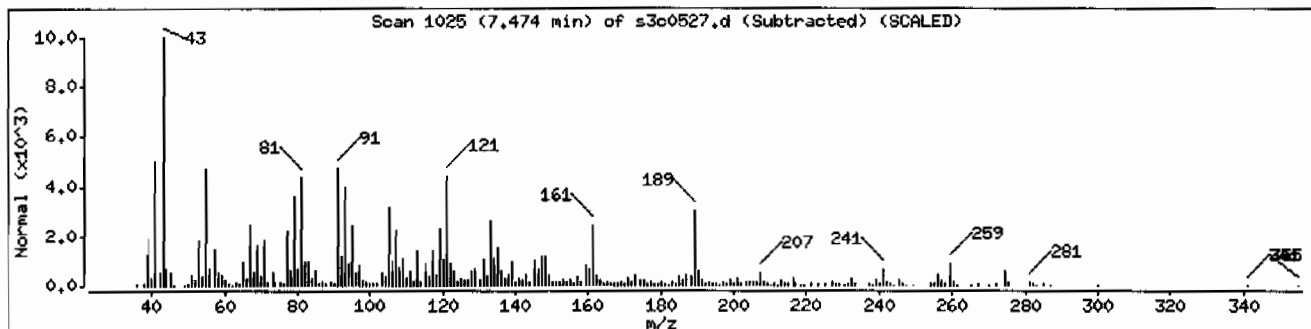
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	53	C <sub>15</sub> H <sub>26</sub> O <sub>2</sub>	238
Epiglobulol	1000150-05-1	NIST05.L	72900	43	C <sub>15</sub> H <sub>26</sub> O	222
4-Camphenylbutan-2-one	1000140-09-7	NIST05.L	61427	38	C <sub>14</sub> H <sub>22</sub> O	206



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 12475620051956677111SVHF111LANL

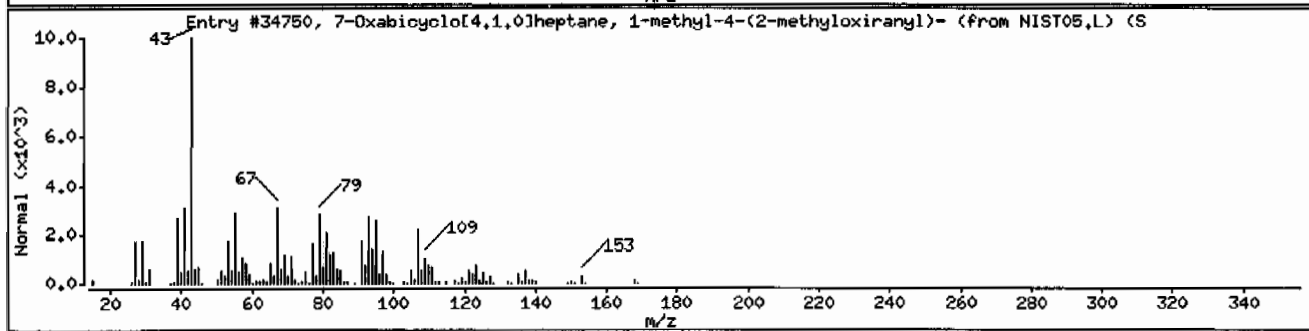
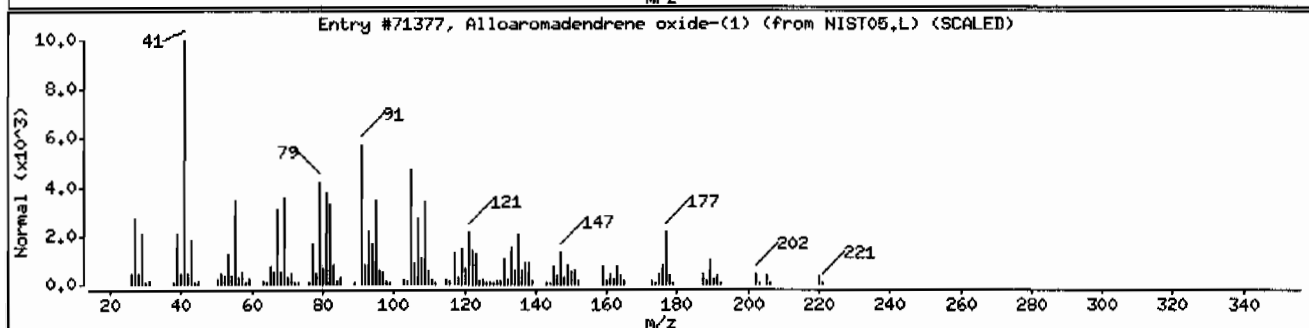
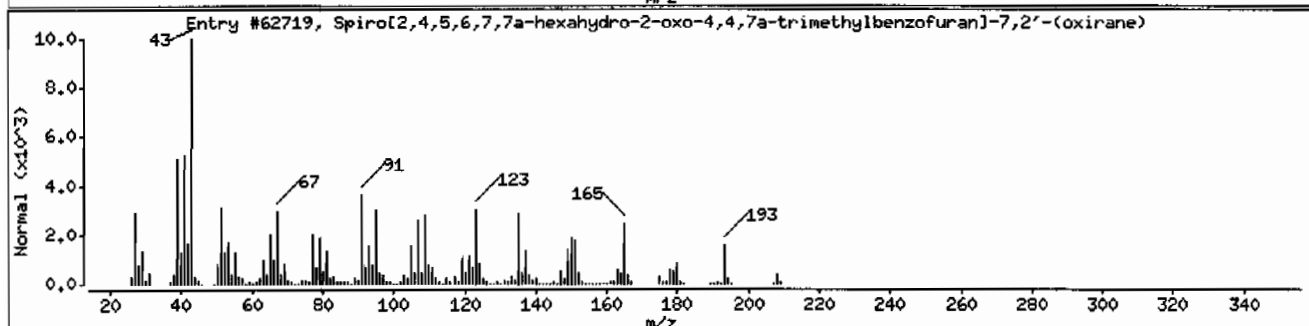
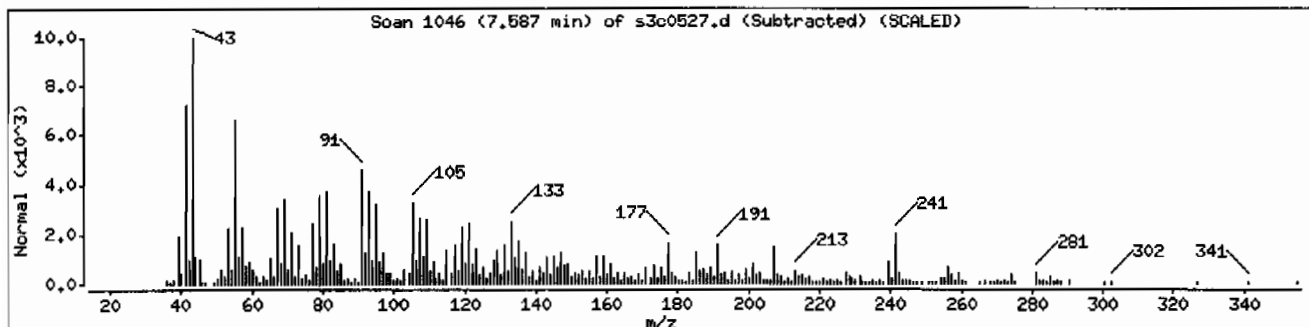
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Spiro[2,4,5,6,7,7a-hexahydro-2-oxo-4,4,7	1000197-10-9	NIST05,L	62719	43	C12H16O3	208
Alloaromadendrene oxide-(1)	1000156-12-8	NIST05,L	71377	38	C15H24O	220
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05,L	34750	38	C10H16O2	168



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF11ILANL

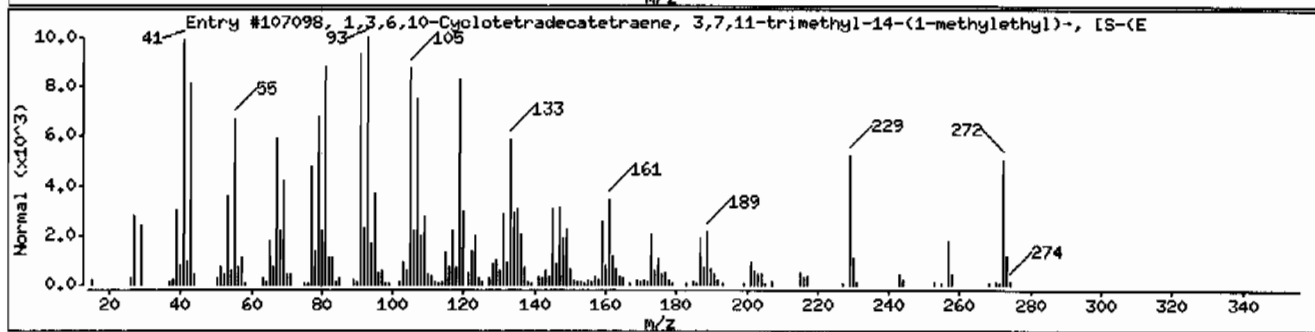
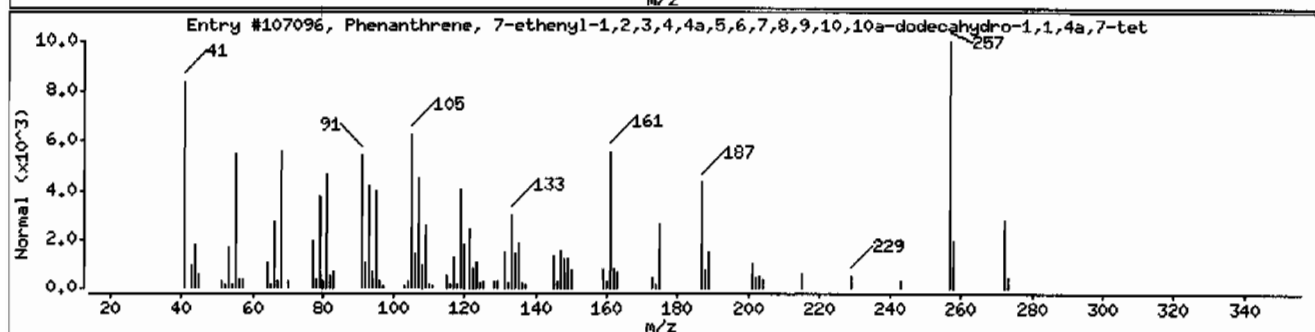
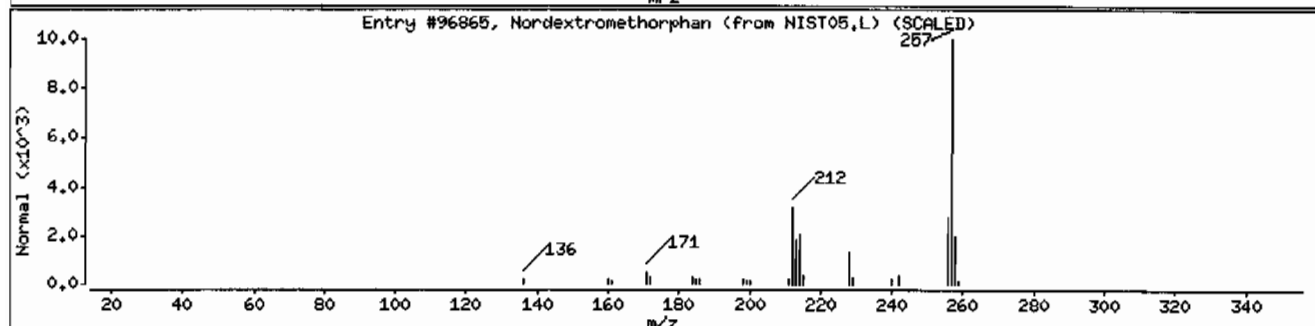
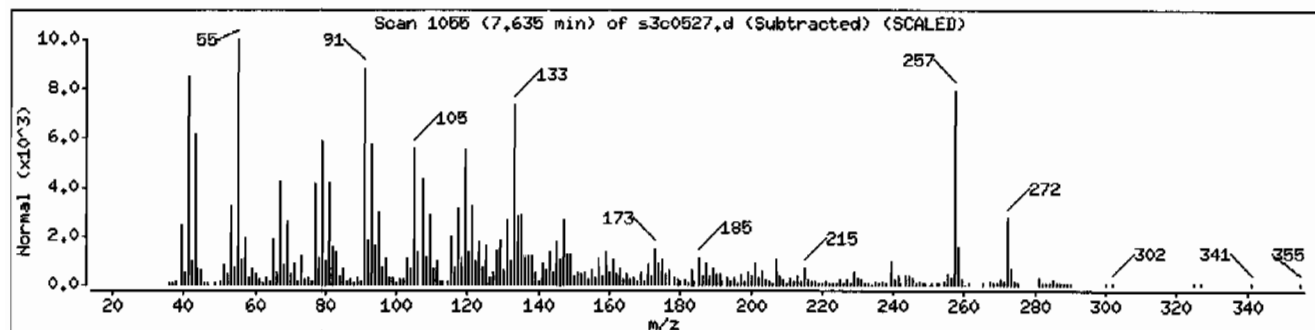
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Nordextromethorphan	51195-74-5	NIST05.L	96865	58	C17H23NO	257
Phenanthrene, 7-ethenyl-1,2,3,4,4a,5,6,7	55255-56-6	NIST05.L	107096	55	C20H32	272
1,3,6,10-Cyclotetradecatetraene, 3,7,11-	1898-13-1	NIST05.L	107098	50	C20H32	272



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: HSD3.i

Sample Info: 1247562005195667711SVHF111LANL

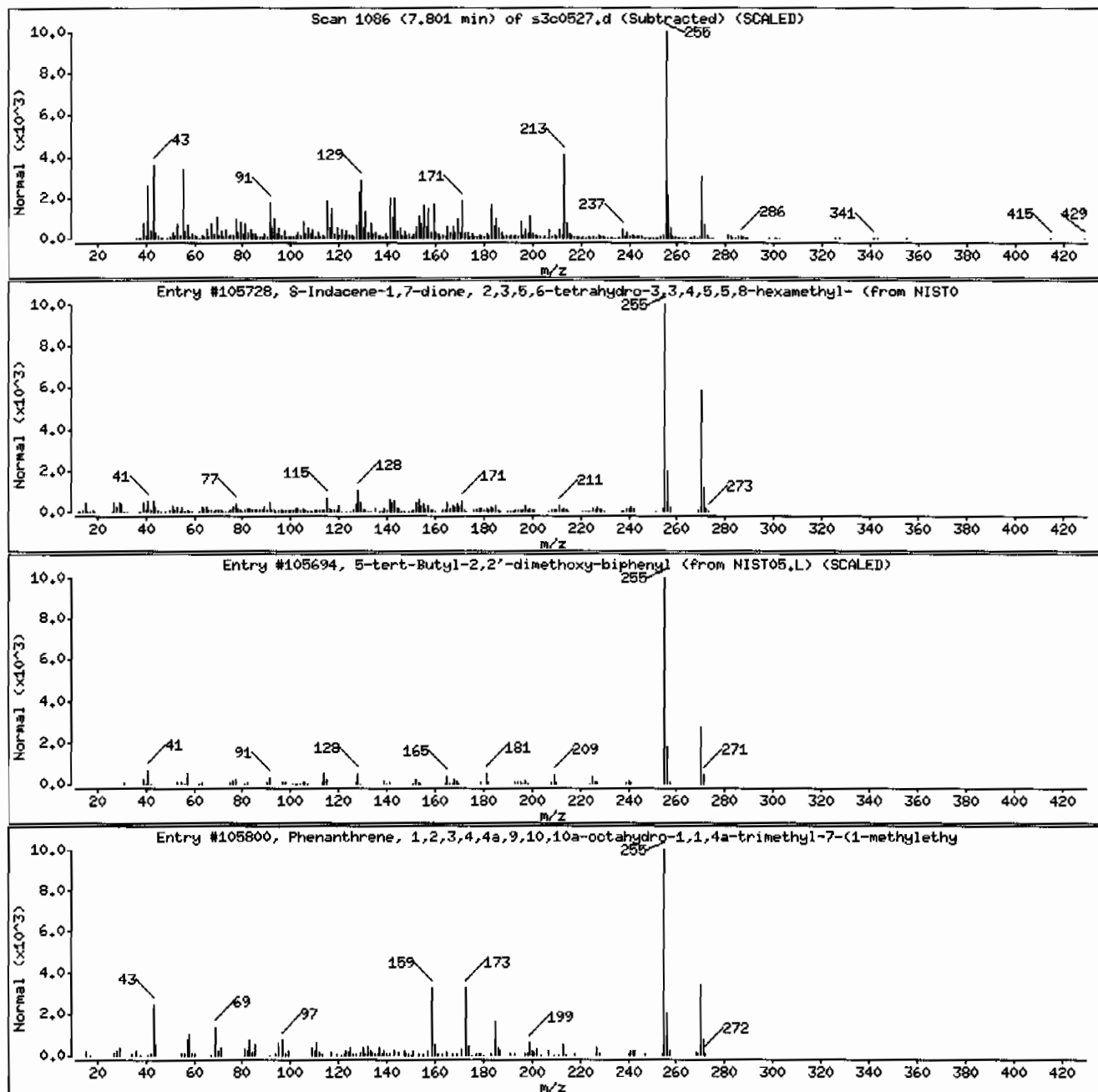
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
S-Indacene-1,7-dione, 2,3,5,6-tetrahydro	55591-16-7	NIST05.L	105728	53	C18H22O2	270
5-tert-Butyl-2,2'-dimethoxy-biphenyl	1000318-04-7	NIST05.L	105694	50	C18H22O2	270
Phenanthrene, 1,2,3,4,4a,9,10,10a-octahydro	19407-28-4	NIST05.L	105800	45	C20H30	270



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: HSD3.i

Sample Info: 12475620051956677111SVHF111LANL

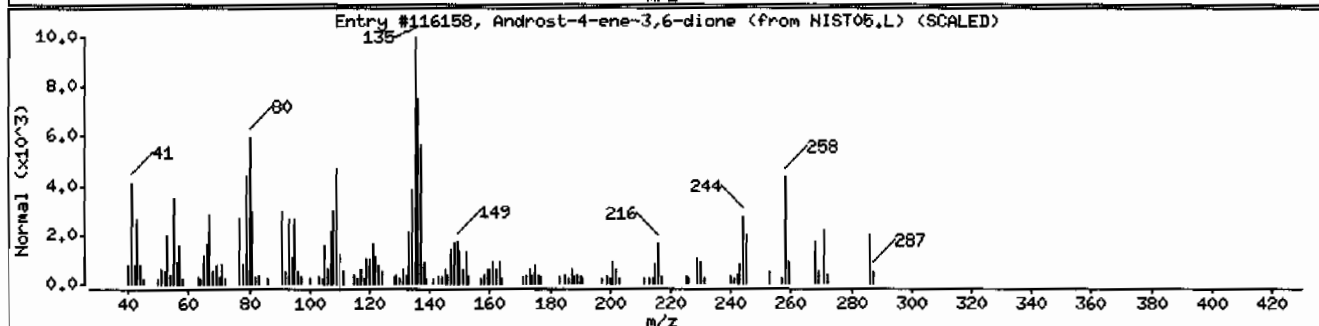
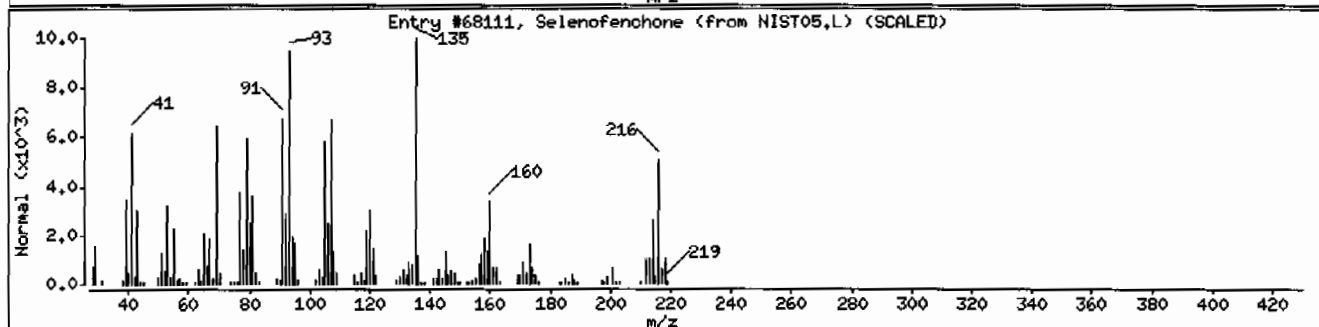
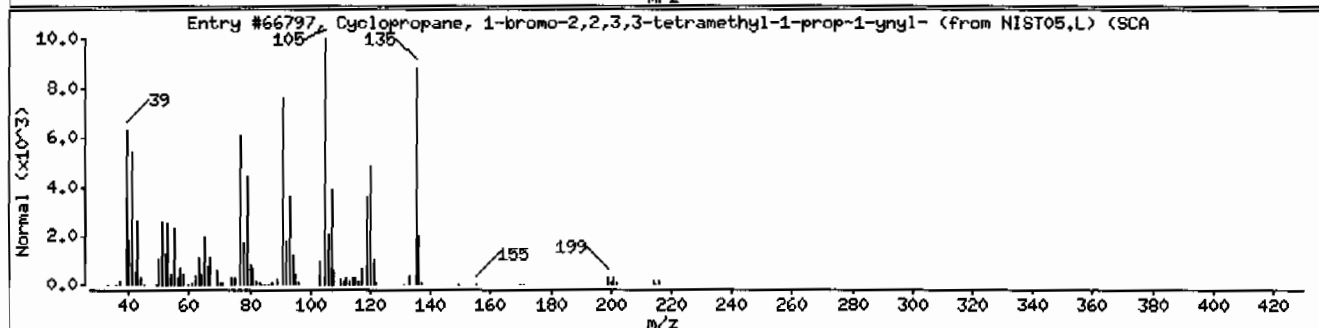
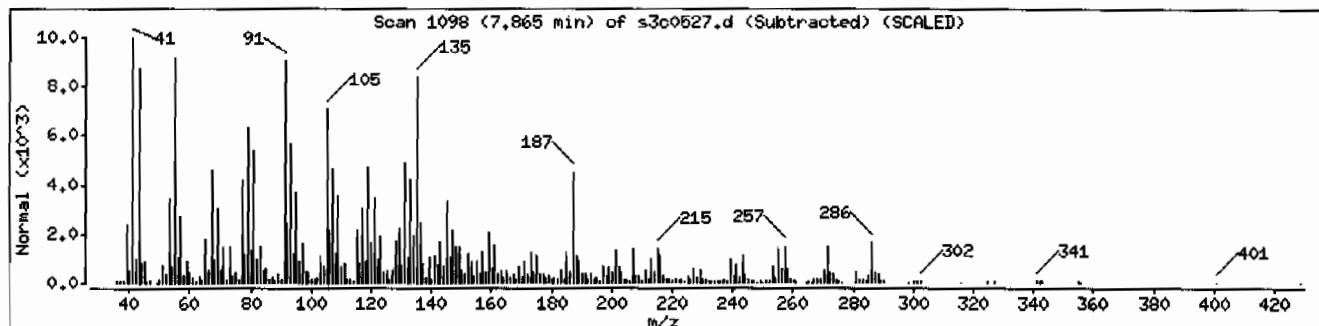
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopropane, 1-bromo-2,2,3,3-tetramethy	138777-60-3	NIST05.L	66797	46	C10H15Br	214
Selenofenchone	61849-83-0	NIST05.L	68111	43	C10H16Se	216
Androst-4-ene-3,6-dione	604-25-1	NIST05.L	116158	25	C19H26O2	286



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVMF111LANL

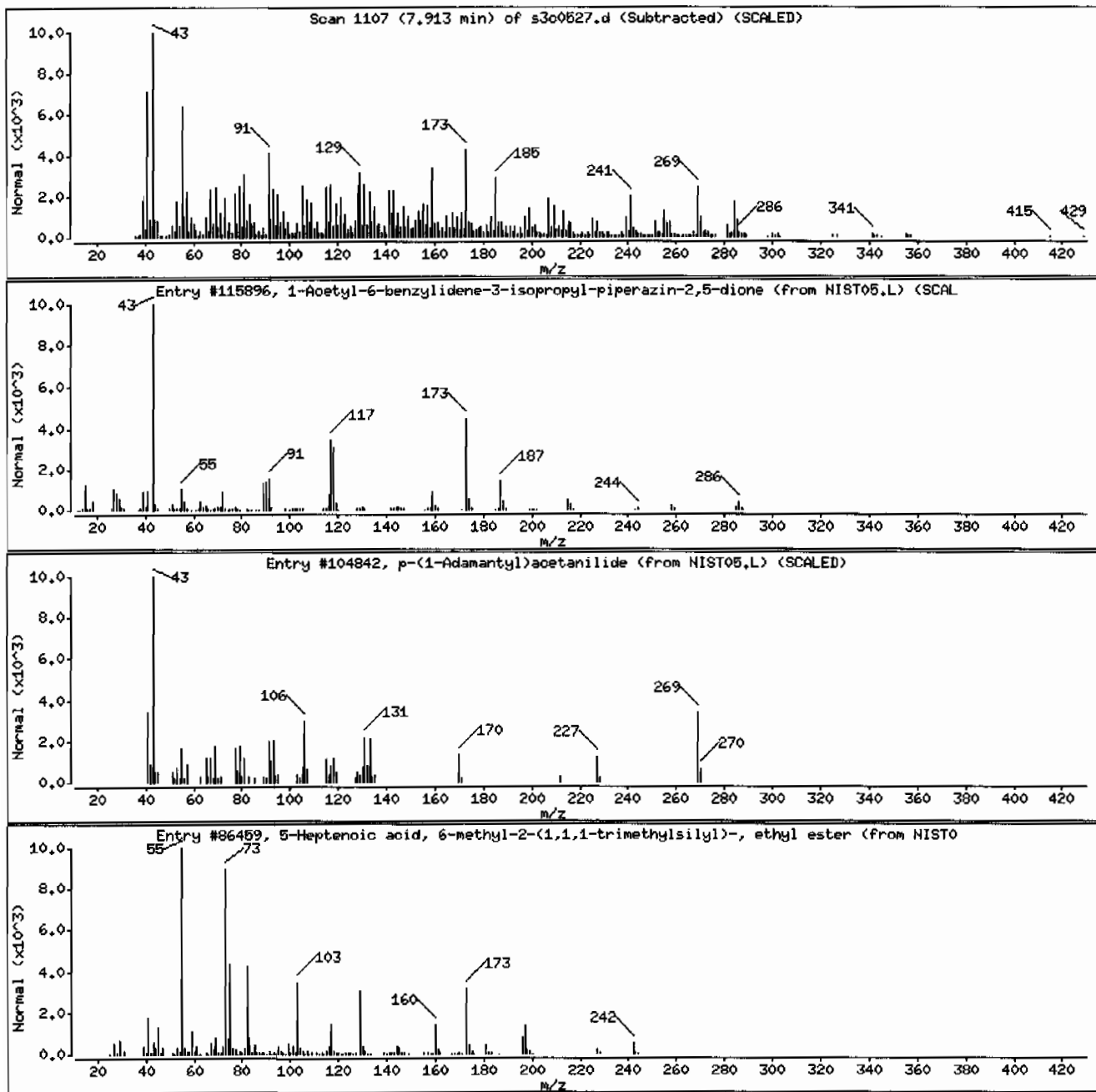
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Acetyl-6-benzylidene-3-isopropyl-piper	1000287-36-5	NIST05.L	115896	15	C <sub>16</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub>	286
p-(1-Adamantyl)acetanilide	1459-50-3	NIST05.L	104842	11	C <sub>18</sub> H <sub>23</sub> N <sub>1</sub> O	269
5-Heptenoic acid, 6-methyl-2-(1,1,1-trim	172921-72-1	NIST05.L	86459	10	C <sub>13</sub> H <sub>26</sub> O <sub>2</sub> Si	242





Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF111LANL

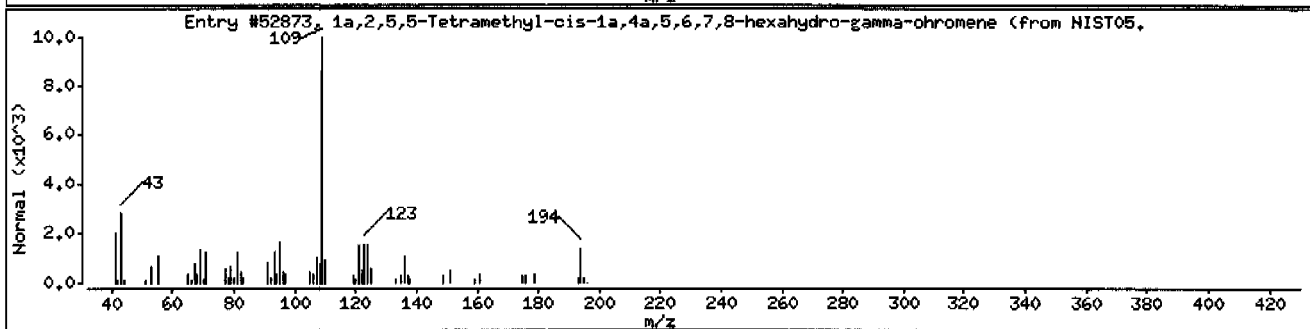
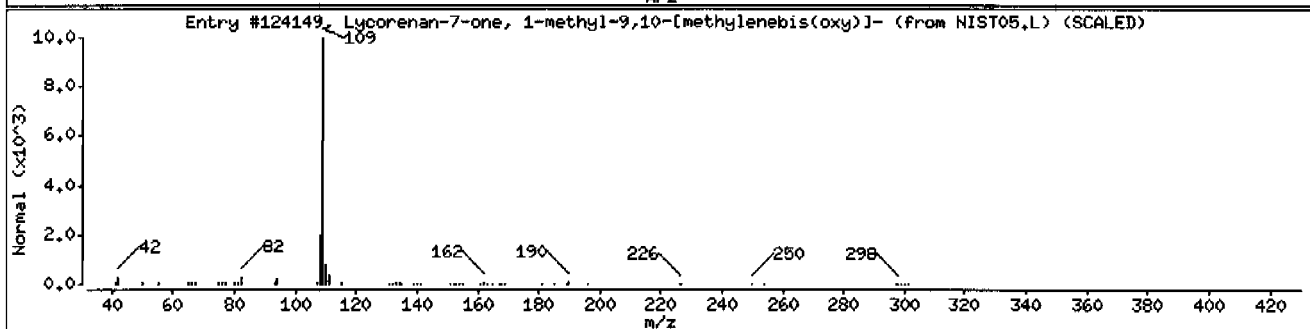
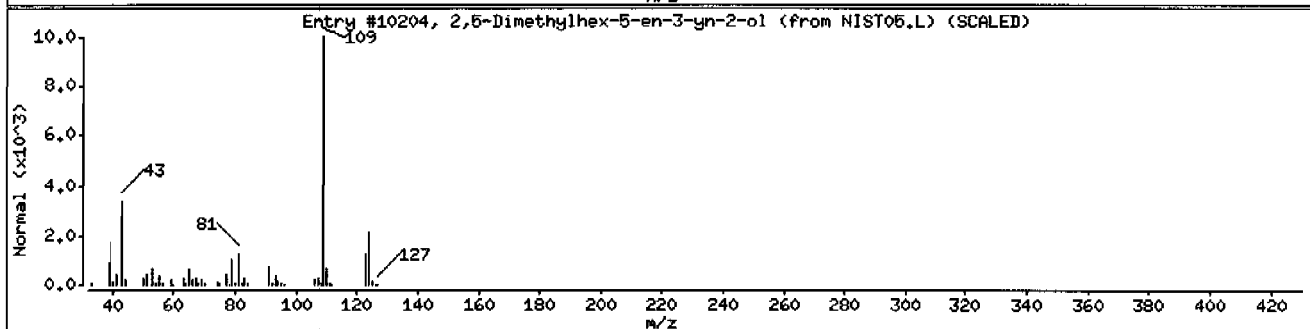
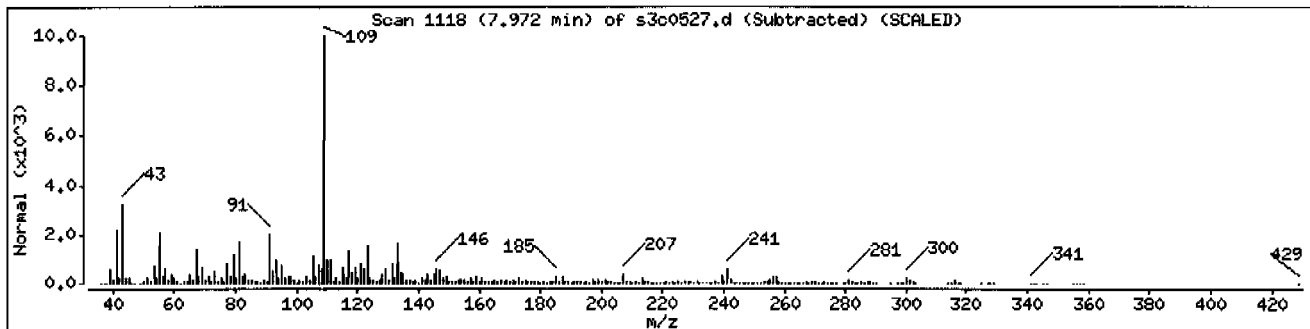
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,5-Dimethylhex-5-en-3-yn-2-ol	1000302-74-9	NIST05.L	10204	53	C8H12O	124
Lycorenan-7-one, 1-methyl-9,10-[methylenebis	568-40-1	NIST05.L	124149	53	C17H17NO4	299
1a,2,5,5-Tetramethyl-cis-1a,4a,5,6,7,8-h	1000215-77-7	NIST05.L	52873	53	C13H22O	194



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Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF11ILANL

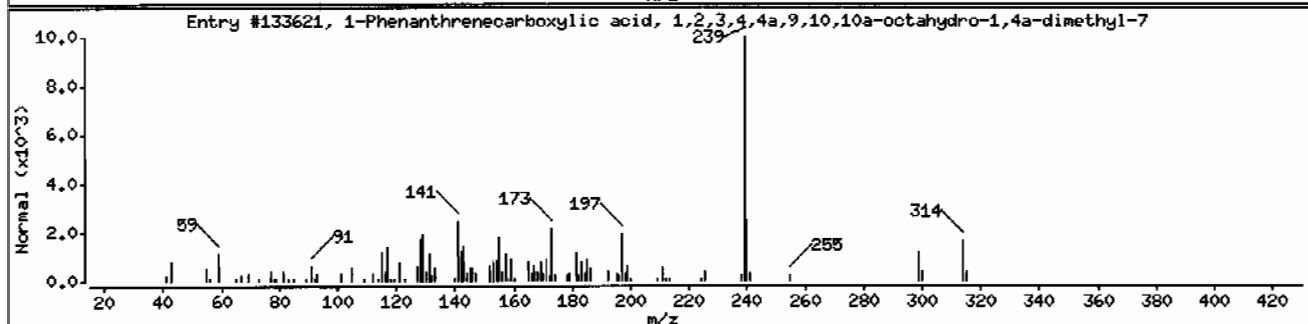
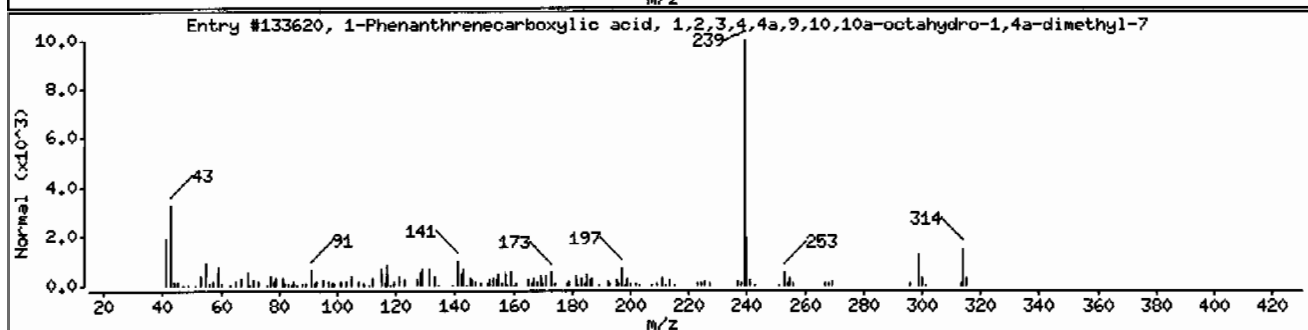
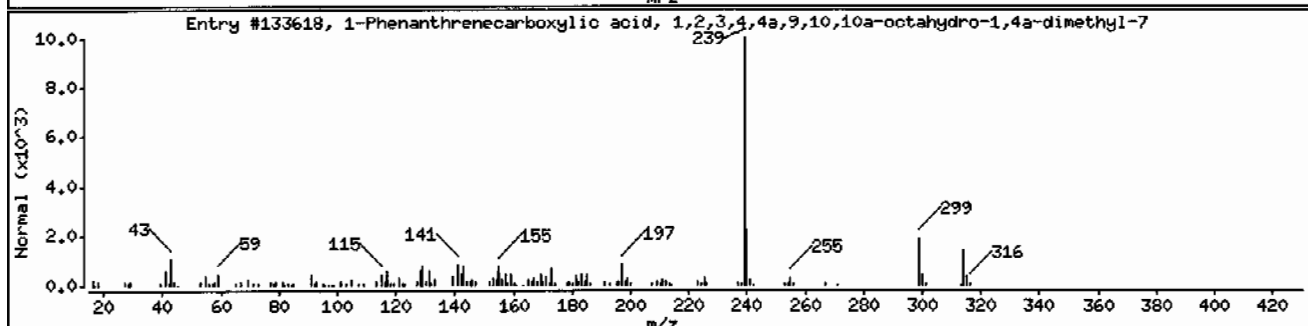
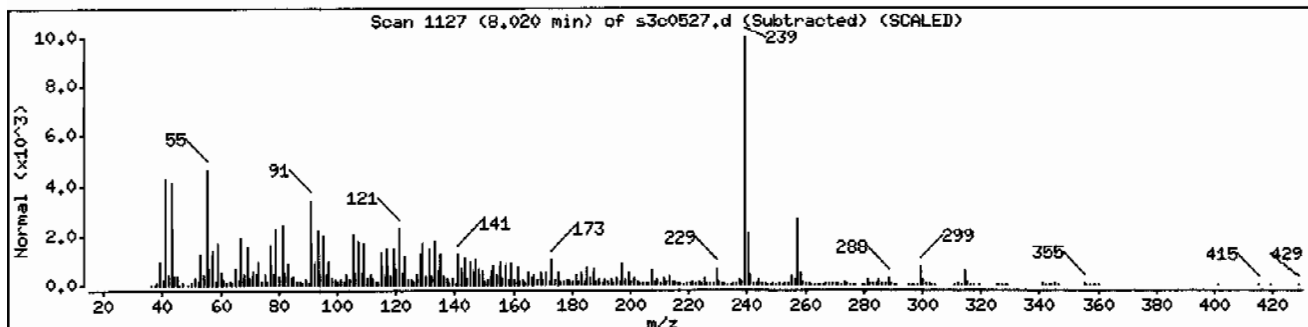
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	99	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	64	C21H30O2	314



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVMF11LANL

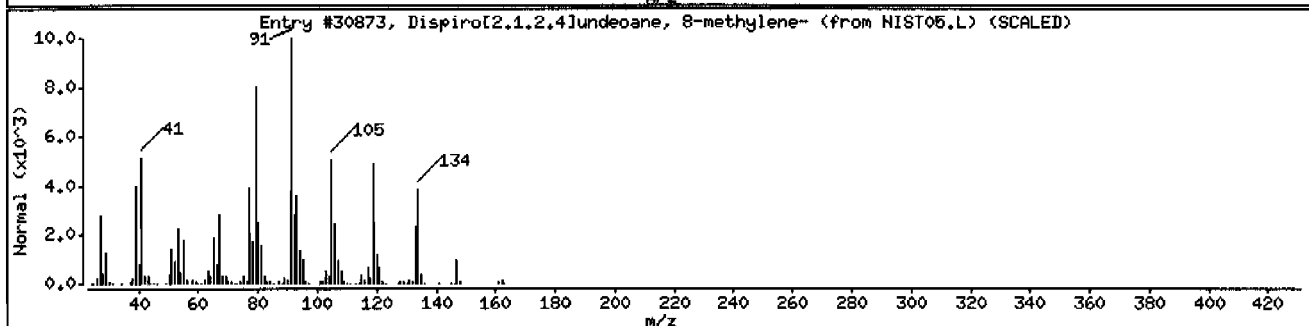
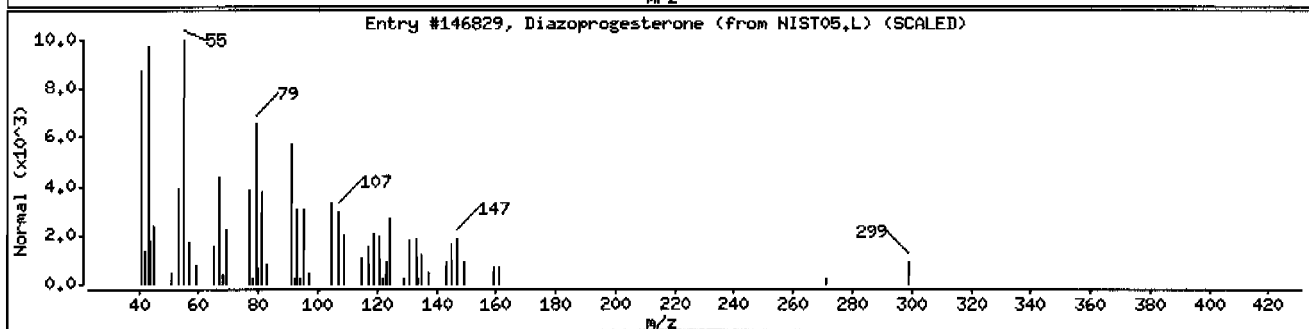
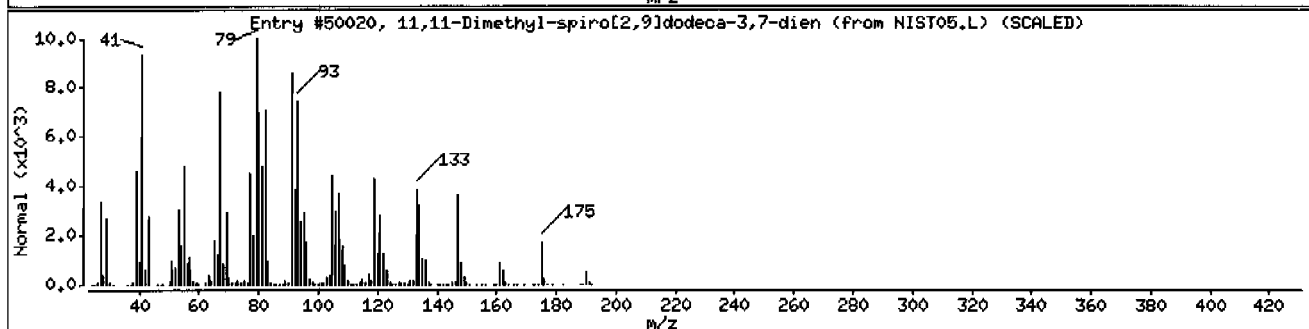
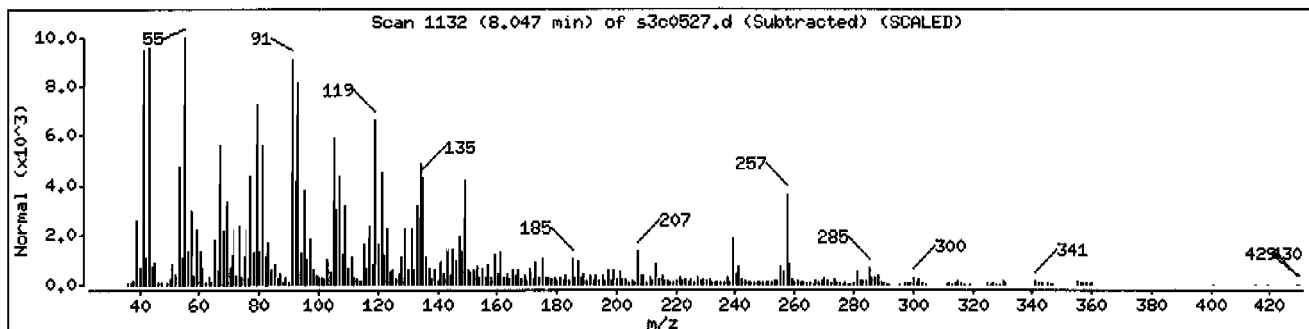
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
11,11-Dimethyl-spiro[2,9]dodeca-3,7-dien	1000062-28-4	NIST05.L	50020	55	C14H22	190
Diazoprogesterone	1000255-30-9	NIST05.L	146829	49	C21H30N4	338
Dispiro[2.1.2.4]undecane, 8-methylene-	51567-08-9	NIST05.L	30873	48	C12H18	162



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711ISVMF11ILANL

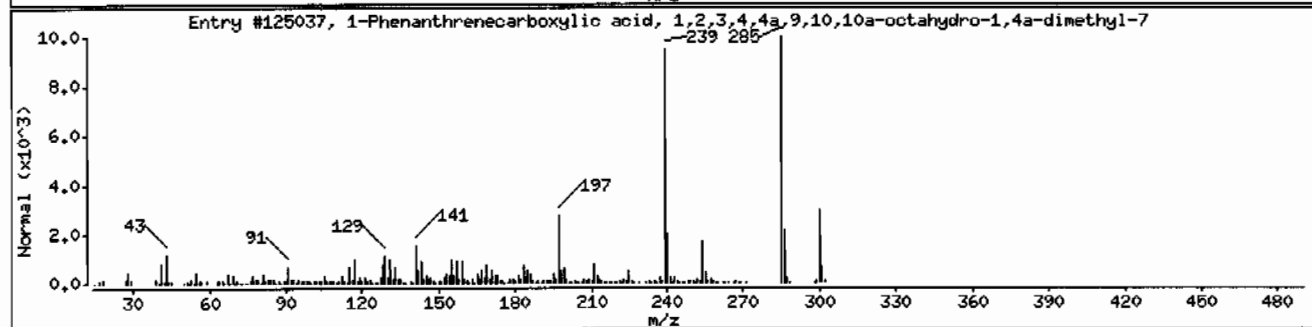
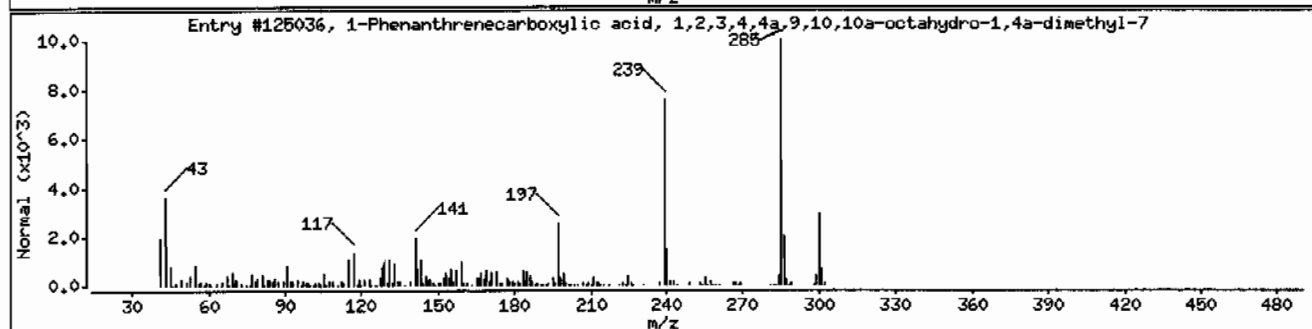
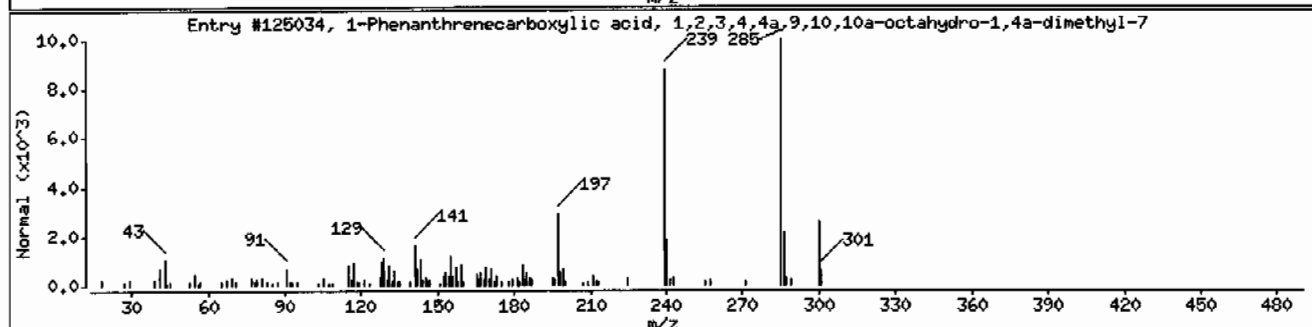
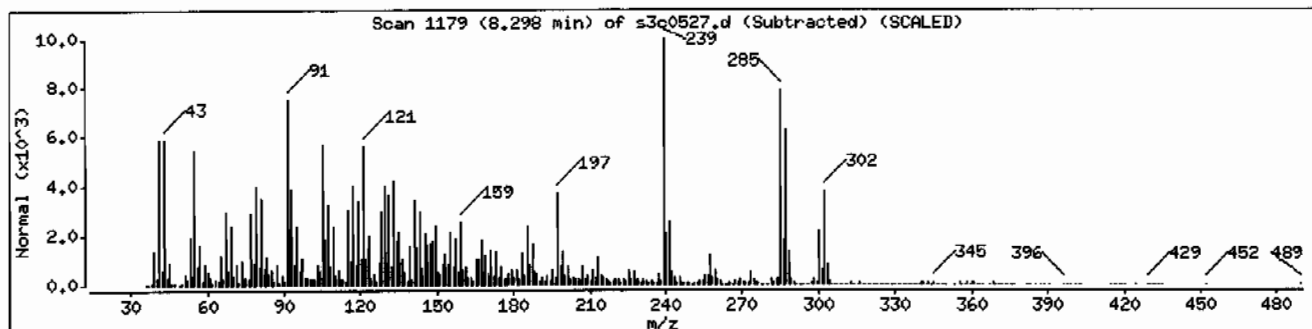
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	97	C20H28O2	300
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	64	C20H28O2	300



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF111LANL

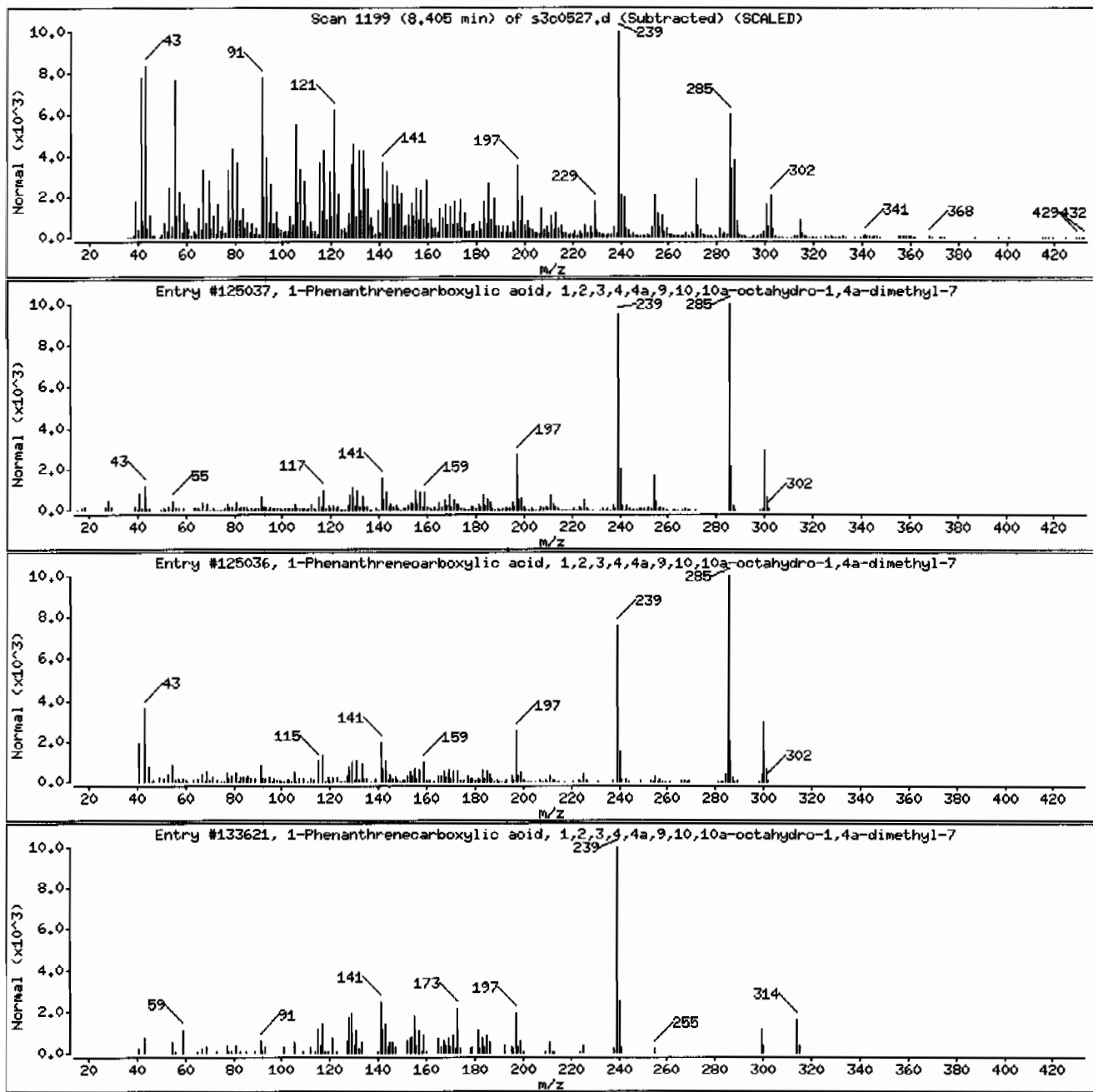
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	87	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	85	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	51	C21H30O2	314



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF111LANL

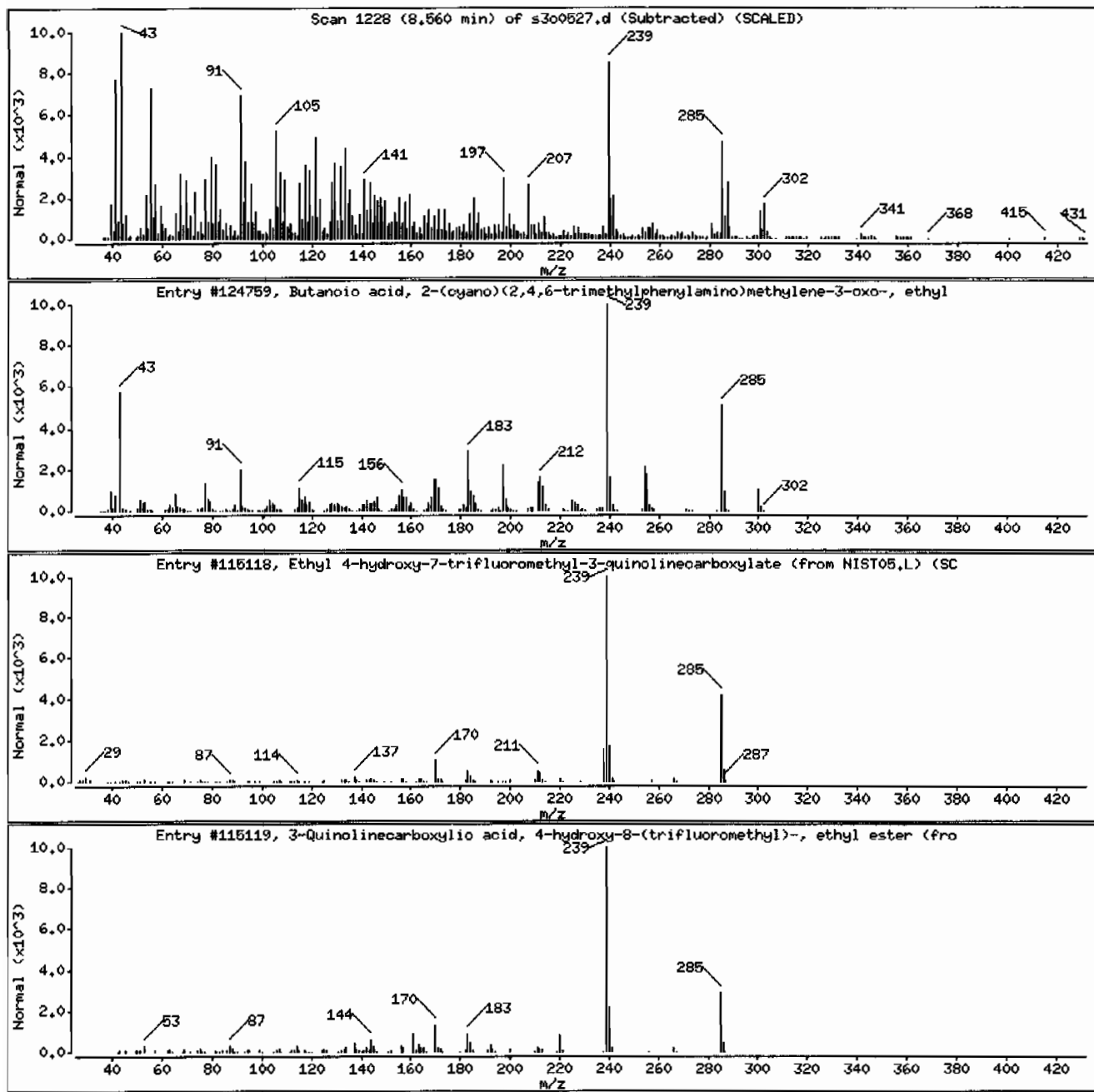
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	70	C17H20N2O3	300
Ethyl 4-hydroxy-7-trifluoromethyl-3-quin	391-02-6	NIST05.L	115118	49	C13H10F3NO3	285
3-Quinolincarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	49	C13H10F3NO3	285



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.1

Sample Info: 1247562005195667711SVHF111LANL

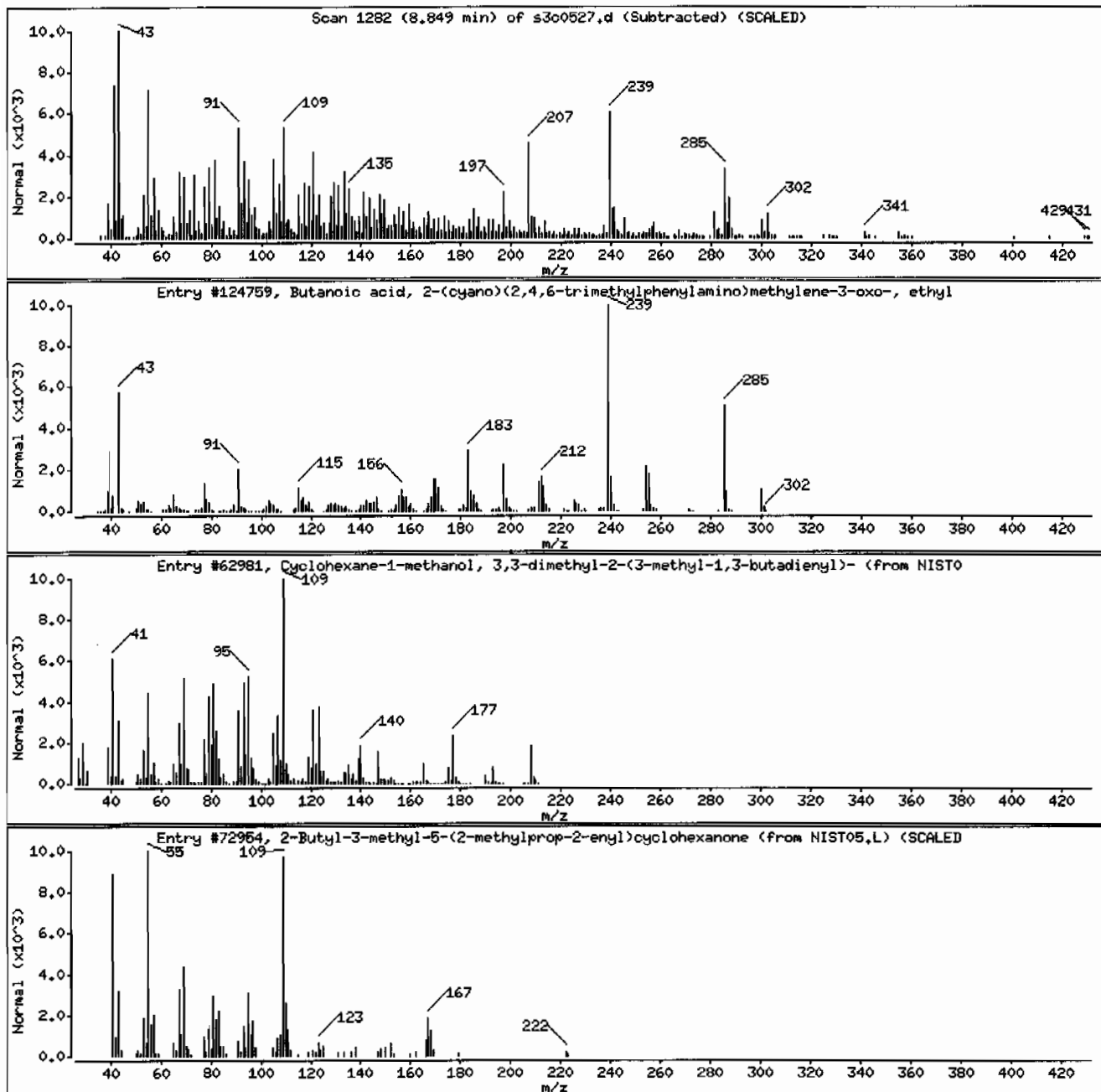
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05,L	124759	56	C17H20N2O3	300
Cyclohexane-1-methanol, 3,3-dimethyl-2-(	1000196-01-5	NIST05,L	62981	55	C14H24O	208
2-Butyl-3-methyl-5-(2-methylprop-2-enyl)	1000281-10-7	NIST05,L	72954	42	C15H26O	222



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF11ILANL

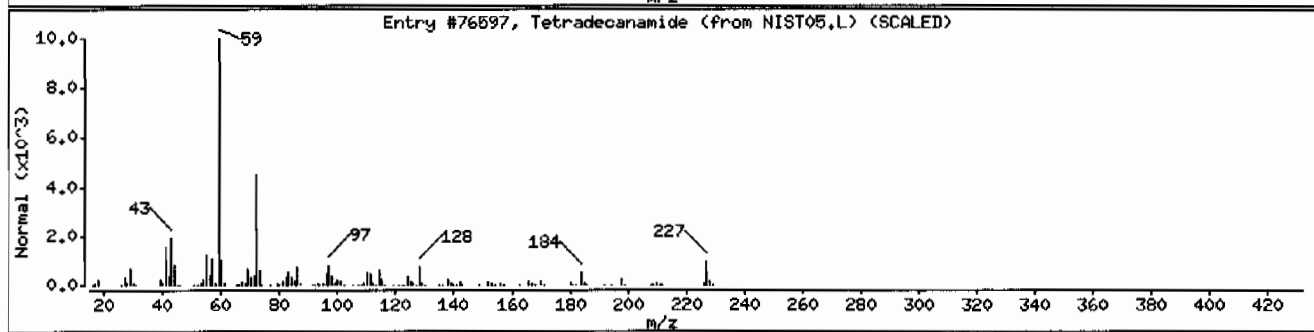
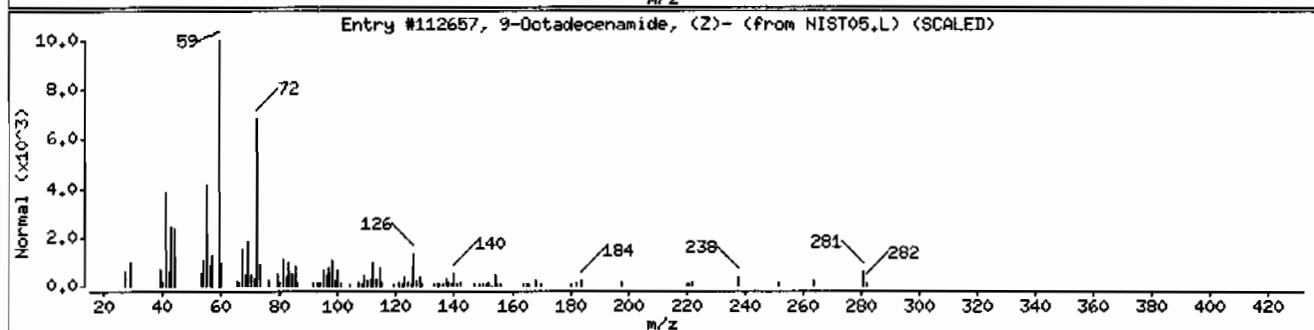
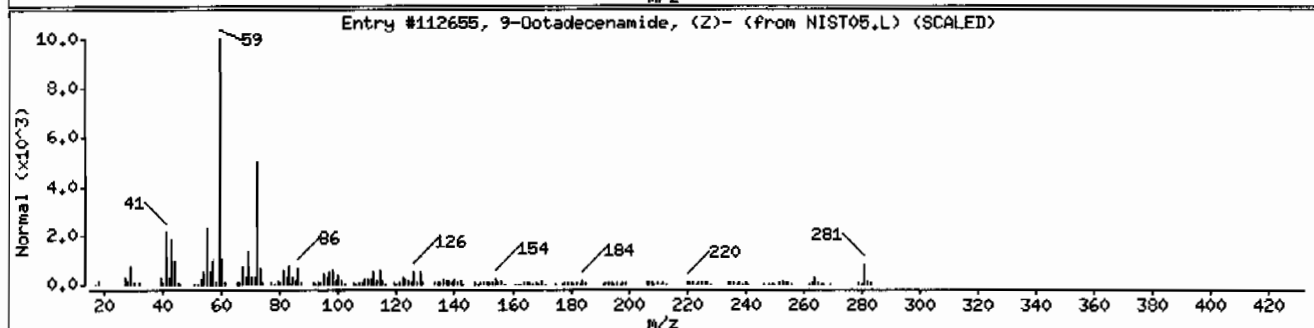
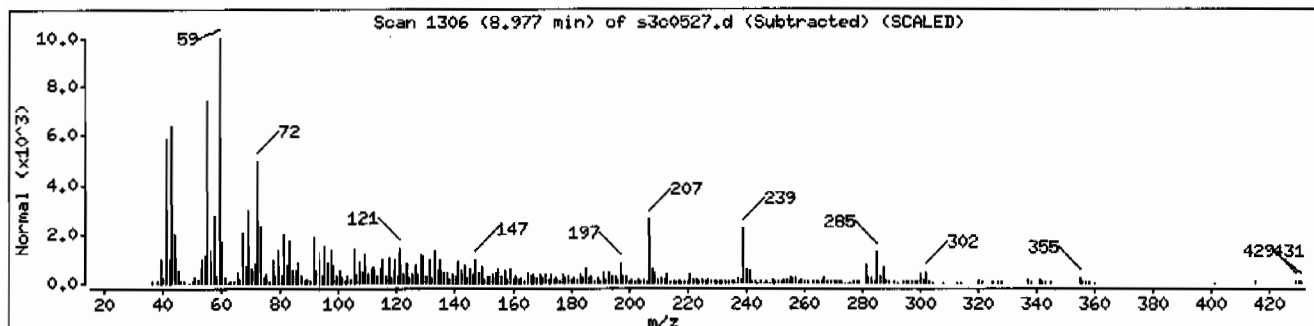
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	60	C18H35NO	281
Tetradecanamide	638-58-4	NIST05.L	76597	60	C14H29NO	227





Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF11ILANL

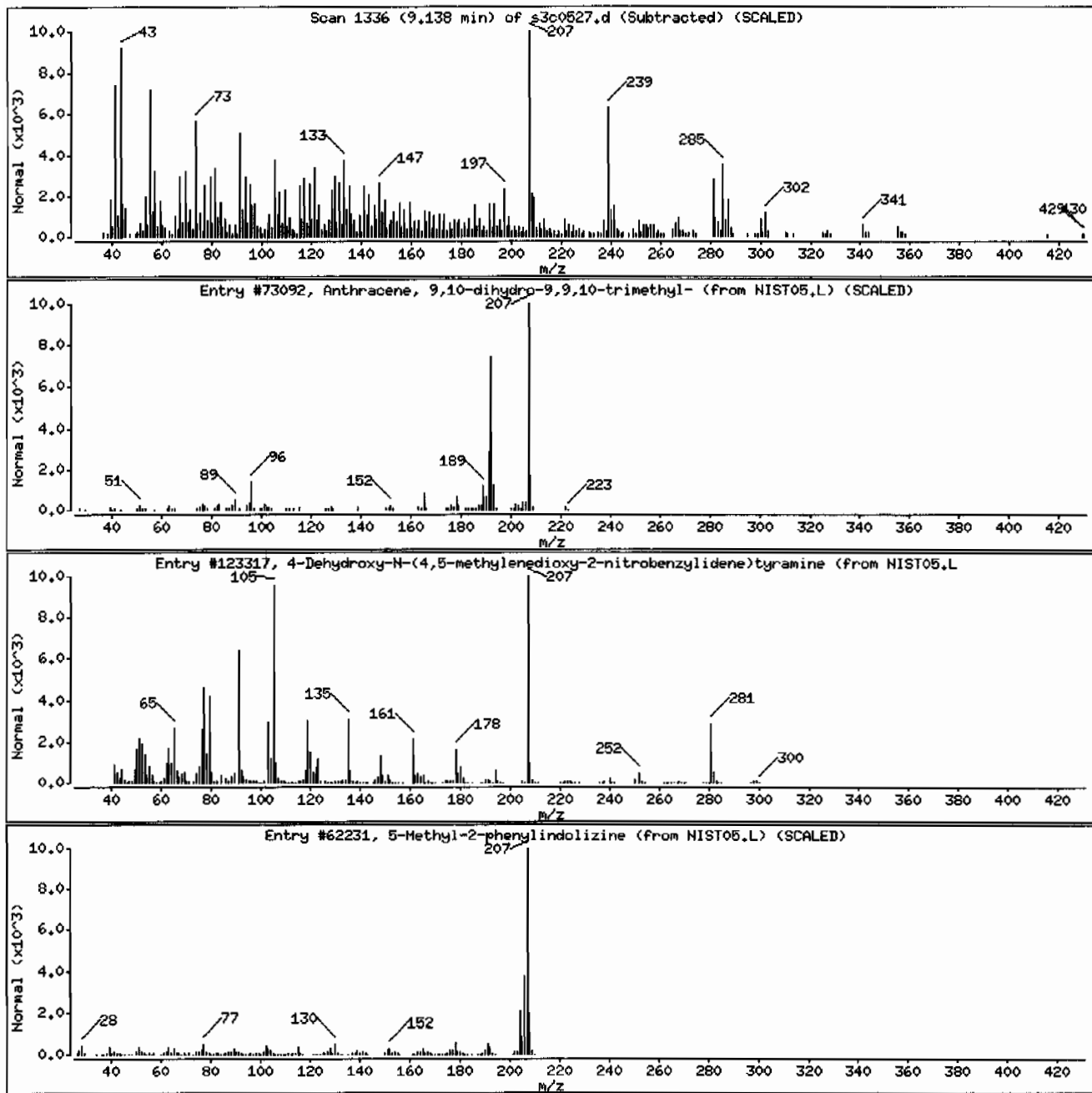
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Anthracene, 9,10-dihydro-9,9,10-trimethyl	14923-29-6	NIST05.L	73092	42	C17H18	222
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	41	C16H14N2O4	298
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	30	C15H13N	207



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVHF111LANL

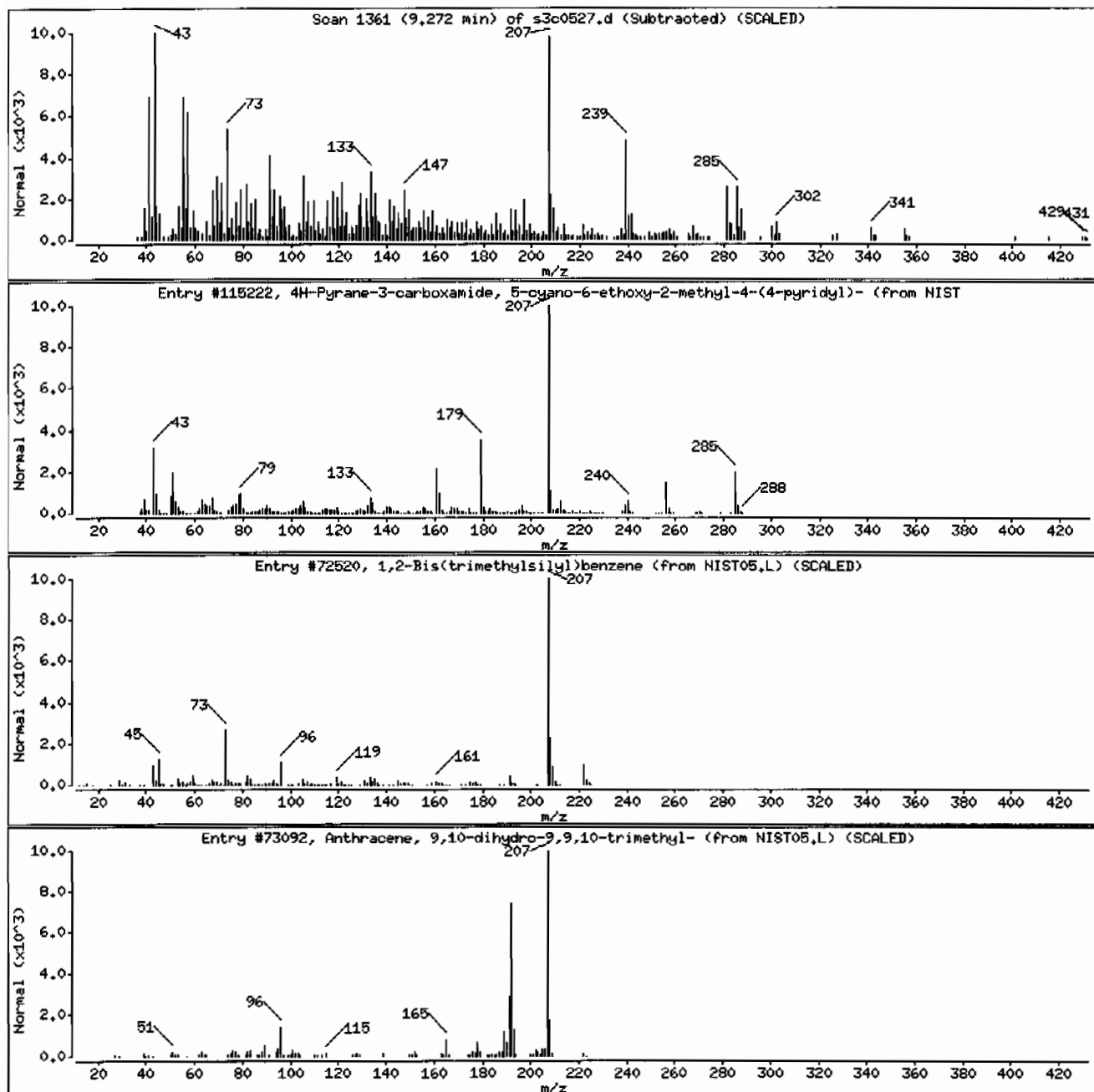
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4H-Pyran-3-carboxamide, 5-cyano-6-ethox	330593-30-1	NIST05.L	115222	43	C15H15N3O3	285
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	38	C12H22Si2	222
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	38	C17H18	222



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.1

Sample Info: 1247562005195667711SVHF111LANL

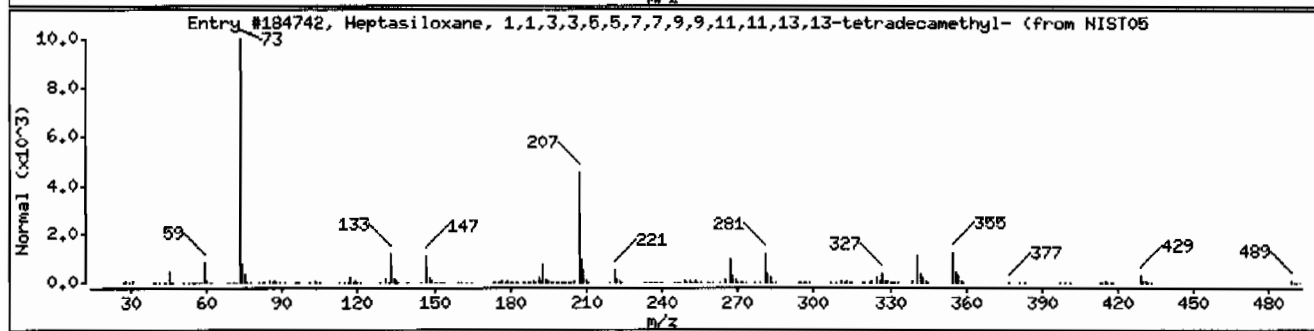
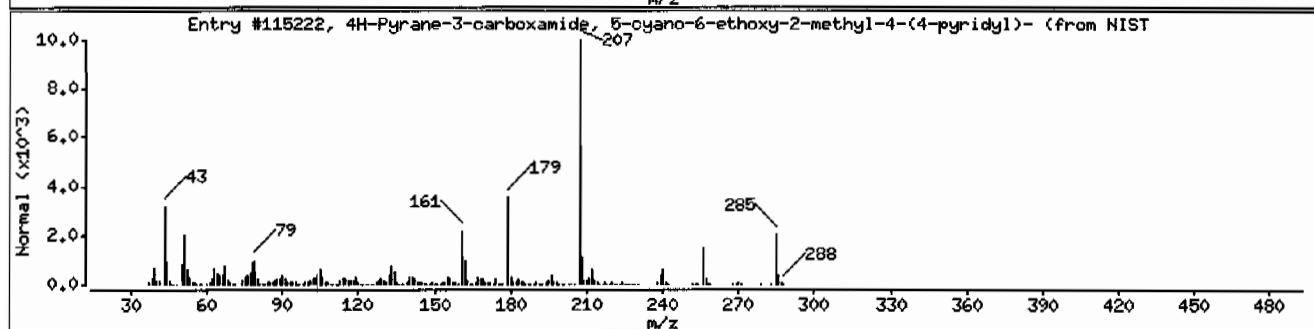
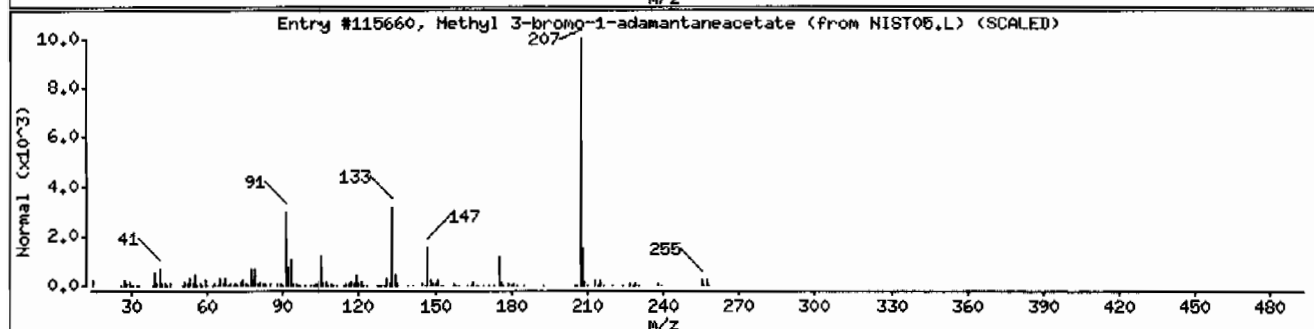
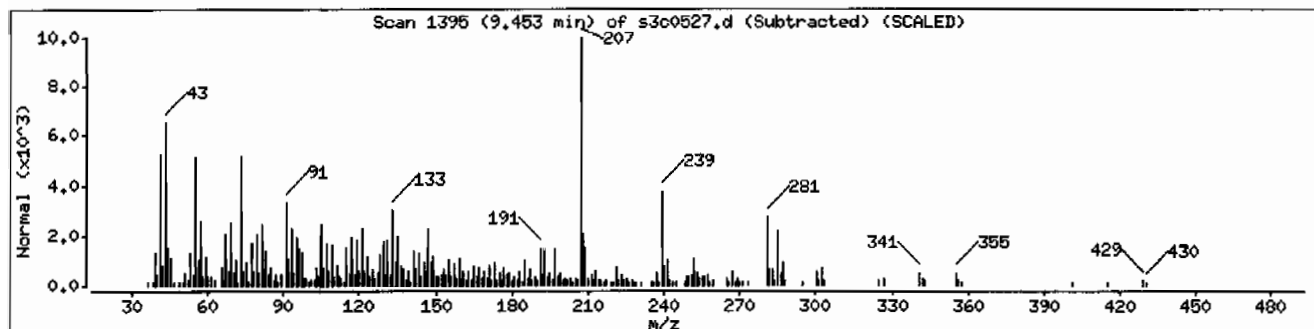
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyl 3-bromo-1-adamantaneacetate	14575-01-0	NIST05.L	115660	43	C13H19BrO2	286
4H-Pyrene-3-carboxamide, 5-cyano-6-ethox	330593-30-1	NIST05.L	115222	43	C15H15N3O3	285
Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11	19095-23-9	NIST05.L	184742	43	C14H44O6Si7	504



Date : 05-MAR-2010 19:12

Client ID: RE15-10-8315

Instrument: MSD3.i

Sample Info: 1247562005195667711SVMF111LANL

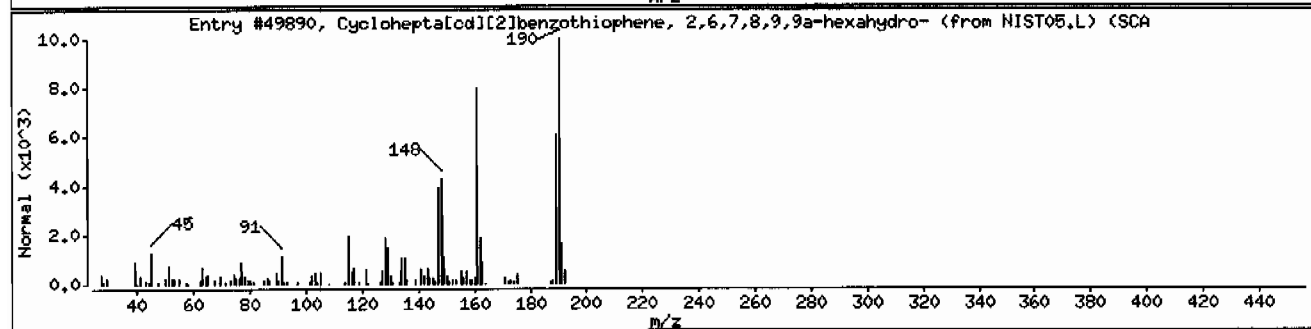
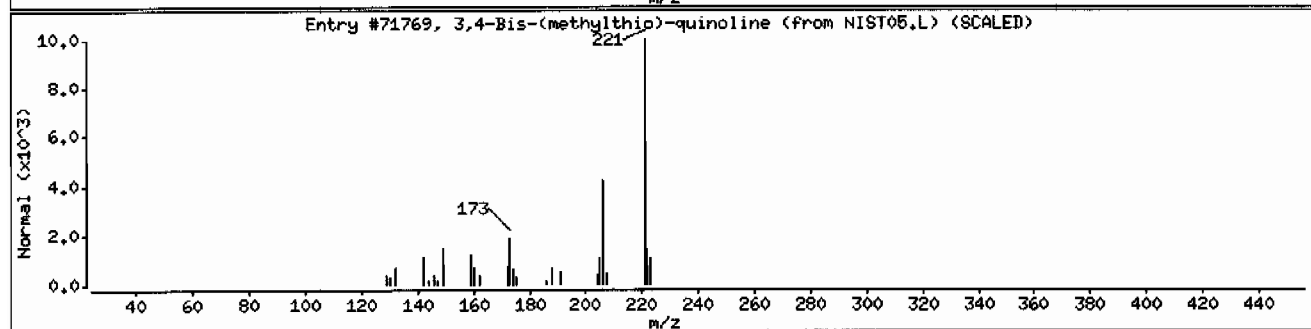
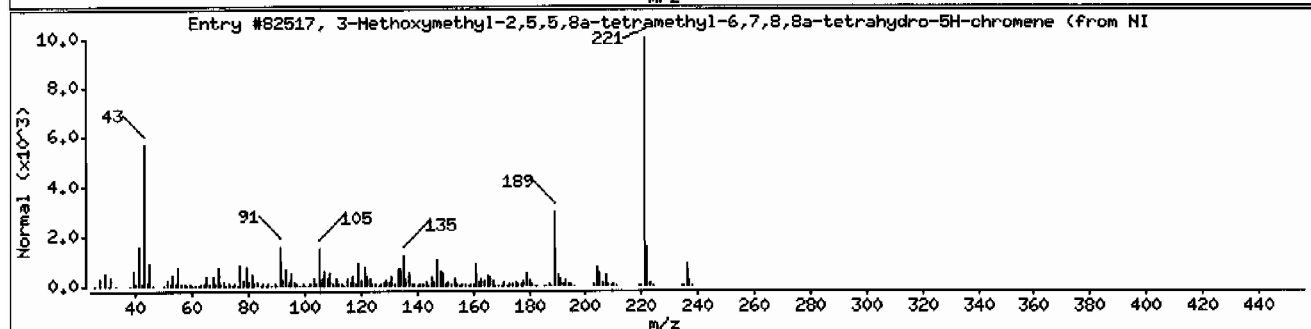
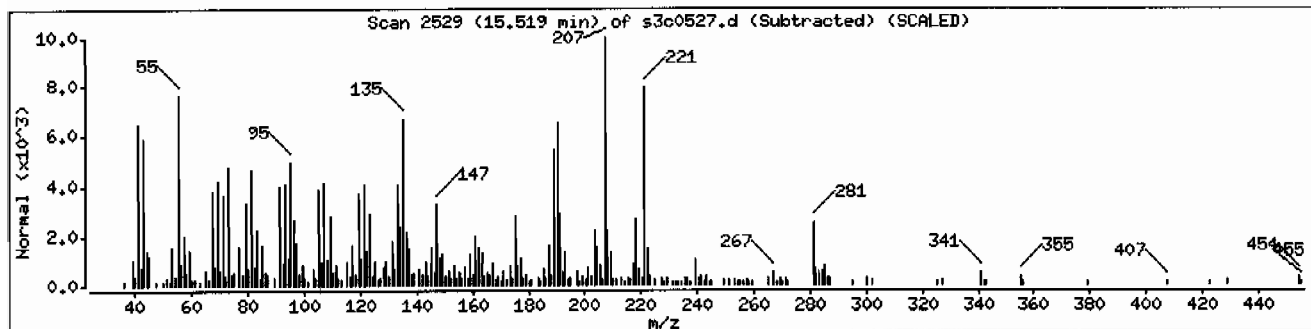
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	30	C15H24O2	236
3,4-Bis-(methylthio)-quinoline	74579-34-3	NIST05.L	71769	25	C11H11NS2	221
Cyclohepta[cd][2]benzothiophene, 2,6,7,8	199807-57-3	NIST05.L	49890	15	C12H14S	190



# Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol		10	20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde	10	20	40	50	80	100	120	
Acetophenone	10	20	40	50	80	100	120	
Caprolactam	10	20	40	50	80	100	120	
1,1'-Biphenyl	10	20	40	50	80	100	120	
Atrazine	10	20	40	50	80	100	120	
Benzidine	10	20	40	50	80	100	120	
3,3'-Dichlorobenzidine	10	20	40	50	80	100	120	
1,4-Dioxane	10	20	40	50	80	100	120	
Methyl methacrylate	10	20	40	50	80	100	120	
Ethyl methacrylate	10	20	40	50	80	100	120	
2-Picoline	10	20	40	50	80	100	120	
N-Nitrosomethylethylamine	10	20	40	50	80	100	120	
Methyl methanesulfonate	10	20	40	50	80	100	120	
N-Nitrosodiethylamine	10	20	40	50	80	100	120	
Ethyl methanesulfonate	10	20	40	50	80	100	120	
Pentachloroethane	10	20	40	50	80	100	120	
N-Nitrosopyrrolidine	10	20	40	50	80	100	120	
N-Nitrosomorpholine	10	20	40	50	80	100	120	
o-Toluidine	10	20	40	50	80	100	120	
N-Nitrosopiperidine	10	20	40	50	80	100	120	
a,a-Dimethylphenethylamine	10	20	40	50	80	100	120	
2,6-Dichlorophenol	10	20	40	50	80	100	120	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene	10	20	40	50	80	100	120	
p-Phenylenediamine	10	20	40	50	80	100	120	
N-Nitrosodi-n-butylamine	10	20	40	50	80	100	120	
Safrole	10	20	40	50	80	100	120	
1,2,4,5-Tetrachlorobenzene	10	20	40	50	80	100	120	
Isosafrole	10	20	40	50	80	100	120	
1,4-Naphthoquinone	10	20	40	50	80	100	120	
Pentachlorobenzene	10	20	40	50	80	100	120	
1-Naphthylamine	10	20	40	50	80	100	120	
2-Naphthylamine	10	20	40	50	80	100	120	
5-Nitro-o-toluidine	10	20	40	50	80	100	120	
1,3,5-Trinitrobenzene	10	20	40	50	80	100	120	
Phenacetin	10	20	40	50	80	100	120	
Diallate	10	20	40	50	80	100	120	
cis-Diallate	1.5	3	6	7.5	12	15	18	
trans-Diallate	8.5	17	34	42	68	85	102	
4-Aminobiphenyl	10	20	40	50	80	100	120	



Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120
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SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol		10	20	40	50	80	100	120
Quinoline		10	20	40	50	80	100	120
2,4-Toluene diisocyanate		10	20	40	50	80	100	120
1-Nitropyrene		10	20	40	50	80	100	120
5-Methylchrysene		10	20	40	50	80	100	120
Benzo(i)fluoranthene		10	20	40	50	80	100	120
Dibenzo(a,h)pyrene		10	20	40	50	80	100	120
Dibenzo(a,h)acridine		10	20	40	50	80	100	120
Dibenzo(a,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: 05-Mar-2010 08:38

### Calibration History

Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m

Start Cal Date: 01-MAR-2010 16:52

End Cal Date : 02-MAR-2010 15:20

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
01-MAR-2010 16:52	MEGAI	/chem/MSD3.i/s030110.b/s3c0103.d
Cal Level: 2 , Cal Amount: 10.00000		
02-MAR-2010 12:32	BJCO	/chem/MSD3.i/s030210.b/s3c0210.d
02-MAR-2010 10:24	HEX	/chem/MSD3.i/s030210.b/s3c0204.d
01-MAR-2010 23:52	PEST	/chem/MSD3.i/s030110.b/s3c0120.d
01-MAR-2010 21:24	AP12	/chem/MSD3.i/s030110.b/s3c0113.d
01-MAR-2010 17:19	MEGAI	/chem/MSD3.i/s030110.b/s3c0104.d
Cal Level: 3 , Cal Amount: 20.00000		
02-MAR-2010 13:00	BJCO	/chem/MSD3.i/s030210.b/s3c0211.d
02-MAR-2010 10:45	HEX	/chem/MSD3.i/s030210.b/s3c0205.d
02-MAR-2010 00:13	PEST	/chem/MSD3.i/s030110.b/s3c0121.d
01-MAR-2010 21:45	AP12	/chem/MSD3.i/s030110.b/s3c0114.d
01-MAR-2010 17:47	MEGAI	/chem/MSD3.i/s030110.b/s3c0105.d
Cal Level: 4 , Cal Amount: 40.00000		
02-MAR-2010 13:28	BJCO	/chem/MSD3.i/s030210.b/s3c0212.d
02-MAR-2010 11:06	HEX	/chem/MSD3.i/s030210.b/s3c0206.d
02-MAR-2010 00:34	PEST	/chem/MSD3.i/s030110.b/s3c0122.d
01-MAR-2010 22:06	AP12	/chem/MSD3.i/s030110.b/s3c0115.d
01-MAR-2010 18:15	MEGAI	/chem/MSD3.i/s030110.b/s3c0106.d
Cal Level: 5 , Cal Amount: 50.00000		
02-MAR-2010 13:56	BJCO	/chem/MSD3.i/s030210.b/s3c0213.d
02-MAR-2010 11:28	HEX	/chem/MSD3.i/s030210.b/s3c0207.d
02-MAR-2010 00:55	PEST	/chem/MSD3.i/s030110.b/s3c0123.d
01-MAR-2010 22:28	AP12	/chem/MSD3.i/s030110.b/s3c0116.d
01-MAR-2010 18:43	MEGAI	/chem/MSD3.i/s030110.b/s3c0107.d
Cal Level: 6 , Cal Amount: 80.00000		
02-MAR-2010 14:24	BJCO	/chem/MSD3.i/s030210.b/s3c0214.d
02-MAR-2010 11:49	HEX	/chem/MSD3.i/s030210.b/s3c0208.d
02-MAR-2010 01:16	PEST	/chem/MSD3.i/s030110.b/s3c0124.d
01-MAR-2010 22:49	AP12	/chem/MSD3.i/s030110.b/s3c0117.d
01-MAR-2010 19:11	MEGAI	/chem/MSD3.i/s030110.b/s3c0108.d
Cal Level: 7 , Cal Amount: 100.00000		

02-MAR-2010 14:51	BJCO	/chem/MSD3.i/s030210.b/s3c0215.d
02-MAR-2010 12:11	HEX	/chem/MSD3.i/s030210.b/s3c0209.d
02-MAR-2010 01:37	PEST	/chem/MSD3.i/s030110.b/s3c0125.d
01-MAR-2010 23:10	AP12	/chem/MSD3.i/s030110.b/s3c0118.d
01-MAR-2010 19:39	MEGAI1	/chem/MSD3.i/s030110.b/s3c0109.d

Cal Level: 8 , Cal Amount: 120.00000

02-MAR-2010 15:20	BJCO	/chem/MSD3.i/s030210.b/s3c0216.d
02-MAR-2010 01:58	PEST	/chem/MSD3.i/s030110.b/s3c0126.d
01-MAR-2010 23:31	AP12	/chem/MSD3.i/s030110.b/s3c0119.d
01-MAR-2010 20:07	MEGAI1	/chem/MSD3.i/s030110.b/s3c0110.d

# Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

04-MAR-2010 21:16	AP12	/chem/MSD3.i/s031410a.b/s3c0424.d
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Ccal Level: 4 , Ccal Amount: 40.0

04-MAR-2010 20:52	MEGAI1	/chem/MSD3.i/s031410a.b/s3c0423.d
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## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
 End Cal Date : 02-MAR-2010 15:20  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

## Calibration File Names:

Level 1: /chem/MSD3.i/s030110.b/s3c0103.d  
 Level 2: /chem/MSD3.i/s030210.b/s3c0210.d  
 Level 3: /chem/MSD3.i/s030210.b/s3c0211.d  
 Level 4: /chem/MSD3.i/s030210.b/s3c0212.d  
 Level 5: /chem/MSD3.i/s030210.b/s3c0213.d  
 Level 6: /chem/MSD3.i/s030210.b/s3c0214.d  
 Level 7: /chem/MSD3.i/s030210.b/s3c0215.d  
 Level 8: /chem/MSD3.i/s030210.b/s3c0216.d

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients	m2	RSD or R^2
1 N-Methyl-N-nitrosomethylamine	++++ 0.77166	0.78263 0.74635	0.79388	0.78645	0.77710	0.77672	AVRG		0.77640		1.94714
2 Pyridine	++++ 1.10986	1.08773 1.08904	1.09911	1.11317	1.10444	1.12393	AVRG		1.10390		1.18576
4 Aniline	++++ 0.68963	0.73073 0.65788	0.71567	0.71171	0.69647	0.67891	AVRG		0.69729		3.51982
209 Benzaldehyde	++++ 0.83434	1.12224 0.78200	1.12915	1.01209	1.04389	0.87574	AVRG		0.97135		14.45929
6 Phenol	++++ 1.34804	1.52925 1.26725	1.52304	1.47401	1.42990	1.37444	AVRG		1.42085		6.80848

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
 End Cal Date : 02-MAR-2010 15:20  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
	100	120									
	Level 7	Level 8									
7 bis(2-Chloroethyl) ether	1.45471 1.09182	1.31098 1.01818	1.29730 1.01818	1.24811 1.01818	1.20853 1.01818	1.12454 1.01818	AVRG AVRG		1.21927		11.45442
8 2-Chlorophenol	++++ 1.12036	1.20213 1.06710	1.21244 1.06710	1.20930 1.06710	1.17427 1.06710	1.13615 1.06710	AVRG AVRG		1.16025		4.71129
203 n-Decane	++++ 1.31840	2.23493 1.18875	2.12079 1.18875	1.84312 1.18875	1.66634 1.18875	1.36228 1.18875	AVRG AVRG		1.67637		24.37704
9 1,3-Dichlorobenzene	++++ 1.14833	1.39458 1.07889	1.36615 1.07889	1.31568 1.07889	1.26697 1.07889	1.17499 1.07889	AVRG AVRG		1.24937		9.48375
11 1,4-Dichlorobenzene	++++ 1.10584	1.42299 1.03930	1.37345 1.03930	1.32177 1.03930	1.24243 1.03930	1.12517 1.03930	AVRG AVRG		1.23299		11.89706
12 Benzyl alcohol	++++ 0.80135	0.76735 0.78175	0.79026 0.78175	0.80326 0.78175	0.80793 0.78175	0.82627 0.78175	AVRG AVRG		0.79688		2.39802
13 1,2-Dichlorobenzene	++++ 0.96496	1.30159 0.90717	1.22552 0.90717	1.11831 0.90717	1.06725 0.90717	0.98061 0.90717	AVRG AVRG		1.08077		13.34898
14 bis(2-Chloroisopropyl) ether	++++ 2.31743	3.20529 ++++	3.13518 ++++	2.92922 ++++	2.79598 ++++	2.46247 ++++	AVRG AVRG		2.80759		12.74065
15 o-Cresol	++++ 0.77217	0.98142 0.73216	0.91678 0.73216	0.85468 0.73216	0.82863 0.73216	0.79542 0.73216	AVRG AVRG		0.84018		10.24527

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
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 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
16 Acetophenone	++++ 1.14057	1.49133 1.05598	1.48506	1.32899	1.37892	1.16775	AVRG		1.29266		13.39919
17 N-Nitrosodipropylamine	1.07165 0.87024	0.96551 0.81744	0.94926	0.94361	0.92201	0.90517	AVRG		0.93061		8.00039
18 m,p-Cresols	++++ 1.25477	1.22348 1.19356	1.24221	1.25489	1.24772	1.25187	AVRG		1.23836		1.82249
19 Hexachloroethane	++++ 0.47817	0.55773 0.44746	0.55904	0.54600	0.52546	0.49297	AVRG		0.51526		8.39931
21 Nitrobenzene	++++ 0.30178	0.34974 0.28147	0.34192	0.33225	0.32810	0.30804	AVRG		0.32047		7.57846
22 Isophorone	++++ 0.62027	0.66329 0.59503	0.63868	0.62029	0.62416	0.62960	AVRG		0.62733		3.30514
23 2-Nitrophenol	++++ 0.12495	0.13656 0.11974	0.14468	0.14595	0.14557	0.13289	AVRG		0.13576		7.73714
24 2,4-Dimethylphenol	++++ 0.23433	0.28711 0.21667	0.27813	0.26204	0.25866	0.24200	AVRG		0.25414		9.75689
25 bis(2-Chloroethoxy)methane	++++ 0.33736	0.41517 0.31547	0.39705	0.37818	0.36726	0.35328	AVRG		0.36625		9.37056

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
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 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
26 2,4-Dichlorophenol	++++ 0.23053	0.23757 0.21733	0.24297 0.21733	0.24432 0.21733	0.24228 0.21733	0.23914 0.21733	AVRG		0.23631		4.04174
27 Benzoic acid	++++ 484586	++++ 579530	12767 579530	90496 579530	159274 579530	380510 579530	LINR	0.55118	0.23315		0.99458
28 1,2,4-Trichlorobenzene	++++ 0.22582	0.27514 0.21225	0.26559 0.21225	0.25063 0.21225	0.24370 0.21225	0.23046 0.21225	AVRG		0.24337		9.18677
30 Naphthalene	1.12402 ++++	0.96267 ++++	0.90754 ++++	0.83793 ++++	0.80217 ++++	++++	AVRG		0.92686		13.64536
204 alpha-Terpineol	++++ 0.25495	0.37259 ++++	0.35693 ++++	0.32159 ++++	0.30581 ++++	0.27284 ++++	AVRG		0.31413		14.64507
31 4-Chloroaniline	++++ 0.39449	0.44636 0.36263	0.44554 0.36263	0.43718 0.36263	0.43194 0.36263	0.41176 0.36263	AVRG		0.41856		7.41584
189 Caprolactam	++++ 0.09490	0.09214 0.08395	0.10283 0.08395	0.10052 0.08395	0.09810 0.08395	0.09469 0.08395	AVRG		0.09530		6.51273
32 Hexachlorobutadiene	++++ 0.12549	0.14865 0.12144	0.14414 0.12144	0.13641 0.12144	0.13293 0.12144	0.12816 0.12144	AVRG		0.13389		7.39680
33 4-Chloro-3-methylphenol	++++ 0.23733	0.25374 0.22523	0.25385 0.22523	0.25122 0.22523	0.25123 0.22523	0.24855 0.22523	AVRG		0.24588		4.35921



## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
 End Cal Date : 02-MAR-2010 15:20  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.1/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD 1 or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
34 2-Methylnaphthalene	0.71935 0.47659	0.62658 ++++	0.59529	0.55434	0.54368	0.50832	AVRG		0.57488		14.10451
35 1-Methylnaphthalene	0.71369 ++++	0.61459 ++++	0.58195	0.53534	0.52449	0.48256	AVRG		0.57544		14.22867
36 Hexachlorocyclopentadiene	++++ 0.16701	0.13263 0.16633	0.16487	0.17673	0.18753	0.18242	AVRG		0.16822		10.66090
208 1,1'-Biphenyl	++++ 1.03242	1.47426 ++++	1.43736	1.24012	1.21999	1.05952	AVRG		1.24395		14.81409
205 2,3-Dichloroaniline	++++ 0.45913	0.61447 0.43043	0.61659	0.56232	0.53255	0.47580	AVRG		0.52733		14.17165
37 2,4,6-Trichlorophenol	++++ 0.25761	0.27425 0.23267	0.32497	0.29631	0.28078	0.27804	AVRG		0.27780		10.42570
38 2,4,5-Trichlorophenol	++++ 0.29730	0.32239 0.29776	0.32691	0.33081	0.32744	0.29818	AVRG		0.31440		5.01599
40 2-Chloronaphthalene	1.26803 ++++	1.11058 ++++	1.09251	0.98263	0.93422	0.85270	AVRG		1.04011		14.21475
42 o-Nitroaniline	++++ 0.37290	0.34070 0.35311	0.37495	0.37763	0.38154	0.38077	AVRG		0.36880		4.24968

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 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
41 m-Nitroaniline	++++ 0.27437	0.23017 0.26467	0.27391 0.26467	0.28344 0.26467	0.29018 0.26467	0.28634 0.26467	AVRG		0.27187		7.47778
43 Dimethylphthalate	++++ 1.01216	1.23452 0.96319	1.20539 0.96319	1.13939 0.96319	1.10226 0.96319	1.05581 0.96319	AVRG		1.10182		9.00927
44 2,6-Dinitrotoluene	++++ 0.23765	0.26597 0.22014	0.28146 0.22014	0.27278 0.22014	0.26725 0.22014	0.24979 0.22014	AVRG		0.25644		8.44772
45 Acenaphthylene	1.84642 1.27275	1.69255 ++++	1.63756 ++++	1.52995 ++++	1.46043 ++++	1.34005 ++++	AVRG		1.53996		13.10895
47 Acenaphthene	16743 ++++	132978 ++++	272427 ++++	504260 ++++	636789 ++++	++++	WLNIR	-0.00920	0.94654		0.99441
48 2,4-Dinitrophenol	++++ 108791	++++ 139996	8207 139996	28935 139996	50603 139996	98368 139996	WLNIR		0.94654		0.99441
49 Dibenzofuran	++++ 1.11115	1.49101 1.04920	1.44970 1.04920	1.33156 1.04920	1.27556 1.04920	1.16127 1.04920	WLNIR	0.36316	0.09252		0.99551<-
50 2,4-Dinitrotoluene	++++ 0.32540	0.31833 0.31308	0.34635 0.31308	0.34856 0.31308	0.34849 0.31308	0.34250 0.31308	AVRG		1.26706		13.31227
51 Diethylphthalate	++++ 0.91384	1.27731 0.86703	1.17796 0.86703	1.08553 0.86703	1.05307 0.86703	0.97323 0.86703	AVRG		0.33467		4.56546
							AVRG		1.04971		13.87191

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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									
52 4-Nitrophenol	++++ 292338	13261 349805	40008	97657	145890	259175	LINR	0.14185	0.21713		0.99879
53 Fluorene	1.42251 ++++	1.27604 ++++	1.20199	1.05521	1.00306	++++	AVRG		1.19176		14.20942
54 4-Chlorophenylphenylether	++++ 0.42323	0.54923 0.41993	0.54677	0.49775	0.47244	0.43815	AVRG		0.47821		11.51179
55 2-Methyl-4,6-dinitrophenol	++++ 192321	6627 233267	22507	63790	102054	180111	LINR	0.16828	0.09744		0.99440
56 p-Nitroaniline	++++ 0.23917	0.18949 0.23563	0.21542	0.24544	0.24590	0.24787	AVRG		0.23128		9.28720
133 Diphenylamine	++++ 0.52242	0.66556 0.48580	0.63553	0.59627	0.57330	0.54109	AVRG		0.57428		11.05579
58 1,2-Diphenylhydrazine	++++ 0.69287	0.91332 0.67344	0.88821	0.82452	0.77878	0.77296	AVRG		0.79201		11.46293
59 Tributylphosphate	++++ 1.09452	1.38506 0.98379	1.36173	1.23186	1.16436	1.03122	AVRG		1.16608		14.35346
61 4-Bromophenylphenylether	++++ 0.16100	0.19858 0.15874	0.19790	0.17965	0.17230	0.16333	AVRG		0.17593		9.56696

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
63 Hexachlorobenzene	++++ 0.17657	0.21320 0.17166	0.20518 0.17971	0.19207 0.18609	0.18609 0.17971	0.17971 0.18609	AVRG	0.18921	0.18921		8.09088
207 Atrazine	++++ 0.04082	0.05628 ++++	0.05776	0.05207	0.04780	0.04328	AVRG	0.04967	0.04967		13.87654
65 Pentachlorophenol	++++ 207727	9958 246267	30599	78281	111498	192521	LINR	0.08512	0.10059		0.99529
206 n-Octadecane	++++ 0.41250	0.85815 0.36370	0.78147	0.64201	0.57781	0.45601	AVRG		0.58452		32.14936
68 Phenanthrene	25563 ++++	222684 ++++	438444	786630	1042335	++++	WLINR	-0.00810	1.00987		0.99192
69 Anthracene	1.23956 0.84565	1.12447 ++++	1.06969	0.98413	0.90089	0.88083	AVRG		1.00646		14.37250
72 Di-n-butylphthalate	++++ 0.89326	1.27681 ++++	1.22583	1.09301	1.05689	0.97108	AVRG		1.08615		13.48205
76 Fluoranthene	1.14971 0.80724	1.07248 0.78950	1.02773	0.90989	0.91477	0.87691	AVRG		0.94353		13.58009
77 Benzidine	++++ 0.41946	0.40474 0.43119	0.42345	0.42715	0.45199	0.42132	AVRG		0.42562		3.35852

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R <sup>2</sup>
79 Pyrene	1.57370 1.09153	1.41026 1.11194	1.37492 1.11194	1.21461 1.11194	1.13982 1.11194	1.12621 1.11194	AVRG	1.25537	14.08106		
85 Butylbenzylphthalate	++++ 0.44494	0.57703 0.42862	0.56140 0.42862	0.50224 0.42862	0.48339 0.42862	0.47097 0.42862	AVRG	0.49552	13.30034		
89 Benzo(a)anthracene	1.16319 1.01133	1.04967 1.02297	1.03721 1.02297	0.95779 1.02297	0.98625 1.02297	1.04531 1.02297	AVRG	1.03421	5.86988		
90 3,3'-Dichlorobenzidine	++++ 0.27205	0.23390 0.27081	0.27432 0.27081	0.28379 0.27081	0.28917 0.27081	0.27139 0.27081	AVRG	0.27078	6.54109		
92 Chrysene	1.13845 0.91412	1.04052 0.90574	0.99204 0.90574	1.01411 0.90574	0.96296 0.90574	0.90509 0.90574	AVRG	0.98413	8.21010		
93 bis(2-Ethylhexyl)phthalate	0.73467 0.64776	0.76050 0.63453	0.76255 0.63453	0.74184 0.63453	0.72840 0.63453	0.66707 0.63453	AVRG	0.70967	7.28020		
94 Di-n-octylphthalate	++++ 1.21431	1.21235 1.11955	1.25451 0.92708	1.26931 0.88531	1.22386 0.87806	1.17162 0.96642	AVRG	1.20936	4.18474		
95 Benzo(b)fluoranthene	0.85153 0.99098	0.90273 0.90181	0.92708 0.90181	0.88531 0.90181	0.87806 0.90181	0.96642 0.90181	AVRG	0.91299	5.09194		
96 Benzo(k)fluoranthene	1.06212 0.82347	0.99289 0.83189	0.98020 0.83189	1.02434 0.83189	0.97342 0.83189	0.79724 0.83189	AVRG	0.93570	10.94818		

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	SRSD or R^2
97 Benzo(a)pyrene	0.69791 0.80142	0.74796 0.76892	0.77352	0.81584	0.82276	0.79683	AVRG		0.77814		5.26691
99 Indeno(1,2,3-cd)pyrene	0.53593 0.69280	0.63141 0.70196	0.67122	0.67133	0.78682	0.79308	AVRG		0.68557		12.06162
100 Dibenzo(a,h)anthracene	0.39696 0.55950	0.47611 0.56787	0.51904	0.53216	0.62931	0.63584	AVRG		0.53960		14.58601
101 Benzo(ghi)perylene	0.51064 0.55768	0.54382 0.55831	0.55174	0.54123	0.65503	0.65670	AVRG		0.57189		9.43439
102 1,4-Dioxane	++++ 0.39127	0.48275 0.34554	0.48345	0.43440	0.45103	0.39739	AVRG		0.42655		11.99838
103 Methyl methacrylate	++++ 0.20778	0.25629 0.17994	0.26105	0.23671	0.24289	0.21210	AVRG		0.22811		12.85894
104 Ethyl methacrylate	++++ 0.84134	1.02566 0.75551	1.03558	0.94702	1.01046	0.87027	AVRG		0.92655		11.56168
105 2-Picoline	++++ 1.20594	1.57564 1.07771	1.56517	1.42337	1.51737	1.25720	AVRG		1.37463		14.23886
106 N-Nitrosomethylethylamine	++++ 0.60717	0.61060 0.58009	0.64605	0.61644	0.66466	0.60616	AVRG		0.61874		4.52915

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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
107 Methyl methanesulfonate	++++ 0.56156	0.63267 0.52952	0.64868 0.52952	0.60129 0.52952	0.66087 0.52952	0.55803 0.52952	AVRG	0.59895	8.44307		
108 N-Nitrosodiethylamine	++++ 0.57359	0.65044 0.52841	0.66644 0.52841	0.61622 0.52841	0.65425 0.52841	0.57001 0.52841	AVRG	0.60848	8.58799		
109 Ethyl Methanesulfonate	++++ 0.75604	0.84654 0.72458	0.84891 0.72458	0.80216 0.72458	0.86198 0.72458	0.75371 0.72458	AVRG	0.79913	6.88470		
110 Pentachloroethane	++++ 0.31304	0.35933 0.29260	0.37272 0.29260	0.34580 0.29260	0.35558 0.29260	0.32327 0.29260	AVRG	0.33748	8.49358		
111 N-Nitrosopyrrolidine	++++ 0.53125	0.62429 0.49767	0.66738 0.49767	0.63435 0.49767	0.63690 0.49767	0.54337 0.49767	AVRG	0.59074	11.03048		
113 N-Nitrosomorpholine	++++ 0.79360	1.07660 ++++	1.08965 ++++	1.00489 ++++	1.13968 ++++	0.85773 ++++	AVRG	0.99369	13.94715		
114 o-Toluidine	++++ 1.60866	2.23028 ++++	2.21868 ++++	1.98214 ++++	2.07846 ++++	1.66443 ++++	AVRG	1.96378	13.76238		
115 N-Nitrosopiperidine	++++ 0.15320	0.16639 0.14598	0.17165 0.14598	0.16416 0.14598	0.16097 0.14598	0.15408 0.14598	AVRG	0.15949	5.55471		
116 a,a-Dimethylphenethylamine	++++ 1.22149	1.08404 1.12461	1.20744 1.12461	1.22469 1.12461	1.33267 1.12461	1.20608 1.12461	AVRG	1.20015	6.62173		

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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	MSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
117 Triethylphosphorothioate	++++ 0.10732	0.14310 0.10861	0.13854	0.12618	0.12157	0.10880	AVRG		0.12202		12.09014
118 2,6-Dichloroptenol	++++ 0.21472	0.22113 0.20330	0.23865	0.23610	0.23676	0.21744	AVRG		0.22402		6.01517
119 Hexachloropropene	++++ 0.08660	0.07204 0.08542	0.08289	0.08409	0.09281	0.08765	AVRG		0.08450		7.51884
120 p-Phenylenediamine	++++ 0.22320	0.28583 0.21365	0.31919	0.29258	0.28447	0.24013	AVRG		0.26558		14.99096
121 N-Nitrosodi-n-butylamine	++++ 0.20345	0.28070 0.19264	0.25065	0.23094	0.22472	0.20786	AVRG		0.22728		13.39932
122 Safrrole	++++ 0.18159	0.22763 0.17035	0.22879	0.21293	0.20293	0.18226	AVRG		0.20093		11.66328
123 1,2,4,5-Tetrachlorobenzene	++++ 0.35221	0.46697 0.35803	0.46828	0.40649	0.39985	0.35582	AVRG		0.40109		12.53989
124 Isosafrole	++++ 0.35553	0.41529 0.34619	0.43193	0.40454	0.38346	0.36429	AVRG		0.38589		8.39822
125 1,4-Naphthoquinone	++++ 0.30509	0.39697 0.28374	0.42598	0.38166	0.35997	0.31446	AVRG		0.35255		14.96686



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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
126 m-Dinitrobenzene	++++ 0.19227	0.17458 0.18187	0.19602	0.19855	0.20367	0.20156	AVRG		0.19264		5.56584
127 Pentachlorobenzene	++++ 0.31847	0.40166 0.33061	0.39838	0.35722	0.35786	0.32027	AVRG		0.35492		9.76550
128 1-Naphthylamine	++++ 0.77838	1.07609 0.78537	1.10196	0.98413	0.97105	0.84323	AVRG		0.93432		14.28175
129 2-Naphthylamine	++++ 0.89670	1.23743 0.89454	1.27572	1.15147	1.09659	0.96847	AVRG		1.07442		14.65175
130 2,3,4,6-Tetrachlorophenol	++++ 0.22833	0.23178 0.23456	0.25689	0.25152	0.25386	0.23709	AVRG		0.24201		4.84182
131 5-Nitro-o-toluidine	++++ 0.29310	0.28355 0.29230	0.32447	0.31733	0.30442	0.30536	AVRG		0.30293		4.79281
132 Thionazin	++++ 0.14920	0.19494 0.14847	0.19863	0.18137	0.17170	0.15272	AVRG		0.17101		12.54639
134 Sulfotepp	++++ 0.10732	0.11270 0.10743	0.11325	0.10434	0.09994	0.09583	AVRG		0.10583		6.02664
135 Phorate	++++ ++++	0.55394	0.54197	0.47427	0.45150	0.38069	AVRG		0.48047		14.72182

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	Level 7	Level 8									
136 2,3,5-Trinitrobenzene	++++ 0.14709	0.10909 0.13843	0.14255	0.15222	0.15776	0.14662	AVRG		0.14197		11.12134
137 Phenacetin	++++ 0.33495	0.32326 0.32675	0.36070	0.36180	0.35660	0.33636	AVRG		0.34292		4.78339
138 Diallyate	++++ 0.26680	0.37499 ++++	0.37119	0.33775	0.31695	0.27925	AVRG		0.32449		14.01321
139 Dimethoate	++++ 0.27100	0.30466 0.27007	0.31471	0.30010	0.29511	0.27029	AVRG		0.28942		6.46090
140 4-Aminobiphenyl	++++ 0.56925	0.72075 0.53880	0.70176	0.65506	0.65565	0.57940	AVRG		0.63153		11.05085
141 Pentachloronitrobenzene	++++ 0.06036	0.07228 0.05612	0.07324	0.06798	0.07028	0.06159	AVRG		0.06598		10.03461
142 Pronamide	++++ 0.22614	0.32276 ++++	0.31463	0.26460	0.27538	0.23240	AVRG		0.27265		14.78874
143 Dinoseb	++++ 257584	8121 316258	28182	82403	132641	240245	LINR	0.19568	0.13236		0.99543
144 Disulfoton	++++ 680673	108601 762070	221830	358175	436645	565821	LINR	-0.31325	0.25393		0.99164

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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
145 Methyl parathion	++++ 0.20340	0.21494 0.20046	0.23415 0.20046	0.22654 0.20046	0.21924 0.20046	0.20556 0.20046	AVRG		0.21490		5.86469
146 4-Nitroquinoline-1-oxide	++++ 0.01564	0.01878 0.01570	0.02499 0.01570	0.02463 0.01570	0.02770 0.01570	0.01733 0.01570	AVRG		0.02068		24.05256
147 Methapyrilene	++++ 0.43518	0.66202 0.40096	0.69118 0.40096	0.59337 0.40096	0.69475 0.40096	0.46266 0.40096	AVRG		0.56287		22.60975
148 Isodrin	++++ 0.09500	0.11902 0.09386	0.11822 0.09386	0.10895 0.09386	0.12640 0.09386	0.09240 0.09386	AVRG		0.10769		13.00554
149 Aramite	++++ 0.04879	0.04941 0.04779	0.05625 0.04779	0.05342 0.04779	0.06656 0.04779	0.04959 0.04779	AVRG		0.05312		12.48885
150 Kepone	++++ 0.07386	0.07586 0.07532	0.08408 0.07532	0.07756 0.07532	0.09671 0.07532	0.07327 0.07532	AVRG		0.07952		10.54853
151 p-(Dimethylamino)azobenzene	++++ 0.29488	0.39858 0.27396	0.39437 0.27396	0.36985 0.27396	0.35593 0.27396	0.31136 0.27396	AVRG		0.34270		14.44302
152 Chlorobenzilate	++++ 0.25144	0.29071 0.27162	0.28877 0.27162	0.27142 0.27162	0.26849 0.27162	0.25460 0.27162	AVRG		0.27101		5.56105
153 3,3'-Dimethylbenzidine	++++ 0.48708	0.51382 0.48802	0.55102 0.48802	0.52974 0.48802	0.54850 0.48802	0.49717 0.48802	AVRG		0.51648		5.27185

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 End Cal Date : 02-MAR-2010 15:20  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R <sup>2</sup>
	100	120									
	Level 7	Level 8									
154 Fampbur	++++ 0.28987	0.32454 0.32077	0.34524 0.32077	0.34268 0.32077	0.33921 0.32077	0.30933 0.32077	AVRG	0.32452	6.18871		
155 2-Acetylaminofluorene	++++ 635238	33816 856774	99439	214057	308653	500750	LINR	0.12393	0.34160	0.99953	
157 7,12Dimethylbenz(a)anthracene	++++ 0.43259	0.45282 0.40125	0.48072	0.46653	0.46073	0.43555	AVRG	0.44717	5.89765		
158 3-Methylcholanthrene	++++ 0.38014	0.31974 0.36293	0.36727	0.37146	0.38509	0.37505	AVRG	0.36595	5.93110		
26 Phthalic anhydride	++++ 327158	14924 405155	50787	124222	152717	266193	LINR	0.16127	0.13589	0.99714	
173 Carbazole	1.02001 0.74713	0.85642 0.71431	0.83195	0.87531	0.85677	0.80892	AVRG	0.83885	11.00387		
174 Hexachlorophene	++++ 2679746	399774 ++++	1526773	1518686	++++	2272703	LINR	4.47618	0.07286	0.99355	
179 Dibenzo(a,e)pyrene	++++ 0.22817	0.14426 0.21902	0.16428	0.18045	0.28365	0.27772	AVRG	0.21394	25.31476	<-	
185 (2,3-Dibromopropyl)phosphate	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG	0.000e+00	0.000e+00	<-	

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
 End Cal Date : 02-MAR-2010 15:20  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	%RSD or R^2
184 p-Benzquinone	++++ 0.37398	0.24190 0.30776	0.31360	0.37206	0.29654	0.32057	AVRG		0.31806		14.31597
191 Parathion	++++ 0.06122	0.06161 0.06210	0.06589	0.06626	0.06465	0.05903	AVRG		0.06296		4.27120
192 Methoxychlor	++++ 0.36755	0.33290 0.40760	0.34089	0.36986	0.42092	0.45460	AVRG		0.38490		11.54094
210 m-Toluidine	++++ 1.81965	1.52562 1.84738	1.74475	1.99672	1.74999	1.66523	AVRG		1.76419		8.38688
211 p-Toluidine	++++ 1.35048	1.46088 1.18101	1.38682	1.29602	1.51710	1.53865	AVRG		1.39014		9.16330
212 Cis Diallate	++++ 0.37768	0.38177 0.37220	0.40018	0.38534	0.35084	0.37316	AVRG		0.37731		3.97800
213 Trans Diallate	++++ 0.31388	0.44117 ++++	0.43669	0.39735	0.37289	0.32853	AVRG		0.38175		14.01321
214 1,4-Dinitrobenzene	++++ 0.24895	0.20542 0.23578	0.23664	0.24407	0.25193	0.25251	AVRG		0.23933		6.86021
215 2-Ethoxyethanol	++++ 0.93358	0.93029 0.89529	0.96309	0.97043	0.95078	0.91925	AVRG		0.93753		2.78726

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
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 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
216 Methylenedis(2-chloroaniline)	++++ 254850	13274 312201	25788	76768	134762	251103	LINR	0.22420	0.17317		0.99396
229 2,2'-Dichlorobenzil	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
230 4-Chlorothiobenzil	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
231 4-Chlorothiophenol	++++ ++++	++++ ++++	++++	++++	++++	++++	LINR	0.000e+00	0.000e+00		0.000e+00
232 bis(p-Chlorophenyl) sulfone	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
233 bis(p-Chlorophenyl) disulfide	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
234 Diphenyl disulfide	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
235 Diphenyl sulfide	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
236 Phenyl sulfone	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00

## GEL Laboratories LLC

## INITIAL CALIBRATION DATA

Start Cal Date : 01-MAR-2010 16:52  
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 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
237 Hydroxymethyl phthalimide	++++	++++	++++	++++	++++	++++	LINR	0.000e+00	0.000e+00		0.000e+00 <-
238 Phthalic acid	++++	++++	++++	++++	++++	++++	LINR	0.000e+00	0.000e+00		0.000e+00 <-
239 Thiophenol	++++	++++	++++	++++	++++	++++	LINR	0.000e+00	0.000e+00		0.000e+00 <-
240 bis(Chloromethyl)ether	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
241 Octachlorostyrene	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
243 Dibenzo(a,h)pyrene	++++	0.24764	0.21244	0.22226	0.28171	0.21132	AVRG		0.24120		12.71000 <-
244 Benzo(j)fluoranthene	++++	0.27182	0.84457	0.81626	0.80577	0.80384	AVRG		0.82091		4.44522 <-
245 Dibenzo(a,j)acridine	++++	0.77522	0.54232	0.53885	0.60325	0.53068	AVRG		0.54624		5.18863 <-
246 Dibenzo(a,h)acridine	++++	0.53135	0.52340	0.52919	0.57971	0.50511	AVRG		0.52461		6.04320 <-

## GEL Laboratories LLC

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Start Cal Date : 01-MAR-2010 16:52  
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 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R^2
247 Quinoline	++++	0.63427	0.59770	0.56458	0.55229	0.51902	AVRG		0.55741		10.02456
248 2,4-Toluene Diiocyanate	++++	0.47661					AVRG				
249 Dibenzo(a,i)pyrene	++++	0.06585	0.08968	0.09196	0.08694	0.06790	AVRG		0.08168		14.22308
250 1-Nitropyrene	++++	0.16208	0.13286	0.14491	0.18805	0.14270	AVRG		0.15940		14.62771
251 5-Methylchrysene	++++	28293	67776	153590	217335	277274	LINR	0.12297	0.20618		0.99717
252 Dibenzo(a,l)pyrene	++++	0.60133	0.57357	0.55876	0.55514	0.51071	AVRG		0.55039		6.82746
253 7H-Dibenzo(c,g)carbazole	++++	0.50284	0.26697	0.25402	0.31087	0.24834	AVRG		0.27424		9.41102
254 1-Hexanol	++++	0.30152	0.33708	0.34485	0.41757	0.32785	AVRG		0.35800		8.99751
IM 225 Trichlorophenols	++++	0.26369	0.35297	1.09551	1.03103	0.88412	AVRG		1.02571		11.33638
	++++	0.36771	1.16052	0.31356	0.30411	0.28811	AVRG		0.29610		7.07025
	++++	0.88631	0.29832				AVRG				
	0.27745	0.26522					AVRG				



## GEL Laboratories LLC

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 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSC or R^2
	100 Level 7	120 Level 8									
=====											
M 226 Tetrachlorophenols	++++	0.23178	0.25689	0.25152	0.25386	0.23709	AVRG		0.24201		4.84182
	0.22833	0.23456									
=====											
M 227 Benzo (b, k) fluoranthene	0.95683	0.94781	0.95364	0.95482	0.92574	0.88183					
	0.90722	0.86685					AVRG		0.92434		3.83617
=====											
M 228 TTO Sum Semivolatiles	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
	++++	++++									
=====											
\$ 3 2-Fluorophenol	++++	1.15047	1.17538	1.15165	1.11963	1.06519	AVRG				
	1.06101	1.00631							1.10423		5.56618
=====											
\$ 5 Phenol-d5	++++	1.48395	1.48838	1.44817	1.41290	1.38199	AVRG				
	1.36042	1.28386							1.40852		5.20233
=====											
\$ 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	++++	0.35727	0.35581	0.34820	0.34654	0.33872	AVRG				
	0.33516	0.31750					AVRG		0.34274		4.01565
=====											
\$ 39 2-Fluorobiphenyl	++++	1.22699	1.18610	1.07317	1.03097	0.93678	AVRG				
	0.90344	0.85259							1.03001		13.79971
=====											

## GEL Laboratories LLC

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Start Cal Date : 01-MAR-2010 16:52  
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Method file : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
Cal Date : 05-Mar-2010 08:38 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
\$ 60 2,4,6-Tribromophenol	++++ 0.12294	0.10868 0.12345	0.12467	0.13140	0.13126	0.13077	AVRG	0.12474			6.43117
\$ 81 p-Terphenyl-d14	++++ 0.64932	0.76190 0.66716	0.74607	0.65946	0.63111	0.66381	AVRG	0.68269			7.37318

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

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 01-MAR-2010 20:56  
Lab File ID: s3c0112.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 01:58  
Lab Sample ID: WBN100225-09.1 Quant Type: ISTD  
Method: /chem/MSD3.i/s030110.b/MSD3-8270R-AQA-030110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
\$ 3 2-Fluorophenol	1.10423	1.07835	1.07835 0.000	-2.34344	60.00000	Averaged	
\$ 5 Phenol-d5	1.40852	1.33696	1.33696 0.000	-5.08053	60.00000	Averaged	
\$ 20 Nitrobenzene-d5	0.34274	0.34789	0.34789 0.000	1.50332	60.00000	Averaged	
\$ 39 2-Fluorobiphenyl	1.03001	1.07403	1.07403 0.000	4.27437	60.00000	Averaged	
\$ 60 2,4,6-Tribromophenol	0.12474	0.12517	0.12517 0.000	0.34459	60.00000	Averaged	
\$ 81 p-Terphenyl-d14	0.68269	0.69770	0.69770 0.000	2.19876	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.77640	0.71775	0.71775 0.000	-7.55424	60.00000	Averaged	
2 Pyridine	1.10390	0.82581	0.82581 0.000	-25.19170	60.00000	Averaged	
4 Aniline	0.69729	0.62649	0.62649 0.000	-10.15330	60.00000	Averaged	
6 Phenol	1.42085	1.39362	1.39362 0.001	-1.91598	20.00000	Averaged ccc	
7 bis(2-Chloroethyl) ether	1.21927	1.08834	1.08834 0.000	-10.73868	60.00000	Averaged	
8 2-Chlorophenol	1.16025	1.11153	1.11153 0.000	-4.19884	60.00000	Averaged	
203 n-Decane	1.67637	1.63433	1.63433 0.000	-2.50810	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.24937	1.24765	1.24765 0.000	-0.13736	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.23299	1.23039	1.23039 0.001	-0.21105	20.00000	Averaged ccc	
13 1,2-Dichlorobenzene	1.08077	1.01369	1.01369 0.000	-6.20665	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	2.80759	2.67004	2.67004 0.000	-4.89941	60.00000	Averaged	
12 Benzyl alcohol	0.79688	0.76868	0.76868 0.000	-3.53857	60.00000	Averaged	
15 o-Cresol	0.84018	0.77356	0.77356 0.000	-7.92988	60.00000	Averaged	
18 m,p-Cresols	1.23836	1.21184	1.21184 0.000	-2.14113	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.93061	0.88688	0.88688 0.050	-4.69947	60.00000	Averaged spcc	
19 Hexachloroethane	0.51526	0.49995	0.49995 0.000	-2.97185	60.00000	Averaged	
21 Nitrobenzene	0.32047	0.31754	0.31754 0.000	-0.91566	60.00000	Averaged	
22 Isophorone	0.62733	0.57357	0.57357 0.000	-8.57023	60.00000	Averaged	
23 2-Nitrophenol	0.13576	0.14898	0.14898 0.001	9.73533	20.00000	Averaged ccc	
24 2,4-Dimethylphenol	0.25414	0.26092	0.26092 0.000	2.67111	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.36625	0.33353	0.33353 0.000	-8.93531	60.00000	Averaged	
26 2,4-Dichlorophenol	0.23631	0.23933	0.23933 0.001	1.27783	20.00000	Averaged ccc	
27 Benzoic acid	43.42839	40.00000	0.12462 0.000	8.57096	60.00000	Linear	
28 1,2,4-Trichlorobenzene	0.24337	0.23428	0.23428 0.000	-3.73429	60.00000	Averaged	
30 Naphthalene	0.92686	0.76873	0.76873 0.000	-17.06122	60.00000	Averaged	
204 alpha-Terpineol	0.31413	0.28376	0.28376 0.000	-9.66966	60.00000	Averaged	
31 4-Chloroaniline	0.41856	0.40025	0.40025 0.000	-4.37400	60.00000	Averaged	
32 Hexachlorobutadiene	0.13389	0.12907	0.12907 0.001	-3.59688	20.00000	Averaged ccc	
33 4-Chloro-3-methylphenol	0.24588	0.24664	0.24664 0.001	0.30945	20.00000	Averaged ccc	
34 2-Methylnaphthalene	0.57488	0.53798	0.53798 0.000	-6.41777	60.00000	Averaged	

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 01-MAR-2010 20:56  
Lab File ID: s3c0112.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 01:58  
Lab Sample ID: WBN100225-09.1 Quant Type: ISTD  
Method: /chem/MSD3.i/s030110.b/MSD3-8270R-AQA-030110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.57544	0.50426	0.50426	0.000	-12.36969	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16822	0.13503	0.13503	0.050	-19.72838	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.52733	0.54042	0.54042	0.000	2.48278	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27780	0.29364	0.29364	0.001	5.69929	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31440	0.33277	0.33277	0.000	5.84213	60.00000	Averaged
40 2-Chloronaphthalene	1.04011	0.96244	0.96244	0.000	-7.46732	60.00000	Averaged
42 o-Nitroaniline	0.36880	0.37248	0.37248	0.000	0.99892	60.00000	Averaged
41 m-Nitroaniline	0.27187	0.27104	0.27104	0.000	-0.30501	60.00000	Averaged
43 Dimethylphthalate	1.10182	1.08739	1.08739	0.000	-1.30954	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25644	0.26289	0.26289	0.000	2.51754	60.00000	Averaged
50 2,4-Dinitrotoluene	0.33467	0.33420	0.33420	0.000	-0.14138	60.00000	Averaged
45 Acenaphthylene	1.53996	1.47752	1.47752	0.000	-4.05487	60.00000	Averaged
47 Acenaphthene	35.55508	40.00000	0.85007	0.001	-11.11230	20.00000	Wt Linear ccc
48 2,4-Dinitrophenol	42.13241	40.00000	0.06385	0.050	5.33101	60.00000	Linear spcc
49 Dibenzofuran	1.26706	1.29964	1.29964	0.000	2.57147	60.00000	Averaged
51 Diethylphthalate	1.04971	1.04449	1.04449	0.000	-0.49755	60.00000	Averaged
52 4-Nitrophenol	39.54129	40.00000	0.18384	0.050	-1.14677	60.00000	Linear spcc
53 Fluorene	1.19176	0.99771	0.99771	0.000	-16.28259	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47821	0.47004	0.47004	0.000	-1.70927	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	49.20533	40.00000	0.10347	0.000	23.01333	60.00000	Linear
56 p-Nitroaniline	0.23128	0.24841	0.24841	0.000	7.40769	60.00000	Averaged
133 Diphenylamine	0.57428	0.58798	0.58798	0.001	2.38555	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.79201	0.80253	0.80253	0.000	1.32824	60.00000	Averaged
61 4-Bromophenylphenylether	0.17593	0.16499	0.16499	0.000	-6.21838	60.00000	Averaged
63 Hexachlorobenzene	0.18921	0.17831	0.17831	0.000	-5.76217	60.00000	Averaged
65 Pentachlorophenol	39.05294	40.00000	0.08964	0.001	-2.36766	20.00000	Linear ccc
206 n-Octadecane	0.58452	0.63724	0.63724	0.000	9.01954	60.00000	Averaged
68 Phenanthrene	34.75748	40.00000	0.88569	0.000	-13.10631	60.00000	Wt Linear
69 Anthracene	1.00646	0.93147	0.93147	0.000	-7.45109	60.00000	Averaged
72 Di-n-butylphthalate	1.08615	1.04966	1.04966	0.000	-3.35882	60.00000	Averaged
76 Fluoranthene	0.94353	0.88033	0.88033	0.001	-6.69804	20.00000	Averaged ccc
79 Pyrene	1.25537	1.09496	1.09496	0.000	-12.77832	60.00000	Averaged
85 Butylbenzylphthalate	0.49552	0.55334	0.55334	0.000	11.66996	60.00000	Averaged
89 Benzo(a)anthracene	1.03421	0.89781	0.89781	0.000	-13.18895	60.00000	Averaged
92 Chrysene	0.98413	0.96085	0.96085	0.000	-2.36538	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70967	0.73112	0.73112	0.000	3.02368	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 01-MAR-2010 20:56  
Lab File ID: s3c0112.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 01:58  
Lab Sample ID: WBN100225-09.1 Quant Type: ISTD  
Method: /chem/MSD3.i/s030110.b/MSD3-8270R-AQA-030110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.20936	1.26509	1.26509	0.001	4.60833	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.91299	0.92799	0.92799	0.000	1.64314	60.00000	Averaged
96 Benzo(k)fluoranthene	0.93570	0.87333	0.87333	0.000	-6.66513	60.00000	Averaged
97 Benzo(a)pyrene	0.77814	0.77191	0.77191	0.001	-0.80094	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.68557	0.65230	0.65230	0.000	-4.85246	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.53960	0.51465	0.51465	0.000	-4.62301	60.00000	Averaged
101 Benzo(ghi)perylene	0.57189	0.52431	0.52431	0.000	-8.32032	60.00000	Averaged
126 m-Dinitrobenzene	0.19264	0.20023	0.20023	0.000	3.93755	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24201	0.22585	0.22585	0.000	-6.67725	60.00000	Averaged
143 Dinoseb	40.09992	40.00000	0.10679	0.000	0.24981	60.00000	Linear
173 Carbazole	0.83885	0.87679	0.87679	0.000	4.52287	60.00000	Averaged
184 p-Benzoquinone	0.31806	0.18974	0.18974	0.000	-40.34367	60.00000	Averaged
192 Methoxychlor	0.38490	0.36848	0.36848	0.000	-4.26636	60.00000	Averaged
211 p-Toluidine	1.39014	1.06174	1.06174	0.000	-23.62322	60.00000	Averaged
210 m-Toluidine	1.76419	1.80361	1.80361	0.000	2.23457	60.00000	Averaged
26 Phthalic anhydride	50.15089	40.00000	0.14846	0.000	25.37723	60.00000	Linear
179 Dibenzo(a,e)pyrene	0.21394	0.14792	0.14792	0.000	-30.85583	60.00000	Averaged
214 1,4-Dinitrobenzene	0.23933	0.24591	0.24591	0.000	2.74915	60.00000	Averaged
215 2-Ethoxyethanol	0.93753	0.94761	0.94761	0.000	1.07512	60.00000	Averaged
216 Methylenebis(2-chloroanilin	40.39014	40.00000	0.13604	0.000	0.97535	60.00000	Linear
M 225 Trichlorophenols	0.29610	0.31320	0.31320	0.000	5.77512	60.00000	Averaged
M 226 Tetrachlorophenols	0.24201	0.22585	0.22585	0.000	-6.67725	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.92434	0.90066	0.90066	0.000	-2.56202	60.00000	Averaged

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Data file : /chem/MSD3.i/s030110.b/s3c0112.d  
Lab Smp Id: WBN100225-09.1 Client Smp ID: MEGAICV  
Inj Date : 01-MAR-2010 20:56  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100225-09.1|40PPM|1|SVMF|1|MEGAICV  
Misc Info : |MSD8270|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030110.b/MSD3-8270R-AQA-030110.m  
Meth Date : 08-Mar-2010 15:47 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 01:58 Cal File: s3c0126.d  
Als bottle: 11 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAII.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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	3.874	3.874	(1.000)	277036	40.0000	
* 29 Naphthalene-d8	136	4.741	4.741	(1.000)	1098770	40.0000	
* 46 Acenaphthene-d10	164	5.998	5.998	(1.000)	573689	40.0000	
* 67 Phenanthrene-d10	188	6.987	6.987	(1.000)	872941	40.0000	
* 91 Chrysene-d12	240	8.661	8.661	(1.000)	705848	40.0000	
* 98 Perylene-d12	264	10.127	10.127	(1.000)	653140	40.0000	
\$ 3 2-Fluorophenol	112	3.067	3.067	(0.792)	298743	40.0000	39.1
\$ 5 Phenol-d5	99	3.591	3.591	(0.927)	370387	40.0000	38.0
\$ 20 Nitrobenzene-d5	82	4.244	4.244	(0.895)	382256	40.0000	40.6
\$ 39 2-Fluorobiphenyl	172	5.484	5.484	(0.914)	616160	40.0000	41.7
\$ 60 2,4,6-Tribromophenol	329	6.533	6.533	(1.089)	71809	40.0000	40.1
\$ 81 p-Terphenyl-d14	244	7.907	7.907	(0.913)	492471	40.0000	40.9
1 N-Methyl-N-nitrosomethylamine	74	2.393	2.393	(0.618)	198842	40.0000	37.0
2 Pyridine	79	2.425	2.425	(0.626)	228778	40.0000	29.9
4 Aniline	66	3.661	3.661	(0.945)	173560	40.0000	35.9
6 Phenol	94	3.596	3.596	(0.928)	386084	40.0000	39.2 (Q)
7 bis(2-Chloroethyl) ether	63	3.677	3.677	(0.949)	301509	40.0000	35.7
8 2-Chlorophenol	128	3.741	3.741	(0.965)	307935	40.0000	38.3
203 n-Decane	43	3.719	3.719	(0.960)	452768	40.0000	39.0
9 1,3-Dichlorobenzene	146	3.842	3.842	(0.992)	345645	40.0000	39.9
11 1,4-Dichlorobenzene	146	3.890	3.890	(1.004)	340863	40.0000	39.9
13 1,2-Dichlorobenzene	146	3.992	3.992	(1.030)	280830	40.0000	37.5
14 bis(2-Chloroisopropyl)ether	45	4.019	4.019	(1.037)	739697	40.0000	38.0
12 Benzyl alcohol	108	3.944	3.944	(1.018)	212953	40.0000	38.6
15 o-Cresol	107	3.992	3.992	(1.030)	214303	40.0000	36.8
18 m,p-Cresols	107	4.094	4.094	(1.057)	335724	40.0000	39.1

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	4.115	4.115	(1.062)	245697	40.0000	38.1
19 Hexachloroethane	117	4.217	4.217	(1.088)	138504	40.0000	38.8
21 Nitrobenzene	77	4.254	4.254	(0.897)	348899	40.0000	39.6
22 Isophorone	82	4.409	4.409	(0.930)	630221	40.0000	36.6
23 2-Nitrophenol	139	4.468	4.468	(0.942)	163696	40.0000	43.9
24 2,4-Dimethylphenol	122	4.457	4.457	(0.940)	286695	40.0000	41.1
25 bis(2-Chloroethoxy)methane	93	4.527	4.527	(0.955)	366471	40.0000	36.4
26 2,4-Dichlorophenol	162	4.629	4.629	(0.976)	262966	40.0000	40.5
27 Benzoic acid	105	4.522	4.522	(0.954)	136934	40.0000	43.4
28 1,2,4-Trichlorobenzene	180	4.693	4.693	(0.990)	257422	40.0000	38.5
30 Naphthalene	128	4.757	4.757	(1.003)	844657	40.0000	33.2 (Q)
204 alpha-Terpineol	59	4.736	4.736	(0.999)	311786	40.0000	36.1
31 4-Chloroaniline	127	4.773	4.773	(1.007)	439782	40.0000	38.2
32 Hexachlorobutadiene	225	4.821	4.821	(1.017)	141822	40.0000	38.6
33 4-Chloro-3-methylphenol	107	5.083	5.083	(1.072)	270999	40.0000	40.1
34 2-Methylnaphthalene	142	5.238	5.238	(1.105)	591120	40.0000	37.4
35 1-Methylnaphthalene	142	5.313	5.313	(1.121)	554061	40.0000	35.0
36 Hexachlorocyclopentadiene	237	5.340	5.340	(0.890)	77465	40.0000	32.1
205 2,3-Dichloroaniline	161	5.436	5.436	(0.906)	310033	40.0000	41.0
37 2,4,6-Trichlorophenol	196	5.426	5.426	(0.905)	168456	40.0000	42.3
38 2,4,5-Trichlorophenol	196	5.452	5.452	(0.909)	190904	40.0000	42.3
40 2-Chloronaphthalene	162	5.591	5.591	(0.932)	552142	40.0000	37.0
42 o-Nitroaniline	65	5.650	5.650	(0.942)	213690	40.0000	40.4
41 m-Nitroaniline	138	5.950	5.950	(0.992)	155492	40.0000	39.9
43 Dimethylphthalate	163	5.763	5.763	(0.961)	623823	40.0000	39.5
44 2,6-Dinitrotoluene	165	5.821	5.821	(0.971)	150818	40.0000	41.0
50 2,4-Dinitrotoluene	165	6.105	6.105	(1.018)	191727	40.0000	39.9
45 Acenaphthylene	152	5.902	5.902	(0.984)	847635	40.0000	38.4
47 Acenaphthene	154	6.019	6.019	(1.004)	487675	40.0000	35.6
48 2,4-Dinitrophenol	184	6.019	6.019	(1.004)	36631	40.0000	42.1
49 Dibenzofuran	168	6.137	6.137	(1.023)	745592	40.0000	41.0
51 Diethylphthalate	149	6.249	6.249	(1.042)	599211	40.0000	39.8
52 4-Nitrophenol	139	6.030	6.030	(1.005)	105468	40.0000	39.5
53 Fluorene	166	6.372	6.372	(1.062)	572376	40.0000	33.5
54 4-Chlorophenylphenylether	204	6.351	6.351	(1.059)	269657	40.0000	39.3
55 2-Methyl-4,6-dinitrophenol	198	6.388	6.388	(0.914)	90323	40.0000	49.2
56 p-Nitroaniline	138	6.378	6.378	(1.063)	142509	40.0000	43.0
133 Diphenylamine	169	6.431	6.431	(0.920)	513273	40.0000	41.0
58 1,2-Diphenylhydrazine	77	6.458	6.458	(0.924)	700564	40.0000	40.5
61 4-Bromophenylphenylether	248	6.677	6.677	(0.956)	144025	40.0000	37.5
63 Hexachlorobenzene	284	6.736	6.736	(0.964)	155652	40.0000	37.7
65 Pentachlorophenol	266	6.854	6.854	(0.981)	78254	40.0000	39.0
206 n-Octadecane	57	6.838	6.838	(0.979)	556275	40.0000	43.6
68 Phenanthrene	178	7.003	7.003	(1.002)	773159	40.0000	34.8
69 Anthracene	178	7.035	7.035	(1.007)	813116	40.0000	37.0
72 Di-n-butylphthalate	149	7.282	7.282	(1.042)	916295	40.0000	38.6
76 Fluoranthene	202	7.720	7.720	(1.105)	768476	40.0000	37.3

Compounds	QUANT SIG			EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS	RT					CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	7.859		7.859	(0.907)	772873	40.0000	34.9
85 Butylbenzylphthalate	149	8.175		8.175	(0.944)	390575	40.0000	44.7
89 Benzo(a)anthracene	228	8.645		8.645	(0.998)	633718	40.0000	34.7
92 Chrysene	228	8.683		8.683	(1.002)	678215	40.0000	39.0
93 bis(2-Ethylhexyl)phthalate	149	8.533		8.533	(0.985)	516062	40.0000	41.2
94 Di-n-octylphthalate	149	9.068		9.068	(0.895)	826280	40.0000	41.8
95 Benzo(b)fluoranthene	252	9.656		9.656	(0.954)	606108	40.0000	40.6
96 Benzo(k)fluoranthene	252	9.688		9.688	(0.957)	570408	40.0000	37.3
97 Benzo(a)pyrene	252	10.052		10.052	(0.993)	504166	40.0000	39.7
99 Indeno(1,2,3-cd)pyrene	276	11.764		11.764	(1.162)	426045	40.0000	38.0
100 Dibenzo(a,h)anthracene	278	11.774		11.774	(1.163)	336140	40.0000	38.2
101 Benzo(ghi)perylene	276	12.277		12.277	(1.212)	342448	40.0000	36.7 (Q)
126 m-Dinitrobenzene	168	5.805		5.805	(0.968)	114870	40.0000	41.6
130 2,3,4,6-Tetrachlorophenol	232	6.206		6.206	(1.035)	129566	40.0000	37.3
143 Dinoseb	211	6.945		6.945	(0.994)	93224	40.0000	40.1
173 Carbazole	167	7.121		7.121	(1.019)	765388	40.0000	41.8
184 p-Benzoquinone	54	3.372		3.372	(0.870)	52565	40.0000	23.9
192 Methoxychlor	227	8.517		8.517	(0.983)	260092	40.0000	38.3
211 p-Toluidine	106	4.158		4.158	(1.073)	294141	40.0000	30.6
210 m-Toluidine	106	4.174		4.174	(1.077)	499666	40.0000	40.9
26 Phthalic anhydride	104	5.281		5.281	(1.114)	163118	40.0000	50.2
179 Dibenzo(a,e)pyrene	302	16.182		16.182	(1.598)	96615	40.0000	27.6
214 1,4-Dinitrobenzene	75	5.746		5.746	(0.958)	141075	40.0000	41.1
215 2-Ethoxyethanol	59	2.238		2.238	(0.578)	262522	40.0000	40.4
216 Methylenebis(2-chloroaniline)	231	8.581		8.581	(0.991)	96021	40.0000	40.4 (Q)
M 225 Trichlorophenols	196					359360	80.0000	84.6
M 226 Tetrachlorophenols	232					129566	40.0000	37.3
M 227 Benzo(b,k)fluoranthene	252					1176516	80.0000	78.0

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: /chem/MSD3.i/s030110.b/s3c0112.o

Date : 01-MAR-2010 20:56

Client ID: MEGACITY

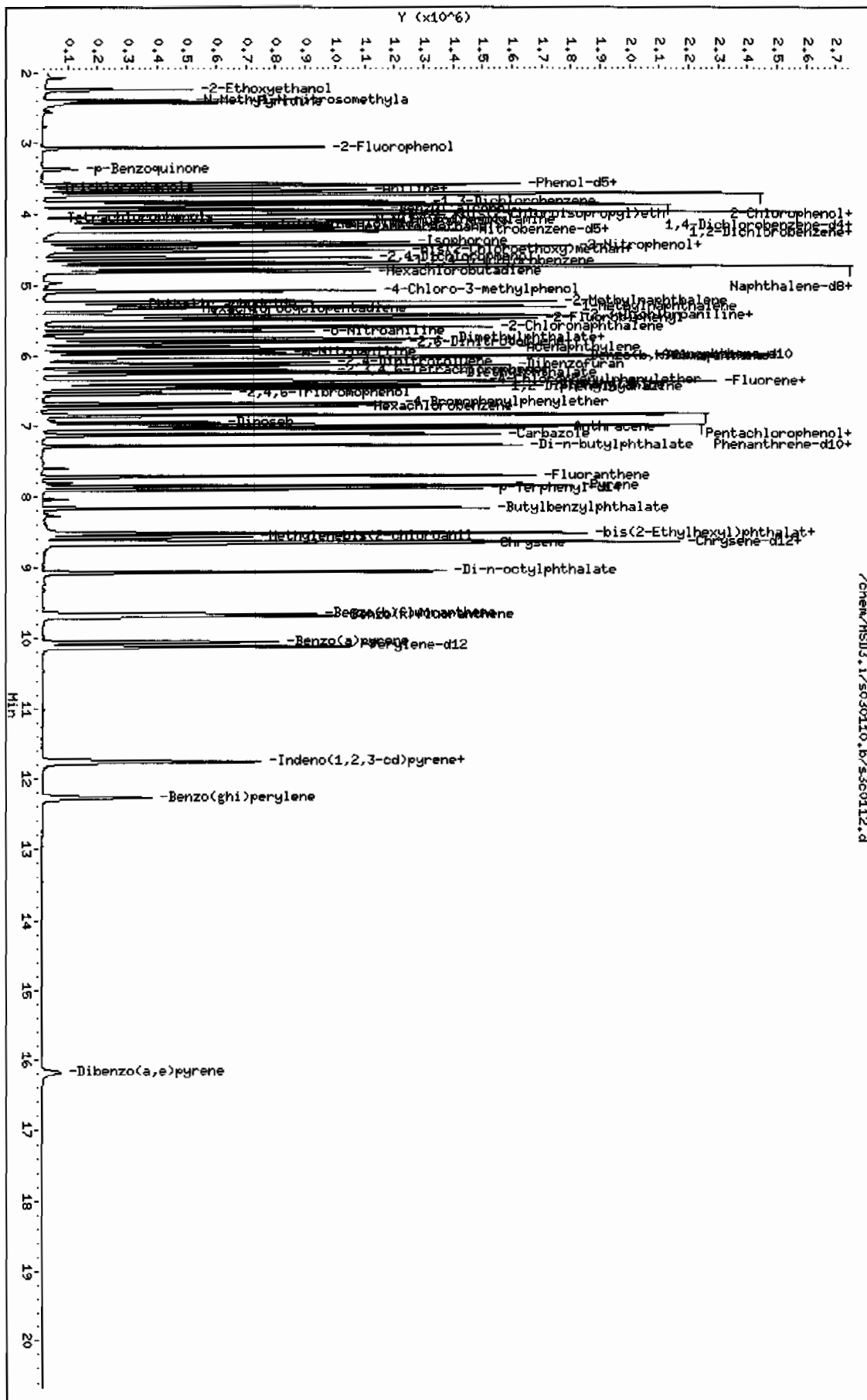
Sample Info: 1|BEN100225-09.1|40PPH11|SVHF11|MEGAICW

Column phase: J&W DB-5MS

Instrument: MSD3.1

Operator: JLD1

Column diameter: 0.20



Data File: /chem/MSD3.i/s030110.b/s3c0127.d  
Report Date: 02-Mar-2010 11:02

Page 4

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 02-MAR-2010 02:19  
Lab File ID: s3c0127.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 01:58  
Lab Sample ID: WBN100218-08.1 Quant Type: ISTD  
Method: /chem/MSD3.i/s030110.b/MSD3-8270R-AQA-030110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.97135	0.84024	0.84024	0.000	-13.49797	60.00000	Averaged
16 Acetophenone	1.29266	1.27259	1.27259	0.000	-1.55260	60.00000	Averaged
189 Caprolactam	0.09530	0.10569	0.10569	0.000	10.89962	60.00000	Averaged
208 1,1'-Biphenyl	1.24395	1.26087	1.26087	0.000	1.36059	60.00000	Averaged
207 Atrazine	0.04967	0.05613	0.05613	0.000	13.00112	60.00000	Averaged
77 Benzidine	0.42562	0.50424	0.50424	0.000	18.47357	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27078	0.31409	0.31409	0.000	15.99598	60.00000	Averaged
102 1,4-Dioxane	0.42655	0.51025	0.51025	0.000	19.62447	60.00000	Averaged
103 Methyl methacrylate	0.22811	0.27838	0.27838	0.000	22.04027	60.00000	Averaged
104 Ethyl methacrylate	0.92655	1.09847	1.09847	0.000	18.55476	60.00000	Averaged
105 2-Picoline	1.37463	1.40209	1.40209	0.000	1.99794	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.61874	0.65637	0.65637	0.000	6.08191	60.00000	Averaged
107 Methyl methanesulfonate	0.59895	0.64637	0.64637	0.000	7.91785	60.00000	Averaged
108 N-Nitrosodiethylamine	0.60848	0.63271	0.63271	0.000	3.98273	60.00000	Averaged
109 Ethyl Methanesulfonate	0.79913	0.94696	0.94696	0.000	18.49829	60.00000	Averaged
110 Pentachloroethane	0.33748	0.46848	0.46848	0.000	38.81774	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.59074	0.63102	0.63102	0.000	6.81848	60.00000	Averaged
113 N-Nitrosomorpholine	0.99369	1.05705	1.05705	0.000	6.37646	60.00000	Averaged
114 o-Toluidine	1.96378	2.01442	2.01442	0.000	2.57900	60.00000	Averaged
115 N-Nitrosopiperidine	0.15949	0.16730	0.16730	0.000	4.89852	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.20015	1.22258	1.22258	0.000	1.86930	60.00000	Averaged
118 2,6-Dichlorophenol	0.22402	0.24389	0.24389	0.000	8.86983	60.00000	Averaged
119 Hexachloropropene	0.08450	0.14073	0.14073	0.000	66.54012	60.00000	Averaged
120 p-Phenylenediamine	0.26558	0.30890	0.30890	0.000	16.31234	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.22728	0.23829	0.23829	0.000	4.84378	60.00000	Averaged
122 Safrole	0.20093	0.24284	0.24284	0.000	20.86015	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.40109	0.42968	0.42968	0.000	7.12647	60.00000	Averaged
124 Isosafrole	0.38589	0.51591	0.51591	0.000	33.69493	60.00000	Averaged
125 1,4-Naphthoquinone	0.35255	0.37068	0.37068	0.000	5.14081	60.00000	Averaged
127 Pentachlorobenzene	0.35492	0.36173	0.36173	0.000	1.91887	60.00000	Averaged
128 1-Naphthylamine	0.93432	1.04621	1.04621	0.000	11.97628	60.00000	Averaged
129 2-Naphthylamine	1.07442	1.22178	1.22178	0.000	13.71517	60.00000	Averaged
131 5-Nitro-o-toluidine	0.30293	0.33853	0.33853	0.000	11.75183	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.14197	0.16897	0.16897	0.000	19.02402	60.00000	Averaged
137 Phenacetin	0.34292	0.37577	0.37577	0.000	9.57841	60.00000	Averaged
138 Diallate	0.32449	0.31117	0.31117	0.000	-4.10383	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 02-MAR-2010 02:19  
Lab File ID: s3c0127.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 01:58  
Lab Sample ID: WBN100218-08.1 Quant Type: ISTD  
Method: /chem/MSD3.i/s030110.b/MSD3-8270R-AQA-030110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	%D / %DRIFT
140 4-Aminobiphenyl	0.63153	0.70624	0.70624	0.000	11.83044	60.00000 Averaged
141 Pentachloronitrobenzene	0.06598	0.07088	0.07088	0.000	7.43436	60.00000 Averaged
142 Pronamide	0.27265	0.27824	0.27824	0.000	2.04872	60.00000 Averaged
146 4-Nitroquinoline-1-oxide	0.02068	0.02449	0.02449	0.000	18.40921	60.00000 Averaged
147 Methapyrilene	0.56287	0.64331	0.64331	0.000	14.29051	60.00000 Averaged
148 Isodrin	0.10769	0.09978	0.09978	0.000	-7.34633	60.00000 Averaged
149 Aramite	0.05312	0.05466	0.05466	0.000	2.90499	60.00000 Averaged
150 Kepone	0.07952	0.07256	0.07256	0.000	-8.76055	60.00000 Averaged
151 p-(Dimethylamino)azobenzene	0.34270	0.36839	0.36839	0.000	7.49386	60.00000 Averaged
152 Chlorobenzilate	0.27101	0.26379	0.26379	0.000	-2.66338	60.00000 Averaged
153 3,3'-Dimethylbenzidine	0.51648	0.58280	0.58280	0.000	12.84210	60.00000 Averaged
155 2-Acetylaminofluorene	44.47964	40.00000	0.33752	0.000	11.19911	60.00000 Linear
157 7,12Dimethylbenz(a)anthracene	0.44717	0.45637	0.45637	0.000	2.05728	60.00000 Averaged
158 3-Methylcholanthrene	0.36595	0.41274	0.41274	0.000	12.78484	60.00000 Averaged
212 Cis Diallate	0.37731	0.47453	0.47453	0.000	25.76665	60.00000 Averaged
213 Trans Diallate	0.38175	0.36609	0.36609	0.000	-4.10383	60.00000 Averaged

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Data file : /chem/MSD3.i/s030110.b/s3c0127.d  
 Lab Smp Id: WBN100218-08.1 Client Smp ID: APICV  
 Inj Date : 02-MAR-2010 02:19  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |WBN100218-08.1|40PPM|1|SVMF|1|APICV  
 Misc Info : |MSD8270|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030110.b/MSD3-8270R-AQA-030110.m  
 Meth Date : 02-Mar-2010 11:01 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 00:34 Cal File: s3c0122.d  
 Als bottle: 26 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	3.875	3.875	(1.000)	313628	40.0000	
* 29 Naphthalene-d8	136	4.741	4.741	(1.000)	1202089	40.0000	
* 46 Acenaphthene-d10	164	5.993	5.993	(1.000)	623902	40.0000	
* 67 Phenanthrene-d10	188	6.988	6.988	(1.000)	931591	40.0000	
* 91 Chrysene-d12	240	8.657	8.657	(1.000)	791581	40.0000	
* 98 Perylene-d12	264	10.122	10.122	(1.000)	606902	40.0000	
209 Benzaldehyde	77	3.602	3.602	(0.930)	263522	40.0000	34.6
16 Acetophenone	105	4.126	4.126	(1.065)	399119	40.0000	39.4
189 Caprolactam	113	5.025	5.025	(1.060)	127050	40.0000	44.4
208 1,1'-Biphenyl	154	5.565	5.565	(0.929)	786660	40.0000	40.5
207 Atrazine	173	6.758	6.758	(0.967)	52288	40.0000	45.2
77 Benzidine	184	7.769	7.769	(0.897)	399148	40.0000	47.4
90 3,3'-Dichlorobenzidine	252	8.587	8.587	(0.992)	248627	40.0000	46.4
102 1,4-Dioxane	88	2.249	2.249	(0.580)	160030	40.0000	47.8
103 Methyl methacrylate	100	2.238	2.238	(0.578)	87309	40.0000	48.8
104 Ethyl methacrylate	69	2.591	2.591	(0.669)	344510	40.0000	47.4
105 2-Picoline	93	2.784	2.784	(0.718)	439736	40.0000	40.8
106 N-Nitrosomethylethylamine	88	2.827	2.827	(0.729)	205856	40.0000	42.4
107 Methyl methanesulfonate	80	2.982	2.982	(0.769)	202720	40.0000	43.2
108 N-Nitrosodiethylamine	102	3.212	3.212	(0.829)	198437	40.0000	41.6
109 Ethyl Methanesulfonate	79	3.367	3.367	(0.869)	296992	40.0000	47.4
110 Pentachloroethane	167	3.698	3.698	(0.954)	146928	40.0000	55.5
111 N-Nitrosopyrrolidine	100	4.121	4.121	(1.063)	197907	40.0000	42.7 (Q)
113 N-Nitrosomorpholine	56	4.142	4.142	(1.069)	331522	40.0000	42.6
114 o-Toluidine	106	4.153	4.153	(1.072)	631779	40.0000	41.0
115 N-Nitrosopiperidine	114	4.356	4.356	(0.919)	201112	40.0000	42.0

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.597	4.597 (0.970)	1469650	40.0000	40.7
118 2,6-Dichlorophenol	162	4.784	4.784 (1.009)	293172	40.0000	43.5
119 Hexachloropropene	213	4.811	4.811 (1.015)	169167	40.0000	66.6
120 p-Phenylenediamine	108	5.025	5.025 (1.060)	371326	40.0000	46.5
121 N-Nitrosodi-n-butylamine	84	4.987	4.987 (1.052)	286445	40.0000	41.9(Q)
122 Safrole	162	5.153	5.153 (1.087)	291916	40.0000	48.3
123 1,2,4,5-Tetrachlorobenzene	216	5.357	5.357 (0.894)	268077	40.0000	42.8
124 Isosafrole	162	5.528	5.528 (0.922)	321880	40.0000	53.5
125 1,4-Naphthoquinone	158	5.715	5.715 (0.954)	231265	40.0000	42.0
127 Pentachlorobenzene	250	6.105	6.105 (1.019)	225687	40.0000	40.8
128 1-Naphthylamine	143	6.191	6.191 (1.033)	652734	40.0000	44.8
129 2-Naphthylamine	143	6.244	6.244 (1.042)	762268	40.0000	45.5
131 5-Nitro-o-toluidine	152	6.367	6.367 (1.062)	211212	40.0000	44.7
136 1,3,5-Trinitrobenzene	75	6.587	6.587 (0.943)	157414	40.0000	47.6
137 Phenacetin	108	6.619	6.619 (0.947)	350060	40.0000	43.8(Q)
138 Diallate	86	6.603	6.603 (0.945)	289886	40.0000	38.4
140 4-Aminobiphenyl	169	6.849	6.849 (0.980)	657925	40.0000	44.7
141 Pentachloronitrobenzene	237	6.859	6.859 (0.982)	66033	40.0000	43.0(Q)
142 Pronamide	173	6.854	6.854 (0.981)	259203	40.0000	40.8
146 4-Nitroquinoline-1-oxide	101	7.464	7.464 (1.068)	22813	40.0000	47.4
147 Methapyrilene	58	7.475	7.475 (1.070)	599303	40.0000	45.7
148 Isodrin	193	7.630	7.630 (1.092)	92956	40.0000	37.1
149 Aramite	185	7.865	7.865 (1.126)	50920	40.0000	41.2
150 Kepone	272	8.282	8.282 (1.185)	67592	40.0000	36.5
151 p-(Dimethylamino)azobenzene	120	7.988	7.988 (0.923)	291607	40.0000	43.0
152 Chlorobenzilate	251	7.999	7.999 (0.924)	208810	40.0000	38.9
153 3,3'-Dimethylbenzidine	212	8.197	8.197 (0.947)	461337	40.0000	45.1
155 2-Acetylaminofluorene	181	8.379	8.379 (0.968)	267174	40.0000	44.5
157 7,12Dimethylbenz(a)anthracene	256	9.625	9.625 (0.951)	276972	40.0000	40.8
158 3-Methylcholanthrene	268	10.481	10.481 (1.035)	250493	40.0000	45.1(Q)
212 Cis Diallate	86	6.667	6.667 (0.954)	66310	6.00000	7.5
213 Trans Diallate	86	6.603	6.603 (0.945)	289886	34.0000	32.6

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3,1/s030110,b/s300127,d

Date : 02-MAR-2010 02:19

Client ID: APICW

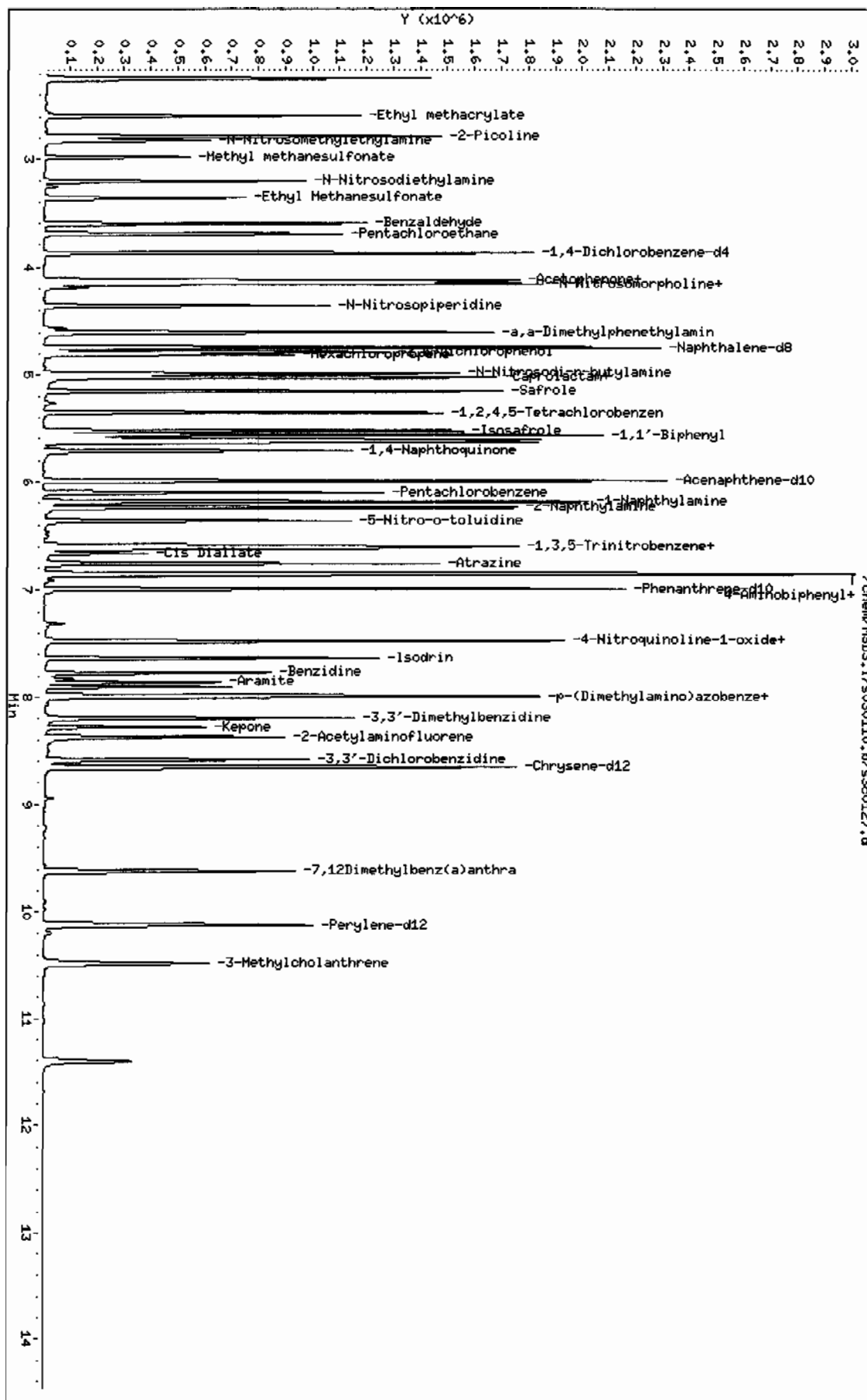
Sample Info: IABNL00218-08.1140PPH11SYMF11APICV

Column phase: 38M DB-5MS

Instrument: MSD3.1

Operator: JLD1

Column diameter: 0.20



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 04-MAR-2010 20:52  
Lab File ID: s3c0423.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100225-09.4 Quant Type: ISTD  
Method: /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.10423	1.05180	1.05180	0.000	-4.74862	60.00000	Averaged
5 Phenol-d5	1.40852	1.30253	1.30253	0.000	-7.52530	60.00000	Averaged
20 Nitrobenzene-d5	0.34274	0.33418	0.33418	0.000	-2.49874	60.00000	Averaged
39 2-Fluorobiphenyl	1.03001	1.03930	1.03930	0.000	0.90208	60.00000	Averaged
60 2,4,6-Tribromophenol	0.12474	0.12995	0.12995	0.000	4.17485	60.00000	Averaged
81 p-Terphenyl-d14	0.68269	0.76085	0.76085	0.000	11.44862	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.77640	0.64798	0.64798	0.000	-16.54056	60.00000	Averaged
2 Pyridine	1.10390	0.71856	0.71856	0.000	-34.90731	60.00000	Averaged
4 Aniline	0.69729	0.56517	0.56517	0.000	-18.94659	60.00000	Averaged
6 Phenol	1.42085	1.37478	1.37478	0.001	-3.24244	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.21927	0.97190	0.97190	0.000	-20.28829	60.00000	Averaged
8 2-Chlorophenol	1.16025	1.13064	1.13064	0.000	-2.55196	60.00000	Averaged
203 n-Decane	1.67637	1.37621	1.37621	0.000	-17.90577	60.00000	Averaged
9 1,3-Dichlorobenzene	1.24937	1.20057	1.20057	0.000	-3.90601	60.00000	Averaged
11 1,4-Dichlorobenzene	1.23299	1.18777	1.18777	0.001	-3.66813	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.08077	1.06122	1.06122	0.000	-1.80960	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.80759	2.36224	2.36224	0.000	-15.86267	60.00000	Averaged
12 Benzyl alcohol	0.79688	0.73617	0.73617	0.000	-7.61841	60.00000	Averaged
15 o-Cresol	0.84018	0.84873	0.84873	0.000	1.01792	60.00000	Averaged
18 m,p-Cresols	1.23836	1.18318	1.18318	0.000	-4.45555	60.00000	Averaged
17 N-Nitrosodipropylamine	0.93061	0.85179	0.85179	0.050	-8.46984	60.00000	Averaged spcc
19 Hexachloroethane	0.51526	0.48909	0.48909	0.000	-5.07924	60.00000	Averaged
21 Nitrobenzene	0.32047	0.30761	0.30761	0.000	-4.01148	60.00000	Averaged
22 Isophorone	0.62733	0.53810	0.53810	0.000	-14.22355	60.00000	Averaged
23 2-Nitrophenol	0.13576	0.14390	0.14390	0.001	5.99025	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.25414	0.25558	0.25558	0.000	0.56974	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.36625	0.30084	0.30084	0.000	-17.85914	60.00000	Averaged
26 2,4-Dichlorophenol	0.23631	0.22660	0.22660	0.001	-4.10951	20.00000	Averaged ccc
27 Benzoic acid	48.56631	40.00000	0.15457	0.000	21.41579	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.24337	0.24381	0.24381	0.000	0.18005	60.00000	Averaged
30 Naphthalene	0.92686	0.78586	0.78586	0.000	-15.21269	60.00000	Averaged
204 alpha-Terpineol	0.31413	0.23978	0.23978	0.000	-23.66915	60.00000	Averaged
31 4-Chloroaniline	0.41856	0.39067	0.39067	0.000	-6.66230	60.00000	Averaged
32 Hexachlorobutadiene	0.13389	0.14010	0.14010	0.001	4.63941	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.24588	0.24805	0.24805	0.001	0.88394	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.57488	0.51500	0.51500	0.000	-10.41561	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 04-MAR-2010 20:52  
Lab File ID: s3c0423.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100225-09.4 Quant Type: ISTD  
Method: /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.57544	0.48603	0.48603	0.000	-15.53761	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.16822	0.18190	0.18190	0.050	8.13573	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.52733	0.50405	0.50405	0.000	-4.41429	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27780	0.27190	0.27190	0.001	-2.12672	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31440	0.33980	0.33980	0.000	8.07854	60.00000	Averaged
40 2-Chloronaphthalene	1.04011	0.90709	0.90709	0.000	-12.78892	60.00000	Averaged
42 o-Nitroaniline	0.36880	0.31866	0.31866	0.000	-13.59559	60.00000	Averaged
41 m-Nitroaniline	0.27187	0.23626	0.23626	0.000	-13.09683	60.00000	Averaged
43 Dimethylphthalate	1.10182	1.02962	1.02962	0.000	-6.55285	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25644	0.24786	0.24786	0.000	-3.34440	60.00000	Averaged
50 2,4-Dinitrotoluene	0.33467	0.31233	0.31233	0.000	-6.67736	60.00000	Averaged
45 Acenaphthylene	1.53996	1.39124	1.39124	0.000	-9.65744	60.00000	Averaged
47 Acenaphthene	37.17525	40.00000	0.88841	0.001	-7.06188	20.00000	Wt Linear ccc
48 2,4-Dinitrophenol	58.31151	40.00000	0.10127	0.050	45.77877	60.00000	Linear spcc
49 Dibenzofuran	1.26706	1.21746	1.21746	0.000	-3.91503	60.00000	Averaged
51 Diethylphthalate	1.04971	0.97908	0.97908	0.000	-6.72881	60.00000	Averaged
52 4-Nitrophenol	39.29065	40.00000	0.18248	0.050	-1.77339	60.00000	Linear spcc
53 Fluorene	1.19176	0.96343	0.96343	0.000	-19.15892	60.00000	Averaged
54 4-Chlorophenylphenylether	0.47821	0.47322	0.47322	0.000	-1.04359	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	60.73442	40.00000	0.13156	0.000	51.83606	60.00000	Linear
56 p-Nitroaniline	0.23128	0.20262	0.20262	0.000	-12.38911	60.00000	Averaged
133 Diphenylamine	0.57428	0.52425	0.52425	0.001	-8.71216	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.79201	0.68119	0.68119	0.000	-13.99209	60.00000	Averaged
61 4-Bromophenylphenylether	0.17593	0.15591	0.15591	0.000	-11.38056	60.00000	Averaged
63 Hexachlorobenzene	0.18921	0.17741	0.17741	0.000	-6.23777	60.00000	Averaged
65 Pentachlorophenol	42.11134	40.00000	0.09734	0.001	5.27836	20.00000	Linear ccc
206 n-Octadecane	0.58452	0.45910	0.45910	0.000	-21.45627	60.00000	Averaged
68 Phenanthrene	33.02172	40.00000	0.84187	0.000	-17.44571	60.00000	Wt Linear
69 Anthracene	1.00646	0.86472	0.86472	0.000	-14.08300	60.00000	Averaged
72 Di-n-butylphthalate	1.08615	0.89830	0.89830	0.000	-17.29487	60.00000	Averaged
76 Fluoranthene	0.94353	0.77811	0.77811	0.001	-17.53213	20.00000	Averaged ccc
79 Pyrene	1.25537	1.20384	1.20384	0.000	-4.10485	60.00000	Averaged
85 Butylbenzylphthalate	0.49552	0.48757	0.48757	0.000	-1.60352	60.00000	Averaged
89 Benzo(a)anthracene	1.03421	0.87041	0.87041	0.000	-15.83863	60.00000	Averaged
92 Chrysene	0.98413	0.84134	0.84134	0.000	-14.50967	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70967	0.63050	0.63050	0.000	-11.15471	60.00000	Averaged



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 04-MAR-2010 20:52  
Lab File ID: s3c0423.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100225-09.4 Quant Type: ISTD  
Method: /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.20936	1.11200	1.11200	0.001	-8.05019	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.91299	0.98722	0.98722	0.000	8.13020	60.00000	Averaged
96 Benzo(k)fluoranthene	0.93570	0.94383	0.94383	0.000	0.86933	60.00000	Averaged
97 Benzo(a)pyrene	0.77814	0.79414	0.79414	0.001	2.05574	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.68557	0.68912	0.68912	0.000	0.51757	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.53960	0.55840	0.55840	0.000	3.48400	60.00000	Averaged
101 Benzo(ghi)perylene	0.57189	0.57139	0.57139	0.000	-0.08776	60.00000	Averaged
126 m-Dinitrobenzene	0.19264	0.18538	0.18538	0.000	-3.76892	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24201	0.23931	0.23931	0.000	-1.11577	60.00000	Averaged
143 Dinoseb	48.66749	40.00000	0.13514	0.000	21.66872	60.00000	Linear
173 Carbazole	0.83885	0.72412	0.72412	0.000	-13.67702	60.00000	Averaged
184 p-Benzoquinone	0.31806	0.06690	0.06690	0.000	-78.96686	60.00000	Averaged <-
192 Methoxychlor	0.38490	0.47601	0.47601	0.000	23.67058	60.00000	Averaged
211 p-Toluidine	1.39014	1.06985	1.06985	0.000	-23.04004	60.00000	Averaged
210 m-Toluidine	1.76419	1.47152	1.47152	0.000	-16.58940	60.00000	Averaged
26 Phthalic anhydride	36.86621	40.00000	0.10333	0.000	-7.83447	60.00000	Linear
179 Dibenzo(a,e)pyrene	0.21394	0.22329	0.22329	0.000	4.37475	60.00000	Averaged
214 1,4-Dinitrobenzene	0.23933	0.22771	0.22771	0.000	-4.85472	60.00000	Averaged
215 2-Ethoxyethanol	0.93753	0.78080	0.78080	0.000	-16.71732	60.00000	Averaged
216 Methylenebis(2-chloroanilin	40.53937	40.00000	0.13668	0.000	1.34843	60.00000	Linear
M 225 Trichlorophenols	0.29610	0.30585	0.30585	0.000	3.29122	60.00000	Averaged
M 226 Tetrachlorophenols	0.24201	0.23931	0.23931	0.000	-1.11577	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.92434	0.96552	0.96552	0.000	4.45517	60.00000	Averaged

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Data file : /chem/MSD3.i/s030410a.b/s3c0423.d  
Lab Smp Id: WBN100225-09.4 Client Smp ID: MEGACVS  
Inj Date : 04-MAR-2010 20:52  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100225-09.4|40PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
Meth Date : 05-Mar-2010 09:07 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAILI.sub  
Target Version: 3.50  
Processing Host: hpc1pl

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	3.719	3.719	(1.000)	310566	40.0000	
* 29 Naphthalene-d8	136	4.580	4.580	(1.000)	1248243	40.0000	
* 46 Acenaphthene-d10	164	5.832	5.832	(1.000)	665833	40.0000	
* 67 Phenanthrene-d10	188	6.832	6.832	(1.000)	1064221	40.0000	
* 91 Chrysene-d12	240	8.458	8.458	(1.000)	692525	40.0000	
* 98 Perylene-d12	264	9.801	9.801	(1.000)	558482	40.0000	
\$ 3 2-Fluorophenol	112	2.912	2.912	(0.783)	326652	40.0000	38.1
\$ 5 Phenol-d5	99	3.436	3.436	(0.924)	404521	40.0000	37.0
\$ 20 Nitrobenzene-d5	82	4.083	4.083	(0.891)	417135	40.0000	39.0
\$ 39 2-Fluorobiphenyl	172	5.324	5.324	(0.913)	691998	40.0000	40.4
\$ 60 2,4,6-Tribromophenol	329	6.372	6.372	(1.093)	86524	40.0000	41.7
\$ 81 p-Terphenyl-d14	244	7.757	7.757	(0.917)	526907	40.0000	44.6
1 N-Methyl-N-nitrosomethylamine	74	2.227	2.227	(0.599)	201240	40.0000	33.4
2 Pyridine	79	2.259	2.259	(0.607)	223159	40.0000	26.0
4 Aniline	66	3.505	3.505	(0.942)	175524	40.0000	32.4
6 Phenol	94	3.446	3.446	(0.927)	426959	40.0000	38.7 (Q)
7 bis(2-Chloroethyl) ether	63	3.527	3.527	(0.948)	301840	40.0000	31.9
8 2-Chlorophenol	128	3.586	3.586	(0.964)	351139	40.0000	39.0
203 n-Decane	43	3.570	3.570	(0.960)	427403	40.0000	32.8
9 1,3-Dichlorobenzene	146	3.687	3.687	(0.991)	372856	40.0000	38.4
11 1,4-Dichlorobenzene	146	3.730	3.730	(1.003)	368880	40.0000	38.5
13 1,2-Dichlorobenzene	146	3.832	3.832	(1.030)	329578	40.0000	39.3
14 bis(2-Chloroisopropyl) ether	45	3.864	3.864	(1.039)	733630	40.0000	33.6
12 Benzyl alcohol	108	3.789	3.789	(1.019)	228630	40.0000	37.0
15 o-Cresol	107	3.837	3.837	(1.032)	263588	40.0000	40.4
18 m,p-Cresols	107	3.939	3.939	(1.059)	367456	40.0000	38.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	3.960	3.960	(1.065)	264537	40.0000	36.6
19 Hexachloroethane	117	4.056	4.056	(1.091)	151895	40.0000	38.0
21 Nitrobenzene	77	4.094	4.094	(0.894)	383978	40.0000	38.4
22 Isophorone	82	4.249	4.249	(0.928)	671685	40.0000	34.3
23 2-Nitrophenol	139	4.308	4.308	(0.940)	179618	40.0000	42.4
24 2,4-Dimethylphenol	122	4.302	4.302	(0.939)	319030	40.0000	40.2
25 bis(2-Chloroethoxy)methane	93	4.372	4.372	(0.954)	375527	40.0000	32.8
26 2,4-Dichlorophenol	162	4.468	4.468	(0.975)	282848	40.0000	38.4
27 Benzoic acid	105	4.366	4.366	(0.953)	192944	40.0000	48.6
28 1,2,4-Trichlorobenzene	180	4.532	4.532	(0.989)	304332	40.0000	40.1
30 Naphthalene	128	4.596	4.596	(1.004)	980948	40.0000	33.9 (Q)
204 alpha-Terpineol	59	4.575	4.575	(0.999)	299306	40.0000	30.5
31 4-Chloroaniline	127	4.612	4.612	(1.007)	487653	40.0000	37.3
32 Hexachlorobutadiene	225	4.661	4.661	(1.018)	174880	40.0000	41.8
33 4-Chloro-3-methylphenol	107	4.928	4.928	(1.076)	309628	40.0000	40.4
34 2-Methylnaphthalene	142	5.078	5.078	(1.109)	642846	40.0000	35.8
35 1-Methylnaphthalene	142	5.147	5.147	(1.124)	606679	40.0000	33.8
36 Hexachlorocyclopentadiene	237	5.174	5.174	(0.887)	121116	40.0000	43.2
205 2,3-Dichloroaniline	161	5.270	5.270	(0.904)	335613	40.0000	38.2
37 2,4,6-Trichlorophenol	196	5.265	5.265	(0.903)	181037	40.0000	39.1
38 2,4,5-Trichlorophenol	196	5.292	5.292	(0.907)	226248	40.0000	43.2
40 2-Chloronaphthalene	162	5.425	5.425	(0.930)	603971	40.0000	34.9
42 o-Nitroaniline	65	5.490	5.490	(0.941)	212174	40.0000	34.6
41 m-Nitroaniline	138	5.784	5.784	(0.992)	157311	40.0000	34.8
43 Dimethylphthalate	163	5.602	5.602	(0.961)	685553	40.0000	37.4
44 2,6-Dinitrotoluene	165	5.655	5.655	(0.970)	165033	40.0000	38.7
50 2,4-Dinitrotoluene	165	5.944	5.944	(1.019)	207957	40.0000	37.3
45 Acenaphthylene	152	5.730	5.730	(0.983)	926333	40.0000	36.1
47 Acenaphthene	154	5.853	5.853	(1.004)	591531	40.0000	37.2
48 2,4-Dinitrophenol	184	5.853	5.853	(1.004)	67431	40.0000	58.3
49 Dibenzofuran	168	5.971	5.971	(1.024)	810623	40.0000	38.4
51 Diethylphthalate	149	6.094	6.094	(1.045)	651902	40.0000	37.3
52 4-Nitrophenol	139	5.875	5.875	(1.007)	121502	40.0000	39.3
53 Fluorene	166	6.212	6.212	(1.065)	641485	40.0000	32.3
54 4-Chlorophenylphenylether	204	6.190	6.190	(1.061)	315088	40.0000	39.6
55 2-Methyl-4,6-dinitrophenol	198	6.233	6.233	(0.912)	140004	40.0000	60.7
56 p-Nitroaniline	138	6.217	6.217	(1.066)	134913	40.0000	35.0
133 Diphenylamine	169	6.271	6.271	(0.918)	557917	40.0000	36.5
58 1,2-Diphenylhydrazine	77	6.303	6.303	(0.922)	724941	40.0000	34.4
61 4-Bromophenylphenylether	248	6.527	6.527	(0.955)	165919	40.0000	35.4
63 Hexachlorobenzene	284	6.575	6.575	(0.962)	188801	40.0000	37.5
65 Pentachlorophenol	266	6.698	6.698	(0.980)	103586	40.0000	42.1
206 n-Octadecane	57	6.693	6.693	(0.980)	488589	40.0000	31.4
68 Phenanthrene	178	6.848	6.848	(1.002)	895938	40.0000	33.0
69 Anthracene	178	6.880	6.880	(1.007)	920253	40.0000	34.4
72 Di-n-butylphthalate	149	7.137	7.137	(1.045)	955988	40.0000	33.1
76 Fluoranthene	202	7.565	7.565	(1.107)	828078	40.0000	33.0

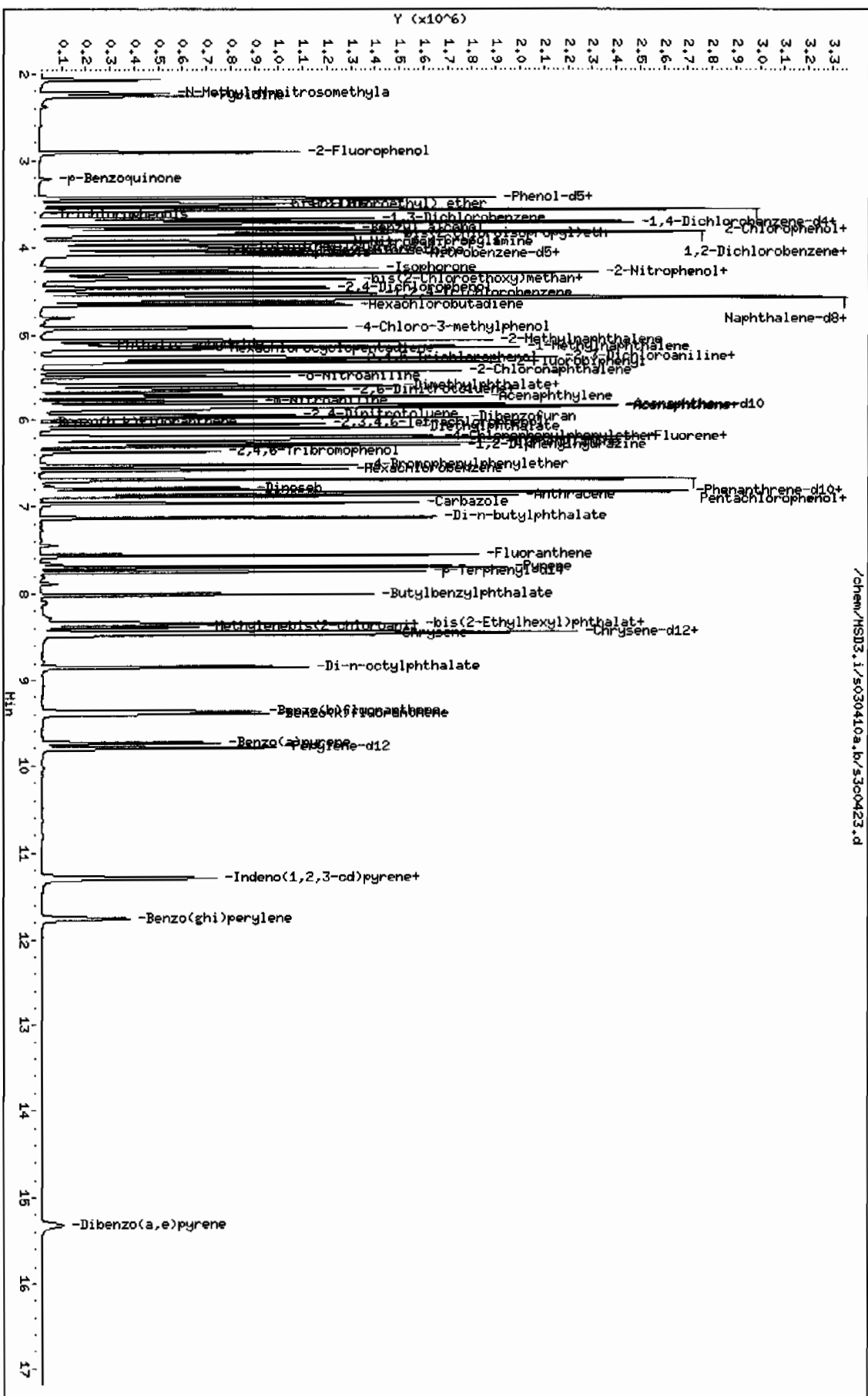
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	7.704	7.704	(0.911)	833690	40.0000	38.4
85 Butylbenzylphthalate	149	8.014	8.014	(0.948)	337654	40.0000	39.4
89 Benzo(a)anthracene	228	8.447	8.447	(0.999)	602779	40.0000	33.7
92 Chrysene	228	8.480	8.480	(1.003)	582646	40.0000	34.2
93 bis(2-Ethylhexyl)phthalate	149	8.351	8.351	(0.987)	436640	40.0000	35.5
94 Di-n-octylphthalate	149	8.849	8.849	(0.903)	621033	40.0000	36.8
95 Benzo(b)fluoranthene	252	9.373	9.373	(0.956)	551343	40.0000	43.2
96 Benzo(k)fluoranthene	252	9.400	9.400	(0.959)	527113	40.0000	40.3
97 Benzo(a)pyrene	252	9.736	9.736	(0.993)	443513	40.0000	40.8
99 Indeno(1,2,3-cd)pyrene	276	11.293	11.293	(1.152)	384860	40.0000	40.2
100 Dibenzo(a,h)anthracene	278	11.304	11.304	(1.153)	311855	40.0000	41.4
101 Benzo(ghi)perylene	276	11.758	11.758	(1.200)	319112	40.0000	40.0 (Q)
126 m-Dinitrobenzene	168	5.639	5.639	(0.967)	123435	40.0000	38.5
130 2,3,4,6-Tetrachlorophenol	232	6.046	6.046	(1.037)	159338	40.0000	39.6
143 Dinoseb	211	6.795	6.795	(0.995)	143823	40.0000	48.7
173 Carbazole	167	6.971	6.971	(1.020)	770626	40.0000	34.5
184 p-Benzoquinone	54	3.216	3.216	(0.865)	20776	40.0000	8.4
192 Methoxychlor	227	8.335	8.335	(0.985)	329650	40.0000	49.5
211 p-Toluidine	106	3.997	3.997	(1.075)	332259	40.0000	30.8
210 m-Toluidine	106	4.019	4.019	(1.081)	457005	40.0000	33.4
26 Phthalic anhydride	104	5.115	5.115	(1.117)	128975	40.0000	36.9
179 Dibenzo(a,e)pyrene	302	15.320	15.320	(1.563)	124706	40.0000	41.7
214 1,4-Dinitrobenzene	75	5.586	5.586	(0.958)	151617	40.0000	38.0
215 2-Ethoxyethanol	59	2.072	2.072	(0.557)	242490	40.0000	33.3
216 MethyleneBis(2-chloroaniline)	231	8.394	8.394	(0.992)	94656	40.0000	40.5 (Q)
M 225 Trichlorophenols	196				407285	80.0000	82.6
M 226 Tetrachlorophenols	232				159338	40.0000	39.6
M 227 Benzo(b,k)fluoranthene	252				1078456	80.0000	83.6

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.i/s030410a.b/s300423.d  
 Date: 04-MAR-2010 20:52  
 Client ID: MEGACVS  
 Sample Info: IWB100225-09.4140PFI11SVHFI11MEGACVS  
 Column phase: J&W DB-5MS

Instrument: MSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 04-MAR-2010 21:16  
Lab File ID: s3c0424.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100218-08.3 Quant Type: ISTD  
Method: /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.97135	0.78432	0.78432	0.000	-19.25465	60.00000	Averaged
16 Acetophenone	1.29266	1.26627	1.26627	0.000	-2.04140	60.00000	Averaged
189 Caprolactam	0.09530	0.09985	0.09985	0.000	4.77369	60.00000	Averaged
208 1,1'-Biphenyl	1.24395	1.29432	1.29432	0.000	4.04949	60.00000	Averaged
207 Atrazine	0.04967	0.04871	0.04871	0.000	-1.92860	60.00000	Averaged
77 Benzidine	0.42562	0.52278	0.52278	0.000	22.82940	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27078	0.30021	0.30021	0.000	10.86895	60.00000	Averaged
102 1,4-Dioxane	0.42655	0.40920	0.40920	0.000	-4.06696	60.00000	Averaged
103 Methyl methacrylate	0.22811	0.24354	0.24354	0.000	6.76579	60.00000	Averaged
104 Ethyl methacrylate	0.92655	0.95776	0.95776	0.000	3.36862	60.00000	Averaged
105 2-Picoline	1.37463	1.25852	1.25852	0.000	-8.44666	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.61874	0.54310	0.54310	0.000	-12.22505	60.00000	Averaged
107 Methyl methanesulfonate	0.59895	0.61120	0.61120	0.000	2.04511	60.00000	Averaged
108 N-Nitrosodiethylamine	0.60848	0.57375	0.57375	0.000	-5.70787	60.00000	Averaged
109 Ethyl Methanesulfonate	0.79913	0.86880	0.86880	0.000	8.71862	60.00000	Averaged
110 Pentachloroethane	0.33748	0.43430	0.43430	0.000	28.68883	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.59074	0.58761	0.58761	0.000	-0.53045	60.00000	Averaged
113 N-Nitrosomorpholine	0.99369	0.98410	0.98410	0.000	-0.96516	60.00000	Averaged
114 o-Toluidine	1.96378	1.90773	1.90773	0.000	-2.85380	60.00000	Averaged
115 N-Nitrosopiperidine	0.15949	0.15531	0.15531	0.000	-2.61880	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.20015	1.02493	1.02493	0.000	-14.59973	60.00000	Averaged
118 2,6-Dichlorophenol	0.22402	0.23422	0.23422	0.000	4.55456	60.00000	Averaged
119 Hexachloropropene	0.08450	0.16824	0.16824	0.000	99	60.00000	Averaged
120 p-Phenylenediamine	0.26558	0.30321	0.30321	0.000	14.17112	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.22728	0.22968	0.22968	0.000	1.05397	60.00000	Averaged
122 Saffrole	0.20093	0.23305	0.23305	0.000	15.98791	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.40109	0.44619	0.44619	0.000	11.24216	60.00000	Averaged
124 Isosaffrole	0.38589	0.45900	0.45900	0.000	18.94528	60.00000	Averaged
125 1,4-Naphthoquinone	0.35255	0.34016	0.34016	0.000	-3.51369	60.00000	Averaged
127 Pentachlorobenzene	0.35492	0.37796	0.37796	0.000	6.49091	60.00000	Averaged
128 1-Naphthylamine	0.93432	0.98702	0.98702	0.000	5.64112	60.00000	Averaged
129 2-Naphthylamine	1.07442	1.11226	1.11226	0.000	3.52191	60.00000	Averaged
131 5-Nitro-o-toluidine	0.30293	0.28838	0.28838	0.000	-4.80536	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.14197	0.17876	0.17876	0.000	25.91833	60.00000	Averaged
137 Phenacetin	0.34292	0.30277	0.30277	0.000	-11.70870	60.00000	Averaged
138 Diallate	0.32449	0.25921	0.25921	0.000	-20.11755	60.00000	Averaged

GEL Laboratories LLC  
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 04-MAR-2010 21:16  
 Lab File ID: s3c0424.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
 Analysis Type: Init. Cal. Times: 16:52 15:20  
 Lab Sample ID: WBN100218-08.3 Quant Type: ISTD  
 Method: /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.63153	0.62128	0.62128	0.000	-1.62247	60.00000	Averaged
141 Pentachloronitrobenzene	0.06598	0.07459	0.07459	0.000	13.04883	60.00000	Averaged
142 Pronamide	0.27265	0.28040	0.28040	0.000	2.84117	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02068	0.02432	0.02432	0.000	17.57523	60.00000	Averaged
147 Methapyrilene	0.56287	0.53446	0.53446	0.000	-5.04727	60.00000	Averaged
148 Isodrin	0.10769	0.08291	0.08291	0.000	-23.01286	60.00000	Averaged
149 Aramite	0.05312	0.03672	0.03672	0.000	-30.87298	60.00000	Averaged
150 Kepone	0.07952	0.06324	0.06324	0.000	-20.47655	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.34270	0.39453	0.39453	0.000	15.12167	60.00000	Averaged
152 Chlorobenzilate	0.27101	0.32080	0.32080	0.000	18.37315	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.51648	0.56748	0.56748	0.000	9.87438	60.00000	Averaged
155 2-Acetylaminofluorene	42.38242	40.00000	0.31961	0.000	5.95604	60.00000	Linear
157 7,12Dimethylbenz(a)anthracene	0.44717	0.47598	0.47598	0.000	6.44339	60.00000	Averaged
158 3-Methylcholanthrene	0.36595	0.41282	0.41282	0.000	12.80660	60.00000	Averaged
212 Cis Diallate	0.37731	0.34855	0.34855	0.000	-7.62226	60.00000	Averaged
213 Trans Diallate	0.38175	0.30495	0.30495	0.000	-20.11755	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030410a.b/s3c0424.d  
 Lab Smp Id: WBN100218-08.3 Client Smp ID: APCVS  
 Inj Date : 04-MAR-2010 21:16  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |WBN100218-08.3|40PPM|1|SVMF|1|APCVS  
 Misc Info : |MSD8270|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 05-Mar-2010 09:00 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.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					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.720	3.720	(1.000)	240152	40.0000	
* 29 Naphthalene-d8	136	4.581	4.581	(1.000)	916409	40.0000	
* 46 Acenaphthene-d10	164	5.827	5.827	(1.000)	527352	40.0000	
* 67 Phenanthrene-d10	188	6.833	6.833	(1.000)	868820	40.0000	
* 91 Chrysene-d12	240	8.453	8.453	(1.000)	538836	40.0000	
* 98 Perylene-d12	264	9.796	9.796	(1.000)	447236	40.0000	
209 Benzaldehyde	77	3.447	3.447	(0.927)	188356	40.0000	32.3
16 Acetophenone	105	3.971	3.971	(1.068)	304097	40.0000	39.2
189 Caproactam	113	4.859	4.859	(1.061)	91506	40.0000	41.9
208 1,1'-Biphenyl	154	5.399	5.399	(0.927)	682562	40.0000	41.6
207 Atrazine	173	6.608	6.608	(0.967)	42322	40.0000	39.2
77 Benzidine	184	7.619	7.619	(0.901)	281693	40.0000	49.1
90 3,3'-Dichlorobenzidine	252	8.394	8.394	(0.993)	161762	40.0000	44.3
102 1,4-Dioxane	88	2.067	2.067	(0.556)	98270	40.0000	38.4
103 Methyl methacrylate	100	2.062	2.062	(0.554)	58487	40.0000	42.7
104 Ethyl methacrylate	69	2.431	2.431	(0.653)	230008	40.0000	41.3
105 2-Picoline	93	2.623	2.623	(0.705)	302236	40.0000	36.6
106 N-Nitrosomethylethylamine	88	2.671	2.671	(0.718)	130426	40.0000	35.1
107 Methyl methanesulfonate	80	2.827	2.827	(0.760)	146780	40.0000	40.8
108 N-Nitrosodiethylamine	102	3.057	3.057	(0.822)	137787	40.0000	37.7
109 Ethyl Methanesulfonate	79	3.217	3.217	(0.865)	208645	40.0000	43.5
110 Pentachloroethane	167	3.543	3.543	(0.953)	104297	40.0000	51.5
111 N-Nitrosopyrrolidine	100	3.960	3.960	(1.065)	141116	40.0000	39.8(Q)
113 N-Nitrosomorpholine	56	3.982	3.982	(1.070)	236334	40.0000	39.6
114 o-Toluidine	106	3.998	3.998	(1.075)	458146	40.0000	38.8
115 N-Nitrosopiperidine	114	4.196	4.196	(0.916)	142330	40.0000	39.0



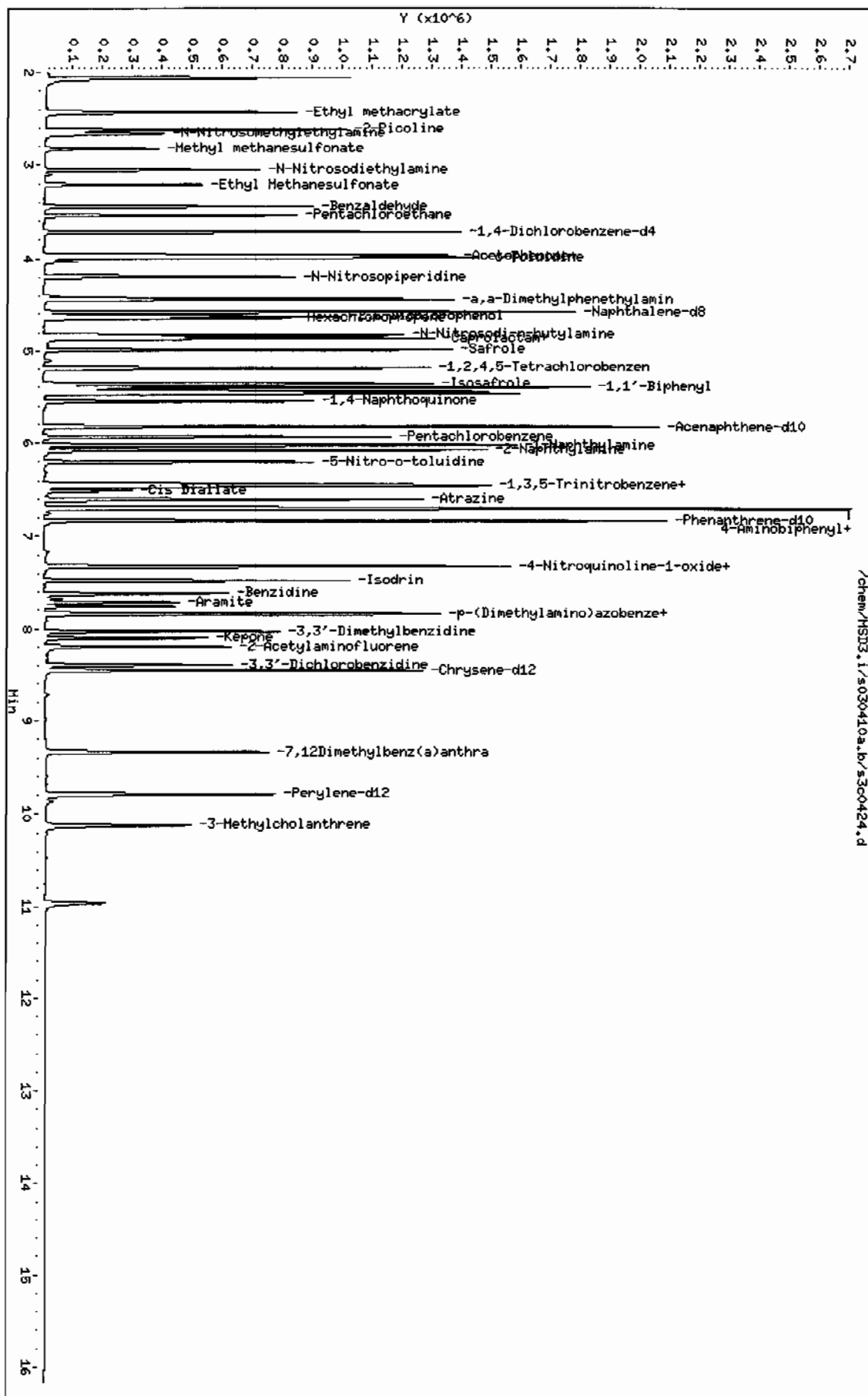
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.436	4.436	(0.968)	939253	40.0000	34.2
118 2,6-Dichlorophenol	162	4.624	4.624	(1.009)	214640	40.0000	41.8
119 Hexachloropropene	213	4.650	4.650	(1.015)	154179	40.0000	79.6
120 p-Phenylenediamine	108	4.864	4.864	(1.062)	277868	40.0000	45.7
121 N-Nitrosodi-n-butylamine	84	4.827	4.827	(1.054)	210477	40.0000	40.4 (Q)
122 Safrole	162	4.993	4.993	(1.090)	213570	40.0000	46.4
123 1,2,4,5-Tetrachlorobenzene	216	5.191	5.191	(0.891)	235297	40.0000	44.5
124 Isosafrole	162	5.362	5.362	(0.920)	242053	40.0000	47.6
125 1,4-Naphthoquinone	158	5.549	5.549	(0.952)	179386	40.0000	38.6
127 Pentachlorobenzene	250	5.939	5.939	(1.019)	199319	40.0000	42.6
128 1-Naphthylamine	143	6.025	6.025	(1.034)	520508	40.0000	42.2
129 2-Naphthylamine	143	6.079	6.079	(1.043)	586551	40.0000	41.4
131 5-Nitro-o-toluidine	152	6.207	6.207	(1.065)	152076	40.0000	38.1
136 1,3,5-Trinitrobenzene	75	6.432	6.432	(0.941)	155311	40.0000	50.4
137 Phenacetin	108	6.464	6.464	(0.946)	263051	40.0000	35.3 (Q)
138 Diallylate	86	6.448	6.448	(0.944)	225207	40.0000	32.0
140 4-Aminobiphenyl	169	6.694	6.694	(0.980)	539780	40.0000	39.4
141 Pentachloronitrobenzene	237	6.704	6.704	(0.981)	64802	40.0000	45.2 (Q)
142 Pronamide	173	6.704	6.704	(0.981)	243615	40.0000	41.1
146 4-Nitroquinoline-1-oxide	101	7.309	7.309	(1.070)	21126	40.0000	47.0
147 Methapyrilene	58	7.325	7.325	(1.072)	464353	40.0000	38.0
148 Isodrin	193	7.474	7.474	(1.094)	72034	40.0000	30.8
149 Aramite	185	7.715	7.715	(1.129)	31901	40.0000	27.6
150 Kepone	272	8.100	8.100	(1.186)	54943	40.0000	31.8
151 p-(Dimethylamino)azobenzene	120	7.833	7.833	(0.927)	212585	40.0000	46.0
152 Chlorobenzilate	251	7.844	7.844	(0.928)	172858	40.0000	47.3
153 3,3'-Dimethylbenzidine	212	8.031	8.031	(0.950)	305777	40.0000	43.9
155 2-Acetylaminofluorene	181	8.197	8.197	(0.970)	172217	40.0000	42.4
157 7,12Dimethylbenz(a)anthracene	256	9.341	9.341	(0.954)	212877	40.0000	42.6
158 3-Methylcholanthrene	268	10.122	10.122	(1.033)	184628	40.0000	45.1 (Q)
212 Cis Diallylate	86	6.512	6.512	(0.953)	45424	6.00000	5.5
213 Trans Diallylate	86	6.448	6.448	(0.944)	225207	34.0000	27.2

## QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.1/s030410a.b/s300424.d  
 Date: 04-MAR-2010 21:16  
 Client ID: APCVS  
 Sample Info: I0000218-08.3140PH111SWF111APCVS  
 Column Phase: J&W DB-SHS

Instrument: MSD3.1  
 Operator: JLDI  
 Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 05-MAR-2010 09:42  
Lab File ID: s3c0503.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100225-09.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.10423	1.13127	1.13127	0.000	2.44906	60.0000	Averaged
5 Phenol-d5	1.40852	1.39371	1.39371	0.000	-1.05164	60.0000	Averaged
20 Nitrobenzene-d5	0.34274	0.35952	0.35952	0.000	4.89630	60.0000	Averaged
39 2-Fluorobiphenyl	1.03001	1.10009	1.10009	0.000	6.80430	60.0000	Averaged
60 2,4,6-Tribromophenol	0.12474	0.14842	0.14842	0.000	18.98370	60.0000	Averaged
81 p-Terphenyl-d14	0.68269	0.71176	0.71176	0.000	4.25800	60.0000	Averaged
1 N-Methyl-N-nitrosomethylami	0.77640	0.69344	0.69344	0.000	-10.68560	60.0000	Averaged
2 Pyridine	1.10390	0.79530	0.79530	0.000	-27.95560	60.0000	Averaged
4 Aniline	0.69729	0.60246	0.60246	0.000	-13.59956	60.0000	Averaged
6 Phenol	1.42085	1.47509	1.47509	0.001	3.81748	20.0000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.21927	1.05795	1.05795	0.000	-13.23111	60.0000	Averaged
8 2-Chlorophenol	1.16025	1.22430	1.22430	0.000	5.52039	60.0000	Averaged
203 n-Decane	1.67637	1.68449	1.68449	0.000	0.48416	60.0000	Averaged
9 1,3-Dichlorobenzene	1.24937	1.31008	1.31008	0.000	4.85937	60.0000	Averaged
11 1,4-Dichlorobenzene	1.23299	1.29983	1.29983	0.001	5.42083	20.0000	Averaged ccc
13 1,2-Dichlorobenzene	1.08077	1.17467	1.17467	0.000	8.68799	60.0000	Averaged
14 bis(2-Chloroisopropyl)ether	2.80759	2.66260	2.66260	0.000	-5.16451	60.0000	Averaged
12 Benzyl alcohol	0.79688	0.80537	0.80537	0.000	1.06462	60.0000	Averaged
15 o-Cresol	0.84018	0.92901	0.92901	0.000	10.57204	60.0000	Averaged
18 m,p-Cresols	1.23836	1.28847	1.28847	0.000	4.04699	60.0000	Averaged
17 N-Nitrosodipropylamine	0.93061	0.91597	0.91597	0.050	-1.57325	60.0000	Averaged spcc
19 Hexachloroethane	0.51526	0.54382	0.54382	0.000	5.54302	60.0000	Averaged
21 Nitrobenzene	0.32047	0.33184	0.33184	0.000	3.54931	60.0000	Averaged
22 Isophorone	0.62733	0.58702	0.58702	0.000	-6.42600	60.0000	Averaged
23 2-Nitrophenol	0.13576	0.15429	0.15429	0.001	13.64904	20.0000	Averaged ccc
24 2,4-Dimethylphenol	0.25414	0.27333	0.27333	0.000	7.55241	60.0000	Averaged
25 bis(2-Chloroethoxy)methane	0.36625	0.32711	0.32711	0.000	-10.68647	60.0000	Averaged
26 2,4-Dichlorophenol	0.23631	0.24114	0.24114	0.001	2.04619	20.0000	Averaged ccc
27 Benzoic acid	43.52582	40.00000	0.12519	0.000	8.81455	60.0000	Linear
28 1,2,4-Trichlorobenzene	0.24337	0.25708	0.25708	0.000	5.63170	60.0000	Averaged
30 Naphthalene	0.92686	0.85096	0.85096	0.000	-8.18931	60.0000	Averaged
204 alpha-Terpineol	0.31413	0.27759	0.27759	0.000	-11.63469	60.0000	Averaged
31 4-Chloroaniline	0.41856	0.40524	0.40524	0.000	-3.18102	60.0000	Averaged
32 Hexachlorobutadiene	0.13389	0.15150	0.15150	0.001	13.15027	20.0000	Averaged ccc
33 4-Chloro-3-methylphenol	0.24588	0.27579	0.27579	0.001	12.16562	20.0000	Averaged ccc
34 2-Methylnaphthalene	0.57488	0.55627	0.55627	0.000	-3.23731	60.0000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 05-MAR-2010 09:42  
Lab File ID: s3c0503.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100225-09.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.57544	0.52903	0.52903	0.000	-8.06506	Averaged
36 Hexachlorocyclopentadiene	0.16822	0.14818	0.14818	0.050	-11.90966	Averaged spcc
205 2,3-Dichloroaniline	0.52733	0.53531	0.53531	0.000	1.51467	Averaged
37 2,4,6-Trichlorophenol	0.27780	0.30121	0.30121	0.001	8.42518	Averaged ccc
38 2,4,5-Trichlorophenol	0.31440	0.34003	0.34003	0.000	8.15420	Averaged
40 2-Chloronaphthalene	1.04011	0.96333	0.96333	0.000	-7.38175	Averaged
42 o-Nitroaniline	0.36880	0.36150	0.36150	0.000	-1.98028	Averaged
41 m-Nitroaniline	0.27187	0.22949	0.22949	0.000	-15.58625	Averaged
43 Dimethylphthalate	1.10182	1.13154	1.13154	0.000	2.69739	Averaged
44 2,6-Dinitrotoluene	0.25644	0.26681	0.26681	0.000	4.04571	Averaged
50 2,4-Dinitrotoluene	0.33467	0.35439	0.35439	0.000	5.89230	Averaged
45 Acenaphthylene	1.53996	1.53278	1.53278	0.000	-0.46596	Averaged
47 Acenaphthene	41.74860	40.00000	0.99663	0.001	4.37149	Wt Linear ccc
48 2,4-Dinitrophenol	62.92468	40.00000	0.11194	0.050	57.31169	Linear spcc
49 Dibenzofuran	1.26706	1.35264	1.35264	0.000	6.75389	Averaged
51 Diethylphthalate	1.04971	1.11508	1.11508	0.000	6.22746	Averaged
52 4-Nitrophenol	45.61006	40.00000	0.21678	0.050	14.02516	Linear spcc
53 Fluorene	1.19176	1.10959	1.10959	0.000	-6.89477	Averaged
54 4-Chlorophenylphenylether	0.47821	0.52916	0.52916	0.000	10.65343	Averaged
55 2-Methyl-4,6-dinitrophenol	60.63904	40.00000	0.13132	0.000	51.59761	Linear
56 p-Nitroaniline	0.23128	0.20219	0.20219	0.000	-12.57840	Averaged
133 Diphenylamine	0.57428	0.52471	0.52471	0.001	-8.63235	Averaged ccc
58 1,2-Diphenylhydrazine	0.79201	0.71984	0.71984	0.000	-9.11243	Averaged
61 4-Bromophenylphenylether	0.17593	0.16225	0.16225	0.000	-7.77234	Averaged
63 Hexachlorobenzene	0.18921	0.18575	0.18575	0.000	-1.82744	Averaged
65 Pentachlorophenol	44.66613	40.00000	0.10376	0.001	11.66533	Linear ccc
206 n-Octadecane	0.58452	0.55910	0.55910	0.000	-4.34972	Averaged
68 Phenanthrene	36.40407	40.00000	0.92727	0.000	-8.98981	Wt Linear
69 Anthracene	1.00646	0.93504	0.93504	0.000	-7.09635	Averaged
72 Di-n-butylphthalate	1.08615	1.07166	1.07166	0.000	-1.33348	Averaged
76 Fluoranthene	0.94353	0.95293	0.95293	0.001	0.99603	Averaged ccc
79 Pyrene	1.25537	1.09562	1.09562	0.000	-12.72534	Averaged
85 Butylbenzylphthalate	0.49552	0.55193	0.55193	0.000	11.38538	Averaged
89 Benzo(a)anthracene	1.03421	1.00877	1.00877	0.000	-2.46009	Averaged
92 Chrysene	0.98413	0.89646	0.89646	0.000	-8.90854	Averaged
93 bis(2-Ethylhexyl)phthalate	0.70967	0.76082	0.76082	0.000	7.20791	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 05-MAR-2010 09:42  
Lab File ID: s3c0503.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100225-09.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.20936	1.44730	1.44730	0.001	19.67542	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.91299	0.97851	0.97851	0.000	7.17652	60.00000	Averaged
96 Benzo(k)fluoranthene	0.93570	1.09113	1.09113	0.000	16.61098	60.00000	Averaged
97 Benzo(a)pyrene	0.77814	0.87925	0.87925	0.001	12.99273	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.68557	0.77891	0.77891	0.000	13.61519	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.53960	0.62014	0.62014	0.000	14.92593	60.00000	Averaged
101 Benzo(ghi)perylene	0.57189	0.63563	0.63563	0.000	11.14437	60.00000	Averaged
126 m-Dinitrobenzene	0.19264	0.20386	0.20386	0.000	5.82051	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24201	0.26736	0.26736	0.000	10.47832	60.00000	Averaged
143 Dinoseb	50.86304	40.00000	0.14241	0.000	27.15761	60.00000	Linear
173 Carbazole	0.83885	0.69340	0.69340	0.000	-17.33925	60.00000	Averaged
184 p-Benzoquinone	0.31806	0.03974	0.03974	0.000	-87.50487	60.00000	Averaged <-
192 Methoxychlor	0.38490	0.59339	0.59339	0.000	54.16615	60.00000	Averaged
211 p-Toluidine	1.39014	0.92765	0.92765	0.000	-33.26912	60.00000	Averaged
210 m-Toluidine	1.76419	1.65275	1.65275	0.000	-6.31675	60.00000	Averaged
26 Phthalic anhydride	46.51915	40.00000	0.13612	0.000	16.29787	60.00000	Linear
179 Dibenzo(a,e)pyrene	0.21394	0.25430	0.25430	0.000	18.86951	60.00000	Averaged
214 1,4-Dinitrobenzene	0.23933	0.25411	0.25411	0.000	6.17641	60.00000	Averaged
215 2-Ethoxyethanol	0.93753	0.86269	0.86269	0.000	-7.98230	60.00000	Averaged
216 Methylenebis(2-chloroanilin	34.84574	40.00000	0.11203	0.000	-12.88564	60.00000	Linear
M 225 Trichlorophenols	0.29610	0.32062	0.32062	0.000	8.28132	60.00000	Averaged
M 226 Tetrachlorophenols	0.24201	0.26736	0.26736	0.000	10.47832	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.92434	1.03482	1.03482	0.000	11.95170	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0503.d  
Lab Smp Id: WBN100225-09.2 Client Smp ID: MEGACVS  
Inj Date : 05-MAR-2010 09:42  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100225-09.2|40PPM|1|SVMF|1|MEGACVS  
Misc Info : |MSD8270|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 07-Mar-2010 14:06 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 2 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: MEGAILI.sub  
Target Version: 3.50  
Processing Host: hpclp1

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====		=====	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4		152	3.703	3.703	(1.000)	230288	40.0000	
* 29 Naphthalene-d8		136	4.564	4.564	(1.000)	943721	40.0000	
* 46 Acenaphthene-d10		164	5.811	5.811	(1.000)	514118	40.0000	
* 67 Phenanthrene-d10		188	6.816	6.816	(1.000)	894626	40.0000	
* 91 Chrysene-d12		240	8.437	8.437	(1.000)	791776	40.0000	
* 98 Perylene-d12		264	9.763	9.763	(1.000)	694468	40.0000	
\$ 3 2-Fluorophenol		112	2.896	2.896	(0.782)	260519	40.0000	41.0
\$ 5 Phenol-d5		99	3.420	3.420	(0.923)	320955	40.0000	39.6
\$ 20 Nitrobenzene-d5		82	4.062	4.062	(0.890)	339290	40.0000	42.0
\$ 39 2-Fluorobiphenyl		172	5.302	5.302	(0.913)	565576	40.0000	42.7
\$ 60 2,4,6-Tribromophenol		329	6.356	6.356	(1.094)	76306	40.0000	47.6
\$ 81 p-Terphenyl-d14		244	7.741	7.741	(0.918)	563554	40.0000	41.7
1 N-Methyl-N-nitrosomethylamine		74	2.211	2.211	(0.597)	159690	40.0000	35.7
2 Pyridine		79	2.243	2.243	(0.606)	183147	40.0000	28.8
4 Aniline		66	3.489	3.489	(0.942)	138739	40.0000	34.6
6 Phenol		94	3.430	3.430	(0.926)	339695	40.0000	41.5(Q)
7 bis(2-Chloroethyl) ether		63	3.505	3.505	(0.947)	243633	40.0000	34.7
8 2-Chlorophenol		128	3.564	3.564	(0.962)	281942	40.0000	42.2
203 n-Decane		43	3.553	3.553	(0.960)	387918	40.0000	40.2
9 1,3-Dichlorobenzene		146	3.666	3.666	(0.990)	301696	40.0000	41.9
11 1,4-Dichlorobenzene		146	3.714	3.714	(1.003)	299336	40.0000	42.2
13 1,2-Dichlorobenzene		146	3.816	3.816	(1.030)	270513	40.0000	43.5
14 bis(2-Chloroisopropyl)ether		45	3.848	3.848	(1.039)	613164	40.0000	37.9
12 Benzyl alcohol		108	3.773	3.773	(1.019)	185466	40.0000	40.4
15 o-Cresol		107	3.821	3.821	(1.032)	213939	40.0000	44.2
18 m,p-Cresols		107	3.923	3.923	(1.059)	296720	40.0000	41.6

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	3.944	3.944	(1.065)	210937	40.0000	39.4
19 Hexachloroethane	117	4.040	4.040	(1.091)	125236	40.0000	42.2
21 Nitrobenzene	77	4.078	4.078	(0.893)	313169	40.0000	41.4
22 Isophorone	82	4.227	4.227	(0.926)	553984	40.0000	37.4
23 2-Nitrophenol	139	4.292	4.292	(0.940)	145611	40.0000	45.4
24 2,4-Dimethylphenol	122	4.286	4.286	(0.939)	257946	40.0000	43.0
25 bis(2-Chloroethoxy)methane	93	4.356	4.356	(0.954)	308705	40.0000	35.7
26 2,4-Dichlorophenol	162	4.447	4.447	(0.974)	227572	40.0000	40.8
27 Benzoic acid	105	4.340	4.340	(0.951)	118147	40.0000	43.5
28 1,2,4-Trichlorobenzene	180	4.511	4.511	(0.988)	242608	40.0000	42.2
30 Naphthalene	128	4.575	4.575	(1.002)	803069	40.0000	36.7 (Q)
204 alpha-Terpineol	59	4.554	4.554	(0.998)	261964	40.0000	35.3
31 4-Chloroaniline	127	4.596	4.596	(1.007)	382436	40.0000	38.7
32 Hexachlorobutadiene	225	4.639	4.639	(1.016)	142970	40.0000	45.3
33 4-Chloro-3-methylphenol	107	4.912	4.912	(1.076)	260269	40.0000	44.9
34 2-Methylnaphthalene	142	5.056	5.056	(1.108)	524961	40.0000	38.7
35 1-Methylnaphthalene	142	5.131	5.131	(1.124)	499253	40.0000	36.8
36 Hexachlorocyclopentadiene	237	5.158	5.158	(0.888)	76183	40.0000	35.2
205 2,3-Dichloroaniline	161	5.254	5.254	(0.904)	275215	40.0000	40.6
37 2,4,6-Trichlorophenol	196	5.244	5.244	(0.902)	154857	40.0000	43.4
38 2,4,5-Trichlorophenol	196	5.276	5.276	(0.908)	174818	40.0000	43.3
40 2-Chloronaphthalene	162	5.409	5.409	(0.931)	495266	40.0000	37.0
42 o-Nitroaniline	65	5.468	5.468	(0.941)	185852	40.0000	39.2
41 m-Nitroaniline	138	5.768	5.768	(0.993)	117987	40.0000	33.8
43 Dimethylphthalate	163	5.581	5.581	(0.960)	581744	40.0000	41.1
44 2,6-Dinitrotoluene	165	5.634	5.634	(0.970)	137172	40.0000	41.6
50 2,4-Dinitrotoluene	165	5.928	5.928	(1.020)	182200	40.0000	42.4
45 Acenaphthylene	152	5.714	5.714	(0.983)	788032	40.0000	39.8
47 Acenaphthene	154	5.832	5.832	(1.004)	512385	40.0000	41.7
48 2,4-Dinitrophenol	184	5.837	5.837	(1.005)	57552	40.0000	62.9
49 Dibenzofuran	168	5.955	5.955	(1.025)	695416	40.0000	42.7
51 Diethylphthalate	149	6.073	6.073	(1.045)	573283	40.0000	42.5
52 4-Nitrophenol	139	5.859	5.859	(1.008)	111453	40.0000	45.6
53 Fluorene	166	6.196	6.196	(1.066)	570461	40.0000	37.2
54 4-Chlorophenylphenylether	204	6.174	6.174	(1.063)	272051	40.0000	44.3
55 2-Methyl-4,6-dinitrophenol	198	6.212	6.212	(0.911)	117485	40.0000	60.6
56 p-Nitroaniline	138	6.196	6.196	(1.066)	103947	40.0000	35.0
133 Diphenylamine	169	6.255	6.255	(0.918)	469417	40.0000	36.5
58 1,2-Diphenylhydrazine	77	6.287	6.287	(0.922)	643989	40.0000	36.4
61 4-Bromophenylphenylether	248	6.506	6.506	(0.954)	145157	40.0000	36.9
63 Hexachlorobenzene	284	6.559	6.559	(0.962)	166179	40.0000	39.3
65 Pentachlorophenol	266	6.682	6.682	(0.980)	92826	40.0000	44.7
206 n-Octadecane	57	6.672	6.672	(0.979)	500182	40.0000	38.3
68 Phenanthrene	178	6.832	6.832	(1.002)	829556	40.0000	36.4
69 Anthracene	178	6.864	6.864	(1.007)	836509	40.0000	37.2
72 Di-n-butylphthalate	149	7.116	7.116	(1.044)	958737	40.0000	39.5
76 Fluoranthene	202	7.549	7.549	(1.107)	852512	40.0000	40.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
79 Pyrene	202	7.688	7.688	(0.911)	867487	40.0000	34.9
85 Butylbenzylphthalate	149	7.993	7.993	(0.947)	437006	40.0000	44.6
89 Benzo(a)anthracene	228	8.426	8.426	(0.999)	798720	40.0000	39.0(H)
92 Chrysene	228	8.453	8.453	(1.002)	709794	40.0000	36.4
93 bis(2-Ethylhexyl)phthalate	149	8.330	8.330	(0.987)	602397	40.0000	42.9
94 Di-n-octylphthalate	149	8.822	8.822	(0.904)	1005106	40.0000	47.9
95 Benzo(b)fluoranthene	252	9.341	9.341	(0.957)	679544	40.0000	42.9(H)
96 Benzo(k)fluoranthene	252	9.367	9.367	(0.959)	757752	40.0000	46.6
97 Benzo(a)pyrene	252	9.699	9.699	(0.993)	610608	40.0000	45.2(H)
99 Indeno(1,2,3-cd)pyrene	276	11.239	11.239	(1.151)	540929	40.0000	45.4
100 Dibenzo(a,h)anthracene	278	11.245	11.245	(1.152)	430666	40.0000	46.0
101 Benzo(ghi)perylene	276	11.694	11.694	(1.198)	441423	40.0000	44.4(Q)
126 m-Dinitrobenzene	168	5.623	5.623	(0.968)	104807	40.0000	42.3
130 2,3,4,6-Tetrachlorophenol	232	6.030	6.030	(1.038)	137457	40.0000	44.2
143 Dinoseb	211	6.779	6.779	(0.994)	127403	40.0000	50.9
173 Carbazole	167	6.955	6.955	(1.020)	620335	40.0000	33.1
184 p-Benzoquinone	54	3.200	3.200	(0.864)	9152	40.0000	5.0
192 Methoxychlor	227	8.314	8.314	(0.985)	469832	40.0000	61.7(H)
211 p-Toluidine	106	3.981	3.981	(1.075)	213627	40.0000	26.7
210 m-Toluidine	106	4.003	4.003	(1.081)	380609	40.0000	37.5
26 Phthalic anhydride	104	5.099	5.099	(1.117)	128457	40.0000	46.5
179 Dibenzo(a,e)pyrene	302	15.208	15.208	(1.558)	176606	40.0000	47.5
214 1,4-Dinitrobenzene	75	5.565	5.565	(0.958)	130643	40.0000	42.5
215 2-Ethoxyethanol	59	2.056	2.056	(0.555)	198668	40.0000	36.8
216 Methylenebis(2-chloroaniline)	231	8.367	8.367	(0.992)	88705	40.0000	34.8(Q)
M 225 Trichlorophenols	196				329675	80.0000	86.6
M 226 Tetrachlorophenols	232				137457	40.0000	44.2
M 227 Benzo(b,k)fluoranthene	252				1437296	80.0000	89.6

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
H - Operator selected an alternate compound hit.

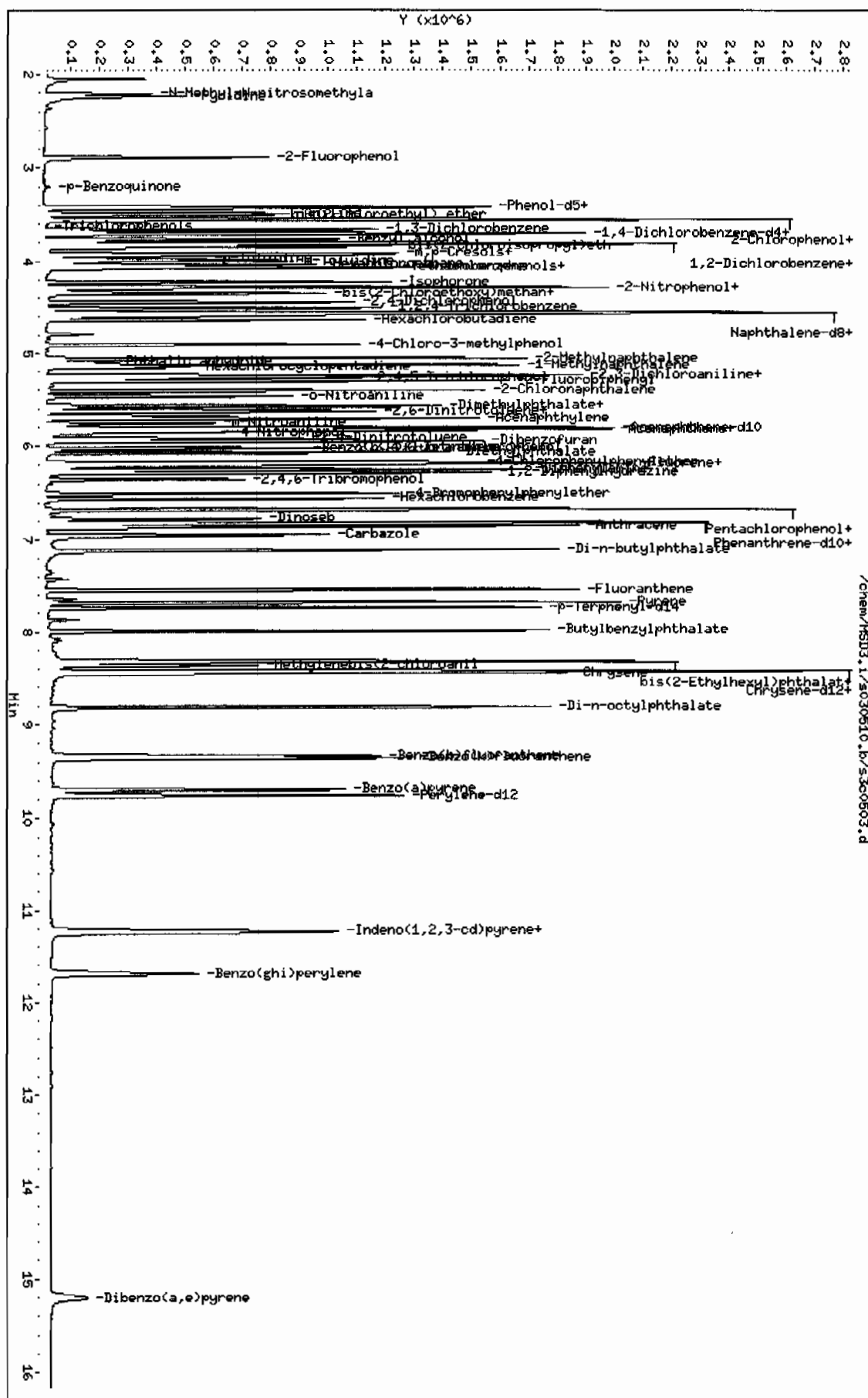


Page 1

Client ID: MEGALYS

Instrument: MSD3.1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 05-MAR-2010 10:33  
Lab File ID: s3c0505.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100218-08.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.97135	0.76044	0.76044	0.000	-21.71329	60.00000	Averaged
16 Acetophenone	1.29266	1.21632	1.21632	0.000	-5.90558	60.00000	Averaged
189 Caprolactam	0.09530	0.09890	0.09890	0.000	3.77356	60.00000	Averaged
208 1,1'-Biphenyl	1.24395	1.23804	1.23804	0.000	-0.47450	60.00000	Averaged
207 Atrazine	0.04967	0.04560	0.04560	0.000	-8.20392	60.00000	Averaged
77 Benzidine	0.42562	0.43809	0.43809	0.000	2.93137	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.27078	0.30814	0.30814	0.000	13.79886	60.00000	Averaged
102 1,4-Dioxane	0.42655	0.43925	0.43925	0.000	2.97759	60.00000	Averaged
103 Methyl methacrylate	0.22811	0.25263	0.25263	0.000	10.74906	60.00000	Averaged
104 Ethyl methacrylate	0.92655	0.98893	0.98893	0.000	6.73291	60.00000	Averaged
105 2-Picoline	1.37463	1.22170	1.22170	0.000	-11.12521	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.61874	0.52682	0.52682	0.000	-14.85621	60.00000	Averaged
107 Methyl methanesulfonate	0.59895	0.59657	0.59657	0.000	-0.39754	60.00000	Averaged
108 N-Nitrosodiethylamine	0.60848	0.54125	0.54125	0.000	-11.04905	60.00000	Averaged
109 Ethyl Methanesulfonate	0.79913	0.81297	0.81297	0.000	1.73212	60.00000	Averaged
110 Pentachloroethane	0.33748	0.43566	0.43566	0.000	29.09205	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.59074	0.57546	0.57546	0.000	-2.58810	60.00000	Averaged
113 N-Nitrosomorpholine	0.99369	0.96156	0.96156	0.000	-3.23326	60.00000	Averaged
114 o-Toluidine	1.96378	1.83377	1.83377	0.000	-6.62017	60.00000	Averaged
115 N-Nitrosopiperidine	0.15949	0.15144	0.15144	0.000	-5.04603	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.20015	0.97691	0.97691	0.000	-18.60039	60.00000	Averaged
118 2,6-Dichlorophenol	0.22402	0.22698	0.22698	0.000	1.32328	60.00000	Averaged
119 Hexachloropropene	0.08450	0.15916	0.15916	0.000	88.35112	60.00000	Averaged
120 p-Phenylenediamine	0.26558	0.28825	0.28825	0.000	8.53675	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.22728	0.23403	0.23403	0.000	2.96810	60.00000	Averaged
122 Safrole	0.20093	0.22467	0.22467	0.000	11.81627	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.40109	0.42585	0.42585	0.000	6.17144	60.00000	Averaged
124 Isosafrole	0.38589	0.44645	0.44645	0.000	15.69388	60.00000	Averaged
125 1,4-Naphthoquinone	0.35255	0.34797	0.34797	0.000	-1.29808	60.00000	Averaged
127 Pentachlorobenzene	0.35492	0.35728	0.35728	0.000	0.66439	60.00000	Averaged
128 1-Naphthylamine	0.93432	0.98082	0.98082	0.000	4.97743	60.00000	Averaged
129 2-Naphthylamine	1.07442	1.09212	1.09212	0.000	1.64788	60.00000	Averaged
131 5-Nitro-o-toluidine	0.30293	0.29730	0.29730	0.000	-1.85978	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.14197	0.17952	0.17952	0.000	26.45463	60.00000	Averaged
137 Phenacetin	0.34292	0.31747	0.31747	0.000	-7.42073	60.00000	Averaged
138 Diallate	0.32449	0.24813	0.24813	0.000	-23.53236	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 05-MAR-2010 10:33  
Lab File ID: s3c0505.d Init. Cal. Date(s): 01-MAR-2010 02-MAR-2010  
Analysis Type: Init. Cal. Times: 16:52 15:20  
Lab Sample ID: WBN100218-08.2 Quant Type: ISTD  
Method: /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.63153	0.62884	0.62884	0.000	-0.42594	60.00000	Averaged
141 Pentachloronitrobenzene	0.06598	0.07246	0.07246	0.000	9.82580	60.00000	Averaged
142 Pronamide	0.27265	0.27478	0.27478	0.000	0.78200	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.02068	0.02111	0.02111	0.000	2.09108	60.00000	Averaged
147 Methapyrilene	0.56287	0.55896	0.55896	0.000	-0.69466	60.00000	Averaged
148 Isodrin	0.10769	0.09025	0.09025	0.000	-16.19481	60.00000	Averaged
149 Aramite	0.05312	0.04853	0.04853	0.000	-8.64224	60.00000	Averaged
150 Kepone	0.07952	0.07200	0.07200	0.000	-9.45875	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.34270	0.34920	0.34920	0.000	1.89506	60.00000	Averaged
152 Chlorobenzilate	0.27101	0.28852	0.28852	0.000	6.46228	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.51648	0.54929	0.54929	0.000	6.35294	60.00000	Averaged
155 2-Acetylaminofluorene	45.48478	40.00000	0.34610	0.000	13.71194	60.00000	Linear
157 7,12Dimethylbenz(a)anthracene	0.44717	0.45455	0.45455	0.000	1.65093	60.00000	Averaged
158 3-Methylcholanthrene	0.36595	0.42543	0.42543	0.000	16.25324	60.00000	Averaged
212 Cis Diallate	0.37731	0.33985	0.33985	0.000	-9.92778	60.00000	Averaged
213 Trans Diallate	0.38175	0.29192	0.29192	0.000	-23.53236	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030510.b/s3c0505.d  
Lab Smp Id: WBN100218-08.2 Client Smp ID: APCVS  
Inj Date : 05-MAR-2010 10:33  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |WBN100218-08.2|40PPM|1|SVMF|1|APCVS  
Misc Info : |MSD8270|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030510.b/MSD3-8270R-AQA-030210.m  
Meth Date : 05-Mar-2010 15:35 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 4 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: AP12.sub  
Target Version: 3.50  
Processing Host: hpc1p1

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.698	3.698	(1.000)	294358	40.0000		
* 29 Naphthalene-d8	136	4.559	4.559	(1.000)	1093907	40.0000		
* 46 Acenaphthene-d10	164	5.806	5.806	(1.000)	629284	40.0000		
* 67 Phenanthrene-d10	188	6.817	6.817	(1.000)	1090205	40.0000		
* 91 Chrysene-d12	240	8.432	8.432	(1.000)	903713	40.0000		
* 98 Perylene-d12	264	9.758	9.758	(1.000)	724109	40.0000		
209 Benzaldehyde	77	3.431	3.431	(0.928)	223841	40.0000		31.3
16 Acetophenone	105	3.955	3.955	(1.069)	358033	40.0000		37.6
189 Caprolactam	113	4.843	4.843	(1.062)	108187	40.0000		41.5
208 1,1'-Biphenyl	154	5.383	5.383	(0.927)	779081	40.0000		39.8
207 Atrazine	173	6.592	6.592	(0.967)	49708	40.0000		36.7
77 Benzidine	184	7.603	7.603	(0.902)	395909	40.0000		41.2
90 3,3'-Dichlorobenzidine	252	8.373	8.373	(0.993)	278470	40.0000		45.5
102 1,4-Dioxane	88	2.072	2.072	(0.560)	129296	40.0000		41.2
103 Methyl methacrylate	100	2.062	2.062	(0.557)	74363	40.0000		44.3
104 Ethyl methacrylate	69	2.425	2.425	(0.656)	291100	40.0000		42.7
105 2-Picoline	93	2.613	2.613	(0.706)	359617	40.0000		35.5
106 N-Nitrosomethylethylamine	88	2.655	2.655	(0.718)	155073	40.0000		34.0
107 Methyl methanesulfonate	80	2.810	2.810	(0.760)	175604	40.0000		39.8
108 N-Nitrosodiethylamine	102	3.040	3.040	(0.822)	159321	40.0000		35.6
109 Ethyl Methanesulfonate	79	3.196	3.196	(0.864)	239305	40.0000		40.7
110 Pentachloroethane	167	3.527	3.527	(0.954)	128239	40.0000		51.6
111 N-Nitrosopyrrolidine	100	3.944	3.944	(1.067)	169390	40.0000		39.0(Q)
113 N-Nitrosomorpholine	56	3.966	3.966	(1.072)	283044	40.0000		38.7
114 o-Toluidine	106	3.976	3.976	(1.075)	539785	40.0000		37.4
115 N-Nitrosopiperidine	114	4.180	4.180	(0.917)	165663	40.0000		38.0

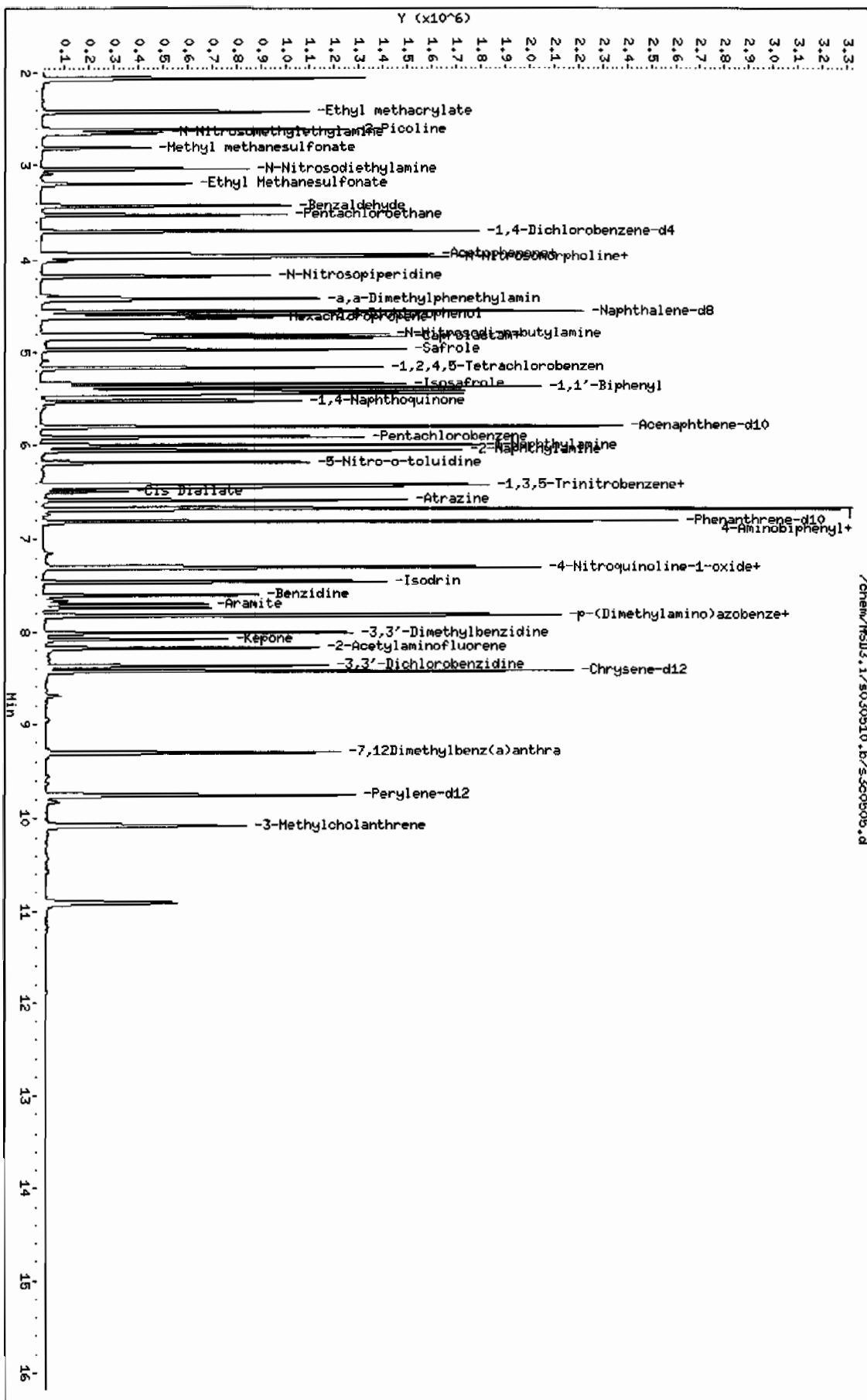
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.426	4.426	(0.971)	1068653	40.0000	32.6
118 2,6-Dichlorophenol	162	4.602	4.602	(1.009)	248295	40.0000	40.5
119 Hexachloropropene	213	4.629	4.629	(1.015)	174104	40.0000	75.3
120 p-Phenylenediamine	108	4.843	4.843	(1.062)	315319	40.0000	43.4
121 N-Nitrosodi-n-butylamine	84	4.811	4.811	(1.055)	256003	40.0000	41.2 (QH)
122 Safrole	162	4.977	4.977	(1.091)	245767	40.0000	44.7
123 1,2,4,5-Tetrachlorobenzene	216	5.169	5.169	(0.890)	267979	40.0000	42.5
124 Isosafrole	162	5.346	5.346	(0.921)	280944	40.0000	46.3
125 1,4-Napthoquinone	158	5.533	5.533	(0.953)	218975	40.0000	39.5
127 Pentachlorobenzene	250	5.918	5.918	(1.019)	224832	40.0000	40.3
128 1-Naphthylamine	143	6.009	6.009	(1.035)	617215	40.0000	42.0
129 2-Naphthylamine	143	6.062	6.062	(1.044)	687255	40.0000	40.6
131 5-Nitro-o-toluidine	152	6.191	6.191	(1.066)	187086	40.0000	39.2
136 1,3,5-Trinitrobenzene	75	6.421	6.421	(0.942)	195716	40.0000	50.6
137 Phenacetin	108	6.447	6.447	(0.946)	346110	40.0000	37.0 (Q)
138 Diallate	86	6.431	6.431	(0.944)	270512	40.0000	30.6
140 4-Aminobiphenyl	169	6.678	6.678	(0.980)	685560	40.0000	39.8
141 Pentachloronitrobenzene	237	6.688	6.688	(0.981)	78996	40.0000	43.9 (Q)
142 Pronamide	173	6.688	6.688	(0.981)	299570	40.0000	40.3
146 4-Nitroquinoline-1-oxide	101	7.293	7.293	(1.070)	23018	40.0000	40.8
147 Methapyrilene	58	7.309	7.309	(1.072)	609385	40.0000	39.7
148 Isodrin	193	7.458	7.458	(1.094)	98394	40.0000	33.5
149 Aramite	185	7.699	7.699	(1.129)	52903	40.0000	36.5
150 Kepone	272	8.084	8.084	(1.186)	78495	40.0000	36.2
151 p-(Dimethylamino)azobenzene	120	7.817	7.817	(0.927)	315575	40.0000	40.8
152 Chlorobenzilate	251	7.827	7.827	(0.928)	260739	40.0000	42.6
153 3,3'-Dimethylbenzidine	212	8.015	8.015	(0.951)	496400	40.0000	42.5
155 2-Acetylaminofluorene	181	8.175	8.175	(0.970)	312778	40.0000	45.5
157 7,12Dimethylbenz(a)anthracene	256	9.309	9.309	(0.954)	329146	40.0000	40.7
158 3-Methylcholanthrene	268	10.085	10.085	(1.033)	308060	40.0000	46.5 (Q)
212 Cis Diallate	86	6.496	6.496	(0.953)	55576	6.00000	5.4
213 Trans Diallate	86	6.431	6.431	(0.944)	270512	34.0000	26.0

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
H - Operator selected an alternate compound hit.

Data File: /chem/MSD3.1/s030510.b/s300505.d  
 Date : 05-MAR-2010 10:33  
 Client ID: APCVS  
 Sample Info: I18N100218-08.2140PH111SWF111APCVS  
 Column phase: J&W DB-5MS

Instrument: MSD3.1  
 Operator: JLD1  
 Column diameter: 0.20



# QC Data

Data File: /chem/HSD3,i/s030110,b/s3c0101.d

Page 1

Date : 01-MAR-2010 16:17

Client ID: DFTPP

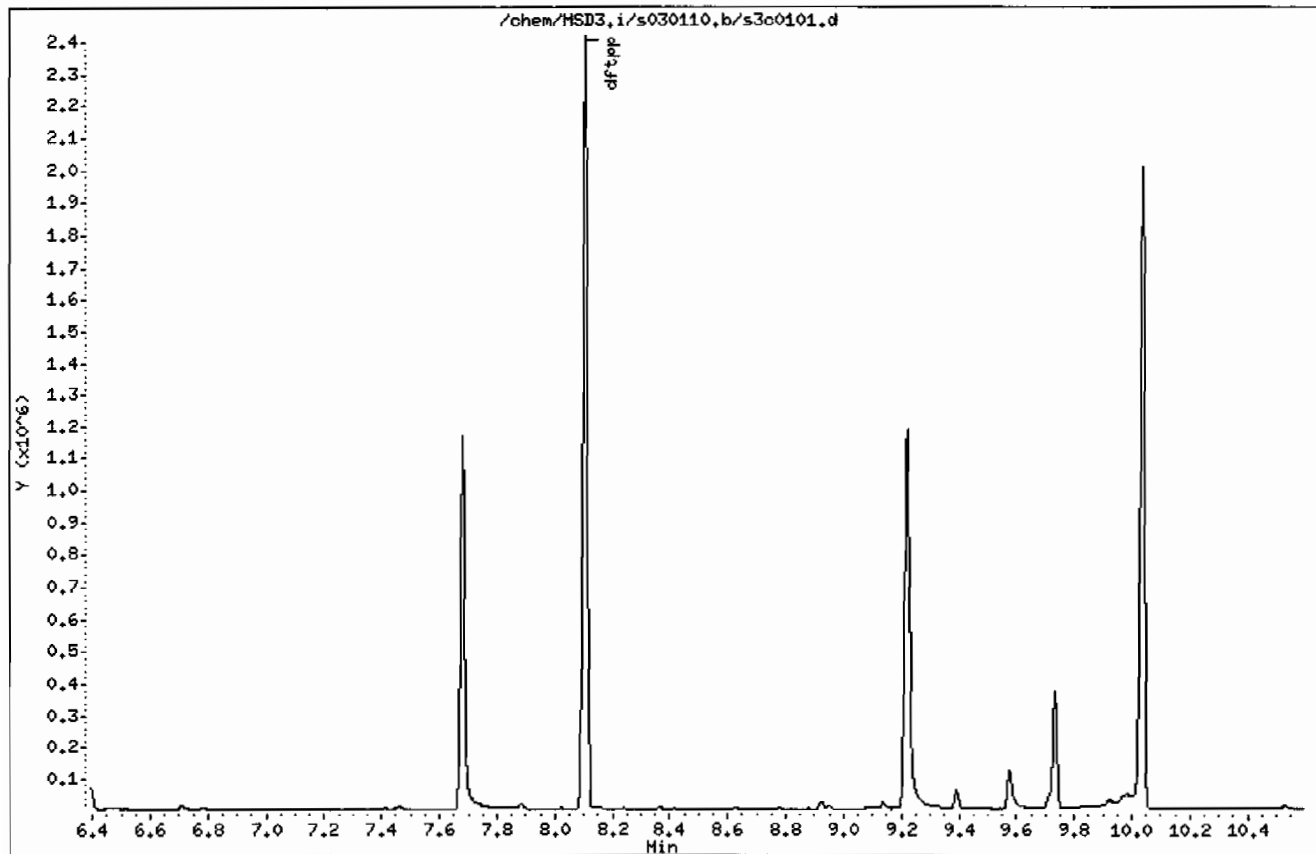
Instrument: HSD3.i

Sample Info: IWBH100207-01|DFTPP|1|SVM|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20





Date : 01-MAR-2010 16:17

Client ID: DFTPP

Instrument: MSD3.1

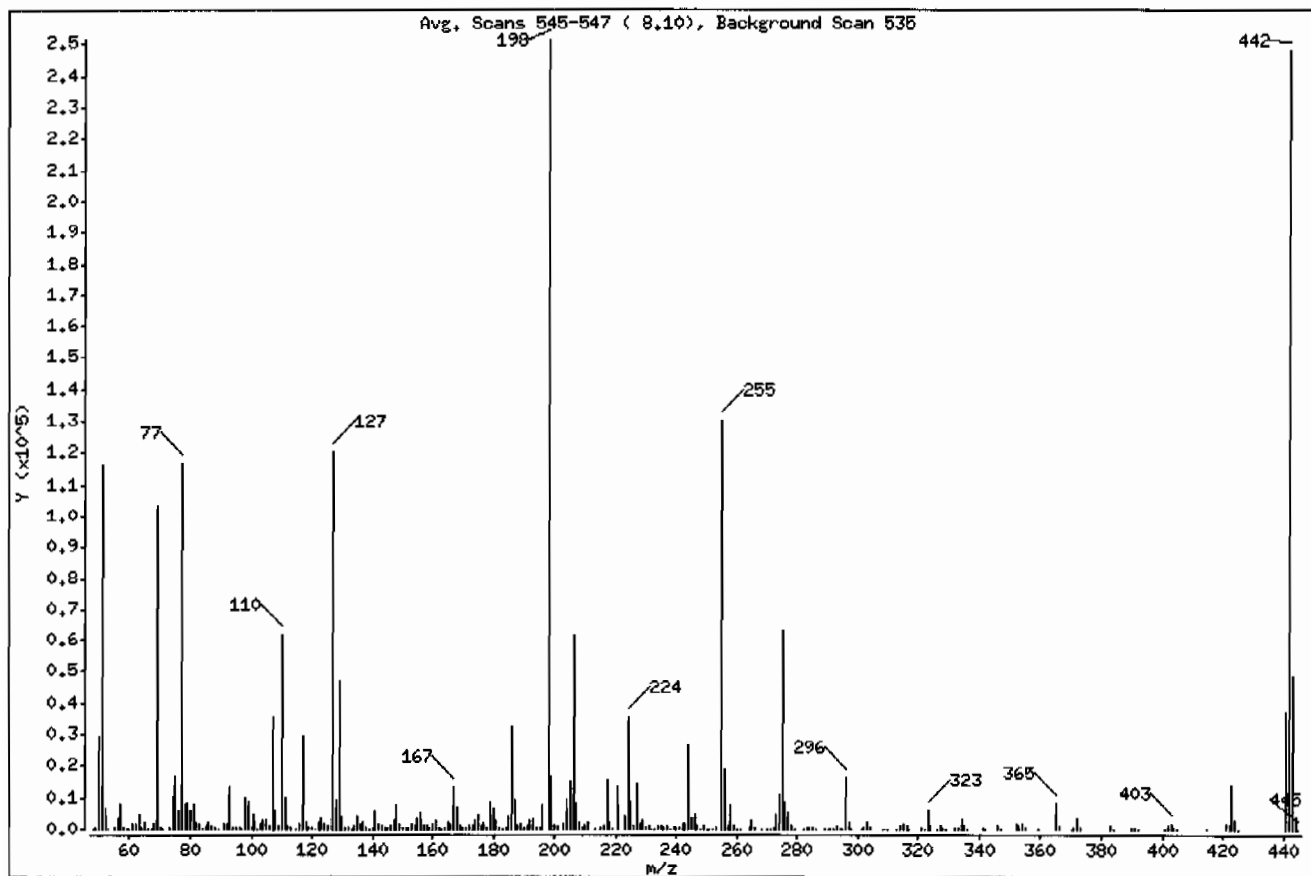
Sample Info: IWBNI00207-01IDFTPP11ISVMI1IDFTPP1

Operator: JLD1

Column phase: J&amp;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	46.26
68	Less than 2.00% of mass 69	0.67 ( 1.62)
69	Mass 69 relative abundance	41.26
70	Less than 2.00% of mass 69	0.18 ( 0.43)
127	40.00 - 60.00% of mass 198	47.80
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.67
275	10.00 - 30.00% of mass 198	25.16
365	Greater than 1.00% of mass 198	3.27
441	Present, but less than mass 443	14.68
442	Greater than 40.00% of mass 198	98.59
443	17.00 - 23.00% of mass 442	19.34 ( 19.62)

Date : 01-MAR-2010 16:17

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00207-01IDFTPP11SVMI1IDFTPP1

Operator: JLD1

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

Column diameter: 0.20

Data File: s3c0101.d

Spectrum: Avg. Scans 545-547 ( 8,10), Background Scan 535

Location of Maximum: 198.00

Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
48.00	68	127.00	120176	203.00	1642	290.00	150
49.00	658	128.00	9014	204.00	9156	291.00	121
50.00	29544	129.00	46648	205.00	14776	292.00	234
51.00	116312	130.00	3891	206.00	61144	293.00	1132
52.00	6176	131.00	842	207.00	8056	294.00	286
53.00	143	132.00	383	208.00	2023	295.00	99
55.00	341	133.00	262	209.00	665	296.00	16036
56.00	3336	134.00	1283	210.00	1047	297.00	2481
57.00	7970	135.00	4034	211.00	2406	298.00	156
58.00	366	136.00	1508	213.00	171	301.00	259
59.00	113	137.00	2315	215.00	586	302.00	308
60.00	8	138.00	425	216.00	1314	303.00	2079
61.00	1488	139.00	248	217.00	15787	304.00	485
62.00	1618	140.00	565	218.00	2115	308.00	245
63.00	4557	141.00	6012	219.00	199	309.00	161
64.00	612	142.00	1946	221.00	13367	310.00	239
65.00	2237	143.00	1320	223.00	3876	313.00	164
66.00	141	144.00	360	224.00	35024	314.00	883
67.00	53	145.00	298	225.00	8922	315.00	1967
68.00	1680	146.00	1070	226.00	1079	316.00	1096
69.00	103712	147.00	3150	227.00	14187	317.00	232
70.00	450	148.00	7398	228.00	2007	321.00	569
71.00	8	149.00	1524	229.00	3118	322.00	266
73.00	752	150.00	448	230.00	483	323.00	5531
74.00	10543	151.00	809	231.00	1266	324.00	1049
75.00	16504	152.00	533	232.00	259	326.00	80
76.00	5713	153.00	1947	233.00	227	327.00	964
77.00	116984	154.00	1439	234.00	914	328.00	527
78.00	7992	155.00	3317	235.00	1047	329.00	70
79.00	7813	156.00	4947	236.00	644	332.00	385
80.00	5839	157.00	963	237.00	1144	333.00	540
81.00	8209	158.00	1015	238.00	153	334.00	3593
82.00	2077	159.00	768	239.00	516	335.00	880
83.00	1874	160.00	1917	240.00	384	336.00	139
84.00	131	161.00	2747	241.00	719	341.00	722

Date : 01-MAR-2010 16:17

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00207-01|DFTPP|1|SVMI1|DFTPP|

Operator: JLD1

Column phase: J&amp;W DB-SMS

Column diameter: 0.20

Data File: s3c0101.d

Spectrum: Avg. Scans 545-547 ( 8,10), Background Scan 535

Location of Maximum: 198.00

Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
85.00	1424	162.00	835	242.00	1754	342.00	152
86.00	2270	163.00	237	243.00	1920	346.00	1442
87.00	1114	164.00	338	244.00	26536	347.00	277
88.00	395	165.00	2194	245.00	3627	352.00	1841
89.00	204	166.00	1848	246.00	4903	353.00	1376
-----							
91.00	1837	167.00	13225	247.00	986	354.00	1982
92.00	2017	168.00	7167	248.00	266	355.00	360
93.00	13150	169.00	1141	249.00	941	359.00	125
94.00	848	170.00	443	250.00	188	365.00	8226
95.00	306	171.00	480	251.00	215	366.00	1254
-----							
96.00	454	172.00	1046	252.00	268	370.00	163
97.00	176	173.00	1421	253.00	577	371.00	415
98.00	10053	174.00	2682	255.00	130152	372.00	3236
99.00	8554	175.00	4683	256.00	19152	373.00	811
100.00	707	176.00	1373	257.00	1443	383.00	958
-----							
101.00	4659	177.00	2152	258.00	7765	384.00	244
102.00	237	178.00	706	259.00	1288	390.00	462
103.00	1501	179.00	8754	260.00	243	391.00	302
104.00	2739	180.00	6080	261.00	177	392.00	205
105.00	2689	181.00	2972	264.00	308	401.00	193
-----							
106.00	890	182.00	458	265.00	3120	402.00	1441
107.00	35480	183.00	203	266.00	427	403.00	1988
108.00	5647	184.00	719	268.00	113	404.00	671
109.00	999	185.00	4333	270.00	169	405.00	77
110.00	61912	186.00	32640	271.00	275	415.00	37
-----							
111.00	9738	187.00	9337	272.00	389	421.00	1908
112.00	1301	188.00	893	273.00	4388	422.00	1765
113.00	390	189.00	1948	274.00	11174	423.00	13848
115.00	164	190.00	392	275.00	63224	424.00	2886
116.00	1813	191.00	1019	276.00	8533	425.00	276
-----							
117.00	29400	192.00	2954	277.00	5254	441.00	36904
118.00	2269	193.00	3331	278.00	868	442.00	247872
119.00	321	194.00	723	279.00	170	443.00	48632
120.00	458	195.00	452	282.00	136	444.00	4280
121.00	135	196.00	7613	283.00	546	445.00	245

Date : 01-MAR-2010 16:17

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00207-01|DFTPP|1|SVMI1|DFTPP|

Operator: JLD1

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

Column diameter: 0.20

Data File: s3c0101.d

Spectrum: Avg. Scans 545-547 ( 8.10), Background Scan 535

Location of Maximum: 198.00

Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	2298	198.00	251392	284.00	387		
123.00	3537	199.00	16752	285.00	836		
124.00	1603	200.00	1366	286.00	157		
125.00	1444	201.00	1114	289.00	188		

Data File: /chem/HSD3,i/s030410a,b/s3c0422,d

Page 1

Date : 04-MAR-2010 20:40

Client ID: DFTPP

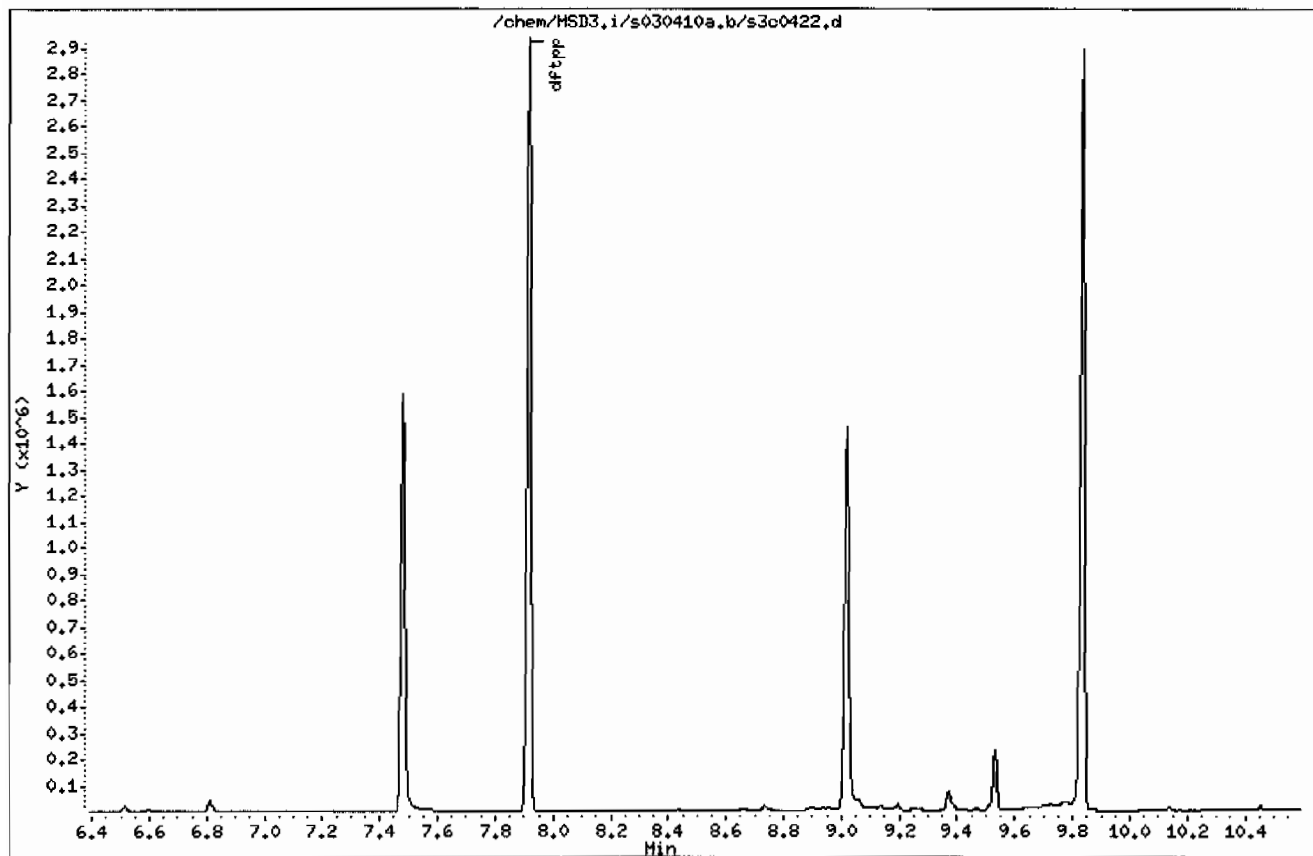
Instrument: HSD3.i

Sample Info: INBN100207-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 04-MAR-2010 20:40

Client ID: DFTPP

Instrument: MSD3.i

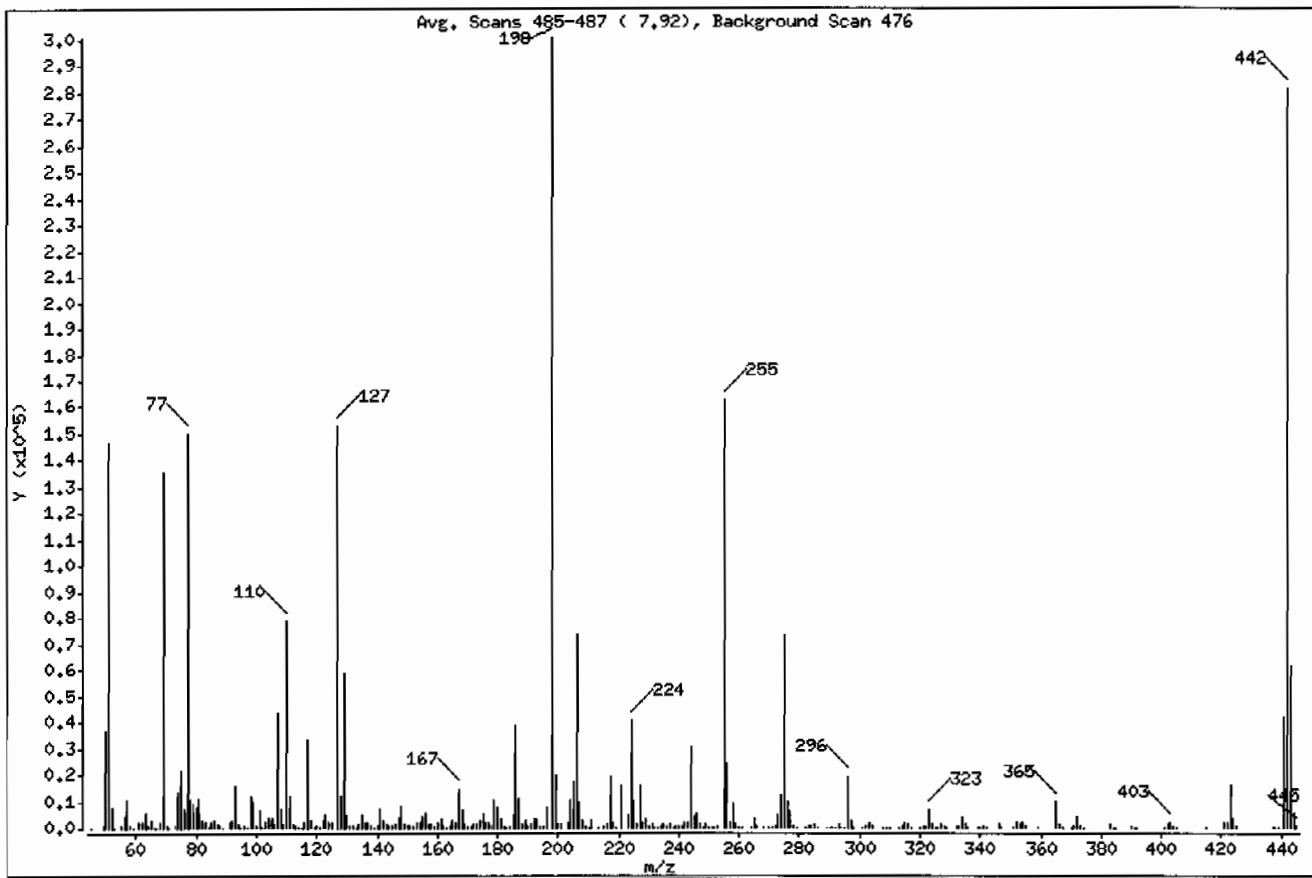
Sample Info: IWBH100207-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;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	48.81
68	Less than 2.00% of mass 69	0.69 ( 1.54)
69	Mass 69 relative abundance	44.95
70	Less than 2.00% of mass 69	0.20 ( 0.45)
127	40.00 - 60.00% of mass 198	50.90
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.71
275	10.00 - 30.00% of mass 198	24.44
365	Greater than 1.00% of mass 198	3.21
441	Present, but less than mass 443	13.98
442	Greater than 40.00% of mass 198	93.47
443	17.00 - 23.00% of mass 442	20.52 ( 21.95)

Date : 04-MAR-2010 20:40

Client ID: DFTPP

Instrument: HSD3.i

Sample Info: IWBH100207-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;W DB-SMS

Column diameter: 0.20

Data File: s3c0422.d

Spectrum: Avg. Scans 485-487 ( 7.92), Background Scan 476

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	71	129.00	58648	207.00	9454	296.00	19392
49.00	786	130.00	5027	208.00	2442	297.00	2673
50.00	36472	131.00	987	209.00	697	298.00	168
51.00	146688	132.00	483	210.00	310	301.00	252
52.00	7565	133.00	202	211.00	2978	302.00	367
53.00	279	134.00	1502	213.00	222	303.00	2322
55.00	729	135.00	4792	215.00	738	304.00	647
56.00	4472	136.00	1924	216.00	1567	308.00	293
57.00	10081	137.00	2320	217.00	19024	309.00	188
58.00	439	138.00	489	218.00	2365	310.00	290
59.00	113	139.00	322	219.00	279	313.00	205
61.00	1873	140.00	711	221.00	15981	314.00	934
62.00	2052	141.00	6918	223.00	4572	315.00	2287
63.00	5465	142.00	2540	224.00	40784	316.00	1256
64.00	706	143.00	1561	225.00	10540	317.00	237
65.00	2705	144.00	394	226.00	1088	320.00	37
66.00	177	145.00	400	227.00	16226	321.00	691
67.00	135	146.00	1189	228.00	2385	322.00	411
68.00	2075	147.00	3733	229.00	3579	323.00	6947
69.00	135104	148.00	8195	230.00	488	324.00	1239
70.00	609	149.00	1707	231.00	1613	325.00	116
71.00	34	150.00	459	232.00	225	326.00	165
73.00	901	151.00	909	233.00	295	327.00	1293
74.00	13208	152.00	475	234.00	981	328.00	661
75.00	21264	153.00	2317	235.00	1299	329.00	123
76.00	7156	154.00	1762	236.00	853	332.00	520
77.00	150016	155.00	4043	237.00	1479	333.00	654
78.00	10684	156.00	5795	238.00	207	334.00	4404
79.00	9252	157.00	1211	239.00	638	335.00	1046
80.00	7423	158.00	1237	240.00	479	336.00	145
81.00	10748	159.00	1008	241.00	978	339.00	77
82.00	2606	160.00	2094	242.00	2160	340.00	73
83.00	2385	161.00	3260	243.00	2237	341.00	758
84.00	165	162.00	943	244.00	30672	342.00	218
85.00	2389	163.00	250	245.00	4263	346.00	1451

Date : 04-MAR-2010 20:40

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100207-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

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

Column diameter: 0.20

Data File: s3c0422.d

Spectrum: Avg. Scans 485-487 ( 7.92), Background Scan 476

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
86.00	2868	164.00	392	246.00	5725	347.00	263
87.00	1300	165.00	2624	247.00	1284	351.00	141
88.00	551	166.00	2263	248.00	255	352.00	2353
89.00	272	167.00	14682	249.00	1129	353.00	1602
91.00	2280	168.00	7199	250.00	199	354.00	2194
-----							
92.00	2570	169.00	1113	251.00	264	355.00	371
93.00	15930	170.00	438	252.00	327	359.00	128
94.00	1221	171.00	561	253.00	673	365.00	9658
95.00	296	172.00	1230	255.00	162432	366.00	1424
96.00	764	173.00	1645	256.00	23984	367.00	118
-----							
97.00	264	174.00	2751	257.00	1839	370.00	217
98.00	11807	175.00	5600	258.00	9060	371.00	550
99.00	9701	176.00	1778	259.00	1503	372.00	3837
100.00	932	177.00	2399	260.00	282	373.00	920
101.00	5912	178.00	861	261.00	257	374.00	75
-----							
102.00	343	179.00	10622	264.00	303	383.00	1084
103.00	1747	180.00	7530	265.00	3623	384.00	315
104.00	3582	181.00	3317	266.00	627	385.00	37
105.00	3351	182.00	591	268.00	67	390.00	470
106.00	1067	183.00	282	270.00	187	391.00	337
-----							
107.00	43696	184.00	791	271.00	340	392.00	271
108.00	6790	185.00	5007	272.00	461	401.00	225
109.00	1205	186.00	38952	273.00	4945	402.00	1497
110.00	78568	187.00	10913	274.00	12671	403.00	2240
111.00	12006	188.00	1196	275.00	73456	404.00	798
-----							
112.00	1480	189.00	2438	276.00	9602	405.00	85
113.00	461	190.00	469	277.00	6027	415.00	82
114.00	67	191.00	1080	278.00	987	421.00	2075
115.00	181	192.00	3307	279.00	237	422.00	2062
116.00	2317	193.00	3636	282.00	148	423.00	15810
-----							
117.00	33136	194.00	808	283.00	681	424.00	3581
118.00	2433	195.00	485	284.00	427	425.00	368
119.00	298	196.00	7808	285.00	1134	437.00	36
120.00	530	198.00	300608	286.00	219	438.00	39
121.00	175	199.00	20168	289.00	234	439.00	159



Date : 04-MAR-2010 20:40

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00207-01IDFTPP1ISVHI1IDFTPP1

Operator: JLD1

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

Column diameter: 0.20

Data File: s3c0422.d

Spectrum: Avg. Scans 485-487 ( 7.92), Background Scan 476

Location of Maximum: 198.00

Number of points: 303

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	2705	200.00	1569	290.00	208	441.00	42016
123.00	4492	201.00	1277	291.00	135	442.00	280960
124.00	1911	203.00	2077	292.00	264	443.00	61680
125.00	1854	204.00	10272	293.00	1430	444.00	5584
127.00	153024	205.00	17416	294.00	301	445.00	376
128.00	11680	206.00	74248	295.00	165		

Data File: /chem/MSD3.i/s030510,b/s3c0501.d

Page 1

Date : 05-MAR-2010 08:48

Client ID: DFTPP

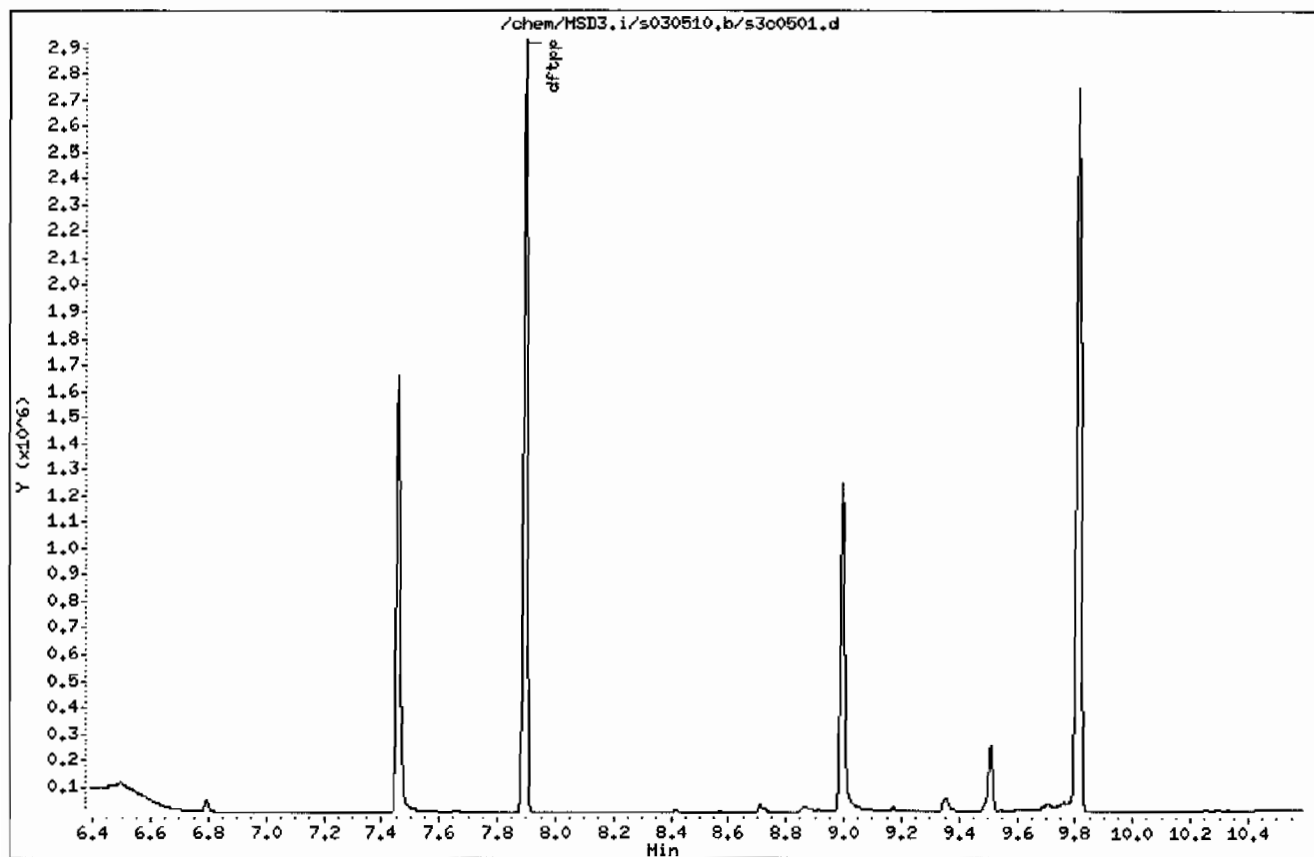
Instrument: MSD3.i

Sample Info: IWBNI00207-01|DFTPP|1|SVH11|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 05-MAR-2010 08:48

Client ID: DFTPP

Instrument: MSD3.i

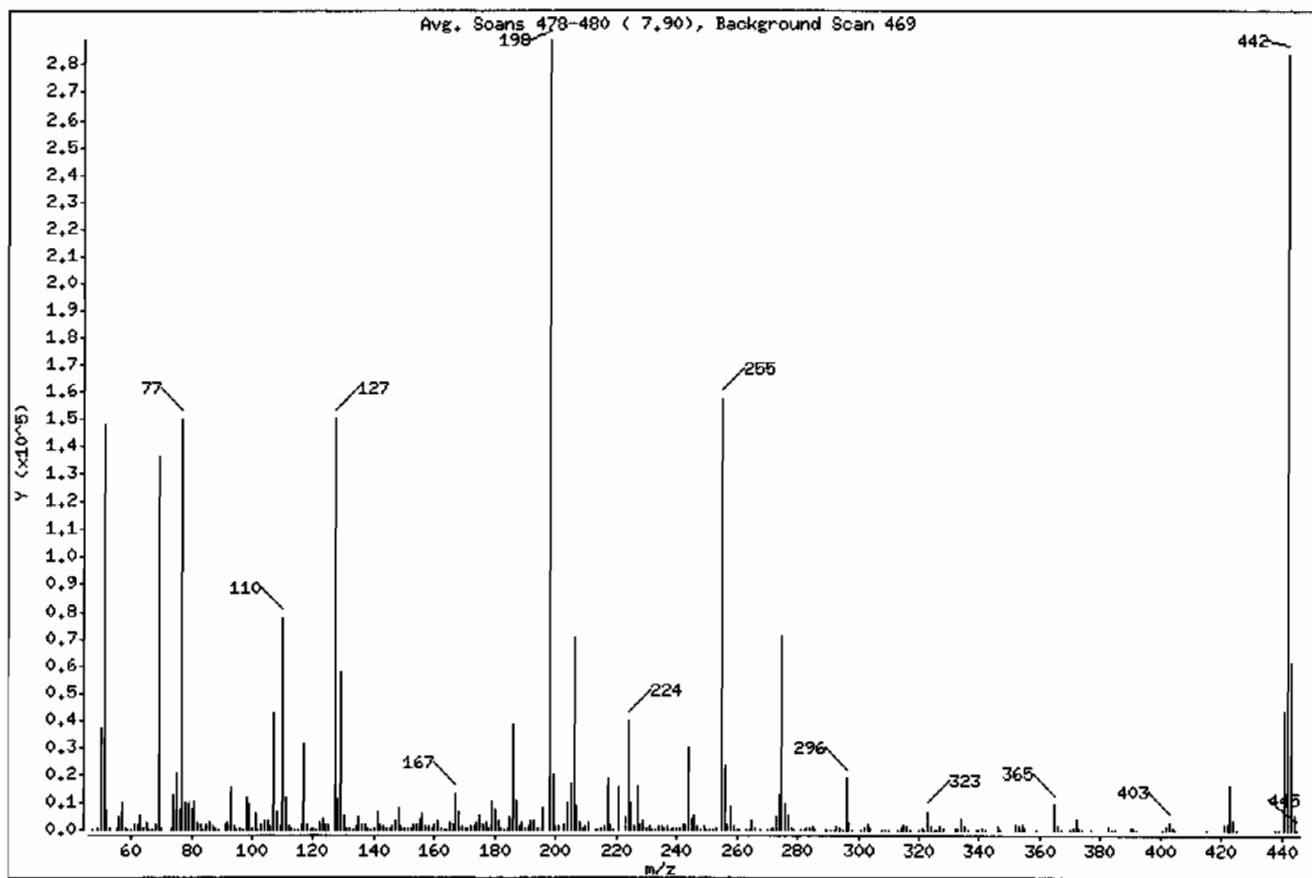
Sample Info: IWBH100207-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&amp;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	51.38
68	Less than 2.00% of mass 69	0.74 ( 1.58)
69	Mass 69 relative abundance	47.07
70	Less than 2.00% of mass 69	0.24 ( 0.50)
127	40.00 - 60.00% of mass 198	51.94
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.83
275	10.00 - 30.00% of mass 198	24.61
365	Greater than 1.00% of mass 198	3.30
441	Present, but less than mass 443	14.87
442	Greater than 40.00% of mass 198	98.05
443	17.00 - 23.00% of mass 442	21.13 ( 21.55)

Date : 05-MAR-2010 08:48

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100207-01IDFTPP1ISVH1IDFTPP1

Operator: JLD1

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

Column diameter: 0.20

Data File: s3c0501.d

Spectrum: Avg. Scans 478-480 ( 7.90), Background Scan 469

Location of Maximum: 198.00

Number of points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
47.00	122	130.00	5039	209.00	778	296.00	18728
49.00	845	131.00	945	210.00	1150	297.00	2543
50.00	37280	132.00	516	211.00	2854	298.00	179
51.00	148416	133.00	225	213.00	224	301.00	258
52.00	7546	134.00	1569	214.00	71	302.00	381
53.00	342	135.00	4611	215.00	759	303.00	2297
55.00	533	136.00	1860	216.00	1475	304.00	678
56.00	4389	137.00	2223	217.00	18480	308.00	262
57.00	10131	138.00	451	218.00	2296	309.00	166
58.00	439	139.00	294	219.00	195	310.00	251
59.00	134	140.00	617	221.00	15290	313.00	157
60.00	40	141.00	6965	223.00	4351	314.00	845
61.00	1808	142.00	2292	224.00	39632	315.00	2100
62.00	1996	143.00	1566	225.00	10041	316.00	1262
63.00	5533	144.00	418	226.00	1019	317.00	238
64.00	784	145.00	408	227.00	15652	320.00	33
65.00	2840	146.00	1249	228.00	2268	321.00	698
66.00	242	147.00	3586	229.00	3427	322.00	323
67.00	125	148.00	7825	230.00	498	323.00	6651
68.00	2144	149.00	1649	231.00	1381	324.00	1198
69.00	136000	150.00	512	232.00	233	325.00	142
70.00	683	151.00	941	233.00	301	326.00	98
73.00	937	152.00	624	234.00	1034	327.00	1323
74.00	12786	153.00	2169	235.00	1218	328.00	567
75.00	20912	154.00	1677	236.00	825	332.00	487
76.00	7207	155.00	3930	237.00	1219	333.00	707
77.00	150208	156.00	6221	238.00	162	334.00	4026
78.00	10281	157.00	1232	239.00	632	335.00	1047
79.00	9106	158.00	1195	240.00	528	336.00	124
80.00	7183	159.00	979	241.00	949	339.00	68
81.00	10511	160.00	2249	242.00	2159	340.00	67
82.00	2506	161.00	3100	243.00	2082	341.00	741
83.00	2314	162.00	890	244.00	29696	342.00	182
84.00	217	163.00	256	245.00	4040	346.00	1441
85.00	2234	164.00	326	246.00	5523	347.00	255

Date : 05-MAR-2010 08:48

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100207-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

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

Column diameter: 0.20

Data File: s3c0501.d

Spectrum: Avg. Scans 478-480 ( 7.90), Background Scan 469

Location of Maximum: 198.00

Number of points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
-----							
86.00	2955	165.00	2566	247.00	1062	352.00	2029
87.00	1333	166.00	2096	248.00	318	353.00	1488
88.00	429	167.00	13544	249.00	1052	354.00	2219
89.00	272	168.00	6909	250.00	192	355.00	457
91.00	2291	169.00	1110	251.00	305	359.00	136
-----							
92.00	2607	170.00	476	252.00	309	365.00	9529
93.00	15310	171.00	550	253.00	661	366.00	1385
94.00	1122	172.00	1078	255.00	157120	367.00	116
95.00	164	173.00	1483	256.00	23264	370.00	177
96.00	842	174.00	2705	257.00	1787	371.00	472
-----							
97.00	195	175.00	5427	258.00	8750	372.00	4017
98.00	11783	176.00	1744	259.00	1414	373.00	921
99.00	9523	177.00	2498	260.00	252	374.00	36
100.00	855	178.00	851	261.00	247	377.00	33
101.00	5744	179.00	10647	263.00	78	383.00	1019
-----							
102.00	320	180.00	7040	264.00	306	384.00	284
103.00	1818	181.00	3413	265.00	3436	385.00	34
104.00	3431	182.00	576	266.00	571	390.00	529
105.00	3339	183.00	295	268.00	120	391.00	352
106.00	1028	184.00	846	270.00	201	392.00	267
-----							
107.00	42560	185.00	4732	271.00	323	401.00	210
108.00	6830	186.00	38288	272.00	419	402.00	1577
109.00	1236	187.00	10773	273.00	4850	403.00	2330
110.00	77984	188.00	1159	274.00	12394	404.00	724
111.00	11775	189.00	2339	275.00	71104	405.00	119
-----							
112.00	1441	190.00	335	276.00	9446	415.00	119
113.00	407	191.00	1168	277.00	5342	421.00	2037
114.00	73	192.00	3198	278.00	896	422.00	2034
115.00	215	193.00	3630	279.00	193	423.00	16254
116.00	2284	194.00	862	281.00	128	424.00	3273
-----							
117.00	31472	195.00	521	282.00	152	425.00	309
118.00	2290	196.00	7957	283.00	635	438.00	67
119.00	306	198.00	288896	284.00	471	439.00	55
120.00	493	199.00	19728	285.00	1055	441.00	42960
121.00	183	200.00	1519	286.00	224	442.00	283264

Date : 05-MAR-2010 08:48

Client ID: DFTPP

Instrument: HSD3.i

Sample Info: IWBNI00207-01.DFTPP|1|SVMI1.DFTPP|

Operator: JLD1

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

Column diameter: 0.20

Data File: s3c0501.d

Spectrum: Avg. Scans 478-480 ( 7.90), Background Scan 469

Location of Maximum: 198.00

Number of points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	2761	201.00	1262	289.00	274	443.00	61048
123.00	4167	203.00	1794	290.00	201	444.00	5524
124.00	1881	204.00	9800	291.00	173	445.00	286
125.00	1802	205.00	16920	292.00	223		
127.00	150016	206.00	70392	293.00	1397		
128.00	11266	207.00	8950	294.00	338		
129.00	57888	208.00	2354	295.00	152		

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

SDG Number: 10-1950  
Lab Sample ID: 1202051280  
Client Sample: QC for batch 956676  
Client ID: MB for batch 956676  
Batch ID: 956677  
Run Date: 03/04/2010 22:02  
Prep Date: 02/23/2010 21:09  
Data File: s3c0426-1.d

Client: LANL010  
Method: SW846 8270C  
Inst: MSD3.I  
Analyst: JLD1  
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	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

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

SDG Number: 10-1950

Matrix: SOIL

Lab Sample ID: 1202051280

Client Sample: QC for batch 956676

Client: LANL010

Project: QC

Client ID: MB for batch 956676

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 956677

Inst: MSD3.I

Dilution: 1

Run Date: 03/04/2010 22:02

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 02/23/2010 21:09

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3c0426-1.d

Column: J&amp;W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

**Tentatively Identified Compound Summary**

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.76	694	ug/kg		JA



GEL Laboratories LLC

Data file : /chem/MSD3.i/s030410a.b/s3c0426-3.d  
Lab Smp Id: 1202051280 Client Smp ID: SBLK01  
Inj Date : 04-MAR-2010 22:02  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |1202051280|956677|1|SVMF|1|SBLK01  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
Meth Date : 05-Mar-2010 09:07 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 5 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.sub  
Target Version: 3.50  
Processing Host: hpc1p1

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
	MASS						ON-COLUMN	FINAL
	=====	=====	==	=====	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		3.715	3.719	(1.000)	287052	40.0000	
* 29 Naphthalene-d8	136		4.576	4.580	(1.000)	1107759	40.0000	
* 46 Acenaphthene-d10	164		5.827	5.832	(1.000)	624331	40.0000	
* 67 Phenanthrene-d10	188		6.833	6.832	(1.000)	989866	40.0000	
* 91 Chrysene-d12	240		8.453	8.458	(1.000)	632239	40.0000	
* 98 Perylene-d12	264		9.796	9.801	(1.000)	436182	40.0000	
\$ 3 2-Fluorophenol	112		2.918	2.912	(0.785)	595222	75.1135	2500
\$ 5 Phenol-d5	99		3.436	3.436	(0.925)	729978	72.2179	2410
\$ 20 Nitrobenzene-d5	82		4.073	4.083	(0.890)	339172	35.7328	1190
\$ 39 2-Fluorobiphenyl	172		5.319	5.324	(0.913)	636288	39.5785	1320
\$ 60 2,4,6-Tribromophenol	329		6.373	6.372	(1.094)	161836	83.1212	2770
\$ 81 p-Terphenyl-d14	244		7.753	7.757	(0.917)	545970	50.5969	1690

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030410a.b/s3c0426-3.d  
Lab Smp Id: 1202051280 Client Smp ID: SBLK01  
Inj Date : 04-MAR-2010 22:02  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |1202051280|956677|1|SVMF|1|SBLK01  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
Meth Date : 05-Mar-2010 09:07 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 5 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1950.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	0.00000	% moisture

Cpnd Variable Local Compound Variable

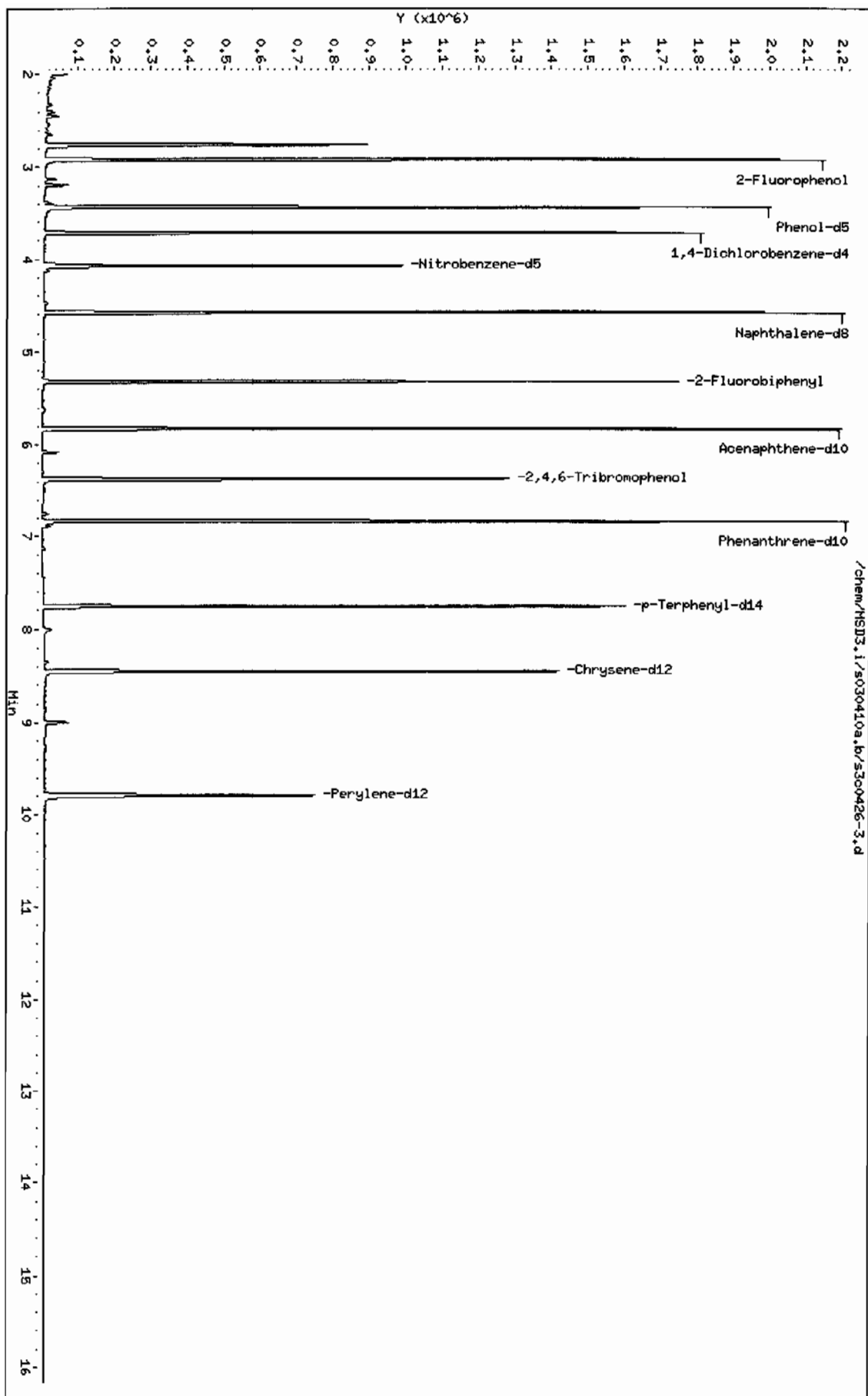
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.715	1942799	40.000

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

Unknown Aldol Condensate				CAS #:			
2.757	1011406	20.8236806	694	0		0	10

Data File: /chem/HSD3.i/s030410a,b/s300426-3.d  
 Date : 04-MAR-2010 22:02  
 Client ID: SBLK01  
 Sample Info: 11202051280195667711SVMF11.SBLK01  
 Volume Injected (uL): 0.5  
 Column phase: 3uM DB-5MS

Instrument: HSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



Date : 04-MAR-2010 22:02

Client ID: SBLK01

Instrument: MSD3.i

Sample Info: I1202051280195667711SVMF11SBLK01

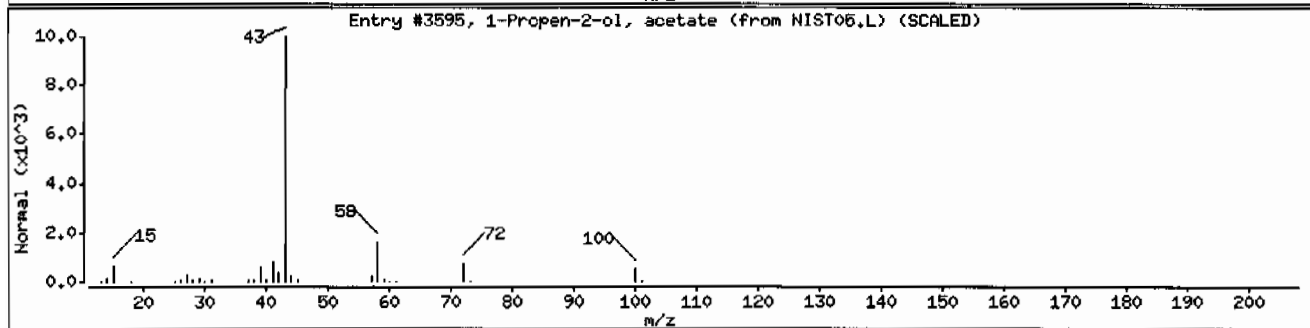
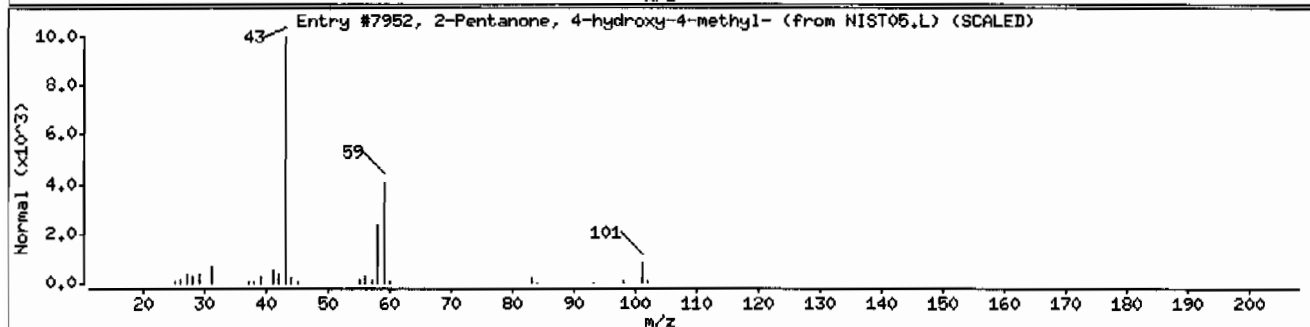
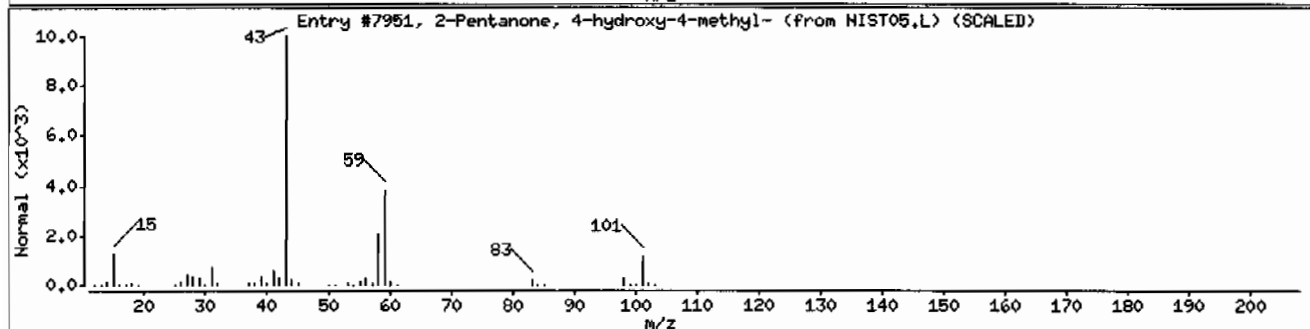
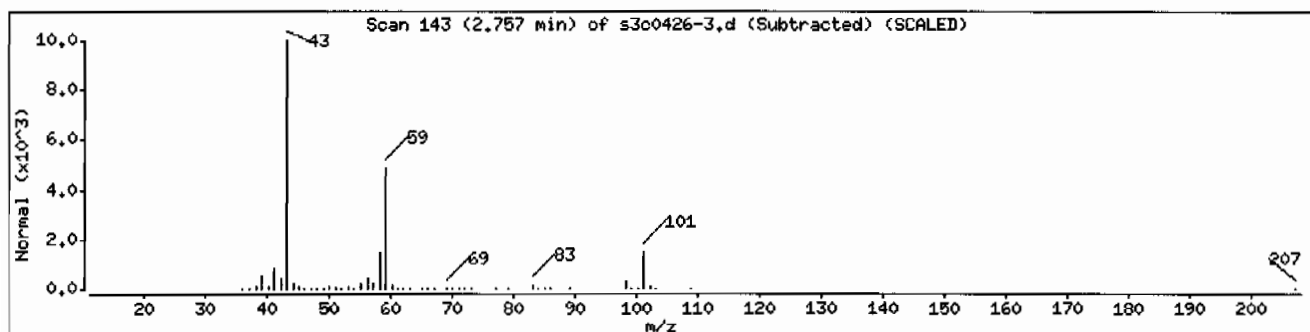
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
1-Propen-2-ol, acetate	108-22-5	NIST05.L	3595	10	C5H8O2	100



Semi-Volatile  
Certificate of Analysis  
Sample Summary

Page 1 of 2

SDG Number: 10-1950

Matrix: SOIL

Lab Sample ID: 1202051281

Client Sample: QC for batch 956676

Client: LANL010

Project: QC

Client ID: LCS for batch 956676

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 956677

Inst: MSD3.I

Dilution: 1

Run Date: 03/04/2010 22:25

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 02/23/2010 21:09

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3c0427-1.d

Column: J&amp;W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		994	ug/kg	66.7	333
108-95-2	Phenol		1240	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1280	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1170	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1220	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1410	ug/kg	66.7	333
83-32-9	Acenaphthene		1310	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1400	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1250	ug/kg	110	333
87-86-5	Pentachlorophenol		1470	ug/kg	83.3	333
129-00-0	Pyrene		1410	ug/kg	10.0	33.3
110-86-1	Pyridine		933	ug/kg	66.7	333
62-53-3	Aniline		1070	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1060	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1130	ug/kg	66.7	333
100-51-6	Benzyl alcohol		995	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1270	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1140	ug/kg	66.7	333
95-48-7	o-Cresol		1420	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1400	ug/kg	100	333
67-72-1	Hexachloroethane		1150	ug/kg	66.7	333
98-95-3	Nitrobenzene		1220	ug/kg	66.7	333
78-59-1	Isophorone		1160	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1330	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1330	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1120	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1260	ug/kg	66.7	333
65-85-0	Benzoic acid		3070	ug/kg	167	667
91-20-3	Naphthalene		1130	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1020	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1300	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1200	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1540	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1390	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1330	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1120	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1300	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1280	ug/kg	66.7	333

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

SDG Number: 10-1950		Matrix: SOIL
Lab Sample ID: 1202051281		
Client Sample: QC for batch 956676	Client: LANL010	Project: QC
Client ID: LCS for batch 956676	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 956677	Inst: MSD3.I	Dilution: 1
Run Date: 03/04/2010 22:25	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 02/23/2010 21:09	Aliquot: 30 g	Final Volume: 1 mL
Data File: s3c0427-1.d	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		1400	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1370	ug/kg	33.3	333
208-96-8	Acenaphthylene		1240	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		2110	ug/kg	127	667
132-64-9	Dibenzofuran		1380	ug/kg	66.7	333
84-66-2	Diethylphthalate		1430	ug/kg	66.7	333
86-73-7	Fluorene		1190	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1480	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1660	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1550	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1330	ug/kg	66.7	333
122-66-7	Azobenzene		1270	ug/kg	66.7	333
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1270	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1330	ug/kg	66.7	333
85-01-8	Phenanthrene		1210	ug/kg	10.0	33.3
120-12-7	Anthracene		1250	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1330	ug/kg	66.7	333
206-44-0	Fluoranthene		1320	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1670	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1250	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1370	ug/kg	100	333
218-01-9	Chrysene		1380	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1510	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1740	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1650	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1740	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1560	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1430	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1480	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1380	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1260	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD3.i/s030410a.b/s3c0427-3.d  
 Lab Smp Id: 1202051281 Client Smp ID: SBLK01LCS  
 Inj Date : 04-MAR-2010 22:25  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |1202051281|956677|1|SVMF|1|SBLK01LCS  
 Misc Info : |MSD8270\_S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
 Meth Date : 05-Mar-2010 09:07 jen00986 Quant Type: ISTD  
 Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
 Als bottle: 6 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.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	0.00000	% 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	3.715	3.719	(1.000)	268241		40.0000	
* 29 Naphthalene-d8	136	4.581	4.580	(1.000)	1108940		40.0000	
* 46 Acenaphthene-d10	164	5.827	5.832	(1.000)	615803		40.0000	
* 67 Phenanthrene-d10	188	6.833	6.832	(1.000)	1046429		40.0000	
* 91 Chrysene-d12	240	8.459	8.458	(1.000)	739603		40.0000	
* 98 Perylene-d12	264	9.796	9.801	(1.000)	558236		40.0000	
\$ 3 2-Fluorophenol	112	2.918	2.912	(0.785)	535449		72.3091	2410
\$ 5 Phenol-d5	99	3.442	3.436	(0.927)	656159		69.4672	2320
\$ 20 Nitrobenzene-d5	82	4.078	4.083	(0.890)	342784		36.0749	1200
\$ 39 2-Fluorobiphenyl	172	5.324	5.324	(0.914)	613289		38.6762	1290
\$ 60 2,4,6-Tribromophenol	329	6.378	6.372	(1.095)	190503		99.2000	3310
\$ 81 p-Terphenyl-d14	244	7.758	7.757	(0.917)	635859		50.3731	1680

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.447	3.446	(0.928)	353036	37.0516	1240 (Q)
8 2-Chlorophenol	128	3.581	3.586	(0.964)	299807	38.5323	1280
11 1,4-Dichlorobenzene	146	3.731	3.730	(1.004)	290823	35.1724	1170
17 N-Nitrosodipropylamine	70	3.961	3.960	(1.066)	228149	36.5582	1220 (Q)
28 1,2,4-Trichlorobenzene	180	4.528	4.532	(0.988)	255229	37.8281	1260
33 4-Chloro-3-methylphenol	107	4.934	4.928	(1.077)	288755	42.3606	1410
47 Acenaphthene	154	5.854	5.853	(1.005)	579011	39.3662	1310
50 2,4-Dinitrotoluene	165	5.945	5.944	(1.020)	216417	42.0038	1400
52 4-Nitrophenol	139	5.881	5.875	(1.009)	106629	37.5725	1250
65 Pentachlorophenol	266	6.699	6.698	(0.980)	107315	44.1865	1470
79 Pyrene	202	7.705	7.704	(0.911)	983988	42.3915	1410
2 Pyridine	79	2.281	2.259	(0.614)	207168	27.9853	933
4 Aniline	66	3.506	3.505	(0.944)	149706	32.0157	1070 (Q)
7 bis(2-Chloroethyl) ether	63	3.522	3.527	(0.948)	260030	31.8022	1060
9 1,3-Dichlorobenzene	146	3.682	3.687	(0.991)	284911	34.0058	1130
12 Benzyl alcohol	108	3.789	3.789	(1.020)	159468	29.8411	995
13 1,2-Dichlorobenzene	146	3.827	3.832	(1.030)	277079	38.2299	1270
14 bis(2-Chloroisopropyl)ether	45	3.859	3.864	(1.039)	644728	34.2434	1140
15 o-Cresol	107	3.843	3.837	(1.035)	240715	42.7233	1420
18 m,p-Cresols	107	3.939	3.939	(1.060)	347871	41.8897	1400
19 Hexachloroethane	117	4.057	4.056	(1.092)	119326	34.5336	1150
21 Nitrobenzene	77	4.094	4.094	(0.894)	324918	36.5711	1220
22 Isophorone	82	4.244	4.249	(0.926)	606943	34.8981	1160
23 2-Nitrophenol	139	4.303	4.308	(0.939)	149779	39.7940	1330
24 2,4-Dimethylphenol	122	4.303	4.302	(0.939)	281243	39.9180	1330
25 bis(2-Chloroethoxy)methane	93	4.367	4.372	(0.953)	341928	33.6747	1120
26 2,4-Dichlorophenol	162	4.469	4.468	(0.975)	248562	37.9410	1260
27 Benzoic acid	105	4.383	4.366	(0.957)	453328	92.1815	3070
30 Naphthalene	128	4.592	4.596	(1.002)	868417	33.7959	1130 (Q)
31 4-Chloroaniline	127	4.613	4.612	(1.007)	354113	30.5168	1020
32 Hexachlorobutadiene	225	4.656	4.661	(1.016)	144405	38.9035	1300
34 2-Methylnaphthalene	142	5.073	5.078	(1.107)	575909	36.1352	1200
36 Hexachlorocyclopentadiene	237	5.175	5.174	(0.888)	119897	46.2977	1540
37 2,4,6-Trichlorophenol	196	5.266	5.265	(0.904)	178010	41.6222	1390
38 2,4,5-Trichlorophenol	196	5.298	5.292	(0.909)	193602	39.9989	1330
40 2-Chloronaphthalene	162	5.426	5.425	(0.931)	540337	33.7446	1120
42 o-Nitroaniline	65	5.490	5.490	(0.942)	220944	38.9143	1300
41 m-Nitroaniline	138	5.784	5.784	(0.993)	160330	38.3067	1280
43 Dimethylphthalate	163	5.597	5.602	(0.961)	713576	42.0677	1400
44 2,6-Dinitrotoluene	165	5.656	5.655	(0.971)	162471	41.1543	1370
45 Acenaphthylene	152	5.731	5.730	(0.983)	881186	37.1686	1240
48 2,4-Dinitrophenol	184	5.854	5.853	(1.005)	69597	63.3895	2110 (Q)
49 Dibenzofuran	168	5.972	5.971	(1.025)	808506	41.4480	1380
51 Diethylphthalate	149	6.095	6.094	(1.046)	693487	42.9128	1430
53 Fluorene	166	6.212	6.212	(1.066)	656426	35.7779	1190
54 4-Chlorophenylphenylether	204	6.191	6.190	(1.062)	326469	44.3443	1480
55 2-Methyl-4,6-dinitrophenol	198	6.234	6.233	(0.912)	110126	49.9319	1660



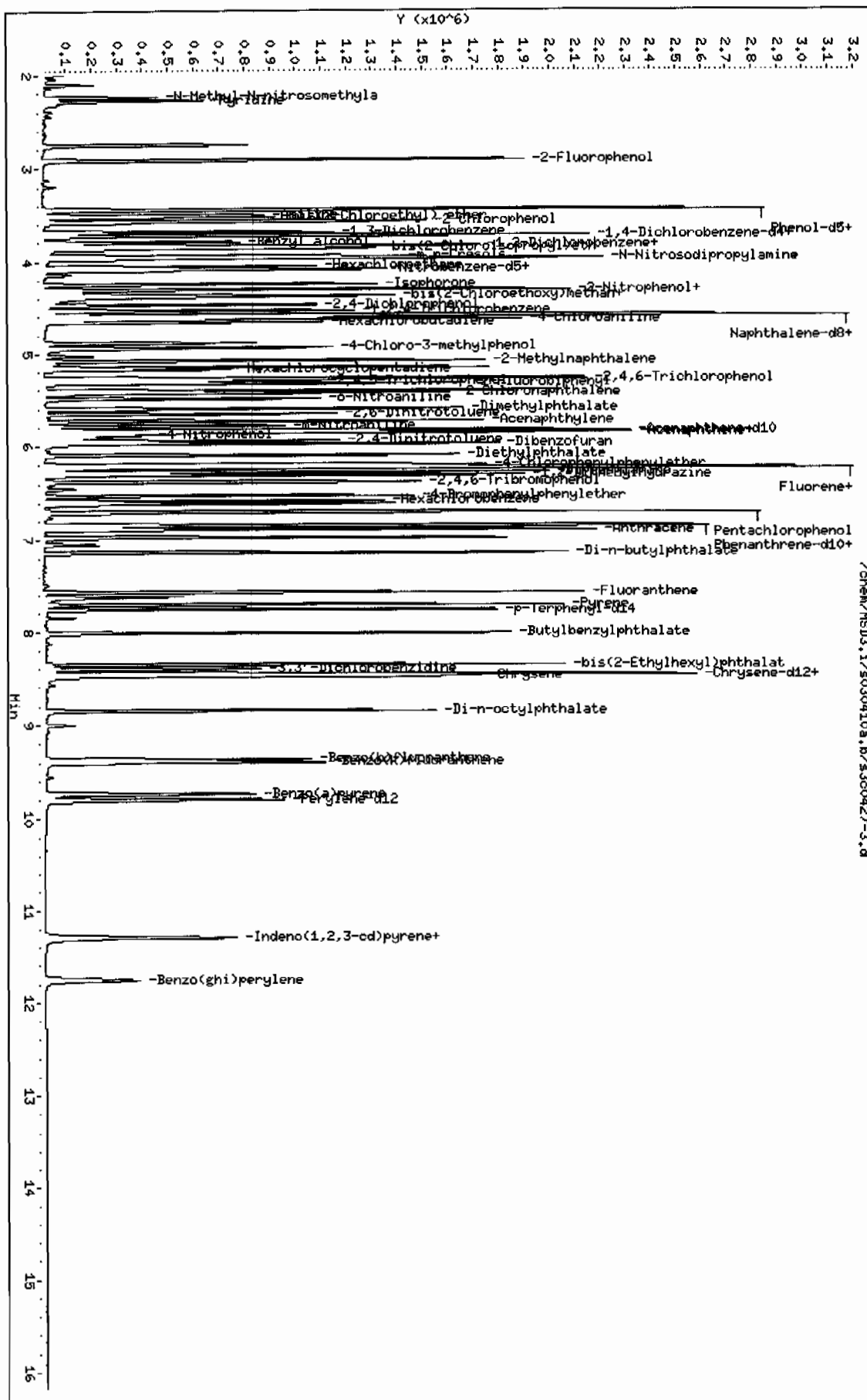
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.218	6.217	(1.067)	165538	46.4928	1550
133 Diphenylamine	169	6.277	6.271	(0.919)	597410	39.7647	1320
58 1,2-Diphenylhydrazine	77	6.303	6.303	(0.922)	788700	38.0653	1270
61 4-Bromophenylphenylether	248	6.523	6.527	(0.955)	175993	38.2393	1270
63 Hexachlorobenzene	284	6.576	6.575	(0.962)	197391	39.8780	1330
68 Phenanthrene	178	6.849	6.848	(1.002)	966683	36.2665	1210
69 Anthracene	178	6.881	6.880	(1.007)	990592	37.6226	1250
72 Di-n-butylphthalate	149	7.132	7.137	(1.044)	1137348	40.0272	1330
76 Fluoranthene	202	7.566	7.565	(1.107)	978981	39.6616	1320
85 Butylbenzylphthalate	149	8.009	8.014	(0.947)	458730	50.0682	1670
89 Benzo(a)anthracene	228	8.448	8.447	(0.999)	716552	37.4713	1250
90 3,3'-Dichlorobenzidine	252	8.395	8.394	(0.992)	206089	41.1629	1370
92 Chrysene	228	8.475	8.480	(1.002)	753009	41.3818	1380
93 bis(2-Ethylhexyl)phthalate	149	8.352	8.351	(0.987)	592595	45.1612	1500
94 Di-n-octylphthalate	149	8.844	8.849	(0.903)	883372	52.3397	1740
95 Benzo(b)fluoranthene	252	9.368	9.373	(0.956)	631363	49.5514	1650
96 Benzo(k)fluoranthene	252	9.400	9.400	(0.960)	681120	52.1591	1740
97 Benzo(a)pyrene	252	9.737	9.736	(0.994)	506933	46.6802	1560
99 Indeno(1,2,3-cd)pyrene	276	11.294	11.293	(1.153)	409443	42.7941	1430
100 Dibenzo(a,h)anthracene	278	11.299	11.304	(1.153)	333345	44.2655	1480
101 Benzo(ghi)perylene	276	11.759	11.758	(1.200)	330230	41.3755	1380
1 N-Methyl-N-nitrosomethylamine	74	2.244	2.227	(0.604)	155241	29.8165	994

#### QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.1/s030410a,b/s300427-3.d  
 Date: 04-MAR-2010 22:25  
 Client ID: SBLK01LCS  
 Sample Info: 11202051281195667111SWH111SBLK01LCS  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-5MS

Instrument: MSD3.1  
 Operator: JLD1  
 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: 956676  
Analyst: Alberto Velasco  
Method: SW846 3550B

Verified by: \_\_\_\_\_

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)
1202051280 MB	23-FEB-2010 21:09:00	30	1	0.03333
1202051281 LCS	23-FEB-2010 21:09:00	30	1	0.03333
247245001	23-FEB-2010 21:09:00	30.18	1	0.03313
247245002	23-FEB-2010 21:09:00	30.05	1	0.03328
247245003	23-FEB-2010 21:09:00	30.09	1	0.03323
247245004	23-FEB-2010 21:09:00	30.01	1	0.03332
247245006	23-FEB-2010 21:09:00	30.09	1	0.03323
247255001	23-FEB-2010 21:09:00	30.15	1	0.03317
247255002	23-FEB-2010 21:09:00	30.01	1	0.03332
247255003	23-FEB-2010 21:09:00	30.02	1	0.03331
247255004	23-FEB-2010 21:09:00	30.18	1	0.03313
247255005	23-FEB-2010 21:09:00	30.16	1	0.03316
247551001	23-FEB-2010 21:09:00	30.18	1	0.03313
1202051282 MS (247551001)	23-FEB-2010 21:09:00	30.16	1	0.03316
1202051283 MSD (247551001)	23-FEB-2010 21:09:00	30.05	1	0.03328
247551002	23-FEB-2010 21:09:00	30.08	1	0.03324
247562002	23-FEB-2010 21:09:00	30.1	1	0.03322
247562003	23-FEB-2010 21:09:00	30.15	1	0.03317
247562004	23-FEB-2010 21:09:00	30.16	1	0.03316
247562005	23-FEB-2010 21:09:00	30.19	1	0.03312
247562006	23-FEB-2010 21:09:00	30.09	1	0.03323
247562007	23-FEB-2010 21:09:00	30.07	1	0.03326
247562008	23-FEB-2010 21:09:00	30.17	1	0.03315
247562009	23-FEB-2010 21:09:00	30.15	1	0.03317

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202051281	BNA LCS w/o Benzidine 50ppm	UE100217-14	1	mL	Verified By: AAW
LCS	1202051281	BENZIDINE LCS	UE100217-22	1	mL	Final Solvent: CH2Cl2
MS	1202051282	BNA LCS w/o Benzidine 50ppm	UE100217-14	1	mL	
MS	1202051282	BENZIDINE LCS	UE100217-22	1	mL	
MSD	1202051283	BNA LCS w/o Benzidine 50ppm	UE100217-14	1	mL	
MSD	1202051283	BENZIDINE LCS	UE100217-22	1	mL	
SURR	All	BNA for all Surrogate	UE091002-10	1	mL	
REGNT	All	Methylene Chloride	1270181-D	150	mL	
REGNT	All	Acetone	1273823-B1	150	mL	
SOURC	All	SODIUM SULFATE	1269268	30	g	

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 03/01/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1262945-D

Multiplier Voltage: 1071 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100227-01

## CALIBRATION &amp; QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s030110.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s3c0101-D.d	WBN100207-01	JLD1	01-MAR-2010 16:17	150NG	s030110	1.0	DFTPP	USE; 8270D MEGA/AP/PEST
s3c0101.d	WBN100207-01	JLD1	01-MAR-2010 16:17	150NG	s030110	1.0	DFTPP	USE; 8270C MEGA/AP/PEST
s3c0102.d	INSTBLK	JLD1	01-MAR-2010 16:30		s030110	1.0	IB	
s3c0103.d	WBN100225-08	JLD1	01-MAR-2010 16:52	101PPM	s030110	1.0	MEGAICAL	USE; LEV 1
s3c0104.d	WBN100225-07	JLD1	01-MAR-2010 17:19	110PPM	s030110	1.0	MEGAICAL	USE; LEV 2
s3c0105.d	WBN100225-06	JLD1	01-MAR-2010 17:47	120PPM	s030110	1.0	MEGAICAL	USE; LEV 3
s3c0106.d	WBN100225-05.i	JLD1	01-MAR-2010 18:15	140PPM	s030110	1.0	MEGAICAL	USE; LEV 4
s3c0107.d	WBN100225-04	JLD1	01-MAR-2010 18:43	150PPM	s030110	1.0	MEGAICAL	USE; LEV 5
s3c0108.d	WBN100225-03	JLD1	01-MAR-2010 19:11	180PPM	s030110	1.0	MEGAICAL	USE; LEV 6
s3c0109.d	WBN100225-02	JLD1	01-MAR-2010 19:39	1100PPM	s030110	1.0	MEGAICAL	USE; LEV 7
s3c0110.d	WBN100225-01	JLD1	01-MAR-2010 20:07	1120PPM	s030110	1.0	MEGAICAL	USE; LEV 8
s3c0111.d	INSTBLK	JLD1	01-MAR-2010 20:35		s030110	1.0	IB	
s3c0112-BOE	WBN100225-09.1	JLD1	01-MAR-2010 20:56	140PPM	s030110	1.0	MEGAICAL	USE; 8270BOE
s3c0112-D.d	WBN100225-09.1	JLD1	01-MAR-2010 20:56	140PPM	s030110	1.0	MEGAICAL	USE; 8270D
s3c0112.d	WBN100225-09.1	JLD1	01-MAR-2010 20:56	140PPM	s030110	1.0	MEGAICAL	USE; 8270C
s3c0113.d	WBN100218-01	JLD1	01-MAR-2010 21:24	110PPM	s030110	1.0	APICAL	USE; LEV 2
s3c0114.d	WBN100218-02	JLD1	01-MAR-2010 21:45	120PPM	s030110	1.0	APICAL	USE; LEV 3
s3c0115.d	WBN100218-03.1	JLD1	01-MAR-2010 22:06	140PPM	s030110	1.0	APICAL	USE; LEV 4
s3c0116.d	WBN100218-04	JLD1	01-MAR-2010 22:28	150PPM	s030110	1.0	APICAL	USE; LEV 5

s3c0117.d	WBNI00218-05	JLD1	01-MAR-2010 22:49	180PPM	s030110	1.0 APICAL	USE; LEV 6
s3c0118.d	WBNI00218-06	JLD1	01-MAR-2010 23:10	100PPM	s030110	1.0 APICAL	USE; LEV 7
s3c0119.d	WBNI00218-07	JLD1	01-MAR-2010 23:31	120PPM	s030110	1.0 APICAL	USE; LEV 8
s3c0120.d	WBNI00205-25	JLD1	01-MAR-2010 23:52	10PPM	s030110	1.0 PESTICAL	USE; LEV 2
s3c0121.d	WBNI00205-24	JLD1	02-MAR-2010 00:13	120PPM	s030110	1.0 PESTICAL	USE; LEV 3
s3c0122.d	WBNI00205-23.1	JLD1	02-MAR-2010 00:34	140PPM	s030110	1.0 PESTICAL	USE; LEV 4
s3c0123.d	WBNI00205-22	JLD1	02-MAR-2010 00:55	150PPM	s030110	1.0 PESTICAL	USE; LEV 5
s3c0124.d	WBNI00205-21	JLD1	02-MAR-2010 01:16	180PPM	s030110	1.0 PESTICAL	USE; LEV 6
s3c0125.d	WBNI00205-20	JLD1	02-MAR-2010 01:37	1100PPM	s030110	1.0 PESTICAL	USE; LEV 7
s3c0126.d	WBNI00205-19	JLD1	02-MAR-2010 01:58	1120PPM	s030110	1.0 PESTICAL	USE; LEV 8
s3c0127-D.d	WBNI00218-08.1	JLD1	02-MAR-2010 02:19	140PPM	s030110	1.0 APICV	USE; 8270D
s3c0127.d	WBNI00218-08.1	JLD1	02-MAR-2010 02:19	140PPM	s030110	1.0 APICV	USE; 8270C
s3c0128-D.d	WBNI00205-26.1	JLD1	02-MAR-2010 02:40	140PPM	s030110	1.0 PESTICV	USE; 8270D
s3c0128.d	WBNI00205-26.1	JLD1	02-MAR-2010 02:40	140PPM	s030110	1.0 PESTICV	USE; 8270C
s3c0129.d	WBNI00207-01	JLD1	02-MAR-2010 03:03	150NG	s030110	1.0 DTTPP	DOSE; TONE FAILS

## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 03/04/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1262945-D  
Multiplier Voltage: 1106 Emv Extr. Injection Volume: 0.5, 1.0 ul  
DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100227-01  
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/MSD3.i/s030410a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s3c0422.d	WBN100207-01	JLD1	04-MAR-2010 20:40	150ng	s030410	1.0	DFTPP	USE
s3c0423.d	WBN100225-09.4	JLD1	04-MAR-2010 20:52	140PPM	s030410	1.0	MEGACVS	USE (310566)
s3c0424.d	WBN100218-08.3	JLD1	04-MAR-2010 21:16	140PPM	s031410a	1.0	APCVS	USE
s3c0425.d	WBN100205-26.3	JLD1	04-MAR-2010 21:39	140PPM	s031410a	1.0	PESTCVS	USE
s3c0426-1.d	1202051280	JLD1	04-MAR-2010 22:02	956677	10-1879	1.0	SBLK01	USE
s3c0426-2.d	1202051280	JLD1	04-MAR-2010 22:02	956677	10-1969	1.0	SBLK01	USE
s3c0426-3.d	1202051280	JLD1	04-MAR-2010 22:02	956677	10-1950	1.0	SBLK01	USE
s3c0426.d	1202051280	JLD1	04-MAR-2010 22:02	956677	10-1876	1.0	SBLK01	USE
s3c0427-1.d	1202051281	JLD1	04-MAR-2010 22:25	956677	10-1879	1.0	SBLK01LCS	USE
s3c0427-2.d	1202051281	JLD1	04-MAR-2010 22:25	956677	10-1969	1.0	SBLK01LCS	USE
s3c0427-3.d	1202051281	JLD1	04-MAR-2010 22:25	956677	10-1950	1.0	SBLK01LCS	USE
s3c0427.d	1202051281	JLD1	04-MAR-2010 22:25	956677	10-1876	1.0	SBLK01LCS	USE
s3c0428.d	1246965001	JLD1	04-MAR-2010 22:47	953293	10-1806	1.0	LANL	USE; RR OF S3C0322; ISTD PASS
s3c0429.d	1246965004	JLD1	04-MAR-2010 23:10	953293	10-1806	1.0	LANL	USE; RR OF S3C0323; ISTD PASS
s3c0430.d	1247035001	JLD1	04-MAR-2010 23:33	953293	10-1825	1.0	LANL	USE; RR OF S3C0325; ISTD PASS
s3c0431.d	1202043539	JLD1	04-MAR-2010 23:56	953293	10-1825	1.0	MS	USE; RR OF S3C0326; ISTD PASS
s3c0432.d	1247035004	JLD1	05-MAR-2010 00:19	953293	10-1825	1.0	LANL	USE; RR OF S3C0328; ISTD PASS
s3c0433.d	1247035010	JLD1	05-MAR-2010 00:42	953293	10-1825	1.0	LANL	USE; RR OF S3C0329; ISTD PASS
s3c0434.d	1247035014	JLD1	05-MAR-2010 01:04	953293	10-1825	1.0	LANL	USE; RR OF S3C0330; ISTD PASS

s3c0435.d	1247041005	JLD1	05-MAR-2010 01:27	953293	10-1816	1.0 LANL	USE; RR OF S3C0331; ISTD PASS
s3c0436.d	1247041007	JLD1	05-MAR-2010 01:49	953293	10-1816	1.0 LANL	USE; RR OF S3C0332; ISTD PASS
s3c0437.d	1247041013	JLD1	05-MAR-2010 02:12	953293	10-1816	1.0 LANL	USE; RR OF S3C0334; ISTD PASS
s3c0438.d	1247245001	JLD1	05-MAR-2010 02:35	956677	10-1876	1.0 LANL	USE
s3c0439.d	1247245002	JLD1	05-MAR-2010 02:58	956677	10-1876	1.0 LANL	DUSE; ISTD LOW; SEE S3C0517
s3c0440.d	1247245003	JLD1	05-MAR-2010 03:20	956677	10-1876	1.0 LANL	DUSE; ISTD LOW; SEE S3C0518
s3c0441.d	1247245004	JLD1	05-MAR-2010 03:43	956677	10-1876	10.0 LANL	USE; EXTRACT THICK/BLACK
s3c0442.d	1247245006	JLD1	05-MAR-2010 04:05	956677	10-1876	10.0 LANL	USE; EXTRACT THICK/BLACK
s3c0443.d	1247255001	JLD1	05-MAR-2010 04:28	956677	10-1879	1.0 LANL	DUSE; ISTD LOW; SEE S3C0519
s3c0444.d	1247255002	JLD1	05-MAR-2010 04:50	956677	10-1879	1.0 LANL	DUSE; ISTD LOW; SEE S3C0520
s3c0445.d	1247255003	JLD1	05-MAR-2010 05:13	956677	10-1879	1.0 LANL	USE
s3c0446.d	1247255004	JLD1	05-MAR-2010 05:35	956677	10-1879	1.0 LANL	DUSE; ISTD LOW; SEE S3C0521
s3c0447.d	1247255005	JLD1	05-MAR-2010 05:58	956677	10-1879	1.0 LANL	USE
s3c0448.d	1247551001	JLD1	05-MAR-2010 06:20	956677	10-1969	1.0 LANL	DUSE; ISTD LOW; SEE S3C0522
s3c0449.d	1202051282	JLD1	05-MAR-2010 06:43	956677	10-1969	1.0 MS	USE
s3c0450.d	1202051283	JLD1	05-MAR-2010 07:05	956677	10-1969	1.0 MSD	USE
s3c0451.d	1246965010	JLD1	05-MAR-2010 07:28	953293	10-1806	1.0 LANL	DUSE; RR OF S3C0324; ISTD LOW



## GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 03/05/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: \_\_\_\_\_  
DATE: 1262945-D

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1262945-D

Multiplier Voltage: 1106 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100207-01 Internal Std ID: WBN100227-01

CALIBRATION &amp; QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s030510.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s3c0501.d	WBN100207-01	JLD1	05-MAR-2010 08:48	50NG	s030510	1.0	DFTPP	USE
s3c0502.d	WBN100225-09.2	JLD1	05-MAR-2010 09:18	40PPM	s030510	1.0	MEGACVS	USE
s3c0503.d	WBN100225-09.2	JLD1	05-MAR-2010 09:42	40PPM	s030510	1.0	MEGACVS	USE (230288)
s3c0504.d	WBN100301-05.4	JLD1	05-MAR-2010 10:06	40PPM	s030510	1.0	BJCOCVS	USE; NOT NEEDED
s3c0505.d	WBN100218-08.2	JLD1	05-MAR-2010 10:33	40PPM	s030510	1.0	APCVS	USE
s3c0506.d	WBN100205-26.2	JLD1	05-MAR-2010 10:56	40PPM	s030510	1.0	PESTCVS	USE
s3c0507.d	WBN100301-05.2	JLD1	05-MAR-2010 11:18	40PPM	s030510	1.0	BJCOCVS	USE; NOT NEEDED
s3c0508.d	1202051396	JLD1	05-MAR-2010 11:53	956751	247013	1.0	SBLK01	USE
s3c0509.d	1202051397	JLD1	05-MAR-2010 12:16	956751	247013	1.0	SBLK01LCS	USE
s3c0510.d	247013005	JLD1	05-MAR-2010 12:39	956751	247013	100.0	BJCO	USE
s3c0511.d	1202051398	JLD1	05-MAR-2010 13:03	956751	247013	100.0	MS	USE
s3c0512.d	1202051399	JLD1	05-MAR-2010 13:26	956751	247013	100.0	MSD	USE
s3c0513.d	247013006	JLD1	05-MAR-2010 13:49	956751	247013	100.0	BJCO	USE
s3c0514.d	247013018	JLD1	05-MAR-2010 14:12	956751	247013	1.0	BJCO	USE
s3c0515.d	247013019	JLD1	05-MAR-2010 14:36	956751	247013	1.0	BJCO	USE
s3c0516.d	247013015	JLD1	05-MAR-2010 14:59	956751	247013	4.0	BJCO	USE
s3c0517.d	247245002	JLD1	05-MAR-2010 15:22	956677	10-1876	1.0	LANL	USE; RR OF S3C0439
s3c0518.d	247245003	JLD1	05-MAR-2010 15:45	956677	10-1876	1.0	LANL	USE; RR OF S3C0440
s3c0519.d	247255001	JLD1	05-MAR-2010 16:08	956677	10-1879	1.0	LANL	USE; RR OF S3C0443

1s3c0520.d	1247255002	JLD1	05-MAR-2010 16:31	956677	10-1879	1.0 LANL	USE; RR OF S3C0444	
1s3c0521.d	1247255004	JLD1	05-MAR-2010 16:54	956677	10-1879	1.0 LANL	USE; RR OF S3C0446	
1s3c0522.d	1247551001	JLD1	05-MAR-2010 17:17	956677	10-1969	1.0 LANL	USE; RR OF S3C0448	
1s3c0523.d	1247551002	JLD1	05-MAR-2010 17:40	956677	10-1969	1.0 LANL	USE	
1s3c0524.d	1247562002	JLD1	05-MAR-2010 18:03	956677	10-1950	1.0 LANL	USE	
1s3c0525.d	1247562003	JLD1	05-MAR-2010 18:26	956677	10-1950	1.0 LANL	USE; ISTD LOW; S3C1130 CONFIRMS	
1s3c0526.d	1247562004	JLD1	05-MAR-2010 18:49	956677	10-1950	1.0 LANL	USE	
1s3c0527.d	1247562005	JLD1	05-MAR-2010 19:12	956677	10-1950	1.0 LANL	USE	
1s3c0528.d	1247562006	JLD1	05-MAR-2010 19:35	956677	10-1950	1.0 LANL	USE	
1s3c0529.d	1247562007	JLD1	05-MAR-2010 19:58	956677	10-1950	1.0 LANL	USE	
1s3c0530.d	1247562008	JLD1	05-MAR-2010 20:21	956677	10-1950	1.0 LANL	USE	
1s3c0531.d	1247562009	JLD1	05-MAR-2010 20:44	956677	10-1950	1.0 LANL	USE	
1s3c0532.d	1WBN100207-01	JLD1	05-MAR-2010 23:11	50NG	s030510	1.0 DETPP	DUSE	
1s3c0533.d	1WBN100225-09.2	JLD1	05-MAR-2010 23:23	140PPM	s030510	1.0 MEGACVS	DUSE	

Data File: /chem/MSD3.i/s031110a.b/s3c1130.d  
 Report Date: 12-Mar-2010 09:44

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s031110a.b/s3c1130.d  
 Lab Smp Id: 247562003 Client Smp ID: RE15-10-8313  
 Inj Date : 11-MAR-2010 20:03  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562003|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270\_S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s031110a.b/MSD3-8270R-AQA-030910.m  
 Meth Date : 12-Mar-2010 08:03 jen00986 Quant Type: ISTD  
 Cal Date : 10-MAR-2010 05:53 Cal File: s3c0957.d  
 Als bottle: 19  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.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	30.15000	weight of sample
M	3.58770	% 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	3.507	3.511	(1.000)	600963	40.0000	
* 29 Naphthalene-d8	136	4.363	4.366	(1.000)	2282585	40.0000	
* 46 Acenaphthene-d10	164	5.604	5.607	(1.000)	1158117	40.0000	
* 67 Phenanthrene-d10	188	6.625	6.624	(1.000)	1868260	40.0000	
* 91 Chrysene-d12	240	8.198	8.207	(1.000)	1078682	40.0000	
* 98 Perylene-d12	264	9.380	9.394	(1.000)	598857	40.0000	
\$ 3 2-Fluorophenol	112	2.726	2.719	(0.777)	964882	71.4438	2460
\$ 5 Phenol-d5	99	3.240	3.243	(0.924)	1156226	72.8711	2510
\$ 20 Nitrobenzene-d5	82	3.865	3.874	(0.886)	512163	39.4143	1360
\$ 39 2-Fluorobiphenyl	172	5.106	5.105	(0.911)	1230699	41.7681	1440
\$ 60 2,4,6-Tribromophenol	329	6.160	6.164	(1.099)	179455	67.5813	2320
\$ 81 p-Terphenyl-d14	244	7.556	7.554	(0.922)	951795	56.9254	1960

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng/ul)	(ug/Kg)	
79 Pyrene	202	7.492	7.495	(0.914)	208765	6.68386	230	
45 Acenaphthylene	152	5.502	5.506	(0.982)	18478	0.42659	14.7(a)	
53 Fluorene	166	5.994	5.998	(1.070)	10807	0.34530	11.9(a)	
68 Phenanthrene	178	6.636	6.640	(1.002)	192216	4.54193	156	
69 Anthracene	178	6.668	6.672	(1.006)	37726	0.91048	31.3(a)	
76 Fluoranthene	202	7.358	7.356	(1.111)	289204	7.54444	260	
89 Benzo(a)anthracene	228	8.193	8.196	(0.999)	83944	3.35093	115	
92 Chrysene	228	8.214	8.223	(1.002)	82311	3.21353	110	
95 Benzo(b)fluoranthene	252	9.011	9.020	(0.961)	83816	5.51404	190	
97 Benzo(a)pyrene	252	9.326	9.335	(0.994)	36552	2.79919	96.3	
99 Indeno(1,2,3-cd)pyrene	276	10.669	10.694	(1.137)	15580	1.38375	47.6	
100 Dibenzo(a,h)anthracene	278	10.674	10.699	(1.138)	4765	0.52001	17.9(a)	
101 Benzo(ghi)perylene	276	11.075	11.090	(1.181)	13053	1.41120	48.5(Q)	

#### 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: s3c1130.d

Report Date: 03/12/2010 08:41

Lab. ID: 247562003

SampleType: SAMPLE

Injection Date: 11-MAR-2010 20:03

Operator: JLD1

Instrument: MSD3.i

Sample Info: |247562003|956677|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270\_S|WBN100227-01|

Comment:

Method used: /chem/MSD3.i/s031110a.b/MSD3-8270R-AQA-030910.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1950

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	55513	3.24	3.30	80-120	100	(T)
93	17147	3.28	3.30	229-289	31	(Q)
-----						
6	Phenol	CAS#: 108-95-2				
94	44769	3.09	3.25	80-120	100	(T)
66	8655	3.09	3.25	12- 72	19	(T)
65	32534	3.09	3.25	0- 30	73	(QT)
-----						
17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	73081	3.87	3.76	80-120	100	(T)
42	57603	3.87	3.76	64-124	79	(T)
-----						
22	Isophorone	CAS#: 78-59-1				
82	527489	3.87	4.04	80-120	100	(T)
138	104	3.93	4.04	0- 55	0	(T)
-----						
27	Benzoic acid	CAS#: 65-85-0				
105	2500	4.15	4.17	80-120	100	( )
122	851	4.16	4.17	53-113	34	(Q)
77	4942	4.15	4.16	36- 96	198	(Q)
-----						
40	2-Chloronaphthalene	CAS#: 91-58-7				
162	25271	5.34	5.21	80-120	100	(T)
164	1445	5.34	5.21	3- 63	6	(T)
127	2293	5.34	5.21	12- 72	9	(QT)
-----						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
42	o-Nitroaniline		CAS#: 88-74-4			
65	28407	5.34	5.27	80-120	100	(T)
92	33029	5.34	5.27	36- 96	116	(QT)
138	3256	5.34	5.27	99-159	11	(QT)
<hr/>						
43	Dimethylphthalate		CAS#: 131-11-3			
163	207008	5.60	5.39	80-120	100	(T)
164	1158117	5.60	5.39	0- 40	559	(QT)
<hr/>						
44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	150624	5.60	5.44	80-120	100	(T)
63	1932	5.60	5.44	40-100	1	(QT)
<hr/>						
45	Acenaphthylene		CAS#: 208-96-8			
152	18478	5.50	5.51	80-120	100	( )
151	4350	5.50	5.51	0- 50	24	( )
153	2330	5.50	5.51	0- 43	13	( )
<hr/>						
50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	150624	5.60	5.73	80-120	100	(T)
89	2181	5.60	5.73	42-102	1	(QT)
63	1932	5.60	5.73	19- 79	1	(QT)
<hr/>						
52	4-Nitrophenol		CAS#: 100-02-7			
139	2474	5.75	5.67	80-120	100	(T)
109	433	5.89	5.67	33- 93	18	(QT)
65	284	5.65	5.67	43-103	12	(Q)
<hr/>						
53	Fluorene		CAS#: 86-73-7			
166	10807	5.99	6.00	80-120	100	( )
165	9094	5.99	6.00	62-122	84	( )
167	1762	5.99	6.00	0- 44	16	( )
<hr/>						
55	2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1			
198	784	6.16	6.02	80-120	100	(T)
105	1976	6.15	6.02	13- 73	252	(QT)
51	1782	6.15	6.02	37- 97	227	(QT)
<hr/>						
56	p-Nitroaniline		CAS#: 100-01-6			
138	571	6.02	6.00	80-120	100	( )
108	1167	6.07	6.00	28- 88	204	(QT)
92	432	6.08	6.00	6- 66	76	(QT)
<hr/>						
61	4-Bromophenylphenylether		CAS#: 101-55-3			
248	14056	6.16	6.32	80-120	100	(T)
141	114540	6.15	6.31	68-128	815	(QT)
250	28617	6.16	6.32	67-127	204	(QT)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
68 Phenanthrene			CAS#: 85-01-8			
178	192216	6.64	6.64	80-120	100	( )
179	31824	6.64	6.64	0- 46	17	( )
176	36117	6.64	6.64	0- 49	19	( )
<hr/>						
69 Anthracene			CAS#: 120-12-7			
178	37726	6.67	6.67	80-120	100	( )
179	7544	6.67	6.67	0- 46	20	( )
176	6523	6.67	6.67	0- 49	17	( )
<hr/>						
76 Fluoranthene			CAS#: 206-44-0			
202	289204	7.36	7.36	80-120	100	( )
203	48904	7.36	7.36	0- 48	17	( )
101	35303	7.35	7.36	0- 44	12	( )
<hr/>						
79 Pyrene			CAS#: 129-00-0			
202	208765	7.49	7.50	80-120	100	( )
200	44889	7.49	7.50	0- 51	22	( )
101	32632	7.49	7.50	0- 47	16	( )
<hr/>						
89 Benzo(a)anthracene			CAS#: 56-55-3			
228	83944	8.19	8.20	80-120	100	( )
226	25336	8.19	8.20	0- 57	30	( )
229	23347	8.19	8.20	0- 50	28	( )
<hr/>						
92 Chrysene			CAS#: 218-01-9			
228	82311	8.21	8.22	80-120	100	( )
229	18791	8.21	8.22	0- 50	23	( )
226	25968	8.21	8.22	0- 59	32	( )
<hr/>						
95 Benzo(b)fluoranthene			CAS#: 205-99-2			
252	83816	9.01	9.02	80-120	100	( )
253	18790	9.01	9.02	0- 52	22	( )
125	14303	9.01	9.02	0- 47	17	( )
<hr/>						
96 Benzo(k)fluoranthene			CAS#: 207-08-9			
252	84198	9.01	9.04	80-120	100	( )
253	19154	9.01	9.04	0- 52	23	( )
125	14303	9.01	9.04	0- 45	17	( )
<hr/>						
97 Benzo(a)pyrene			CAS#: 50-32-8			
252	36552	9.33	9.34	80-120	100	( )
253	8752	9.33	9.34	0- 52	24	( )
125	6108	9.32	9.34	0- 30	17	( )
<hr/>						
99 Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5			
276	15580	10.67	10.69	80-120	100	( )
138	5244	10.67	10.69	15- 75	34	( )
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	4765	10.67	10.70	80-120	100	( )
139	1153	10.67	10.69	0- 30	24	( )

-----						
101	Benzo(ghi)perylene			CAS#: 191-24-2		
276	13053	11.08	11.09	80-120	100	( )
138	4971	11.07	11.09	0- 30	38	(Q)

-----

Q qualifier indicates ion failed ratio requirement



GEL Laboratories LLC

Data file : /chem/MSD3.i/s031110a.b/s3c1130.d  
 Lab Smp Id: 247562003 Client Smp ID: RE15-10-8313  
 Inj Date : 11-MAR-2010 20:03  
 Operator : JLD1 Inst ID: MSD3.i  
 Smp Info : |247562003|956677|1|SVMF|1|LANL  
 Misc Info : |MSD8270 S|WBN100227-01|  
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
 Method : /chem/MSD3.i/s031110a.b/MSD3-8270R-AQA-030910.m  
 Meth Date : 12-Mar-2010 08:03 jen00986 Quant Type: ISTD  
 Cal Date : 10-MAR-2010 05:53 Cal File: s3c0957.d  
 Als bottle: 19  
 Dil Factor: 1.00000  
 Integrator: HP RTE Compound Sublist: 10-1950.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	30.15000	weight of sample
M	3.58770	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.507	3468567	40.000
* 91 Chrysene-d12	8.198	5351712	40.000
* 98 Perylene-d12	9.380	2000011	40.000

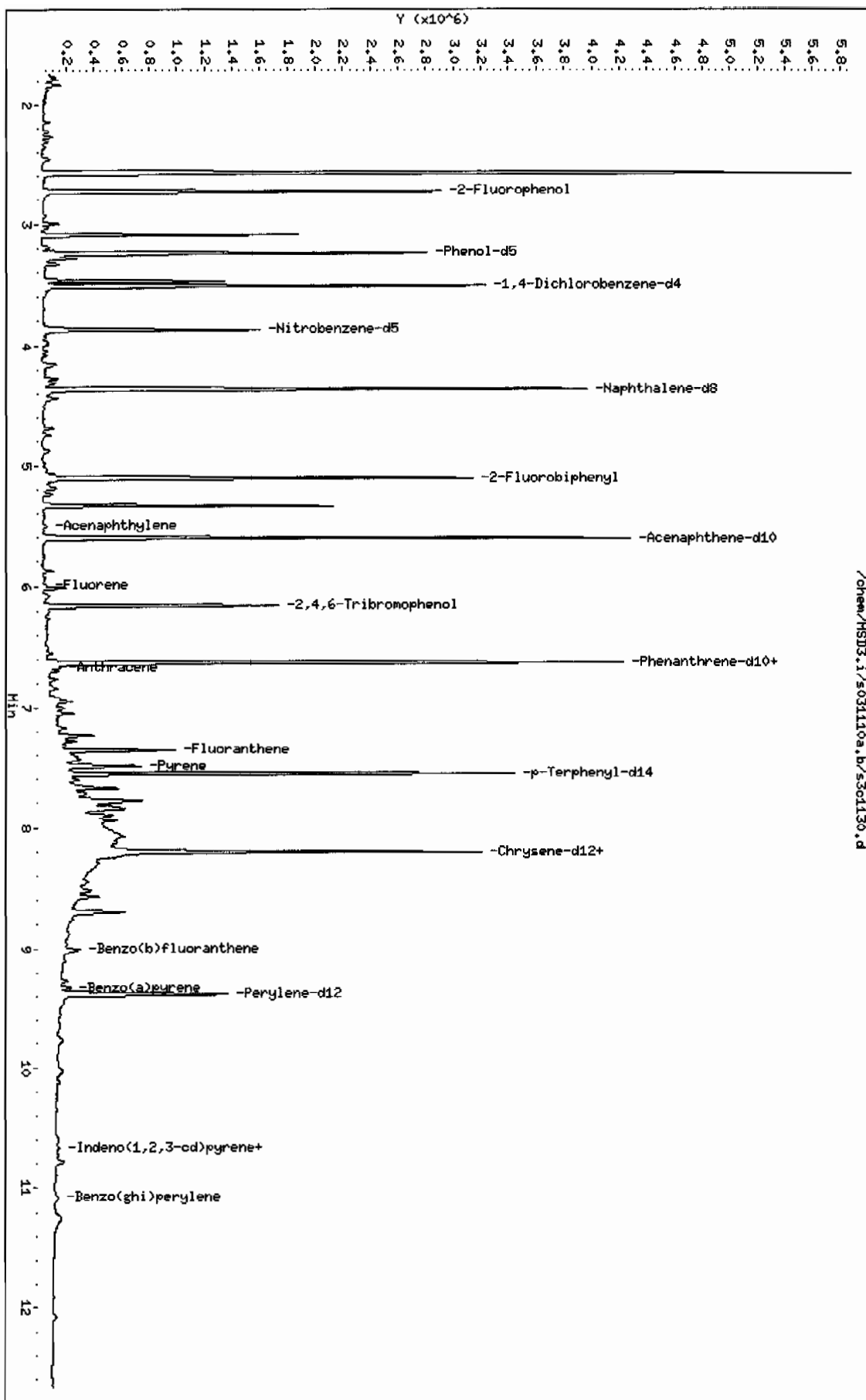
CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY CPND #
=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.571	7440164	85.8010035	2950	0		0	10
3-Carene					CAS #: 13466-78-9		
3.470	1404077	16.1920145	557	96	NIST05.L	15157	10
Pyrene, 1-methyl-					CAS #: 2381-21-7		
7.674	722443	5.39971256	186	87	NIST05.L	68688	91
Unknown					CAS #:		
7.775	1433713	10.7159207	369	0		0	91
Unknown					CAS #:		
7.845	1085363	8.11226638	279	0		0	91
Unknown					CAS #:		
7.904	738292	5.51817478	190	0		0	91
Unknown					CAS #:		
7.941	711571	5.31845166	183	0		0	91
Unknown					CAS #:		
8.075	2783663	20.8057727	716	0		0	91
Unknown					CAS #:		
8.118	999911	7.47357945	257	0		0	91
Unknown					CAS #:		
8.294	890662	6.65702561	229	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
8.695	1121631	8.38334434	288	93	NIST05.L	112655	91
Unknown					CAS #:		
8.759	785590	5.87168900	202	0		0	91
Unknown					CAS #:		
8.877	597148	11.9428861	411	0		0	98
Unknown					CAS #:		
8.963	248887	4.97772088	171	0		0	98
Unknown					CAS #:		
9.102	220058	4.40113872	151	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Perylene					CAS #: 198-55-0		
9.273	243952	4.87901559	168	96	NIST05.L	93574	98
Unknown					CAS #:		
9.449	241507	4.83011477	166	0		0	98
Unknown					CAS #:		
10.027	261296	5.22588574	180	0		0	98
Unknown					CAS #:		
11.252	330557	6.61111107	227	0		0	98

Data File: /chem/HSD3.i/s031110a.b/s301130.d  
 Date: 11-MAR-2010 20:03  
 Client ID: REL5-10-8313  
 Sample Info: 124756200319667711SVNF111LNL  
 Volume Injected (uL): 0.5  
 Column phase: J&M DB-SMS

Instrument: HSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

Volume Injected (uL): 0.5

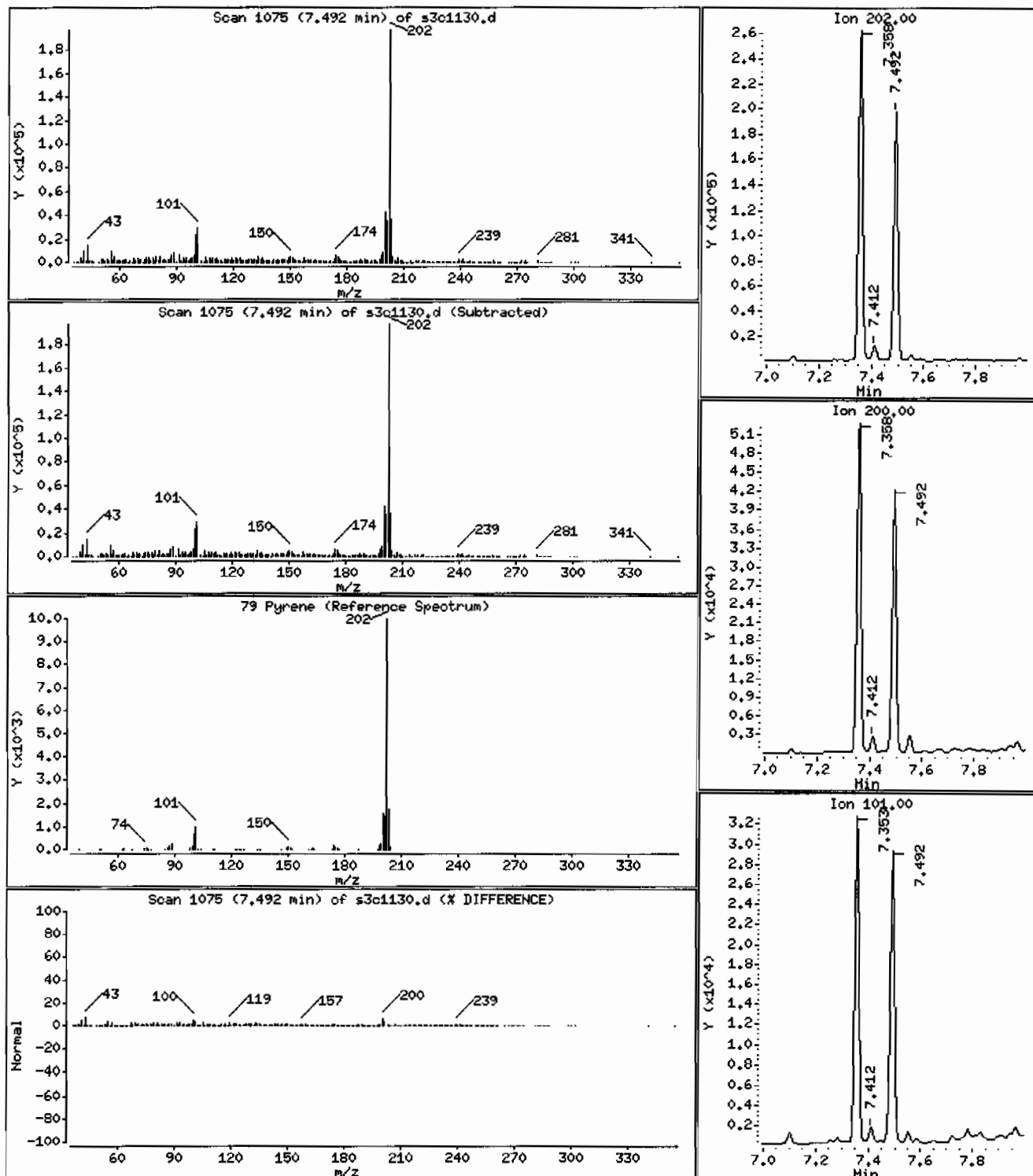
Operator: JLD1

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

Column diameter: 0.20

79 Pyrene

Concentration: 230 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711ISVHF11ILANL

Volume Injected (uL): 0.5

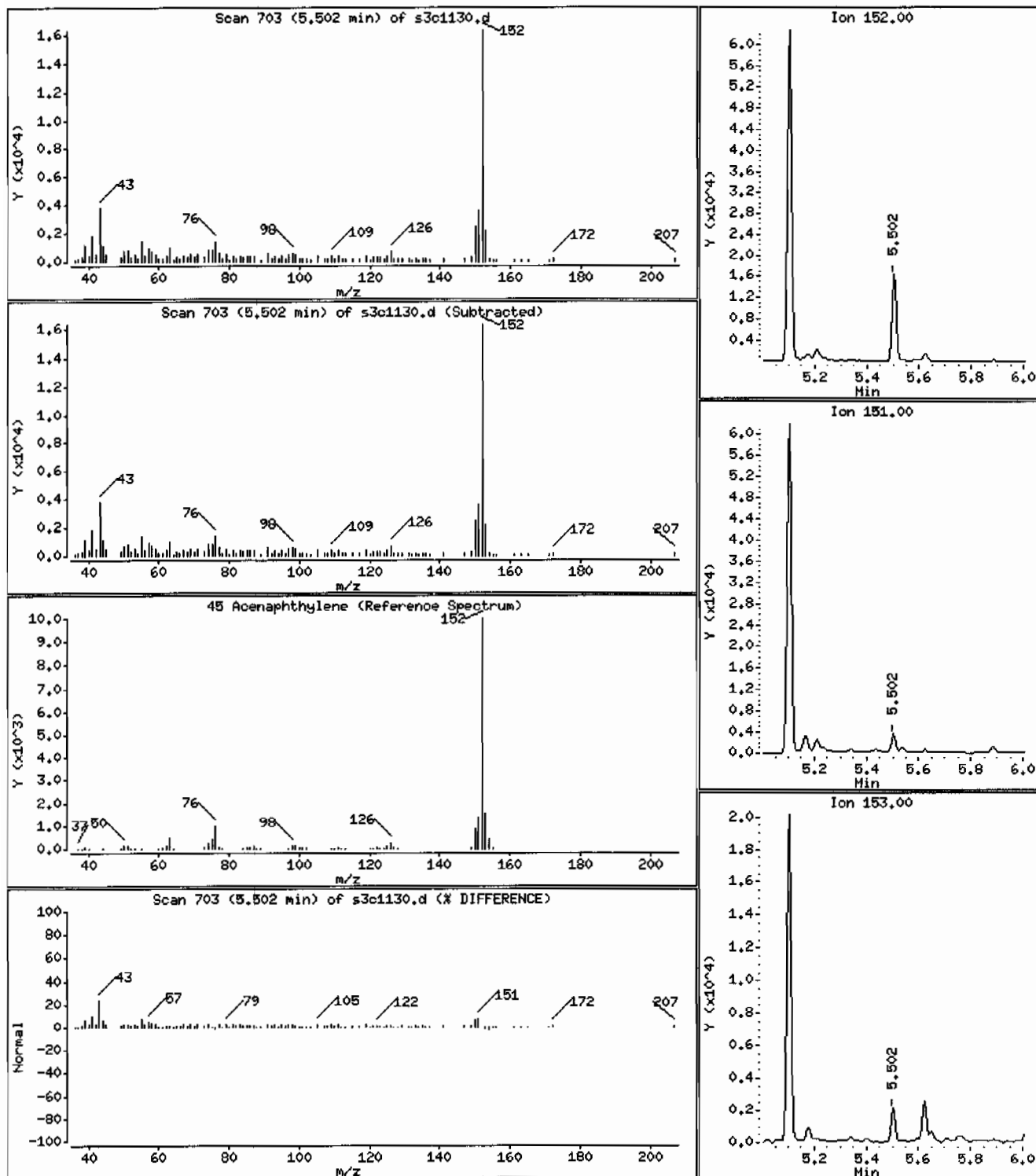
Operator: JLD1

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

Column diameter: 0.20

45 Acenaphthylene

Concentration: 14.7 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

Volume Injected (uL): 0.5

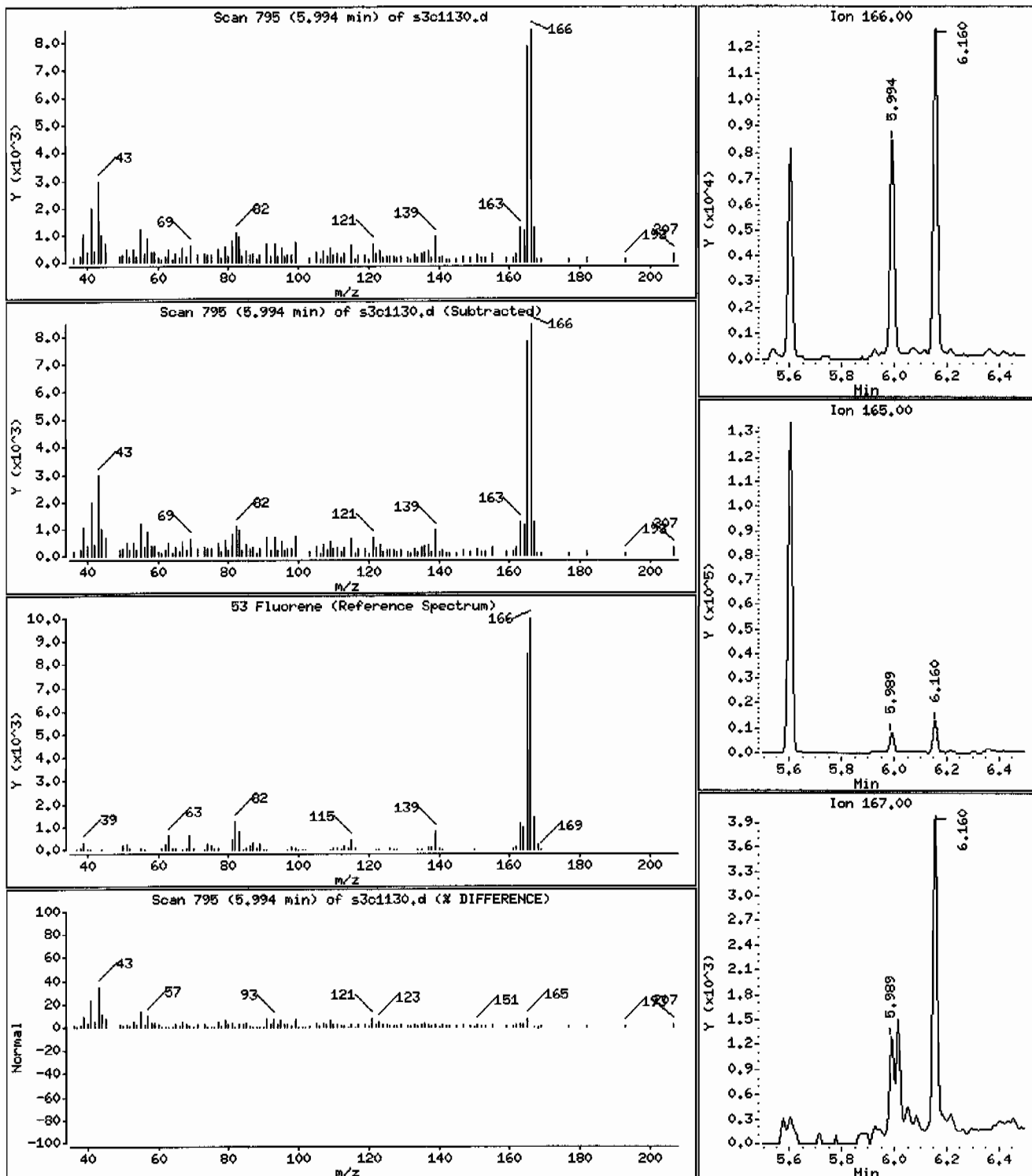
Operator: JLD1

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

Column diameter: 0.20

53 Fluorene

Concentration: 11.9 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

Volume Injected (uL): 0.5

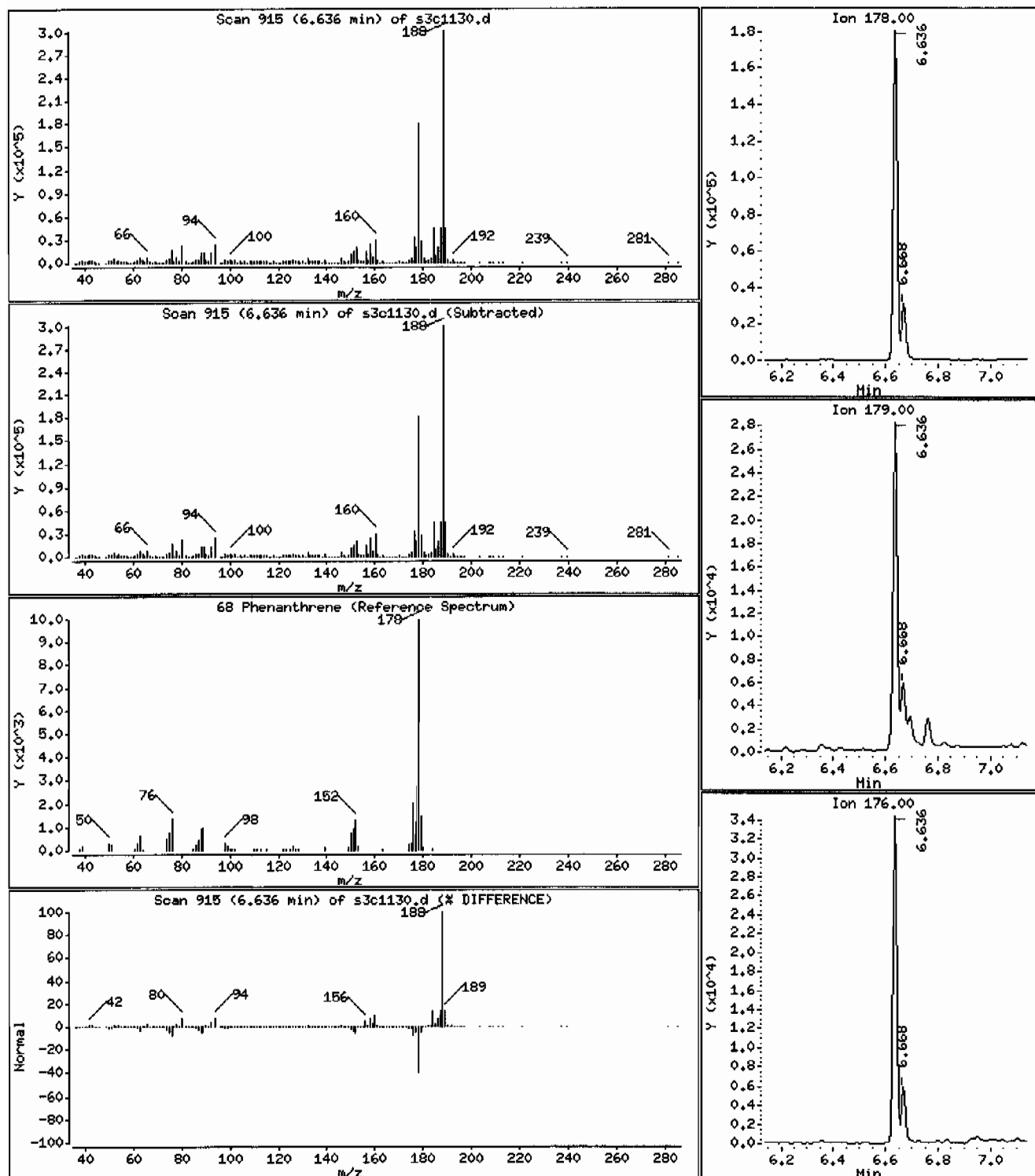
Operator: JLD1

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

Column diameter: 0.20

68 Phenanthrene

Concentration: 156 ug/Kg





Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 12475620031956677111SVMF111LANL

Volume Injected (uL): 0.5

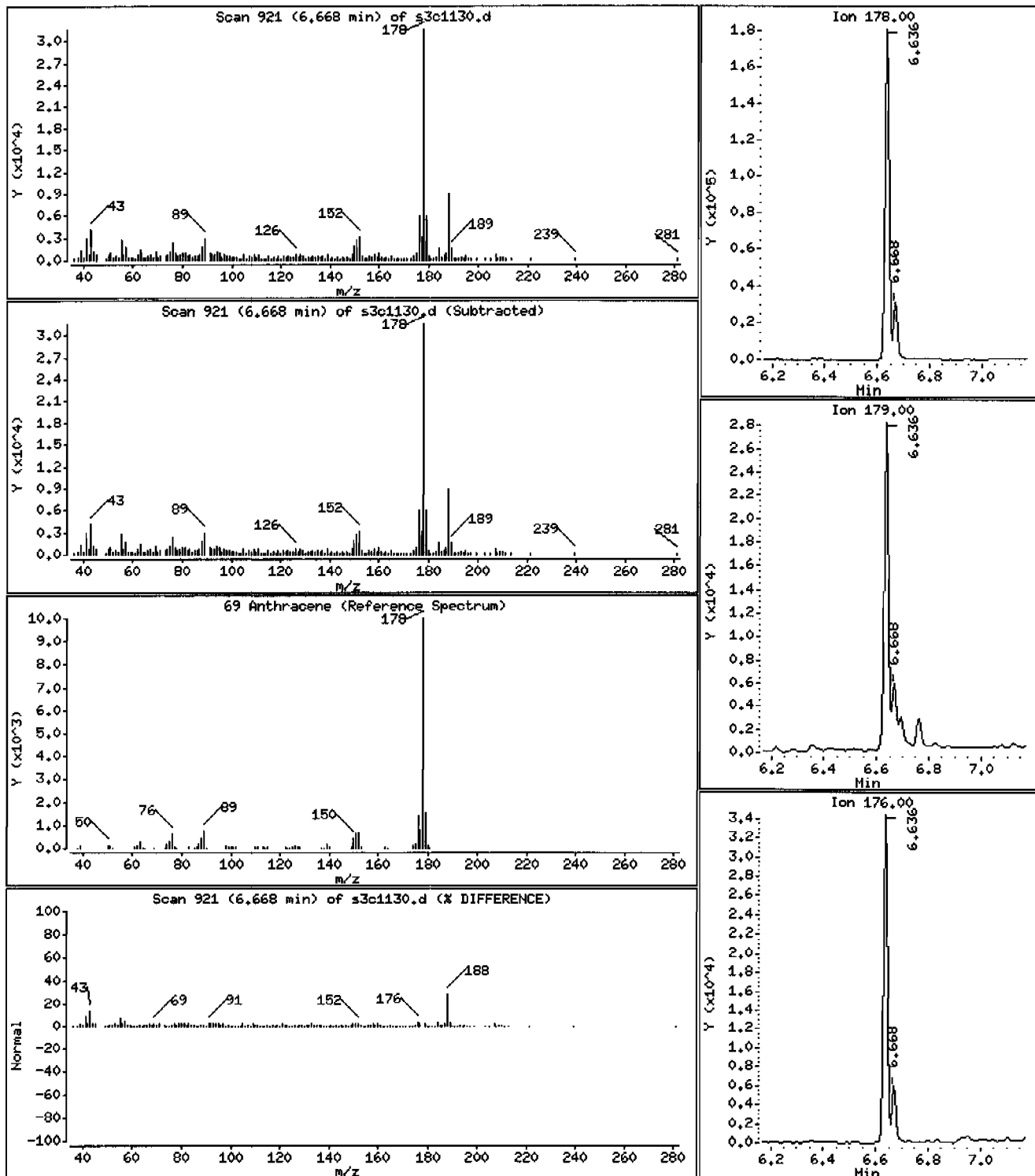
Operator: JLD1

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

Column diameter: 0.20

69 Anthracene

Concentration: 31.3 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.1

Sample Info: 1247562003195667711SVHF11ILANL

Volume Injected (uL): 0.5

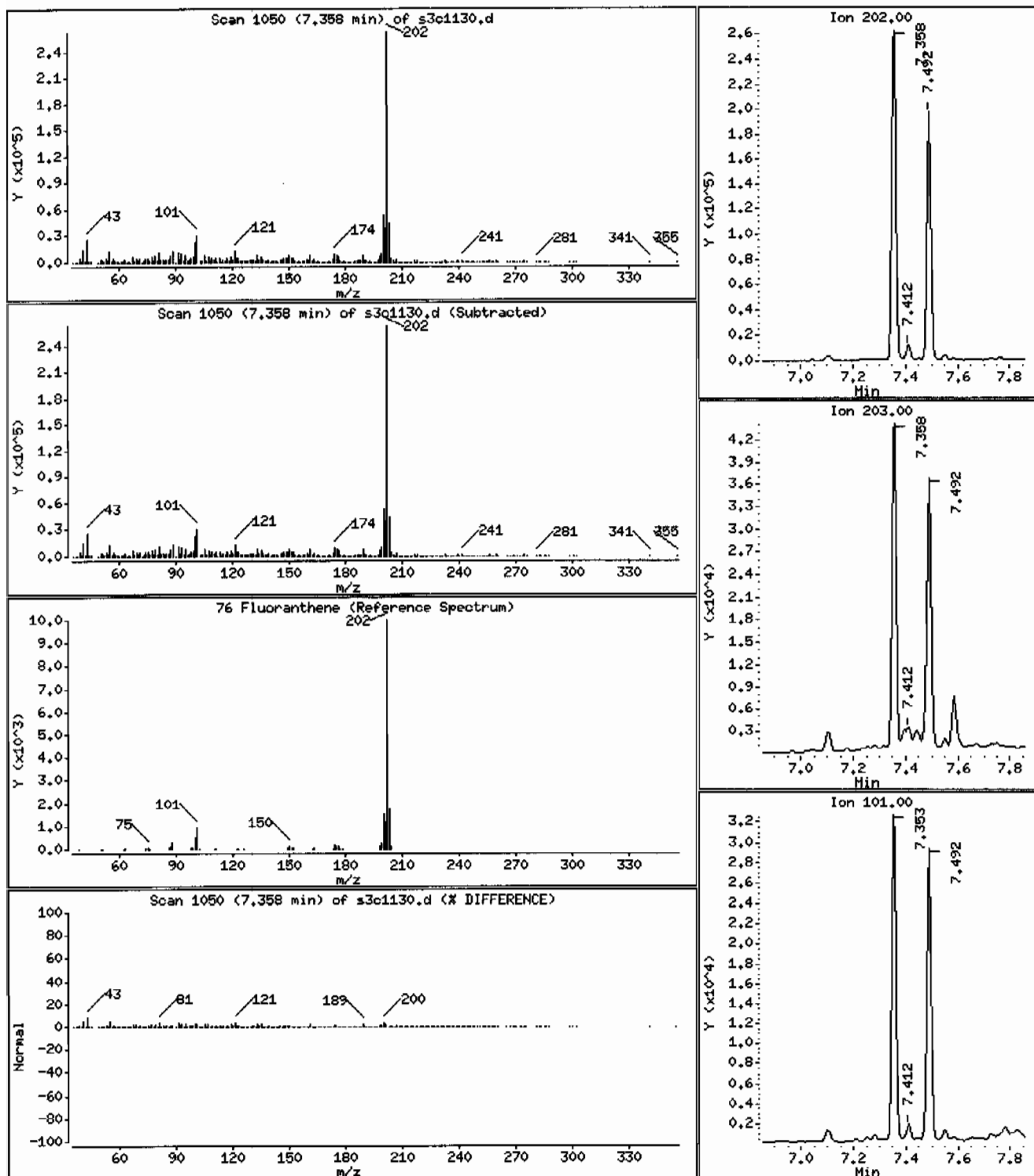
Operator: JLD1

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

Column diameter: 0.20

76 Fluoranthene

Concentration: 260 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

Volume Injected (uL): 0.5

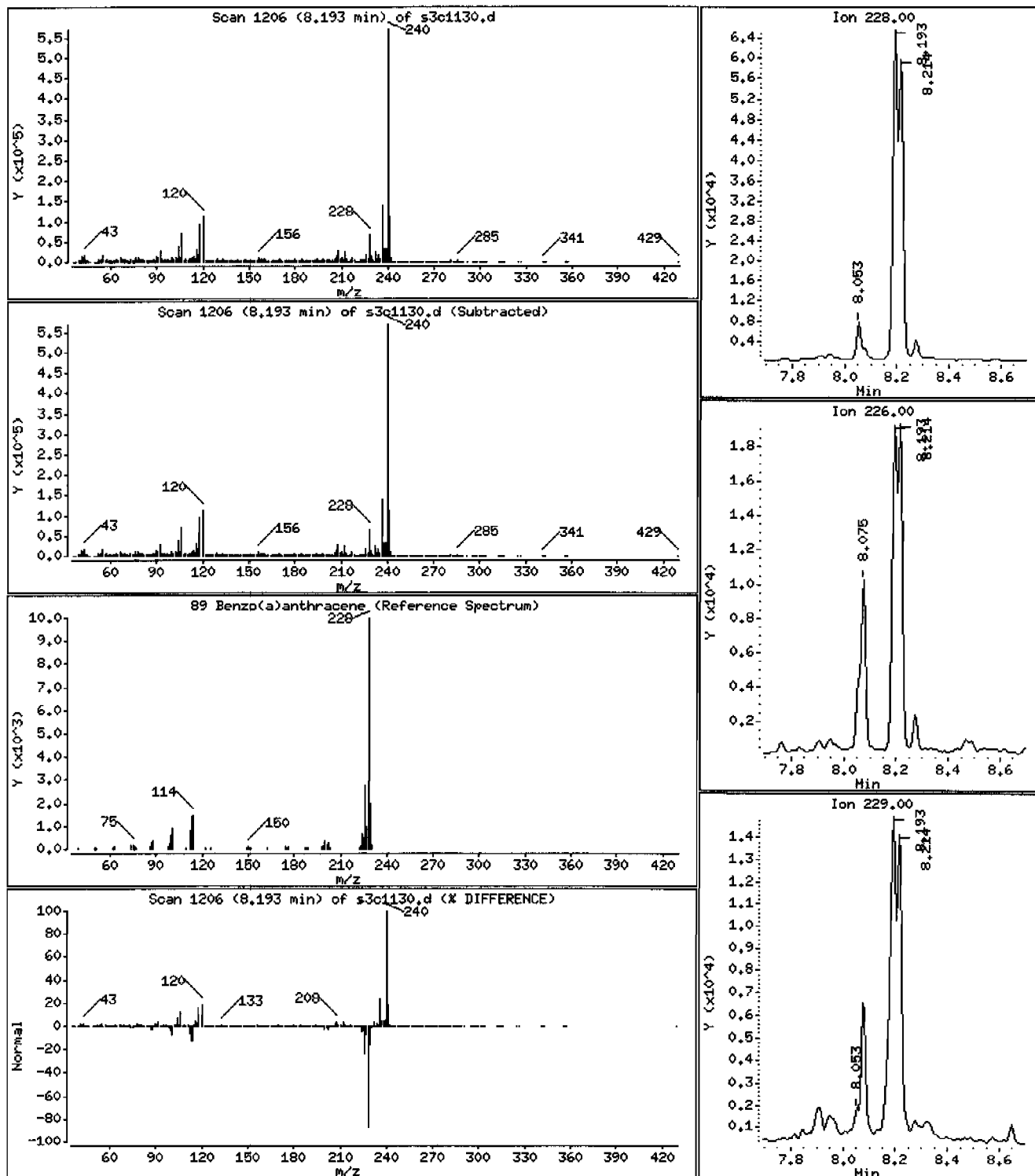
Operator: JLD1

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

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 115 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (ul): 0.5

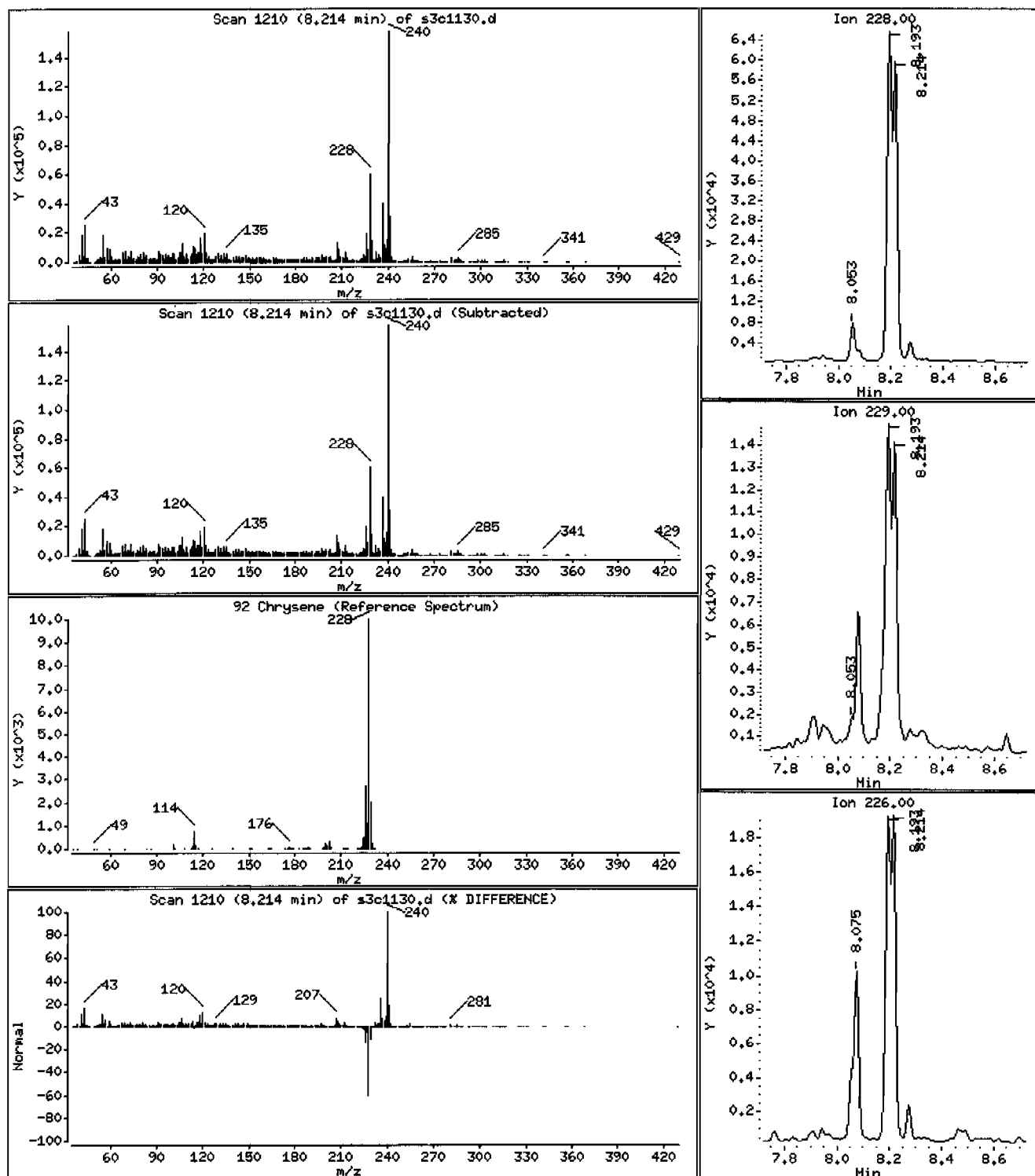
Operator: JLD1

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

Column diameter: 0.20

92 Chrysene

Concentration: 110 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (uL): 0.5

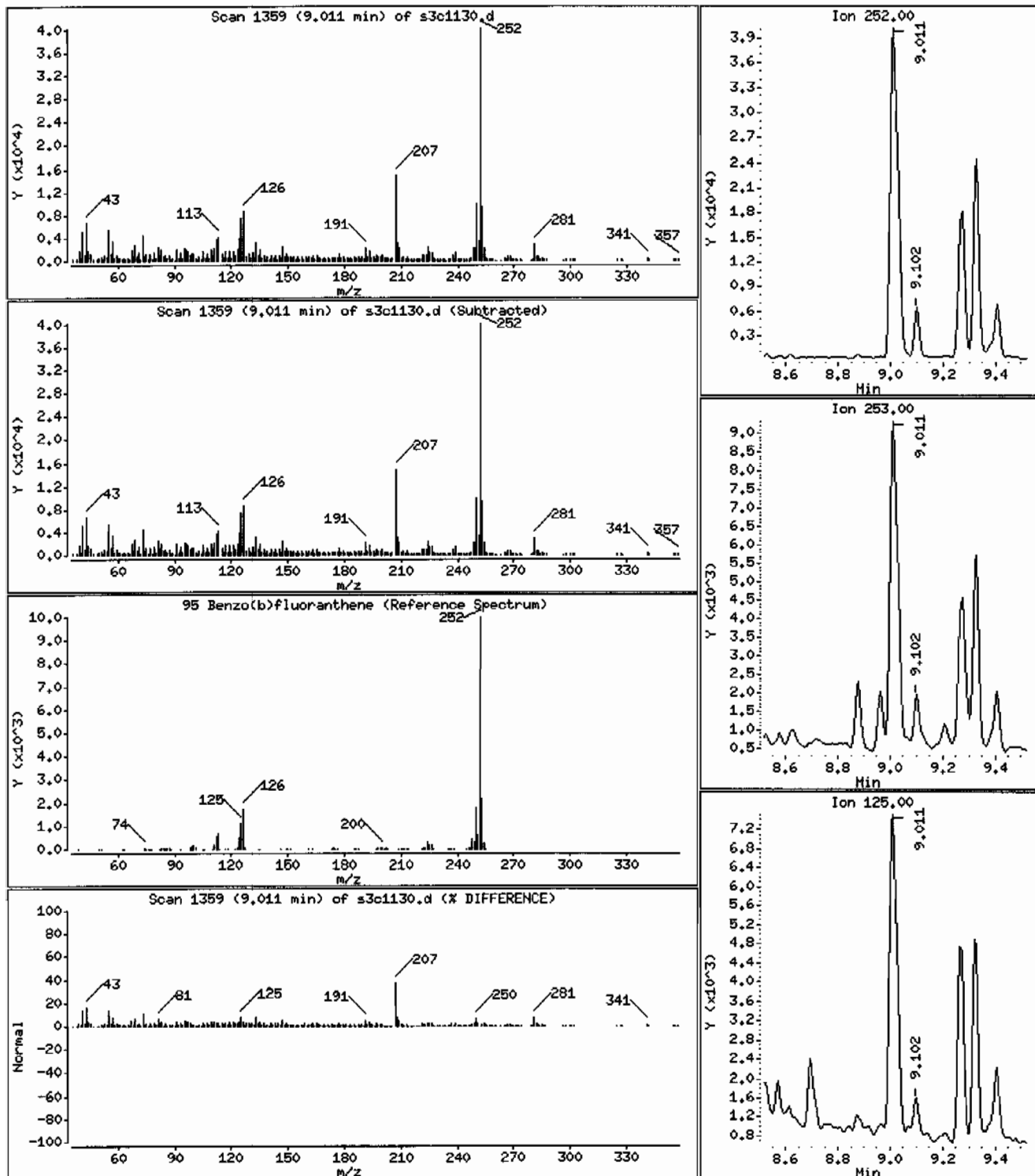
Operator: JLD1

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

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 190 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

Volume Injected (uL): 0.5

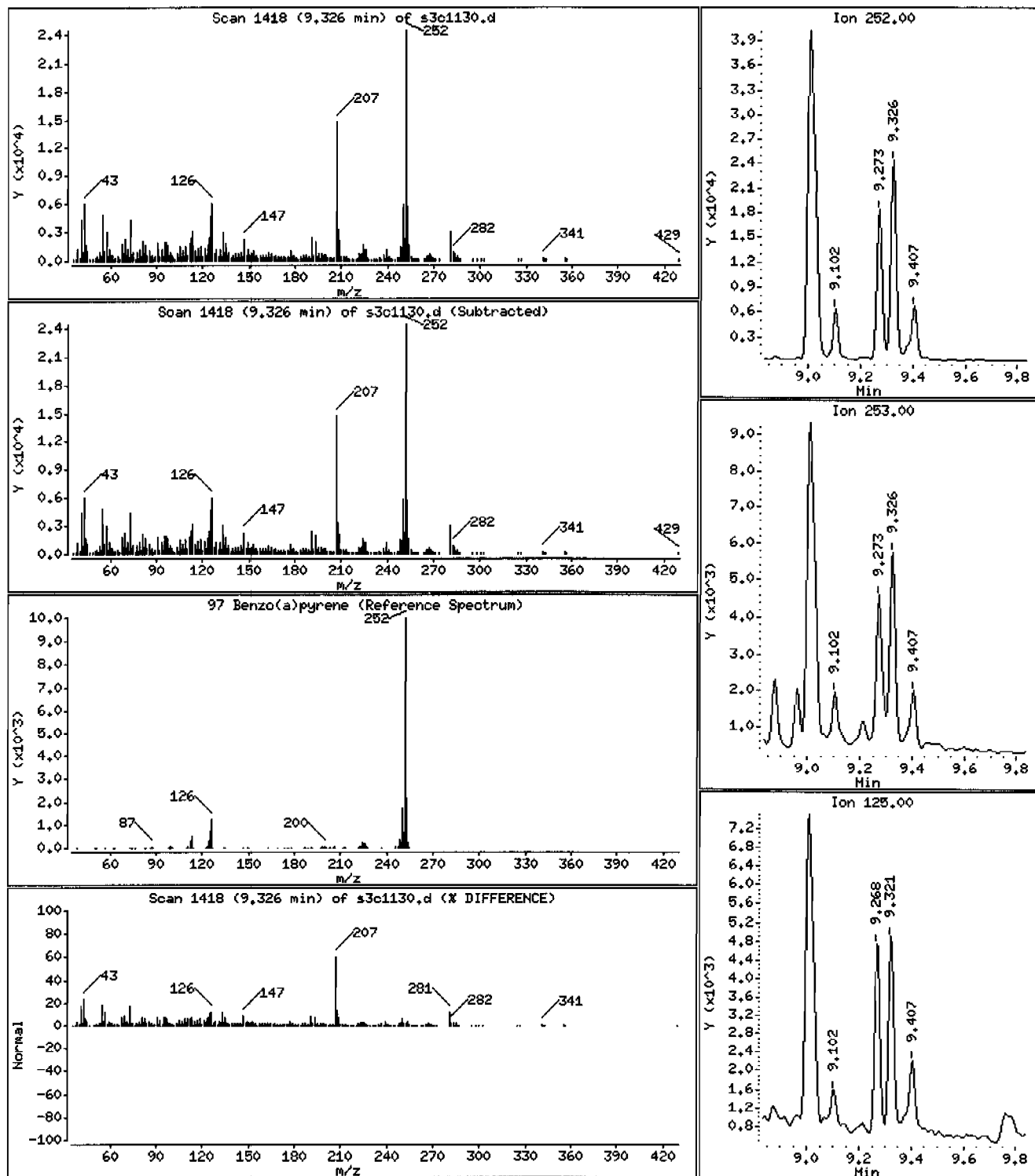
Operator: JLD1

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

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 96,3 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 12475620031956677111SVHF111LANL

Volume Injected (uL): 0.5

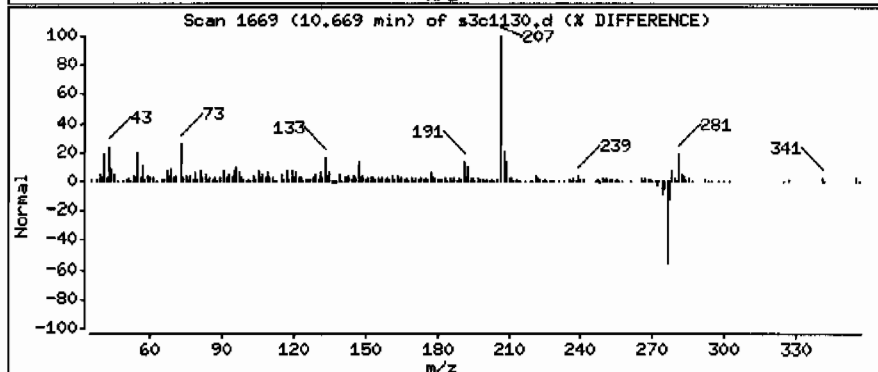
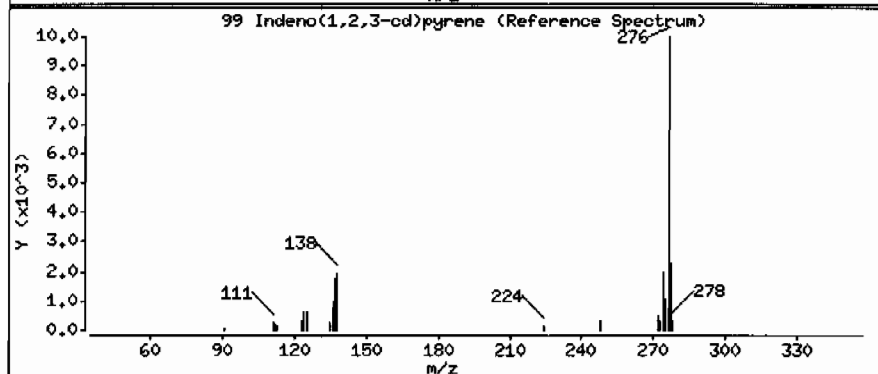
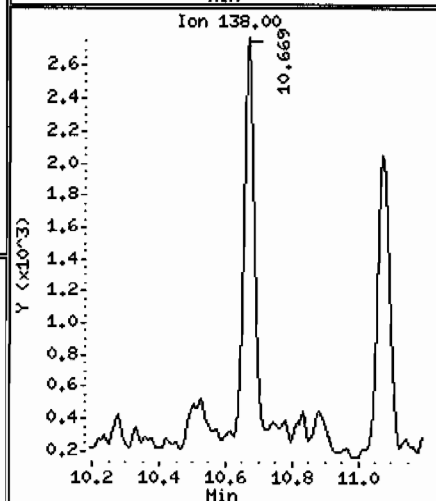
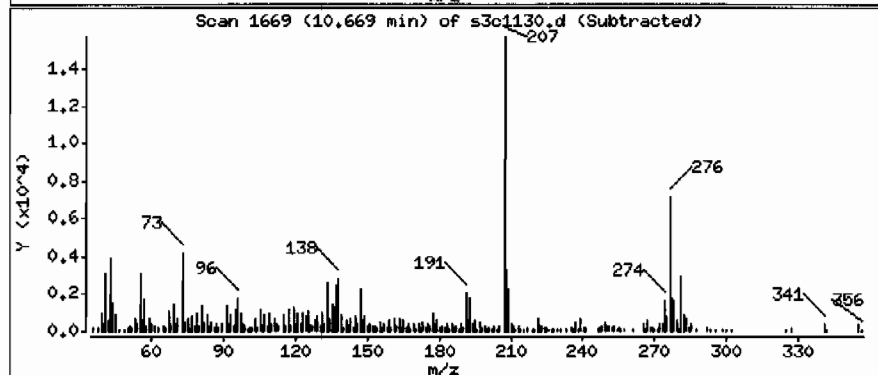
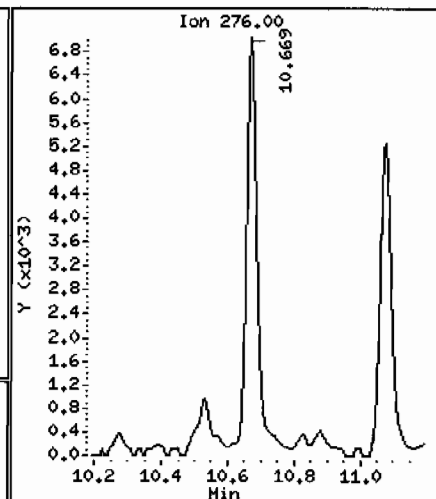
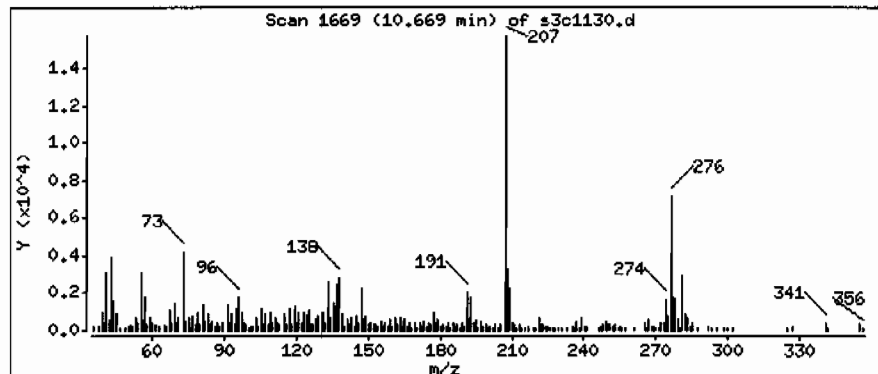
Operator: JLD1

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

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 47,6 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11LANL

Volume Injected (uL): 0.5

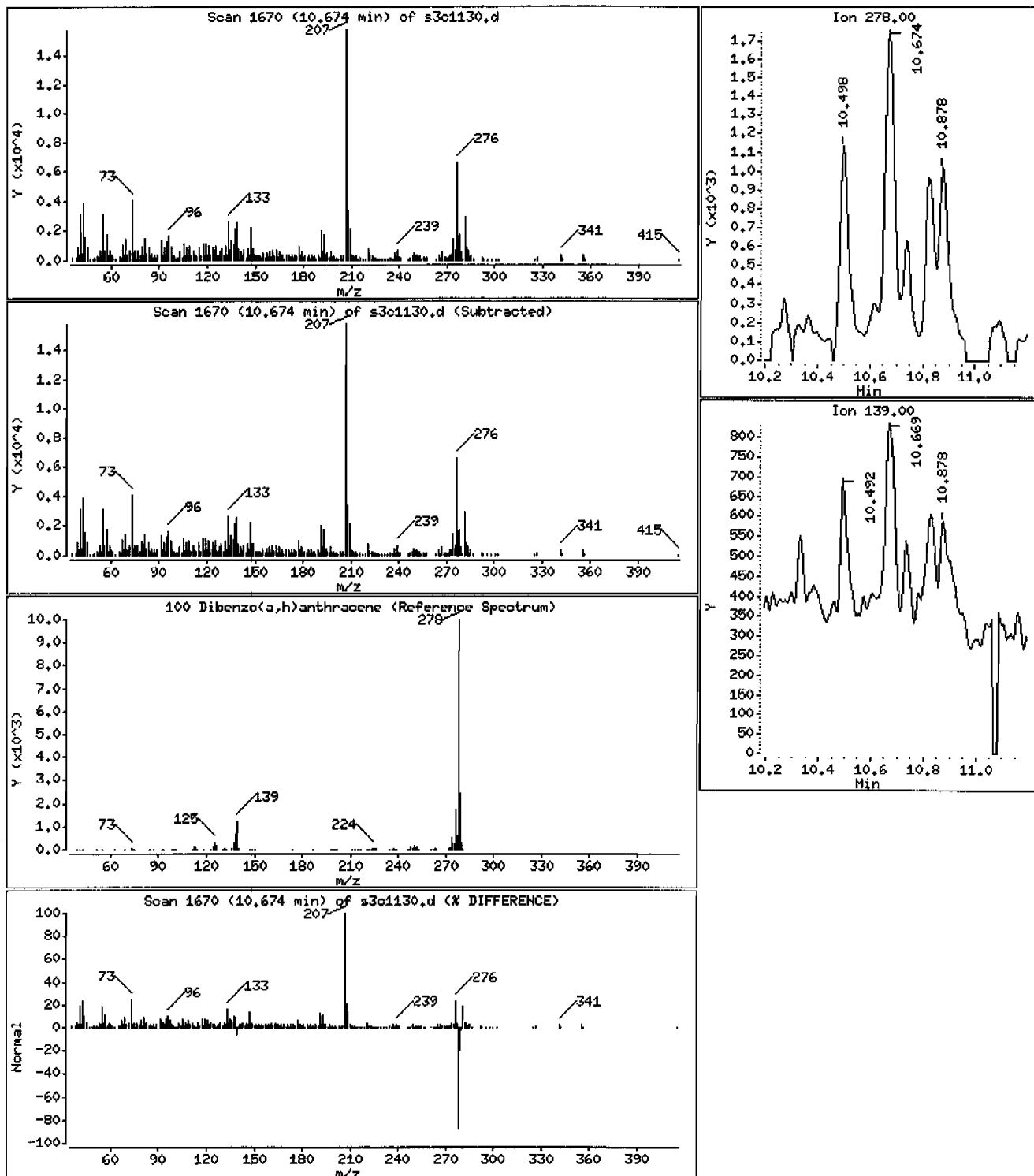
Operator: JLD1

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

Column diameter: 0.20

100 Dibenzo(a,h)anthracene

Concentration: 17.9 ug/Kg





Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

Volume Injected (uL): 0,5

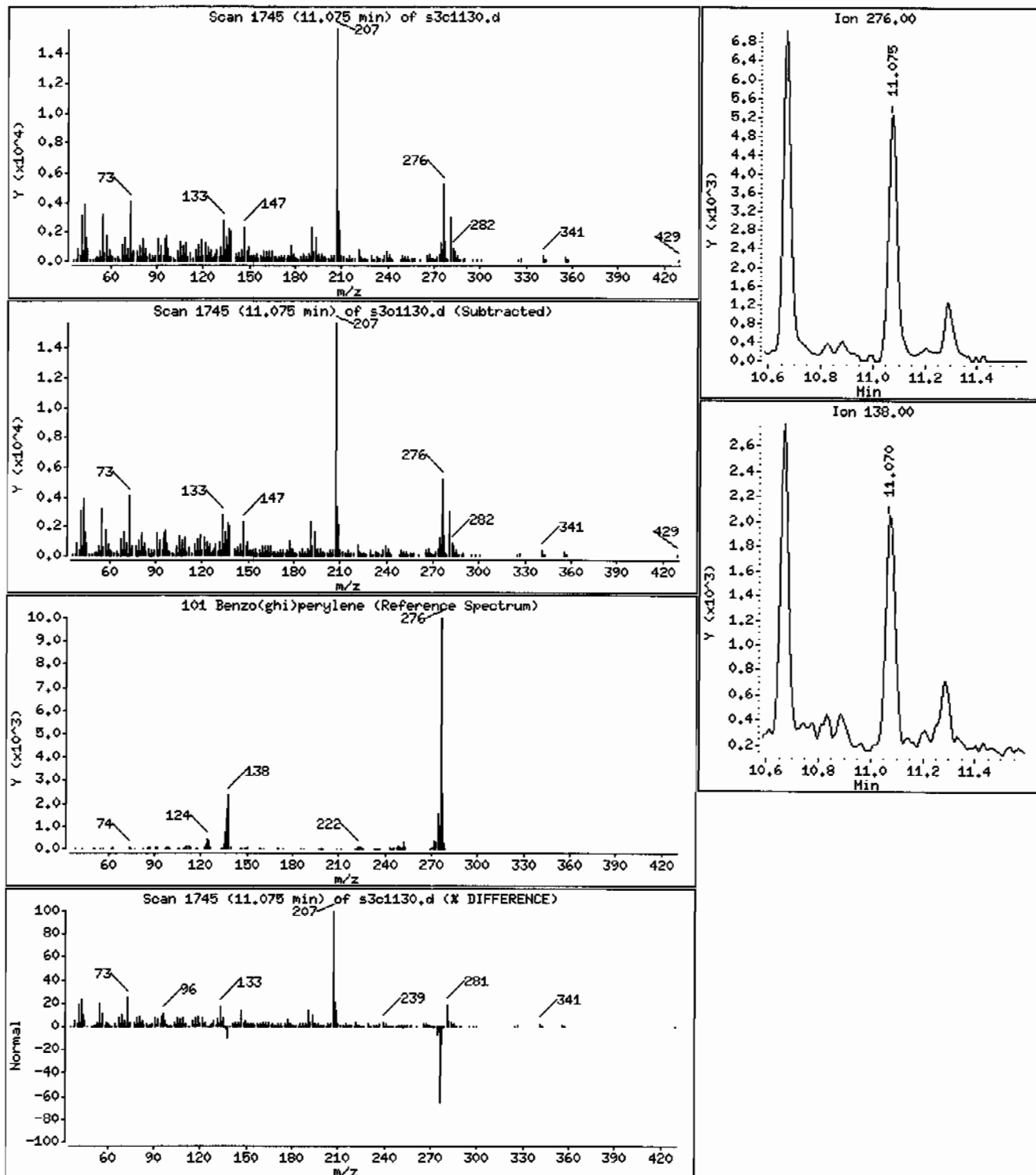
Operator: JLD1

Column phase: J&amp;W DB-6MS

Column diameter: 0,20

101 Benzo(ghi)perylene

Concentration: 48,5 ug/Kg



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

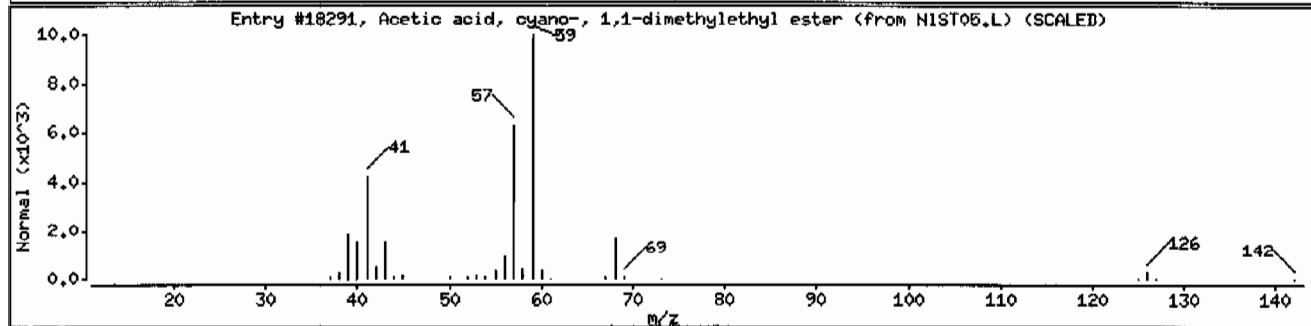
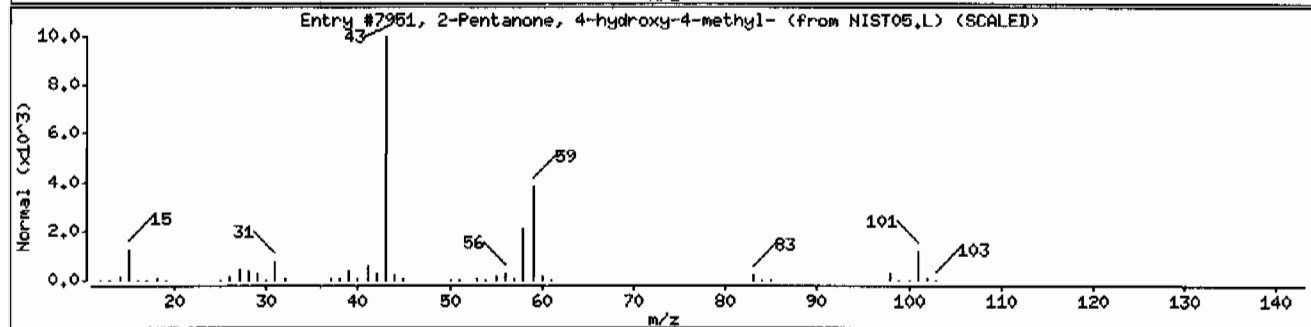
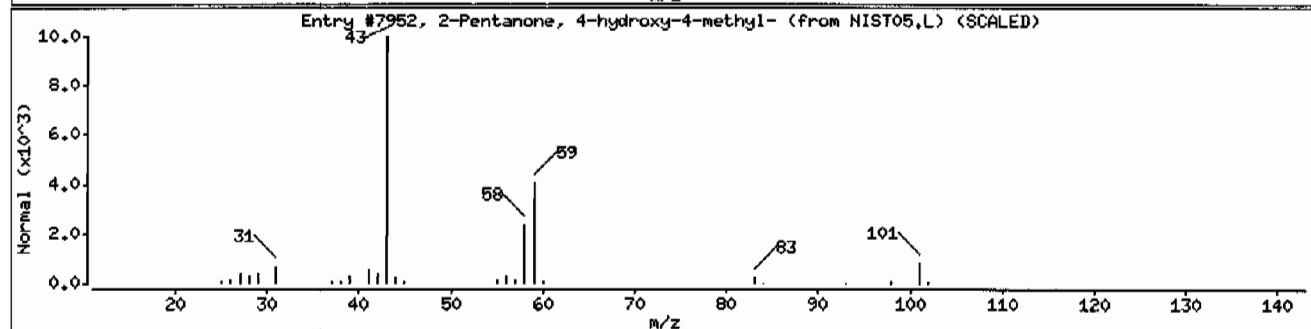
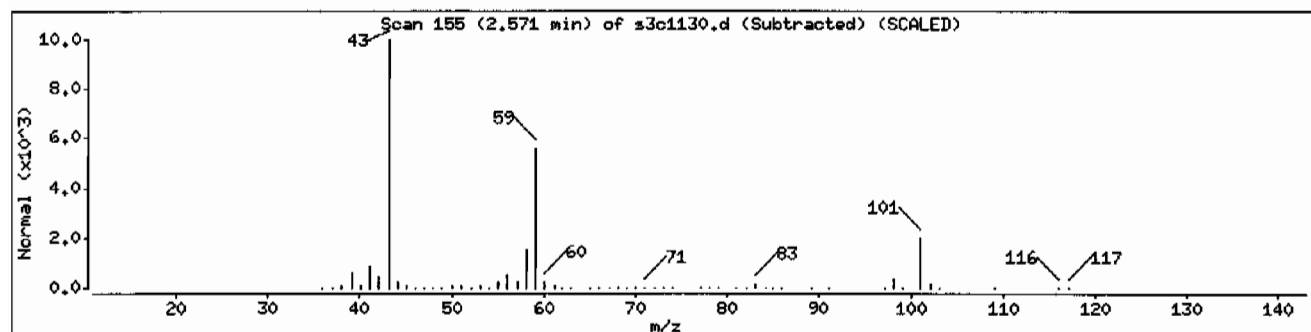
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	17	C7H11NO2	141



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711ISVMFI11LANL

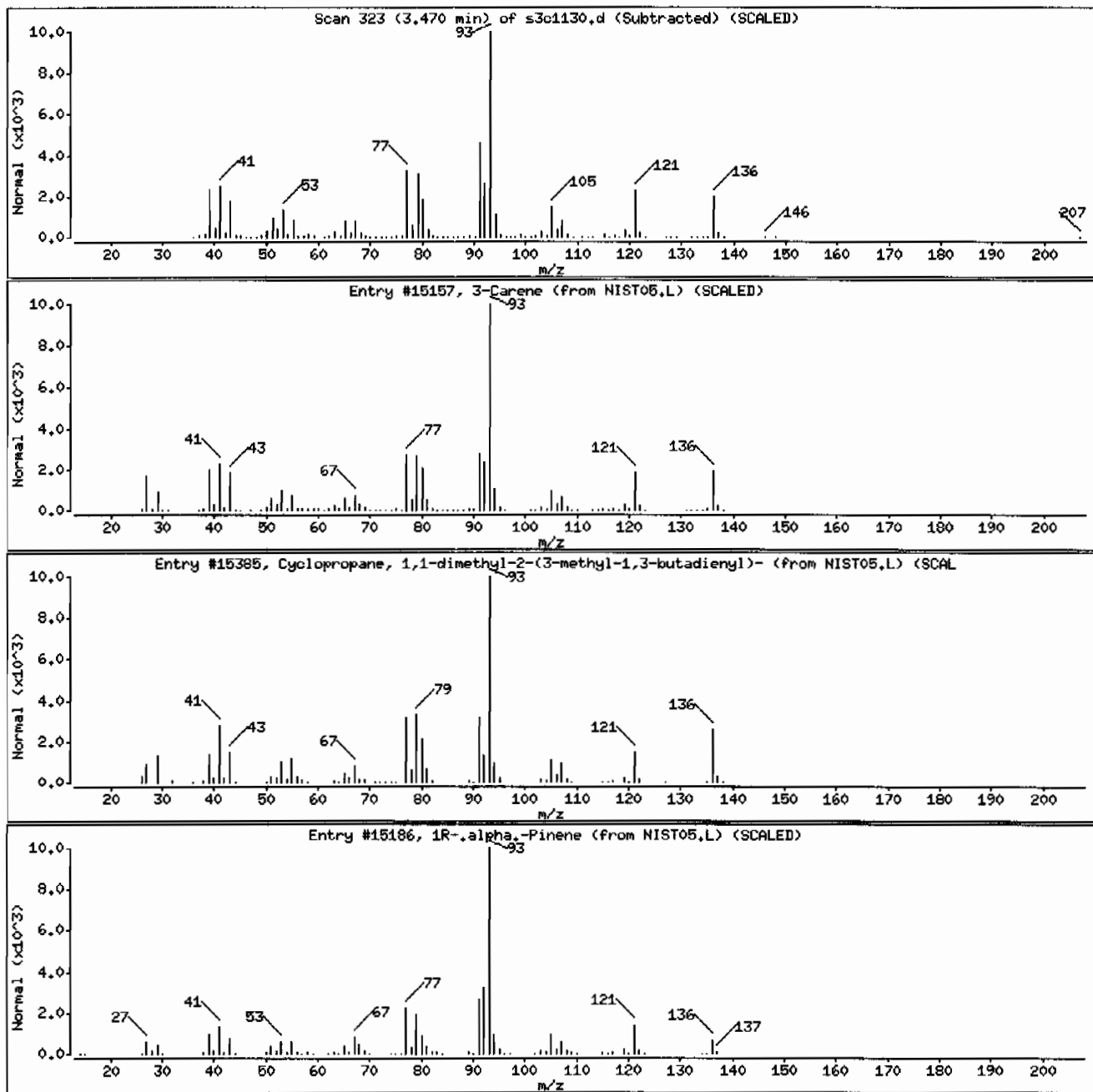
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15157	96	C10H16	136
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST05.L	15385	95	C10H16	136
1R-,alpha.-Pinene	7785-70-8	NIST05.L	15186	95	C10H16	136



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

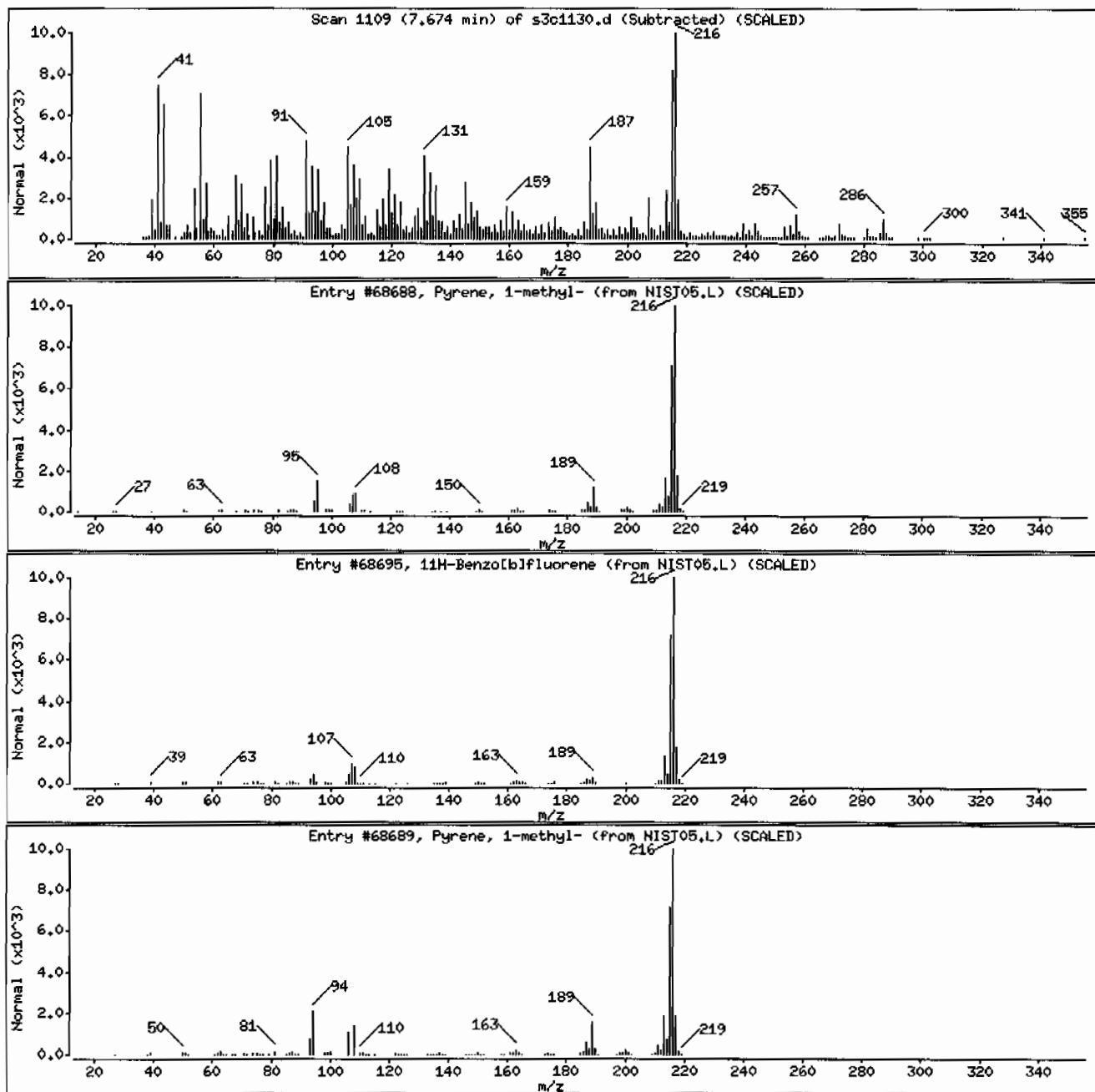
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68688	87	C17H12	216
11H-Benzo[b]fluorene	243-17-4	NIST05.L	68695	70	C17H12	216
Pyrene, 1-methyl-	2381-21-7	NIST05.L	68689	64	C17H12	216



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF11ILANL

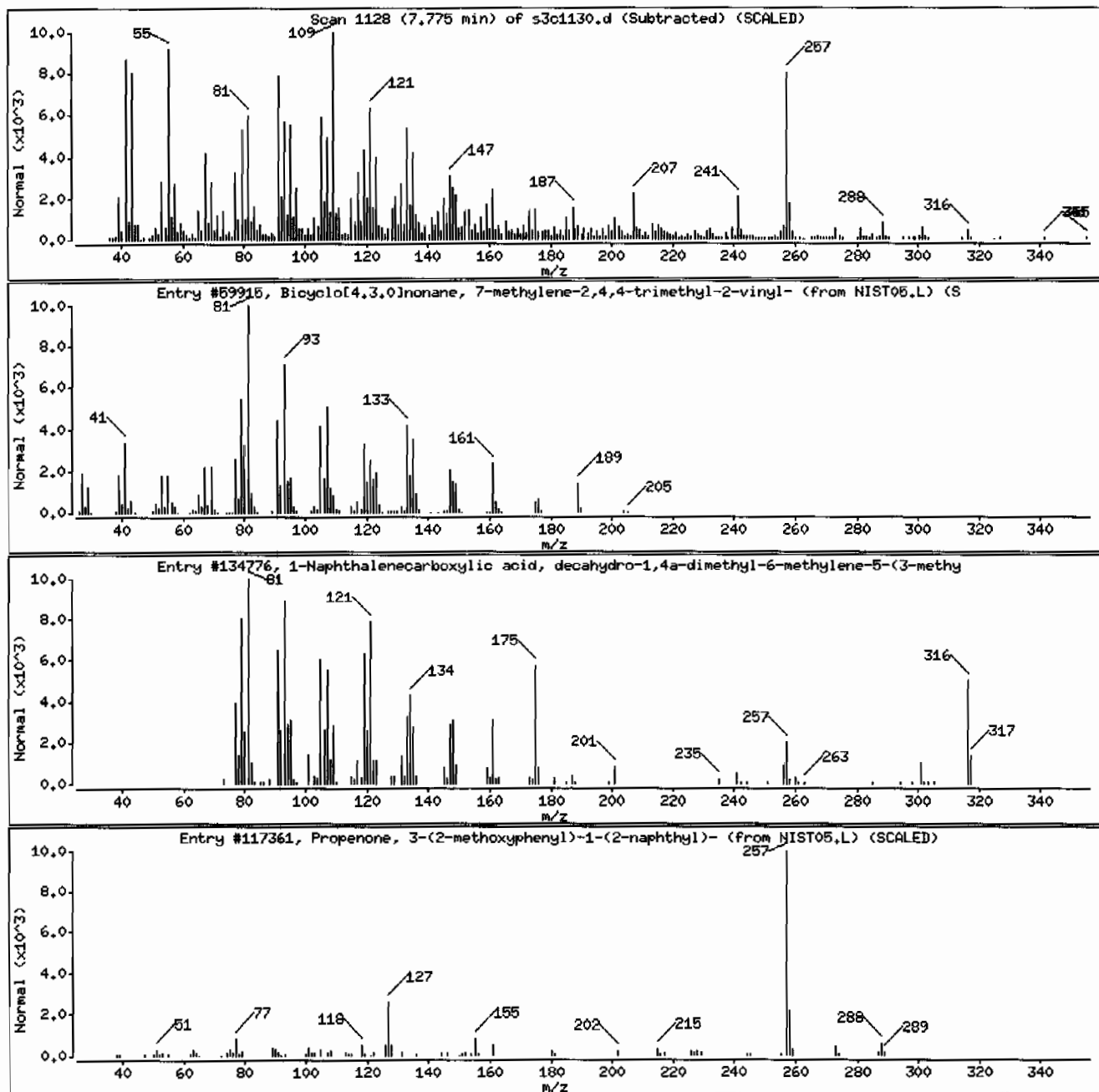
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	55	C15H24	204
1-Naphthalenecarboxylic acid, decahydro-	15798-13-7	NIST05.L	134776	51	C21H32O2	316
Propenone, 3-(2-methoxyphenyl)-1-(2-naph	52601-56-6	NIST05.L	117361	45	C20H16O2	288



Date: 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247662003195667711SVHF111LANL

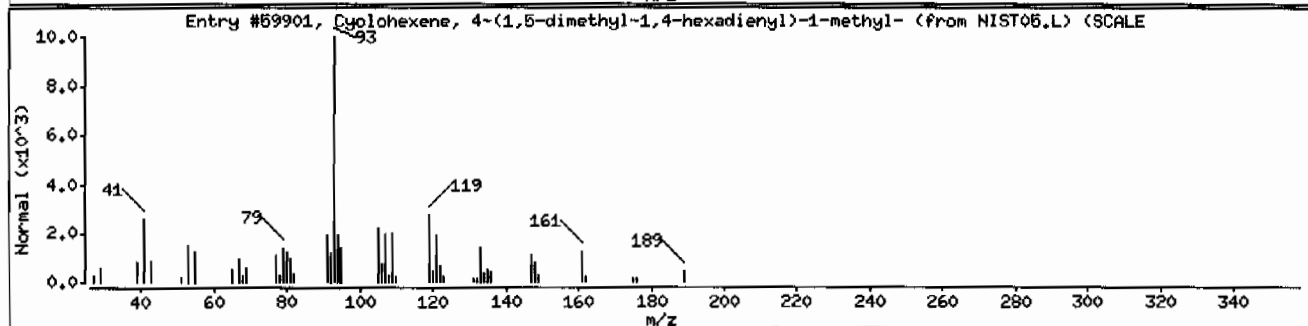
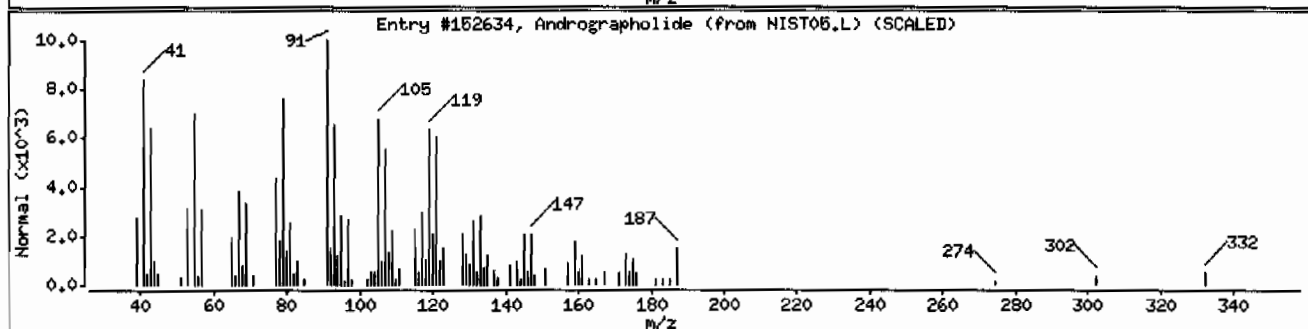
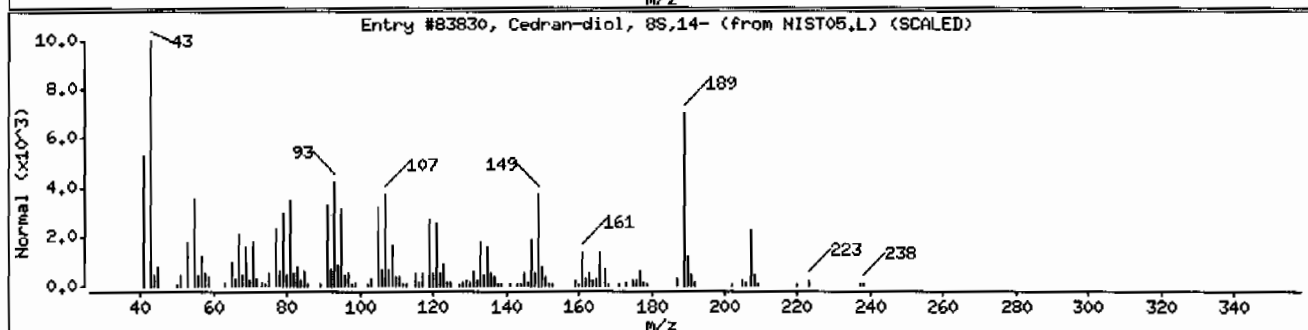
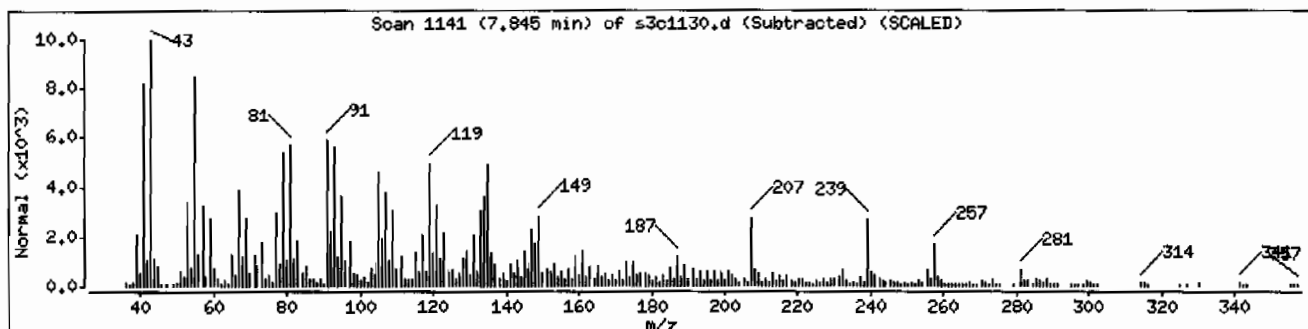
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	47	C15H26O2	238
Andrographolide	5508-58-7	NIST05.L	152634	35	C20H30O5	350
Cyclohexene, 4-(1,5-dimethyl-1,4-hexadie	17627-44-0	NIST05.L	59901	25	C15H24	204



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

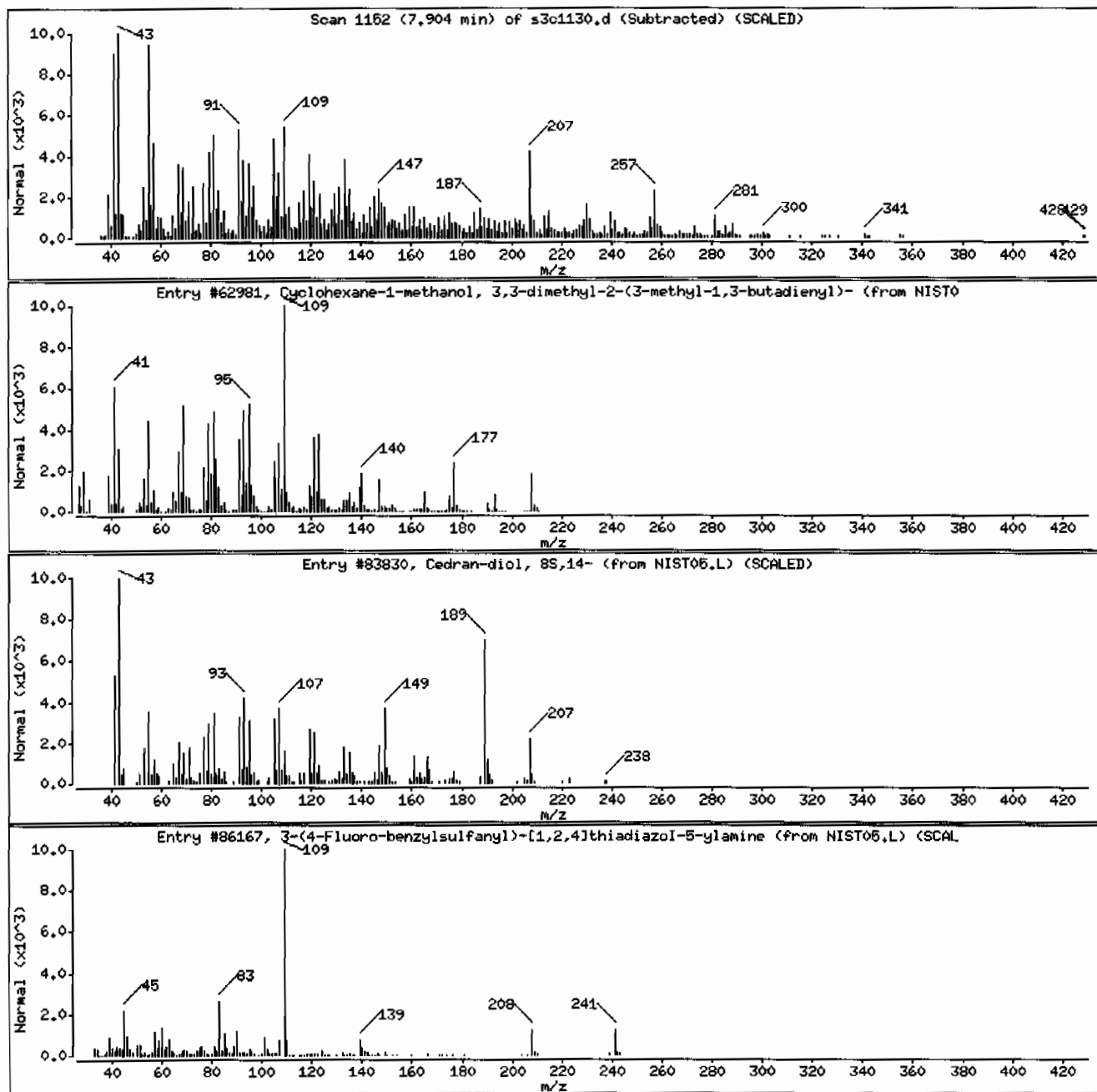
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane-1-methanol, 3,3-dimethyl-2-(	1000196-01-5	NIST05.L	62981	45	C14H24O	208
Cedran-diol, 8S,14-	62600-08-9	NIST05.L	83830	38	C15H26O2	238
3-(4-Fluoro-benzylsulfanyl)-[1,2,4]thiad	1000274-24-3	NIST05.L	86167	25	C9H8FN3S2	241



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

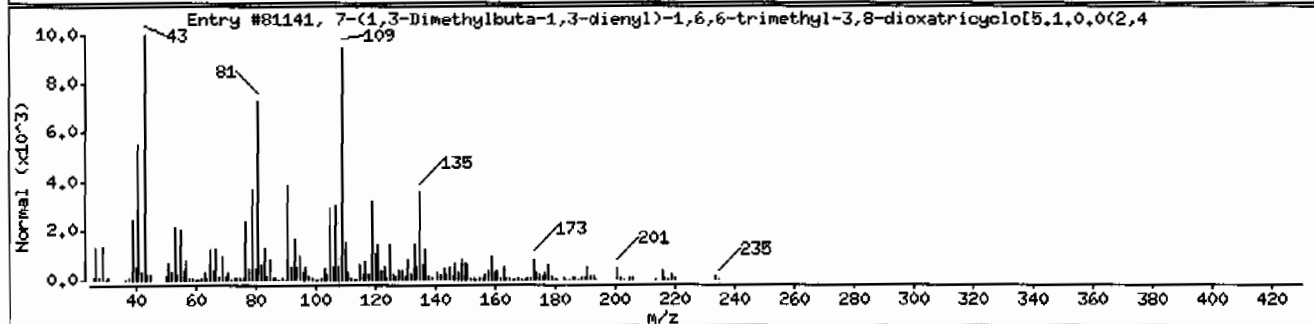
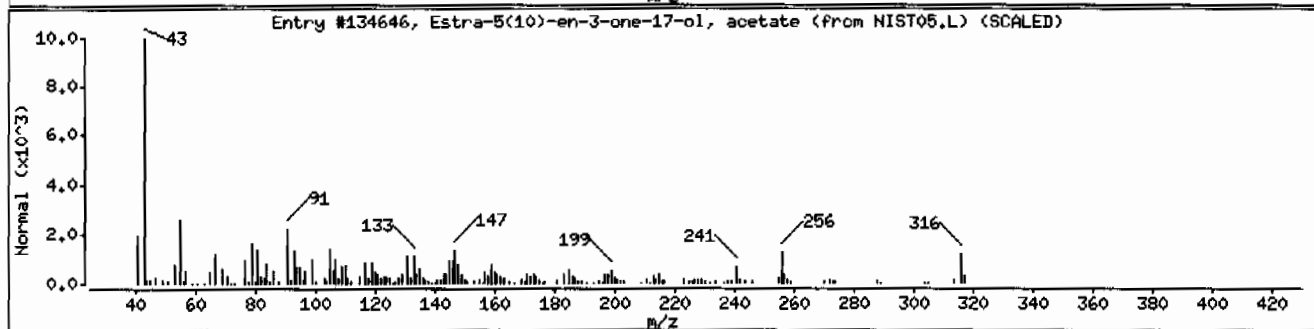
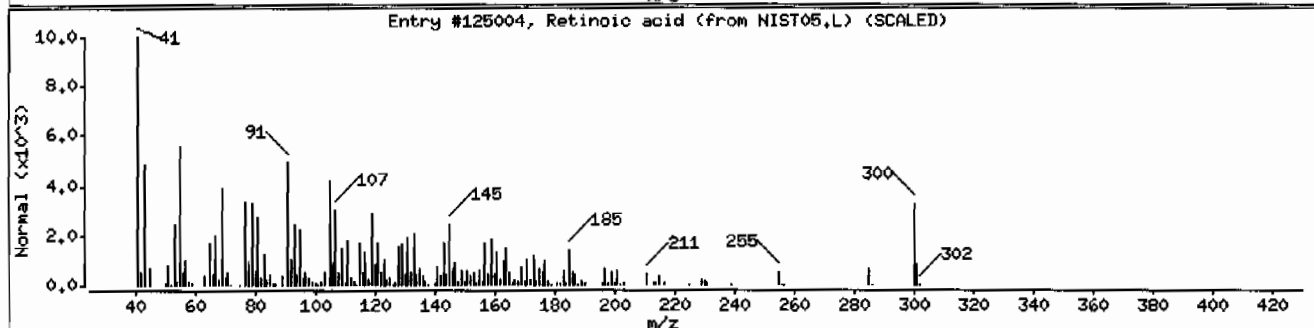
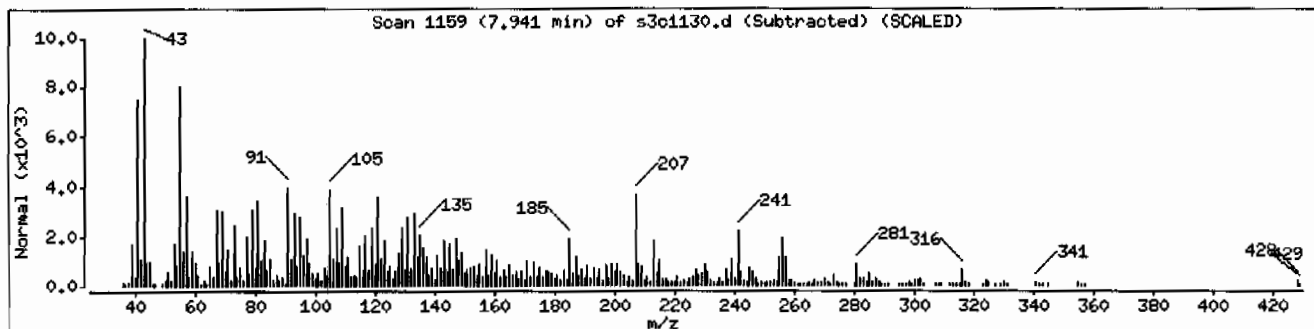
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	50	C <sub>20</sub> H <sub>28</sub> O <sub>2</sub>	300
Estra-5(10)-en-3-one-17-ol, acetate	19906-32-2	NIST05.L	134646	48	C <sub>20</sub> H <sub>28</sub> O <sub>3</sub>	316
7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr	1000190-22-7	NIST05.L	81141	44	C <sub>15</sub> H <sub>22</sub> O <sub>2</sub>	234





Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711ISVHF11ILANL

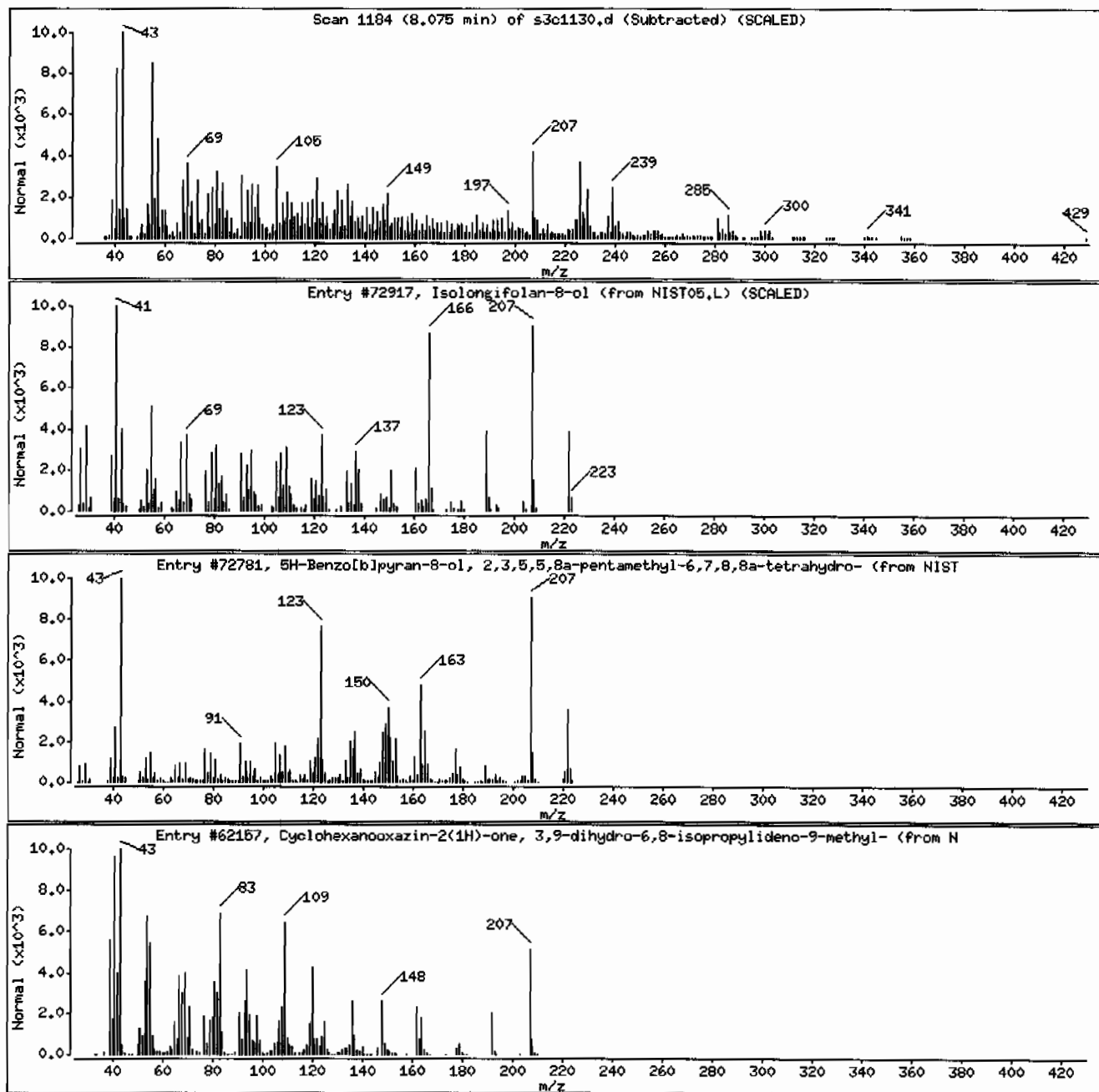
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Isolongifolan-8-ol	1139-08-8	NIST05.L	72917	10	C15H26O	222
5H-Benzo[b]pyran-8-ol, 2,3,5,5,8a-pentamethyl-	97306-66-6	NIST05.L	72781	10	C14H22O2	222
Cyclohexanooxazin-2(1H)-one, 3,9-dihydro	1000260-31-8	NIST05.L	62157	10	C12H17NO2	207



Date: 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVHF111LANL

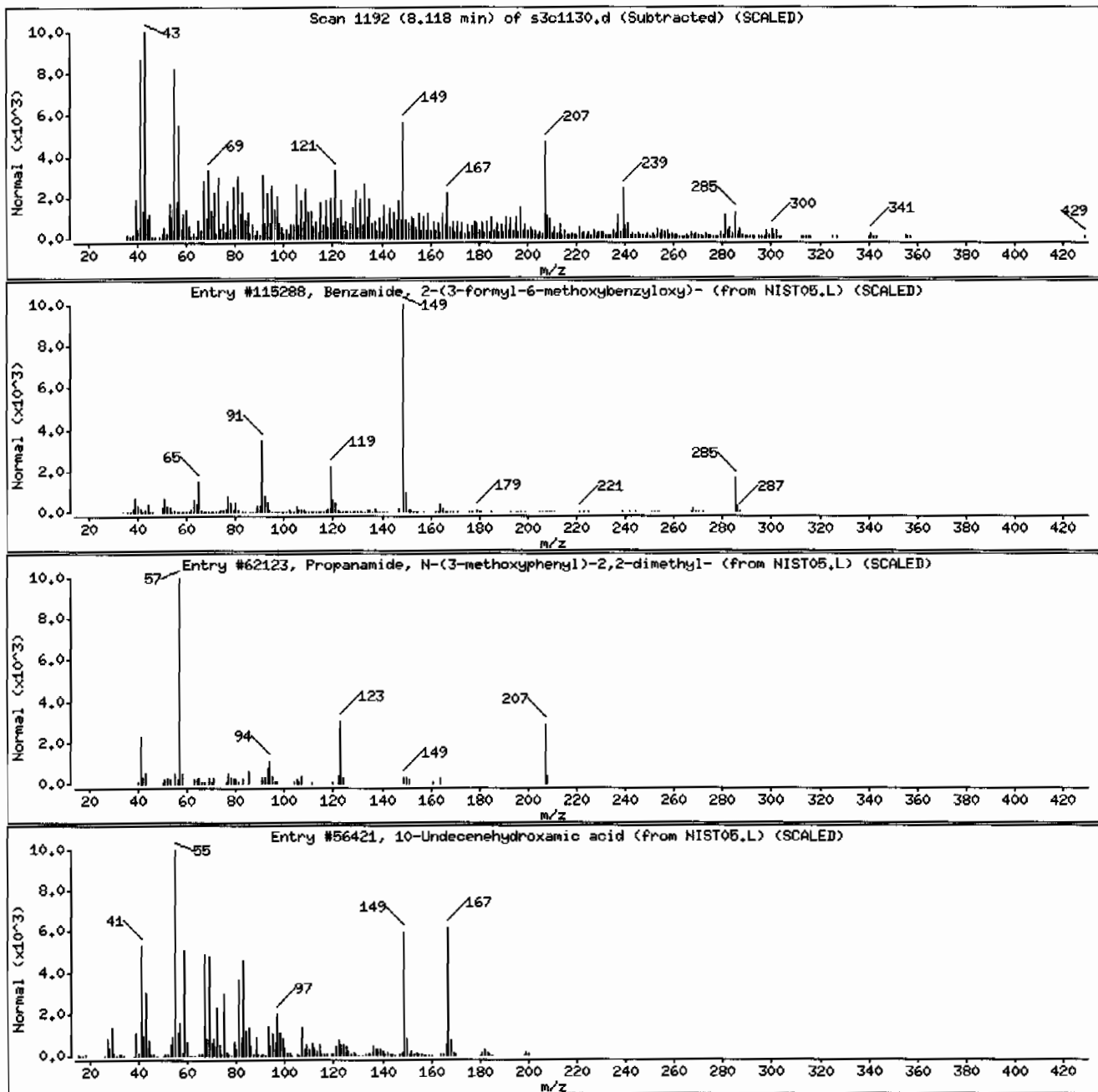
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzamide, 2-(3-formyl-6-methoxybenzyloxy)-	1000273-81-6	NIST05.L	115288	25	C16H15N04	285
Propanamide, N-(3-methoxyphenyl)-2,2-dimethyl-	56619-93-3	NIST05.L	62123	11	C12H17N02	207
10-Undecenehydroxamic acid	16791-35-8	NIST05.L	56421	11	C11H21N02	199



Date: 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

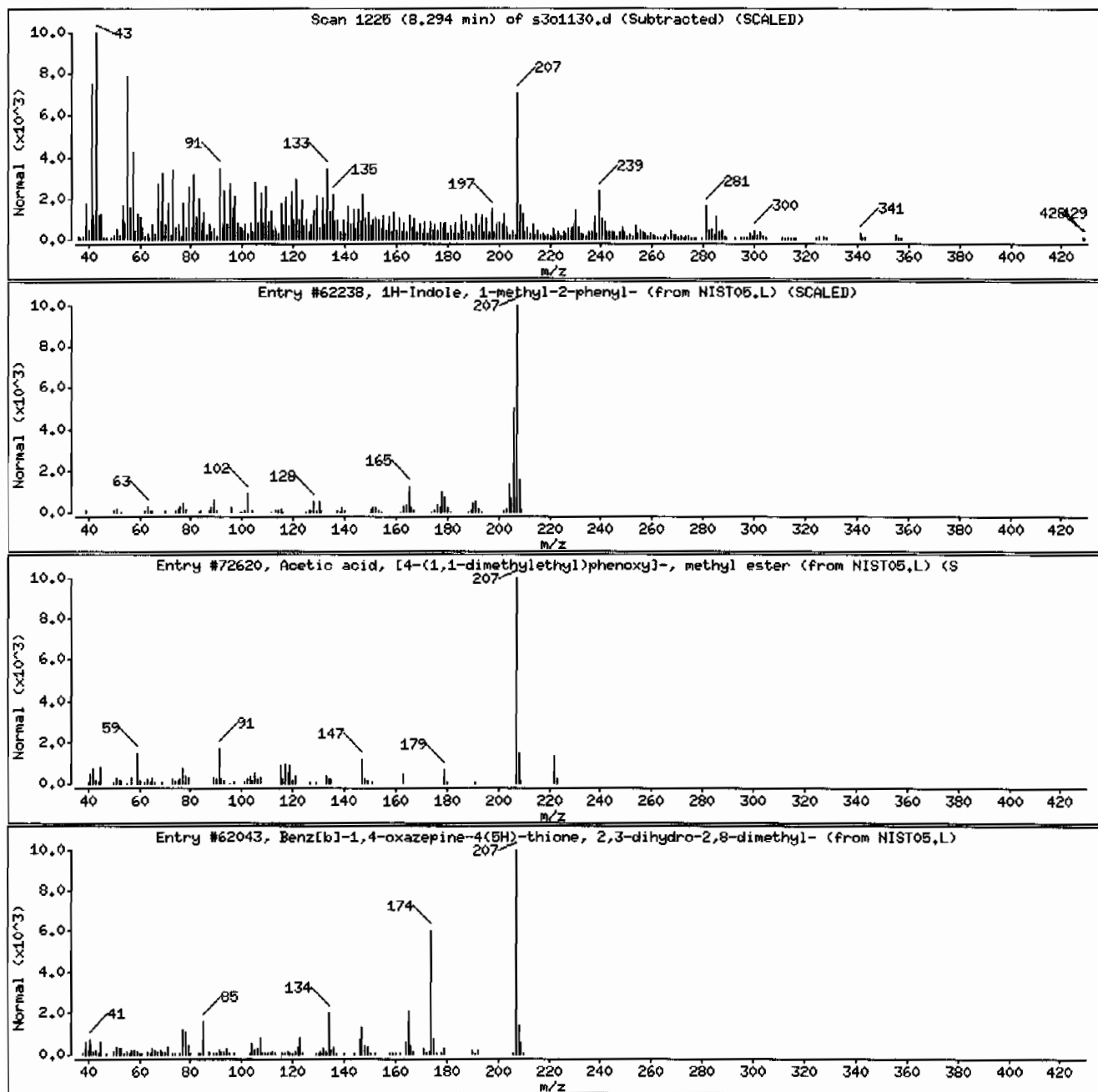
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62238	35	C15H13N	207
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	35	C13H18O3	222
Benz[b]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	35	C11H13NOS	207



Date: 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

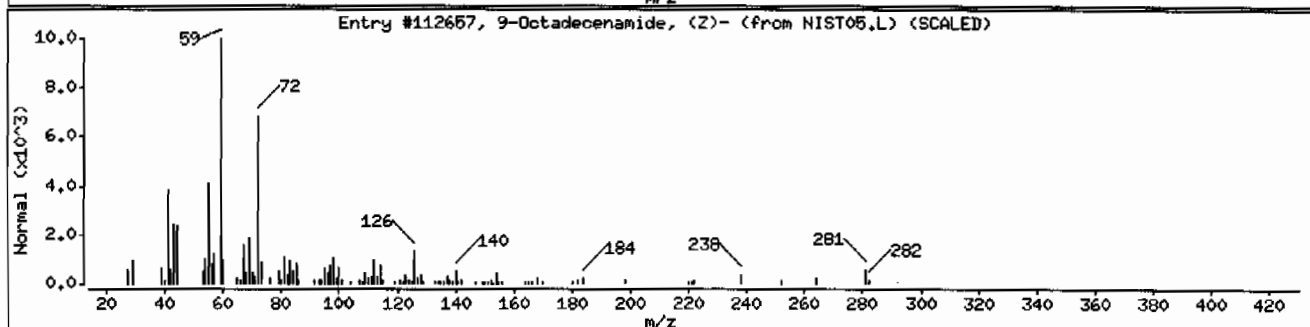
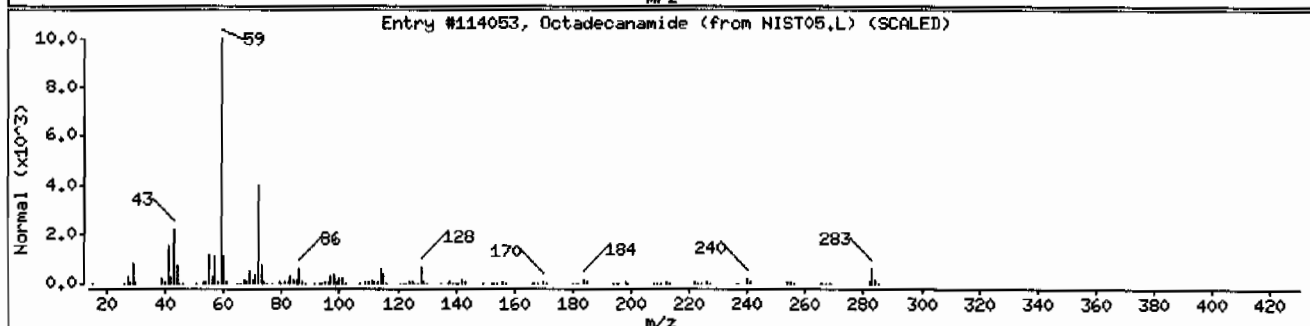
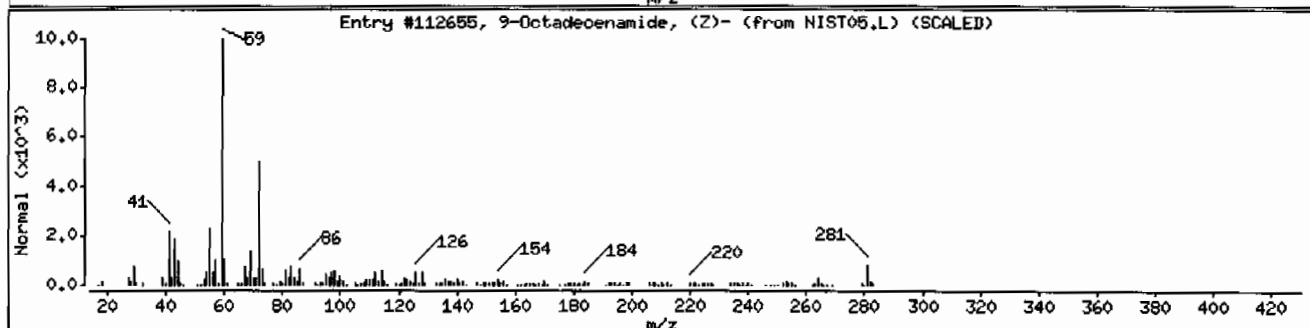
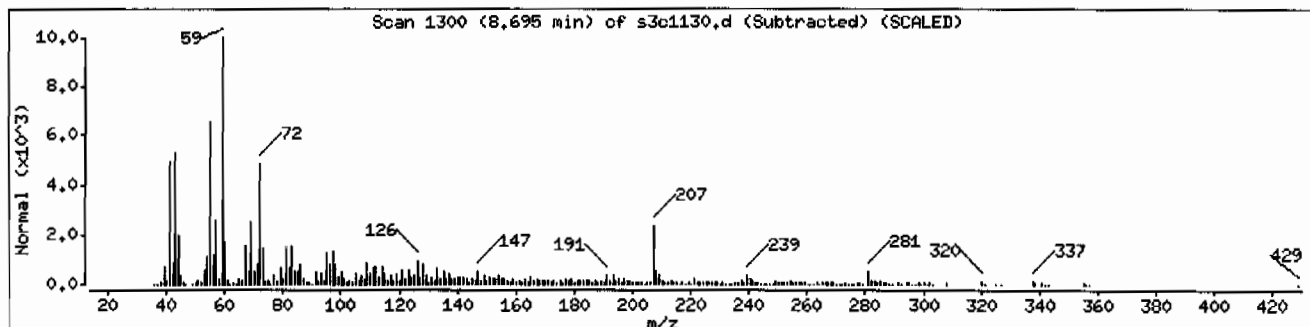
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	93	C18H35NO	281
Octadecanamide	124-26-5	NIST05.L	114053	91	C18H37NO	283
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	64	C18H35NO	281



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

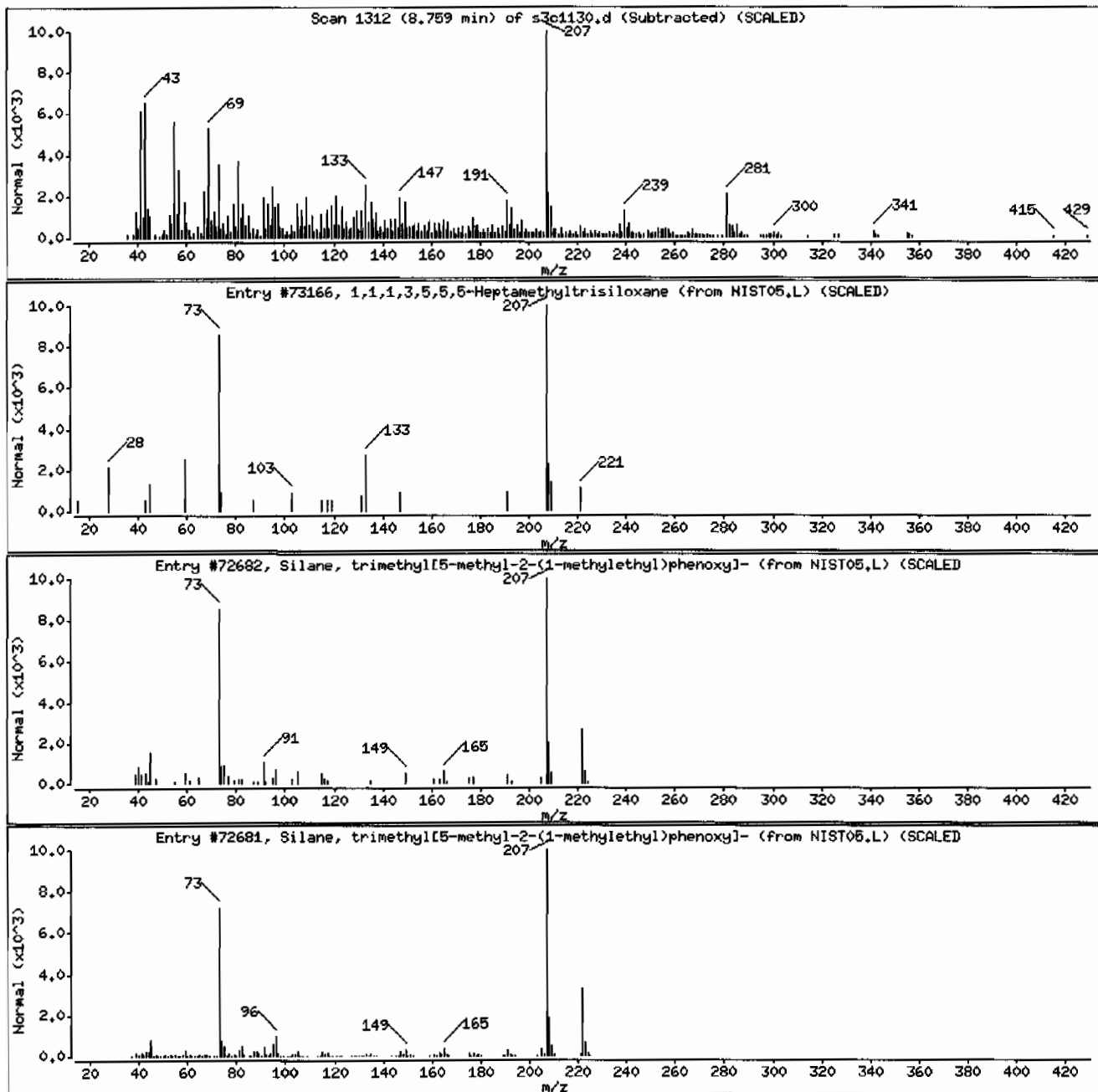
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	47	C7H22O2Si3	222
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72682	43	C13H22OSi	222
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	43	C13H22OSi	222



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

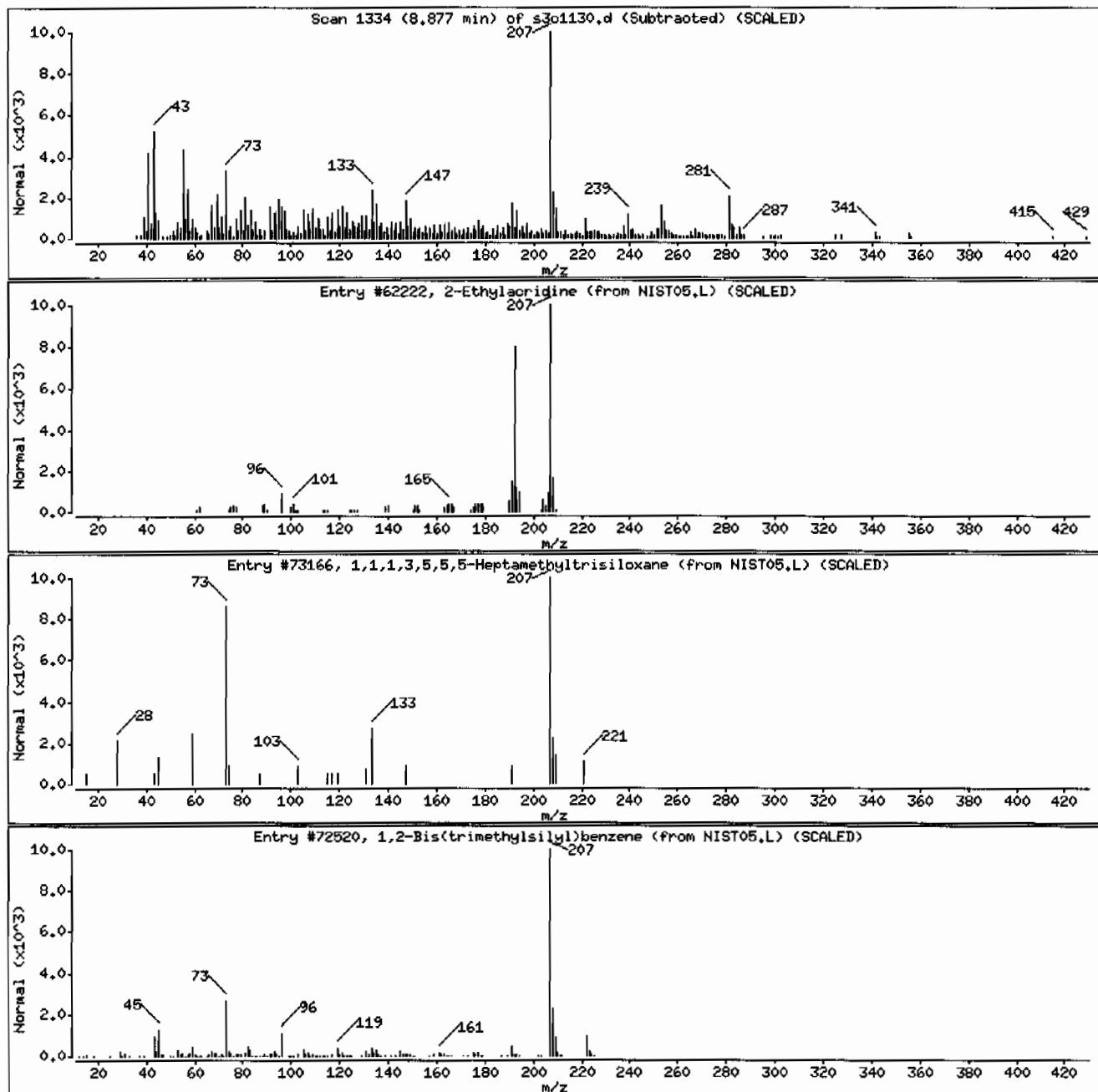
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	66751-83-2	NIST05.L	62222	66	C15H13N	207
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	50	C7H22O2Si3	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	47	C12H22Si2	222



Date: 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF11ILANL

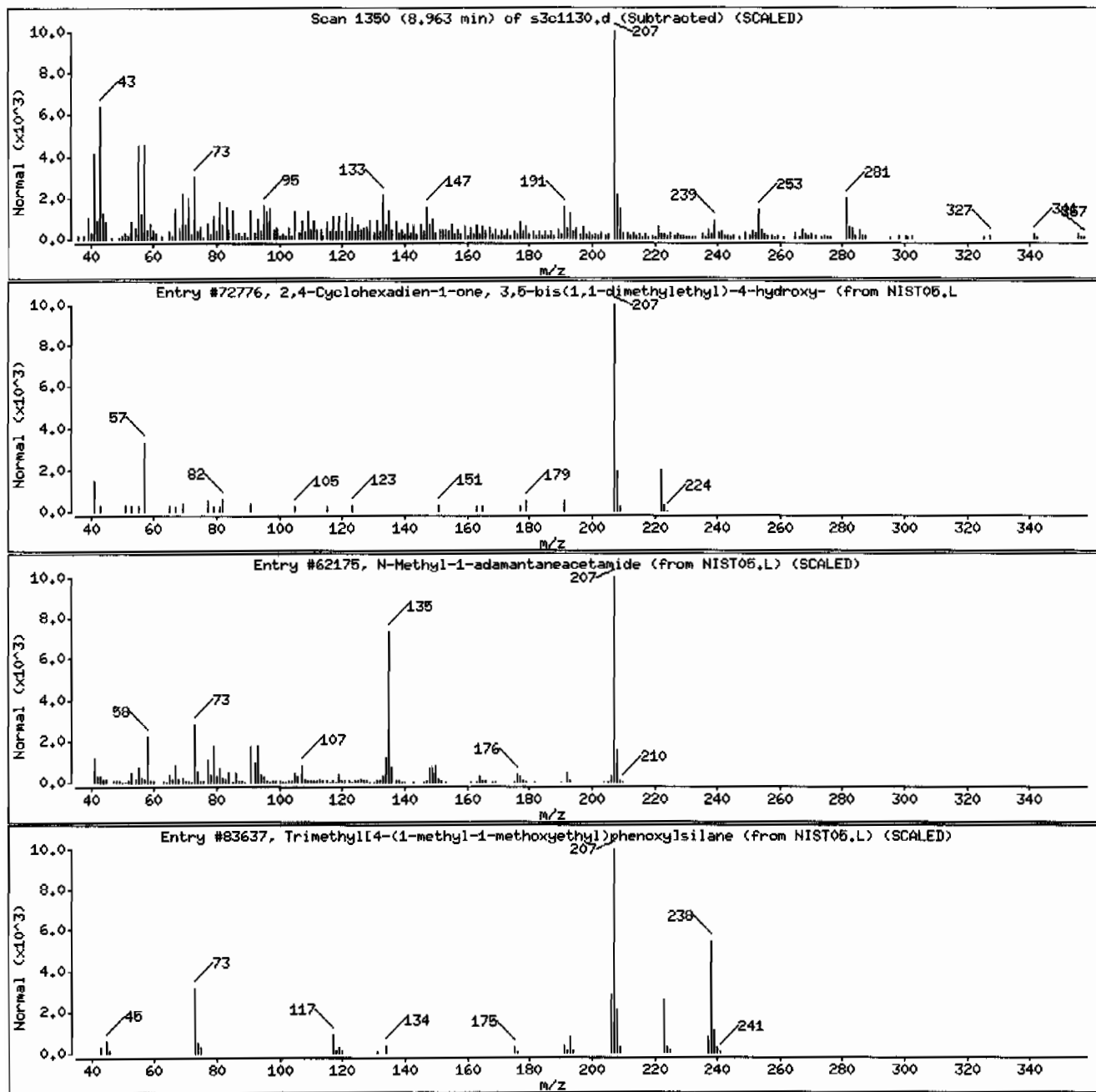
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,4-Cyclohexadien-1-one, 3,5-bis(1,1-dimethyl-1-ethoxyethyl)-4-hydroxy-	54965-43-4	NIST05.L	72776	50	C <sub>14</sub> H <sub>22</sub> O <sub>2</sub>	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	49	C <sub>13</sub> H <sub>21</sub> NO	207
Trimethyl[4-(1-methyl-1-methoxyethyl)phenoxy]silane	1000283-54-8	NIST05.L	83637	47	C <sub>13</sub> H <sub>22</sub> O <sub>2</sub> Si	238



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

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

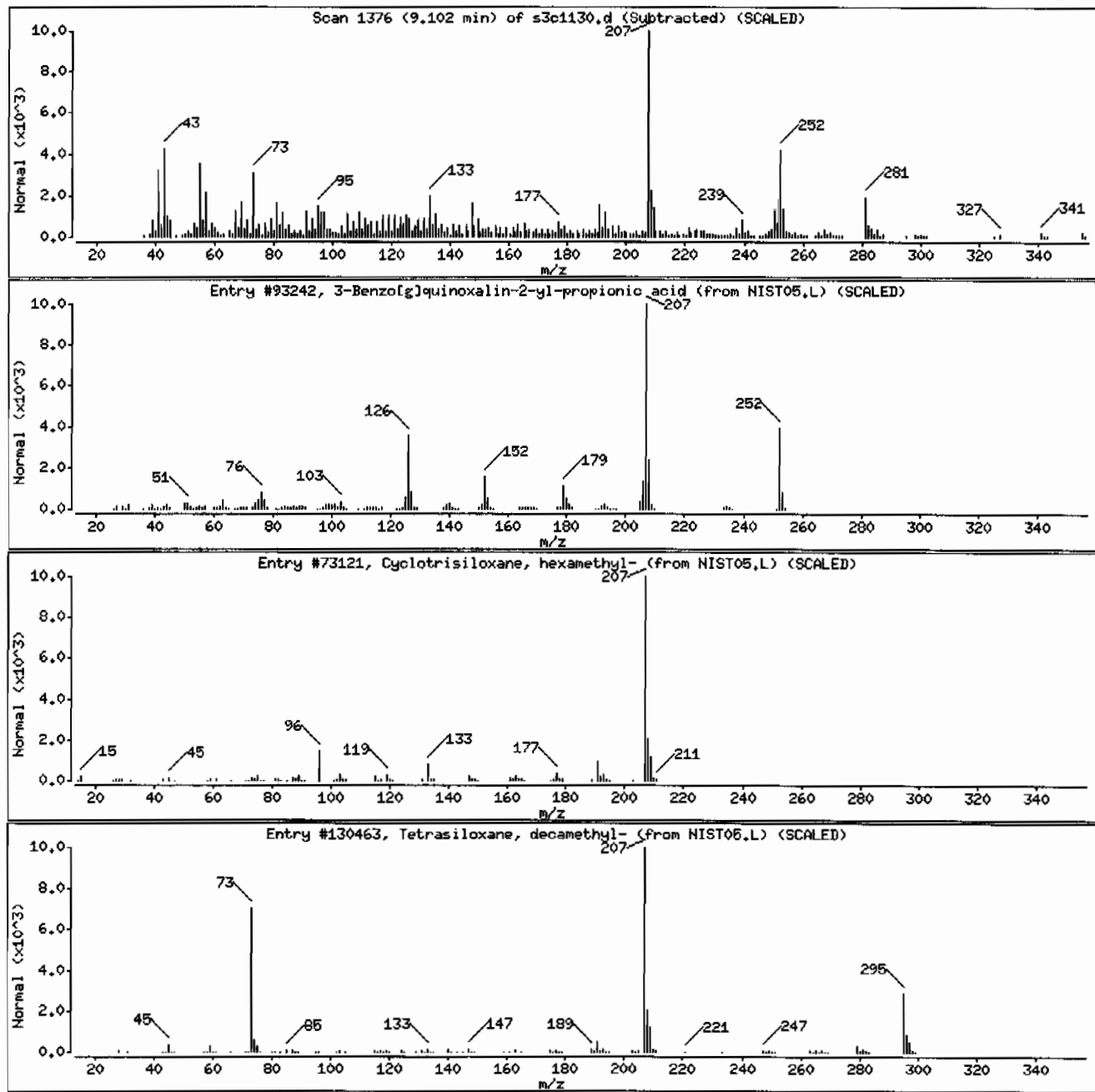
Column diameter: 0.20

## Library Search Compound Match

Unknown

3-Benzof[quinoxalin-2-yl]-propionic acid

CAS Number	Library	Entry	Quality	Formula	Weight
25470-39-7	NIST05.L	93242	52	C15H12N2O2	252
541-05-9	NIST05.L	73121	46	C6H18O3Si3	222
141-62-8	NIST05.L	130463	43	C10H30O3Si4	310





Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711/SVHF111LANL

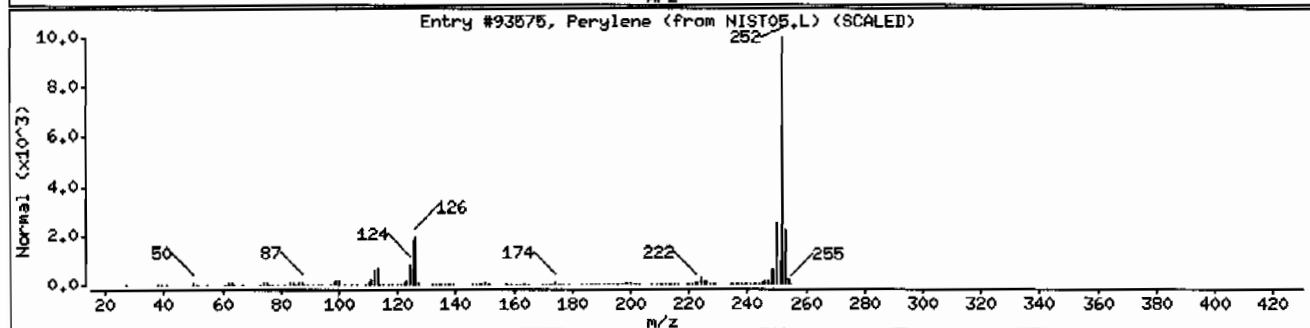
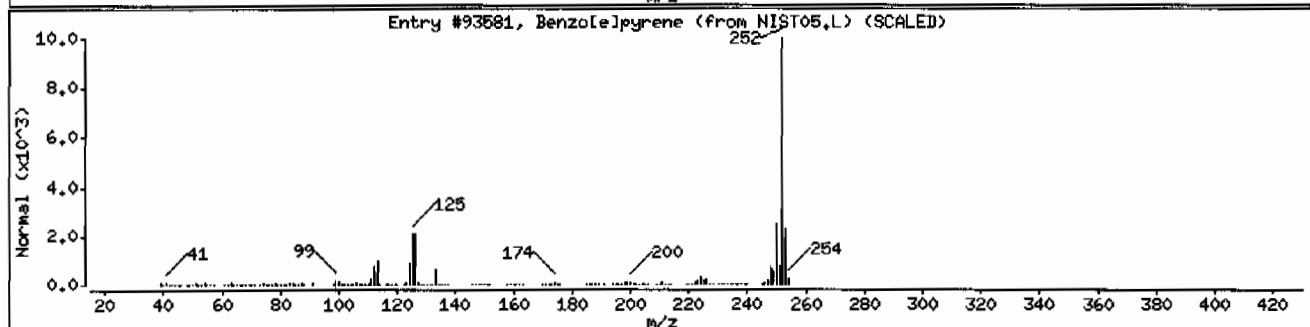
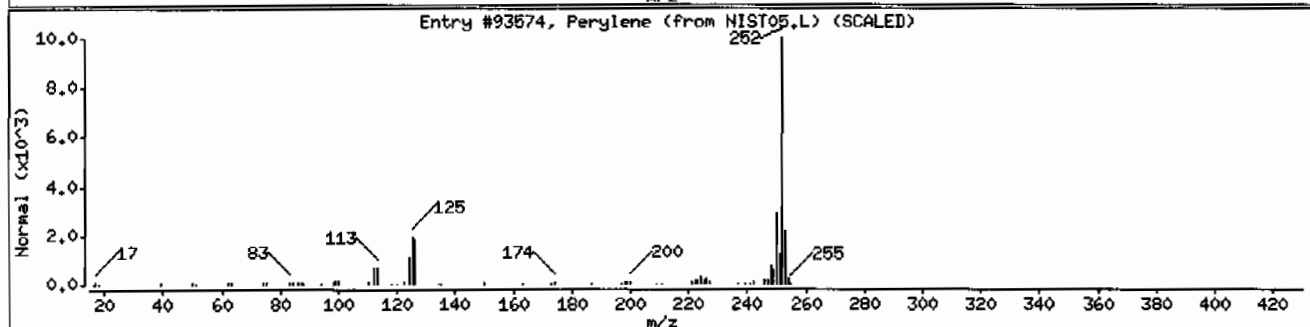
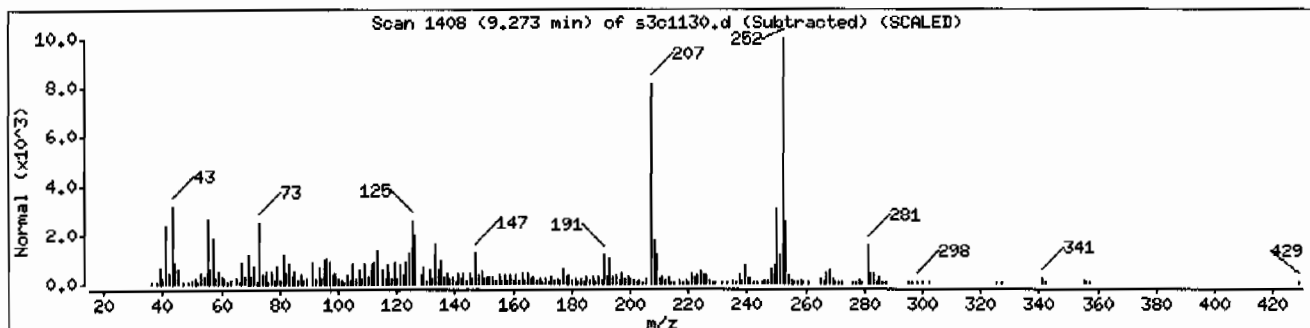
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Perylene	198-55-0	NIST05.L	93574	96	C20H12	252
Benzo[el]pyrene	192-97-2	NIST05.L	93581	95	C20H12	252
Perylene	198-55-0	NIST05.L	93575	95	C20H12	252



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.i

Sample Info: 1247562003195667711SVHF111LANL

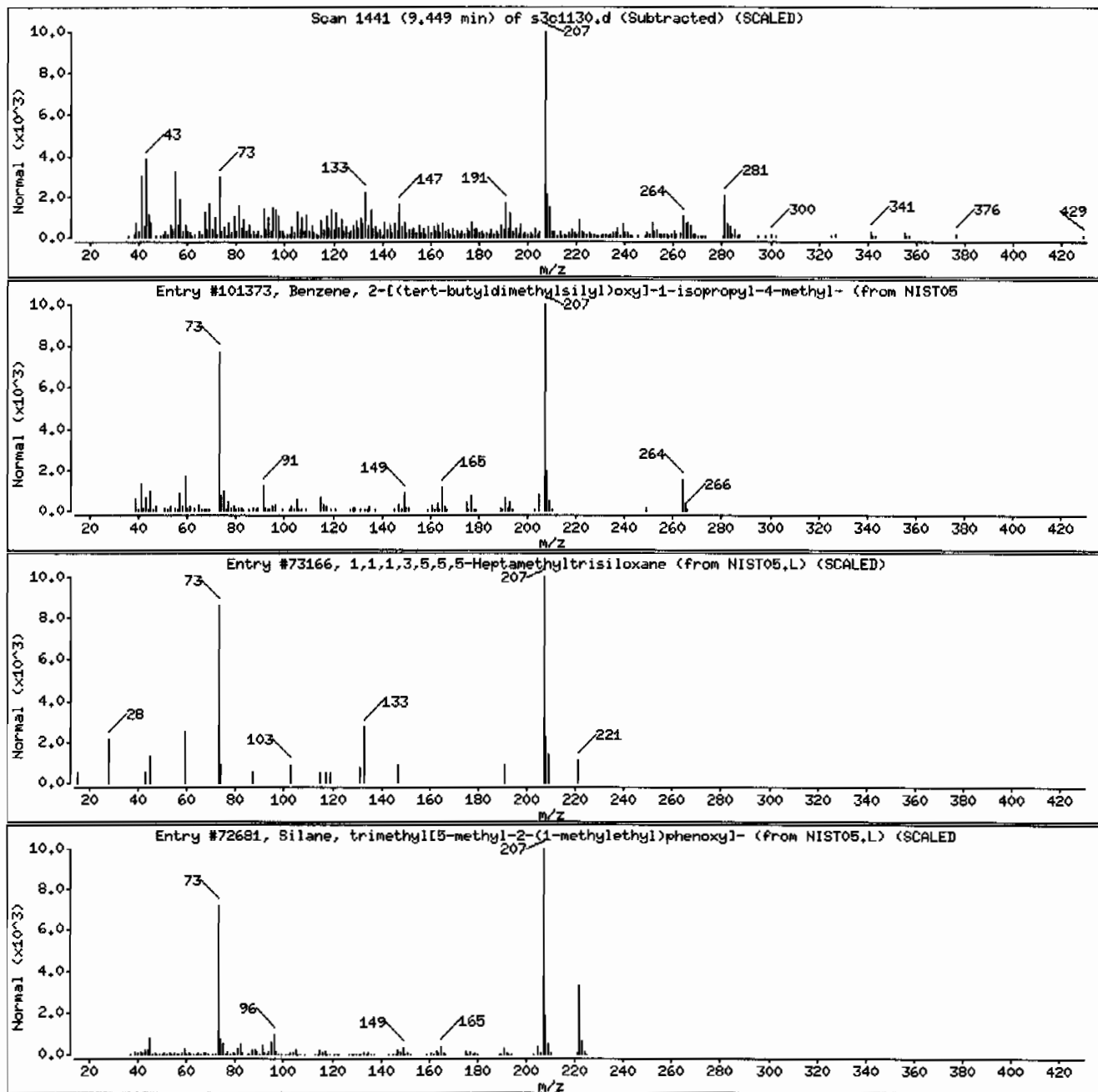
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&amp;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	62	C <sub>16</sub> H <sub>28</sub> O <sub>2</sub> Si	264
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	59	C <sub>7</sub> H <sub>22</sub> O <sub>2</sub> Si <sub>3</sub>	222
Silane, trimethyl[5-methyl-2-(1-methylethyl	55012-80-1	NIST05.L	72681	55	C <sub>13</sub> H <sub>22</sub> O <sub>2</sub> Si	222



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: MSD3.1

Sample Info: 12475620031956677111SVHF11/LANL

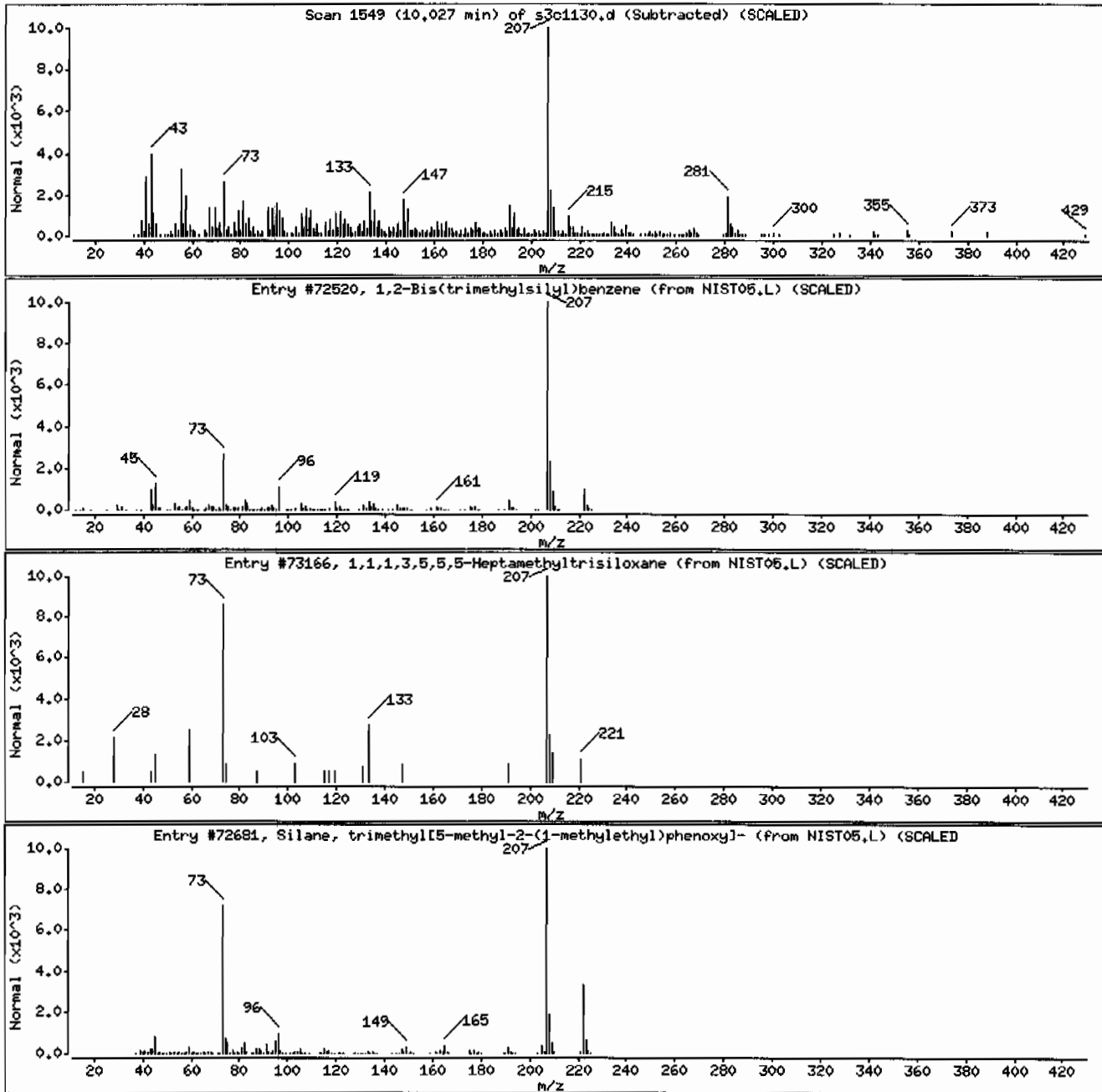
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	50	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	47	C <sub>7</sub> H <sub>20</sub> Si <sub>3</sub>	222
Silane, trimethyl[5-methyl-2-(1-methylethyl)phenoxy]-	55012-80-1	NIST05.L	72681	47	C <sub>13</sub> H <sub>20</sub> Si	222



Date : 11-MAR-2010 20:03

Client ID: RE15-10-8313

Instrument: HSD3.i

Sample Info: 1247562003195667711SVHF11ILANL

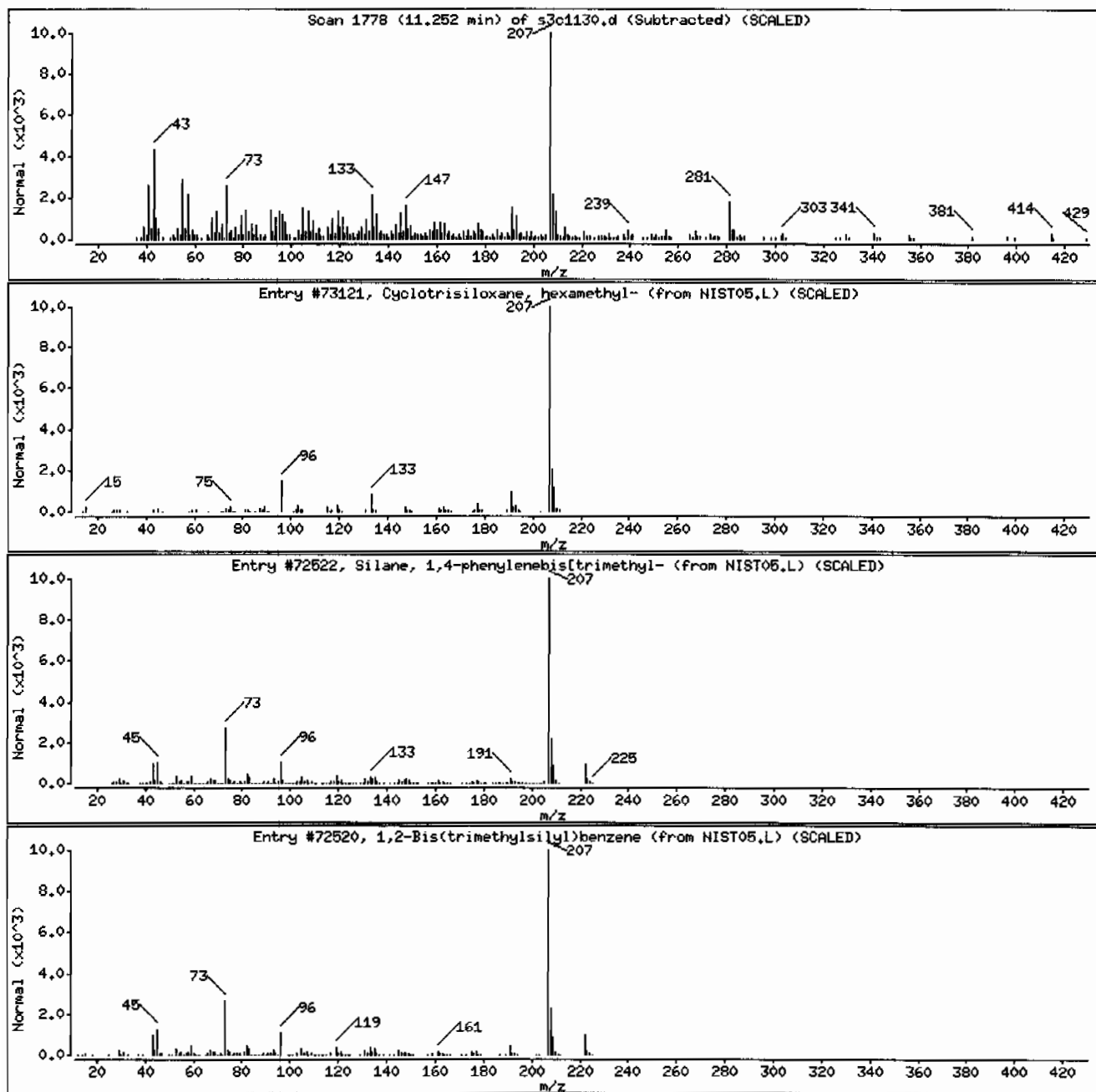
Volume Injected (uL): 0.5

Operator: JLD1

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

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-06-9	NIST05.L	73121	59	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	53	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	53	C <sub>12</sub> H <sub>22</sub> Si <sub>2</sub>	222



GEL Laboratories LLC

Data file : /chem/MSD3.i/s030410a.b/s3c0449.d  
Lab Smp Id: 1202051282 Client Smp ID: RE15-10-8349MS  
Inj Date : 05-MAR-2010 06:43  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |1202051282|956677|1|SVMF|1|MS  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
Meth Date : 05-Mar-2010 09:07 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 28 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1969.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	30.16000	weight of sample
M	6.91130	% 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	3.720	3.719	(1.000)	308884	40.0000	
* 29 Naphthalene-d8	136	4.581	4.580	(1.000)	1246448	40.0000	
* 46 Acenaphthene-d10	164	5.833	5.832	(1.000)	650147	40.0000	
* 67 Phenanthrene-d10	188	6.838	6.832	(1.000)	1006118	40.0000	
* 91 Chrysene-d12	240	8.459	8.458	(1.000)	509381	40.0000	
* 98 Perylene-d12	264	9.807	9.801	(1.000)	326468	40.0000	
\$ 3 2-Fluorophenol	112	2.918	2.912	(0.784)	607636	71.2604	2540
\$ 5 Phenol-d5	99	3.447	3.436	(0.927)	738671	67.9128	2420
\$ 20 Nitrobenzene-d5	82	4.084	4.083	(0.891)	382976	35.8583	1280
\$ 39 2-Fluorobiphenyl	172	5.325	5.324	(0.913)	653866	39.0569	1390
\$ 60 2,4,6-Tribromophenol	329	6.378	6.372	(1.094)	172656	85.1573	3030
\$ 81 p-Terphenyl-d14	244	7.758	7.757	(0.917)	473479	54.4621	1940

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.453	3.446	(0.928)	395628	36.0582	1280 (Q)
8 2-Chlorophenol	128	3.586	3.586	(0.964)	343299	38.3164	1360
11 1,4-Dichlorobenzene	146	3.731	3.730	(1.003)	341365	35.8527	1280
17 N-Nitrosodipropylamine	70	3.961	3.960	(1.065)	259945	36.1724	1290 (Q)
28 1,2,4-Trichlorobenzene	180	4.533	4.532	(0.989)	292006	38.5044	1370
33 4-Chloro-3-methylphenol	107	4.945	4.928	(1.079)	304359	39.7240	1410
47 Acenaphthene	154	5.854	5.853	(1.004)	577183	37.1484	1320
50 2,4-Dinitrotoluene	165	5.950	5.944	(1.020)	206238	37.9137	1350
52 4-Nitrophenol	139	5.897	5.875	(1.011)	104372	35.2479	1260 (H)
65 Pentachlorophenol	266	6.710	6.698	(0.981)	81310	35.5422	1260
79 Pyrene	202	7.705	7.704	(0.911)	776178	48.5519	1730
2 Pyridine	79	2.281	2.259	(0.613)	225697	26.4766	943
4 Aniline	66	3.506	3.505	(0.942)	179374	33.3129	1190
7 bis(2-Chloroethyl) ether	63	3.522	3.527	(0.947)	297415	31.5883	1120
9 1,3-Dichlorobenzene	146	3.688	3.687	(0.991)	329916	34.1961	1220
12 Benzyl alcohol	108	3.800	3.789	(1.022)	125391	20.3769	726
13 1,2-Dichlorobenzene	146	3.832	3.832	(1.030)	320665	38.4221	1370
14 bis(2-Chloroisopropyl) ether	45	3.864	3.864	(1.039)	716994	33.0709	1180
15 o-Cresol	107	3.848	3.837	(1.034)	295376	45.5267	1620
18 m,p-Cresols	107	3.945	3.939	(1.060)	420162	43.9375	1560
19 Hexachloroethane	117	4.057	4.056	(1.091)	125618	31.5710	1120
21 Nitrobenzene	77	4.094	4.094	(0.894)	371283	37.1795	1320
22 Isophorone	82	4.249	4.249	(0.928)	675146	34.5370	1230
23 2-Nitrophenol	139	4.308	4.308	(0.940)	145763	34.4547	1230
24 2,4-Dimethylphenol	122	4.308	4.302	(0.940)	308453	38.9502	1390
25 bis(2-Chloroethoxy) methane	93	4.372	4.372	(0.954)	384029	33.6486	1200
26 2,4-Dichlorophenol	162	4.469	4.468	(0.975)	269304	36.5721	1300
27 Benzoic acid	105	4.372	4.366	(0.954)	203517	50.0598	1780
30 Naphthalene	128	4.597	4.596	(1.004)	984658	34.0922	1210
31 4-Chloroaniline	127	4.618	4.612	(1.008)	378185	28.9958	1030
32 Hexachlorobutadiene	225	4.661	4.661	(1.018)	166076	39.8059	1420
34 2-Methylnaphthalene	142	5.078	5.078	(1.109)	637382	35.5803	1270
36 Hexachlorocyclopentadiene	237	5.175	5.174	(0.887)	54172	19.8133	706
37 2,4,6-Trichlorophenol	196	5.271	5.265	(0.904)	175038	38.7653	1380
38 2,4,5-Trichlorophenol	196	5.303	5.292	(0.909)	208059	40.7151	1450
40 2-Chloronaphthalene	162	5.431	5.425	(0.931)	576896	34.1245	1220
42 o-Nitroaniline	65	5.496	5.490	(0.942)	224781	37.4988	1340
41 m-Nitroaniline	138	5.790	5.784	(0.993)	164482	37.2228	1320
43 Dimethylphthalate	163	5.597	5.602	(0.960)	742149	41.4410	1480
44 2,6-Dinitrotoluene	165	5.656	5.655	(0.970)	158488	38.0247	1350
45 Acenaphthylene	152	5.731	5.730	(0.983)	908000	36.2765	1290
48 2,4-Dinitrophenol	184	5.865	5.853	(1.006)	11784	22.3626	796 (Q)
49 Dibenzofuran	168	5.977	5.971	(1.025)	825817	40.0991	1430
51 Diethylphthalate	149	6.095	6.094	(1.045)	735084	43.0840	1530
53 Fluorene	166	6.212	6.212	(1.065)	665566	34.3598	1220
54 4-Chlorophenylphenylether	204	6.196	6.190	(1.062)	337779	43.4569	1550
55 2-Methyl-4,6-dinitrophenol	198	6.239	6.233	(0.912)	28679	18.4323	656 (Q)

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.223	6.217	(1.067)	166774	44.3656	1580
133 Diphenylamine	169	6.277	6.271	(0.918)	603404	41.7729	1490
58 1,2-Diphenylhydrazine	77	6.303	6.303	(0.922)	796112	39.9625	1420
61 4-Bromophenylphenylether	248	6.528	6.527	(0.955)	176281	39.8365	1420
63 Hexachlorobenzene	284	6.581	6.575	(0.962)	189382	39.7929	1420
68 Phenanthrene	178	6.854	6.848	(1.002)	1003802	39.1938	1400
69 Anthracene	178	6.886	6.880	(1.007)	915038	36.1455	1290
72 Di-n-butylphthalate	149	7.138	7.137	(1.044)	1112563	40.7237	1450
76 Fluoranthene	202	7.566	7.565	(1.106)	812595	34.2397	1220
85 Butylbenzylphthalate	149	8.015	8.014	(0.948)	360986	57.2072	2040
89 Benzo(a)anthracene	228	8.453	8.447	(0.999)	487553	37.0194	1320
90 3,3'-Dichlorobenzidine	252	8.400	8.394	(0.993)	163974	47.5535	1690
92 Chrysene	228	8.480	8.480	(1.003)	495391	39.5287	1410
93 bis(2-Ethylhexyl)phthalate	149	8.352	8.351	(0.987)	477570	52.8446	1880
94 Di-n-octylphthalate	149	8.849	8.849	(0.902)	634490	64.2820	2290
95 Benzo(b)fluoranthene	252	9.379	9.373	(0.956)	344137	46.1833	1640
96 Benzo(k)fluoranthene	252	9.406	9.400	(0.959)	392557	51.4028	1830
97 Benzo(a)pyrene	252	9.748	9.736	(0.994)	299821	47.2087	1680
99 Indeno(1,2,3-cd)pyrene	276	11.310	11.293	(1.153)	238656	42.6521	1520
100 Dibenzo(a,h)anthracene	278	11.315	11.304	(1.154)	199894	45.3888	1620
101 Benzo(ghi)perylene	276	11.775	11.758	(1.201)	183280	39.2662	1400
1 N-Methyl-N-nitrosomethylamine	74	2.249	2.227	(0.605)	178195	29.7218	1060

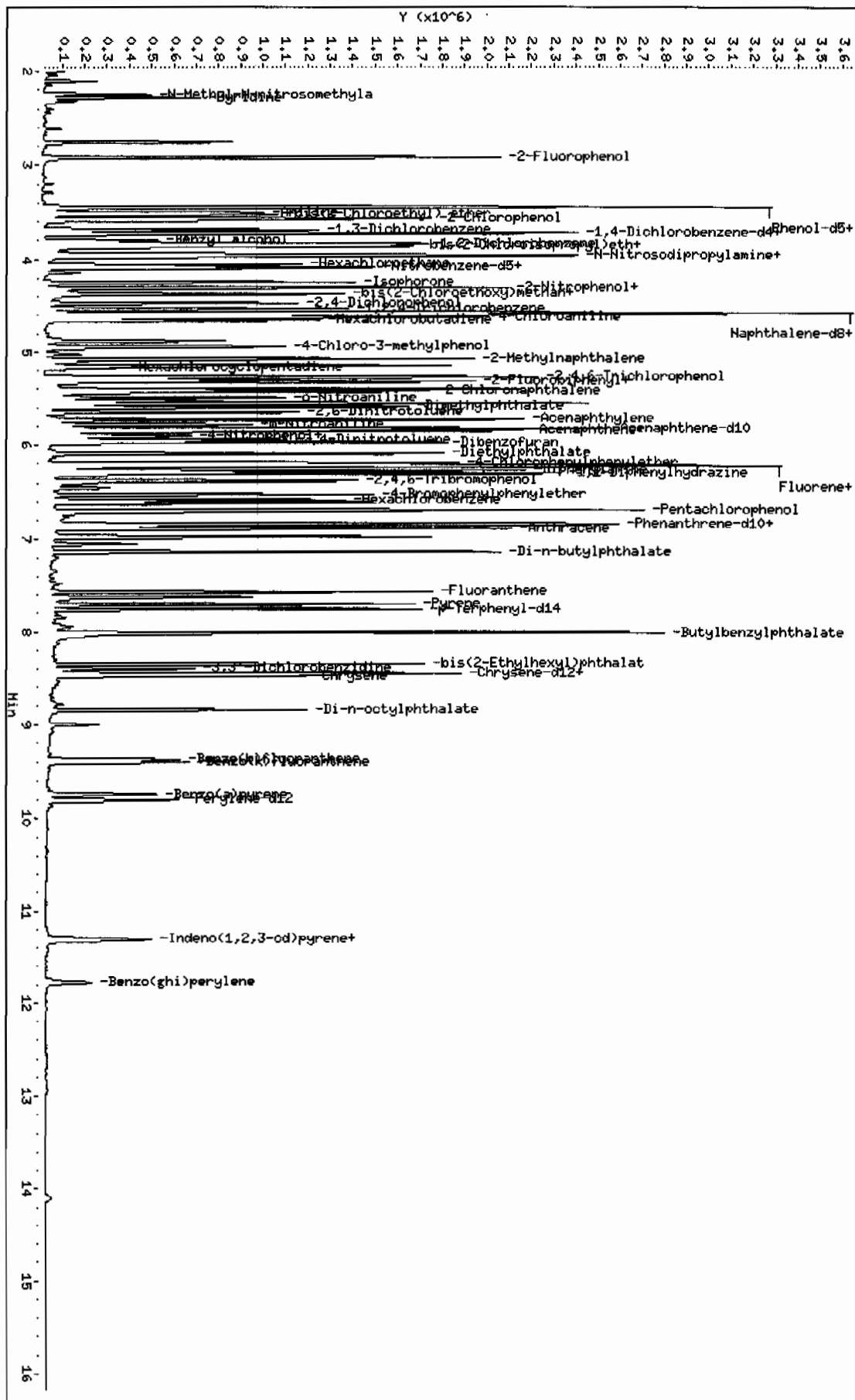
#### QC Flag Legend

Q - Qualifier signal failed the ratio test.  
 H - Operator selected an alternate compound hit.

Data File: /chem/MSD3.1/s030410a,b/s300449.d  
 Date: 05-MAR-2010 06:43  
 Client ID: RE15-10-8349MS  
 Sample Info: 14202051282195667711.SWV1.1.MS  
 Volume Injected (uL): 0.5  
 Column Phase: J&W DB-5MS

Instrument: MSD3.1  
 Operator: JLD1  
 Column diameter: 0.20

/chem/MSD3.1/s030410a,b/s300449.d





GEL Laboratories LLC

Data file : /chem/MSD3.i/s030410a.b/s3c0450.d  
Lab Smp Id: 1202051283 Client Smp ID: RE15-10-8349MSD  
Inj Date : 05-MAR-2010 07:05  
Operator : JLD1 Inst ID: MSD3.i  
Smp Info : |1202051283|956677|1|SVMF|1|MSD  
Misc Info : |MSD8270\_S|WBN100227-01|  
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film  
Method : /chem/MSD3.i/s030410a.b/MSD3-8270R-AQA-030210.m  
Meth Date : 05-Mar-2010 09:07 jen00986 Quant Type: ISTD  
Cal Date : 02-MAR-2010 15:20 Cal File: s3c0216.d  
Als bottle: 29 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: HP RTE Compound Sublist: 10-1969.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	30.05000	weight of sample
M	6.91130	% 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	3.720	3.719	(1.000)	240024		40.0000	
* 29 Naphthalene-d8	136	4.581	4.580	(1.000)	995471		40.0000	
* 46 Acenaphthene-d10	164	5.833	5.832	(1.000)	533852		40.0000	
* 67 Phenanthrene-d10	188	6.838	6.832	(1.000)	828277		40.0000	
* 91 Chrysene-d12	240	8.459	8.458	(1.000)	477217		40.0000	
* 98 Perylene-d12	264	9.807	9.801	(1.000)	294722		40.0000	
\$ 3 2-Fluorophenol	112	2.918	2.912	(0.784)	455691		68.7726	2460
\$ 5 Phenol-d5	99	3.442	3.436	(0.925)	569523		67.3833	2410
\$ 20 Nitrobenzene-d5	82	4.084	4.083	(0.891)	298699		35.0185	1250
\$ 39 2-Fluorobiphenyl	172	5.325	5.324	(0.913)	524693		38.1685	1360
\$ 60 2,4,6-Tribromophenol	329	6.378	6.372	(1.094)	136876		82.2163	2940
\$ 81 p-Terphenyl-d14	244	7.758	7.757	(0.917)	425251		52.2114	1870

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	3.453	3.446	(0.928)	310116	36.3733	1300 (Q)
8 2-Chlorophenol	128	3.586	3.586	(0.964)	266657	38.3007	1370
11 1,4-Dichlorobenzene	146	3.731	3.730	(1.003)	266308	35.9939	1290
17 N-Nitrosodipropylamine	70	3.961	3.960	(1.065)	203102	36.3707	1300 (Q)
28 1,2,4-Trichlorobenzene	180	4.533	4.532	(0.989)	228380	37.7070	1350
33 4-Chloro-3-methylphenol	107	4.945	4.928	(1.079)	253996	41.5087	1480
47 Acenaphthene	154	5.854	5.853	(1.004)	473184	37.0886	1320
50 2,4-Dinitrotoluene	165	5.950	5.944	(1.020)	169317	37.9069	1360
52 4-Nitrophenol	139	5.897	5.875	(1.011)	86339	35.4676	1270 (H)
65 Pentachlorophenol	266	6.710	6.698	(0.981)	64666	34.4515	1230
79 Pyrene	202	7.705	7.704	(0.911)	678624	45.3107	1620
2 Pyridine	79	2.276	2.259	(0.612)	178160	26.8960	961
4 Aniline	66	3.506	3.505	(0.942)	144911	34.6334	1240
7 bis(2-Chloroethyl) ether	63	3.522	3.527	(0.947)	230187	31.4619	1120
9 1,3-Dichlorobenzene	146	3.688	3.687	(0.991)	256983	34.2783	1220
12 Benzyl alcohol	108	3.800	3.789	(1.022)	85051	17.7865	636
13 1,2-Dichlorobenzene	146	3.832	3.832	(1.030)	250611	38.6429	1380
14 bis(2-Chloroisopropyl) ether	45	3.864	3.864	(1.039)	574001	34.0709	1220
15 o-Cresol	107	3.848	3.837	(1.034)	256548	50.8863	1820
18 m,p-Cresols	107	3.945	3.939	(1.060)	338949	45.6135	1630
19 Hexachloroethane	117	4.057	4.056	(1.091)	90984	29.4267	1050
21 Nitrobenzene	77	4.094	4.094	(0.894)	293252	36.7692	1310
22 Isophorone	82	4.249	4.249	(0.928)	540583	34.6254	1240
23 2-Nitrophenol	139	4.308	4.308	(0.940)	106173	31.4239	1120
24 2,4-Dimethylphenol	122	4.308	4.302	(0.940)	242449	38.3342	1370
25 bis(2-Chloroethoxy) methane	93	4.372	4.372	(0.954)	301447	33.0719	1180
26 2,4-Dichlorophenol	162	4.469	4.468	(0.975)	218213	37.1051	1330
27 Benzoic acid	105	4.362	4.366	(0.952)	138150	45.8566	1640
30 Naphthalene	128	4.597	4.596	(1.004)	776800	33.6763	1200 (Q)
31 4-Chloroaniline	127	4.619	4.612	(1.008)	388279	37.2753	1330
32 Hexachlorobutadiene	225	4.661	4.661	(1.018)	131356	39.4217	1410
34 2-Methylnaphthalene	142	5.079	5.078	(1.109)	509787	35.6324	1270
36 Hexachlorocyclopentadiene	237	5.175	5.174	(0.887)	29559	13.1662	471
37 2,4,6-Trichlorophenol	196	5.271	5.265	(0.904)	141446	38.1498	1360
38 2,4,5-Trichlorophenol	196	5.303	5.292	(0.909)	177203	42.2309	1510
40 2-Chloronaphthalene	162	5.432	5.425	(0.931)	467119	33.6502	1200
42 o-Nitroaniline	65	5.490	5.490	(0.941)	188631	38.3232	1370
41 m-Nitroaniline	138	5.790	5.784	(0.993)	144319	39.7745	1420
43 Dimethylphthalate	163	5.597	5.602	(0.960)	613182	41.6983	1490
44 2,6-Dinitrotoluene	165	5.656	5.655	(0.970)	132030	38.5774	1380
45 Acenaphthylene	152	5.731	5.730	(0.983)	757261	36.8447	1320
48 2,4-Dinitrophenol	184	5.870	5.853	(1.006)	6252	19.5895	700 (aQ)
49 Dibenzofuran	168	5.972	5.971	(1.024)	675644	39.9539	1430
51 Diethylphthalate	149	6.095	6.094	(1.045)	615489	43.9329	1570
53 Fluorene	166	6.212	6.212	(1.065)	540491	33.9812	1210
54 4-Chlorophenylphenylether	204	6.196	6.190	(1.062)	280057	43.8796	1570
55 2-Methyl-4,6-dinitrophenol	198	6.234	6.233	(0.912)	16757	15.0361	538 (Q)

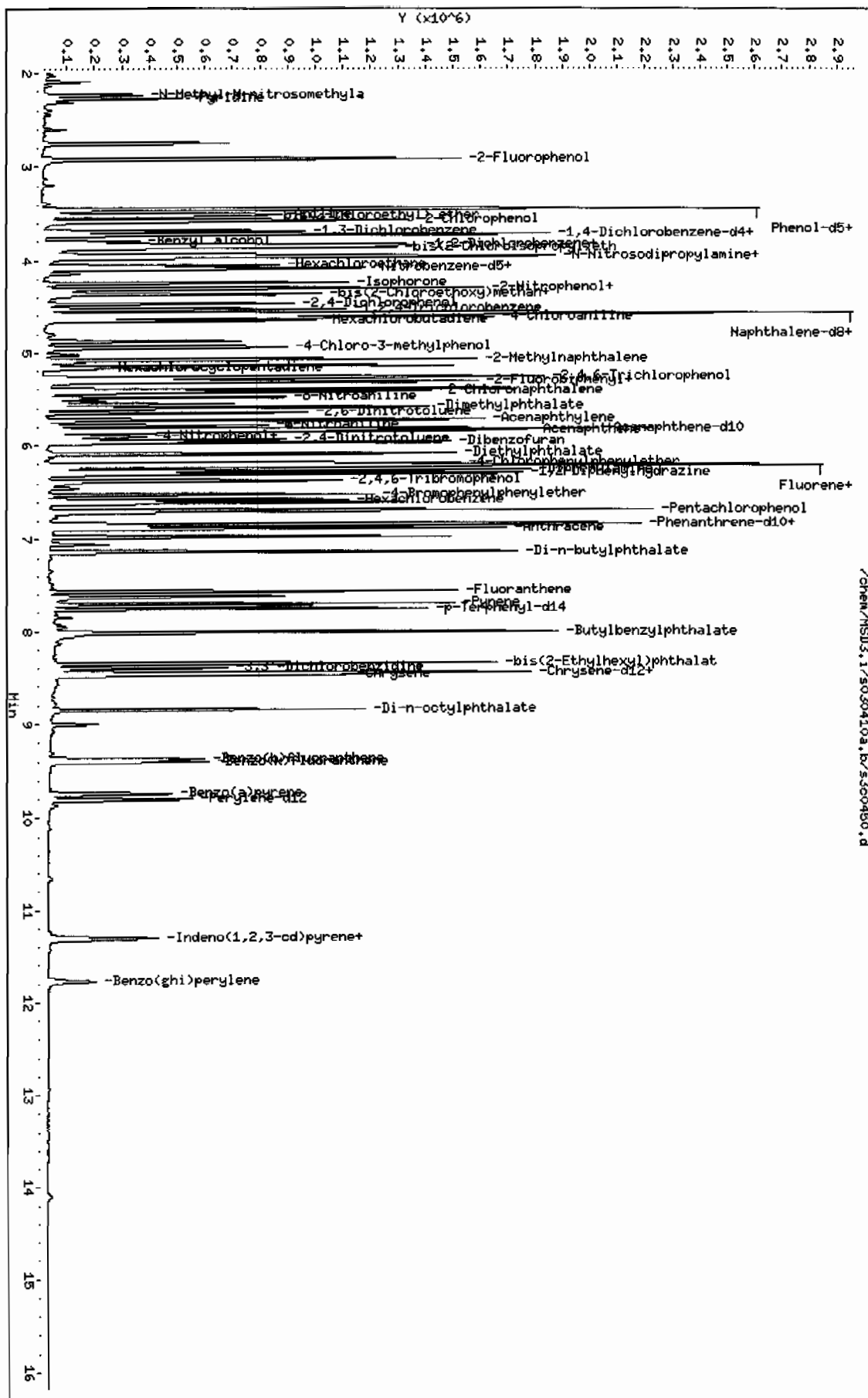
Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.218	6.217	(1.066)	136361	44.1773	1580
133 Diphenylamine	169	6.277	6.271	(0.918)	505184	42.4824	1520
58 1,2-Diphenylhydrazine	77	6.303	6.303	(0.922)	650998	39.6946	1420
61 4-Bromophenylphenylether	248	6.528	6.527	(0.955)	147281	40.4293	1440
63 Hexachlorobenzene	284	6.581	6.575	(0.962)	157743	40.2615	1440
68 Phenanthrene	178	6.854	6.848	(1.002)	805533	38.1974	1360
69 Anthracene	178	6.886	6.880	(1.007)	756204	36.2850	1300
72 Di-n-butylphthalate	149	7.138	7.137	(1.044)	947582	42.1321	1510
76 Fluoranthene	202	7.566	7.565	(1.106)	696531	35.6509	1270
85 Butylbenzylphthalate	149	8.015	8.014	(0.948)	344589	58.2893	2080
89 Benzo(a)anthracene	228	8.448	8.447	(0.999)	466386	37.7989	1350
90 3,3'-Dichlorobenzidine	252	8.400	8.394	(0.993)	164284	50.8545	1820
92 Chrysene	228	8.480	8.480	(1.003)	464688	39.5779	1410
93 bis(2-Ethylhexyl)phthalate	149	8.352	8.351	(0.987)	466578	55.1080	1970
94 Di-n-octylphthalate	149	8.849	8.849	(0.902)	644077	72.2821	2580 (R)
95 Benzo(b)fluoranthene	252	9.379	9.373	(0.956)	329734	49.0169	1750
96 Benzo(k)fluoranthene	252	9.406	9.400	(0.959)	351172	50.9368	1820
97 Benzo(a)pyrene	252	9.743	9.736	(0.993)	271000	47.2669	1690
99 Indeno(1,2,3-cd)pyrene	276	11.304	11.293	(1.153)	204780	40.5400	1450
100 Dibenzo(a,h)anthracene	278	11.310	11.304	(1.153)	171752	43.1995	1540
101 Benzo(ghi)perylene	276	11.775	11.758	(1.201)	155594	36.9254	1320
1 N-Methyl-N-nitrosomethylamine	74	2.238	2.227	(0.602)	135512	29.0869	1040

#### 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.
- H - Operator selected an alternate compound hit.

Data File: /chem/MSD3.i/s030410a.b/s300450.d  
 Date : 05-MAR-2010 07:05  
 Client ID: REA5-10-8349HSD  
 Sample Info: 11202051283195667111SWF11.HSD  
 Volume Injected (uL): 0.5  
 Column phase: J&W DB-SMS

Instrument: MSD3.i  
 Operator: JLD1  
 Column diameter: 0.20



# LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1950**

**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: 956045

Prep Batch Number: 956039

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

<b>Sample ID</b>	<b>Client ID</b>
247562002	RE15-10-8314
247562003	RE15-10-8313
247562004	RE15-10-8312
247562005	RE15-10-8315
247562006	RE15-10-8311
247562007	RE15-10-8310
247562008	RE15-10-8303
247562009	RE15-10-8302
1202049901	Method Blank (MB)
1202049902	Laboratory Control Sample (LCS)
1202049903	247421002(WST16-10-12226) Matrix Spike (MS)
1202049904	247421002(WST16-10-12226) Matrix Spike Duplicate (MSD)

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

**Primary Analyte Analysis**

**Calibration Information**

**Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

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#### **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 50.3%. The recovery limits are 51-112%. Since the spike recovery falls within the DOD QSM marginal exceedance limit of 41-122%, and the samples are beyond twice the hold time, the data are reported. Please see data exception report 808839.

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

Client sample 247421002 (WST16-10-12226) from SDG 10-1920 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

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

The MS recovered Tetryl at 24.7%. The recovery limits are 36-124%. Since the spike recovery falls within the DOD QSM marginal exceedance limit of 22-139%, and the samples are beyond twice the hold time, the data are reported. Please see data exception report 808839.

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

The MSD recovered Tetryl at 27.1%. The recovery limits are 36-124%. Since the spike recovery falls within the DOD QSM marginal exceedance limit of 22-139%, and the samples are beyond twice the hold time, the data are reported. Please see data exception report 808839.

##### **MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.

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

The internal standard responses were within the required acceptance criteria for all samples and QC in this SDG.

#### **Technical Information**

##### **Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

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#### **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 247562004(RE15-10-8312) failed ISTD acceptance criteria. It was re-analyzed and passed acceptance criteria. The re-analysis is reported.

#### **Secondary Analyte Analysis**

#### **Calibration Information**

##### **Initial Calibration**

All initial calibration requirements for this analysis have been met for this SDG.

##### **Calibration Verification Standard Requirements**

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

##### **Calibration Blank Requirements**

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

##### **CRI Requirements**

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

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

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

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

##### **Surrogate Recoveries**

The LCS spike recoveries were within the established acceptance limits.

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

Client sample 247421002 (WST16-10-12226) from SDG 10-1920 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

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

The MS spike recoveries were within the established acceptance limits.

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

The MSD spike recoveries were within the established acceptance limits.

##### **MS/MSD Relative Percent Difference (RPD) Statement**

The RPD(s) between the MS and MSD met the acceptance limits.



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

The internal standards were not added to the secondary analyte extracts.

#### **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 808839 was generated for this SDG.

The LCS recovered Tetryl at 50.3%. The recovery limits are 51-112%. Since the spike recovery falls within the DOD QSM marginal exceedance limit of 41-122%, and the samples are beyond twice the hold time, the data are reported.

The MS recovered Tetryl at 24.7%. The MSD recovered Tetryl at 27.1%. The recovery limits are 36-124%. Since the spike recovery falls within the DOD QSM marginal exceedance limit of 22-139%, and the samples are beyond twice the hold time, the data are reported.

##### **Manual Integrations**

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

##### **Flagging Convention**

The samples were not originally analyzed using SW-846 Method 8330.

##### **Additional Comments**

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

### **System Configuration**

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

### **Chromatographic Columns**

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

### **Certification Statement**

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

### **Review Validation:**

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

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

Reviewer: *Leopoldo Mauer* Date: *03/28/10*

# SAMPLE DATA SUMMARY

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8314

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319051a

Date Analyzed: 20-MAR-10 17:29

Units: ug/kg

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

\*Concentration =

Instrument				
Value	X	Concentrated Extract Volume	X	Dilution
		Sample Amount		Factor

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8314

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100033.wiff

Date Analyzed: 10-MAR-10 23:53

Units: ug/kg

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

\*Concentration =

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: RE15-10-8313

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562003

Sample Amount 2

Moisture: 3.6

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319052a

Date Analyzed: 20-MAR-10 17:58

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8313

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562003

Sample Amount 2

Moisture: 3.6

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100034.wiff

Date Analyzed: 11-MAR-10 00:09

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8312

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562004

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323013a

Date Analyzed: 23-MAR-10 15:02

Units: ug/kg

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

\*Concentration =

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



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8312

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562004

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100035.wiff

Date Analyzed: 11-MAR-10 00:25

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8315

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562005

Sample Amount 2

Moisture: 3.4

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319054a

Date Analyzed: 20-MAR-10 18:57

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8315

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562005

Sample Amount 2

Moisture: 3.4

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100036.wiff

Date Analyzed: 11-MAR-10 00:41

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: RE15-10-8311

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562006

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319055a

Date Analyzed: 20-MAR-10 19:27

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8311

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562006

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100040.wiff

Date Analyzed: 11-MAR-10 01:43

Units: ug/kg

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

\*Concentration =

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

1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8310

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562007

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319056a

Date Analyzed: 20-MAR-10 19:56

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: RE15-10-8310

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562007

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100041.wiff

Date Analyzed: 11-MAR-10 01:59

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
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1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8303

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562008

Sample Amount 2

Moisture: 3.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319057a

Date Analyzed: 20-MAR-10 20:26

Units: ug/kg

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

\*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8303

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562008

Sample Amount 2

Moisture: 3.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100042.wiff

Date Analyzed: 11-MAR-10 02:15

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: RE15-10-8302

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562009

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319058a

Date Analyzed: 20-MAR-10 20:55

Units: ug/kg

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

\*Concentration =

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

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8302

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562009

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100043.wiff

Date Analyzed: 11-MAR-10 02:31

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
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# QUALITY CONTROL SUMMARY

# High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
247562002	RE15-10-8314	94.6	70 - 144	
247562002	RE15-10-8314	118	70 - 144	
247562003	RE15-10-8313	83	70 - 144	
247562003	RE15-10-8313	115	70 - 144	
247562004	RE15-10-8312	106	70 - 144	
247562004	RE15-10-8312	116	70 - 144	
247562005	RE15-10-8315	101	70 - 144	
247562005	RE15-10-8315	118	70 - 144	
247562006	RE15-10-8311	101	70 - 144	
247562006	RE15-10-8311	117	70 - 144	
247562007	RE15-10-8310	98	70 - 144	
247562007	RE15-10-8310	118	70 - 144	
247562008	RE15-10-8303	90	70 - 144	
247562008	RE15-10-8303	122	70 - 144	
247562009	RE15-10-8302	103	70 - 144	
247562009	RE15-10-8302	116	70 - 144	
1202049901	MB for batch 956039	118	70 - 144	
1202049901	MB for batch 956039	108	70 - 144	
1202049902	LCS for batch 956039	117	70 - 144	
1202049902	LCS for batch 956039	106	70 - 144	

DNT = 3,4-Dinitrotoluene

**3B**  
**High Explosives LCS/LCS Duplicate Summary**

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1950

Extract Batch Code: 956039

Date Extracted: 25-FEB-10

GEL LCS ID: 1202049902

GEL LCSDUP ID:

Analysis Date/Time: 20-MAR-10 06:40

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
p-Nitrotoluene	5000	4910	98.3					67 - 131
1,3,5-Trinitrobenzene	5000	4040	80.7					69 - 126
2,4,6-Trinitrotoluene	5000	4740	94.8					73 - 149
2,4-Dinitrotoluene	5000	5170	103					87 - 137
2,6-Dinitrotoluene	5000	5040	101					89 - 120
2-Amino-4,6-dinitrotoluene	5000	4730	94.7					90 - 130
4-Amino-2,6-dinitrotoluene	5000	4900	98.1					84 - 130
HMX	5000	4190	83.8					58 - 138
Nitrobenzene	5000	5760	115					71 - 122
PETN	5000	5500	110					64 - 137
RDX	5000	5100	102					81 - 137
Tetryl	5000	2520	50.3 *					51 - 112
m-Dinitrobenzene	5000	4830	96.5					83 - 122
m-Nitrotoluene	5000	4860	97.2					73 - 118
o-Nitrotoluene	5000	5520	110					72 - 119

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

3B  
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1950

Extract Batch Code: 956039

Date Extracted: 25-FEB-10

GEL LCS ID: 1202049902

GEL LCSDUP ID:

Analysis Date/Time: 10-MAR-10 19:11

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,4-Diamino-6-nitrotoluene	5000	5180	104					52 - 114
2,6-Diamino-4-nitrotoluene	5000	5210	104					64 - 122
3,5-Dinitroaniline	5000	5130	103					70 - 127
TATB	5000	4760	95.2					28 - 162
tris(o-cresyl) phosphate	5000	4890	97.8					84 - 119

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: WST16-10-12226

Lab Code: GEL

GEL Job No (SDG) 10-1950

Extract Batch Code: 956039

Date Extracted: 25-FEB-10

GEL Spike ID: 1202049903

GEL SpikeDup ID: 1202049904

Analysis Date/Time: 20-MAR-10 07:38

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
4-Amino-2,6-dinitrotoluene	5000	0	5160	103	5120	102	.782	30	72 - 143
HMX	5000	0	5060	101	5210	104	2.93	30	51 - 144
Nitrobenzene	5000	0	5060	101	4880	97.6	3.76	30	70 - 122
1,3,5-Trinitrobenzene	5000	0	4410	88.2	4410	88.2	.081	30	50 - 140
2-Amino-4,6-dinitrotoluene	5000	0	4930	98.7	4980	99.6	.932	30	85 - 137
2,6-Dinitrotoluene	5000	0	5160	103	5050	101	2.23	30	90 - 118
2,4-Dinitrotoluene	5000	0	5340	107	5310	106	.55	30	86 - 135
2,4,6-Trinitrotoluene	5000	0	4370	87.4	4490	89.9	2.76	30	76 - 144
PETN	5000	0	5500	110	6100	122	10.4	30	60 - 140
RDX	5000	0	5880	118	5720	114	2.85	30	59 - 152
Tetryl	5000	0	1240	24.7 *	1360	27.1 *	9.22	30	36 - 124
m-Dinitrobenzene	5000	0	4970	99.3	5040	101	1.54	30	85 - 118
m-Nitrotoluene	5000	0	4580	91.6	4840	96.7	5.41	30	70 - 120
o-Nitrotoluene	5000	0	4560	91.2	4830	96.6	5.78	30	69 - 123
p-Nitrotoluene	5000	0	4770	95.5	4710	94.2	1.32	30	65 - 133

#Column to be used to flag recovery and RPD values with an asterisk



# High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: WST16-10-12226

Lab Code: GEL

GEL Job No (SDG) 10-1950

Extract Batch Code: 956039

Date Extracted: 25-FEB-10

GEL Spike ID: 1202049903

GEL SpikeDup ID: 1202049904

Analysis Date/Time: 10-MAR-10 19:42

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,4-Diamino-6-nitrotoluene	5000	0	5330	107	5550	111	4.04	26	34 - 135
2,6-Diamino-4-nitrotoluene	5000	0	5350	107	5400	108	.93	30	55 - 130
TATB	5000	0	5160	103	4390	87.8	16.1	30	29 - 155
3,5-Dinitroaniline	5000	0	5250	105	5300	106	.948	30	73 - 129
tris(o-cresyl) phosphate	5000	0	4900	98	4870	97.4	.614	30	72 - 127

#Column to be used to flag recovery and RPD values with an asterisk

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 19-MAR-10 16:54

GEL Data File: EXP0319001a

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	423.048
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	475.815
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDBI031910expa.mdb, Time: Sat Mar 20 10:50:15 2010

Calibration: Untitled, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319001a

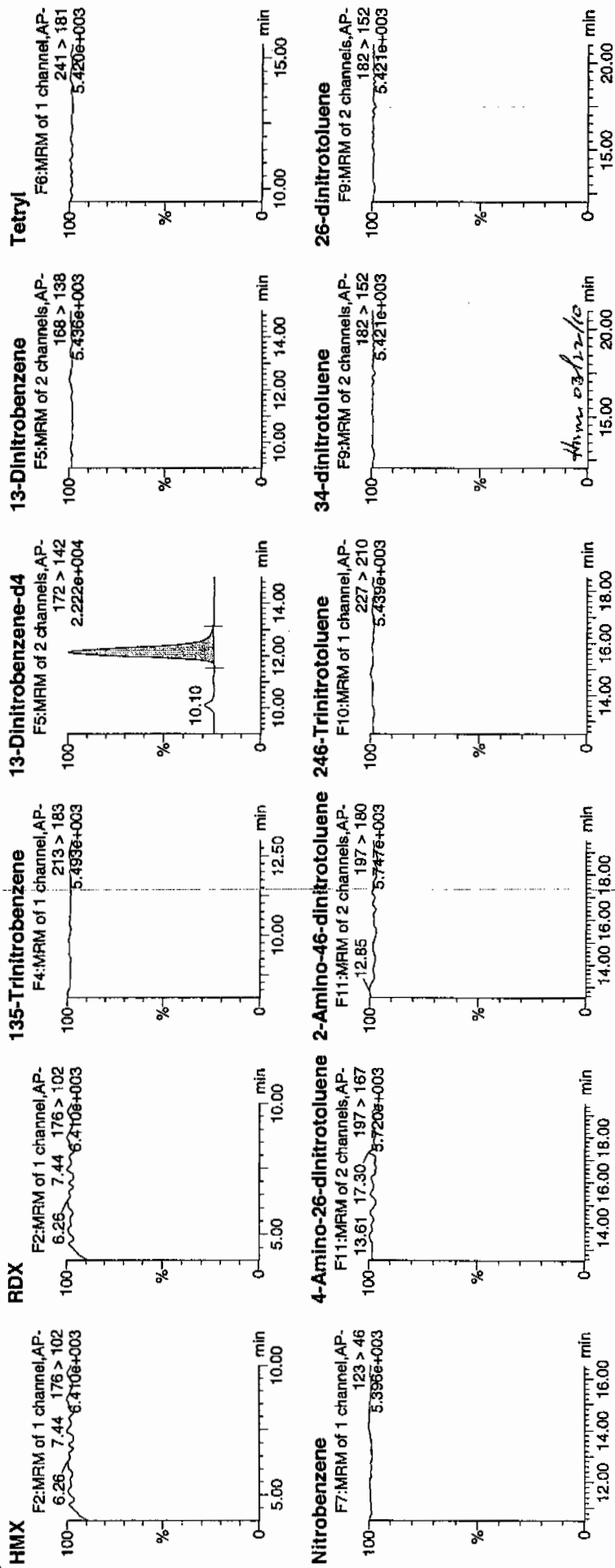
Date: 19-Mar-2010

Time: 16:54:21

ID: XIBLK01

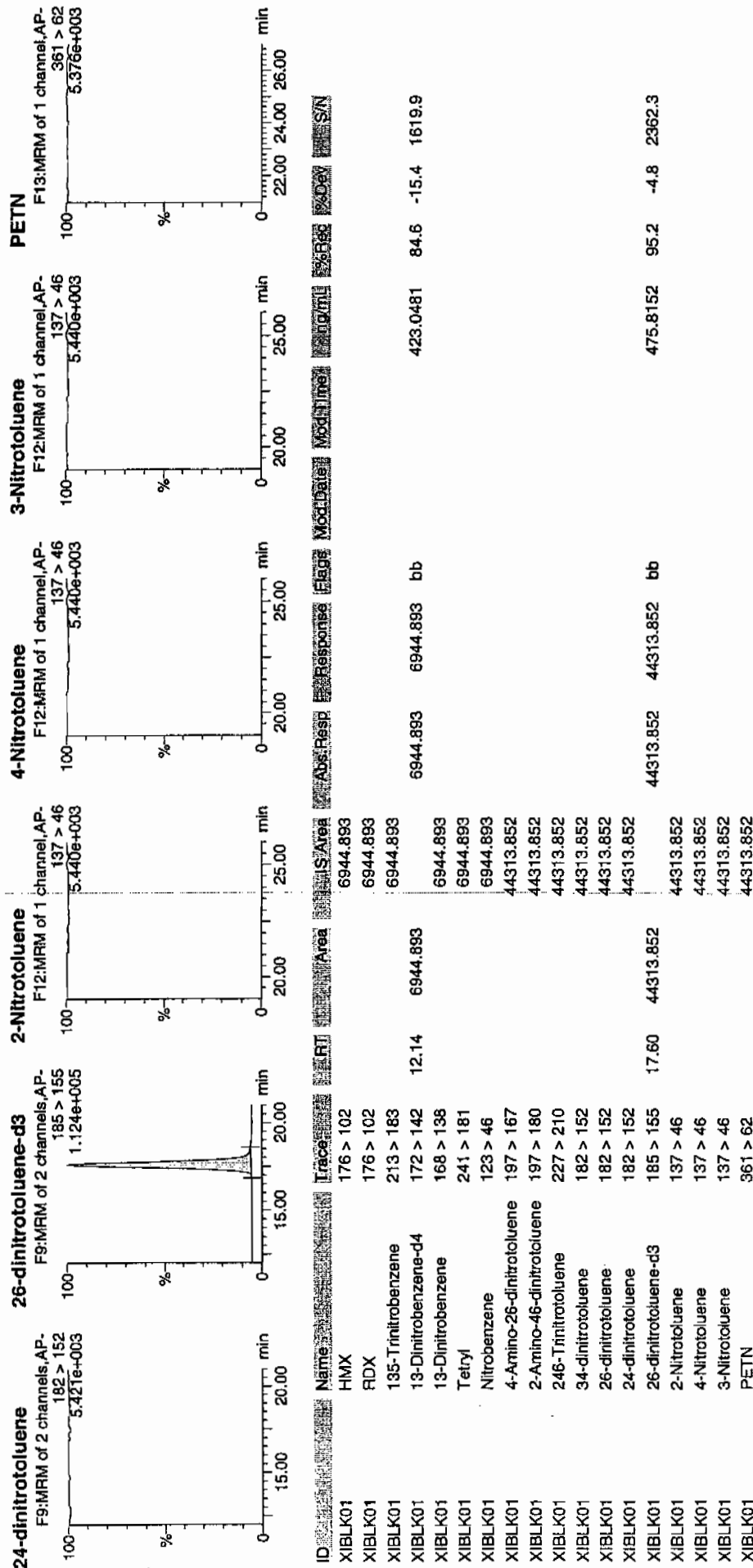
Vial: 1:1,A

Page 1 of 1259



**Quantify Sample Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 19-MAR-10 17:23

GEL Data File: EXP0319002a

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	530.201
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	529.637
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319002a

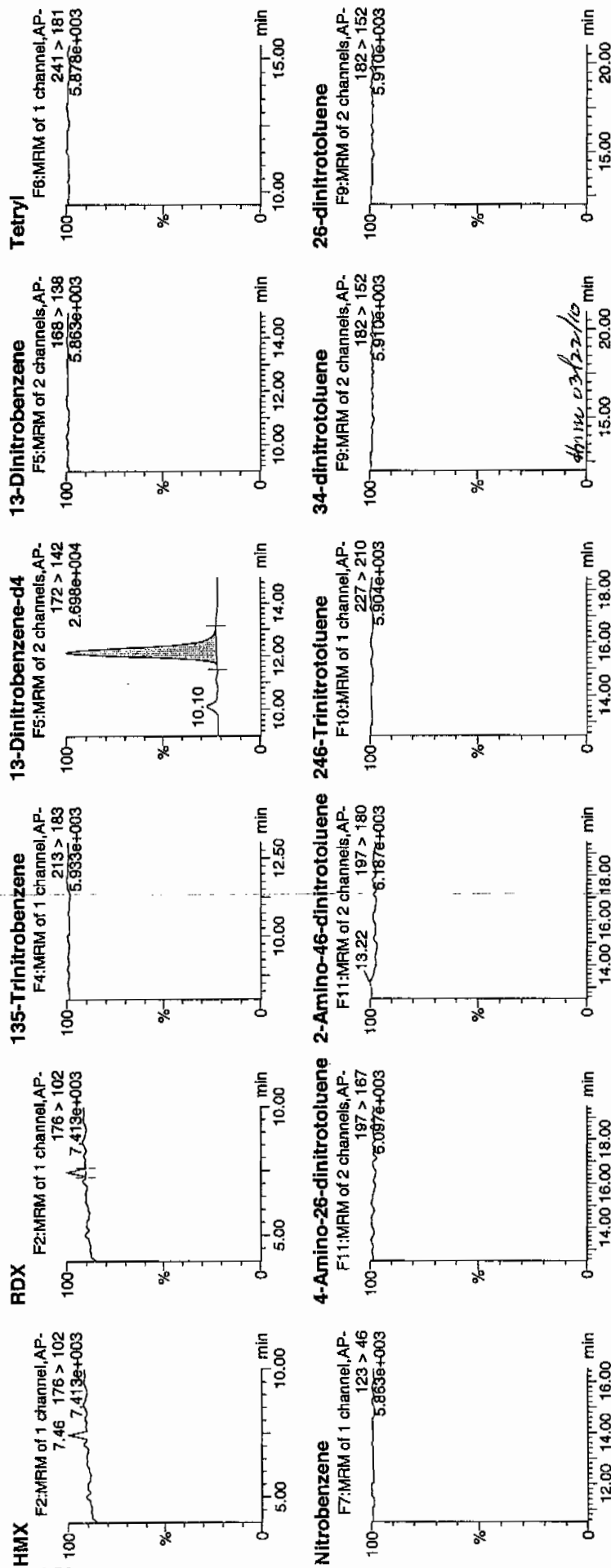
Date: 19-Mar-2010

Time: 17:23:49

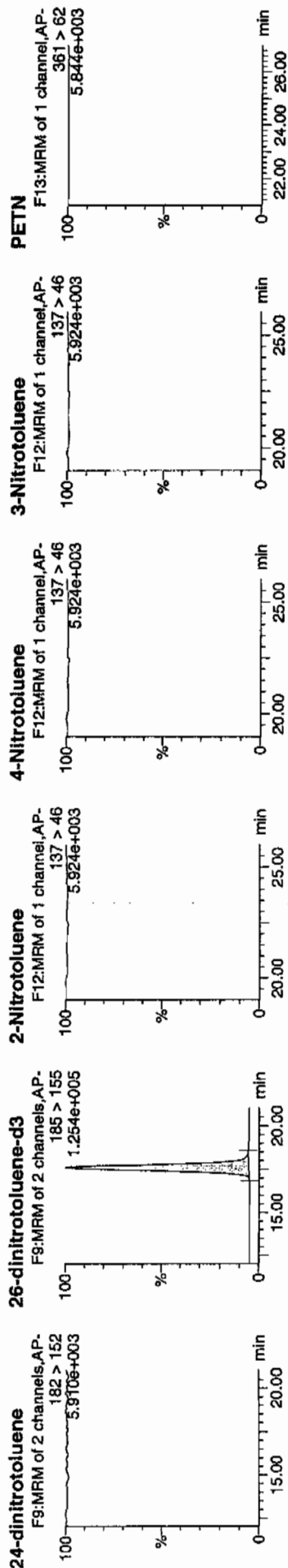
ID: XIBLK01

Vial: 1:1,A

100%  
3/10/10



Dataset: C:\MASSLYNX\New\_Exp\PRO031910expA.qld, Time: Sat Mar 20 11:05:24 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Rec	Dev	SN
XIBLK01	HMX	176 > 102			8703.944								
XIBLK01	RDX	176 > 102			8703.944								
XIBLK01	135-Trinitrobenzene	213 > 183			8703.944								
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.14	8703.944									
XIBLK01	13-Dinitrobenzene	168 > 138			8703.944								
XIBLK01	Tetryl	241 > 181			8703.944								
XIBLK01	Nitrobenzene	123 > 46			8703.944								
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			49326.441								
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			49326.441								
XIBLK01	246-Trinitrotoluene	227 > 210			49326.441								
XIBLK01	34-dinitrotoluene	182 > 152			49326.441								
XIBLK01	26-dinitrotoluene	182 > 152			49326.441								
XIBLK01	24-dinitrotoluene	182 > 152			49326.441								
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.60	49326.441									
XIBLK01	2-Nitrotoluene	137 > 46			49326.441								
XIBLK01	4-Nitrotoluene	137 > 46			49326.441								
XIBLK01	3-Nitrotoluene	137 > 46			49326.441								
XIBLK01	PETN	361 > 62			49326.441								

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 23-MAR-10 09:08

GEL Data File: EXP0323001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	229.482
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	228.802
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0



Quantity Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\032310expa.mdb, Time: Tue Mar 23 14:06:48 2010  
Calibration: Untitled, Time: Wed Mar 24 09:29:41 2010

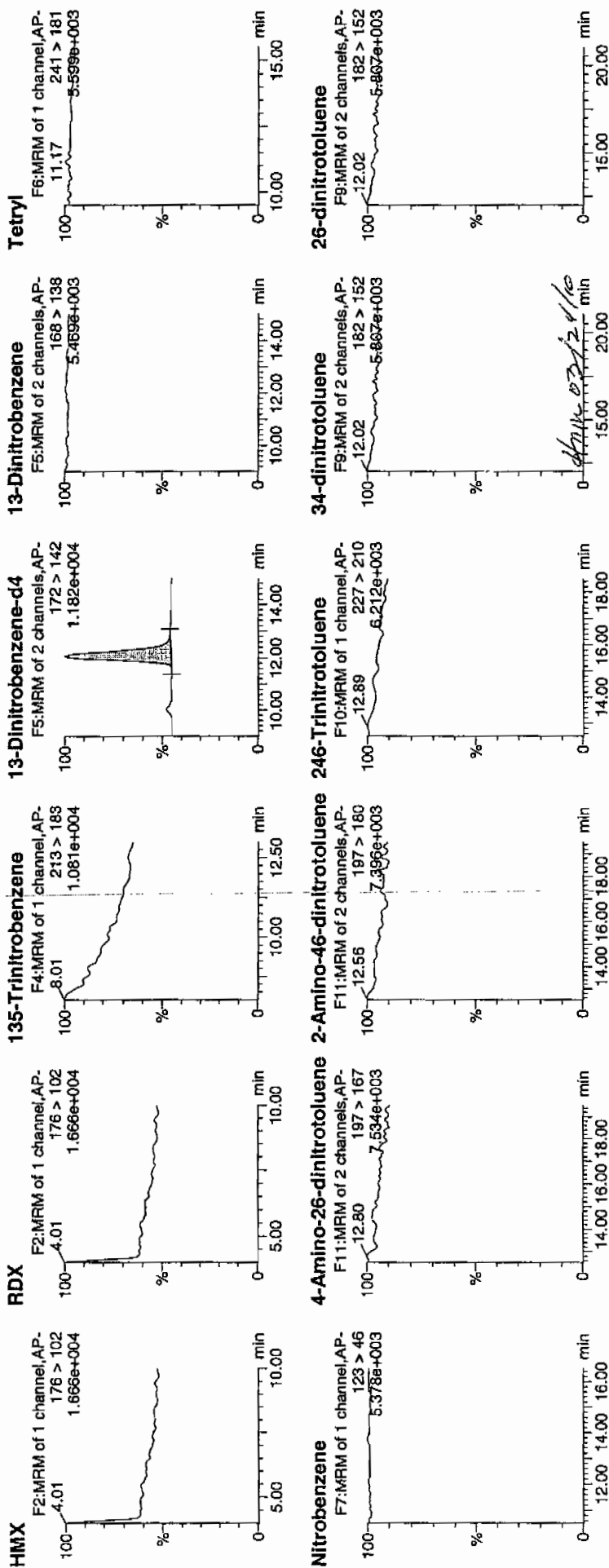
Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0323001a

Date: 23-Mar-2010

Time: 09:08:58

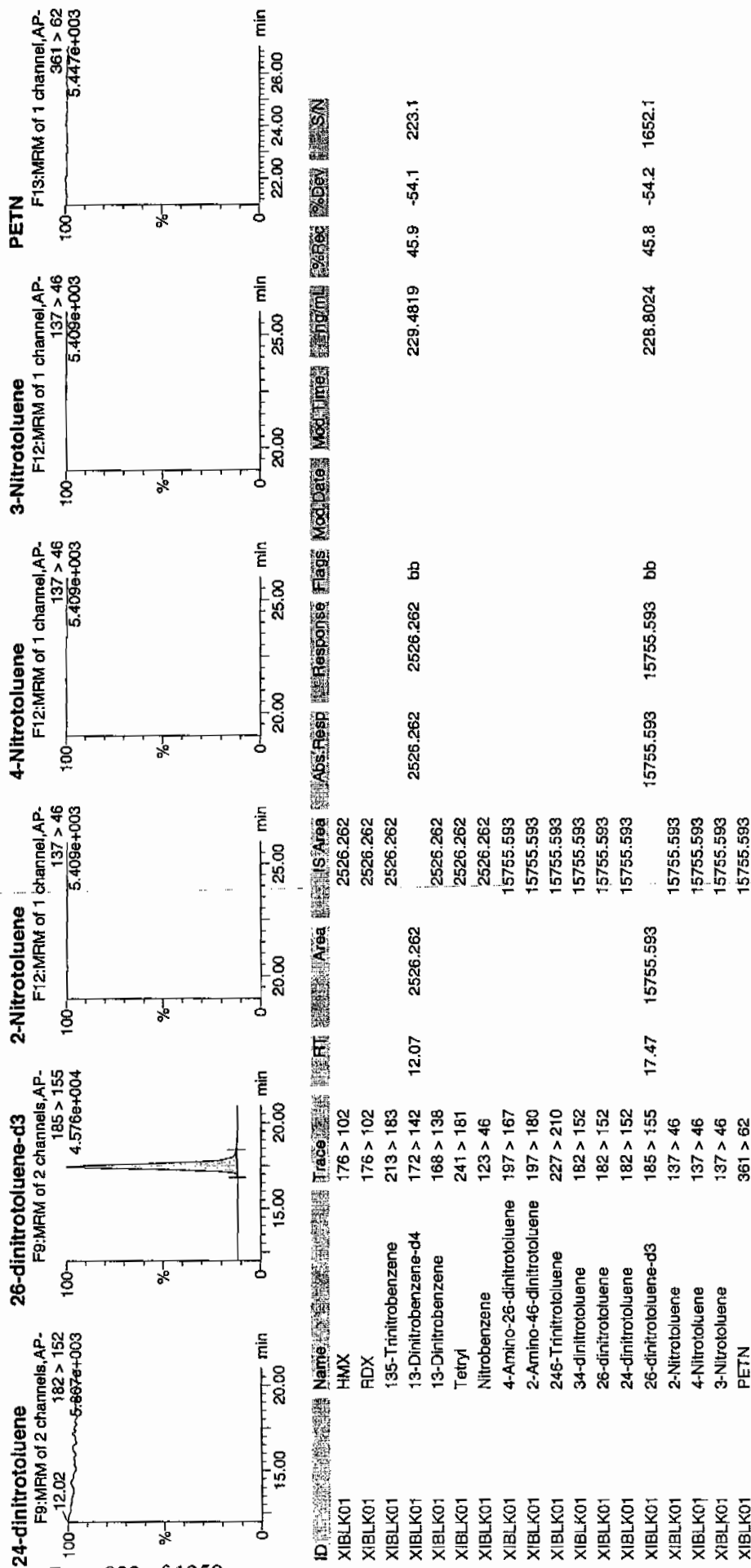
ID: XIBLK01

Vial: 1:1,A



Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 23-MAR-10 09:38

GEL Data File: EXP0323002a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	249.294
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	247.4
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

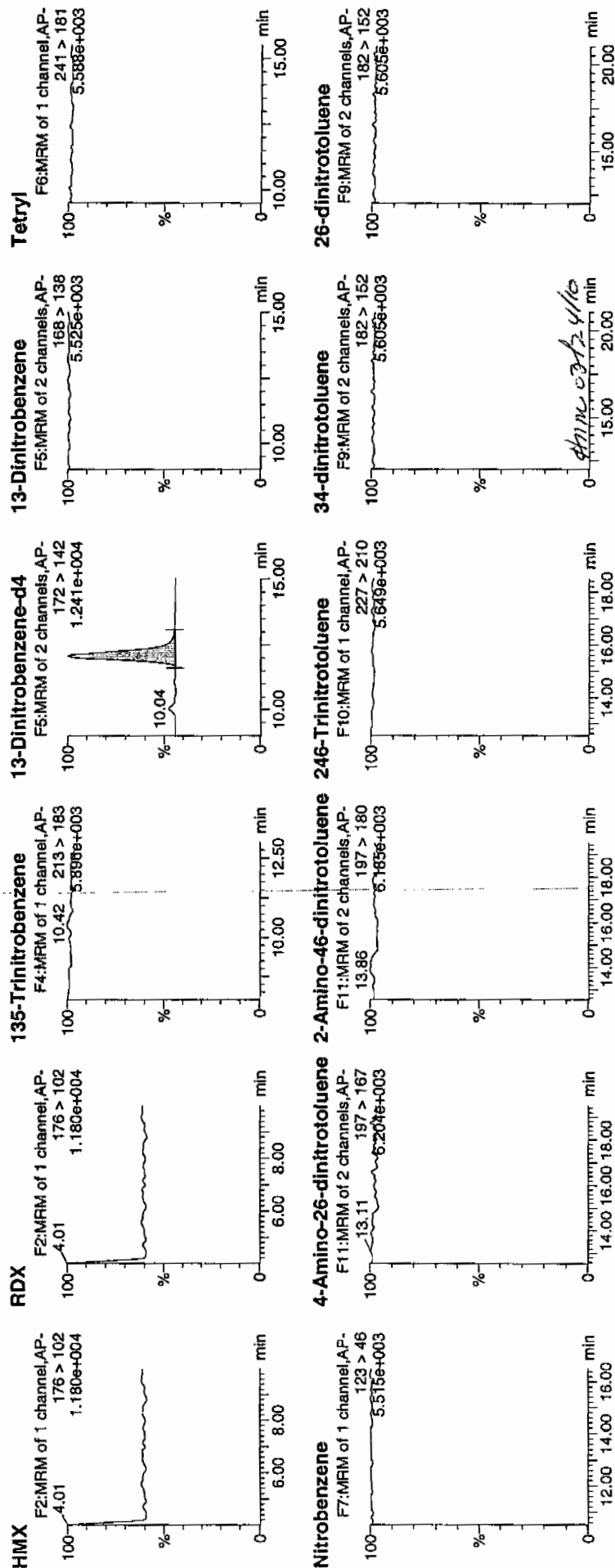
Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0323002a

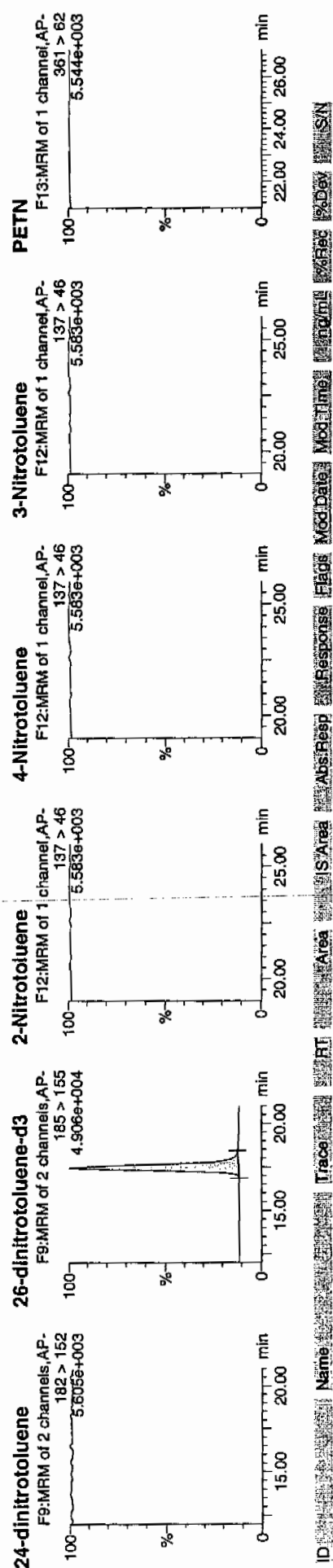
Date: 23-Mar-2010

Time: 09:38:34

ID: XIBLK01

Vial: 1:1,A





ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Data	Mod Time	%Rec	%Dev
XIBLK01	HMX	176 > 102			2744.369							
XIBLK01	RDX	176 > 102			2744.369							
XIBLK01	135-Trinitrobenzene	213 > 183			2744.369							
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.06	2744.369					2744.369	2744.369	49.9	-50.1
XIBLK01	13-Dinitrobenzene	168 > 138			2744.369							
XIBLK01	Tetryl	241 > 181			2744.369							
XIBLK01	Nitrobenzene	123 > 46			2744.369							
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			17036.252							
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			17036.252							
XIBLK01	246-Trinitrotoluene	227 > 210			17036.252							
XIBLK01	34-dinitrotoluene	182 > 152			17036.252							
XIBLK01	26-dinitrotoluene	182 > 152			17036.252							
XIBLK01	24-dinitrotoluene	182 > 152			17036.252							
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.46	17036.252					17036.252	17036.252	49.5	-50.5
XIBLK01	2-Nitrotoluene	137 > 46			17036.252							
XIBLK01	4-Nitrotoluene	137 > 46			17036.252							
XIBLK01	3-Nitrotoluene	137 > 46			17036.252							
XIBLK01	PETN	361 > 62			17036.252				247.4001	247.4001	49.5	-50.5
											2009.2	

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 10-MAR-10 15:31

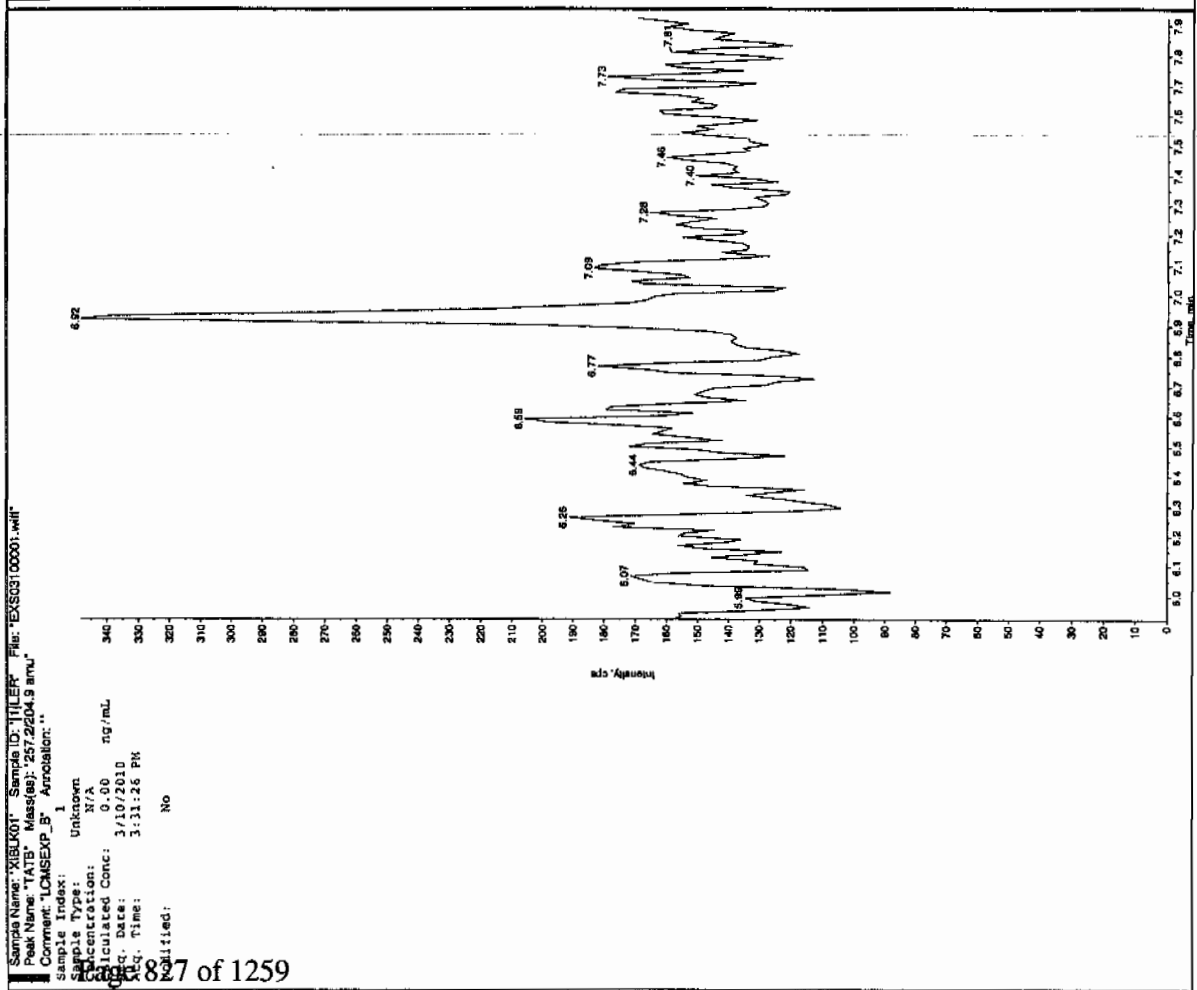
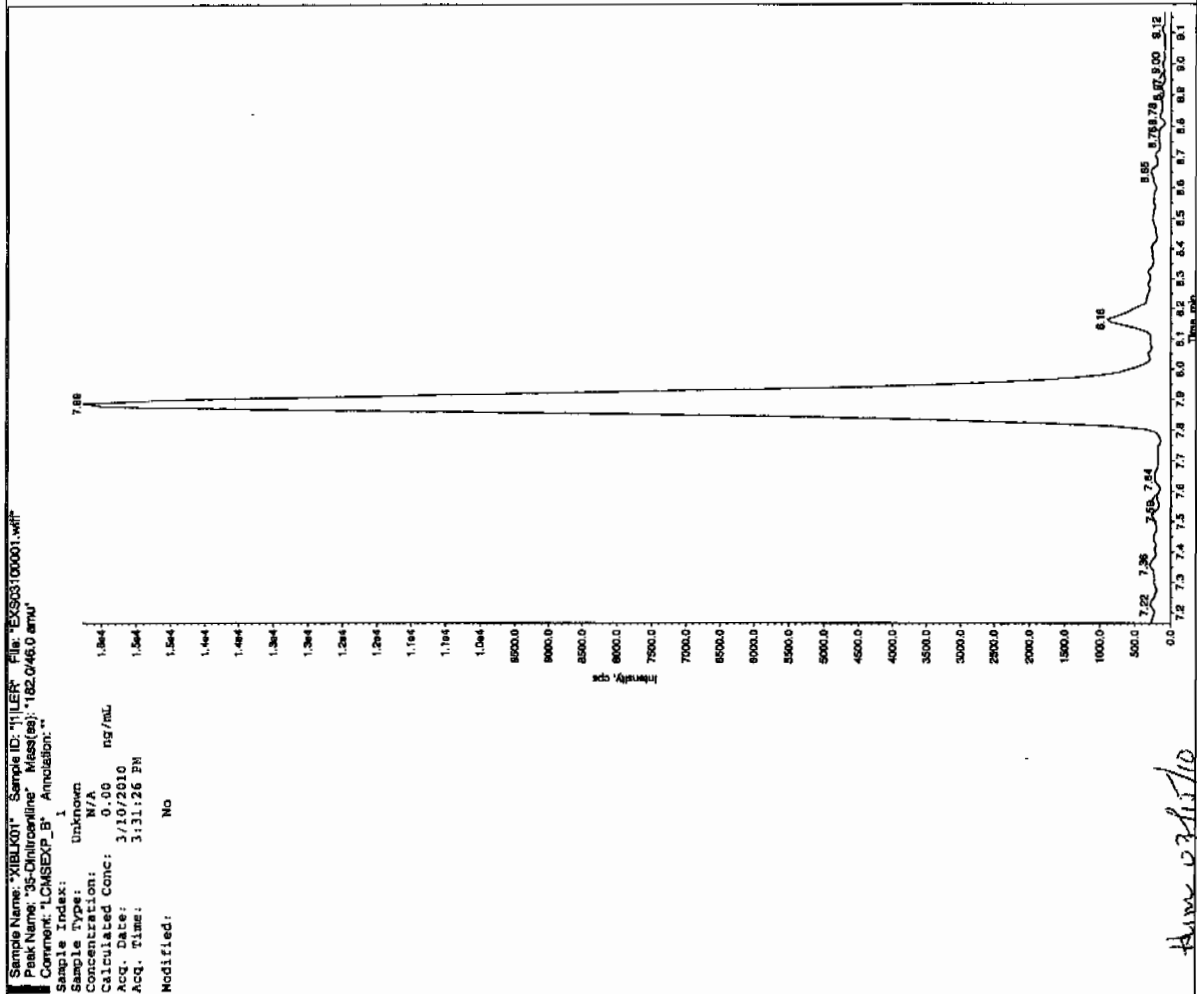
GEL Data File: EXS03100001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	98.2
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	14.6
2,6-Diamino-4-nitrotoluene	0	0

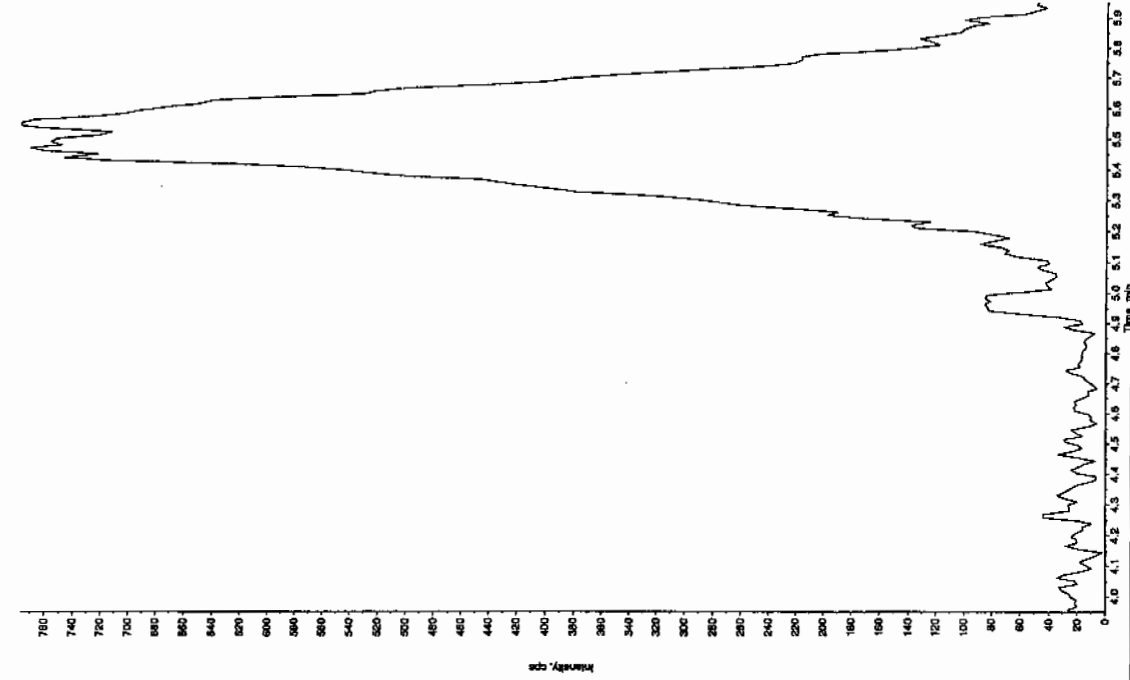
Ken 3/13/10



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

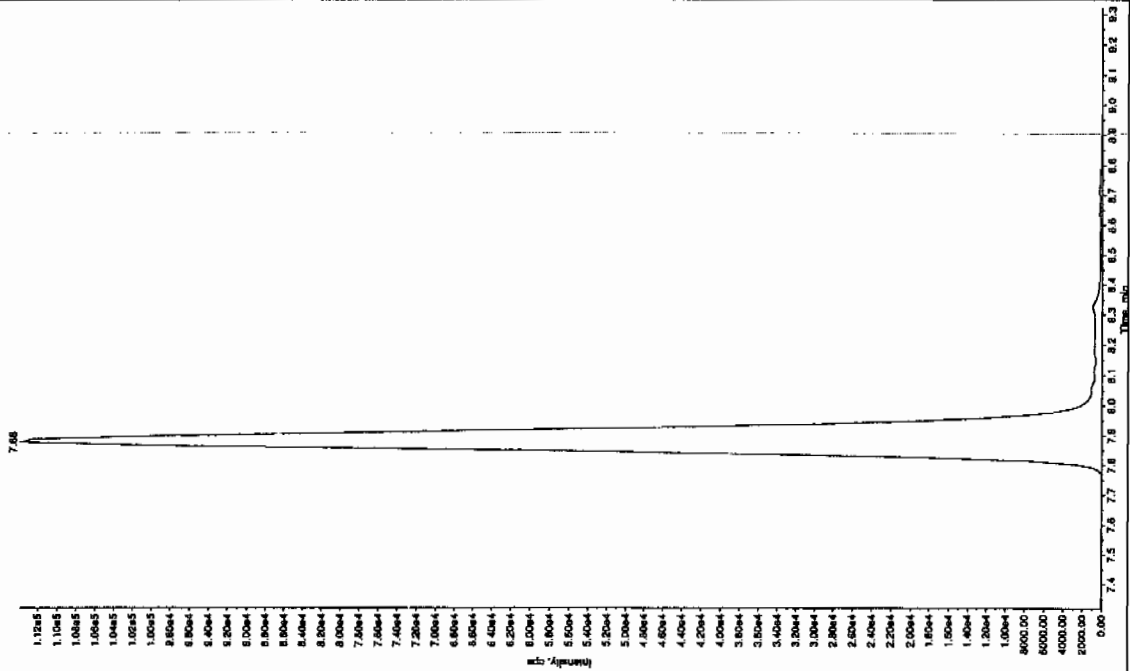
Sample Name: "XBL001" Sample ID: "111EP" File: "EX00100001.wif"  
 Peak Name: "6-Dimethyl-4-nitroindole" Mass(es): "168.046.0 amu"  
 Comment: "LONSEP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:31:26 PM  
 Modified: No



Sample Name: "XBL001" Sample ID: "111EP" File: "EX00100001.wif"  
 Peak Name: "6-Dimethyl-4-nitroindole" Mass(es): "168.046.0 amu"  
 Comment: "LONSEP\_B" Annotation: ""

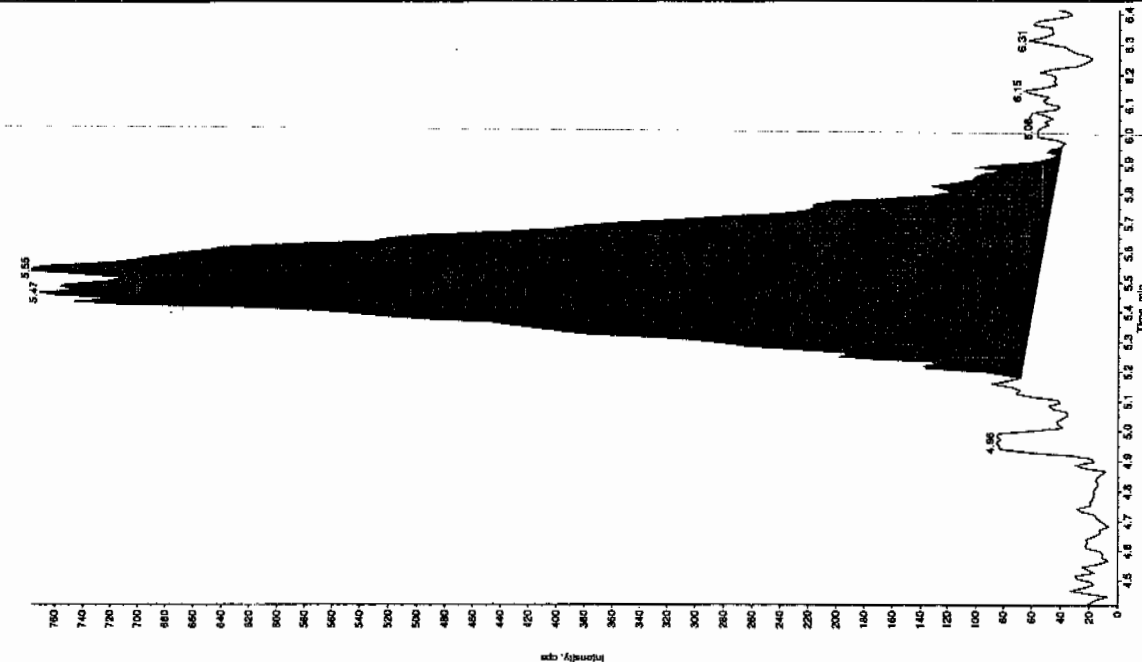
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:31:26 PM  
 Modified: No





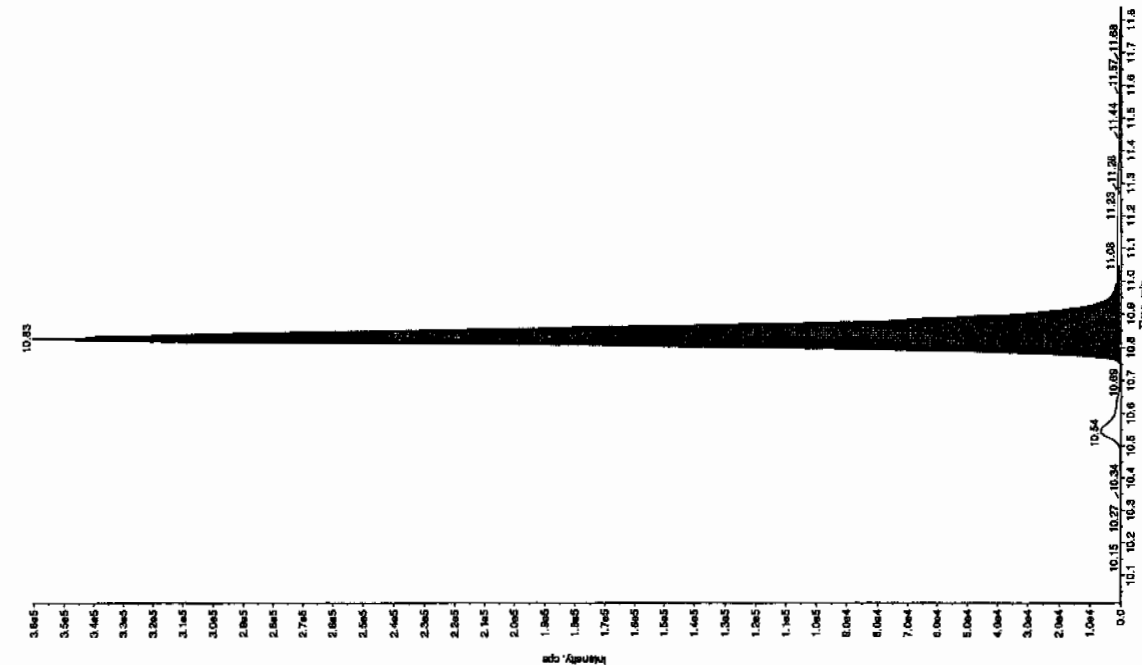
Sample Name: "XBLK01" Sample ID: "JUL01" File: "EX0010001.wif"  
 Peak Name: "24-Diamino-6-oxotetraosene" Mass(es): "160.046.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 14.5 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:31:26 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 6.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.42 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.55 min  
 Area: 1.54e+004 counts  
 Height: 721.263 cps  
 Start Time: 5.18 min  
 End Time: 5.96 min



Sample Name: "XBLK01" Sample ID: "JUL01" File: "EX0010001.wif"  
 Peak Name: "Valicic acid (phosphate)" Mass(es): "355.151.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 98.2 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:31:26 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.36e+006 counts  
 Height: 360022.461 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 10-MAR-10 15:47

GEL Data File: EXS03100002.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

Scan 3/2/10

Sample Name: "XBLK01" Sample ID: "TILER" File: "EXS03100002.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

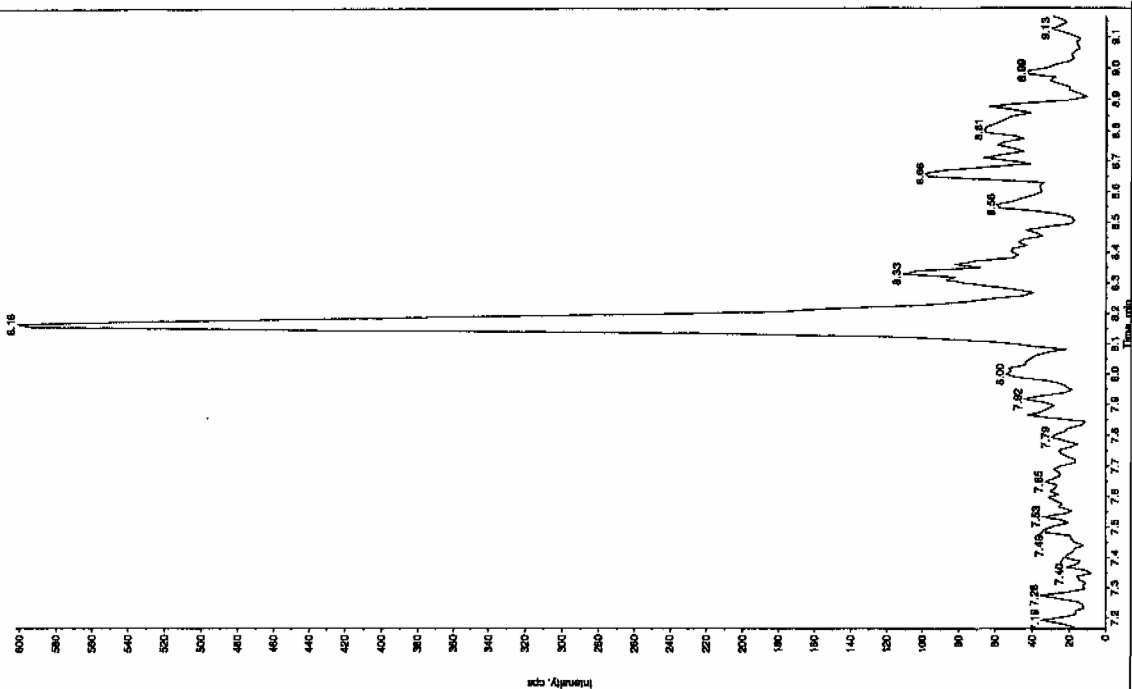
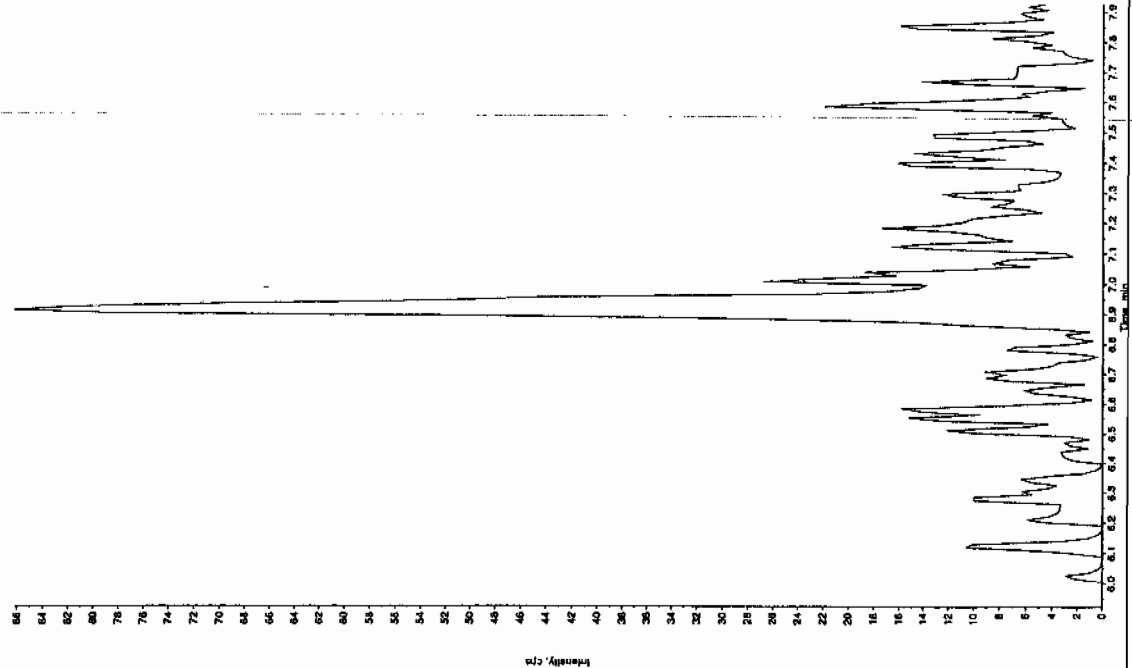
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 3/10/2010

Acq. Time: 3:47:13 PM

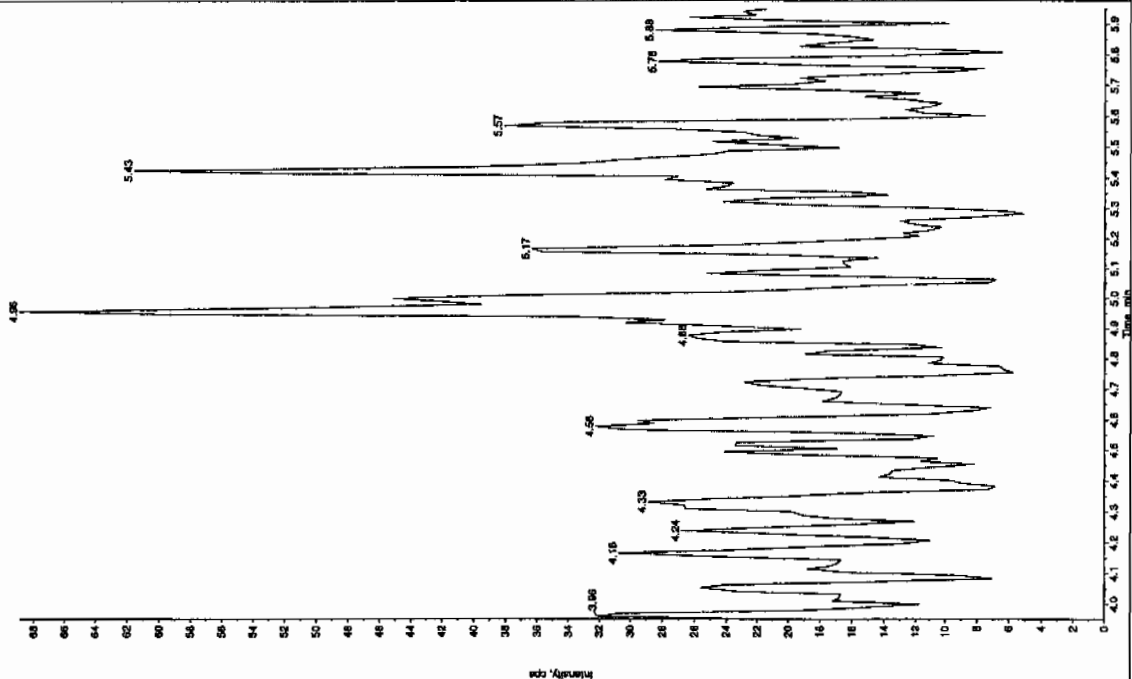
Modified: NO



Time 03/15/10

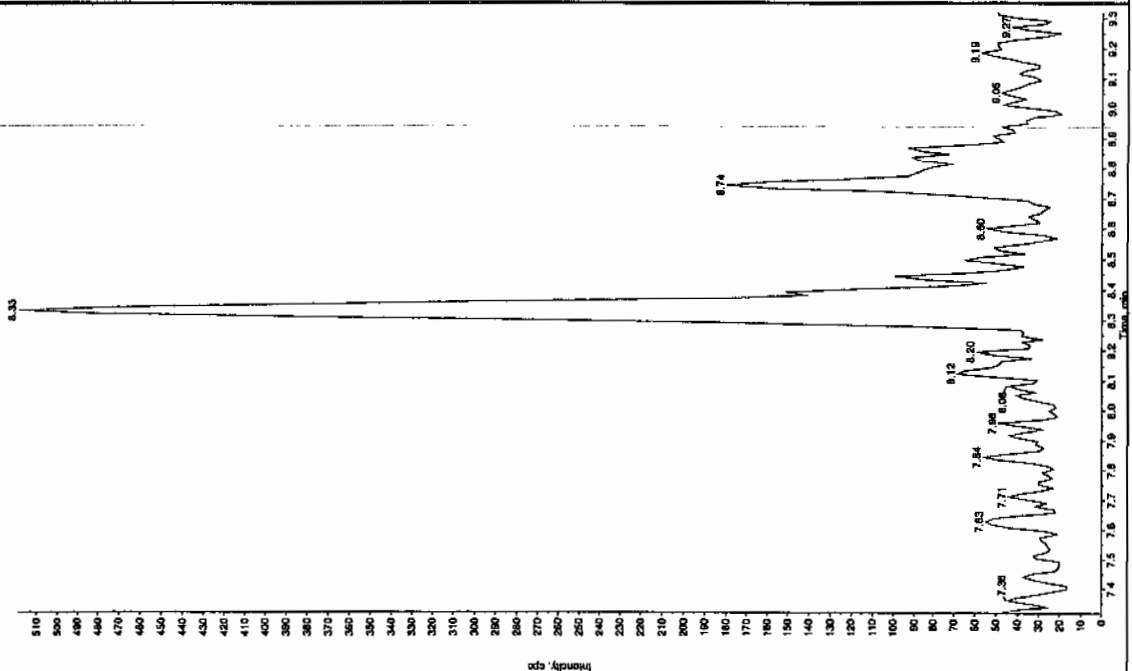
Sample Name: "XBLK01" Sample ID: "11LER" File: "E262010002.wif"  
 Peak Name: "26-Dimethyl-4-nitrobenzene" Mass(es): "168.046.0 amu"  
 Comment: "LONSEP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No



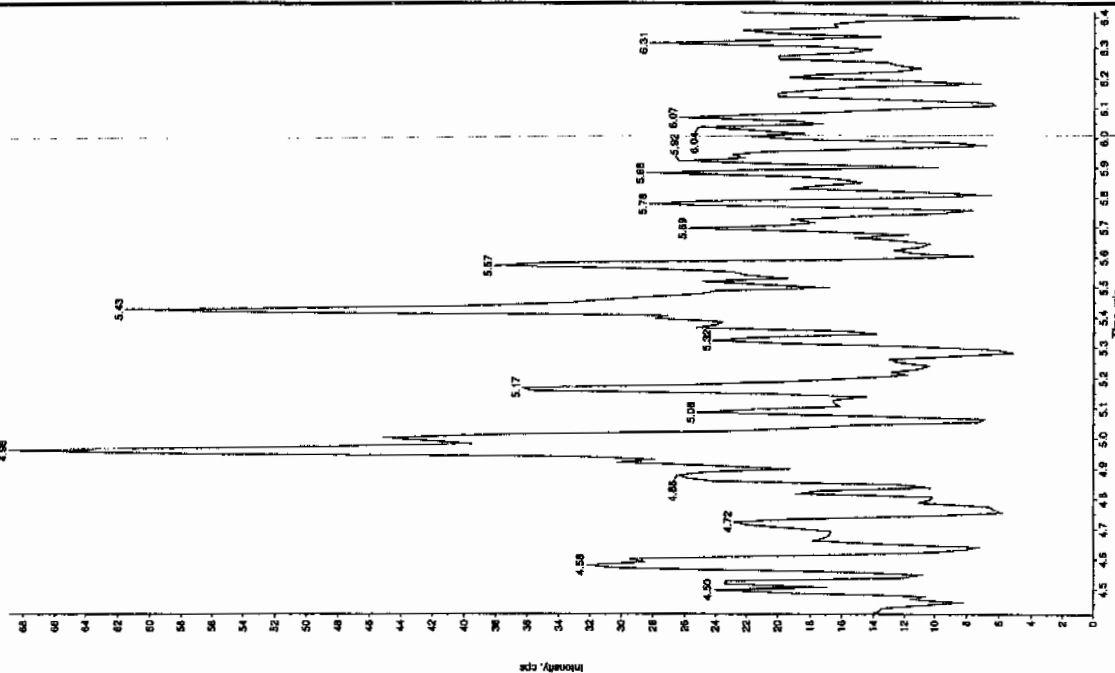
Sample Name: "XBLK01" Sample ID: "11LER" File: "E262010002.wif"  
 Peak Name: "26-Dimethyl-4-nitrobenzene" Mass(es): "162.151.0 amu"  
 Comment: "LONSEP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No



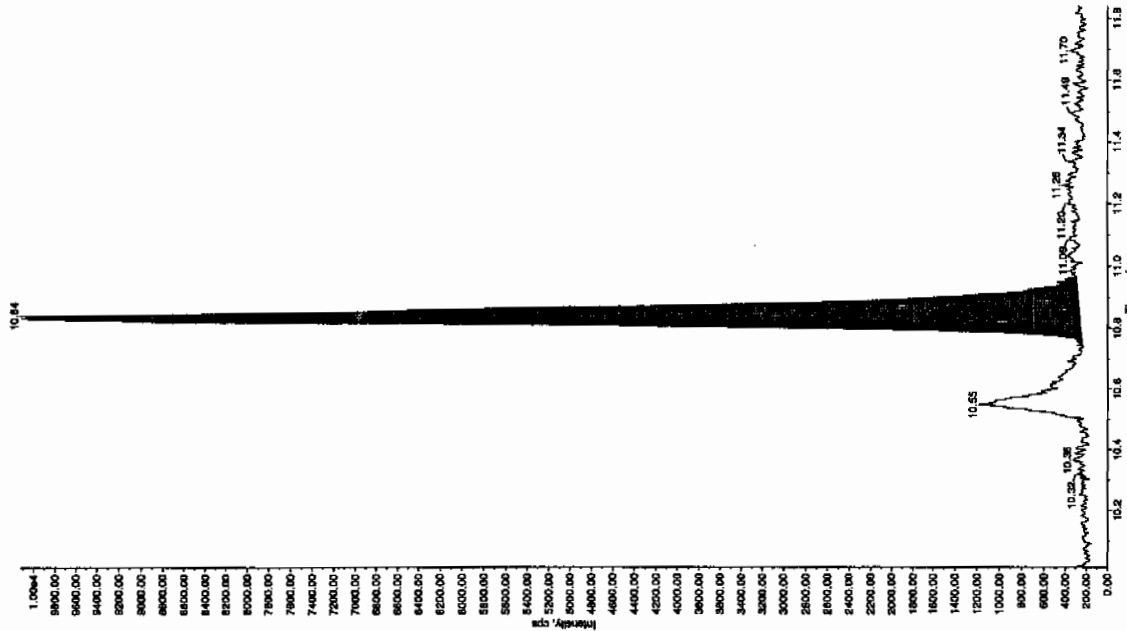
Sample Name: "XIBUK01" Sample ID: "HILF" File: "EX503100002.wif"  
 Peak Name: "24-Diamino-Ethioduane" Mass(es): "166.048.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No



Sample Name: "XIBUK01" Sample ID: "HILF" File: "EX503100002.wif"  
 Peak Name: "Vialo-cresyl phosphate" Mass(es): "369.191.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: No Intercept  
 Acq. Date: 3/10/2010  
 Acq. Time: 3:47:13 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 30.0 points  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 3.91e-004 counts  
 Height: 9861.161 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 19-MAR-10 20:50

GEL Data File: EXP0319009a

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	542.302
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	453.96
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\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319009a

Date: 19-Mar-2010

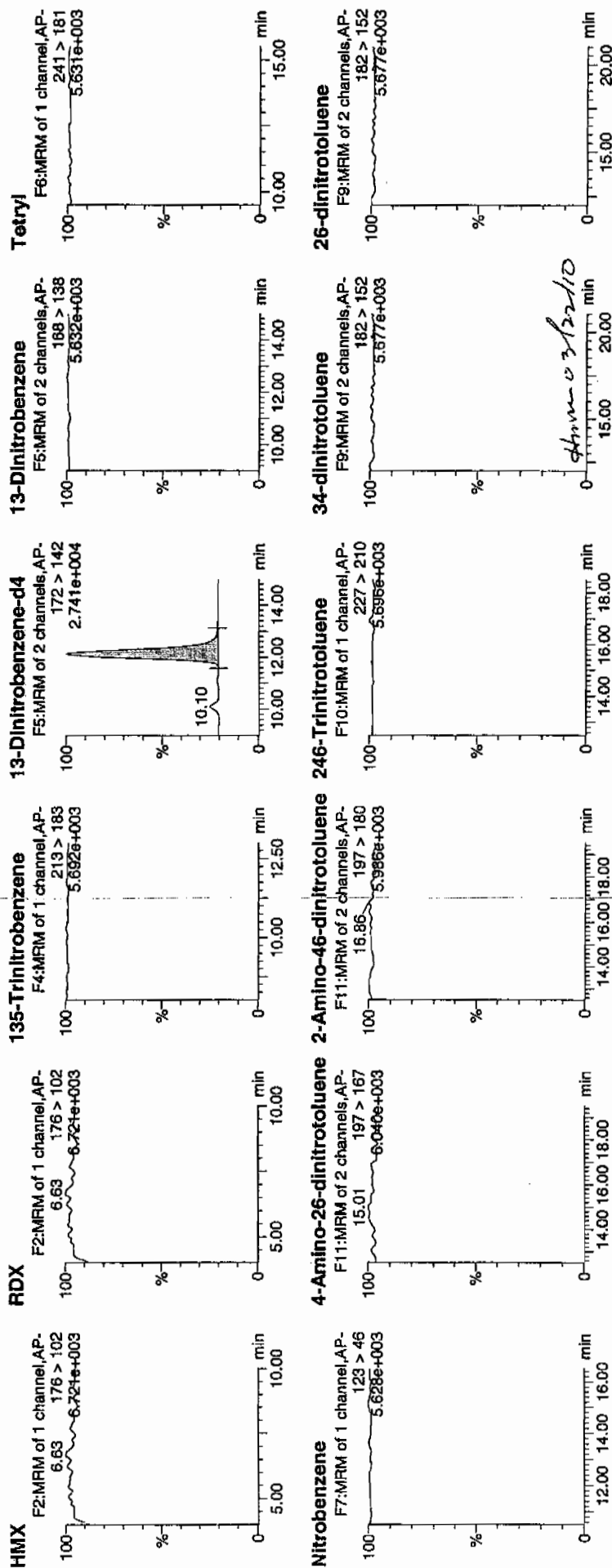
Time: 20:50:09

ID: XIBLK02

Vial: 1:1,A

Page 835 of 1259

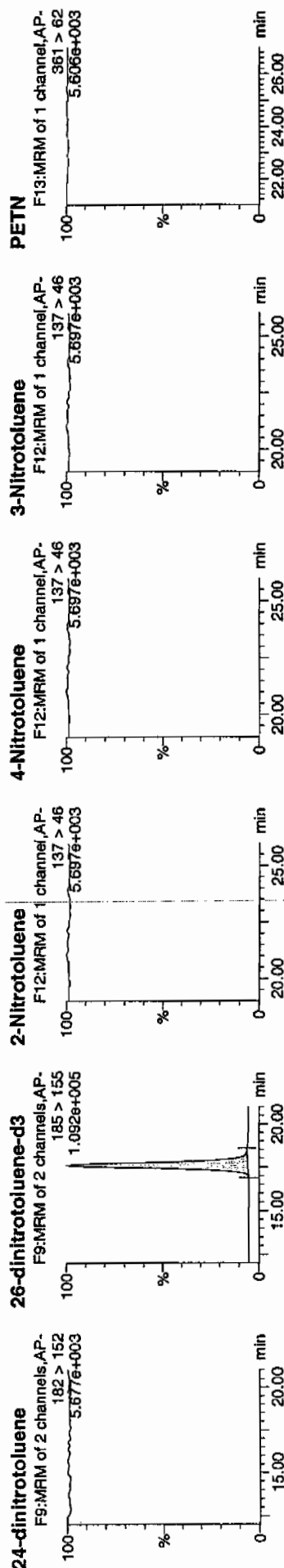
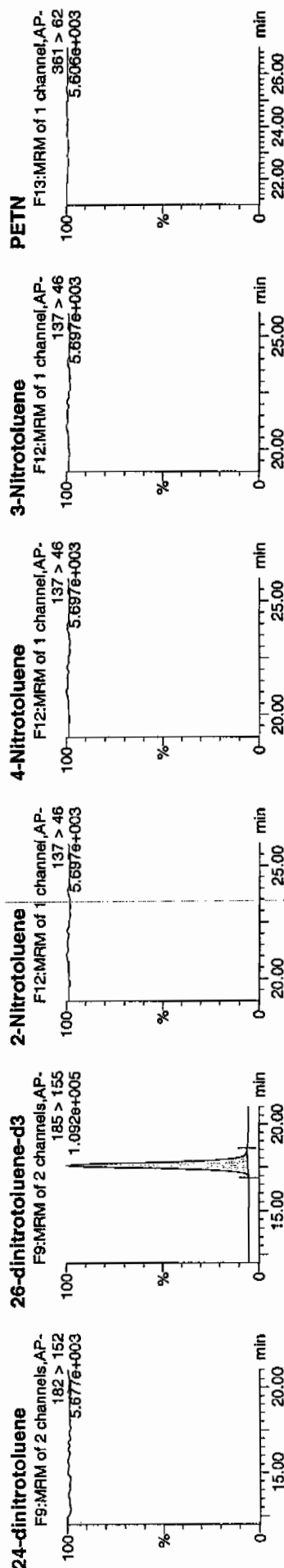
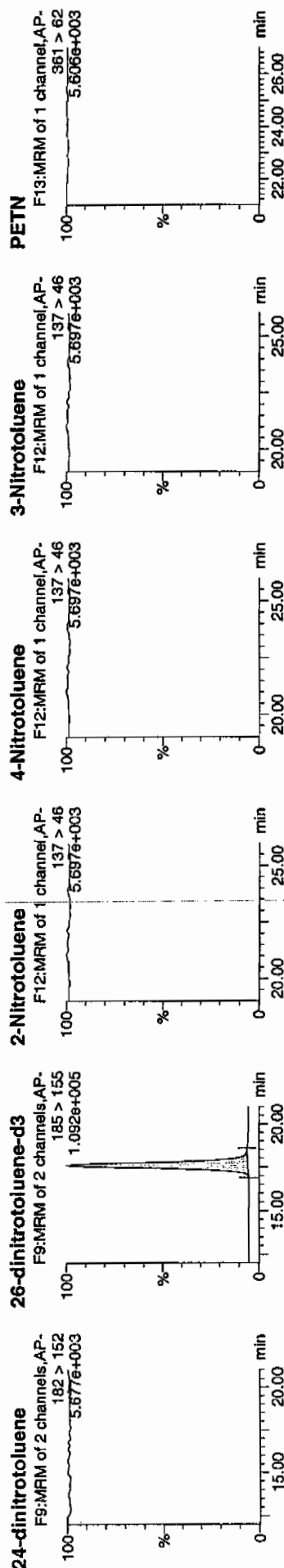
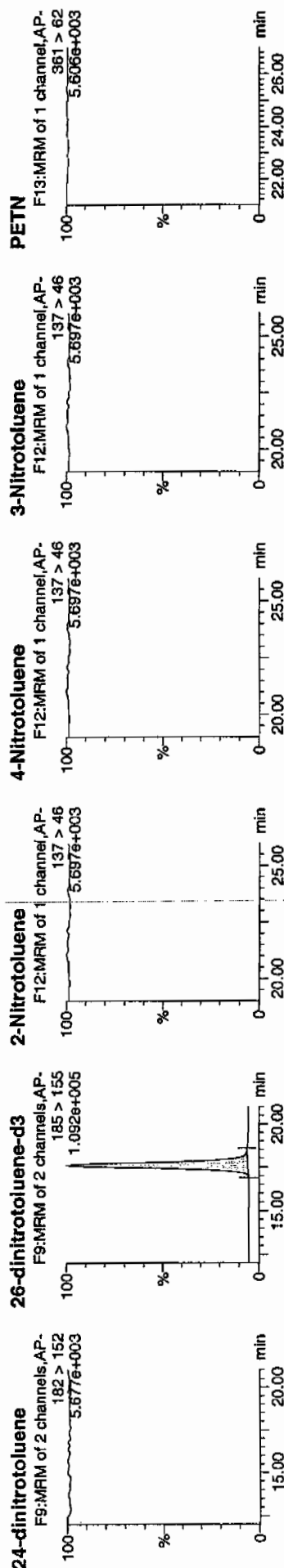
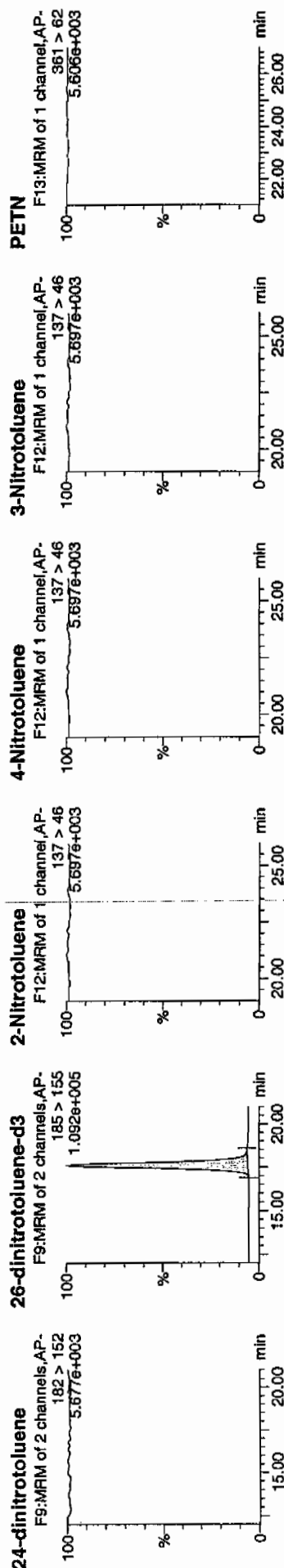
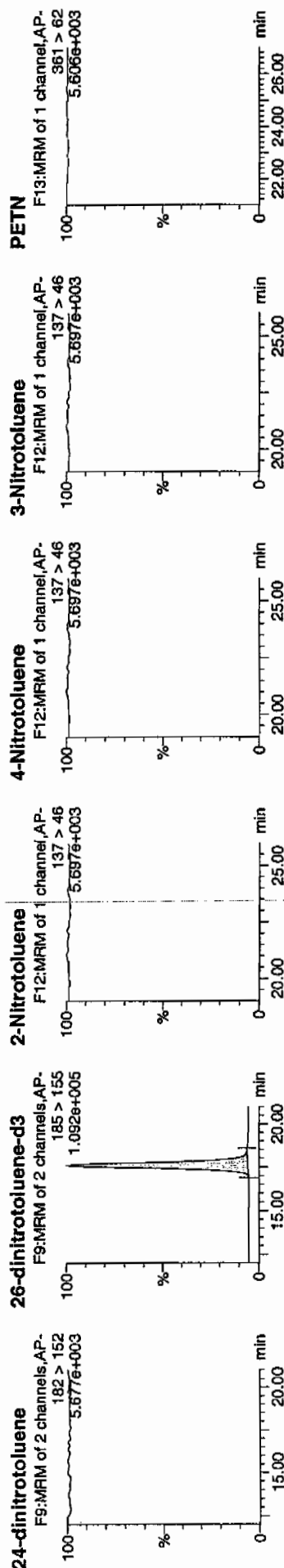
MMT  
3/20/10



### Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



ID	Name	Trace	RT	Area	SArea	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Intno:ml	%Rec	%Dev	SN
XIBLK02	HMX	176 > 102			8902.596									
XIBLK02	RDX	176 > 102			8902.596									
XIBLK02	135-Trinitrobenzene	213 > 183			8902.596									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	12.14	8902.596		8902.596	8902.596	bb			542.3015	108.5	8.5	701.2
XIBLK02	13-Dinitrobenzene	168 > 138			8902.596									
XIBLK02	Tetryl	241 > 181			8902.596									
XIBLK02	Nitrobenzene	123 > 46			8902.596									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			42278.402									
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			42278.402									
XIBLK02	246-Trinitrotoluene	227 > 210			42278.402									
XIBLK02	34-dinitrotoluene	182 > 152			42278.402									
XIBLK02	26-dinitrotoluene	182 > 152			42278.402									
XIBLK02	24-dinitrotoluene	182 > 152			42278.402									
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.60	42278.402		42278.402	42278.402	bb			453.9598	90.8	-9.2	3635.3
XIBLK02	2-Nitrotoluene	137 > 46			42278.402									
XIBLK02	4-Nitrotoluene	137 > 46			42278.402									
XIBLK02	3-Nitrotoluene	137 > 46			42278.402									
XIBLK02	PETN	361 > 62			42278.402									



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 19-MAR-10 21:49

GEL Data File: EXP0319011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	460.101
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	436.341

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0319011a

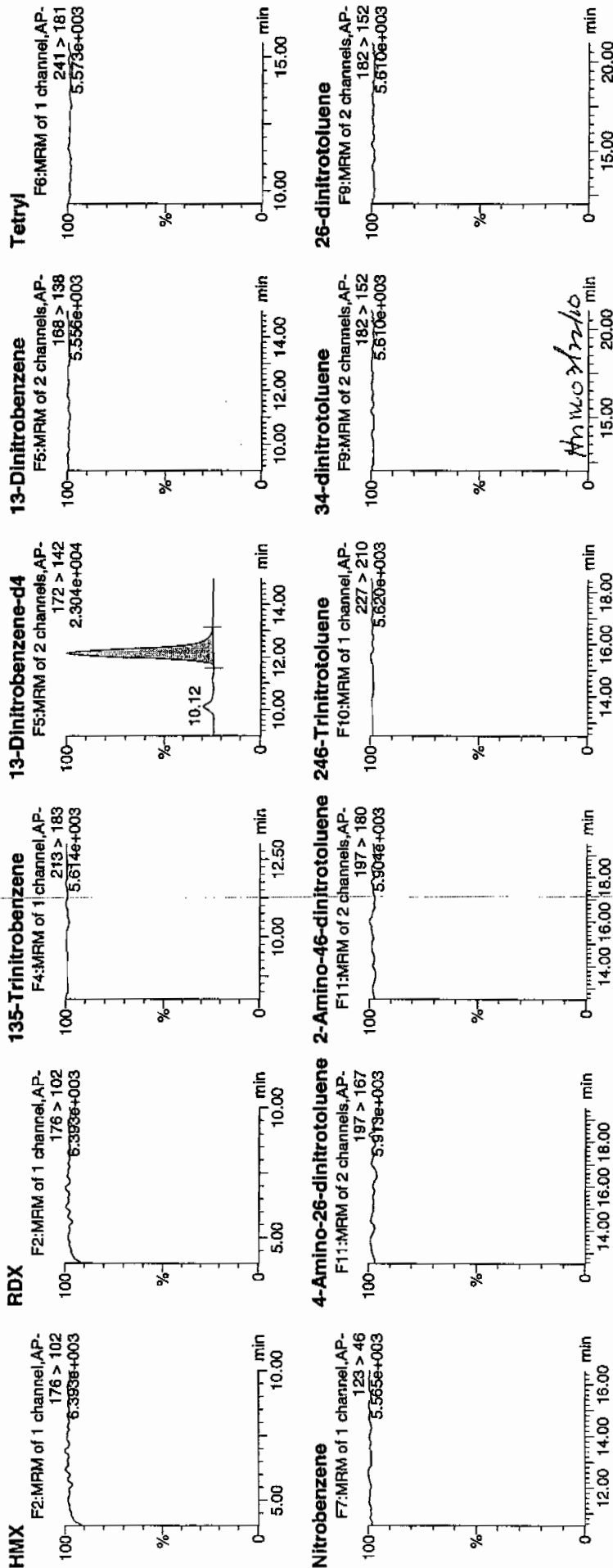
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Time: 21:49:07

ID: XIBLK03

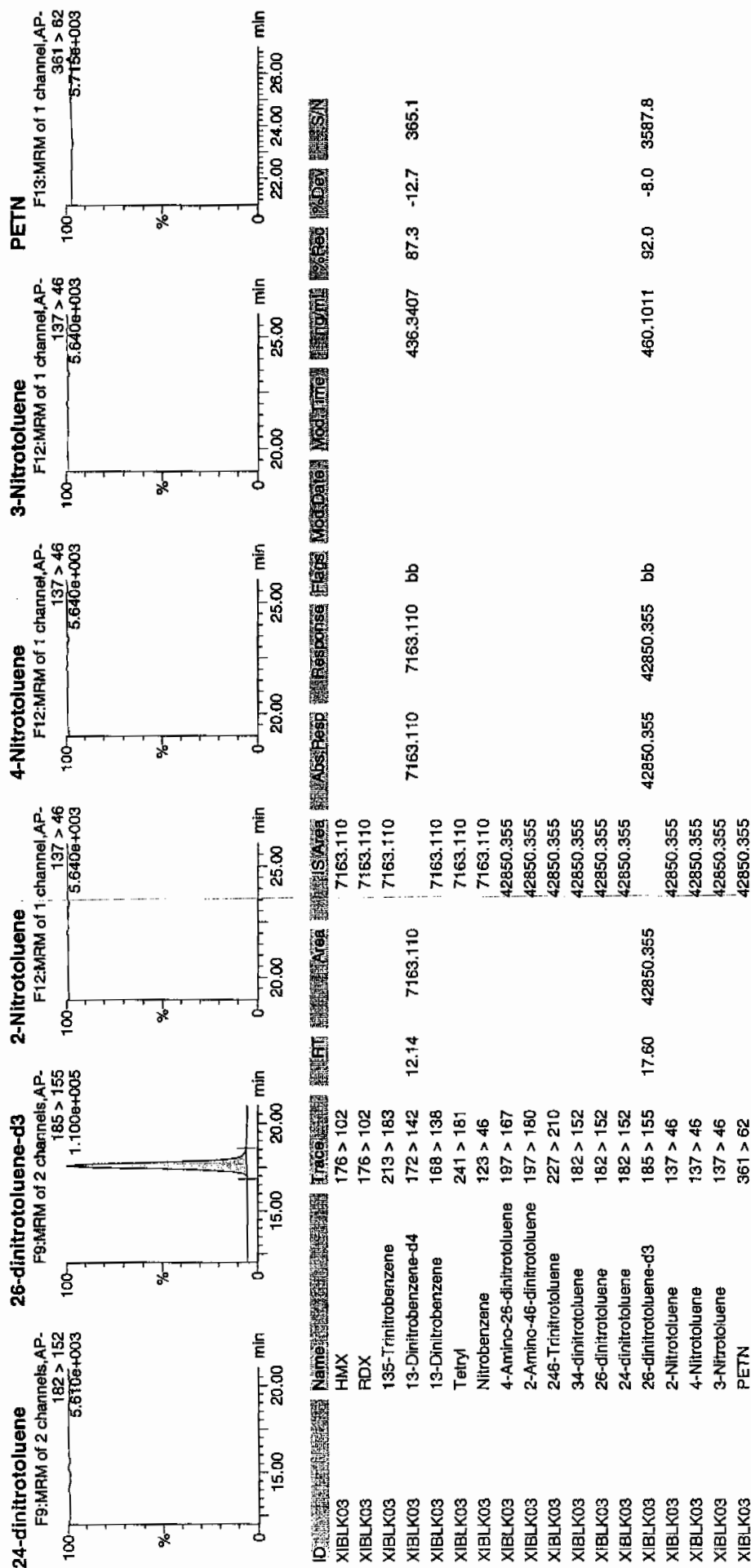
Vial: 1:1,A

3/20/10  
MTP



Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 20-MAR-10 03:43

GEL Data File: EXP0319023a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	405.596
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	447.464
2-Amino-4,6-dinitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319023a

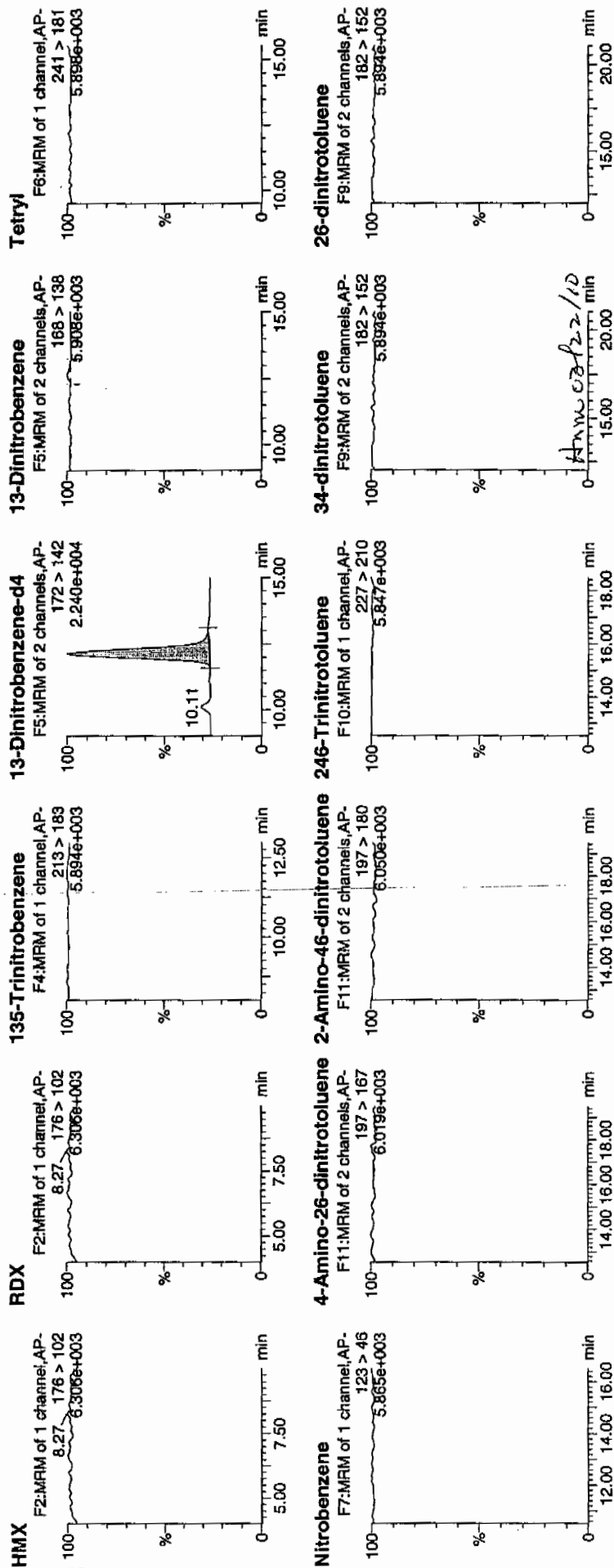
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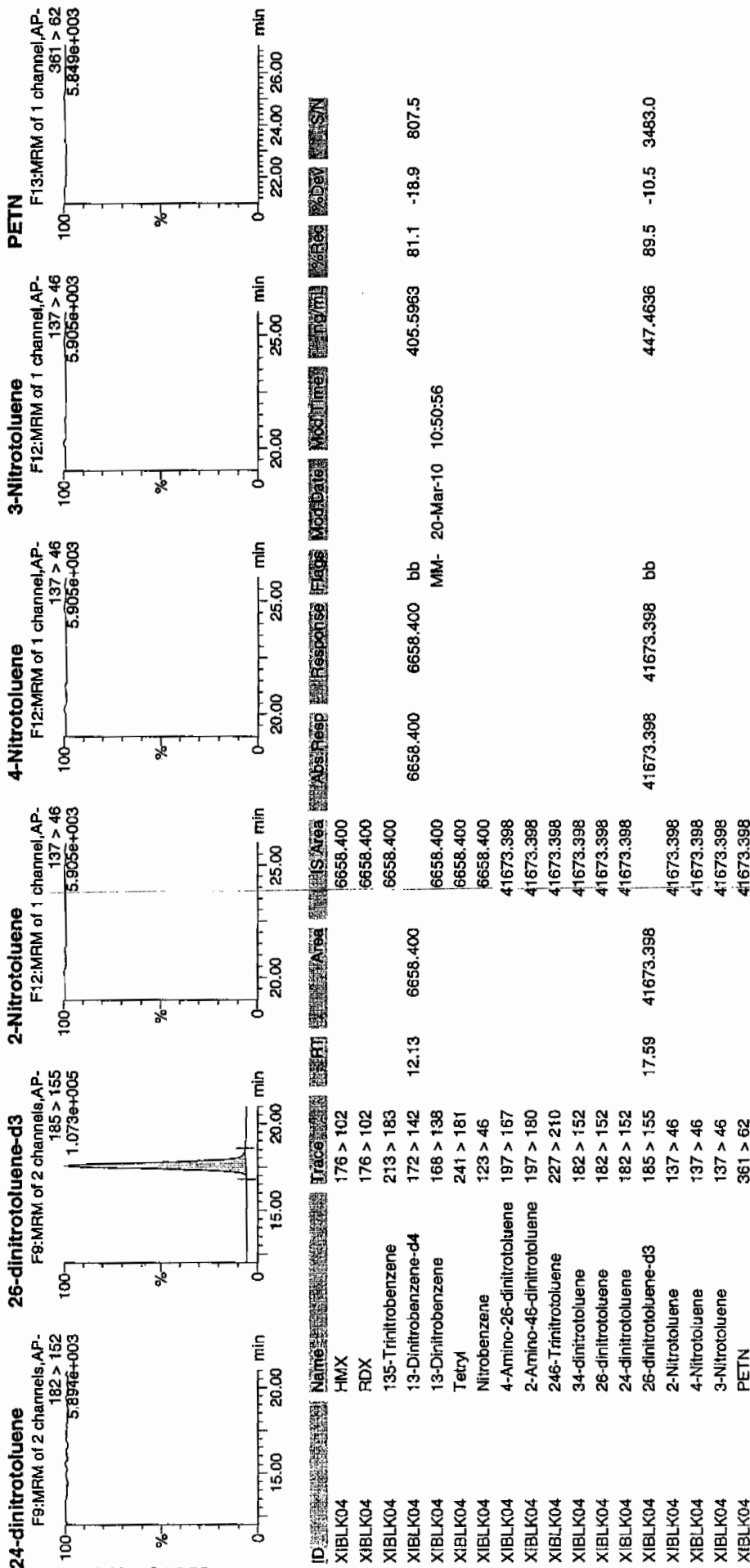
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AP-11/10/10



**Quantify Sample Report**  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



4A  
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 20-MAR-10 05:41

GEL Data File: EXP0319027a

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	480.062
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	507.169
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0

**Quantify Sample Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319027a

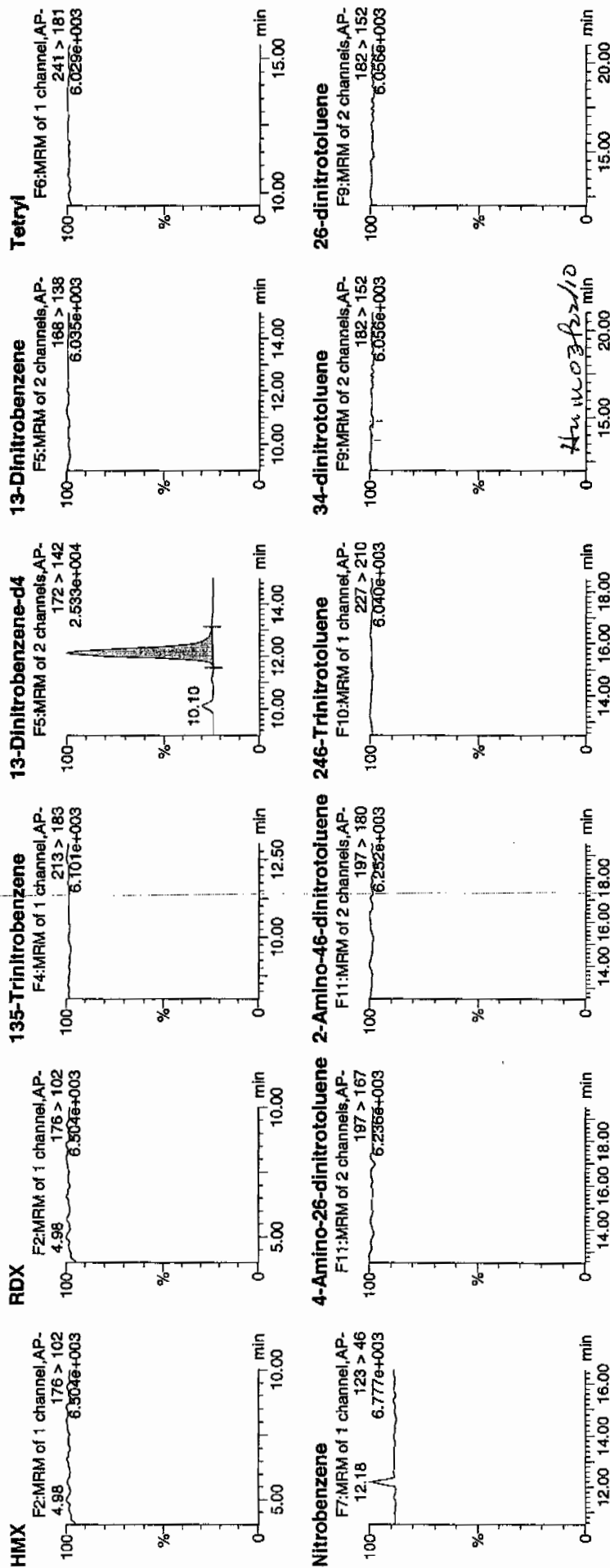
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Time: 05:41:00

ID: XIBLK05

Vial: 1:1,A

*Handwritten:* 2/10/10



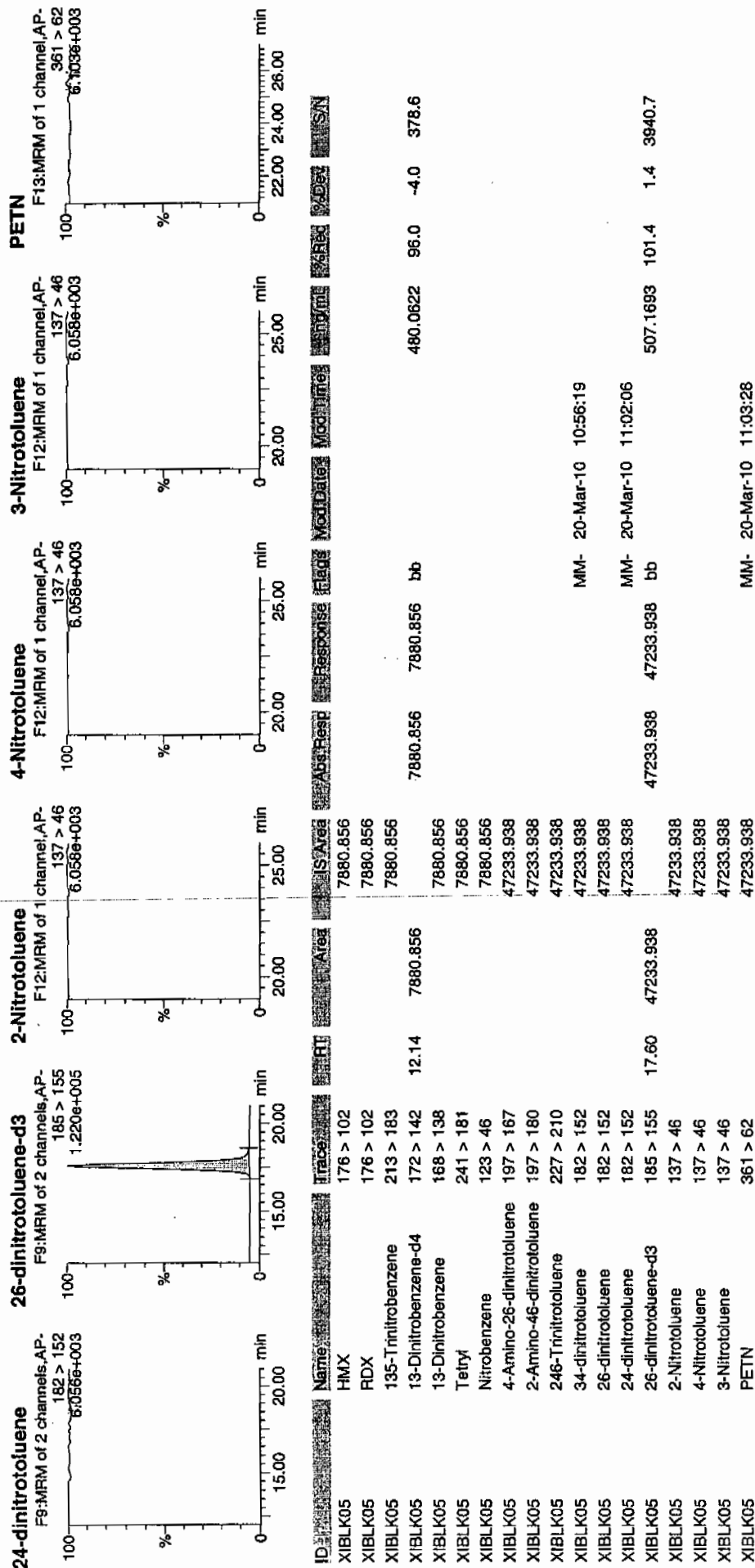


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sat Mar 20 11:06:08 2010, Page 54 of 73

Dataset: C:\MASSLYN\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 20-MAR-10 09:36

GEL Data File: EXP0319035a

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	459.279
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene--d3	500	492.299
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319035a

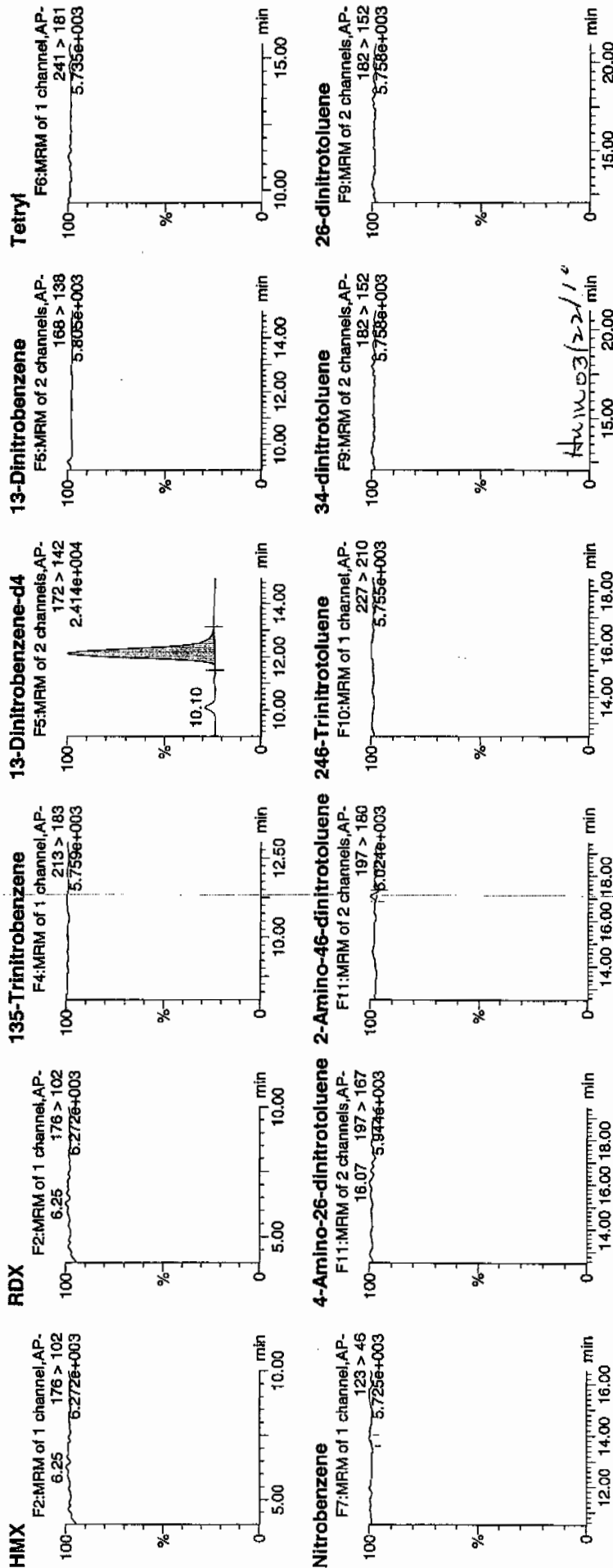
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ID: XIBLK06

Vial: 1:1,A

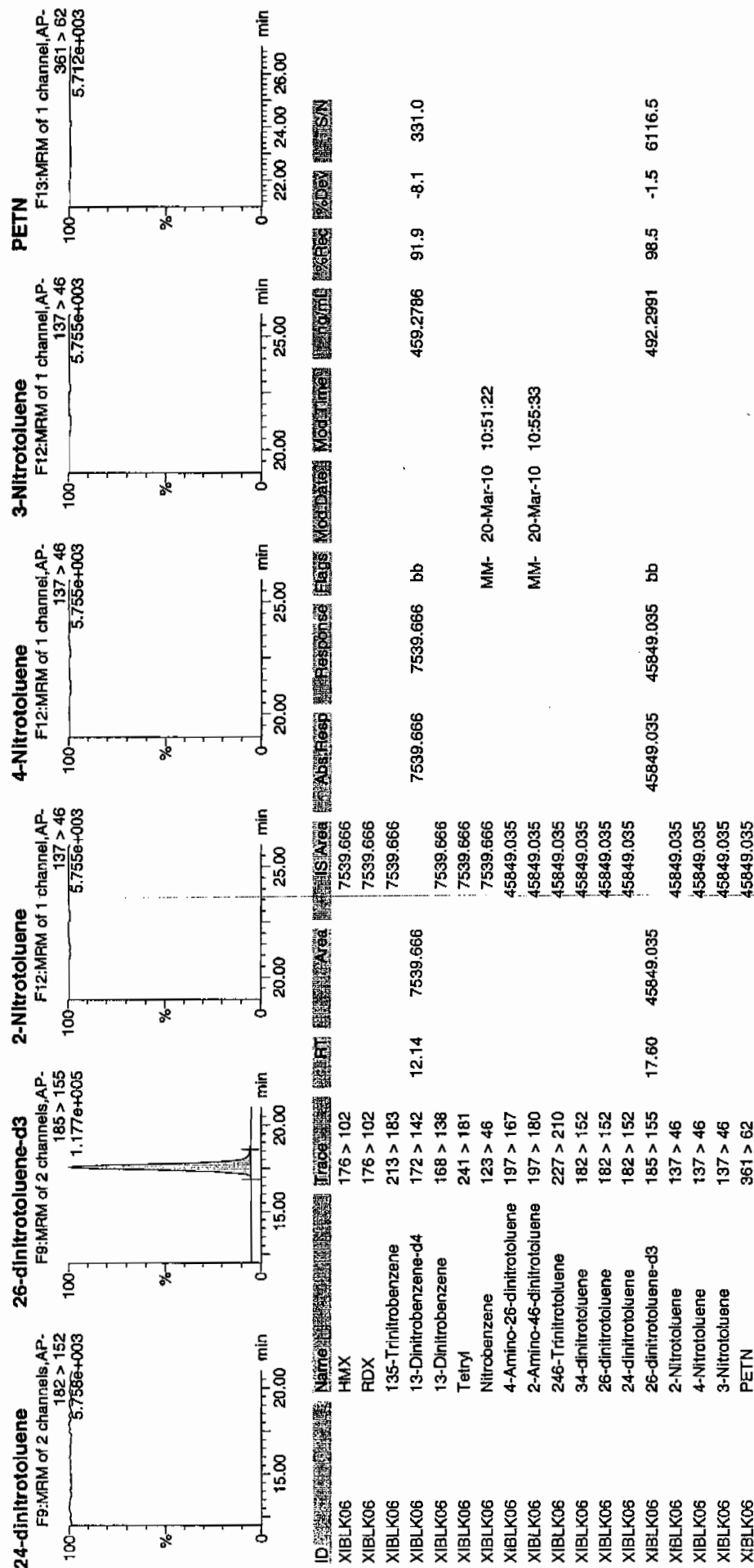
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120



Printed: Sat Mar 20 11:06:08 2010, Page 70 of 73

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 20-MAR-10 16:00

GEL Data File: EXP0319048a

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	438.895
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	473.981
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319048a

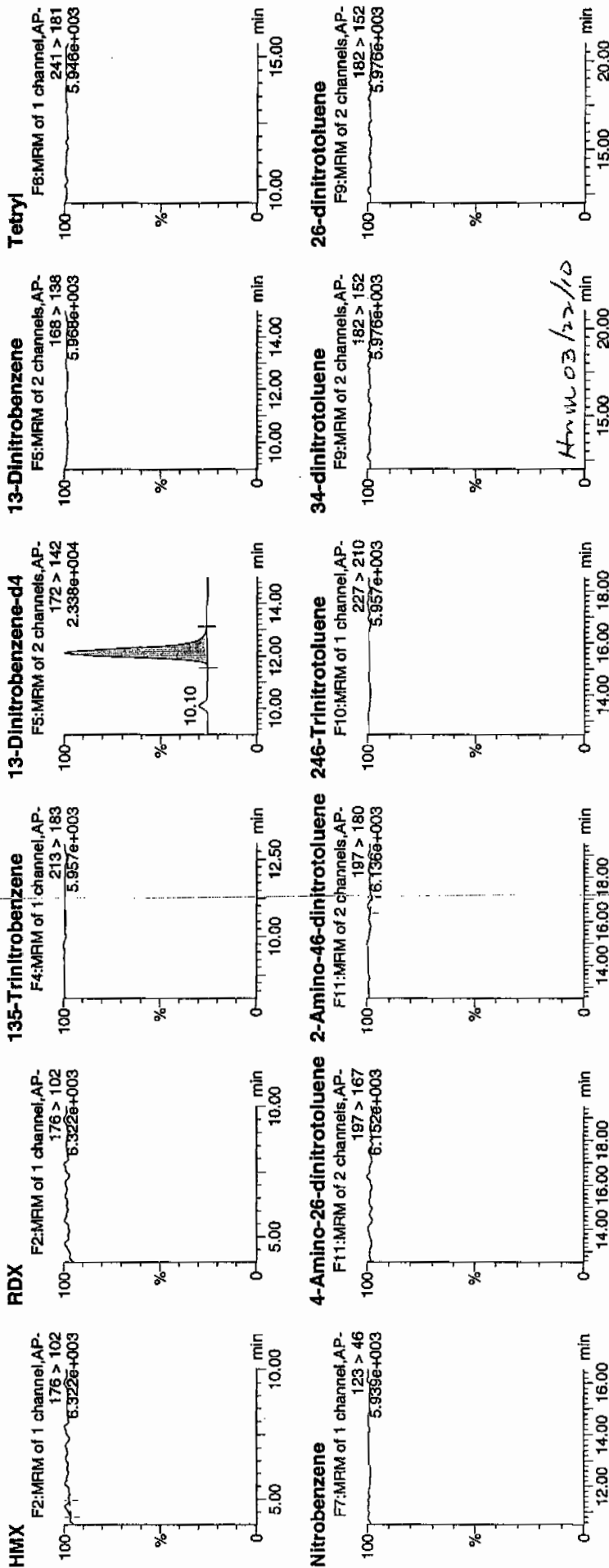
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Time: 16:00:37

ID: XIBLK07

Vial: 1:1,A

2/11/10

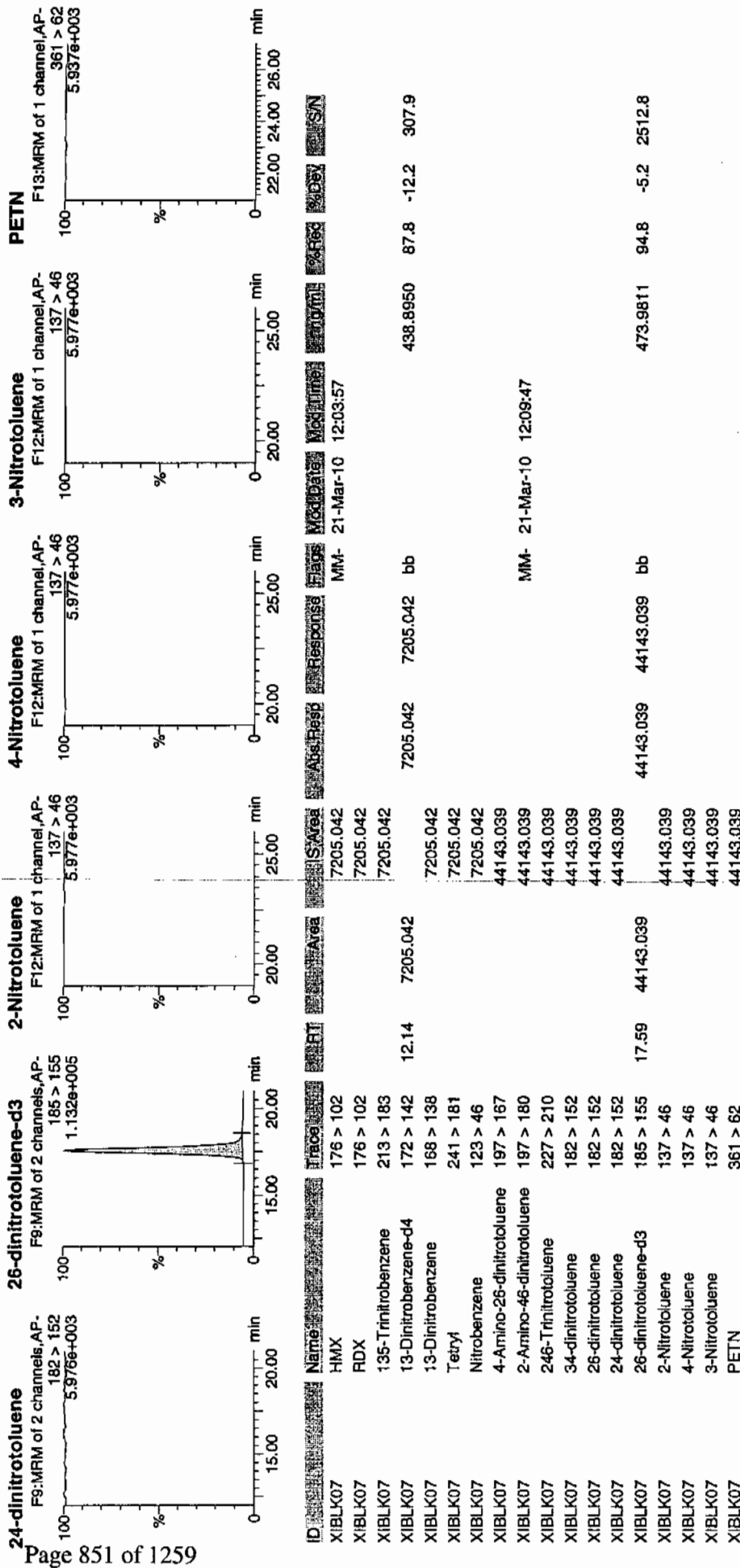


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Mar 21 12:22:16 2010, Page 24 of 103

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 20-MAR-10 21:54

GEL Data File: EXP0319060a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	449.72
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	422.313



Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319060a

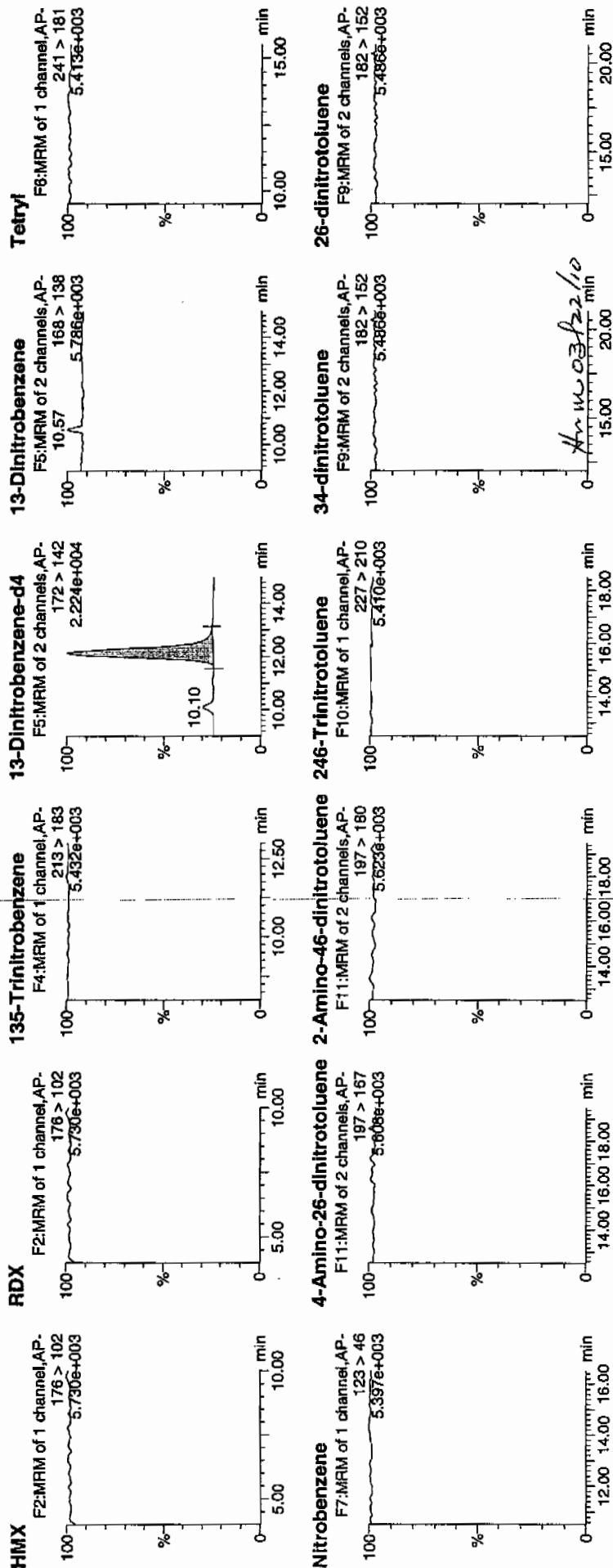
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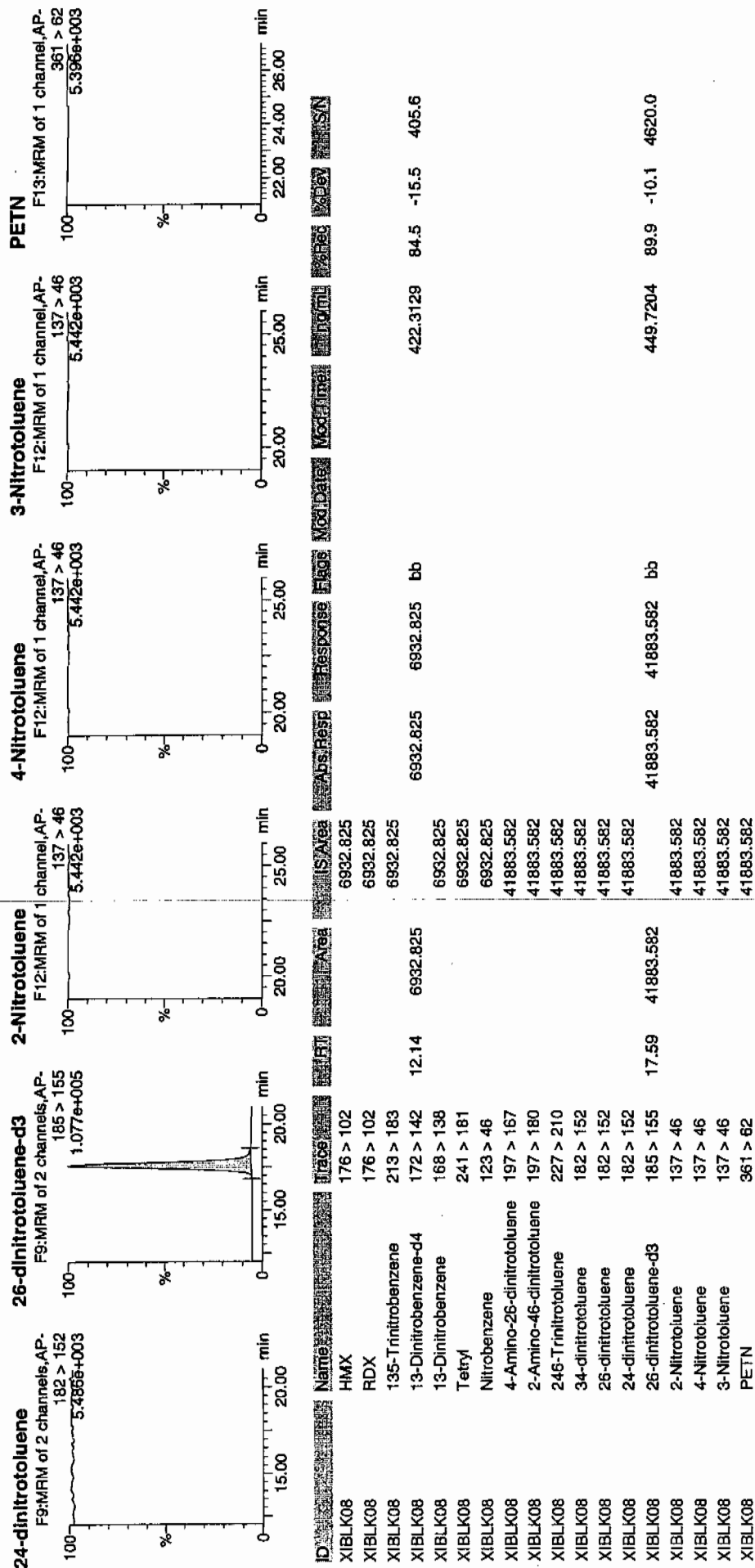
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10/10



**Quantify Sample Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp\PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 23-MAR-10 13:04

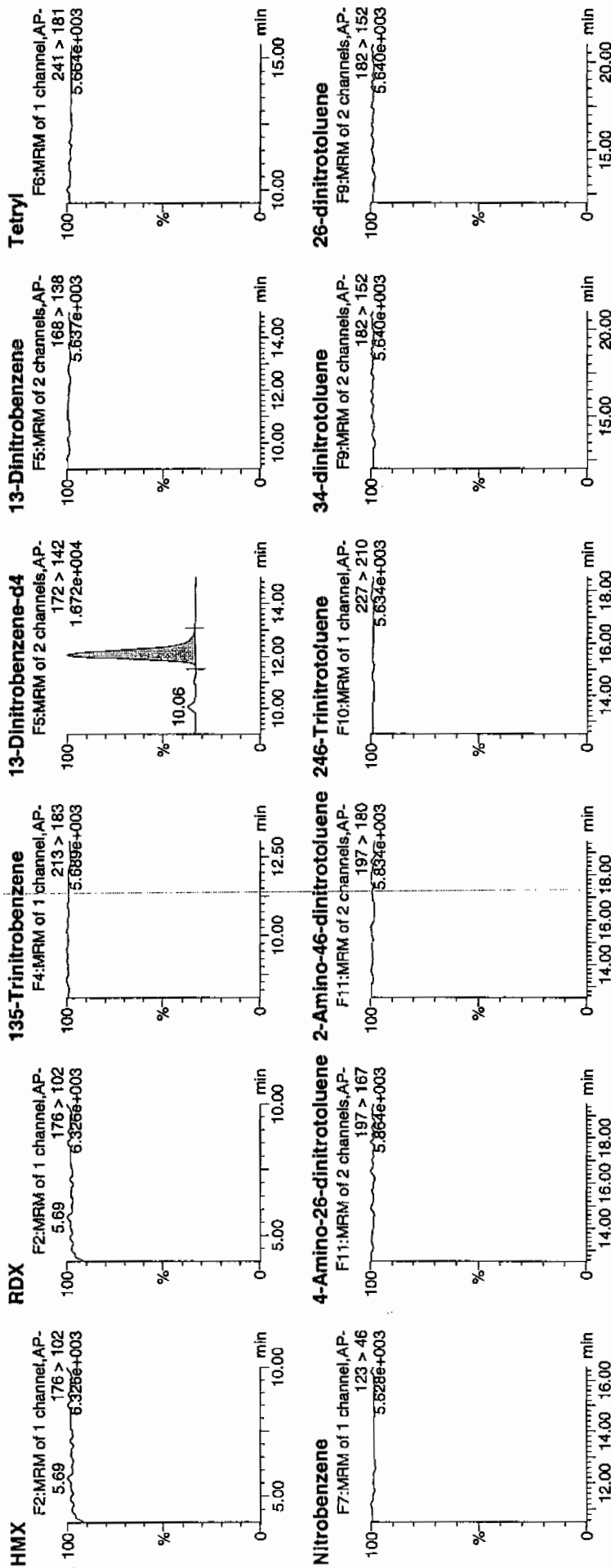
GEL Data File: EXP0323009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	400.005
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	359.09
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

100%  
100%



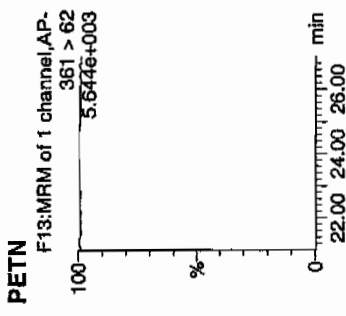
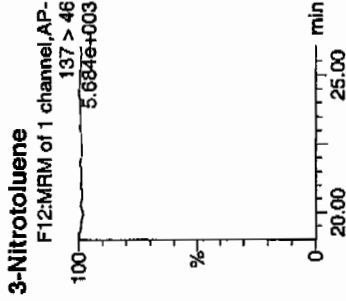
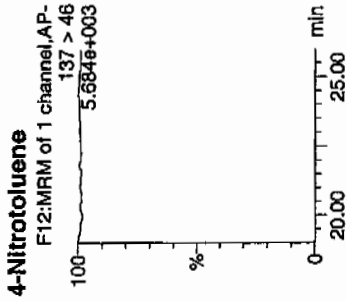
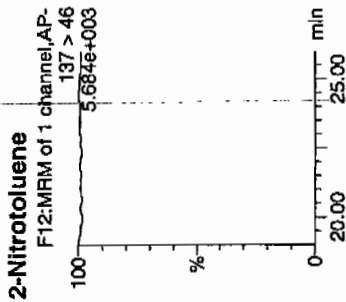
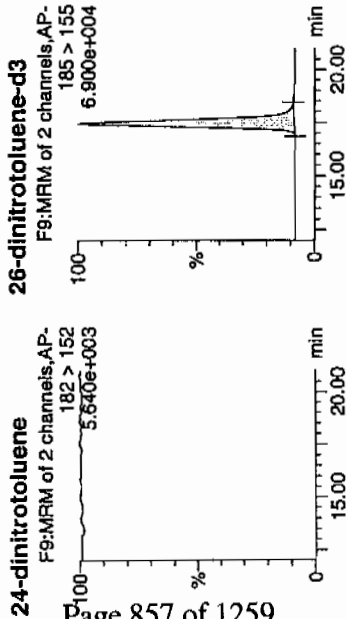
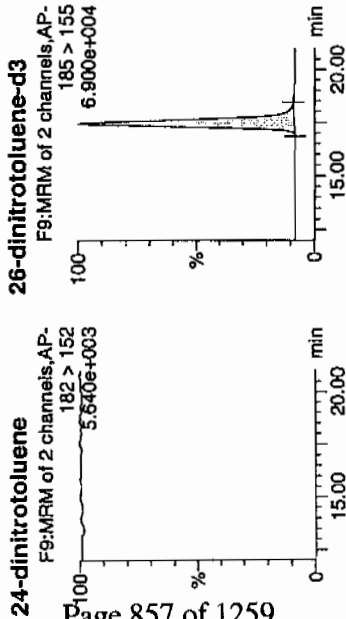
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# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 18 of 99

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Integrator	Acq Date	Acq Time
XIBLK02	HMX	176 > 102			4403.474								
XIBLK02	RDX	176 > 102			4403.474								
XIBLK02	135-Trinitrobenzene	213 > 183			4403.474								
XIBLK02	13-Dinitrobenzene-d4	172 > 142	12.07	4403.474		4403.474	4403.474	bb					
XIBLK02	13-Dinitrobenzene	168 > 138			4403.474								
XIBLK02	Tetryl	241 > 181			4403.474								
XIBLK02	Nitrobenzene	123 > 46			4403.474								
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			4403.474								
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			24727.354								
XIBLK02	246-Trinitrotoluene	227 > 210			24727.354								
XIBLK02	34-dinitrotoluene	182 > 152			24727.354								
XIBLK02	26-dinitrotoluene	182 > 152			24727.354								
XIBLK02	24-dinitrotoluene	182 > 152			24727.354								
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.44	24727.354		24727.354	24727.354	bb					
XIBLK02	2-Nitrotoluene	137 > 46			24727.354								
XIBLK02	4-Nitrotoluene	137 > 46			24727.354								
XIBLK02	3-Nitrotoluene	137 > 46			24727.354								
XIBLK02	PETN	361 > 62			24727.354								
						24727.354	24727.354						
						4403.474	4403.474						
						400.0051	400.0051						
						359.0901	359.0901						
						71.8	71.8						
						-28.2	-28.2						
						3290.4	3290.4						

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 23-MAR-10 14:03

GEL Data File: EXP0323011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	505.262
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	469.688
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

**Quantify Sample Report**  
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0323011a

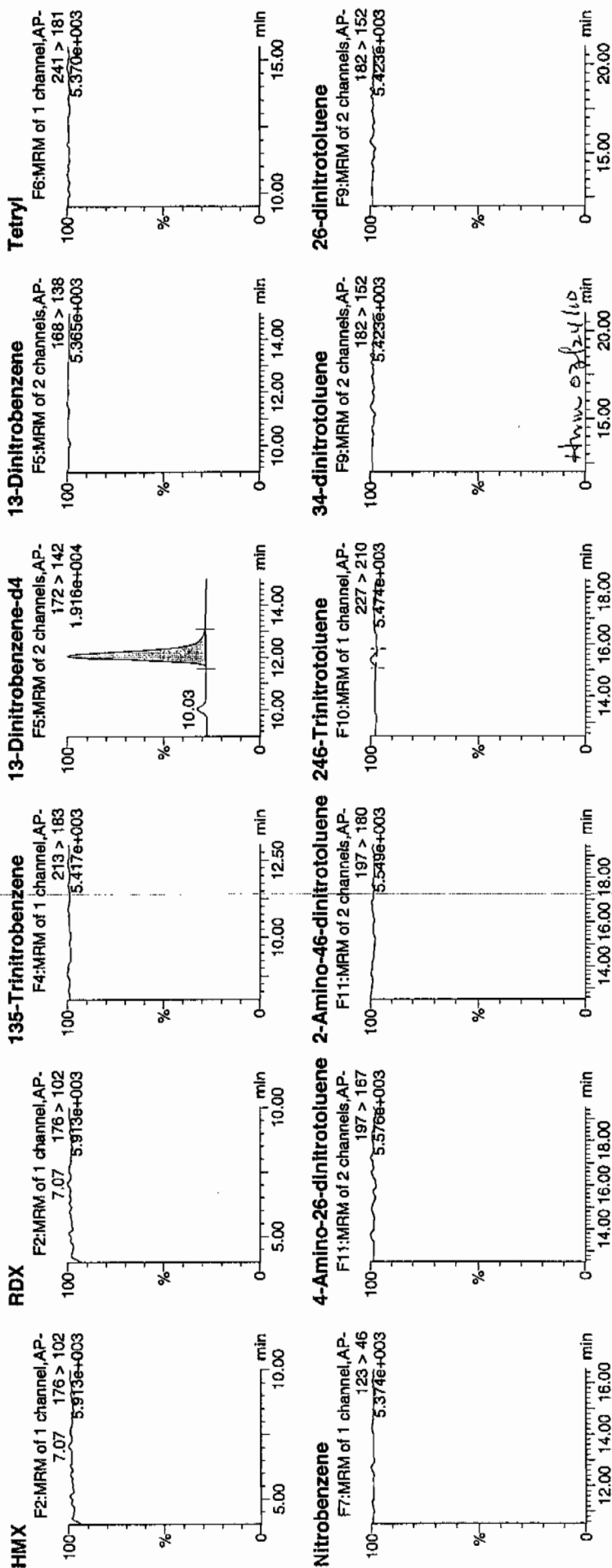
Date: 23-Mar-2010

Time: 14:03:49

ID: XIBLK03

Vial: 1:1,A

pdf  
3/24/10

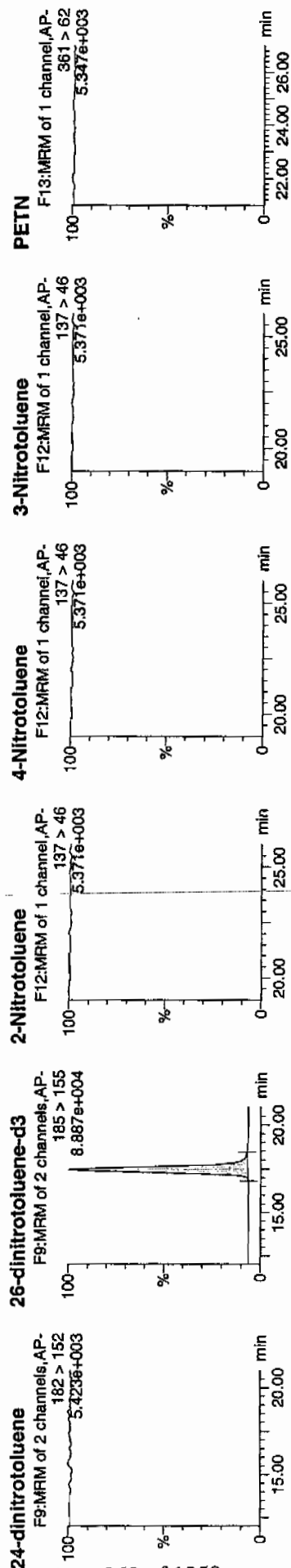


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 22 of 99

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Conc	Dev	S/N
XIBLK03	HMX	176 > 102			5562.196								
XIBLK03	RDX	176 > 102			5562.196								
XIBLK03	135-Trinitrobenzene	213 > 183			5562.196								
XIBLK03	13-Dinitrobenzene-d4	172 > 142	12.07	5562.196		5562.196	5562.196	bb			505.2617	101.1	1.1
XIBLK03	13-Dinitrobenzene	168 > 138											
XIBLK03	Tetryl	241 > 181											
XIBLK03	Nitrobenzene	123 > 46			5562.196								
XIBLK03	4-Amino-26-dinitrotoluene	197 > 167			5562.196								
XIBLK03	2-Amino-46-dinitrotoluene	197 > 180			32343.238								
XIBLK03	246-Trinitrotoluene	227 > 210			32343.238					MM- 24-Mar-10 09:18:21			
XIBLK03	34-dinitrotoluene	182 > 152			32343.238								
XIBLK03	26-dinitrotoluene	182 > 152			32343.238								
XIBLK03	24-dinitrotoluene	182 > 152			32343.238								
XIBLK03	26-dinitrotoluene-d3	185 > 155	17.44	32343.238			32343.238	bb			469.6878	93.9	-6.1
XIBLK03	2-Nitrotoluene	137 > 46			32343.238								
XIBLK03	4-Nitrotoluene	137 > 46			32343.238								
XIBLK03	3-Nitrotoluene	137 > 46			32343.238								
XIBLK03	PETN	361 > 62			32343.238								



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 23-MAR-10 20:27

GEL Data File: EXP0323024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	562.021
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	528.426
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0323024a

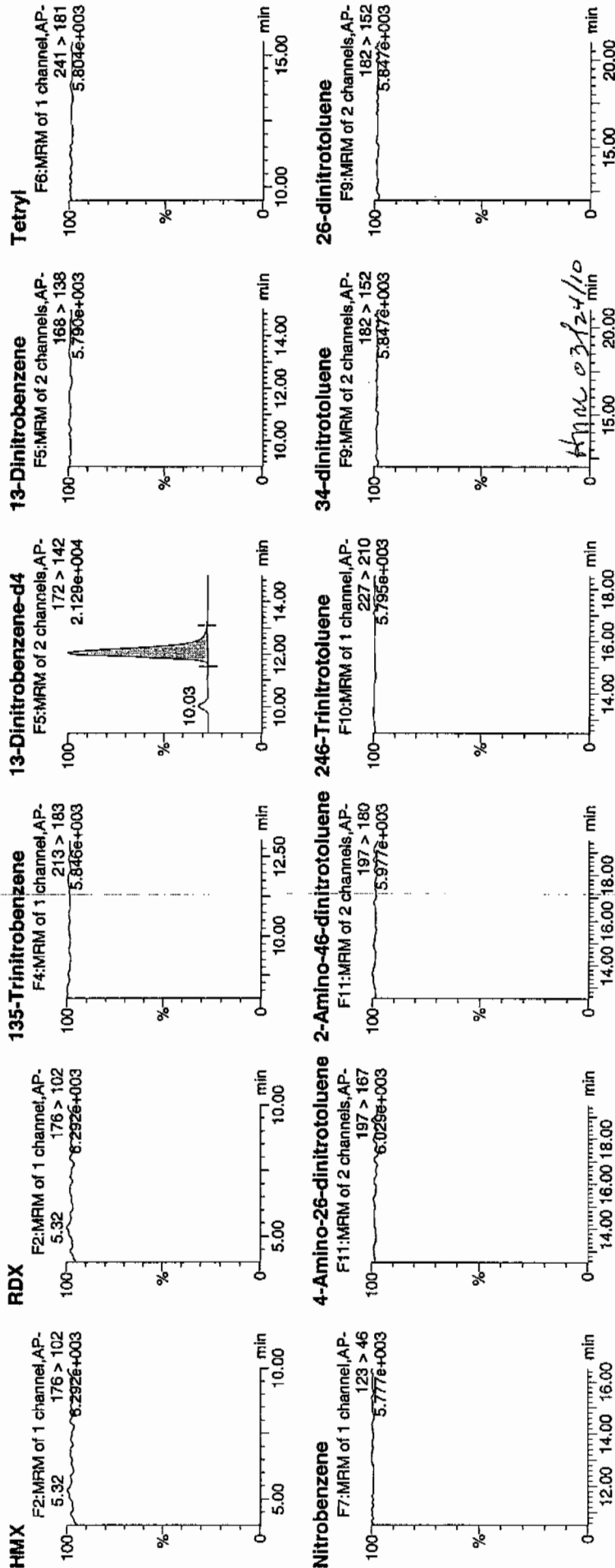
Date: 23-Mar-2010

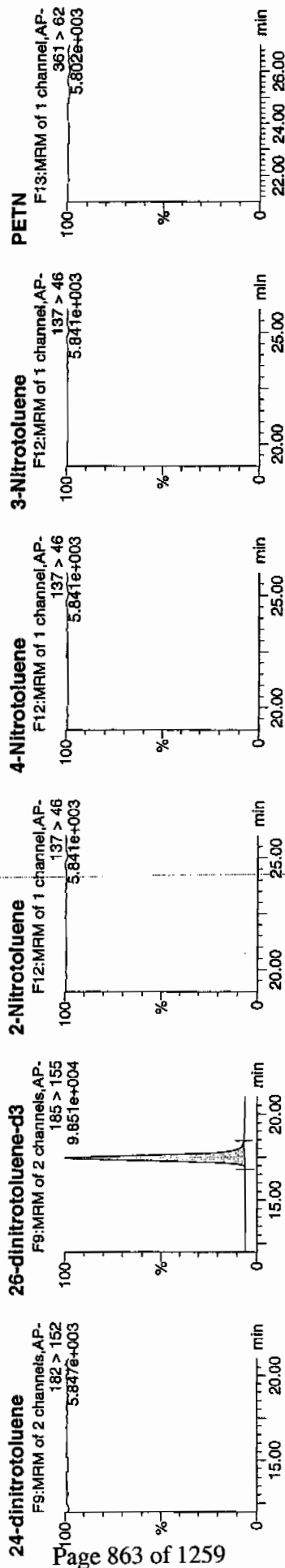
Time: 20:27:13

ID: XIBLK04

Vial: 1:1,A

WAT  
3/24/10





ID	Name	RI	Area	S Area	Abs Resp	Response	Mod Data	Mod Time	Ref	Day	ISN
XIBLK04	HMX	176 > 102		6187.030							
XIBLK04	RDX	176 > 102		6187.030							
XIBLK04	135-Trinitrobenzene	213 > 183		6187.030							
XIBLK04	13-Dinitrobenzene-d4	172 > 142	12.07	6187.030		6187.030	bb	562.0207	112.4	12.4	852.7
XIBLK04	13-Dinitrobenzene	168 > 138		6187.030							
XIBLK04	Tetryl	241 > 181		6187.030							
XIBLK04	Nitrobenzene	123 > 46		6187.030							
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167		36388.039							
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180		36388.039							
XIBLK04	246-Trinitrotoluene	227 > 210		36388.039							
XIBLK04	34-dinitrotoluene	182 > 152		36388.039							
XIBLK04	26-dinitrotoluene	182 > 152		36388.039							
XIBLK04	24-dinitrotoluene	182 > 152		36388.039							
XIBLK04	26-dinitrotoluene-d3	185 > 155	17.42	36388.039		36388.039	bb	528.4263	105.7	5.7	3528.7
XIBLK04	2-Nitrotoluene	137 > 46		36388.039							
XIBLK04	4-Nitrotoluene	137 > 46		36388.039							
XIBLK04	3-Nitrotoluene	137 > 46		36388.039							
XIBLK04	PETN	361 > 62		36388.039							

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 10-MAR-10 17:52

GEL Data File: EXS03100010.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.61
TATB	0	0
3,5-Dinitroaniline	0	0

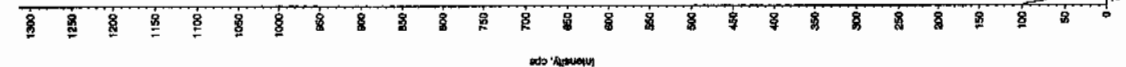
Jan 31/3/10

Sample Name: "XIBLK02" Sample ID: "JILER" File: "EX503100010.wif"

Peak Name: "35-Orthoanisole" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 5:52:48 PM  
 Acq. Time: 5:52:48 PM  
 Modified: No



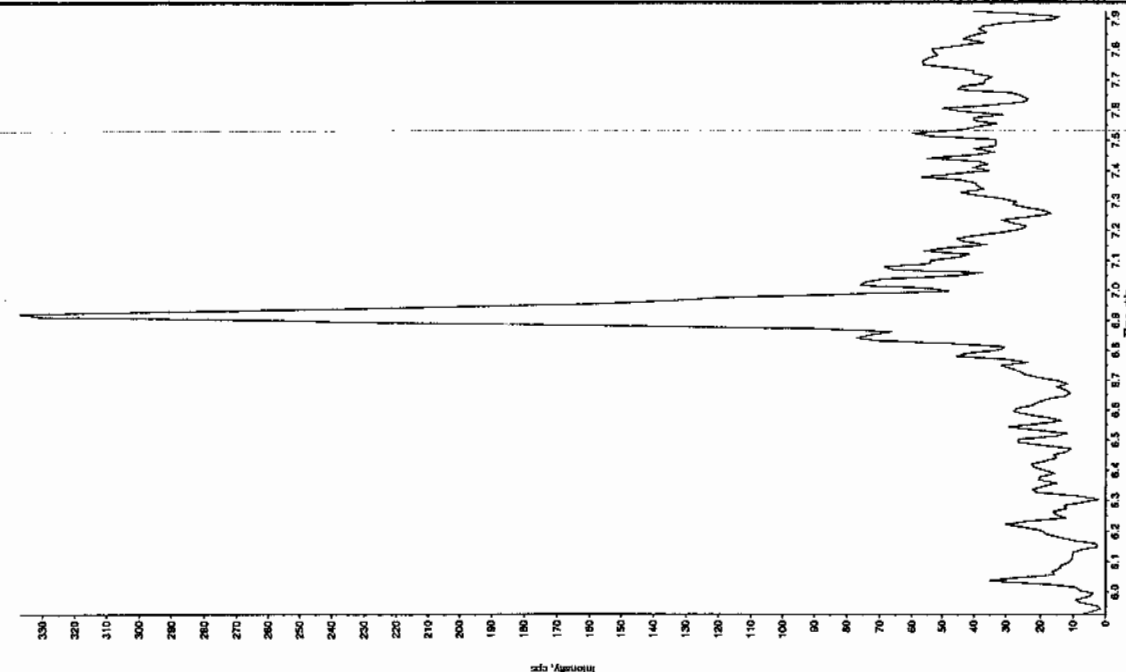
HW0311510

Sample Name: "XIBLK02" Sample ID: "JILER" File: "EX503100010.wif"

Peak Name: "TAIB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_B" Annotation: "

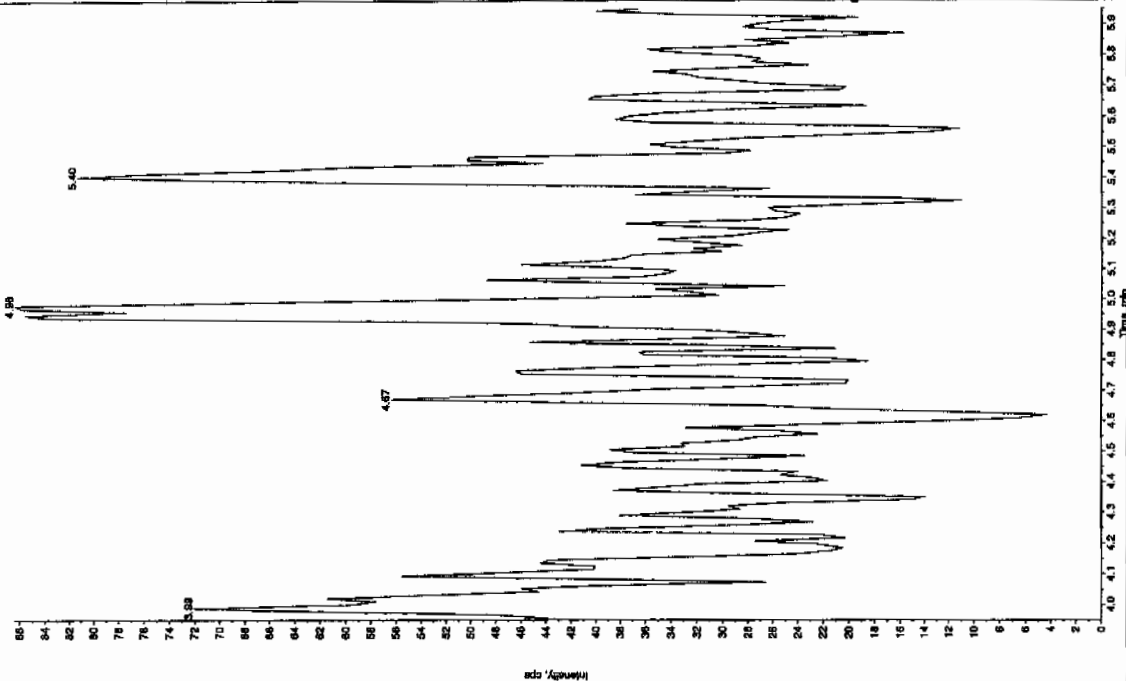
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 5:52:48 PM  
 Acq. Time: 5:52:48 PM  
 Modified: No



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

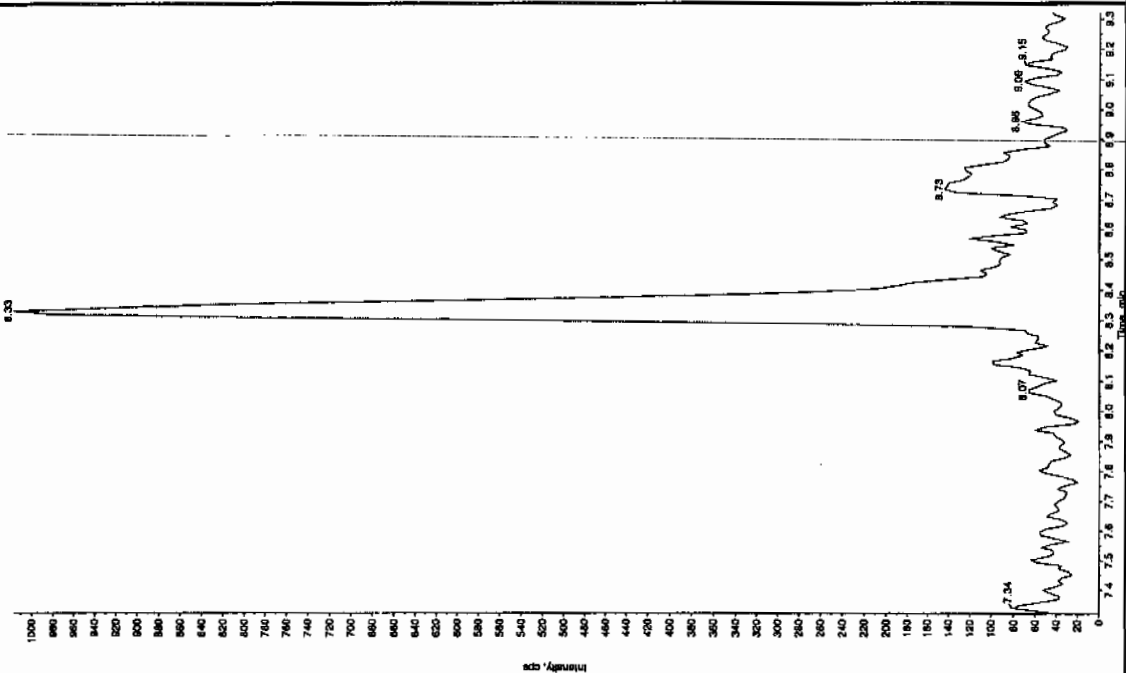
Sample Name: 'XBLK02' Sample ID: '11111' File: 'EXS03100010.will'  
 Peak Name: '26-Diamino-4-nitrotoluene' Mass(es): '166.046.0 amu'  
 Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 5:52:48 PM  
 Modified: No



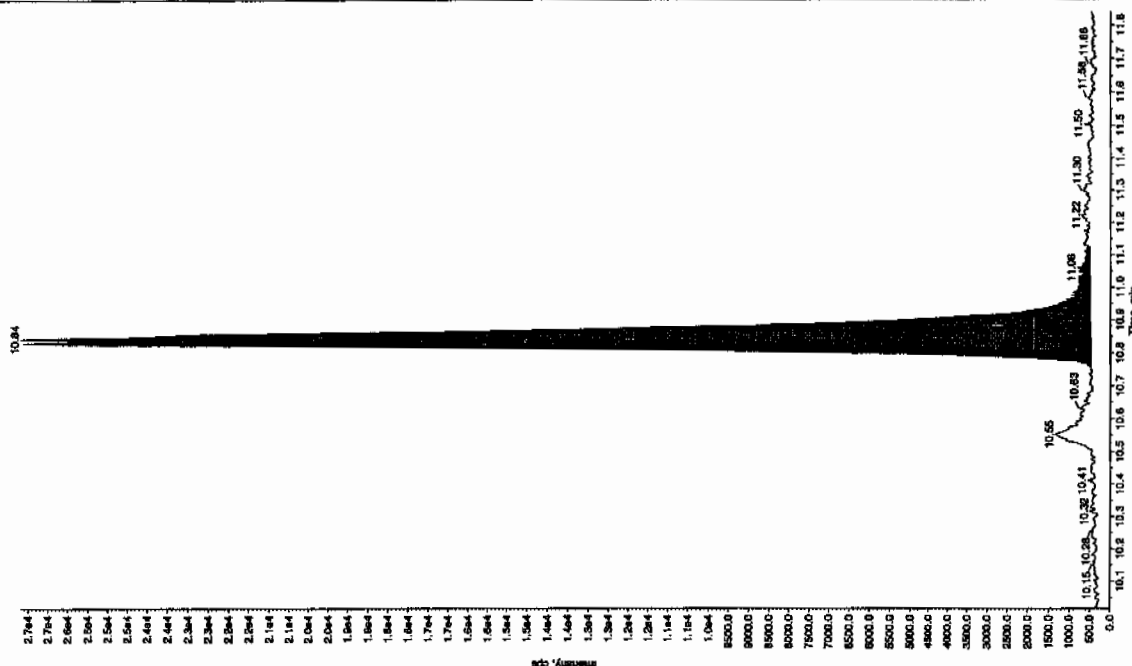
Sample Name: 'XBLK02' Sample ID: '11111' File: 'EXS03100010.will'  
 Peak Name: '34-Dinitrotoluene' Mass(es): '182.1151.9 amu'  
 Comment: 'LCMSEXP\_B' Annotation: ''

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 5:52:48 PM  
 Modified: No



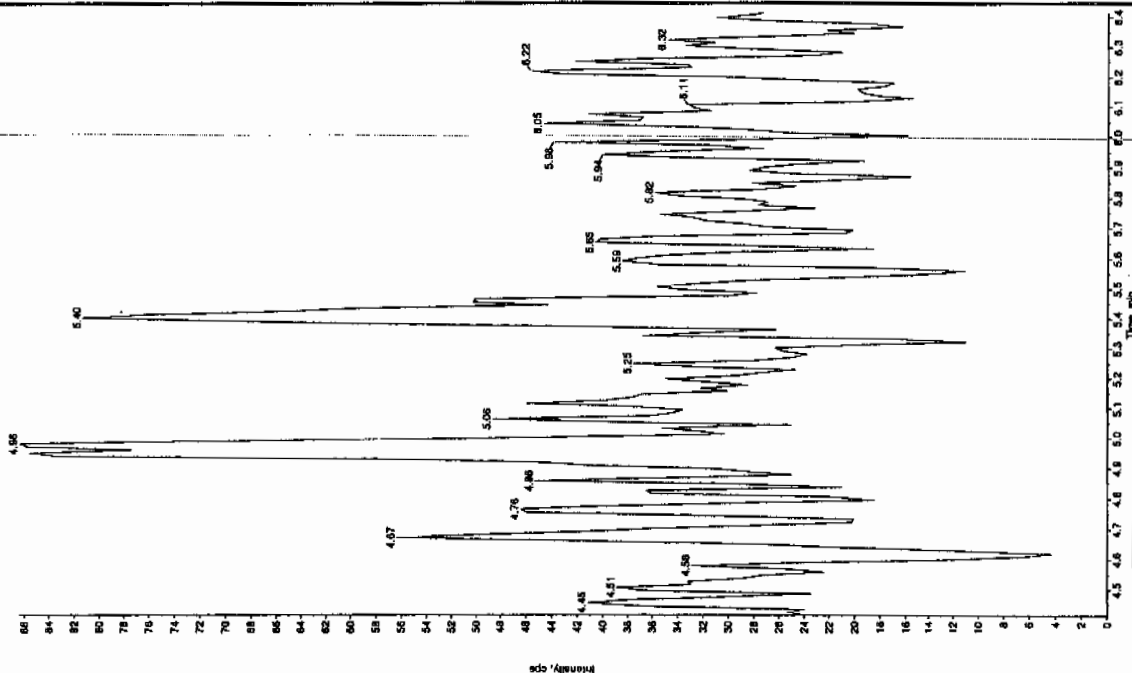
Sample Name: "XIBLK02" Sample ID: "11LER" File: "EX503100010.wif"  
 Peak Name: "Is(iso-octyl) phosphate" Mass(es): "389.1/91.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 3.61 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 5:52:48 PM  
 Modified: No  
 Proc. Algorithm: Intelligun - IOA  
 Min. Peak Width: 800.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.13e+005 counts  
 Height: 26720.905 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "XIBLK02" Sample ID: "11LER" File: "EX503100010.wif"  
 Peak Name: "24-Diamino-5-nitrothiophene" Mass(es): "156.0/46.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 5:52:48 PM  
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 10-MAR-10 18:24

GEL Data File: EXS03100012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

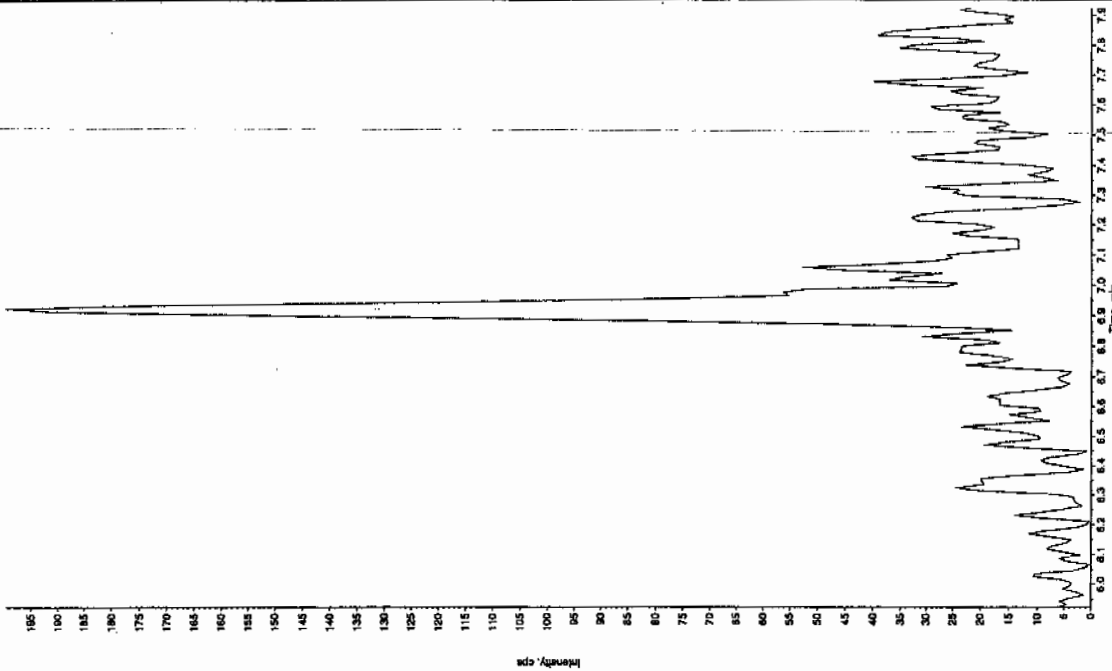
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	1.32
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



dan 3/13/10

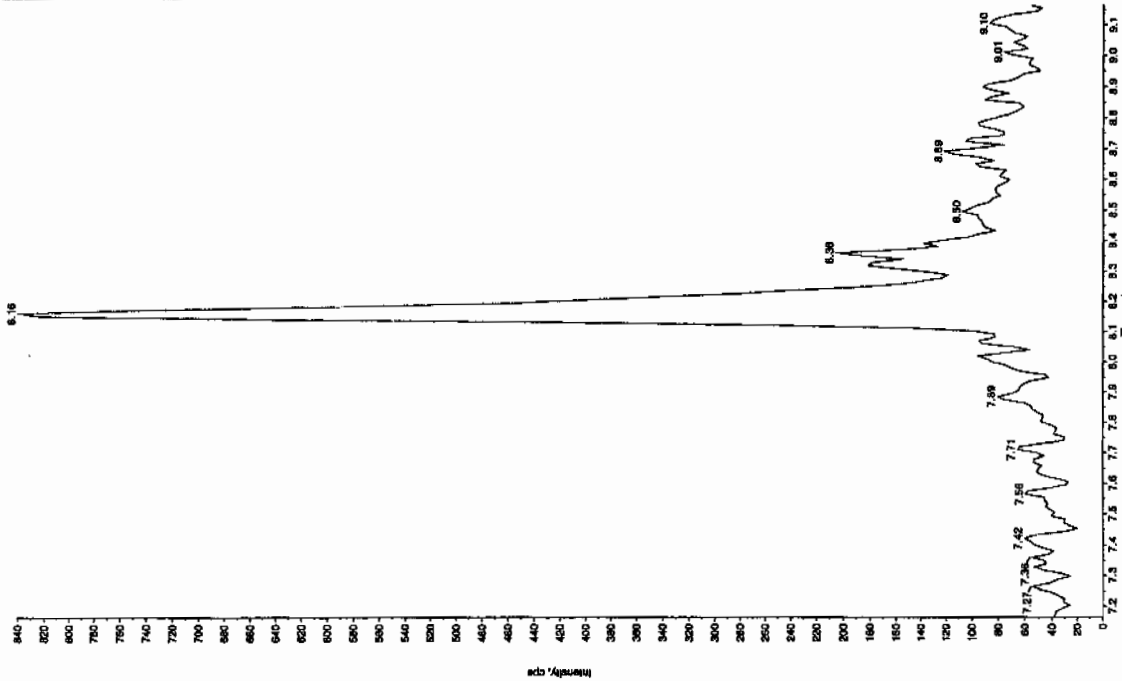
Sample Name: "XELU03" Sample ID: "11111" File: "EXS03100012.wif"  
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
 Comment: "LCHSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 6:24:12 PM  
 Acq. Time: 6:24:12 PM  
 Modified: No



Sample Name: "XELU03" Sample ID: "11111" File: "EXS03100012.wif"  
 Peak Name: "35 Dinitroaniline" Mass(es): "182.046.0 amu"  
 Comment: "LCHSEXP\_B" Annotation: ""

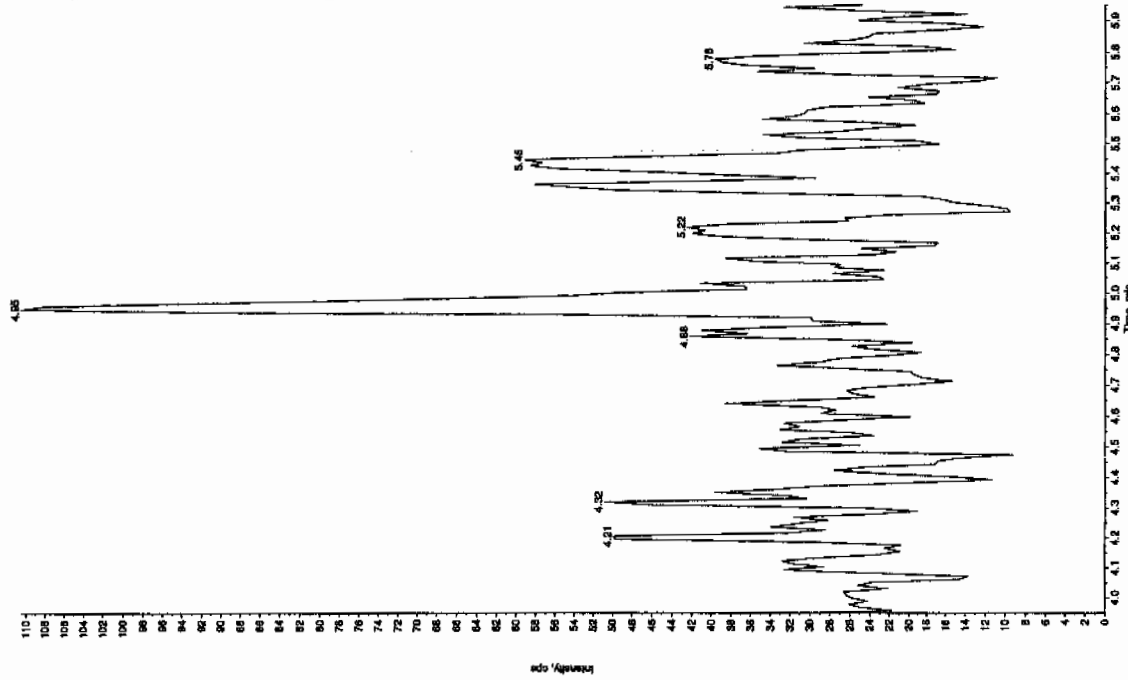
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 6:24:12 PM  
 Acq. Time: 6:24:12 PM  
 Modified: No



Am m 3/13/10

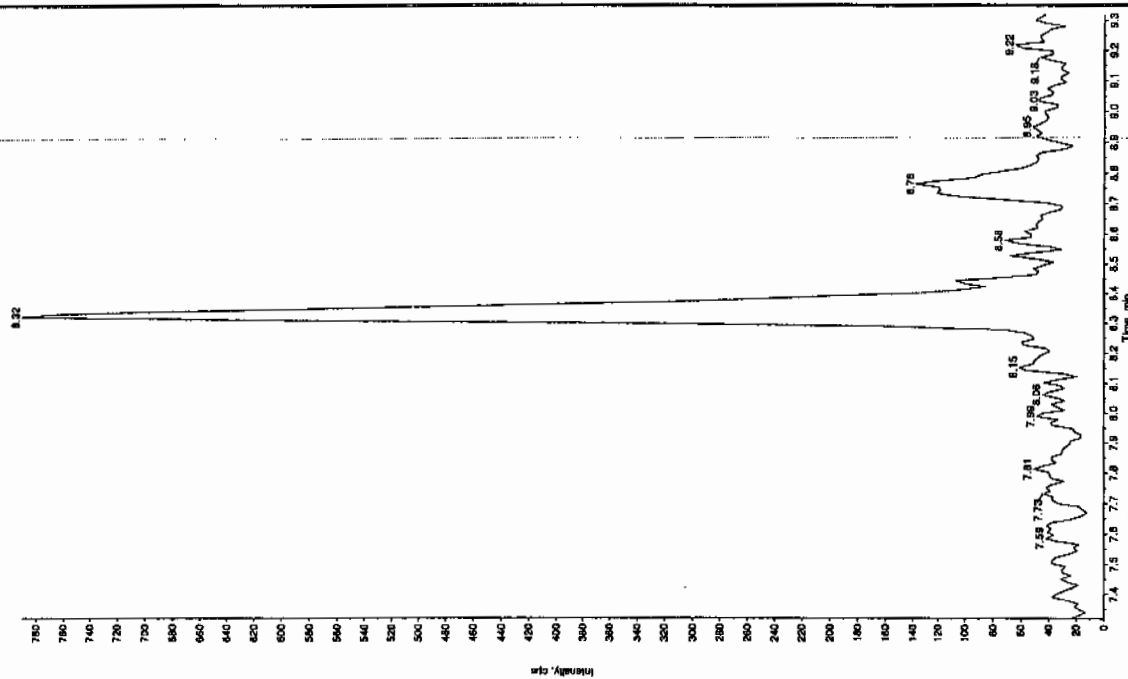
Sample Name: "XBLK03" Sample ID: "111111" File: "EX503100012.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "185.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 6:24:12 PM  
 Acq. Time: 6:24:12 PM  
 Modified: No



Sample Name: "XBLK03" Sample ID: "111111" File: "EX503100012.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "182.1751.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 6:24:12 PM  
 Acq. Time: 6:24:12 PM  
 Modified: No

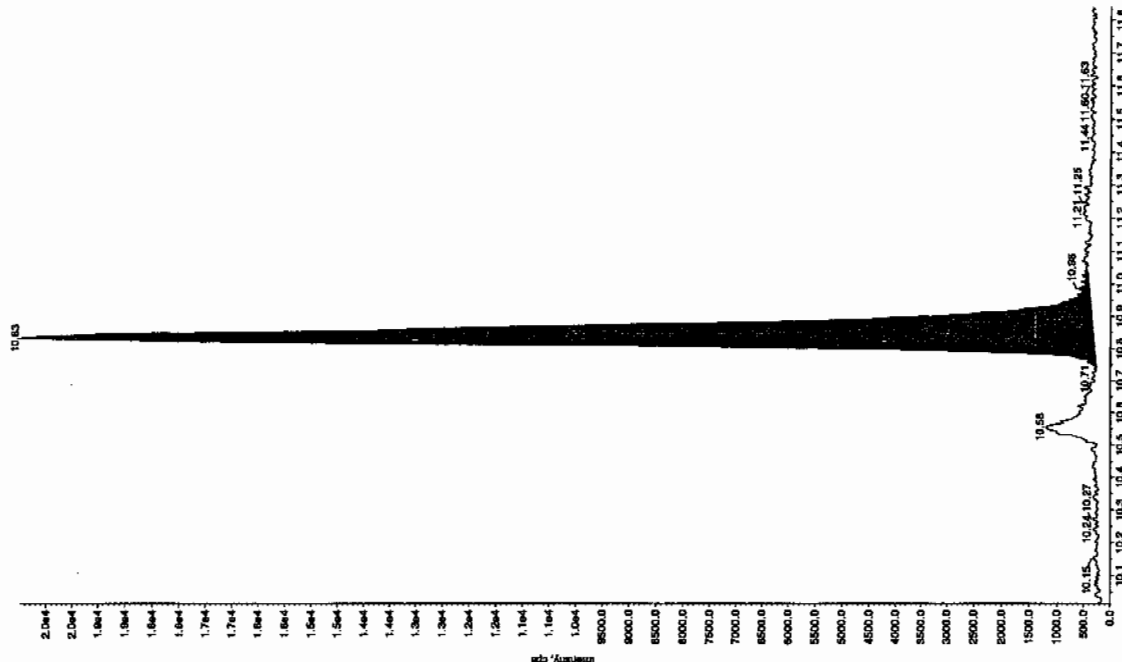
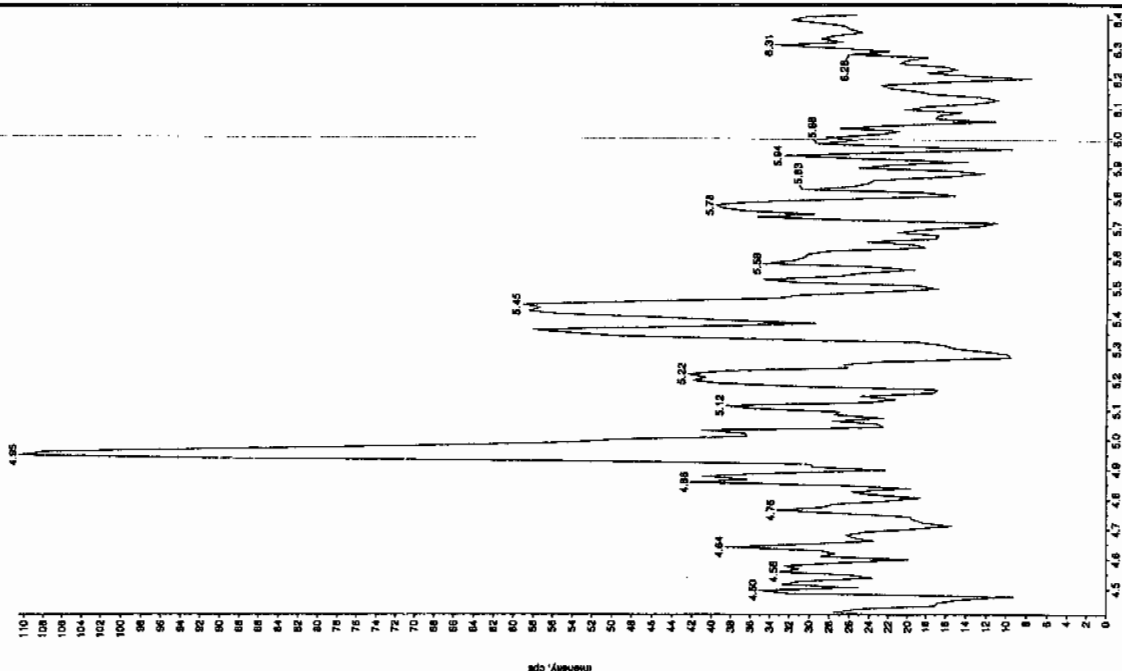


Sample Name: "XBLK03" Sample ID: "11LER" File: "EX0503100012.wif"  
 Peak Name: "24-Diamino-6-aziridinone" Mass(es): "160.046.0 amu"  
 Concentration: "1.32" mg/mL  
 Sample Index: "1" Annotation: ""

Sample Type: Unknown  
 Concentration: 1.32 mg/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:24:12 PM  
 Modified: No

Sample Name: "XBLK03" Sample ID: "11LER" File: "EX0503100012.wif"  
 Peak Name: "24-Diamino-6-aziridinone" Mass(es): "160.046.0 amu"  
 Concentration: "1.32" mg/mL  
 Sample Index: "1" Annotation: ""

Sample Type: Unknown  
 Concentration: 1.32 mg/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:24:12 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: 8.26e+004 counts  
 Height: 20172.037 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 10-MAR-10 21:48

GEL Data File: EXS03100025.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	.283
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Run 3/13/10

Sample Name: "XIBLX04" Sample ID: "HILLER" File: "EX50310025.wif"

Peak Name: "1ATB" Mass(es): "257.2/260.9 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

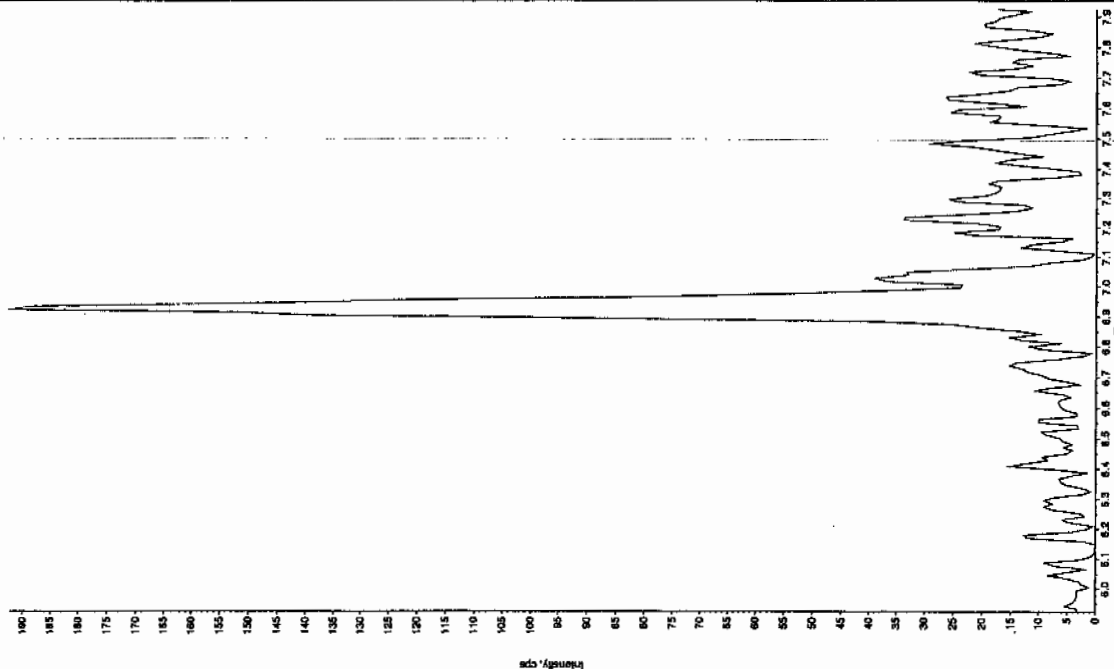
Concentration: 0.00 ng/mL

Calculated Conc: 3/10/2010

Acq. Date: 3/10/2010

Acq. Time: 9:48:16 PM

Modified: No



Sample Name: "XIBLX04" Sample ID: "HILLER" File: "EX50310025.wif"

Peak Name: "3S-Dinitroaniline" Mass(es): "182.0/183.0 amu"

Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1

Sample Type: Unknown

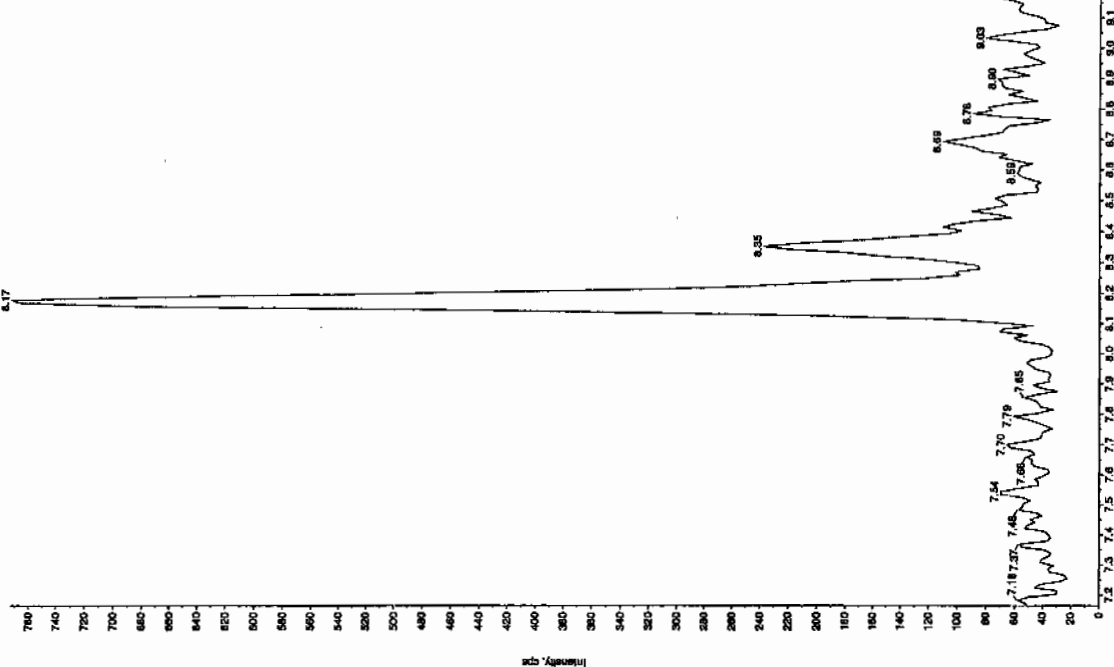
Concentration: 0.00 ng/mL

Calculated Conc: 3/10/2010

Acq. Date: 3/10/2010

Acq. Time: 9:48:16 PM

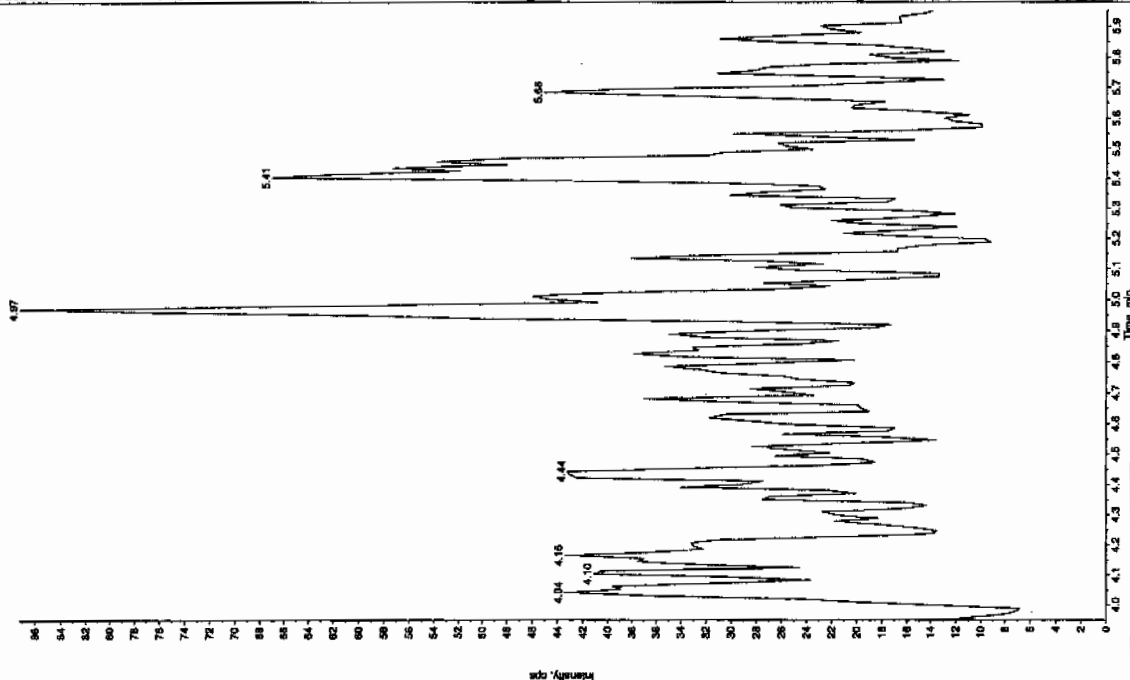
Modified: No



Run 03/15/10

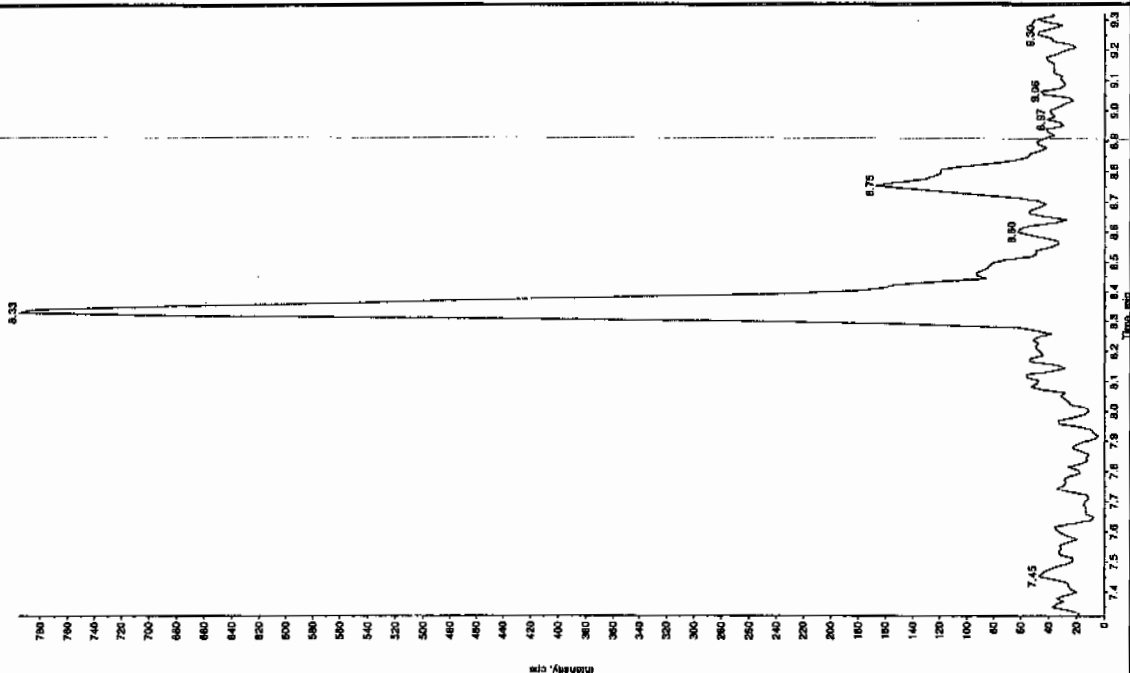
Sample Name: "XIBL004" Sample ID: "TILER" File: "EX030100025.wif"  
 Peak Name: "28-Hydroxy-2-methyl-2-propyl-1,3-dioxane" Mass(es): "160.0460 amu"  
 Comment: "LONSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 9:48:18 PM  
 Modified: No



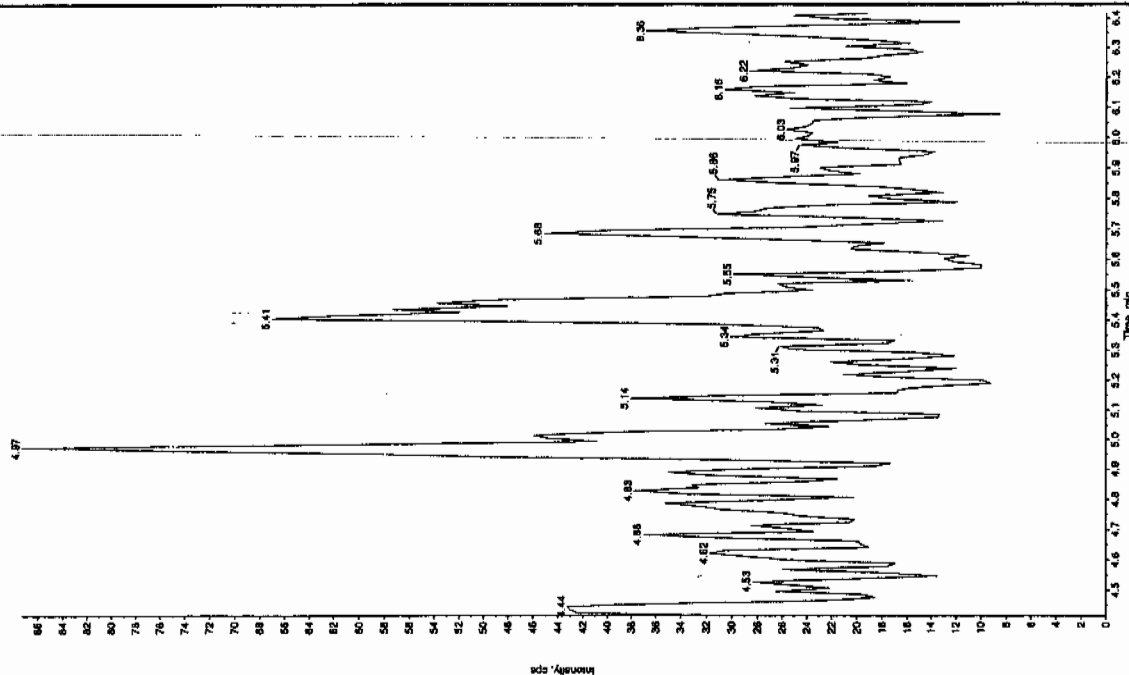
Sample Name: "XIBL004" Sample ID: "TILER" File: "EX030100025.wif"  
 Peak Name: "34-Entololone" Mass(es): "162.1715 amu"  
 Comment: "LONSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 9:48:18 PM  
 Modified: No



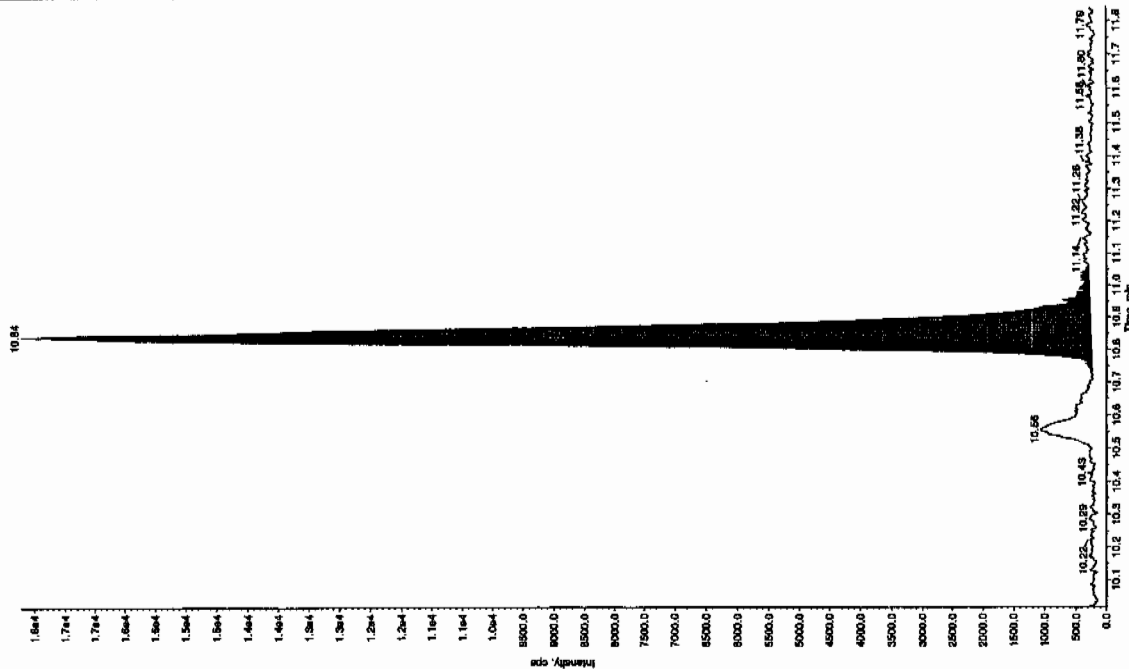
Sample Name: "XIBLK04" Sample ID: "111ER" File: "EX503100025.will"  
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 9:48:18 PM  
 Modified: NO



Sample Name: "XIBLK04" Sample ID: "111ER" File: "EX503100025.will"  
 Peak Name: "bis(o-cresyl) phosphite" Mass(es): "388.181.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.283 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 8:48:18 PM  
 Modified: NO  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 6.88e+004 counts  
 Height: 17471.106 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 11-MAR-10 01:12

GEL Data File: EXS03100038.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

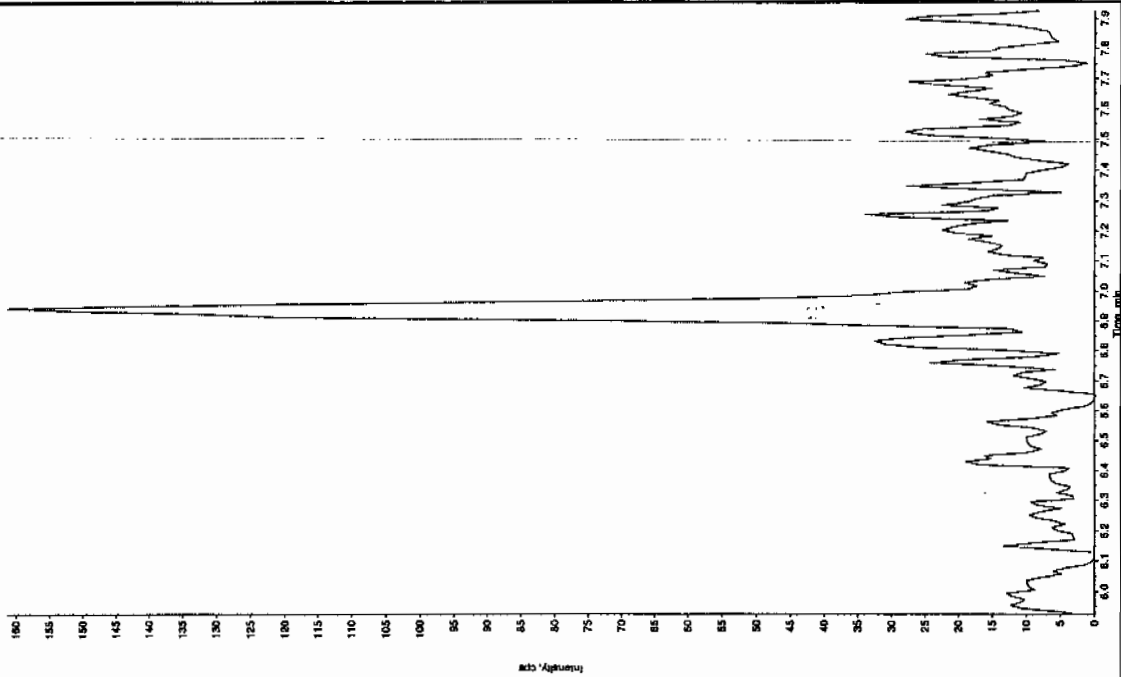
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.104
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0



Dec 3/13/10

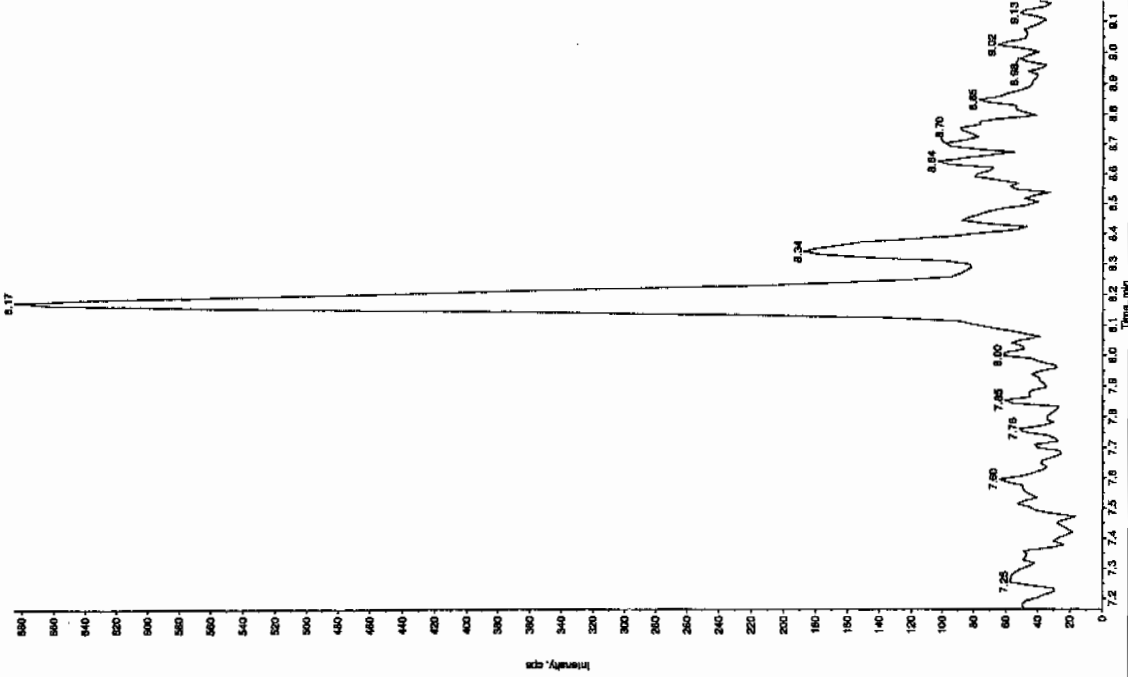
Sample Name: XIBL005 Sample ID: 11111111 File: EX503100038.wif  
 Peak Name: TATB Mass(es): 257.2204.9 amu  
 Comment: LCMSEXP\_B7 Annotation: \*

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:12:29 AM  
 Modified: No



Sample Name: XIBL005 Sample ID: 11111111 File: EX503100038.wif  
 Peak Name: 3,5-Dinitroaniline Mass(es): 182.046.0 amu  
 Comment: LCMSEXP\_B7 Annotation: \*

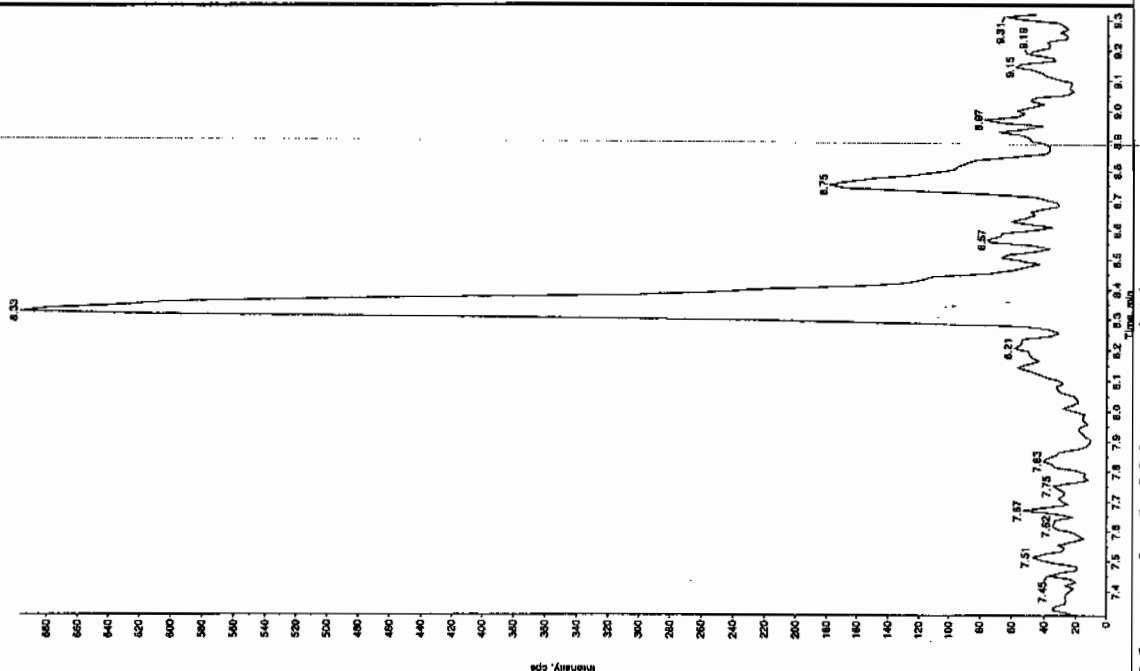
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:12:29 AM  
 Modified: No



Dec 3/13/10

Sample Name: 'XILK05' Sample ID: 'XILK' File: 'EXS03100039.wiff'  
Peak Name: '34-Dinitrofluorene' Mass(es): '182.1/51.9 emu'  
Comment: 'LCMSEXP\_B' Annotation: ''

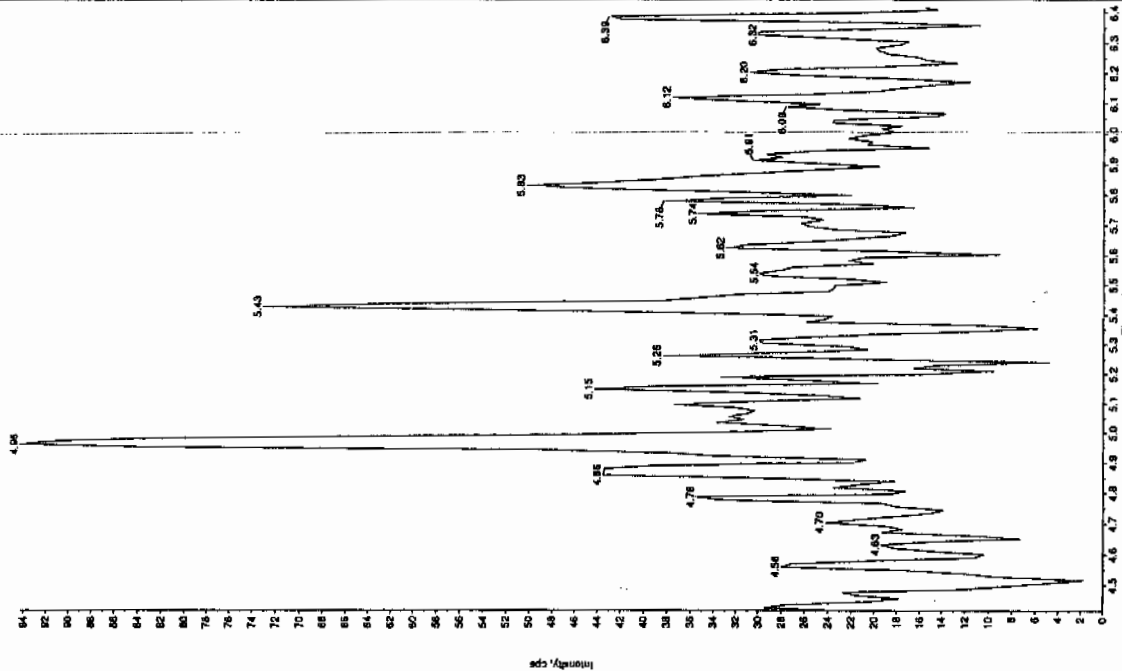
Sample Index:	Unknown	ng/mL
Sample Type:	N/A	
Concentration:	0.00	
Q. Date:	3/11/2010	
Q. Time:	1:12:29 AM	
Modified:	No	



Sample Name: "XIBLK05" Sample ID: "1111ER" File: "EX503100038.wif"  
 Peak Name: "24-Diamino-5-nitrofluorene" Mass(es): "155.045.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:12:29 AM  
 Modified: No

Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 3.00 sec  
 Scan Rate: 30.0 points/sec  
 RT Window: 10.8 min  
 Expected RT: No  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 6.64e+004 counts  
 Height: 17070.473 cps  
 Start Time: 10.7 min  
 End Time: 11.0 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1950

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 11-MAR-10 03:02

GEL Data File: EXS03100045.wiff

Instrument ID: LCMSMS

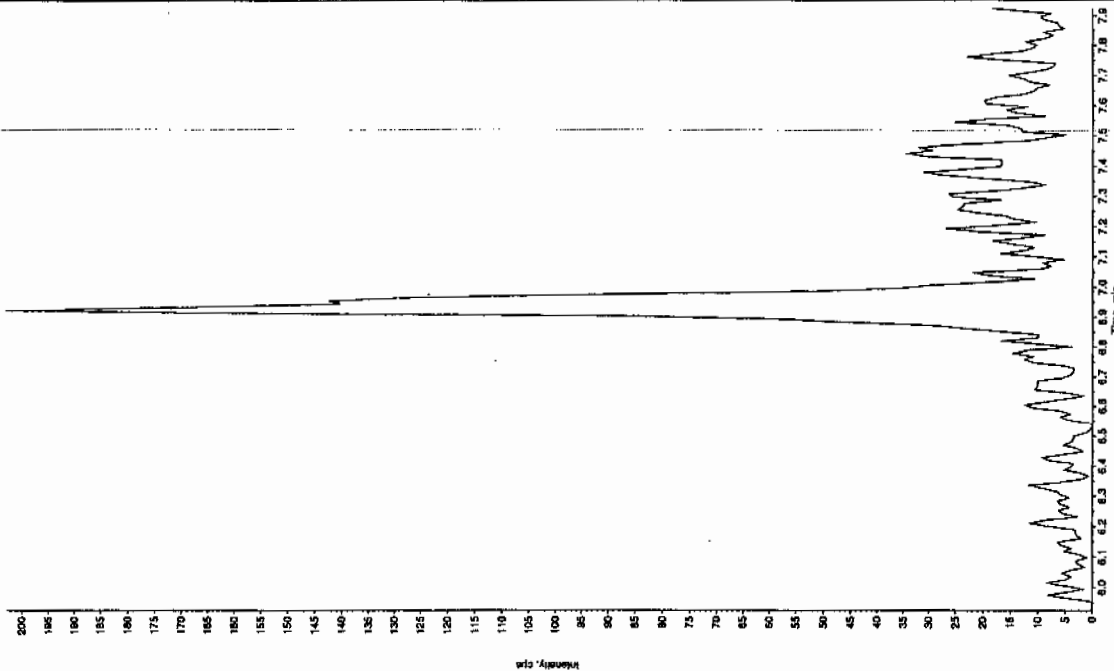
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.271
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

det 3/14/10

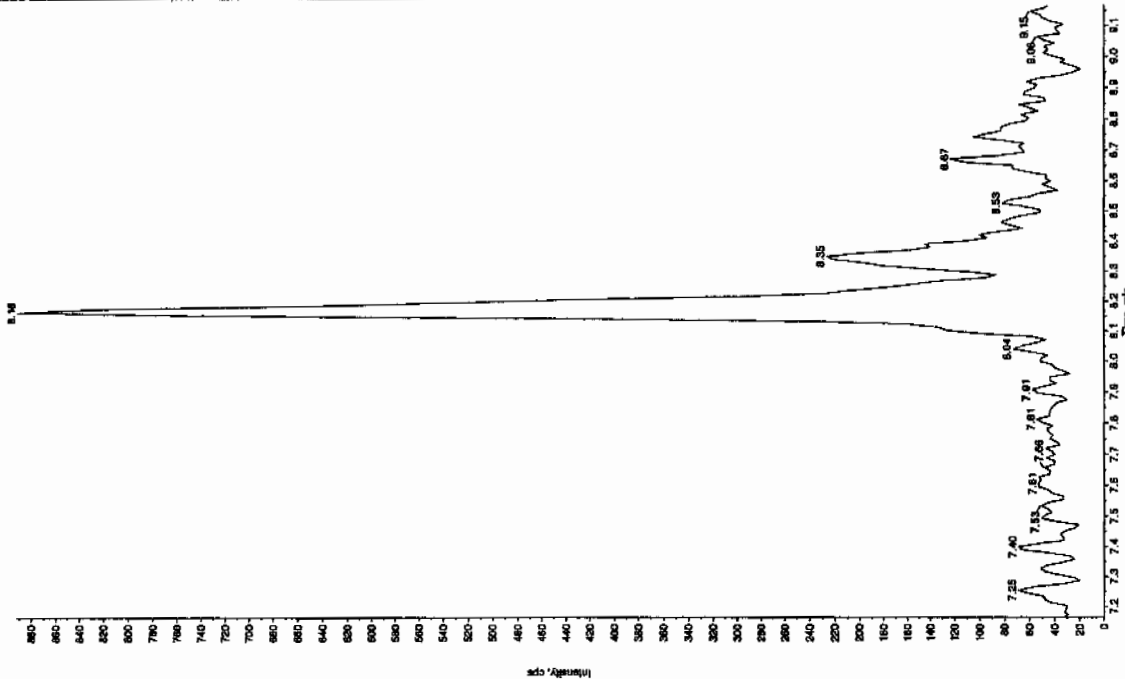
Sample Name: "XBLX06" Sample ID: "JTLER" File: "EXS03100045.wif"  
Peak Name: "TATB" Mass(es): "257.2204.9 amu"  
Comment: "LOMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 3/11/2010  
Acq. Time: 3:02:28 AM  
Modified: No



Sample Name: "XBLX06" Sample ID: "JTLER" File: "EXS03100045.wif"  
Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"  
Comment: "LOMSEXP\_B" Annotation: ""

Sample Index: 1  
Sample Type: Unknown  
Concentration: N/A  
Calculated Conc: 0.00 ng/mL  
Acq. Date: 3/11/2010  
Acq. Time: 3:02:28 AM  
Modified: No

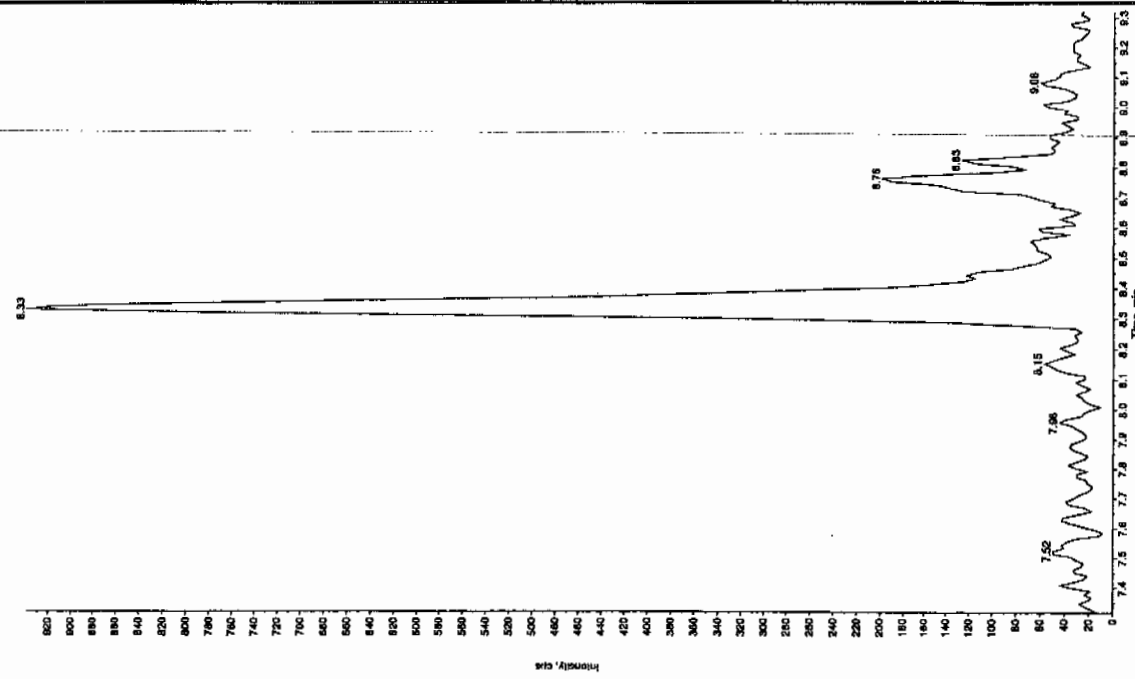


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

det 3/15/10

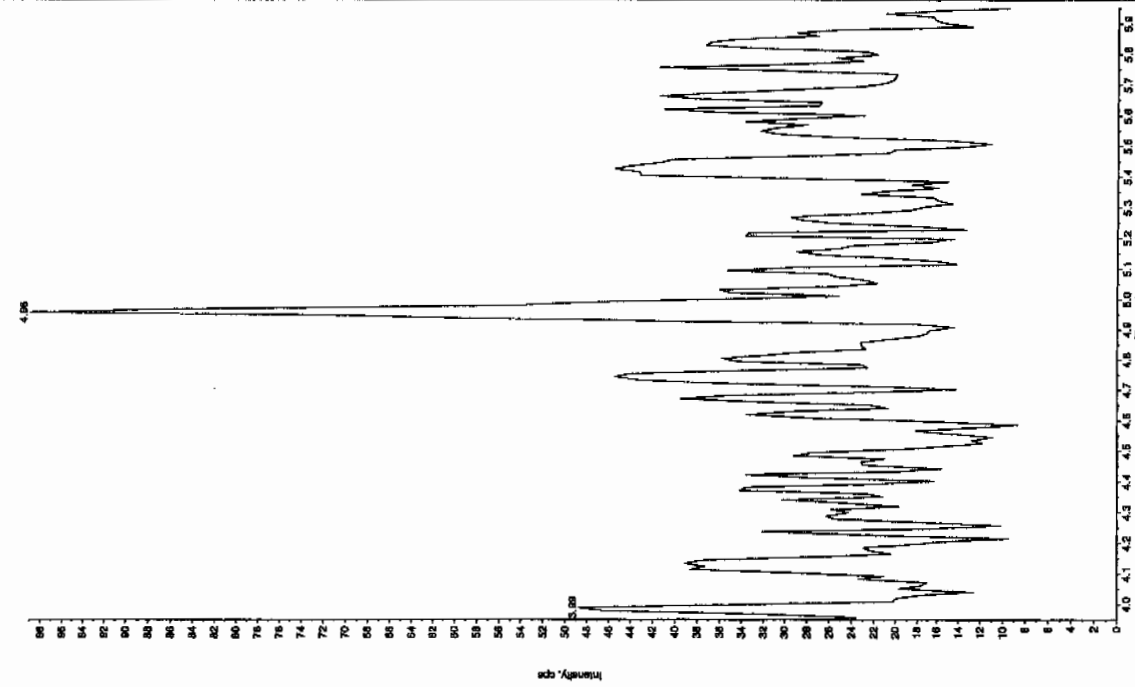
Sample Name: "XBLX08" Sample ID: "11LEP" File: "EXS03100045.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1/151.9 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.76 ng/mL  
 Calculated Conc: 3.11/20.0  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:02:28 AM  
 Modified: No



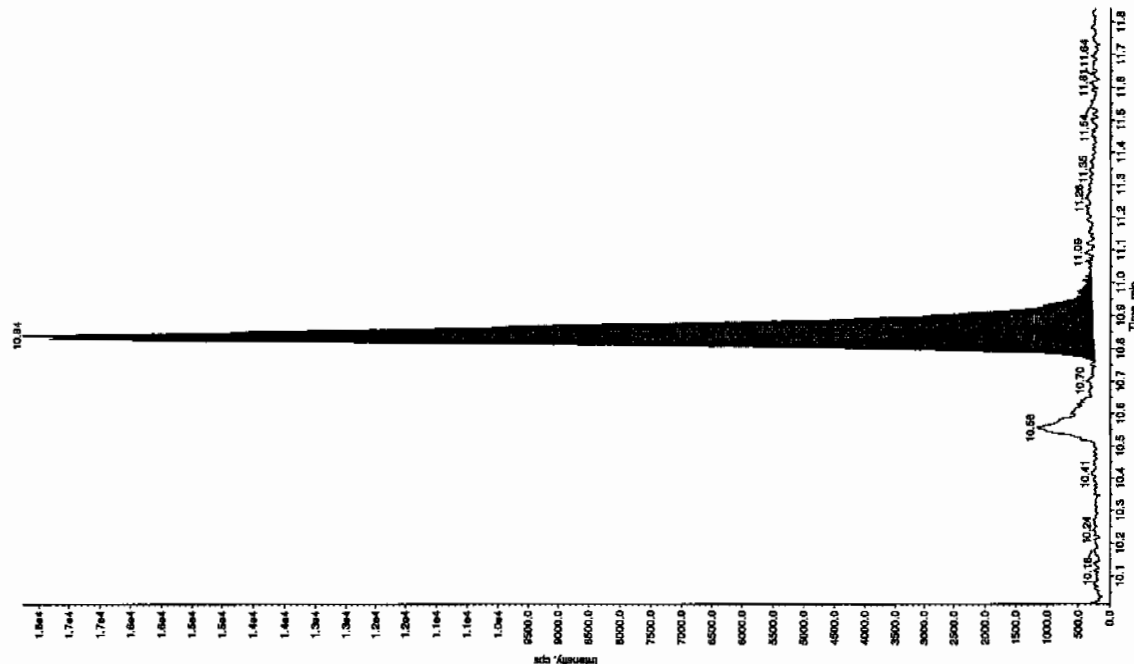
Sample Name: "XBLX08" Sample ID: "11LEP" File: "EXS03100045.wif"  
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "196.0/166.0 amu"  
 Comment: "LCMSEXP\_B" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 3.11/20.0  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:02:28 AM  
 Modified: No



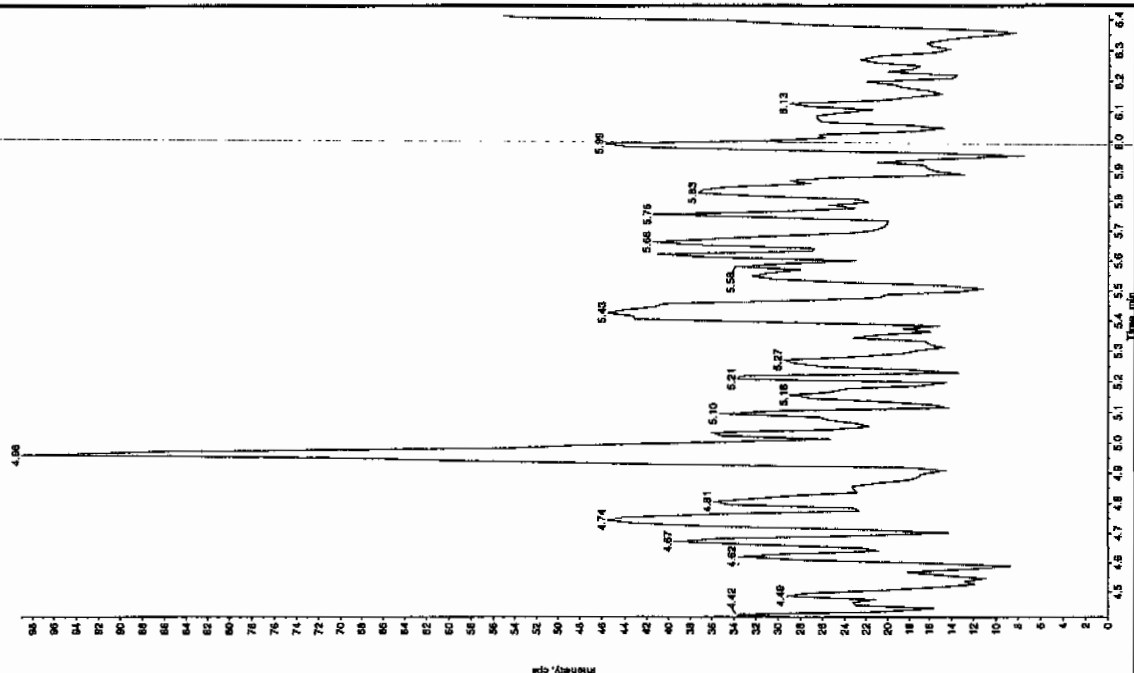
Sample Name: "XBL006" Sample ID: "11LER" File: "EXS0100045.wif"  
 Peak Name: "bis(4-oxocyclohexyl) phosphine" Mass(es): "389.191.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:02:28 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Xr Window: 10.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 6.86e+004 counts  
 Height: 17511.333 cps  
 Start Time: 10.8 min  
 End Time: 11.0 min



Sample Name: "XBL006" Sample ID: "11LER" File: "EXS0100045.wif"  
 Peak Name: "24-Dinitro-6-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP\_B" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 0.00  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:02:28 AM  
 Modified: No



Nairb.ref

;Positive ion monoisotopic and average masses from solution  
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/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



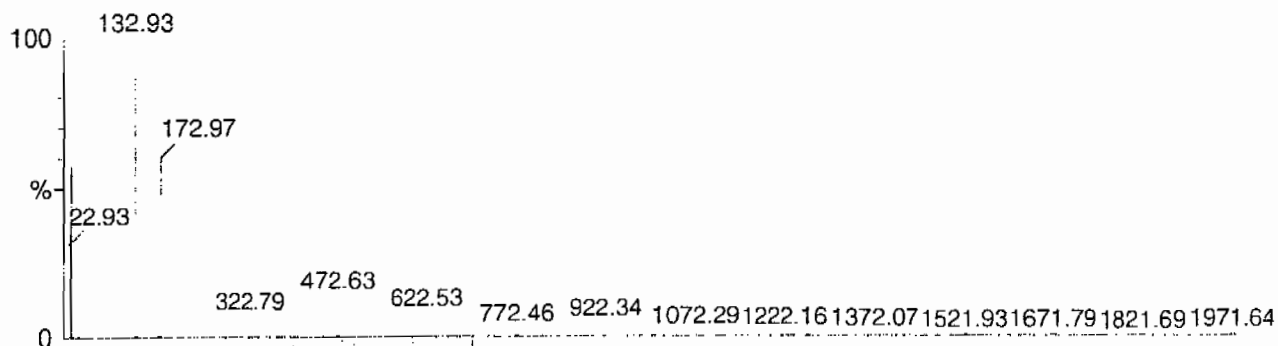
Calibration Report - MS1 Static

Page 1 of 1

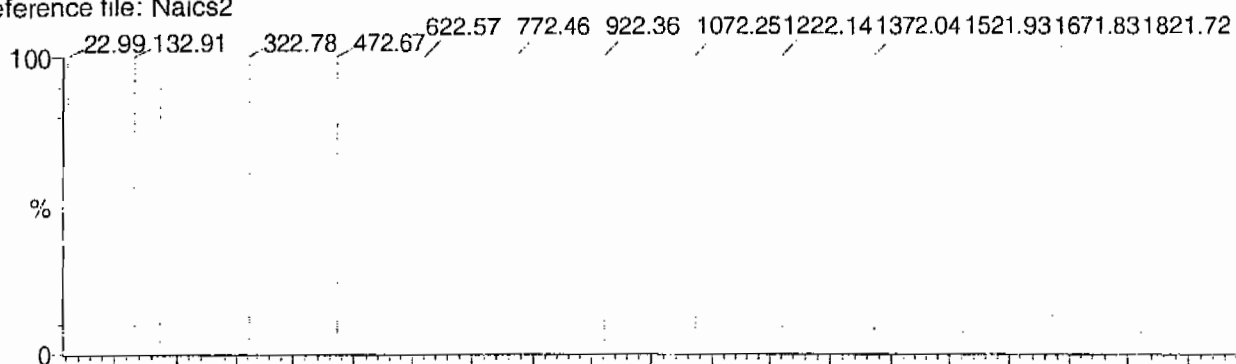
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

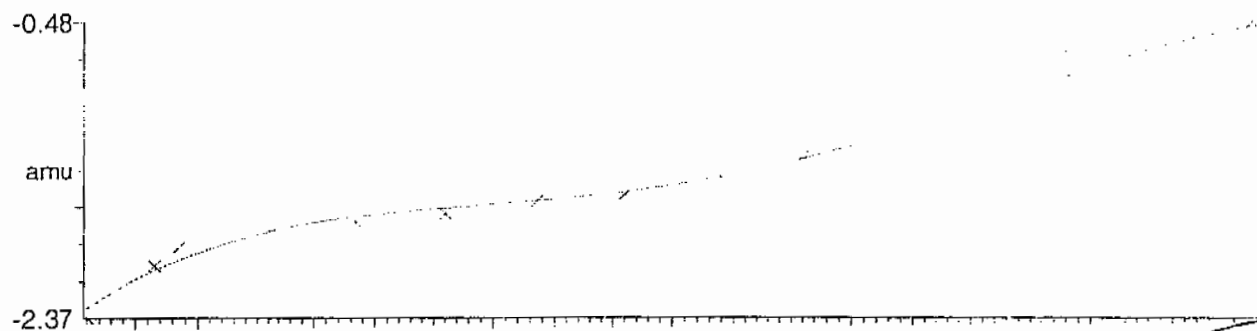
15 matches of 15 tested references



Reference file: Naics2

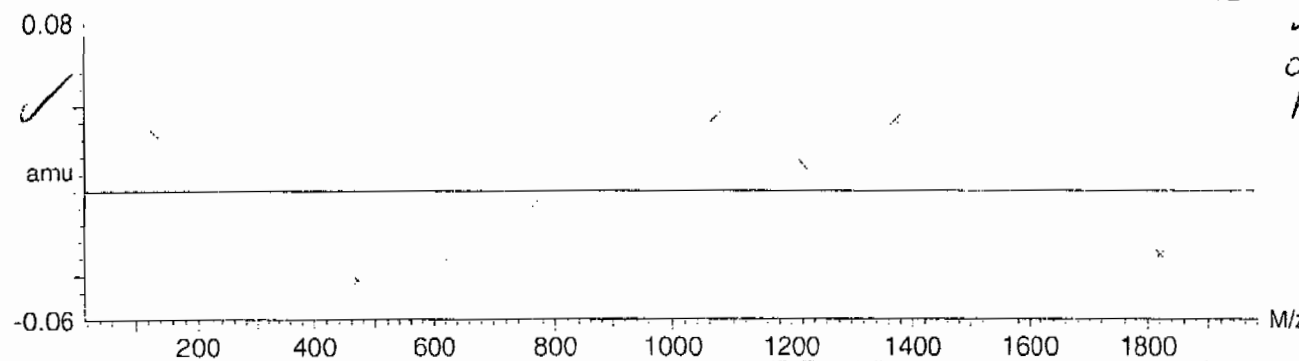


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-1.673470 \times 10^{-9} \pm 0.036953$



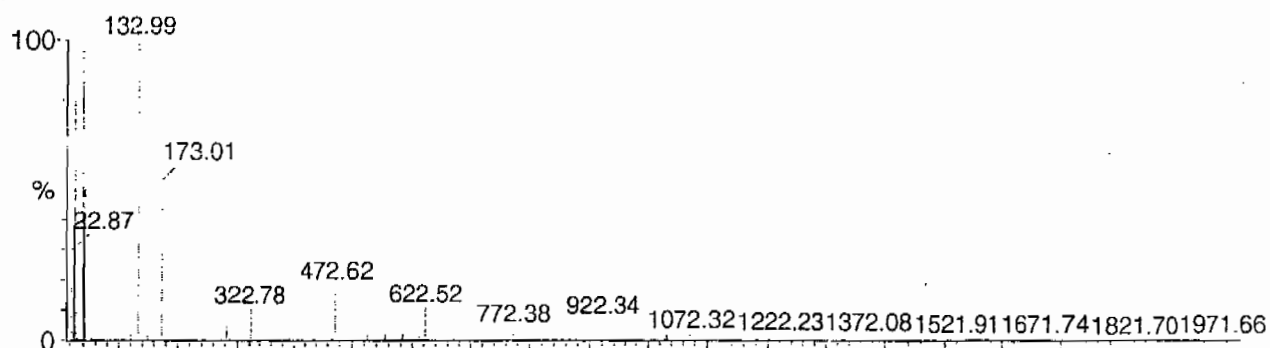
Calibration Report - MS1 Scanning

Page 1 of 1

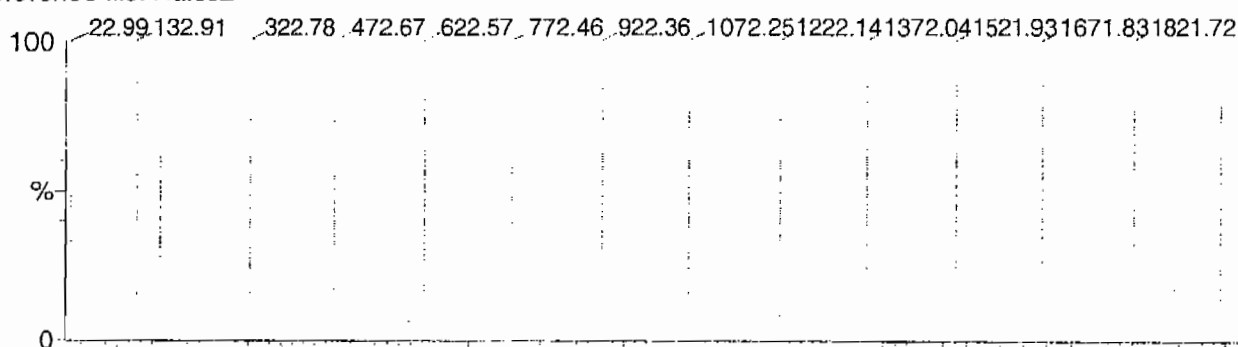
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

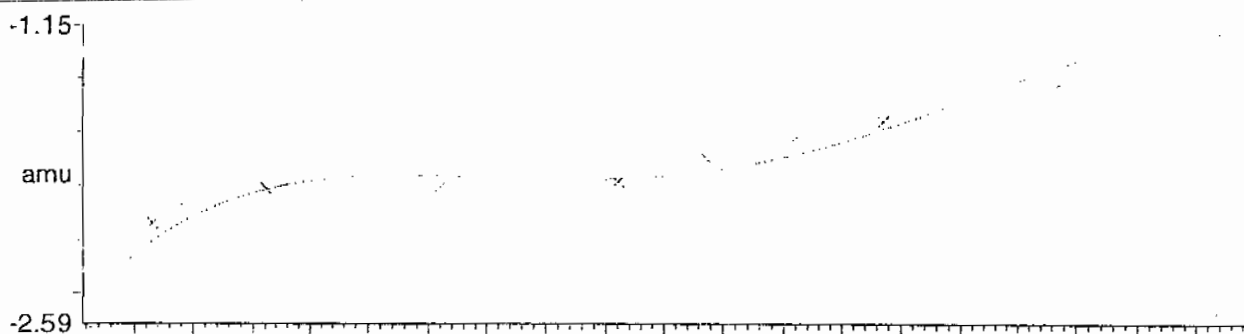
15 matches of 15 tested references:



Reference file: Naics2

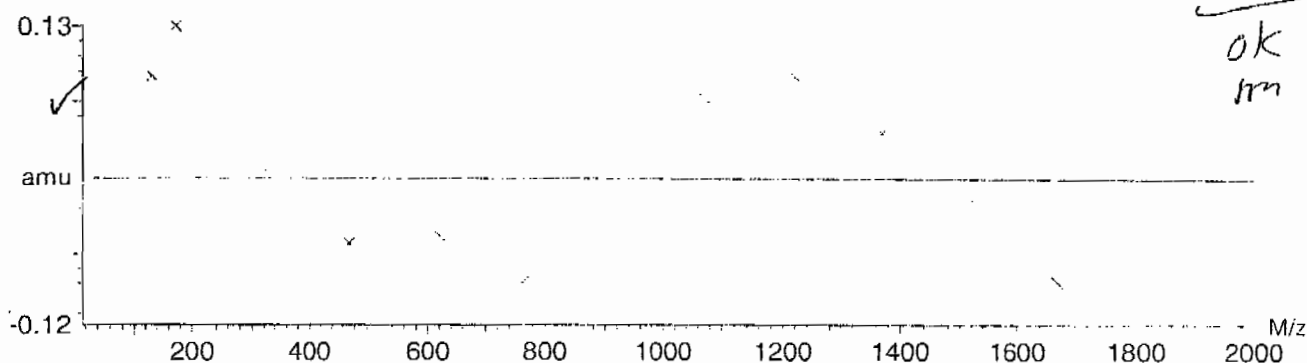


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-5.432715 \times 10^{-9} \pm 0.069858$



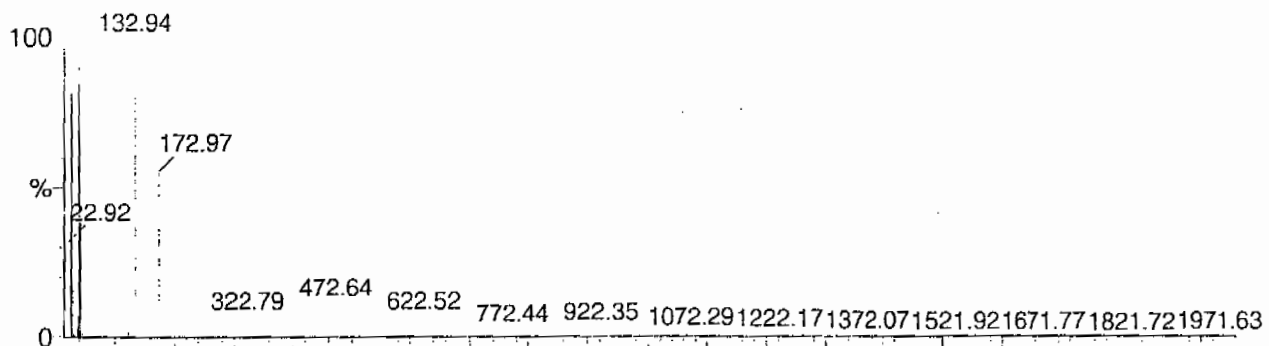
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

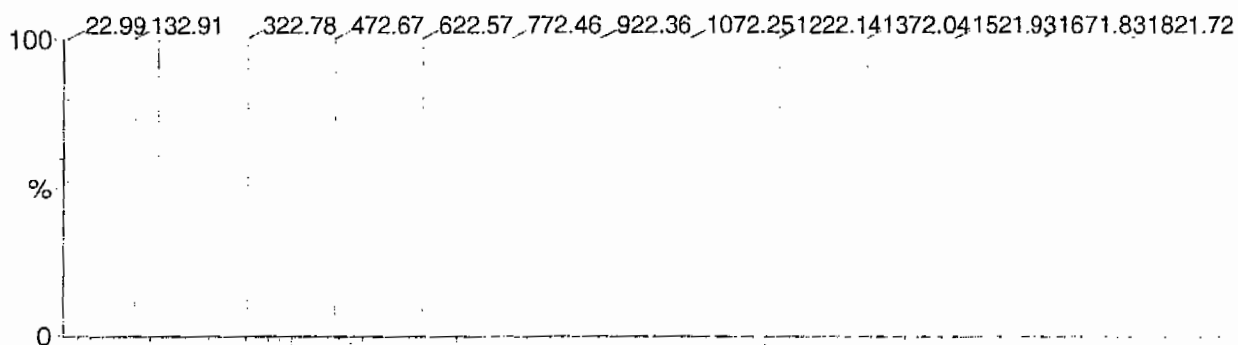
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

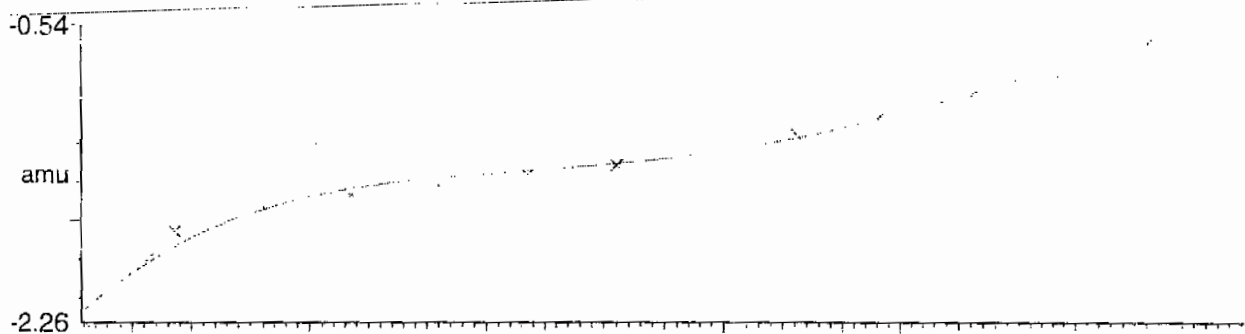
15 matches of 15 tested references



Reference file: Naics2

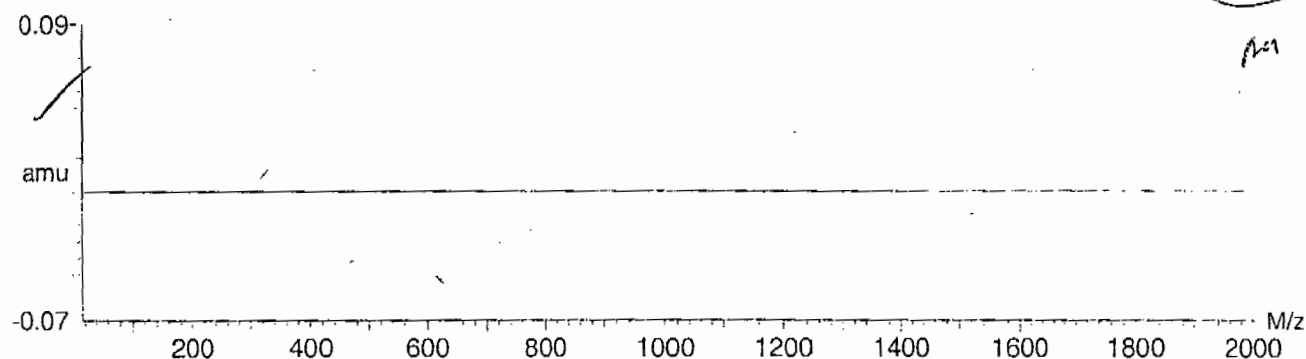


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $3.486639 \times 10^{-9} \pm 0.040487$



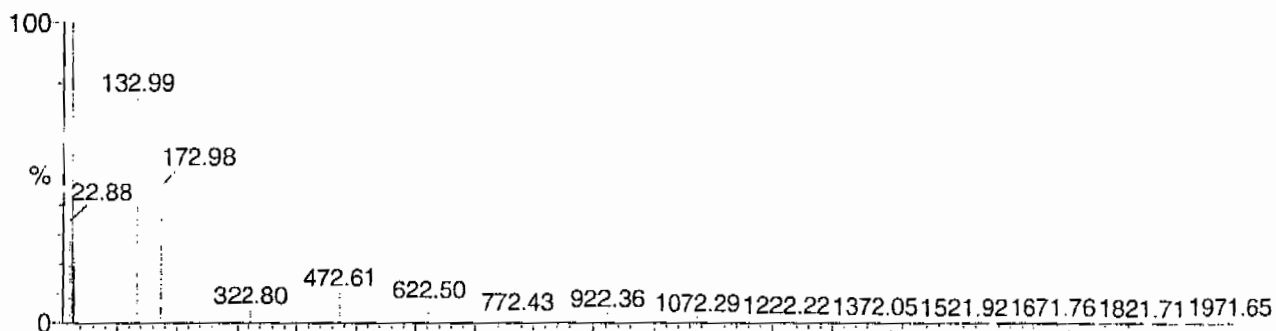
Calibration Report - MS2 Static

Page 1 of 1

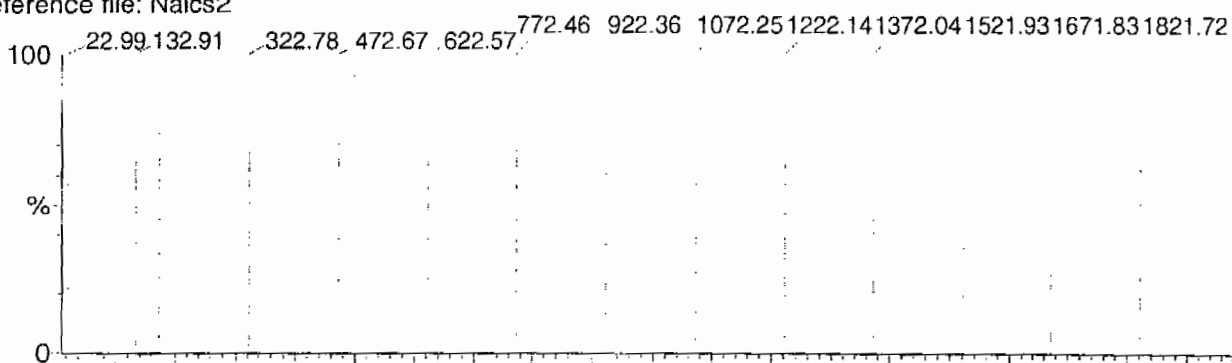
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

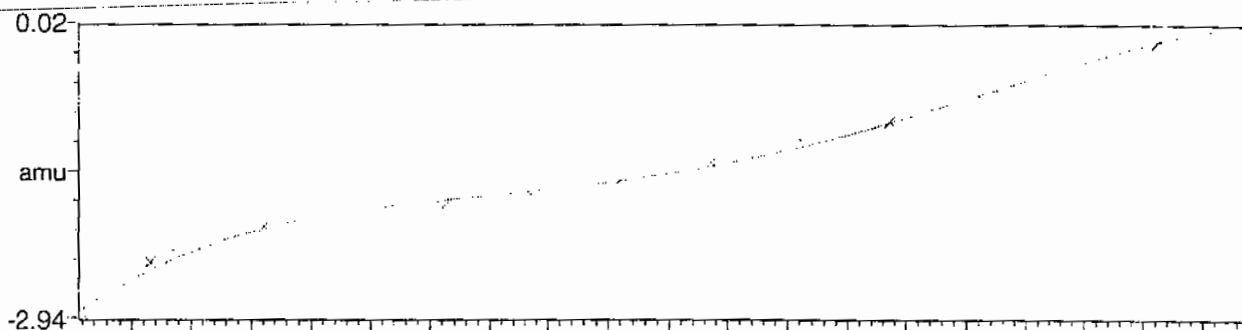
15 matches of 15 tested references



Reference file: Naics2

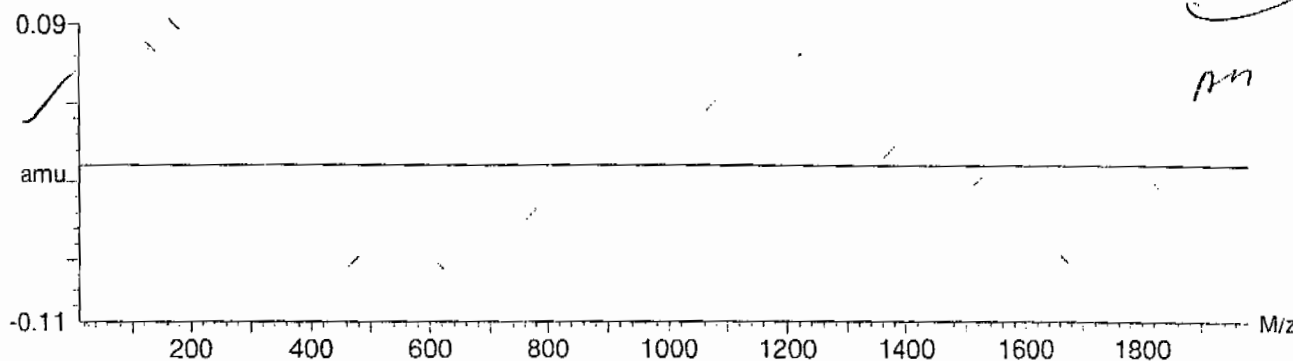


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $2.048910 \times 10^{-9} \pm 0.057803$



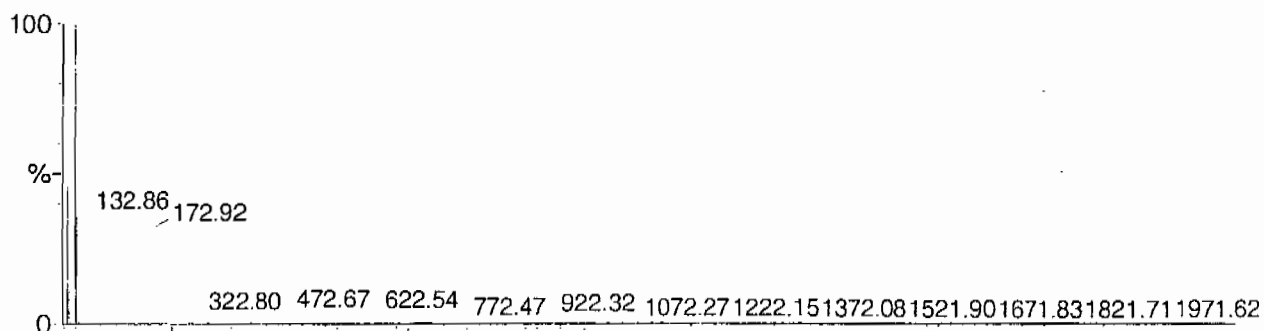
Calibration Report - MS2 Scanning

Page 1 of 1

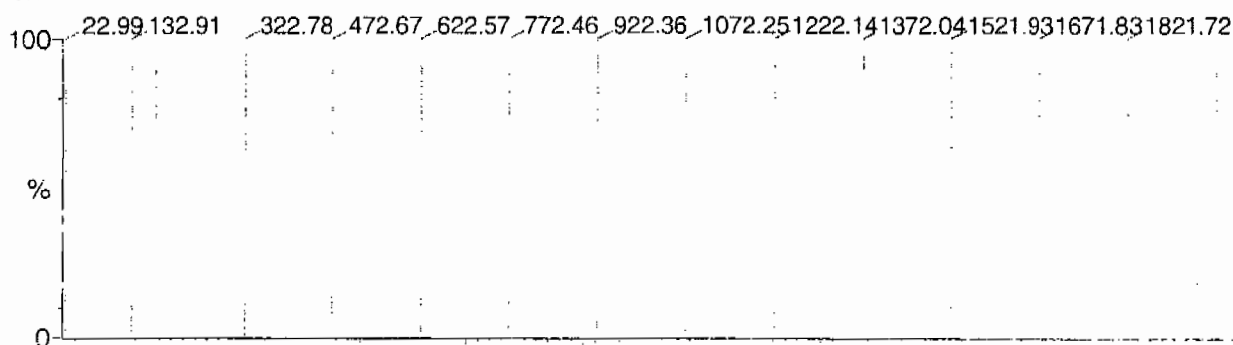
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

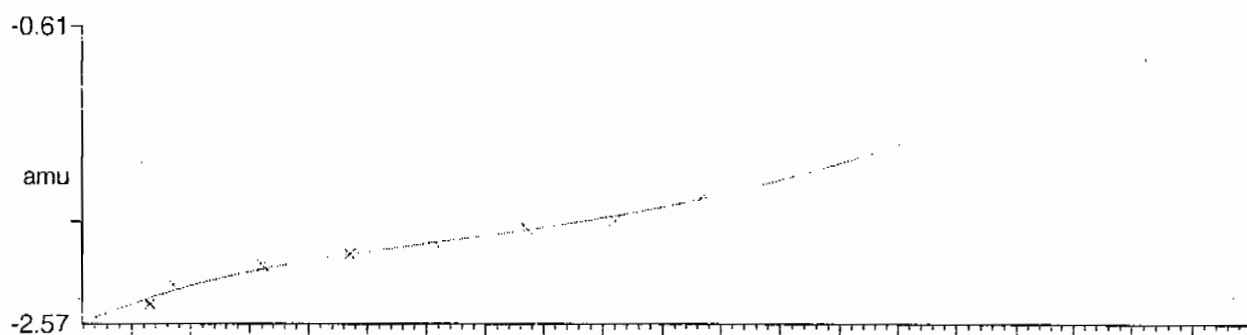
14 matches of 15 tested references



Reference file: Naics2

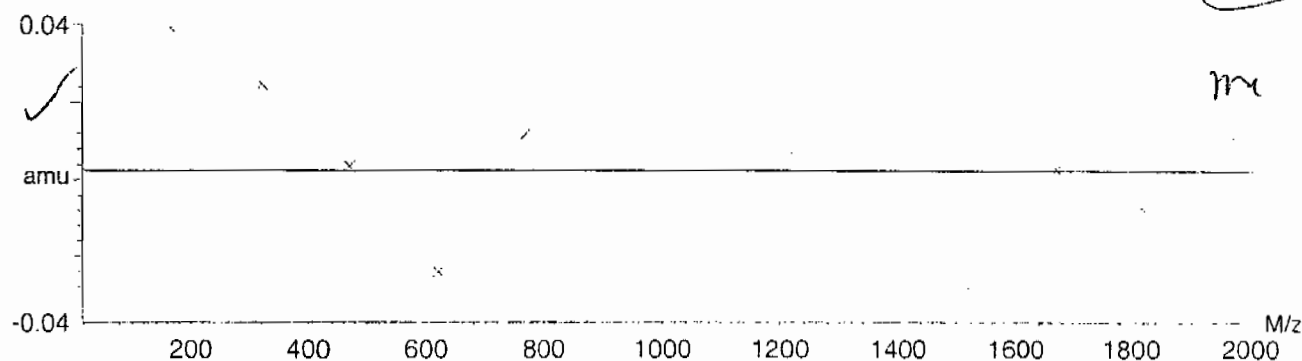


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-2.623502 \times 10^{-9} \pm 0.025622$



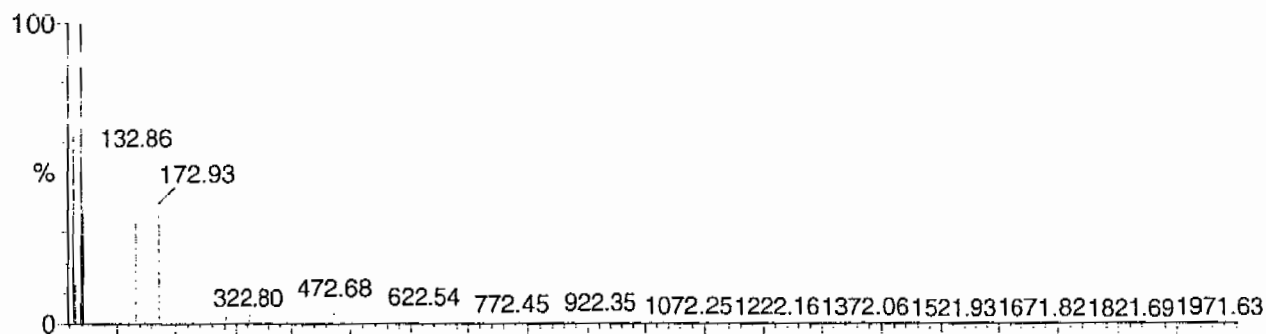
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

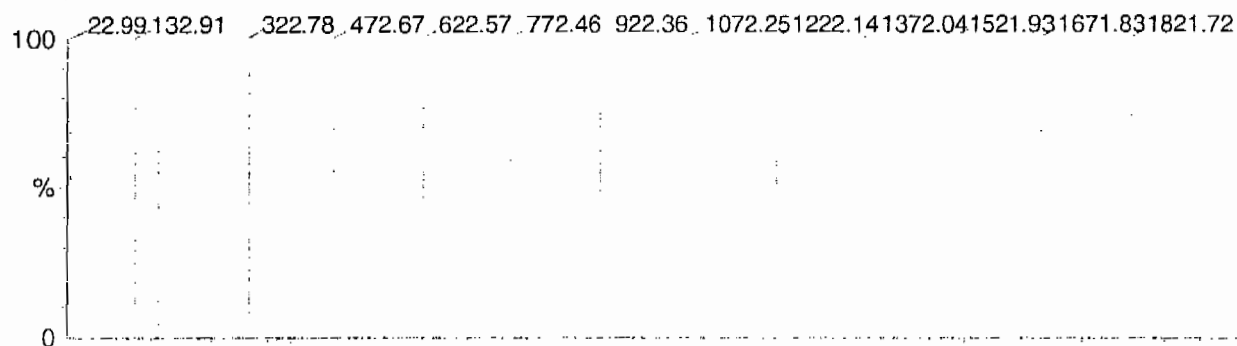
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

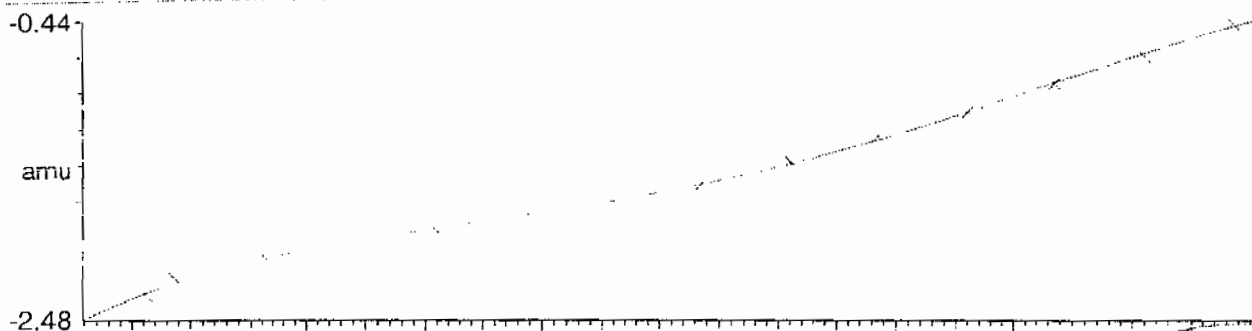
14 matches of 15 tested references



Reference file: Naics2

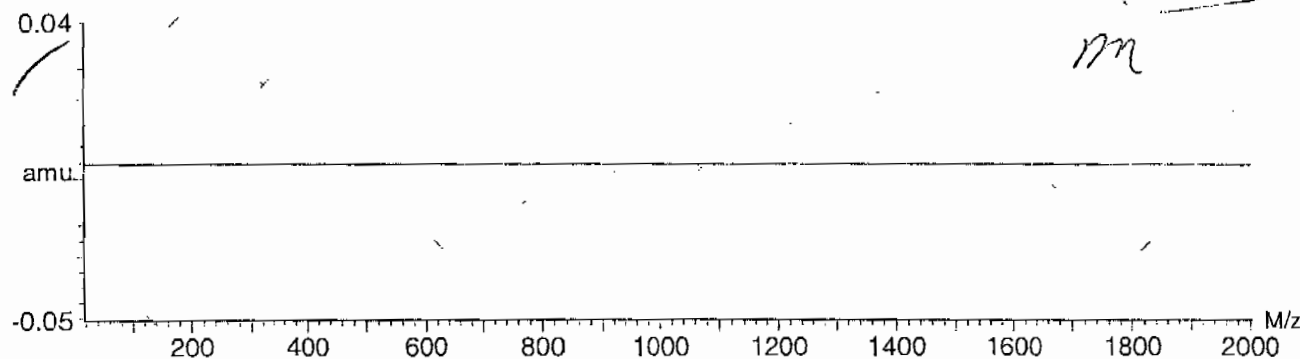


Mass difference (Raw - Ref mass)



Residuals

Mean residual =  $-6.785350 \times 10^{-9} \pm 0.023134$

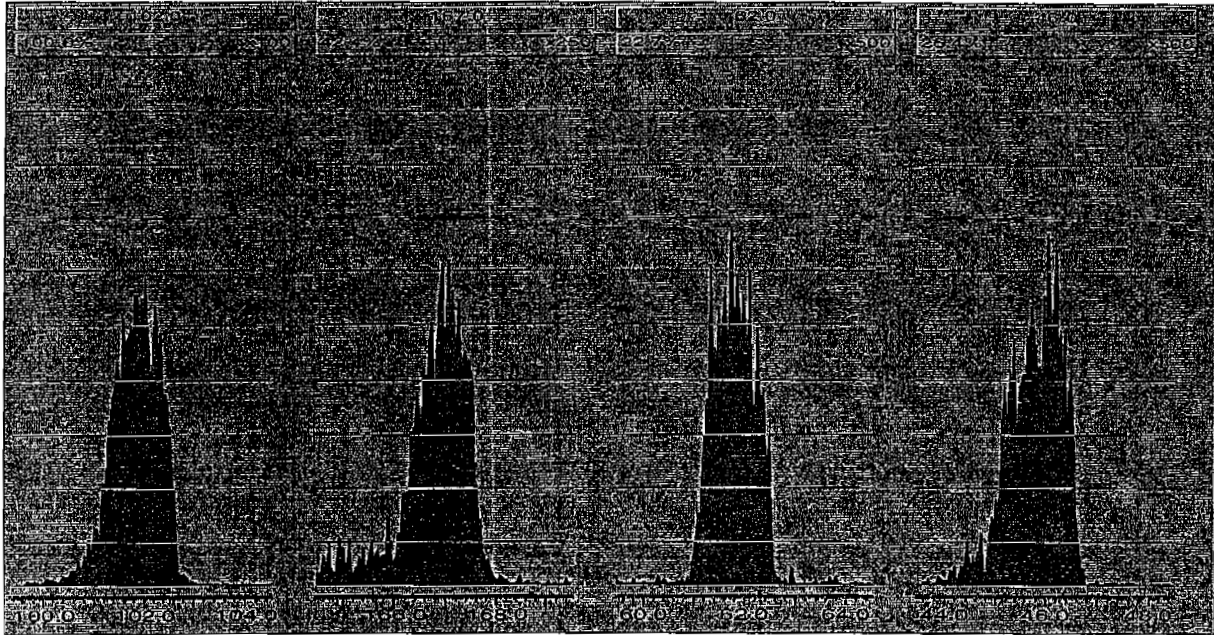


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNXNEW\_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Fri Mar 19 12:20:57 2010

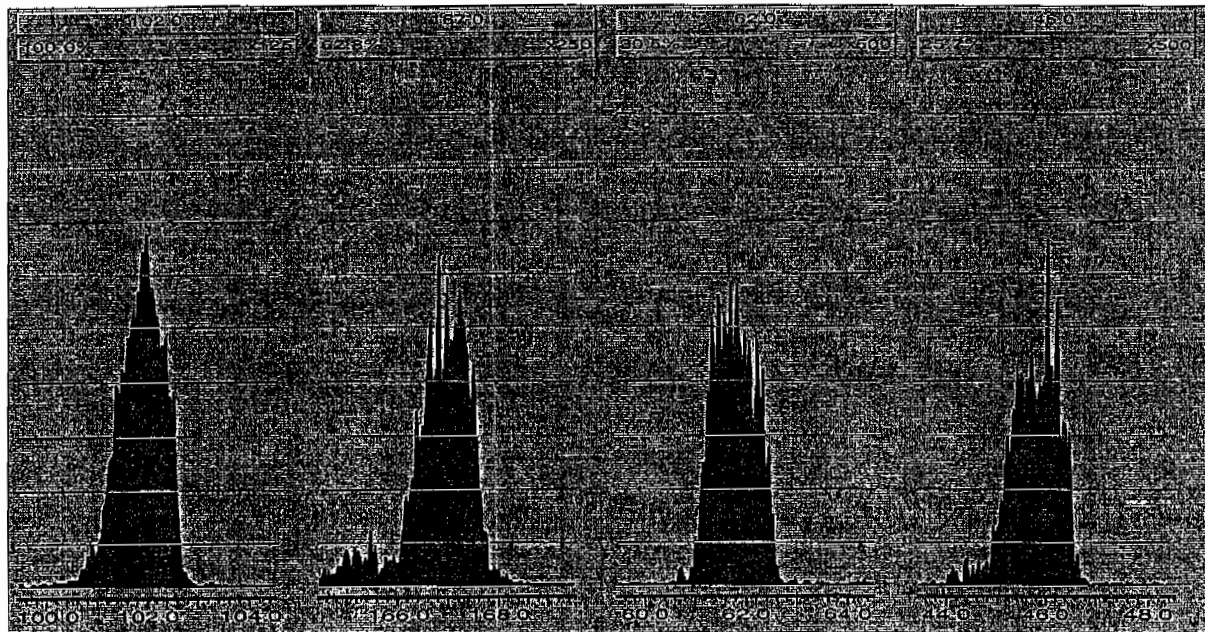


# Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW\_EXP.PROVACQUDB\explosives04.IPR

Printed : Tue Mar 23 09:07:10 2010





# High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

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) #
			8208.162	12.135	46566.233	17.593
Upper Limit			10670.6106	12.635	60536.1029	18.093
Lower Limit			5745.7134	11.635	32596.3631	17.093
MB for batch 956039	20-mar-10 06:10	EXP0319028a	8332.72	12.136	41512.1	17.597
LCS for batch 956039	20-mar-10 06:40	EXP0319029a	7861.02	12.136	44936.9	17.597
RE15-10-8314	20-mar-10 17:29	EXP0319051a	7530.92	12.139	43803.4	17.592
RE15-10-8313	20-mar-10 17:58	EXP0319052a	7148.39	12.137	55525.7	17.595
RE15-10-8315	20-mar-10 18:57	EXP0319054a	7302.4	12.137	44778.7	17.595
RE15-10-8311	20-mar-10 19:27	EXP0319055a	6618.35	12.137	40896.2	17.591
RE15-10-8310	20-mar-10 19:56	EXP0319056a	6407.29	12.137	39026.4	17.595
RE15-10-8303	20-mar-10 20:26	EXP0319057a	6577.81	12.136	44804.9	17.598
RE15-10-8302	20-mar-10 20:55	EXP0319058a	8356.92	12.137	42364.3	17.595
			5504.273	12.072	34430.583	17.449
Upper Limit			7155.5549	12.572	44759.7579	17.949
Lower Limit			3852.9911	11.572	24101.4081	16.949
RE15-10-8312	23-mar-10 15:02	EXP0323013a	5886.96	12.067	31117.2	17.444

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: RE15-10-8314

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319051a

Date Analyzed: 20-MAR-10 17:29

Units: ug/kg

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

\*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319051a

Date: 20-Mar-2010

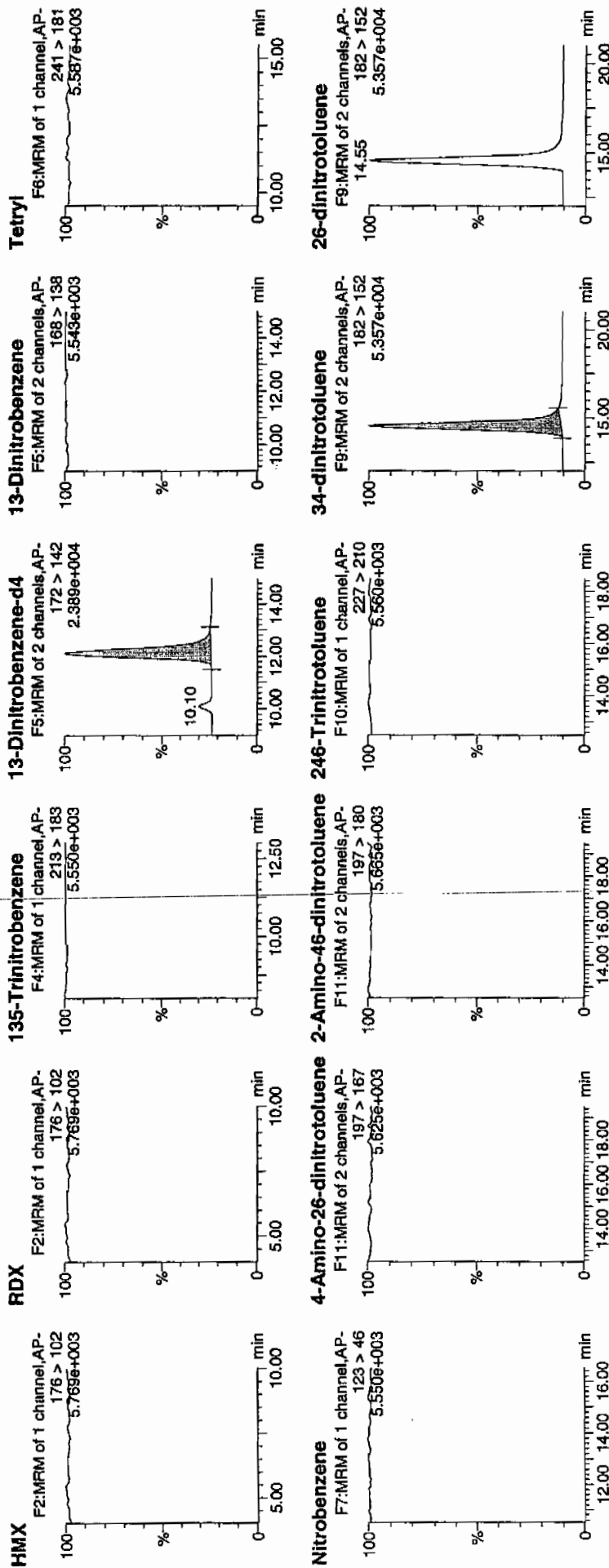
Time: 17:29:07

ID: 247562002

Vial: 2:3,E

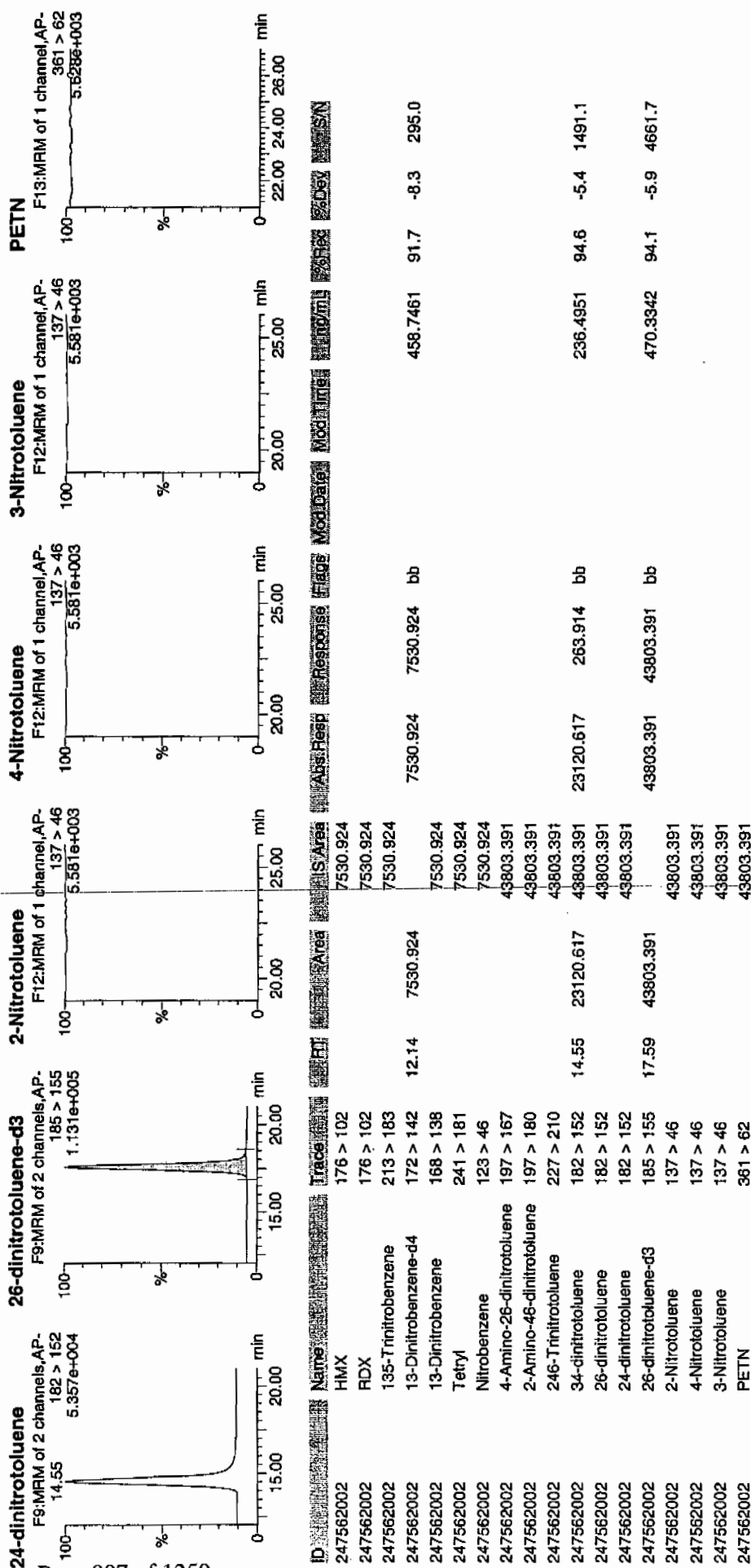
10/17  
3/21/10

100-950045 | 2000 | 2



4mm  
0.3124/10

Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA1.qtd, Time: Sun Mar 21 12:20:26 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8314

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100033.wiff

Date Analyzed: 10-MAR-10 23:53

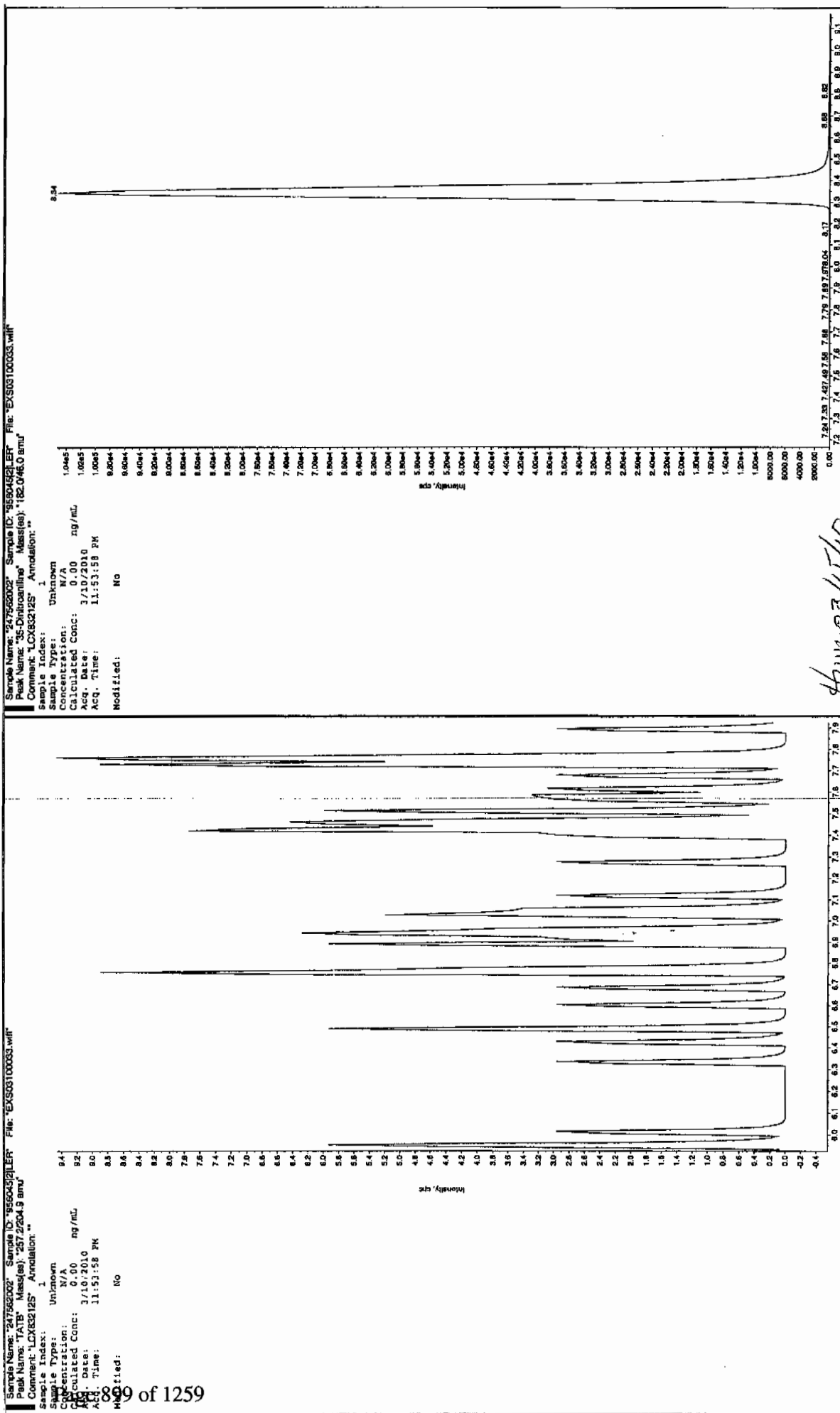
Units: ug/kg

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

\*Concentration =

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

See 3/13/10

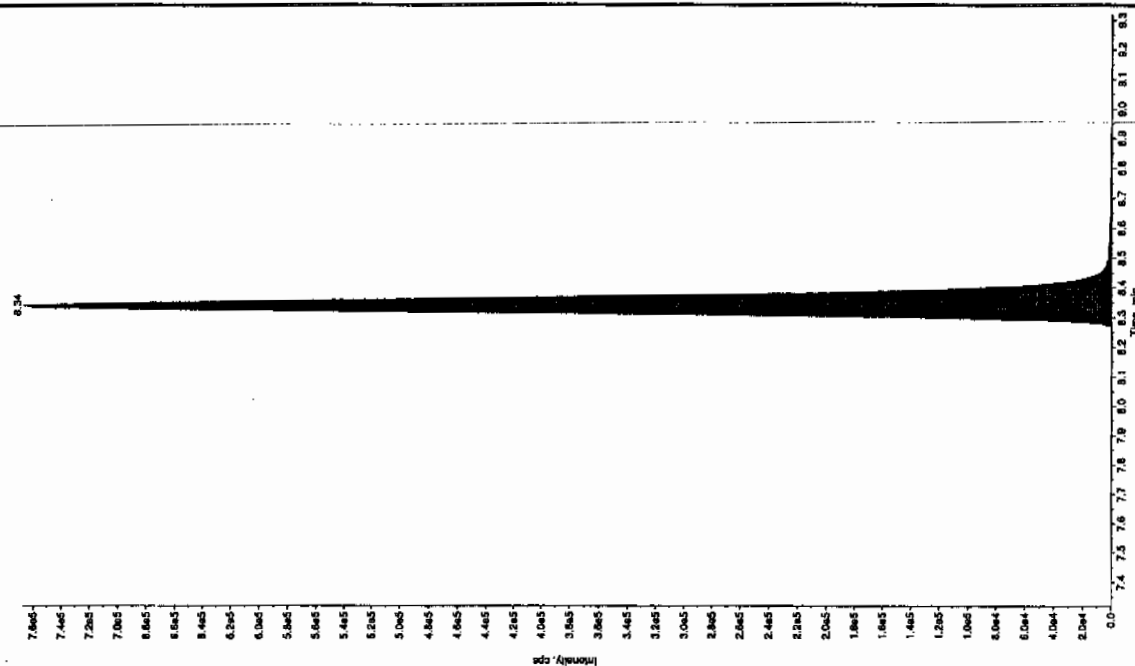


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4/11/10

Sample Name: 247562022 Sample ID: 55504521.ERP File: EX503100033.wif  
 Peak Name: 29.04min-4.00min Mass(es): 166.046.0 amu  
 Comment: "LCX582125" Annotation: "

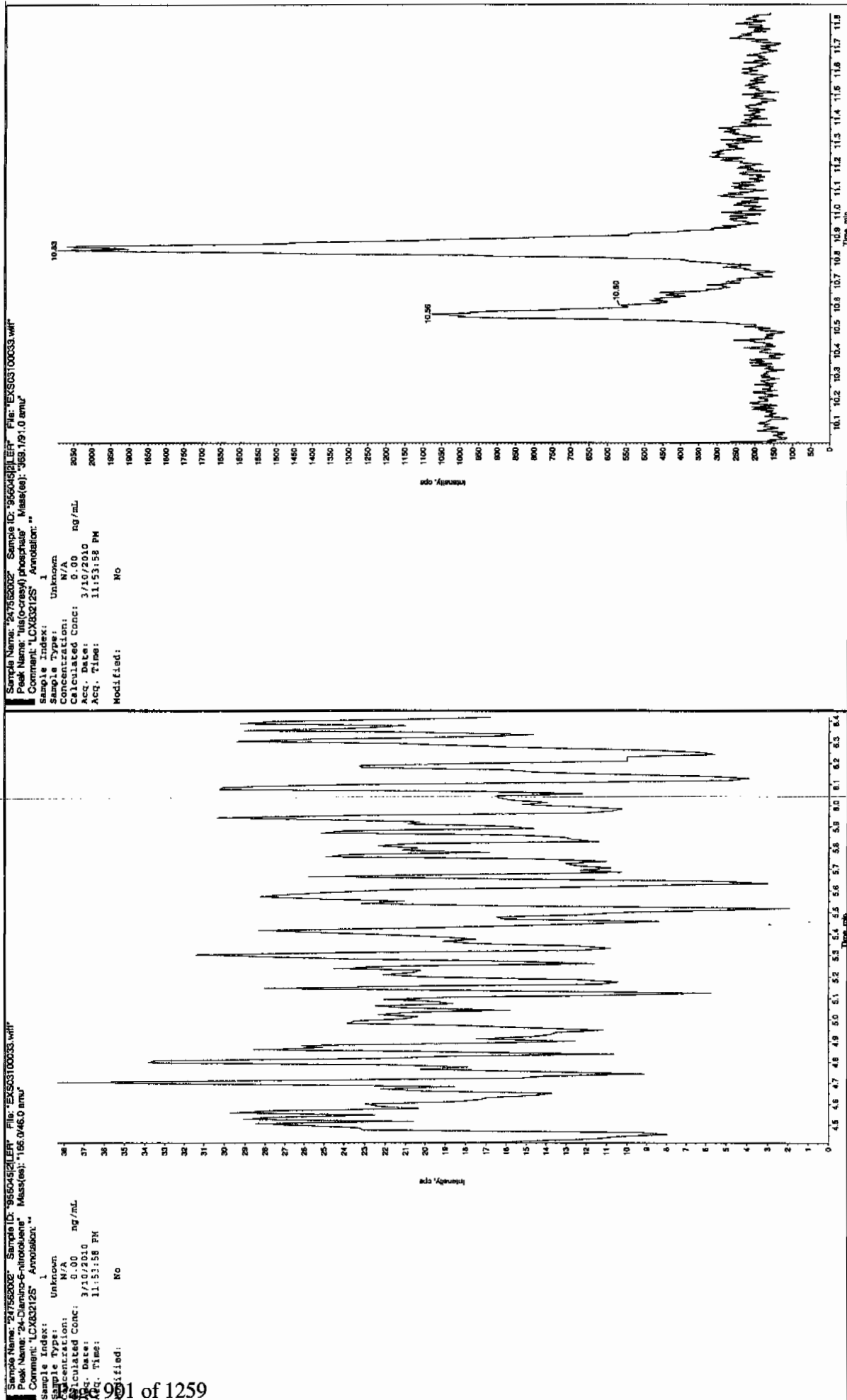
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 11:53:58 PM  
 Modified: No



Sample Name: 247562022 Sample ID: 55504521.ERP File: EX503100033.wif  
 Peak Name: 29.04min-4.00min Mass(es): 166.046.0 amu  
 Comment: "LCX582125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 294. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 11:53:58 PM  
 Modified: No  
 Processing Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3.0 points  
 Acquisition Window: 15.0 sec  
 Selected RT: 8.32 min  
 Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.34 min  
 Area: 2.94e+006 counts  
 Height: 767015.015 cps  
 Start Time: 8.22 min  
 End Time: 8.68 min





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8313

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562003

Sample Amount 2

Moisture: 3.6

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319052a

Date Analyzed: 20-MAR-10 17:58

Units: ug/kg

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

\*Concentration =

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

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319052a

Date: 20-Mar-2010

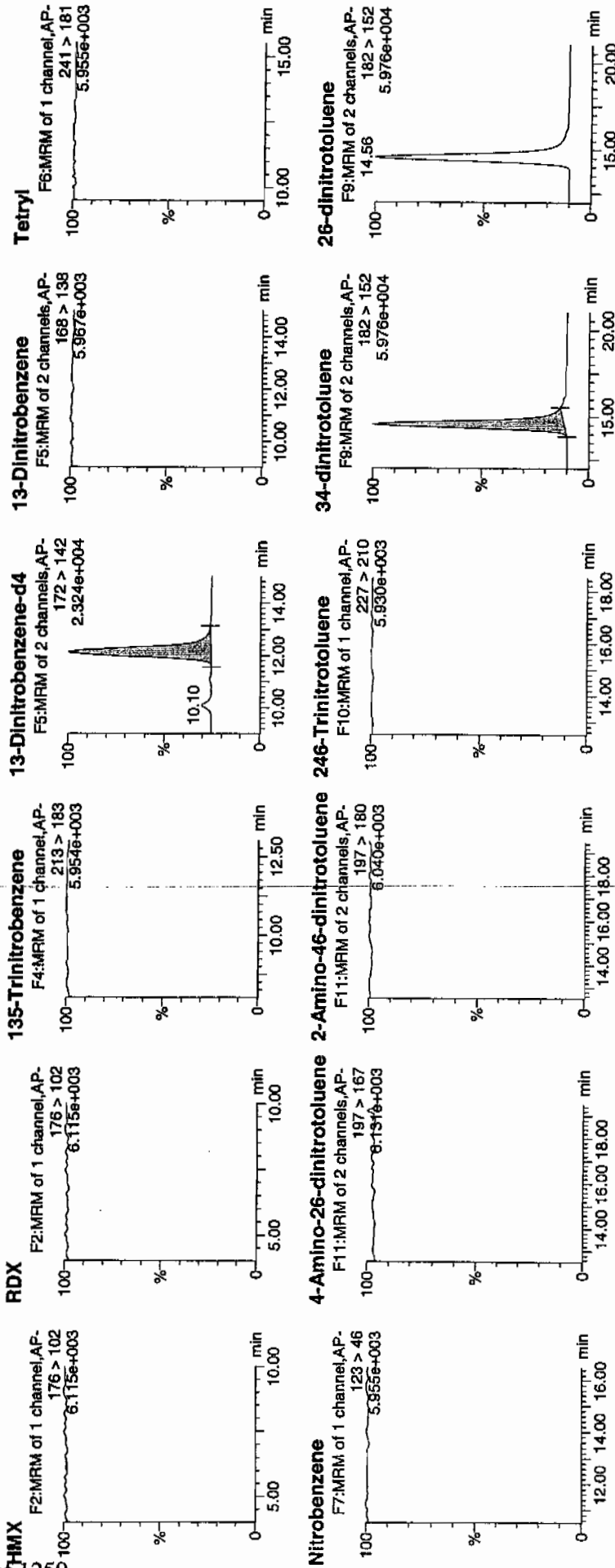
Time: 17:58:36

ID: 247562003

Val: 2:3,F

WAT  
3/21/10

WAT  
956045 | 121



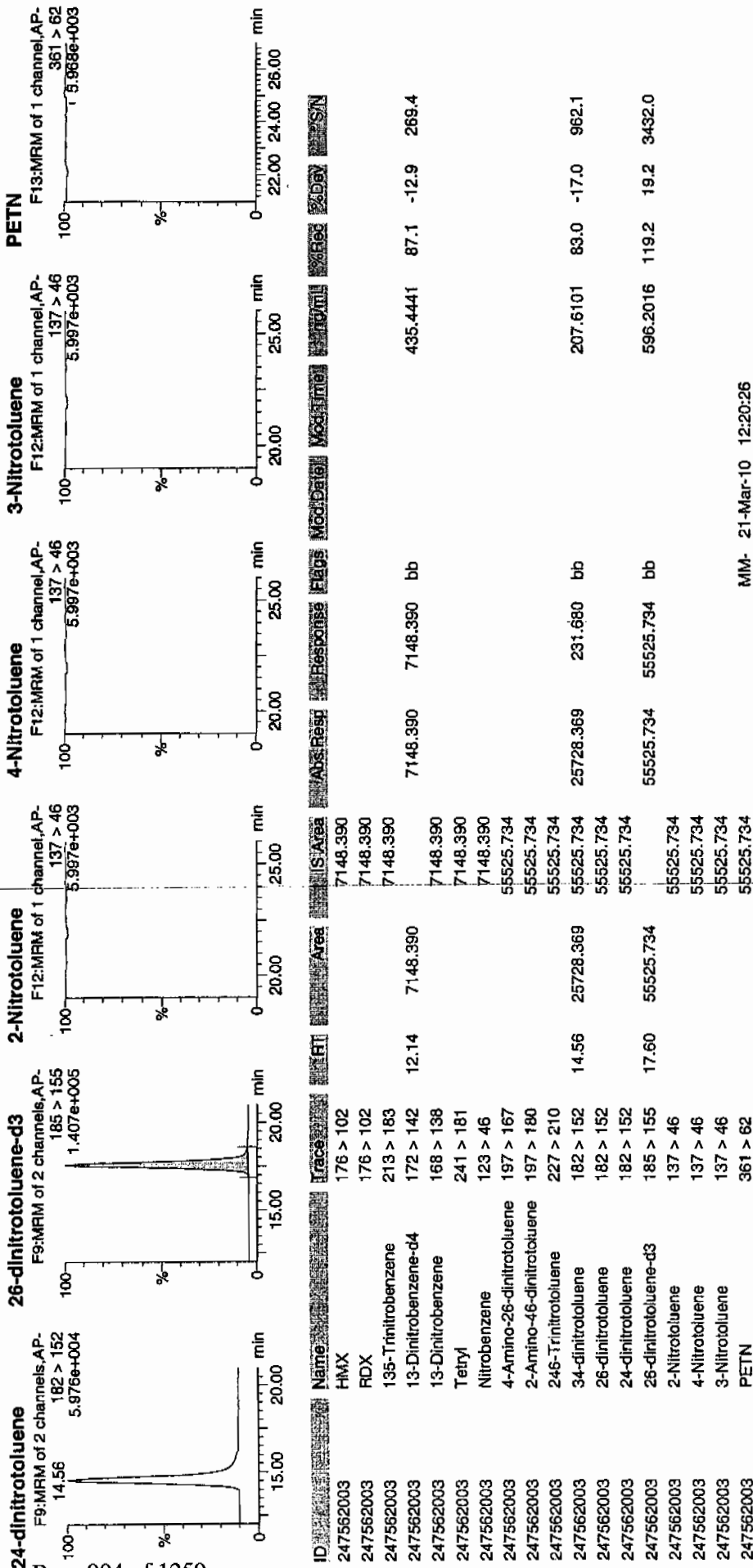
WAT  
03/21/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Mar 21 12:22:16 2010, Page 32 of 103

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8313

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562003

Sample Amount 2

Moisture: 3.6

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100034.wiff

Date Analyzed: 11-MAR-10 00:09

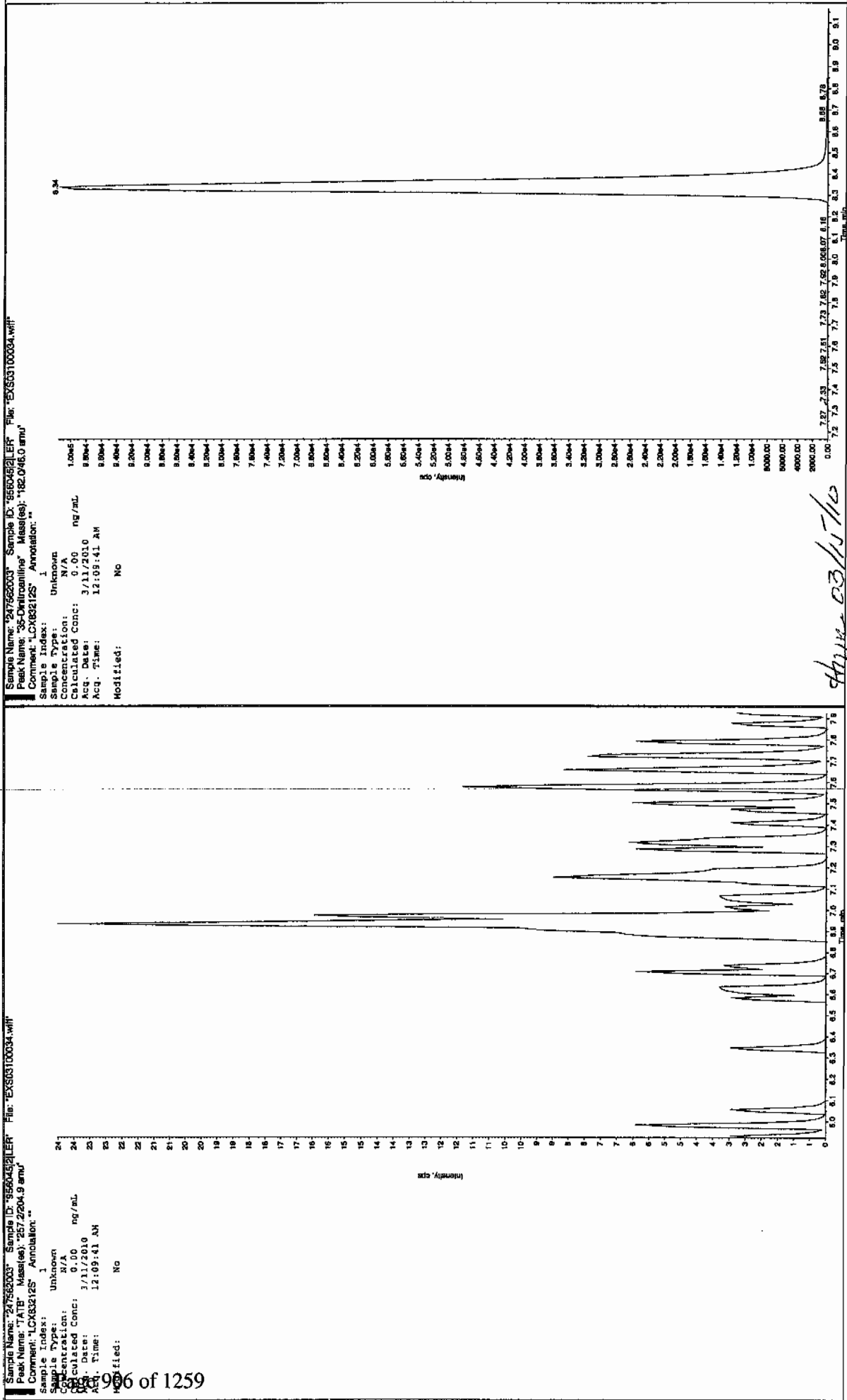
Units: ug/kg

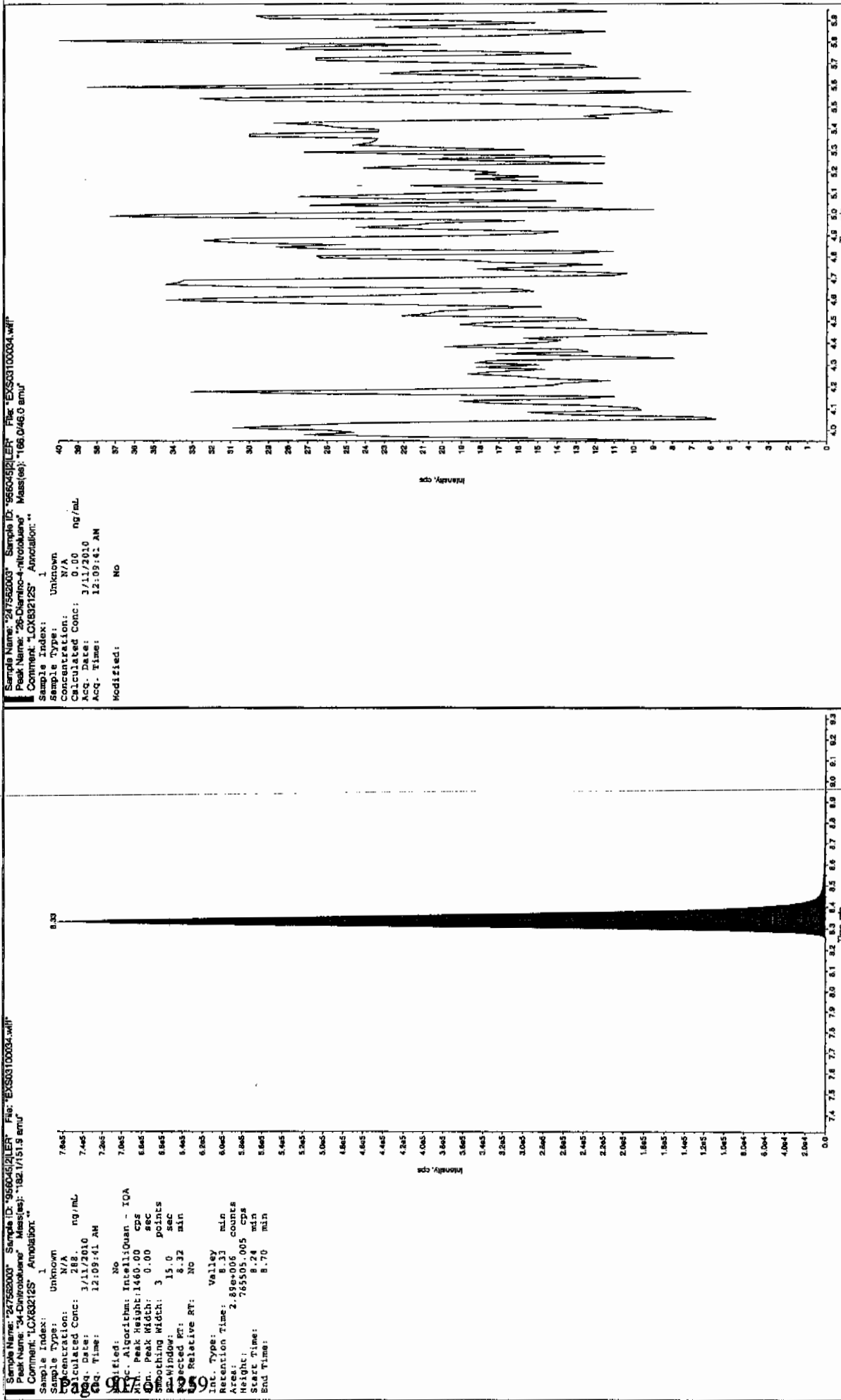
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

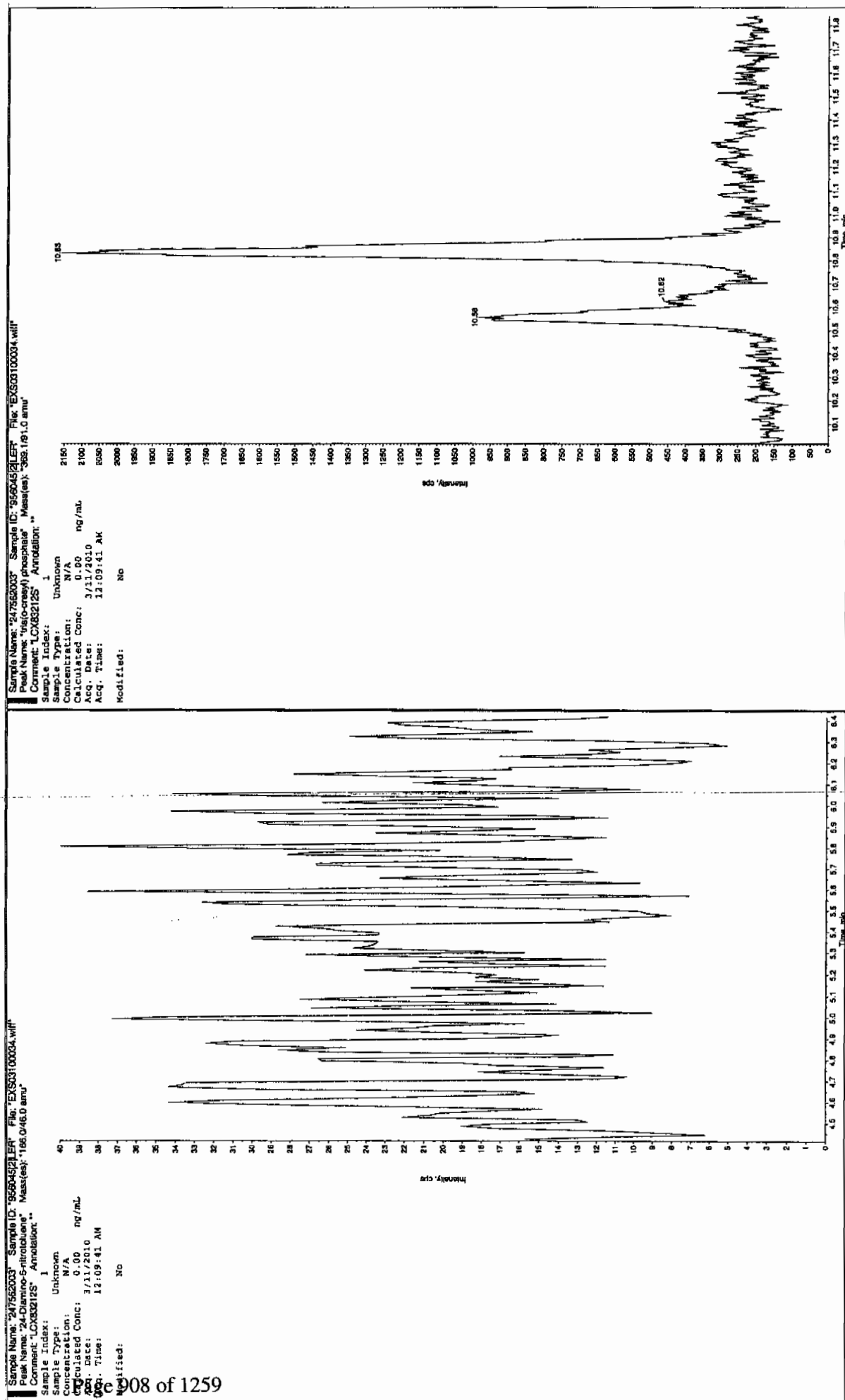
Instrument Value X  $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$  X Dilution Factor

Jan 31/13/10





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS #4



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8312

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562004

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0323013a

Date Analyzed: 23-MAR-10 15:02

Units: ug/kg

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

\*Concentration =

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

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0323013a

Date: 23-Mar-2010

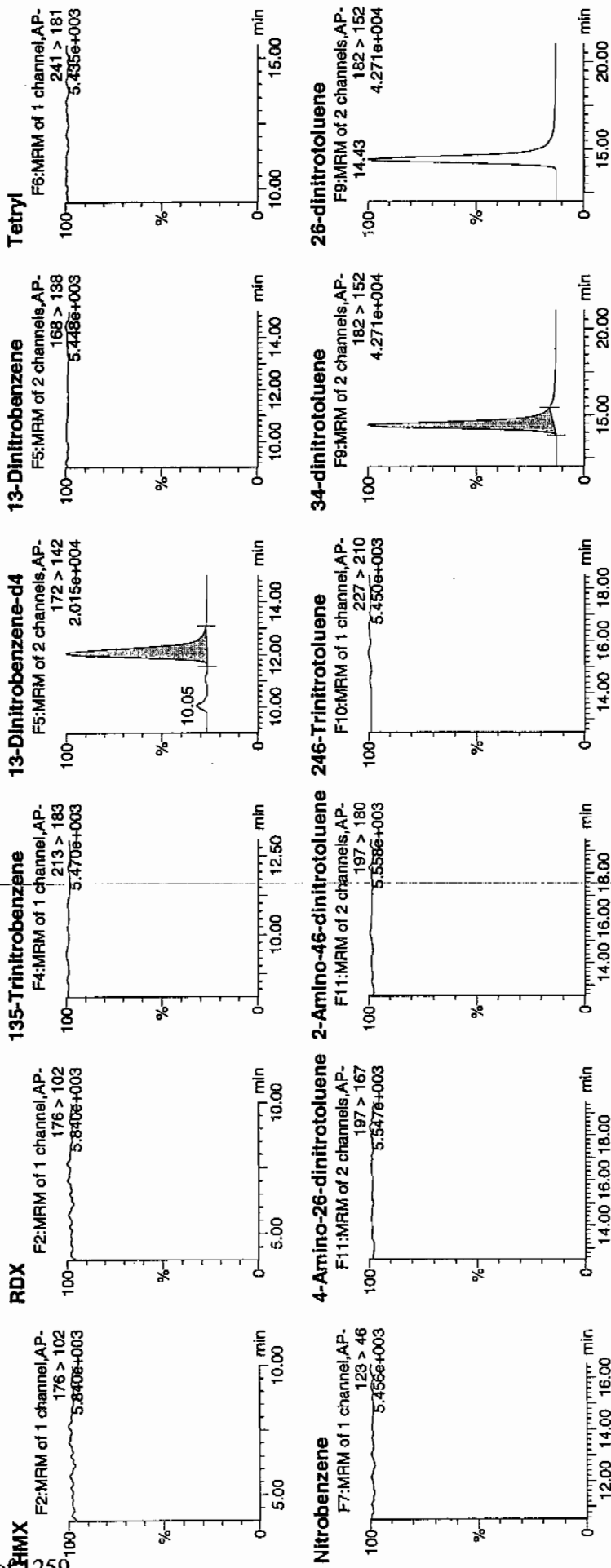
Time: 15:02:49

ID: 247562004

Vial: 1:3,A

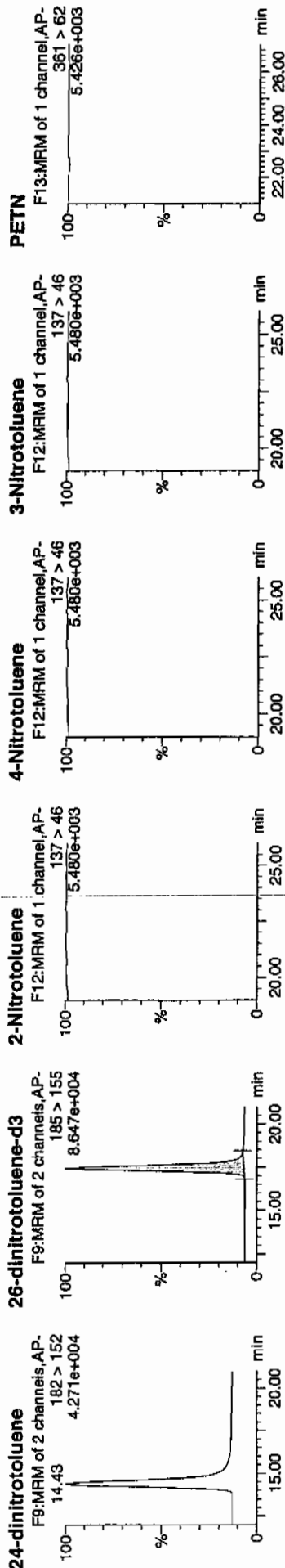
not  
3/24/10

1956045 / 8022 / 21



4/24/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

[illegible]

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8312

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562004

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100035.wiff

Date Analyzed: 11-MAR-10 00:25

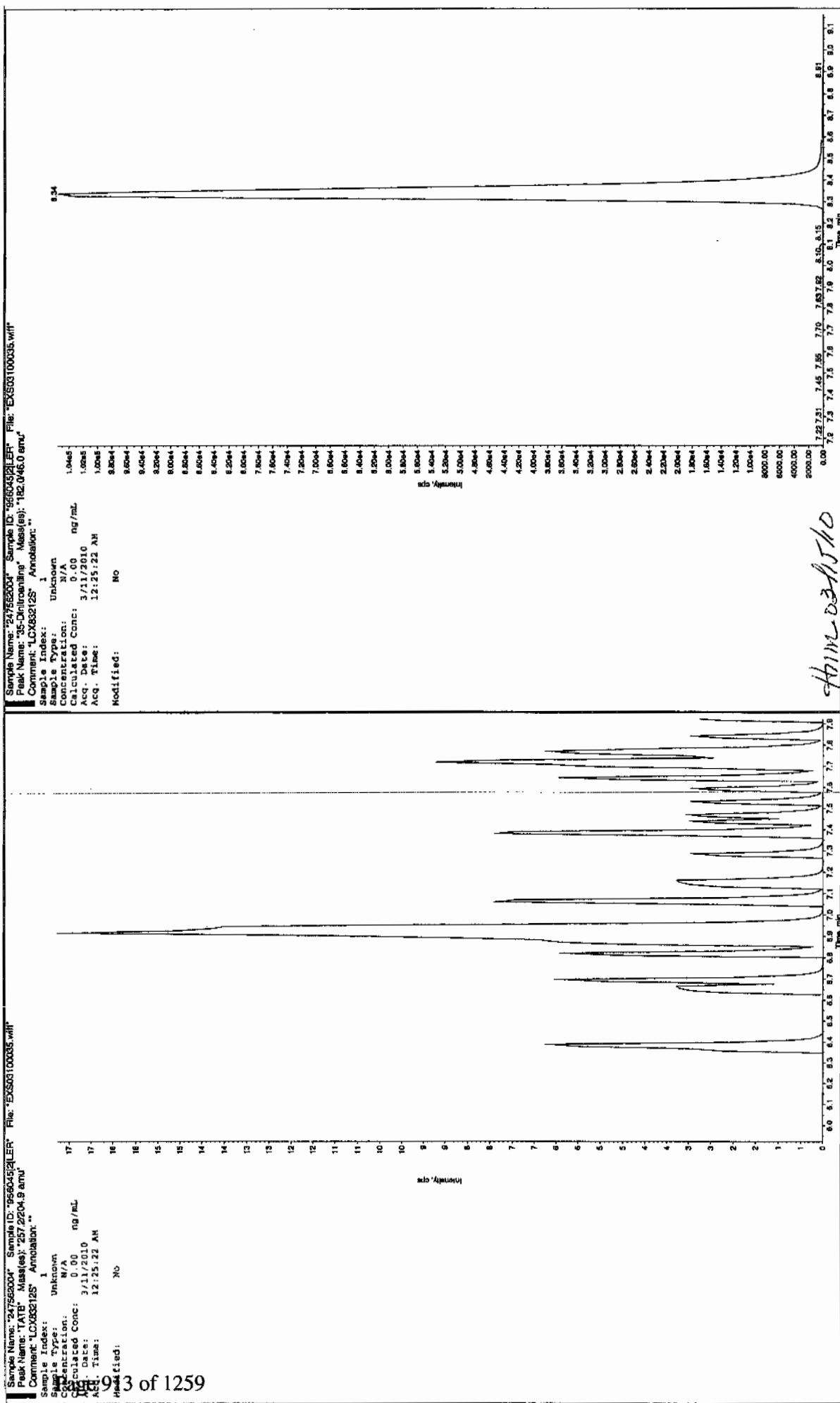
Units: ug/kg

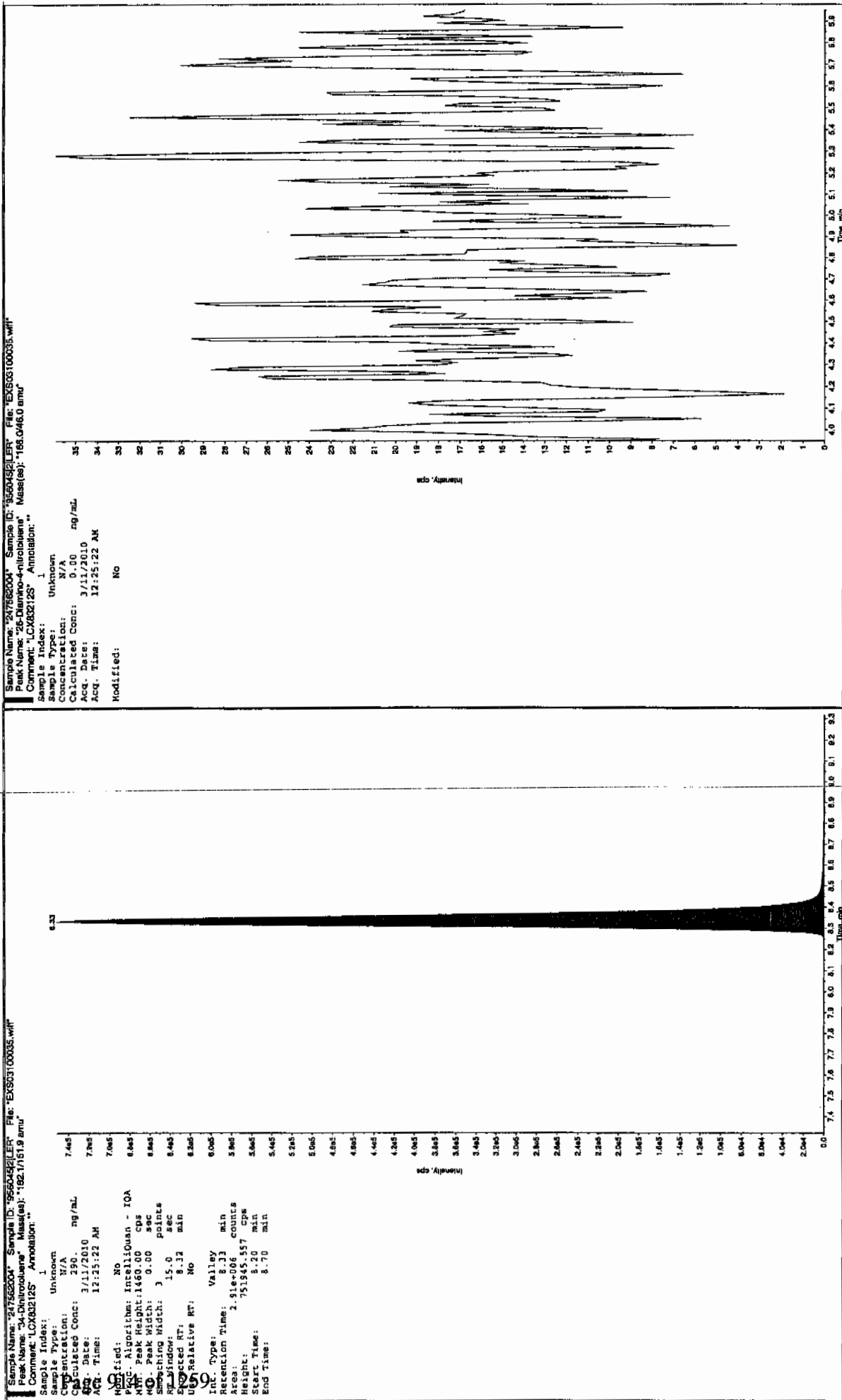
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

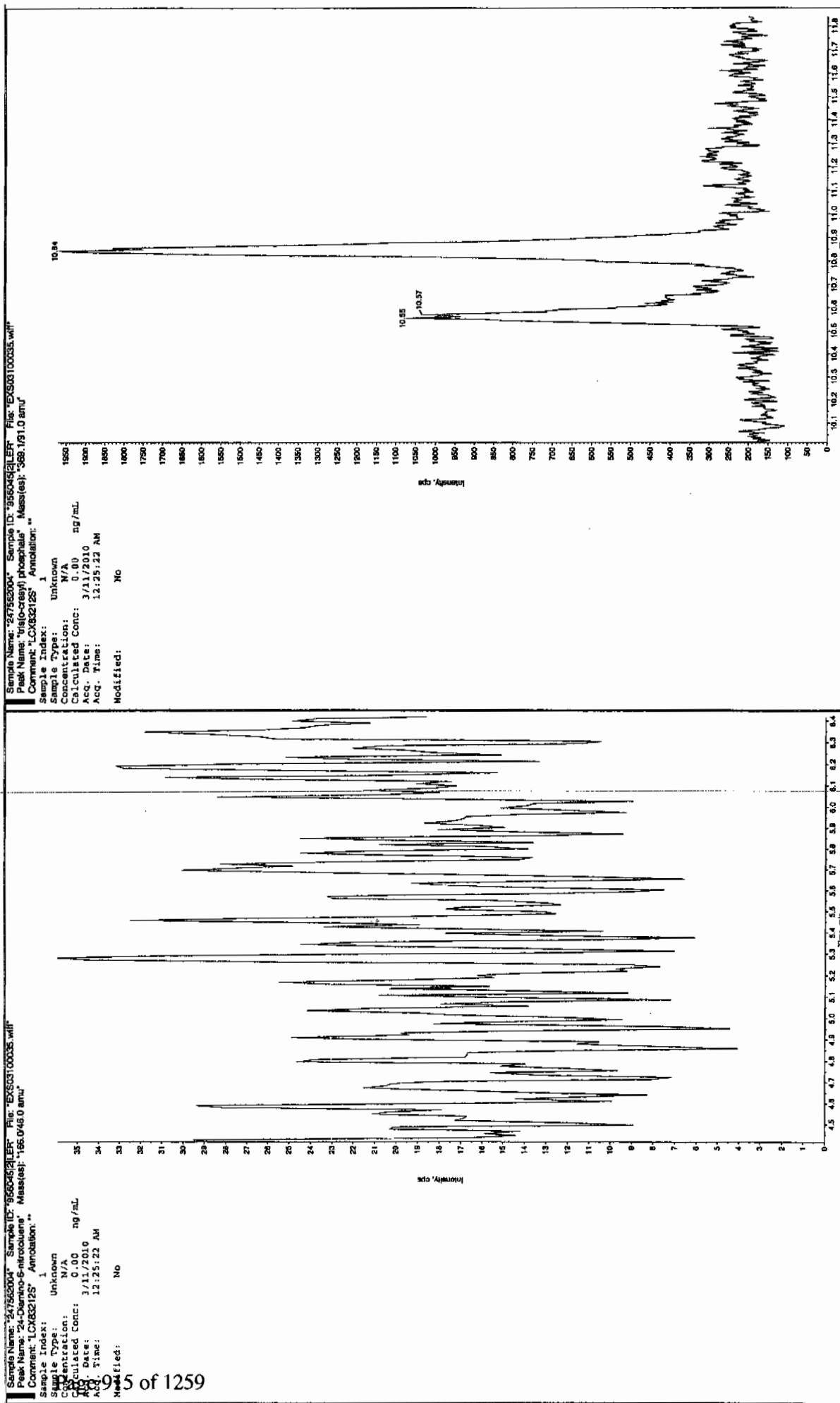
\*Concentration =

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

for 3/13/10







1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8315

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562005

Sample Amount 2

Moisture: 3.4

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319054a

Date Analyzed: 20-MAR-10 18:57

Units: ug/kg

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

\*Concentration =

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



Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319054a

Date: 20-Mar-2010

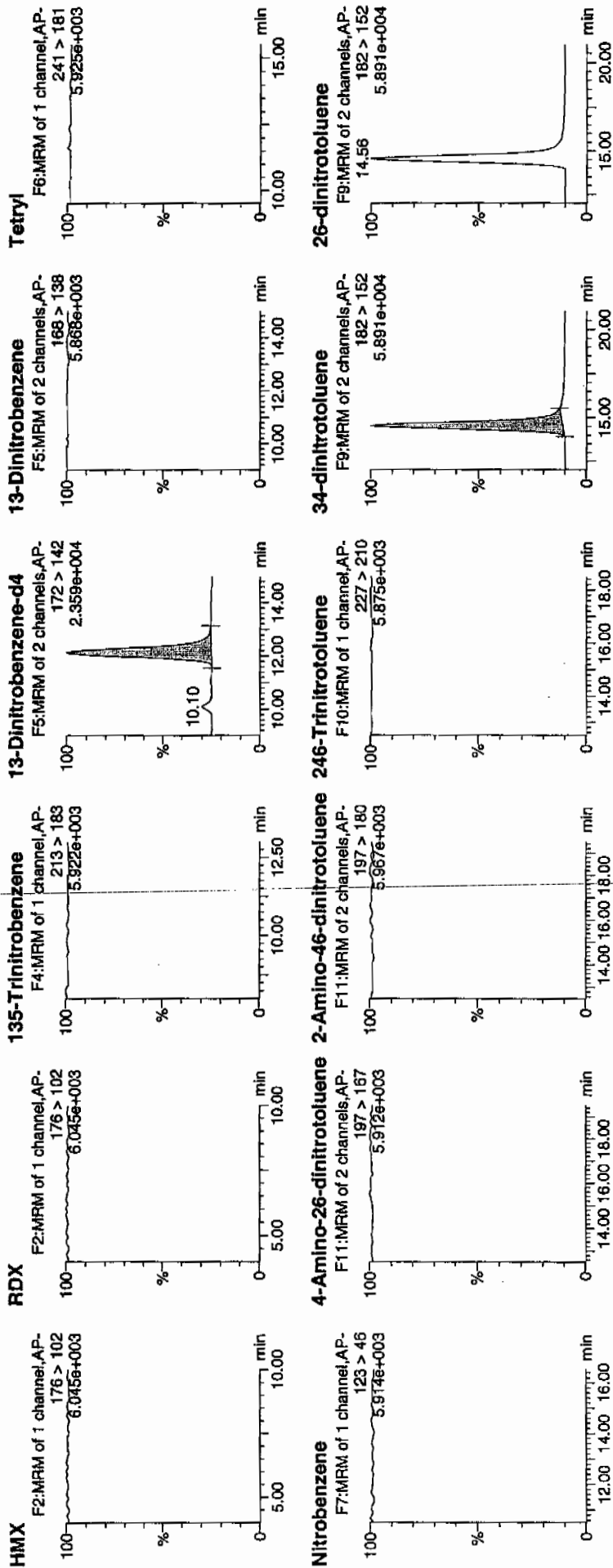
Time: 18:57:34

ID: 247562005

Vial: 2:4,B

1471  
3/21/10

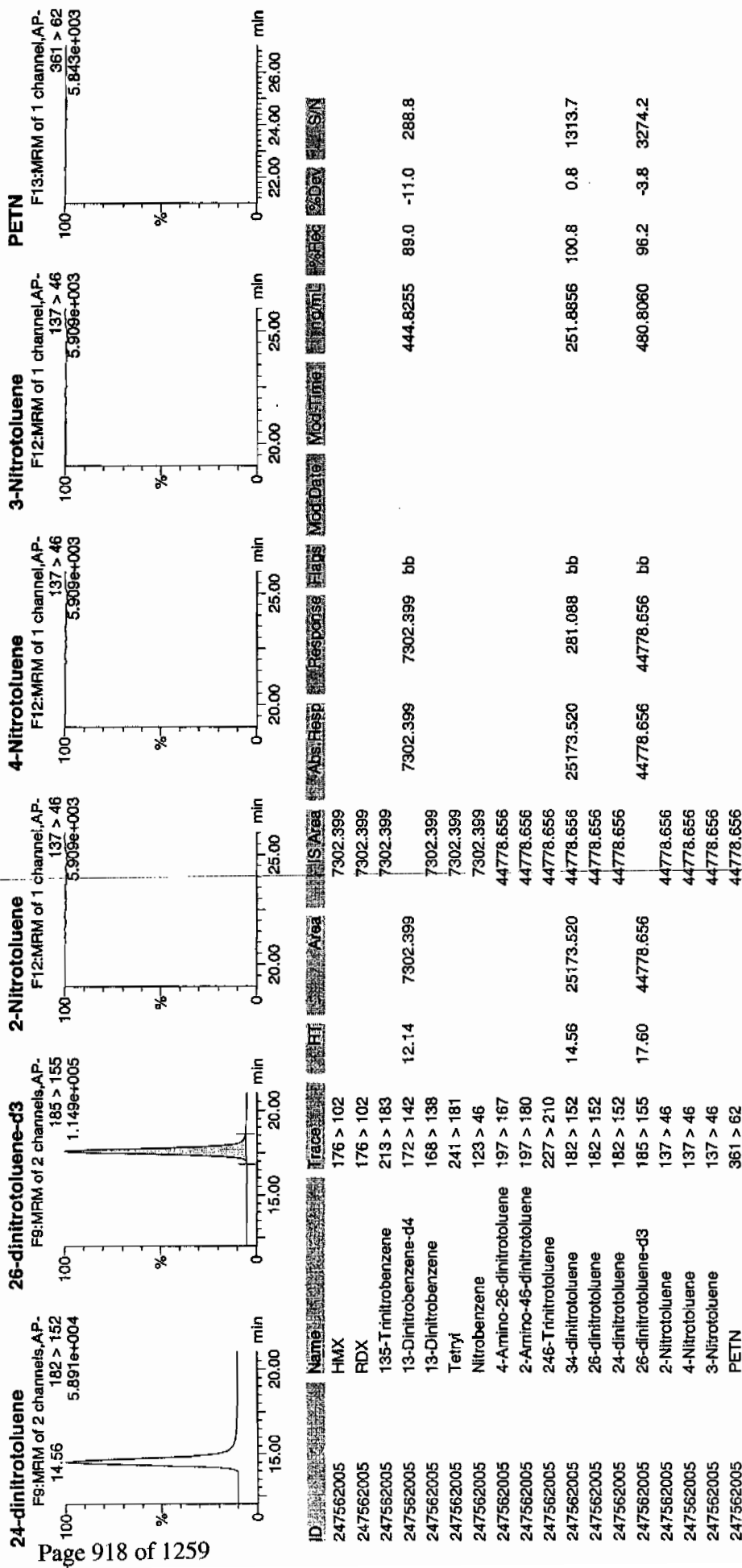
ANU | 936045 | 21



from 03/24/10

**Quantify Sample Report**  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8315

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562005

Sample Amount 2

Moisture: 3.4

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100036.wiff

Date Analyzed: 11-MAR-10 00:41

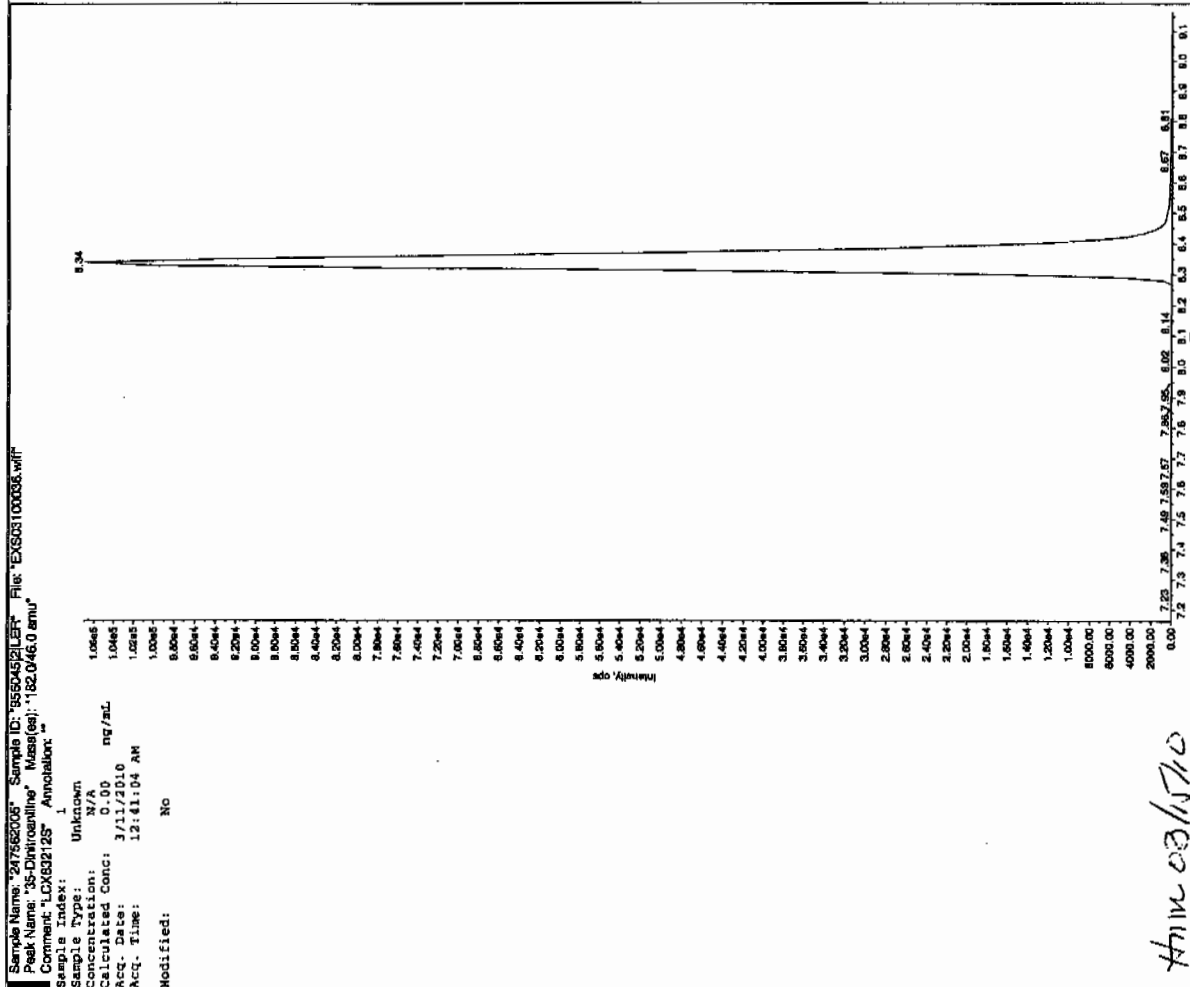
Units: ug/kg

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

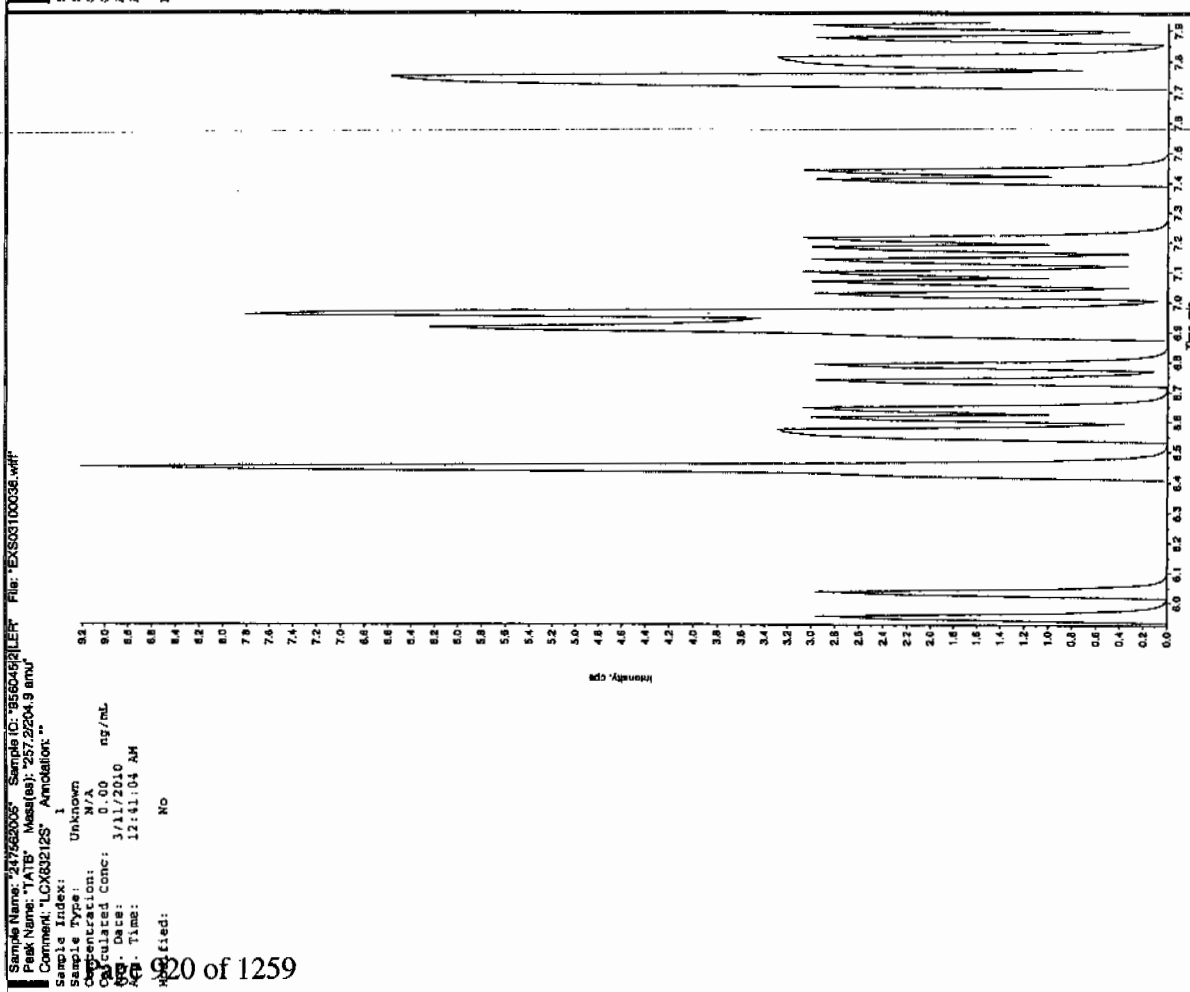
\*Concentration =

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

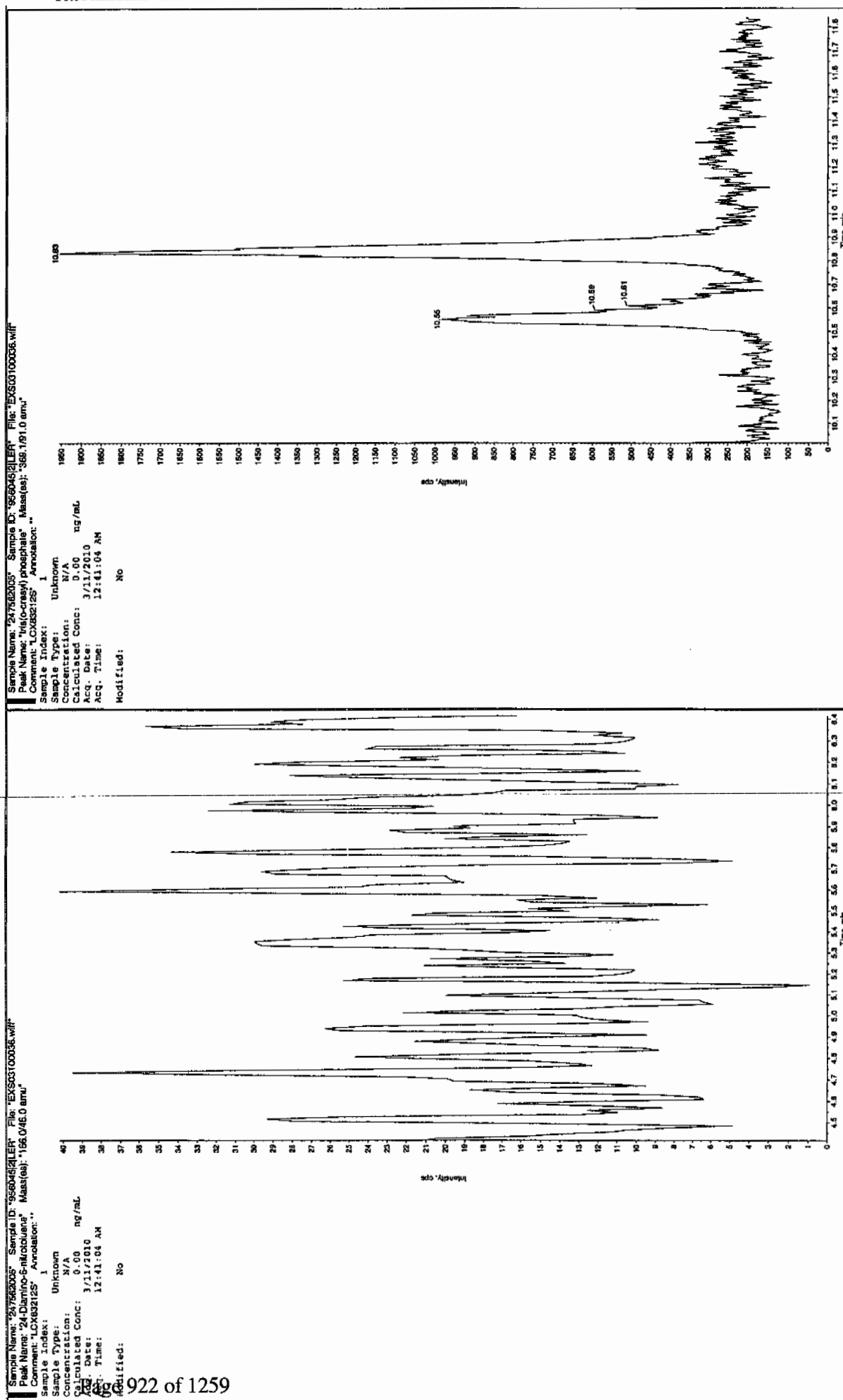
Jan 31/3/10



Jan 03/1/10







1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8311

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562006

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319055a

Date Analyzed: 20-MAR-10 19:27

Units: ug/kg

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

\*Concentration =

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319055a

Date: 20-Mar-2010

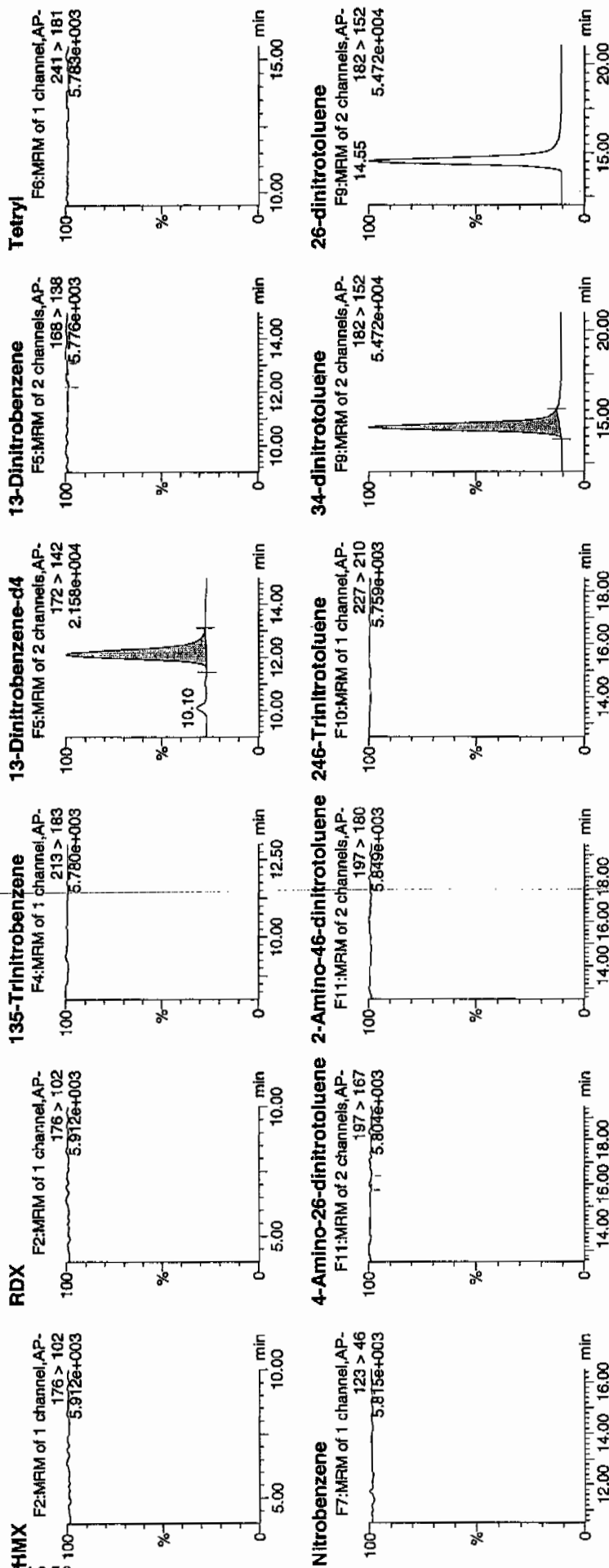
Time: 19:27:04

ID: 247562006

Vial: 2:4,C

4477  
3/21/10

WAL/956045 / 8022 / 121



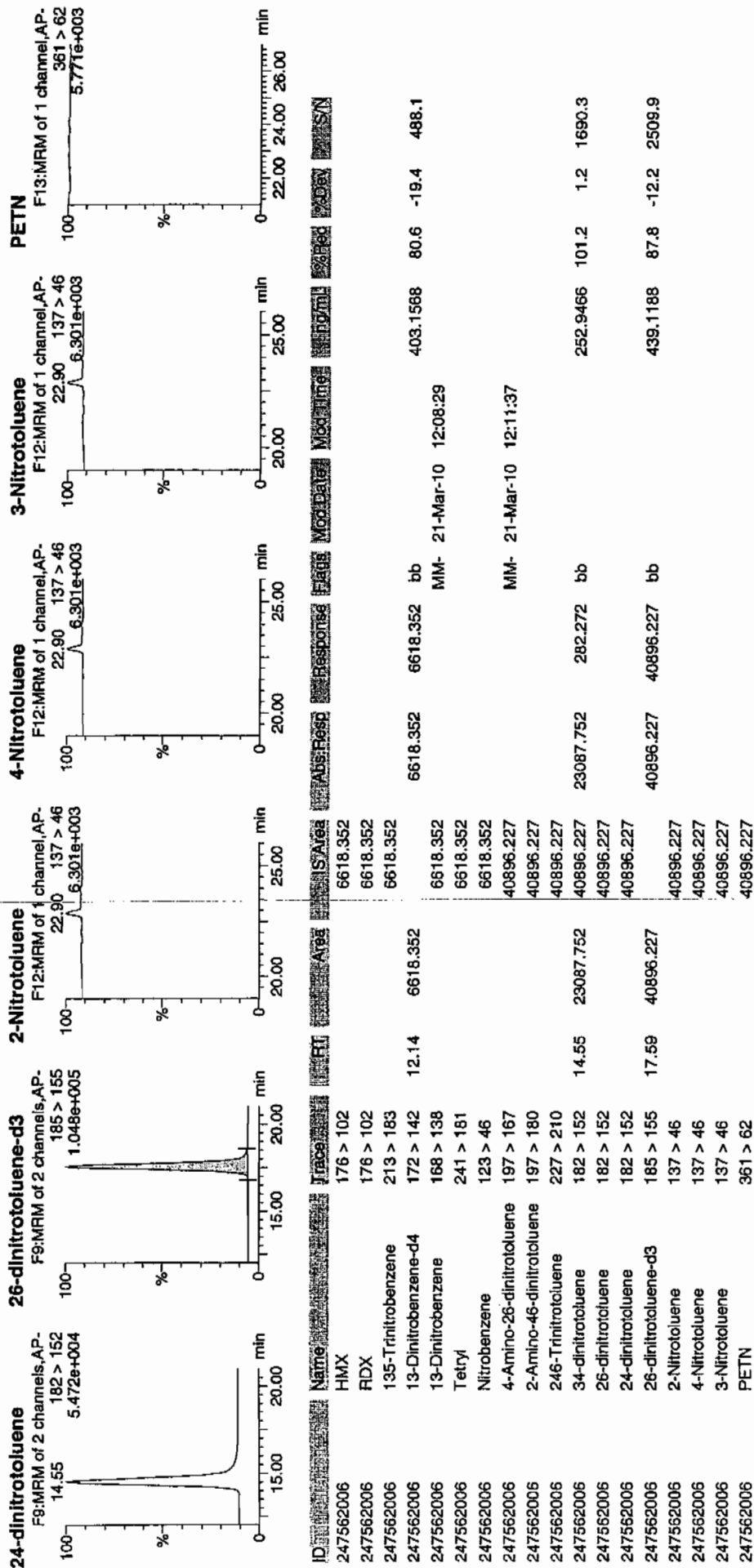
4477  
03/24/10



Printed: Sun Mar 21 12:22:16 2010, Page 38 of 103

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8311

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562006

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100040.wiff

Date Analyzed: 11-MAR-10 01:43

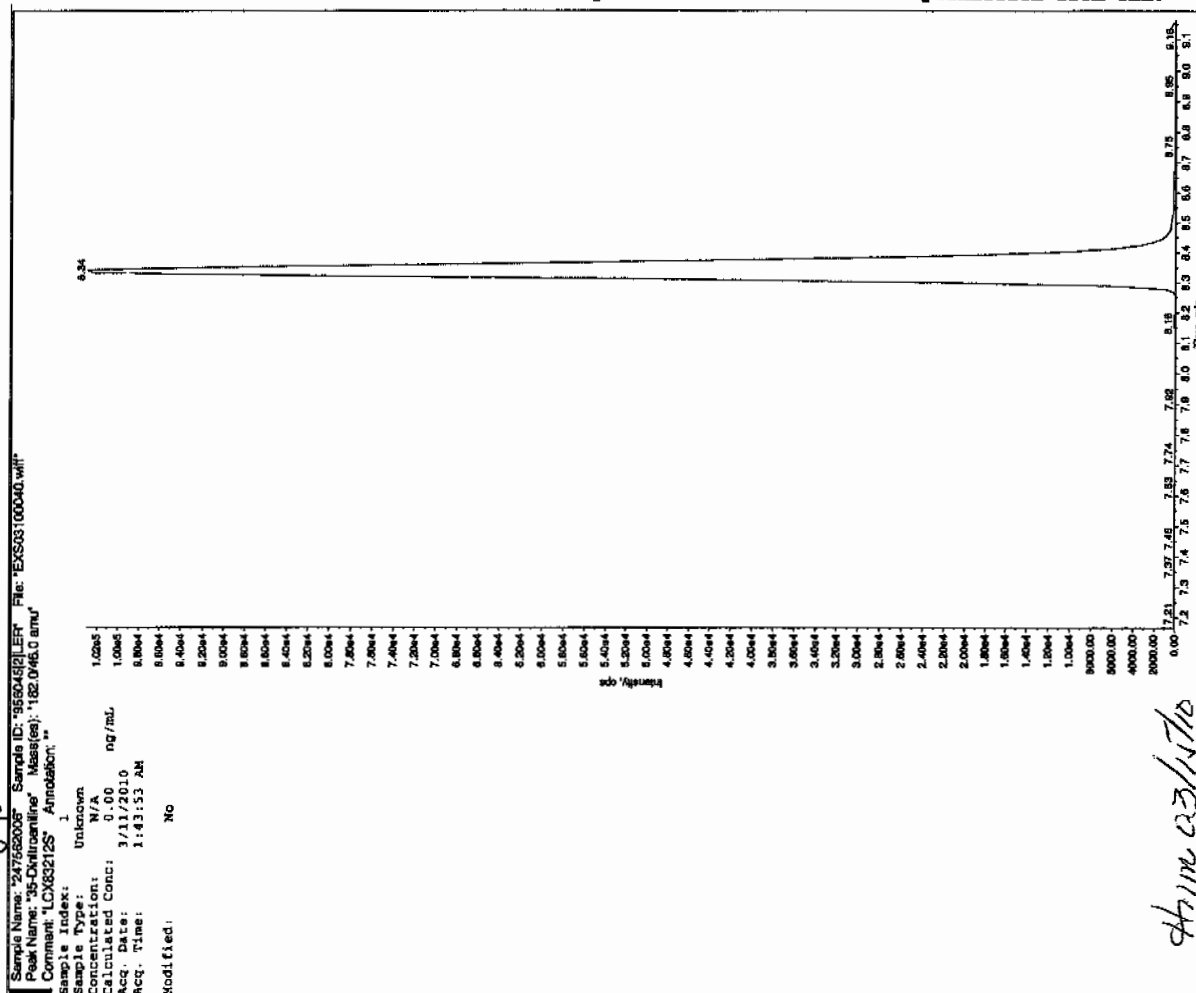
Units: ug/kg

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

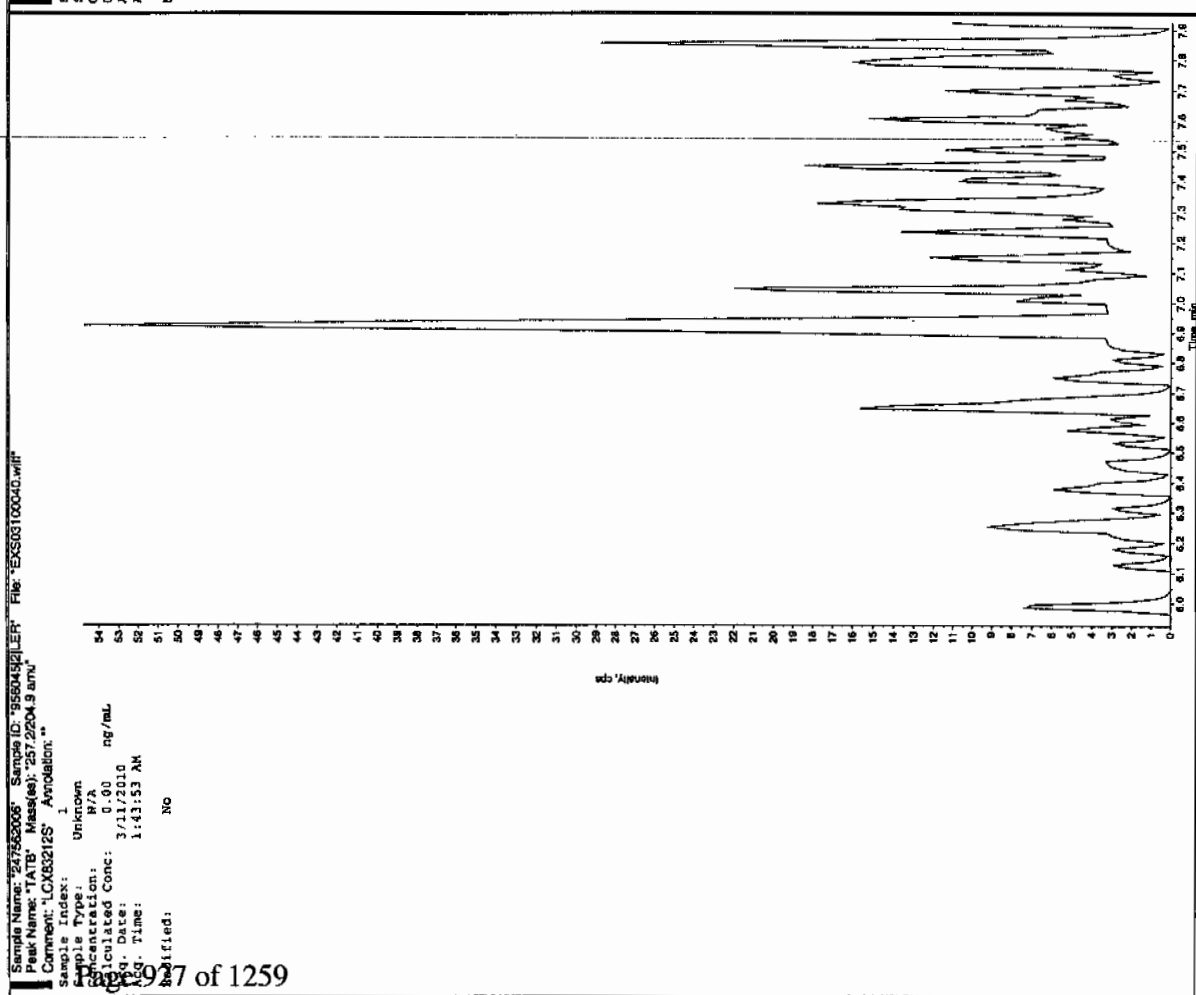
\*Concentration =

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

See 3/13/10



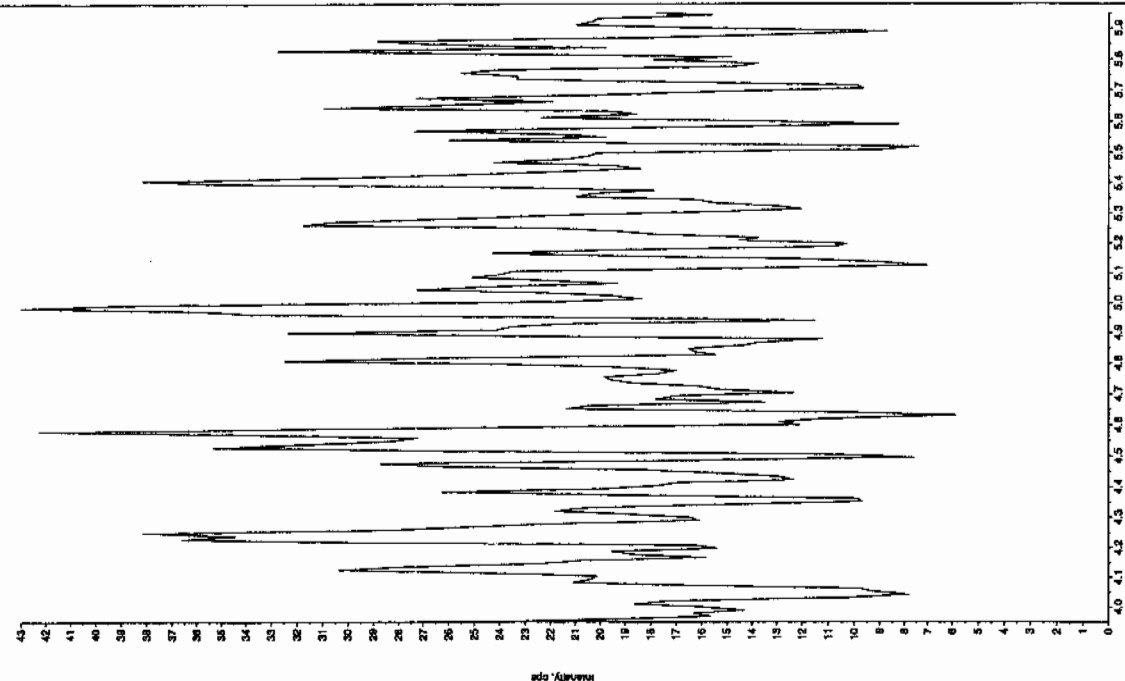
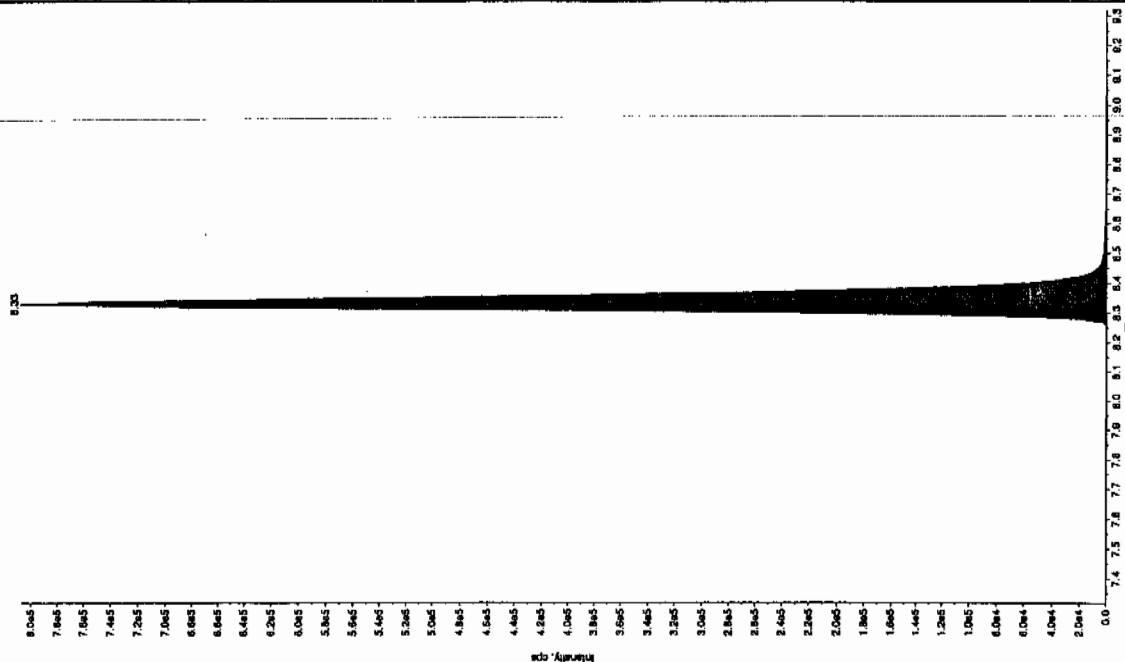
Time 02/11/10

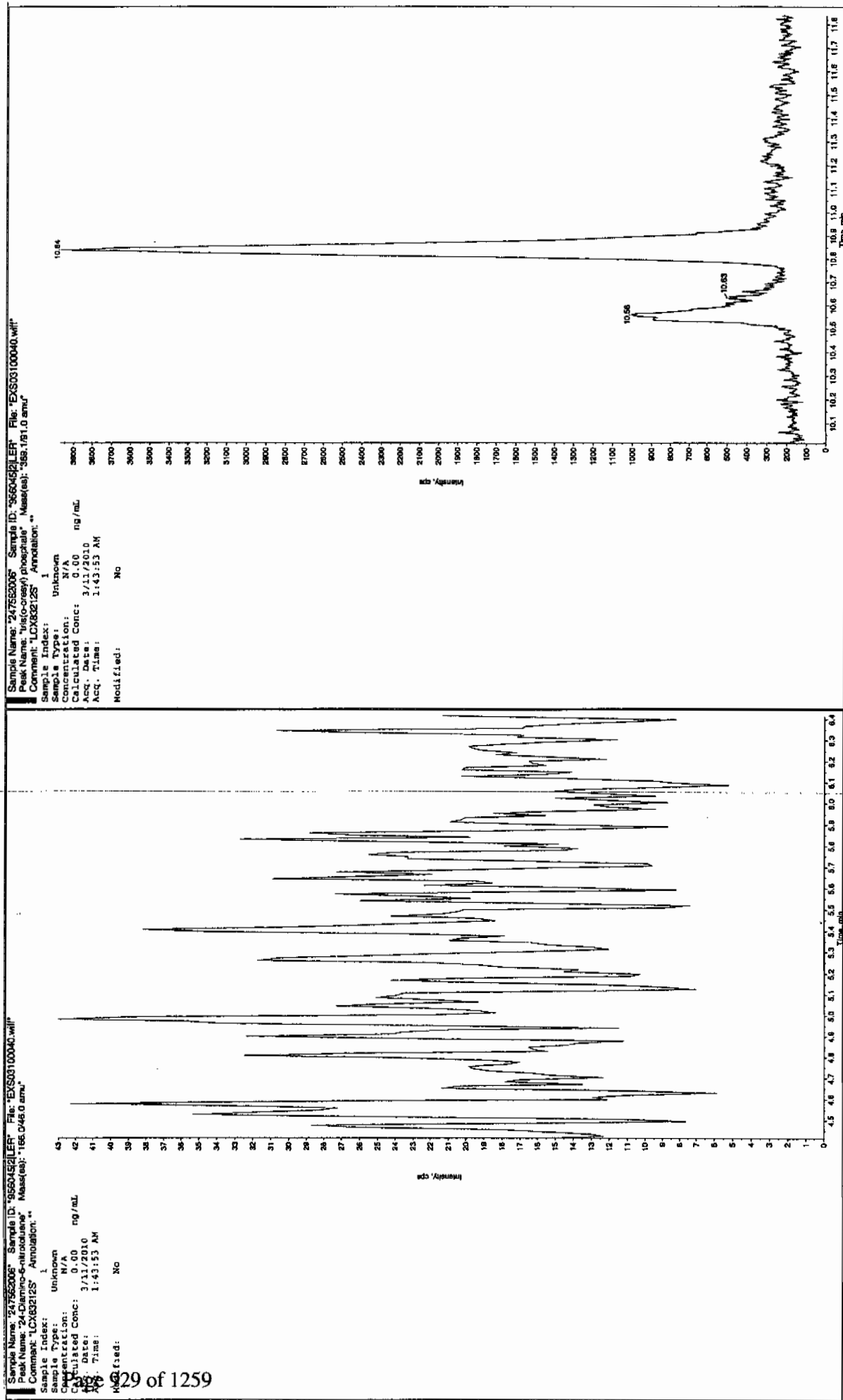


Sample Name: "247562006" Sample ID: "956045|2|LER" File: "EXS03100040.wiff"  
Peak Name: "34-Dinitrofluorene" Mass(es): "192.1/151.9 amu"  
Comment: "LCX83212S" Annotation: ""

Sample ID:	1	Sample Type:	Unknown
Concentration:	233	ng/mL	
Associated Conc:	N/A		
Run Date:	3/11/2018		
Run Time:	1:43:53 AM		
File:	10		
Used:	NO		
Algorithm:	IntelliQuan - IOA		
Peak Height:	1465.00	cps	
Peak Width:	0.00	sec	
Acquiring Width:	3	points	
Acquiring Window:	15.0	sec	
Corrected RT:	8.32	min	
Relative RT:	NO		
Type:	Valley		
Retention Time:	8.33	min	
Abundance:	7,946,006	counts	
Height:	807324.219	cps	
Start Time:	8.25	min	
End Time:	8.73	min	

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00
Acq. Date:	3/11/2010
Acq. Time:	1:43:53 AM
Modified:	No





\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8310

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562007

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319056a

Date Analyzed: 20-MAR-10 19:56

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		

Quantity Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0319056a

Date: 20-Mar-2010

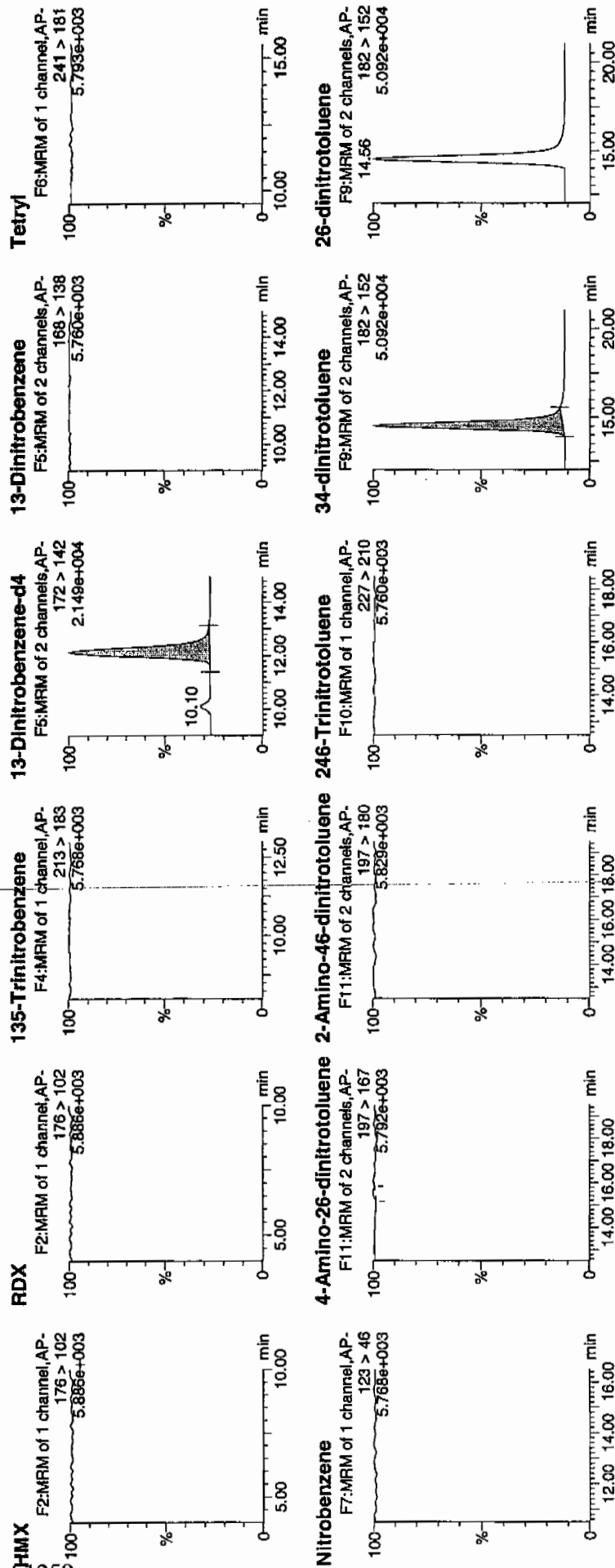
Time: 19:56:33

ID: 247562007

Vial: 2:4,D

3/21/10

259  
HMX  
RDX  
135-Trinitrobenzene  
13-Dinitrobenzene-d4  
Tetryl  
13-Dinitrobenzene  
26-dinitrotoluene  
34-dinitrotoluene  
4-Amino-26-dinitrotoluene  
2-Amino-46-dinitrotoluene  
4-Amino-26-dinitrotoluene  
Nitrobenzene

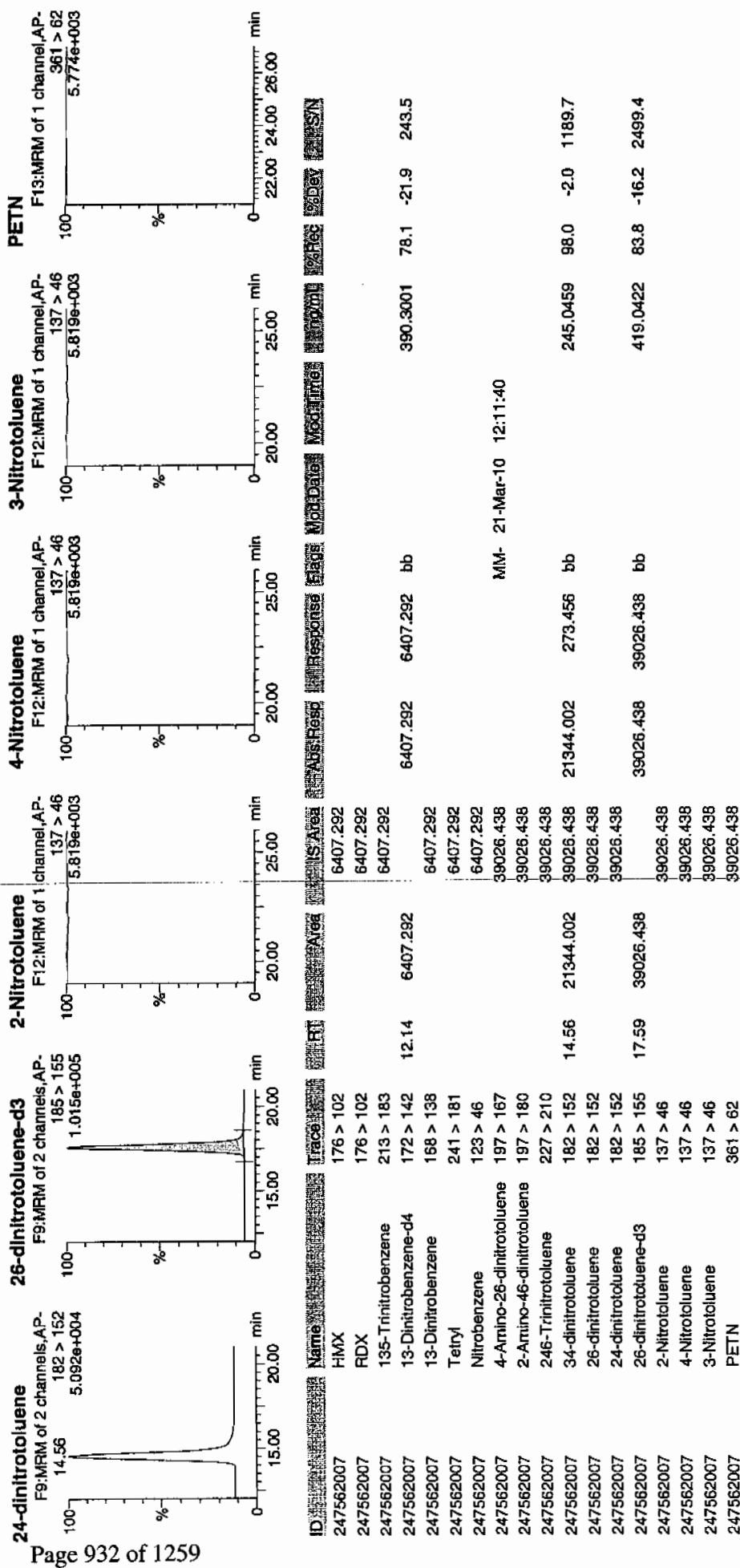


3/21/10

## Quantify Sample Report

Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8310

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562007

Sample Amount 2

Moisture: 3.7

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100041.wiff

Date Analyzed: 11-MAR-10 01:59

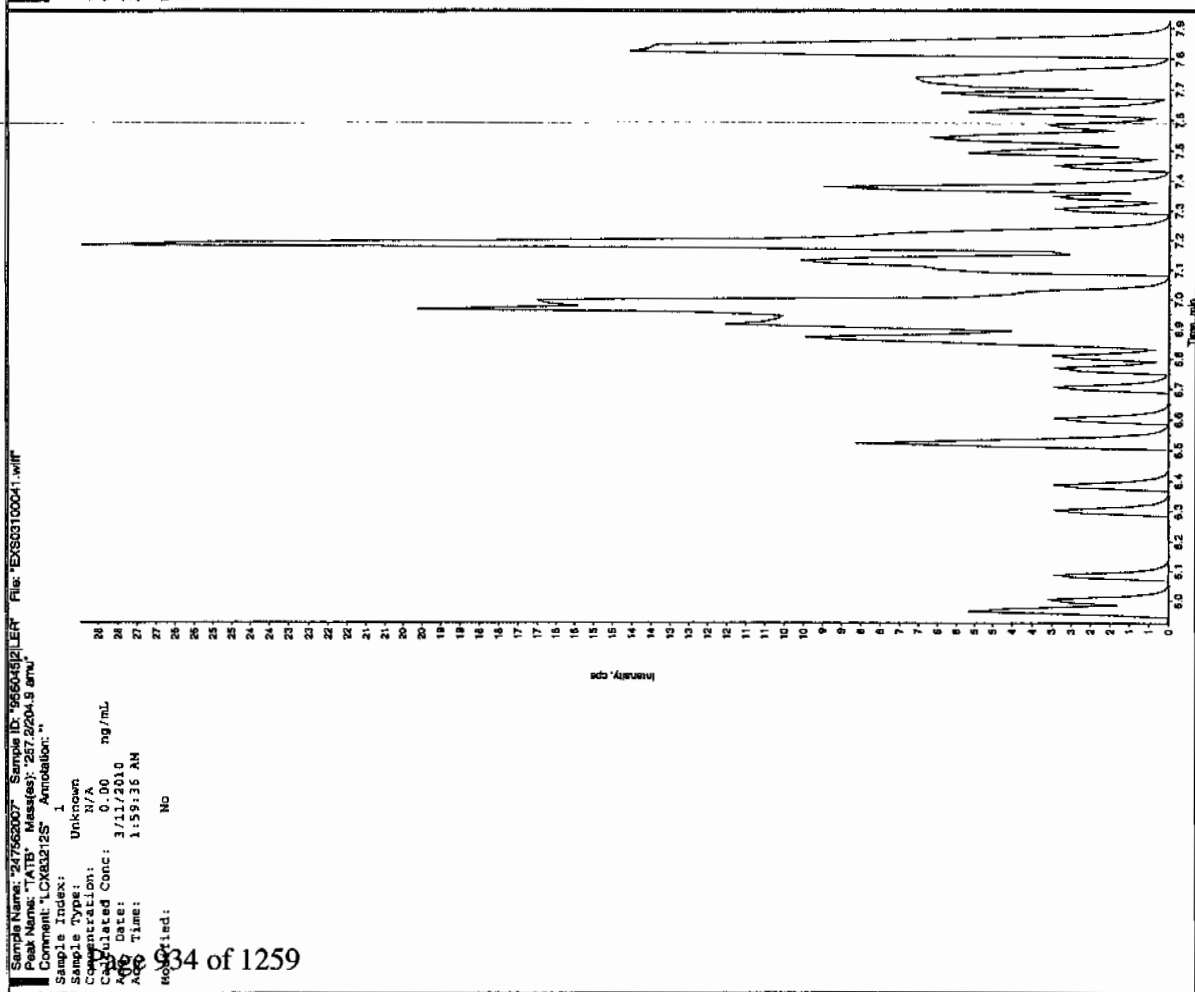
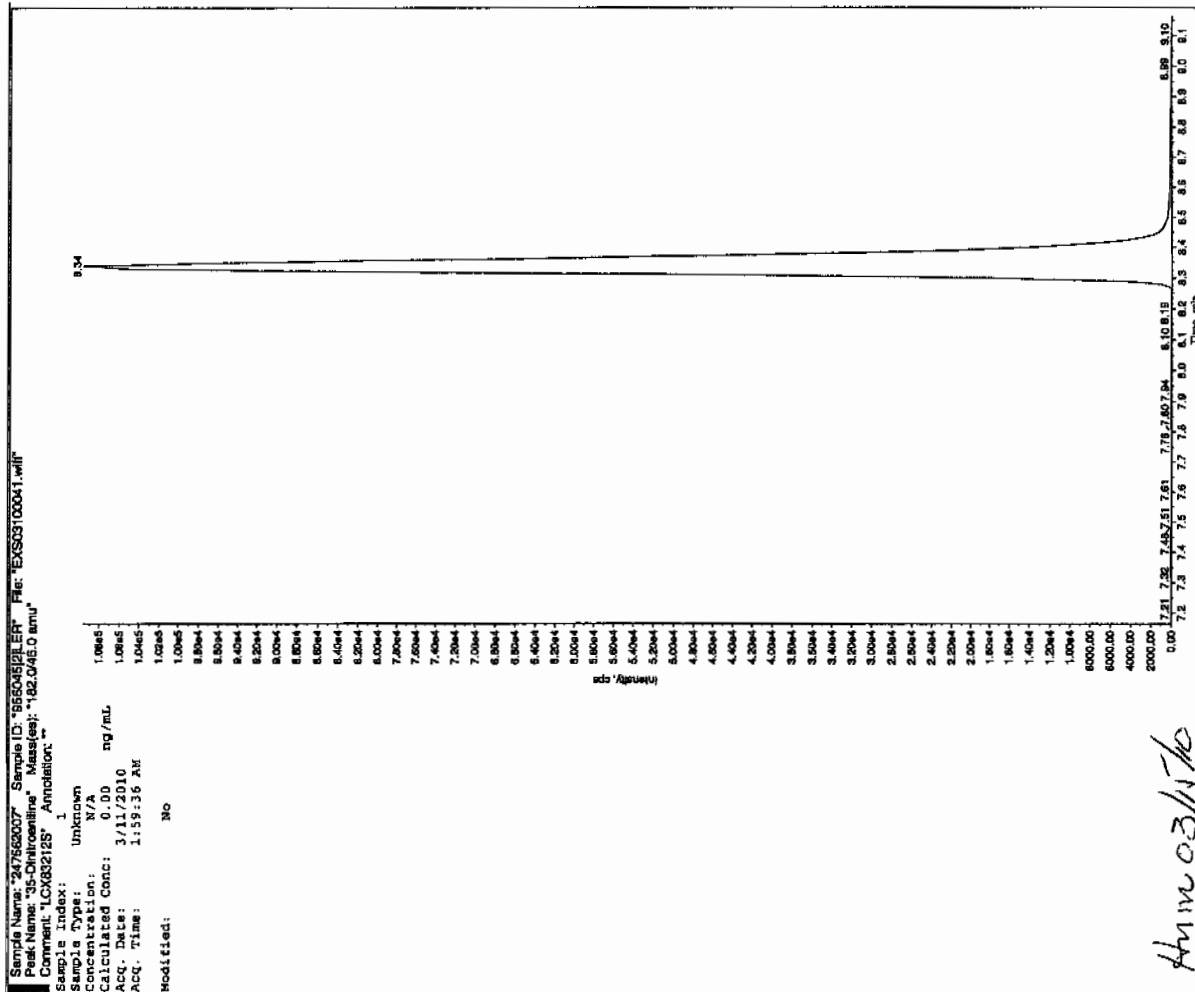
Units: ug/kg

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

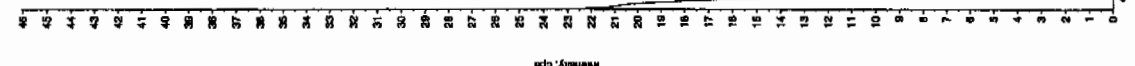
Ken 3/13/10



934 of 1259

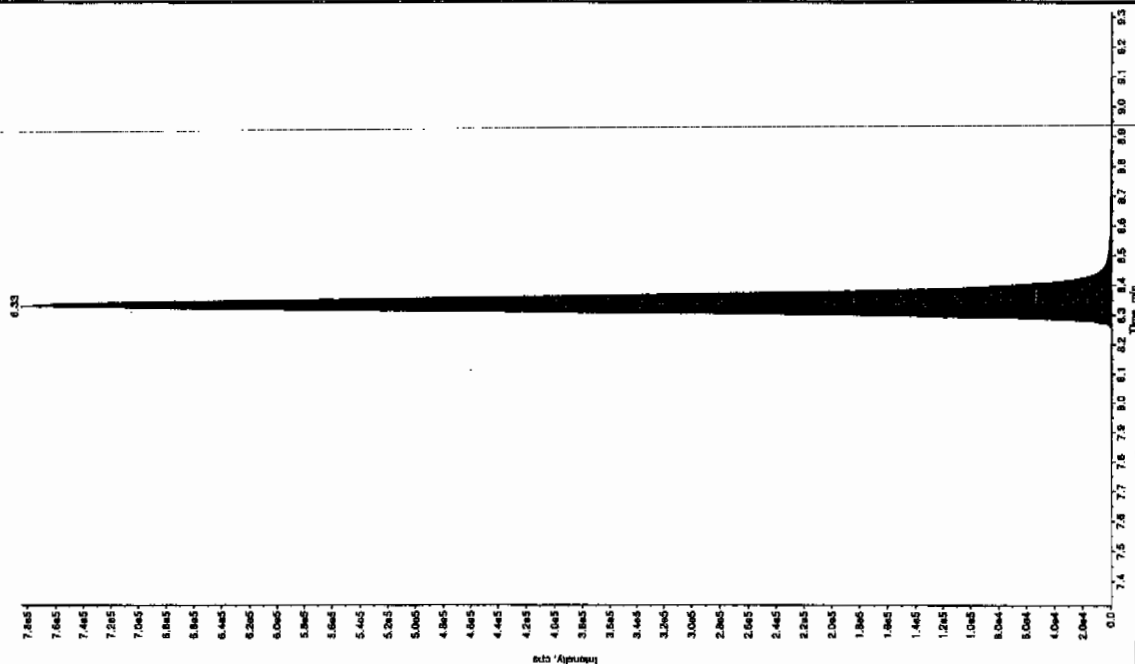
Sample Name: "247652007" Sample ID: "9550432125" File: "EX503100041.wif"  
 Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "186.0463.0 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:59:16 AM  
 Modified: No



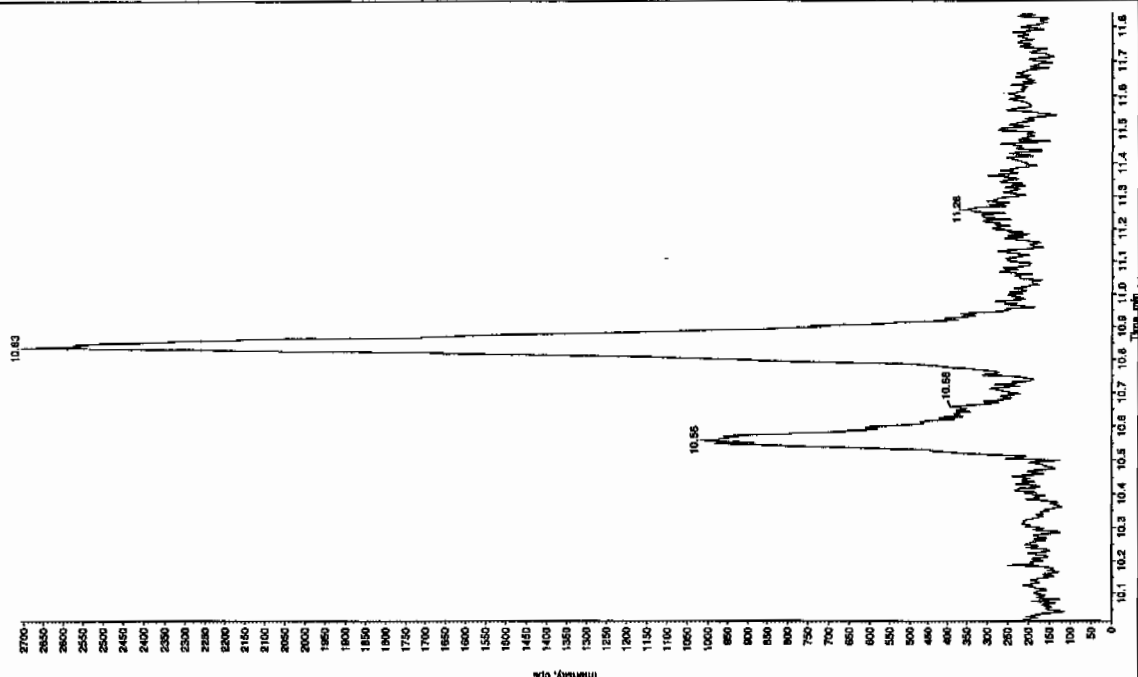
Sample Name: "247652007" Sample ID: "9550432125" File: "EX503100041.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.0451.9 amu"  
 Comment: "LCX832125" Annotation: "

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 286. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:59:16 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - TOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 Peak Window: 15.0 sec  
 Ret. Time: 8.32 min  
 Ret. Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Area: 2.95e+006 counts  
 Height: 784588.745 cps  
 Start Time: 8.24 min  
 End Time: 8.68 min



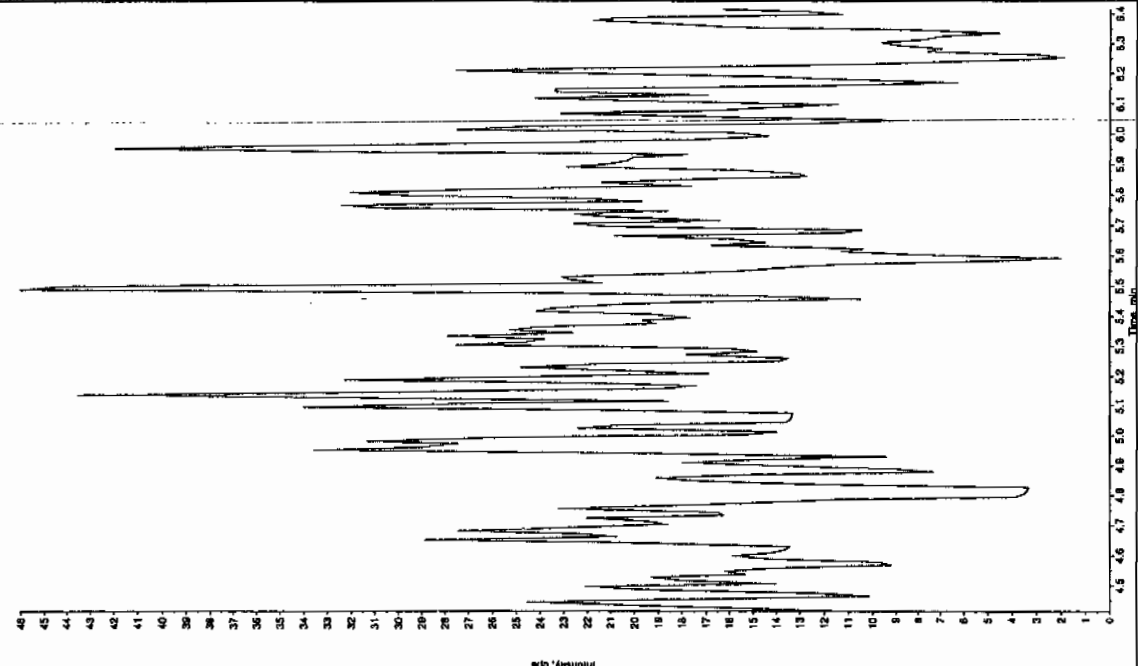
Sample Name: "247552007" Sample ID: "95604521.1" File: "EX503100041.wif"  
 Peak Name: "tris(2-chloroethyl) phosphite" Mass(es): "388.1/91.0 amu"  
 Comment: "LCX632125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:59:36 AM  
 Modified: No



Sample Name: "247552007" Sample ID: "95604521.1" File: "EX503100041.wif"  
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "166.046.0 amu"  
 Comment: "LCX632125" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:59:36 AM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8303

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562008

Sample Amount 2

Moisture: 3.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319057a

Date Analyzed: 20-MAR-10 20:26

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

**Quantity Sample Report**  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319057a

Date: 20-Mar-2010

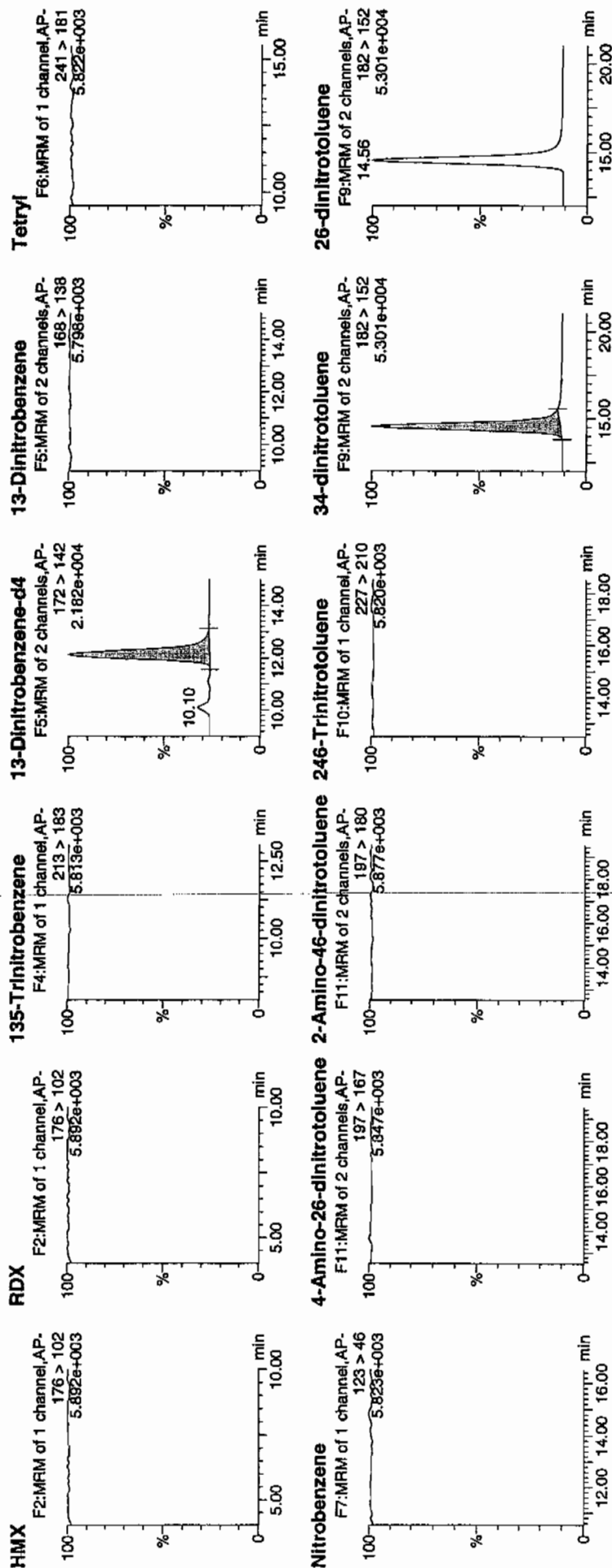
Time: 20:26:02

ID: 247562008

Vial: 2:4,E

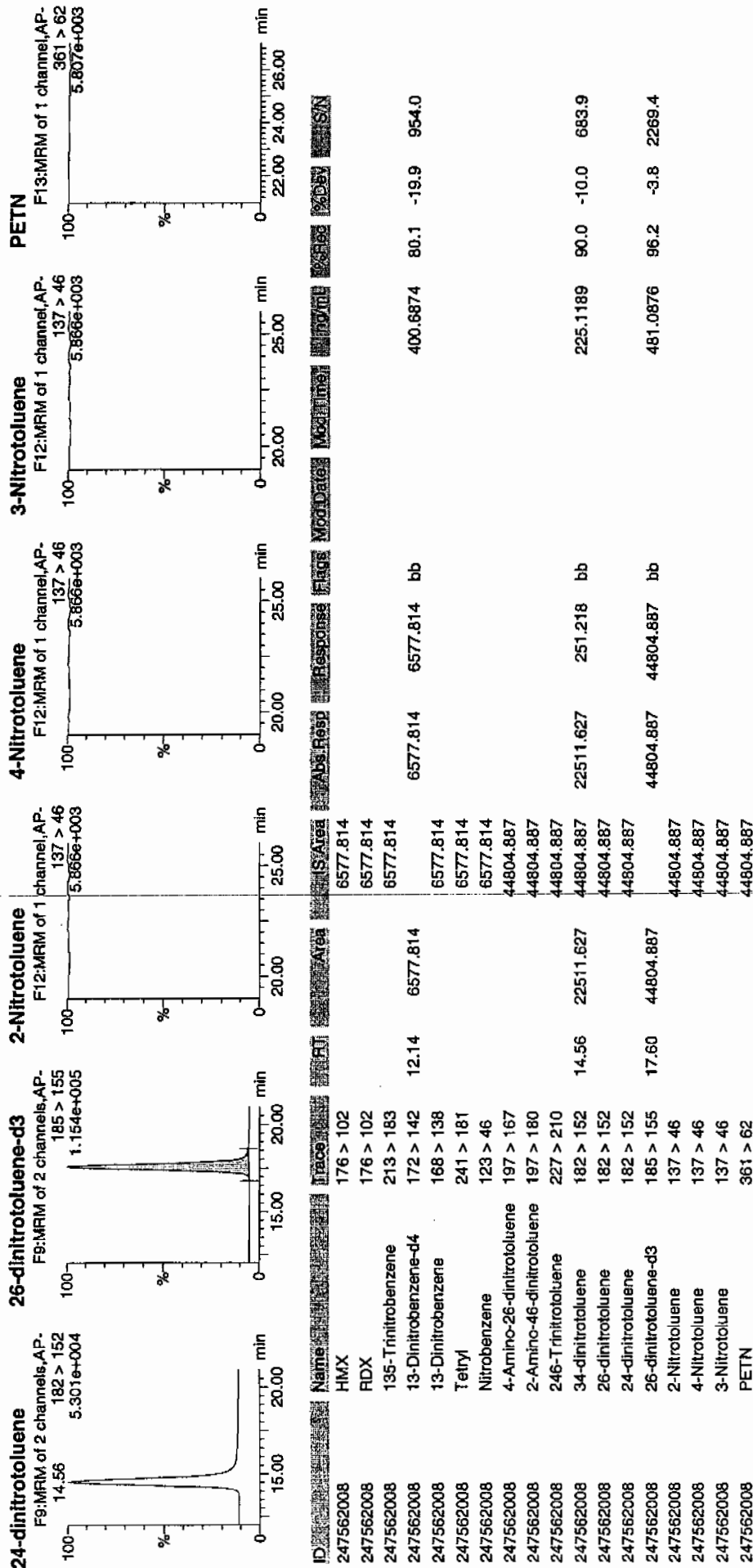
1477  
3/21/10

162x 956045 / 21



Amc  
03/24/10

Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8303

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562008

Sample Amount 2

Moisture: 3.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100042.wiff

Date Analyzed: 11-MAR-10 02:15

Units: ug/kg

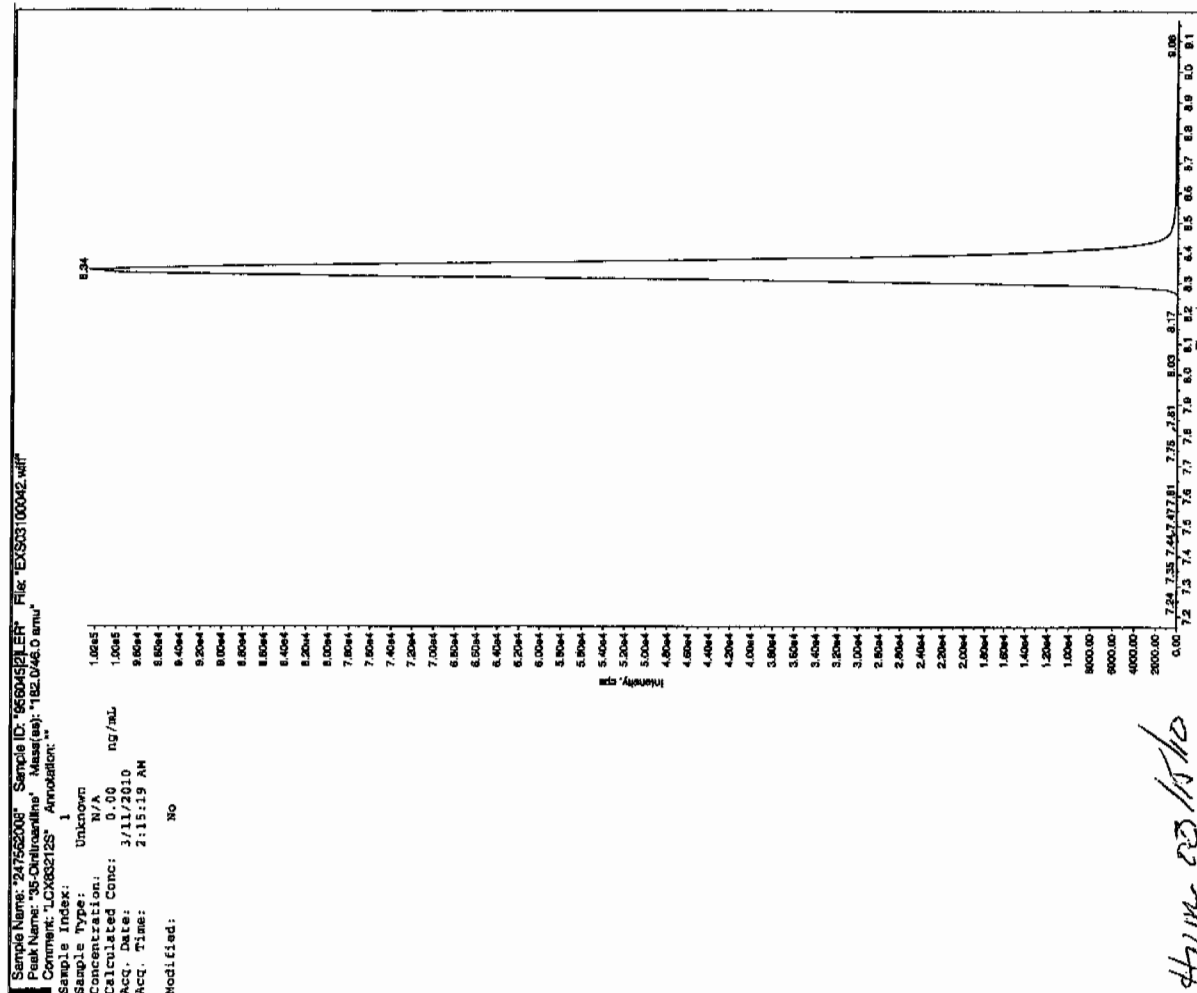
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

\*Concentration =

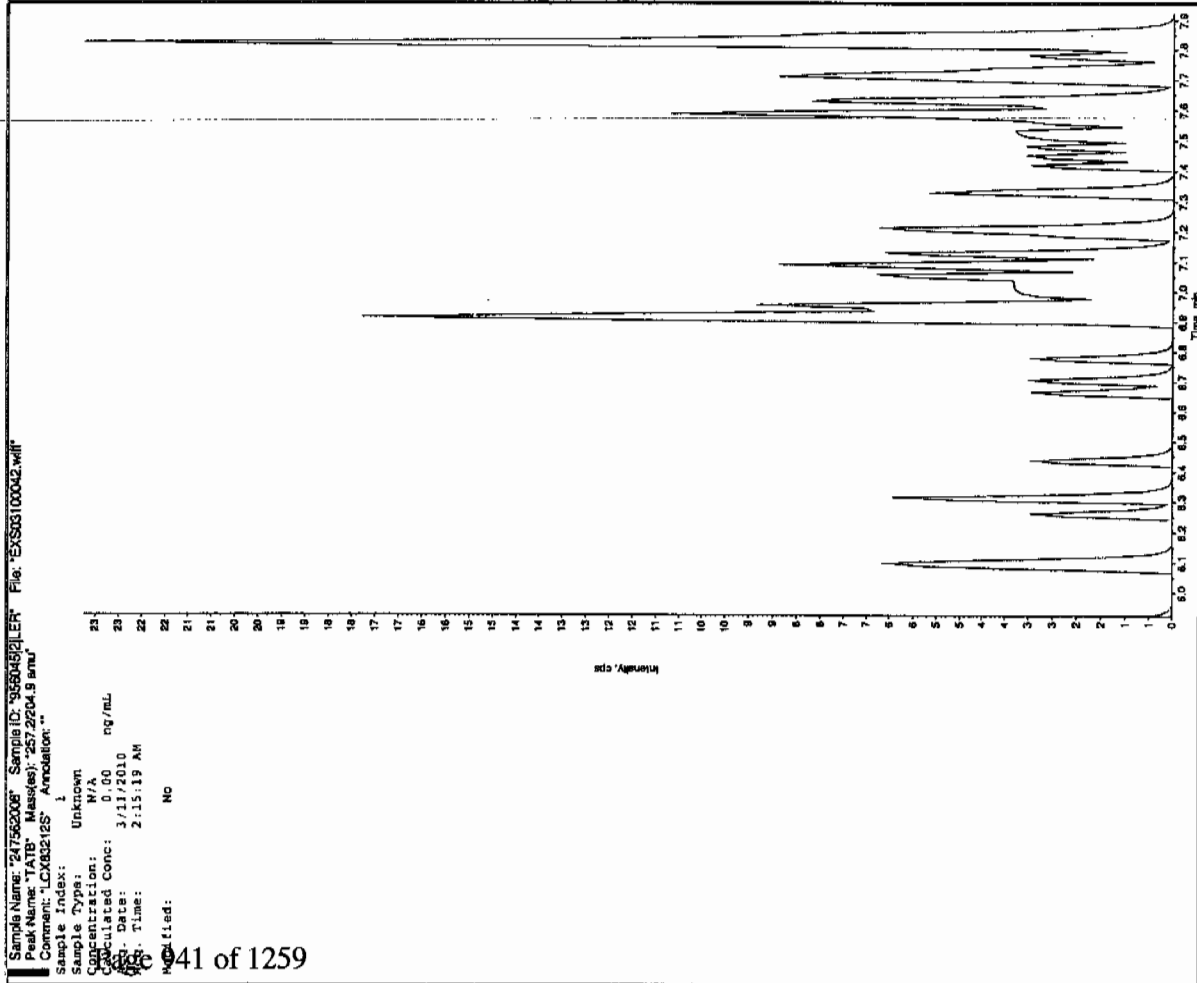
Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
------------------	---	---	---	-----------------



Run 310110



Hum 03/15/10

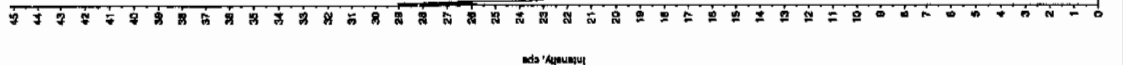


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS #4

Sample Name: 247562008 Sample ID: 555045015 File: EX503100042.wif  
 Peak Name: 25-Diamino-4-Hydroxylurea Mass(es): 166.0463.0 amu  
 Comment: CX332125 Annotation: 1

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/11/2010  
 Acq. Date: 2:15:19 AM  
 Acq. Time: 2:15:19 AM  
 Modified: No

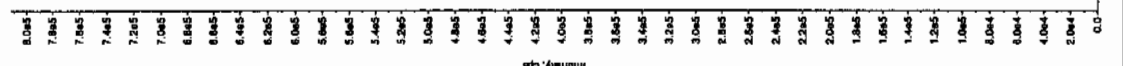
Intensity, cps



Sample Name: 247562008 Sample ID: 555045015 File: EX503100042.wif  
 Peak Name: 04-Dinitrotoluene Mass(es): 182.17151.9 amu  
 Comment: CX332125 Annotation: 1

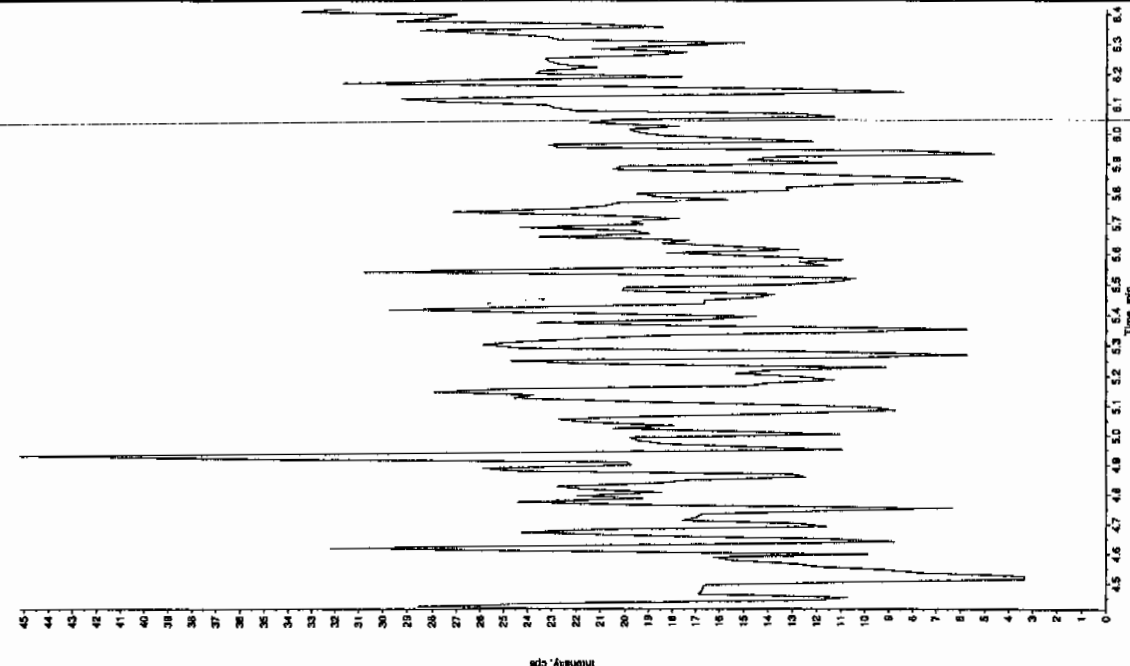
Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 304 ng/mL  
 Calculated Conc: 3/11/2010  
 Acq. Date: 2:15:19 AM  
 Acq. Time: 2:15:19 AM  
 Modified: No  
 Acq. Algorithm: IntelliQuan - IQA  
 No. Peak Height: 1460.00 cps  
 No. Peak Width: 6.00 sec  
 Smoothing Width: 3 points  
 Window: 15.0 sec  
 Expected RT: 8.32 min  
 RT Relative RT: No  
 Type: Valley  
 Attention Time: 8.33 min  
 Area: 3.04e+006 counts  
 Weight: 812189.636 cps  
 Start Time: 8.22 min  
 End Time: 8.73 min

Intensity, cps

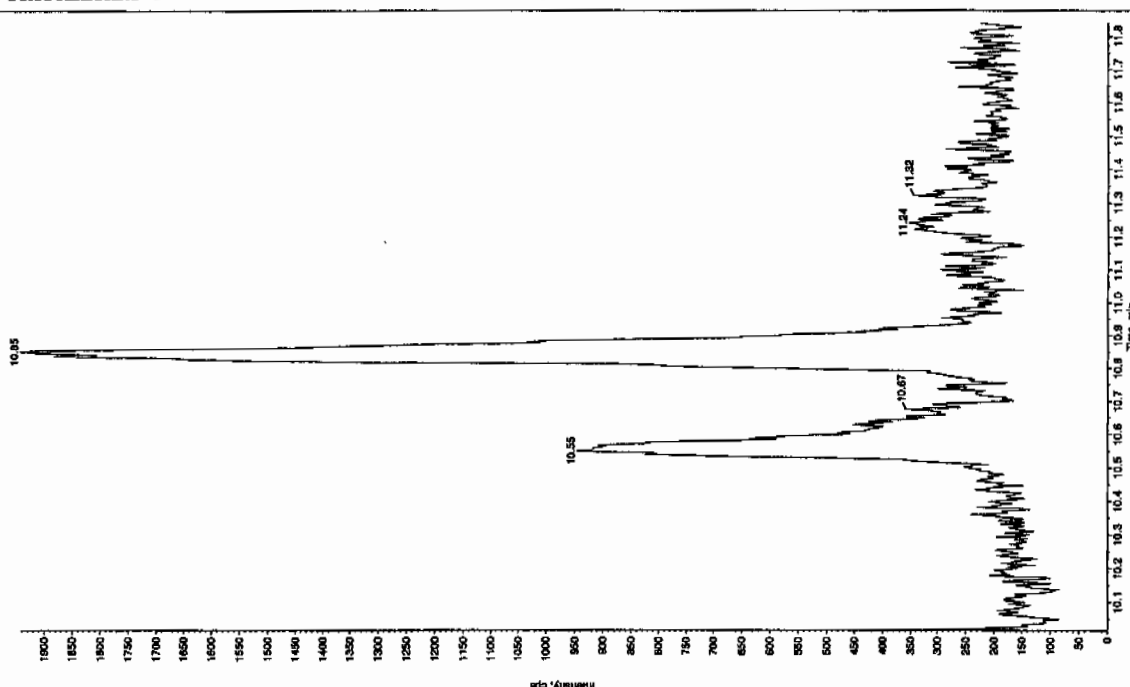


Sample Name: "247562008" Sample ID: "955045(2)LER" File: "EX503100042.wif"  
 Peak Name: "tris(o-cresyl) phosphite" Mass(es): "359.191.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:15:19 AM  
 Modified: No



Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:15:19 AM  
 Modified: No



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8302

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562009

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319058a

Date Analyzed: 20-MAR-10 20:55

Units: ug/kg

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

\*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319058a

Date: 20-Mar-2010

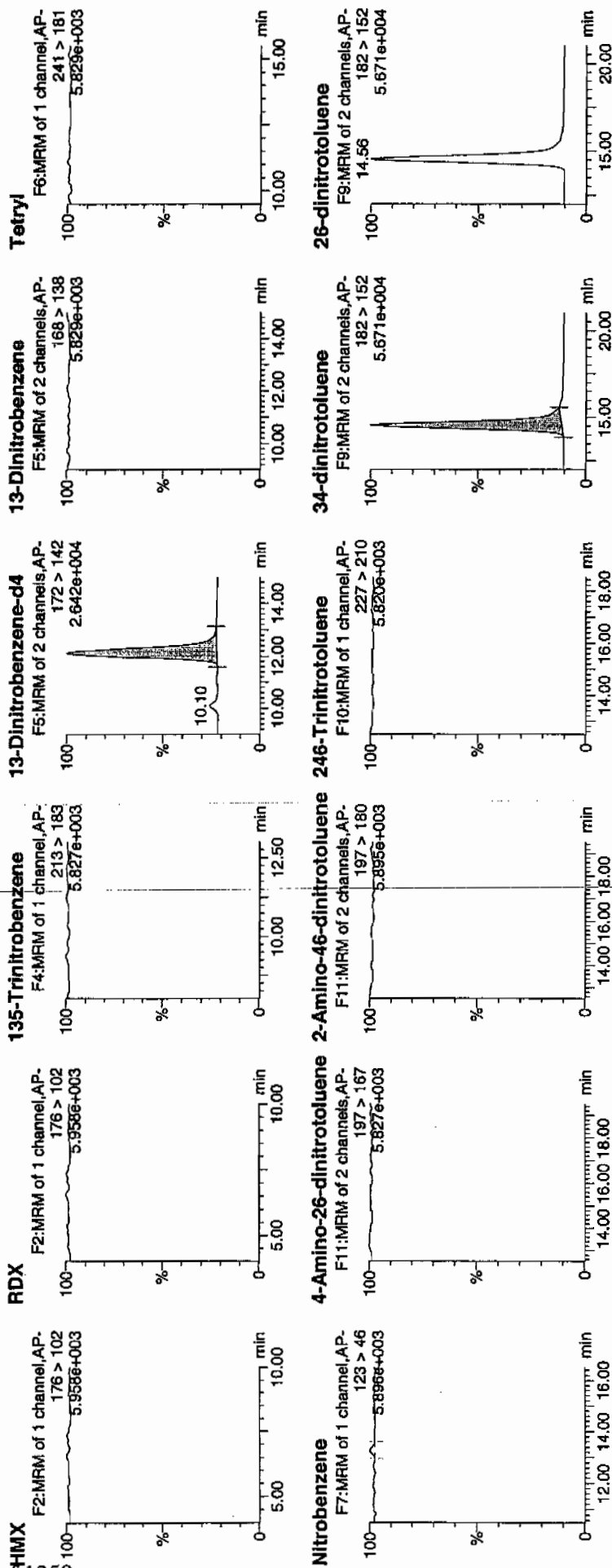
Time: 20:55:30

ID: 247562009

Vial: 2:4,F

12/1/10

12/1/10



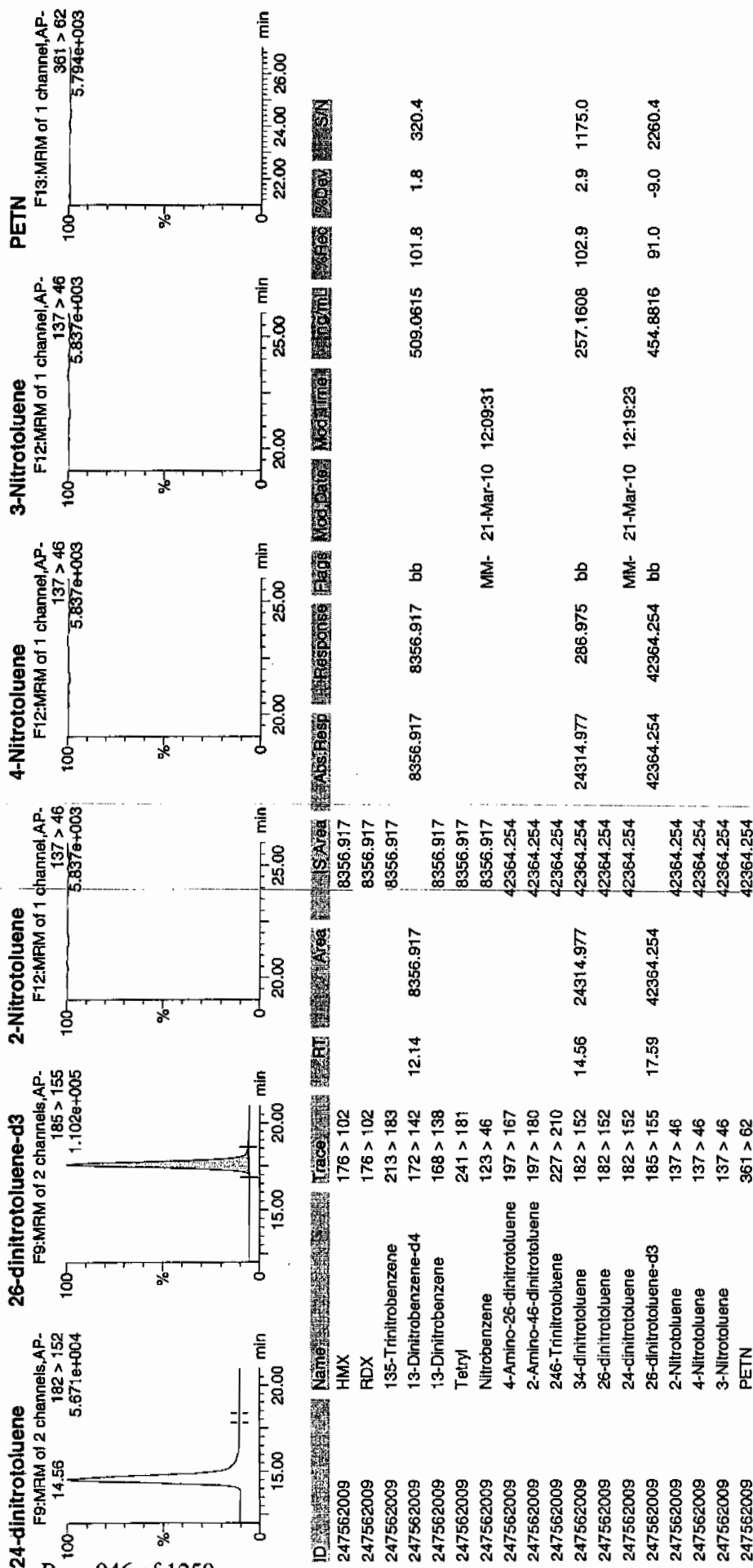
4/11/10  
03/24/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Mar 21 12:22:16 2010, Page 44 of 103

Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8302

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 247562009

Sample Amount 2

Moisture: 5.2

Amount Units g

Date Received: 20-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100043.wiff

Date Analyzed: 11-MAR-10 02:31

Units: ug/kg

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

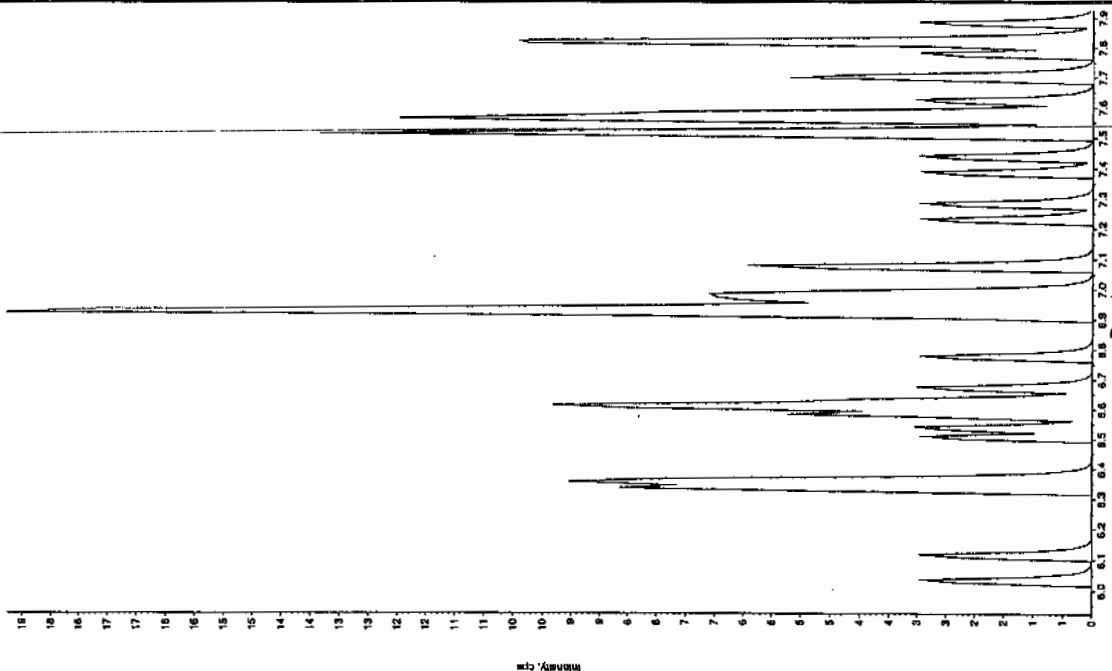
\*Concentration =

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

for 311310

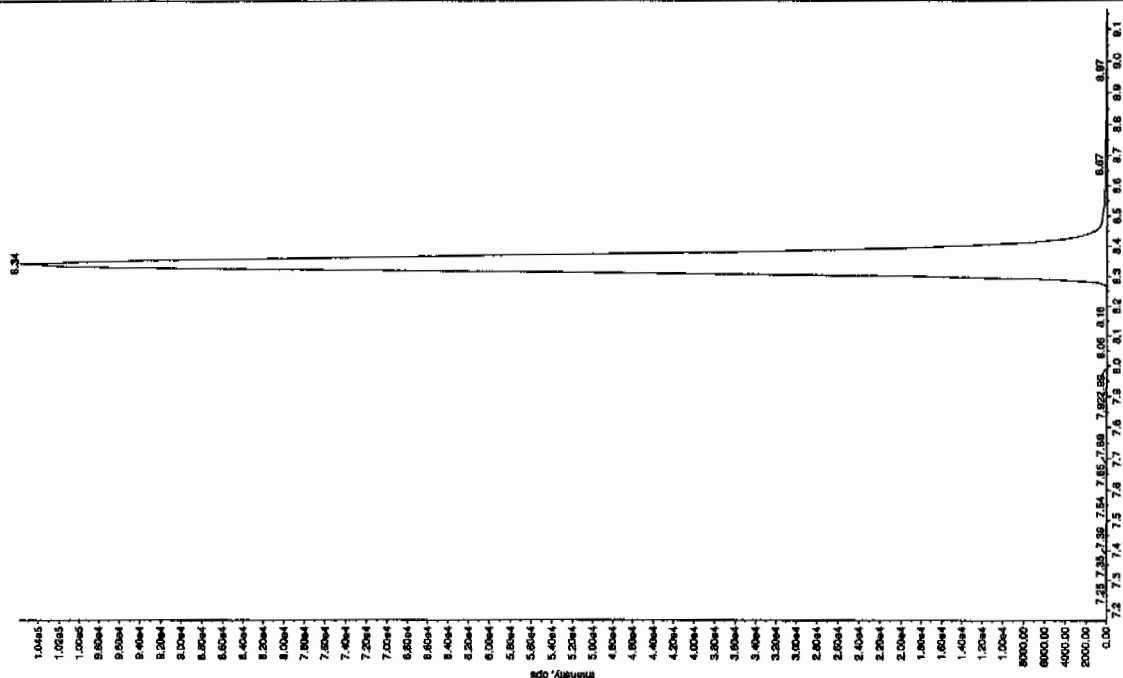
Sample Name: "247562009" Sample ID: "95604521L1" File: "EXS03100043.will"  
 Peak Name: "TATB" Mass(es): "257 2/204.9 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:31:03 AM  
 Modified: No



Sample Name: "247562009" Sample ID: "95604521L1" File: "EXS03100043.will"  
 Peak Name: "35-Dinitrophenol" Mass(es): "182 0/168.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 0.00 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:31:03 AM  
 Modified: No

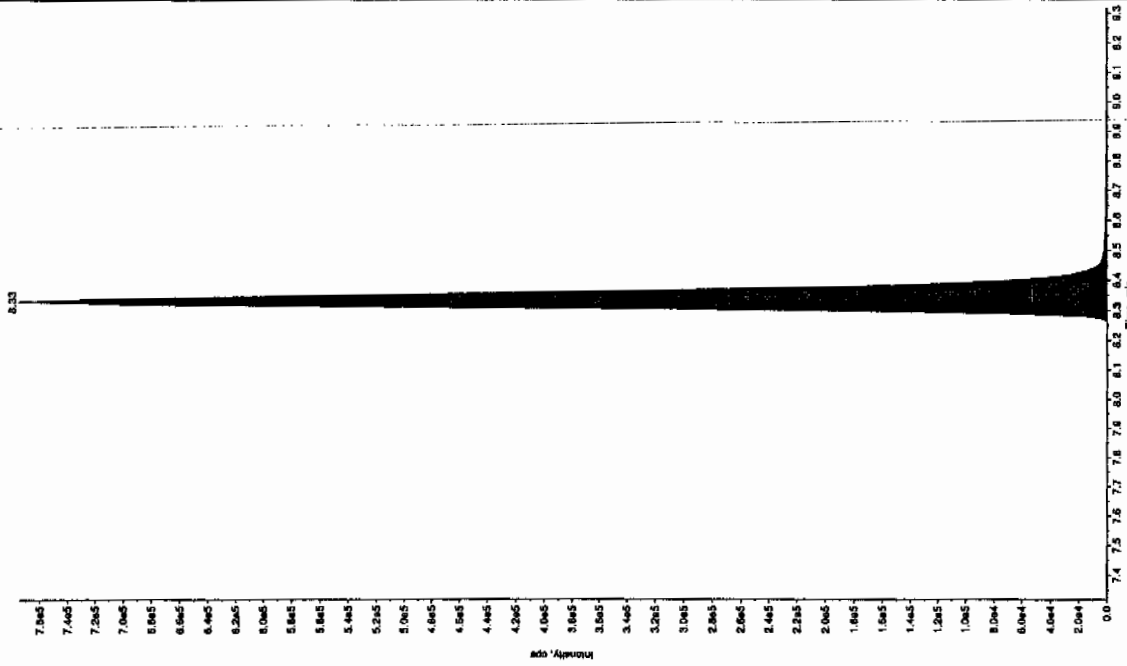


Amik 03/15/10



Sample Name: "247562009" Sample ID: "8560452LER" File: "EXS03100043.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1519 amu"  
 Comment: "LCX83212S" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/11/2010  
 Acq. Date: 2:31:03 AM  
 Acq. Time: 2:31:03 AM  
 Modified: No



Sample Name: "247562009" Sample ID: "8560452LER" File: "EXS03100043.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1519 amu"  
 Comment: "LCX83212S" Annotation: "1"

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: 0.00 ng/mL  
 Calculated Conc: 3/11/2010  
 Acq. Date: 2:31:03 AM  
 Acq. Time: 2:31:03 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Area Window: 15.0 sec  
 Retained RT: 8.32 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Peak Width: 2.91e-02 min  
 Height: 2.774857e+03 counts  
 Start Time: 8.24 min  
 End Time: 8.68 min

Sample Name: "247562009" Sample ID: "95804521LRF" File: "EXS03100043.wif"

Peak Name: "24-Diethyl-6-nitrophenol" Mass(es): 365.1791.0 amu

Comment: "LCX832125" Annotation: "1"

Sample Index: 1

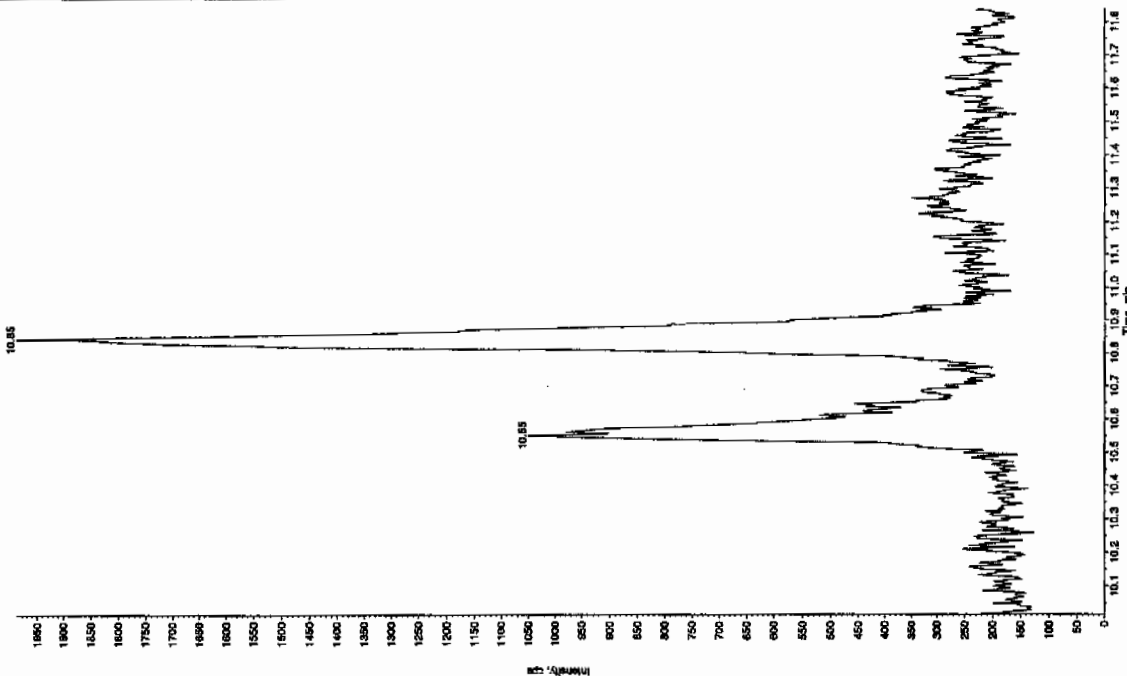
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 3/11/2010

Acq. Time: 2:31:03 AM

Modified: No



Sample Name: "247562009" Sample ID: "95804521LRF" File: "EXS03100043.wif"

Peak Name: "24-Diethyl-6-nitrophenol" Mass(es): 156.046.0 amu

Comment: "LCX832125" Annotation: "1"

Sample Index: 1

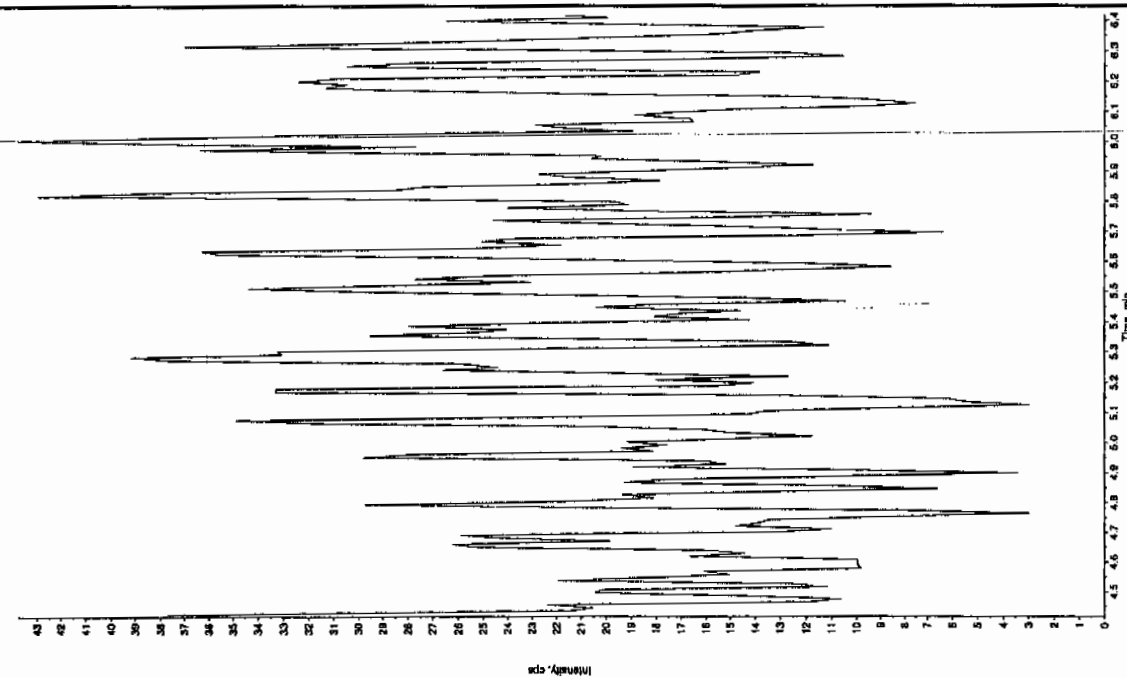
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 3/11/2010

Acq. Time: 2:31:03 AM

Modified: No



# STANDARDS DATA

SW846 8321A Modified-Explosives  
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
<b>Primary Analytes</b>								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
<b>Secondary Analytes</b>								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1950

Lab Code: GEL

Run Date: 10-MAR-10 19-MAR-10 23-MAR-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:	EXP0319003a	EXP0319004a	EXP0319005a	EXP0319006a	EXP0319007a	EXP0319008a			
Data File:									
1,3,5-Trinitrobenzene	4.934	4.658	4.052	4.308	4.896	5.867	4.786	13.17	
1,3-Dinitrobenzene-d4	17.078	17.454	16.592	19.338	13.899	14.139	16.417	12.663	
2,4,6-Trinitrotoluene	.451	.404	.409	.331	.44	.542	0.430	16.164	
2,4-Dinitrotoluene	.239	.248	.246	.211	.249	.254	0.241	6.373	
2,6-Dinitrotoluene	1.106	1.153	1.116	1.085	1.162	1.147	1.128	2.683	
2,6-Dinitrotoluene-d3	97.958	93.948	90.487	115.944	84.041	76.417	93.133	14.513	
2-Amino-4,6-dinitrotoluene	.66	.538	.502	.526	.574	.766	0.594	16.922	
3,4-Dinitrotoluene	1.135	1.095	1.033	1.099	1.056	1.277	1.116	7.756	
4-Amino-2,6-dinitrotoluene	.406	.346	.352	.296	.362	.452	0.369	14.572	
HMX	4.054	4.355	4.659	3.304	5.158	3.924	4.242	15.066	
Nitrobenzene	.709	.661	.63	.684	.718	.766	0.695	6.827	
RDX	2.618	2.614	2.626	2.301	3.123	3.67	2.825	17.381	
Tetryl	1.115	1.134	1.207	1.016	1.261	1.326	1.177	9.47	
m-Dinitrobenzene	1.316	1.413	1.265	1.336	1.333	1.473	1.356	5.494	
m-Nitrotoluene	.061	.068	.05	.043	.056	.059	0.056	15.483	
o-Nitrotoluene	.106	.11	.083	.075	.093	.093	0.093	14.248	
p-Nitrotoluene	.051	.052	.043	.037	.047	.047	0.046	11.401	

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: 10-1950

Lab Code: GEL

Run Date: 10-MAR-10.19-MAR-10.23-MAR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

	1	2	3	4	5	6	Slope	Intercept	COD	Q
Calibration Level:	EXP0319003a	EXP0319004a	EXP0319005a	EXP0319006a	EXP0319007a	EXP0319008a				
Data File:										
Parname										
PEIN	3571.23	7118.35	24758.3	44512.9	76075.7	84107.2	1.086	14.643	.9933	

Linear fit:  $Y = mx + b$   
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

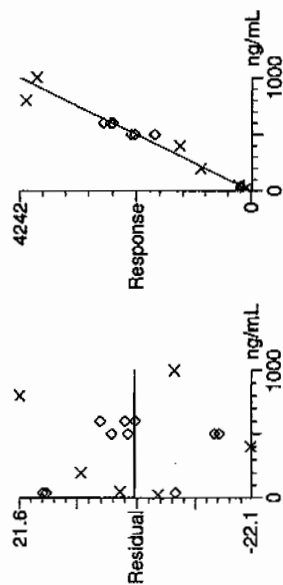
\* Values outside of QC Limit

Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

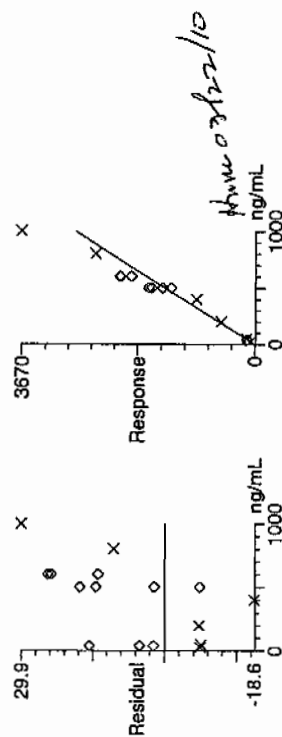
Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\031910expa.mdb, Time: Sat Mar 20 10:50:15 2010  
Calibration: Untitled, Time: Sat Mar 20 11:05:24 2010

Compound name: HMX  
Response Factor: 4.24242  
RRF SD: 0.639182, % Relative SD: 15.0664  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF



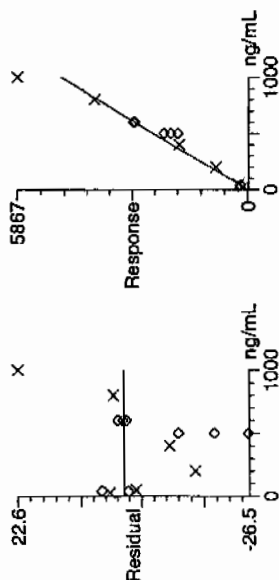
Compound name: RDX  
Response Factor: 2.82542  
RRF SD: 0.491092, % Relative SD: 17.3812  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF



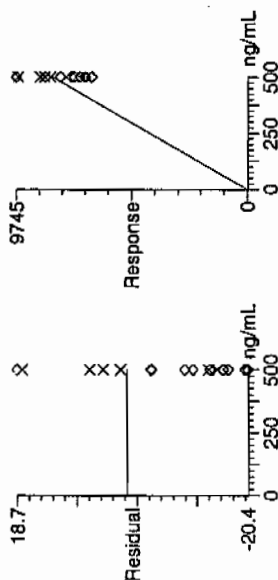
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Compound name: 135-Trinitrobenzene  
Response Factor: 4.78565  
RRF SD: 0.630251, % Relative SD: 13.1696  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF



Compound name: 13-Dinitrobenzene-d4  
Response Factor: 16.4163  
RRF SD: 2.0788, % Relative SD: 12.663  
Response type: External Std, Area  
Curve type: RF

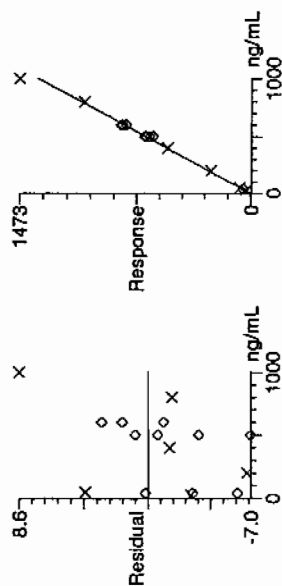




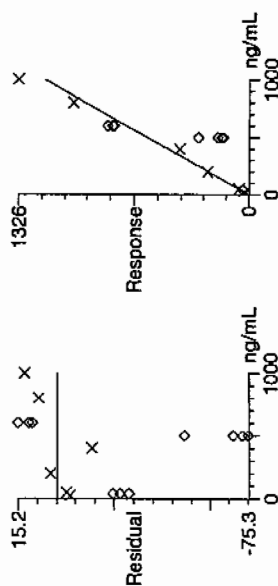
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qtd, Time: Sat Mar 20 11:05:24 2010

Compound name: 13-Dinitrobenzene  
Response Factor: 1.35599  
RRF SD: 0.0744962, % Relative SD: 5.49386  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



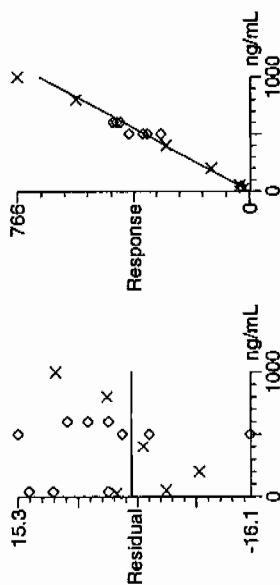
Compound name: Tetnyl  
Response Factor: 1.17668  
RRF SD: 0.111431, % Relative SD: 9.46995  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



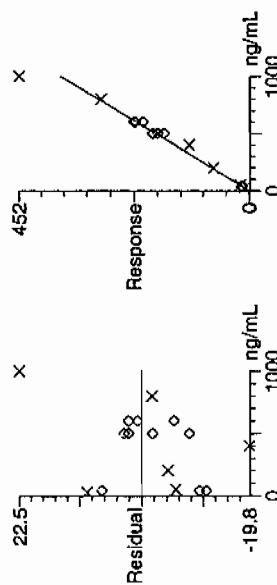
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO1031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Compound name: Nitrobenzene  
 Response Factor: 0.69451  
 RRF SD: 0.0474118, % Relative SD: 6.82665  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: Rf



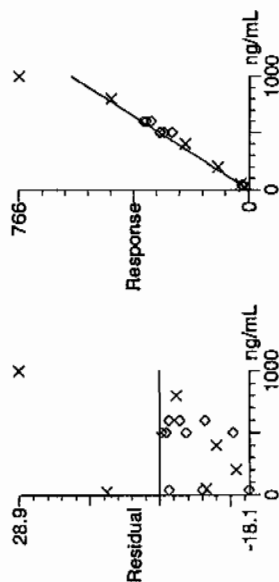
Compound name: 4-Amino-26-dinitrotoluene  
 Response Factor: 0.36909  
 RRF SD: 0.0537838, % Relative SD: 14.572  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: Rf



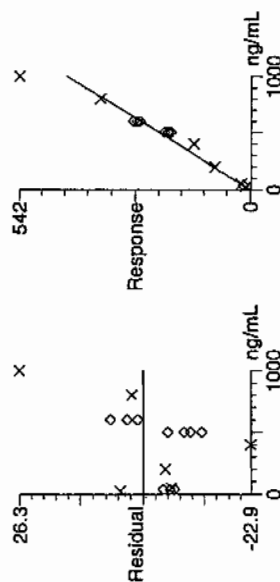
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Compound name: 2-Amino-46-dinitrotoluene  
Response Factor: 0.594147  
RRF SD: 0.100543, % Relative SD: 16.9222  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



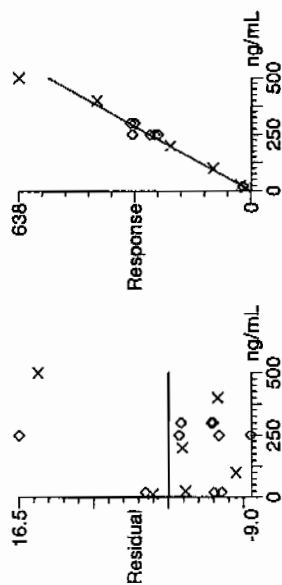
Compound name: 246-Trinitrotoluene  
Response Factor: 0.4294  
RRF SD: 0.0694084, % Relative SD: 16.164  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



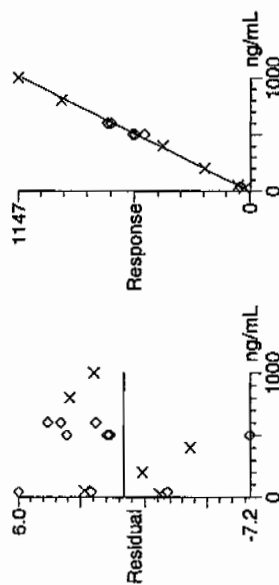
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Compound name: 34-dinitrotoluene  
 Response Factor: 1.11594  
 RRF SD: 0.0865532, % Relative SD: 7.75611  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



Compound name: 26-dinitrotoluene  
 Response Factor: 1.12816  
 RRF SD: 0.0302691, % Relative SD: 2.68306  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF

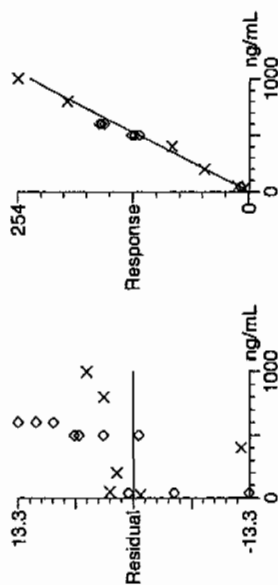


Printed: Sat Mar 20 11:06:08 2010, Page 7 of 9

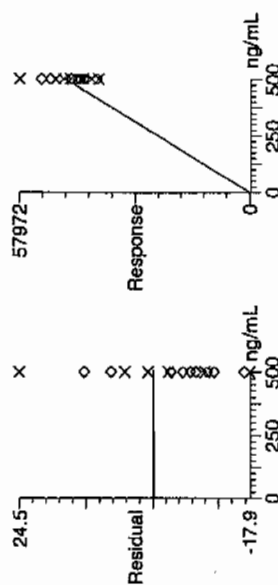
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qid, Time: Sat Mar 20 11:05:24 2010

Compound name: 24-dinitrotoluene  
Response Factor: 0.241092  
RRF SD: 0.0153653, % Relative SD: 6.3732  
Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
Curve type: RF



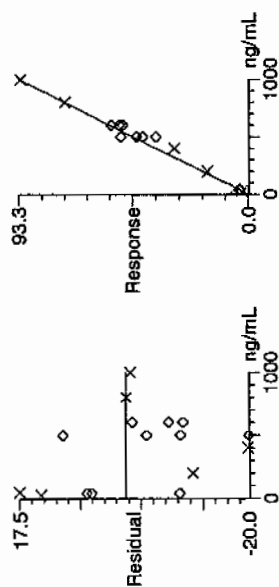
Compound name: 26-dinitrotoluene-d3  
Response Factor: 93.1325  
RRF SD: 13.516, % Relative SD: 14.5127  
Response type: External Std, Area  
Curve type: RF



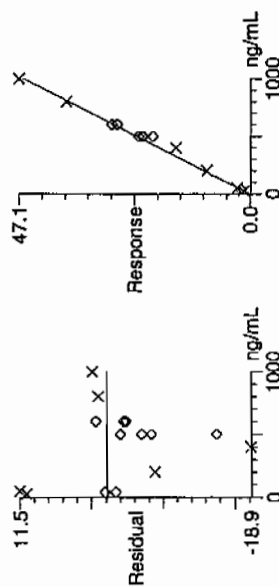
**Quantify Calibration Report**  
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qtd, Time: Sat Mar 20 11:05:24 2010

Compound name: 2-Nitrotoluene  
 Response Factor: 0.0933197  
 RRF SD: 0.0132962, % Relative SD: 14.2481  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



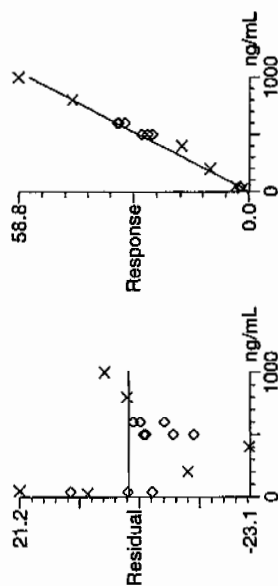
Compound name: 4-Nitrotoluene  
 Response Factor: 0.0461933  
 RRF SD: 0.00526639, % Relative SD: 11.4008  
 Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
 Curve type: RF



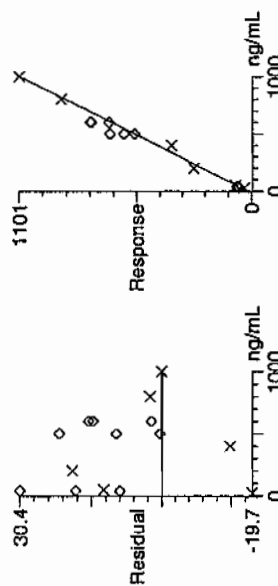
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Compound name: 3-Nitrotoluene  
Response Factor: 0.0562003  
RRF SD: 0.00870123, % Relative SD: 15.4825  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



Compound name: PETN  
Correlation coefficient:  $r = 0.996647$ ,  $r^2 = 0.993305$   
Calibration curve:  $1.08596 * x + 14.643$   
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0319010a

Analysis Date: 19-MAR-10 21:19

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	601.679	100	
1,3-Dinitrobenzene-d4	500	400.213	80	
2,4,6-Trinitrotoluene	600	607.061	101	
2,4-Dinitrotoluene	600	679.677	113	
2,6-Dinitrotoluene	600	621.301	104	
2,6-Dinitrotoluene-d3	500	448.99	90	
2-Amino-4,6-dinitrotoluene	600	545.067	91	
3,4-Dinitrotoluene	300	285.258	95	
4-Amino-2,6-dinitrotoluene	600	565.303	94	
HMX	600	599.565	100	
Nitrobenzene	600	651.909	109	
PETN	600	613.34	102	
RDX	600	746.638	124	*
Tetryl	600	666.124	111	
m-Dinitrobenzene	600	618.738	103	
m-Nitrotoluene	600	586.775	98	
o-Nitrotoluene	600	558.066	93	
p-Nitrotoluene	600	584.772	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

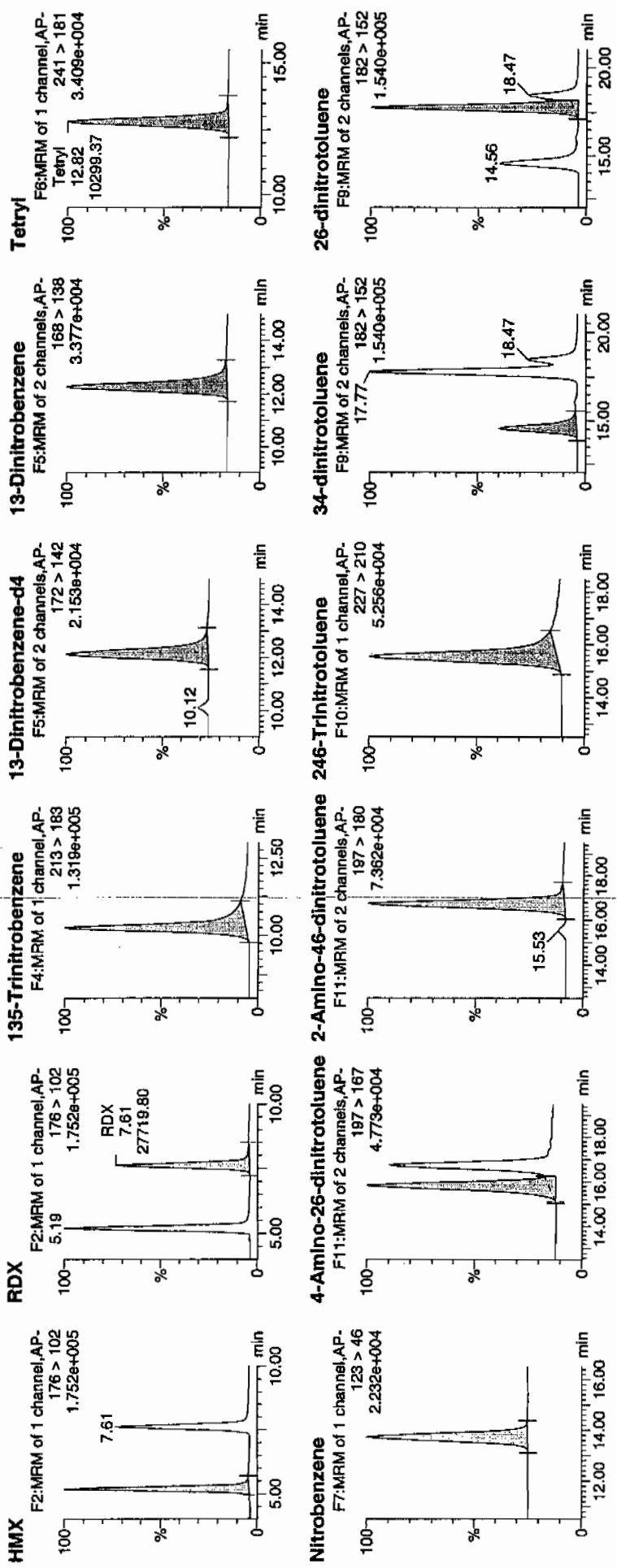


Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

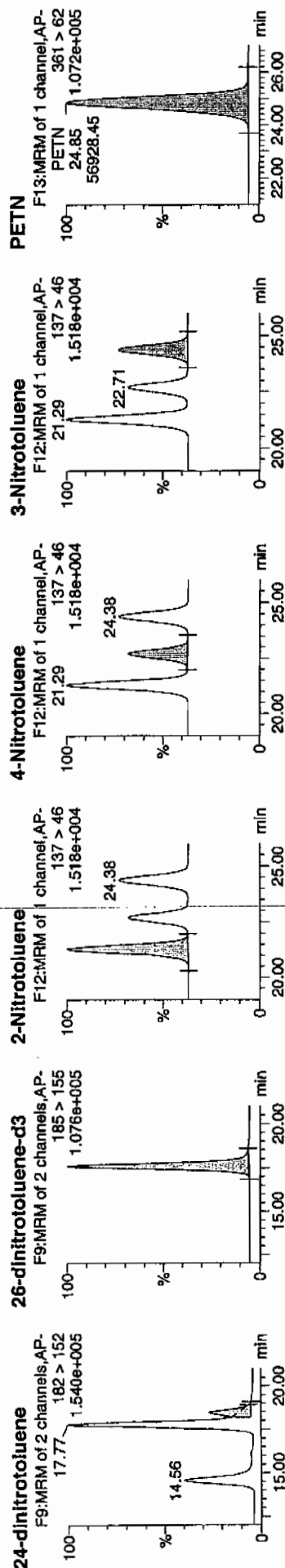
Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319010a

Date: 19-Mar-2010  
Time: 21:19:38  
ID: WXX100319-07ICV  
Vial: 1:1,B

3/20/10



Handwritten note: 18.47



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Version	Rec	%Dev	CSN
WVXX100319-07ICV	HMX	176 > 102	5.19	33423.121	6570.021	33423.121	2543.608	bb			599.5653	99.9	-0.1	2774.6
WVXX100319-07ICV	RDX	176 > 102	7.61	27719.803	6570.021	27719.803	2109.567	bb			746.6378	124.4	24.4	2003.8
WVXX100319-07ICV	135-Trinitrobenzene	213 > 183	10.23	37835.734	6570.021	37835.734	2879.423	bb			601.6787	100.3	0.3	3588.0
WVXX100319-07ICV	13-Dinitrobenzene-d4	172 > 142	12.14	6570.021		6570.021	6570.021	bb			400.2127	80.0	-20.0	715.5
WVXX100319-07ICV	13-Dinitrobenzene	168 > 138	12.27	11024.536	6570.021	11024.536	839.003	bb			618.7378	103.1	3.1	1004.2
WVXX100319-07ICV	Tetryl	241 > 181	12.82	10299.374	6570.021	10299.374	783.816	bb			666.1242	111.0	11.0	720.2
WVXX100319-07ICV	Nitrobenzene	123 > 46	13.72	5949.249	6570.021	5949.249	452.757	bb			651.9087	108.7	8.7	484.8
WVXX100319-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.83	17449.465	41815.598	17449.465	208.648	MM	20-Mar-10	10:53:54	565.3029	94.2	-5.8	412.6
WVXX100319-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.73	27083.949	41815.598	27083.949	323.850	bb			545.0667	90.8	-9.2	943.0
WVXX100319-07ICV	246-Trinitrotoluene	227 > 210	15.55	21800.279	41815.598	21800.279	260.672	bb			607.0606	101.2	1.2	1547.1
WVXX100319-07ICV	34-dinitrotoluene	182 > 152	14.56	26622.328	41815.598	26622.328	318.330	bb			285.2582	95.1	-4.9	1006.5
WVXX100319-07ICV	26-dinitrotoluene	182 > 152	17.77	58619.211	41815.598	58619.211	700.925	MM	20-Mar-10	10:58:41	621.3012	103.6	3.6	2704.8
WVXX100319-07ICV	24-dinitrotoluene	182 > 152	18.47	13704.189	41815.598	13704.189	163.865	MM	20-Mar-10	11:01:17	679.6771	113.3	13.3	610.9
WVXX100319-07ICV	26-dinitrotoluene-d3	185 > 155	17.60	41815.598		41815.598	41815.598	bb			448.9905	89.8	-10.2	4079.8
WVXX100319-07ICV	2-Nitrotoluene	137 > 46	21.29	4355.388	41815.598	4355.388	52.079	bb			558.0655	93.0	-7.0	835.7
WVXX100319-07ICV	4-Nitrotoluene	137 > 46	22.71	2259.093	41815.598	2259.093	27.013	bb			584.7720	97.5	-2.5	413.8
WVXX100319-07ICV	3-Nitrotoluene	137 > 46	24.38	2757.896	41815.598	2757.896	32.977	bb			586.7746	97.8	-2.2	479.7
WVXX100319-07ICV	PETN	361 > 62	24.85	56928.445	41815.598	56928.445	680.708	bb			613.3401	102.2	2.2	13603.2

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/19/10  
 Time of Injection: 2119  
 Standard Number: WXX100319-07ICV  
 Data File: EXP0319010a

HMX	99.9
RDX	124.4
135-TNB	100.3
13-DNB	103.1
Tetryl	111.0
Nitrobenzene	108.7
4A-26-DNT	94.2
2A-46-DNT	90.8
246-TNT	101.2
34-DNT(surr)	95.1
26-DNT	103.6
24-DNT	113.3
2-NT	93.0
4-NT	97.5
3-NT	97.8
PETN	102.2

*Math  
3/22/10*

Total 1636.1

Average 102.3

*HWK 03/22/10*

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1950

Lab Code: GEL

Run Date: 10-MAR-10 19-MAR-10 23-MAR-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:	EXP0323003a	EXP0323004a	EXP0323005a	EXP0323006a	EXP0323007a	EXP0323008a			
Data File:									
1,3,5-Trinitrobenzene	5.032	4.994	4.537	4.6	4.618	4.575	4.726	4.748	
1,3-Dinitrobenzene-d4	11.754	12.906	11.01	10.6	10.117	9.664	11.009	10.69	
2,4,6-Trinitrotoluene	.424	.368	.38	.453	.443	.394	0.410	8.493	
2,4-Dinitrotoluene	.262	.293	.273	.265	.282	.289	0.277	4.587	
2,6-Dinitrotoluene	1.112	1.205	1.106	1.163	1.182	1.174	1.157	3.448	
2,6-Dinitrotoluene-d3	82.805	73.801	67.998	67.968	62.879	57.717	68.861	12.666	
2-Amino-4,6-dinitrotoluene	.508	.507	.537	.569	.587	.577	0.548	6.473	
3,4-Dinitrotoluene	.915	.995	1.13	1.083	1.133	1.097	1.059	8.15	
4-Amino-2,6-dinitrotoluene	.347	.327	.35	.36	.369	.368	0.354	4.504	
HMX	5.311	4.69	5.261	6.242	6.079	5.497	5.513	10.373	
Nitrobenzene	.686	.654	.672	.653	.651	.615	0.655	3.64	
RDX	3.229	2.859	3.253	3.567	3.545	3.415	3.311	7.936	
Tetryl	1.129	1.002	1.143	1.22	1.115	1.273	1.147	8.152	
m-Dinitrobenzene	1.371	1.208	1.328	1.336	1.345	1.381	1.328	4.687	
m-Nitrotoluene	.051	.048	.054	.052	.048	.049	0.050	4.981	
o-Nitrotoluene	.076	.089	.078	.08	.079	.082	0.081	5.666	
p-Nitrotoluene	.03	.046	.039	.039	.039	.04	0.039	13.369	

Q column used to flag RSD values outside of Limit (>20%)

\* Values outside of QC Limit

Form 6

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1950

Lab Code: GEL

Run Date: 10-MAR-10.19-MAR-10.23-MAR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

	1	2	3	4	5	6	Slope	Intercept	COD	Q
Calibration Level:	EXP0323003a	EXP0323004a	EXP0323005a	EXP0323006a	EXP0323007a	EXP0323008a				
Data File:										
Parname										
PETN	2318.77	4444.01	14597.9	26021	45749.6	53868.3	.909	16.24	.9989	

Linear fit :  $Y=mx +b$   
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

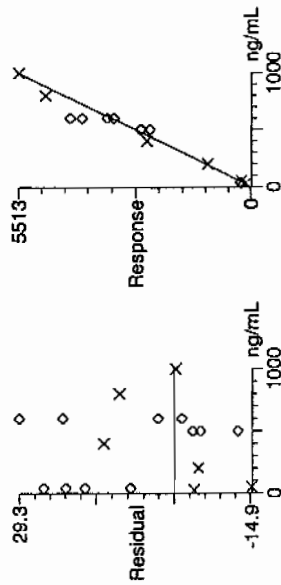
\* Values outside of QC Limit

Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

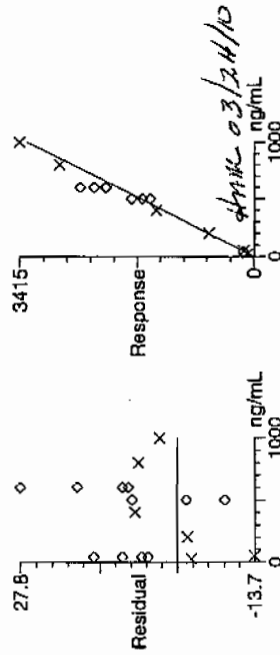
Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Method: C:\MASSLYNX\New\_Exp.PRO\MethDB\032310expa.mdb, Time: Tue Mar 23 14:06:48 2010  
Calibration: Untitled, Time: Wed Mar 24 09:29:41 2010

Compound name: HMX  
Response Factor: 5.51311  
RRF SD: 0.571885, % Relative SD: 10.3732  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



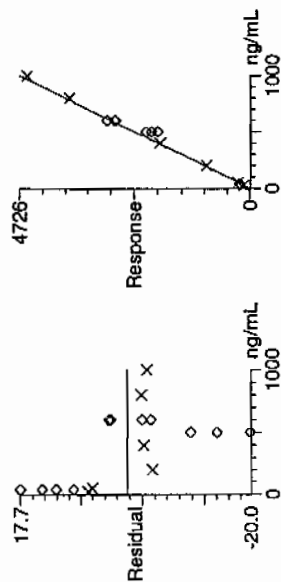
Compound name: RDX  
Response Factor: 3.31129  
RRF SD: 0.26278, % Relative SD: 7.93586  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



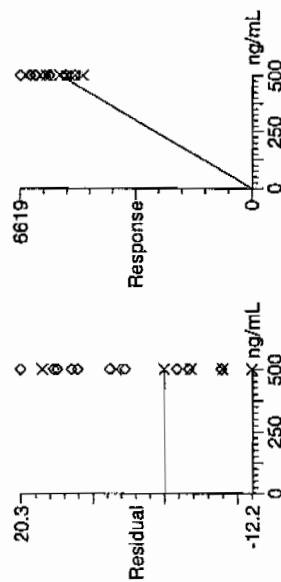
# Quantity Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 135-Trinitrobenzene  
 Response Factor: 4.7262  
 RRF SD: 0.224421, % Relative SD: 4.74845  
 Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
 Curve type: Rf



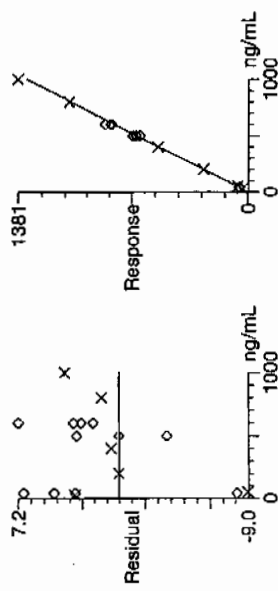
Compound name: 13-Dinitrobenzene-d4  
 Response Factor: 11.0085  
 RRF SD: 1.17683, % Relative SD: 10.6902  
 Response type: External Std, Area  
 Curve type: Rf



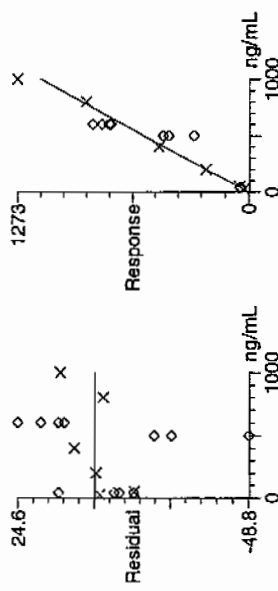
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qid, Time: Wed Mar 24 09:29:41 2010

Compound name: 13-Dinitrobenzene  
Response Factor: 1.32795  
RRF SD: 0.0622466, % Relative SD: 4.68744  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF



Compound name: Tetraol  
Response Factor: 1.14683  
RRF SD: 0.0934919, % Relative SD: 8.15221  
Response type: Internal Std (Ref 4), Area \* (IS Conc. / IS Area)  
Curve type: RF

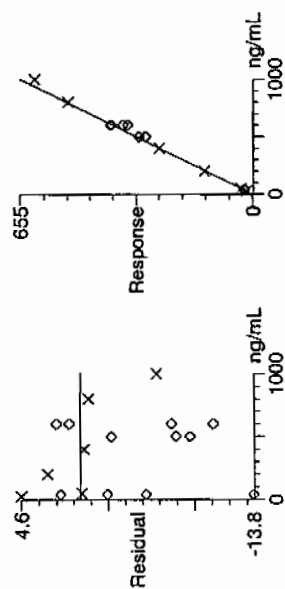




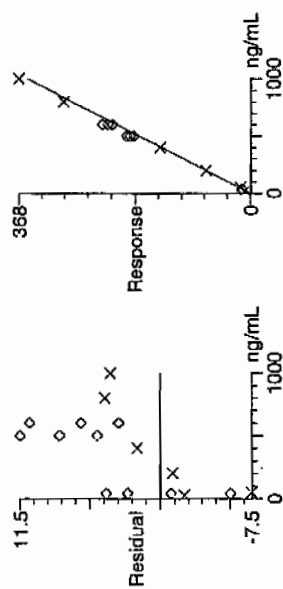
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: Nitrobenzene  
Response Factor: 0.655153  
RRF SD: 0.0238446, % Relative SD: 3.63954  
Response type: Internal Std ( Ref 4 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



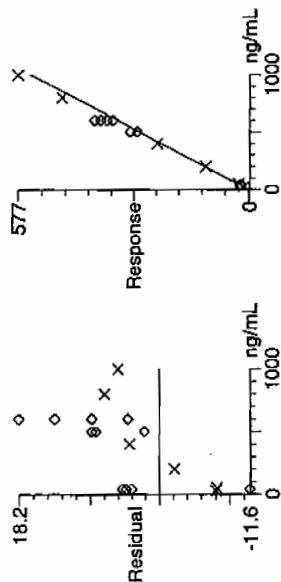
Compound name: 4-Amino-26-dinitrotoluene  
Response Factor: 0.353375  
RRF SD: 0.0159163, % Relative SD: 4.50407  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



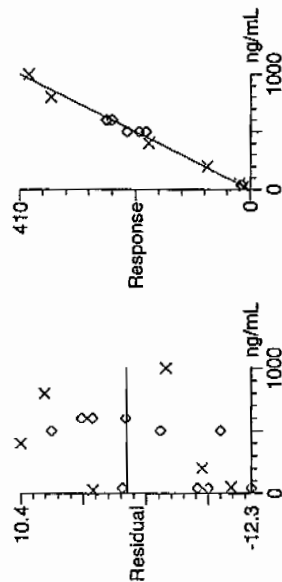
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qtd, Time: Wed Mar 24 09:29:41 2010

Compound name: 2-Amino-46-dinitrotoluene  
Response Factor: 0.547585  
RRF SD: 0.0354456, % Relative SD: 6.47307  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



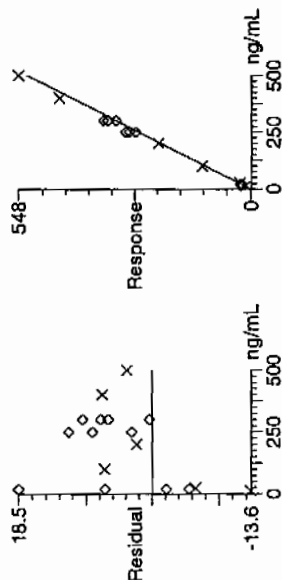
Compound name: 246-Trinitrotoluene  
Response Factor: 0.410071  
RRF SD: 0.0348258, % Relative SD: 8.49263  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



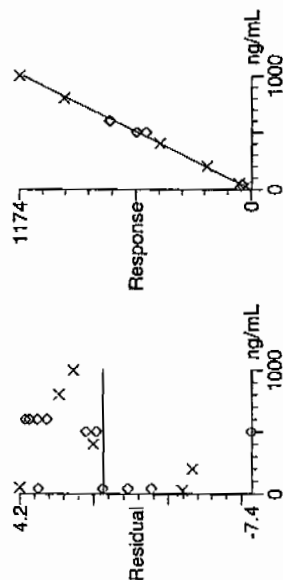
# Quantify Calibration Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 34-dinitrotoluene  
Response Factor: 1.05888  
RRF SD: 0.0862978, % Relative SD: 8.14988  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



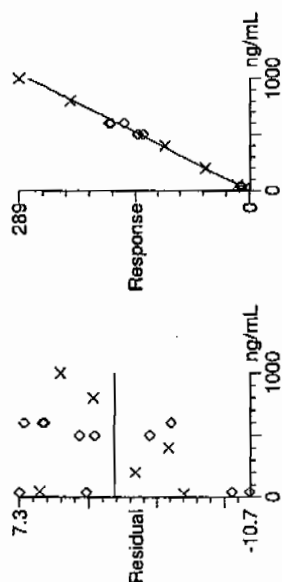
Compound name: 26-dinitrotoluene  
Response Factor: 1.15701  
RRF SD: 0.039889, % Relative SD: 3.44758  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



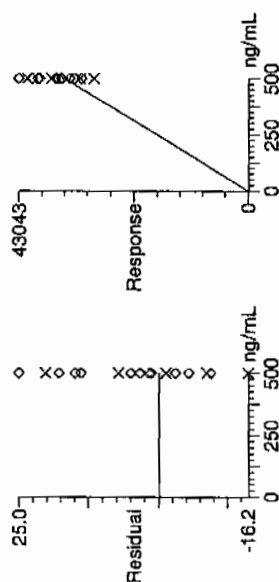
Quantify Calibration Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\_PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 24-dinitrotoluene  
Response Factor: 0.277495  
RRF SD: 0.0127293, % Relative SD: 4.58723  
Response type: Internal Std (Ref 14), Area \* (IS Conc. / IS Area)  
Curve type: RF



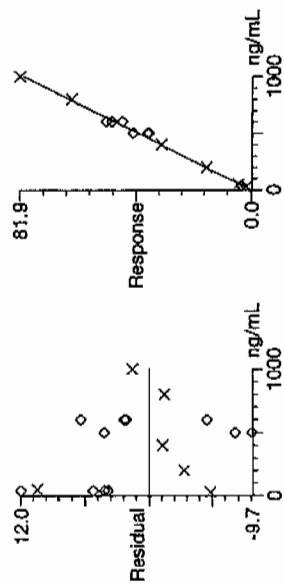
Compound name: 26-dinitrotoluene-d3  
Response Factor: 68.8611  
RRF SD: 8.72211, % Relative SD: 12.6662  
Response type: External Std, Area  
Curve type: RF



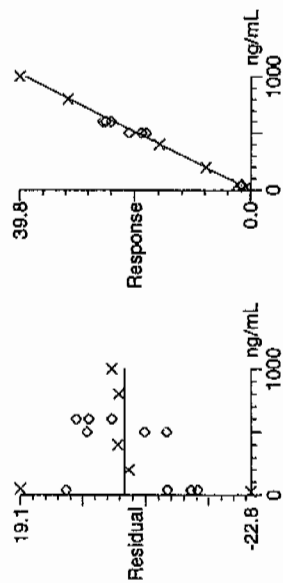
**Quantify Calibration Report**  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qid, Time: Wed Mar 24 09:29:41 2010

Compound name: 2-Nitrotoluene  
Response Factor: 0.0806432  
RRF SD: 0.00456922, % Relative SD: 5.66596  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RIF



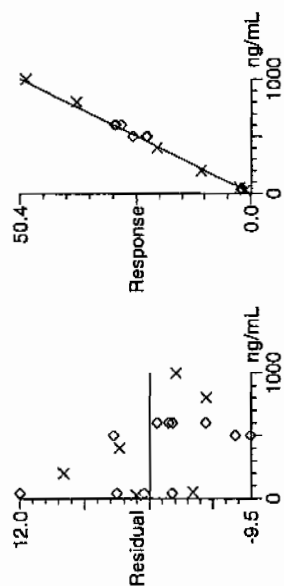
Compound name: 4-Nitrotoluene  
Response Factor: 0.0389409  
RRF SD: 0.00520599, % Relative SD: 13.369  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RIF



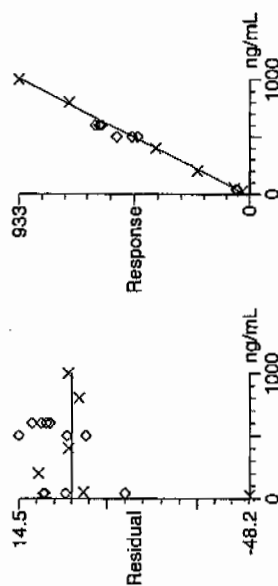
# Quantify Calibration Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Compound name: 3-Nitrotoluene  
Response Factor: 0.0504212  
RRF SD: 0.00251151, % Relative SD: 4.98107  
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: RF



Compound name: PETN  
Correlation coefficient:  $r = 0.999467$ ,  $r^2 = 0.998933$   
Calibration curve:  $0.908775 * x + 16.2395$   
Response type: Internal Std ( Ref 14 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0323010a

Analysis Date: 23-MAR-10 13:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6-Trinitrotoluene	600	600.545	100	
2,4-Dinitrotoluene	600	572.778	95	
2,6-Dinitrotoluene	600	623.33	104	
2,6-Dinitrotoluene-d3	500	452.986	91	
2-Amino-4,6-dinitrotoluene	600	624.798	104	
3,4-Dinitrotoluene	300	301.181	100	
4-Amino-2,6-dinitrotoluene	600	620.044	103	
HMX	600	591.583	99	
Nitrobenzene	600	611.463	102	
PETN	600	650.548	108	
RDX	600	659.349	110	
Tetryl	600	669.49	112	
m-Dinitrobenzene	600	616.682	103	
m-Nitrotoluene	600	589.179	98	
o-Nitrotoluene	600	638.057	106	
p-Nitrotoluene	600	638.597	106	
1,3,5-Trinitrobenzene	600	585.721	98	
1,3-Dinitrobenzene-d4	500	460.269	92	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

# Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 19 of 99

Dataset: C:\MASSLYNX\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0323010a

Date: 23-Mar-2010

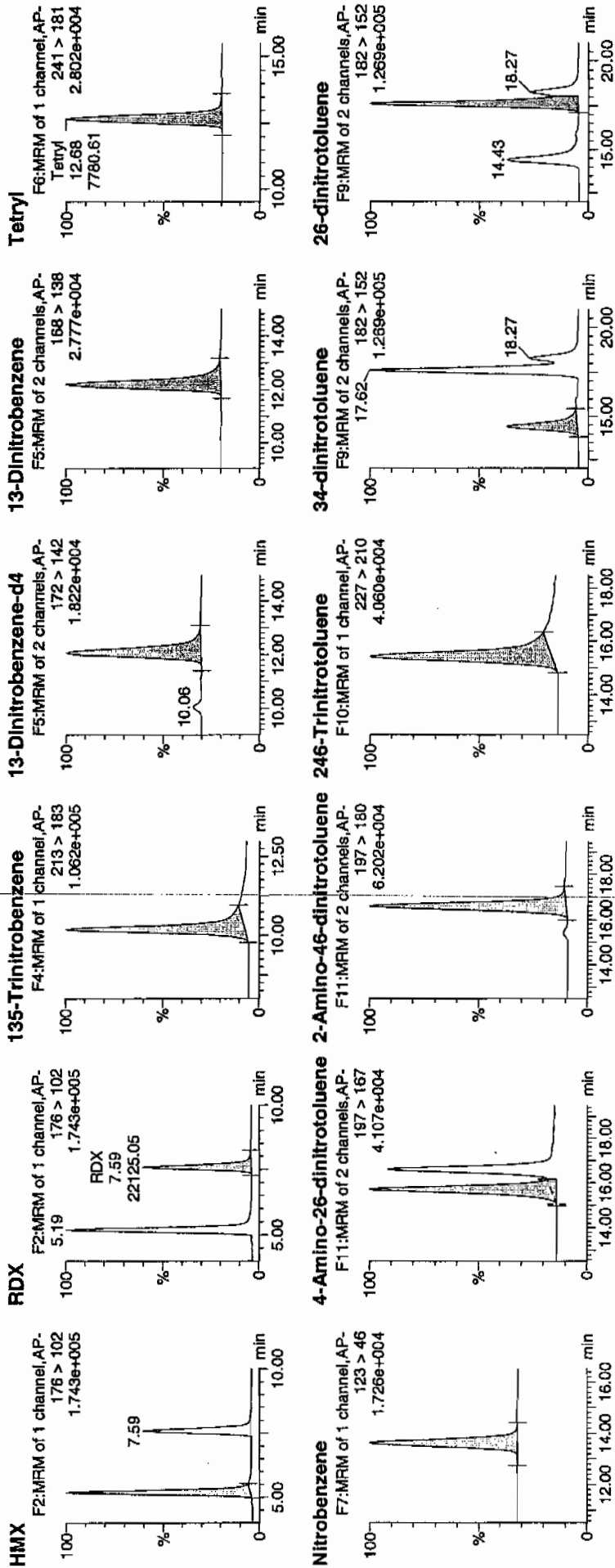
Time: 13:34:21

ID: WXX100323-07ICV

Vial: 1:1,B

MM  
3/24/10

980 of 1259



Handwritten note: 4/10

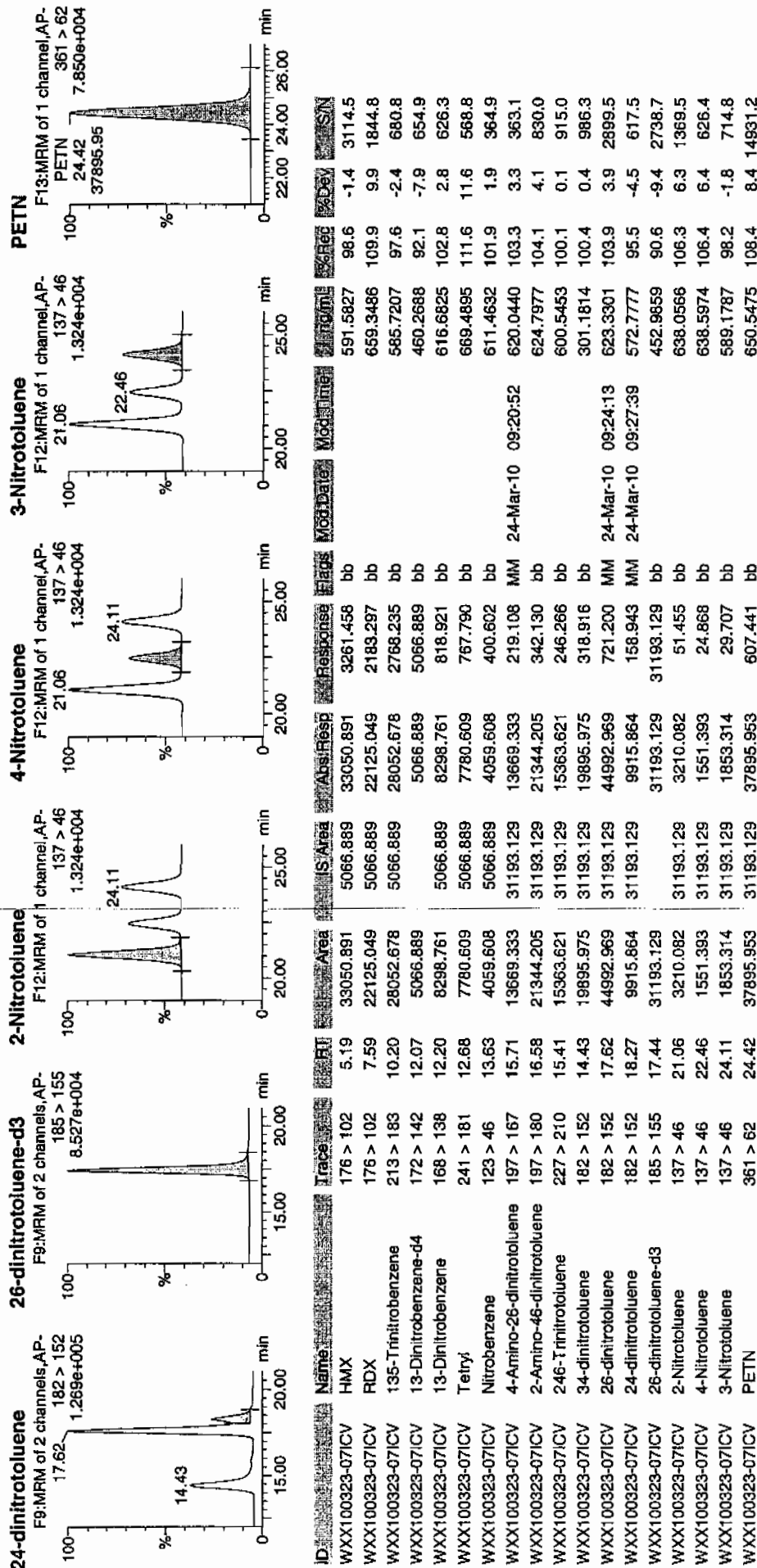


# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 20 of 99

Dataset: C:\MASSLYN\New\_Exp.PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



# GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/23/10  
 Time of Injection: 1334  
 Standard Number: WXX100323-07ICV  
 Data File: EXP0323010a

HMX	98.6
RDX	109.9
135-TNB	97.6
13-DNB	102.8
Tetryl	111.6
Nitrobenzene	101.9
4A-26-DNT	103.3
2A-46-DNT	104.1
246-TNT	100.1
34-DNT(surr)	100.4
26-DNT	103.9
24-DNT	95.5
2-NT	106.3
4-NT	106.4
3-NT	98.2
PETN	108.4

1.447  
3/24/10

Total 1649.0

Average 103.1

471100323-07ICV

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1950

Lab Code: GEL

Run Date: 10-MAR-10.19-MAR-10.23-MAR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: Average RF

	19	20	21	22	23	25	Ave RF	RSD	Q
Calibration Level:	EXS03100003.w	EXS03100004.w	EXS03100005.w	EXS03100006.w	EXS03100007.w	EXS03100009.w			
Data File:									
Parname									
2,4-Diamino-6-nitrotoluene	1090	1070	1100	1030	1110	938	1056.333	6.07	
2,6-Diamino-4-nitrotoluene	1620	1550	1540	1570	1520	1380	1530.000	5.41	

Q column used to flag RSD values outside of Limit (>20%)

\* Values outside of QC Limit

# Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1950

Lab Code: GEL

Run Date: 10-MAR-10 19-MAR-10 23-MAR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	25	X	X^2	Intercept	COD	Q
Data File:	EXS03100003.wiff	EXS03100004.wiff	EXS03100005.wiff	EXS03100006.wiff	EXS03100007.wiff	EXS03100009.wiff					
Parname:											
3,4-Dinitrotoluene	269000	536000	1300000	2570000	3200000	9020000	22800	10300	-1.34	1	
3,5-Dinitroaniline	414000	823000	2000000	3900000	4810000	12200000	189000	6930	-459	.9986	
TATB	64800	130000	329000	728000	1060000	2830000	-15900	1460	-021	.9999	
tris(o-cresyl) phosphate	689000	1380000	3340000	6340000	9120000	20300000	65000	13300	-1.59	1	

Quadratic Fit:  $y = Ax^2 + Bx + C$   
 where  $X^2$  column above is coefficient A  
 X column above is coefficient B  
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

\* Values outside of QC Limit

031010ICAL

Peak Name: TATB  
No Internal Standard  
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.59e+004			
a1	1.46e+003			
a2	-0.0212			
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	1.89e+005			
a1	6.93e+003			
a2	-0.459			
Correlation coefficient 0.9986				
Use Area				

Peak Name: 34-Dinitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	2.28e+004			
a1	1.03e+004			
a2	-1.34			
Correlation coefficient 1.0000				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Mean Response Factor	Weighting	None	Iterate No
Factor	1.53e+003			
Standard deviation	82.8			
%RSD	5.41			
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene  
No Internal Standard  
Q1/Q3 Masses: 165.97/46.00 amu

*Jan 3/13/10*

*4/11/10 03/15/10*

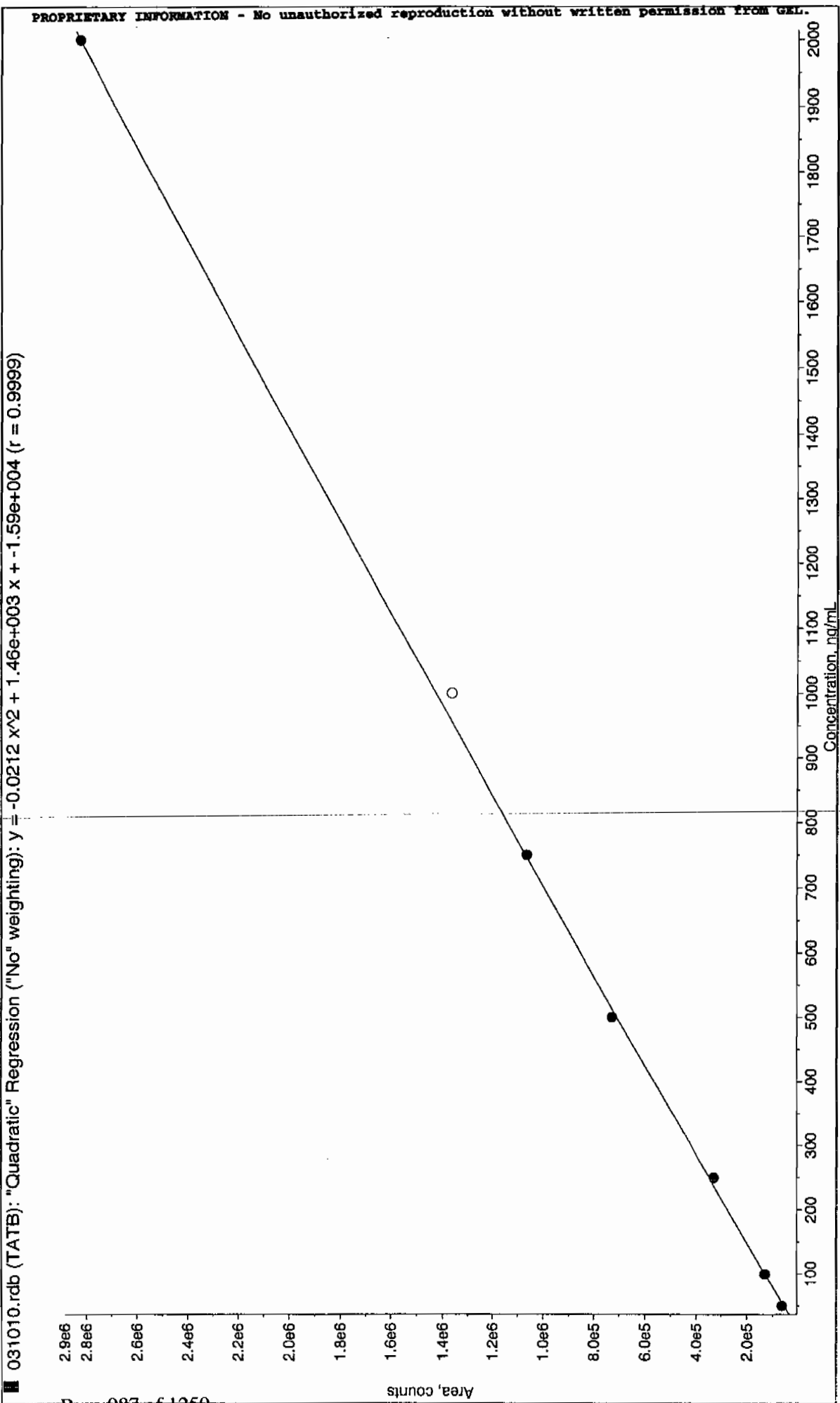
031010ICAL  
None Iterate No

Fit Mean Response Factor Weighting  
Factor 1.06e+003  
Standard deviation 64.2  
%RSD 6.07  
Use Area

Peak Name: tris(o-cresyl) phosphate  
No Internal Standard  
Q1/Q3 Masses: 369.15/91.00 amu

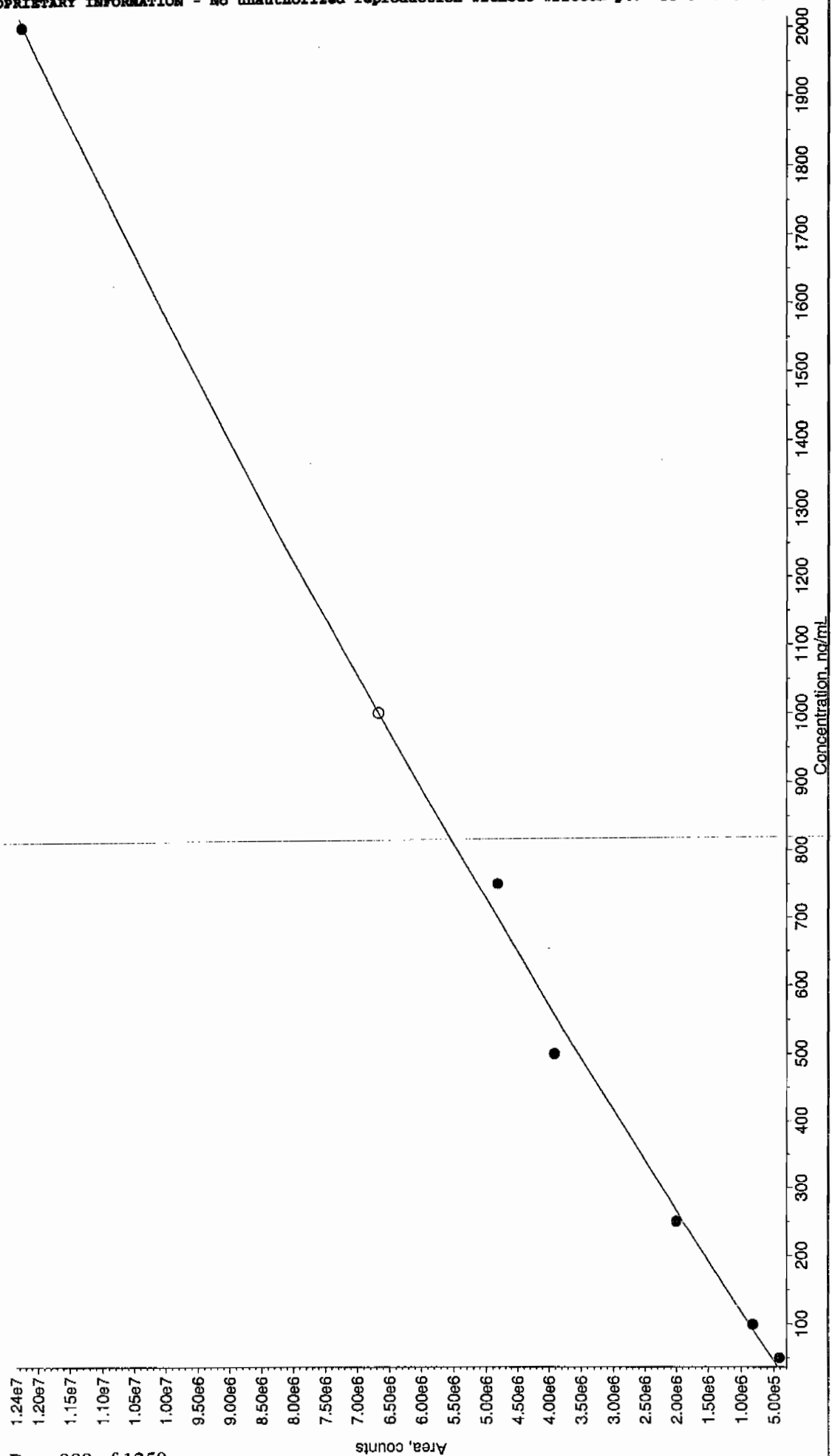
Fit Quadratic Weighting None  
a0 6.5e+004  
a1 1.33e+004  
a2 -1.59  
Correlation coefficient 1.0000  
Use Area

031010.rdb (TATB): "Quadratic" Regression ("No" weighting):  $y = -0.0212x^2 + 1.46e+003x + -1.59e+004$  ( $r = 0.9999$ )



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

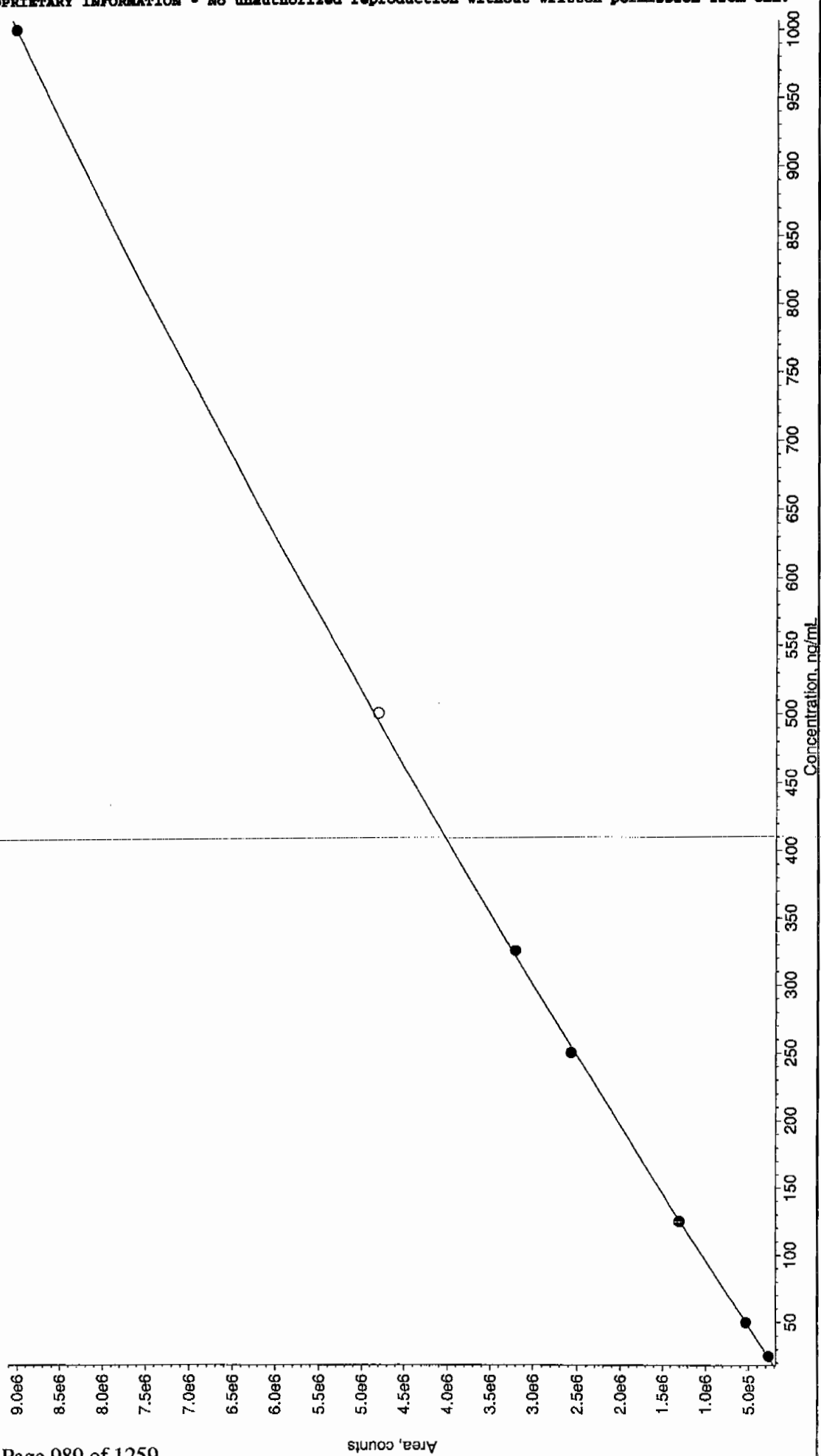
031010.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting):  $y = -0.459 x^2 + 6.93e+003 x + 1.89e+005$  ( $r = 0.9986$ )



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

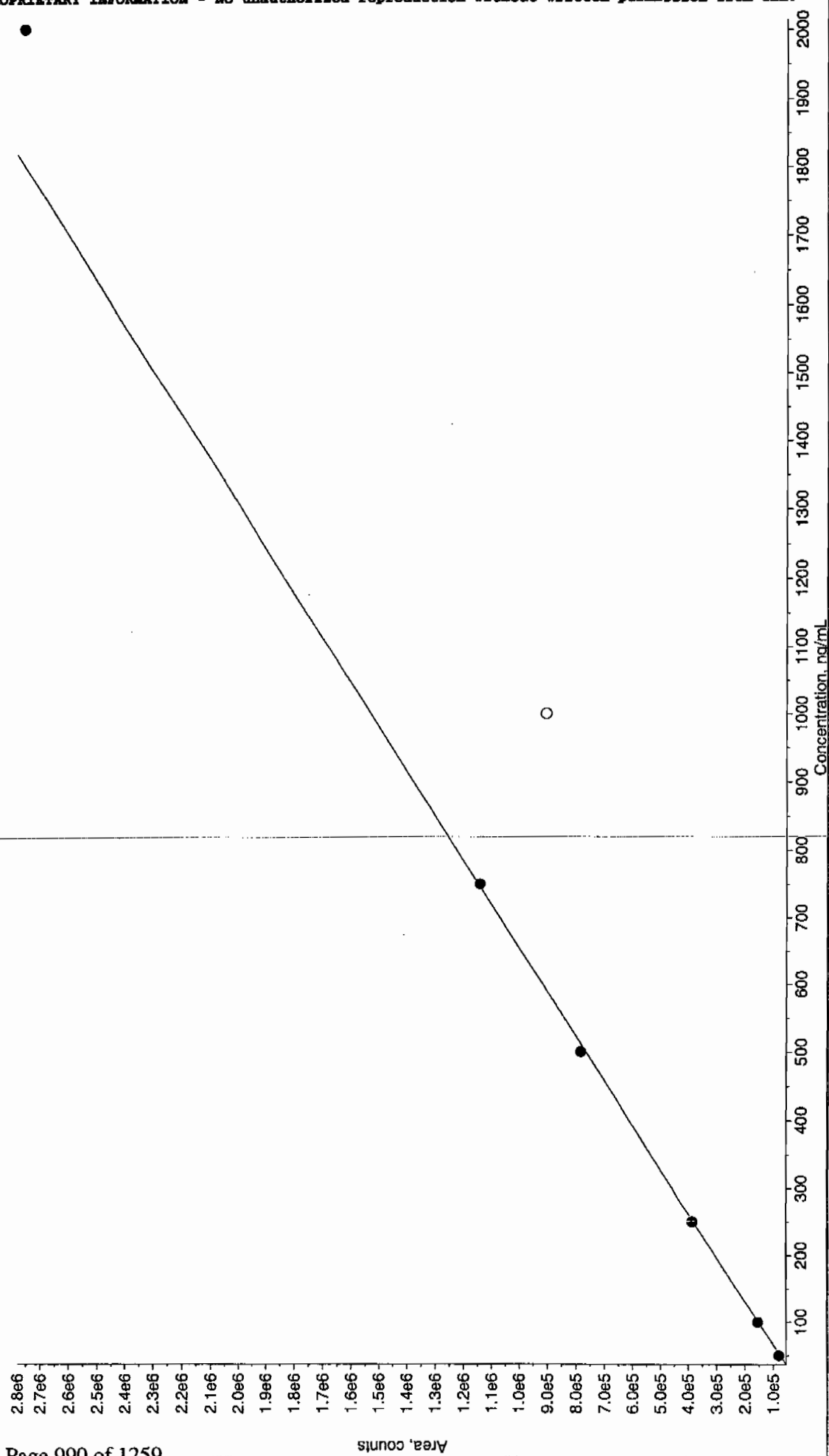


031010.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting):  $y = -1.34 x^2 + 1.03e+004 x + 2.28e+004$  ( $r = 1.0000$ )

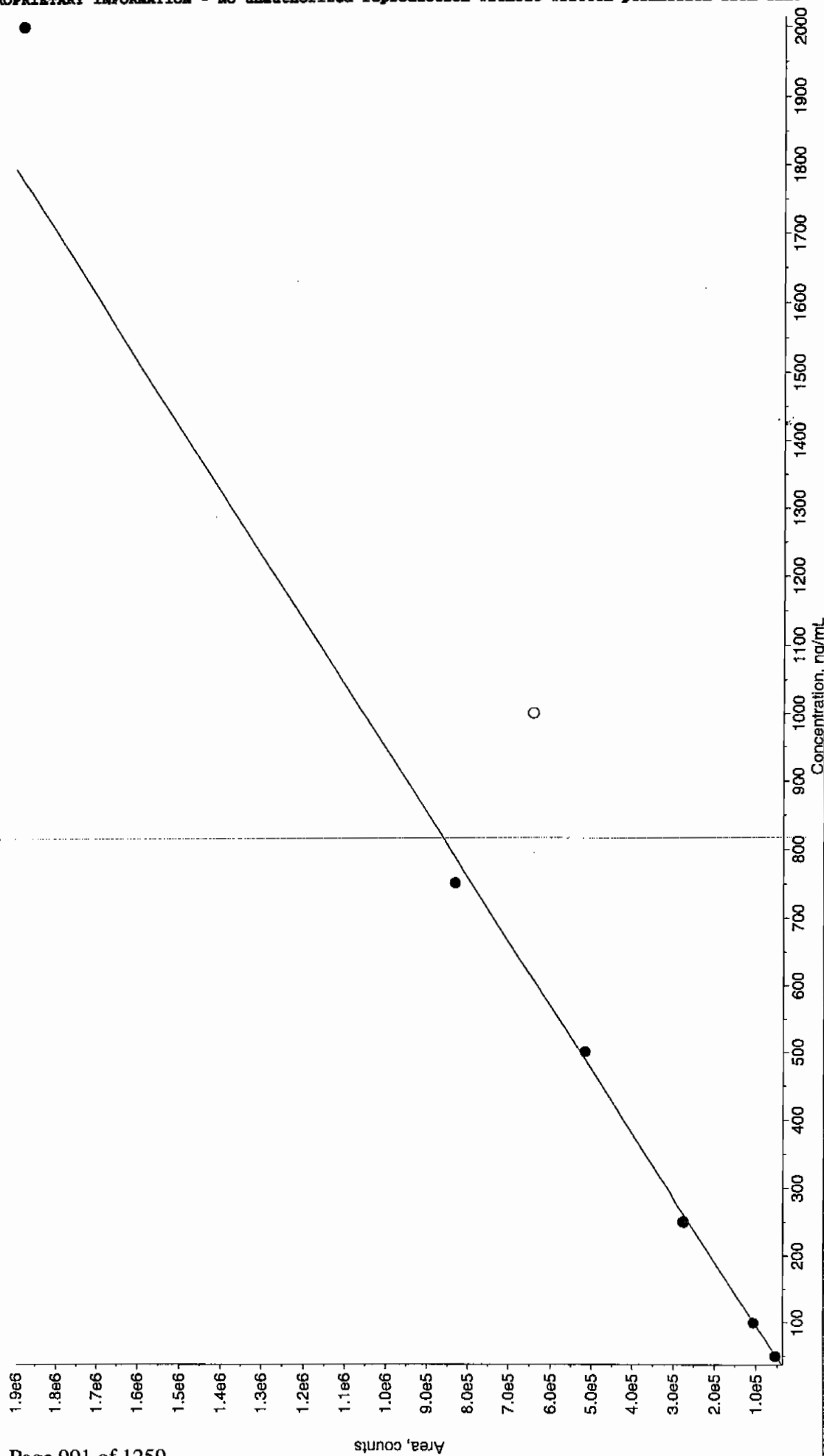


\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

031010.rdb (26-Diamino-4-nitrotoluene): "Mean Response Factor" Regression ("No" weighting):  $y = 1.53e+003 \times (\text{std. dev.} = 82.8)$

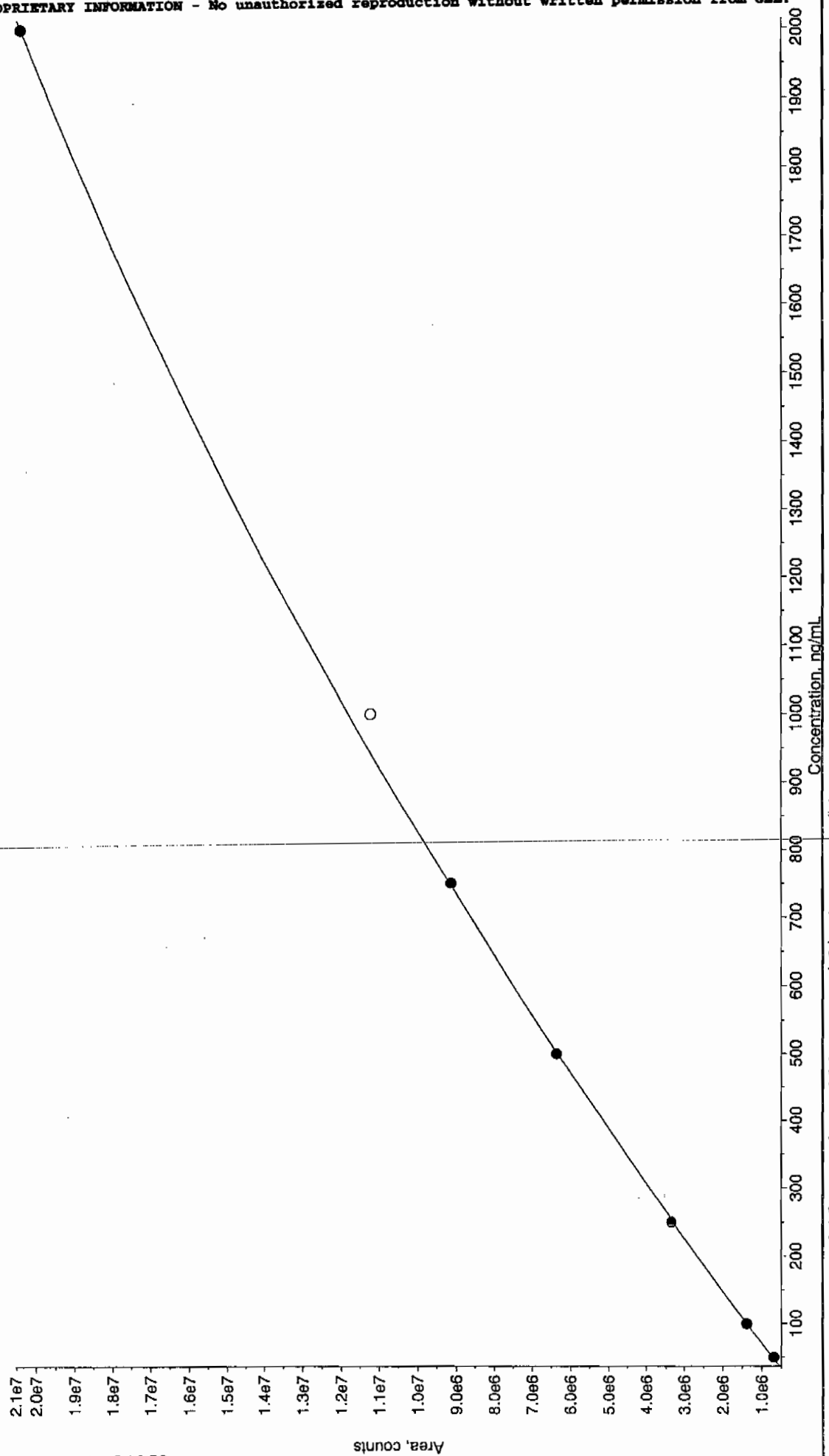


031010.rdb (24-Diamino-6-nitrotoluene): "Mean Response Factor" Regression ("No" weighting):  $y = 1.06e+003 x$  (std. dev. = 64.2)



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

031010.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting):  $y = -1.59x^2 + 1.33e+004x + 6.5e+004$  ( $r = 1.0000$ )



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS03100011.wiff

Analysis Date: 10-MAR-10 18:08

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	506	101	
2,6-Diamino-4-nitrotoluene	500	502	100	
3,4-Dinitrotoluene	250	243	97	
3,5-Dinitroaniline	500	527	105	
TATB	500	461	92	
tris(o-cresyl) phosphate	500	483	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

Lat 3/13/10

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

Sample Name: "WXX100310-261V" Sample ID: "111ER" File: "EXSG100011.wif"

Peak Name: "35-Dinitrobenzine" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Concentration: 500. ng/mL

Calculated Conc: 527. ng/mL

Acq. Date: 3/10/2010

Acq. Time: 6:08:30 PM

Modified: No

Proc. Algorithm: IntelliQuan - ION

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.16 min

Use Relative RT: No

Int. Type: Valley

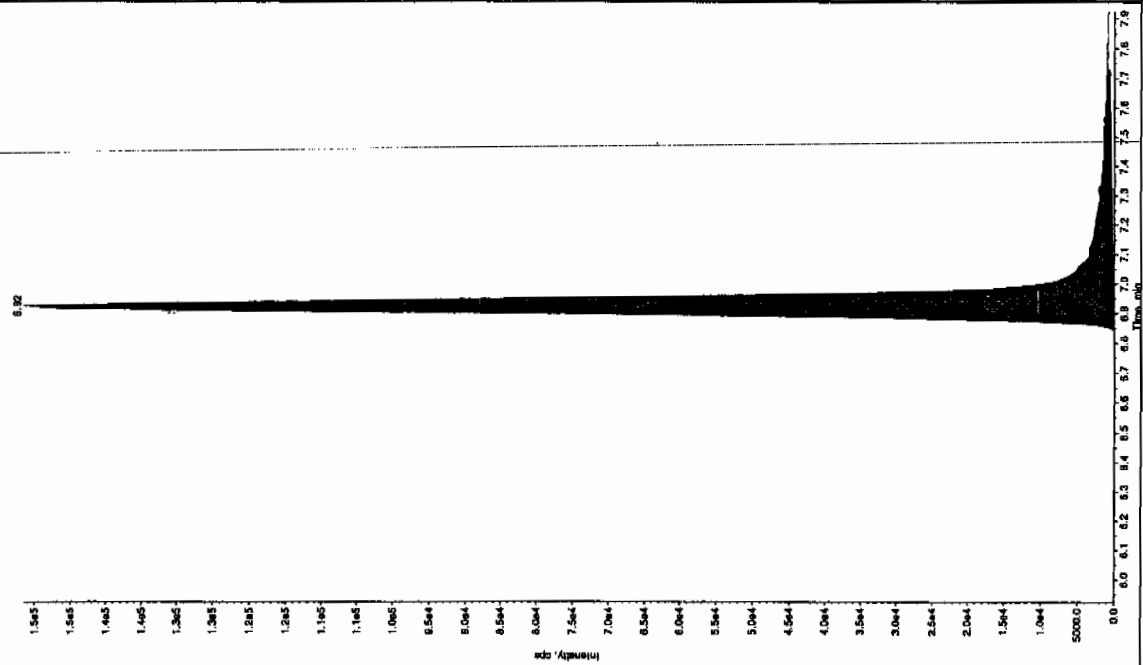
Retention Time: 8.16 min

Area: 3.71e+006 counts

Height: 534657.959 cps

Start Time: 8.06 min

End Time: 8.28 min



Sample Name: "WXX100310-261V" Sample ID: "111ER" File: "EXSG100011.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1

Concentration: 500. ng/mL

Calculated Conc: 461. ng/mL

Acq. Date: 3/10/2010

Acq. Time: 6:08:30 PM

Modified: No

Proc. Algorithm: IntelliQuan - ION

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.82 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 6.82 min

Area: 6.54e+005 counts

Height: 151450.114 cps

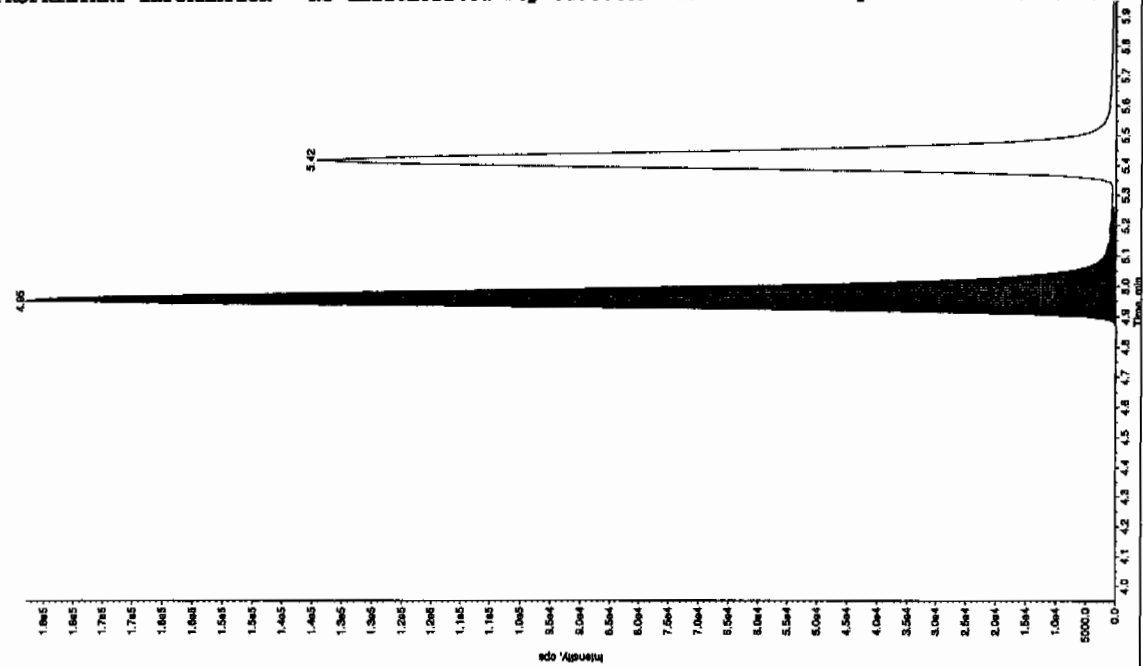
Start Time: 6.82 min

End Time: 7.73 min

Amw 02/15/10

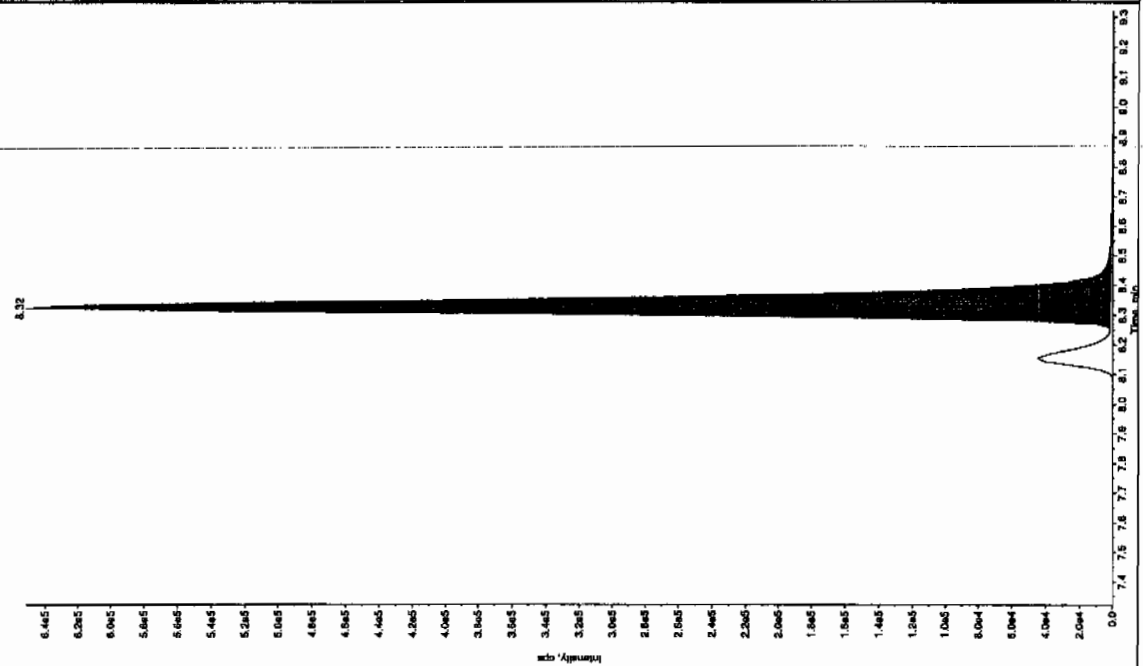
Sample Name: "WXX100310-250V" Sample ID: "111ER" File: "EX503100011.wif"  
 Peak Name: "25-Diamino-4-Nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 500. ng/mL  
 Concentration: 502. ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 6:08:30 PM  
 Acq. Time: 1865  
 Modified: NO  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 4.95 min  
 Area: 7.58e+005 counts  
 Height: 182806.763 cps  
 Start Time: 4.87 min  
 End Time: 5.26 min



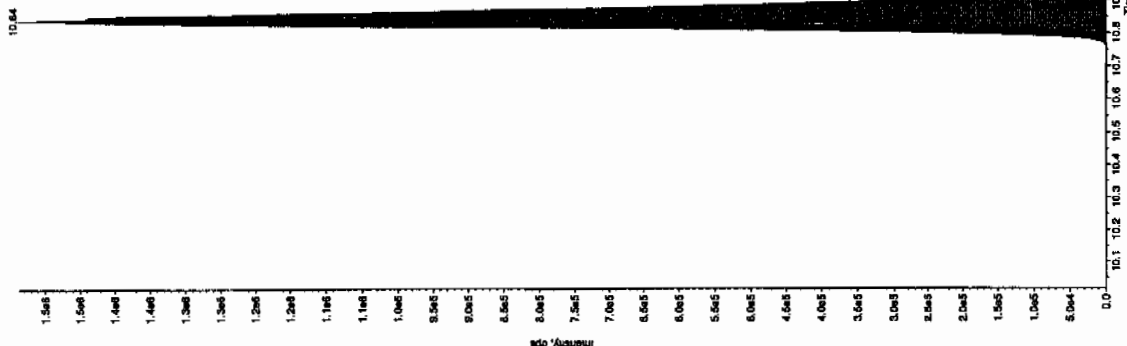
Sample Name: "WXX100310-250V" Sample ID: "111ER" File: "EX503100011.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1 QC  
 Sample Type: 243. ng/mL  
 Concentration: 243. ng/mL  
 Calculated Conc: 3/10/2010  
 Acq. Date: 6:08:30 PM  
 Acq. Time: 6445  
 Modified: NO  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.32 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 8.32 min  
 Area: 2.46e+005 counts  
 Height: 650270.996 cps  
 Start Time: 8.25 min  
 End Time: 8.69 min



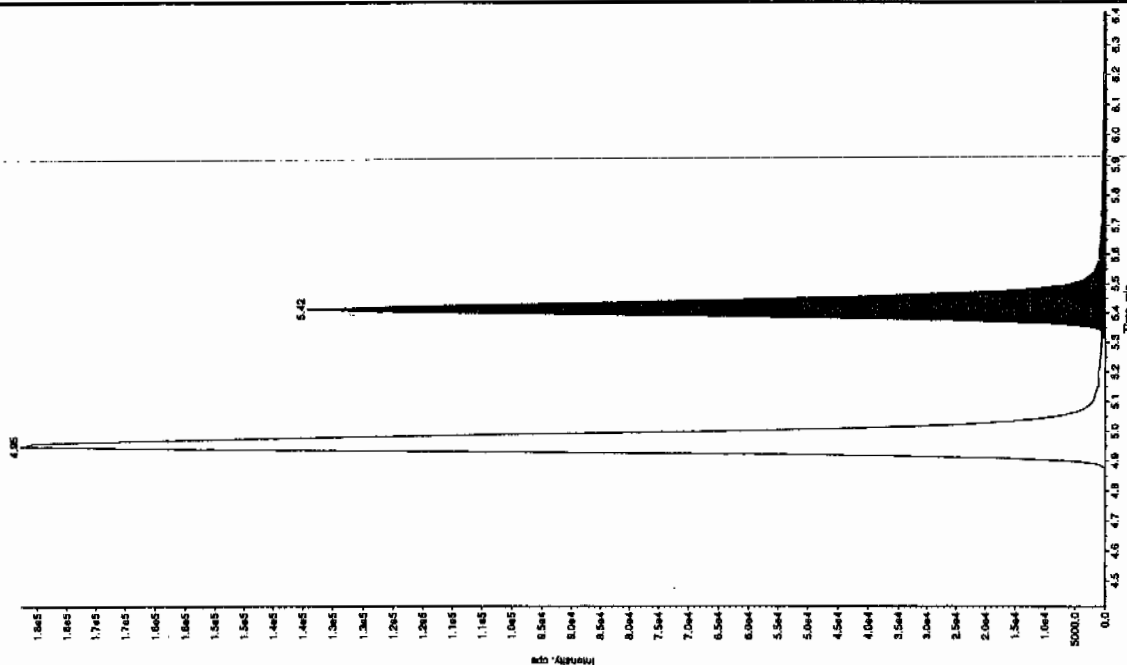
Sample Name: "WXX100310-280V" Sample ID: "J1LEF" File: "EXS03100011.wif"  
 Peak Name: "166.045.0 amu" Mass(es): 166.045.0 amu  
 Comment: "LONSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500. ng/mL  
 Calculated Conc: 483. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:08:30 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 6.12e+006 counts  
 Height: 1537228.882 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



Sample Name: "WXX100310-280V" Sample ID: "J1LEF" File: "EXS03100011.wif"  
 Peak Name: "24-Dienol-6-nitrobenzene" Mass(es): 166.045.0 amu  
 Comment: "LONSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 500. ng/mL  
 Calculated Conc: 500. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:08:30 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: 5.42 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.42 min  
 Area: 3.5e+005 counts  
 Height: 134073.385 cps  
 Start Time: 5.31 min  
 End Time: 5.62 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0319012a

Analysis Date: 19-MAR-10 22:18

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
4-Amino-2,6-dinitrotoluene	40	35.27	88	
HMX	40	36.922	92	
Nitrobenzene	40	45.522	114	
PETN	40	43.663	109	
RDX	40	40.907	102	
Tetryl	40	30.076	75	
m-Dinitrobenzene	40	38.78	97	
m-Nitrotoluene	40	44.56	111	
o-Nitrotoluene	40	42.241	106	
p-Nitrotoluene	40	39.554	99	
1,3,5-Trinitrobenzene	40	39.627	99	
1,3-Dinitrobenzene-d4	500	444.248	89	
2,4,6-Trinitrotoluene	40	37.741	94	
2,4-Dinitrotoluene	40	34.69	87	
2,6-Dinitrotoluene	40	42.395	106	
2,6-Dinitrotoluene-d3	500	471.684	94	
2-Amino-4,6-dinitrotoluene	40	32.751	82	
3,4-Dinitrotoluene	20	18.832	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

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\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319012a

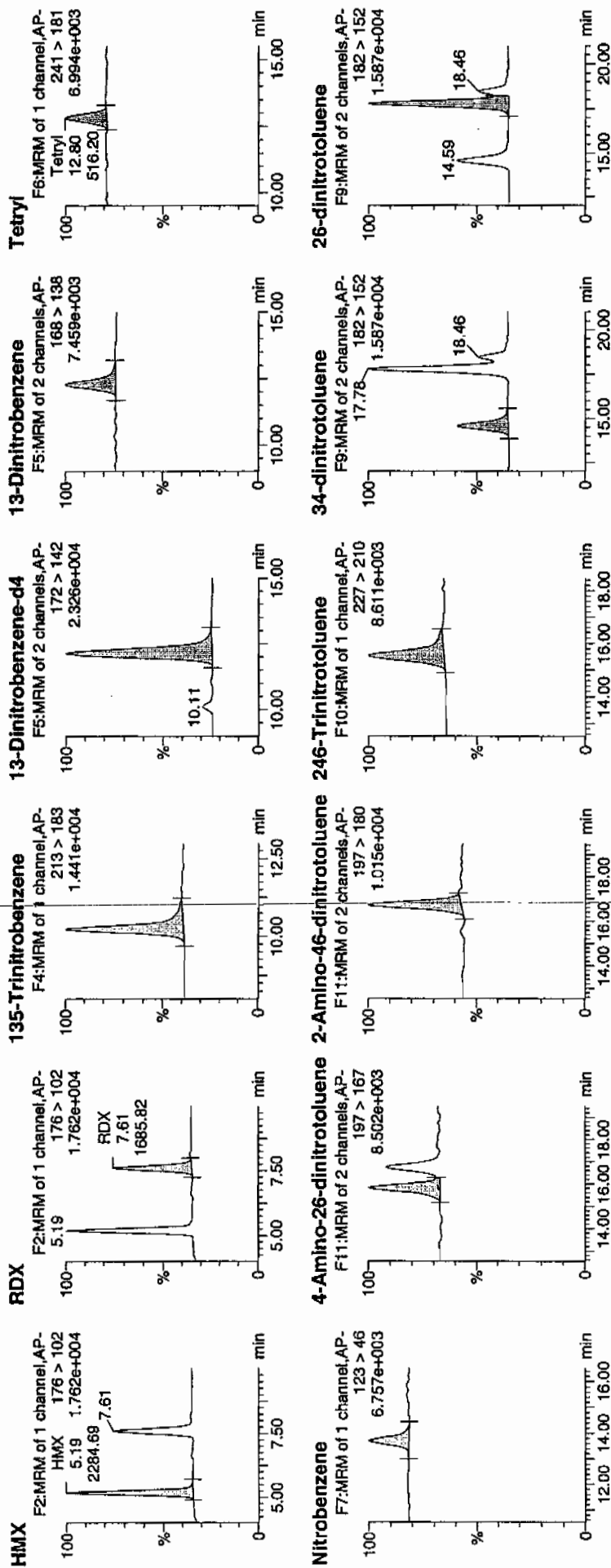
Date: 19-Mar-2010

Time: 22:18:36

ID: WXX100319-08CRI

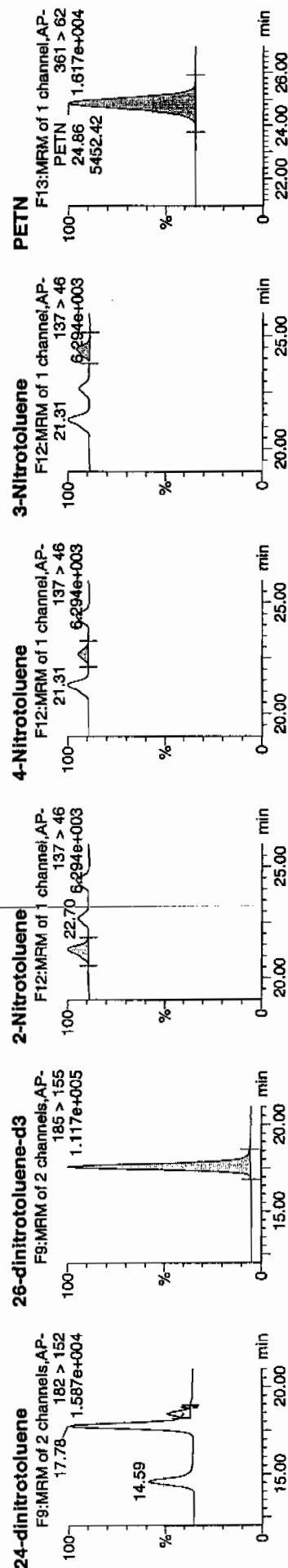
Vial: 1:1,C

11/2/10  
3/10/10



Handwritten signature

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



ID	Name	Trace	RT	Area	IS Area	Abn Resp	Response	Flags	Mod Date	Mod Time	Intg M	Rec	Dev	S/N
WXX100319-08CRI	HMx	176 > 102	5.19	2284.691	7292.912	2284.691	156.638	bb			36.9218	92.3	-7.7	23.6
WXX100319-08CRI	RDX	176 > 102	7.61	1685.822	7292.912	1685.822	115.579	bb			40.9070	102.3	2.3	14.5
WXX100319-08CRI	135-Trinitrobenzene	213 > 183	10.23	2766.046	7292.912	2766.046	189.639	bb			39.6267	99.1	-0.9	222.7
WXX100319-08CRI	13-Dinitrobenzene-d4	172 > 142	12.13	7292.912		7292.912	7292.912	bb			444.2476	88.8	-11.2	601.7
WXX100319-08CRI	13-Dinitrobenzene	168 > 138	12.27	766.991	7292.912	766.991	52.585	bb			38.7795	96.9	-3.1	56.1
WXX100319-08CRI	Tetryl	241 > 181	12.80	516.195	7292.912	516.195	35.390	bb			30.0763	75.2	-24.8	58.5
WXX100319-08CRI	Nitrobenzene	123 > 46	13.70	461.133	7292.912	461.133	31.615	bb			45.5215	113.8	13.8	39.4
WXX100319-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.82	1143.709	43929.121	1143.709	13.018	MM	20-Mar-10	10:54:00	35.2696	88.2	-11.8	67.1
WXX100319-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.72	1709.632	43929.121	1709.632	19.459	bb			32.7511	81.9	-18.1	177.6
WXX100319-08CRI	246-Trinitrotoluene	227 > 210	15.54	1423.825	43929.121	1423.825	16.206	bb			37.7409	94.4	-5.6	170.9
WXX100319-08CRI	34-dinitrotoluene	182 > 152	14.59	1846.391	43929.121	1846.391	21.016	bb			18.9322	94.2	-5.8	84.0
WXX100319-08CRI	26-dinitrotoluene	182 > 152	17.78	4202.054	43929.121	4202.054	47.828	MM	20-Mar-10	10:58:48	42.3945	106.0	6.0	228.5
WXX100319-08CRI	24-dinitrotoluene	182 > 152	18.46	734.808	43929.121	734.808	8.364	MM	20-Mar-10	11:01:30	34.6904	86.7	-13.3	43.8
WXX100319-08CRI	26-dinitrotoluene-d3	185 > 155	17.61	43929.121		43929.121	43929.121	bb			471.5842	94.3	-5.7	3953.7
WXX100319-08CRI	2-Nitrotoluene	137 > 46	21.31	346.332	43929.121	346.332	3.942	bb			42.2413	105.6	5.6	35.4
WXX100319-08CRI	4-Nitrotoluene	137 > 46	22.70	160.527	43929.121	160.527	1.827	bb			39.5536	98.9	-1.1	17.3
WXX100319-08CRI	3-Nitrotoluene	137 > 46	24.43	220.022	43929.121	220.022	2.504	bb			44.5600	111.4	11.4	22.0
WXX100319-08CRI	PETN	361 > 62	24.86	5452.419	43929.121	5452.419	62.059	bb			43.9628	109.2	9.2	974.0

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/19/10  
 Time of Injection 2218  
 Standard Number WXX100319-08CRI  
 Data File EXP0319012a

HMX	92.3
RDX	102.3
135-TNB	99.1
13-DNB	96.9
Tetryl	75.2
Nitrobenzene	113.8
4A-26-DNT	88.2
2A-46-DNT	81.9
246-TNT	94.4
34-DNT(surr)	94.2
26-DNT	106.0
24-DNT	86.7
2-NT	105.6
4-NT	98.9
3-NT	111.4
PETN	109.2

*1007  
3/22/10*

Total 1556.1

Average 97.3

*4mm-0319012a*

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0319022a

Analysis Date: 20-MAR-10 03:13

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
o-Nitrotoluene	600	593.465	99	
p-Nitrotoluene	600	608.706	101	
1,3,5-Trinitrobenzene	600	596.766	99	
1,3-Dinitrobenzene-d4	500	398.076	80	*
2,4,6-Trinitrotoluene	600	620.636	103	
2,4-Dinitrotoluene	600	654.89	109	
2,6-Dinitrotoluene	600	625.73	104	
2,6-Dinitrotoluene-d3	500	415.339	83	
2-Amino-4,6-dinitrotoluene	600	575.512	96	
3,4-Dinitrotoluene	300	286.078	95	
4-Amino-2,6-dinitrotoluene	600	604.613	101	
HMX	600	610.321	102	
Nitrobenzene	600	619.1	103	
PETN	600	694.771	116	
RDX	600	682.896	114	
Tetryl	600	657.931	110	
m-Dinitrobenzene	600	593.531	99	
m-Nitrotoluene	600	594.961	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

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319022a

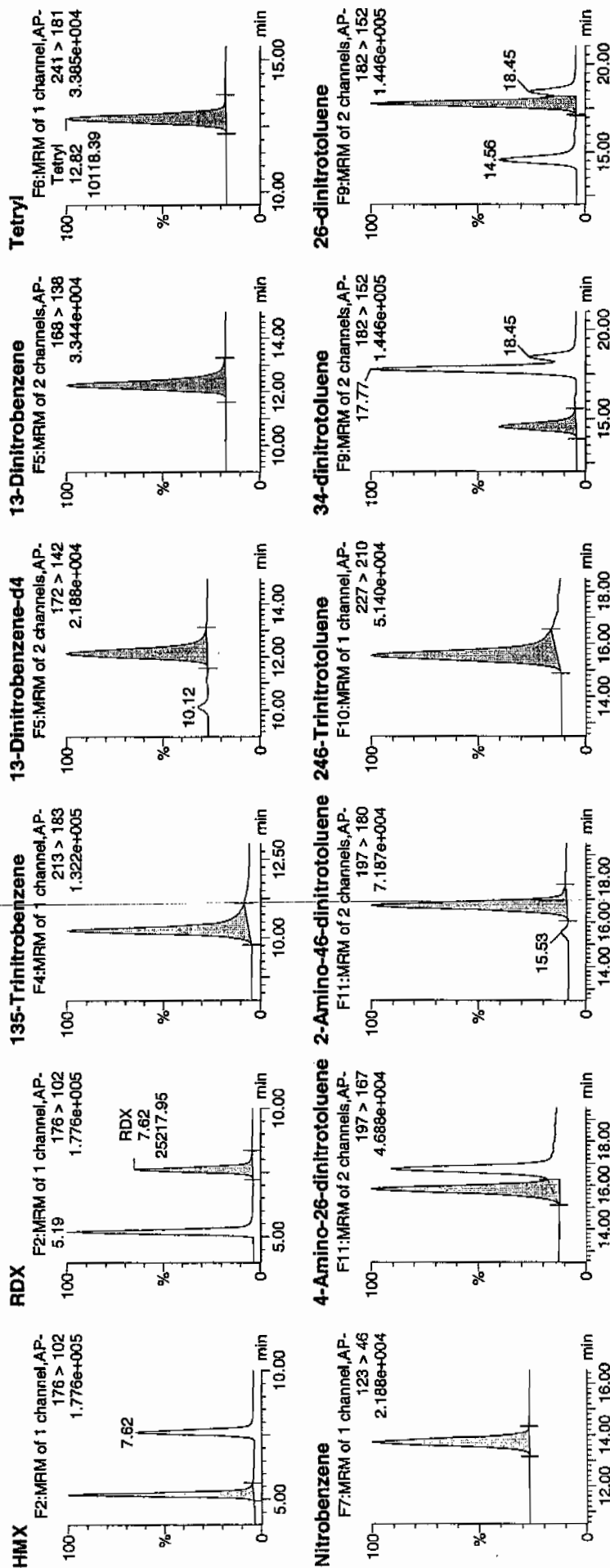
Date: 20-Mar-2010

Time: 03:13:32

ID: WXX100319-07CCV

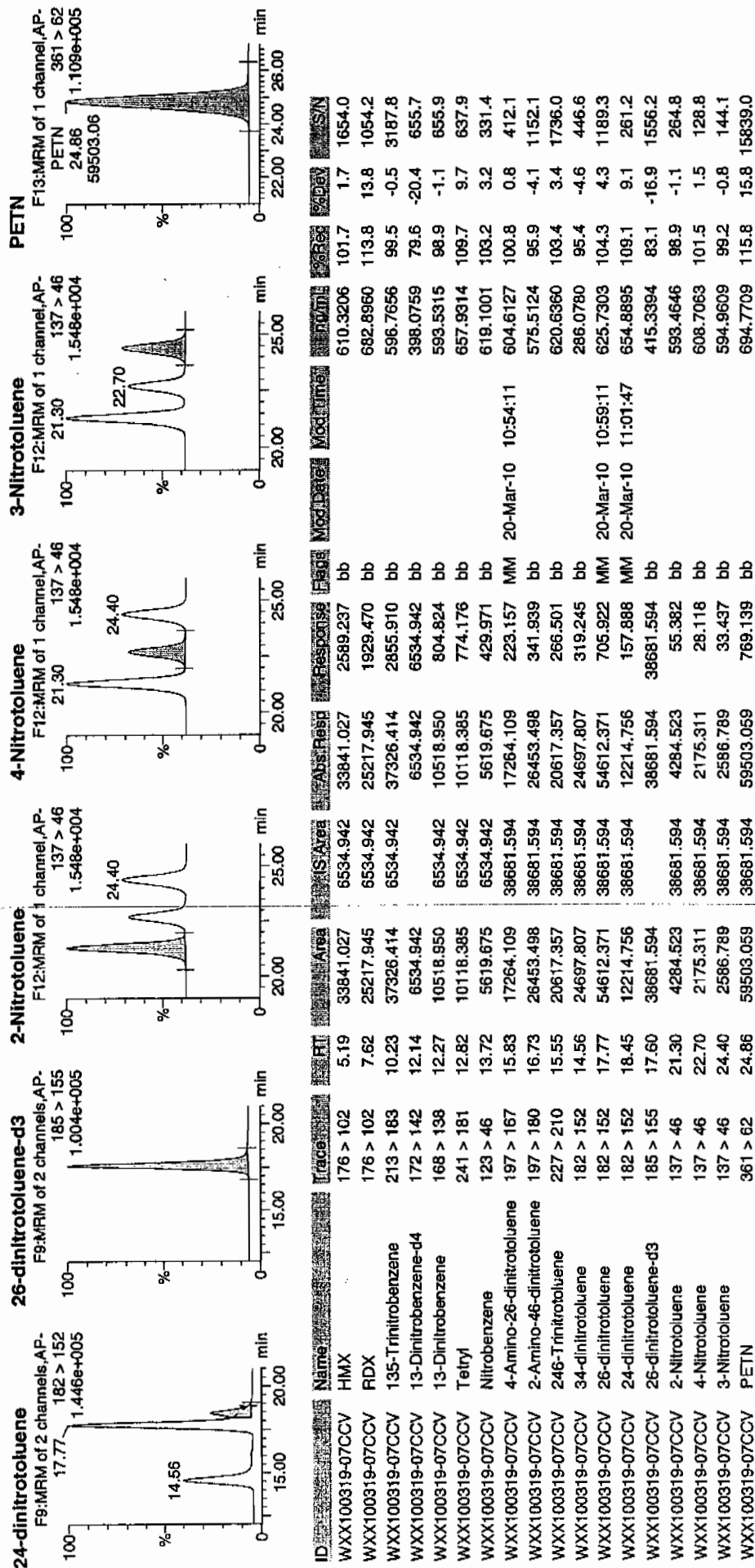
Vial: 1:1,B

11/17/10  
3/10/10



11/17/10  
3/10/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/20/10  
 Time of Injection: 0313  
 Standard Number: WXX100319-07CCV  
 Data File: EXP0319022a

HMX	101.7
RDX	113.8
135-TNB	99.5
13-DNB	98.9
Tetryl	109.7
Nitrobenzene	103.2
4A-26-DNT	100.8
2A-46-DNT	95.9
246-TNT	103.4
34-DNT(surr)	95.4
26-DNT	104.3
24-DNT	109.1
2-NT	98.9
4-NT	101.5
3-NT	99.2
PETN	115.8

*MTT  
3/20/10*

Total 1651.1

Average 103.2

*#111-0319022/10*

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0319024a

Analysis Date: 20-MAR-10 04:12

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	41.981	105	
1,3-Dinitrobenzene-d4	500	414.198	83	
2,4,6-Trinitrotoluene	40	37.34	93	
2,4-Dinitrotoluene	40	40.233	101	
2,6-Dinitrotoluene	40	40.727	102	
2,6-Dinitrotoluene-d3	500	442.71	89	
2-Amino-4,6-dinitrotoluene	40	36.537	91	
3,4-Dinitrotoluene	20	19.003	95	
4-Amino-2,6-dinitrotoluene	40	42.896	107	
HMX	40	46.851	117	
Nitrobenzene	40	44.233	111	
PETN	40	47.421	119	
RDX	40	42.067	105	
Tetryl	40	31.143	78	
m-Dinitrobenzene	40	37.549	94	
m-Nitrotoluene	40	38.238	96	
o-Nitrotoluene	40	36.515	91	
p-Nitrotoluene	40	40.115	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Printed: Sat Mar 20 11:06:08 2010, Page 47 of 73

Quantify Sample Report  
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319024a

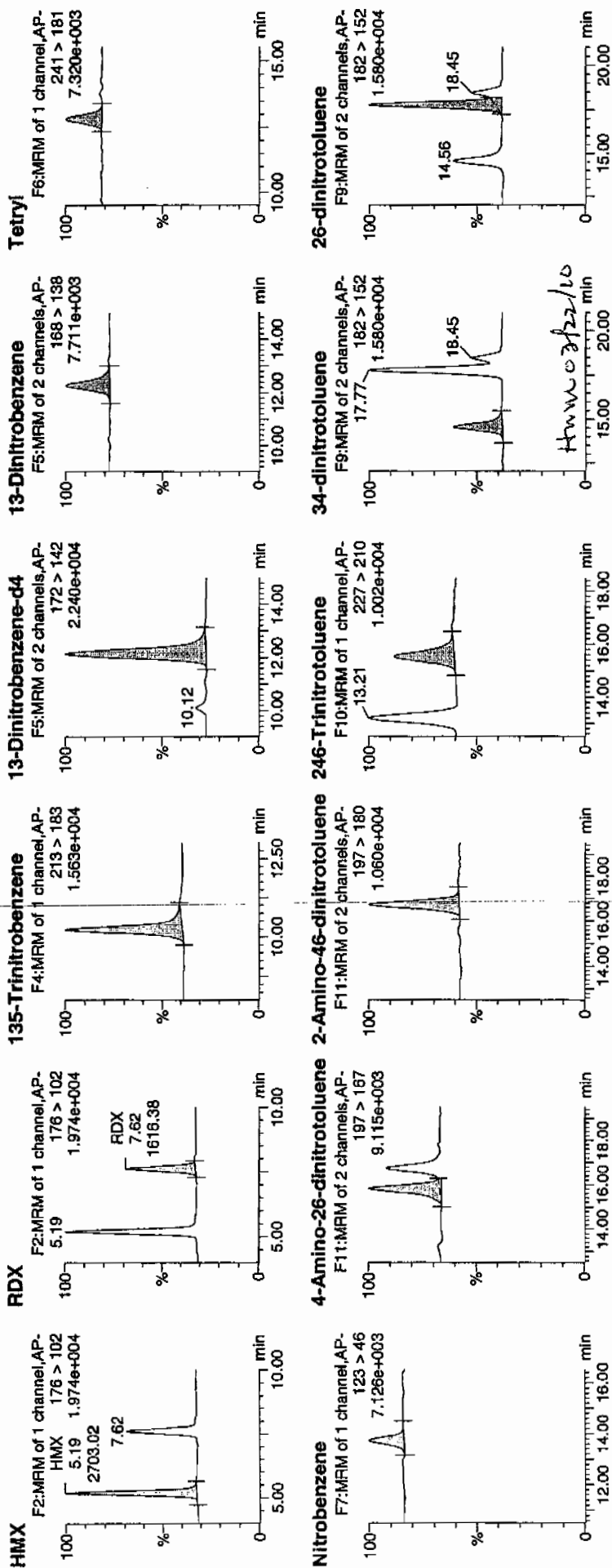
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Time: 04:12:29

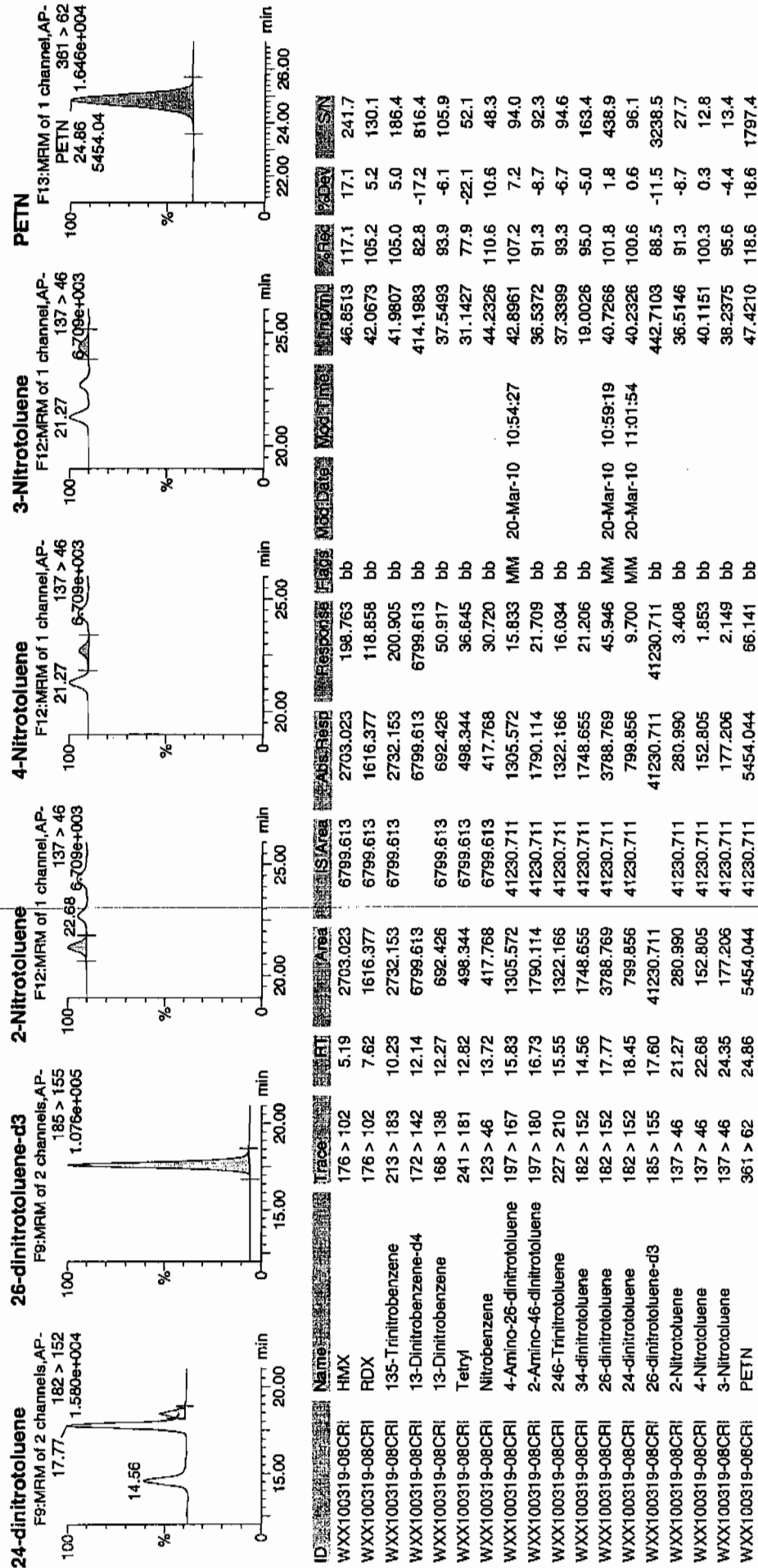
ID: WXX100319-08CRI

Vial: 1:1,C

WXX  
3/20/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/20/10  
 Time of Injection 0412  
 Standard Number WXX100319-08CRI  
 Data File EXP0319024a

HMX		117.1
RDX		105.2
135-TNB		105.0
13-DNB		93.9
Tetryl		77.9
Nitrobenzene		110.6
4A-26-DNT		107.2
2A-46-DNT		91.3
246-TNT		93.3
34-DNT(surr)		95.0
26-DNT		101.8
24-DNT		100.6
2-NT		91.3
4-NT		100.3
3-NT		95.6
PETN		118.6

MTT  
3/20/10

Total 1604.7

Average 100.3

4/11/10-03-12-10

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0319034a

Analysis Date: 20-MAR-10 09:07

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	607.809	101	
1,3-Dinitrobenzene-d4	500	418.159	84	
2,4,6-Trinitrotoluene	600	641.716	107	
2,4-Dinitrotoluene	600	667.541	111	
2,6-Dinitrotoluene	600	609.314	102	
2,6-Dinitrotoluene-d3	500	459.614	92	
2-Amino-4,6-dinitrotoluene	600	588.691	98	
3,4-Dinitrotoluene	300	295.867	99	
4-Amino-2,6-dinitrotoluene	600	614.541	102	
HMX	600	638.024	106	
Nitrobenzene	600	635.42	106	
PETN	600	689.169	115	
RDX	600	742.292	124	*
Tetryl	600	691.27	115	
m-Dinitrobenzene	600	610.491	102	
m-Nitrotoluene	600	559.832	93	
o-Nitrotoluene	600	544.36	91	
p-Nitrotoluene	600	587.044	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

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\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0319034a

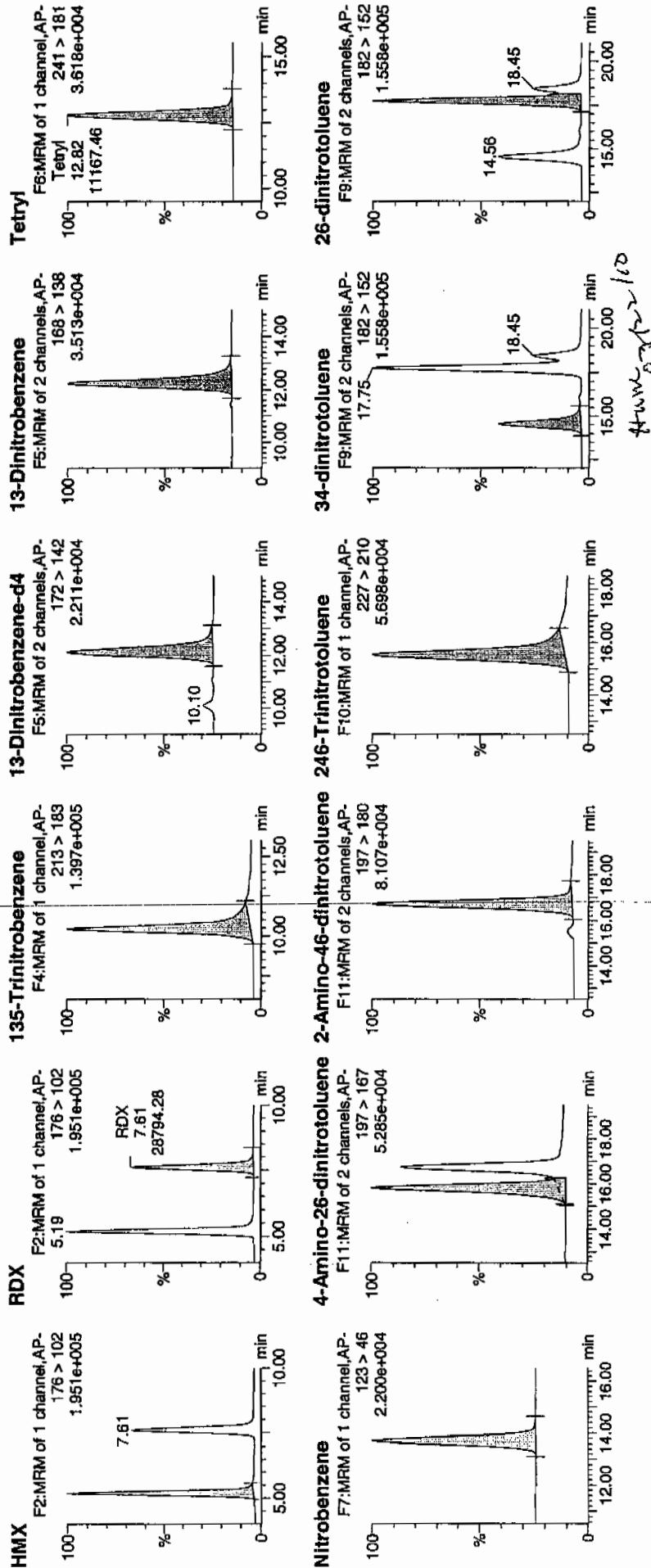
Date: 20-Mar-2010

Time: 09:07:21

ID: WXX100319-07CCV

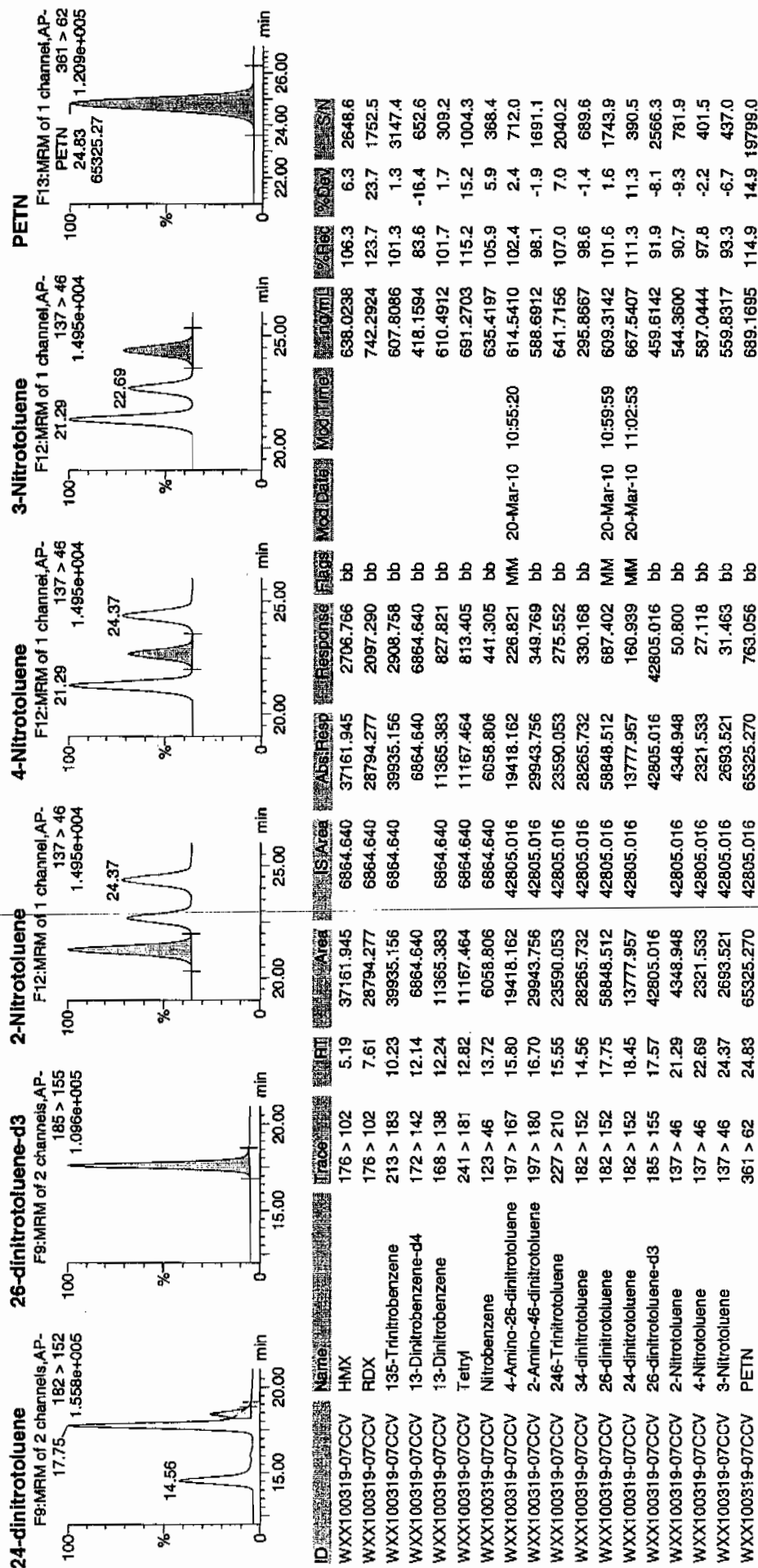
Vial: 1:1,B

MTT  
3/10/10



Dataset: C:\MASSLYNX\New\_Exp\_PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

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GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/20/10  
 Time of Injection: 0907  
 Standard Number: WXX100319-07CCV  
 Data File: EXP0319034a

HMX	106.3
RDX	123.7
135-TNB	101.3
13-DNB	101.7
Tetryl	115.2
Nitrobenzene	105.9
4A-26-DNT	102.4
2A-46-DNT	98.1
246-TNT	107.0
34-DNT(surr)	98.6
26-DNT	101.6
24-DNT	111.3
2-NT	90.7
4-NT	97.8
3-NT	93.3
PETN	114.9

*not  
show*

Total 1669.8

Average 104.4

*111.02 22-10*

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0319036a

Analysis Date: 20-MAR-10 10:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3-Dinitrobenzene-d4	500	429.507	86	
2,4,6-Trinitrotoluene	40	38.317	96	
2,4-Dinitrotoluene	40	38.152	95	
2,6-Dinitrotoluene	40	39.018	98	
2,6-Dinitrotoluene-d3	500	464.792	93	
2-Amino-4,6-dinitrotoluene	40	39.247	98	
3,4-Dinitrotoluene	20	20.507	103	
4-Amino-2,6-dinitrotoluene	40	35.784	89	
HMX	40	46.606	117	
Nitrobenzene	40	41.291	103	
PETN	40	52.159	130	*
RDX	40	46.272	116	
Tetryl	40	28.725	72	
m-Dinitrobenzene	40	40.068	100	
m-Nitrotoluene	40	40.078	100	
o-Nitrotoluene	40	42.592	106	
p-Nitrotoluene	40	40.139	100	
1,3,5-Trinitrobenzene	40	41.932	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Printed: Sat Mar 20 11:06:08 2010, Page 71 of 73

Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319036a

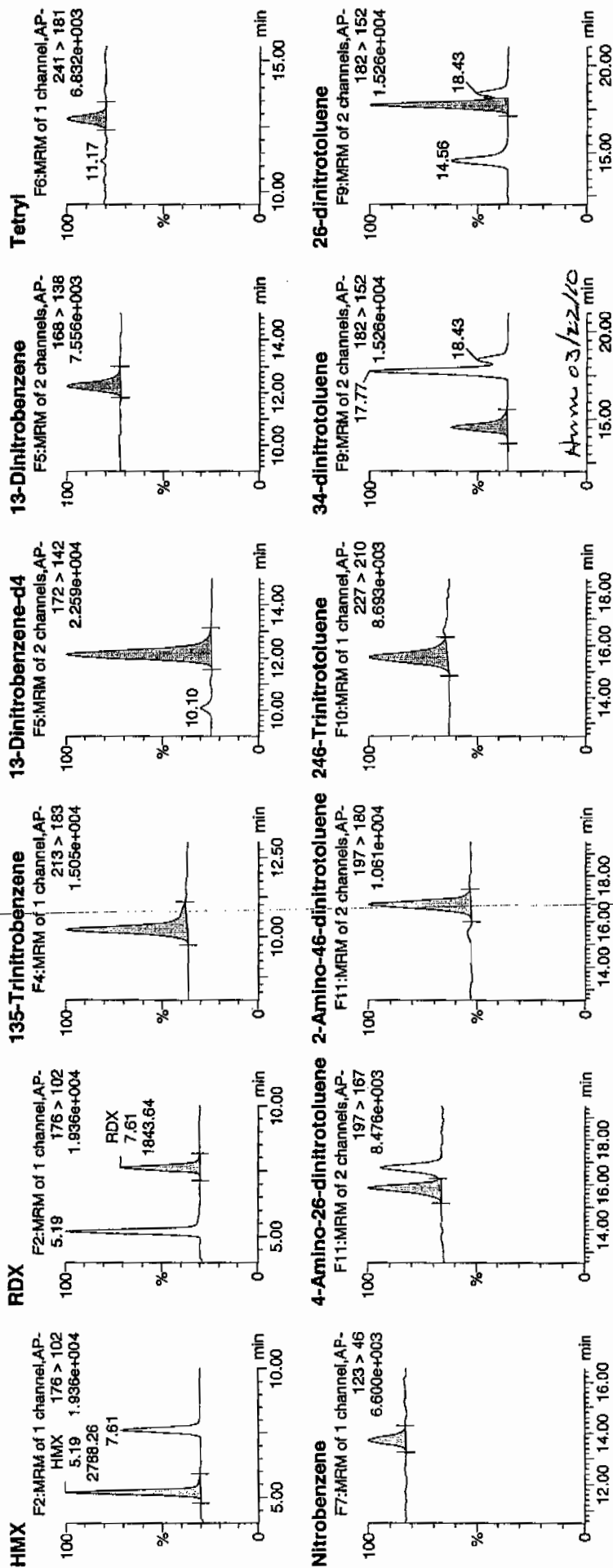
Date: 20-Mar-2010

Time: 10:06:26

ID: WXX100319-08CRI

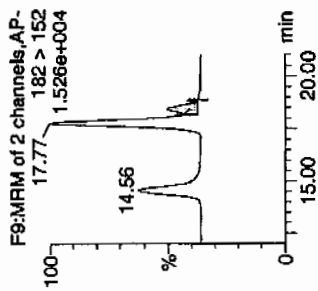
Vial: 1:1,C

*WXX*  
*5/12/10*

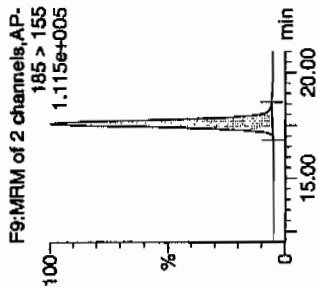


Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

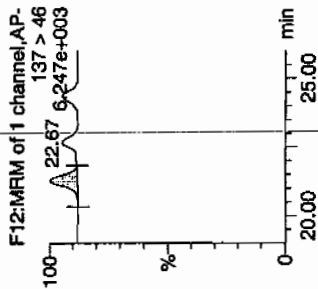
## 24-dinitrotoluene



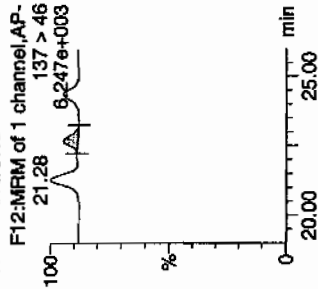
## 26-dinitrotoluene-d3



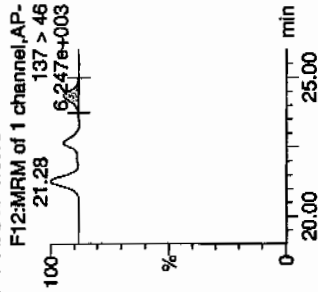
## 2-Nitrotoluene



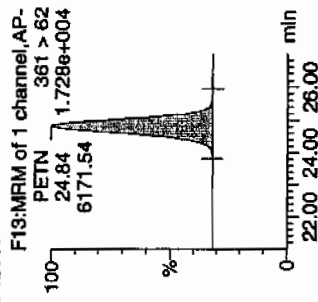
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	Trace	RT	Area	ISTD Area	Abst Resp	Response	Flags	Mod Date	Mod Time	Int Time	Area	SN
WXX100319-08CRI	HMZ	176 > 102	5.19	2786.264	7050.922	2786.264	197.723	bb				46.6063	116.5
WXX100319-08CRI	RDX	176 > 102	7.61	1843.635	7050.922	1843.635	130.737	bb				46.2717	115.7
WXX100319-08CRI	135-Trinitrobenzene	213 > 183	10.23	2829.850	7050.922	2829.850	200.672	bb				41.9321	104.8
WXX100319-08CRI	13-Dinitrobenzene-d4	172 > 142	12.14	7050.922	7050.922	7050.922	7050.922	bb				429.5068	85.9
WXX100319-08CRI	13-Dinitrobenzene	168 > 138	12.27	766.182	7050.922	766.182	54.332	bb				40.0681	100.2
WXX100319-08CRI	Tetryl	241 > 181	12.82	476.640	7050.922	476.640	33.800	bb				28.7247	71.8
WXX100319-08CRI	Nitrobenzene	123 > 46	13.72	404.398	7050.922	404.398	28.677	bb				41.2909	103.2
WXX100319-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.83	1143.445	43287.270	1143.445	13.208	MM	20-Mar-10	10:55:27		35.7843	89.5
WXX100319-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.73	2018.810	43287.270	2018.810	23.319	bb				39.2474	98.1
WXX100319-08CRI	246-Trinitrotoluene	227 > 210	15.55	1424.441	43287.270	1424.441	16.453	bb				38.3171	95.8
WXX100319-08CRI	34-dinitrotoluene	182 > 152	14.56	1981.222	43287.270	1981.222	22.885	bb				20.5071	102.5
WXX100319-08CRI	26-dinitrotoluene	182 > 152	17.77	3810.907	43287.270	3810.907	44.019	MM	20-Mar-10	11:00:06		39.0183	97.5
WXX100319-08CRI	24-dinitrotoluene	182 > 152	18.43	796.330	43287.270	796.330	9.198	MM	20-Mar-10	11:03:02		38.1523	95.4
WXX100319-08CRI	26-dinitrotoluene-d3	185 > 155	17.58	43287.270	43287.270	43287.270	43287.270	bb				464.7924	93.0
WXX100319-08CRI	2-Nitrotoluene	137 > 46	21.28	344.107	43287.270	344.107	3.975	bb				42.5922	106.5
WXX100319-08CRI	4-Nitrotoluene	137 > 46	22.67	160.523	43287.270	160.523	1.854	bb				40.1391	100.3
WXX100319-08CRI	3-Nitrotoluene	137 > 46	24.36	194.999	43287.270	194.999	2.252	bb				40.0778	100.2
WXX100319-08CRI	PETN	361 > 62	24.84	6171.536	43287.270	6171.536	71.286	bb				52.1590	130.4

# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/20/10  
 Time of Injection 1006  
 Standard Number WXX100319-08CRI  
 Data File EXP0319036a

HMX	116.5
RDX	115.7
135-TNB	104.8
13-DNB	100.2
Tetryl	71.8
Nitrobenzene	103.2
4A-26-DNT	89.5
2A-46-DNT	98.1
246-TNT	95.8
34-DNT(surr)	102.5
26-DNT	97.5
24-DNT	95.4
2-NT	106.5
4-NT	100.3
3-NT	100.2
PETN	130.4

*auth  
3/22/10*

Total 1628.4

Average 101.8

*Auth 03/22/10*

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0319047a

Analysis Date: 20-MAR-10 15:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	569.715	95	
1,3-Dinitrobenzene-d4	500	425.661	85	
2,4,6-Trinitrotoluene	600	624.11	104	
2,4-Dinitrotoluene	600	649.388	108	
2,6-Dinitrotoluene	600	623.466	104	
2,6-Dinitrotoluene-d3	500	445.978	89	
2-Amino-4,6-dinitrotoluene	600	556.254	93	
3,4-Dinitrotoluene	300	283.304	94	
4-Amino-2,6-dinitrotoluene	600	599.338	100	
HMX	600	631.041	105	
Nitrobenzene	600	590.064	98	
PETN	600	651.449	109	
RDX	600	671.226	112	
Tetryl	600	612.056	102	
m-Dinitrobenzene	600	588.611	98	
m-Nitrotoluene	600	569.905	95	
o-Nitrotoluene	600	542.331	90	
p-Nitrotoluene	600	595.86	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Mar 21 12:22:16 2010, Page 21 of 103

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319047a

Date: 20-Mar-2010

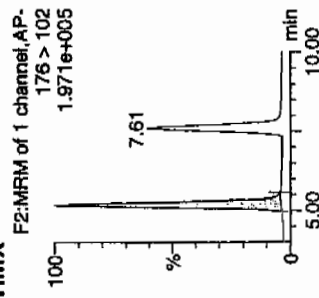
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ID: WXX100319-07CCV

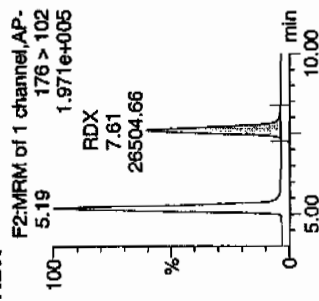
Vial: 1:1,B

WXX  
3/21/10

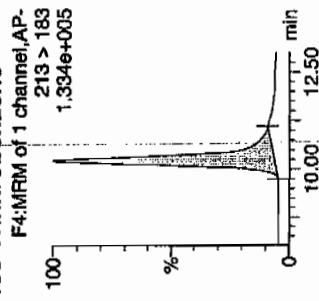
## HMX



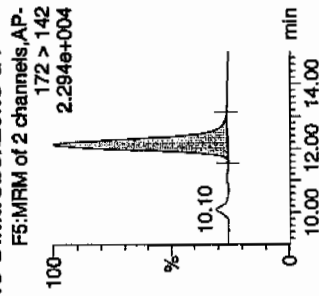
## RDX



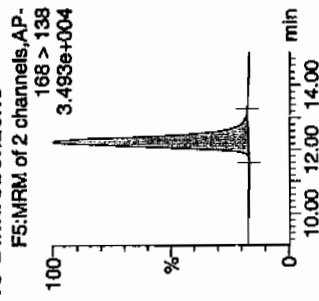
## 135-Trinitrobenzene



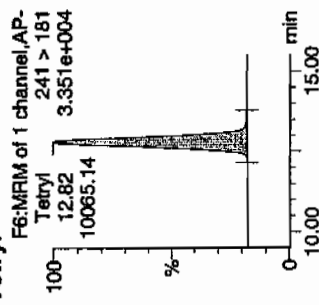
## 13-Dinitrobenzene-d4



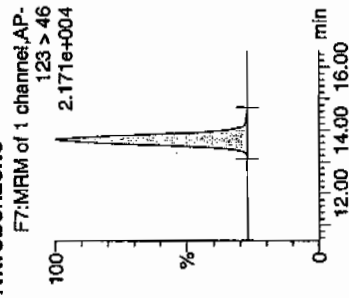
## 13-Dinitrobenzene



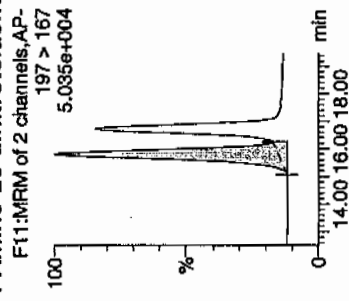
## Tetryl



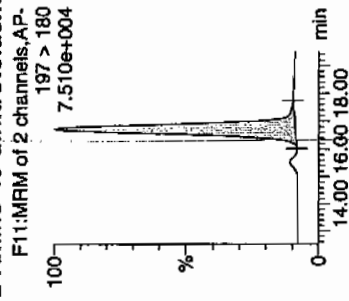
## Nitrobenzene



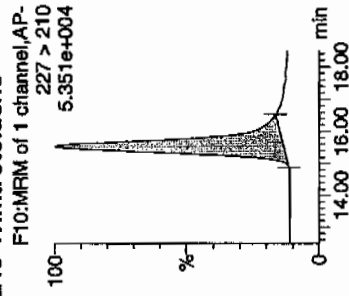
## 4-Amino-26-dinitrotoluene



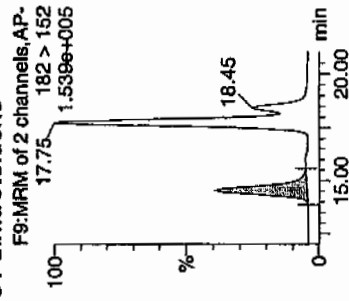
## 2-Amino-46-dinitrotoluene



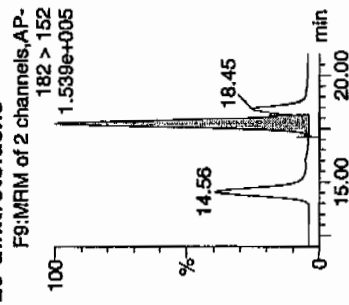
## 246-Trinitrotoluene



## 34-dinitrotoluene

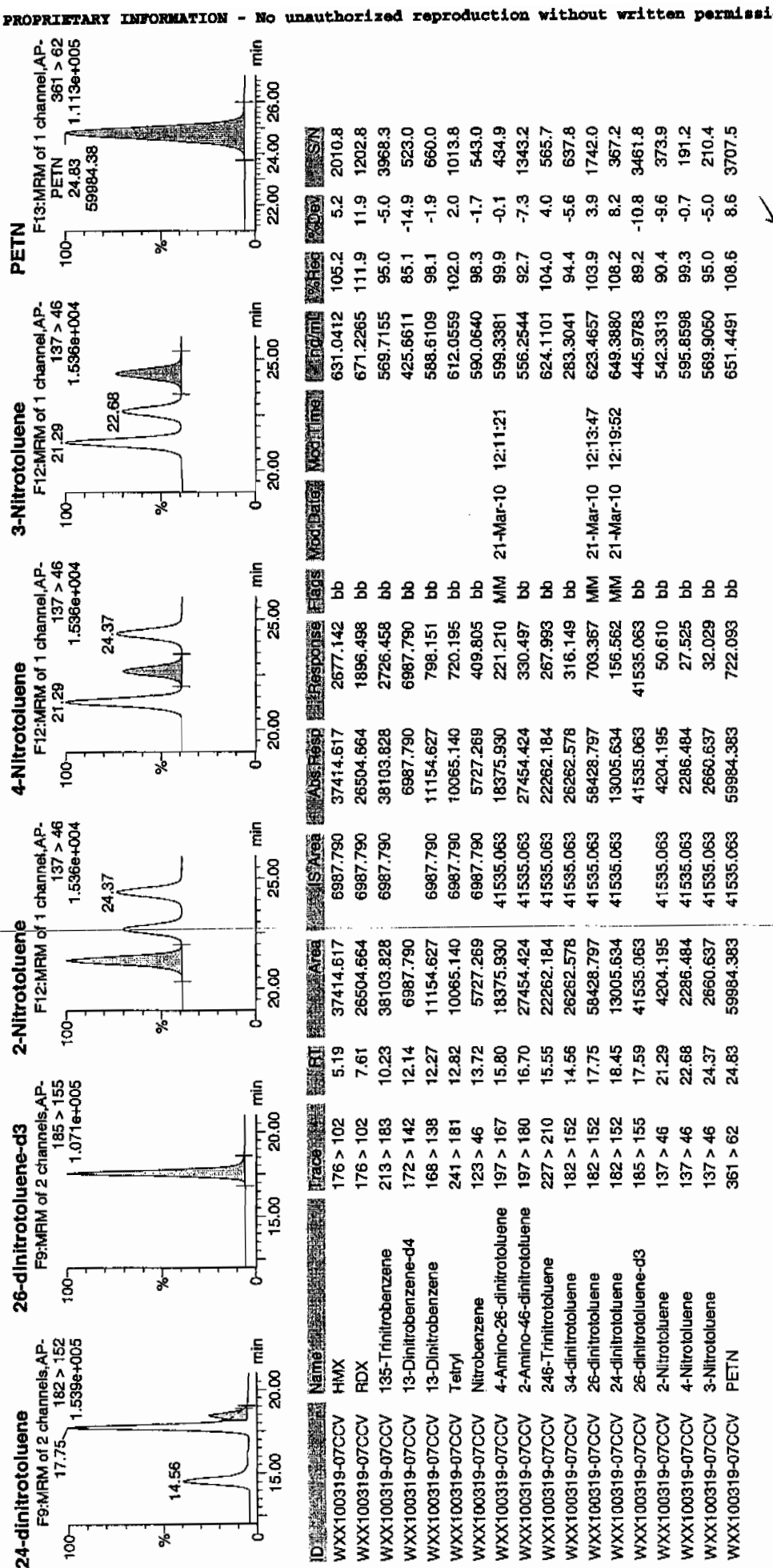


## 26-dinitrotoluene



Handwritten note: HMM 08/21/10

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/20/10  
 Time of Injection: 1530  
 Standard Number: WXX100319-07CCV  
 Data File: EXP0319047a

HMX	105.2
RDX	111.9
135-TNB	95.0
13-DNB	98.1
Tetryl	102.0
Nitrobenzene	98.3
4A-26-DNT	99.9
2A-46-DNT	92.7
246-TNT	104.0
34-DNT(surr)	94.4
26-DNT	103.9
24-DNT	108.2
2-NT	90.4
4-NT	99.3
3-NT	95.0
PETN	108.6

WHT  
3/21/10

Total 1606.9

Average 100.4

HMM-03/22/10

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0319049a

Analysis Date: 20-MAR-10 16:30

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
PETN	40	46.335	116	
RDX	40	48.91	122	
Tetryl	40	25.298	63	*
m-Dinitrobenzene	40	41.003	103	
m-Nitrotoluene	40	36.41	91	
o-Nitrotoluene	40	36.545	91	
p-Nitrotoluene	40	46.73	117	
1,3,5-Trinitrobenzene	40	42.36	106	
1,3-Dinitrobenzene-d4	500	425.894	85	
2,4,6-Trinitrotoluene	40	44.23	111	
2,4-Dinitrotoluene	40	50.779	127	
2,6-Dinitrotoluene	40	41.353	103	
2,6-Dinitrotoluene-d3	500	471.28	94	
2-Amino-4,6-dinitrotoluene	40	31.885	80	
3,4-Dinitrotoluene	20	20.064	100	
4-Amino-2,6-dinitrotoluene	40	44.304	111	
HMX	40	50.353	126	
Nitrobenzene	40	42.362	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 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: Sun Mar 21 12:22:16 2010, Page 25 of 103

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319049a

Date: 20-Mar-2010

Time: 16:30:07

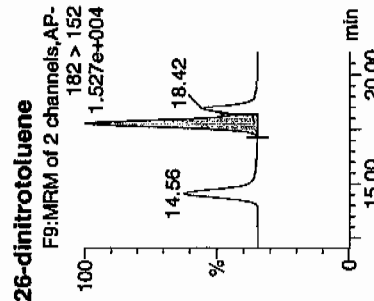
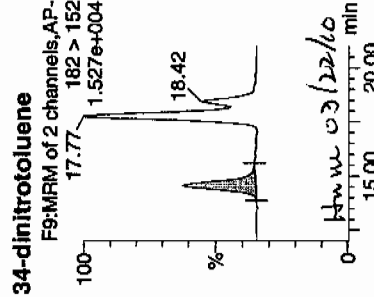
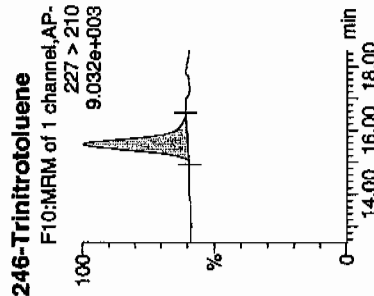
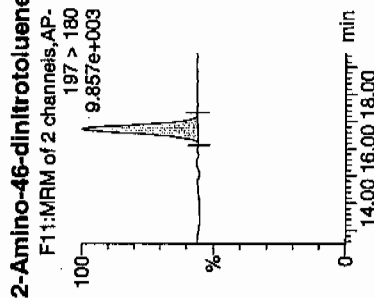
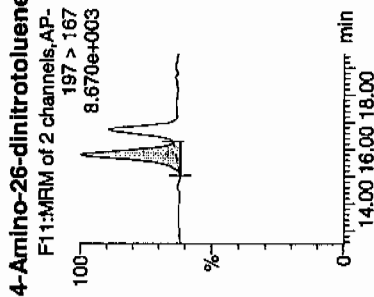
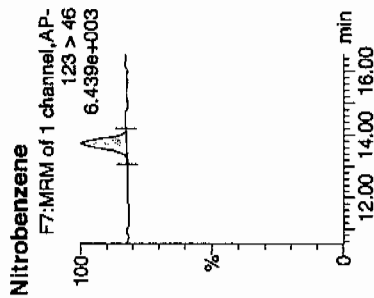
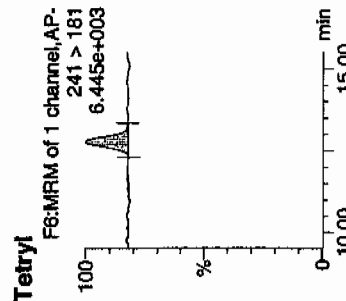
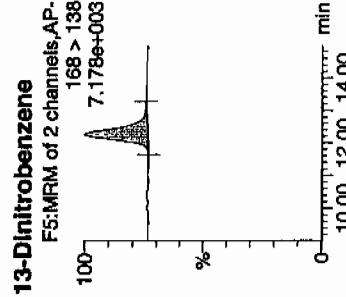
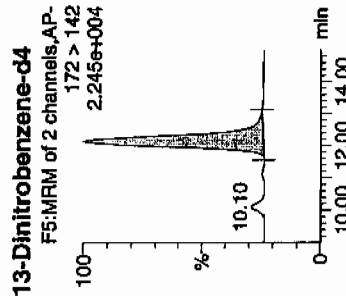
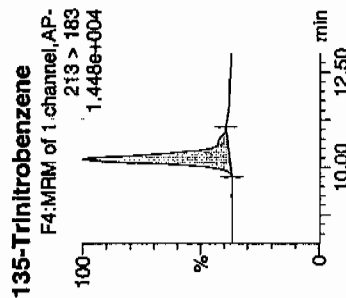
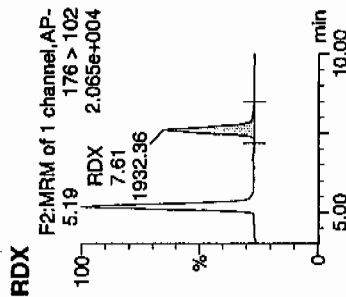
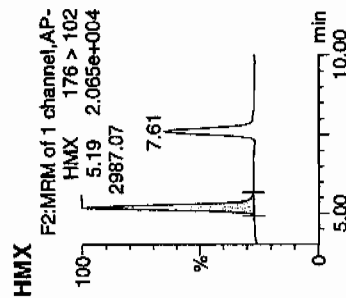
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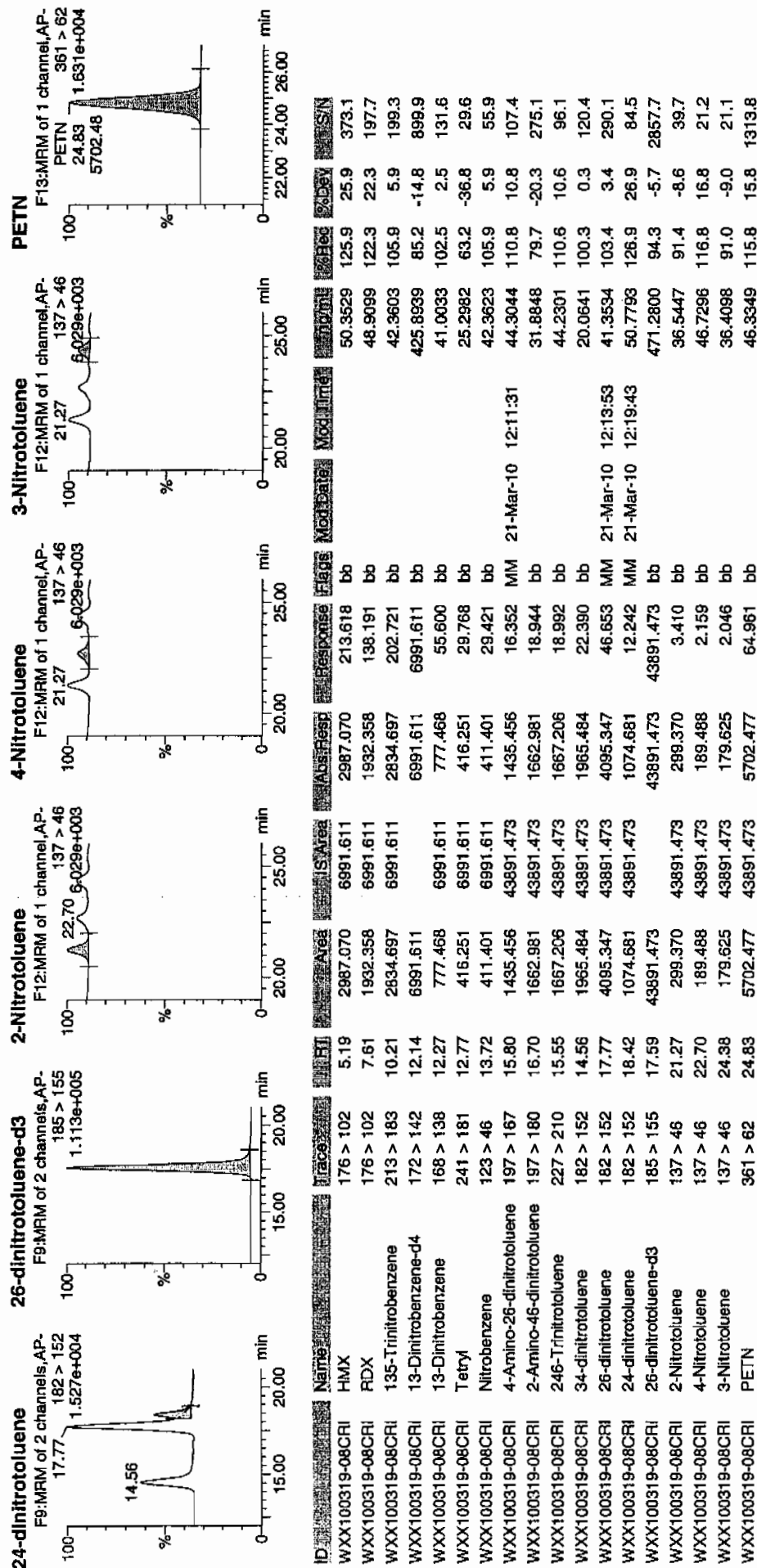
Vial: 1:1,C

WXX  
3/21/10

Page 1022 of 1259

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GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/20/10  
 Time of Injection 1630  
 Standard Number WXX100319-08CRI  
 Data File EXP0319049a

HMX	125.9
RDX	122.3
135-TNB	105.9
13-DNB	102.5
Tetryl	63.2
Nitrobenzene	105.9
4A-26-DNT	110.8
2A-46-DNT	79.7
246-TNT	110.6
34-DNT(surr)	100.3
26-DNT	103.4
24-DNT	126.9
2-NT	91.4
4-NT	116.8
3-NT	91.0
PETN	115.8

WAT  
3/21/10

Total 1672.4

HW 03/22/10

Average 104.5

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%

No single analyte > +/- 60%

7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0319059a

Analysis Date: 20-MAR-10 21:24

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2-Amino-4,6-dinitrotoluene	600	583.672	97	
3,4-Dinitrotoluene	300	286.477	95	
4-Amino-2,6-dinitrotoluene	600	584.489	97	
HMX	600	641.492	107	
Nitrobenzene	600	598.49	100	
PETN	600	712.406	119	
RDX	600	712.175	119	
Tetryl	600	662.828	110	
m-Dinitrobenzene	600	609.817	102	
m-Nitrotoluene	600	582.842	97	
o-Nitrotoluene	600	678.142	113	
p-Nitrotoluene	600	608.825	101	
1,3,5-Trinitrobenzene	600	604.918	101	
1,3-Dinitrobenzene-d4	500	391.283	78	*
2,4,6-Trinitrotoluene	600	602.348	100	
2,4-Dinitrotoluene	600	703.344	117	
2,6-Dinitrotoluene	600	626.187	104	
2,6-Dinitrotoluene-d3	500	419.09	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 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\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

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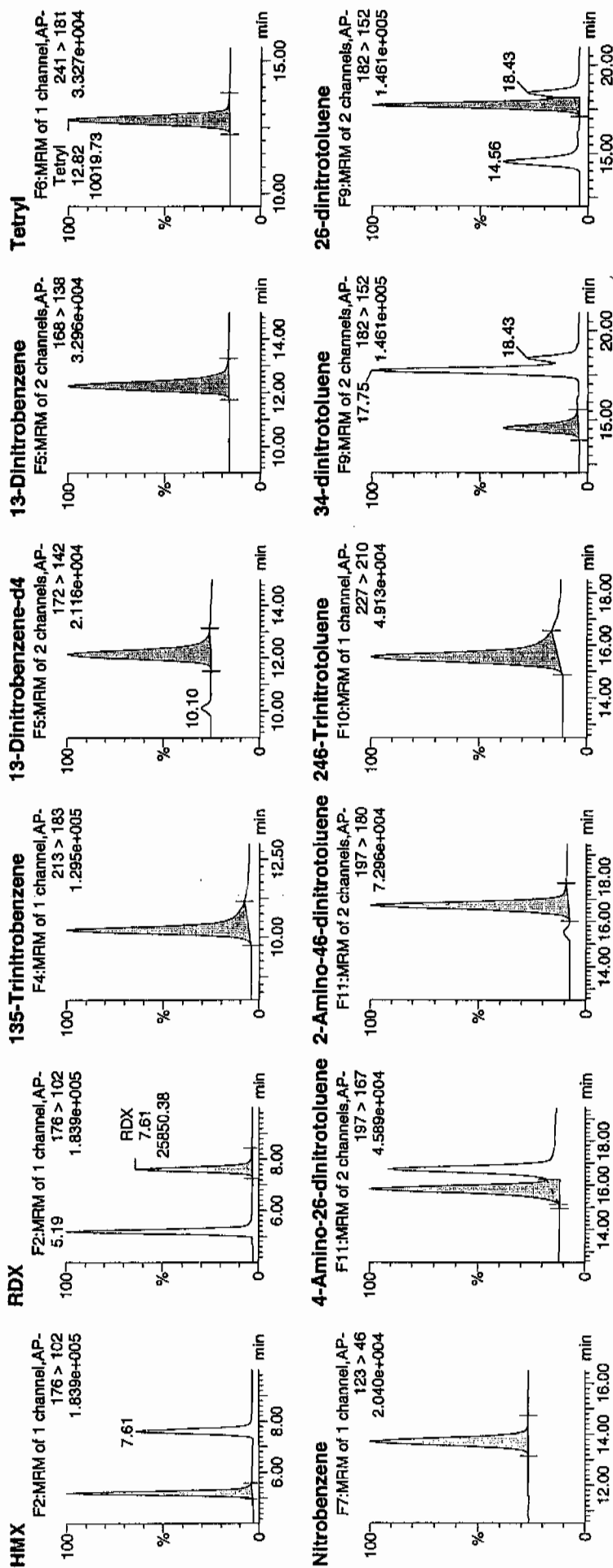
Date: 20-Mar-2010

Time: 21:24:58

ID: WXX100319-07CCV

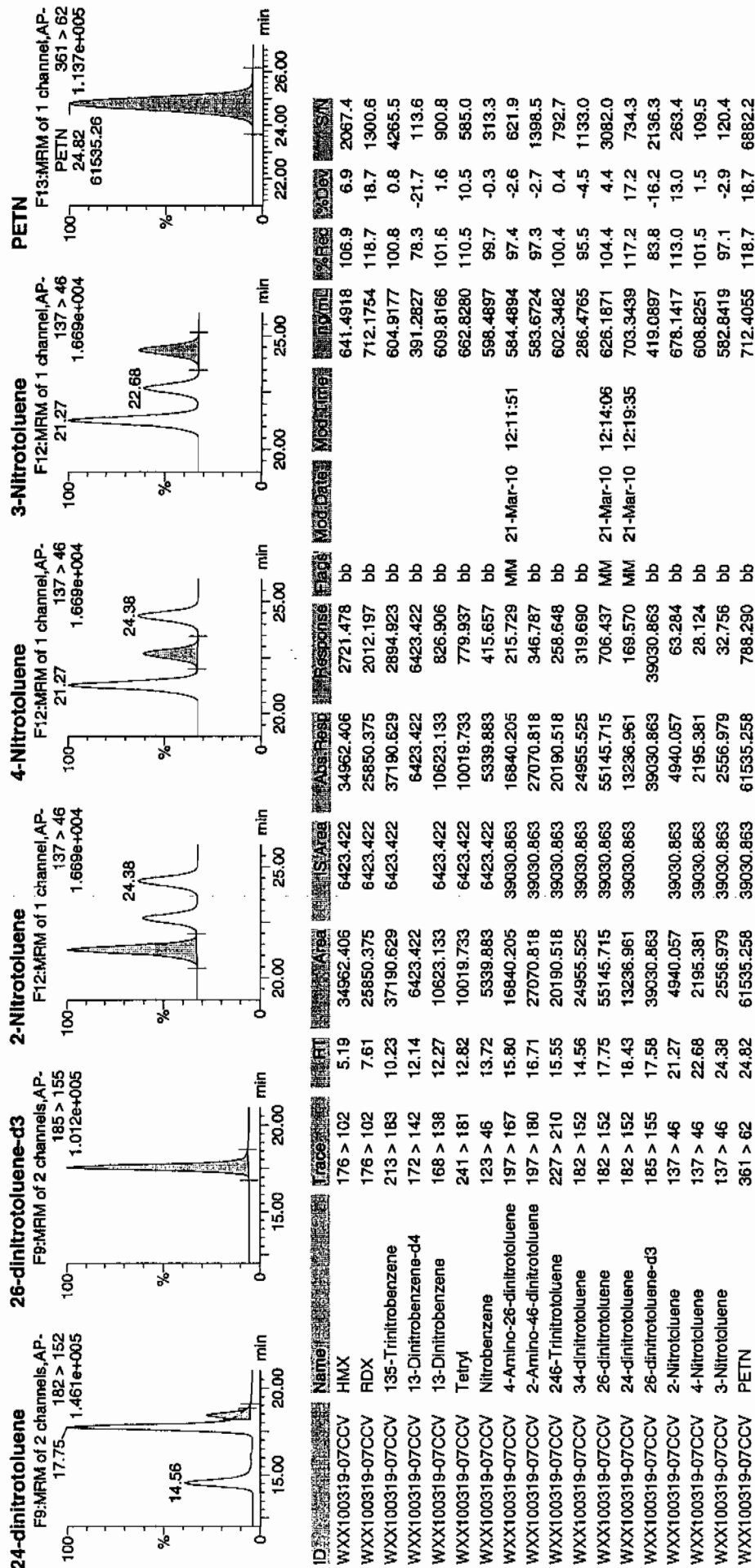
Vial: 1:1,B

WXX  
3/1/10



Handwritten signature/initials

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010



GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/20/10  
 Time of Injection: 2124  
 Standard Number: WXX100319-07CCV  
 Data File: EXP0319059a

HMX	106.9
RDX	118.7
135-TNB	100.8
13-DNB	101.6
Tetryl	110.5
Nitrobenzene	99.7
4A-26-DNT	97.4
2A-46-DNT	97.3
246-TNT	100.4
34-DNT(surr)	95.5
26-DNT	104.4
24-DNT	117.2
2-NT	113.0
4-NT	101.5
3-NT	97.1
PETN	118.7

*MTT  
3/21/10*

Total 1680.7

*Sum 03/22/10*

Average 105.0

ICV Limits 85-115%  
 CRI Limits 70-130%  
 CCV Limits 85-115%

No single analyte > +/- 60%



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0319061a

Analysis Date: 20-MAR-10 22:24

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	39.755	99	
1,3-Dinitrobenzene-d4	500	433.946	87	
2,4,6-Trinitrotoluene	40	36.564	91	
2,4-Dinitrotoluene	40	42.81	107	
2,6-Dinitrotoluene	40	40.694	102	
2,6-Dinitrotoluene-d3	500	474.965	95	
2-Amino-4,6-dinitrotoluene	40	34.564	86	
3,4-Dinitrotoluene	20	18.719	94	
4-Amino-2,6-dinitrotoluene	40	37.649	94	
HMX	40	46.909	117	
Nitrobenzene	40	41.889	105	
PETN	40	49.601	124	
RDX	40	44.557	111	
Tetryl	40	25.35	63	*
m-Dinitrobenzene	40	41.331	103	
m-Nitrotoluene	40	49.186	123	
o-Nitrotoluene	40	35.398	88	
p-Nitrotoluene	40	37.225	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA1.qld, Time: Sun Mar 21 12:20:26 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319061a

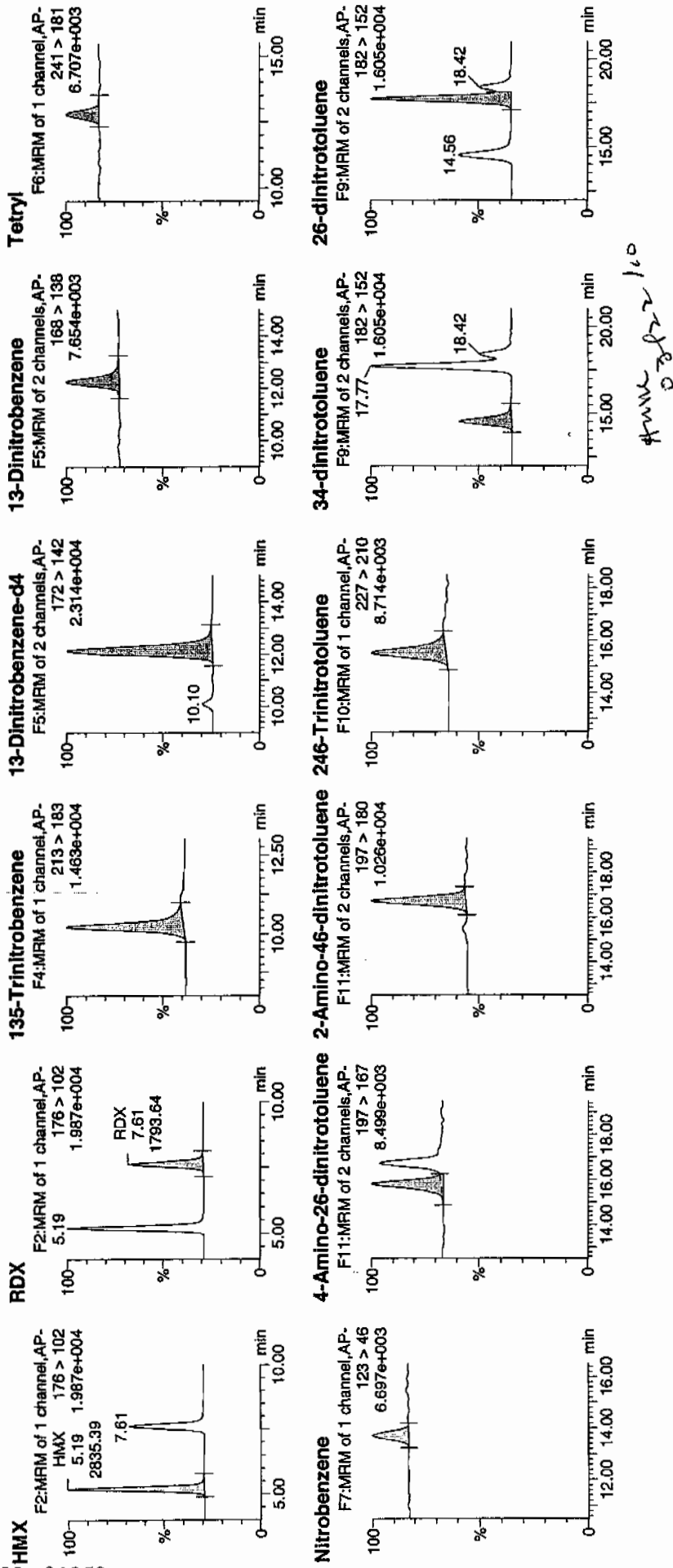
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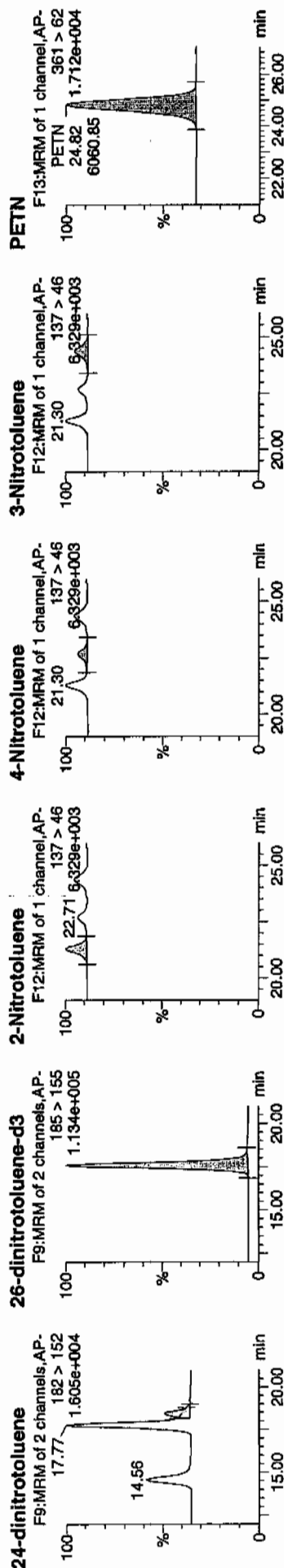
Time: 22:24:03

ID: WXX100319-08CRI

Vial: 1:1,C

MTT  
3/21/10





ID	Name	Trace	RI	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Count	%Rec	%Dev	SN
WXX100319-08CRI	HMx	176 > 102	5.19	2835.387	7123.790	2835.387	199.008	bb			46.9091	117.3	17.3	473.3
WXX100319-08CRI	RDX	176 > 102	7.61	1793.642	7123.790	1793.642	125.891	bb			44.5565	111.4	11.4	258.5
WXX100319-08CRI	135-Trinitrobenzene	213 > 183	10.23	2710.655	7123.790	2710.655	190.254	bb			39.7551	99.4	-0.6	314.7
WXX100319-08CRI	13-Dinitrobenzene-d4	172 > 142	12.14	7123.790		7123.790	7123.790	bb			433.9456	86.8	-13.2	619.3
WXX100319-08CRI	13-Dinitrobenzene	168 > 138	12.27	798.506	7123.790	798.506	56.045	bb			41.3314	103.3	3.3	100.2
WXX100319-08CRI	Tetryl	241 > 181	12.82	424.996	7123.790	424.996	29.829	bb			25.3504	63.4	-36.6	29.5
WXX100319-08CRI	Nitrobenzene	123 > 46	13.72	414.494	7123.790	414.494	29.092	bb			41.8889	104.7	4.7	30.7
WXX100319-08CRI	4-Amino-26-dinitrotoluene	197 > 187	15.80	1229.342	44234.637	1229.342	13.896	MM	21-Mar-10	12:11:57	37.6485	94.1	-5.9	95.7
WXX100319-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.73	1816.828	44234.637	1816.828	20.536	bb			34.5843	86.4	-13.6	210.4
WXX100319-08CRI	248-Trinitrotoluene	227 > 210	15.55	1389.002	44234.637	1389.002	15.700	bb			36.5636	91.4	-8.6	78.0
WXX100319-08CRI	34-dinitrotoluene	182 > 152	14.56	1848.027	44234.637	1848.027	20.889	bb			18.7187	93.6	-6.4	92.4
WXX100319-08CRI	26-dinitrotoluene	182 > 152	17.77	4061.595	44234.637	4061.595	45.910	MM	21-Mar-10	12:14:13	40.6944	101.7	1.7	252.2
WXX100319-08CRI	24-dinitrotoluene	182 > 152	18.42	913.094	44234.637	913.094	10.321	MM	21-Mar-10	12:18:59	42.8095	107.0	7.0	52.4
WXX100319-08CRI	26-dinitrotoluene-d3	185 > 155	17.59	44234.637		44234.637	44234.637	bb			474.9646	95.0	-5.0	2971.1
WXX100319-08CRI	2-Nitrotoluene	137 > 46	21.30	292.239	44234.637	292.239	3.303	bb			35.3975	88.5	-11.5	80.6
WXX100319-08CRI	4-Nitrotoluene	137 > 46	22.71	152.125	44234.637	152.125	1.720	bb			37.2245	93.1	-6.9	35.1
WXX100319-08CRI	3-Nitrotoluene	137 > 46	24.38	244.551	44234.637	244.551	2.764	bb			49.1857	123.0	23.0	49.7
WXX100319-08CRI	PETN	361 > 62	24.82	6060.848	44234.637	6060.848	68.508	bb			49.6010	124.0	24.0	1680.0

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/20/10  
 Time of Injection 2224  
 Standard Number WXX100319-08CRI  
 Data File EXP0319061a

HMX	117.3
RDX	111.4
135-TNB	99.4
13-DNB	103.3
Tetryl	63.4
Nitrobenzene	104.7
4A-26-DNT	94.1
2A-46-DNT	86.4
246-TNT	91.4
34-DNT(surr)	93.6
26-DNT	101.7
24-DNT	107.0
2-NT	88.5
4-NT	93.1
3-NT	123.0
PETN	124.0

*NOT  
3/22/10*

Total 1602.3

Average 100.1

*Hum 03/22/10*

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323012a

Analysis Date: 23-MAR-10 14:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	40	39.526	99	
2,6-Dinitrotoluene-d3	500	484.851	97	
2-Amino-4,6-dinitrotoluene	40	41.982	105	
3,4-Dinitrotoluene	20	19.603	98	
4-Amino-2,6-dinitrotoluene	40	41.07	103	
HMX	40	46.731	117	
Nitrobenzene	40	39.137	98	
PETN	40	43.189	108	
RDX	40	43.979	110	
Tetryl	40	44.65	112	
m-Dinitrobenzene	40	42.729	107	
m-Nitrotoluene	40	44.799	112	
o-Nitrotoluene	40	42.092	105	
p-Nitrotoluene	40	44.279	111	
1,3,5-Trinitrobenzene	40	44.728	112	
1,3-Dinitrobenzene-d4	500	482.919	97	
2,4,6-Trinitrotoluene	40	35.085	88	
2,4-Dinitrotoluene	40	40.855	102	

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\032310expA.qld, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0323012a

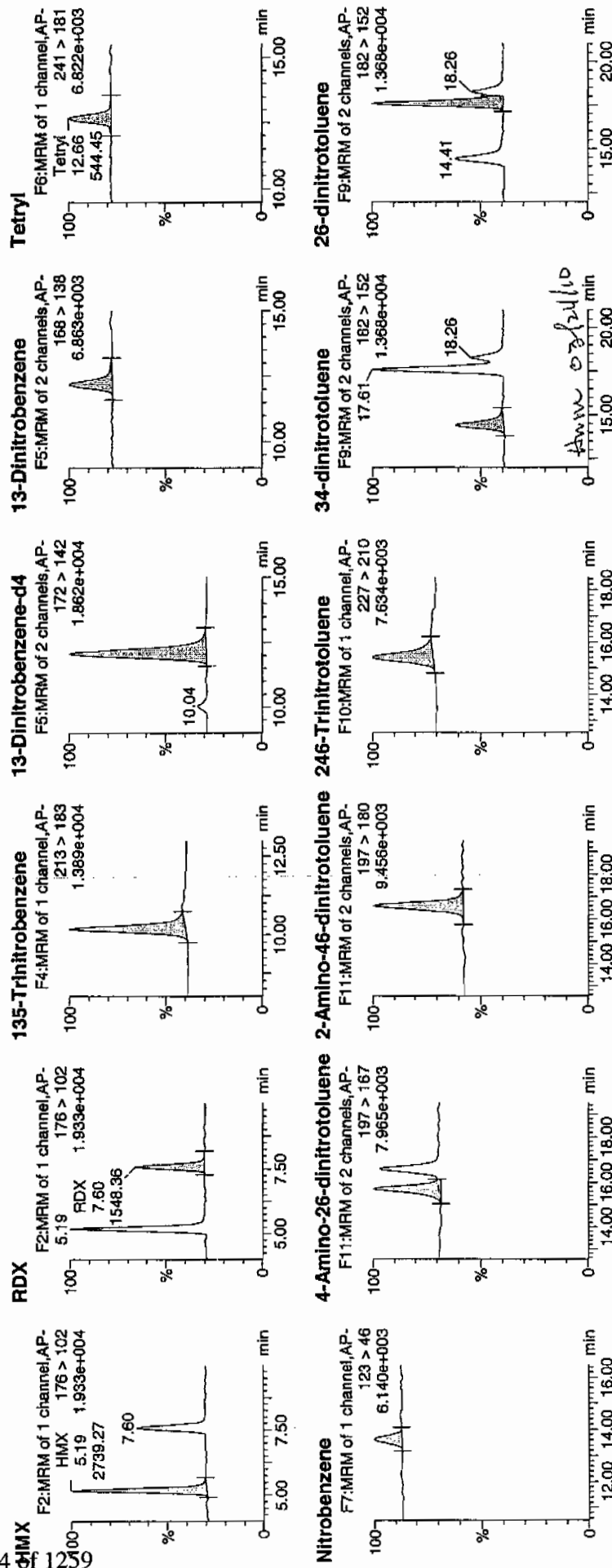
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Time: 14:33:19

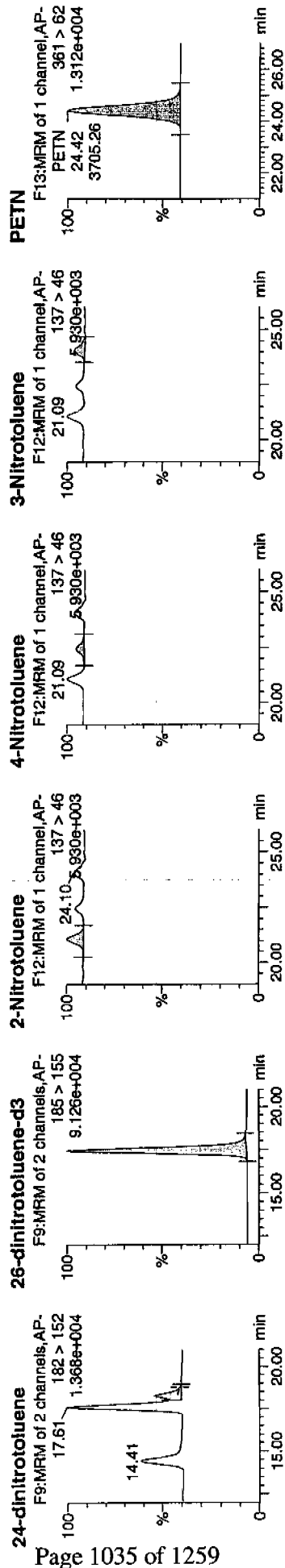
ID: WXX100323-08CRI

Sample: 1:1,C

1.177  
3.1416



Dataset: C:\MASSLYNX\New\_Exp\_PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Area (mL)	% Rec	SN
WXX100323-08Cf1	HMX	176 > 102	5.19	2739.266	5316.234	2739.266	257.632	bb			46.7309	116.8	251.6
WXX100323-08Cf1	RDX	176 > 102	7.60	1548.360	5316.234	1548.360	145.626	bb			43.9785	109.9	127.8
WXX100323-08Cf1	135-Trinitrobenzene	213 > 183	10.18	2247.627	5316.234	2247.627	211.393	bb			44.7278	111.8	445.9
WXX100323-08Cf1	13-Dinitrobenzene-d4	172 > 142	12.06	5316.234	5316.234	5316.234	5316.234	bb			482.9189	96.6	3.4
WXX100323-08Cf1	13-Dinitrobenzene	168 > 138	12.20	603.300	5316.234	603.300	56.741	bb			42.7286	106.8	69.7
WXX100323-08Cf1	Tetryl	241 > 181	12.66	544.449	5316.234	544.449	51.206	bb			44.6503	111.6	70.1
WXX100323-08Cf1	Nitrobenzene	123 > 46	13.61	272.627	5316.234	272.627	25.641	bb			39.1374	97.8	-2.2
WXX100323-08Cf1	4-Amino-26-dinitrotoluene	197 > 167	15.70	969.114	33387.395	969.114	14.513	MM	24-Mar-10	09:21:01	41.0702	102.7	2.7
WXX100323-08Cf1	2-Amino-46-dinitrotoluene	197 > 180	16.59	1535.075	33387.395	1535.075	22.989	bb			41.9822	105.0	5.0
WXX100323-08Cf1	246-Trinitrotoluene	227 > 210	15.40	960.700	33387.395	960.700	14.387	bb			35.0846	87.7	-12.3
WXX100323-08Cf1	34-dinitrotoluene	182 > 152	14.41	1386.049	33387.395	1386.049	20.757	bb			19.6028	98.0	-2.0
WXX100323-08Cf1	26-dinitrotoluene	182 > 152	17.61	3053.718	33387.395	3053.718	45.732	MM	24-Mar-10	09:24:21	39.5256	98.8	-1.2
WXX100323-08Cf1	24-dinitrotoluene	182 > 152	18.26	757.031	33387.395	757.031	11.337	MM	24-Mar-10	09:27:48	40.8550	102.1	2.1
WXX100323-08Cf1	26-dinitrotoluene-d3	185 > 155	17.43	33387.395	33387.395	33387.395	33387.395	bb			484.8510	97.0	-3.0
WXX100323-08Cf1	2-Nitrotoluene	137 > 46	21.09	226.665	33387.395	226.665	3.394	bb			42.0924	105.2	5.2
WXX100323-08Cf1	4-Nitrotoluene	137 > 46	22.46	115.137	33387.395	115.137	1.724	bb			44.2789	110.7	10.7
WXX100323-08Cf1	3-Nitrotoluene	137 > 46	24.10	150.832	33387.395	150.832	2.259	bb			44.7990	112.0	12.0
WXX100323-08Cf1	PETN	361 > 62	24.42	3705.264	33387.395	3705.264	55.489	bb			43.1894	108.0	8.0

# GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/23/10  
 Time of Injection 1433  
 Standard Number WXX100323-08CRI  
 Data File EXP0323012a

HMX	116.8
RDX	109.9
135-TNB	111.8
13-DNB	106.8
Tetryl	111.6
Nitrobenzene	97.8
4A-26-DNT	102.7
2A-46-DNT	105.0
246-TNT	87.7
34-DNT(surr)	98.0
26-DNT	98.8
24-DNT	102.1
2-NT	105.2
4-NT	110.7
3-NT	112.0
PETN	108.0
Total	1684.9

Average

105.3

not  
3/24/10

NMM 03/24/10

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0323023a

Analysis Date: 23-MAR-10 19:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
4-Amino-2,6-dinitrotoluene	600	638.616	106	
HMX	600	775.75	129	*
Nitrobenzene	600	605.281	101	
PETN	600	636.192	106	
RDX	600	766.934	128	*
Tetryl	600	703.31	117	
m-Dinitrobenzene	600	619.864	103	
m-Nitrotoluene	600	587.224	98	
o-Nitrotoluene	600	612.723	102	
p-Nitrotoluene	600	652.819	109	
1,3,5-Trinitrobenzene	600	618.225	103	
1,3-Dinitrobenzene-d4	500	527.566	106	
2,4,6-Trinitrotoluene	600	626.233	104	
2,4-Dinitrotoluene	600	641.728	107	
2,6-Dinitrotoluene	600	622.086	104	
2,6-Dinitrotoluene-d3	500	516.532	103	
2-Amino-4,6-dinitrotoluene	600	682.18	114	
3,4-Dinitrotoluene	300	318.667	106	

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\032310expA.qtd, Time: Wed Mar 24 09:29:41 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\data\EXP0323023a

Date: 23-Mar-2010

Time: 19:57:38

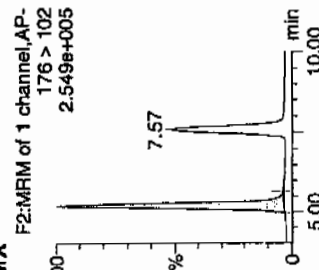
ID: WXX100323-07CCV

Vial: 1:1,B

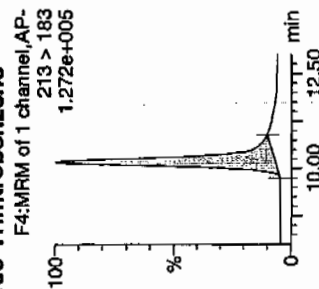
1058  
3/24/10

1058 of 1259

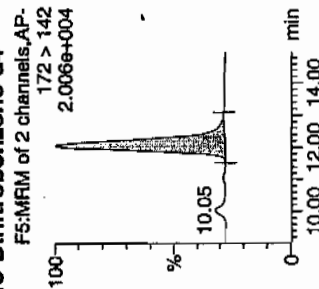
# RDX



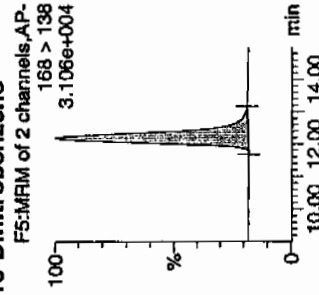
# 135-Trinitrobenzene



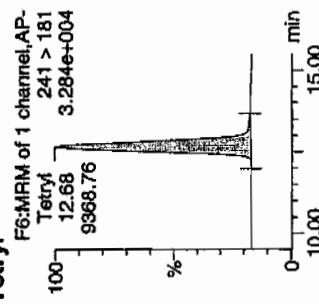
# 13-Dinitrobenzene-d4



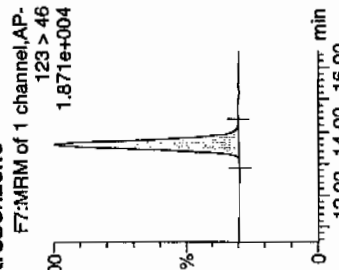
# 13-Dinitrobenzene



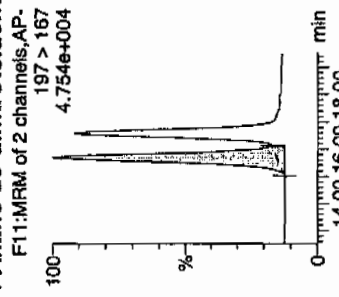
# Tetryl



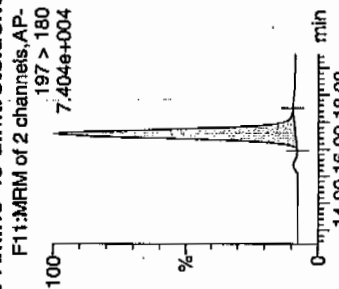
# Nitrobenzene



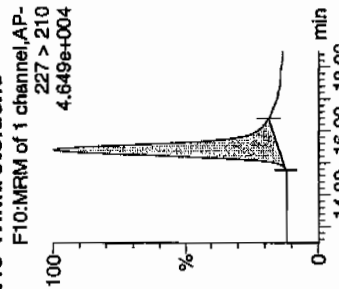
# 4-Amino-26-dinitrotoluene



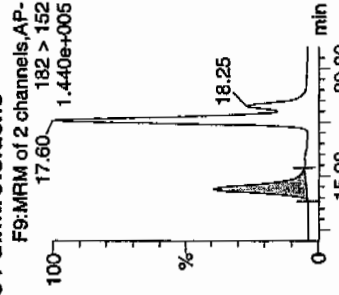
# 2-Amino-46-dinitrotoluene



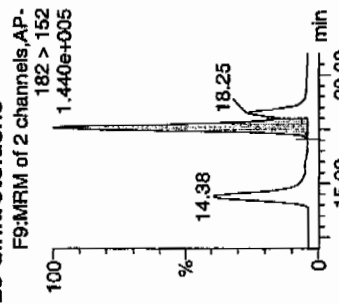
# 246-Trinitrotoluene



# 34-dinitrotoluene



# 26-dinitrotoluene



1058 of 1259

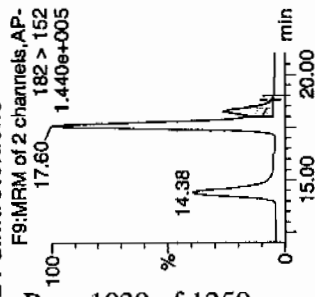
# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

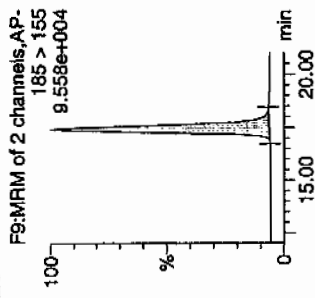
Printed: Wed Mar 24 09:32:17 2010, Page 46 of 99

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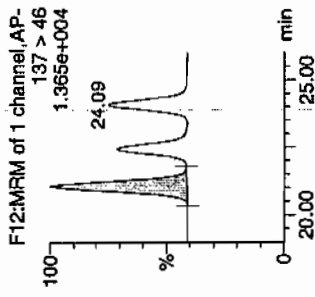
## 24-dinitrotoluene



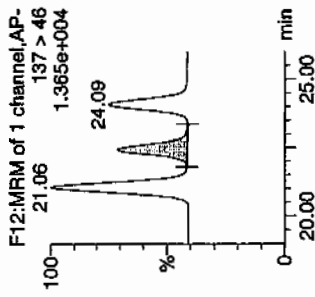
## 26-dinitrotoluene-d3



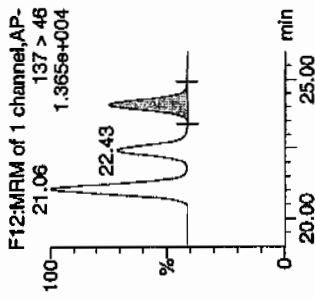
## 2-Nitrotoluene



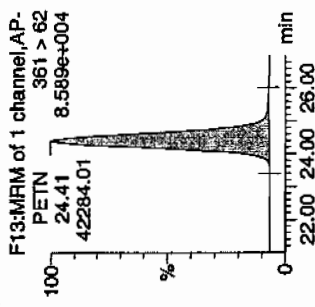
## 4-Nitrotoluene



## 3-Nitrotoluene



## PETN



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (ppm)	% Rec	% Dev	SN
WXX100323-07CCV	HMX	176 > 102	5.19	49676.969	5807.738	49676.969	4276.791	bb			775.7499	129.3	29.3	1471.7
WXX100323-07CCV	RDX	176 > 102	7.57	29498.021	5807.738	29498.021	2539.545	bb			766.9342	127.8	27.8	773.2
WXX100323-07CCV	135-Trinitrobenzene	213 > 183	10.18	33938.762	5807.738	33938.762	2921.857	bb			618.2251	103.0	3.0	363.0
WXX100323-07CCV	13-Dinitrobenzene-d4	172 > 142	12.07	5807.738		5807.738	5807.738	bb			527.5664	105.5	5.5	530.1
WXX100323-07CCV	13-Dinitrobenzene	168 > 138	12.20	9561.233	5807.738	9561.233	823.146	bb			619.8643	103.3	3.3	1122.1
WXX100323-07CCV	Tetryl	241 > 181	12.68	9368.761	5807.738	9368.761	806.576	bb			703.3099	117.2	17.2	808.1
WXX100323-07CCV	Nitrobenzene	123 > 46	13.58	4606.136	5807.738	4606.136	396.552	bb			605.2814	100.9	0.9	436.9
WXX100323-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.68	16053.771	35568.965	16053.771	225.671	MM	24-Mar-10	09:21:43	638.6162	106.4	6.4	555.1
WXX100323-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.58	26573.668	35568.965	26573.668	373.551	bb			682.1795	113.7	13.7	1083.3
WXX100323-07CCV	246-Trinitrotoluene	227 > 210	15.41	18268.205	35568.965	18268.205	256.800	bb			626.2328	104.4	4.4	1903.4
WXX100323-07CCV	34-dinitrotoluene	182 > 152	14.38	24004.193	35568.965	24004.193	337.432	bb			318.6675	106.2	6.2	745.6
WXX100323-07CCV	26-dinitrotoluene	182 > 152	17.60	51202.254	35568.965	51202.254	719.760	MM	24-Mar-10	09:24:58	622.0857	103.7	3.7	2050.7
WXX100323-07CCV	24-dinitrotoluene	182 > 152	18.25	12667.996	35568.965	12667.996	178.077	MM	24-Mar-10	09:28:37	641.7283	107.0	7.0	461.8
WXX100323-07CCV	26-dinitrotoluene-d3	185 > 155	17.42	35568.965		35568.965	35568.965	bb			516.5317	103.3	3.3	2935.3
WXX100323-07CCV	2-Nitrotoluene	137 > 46	21.06	3515.065	35568.965	3515.065	49.412	bb			612.7229	102.1	2.1	589.1
WXX100323-07CCV	4-Nitrotoluene	137 > 46	22.43	1808.423	35568.965	1808.423	25.421	bb			652.8194	108.8	8.8	299.5
WXX100323-07CCV	3-Nitrotoluene	137 > 46	24.09	2106.291	35568.965	2106.291	29.609	bb			587.2244	97.9	-2.1	335.3
WXX100323-07CCV	PETN	361 > 62	24.41	42284.008	35568.965	42284.008	594.395	bb			636.1919	106.0	6.0	11544.8

GRAND MEAN AVERAGE

Vendor: Restek  
 Date of Analysis: 03/23/10  
 Time of Injection: 1957  
 Standard Number: WXX100323-07CCV  
 Data File: EXP0323023a

HMX	129.3
RDX	127.8
135-TNB	103.0
13-DNB	103.3
Tetryl	117.2
Nitrobenzene	100.9
4A-26-DNT	106.4
2A-46-DNT	113.7
246-TNT	104.4
34-DNT(surr)	106.2
26-DNT	103.7
24-DNT	107.0
2-NT	102.1
4-NT	108.8
3-NT	97.9
PETN	106.0

*Handwritten:* 1400 3/24/10

Total 1737.7

*Handwritten:* HMX 03/24/10

Average 108.6

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0323025a

Analysis Date: 23-MAR-10 20:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Nitrotoluene	40	39.158	98	
o-Nitrotoluene	40	44.793	112	
p-Nitrotoluene	40	35.3	88	
1,3,5-Trinitrobenzene	40	43.551	109	
1,3-Dinitrobenzene-d4	500	578.273	116	
2,4,6-Trinitrotoluene	40	36.796	92	
2,4-Dinitrotoluene	40	36.274	91	
2,6-Dinitrotoluene	40	39.059	98	
2,6-Dinitrotoluene-d3	500	625.064	125	
2-Amino-4,6-dinitrotoluene	40	35.345	88	
3,4-Dinitrotoluene	20	18.965	95	
4-Amino-2,6-dinitrotoluene	40	37.682	94	
HMX	40	43.341	108	
Nitrobenzene	40	37.897	95	
PETN	40	34.251	86	
RDX	40	42.597	106	
Tetryl	40	36.872	92	
m-Dinitrobenzene	40	41.891	105	

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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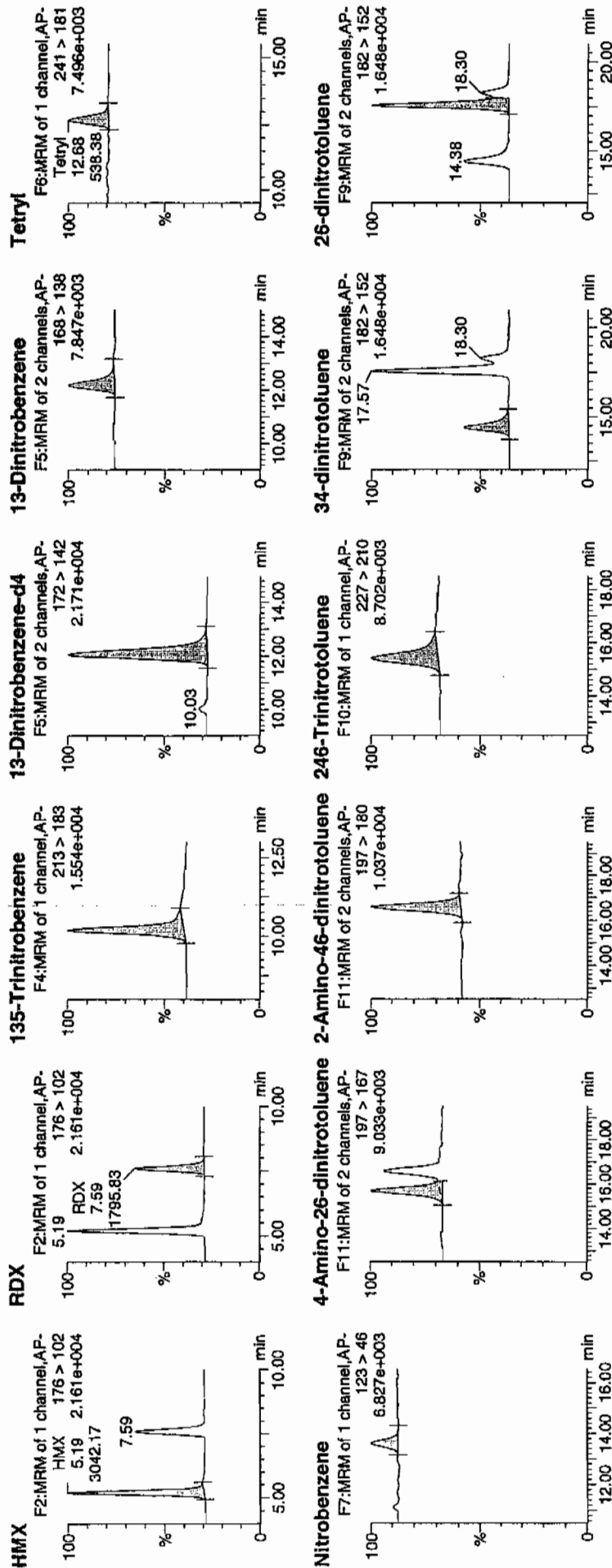
Date: 23-Mar-2010

Time: 20:56:42

ID: WXX100323-08CRI

Vial: 1:1,C

WXX  
3/24/10



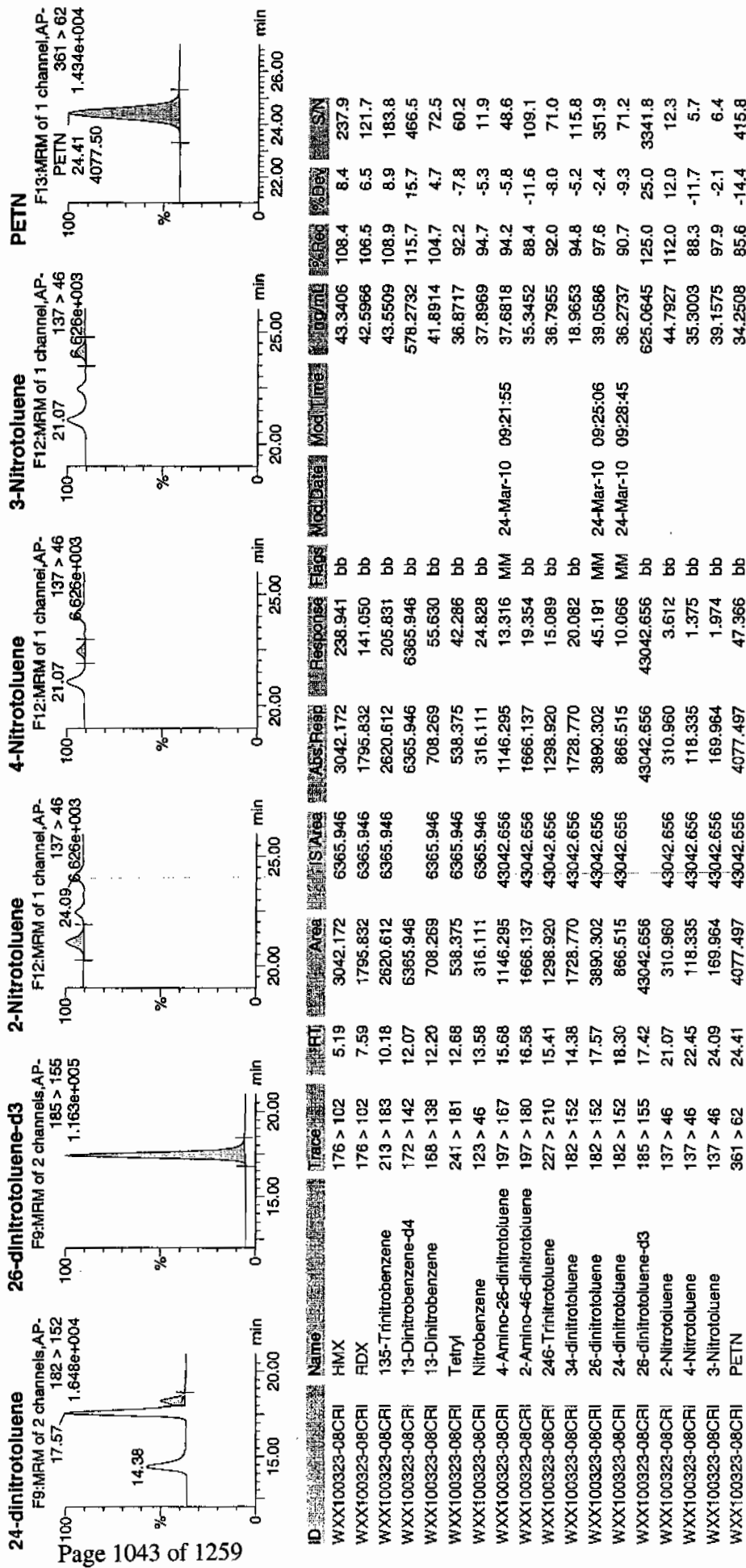
WXX  
3/24/10

# Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Mar 24 09:32:17 2010, Page 50 of 99

Dataset: C:\MASSLYNX\New\_Exp\PRO\032310expA.qld, Time: Wed Mar 24 09:29:41 2010



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: UltraScientific  
 Date of Analysis 03/23/10  
 Time of Injection 2056  
 Standard Number WXX100323-08CRI  
 Data File EXP0323025a

HMX	108.4
RDX	106.5
135-TNB	108.9
13-DNB	104.7
Tetryl	92.2
Nitrobenzene	94.7
4A-26-DNT	94.2
2A-46-DNT	88.4
246-TNT	92.0
34-DNT(surr)	94.8
26-DNT	97.6
24-DNT	90.7
2-NT	112.0
4-NT	88.3
3-NT	97.9
PETN	85.6

*Handwritten:* 100%  
3/24/10

Total 1556.9

*Handwritten:* HMM 03/24/10

Average 97.3

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): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03100013.wiff

Analysis Date: 10-MAR-10 18:39

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	50	48.5	97	
3,5-Dinitroaniline	100	87.1	87	
TATB	100	91.8	92	
tris(o-cresyl) phosphate	100	97.1	97	
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	103	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

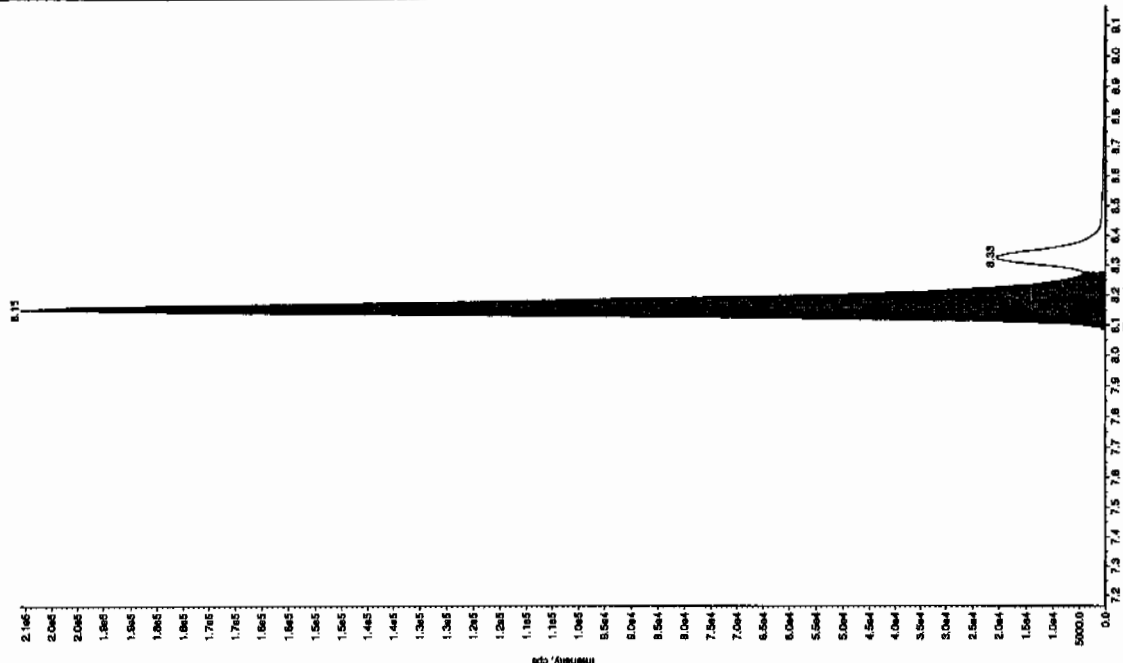
\* Value outside of Recovery Limits

Sample Name: "WXX100010-27GR" Sample ID: "11155" File: "EX50100013.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 87.1 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:39:55 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.16 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.15 min  
 Area: 7.89e+005 counts  
 Height: 205905.838 cps  
 Start Time: 8.06 min  
 End Time: 8.28 min

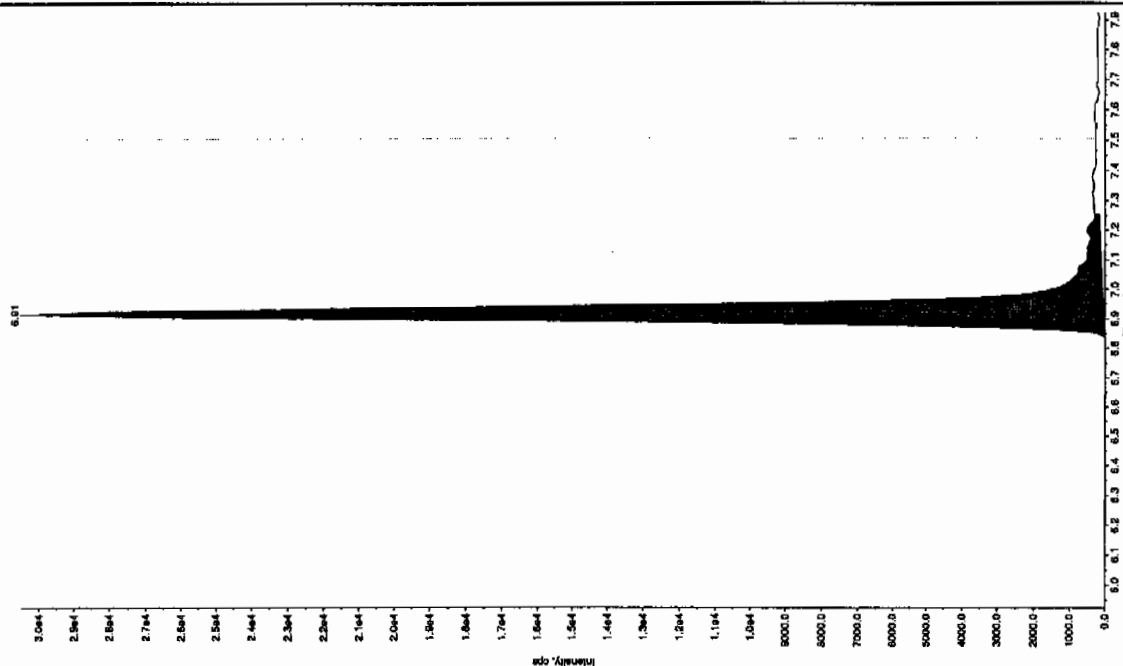


Sample Name: "WXX100010-27GR" Sample ID: "11155" File: "EX50100013.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "257.2024.8 amu"

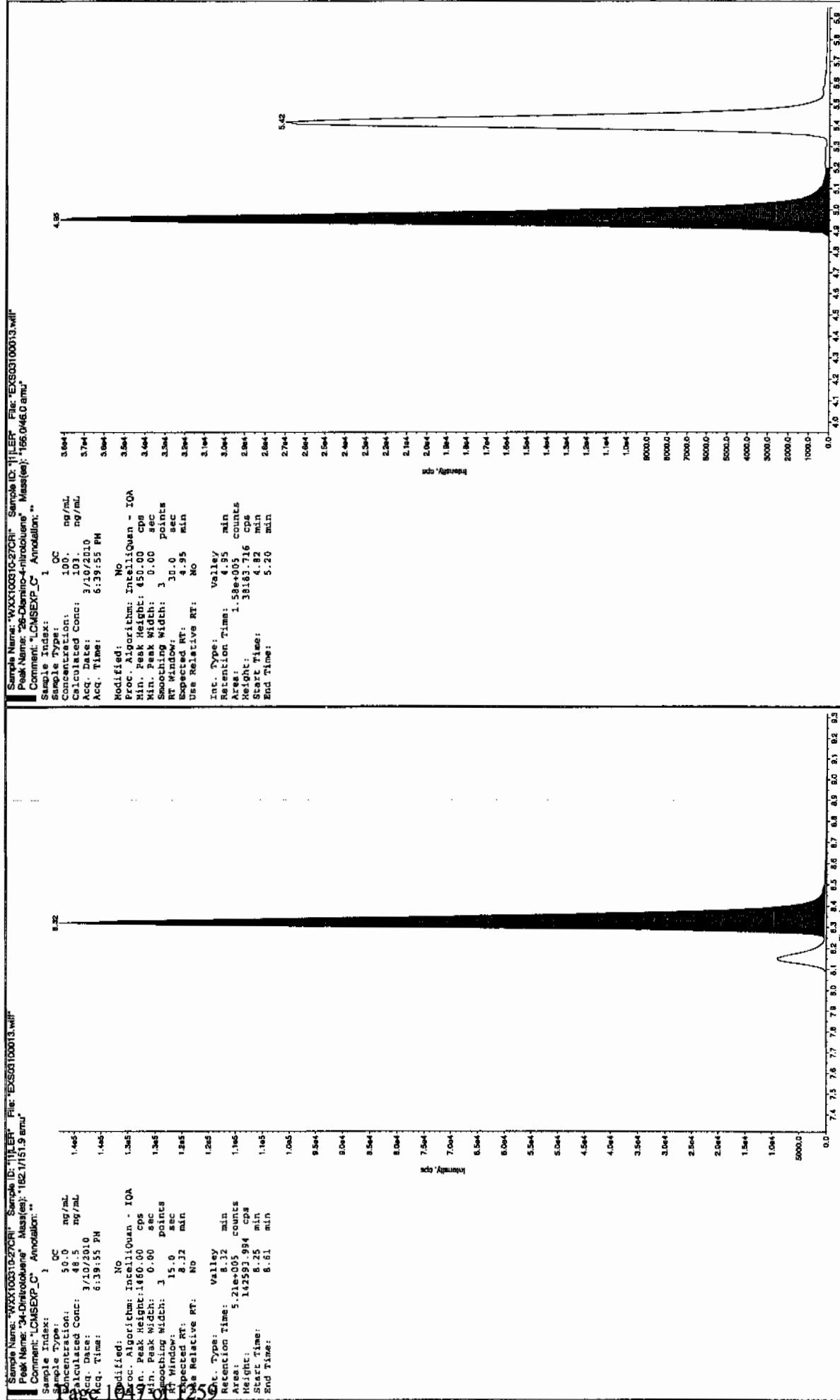
Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 91.8 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:39:55 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 2500.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 8.92 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.91 min  
 Area: 1.18e+005 counts  
 Height: 30457.434 cps  
 Start Time: 8.81 min  
 End Time: 9.01 min



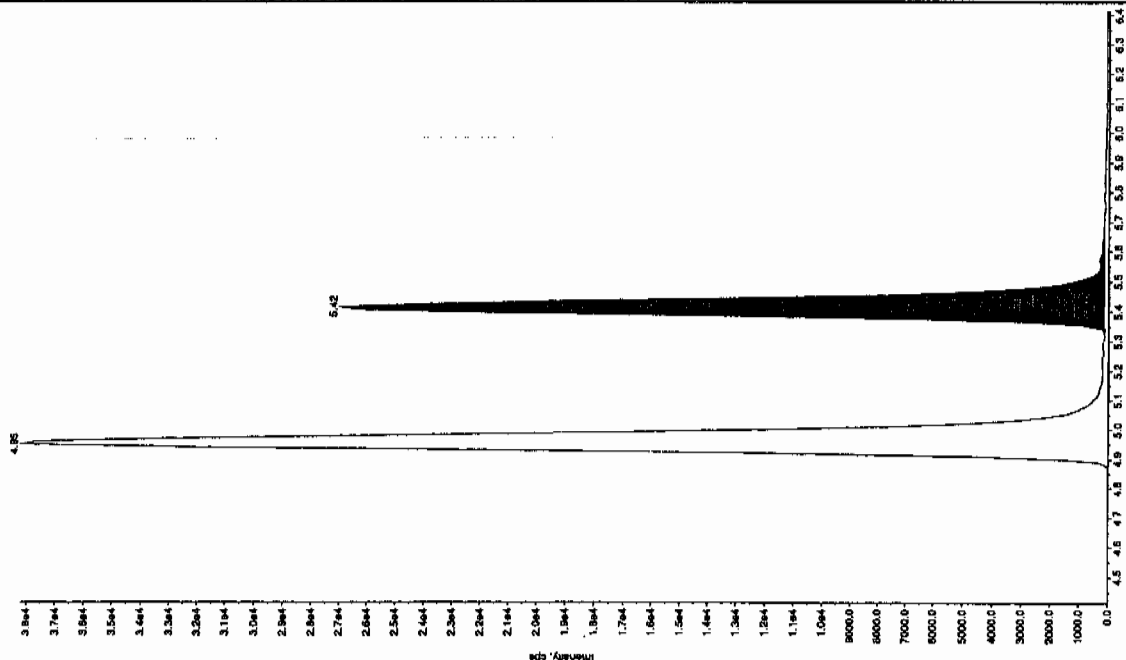
LCR 3/13/10

Amc 03/13/10



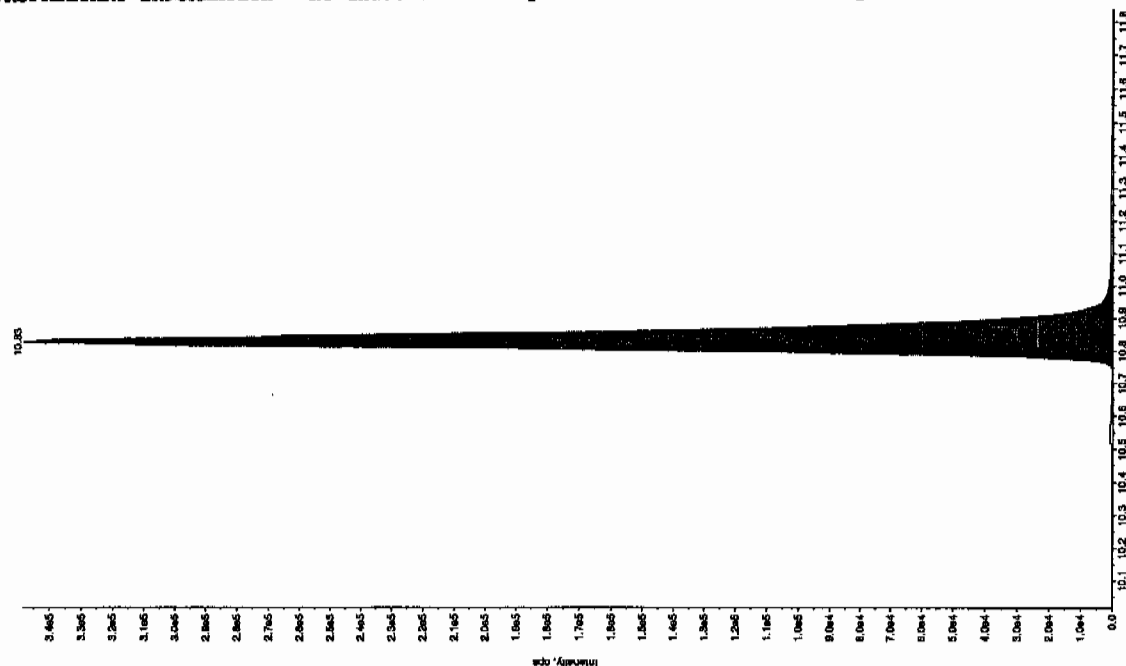
Sample Name: 'WXX100310-2709' Sample ID: '111ER' File: 'EX503100013.will'  
 Peak Name: '24-Diamino-6-nitrotoluene' Mass(es): '156.046.0 amu'  
 Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 103. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:39:55 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 3.00 points  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 5.42 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.42 min  
 Area: 1.08e+005 counts  
 Height: 36822.714 cps  
 Start Time: 5.31 min  
 End Time: 5.67 min



Sample Name: 'WXX100310-2709' Sample ID: '111ER' File: 'EX503100013.will'  
 Peak Name: 'tris(o-cresyl) phosphite' Mass(es): '383.181.0 amu'  
 Comment: 'LCMSEXP\_C' Annotation: ''

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 97.1 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 6:39:55 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 1.34e+006 counts  
 Height: 348340.515 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03100024.wiff

Analysis Date: 10-MAR-10 21:32

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	519	104	
2,6-Diamino-4-nitrotoluene	500	522	104	
3,4-Dinitrotoluene	250	258	103	
3,5-Dinitroaniline	500	541	108	
TATB	500	483	97	
tris(o-cresyl) phosphate	500	480	96	

Recovery Limits:

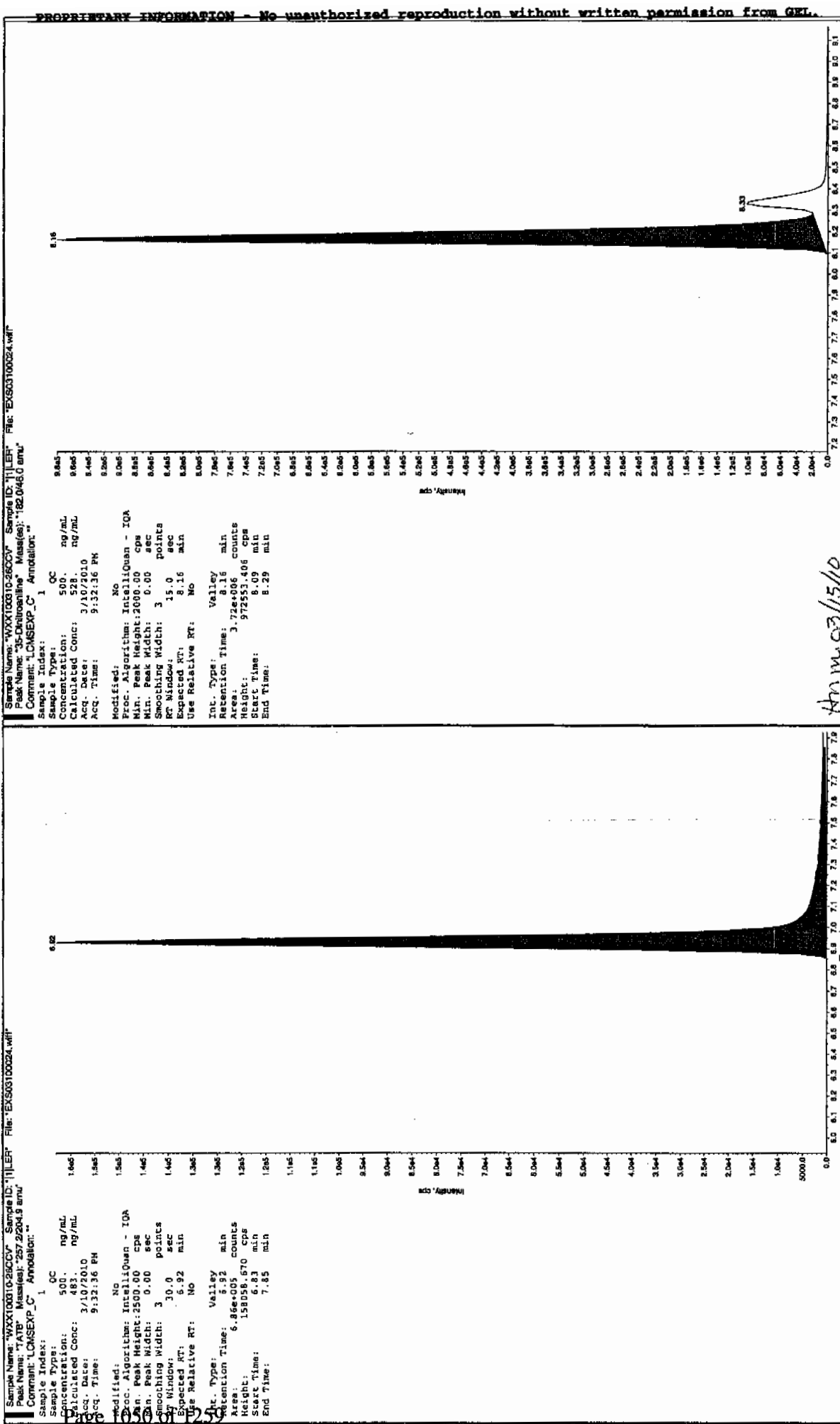
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

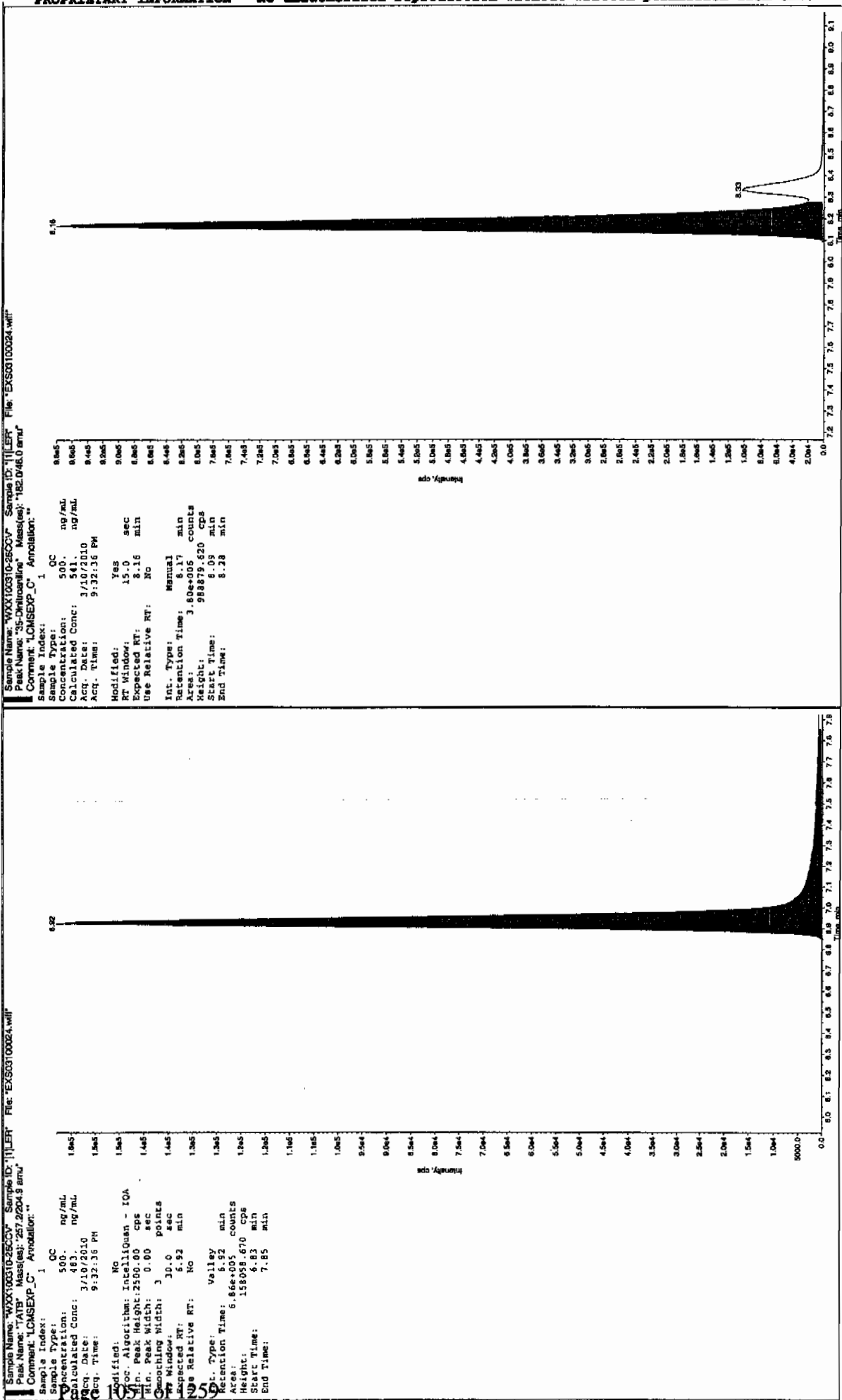
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Before Jan 31/3/10

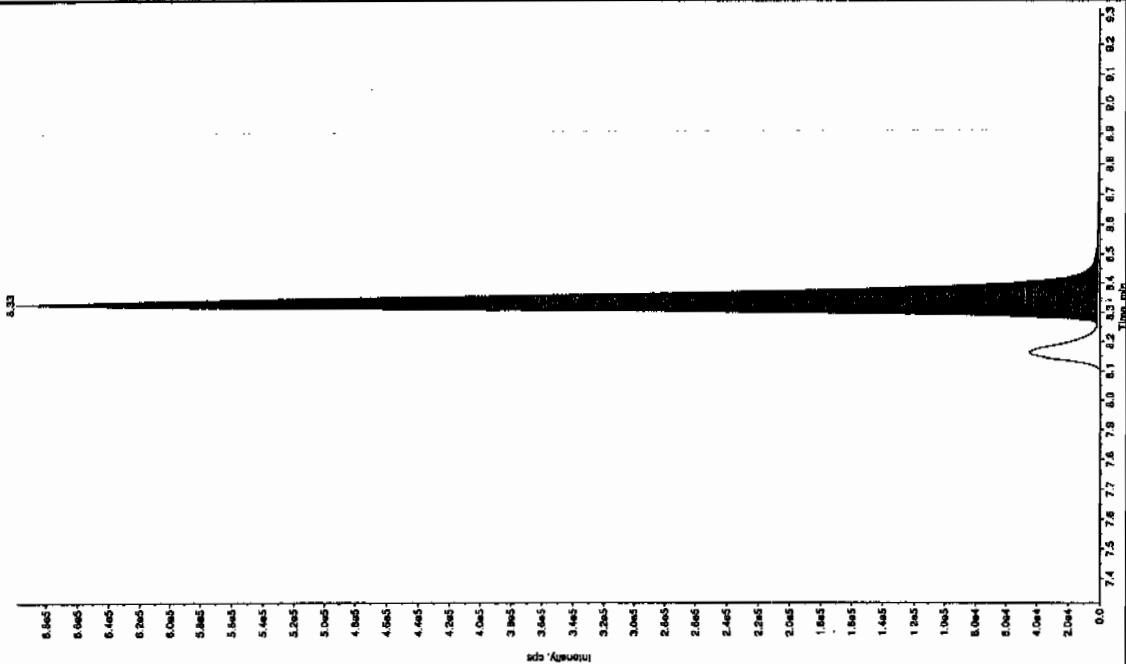


after ran 3/13/10



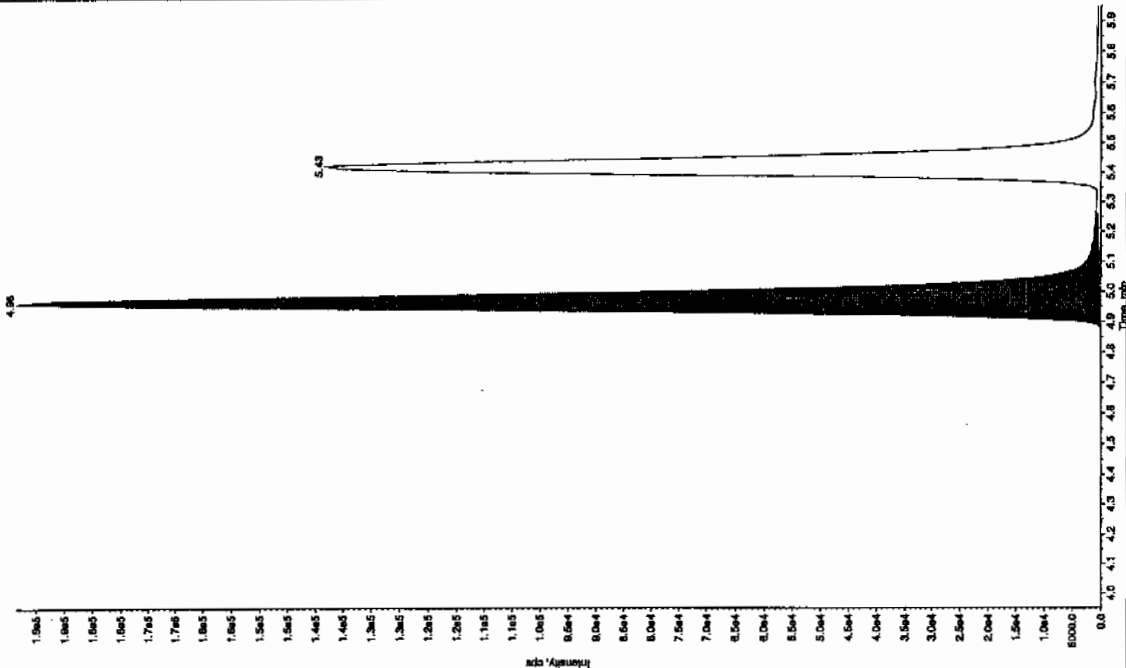
Sample Name: "WXX100310-2500Y" Sample ID: "111ER" File: "EXS03100224.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.17/131.9 amu"  
 Comment: "LCMSEXP\_C" Acquisition: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 258. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 9:32:36 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Nr Window: 15.0 sec  
 Expected RT: 8.32 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Area: 2.60e+006 counts  
 Height: 696777.588 cps  
 Start Time: 8.26 min  
 End Time: 8.45 min

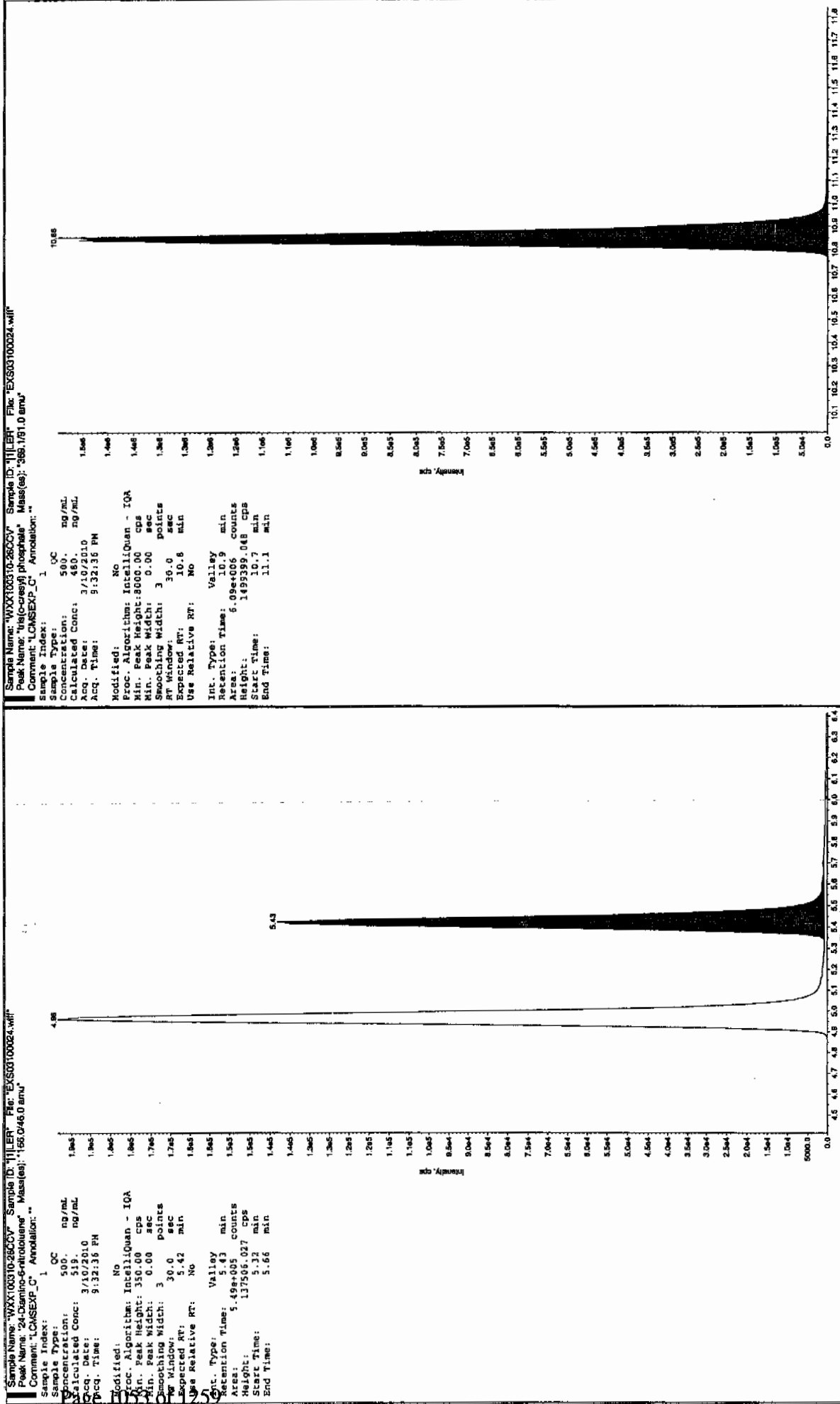


Sample Name: "WXX100310-2500Y" Sample ID: "111ER" File: "EXS03100224.wif"  
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.17/131.9 amu"  
 Comment: "LCMSEXP\_C" Acquisition: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 522. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 9:32:36 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 Nr Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.96 min  
 Area: 8.00e+005 counts  
 Height: 193529.413 cps  
 Start Time: 4.87 min  
 End Time: 5.26 min







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03100026.wiff

Analysis Date: 10-MAR-10 22:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	101	101	
3,4-Dinitrotoluene	50	50	100	
3,5-Dinitroaniline	100	88.4	88	
TATB	100	91.2	91	
tris(o-cresyl) phosphate	100	98.2	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

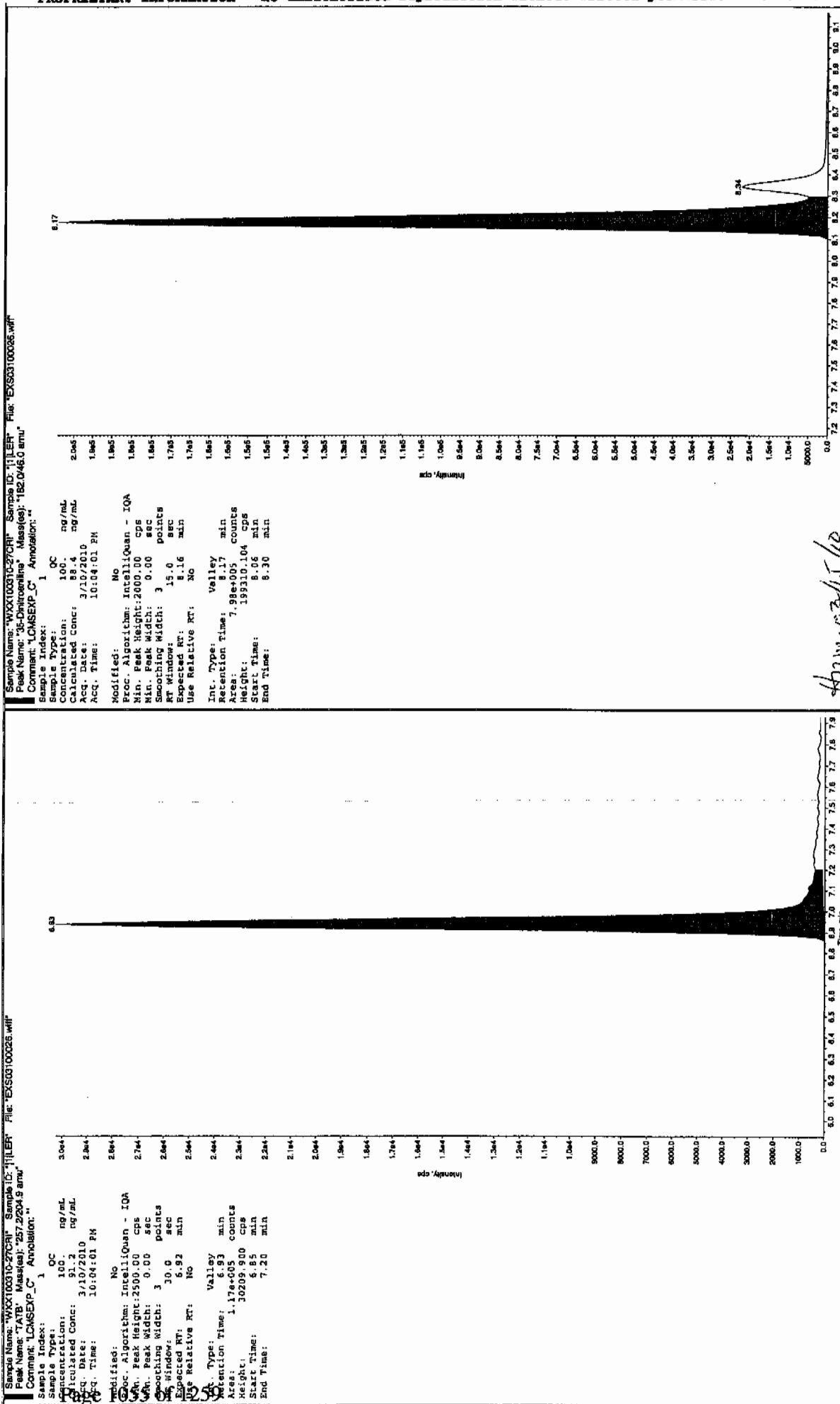
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

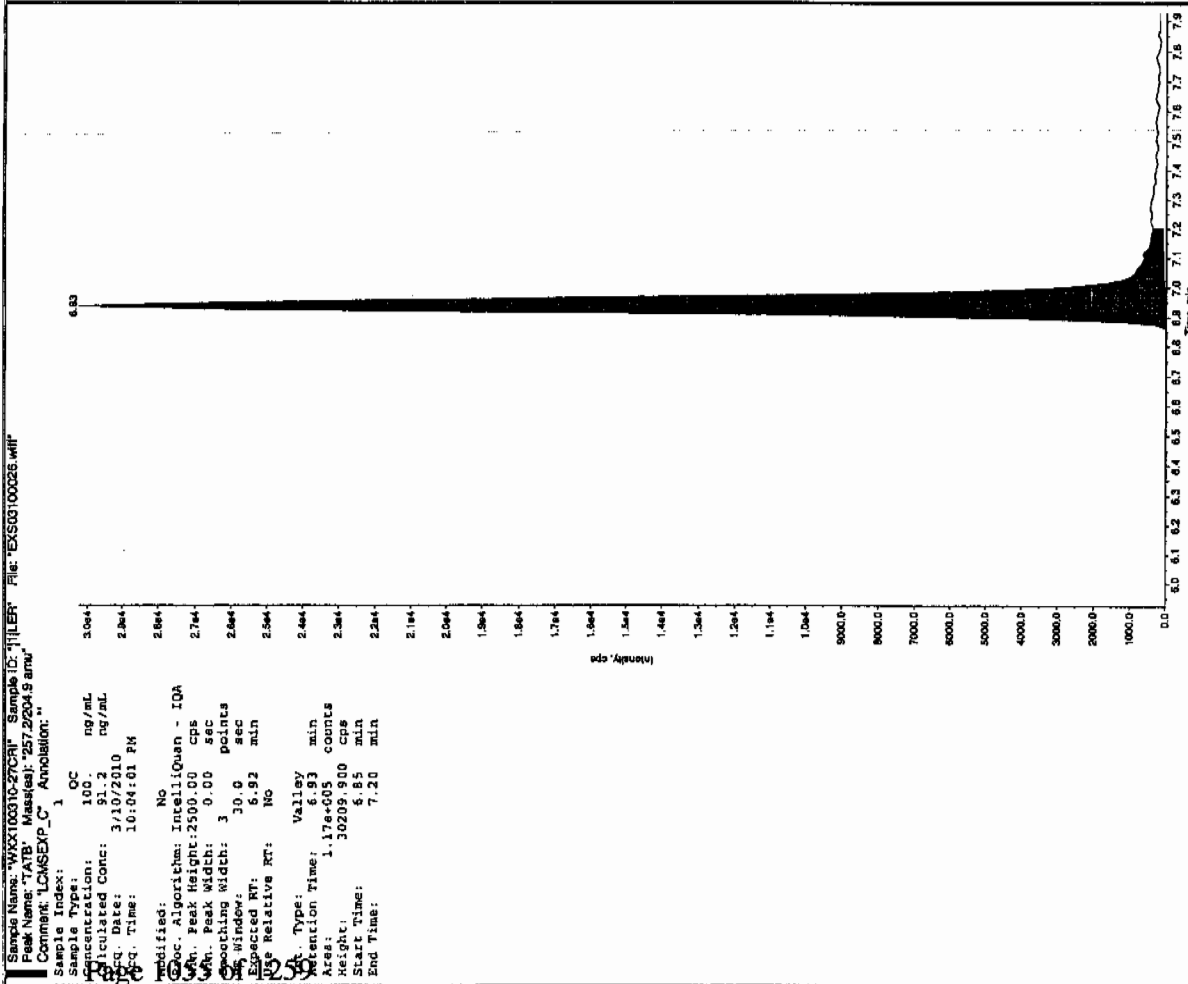
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Jan 31/31/10



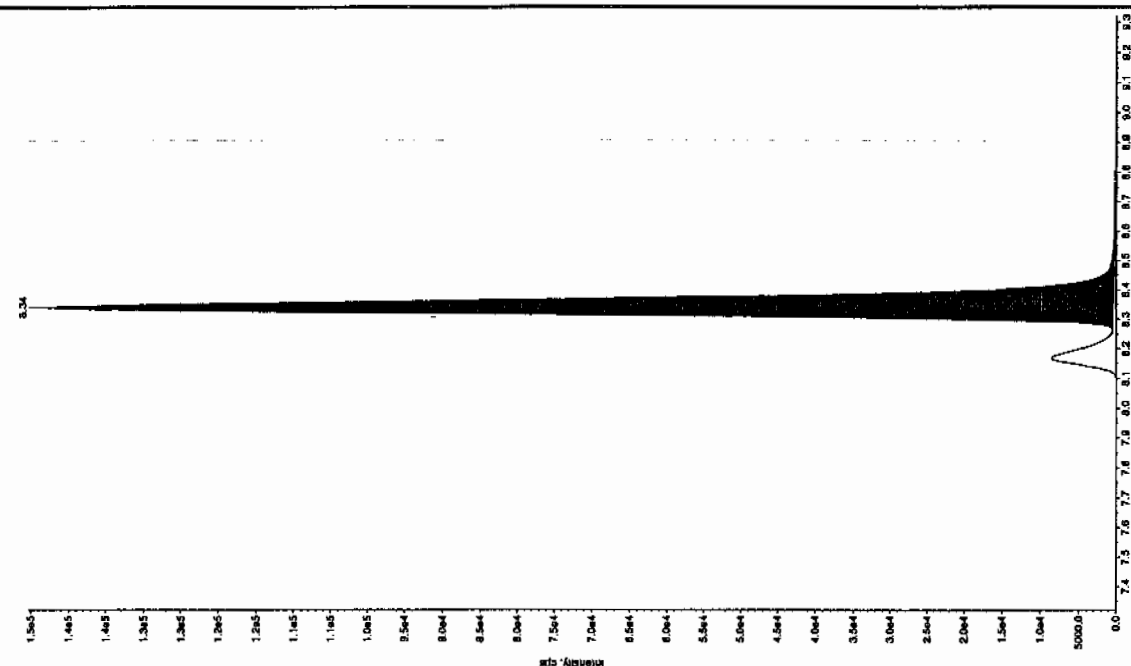
Area 7.98e+005



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

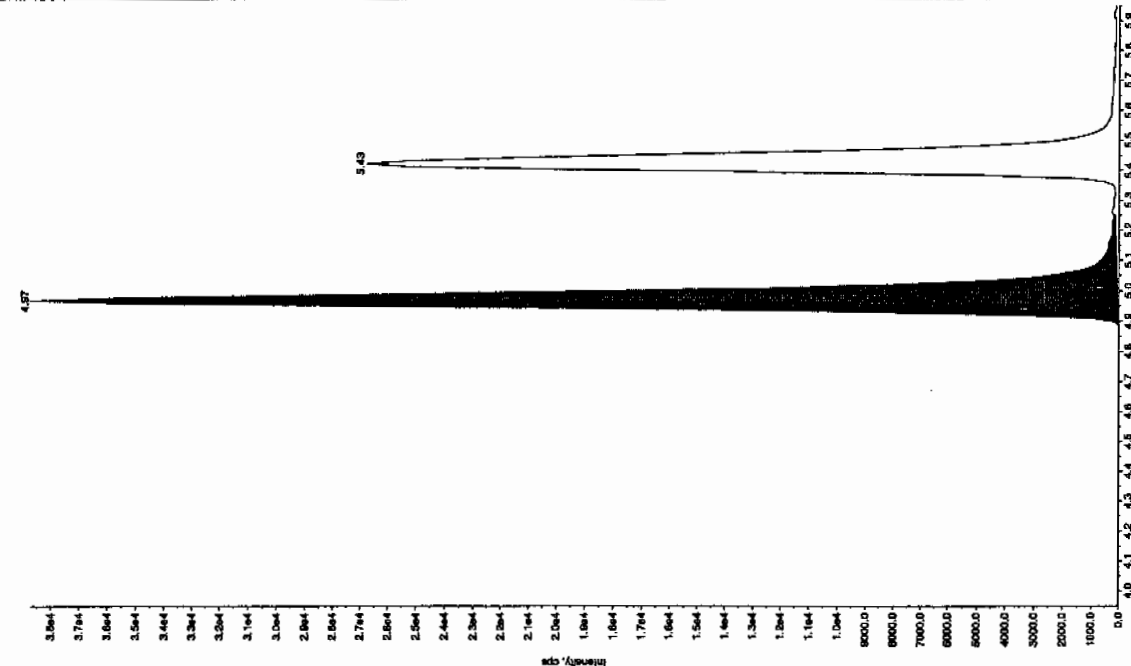
Sample Name: "WXX100310-27091" Sample ID: "11151" File: "EX0310028.wif"  
 Peak Name: "34-Dinitrophenol" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSXP\_C" Annotation: "

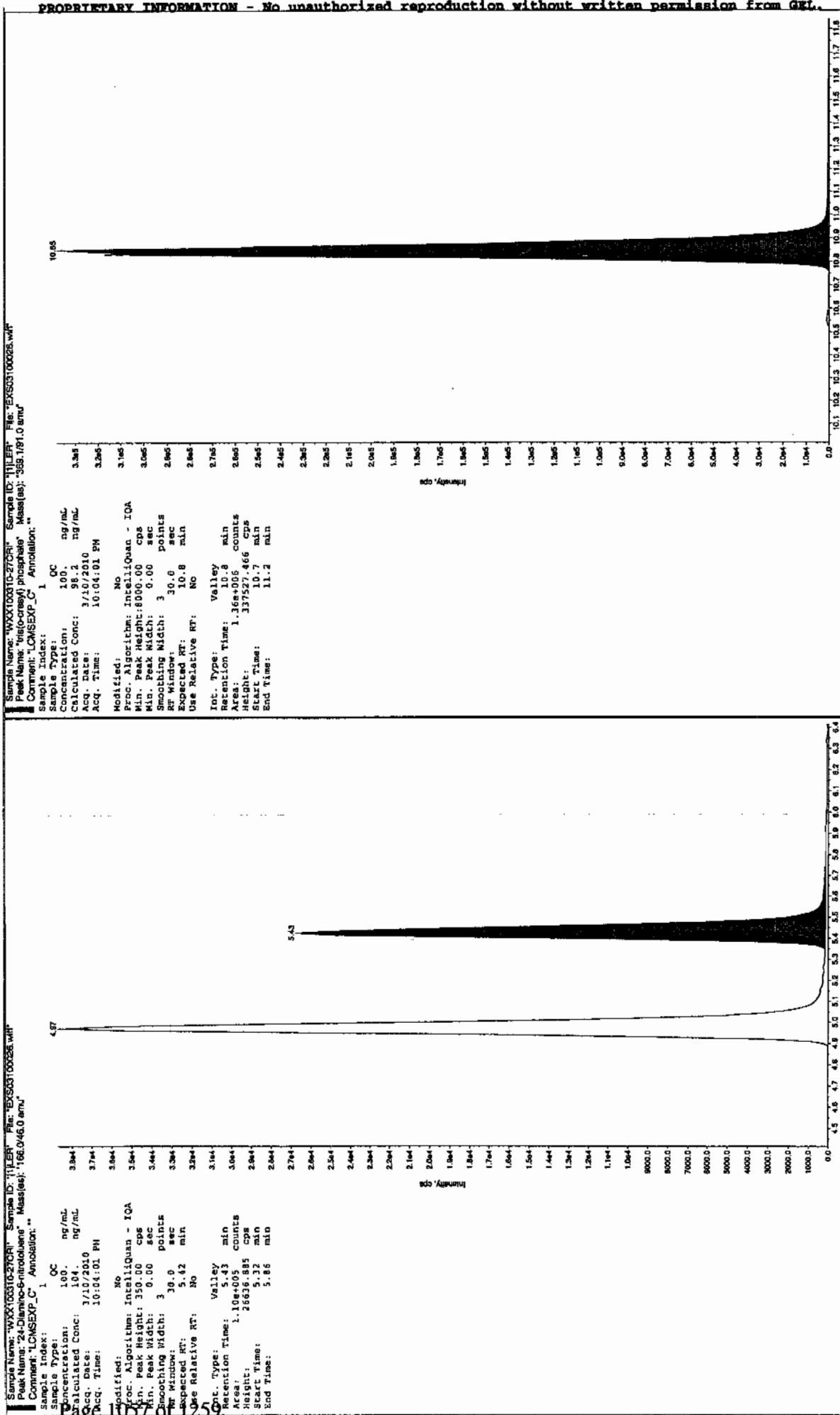
Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Calculated Conc: 101. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 10:04:01 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.97 min  
 Area: 1.55e+005 counts  
 Height: 38699.741 cps  
 Start Time: 4.88 min  
 End Time: 5.25 min



Sample Name: "WXX100310-27091" Sample ID: "11151" File: "EX0310028.wif"  
 Peak Name: "34-Dinitrophenol" Mass(es): "186.046.0 amu"  
 Comment: "LCMSXP\_C" Annotation: "

Sample Index: 1 QC  
 Sample Type: 100. ng/mL  
 Calculated Conc: 101. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 10:04:01 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.97 min  
 Area: 1.55e+005 counts  
 Height: 38699.741 cps  
 Start Time: 4.88 min  
 End Time: 5.25 min





7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03100037.wiff

Analysis Date: 11-MAR-10 00:56

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	546	109	
2,6-Diamino-4-nitrotoluene	500	531	106	
3,4-Dinitrotoluene	250	265	106	
3,5-Dinitroaniline	500	561	112	
TATB	500	471	94	
tris(o-cresyl) phosphate	500	478	96	

Recovery Limits:

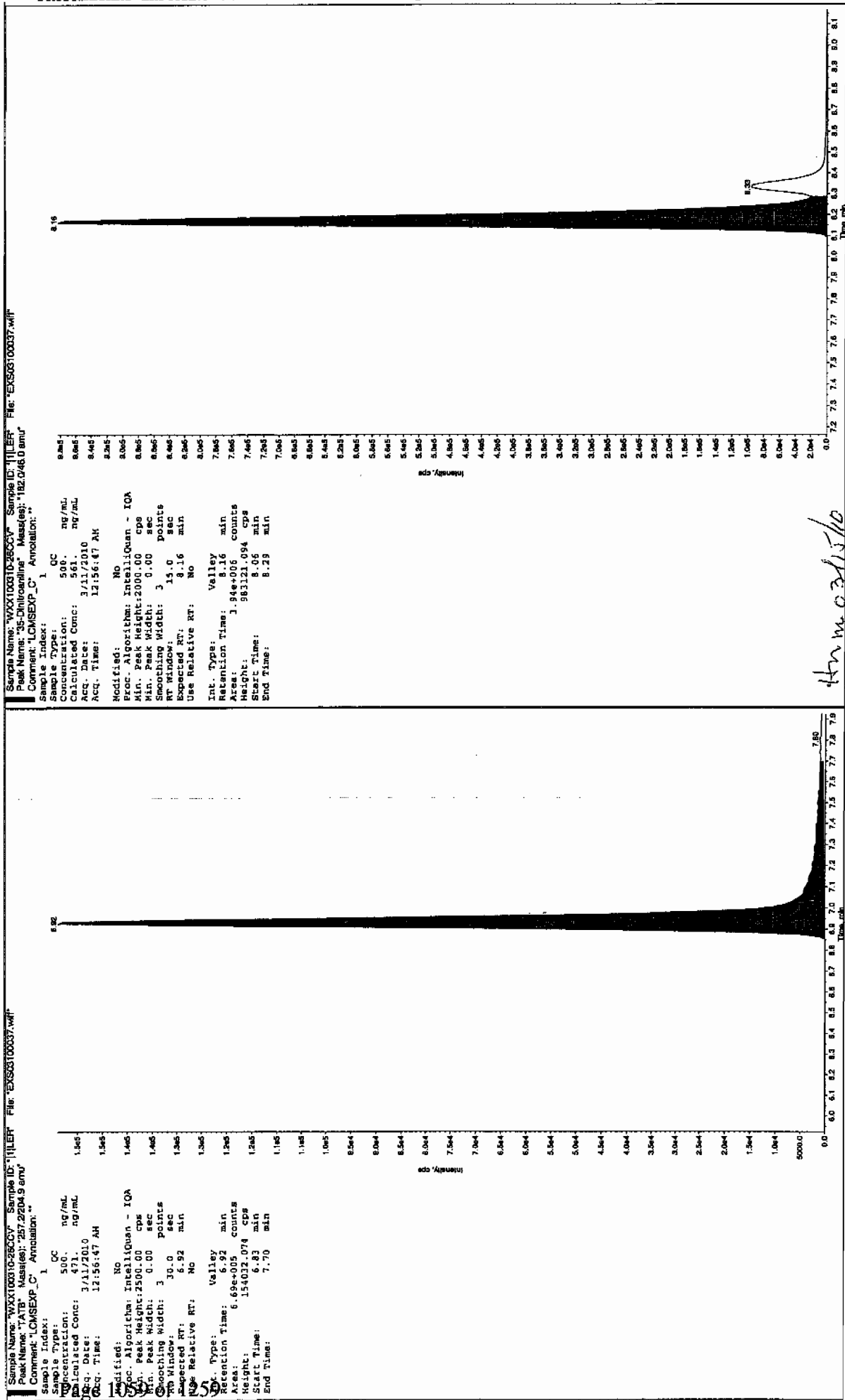
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,  
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

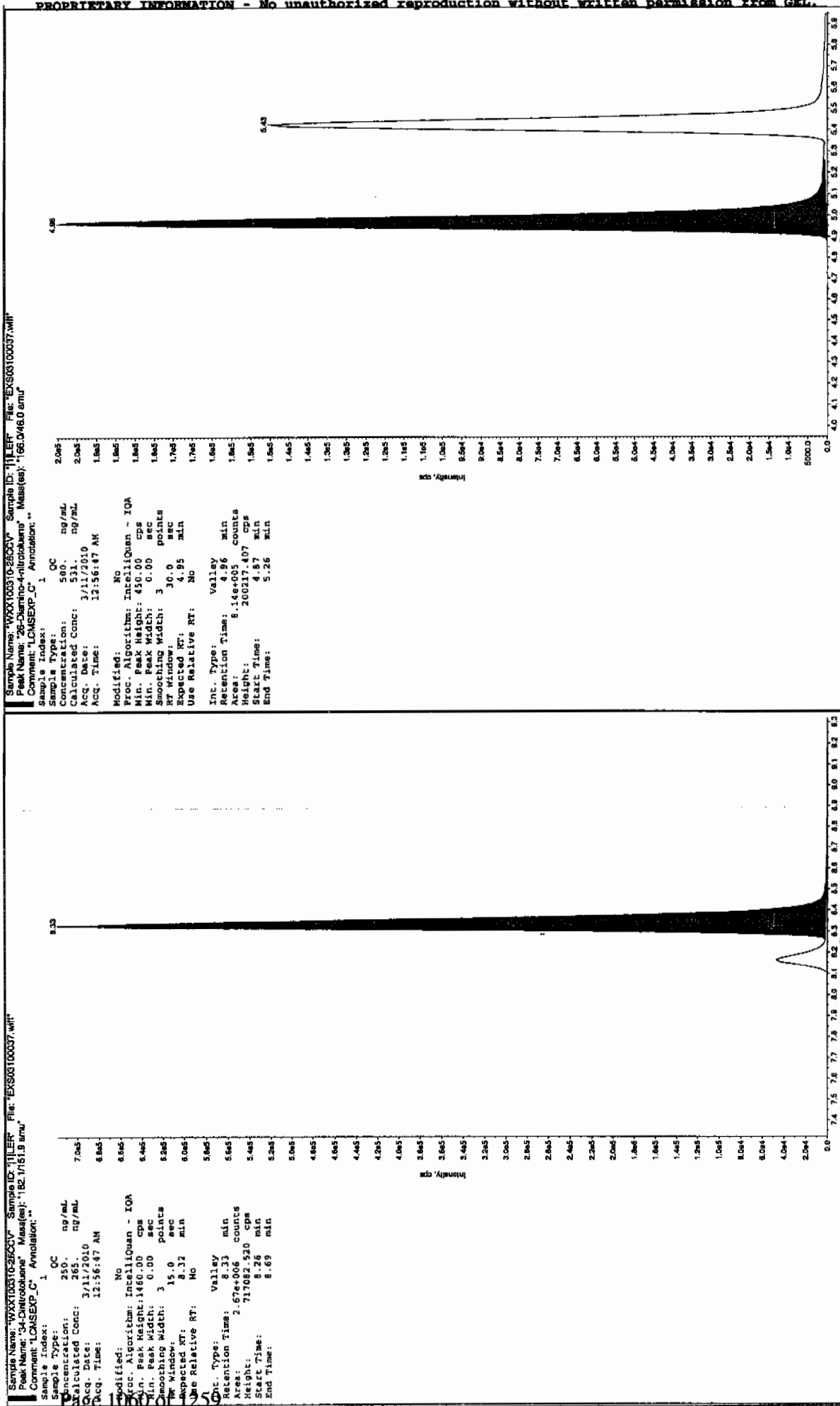
# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

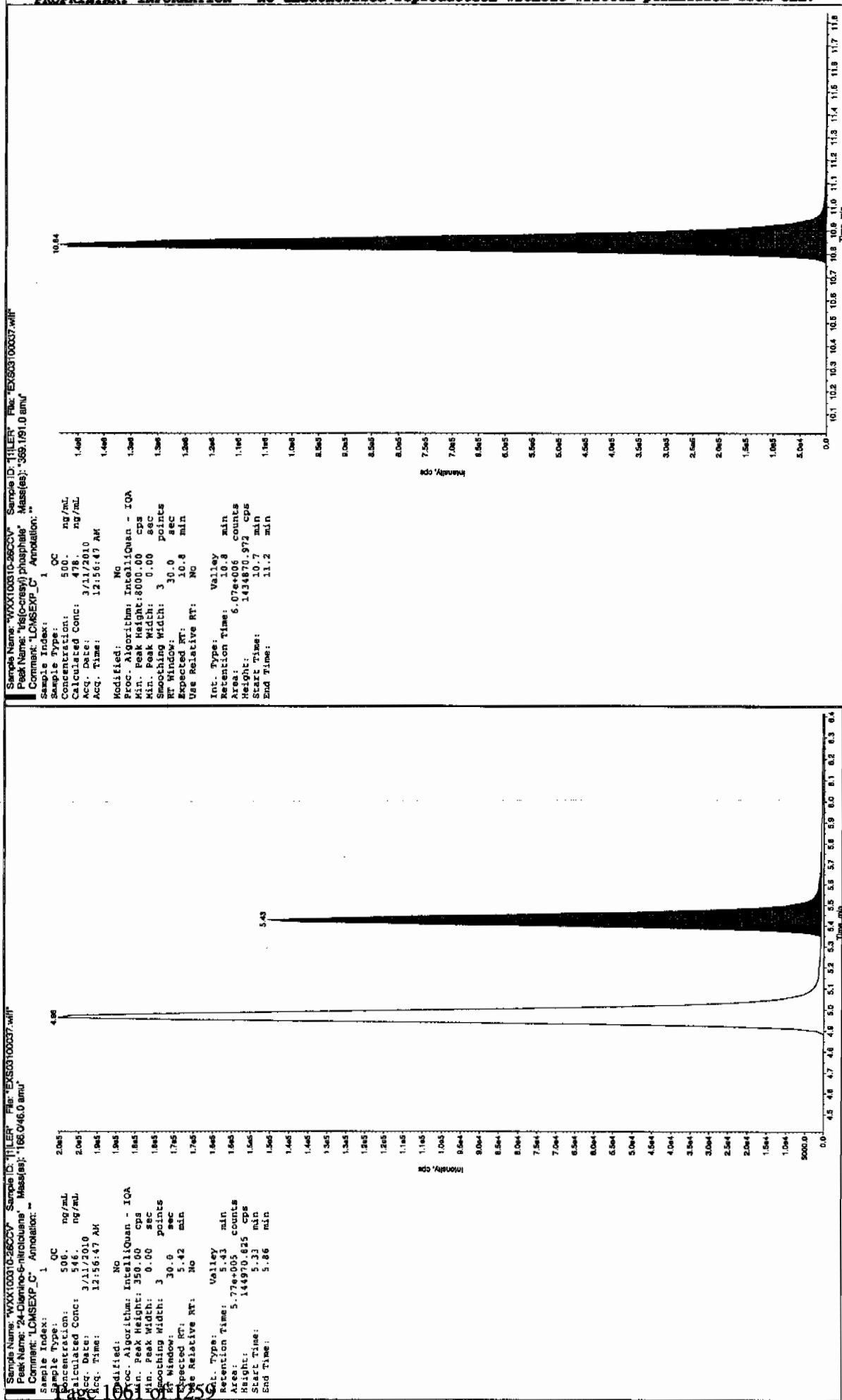
San 3/13/10



San 3/13/10







7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03100039.wiff

Analysis Date: 11-MAR-10 01:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	108	108	
2,6-Diamino-4-nitrotoluene	100	107	107	
3,4-Dinitrotoluene	50	50.3	101	
3,5-Dinitroaniline	100	87.8	88	
TATB	100	93.6	94	
tris(o-cresyl) phosphate	100	95.4	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

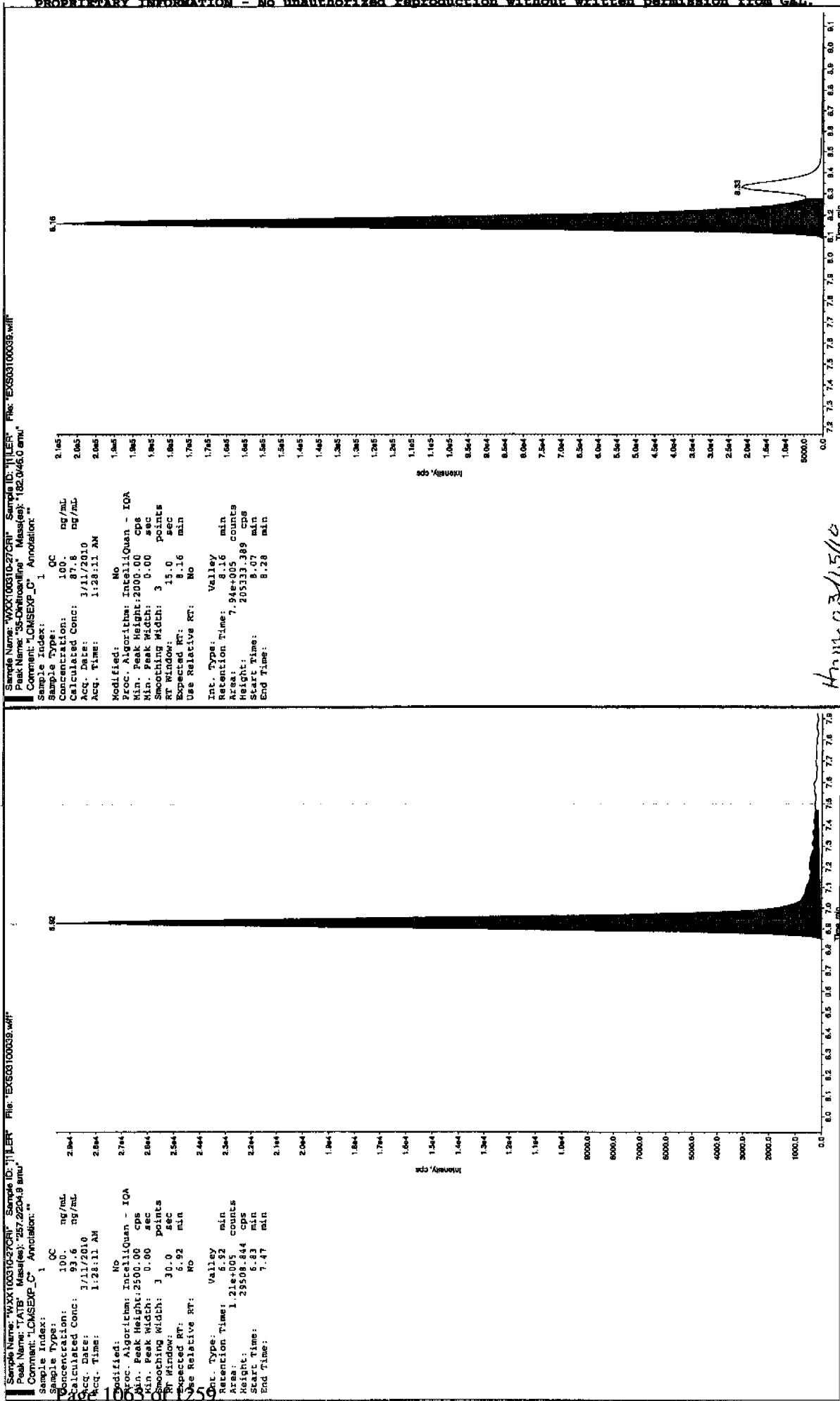
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

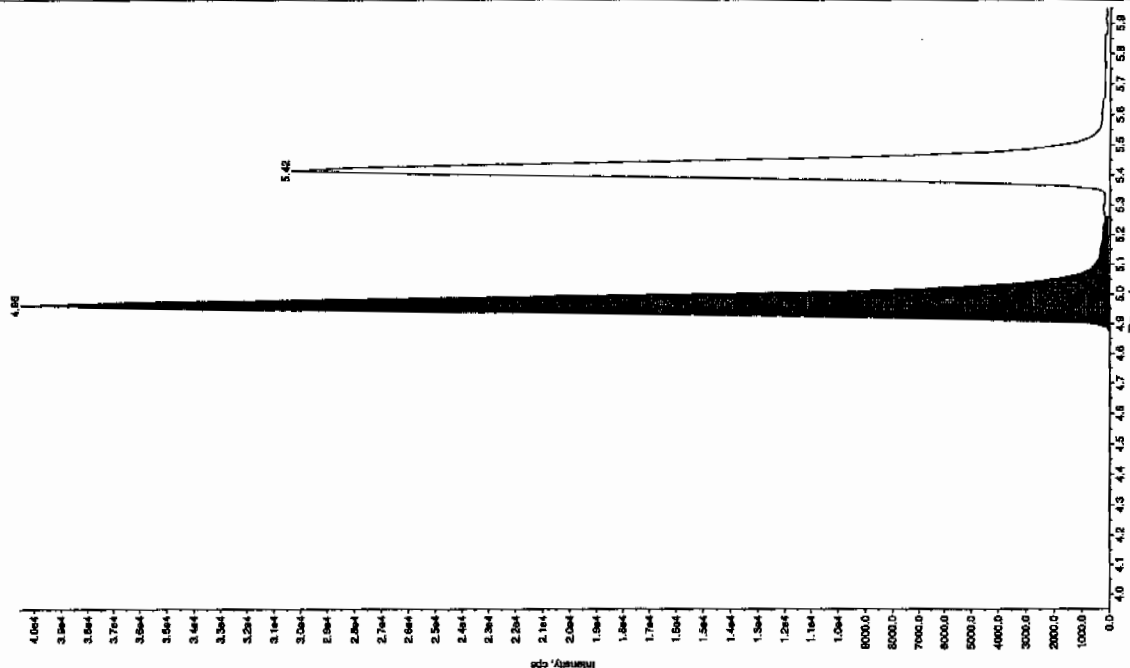
dan 3/13/10



dan 3/15/10

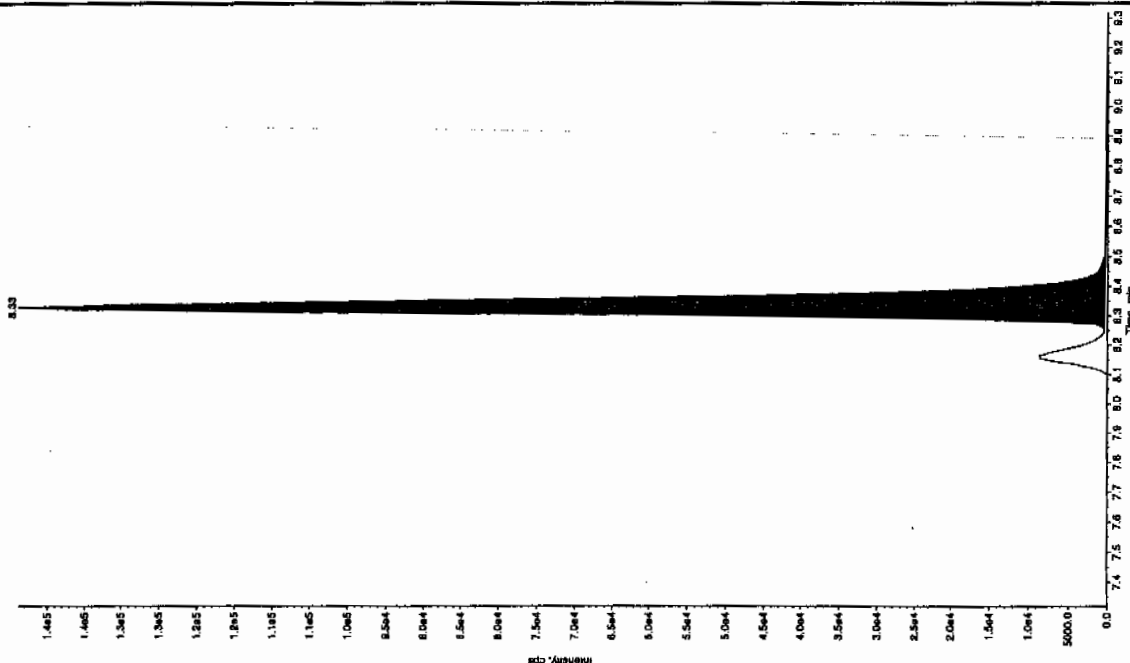
Sample Name: "WXX100310-270R" Sample ID: "11LRF" File: "EXS03100039.wif"  
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "186.046.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

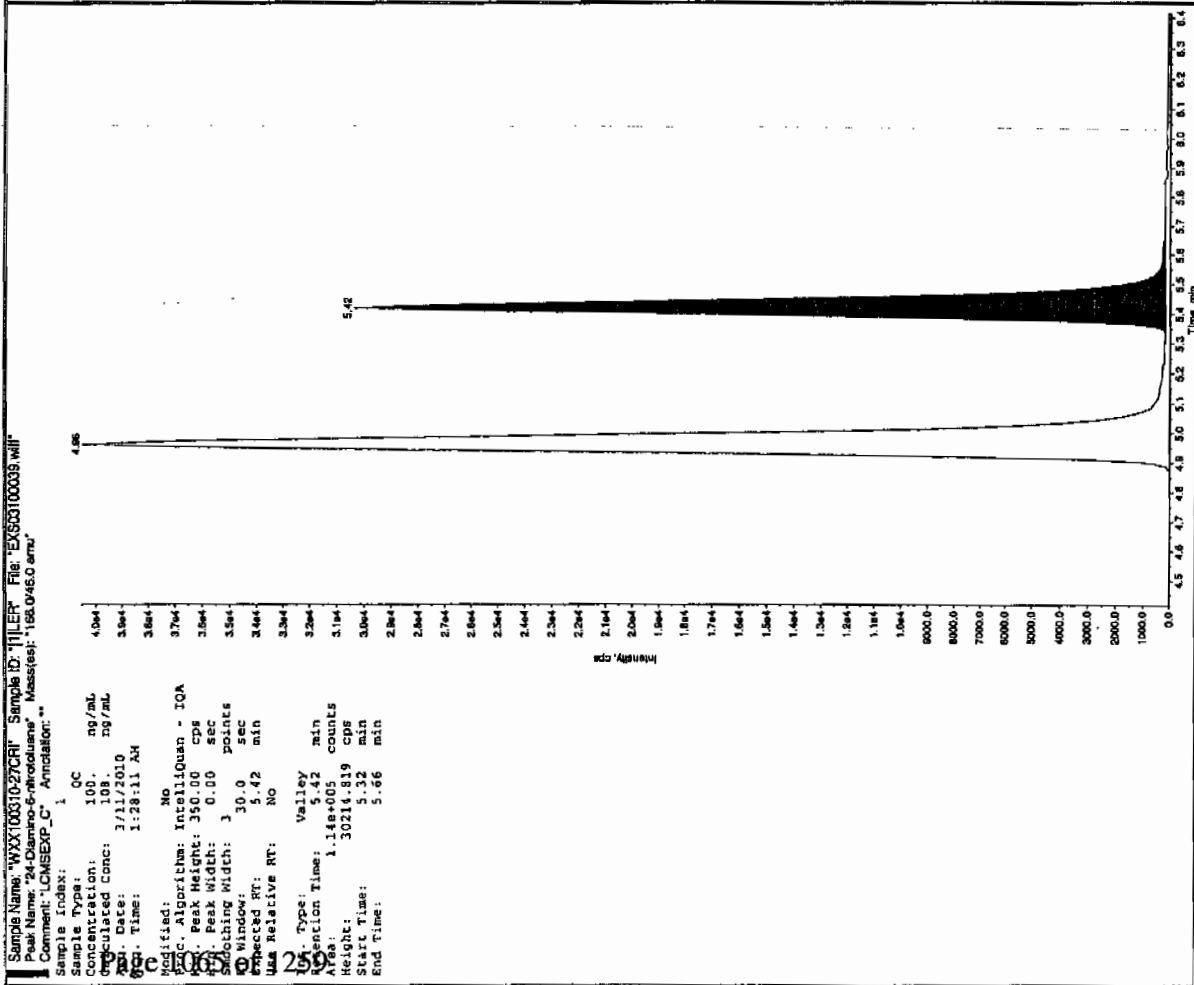
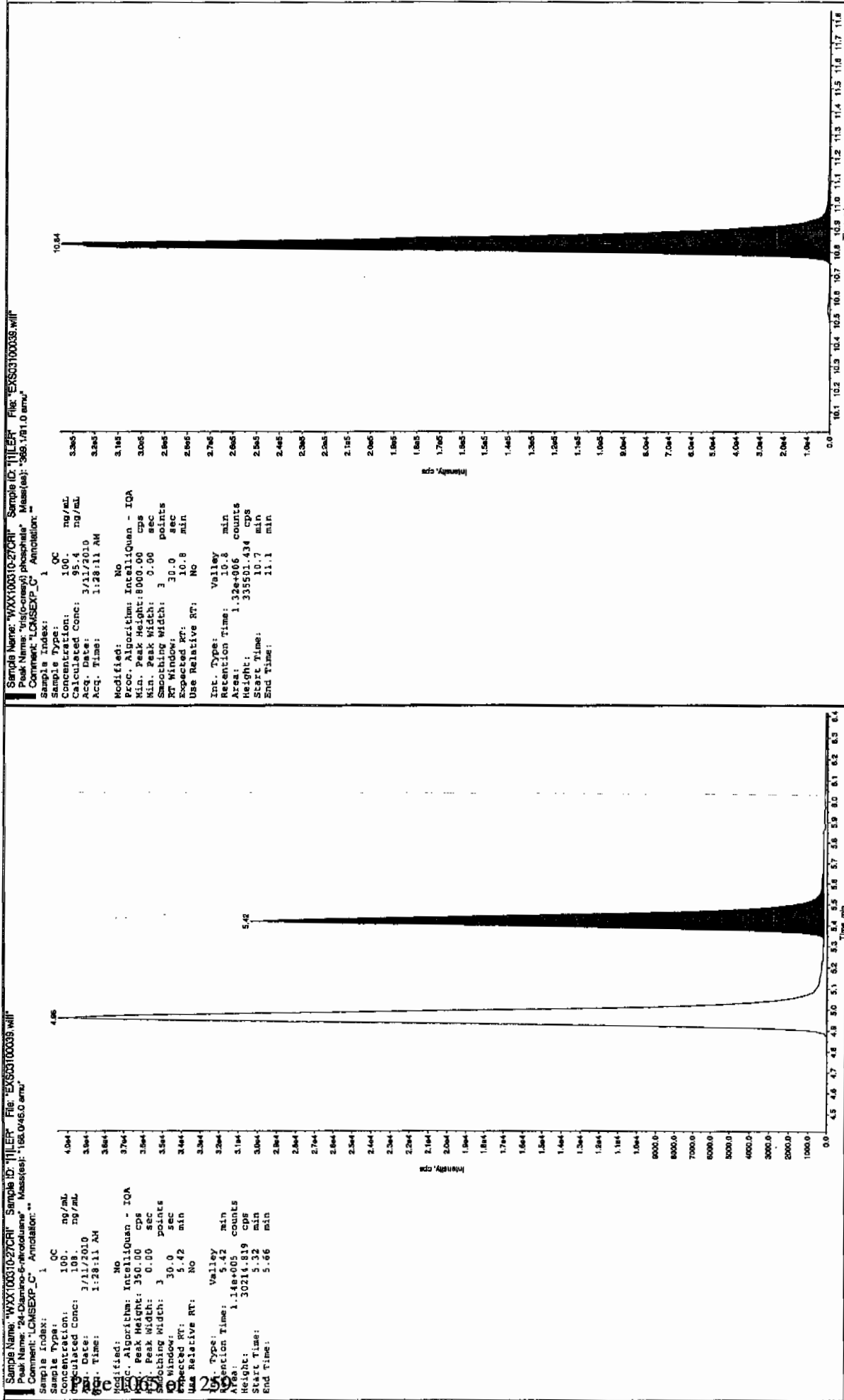
Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 107. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:28:11 AM  
 Modified: NO  
 Proc. Algorithm: Internal - IOA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 4.96 min  
 Area: 1.66e+005 counts  
 Height: 40503.166 cps  
 Start Time: 4.83 min  
 End Time: 5.26 min



Sample Name: "WXX100310-270R" Sample ID: "11LRF" File: "EXS03100039.wif"  
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 50.3 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 1:28:11 AM  
 Modified: NO  
 Proc. Algorithm: Internal - IOA  
 Min. Peak Height: 1450.00 cps  
 Min. Peak Width: 3.00 sec  
 Smoothing Width: 3.00 points  
 RT Window: 15.0 sec  
 Expected RT: 8.32 min  
 Use Relative RT: NO  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Area: 5.39e+005 counts  
 Height: 143335.968 cps  
 Start Time: 8.26 min  
 End Time: 8.58 min





7A  
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03100044.wiff

Analysis Date: 11-MAR-10 02:46

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	566	113	
2,6-Diamino-4-nitrotoluene	500	543	109	
3,4-Dinitrotoluene	250	268	107	
3,5-Dinitroaniline	500	562	112	
TATB	500	493	99	
tris(o-cresyl) phosphate	500	470	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%

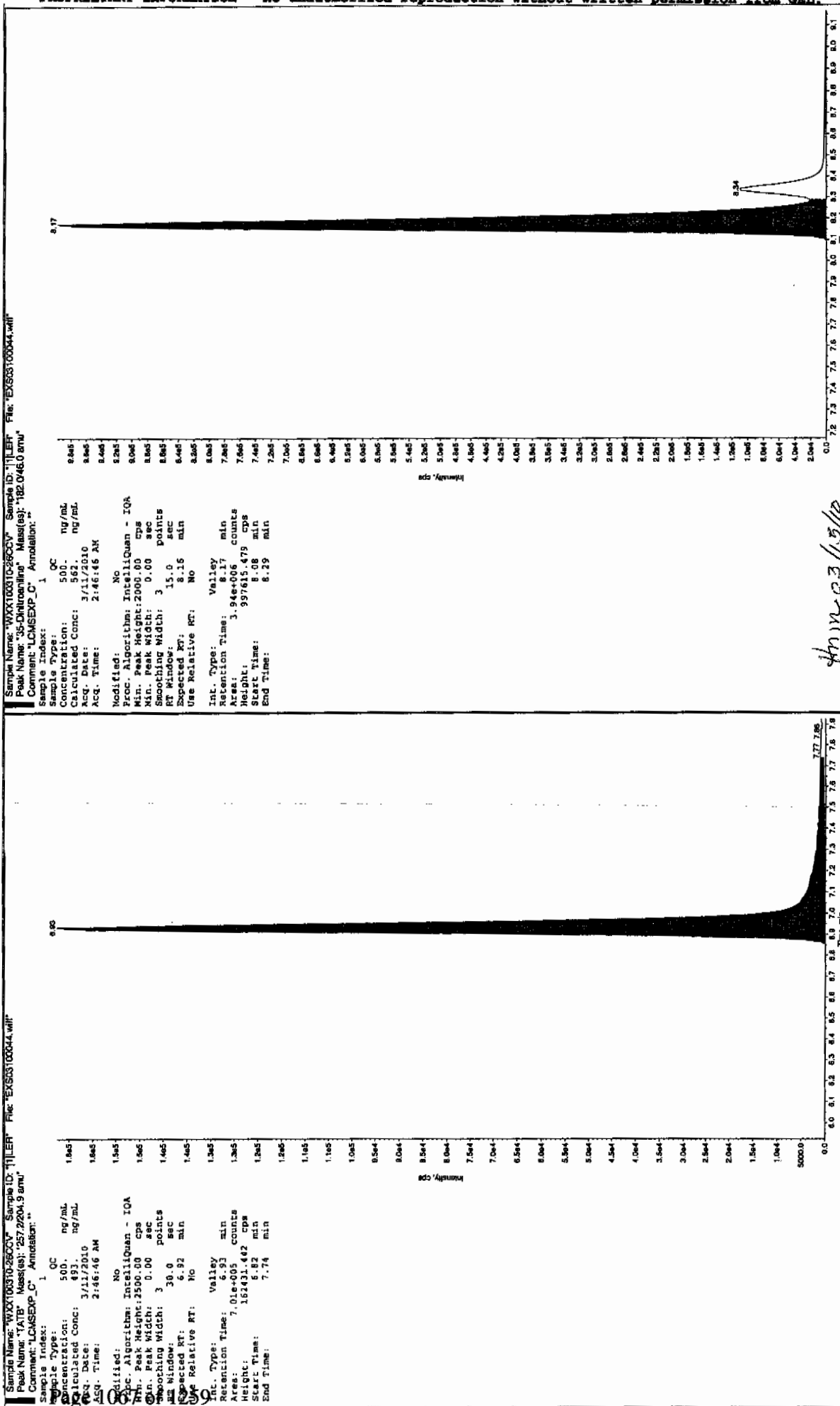
Other Target Analytes 80-120%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

Jan 31/4/10

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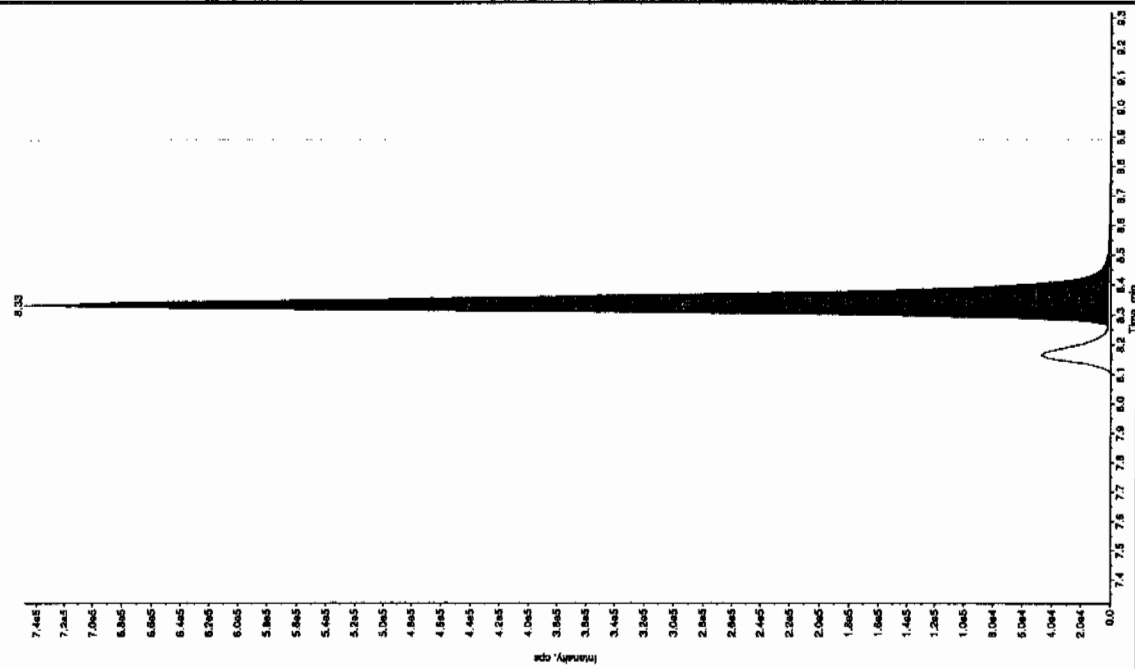


4/11/03/15/10

\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSSMS#4

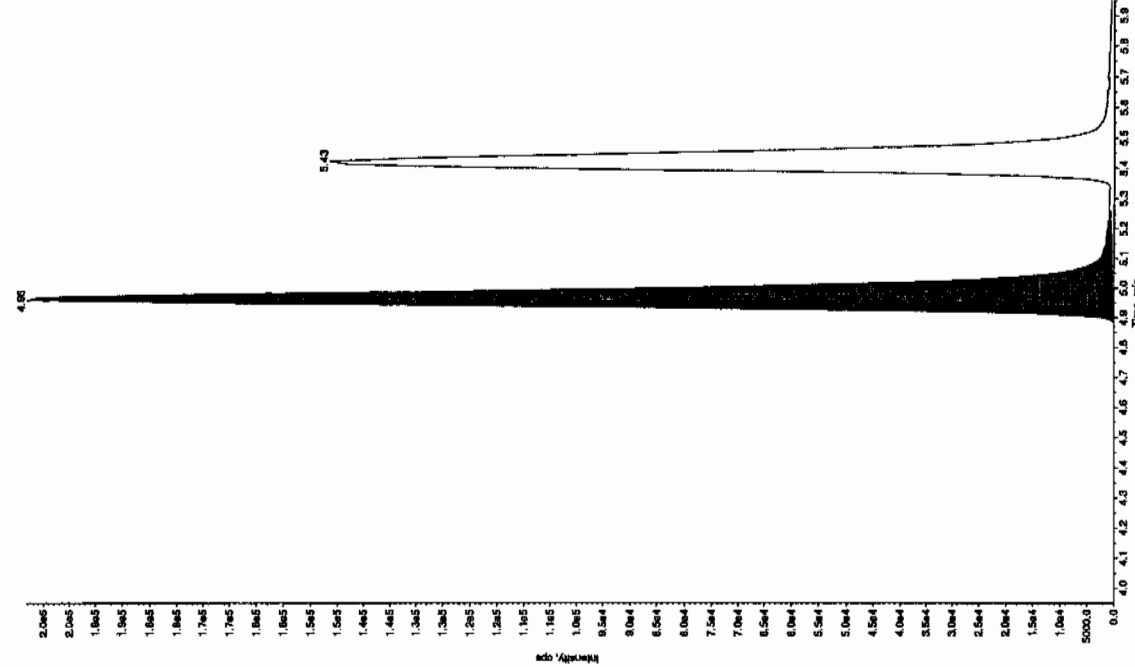
Sample Name: "WXX100310-250CV" Sample ID: "111ER" File: "EX503100044.wif"  
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: QC  
 Concentration: 250. ng/mL  
 Calculated Conc: 250. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:46:46 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1460.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.32 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Area: 2.59e+006 counts  
 Height: 746569.519 cps  
 Start Time: 8.26 min  
 End Time: 8.65 min



Sample Name: "WXX100310-250CV" Sample ID: "111ER" File: "EX503100044.wif"  
 Peak Name: "28-Dinitro-4-nitrotoluene" Mass(es): "166.0/146.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: "

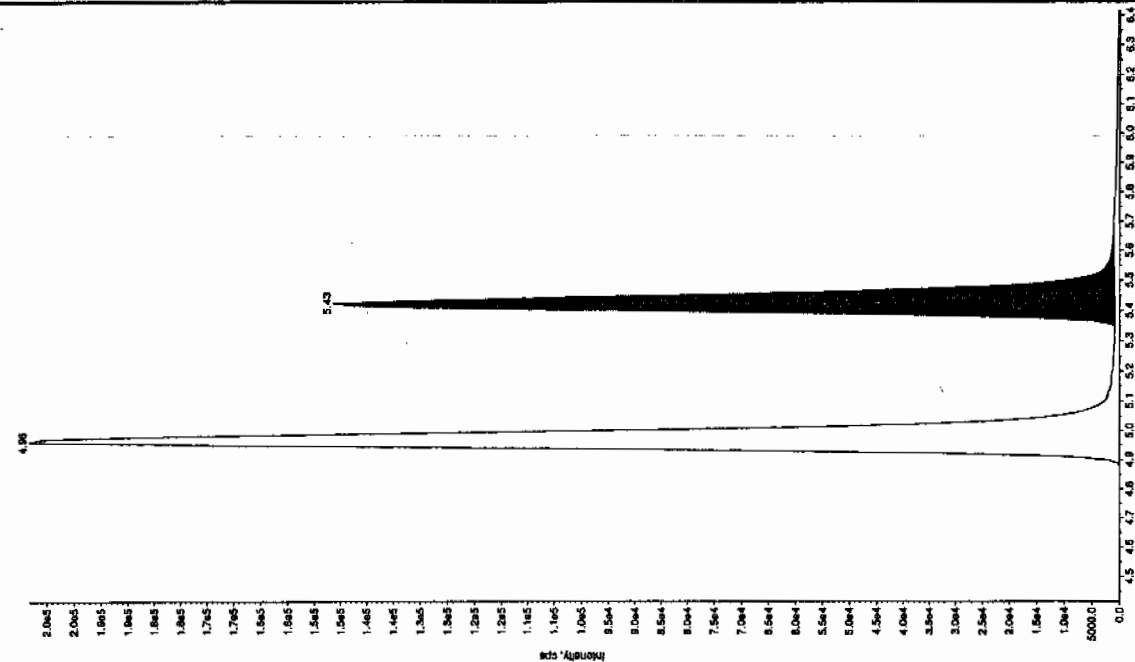
Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 543. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:46:46 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.96 min  
 Area: 8.31e+005 counts  
 Height: 203297.394 cps  
 Start Time: 4.87 min  
 End Time: 5.26 min





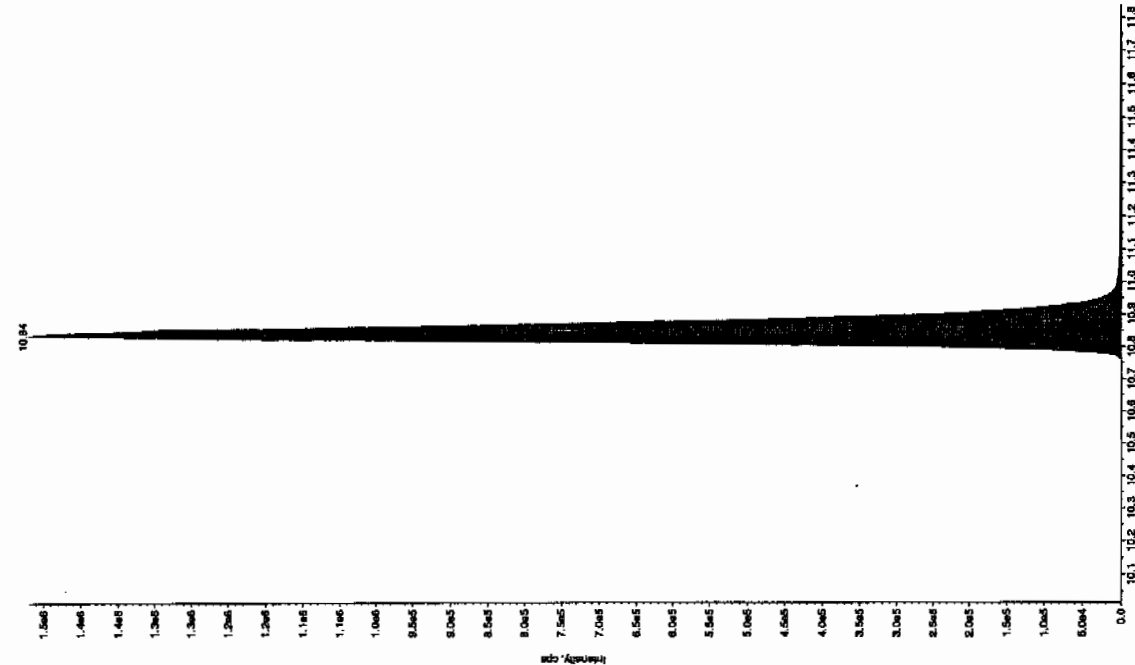
Sample Name: WXX100310-280CV\* Sample ID: J11ER\* File: EX603100044.wif  
 Peak Name: 24-Diamino-5-nitroindole\* Mass(es): 186.0465.0 amu  
 Comment: LCMSXCP\_C\* Annotation:

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 566. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:46:46 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.42 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.43 min  
 Area: 5.98e+005 counts  
 Height: 145700.638 cps  
 Start Time: 5.33 min  
 End Time: 5.67 min



Sample Name: WXX100310-280CV\* Sample ID: J11ER\* File: EX603100044.wif  
 Peak Name: 1-(6-cresyl) phosphatidylcholine\* Mass(es): 369.1911.0 amu  
 Comment: LCMSXCP\_C\* Annotation:

Sample Index: 1  
 Sample Type: QC  
 Concentration: 500. ng/mL  
 Calculated Conc: 470. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 2:46:46 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 5.97e+006 counts  
 Height: 1468909.424 cps  
 Start Time: 10.7 min  
 End Time: 11.2 min



7B  
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1950

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03100046.wiff

Analysis Date: 11-MAR-10 03:18

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	107	107	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	50.3	101	
3,5-Dinitroaniline	100	91	91	
TATB	100	98.2	98	
tris(o-cresyl) phosphate	100	94.3	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

# Column used to flag Recovery outside of Limits

\* Value outside of Recovery Limits

264 3/14/10

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

Sample Name: NXX10031027091 Sample ID: 111ER File: EXS03100046.will

Peak Name: 8321A-Modified LCM SMS#4 Mass(es): 182.0463 amu

Comment: LCMSEXP\_C Acquisition:

Sample Index: 1

Concentration: 100 ng/mL

Calculated Conc: 91.0 ng/mL

Acq. Date: 3/11/2010

Acq. Time: 3:18:11 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.16 min

Use Relative RT: No

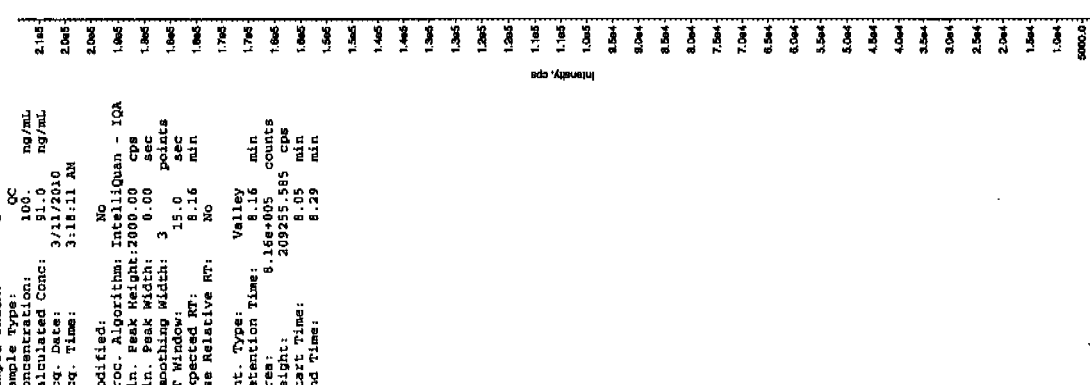
Int. Type: Valley

Retention Time: 8.16 min

Height: 209255.585 counts

Start Time: 8.05 min

End Time: 8.29 min



4444 03/15/10

Sample Name: NXX10031027091 Sample ID: 111ER File: EXS03100046.will

Peak Name: 8321A-Modified LCM SMS#4 Mass(es): 182.0463 amu

Comment: LCMSEXP\_C Acquisition:

Sample Index: 1

Concentration: 100 ng/mL

Calculated Conc: 98.2 ng/mL

Acq. Date: 3/11/2010

Acq. Time: 3:18:11 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.92 min

Use Relative RT: No

Int. Type: Valley

Retention Time: 6.92 min

Height: 1.28e+005 counts

Start Time: 6.79 min

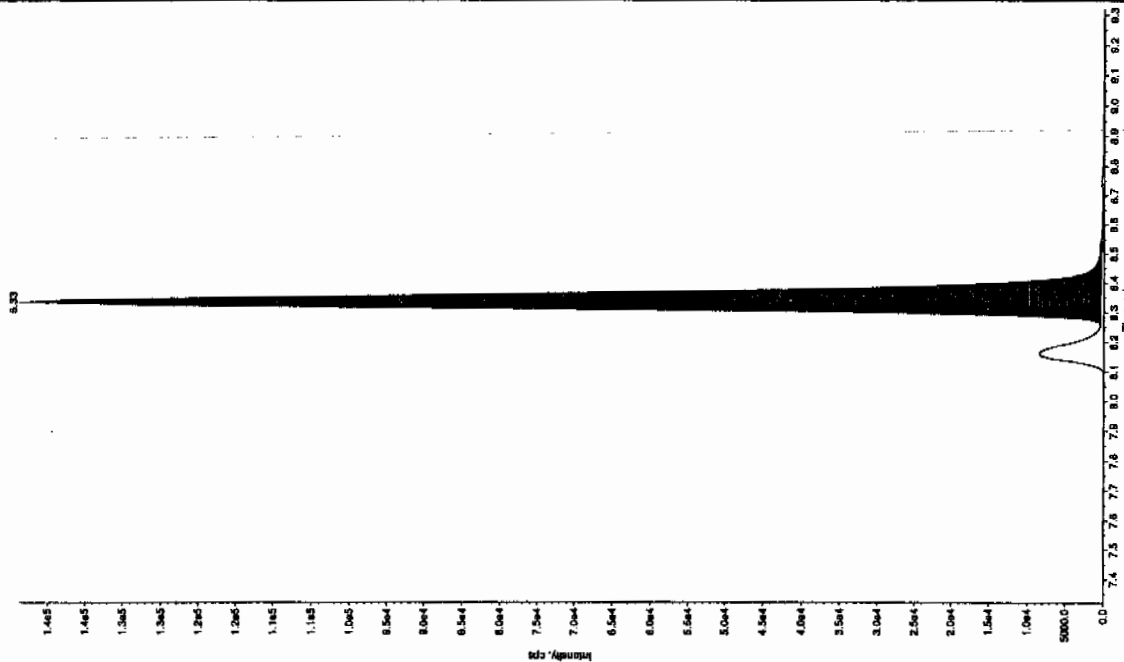
End Time: 7.76 min



\*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

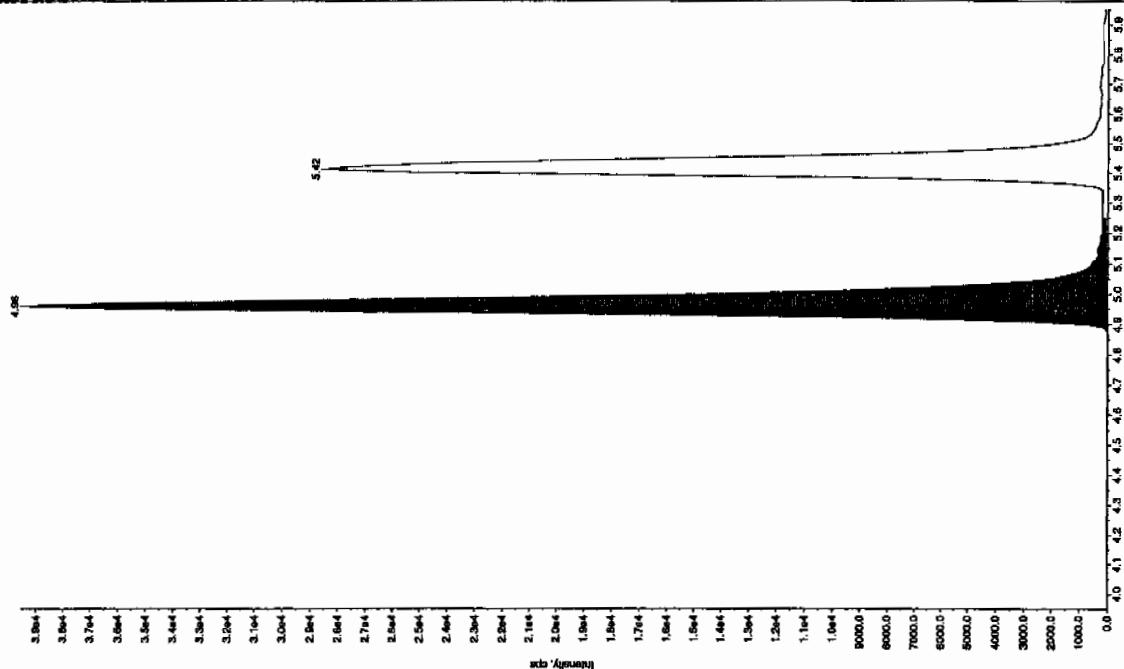
Sample Name: "WXX100310-27CR" Sample ID: "11LHR" File: "EX503100046.wif"  
 Peak Name: "34-Ornitroloene" Mass(es): "182.1/151.9 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 50.0 ng/mL  
 Calculated Conc: 50.3 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:18:11 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 1450.0 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 15.0 sec  
 Expected RT: 8.32 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 8.33 min  
 Area: 5.40e+005 counts  
 Height: 143562.103 cps  
 Start Time: 8.28 min  
 End Time: 8.56 min



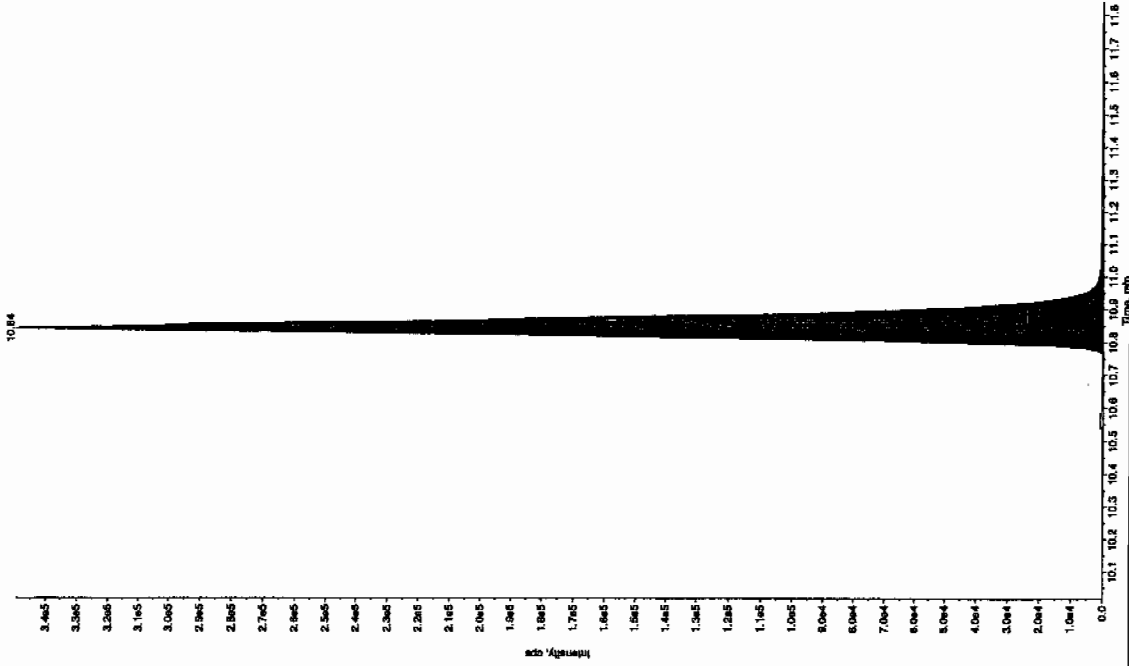
Sample Name: "WXX100310-27CR" Sample ID: "11LHR" File: "EX503100046.wif"  
 Peak Name: "26-Diamino-4-nitroloene" Mass(es): "186.0/48.0 amu"  
 Comment: "LCMSEXP\_C" Annotation: ""

Sample Index: 1  
 Sample Type: QC  
 Concentration: 100. ng/mL  
 Calculated Conc: 106. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:18:11 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 450.0 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 4.95 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 4.96 min  
 Area: 1.62e+005 counts  
 Height: 39546.810 cps  
 Start Time: 4.87 min  
 End Time: 5.25 min



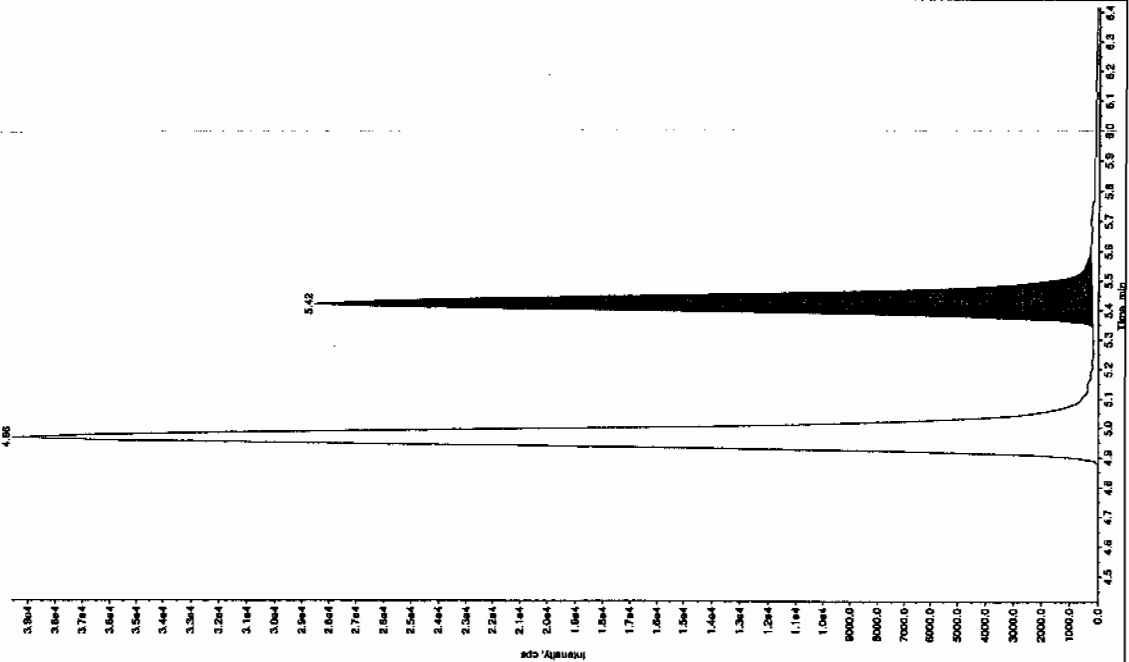
Sample Name: "WXX100310-2709" Sample ID: "HLEP" File: "EX503100046.wif"  
 Peak Name: "Tris(4-methylphenyl) phosphite" Mass(es): "389.191.0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100 ng/mL  
 Calculated Conc: 94.3 ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:18:11 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Peak Height: 318406 counts  
 Peak Area: 349152.496 cps  
 Start Time: 0.0 min  
 End Time: 11.2 min



Sample Name: "WXX100310-2709" Sample ID: "HLEP" File: "EX503100046.wif"  
 Peak Name: "24-Dien-2-yl phosphite" Mass(es): "166.046.0 amu"  
 Comment: "LCMS-EXP\_C" Annotation: "

Sample Index: 1  
 Sample Type: OC  
 Concentration: 100 ng/mL  
 Calculated Conc: 107. ng/mL  
 Acq. Date: 3/11/2010  
 Acq. Time: 3:18:11 AM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IOA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.42 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.42 min  
 Peak Height: 1.13e+005 counts  
 Peak Area: 28350.166 cps  
 Start Time: 5.34 min  
 End Time: 5.59 min



# QUALITY CONTROL DATA

1  
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 956039

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 1202049901

Sample Amount 2

Moisture:

Amount Units g

Date Received: 22-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319028a

Date Analyzed: 20-MAR-10 06:10

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\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP\_PRO\Data\EXP0319028a

Date: 20-Mar-2010

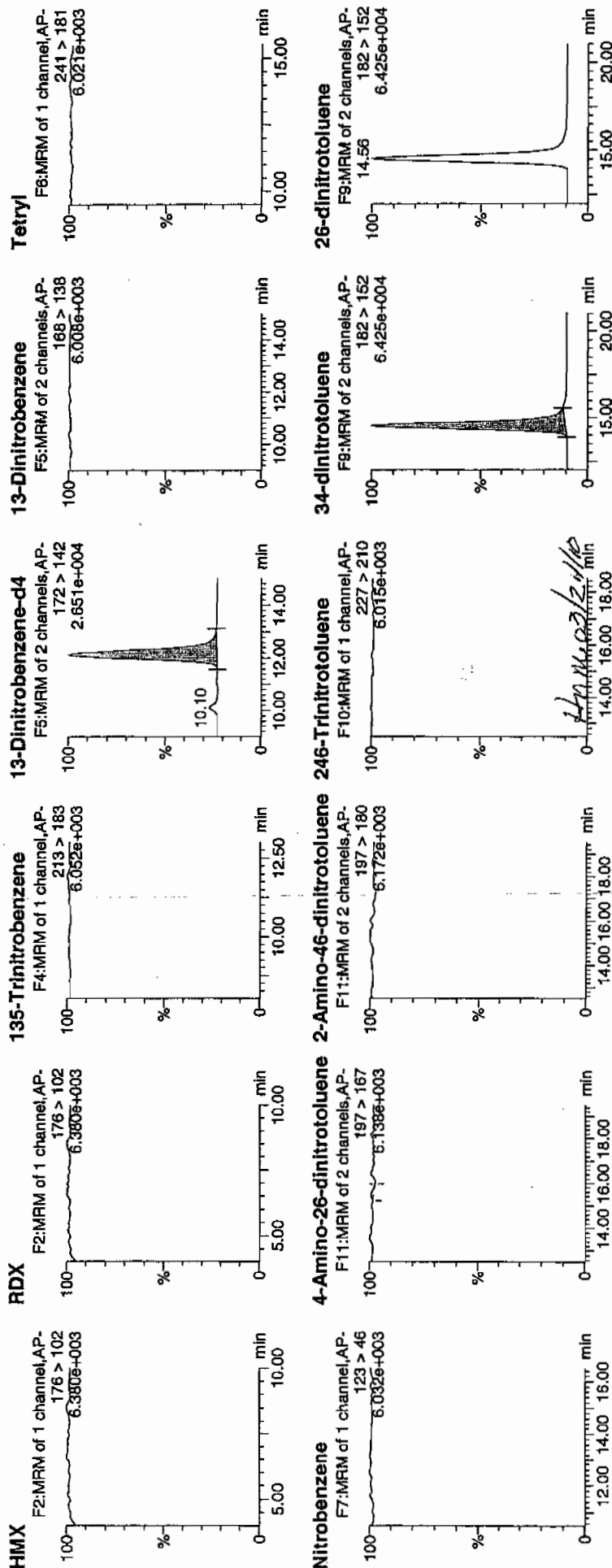
Time: 06:10:29

ID: 1202049901

Vial: 2:1,A

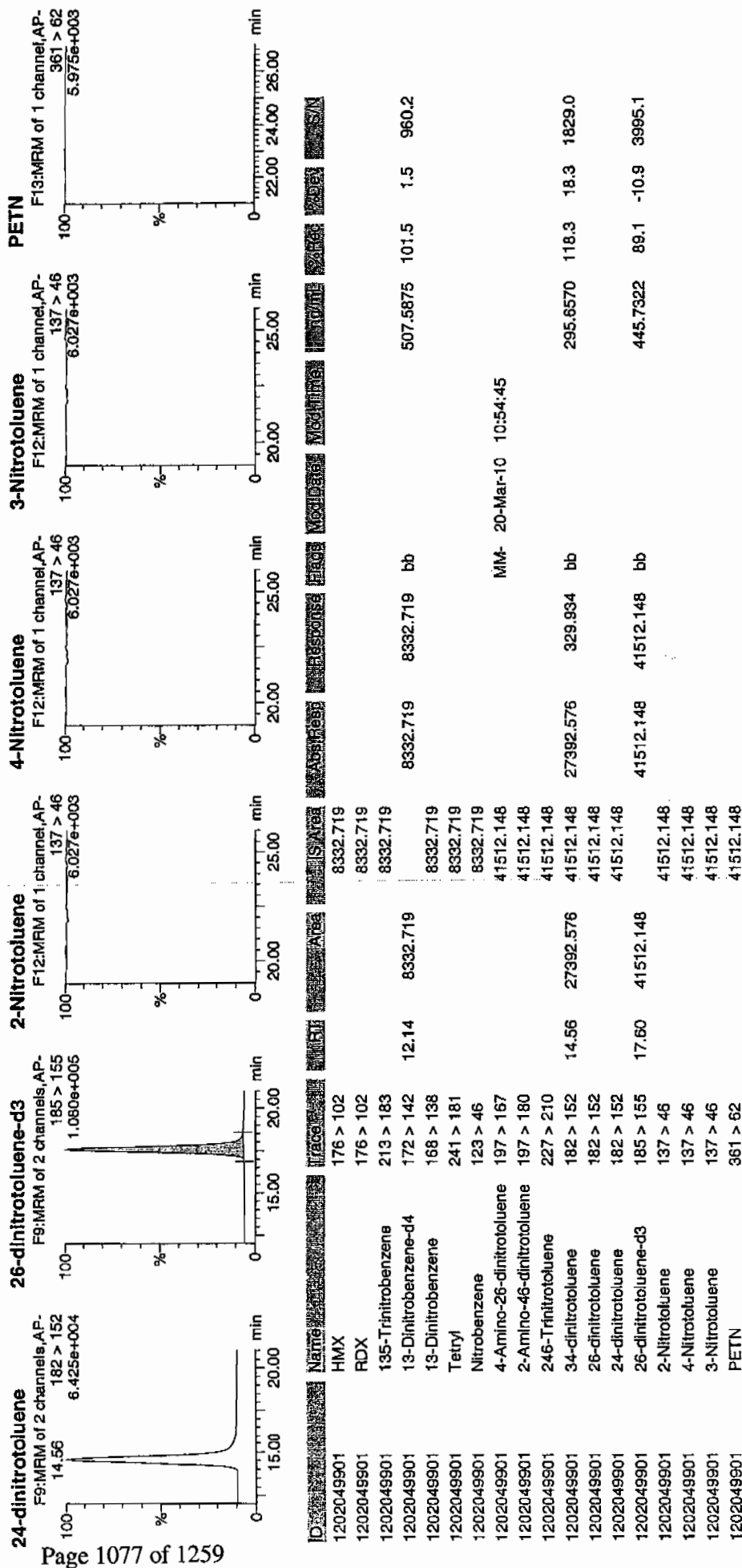
MSA  
3/24/10

LANV 956045 / 8022 / MSB 121





Dataset: C:\MASSLYNX\New\_Exp\PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010



1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 956039

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 1202049901

Sample Amount 2

Moisture:

Amount Units g

Date Received: 22-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100014.wiff

Date Analyzed: 10-MAR-10 18:55

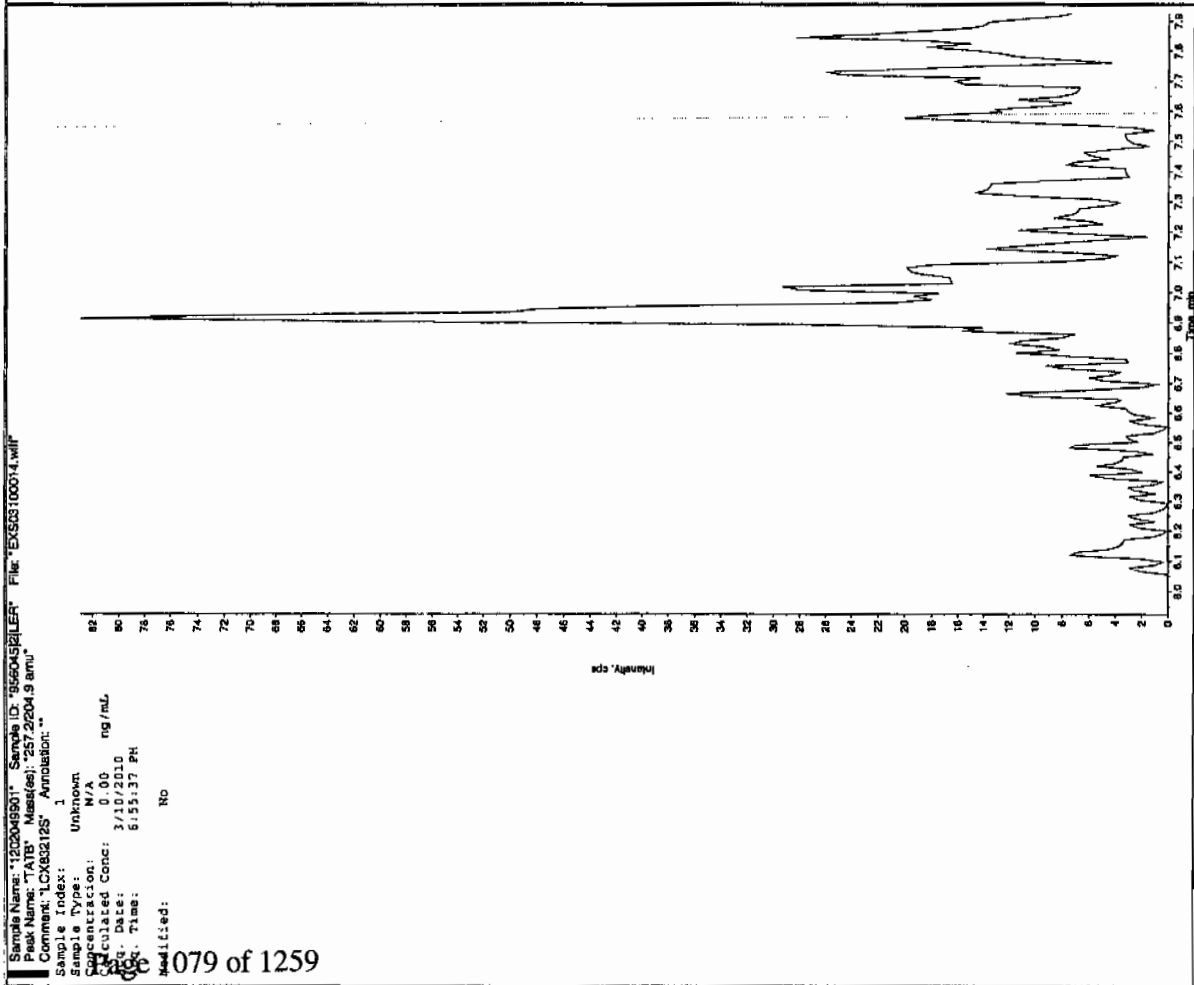
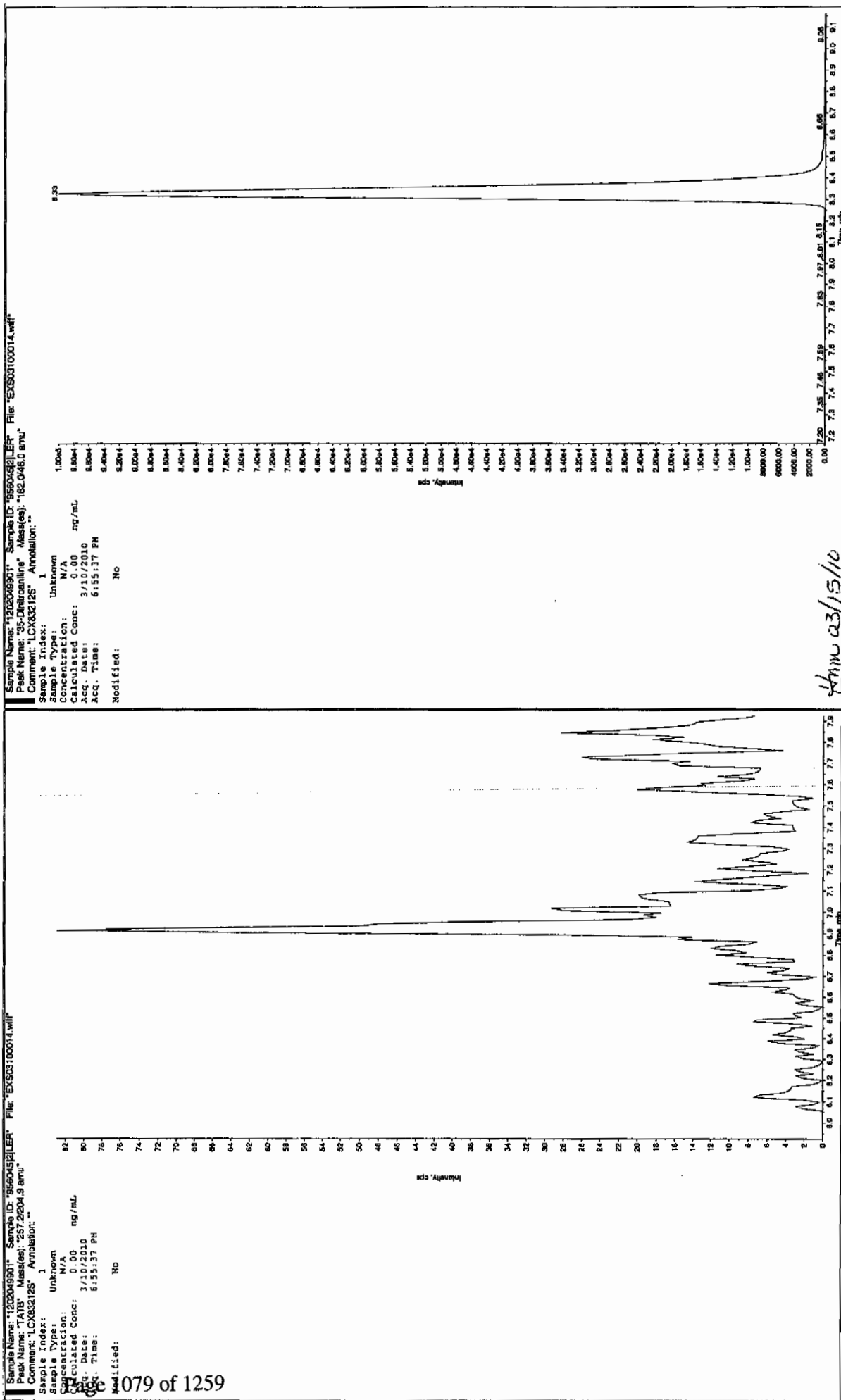
Units: ug/kg

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

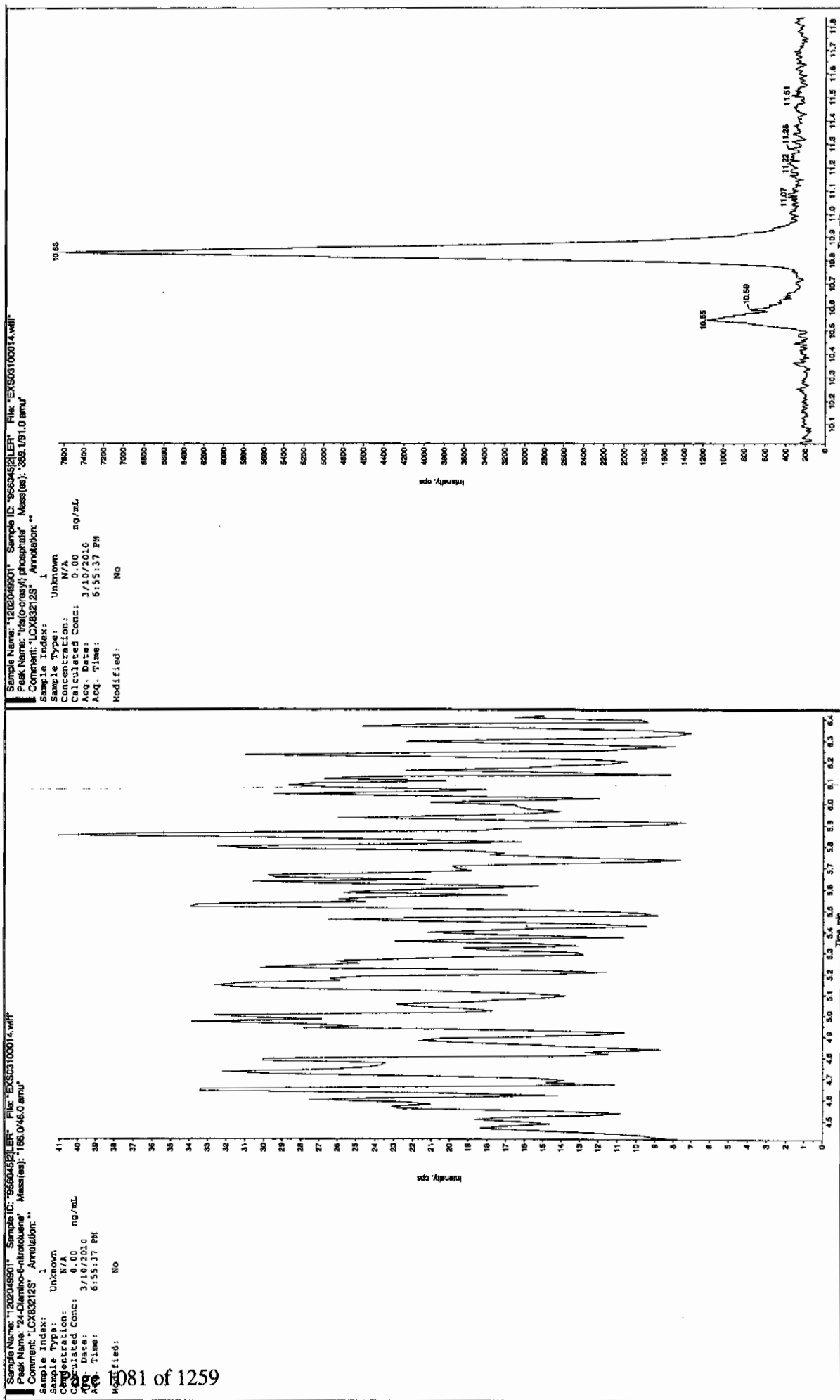
\*Concentration =

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

See 3/13/10







1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 956039

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 1202049902

Sample Amount 2

Moisture:

Amount Units g

Date Received: 22-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0319029a

Date Analyzed: 20-MAR-10 06:40

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4740	
121-14-2	2,4-Dinitrotoluene	5170	
121-82-4	RDX	5100	
19406-51-0	4-Amino-2,6-dinitrotoluene	4900	
2691-41-0	HMX	4190	
35572-78-2	2-Amino-4,6-dinitrotoluene	4730	
479-45-8	Tetryl	2520	
606-20-2	2,6-Dinitrotoluene	5040	
78-11-5	PETN	5500	
88-72-2	o-Nitrotoluene	5520	
98-95-3	Nitrobenzene	5760	
99-08-1	m-Nitrotoluene	4860	
99-35-4	1,3,5-Trinitrobenzene	4040	
99-65-0	m-Dinitrobenzene	4830	
99-99-0	p-Nitrotoluene	4910	

\*Concentration =

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

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319029a

Date: 20-Mar-2010

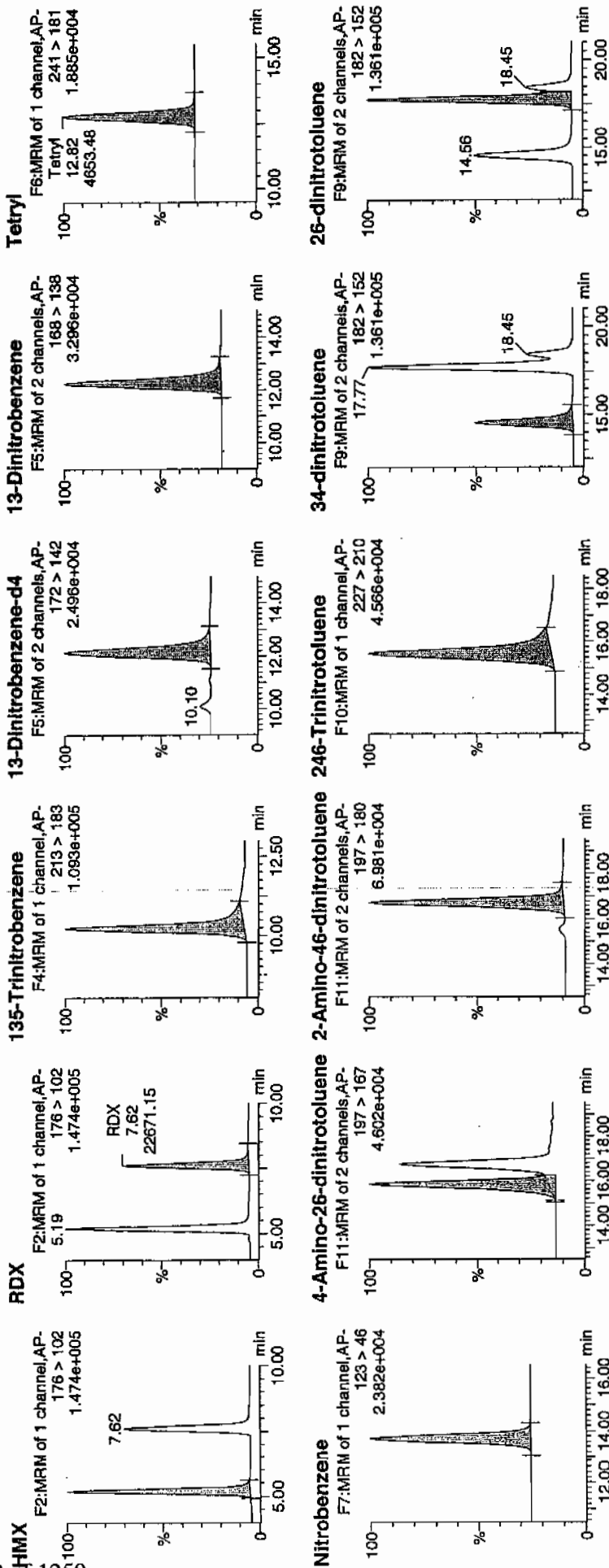
Time: 06:40:02

ID: 1202049902

Vial: 2:1,B

not  
3/21/10

↓ Tetraol



Handwritten note: 18.45





1

# High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 956039

Lab Code: GEL

GEL Job No (SDG) 10-1950

Matrix: SOIL

GEL Sample ID: 1202049902

Sample Amount 2

Moisture:

Amount Units g

Date Received: 22-FEB-10

Extraction Type Sonication

Extraction Batch ID: 956039

Concentrated Extract Volume (mL) 10

Date Extracted: 25-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03100015.wiff

Date Analyzed: 10-MAR-10 19:11

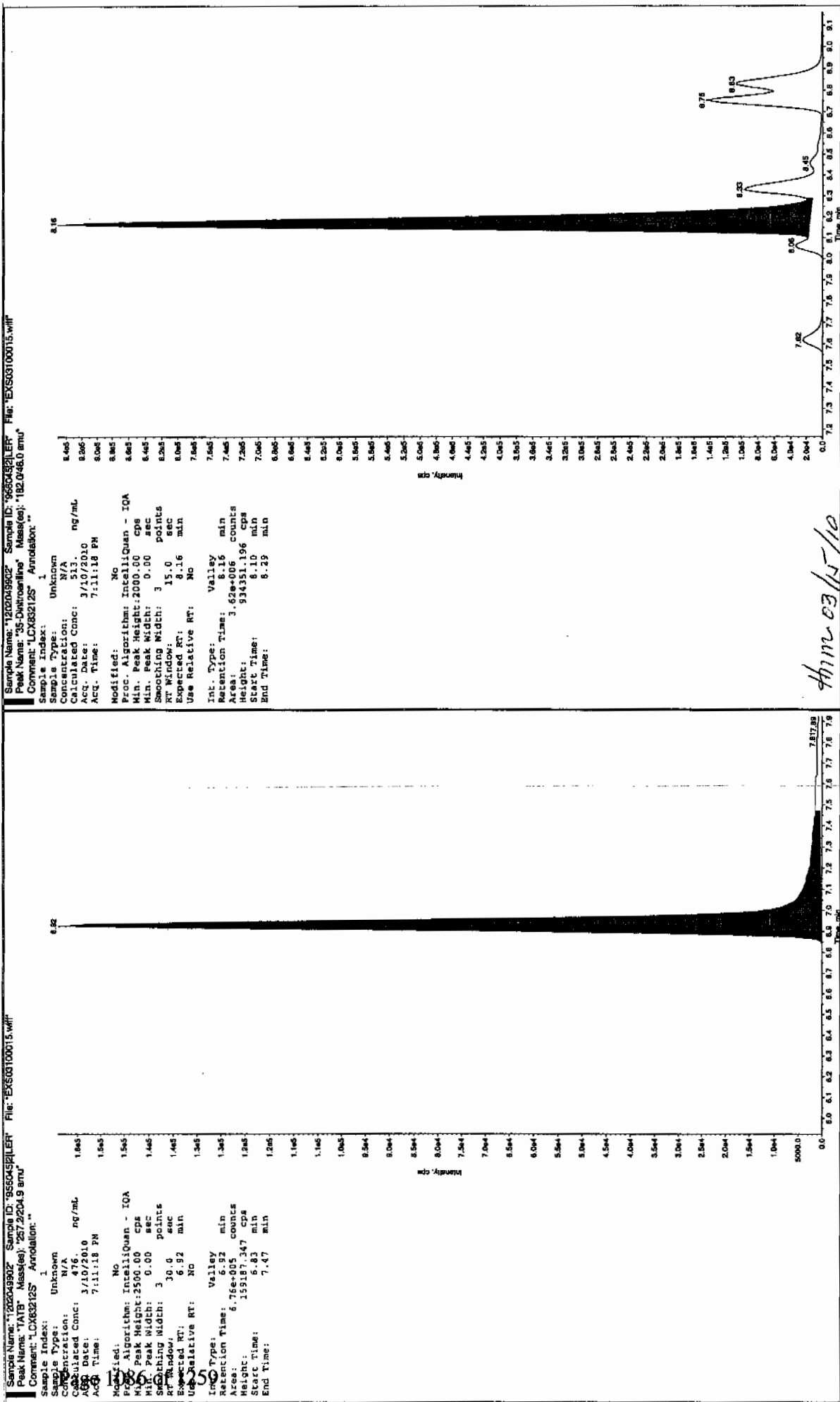
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	4760	
59229-75-3	2,6-Diamino-4-nitrotoluene	5210	
618-87-1	3,5-Dinitroaniline	5130	
6629-29-4	2,4-Diamino-6-nitrotoluene	5180	
78-30-8	tris(o-cresyl) phosphate	4890	

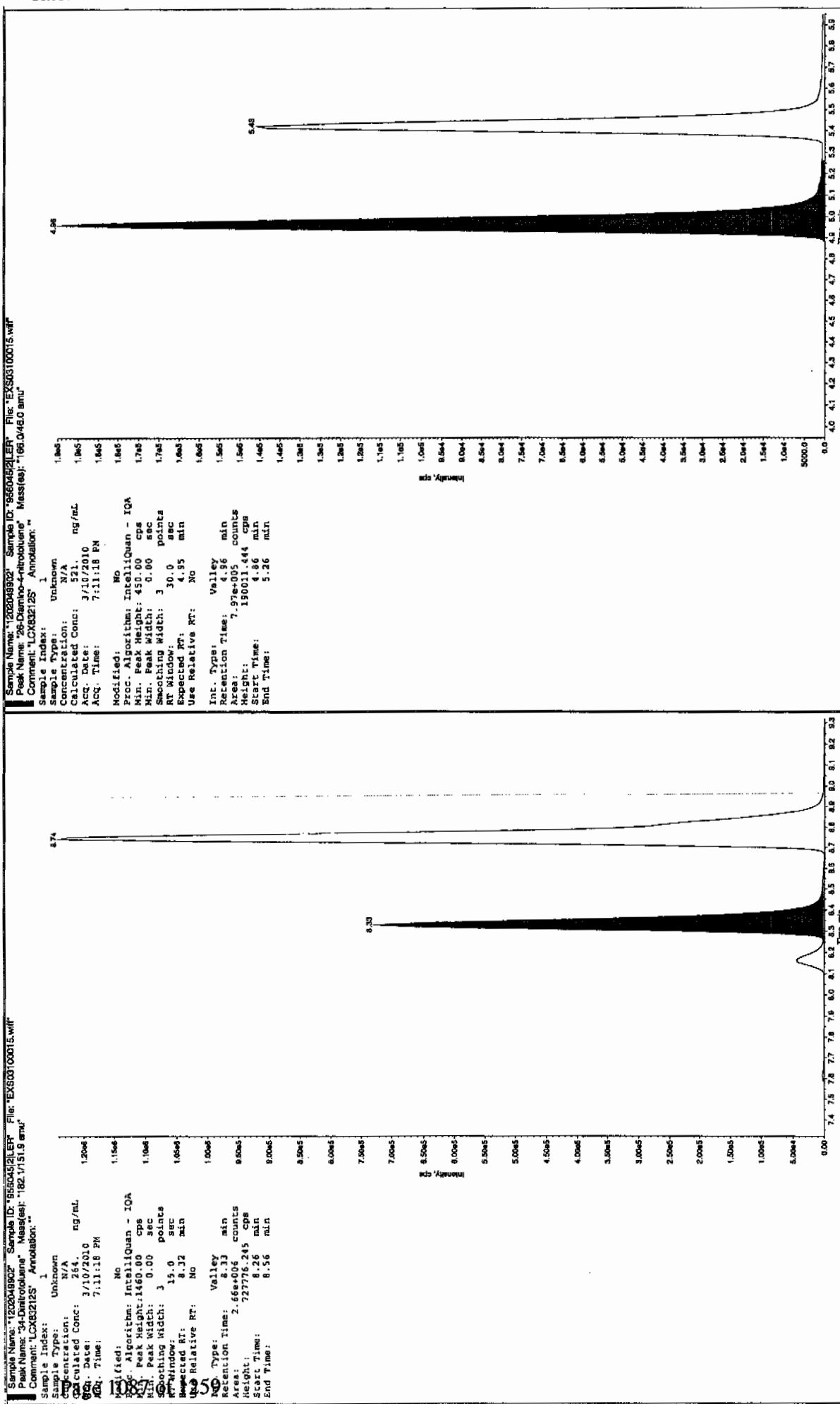
\*Concentration =

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

See 3/13/10

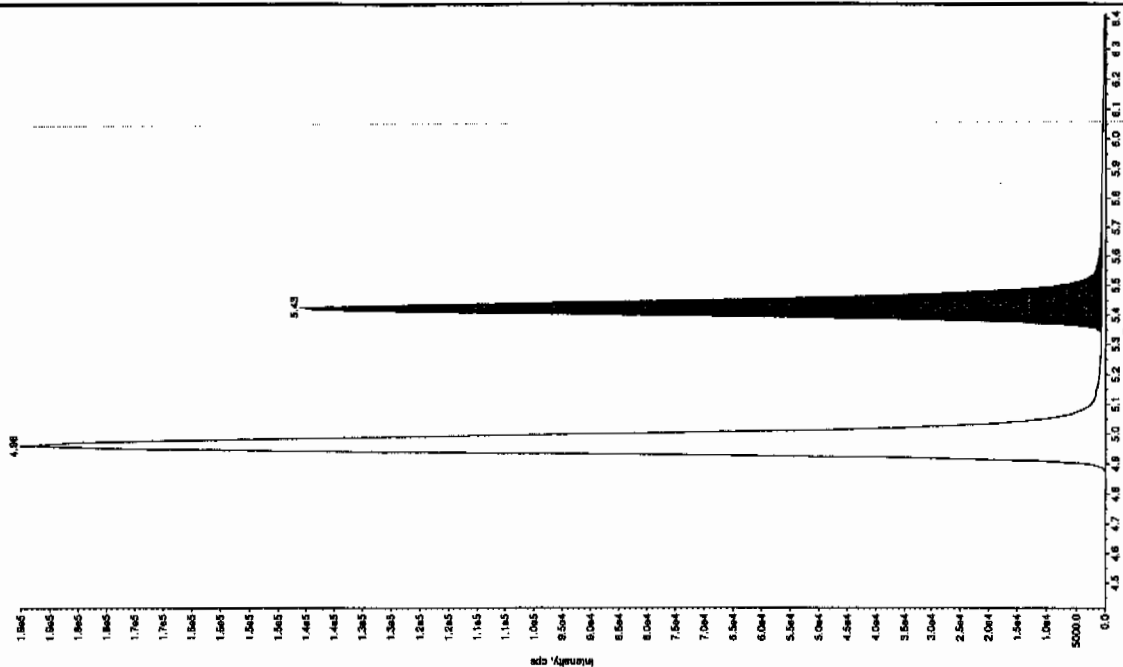


4/11/10 03/15/10



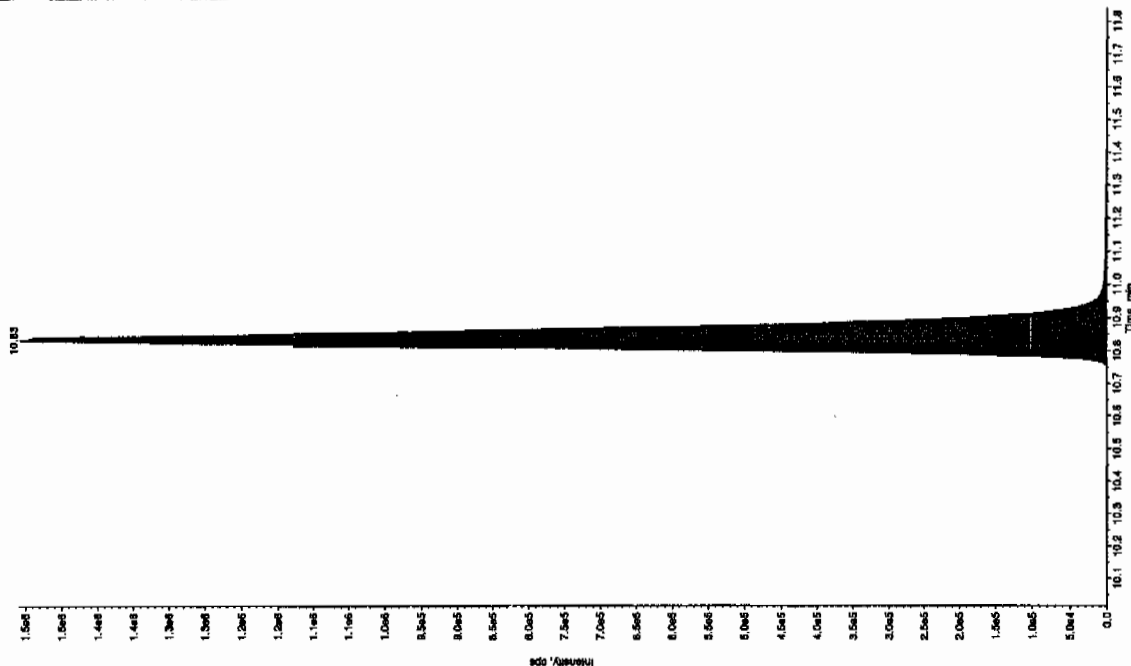
Sample Name: "1202048902" Sample ID: "9560492" File: "EXS03100015.wit"  
 Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "166.046.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 518. ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 7:11:18 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 350.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 5.42 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 5.43 min  
 Area: 5.47e+005 counts  
 Height: 140329.056 cps  
 Start Time: 5.33 min  
 End Time: 5.76 min



Sample Name: "1202048902" Sample ID: "9560492" File: "EXS03100015.wit"  
 Peak Name: "Tris-(cresyl) phosphate" Mass(es): "389.151.0 amu"  
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1  
 Sample Type: Unknown  
 Concentration: N/A  
 Calculated Conc: 16950.0 ng/mL  
 Acq. Date: 3/10/2010  
 Acq. Time: 7:11:18 PM  
 Modified: No  
 Proc. Algorithm: IntelliQuan - IQA  
 Min. Peak Height: 8000.00 cps  
 Min. Peak Width: 0.00 sec  
 Smoothing Width: 3 points  
 RT Window: 30.0 sec  
 Expected RT: 10.8 min  
 Use Relative RT: No  
 Int. Type: Valley  
 Retention Time: 10.8 min  
 Area: 5.19e+006 counts  
 Height: 1508305.864 cps  
 Start Time: 10.7 min  
 End Time: 11.1 min



# MISCELLANEOUS DATA

# Prep Logbook

## Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 956039 Verified by: \_\_\_\_\_  
 Analyst: Sirena White  
 Method: SW846 8330 PREP  
 Lab SOP: GL-OA-E-033 REV# 17  
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202049901 MB	25-FEB-2010 18:07:00	2	10	5
1202049902 LCS	25-FEB-2010 18:07:00	2	10	5
247421002	25-FEB-2010 18:07:00	2	10	5
1202049903 MS (247421002)	25-FEB-2010 18:07:00	2	10	5
1202049904 MSD (247421002)	25-FEB-2010 18:07:00	2	10	5
247421003	25-FEB-2010 18:07:00	2	10	5
247421004	25-FEB-2010 18:07:00	2	10	5
247421005	25-FEB-2010 18:07:00	2	10	5
247421006	25-FEB-2010 18:07:00	2	10	5
247421007	25-FEB-2010 18:07:00	2	10	5
247450002	25-FEB-2010 18:07:00	2	10	5
247450003	25-FEB-2010 18:07:00	2	10	5
247450004	25-FEB-2010 18:07:00	2	10	5
247450005	25-FEB-2010 18:07:00	2	10	5
247450006	25-FEB-2010 18:07:00	2	10	5
247450007	25-FEB-2010 18:07:00	2	10	5
247562002	25-FEB-2010 18:07:00	2	10	5
247562003	25-FEB-2010 18:07:00	2	10	5
247562004	25-FEB-2010 18:07:00	2	10	5
247562005	25-FEB-2010 18:07:00	2	10	5
247562006	25-FEB-2010 18:07:00	2	10	5
247562007	25-FEB-2010 18:07:00	2	10	5
247562008	25-FEB-2010 18:07:00	2	10	5
247562009	25-FEB-2010 18:07:00	2	10	5

Comments:

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
LCS	1202049902	8321 Explosives LCS	DCX100208-03	.1	mL	Final Solvent: ACN
LCS	1202049902	8321 LANL Explosives Mix 10mg/L	UXX100210-02.4	1	mL	
MS	1202049903	8321 Explosives LCS	DCX100208-03	.1	mL	
MS	1202049903	8321 LANL Explosives Mix 10mg/L	UXX100210-02.4	1	mL	
MSD	1202049904	8321 Explosives LCS	DCX100208-03	.1	mL	
MSD	1202049904	8321 LANL Explosives Mix 10mg/L	UXX100210-02.4	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Surrogate)	DCP100223-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 03/19/10  
 Extr. Injection Volume: 50uL  
 Sequence Number: 031910expA  
 Initial Calibration Date: 03/19/10  
 Method: SW846 8321A-Modified  
 Int. Std.: UXX100309-01.1  
 Mobile Phase Lot#: 1285274, 1281642  
 Standard-Samp Reagent Lot#: 1283379, 1284736  
 Reviewed BY: *HAN*  
 Date: *2/24/10*  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100319-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0319001a	XIBLK01	MAP	3/19/10 16:54			1		USE	B
EXP0319002a	XIBLK01	MAP	3/19/10 17:23			1		USE	B
EXP0319003a	WXXICAL-01	MAP	3/19/10 17:53			1		USE	I
EXP0319004a	WXXICAL-02	MAP	3/19/10 18:22			1		USE	I
EXP0319005a	WXXICAL-03	MAP	3/19/10 18:52			1		USE	I
EXP0319006a	WXXICAL-04	MAP	3/19/10 19:21			1		USE	I
EXP0319007a	WXXICAL-05	MAP	3/19/10 19:51			1		USE	I
EXP0319008a	WXXICAL-06	MAP	3/19/10 20:20			1		USE	I
EXP0319009a	XIBLK02	MAP	3/19/10 20:50			1		USE	B
EXP0319010a	WXXICV	MAP	3/19/10 21:19			1		USE	C
EXP0319011a	XIBLK03	MAP	3/19/10 21:49			1		USE	B
EXP0319012a	WXXCRI	MAP	3/19/10 22:18			1		USE	C
EXP0319013a	247346004	MAP	3/19/10 22:48	955065	10-1911	2	LANL	USE	S
EXP0319014a	247346005	MAP	3/19/10 23:17	955065	10-1911	2	LANL	USE	S
EXP0319015a	247346006	MAP	3/19/10 23:47	955065	10-1911	2	LANL	USE	S
EXP0319016a	247346007	MAP	3/20/10 0:16	955065	10-1911	2	LANL	USE	S
EXP0319017a	247346008	MAP	3/20/10 0:46	955065	10-1911	2	LANL	USE	S
EXP0319018a	247358001	MAP	3/20/10 1:15	955065	10-1914	2	LANL	USE	S
EXP0319019a	247358002	MAP	3/20/10 1:45	955065	10-1914	2	LANL	USE	S
EXP0319020a	247358003	MAP	3/20/10 2:14	955065	10-1914	2	LANL	USE	S
EXP0319021a	247358004	MAP	3/20/10 2:44	955065	10-1914	2	LANL	USE	S
EXP0319022a	WXXCCV	MAP	3/20/10 3:13			1		USE	C
EXP0319023a	XIBLK04	MAP	3/20/10 3:43			1		USE	B
EXP0319024a	WXXCRI	MAP	3/20/10 4:12			1		USE	C
EXP0319025a	248259006	MAP	3/20/10 4:41	958286	10-2148	10	LANL	USE	S
EXP0319026a	1202055085	MAP	3/20/10 5:11	958286	10-2051	2	LANL	USE	S
EXP0319027a	XIBLK05	MAP	3/20/10 5:41			1		USE	B
EXP0319028a	1202049901	MAP	3/20/10 6:10	956045	Various	2	LANL	USE	S
EXP0319029a	1202049902	MAP	3/20/10 6:40	956045	Various	2	LANL	USE	S

EXP0319030a	247421002	MAP	3/20/10 7:09	956045	10-1920	2	LANL	USE	S
EXP0319031a	1202049903	MAP	3/20/10 7:38	956045	10-1920	2	LANL	USE	S
EXP0319032a	1202049904	MAP	3/20/10 8:08	956045	10-1920	2	LANL	USE	S
EXP0319033a	247421003	MAP	3/20/10 8:37	956045	10-1920	2	LANL	USE	S
EXP0319034a	WXXCCV	MAP	3/20/10 9:07			1		USE	C
EXP0319035a	XIBLK06	MAP	3/20/10 9:36			1		USE	B
EXP0319036a	WXXCRI	MAP	3/20/10 10:06			1		USE	C
EXP0319037a	247421004	MAP	3/20/10 10:35	956045	10-1920	2	LANL	USE	S
EXP0319038a	247421005	MAP	3/20/10 11:05	956045	10-1920	2	LANL	USE	S
EXP0319039a	247421006	MAP	3/20/10 11:34	956045	10-1920	2	LANL	USE	S
EXP0319040a	247421007	MAP	3/20/10 12:04	956045	10-1920	2	LANL	USE	S
EXP0319041a	247450002	MAP	3/20/10 12:33	956045	10-1937	2	LANL	USE	S
EXP0319042a	247450003	MAP	3/20/10 13:03	956045	10-1937	2	LANL	USE	S
EXP0319043a	247450004	MAP	3/20/10 13:32	956045	10-1937	2	LANL	USE	S
EXP0319044a	247450005	MAP	3/20/10 14:02	956045	10-1937	2	LANL	USE	S
EXP0319045a	247450006	MAP	3/20/10 14:31	956045	10-1937	2	LANL	USE	S
EXP0319046a	247450007	MAP	3/20/10 15:01	956045	10-1937	2	LANL	DUSE-RA	S
EXP0319047a	WXXCCV	MAP	3/20/10 15:30			1		USE	C
EXP0319048a	XIBLK07	MAP	3/20/10 16:00			1		USE	B
EXP0319049a	WXXCRI	MAP	3/20/10 16:30			1		USE	C
EXP0319050a	247450007	MAP	3/20/10 16:59	956045	10-1937	2	LANL	USE	S
EXP0319051a	247562002	MAP	3/20/10 17:29	956045	10-1950	2	LANL	USE	S
EXP0319052a	247562003	MAP	3/20/10 17:58	956045	10-1950	2	LANL	USE	S
EXP0319053a	247562004	MAP	3/20/10 18:28	956045	10-1950	2	LANL	DUSE-RA	S
EXP0319054a	247562005	MAP	3/20/10 18:57	956045	10-1950	2	LANL	USE	S
EXP0319055a	247562006	MAP	3/20/10 19:27	956045	10-1950	2	LANL	USE	S
EXP0319056a	247562007	MAP	3/20/10 19:56	956045	10-1950	2	LANL	USE	S
EXP0319057a	247562008	MAP	3/20/10 20:26	956045	10-1950	2	LANL	USE	S
EXP0319058a	247562009	MAP	3/20/10 20:55	956045	10-1950	2	LANL	USE	S
EXP0319059a	WXXCCV	MAP	3/20/10 21:24			1		USE	C
EXP0319060a	XIBLK08	MAP	3/20/10 21:54			1		USE	B
EXP0319061a	WXXCRI	MAP	3/20/10 22:24			1		USE	C
EXP0319062a	1202049932	MAP	3/20/10 22:53	956053	Various	2	LANL	USE	S
EXP0319063a	1202049933	MAP	3/20/10 23:23	956053	Various	2	LANL	USE	S
EXP0319064a	247545001	MAP	3/20/10 23:52	956053	10-1964	2	LANL	USE	S
EXP0319065a	247545002	MAP	3/21/10 0:22	956053	10-1964	2	LANL	USE	S
EXP0319066a	247551001	MAP	3/21/10 0:51	956053	10-1969	2	LANL	USE	S



EXP0319067a	247551002	MAP	3/21/10 1:21	956053	10-1969	2	LANL	USE	S
EXP0319068a	247552002	MAP	3/21/10 1:50	956053	10-1970	2	LANL	USE	S
EXP0319069a	247556001	MAP	3/21/10 2:20	956053	10-1953	2	LANL	USE	S
EXP0319070a	1202049934	MAP	3/21/10 2:49	956053	10-1953	2	LANL	USE	S
EXP0319071a	1202049935	MAP	3/21/10 3:19	956053	10-1953	2	LANL	USE	S
EXP0319072a	WXXCCV	MAP	3/21/10 3:48			1		USE	C
EXP0319073a	XIBLK09	MAP	3/21/10 4:18			1		USE	B
EXP0319074a	WXXCRI	MAP	3/21/10 4:47			1		USE	C
EXP0319075a	247556002	MAP	3/21/10 5:17	956053	10-1953	2	LANL	USE	S
EXP0319076a	247556003	MAP	3/21/10 5:46	956053	10-1953	2	LANL	USE	S
EXP0319077a	247556004	MAP	3/21/10 6:16	956053	10-1953	2	LANL	USE	S
EXP0319078a	247556005	MAP	3/21/10 6:45	956053	10-1953	2	LANL	USE	S
EXP0319079a	247556001	MAP	3/21/10 7:15	956053	10-1956	2	LANL	USE	S
EXP0319080a	247556002	MAP	3/21/10 7:44	956053	10-1956	2	LANL	USE	S
EXP0319081a	247556003	MAP	3/21/10 8:14	956053	10-1956	2	LANL	USE	S
EXP0319082a	247556004	MAP	3/21/10 8:43	956053	10-1956	2	LANL	USE	S
EXP0319083a	247556005	MAP	3/21/10 9:13	956053	10-1956	2	LANL	USE	S
EXP0319084a	247556006	MAP	3/21/10 9:42	956053	10-1956	2	LANL	USE	S
EXP0319085a	WXXCCV	MAP	3/21/10 10:12			1		USE	C
EXP0319086a	XIBLK10	MAP	3/21/10 10:41			1		USE	B
EXP0319087a	WXXCRI	MAP	3/21/10 11:11			1		USE	C
EXP0319088a	247556007	MAP	3/21/10 11:40	956053	10-1956	2	LANL	DUSE-RA	S
EXP0319089a	247556008	MAP	3/21/10 12:10	956053	10-1956	2	LANL	DUSE-RA	S
EXP0319090a	247556009	MAP	3/21/10 12:40	956053	10-1956	2	LANL	DUSE-RA	S
EXP0319091a	247556010	MAP	3/21/10 13:09	956053	10-1956	2	LANL	DUSE-RA	S
EXP0319092a	2475562004	MAP	3/21/10 13:39	956045	10-1950	2	LANL	DUSE-RA	S
EXP0319093a	1202035690	MAP	3/21/10 14:08	955087	Various	2	LANL	DUSE-RA	S
EXP0319094a	1202035691	MAP	3/21/10 14:38	955087	Various	2	LANL	DUSE-RA	S
EXP0319095a	246434002	MAP	3/21/10 15:07	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319096a	1202035692	MAP	3/21/10 15:37	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319097a	1202035693	MAP	3/21/10 16:06	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319098a	WXXCCV	MAP	3/21/10 16:36			1		DUSE	C
EXP0319099a	XIBLK11	MAP	3/21/10 17:05			1		DUSE	B
EXP0319100a	WXXCRI	MAP	3/21/10 17:35			1		DUSE	C
EXP0319101a	246434003	MAP	3/21/10 18:04	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319102a	246434004	MAP	3/21/10 18:34	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319103a	246434005	MAP	3/21/10 19:03	955087	10-1620	2	LANL	DUSE-RA	S

EXP0319104a	246434006	MAP	3/21/10 19:33	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319105a	246434007	MAP	3/21/10 20:02	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319106a	246434008	MAP	3/21/10 20:32	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319107a	246434009	MAP	3/21/10 21:01	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319108a	246434010	MAP	3/21/10 21:31	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319109a	246434011	MAP	3/21/10 22:00	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319110a	246434012	MAP	3/21/10 22:30	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319111a	WXXCCV	MAP	3/21/10 22:59			1		DUSE	C
EXP0319112a	XIBLK12	MAP	3/21/10 23:29			1		DUSE	B
EXP0319113a	WXXCRI	MAP	3/21/10 23:58			1		DUSE	C
EXP0319114a	246434013	MAP	3/22/10 0:28	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319115a	246434014	MAP	3/22/10 0:57	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319116a	246434015	MAP	3/22/10 1:27	955087	10-1620	2	LANL	DUSE-RA	S
EXP0319117a	246442002	MAP	3/22/10 1:56	955087	10-1623	2	LANL	DUSE-RA	S
EXP0319118a	246442003	MAP	3/22/10 2:26	955087	10-1623	2	LANL	DUSE-RA	S
EXP0319119a	246442004	MAP	3/22/10 2:55	955087	10-1623	2	LANL	DUSE-RA	S
EXP0319120a	246442005	MAP	3/22/10 3:25	955087	10-1623	2	LANL	DUSE-RA	S
EXP0319121a	246442006	MAP	3/22/10 3:54	955087	10-1623	2	LANL	DUSE-RA	S
EXP0319122a	WXXCCV	MAP	3/22/10 4:24			1		DUSE	C
EXP0319123a	XIBLK13	MAP	3/22/10 4:53			1		DUSE	B
EXP0319124a	WXXCRI	MAP	3/22/10 5:23			1		DUSE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 03/23/10  
 Extr. Injection Volume: 50uL  
 Sequence Number: 032310expA  
 Initial Calibration Date: 03/23/10  
 Method: SW846 8321A-Modified  
 Int. Std.: UXX100309-01.2  
 Mobile Phase Lot#: 1289327, 1281642  
 Standard-Samp Reagent Lot#: 1283379, 1284736

Reviewed BY: *ham*

Date: 03/24/10

SOP: GL-OA-E-056 Rev.12

Alt Check Std. ID: WXX100323-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0323001a	XIBLK01	MAP	3/23/10 9:08			1		USE	B
EXP0323002a	XIBLK01	MAP	3/23/10 9:38			1		USE	B
EXP0323003a	WXXICAL-01	MAP	3/23/10 10:08			1		USE	I
EXP0323004a	WXXICAL-02	MAP	3/23/10 10:37			1		USE	I
EXP0323005a	WXXICAL-03	MAP	3/23/10 11:07			1		USE	I
EXP0323006a	WXXICAL-04	MAP	3/23/10 11:36			1		USE	I
EXP0323007a	WXXICAL-05	MAP	3/23/10 12:05			1		USE	I
EXP0323008a	WXXICAL-06	MAP	3/23/10 12:35			1		USE	I
EXP0323009a	XIBLK02	MAP	3/23/10 13:04			1		USE	B
EXP0323010a	WXXICV	MAP	3/23/10 13:34			1		USE	C
EXP0323011a	XIBLK03	MAP	3/23/10 14:03			1		USE	B
EXP0323012a	WXXICRI	MAP	3/23/10 14:33			1		USE	C
EXP0323013a	247562004	MAP	3/23/10 15:02	956045	10-1950	2	LANL	USE	S
EXP0323014a	247565007	MAP	3/23/10 15:32	956053	10-1956	2	LANL	USE	S
EXP0323015a	247565008	MAP	3/23/10 16:01	956053	10-1956	2	LANL	USE	S
EXP0323016a	247565009	MAP	3/23/10 16:31	956053	10-1956	2	LANL	USE	S
EXP0323017a	247565010	MAP	3/23/10 17:00	956053	10-1956	2	LANL	USE	S
EXP0323018a	1202035690	MAP	3/23/10 17:30	950087	Various	2	LANL	USE	S
EXP0323019a	1202035691	MAP	3/23/10 17:59	950087	Various	2	LANL	USE	S
EXP0323020a	246434002	MAP	3/23/10 18:29	950087	10-1620	2	LANL	USE	S
EXP0323021a	1202035692	MAP	3/23/10 18:58	950087	10-1620	2	LANL	USE	S
EXP0323022a	1202035693	MAP	3/23/10 19:28	950087	10-1620	2	LANL	USE	S
EXP0323023a	WXXCCV	MAP	3/23/10 19:57			1		USE	C
EXP0323024a	XIBLK04	MAP	3/23/10 20:27			1		USE	B
EXP0323025a	WXXICRI	MAP	3/23/10 20:56			1		USE	C
EXP0323026a	246434003	MAP	3/23/10 21:26	950087	10-1620	2	LANL	USE	S
EXP0323027a	246434004	MAP	3/23/10 21:55	950087	10-1620	2	LANL	USE	S
EXP0323028a	246434005	MAP	3/23/10 22:25	950087	10-1620	2	LANL	USE	S
EXP0323029a	246434006	MAP	3/23/10 22:54	950087	10-1620	2	LANL	USE	S

EXP0323030a	246434007	MAP	3/23/10 23:24	950087	10-1620	2	LANL	USE	S
EXP0323031a	246434008	MAP	3/23/10 23:53	950087	10-1620	2	LANL	USE	S
EXP0323032a	246434009	MAP	3/24/10 0:23	950087	10-1620	2	LANL	USE	S
EXP0323033a	246434010	MAP	3/24/10 0:52	950087	10-1620	2	LANL	USE	S
EXP0323034a	246434011	MAP	3/24/10 1:22	950087	10-1620	2	LANL	USE	S
EXP0323035a	246434012	MAP	3/24/10 1:51	950087	10-1620	2	LANL	USE	S
EXP0323036a	WXXCCV	MAP	3/24/10 2:21			1		USE	C
EXP0323037a	XIBLK05	MAP	3/24/10 2:50			1		USE	B
EXP0323038a	WXXCRI	MAP	3/24/10 3:20			1		USE	C
EXP0323039a	246434013	MAP	3/24/10 3:49	950087	10-1620	2	LANL	USE	S
EXP0323040a	246434014	MAP	3/24/10 4:19	950087	10-1620	2	LANL	USE	S
EXP0323041a	246434015	MAP	3/24/10 4:48	950087	10-1620	2	LANL	USE	S
EXP0323042a	246442002	MAP	3/24/10 5:18	950087	10-1623	2	LANL	USE	S
EXP0323043a	246442003	MAP	3/24/10 5:47	950087	10-1623	2	LANL	USE	S
EXP0323044a	246442004	MAP	3/24/10 6:17	950087	10-1623	2	LANL	USE	S
EXP0323045a	246442005	MAP	3/24/10 6:46	950087	10-1623	2	LANL	USE	S
EXP0323046a	246442006	MAP	3/24/10 7:15	950087	10-1623	2	LANL	USE	S
EXP0323047a	WXXCCV	MAP	3/24/10 7:45			1		USE	C
EXP0323048a	XIBLK06	MAP	3/24/10 8:15			1		USE	B
EXP0323049a	WXXCRI	MAP	3/24/10 8:44			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS4

Date: 03/10/10  
 Extr. Injection Volume: 10uL  
 Sequence Number: 031010exs  
 Initial Calibration Date: 031010  
 Method: 8321A-Modified  
 Int. Std.: N/A  
 Mobile Phase Lot#: 1268566, 1268568  
 Standard-Samp Reagent Lot#: 1274562, 1261217  
 SOP: GL-OA-E-056 Rev.12  
 Alt Check Std. ID: WXX100310-26

Reviewed By: *hnm*

Date: 03/15/10

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS03100001.wiff	XIBLK01	LER	3/10/2010 15:31			1		USE	B
EXS03100002.wiff	XIBLK01	LER	3/10/2010 15:47			1		USE	B
EXS03100003.wiff	WXXICAL-19	LER	3/10/2010 16:02			1		USE	I
EXS03100004.wiff	WXXICAL-20	LER	3/10/2010 16:18			1		USE	I
EXS03100005.wiff	WXXICAL-21	LER	3/10/2010 16:34			1		USE	I
EXS03100006.wiff	WXXICAL-22	LER	3/10/2010 16:50			1		USE	I
EXS03100007.wiff	WXXICAL-23	LER	3/10/2010 17:05			1		USE	I
EXS03100008.wiff	WXXICAL-24	LER	3/10/2010 17:21			1		DUSE	I
EXS03100009.wiff	WXXICAL-25	LER	3/10/2010 17:37			1		USE	I
EXS03100010.wiff	XIBLK02	LER	3/10/2010 17:52			1		USE	B
EXS03100011.wiff	WXXICV	LER	3/10/2010 18:08			1		USE	C
EXS03100012.wiff	XIBLK03	LER	3/10/2010 18:24			1		USE	B
EXS03100013.wiff	WXXCRI	LER	3/10/2010 18:39			1		USE	C
EXS03100014.wiff	1202049901	LER	3/10/2010 18:55	956045	VARIOUS	2	LANL	USE	S
EXS03100015.wiff	1202049902	LER	3/10/2010 19:11	956045	VARIOUS	2	LANL	USE	S
EXS03100016.wiff	247421002	LER	3/10/2010 19:26	956045	10-1920	2	LANL	USE	S
EXS03100017.wiff	1202049903	LER	3/10/2010 19:42	956045	10-1920	2	LANL	USE	S
EXS03100018.wiff	1202049904	LER	3/10/2010 19:58	956045	10-1920	2	LANL	USE	S
EXS03100019.wiff	247421003	LER	3/10/2010 20:14	956045	10-1920	2	LANL	USE	S
EXS03100020.wiff	247421004	LER	3/10/2010 20:29	956045	10-1920	2	LANL	USE	S
EXS03100021.wiff	247421005	LER	3/10/2010 20:45	956045	10-1920	2	LANL	USE	S
EXS03100022.wiff	247421006	LER	3/10/2010 20:51	956045	10-1920	2	LANL	USE	S
EXS03100023.wiff	247421007	LER	3/10/2010 21:16	956045	10-1920	2	LANL	USE	S
EXS03100024.wiff	WXXCCV	LER	3/10/2010 21:32			1		USE	C
EXS03100025.wiff	XIBLK04	LER	3/10/2010 21:48			1		USE	B
EXS03100026.wiff	WXXCRI	LER	3/10/2010 22:04			1		USE	C
EXS03100027.wiff	247450002	LER	3/10/2010 22:19	956045	10-1937	2	LANL	USE	S
EXS03100028.wiff	247450003	LER	3/10/2010 22:35	956045	10-1937	2	LANL	USE	S
EXS03100029.wiff	247450004	LER	3/10/2010 22:51	956045	10-1937	2	LANL	USE	S
EXS03100030.wiff	247450005	LER	3/10/2010 23:06	956045	10-1937	2	LANL	USE	S

EXS03100031.wiff	247450006	LER	3/10/2010 23:22	956045	10-1937	2	LANL	USE	S
EXS03100032.wiff	247450007	LER	3/10/2010 23:38	956045	10-1937	2	LANL	USE	S
EXS03100033.wiff	247562002	LER	3/10/2010 23:53	956045	10-1950	2	LANL	USE	S
EXS03100034.wiff	247562003	LER	3/11/2010 0:09	956045	10-1950	2	LANL	USE	S
EXS03100035.wiff	247562004	LER	3/11/2010 0:25	956045	10-1950	2	LANL	USE	S
EXS03100036.wiff	247562005	LER	3/11/2010 0:41	956045	10-1950	2	LANL	USE	S
EXS03100037.wiff	WXXCCV	LER	3/11/2010 0:56			1		USE	C
EXS03100038.wiff	XIBLK05	LER	3/11/2010 1:12			1		USE	B
EXS03100039.wiff	WXXCRI	LER	3/11/2010 1:28			1		USE	C
EXS03100040.wiff	247562006	LER	3/11/2010 1:43	956045	10-1950	2	LANL	USE	S
EXS03100041.wiff	247562007	LER	3/11/2010 1:59	956045	10-1950	2	LANL	USE	S
EXS03100042.wiff	247562008	LER	3/11/2010 2:15	956045	10-1950	2	LANL	USE	S
EXS03100043.wiff	247562009	LER	3/11/2010 2:31	956045	10-1950	2	LANL	USE	S
EXS03100044.wiff	WXXCCV	LER	3/11/2010 2:46			1		USE	C
EXS03100045.wiff	XIBLK06	LER	3/11/2010 3:02			1		USE	B
EXS03100046.wiff	WXXCRI	LER	3/11/2010 3:18			1		USE	C
EXS03100047.wiff	1202056029	LER	3/11/2010 3:33	958682	VARIOUS	2	LANL	USE	S
EXS03100048.wiff	1202056030	LER	3/11/2010 3:49	958682	VARIOUS	2	LANL	USE	S
EXS03100049.wiff	1202056034	LER	3/11/2010 4:05	958682	VARIOUS	2	LANL	USE	S
EXS03100050.wiff	248152002	LER	3/11/2010 4:21	958682	10-2101	2	LANL	USE	S
EXS03100051.wiff	248152004	LER	3/11/2010 4:36	958682	10-2101	2	LANL	USE	S
EXS03100052.wiff	248168006	LER	3/11/2010 4:52	958682	10-2107	2	LANL	USE	S
EXS03100053.wiff	1202056031	LER	3/11/2010 5:08	958682	10-2107	2	LANL	USE	S
EXS03100054.wiff	1202056032	LER	3/11/2010 5:23	958682	10-2107	2	LANL	USE	S
EXS03100055.wiff	WXXCCV	LER	3/11/2010 5:39			1		USE	C
EXS03100056.wiff	XIBLK07	LER	3/11/2010 5:55			1		USE	B
EXS03100057.wiff	WXXCRI	LER	3/11/2010 6:10			1		USE	C
EXS03100058.wiff	1202041884	LER	3/11/2010 6:26	952673	VARIOUS	2	LANL	USE	S
EXS03100059.wiff	1202041885	LER	3/11/2010 6:42	952673	VARIOUS	2	LANL	USE	S
EXS03100060.wiff	1202041891	LER	3/11/2010 6:58	952673	VARIOUS	2	LANL	USE	S
EXS03100061.wiff	246859005	LER	3/11/2010 7:13	952673	10-1779	2	LANL	USE	S
EXS03100062.wiff	246879005	LER	3/11/2010 7:29	952673	10-1776	2	LANL	USE	S
EXS03100063.wiff	246879012	LER	3/11/2010 7:45	952673	10-1776	2	LANL	USE	S
EXS03100064.wiff	246888006	LER	3/11/2010 8:00	952673	10-1773	2	LANL	USE	S
EXS03100065.wiff	246888010	LER	3/11/2010 8:16	952673	10-1773	2	LANL	USE	S
EXS03100066.wiff	WXXCCV	LER	3/11/2010 8:32			1		USE	C
EXS03100067.wiff	XIBLK08	LER	3/11/2010 8:48			1		USE	B

[illegible]

[illegible]





Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp\PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP\PRO\Data\EXP0319031a

Date: 20-Mar-2010

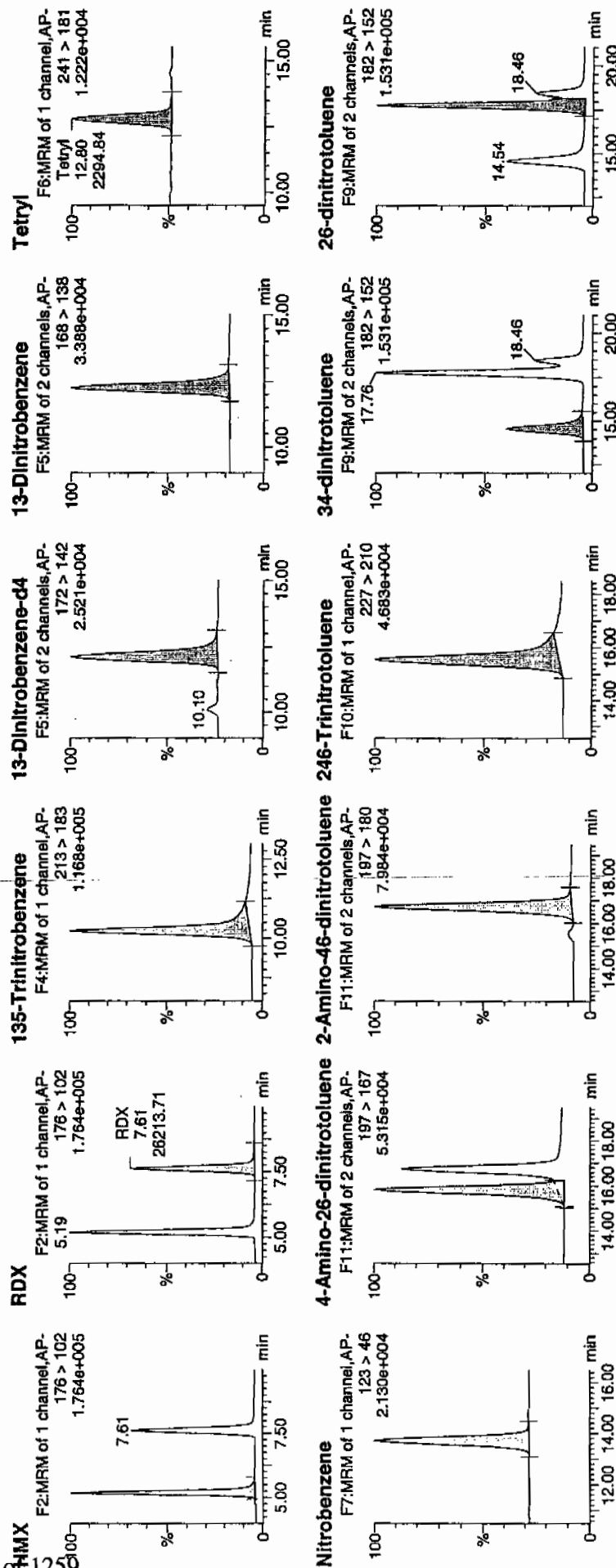
Time: 07:38:59

ID: 1202049903

Vial: 2:1,D

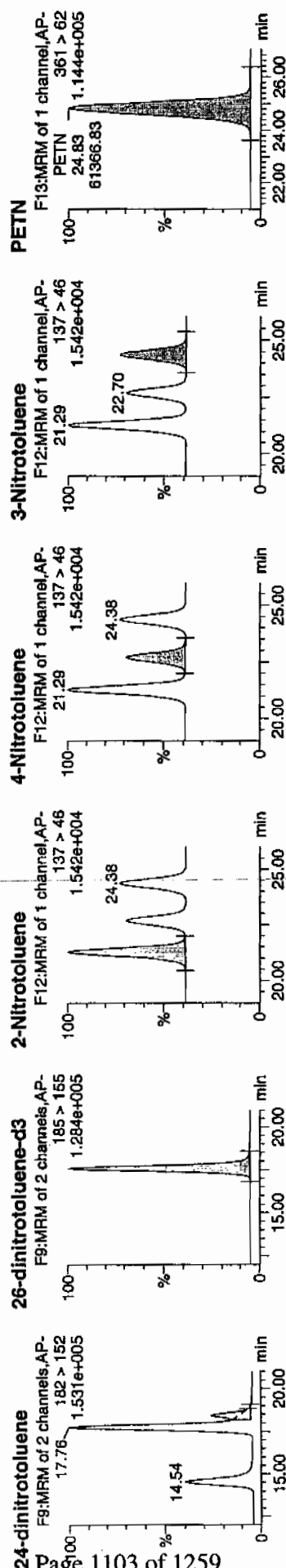
447  
3/24/10

24742100245 / 21



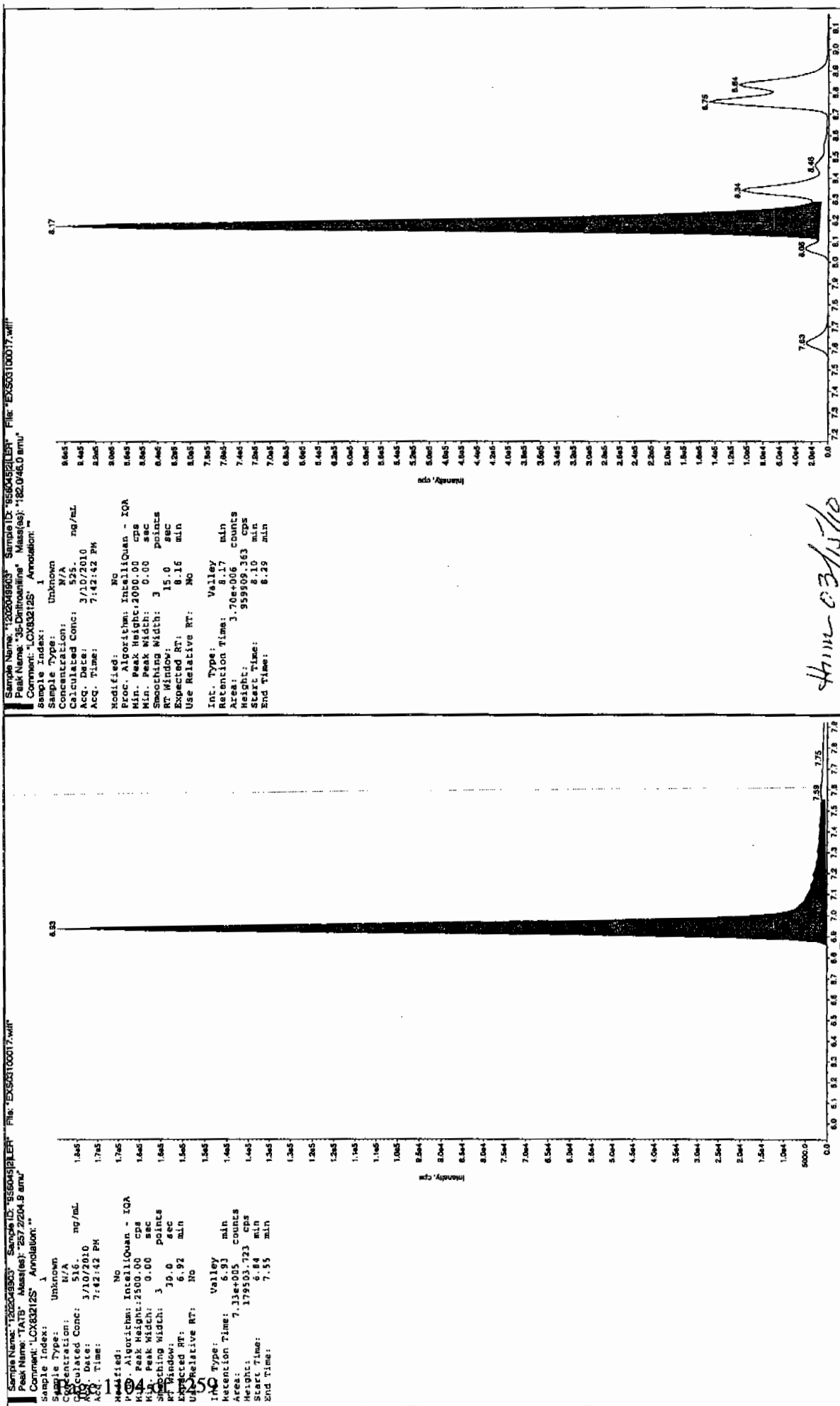
HN 12  
03/24/10

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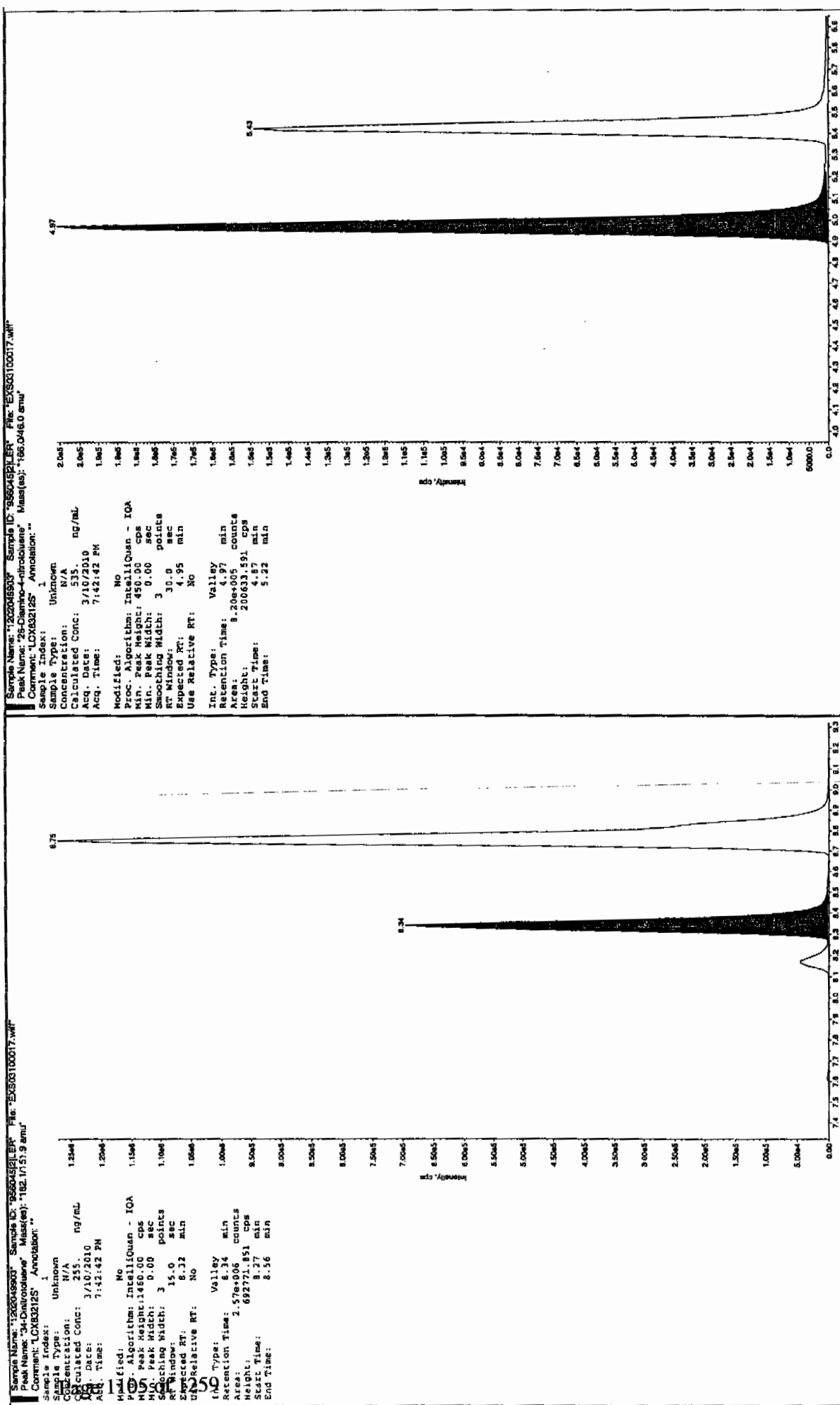


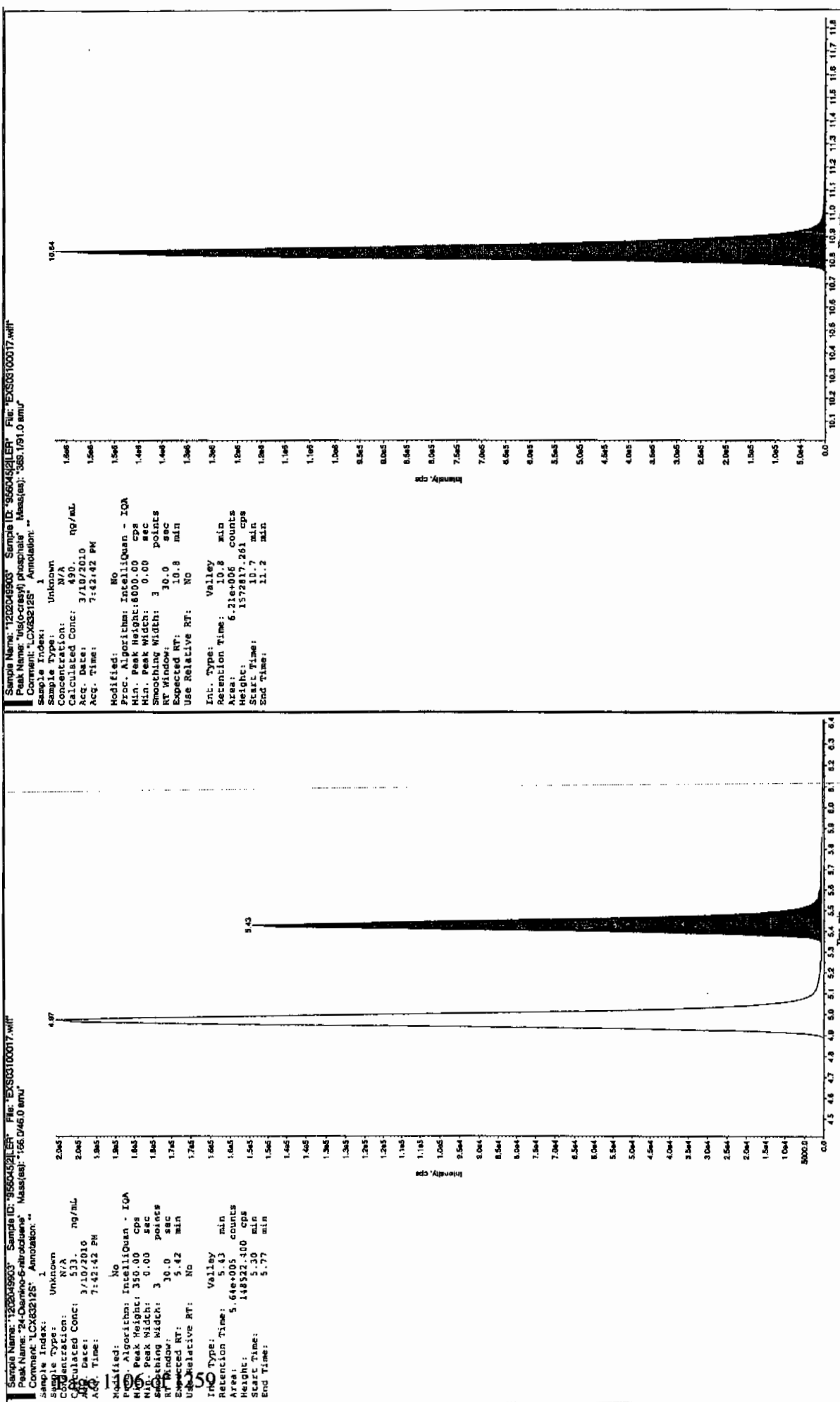
ID	Name	Trace	RT	Area	SWAG	Abs Resp	Response	Phase	Mod Date	Mod Time	Norm	Rec	Dev	SN
1202049903	HMx	176 > 102	5.19	33861.219	7883.840	33861.219	2147.508	db			506.1987	101.2	1.2	6129.9
1202049903	RDx	176 > 102	7.61	28213.713	7883.840	26213.713	1662.497	bb			588.4063	117.7	17.7	4071.7
1202049903	135-Trinitrobenzene	213 > 183	10.23	33262.219	7883.840	33262.219	2109.519	bb			440.8011	88.2	-11.8	3680.6
1202049903	13-Dinitrobenzene-d4	172 > 142	12.13	7883.840		7883.840	7883.840	bb			480.2440	96.0	-4.0	789.8
1202049903	13-Dinitrobenzene	168 > 138	12.27	10616.670	7883.840	10616.670	673.318	bb			496.5507	99.3	-0.7	878.1
1202049903	Tetryl	241 > 181	12.80	2294.845	7883.840	2294.845	145.541	bb			123.6877	24.7	-75.3	233.1
1202049903	Nitrobenzene	123 > 46	13.70	5546.239	7883.840	5546.239	351.747	bb			506.4682	101.3	1.3	287.9
1202049903	4-Amino-26-dinitrotoluene	197 > 167	15.82	19105.391	50169.926	19105.391	190.407	MM	20-Mar-10	10:55:00	515.8614	103.2	3.2	289.7
1202049903	2-Amino-46-dinitrotoluene	197 > 180	16.72	29409.268	50169.926	29409.268	293.097	bb			493.3064	98.7	-1.3	1034.3
1202049903	246-Trinitrotoluene	227 > 210	15.54	18834.219	50169.926	18834.219	187.704	bb			437.1319	87.4	-12.6	416.0
1202049903	34-dinitrotoluene	182 > 152	14.54	26438.410	50169.926	26438.410	263.489	bb			236.1143	94.4	-5.6	1142.9
1202049903	26-dinitrotoluene	182 > 152	17.76	58405.973	50169.926	58405.973	582.082	MM	20-Mar-10	10:59:47	515.9580	103.2	3.2	3081.5
1202049903	24-dinitrotoluene	182 > 152	18.46	12913.897	50169.926	12913.897	128.702	MM	20-Mar-10	11:02:23	533.8281	106.8	6.8	676.7
1202049903	26-dinitrotoluene-d3	185 > 155	17.59	50169.926		50169.926	50169.926	bb			538.6942	107.7	7.7	3385.9
1202049903	2-Nitrotoluene	137 > 46	21.29	4268.196	50169.926	4268.196	42.537	bb			455.8244	91.2	-8.8	380.3
1202049903	4-Nitrotoluene	137 > 46	22.70	2212.226	50169.926	2212.226	22.047	bb			477.2839	96.5	-4.5	187.6
1202049903	3-Nitrotoluene	137 > 46	24.38	2583.438	50169.926	2583.438	25.747	bb			458.1275	91.6	-8.4	208.7
1202049903	PETN	361 > 62	24.83	61366.828	50169.926	61366.828	611.590	bb			549.6930	109.9	9.9	10158.3

San 3/13/10



San 03/15/10





Quantify Sample Report  
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New\_Exp.PRO\031910expA.qld, Time: Sat Mar 20 11:05:24 2010

Name: C:\MASSLYNX\NEW\_EXP.PRO\Data\EXP0319032a

Date: 20-Mar-2010

Time: 08:08:27

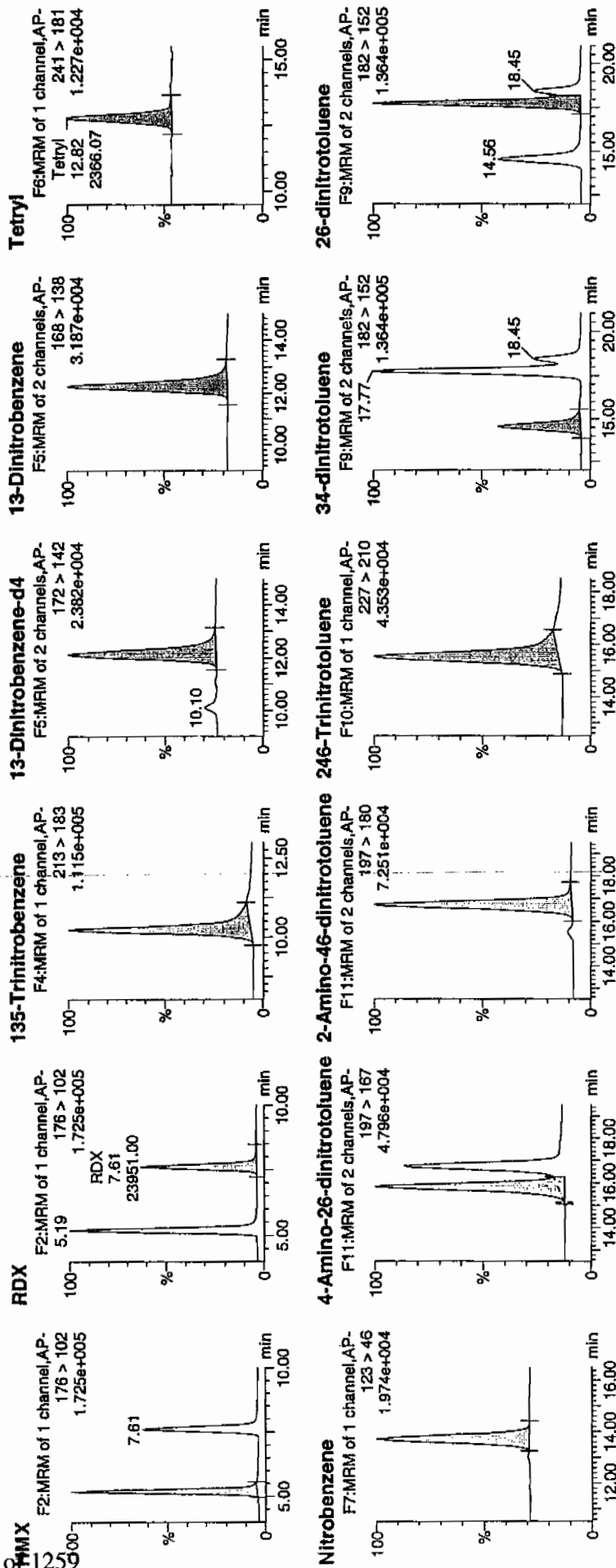
ID: 1202049904

Label: 2:1,E

1477  
3/2/10

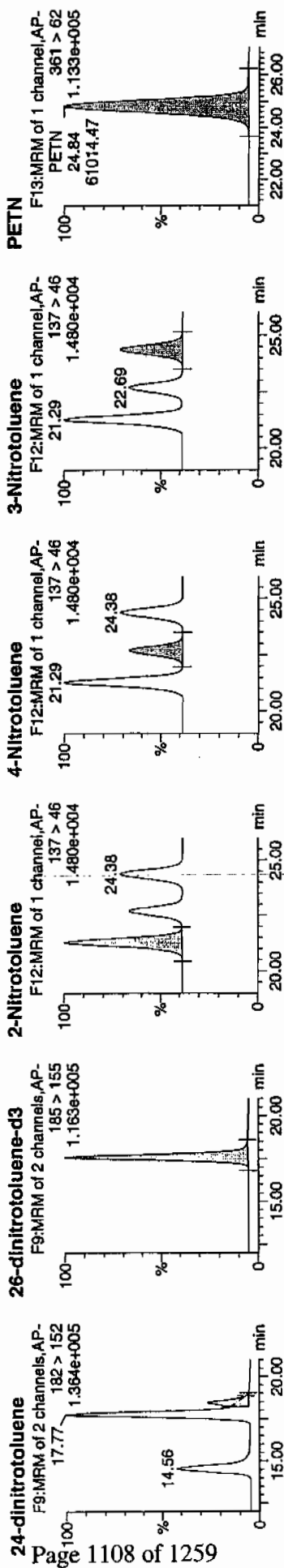
247421002 ASD / 21

WAVE 1956045 / SCLIP



Am m 03/24/10

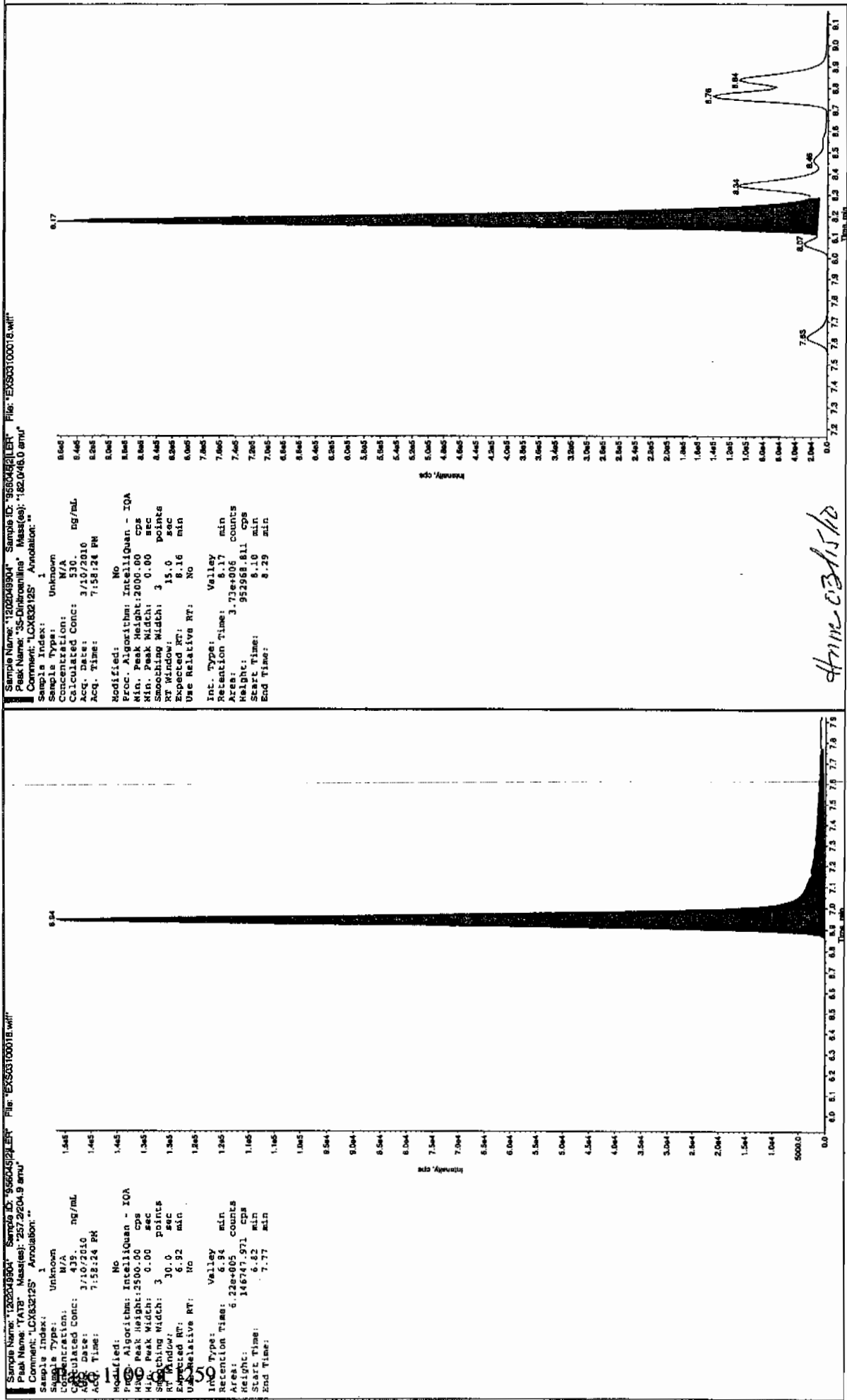
Dataset: C:\MASSLYNX\New\_Exp\PRO1031910expA.qld, Time: Sat Mar 20 11:05:24 2010

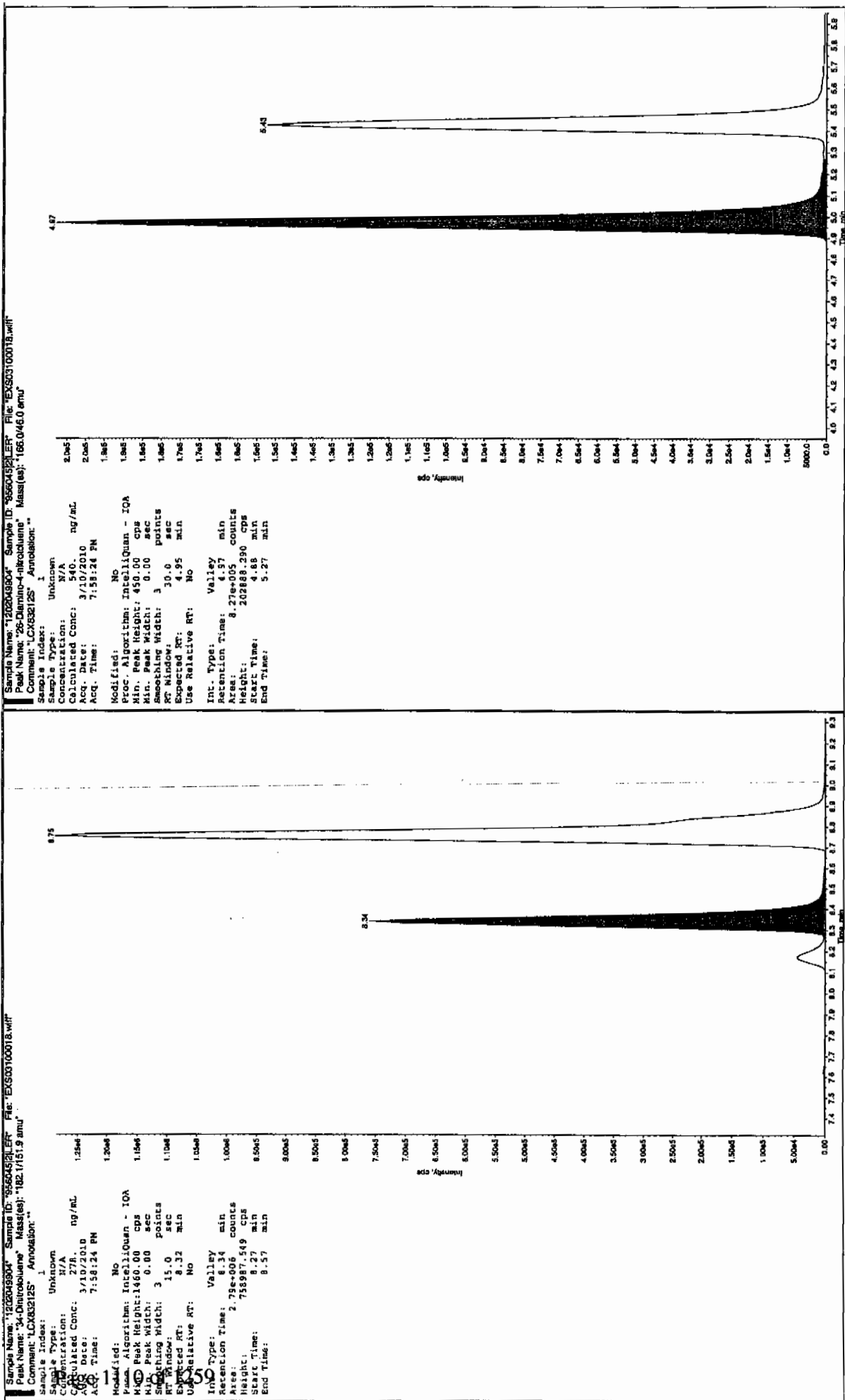


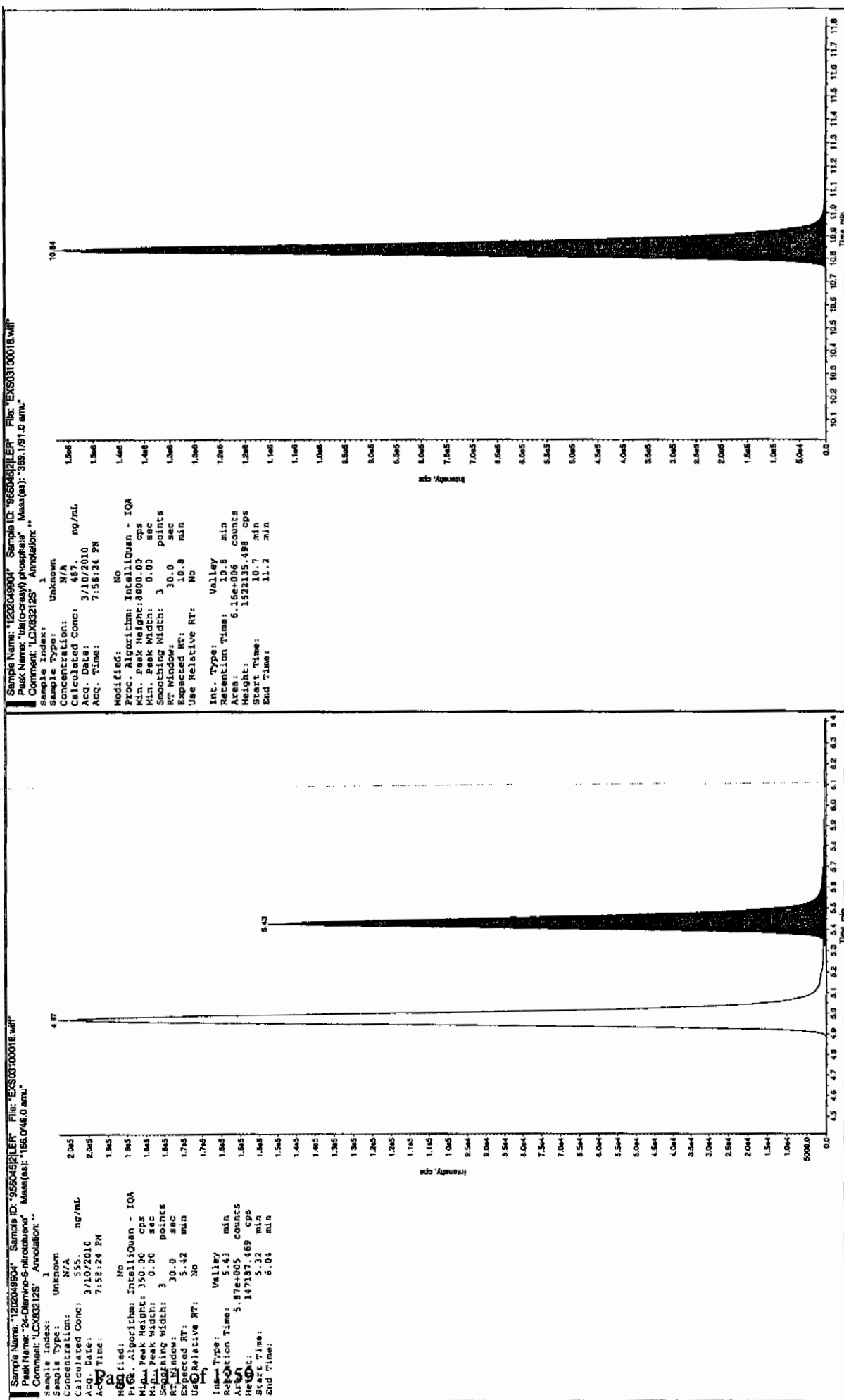
ID	Name	Trace	RT	Area	Area%	Response	Area	Mod	Mod Ret	Mod Area	Mod Area%	Mod Ret	Mod Area	Mod Area%
1202049904	HMIX	176 > 102	5.19	32782.109	7411.855	32782.109	2211.465	bb	521.2742	104.3	4.3	3851.9		
1202049904	RDX	176 > 102	7.61	23951.002	7411.855	23951.002	1615.723	bb	571.8516	114.4	14.4	2377.3		
1202049904	135-Trinitrobenzene	213 > 183	10.23	31296.355	7411.855	31296.355	2111.236	bb	441.1600	88.2	-11.8	9146.6		
1202049904	13-Dinitrobenzene-d4	172 > 142	12.14	7411.855		7411.855	7411.855	bb	451.4930	90.3	-9.7	648.6		
1202049904	13-Dinitrobenzene	168 > 138	12.27	10136.221	7411.855	10136.221	683.784	bb	504.2690	100.9	0.9	992.7		
1202049904	Tetryl	241 > 181	12.82	2366.068	7411.855	2366.068	159.614	bb	135.6474	27.1	-72.9	128.5		
1202049904	Nitrobenzene	123 > 46	13.72	5021.542	7411.855	5021.542	338.751	bb	487.7548	97.6	-2.4	412.3		
1202049904	4-Amino-26-dinitrotoluene	197 > 167	15.83	17021.529	45048.641	17021.529	188.924	MM	511.8637	102.4	2.4	456.0		
1202049904	2-Amino-46-dinitrotoluene	197 > 180	16.73	26654.318	45048.641	26654.318	295.839	bb	497.9226	99.6	-0.4	1061.1		
1202049904	246-Trinitrotoluene	227 > 210	15.55	17385.240	45048.641	17385.240	192.961	bb	449.3734	89.9	-10.1	1777.0		
1202049904	34-dinitrotoluene	182 > 152	14.56	24840.879	45048.641	24840.879	275.712	bb	247.0676	98.8	-1.2	669.1		
1202049904	26-dinitrotoluene	182 > 152	17.77	51289.004	45048.641	51289.004	569.263	MM	504.5952	100.9	0.9	1681.1		
1202049904	24-dinitrotoluene	182 > 152	18.45	11532.006	45048.641	11532.006	127.995	MM	530.8976	106.2	6.2	371.5		
1202049904	26-dinitrotoluene-d3	185 > 155	17.60	45048.641		45048.641	45048.641	bb	483.7049	96.7	-3.3	4706.3		
1202049904	2-Nitrotoluene	137 > 46	21.29	4060.661	45048.641	4060.661	45.070	bb	482.9606	96.6	-3.4	708.9		
1202049904	4-Nitrotoluene	137 > 46	22.69	1960.444	45048.641	1960.444	21.759	bb	471.0462	94.2	-5.8	325.4		
1202049904	3-Nitrotoluene	137 > 46	24.38	2448.784	45048.641	2448.784	27.179	bb	483.6159	96.7	-3.3	381.6		
1202049904	PETN	361 > 62	24.84	61014.473	45048.641	61014.473	677.207	bb	610.1156	122.0	22.0	28558.3		



Run 3/13/10







GEL Laboratories LLC  
Form GEL-DER

DER Report No.: 808839

Revision No.: 2

### DATA EXCEPTION REPORT

<b>Mo. Day Yr.</b> 24-MAR-10	<b>Division:</b> Federal	<b>Quality Criteria:</b> Specifications	<b>Type:</b> Process
<b>Instrument Type:</b> LC-MS/MS	<b>Test / Method:</b> SW846 8321A Modified	<b>Matrix Type:</b> Solid	<b>Client Code:</b> LANL
<b>Batch ID:</b> 956045	<b>Sample Numbers:</b> See Below		
<b>Potentially affected work order(s)(SDG):</b> 247421(10-1920), 247450(10-1937), 247562(10-1950) <b>Application Issues:</b> Failed Recovery for MSD/PSD Failed Recovery for LCS/LCSD Failed Recovery for MS/PS Failed Recovery for Surrogate or Tracer			
<b>Specification and Requirements</b>		<b>DER Disposition:</b>	
<b>Exception Description:</b>			
1. The following sample did not meet Surrogate recovery limits for the Primary analyte analysis: 247450007 at 145%. The recovery limits are 70-144%.  2. The Laboratory Control Sample (1202049902) did not meet spike recovery limits for Tetra at 50.3%. The recovery limits are 51-112%.  3. The Matrix Spike (1202049903) did not meet spike recovery limits for Tetra at 24.7%. The recovery limits are 36-124%.  4. The Matrix Spike Duplicate (1202049904) did not meet spike recovery limits for Tetra at 27.1%. The recovery limits are 36-124%.		1. Since there were no target analytes detected in the associated sample, and the surrogate passed in the Secondary analyte analysis, the data are reported with the appropriate DER. The discrepancy is noted in the case narrative.  2. Since the spike recovery falls within the DOD QSM marginal exceedance limit of 41-122%, and the samples are beyond twice the hold time, the data are reported with the appropriate DER. The discrepancy is noted in the case narrative.  3. & 4. Since the spike recoveries fall within the DOD QSM marginal exceedance limit of 22-139%, and the samples are beyond twice the hold time, the data are reported with the appropriate DER. The discrepancies are noted in the case narrative.	

**Originator's Name:**

Michael Penny 24-MAR-10

**Data Validator/Group Leader:**

Herbert Maier 24-MAR-10

GC  
SEMIVOLATILE  
PCB  
ANALYSIS

**PCB Case Narrative  
Los Alamos National Laboratory (LANL)  
SDG 10-1950**

**Method/Analysis Information**

**Procedure:** Analysis of Polychlorinated Biphenyls by ECD  
**Analytical Method:** SW846 8082  
**Prep Method:** SW846 3550B  
**Analytical Batch Number:** 957825  
**Prep Batch Number:** 957824

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in SW846 8082:

<b>Sample ID</b>	<b>Client ID</b>
247562008	RE15-10-8303
247562009	RE15-10-8302
1202053872	Method Blank (MB)
1202053873	Laboratory Control Sample (LCS)
1202053874	247784002(WST15-10-11622) Matrix Spike (MS)
1202053875	247784002(WST15-10-11622) 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 (#10-1979) 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 was not within the required acceptance limits due to relatively lower spike recovery in the MSD.

### **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.

#### **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:

<b>Instrument ID</b>	<b>Instrument</b>	<b>System Configuration</b>	<b>Column ID</b>	<b>Column Description</b>
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: Jimi Cao

Date: 3/19/10

## Roadmap for LANL 10-1950 PCB

This roadmap was analyzed by yip00818 on 03-01-2010, 09:27.

This roadmap was reviewed by jim01140 on 03-01-2010, 16:43.

This roadmap was packaged by yml on 03-19-2010, 11:18.

This roadmap was validated by jim01140 on 03-19-2010, 14:22.

Front Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/066f6601.d	247562008	sample	26-FEB-2010	19:00	10-1950.sub	RE15-10-8303	1.00000	957825	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/067f6701.d	247562009	sample	26-FEB-2010	19:13	10-1950.sub	RE15-10-8302	1.00000	957825	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/066f6601.d	247562008	sample	26-FEB-2010	19:00	10-1950.sub	RE15-10-8303	1.00000	957825	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/067f6701.d	247562009	sample	26-FEB-2010	19:13	10-1950.sub	RE15-10-8302	1.00000	957825	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/053f5301-2.d	1202053872	mb	26-FEB-2010	16:16	10-1950.sub	PBLK01	1.00000	957825	
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/054f5401-2.d	1202053873	lcs	26-FEB-2010	16:29	10-1950.sub	PBLK01LCS	1.00000	957825	

Back QC Sample Column

exclude	manual	datafile	smid	sampletype	injdate	injtime	sublist	clientid	dilution	prebatchid	comment
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/053b5301-2.d	1202053872	mb	26-FEB-2010	16:16	10-1950.sub	PBLK01	1.00000	957825	
<input type="checkbox"/>	N	/chem/ecdl1a.i/022610.b/054b5401-2.d	1202053873	lcs	26-FEB-2010	16:29	10-1950.sub	PBLK01LCS	1.00000	957825	

# SAMPLE DATA SUMMARY

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1950  
Lab Sample ID: 247562009Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOWClient ID: RE15-10-8302  
Batch ID: 957825  
Run Date: 02/26/2010 19:13  
Prep Date: 02/25/2010 21:11  
Data File: 067f6701.d  
067b6701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.51	ug/kg	1.17	3.51	1
11104-28-2	Aroclor-1221	U	3.51	ug/kg	1.17	3.51	1
11141-16-5	Aroclor-1232	U	3.51	ug/kg	1.17	3.51	1
53469-21-9	Aroclor-1242		27.2	ug/kg	1.17	3.51	2
12672-29-6	Aroclor-1248	U	3.51	ug/kg	1.17	3.51	1
11097-69-1	Aroclor-1254		31.2	ug/kg	1.17	3.51	1
11096-82-5	Aroclor-1260	P	13.1	ug/kg	1.17	3.51	1

## PCB

Page 1 of 1

## Certificate of Analysis

## Sample Summary

SDG Number: 10-1950

Lab Sample ID: 247562008

Client ID: RE15-10-8303

Batch ID: 957825

Run Date: 02/26/2010 19:00

Prep Date: 02/25/2010 21:11

Data File: 066f6601.d

066b6601.d

Date Collected: 02/15/2010 12:00

Date Received: 02/20/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.07 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 3.2

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.43	ug/kg	1.14	3.43	1
11104-28-2	Aroclor-1221	U	3.43	ug/kg	1.14	3.43	1
11141-16-5	Aroclor-1232	U	3.43	ug/kg	1.14	3.43	1
53469-21-9	Aroclor-1242	U	3.43	ug/kg	1.14	3.43	1
12672-29-6	Aroclor-1248	U	3.43	ug/kg	1.14	3.43	1
11097-69-1	Aroclor-1254	U	3.43	ug/kg	1.14	3.43	1
11096-82-5	Aroclor-1260	U	3.43	ug/kg	1.14	3.43	1

# QUALITY CONTROL SUMMARY

**PCB**  
**Surrogate Recovery Report**

Page 1 of 1

**SDG Number: 10-1950****Matrix Type: SOLID****CAP Column (1) : CLP1****CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1	4CMX 2	DCB 1	DCB 2
		%REC #	%REC #	%REC #	%REC #
1202053872	MB for batch 957824	72	73	71	82
1202053873	LCS for batch 957824	73	74	68	83
247562008	RE15-10-8303	67	68	73	69
247562009	RE15-10-8302	52	52	55	56

**Surrogate****Acceptance Limits**

4CMX = 4cmx

(32%-120%)

DCB = Decachlorobiphenyl

(30%-116%)

\* Recovery outside Acceptance Limits

# Column to be used to flag recovery values

D Sample Diluted

PCB

Page 1 of 1

**Quality Control Summary  
Spike Recovery Report**

SDG Number: 10-1950

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 957824

Matrix: SOIL

Lab Sample ID:1202053873

Instrument: ECD1A.I

Analysis Date: 02/26/2010 16:29

Dilution: 1

Analyst: YS1

Pre Batch II 957824

Inj. Vol: 1 uL

Batch ID: 957825

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	26.5	80	39-102
11096-82-5	LCS Aroclor-1260	33.3	0.0	32.3	97	45-118



PCB

Page 1 of 2

**Quality Control Summary  
Spike Recovery Report**

SDG Number: 10-1979

Sample Type: Matrix Spike

Client ID: WST15-10-11622MS

Matrix: R

Lab Sample ID:1202053874

%Moisture: 13.3

Instrument: ECD1A.I

Analysis Date: 02/26/2010 19:38

Dilution: 5

Analyst: YS1

Prep Batch ID: 957824

Inj. Vol: 1 uL

Batch ID: 957825

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	38.2	0.00 U	27.9	73	23-119
11096-82-5	MS Aroclor-1260	38.2	0.00 U	32.5	85	28-124

PCB

Page 2 of 2

Quality Control Summary  
Spike Recovery Report

SDG Number: 10-1979

Sample Type: Matrix Spike Duplicate

Client ID: WST15-10-11622MSD

Matrix: R

Lab Sample ID:1202053875

%Moisture: 13.3

Instrument: ECD1A.I

Analysis Date: 02/26/2010 19:51

Dilution: 5

Analyst: YS1

Prep Batch ID: 957824

Inj. Vol: 1 uL

Batch ID: 957825

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	38.3	0.00 U	22.8	60	23-119	20	0-28
11096-82-5	MSD Aroclor-1260	38.3	0.00 U	21.7	57	28-124	40 *	0-30

## Method Blank Summary

Page 1 of 1

SDG Number:	10-1950	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 957824	Instrument ID:	ECD1A.I_2	Data File:	053b5301-1.d
Lab Sample ID:	1202053872		ECD1A.I_1		053f5301-1.d
Column:	CLP2	Prep Date:	02/25/2010 21:11	Analyzed:	02/26/10 16:16
	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 957824	1202053873	054f5401-1.d 054b5401-1.d	02/26/10	1629
02 RE15-10-8303	247562008	066f6601.d 066b6601.d	02/26/10	1900
03 RE15-10-8302	247562009	067f6701.d 067b6701.d	02/26/10	1913

# SAMPLE DATA

## PCB

Page 1 of 1

Certificate of Analysis  
Sample SummarySDG Number: 10-1950  
Lab Sample ID: 247562009Date Collected: 02/15/2010 12:00  
Date Received: 02/20/2010 08:55  
Client: LANL010  
Method: SW846 8082  
Inst: ECD1A.I  
Analyst: YS1  
Aliquot: 30.03 g  
Column: 1 CLP1  
2 CLP2Matrix: R  
%Moisture: 5.2  
Project: LANL01004  
SOP Ref: GL-OA-E-040  
Dilution: 1  
Inj. Vol: 1 uL  
Final Volume: 1 mL  
Level: LOWClient ID: RE15-10-8302  
Batch ID: 957825  
Run Date: 02/26/2010 19:13  
Prep Date: 02/25/2010 21:11  
Data File: 067f6701.d  
067b6701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.51	ug/kg	1.17	3.51	1
11104-28-2	Aroclor-1221	U	3.51	ug/kg	1.17	3.51	1
11141-16-5	Aroclor-1232	U	3.51	ug/kg	1.17	3.51	1
53469-21-9	Aroclor-1242		27.2	ug/kg	1.17	3.51	2
12672-29-6	Aroclor-1248	U	3.51	ug/kg	1.17	3.51	1
11097-69-1	Aroclor-1254		31.2	ug/kg	1.17	3.51	1
11096-82-5	Aroclor-1260	P	13.1	ug/kg	1.17	3.51	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022610.b/067f6701.d

Lab Smp Id: 247562009

Client Smp ID: RE15-10-8302

Inj Date : 26-FEB-2010 19:13

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |247562009|1|

Misc Info : |ECD82P\_1S|957825|SVA|LANL|SOIL|RE15-10-8302|||

Comment :

Method : /chem/ecd1a.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 01-Mar-2010 06:19 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 67

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1950.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	30.03000	Weight of sample extracted (g)
M	5.18340	% Moisture

Cpnd Variable

Local Compound Variable

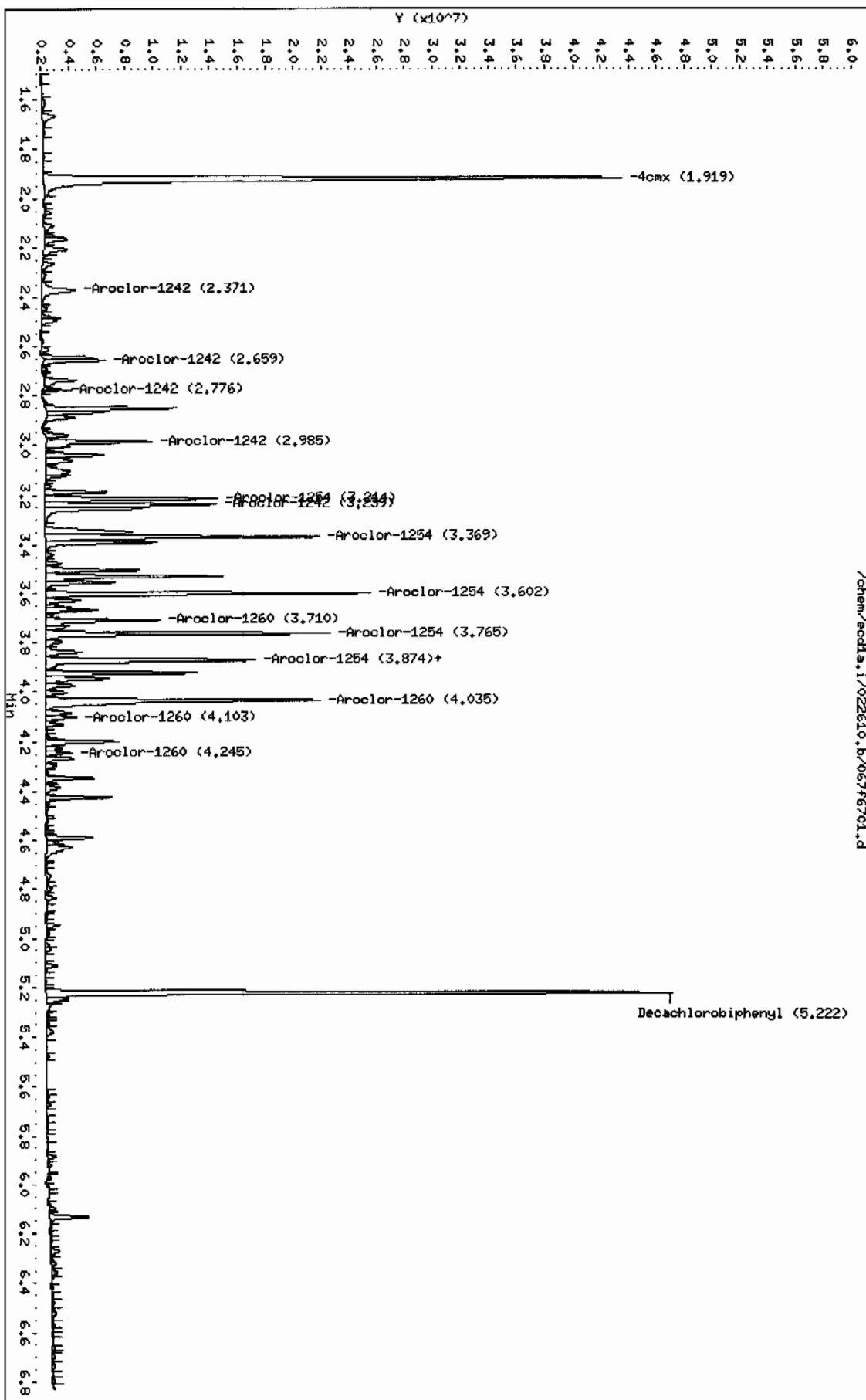
CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
1.919	1.917	0.002	44405297 103.115	3.6	80.00-	120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.222	5.226	-0.004	33869915 110.222	3.9	80.00-	120.00	100.00
4 Aroclor-1242				CAS #: 53469-21-9			
2.371	2.371	0.000	3690049 293.853	10.3	80.00-	120.00	100.00
2.659	2.659	0.000	3679667 251.831	8.8	107.77-	147.77	99.72
2.776	2.776	0.000	514744 91.4414	3.2	29.35-	69.35	13.95
2.985	2.987	-0.002	6572336 899.045	31.6	43.48-	83.48	178.11

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
4 Aroclor-1242 (continued)								
3.239	3.241	-0.002	9757228	1578.05	55.4	40.66-	80.66	264.42
Average of Peak Concentrations =					21.9			
-----								
6 Aroclor-1254					CAS #: 11097-69-1			
3.214	3.216	-0.002	9141604	761.334	26.7	80.00-	120.00	100.00
3.369	3.371	-0.002	14046745	887.229	31.2	115.08-	155.08	153.66
3.602	3.605	-0.003	16416716	840.848	29.5	156.01-	196.01	179.58
3.765	3.767	-0.002	14856495	1075.84	37.8	112.15-	152.15	162.52
3.874	3.877	-0.003	12485499	874.272	30.7	108.51-	148.51	136.58
Average of Peak Concentrations =					31.2			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.710	3.714	-0.004	6640330	388.951	13.7	80.00-	120.00	100.00
3.874	3.876	-0.002	12485499	528.074	18.5	129.59-	169.59	188.03
4.035	4.039	-0.004	18339089	734.406	25.8	141.00-	181.00	276.18
4.103	4.107	-0.004	1817751	126.183	4.4	70.55-	110.55	27.37
4.245	4.249	-0.004	1370353	94.9621	3.3	73.92-	113.92	20.64
Average of Peak Concentrations =					13.1			

Data File: /chem/ecdda.i/022610.b/0676701.d  
Date: 26-FEB-2010 19:13  
Client ID: RE15-10-8302  
Sample Info: 124756209111  
Volume Injected (ul): 1.0  
Column phase: CLP1

Instrument: ecdda.i  
Operator: VSL  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/022610.b/067b6701.d

Lab Smp Id: 247562009

Client Smp ID: RE15-10-8302

Inj Date : 26-FEB-2010 19:13

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |247562009|1|

Misc Info : |ECD82P\_1S|957825|SVA|LANL|SOIL|RE15-10-8302|||

Comment :

Method : /chem/ecdl1.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 01-Mar-2010 06:02 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 67

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1950.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	30.03000	Weight of sample extracted (g)
M	5.18340	% Moisture

Cpnd Variable

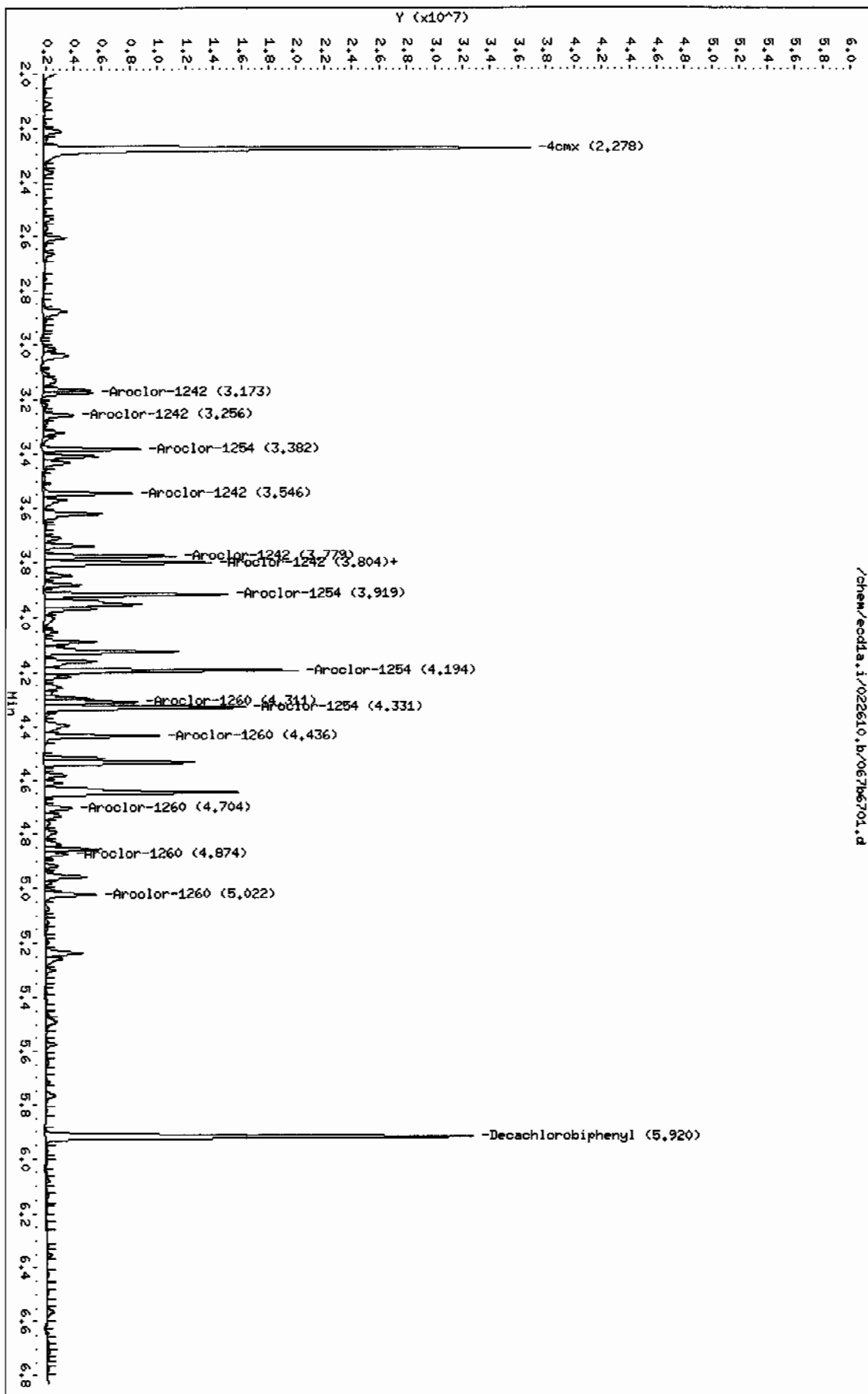
Local Compound Variable

CONCENTRATIONS								
			ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====		
-----								
\$ 11 4cmx				CAS #: 877-09-8				
2.278	2.276	0.002	31208214	104.938	3.7	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3				
5.920	5.922	-0.002	23732062	112.209	3.9	80.00-	120.00	100.00
-----								
4 Aroclor-1242				CAS #: 53469-21-9				
3.173	3.173	0.000	2482071	239.785	8.4	80.00-	120.00	100.00
3.256	3.256	0.000	1784271	245.129	8.6	46.34-	86.34	71.89
3.546	3.546	0.000	4695507	814.004	28.6	33.96-	73.96	189.18
3.779	3.781	-0.002	6456522	1115.49	39.2	35.65-	75.65	260.13

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
4 Aroclor-1242 (continued)								
3.804	3.808	-0.004	9678671	1457.33	51.2	42.85-	82.85	389.94
Average of Peak Concentrations =					27.2			
-----								
6 Aroclor-1254					CAS #: 11097-69-1			
3.382	3.381	0.001	4855025	800.051	28.1	80.00-	120.00	100.00
3.804	3.804	0.000	9678671	900.952	31.6	161.86-	201.86	199.35
3.919	3.920	-0.001	9432545	810.129	28.4	182.17-	222.17	194.28
4.194	4.196	-0.002	12352993	776.982	27.3	264.54-	304.54	254.44
4.331	4.332	-0.001	9816384	819.724	28.8	189.41-	229.41	202.19
Average of Peak Concentrations =					28.8			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.311	4.313	-0.002	5078763	384.590	13.5	80.00-	120.00	100.00
4.436	4.438	-0.002	6030168	387.373	13.6	103.03-	143.03	118.73
4.704	4.704	0.000	1919793	162.097	5.7	72.18-	112.18	37.80
4.874	4.877	-0.003	1160535	95.1165	3.3	75.21-	115.21	22.85
5.022	5.024	-0.002	2973175	112.080	3.9	193.96-	233.96	58.54
Average of Peak Concentrations =					8.0			
-----								

Data File: /chem/eodda.i/022610.b/067b6701.d  
Date : 26-FEB-2010 19:13  
Client ID: RE15-10-8302  
Sample Info: 1247562009141  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: eodda.i  
Operator: YSL  
Column diameter: 0.25



## PCB

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## Certificate of Analysis

## Sample Summary

SDG Number: 10-1950	Date Collected: 02/15/2010 12:00	Matrix: R
Lab Sample ID: 247562008	Date Received: 02/20/2010 08:55	% Moisture: 3.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-8303	Method: SW846 8082	SOP Ref: GL-OA-E-040
Batch ID: 957825	Inst: ECD1A.I	Dilution: 1
Run Date: 02/26/2010 19:00	Analyst: YS1	Inj. Vol: 1 uL
Prep Date: 02/25/2010 21:11	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: 066f6601.d	Column: 1 CLP1	Level: LOW
	2 CLP2	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.43	ug/kg	1.14	3.43	1
11104-28-2	Aroclor-1221	U	3.43	ug/kg	1.14	3.43	1
11141-16-5	Aroclor-1232	U	3.43	ug/kg	1.14	3.43	1
53469-21-9	Aroclor-1242	U	3.43	ug/kg	1.14	3.43	1
12672-29-6	Aroclor-1248	U	3.43	ug/kg	1.14	3.43	1
11097-69-1	Aroclor-1254	U	3.43	ug/kg	1.14	3.43	1
11096-82-5	Aroclor-1260	U	3.43	ug/kg	1.14	3.43	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/066f6601.d

Lab Smp Id: 247562008

Client Smp ID: RE15-10-8303

Inj Date : 26-FEB-2010 19:00

Operator : YS1

Inst ID: ecdla.i

Smp Info : |247562008|1|

Misc Info : |ECD82P\_1S|957825|SVA|LANL|SOIL|RE15-10-8303|||

Comment :

Method : /chem/ecdla.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 01-Mar-2010 06:03 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 66

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1950.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	30.07000	Weight of sample extracted (g)
M	3.17440	% Moisture

Cpnd Variable

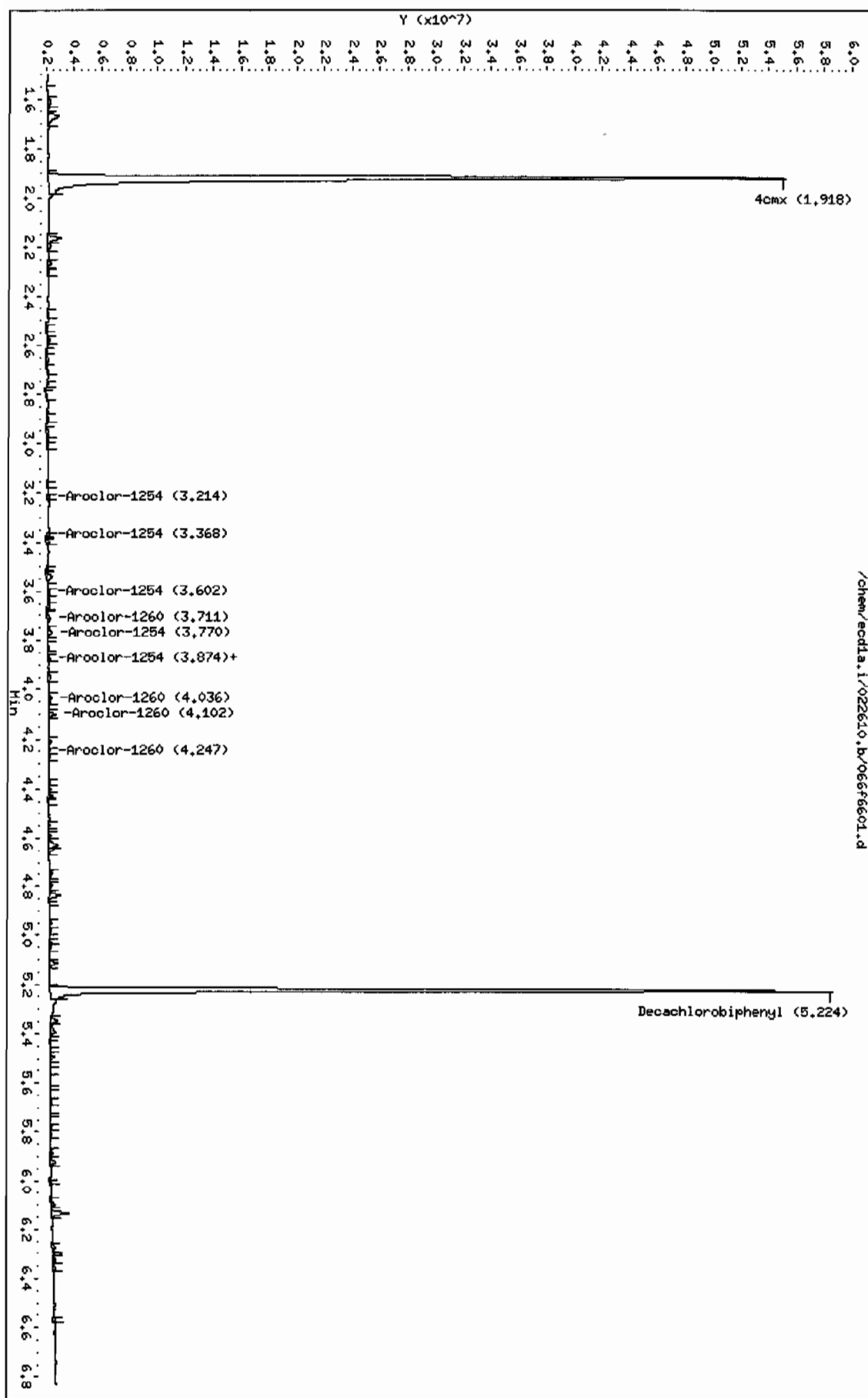
Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
RESPONSE ( ug/L)	(ug/Kg)					
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.918	1.917	0.001	57681590	133.945	4.6 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.224	5.226	-0.002	44603519	145.152	5.0 80.00- 120.00	100.00

Data File: /chem/ecdl1.i/022610.b/066f6601.d  
 Date : 26-FEB-2010 19:00  
 Client ID: REIS-10-8303  
 Sample Info: 1247562008111  
 Volume Injected (uL): 1.0  
 Column phase: CLP1

Instrument: ecdl1.i  
 Operator: YSL  
 Column diameter: 0.25



Data File: /chem/ecdl1a.i/022610.b/066b6601.d  
Report Date: 01-Mar-2010 06:15

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/066b6601.d

Lab Smp Id: 247562008

Client Smp ID: RE15-10-8303

Inj Date : 26-FEB-2010 19:00

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |247562008|1|

Misc Info : |ECD82P\_1S|957825|SVA|LANL|SOIL|RE15-10-8303|||

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 01-Mar-2010 06:02 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 66

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1950.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	30.07000	Weight of sample extracted (g)
M	3.17440	% Moisture

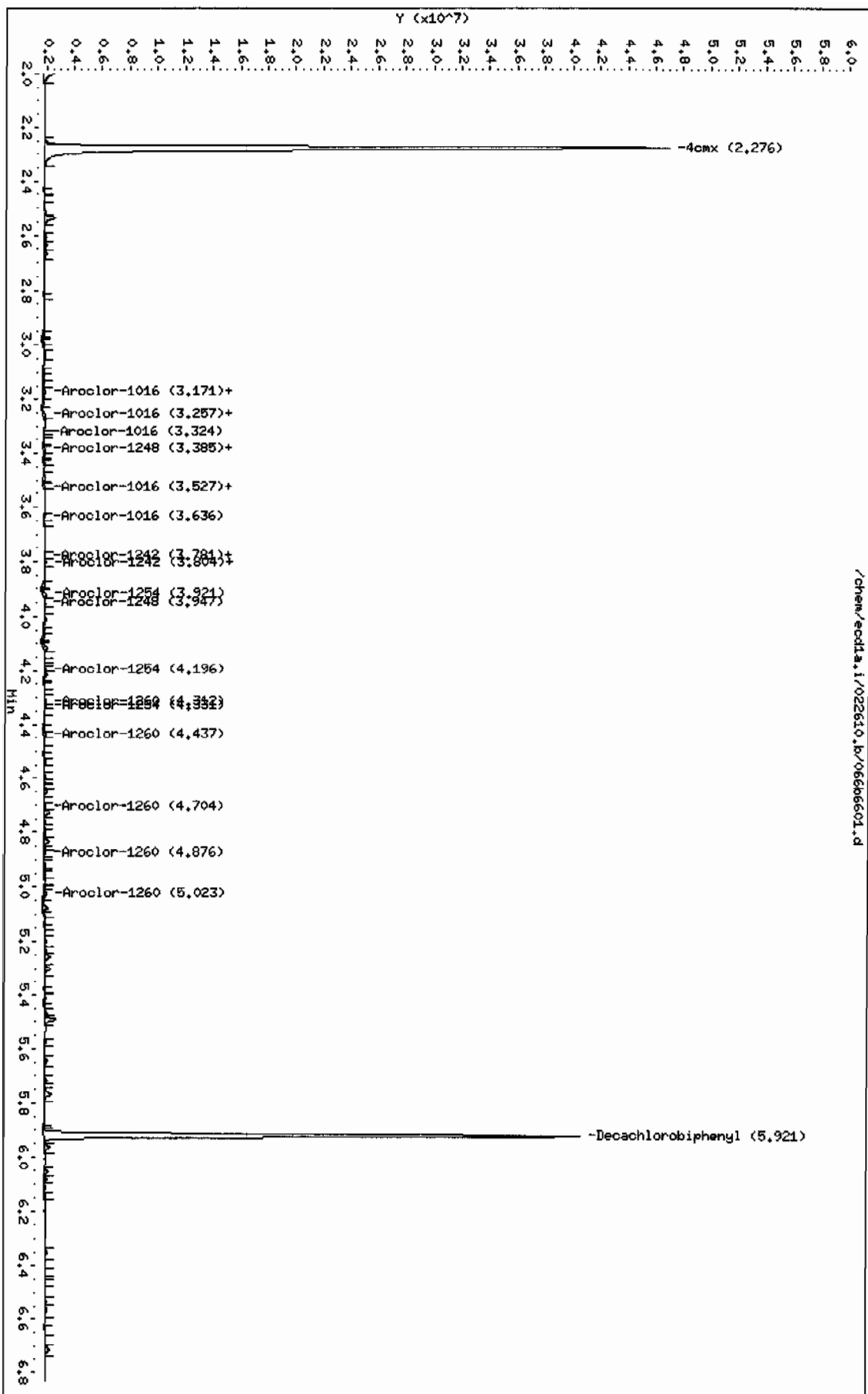
Cpnd Variable

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	
2.276	2.276	0.000	40323316	135.588	4.6 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.921	5.922	-0.001	29245132	138.276	4.7 80.00- 120.00	100.00

Data File: /chem/eod1a.i/022610.b/0666601.d  
 Date: 26-FEB-2010 19:00  
 Client ID: RELS-10-8303  
 Sample Info: 124756200811  
 Volume Injected (uL): 1.0  
 Column phase: CLP2

Instrument: eod1a.i  
 Operator: YSI  
 Column diameter: 0.25





# STANDARDS DATA

Report Date: 02-Mar-2010 17:50

### Calibration History

Method : /chem/ecdla.i/022610.b/ECD1-F-8082-022210.m

Start Cal Date: 22-FEB-2010 06:31

End Cal Date : 24-FEB-2010 02:39

#### Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-FEB-2010 11:26	AR1268	/chem/ecdla.i/022210.b/032f3201.d
22-FEB-2010 10:23	AR1248	/chem/ecdla.i/022210.b/026f2601.d
22-FEB-2010 09:20	AR1242	/chem/ecdla.i/022210.b/020f2001.d
22-FEB-2010 08:16	AR1254	/chem/ecdla.i/022210.b/014f1401.d
22-FEB-2010 07:13	AR1660	/chem/ecdla.i/022210.b/008f0801.d

Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecdla.i/022210.b/033f3301.d
22-FEB-2010 10:33	AR1248	/chem/ecdla.i/022210.b/027f2701.d
22-FEB-2010 09:30	AR1242	/chem/ecdla.i/022210.b/021f2101.d
22-FEB-2010 08:27	AR1254	/chem/ecdla.i/022210.b/015f1501.d
22-FEB-2010 07:24	AR1660	/chem/ecdla.i/022210.b/009f0901.d

Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecdla.i/022210.b/034f3401.d
22-FEB-2010 10:44	AR1248	/chem/ecdla.i/022210.b/028f2801.d
22-FEB-2010 09:41	AR1242	/chem/ecdla.i/022210.b/022f2201.d
22-FEB-2010 08:37	AR1254	/chem/ecdla.i/022210.b/016f1601.d
22-FEB-2010 07:34	AR1660	/chem/ecdla.i/022210.b/010f1001.d

Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecdla.i/022210.b/035f3501.d
22-FEB-2010 11:05	AR1248	/chem/ecdla.i/022210.b/030f3001.d
22-FEB-2010 09:51	AR1242	/chem/ecdla.i/022210.b/023f2301.d
22-FEB-2010 08:48	AR1254	/chem/ecdla.i/022210.b/017f1701.d
22-FEB-2010 07:45	AR1660	/chem/ecdla.i/022210.b/011f1101.d
22-FEB-2010 07:03	AR1262	/chem/ecdla.i/022210.b/007f0701.d
22-FEB-2010 06:52	AR1221	/chem/ecdla.i/022210.b/006f0601.d
22-FEB-2010 06:41	AR1232	/chem/ecdla.i/022210.b/005f0501.d
22-FEB-2010 06:31	DDTANALOGSTD	/chem/ecdla.i/022210.b/004f0401.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecdla.i/022210.b/036f3601.d
22-FEB-2010 10:54	AR1248	/chem/ecdla.i/022210.b/029f2901.d
22-FEB-2010 10:02	AR1242	/chem/ecdla.i/022210.b/024f2401.d
22-FEB-2010 08:59	AR1254	/chem/ecdla.i/022210.b/018f1801.d
22-FEB-2010 07:55	AR1660	/chem/ecdla.i/022210.b/012f1201.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 20:16	AR1660	/chem/ecdl1a.i/022610.b/072f7201.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 17:57	AR1660	/chem/ecdl1a.i/022610.b/061f6101.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 15:51	AR1660	/chem/ecdl1a.i/022610.b/051f5101.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 13:36	AR1660	/chem/ecdl1a.i/022610.b/040f4001.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 11:09	AR1660	/chem/ecdl1a.i/022610.b/028f2801.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 11:09	AR1660	/chem/ecdl1a.i/022610.b/028b2801.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 08:55	AR1660	/chem/ecdl1a.i/022610.b/016f1601.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 07:48	AR1262	/chem/ecdl1a.i/022610.b/010f1001.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 07:37	AR1221	/chem/ecdl1a.i/022610.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 07:27	AR1232	/chem/ecdl1a.i/022610.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 07:16	AR1660	/chem/ecdl1a.i/022610.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 07:06	AR1268	/chem/ecdl1a.i/022610.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 06:55	AR1248	/chem/ecdl1a.i/022610.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 06:45	AR1242	/chem/ecdl1a.i/022610.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 06:34	AR1254	/chem/ecdl1a.i/022610.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
26-FEB-2010 06:24	AR1660	/chem/ecdl1a.i/022610.b/002f0201.d

Report Date: 02-Mar-2010 17:49

### Calibration History

Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m  
Start Cal Date: 22-FEB-2010 06:31  
End Cal Date : 24-FEB-2010 02:39

#### 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/032b3201.d
22-FEB-2010 10:23	AR1248	/chem/ecdl1a.i/022210.b/026b2601.d
22-FEB-2010 09:20	AR1242	/chem/ecdl1a.i/022210.b/020b2001.d
22-FEB-2010 08:16	AR1254	/chem/ecdl1a.i/022210.b/014b1401.d
22-FEB-2010 07:13	AR1660	/chem/ecdl1a.i/022210.b/008b0801.d

Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecdl1a.i/022210.b/033b3301.d
22-FEB-2010 10:33	AR1248	/chem/ecdl1a.i/022210.b/027b2701.d
22-FEB-2010 09:30	AR1242	/chem/ecdl1a.i/022210.b/021b2101.d
22-FEB-2010 08:27	AR1254	/chem/ecdl1a.i/022210.b/015b1501.d
22-FEB-2010 07:24	AR1660	/chem/ecdl1a.i/022210.b/009b0901.d

Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecdl1a.i/022210.b/034b3401.d
22-FEB-2010 10:44	AR1248	/chem/ecdl1a.i/022210.b/028b2801.d
22-FEB-2010 09:41	AR1242	/chem/ecdl1a.i/022210.b/022b2201.d
22-FEB-2010 08:37	AR1254	/chem/ecdl1a.i/022210.b/016b1601.d
22-FEB-2010 07:34	AR1660	/chem/ecdl1a.i/022210.b/010b1001.d

Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecdl1a.i/022210.b/035b3501.d
22-FEB-2010 11:05	AR1248	/chem/ecdl1a.i/022210.b/030b3001.d
22-FEB-2010 09:51	AR1242	/chem/ecdl1a.i/022210.b/023b2301.d
22-FEB-2010 08:48	AR1254	/chem/ecdl1a.i/022210.b/017b1701.d
22-FEB-2010 07:45	AR1660	/chem/ecdl1a.i/022210.b/011b1101.d
22-FEB-2010 07:03	AR1262	/chem/ecdl1a.i/022210.b/007b0701.d
22-FEB-2010 06:52	AR1221	/chem/ecdl1a.i/022210.b/006b0601.d
22-FEB-2010 06:41	AR1232	/chem/ecdl1a.i/022210.b/005b0501.d
22-FEB-2010 06:31	DDTANALOGSTD	/chem/ecdl1a.i/022210.b/004b0401.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecdl1a.i/022210.b/036b3601.d
22-FEB-2010 10:54	AR1248	/chem/ecdl1a.i/022210.b/029b2901.d
22-FEB-2010 10:02	AR1242	/chem/ecdl1a.i/022210.b/024b2401.d
22-FEB-2010 08:59	AR1254	/chem/ecdl1a.i/022210.b/018b1801.d
22-FEB-2010 07:55	AR1660	/chem/ecdl1a.i/022210.b/012b1201.d

Continuing Calibration  
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 20:16   AR1660	/chem/ecd1a.i/022610.b/072b7201.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 17:57   AR1660	/chem/ecd1a.i/022610.b/061b6101.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 15:51   AR1660	/chem/ecd1a.i/022610.b/051b5101.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 13:36   AR1660	/chem/ecd1a.i/022610.b/040b4001.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 11:09   AR1660	/chem/ecd1a.i/022610.b/028b2801.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 08:55   AR1660	/chem/ecd1a.i/022610.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 07:48   AR1262	/chem/ecd1a.i/022610.b/010b1001.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 07:16   AR1660	/chem/ecd1a.i/022610.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 07:37   AR1221	/chem/ecd1a.i/022610.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 07:27   AR1232	/chem/ecd1a.i/022610.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 07:06   AR1268	/chem/ecd1a.i/022610.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 06:55   AR1248	/chem/ecd1a.i/022610.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 06:45   AR1242	/chem/ecd1a.i/022610.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 06:34   AR1254	/chem/ecd1a.i/022610.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000	
26-FEB-2010 06:24   AR1660	/chem/ecd1a.i/022610.b/002b0201.d

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/022610.b/ECD1-F-8082-022210.m  
Quant Method : ESTD Target Version : 3.50  
Last Update : 01-Mar-2010 06:19 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	2.371	2.341-2.401	1.538e+04
	2.659	2.629-2.689	1.824e+04
	2.739	2.709-2.769	1.207e+04
	2.776	2.746-2.806	7.096e+03
	2.987	2.957-3.017	8.912e+03
63 4,4-DDD	3.900	3.880-3.920	3.060e+05
64 4,4-DDE	3.551	3.531-3.571	3.552e+05
62 4,4-DDT	4.064	4.044-4.084	2.080e+05
2 Aroclor-1221	2.031	2.001-2.061	4.398e+03
	2.124	2.094-2.154	2.431e+03
	2.150	2.120-2.180	1.042e+04
3 Aroclor-1232	2.371	2.341-2.401	6.218e+03
	2.659	2.629-2.689	7.488e+03
	2.739	2.709-2.769	4.887e+03
	2.854	2.824-2.884	2.191e+03
	3.241	3.211-3.271	2.731e+03
4 Aroclor-1242	2.371	2.341-2.401	1.256e+04
	2.659	2.629-2.689	1.461e+04
	2.776	2.746-2.806	5.629e+03
	2.987	2.957-3.017	7.310e+03
	3.241	3.211-3.271	6.183e+03

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1.i/022610.b/ECD1-F-8082-022210.m

Compound	RT	RT Window	RF
5 Aroclor-1248	2.854	2.824-2.884	9.301e+03
	2.987	2.957-3.017	1.241e+04
	3.241	3.211-3.271	1.220e+04
	3.373	3.343-3.403	1.042e+04
	3.606	3.576-3.636	6.820e+03
6 Aroclor-1254	3.216	3.186-3.246	1.201e+04
	3.371	3.341-3.401	1.583e+04
	3.605	3.575-3.635	1.952e+04
	3.767	3.737-3.797	1.381e+04
	3.877	3.847-3.907	1.428e+04
7 Aroclor-1260	3.714	3.684-3.744	1.707e+04
	3.876	3.846-3.906	2.364e+04
	4.039	4.009-4.069	2.497e+04
	4.107	4.077-4.137	1.441e+04
	4.249	4.219-4.279	1.443e+04
8 Aroclor-1262	3.714	3.684-3.744	1.261e+04
	3.876	3.846-3.906	1.569e+04
	4.106	4.076-4.136	1.995e+04
	4.250	4.220-4.280	1.798e+04
	4.429	4.399-4.459	3.725e+04
9 Aroclor-1268	4.613	4.583-4.643	4.848e+04
	4.636	4.606-4.666	5.448e+04
	4.748	4.718-4.778	3.862e+04
	4.951	4.921-4.981	1.635e+04
	5.117	5.087-5.147	1.121e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.917	1.887-1.947	4.306e+05
\$ 12 Decachlorobiphenyl	5.226	5.196-5.256	3.073e+05

## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m  
 Quant Method : ESTD Target Version : 3.50  
 Last Update : 01-Mar-2010 07:25 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	3.173	3.143-3.203	1.279e+04
	3.256	3.226-3.286	8.918e+03
	3.319	3.289-3.349	5.406e+03
	3.547	3.517-3.577	6.916e+03
	3.623	3.593-3.653	6.425e+03
62 4,4-DDT	4.660	4.640-4.680	1.000e+05
63 4,4-DDE	4.128	4.108-4.148	2.505e+05
64 4,4-DDD	4.473	4.453-4.493	2.085e+05
2 Aroclor-1221	2.474	2.444-2.504	3.431e+03
	2.569	2.539-2.599	2.152e+03
	2.609	2.579-2.639	7.328e+03
3 Aroclor-1232	2.876	2.846-2.906	4.920e+03
	3.173	3.143-3.203	5.252e+03
	3.256	3.226-3.286	3.768e+03
	3.547	3.517-3.577	2.699e+03
4 Aroclor-1242	3.781	3.751-3.811	2.631e+03
	3.173	3.143-3.203	1.035e+04
	3.256	3.226-3.286	7.279e+03
	3.546	3.516-3.576	5.768e+03
	3.781	3.751-3.811	5.788e+03
	3.808	3.778-3.838	6.641e+03



## GEL Laboratories LLC

## COMPOUND LISTING

Method file : /chem/ecdl1.i/022610.b/ECD1-B-8082-022210.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.382	3.352-3.412	7.602e+03
	3.547	3.517-3.577	9.360e+03
	3.781	3.751-3.811	1.065e+04
	3.808	3.778-3.838	1.210e+04
	3.945	3.915-3.975	1.150e+04
6 Aroclor-1254	3.381	3.351-3.411	6.068e+03
	3.804	3.774-3.834	1.074e+04
	3.920	3.890-3.950	1.164e+04
	4.196	4.166-4.226	1.590e+04
	4.332	4.302-4.362	1.198e+04
7 Aroclor-1260	4.313	4.283-4.343	1.321e+04
	4.438	4.408-4.468	1.557e+04
	4.704	4.674-4.734	1.184e+04
	4.877	4.847-4.907	1.220e+04
	5.024	4.994-5.054	2.653e+04
8 Aroclor-1262	4.438	4.408-4.468	1.126e+04
	4.704	4.674-4.734	1.550e+04
	4.877	4.847-4.907	1.407e+04
	5.024	4.994-5.054	2.845e+04
	5.237	5.207-5.267	1.972e+04
9 Aroclor-1268	5.235	5.205-5.265	3.730e+04
	5.263	5.233-5.293	3.492e+04
	5.412	5.382-5.442	2.658e+04
	5.577	5.547-5.607	1.223e+04
	5.770	5.740-5.800	7.433e+04
10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.276	2.246-2.306	2.974e+05
\$ 12 Decachlorobiphenyl	5.922	5.892-5.952	2.115e+05

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31  
 End Cal Date : 24-FEB-2010 02:39  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/022610.b/ECD1-F-8082-022210.m  
 Cal Date : 01-Mar-2010 06:19 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/022210.b/032f3201.d  
 Level 2: /chem/ecdla.i/022210.b/033f3301.d  
 Level 3: /chem/ecdla.i/022210.b/034f3401.d  
 Level 4: /chem/ecdla.i/022210.b/035f3501.d  
 Level 5: /chem/ecdla.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)	18473	16312	15150	14238	12749	15384	14.060
(2)	20194	18537	17759	17625	17070	18237	6.651
(3)	14170	12473	11875	11163	10646	12065	11.317
(4)	8163	7198	6933	6624	6564	7096	9.135
(5)	10345	9178	8623	8273	8142	8912	10.051
63 4,4-DDD	++++	++++	++++	305990	++++	305990	0.000
64 4,4-DDE	++++	++++	++++	355239	++++	355239	0.000
62 4,4-DDT	++++	++++	++++	208015	++++	208015	0.000
2 Aroclor-1221(1)	++++	++++	++++	4398	++++	4398	0.000
(2)	++++	++++	++++	2431	++++	2431	0.000
(3)	++++	++++	++++	10418	++++	10418	0.000
3 Aroclor-1232(1)	++++	++++	++++	6218	++++	6218	0.000
(2)	++++	++++	++++	7488	++++	7488	0.000
(3)	++++	++++	++++	4887	++++	4887	0.000
(4)	++++	++++	++++	2191	++++	2191	0.000
(5)	++++	++++	++++	2731	++++	2731	0.000
4 Aroclor-1242(1)	14895	13406	12308	11554	10624	12557	13.200
(2)	15940	15326	14418	13613	13761	14612	6.870
(3)	6066	5934	5542	5337	5267	5629	6.326
(4)	8523	7616	7127	6725	6562	7310	10.814
(5)	6824	6256	5999	5817	6020	6183	6.317
5 Aroclor-1248(1)	10594	9810	9017	8885	8199	9301	9.911
(2)	14228	12736	11895	11712	11476	12409	9.043
(3)	12841	12156	11815	11785	12410	12201	3.615
(4)	11297	10503	10013	9956	10333	10420	5.179
(5)	7445	6917	6453	6460	6824	6820	5.977

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31  
 End Cal Date : 24-FEB-2010 02:39  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1.i/022610.b/ECD1-F-8082-022210.m  
 Cal Date : 01-Mar-2010 06:19 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)	13496	12213	11744	11466	11117	12007	7.694
(2)	16789	15969	15727	15423	15253	15832	3.802
(3)	20267	19353	19208	19481	19310	19524	2.185
(4)	14142	13669	13487	13772	13976	13809	1.858
(5)	15228	14234	13851	14228	13864	14281	3.932
7 Aroclor-1260(1)	19445	17307	16758	16208	15645	17072	8.574
(2)	25625	23757	23316	22992	22528	23643	5.056
(3)	27164	24948	24176	24127	24442	24971	5.079
(4)	16166	14596	13941	13551	13775	14406	7.345
(5)	15672	14437	13986	13647	14411	14431	5.316
8 Aroclor-1262(1)	++++	++++	++++	12612	++++	12612	0.000
(2)	++++	++++	++++	15693	++++	15693	0.000
(3)	++++	++++	++++	19946	++++	19946	0.000
(4)	++++	++++	++++	17981	++++	17981	0.000
(5)	++++	++++	++++	37250	++++	37250	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	457836	439032	431646	423676	400995	430637	4.841
12 Decachlorobiphenyl	331580	312081	303953	298909	289924	307289	5.135

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31  
 End Cal Date : 24-FEB-2010 02:39  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdla.i/022210.b/ECD1-B-8082-022210.m  
 Cal Date : 01-Mar-2010 07:25 yip00818  
 Curve Type : Average

## Calibration File Names:

Level 1: /chem/ecdla.i/022210.b/032b3201.d  
 Level 2: /chem/ecdla.i/022210.b/033b3301.d  
 Level 3: /chem/ecdla.i/022210.b/034b3401.d  
 Level 4: /chem/ecdla.i/022210.b/035b3501.d  
 Level 5: /chem/ecdla.i/022210.b/036b3601.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
1 Aroclor-1016(1)	14790	13406	12599	11956	11198	12790	10.807
(2)	11020	9550	8735	8081	7204	8918	16.336
(3)	6667	5702	5261	4923	4477	5406	15.464
(4)	8469	7466	6811	6206	5627	6916	15.991
(5)	7861	6755	6366	5845	5300	6425	15.123
62 4,4-DDT	+++++	+++++	+++++	100019	+++++	100019	0.000
63 4,4-DDE	+++++	+++++	+++++	250510	+++++	250510	0.000
64 4,4-DDD	+++++	+++++	+++++	208527	+++++	208527	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	3431	+++++	3431	0.000
(2)	+++++	+++++	+++++	2152	+++++	2152	0.000
(3)	+++++	+++++	+++++	7328	+++++	7328	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	4920	+++++	4920	0.000
(2)	+++++	+++++	+++++	5252	+++++	5252	0.000
(3)	+++++	+++++	+++++	3768	+++++	3768	0.000
(4)	+++++	+++++	+++++	2699	+++++	2699	0.000
(5)	+++++	+++++	+++++	2631	+++++	2631	0.000
4 Aroclor-1242(1)	12162	10602	10267	9852	8873	10351	11.615
(2)	8972	7860	7095	6551	5917	7279	16.286
(3)	7172	6222	5595	5138	4714	5768	16.707
(4)	7092	6149	5608	5215	4876	5788	15.018
(5)	8262	7049	6439	5944	5512	6641	16.138
5 Aroclor-1248(1)	9375	8130	7334	6873	6297	7602	15.743
(2)	11273	9902	9059	8609	7955	9360	13.704
(3)	12356	11118	10348	9982	9432	10647	10.657
(4)	14147	12783	11698	11327	10532	12097	11.596
(5)	13387	12032	11069	10719	10286	11499	10.750

GEL Laboratories LLC  
INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31  
 End Cal Date : 24-FEB-2010 02:39  
 Quant Method : ESTD  
 Origin : Disabled  
 Target Version : 3.50  
 Integrator : Falcon  
 Method file : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m  
 Cal Date : 01-Mar-2010 07:25 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)	7593	6474	5915	5463	4897	6068	16.986
(2)	13079	11278	10543	9836	8978	10743	14.511
(3)	14023	12144	11373	10769	9907	11643	13.419
(4)	18579	16173	15683	15087	13972	15899	10.745
(5)	14693	12059	11530	11303	10291	11975	13.772
7 Aroclor-1260(1)	16156	14478	12627	11898	10869	13206	15.988
(2)	18308	16389	15401	14483	13254	15567	12.332
(3)	14169	12468	11644	10875	10061	11844	13.319
(4)	14677	12787	11930	11182	10430	12201	13.416
(5)	30570	27429	26347	25126	23163	26527	10.405
8 Aroclor-1262(1)	++++	++++	++++	11265	++++	11265	0.000
(2)	++++	++++	++++	15504	++++	15504	0.000
(3)	++++	++++	++++	14070	++++	14070	0.000
(4)	++++	++++	++++	28448	++++	28448	0.000
(5)	++++	++++	++++	19723	++++	19723	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	335261	308362	295849	285028	262485	297397	9.098
\$ 12 Decachlorobiphenyl	252219	220293	206273	196840	181867	211498	12.633

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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 0634  
 Lab File ID: 003F0301 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0816 0859  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	12007.350	11917.276	0.01	-0.8	15.0
(2)	15832.152	16097.860	0.01	1.7	15.0
(3)	19523.991	20975.049	0.01	7.4	15.0
(4)	13809.178	15748.810	0.01	14.0	15.0
(5)	14281.016	15315.347	0.01	7.2	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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 0634  
 Lab File ID: 003B0301 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0816 0859  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	6068.393	5749.792	0.01	-5.2	15.0
(2)	10742.712	10456.396	0.01	-2.7	15.0
(3)	11643.270	11624.252	0.01	-0.2	15.0
(4)	15898.678	16360.641	0.01	2.9	15.0
(5)	11975.232	12040.670	0.01	0.5	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 0645  
 Lab File ID: 004F0401 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0920 1002  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1242	12557.447	11206.551	0.01	-10.8	15.0
(2)	14611.650	14319.111	0.01	-2.0	15.0
(3)	5629.225	5530.222	0.01	-1.8	15.0
(4)	7310.356	7114.288	0.01	-2.7	15.0
(5)	6183.099	6797.661	0.01	9.9	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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 0645  
 Lab File ID: 004B0401 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0920 1002  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1242	10351.237	10326.752	0.01	-0.2	15.0
(2)	7278.919	6851.054	0.01	-5.9	15.0
(3)	5768.408	5572.159	0.01	-3.4	15.0
(4)	5788.073	5747.261	0.01	-0.7	15.0
(5)	6641.390	6490.610	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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 0716  
 Lab File ID: 007F0701 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13369.087	0.01	-13.1	15.0
(2)	18237.012	17071.873	0.01	-6.4	15.0
(3)	12065.482	10795.908	0.01	-10.5	15.0
(4)	7096.105	6509.966	0.01	-8.3	15.0
(5)	8912.192	8195.079	0.01	-8.0	15.0
Aroclor-1260	17072.421	15796.125	0.01	-7.5	15.0
(2)	23643.449	23677.059	0.01	0.1	15.0
(3)	24971.335	25544.073	0.01	2.3	15.0
(4)	14405.675	14317.174	0.01	-0.6	15.0
(5)	14430.527	14872.154	0.01	3.1	15.0
4cmx	430636.91	382002.17	0.01	-11.3	15.0
Decachlorobiphenyl	307289.35	292662.24	0.01	-4.8	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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 0716  
 Lab File ID: 007B0701 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12326.850	0.01	-3.6	15.0
(2)	8917.926	7938.108	0.01	-11.0	15.0
(3)	5406.011	4979.771	0.01	-7.9	15.0
(4)	6915.638	6230.724	0.01	-9.9	15.0
(5)	6425.213	5832.725	0.01	-9.2	15.0
Aroclor-1260	13205.642	12060.877	0.01	-8.7	15.0
(2)	15566.814	14694.930	0.01	-5.6	15.0
(3)	11843.501	11019.463	0.01	-7.0	15.0
(4)	12201.193	11492.870	0.01	-5.8	15.0
(5)	26527.172	25715.032	0.01	-3.1	15.0
4cmx	297396.93	270963.99	0.01	-8.9	15.0
Decachlorobiphenyl	211498.34	193157.31	0.01	-8.7	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 1551  
 Lab File ID: 051F5101 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13742.030	0.01	-10.7	15.0
(2)	18237.012	18119.076	0.01	-0.6	15.0
(3)	12065.482	11401.559	0.01	-5.5	15.0
(4)	7096.105	6906.918	0.01	-2.7	15.0
(5)	8912.192	8746.177	0.01	-1.9	15.0
Aroclor-1260	17072.421	16830.207	0.01	-1.4	15.0
(2)	23643.449	25281.195	0.01	6.9	15.0
(3)	24971.335	26929.676	0.01	7.8	15.0
(4)	14405.675	15211.828	0.01	5.6	15.0
(5)	14430.527	15812.023	0.01	9.6	15.0
4cmx	430636.91	402924.87	0.01	-6.4	15.0
Decachlorobiphenyl	307289.35	300728.54	0.01	-2.1	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 1551  
 Lab File ID: 051B5101 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12757.892	0.01	-0.2	15.0
(2)	8917.926	8304.139	0.01	-6.9	15.0
(3)	5406.011	5181.258	0.01	-4.2	15.0
(4)	6915.638	6717.892	0.01	-2.8	15.0
(5)	6425.213	6213.156	0.01	-3.3	15.0
Aroclor-1260	13205.642	12548.873	0.01	-5.0	15.0
(2)	15566.814	15364.459	0.01	-1.3	15.0
(3)	11843.501	11557.506	0.01	-2.4	15.0
(4)	12201.193	12007.109	0.01	-1.6	15.0
(5)	26527.172	26939.299	0.01	1.6	15.0
4cmx	297396.93	280945.76	0.01	-5.5	15.0
Decachlorobiphenyl	211498.34	200670.44	0.01	-5.1	15.0

FORM VII PEST

FORM 7  
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 1757  
 Lab File ID: 061F6101 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13866.265	0.01	-9.9	15.0
(2)	18237.012	18250.449	0.01	0.1	15.0
(3)	12065.482	11490.812	0.01	-4.8	15.0
(4)	7096.105	6955.332	0.01	-2.0	15.0
(5)	8912.192	8914.344	0.01	0.0	15.0
Aroclor-1260	17072.421	17003.584	0.01	-0.4	15.0
(2)	23643.449	25489.037	0.01	7.8	15.0
(3)	24971.335	27358.854	0.01	9.6	15.0
(4)	14405.675	15388.147	0.01	6.8	15.0
(5)	14430.527	16000.117	0.01	10.9	15.0
4cmx	430636.91	405733.82	0.01	-5.8	15.0
Decachlorobiphenyl	307289.35	301676.83	0.01	-1.8	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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 1757  
 Lab File ID: 061B6101 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12447.362	0.01	-2.7	15.0
(2)	8917.926	8323.887	0.01	-6.7	15.0
(3)	5406.011	5186.298	0.01	-4.1	15.0
(4)	6915.638	6720.262	0.01	-2.8	15.0
(5)	6425.213	6292.041	0.01	-2.1	15.0
Aroclor-1260	13205.642	12508.093	0.01	-5.3	15.0
(2)	15566.814	15388.858	0.01	-1.1	15.0
(3)	11843.501	11529.422	0.01	-2.6	15.0
(4)	12201.193	11909.080	0.01	-2.4	15.0
(5)	26527.172	26762.600	0.01	0.9	15.0
4cmx	297396.93	283729.98	0.01	-4.6	15.0
Decachlorobiphenyl	211498.34	197495.35	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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 2016  
 Lab File ID: 072F7201 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13954.918	0.01	-9.3	15.0
(2)	18237.012	17948.290	0.01	-1.6	15.0
(3)	12065.482	11573.328	0.01	-4.1	15.0
(4)	7096.105	7055.683	0.01	-0.6	15.0
(5)	8912.192	9032.352	0.01	1.3	15.0
Aroclor-1260	17072.421	17136.710	0.01	0.4	15.0
(2)	23643.449	25634.028	0.01	8.4	15.0
(3)	24971.335	27589.382	0.01	10.5	15.0
(4)	14405.675	15517.103	0.01	7.7	15.0
(5)	14430.527	16094.752	0.01	11.5	15.0
4cmx	430636.91	409869.79	0.01	-4.8	15.0
Decachlorobiphenyl	307289.35	302956.26	0.01	-1.4	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.: 10-1950  
 Instrument ID: ECD1A Calibration Date: 02/26/10 Time: 2016  
 Lab File ID: 072B7201 Init. Calib. Date(s): 02/22/10 02/22/10  
 Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755  
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	13062.814	0.01	2.1	15.0
(2)	8917.926	8424.665	0.01	-5.5	15.0
(3)	5406.011	5258.636	0.01	-2.7	15.0
(4)	6915.638	6791.871	0.01	-1.8	15.0
(5)	6425.213	6291.171	0.01	-2.1	15.0
Aroclor-1260	13205.642	12537.192	0.01	-5.1	15.0
(2)	15566.814	15390.272	0.01	-1.1	15.0
(3)	11843.501	11565.060	0.01	-2.4	15.0
(4)	12201.193	12008.567	0.01	-1.6	15.0
(5)	26527.172	26828.530	0.01	1.1	15.0
4cmx	297396.93	286738.21	0.01	-3.6	15.0
Decachlorobiphenyl	211498.34	195365.26	0.01	-7.6	15.0

FORM VII PEST

Data File: /chem/ecdl1a.i/022610.b/003f0301.d  
Report Date: 26-Feb-2010 11:29

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/003f0301.d

Lab Smp Id: WAR100219-54 Client Smp ID: AR125401

Inj Date : 26-FEB-2010 06:34

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR100219-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 26-Feb-2010 11:25 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
3.216	3.216	0.000	11917276 1000.00	992	80.00- 120.00	100.00
3.371	3.371	0.000	16097860 1000.00	1020	115.08- 155.08	135.08
3.605	3.605	0.000	20975049 1000.00	1070	156.01- 196.01	176.01
3.767	3.767	0.000	15748810 1000.00	1140	112.15- 152.15	132.15
3.877	3.877	0.000	15315347 1000.00	1070	108.51- 148.51	128.51

Average of Peak Amounts = 1.06e+03

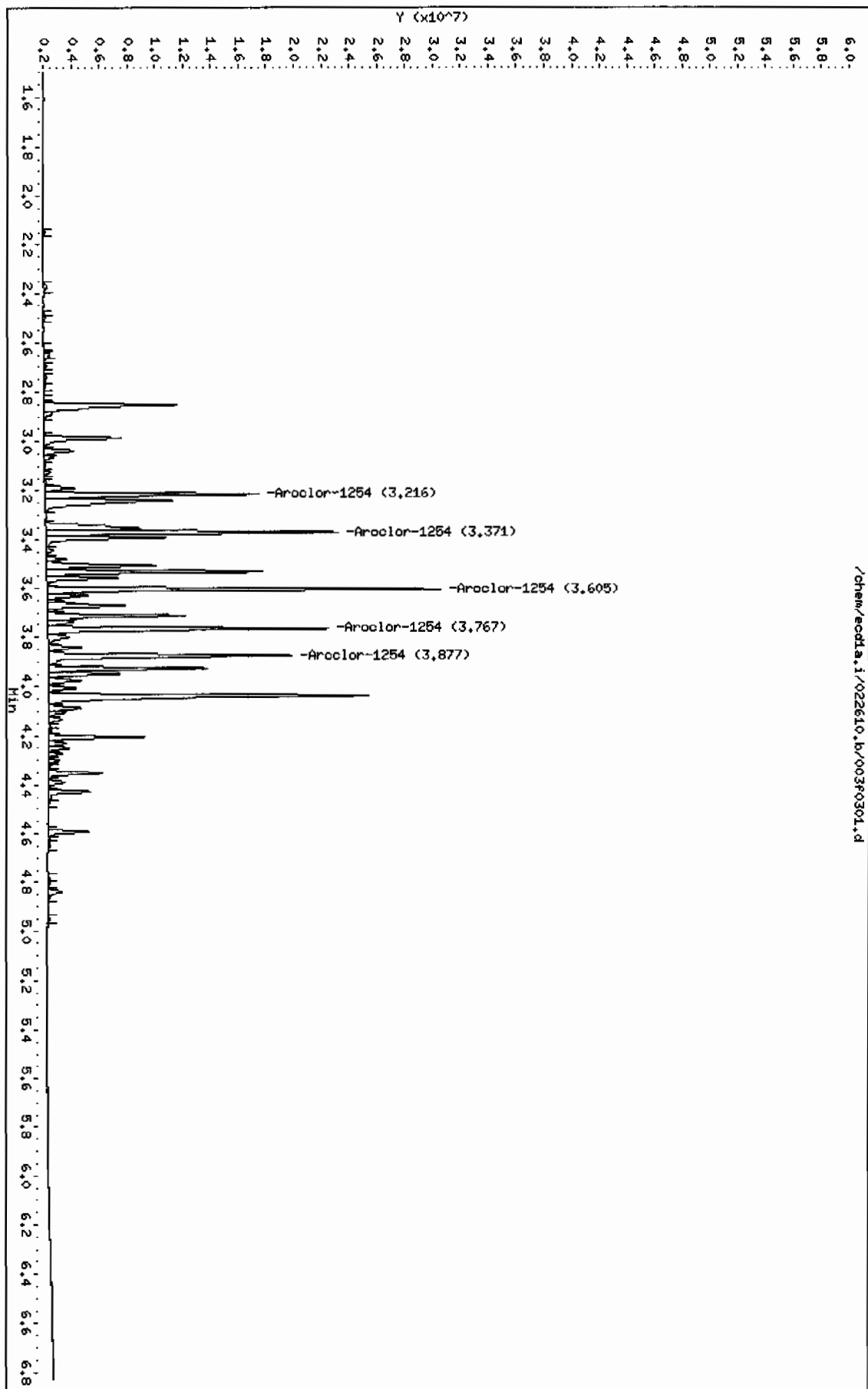
Data File: /chem/ecdl1.i/022610.b/003f0301.d  
Date: 26-FEB-2010 06:34  
Client ID: AR126401  
Sample Info: 14AR100219-54

Page 1

Column phase: CLP1

Instrument: ecdl1.i  
Operator: YSL  
Column diameter: 0.25

/chem/ecdl1.i/022610.b/003f0301.d



Data File: /chem/ecdl1a.i/022610.b/003b0301.d  
Report Date: 26-Feb-2010 11:29

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/003b0301.d

Lab Smp Id: WAR100219-54 Client Smp ID: AR125401

Inj Date : 26-FEB-2010 06:34

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR100219-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 26-Feb-2010 11:27 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

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.381	3.381	0.000	5749792 1000.00	947	80.00- 120.00	100.00
3.804	3.804	0.000	10456396 1000.00	973	161.86- 201.86	181.86
3.920	3.920	0.000	11624252 1000.00	998	182.17- 222.17	202.17
4.196	4.196	0.000	16360641 1000.00	1030	264.54- 304.54	284.54
4.332	4.332	0.000	12040670 1000.00	1000	189.41- 229.41	209.41
Average of Peak Amounts =				991		

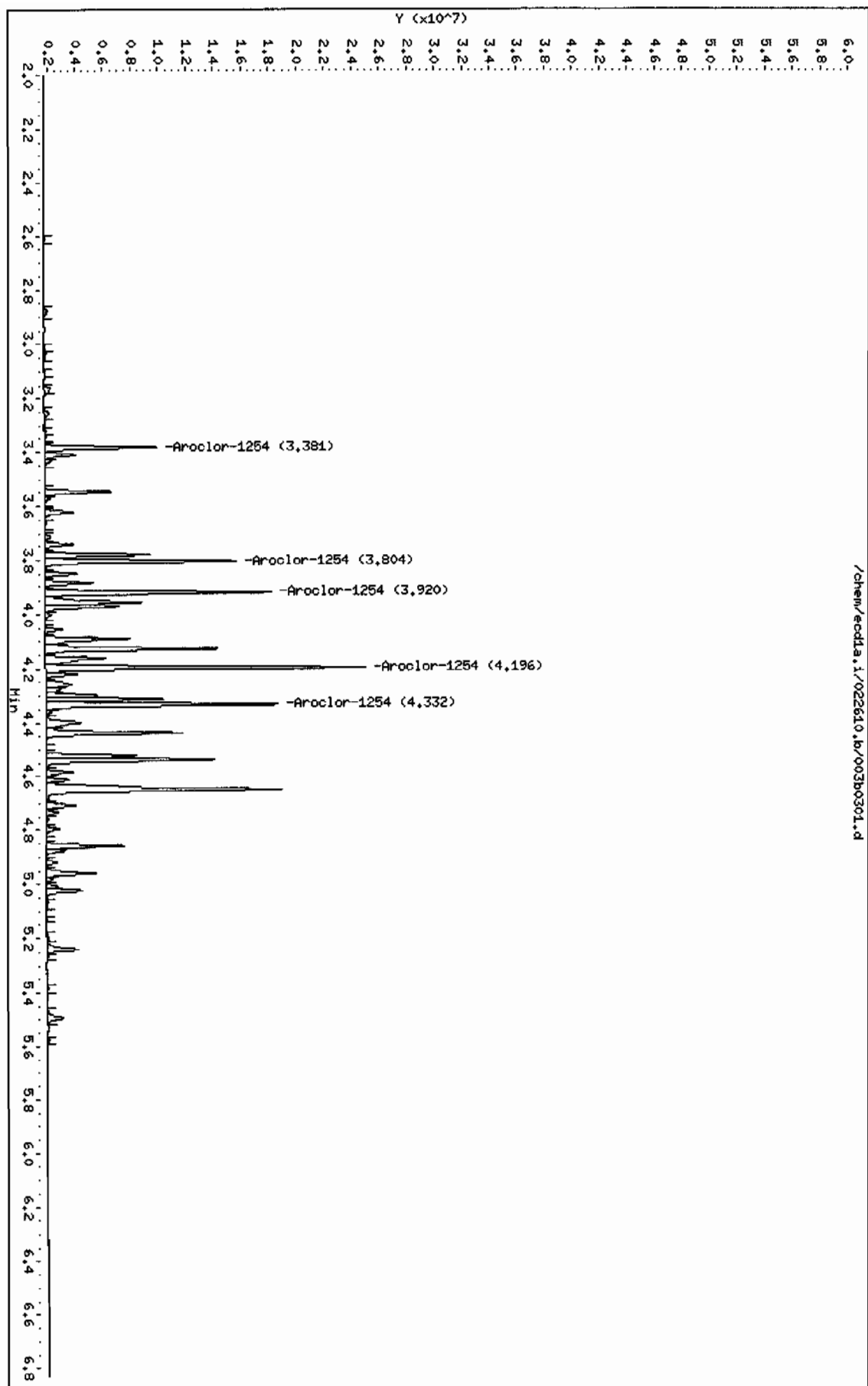
Data File: /chem/ecdl1a.i/022610.b/003b0301.d  
Date : 26-FEB-2010 06:34  
Client ID: AR125401  
Sample Info: 1MR100219-S4

Instrument: ecdl1a.i

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Column phase: CLP2

Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/022610.b/004f0401.d

Lab Smp Id: WAR100219-42

Client Smp ID: AR124201

Inj Date : 26-FEB-2010 06:45

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100219-42

Misc Info :

Comment :

Method : /chem/ecdl1.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 26-Feb-2010 11:25 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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242

CAS #: 53469-21-9

2.371	2.371	0.000	11206551	1000.00	892 80.00- 120.00	100.00
2.659	2.659	0.000	14319111	1000.00	980 107.77- 147.77	127.77
2.776	2.776	0.000	5530222	1000.00	982 29.35- 69.35	49.35
2.987	2.987	0.000	7114288	1000.00	973 43.48- 83.48	63.48
3.241	3.241	0.000	6797661	1000.00	1100 40.66- 80.66	60.66

Average of Peak Amounts =

985

Data File: /chem/ecdl1a.i/022610.b/004f0401.d

Date : 26-FEB-2010 06:45

Client ID: AR124201

Sample Info: IMAR100219-42

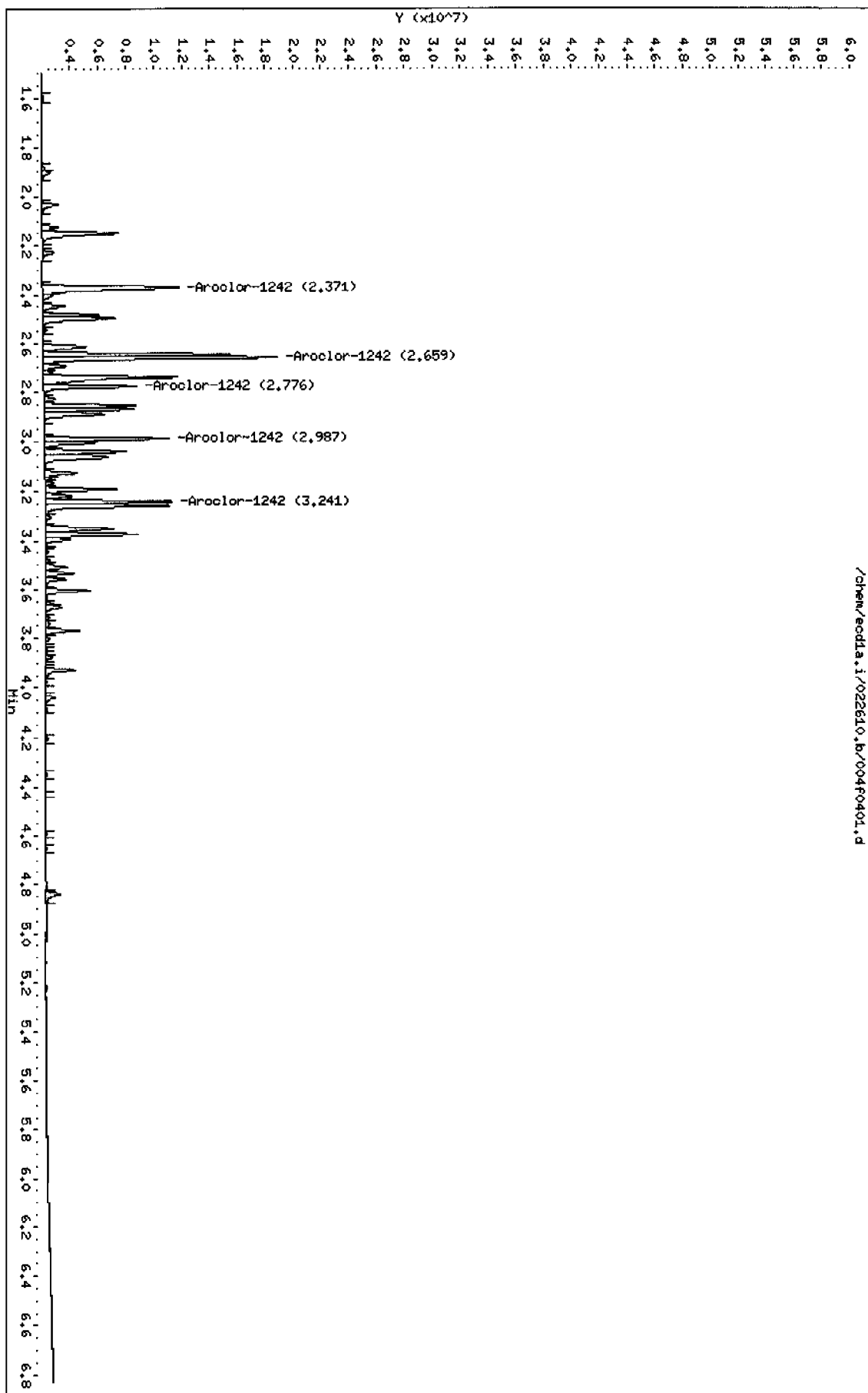
Column phase: CLP1

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.26

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Data File: /chem/ecdl1a.i/022610.b/004b0401.d  
Report Date: 26-Feb-2010 11:29

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/004b0401.d

Lab Smp Id: WAR100219-42 Client Smp ID: AR124201

Inj Date : 26-FEB-2010 06:45

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR100219-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 26-Feb-2010 11:27 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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

4 Aroclor-1242

CAS #: 53469-21-9

3.173	3.173	0.000	10326752	1000.00	998 80.00- 120.00	100.00
3.256	3.256	0.000	6851054	1000.00	941 46.34- 86.34	66.34
3.546	3.546	0.000	5572159	1000.00	966 33.96- 73.96	53.96
3.781	3.781	0.000	5747261	1000.00	993 35.65- 75.65	55.65
3.808	3.808	0.000	6490610	1000.00	977 42.85- 82.85	62.85

Average of Peak Amounts =

975



Data File: /chem/ecdt1a.i/022610.b/004b0401.d

Date: 26-FEB-2010 06:45

Client ID: AR124201

Sample Info: IMR100219-42

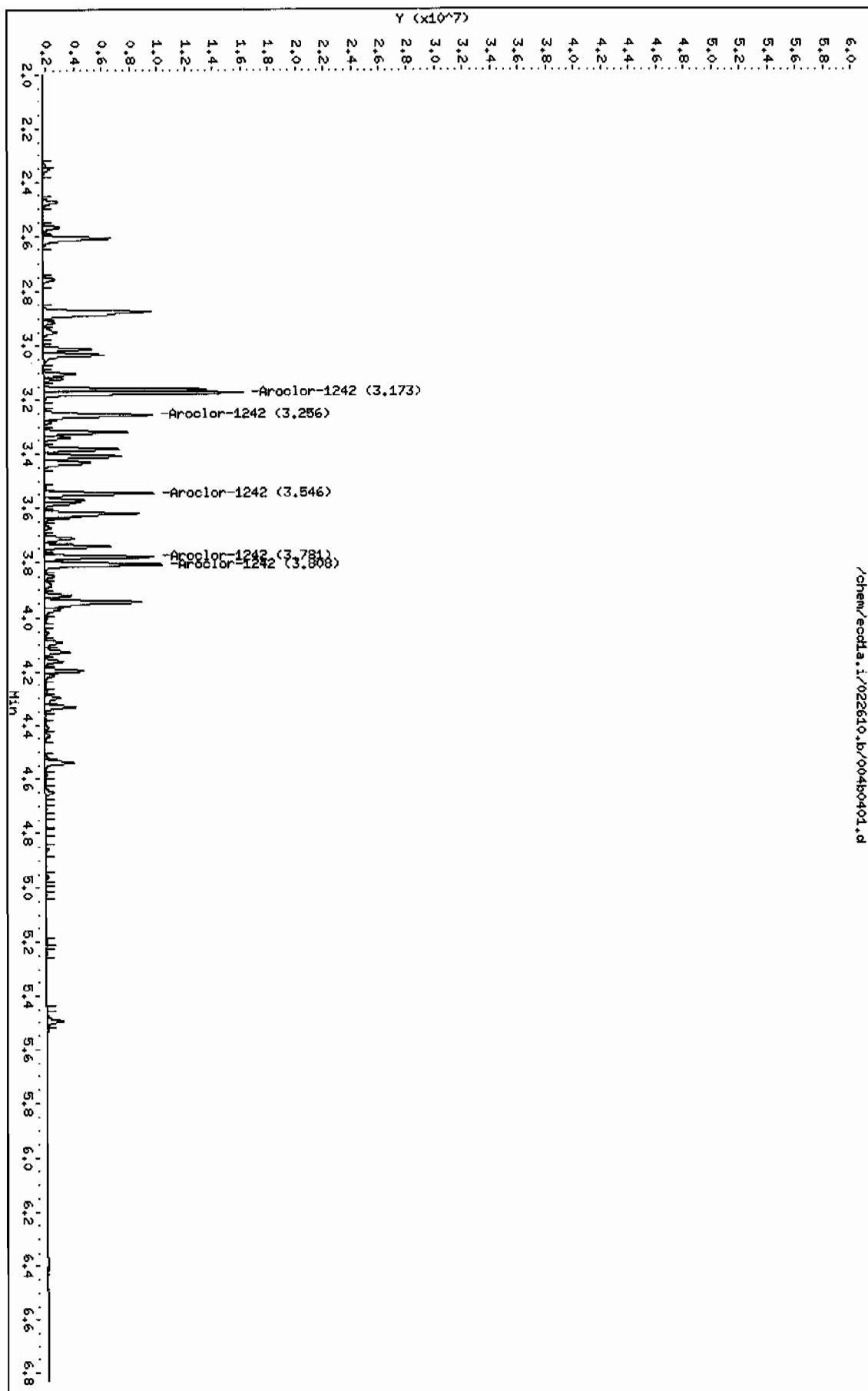
Column phase: CLP2

Instrument: ecdt1a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdt1a.i/022610.b/004b0401.d



Data File: /chem/ecdl1a.i/022610.b/005f0501.d  
Report Date: 26-Feb-2010 11:29

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/005f0501.d

Lab Smp Id: WAR100223-48 Client Smp ID: AR124801

Inj Date : 26-FEB-2010 06:55

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR100223-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 26-Feb-2010 11:25 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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248

CAS #: 12672-29-6

2.854	2.854	0.000	9336150	1000.00	1000 80.00- 120.00	100.00
2.987	2.987	0.000	12358805	1000.00	996 112.38- 152.38	132.38
3.241	3.241	0.000	13507620	1000.00	1110 124.68- 164.68	144.68
3.373	3.373	0.000	11134117	1000.00	1070 99.26- 139.26	119.26
3.606	3.606	0.000	7555325	1000.00	1110 60.93- 100.93	80.93

Average of Peak Amounts = 1.06e+03

Data File: /chem/ecdt1.i/022610.b/005f0501.d

Date: 26-FEB-2010 06:55

Client ID: AR124801

Sample Info: 1MAR100223-48

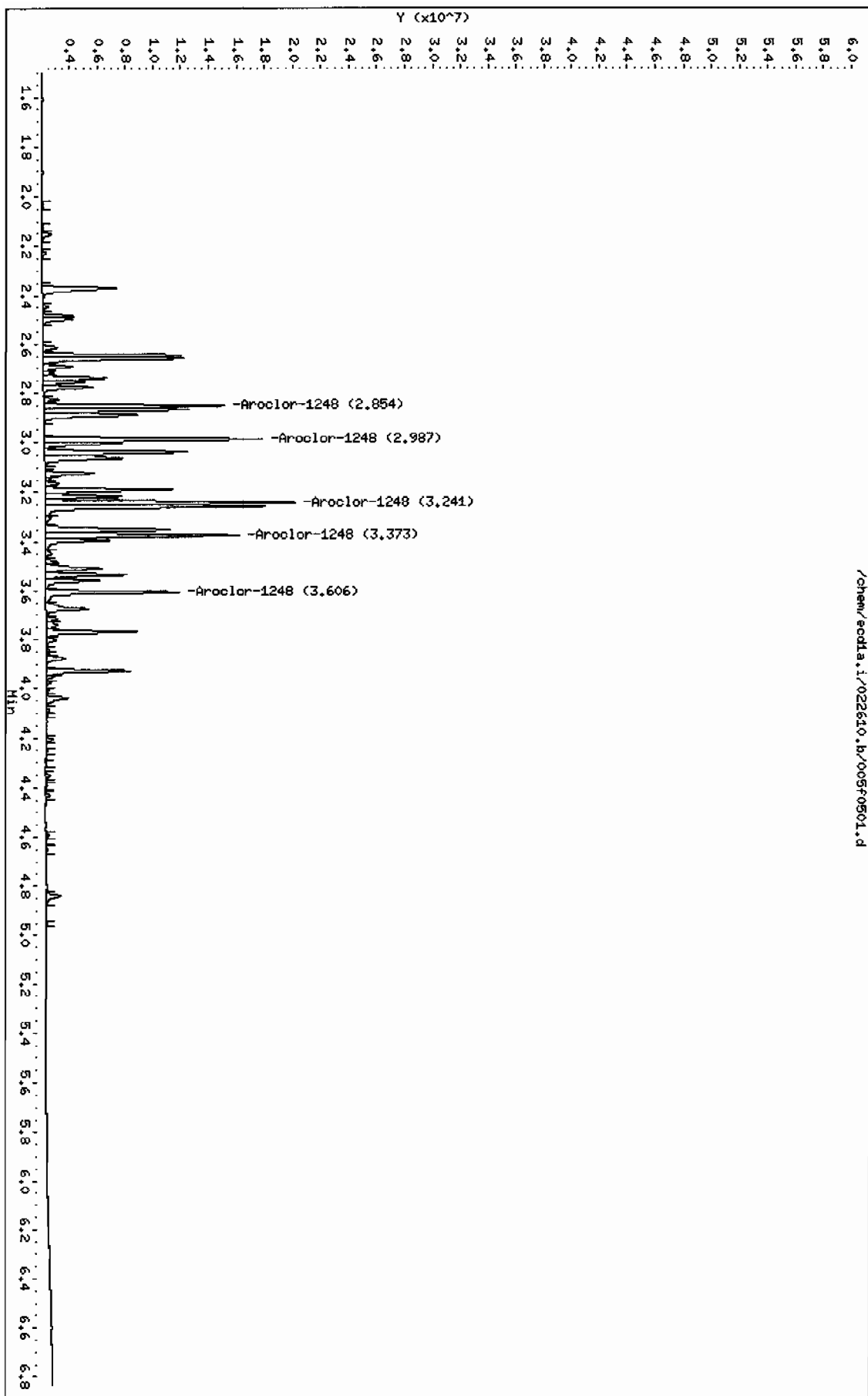
Column phase: CLP1

Instrument: ecdt1.i

Operator: YS1

Column diameter: 0.25

/chem/ecdt1.i/022610.b/005f0501.d



Data File: /chem/ecdl1a.i/022610.b/005b0501.d  
Report Date: 26-Feb-2010 11:29

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/005b0501.d

Lab Smp Id: WAR100223-48

Client Smp ID: AR124801

Inj Date : 26-FEB-2010 06:55

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100223-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 26-Feb-2010 11:27 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
3.382	3.382	0.000	7456947 1000.00	981 80.00~ 120.00	100.00	
3.547	3.547	0.000	9361892 1000.00	1000 105.55~ 145.55	125.55	
3.781	3.781	0.000	10892519 1000.00	1020 126.07~ 166.07	146.07	
3.808	3.808	0.000	12162267 1000.00	1000 143.10~ 183.10	163.10	
3.945	3.945	0.000	11751770 1000.00	1020 137.59~ 177.59	157.59	

Average of Peak Amounts = 1.01e+03

Data File: /chem/eodla.i/022610.b/005b0501.d

Date: 26-FEB-2010 06:55

Client ID: AR124801

Sample Info: IMR100223-48

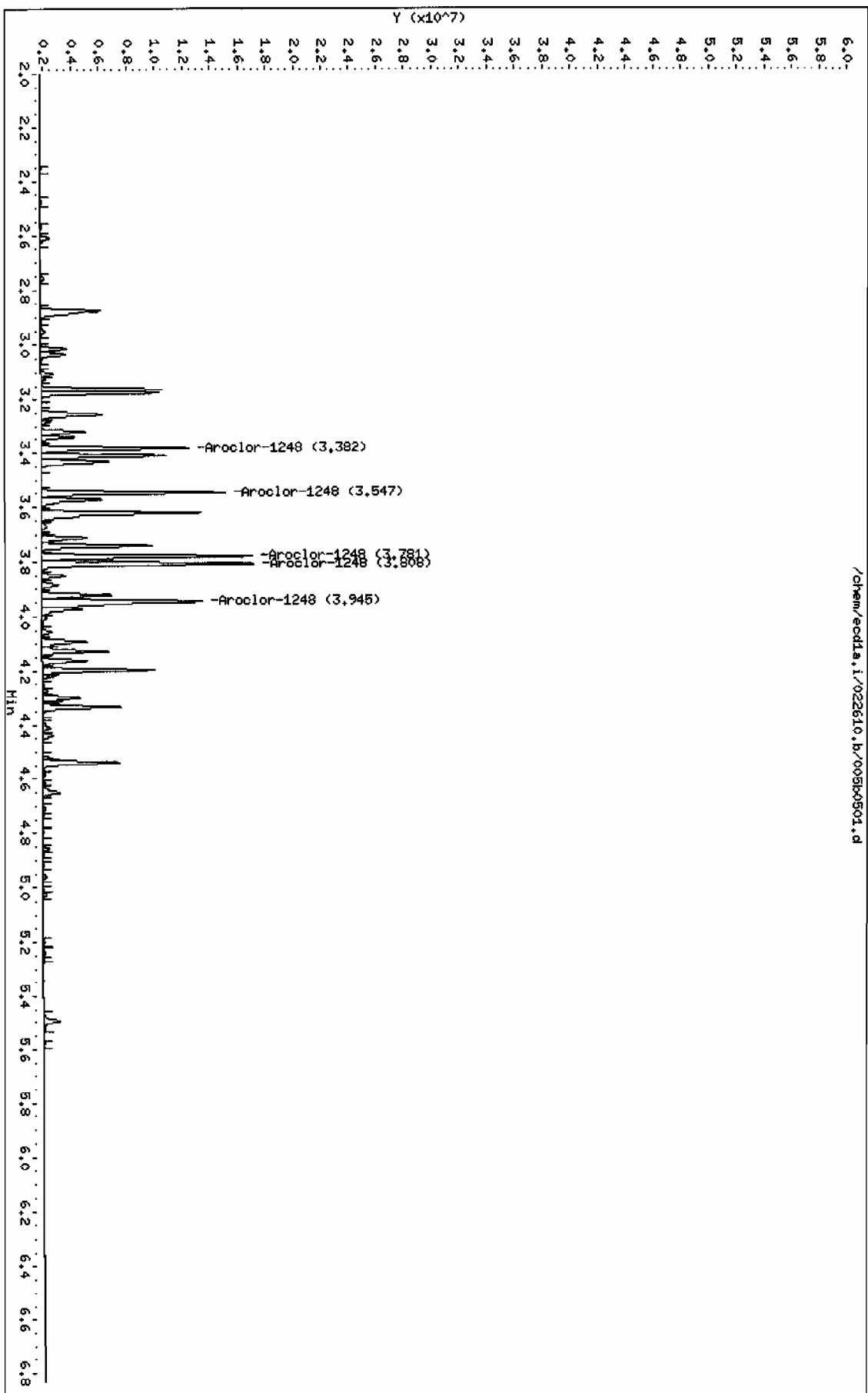
Column phase: CLP2

Instrument: eodla.i

Operator: VSL

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/007f0701.d

Lab Smp Id: WAR100222-60 01

Client Smp ID: AR166001

Inj Date : 26-FEB-2010 07:16

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 26-Feb-2010 11:25 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: 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			
1.917	1.917	0.000	38200217	100.000	88.7	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.226	5.226	0.000	29266224	100.000	95.2	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.371	2.371	0.000	13369087	1000.00	869	80.00-	120.00	100.00
2.659	2.659	0.000	17071873	1000.00	936	111.29-	151.29	127.70
2.739	2.739	0.000	10795908	1000.00	895	62.81-	102.81	80.75
2.776	2.776	0.000	6509966	1000.00	917	29.77-	69.77	48.69
2.987	2.987	0.000	8195079	1000.00	920	43.95-	83.95	61.30
Average of Peak Amounts =					907			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.714	3.714	0.000	15796125	1000.00	925	80.00-	120.00	100.00
3.876	3.876	0.000	23677059	1000.00	1000	129.80-	169.80	149.89
4.039	4.039	0.000	25544073	1000.00	1020	141.42-	181.42	161.71
4.107	4.107	0.000	14317174	1000.00	994	70.48-	110.48	90.64
4.249	4.249	0.000	14872154	1000.00	1030	74.01-	114.01	94.15
Average of Peak Amounts =					995			

Data File: /chem/ecdl1.i/022610.b/0070701.d

Date: 26-FEB-2010 07:16

Client ID: AR166001

Sample Info: 148R100222-60 01

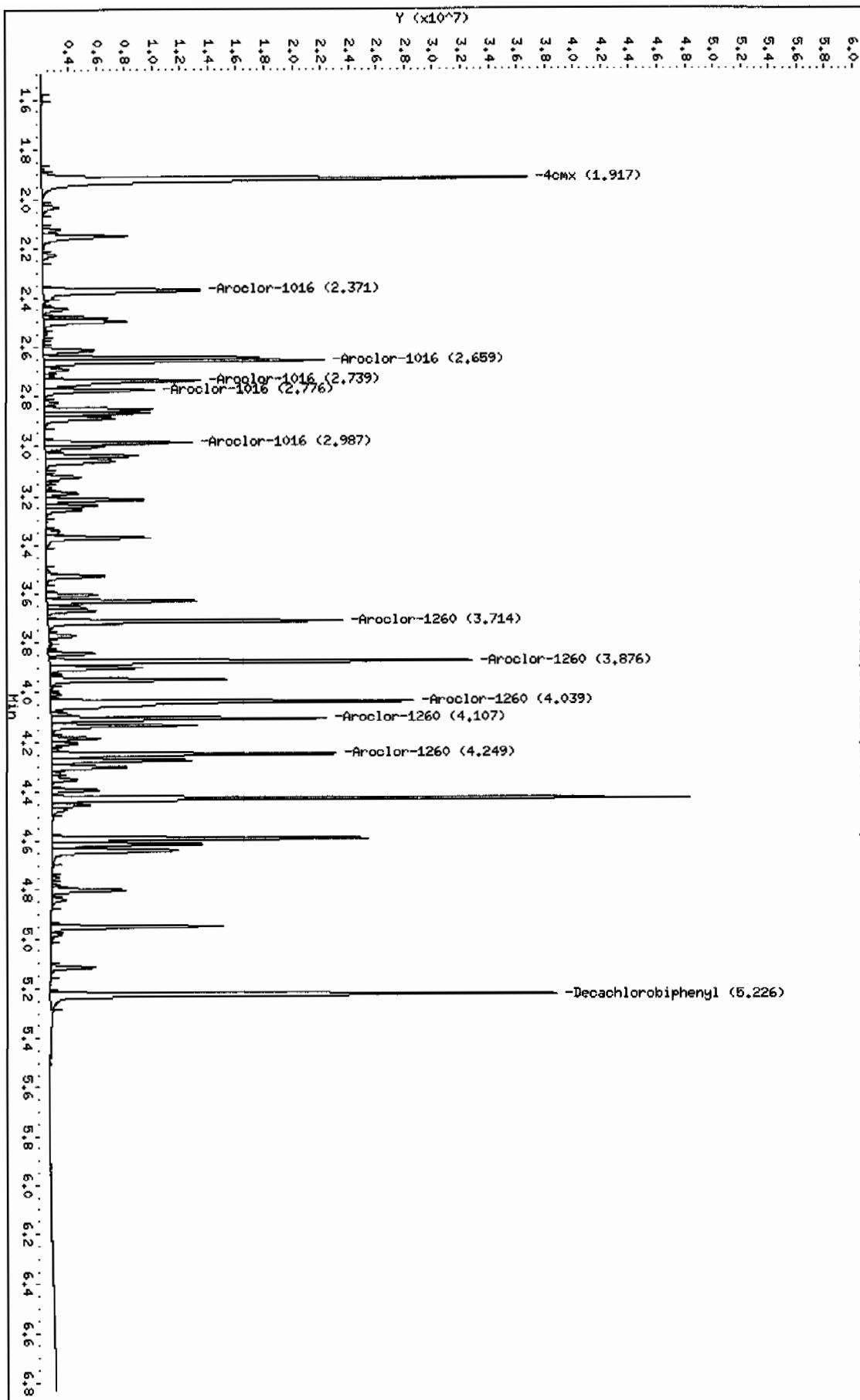
Column phase: CLP1

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl1.i/022610.b/0070701.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/007b0701.d

Lab Smp Id: WAR100222-60 01

Client Smp ID: AR166001

Inj Date : 26-FEB-2010 07:16

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100222-60 01

Misc Info :

Comment :

Method : /chem/ecdla.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 26-Feb-2010 11:27 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: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.276	2.276	0.000	27096399 100.000	91.1	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.922	5.922	0.000	19315731 100.000	91.3	80.00- 120.00	100.00	
-----							
1 Aroclor-1016				CAS #: 12674-11-2			
3.173	3.173	0.000	12326850 1000.00	964	80.00- 120.00	100.00 (M)	
3.256	3.256	0.000	7938108 1000.00	890	46.51- 86.51	64.40	
3.319	3.319	0.000	4979771 1000.00	921	21.26- 61.26	40.40	
3.547	3.547	0.000	6230724 1000.00	901	32.03- 72.03	50.55	
3.623	3.623	0.000	5832725 1000.00	908	28.18- 68.18	56.97	
Average of Peak Amounts =				917			
-----							
7 Aroclor-1260				CAS #: 11096-82-5			
4.313	4.313	0.000	12060877 1000.00	913	80.00- 120.00	100.00	
4.438	4.438	0.000	14694930 1000.00	944	102.13- 142.13	121.84	
4.704	4.704	0.000	11019463 1000.00	930	71.67- 111.67	91.37	
4.877	4.877	0.000	11492870 1000.00	942	74.75- 114.75	95.29	
5.024	5.024	0.000	25715032 1000.00	969	192.32- 232.32	213.21	
Average of Peak Amounts =				940			



QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecodla.i/022610.b/007b0701.d

Date : 26-FEB-2010 07:16

Client ID: AR166001

Sample Info: IWR100222-60 01

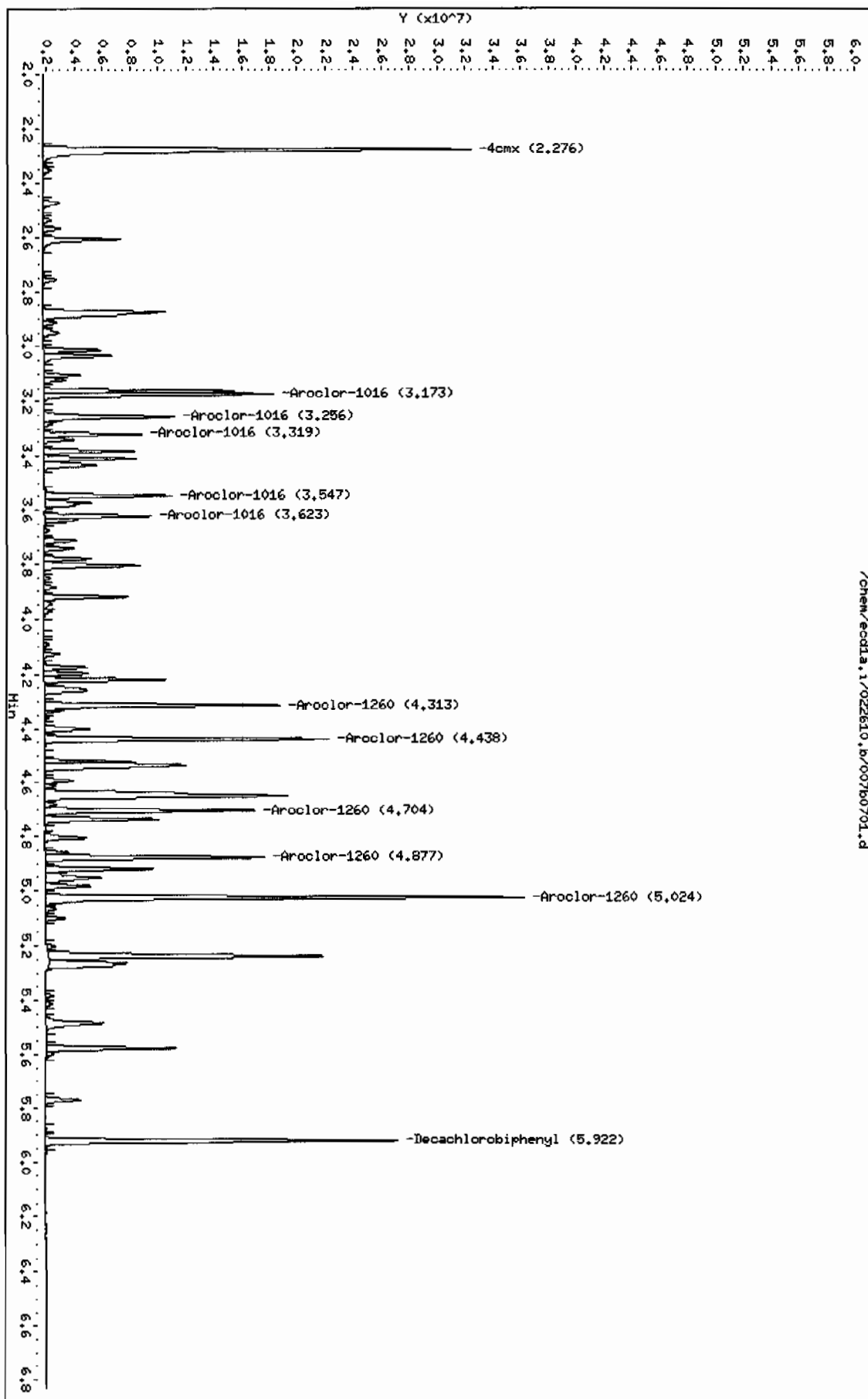
Column phase: CLP2

Instrument: ecodla.i

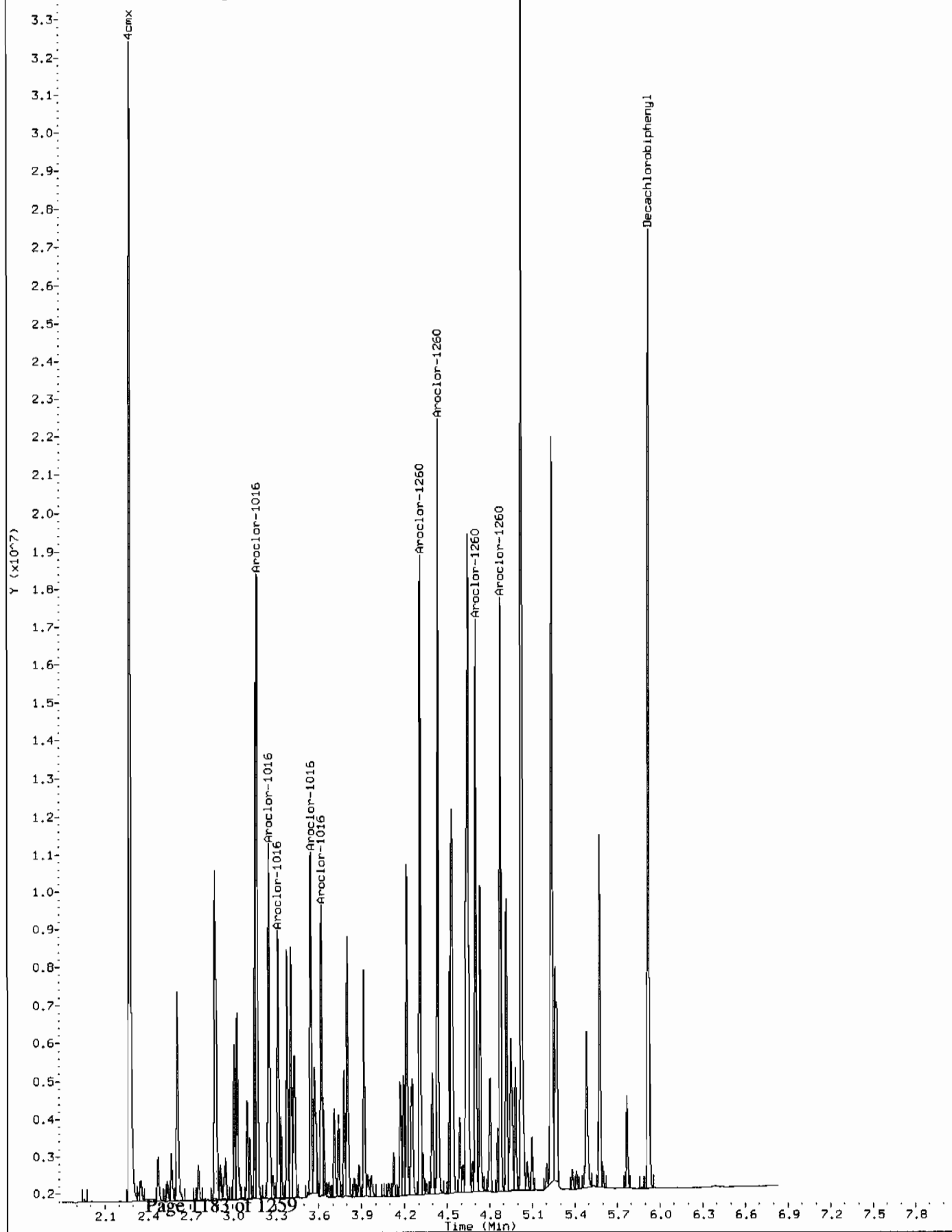
Operator: YSL

Column diameter: 0.25

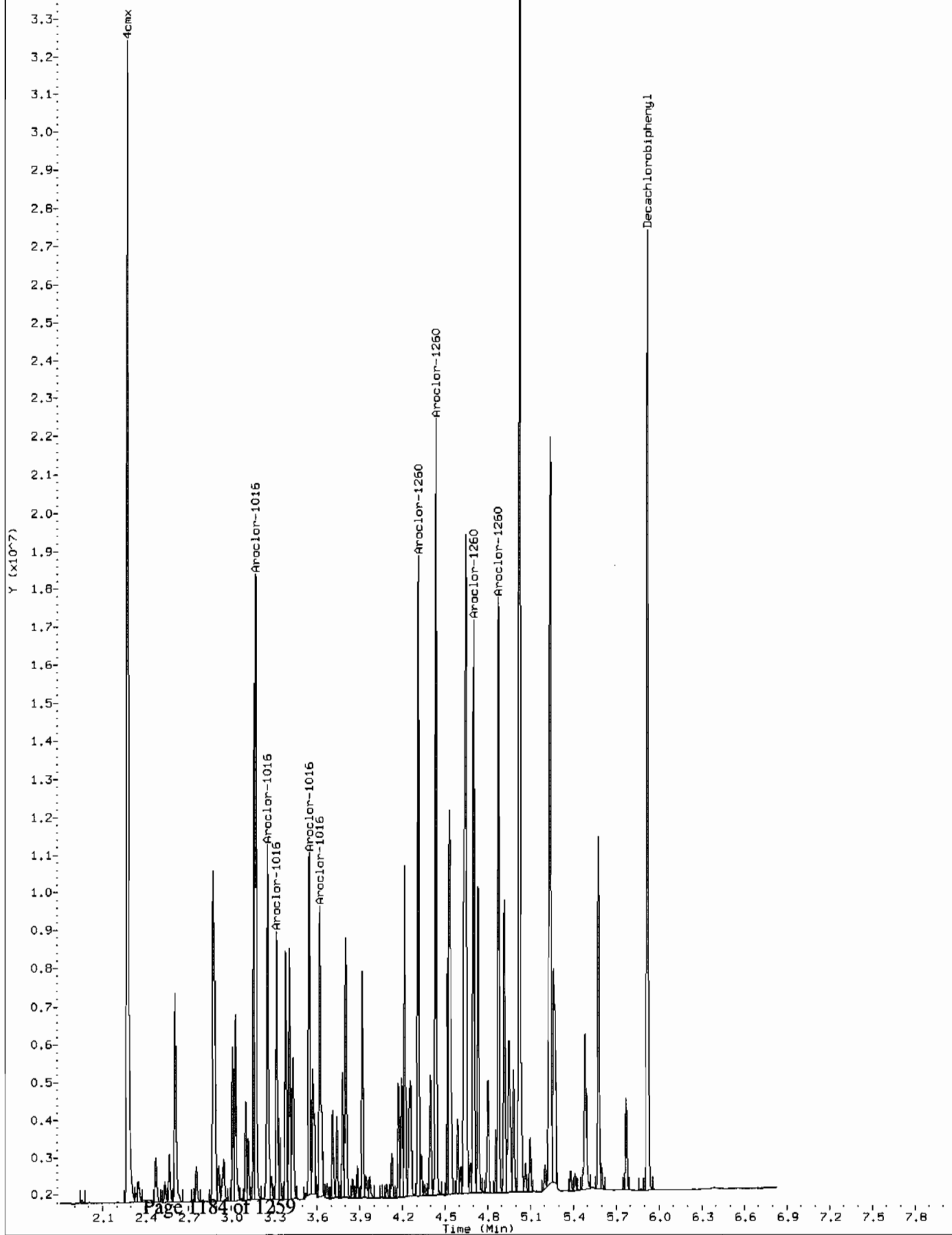
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Comment: Manually Integrated  
Data File: /chem/ecdla.i/022610.b/007b0701.d  
Operator: YS1  
Injection Date: 26-FEB-2010 07:16  
Instrument: ecdla.i  
Client Sample ID: AR166001



Comment: Before manual integration  
Data File: /chem/ecdl1a.i/022610.b/Orig-007b0701.d  
Operator: YS1  
Injection Date: 26-FEB-2010 07:16  
Instrument: ecd1a.i  
Client Sample ID: AR166001



Data File: /chem/ecdla.i/022610.b/008f0801.d  
Report Date: 26-Feb-2010 11:30

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/008f0801.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 26-FEB-2010 07:27

Operator : YSl

Inst ID: ecdla.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdla.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 26-Feb-2010 11:25 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: 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
2.371	2.371	0.000	6451908 1000.00	1040	80.00- 120.00	100.00
2.659	2.659	0.000	8300963 1000.00	1110	108.66- 148.66	128.66
2.739	2.739	0.000	5352163 1000.00	1100	62.95- 102.95	82.95
2.854	2.854	0.000	2613047 1000.00	1190	20.50- 60.50	40.50
3.241	3.241	0.000	3485970 1000.00	1280	34.03- 74.03	54.03

Average of Peak Amounts = 1.14e+03

Data File: /chem/ecdl.a.i/022610.b/008f0801.d

Date : 26-FEB-2010 07:27

Client ID: AR123201

Sample Info: 1MAR100104-32

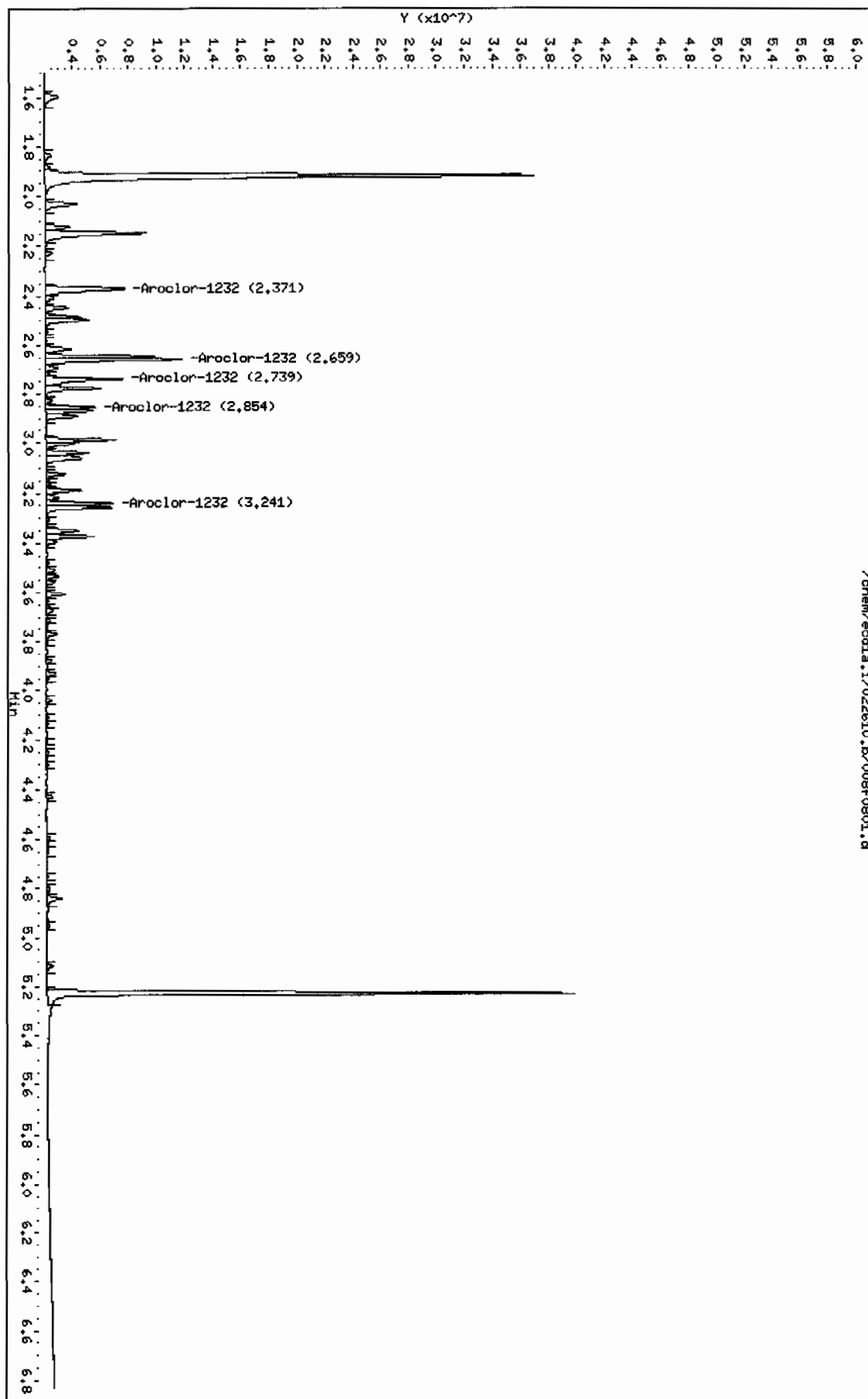
Column phase: CLP1

Instrument: ecdl.a.i

Operator: YS1

Column diameter: 0.25

/chem/ecdl.a.i/022610.b/008f0801.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/008b0801.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 26-FEB-2010 07:27

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 26-Feb-2010 11:27 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: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
3	Aroclor-1232			CAS #: 11141-16-5		
2.876	2.876	0.000	5264128 1000.00	1070	80.00- 120.00	100.00
3.173	3.173	0.000	6111285 1000.00	1160	96.09- 136.09	116.09
3.256	3.256	0.000	4060631 1000.00	1080	57.14- 97.14	77.14
3.547	3.547	0.000	3036183 1000.00	1120	37.68- 77.68	57.68
3.781	3.781	0.000	3032185 1000.00	1150	37.60- 77.60	57.60
Average of Peak Amounts				1.12e+03		

Data File: /chem/ecdda.i/022610.b/008b0801.d  
Date: 26-FEB-2010 07:27  
Client ID: AR123201  
Sample Info: 1MAR100104-32

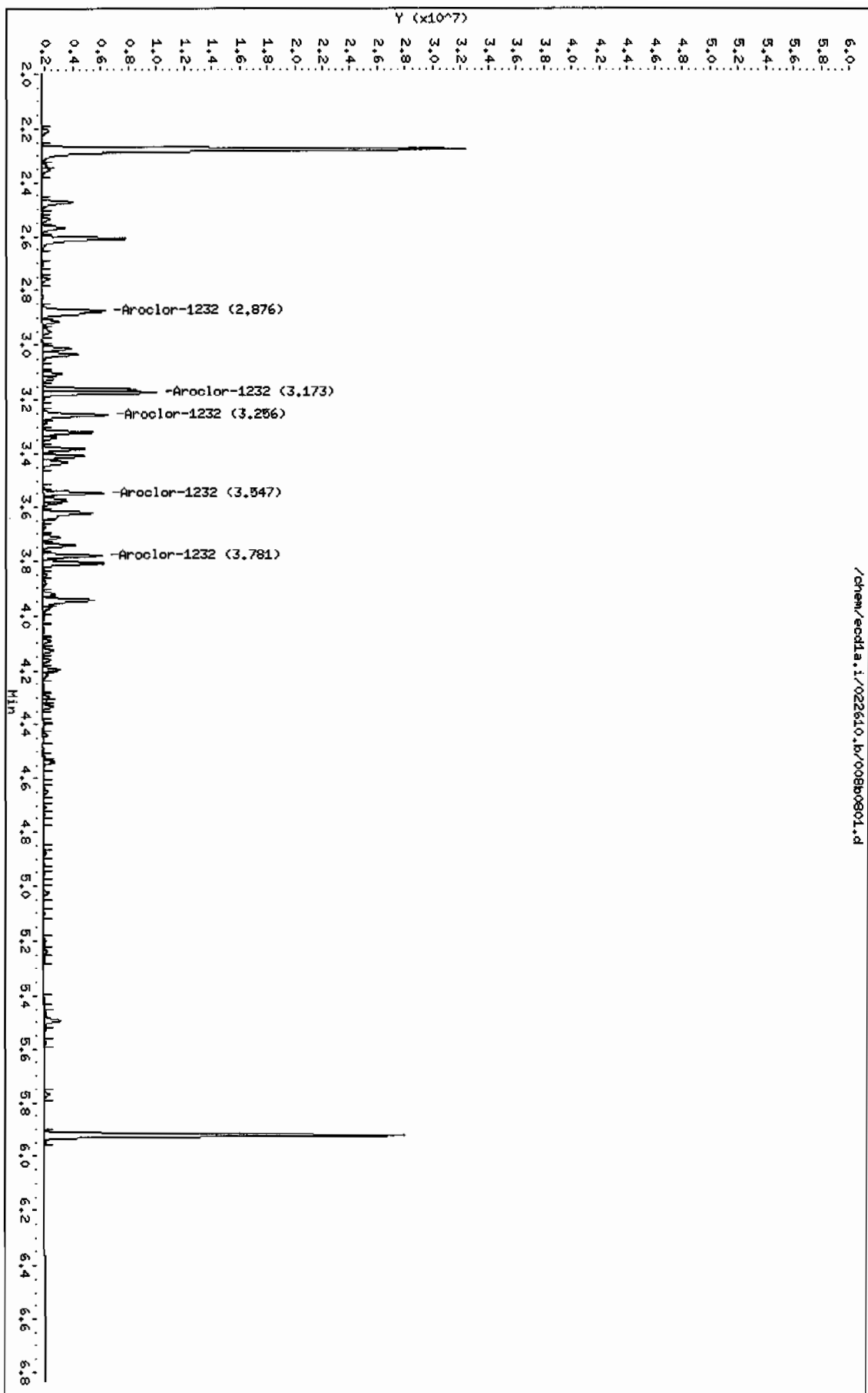
Instrument: ecdda.i

Page 1

Column phase: CLP2

Operator: YSL  
Column diameter: 0.25

/chem/ecdda.i/022610.b/008b0801.d





Data File: /chem/ecdla.i/022610.b/009f0901.d  
Report Date: 26-Feb-2010 11:30

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/009f0901.d

Lab Smp Id: WAR100104-21 Client Smp ID: AR122101

Inj Date : 26-FEB-2010 07:37

Operator : YS1 Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 26-Feb-2010 11:25 yip00818 Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d

Als bottle: 9 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			
2.031	2.031	0.000	4424608 1000.00	1010	80.00- 120.00	100.00
2.124	2.124	0.000	2498229 1000.00	1030	36.46- 76.46	56.46
2.150	2.150	0.000	10538061 1000.00	1010	218.17- 258.17	238.17

Average of Peak Amounts = 1.02e+03

Data File: /chem/ecdt.a.i/022610.b/009f0901.d  
Date : 26-FEB-2010 07:37  
Client ID: AR122101  
Sample Info: 14AR100104-21

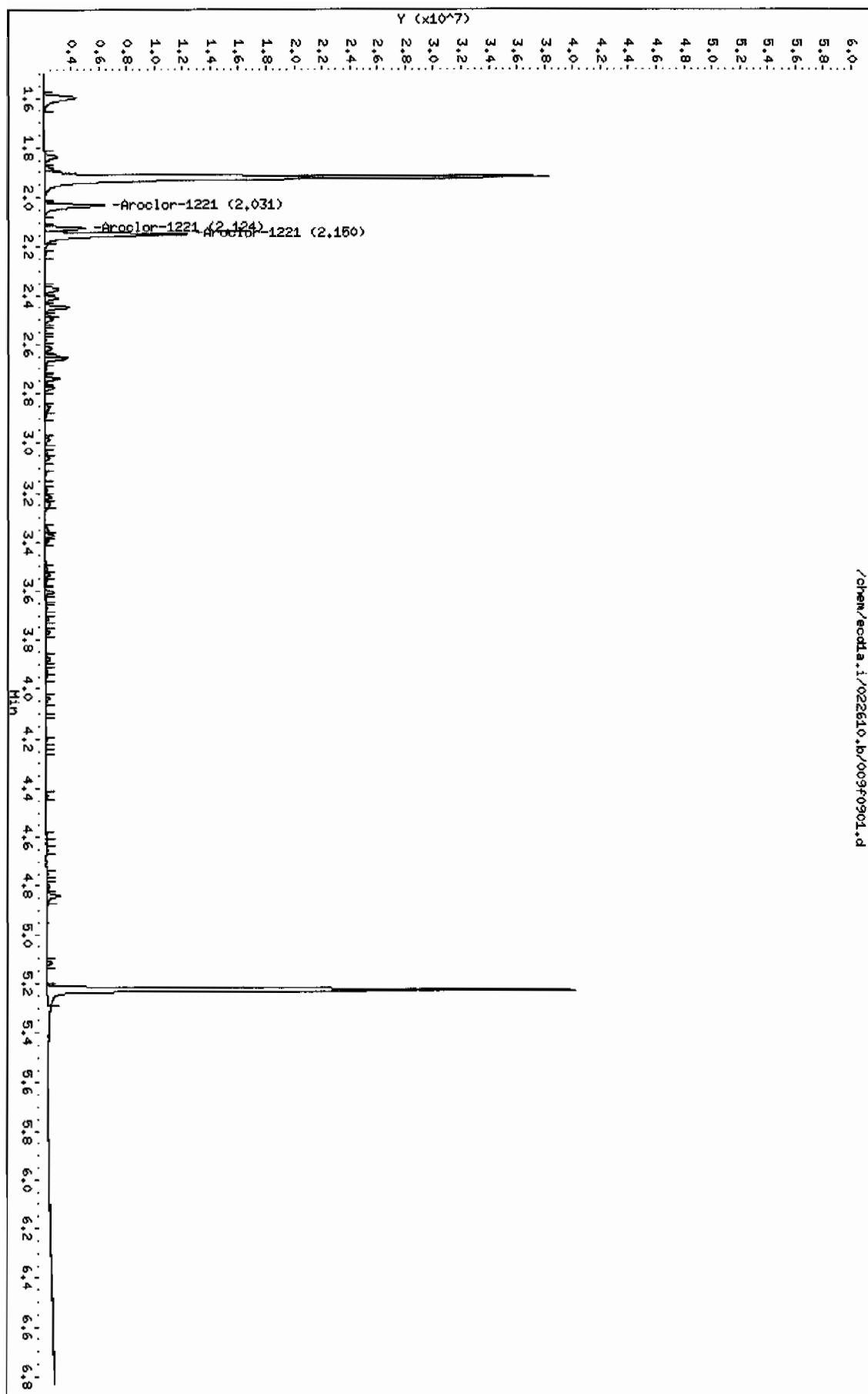
Instrument: ecdt.a.i

Page 1

Column phase: CLP1

Operator: YSL  
Column diameter: 0.25

/chem/ecdt.a.i/022610.b/009f0901.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022610.b/009b0901.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 26-FEB-2010 07:37

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecd1a.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 26-Feb-2010 11:27 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 9

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

2.474	2.474	0.000	3421188	1000.00	997 80.00- 120.00	100.00
2.569	2.569	0.000	2200553	1000.00	1020 44.32- 84.32	64.32
2.609	2.609	0.000	7647036	1000.00	1040 203.52- 243.52	223.52

Average of Peak Amounts = 1.02e+03

Data File: /chem/ecdl1.i/022610.b/009b0901.d  
Date : 26-FEB-2010 07:37  
Client ID: AR122101  
Sample Info: IMR100104-21

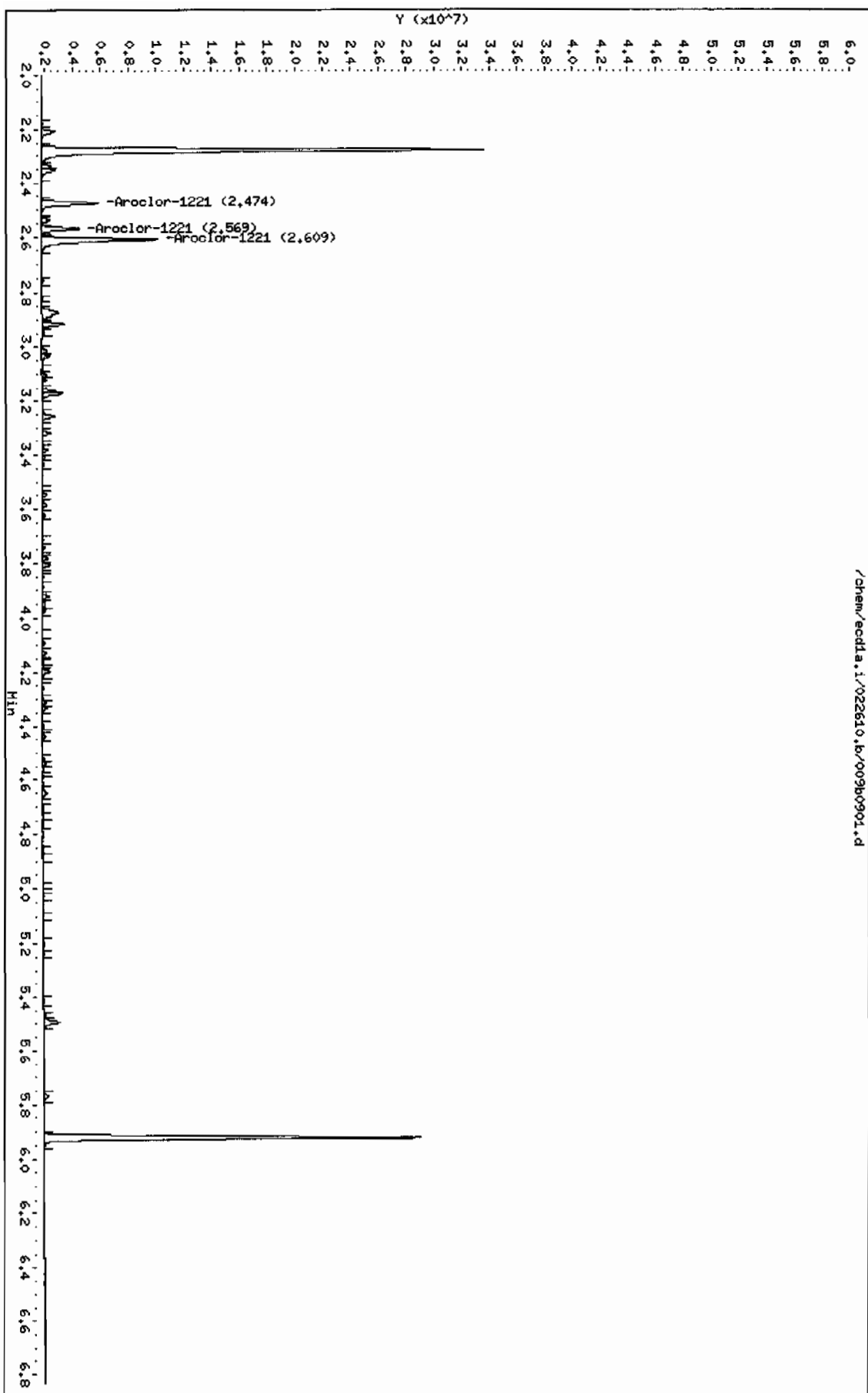
Instrument: ecdl1.i

Page 1

Column phase: CLP2

Operator: YSL  
Column diameter: 0.25

/chem/ecdl1.i/022610.b/009b0901.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/051f5101.d

Lab Smp Id: WAR100222-60 05

Client Smp ID: AR166005

Inj Date : 26-FEB-2010 15:51

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 05

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 01-Mar-2010 06:19 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 51

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

1.917	1.917	0.000	40292487	100.000	93.6 80.00- 120.00	100.00
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\$ 12 Decachlorobiphenyl

CAS #: 2051-24-3

5.225	5.226	-0.001	30072854	100.000	97.9 80.00- 120.00	100.00
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1 Aroclor-1016

CAS #: 12674-11-2

2.371	2.371	0.000	13742029	1000.00	893 80.00- 120.00	100.00
2.657	2.659	-0.002	18119076	1000.00	994 108.62- 148.62	131.85
2.737	2.739	-0.002	11401559	1000.00	945 62.93- 102.93	82.97
2.775	2.776	-0.001	6906918	1000.00	973 30.56- 70.56	50.26
2.986	2.987	-0.001	8746177	1000.00	981 44.73- 84.73	63.65

Average of Peak Amounts = 957

7 Aroclor-1260

CAS #: 11096-82-5

3.712	3.714	-0.002	16830207	1000.00	986 80.00- 120.00	100.00
3.875	3.876	-0.001	25281195	1000.00	1070 129.59- 169.59	150.21
4.037	4.039	-0.002	26929676	1000.00	1080 141.00- 181.00	160.01
4.105	4.107	-0.002	15211827	1000.00	1060 70.55- 110.55	90.38
4.247	4.249	-0.002	15812022	1000.00	1100 73.92- 113.92	93.95

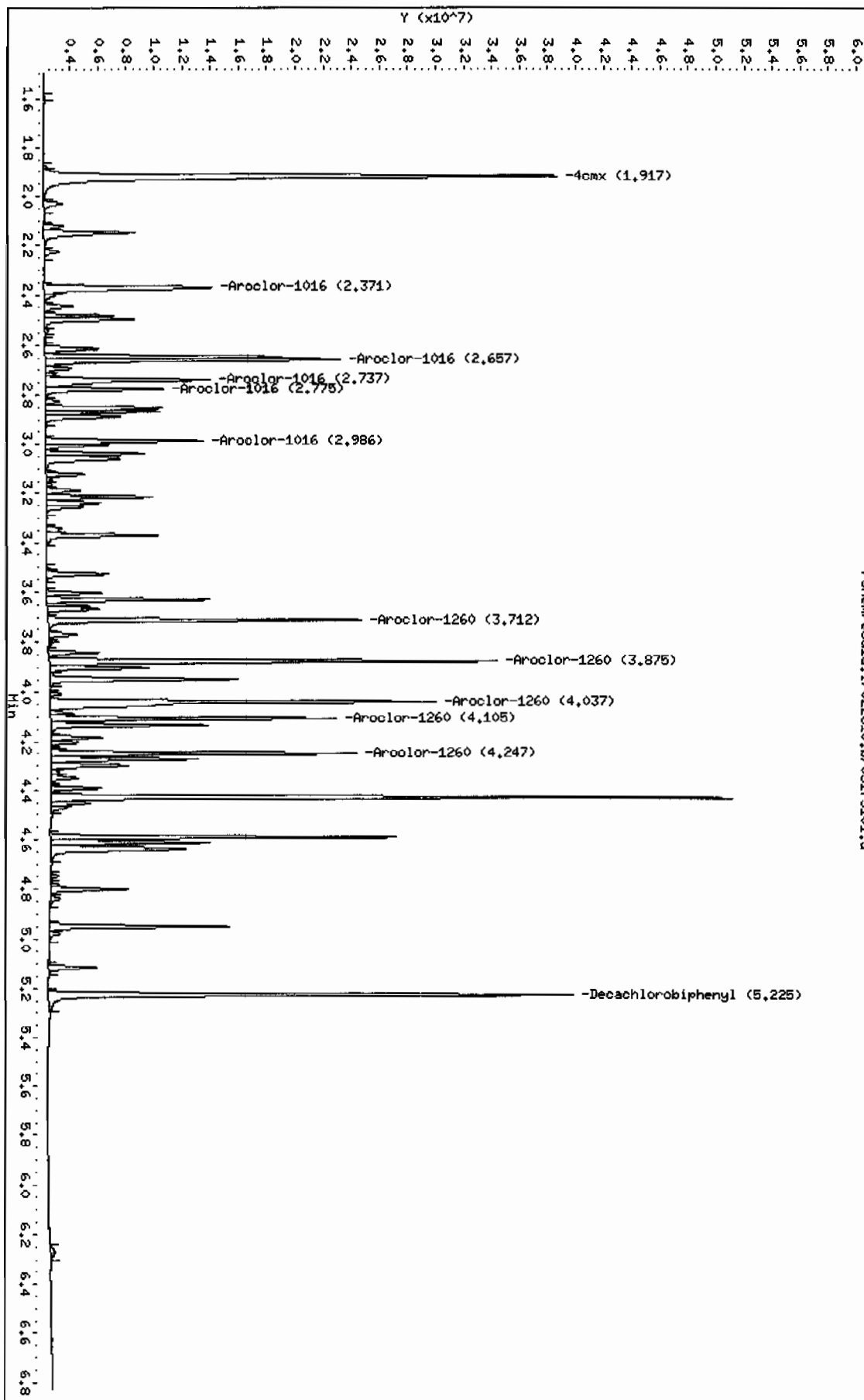
Average of Peak Amounts = 1.06e+03

Data File: /chem/ecdt.a.i/022610.b/051f5101.d  
Date: 26-FEB-2010 15:51  
Client ID: AR16005  
Sample Info: IWR100222-60 05

Column phase: CLP1

Instrument: ecdt.a.i  
Operator: YSI  
Column diameter: 0.25

/chem/ecdt.a.i/022610.b/051f5101.d



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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/051b5101.d

Lab Smp Id: WAR100222-60 05

Client Smp ID: AR166005

Inj Date : 26-FEB-2010 15:51

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 05

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m

Meth Date : 01-Mar-2010 06:02 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036b3601.d

Als bottle: 51

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx						
				CAS #: 877-09-8		
2.276	2.276	0.000	28094576 100.000	94.5	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl						
				CAS #: 2051-24-3		
5.920	5.922	-0.002	20067044 100.000	94.9	80.00- 120.00	100.00
-----						
1 Aroclor-1016						
				CAS #: 12674-11-2		
3.172	3.173	-0.001	12757892 1000.00	998	80.00- 120.00	100.00
3.256	3.256	0.000	8304138 1000.00	931	46.87- 86.87	65.09
3.319	3.319	0.000	5181257 1000.00	958	21.67- 61.67	40.61
3.546	3.547	-0.001	6717891 1000.00	971	32.51- 72.51	52.66
3.622	3.623	-0.001	6213156 1000.00	967	39.64- 79.64	48.70
Average of Peak Amounts =				965		
-----						
7 Aroclor-1260						
				CAS #: 11096-82-5		
4.311	4.313	-0.002	12548872 1000.00	950	80.00- 120.00	100.00
4.436	4.438	-0.002	15364458 1000.00	987	103.03- 143.03	122.44
4.702	4.704	-0.002	11557506 1000.00	976	72.18- 112.18	92.10
4.876	4.877	-0.001	12007108 1000.00	984	75.21- 115.21	95.68
5.022	5.024	-0.002	26939299 1000.00	1020	193.96- 233.96	214.68
Average of Peak Amounts =				983		
-----						

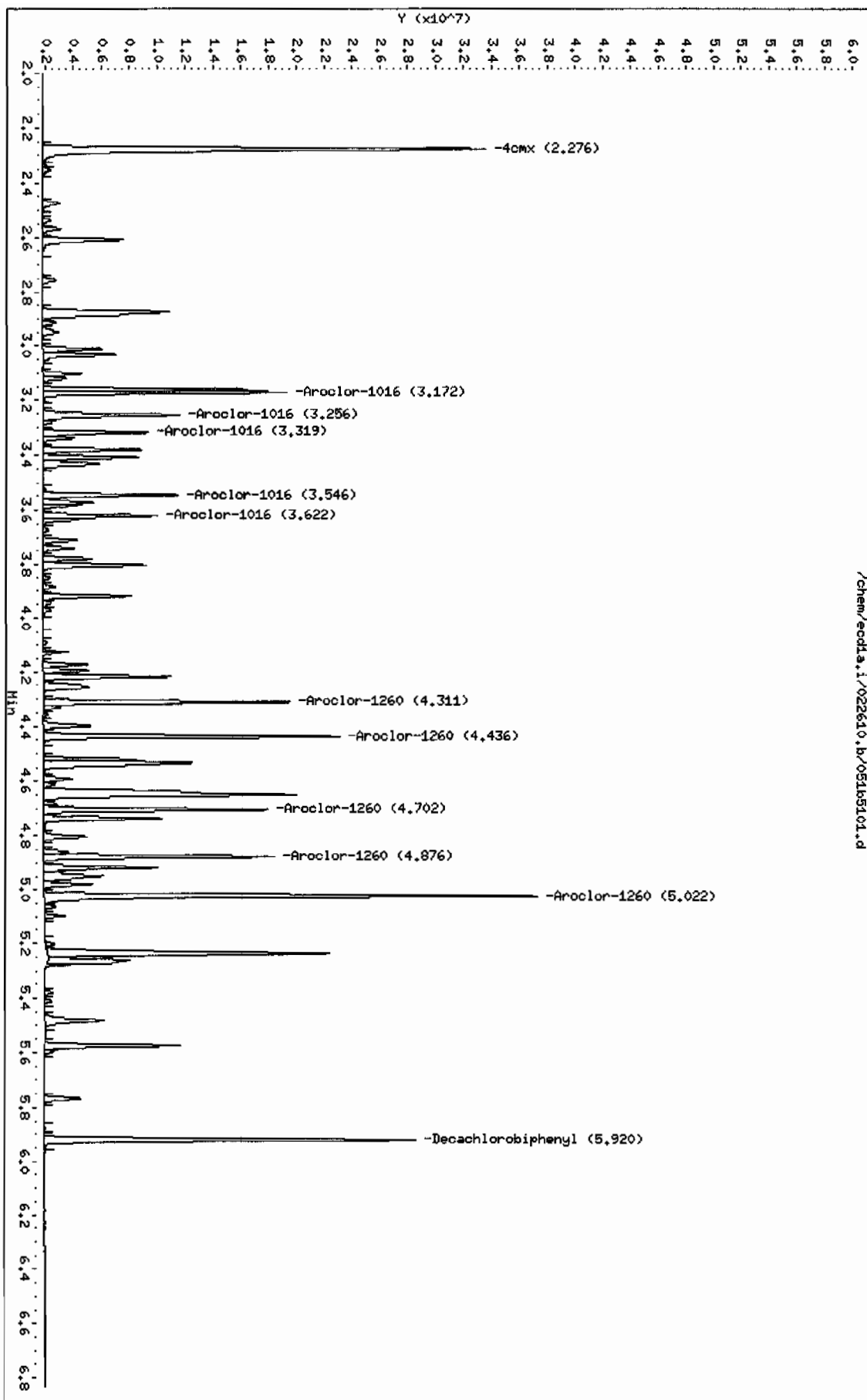
Data File: /chem/ecdt1a.i/022610.b/051b5101.d  
Date: 26-FEB-2010 15:51  
Client ID: 6R166005  
Sample Info: 1MAR100222-60 05

Instrument: ecdt1a.i

Page 1

Column phase: CLP2

Operator: YSL  
Column diameter: 0.25





GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/061f6101.d

Lab Smp Id: WAR100222-60 06

Client Smp ID: AR166006

Inj Date : 26-FEB-2010 17:57

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100222-60 06

Misc Info :

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 01-Mar-2010 06:03 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 61

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
1.918	1.917	0.001	40573382	100.000	94.2	80.00- 120.00	100.00	
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.224	5.226	-0.002	30167683	100.000	98.2	80.00- 120.00	100.00	
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
2.371	2.371	0.000	13866265	1000.00	901	80.00- 120.00	100.00	
2.657	2.659	-0.002	18250449	1000.00	1000	111.62- 151.62	131.62	
2.737	2.739	-0.002	11490812	1000.00	952	62.87- 102.87	82.87	
2.776	2.776	0.000	6955332	1000.00	980	30.16- 70.16	50.16	
2.986	2.987	-0.001	8914344	1000.00	1000	44.29- 84.29	64.29	
Average of Peak Amounts =					967			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.712	3.714	-0.002	17003584	1000.00	996	80.00- 120.00	100.00	
3.874	3.876	-0.002	25489037	1000.00	1080	129.90- 169.90	149.90	
4.036	4.039	-0.003	27358854	1000.00	1100	140.90- 180.90	160.90	
4.104	4.107	-0.003	15388147	1000.00	1070	70.50- 110.50	90.50	
4.247	4.249	-0.002	16000117	1000.00	1110	74.10- 114.10	94.10	
Average of Peak Amounts =					1.07e+03			

Data File: /chem/ecdl1.i/022610.b/061f6101.d

Date : 26-FEB-2010 17:57

Client ID: AR166006

Sample Info: IWR100222-60 06

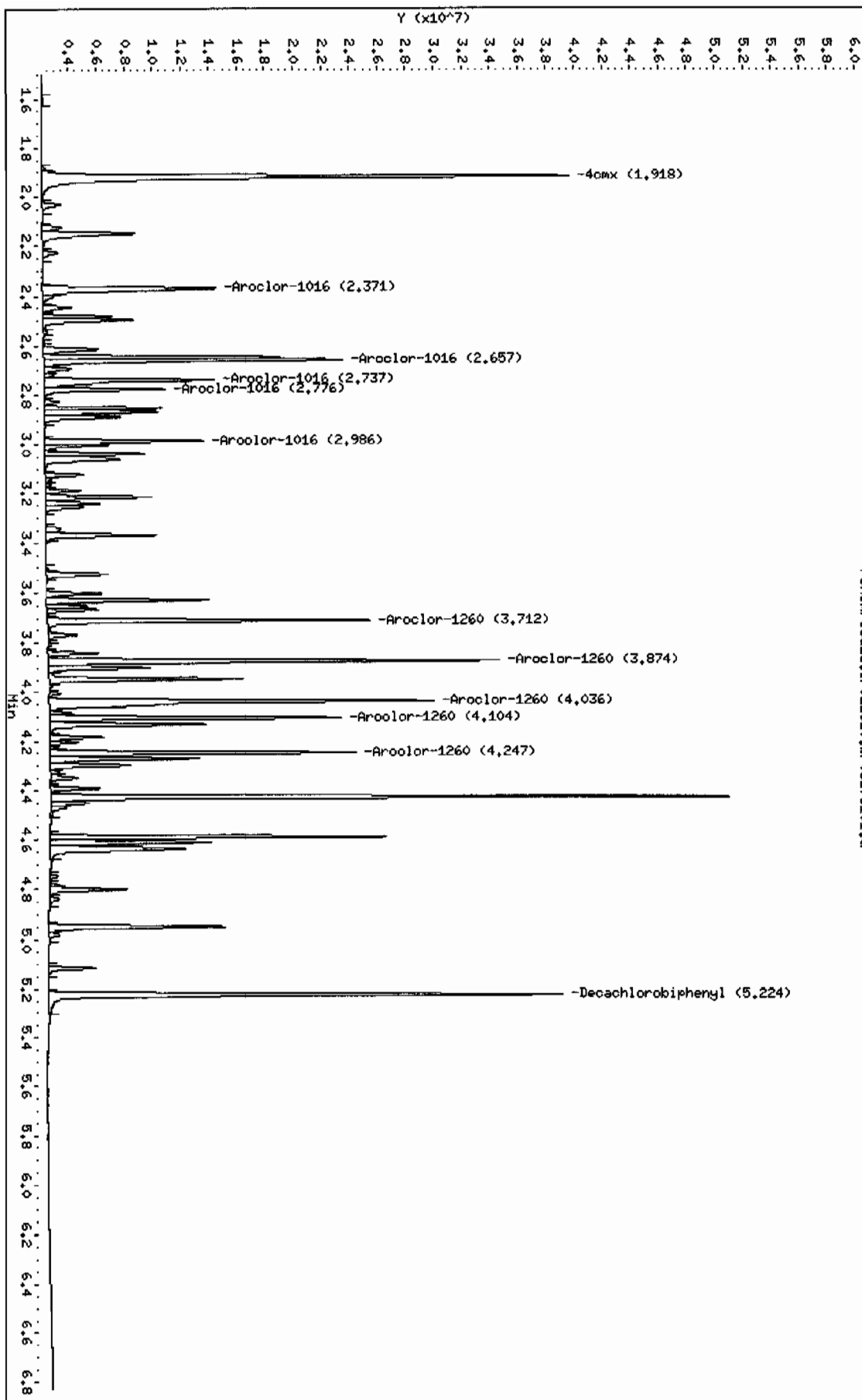
Column phase: CLP1

Instrument: ecdl1.i

Operator: YSI

Column diameter: 0.25

/chem/ecdl1.i/022610.b/061f6101.d



Data File: /chem/ecdla.i/022610.b/061b6101.d  
Report Date: 01-Mar-2010 07:17

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/061b6101.d  
Lab Smp Id: WAR100222-60 06 Client Smp ID: AR166006  
Inj Date : 26-FEB-2010 17:57  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |WAR100222-60 06  
Misc Info :  
Comment :  
Method : /chem/ecdla.i/022610.b/ECD1-B-8082-022210.m  
Meth Date : 01-Mar-2010 06:02 yip00818 Quant Type: ESTD  
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d  
Als bottle: 61 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: AR1660.sub  
Target Version: 3.50 Sample Matrix: None  
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE ( ug/L)	ON-COL ( ug/L)	TARGET RANGE	RATIO
<hr/>						
\$ 11 4cmx			CAS #: 877-09-8			
2.277	2.276	0.001	28372998 100.000	95.4	80.00- 120.00	100.00
<hr/>						
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.921	5.922	-0.001	19749535 100.000	93.4	80.00- 120.00	100.00
<hr/>						
1 Aroclor-1016			CAS #: 12674-11-2			
3.172	3.173	-0.001	12447362 1000.00	973	80.00- 120.00	100.00 (M)
3.255	3.256	-0.001	8323887 1000.00	933	46.87- 86.87	66.87
3.318	3.319	-0.001	5186298 1000.00	959	21.67- 61.67	41.67
3.545	3.547	-0.002	6720262 1000.00	972	32.51- 72.51	53.99
3.621	3.623	-0.002	6292041 1000.00	979	39.64- 79.64	50.55
Average of Peak Amounts =			963			
<hr/>						
7 Aroclor-1260			CAS #: 11096-82-5			
4.312	4.313	-0.001	12508093 1000.00	947	80.00- 120.00	100.00
4.437	4.438	-0.001	15388858 1000.00	988	103.03- 143.03	123.03
4.702	4.704	-0.002	11529422 1000.00	973	72.18- 112.18	92.18
4.876	4.877	-0.001	11909080 1000.00	976	75.21- 115.21	95.21
5.022	5.024	-0.002	26762600 1000.00	1010	193.96- 233.96	213.96
Average of Peak Amounts =			979			
<hr/>						

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/022610.b/061b6101.d

Date: 26-FEB-2010 17:57

Client ID: AR166006

Sample Info: 11MR100222-60 06

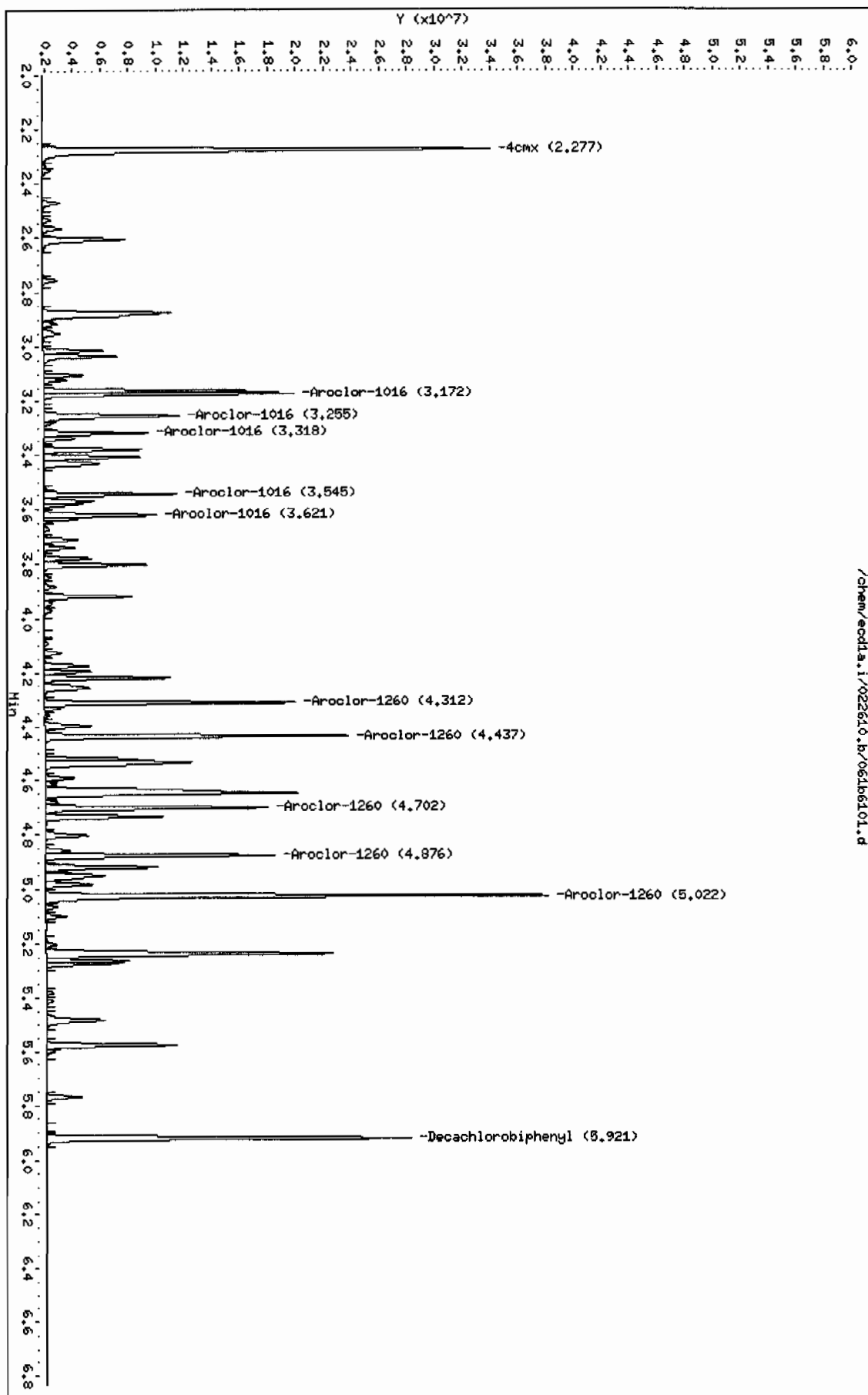
Page 1

Column phase: CLP2

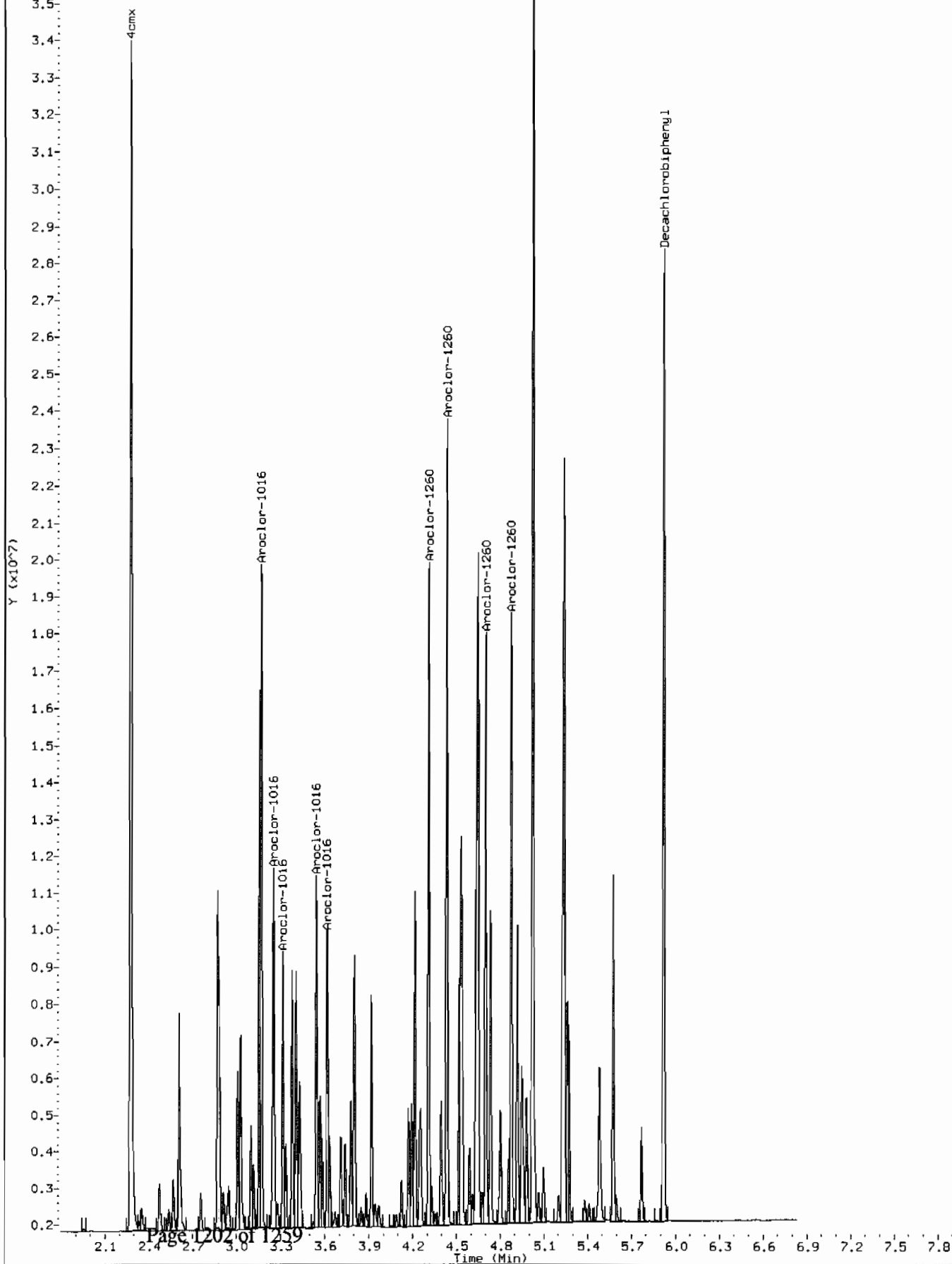
Instrument: eodla.i

Operator: YSL

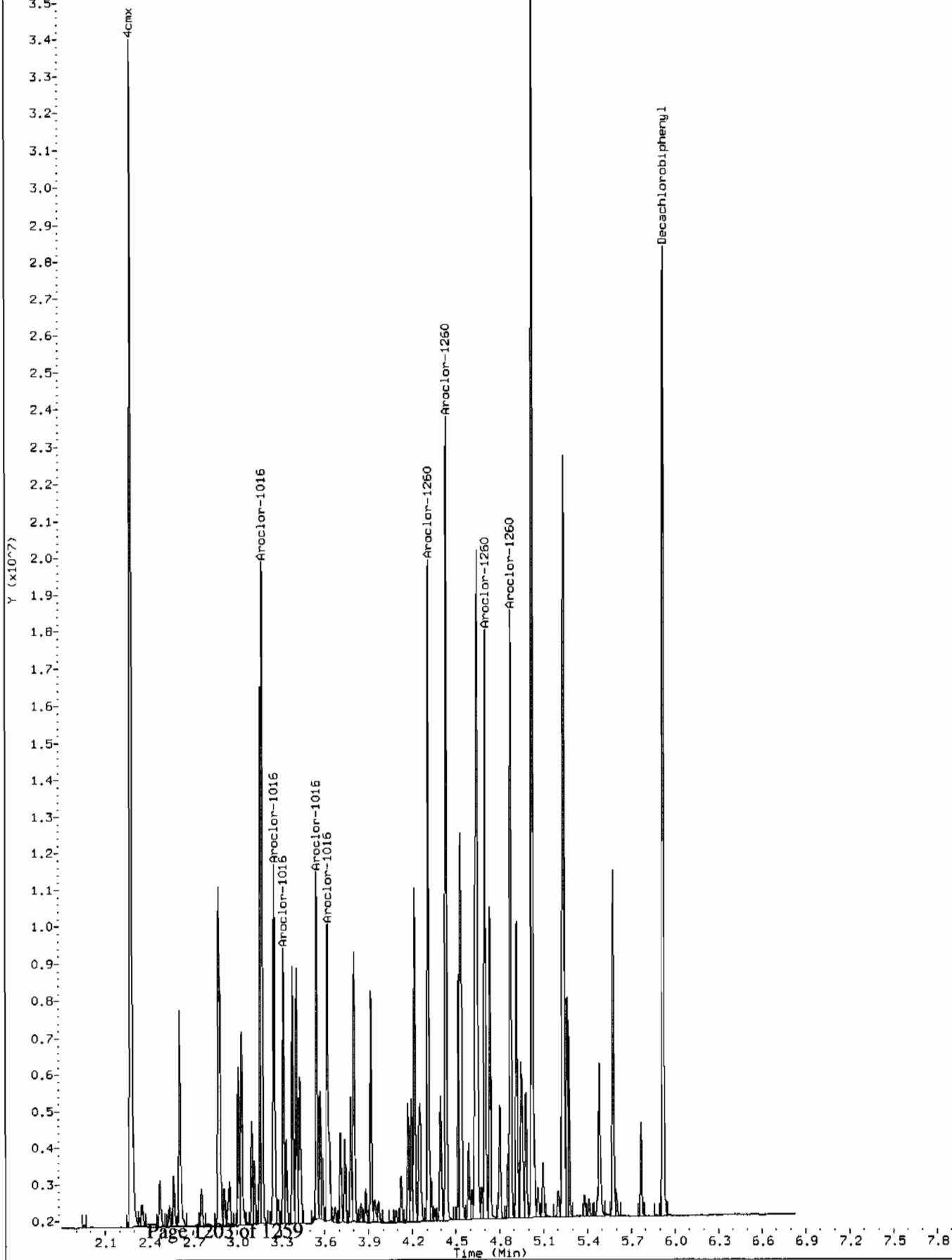
Column diameter: 0.25



Comment: Manually Integrated  
Data File: /chem/ecdla.i/022610.b/61b6101.d  
Operator: YS1  
Injection Date: 26-FEB-2010 17:57  
Instrument: ecdla.i  
Client Sample ID: AR166006



Comment: Before manual integration  
Data File: /chem/ecdl1a.i/022610.b/orig-061b6101.d  
Operator: YS1  
Injection Date: 26-FEB-2010 17:57  
Instrument: ecd1a.i  
Client Sample ID: AR166006



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/072f7201.d  
 Lab Smp Id: WAR100222-60 07 Client Smp ID: AR166007  
 Inj Date : 26-FEB-2010 20:16  
 Operator : YSl Inst ID: ecdla.i  
 Smp Info : |WAR100222-60 07  
 Misc Info :  
 Comment :  
 Method : /chem/ecdla.i/022610.b/ECD1-F-8082-022210.m  
 Meth Date : 01-Mar-2010 06:19 yip00818 Quant Type: ESTD  
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d  
 Als bottle: 72 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: AR1660.sub  
 Target Version: 3.50 Sample Matrix: None  
 Processing Host: hpc1p1

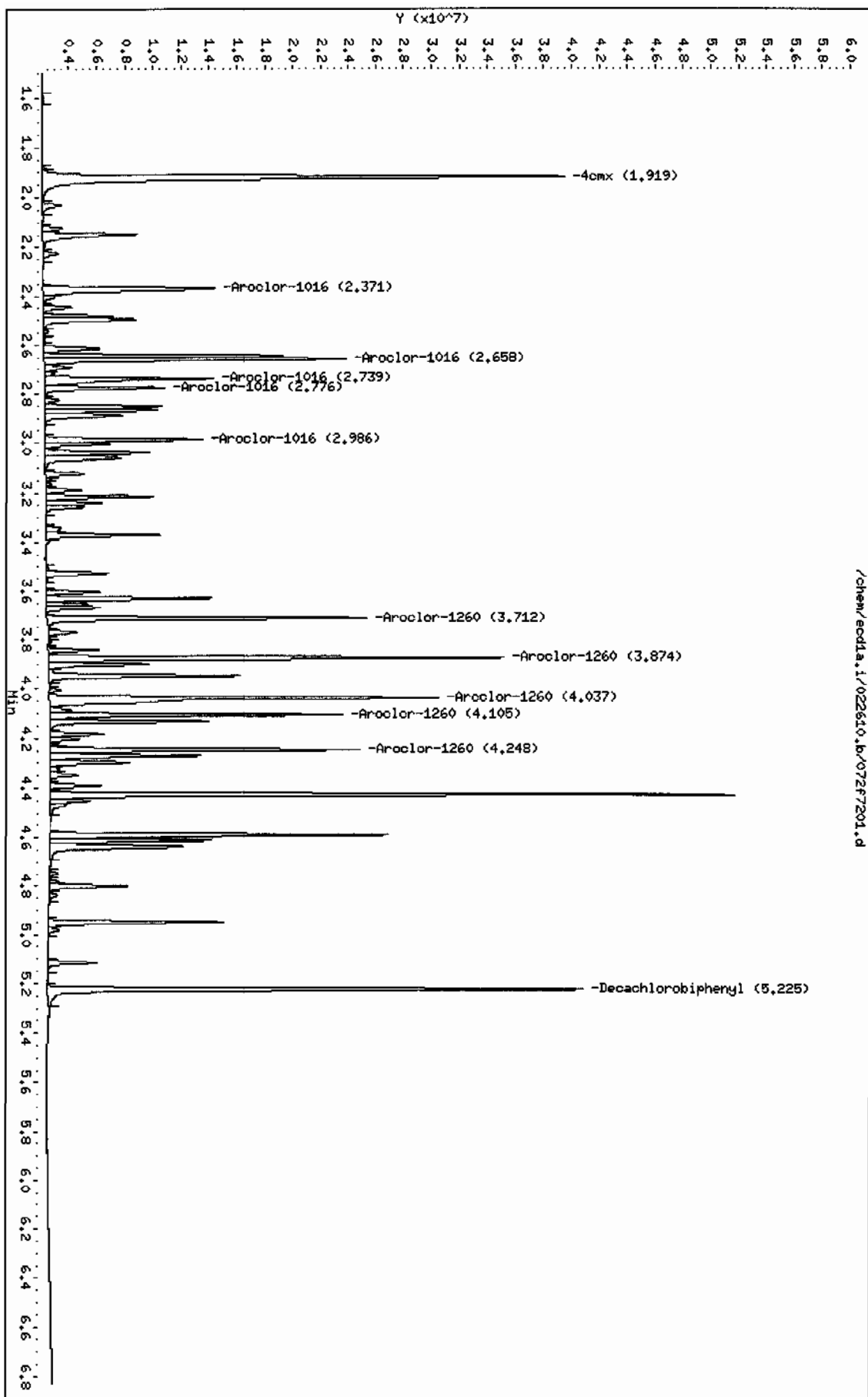
AMOUNTS							
			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.919	1.917	0.002	40986979	100.000	95.2	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.225	5.226	-0.001	30295626	100.000	98.6	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
2.371	2.371	0.000	13954918	1000.00	907	80.00- 120.00	100.00
2.658	2.659	-0.001	17948290	1000.00	984	108.62- 148.62	128.62
2.739	2.739	0.000	11573328	1000.00	959	62.93- 102.93	82.93
2.776	2.776	0.000	7055683	1000.00	994	30.56- 70.56	50.56
2.986	2.987	-0.001	9032352	1000.00	1010	44.73- 84.73	64.73
Average of Peak Amounts =					972		
-----							
7 Aroclor-1260					CAS #: 11096-82-5		
3.712	3.714	-0.002	17136710	1000.00	1000	80.00- 120.00	100.00
3.874	3.876	-0.002	25634028	1000.00	1080	129.59- 169.59	149.59
4.037	4.039	-0.002	27589382	1000.00	1100	141.00- 181.00	161.00
4.105	4.107	-0.002	15517103	1000.00	1080	70.55- 110.55	90.55
4.248	4.249	-0.001	16094752	1000.00	1120	73.92- 113.92	93.92
Average of Peak Amounts =					1.08e+03		
-----							



Data File: /chem/ecdl1.i/022610.b/072f7201.d  
Date: 26-FEB-2010 20:16  
Client ID: AR166007  
Sample Info: MWRT00222-60 07

Column Phase: CLP1

Instrument: ecdl1.i  
Operator: YSL  
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/072b7201.d  
Lab Smp Id: WAR100222-60 07 Client Smp ID: AR166007  
Inj Date : 26-FEB-2010 20:16  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |WAR100222-60 07  
Misc Info :  
Comment :  
Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m  
Meth Date : 01-Mar-2010 06:02 yip00818 Quant Type: ESTD  
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d  
Als bottle: 72 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			
2.277	2.276	0.001	28673821	100.000	96.4	80.00-	120.00	100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.921	5.922	-0.001	19536526	100.000	92.4	80.00-	120.00	100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.173	3.173	0.000	13062814	1000.00	1020	80.00-	120.00	100.00
3.256	3.256	0.000	8424665	1000.00	945	46.87-	86.87	64.49
3.319	3.319	0.000	5258635	1000.00	973	21.67-	61.67	40.26
3.547	3.547	0.000	6791871	1000.00	982	33.99-	73.99	51.99
3.622	3.623	-0.001	6291170	1000.00	979	30.55-	70.55	48.16
Average of Peak Amounts =					980			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
4.312	4.313	-0.001	12537191	1000.00	949	80.00-	120.00	100.00
4.437	4.438	-0.001	15390272	1000.00	989	103.03-	143.03	122.76
4.703	4.704	-0.001	11565059	1000.00	976	72.18-	112.18	92.25
4.876	4.877	-0.001	12008566	1000.00	984	75.21-	115.21	95.78
5.024	5.024	0.000	26828530	1000.00	1010	193.96-	233.96	213.99
Average of Peak Amounts =					982			

Data File: /chem/eodla.i/022610.b/072b7201.d

Date : 26-FEB-2010 20:16

Client ID: AR16007

Sample Info: IMR100222-60 07

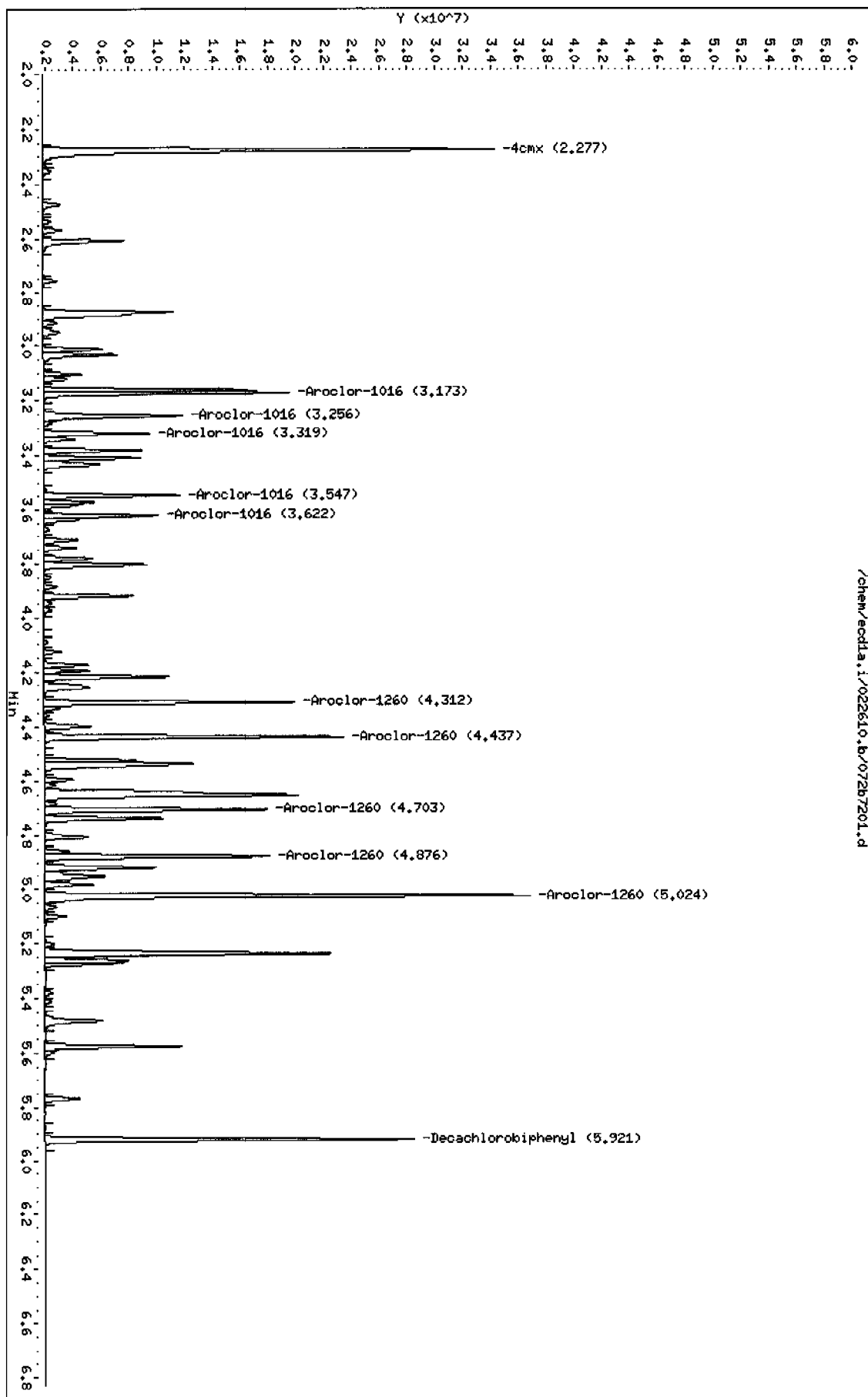
Page 1

Column phase: CLP2

Instrument: eodla.i

Operator: YSI

Column diameter: 0.25



8D  
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1950

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 1.92				DCB: 5.23			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT	#
01	PIBLK01	WAR100219-99	02/22/10 0559	1.92		5.23	
02	ZZZZZ	ZZZZZ	02/22/10 0610	1.92		5.23	
03	ZZZZZ	ZZZZZ	02/22/10 0620	1.92		5.23	
04	DDTANALOGSTD	WAR091219-DD	02/22/10 0631				
05	AR123201	WAR100104-32	02/22/10 0641				
06	AR122101	WAR100104-21	02/22/10 0652				
07	AR126201	WAR100104-62	02/22/10 0703				
08	AR166001	WAR100222-01	02/22/10 0713	1.92		5.23	
09	AR166002	WAR100222-02	02/22/10 0724	1.92		5.23	
10	AR166003	WAR100222-03	02/22/10 0734	1.92		5.23	
11	AR166004	WAR100222-04	02/22/10 0745	1.92		5.23	
12	AR166005	IAR100104-01	02/22/10 0755	1.92		5.23	
13	AR166001	WAR100203-60	02/22/10 0806	1.92		5.23	
14	AR125401	WAR100222-05	02/22/10 0816				
15	AR125402	WAR100222-06	02/22/10 0827				
16	AR125403	WAR100222-07	02/22/10 0837				
17	AR125404	WAR100222-08	02/22/10 0848				
18	AR125405	IAR100219-02	02/22/10 0859				
19	AR125401	WAR100219-54	02/22/10 0909				
20	AR124201	WAR100222-09	02/22/10 0920				
21	AR124202	WAR100222-10	02/22/10 0930				
22	AR124203	WAR100222-11	02/22/10 0941				
23	AR124204	WAR100222-12	02/22/10 0951				
24	AR124205	IAR100219-01	02/22/10 1002				
25	AR124201	WAR100219-42	02/22/10 1012				
26	AR124801	WAR100222-13	02/22/10 1023				
27	AR124802	WAR100222-14	02/22/10 1033				
28	AR124803	WAR100222-15	02/22/10 1044				
29	AR124805	IAR100211-01	02/22/10 1054				
30	AR124804	WAR100222-16	02/22/10 1105				
31	AR124801	WAR091217-48	02/22/10 1116				
32	AR126801	WAR100222-17	02/22/10 1126				

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.: 10-1950

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.92		DCB: 5.23			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR126802	WAR100222-18	02/22/10 1137		
02	AR126803	WAR100222-19	02/22/10 1147		
03	AR126804	WAR100222-20	02/22/10 1158		
04	AR126805	IAR100104-05	02/22/10 1208		
05	AR126801	WAR100107-68	02/22/10 1219		
06	PIBLK02	WAR100219-99	02/22/10 1229	1.92	5.23
07	ZZZZZ	ZZZZZ	02/22/10 1240	1.92	5.23
08	ZZZZZ	ZZZZZ	02/22/10 1250	1.93	5.23
09	ZZZZZ	ZZZZZ	02/22/10 1301	1.92	5.23
10	ZZZZZ	ZZZZZ	02/22/10 1314	1.92	5.23
11	ZZZZZ	ZZZZZ	02/22/10 1326	1.92	5.23
12	ZZZZZ	ZZZZZ	02/22/10 1339	1.92	5.23
13	ZZZZZ	ZZZZZ	02/22/10 1351	1.92	5.23
14	ZZZZZ	ZZZZZ	02/22/10 1404	1.92	5.23
15	ZZZZZ	ZZZZZ	02/22/10 1417	1.92	5.23
16	ZZZZZ	ZZZZZ	02/22/10 1430	1.92	5.23
17	AR166002	WAR100203-60	02/22/10 1442	1.92	5.23
18	PIBLK03	WAR100219-99	02/22/10 1453	1.92	5.23
19	ZZZZZ	ZZZZZ	02/22/10 1503	1.92	5.23
20	ZZZZZ	ZZZZZ	02/22/10 1516	1.92	5.23
21	ZZZZZ	ZZZZZ	02/22/10 1528	1.92	5.23
22	ZZZZZ	ZZZZZ	02/22/10 1541	1.92	5.23
23	ZZZZZ	ZZZZZ	02/22/10 1554	1.92	5.23
24	ZZZZZ	ZZZZZ	02/22/10 1606	1.92	5.23
25	ZZZZZ	ZZZZZ	02/22/10 1619	1.92	5.23
26	ZZZZZ	ZZZZZ	02/22/10 1632	1.92	5.23
27	ZZZZZ	ZZZZZ	02/22/10 1644	1.92	5.23
28	ZZZZZ	ZZZZZ	02/22/10 1657	1.92	5.23
29	AR166003	WAR100203-60	02/22/10 1710	1.92	5.23
30	PIBLK04	WAR100219-99	02/22/10 1722	1.92	5.23
31	ZZZZZ	ZZZZZ	02/22/10 1735	1.92	5.23
32	ZZZZZ	ZZZZZ	02/22/10 1748	1.92	5.23

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.: 10-1950

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.29			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100219-99	02/22/10	0559	2.29	5.93
02	ZZZZZ	ZZZZZ	02/22/10	0610	2.29	5.94
03	ZZZZZ	ZZZZZ	02/22/10	0620	2.29	5.94
04	DDTANALOGSTD	WAR091219-DD	02/22/10	0631		
05	AR123201	WAR100104-32	02/22/10	0641		
06	AR122101	WAR100104-21	02/22/10	0652		
07	AR126201	WAR100104-62	02/22/10	0703		
08	AR166001	WAR100222-01	02/22/10	0713	2.29	5.94
09	AR166002	WAR100222-02	02/22/10	0724	2.29	5.94
10	AR166003	WAR100222-03	02/22/10	0734	2.29	5.94
11	AR166004	WAR100222-04	02/22/10	0745	2.29	5.94
12	AR166005	IAR100104-01	02/22/10	0755	2.29	5.94
13	AR166001	WAR100203-60	02/22/10	0806	2.29	5.94
14	AR125401	WAR100222-05	02/22/10	0816		
15	AR125402	WAR100222-06	02/22/10	0827		
16	AR125403	WAR100222-07	02/22/10	0837		
17	AR125404	WAR100222-08	02/22/10	0848		
18	AR125405	IAR100219-02	02/22/10	0859		
19	AR125401	WAR100219-54	02/22/10	0909		
20	AR124201	WAR100222-09	02/22/10	0920		
21	AR124202	WAR100222-10	02/22/10	0930		
22	AR124203	WAR100222-11	02/22/10	0941		
23	AR124204	WAR100222-12	02/22/10	0951		
24	AR124205	IAR100219-01	02/22/10	1002		
25	AR124201	WAR100219-42	02/22/10	1012		
26	AR124801	WAR100222-13	02/22/10	1023		
27	AR124802	WAR100222-14	02/22/10	1033		
28	AR124803	WAR100222-15	02/22/10	1044		
29	AR124805	IAR100211-01	02/22/10	1054		
30	AR124804	WAR100222-16	02/22/10	1105		
31	AR124801	WAR091217-48	02/22/10	1116		
32	AR126801	WAR100222-17	02/22/10	1126		

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.: 10-1950

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.29			DCB: 5.94			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR126802	WAR100222-18	02/22/10	1137		
02	AR126803	WAR100222-19	02/22/10	1147		
03	AR126804	WAR100222-20	02/22/10	1158		
04	AR126805	IAR100104-05	02/22/10	1208		
05	AR126801	WAR100107-68	02/22/10	1219		
06	PIBLK02	WAR100219-99	02/22/10	1229	2.29	5.94
07	ZZZZZ	ZZZZZ	02/22/10	1240	2.29	5.94
08	ZZZZZ	ZZZZZ	02/22/10	1250	2.29	5.94
09	ZZZZZ	ZZZZZ	02/22/10	1301	2.29	5.94
10	ZZZZZ	ZZZZZ	02/22/10	1314	2.29	5.94
11	ZZZZZ	ZZZZZ	02/22/10	1326	2.29	5.94
12	ZZZZZ	ZZZZZ	02/22/10	1339	2.29	5.93
13	ZZZZZ	ZZZZZ	02/22/10	1351	2.29	5.93
14	ZZZZZ	ZZZZZ	02/22/10	1404	2.29	5.94
15	ZZZZZ	ZZZZZ	02/22/10	1417	2.29	5.93
16	ZZZZZ	ZZZZZ	02/22/10	1430	2.29	5.93
17	AR166002	WAR100203-60	02/22/10	1442	2.29	5.94
18	PIBLK03	WAR100219-99	02/22/10	1453	2.29	5.94
19	ZZZZZ	ZZZZZ	02/22/10	1503	2.29	5.94
20	ZZZZZ	ZZZZZ	02/22/10	1516	2.29	5.93
21	ZZZZZ	ZZZZZ	02/22/10	1528	2.29	5.93
22	ZZZZZ	ZZZZZ	02/22/10	1541	2.29	5.94
23	ZZZZZ	ZZZZZ	02/22/10	1554	2.29	5.93
24	ZZZZZ	ZZZZZ	02/22/10	1606	2.29	5.93
25	ZZZZZ	ZZZZZ	02/22/10	1619	2.29	5.94
26	ZZZZZ	ZZZZZ	02/22/10	1632	2.29	5.93
27	ZZZZZ	ZZZZZ	02/22/10	1644	2.29	5.93
28	ZZZZZ	ZZZZZ	02/22/10	1657	2.29	5.93
29	AR166003	WAR100203-60	02/22/10	1710	2.29	5.93
30	PIBLK04	WAR100219-99	02/22/10	1722	2.29	5.93
31	ZZZZZ	ZZZZZ	02/22/10	1735	2.29	5.93
32	ZZZZZ	ZZZZZ	02/22/10	1748	2.29	5.94

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.

page 2 of 2

FORM VIII PEST

OLM03.0

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.: 10-1950

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.92			DCB: 5.23			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100219-99	02/26/10	0613	1.91	5.22
02	ZZZZZ	ZZZZZ	02/26/10	0624	1.92	5.22
03	AR125401	WAR100219-54	02/26/10	0634		
04	AR124201	WAR100219-42	02/26/10	0645		
05	AR124801	WAR100223-48	02/26/10	0655		
06	AR126801	WAR100107-68	02/26/10	0706		
07	AR166001	WAR100222-60	02/26/10	0716	1.92	5.23
08	AR123201	WAR100104-32	02/26/10	0727		
09	AR122101	WAR100104-21	02/26/10	0737		
10	AR126201	WAR100104-62	02/26/10	0748		
11	DDTANALOGSTD	WAR091219-DD	02/26/10	0758		
12	PIBLK02	WAR100219-99	02/26/10	0809	1.92	5.23
13	ZZZZZ	ZZZZZ	02/26/10	0819	1.92	5.23
14	ZZZZZ	ZZZZZ	02/26/10	0830	1.92	5.23
15	ZZZZZ	ZZZZZ	02/26/10	0843	1.92	5.22
16	AR166002	WAR100222-60	02/26/10	0855	1.92	5.22
17	PIBLK03	WAR100219-99	02/26/10	0906	1.92	5.23
18	ZZZZZ	ZZZZZ	02/26/10	0916	1.92	5.23
19	ZZZZZ	ZZZZZ	02/26/10	0927	1.92	5.22
20	ZZZZZ	ZZZZZ	02/26/10	0937	1.92	5.23
21	ZZZZZ	ZZZZZ	02/26/10	0948	1.92	5.23
22	ZZZZZ	ZZZZZ	02/26/10	0958	1.92	5.23
23	ZZZZZ	ZZZZZ	02/26/10	1009	1.92	5.23
24	ZZZZZ	ZZZZZ	02/26/10	1019	1.92	5.22
25	ZZZZZ	ZZZZZ	02/26/10	1030	1.92	5.22
26	ZZZZZ	ZZZZZ	02/26/10	1042	1.92	5.22
27	ZZZZZ	ZZZZZ	02/26/10	1055	1.92	5.22
28	AR166003	WAR100222-60	02/26/10	1109	1.92	5.22
29	PIBLK04	WAR100219-99	02/26/10	1120	1.92	5.23
30	ZZZZZ	ZZZZZ	02/26/10	1130	1.92	5.23
31	ZZZZZ	ZZZZZ	02/26/10	1143	1.92	5.23
32	ZZZZZ	ZZZZZ	02/26/10	1155	1.92	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.: 10-1950

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.92			DCB: 5.23			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	02/26/10	1208	1.92	5.22
02	ZZZZZ	ZZZZZ	02/26/10	1221	1.92	5.22
03	ZZZZZ	ZZZZZ	02/26/10	1233	1.92	5.22
04	ZZZZZ	ZZZZZ	02/26/10	1246	1.92	5.22
05	ZZZZZ	ZZZZZ	02/26/10	1259	1.92	5.23
06	ZZZZZ	ZZZZZ	02/26/10	1311	1.92	5.22
07	ZZZZZ	ZZZZZ	02/26/10	1324	1.92	5.22
08	AR166004	WAR100222-60	02/26/10	1336	1.92	5.22
09	PIBLK05	WAR100219-99	02/26/10	1347	1.92	5.23
10	ZZZZZ	ZZZZZ	02/26/10	1358	1.92	5.22
11	ZZZZZ	ZZZZZ	02/26/10	1410	1.92	5.22
12	ZZZZZ	ZZZZZ	02/26/10	1423	1.92	5.22
13	ZZZZZ	ZZZZZ	02/26/10	1435	1.92	5.22
14	ZZZZZ	ZZZZZ	02/26/10	1448	1.92	5.22
15	ZZZZZ	ZZZZZ	02/26/10	1500	1.92	5.22
16	ZZZZZ	ZZZZZ	02/26/10	1513	1.92	5.22
17	ZZZZZ	ZZZZZ	02/26/10	1526	1.92	5.22
18	ZZZZZ	ZZZZZ	02/26/10	1538	1.92	5.22
19	AR166005	WAR100222-60	02/26/10	1551	1.92	5.22
20	PIBLK06	WAR100219-99	02/26/10	1603	1.92	5.22
21	PBLK01	1202053872	02/26/10	1616	1.92	5.22
22	PBLK01LCS	1202053873	02/26/10	1629	1.92	5.22
23	ZZZZZ	ZZZZZ	02/26/10	1641	1.92	5.22
24	ZZZZZ	ZZZZZ	02/26/10	1654	1.92	5.23
25	ZZZZZ	ZZZZZ	02/26/10	1707	1.92	5.22
26	ZZZZZ	ZZZZZ	02/26/10	1719	1.92	5.22
27	ZZZZZ	ZZZZZ	02/26/10	1732	1.92	5.22
28	ZZZZZ	ZZZZZ	02/26/10	1745	1.92	5.22
29	AR166006	WAR100222-60	02/26/10	1757	1.92	5.22
30	PIBLK07	WAR100219-99	02/26/10	1810	1.92	5.22
31	ZZZZZ	ZZZZZ	02/26/10	1822	1.92	5.22
32	ZZZZZ	ZZZZZ	02/26/10	1835	1.92	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.: 10-1950

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 1.92				DCB: 5.23			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
							#
01	ZZZZZ	ZZZZZ	02/26/10	1848	1.92		5.22
02	RE15-10-8303	247562008	02/26/10	1900	1.92		5.22
03	RE15-10-8302	247562009	02/26/10	1913	1.92		5.22
04	ZZZZZ	ZZZZZ	02/26/10	1926	1.92		5.22
05	ZZZZZ	ZZZZZ	02/26/10	1938	1.92		5.22
06	ZZZZZ	ZZZZZ	02/26/10	1951	1.92		5.22
07	ZZZZZ	ZZZZZ	02/26/10	2003	1.92		5.22
08	AR166007	WAR100222-60	02/26/10	2016	1.92		5.23
09	PIBLK08	WAR100219-99	02/26/10	2029	1.92		5.22
10	ZZZZZ	ZZZZZ	02/26/10	2041	1.92		5.22
11	ZZZZZ	ZZZZZ	02/26/10	2054	1.92		5.22
12							
13							
14							
15							
16							
17							
18							
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.: 10-1950  
 GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10  
 Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.28		DCB: 5.92			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	02/26/10	0613	
02	ZZZZZ	ZZZZZ	02/26/10	0624	
03	AR125401	WAR100219-54	02/26/10	0634	
04	AR124201	WAR100219-42	02/26/10	0645	
05	AR124801	WAR100223-48	02/26/10	0655	
06	AR126801	WAR100107-68	02/26/10	0706	
07	AR166001	WAR100222-60	02/26/10	0716	
08	AR123201	WAR100104-32	02/26/10	0727	
09	AR122101	WAR100104-21	02/26/10	0737	
10	AR126201	WAR100104-62	02/26/10	0748	
11	DDTANALOGSTD	WAR091219-DD	02/26/10	0758	
12	PIBLK02	WAR100219-99	02/26/10	0809	
13	ZZZZZ	ZZZZZ	02/26/10	0819	
14	ZZZZZ	ZZZZZ	02/26/10	0830	
15	ZZZZZ	ZZZZZ	02/26/10	0843	
16	AR166002	WAR100222-60	02/26/10	0855	
17	PIBLK03	WAR100219-99	02/26/10	0906	
18	ZZZZZ	ZZZZZ	02/26/10	0916	
19	ZZZZZ	ZZZZZ	02/26/10	0927	
20	ZZZZZ	ZZZZZ	02/26/10	0937	
21	ZZZZZ	ZZZZZ	02/26/10	0948	
22	ZZZZZ	ZZZZZ	02/26/10	0958	
23	ZZZZZ	ZZZZZ	02/26/10	1009	
24	ZZZZZ	ZZZZZ	02/26/10	1019	
25	ZZZZZ	ZZZZZ	02/26/10	1030	
26	ZZZZZ	ZZZZZ	02/26/10	1042	
27	ZZZZZ	ZZZZZ	02/26/10	1055	
28	AR166003	WAR100222-60	02/26/10	1109	
29	PIBLK04	WAR100219-99	02/26/10	1120	
30	ZZZZZ	ZZZZZ	02/26/10	1130	
31	ZZZZZ	ZZZZZ	02/26/10	1143	
32	ZZZZZ	ZZZZZ	02/26/10	1155	

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.: 10-1950

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.28			DCB: 5.92			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	ZZZZZ	02/26/10	1208	2.28	5.92	
02	ZZZZZ	02/26/10	1221	2.28	5.92	
03	ZZZZZ	02/26/10	1233	2.28	5.92	
04	ZZZZZ	02/26/10	1246	2.28	5.92	
05	ZZZZZ	02/26/10	1259	2.28	5.92	
06	ZZZZZ	02/26/10	1311	2.28	5.92	
07	ZZZZZ	02/26/10	1324	2.28	5.92	
08	AR166004	WAR100222-60	1336	2.28	5.92	
09	PIBLK05	WAR100219-99	1347	2.28	5.92	
10	ZZZZZ	02/26/10	1358	2.28	5.92	
11	ZZZZZ	02/26/10	1410	2.28	5.92	
12	ZZZZZ	02/26/10	1423	2.28	5.92	
13	ZZZZZ	02/26/10	1435	2.28	5.92	
14	ZZZZZ	02/26/10	1448	2.28	5.92	
15	ZZZZZ	02/26/10	1500	2.28	5.92	
16	ZZZZZ	02/26/10	1513	2.28	5.92	
17	ZZZZZ	02/26/10	1526	2.28	5.92	
18	ZZZZZ	02/26/10	1538	2.28	5.92	
19	AR166005	WAR100222-60	1551	2.28	5.92	
20	PIBLK06	WAR100219-99	1603	2.28	5.92	
21	PBLK01	1202053872	1616	2.28	5.92	
22	PBLK01LCS	1202053873	1629	2.28	5.92	
23	ZZZZZ	02/26/10	1641	2.28	5.92	
24	ZZZZZ	02/26/10	1654	2.28	5.92	
25	ZZZZZ	02/26/10	1707	2.28	5.92	
26	ZZZZZ	02/26/10	1719	2.28	5.92	
27	ZZZZZ	02/26/10	1732	2.28	5.92	
28	ZZZZZ	02/26/10	1745	2.28	5.92	
29	AR166006	WAR100222-60	1757	2.28	5.92	
30	PIBLK07	WAR100219-99	1810	2.28	5.92	
31	ZZZZZ	02/26/10	1822	2.28	5.92	
32	ZZZZZ	02/26/10	1835	2.28	5.92	

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.

page 2 of 3

FORM VIII PEST

OLM03.0

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.: 10-1950

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.28			DCB: 5.92			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	ZZZZZ	02/26/10	1848	2.28	5.92
02	RE15-10-8303	247562008	02/26/10	1900	2.28	5.92
03	RE15-10-8302	247562009	02/26/10	1913	2.28	5.92
04	ZZZZZ	ZZZZZ	02/26/10	1926	2.28	5.92
05	ZZZZZ	ZZZZZ	02/26/10	1938	2.28	5.92
06	ZZZZZ	ZZZZZ	02/26/10	1951	2.28	5.92
07	ZZZZZ	ZZZZZ	02/26/10	2003	2.28	5.92
08	AR166007	WAR100222-60	02/26/10	2016	2.28	5.92
09	PIBLK08	WAR100219-99	02/26/10	2029	2.28	5.92
10	ZZZZZ	ZZZZZ	02/26/10	2041	2.28	5.92
11	ZZZZZ	ZZZZZ	02/26/10	2054	2.28	5.92
12						
13						
14						
15						
16						
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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.

## Identification Summary

Page 1 of 1

SDG Number: 10-1950

Client ID: LCS for batch 957824

Lab Sample ID: 1202053873

Data File: 054f5401.d

Data File: 054b5401.d

Inst: ECD1A.I\_1

Inst: ECD1AJ\_2

Column: CLP1

Column: CLP2

Analyzed: 26-FEB-10 16:29

Analyzed: 26-FEB-10 16:29

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							.908
Column 1	1	2.37	2.34 – 2.4	24	26.3	ug/kg	
	2	2.66	2.63 – 2.69	26.5		ug/kg	
	3	2.74	2.71 – 2.77	26.9		ug/kg	
	4	2.78	2.75 – 2.81	26.8		ug/kg	
	5	2.99	2.96 – 3.02	27.2		ug/kg	
Column 2	1	3.17	3.14 – 3.2	27.2	26.5	ug/kg	
	2	3.26	3.23 – 3.29	25.5		ug/kg	
	3	3.32	3.29 – 3.35	26.3		ug/kg	
	4	3.55	3.52 – 3.58	26.9		ug/kg	
	5	3.62	3.59 – 3.65	26.7		ug/kg	
Aroclor-1260							4.05
Column 1	1	3.71	3.68 – 3.74	31.6	32.3	ug/kg	
	2	3.87	3.85 – 3.91	32.5		ug/kg	
	3	4.04	4.01 – 4.07	34.6		ug/kg	
	4	4.1	4.08 – 4.14	33.6		ug/kg	
	5	4.25	4.22 – 4.28	29.1		ug/kg	
Column 2	1	4.31	4.28 – 4.34	29.5	31	ug/kg	
	2	4.44	4.41 – 4.47	30.9		ug/kg	
	3	4.7	4.67 – 4.73	30.7		ug/kg	
	4	4.88	4.85 – 4.91	31.2		ug/kg	
	5	5.02	4.99 – 5.05	32.6		ug/kg	

## Identification Summary

Page 1 of 2

SDG Number: 10-1950

Client ID: RE15-10-8302

Lab Sample ID: 247562009

Data File: 067f6701.d

Data File: 067b6701.d

Inst: ECD1AJ\_1

Inst: ECD1AJ\_2

Column: CLP1

Column: CLP2

Analyzed: 26-FEB-10 19:13

Analyzed: 26-FEB-10 19:13

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
<b>Aroclor-1242</b>							21.7
<i>Column 1</i>	1	2.37	2.34 – 2.4	10.3		ug/kg	
	2	2.66	2.63 – 2.69	8.84		ug/kg	
	3	2.78	2.75 – 2.81	3.21		ug/kg	
	4	2.99	2.96 – 3.02	31.6		ug/kg	
	5	3.24	3.21 – 3.27	55.4		ug/kg	
					21.9		
<i>Column 2</i>	1	3.17	3.14 – 3.2	8.42		ug/kg	
	2	3.26	3.23 – 3.29	8.61		ug/kg	
	3	3.55	3.52 – 3.58	28.6		ug/kg	
	4	3.78	3.75 – 3.81	39.2		ug/kg	
	5	3.8	3.78 – 3.84	51.2		ug/kg	
					27.2		
<b>Aroclor-1254</b>							7.76
<i>Column 1</i>	1	3.21	3.19 – 3.25	26.7		ug/kg	
	2	3.37	3.34 – 3.4	31.2		ug/kg	
	3	3.6	3.57 – 3.63	29.5		ug/kg	
	4	3.77	3.74 – 3.8	37.8		ug/kg	
	5	3.87	3.85 – 3.91	30.7		ug/kg	
					31.2		
<i>Column 2</i>	1	3.38	3.35 – 3.41	28.1		ug/kg	
	2	3.8	3.77 – 3.83	31.6		ug/kg	
	3	3.92	3.89 – 3.95	28.5		ug/kg	
	4	4.19	4.17 – 4.23	27.3		ug/kg	
	5	4.33	4.3 – 4.36	28.8		ug/kg	
					28.9		

## Identification Summary

Page 2 of 2

SDG Number: 10-1950

Client ID: RE15-10-8302

Lab Sample ID: 247562009

Data File: 067f6701.d

Data File: 067b6701.d

Inst: ECD1A.I\_1

Inst: ECD1A.I\_2

Column: CLP1

Column: CLP2

Analyzed: 26-FEB-10 19:13

Analyzed: 26-FEB-10 19:13

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1260							48.5
Column 1	1	3.71	3.68 - 3.74	13.7		ug/kg	
	2	3.87	3.85 - 3.91	18.5		ug/kg	
	3	4.04	4.01 - 4.07	25.8		ug/kg	
	4	4.1	4.08 - 4.14	4.43		ug/kg	
	5	4.25	4.22 - 4.28	3.34		ug/kg	
					13.2		
Column 2	1	4.31	4.28 - 4.34	13.5		ug/kg	
	2	4.44	4.41 - 4.47	13.6		ug/kg	
	3	4.7	4.67 - 4.73	5.69		ug/kg	
	4	4.87	4.85 - 4.91	3.34		ug/kg	
	5	5.02	4.99 - 5.05	3.94		ug/kg	
					8.02		



# QUALITY CONTROL DATA

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

Page 1 of 1

SDG Number: 10-1950

Lab Sample ID: 1202053872

Client Sample: QC for batch 957824

Client ID: MB for batch 957824

Batch ID: 957825

Run Date: 02/26/2010 16:16

Prep Date: 02/25/2010 21:11

Data File: 053f5301-1.d  
053b5301-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD1A.J

Analyst: YS1

Aliquot: 30 g

Column: 1 CLP1  
2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022610.b/053f5301-2.d  
Lab Smp Id: 1202053872 Client Smp ID: PBLK01  
Inj Date : 26-FEB-2010 16:16  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202053872|1|  
Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecd1a.i/022610.b/ECD1-F-8082-022210.m  
Meth Date : 01-Mar-2010 06:19 yip00818 Quant Type: ESTD  
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d  
Als bottle: 53 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1950.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx						CAS #: 877-09-8	
1.918	1.917	0.001	61595973	143.035	4.8	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3	
5.224	5.226	-0.002	43479596	141.494	4.7	80.00- 120.00	100.00
-----							

Data File: /chem/ecdda.i/022610.b/053f5301-2.d

Date: 26-FEB-2010 16:16

Client ID: PBLK01

Sample Info: 1120205387211

Volume Injected (uL): 1.0

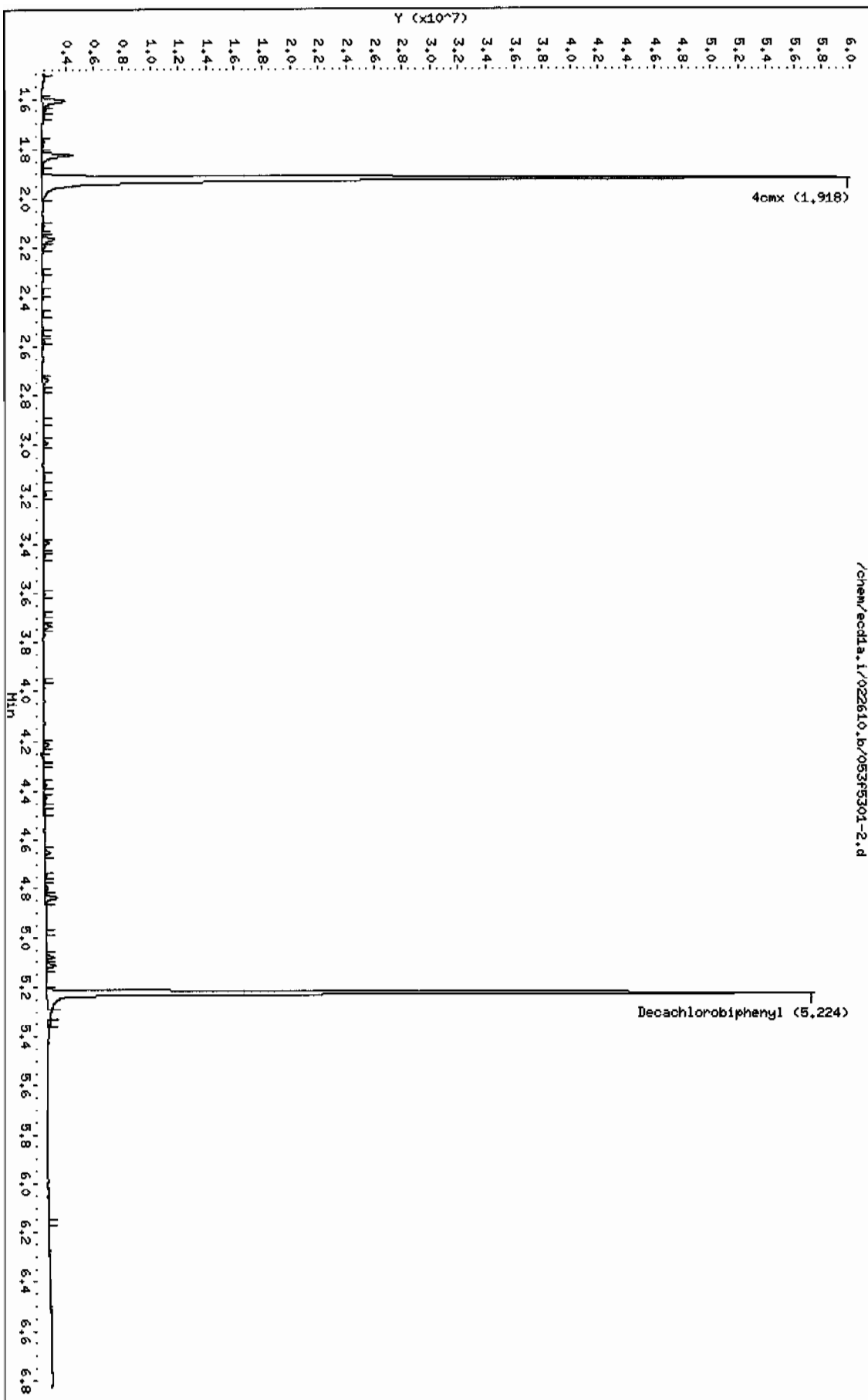
Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/022610.b/053b5301-2.d  
Report Date: 01-Mar-2010 09:07

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/053b5301-2.d  
Lab Smp Id: 1202053872 Client Smp ID: PBLK01  
Inj Date : 26-FEB-2010 16:16  
Operator : YS1 Inst ID: ecd1a.i  
Smp Info : |1202053872|1|  
Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|MB|||  
Comment :  
Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m  
Meth Date : 01-Mar-2010 07:25 yip00818 Quant Type: ESTD  
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d  
Als bottle: 53 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1950.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

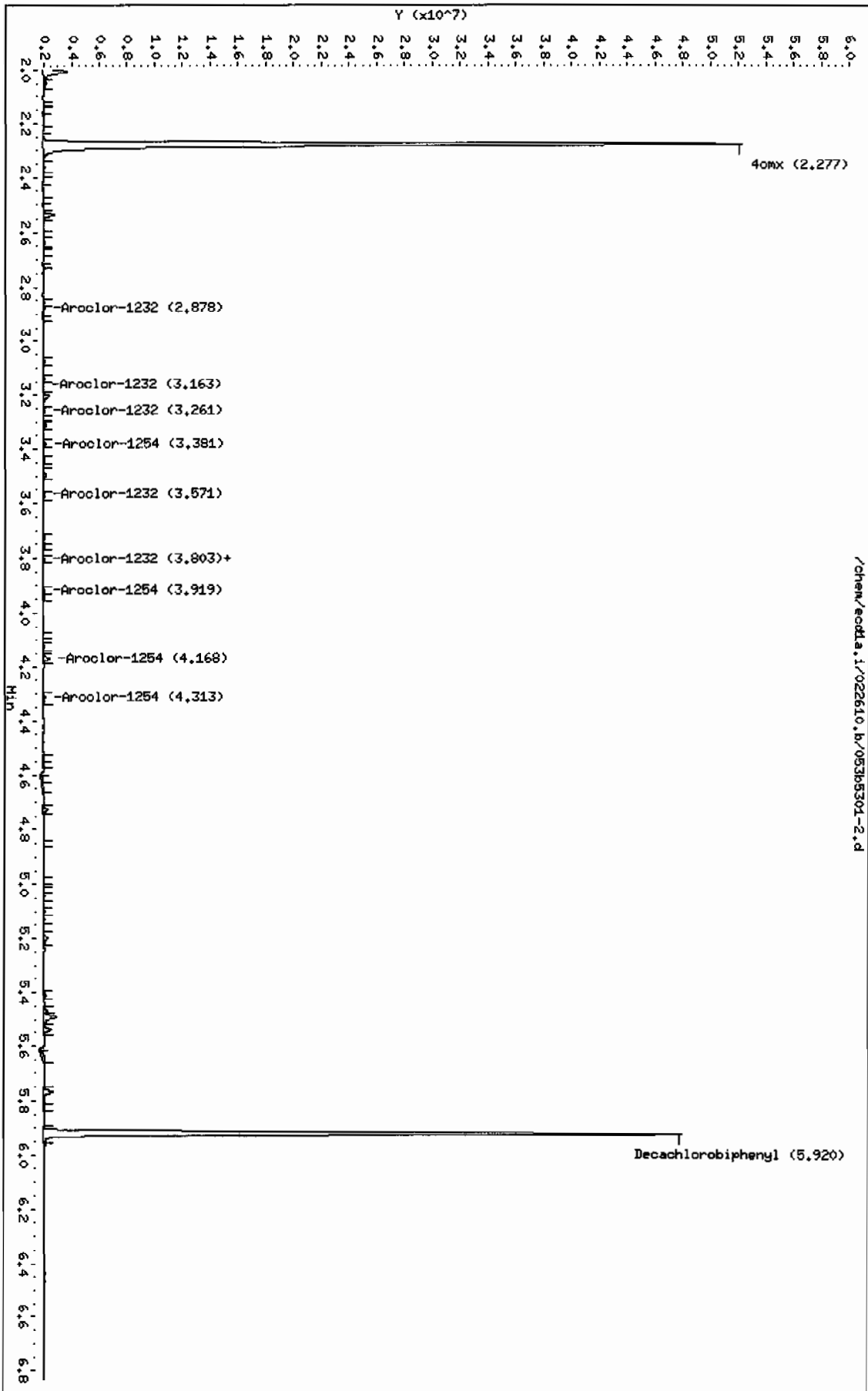
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
2.277	2.276	0.001	43427252 146.025	4.9	80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.920	5.922	-0.002	34851202 164.782	5.5	80.00- 120.00	100.00
-----						

Data File: /chem/ecdda.i/022610.b/053b5301-2.d  
Date: 26-FEB-2010 16:16  
Client ID: PBLK01  
Sample Info: 1120205387211  
Volume Injected (uL): 1.0  
Column Phase: CLP2

Instrument: ecdda.i  
Operator: YS1  
Column diameter: 0.25

Page 1



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

SDG Number: 10-1950

Lab Sample ID: 1202053873

Client Sample: QC for batch 957824

Client ID: LCS for batch 957824

Batch ID: 957825

Run Date: 02/26/2010 16:29

Prep Date: 02/25/2010 21:11

Data File: 054f5401-1.d

054b5401-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30 g

Column: 1 CLP1

2 CLP2

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		26.5	ug/kg	1.11	3.33	2
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260		32.3	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/022610.b/054f5401-2.d

Lab Smp Id: 1202053873

Client Smp ID: PBLK01LCS

Inj Date : 26-FEB-2010 16:29

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |1202053873|1|

Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|LCS|||

Comment :

Method : /chem/ecdl1a.i/022610.b/ECD1-F-8082-022210.m

Meth Date : 01-Mar-2010 06:19 yip00818

Quant Type: ESTD

Cal Date : 22-FEB-2010 12:08

Cal File: 036f3601.d

Als bottle: 54

QC Sample: LCS

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1950.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable

Local Compound Variable

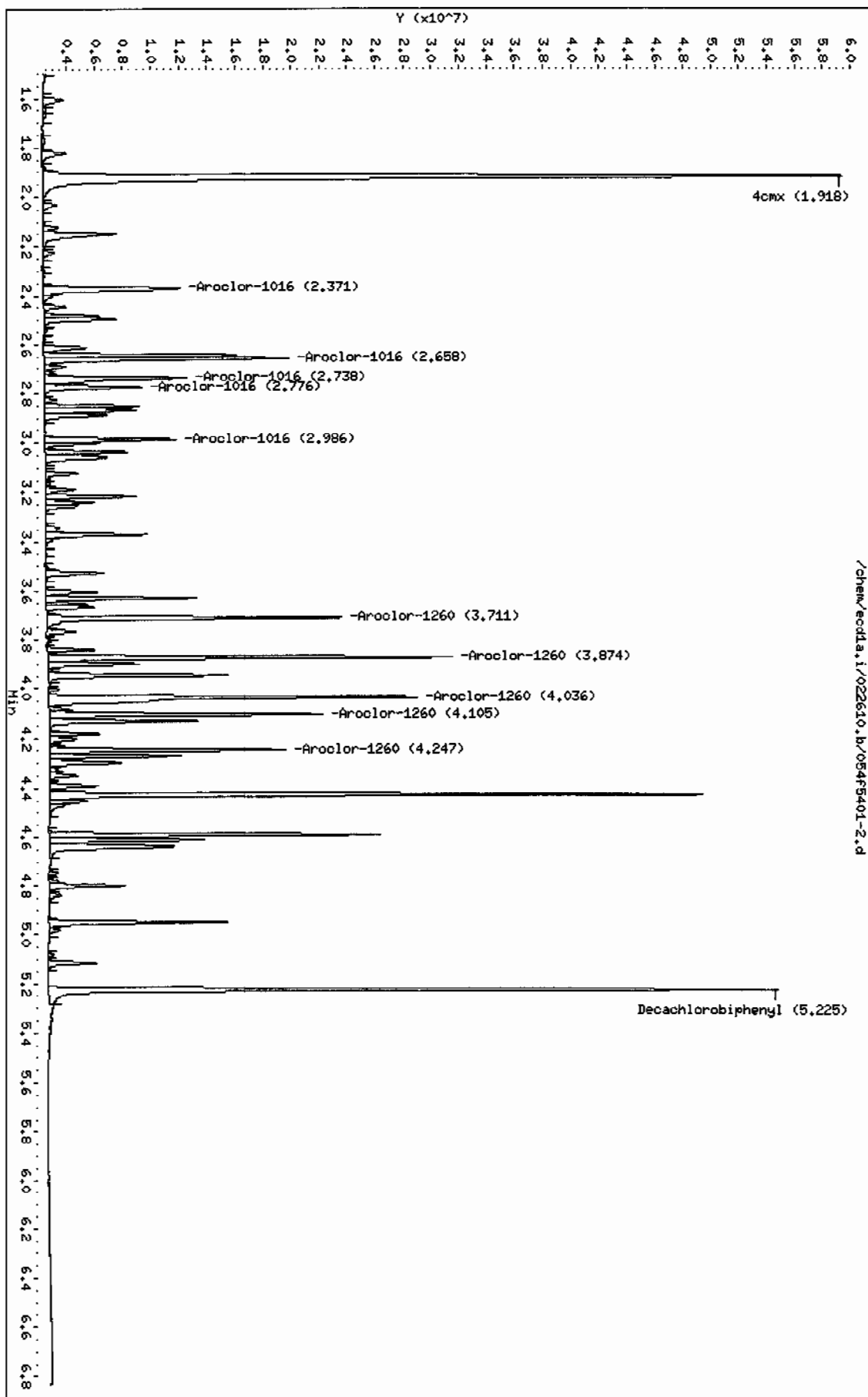
CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8				
1.918	1.917	0.001	62663065	145.513	4.8	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3				
5.225	5.226	-0.001	41509043	135.081	4.5	80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2				
2.371	2.371	0.000	11061717	719.024	24.0	80.00- 120.00	100.00
2.658	2.659	-0.001	14481191	794.055	26.5	108.62- 148.62	130.91
2.738	2.739	-0.001	9752934	808.334	26.9	62.93- 102.93	88.17
2.776	2.776	0.000	5698480	803.043	26.8	30.56- 70.56	51.52



CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
2.986	2.987	-0.001	7283168	817.214	27.2	44.73-	84.73	65.84
Average of Peak Concentrations =					26.3			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.711	3.714	-0.003	16181100	947.792	31.6	80.00-	120.00	100.00
3.874	3.876	-0.002	23041378	974.535	32.5	129.59-	169.59	142.40
4.036	4.039	-0.003	25926007	1038.23	34.6	141.00-	181.00	160.22
4.105	4.107	-0.002	14508324	1007.13	33.6	70.55-	110.55	89.66
4.247	4.249	-0.002	12586320	872.201	29.1	73.92-	113.92	77.78
Average of Peak Concentrations =					32.3			
-----								

Data File: /chem/eodla.i/022610.b/054f5401-2.d  
Date: 26-FEB-2010 16:29  
Client ID: PBLK01LCS  
Sample Info: 1120205387311  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: eodla.i  
Operator: YSA  
Column diameter: 0.25



Data File: /chem/ecdla.i/022610.b/054b5401-2.d  
Report Date: 01-Mar-2010 09:08

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/054b5401-2.d  
Lab Smp Id: 1202053873 Client Smp ID: PBLK01LCS  
Inj Date : 26-FEB-2010 16:29  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202053873|1|  
Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|LCS|  
Comment :  
Method : /chem/ecdla.i/022610.b/ECD1-B-8082-022210.m  
Meth Date : 01-Mar-2010 07:25 yip00818 Quant Type: ESTD  
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d  
Als bottle: 54 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: 10-1950.sub  
Target Version: 3.50 Sample Matrix: Soil  
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
2.277	2.276	0.001	43799043	147.275	4.9 80.00- 120.00	100.00
-----						
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.921	5.922	-0.001	35069795	165.816	5.5 80.00- 120.00	100.00
-----						
1 Aroclor-1016 CAS #: 12674-11-2						
3.172	3.173	-0.001	10418981	814.633	27.2 80.00- 120.00	100.00 (M)
3.256	3.256	0.000	6835950	766.540	25.6 44.49- 84.49	65.61
3.318	3.319	-0.001	4263199	788.604	26.3 20.26- 60.26	40.92
3.546	3.547	-0.001	5582327	807.203	26.9 31.99- 71.99	53.58

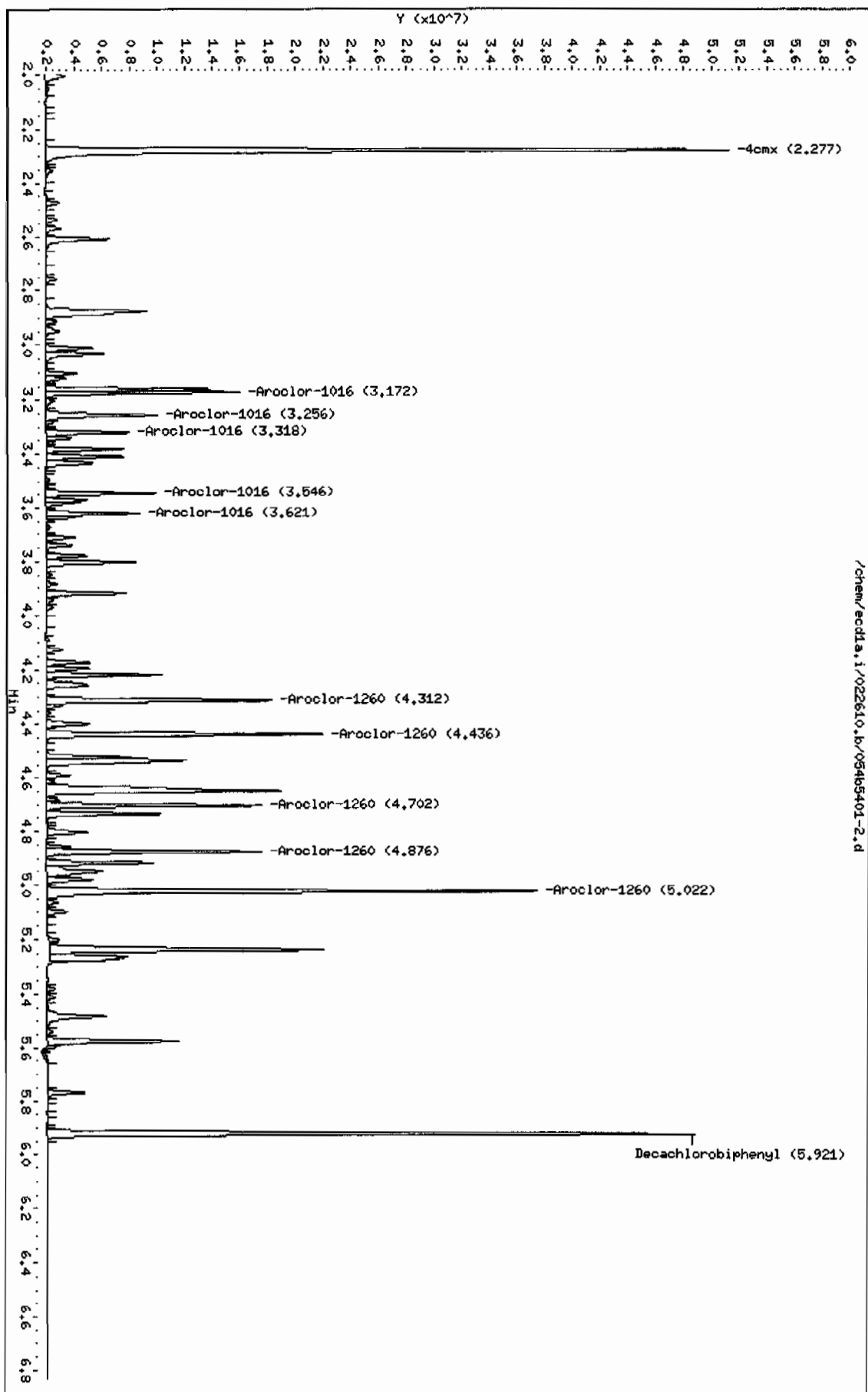
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
-	=====	=====	=====		=====	=====		=====	
1 Aroclor-1016 (continued)									
3.621	3.623	-0.002	5144339 800.649		26.7	28.16-	68.16	49.37	
Average of Peak Concentrations =					26.5				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.312	4.313	-0.001	11678868 884.385		29.5	80.00-	120.00	100.00	
4.436	4.438	-0.002	14415240 926.024		30.9	102.76-	142.76	123.43	
4.702	4.704	-0.002	10908167 921.026		30.7	72.25-	112.25	93.40	
4.876	4.877	-0.001	11438709 937.507		31.2	75.78-	115.78	97.94	
5.022	5.024	-0.002	25968197 978.928		32.6	193.99-	233.99	222.35	
Average of Peak Concentrations =					31.0				

#### QC Flag Legend

M - Compound response manually integrated.

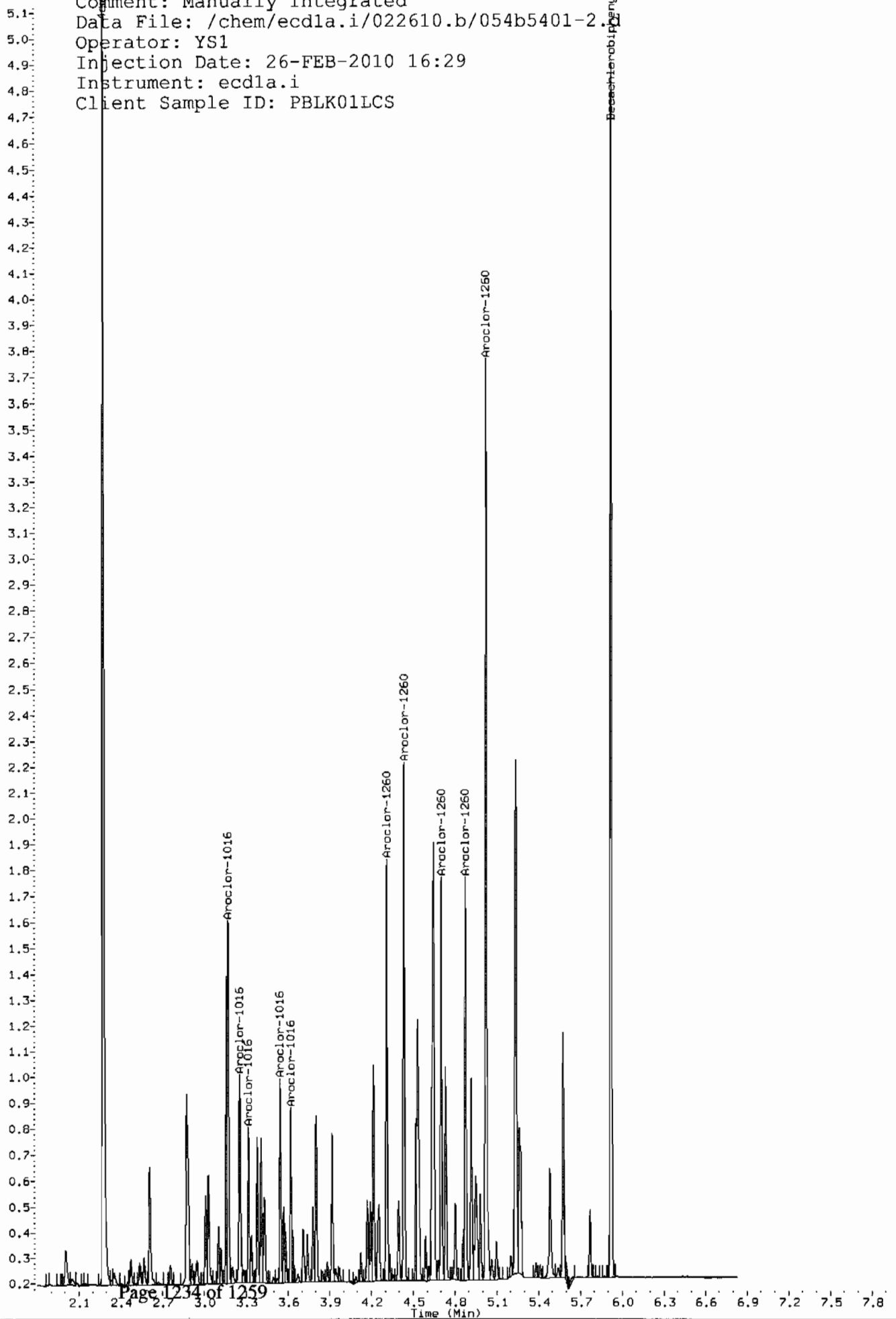
Data File: /chem/eod1a.i/022610.b/054b5401-2.d  
Date: 26-FEB-2010 16:29  
Client ID: PBLKOLCS  
Sample Info: 11202053873141  
Volume Injected (ul): 1.0  
Column phase: CLP2

Instrument: eod1a.i  
Operator: YSL  
Column diameter: 0.25

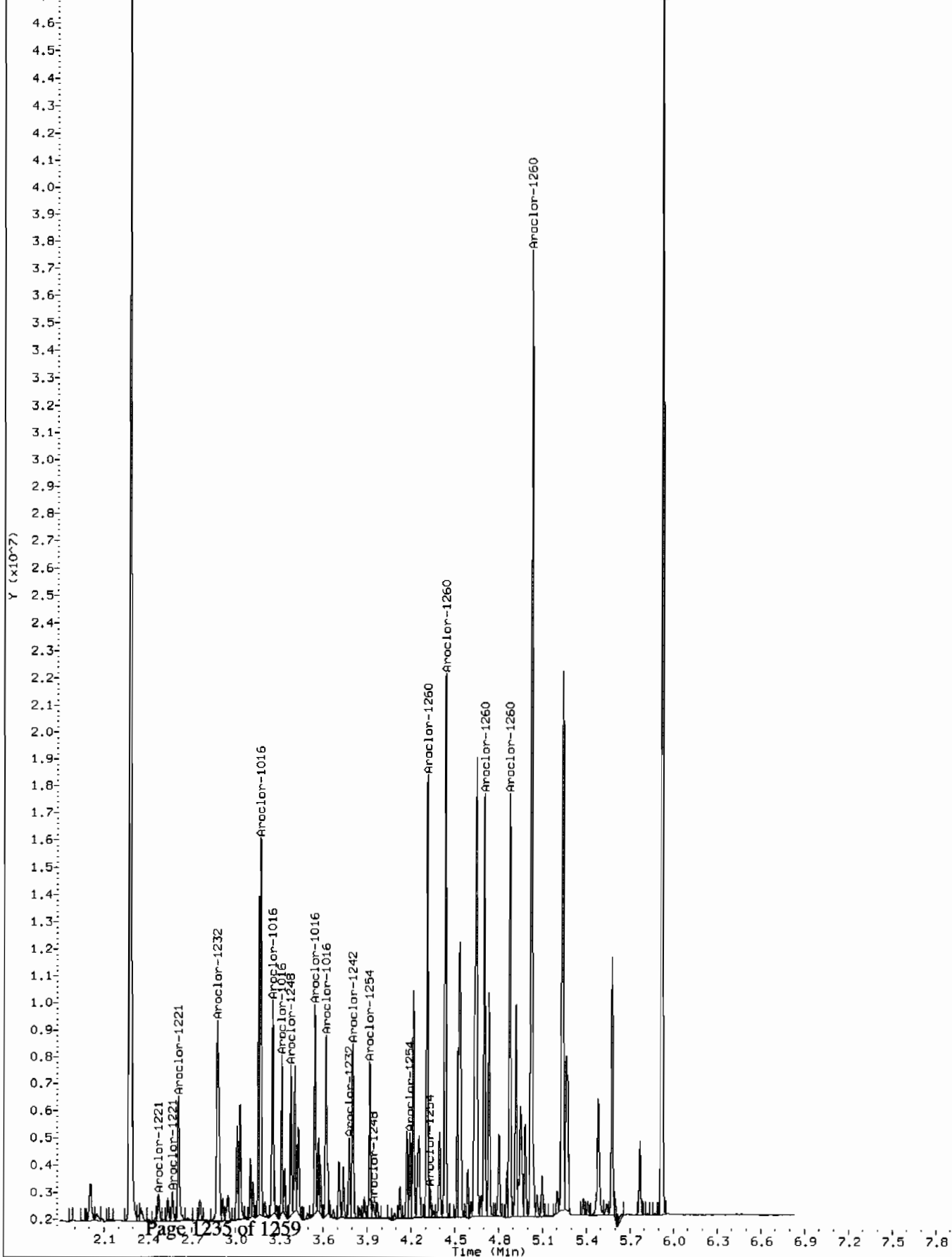


Comment: Manually Integrated  
Data File: /chem/ecdl1.i/022610.b/054b5401-2.1  
Operator: YS1  
Injection Date: 26-FEB-2010 16:29  
Instrument: ecd1a.i  
Client Sample ID: PBLK01LCS

Y (x10<sup>-7</sup>)



Comment: Before manual integration  
Data File: /chem/ecdl1.i/022610.b/orig-054b541-2.d  
Operator: YS1  
Injection Date: 26-FEB-2010 16:29  
Instrument: ecd1a.i  
Client Sample ID: PBLK01LCS



# MISCELLANEOUS DATA



## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 02/23/2010 METHOD: ECD1-F-8082-022210.m OPERATOR: YS1 REVIEWED BY: \_\_\_\_\_

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699

ALUMINA LOT 1240553-A  
COPPER LOT 236547-A

## Calibration &amp; QC Information

Initial Calibration Dates: See Calibration History and 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/ecdl.a.i/022210.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	22-FEB-2010 05:59		022210	1.01	CLEAN	
002f0201.d	WAR100203-60 01	YS1	22-FEB-2010 06:10		022210	1.01	DUSE RE-ICAL	
003f0301.d	AR1660-4	YS1	22-FEB-2010 06:20		022210	1.01	DUSE SCREEN	
004f0401.d	WAR091219-DDT	YS1	22-FEB-2010 06:31		022210	1.01	DDT ANALOG STANDARD	
005f0501.d	WAR100104-32	YS1	22-FEB-2010 06:41		022210	1.01	PATTERN ONLY	
006f0601.d	WAR100104-21	YS1	22-FEB-2010 06:52		022210	1.01	PATTERN ONLY	
007f0701.d	WAR100104-62	YS1	22-FEB-2010 07:03		022210	1.01	PATTERN ONLY	
008f0801.d	WAR100222-01 60	YS1	22-FEB-2010 07:13		022210	1.01	AR1660 I-CAL LEVEL 1	
009f0901.d	WAR100222-02 60	YS1	22-FEB-2010 07:24		022210	1.01	AR1660 I-CAL LEVEL 2	
010f1001.d	WAR100222-03 60	YS1	22-FEB-2010 07:34		022210	1.01	AR1660 I-CAL LEVEL 3	
011f1101.d	WAR100222-04 60	YS1	22-FEB-2010 07:45		022210	1.01	AR1660 I-CAL LEVEL 4	
012f1201.d	WAR100104-01	YS1	22-FEB-2010 07:55		022210	1.01	AR1660 I-CAL LEVEL 5	
013f1301.d	WAR100203-60 01	YS1	22-FEB-2010 08:06		022210	1.01	PASSED ON BOTH COLUMNS	
014f1401.d	WAR100222-05 54	YS1	22-FEB-2010 08:16		022210	1.01	AR1254 I-CAL LEVEL 1	
015f1501.d	WAR100222-06 54	YS1	22-FEB-2010 08:27		022210	1.01	AR1254 I-CAL LEVEL 2	

Instrument Batch: /chem/ecdl.a.i/022210.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	WAR100222-07 54	YS1	22-FEB-2010 08:37		022210		1.0		AR1254 I-CAL LEVEL 3
017f1701.d	WAR100222-08 54	YS1	22-FEB-2010 08:48		022210		1.0		AR1254 I-CAL LEVEL 4
018f1801.d	WAR100219-02	YS1	22-FEB-2010 08:59		022210		1.0		AR1254 I-CAL LEVEL 5
019f1901.d	WAR100219-54	YS1	22-FEB-2010 09:09		022210		1.0		PASSED ON BOTH COLUMNS
020f2001.d	WAR100222-09 42	YS1	22-FEB-2010 09:20		022210		1.0		AR1242 I-CAL LEVEL 1
021f2101.d	WAR100222-10 42	YS1	22-FEB-2010 09:30		022210		1.0		AR1242 I-CAL LEVEL 2
022f2201.d	WAR100222-11 42	YS1	22-FEB-2010 09:41		022210		1.0		AR1242 I-CAL LEVEL 3
023f2301.d	WAR100222-12 42	YS1	22-FEB-2010 09:51		022210		1.0		AR1242 I-CAL LEVEL 4
024f2401.d	WAR100219-01	YS1	22-FEB-2010 10:02		022210		1.0		AR1242 I-CAL LEVEL 5
025f2501.d	WAR100219-42	YS1	22-FEB-2010 10:12		022210		1.0		PASSED ON BOTH COLUMNS
026f2601.d	WAR100222-13 48	YS1	22-FEB-2010 10:23		022210		1.0		AR1248 I-CAL LEVEL 1
027f2701.d	WAR100222-14 48	YS1	22-FEB-2010 10:33		022210		1.0		AR1248 I-CAL LEVEL 2
028f2801.d	WAR100222-15 48	YS1	22-FEB-2010 10:44		022210		1.0		AR1248 I-CAL LEVEL 3
029f2901.d	WAR100211-01	YS1	22-FEB-2010 10:54		022210		1.0		AR1248 I-CAL LEVEL 5
030f3001.d	WAR100222-16	YS1	22-FEB-2010 11:05		022210		1.0		AR1248 I-CAL LEVEL 4
031f3101.d	WAR091217-48	YS1	22-FEB-2010 11:16		022210		1.0		PASSED ON BOTH COLUMNS
032f3201.d	WAR100222-17 68	YS1	22-FEB-2010 11:26		022210		1.0		AR1268 I-CAL LEVEL 1
033f3301.d	WAR100222-18 68	YS1	22-FEB-2010 11:37		022210		1.0		AR1268 I-CAL LEVEL 2
034f3401.d	WAR100222-19 68	YS1	22-FEB-2010 11:47		022210		1.0		AR1268 I-CAL LEVEL 3
035f3501.d	WAR100222-20 68	YS1	22-FEB-2010 11:58		022210		1.0		AR1268 I-CAL LEVEL 4

Instrument Batch: /chem/ecdl.a.i/022210.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR100104-05	YS1	22-FEB-2010 12:08		022210		1.0	AR1268 I-CAL LEVEL 5
037f3701.d	WAR100107-68	YS1	22-FEB-2010 12:19		022210		1.0	PASSED ON BOTH COLUMNS
038f3801.d	WAR100219-99 02	YS1	22-FEB-2010 12:29		022210		1.0	CLEAN
039f3901-1.d	1202046866	YS1	22-FEB-2010 12:40	1954781	110-1846		1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901-2.d	1202046866	YS1	22-FEB-2010 12:40	1954781	110-1848		1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER

039f3901.d	1202046866	YS1	22-FEB-2010 12:40	954781	10-1808	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001-1.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1846	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001-2.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1848	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1808	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
041f4101.d	246968001	YS1	22-FEB-2010 13:01	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	246968002	YS1	22-FEB-2010 13:14	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	246968003	YS1	22-FEB-2010 13:26	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	246968004	YS1	22-FEB-2010 13:39	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	246968005	YS1	22-FEB-2010 13:51	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	246968006	YS1	22-FEB-2010 14:04	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	246968007	YS1	22-FEB-2010 14:17	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	246968008	YS1	22-FEB-2010 14:30	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	100203-60 02	YS1	22-FEB-2010 14:42		022210	1.0	PASSED ON BOTH COLUMNS
050f5001.d	100203-99 03	YS1	22-FEB-2010 14:53		022210	1.0	CLEAN
051f5101.d	246968009	YS1	22-FEB-2010 15:03	954781	10-1808	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
052f5201.d	246968010	YS1	22-FEB-2010 15:16	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	246968011	YS1	22-FEB-2010 15:28	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	246968012	YS1	22-FEB-2010 15:41	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	246968013	YS1	22-FEB-2010 15:54	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
056f5601.d	246968014	YS1	22-FEB-2010 16:06	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	246968015	YS1	22-FEB-2010 16:19	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	246968016	YS1	22-FEB-2010 16:32	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	246968017	YS1	22-FEB-2010 16:44	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	247121002	YS1	22-FEB-2010 16:57	954781	10-1846	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

06cf6101.d	WAR100203-60 03	YS1	22-FEB-2010 17:10		1022210	1.01	PASSED ON BOTH COLUMNS
06cf6201.d	WAR100219-99 04	YS1	22-FEB-2010 17:22		1022210	1.01	CLEAN
06cf6301.d	247123001	YS1	22-FEB-2010 17:35	954781	110-1848	1.01	LANL
06cf6401.d	1202046868	YS1	22-FEB-2010 17:48	954781	110-1848	1.01	QC A
06cf6501.d	1202046869	YS1	22-FEB-2010 18:00	954781	110-1848	1.01	QC A
06cf6601.d	WAR100203-60 04	YS1	22-FEB-2010 18:13		1022210	1.01	PASSED ON BOTH COLUMNS
06cf6701.d	WAR100219-99 05	YS1	22-FEB-2010 18:26		1022210	1.01	CLEAN
06cf6801.d	1202048527	YS1	22-FEB-2010 18:38	955479	110-1818	1.01	QC A
06cf6901.d	1202048528	YS1	22-FEB-2010 18:51	955479	110-1818	1.01	QC A
070f7001.d	247043003	YS1	22-FEB-2010 19:04	955479	110-1818	1.01	LANL
071f7101.d	1202048529	YS1	22-FEB-2010 19:16	955479	110-1818	1.01	QC A

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Instrument Batch: /chem/ecdl1a.i/022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
072f7201.d	1202048530	YS1	22-FEB-2010 19:29	955479	110-1818	1.01	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	247043004	YS1	22-FEB-2010 19:42	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
074f7401.d	247043005	YS1	22-FEB-2010 19:54	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
075f7501.d	247043006	YS1	22-FEB-2010 20:07	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
076f7601.d	247043007	YS1	22-FEB-2010 20:20	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	247043008	YS1	22-FEB-2010 20:32	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	WAR100203-60 05	YS1	22-FEB-2010 20:45		1022210	1.01		PASSED ON BOTH COLUMNS
079f7901.d	WAR100219-99 06	YS1	22-FEB-2010 20:58		1022210	1.01		CLEAN
080f8001.d	247043009	YS1	22-FEB-2010 21:10	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	247043010	YS1	22-FEB-2010 21:23	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
082f8201.d	247043011	YS1	22-FEB-2010 21:35	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	247043012	YS1	22-FEB-2010 21:48	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	247043013	YS1	22-FEB-2010 22:01	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	247043014	YS1	22-FEB-2010 22:13	955479	110-1818	1.01	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

086f8601.d	247043015	YS1	22-FEB-2010 22:26	955479	10-1818	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
087f8701.d	247043016	YS1	22-FEB-2010 22:39	955479	10-1818	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	247043017	YS1	22-FEB-2010 22:51	955479	10-1818	1.0 LANL	SURROGATE LOW RE
089f8901.d	247043018	YS1	22-FEB-2010 23:04	955479	10-1818	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
090f9001.d	WAR100203-60 06	YS1	22-FEB-2010 23:17		022210	1.0	PASSED ON BOTH COLUMNS
091f9101.d	WAR100219-99 07	YS1	22-FEB-2010 23:29		022210	1.0	CLEAN

Instrument Batch: /chem/ecdl1a.i/022210.b

Page: 5

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
092f9201.d	1660	YS1	22-FEB-2010 23:42		022210	1.0		DUSE SCREEN
093f9301.d	1660-4	YS1	22-FEB-2010 23:55		022210	1.0		DUSE SCREEN



## GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 03/01/2010

METHOD: ECD1-F-8082-022210.m

OPERATOR:YS1

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

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

HARDWARE CONFIGURATION &amp; METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA936  
ALUMINA LOT 1273992-A  
COPPER LOT 1249397-A

## Calibration &amp; 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/022610.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	126-FEB-2010 06:13	1	022610	1.01	CLEAN	
002f0201.d	WAR100222-60 01	YS1	126-FEB-2010 06:24	1	022610	1.01	DOSE RR FILE 7	
003f0301.d	WAR100219-54	YS1	126-FEB-2010 06:34	1	022610	1.01	PASSED ON BOTH COLUMNS	
004f0401.d	WAR100219-42	YS1	126-FEB-2010 06:45	1	022610	1.01	PASSED ON BOTH COLUMNS	
005f0501.d	WAR100223-48	YS1	126-FEB-2010 06:55	1	022610	1.01	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100107-68	YS1	126-FEB-2010 07:06	1	022610	1.01	PASSED ON BOTH COLUMNS	
007f0701.d	WAR100222-60 01	YS1	126-FEB-2010 07:16	1	022610	1.01	PASSED ON BOTH COLUMNS	
008f0801.d	WAR100104-32	YS1	126-FEB-2010 07:27	1	022610	1.01	PATTERN ONLY	
009f0901.d	WAR100104-21	YS1	126-FEB-2010 07:37	1	022610	1.01	PATTERN ONLY	
010f1001.d	WAR100104-62	YS1	126-FEB-2010 07:48	1	022610	1.01	PATTERN ONLY	
011f1101.d	WAR091219-DDT	YS1	126-FEB-2010 07:58	1	022610	1.01	DDT ANALOG STANDARD	
012f1201.d	WAR100219-99 02	YS1	126-FEB-2010 08:09	1	022610	1.01	CLEAN	
013f1301.d	1247936001	YS1	126-FEB-2010 08:19	1957235	1247936	100.01	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	1202052495	YS1	126-FEB-2010 08:30	1957235	1247936	100.01	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1202052496	YS1	126-FEB-2010 08:43	1957235	1247936	100.01	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022610.b

Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
-----------	-------------------	---------	---------------------	-------	-----	----------	--------	----------

016f1601.d	WAR100222-60 02	YS1	26-FEB-2010 08:55		022610	1.01	PASSED ON BOTH COLUMNS
017f1701.d	WAR100219-99 03	YS1	26-FEB-2010 09:06		022610	1.01	CLEAN
018f1801.d	1202052477	YS1	26-FEB-2010 09:16	957228	MMR09-053	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d	1202052478	YS1	26-FEB-2010 09:27	957228	MMR09-053	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	1202052479	YS1	26-FEB-2010 09:37	957228	MMR09-053	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	247750002	YS1	26-FEB-2010 09:48	957228	MMR09-053	1.01PASS	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	247750003	YS1	26-FEB-2010 09:58	957228	MMR09-053	1.01PASS	SURROGATE LOW RE
023f2301.d	1202052694	YS1	26-FEB-2010 10:09	957334	022610	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	1202052695	YS1	26-FEB-2010 10:19	957334	247838	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	247838002	YS1	26-FEB-2010 10:30	957334	247838	5.01GEIC	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	1202052696	YS1	26-FEB-2010 10:42	957334	247838	5.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	1202052697	YS1	26-FEB-2010 10:55	957334	247838	5.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	WAR100222-60 03	YS1	26-FEB-2010 11:09		022610	1.01	PASSED ON BOTH COLUMNS
029f2901.d	WAR100219-99 04	YS1	26-FEB-2010 11:20		022610	1.01	CLEAN
030f3001.d	1202052484	YS1	26-FEB-2010 11:30	957231	10-1879	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	1202052485	YS1	26-FEB-2010 11:43	957231	10-1879	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	247255001	YS1	26-FEB-2010 11:55	957231	10-1879	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	247255002	YS1	26-FEB-2010 12:08	957231	10-1879	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
034f3401.d	247255003	YS1	26-FEB-2010 12:21	957231	10-1879	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	247255004	YS1	26-FEB-2010 12:33	957231	10-1879	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl1a.i/022610.b

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Data File	GL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	247255005	YS1	26-FEB-2010 12:46	957231	10-1879	5.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	247319001	YS1	26-FEB-2010 12:59	957231	10-1892	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	247319002	YS1	26-FEB-2010 13:11	957231	10-1892	5.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	247319003	YS1	26-FEB-2010 13:24	957231	10-1892	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	WAR100222-60 04	YS1	26-FEB-2010 13:36		022610	1.01		PASSED ON BOTH COLUMNS



041f4101.d	WAR100219-99 05	YS1	26-FEB-2010 13:47	1	022610	1.0	CLEAN
042f4201.d	247319004	YS1	26-FEB-2010 13:58	957231	10-1892	10.0	LANL
043f4301.d	247319005	YS1	26-FEB-2010 14:10	957231	10-1892	10.0	LANL
044f4401.d	247319006	YS1	26-FEB-2010 14:23	957231	10-1892	5.0	LANL
045f4501.d	247319007	YS1	26-FEB-2010 14:35	957231	10-1892	10.0	LANL
046f4601.d	247332006	YS1	26-FEB-2010 14:48	957231	10-1905	5.0	LANL
047f4701.d	1202052486	YS1	26-FEB-2010 15:00	957231	10-1905	5.0	QC A
048f4801.d	1202052487	YS1	26-FEB-2010 15:13	957231	10-1905	5.0	QC A
049f4901.d	247332007	YS1	26-FEB-2010 15:26	957231	10-1905	1.0	LANL
050f5001.d	247332008	YS1	26-FEB-2010 15:38	957231	10-1905	1.0	LANL
051f5101.d	WAR100222-60 05	YS1	26-FEB-2010 15:51	1	022610	1.0	PASSED ON BOTH COLUMNS
052f5201.d	WAR100219-99 06	YS1	26-FEB-2010 16:03	1	022610	1.0	CLEAN
053f5301.d	1202053872	YS1	26-FEB-2010 16:16	957825	10-1879	1.0	QC A
054f5401.d	1202053873	YS1	26-FEB-2010 16:29	957825	10-1879	1.0	QC A
055f5501.d	247462001	YS1	26-FEB-2010 16:41	957825	10-1940	10.0	LANL

Instrument Batch: /chem/ecd1a.i/022610.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	247462002	YS1	26-FEB-2010 16:54	957825	10-1940	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	247462003	YS1	26-FEB-2010 17:07	957825	10-1940	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	247462004	YS1	26-FEB-2010 17:19	957825	10-1940	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	247462005	YS1	26-FEB-2010 17:32	957825	10-1940	10.0	LANL	UPLOAD BOTH COLCMNS, USE HIGHER
060f6001.d	247462006	YS1	26-FEB-2010 17:45	957825	10-1940	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	WAR100222-60 06	YS1	26-FEB-2010 17:57		022610	1.0		PASSED ON BOTH COLUMNS
062f6201.d	WAR100219-99 07	YS1	26-FEB-2010 18:10		022610	1.0		CLEAN
063f6301.d	247467001	YS1	26-FEB-2010 18:22	957825	10-1943	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	247467002	YS1	26-FEB-2010 18:35	957825	10-1943	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

1065f6501.d	1247467003	YS1	126-FEB-2010 18:48	1957825	110-1943	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1066f6601.d	1247562008	YS1	126-FEB-2010 19:00	1957825	110-1950	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1067f6701.d	1247562009	YS1	126-FEB-2010 19:13	1957825	110-1950	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1068f6801.d	1247784002	YS1	126-FEB-2010 19:26	1957825	110-1979	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1069f6901.d	11202053874	YS1	126-FEB-2010 19:38	1957825	110-1879	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1070f7001.d	11202053875	YS1	126-FEB-2010 19:51	1957825	110-1879	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1071f7101.d	1247855002	YS1	126-FEB-2010 20:03	1957825	110-1978	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1072f7201.d	1247855002	YS1	126-FEB-2010 20:16	1957825	110-1978	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1073f7301.d	1247855002	YS1	126-FEB-2010 20:29	1957825	110-1978	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1074f7401.d	1247855002	YS1	126-FEB-2010 20:41	1957825	110-1978	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
1075f7501.d	1247855002	YS1	126-FEB-2010 20:54	1957825	110-1978	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022610.b Page: 4

Data File: /chem/ecd1a.i/022610.b/069b6901.d  
 Report Date: 01-Mar-2010 10:08

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022610.b/069b6901.d  
 Lab Smp Id: 1202053874 Client Smp ID: WST15-10-11622MS  
 Inj Date : 26-FEB-2010 19:38  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202053874|5|  
 Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecd1a.i/022610.b/ECD1-B-8082-022210.m  
 Meth Date : 01-Mar-2010 07:25 yip00818 Quant Type: ESTD  
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d  
 Als bottle: 69 QC Sample: MS  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1979.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	13.27340	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
=====							
\$ 11 4cmx				CAS #: 877-09-8			
2.277	2.276	0.001	7303329 24.5575	4.7	80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.920	5.922	-0.002	5878817 27.7960	5.3	80.00- 120.00	100.00	
-----							
1 Aroclor-1016				CAS #: 12674-11-2			
3.172	3.173	-0.001	1792676 140.165	26.8	80.00- 120.00	100.00(M)	
3.256	3.256	0.000	1285171 144.111	27.5	44.49- 84.49	71.69	
3.319	3.319	0.000	775284 143.411	27.4	20.26- 60.26	43.25	
3.546	3.547	-0.001	1010528 146.122	27.9	31.99- 71.99	56.37	

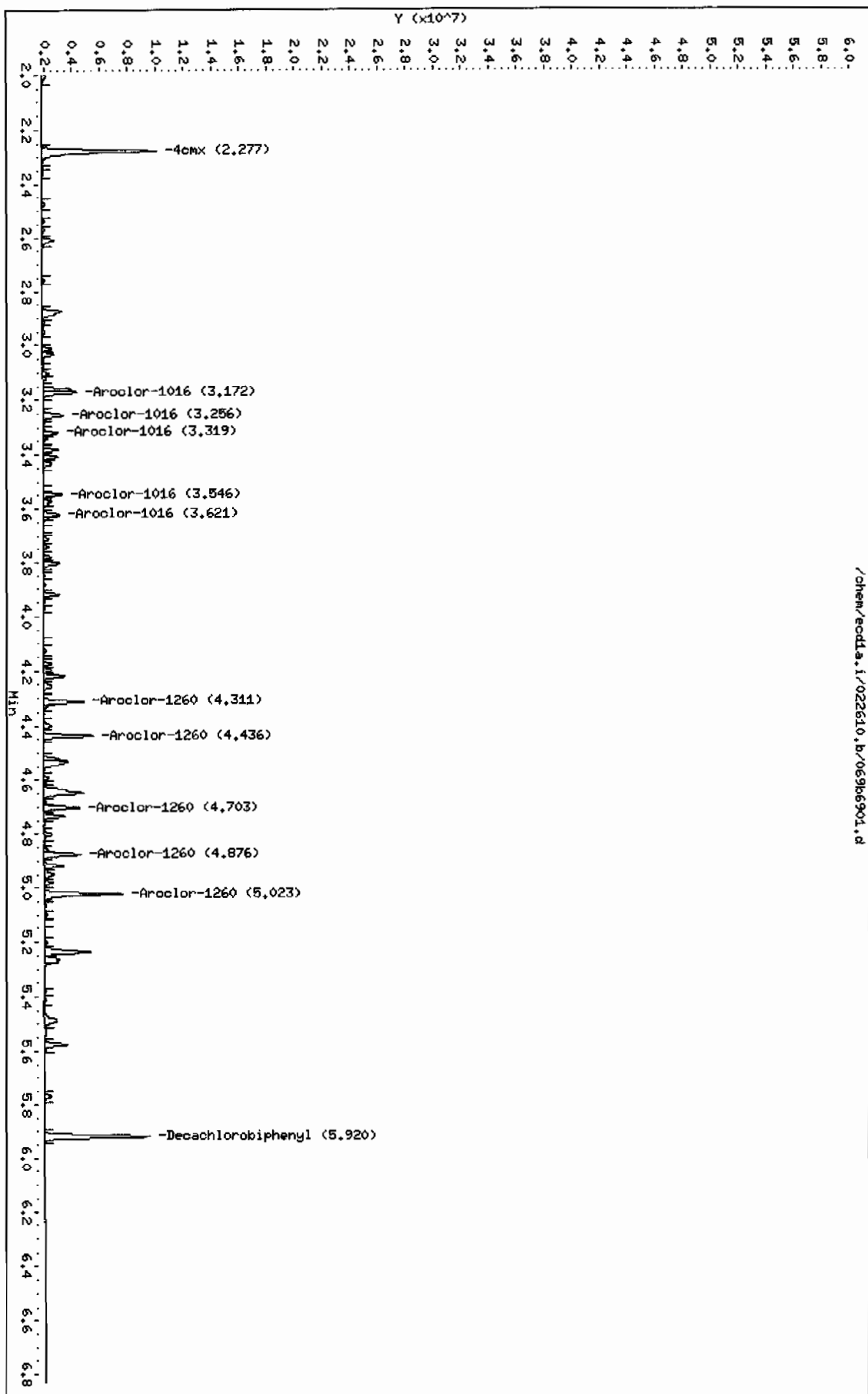
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued)									
3.621	3.623	-0.002	952680	148.272	28.3	28.16-	68.16	53.14	
Average of Peak Concentrations =					27.6				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.311	4.313	-0.002	2117989	160.385	30.6	80.00-	120.00	100.00	
4.436	4.438	-0.002	2620739	168.354	32.2	102.76-	142.76	123.74	
4.703	4.704	-0.001	1988196	167.872	32.1	72.25-	112.25	93.87	
4.876	4.877	-0.001	1982759	162.505	31.0	75.78-	115.78	93.62	
5.023	5.024	-0.001	4406125	166.099	31.7	193.99-	233.99	208.03	
Average of Peak Concentrations =					31.5				
-----									

#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl.a.i/022610.b/069b6901.d  
Date : 26-FEB-2010 19:38  
Client ID: MST16-10-11628HS  
Sample Info: 11202053874151  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: ecdl.a.i  
Operator: YSI  
Column diameter: 0.25



Data File: /chem/ecdl1.i/022610.b/069f6901.d  
 Report Date: 01-Mar-2010 10:08

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/022610.b/069f6901.d  
 Lab Smp Id: 1202053874 Client Smp ID: WST15-10-11622MS  
 Inj Date : 26-FEB-2010 19:38  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202053874|5|  
 Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|MS|||  
 Comment :  
 Method : /chem/ecdl1.i/022610.b/ECD1-F-8082-022210.m  
 Meth Date : 01-Mar-2010 06:19 yip00818 Quant Type: ESTD  
 Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d  
 Als bottle: 69 QC Sample: MS  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1979.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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.17000	Weight of sample extracted (g)
M	13.27340	% Moisture

Cpnd Variable Local Compound Variable

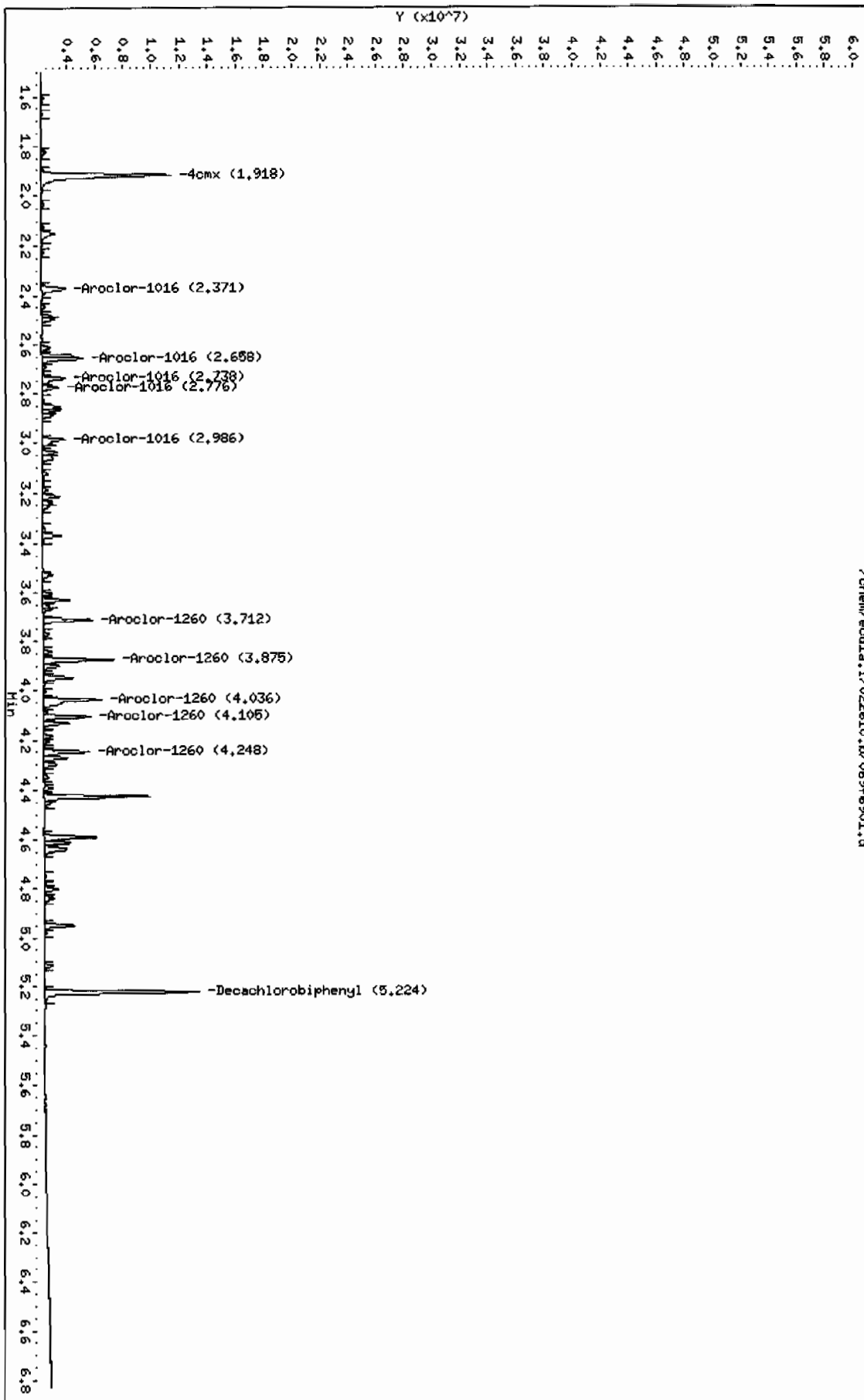
CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.918	1.917	0.001	9953178	23.1127	4.4	80.00- 120.00	100.00
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.224	5.226	-0.002	8718475	28.3722	5.4	80.00- 120.00	100.00
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
2.371	2.371	0.000	2039713	132.584	25.3	80.00- 120.00	100.00
2.658	2.659	-0.001	2521233	138.248	26.4	108.62- 148.62	123.61
2.738	2.739	-0.001	1656489	137.292	26.2	62.93- 102.93	81.21
2.776	2.776	0.000	966801	136.244	26.0	30.56- 70.56	47.40

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====		=====	
1 Aroclor-1016 (continued)									
2.986	2.987	-0.001	1665400	186.868	35.7	44.73-	84.73	81.65	
Average of Peak Concentrations =					27.9				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
3.712	3.714	-0.002	2729600	159.884	30.6	80.00-	120.00	100.00	
3.875	3.876	-0.001	4034311	170.631	32.6	129.59-	169.59	147.80	
4.036	4.039	-0.003	4273158	171.123	32.7	141.00-	181.00	156.55	
4.105	4.107	-0.002	2514057	174.519	33.3	70.55-	110.55	92.10	
4.248	4.249	-0.001	2505848	173.649	33.2	73.92-	113.92	91.80	
Average of Peak Concentrations =					32.5				

Data File: /chem/ecdl.a.i/022610.b/069f6901.d  
Date : 26-FEB-2010 19:39  
Client ID: MST15-10-11622HS  
Sample Info: 11202053874151  
Volume Injected (uL): 1.0  
Column phase: CLP1

Instrument: ecdl.a.i  
Operator: YSI  
Column diameter: 0.25

/chem/ecdl.a.i/022610.b/069f6901.d





Data File: /chem/ecdl1a.i/022610.b/070b7001.d  
 Report Date: 01-Mar-2010 16:37

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL  
 Data file : /chem/ecdl1a.i/022610.b/070b7001.d  
 Lab Smp Id: 1202053875 Client Smp ID: WST15-10-11622MSD  
 Inj Date : 26-FEB-2010 19:51  
 Operator : YS1 Inst ID: ecd1a.i  
 Smp Info : |1202053875|5|  
 Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|MSD|  
 Comment :  
 Method : /chem/ecdl1a.i/022610.b/ECD1-B-8082-022210.m  
 Meth Date : 01-Mar-2010 07:25 yip00818 Quant Type: ESTD  
 Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d  
 Als bottle: 70 QC Sample: MSD  
 Dil Factor: 5.00000  
 Integrator: Falcon Compound Sublist: 10-1979.sub  
 Target Version: 3.50 Sample Matrix: Soil  
 Processing Host: hpc1p1

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

Name	Value	Description
DF	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	13.27340	% 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			
2.277	2.276	0.001	6210460	20.8827	4.0	80.00- 120.00		100.00
-----								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.921	5.922	-0.001	3649272	17.2544	3.3	80.00- 120.00		100.00
-----								
1 Aroclor-1016					CAS #: 12674-11-2			
3.172	3.173	-0.001	1520157	118.857	22.8	80.00- 120.00		100.00 (M)
3.256	3.256	0.000	1059623	118.819	22.8	44.49-	84.49	69.70
3.319	3.319	0.000	630295	116.592	22.3	20.26-	60.26	41.46
3.546	3.547	-0.001	784822	113.485	21.7	31.99-	71.99	51.63

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE ( ug/L)		(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====	=====		
1 Aroclor-1016 (continued)									
3.621	3.623	-0.002	732496	114.003	21.8	28.16-	68.16	48.19	
Average of Peak Concentrations =					22.3				
-----									
7 Aroclor-1260					CAS #: 11096-82-5				
4.311	4.313	-0.002	1393645	105.534	20.2	80.00-	120.00	100.00	
4.436	4.438	-0.002	1684215	108.193	20.7	102.76-	142.76	120.85	
4.702	4.704	-0.002	1239512	104.658	20.0	72.25-	112.25	88.94	
4.875	4.877	-0.002	1218377	99.8572	19.1	75.78-	115.78	87.42	
5.022	5.024	-0.002	2952494	111.301	21.3	193.99-	233.99	211.85	
Average of Peak Concentrations =					20.3				
-----									

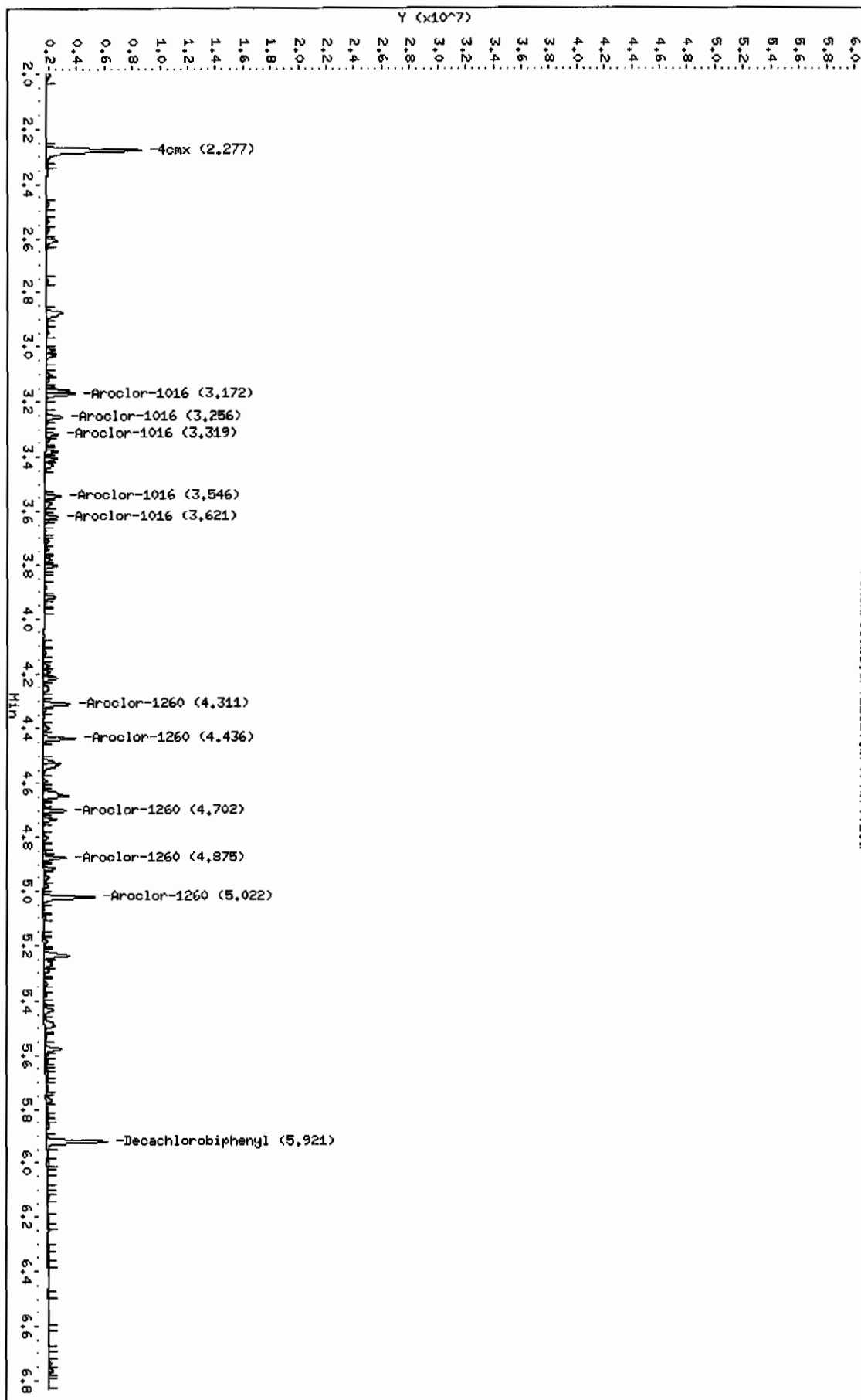
#### QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla,i/022610,b/070b7001.d  
Date: 26-FEB-2010 19:51  
Client ID: MSTLB-10-1162CHSD  
Sample Info: 11202053875151  
Volume Injected (uL): 1.0  
Column phase: CLP2

Instrument: eodla,i  
Operator: YSI  
Column diameter: 0.25

/chem/eodla,i/022610,b/070b7001.d



Data File: /chem/ecdla.i/022610.b/070f7001.d  
Report Date: 01-Mar-2010 10:08

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022610.b/070f7001.d  
Lab Smp Id: 1202053875 Client Smp ID: WST15-10-11622MSD  
Inj Date : 26-FEB-2010 19:51  
Operator : YS1 Inst ID: ecdla.i  
Smp Info : |1202053875|5|  
Misc Info : |ECD82P\_1S|957825|SVA|QC A|SOIL|MSD|||  
Comment :  
Method : /chem/ecdla.i/022610.b/ECD1-F-8082-022210.m  
Meth Date : 01-Mar-2010 06:19 yip00818 Quant Type: ESTD  
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d  
Als bottle: 70 QC Sample: MSD  
Dil Factor: 5.00000  
Integrator: Falcon Compound Sublist: 10-1979.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	5.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	13.27340	% Moisture

Cpnd Variable Local Compound Variable

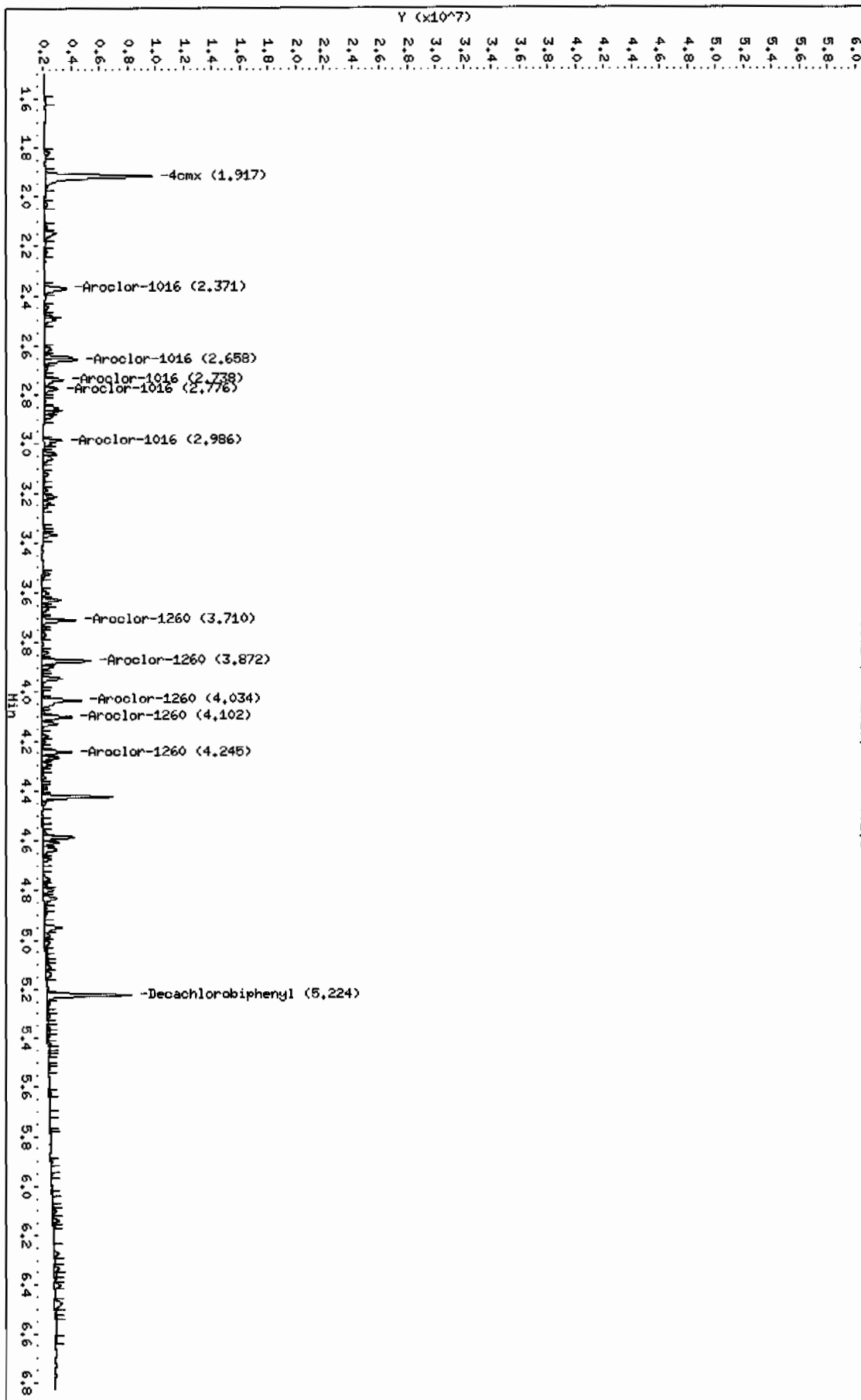
CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE ( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
-----							
\$ 11 4cmx					CAS #: 877-09-8		
1.917	1.917	0.000	8547234	19.8479	3.8 80.00- 120.00	100.00	
-----							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.224	5.226	-0.002	4958597	16.1366	3.1 80.00- 120.00	100.00	
-----							
1 Aroclor-1016					CAS #: 12674-11-2		
2.371	2.371	0.000	1738226	112.987	21.6 80.00- 120.00	100.00	
2.658	2.659	-0.001	2024435	111.007	21.2 108.62- 148.62	116.47	
2.738	2.739	-0.001	1354949	112.300	21.5 62.93- 102.93	77.95	
2.776	2.776	0.000	775389	109.270	20.9 30.56- 70.56	44.61	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	( ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)								
2.986	2.987	-0.001	1337243	150.046	28.7	44.73-	84.73	76.93
Average of Peak Concentrations =					22.8			
-----								
7 Aroclor-1260					CAS #: 11096-82-5			
3.710	3.714	-0.004	1856606	108.749	20.8	80.00-	120.00	100.00
3.872	3.876	-0.004	2730498	115.486	22.1	129.59-	169.59	147.07
4.034	4.039	-0.005	2887986	115.652	22.1	141.00-	181.00	155.55
4.102	4.107	-0.005	1661782	115.356	22.1	70.55-	110.55	89.51
4.245	4.249	-0.004	1613518	111.813	21.4	73.92-	113.92	86.91
Average of Peak Concentrations =					21.7			
-----								

Data File: /chem/eodla.i/022610.b/0707001.d  
Date: 26-FEB-2010 19:51  
Client ID: MST15-10-11622MSD  
Sample Info: 14202053875151  
Volume Injected (uL): 1.0  
Column Phase: CLP1

Instrument: eodla.i  
Operator: YSL  
Column diameter: 0.25

/chem/eodla.i/022610.b/0707001.d



# Prep Logbook Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 957824      Verified by: \_\_\_\_\_

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202053872 MB	25-FEB-2010 21:11:00	30	H2SO4/KM2	2	9	1	0.03333	
1202053873 LCS	25-FEB-2010 21:11:00	30	H2SO4/KM2	2	9	1	0.03333	
247462001	25-FEB-2010 21:11:00	30.05	H2SO4/KM2	2	9	1	0.03328	
247462002	25-FEB-2010 21:11:00	30.05	H2SO4/KM2	2	9	1	0.03328	
247462003	25-FEB-2010 21:11:00	30.16	H2SO4/KM2	2	9	1	0.03316	
247462004	25-FEB-2010 21:11:00	30.02	H2SO4/KM2	2	9	1	0.03331	
247462005	25-FEB-2010 21:11:00	30.02	H2SO4/KM2	2	9	1	0.03331	
247462006	25-FEB-2010 21:11:00	30.19	H2SO4/KM2	2	9	1	0.03312	
247467001	25-FEB-2010 21:11:00	30.17	H2SO4/KM2	2	9	1	0.03315	
247467002	25-FEB-2010 21:11:00	30.16	H2SO4/KM2	2	9	1	0.03316	
247467003	25-FEB-2010 21:11:00	30.19	H2SO4/KM2	2	9	1	0.03312	
247562008	25-FEB-2010 21:11:00	30.07	H2SO4/KM2	2	9	1	0.03326	
247562009	25-FEB-2010 21:11:00	30.03	H2SO4/KM2	2	9	1	0.0333	
247784002	25-FEB-2010 21:11:00	30.15	H2SO4/KM2	2	9	1	0.03317	
1202053874 MS (247784002)	25-FEB-2010 21:11:00	30.17	H2SO4/KM2	2	9	1	0.03315	
1202053875 MSD (247784002)	25-FEB-2010 21:11:00	30.11	H2SO4/KM2	2	9	1	0.03321	
247855002	25-FEB-2010 21:11:00	30.15	H2SO4/KM2	2	9	1	0.03317	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202053873	PCB Laboratory Control	WE100210-07	1	mL	Clean up Date: 2/25/10
MS	1202053874	PCB Laboratory Control	WE100210-07	1	mL	Clean up Initials: AUS
MSD	1202053875	PCB Laboratory Control	WE100210-07	1	mL	Verified By: AV
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091217-15	1	mL	Final Solvent: Hexane
REGNT	All	1:1 sulfuric acid	1260695a	5	mL	Clean Up SOP: GL-OA-E-037
REGNT	All	Hexane	1273340-B2	150	mL	
REGNT	All	Acetone	1273823-B1	150	mL	
REGNT	All	5% Potassium Permanganate	B1275177-F	5	mL	
SOURC	All	SODIUM SULFATE	1274910	30	g	