

Tuesday, January 12, 2010

Page 1 of 2
REQUEST NUMBER: 10-1225

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

These Samples are on:

General Engineering Laboratories, Inc., Charleston, SC.

LANL Request Number: 10-1225

2040 Savage Rd

Per Agreement Number: 126310011

Charleston, SC 29407

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/12/2010

TURNAROUND/REPORT DUE: 2/11/2010

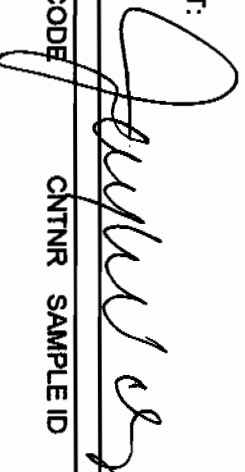
TURNAROUND REQ'D: 30 Days

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	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846:8270C	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7261	R	1/8/2010	
		1	RE12-10-7262	R	1/8/2010	
		1	RE12-10-7263	R	1/8/2010	
		1	RE12-10-7264	R	1/8/2010	

Tuesday, January 12, 2010

Page 2 of 2
REQUEST NUMBER: 10-1225

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8270C						
		1	RE12-10-7265	R	1/8/2010	
		1	RE12-10-7266	R	1/8/2010	
		1	RE12-10-7267	R	1/8/2010	
		1	RE12-10-7268	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
SW-846:8321A_MOD						
		1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7261	R	1/8/2010	
		1	RE12-10-7262	R	1/8/2010	
		1	RE12-10-7263	R	1/8/2010	
		1	RE12-10-7264	R	1/8/2010	
		1	RE12-10-7265	R	1/8/2010	
		1	RE12-10-7266	R	1/8/2010	
		1	RE12-10-7267	R	1/8/2010	
		1	RE12-10-7268	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	

Tuesday, January 12, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1225

LOS ALAMOS

REQUEST NUMBER: 10-1225

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

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
RE12-10-7262	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7266	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7258	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7268	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7265	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7261	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7259	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7263	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7271	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7260	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7267	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7264	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7270	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7269	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7283	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7282	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R

Relinquished By:

Date Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7258

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		1016		SUB-MEDIA:	TUFF 1		OK
PRS ID:	12-004(a)		OK	SAMPLE TECH CODE:	HA		NA
LOCATION ID:	12-610542			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		0.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		0.8	SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R		R	EXCAVATED: YES/NO/NA	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1L 2RM 1/2 (10)	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: grey tuff, some brown clay

SAMPLE COMMENTS:

Hit tuff at 6 inches

LOCATION DESC:

4a-8 south of bunker

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 33 dpmBeta/Gamma \leq 2590 dpmPID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7259

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1025		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610542	↓		FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	1.7		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	y	
1	↓	Met+U+CLO4+C N	1 L POLY 1 L ppm 1/7/10	Ice	y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC:

Pinkish gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

4a-8 south of benches

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpm
Beta/Gamma \leq 2640 dpm

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

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherrill Sherwood (Signature) Sherrill Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7260

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/08/2010	MEDIA:	QBT3
TIME COLLECTED (HH:MM)	1104	SUB-MEDIA:	TUFF1
PRS ID: 12-004(a)	OK	SAMPLE TECH CODE:	HA
LOCATION ID: 12-610543	↓	FIELD QC TYPE:	NA
LOCATION TYPE: GENERIC	↓	FIELD PREP:	NA
TOP DEPTH: 0	0.0	SAMPLE USAGE:	INV
BOTTOM DEPTH: 0	1.0	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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 L PRM 1/2/10	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Frozen brown silty sand and some gray tuff, some roots and tuff rocks

FD: RE12-10-7283

SAMPLE COMMENTS:

Hit tuff at 0.5 ft

LOCATION DESC: 4a-9, southeast of bunker

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \leftarrow 36 dpm
Beta/Gamma \leftarrow 3690 dpm

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

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) Sheri Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7261

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		1137		SUB-MEDIA:	TUFF 1		↓
PRS ID:	12-004(a)		ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610543		↓	FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		
TOP DEPTH:	0		1.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		1.8	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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	y	
1	↓	Met+U+CLO4+C N	1 GAL POLY	Ice	y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC: pinkish grey tuff with orange tuff, some roots, slightly moist, Some brown sand

SAMPLE COMMENTS:

1.2' hit tuff

LOCATION DESC: 4a-9, southeast of bunker

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 22 dpm
Beta/Gamma \pm 2480 dpm

PID Ambient 0.0
Reading 0.0 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7262

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/08/2010	MEDIA:	QBT3
TIME COLLECTED (HH:MM)	1120	SUB-MEDIA:	TUFF 1
PRS ID: 12-004(a)	OK	SAMPLE TECH CODE: HA	OK
LOCATION ID: 12-610544	↓	FIELD QC TYPE: NA	↓
LOCATION TYPE: GENERIC	↓	FIELD PREP: NA	↓
TOP DEPTH: 0	0.0	SAMPLE USAGE: INV	↓
BOTTOM DEPTH: 0	0.6	SCREEN/PORT DESC: NA	
FIELD MATRIX: R	OK	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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/8/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray, weathered tuff, some roots and rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

4a-10 south of bunker

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 16 dpm
Beta/Gamma \leq 2500 dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7263

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1150		SUB-MEDIA:	TUFF 1		
PRS ID:	12-004(a)	ok		SAMPLE TECH CODE:	HA		
LOCATION ID:	12-610544			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	1.7		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	R		EXCAVATED: YES / <input checked="" type="checkbox"/> NO / NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES / <input checked="" type="checkbox"/> NO / NA
BOREHOLE: YES / <input checked="" type="checkbox"/> NO / NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray, tuff, some roots

SAMPLE COMMENTS:

NA

LOCATION DESC:

4a- 10 south of bunker

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 16 dpm
Beta/Gamma \leq 2430 dpm

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

COLLECTED BY (PRINT)

Th. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherrif Sherwood (Signature) Sherrif Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7264

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		1259		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610545	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	0.9		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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1	↓	Met+U+CLO4+C N	1 GAL POLY	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown silty sand, some root

SAMPLE COMMENTS:

R3 01-08-10 0.5' hit tuff

LOCATION DESC: 4a-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 22 dpm
Beta/Gamma = 2700 dpmPID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm

HE Neg.

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TL McFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherrishenwood (Signature)	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7265

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3		
TIME COLLECTED (HH:MM)		1304		SUB-MEDIA:	TUFF 1		OK
PRS ID:	12-004(a)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610545			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	OK		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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY <i>ram 1/2/10</i>	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY <i>1 Liter</i>	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Pinkish grey tuff

FD RE12-10-7282

SAMPLE COMMENTS:

NA

LOCATION DESC: 4a-11 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 22 dpm
 Beta/Gamma \leq 3150 dpm

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

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherrv. Sherwood (Signature) Sherrv. Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7266

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/08/2010	MEDIA:	QBT3	Allh SED
TIME COLLECTED (HH:MM)		1257	SUB-MEDIA:	TUFF 1	NA
PRS ID:	12-004(a)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	12-610546	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	0.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	0.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	SED	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	NA	
			BOREHOLE DIRECTION:	NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 118/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

moist sand, tuff fragments, pine needles

SAMPLE COMMENTS:

NA

LOCATION DESC: 4a-12 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha \leq 16 dpm
Beta/Gamma \leq 2710 dpm

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

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherri Greenwood (Signature) Sherri Greenwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7267

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1304		SUB-MEDIA:		TUFF 1	
PRS ID: 12-004(a)		ok		SAMPLE TECH CODE:		HA	
LOCATION ID: 12-610546		↓		FIELD QC TYPE:		NA	
LOCATION TYPE: GENERIC		↓		FIELD PREP:		NA	
TOP DEPTH: 0		1.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH: 0		2.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		ok		EXCAVATED: YES/NO		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray tuff and brown moist sand

SAMPLE COMMENTS:

Tuff at 1.6 ft

LOCATION DESC:

4a-12

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 38 dpm
Beta/Gamma \leq 3000 dpm

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

COLLECTED BY (PRINT)

T. L. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) Sheri Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7268

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3		
TIME COLLECTED (HH:MM)		0108/2009 1319		SUB-MEDIA:	TUFF 1		A11b
PRS ID:	12-004(a)	ok		SAMPLE TECH CODE:	HA		NA
LOCATION ID:	12-610547			FIELD QC TYPE:	NA		ok
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	0.7		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brownish gray silty sand, some tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

4a-13 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 22 dpm

Beta/Gamma = 3030 dpm

HE neg

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

COLLECTED BY (PRINT)

TLMcFarlane

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherin Sherwood (Signature) Sherin Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7269

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1326		SUB-MEDIA:		TUFF 1	
PRS ID: 12-004(a)		ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID: 12-610547		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		1.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		1.9		SCREEN/PORT DESC: NA			
FIELD MATRIX: R		ok		EXCAVATED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA			
BOREHOLE: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/08/2010	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray tuff

SAMPLE COMMENTS:

Tuff at 1.0 ft

LOCATION DESC:

4a-13 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 22 dpm
Beta/Gamma \leq 2720 dpm

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

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sheri Greenwood (Signature) Sheri Greenwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7270

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1343		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-004(a)		OK	SAMPLE TECH CODE:	HA		OK
LOCATION ID:	12-610548		↓	FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC		↓	FIELD PREP:	NA		↓
TOP DEPTH:	0		0.0	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		0.8	SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R		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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/8/10	None	Y	
1	↓	Met+U+CLO4+C N	1 GAL POLY 1L	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: dark ^{nsf} brown soil, wood/Root ^{nsf} Fragments/moist
 1-6-10 1-4-10

SAMPLE COMMENTS:

N/A

LOCATION DESC:

4a-14, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 16 dpm
 Beta/Gamma \leq 2860 dpm

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

HE NEG

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7271

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3		ok
TIME COLLECTED (HH:MM)		1350		SUB-MEDIA:	TUFF 1		L
PRS ID:	12-004(a)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	12-610548			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	1.8		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	8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY 72m 1/08/10	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Pinkish gray, tuff

SAMPLE COMMENTS:

Hit tuff at 8 inches

LOCATION DESC:

4a-14 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpm
Beta/Gamma \leq 2860 dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 61/08/2010 1517	RECEIVED BY (Printed Name) Sherrill Sherwood (Signature) Sherrill Sherwood	Date/Time 11/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7282

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3	ok	
TIME COLLECTED(HH:MM)		1304		SUB-MEDIA:	TUFF1	↓	
PRS ID:	12-004(a)	ok		SAMPLE TECH CODE:	HA	ok	
LOCATION ID:	UNK	12-610545		FIELD QC TYPE:	FD	↓	
LOCATION TYPE:	GENERIC	ok		FIELD PREP:	NA	↓	
TOP DEPTH:	0	1.0		SAMPLE USAGE:	QC	↓	
BOTTOM DEPTH:	0	3.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA	NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA	NO		
BOREHOLE: YES/NO/NA	NO			BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISO PU+ISOU	1 LITER POLY 12m 1/08/10	None	Y	
1	↓	Met+U+CLO4+C N	1 LITER POLY 1 liter	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7265

Pinkish gray Tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 4a-11, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

$\alpha \leq 22$ dpm

$\text{Bg} \leq 3150$ dpm

PID $\frac{\text{reading}}{\text{ambient}} = \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) R. Saunders	1/08/2010	(Printed Name) Sherri Sherwood	1/8/10
(Signature) R. Saunders	1517	(Signature) Sherri Sherwood	1517
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2480

EVENT NAME: 4th Qtr. FY09 - AOC 12-004(a) - Threemile Canyon

SAMPLE ID: RE12-10-7283

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/08/2010		MEDIA:	QBT3		A114
TIME COLLECTED (HH:MM)		1104		SUB-MEDIA:	TUFF 1		NA
PRS ID:	12-004(a)		ok	SAMPLE TECH CODE:	HA		ok
LOCATION ID:	LNK		12-610543	FIELD QC TYPE:	FD		
LOCATION TYPE:	GENERIC		ok	FIELD PREP:	NA		
TOP DEPTH:	0		0.0	SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0		1.0	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	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY 13m 1/08/2010	None	Y	
1		Met+U+CLO4+C N	1 GAL POLY 1 Liter	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE12-10-7260

Frozen brown silty sand and some gray tuff, some roots and tuff rocks

SAMPLE COMMENTS:

1st tuff at 0.5 ft

LOCATION DESC: 4a-9, southeast of bunker

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha < 38 dpm
Beta/Gamma < 2690 dpmPID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm
HE negative

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)


R Saunders

RELINQUISHED BY (Printed Name) R. Saunders (Signature) R. Saunders	Date/Time 01/08/2010 1517	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/8/10 1517
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Rad Screening Data Release Form

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

RE12-10 7258	7268
7259	7269
7260	7270
7261	7271
7262	
7263	
7283	
7282	
7264	
7265	
7267	



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

.....

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

Reason:

.....

Print Last Name

Byers

Signature



Date



133 State Road 4, White Rock, NM 87544

505-872-2770 FAX 505-872-9534

ARS Sample Delivery Group: AR52-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7258

ARS Sample ID: AR52-10-00014-001

Sample Collection Date: 01/08/10 10:16

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	18.08	24.17	39.18	24.27		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	50.52	16.62	19.19	17.74		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.02	0.05	0.10	0.05		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	6.40	9.55	4.41	9.55		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	9.85	0.10	9.85		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.38	0.24	0.07	0.24		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	-0.01	12.88	0.06	12.88		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RU-102	0.63	0.50	0.11	0.50		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.33	0.49	0.13	0.50		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	1.89	0.85	0.26	0.85		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	0.36	0.41	0.37	0.41		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	2.14	3.31	1.45	3.34		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.20	0.31	0.13	0.31		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 1.28

Matthew J. Edley
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: AR52-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7259

ARS Sample ID: AR52-10-00014-002

Sample Collection Date: 01/08/10 10:25

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNC	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	41.27	28.73	28.54	29.17		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	36.60	15.17	17.99	15.82		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.07	0.14	0.11	0.14		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	30.24	9.59	1.75	9.63		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.71	0.74	0.12	0.74		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.19	0.19	0.08	0.19		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	-0.01	15.02	0.07	15.02		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.91	0.57	0.13	0.58		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.31	0.80	0.15	0.51		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-226	1.76	0.93	0.31	0.93		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	0.80	0.89	0.44	0.89		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	1.90	2.13	1.17	2.16		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	-0.01	31.82	0.07	31.82		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 0.53

Matthew J. Edler
Quality Assurance Review

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

LELAP Certificate # 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7260

ARS Sample ID: ARS2-10-00014-003

Sample Collection Date: 01/08/10 11:04

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	56.26	34.26	32.23	34.95		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	61.67	19.13	19.86	20.57		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	16.48	7.89	1.92	7.61		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	12.57	0.13	12.57		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.06	0.10	0.09	0.10		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.13	0.17	0.08	0.17		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.00	13.07	0.15	13.07		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.50	0.89	0.20	0.89		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	2.31	1.01	0.34	1.01		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.21	0.60	0.37	0.60		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	4.35	4.64	1.04	4.64		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.42	0.33	0.11	0.33		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 1.06

Matthew J. Edick
Quality Assurance Review

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LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00014

Client Sample ID: RE12-10-7261

Sample Collection Date: 01/08/10 11:37

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00014-004

Date Received: 01/11/10 00:00

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MNR	TPH	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	31.66	17.26	35.16	27.54		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	51.60	16.62	18.68	17.97		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	8.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	22.28	8.98	2.02	8.97		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	19.14	0.13	13.10		pCi/o	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.07	0.10	0.10	0.10		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.14	0.18	0.08	0.18		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.29	0.40	0.15	0.40		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	0.69	0.51	0.23	0.51		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-226	1.35	0.85	0.35	0.86		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.04	1.14	0.44	1.14		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	2.56	2.80	1.40	2.96		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.20	0.33	0.15	0.33		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 1.23

Martin J. Eden
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00014

Request of PO Number:

Client Sample ID: RE12-10-7262

ARS Sample ID: ARS2-10-00014-005

Sample Collection Date: 01/08/10 11:20

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDR	Totl	Qval	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	42.83	32.49	39.18	32.91		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	56.34	17.55	19.19	18.55		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	31.47	10.38	1.97	10.42		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	17.87	0.13	12.87		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.14	0.13	0.00	0.15		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.24	0.22	0.08	0.22		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.00	13.39	0.15	13.39		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.46	0.86	0.17	0.87		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	2.28	0.93	0.34	0.94		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	-0.06	72.35	0.20	72.35		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	10.37	5.02	1.58	5.55		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.34	0.34	0.09	0.34		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 0.57

Matthew J. Edm
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7263

ARS Sample ID: ARS2-10-00014-006

Sample Collection Date: 01/08/10 11:50

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 17:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	41.25	28.73	28.64	29.17		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	54.65	17.02	17.99	18.29		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
RA-22	0.06	0.13	0.10	0.12		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	25.98	8.36	1.54	8.36		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.11	0.13	0.10	0.13		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.00	0.00	0.07	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.05	0.06	0.06	0.06		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.50	0.56	0.12	0.56		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.27	0.44	0.11	0.45		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-226	1.48	0.76	0.27	0.77		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	0.17	0.43	0.24	0.43		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	3.69	3.32	1.26	3.44		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.51	0.27	0.07	0.27		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 0.51

Matt L. Eddy
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00014

Client Sample ID: RE12-10-7264

Sample Collection Date: 01/08/10 12:59

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00014-007

Date Received: 01/11/10 00:00

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDL	TEN	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	36.94	28.56	32.13	28.91		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	63.54	18.95	19.86	20.49		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.09	0.18	0.14	0.18		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	21.34	9.35	2.27	9.37		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	14.85	0.18	14.85		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.00	0.00	0.11	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.01	0.05	0.09	0.05		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
BU-152	0.00	15.44	0.17	15.44		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.12	0.65	0.27	0.65		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-226	1.77	1.07	0.40	1.07		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.85	1.25	0.23	1.25		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	2.24	2.84	1.43	2.88		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.52	0.36	0.11	0.36		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 1.32

Matthew J. Edm
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7766

ARS Sample ID: ARS2-10-00014-008

Sample Collection Date: 01/08/10 13:04

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	35.24	35.06	35.16	35.80		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	30.32	15.10	18.65	18.55		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	30.05	9.09	1.59	9.13		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	10.41	0.11	10.41		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	-0.01	13.63	0.07	13.63		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.00	10.83	0.12	10.83		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.43	0.49	0.14	0.50		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-226	1.10	0.74	0.20	0.74		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.10	0.84	0.32	0.84		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	5.16	5.11	1.77	5.30		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	-0.01	21.73	0.05	21.73		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 0.60

Matthew J. Eden
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7266

ARS Sample ID: ARS2-10-00014-009

Sample Collection Date: 01/08/10 12:51

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	37.91	31.00	39.18	31.34		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	41.31	16.00	19.19	16.78		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	22.70	7.20	1.32	7.23		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	8.62	0.09	8.62		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.12	0.13	0.06	0.13		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.09	0.27	0.12	0.27		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.21	0.22	0.10	0.22		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.57	0.49	0.13	0.49		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	1.75	0.74	0.23	0.75		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.21	0.67	0.23	0.67		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	2.80	2.61	1.17	2.69		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	-0.01	23.89	0.05	23.89		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
NOTES: % Moisture: 2.20										

Matthew J. Edger
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ARS Sample Delivery Group: ARS2-10-00014
Client Sample ID: RE12-10-7267
Sample Collection Date: 01/08/10 13:04
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00014-010
Date Received: 01/11/10 00:00
Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	50.50	31.44	28.64	32.05		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	34.13	15.07	17.99	15.64		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	29.06	8.99	1.61	9.04		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	10.53	0.11	10.53		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.07	0.12	0.08	0.12		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.07	0.11	0.07	0.11		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.00	10.95	0.12	10.95		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.80	0.52	0.11	0.53		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	3.29	1.53	0.28	1.53		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.81	0.97	0.44	0.97		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	2.71	3.30	1.40	3.36		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.06	0.15	0.08	0.15		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
NOTES: % Moisture: 0.73										

Matthew J. Edler
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00014

Client Sample ID: RE12-10-7268

Sample Collection Date: 01/08/10 13:19

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00014-011

Date Received: 01/11/10 00:00

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.46	23.38	32.23	23.54		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	39.83	16.26	19.86	16.98		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.13	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	33.19	10.66	1.97	10.71		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	12.91	0.13	12.91		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.28	0.25	0.09	0.25		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.24	0.22	0.08	0.22		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
SU-152	0.75	0.75	0.23	0.75		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.20	0.51	0.16	0.51		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	1.37	0.83	0.60	0.84		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.74	1.26	0.38	1.27		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	4.27	4.02	1.68	4.14		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.07	0.24	0.12	0.24		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
NOTES: % Moisture: 0.92										

Matthew J. Edm
Quality Assurance Review

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ARS Sample Delivery Group: ARS2-10-00014
Client Sample ID: RE12-10-7269
Sample Collection Date: 01/08/10 13:26
Sample Matrix: Soil/Solid

Request or PO Number:
ARS Sample ID: ARS2-10-00014-012
Date Received: 01/11/10 00:00
Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	22.48	24.10	35.16	24.26		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	41.20	13.60	18.63	16.40		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.12	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	29.16	9.75	1.87	9.79		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.07	0.15	0.12	0.15		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.00	0.00	0.09	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.01	0.04	0.08	0.04		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.46	0.53	0.14	0.53		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.76	0.57	0.13	0.57		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	1.45	0.75	0.38	0.75		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.14	1.10	0.33	1.10		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	-0.45	-4.73	1.45	-4.73		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.28	0.34	0.14	0.34		pCi/g	EPA 901.1M	1/11/2010	ME	N/A

NOTES: % Moisture: 0.62

Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7270

ARS Sample ID: ARS2-10-00014-013

Sample Collection Date: 01/08/10 13:43

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	18.08	24.17	39.18	24.27		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	51.38	16.71	19.19	17.85		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	28.42	8.59	1.50	8.63		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	9.85	0.10	9.85		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.35	0.29	0.07	0.29		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.37	0.24	0.06	0.24		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.00	10.24	0.11	10.24		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.36	0.43	0.08	0.44		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	1.76	0.76	0.26	0.77		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	0.49	0.48	0.31	0.48		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	4.25	3.19	1.32	3.33		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.30	0.32	0.13	0.32		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
NOTES: % Moisture: 1.72										

Matthew J. Edm
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7271

ARS Sample ID: ARS2-10-00014-014

Sample Collection Date: 01/08/10 13:50

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	36.66	27.26	28.64	27.63		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	30.10	14.36	17.99	14.83		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.10	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	24.85	8.20	1.55	8.23		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	10.17	0.10	10.17		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.04	0.08	0.07	0.08		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.11	0.14	0.06	0.14		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.60	0.43	0.12	0.43		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.64	0.53	0.15	0.53		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	0.61	0.70	0.52	0.70		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	1.99	0.91	0.16	0.91		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	2.35	2.70	1.23	2.75		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.29	0.29	0.12	0.29		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
NOTES: % Moisture: 0.58										

Matthew J. Edm
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00014

Client Sample ID: RE12-10-7282

Sample Collection Date: 01/08/10 13:04

Sample Matrix: Soil/Solid

Request or PO Number:

ARS Sample ID: ARS2-10-00014-015

Date Received: 01/11/10 00:00

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	7.97	16.67	32.23	16.70		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	44.95	16.52	19.86	17.41		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.06	0.12	0.10	0.12		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	24.68	8.25	1.58	8.29		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	10.36	0.11	10.36		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.00	0.00	0.08	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	-0.01	13.56	0.07	13.56		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.24	0.43	0.14	0.43		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.66	0.53	0.15	0.54		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	0.71	0.36	0.30	0.37		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	0.84	0.66	0.20	0.66		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	1.15	2.55	1.25	2.37		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.13	0.19	0.08	0.19		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
NOTES: % Moisture: 0.58										

Matthew J. Edm
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558



133 State Road 4, White Rock, NM 87544

505-672-2770 FAX 505-672-9534

ARS Sample Delivery Group: ARS2-10-00014

Request or PO Number:

Client Sample ID: RE12-10-7283

ARS Sample ID: ARS2-10-00014-016

Sample Collection Date: 01/08/10 11:04

Date Received: 01/11/10 00:00

Sample Matrix: Soil/Solid

Report Date: 01/11/10 13:33

Analysis Description	Analysis Results	Analysis Error +/- 2 s	MDC	TPU	Qual	Analysis Units	Analysis Test Method	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
GROSS ALPHA	40.86	30.09	35.16	30.50		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
GROSS BETA	36.19	15.40	18.65	16.03		pCi/g	EPA 900.0M	1/11/2010	ME	N/A
NA-22	0.00	0.00	0.15	0.00		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
K-40	2.28	7.77	4.16	7.77		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CO-60	0.00	15.56	0.16	15.56		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-134	0.42	0.34	0.11	0.34		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
CS-137	0.09	0.31	0.16	0.31		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
EU-152	0.33	0.47	0.18	0.47		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
PB-212	1.44	0.58	0.15	0.59		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
RA-228	1.00	0.71	0.40	0.71		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-235	2.10	1.14	0.24	1.14		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
U-238	6.81	4.00	1.46	4.29		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
AM-241	0.03	0.13	0.07	0.13		pCi/g	EPA 901.1M	1/11/2010	ME	N/A
NOTES: % Moisture: 1.99										

Matthew L. Folwe
Quality Assurance Review

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

LELAP Certificate# 30658

NELAP Certificate # E87558

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1225 VALIDATION DATE: 2/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. The ICV and CCV %Ds were >20% for hexachlorocyclopentadiene. All the associated sample results were NDs and, thus, were qualified UJ,SV7c.

Reviewed by: Mary Donovan


Level: II

Date: 02/19/10


VALIDATOR'S SIGNATURE: _____

Eric T. Mink


DATE: 2/19/10

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


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

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

Yes No N/A				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	
5115-2 Semivolatile Organic Compound (SVOC) Analytical Data Validation Checklist	Records Use only 

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

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

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input 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: 10-1225
Lab Sample ID: 244626003

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7258
Batch ID: 942840
Run Date: 01/19/2010 14:09
Prep Date: 01/18/2010 20:10
Data File: s5a1911.d

CAS No.	Parma name	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.7	388
108-95-2	Phenol	U	388	ug/kg	77.7	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.7	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.7	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.7	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.7	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.7	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.7	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.7	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.7	388
108-60-1	bis(2-Chloroisopropyl) ether	U	388	ug/kg	77.7	388
95-48-7	o-Cresol	U	388	ug/kg	77.7	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.7	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.7	388
78-59-1	Isophorone	U	388	ug/kg	77.7	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.7	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.7	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.7	388
65-85-0	Benzoic acid	U	777	ug/kg	194	777
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.7	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.7	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.77	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.7	388 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.7	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.7	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.7	388
99-09-2	o-Nitroaniline	U	388	ug/kg	77.7	388
	3-Nitroaniline					

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626003	Date Received: 01/13/2010 08:55	%Moisture: 14.3
Client ID: RE12-10-7258	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:09	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5n1911.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	388	ug/kg	77.7	388
208-96-8	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
51-28-5	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
132-64-9	2,4-Dinitrophenol	U	777	ug/kg	148	777
84-66-2	Dibenzofuran	U	388	ug/kg	77.7	388
86-73-7	Diethylphthalate	U	388	ug/kg	77.7	388
7005-72-3	Fluorene	U	38.8	ug/kg	11.6	38.8
534-52-1	4-Chlorophenylphenylether	U	388	ug/kg	77.7	388
100-01-6	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.7	388
122-39-4	4-Nitroaniline	U	388	ug/kg	116	388
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	388	ug/kg	77.7	388
118-74-1	Azobenzene	U	388	ug/kg	77.7	388
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	388	ug/kg	77.7	388
84-74-2	Hexachlorobenzene	U	388	ug/kg	77.7	388
206-44-0	Phenanthrene	U	38.8	ug/kg	11.6	38.8
85-68-7	Anthracene	U	38.8	ug/kg	7.77	38.8
56-55-3	Di-n-butylphthalate	U	388	ug/kg	77.7	388
91-94-1	Fluoranthene	U	38.8	ug/kg	11.6	38.8
218-01-9	Butylbenzylphthalate	U	388	ug/kg	77.7	388
117-81-7	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
117-84-0	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
205-99-2	Chrysene	U	38.8	ug/kg	11.6	38.8
207-08-9	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.7	388
50-32-8	Di-n-octylphthalate	U	388	ug/kg	77.7	388
193-39-5	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
53-70-3	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
120-82-1	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
	1,2,4-Trichlorobenzene	U	388	ug/kg	77.7	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.16	182	ug/kg	87	NJ
	Unknown Aldol Condensate	2.95	496	ug/kg		JA

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626003	Date Received: 01/13/2010 08:55	%Moisture: 14.3
Client ID: RE12-10-7258	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:09	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1911.d	Allquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.01	202	ug/kg	97	NJ
	Unknown	10.02	176	ug/kg		J
	Unknown	10.05	220	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	10.41	282	ug/kg	94	NJ
	Unknown	13.3	276	ug/kg		J
	Unknown	13.42	316	ug/kg		J
	Unknown	13.79	198	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7259
Batch ID: 942840
Run Date: 01/19/2010 15:42
Prep Date: 01/18/2010 20:10
Data File: s5a1915.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl) ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626007	Date Received: 01/13/2010 08:55	%Moisture: 6.5
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7259	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 15:42	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Allquot: 30.16 g	Final Volume: 1 mL
Data File: s5a1915.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	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.02	604	ug/kg		J
79-09-4	Propanoic acid	2.16	203	ug/kg	91	NJ

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Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	615	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.47	229	ug/kg	90	NJ
	Unknown	5.76	228	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.79	1260	ug/kg	98	NJ
5794-03-6	Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5.95	193	ug/kg	83	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	161	ug/kg	93	NJ
77-53-2	Cedrol	6.57	1260	ug/kg	94	NJ
	Unknown	8.91	278	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.02	1710	ug/kg	98	NJ
	Unknown	9.04	647	ug/kg		J
	Unknown	9.4	155	ug/kg		J
7773-83-3	1-Docosanethiol	9.42	155	ug/kg	96	NJ
	Unknown	9.5	232	ug/kg		J
	Unknown	9.75	261	ug/kg		J
	Unknown	10.07	3080	ug/kg		J
559-74-0	Friedelan-3-one	10.11	1470	ug/kg	99	NJ
	Unknown	10.33	160	ug/kg		J
	Unknown	10.71	313	ug/kg		J
	Unknown	11.46	165	ug/kg		J
	Unknown	11.67	185	ug/kg		J
	Unknown	12	619	ug/kg		J
1000196-01-5	Cyclohexane-1-methanol, 3,3-dimethyl-2-(	12.35	1740	ug/kg	91	NJ
	Unknown	12.75	428	ug/kg		J
	Unknown	13.29	196	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	13.8	653	ug/kg	93	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626010

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7260
Batch ID: 942840
Run Date: 01/19/2010 16:51
Prep Date: 01/18/2010 20:10
Data File: u5a1918.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	415	ug/kg	83.1	415
108-95-2	Phenol	U	415	ug/kg	83.1	415
95-57-8	2-Chlorophenol	U	415	ug/kg	83.1	415
106-46-7	1,4-Dichlorobenzene	U	415	ug/kg	83.1	415
621-64-7	N-Nitrosodipropylamine	U	415	ug/kg	83.1	415
59-50-7	4-Chloro-3-methylphenol	U	415	ug/kg	83.1	415
83-32-9	Acenaphthene	U	41.5	ug/kg	13.7	41.5
121-14-2	2,4-Dinitrotoluene	U	415	ug/kg	41.5	415
100-02-7	4-Nitrophenol	U	415	ug/kg	137	415
87-86-5	Pentachlorophenol	U	415	ug/kg	104	415
129-00-0	Pyrene	U	41.5	ug/kg	12.5	41.5
110-86-1	Pyridine	U	415	ug/kg	83.1	415
62-53-3	Aniline	U	415	ug/kg	125	415
111-44-4	bis(2-Chloroethyl) ether	U	415	ug/kg	83.1	415
541-73-1	1,3-Dichlorobenzene	U	415	ug/kg	83.1	415
100-51-6	Benzyl alcohol	U	415	ug/kg	125	415
95-50-1	1,2-Dichlorobenzene	U	415	ug/kg	83.1	415
108-60-1	bis(2-Chloroisopropyl) ether	U	415	ug/kg	83.1	415
95-48-7	o-Cresol	U	415	ug/kg	83.1	415
65794-96-9	m,p-Cresols	U	415	ug/kg	125	415
67-72-1	Hexachloroethane	U	415	ug/kg	83.1	415
98-95-3	Nitrobenzene	U	415	ug/kg	83.1	415
78-59-1	Isophorone	U	415	ug/kg	83.1	415
88-75-5	2-Nitrophenol	U	415	ug/kg	83.1	415
105-67-9	2,4-Dimethylphenol	U	415	ug/kg	145	415
111-91-1	bis(2-Chloroethoxy)methane	U	415	ug/kg	83.1	415
120-83-2	2,4-Dichlorophenol	U	415	ug/kg	83.1	415
65-85-0	Benzoic acid	U	831	ug/kg	208	831
91-20-3	Naphthalene	U	41.5	ug/kg	12.5	41.5
106-47-8	4-Chloroaniline	U	415	ug/kg	83.1	415
87-68-3	Hexachlorobutadiene	U	415	ug/kg	83.1	415
91-57-6	2-Methylnaphthalene	U	41.5	ug/kg	8.31	41.5
77-47-4	Hexachlorocyclopentadiene	U	415	ug/kg	83.1	415 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	415	ug/kg	83.1	415
95-95-4	2,4,5-Trichlorophenol	U	415	ug/kg	83.1	415
91-58-7	2-Chloronaphthalene	U	41.5	ug/kg	13.7	41.5
88-74-4	2-Nitroaniline	U	415	ug/kg	83.1	415
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	415	ug/kg	83.1	415

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626010	Date Received: 01/13/2010 08:55	%Moisture: 19.9
Client ID: RE12-10-7260	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 16:51	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: a5a1918.d	Aliquot: 30.05 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
<i>m-Nitroaniline</i>						
131-11-3	Dimethylphthalate	U	415	ug/kg	83.1	415
606-20-2	2,6-Dinitrotoluene	U	415	ug/kg	41.5	415
208-96-8	Acenaphthylene	U	41.5	ug/kg	12.5	41.5
51-28-5	2,4-Dinitrophenol	U	831	ug/kg	158	831
132-64-9	Dibenzofuran	U	415	ug/kg	83.1	415
84-66-2	Diethylphthalate	U	415	ug/kg	83.1	415
86-73-7	Fluorene	U	41.5	ug/kg	12.5	41.5
7005-72-3	4-Chlorophenylphenylether	U	415	ug/kg	83.1	415
534-52-1	2-Methyl-4,6-dinitrophenol	U	415	ug/kg	83.1	415
100-01-6	4-Nitroaniline	U	415	ug/kg	125	415
<i>p-Nitroaniline</i>						
122-39-4	Diphenylamine	U	415	ug/kg	83.1	415
122-66-7	Azobenzene	U	415	ug/kg	83.1	415
<i>1,2-Diphenylhydrazine</i>						
101-55-3	4-Bromophenylphenylether	U	415	ug/kg	83.1	415
118-74-1	Hexachlorobenzene	U	415	ug/kg	83.1	415
85-01-8	Phenanthrene	U	41.5	ug/kg	12.5	41.5
120-12-7	Anthracene	U	41.5	ug/kg	8.31	41.5
84-74-2	Di-n-butylphthalate	U	415	ug/kg	83.1	415
206-44-0	Fluoranthene	U	41.5	ug/kg	12.5	41.5
85-68-7	Butylbenzylphthalate	U	415	ug/kg	83.1	415
56-55-3	Benzo(a)anthracene	U	41.5	ug/kg	12.5	41.5
91-94-1	3,3'-Dichlorobenzidine	U	415	ug/kg	125	415
218-01-9	Chrysene	U	41.5	ug/kg	12.5	41.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	415	ug/kg	83.1	415
117-84-0	Di-n-octylphthalate	U	415	ug/kg	83.1	415
205-99-2	Benzo(b)fluoranthene	U	41.5	ug/kg	12.5	41.5
207-08-9	Benzo(k)fluoranthene	U	41.5	ug/kg	12.5	41.5
50-32-8	Benzo(a)pyrene	U	41.5	ug/kg	12.5	41.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.5	ug/kg	12.5	41.5
53-70-3	Dibenzo(a,h)anthracene	U	41.5	ug/kg	12.5	41.5
191-24-2	Benzo(ghi)perylene	U	41.5	ug/kg	12.5	41.5
120-82-1	1,2,4-Trichlorobenzene	U	415	ug/kg	83.1	415

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R-.alpha.-Pinene	3.51	2580	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	5150	ug/kg	99	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626010	Date Received: 01/13/2010 08:55	%Moisture: 19.9
Client ID: RE12-10-7260	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 16:51	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1918.d	Aliquot: 30.05 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
77-53-2	Cedrol	6.57	2470	ug/kg	94	NJ
473-16-5	2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	6.7	919	ug/kg	96	NJ
4727-18-8	Cyclopentadecanone, 2-hydroxy-	8.25	908	ug/kg	95	NJ
	Unknown	8.39	1030	ug/kg		J
77899-03-7	1-Heneicosyl formate	8.77	1080	ug/kg	99	NJ
	Unknown	8.89	1240	ug/kg		J
	Unknown	8.92	2170	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	4950	ug/kg	99	NJ
	Unknown	9.05	3390	ug/kg		J
	Unknown	9.12	806	ug/kg		J
302-79-4	Retinoic acid	9.17	791	ug/kg	86	NJ
	Unknown	9.2	1020	ug/kg		J
	Unknown	9.23	1070	ug/kg		J
	Unknown	9.3	1060	ug/kg		J
	Unknown	9.35	757	ug/kg		J
	Unknown	9.39	789	ug/kg		J
6971-40-0	17-Pentatriacontene	9.42	1580	ug/kg	90	NJ
	Unknown	9.47	1030	ug/kg		J
	Unknown	9.51	1320	ug/kg		J
	Unknown	9.56	1170	ug/kg		J
	Unknown	9.6	1040	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.63	1110	ug/kg	93	NJ
	Unknown	9.77	1780	ug/kg		J
3772-56-3	2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.89	802	ug/kg	96	NJ
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	1460	ug/kg	95	NJ
	Unknown	10.08	1610	ug/kg		J
	Unknown	11.88	2680	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	2630	ug/kg	99	NJ

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**Semi-Volatile
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Sample Summary**

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SDG Number: 10-1225
Lab Sample ID: 244626006

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7261
Batch ID: 942840
Run Date: 01/19/2010 15:18
Prep Date: 01/18/2010 20:10
Data File: e5a1914.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl) ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	382	ug/kg	76.4	382

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Certificate of Analysis
Sample Summary**

SDG Number: 10-1225
Lab Sample ID: 244626006

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7261
Batch ID: 942840
Run Date: 01/19/2010 15:18
Prep Date: 01/18/2010 20:10
Data File: s5a1914.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	J	121	ug/kg	76.4	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.01	4070	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.51	2900	ug/kg	97	NJ

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Sample Summary**

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626006	Date Received: 01/13/2010 08:55	%Moisture: 13.3
Client ID: RE12-10-7261	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 15:18	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1914.d	Aliquot: 30.17 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5.52	701	ug/kg	99	NJ
	Unknown	5.6	753	ug/kg		J
5951-67-7	Cyclohexene, 6-ethenyl-6-methyl-1-(1-met	5.7	1230	ug/kg	89	NJ
	Unknown	5.77	1560	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.81	8340	ug/kg	98	NJ
470-40-6	Thujopsene	5.88	803	ug/kg	99	NJ
	Unknown	5.96	1360	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	6.14	1880	ug/kg	96	NJ
19870-75-8	Cedrane, 8-propoxy-	6.58	5110	ug/kg	94	NJ
	Unknown	6.89	2820	ug/kg		J
	Unknown	7.11	990	ug/kg		J
21391-98-0	1-Cyclohexene-1-carboxaldehyde, 4-(1-met	7.38	1150	ug/kg	80	NJ
	Unknown	8.93	5940	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.06	16800	ug/kg	99	NJ
	Unknown	9.08	8980	ug/kg		J
	Unknown	9.12	1430	ug/kg		J
	Unknown	9.21	6550	ug/kg		J
	Unknown	9.26	3820	ug/kg		J
88104-31-8	2-Chloropropionic acid, octadecyl ester	9.43	1160	ug/kg	93	NJ
23613-02-7	1,3,5-Triazine-2(1H)-thione, 4-(diethyla	9.49	2420	ug/kg	90	NJ
	Unknown	9.52	1100	ug/kg		J
	Unknown	9.56	3310	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.64	1850	ug/kg	90	NJ
	Unknown	9.77	1970	ug/kg		J
	Unknown	10.12	11200	ug/kg		J
	Unknown	10.51	1560	ug/kg		J
7225-64-1	Heptadecane, 9-octyl-	10.82	2010	ug/kg	96	NJ
83-46-5	.beta.-Sitosterol	13.84	3300	ug/kg	99	NJ

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

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SDG Number: 10-1225
Lab Sample ID: 244626001

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7262
Batch ID: 942840
Run Date: 01/19/2010 12:35
Prep Date: 01/18/2010 20:10
Data File: s5a1907.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.9	364
108-95-2	Phenol	U	364	ug/kg	72.9	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.9	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl) ether	U	364	ug/kg	72.9	364
95-48-7	o-Cresol	U	364	ug/kg	72.9	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364
78-59-1	Isophorone	U	364	ug/kg	72.9	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.9	364
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	364	ug/kg	72.9	364

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626001

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7262
Batch ID: 942840
Run Date: 01/19/2010 12:35
Prep Date: 01/18/2010 20:10
Data File: s5a1907.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline	U	364	ug/kg	72.9	364
606-20-2	Dimethylphthalate	U	364	ug/kg	36.4	364
208-96-8	2,6-Dinitrotoluene	U	36.4	ug/kg	10.9	36.4
51-28-5	Acenaphthylene	U	729	ug/kg	138	729
132-64-9	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
122-39-4	<i>p</i> -Nitroaniline	U	364	ug/kg	72.9	364
122-66-7	Diphenylamine	U	364	ug/kg	72.9	364
101-55-3	Azobenzene	U	364	ug/kg	72.9	364
118-74-1	1,2-Diphenylhydrazine	U	364	ug/kg	72.9	364
85-01-8	4-Bromophenylphenylether	U	364	ug/kg	72.9	364
120-12-7	Hexachlorobenzene	U	36.4	ug/kg	10.9	36.4
84-74-2	Phenanthrene	U	36.4	ug/kg	7.29	36.4
206-44-0	Anthracene	U	364	ug/kg	72.9	364
85-68-7	Di-n-butylphthalate	U	36.4	ug/kg	10.9	36.4
56-55-3	Fluoranthene	U	364	ug/kg	72.9	364
91-94-1	Butylbenzylphthalate	U	36.4	ug/kg	10.9	36.4
218-01-9	Benzo(a)anthracene	U	364	ug/kg	109	364
117-81-7	3,3'-Dichlorobenzidine	U	36.4	ug/kg	10.9	36.4
117-84-0	Chrysene	U	364	ug/kg	72.9	364
205-99-2	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364
207-08-9	Di-n-octylphthalate	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
193-39-5	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
53-70-3	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
191-24-2	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
120-82-1	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	496	ug/kg		JA
	Unknown	5.6	476	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626001	Date Received: 01/13/2010 08:55	%Moisture: 8.9
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7262	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 12:35	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s5a1907.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
21996-77-0	Di-epi-.alpha.-cedrene-(I)	5.67	206	ug/kg	92	NJ
30021-74-0	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.69	291	ug/kg	83	NJ
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-	5.84	526	ug/kg	95	NJ
	Unknown	5.96	980	ug/kg		J
469-61-4	1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	6	212	ug/kg	83	NJ
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	6.11	501	ug/kg	91	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	605	ug/kg	97	NJ
4045-44-7	1,3-Cyclopentadiene, 1,2,3,4,5-pentameth	6.2	308	ug/kg	90	NJ
	Unknown	6.75	308	ug/kg		J
	Unknown	6.88	797	ug/kg		J
	Unknown	7.09	268	ug/kg		J
	Unknown	7.29	364	ug/kg		J
2416-20-8	Hexadecenoic acid, Z-11-	7.58	702	ug/kg	95	NJ
57-10-3	n-Hexadecanoic acid	7.61	296	ug/kg	98	NJ
62600-05-9	Cedran-diol, 8S,14-	7.65	354	ug/kg	87	NJ
112-79-8	9-Octadecenoic acid, (E)-	8.25	587	ug/kg	98	NJ
	Unknown	8.91	2030	ug/kg		J
	Unknown	9.16	863	ug/kg		J
	Unknown	9.43	445	ug/kg		J
	Unknown	9.5	1070	ug/kg		J
	Unknown	9.54	609	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.62	866	ug/kg	90	NJ
564-73-8	2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.88	321	ug/kg	83	NJ
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	972	ug/kg	95	NJ
	Unknown	10.08	3980	ug/kg		J
	Unknown	10.44	416	ug/kg		J
	Unknown	10.49	572	ug/kg		J
83-46-5	.beta.-Sitosterol	13.81	1740	ug/kg	94	NJ

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

SDG Number: 10-1225

Lab Sample ID: 244626008

Date Collected: 01/08/2010 12:00

Date Received: 01/13/2010 08:55

Matrix: R

%Moisture: 5.6

Client ID: RE12-10-7263

Batch ID: 942840

Run Date: 01/19/2010 16:05

Prep Date: 01/18/2010 20:10

Data File: s5a1916.d

Client: LANL010

Method: SW846 8270C

Inst: MSD5.I

Analyst: RMB

Aliquot: 30.02 g

Column: J&W DB-SMS

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	353	ug/kg	70.6	353
108-95-2	Phenol	U	353	ug/kg	70.6	353
95-57-8	2-Chlorophenol	U	353	ug/kg	70.6	353
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.6	353
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.6	353
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.6	353
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3
110-86-1	Pyridine	U	353	ug/kg	70.6	353
62-53-3	Aniline	U	353	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.6	353
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.6	353
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.6	353
108-60-1	bis(2-Chloroisopropyl) ether	U	353	ug/kg	70.6	353
95-48-7	o-Cresol	U	353	ug/kg	70.6	353
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353
67-72-1	Hexachloroethane	U	353	ug/kg	70.6	353
98-95-3	Nitrobenzene	U	353	ug/kg	70.6	353
78-59-1	Isophorone	U	353	ug/kg	70.6	353
88-75-5	2-Nitrophenol	U	353	ug/kg	70.6	353
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	123	353
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.6	353
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.6	353
65-85-0	Benzoic acid	U	706	ug/kg	176	706
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline	U	353	ug/kg	70.6	353
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.6	353
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.06	35.3
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.6	353 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.6	353
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.6	353
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline	U	353	ug/kg	70.6	353
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	353	ug/kg	70.6	353

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Certificate of Analysis
Sample Summary**

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SDG Number: 10-1225
Lab Sample ID: 244626008

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 5.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7263
Batch ID: 942840
Run Date: 01/19/2010 16:05
Prep Date: 01/18/2010 20:10
Data File: s5a1916.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	353	ug/kg	70.6	353
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol	U	706	ug/kg	134	706
132-64-9	Dibenzofuran	U	353	ug/kg	70.6	353
84-66-2	Diethylphthalate	U	353	ug/kg	70.6	353
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.6	353
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.6	353
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	353	ug/kg	70.6	353
122-66-7	Azobenzene	U	353	ug/kg	70.6	353
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.6	353
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.6	353
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3
120-12-7	Anthracene	U	35.3	ug/kg	7.06	35.3
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.6	353
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.6	353
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.6	353
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.6	353
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.6	353

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.03	590	ug/kg		J
	Unknown Aldol Condensate	2.95	485	ug/kg		JA

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Sample Summary

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SDG Number: 10-1225
Lab Sample ID: 244626008

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 5.6
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
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	5.6	264	ug/kg		J
469-61-4	1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	5.65	393	ug/kg	97	NJ
3650-28-0	1,4-Methano-1H-indene, octahydro-4-methy	5.69	194	ug/kg	99	NJ
	Unknown	5.76	904	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	3580	ug/kg	99	NJ
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-	5.84	322	ug/kg	96	NJ
470-40-6	Thujopsene	5.96	767	ug/kg	90	NJ
	Unknown	6	194	ug/kg		J
56816-08-1	Cyclohexene, 5-methyl-3-(1-methylethenyl	6.09	200	ug/kg	92	NJ
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	6.11	367	ug/kg	91	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	534	ug/kg	95	NJ
	Unknown	6.2	190	ug/kg		J
77-53-2	Cedrol	6.57	3240	ug/kg	93	NJ
	Unknown	6.88	553	ug/kg		J
	Unknown	7.29	207	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	7.65	278	ug/kg	87	NJ
	Unknown	8.91	405	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	5670	ug/kg	99	NJ
	Unknown	9.54	180	ug/kg		J
6755-93-7	2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	9.75	399	ug/kg	93	NJ
	Unknown	9.88	184	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.03	256	ug/kg	96	NJ
	Unknown	10.08	2390	ug/kg		J
	Unknown	10.49	260	ug/kg		J
	Unknown	12.74	408	ug/kg		J
	Unknown	13.31	740	ug/kg		J
	Unknown	13.55	2140	ug/kg		J
	Unknown	13.8	558	ug/kg		J

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Certificate of Analysis
Sample Summary

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SDG Number: 10-1225
Lab Sample ID: 244626012

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7264
Batch ID: 942840
Run Date: 01/19/2010 17:37
Prep Date: 01/18/2010 20:10
Data File: s5a1920.d

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

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Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1225
Lab Sample ID: 244626012

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	696	ug/kg		JA
79-92-5	Camphene	3.61	452	ug/kg	96	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626012	Date Received: 01/13/2010 08:55	%Moisture: 11
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7264	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 17:37	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5a1920.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.58	315	ug/kg		J
	Unknown	9.01	480	ug/kg		J
	Unknown	9.03	384	ug/kg		J
	Unknown	9.83	337	ug/kg		J
	Unknown	9.86	618	ug/kg		J
	Unknown	9.93	477	ug/kg		J
	Unknown	9.97	271	ug/kg		J
	Unknown	10.02	414	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	10.06	391	ug/kg	96	NJ
56221-91-1	13-Tetradecen-1-ol acetate	10.08	534	ug/kg	96	NJ
	Unknown	10.1	327	ug/kg		J
	Unknown	10.14	409	ug/kg		J
	Unknown	10.17	407	ug/kg		J
	Unknown	10.24	319	ug/kg		J
	Unknown	10.28	388	ug/kg		J
	Unknown	10.32	396	ug/kg		J
	Unknown	10.42	681	ug/kg		J
	Unknown	10.52	520	ug/kg		J
	Unknown	10.71	612	ug/kg		J
112-95-8	Eicosane	10.82	954	ug/kg	97	NJ
504-57-4	10-Nonadecanone	11.77	608	ug/kg	90	NJ
112-95-8	Eicosane	11.81	417	ug/kg	98	NJ
	Unknown	11.88	1390	ug/kg		J
	Unknown	12.06	642	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.93	489	ug/kg	91	NJ
	Unknown	13.29	568	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.81	908	ug/kg	97	NJ
	Unknown	14.29	404	ug/kg		J

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626005	Date Received: 01/13/2010 08:55	%Moisture: 6.2
Client ID: RE12-10-7265	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:55	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1913.d	Aliquot: 30.04 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	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	355	ug/kg	70.9	355

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626005	Date Received: 01/13/2010 08:55	%Moisture: 6.2
Client ID: RE12-10-7265	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:55	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1913.d	Allquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaume	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	884	ug/kg		J
79-09-4	Propanoic acid	2.15	172	ug/kg	81	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626005	Date Received: 01/13/2010 08:55	%Moisture: 6.2
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7265	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 14:55	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5a1913.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	Flt	Qual
	Unknown Aldol Condensate	2.95	481	ug/kg		JA
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.02	546	ug/kg	90	NJ
301-02-0	9-Octadecenamide, (Z)-	10.41	234	ug/kg	90	NJ
	Unknown	10.81	152	ug/kg		J
	Unknown	11.96	389	ug/kg		J
	Unknown	12.72	352	ug/kg		J
	Unknown	13.12	228	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626002

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7266
Batch ID: 942840
Run Date: 01/19/2010 13:45
Prep Date: 01/18/2010 20:10
Data File: s5a1910.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	415	ug/kg	83.0	415
108-95-2	Phenol	U	415	ug/kg	83.0	415
95-57-8	2-Chlorophenol	U	415	ug/kg	83.0	415
106-46-7	1,4-Dichlorobenzene	U	415	ug/kg	83.0	415
621-64-7	N-Nitrosodipropylamine	U	415	ug/kg	83.0	415
59-50-7	4-Chloro-3-methylphenol	U	415	ug/kg	83.0	415
83-32-9	Acenaphthene	U	41.5	ug/kg	13.7	41.5
121-14-2	2,4-Dinitrotoluene	U	415	ug/kg	41.5	415
100-02-7	4-Nitrophenol	U	415	ug/kg	137	415
87-86-5	Pentachlorophenol	U	415	ug/kg	104	415
129-00-0	Pyrene	U	41.5	ug/kg	12.4	41.5
110-86-1	Pyridine	U	415	ug/kg	83.0	415
62-53-3	Aniline	U	415	ug/kg	124	415
111-44-4	bis(2-Chloroethyl) ether	U	415	ug/kg	83.0	415
541-73-1	1,3-Dichlorobenzene	U	415	ug/kg	83.0	415
100-51-6	Benzyl alcohol	U	415	ug/kg	124	415
95-50-1	1,2-Dichlorobenzene	U	415	ug/kg	83.0	415
108-60-1	bis(2-Chloroisopropyl)ether	U	415	ug/kg	83.0	415
95-48-7	o-Cresol	U	415	ug/kg	83.0	415
65794-96-9	m,p-Cresols	U	415	ug/kg	124	415
67-72-1	Hexachloroethane	U	415	ug/kg	83.0	415
98-95-3	Nitrobenzene	U	415	ug/kg	83.0	415
78-59-1	Isophorone	U	415	ug/kg	83.0	415
88-75-5	2-Nitrophenol	U	415	ug/kg	83.0	415
105-67-9	2,4-Dimethylphenol	U	415	ug/kg	145	415
111-91-1	bis(2-Chloroethoxy)methane	U	415	ug/kg	83.0	415
120-83-2	2,4-Dichlorophenol	U	415	ug/kg	83.0	415
65-85-0	Benzoic acid	U	830	ug/kg	207	830
91-20-3	Naphthalene	U	41.5	ug/kg	12.4	41.5
106-47-8	4-Chloroaniline	U	415	ug/kg	83.0	415
87-68-3	Hexachlorobutadiene	U	415	ug/kg	83.0	415
91-57-6	2-Methylnaphthalene	U	41.5	ug/kg	8.30	41.5
77-47-4	Hexachlorocyclopentadiene	U	415	ug/kg	83.0	415 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	415	ug/kg	83.0	415
95-95-4	2,4,5-Trichlorophenol	U	415	ug/kg	83.0	415
91-58-7	2-Chloronaphthalene	U	41.5	ug/kg	13.7	41.5
88-74-4	2-Nitroaniline	U	415	ug/kg	83.0	415
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	415	ug/kg	83.0	415

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626002	Date Received: 01/13/2010 08:55	%Moisture: 19.7
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7266	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 13:45	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s5a1910.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	415	ug/kg	83.0	415
606-20-2	2,6-Dinitrotoluene	U	415	ug/kg	41.5	415
208-96-8	Acenaphthylene	U	41.5	ug/kg	12.4	41.5
51-28-5	2,4-Dinitrophenol	U	830	ug/kg	158	830
132-64-9	Dibenzofuran	U	415	ug/kg	83.0	415
84-66-2	Diethylphthalate	U	415	ug/kg	83.0	415
86-73-7	Fluorene	U	41.5	ug/kg	12.4	41.5
7005-72-3	4-Chlorophenylphenylether	U	415	ug/kg	83.0	415
534-52-1	2-Methyl-4,6-dinitrophenol	U	415	ug/kg	83.0	415
100-01-6	4-Nitroaniline	U	415	ug/kg	124	415
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	415	ug/kg	83.0	415
122-66-7	Azobenzene	U	415	ug/kg	83.0	415
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	415	ug/kg	83.0	415
118-74-1	Hexachlorobenzene	U	415	ug/kg	83.0	415
85-01-8	Phenanthrene	U	41.5	ug/kg	12.4	41.5
120-12-7	Anthracene	U	41.5	ug/kg	8.30	41.5
84-74-2	Di-n-butylphthalate	U	415	ug/kg	83.0	415
206-44-0	Fluoranthene	U	41.5	ug/kg	12.4	41.5
85-68-7	Butylbenzylphthalate	U	415	ug/kg	83.0	415
56-55-3	Benzo(a)anthracene	U	41.5	ug/kg	12.4	41.5
91-94-1	3,3'-Dichlorobenzidine	U	415	ug/kg	124	415
218-01-9	Chrysene	U	41.5	ug/kg	12.4	41.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	415	ug/kg	83.0	415
117-84-0	Di-n-octylphthalate	U	415	ug/kg	83.0	415
205-99-2	Benzo(b)fluoranthene	U	41.5	ug/kg	12.4	41.5
207-08-9	Benzo(k)fluoranthene	U	41.5	ug/kg	12.4	41.5
50-32-8	Benzo(a)pyrene	U	41.5	ug/kg	12.4	41.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.5	ug/kg	12.4	41.5
53-70-3	Dibenzo(a,h)anthracene	U	41.5	ug/kg	12.4	41.5
191-24-2	Benzo(ghi)perylene	U	41.5	ug/kg	12.4	41.5
120-82-1	1,2,4-Trichlorobenzene	U	415	ug/kg	83.0	415

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
79-09-4	Propanoic acid	2.17	204	ug/kg	90	NJ
	Unknown Aldol Condensate	2.95	467	ug/kg		JA

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626002	Date Received: 01/13/2010 08:55	%Moisture: 19.7
Client ID: RE12-10-7266	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 13:45	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1910.d	Aliquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	6.02	169	ug/kg	96	NJ
	Unknown	9.72	267	ug/kg		J
	Unknown	10.04	919	ug/kg		J
	Unknown	10.7	216	ug/kg		J
	Unknown	10.82	234	ug/kg		J
112-95-8	Eicosane	11.8	170	ug/kg	96	NJ
	Unknown	11.87	355	ug/kg		J
	Unknown	12.28	198	ug/kg		J
	Unknown	12.3	255	ug/kg		J
	Unknown	13.29	205	ug/kg		J
83-46-5	Unknown	13.41	479	ug/kg		J
	.beta.-Sitosterol	13.79	494	ug/kg	97	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626011	Date Received: 01/13/2010 08:55	%Moisture: 7.1
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7267	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 17:14	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.06 g	Final Volume: 1 mL
Data File: s5a1919.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.6	358
108-95-2	Phenol	U	358	ug/kg	71.6	358
95-57-8	2-Chlorophenol	U	358	ug/kg	71.6	358
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.6	358
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.6	358
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.6	358
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358
87-86-5	Pentachlorophenol	U	358	ug/kg	89.5	358
129-00-0	Pyrene	U	35.8	ug/kg	10.7	35.8
110-86-1	Pyridine	U	358	ug/kg	71.6	358
62-53-3	Aniline	U	358	ug/kg	107	358
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.6	358
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.6	358
100-51-6	Benzyl alcohol	U	358	ug/kg	107	358
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.6	358
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.6	358
95-48-7	o-Cresol	U	358	ug/kg	71.6	358
65794-96-9	m,p-Cresols	U	358	ug/kg	107	358
67-72-1	Hexachloroethane	U	358	ug/kg	71.6	358
98-95-3	Nitrobenzene	U	358	ug/kg	71.6	358
78-59-1	Isophorone	U	358	ug/kg	71.6	358
88-75-5	2-Nitrophenol	U	358	ug/kg	71.6	358
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.6	358
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.6	358
65-85-0	Benzoic acid	U	716	ug/kg	179	716
91-20-3	Naphthalene	U	35.8	ug/kg	10.7	35.8
106-47-8	4-Chloroaniline	U	358	ug/kg	71.6	358
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.6	358
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.16	35.8
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.6	358 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.6	358
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.6	358
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8
88-74-4	2-Nitroaniline	U	358	ug/kg	71.6	358
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	358	ug/kg	71.6	358

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626011

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7267
Batch ID: 942840
Run Date: 01/19/2010 17:14
Prep Date: 01/18/2010 20:10
Data File: s5a1919.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	358	ug/kg	71.6	358
208-96-8	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358
51-28-5	Acenaphthylene	U	35.8	ug/kg	10.7	35.8
132-64-9	2,4-Dinitrophenol	U	716	ug/kg	136	716
84-66-2	Dibenzofuran	U	358	ug/kg	71.6	358
86-73-7	Diethylphthalate	U	358	ug/kg	71.6	358
7005-72-3	Fluorene	U	35.8	ug/kg	10.7	35.8
534-52-1	4-Chlorophenylphenylether	U	358	ug/kg	71.6	358
100-01-6	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.6	358
122-39-4	4-Nitroaniline	U	358	ug/kg	107	358
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	358	ug/kg	71.6	358
118-74-1	Azobenzene	U	358	ug/kg	71.6	358
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	358	ug/kg	71.6	358
84-74-2	Hexachlorobenzene	U	358	ug/kg	71.6	358
206-44-0	Phenanthrene	U	35.8	ug/kg	10.7	35.8
85-68-7	Anthracene	U	35.8	ug/kg	7.16	35.8
56-55-3	Di-n-butylphthalate	U	358	ug/kg	71.6	358
91-94-1	Fluoranthene	U	35.8	ug/kg	10.7	35.8
218-01-9	Butylbenzylphthalate	U	358	ug/kg	71.6	358
117-81-7	Benzo(a)anthracene	U	35.8	ug/kg	10.7	35.8
117-84-0	3,3'-Dichlorobenzidine	U	358	ug/kg	107	358
205-99-2	Chrysene	U	35.8	ug/kg	10.7	35.8
207-08-9	bis(2-Ethylhexyl)phthalate	U	358	ug/kg	71.6	358
50-32-8	Di-n-octylphthalate	U	358	ug/kg	71.6	358
193-39-5	Benzo(b)fluoranthene	U	35.8	ug/kg	10.7	35.8
53-70-3	Benzo(k)fluoranthene	U	35.8	ug/kg	10.7	35.8
191-24-2	Benzo(a)pyrene	U	35.8	ug/kg	10.7	35.8
120-82-1	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.7	35.8
	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.7	35.8
	Benzo(ghi)perylene	U	35.8	ug/kg	10.7	35.8
	1,2,4-Trichlorobenzene	U	358	ug/kg	71.6	358

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.18	243	ug/kg	90	NJ
	Unknown Aldol Condensate	2.96	605	ug/kg		JA

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626011	Date Received: 01/13/2010 08:55	%Moisture: 7.1
Client ID: RE12-10-7267	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 17:14	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1919.d	Aliquot: 30.06 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
1058-61-3	Stigmast-4-en-3-one	8.28	288	ug/kg	93	NJ
	Unknown	9.46	185	ug/kg		J
559-74-0	Friedelan-3-one	10.06	745	ug/kg	93	NJ
	Unknown	10.34	234	ug/kg		J
112-84-5	13-Docosenamide, (Z)-	10.41	203	ug/kg	87	NJ
	Unknown	10.52	228	ug/kg		J
	Unknown	10.72	464	ug/kg		J
	Unknown	11.01	237	ug/kg		J
	Unknown	11.67	813	ug/kg		J
	Unknown	12.05	400	ug/kg		J
	Unknown	12.32	332	ug/kg		J
	Unknown	12.76	879	ug/kg		J
	Unknown	13.31	185	ug/kg		J
	Unknown	13.55	320	ug/kg		J
	Unknown	14.33	146	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626004

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

Client ID: RE12-10-7268
Batch ID: 942840
Run Date: 01/19/2010 14:32
Prep Date: 01/18/2010 20:10
Data File: s5a1912.d

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

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

SDG Number: 10-1225
Lab Sample ID: 244626004

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

Client ID: RE12-10-7268
Batch ID: 942840
Run Date: 01/19/2010 14:32
Prep Date: 01/18/2010 20:10
Data File: s5a1912.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	369	ug/kg	73.9	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	369	ug/kg	73.9	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.9	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.9	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.9	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.9	369
122-66-7	Azobenzene	U	369	ug/kg	73.9	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.9	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.9	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.39	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.9	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.9	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.9	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.9	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.9	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	4290	ug/kg		J
79-09-4	Propanoic acid	2.17	214	ug/kg	87	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626004	Date Received: 01/13/2010 08:55	%Moisture: 9.8
Client ID: RE12-10-7268	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:32	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1912.d	Allquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	451	ug/kg		JA
559-74-0	Friedelan-3-one	10.02	245	ug/kg	90	NJ
	Unknown	10.05	389	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	10.41	193	ug/kg	89	NJ
	Unknown	10.51	160	ug/kg		J
	Unknown	12.72	264	ug/kg		J
	Unknown	12.92	229	ug/kg		J
	Unknown	13.31	555	ug/kg		J
83-46-5	.beta.-Sitosterol	13.79	309	ug/kg	96	NJ
	Unknown	14.32	152	ug/kg		J

ETM
2/19/10

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626014	Date Received: 01/13/2010 08:55	%Moisture: 6
Client ID: RE12-10-7269	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:24	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: a5a1922.d	Allquot: 30.04 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	354	ug/kg	70.8	354
108-95-2	Phenol	U	354	ug/kg	70.8	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.8	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.8	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.8	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.8	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.5	354
129-00-0	Pyrene	U	35.4	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.8	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.8	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.8	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.8	354
108-60-1	bis(2-Chloroisopropyl) ether	U	354	ug/kg	70.8	354
95-48-7	o-Cresol	U	354	ug/kg	70.8	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.8	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.8	354
78-59-1	Isophorone	U	354	ug/kg	70.8	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.8	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.8	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.8	354
65-85-0	Benzoic acid	U	708	ug/kg	177	708
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.8	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.8	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.08	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.8	354 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.8	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.8	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline	U	354	ug/kg	70.8	354
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	354	ug/kg	70.8	354

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626014	Date Received: 01/13/2010 08:55	%Moisture: 6
Client ID: RE12-10-7269	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:24	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1922.d	Aliquot: 30.04 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	U	354	ug/kg	70.8	354
606-20-2	Dimethylphthalate	U	354	ug/kg	35.4	354
208-96-8	2,6-Dinitrotoluene	U	35.4	ug/kg	10.6	35.4
51-28-5	Acenaphthylene	U	708	ug/kg	135	708
132-64-9	2,4-Dinitrophenol	U	354	ug/kg	70.8	354
84-66-2	Dibenzofuran	U	354	ug/kg	70.8	354
86-73-7	Diethylphthalate	U	35.4	ug/kg	10.6	35.4
7005-72-3	Fluorene	U	354	ug/kg	70.8	354
534-52-1	4-Chlorophenylphenylether	U	354	ug/kg	70.8	354
100-01-6	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	106	354
122-39-4	4-Nitroaniline	U	354	ug/kg	70.8	354
122-66-7	<i>p</i> -Nitroaniline	U	354	ug/kg	70.8	354
101-55-3	Diphenylamine	U	354	ug/kg	70.8	354
118-74-1	Azobenzene	U	354	ug/kg	70.8	354
85-01-8	1,2-Diphenylhydrazine	U	354	ug/kg	70.8	354
120-12-7	4-Bromophenylphenylether	U	354	ug/kg	70.8	354
84-74-2	Hexachlorobenzene	U	35.4	ug/kg	10.6	35.4
206-44-0	Phenanthrene	U	35.4	ug/kg	7.08	35.4
85-68-7	Anthracene	U	354	ug/kg	70.8	354
56-55-3	Di-n-butylphthalate	U	35.4	ug/kg	10.6	35.4
91-94-1	Fluoranthene	U	354	ug/kg	70.8	354
218-01-9	Butylbenzylphthalate	U	35.4	ug/kg	10.6	35.4
117-81-7	Benzo(a)anthracene	U	354	ug/kg	106	354
117-84-0	3,3'-Dichlorobenzidine	U	35.4	ug/kg	10.6	35.4
205-99-2	Chrysene	U	354	ug/kg	70.8	354
207-08-9	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.8	354
50-32-8	Di-n-octylphthalate	U	35.4	ug/kg	10.6	35.4
193-39-5	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
53-70-3	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(a)pyrene	U	35.4	ug/kg	10.6	35.4
120-82-1	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4
	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
	1,2,4-Trichlorobenzene	U	354	ug/kg	70.8	354

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.03	396	ug/kg		J
79-09-4	Propanoic acid	2.17	185	ug/kg	90	NJ

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626014	Date Received: 01/13/2010 08:55	%Moisture: 6
Client ID: RE12-10-7269	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:24	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1922.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.96	538	ug/kg		JA
	Unknown	10.05	195	ug/kg		J
	Unknown	10.71	157	ug/kg		J
	Unknown	12	741	ug/kg		J
	Unknown	12.76	1320	ug/kg		J
	Unknown	13.53	341	ug/kg		J

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626013

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7270
Batch ID: 942840
Run Date: 01/19/2010 18:01
Prep Date: 01/18/2010 20:10
Data File: s5a1921.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.7	379
108-95-2	Phenol	U	379	ug/kg	75.7	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.7	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.7	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.7	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.7	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.7	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.7	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.7	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.7	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.7	379
108-60-1	bis(2-Chloroisopropyl) ether	U	379	ug/kg	75.7	379
95-48-7	o-Cresol	U	379	ug/kg	75.7	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.7	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.7	379
78-59-1	Isophorone	U	379	ug/kg	75.7	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.7	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.7	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.7	379
65-85-0	Benzoic acid	J	608	ug/kg	189	757
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.7	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.7	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.57	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.7	379 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.7	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.7	379
91-58-7	2-Chloronaphthalene	U	37.9	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.7	379
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	379	ug/kg	75.7	379

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

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SDG Number: 10-1225
Lab Sample ID: 244626013

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 12.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7270
Batch ID: 942840
Run Date: 01/19/2010 18:01
Prep Date: 01/18/2010 20:10
Data File: s5a1921.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	379	ug/kg	75.7	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	757	ug/kg	144	757
132-64-9	Dibenzofuran	U	379	ug/kg	75.7	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.7	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.7	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.7	379
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.7	379
122-66-7	Azobenzene	U	379	ug/kg	75.7	379
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.7	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.7	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.57	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.7	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.7	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.7	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.7	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.7	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.96	709	ug/kg		JA
7785-70-8	1R- α -Pinene	3.51	812	ug/kg	97	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626013	Date Received: 01/13/2010 08:55	%Moisture: 12.5
Client ID: RE12-10-7270	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:01	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1921.d	Aliquot: 30.17 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.01	227	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.08	244	ug/kg	98	NJ
	Unknown	9.11	367	ug/kg		J
	Unknown	9.25	278	ug/kg		J
	Unknown	9.34	185	ug/kg		J
6971-40-0	17-Pentatriacontene	9.42	301	ug/kg	93	NJ
62600-05-9	Cedran-diol, 8S,14-	9.48	336	ug/kg	83	NJ
	Unknown	9.57	276	ug/kg		J
	Unknown	9.6	312	ug/kg		J
	Unknown	9.7	254	ug/kg		J
	Unknown	9.73	415	ug/kg		J
	Unknown	9.77	189	ug/kg		J
	Unknown	9.78	272	ug/kg		J
110936-78-2	7-Oxodelhydroabietic acid, methyl ester	9.86	273	ug/kg	89	NJ
	Unknown	9.93	229	ug/kg		J
	Unknown	9.96	205	ug/kg		J
	Unknown	10.05	491	ug/kg		J
629-96-9	1-Eicosanol	10.08	468	ug/kg	83	NJ
	Unknown	10.17	214	ug/kg		J
	Unknown	10.22	353	ug/kg		J
	Unknown	10.29	312	ug/kg		J
	Unknown	10.42	203	ug/kg		J
	Unknown	10.72	367	ug/kg		J
	Unknown	11.67	673	ug/kg		J
	Unknown	12.75	582	ug/kg		J
	Unknown	13.32	1800	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	2070	ug/kg	93	NJ
	Unknown	14.34	407	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626009

Client ID: RE12-10-7271
Batch ID: 942840
Run Date: 01/19/2010 16:28
Prep Date: 01/18/2010 20:10
Data File: s5a1917.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	71.9	360
108-95-2	Phenol	U	360	ug/kg	71.9	360
95-57-8	2-Chlorophenol	U	360	ug/kg	71.9	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	71.9	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	71.9	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	71.9	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	89.9	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	71.9	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	71.9	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	71.9	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	71.9	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	71.9	360
95-48-7	o-Cresol	U	360	ug/kg	71.9	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	71.9	360
98-95-3	Nitrobenzene	U	360	ug/kg	71.9	360
78-59-1	Isophorone	U	360	ug/kg	71.9	360
88-75-5	2-Nitrophenol	U	360	ug/kg	71.9	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	71.9	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	71.9	360
65-85-0	Benzoic acid	U	719	ug/kg	180	719
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	71.9	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	71.9	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.19	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	71.9	360 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	71.9	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	71.9	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	71.9	360
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	360	ug/kg	71.9	360

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626009

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
606-20-2	Dimethylphthalate	U	360	ug/kg	71.9	360
208-96-8	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
51-28-5	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
132-64-9	2,4-Dinitrophenol	U	719	ug/kg	137	719
84-66-2	Dibenzofuran	U	360	ug/kg	71.9	360
86-73-7	Diethylphthalate	U	360	ug/kg	71.9	360
7005-72-3	Fluorene	U	36.0	ug/kg	10.8	36.0
534-52-1	4-Chlorophenylphenylether	U	360	ug/kg	71.9	360
100-01-6	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	71.9	360
	4-Nitroaniline	U	360	ug/kg	108	360
122-39-4	<i>p</i> -Nitroaniline					
122-66-7	Diphenylamine	U	360	ug/kg	71.9	360
	Azobenzene	U	360	ug/kg	71.9	360
101-55-3	1,2-Diphenylhydrazine					
118-74-1	4-Bromophenylphenylether	U	360	ug/kg	71.9	360
85-01-8	Hexachlorobenzene	U	360	ug/kg	71.9	360
120-12-7	Phenanthrene	U	36.0	ug/kg	10.8	36.0
84-74-2	Anthracene	U	36.0	ug/kg	7.19	36.0
206-44-0	Di-n-butylphthalate	U	360	ug/kg	71.9	360
85-68-7	Fluoranthene	U	36.0	ug/kg	10.8	36.0
56-55-3	Butylbenzylphthalate	U	360	ug/kg	71.9	360
91-94-1	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
218-01-9	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
117-81-7	Chrysene	U	36.0	ug/kg	10.8	36.0
117-84-0	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	71.9	360
205-99-2	Di-n-octylphthalate	U	360	ug/kg	71.9	360
207-08-9	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
193-39-5	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
191-24-2	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
120-82-1	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
	1,2,4-Trichlorobenzene	U	360	ug/kg	71.9	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	527	ug/kg		J
	Unknown	2.17	197	ug/kg		J

ETM
2/19/10

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626009	Date Received: 01/13/2010 08:55	%Moisture: 7.6
Client ID: RE12-10-7271	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 16:28	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1917.d	Allquot: 30.09 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.2	208	ug/kg	91	NJ
	Unknown Aldol Condensate	2.96	638	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.51	396	ug/kg	97	NJ
13466-78-9	3-Carene	3.9	227	ug/kg	96	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.08	161	ug/kg	98	NJ
	Unknown	9.11	189	ug/kg		J
295-48-7	Cyclopentadecane	9.42	236	ug/kg	95	NJ
	Unknown	9.7	169	ug/kg		J
112-95-8	Eicosane	9.73	215	ug/kg	95	NJ
	Unknown	9.86	171	ug/kg		J
	Unknown	10.06	1270	ug/kg		J
	Unknown	10.41	188	ug/kg		J
	Unknown	10.52	248	ug/kg		J
	Unknown	12.3	191	ug/kg		J
	Unknown	12.92	295	ug/kg		J
	Unknown	13.11	220	ug/kg		J
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	13.32	3100	ug/kg	83	NJ
	Unknown	13.46	359	ug/kg		J
	Unknown	13.73	742	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.81	1110	ug/kg	93	NJ
	Unknown	14.34	590	ug/kg		J
	Unknown	14.4	248	ug/kg		J

ETM
2/19/10

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

SDG Number: 10-1225
Lab Sample ID: 244626016

Client ID: RE12-10-7282
Batch ID: 942840
Run Date: 01/19/2010 19:10
Prep Date: 01/18/2010 20:10
Data File: s5a1924.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
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	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
99-09-2	o-Nitroaniline	U	355	ug/kg	70.9	355
	3-Nitroaniline					

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626016

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
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	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
122-39-4	<i>p</i> -Nitroaniline					
	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
101-55-3	<i>1,2</i> -Diphenylhydrazine					
	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	375	ug/kg		J
79-09-4	Propanoic acid	2.17	174	ug/kg	90	NJ

ETM
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626016	Date Received: 01/13/2010 08:55	%Moisture: 6.2
Client ID: RE12-10-7282	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 19:10	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1924.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	Fit	Qual
	Unknown Aldol Condensate	2.95	606	ug/kg		JA
58-22-0	Androst-4-en-3-one, 17-hydroxy-, (17.bet	8.27	206	ug/kg	81	NJ
559-74-0	Friedelan-3-one	10.06	574	ug/kg	97	NJ
	Unknown	10.34	181	ug/kg		J
112-84-5	13-Docosenamide, (Z)-	10.41	160	ug/kg	95	NJ
	Unknown	10.72	211	ug/kg		J
	Unknown	11.67	473	ug/kg		J
	Unknown	12.32	227	ug/kg		J
	Unknown	12.76	497	ug/kg		J
	Unknown	13.55	226	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626015

Client ID: RE12-10-7283
Batch ID: 942840
Run Date: 01/19/2010 18:47
Prep Date: 01/18/2010 20:10
Data File: s5a1923.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.2
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	407	ug/kg	81.5	407
108-95-2	Phenol	U	407	ug/kg	81.5	407
95-57-8	2-Chlorophenol	U	407	ug/kg	81.5	407
106-46-7	1,4-Dichlorobenzene	U	407	ug/kg	81.5	407
621-64-7	N-Nitrosodipropylamine	U	407	ug/kg	81.5	407
59-50-7	4-Chloro-3-methylphenol	U	407	ug/kg	81.5	407
83-32-9	Acenaphthene	U	40.7	ug/kg	13.4	40.7
121-14-2	2,4-Dinitrotoluene	U	407	ug/kg	40.7	407
100-02-7	4-Nitrophenol	U	407	ug/kg	134	407
87-86-5	Pentachlorophenol	U	407	ug/kg	102	407
129-00-0	Pyrene	U	40.7	ug/kg	12.2	40.7
110-86-1	Pyridine	U	407	ug/kg	81.5	407
62-53-3	Aniline	U	407	ug/kg	122	407
111-44-4	bis(2-Chloroethyl) ether	U	407	ug/kg	81.5	407
541-73-1	1,3-Dichlorobenzene	U	407	ug/kg	81.5	407
100-51-6	Benzyl alcohol	U	407	ug/kg	122	407
95-50-1	1,2-Dichlorobenzene	U	407	ug/kg	81.5	407
108-60-1	bis(2-Chloroisopropyl)ether	U	407	ug/kg	81.5	407
95-48-7	o-Cresol	U	407	ug/kg	81.5	407
65794-96-9	m,p-Cresols	U	407	ug/kg	122	407
67-72-1	Hexachloroethane	U	407	ug/kg	81.5	407
98-95-3	Nitrobenzene	U	407	ug/kg	81.5	407
78-59-1	Isophorone	U	407	ug/kg	81.5	407
88-75-5	2-Nitrophenol	U	407	ug/kg	81.5	407
105-67-9	2,4-Dimethylphenol	U	407	ug/kg	143	407
111-91-1	bis(2-Chloroethoxy)methane	U	407	ug/kg	81.5	407
120-83-2	2,4-Dichlorophenol	U	407	ug/kg	81.5	407
65-85-0	Benzoic acid	J	645	ug/kg	204	815
91-20-3	Naphthalene	U	40.7	ug/kg	12.2	40.7
106-47-8	4-Chloroaniline	U	407	ug/kg	81.5	407
87-68-3	Hexachlorobutadiene	U	407	ug/kg	81.5	407
91-57-6	2-Methylnaphthalene	U	40.7	ug/kg	8.15	40.7
77-47-4	Hexachlorocyclopentadiene	U	407	ug/kg	81.5	407 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	407	ug/kg	81.5	407
95-95-4	2,4,5-Trichlorophenol	U	407	ug/kg	81.5	407
91-58-7	2-Chloronaphthalene	U	40.7	ug/kg	13.4	40.7
88-74-4	2-Nitroaniline	U	407	ug/kg	81.5	407
99-09-2	<i>o</i> -Nitroaniline	U	407	ug/kg	81.5	407
	3-Nitroaniline					

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

SDG Number: 10-1225
Lab Sample ID: 244626015

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7283
Batch ID: 942840
Run Date: 01/19/2010 18:47
Prep Date: 01/18/2010 20:10
Data File: s5a1923.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	407	ug/kg	81.5	407
606-20-2	2,6-Dinitrotoluene	U	407	ug/kg	40.7	407
208-96-8	Acenaphthylene	U	40.7	ug/kg	12.2	40.7
51-28-5	2,4-Dinitrophenol	U	815	ug/kg	155	815
132-64-9	Dibenzofuran	U	407	ug/kg	81.5	407
84-66-2	Diethylphthalate	U	407	ug/kg	81.5	407
86-73-7	Fluorene	U	40.7	ug/kg	12.2	40.7
7005-72-3	4-Chlorophenylphenylether	U	407	ug/kg	81.5	407
534-52-1	2-Methyl-4,6-dinitrophenol	U	407	ug/kg	81.5	407
100-01-6	4-Nitroaniline	U	407	ug/kg	122	407
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	407	ug/kg	81.5	407
122-66-7	Azobenzene	U	407	ug/kg	81.5	407
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	407	ug/kg	81.5	407
118-74-1	Hexachlorobenzene	U	407	ug/kg	81.5	407
85-01-8	Phenanthrene	U	40.7	ug/kg	12.2	40.7
120-12-7	Anthracene	U	40.7	ug/kg	8.15	40.7
84-74-2	Di-n-butylphthalate	U	407	ug/kg	81.5	407
206-44-0	Fluoranthene	U	40.7	ug/kg	12.2	40.7
85-68-7	Butylbenzylphthalate	U	407	ug/kg	81.5	407
56-55-3	Benzo(a)anthracene	U	40.7	ug/kg	12.2	40.7
91-94-1	3,3'-Dichlorobenzidine	U	407	ug/kg	122	407
218-01-9	Chrysene	U	40.7	ug/kg	12.2	40.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	407	ug/kg	81.5	407
117-84-0	Di-n-octylphthalate	U	407	ug/kg	81.5	407
205-99-2	Benzo(b)fluoranthene	U	40.7	ug/kg	12.2	40.7
207-08-9	Benzo(k)fluoranthene	U	40.7	ug/kg	12.2	40.7
50-32-8	Benzo(a)pyrene	U	40.7	ug/kg	12.2	40.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.7	ug/kg	12.2	40.7
53-70-3	Dibenzo(a,h)anthracene	U	40.7	ug/kg	12.2	40.7
191-24-2	Benzo(ghi)perylene	U	40.7	ug/kg	12.2	40.7
120-82-1	1,2,4-Trichlorobenzene	U	407	ug/kg	81.5	407

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.69	587	ug/kg	87	NJ
	Unknown	5.76	634	ug/kg		J

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626015	Date Received: 01/13/2010 08:55	%Moisture: 18.2
Client ID: RE12-10-7283	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 18:47	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1923.d	Aliquot: 30.01 g	Final Volume: 1 mL
	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
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	5610	ug/kg	99	NJ
	Unknown	5.96	636	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	6.14	752	ug/kg	94	NJ
77-53-2	Cedrol	6.57	3250	ug/kg	94	NJ
473-16-5	2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	6.7	587	ug/kg	95	NJ
	Unknown	6.88	1160	ug/kg		J
1000130-97-9	E-15-Heptadecenal	8.77	558	ug/kg	98	NJ
	Unknown	8.92	2020	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	7030	ug/kg	99	NJ
	Unknown	9.35	412	ug/kg		J
	Unknown	9.37	450	ug/kg		J
1599-67-3	1-Docosene	9.42	935	ug/kg	99	NJ
	Unknown	9.47	575	ug/kg		J
	Unknown	9.51	880	ug/kg		J
	Unknown	9.56	582	ug/kg		J
	Unknown	9.59	463	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.62	715	ug/kg	91	NJ
6755-93-7	2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	9.76	1180	ug/kg	98	NJ
3772-56-3	2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.88	541	ug/kg	98	NJ
	Unknown	9.94	629	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	759	ug/kg	95	NJ
	Unknown	10.08	1760	ug/kg		J
	Unknown	10.26	450	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.51	1080	ug/kg	93	NJ
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.88	895	ug/kg	89	NJ
112-95-8	Eicosane	13.17	1360	ug/kg	95	NJ
	Unknown	13.31	806	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	1750	ug/kg	92	NJ

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1225 VALIDATION DATE: 2/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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


1. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis was not reported in the data package. Thus, surrogate RT criteria could not be evaluated. No sample data were qualified as a result.
2. The ICV %D was >20% but ≤40% with a negative bias for tetryl. The associated sample results were NDs and, thus, were qualified UJ,HE7c. In the CCVs, the %Ds were >20% with a positive bias for HMX and RDX. All the associated sample results were NDs and, thus, were not qualified.
3. The MS/MSD RPD was > the laboratory acceptance limit for tetryl. The associated sample results were NDs and, thus, were qualified UJ,HE12g.

Reviewed by: Mary Donovan Level: II Date: 02/19/10


VALIDATOR'S SIGNATURE: _____

Eric T. Mink


DATE: 2/19/10

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


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

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

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

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

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

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

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626001

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130015a

Date Analyzed: 30-JAN-10 18:35

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,HE7c	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

ETM
2/19/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626001

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250072.wiff

Date Analyzed: 26-JAN-10 05:08

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

ETM
2/19/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7266

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626002

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130018a

Date Analyzed: 30-JAN-10 20:04

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE7c	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: RE12-10-7266

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626002

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250075.wiff

Date Analyzed: 26-JAN-10 05:55

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	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

ETM
2/19/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7258

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626003

Sample Amount 2

Moisture: 14.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130019a

Date Analyzed: 30-JAN-10 20:33

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,HE7c	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: RE12-10-7258

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626003

Sample Amount 2

Moisture: 14.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250076.wiff

Date Analyzed: 26-JAN-10 06:11

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7268

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626004

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130020a

Date Analyzed: 30-JAN-10 21:03

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,HE7c 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: RE12-10-7268

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626004

Sample Amount 2

Moisture: 2.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250077.wiff

Date Analyzed: 26-JAN-10 06:26

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	<u>Dilution</u>
		<u>Sample Amount</u>		<u>Factor</u>

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7265

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626005

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130021a

Date Analyzed: 30-JAN-10 21:32

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl UJ,HE7c	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: RE12-10-7265

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626005

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250078.wiff

Date Analyzed: 26-JAN-10 06:42

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

ETM
2/19/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7261

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626006

Sample Amount 2

Moisture: 13.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130022a

Date Analyzed: 30-JAN-10 22:02

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,HE7c	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		

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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7261

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626006

Sample Amount 2

Moisture: 13.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250079.wiff

Date Analyzed: 26-JAN-10 06:58

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7259

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626007

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130026a

Date Analyzed: 31-JAN-10 00:00

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,HE7c	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7259

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626007

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250083.wiff

Date Analyzed: 26-JAN-10 08:00

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

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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7263

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626008

Sample Amount 2

Moisture: 5.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130027a

Date Analyzed: 31-JAN-10 00:29

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,HE7c	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

ETM
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7263

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626008

Sample Amount 2

Moisture: 5.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250084.wiff

Date Analyzed: 26-JAN-10 08:16

Units: ug/kg

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

*Concentration =

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

ETM
2/19/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7271

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626009

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130028a

Date Analyzed: 31-JAN-10 00:59

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,HE7c	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

ETM
2/19/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7271

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626009

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250085.wiff

Date Analyzed: 26-JAN-10 08:32

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

ETM
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7260

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626010

Sample Amount 2

Moisture: 19.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130029a

Date Analyzed: 31-JAN-10 01:28

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

ETM
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7260

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626010

Sample Amount 2

Moisture: 19.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250086.wiff

Date Analyzed: 26-JAN-10 08:48

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7267

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626011

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130030a

Date Analyzed: 31-JAN-10 01:58

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,HE7c 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

ETM
2/19/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7267

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626011

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250087.wiff

Date Analyzed: 26-JAN-10 09:03

Units: ug/kg

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

*Concentration =

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

ETM
2/19/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7264

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626012

Sample Amount 2

Moisture: 11.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130031a

Date Analyzed: 31-JAN-10 02:27

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,HE7c	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

ETM
2/19/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7264

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626012

Sample Amount 2

Moisture: 11.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250088.wiff

Date Analyzed: 26-JAN-10 09:19

Units: ug/kg

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

*Concentration =

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

ETM
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7270

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626013

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130032a

Date Analyzed: 31-JAN-10 02:57

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,HE7c	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

ETM
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7270

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626013

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250089.wiff

Date Analyzed: 26-JAN-10 09:35

Units: ug/kg

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

*Concentration =

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

ETM
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7269

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626014

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130033a

Date Analyzed: 31-JAN-10 03:26

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,HE7c	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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2/19/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7269

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626014

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250090.wiff

Date Analyzed: 26-JAN-10 09:50

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

ETM
2/19/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7283

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626015

Sample Amount 2

Moisture: 18.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130034a

Date Analyzed: 31-JAN-10 03:56

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,HE7c	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

ETM
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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7283

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626015

Sample Amount 2

Moisture: 18.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250091.wiff

Date Analyzed: 26-JAN-10 10:06

Units: ug/kg

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

*Concentration =

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: RE12-10-7282

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626016

Sample Amount 2

Molsture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130035a

Date Analyzed: 31-JAN-10 04:25

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

ETM
2/19/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7282

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626016

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250092.wiff

Date Analyzed: 26-JAN-10 10:22

Units: ug/kg

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

*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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ETM
2/19/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1225 VALIDATION DATE: 2/19/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Eric T. Mink ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check


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

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


- It should also be noted that the MS/MSD analyses were performed on a LANL sample from a different RN. However, MS/MSD analyses are not required for this analysis and, thus, no sample data were qualified.

Reviewed by: Mary Donovan Level: II Date: 02/19/10


VALIDATOR'S SIGNATURE: Eric T. Mink DATE: 2/19/10

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 type="checkbox"/>	<input checked="" type="checkbox"/>	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, P7f	R, P7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The breakdown criteria have been exceeded. This can cause low bias in reported results. If compound is detected, qualify J-. If compound is not present, but breakdown products are present, qualify R. If no compounds or breakdown products are present, qualify UJ (4,4' DDT and Endrin).	UJ, R, P13	J-, P13

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

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

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

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

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

5116-2

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

Records Use only



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

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1225
Lab Sample ID: 244626016Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 6.2
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	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260	U	3.55	ug/kg	1.18	3.55	1

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2/19/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1225
Lab Sample ID: 244626015Client ID: RE12-10-7283
Batch ID: 942247
Run Date: 01/19/2010 11:58
Prep Date: 01/18/2010 10:10
Data File: 031f3101.d
031b3101.dDate Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1AJ
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 18.2
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	4.07	ug/kg	1.36	4.07	1
11104-28-2	Aroclor-1221	U	4.07	ug/kg	1.36	4.07	1
11141-16-5	Aroclor-1232	U	4.07	ug/kg	1.36	4.07	1
53469-21-9	Aroclor-1242	U	4.07	ug/kg	1.36	4.07	1
12672-29-6	Aroclor-1248	U	4.07	ug/kg	1.36	4.07	1
11097-69-1	Aroclor-1254	U	4.07	ug/kg	1.36	4.07	1
11096-82-5	Aroclor-1260	U	4.07	ug/kg	1.36	4.07	1

ETM
2/19/10

Tuesday, January 12, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1225

LOS ALAMOS

REQUEST NUMBER: 10-1225

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2446267.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7262	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7266	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7258	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7268	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7265	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7261	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7259	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7263	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7271	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7260	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7267	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7264	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7270	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7269	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7283	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7282	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Received for DISPOSAL By:

Date Time

Remarks:

Printed Name Signature

Tuesday, January 12, 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: 10-1225
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

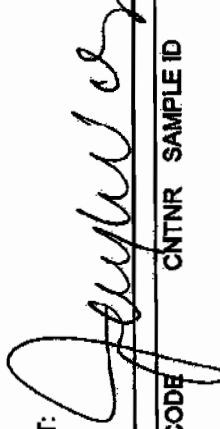
Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/12/2010
TURNAROUND/REPORT DUE: 2/11/2010
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	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846-8270C	1	RE12-10-7256	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7261	R	1/8/2010	
		1	RE12-10-7262	R	1/8/2010	
		1	RE12-10-7263	R	1/8/2010	
		1	RE12-10-7284	R	1/8/2010	

Tuesday, January 12, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE12-10-7265	R	1/8/2010	
		1	RE12-10-7266	R	1/8/2010	
		1	RE12-10-7267	R	1/8/2010	
		1	RE12-10-7268	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846:8321A_MOD	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7261	R	1/8/2010	
		1	RE12-10-7262	R	1/8/2010	
		1	RE12-10-7263	R	1/8/2010	
		1	RE12-10-7264	R	1/8/2010	
		1	RE12-10-7265	R	1/8/2010	
		1	RE12-10-7266	R	1/8/2010	
		1	RE12-10-7267	R	1/8/2010	
		1	RE12-10-7268	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	

Final Page of REQUEST NUMBER 10-1225

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1226 VALIDATION DATE: 02/25/2010 LAB CODE: GELCONTRACT LABORATORY NAME: GEL Laboratories LLCVALIDATOR: Mary Donovan 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 checked="" type="checkbox"/> LCMSMS PERCHLORATES |
| <input type="checkbox"/> TPH-DRO | <input type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | <input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS |

☐ OTHER (DESCRIBE): _____


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 %R calculations were performed incorrectly. The parent sample result was < the MDL and, thus, a result of 0 mg/kg should have been used to calculate the %Rs. The laboratory subtracted the parent sample concentration. The MSD %R was not within the acceptance limits when calculated correctly. The MSD %R was > the laboratory UAL for perchlorate. All associated sample results were NDs and, thus, were not qualified.


Reviewed by: ETM Level: 1 Date: 2/26/10VALIDATOR'S SIGNATURE: Mary A. Donovan DATE: 02/25/2010

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2	Records Use only
LC/MS/MS Perchlorate Analytical Data Validation Checklist 	

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. The Internal Standard (IS) relative retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
<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, PERC0b	R, PERC0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
<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, PERC1d	R, PERC1d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, PERC4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$.	N/A	J+, PERC4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC4e	R, PERC4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.	UJ, PERC7	J, PERC7
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.99 .	UJ, R, PERC7a	J, PERC7a

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2	Records Use only
LC/MS/MS Perchlorate Analytical Data Validation Checklist	

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"/>	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, PERC7f	R, PERC7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17. The ion ratio documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	N/A	R, PERC8a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The LCS documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PERC12c	R, PERC12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26. The MS/MSD percent recovery was >125%.	N/A	J+, PERC12f

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST	
5121-2 LC/MS/MS Perchlorate 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"/>	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28. 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, PERC15	N/A
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	31. The Interference Check Sample was not within $\pm 20\%$ of the known value.	UJ, PERC16a	J, PERC16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	33. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, PERC19	J, R, PERC19
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942321

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7262

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1226

GEL Sample ID: 244628001

Date Filtered: 25-JAN-10

Injection Volume (uL): 20

%Solids: 21.1

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.549	2.19	0.549	ug/kg	U	1	25-JAN-10 22:00	per0125044a
	Perchlorate Isotope Ratio						1	25-JAN-10 22:00	per0125044a
14797-73-0	Perchlorate-101	.549	2.19	0.549	ug/kg	U	1	25-JAN-10 22:00	per0125044a
	Perchlorate-O(18)			5.58	ug/kg		1	25-JAN-10 22:00	per0125044a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X $\frac{1}{\% \text{Solids}}$
Aliquot

MAD

02/25/10

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942321
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7266
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1226
 GEL Sample ID: 244628002
 Date Filtered: 25-JAN-10
 Injection Volume (uL): 20
 %Solids: 80

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.623	2.49	0.623	ug/kg	U	1	25-JAN-10 22:55	per0125050a
	Perchlorate Isotope Ratio						1	25-JAN-10 22:55	per0125050a
14797-73-0	Perchlorate-101	.623	2.49	0.623	ug/kg	U	1	25-JAN-10 22:55	per0125050a
	Perchlorate-O(18)			6.88	ug/kg		1	25-JAN-10 22:55	per0125050a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹
 Aliquot %Solids

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942321
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7258
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1226
 GEL Sample ID: 244628003
 Date Filtered: 25-JAN-10
 Injection Volume (uL): 20
 %Solids: 86

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.583	2.33	0.583	ug/kg	U	1	25-JAN-10 23:04	per0125051a
	Perchlorate Isotope Ratio								
14797-73-0	Perchlorate-101	.583	2.33	0.583	ug/kg	U	1	25-JAN-10 23:04	per0125051a
	Perchlorate-O(18)			6.86	ug/kg		1	25-JAN-10 23:04	per0125051a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942321
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7268
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1226
 GEL Sample ID: 244628004
 Date Filtered: 25-JAN-10
 Injection Volume (uL): 20
 %Solids: 90.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.554	2.22	0.554	ug/kg	U	1	25-JAN-10 23:13	per0125052a
	Perchlorate Isotope Ratio						1	25-JAN-10 23:13	per0125052a
14797-73-0	Perchlorate-101	.554	2.22	0.554	ug/kg	U	1	25-JAN-10 23:13	per0125052a
	Perchlorate-O(18)			6.30	ug/kg		1	25-JAN-10 23:13	per0125052a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X $\frac{1}{\% \text{Solids}}$
 Aliquot

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942321

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7265

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1226

GEL Sample ID: 244628005

Date Filtered: 25-JAN-10

Injection Volume (uL): 20

%Solids: 93.8

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.533	ug/kg	U	1	25-JAN-10 23:22	per0125053a
	Perchlorate Isotope Ratio						1	25-JAN-10 23:22	per0125053a
14797-73-0	Perchlorate-101	.533	2.13	0.557	ug/kg	J	1	25-JAN-10 23:22	per0125053a
	Perchlorate-O(18)			6.27	ug/kg		1	25-JAN-10 23:22	per0125053a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{\% \text{Solids}}{1}$

MAD
02/25/10

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942321

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7261

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1226

GEL Sample ID: 244628006

Date Filtered: 25-JAN-10

Injection Volume (uL): 20

%Solids: 87

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.577	2.31	0.577	ug/kg	U	1	25-JAN-10 23:31	per0125054a
	Perchlorate Isotope Ratio						1	25-JAN-10 23:31	per0125054a
14797-73-0	Perchlorate-101	.577	2.31	0.577	ug/kg	U	1	25-JAN-10 23:31	per0125054a
	Perchlorate-O(18)			7.19	ug/kg		1	25-JAN-10 23:31	per0125054a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942321
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7259
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1226
 GEL Sample ID: 244628007
 Date Filtered: 25-JAN-10
 Injection Volume (uL): 20
 %Solids: 93.5

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.535	2.14	0.535	ug/kg	U	1	25-JAN-10 23:40	per0125055a
	Perchlorate Isotope Ratio						1	25-JAN-10 23:40	per0125055a
14797-73-0	Perchlorate-101	.535	2.14	0.535	ug/kg	U	1	25-JAN-10 23:40	per0125055a
	Perchlorate-O(18)			5.95	ug/kg		1	25-JAN-10 23:40	per0125055a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X Concentrated Extract Volume X $\frac{1}{\% \text{Solids}}$
 Aliquot

MAD
 02/25/10

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942321

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7263

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1226

GEL Sample ID: 244628008

Date Filtered: 25-JAN-10

Injection Volume (uL): 20

%Solids: 94.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.53	2.12	0.530	ug/kg	U	1	25-JAN-10 23:49	per0125056a
	Perchlorate Isotope Ratio						1	25-JAN-10 23:49	per0125056a
14797-73-0	Perchlorate-101	.53	2.12	0.530	ug/kg	U	1	25-JAN-10 23:49	per0125056a
	Perchlorate-O(18)			6.25	ug/kg		1	25-JAN-10 23:49	per0125056a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹
Aliquot %Solids

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.

RE12-10-7271

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 242321

Extraction Type: Solid Prep

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1226

GEL Sample ID: 244628009

Date Filtered: 25-JAN-10

Injection Volume (uL): 20

%Solids: 92.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.541	2.16	0.541	ug/kg	U	1	25-JAN-10 23:58	per0125057a
	Perchlorate Isotope Ratio						1	25-JAN-10 23:58	per0125057a
14797-73-0	Perchlorate-101	.541	2.16	0.541	ug/kg	U	1	25-JAN-10 23:58	per0125057a
	Perchlorate-O(18)			6.21	ug/kg		1	25-JAN-10 23:58	per0125057a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X ¹ %Solids
Aliquot

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 242321
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7260
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1226
 GEL Sample ID: 244628010
 Date Filtered: 25-JAN-10
 Injection Volume (uL): 20
 %Solids: 80

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.624	2.5	0.624	ug/kg	U	1	26-JAN-10 00:34	per0125061a
	Perchlorate Isotope Ratio						1	26-JAN-10 00:34	per0125061a
14797-73-0	Perchlorate-101	.624	2.5	0.624	ug/kg	U	1	26-JAN-10 00:34	per0125061a
	Perchlorate-O(18)			7.86	ug/kg		1	26-JAN-10 00:34	per0125061a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X %Solids
 Aliquot

MAD
 02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942321
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7267
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1226
 GEL Sample ID: 244628011
 Date Filtered: 25-JAN-10
 Injection Volume (uL): 20
 %Solids: 92.9

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.538	2.15	0.538	ug/kg	U	1	26-JAN-10 00:44	per0125062a
	Perchlorate Isotope Ratio						1	26-JAN-10 00:44	per0125062a
14797-73-0	Perchlorate-101	.538	2.15	0.538	ug/kg	U	1	26-JAN-10 00:44	per0125062a
	Perchlorate-O(18)			5.67	ug/kg		1	26-JAN-10 00:44	per0125062a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
 Aliquot

MAD
 02/25/10

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942321

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7264

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1226

GEL Sample ID: 244628012

Date Filtered: 25-JAN-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.562	2.25	0.562	ug/kg	U	1	26-JAN-10 00:53	per0125063a
	Perchlorate Isotope Ratio						1	26-JAN-10 00:53	per0125063a
14797-73-0	Perchlorate-101	.562	2.25	0.562	ug/kg	U	1	26-JAN-10 00:53	per0125063a
	Perchlorate-O(18)			6.69	ug/kg		1	26-JAN-10 00:53	per0125063a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
Lab Code: GEL
Instrument: LCMSMS
Method: SW846 8850 Modified
Matrix: SOIL
Extraction Batch ID: 942321
Extraction Type: Solid Prep
Sample Volume/Weight: 2.00 g
Concentrated Extract Volume: 20.0
Client Sample No.
RE12-10-7270
Date Received: 13-JAN-10
GEL Job No (SDG): 10-1226
GEL Sample ID: 244628013
Date Filtered: 25-JAN-10
Injection Volume (uL): 20
%Solids: 88

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.571	2.29	0.571	ug/kg	U	1	26-JAN-10 01:02	per0125064a
	Perchlorate Isotope Ratio						1	26-JAN-10 01:02	per0125064a
14797-73-0	Perchlorate-101	.571	2.29	0.571	ug/kg	U	1	26-JAN-10 01:02	per0125064a
	Perchlorate-O(18)			6.56	ug/kg		1	26-JAN-10 01:02	per0125064a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
 Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

MAD
 02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 942321
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE12-10-7269
 Date Received: 13-JAN-10
 GEL Job No (SDG): 10-1226
 GEL Sample ID: 244628014
 Date Filtered: 25-JAN-10
 Injection Volume (uL): 20
 %Solids: 94

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.532	2.13	0.532	ug/kg	U	1	26-JAN-10 01:11	per0125065a
	Perchlorate Isotope Ratio						1	26-JAN-10 01:11	per0125065a
14797-73-0	Perchlorate-101	.532	2.13	0.532	ug/kg	U	1	26-JAN-10 01:11	per0125065a
	Perchlorate-O(18)			5.76	ug/kg		1	26-JAN-10 01:11	per0125065a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X $\frac{1}{\% \text{Solids}}$
 Aliquot

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 942321

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE12-10-7283

Date Received: 13-JAN-10

GEL Job No (SDG): 10-1226

GEL Sample ID: 244628015

Date Filtered: 25-JAN-10

Injection Volume (uL): 20

%Solids: 82

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.611	2.44	0.611	ug/kg	U	1	26-JAN-10 01:20	per0125066a
	Perchlorate Isotope Ratio						1	26-JAN-10 01:20	per0125066a
14797-73-0	Perchlorate-101	.611	2.44	0.611	ug/kg	U	1	26-JAN-10 01:20	per0125066a
	Perchlorate-O(18)			7.41	ug/kg		1	26-JAN-10 01:20	per0125066a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

Instrument Value X Concentrated Extract Volume X $\frac{1}{\text{Aliquot}}$ %Solids

MAD
02/25/10

Form 1

Perchlorate Analysis Data Sheet

Client Sample No.
RE12-10-7282

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Date Received: 13-JAN-10

Instrument: LCMSMS

GEL Job No (SDG): 10-1226

Method: SW846 6850 Modified

GEL Sample ID: 244628016

Matrix: SOIL

Date Filtered: 25-JAN-10

Extraction Batch ID: 942321

Injection Volume (uL): 20

Extraction Type: Solid Prep

%Solids: 93.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.533	2.13	0.533	ug/kg	U	1	26-JAN-10 01:29	per0125067a
	Perchlorate Isotope Ratio						1	26-JAN-10 01:29	per0125067a
14797-73-0	Perchlorate-101	.533	2.13	0.533	ug/kg	U	1	26-JAN-10 01:29	per0125067a
	Perchlorate-O(18)			6.00	ug/kg		1	26-JAN-10 01:29	per0125067a

[^] When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\% \text{Solids}}$

MAD
02/25/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1226 VALIDATION DATE: 02/25/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Mary Donovan 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 checked="" type="checkbox"/> METALS | <input type="checkbox"/> PCB CONGENERS | <input type="checkbox"/> ORGANOCHLORINE |
| <input type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | <input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): | | | |

Section II. Completeness Check

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


- In the ICB and CCBs associated with all samples except RE12-10-7269, Tl was detected. The Tl results for samples -7262, -7266, -7258, -7261, -7259, -7263, -7260 and -7283 were detects $\leq 5X$ the greatest blank concentration and, thus, were qualified UJ4b. The remaining associated sample results were NDs and, thus, were not qualified.
- In the FR blank, sample -7286 in RN 10-1262, associated with all samples, Mn and K were detected. All associated sample results were detects $> 5X$ the greatest FR blank concentrations and, thus, were not qualified.
- The MS %Rs were $<$ the laboratory LAL but $\geq 10\%$ for Se and Tl. All associated sample results were either NDs or qualified ND and, thus, were qualified UJ16a. The MS %Rs were also $>$ the laboratory UAL for Al and $< 10\%$ for Ca, Fe and Mn. However, the associated parent sample concentrations were $> 4X$ the spike concentrations. Thus, the associated sample results were not qualified, based on professional judgment.

Reviewed by: ETM


Level: 1

Date: 2/26/10


VALIDATOR'S SIGNATURE: Mary A. Donovan DATE: 02/25/2010

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2	Records Use only
Metals Analytical Data Validation Checklist 	


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, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The mass calibration is not within 0.1 amu or %RSD is >5% for any isotope (Be, Mg, Co, In, Pb).	UJ, I16a	J, I16a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
<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, I16c	R, I16c
<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, I7	J, I7
<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, I7a	J, I7a
<input type="checkbox"/>	<input checked="" 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, I7c	J, I7c
<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, I7d	J, I7d
<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, I7f	R, I7f
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Metals interference check sample percent recover value is <50%.	R, I2	J-, I2

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals 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"/>	13. Metals Interference check sample percent recovery value is $\geq 50\%$ and $< 80\%$	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Metals interference check sample percent recovery value is $> 120\%$.	N/A	J+, I2b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The sample result is $\leq 5X$ the concentration of the related analyte in the method blank.	U, I4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $> 5X$.	N/A	J, I4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. The sample result is $\leq 5X$ the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22. The associated matrix spike recovery was $< 10\%$. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23. The associated matrix spike recovery was $<$ the LAL but $> 10\%$. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J+, I6a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24. The associated matrix spike recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals 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"/>	25. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If the LCS information is present, do not Reject. Qualify data based on the LCS information.	R, I6c	R, I6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The sample and the duplicate sample results were $\geq 5X$ the RL and the duplicate RPD was $>20\%$ for water samples and $>35\%$ for soil samples.	UJ, I10a	J, I10a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<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, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recover was $<$ the LAL but $>10\%$. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recovery was $>$ the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
<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. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32. The quantitating IS area count is $<10\%$ for metals window in relation to the initial calibration blank. Follow the method-specific windows.	R, I1a	J, I1a

METALS ANALYTICAL DATA VALIDATION CHECKLIST	
5118-2 Metals Analytical Data Validation Checklist	Records Use only 

Yes No N/A				Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	33. The IS area count for the quantitating IS is <60% but >10% for metals window in relation to the initial calibration blank. Follow the method-specific windows.	UJ, I1b	J, I1b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. The IS area count for the quantitating IS is >125% in relation to the metals initial calibration blank. Follow method-specific windows.	UJ, I1c	J, I1c
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I1d	R, I1d
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	36. Serial dilution sample RPD was >10% and the sample result was >50X the MDL (>100X the MDL for ICPMS). Qualify ONLY the sample used for the serial dilution.	UJ, I18	J, I18
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40. 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"/>	41. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628001

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7262

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 91.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6060000	ug/Kg	*	7400	21800	21800	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-36-0	Antimony	364	ug/Kg	J	359	1090	1090	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-38-2	Arsenic	1.41	mg/kg		0.218	1.09	1.09	2	MS	RMJ	01/30/10 17:47	100129-4	941798
7440-39-3	Barium	55200	ug/Kg		109	544	544	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-41-7	Beryllium	0.728	mg/kg	N	0.0218	0.109	0.109	2	MS	RMJ	02/06/10 21:34	100206-5	941798
7440-43-9	Cadmium	544	ug/Kg	U	109	544	544	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-70-2	Calcium	2210000	ug/Kg		8710	27200	27200	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-47-3	Chromium	22700	ug/Kg		163	544	544	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-48-4	Cobalt	2670	ug/Kg		163	544	544	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-50-8	Copper	2610	ug/Kg		282	939	939	1	P	HSC	02/09/10 07:13	020910-1	950667
7439-89-6	Iron	10900000	ug/Kg		8710	27200	27200	1	P	HSC	01/29/10 23:25	012910-2	941795
7439-92-1	Lead	9150	ug/Kg		272	1090	1090	1	P	HSC	01/29/10 23:25	012910-2	941795
7439-95-4	Magnesium	1120000	ug/Kg		9250	32700	32700	1	P	HSC	01/29/10 23:25	012910-2	941795
7439-96-5	Manganese	265000	ug/Kg		218	1090	1090	1	P	HSC	01/29/10 23:25	012910-2	941795
7439-97-6	Mercury	12.7	ug/kg		4.26	12.5	12.5	1	AV	JXL1	01/28/10 12:59	012810S1-8	943309
7440-02-0	Nickel	3.76	mg/kg		0.109	0.435	0.435	2	MS	RMJ	01/30/10 17:47	100129-4	941798
7440-09-7	Potassium	903000	ug/Kg	*	6970	27200	27200	1	P	HSC	01/29/10 23:25	012910-2	941795
7782-49-2	Selenium	UJ,16a	mg/kg	UN	0.544	1.09	1.09	2	MS	RMJ	01/30/10 17:47	100129-4	941798
7440-22-4	Silver	421	ug/Kg	J	109	544	544	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-23-5	Sodium	80200	ug/Kg		7620	27200	27200	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-28-0	Thallium	U,14b	mg/kg	JN	0.0653	0.218	0.218	2	MS	RMJ	01/30/10 17:47	100129-4	941798
7440-61-1	Uranium	0.945	mg/kg		0.0134	0.0406	0.0406	2	MS	SKJ	02/09/10 11:52	100209-3	950023
7440-62-2	Vanadium	13800	ug/Kg		109	544	544	1	P	HSC	01/29/10 23:25	012910-2	941795
7440-66-6	Zinc	28000	ug/Kg	*	359	1090	1090	1	P	HSC	01/29/10 23:25	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.504	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.504	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.526	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.541	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.584	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628002

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7266

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2420000	ug/Kg	*	8270	24300	24300	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-36-0	Antimony	1070	ug/Kg	J	402	1220	1220	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-38-2	Arsenic	1.19	mg/kg	J	0.244	1.22	1.22	2	MS	RMJ	01/30/10 18:17	100129-4	941798
7440-39-3	Barium	41700	ug/Kg		122	608	608	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-41-7	Beryllium	0.965	mg/kg	N	0.0244	0.122	0.122	2	MS	RMJ	02/06/10 21:47	100206-5	941798
7440-43-9	Cadmium	134	ug/Kg	J	122	608	608	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-70-2	Calcium	2070000	ug/Kg		9730	30400	30400	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-47-3	Chromium	38100	ug/Kg		183	608	608	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-48-4	Cobalt	1140	ug/Kg		183	608	608	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-50-8	Copper	3840	ug/Kg		368	1230	1230	1	P	HSC	02/09/10 07:39	020910-1	950667
7439-89-6	Iron	7130000	ug/Kg		9730	30400	30400	1	P	HSC	01/30/10 00:14	012910-2	941795
7439-92-1	Lead	7880	ug/Kg		304	1220	1220	1	P	HSC	01/30/10 00:14	012910-2	941795
7439-95-4	Magnesium	498000	ug/Kg		10300	36500	36500	1	P	HSC	01/30/10 00:14	012910-2	941795
7439-96-5	Manganese	264000	ug/Kg		243	1220	1220	1	P	HSC	01/30/10 00:14	012910-2	941795
7439-97-6	Mercury	5.09	ug/kg	J	4.8	14.1	14.1	1	AV	JXL1	01/28/10 13:07	012810S1-8	943309
7440-02-0	Nickel	3.23	mg/kg		0.122	0.489	0.489	2	MS	RMJ	01/30/10 18:17	100129-4	941798
7440-09-7	Potassium	477000	ug/Kg	*	7790	30400	30400	1	P	HSC	01/30/10 00:14	012910-2	941795
7782-49-2	Selenium UJ,16a	1.22	mg/kg	UN	0.611	1.22	1.22	2	MS	RMJ	01/30/10 18:17	100129-4	941798
7440-22-4	Silver	363	ug/Kg	J	122	608	608	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-23-5	Sodium	42400	ug/Kg		8520	30400	30400	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-28-0	Thallium U,14b	0.0916	mg/kg	JN	0.0733	0.244	0.244	2	MS	RMJ	01/30/10 18:17	100129-4	941798
7440-61-1	Uranium	2.63	mg/kg		0.0149	0.0451	0.0451	2	MS	SKJ	02/09/10 12:03	100209-3	950023
7440-62-2	Vanadium	5970	ug/Kg		122	608	608	1	P	HSC	01/30/10 00:14	012910-2	941795
7440-66-6	Zinc	37100	ug/Kg	*	402	1220	1220	1	P	HSC	01/30/10 00:14	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.512	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.51	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.529	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.552	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.508	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628003

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7258

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4040000	ug/Kg	*	7850	23100	23100	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-36-0	Antimony	1360	ug/Kg		381	1150	1150	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-38-2	Arsenic	1.34	mg/kg		0.231	1.15	1.15	2	MS	RMJ	01/30/10 18:23	100129-4	941798
7440-39-3	Barium	36000	ug/Kg		115	577	577	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-41-7	Beryllium	0.709	mg/kg	N	0.0231	0.115	0.115	2	MS	RMJ	02/06/10 21:50	100206-5	941798
7440-43-9	Cadmium	577	ug/Kg	U	115	577	577	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-70-2	Calcium	638000	ug/Kg		9240	28900	28900	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-47-3	Chromium	60400	ug/Kg		173	577	577	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-48-4	Cobalt	4830	ug/Kg		173	577	577	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-50-8	Copper	3730	ug/Kg		314	1050	1050	1	P	HSC	02/09/10 07:42	020910-1	950667
7439-89-6	Iron	9590000	ug/Kg		9240	28900	28900	1	P	HSC	01/30/10 00:21	012910-2	941795
7439-92-1	Lead	6400	ug/Kg		289	1150	1150	1	P	HSC	01/30/10 00:21	012910-2	941795
7439-95-4	Magnesium	563000	ug/Kg		9820	34600	34600	1	P	HSC	01/30/10 00:21	012910-2	941795
7439-96-5	Manganese	296000	ug/Kg		231	1150	1150	1	P	HSC	01/30/10 00:21	012910-2	941795
7439-97-6	Mercury	20.1	ug/kg		4.37	12.9	12.9	1	AV	JXL1	01/28/10 13:09	012810S1-8	943309
7440-02-0	Nickel	4.89	mg/kg		0.115	0.461	0.461	2	MS	RMJ	01/30/10 18:23	100129-4	941798
7440-09-7	Potassium	589000	ug/Kg	*	7390	28900	28900	1	P	HSC	01/30/10 00:21	012910-2	941795
7782-49-2	Selenium UJ,16a	1.15	mg/kg	UN	0.576	1.15	1.15	2	MS	RMJ	01/30/10 18:23	100129-4	941798
7440-22-4	Silver	502	ug/Kg	J	115	577	577	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-23-5	Sodium	128000	ug/Kg		8080	28900	28900	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-28-0	Thallium U,14b	0.0781	mg/kg	JN	0.0692	0.231	0.231	2	MS	RMJ	01/30/10 18:23	100129-4	941798
7440-61-1	Uranium	1.39	mg/kg		0.0147	0.0444	0.0444	2	MS	SKJ	02/09/10 12:05	100209-3	950023
7440-62-2	Vanadium	8340	ug/Kg		115	577	577	1	P	HSC	01/30/10 00:21	012910-2	941795
7440-66-6	Zinc	28400	ug/Kg	*	381	1150	1150	1	P	HSC	01/30/10 00:21	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.505	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.506	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.544	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.525	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.557	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628004

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7268

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 90.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3360000	ug/Kg	*	7360	21700	21700	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-36-0	Antimony	1080	ug/Kg	U	357	1080	1080	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-38-2	Arsenic	1.04	mg/kg	J	0.217	1.08	1.08	2	MS	RMJ	01/30/10 18:29	100129-4	941798
7440-39-3	Barium	40100	ug/Kg		108	541	541	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-41-7	Beryllium	0.679	mg/kg	N	0.0217	0.108	0.108	2	MS	RMJ	02/06/10 21:53	100206-5	941798
7440-43-9	Cadmium	541	ug/Kg	U	108	541	541	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-70-2	Calcium	647000	ug/Kg		8660	27100	27100	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-47-3	Chromium	3910	ug/Kg		162	541	541	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-48-4	Cobalt	1590	ug/Kg		162	541	541	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-50-8	Copper	4540	ug/Kg		327	1090	1090	1	P	HSC	02/09/10 07:46	020910-1	950667
7439-89-6	Iron	10000000	ug/Kg		8660	27100	27100	1	P	HSC	01/30/10 00:28	012910-2	941795
7439-92-1	Lead	10800	ug/Kg		271	1080	1080	1	P	HSC	01/30/10 00:28	012910-2	941795
7439-95-4	Magnesium	603000	ug/Kg		9200	32500	32500	1	P	HSC	01/30/10 00:28	012910-2	941795
7439-96-5	Manganese	330000	ug/Kg		217	1080	1080	1	P	HSC	01/30/10 00:28	012910-2	941795
7439-97-6	Mercury	5.7	ug/kg	J	3.91	11.5	11.5	1	AV	JXL1	01/28/10 13:11	012810S1-8	943309
7440-02-0	Nickel	1.87	mg/kg		0.108	0.433	0.433	2	MS	RMJ	01/30/10 18:29	100129-4	941798
7440-09-7	Potassium	530000	ug/Kg	*	6930	27100	27100	1	P	HSC	01/30/10 00:28	012910-2	941795
7782-49-2	Selenium UJ,16a	1.08	mg/kg	UN	0.541	1.08	1.08	2	MS	RMJ	01/30/10 18:29	100129-4	941798
7440-22-4	Silver	523	ug/Kg	J	108	541	541	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-23-5	Sodium	48800	ug/Kg		7580	27100	27100	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-28-0	Thallium UJ,16a	0.217	mg/kg	UN	0.065	0.217	0.217	2	MS	RMJ	01/30/10 18:29	100129-4	941798
7440-61-1	Uranium	3.89	mg/kg		0.0143	0.0433	0.0433	2	MS	SKJ	02/09/10 12:12	100209-3	950023
7440-62-2	Vanadium	8030	ug/Kg		108	541	541	1	P	HSC	01/30/10 00:28	012910-2	941795
7440-66-6	Zinc	45600	ug/Kg	*	357	1080	1080	1	P	HSC	01/30/10 00:28	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.512	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.512	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.578	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.512	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.508	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628005

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7265

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 93.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1970000	ug/Kg	*	7090	20900	20900	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-36-0	Antimony	1040	ug/Kg	U	344	1040	1040	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-38-2	Arsenic	0.451	mg/kg	J	0.205	1.02	1.02	2	MS	RMJ	01/30/10 18:34	100129-4	941798
7440-39-3	Barium	10400	ug/Kg		104	521	521	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-41-7	Beryllium	0.692	mg/kg	N	0.0205	0.102	0.102	2	MS	RMJ	02/06/10 22:01	100206-5	941798
7440-43-9	Cadmium	521	ug/Kg	U	104	521	521	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-70-2	Calcium	264000	ug/Kg		8340	26100	26100	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-47-3	Chromium	2320	ug/Kg		156	521	521	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-48-4	Cobalt	399	ug/Kg	J	156	521	521	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-50-8	Copper	2280	ug/Kg		272	908	908	1	P	HSC	02/09/10 07:50	020910-1	950667
7439-89-6	Iron	7700000	ug/Kg		8340	26100	26100	1	P	HSC	01/30/10 00:35	012910-2	941795
7439-92-1	Lead	6310	ug/Kg		261	1040	1040	1	P	HSC	01/30/10 00:35	012910-2	941795
7439-95-4	Magnesium	370000	ug/Kg		8860	31300	31300	1	P	HSC	01/30/10 00:35	012910-2	941795
7439-96-5	Manganese	292000	ug/Kg		209	1040	1040	1	P	HSC	01/30/10 00:35	012910-2	941795
7439-97-6	Mercury	12.6	ug/kg	U	4.29	12.6	12.6	1	AV	JXL1	01/28/10 13:16	012810S1-8	943309
7440-02-0	Nickel	0.837	mg/kg		0.102	0.409	0.409	2	MS	RMJ	01/30/10 18:34	100129-4	941798
7440-09-7	Potassium	320000	ug/Kg	*	6670	26100	26100	1	P	HSC	01/30/10 00:35	012910-2	941795
7782-49-2	Selenium UJ,16a	1.02	mg/kg	UN	0.511	1.02	1.02	2	MS	RMJ	01/30/10 18:34	100129-4	941798
7440-22-4	Silver	369	ug/Kg	J	104	521	521	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-23-5	Sodium	200000	ug/Kg		7300	26100	26100	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-28-0	Thallium UJ,16a	0.205	mg/kg	UN	0.0614	0.205	0.205	2	MS	RMJ	01/30/10 18:34	100129-4	941798
7440-61-1	Uranium	0.615	mg/kg		0.013	0.0395	0.0395	2	MS	SKJ	02/09/10 12:14	100209-3	950023
7440-62-2	Vanadium	2700	ug/Kg		104	521	521	1	P	HSC	01/30/10 00:35	012910-2	941795
7440-66-6	Zinc	48300	ug/Kg	*	344	1040	1040	1	P	HSC	01/30/10 00:35	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.511	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.521	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.507	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.539	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.587	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628006

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7261

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 87

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7320000	ug/Kg	*	7510	22100	22100	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-36-0	Antimony	926	ug/Kg	J	364	1100	1100	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-38-2	Arsenic	1.84	mg/kg		0.227	1.13	1.13	2	MS	RMJ	01/30/10 18:52	100129-4	941798
7440-39-3	Barium	67700	ug/Kg		110	552	552	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-41-7	Beryllium	1.17	mg/kg	N	0.0227	0.113	0.113	2	MS	RMJ	02/06/10 22:03	100206-5	941798
7440-43-9	Cadmium	552	ug/Kg	U	110	552	552	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-70-2	Calcium	2410000	ug/Kg		8840	27600	27600	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-47-3	Chromium	43800	ug/Kg		166	552	552	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-48-4	Cobalt	2570	ug/Kg		166	552	552	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-50-8	Copper	5310	ug/Kg		337	1120	1120	1	P	HSC	02/09/10 07:53	020910-1	950667
7439-89-6	Iron	10000000	ug/Kg		8840	27600	27600	1	P	HSC	01/30/10 00:42	012910-2	941795
7439-92-1	Lead	8010	ug/Kg		276	1100	1100	1	P	HSC	01/30/10 00:42	012910-2	941795
7439-95-4	Magnesium	1290000	ug/Kg		9390	33100	33100	1	P	HSC	01/30/10 00:42	012910-2	941795
7439-96-5	Manganese	217000	ug/Kg		221	1100	1100	1	P	HSC	01/30/10 00:42	012910-2	941795
7439-97-6	Mercury	31.6	ug/kg		4.57	13.4	13.4	1	AV	JXL1	01/28/10 13:17	012810S1-8	943309
7440-02-0	Nickel	7.16	mg/kg		0.113	0.453	0.453	2	MS	RMJ	01/30/10 18:52	100129-4	941798
7440-09-7	Potassium	951000	ug/Kg	*	7070	27600	27600	1	P	HSC	01/30/10 00:42	012910-2	941795
7782-49-2	Selenium UJ,16a	1.13	mg/kg	UN	0.566	1.13	1.13	2	MS	RMJ	01/30/10 18:52	100129-4	941798
7440-22-4	Silver	438	ug/Kg	J	110	552	552	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-23-5	Sodium	94400	ug/Kg		7730	27600	27600	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-28-0	Thallium UJ,14b	0.127	mg/kg	JN	0.068	0.227	0.227	2	MS	RMJ	01/30/10 18:52	100129-4	941798
7440-61-1	Uranium	1.27	mg/kg		0.0152	0.046	0.046	2	MS	SKJ	02/09/10 12:16	100209-3	950023
7440-62-2	Vanadium	12400	ug/Kg		110	552	552	1	P	HSC	01/30/10 00:42	012910-2	941795
7440-66-6	Zinc	25400	ug/Kg	*	364	1100	1100	1	P	HSC	01/30/10 00:42	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.522	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.509	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.515	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.501	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.514	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628007

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7259

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 93.5

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3880000	ug/Kg	*	7160	21100	21100	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-36-0	Antimony	1050	ug/Kg	U	347	1050	1050	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-38-2	Arsenic	1.23	mg/kg		0.205	1.02	1.02	2	MS	RMJ	01/30/10 18:58	100129-4	941798
7440-39-3	Barium	28200	ug/Kg		105	526	526	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-41-7	Beryllium	0.662	mg/kg	N	0.0205	0.102	0.102	2	MS	RMJ	02/06/10 22:06	100206-5	941798
7440-43-9	Cadmium	526	ug/Kg	U	105	526	526	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-70-2	Calcium	587000	ug/Kg		8420	26300	26300	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-47-3	Chromium	15200	ug/Kg		158	526	526	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-48-4	Cobalt	1570	ug/Kg		158	526	526	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-50-8	Copper	3020	ug/Kg		315	1050	1050	1	P	HSC	02/09/10 07:57	020910-1	950667
7439-89-6	Iron	7760000	ug/Kg		8420	26300	26300	1	P	HSC	01/30/10 00:49	012910-2	941795
7439-92-1	Lead	5060	ug/Kg		263	1050	1050	1	P	HSC	01/30/10 00:49	012910-2	941795
7439-95-4	Magnesium	486000	ug/Kg		8950	31600	31600	1	P	HSC	01/30/10 00:49	012910-2	941795
7439-96-5	Manganese	212000	ug/Kg		211	1050	1050	1	P	HSC	01/30/10 00:49	012910-2	941795
7439-97-6	Mercury	27.4	ug/kg		4.09	12	12	1	AV	JXLI	01/28/10 13:19	012810S1-8	943309
7440-02-0	Nickel	3.24	mg/kg		0.102	0.41	0.41	2	MS	RMJ	01/30/10 18:58	100129-4	941798
7440-09-7	Potassium	471000	ug/Kg	*	6740	26300	26300	1	P	HSC	01/30/10 00:49	012910-2	941795
7782-49-2	Selenium UJ,16a	1.02	mg/kg	UN	0.512	1.02	1.02	2	MS	RMJ	01/30/10 18:58	100129-4	941798
7440-22-4	Silver	392	ug/Kg	J	105	526	526	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-23-5	Sodium	98000	ug/Kg		7370	26300	26300	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-28-0	Thallium U,14b	0.0662	mg/kg	JN	0.0615	0.205	0.205	2	MS	RMJ	01/30/10 18:58	100129-4	941798
7440-61-1	Uranium	0.520	mg/kg		0.0131	0.0398	0.0398	2	MS	SKJ	02/09/10 12:18	100209-3	950023
7440-62-2	Vanadium	6200	ug/Kg		105	526	526	1	P	HSC	01/30/10 00:49	012910-2	941795
7440-66-6	Zinc	20700	ug/Kg	*	347	1050	1050	1	P	HSC	01/30/10 00:49	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.508	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.522	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.533	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.538	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.509	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628008

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7263

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 94.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6020000	ug/Kg	*	6980	20500	20500	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-36-0	Antimony	470	ug/Kg	J	339	1030	1030	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-38-2	Arsenic	1.8	mg/kg		0.209	1.04	1.04	2	MS	RMJ	01/30/10 19:04	100129-4	941798
7440-39-3	Barium	44900	ug/Kg		103	513	513	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-41-7	Beryllium	1.01	mg/kg	N	0.0209	0.104	0.104	2	MS	RMJ	02/06/10 22:09	100206-5	941798
7440-43-9	Cadmium	513	ug/Kg	U	103	513	513	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-70-2	Calcium	1680000	ug/Kg		8210	25700	25700	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-47-3	Chromium	18500	ug/Kg		154	513	513	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-48-4	Cobalt	1700	ug/Kg		154	513	513	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-50-8	Copper	3810	ug/Kg		287	956	956	1	P	HSC	02/09/10 08:01	020910-1	950667
7439-89-6	Iron	9780000	ug/Kg		8210	25700	25700	1	P	HSC	01/30/10 00:56	012910-2	941795
7439-92-1	Lead	7660	ug/Kg		257	1030	1030	1	P	HSC	01/30/10 00:56	012910-2	941795
7439-95-4	Magnesium	1090000	ug/Kg		8720	30800	30800	1	P	HSC	01/30/10 00:56	012910-2	941795
7439-96-5	Manganese	204000	ug/Kg		205	1030	1030	1	P	HSC	01/30/10 00:56	012910-2	941795
7439-97-6	Mercury	20.9	ug/kg		3.68	10.8	10.8	1	AV	JXL1	01/28/10 13:21	012810S1-8	943309
7440-02-0	Nickel	6.14	mg/kg		0.104	0.417	0.417	2	MS	RMJ	01/30/10 19:04	100129-4	941798
7440-09-7	Potassium	799000	ug/Kg	*	6570	25700	25700	1	P	HSC	01/30/10 00:56	012910-2	941795
7782-49-2	Selenium UJ,16a	1.04	mg/kg	UN	0.521	1.04	1.04	2	MS	RMJ	01/30/10 19:04	100129-4	941798
7440-22-4	Silver	441	ug/Kg	J	103	513	513	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-23-5	Sodium	92200	ug/Kg		7180	25700	25700	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-28-0	Thallium U,14b	0.0872	mg/kg	JN	0.0626	0.209	0.209	2	MS	RMJ	01/30/10 19:04	100129-4	941798
7440-61-1	Uranium	0.697	mg/kg		0.0135	0.0409	0.0409	2	MS	SKJ	02/09/10 12:20	100209-3	950023
7440-62-2	Vanadium	12300	ug/Kg		103	513	513	1	P	HSC	01/30/10 00:56	012910-2	941795
7440-66-6	Zinc	22200	ug/Kg	*	339	1030	1030	1	P	HSC	01/30/10 00:56	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.516	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.508	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.587	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.518	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.554	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628009

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7271

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 92.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	4910000	ug/Kg	*	7360	21600	21600	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-36-0	Antimony	458	ug/Kg	J	357	1080	1080	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-38-2	Arsenic	1.13	mg/kg		0.211	1.06	1.06	2	MS	RMJ	01/30/10 19:10	100129-4	941798
7440-39-3	Barium	31900	ug/Kg		108	541	541	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-41-7	Beryllium	1.17	mg/kg	N	0.0211	0.106	0.106	2	MS	RMJ	02/06/10 22:12	100206-5	941798
7440-43-9	Cadmium	541	ug/Kg	U	108	541	541	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-70-2	Calcium	1290000	ug/Kg		8660	27000	27000	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-47-3	Chromium	12600	ug/Kg		162	541	541	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-48-4	Cobalt	1100	ug/Kg		162	541	541	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-50-8	Copper	5070	ug/Kg		277	925	925	1	P	HSC	02/09/10 08:04	020910-1	950667
7439-89-6	Iron	9480000	ug/Kg		8660	27000	27000	1	P	HSC	01/30/10 01:03	012910-2	941795
7439-92-1	Lead	7600	ug/Kg		270	1080	1080	1	P	HSC	01/30/10 01:03	012910-2	941795
7439-95-4	Magnesium	938000	ug/Kg		9200	32500	32500	1	P	HSC	01/30/10 01:03	012910-2	941795
7439-96-5	Manganese	225000	ug/Kg		216	1080	1080	1	P	HSC	01/30/10 01:03	012910-2	941795
7439-97-6	Mercury	16.9	ug/kg		3.97	11.7	11.7	1	AV	JXL1	01/28/10 13:23	012810S1-8	943309
7440-02-0	Nickel	3.27	mg/kg		0.106	0.423	0.423	2	MS	RMJ	01/30/10 19:10	100129-4	941798
7440-09-7	Potassium	622000	ug/Kg	*	6920	27000	27000	1	P	HSC	01/30/10 01:03	012910-2	941795
7782-49-2	Selenium UJ,16a	1.06	mg/kg	UN	0.528	1.06	1.06	2	MS	RMJ	01/30/10 19:10	100129-4	941798
7440-22-4	Silver	433	ug/Kg	J	108	541	541	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-23-5	Sodium	64400	ug/Kg		7570	27000	27000	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-28-0	Thallium UJ,16a	0.211	mg/kg	UN	0.0634	0.211	0.211	2	MS	RMJ	01/30/10 19:10	100129-4	941798
7440-61-1	Uranium	1.01	mg/kg		0.0143	0.0433	0.0433	2	MS	SKJ	02/09/10 12:23	100209-3	950023
7440-62-2	Vanadium	8390	ug/Kg		108	541	541	1	P	HSC	01/30/10 01:03	012910-2	941795
7440-66-6	Zinc	41800	ug/Kg	*	357	1080	1080	1	P	HSC	01/30/10 01:03	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.5	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.512	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.556	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.5	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.585	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628010

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7260

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 80

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9390000	ug/Kg	*	8370	24600	24600	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-36-0	Antimony	414	ug/Kg	J	406	1230	1230	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-38-2	Arsenic	2.27	mg/kg		0.25	1.25	1.25	2	MS	RMJ	01/30/10 19:16	100129-4	941798
7440-39-3	Barium	118000	ug/Kg		123	615	615	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-41-7	Beryllium	1.45	mg/kg	N	0.025	0.125	0.125	2	MS	RMJ	02/06/10 22:14	100206-5	941798
7440-43-9	Cadmium	213	ug/Kg	J	123	615	615	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-70-2	Calcium	5100000	ug/Kg		9850	30800	30800	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-47-3	Chromium	15100	ug/Kg		185	615	615	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-48-4	Cobalt	3390	ug/Kg		185	615	615	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-50-8	Copper	8690	ug/Kg		359	1200	1200	1	P	HSC	02/09/10 08:15	020910-1	950667
7439-89-6	Iron	11900000	ug/Kg		9850	30800	30800	1	P	HSC	01/30/10 01:25	012910-2	941795
7439-92-1	Lead	16100	ug/Kg		308	1230	1230	1	P	HSC	01/30/10 01:25	012910-2	941795
7439-95-4	Magnesium	1810000	ug/Kg		10500	36900	36900	1	P	HSC	01/30/10 01:25	012910-2	941795
7439-96-5	Manganese	328000	ug/Kg		246	1230	1230	1	P	HSC	01/30/10 01:25	012910-2	941795
7439-97-6	Mercury	30.6	ug/kg		4.54	13.3	13.3	1	AV	JXL1	01/28/10 13:24	012810S1-8	943309
7440-02-0	Nickel	5.98	mg/kg		0.125	0.499	0.499	2	MS	RMJ	01/30/10 19:16	100129-4	941798
7440-09-7	Potassium	1530000	ug/Kg	*	7880	30800	30800	1	P	HSC	01/30/10 01:25	012910-2	941795
7782-49-2	Selenium U,16a	1.25	mg/kg	UN	0.624	1.25	1.25	2	MS	RMJ	01/30/10 19:16	100129-4	941798
7440-22-4	Silver	487	ug/Kg	J	123	615	615	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-23-5	Sodium	70600	ug/Kg		8620	30800	30800	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-28-0	Thallium U,14b	0.125	mg/kg	JN	0.0749	0.25	0.25	2	MS	RMJ	01/30/10 19:16	100129-4	941798
7440-61-1	Uranium	6.34	mg/kg		0.0155	0.0468	0.0468	2	MS	SKJ	02/09/10 12:25	100209-3	950023
7440-62-2	Vanadium	19200	ug/Kg		123	615	615	1	P	HSC	01/30/10 01:25	012910-2	941795
7440-66-6	Zinc	38700	ug/Kg	*	406	1230	1230	1	P	HSC	01/30/10 01:25	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.507	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.5	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.561	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.533	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.522	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628011

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7267

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 92.9

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2280000	ug/Kg	*	7070	20800	20800	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-36-0	Antimony	1040	ug/Kg	U	343	1040	1040	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-38-2	Arsenic	0.892	mg/kg	J	0.214	1.07	1.07	2	MS	RMJ	01/30/10 19:22	100129-4	941798
7440-39-3	Barium	26500	ug/Kg		104	520	520	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-41-7	Beryllium	0.679	mg/kg	N	0.0214	0.107	0.107	2	MS	RMJ	02/06/10 22:17	100206-5	941798
7440-43-9	Cadmium	520	ug/Kg	U	104	520	520	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-70-2	Calcium	686000	ug/Kg		8310	26000	26000	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-47-3	Chromium	4600	ug/Kg		156	520	520	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-48-4	Cobalt	1050	ug/Kg		156	520	520	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-50-8	Copper	2600	ug/Kg		293	977	977	1	P	HSC	02/09/10 08:19	020910-1	950667
7439-89-6	Iron	9160000	ug/Kg		8310	26000	26000	1	P	HSC	01/30/10 01:32	012910-2	941795
7439-92-1	Lead	5300	ug/Kg		260	1040	1040	1	P	HSC	01/30/10 01:32	012910-2	941795
7439-95-4	Magnesium	438000	ug/Kg		8830	31200	31200	1	P	HSC	01/30/10 01:32	012910-2	941795
7439-96-5	Manganese	257000	ug/Kg		208	1040	1040	1	P	HSC	01/30/10 01:32	012910-2	941795
7439-97-6	Mercury	4.97	ug/kg	J	3.84	11.3	11.3	1	AV	JXL1	01/28/10 13:26	012810S1-8	943309
7440-02-0	Nickel	1.68	mg/kg		0.107	0.428	0.428	2	MS	RMJ	01/30/10 19:22	100129-4	941798
7440-09-7	Potassium	406000	ug/Kg	*	6650	26000	26000	1	P	HSC	01/30/10 01:32	012910-2	941795
7782-49-2	Selenium UJ,16a	1.07	mg/kg	UN	0.535	1.07	1.07	2	MS	RMJ	01/30/10 19:22	100129-4	941798
7440-22-4	Silver	359	ug/Kg	J	104	520	520	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-23-5	Sodium	55000	ug/Kg		7270	26000	26000	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-28-0	Thallium UJ,16a	0.214	mg/kg	UN	0.0642	0.214	0.214	2	MS	RMJ	01/30/10 19:22	100129-4	941798
7440-61-1	Uranium	0.678	mg/kg		0.0142	0.0431	0.0431	2	MS	SKJ	02/09/10 12:27	100209-3	950023
7440-62-2	Vanadium	7000	ug/Kg		104	520	520	1	P	HSC	01/30/10 01:32	012910-2	941795
7440-66-6	Zinc	43200	ug/Kg	*	343	1040	1040	1	P	HSC	01/30/10 01:32	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.518	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.503	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.572	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.5	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.551	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628012

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7264

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	2050000	ug/Kg	*	7510	22100	22100	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-36-0	Antimony	1100	ug/Kg	U	364	1100	1100	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-38-2	Arsenic	0.796	mg/kg	J	0.224	1.12	1.12	2	MS	RMJ	01/30/10 19:28	100129-4	941798
7440-39-3	Barium	36700	ug/Kg		110	552	552	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-41-7	Beryllium	0.784	mg/kg	N	0.0224	0.112	0.112	2	MS	RMJ	02/09/10 04:26	100208-7	941798
7440-43-9	Cadmium	118	ug/Kg	J	110	552	552	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-70-2	Calcium	1660000	ug/Kg		8830	27600	27600	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-47-3	Chromium	1980	ug/Kg		166	552	552	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-48-4	Cobalt	946	ug/Kg		166	552	552	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-50-8	Copper	2720	ug/Kg		325	1080	1080	1	P	HSC	02/09/10 08:23	020910-1	950667
7439-89-6	Iron	7390000	ug/Kg		8830	27600	27600	1	P	HSC	01/30/10 01:39	012910-2	941795
7439-92-1	Lead	8630	ug/Kg		276	1100	1100	1	P	HSC	01/30/10 01:39	012910-2	941795
7439-95-4	Magnesium	519000	ug/Kg		9380	33100	33100	1	P	HSC	01/30/10 01:39	012910-2	941795
7439-96-5	Manganese	394000	ug/Kg		221	1100	1100	1	P	HSC	01/30/10 01:39	012910-2	941795
7439-97-6	Mercury	9.11	ug/kg	J	3.92	11.5	11.5	1	AV	JXL1	01/28/10 13:28	012810S1-8	943309
7440-02-0	Nickel	1.55	mg/kg		0.112	0.448	0.448	2	MS	RMJ	01/30/10 19:28	100129-4	941798
7440-09-7	Potassium	499000	ug/Kg	*	7070	27600	27600	1	P	HSC	01/30/10 01:39	012910-2	941795
7782-49-2	Selenium UJ,16a	1.12	mg/kg	UN	0.56	1.12	1.12	2	MS	RMJ	01/30/10 19:28	100129-4	941798
7440-22-4	Silver	309	ug/Kg	J	110	552	552	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-23-5	Sodium	70000	ug/Kg		7730	27600	27600	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-28-0	Thallium UJ,16a	0.224	mg/kg	UN	0.0672	0.224	0.224	2	MS	RMJ	01/30/10 19:28	100129-4	941798
7440-61-1	Uranium	2.08	mg/kg		0.0148	0.045	0.045	2	MS	SKJ	02/09/10 12:34	100209-3	950023
7440-62-2	Vanadium	4740	ug/Kg		110	552	552	1	P	HSC	01/30/10 01:39	012910-2	941795
7440-66-6	Zinc	45800	ug/Kg	*	364	1100	1100	1	P	HSC	01/30/10 01:39	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.509	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.502	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.585	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.5	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.518	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628013

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7270

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	3160000	ug/Kg	*	7770	22900	22900	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-36-0	Antimony	1140	ug/Kg	U	377	1140	1140	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-38-2	Arsenic	1.07	mg/kg	J	0.229	1.14	1.14	2	MS	RMJ	01/30/10 19:33	100129-4	941798
7440-39-3	Barium	42700	ug/Kg		114	571	571	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-41-7	Beryllium	0.744	mg/kg	N	0.0229	0.114	0.114	2	MS	RMJ	02/09/10 04:29	100208-7	941798
7440-43-9	Cadmium	133	ug/Kg	J	114	571	571	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-70-2	Calcium	976000	ug/Kg		9140	28600	28600	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-47-3	Chromium	9060	ug/Kg		171	571	571	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-48-4	Cobalt	1360	ug/Kg		171	571	571	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-50-8	Copper	4460	ug/Kg		298	994	994	1	P	HSC	02/09/10 08:26	020910-1	950667
7439-89-6	Iron	8200000	ug/Kg		9140	28600	28600	1	P	HSC	01/30/10 01:46	012910-2	941795
7439-92-1	Lead	9130	ug/Kg		286	1140	1140	1	P	HSC	01/30/10 01:46	012910-2	941795
7439-95-4	Magnesium	599000	ug/Kg		9710	34300	34300	1	P	HSC	01/30/10 01:46	012910-2	941795
7439-96-5	Manganese	301000	ug/Kg		229	1140	1140	1	P	HSC	01/30/10 01:46	012910-2	941795
7439-97-6	Mercury	8.19	ug/kg	J	4.28	12.6	12.6	1	AV	JXL	01/28/10 13:29	012810S1-8	943309
7440-02-0	Nickel	2.58	mg/kg		0.114	0.457	0.457	2	MS	RMJ	01/30/10 19:33	100129-4	941798
7440-09-7	Potassium	553000	ug/Kg	*	7310	28600	28600	1	P	HSC	01/30/10 01:46	012910-2	941795
7782-49-2	Selenium UJ,16a	1.14	mg/kg	UN	0.571	1.14	1.14	2	MS	RMJ	01/30/10 19:33	100129-4	941798
7440-22-4	Silver	358	ug/Kg	J	114	571	571	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-23-5	Sodium	53200	ug/Kg		8000	28600	28600	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-28-0	Thallium UJ,16a	0.229	mg/kg	UN	0.0686	0.229	0.229	2	MS	RMJ	01/30/10 19:33	100129-4	941798
7440-61-1	Uranium	4.76	mg/kg		0.0136	0.0412	0.0412	2	MS	SKJ	02/09/10 12:36	100209-3	950023
7440-62-2	Vanadium	7040	ug/Kg		114	571	571	1	P	HSC	01/30/10 01:46	012910-2	941795
7440-66-6	Zinc	38500	ug/Kg	*	377	1140	1140	1	P	HSC	01/30/10 01:46	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.5	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.5	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.544	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.554	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.575	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628014

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7269

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 94

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1840000	ug/Kg	*	7230	21300	21300	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-36-0	Antimony	1060	ug/Kg	U	351	1060	1060	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-38-2	Arsenic	1.07	mg/kg		0.203	1.01	1.01	2	MS	RMJ	01/30/10 19:51	100129-4	941798
7440-39-3	Barium	16200	ug/Kg		106	532	532	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-41-7	Beryllium	1.19	mg/kg	N	0.0203	0.101	0.101	2	MS	RMJ	02/09/10 04:37	100208-7	941798
7440-43-9	Cadmium	532	ug/Kg	U	106	532	532	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-70-2	Calcium	346000	ug/Kg		8510	26600	26600	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-47-3	Chromium	7370	ug/Kg		160	532	532	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-48-4	Cobalt	410	ug/Kg	J	160	532	532	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-50-8	Copper	3100	ug/Kg		317	1060	1060	1	P	HSC	02/09/10 08:30	020910-1	950667
7439-89-6	Iron	8080000	ug/Kg		8510	26600	26600	1	P	HSC	01/30/10 01:53	012910-2	941795
7439-92-1	Lead	5910	ug/Kg		266	1060	1060	1	P	HSC	01/30/10 01:53	012910-2	941795
7439-93-4	Magnesium	337000	ug/Kg		9040	31900	31900	1	P	HSC	01/30/10 01:53	012910-2	941795
7439-96-5	Manganese	326000	ug/Kg		213	1060	1060	1	P	HSC	01/30/10 01:53	012910-2	941795
7439-97-6	Mercury	12.5	ug/kg	U	4.26	12.5	12.5	1	AV	JXL1	01/28/10 13:31	012810S1-8	943309
7440-02-0	Nickel	1.53	mg/kg		0.101	0.405	0.405	2	MS	RMJ	01/30/10 19:51	100129-4	941798
7440-09-7	Potassium	291000	ug/Kg	*	6810	26600	26600	1	P	HSC	01/30/10 01:53	012910-2	941795
7782-49-2	Selenium	1.01	mg/kg	UN	0.507	1.01	1.01	2	MS	RMJ	01/30/10 19:51	100129-4	941798
7440-22-4	Silver	393	ug/Kg	J	106	532	532	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-23-5	Sodium	89900	ug/Kg		7450	26600	26600	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-28-0	Thallium	0.203	mg/kg	UN	0.0608	0.203	0.203	2	MS	RMJ	02/06/10 23:56	100206-6	941798
7440-61-1	Uranium	0.628	mg/kg		0.0128	0.0389	0.0389	2	MS	SKJ	02/09/10 12:38	100209-3	950023
7440-62-2	Vanadium	3210	ug/Kg		106	532	532	1	P	HSC	01/30/10 01:53	012910-2	941795
7440-66-6	Zinc	44900	ug/Kg	*	351	1060	1060	1	P	HSC	01/30/10 01:53	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.5	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.525	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.509	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.547	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.504	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628015

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7283

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 82

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9870000	ug/Kg	*	8090	23800	23800	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-36-0	Antimony	527	ug/Kg	J	392	1190	1190	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-38-2	Arsenic	2.13	mg/kg		0.237	1.18	1.18	2	MS	RMJ	01/30/10 19:57	100129-4	941798
7440-39-3	Barium	107000	ug/Kg		119	595	595	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-41-7	Beryllium	1.22	mg/kg	N	0.0237	0.118	0.118	2	MS	RMJ	02/09/10 04:40	100208-7	941798
7440-43-9	Cadmium	120	ug/Kg	J	119	595	595	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-70-2	Calcium	3720000	ug/Kg		9510	29700	29700	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-47-3	Chromium	17400	ug/Kg		178	595	595	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-48-4	Cobalt	3910	ug/Kg		178	595	595	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-50-8	Copper	7700	ug/Kg		338	1130	1130	1	P	HSC	02/09/10 08:34	020910-1	950667
7439-89-6	Iron	13500000	ug/Kg		9510	29700	29700	1	P	HSC	01/30/10 02:01	012910-2	941795
7439-92-1	Lead	15300	ug/Kg		297	1190	1190	1	P	HSC	01/30/10 02:01	012910-2	941795
7439-95-4	Magnesium	1770000	ug/Kg		10100	35700	35700	1	P	HSC	01/30/10 02:01	012910-2	941795
7439-96-5	Manganese	415000	ug/Kg		238	1190	1190	1	P	HSC	01/30/10 02:01	012910-2	941795
7439-97-6	Mercury	26.7	ug/kg		4.27	12.6	12.6	1	AV	JXL1	01/28/10 13:36	012810S1-8	943309
7440-02-0	Nickel	5.84	mg/kg		0.118	0.474	0.474	2	MS	RMJ	01/30/10 19:57	100129-4	941798
7440-09-7	Potassium	1460000	ug/Kg	*	7610	29700	29700	1	P	HSC	01/30/10 02:01	012910-2	941795
7782-49-2	Selenium UJ,16a	1.18	mg/kg	UN	0.592	1.18	1.18	2	MS	RMJ	01/30/10 19:57	100129-4	941798
7440-22-4	Silver	651	ug/Kg		119	595	595	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-23-5	Sodium	82400	ug/Kg		8320	29700	29700	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-28-0	Thallium U,14b	0.124	mg/kg	JN	0.0711	0.237	0.237	2	MS	RMJ	01/30/10 19:57	100129-4	941798
7440-61-1	Uranium	6.15	mg/kg		0.015	0.0455	0.0455	2	MS	SKJ	02/09/10 12:41	100209-3	950023
7440-62-2	Vanadium	19800	ug/Kg		119	595	595	1	P	HSC	01/30/10 02:01	012910-2	941795
7440-66-6	Zinc	38400	ug/Kg	*	392	1190	1190	1	P	HSC	01/30/10 02:01	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.514	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.516	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.584	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.537	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.542	g	50	mL	02/08/10	BXA1

MAD
02/25/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1226

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 244628016

BASIS: Dry Weight

DATE COLLECTED 08-JAN-10

CLIENT ID: RE12-10-7282

LEVEL: Low

DATE RECEIVED 13-JAN-10

MATRIX: SOIL

%SOLIDS: 93.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-3	Aluminum	1790000	ug/Kg	*	7250	21300	21300	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-36-0	Antimony	1070	ug/Kg	U	352	1070	1070	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-38-2	Arsenic	0.457	mg/kg	J	0.211	1.06	1.06	2	MS	RMJ	01/30/10 20:03	100129-4	941798
7440-39-3	Barium	12500	ug/Kg		107	533	533	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-41-7	Beryllium	0.795	mg/kg	N	0.0211	0.106	0.106	2	MS	RMJ	02/09/10 04:44	100208-7	941798
7440-43-9	Cadmium	533	ug/Kg	U	107	533	533	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-70-2	Calcium	404000	ug/Kg		8530	26700	26700	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-47-3	Chromium	3270	ug/Kg		160	533	533	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-48-4	Cobalt	456	ug/Kg	J	160	533	533	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-50-8	Copper	2350	ug/Kg		292	974	974	1	P	HSC	02/09/10 08:37	020910-1	950667
7439-89-6	Iron	8180000	ug/Kg		8530	26700	26700	1	P	HSC	01/30/10 02:08	012910-2	941795
7439-92-1	Lead	8660	ug/Kg		267	1070	1070	1	P	HSC	01/30/10 02:08	012910-2	941795
7439-95-4	Magnesium	300000	ug/Kg		9060	32000	32000	1	P	HSC	01/30/10 02:08	012910-2	941795
7439-96-5	Manganese	335000	ug/Kg		213	1070	1070	1	P	HSC	01/30/10 02:08	012910-2	941795
7439-97-6	Mercury	12.7	ug/kg	U	4.32	12.7	12.7	1	AV	JXL1	01/28/10 13:38	012810S1-8	943309
7440-02-0	Nickel	0.913	mg/kg		0.106	0.422	0.422	2	MS	RMJ	01/30/10 20:03	100129-4	941798
7440-09-7	Potassium	278000	ug/Kg	*	6820	26700	26700	1	P	HSC	01/30/10 02:08	012910-2	941795
7782-49-2	Selenium UJ,16a	1.06	mg/kg	UN	0.528	1.06	1.06	2	MS	RMJ	01/30/10 20:03	100129-4	941798
7440-22-4	Silver	353	ug/Kg	J	107	533	533	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-23-5	Sodium	211000	ug/Kg		7460	26700	26700	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-28-0	Thallium UJ,16a	0.211	mg/kg	UN	0.0633	0.211	0.211	2	MS	RMJ	01/30/10 20:03	100129-4	941798
7440-61-1	Uranium	0.547	mg/kg		0.0129	0.0391	0.0391	2	MS	SKJ	02/09/10 12:43	100209-3	950023
7440-62-2	Vanadium	3280	ug/Kg		107	533	533	1	P	HSC	01/30/10 02:08	012910-2	941795
7440-66-6	Zinc	50000	ug/Kg	*	352	1070	1070	1	P	HSC	01/30/10 02:08	012910-2	941795

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
941795	941792	SW846 3050B	0.5	g	50	mL	01/20/10	BXA1
941798	941796	SW846 3050B	0.505	g	50	mL	01/20/10	BXA1
943309	943308	SW846 7471A Prep	0.503	g	30	mL	01/27/10	TXB3
950023	950022	SW846 3050B	0.546	g	50	mL	02/08/10	BXA1
950667	950666	SW846 3050B	0.547	g	50	mL	02/08/10	BXA1

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DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1226 VALIDATION DATE: 02/25/2010 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Mary Donovan 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 checked="" type="checkbox"/> GENERAL CHEMISTRY | <input type="checkbox"/> RADIOCHEMISTRY | <input type="checkbox"/> LCMSMS HIGH EXPLOSIVES | PESTICIDES/POLYCHLORINATED BIPHENYLS |
| <input type="checkbox"/> OTHER (DESCRIBE): total cyanide only | | | |

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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. QUANTITATION REPORTS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. SAMPLE CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. TICS FORMS |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. STANDARD CHROMATOGRAMS | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. TICS MASS SPECTRA |

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


1. It should be noted that the parent samples for the matrix QC associated with samples RE12-10-7262, -7266, -7258, -7268, -7265, -7261, -7259, -7263 and -7271 were from other LANL RNs. No sample data were qualified as a result.

Reviewed by: ETM Level: 1 Date: 2/26/10


VALIDATOR'S SIGNATURE: Mary A. Donovan DATE: 02/25/2010

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry 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, I9	J-, I9
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
<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, I7	J, I7
<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, I7a	J, I7a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
<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, I7d	J, I7d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Required calibration information is missing or samples were analyzed on an expired calibration. Contact the SMO or external laboratory for information.	R, I7f	R, I7f
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry 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"/>	14. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5X.	N/A	J, I4a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, I4e	R, I4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. The associated matrix spike recovery was below the Lower Acceptance Limit (LAL) but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I6a	J-, I6a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. The associated matrix spike recovery was above the Upper Acceptance Limit (UAL). Follow the external laboratory limits located within the associated data package.	UJ, I6b	J+, I6b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Required matrix spike information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information. If LCS information is present, do not reject. Qualify data based on LCS information.	R, I6c	R, I6c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. The sample and/or the duplicate sample results RPD is not within the acceptance limits. Follow the external laboratory limits located within the associated data package.	UJ, I10b	J, I10b

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST	
5120-2 General Chemistry 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"/>	24. The duplicate sample was not prepared and/or analyzed with the samples for unspecified reasons. The duplicate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	UJ, I10d	J, I10d
<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, I12	R, I12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The LCS percent recover was < the LAL but >10%. Follow the external laboratory limits located within the associated data package.	UJ, I12a	J-, I12a
<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+, I12b
<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. Do not Reject if MS/MSD information is present. Qualify according to MS/MSD criteria.	R, I12c	R, I12c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LANL project chemist identified quality deficiencies in the reported data that require further qualification. This code can ONLY be used and/or under advisement by the LANL project chemist.	UJ, R, I19	J, R, I19
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31. Qualification of data via data validation does 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 (no qualification)

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7262
Sample ID: 244628001
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 8.86%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	74.6	274	ug/kg	1	AXC2	01/21/10	1216	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7266
Sample ID: 244628002
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 19.7%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>										
Cyanide, Total	U	ND	84.7	311	ug/kg	1	AXC2 01/21/10	1216	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Address : PO Box 1663
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANLER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7258
Sample ID: 244628003
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 14.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	79.3	292	ug/kg	1	AXC2	01/21/10	1217	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7268
Sample ID: 244628004
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 9.81%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	75.4	277	ug/kg	1	AXC2	01/21/10	1222	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7265
Sample ID: 244628005
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 6.16%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>										
Cyanide, Total	U	ND	72.5	266	ug/kg	1	AXC2 01/21/10	1223	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7261
Sample ID: 244628006
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 13.3%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	78.4	288	ug/kg	1	AXC2	01/21/10	1224	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7259
Sample ID: 244628007
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 6.49%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.7	267	ug/kg	1	AXC2	01/21/10	1225	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7263
Sample ID: 244628008
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 5.59%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	72.0	265	ug/kg	1	AXC2	01/21/10	1225	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Certificate of Analysis

Company : Los Alamos National Laboratory
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7271
Sample ID: 244628009
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 7.57%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	73.6	270	ug/kg	1	AXC2	01/21/10	1226	941967	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/20/10	1551	941966

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7260
Sample ID: 244628010
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 19.9%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	119	84.9	312	ug/kg	1	AXC2	01/21/10	1052	941971	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1508	941970

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID:	RE12-10-7267	Project:	LANL01004
Sample ID:	244628011	Client ID:	LANL010
Matrix:	R		
Collect Date:	08-JAN-10 12:00		
Receive Date:	13-JAN-10		
Collector:	Client		
Moisture:	7.12%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	66.6	245	ug/kg	1	AXC2	01/21/10	1056	941971	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1508	941970

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7264
Sample ID: 244628012
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 11%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.8	260	ug/kg	1	AXC2	01/21/10	1057	941971	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1508	941970

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company: Los Alamos National Laboratory
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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7270
Sample ID: 244628013
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 12.5%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	73.3	269	ug/kg	1	AXC2	01/21/10	1058	941971	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1508	941970

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7269
Sample ID: 244628014
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 6%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	64.6	237	ug/kg	1	AXC2	01/21/10	1058	941971	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1508	941970

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Certificate of Analysis

Company : Los Alamos National Laboratory
Address : PO Box 1663
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID:	RE12-10-7283	Project:	LANL01004
Sample ID:	244628015	Client ID:	LANL010
Matrix:	R		
Collect Date:	08-JAN-10 12:00		
Receive Date:	13-JAN-10		
Collector:	Client		
Moisture:	18.2%		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	J	124	83.1	306	ug/kg	1	AXC2	01/21/10	1059	941971	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1508	941970

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: February 1, 2010

Client SDG: 10-1226

Client Sample ID: RE12-10-7282
Sample ID: 244628016
Matrix: R
Collect Date: 08-JAN-10 12:00
Receive Date: 13-JAN-10
Collector: Client
Moisture: 6.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	65.9	242	ug/kg	1	AXC2	01/21/10	1100	941971	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	01/19/10	1508	941970

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Tuesday, January 12, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1226

LOS ALAMOS

REQUEST NUMBER: 10-1226

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

2446287

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7262	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7266	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7258	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7268	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7265	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7261	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7259	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7263	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7271	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7260	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7267	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7264	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7270	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7269	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7283	1	POLY	Met+U+CLO4+CN	Ice	R
RE12-10-7282	1	POLY	Met+U+CLO4+CN	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

[Signature]
Printed Name Signature

1/12/10 1400

[Signature]
Printed Name Signature

1-13-10 0855

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Tuesday, January 12, 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: 10-1226

Per Agreement Number: 126310011

Project Cost Code: MR3A0528E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/12/2010

TURNAROUND/REPORT DUE: 2/11/2010

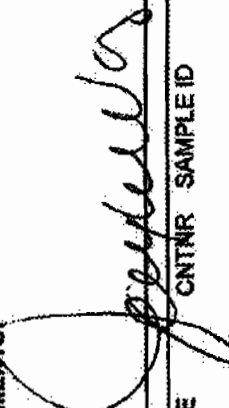
TURNAROUND REQ'D: 30 Days

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-846-6020	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7261	R	1/8/2010	
		1	RE12-10-7262	R	1/8/2010	
		1	RE12-10-7263	R	1/8/2010	
		1	RE12-10-7264	R	1/8/2010	
		1	RE12-10-7265	R	1/8/2010	
		1	RE12-10-7266	R	1/8/2010	

Tuesday, January 12, 2010

Page 2 of 3

REQUEST NUMBER: 10-1226

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846.8020	1	RE12-10-7267	R	1/8/2010	
		1	RE12-10-7268	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846.8850	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7280	R	1/8/2010	
		1	RE12-10-7281	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
		1	RE12-10-7284	R	1/8/2010	
		1	RE12-10-7285	R	1/8/2010	
		1	RE12-10-7286	R	1/8/2010	
		1	RE12-10-7287	R	1/8/2010	
		1	RE12-10-7288	R	1/8/2010	
		1	RE12-10-7289	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846.7471A	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7280	R	1/8/2010	
		1	RE12-10-7281	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	

Tuesday, January 12, 2010

REQUEST NUMBER: 10-1226

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-7471A	1	RE12-10-7283	R	1/8/2010	
		1	RE12-10-7284	R	1/8/2010	
		1	RE12-10-7285	R	1/8/2010	
		1	RE12-10-7286	R	1/8/2010	
		1	RE12-10-7287	R	1/8/2010	
		1	RE12-10-7288	R	1/8/2010	
		1	RE12-10-7289	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846-9012A	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7281	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
		1	RE12-10-7284	R	1/8/2010	
		1	RE12-10-7285	R	1/8/2010	
		1	RE12-10-7286	R	1/8/2010	
		1	RE12-10-7287	R	1/8/2010	
		1	RE12-10-7288	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	



January 18, 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: 244626
SDG: 10-1225

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 13, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB and GC/MS Semivolatile. 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: 10-1225
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 244626
SDG: 10-1225

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Quality Control Data.....	1190
Miscellaneous Data.....	1205

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 244626
SDG # : 10-1225**

January 18, 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 January 13, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

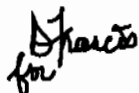
<u>Laboratory ID</u>	<u>Client ID</u>
244626001	RE12-10-7262
244626002	RE12-10-7266
244626003	RE12-10-7258
244626004	RE12-10-7268
244626005	RE12-10-7265
244626006	RE12-10-7261
244626007	RE12-10-7259
244626008	RE12-10-7263
244626009	RE12-10-7271
244626010	RE12-10-7260
244626011	RE12-10-7267
244626012	RE12-10-7264
244626013	RE12-10-7270
244626014	RE12-10-7269
244626015	RE12-10-7283
244626016	RE12-10-7282

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 and GC/MS Semivolatile.

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 18 January 2010

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

Chain of Custody and Supporting Documentation

Tuesday, January 12, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1225

LOS ALAMOS

REQUEST NUMBER: 10-1225

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/11/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244626/

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE12-10-7262	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7266	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7258	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7268	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7265	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7261	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7259	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7263	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7271	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7260	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7267	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7264	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7270	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7269	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE12-10-7283	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE12-10-7282	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

[Signature]
 Printed Name Signature

11/12/10 1400

[Signature]
 Printed Name Signature

1-13-10 0855

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Received for DISPOSAL By: Date Time

Remarks:

Printed Name Signature

Tuesday, January 12, 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: 1/12/2010

TURNAROUND/REPORT DUE: 2/11/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

Page 1 of 2

REQUEST NUMBER: 10-1225

These Samples are on:

LANL Request Number: 10-1225

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846:8270C	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7261	R	1/8/2010	
		1	RE12-10-7262	R	1/8/2010	
		1	RE12-10-7263	R	1/8/2010	
		1	RE12-10-7264	R	1/8/2010	

Tuesday, January 12, 2010

Page 2 of 2

REQUEST NUMBER: 10-1225

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8270C	1	RE12-10-7265	R	1/8/2010	
		1	RE12-10-7266	R	1/8/2010	
		1	RE12-10-7267	R	1/8/2010	
		1	RE12-10-7268	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	
	SW-846:8321A_MOD	1	RE12-10-7258	R	1/8/2010	
		1	RE12-10-7259	R	1/8/2010	
		1	RE12-10-7260	R	1/8/2010	
		1	RE12-10-7261	R	1/8/2010	
		1	RE12-10-7262	R	1/8/2010	
		1	RE12-10-7263	R	1/8/2010	
		1	RE12-10-7264	R	1/8/2010	
		1	RE12-10-7265	R	1/8/2010	
		1	RE12-10-7266	R	1/8/2010	
		1	RE12-10-7267	R	1/8/2010	
		1	RE12-10-7268	R	1/8/2010	
		1	RE12-10-7269	R	1/8/2010	
		1	RE12-10-7270	R	1/8/2010	
		1	RE12-10-7271	R	1/8/2010	
		1	RE12-10-7282	R	1/8/2010	
		1	RE12-10-7283	R	1/8/2010	

Final Page of REQUEST NUMBER 10-1225



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCOC/Work Order: 10-1225		
Received By: Greg Tyler			Date Received: 1/13/10		
Suspected Hazard Information		Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.	
COC/Samples marked as radioactive?			X	Maximum Counts Observed*: 60cpm	
Classified Radioactive II by RSO?			X		
COC/Samples marked containing PCBs?			X		
Shipped as a DOT Hazardous?			X	Hazard Class Shipped: UN#:	
Samples identified as Foreign Soil?			X		

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other 1-6C 18, 12, 13C
3	Chain of custody documents included with shipment?	X			
4	Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7	Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	X			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?		X		Sample ID's affected: No time on Chain of Custody.
11	Number of containers received match number indicated on COC?	X			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	X			

Comments:

Fed Ex Tracking Numbers:

7209 7849 4887 1C 7209 7849 4854 10C
 7209 7849 4924 1C 7209 7849 4800 12C
 7209 7849 4810 2C 7209 7849 4843 13C
 7209 7849 4898 3C
 7209 7849 4946 4C
 7209 7849 4865 5C
 7209 7849 4876 6C
 7209 7849 4935 6C

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

SHIP DATE: 12JAN10
ACTWGT: 54.9 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

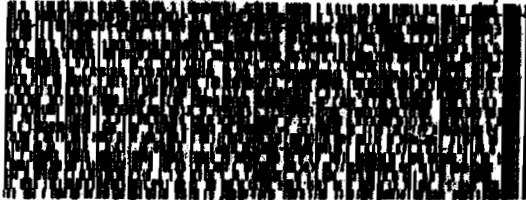
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(43) 656-8171
REF: 68010AMR3A0352V800

WED - 13JAN A1



2 of 2
WED - 13JAN A1
PRIORITY OVERNIGHT

TRK# 7209 7849 4887
0201

29407
SC-US
CHS

XX CHSA



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

SHIP DATE: 12JAN10
ACTWGT: 55.9 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

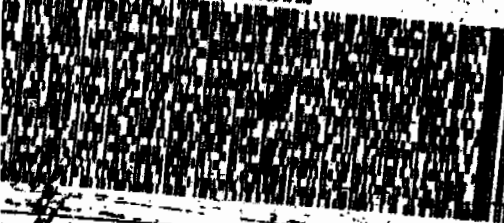
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(43) 656-8171
REF: 68010AMR2A03515BYD0

WED - 13JAN A1



3 of 3
WED - 13JAN A1
PRIORITY OVERNIGHT

TRK# 7209 7849 4810
0201

29407
SC-US
CHS

XX CHSA

Page 10 of 1227

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

SHIP DATE: 12JAN10
ACTWGT: 47.9 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

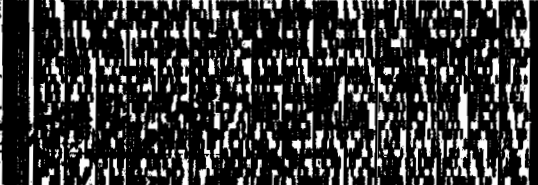
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GENERAL ENGINEERING LAB
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(43) 656-8171
REF: 68010AMR3A03529E00

WED - 13JAN A1



WED - 13JAN A1
PRIORITY OVERNIGHT

TRK# 7209 7849 4924
0201

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SC-US
CHS

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

SHIP DATE: 12JAN10
ACTWGT: 57.9 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

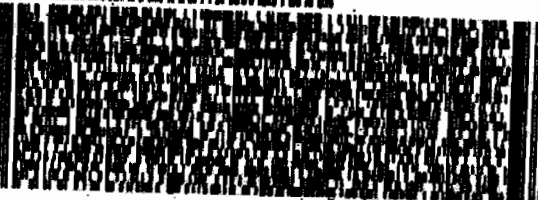
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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(43) 656-8171
REF: 68010AMR3A0352V800

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WED - 13JAN A1
PRIORITY OVERNIGHT

TRK# 7209 7849 4898
0201

29407
SC-US
CHS

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

LOS ALAMOS, NM 87545
UNITED STATES US

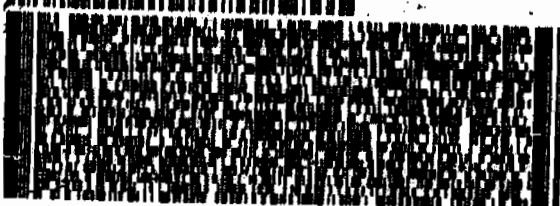
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

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WED - 13JAN A1
PRIORITY OVERNIGHT

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CHS



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

LOS ALAMOS, NM 87545
UNITED STATES US

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2040 SAVAGE RD

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REF: 6B010AMR3A0352VA00

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WED - 13JAN A1
PRIORITY OVERNIGHT

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SC-US
CHS

1 of 1227

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

LOS ALAMOS, NM 87545
UNITED STATES US

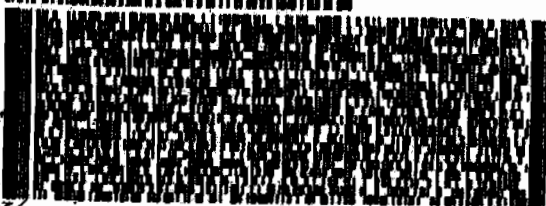
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A0352VA00

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Master 7209 7849 4843 0201

WED - 13JAN A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
7800 BLDG 1237 DPU 03

SHIP DATE: 12JAN10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

LOS ALAMOS, NM 87545
UNITED STATES US

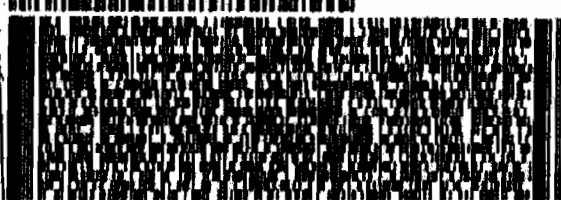
VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 6B010AMR3A05529E00

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0201 7209 7849 4935

WED - 13JAN A1
PRIORITY OVERNIGHT

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CHS

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

SHIP DATE: 12JAN10
ACTWT: 45.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR3A0352VA00

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Express

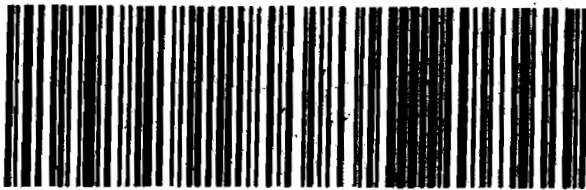


2 of 3
NPS# 7209 7849 4854
Matr# 7209 7849 4843 (8201)

WED - 13JAN A1
PRIORITY OVERNIGHT

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SC-US
CHS

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Part # 156148-434 NINT V3 04-0

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

SHIP DATE: 12JAN10
ACTWT: 59.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

12°

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR2A0515BYD0

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Express

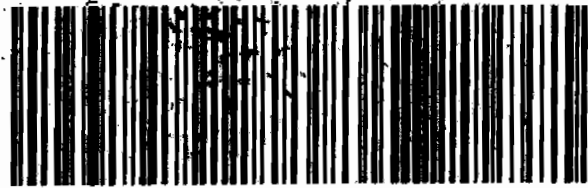


2 of 3
NPS# 7209 7849 4800
Matr# 7209 7849 4785 (8201)

WED - 13JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



Part # 156148-434 NINT V3 04-0

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

SHIP DATE: 12JAN10
ACTWT: 38.0 LB MAN
CAD: 0014176/CAFE2449

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

13°

CHARLESTON SC 29407

(843) 556-8171
REF: 68010AMR3A0352VA00

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1 of 3
TRK# 7209 7849 4843
NM MASTER NM

WED - 13JAN A1
PRIORITY OVERNIGHT

29407
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CHS

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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 Semivolatile Analysis

**Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1225**

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:	942840
Prep Batch Number:	942836

Sample Analysis

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

Sample ID	Client ID
244626001	RE12-10-7262
244626002	RE12-10-7266
244626003	RE12-10-7258
244626004	RE12-10-7268
244626005	RE12-10-7265
244626006	RE12-10-7261
244626007	RE12-10-7259
244626008	RE12-10-7263
244626009	RE12-10-7271
244626010	RE12-10-7260
244626011	RE12-10-7267
244626012	RE12-10-7264
244626013	RE12-10-7270
244626014	RE12-10-7269
244626015	RE12-10-7283
244626016	RE12-10-7282
1202018608	Method Blank (MB)
1202018609	Laboratory Control Sample (LCS)
1202018610	244626001(RE12-10-7262) Matrix Spike (MS)
1202018611	244626001(RE12-10-7262) 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.

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

Initial Calibration

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

CCV Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 244626001 (RE12-10-7262) was selected for analysis as the matrix spike/matrix spike duplicate.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance

The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information**Data Exception (DER) Documentation**

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

Manual Integrations

Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments

Additional comments were not required for this SDG.

Electronic Package Comment

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

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

System Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD5.I	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

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

Review Validation:

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

Reviewer: Dan Berchman Date: 2-9-10

Roadmap for LANL 10-1225 SVOA

This roadmap was analyzed by rmb on 01-20-2010, 11:55.

This roadmap was reviewed by bar00895 on 01-20-2010, 14:27.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1907.d	244626001	19-JAN-2010	12:35	10-1225.sub	RE12-10-7262	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1910.d	244626002	19-JAN-2010	13:45	10-1225.sub	RE12-10-7266	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1911.d	244626003	19-JAN-2010	14:09	10-1225.sub	RE12-10-7258	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1912.d	244626004	19-JAN-2010	14:32	10-1225.sub	RE12-10-7268	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1913.d	244626005	19-JAN-2010	14:55	10-1225.sub	RE12-10-7265	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1914.d	244626006	19-JAN-2010	15:18	10-1225.sub	RE12-10-7261	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1915.d	244626007	19-JAN-2010	15:42	10-1225.sub	RE12-10-7259	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1916.d	244626008	19-JAN-2010	16:05	10-1225.sub	RE12-10-7263	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1917.d	244626009	19-JAN-2010	16:28	10-1225.sub	RE12-10-7271	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1918.d	244626010	19-JAN-2010	16:51	10-1225.sub	RE12-10-7260	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1919.d	244626011	19-JAN-2010	17:14	10-1225.sub	RE12-10-7267	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1920.d	244626012	19-JAN-2010	17:37	10-1225.sub	RE12-10-7264	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1921.d	244626013	19-JAN-2010	18:01	10-1225.sub	RE12-10-7270	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1922.d	244626014	19-JAN-2010	18:24	10-1225.sub	RE12-10-7269	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1923.d	244626015	19-JAN-2010	18:47	10-1225.sub	RE12-10-7283	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1924.d	244626016	19-JAN-2010	19:10	10-1225.sub	RE12-10-7282	1	942840	<input type="checkbox"/>

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
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<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1904.d	1202018608	mb	19-JAN-2010	11:25	10-1225.sub	SBLK01	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1905.d	1202018609	lcs	19-JAN-2010	11:48	10-1225.sub	SBLK01LCS	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1908.d	1202018610	ms	19-JAN-2010	12:59	10-1225.sub	RE12-10-7262MS	1	942840	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s011910.b/s5a1909.d	1202018611	msd	19-JAN-2010	13:22	10-1225.sub	RE12-10-7262MSD	1	942840	<input type="checkbox"/>

Sample Data Summary

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

SDG Number: 10-1225
Lab Sample ID: 244626003

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.7	388
108-95-2	Phenol	U	388	ug/kg	77.7	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.7	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.7	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.7	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.7	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.7	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.7	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.7	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.7	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.7	388
95-48-7	o-Cresol	U	388	ug/kg	77.7	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.7	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.7	388
78-59-1	Isophorone	U	388	ug/kg	77.7	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.7	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.7	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.7	388
65-85-0	Benzoic acid	U	777	ug/kg	194	777
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.7	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.7	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.77	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.7	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.7	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.7	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.7	388
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	388	ug/kg	77.7	388

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

SDG Number: 10-1225
Lab Sample ID: 244626003

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	388	ug/kg	77.7	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	777	ug/kg	148	777
132-64-9	Dibenzofuran	U	388	ug/kg	77.7	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.7	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.7	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.7	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.7	388
122-66-7	Azobenzene	U	388	ug/kg	77.7	388
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.7	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.7	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.77	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.7	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.7	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.7	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.7	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.7	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.16	182	ug/kg	87	NJ
	Unknown Aldol Condensate	2.95	496	ug/kg		JA

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626003	Date Received: 01/13/2010 08:55	%Moisture: 14.3
Client ID: RE12-10-7258	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:09	Inst: MSD5.J	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1911.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.01	202	ug/kg	97	NJ
	Unknown	10.02	176	ug/kg		J
	Unknown	10.05	220	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	10.41	282	ug/kg	94	NJ
	Unknown	13.3	276	ug/kg		J
	Unknown	13.42	316	ug/kg		J
	Unknown	13.79	198	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7259
Batch ID: 942840
Run Date: 01/19/2010 15:42
Prep Date: 01/18/2010 20:10
Data File: s5a1915.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
99-09-2	o-Nitroaniline	U	355	ug/kg	70.9	355
	3-Nitroaniline					

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

SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7259
Batch ID: 942840
Run Date: 01/19/2010 15:42
Prep Date: 01/18/2010 20:10
Data File: s5a1915.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.02	604	ug/kg		J
79-09-4	Propanoic acid	2.16	203	ug/kg	91	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7259
Batch ID: 942840
Run Date: 01/19/2010 15:42
Prep Date: 01/18/2010 20:10
Data File: s5a1915.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	615	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.47	229	ug/kg	90	NJ
	Unknown	5.76	228	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.79	1260	ug/kg	98	NJ
5794-03-6	Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5.95	193	ug/kg	83	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	161	ug/kg	93	NJ
77-53-2	Cedrol	6.57	1260	ug/kg	94	NJ
	Unknown	8.91	278	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.02	1710	ug/kg	98	NJ
	Unknown	9.04	647	ug/kg		J
	Unknown	9.4	155	ug/kg		J
7773-83-3	1-Docosanethiol	9.42	155	ug/kg	96	NJ
	Unknown	9.5	232	ug/kg		J
	Unknown	9.75	261	ug/kg		J
	Unknown	10.07	3080	ug/kg		J
559-74-0	Friedelan-3-one	10.11	1470	ug/kg	99	NJ
	Unknown	10.33	160	ug/kg		J
	Unknown	10.71	313	ug/kg		J
	Unknown	11.46	165	ug/kg		J
	Unknown	11.67	185	ug/kg		J
	Unknown	12	619	ug/kg		J
1000196-01-5	Cyclohexane-1-methanol, 3,3-dimethyl-2-(	12.35	1740	ug/kg	91	NJ
	Unknown	12.75	428	ug/kg		J
	Unknown	13.29	196	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	13.8	653	ug/kg	93	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626010	Date Received: 01/13/2010 08:55	%Moisture: 19.9
Client ID: RE12-10-7260	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 16:51	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1918.d	Aliquot: 30.05 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	415	ug/kg	83.1	415
108-95-2	Phenol	U	415	ug/kg	83.1	415
95-57-8	2-Chlorophenol	U	415	ug/kg	83.1	415
106-46-7	1,4-Dichlorobenzene	U	415	ug/kg	83.1	415
621-64-7	N-Nitrosodipropylamine	U	415	ug/kg	83.1	415
59-50-7	4-Chloro-3-methylphenol	U	415	ug/kg	83.1	415
83-32-9	Acenaphthene	U	41.5	ug/kg	13.7	41.5
121-14-2	2,4-Dinitrotoluene	U	415	ug/kg	41.5	415
100-02-7	4-Nitrophenol	U	415	ug/kg	137	415
87-86-5	Pentachlorophenol	U	415	ug/kg	104	415
129-00-0	Pyrene	U	41.5	ug/kg	12.5	41.5
110-86-1	Pyridine	U	415	ug/kg	83.1	415
62-53-3	Aniline	U	415	ug/kg	125	415
111-44-4	bis(2-Chloroethyl) ether	U	415	ug/kg	83.1	415
541-73-1	1,3-Dichlorobenzene	U	415	ug/kg	83.1	415
100-51-6	Benzyl alcohol	U	415	ug/kg	125	415
95-50-1	1,2-Dichlorobenzene	U	415	ug/kg	83.1	415
108-60-1	bis(2-Chloroisopropyl)ether	U	415	ug/kg	83.1	415
95-48-7	o-Cresol	U	415	ug/kg	83.1	415
65794-96-9	m,p-Cresols	U	415	ug/kg	125	415
67-72-1	Hexachloroethane	U	415	ug/kg	83.1	415
98-95-3	Nitrobenzene	U	415	ug/kg	83.1	415
78-59-1	Isophorone	U	415	ug/kg	83.1	415
88-75-5	2-Nitrophenol	U	415	ug/kg	83.1	415
105-67-9	2,4-Dimethylphenol	U	415	ug/kg	145	415
111-91-1	bis(2-Chloroethoxy)methane	U	415	ug/kg	83.1	415
120-83-2	2,4-Dichlorophenol	U	415	ug/kg	83.1	415
65-85-0	Benzoic acid	U	831	ug/kg	208	831
91-20-3	Naphthalene	U	41.5	ug/kg	12.5	41.5
106-47-8	4-Chloroaniline	U	415	ug/kg	83.1	415
87-68-3	Hexachlorobutadiene	U	415	ug/kg	83.1	415
91-57-6	2-Methylnaphthalene	U	41.5	ug/kg	8.31	41.5
77-47-4	Hexachlorocyclopentadiene	U	415	ug/kg	83.1	415
88-06-2	2,4,6-Trichlorophenol	U	415	ug/kg	83.1	415
95-95-4	2,4,5-Trichlorophenol	U	415	ug/kg	83.1	415
91-58-7	2-Chloronaphthalene	U	41.5	ug/kg	13.7	41.5
88-74-4	2-Nitroaniline	U	415	ug/kg	83.1	415
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	415	ug/kg	83.1	415

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

SDG Number: 10-1225
Lab Sample ID: 244626010

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7260
Batch ID: 942840
Run Date: 01/19/2010 16:51
Prep Date: 01/18/2010 20:10
Data File: s5a1918.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	415	ug/kg	83.1	415
606-20-2	2,6-Dinitrotoluene	U	415	ug/kg	41.5	415
208-96-8	Acenaphthylene	U	41.5	ug/kg	12.5	41.5
51-28-5	2,4-Dinitrophenol	U	831	ug/kg	158	831
132-64-9	Dibenzofuran	U	415	ug/kg	83.1	415
84-66-2	Diethylphthalate	U	415	ug/kg	83.1	415
86-73-7	Fluorene	U	41.5	ug/kg	12.5	41.5
7005-72-3	4-Chlorophenylphenylether	U	415	ug/kg	83.1	415
534-52-1	2-Methyl-4,6-dinitrophenol	U	415	ug/kg	83.1	415
100-01-6	4-Nitroaniline	U	415	ug/kg	125	415
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	415	ug/kg	83.1	415
122-66-7	Azobenzene	U	415	ug/kg	83.1	415
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	415	ug/kg	83.1	415
118-74-1	Hexachlorobenzene	U	415	ug/kg	83.1	415
85-01-8	Phenanthrene	U	41.5	ug/kg	12.5	41.5
120-12-7	Anthracene	U	41.5	ug/kg	8.31	41.5
84-74-2	Di-n-butylphthalate	U	415	ug/kg	83.1	415
206-44-0	Fluoranthene	U	41.5	ug/kg	12.5	41.5
85-68-7	Butylbenzylphthalate	U	415	ug/kg	83.1	415
56-55-3	Benzo(a)anthracene	U	41.5	ug/kg	12.5	41.5
91-94-1	3,3'-Dichlorobenzidine	U	415	ug/kg	125	415
218-01-9	Chrysene	U	41.5	ug/kg	12.5	41.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	415	ug/kg	83.1	415
117-84-0	Di-n-octylphthalate	U	415	ug/kg	83.1	415
205-99-2	Benzo(b)fluoranthene	U	41.5	ug/kg	12.5	41.5
207-08-9	Benzo(k)fluoranthene	U	41.5	ug/kg	12.5	41.5
50-32-8	Benzo(a)pyrene	U	41.5	ug/kg	12.5	41.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.5	ug/kg	12.5	41.5
53-70-3	Dibenzo(a,h)anthracene	U	41.5	ug/kg	12.5	41.5
191-24-2	Benzo(ghi)perylene	U	41.5	ug/kg	12.5	41.5
120-82-1	1,2,4-Trichlorobenzene	U	415	ug/kg	83.1	415

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.51	2580	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	5150	ug/kg	99	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626010

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7260
Batch ID: 942840
Run Date: 01/19/2010 16:51
Prep Date: 01/18/2010 20:10
Data File: s5a1918.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
77-53-2	Cedrol	6.57	2470	ug/kg	94	NJ
473-16-5	2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	6.7	919	ug/kg	96	NJ
4727-18-8	Cyclopentadecanone, 2-hydroxy-	8.25	908	ug/kg	95	NJ
	Unknown	8.39	1030	ug/kg		J
77899-03-7	1-Heneicosyl formate	8.77	1080	ug/kg	99	NJ
	Unknown	8.89	1240	ug/kg		J
	Unknown	8.92	2170	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	4950	ug/kg	99	NJ
	Unknown	9.05	3390	ug/kg		J
	Unknown	9.12	806	ug/kg		J
302-79-4	Retinoic acid	9.17	791	ug/kg	86	NJ
	Unknown	9.2	1020	ug/kg		J
	Unknown	9.23	1070	ug/kg		J
	Unknown	9.3	1060	ug/kg		J
	Unknown	9.35	757	ug/kg		J
	Unknown	9.39	789	ug/kg		J
6971-40-0	17-Pentatriacontene	9.42	1580	ug/kg	90	NJ
	Unknown	9.47	1030	ug/kg		J
	Unknown	9.51	1320	ug/kg		J
	Unknown	9.56	1170	ug/kg		J
	Unknown	9.6	1040	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.63	1110	ug/kg	93	NJ
	Unknown	9.77	1780	ug/kg		J
3772-56-3	2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.89	802	ug/kg	96	NJ
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	1460	ug/kg	95	NJ
	Unknown	10.08	1610	ug/kg		J
	Unknown	11.88	2680	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	2630	ug/kg	99	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626006

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7261
Batch ID: 942840
Run Date: 01/19/2010 15:18
Prep Date: 01/18/2010 20:10
Data File: s5a1914.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	382	ug/kg	76.4	382

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626006	Date Received: 01/13/2010 08:55	%Moisture: 13.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7261	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 15:18	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.17 g	Final Volume: 1 mL
Data File: s5a1914.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	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	J	121	ug/kg	76.4	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.01	4070	ug/kg		J
7785-70-8	1R-.alpha.-Pinene	3.51	2900	ug/kg	97	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626006

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7261
Batch ID: 942840
Run Date: 01/19/2010 15:18
Prep Date: 01/18/2010 20:10
Data File: s5a1914.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
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5.52	701	ug/kg	99	NJ
	Unknown	5.6	753	ug/kg		J
5951-67-7	Cyclohexene, 6-ethenyl-6-methyl-1-(1-met	5.7	1230	ug/kg	89	NJ
	Unknown	5.77	1560	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.81	8340	ug/kg	98	NJ
470-40-6	Thujopsene	5.88	803	ug/kg	99	NJ
	Unknown	5.96	1360	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	6.14	1880	ug/kg	96	NJ
19870-75-8	Cedrane, 8-propoxy-	6.58	5110	ug/kg	94	NJ
	Unknown	6.89	2820	ug/kg		J
	Unknown	7.11	990	ug/kg		J
21391-98-0	1-Cyclohexene-1-carboxaldehyde, 4-(1-met	7.38	1150	ug/kg	80	NJ
	Unknown	8.93	5940	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.06	16800	ug/kg	99	NJ
	Unknown	9.08	8980	ug/kg		J
	Unknown	9.12	1430	ug/kg		J
	Unknown	9.21	6550	ug/kg		J
	Unknown	9.26	3820	ug/kg		J
88104-31-8	2-Chloropropionic acid, octadecyl ester	9.43	1160	ug/kg	93	NJ
23613-02-7	1,3,5-Triazine-2(1H)-thione, 4-(diethyla	9.49	2420	ug/kg	90	NJ
	Unknown	9.52	1100	ug/kg		J
	Unknown	9.56	3310	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.64	1850	ug/kg	90	NJ
	Unknown	9.77	1970	ug/kg		J
	Unknown	10.12	11200	ug/kg		J
	Unknown	10.51	1560	ug/kg		J
7225-64-1	Heptadecane, 9-octyl-	10.82	2010	ug/kg	96	NJ
83-46-5	.beta.-Sitosterol	13.84	3300	ug/kg	99	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626001

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7262
Batch ID: 942840
Run Date: 01/19/2010 12:35
Prep Date: 01/18/2010 20:10
Data File: s5a1907.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.9	364
108-95-2	Phenol	U	364	ug/kg	72.9	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.9	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl)ether	U	364	ug/kg	72.9	364
95-48-7	o-Cresol	U	364	ug/kg	72.9	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364
78-59-1	Isophorone	U	364	ug/kg	72.9	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.9	364
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	364	ug/kg	72.9	364

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626001	Date Received: 01/13/2010 08:55	%Moisture: 8.9
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7262	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 12:35	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s5a1907.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	364	ug/kg	72.9	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364
122-66-7	Azobenzene	U	364	ug/kg	72.9	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	496	ug/kg		JA
	Unknown	5.6	476	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626001

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7262
Batch ID: 942840
Run Date: 01/19/2010 12:35
Prep Date: 01/18/2010 20:10
Data File: s5a1907.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
21996-77-0	Di-epi-.alpha.-cedrene-(I)	5.67	206	ug/kg	92	NJ
30021-74-0	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.69	291	ug/kg	83	NJ
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-	5.84	526	ug/kg	95	NJ
	Unknown	5.96	980	ug/kg		J
469-61-4	1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	6	212	ug/kg	83	NJ
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	6.11	501	ug/kg	91	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	605	ug/kg	97	NJ
4045-44-7	1,3-Cyclopentadiene, 1,2,3,4,5-pentameth	6.2	308	ug/kg	90	NJ
	Unknown	6.75	308	ug/kg		J
	Unknown	6.88	797	ug/kg		J
	Unknown	7.09	268	ug/kg		J
	Unknown	7.29	364	ug/kg		J
2416-20-8	Hexadecenoic acid, Z-11-	7.58	702	ug/kg	95	NJ
57-10-3	n-Hexadecanoic acid	7.61	296	ug/kg	98	NJ
62600-05-9	Cedran-diol, 8S,14-	7.65	354	ug/kg	87	NJ
112-79-8	9-Octadecenoic acid, (E)-	8.25	587	ug/kg	98	NJ
	Unknown	8.91	2030	ug/kg		J
	Unknown	9.16	863	ug/kg		J
	Unknown	9.43	445	ug/kg		J
	Unknown	9.5	1070	ug/kg		J
	Unknown	9.54	609	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.62	866	ug/kg	90	NJ
564-73-8	2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.88	321	ug/kg	83	NJ
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	972	ug/kg	95	NJ
	Unknown	10.08	3980	ug/kg		J
	Unknown	10.44	416	ug/kg		J
	Unknown	10.49	572	ug/kg		J
83-46-5	.beta.-Sitosterol	13.81	1740	ug/kg	94	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626008

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 5.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7263
Batch ID: 942840
Run Date: 01/19/2010 16:05
Prep Date: 01/18/2010 20:10
Data File: s5a1916.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.6	353
108-95-2	Phenol	U	353	ug/kg	70.6	353
95-57-8	2-Chlorophenol	U	353	ug/kg	70.6	353
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.6	353
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.6	353
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.6	353
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3
110-86-1	Pyridine	U	353	ug/kg	70.6	353
62-53-3	Aniline	U	353	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.6	353
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.6	353
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.6	353
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.6	353
95-48-7	o-Cresol	U	353	ug/kg	70.6	353
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353
67-72-1	Hexachloroethane	U	353	ug/kg	70.6	353
98-95-3	Nitrobenzene	U	353	ug/kg	70.6	353
78-59-1	Isophorone	U	353	ug/kg	70.6	353
88-75-5	2-Nitrophenol	U	353	ug/kg	70.6	353
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	123	353
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.6	353
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.6	353
65-85-0	Benzoic acid	U	706	ug/kg	176	706
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline	U	353	ug/kg	70.6	353
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.6	353
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.06	35.3
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.6	353
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.6	353
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.6	353
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline	U	353	ug/kg	70.6	353
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	353	ug/kg	70.6	353

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

SDG Number: 10-1225
Lab Sample ID: 244626008

Client ID: RE12-10-7263
Batch ID: 942840
Run Date: 01/19/2010 16:05
Prep Date: 01/18/2010 20:10
Data File: s5a1916.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 5.6
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	353	ug/kg	70.6	353
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol	U	706	ug/kg	134	706
132-64-9	Dibenzofuran	U	353	ug/kg	70.6	353
84-66-2	Diethylphthalate	U	353	ug/kg	70.6	353
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.6	353
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.6	353
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	353	ug/kg	70.6	353
122-66-7	Azobenzene	U	353	ug/kg	70.6	353
101-55-3	1,2-Diphenylhydrazine 4-Bromophenylphenylether	U	353	ug/kg	70.6	353
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.6	353
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3
120-12-7	Anthracene	U	35.3	ug/kg	7.06	35.3
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.6	353
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.6	353
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.6	353
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.6	353
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.6	353

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	590	ug/kg		J
	Unknown Aldol Condensate	2.95	485	ug/kg		JA

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

SDG Number: 10-1225
Lab Sample ID: 244626008

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 5.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7263
Batch ID: 942840
Run Date: 01/19/2010 16:05
Prep Date: 01/18/2010 20:10
Data File: s5a1916.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	5.6	264	ug/kg		J
469-61-4	1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	5.65	393	ug/kg	97	NJ
3650-28-0	1,4-Methano-1H-indene, octahydro-4-methy	5.69	194	ug/kg	99	NJ
	Unknown	5.76	904	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	3580	ug/kg	99	NJ
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-	5.84	322	ug/kg	96	NJ
470-40-6	Thujopsene	5.96	767	ug/kg	90	NJ
	Unknown	6	194	ug/kg		J
56816-08-1	Cyclohexene, 5-methyl-3-(1-methylethenyl	6.09	200	ug/kg	92	NJ
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	6.11	367	ug/kg	91	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	534	ug/kg	95	NJ
	Unknown	6.2	190	ug/kg		J
77-53-2	Cedrol	6.57	3240	ug/kg	93	NJ
	Unknown	6.88	553	ug/kg		J
	Unknown	7.29	207	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	7.65	278	ug/kg	87	NJ
	Unknown	8.91	405	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	5670	ug/kg	99	NJ
	Unknown	9.54	180	ug/kg		J
6755-93-7	2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	9.75	399	ug/kg	93	NJ
	Unknown	9.88	184	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.03	256	ug/kg	96	NJ
	Unknown	10.08	2390	ug/kg		J
	Unknown	10.49	260	ug/kg		J
	Unknown	12.74	408	ug/kg		J
	Unknown	13.31	740	ug/kg		J
	Unknown	13.55	2140	ug/kg		J
	Unknown	13.8	558	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1225
Lab Sample ID: 244626012

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 11
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7264
Batch ID: 942840
Run Date: 01/19/2010 17:37
Prep Date: 01/18/2010 20:10
Data File: s5a1920.d

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

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

SDG Number: 10-1225
Lab Sample ID: 244626012

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7264
Batch ID: 942840
Run Date: 01/19/2010 17:37
Prep Date: 01/18/2010 20:10
Data File: s5a1920.d

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	696	ug/kg		JA
79-92-5	Camphene	3.61	452	ug/kg	96	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626012

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7264
Batch ID: 942840
Run Date: 01/19/2010 17:37
Prep Date: 01/18/2010 20:10
Data File: s5a1920.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.58	315	ug/kg		J
	Unknown	9.01	480	ug/kg		J
	Unknown	9.03	384	ug/kg		J
	Unknown	9.83	337	ug/kg		J
	Unknown	9.86	618	ug/kg		J
	Unknown	9.93	477	ug/kg		J
	Unknown	9.97	271	ug/kg		J
	Unknown	10.02	414	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	10.06	391	ug/kg	96	NJ
56221-91-1	13-Tetradecen-1-ol acetate	10.08	534	ug/kg	96	NJ
	Unknown	10.1	327	ug/kg		J
	Unknown	10.14	409	ug/kg		J
	Unknown	10.17	407	ug/kg		J
	Unknown	10.24	319	ug/kg		J
	Unknown	10.28	388	ug/kg		J
	Unknown	10.32	396	ug/kg		J
	Unknown	10.42	681	ug/kg		J
	Unknown	10.52	520	ug/kg		J
	Unknown	10.71	612	ug/kg		J
112-95-8	Eicosane	10.82	954	ug/kg	97	NJ
504-57-4	10-Nonadecanone	11.77	608	ug/kg	90	NJ
112-95-8	Eicosane	11.81	417	ug/kg	98	NJ
	Unknown	11.88	1390	ug/kg		J
	Unknown	12.06	642	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.93	489	ug/kg	91	NJ
	Unknown	13.29	568	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.81	908	ug/kg	97	NJ
	Unknown	14.29	404	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626005

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7265
Batch ID: 942840
Run Date: 01/19/2010 14:55
Prep Date: 01/18/2010 20:10
Data File: s5a1913.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626005	Date Received: 01/13/2010 08:55	%Moisture: 6.2
Client ID: RE12-10-7265	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:55	Inst: MSD5.1	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1913.d	Aliquot: 30.04 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	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	884	ug/kg		J
79-09-4	Propanoic acid	2.15	172	ug/kg	81	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626005

Client ID: RE12-10-7265
Batch ID: 942840
Run Date: 01/19/2010 14:55
Prep Date: 01/18/2010 20:10
Data File: s5a1913.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
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
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Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	481	ug/kg		JA
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.02	546	ug/kg	90	NJ
301-02-0	9-Octadecenamide, (Z)-	10.41	234	ug/kg	90	NJ
	Unknown	10.81	152	ug/kg		J
	Unknown	11.96	389	ug/kg		J
	Unknown	12.72	352	ug/kg		J
	Unknown	13.12	228	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626002

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
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	415	ug/kg	83.0	415
108-95-2	Phenol	U	415	ug/kg	83.0	415
95-57-8	2-Chlorophenol	U	415	ug/kg	83.0	415
106-46-7	1,4-Dichlorobenzene	U	415	ug/kg	83.0	415
621-64-7	N-Nitrosodipropylamine	U	415	ug/kg	83.0	415
59-50-7	4-Chloro-3-methylphenol	U	415	ug/kg	83.0	415
83-32-9	Acenaphthene	U	41.5	ug/kg	13.7	41.5
121-14-2	2,4-Dinitrotoluene	U	415	ug/kg	41.5	415
100-02-7	4-Nitrophenol	U	415	ug/kg	137	415
87-86-5	Pentachlorophenol	U	415	ug/kg	104	415
129-00-0	Pyrene	U	41.5	ug/kg	12.4	41.5
110-86-1	Pyridine	U	415	ug/kg	83.0	415
62-53-3	Aniline	U	415	ug/kg	124	415
111-44-4	bis(2-Chloroethyl) ether	U	415	ug/kg	83.0	415
541-73-1	1,3-Dichlorobenzene	U	415	ug/kg	83.0	415
100-51-6	Benzyl alcohol	U	415	ug/kg	124	415
95-50-1	1,2-Dichlorobenzene	U	415	ug/kg	83.0	415
108-60-1	bis(2-Chloroisopropyl)ether	U	415	ug/kg	83.0	415
95-48-7	o-Cresol	U	415	ug/kg	83.0	415
65794-96-9	m,p-Cresols	U	415	ug/kg	124	415
67-72-1	Hexachloroethane	U	415	ug/kg	83.0	415
98-95-3	Nitrobenzene	U	415	ug/kg	83.0	415
78-59-1	Isophorone	U	415	ug/kg	83.0	415
88-75-5	2-Nitrophenol	U	415	ug/kg	83.0	415
105-67-9	2,4-Dimethylphenol	U	415	ug/kg	145	415
111-91-1	bis(2-Chloroethoxy)methane	U	415	ug/kg	83.0	415
120-83-2	2,4-Dichlorophenol	U	415	ug/kg	83.0	415
65-85-0	Benzoic acid	U	830	ug/kg	207	830
91-20-3	Naphthalene	U	41.5	ug/kg	12.4	41.5
106-47-8	4-Chloroaniline	U	415	ug/kg	83.0	415
87-68-3	Hexachlorobutadiene	U	415	ug/kg	83.0	415
91-57-6	2-Methylnaphthalene	U	41.5	ug/kg	8.30	41.5
77-47-4	Hexachlorocyclopentadiene	U	415	ug/kg	83.0	415
88-06-2	2,4,6-Trichlorophenol	U	415	ug/kg	83.0	415
95-95-4	2,4,5-Trichlorophenol	U	415	ug/kg	83.0	415
91-58-7	2-Chloronaphthalene	U	41.5	ug/kg	13.7	41.5
88-74-4	2-Nitroaniline	U	415	ug/kg	83.0	415
99-09-2	<i>o</i> -Nitroaniline	U	415	ug/kg	83.0	415
	3-Nitroaniline					

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626002

Client ID: RE12-10-7266
Batch ID: 942840
Run Date: 01/19/2010 13:45
Prep Date: 01/18/2010 20:10
Data File: s5a1910.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	415	ug/kg	83.0	415
606-20-2	2,6-Dinitrotoluene	U	415	ug/kg	41.5	415
208-96-8	Acenaphthylene	U	41.5	ug/kg	12.4	41.5
51-28-5	2,4-Dinitrophenol	U	830	ug/kg	158	830
132-64-9	Dibenzofuran	U	415	ug/kg	83.0	415
84-66-2	Diethylphthalate	U	415	ug/kg	83.0	415
86-73-7	Fluorene	U	41.5	ug/kg	12.4	41.5
7005-72-3	4-Chlorophenylphenylether	U	415	ug/kg	83.0	415
534-52-1	2-Methyl-4,6-dinitrophenol	U	415	ug/kg	83.0	415
100-01-6	4-Nitroaniline	U	415	ug/kg	124	415
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	415	ug/kg	83.0	415
122-66-7	Azobenzene	U	415	ug/kg	83.0	415
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	415	ug/kg	83.0	415
118-74-1	Hexachlorobenzene	U	415	ug/kg	83.0	415
85-01-8	Phenanthrene	U	41.5	ug/kg	12.4	41.5
120-12-7	Anthracene	U	41.5	ug/kg	8.30	41.5
84-74-2	Di-n-butylphthalate	U	415	ug/kg	83.0	415
206-44-0	Fluoranthene	U	41.5	ug/kg	12.4	41.5
85-68-7	Butylbenzylphthalate	U	415	ug/kg	83.0	415
56-55-3	Benzo(a)anthracene	U	41.5	ug/kg	12.4	41.5
91-94-1	3,3'-Dichlorobenzidine	U	415	ug/kg	124	415
218-01-9	Chrysene	U	41.5	ug/kg	12.4	41.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	415	ug/kg	83.0	415
117-84-0	Di-n-octylphthalate	U	415	ug/kg	83.0	415
205-99-2	Benzo(b)fluoranthene	U	41.5	ug/kg	12.4	41.5
207-08-9	Benzo(k)fluoranthene	U	41.5	ug/kg	12.4	41.5
50-32-8	Benzo(a)pyrene	U	41.5	ug/kg	12.4	41.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.5	ug/kg	12.4	41.5
53-70-3	Dibenzo(a,h)anthracene	U	41.5	ug/kg	12.4	41.5
191-24-2	Benzo(ghi)perylene	U	41.5	ug/kg	12.4	41.5
120-82-1	1,2,4-Trichlorobenzene	U	415	ug/kg	83.0	415

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.17	204	ug/kg	90	NJ
	Unknown Aldol Condensate	2.95	467	ug/kg		JA

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

SDG Number: 10-1225
Lab Sample ID: 244626002

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7266
Batch ID: 942840
Run Date: 01/19/2010 13:45
Prep Date: 01/18/2010 20:10
Data File: s5a1910.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
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	6.02	169	ug/kg	96	NJ
	Unknown	9.72	267	ug/kg		J
	Unknown	10.04	919	ug/kg		J
	Unknown	10.7	216	ug/kg		J
	Unknown	10.82	234	ug/kg		J
112-95-8	Eicosane	11.8	170	ug/kg	96	NJ
	Unknown	11.87	355	ug/kg		J
	Unknown	12.28	198	ug/kg		J
	Unknown	12.3	255	ug/kg		J
	Unknown	13.29	205	ug/kg		J
	Unknown	13.41	479	ug/kg		J
83-46-5	.beta.-Sitosterol	13.79	494	ug/kg	97	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626011

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7267
Batch ID: 942840
Run Date: 01/19/2010 17:14
Prep Date: 01/18/2010 20:10
Data File: s5a1919.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.6	358
108-95-2	Phenol	U	358	ug/kg	71.6	358
95-57-8	2-Chlorophenol	U	358	ug/kg	71.6	358
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.6	358
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.6	358
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.6	358
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358
87-86-5	Pentachlorophenol	U	358	ug/kg	89.5	358
129-00-0	Pyrene	U	35.8	ug/kg	10.7	35.8
110-86-1	Pyridine	U	358	ug/kg	71.6	358
62-53-3	Aniline	U	358	ug/kg	107	358
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.6	358
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.6	358
100-51-6	Benzyl alcohol	U	358	ug/kg	107	358
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.6	358
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.6	358
95-48-7	o-Cresol	U	358	ug/kg	71.6	358
65794-96-9	m,p-Cresols	U	358	ug/kg	107	358
67-72-1	Hexachloroethane	U	358	ug/kg	71.6	358
98-95-3	Nitrobenzene	U	358	ug/kg	71.6	358
78-59-1	Isophorone	U	358	ug/kg	71.6	358
88-75-5	2-Nitrophenol	U	358	ug/kg	71.6	358
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.6	358
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.6	358
65-85-0	Benzoic acid	U	716	ug/kg	179	716
91-20-3	Naphthalene	U	35.8	ug/kg	10.7	35.8
106-47-8	4-Chloroaniline	U	358	ug/kg	71.6	358
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.6	358
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.16	35.8
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.6	358
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.6	358
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.6	358
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8
88-74-4	2-Nitroaniline	U	358	ug/kg	71.6	358
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	358	ug/kg	71.6	358

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

SDG Number: 10-1225
Lab Sample ID: 244626011

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7267
Batch ID: 942840
Run Date: 01/19/2010 17:14
Prep Date: 01/18/2010 20:10
Data File: s5a1919.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	358	ug/kg	71.6	358
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.7	35.8
51-28-5	2,4-Dinitrophenol	U	716	ug/kg	136	716
132-64-9	Dibenzofuran	U	358	ug/kg	71.6	358
84-66-2	Diethylphthalate	U	358	ug/kg	71.6	358
86-73-7	Fluorene	U	35.8	ug/kg	10.7	35.8
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.6	358
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.6	358
100-01-6	4-Nitroaniline	U	358	ug/kg	107	358
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	358	ug/kg	71.6	358
122-66-7	Azobenzene	U	358	ug/kg	71.6	358
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.6	358
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.6	358
85-01-8	Phenanthrene	U	35.8	ug/kg	10.7	35.8
120-12-7	Anthracene	U	35.8	ug/kg	7.16	35.8
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.6	358
206-44-0	Fluoranthene	U	35.8	ug/kg	10.7	35.8
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.6	358
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.7	35.8
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	107	358
218-01-9	Chrysene	U	35.8	ug/kg	10.7	35.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	358	ug/kg	71.6	358
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.6	358
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.7	35.8
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.7	35.8
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.7	35.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.7	35.8
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.7	35.8
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.7	35.8
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.6	358

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Ft	Qual
79-09-4	Propanoic acid	2.18	243	ug/kg	90	NJ
	Unknown Aldol Condensate	2.96	605	ug/kg		JA

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

Page 3 of 3

SDG Number: 10-1225
Lab Sample ID: 244626011

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7267
Batch ID: 942840
Run Date: 01/19/2010 17:14
Prep Date: 01/18/2010 20:10
Data File: s5a1919.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
1058-61-3	Stigmast-4-en-3-one		8.28	288	ug/kg	93	NJ
	Unknown		9.46	185	ug/kg		J
559-74-0	Friedelan-3-one		10.06	745	ug/kg	93	NJ
	Unknown		10.34	234	ug/kg		J
112-84-5	13-Docosenamide, (Z)-		10.41	203	ug/kg	87	NJ
	Unknown		10.52	228	ug/kg		J
	Unknown		10.72	464	ug/kg		J
	Unknown		11.01	237	ug/kg		J
	Unknown		11.67	813	ug/kg		J
	Unknown		12.05	400	ug/kg		J
	Unknown		12.32	332	ug/kg		J
	Unknown		12.76	879	ug/kg		J
	Unknown		13.31	185	ug/kg		J
	Unknown		13.55	320	ug/kg		J
	Unknown		14.33	146	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626004

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

Client ID: RE12-10-7268
Batch ID: 942840
Run Date: 01/19/2010 14:32
Prep Date: 01/18/2010 20:10
Data File: s5a1912.d

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

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

SDG Number: 10-1225
Lab Sample ID: 244626004

Client ID: RE12-10-7268
Batch ID: 942840
Run Date: 01/19/2010 14:32
Prep Date: 01/18/2010 20:10
Data File: s5a1912.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	369	ug/kg	73.9	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	369	ug/kg	73.9	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.9	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.9	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.9	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.9	369
122-66-7	Azobenzene	U	369	ug/kg	73.9	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.9	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.9	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.39	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.9	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.9	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.9	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.9	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.9	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	4290	ug/kg		J
79-09-4	Propanoic acid	2.17	214	ug/kg	87	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626004

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

Client ID: RE12-10-7268
Batch ID: 942840
Run Date: 01/19/2010 14:32
Prep Date: 01/18/2010 20:10
Data File: s5a1912.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.95	451	ug/kg		JA
559-74-0	Friedelan-3-one	10.02	245	ug/kg	90	NJ
	Unknown	10.05	389	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	10.41	193	ug/kg	89	NJ
	Unknown	10.51	160	ug/kg		J
	Unknown	12.72	264	ug/kg		J
	Unknown	12.92	229	ug/kg		J
	Unknown	13.31	555	ug/kg		J
83-46-5	.beta.-Sitosterol	13.79	309	ug/kg	96	NJ
	Unknown	14.32	152	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1225
Lab Sample ID: 244626014

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7269
Batch ID: 942840
Run Date: 01/19/2010 18:24
Prep Date: 01/18/2010 20:10
Data File: s5a1922.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.8	354
108-95-2	Phenol	U	354	ug/kg	70.8	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.8	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.8	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.8	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.8	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.5	354
129-00-0	Pyrene	U	35.4	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.8	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.8	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.8	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.8	354
108-60-1	bis(2-Chloroisopropyl)ether	U	354	ug/kg	70.8	354
95-48-7	o-Cresol	U	354	ug/kg	70.8	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.8	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.8	354
78-59-1	Isophorone	U	354	ug/kg	70.8	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.8	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.8	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.8	354
65-85-0	Benzoic acid	U	708	ug/kg	177	708
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.8	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.8	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.08	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.8	354
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.8	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.8	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline	U	354	ug/kg	70.8	354
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	354	ug/kg	70.8	354

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

SDG Number: 10-1225
Lab Sample ID: 244626014

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.J
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7269
Batch ID: 942840
Run Date: 01/19/2010 18:24
Prep Date: 01/18/2010 20:10
Data File: s5a1922.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	354	ug/kg	70.8	354
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	U	708	ug/kg	135	708
132-64-9	Dibenzofuran	U	354	ug/kg	70.8	354
84-66-2	Diethylphthalate	U	354	ug/kg	70.8	354
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.8	354
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.8	354
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	354	ug/kg	70.8	354
122-66-7	Azobenzene	U	354	ug/kg	70.8	354
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	354	ug/kg	70.8	354
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.8	354
85-01-8	Phenanthrene	U	35.4	ug/kg	10.6	35.4
120-12-7	Anthracene	U	35.4	ug/kg	7.08	35.4
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.8	354
206-44-0	Fluoranthene	U	35.4	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.8	354
56-55-3	Benzo(a)anthracene	U	35.4	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354
218-01-9	Chrysene	U	35.4	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.8	354
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.8	354
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene	U	35.4	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.8	354

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	396	ug/kg		J
79-09-4	Propanoic acid	2.17	185	ug/kg	90	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626014

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7269
Batch ID: 942840
Run Date: 01/19/2010 18:24
Prep Date: 01/18/2010 20:10
Data File: s5a1922.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate		2.96	538	ug/kg		JA
	Unknown		10.05	195	ug/kg		J
	Unknown		10.71	157	ug/kg		J
	Unknown		12	741	ug/kg		J
	Unknown		12.76	1320	ug/kg		J
	Unknown		13.53	341	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626013

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.7	379
108-95-2	Phenol	U	379	ug/kg	75.7	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.7	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.7	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.7	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.7	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.7	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.7	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.7	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.7	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.7	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.7	379
95-48-7	o-Cresol	U	379	ug/kg	75.7	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.7	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.7	379
78-59-1	Isophorone	U	379	ug/kg	75.7	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.7	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.7	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.7	379
65-85-0	Benzoic acid	J	608	ug/kg	189	757
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.7	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.7	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.57	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.7	379
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.7	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.7	379
91-58-7	2-Chloronaphthalene	U	37.9	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.7	379
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	379	ug/kg	75.7	379

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

SDG Number: 10-1225
Lab Sample ID: 244626013

Client ID: RE12-10-7270
Batch ID: 942840
Run Date: 01/19/2010 18:01
Prep Date: 01/18/2010 20:10
Data File: s5a1921.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	379	ug/kg	75.7	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	757	ug/kg	144	757
132-64-9	Dibenzofuran	U	379	ug/kg	75.7	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.7	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.7	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.7	379
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.7	379
122-66-7	Azobenzene	U	379	ug/kg	75.7	379
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.7	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.7	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.57	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.7	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.7	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.7	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.7	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.7	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.96	709	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.51	812	ug/kg	97	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626013	Date Received: 01/13/2010 08:55	%Moisture: 12.5
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7270	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 18:01	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.17 g	Final Volume: 1 mL
Data File: s5a1921.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	9.01	227	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.08	244	ug/kg	98	NJ
	Unknown	9.11	367	ug/kg		J
	Unknown	9.25	278	ug/kg		J
	Unknown	9.34	185	ug/kg		J
6971-40-0	17-Pentatriacontene	9.42	301	ug/kg	93	NJ
62600-05-9	Cedran-diol, 8S,14-	9.48	336	ug/kg	83	NJ
	Unknown	9.57	276	ug/kg		J
	Unknown	9.6	312	ug/kg		J
	Unknown	9.7	254	ug/kg		J
	Unknown	9.73	415	ug/kg		J
	Unknown	9.77	189	ug/kg		J
	Unknown	9.78	272	ug/kg		J
110936-78-2	7-Oxodehydroabietic acid, methyl ester	9.86	273	ug/kg	89	NJ
	Unknown	9.93	229	ug/kg		J
	Unknown	9.96	205	ug/kg		J
	Unknown	10.05	491	ug/kg		J
629-96-9	1-Eicosanol	10.08	468	ug/kg	83	NJ
	Unknown	10.17	214	ug/kg		J
	Unknown	10.22	353	ug/kg		J
	Unknown	10.29	312	ug/kg		J
	Unknown	10.42	203	ug/kg		J
	Unknown	10.72	367	ug/kg		J
	Unknown	11.67	673	ug/kg		J
	Unknown	12.75	582	ug/kg		J
	Unknown	13.32	1800	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	2070	ug/kg	93	NJ
	Unknown	14.34	407	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626009

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7271
Batch ID: 942840
Run Date: 01/19/2010 16:28
Prep Date: 01/18/2010 20:10
Data File: s5a1917.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	71.9	360
108-95-2	Phenol	U	360	ug/kg	71.9	360
95-57-8	2-Chlorophenol	U	360	ug/kg	71.9	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	71.9	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	71.9	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	71.9	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	89.9	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	71.9	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	71.9	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	71.9	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	71.9	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	71.9	360
95-48-7	o-Cresol	U	360	ug/kg	71.9	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	71.9	360
98-95-3	Nitrobenzene	U	360	ug/kg	71.9	360
78-59-1	Isophorone	U	360	ug/kg	71.9	360
88-75-5	2-Nitrophenol	U	360	ug/kg	71.9	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	71.9	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	71.9	360
65-85-0	Benzoic acid	U	719	ug/kg	180	719
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	71.9	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	71.9	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.19	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	71.9	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	71.9	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	71.9	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	71.9	360
99-09-2	o-Nitroaniline	U	360	ug/kg	71.9	360
	3-Nitroaniline					

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

SDG Number: 10-1225
Lab Sample ID: 244626009

Client ID: RE12-10-7271
Batch ID: 942840
Run Date: 01/19/2010 16:28
Prep Date: 01/18/2010 20:10
Data File: s5a1917.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.6
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	360	ug/kg	71.9	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	719	ug/kg	137	719
132-64-9	Dibenzofuran	U	360	ug/kg	71.9	360
84-66-2	Diethylphthalate	U	360	ug/kg	71.9	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	71.9	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	71.9	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	71.9	360
122-66-7	Azobenzene	U	360	ug/kg	71.9	360
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	71.9	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	71.9	360
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.19	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	71.9	360
206-44-0	Fluoranthene	U	36.0	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	71.9	360
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	U	36.0	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	71.9	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	71.9	360
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	71.9	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.03	527	ug/kg		J
	Unknown	2.17	197	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626009

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7271
Batch ID: 942840
Run Date: 01/19/2010 16:28
Prep Date: 01/18/2010 20:10
Data File: s5a1917.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.2	208	ug/kg	91	NJ
	Unknown Aldol Condensate	2.96	638	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.51	396	ug/kg	97	NJ
13466-78-9	3-Carene	3.9	227	ug/kg	96	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.08	161	ug/kg	98	NJ
	Unknown	9.11	189	ug/kg		J
295-48-7	Cyclopentadecane	9.42	236	ug/kg	95	NJ
	Unknown	9.7	169	ug/kg		J
112-95-8	Eicosane	9.73	215	ug/kg	95	NJ
	Unknown	9.86	171	ug/kg		J
	Unknown	10.06	1270	ug/kg		J
	Unknown	10.41	188	ug/kg		J
	Unknown	10.52	248	ug/kg		J
	Unknown	12.3	191	ug/kg		J
	Unknown	12.92	295	ug/kg		J
	Unknown	13.11	220	ug/kg		J
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	13.32	3100	ug/kg	83	NJ
	Unknown	13.46	359	ug/kg		J
	Unknown	13.73	742	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.81	1110	ug/kg	93	NJ
	Unknown	14.34	590	ug/kg		J
	Unknown	14.4	248	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626016

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.07 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7282
Batch ID: 942840
Run Date: 01/19/2010 19:10
Prep Date: 01/18/2010 20:10
Data File: s5a1924.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

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

SDG Number: 10-1225
Lab Sample ID: 244626016

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7282
Batch ID: 942840
Run Date: 01/19/2010 19:10
Prep Date: 01/18/2010 20:10
Data File: s5a1924.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	375	ug/kg		J
79-09-4	Propanoic acid	2.17	174	ug/kg	90	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626016	Date Received: 01/13/2010 08:55	%Moisture: 6.2
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7282	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 19:10	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s5a1924.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	606	ug/kg		JA
58-22-0	Androst-4-en-3-one, 17-hydroxy-, (17.bet	8.27	206	ug/kg	81	NJ
559-74-0	Friedelan-3-one	10.06	574	ug/kg	97	NJ
	Unknown	10.34	181	ug/kg		J
112-84-5	13-Docosenamide, (Z)-	10.41	160	ug/kg	95	NJ
	Unknown	10.72	211	ug/kg		J
	Unknown	11.67	473	ug/kg		J
	Unknown	12.32	227	ug/kg		J
	Unknown	12.76	497	ug/kg		J
	Unknown	13.55	226	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1225
Lab Sample ID: 244626015

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7283
Batch ID: 942840
Run Date: 01/19/2010 18:47
Prep Date: 01/18/2010 20:10
Data File: s5a1923.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	407	ug/kg	81.5	407
108-95-2	Phenol	U	407	ug/kg	81.5	407
95-57-8	2-Chlorophenol	U	407	ug/kg	81.5	407
106-46-7	1,4-Dichlorobenzene	U	407	ug/kg	81.5	407
621-64-7	N-Nitrosodipropylamine	U	407	ug/kg	81.5	407
59-50-7	4-Chloro-3-methylphenol	U	407	ug/kg	81.5	407
83-32-9	Acenaphthene	U	40.7	ug/kg	13.4	40.7
121-14-2	2,4-Dinitrotoluene	U	407	ug/kg	40.7	407
100-02-7	4-Nitrophenol	U	407	ug/kg	134	407
87-86-5	Pentachlorophenol	U	407	ug/kg	102	407
129-00-0	Pyrene	U	40.7	ug/kg	12.2	40.7
110-86-1	Pyridine	U	407	ug/kg	81.5	407
62-53-3	Aniline	U	407	ug/kg	122	407
111-44-4	bis(2-Chloroethyl) ether	U	407	ug/kg	81.5	407
541-73-1	1,3-Dichlorobenzene	U	407	ug/kg	81.5	407
100-51-6	Benzyl alcohol	U	407	ug/kg	122	407
95-50-1	1,2-Dichlorobenzene	U	407	ug/kg	81.5	407
108-60-1	bis(2-Chloroisopropyl) ether	U	407	ug/kg	81.5	407
95-48-7	o-Cresol	U	407	ug/kg	81.5	407
65794-96-9	m,p-Cresols	U	407	ug/kg	122	407
67-72-1	Hexachloroethane	U	407	ug/kg	81.5	407
98-95-3	Nitrobenzene	U	407	ug/kg	81.5	407
78-59-1	Isophorone	U	407	ug/kg	81.5	407
88-75-5	2-Nitrophenol	U	407	ug/kg	81.5	407
105-67-9	2,4-Dimethylphenol	U	407	ug/kg	143	407
111-91-1	bis(2-Chloroethoxy)methane	U	407	ug/kg	81.5	407
120-83-2	2,4-Dichlorophenol	U	407	ug/kg	81.5	407
65-85-0	Benzoic acid	J	645	ug/kg	204	815
91-20-3	Naphthalene	U	40.7	ug/kg	12.2	40.7
106-47-8	4-Chloroaniline	U	407	ug/kg	81.5	407
87-68-3	Hexachlorobutadiene	U	407	ug/kg	81.5	407
91-57-6	2-Methylnaphthalene	U	40.7	ug/kg	8.15	40.7
77-47-4	Hexachlorocyclopentadiene	U	407	ug/kg	81.5	407
88-06-2	2,4,6-Trichlorophenol	U	407	ug/kg	81.5	407
95-95-4	2,4,5-Trichlorophenol	U	407	ug/kg	81.5	407
91-58-7	2-Chloronaphthalene	U	40.7	ug/kg	13.4	40.7
88-74-4	2-Nitroaniline	U	407	ug/kg	81.5	407
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	407	ug/kg	81.5	407

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626015	Date Received: 01/13/2010 08:55	% Moisture: 18.2
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7283	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 18:47	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a1923.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	407	ug/kg	81.5	407
606-20-2	2,6-Dinitrotoluene	U	407	ug/kg	40.7	407
208-96-8	Acenaphthylene	U	40.7	ug/kg	12.2	40.7
51-28-5	2,4-Dinitrophenol	U	815	ug/kg	155	815
132-64-9	Dibenzofuran	U	407	ug/kg	81.5	407
84-66-2	Diethylphthalate	U	407	ug/kg	81.5	407
86-73-7	Fluorene	U	40.7	ug/kg	12.2	40.7
7005-72-3	4-Chlorophenylphenylether	U	407	ug/kg	81.5	407
534-52-1	2-Methyl-4,6-dinitrophenol	U	407	ug/kg	81.5	407
100-01-6	4-Nitroaniline	U	407	ug/kg	122	407
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	407	ug/kg	81.5	407
122-66-7	Azobenzene	U	407	ug/kg	81.5	407
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	407	ug/kg	81.5	407
118-74-1	Hexachlorobenzene	U	407	ug/kg	81.5	407
85-01-8	Phenanthrene	U	40.7	ug/kg	12.2	40.7
120-12-7	Anthracene	U	40.7	ug/kg	8.15	40.7
84-74-2	Di-n-butylphthalate	U	407	ug/kg	81.5	407
206-44-0	Fluoranthene	U	40.7	ug/kg	12.2	40.7
85-68-7	Butylbenzylphthalate	U	407	ug/kg	81.5	407
56-55-3	Benzo(a)anthracene	U	40.7	ug/kg	12.2	40.7
91-94-1	3,3'-Dichlorobenzidine	U	407	ug/kg	122	407
218-01-9	Chrysene	U	40.7	ug/kg	12.2	40.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	407	ug/kg	81.5	407
117-84-0	Di-n-octylphthalate	U	407	ug/kg	81.5	407
205-99-2	Benzo(b)fluoranthene	U	40.7	ug/kg	12.2	40.7
207-08-9	Benzo(k)fluoranthene	U	40.7	ug/kg	12.2	40.7
50-32-8	Benzo(a)pyrene	U	40.7	ug/kg	12.2	40.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.7	ug/kg	12.2	40.7
53-70-3	Dibenzo(a,h)anthracene	U	40.7	ug/kg	12.2	40.7
191-24-2	Benzo(ghi)perylene	U	40.7	ug/kg	12.2	40.7
120-82-1	1,2,4-Trichlorobenzene	U	407	ug/kg	81.5	407

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.69	587	ug/kg	87	NJ
	Unknown	5.76	634	ug/kg		J

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626015	Date Received: 01/13/2010 08:55	%Moisture: 18.2
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7283	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 18:47	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a1923.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
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	5610	ug/kg	99	NJ
	Unknown	5.96	636	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	6.14	752	ug/kg	94	NJ
77-53-2	Cedrol	6.57	3250	ug/kg	94	NJ
473-16-5	2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	6.7	587	ug/kg	95	NJ
	Unknown	6.88	1160	ug/kg		J
1000130-97-9	E-15-Heptadecenal	8.77	558	ug/kg	98	NJ
	Unknown	8.92	2020	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	7030	ug/kg	99	NJ
	Unknown	9.35	412	ug/kg		J
	Unknown	9.37	450	ug/kg		J
1599-67-3	1-Docosene	9.42	935	ug/kg	99	NJ
	Unknown	9.47	575	ug/kg		J
	Unknown	9.51	880	ug/kg		J
	Unknown	9.56	582	ug/kg		J
	Unknown	9.59	463	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.62	715	ug/kg	91	NJ
6755-93-7	2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	9.76	1180	ug/kg	98	NJ
3772-56-3	2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.88	541	ug/kg	98	NJ
	Unknown	9.94	629	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	759	ug/kg	95	NJ
	Unknown	10.08	1760	ug/kg		J
	Unknown	10.26	450	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.51	1080	ug/kg	93	NJ
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.88	895	ug/kg	89	NJ
112-95-8	Eicosane	13.17	1360	ug/kg	95	NJ
	Unknown	13.31	806	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	1750	ug/kg	92	NJ

QC Summary

Semi-Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1225

Matrix Type: SOLID

CAP Column (1) : J&W DB-5MS

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202018608	MB for batch 942836	73	71	77	73	70	86
1202018609	LCS for batch 942836	74	71	81	76	83	83
244626001	RE12-10-7262	71	68	75	72	89	87
1202018610	RE12-10-7262MS	64	63	70	67	80	79
1202018611	RE12-10-7262MSD	70	67	75	73	87	80
244626002	RE12-10-7266	66	65	73	70	80	89
244626003	RE12-10-7258	70	68	77	73	81	84
244626004	RE12-10-7268	73	71	79	76	87	90
244626005	RE12-10-7265	70	68	75	71	82	84
244626006	RE12-10-7261	65	66	69	75	90	75
244626007	RE12-10-7259	67	66	72	73	87	87
244626008	RE12-10-7263	62	60	69	67	78	79
244626009	RE12-10-7271	68	66	75	72	86	89
244626010	RE12-10-7260	65	64	70	71	86	90
244626011	RE12-10-7267	62	62	70	68	81	92
244626012	RE12-10-7264	71	71	76	76	92	95
244626013	RE12-10-7270	67	70	72	74	87	91
244626014	RE12-10-7269	64	62	71	68	77	97
244626015	RE12-10-7283	56	57	61	62	73	79
244626016	RE12-10-7282	64	64	67	66	80	84

Surrogate**Acceptance Limits**

2FP	= 2-Fluorophenol	(35%-96%)
PHL	= Phenol-d5	(36%-96%)
NBZ	= Nitrobenzene-d5	(34%-104%)
FBP	= 2-Fluorobiphenyl	(36%-100%)
TBP	= 2,4,6-Tribromophenol	(37%-106%)
TPH	= p-Terphenyl-d14	(40%-124%)

* 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: 10-1225

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 942836

Matrix: SOIL

Lab Sample ID: 1202018609

Instrument: MSD5.I

Analysis Date: 01/19/2010 11:48

Dilution: 1

Analyst: RMB

Pre Batch ID: 942836

Inj. Vol: .5 uL

Batch ID: 942840

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	LCS N-Methyl-N-nitrosomethylam	1670	0.0	1200	72	31-95
108-95-2	LCS Phenol	1670	0.0	1310	78	37-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1290	77	40-105
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1250	75	34-103
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1340	80	36-110
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1450	87	46-114
83-32-9	LCS Acenaphthene	1670	0.0	1350	81	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1360	81	49-107
100-02-7	LCS 4-Nitrophenol	1670	0.0	1800	108	33-110
87-86-5	LCS Pentachlorophenol	1670	0.0	1480	89	38-116
129-00-0	LCS Pyrene	1670	0.0	1260	76	43-108
110-86-1	LCS Pyridine	1670	0.0	1350	81	13-129
62-53-3	LCS Aniline	1670	0.0	1360	82	30-121
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1240	74	37-106
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1220	73	33-103
100-51-6	LCS Benzyl alcohol	1670	0.0	1560	94	31-100
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1350	81	34-108
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1280	77	34-120
95-48-7	LCS o-Cresol	1670	0.0	1380	83	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1450	87	43-118
67-72-1	LCS Hexachloroethane	1670	0.0	1190	72	34-105
98-95-3	LCS Nitrobenzene	1670	0.0	1410	85	37-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1225

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 942836

Matrix: SOIL

Lab Sample ID: 1202018609

Instrument: MSD5.I

Analysis Date: 01/19/2010 11:48

Dilution: 1

Analyst: RMB

Prep Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

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	1340	80	41-108
88-75-5	LCS 2-Nitrophenol	1670	0.0	1370	82	35-112
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1300	78	35-114
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1290	78	40-109
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1400	84	45-109
65-85-0	LCS Benzoic acid	3330	0.0	2740	82	27-137
91-20-3	LCS Naphthalene	1670	0.0	1270	76	35-105
106-47-8	LCS 4-Chloroaniline	1670	0.0	1410	85	30-122
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1350	81	37-111
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1390	83	40-106
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1120	67	24-135
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1500	90	46-107
95-95-4	LCS 2,4,5-Trichlorophenol	1670	0.0	1450	87	44-110
91-58-7	LCS 2-Chloronaphthalene	1670	0.0	1380	83	44-104
88-74-4	LCS 2-Nitroaniline	1670	0.0	1480	89	44-113
	<i>o</i> -Nitroaniline					
99-09-2	LCS 3-Nitroaniline	1670	0.0	1520	91	48-113
	<i>m</i> -Nitroaniline					
131-11-3	LCS Dimethylphthalate	1670	0.0	1340	80	47-104
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1320	79	47-103
208-96-8	LCS Acenaphthylene	1670	0.0	1340	81	43-104
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1690	102	32-114
132-64-9	LCS Dibenzofuran	1670	0.0	1620	97	47-112
84-66-2	LCS Diethylphthalate	1670	0.0	1360	82	50-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1225

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 942836

Matrix: SOIL

Lab Sample ID: 1202018609

Instrument: MSD5.I

Analysis Date: 01/19/2010 11:48

Dilution: 1

Analyst: RMB

Pren Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS Fluorene	1670	0.0	1310	78	49-102
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1320	79	50-109
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1330	80	35-114
100-01-6	LCS 4-Nitroaniline <i>p</i> -Nitroaniline	1670	0.0	1900	114	44-139
122-39-4	LCS Diphenylamine	1670	0.0	1360	81	46-111
122-66-7	LCS Azobenzene <i>1,2</i> -Diphenylhydrazine	1670	0.0	1400	84	40-119
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1240	75	45-112
118-74-1	LCS Hexachlorobenzene	1670	0.0	1270	76	44-115
85-01-8	LCS Phenanthrene	1670	0.0	1330	80	45-107
120-12-7	LCS Anthracene	1670	0.0	1350	81	46-106
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1330	80	52-115
206-44-0	LCS Fluoranthene	1670	0.0	1380	83	50-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1330	80	49-115
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1360	82	48-105
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1300	78	45-98
218-01-9	LCS Chrysene	1670	0.0	1400	84	48-105
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1350	81	50-117
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1180	71	39-123
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1370	82	46-111
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1300	78	46-114
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1390	84	49-112
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1570	94	45-128

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 4

SDG Number: 10-1225

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 942836

Matrix: SOIL

Lab Sample ID: 1202018609

Instrument: MSD5.I

Analysis Date: 01/19/2010 11:48

Dilution: 1

Analyst: RMB

Prep Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

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	1600	96	44-131
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1660	100	42-128
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1320	79	36-109

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1225

Sample Type: Matrix Spike

Client ID: RE12-10-7262MS

Matrix: R

Lab Sample ID: 1202018610

%Moisture: 8.9

Instrument: MSD5.I

Analysis Date: 01/19/2010 12:59

Dilution: 1

Analyst: RMB

Pren Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

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	1830	0.00 U	1110	61	32-90
108-95-2	MS Phenol	1830	0.00 U	1290	70	32-105
95-57-8	MS 2-Chlorophenol	1830	0.00 U	1260	69	33-106
106-46-7	MS 1,4-Dichlorobenzene	1830	0.00 U	1170	64	33-95
621-64-7	MS N-Nitrosodipropylamine	1830	0.00 U	1320	72	31-109
59-50-7	MS 4-Chloro-3-methylphenol	1830	0.00 U	1520	83	38-119
83-32-9	MS Acenaphthene	1830	0.00 U	1320	72	39-100
121-14-2	MS 2,4-Dinitrotoluene	1830	0.00 U	1320	72	42-107
100-02-7	MS 4-Nitrophenol	1830	0.00 U	1850	102	24-120
87-86-5	MS Pentachlorophenol	1830	0.00 U	1710	94	26-121
129-00-0	MS Pyrene	1830	0.00 U	1340	73	34-120
110-86-1	MS Pyridine	1830	0.00 U	1170	64	30-95
62-53-3	MS Aniline	1830	0.00 U	1340	74	34-111
111-44-4	MS bis(2-Chloroethyl) ether	1830	0.00 U	1170	64	34-101
541-73-1	MS 1,3-Dichlorobenzene	1830	0.00 U	1160	64	31-97
100-51-6	MS Benzyl alcohol	1830	0.00 U	1530	84	17-120
95-50-1	MS 1,2-Dichlorobenzene	1830	0.00 U	1280	70	32-102
108-60-1	MS bis(2-Chloroisopropyl)ether	1830	0.00 U	1230	67	32-113
95-48-7	MS o-Cresol	1830	0.00 U	1380	75	31-119
65794-96-9	MS m,p-Cresols	1830	0.00 U	1450	79	35-125
67-72-1	MS Hexachloroethane	1830	0.00 U	1150	63	30-100
98-95-3	MS Nitrobenzene	1830	0.00 U	1360	74	33-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1225

Sample Type: Matrix Spike

Client ID: RE12-10-7262MS

Matrix: R

Lab Sample ID: 1202018610

%Moisture: 8.9

Instrument: MSD5.I

Analysis Date: 01/19/2010 12:59

Dilution: 1

Analyst: RMB

Preo Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	1830	0.00	U	1320	72	34-110
88-75-5	MS 2-Nitrophenol	1830	0.00	U	1400	76	32-108
105-67-9	MS 2,4-Dimethylphenol	1830	0.00	U	1320	73	32-115
111-91-1	MS bis(2-Chloroethoxy)methane	1830	0.00	U	1270	69	35-108
120-83-2	MS 2,4-Dichlorophenol	1830	0.00	U	1390	76	38-110
65-85-0	MS Benzoic acid	3650	0.00	U	3400	93	18-134
91-20-3	MS Naphthalene	1830	0.00	U	1230	68	31-105
106-47-8	MS 4-Chloroaniline	1830	0.00	U	1350	74	29-123
87-68-3	MS Hexachlorobutadiene	1830	0.00	U	1300	71	31-109
91-57-6	MS 2-Methylnaphthalene	1830	0.00	U	1360	74	32-110
77-47-4	MS Hexachlorocyclopentadiene	1830	0.00	U	1020	56	21-122
88-06-2	MS 2,4,6-Trichlorophenol	1830	0.00	U	1560	85	37-108
95-95-4	MS 2,4,5-Trichlorophenol	1830	0.00	U	1440	79	37-116
91-58-7	MS 2-Chloronaphthalene	1830	0.00	U	1370	75	37-103
88-74-4	MS 2-Nitroaniline o-Nitroaniline	1830	0.00	U	1450	79	36-115
99-09-2	MS 3-Nitroaniline m-Nitroaniline	1830	0.00	U	1450	79	39-117
131-11-3	MS Dimethylphthalate	1830	0.00	U	1340	73	41-105
606-20-2	MS 2,6-Dinitrotoluene	1830	0.00	U	1310	72	41-103
208-96-8	MS Acenaphthylene	1830	0.00	U	1290	70	41-103
51-28-5	MS 2,4-Dinitrophenol	1830	0.00	U	1610	88	25-104
132-64-9	MS Dibenzofuran	1830	0.00	U	1590	87	40-114
84-66-2	MS Diethylphthalate	1830	0.00	U	1390	76	43-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 8

SDG Number: 10-1225

Sample Type: Matrix Spike

Client ID: RE12-10-7262MS

Matrix: R

Lab Sample ID: 1202018610

%Moisture: 8.9

Instrument: MSD5.I

Analysis Date: 01/19/2010 12:59

Dilution: 1

Analyst: RMB

Prep Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	1830	0.00 U	1340	73	48-99
7005-72-3	MS 4-Chlorophenylphenylether	1830	0.00 U	1330	73	42-111
534-52-1	MS 2-Methyl-4,6-dinitrophenol	1830	0.00 U	1380	76	19-118
100-01-6	MS 4-Nitroaniline <i>p</i> -Nitroaniline	1830	0.00 U	1860	102	35-139
122-39-4	MS Diphenylamine	1830	0.00 U	1370	75	41-112
122-66-7	MS Azobenzene <i>1,2-Diphenylhydrazine</i>	1830	0.00 U	936	51	37-118
101-55-3	MS 4-Bromophenylphenylether	1830	0.00 U	1250	68	39-112
118-74-1	MS Hexachlorobenzene	1830	0.00 U	1270	70	38-113
85-01-8	MS Phenanthrene	1830	0.00 U	1330	73	38-110
120-12-7	MS Anthracene	1830	0.00 U	1350	74	38-112
84-74-2	MS Di-n-butylphthalate	1830	0.00 U	1390	76	42-119
206-44-0	MS Fluoranthene	1830	0.00 U	1350	74	38-119
85-68-7	MS Butylbenzylphthalate	1830	0.00 U	818	45	39-126
56-55-3	MS Benzo(a)anthracene	1830	0.00 U	1420	78	39-110
91-94-1	MS 3,3'-Dichlorobenzidine	1830	0.00 U	792	43	35-106
218-01-9	MS Chrysene	1830	0.00 U	1400	76	39-109
117-81-7	MS bis(2-Ethylhexyl)phthalate	1830	0.00 U	1400	77	40-125
117-84-0	MS Di-n-octylphthalate	1830	0.00 U	1540	84	30-147
205-99-2	MS Benzo(b)fluoranthene	1830	0.00 U	1420	78	38-117
207-08-9	MS Benzo(k)fluoranthene	1830	0.00 U	1490	82	39-120
50-32-8	MS Benzo(a)pyrene	1830	0.00 U	1430	78	40-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	1830	0.00 U	1240	68	32-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 8

SDG Number: 10-1225

Client ID: RE12-10-7262MS

Lab Sample ID: 1202018610

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 8.9

Analysis Date: 01/19/2010 12:59

Dilution: 1

Prep Batch II 942836

Batch ID: 942840

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	1830	0.00 U	1280	70	32-124
191-24-2	MS Benzo(ghi)perylene	1830	0.00 U	1210	66	28-119
120-82-1	MS 1,2,4-Trichlorobenzene	1830	0.00 U	1280	70	31-105

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 8

SDG Number: 10-1225

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7262MSD

Matrix: R

Lab Sample ID: 1202018611

%Moisture: 8.9

Instrument: MSD5.I

Analysis Date: 01/19/2010 13:22

Dilution: 1

Analyst: RMB

Pren Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

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	1820	0.00 U	1190	65	32-90	6	0-30
108-95-2	MSD Phenol	1820	0.00 U	1410	77	32-105	9	0-30
95-57-8	MSD 2-Chlorophenol	1820	0.00 U	1360	75	33-106	8	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1820	0.00 U	1270	70	33-95	8	0-30
621-64-7	MSD N-Nitrosodipropylamine	1820	0.00 U	1400	77	31-109	6	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1820	0.00 U	1620	89	38-119	6	0-30
83-32-9	MSD Acenaphthene	1820	0.00 U	1410	77	39-100	7	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1820	0.00 U	1430	78	42-107	8	0-30
100-02-7	MSD 4-Nitrophenol	1820	0.00 U	1980	109	24-120	7	0-30
87-86-5	MSD Pentachlorophenol	1820	0.00 U	1830	101	26-121	7	0-30
129-00-0	MSD Pyrene	1820	0.00 U	1350	74	34-120	1	0-30
110-86-1	MSD Pyridine	1820	0.00 U	1230	68	30-95	5	0-30
62-53-3	MSD Aniline	1820	0.00 U	1470	81	34-111	9	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1820	0.00 U	1270	69	34-101	8	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1820	0.00 U	1250	69	31-97	7	0-30
100-51-6	MSD Benzyl alcohol	1820	0.00 U	1650	90	17-120	8	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1820	0.00 U	1380	76	32-102	8	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1820	0.00 U	1320	72	32-113	7	0-30
95-48-7	MSD o-Cresol	1820	0.00 U	1490	82	31-119	8	0-30
65794-96-9	MSD m,p-Cresols	1820	0.00 U	1580	87	35-125	8	0-30
67-72-1	MSD Hexachloroethane	1820	0.00 U	1270	69	30-100	10	0-30
98-95-3	MSD Nitrobenzene	1820	0.00 U	1470	81	33-108	8	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 8

SDG Number: 10-1225

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7262MSD

Matrix: R

Lab Sample ID: 1202018611

%Moisture: 8.9

Instrument: MSD5.I

Analysis Date: 01/19/2010 13:22

Dilution: 1

Analyst: RMB

Pren Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	1820	0.00	U 1420	78	34-110	8	0-30
88-75-5	MSD 2-Nitrophenol	1820	0.00	U 1500	82	32-108	7	0-30
105-67-9	MSD 2,4-Dimethylphenol	1820	0.00	U 1430	78	32-115	7	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1820	0.00	U 1360	75	35-108	7	0-30
120-83-2	MSD 2,4-Dichlorophenol	1820	0.00	U 1510	83	38-110	9	0-30
65-85-0	MSD Benzoic acid	3640	0.00	U 3410	94	18-134	1	0-30
91-20-3	MSD Naphthalene	1820	0.00	U 1320	73	31-105	7	0-30
106-47-8	MSD 4-Chloroaniline	1820	0.00	U 1510	83	29-123	11	0-30
87-68-3	MSD Hexachlorobutadiene	1820	0.00	U 1400	77	31-109	8	0-30
91-57-6	MSD 2-Methylnaphthalene	1820	0.00	U 1470	81	32-110	8	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1820	0.00	U 1110	61	21-122	8	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1820	0.00	U 1660	91	37-108	6	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1820	0.00	U 1560	86	37-116	8	0-30
91-58-7	MSD 2-Chloronaphthalene	1820	0.00	U 1480	81	37-103	7	0-30
88-74-4	MSD 2-Nitroaniline o-Nitroaniline	1820	0.00	U 1540	85	36-115	6	0-30
99-09-2	MSD 3-Nitroaniline m-Nitroaniline	1820	0.00	U 1590	87	39-117	9	0-30
131-11-3	MSD Dimethylphthalate	1820	0.00	U 1460	80	41-105	9	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1820	0.00	U 1410	77	41-103	8	0-30
208-96-8	MSD Acenaphthylene	1820	0.00	U 1400	77	41-103	8	0-30
51-28-5	MSD 2,4-Dinitrophenol	1820	0.00	U 1680	92	25-104	4	0-30
132-64-9	MSD Dibenzofuran	1820	0.00	U 1710	94	40-114	7	0-30
84-66-2	MSD Diethylphthalate	1820	0.00	U 1480	81	43-110	6	0-30

Semi-Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1225

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7262MSD

Matrix: R

Lab Sample ID: 1202018611

%Moisture: 8.9

Instrument: MSD5.I

Analysis Date: 01/19/2010 13:22

Dilution: 1

Analyst: RMB

Prep Batch ID: 942836

Inj. Vol: .5 uL

Batch ID: 942840

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	1820	0.00 U	1440	79	48-99	7	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1820	0.00 U	1430	78	42-111	7	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1820	0.00 U	1460	80	19-118	6	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	1820	0.00 U	2010	110	35-139	8	0-30
122-39-4	MSD Diphenylamine	1820	0.00 U	1460	80	41-112	6	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	1820	0.00 U	955	52	37-118	2	0-30
101-55-3	MSD 4-Bromophenylphenylether	1820	0.00 U	1340	73	39-112	7	0-30
118-74-1	MSD Hexachlorobenzene	1820	0.00 U	1370	75	38-113	7	0-30
85-01-8	MSD Phenanthrene	1820	0.00 U	1420	78	38-110	7	0-30
120-12-7	MSD Anthracene	1820	0.00 U	1430	79	38-112	6	0-30
84-74-2	MSD Di-n-butylphthalate	1820	0.00 U	1460	80	42-119	5	0-30
206-44-0	MSD Fluoranthene	1820	0.00 U	1470	81	38-119	8	0-30
85-68-7	MSD Butylbenzylphthalate	1820	0.00 U	817	45	39-126	0	0-30
56-55-3	MSD Benzo(a)anthracene	1820	0.00 U	1510	83	39-110	6	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1820	0.00 U	890	49	35-106	12	0-30
218-01-9	MSD Chrysene	1820	0.00 U	1480	81	39-109	6	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1820	0.00 U	1440	79	40-125	2	0-30
117-84-0	MSD Di-n-octylphthalate	1820	0.00 U	1570	86	30-147	2	0-30
205-99-2	MSD Benzo(b)fluoranthene	1820	0.00 U	1500	82	38-117	6	0-30
207-08-9	MSD Benzo(k)fluoranthene	1820	0.00 U	1600	88	39-120	7	0-30
50-32-8	MSD Benzo(a)pyrene	1820	0.00 U	1510	83	40-115	6	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1820	0.00 U	1300	71	32-120	5	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 8 of 8

SDG Number: 10-1225

Sample Type: Matrix Spike Duplicate

Client ID: RE12-10-7262MSD

Matrix: R

Lab Sample ID:1202018611

%Moisture: 8.9

Instrument: MSD5.I

Analysis Date: 01/19/2010 13:22

Dilution: 1

Analyst: RMB

Prep Batch II 942836

Inj. Vol: .5 uL

Batch ID: 942840

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1820	0.00	U	1330	73	32-124	4	0-30
191-24-2	MSD Benzo(ghi)perylene	1820	0.00	U	1260	69	28-119	4	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1820	0.00	U	1370	75	31-105	7	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1225	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 942836	Instrument ID:	MSD5.I	Data File:	s5a1904.d
Lab Sample ID:	1202018608	Prep Date:	01/18/2010 20:10	Analyzed:	01/19/10 11:25
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 942836	1202018609	s5a1905.d	01/19/10	1148
02 RE12-10-7262	244626001	s5a1907.d	01/19/10	1235
03 RE12-10-7262MS	1202018610	s5a1908.d	01/19/10	1259
04 RE12-10-7262MSD	1202018611	s5a1909.d	01/19/10	1322
05 RE12-10-7266	244626002	s5a1910.d	01/19/10	1345
06 RE12-10-7258	244626003	s5a1911.d	01/19/10	1409
07 RE12-10-7268	244626004	s5a1912.d	01/19/10	1432
08 RE12-10-7265	244626005	s5a1913.d	01/19/10	1455
09 RE12-10-7261	244626006	s5a1914.d	01/19/10	1518
10 RE12-10-7259	244626007	s5a1915.d	01/19/10	1542
11 RE12-10-7263	244626008	s5a1916.d	01/19/10	1605
12 RE12-10-7271	244626009	s5a1917.d	01/19/10	1628
13 RE12-10-7260	244626010	s5a1918.d	01/19/10	1651
14 RE12-10-7267	244626011	s5a1919.d	01/19/10	1714
15 RE12-10-7264	244626012	s5a1920.d	01/19/10	1737
16 RE12-10-7270	244626013	s5a1921.d	01/19/10	1801
17 RE12-10-7269	244626014	s5a1922.d	01/19/10	1824
18 RE12-10-7283	244626015	s5a1923.d	01/19/10	1847
19 RE12-10-7282	244626016	s5a1924.d	01/19/10	1910

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1225

Instrument ID: MSD5.I

Injection Date/Time: 05-JAN-10 07:45

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s010510.b/s5a0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	37.4
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	35.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.5
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	24.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	77.1
442	Greater than 40% of mass 198	71
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN091225-09	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 08:21
MEGAICAL010	WBN091225-10	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 08:49
MEGAICAL020	WBN091225-11	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 09:17
MEGAICAL040	WBN091225-12.1	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 09:45
MEGAICAL050	WBN091225-13	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 10:13
MEGAICAL080	WBN091225-14	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 10:42
MEGAICAL100	WBN091225-15	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 11:10
MEGAICAL120	WBN091225-16	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 11:38
MEGAICV	WBN091223-17.1	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 12:29
AP12ICAL010	WBN100103-01	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 12:58
AP12ICAL020	WBN100103-02	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 13:21
AP12ICAL040	WBN100103-03.1	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 13:44
AP12ICAL050	WBN100103-04	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 14:07
AP12ICAL080	WBN100103-05	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 14:30
AP12ICAL100	WBN100103-06	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 14:53
AP12ICAL120	WBN100103-07	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 15:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1225

Instrument ID: MSD5.I

Injection Date/Time: 05-JAN-10 07:45

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s010510.b/s5a0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	37.4
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	35.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.5
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	24.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	77.1
442	Greater than 40% of mass 198	71
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICV	WBN100103-08.1	/chem/MSD5.i/s010510.b/s5a0501.d	05-JAN-10 17:55

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1225

Instrument ID: MSD5.I

Injection Date/Time: 19-JAN-10 10:07

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s011910.b/s5a1901.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	42.9
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	38.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.6
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	24.4
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	78.4
442	Greater than 40% of mass 198	70.2
443	17 - 23% of mass 442	19.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN091225-12.3	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 10:21
AP12CVS	WBN100103-03.5	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 10:50
SBLK01	1202018608	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 11:25
SBLK01LCS	1202018609	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 11:48
RE12-10-7262	244626001	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 12:35
RE12-10-7262MS	1202018610	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 12:59
RE12-10-7262MSD	1202018611	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 13:22
RE12-10-7266	244626002	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 13:45
RE12-10-7258	244626003	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 14:09
RE12-10-7268	244626004	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 14:32
RE12-10-7265	244626005	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 14:55
RE12-10-7261	244626006	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 15:18
RE12-10-7259	244626007	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 15:42
RE12-10-7263	244626008	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 16:05
RE12-10-7271	244626009	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 16:28
RE12-10-7260	244626010	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 16:51

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1225

Instrument ID: MSD5.I

Injection Date/Time: 19-JAN-10 10:07

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s011910.b/s5a1901.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	42.9
68	Less than 2% of mass 69	1.5
69	Mass 69 Relative Abundance	38.7
70	Less than 2% of mass 69	0.6
127	40 - 60% of mass 198	48.6
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	6.8
275	10 - 30% of mass 198	24.4
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	78.4
442	Greater than 40% of mass 198	70.2
443	17 - 23% of mass 442	19.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE12-10-7267	244626011	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 17:14
RE12-10-7264	244626012	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 17:37
RE12-10-7270	244626013	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 18:01
RE12-10-7269	244626014	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 18:24
RE12-10-7283	244626015	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 18:47
RE12-10-7282	244626016	/chem/MSD5.i/s011910.b/s5a1901.d	19-JAN-10 19:10

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1225

Instrument: MSD5.I

STD Analysis Time: 19-JAN-10 10:21

GC Column: J&W DB-5MS

Data File: s5a1902.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	541987		3.94	2004415		4.81	1072158		6.06	1943353		7.23	1806290		9.65	1618959		11.3
Upper Limit	1083974		4.44	4008830		5.31	2144316		6.56	3886706		7.73	3612580		10.2	3237918		11.8
Lower Limit	270994		3.44	1002208		4.31	536079		5.56	971677		6.73	903145		9.15	809480		10.8
Sample ID																		
BLK01	565270		3.93	1914408		4.8	1111752		6.05	1993309		7.23	1778328		9.64	1573958		11.3
BLK01LCS	564984		3.93	2042405		4.8	1084701		6.06	2018867		7.23	1934386		9.64	1814874		11.3
RE12-10-7262	551949		3.93	1870389		4.8	1052979		6.06	1952881		7.23	1727865		9.64	1245162		11.3
RE12-10-7262MS	557082		3.94	2019682		4.8	1086506		6.06	2011310		7.23	1771034		9.65	1292417		11.3
RE12-10-7262MSD	520556		3.94	1902956		4.8	1024931		6.06	1904323		7.23	1796933		9.65	1361144		11.3
RE12-10-7266	578529		3.93	1901847		4.8	1116536		6.06	2006694		7.23	1662344		9.64	1159475		11.3
RE12-10-7258	552161		3.93	1826616		4.8	1085047		6.05	1993759		7.23	1804598		9.64	1436952		11.3
RE12-10-7268	567736		3.93	1918377		4.8	1137042		6.06	2044076		7.23	1787573		9.64	1331938		11.3
RE12-10-7265	550904		3.93	1906469		4.8	1149762		6.05	2109667		7.23	1928520		9.64	1653044		11.3
RE12-10-7261	498022		3.94	1723841		4.8	929314		6.06	1815764		7.23	1742293		9.66	1210291		11.3
RE12-10-7259	539120		3.93	1848204		4.8	1062172		6.06	1957892		7.23	1758286		9.64	1414630		11.3
RE12-10-7263	590066		3.93	1972705		4.8	1143718		6.06	2091039		7.23	1897347		9.64	1444145		11.3
RE12-10-7271	568965		3.93	1912920		4.8	1142685		6.06	2051513		7.23	1775679		9.64	1260571		11.3
RE12-10-7260	541424		3.93	1864481		4.8	1070798		6.06	1954233		7.23	1534925		9.65	867699		11.3
RE12-10-7267	615031		3.93	2036027		4.8	1202283		6.06	2154152		7.23	1798689		9.64	1163061		11.3
RE12-10-7264	539497		3.93	1870088		4.8	1103031		6.06	2024626		7.23	1723347		9.65	1119575		11.3
RE12-10-7270	579034		3.93	2027198		4.8	1165977		6.06	2124732		7.23	1763187		9.65	1124360		11.3
RE12-10-7269	599098		3.93	1981883		4.8	1171378		6.06	2073430		7.23	1604123		9.64	1014624		11.3
RE12-10-7283	595460		3.94	2008158		4.8	1153650		6.06	2123067		7.23	1715822		9.65	1039158		11.3
RE12-10-7282	574544		3.93	2023908		4.8	1166780		6.06	2162299		7.23	1919542		9.64	1475104		11.3

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

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

SDG Number: 10-1225
Lab Sample ID: 244626003

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7258
Batch ID: 942840
Run Date: 01/19/2010 14:09
Prep Date: 01/18/2010 20:10
Data File: s5a1911.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.7	388
108-95-2	Phenol	U	388	ug/kg	77.7	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.7	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.7	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.7	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.7	388
83-32-9	Acenaphthene	U	38.8	ug/kg	12.8	38.8
121-14-2	2,4-Dinitrotoluene	U	388	ug/kg	38.8	388
100-02-7	4-Nitrophenol	U	388	ug/kg	128	388
87-86-5	Pentachlorophenol	U	388	ug/kg	97.1	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.7	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.7	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.7	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.7	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.7	388
95-48-7	o-Cresol	U	388	ug/kg	77.7	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.7	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.7	388
78-59-1	Isophorone	U	388	ug/kg	77.7	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.7	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.7	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.7	388
65-85-0	Benzoic acid	U	777	ug/kg	194	777
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.7	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.7	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.77	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.7	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.7	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.7	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.7	388
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	388	ug/kg	77.7	388

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

SDG Number: 10-1225
Lab Sample ID: 244626003

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7258
Batch ID: 942840
Run Date: 01/19/2010 14:09
Prep Date: 01/18/2010 20:10
Data File: s5a1911.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	388	ug/kg	77.7	388
606-20-2	2,6-Dinitrotoluene	U	388	ug/kg	38.8	388
208-96-8	Acenaphthylene	U	38.8	ug/kg	11.6	38.8
51-28-5	2,4-Dinitrophenol	U	777	ug/kg	148	777
132-64-9	Dibenzofuran	U	388	ug/kg	77.7	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.7	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.7	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.7	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.7	388
122-66-7	Azobenzene	U	388	ug/kg	77.7	388
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.7	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.7	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.77	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.7	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.7	388
56-55-3	Benzo(a)anthracene	U	38.8	ug/kg	11.6	38.8
91-94-1	3,3'-Dichlorobenzidine	U	388	ug/kg	116	388
218-01-9	Chrysene	U	38.8	ug/kg	11.6	38.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	388	ug/kg	77.7	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.7	388
205-99-2	Benzo(b)fluoranthene	U	38.8	ug/kg	11.6	38.8
207-08-9	Benzo(k)fluoranthene	U	38.8	ug/kg	11.6	38.8
50-32-8	Benzo(a)pyrene	U	38.8	ug/kg	11.6	38.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.8	ug/kg	11.6	38.8
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8
191-24-2	Benzo(ghi)perylene	U	38.8	ug/kg	11.6	38.8
120-82-1	1,2,4-Trichlorobenzene	U	388	ug/kg	77.7	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
79-09-4	Propanoic acid	2.16	182	ug/kg	87	NJ
	Unknown Aldol Condensate	2.95	496	ug/kg		JA

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626003	Date Received: 01/13/2010 08:55	%Moisture: 14.3
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7258	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 14:09	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5a1911.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.01	202	ug/kg	97	NJ
	Unknown	10.02	176	ug/kg		J
	Unknown	10.05	220	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	10.41	282	ug/kg	94	NJ
	Unknown	13.3	276	ug/kg		J
	Unknown	13.42	316	ug/kg		J
	Unknown	13.79	198	ug/kg		J

Data File: /chem/MSD5.i/s011910.b/s5a1911.d
 Report Date: 19-Jan-2010 14:24

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1911.d
 Lab Smp Id: 244626003 Client Smp ID: RE12-10-7258
 Inj Date : 19-JAN-2010 14:09
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626003|942840|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	14.26540	% 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	3.931	3.940	(1.000)	552161	40.0000	
* 29 Naphthalene-d8		136	4.801	4.807	(1.000)	1826616	40.0000	
* 46 Acenaphthene-d10		164	6.054	6.063	(1.000)	1085047	40.0000	
* 67 Phenanthrene-d10		188	7.231	7.234	(1.000)	1993759	40.0000	
* 91 Chrysene-d12		240	9.636	9.646	(1.000)	1804598	40.0000	
* 98 Perylene-d12		264	11.324	11.331	(1.000)	1436952	40.0000	
\$ 3 2-Fluorophenol		112	3.125	3.121	(0.795)	958068	69.9648	2720
\$ 5 Phenol-d5		99	3.649	3.651	(0.928)	1147056	67.9233	2640
\$ 20 Nitrobenzene-d5		82	4.296	4.301	(0.895)	539931	38.4976	1490
\$ 39 2-Fluorobiphenyl		172	5.543	5.548	(0.915)	1047282	36.4865	1420
\$ 60 2,4,6-Tribromophenol		329	6.654	6.661	(1.099)	278731	80.8225	3140
\$ 81 p-Terphenyl-d14		244	8.607	8.611	(0.893)	1190156	42.0022	1630

ION RATIO REPORT

SV REPORT

Data file: s5a1911.d

Report Date: 01/19/2010 14:22

Lab. ID: 244626003

SampleType: SAMPLE

Injection Date: 19-JAN-2010 14:09

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626003|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

4	Aniline	CAS#: 62-53-3				
66	62955	3.65	3.72	80-120	100	(T)
93	692	3.61	3.72	210-270	1	(QT)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	73789	4.30	4.18	80-120	100	(T)
42	46133	4.30	4.18	44-104	63	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	3456	4.55	4.57	80-120	100	()
122	2532	4.55	4.57	39- 99	73	()
77	4068	4.55	4.57	34- 94	118	(Q)

43	Dimethylphthalate	CAS#: 131-11-3				
163	198921	6.06	5.82	80-120	100	(T)
164	1085047	6.05	5.82	0- 40	545	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	147374	6.05	5.88	80-120	100	(T)
63	1994	6.05	5.88	61-121	1	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	147374	6.05	6.17	80-120	100	(T)
89	2534	6.05	6.17	47-107	2	(QT)
63	1994	6.05	6.17	23- 83	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	15744	6.65	6.47	80-120	100	(T)
165	15828	6.65	6.47	56-116	101	(T)
167	5365	6.65	6.47	0- 44	34	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	952	6.65	6.49	80-120	100	(T)
105	1931	6.65	6.49	12- 72	203	(QT)
51	1772	6.65	6.49	42-102	186	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	20064	6.65	6.84	80-120	100	(T)
141	126226	6.65	6.83	43-103	629	(QT)
250	39107	6.65	6.84	68-128	195	(QT)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	301	13.10	13.12	80-120	100	()
138	325	13.09	13.12	1- 61	108	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1911.d
 Lab Smp Id: 244626003 Client Smp ID: RE12-10-7258
 Inj Date : 19-JAN-2010 14:09
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626003|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	14.26540	% moisture

Cpnd Variable

Local Compound Variable

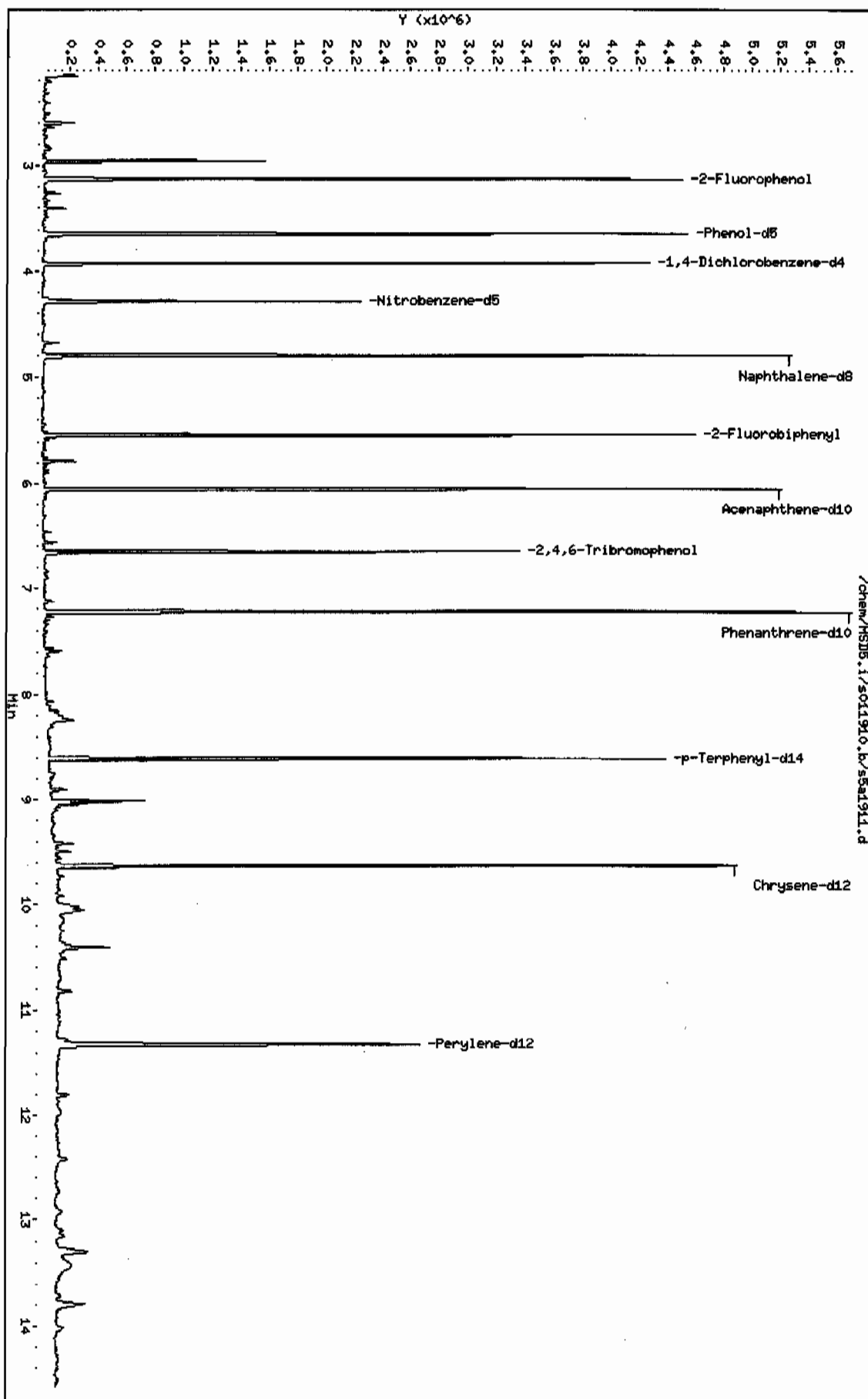
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3343713	40.000
* 91 Chrysene-d12	9.636	4984782	40.000
* 98 Perylene-d12	11.324	4059252	40.000

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 #
Propanoic acid					CAS #: 79-09-4		
2.160	391742	4.68631616	182	87	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.954	1068218	12.7788179	496	0		0	10
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
9.013	649298	5.21024222	202	97	NIST05.L	116238	91
Unknown					CAS #:		
10.019	563993	4.52572170	176	0		0	91
Unknown					CAS #:		
10.054	705989	5.66515451	220	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
10.407	904088	7.25478215	282	94	NIST05.L	112655	91
Unknown					CAS #:		
13.301	720143	7.09631196	276	0		0	98
Unknown					CAS #:		
13.424	824642	8.12605030	316	0		0	98
Unknown					CAS #:		
13.795	518457	5.10888810	198	0		0	98

Data File: /chem/MSDB.i/s011910.b/s5a1911.d
 Date: 19-JUN-2010 14:09
 Client ID: RE12-10-7288
 Sample Info: 1244626003194284011SVH11LML
 Volume Injected (ul): 0.5
 Column Phase: 3M DB-SMS

Instrument: MSDB.i
 Operator: RMB
 Column diameter: 0.20



Date : 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011SVH11ILANL

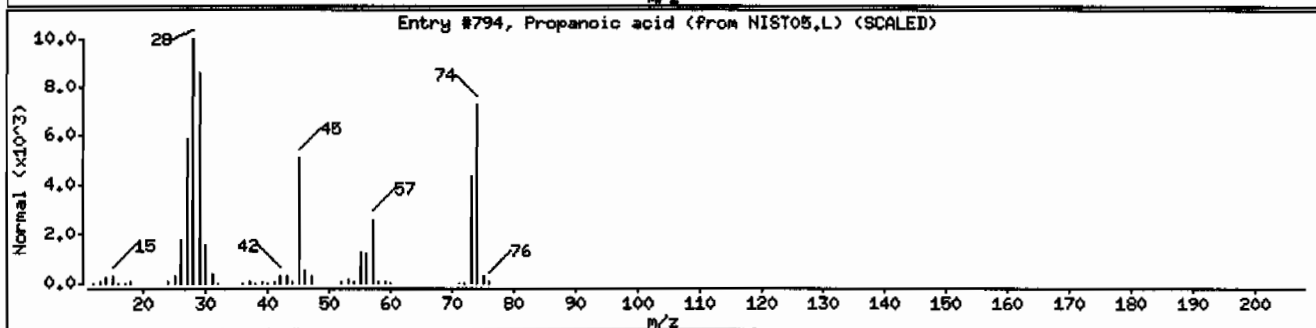
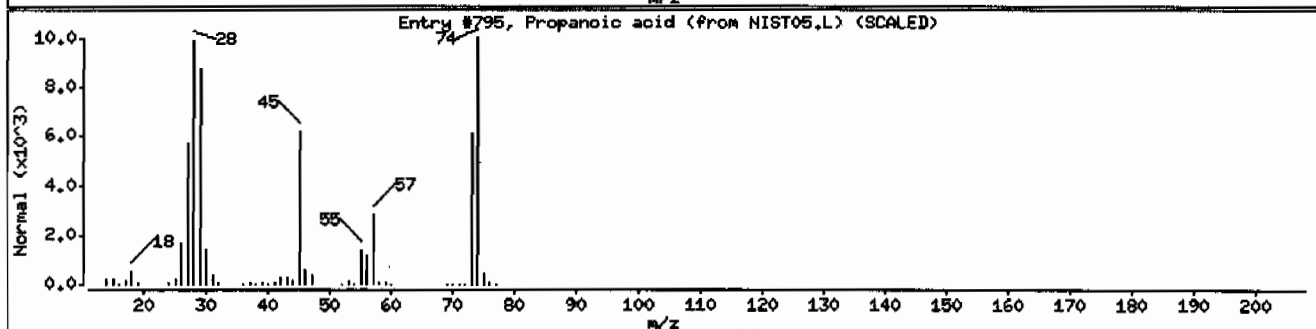
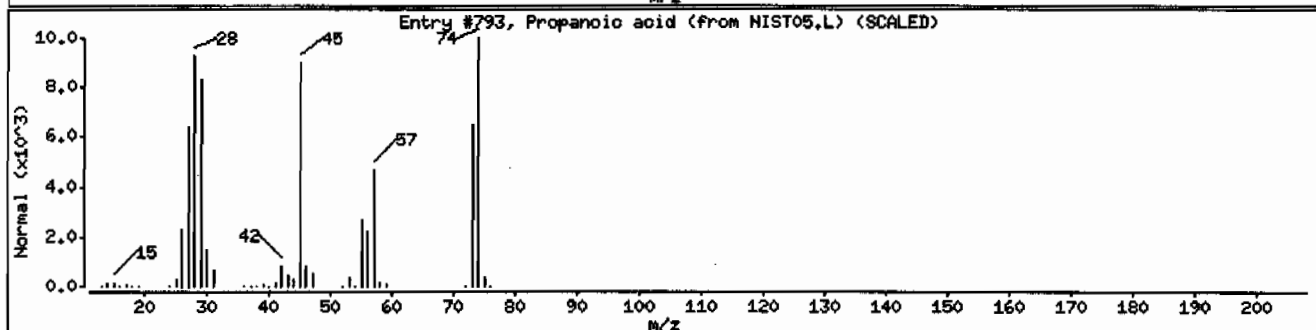
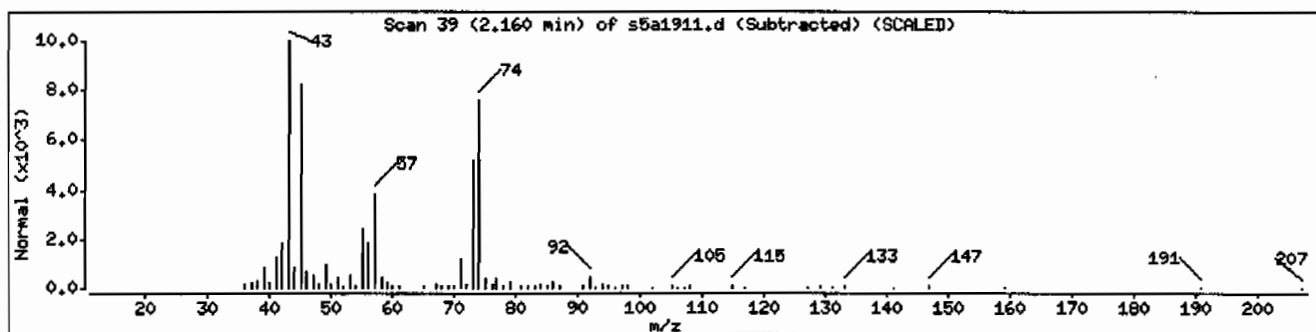
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	87	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	80	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	52	C3H6O2	74



Date: 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011ISVH11ILANL

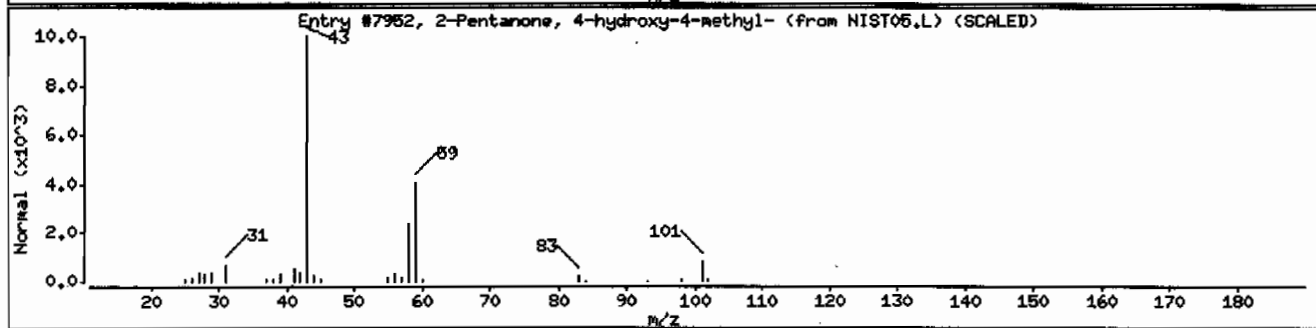
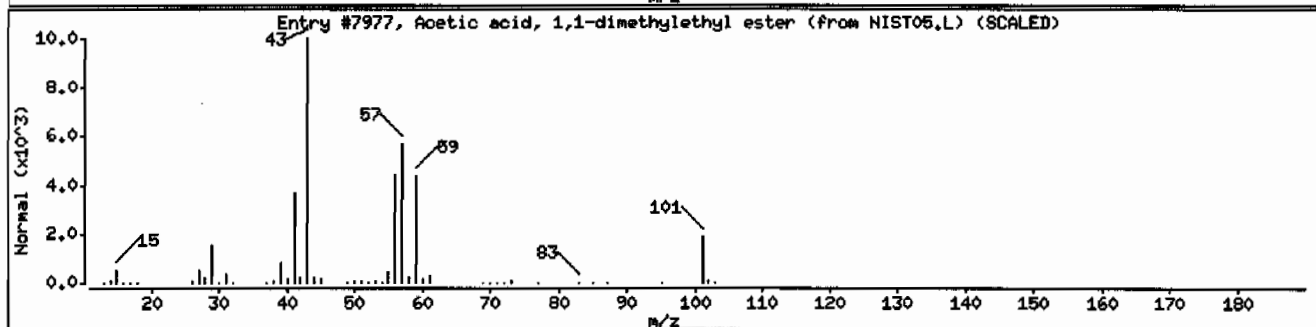
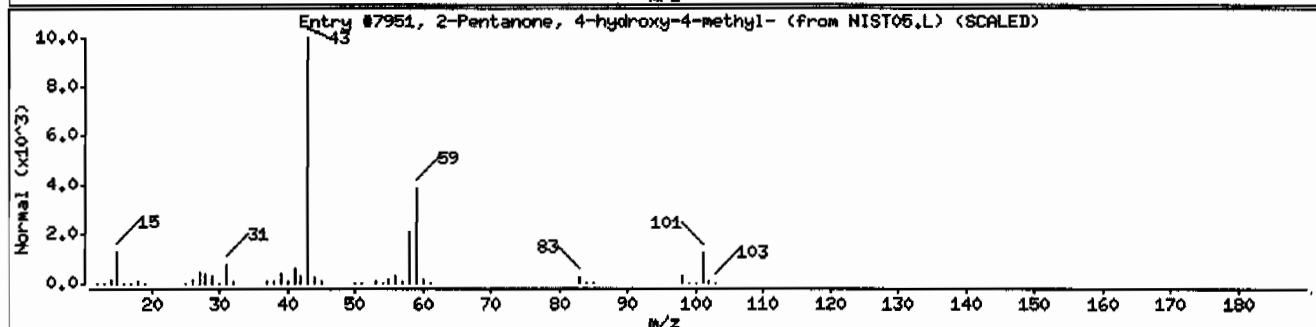
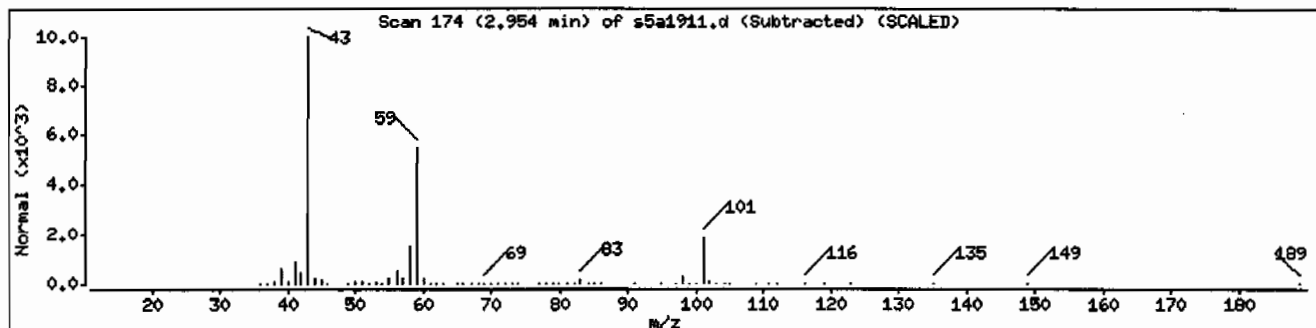
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	89	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116



Date : 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011SVH111LANL

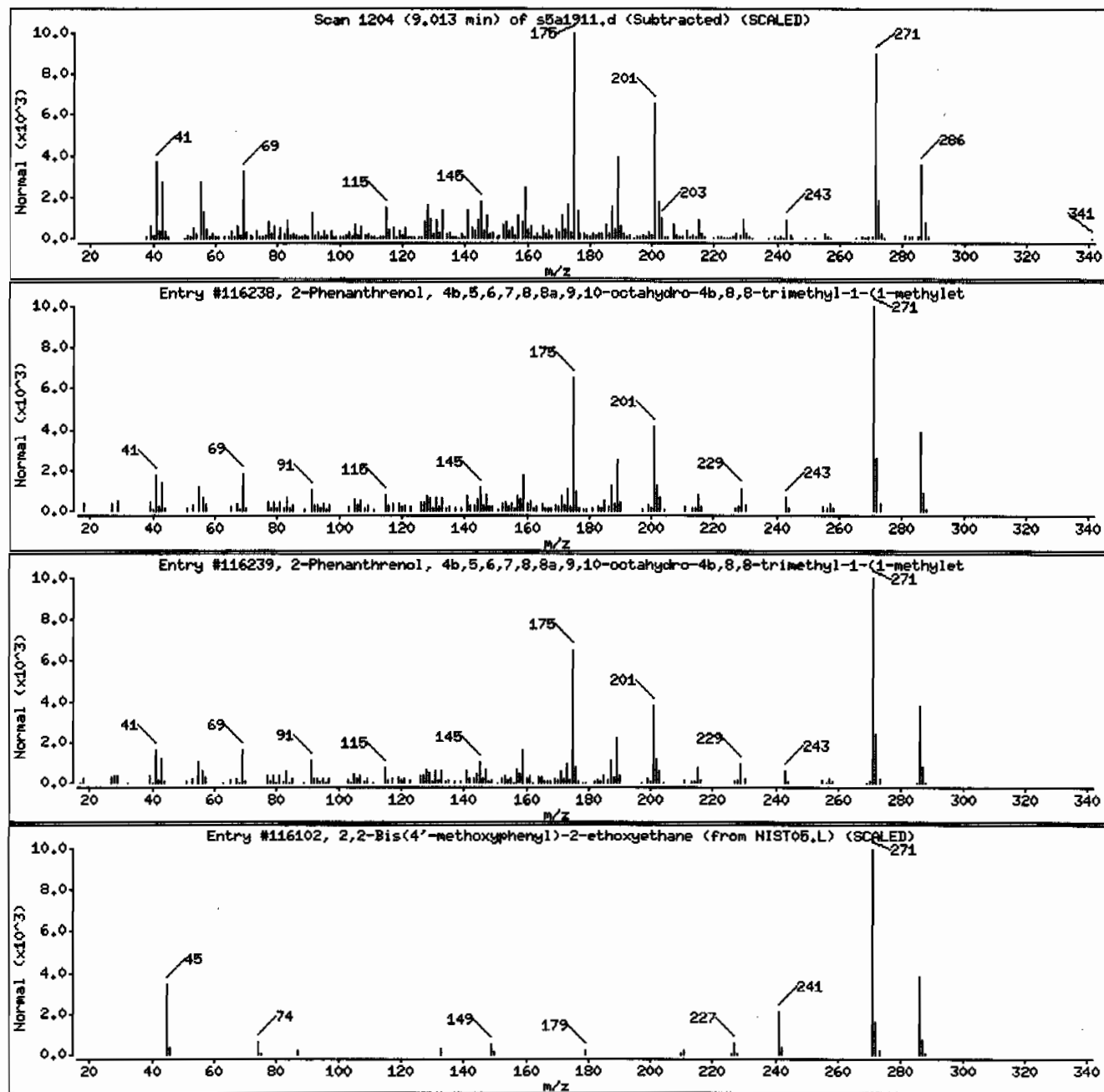
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	97	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
2,2-Bis(4'-methoxyphenyl)-2-ethoxyethane	1000283-53-7	NIST05.L	116102	25	C18H22O3	286



Date : 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011SVH11ILANL

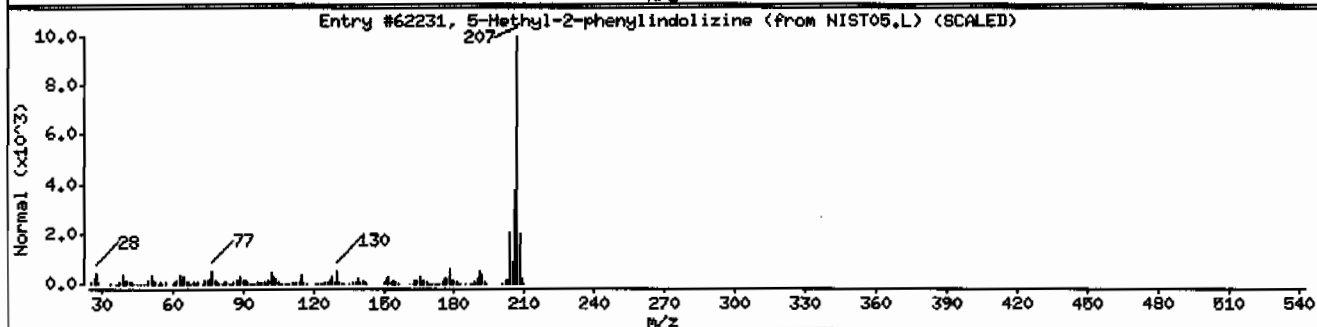
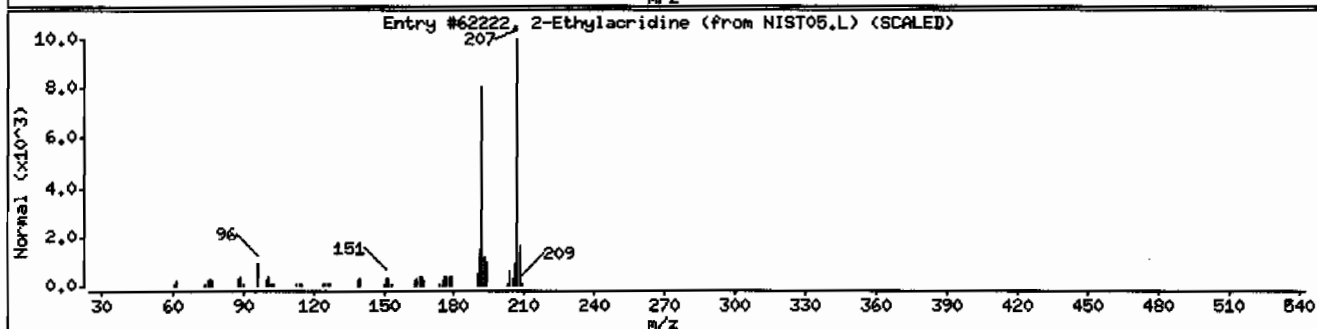
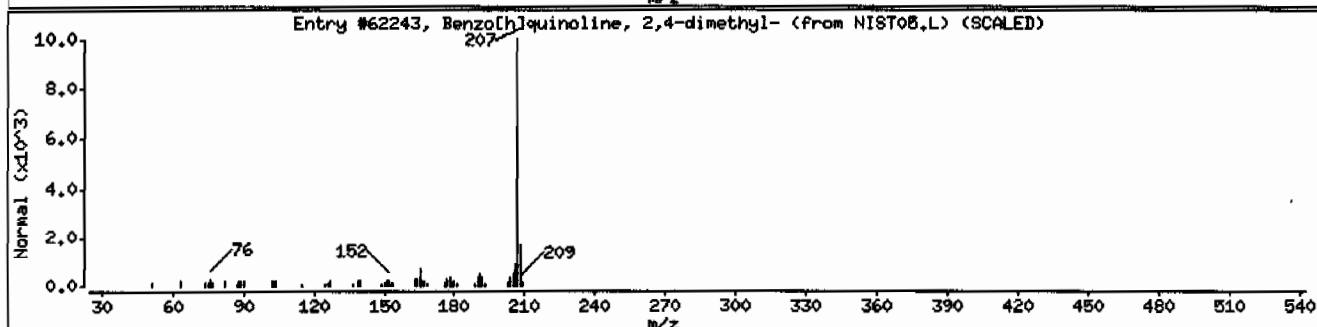
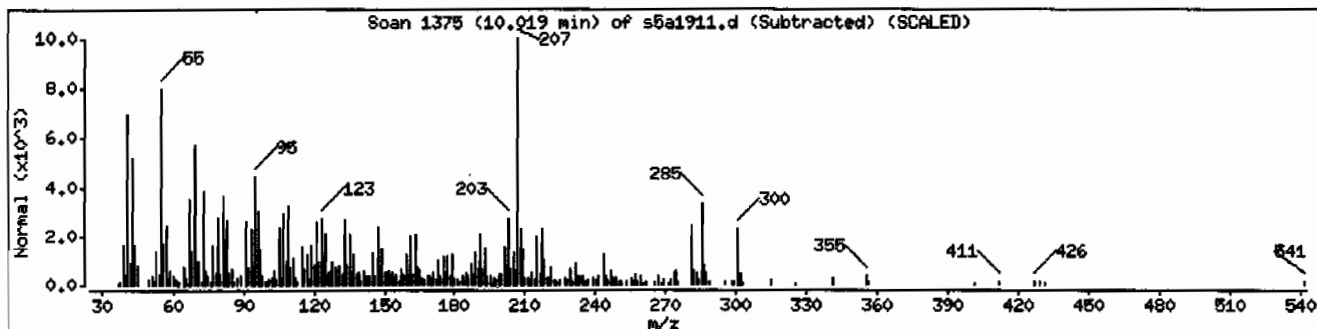
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	42	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	27	C15H13N	207



Date: 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011SVH11ILANL

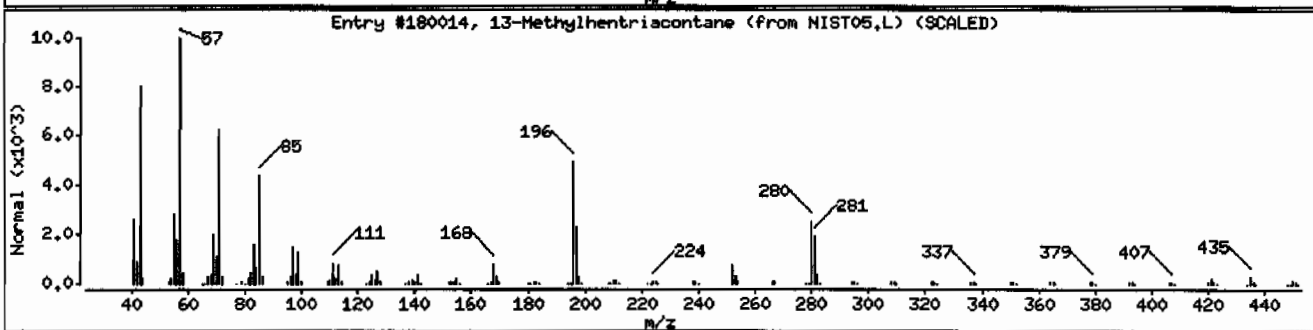
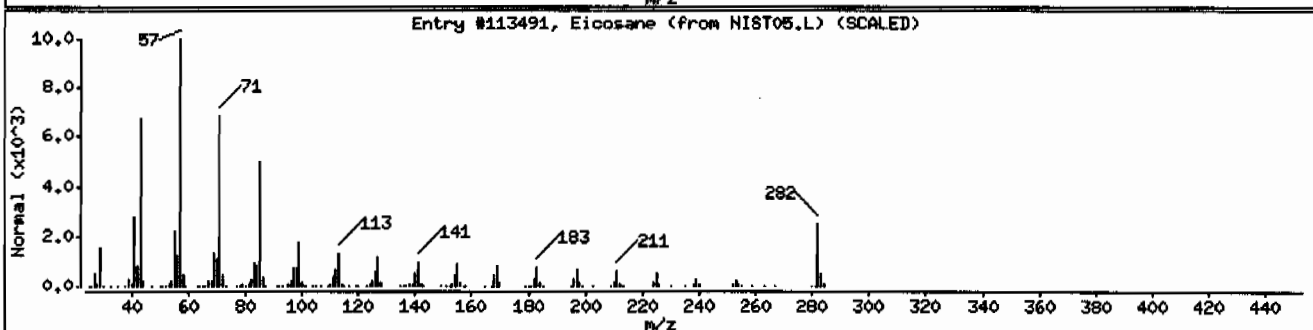
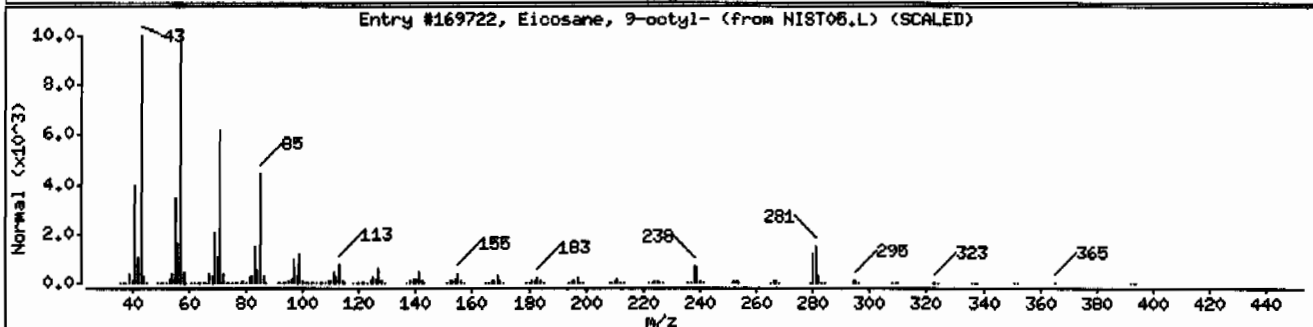
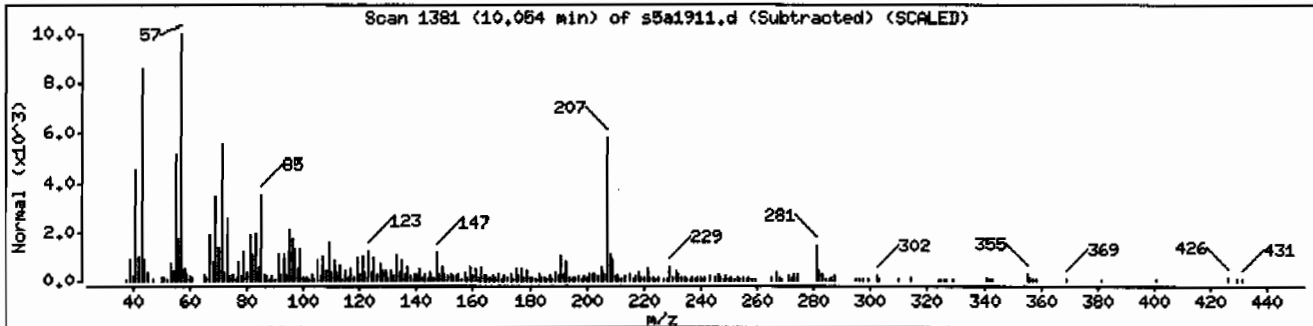
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	42	C28H58	394
Eicosane	112-96-8	NIST05.L	113491	38	C20H42	282
13-Methylhentriacontane	1000131-19-4	NIST05.L	180014	38	C32H66	451



Date: 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011ISVM11ILANL

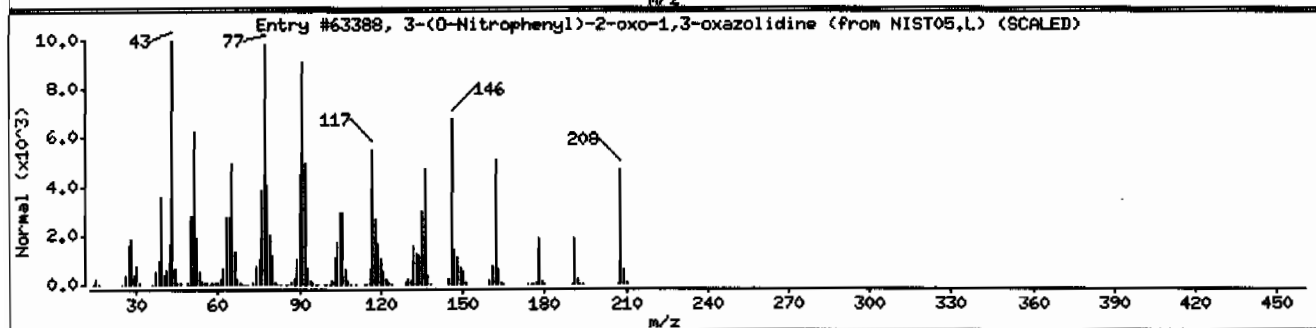
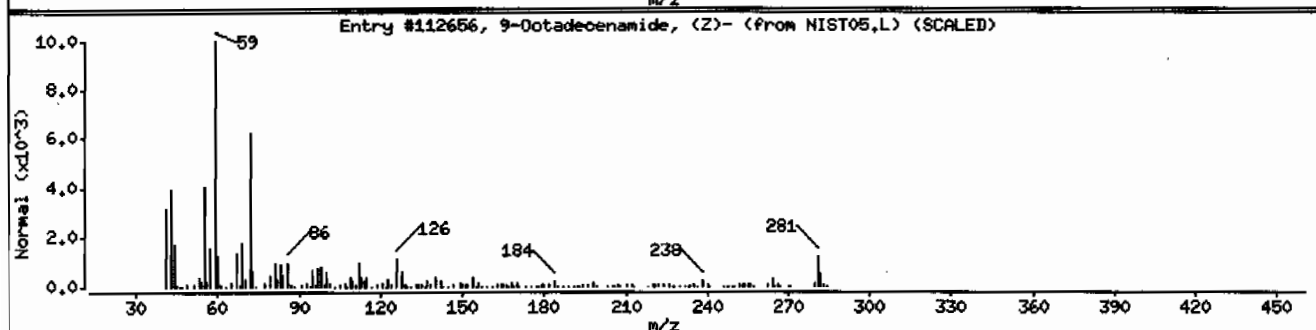
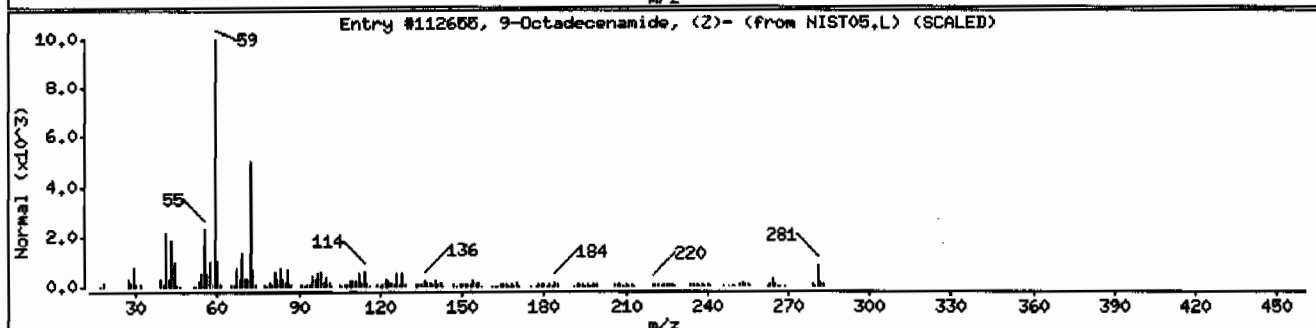
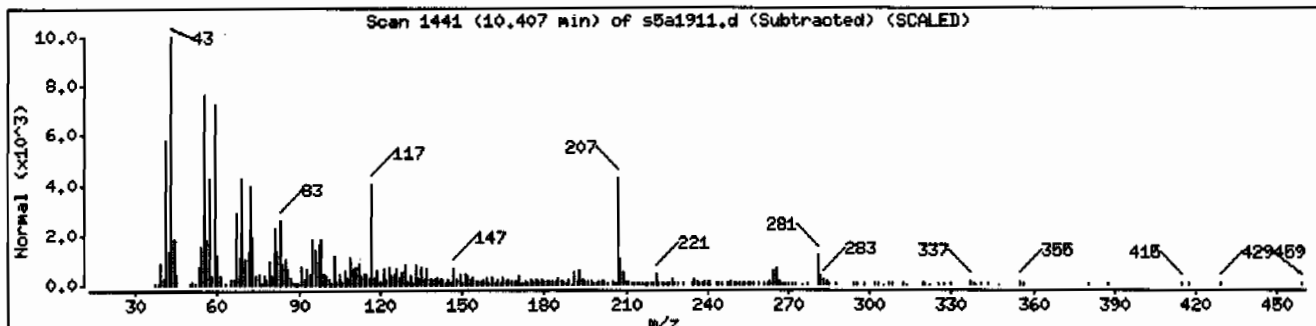
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	94	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	86	C18H35NO	281
3-(0-Nitrophenyl)-2-oxo-1,3-oxazolidine	90417-72-4	NIST05.L	63388	53	C9H8N2O4	208



Date: 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011SVH111LANL

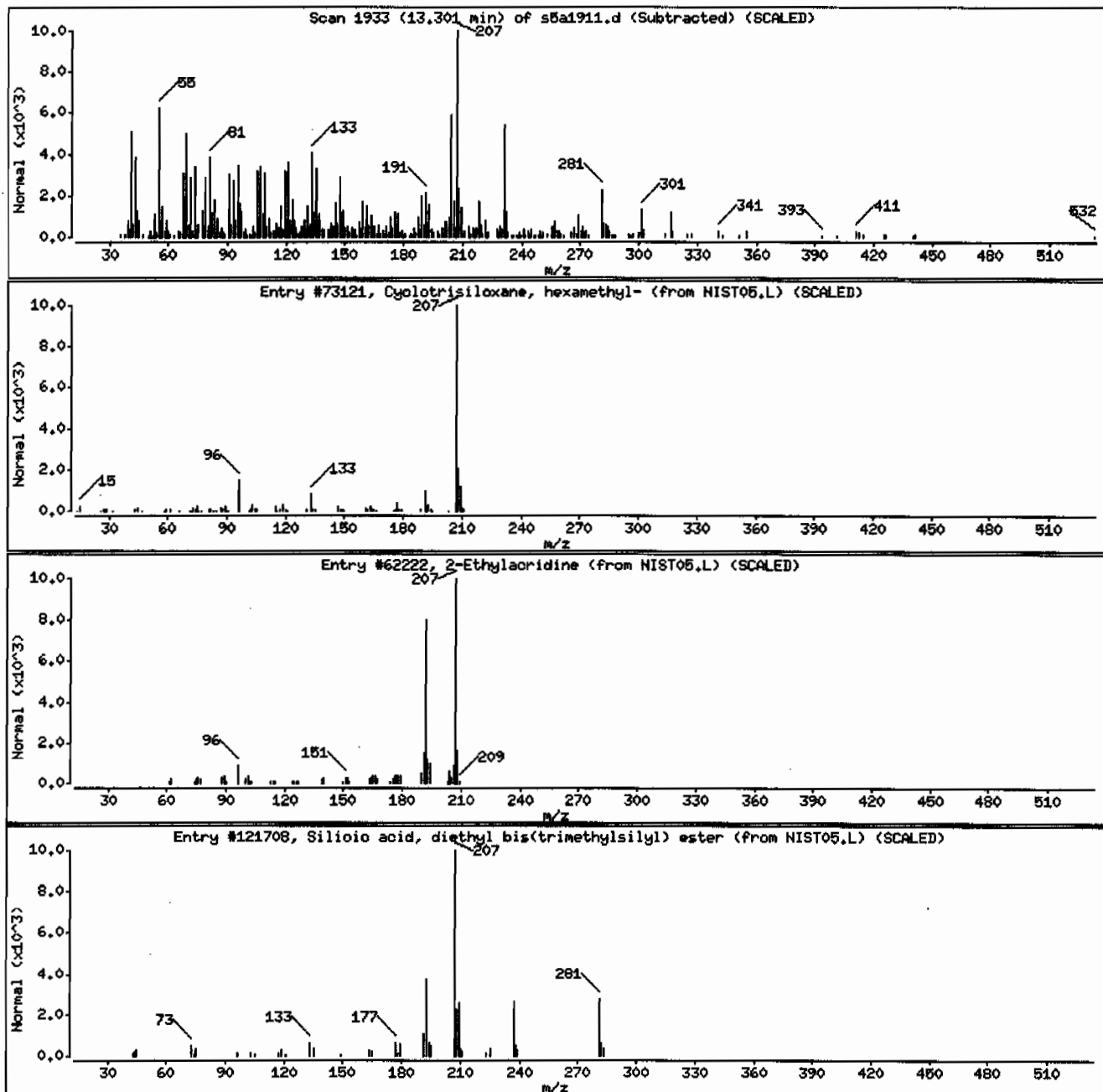
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C ₆ H ₁₈ O ₃ Si ₃	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C ₁₅ H ₁₃ N	207
Silicic acid, diethyl bis(trimethylsilyl)	3555-45-1	NIST05.L	121708	35	C ₁₀ H ₂₈ O ₄ Si ₃	296



Date: 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: HSD5.i

Sample Info: 12446260031942840111SVH111LANL

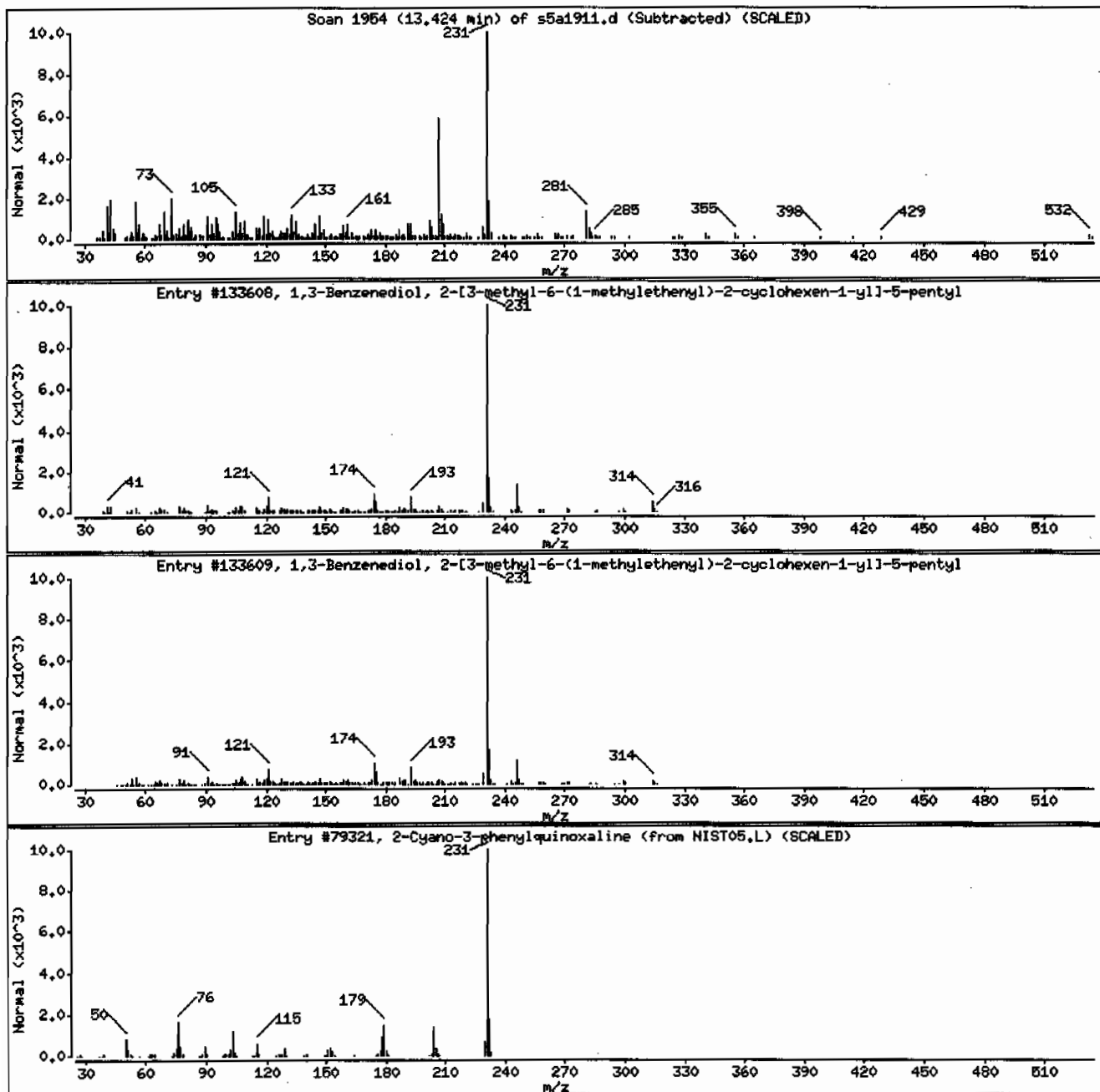
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Benzenediol, 2-[3-methyl-6-(1-methyl	13956-29-1	NIST05.L	133608	43	C21H30O2	314
1,3-Benzenediol, 2-[3-methyl-6-(1-methyl	13956-29-1	NIST05.L	133609	38	C21H30O2	314
2-Cyano-3-phenylquinoxaline	59393-45-2	NIST05.L	79321	35	C15H9N3	231



Date: 19-JAN-2010 14:09

Client ID: RE12-10-7258

Instrument: MSD5.i

Sample Info: 1244626003194284011ISVM11ILANL

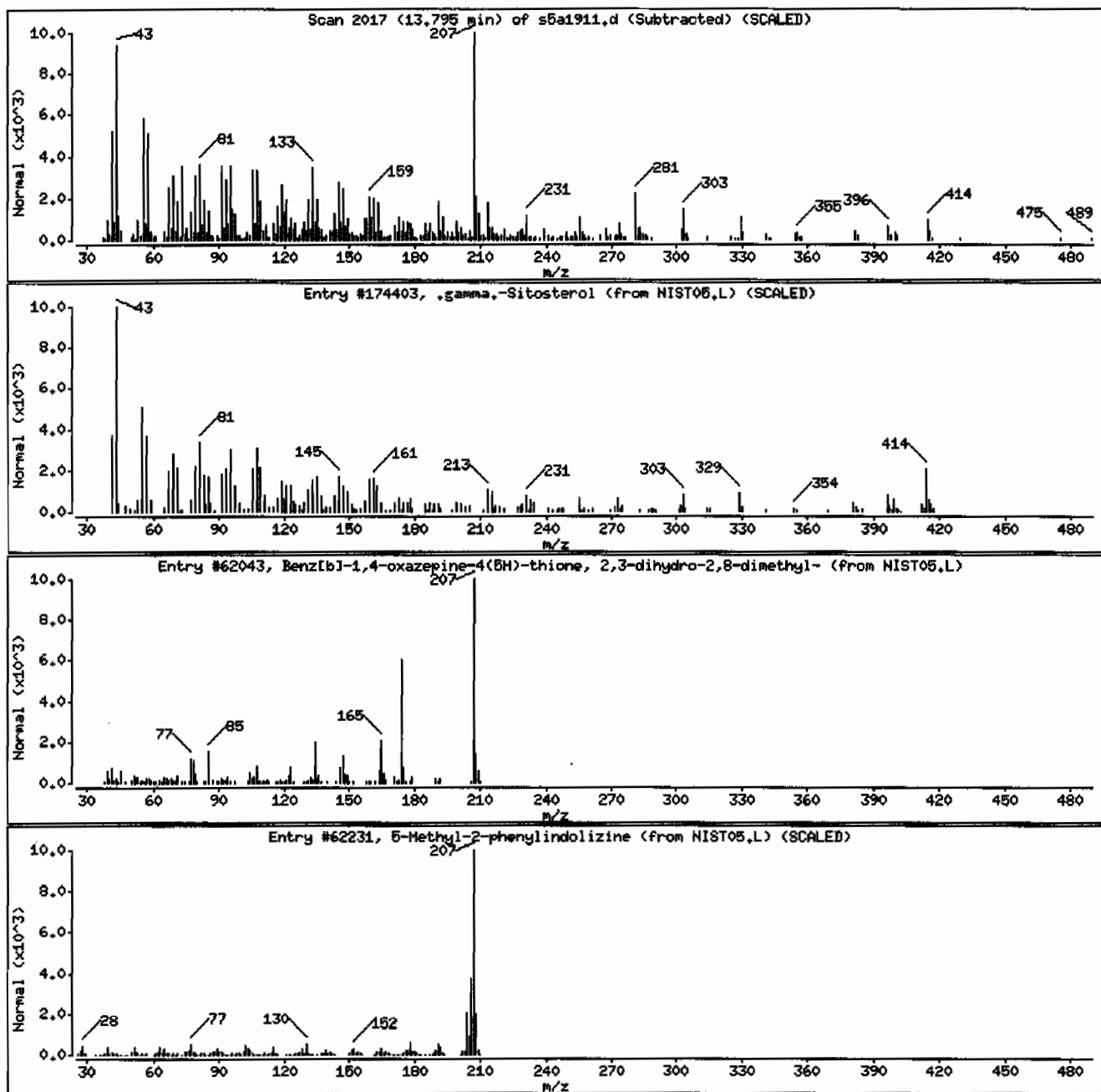
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	72	C29H50O	414
Benz[bl-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	41	C11H13NOS	207
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	38	C15H13N	207



Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7259
Batch ID: 942840
Run Date: 01/19/2010 15:42
Prep Date: 01/18/2010 20:10
Data File: s5a1915.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	355	ug/kg	70.9	355

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7259
Batch ID: 942840
Run Date: 01/19/2010 15:42
Prep Date: 01/18/2010 20:10
Data File: s5a1915.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.02	604	ug/kg		J
79-09-4	Propanoic acid	2.16	203	ug/kg	91	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626007

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.16 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	615	ug/kg		JA
5131-66-8	2-Propanol, 1-butoxy-	3.47	229	ug/kg	90	NJ
	Unknown	5.76	228	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.79	1260	ug/kg	98	NJ
5794-03-6	Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5.95	193	ug/kg	83	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	161	ug/kg	93	NJ
77-53-2	Cedrol	6.57	1260	ug/kg	94	NJ
	Unknown	8.91	278	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.02	1710	ug/kg	98	NJ
	Unknown	9.04	647	ug/kg		J
	Unknown	9.4	155	ug/kg		J
7773-83-3	1-Docosanethiol	9.42	155	ug/kg	96	NJ
	Unknown	9.5	232	ug/kg		J
	Unknown	9.75	261	ug/kg		J
	Unknown	10.07	3080	ug/kg		J
559-74-0	Friedelan-3-one	10.11	1470	ug/kg	99	NJ
	Unknown	10.33	160	ug/kg		J
	Unknown	10.71	313	ug/kg		J
	Unknown	11.46	165	ug/kg		J
	Unknown	11.67	185	ug/kg		J
	Unknown	12	619	ug/kg		J
1000196-01-5	Cyclohexane-1-methanol, 3,3-dimethyl-2-(	12.35	1740	ug/kg	91	NJ
	Unknown	12.75	428	ug/kg		J
	Unknown	13.29	196	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	13.8	653	ug/kg	93	NJ

Data File: /chem/MSD5.i/s011910.b/s5a1915.d
Report Date: 20-Jan-2010 07:53

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1915.d
Lab Smp Id: 244626007 Client Smp ID: RE12-10-7259
Inj Date : 19-JAN-2010 15:42
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626007|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.16000	weight of sample
M	6.48860	% 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	3.931	3.940	(1.000)	539120	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1848204	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1062172	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	1957892	40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1758286	40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1414630	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	897468	67.1247	2380
\$ 5 Phenol-d5	99	3.649	3.651	(0.928)	1087200	65.9362	2340
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	509642	35.9135	1270
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	1020019	36.3020	1290
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	292334	86.5925	3070
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.893)	1199179	43.4353	1540

ION RATIO REPORT

SV REPORT

Data file: s5a1915.d

Report Date: 01/20/2010 07:05

Lab. ID: 244626007

SampleType: SAMPLE

Injection Date: 19-JAN-2010 15:42

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626007|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	60086	3.65	3.72	80-120	100	(T)
93	1001	3.61	3.72	210-270	2	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	67531	4.30	4.18	80-120	100	(T)
42	42286	4.30	4.18	44-104	63	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	6106	4.54	4.57	80-120	100	()
122	2861	4.54	4.57	39- 99	47	()
77	4294	4.54	4.57	34- 94	70	()

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	40484	5.79	5.66	80-120	100	(T)
164	2193	5.79	5.66	4- 64	5	(T)
127	3399	5.79	5.66	9- 69	8	(QT)

42 o-Nitroaniline		CAS#: 88-74-4				
65	54291	5.79	5.71	80-120	100	(T)
92	81866	5.79	5.71	31- 91	151	(QT)
138	3716	5.79	5.71	70-130	7	(QT)

43 Dimethylphthalate		CAS#: 131-11-3				
163	194511	6.06	5.82	80-120	100	(T)
164	1062172	6.06	5.82	0- 40	546	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	145682	6.06	5.88	80-120	100	(T)
63	2170	6.06	5.88	61-121	1	(QT)
<hr/>						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	145145	6.06	6.17	80-120	100	(T)
89	2918	6.05	6.17	47-107	2	(QT)
63	2083	6.06	6.17	23- 83	1	(QT)
<hr/>						
51	Diethylphthalate			CAS#: 84-66-2		
149	75189	6.57	6.33	80-120	100	(T)
177	18552	6.57	6.33	0- 53	25	(T)
150	286658	6.57	6.33	0- 43	381	(QT)
<hr/>						
52	4-Nitrophenol			CAS#: 100-02-7		
139	284	6.09	6.10	80-120	100	()
109	2787	6.09	6.10	41-101	980	(Q)
65	4819	6.09	6.10	72-132	1695	(Q)
<hr/>						
53	Fluorene			CAS#: 86-73-7		
166	14678	6.57	6.47	80-120	100	(T)
165	38287	6.57	6.47	56-116	261	(QT)
167	3598	6.57	6.47	0- 44	25	(T)
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55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	1071	6.65	6.49	80-120	100	(T)
105	3242	6.65	6.49	12- 72	303	(QT)
51	2082	6.65	6.49	42-102	194	(QT)
<hr/>						
58	1,2-Diphenylhydrazine			CAS#: 122-66-7		
77	72625	6.57	6.57	80-120	100	()
105	67964	6.57	6.57	0- 47	94	(Q)
182	140	6.65	6.57	0- 57	0	(T)
<hr/>						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	20512	6.65	6.84	80-120	100	(T)
141	130950	6.65	6.83	43-103	638	(QT)
250	40871	6.65	6.84	68-128	199	(QT)
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99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	576	13.09	13.12	80-120	100	()
138	744	13.14	13.12	1- 61	129	(Q)
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100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	437	13.08	13.13	80-120	100	()
139	1307	13.09	13.12	0- 30	299	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1915.d
 Lab Smp Id: 244626007 Client Smp ID: RE12-10-7259
 Inj Date : 19-JAN-2010 15:42
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626007|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.16000	weight of sample
M	6.48860	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3256587	40.000
* 46 Acenaphthene-d10	6.060	4726050	40.000
* 91 Chrysene-d12	9.642	5318252	40.000
* 98 Perylene-d12	11.330	3822495	40.000

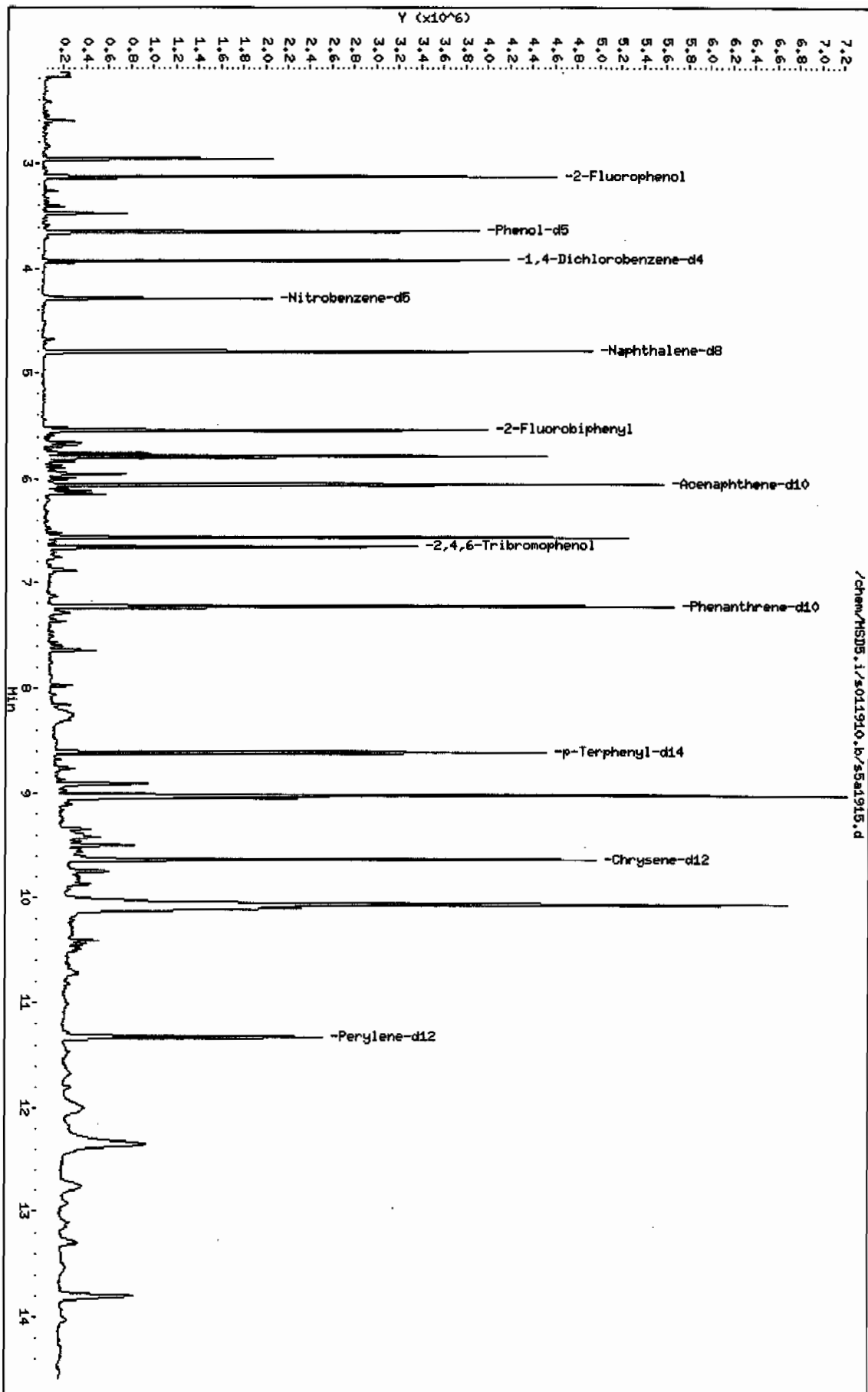
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	-----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.019	1386237	17.0268730	604	0		0	10
Propanoic acid					CAS #: 79-09-4		
2.160	465790	5.72120599	203	91	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.954	1411942	17.3426002	615	0		0	10
2-Propanol, 1-butoxy-					CAS #: 5131-66-8		
3.472	525670	6.45669701	229	90	NIST05.L	13973	10
Unknown					CAS #:		
5.760	758666	6.42113914	228	0		0	46
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.790	4186107	35.4300621	1260	98	NIST05.L	60018	46
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me					CAS #: 5794-03-6		
5.954	643847	5.44934616	193	83	NIST05.L	15386	46
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr					CAS #: 19912-83-5		
6.142	535203	4.52981545	161	93	NIST05.L	59904	46
Cedrol					CAS #: 77-53-2		
6.566	4203740	35.5793035	1260	94	NIST05.L	72884	46
Unknown					CAS #:		
8.907	1042767	7.84293354	278	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
9.019	6425990	48.3315911	1710	98	NIST05.L	116238	91
Unknown					CAS #:		
9.042	2424687	18.2367186	647	0		0	91
Unknown					CAS #:		
9.401	580917	4.36923184	155	0		0	91
1-Docosanethiol					CAS #: 7773-83-3		
9.419	580642	4.36716761	155	96	NIST05.L	148955	91
Unknown					CAS #:		
9.495	870733	6.54901890	232	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
9.754	976999	7.34827374	260	0		0	91
Unknown					CAS #:		
10.072	11532754	86.7409304	3080	0		0	91
Friedelan-3-one					CAS #: 559-74-0		
10.107	5517137	41.4958688	1470	99	NIST05.L	176566	91
Unknown					CAS #:		
10.330	601791	4.52623300	160	0		0	91
Unknown					CAS #:		
10.713	844804	8.84034068	313	0		0	98
Unknown					CAS #:		
11.460	444503	4.65143931	165	0		0	98
Unknown					CAS #:		
11.666	499704	5.22908319	185	0		0	98
Unknown					CAS #:		
12.001	1667347	17.4477288	619	0		0	98
Cyclohexane-1-methanol, 3,3-dimethyl-2-(					CAS #: 1000196-01-5		
12.348	4679346	48.9664044	1740	91	NIST05.L	62981	98
Unknown					CAS #:		
12.754	1153527	12.0709310	428	0		0	98
Unknown					CAS #:		
13.295	528118	5.52641875	196	0		0	98
Stigmasterol, 22,23-dihydro-					CAS #: 1000214-20-7		
13.801	1760724	18.4248662	653	93	NIST05.L	174408	98

Data File: /chem/MSDB.i/s011910.b/s5a1915.d
 Date: 19-JAN-2010 15:42
 Client ID: RE12-10-7259
 Sample Info: 1244626007194284011.SW111.LAM
 Volume Injected (uL): 0.5
 Column phase: JSM DB-SHS

Instrument: MSDB.i
 Operator: RHB
 Column diameter: 0.20



Date: 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011SVH111LANL

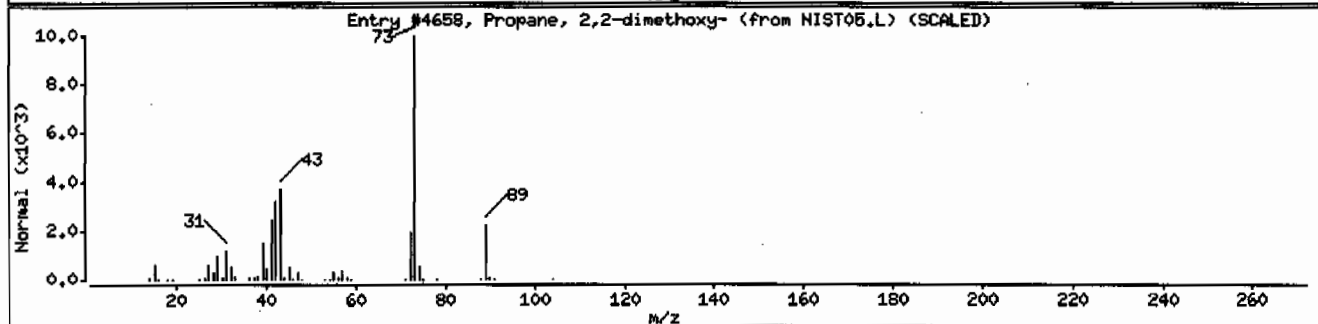
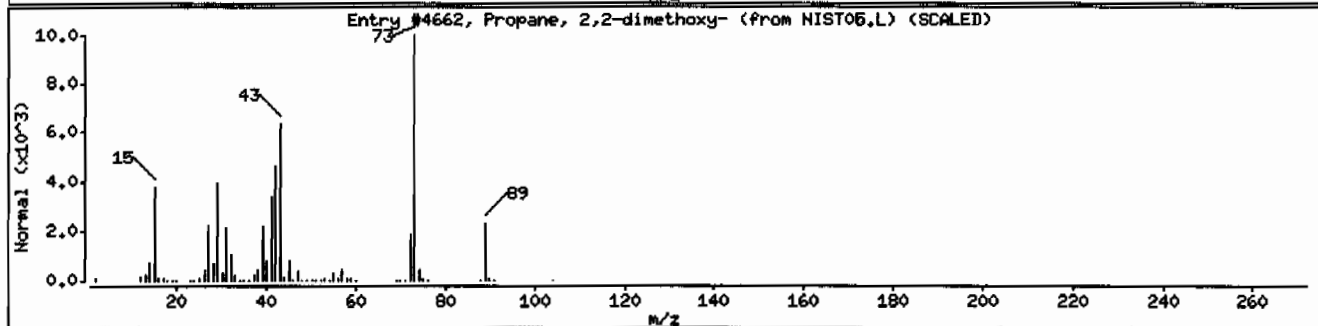
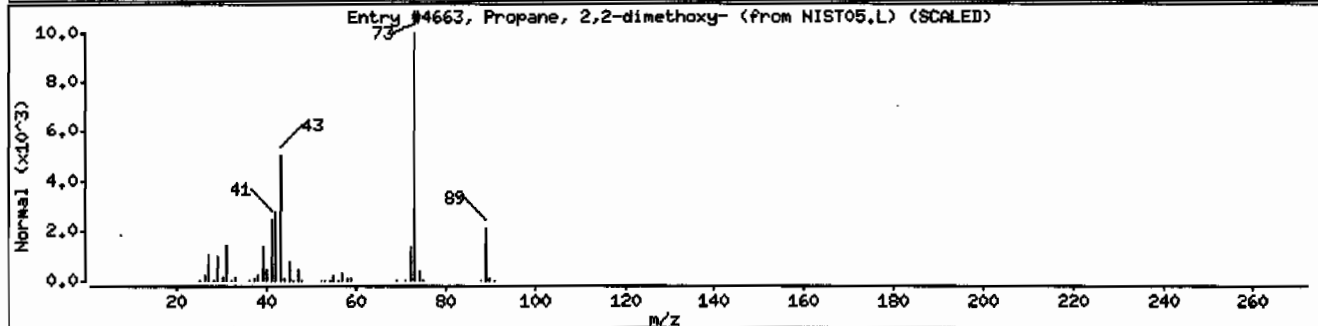
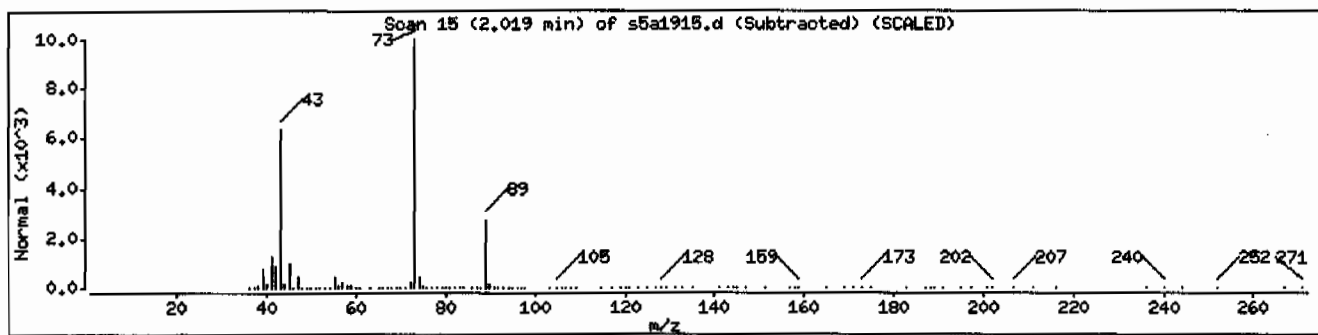
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	78	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	40	C5H12O2	104



Date: 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011ISVH11ILANL

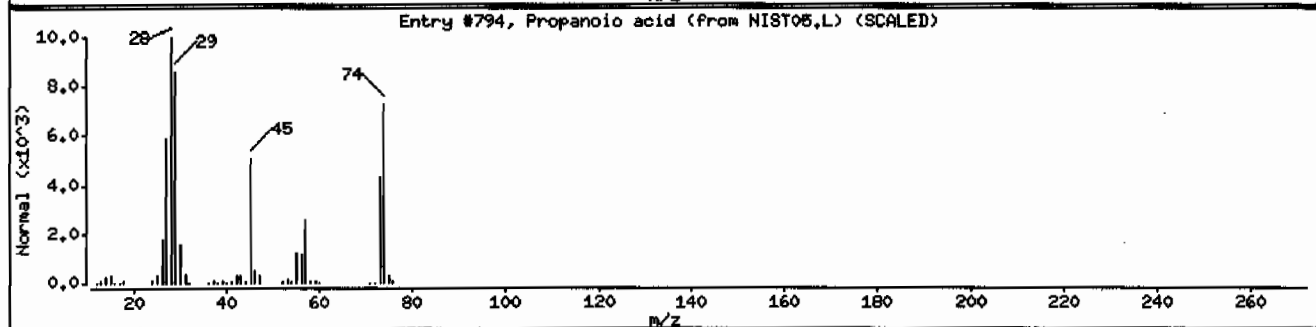
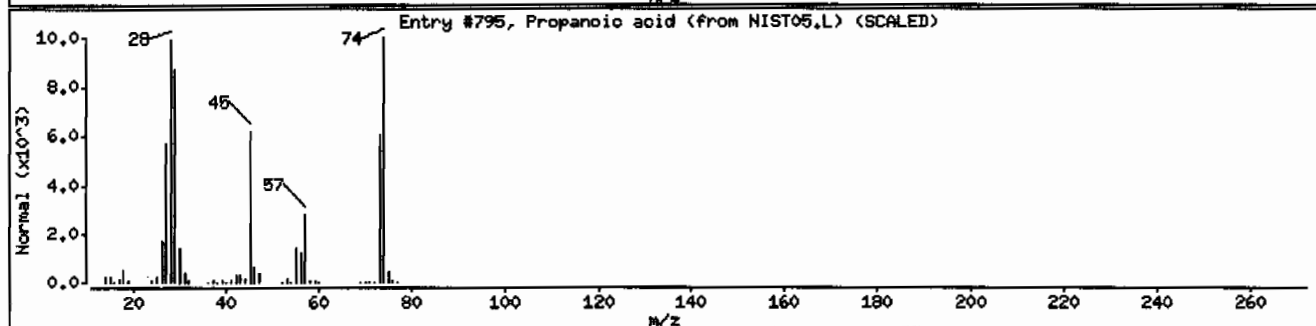
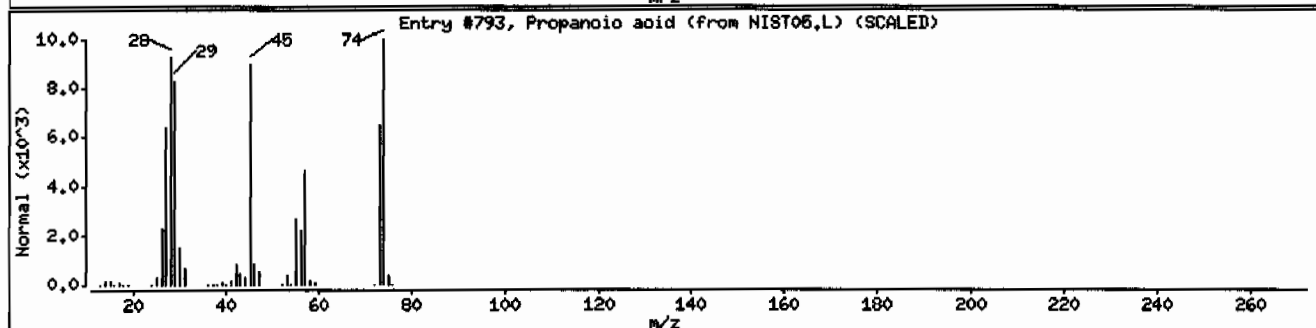
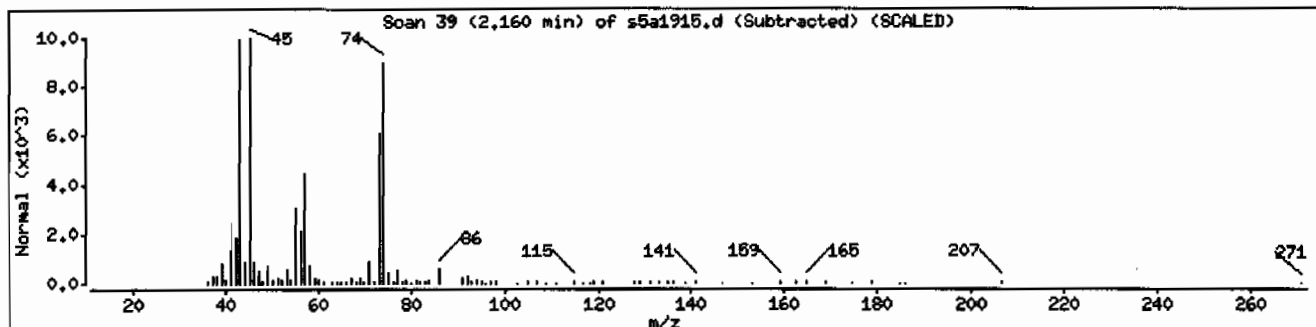
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	91	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	90	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	64	C3H6O2	74



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011SVH111LANL

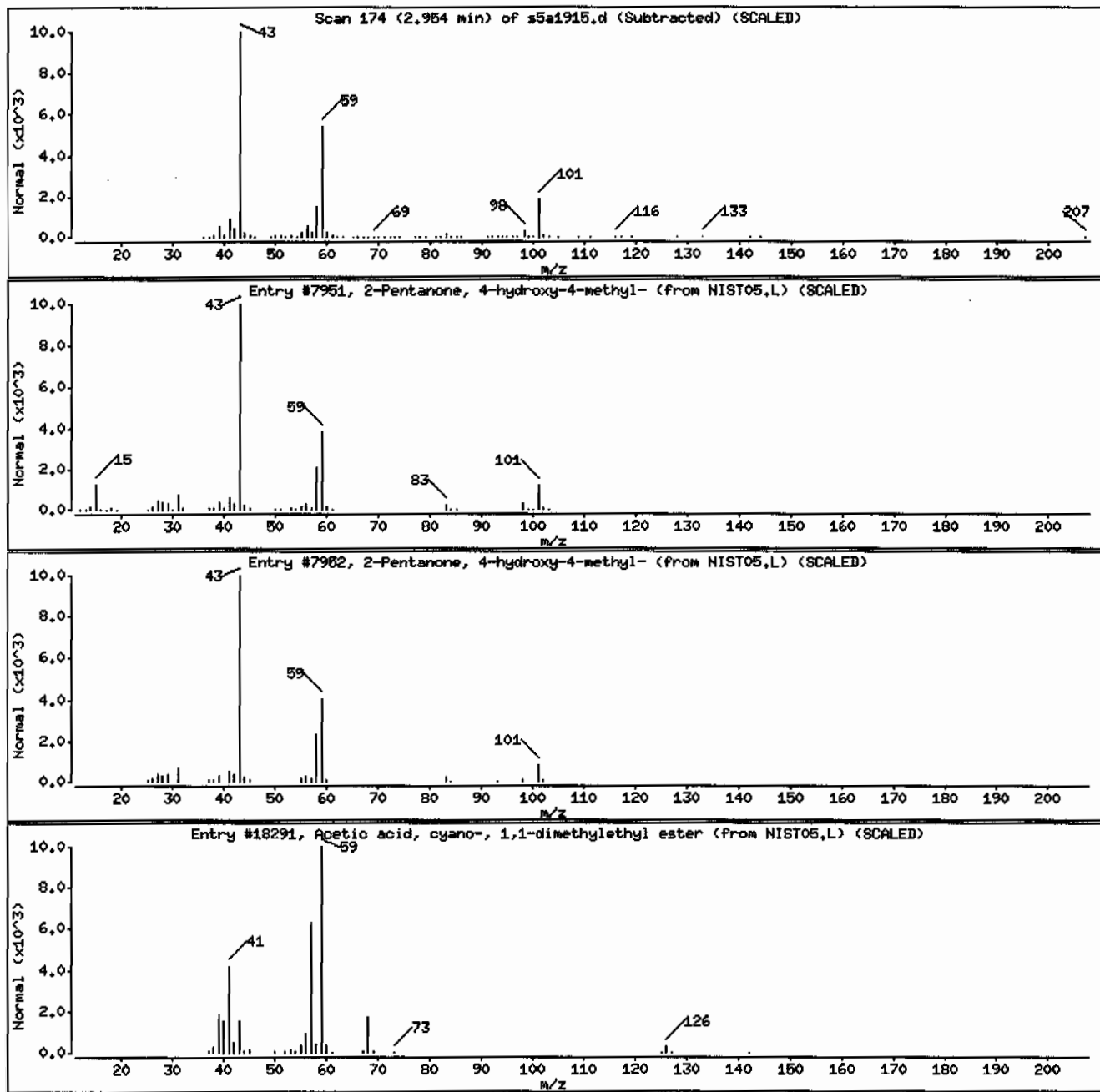
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	40	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: 19-JAN-2010 15:42

Client ID: RE12-10-7289

Instrument: MSD5.i

Sample Info: 1244626007194284011ISVH111LANL

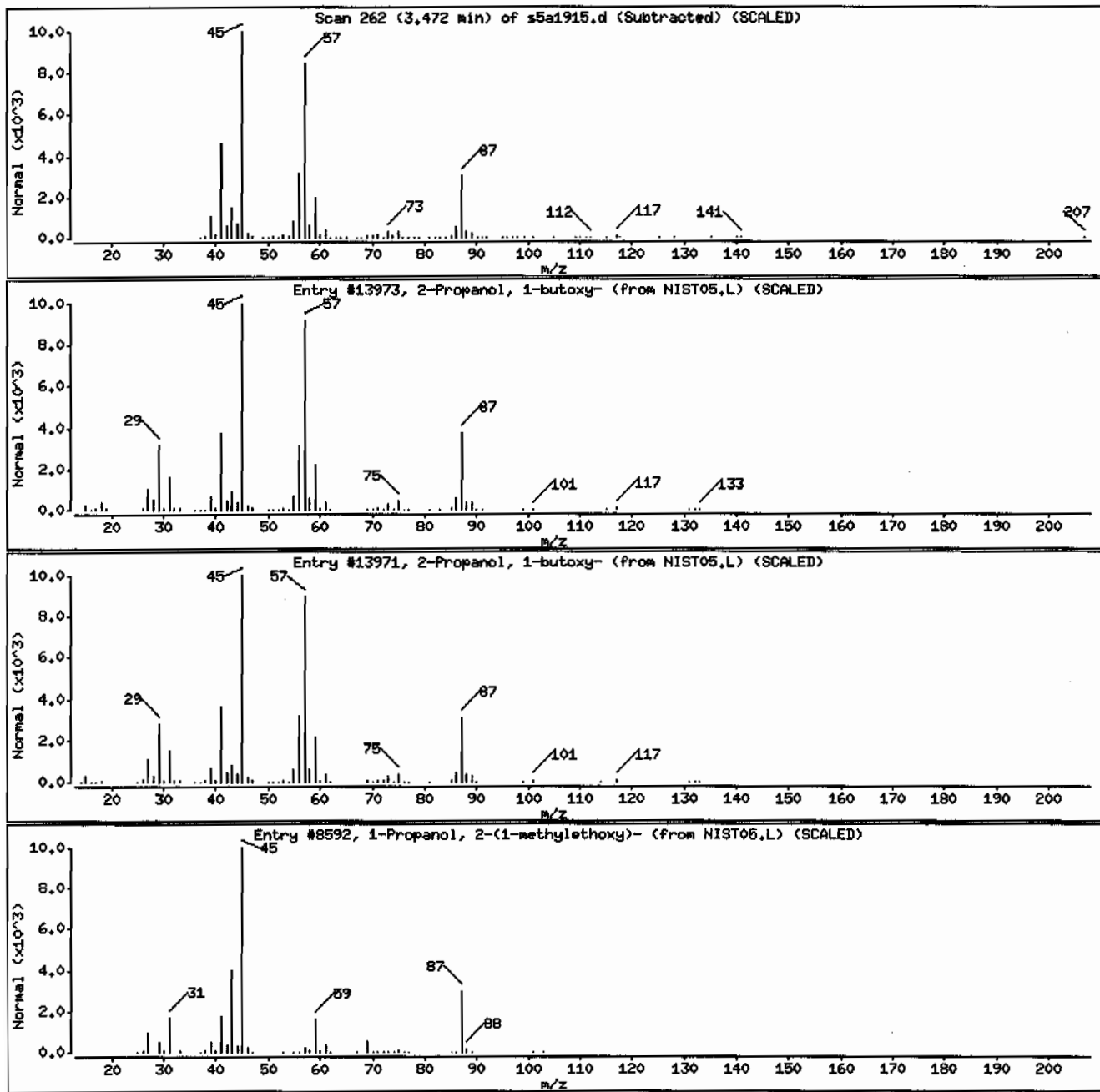
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13973	90	C7H16O2	132
2-Propanol, 1-butoxy-	5131-66-8	NIST05.L	13971	90	C7H16O2	132
1-Propanol, 2-(1-methylethoxy)-	3944-37-4	NIST05.L	8592	59	C6H14O2	118



Date: 19-JAN-2010 15:42

Client ID: RE12-10-7289

Instrument: HSD5.i

Sample Info: 1244626007194284011SVMI11LANL

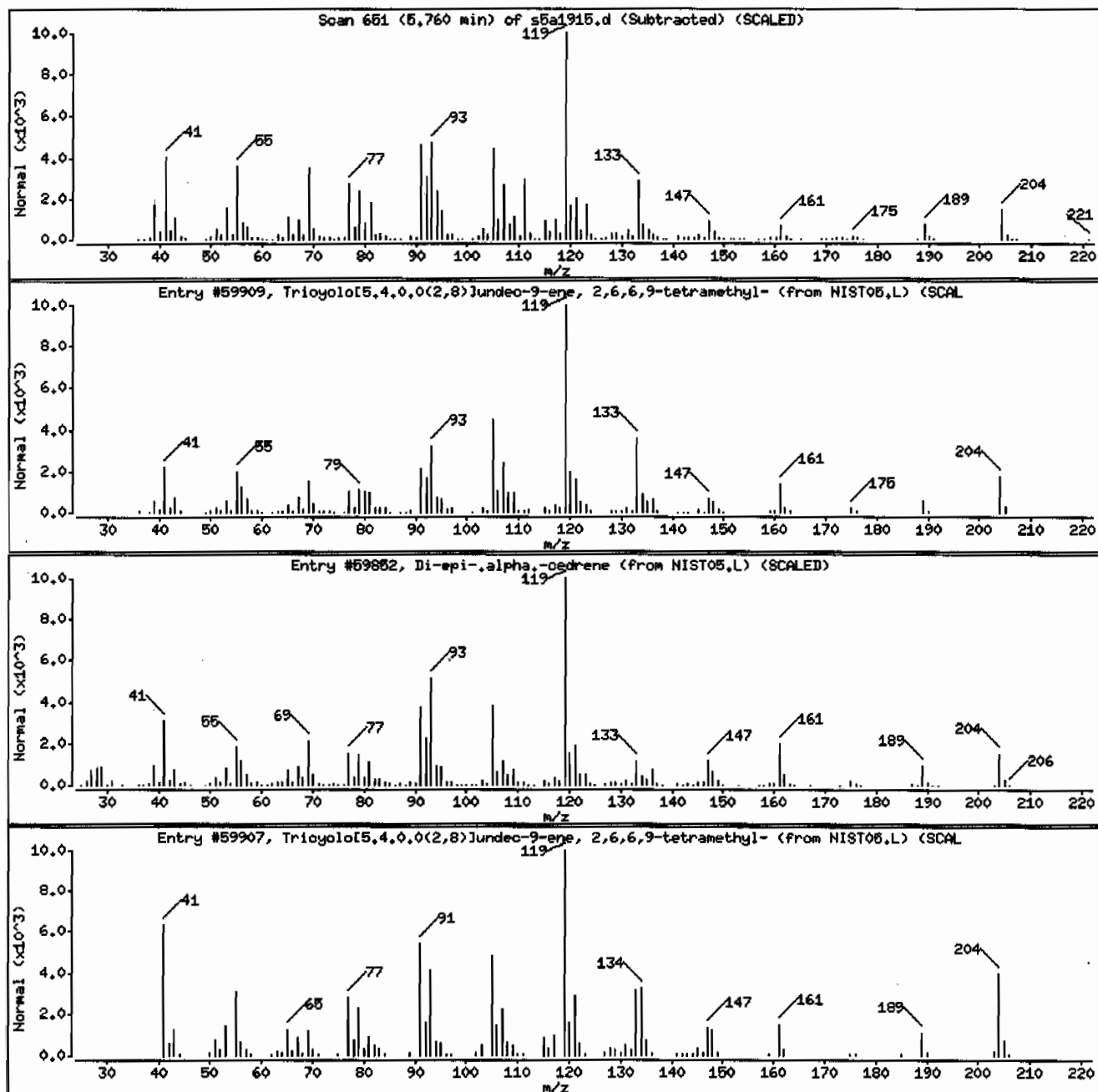
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	78	C15H24	204
Di-epi-,alpha-,cedrene	1000156-13-3	NIST05.L	59852	70	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	64	C15H24	204



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011ISVMI1ILANL

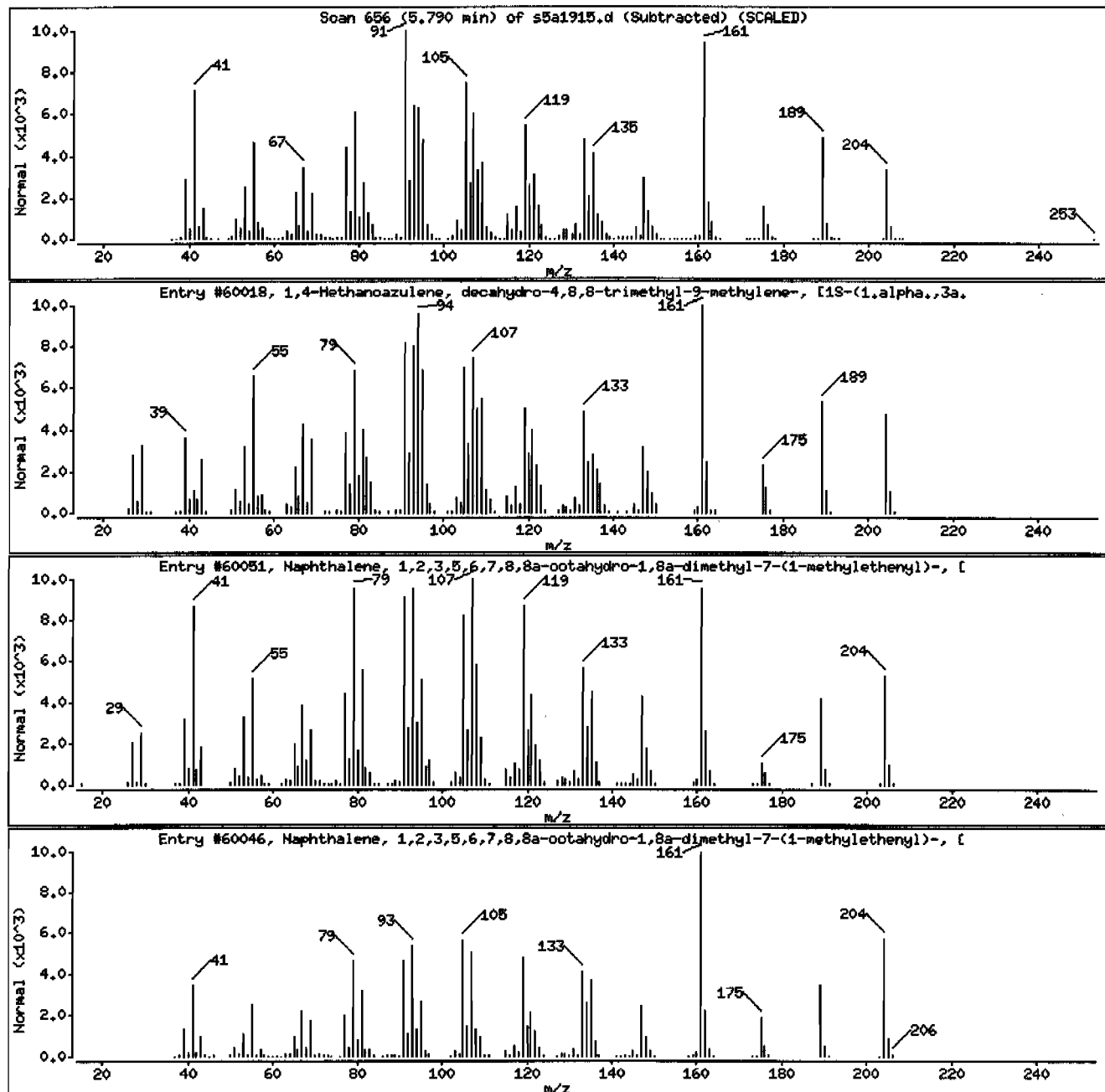
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60051	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	96	C15H24	204



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: I244626007194284011SVMI11LANL

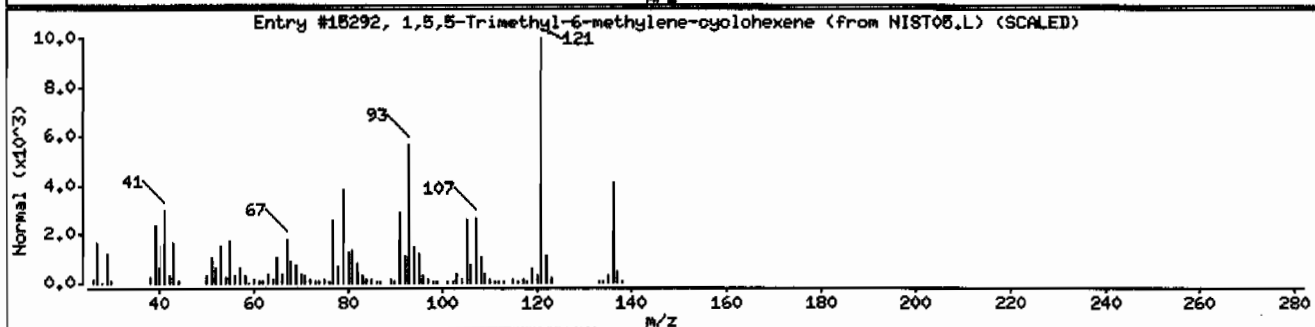
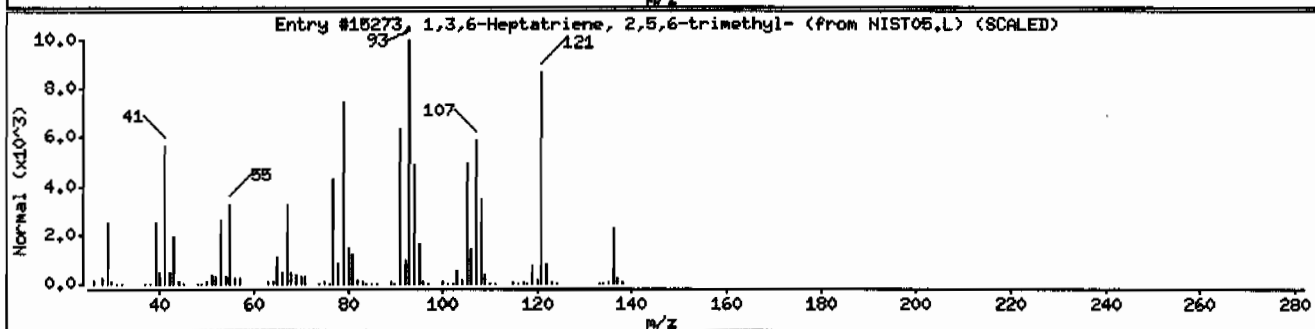
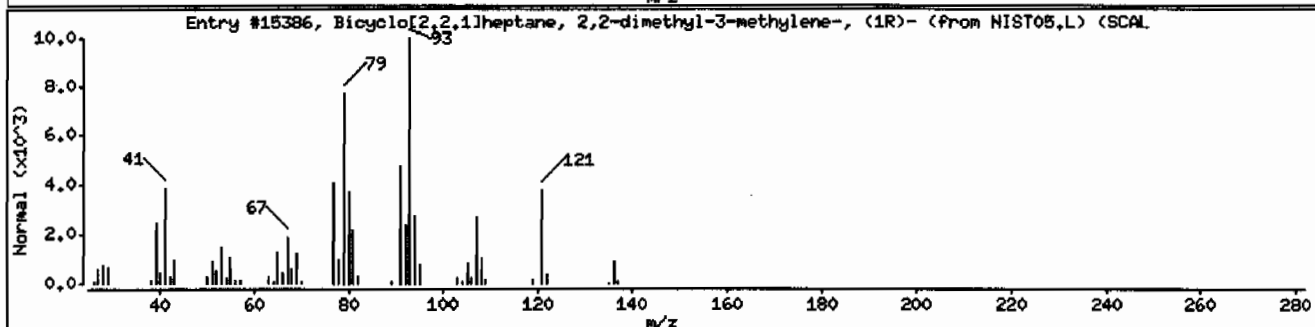
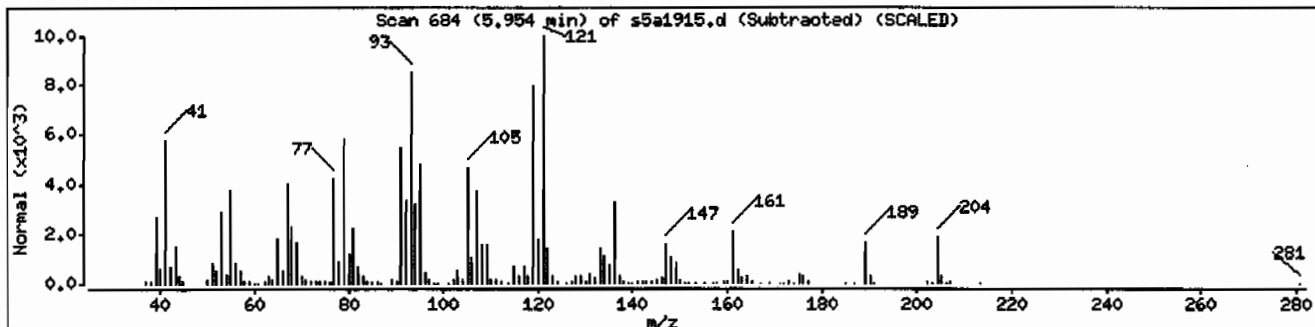
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[2,2,1]heptane, 2,2-dimethyl-3-me	5794-03-6	NIST05.L	15386	83	C10H16	136
1,3,6-Heptatriene, 2,5,6-trimethyl-	42123-66-0	NIST05.L	15273	78	C10H16	136
1,5,5-Trimethyl-6-methylene-cyclohexene	514-95-4	NIST05.L	15292	64	C10H16	136



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7289

Instrument: MSD5.i

Sample Info: I244626007194284011SVH111LANL

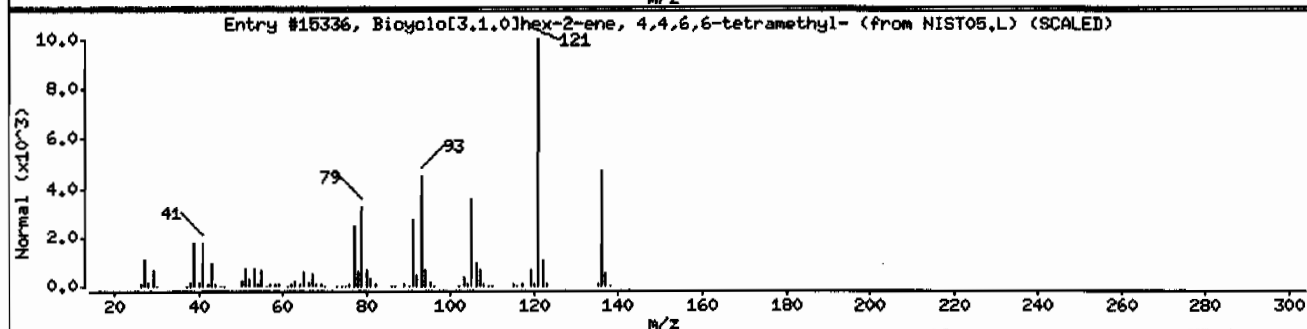
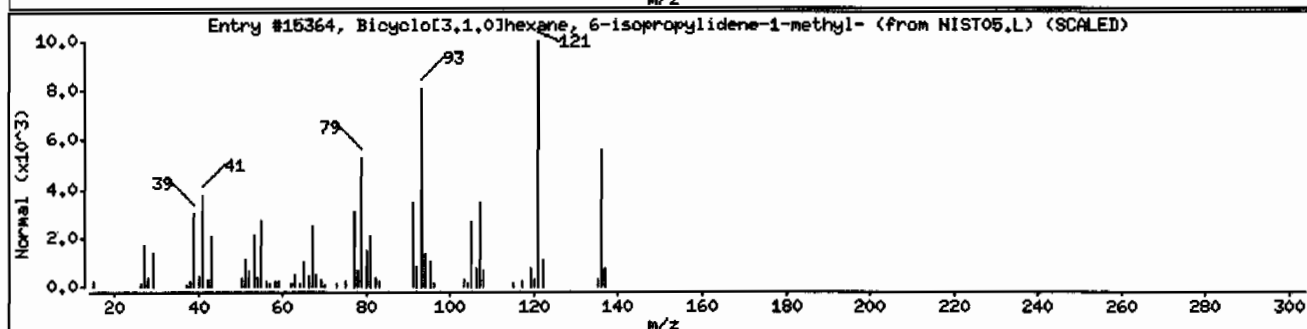
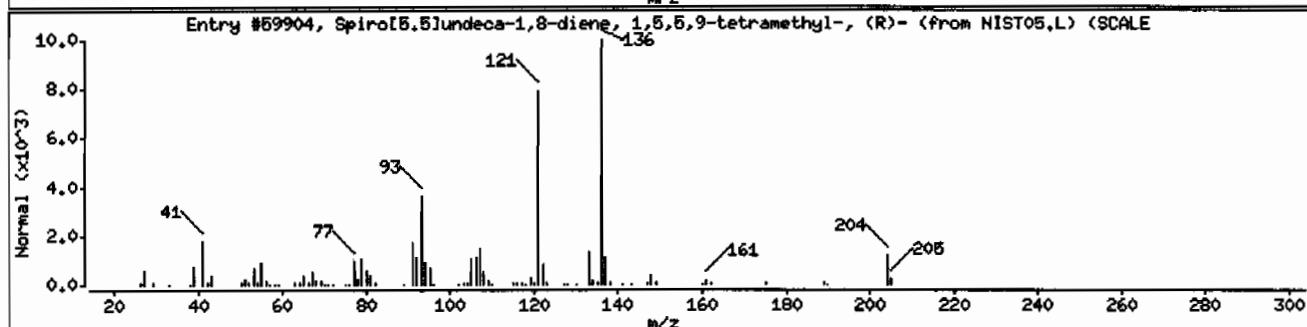
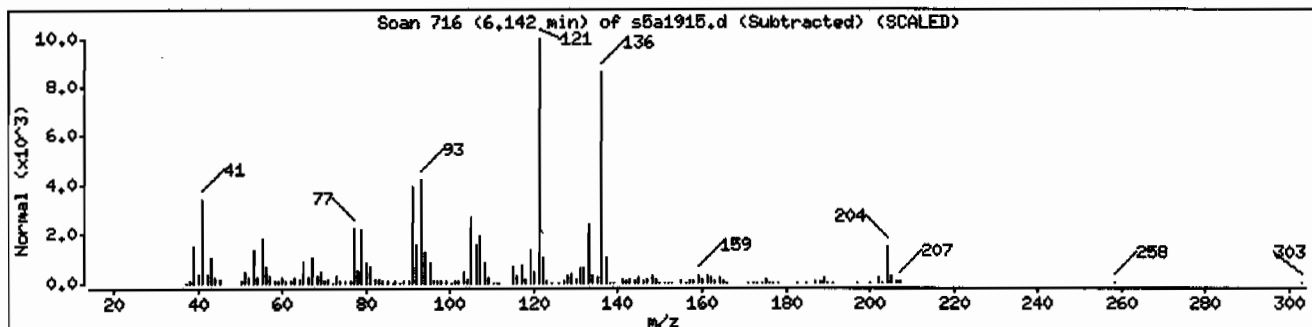
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	19912-83-5	NIST05.L	59904	93	C16H24	204
Bicyclo[3.1.0]hexane, 6-isopropylidene-1	24824-57-0	NIST05.L	15364	87	C10H16	136
Bicyclo[3.1.0]hex-2-ene, 4,4,6,6-tetrame	19487-09-3	NIST05.L	15336	83	C10H16	136



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011SVH11ILANL

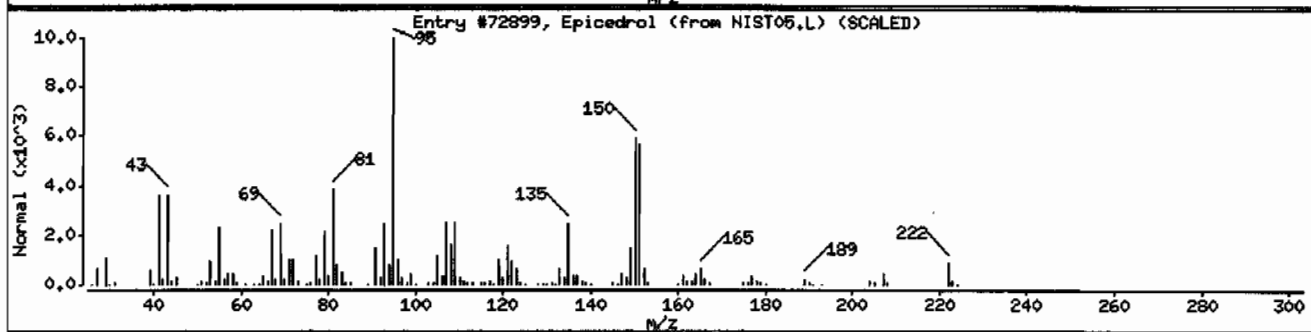
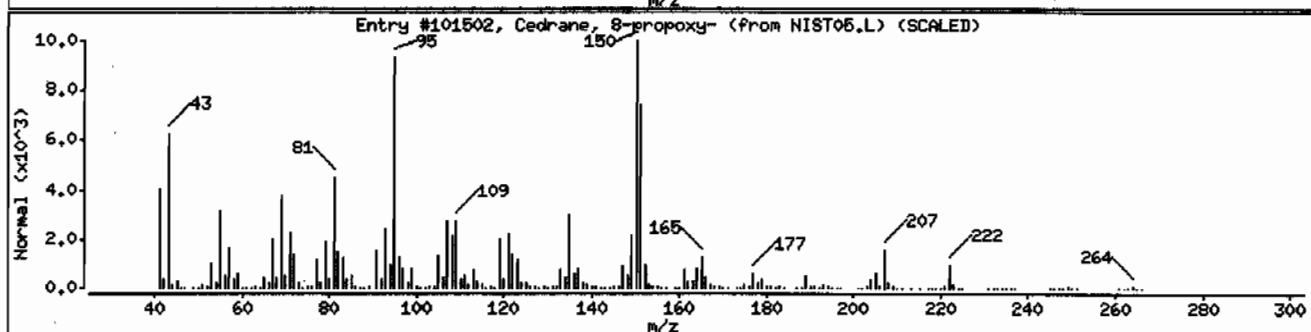
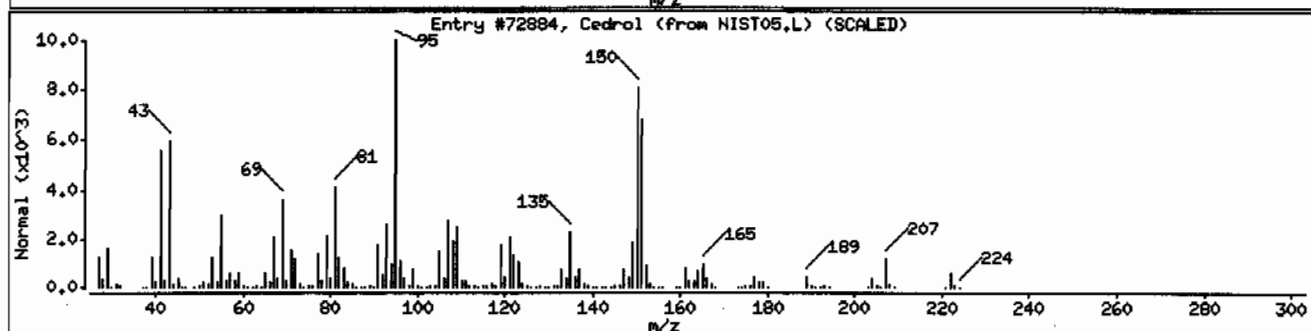
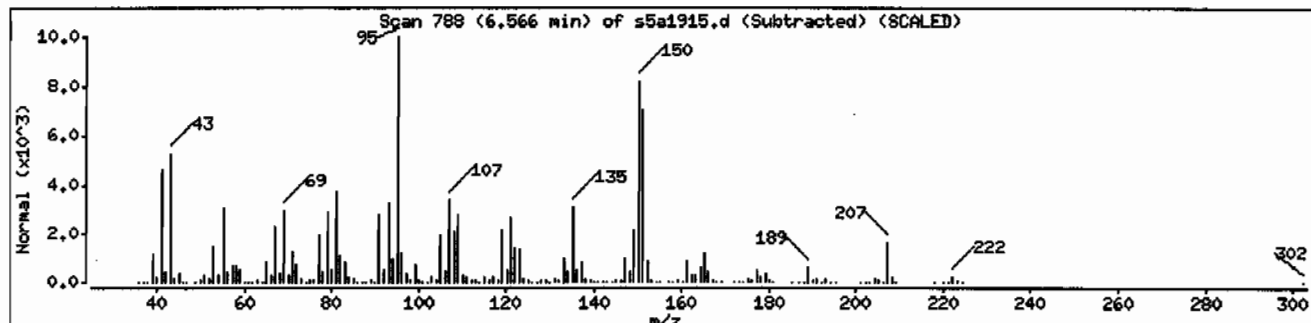
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72884	94	C ₁₅ H ₂₆ O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	94	C ₁₈ H ₃₂ O	264
Epicedrol	1000156-22-8	NIST05.L	72899	91	C ₁₅ H ₂₆ O	222



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011SVH11ILANL

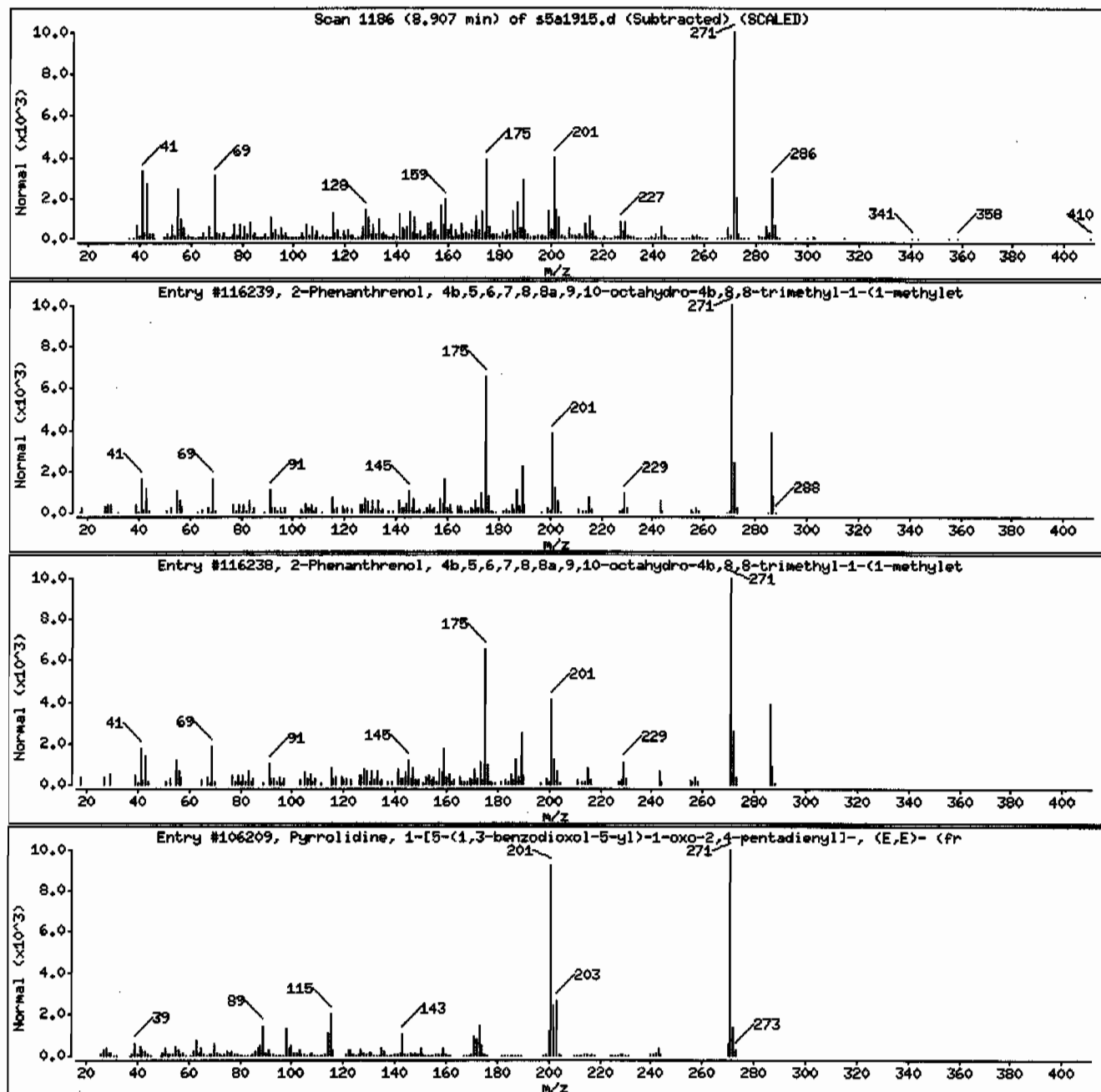
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	91	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	91	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	45	C16H17NO3	271



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: HSD5.i

Sample Info: 1244626007194284011SVH11ILANL

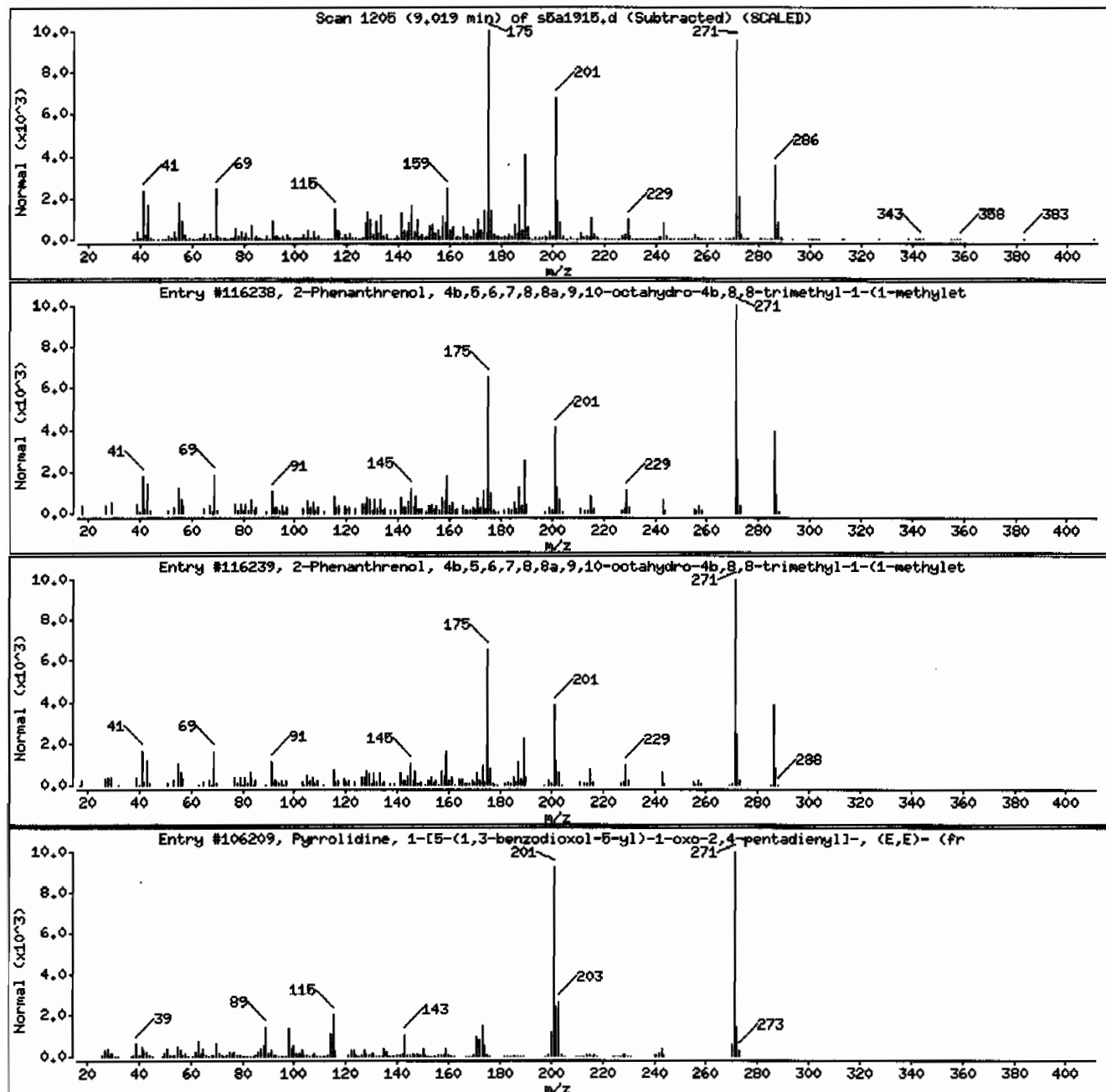
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	98	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	96	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	27	C16H17NO3	271



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7239

Instrument: HSD5.i

Sample Info: 1244626007194284011SVH111LANL

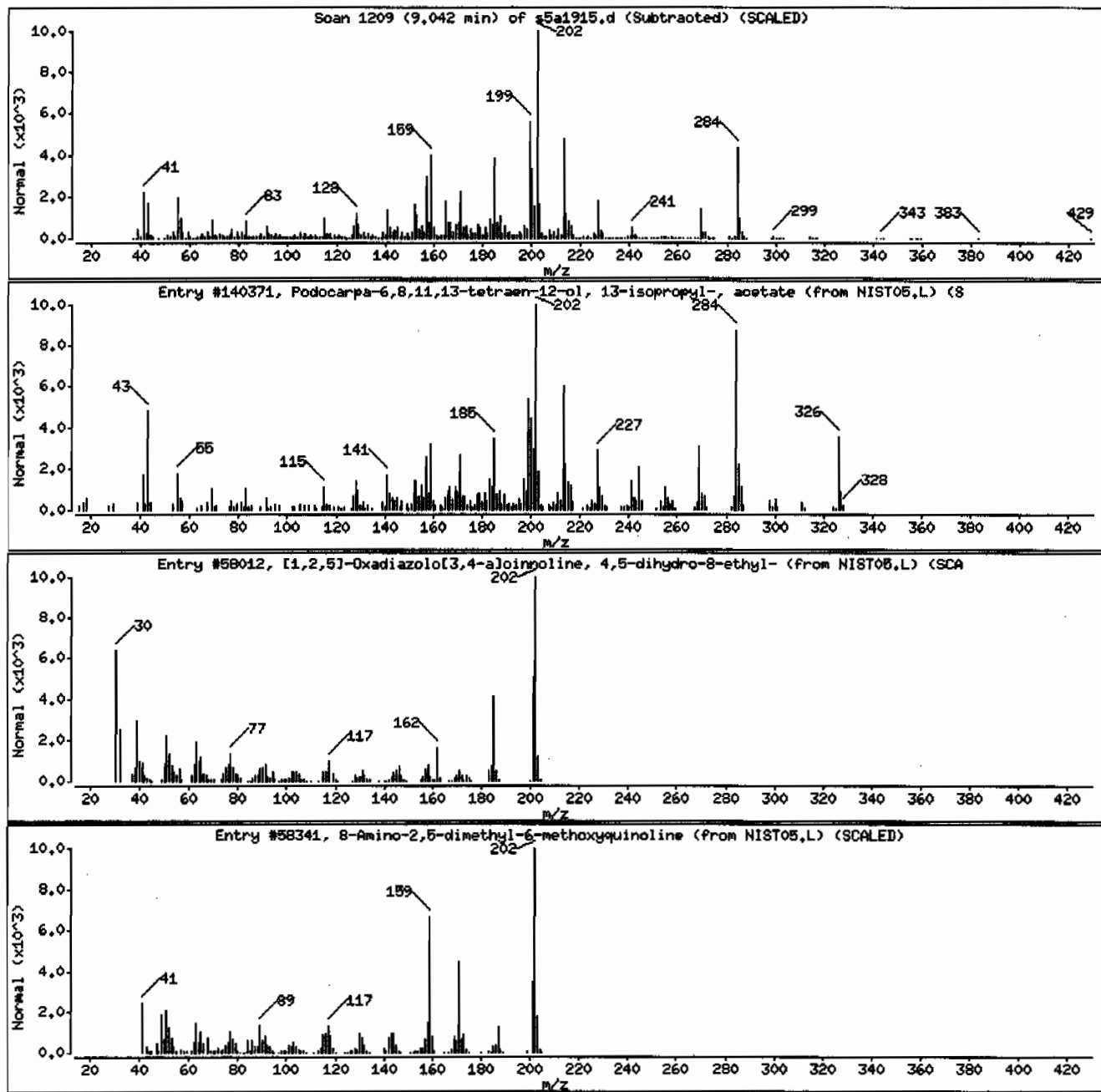
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Podocarpa-6,8,11,13-tetraen-12-ol, 13-is	22160-86-7	NIST05.L	140371	43	C22H30O2	326
[1,2,5]-Oxadiazolo[3,4-a]cinnoline, 4,5-	1000260-59-4	NIST05.L	58012	30	C10H10N4O	202
8-Amino-2,5-dimethyl-6-methoxyquinoline	1000214-69-9	NIST05.L	58341	30	C12H14N2O	202



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011SVH111LANL

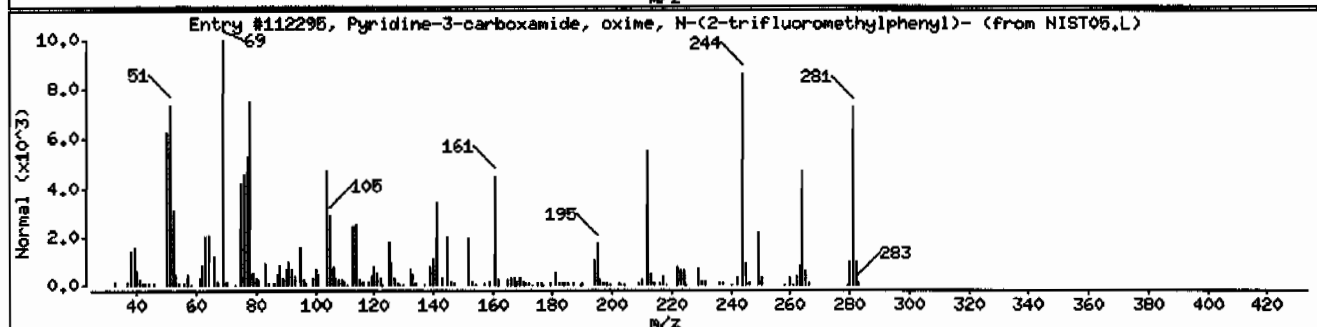
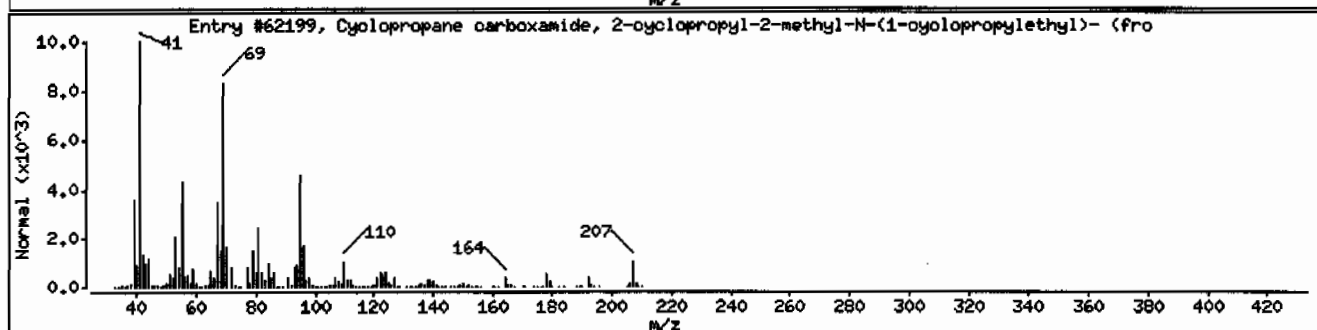
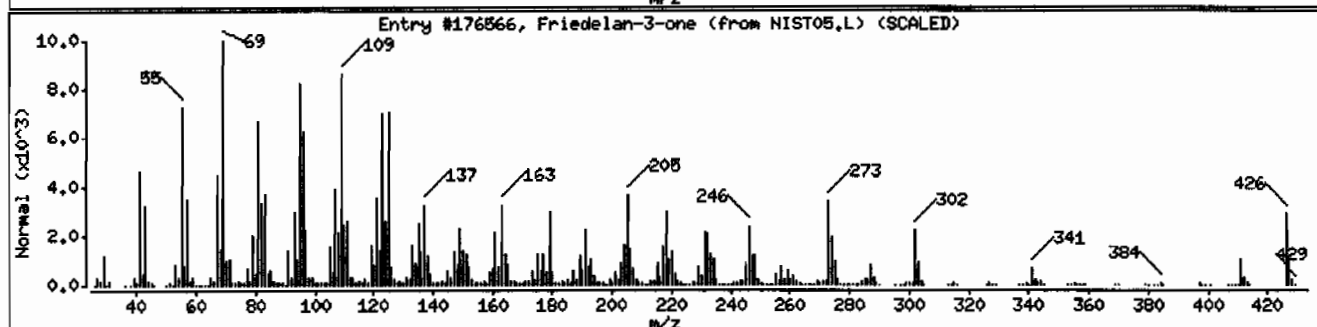
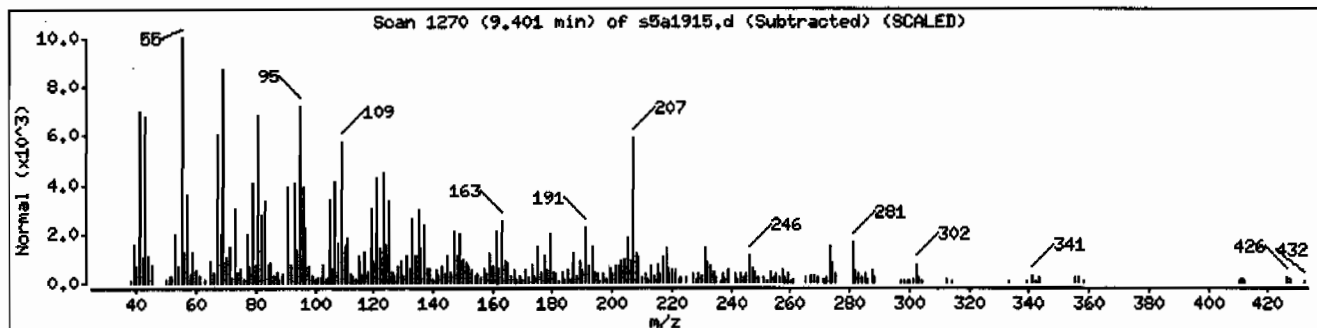
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Friedelan-3-one	559-74-0	NIST05.L	176566	74	C ₃₀ H ₅₀ O	426
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	60	C ₁₃ H ₂₁ N	207
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	56	C ₁₃ H ₁₀ F ₃ N ₃ O	281



Date: 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: I244626007194284011ISVH11ILANL

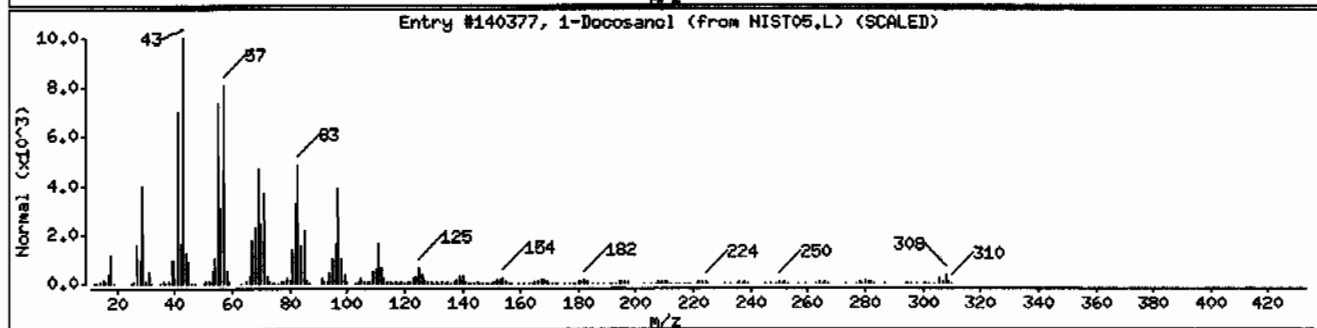
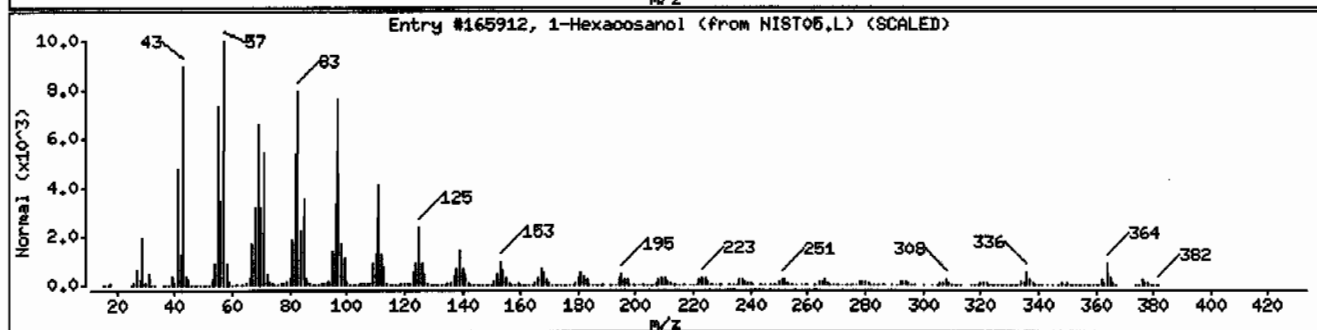
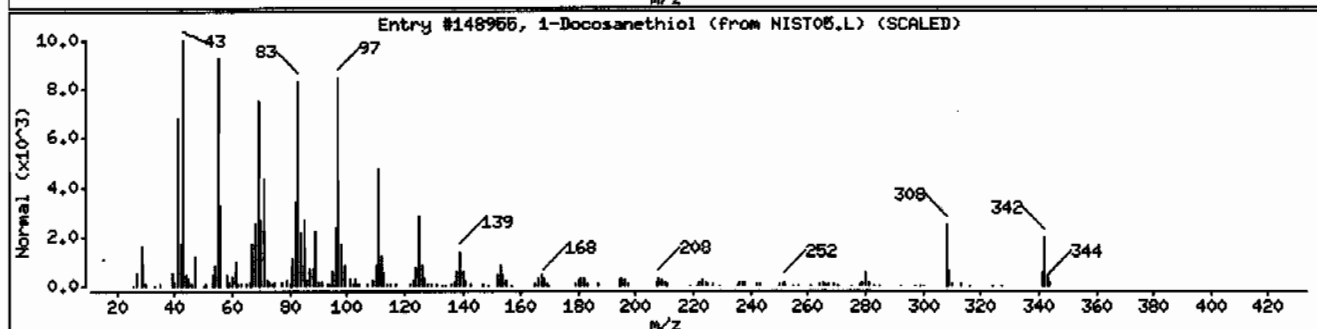
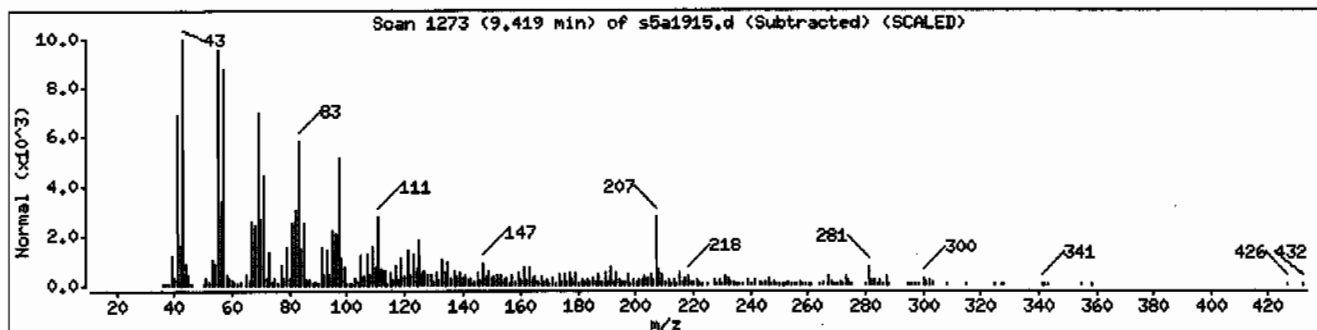
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosanethiol	7773-83-3	NIST05.L	148955	96	C22H46S	342
1-Hexacosanol	506-52-5	NIST05.L	165912	81	C26H54O	382
1-Docosanol	661-19-8	NIST05.L	140377	76	C22H46O	326



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011ISVH11ILANL

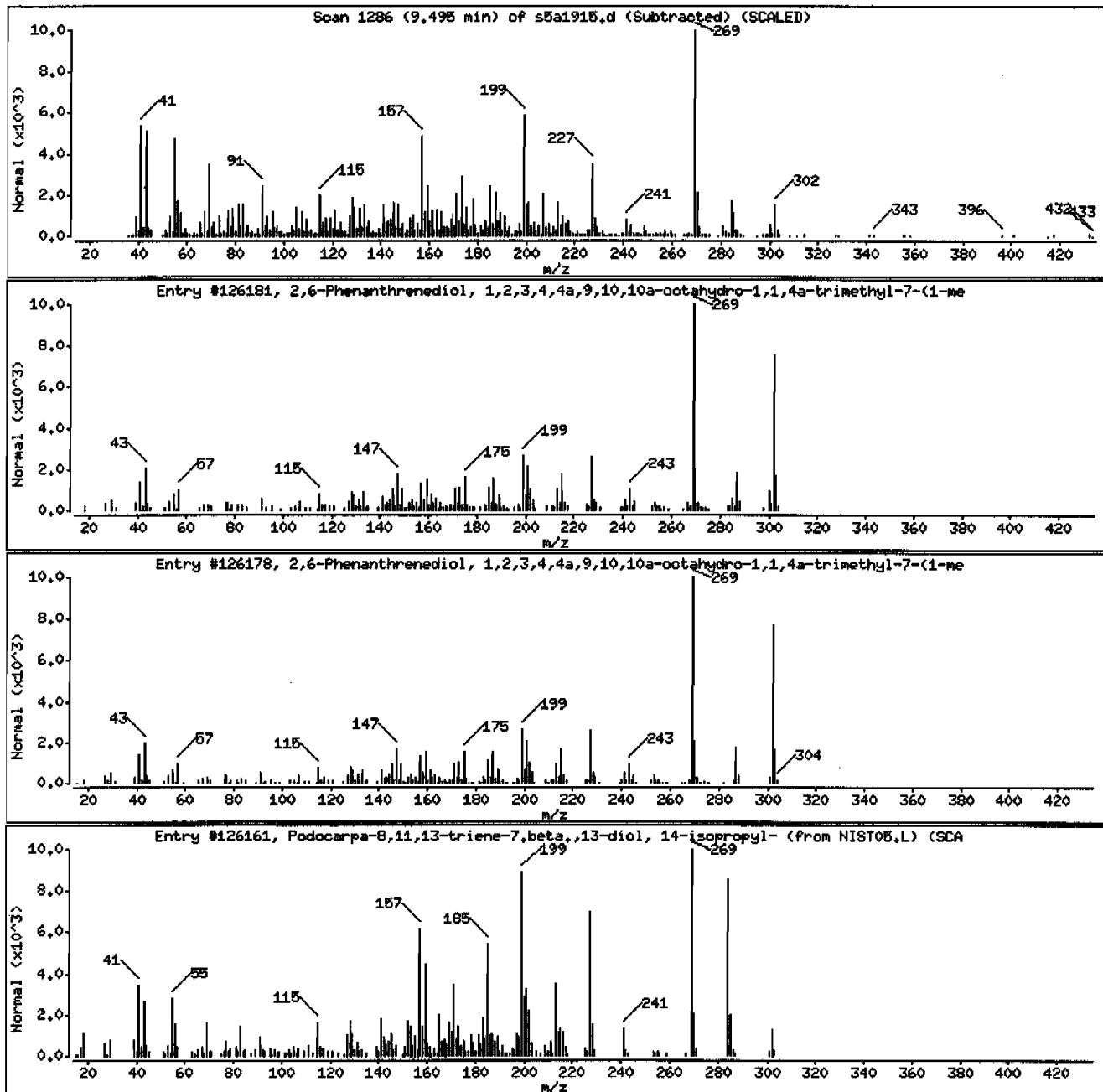
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	564-73-8	NIST05.L	126181	55	C20H30O2	302
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	564-73-8	NIST05.L	126178	52	C20H30O2	302
Podocarpa-8,11,13-triene-7,13-diol	24338-19-0	NIST05.L	126161	43	C20H30O2	302



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.1

Sample Info: 1244626007194284011SVH11ILANL

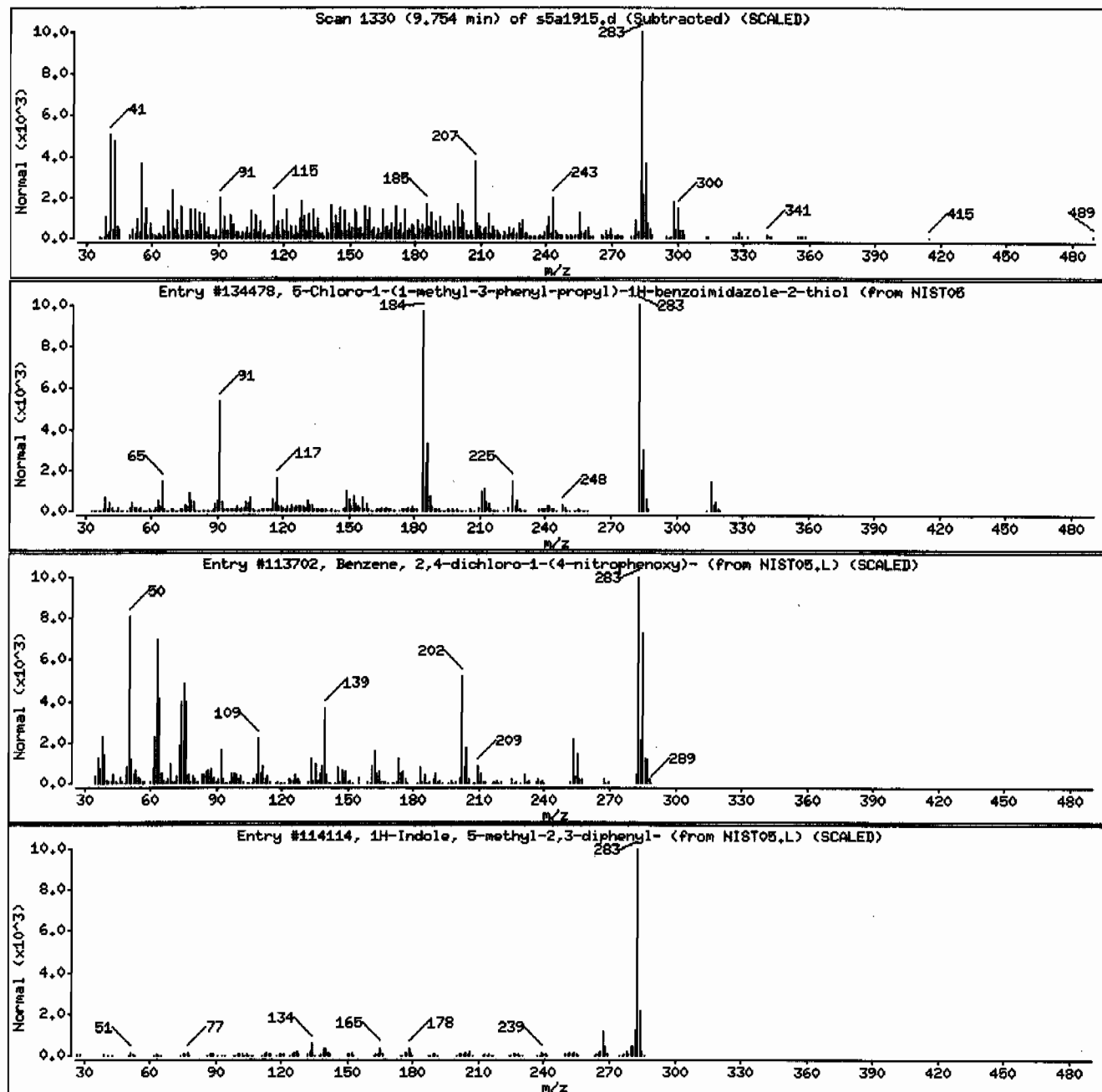
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Chloro-1-(1-methyl-3-phenyl-propyl)-1H	1000296-61-5	NIST05.L	134478	50	C17H17ClN2S	316
Benzene, 2,4-dichloro-1-(4-nitrophenoxy)	1836-75-5	NIST05.L	113702	46	C12H7Cl2NO3	283
1H-Indole, 5-methyl-2,3-diphenyl-	36804-50-9	NIST05.L	114114	43	C21H17N	283



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.1

Sample Info: I244626007194284011ISVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

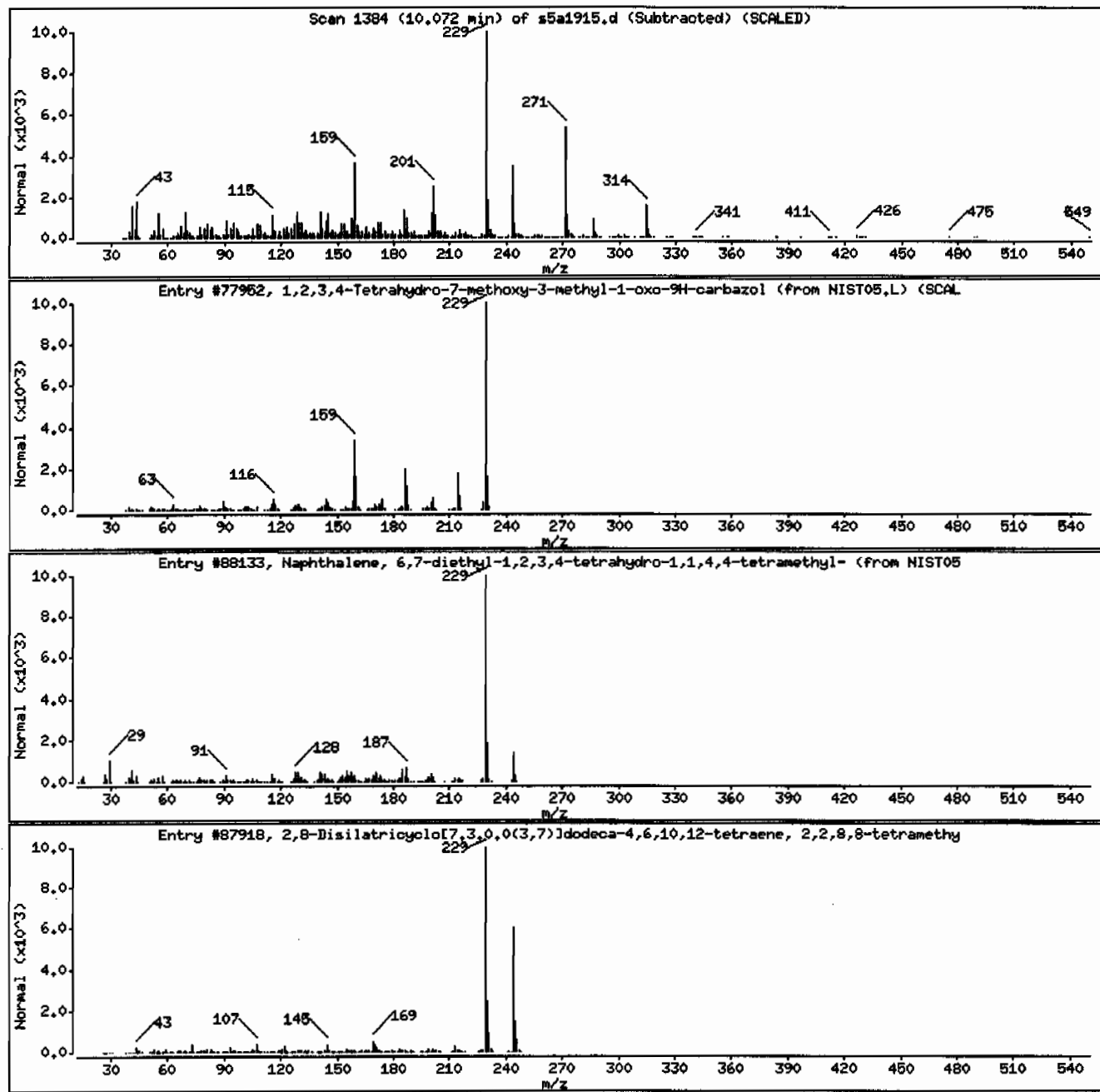
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-Naphthalene, 6,7-diethyl-1,2,3,4-tetrahy	32650-51-9	NIST05.L	77952	50	C ₁₄ H ₁₈ N ₀ O ₂	229
2,8-Bisilatricyclo[7,3,0,0(3,7)]dodeca-4	55741-10-1	NIST05.L	88133	42	C ₁₈ H ₂₈	244
	1000163-56-4	NIST05.L	87918	38	C ₁₄ H ₂₀ S ₁₂	244



Date: 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: HSD5.1

Sample Info: 1244626007194284011SVH11ILANL

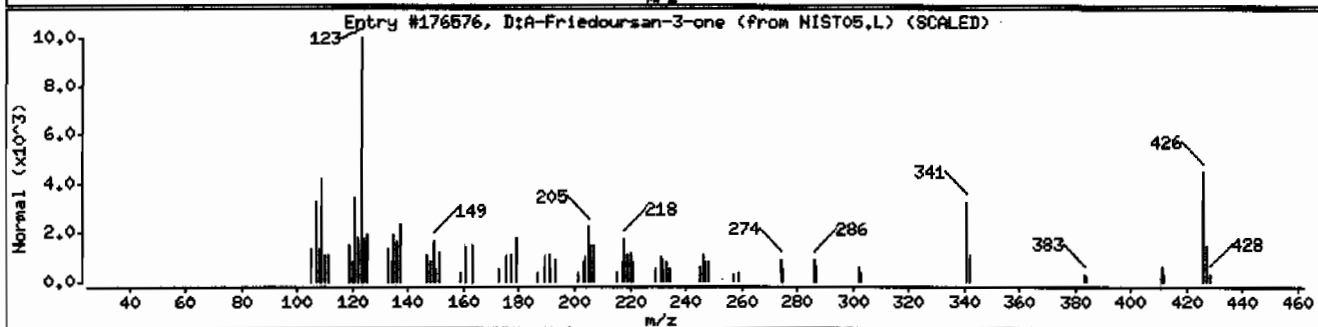
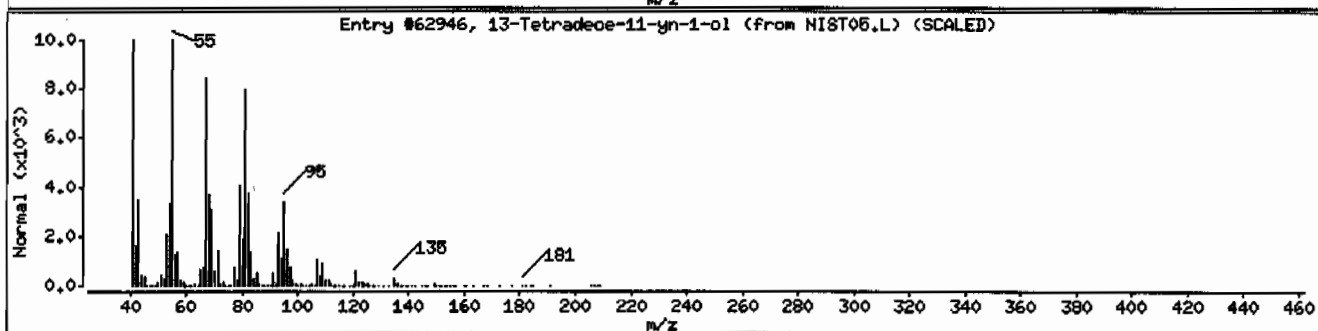
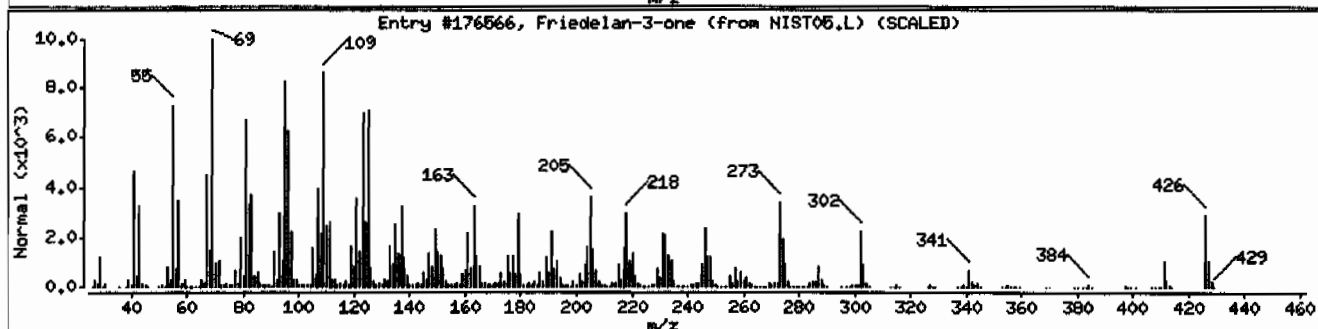
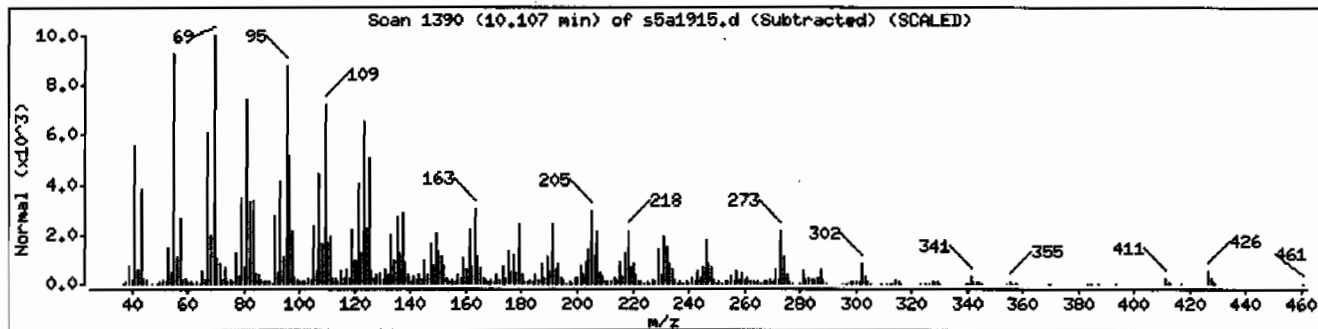
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	99	C30H50O	426
13-Tetradec-11-yn-1-ol	1000131-00-4	NIST05.L	62946	64	C14H24O	208
D:A-Friedoursan-3-one	89950-00-5	NIST05.L	176576	56	C30H50O	426



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: HSD5.1

Sample Info: 1244626007194284011SVMI1ILANL

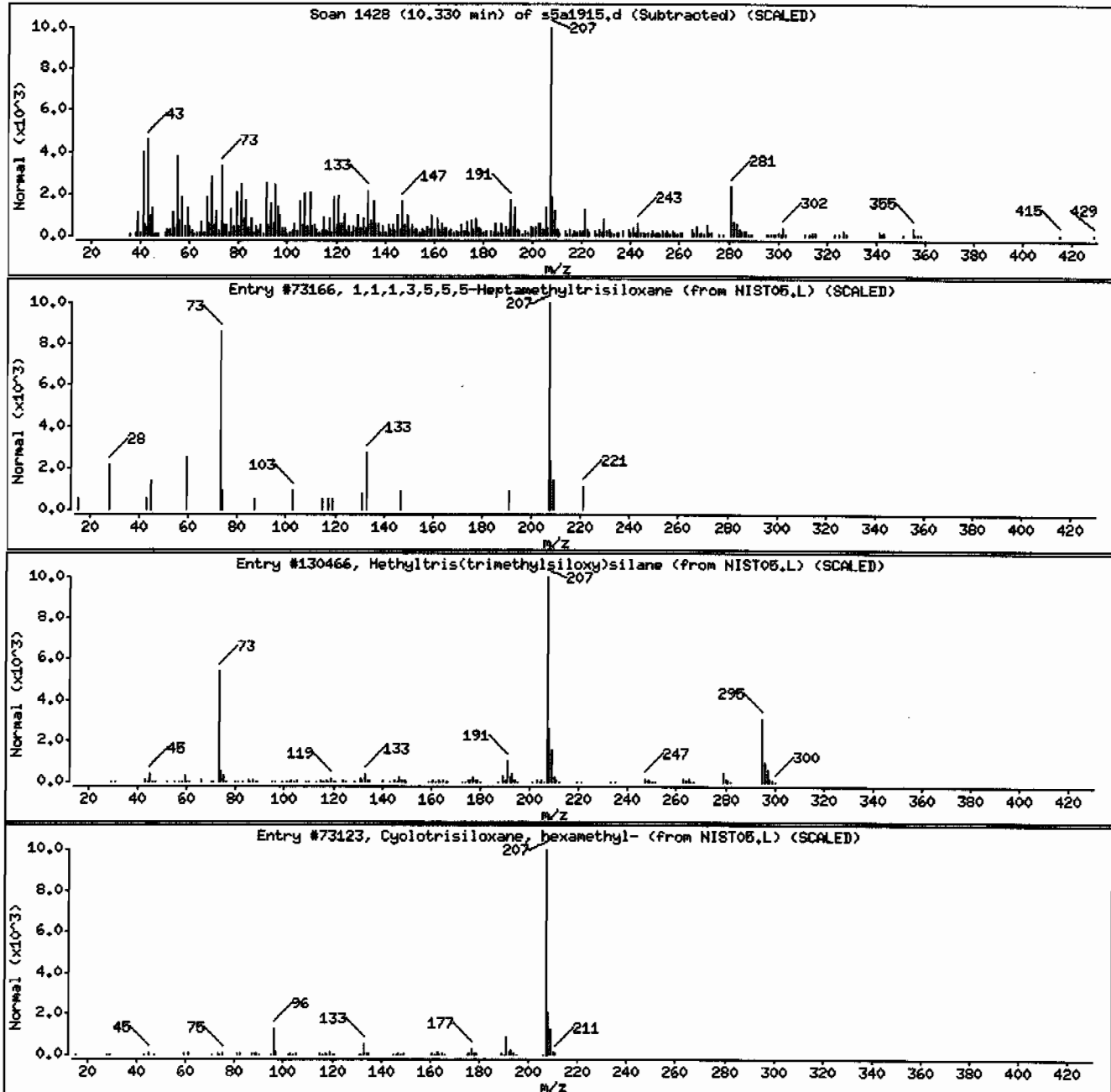
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	47	C ₇ H ₂₂ O ₂ Si ₃	222
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	38	C ₁₀ H ₃₀ O ₃ Si ₄	310
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	38	C ₆ H ₁₈ O ₃ Si ₃	222



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.1

Sample Info: 1244626007194284011SVH11LANL

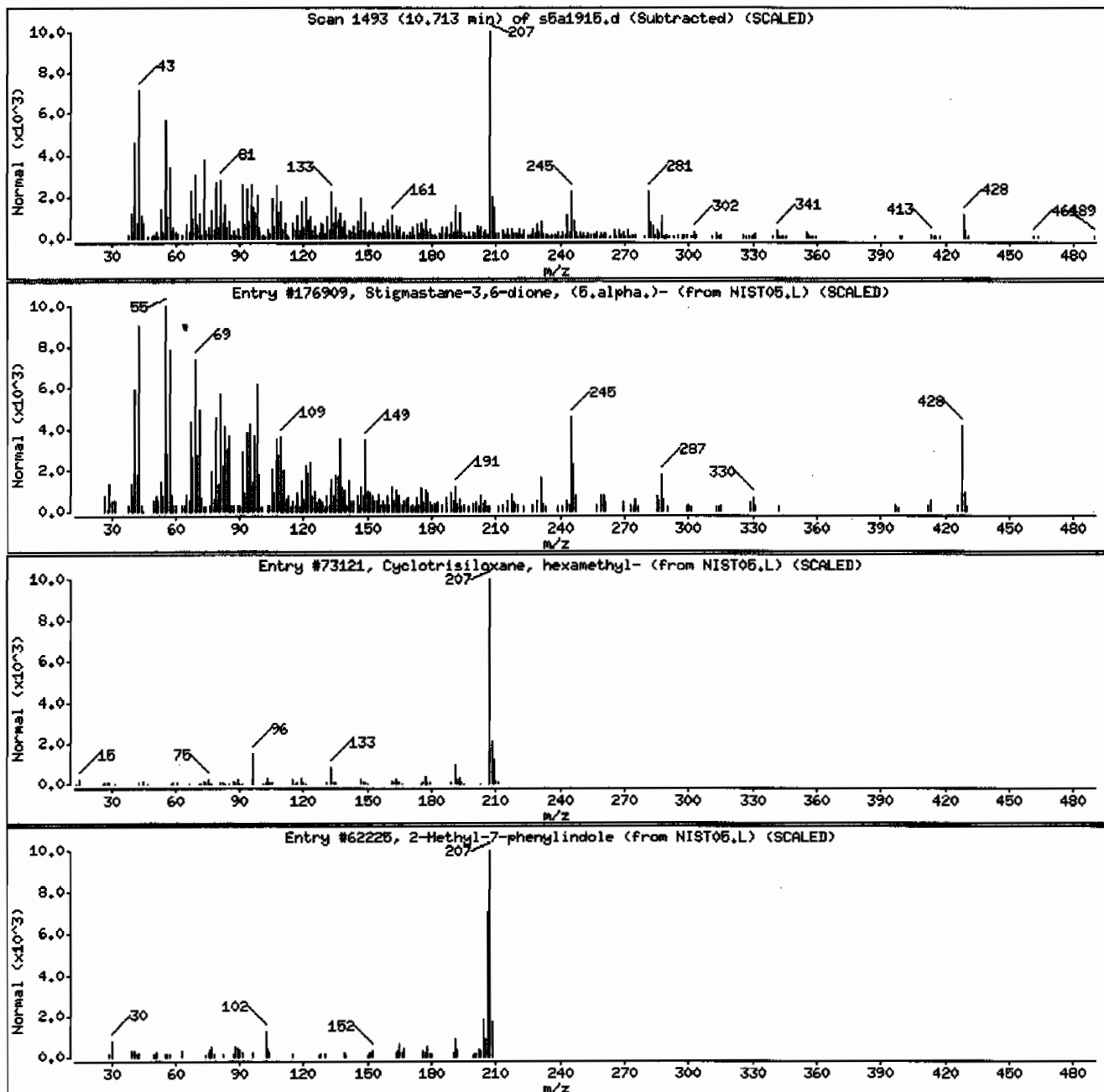
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-8MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stigmastane-3,6-dione, (6.alpha.)-	22149-69-5	NIST05.L	176909	43	C29H48O2	428
Cyclotrisiloxane, hexamethyl-	541-08-9	NIST05.L	73121	38	C6H18O3Si3	222
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	38	C15H13N	207



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7289

Instrument: HSD5.i

Sample Info: 1244626007194284011ISVH11ILANL

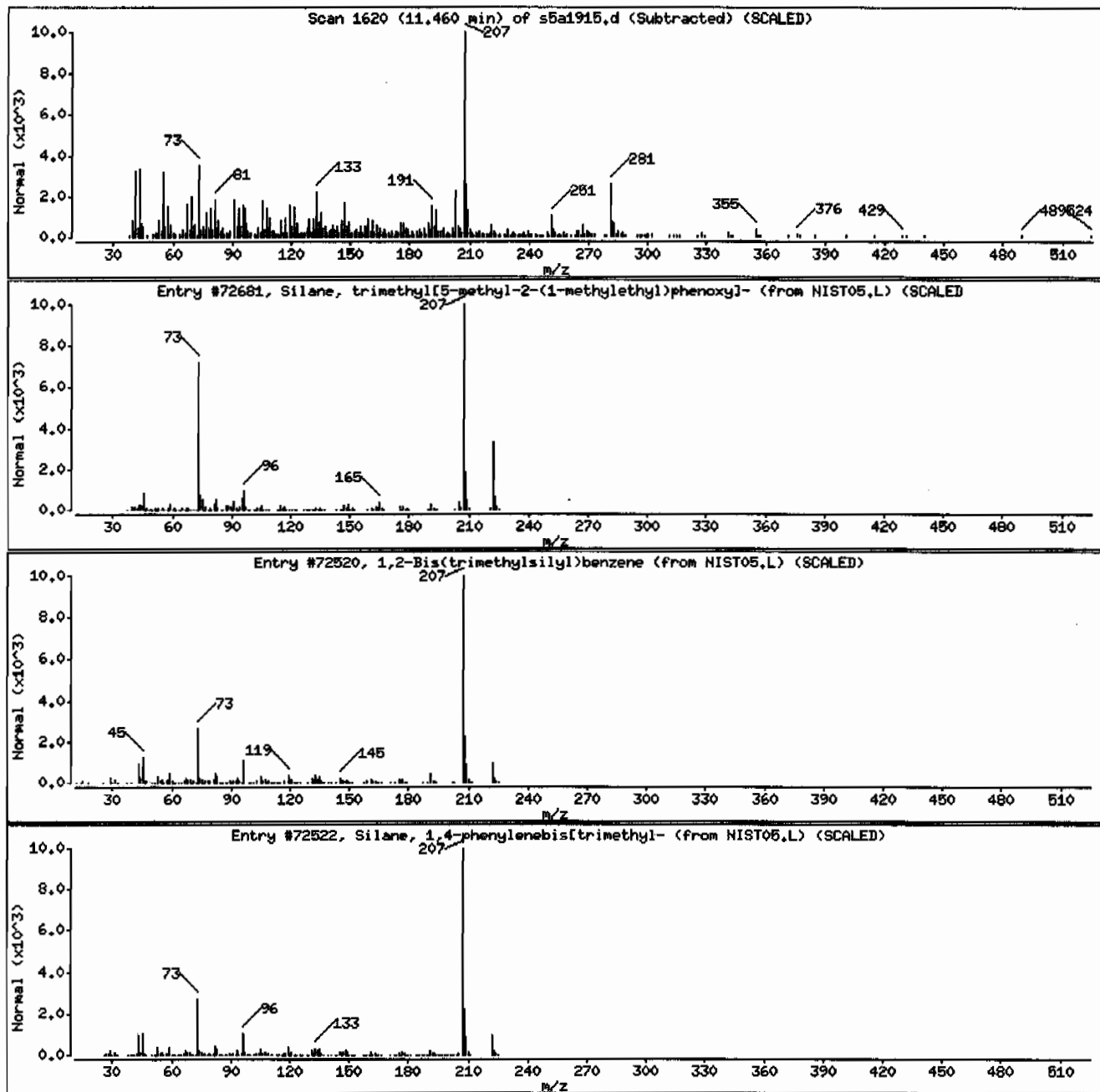
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, trimethyl[5-methyl-2-(1-methylethyl	55012-80-1	NIST05.L	72681	49	C13H22OSi	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	47	C12H22Si2	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	47	C12H22Si2	222



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.1

Sample Info: I244626007194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

1,1,1,3,5,5,5-Heptamethyltrisiloxane

CAS Number

Library

Entry

Quality

Formula

Weight

1873-88-7

NIST05.L

73166

50

C7H22O2Si3

222

Silane, trimethyl[5-methyl-2-(1-methylet

55012-80-1

NIST05.L

72681

49

C13H22OSi

222

Cyclotrisiloxane, hexamethyl-

541-05-9

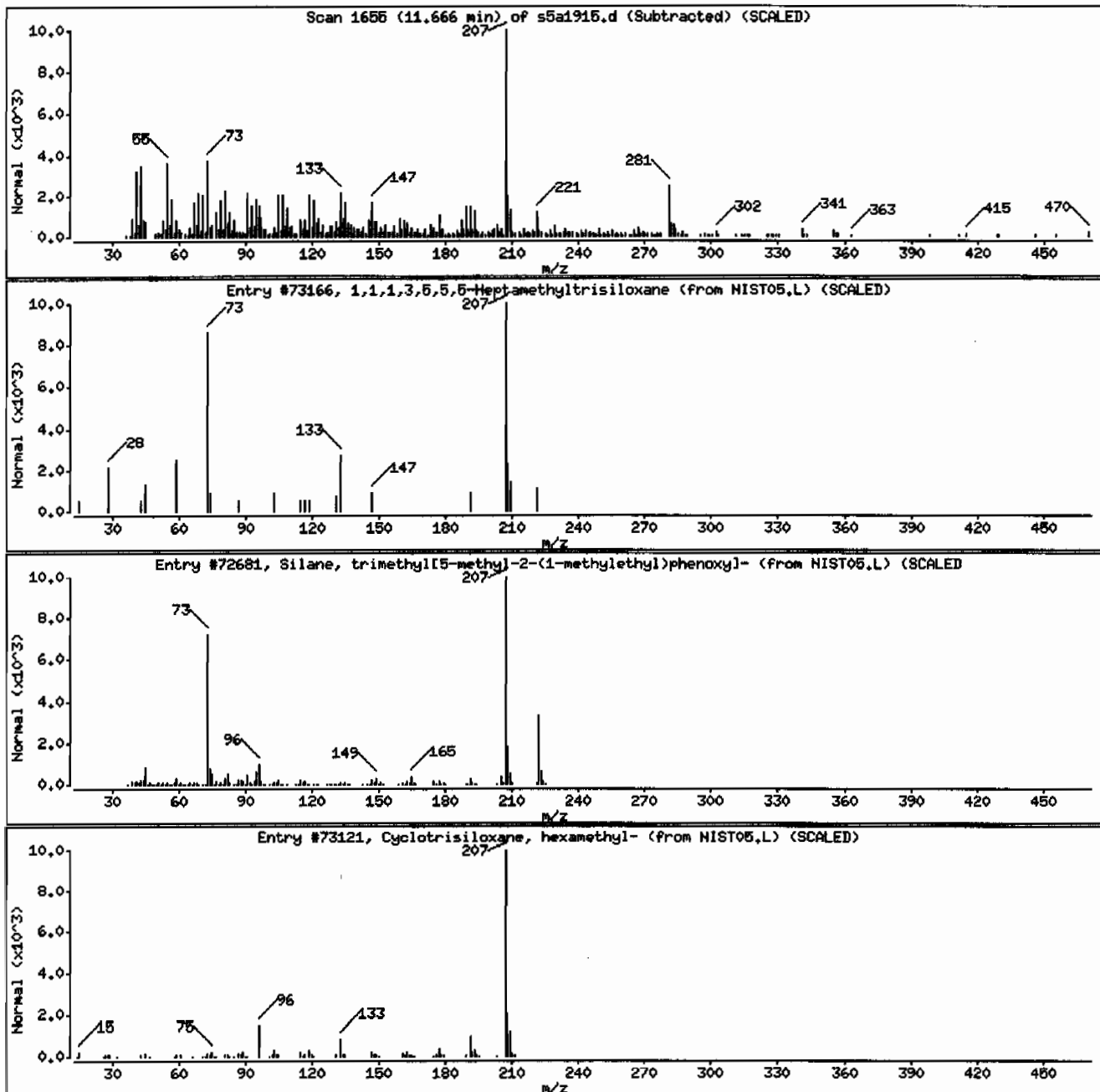
NIST05.L

73121

47

C6H18O3Si3

222



Date: 19-JAN-2010 15:42

Client ID: RE12-10-7289

Instrument: MSD5.i

Sample Info: 1244626007194284011SVH11ILANL

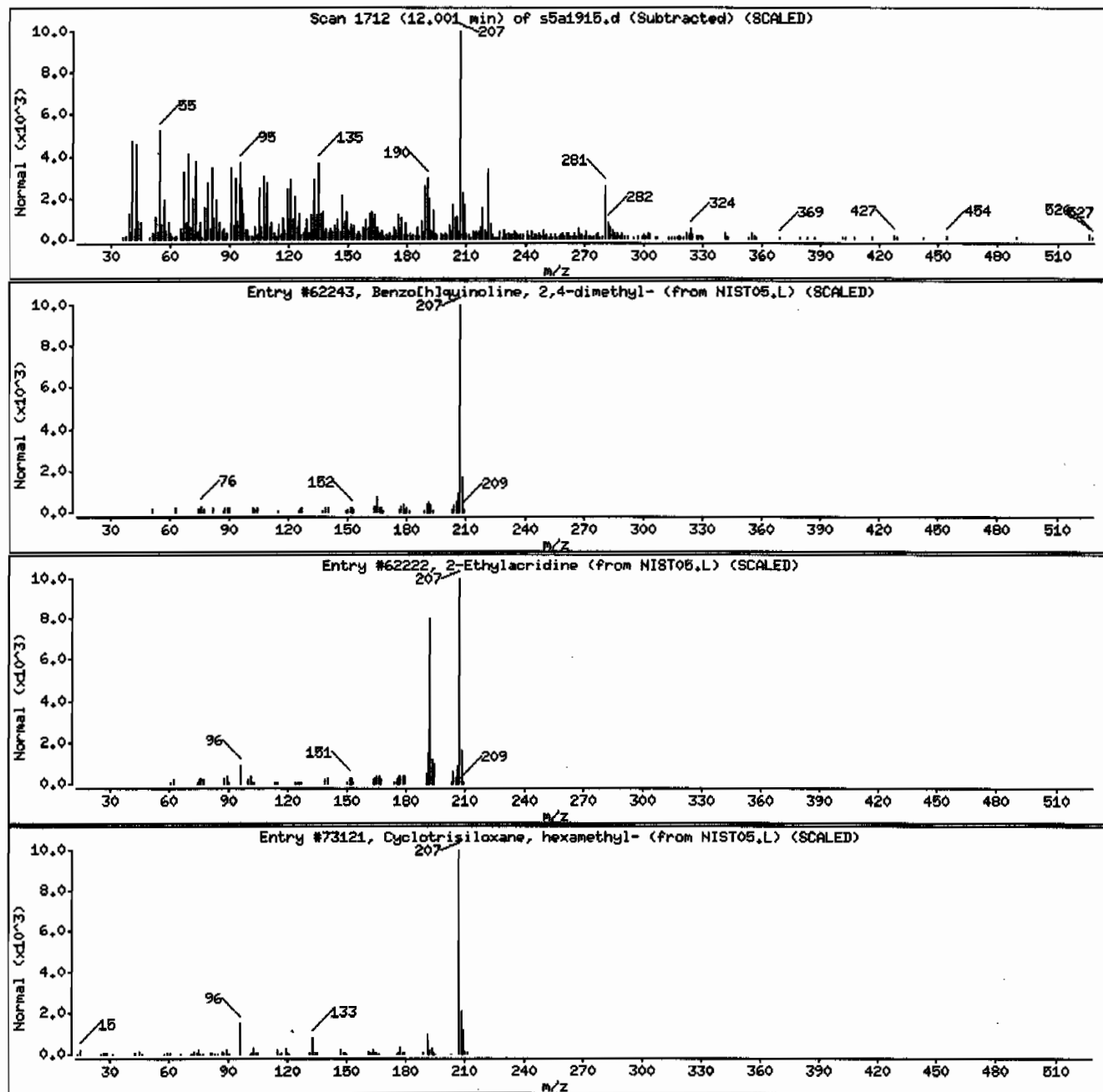
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	45	C18H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	43	C18H13N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C6H18OSi3	222



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.1

Sample Info: 1244626007194284011SVMI1ILANL

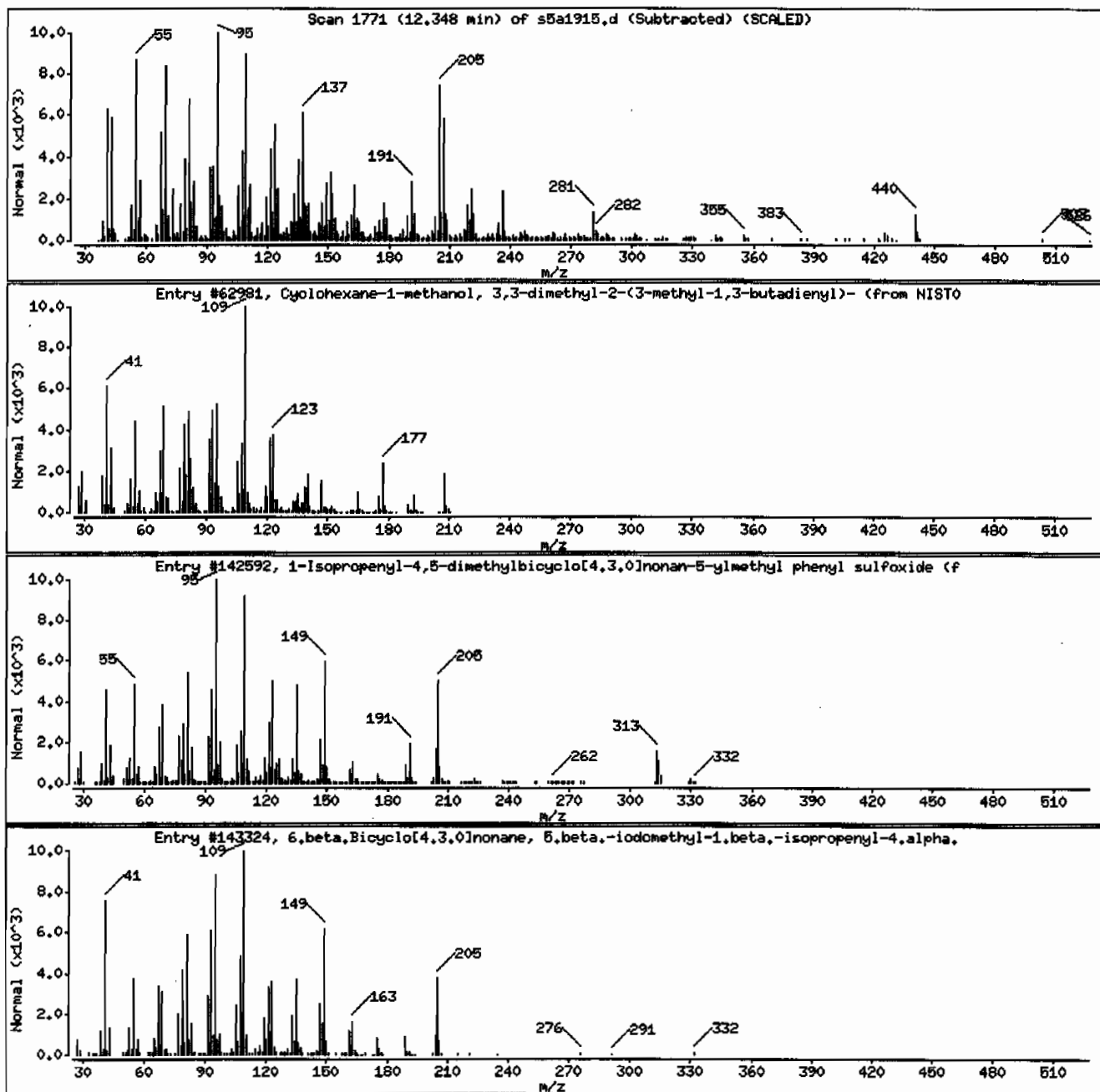
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane-1-methanol, 3,3-dimethyl-2-(	1000196-01-5	NIST05.L	62981	91	C14H24O	208
1-Isopropenyl-4,5-dimethylbicyclo[4.3.0]	1000195-85-4	NIST05.L	142592	60	C21H30OS	330
6.beta.Bicyclo[4.3.0]nonane, 5.beta.-iod	1000195-85-9	NIST05.L	143324	49	C15H26I	332



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: MSD5.i

Sample Info: 1244626007194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

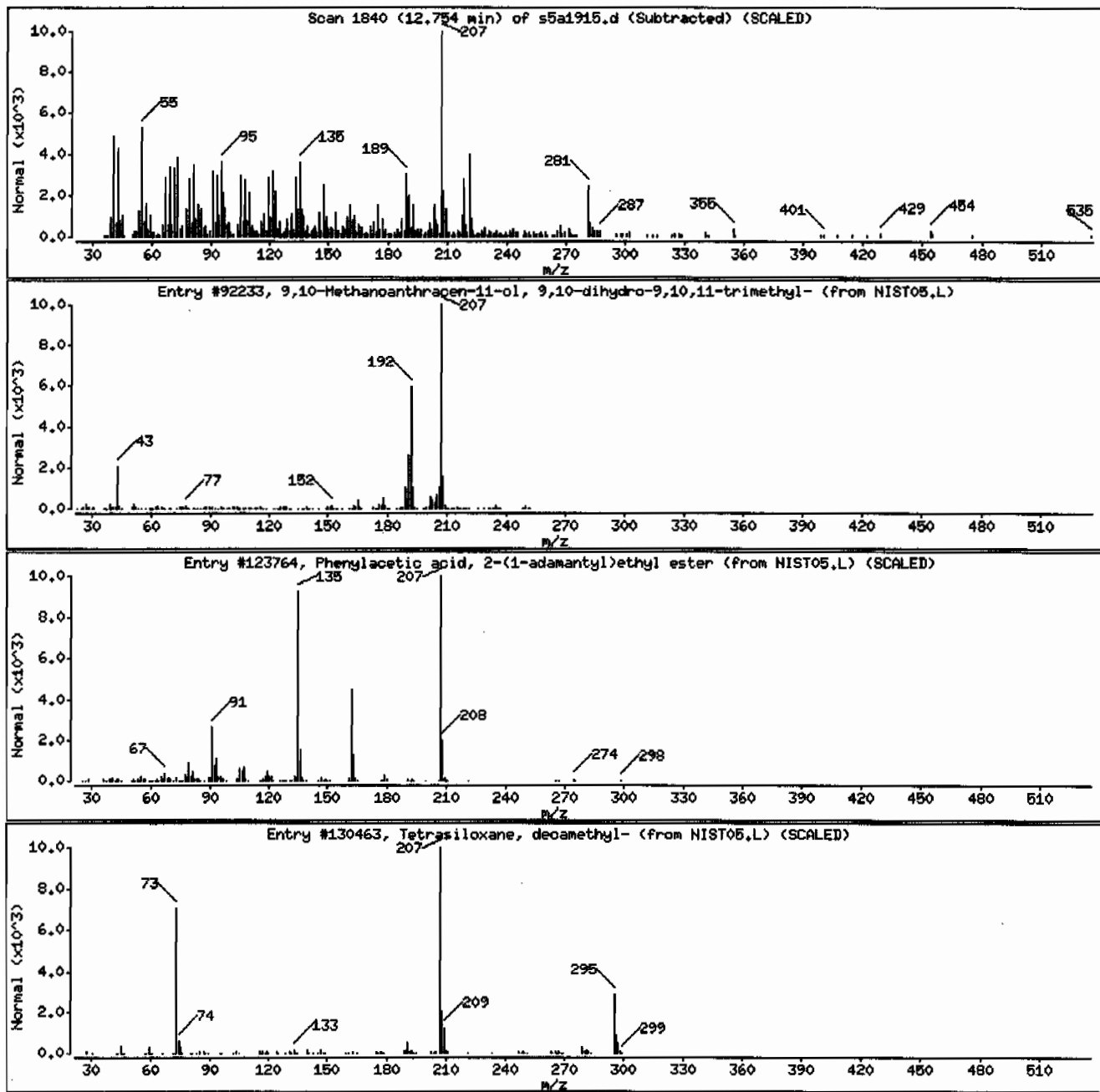
Unknown

9,10-Methanoanthracene-11-ol, 9,10-dihydro

Phenylacetic acid, 2-(1-adamantyl)ethyl

Tetrasiloxane, decamethyl-

CAS Number	Library	Entry	Quality	Formula	Weight
126615-74-5	NIST05.L	92233	27	C18H18O	250
1000282-91-2	NIST05.L	123764	27	C20H26O2	298
141-62-8	NIST05.L	130463	27	C10H30O3Si4	310



Date: 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: HSD5.i

Sample Info: 1244626007194284011ISVH11ILANL

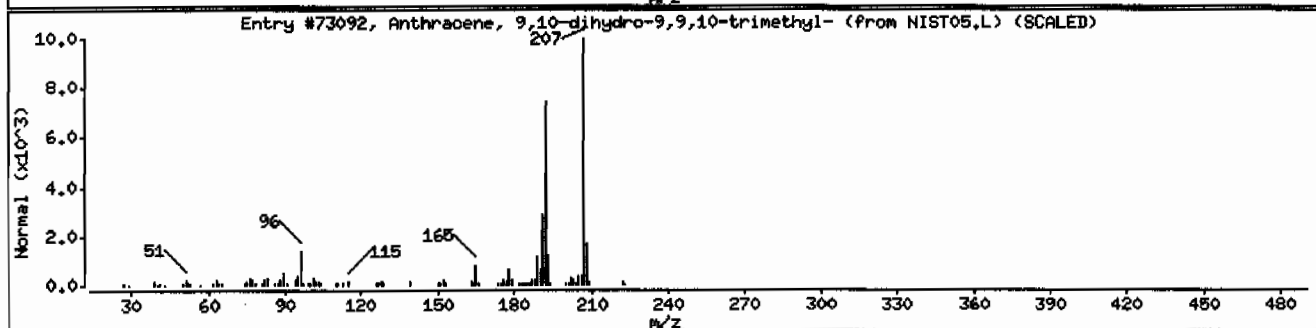
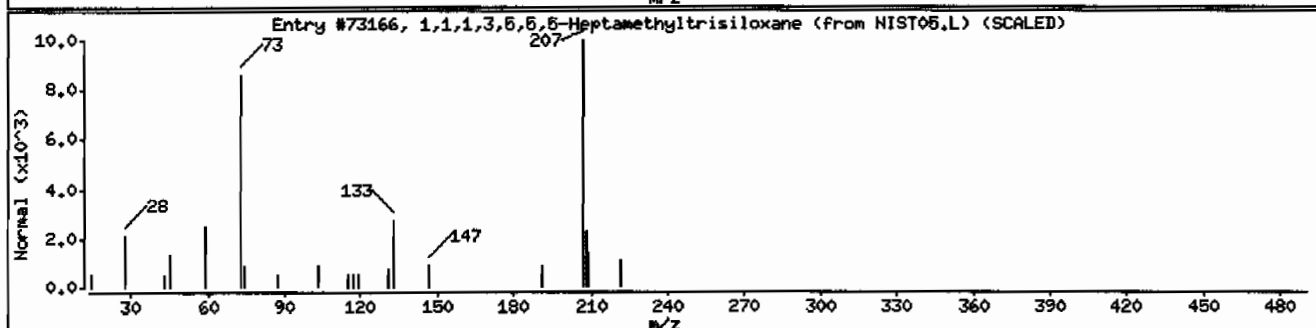
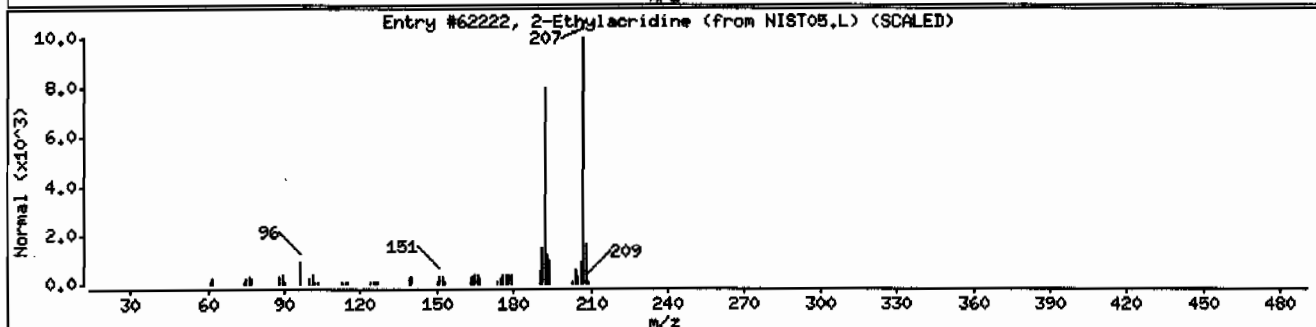
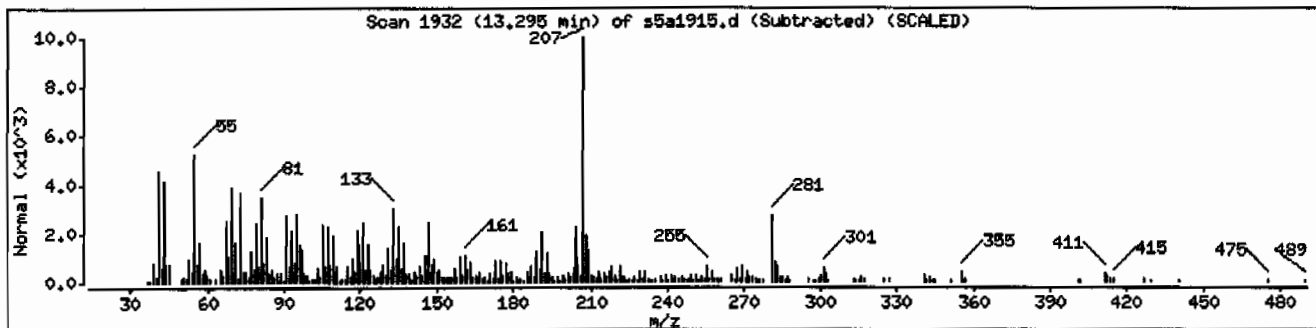
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55761-83-2	NIST05.L	62222	43	C15H13N	207
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C7H22O2Si3	222
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	41	C17H18	222



Date : 19-JAN-2010 15:42

Client ID: RE12-10-7259

Instrument: HSD5.i

Sample Info: 1244626007194284011SVH11ILANL

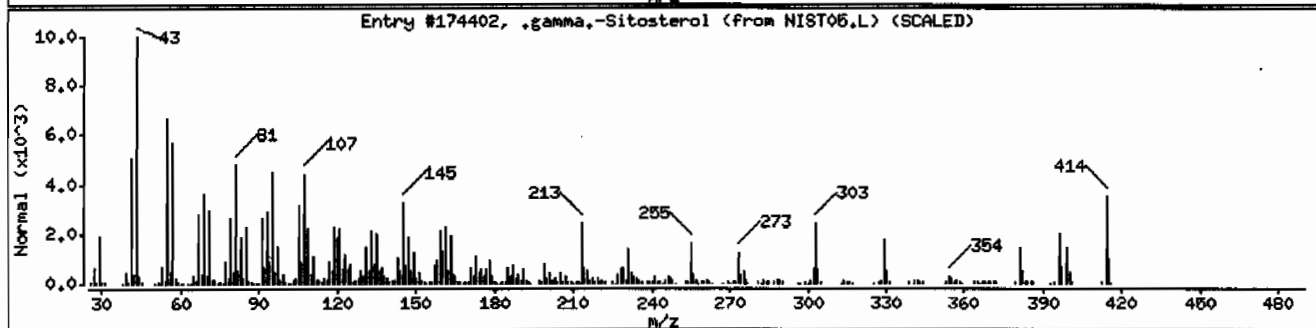
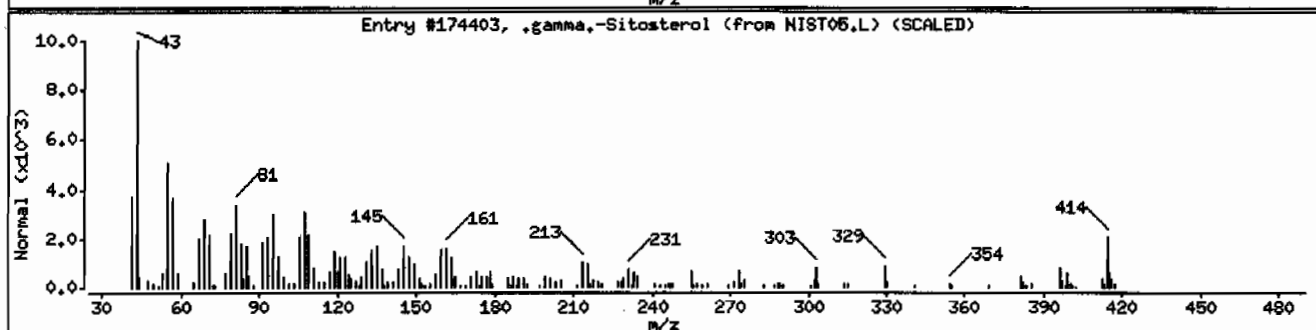
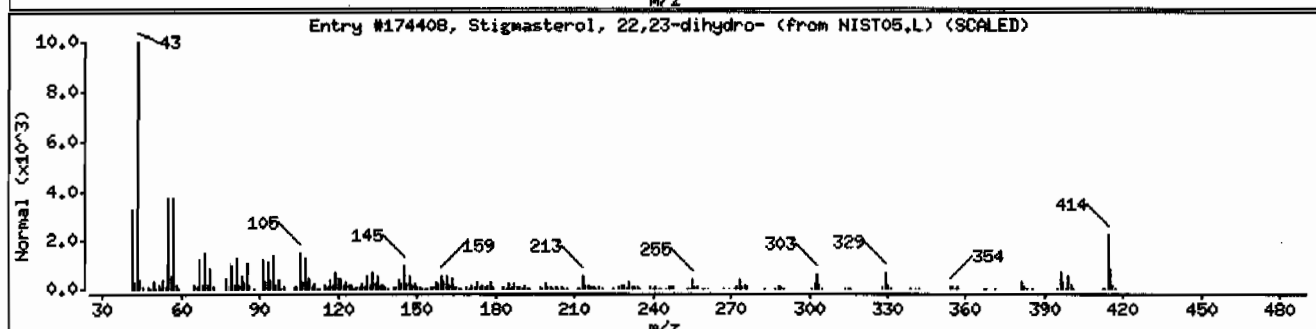
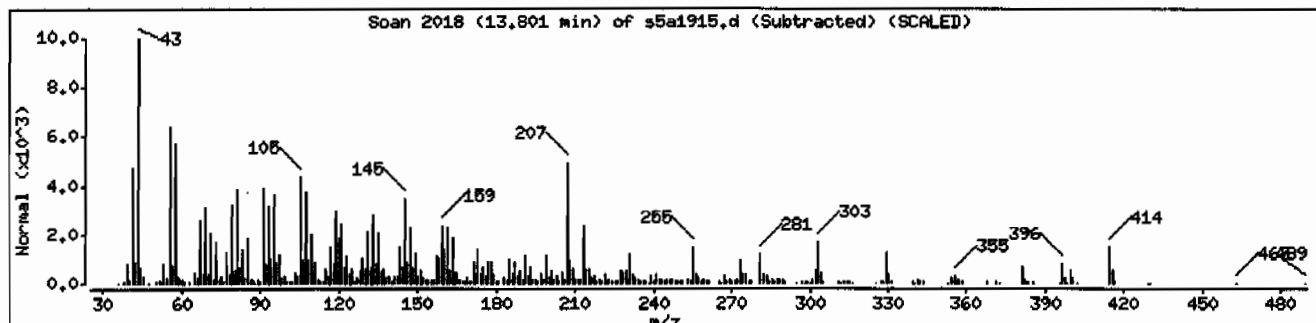
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	93	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	87	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	38	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1225
Lab Sample ID: 244626010

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7260
Batch ID: 942840
Run Date: 01/19/2010 16:51
Prep Date: 01/18/2010 20:10
Data File: s5a1918.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	415	ug/kg	83.1	415
108-95-2	Phenol	U	415	ug/kg	83.1	415
95-57-8	2-Chlorophenol	U	415	ug/kg	83.1	415
106-46-7	1,4-Dichlorobenzene	U	415	ug/kg	83.1	415
621-64-7	N-Nitrosodipropylamine	U	415	ug/kg	83.1	415
59-50-7	4-Chloro-3-methylphenol	U	415	ug/kg	83.1	415
83-32-9	Acenaphthene	U	41.5	ug/kg	13.7	41.5
121-14-2	2,4-Dinitrotoluene	U	415	ug/kg	41.5	415
100-02-7	4-Nitrophenol	U	415	ug/kg	137	415
87-86-5	Pentachlorophenol	U	415	ug/kg	104	415
129-00-0	Pyrene	U	41.5	ug/kg	12.5	41.5
110-86-1	Pyridine	U	415	ug/kg	83.1	415
62-53-3	Aniline	U	415	ug/kg	125	415
111-44-4	bis(2-Chloroethyl) ether	U	415	ug/kg	83.1	415
541-73-1	1,3-Dichlorobenzene	U	415	ug/kg	83.1	415
100-51-6	Benzyl alcohol	U	415	ug/kg	125	415
95-50-1	1,2-Dichlorobenzene	U	415	ug/kg	83.1	415
108-60-1	bis(2-Chloroisopropyl)ether	U	415	ug/kg	83.1	415
95-48-7	o-Cresol	U	415	ug/kg	83.1	415
65794-96-9	m,p-Cresols	U	415	ug/kg	125	415
67-72-1	Hexachloroethane	U	415	ug/kg	83.1	415
98-95-3	Nitrobenzene	U	415	ug/kg	83.1	415
78-59-1	Isophorone	U	415	ug/kg	83.1	415
88-75-5	2-Nitrophenol	U	415	ug/kg	83.1	415
105-67-9	2,4-Dimethylphenol	U	415	ug/kg	145	415
111-91-1	bis(2-Chloroethoxy)methane	U	415	ug/kg	83.1	415
120-83-2	2,4-Dichlorophenol	U	415	ug/kg	83.1	415
65-85-0	Benzoic acid	U	831	ug/kg	208	831
91-20-3	Naphthalene	U	41.5	ug/kg	12.5	41.5
106-47-8	4-Chloroaniline	U	415	ug/kg	83.1	415
87-68-3	Hexachlorobutadiene	U	415	ug/kg	83.1	415
91-57-6	2-Methylnaphthalene	U	41.5	ug/kg	8.31	41.5
77-47-4	Hexachlorocyclopentadiene	U	415	ug/kg	83.1	415
88-06-2	2,4,6-Trichlorophenol	U	415	ug/kg	83.1	415
95-95-4	2,4,5-Trichlorophenol	U	415	ug/kg	83.1	415
91-58-7	2-Chloronaphthalene	U	41.5	ug/kg	13.7	41.5
88-74-4	2-Nitroaniline	U	415	ug/kg	83.1	415
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	415	ug/kg	83.1	415

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

SDG Number: 10-1225
Lab Sample ID: 244626010

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7260
Batch ID: 942840
Run Date: 01/19/2010 16:51
Prep Date: 01/18/2010 20:10
Data File: s5a1918.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	415	ug/kg	83.1	415
606-20-2	2,6-Dinitrotoluene	U	415	ug/kg	41.5	415
208-96-8	Acenaphthylene	U	41.5	ug/kg	12.5	41.5
51-28-5	2,4-Dinitrophenol	U	831	ug/kg	158	831
132-64-9	Dibenzofuran	U	415	ug/kg	83.1	415
84-66-2	Diethylphthalate	U	415	ug/kg	83.1	415
86-73-7	Fluorene	U	41.5	ug/kg	12.5	41.5
7005-72-3	4-Chlorophenylphenylether	U	415	ug/kg	83.1	415
534-52-1	2-Methyl-4,6-dinitrophenol	U	415	ug/kg	83.1	415
100-01-6	4-Nitroaniline	U	415	ug/kg	125	415
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	415	ug/kg	83.1	415
122-66-7	Azobenzene	U	415	ug/kg	83.1	415
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	415	ug/kg	83.1	415
118-74-1	Hexachlorobenzene	U	415	ug/kg	83.1	415
85-01-8	Phenanthrene	U	41.5	ug/kg	12.5	41.5
120-12-7	Anthracene	U	41.5	ug/kg	8.31	41.5
84-74-2	Di-n-butylphthalate	U	415	ug/kg	83.1	415
206-44-0	Fluoranthene	U	41.5	ug/kg	12.5	41.5
85-68-7	Butylbenzylphthalate	U	415	ug/kg	83.1	415
56-55-3	Benzo(a)anthracene	U	41.5	ug/kg	12.5	41.5
91-94-1	3,3'-Dichlorobenzidine	U	415	ug/kg	125	415
218-01-9	Chrysene	U	41.5	ug/kg	12.5	41.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	415	ug/kg	83.1	415
117-84-0	Di-n-octylphthalate	U	415	ug/kg	83.1	415
205-99-2	Benzo(b)fluoranthene	U	41.5	ug/kg	12.5	41.5
207-08-9	Benzo(k)fluoranthene	U	41.5	ug/kg	12.5	41.5
50-32-8	Benzo(a)pyrene	U	41.5	ug/kg	12.5	41.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.5	ug/kg	12.5	41.5
53-70-3	Dibenzo(a,h)anthracene	U	41.5	ug/kg	12.5	41.5
191-24-2	Benzo(ghi)perylene	U	41.5	ug/kg	12.5	41.5
120-82-1	1,2,4-Trichlorobenzene	U	415	ug/kg	83.1	415

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	3.51	2580	ug/kg	97	NJ
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	5150	ug/kg	99	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626010

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 19.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7260
Batch ID: 942840
Run Date: 01/19/2010 16:51
Prep Date: 01/18/2010 20:10
Data File: s5a1918.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
77-53-2	Cedrol	6.57	2470	ug/kg	94	NJ
473-16-5	2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	6.7	919	ug/kg	96	NJ
4727-18-8	Cyclopentadecanone, 2-hydroxy-	8.25	908	ug/kg	95	NJ
	Unknown	8.39	1030	ug/kg		J
77899-03-7	1-Heneicosyl formate	8.77	1080	ug/kg	99	NJ
	Unknown	8.89	1240	ug/kg		J
	Unknown	8.92	2170	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	4950	ug/kg	99	NJ
	Unknown	9.05	3390	ug/kg		J
	Unknown	9.12	806	ug/kg		J
302-79-4	Retinoic acid	9.17	791	ug/kg	86	NJ
	Unknown	9.2	1020	ug/kg		J
	Unknown	9.23	1070	ug/kg		J
	Unknown	9.3	1060	ug/kg		J
	Unknown	9.35	757	ug/kg		J
	Unknown	9.39	789	ug/kg		J
6971-40-0	17-Pentatriacontene	9.42	1580	ug/kg	90	NJ
	Unknown	9.47	1030	ug/kg		J
	Unknown	9.51	1320	ug/kg		J
	Unknown	9.56	1170	ug/kg		J
	Unknown	9.6	1040	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.63	1110	ug/kg	93	NJ
	Unknown	9.77	1780	ug/kg		J
3772-56-3	2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.89	802	ug/kg	96	NJ
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	1460	ug/kg	95	NJ
	Unknown	10.08	1610	ug/kg		J
	Unknown	11.88	2680	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	2630	ug/kg	99	NJ

Data File: /chem/MSD5.i/s011910.b/s5a1918.d
Report Date: 20-Jan-2010 08:40

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1918.d
Lab Smp Id: 244626010 Client Smp ID: RE12-10-7260
Inj Date : 19-JAN-2010 16:51
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626010|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	19.87880	% 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	3.931	3.940 (1.000)	541424	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807 (1.000)	1864481	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063 (1.000)	1070798	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234 (1.000)	1954233	40.0000	
* 91 Chrysene-d12	240	9.648	9.646 (1.000)	1534925	40.0000	
* 98 Perylene-d12	264	11.336	11.331 (1.000)	867699	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121 (0.795)	877999	65.3891	2720
\$ 5 Phenol-d5	99	3.649	3.651 (0.928)	1061571	64.1079	2660
\$ 20 Nitrobenzene-d5	82	4.296	4.301 (0.895)	500562	34.9657	1450
\$ 39 2-Fluorobiphenyl	172	5.543	5.548 (0.915)	1012104	35.7302	1480
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661 (1.099)	291191	85.5591	3550
\$ 81 p-Terphenyl-d14	244	8.613	8.611 (0.893)	1087296	45.1138	1870

ION RATIO REPORT

SV REPORT

Data file: s5a1918.d

Report Date: 01/20/2010 07:07

Lab. ID: 244626010

SampleType: SAMPLE

Injection Date: 19-JAN-2010 16:51

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626010|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	330215	2.23	2.42	80-120	100	(T)
42	11405	2.23	2.42	69-129	3	(QT)
43	13120	2.22	2.42	13- 73	4	(QT)

4 Aniline				CAS#: 62-53-3		
66	59341	3.65	3.72	80-120	100	(T)
93	29267	3.61	3.72	210-270	49	(QT)

6 Phenol				CAS#: 108-95-2		
94	119577	3.51	3.66	80-120	100	(T)
66	23473	3.51	3.66	14- 74	20	(T)
65	94113	3.51	3.66	0- 30	79	(QT)

7 bis(2-Chloroethyl) ether				CAS#: 111-44-4		
63	31165	3.51	3.74	80-120	100	(T)
93	1170485	3.51	3.74	109-169	3756	(QT)
95	15584	3.51	3.74	6- 66	50	(T)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	70967	4.30	4.18	80-120	100	(T)
42	44548	4.30	4.18	44-104	63	(T)

22 Isophorone				CAS#: 78-59-1		
82	503427	4.30	4.47	80-120	100	(T)
138	307	4.31	4.47	0- 49	0	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
27 Benzoic acid			CAS#: 65-85-0			
105	15820	4.58	4.57	80-120	100	()
122	12864	4.54	4.57	39- 99	81	()
77	38961	4.57	4.57	34- 94	246	(Q)
<hr/>						
40 2-Chloronaphthalene			CAS#: 91-58-7			
162	13063	5.69	5.66	80-120	100	()
164	925	5.67	5.66	4- 64	7	()
127	1788	5.69	5.66	9- 69	14	()
<hr/>						
42 o-Nitroaniline			CAS#: 88-74-4			
65	19542	5.69	5.71	80-120	100	()
92	31505	5.69	5.71	31- 91	161	(Q)
138	826	5.68	5.71	70-130	4	(Q)
<hr/>						
41 m-Nitroaniline			CAS#: 99-09-2			
138	19881	5.80	6.01	80-120	100	(T)
92	302959	5.80	6.01	82-142	1524	(QT)
108	325108	5.80	6.01	0- 40	1635	(QT)
<hr/>						
43 Dimethylphthalate			CAS#: 131-11-3			
163	101293	5.80	5.82	80-120	100	()
164	12813	5.80	5.82	0- 40	13	()
<hr/>						
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	146230	6.06	5.88	80-120	100	(T)
63	4799	6.06	5.88	61-121	3	(QT)
<hr/>						
48 2,4-Dinitrophenol			CAS#: 51-28-5			
184	287	6.05	6.08	80-120	100	()
154	4370	6.06	6.09	1306-1366	1519	(Q)
<hr/>						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	146230	6.06	6.17	80-120	100	(T)
89	2885	6.06	6.17	47-107	2	(QT)
63	4181	6.06	6.17	23- 83	3	(QT)
<hr/>						
51 Diethylphthalate			CAS#: 84-66-2			
149	181746	6.57	6.33	80-120	100	(T)
177	46176	6.57	6.33	0- 53	25	(T)
150	642838	6.57	6.33	0- 43	354	(QT)
<hr/>						
52 4-Nitrophenol			CAS#: 100-02-7			
139	1120	6.11	6.10	80-120	100	()
109	6698	6.11	6.10	41-101	598	(Q)
65	40379	6.11	6.10	72-132	3603	(Q)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	34986	6.57	6.47	80-120	100	(T)
165	92269	6.57	6.47	56-116	264	(QT)
167	7240	6.57	6.47	0- 44	21	(T)

54 4-Chlorophenylphenylether		CAS#: 7005-72-3				
204	45445	6.59	6.45	80-120	100	(T)
141	1776	6.57	6.45	25- 85	4	(QT)
206	1363	6.59	6.45	3- 63	3	(QT)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	293	6.55	6.49	80-120	100	(T)
105	151003	6.57	6.49	12- 72	51415	(QT)
51	24426	6.57	6.49	42-102	8317	(QT)

56 p-Nitroaniline		CAS#: 100-01-6				
138	17120	6.57	6.47	80-120	100	(T)
108	175133	6.57	6.47	45-105	1023	(QT)
92	49046	6.57	6.47	18- 78	286	(QT)

58 1,2-Diphenylhydrazine		CAS#: 122-66-7				
77	172757	6.57	6.57	80-120	100	()
105	156408	6.57	6.57	0- 47	91	(Q)
182	720	6.57	6.57	0- 57	0	()

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	20021	6.66	6.84	80-120	100	(T)
141	126466	6.65	6.83	43-103	632	(QT)
250	39477	6.66	6.84	68-128	197	(QT)

79 Pyrene		CAS#: 129-00-0				
202	20298	8.62	8.51	80-120	100	(T)
200	36900	8.62	8.51	0- 50	182	(QT)
101	3830	8.62	8.51	0- 44	19	(T)

85 Butylbenzylphthalate		CAS#: 85-68-7				
149	44491	9.04	9.04	80-120	100	()
91	202901	9.04	9.04	41-101	456	(Q)
206	4118	9.05	9.04	0- 52	9	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	15678	9.65	9.63	80-120	100	()
226	2222	9.67	9.63	0- 57	14	()
229	78751	9.63	9.63	0- 50	502	(Q)

92 Chrysene		CAS#: 218-01-9				
228	11998	9.51	9.67	80-120	100	(T)
229	19182	9.48	9.67	0- 51	160	(QT)
226	5862	9.50	9.67	0- 60	49	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	1811	13.11	13.12	80-120	100	()
138	5657	13.17	13.12	1- 61	312	(Q)

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	294	13.13	13.13	80-120	100	()
139	7120	13.16	13.12	0- 30	2419	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1918.d
Lab Smp Id: 244626010 Client Smp ID: RE12-10-7260
Inj Date : 19-JAN-2010 16:51
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626010|942840|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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	30.05000	weight of sample
M	19.87880	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3321899	40.000
* 46 Acenaphthene-d10	6.060	5843420	40.000
* 67 Phenanthrene-d10	7.231	6004870	40.000
* 91 Chrysene-d12	9.648	7648861	40.000
* 98 Perylene-d12	11.336	3047101	40.000

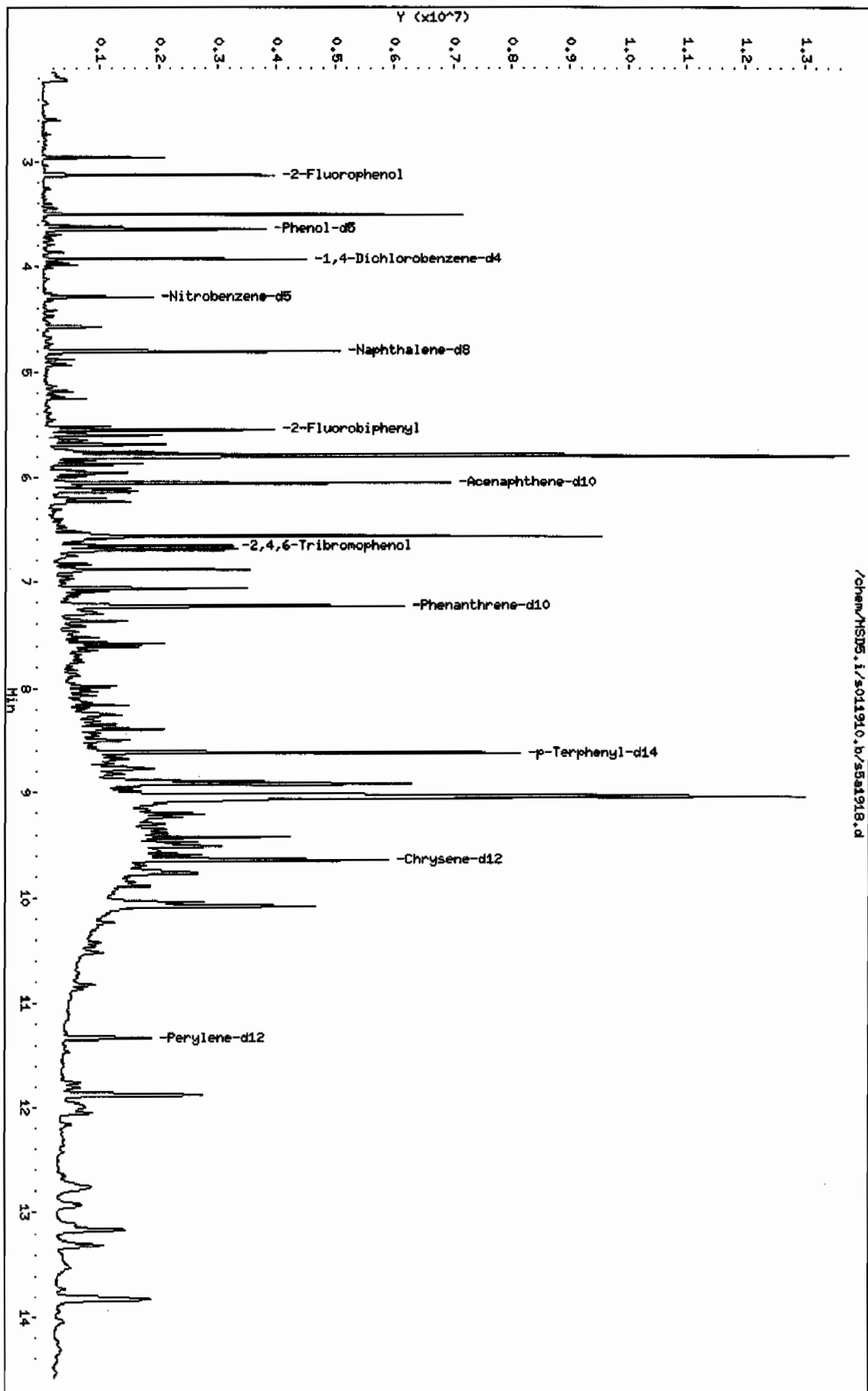
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.507	5164261	62.1844261	2580	97	NIST05.L	15188	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.795	18120480	124.040233	5150	99	NIST05.L	60024	46
Cedrol					CAS #: 77-53-2		
6.572	8677594	59.4007882	2470	94	NIST05.L	72884	46
2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a					CAS #: 473-16-5		
6.695	3320824	22.1208702	919	96	NIST05.L	73025	67
Cyclopentadecanone, 2-hydroxy-					CAS #: 4727-18-8		
8.248	3281165	21.8566919	908	95	NIST05.L	85349	67
Unknown					CAS #:		
8.389	3731431	24.8560256	1030	0		0	67
1-Heneicosyl formate					CAS #: 77899-03-7		
8.766	4954978	25.9122370	1080	99	NIST05.L	147938	91
Unknown					CAS #:		
8.889	5720008	29.9129898	1240	0		0	91
Unknown					CAS #:		
8.919	9970405	52.1406011	2160	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
9.036	22811317	119.292620	4950	99	NIST05.L	116239	91
Unknown					CAS #:		
9.054	15587511	81.5154636	3380	0		0	91
Unknown					CAS #:		
9.119	3712082	19.4124701	806	0		0	91
Retinoic acid					CAS #: 302-79-4		
9.166	3641395	19.0428065	791	86	NIST05.L	125004	91
Unknown					CAS #:		
9.201	4686872	24.5101669	1020	0		0	91
Unknown					CAS #:		
9.231	4920389	25.7313527	1070	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
9.301	4893086	25.5885728	1060	0		0	91
Unknown					CAS #:		
9.348	3484938	18.2246139	757	0		0	91
Unknown					CAS #:		
9.389	3631092	18.9889279	789	0		0	91
17-Pentatriacontene					CAS #: 6971-40-0		
9.425	7255969	37.9453578	1580	90	NIST05.L	183898	91
Unknown					CAS #:		
9.472	4730095	24.7362073	1030	0		0	91
Unknown					CAS #:		
9.513	6058836	31.6849031	1320	0		0	91
Unknown					CAS #:		
9.560	5381541	28.1429689	1170	0		0	91
Unknown					CAS #:		
9.595	4800903	25.1064966	1040	0		0	91
Podocarpa-8,11,13-trien-3-one, 14-isopro					CAS #: 18326-16-4		
9.631	5113218	26.7397617	1110	93	NIST05.L	133599	91
Unknown					CAS #:		
9.772	8194130	42.8515056	1780	0		0	91
2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10					CAS #: 3772-56-3		
9.889	3690302	19.2985722	802	96	NIST05.L	126180	91
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he					CAS #: 511-05-7		
10.042	6744017	35.2680852	1460	95	NIST05.L	125029	91
Unknown					CAS #:		
10.083	7431889	38.8653391	1610	0		0	91
Unknown					CAS #:		
11.883	4918132	64.5614456	2680	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.824	4821000	63.2863758	2630	99	NIST05.L	174402	98

Data File: /chem/MSDS.i/s011910.b/s011918.d
 Date: 19-JAN-2010 16:51
 Client ID: RE12-10-7260
 Sample Info: 124626010194284011SVH11.LANL
 Volume Injected (uL): 0.5
 Column phase: JMW DB-SMS

Instrument: MSD5.1
 Operator: RMB
 Column diameter: 0.20



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVMI11LANL

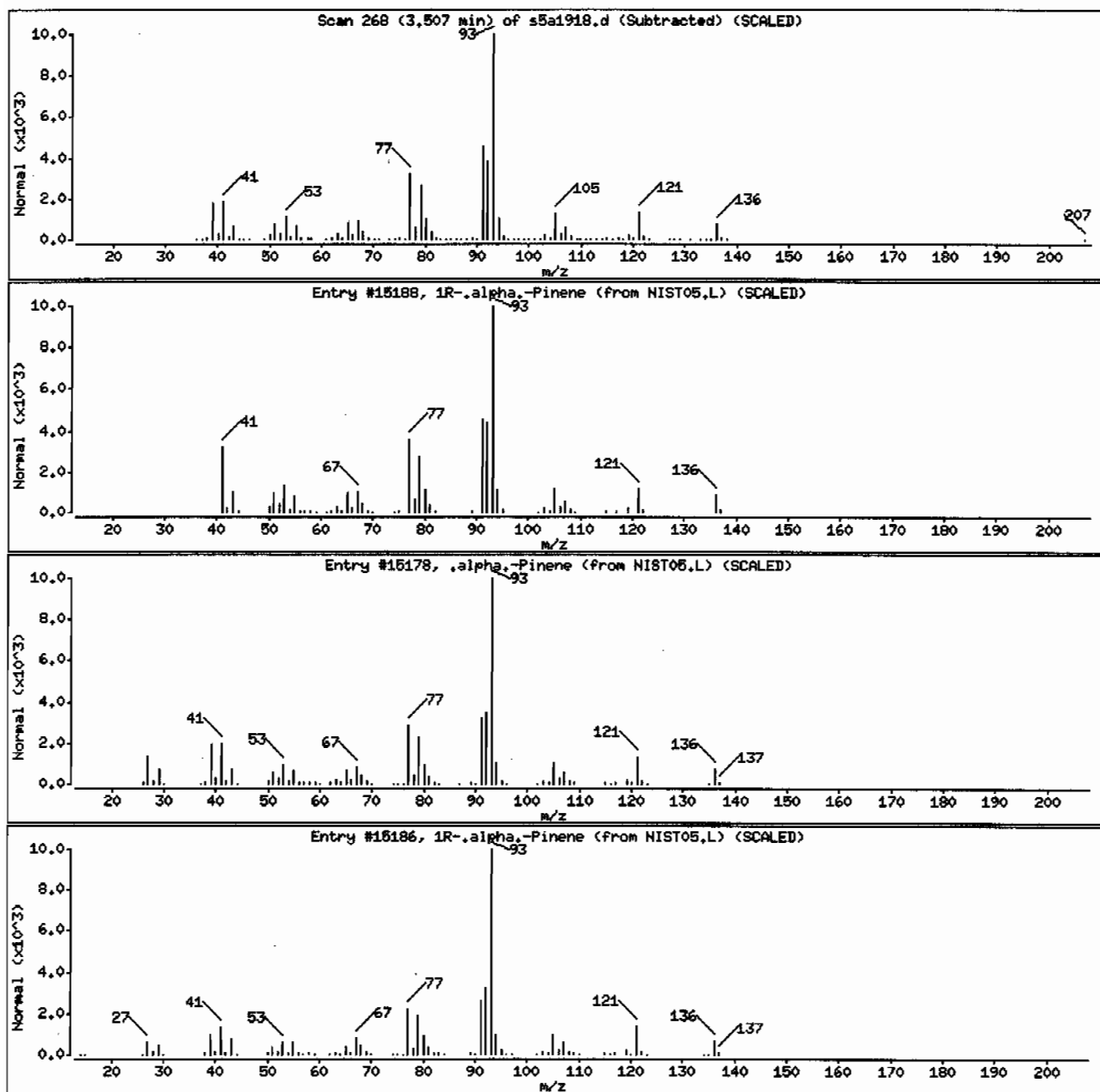
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7786-70-8	NIST05.L	15188	97	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136
1R-.alpha.-Pinene	7786-70-8	NIST05.L	15186	96	C10H16	136



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH111LANL

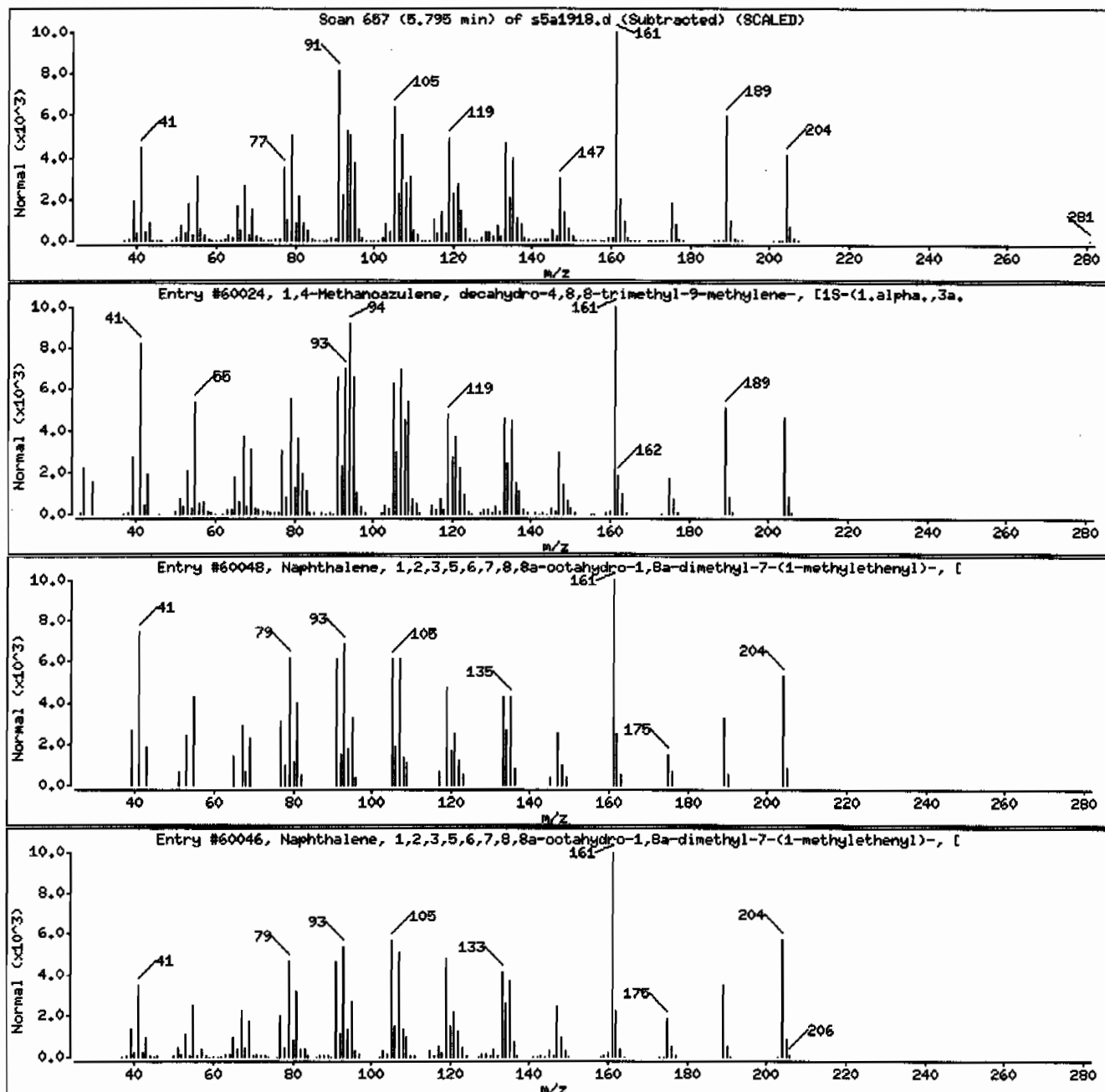
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60048	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	97	C15H24	204



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011ISVH11ILANL

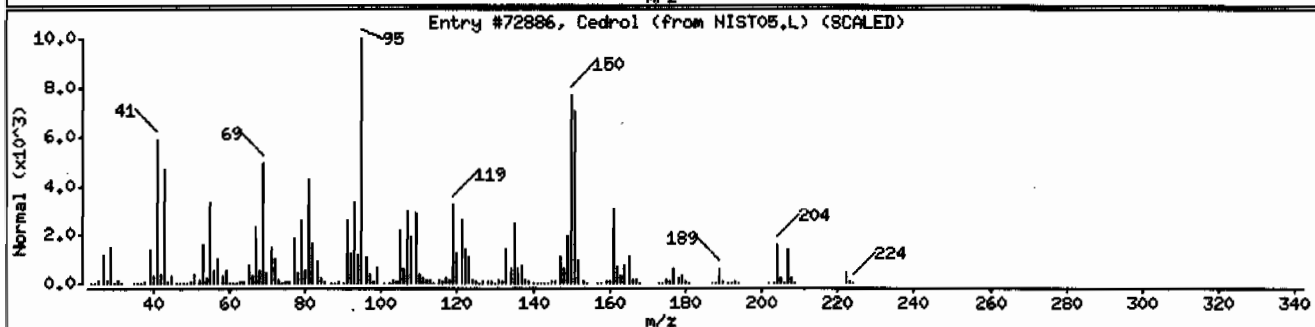
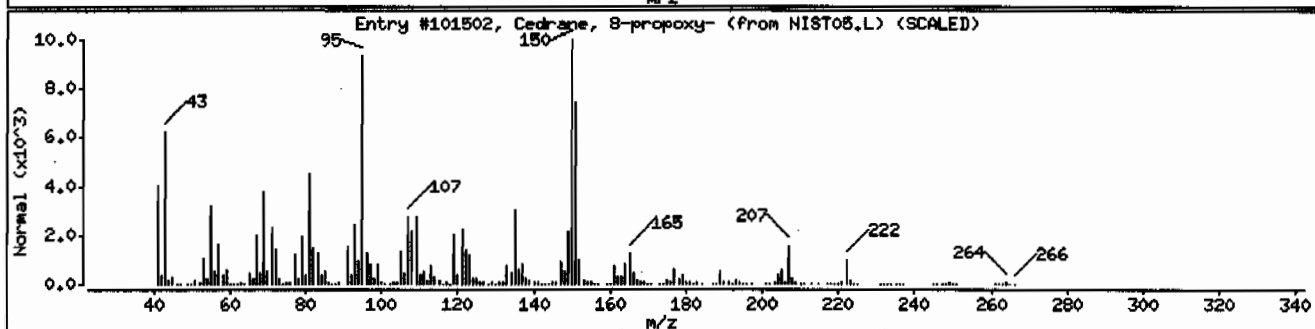
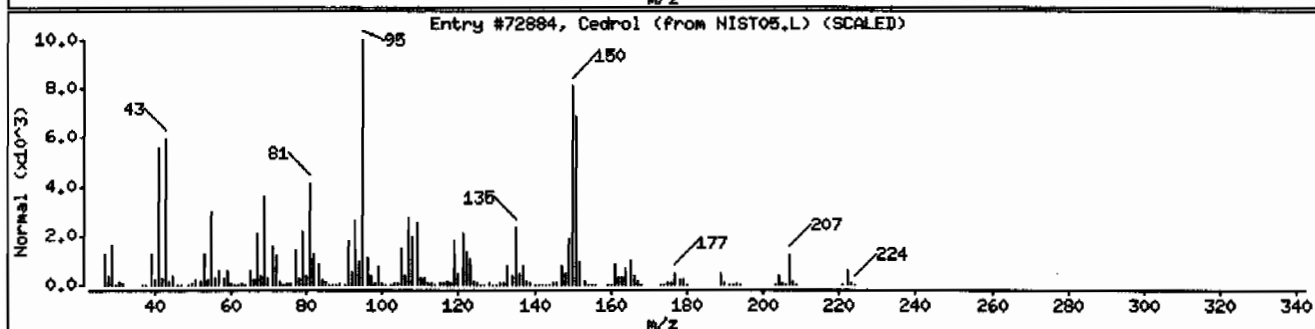
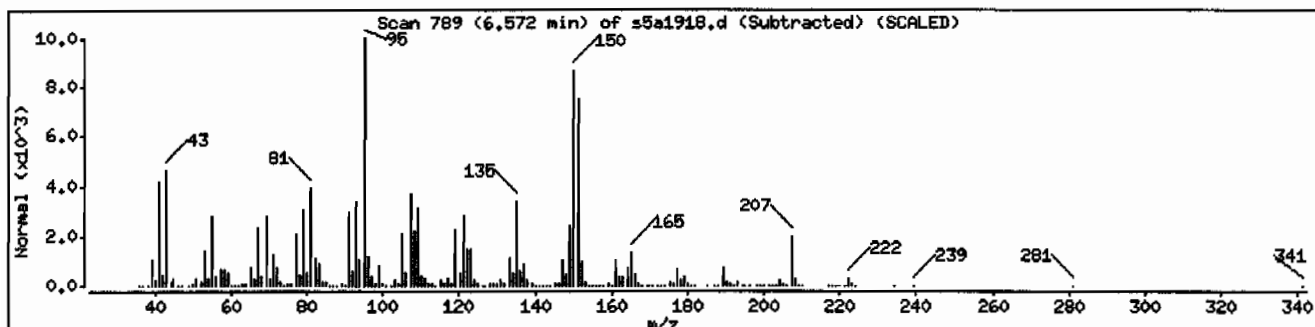
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72884	94	C ₁₅ H ₂₆ O	222
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	91	C ₁₈ H ₃₂ O	264
Cedrol	77-53-2	NIST05.L	72886	91	C ₁₅ H ₂₆ O	222



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.1

Sample Info: 1244626010194284011SVH111LANL

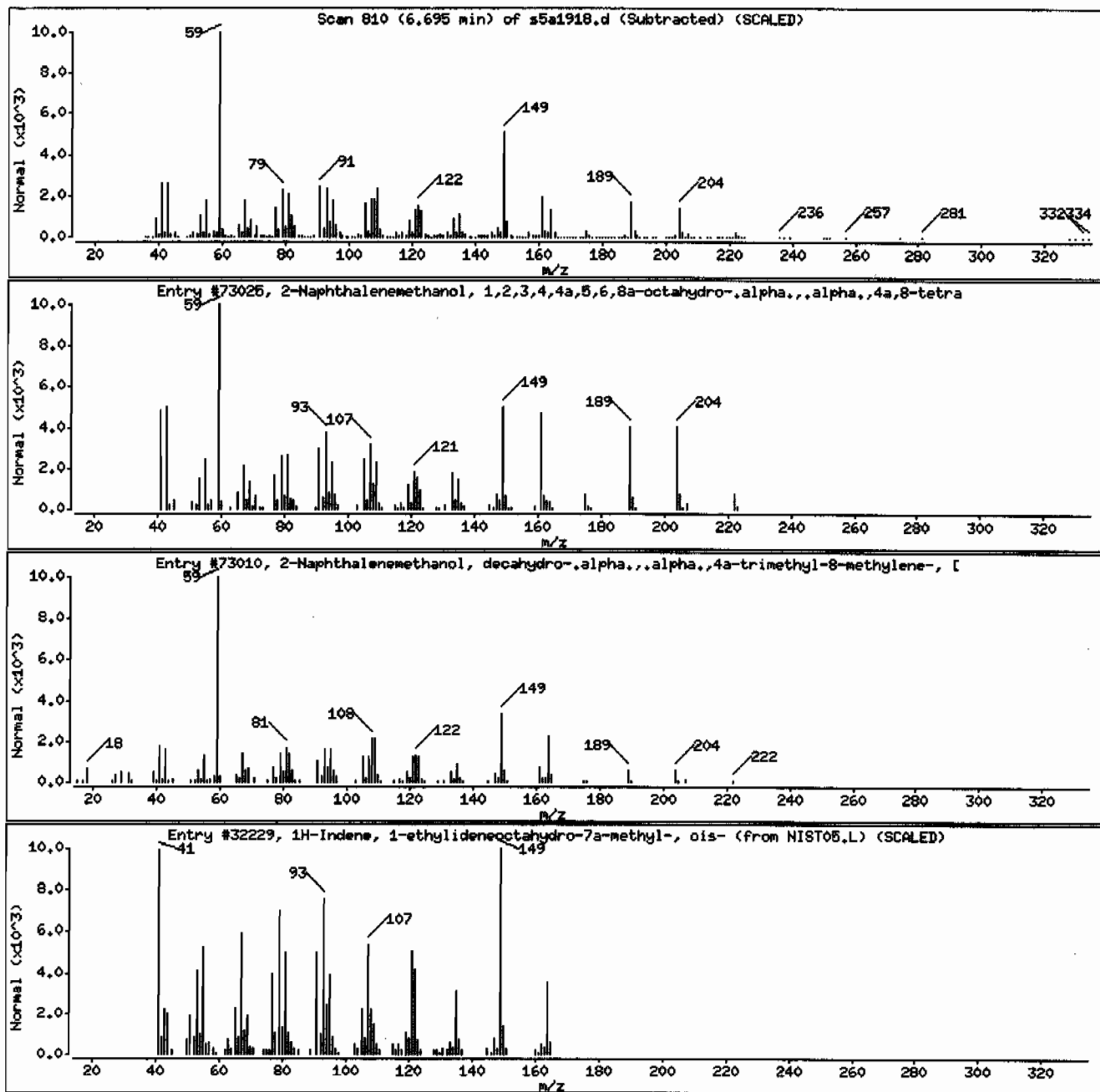
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	473-16-5	NIST05.L	73025	96	C15H26O	222
2-Naphthalenemethanol, decahydro-.alpha.	473-15-4	NIST05.L	73010	90	C15H26O	222
1H-Indene, 1-ethylideneoctahydro-7a-meth	56362-87-9	NIST05.L	32229	90	C12H20	164



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11ILANL

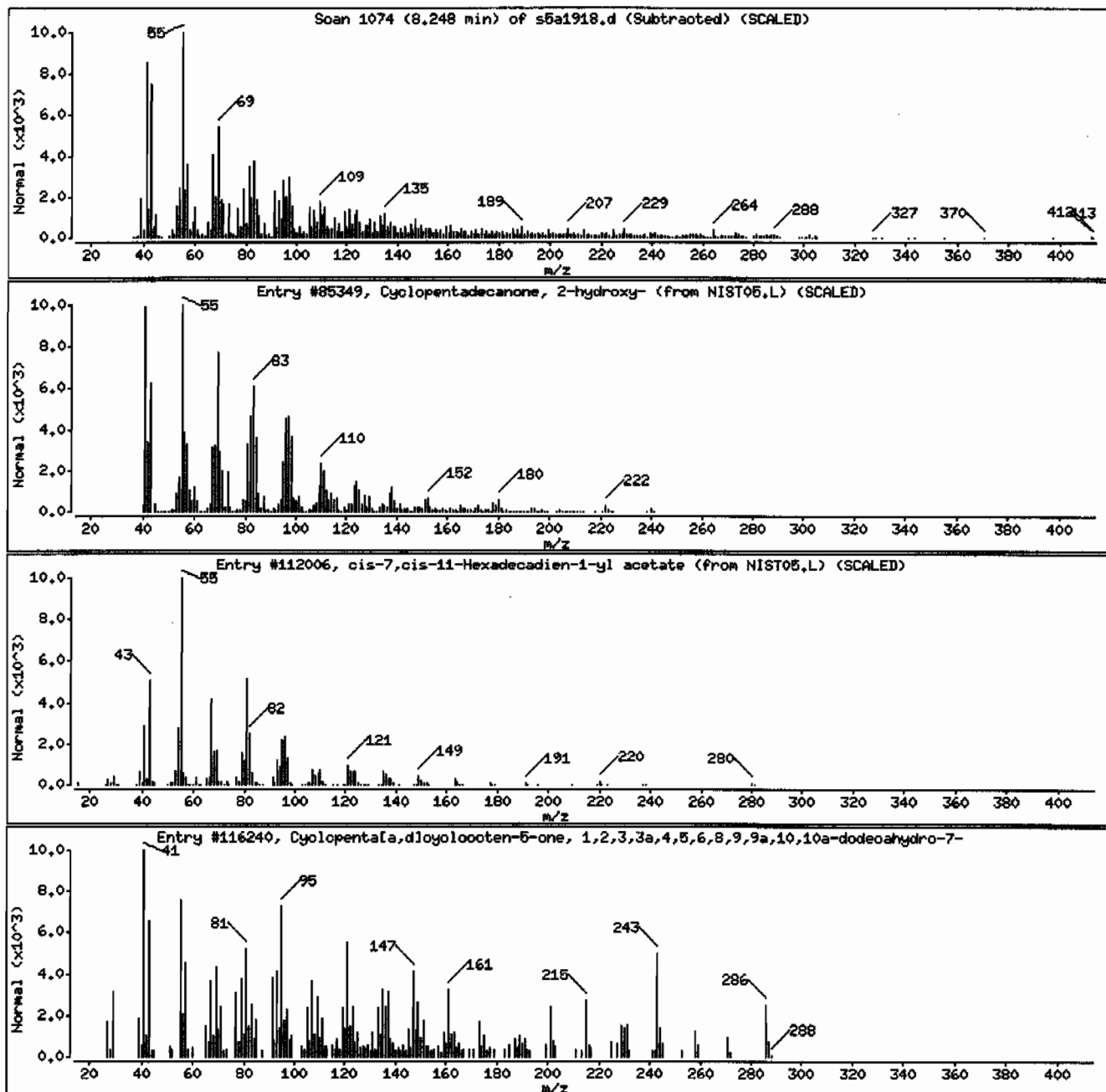
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentadecanone, 2-hydroxy-	4727-18-8	NIST05.L	85349	95	C15H28O2	240
cis-7,cis-11-Hexadecadien-1-yl acetate	52207-99-5	NIST05.L	112006	93	C18H32O2	280
Cyclopentadecylcycloocten-5-one, 1,2,3,3	1000197-98-9	NIST05.L	116240	78	C20H30O	286



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011ISVH11LANL

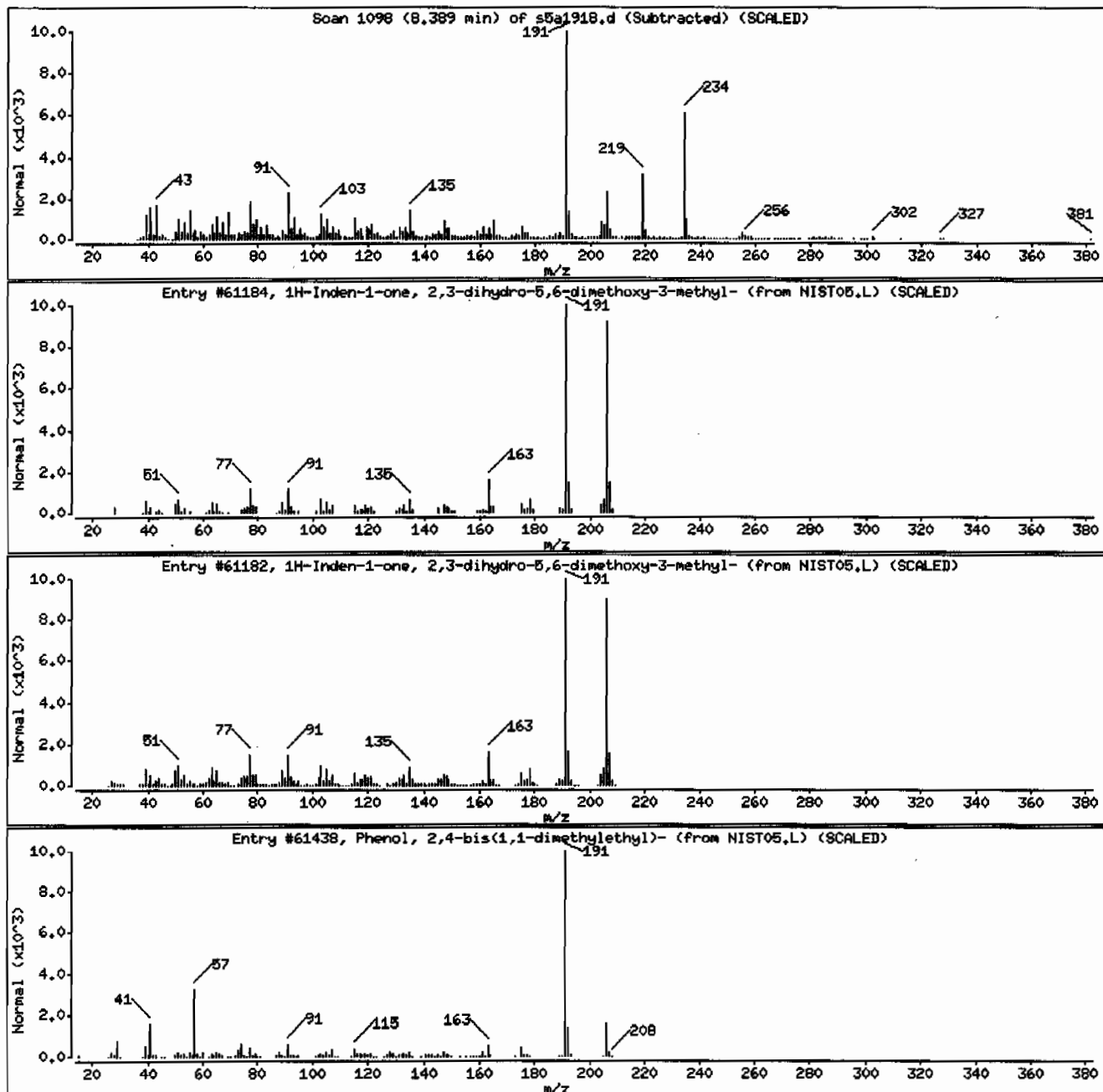
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Inden-1-one, 2,3-dihydro-5,6-dimethox	4082-25-1	NIST05.L	61184	64	C12H14O3	206
1H-Inden-1-one, 2,3-dihydro-5,6-dimethox	4082-25-1	NIST05.L	61182	60	C12H14O3	206
Phenol, 2,4-bis(1,1-dimethylethyl)-	96-76-4	NIST05.L	61438	49	C14H22O	206



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011SVH111LANL

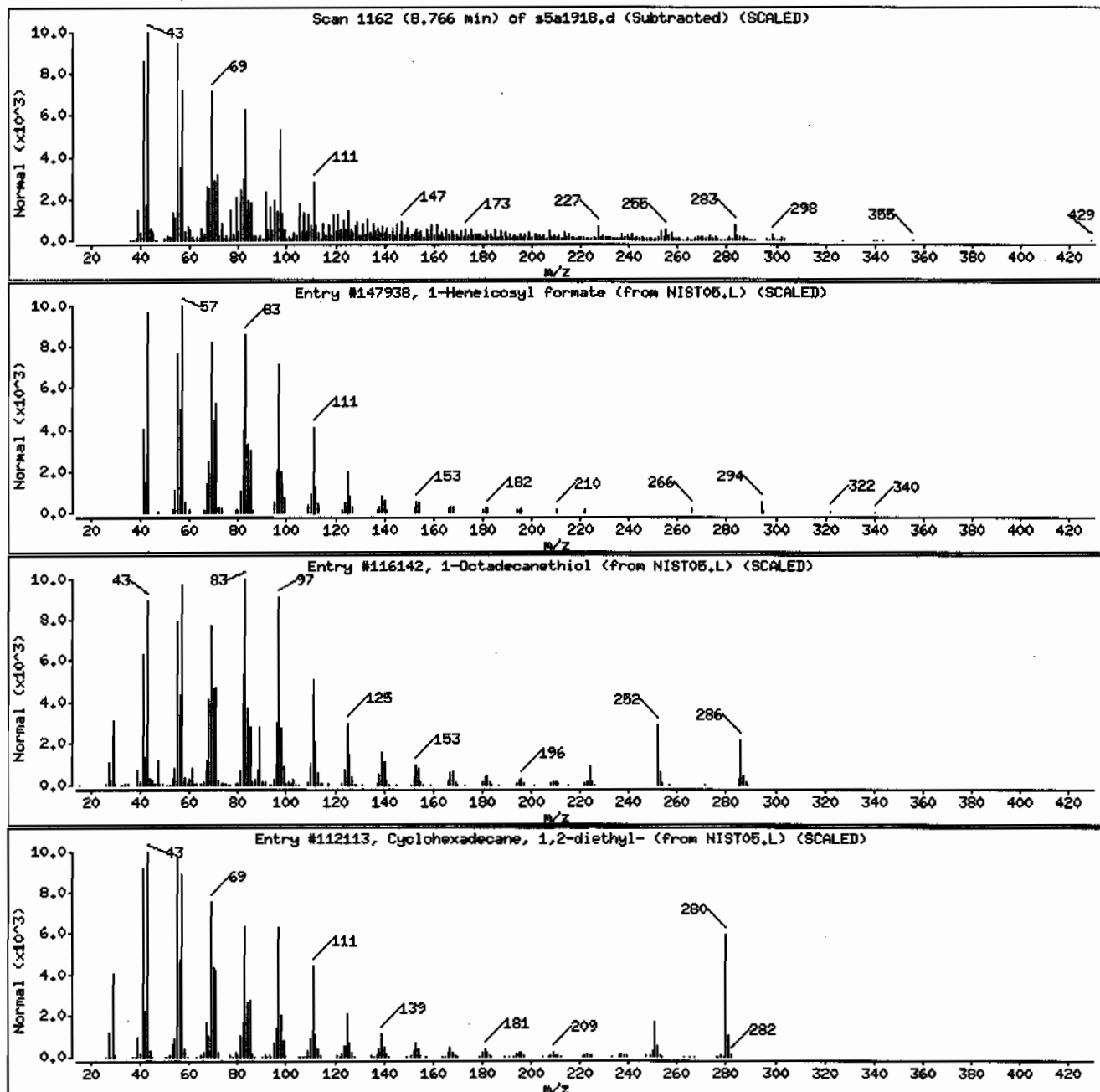
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Heneicosyl formate	77899-03-7	NIST05.L	147938	99	C22H44O2	340
1-Octadecanethiol	2885-00-9	NIST05.L	116142	95	C18H38S	286
Cyclohexadecane, 1,2-diethyl-	1000155-85-3	NIST05.L	112113	93	C20H40	280



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11ILANL

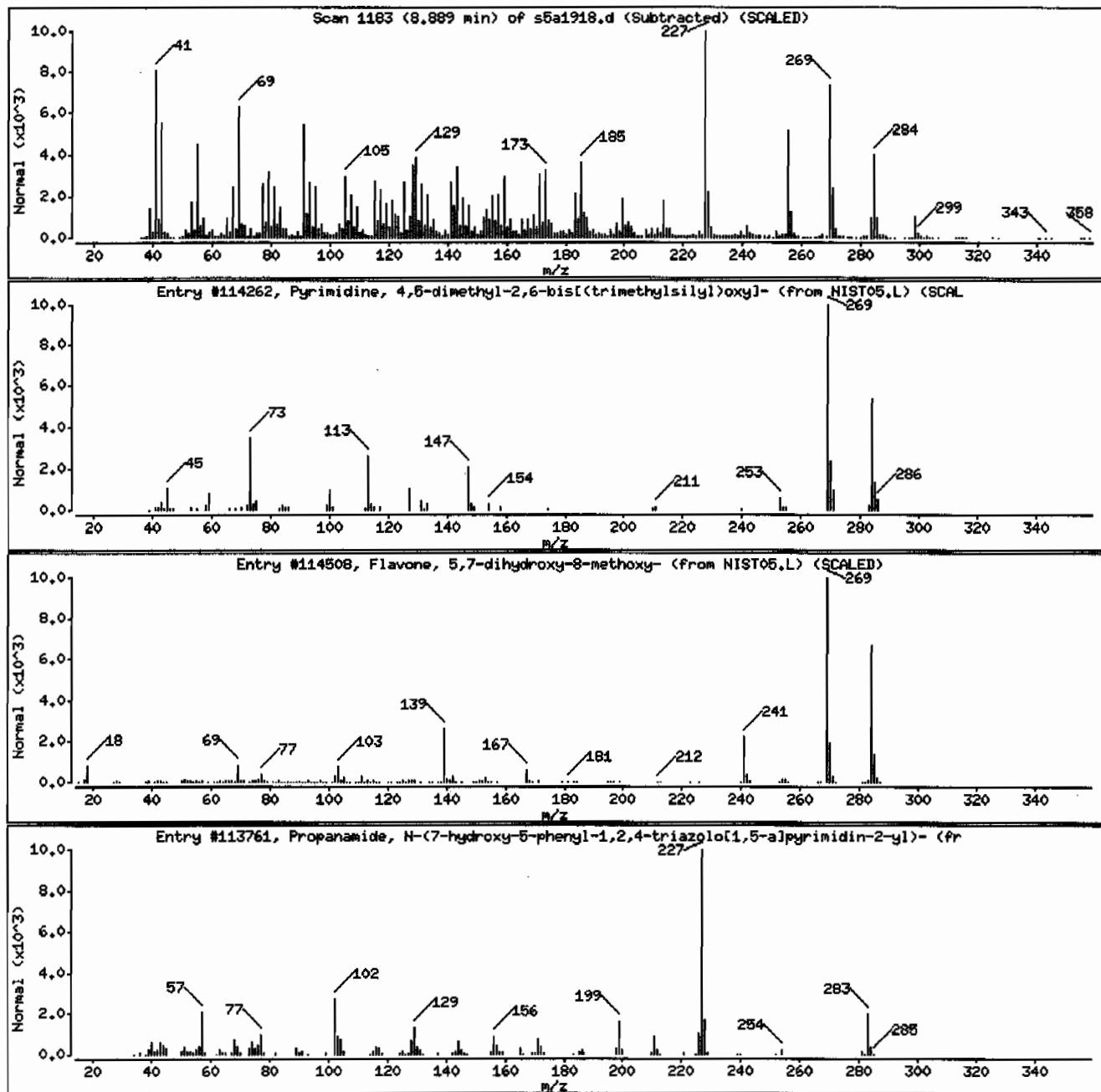
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrimidine, 4,5-dimethyl-2,6-bis[(trimet	31111-32-7	NIST05.L	114262	38	C12H24N2O2Si284	
Flavone, 5,7-dihydroxy-8-methoxy-	632-85-9	NIST05.L	114508	38	C16H12O5	284
Propanamide, N-(7-hydroxy-5-phenyl-1,2,4	1000271-00-9	NIST05.L	113761	35	C14H13N5O2	283



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11LANL

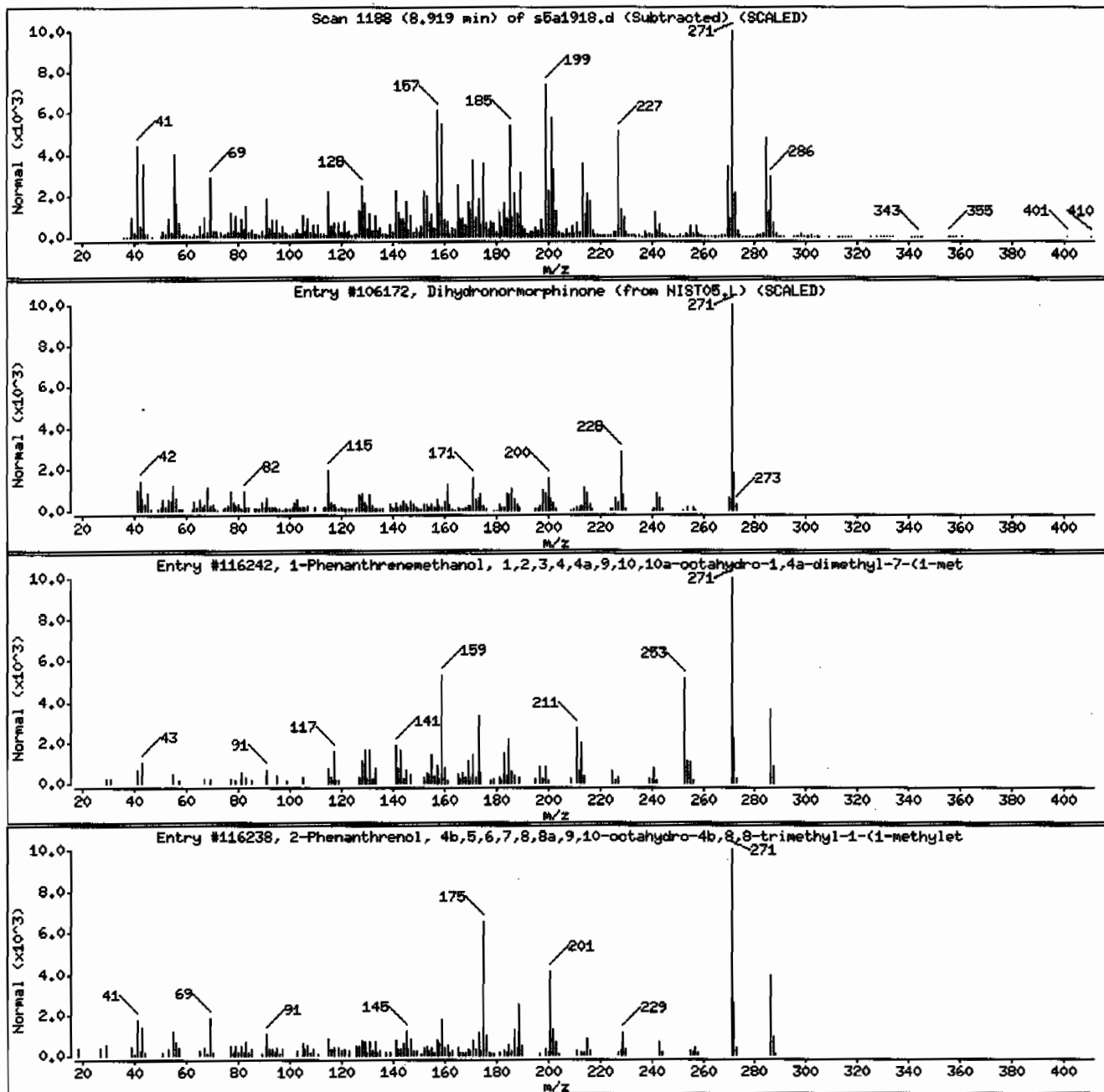
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dihydronormorphinone	14696-23-2	NIST05.L	106172	53	C16H17NO3	271
1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,	24035-43-6	NIST05.L	116242	38	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	25	C20H30O	286



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011ISVMI1ILANL

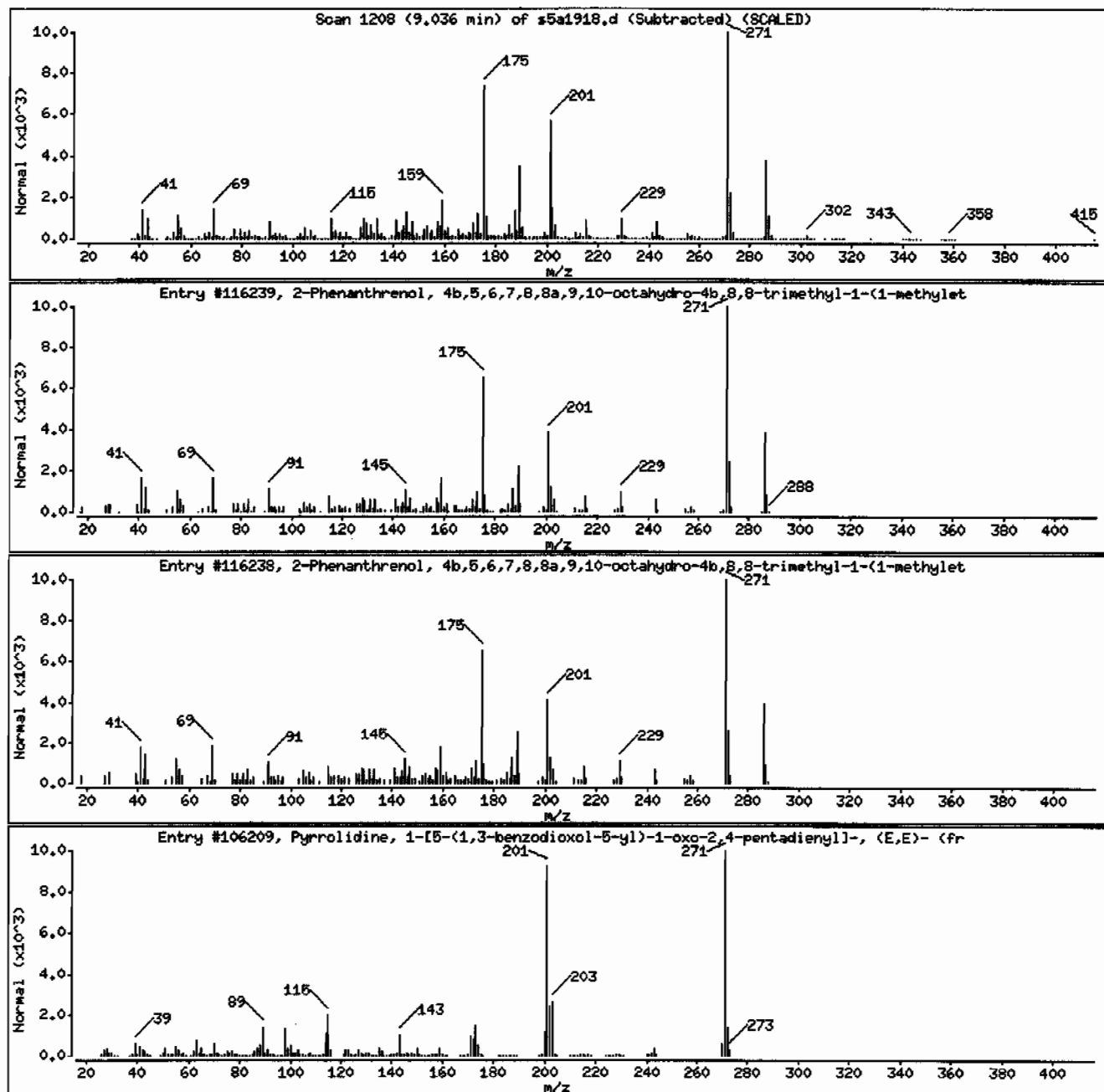
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	99	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	95	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	41	C16H17NO3	271



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH111LANL

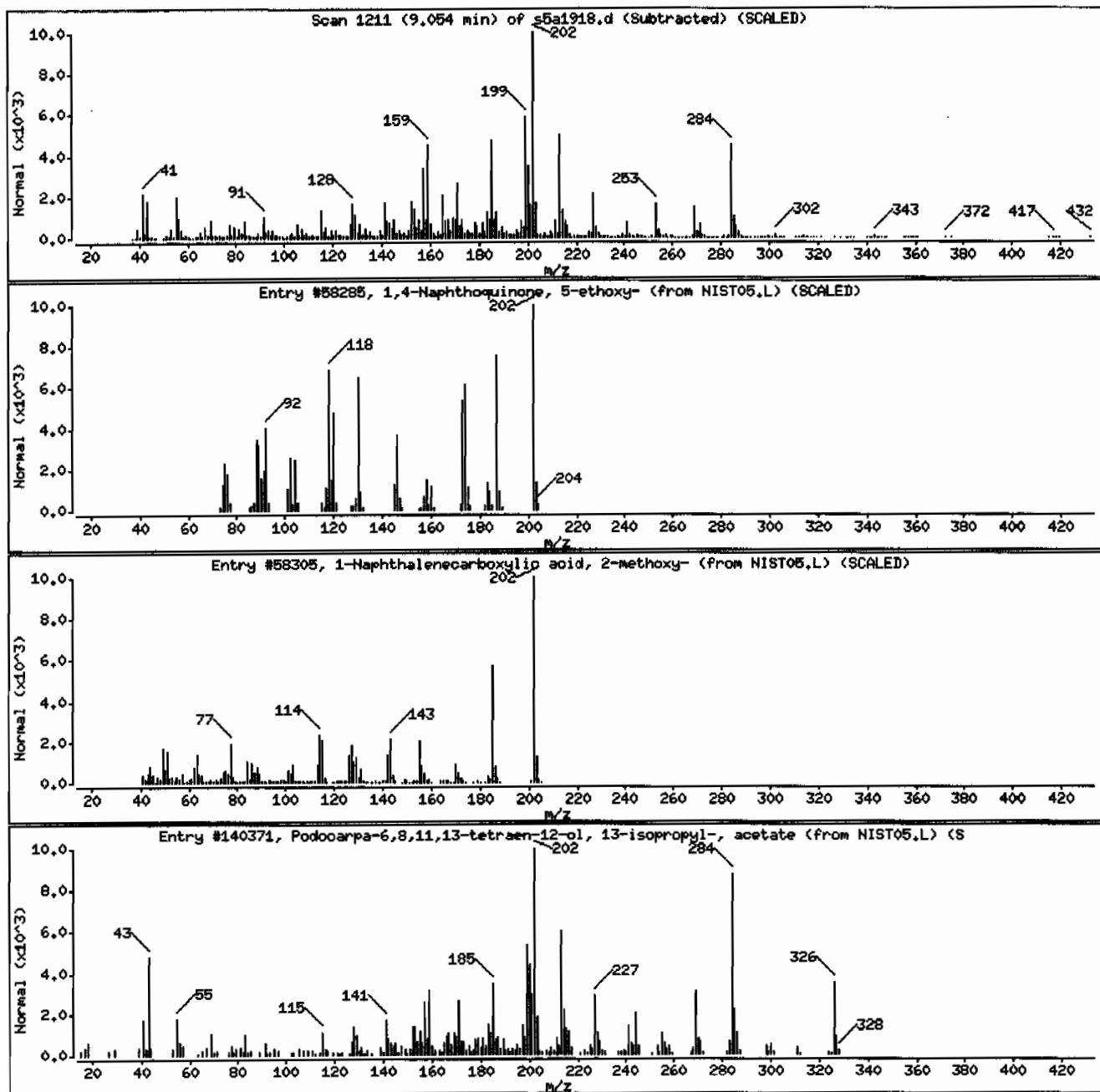
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Naphthoquinone, 5-ethoxy-	22924-19-2	NIST05.L	58285	59	C12H10O3	202
1-Naphthalenecarboxylic acid, 2-methoxy-	947-62-6	NIST05.L	58305	38	C12H10O3	202
Podocarpa-6,8,11,13-tetraen-12-ol, 13-is	22160-86-7	NIST05.L	140371	38	C22H30O2	326



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11ILANL

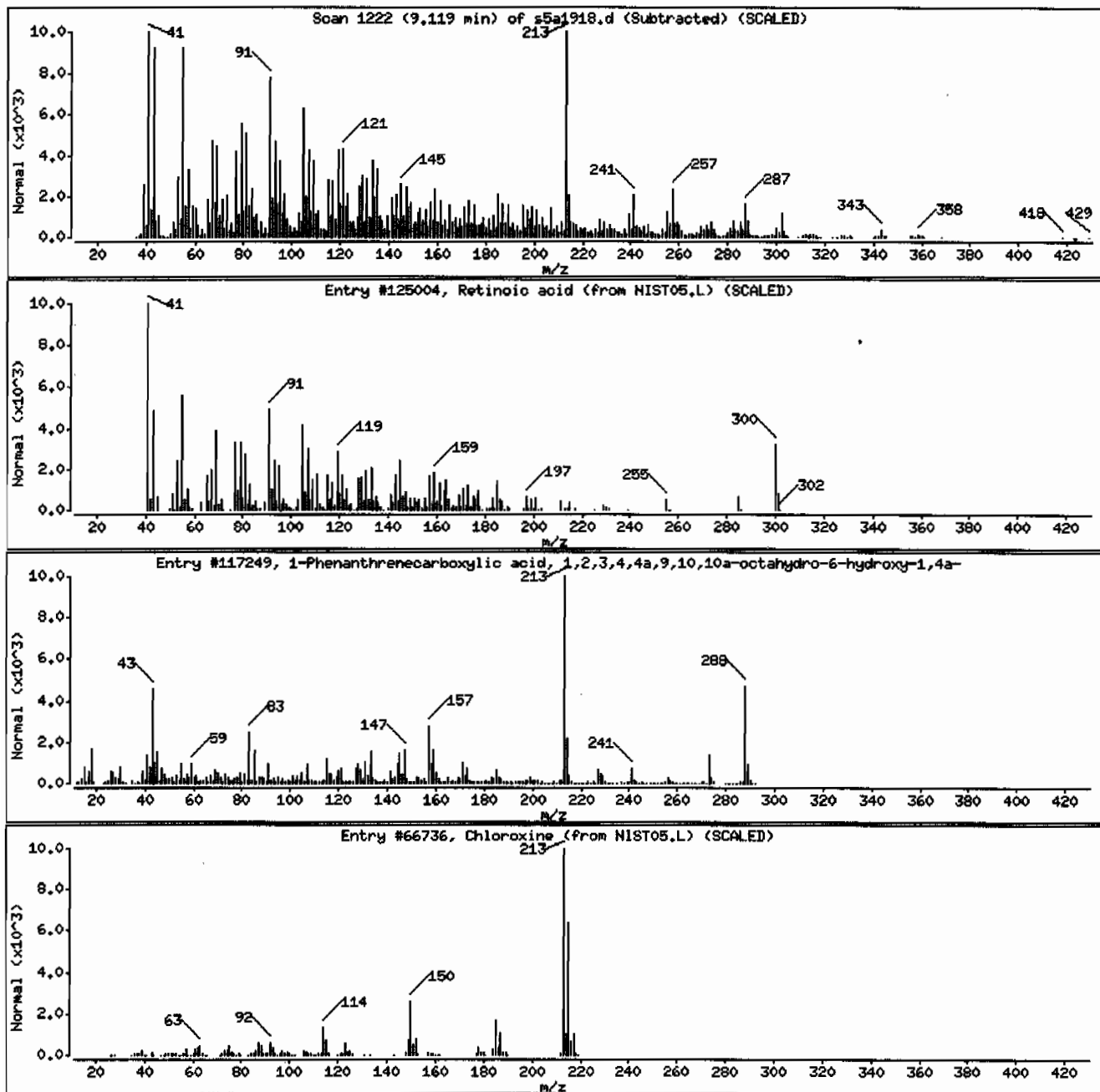
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	58	C ₂₀ H ₂₈ O ₂	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	4614-56-6	NIST05.L	117249	41	C ₁₈ H ₂₄ O ₃	288
Chloroxine	773-76-2	NIST05.L	66736	38	C ₉ H ₅ Cl ₂ N ₂ O	213



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11ILANL

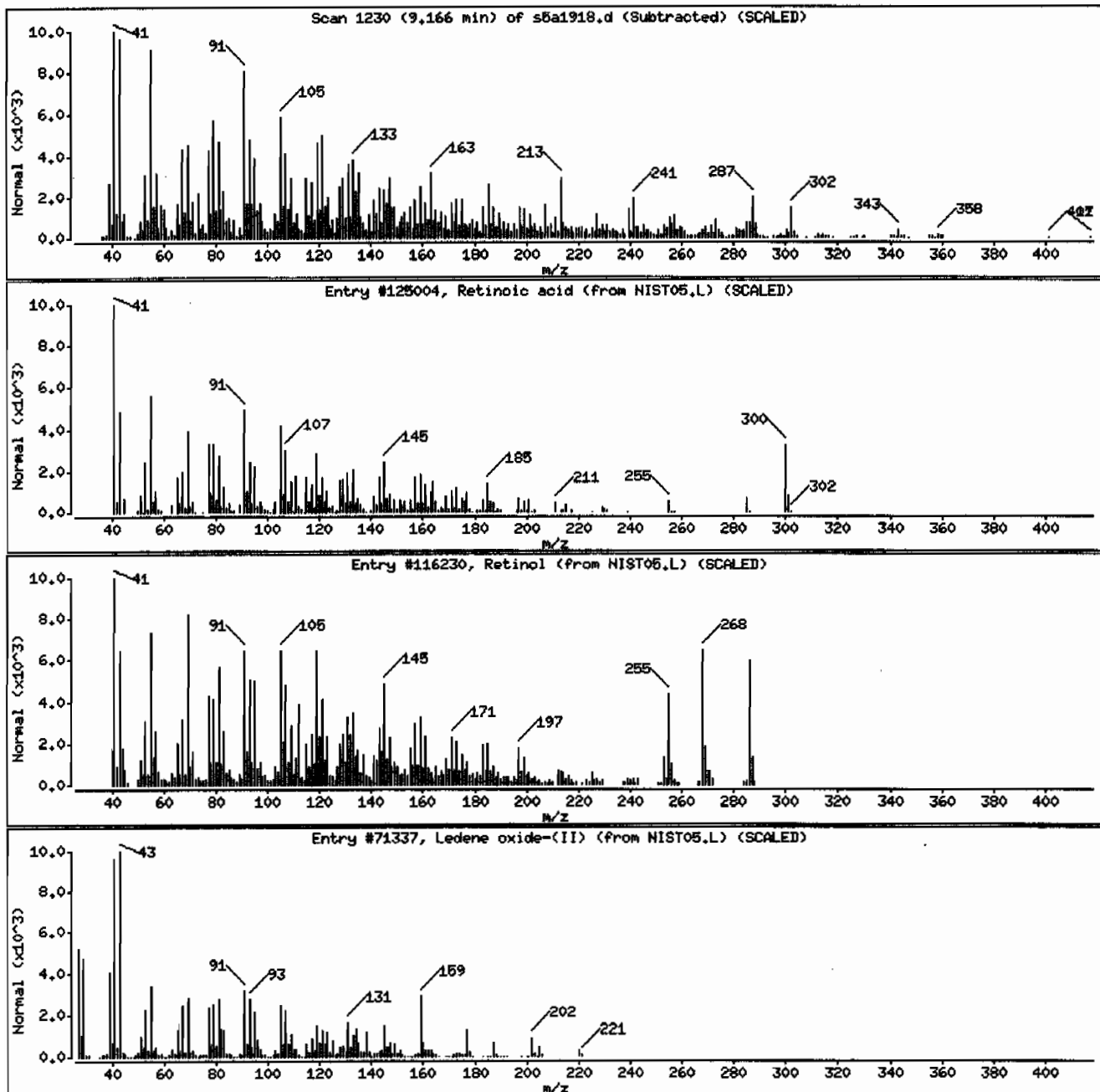
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Retinoic acid	302-79-4	NIST05.L	125004	86	C ₂₀ H ₂₈ O ₂	300
Retinol	68-26-8	NIST05.L	116230	55	C ₂₀ H ₃₀ O	286
Ledene oxide-(II)	1000159-36-7	NIST05.L	71337	38	C ₁₅ H ₂₄ O	220



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11ILANL

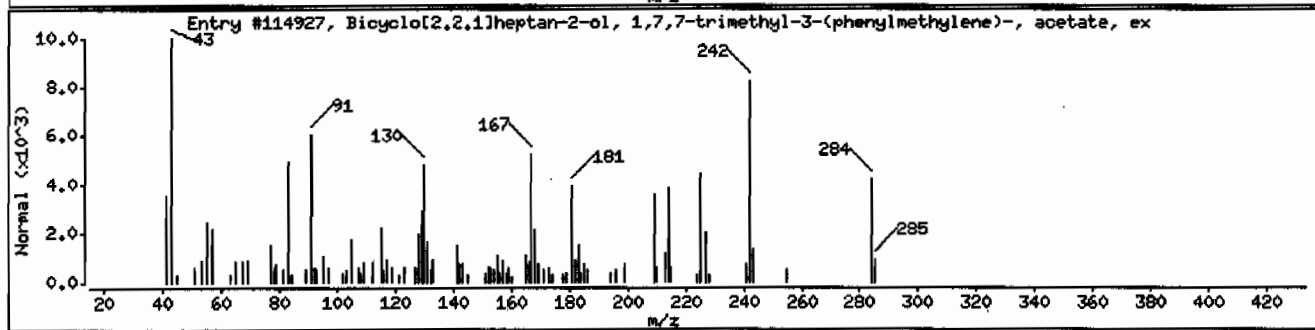
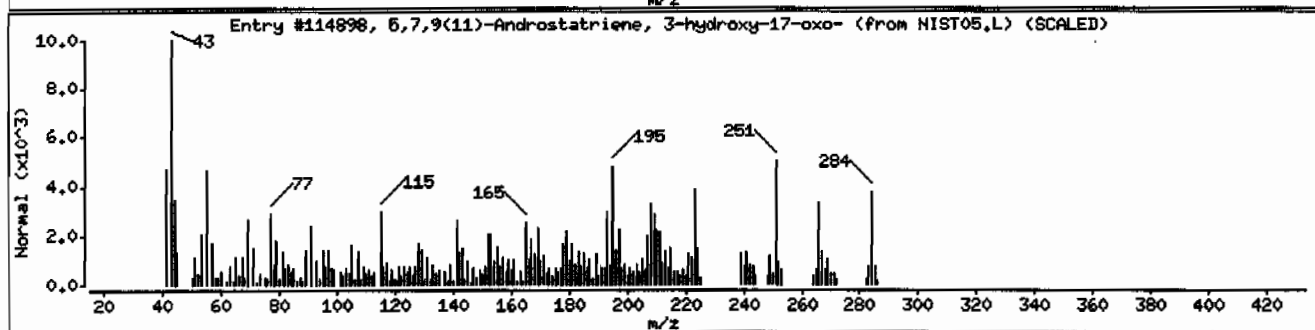
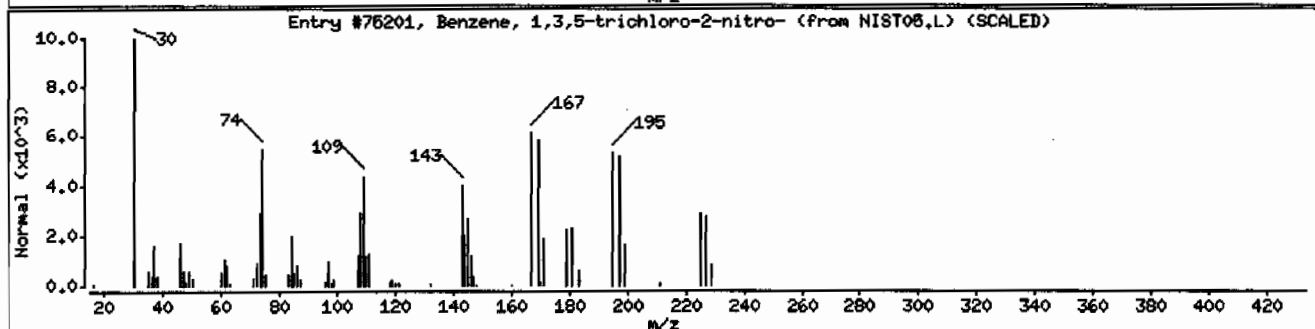
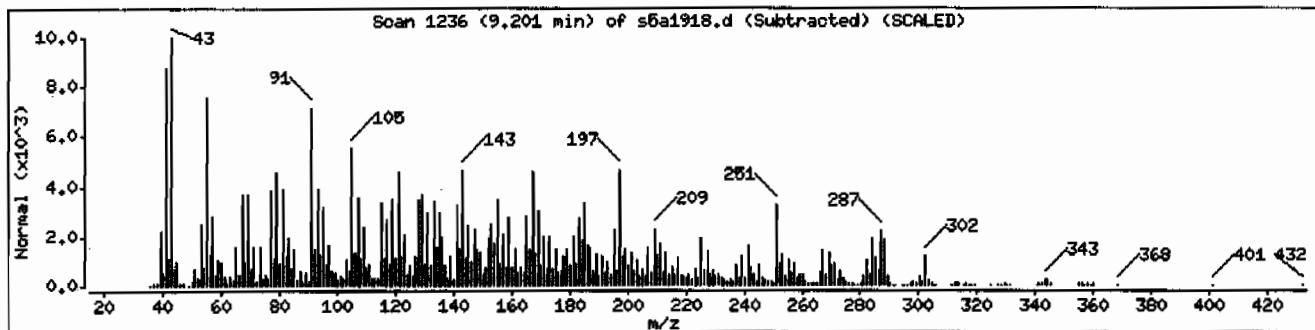
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1,3,5-trichloro-2-nitro-	18708-70-8	NIST05.L	75201	11	C6H2Cl3NO2	225
5,7,9(11)-Androstatriene, 3-hydroxy-17-o	1000251-16-3	NIST05.L	114898	10	C19H24O2	284
Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	55122-61-5	NIST05.L	114927	10	C19H24O2	284



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11ILANL

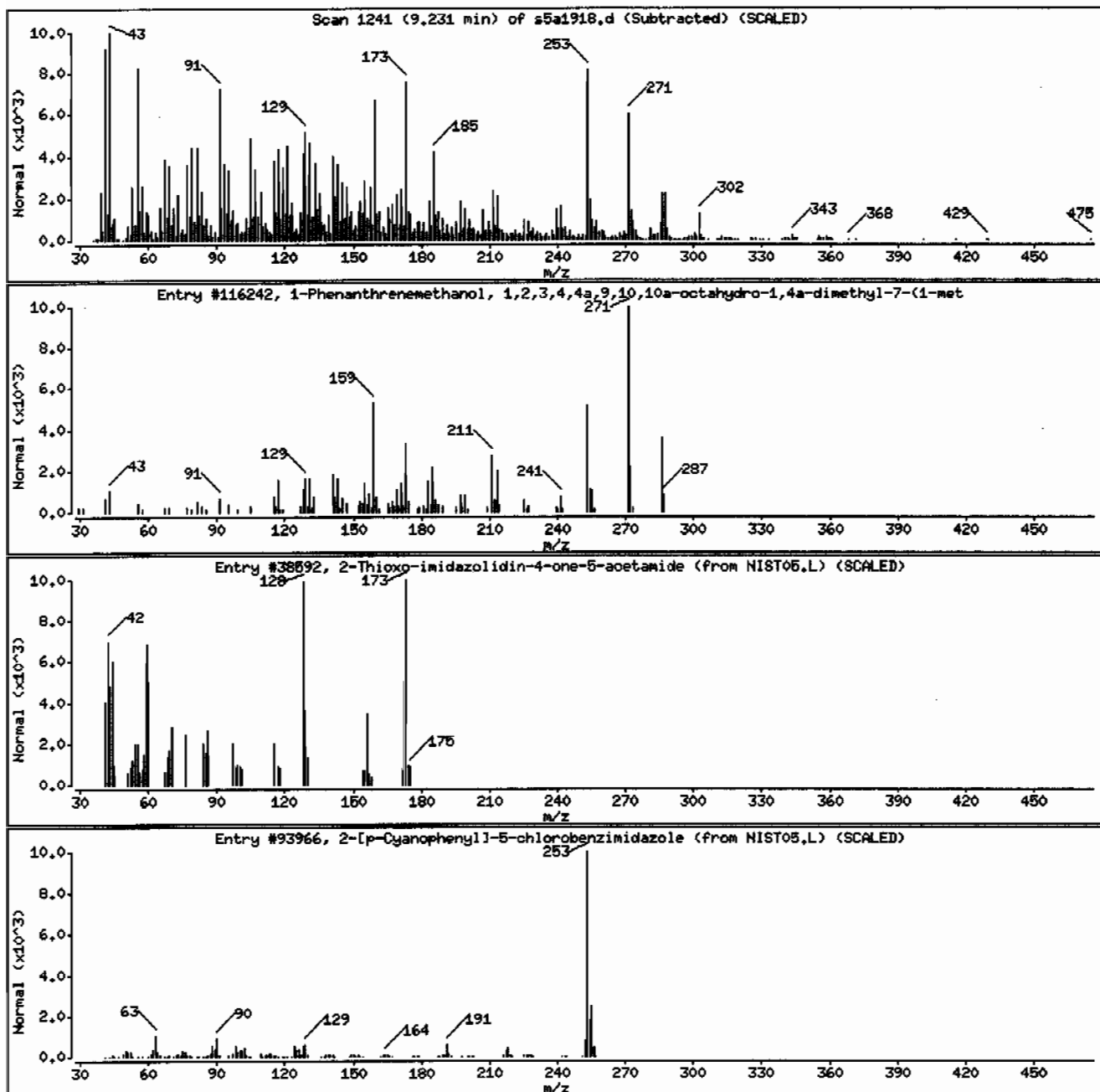
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,	24035-43-6	NIST05.L	116242	20	C20H30O	286
2-Thioxo-imidazolidin-4-one-5-acetamide	1000146-03-1	NIST05.L	38892	15	C5H7N3O2S	173
2-[p-Cyanophenyl]-5-chlorobenzimidazole	146132-86-7	NIST05.L	93966	15	C14H8ClN3	263



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.1

Sample Info: 1244626010194284011SVMI1ILANL

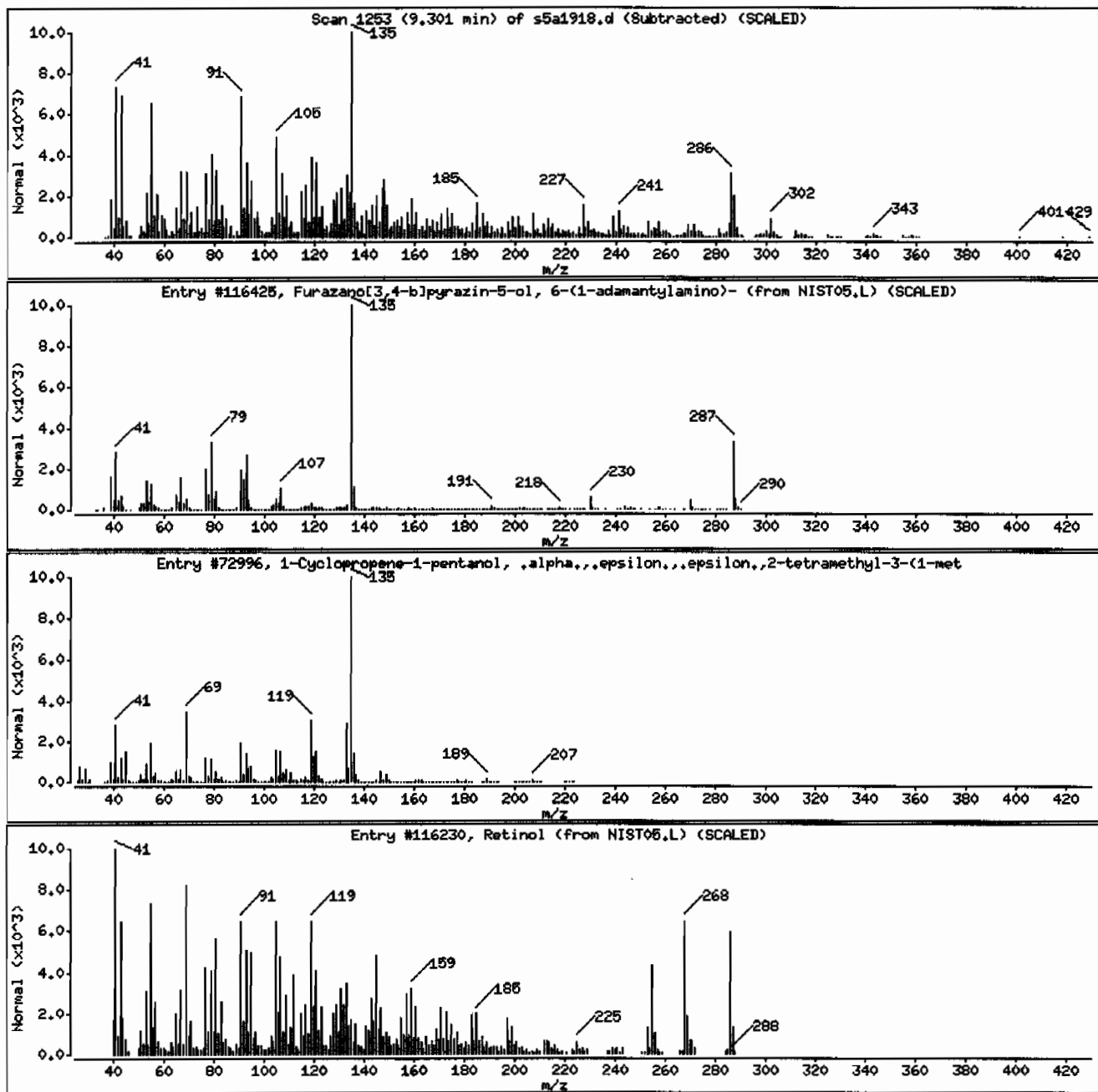
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Furazano[3,4-b]pyrazin-5-ol, 6-(1-adaman	1000263-25-7	NIST05.L	116425	74	C14H17N5O2	287
1-Cyclopropene-1-pentanol, .alpha.,.epsi	90165-06-3	NIST05.L	72996	64	C15H26O	222
Retinol	68-26-8	NIST05.L	116230	44	C20H30O	286



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.1

Sample Info: 1244626010194284011SVH11ILANL

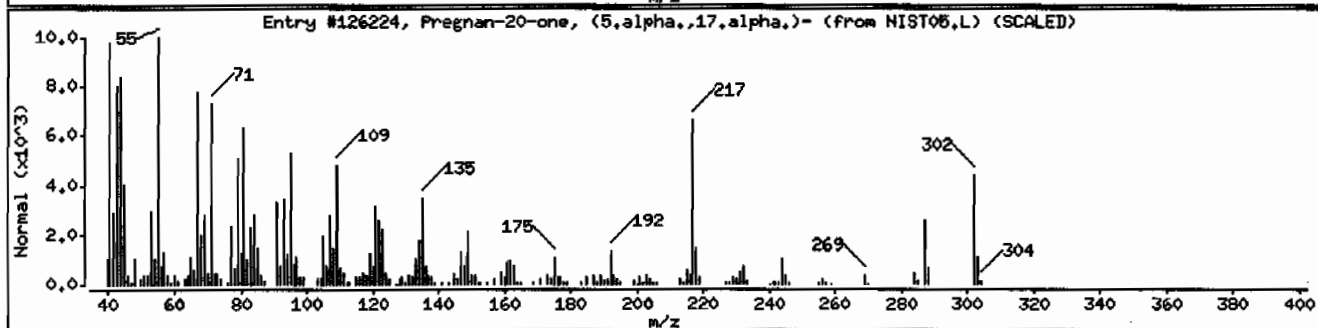
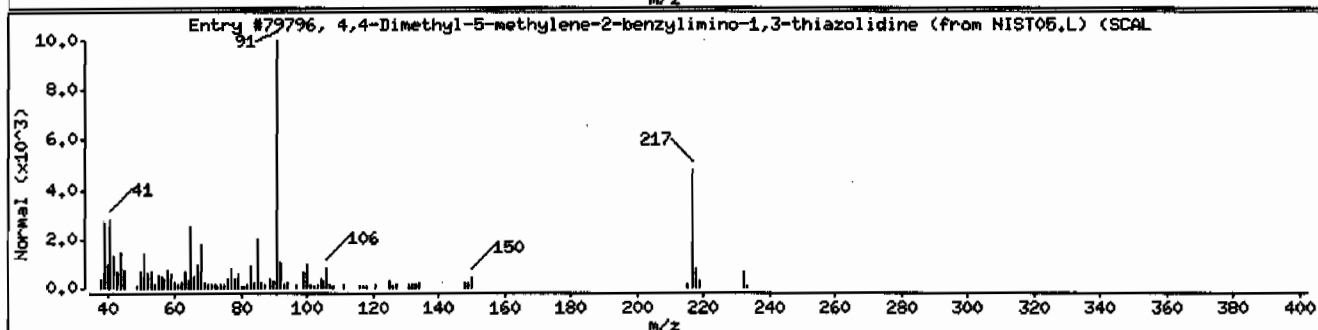
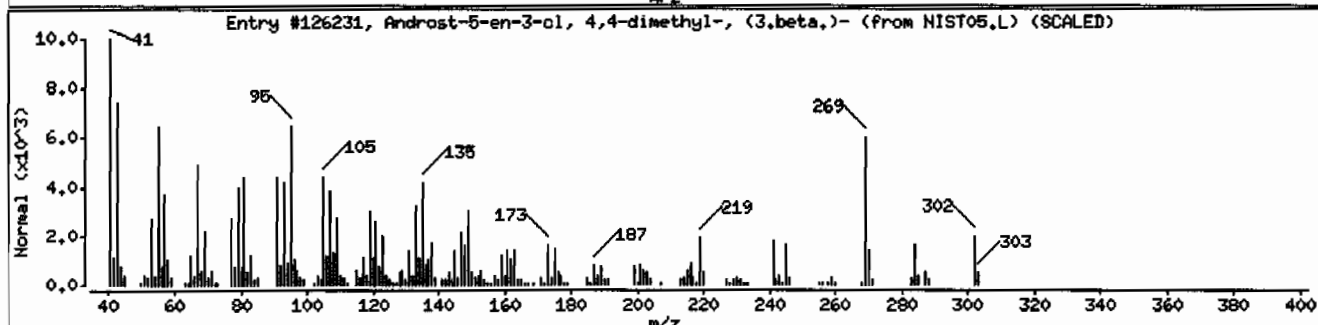
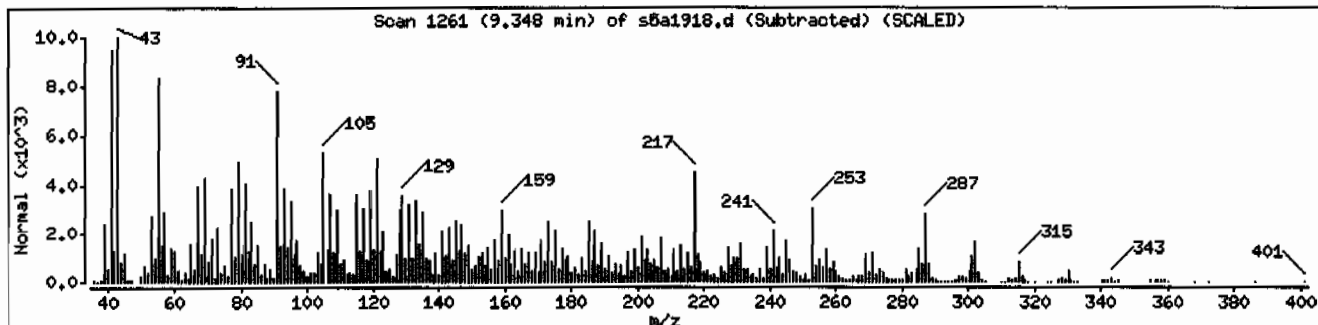
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androst-5-en-3-ol, 4,4-dimethyl-, (3.beta.)	7673-17-8	NIST05.L	126231	41	C21H34O	302
4,4-Dimethyl-5-methylene-2-benzylimino-1	71224-24-3	NIST05.L	79796	15	C13H16N2S	232
Pregnan-20-one, (5.alpha.,17.alpha.)-	7704-90-7	NIST05.L	126224	14	C21H34O	302



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011SVH11ILANL

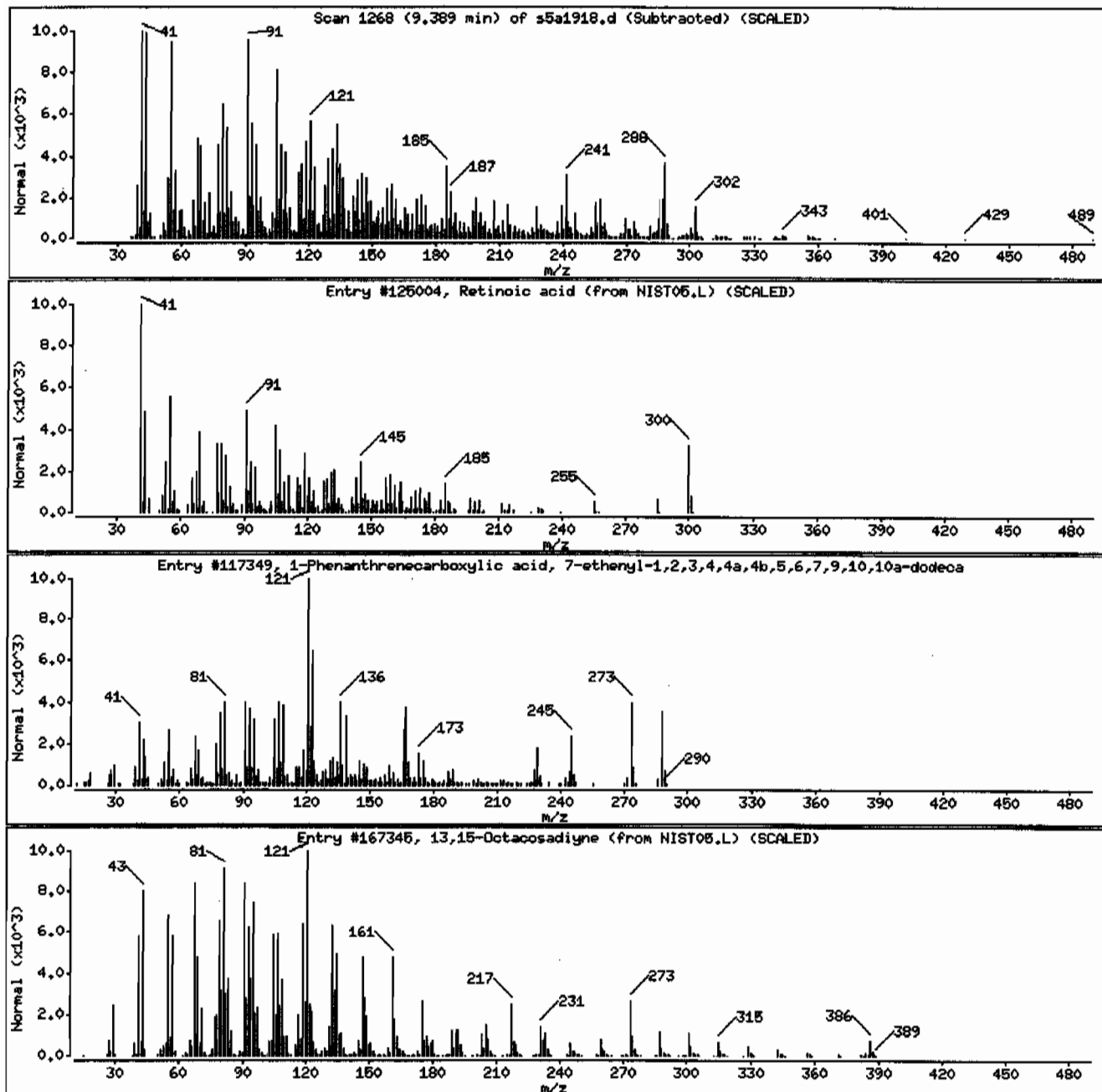
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	58	C ₂₀ H ₂₈ O ₂	300
1-Phenanthrenecarboxylic acid, 7-ethenyl	57289-55-1	NIST05.L	117349	27	C ₁₉ H ₂₆ O ₂	288
13,15-Octacosadiyne	24643-46-7	NIST05.L	167345	27	C ₂₈ H ₅₀	386



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011SVH111LANL

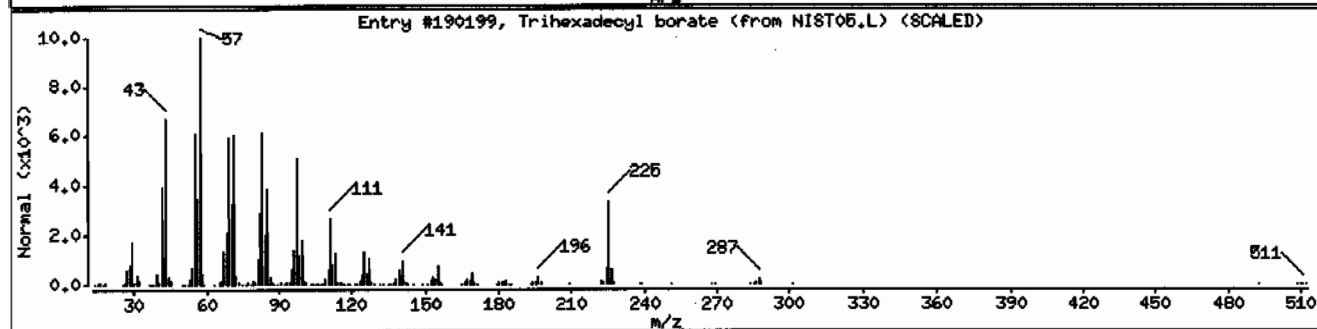
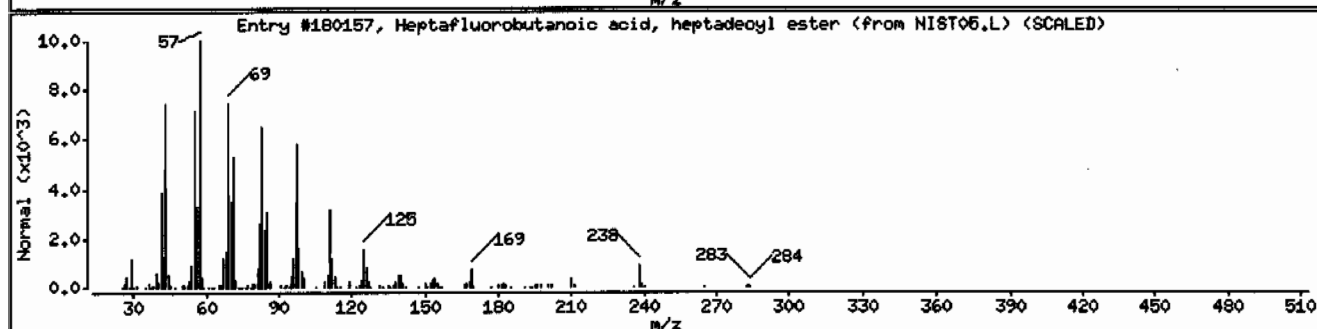
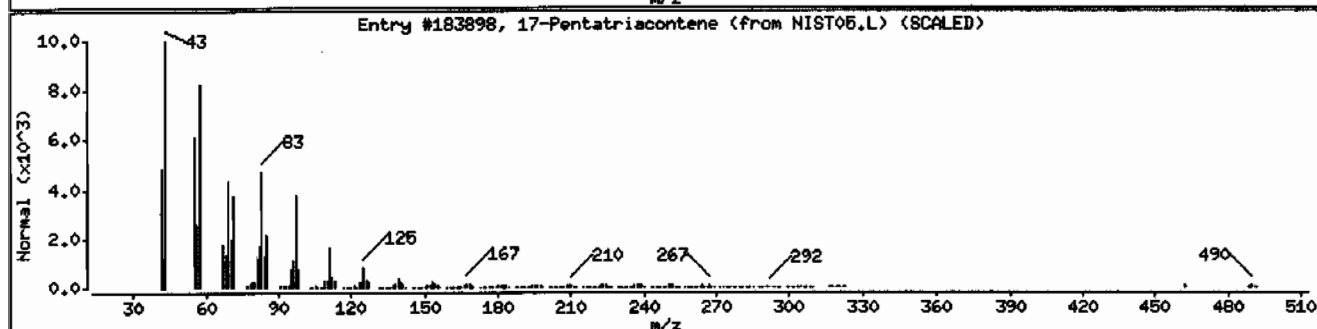
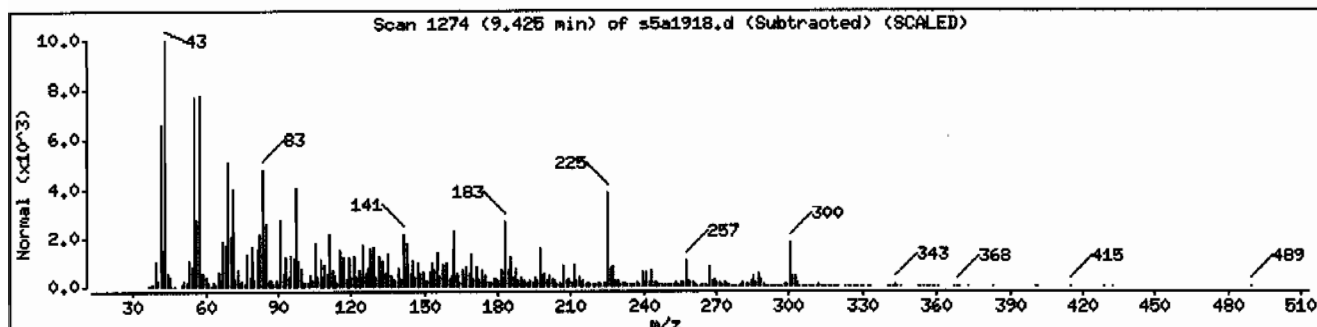
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
17-Pentatriacontene	6971-40-0	NIST05.L	183898	90	C35H70	491
Heptafluorobutanoic acid, heptadecyl est	1000282-97-3	NIST05.L	180157	78	C21H35F7O2	452
Trihexadecyl borate	2665-11-4	NIST05.L	190199	70	C48H99BO3	735



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

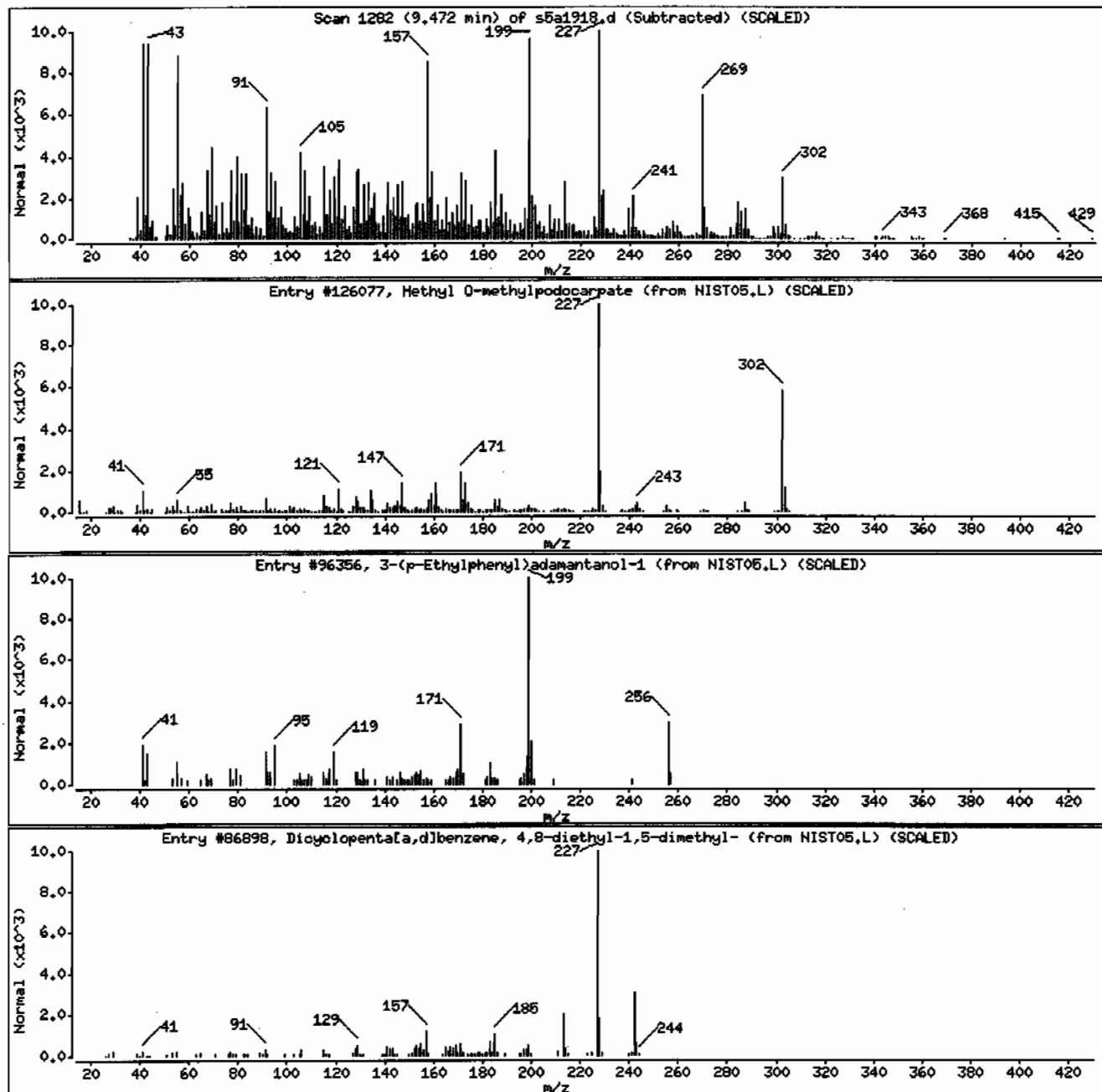
Unknown

Methyl 0-methylpodocarpate

CAS Number	Library	Entry	Quality	Formula	Weight
1231-74-9	NIST05.L	126077	42	C19H26O3	302
106888-19-1	NIST05.L	96356	40	C18H24O	256
1000156-41-6	NIST05.L	86898	38	C18H26	242

3-(p-Ethylphenyl)adamantan-1-ol

Dicyclopenta[a,d]benzene, 4,8-diethyl-1,



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011ISVM11ILANL

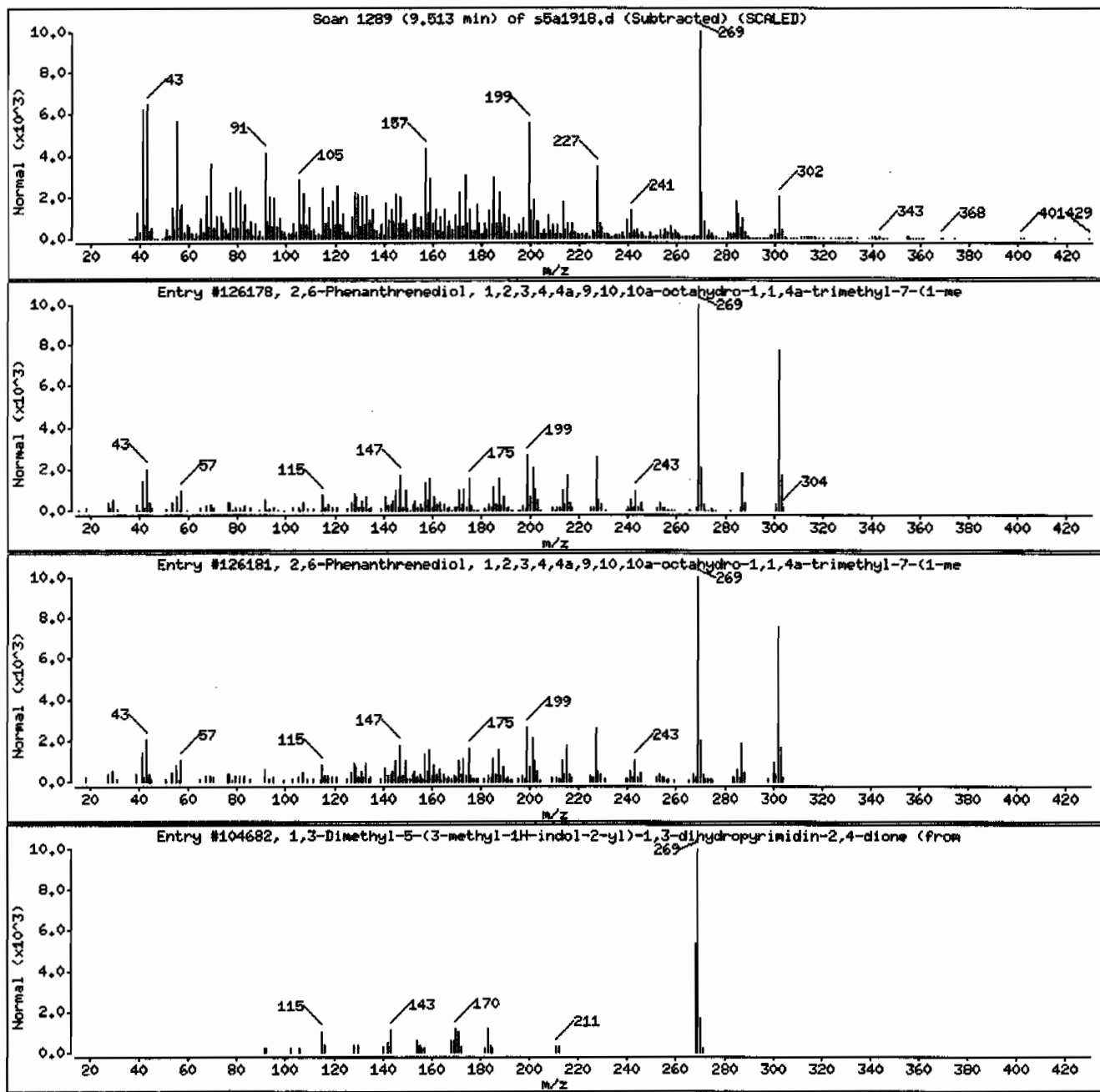
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	564-73-8	NIST05.L	126178	64	C20H30O2	302
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	564-73-8	NIST05.L	126181	53	C20H30O2	302
1,3-Dimethyl-5-(3-methyl-1H-indol-2-yl)-	66723-75-9	NIST05.L	104682	38	C18H15N3O2	269



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011SVMI1ILANL

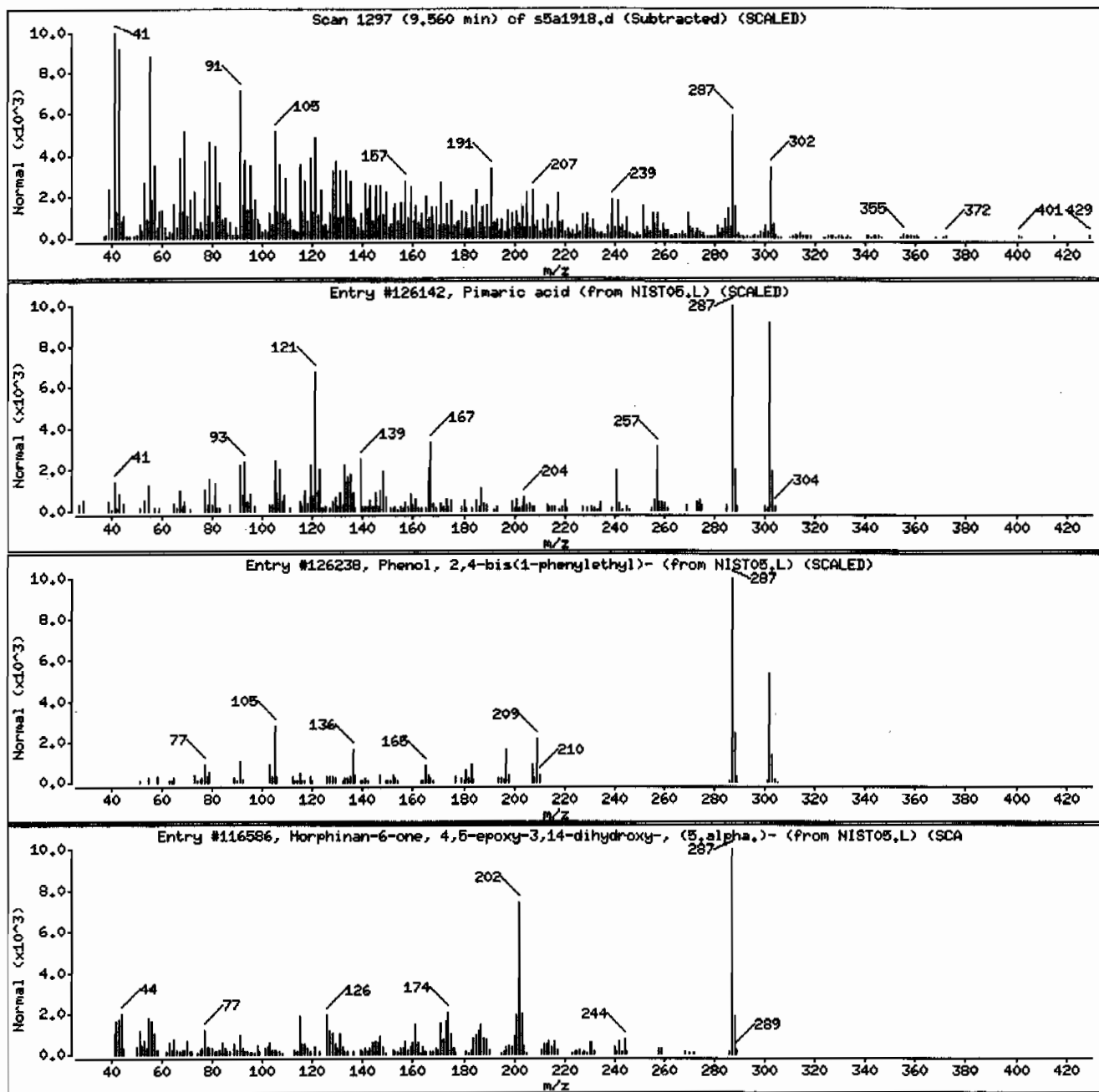
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-8MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pimaric acid	127-27-5	NIST05.L	126142	56	C ₂₀ H ₃₀ O ₂	302
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	48	C ₂₂ H ₂₂ O	302
Morphinan-6-one, 4,5-epoxy-3,14-dihydroxy	33522-95-1	NIST05.L	116586	44	C ₁₆ H ₁₇ NO ₄	287



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.1

Sample Info: I244626010194284011SVH11ILANL

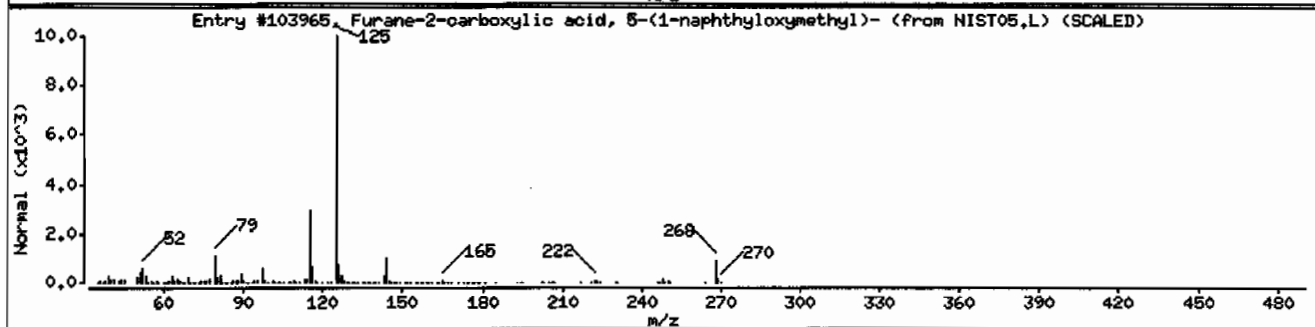
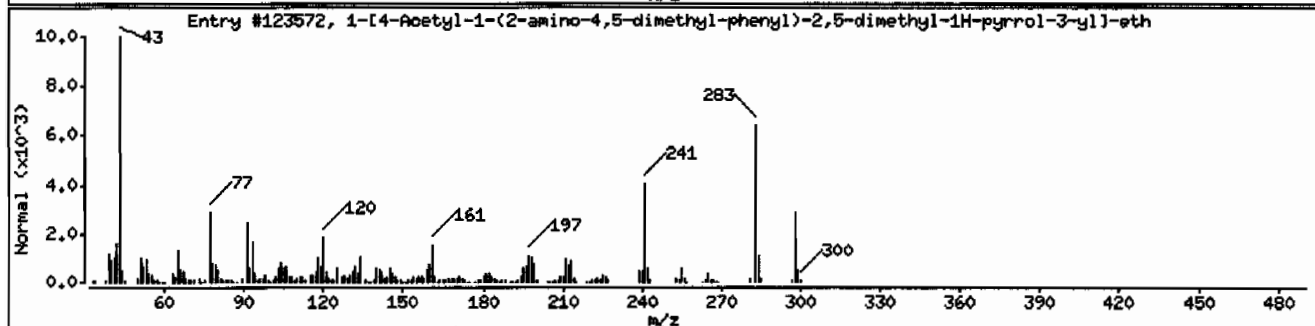
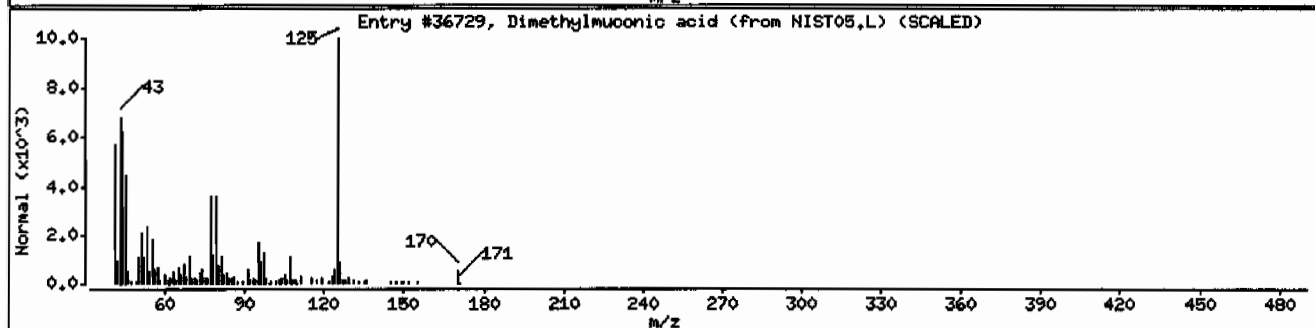
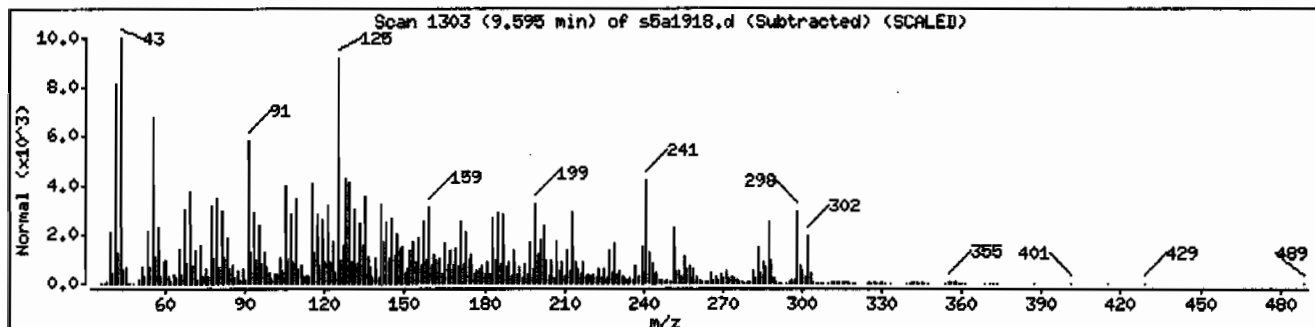
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Dimethylmuconic acid	1000127-78-3	NIST05.L	36729	25	C8H10O4	170
1-[4-Acetyl-1-(2-amino-4,5-dimethyl-phen	1000300-66-6	NIST05.L	123572	25	C18H22N2O2	298
Furane-2-carboxylic acid, 5-(1-naphthyl	1000272-89-2	NIST05.L	103965	25	C16H12O4	268



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011ISVM11ILANL

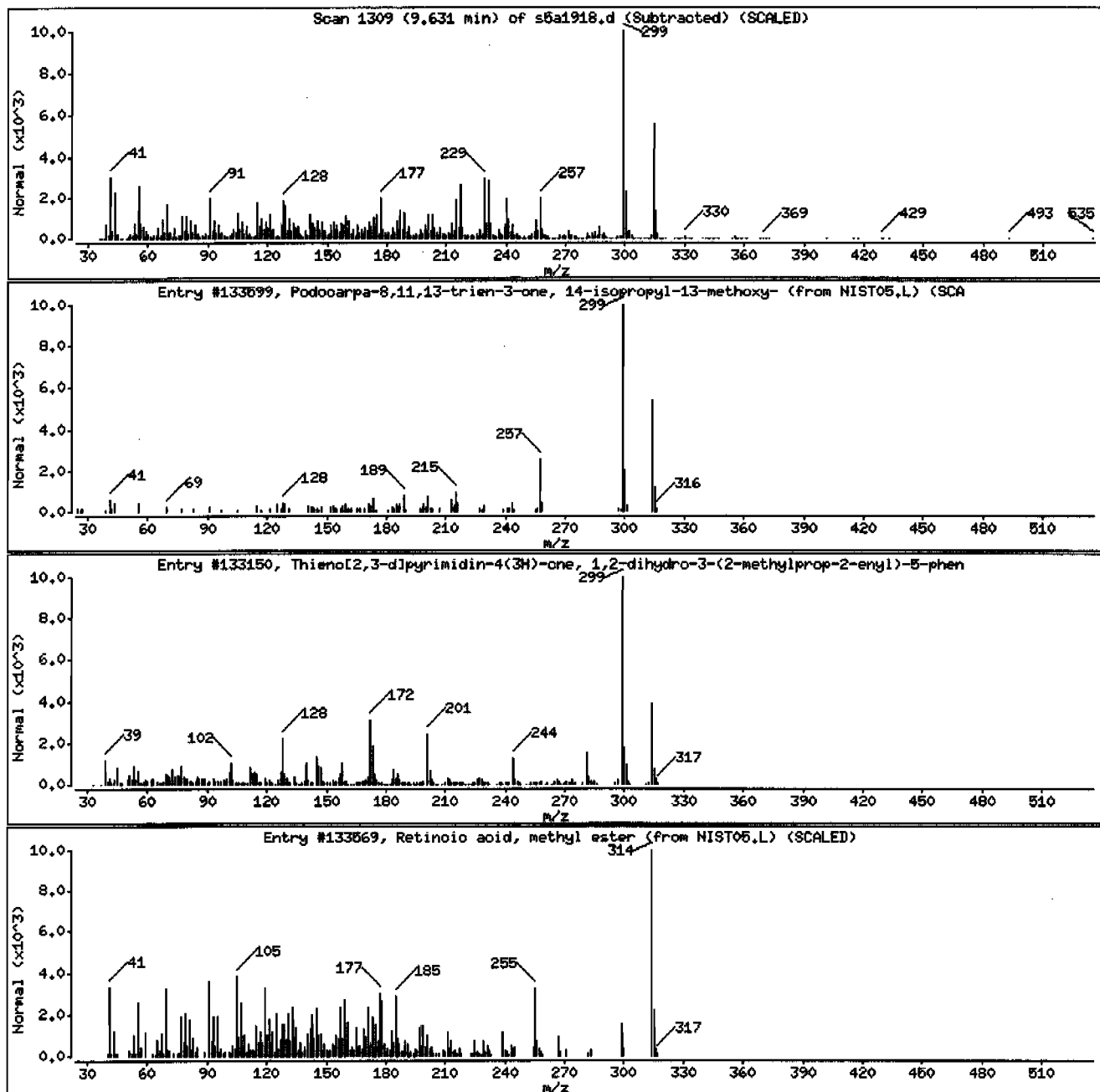
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Podocarpa-8,11,13-trien-3-one, 14-isopro	18326-16-4	NIST05.L	133599	93	C21H30O2	314
Thieno[2,3-d]pyrimidin-4(3H)-one, 1,2-di	327170-57-0	NIST05.L	133150	43	C16H14N2O2	314
Retinoic acid, methyl ester	339-16-2	NIST05.L	133569	42	C21H30O2	314



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011SVH11ILANL

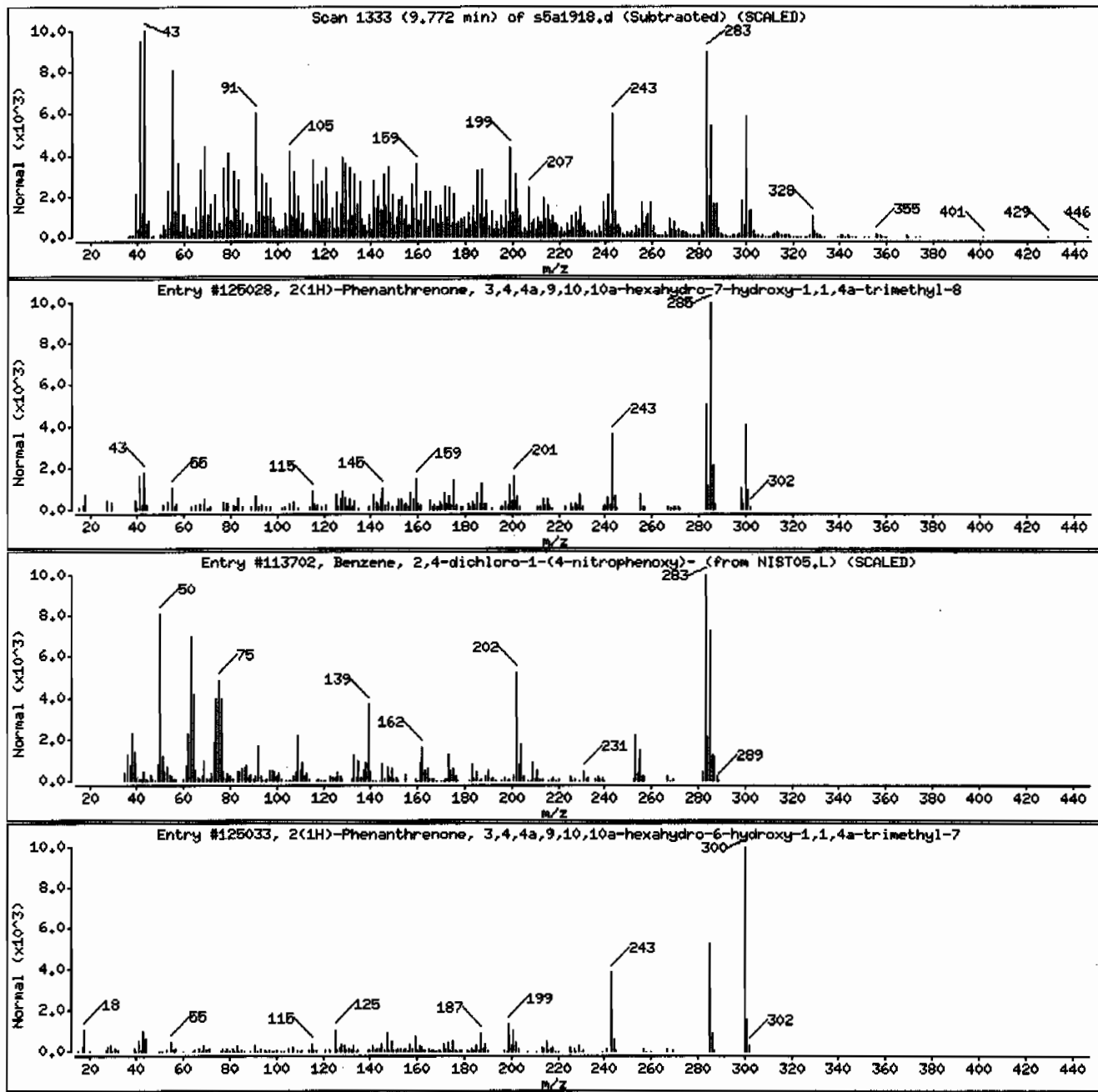
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	6755-93-7	NIST05.L	125028	60	C20H28O2	300
Benzene, 2,4-dichloro-1-(4-nitrophenoxy)	1836-75-5	NIST05.L	113702	58	C12H7Cl2NO3	283
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	472-37-7	NIST05.L	125033	49	C20H28O2	300



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 12446260101942840111SVH111LANL

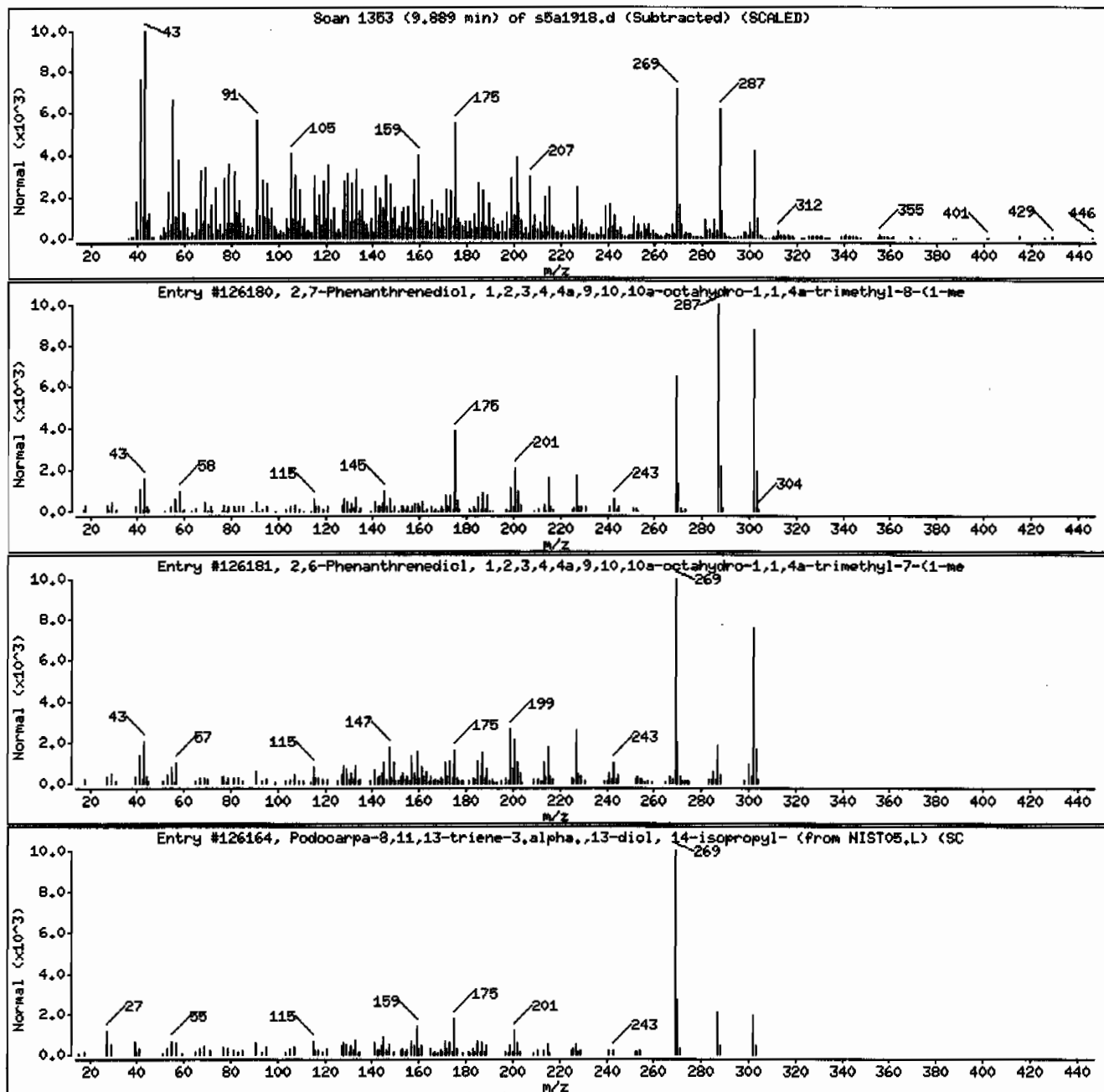
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	3772-66-3	NIST05.L	126180	96	C20H30O2	302
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	564-73-8	NIST05.L	126181	89	C20H30O2	302
Podocarpa-8,11,13-triene-3,α,13-diol	18326-87-6	NIST05.L	126164	86	C20H30O2	302



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.1

Sample Info: 1244626010194284011SVH11LANL

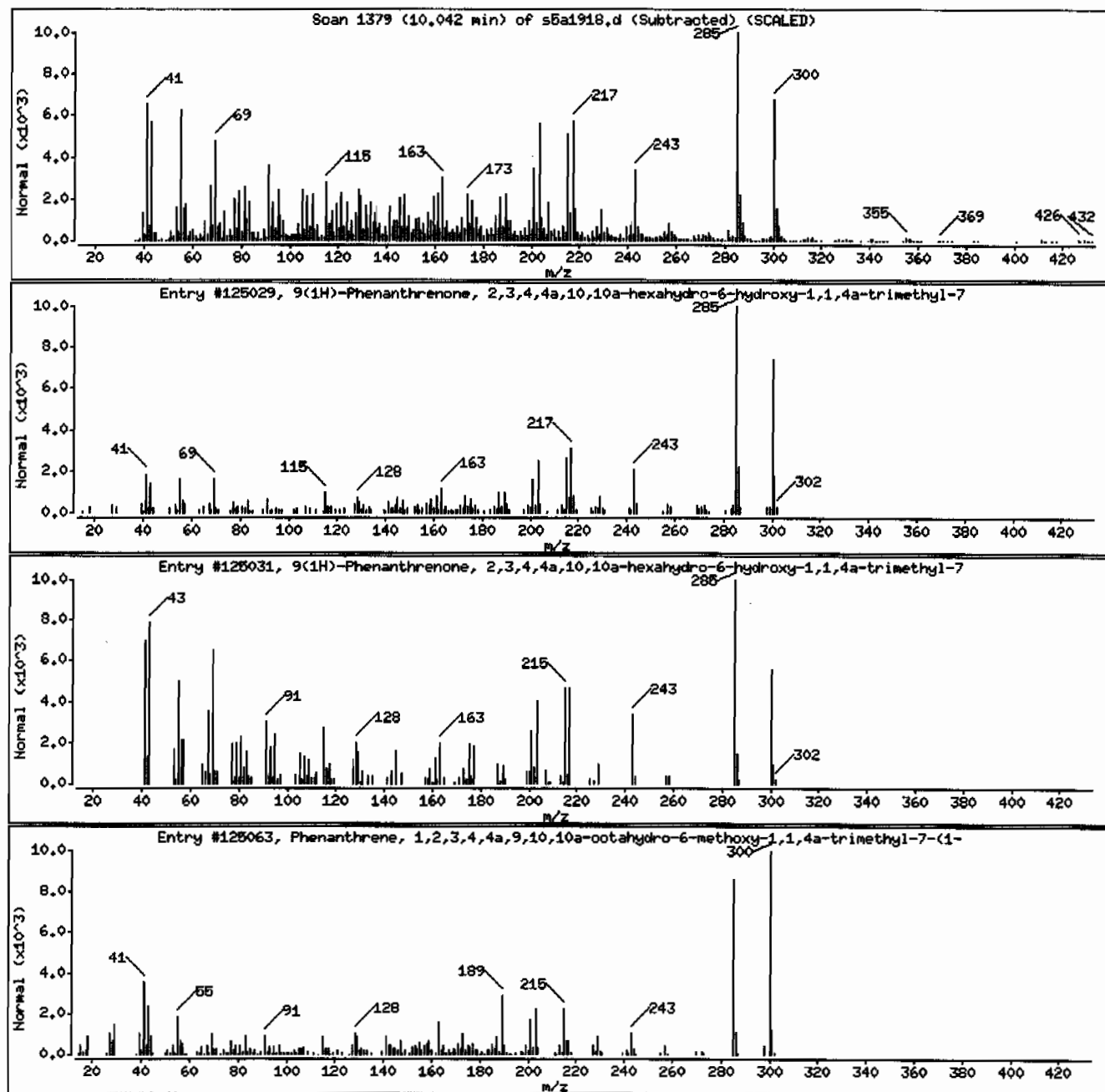
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	611-05-7	NIST05.L	125029	95	C20H28O2	300
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	611-05-7	NIST05.L	125031	94	C20H28O2	300
Phenanthrene, 1,2,3,4,4a,9,10,10a-octahy	10064-26-3	NIST05.L	125063	89	C21H32O	300



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011SVMI1ILANL

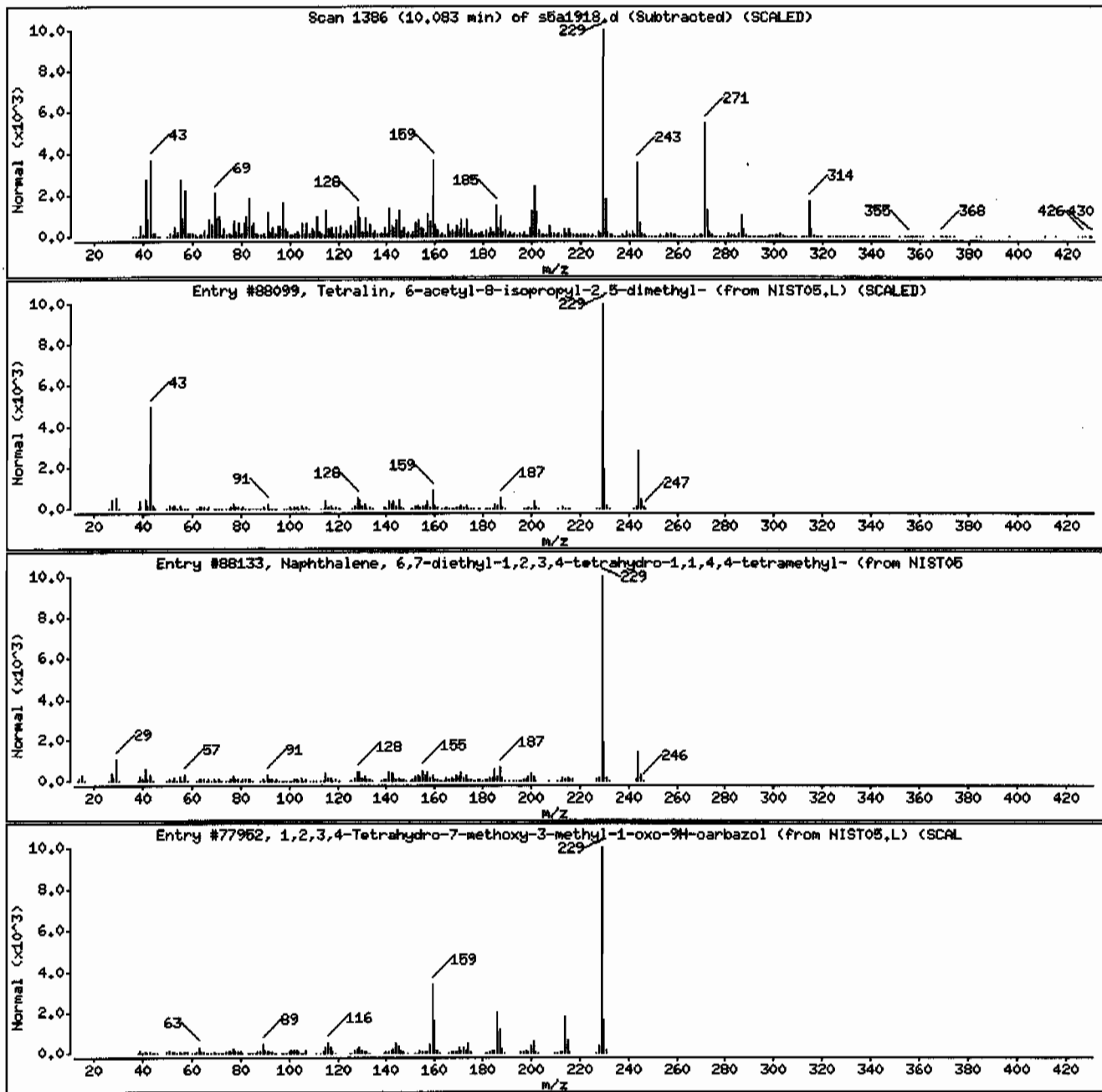
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetralin, 6-acetyl-8-isopropyl-2,5-dimet	1000155-43-5	NIST05.L	88099	64	C17H24O	244
Naphthalene, 6,7-diethyl-1,2,3,4-tetrahy	55741-10-1	NIST05.L	88133	59	C18H28	244
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-	32550-51-9	NIST05.L	77952	50	C14H15NO2	229



Date: 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: HSD5.i

Sample Info: 1244626010194284011SVH11ILANL

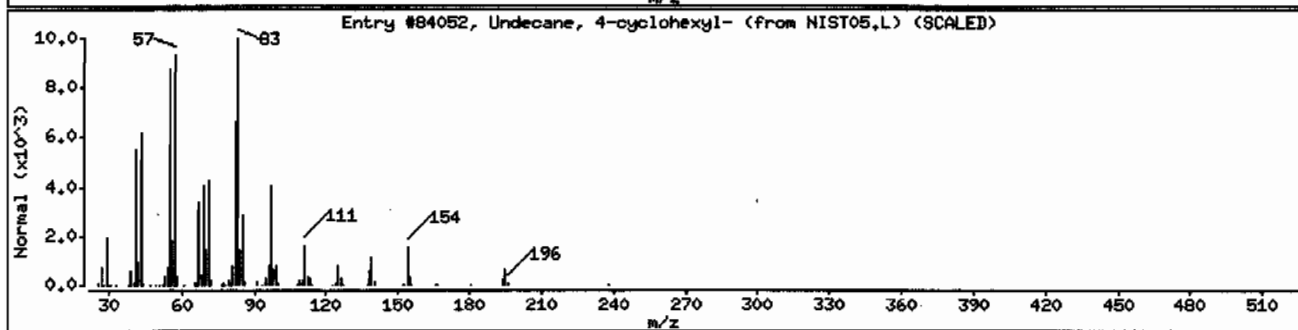
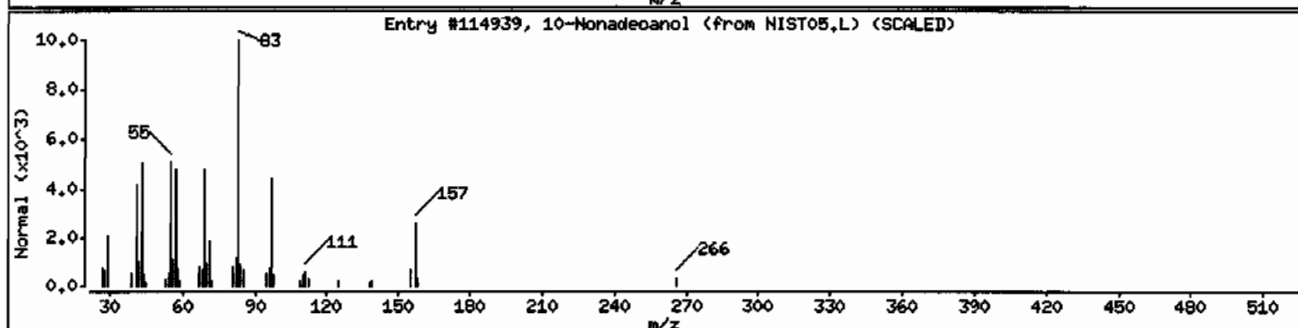
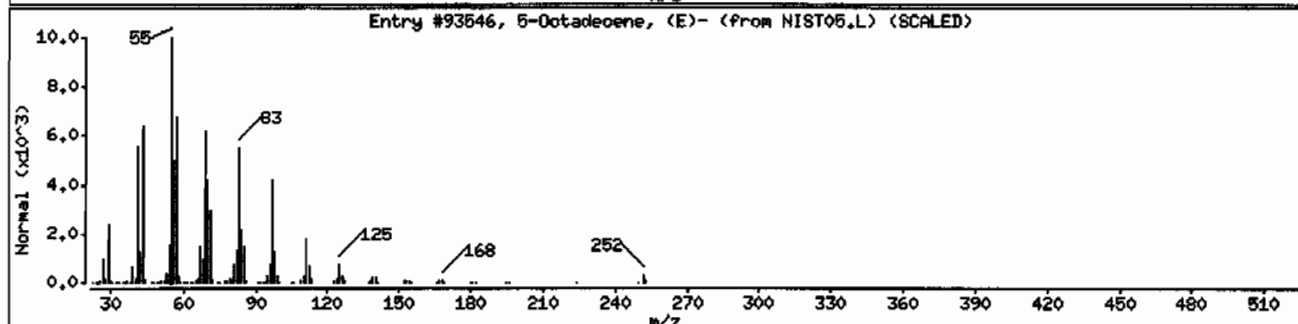
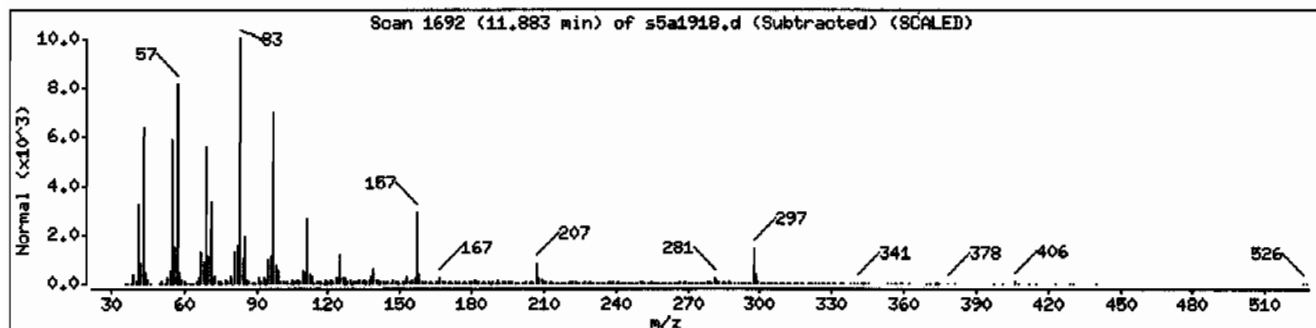
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Octadecene, (E)-	7206-21-5	NIST05.L	93546	78	C18H36	252
10-Nonadecanol	16840-84-9	NIST05.L	114939	64	C19H40O	284
Undecane, 4-cyclohexyl-	13151-79-6	NIST05.L	84052	52	C17H34	238



Date : 19-JAN-2010 16:51

Client ID: RE12-10-7260

Instrument: MSD5.i

Sample Info: 1244626010194284011SVMI1ILANL

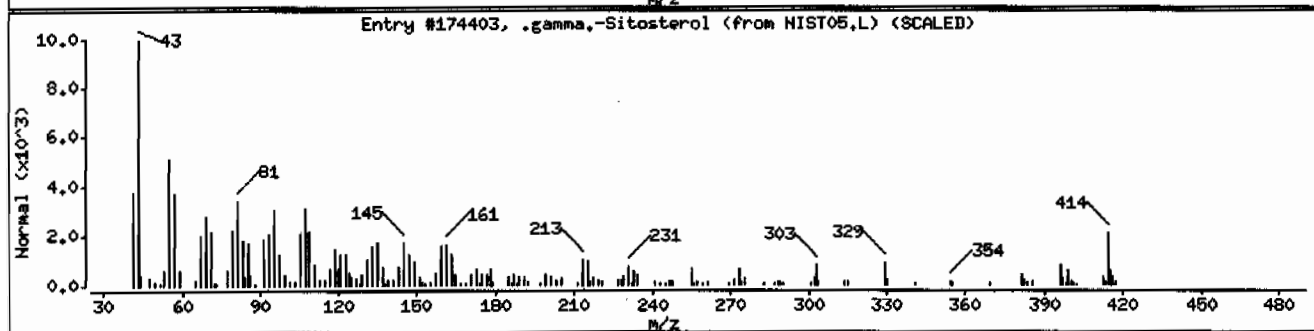
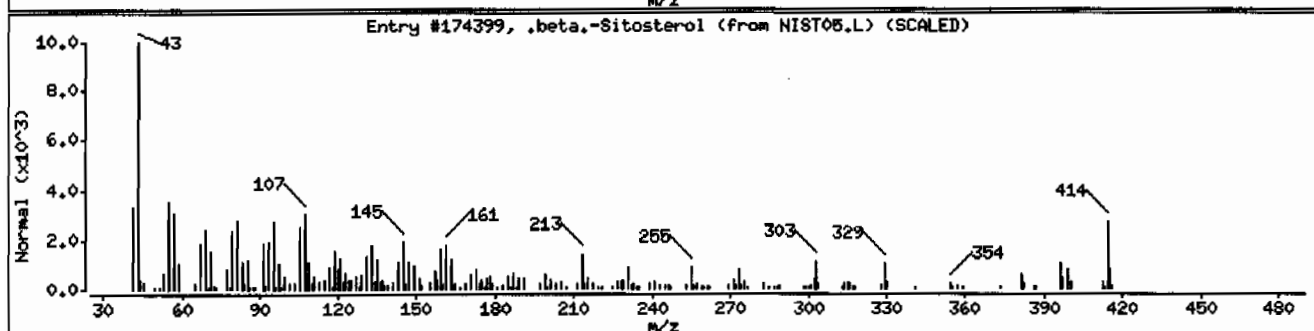
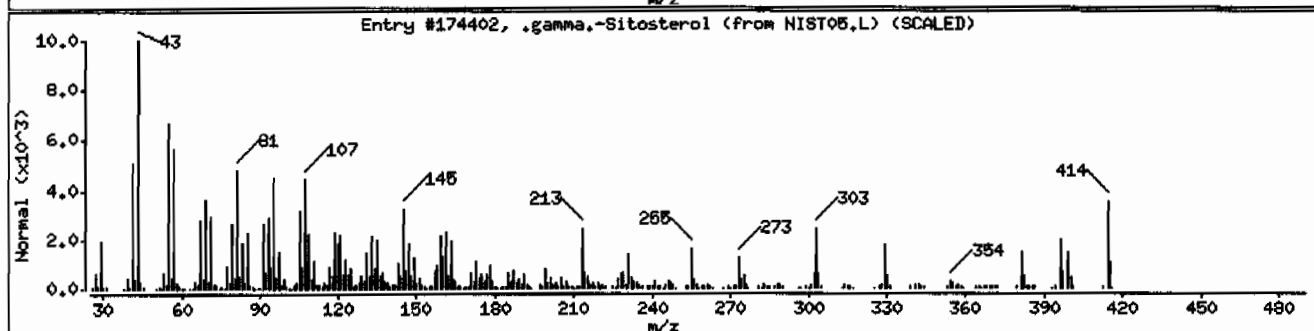
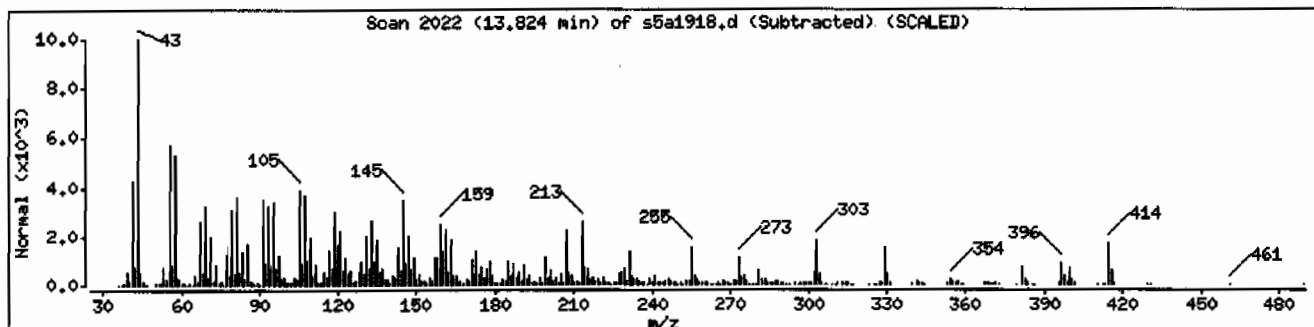
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	99	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	94	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	89	C29H50O	414



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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626006	Date Received: 01/13/2010 08:55	%Moisture: 13.3
Client ID: RE12-10-7261	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 15:18	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1914.d	Aliquot: 30.17 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	382	ug/kg	76.4	382
108-95-2	Phenol	U	382	ug/kg	76.4	382
95-57-8	2-Chlorophenol	U	382	ug/kg	76.4	382
106-46-7	1,4-Dichlorobenzene	U	382	ug/kg	76.4	382
621-64-7	N-Nitrosodipropylamine	U	382	ug/kg	76.4	382
59-50-7	4-Chloro-3-methylphenol	U	382	ug/kg	76.4	382
83-32-9	Acenaphthene	U	38.2	ug/kg	12.6	38.2
121-14-2	2,4-Dinitrotoluene	U	382	ug/kg	38.2	382
100-02-7	4-Nitrophenol	U	382	ug/kg	126	382
87-86-5	Pentachlorophenol	U	382	ug/kg	95.5	382
129-00-0	Pyrene	U	38.2	ug/kg	11.5	38.2
110-86-1	Pyridine	U	382	ug/kg	76.4	382
62-53-3	Aniline	U	382	ug/kg	115	382
111-44-4	bis(2-Chloroethyl) ether	U	382	ug/kg	76.4	382
541-73-1	1,3-Dichlorobenzene	U	382	ug/kg	76.4	382
100-51-6	Benzyl alcohol	U	382	ug/kg	115	382
95-50-1	1,2-Dichlorobenzene	U	382	ug/kg	76.4	382
108-60-1	bis(2-Chloroisopropyl)ether	U	382	ug/kg	76.4	382
95-48-7	o-Cresol	U	382	ug/kg	76.4	382
65794-96-9	m,p-Cresols	U	382	ug/kg	115	382
67-72-1	Hexachloroethane	U	382	ug/kg	76.4	382
98-95-3	Nitrobenzene	U	382	ug/kg	76.4	382
78-59-1	Isophorone	U	382	ug/kg	76.4	382
88-75-5	2-Nitrophenol	U	382	ug/kg	76.4	382
105-67-9	2,4-Dimethylphenol	U	382	ug/kg	134	382
111-91-1	bis(2-Chloroethoxy)methane	U	382	ug/kg	76.4	382
120-83-2	2,4-Dichlorophenol	U	382	ug/kg	76.4	382
65-85-0	Benzoic acid	U	764	ug/kg	191	764
91-20-3	Naphthalene	U	38.2	ug/kg	11.5	38.2
106-47-8	4-Chloroaniline	U	382	ug/kg	76.4	382
87-68-3	Hexachlorobutadiene	U	382	ug/kg	76.4	382
91-57-6	2-Methylnaphthalene	U	38.2	ug/kg	7.64	38.2
77-47-4	Hexachlorocyclopentadiene	U	382	ug/kg	76.4	382
88-06-2	2,4,6-Trichlorophenol	U	382	ug/kg	76.4	382
95-95-4	2,4,5-Trichlorophenol	U	382	ug/kg	76.4	382
91-58-7	2-Chloronaphthalene	U	38.2	ug/kg	12.6	38.2
88-74-4	2-Nitroaniline	U	382	ug/kg	76.4	382
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	382	ug/kg	76.4	382

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

SDG Number: 10-1225
Lab Sample ID: 244626006

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	382	ug/kg	76.4	382
606-20-2	2,6-Dinitrotoluene	U	382	ug/kg	38.2	382
208-96-8	Acenaphthylene	U	38.2	ug/kg	11.5	38.2
51-28-5	2,4-Dinitrophenol	U	764	ug/kg	145	764
132-64-9	Dibenzofuran	U	382	ug/kg	76.4	382
84-66-2	Diethylphthalate	U	382	ug/kg	76.4	382
86-73-7	Fluorene	U	38.2	ug/kg	11.5	38.2
7005-72-3	4-Chlorophenylphenylether	U	382	ug/kg	76.4	382
534-52-1	2-Methyl-4,6-dinitrophenol	U	382	ug/kg	76.4	382
100-01-6	4-Nitroaniline	U	382	ug/kg	115	382
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	382	ug/kg	76.4	382
122-66-7	Azobenzene	U	382	ug/kg	76.4	382
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	382	ug/kg	76.4	382
118-74-1	Hexachlorobenzene	U	382	ug/kg	76.4	382
85-01-8	Phenanthrene	U	38.2	ug/kg	11.5	38.2
120-12-7	Anthracene	U	38.2	ug/kg	7.64	38.2
84-74-2	Di-n-butylphthalate	J	121	ug/kg	76.4	382
206-44-0	Fluoranthene	U	38.2	ug/kg	11.5	38.2
85-68-7	Butylbenzylphthalate	U	382	ug/kg	76.4	382
56-55-3	Benzo(a)anthracene	U	38.2	ug/kg	11.5	38.2
91-94-1	3,3'-Dichlorobenzidine	U	382	ug/kg	115	382
218-01-9	Chrysene	U	38.2	ug/kg	11.5	38.2
117-81-7	bis(2-Ethylhexyl)phthalate	U	382	ug/kg	76.4	382
117-84-0	Di-n-octylphthalate	U	382	ug/kg	76.4	382
205-99-2	Benzo(b)fluoranthene	U	38.2	ug/kg	11.5	38.2
207-08-9	Benzo(k)fluoranthene	U	38.2	ug/kg	11.5	38.2
50-32-8	Benzo(a)pyrene	U	38.2	ug/kg	11.5	38.2
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.2	ug/kg	11.5	38.2
53-70-3	Dibenzo(a,h)anthracene	U	38.2	ug/kg	11.5	38.2
191-24-2	Benzo(ghi)perylene	U	38.2	ug/kg	11.5	38.2
120-82-1	1,2,4-Trichlorobenzene	U	382	ug/kg	76.4	382

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.01	4070	ug/kg		J
7785-70-8	1R- α -Pinene	3.51	2900	ug/kg	97	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 3 of 3

SDG Number: 10-1225
Lab Sample ID: 244626006

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 13.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7261
Batch ID: 942840
Run Date: 01/19/2010 15:18
Prep Date: 01/18/2010 20:10
Data File: s5a1914.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
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5.52	701	ug/kg	99	NJ
	Unknown	5.6	753	ug/kg		J
5951-67-7	Cyclohexene, 6-ethenyl-6-methyl-1-(1-met	5.7	1230	ug/kg	89	NJ
	Unknown	5.77	1560	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.81	8340	ug/kg	98	NJ
470-40-6	Thujopsene	5.88	803	ug/kg	99	NJ
	Unknown	5.96	1360	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	6.14	1880	ug/kg	96	NJ
19870-75-8	Cedrane, 8-propoxy-	6.58	5110	ug/kg	94	NJ
	Unknown	6.89	2820	ug/kg		J
	Unknown	7.11	990	ug/kg		J
21391-98-0	1-Cyclohexene-1-carboxaldehyde, 4-(1-met	7.38	1150	ug/kg	80	NJ
	Unknown	8.93	5940	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.06	16800	ug/kg	99	NJ
	Unknown	9.08	8980	ug/kg		J
	Unknown	9.12	1430	ug/kg		J
	Unknown	9.21	6550	ug/kg		J
	Unknown	9.26	3820	ug/kg		J
88104-31-8	2-Chloropropionic acid, octadecyl ester	9.43	1160	ug/kg	93	NJ
23613-02-7	1,3,5-Triazine-2(1H)-thione, 4-(diethyla	9.49	2420	ug/kg	90	NJ
	Unknown	9.52	1100	ug/kg		J
	Unknown	9.56	3310	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.64	1850	ug/kg	90	NJ
	Unknown	9.77	1970	ug/kg		J
	Unknown	10.12	11200	ug/kg		J
	Unknown	10.51	1560	ug/kg		J
7225-64-1	Heptadecane, 9-octyl-	10.82	2010	ug/kg	96	NJ
83-46-5	.beta.-Sitosterol	13.84	3300	ug/kg	99	NJ

Data File: /chem/MSD5.i/s011910.b/s5a1914.d
Report Date: 20-Jan-2010 07:49

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1914.d
Lab Smp Id: 244626006 Client Smp ID: RE12-10-7261
Inj Date : 19-JAN-2010 15:18
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626006|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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	13.27630	% 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	3.937	3.940	(1.000)	498022		40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1723841		40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	929314		40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	1815764		40.0000	
* 91 Chrysene-d12	240	9.660	9.646	(1.000)	1742293		40.0000	
* 98 Perylene-d12	264	11.342	11.331	(1.000)	1210291		40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.794)	802443		64.9702	2480
\$ 5 Phenol-d5	99	3.648	3.651	(0.927)	1001910		65.7779	2510
\$ 20 Nitrobenzene-d5	82	4.295	4.301	(0.895)	457175		34.5405	1320
\$ 39 2-Fluorobiphenyl	172	5.548	5.548	(0.916)	917126		37.3064	1420
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	266078		90.0828	3440
\$ 81 p-Terphenyl-d14	244	8.613	8.611	(0.892)	1029003		37.6135	1440

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
72 Di-n-butylphthalate	149	7.654	7.652	(1.059)	140525	3.17065	121 (a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5a1914.d

Report Date: 01/20/2010 07:04

Lab. ID: 244626006

SampleType: SAMPLE

Injection Date: 19-JAN-2010 15:18

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626006|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	55018	3.65	3.72	80-120	100	(T)
93	10541	3.61	3.72	210-270	19	(QT)

6	Phenol	CAS#: 108-95-2				
94	137061	3.51	3.66	80-120	100	(T)
66	28554	3.51	3.66	14- 74	21	(T)
65	105794	3.51	3.66	0- 30	77	(QT)

7	bis(2-Chloroethyl) ether	CAS#: 111-44-4				
63	36344	3.51	3.74	80-120	100	(T)
93	1330358	3.51	3.74	109-169	3660	(QT)
95	17621	3.51	3.74	6- 66	48	(T)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	66386	4.30	4.18	80-120	100	(T)
42	39559	4.30	4.18	44-104	60	(T)

22	Isophorone	CAS#: 78-59-1				
82	459797	4.30	4.47	80-120	100	(T)
138	333	4.35	4.47	0- 49	0	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	21011	4.54	4.57	80-120	100	()
122	16503	4.54	4.57	39- 99	79	()
77	23730	4.58	4.57	34- 94	113	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
40 2-Chloronaphthalene				CAS#: 91-58-7		
162	55271	5.70	5.66	80-120	100	()
164	1250	5.69	5.66	4- 64	2	(Q)
127	7434	5.70	5.66	9- 69	13	()
<hr/>						
42 o-Nitroaniline				CAS#: 88-74-4		
65	79214	5.70	5.71	80-120	100	()
92	128527	5.70	5.71	31- 91	162	(Q)
138	1749	5.75	5.71	70-130	2	(Q)
<hr/>						
41 m-Nitroaniline				CAS#: 99-09-2		
138	48970	5.81	6.01	80-120	100	(T)
92	679924	5.82	6.01	82-142	1388	(QT)
108	884052	5.81	6.01	0- 40	1805	(QT)
<hr/>						
43 Dimethylphthalate				CAS#: 131-11-3		
163	256375	5.81	5.82	80-120	100	()
164	21874	5.81	5.82	0- 40	9	()
<hr/>						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	125061	6.06	5.88	80-120	100	(T)
63	10090	6.06	5.88	61-121	8	(QT)
<hr/>						
48 2,4-Dinitrophenol				CAS#: 51-28-5		
184	122	6.06	6.08	80-120	100	()
154	3432	6.06	6.09	1306-1366	2796	(Q)
<hr/>						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	124238	6.06	6.17	80-120	100	(T)
89	7117	6.06	6.17	47-107	6	(QT)
63	8340	6.06	6.17	23- 83	7	(QT)
<hr/>						
51 Diethylphthalate				CAS#: 84-66-2		
149	56576	6.52	6.33	80-120	100	(T)
177	10025	6.51	6.33	0- 53	18	(T)
150	40208	6.52	6.33	0- 43	71	(QT)
<hr/>						
52 4-Nitrophenol				CAS#: 100-02-7		
139	1192	6.09	6.10	80-120	100	()
109	84381	6.08	6.10	41-101	7074	(Q)
65	69858	6.06	6.10	72-132	5857	(Q)
<hr/>						
53 Fluorene				CAS#: 86-73-7		
166	19775	6.52	6.47	80-120	100	()
165	16010	6.52	6.47	56-116	81	()
167	3032	6.51	6.47	0- 44	15	()
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
54 4-Chlorophenylphenylether				CAS#: 7005-72-3		
204	83859	6.55	6.45	80-120	100	(T)
141	4155	6.51	6.45	25- 85	5	(Q)
206	4868	6.58	6.45	3- 63	6	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	158	6.53	6.49	80-120	100	()
105	73230	6.51	6.49	12- 72	46203	(Q)
51	13008	6.50	6.49	42-102	8207	(Q)
<hr/>						
56 p-Nitroaniline				CAS#: 100-01-6		
138	61993	6.58	6.47	80-120	100	(T)
108	488372	6.58	6.47	45-105	788	(QT)
92	165611	6.58	6.47	18- 78	267	(QT)
<hr/>						
58 1,2-Diphenylhydrazine				CAS#: 122-66-7		
77	430349	6.58	6.57	80-120	100	()
105	417233	6.58	6.57	0- 47	97	(Q)
182	1177	6.57	6.57	0- 57	0	()
<hr/>						
61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	18078	6.66	6.84	80-120	100	(T)
141	123689	6.66	6.83	43-103	684	(QT)
250	36642	6.66	6.84	68-128	203	(QT)
<hr/>						
68 Phenanthrene				CAS#: 85-01-8		
178	23740	7.38	7.25	80-120	100	(T)
179	14114	7.38	7.25	0- 46	59	(QT)
176	12715	7.38	7.25	0- 50	54	(QT)
<hr/>						
69 Anthracene				CAS#: 120-12-7		
178	23751	7.38	7.30	80-120	100	(T)
179	14114	7.38	7.30	0- 46	59	(QT)
176	13838	7.38	7.30	0- 49	58	(QT)
<hr/>						
72 Di-n-butylphthalate				CAS#: 84-74-2		
149	140525	7.65	7.65	80-120	100	()
150	24889	7.65	7.65	0- 40	18	()
104	3151	7.65	7.65	0- 36	2	()
<hr/>						
79 Pyrene				CAS#: 129-00-0		
202	38904	8.62	8.51	80-120	100	(T)
200	77028	8.62	8.51	0- 50	198	(QT)
101	7328	8.62	8.51	0- 44	19	(T)
<hr/>						
85 Butylbenzylphthalate				CAS#: 85-68-7		
149	42301	9.05	9.04	80-120	100	()
91	464687	9.05	9.04	41-101	1099	(Q)
206	1716	9.05	9.04	0- 52	4	()
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
89 Benzo(a)anthracene				CAS#: 56-55-3		
228	28208	9.64	9.63	80-120	100	()
226	18362	9.62	9.63	0- 57	65	(Q)
229	265163	9.64	9.63	0- 50	940	(Q)

92 Chrysene				CAS#: 218-01-9		
228	10765	9.64	9.67	80-120	100	()
229	179423	9.64	9.67	0- 51	1667	(Q)
226	14451	9.62	9.67	0- 60	134	(Q)

93 bis(2-Ethylhexyl)phthalate				CAS#: 117-81-7		
149	116315	9.56	9.56	80-120	100	()
167	38839	9.56	9.56	4- 64	33	()

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	1189	13.11	13.12	80-120	100	()
138	3437	13.12	13.12	1- 61	289	(Q)

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	304	13.12	13.13	80-120	100	()
139	1793	13.12	13.12	0- 30	589	(Q)

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	5978	13.84	13.66	80-120	100	(T)
138	12098	13.83	13.66	0- 30	202	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1914.d
 Lab Smp Id: 244626006 Client Smp ID: RE12-10-7261
 Inj Date : 19-JAN-2010 15:18
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626006|942840|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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	13.27630	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.937	3070153	40.000
* 46 Acenaphthene-d10	6.060	8105171	40.000
* 67 Phenanthrene-d10	7.231	7301666	40.000
* 91 Chrysene-d12	9.660	5116587	40.000
* 98 Perylene-d12	11.342	3813728	40.000

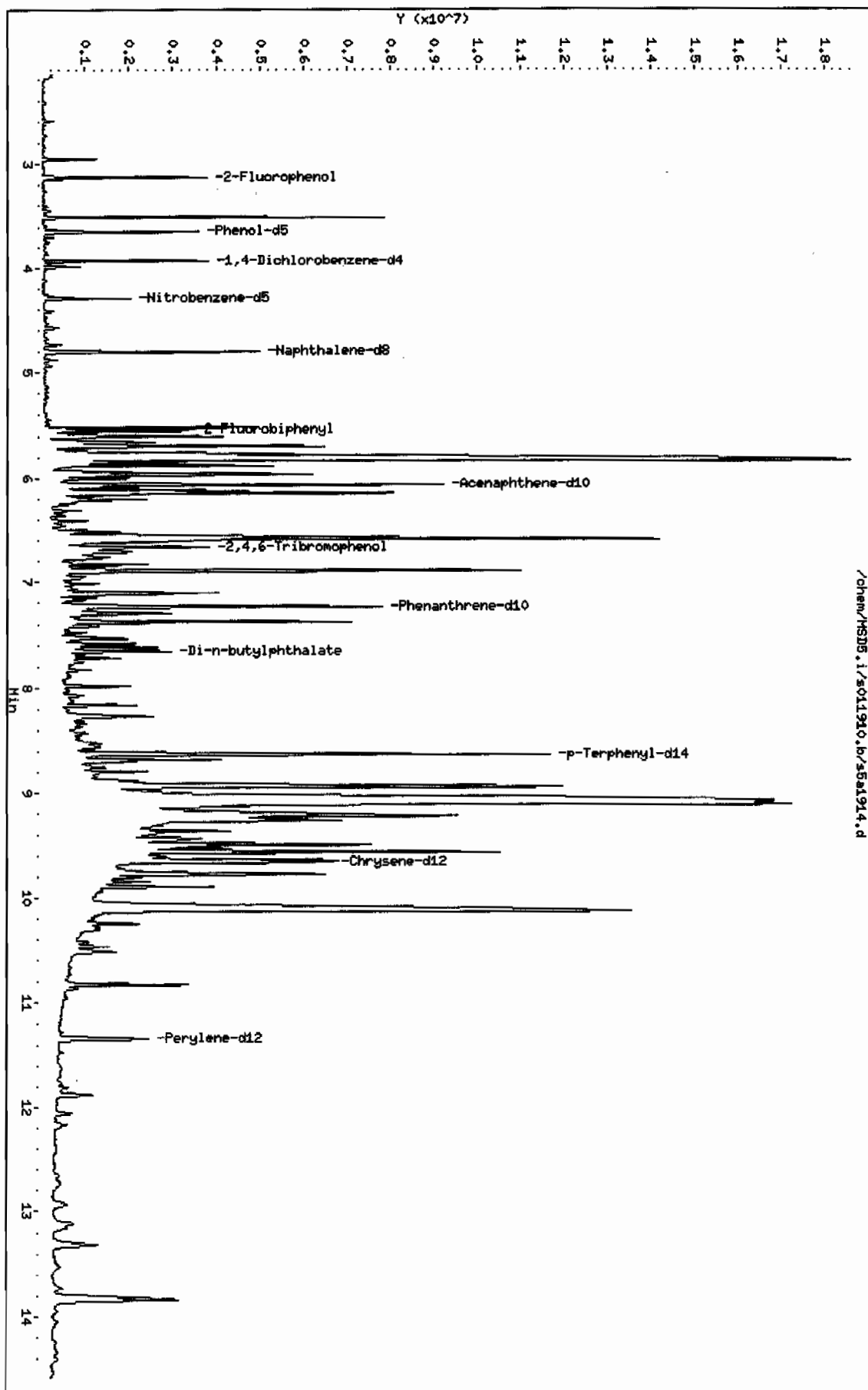
RT	AREA	CONCENTRATIONS		QUAL	QUANT		
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.007	8165223	106.381936	4060	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.507	5833698	76.0052798	2900	97	NIST05.L	15188	10
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6					CAS #: 5989-08-2		
5.519	3715583	18.3368504	701	99	NIST05.L	59909	46
Unknown					CAS #:		
5.601	3991988	19.7009416	753	0		0	46
Cyclohexene, 6-ethenyl-6-methyl-1-(1-met					CAS #: 5951-67-7		
5.695	6509322	32.1242895	1230	89	NIST05.L	59984	46
Unknown					CAS #:		
5.766	8261352	40.7707680	1560	0		0	46
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.813	44195483	218.110039	8340	98	NIST05.L	60024	46
Thujopsene					CAS #: 470-40-6		
5.878	4257269	21.0101351	803	99	NIST05.L	59785	46
Unknown					CAS #:		
5.960	7210665	35.5854995	1360	0		0	46
Benzene, 1-methyl-4-(1,2,2-trimethylcycl					CAS #: 16982-00-6		
6.136	9975326	49.2294386	1880	96	NIST05.L	58541	46
Cedrane, 8-propoxy-					CAS #: 19870-75-8		
6.584	27108943	133.785902	5110	94	NIST05.L	101502	46
Unknown					CAS #:		
6.889	13468538	73.7833623	2820	0		0	67
Unknown					CAS #:		
7.107	4729053	25.9067039	990	0		0	67
1-Cyclohexene-1-carboxaldehyde, 4-(1-met					CAS #: 21391-98-0		
7.378	5475388	29.9952767	1150	80	NIST05.L	24285	67
Unknown					CAS #:		
8.930	19888717	155.484242	5940	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
9.060	56242947	439.691117	16800	99	NIST05.L	116239	91
Unknown					CAS #:		
9.083	30067197	235.056663	8980	0		0	91
Unknown					CAS #:		
9.125	4779873	37.3676673	1430	0		0	91
Unknown					CAS #:		
9.213	21933144	171.466982	6550	0		0	91
Unknown					CAS #:		
9.260	12800398	100.069813	3820	0		0	91
2- Chloropropionic acid, octadecyl ester					CAS #: 88104-31-8		
9.430	3889680	30.4083981	1160	93	NIST05.L	157163	91
1,3,5-Triazine-2(1H)-thione, 4-(diethyla					CAS #: 23613-02-7		
9.489	8114208	63.4345312	2420	90	NIST05.L	76728	91
Unknown					CAS #:		
9.519	3682970	28.7923935	1100	0		0	91
Unknown					CAS #:		
9.560	11062684	86.4848719	3300	0		0	91
Podocarpa-8,11,13-trien-3-one, 14-isopro					CAS #: 18326-16-4		
9.642	6189824	48.3902587	1850	90	NIST05.L	133599	91
Unknown					CAS #:		
9.772	6592065	51.5348568	1970	0		0	91
Unknown					CAS #:		
10.124	37643969	294.289679	11200	0		0	91
Unknown					CAS #:		
10.513	3886857	40.7669997	1560	0		0	98
Heptadecane, 9-octyl-					CAS #: 7225-64-1		
10.824	5004570	52.4900467	2010	96	NIST05.L	153748	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.836	8225188	86.2692489	3300	99	NIST05.L	174399	98

Data File: /chem/HSD5.i/s011910.b/s5a1914.d
 Date: 19-Jan-2010 15:18
 Client ID: RE12-10-7261
 Sample Info: 1244626006194284011SVH11L1ANL
 Volume Injected (uL): 0.5
 Column phase: JSM DB-SMS

Instrument: HSD5.i
 Operator: RMB
 Column diameter: 0.20



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: I244626006194284011ISVH11ILANL

Volume Injected (uL): 0.5

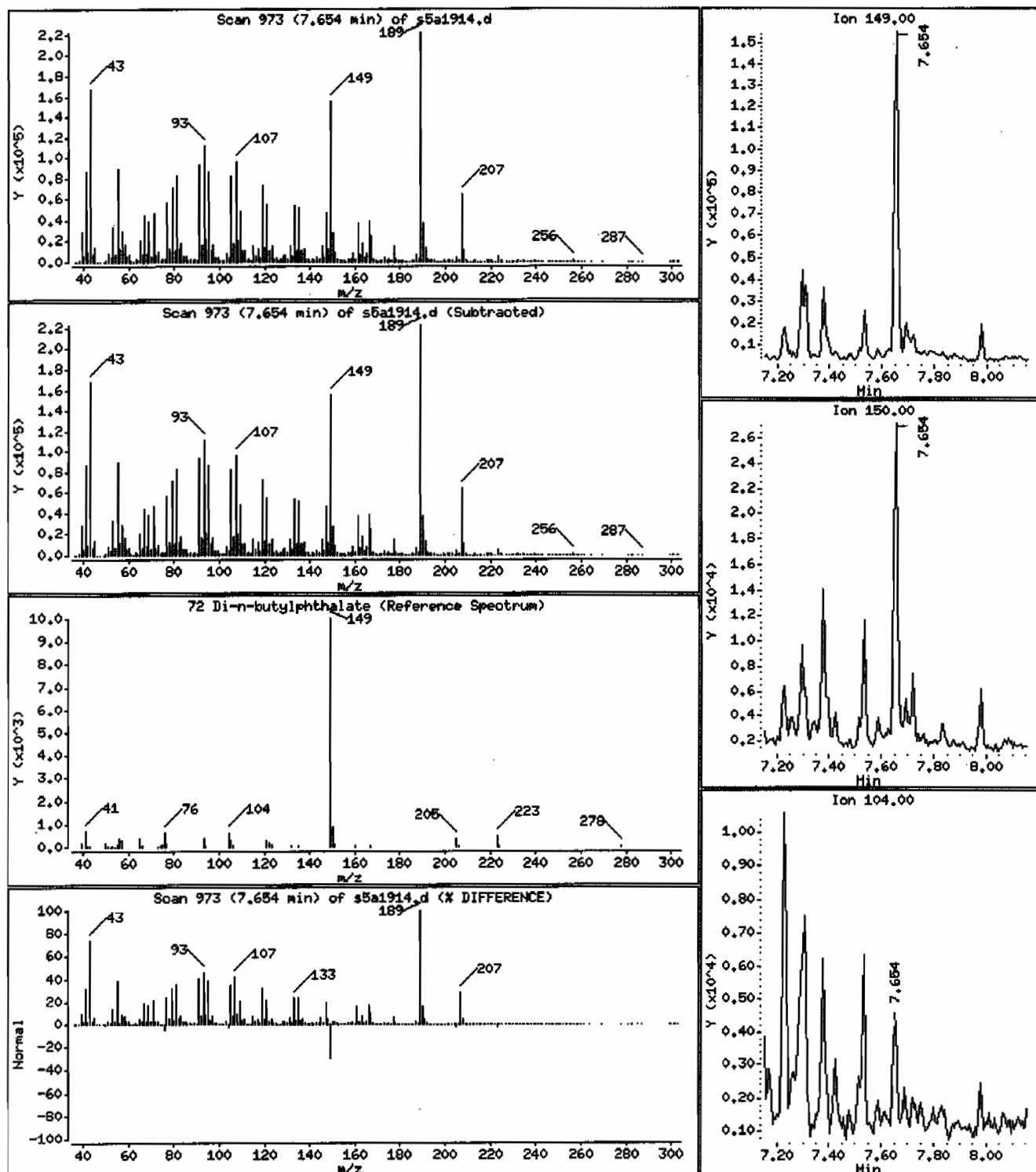
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 121 ug/Kg



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11ILANL

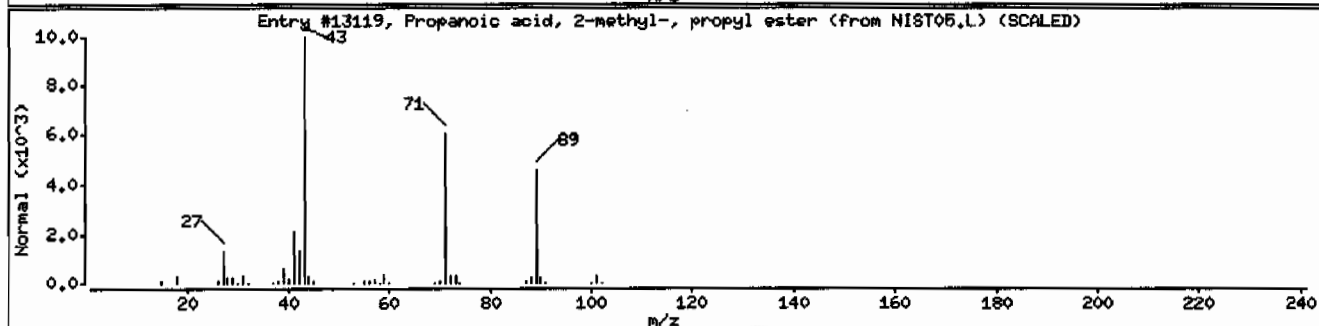
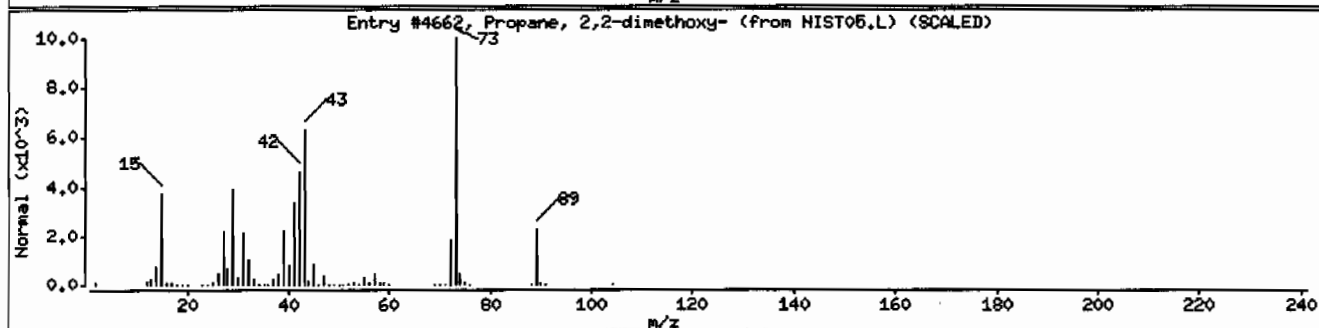
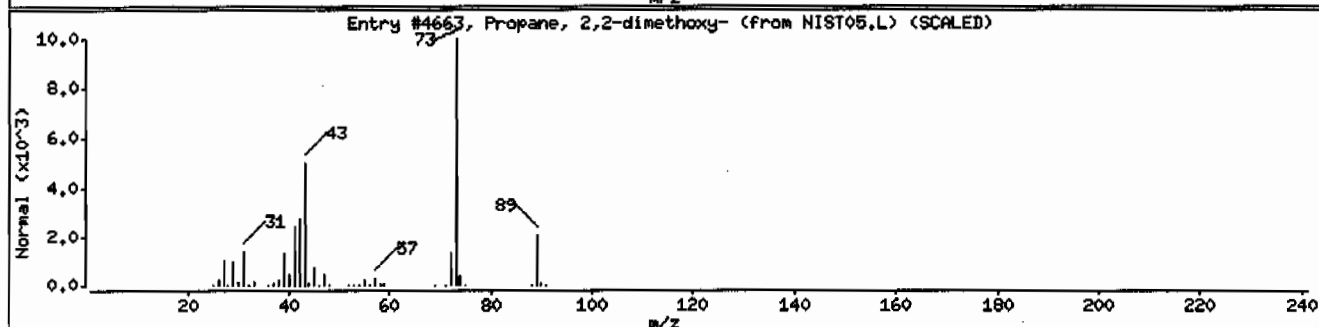
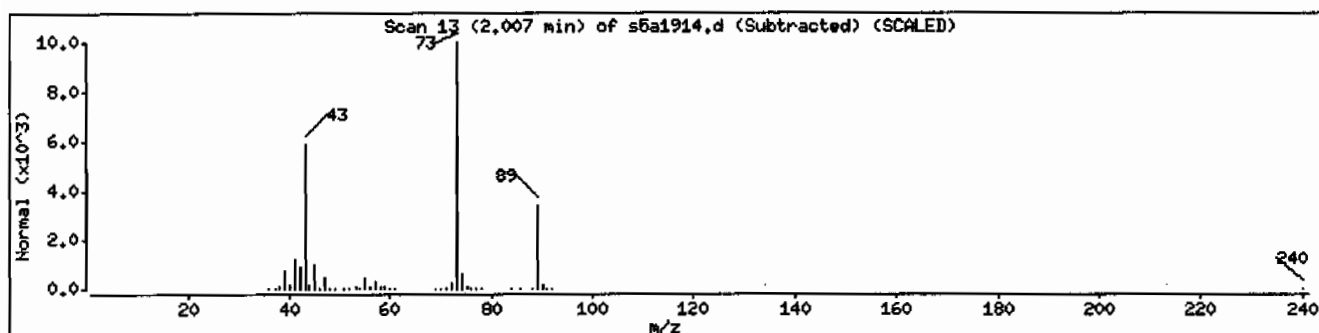
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-6MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	43	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	38	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	16	C7H14O2	130



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.1

Sample Info: 1244626006194284011SVH11ILANL

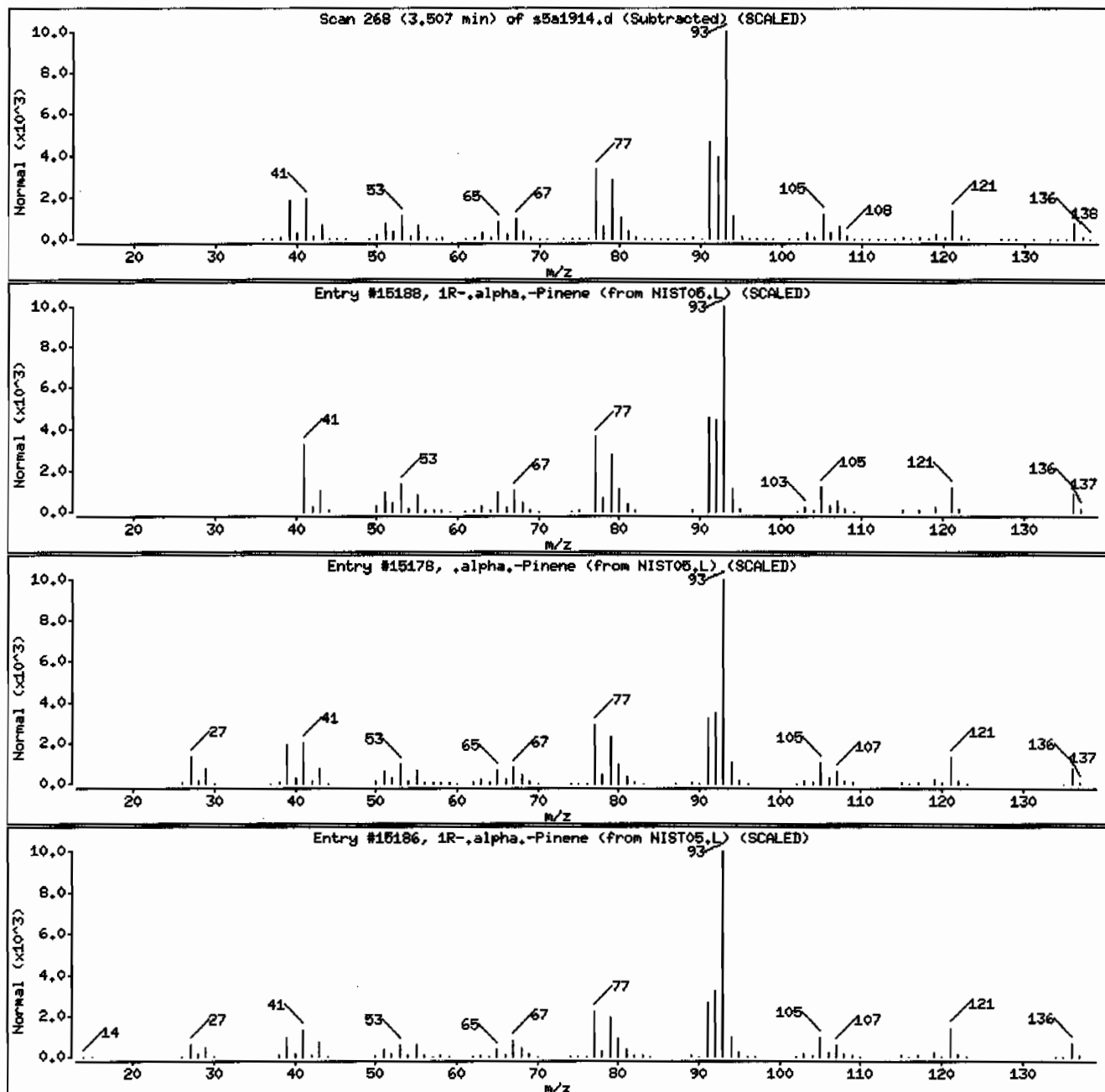
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-,alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136
1R-,alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: HSD5.i

Sample Info: 1244626006194284011SVH111LANL

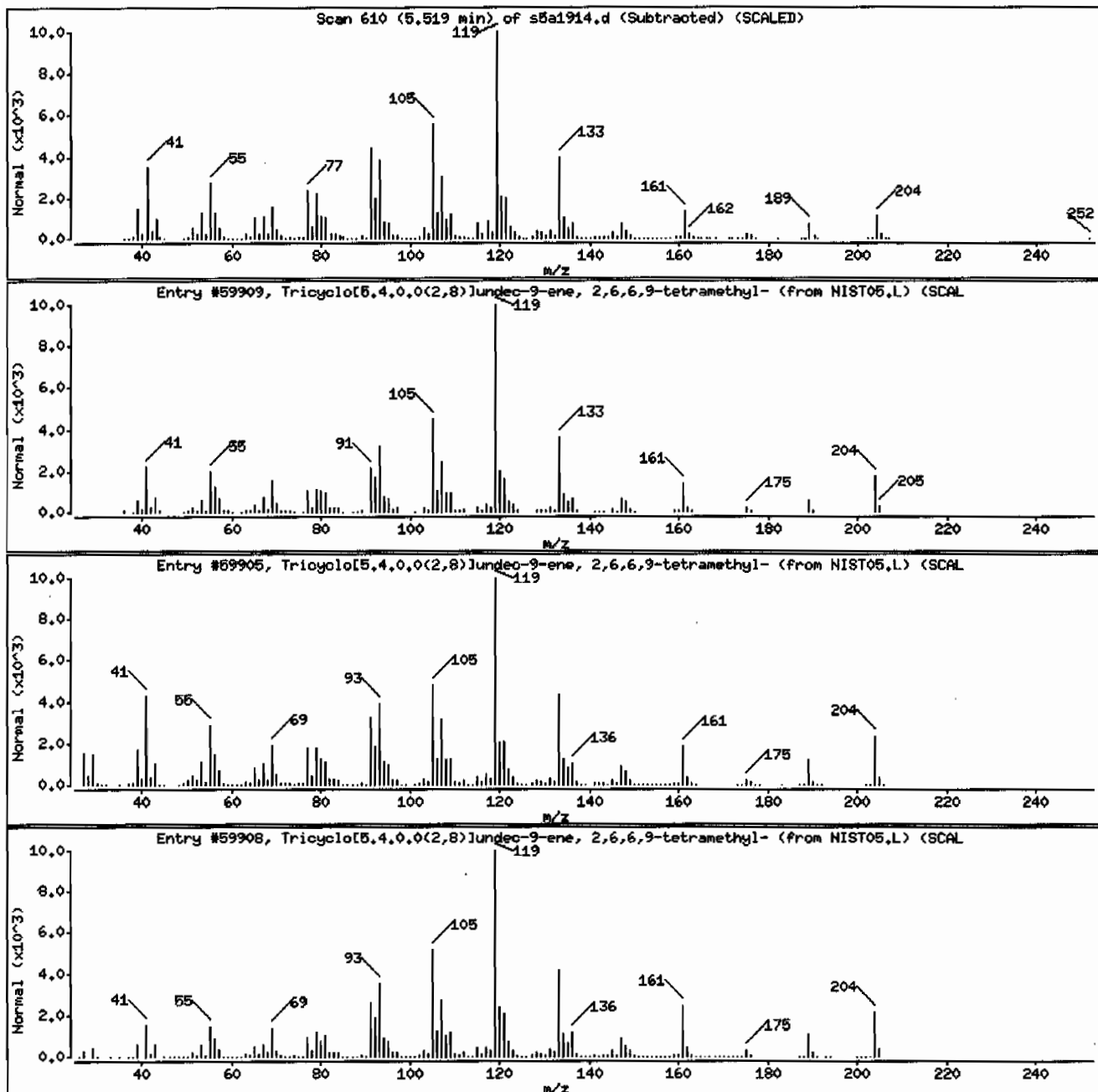
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	99	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59905	98	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59908	96	C15H24	204



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: HSD5.i

Sample Info: 1244626006194284011SVH11ILANL

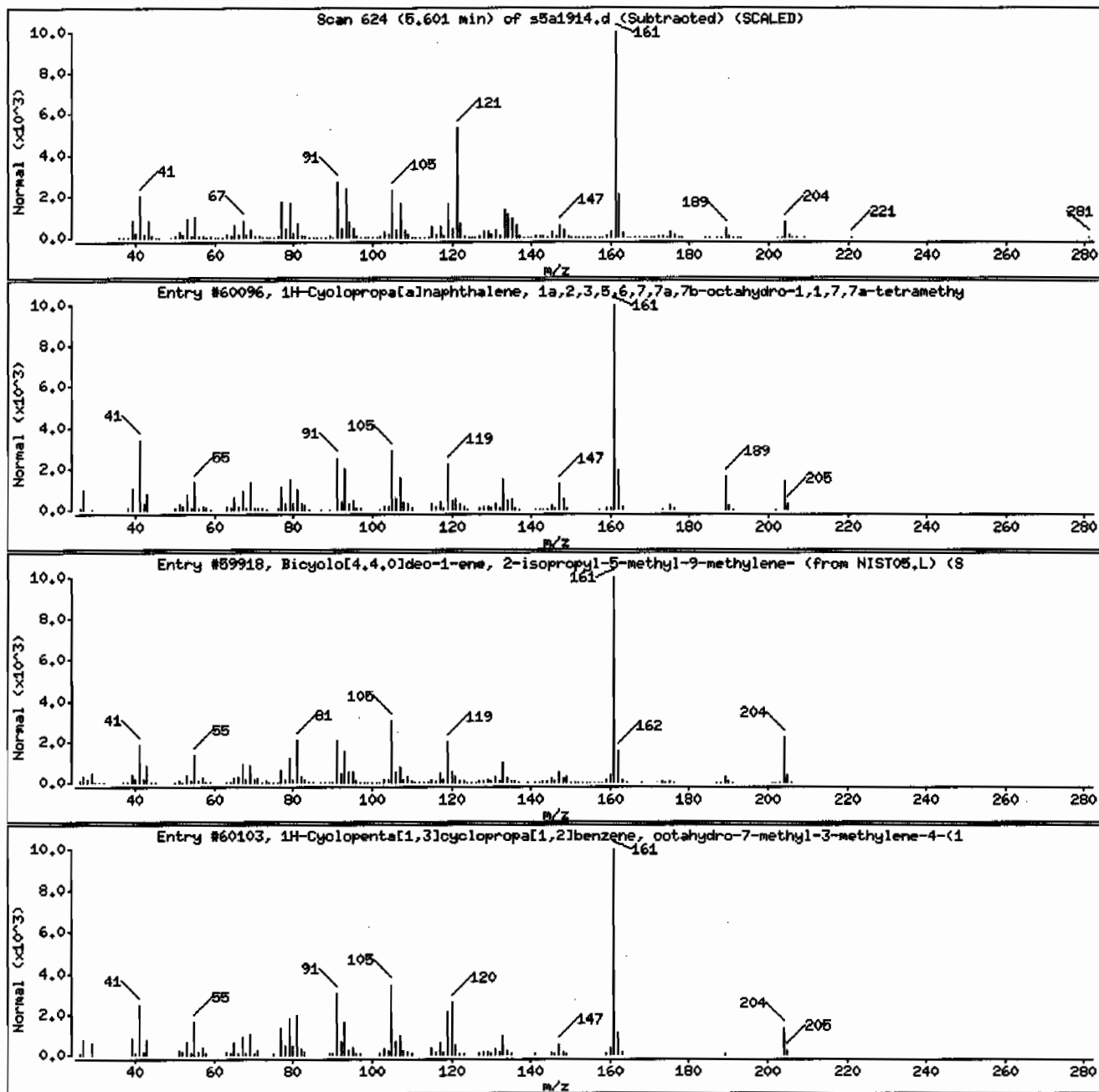
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,	17334-55-3	NIST05.L	60096	72	C15H24	204
Bicyclo[4.4.0]dec-1-ene, 2-isopropyl-5-m	150320-52-8	NIST05.L	59918	70	C15H24	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60103	64	C15H24	204



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: HSD5.i

Sample Info: 1244626006194284011ISVH11ILANL

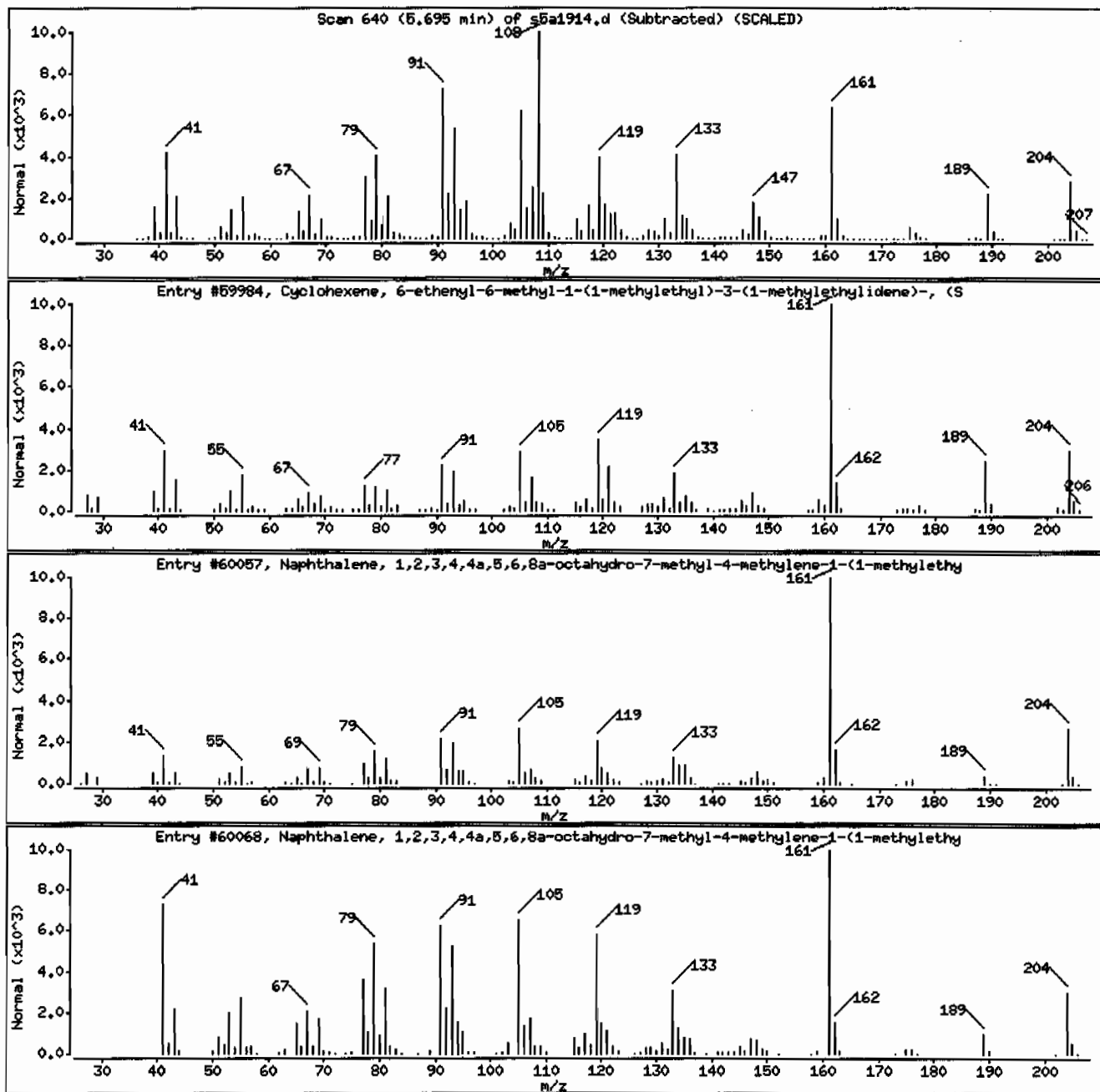
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 6-ethenyl-6-methyl-1-(1-met	5951-67-7	NIST05.L	59984	89	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	39029-41-9	NIST05.L	60057	87	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60068	83	C15H24	204



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011ISVH11LANL

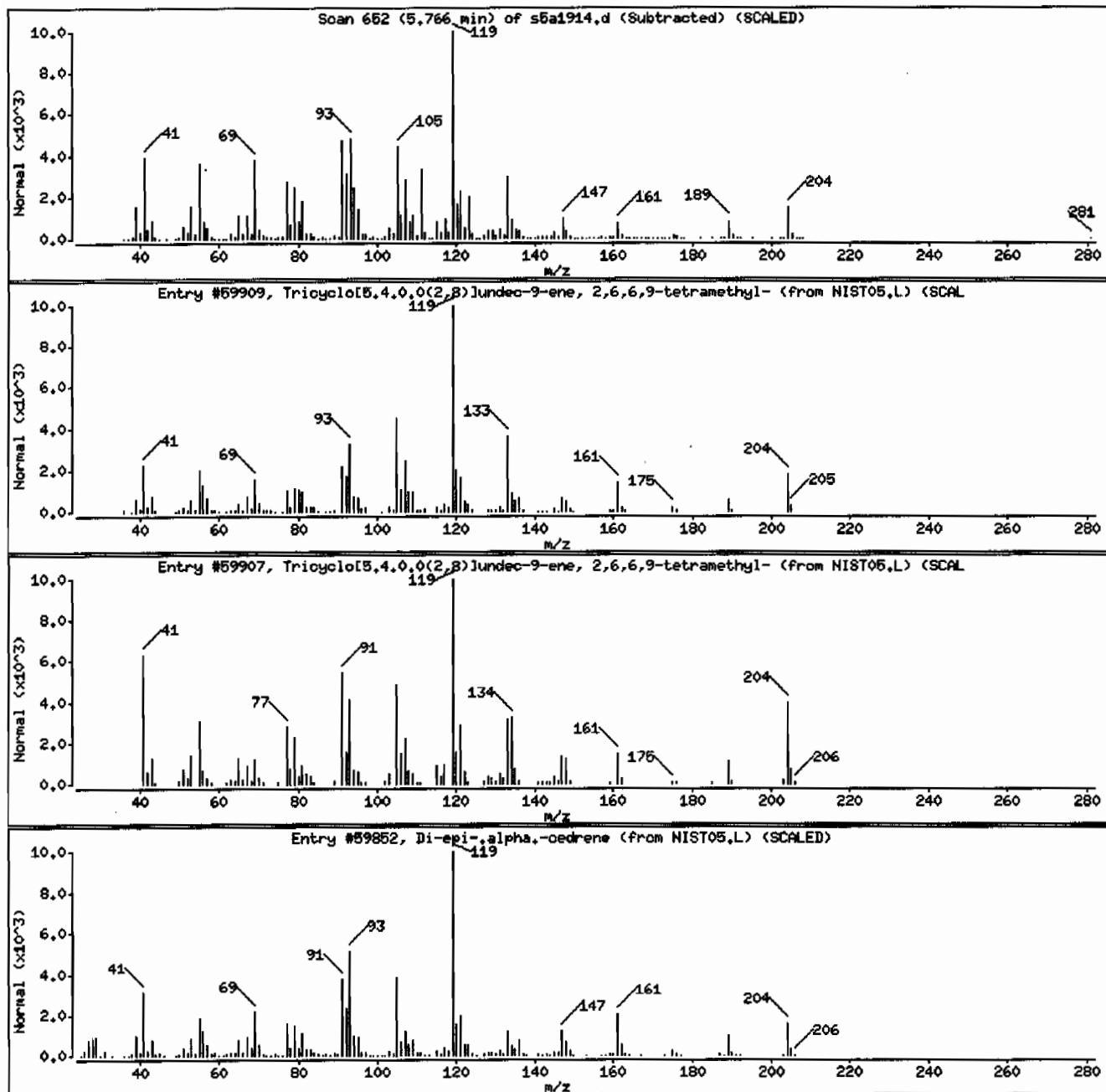
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	86	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	70	C15H24	204
Di-epi-.alpha.-cedrene	1000156-13-3	NIST05.L	59852	62	C15H24	204



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH111LANL

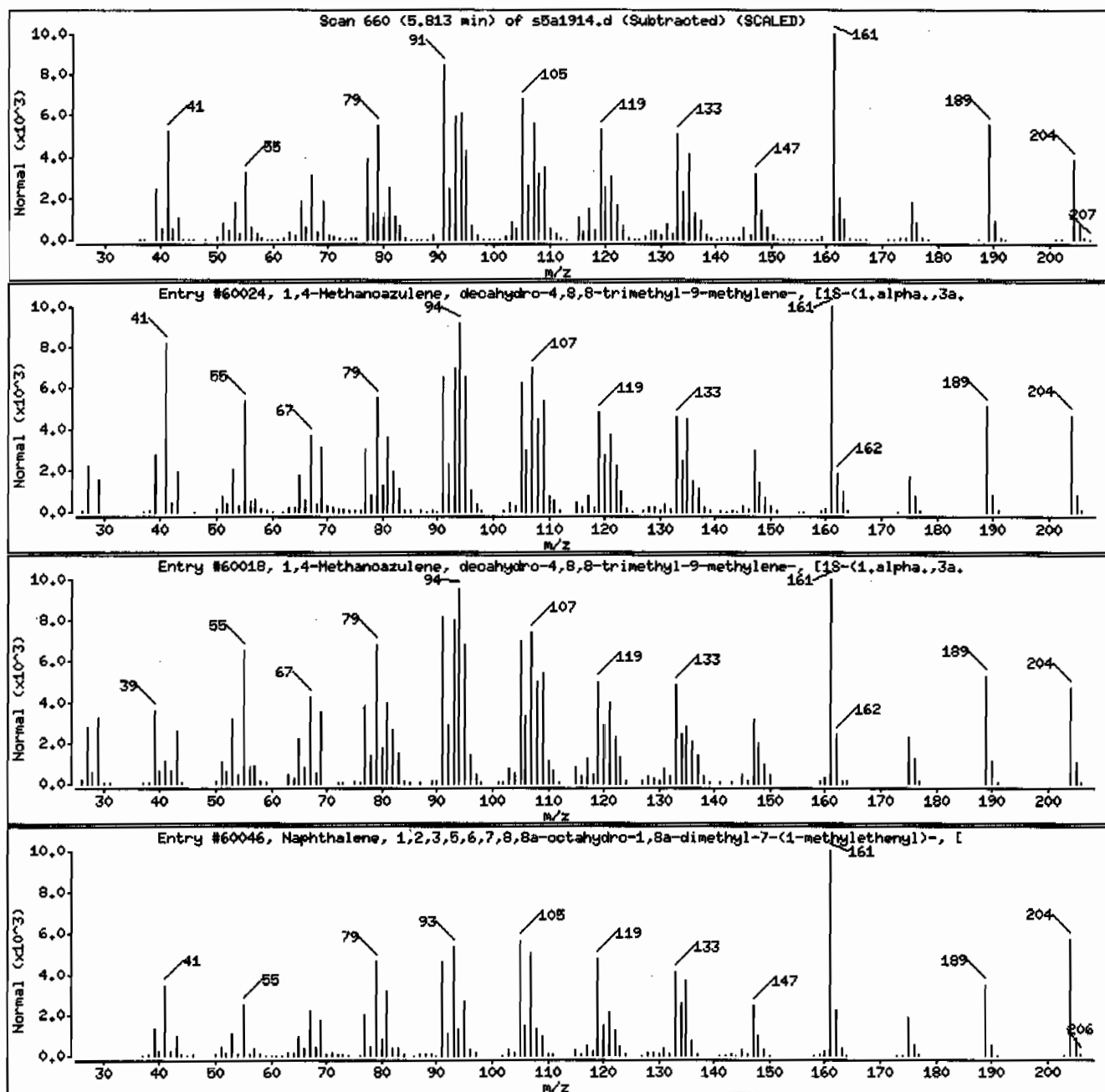
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	97	C15H24	204



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011ISVM11ILANL

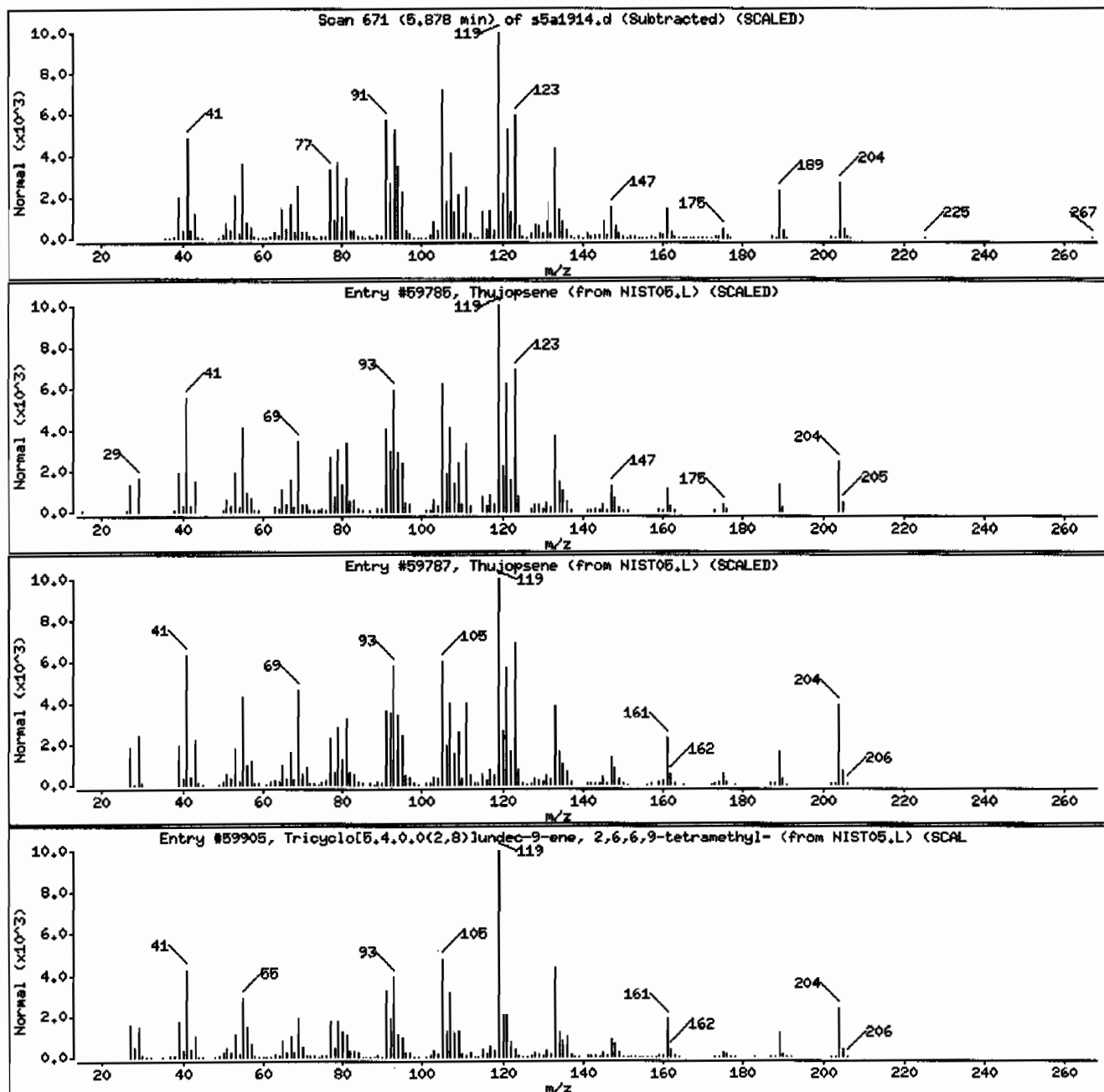
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thujopsene	470-40-6	NIST05.L	59785	99	C15H24	204
Thujopsene	470-40-6	NIST05.L	59787	98	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59905	86	C15H24	204



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: I244626006194284011ISVH11ILANL

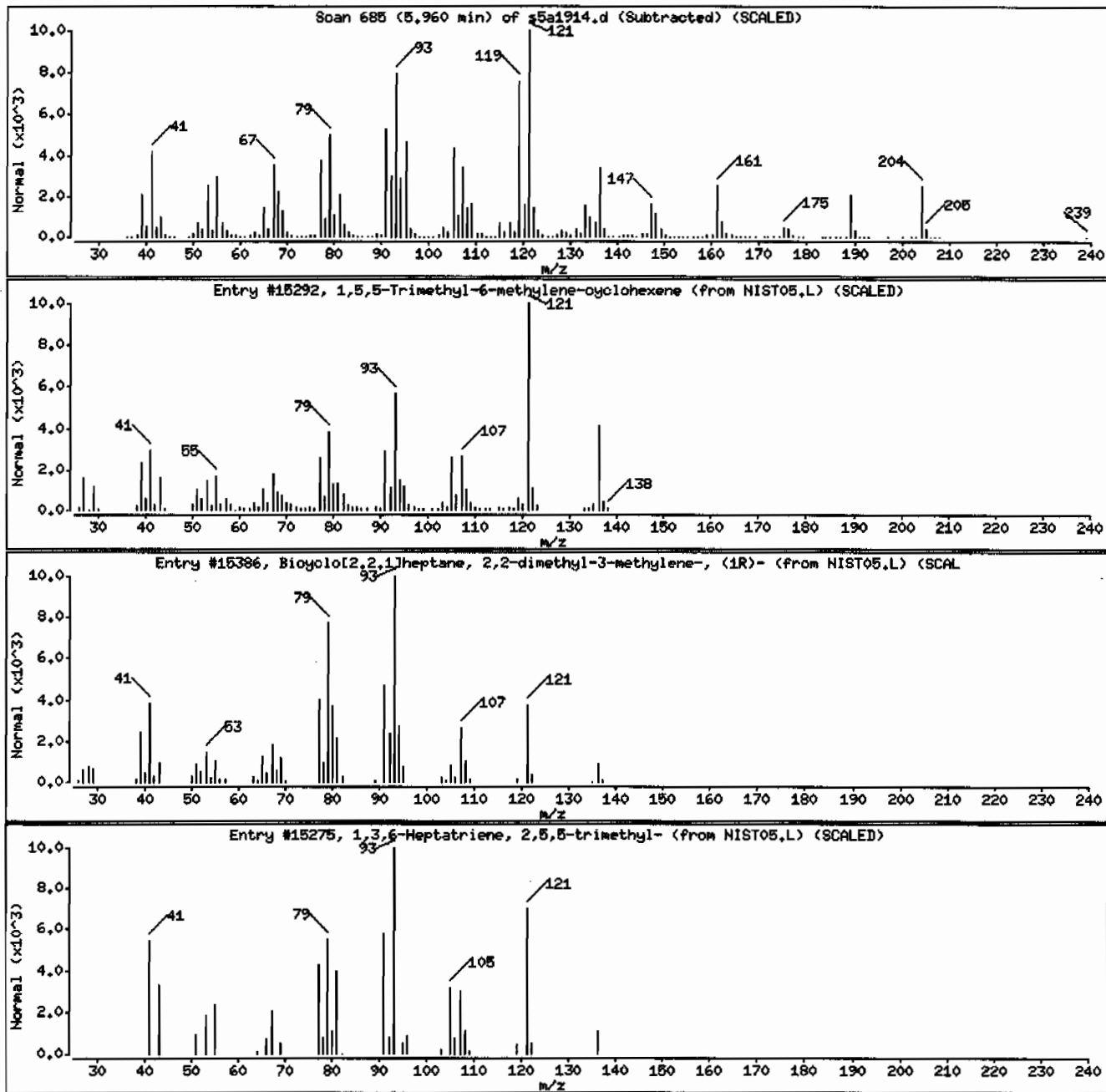
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,5,5-Trimethyl-6-methylene-cyclohexene	514-95-4	NIST05.L	15292	70	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	8794-03-6	NIST05.L	15386	70	C10H16	136
1,3,6-Heptatriene, 2,5,5-trimethyl-	29548-02-5	NIST05.L	15275	64	C10H16	136



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: HSD5.i

Sample Info: 1244626006194284011SVH11ILANL

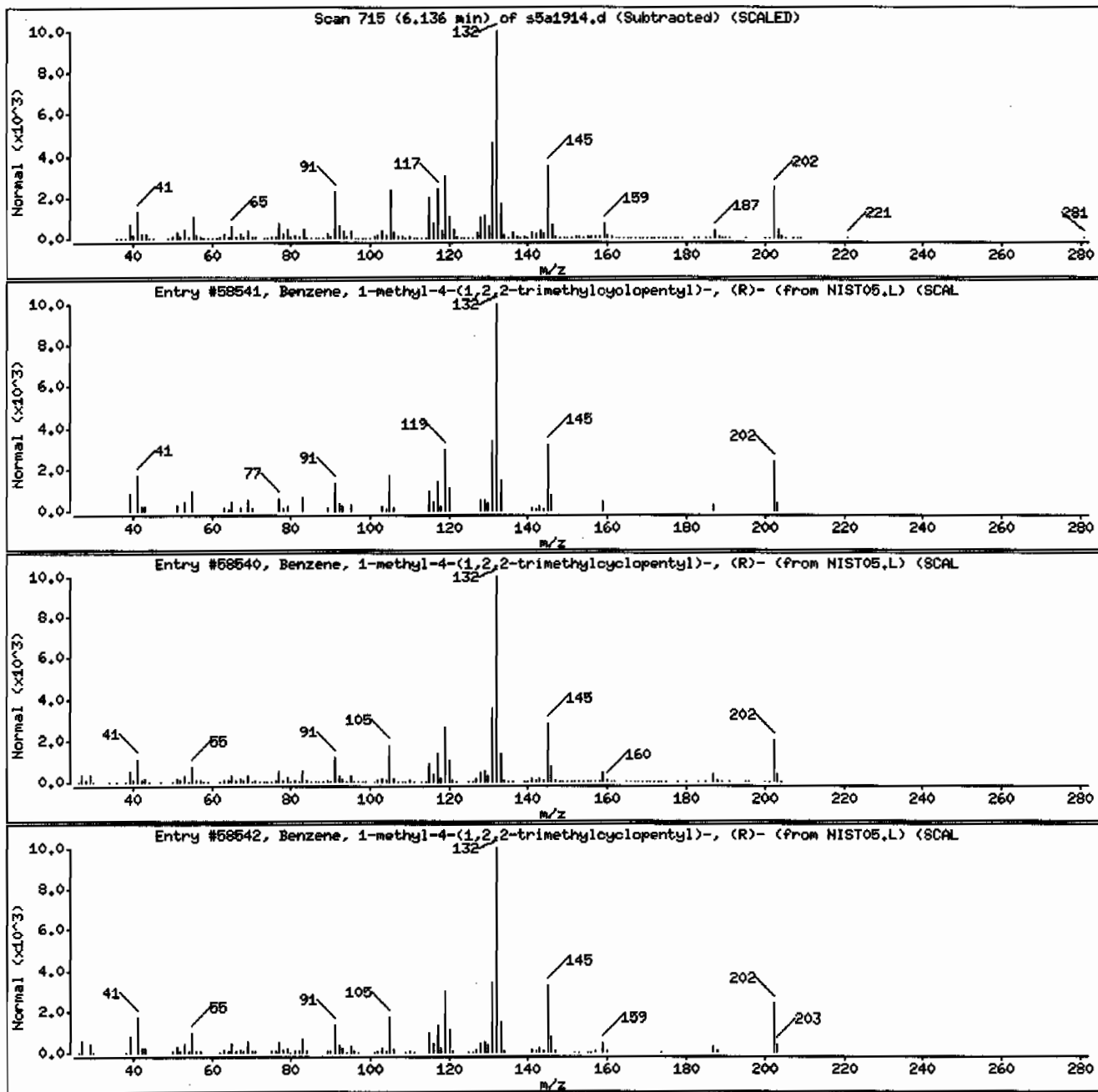
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58541	96	C15H22	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58540	95	C15H22	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58542	95	C15H22	202



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH111LANL

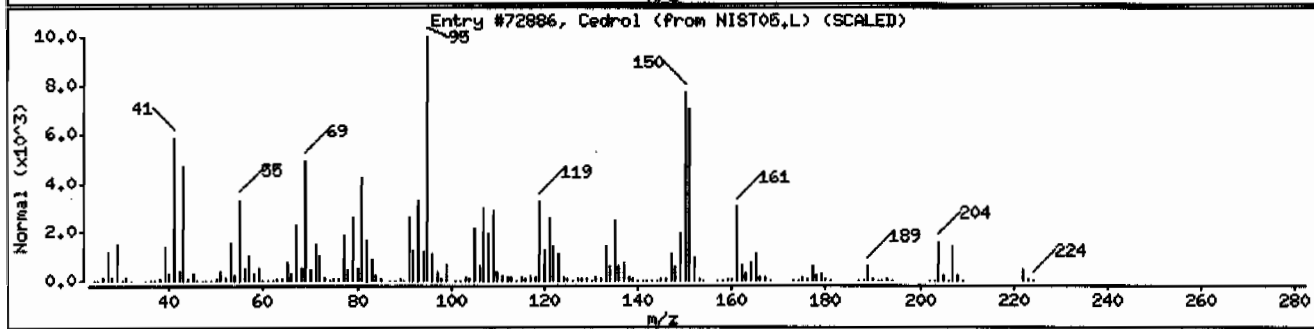
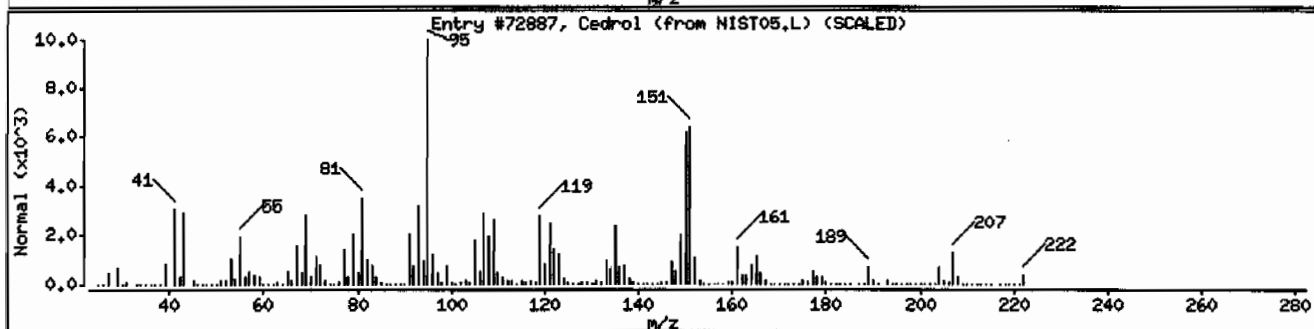
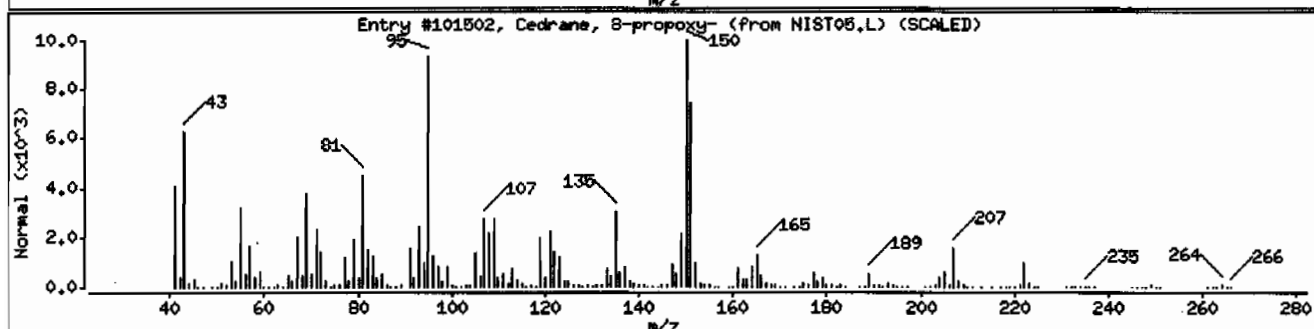
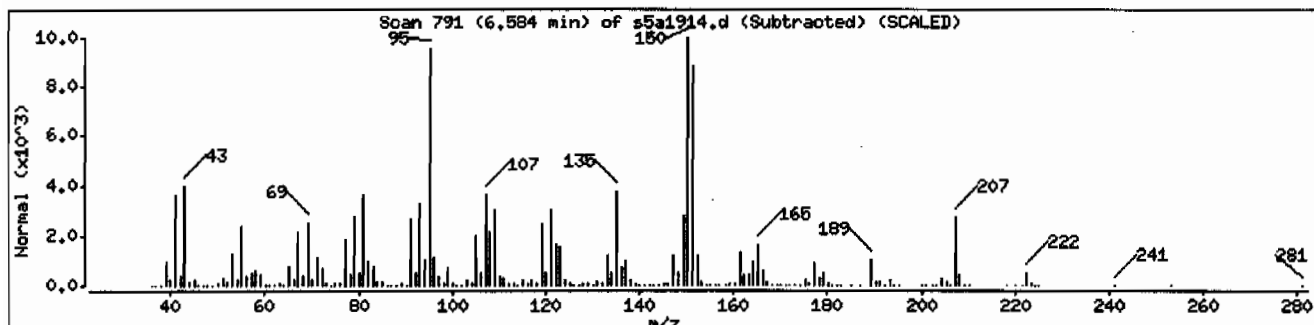
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrane, 8-propoxy-	19870-75-8	NIST05.L	101502	94	C ₁₈ H ₃₂ O	264
Cedrol	77-53-2	NIST05.L	72887	92	C ₁₅ H ₂₆ O	222
Cedrol	77-53-2	NIST05.L	72886	91	C ₁₅ H ₂₆ O	222



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11ILANL

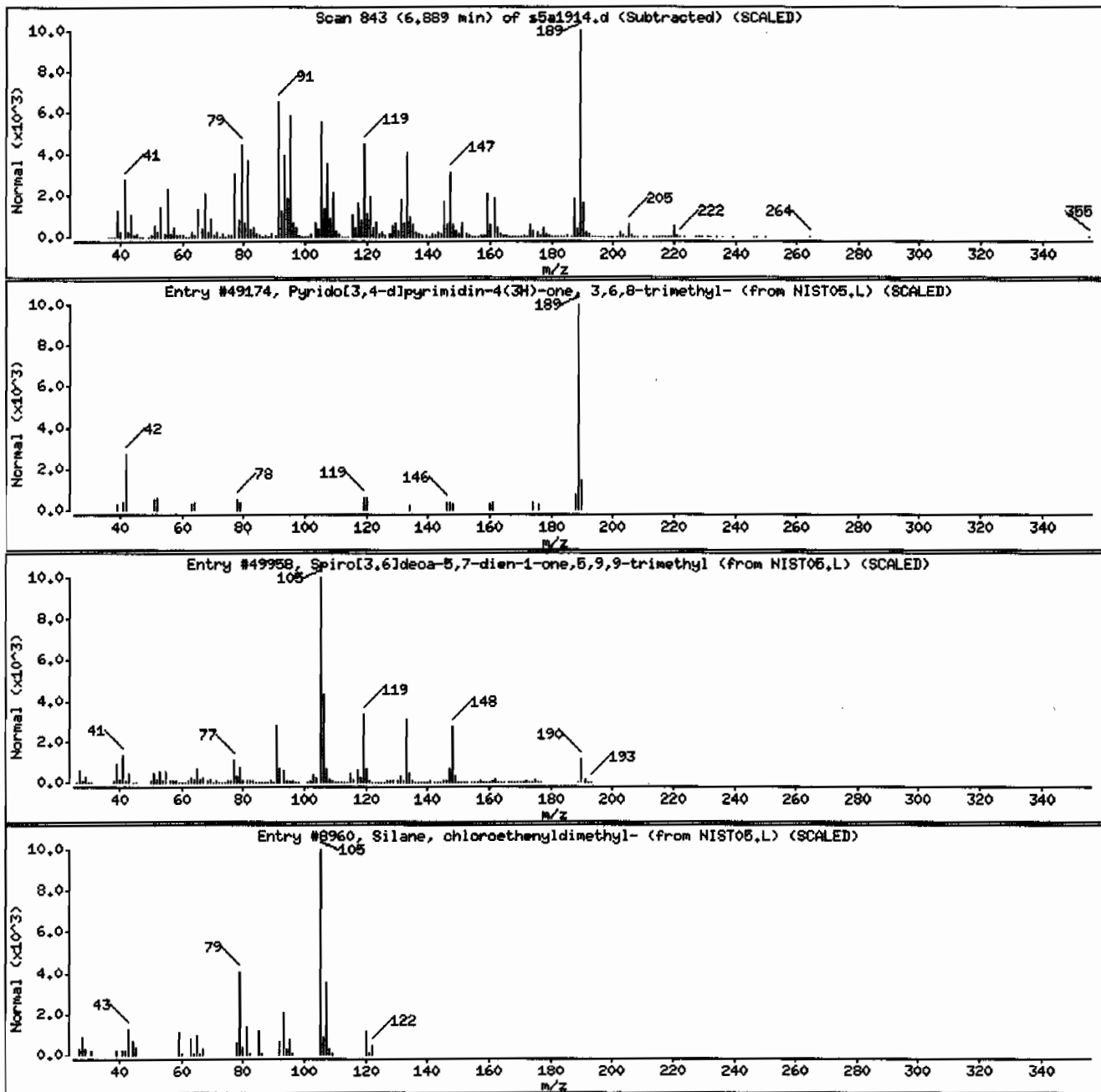
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrido[3,4-d]pyrimidin-4(3H)-one, 3,6,8-	22389-79-3	NIST05.L	49174	18	C10H11N3O	189
Spiro[3.6]deca-5,7-dien-1-one,5,9,9-trimethyl-	81532-19-6	NIST05.L	49958	15	C13H18O	190
Silane, chloroethenylidimethyl-	1719-58-0	NIST05.L	8960	11	C4H9ClSi	120



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011ISVH11ILANL

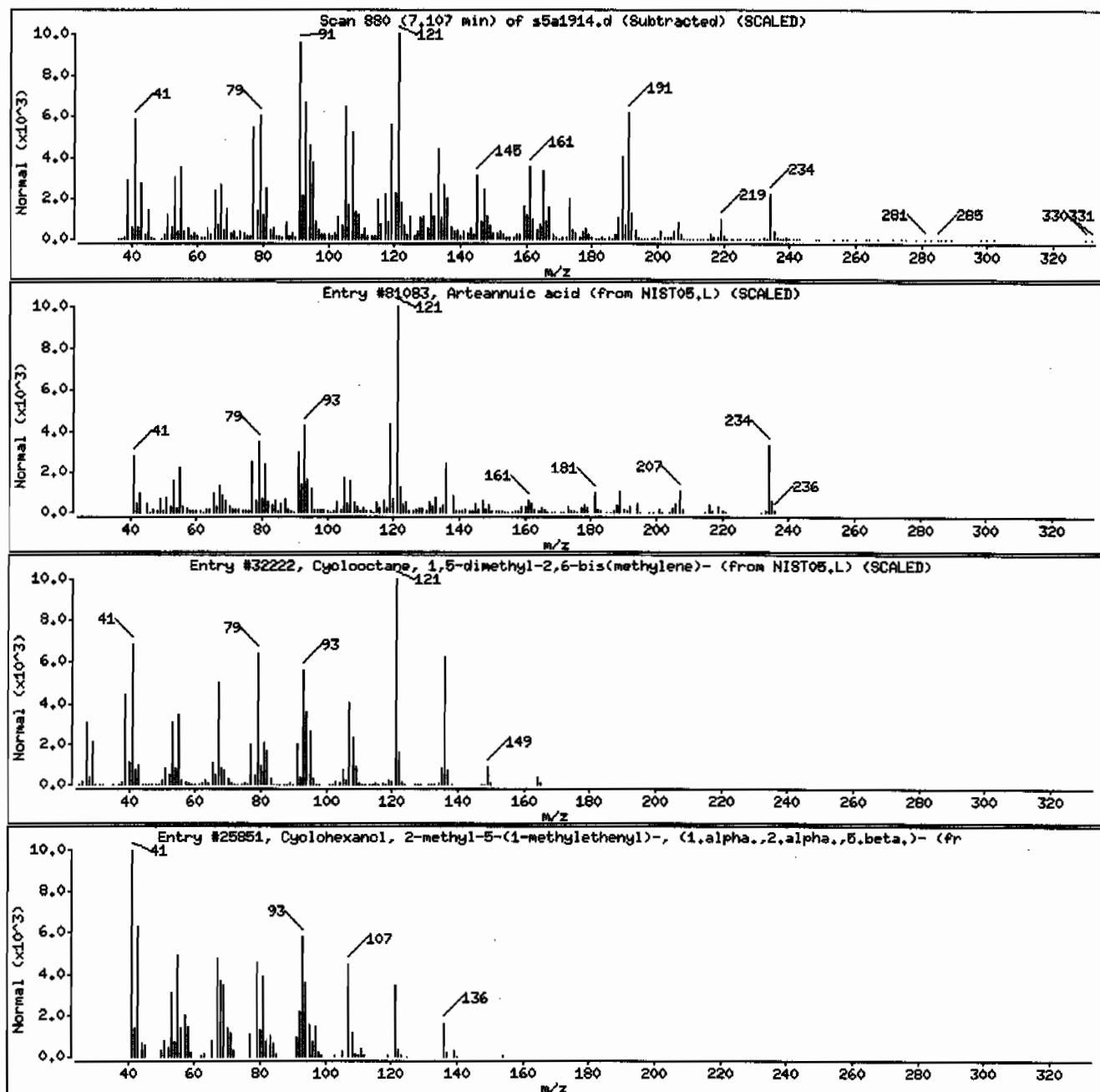
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Arteannuic acid	80286-58-4	NIST05.L	81083	50	C ₁₅ H ₂₂ O ₂	234
Cyclooctane, 1,5-dimethyl-2,6-bis(methyl	74301-13-6	NIST05.L	32222	46	C ₁₂ H ₂₀	164
Cyclohexanol, 2-methyl-5-(1-methyletheny	18676-33-7	NIST05.L	25851	44	C ₁₀ H ₁₈ O	154



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11ILANL

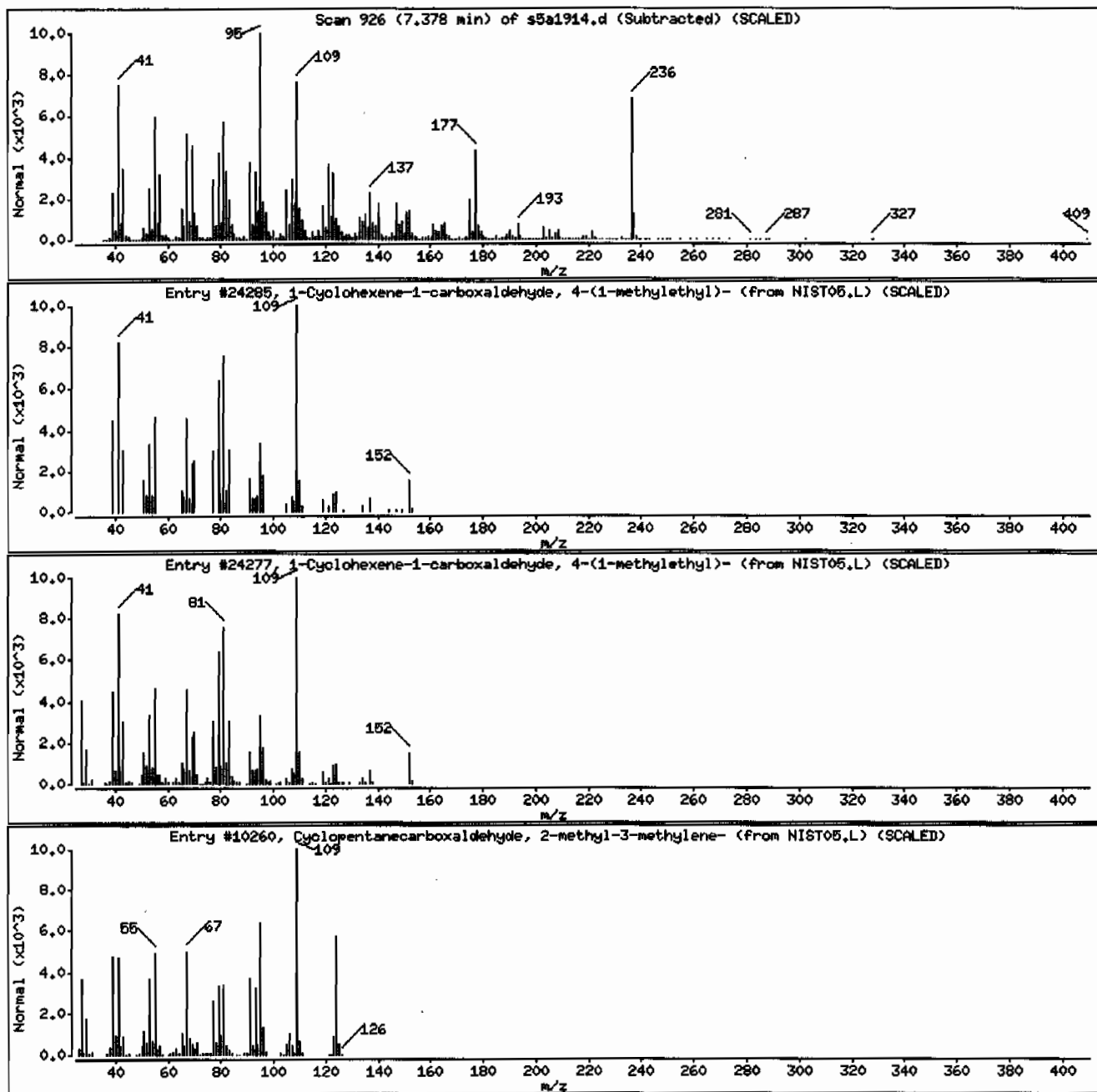
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Cyclohexene-1-carboxaldehyde, 4-(1-met	21391-98-0	NIST05.L	24285	80	C10H16O	152
1-Cyclohexene-1-carboxaldehyde, 4-(1-met	21391-98-0	NIST05.L	24277	70	C10H16O	152
Cyclopentanecarboxaldehyde, 2-methyl-3-m	1000154-24-0	NIST05.L	10260	50	C8H12O	124



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH111LANL

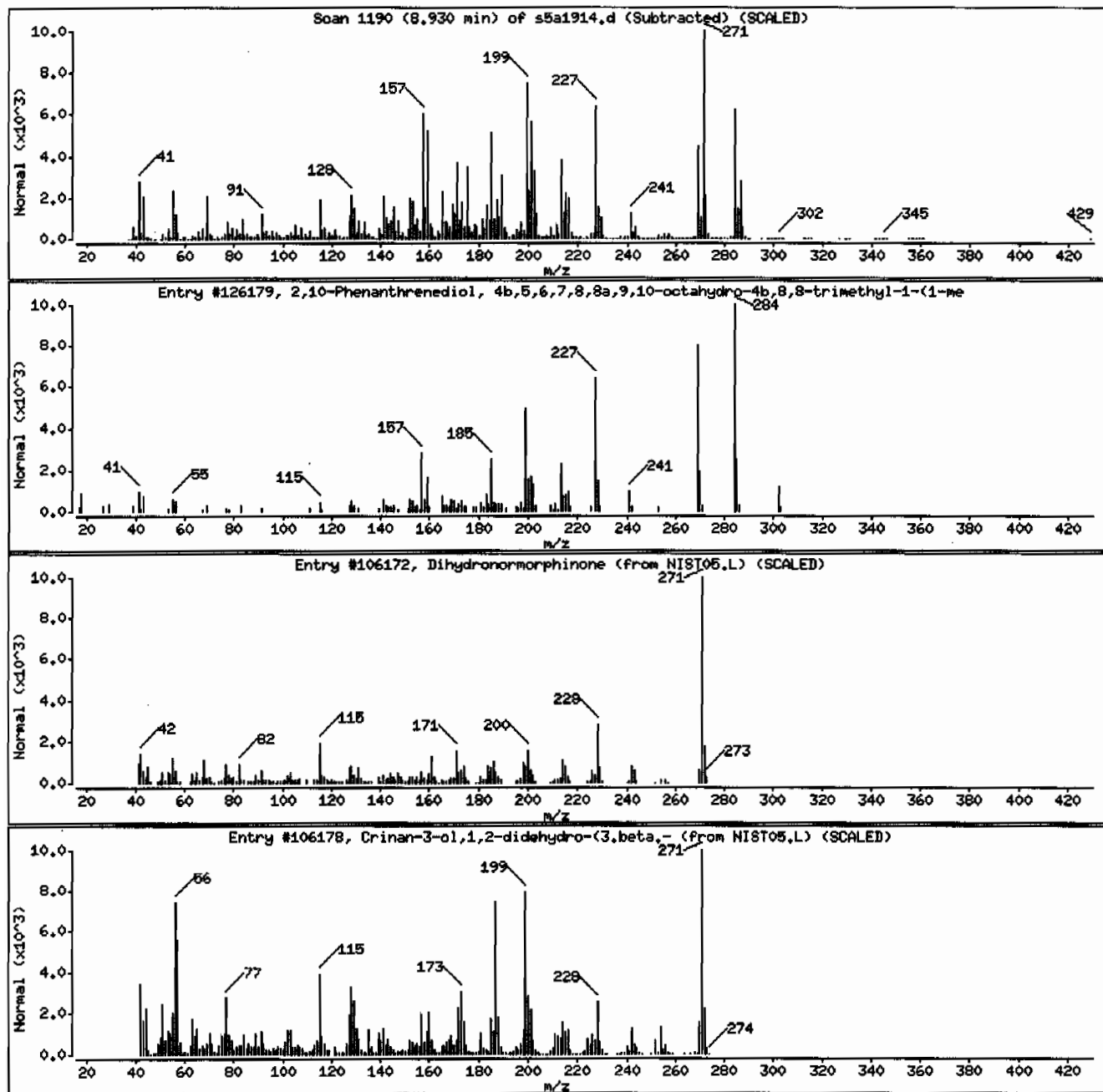
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,10-Phenanthrenediol, 4b,5,6,7,8,8a,9,1	6811-52-5	NIST05.L	126179	64	C20H30O2	302
Dihydronormorphine	14696-23-2	NIST05.L	106172	53	C16H17NO3	271
Crinan-3-ol,1,2-didehydro-(3.beta.,-	546-05-4	NIST05.L	106178	48	C16H17NO3	271



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: I244626006/942840111SVH111LANL

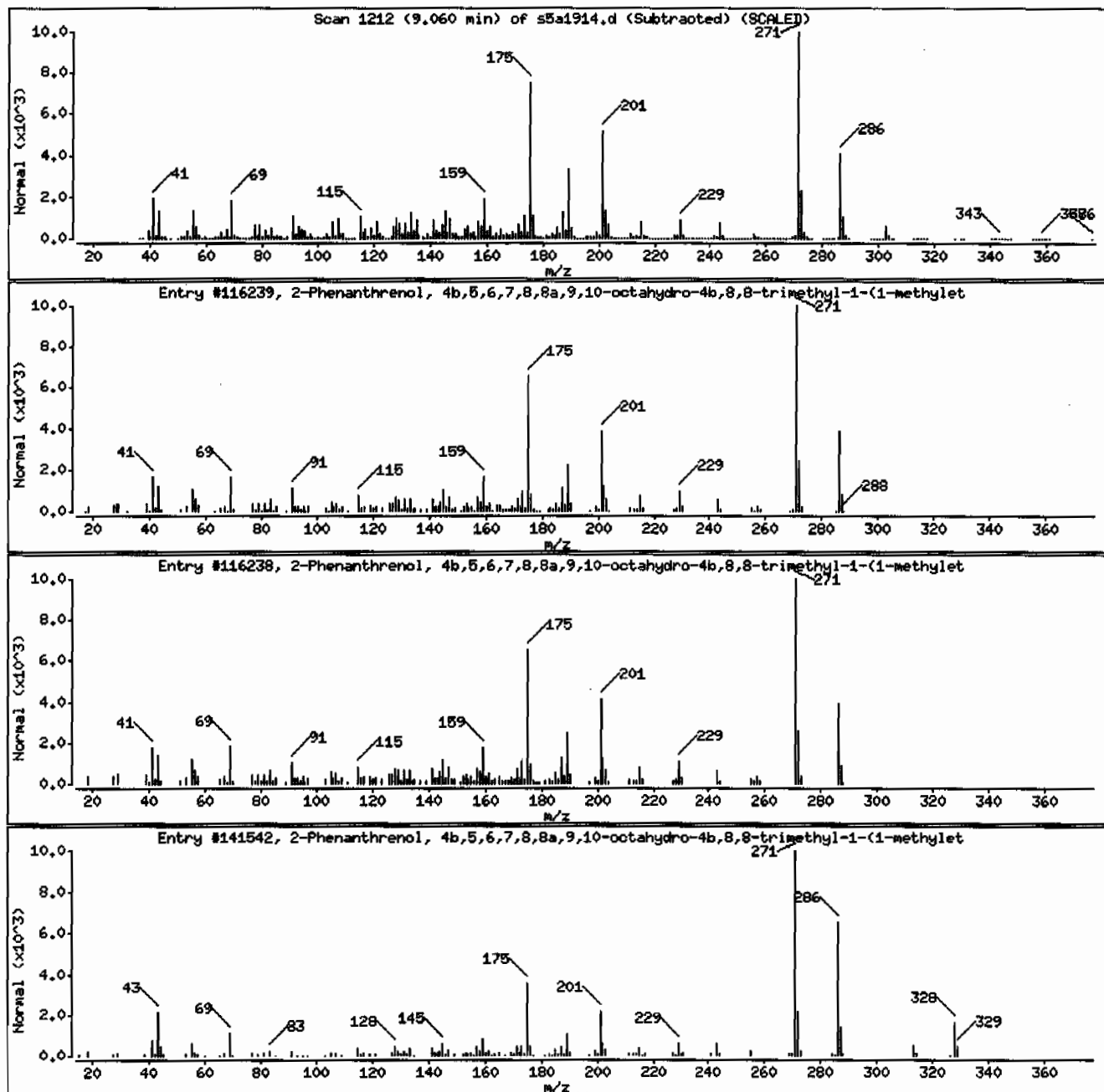
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	99	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	91	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	15340-82-6	NIST05.L	141542	87	C22H32O2	328



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11ILANL

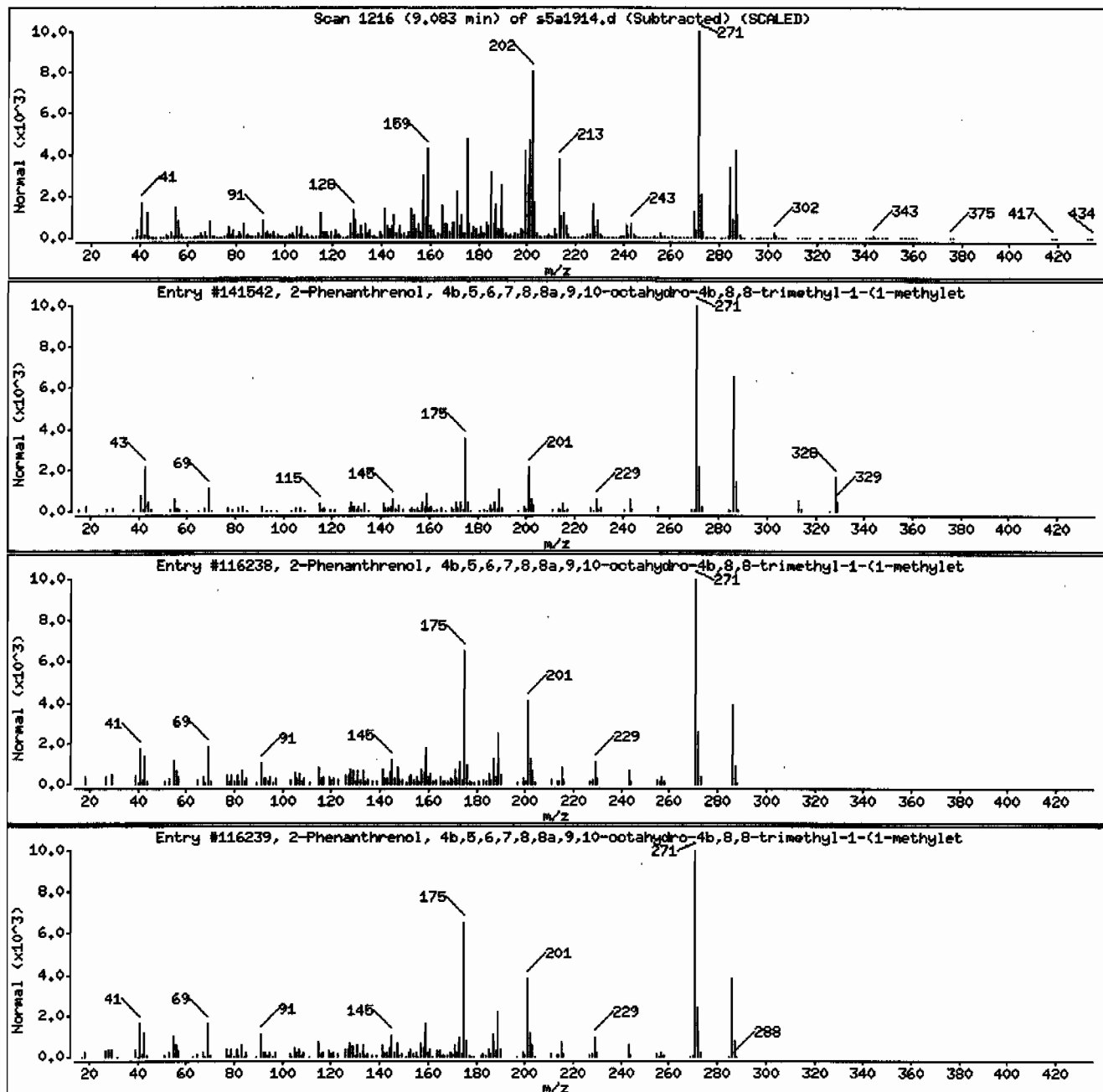
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	15340-82-6	NIST05.L	141542	43	C22H32O2	328
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	41	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	41	C20H30O	286



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH111LANL

Volume Injected (uL): 0.5

Operator: RMB

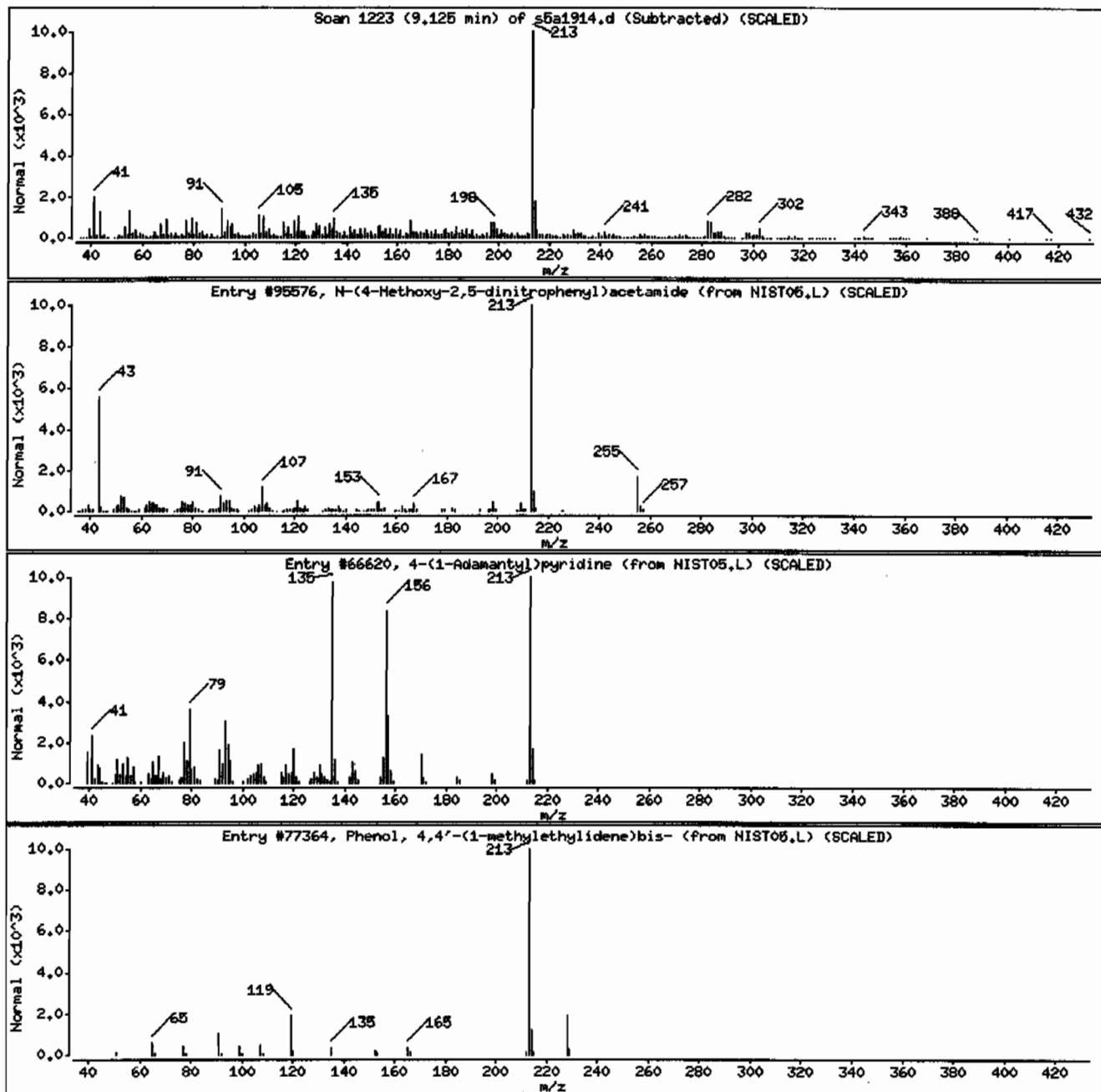
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
N-(4-Methoxy-2,5-dinitrophenyl)acetamide	257932-05-1	NIST05.L	95576	64	C9H9N3O6	266
4-(1-Adamantyl)pyridine	60159-38-8	NIST05.L	66620	59	C15H19N	213
Phenol, 4,4'-(1-methylethylidene)bis-	80-05-7	NIST05.L	77364	53	C15H16O2	228



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH111LANL

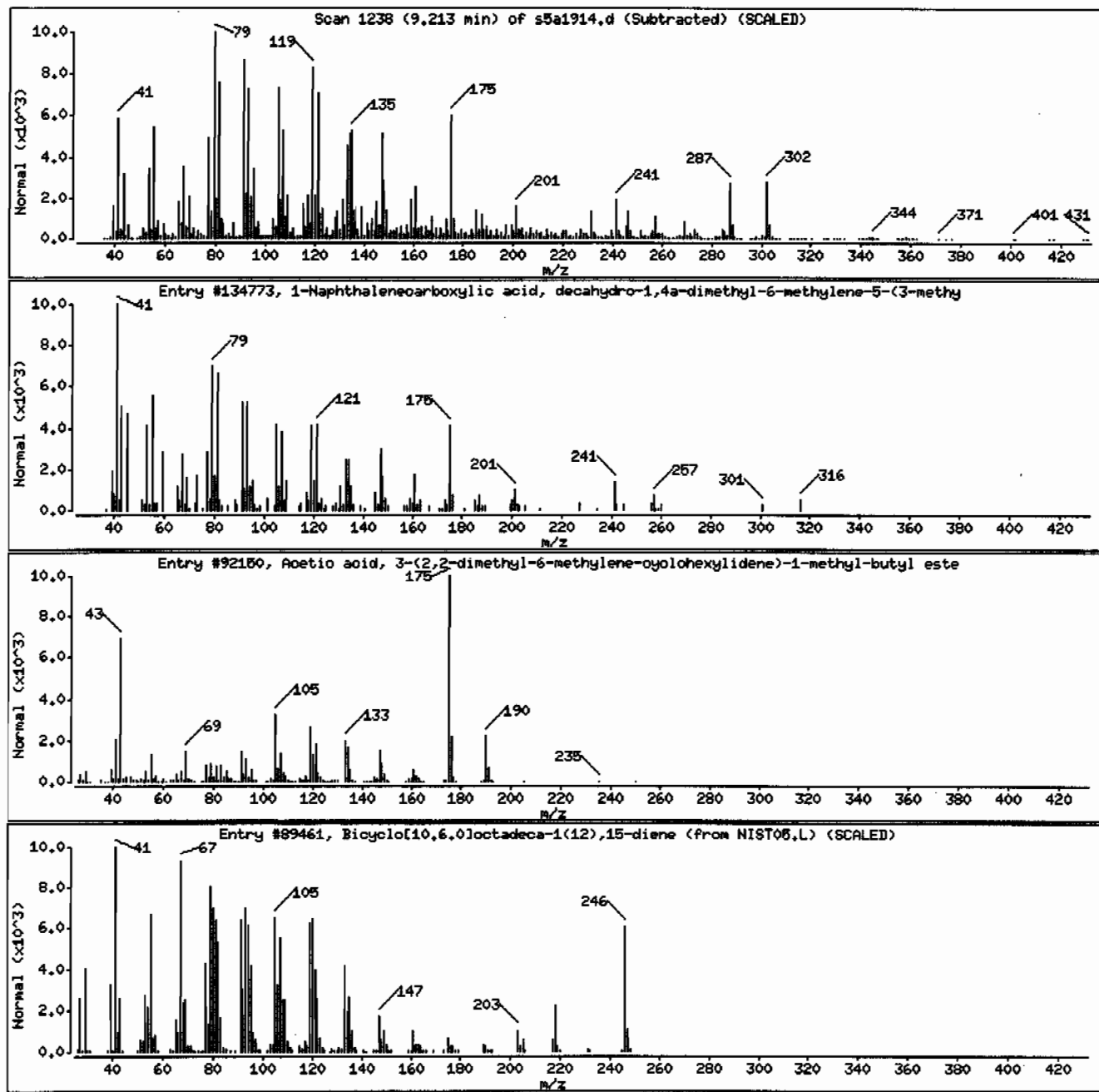
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Naphthalenecarboxylic acid, decahydro-	10178-35-5	NIST05.L	134773	46	C21H32O2	316
Acetic acid, 3-(2,2-dimethyl-6-methylene	1000192-69-2	NIST05.L	92150	41	C16H26O2	250
Bicyclo[10,6,0]octadeca-1(12),15-diene	1000155-85-1	NIST05.L	89461	20	C18H30	246



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11LNL

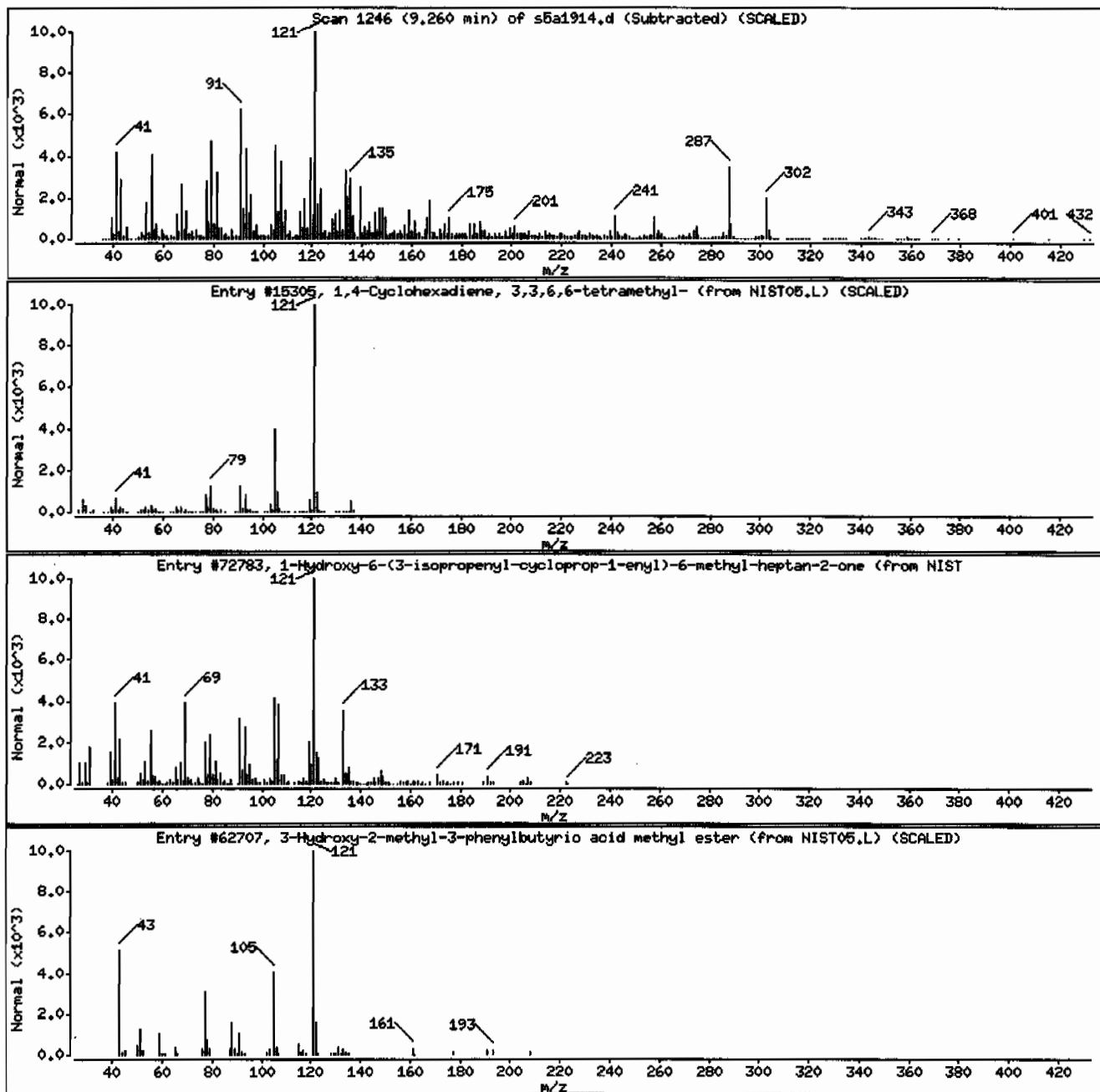
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	35	C10H16	136
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-yl)-6-methyl-heptan-2-one	1000189-14-9	NIST05.L	72783	27	C14H22O2	222
3-Hydroxy-2-methyl-3-phenylbutyric acid	57956-39-5	NIST05.L	62707	18	C12H16O3	208



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: HSD5.i

Sample Info: 1244626006194284011SVH11ILANL

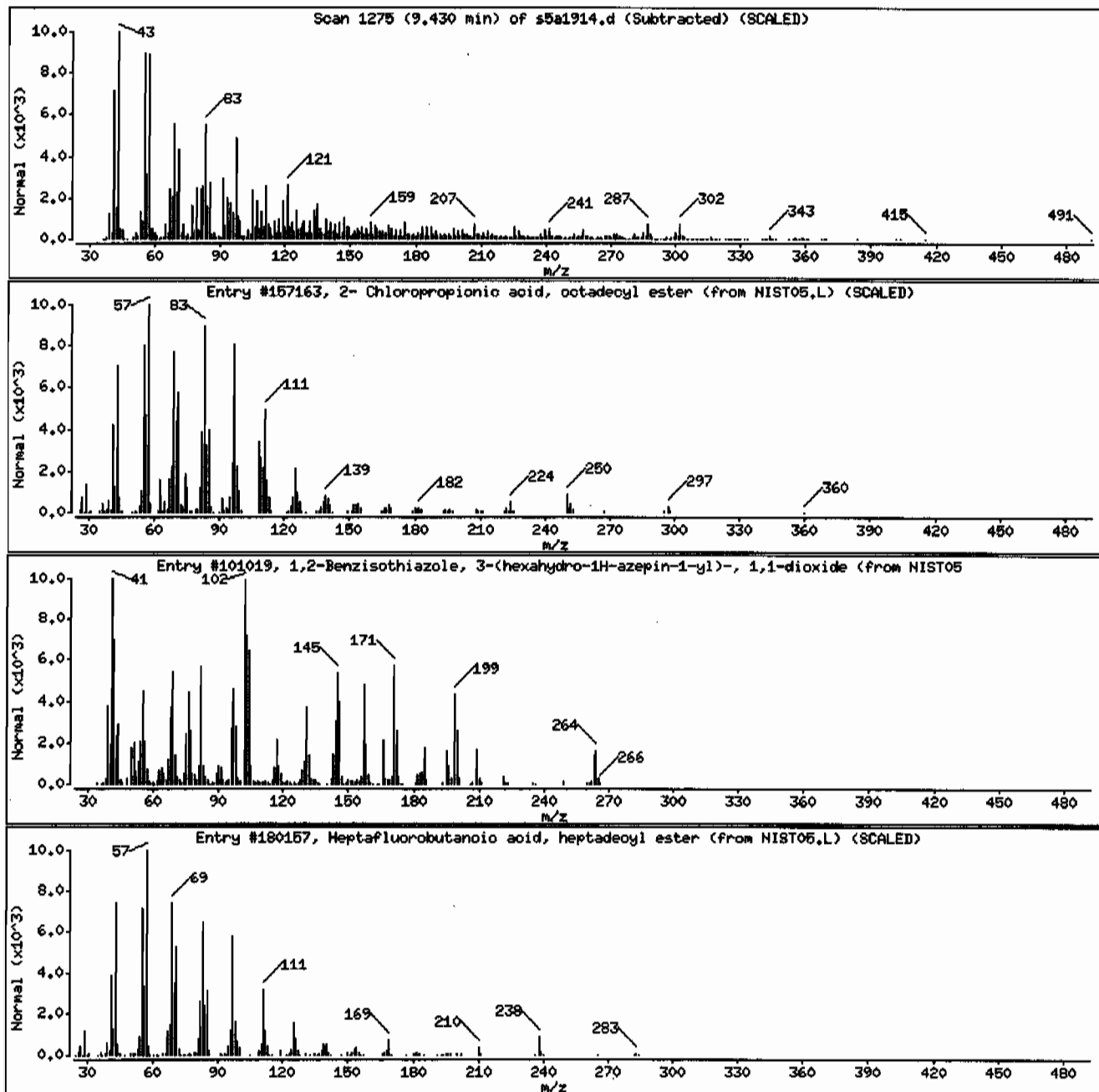
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2- Chloropropionic acid, octadecyl ester	88104-31-8	NIST05.L	157163	93	C21H41ClO2	360
1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-, 1,1-dioxide	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264
Heptafluorobutanoic acid, heptadecyl est	1000282-97-3	NIST05.L	180157	90	C21H35F7O2	452



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11ILANL

Volume Injected (uL): 0.5

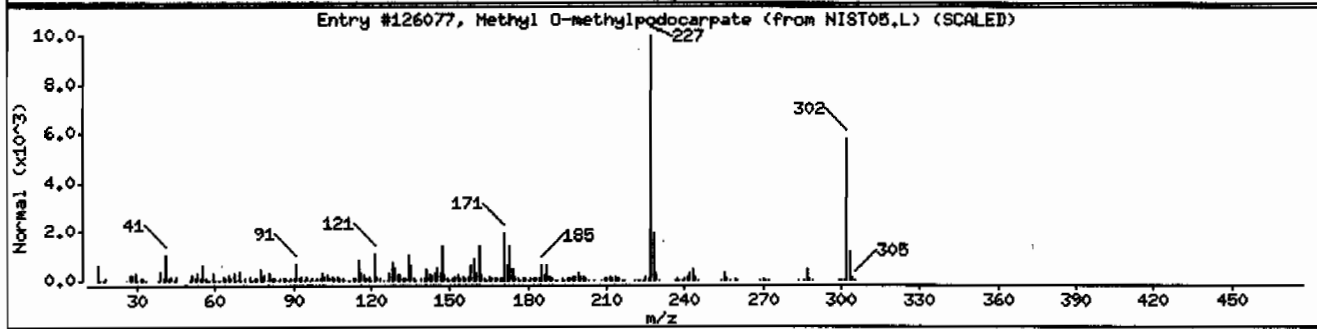
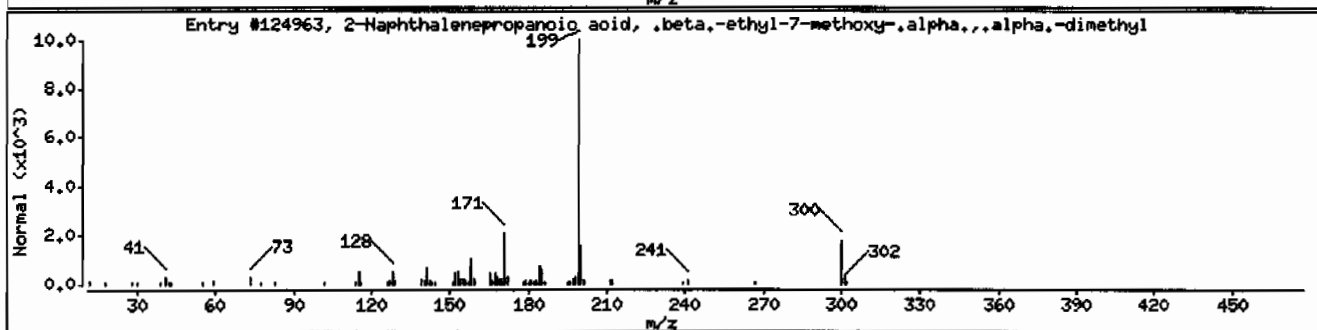
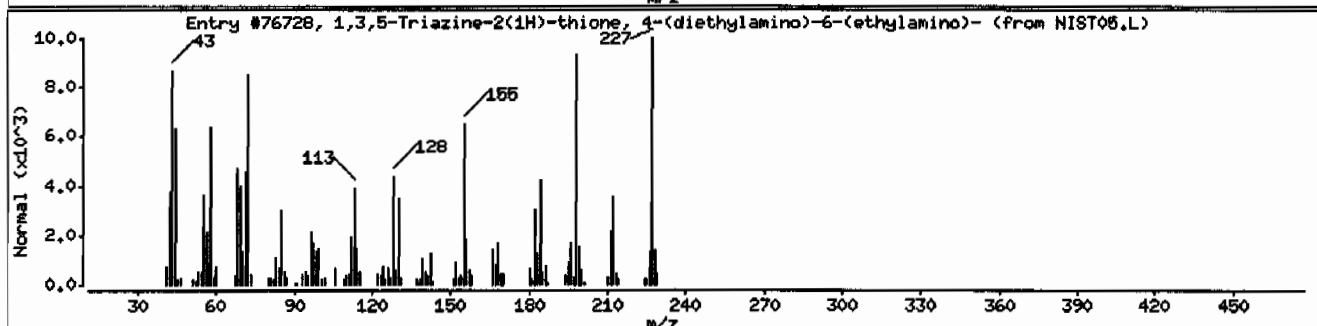
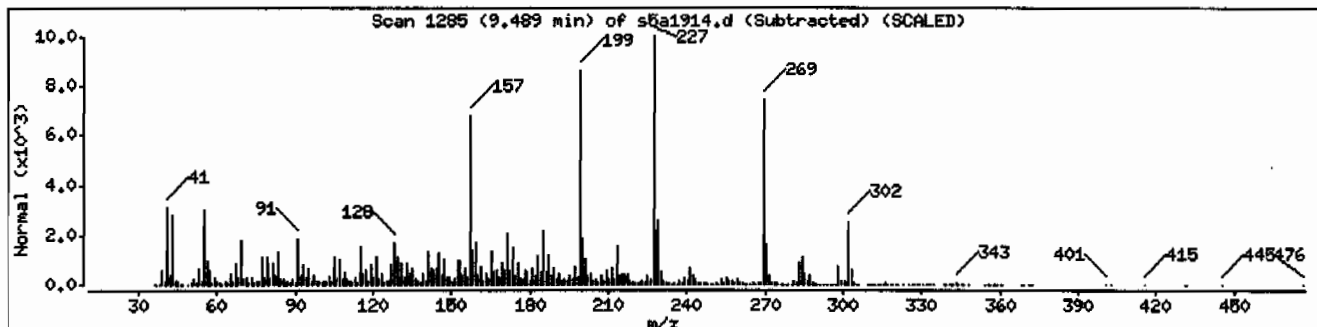
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,3,5-Triazine-2(1H)-thione, 4-(diethyla	23613-02-7	NIST05.L	76728	90	C9H17N5S	227
2-Naphthalenepropanoic acid, .beta.-ethy	57289-68-6	NIST05.L	124963	55	C19H24O3	300
Methyl 0-methylpodocarpate	1231-74-9	NIST05.L	126077	38	C19H26O3	302



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVMI1ILANL

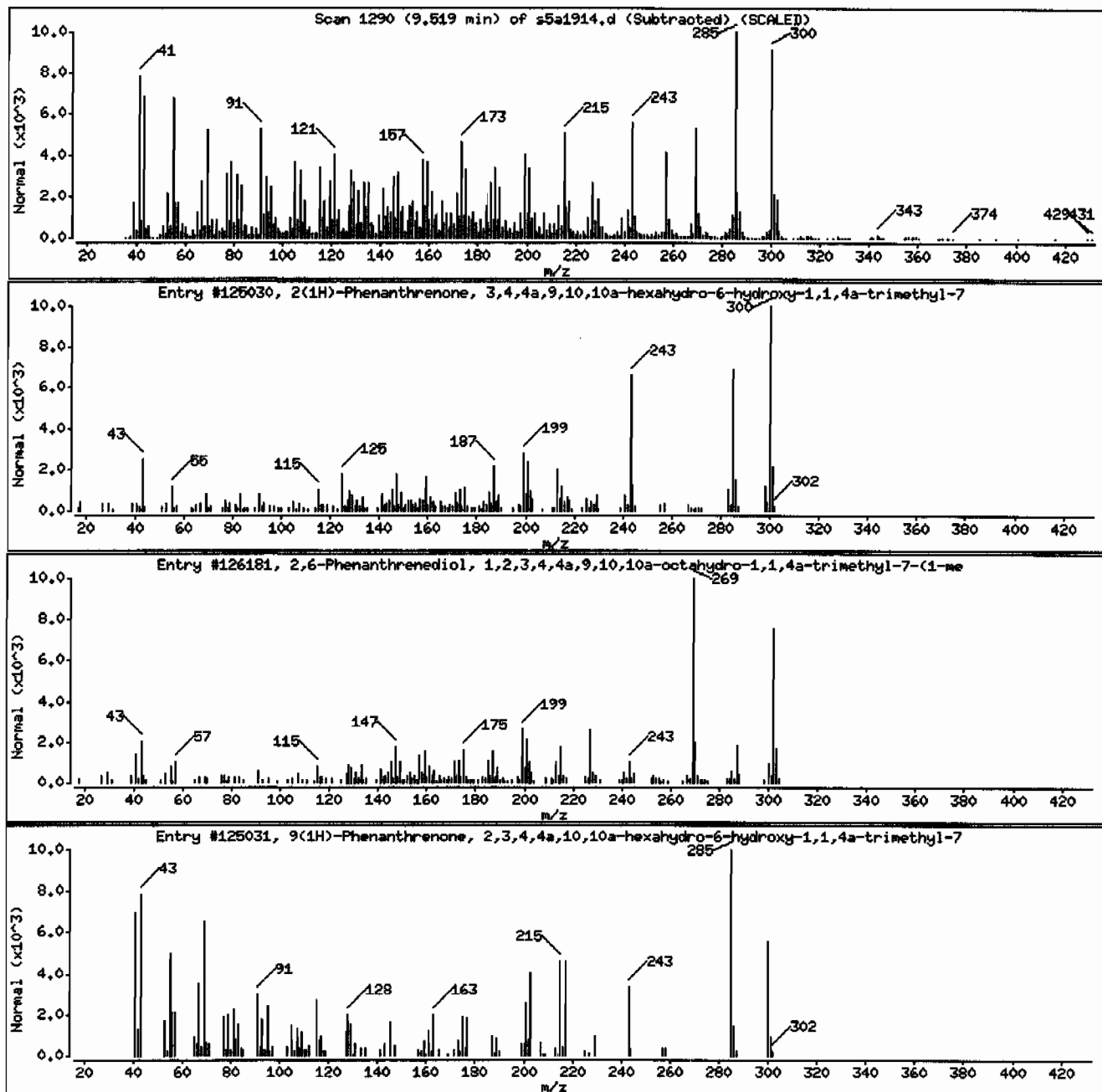
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-h	472-37-7	NIST05.L	125030	70	C20H28O2	300
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	564-73-8	NIST05.L	126181	55	C20H30O2	302
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-h	511-05-7	NIST05.L	125031	46	C20H28O2	300



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11ILANL

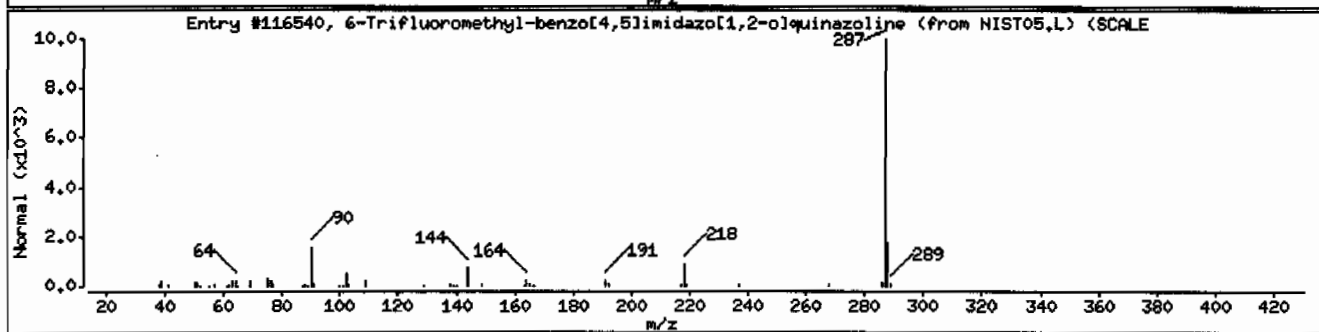
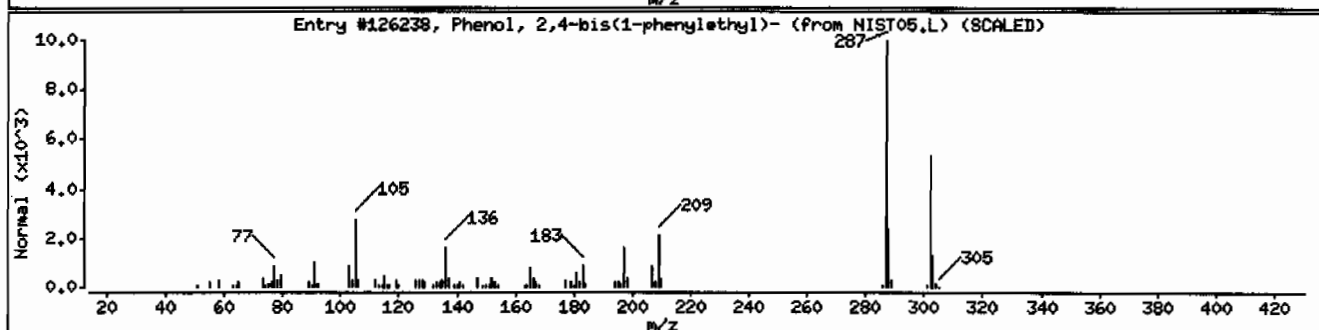
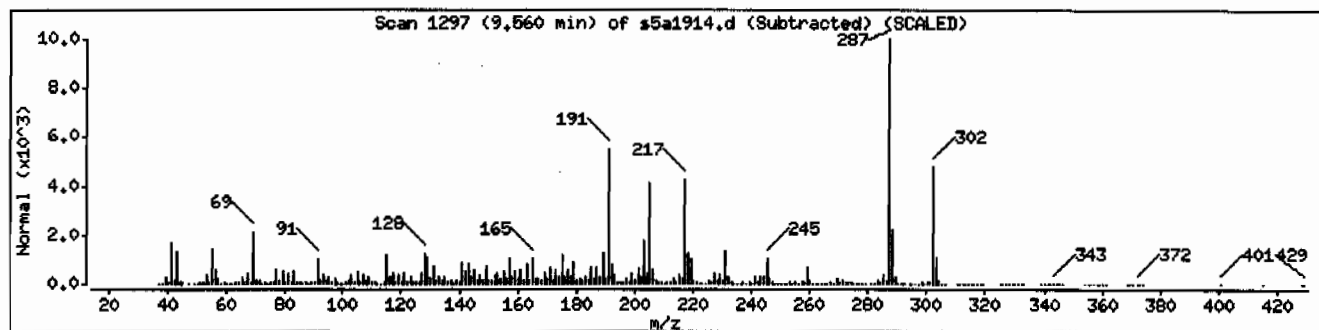
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Xanthen-9-one, 1-hydroxy-3,5,8-trimethoxy	49899-09-9	NIST05.L	125840	46	C ₁₆ H ₁₄ O ₆	302
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	25	C ₂₂ H ₂₀ O	302
6-Trifluoromethyl-benzo[4,5]imidazo[1,2-	1000317-89-2	NIST05.L	116540	22	C ₁₅ H ₈ F ₃ N ₃	287



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: HSD5.i

Sample Info: 1244626006194284011SVH11ILANL

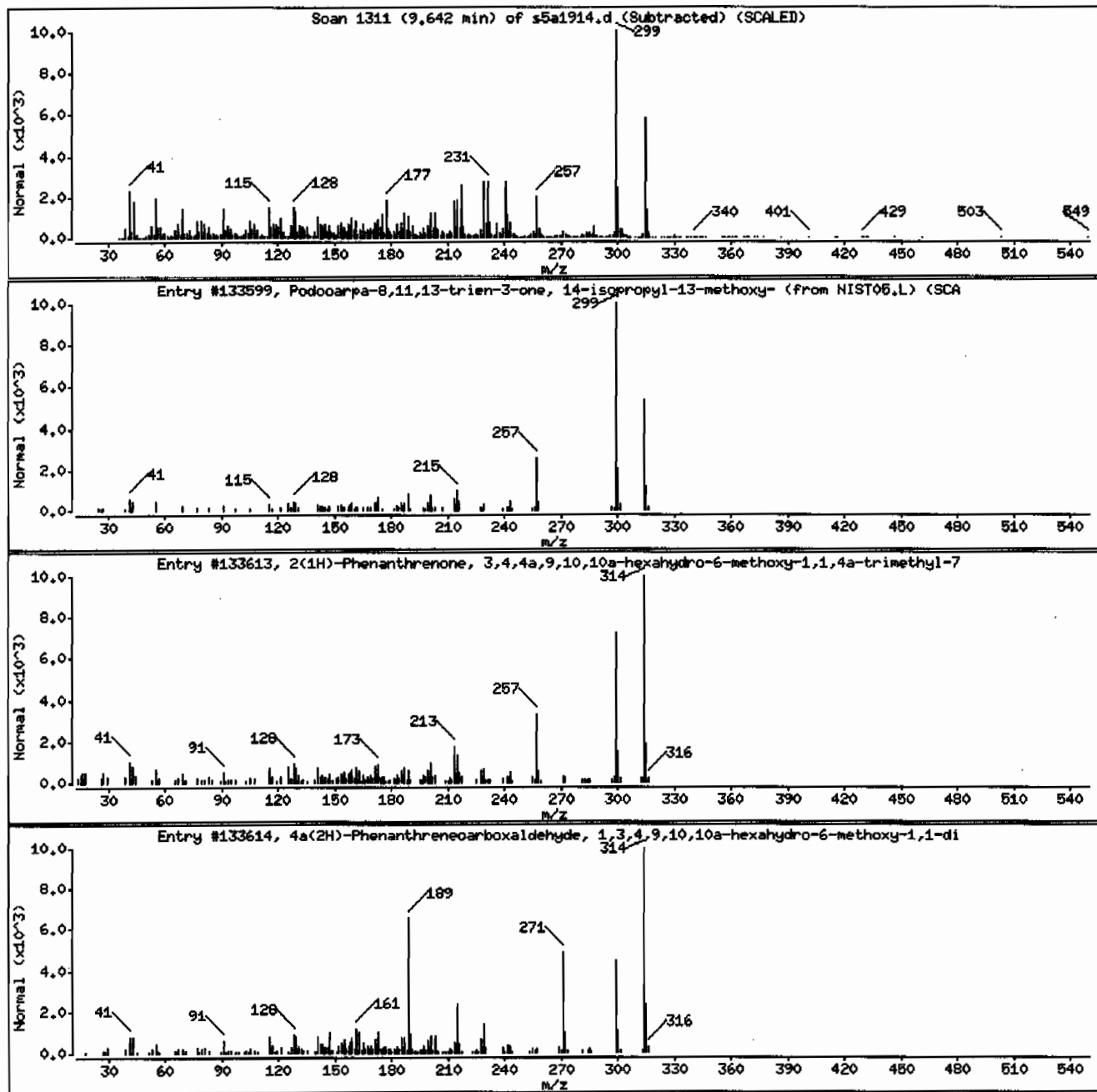
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Podocarpa-8,11,13-trien-3-one, 14-isopro	18326-16-4	NIST05.L	133599	90	C21H30O2	314
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	18325-89-8	NIST05.L	133613	84	C21H30O2	314
4a(2H)-Phenanthreneoicarboxaldehyde, 1,3,4	57397-33-8	NIST05.L	133614	60	C21H30O2	314



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.1

Sample Info: 1244626006194284011SVH11ILANL

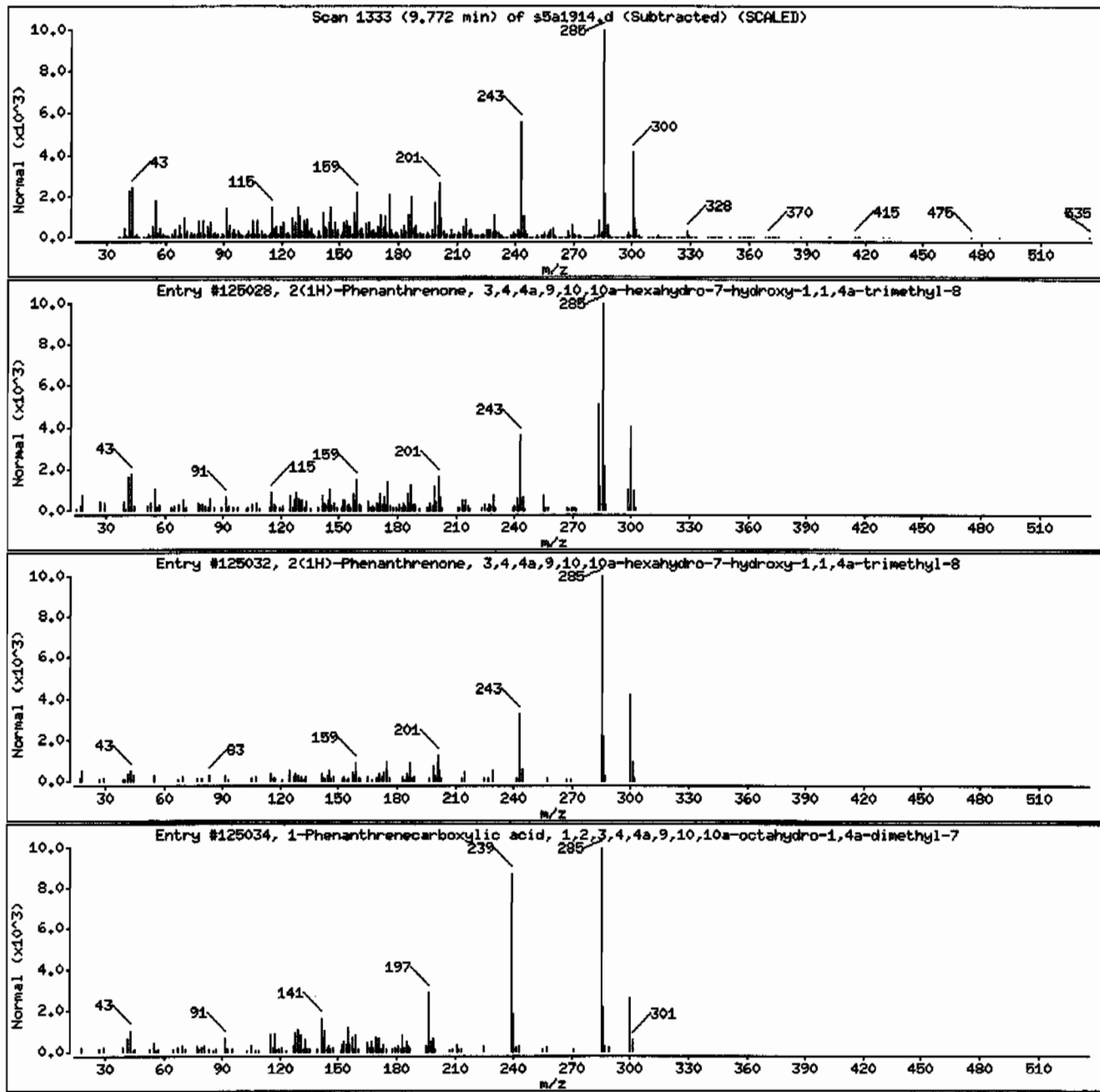
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-h	6755-93-7	NIST05.L	125028	76	C20H28O2	300
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-h	6755-93-7	NIST05.L	125032	68	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	50	C20H28O2	300



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: HSD5.1

Sample Info: 12446260061942840111SVH111LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

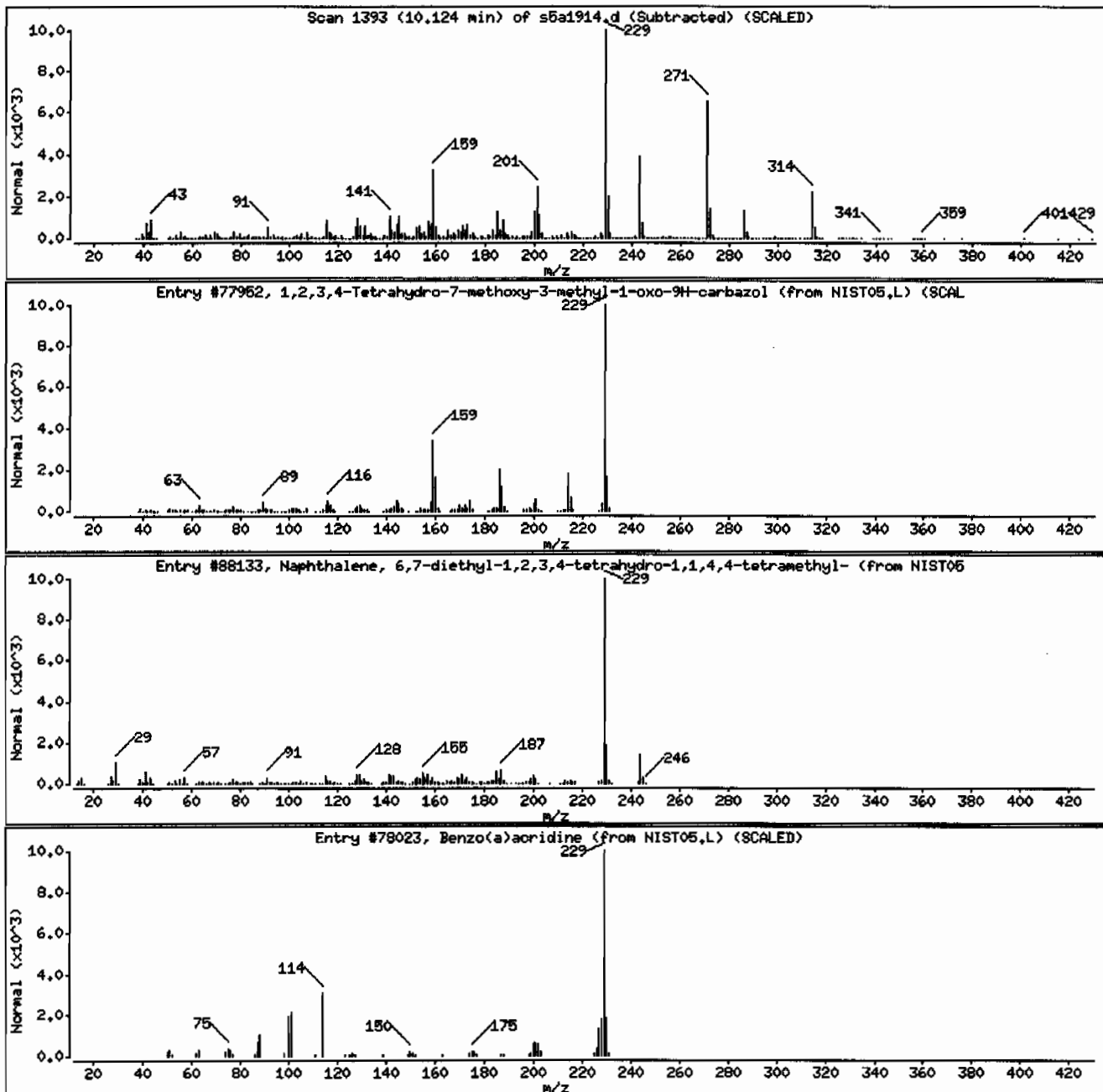
Column diameter: 0.20

Library Search Compound Match

Unknown

1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-Naphthalene, 6,7-diethyl-1,2,3,4-tetrahy
Benzo(a)acridine

CAS Number	Library	Entry	Quality	Formula	Weight
32550-51-9	NIST05.L	77952	38	C14H15NO2	229
55741-10-1	NIST05.L	88133	30	C18H28	244
225-11-6	NIST05.L	78023	30	C17H11N	229



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.1

Sample Info: 1244626006194284011SVH11ILANL

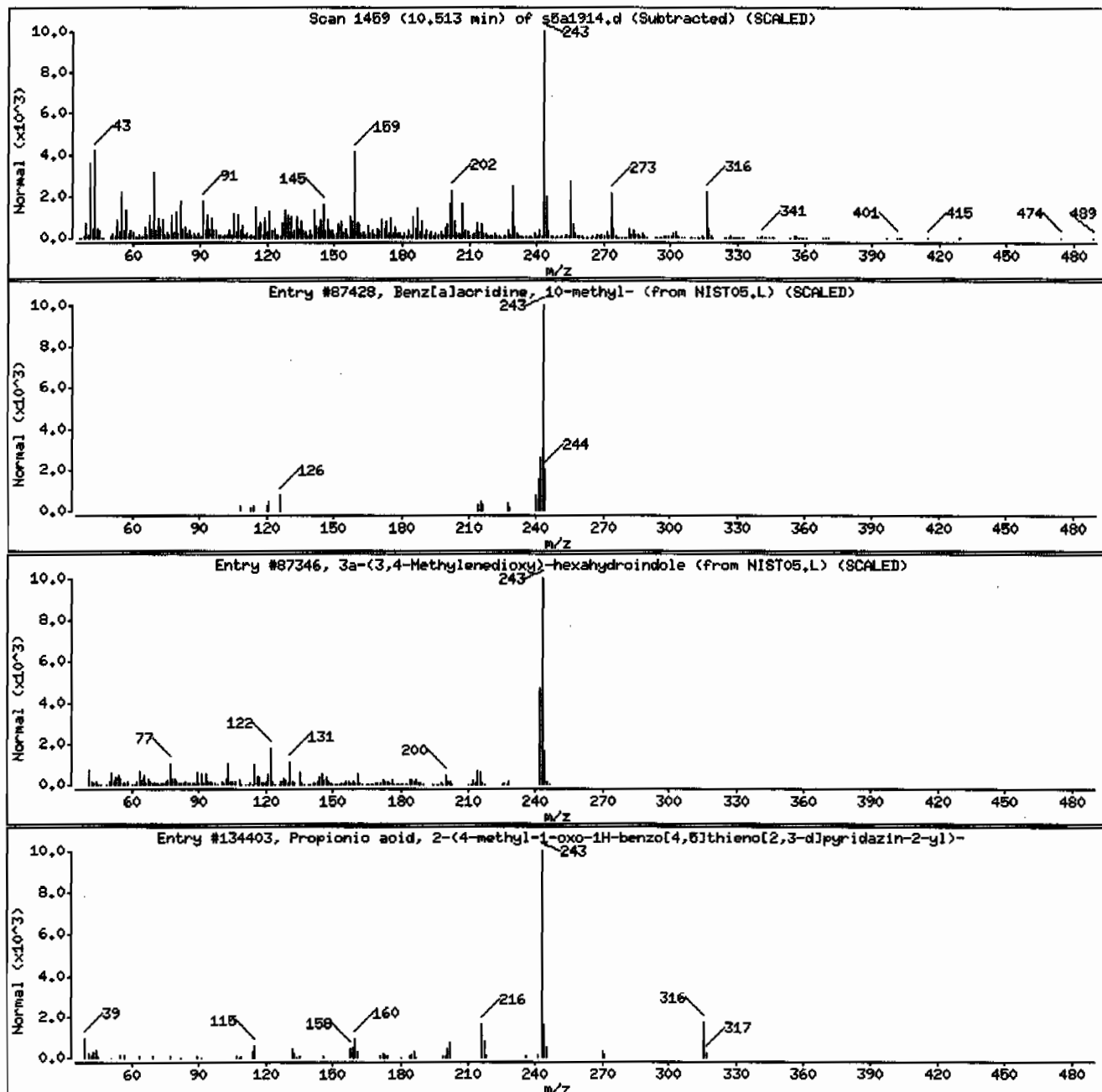
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benz[<i>a</i>]acridine, 10-methyl-	3781-67-7	NIST05.L	87428	38	C18H13N	243
3a-(3,4-Methylenedioxy)-hexahydroindole	109535-43-5	NIST05.L	87346	38	C15H17NO2	243
Propionic acid, 2-(4-methyl-1-oxo-1H-ben	1000315-94-5	NIST05.L	134403	38	C16H16N2O3S	316



Date : 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.i

Sample Info: 1244626006194284011SVMI11LANL

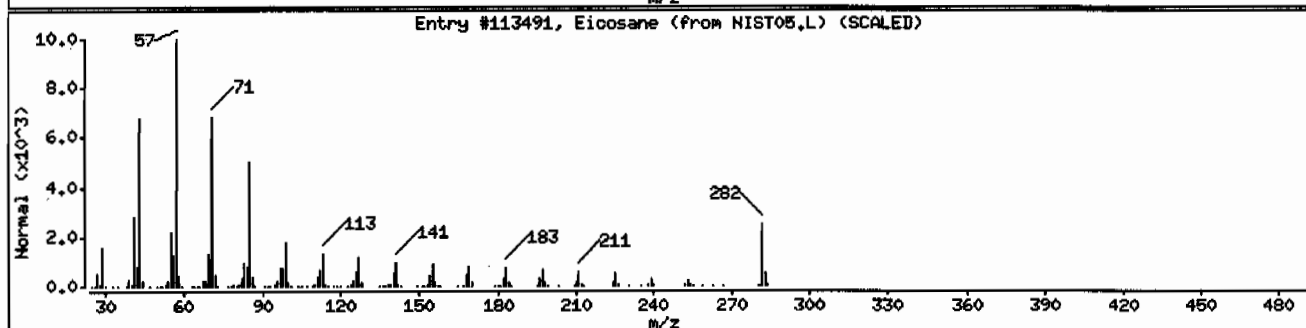
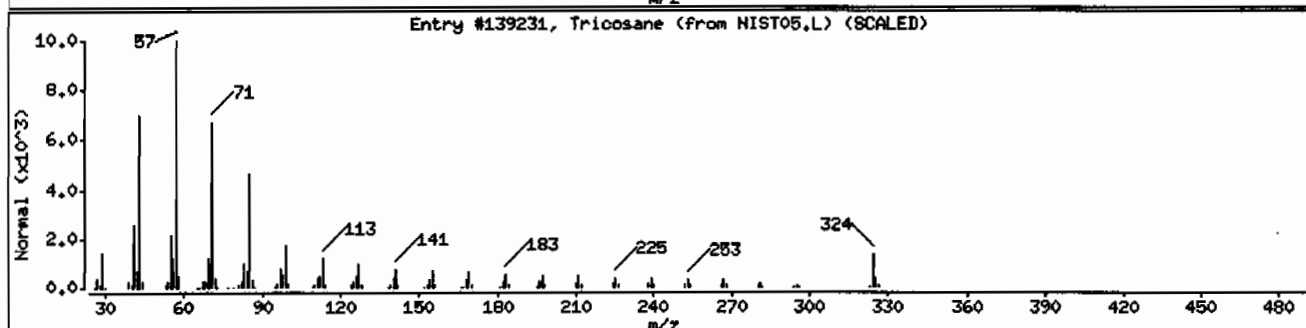
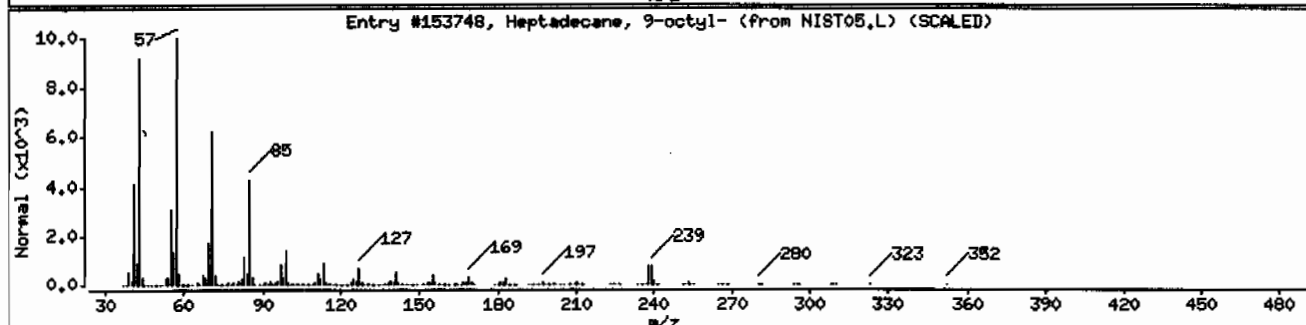
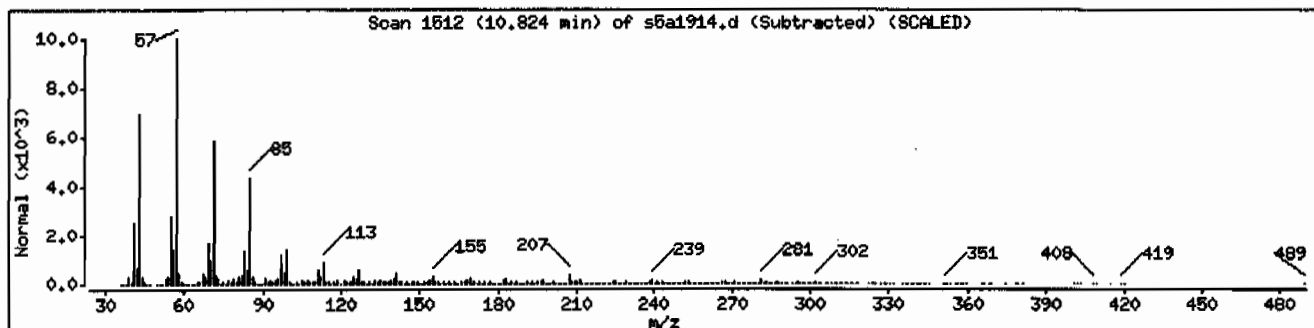
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptadecane, 9-octyl-	7225-64-1	NIST05.L	153748	96	C ₂₆ H ₅₂	352
Tricosane	638-67-5	NIST05.L	139231	95	C ₂₃ H ₄₈	324
Eicosane	112-95-8	NIST05.L	113491	94	C ₂₀ H ₄₂	282



Date: 19-JAN-2010 15:18

Client ID: RE12-10-7261

Instrument: MSD5.1

Sample Info: 1244626006194284011SVH11ILANL

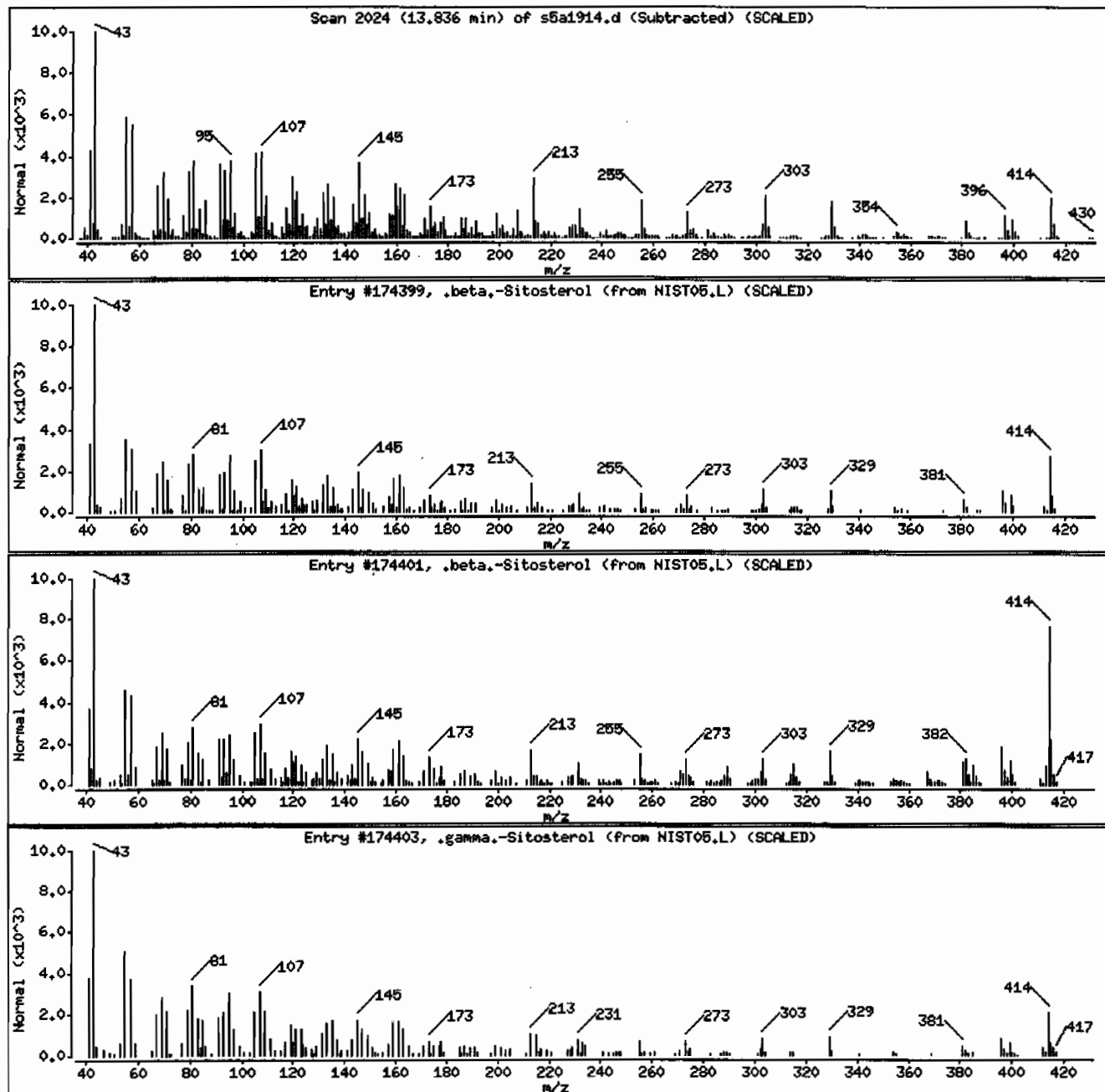
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-6	NIST05.L	174399	99	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	93	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	91	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1225
Lab Sample ID: 244626001

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 8.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7262
Batch ID: 942840
Run Date: 01/19/2010 12:35
Prep Date: 01/18/2010 20:10
Data File: s5a1907.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	364	ug/kg	72.9	364
108-95-2	Phenol	U	364	ug/kg	72.9	364
95-57-8	2-Chlorophenol	U	364	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene	U	364	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine	U	364	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol	U	364	ug/kg	72.9	364
83-32-9	Acenaphthene	U	36.4	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene	U	364	ug/kg	36.4	364
100-02-7	4-Nitrophenol	U	364	ug/kg	120	364
87-86-5	Pentachlorophenol	U	364	ug/kg	91.1	364
129-00-0	Pyrene	U	36.4	ug/kg	10.9	36.4
110-86-1	Pyridine	U	364	ug/kg	72.9	364
62-53-3	Aniline	U	364	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether	U	364	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene	U	364	ug/kg	72.9	364
100-51-6	Benzyl alcohol	U	364	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene	U	364	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl) ether	U	364	ug/kg	72.9	364
95-48-7	o-Cresol	U	364	ug/kg	72.9	364
65794-96-9	m,p-Cresols	U	364	ug/kg	109	364
67-72-1	Hexachloroethane	U	364	ug/kg	72.9	364
98-95-3	Nitrobenzene	U	364	ug/kg	72.9	364
78-59-1	Isophorone	U	364	ug/kg	72.9	364
88-75-5	2-Nitrophenol	U	364	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol	U	364	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane	U	364	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol	U	364	ug/kg	72.9	364
65-85-0	Benzoic acid	U	729	ug/kg	182	729
91-20-3	Naphthalene	U	36.4	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline	U	364	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene	U	364	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene	U	36.4	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene	U	364	ug/kg	72.9	364
88-06-2	2,4,6-Trichlorophenol	U	364	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol	U	364	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene	U	36.4	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline	U	364	ug/kg	72.9	364
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	364	ug/kg	72.9	364

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626001	Date Received: 01/13/2010 08:55	%Moisture: 8.9
Client ID: RE12-10-7262	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 12:35	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1907.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	364	ug/kg	72.9	364
606-20-2	2,6-Dinitrotoluene	U	364	ug/kg	36.4	364
208-96-8	Acenaphthylene	U	36.4	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol	U	729	ug/kg	138	729
132-64-9	Dibenzofuran	U	364	ug/kg	72.9	364
84-66-2	Diethylphthalate	U	364	ug/kg	72.9	364
86-73-7	Fluorene	U	36.4	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether	U	364	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol	U	364	ug/kg	72.9	364
100-01-6	4-Nitroaniline	U	364	ug/kg	109	364
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	364	ug/kg	72.9	364
122-66-7	Azobenzene	U	364	ug/kg	72.9	364
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	364	ug/kg	72.9	364
118-74-1	Hexachlorobenzene	U	364	ug/kg	72.9	364
85-01-8	Phenanthrene	U	36.4	ug/kg	10.9	36.4
120-12-7	Anthracene	U	36.4	ug/kg	7.29	36.4
84-74-2	Di-n-butylphthalate	U	364	ug/kg	72.9	364
206-44-0	Fluoranthene	U	36.4	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate	U	364	ug/kg	72.9	364
56-55-3	Benzo(a)anthracene	U	36.4	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine	U	364	ug/kg	109	364
218-01-9	Chrysene	U	36.4	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	364	ug/kg	72.9	364
117-84-0	Di-n-octylphthalate	U	364	ug/kg	72.9	364
205-99-2	Benzo(b)fluoranthene	U	36.4	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene	U	36.4	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene	U	36.4	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.4	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene	U	36.4	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene	U	36.4	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene	U	364	ug/kg	72.9	364

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	496	ug/kg		JA
	Unknown	5.6	476	ug/kg		J

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626001	Date Received: 01/13/2010 08:55	%Moisture: 8.9
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7262	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 12:35	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s5a1907.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
21996-77-0	Di-epi-.alpha.-cedrene-(I)	5.67	206	ug/kg	92	NJ
30021-74-0	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.69	291	ug/kg	83	NJ
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-	5.84	526	ug/kg	95	NJ
	Unknown	5.96	980	ug/kg		J
469-61-4	1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	6	212	ug/kg	83	NJ
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	6.11	501	ug/kg	91	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	605	ug/kg	97	NJ
4045-44-7	1,3-Cyclopentadiene, 1,2,3,4,5-pentameth	6.2	308	ug/kg	90	NJ
	Unknown	6.75	308	ug/kg		J
	Unknown	6.88	797	ug/kg		J
	Unknown	7.09	268	ug/kg		J
	Unknown	7.29	364	ug/kg		J
2416-20-8	Hexadecenoic acid, Z-11-	7.58	702	ug/kg	95	NJ
57-10-3	n-Hexadecanoic acid	7.61	296	ug/kg	98	NJ
62600-05-9	Cedran-diol, 8S,14-	7.65	354	ug/kg	87	NJ
112-79-8	9-Octadecenoic acid, (E)-	8.25	587	ug/kg	98	NJ
	Unknown	8.91	2030	ug/kg		J
	Unknown	9.16	863	ug/kg		J
	Unknown	9.43	445	ug/kg		J
	Unknown	9.5	1070	ug/kg		J
	Unknown	9.54	609	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.62	866	ug/kg	90	NJ
564-73-8	2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.88	321	ug/kg	83	NJ
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-hc	10.04	972	ug/kg	95	NJ
	Unknown	10.08	3980	ug/kg		J
	Unknown	10.44	416	ug/kg		J
	Unknown	10.49	572	ug/kg		J
83-46-5	.beta.-Sitosterol	13.81	1740	ug/kg	94	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1907.d
Lab Smp Id: 244626001 Client Smp ID: RE12-10-7262
Inj Date : 19-JAN-2010 12:35
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626001|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	8.86210	% 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	3.931	3.940	(1.000)	551949	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1870389	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1052979	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	1952881	40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1727865	40.0000	
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1245162	40.0000	
\$ 3 2-Fluorophenol	112	3.119	3.121	(0.793)	966284	70.5918	2570
\$ 5 Phenol-d5	99	3.648	3.651	(0.928)	1145112	67.8342	2470
\$ 20 Nitrobenzene-d5	82	4.295	4.301	(0.895)	539618	37.5748	1370
\$ 39 2-Fluorobiphenyl	172	5.542	5.548	(0.915)	1002796	36.0006	1310
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	298652	89.2363	3250
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.893)	1180734	43.5202	1580

ION RATIO REPORT

SV REPORT

Data file: s5a1907.d

Report Date: 01/19/2010 12:49

Lab. ID: 244626001

SampleType: SAMPLE

Injection Date: 19-JAN-2010 12:35

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626001|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	62953	3.65	3.72	80-120	100	(T)
93	4322	3.61	3.72	210-270	7	(QT)

6 Phenol		CAS#: 108-95-2				
94	42308	3.51	3.66	80-120	100	(T)
66	8545	3.51	3.66	14- 74	20	(T)
65	33589	3.51	3.66	0- 30	79	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	76817	4.30	4.18	80-120	100	(T)
42	45428	4.30	4.18	44-104	59	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	7268	4.54	4.57	80-120	100	()
122	4805	4.54	4.57	39- 99	66	()
77	5940	4.54	4.57	34- 94	82	()

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	10148	5.65	5.66	80-120	100	()
164	540	5.65	5.66	4- 64	5	()
127	2824	5.65	5.66	9- 69	28	()

42 o-Nitroaniline		CAS#: 88-74-4				
65	48918	5.76	5.71	80-120	100	()
92	146986	5.76	5.71	31- 91	300	(Q)
138	593	5.74	5.71	70-130	1	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
41 m-Nitroaniline			CAS#: 99-09-2			
138	14602	5.80	6.01	80-120	100	(T)
92	356377	5.81	6.01	82-142	2441	(QT)
108	276755	5.80	6.01	0- 40	1895	(QT)
<hr/>						
43 Dimethylphthalate			CAS#: 131-11-3			
163	79971	5.80	5.82	80-120	100	()
164	9956	5.80	5.82	0- 40	12	()
<hr/>						
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	143092	6.06	5.88	80-120	100	(T)
63	6060	6.06	5.88	61-121	4	(QT)
<hr/>						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	141984	6.06	6.17	80-120	100	(T)
89	4286	6.06	6.17	47-107	3	(QT)
63	4661	6.06	6.17	23- 83	3	(QT)
<hr/>						
51 Diethylphthalate			CAS#: 84-66-2			
149	330873	6.57	6.33	80-120	100	(T)
177	91828	6.58	6.33	0- 53	28	(T)
150	1162699	6.58	6.33	0- 43	351	(QT)
<hr/>						
52 4-Nitrophenol			CAS#: 100-02-7			
139	1379	6.09	6.10	80-120	100	()
109	32128	6.09	6.10	41-101	2329	(Q)
65	44212	6.09	6.10	72-132	3205	(Q)
<hr/>						
53 Fluorene			CAS#: 86-73-7			
166	9028	6.51	6.47	80-120	100	()
165	6245	6.51	6.47	56-116	69	()
167	1458	6.51	6.47	0- 44	16	()
<hr/>						
54 4-Chlorophenylphenylether			CAS#: 7005-72-3			
204	48575	6.58	6.45	80-120	100	(T)
141	2853	6.57	6.45	25- 85	6	(QT)
206	2318	6.58	6.45	3- 63	5	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	1047	6.65	6.49	80-120	100	(T)
105	26854	6.68	6.49	12- 72	2564	(QT)
51	2907	6.65	6.49	42-102	278	(QT)
<hr/>						
56 p-Nitroaniline			CAS#: 100-01-6			
138	33188	6.57	6.47	80-120	100	(T)
108	314696	6.57	6.47	45-105	948	(QT)
92	86752	6.57	6.47	18- 78	261	(QT)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
58	1,2-Diphenylhydrazine			CAS#: 122-66-7		
77	296588	6.57	6.57	80-120	100	()
105	282807	6.57	6.57	0- 47	95	(Q)
182	273	6.57	6.57	0- 57	0	()
<hr/>						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	20617	6.65	6.84	80-120	100	(T)
141	136161	6.65	6.83	43-103	660	(QT)
250	40405	6.66	6.84	68-128	196	(QT)
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79	Pyrene			CAS#: 129-00-0		
202	28117	8.62	8.51	80-120	100	(T)
200	53984	8.62	8.51	0- 50	192	(QT)
101	5746	8.62	8.51	0- 44	20	(T)
<hr/>						
85	Butylbenzylphthalate			CAS#: 85-68-7		
149	50987	9.04	9.04	80-120	100	()
91	266930	9.04	9.04	41-101	524	(Q)
206	1254	9.02	9.04	0- 52	2	()
<hr/>						
89	Benzo(a)anthracene			CAS#: 56-55-3		
228	11021	9.64	9.63	80-120	100	()
226	4830	9.61	9.63	0- 57	44	()
229	86538	9.62	9.63	0- 50	785	(Q)
<hr/>						
92	Chrysene			CAS#: 218-01-9		
228	13046	9.76	9.67	80-120	100	(T)
229	19690	9.75	9.67	0- 51	151	(QT)
226	5128	9.76	9.67	0- 60	39	(T)
<hr/>						
99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	862	13.08	13.12	80-120	100	()
138	2708	13.09	13.12	1- 61	314	(Q)
<hr/>						
100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	187	13.11	13.13	80-120	100	()
139	998	13.10	13.12	0- 30	533	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1907.d
Lab Smp Id: 244626001 Client Smp ID: RE12-10-7262
Inj Date : 19-JAN-2010 12:35
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626001|942840|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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	30.11000	weight of sample
M	8.86210	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3369056	40.000
* 46 Acenaphthene-d10	6.060	6651994	40.000
* 67 Phenanthrene-d10	7.231	5263754	40.000
* 91 Chrysene-d12	9.642	4513344	40.000
* 98 Perylene-d12	11.324	3595624	40.000

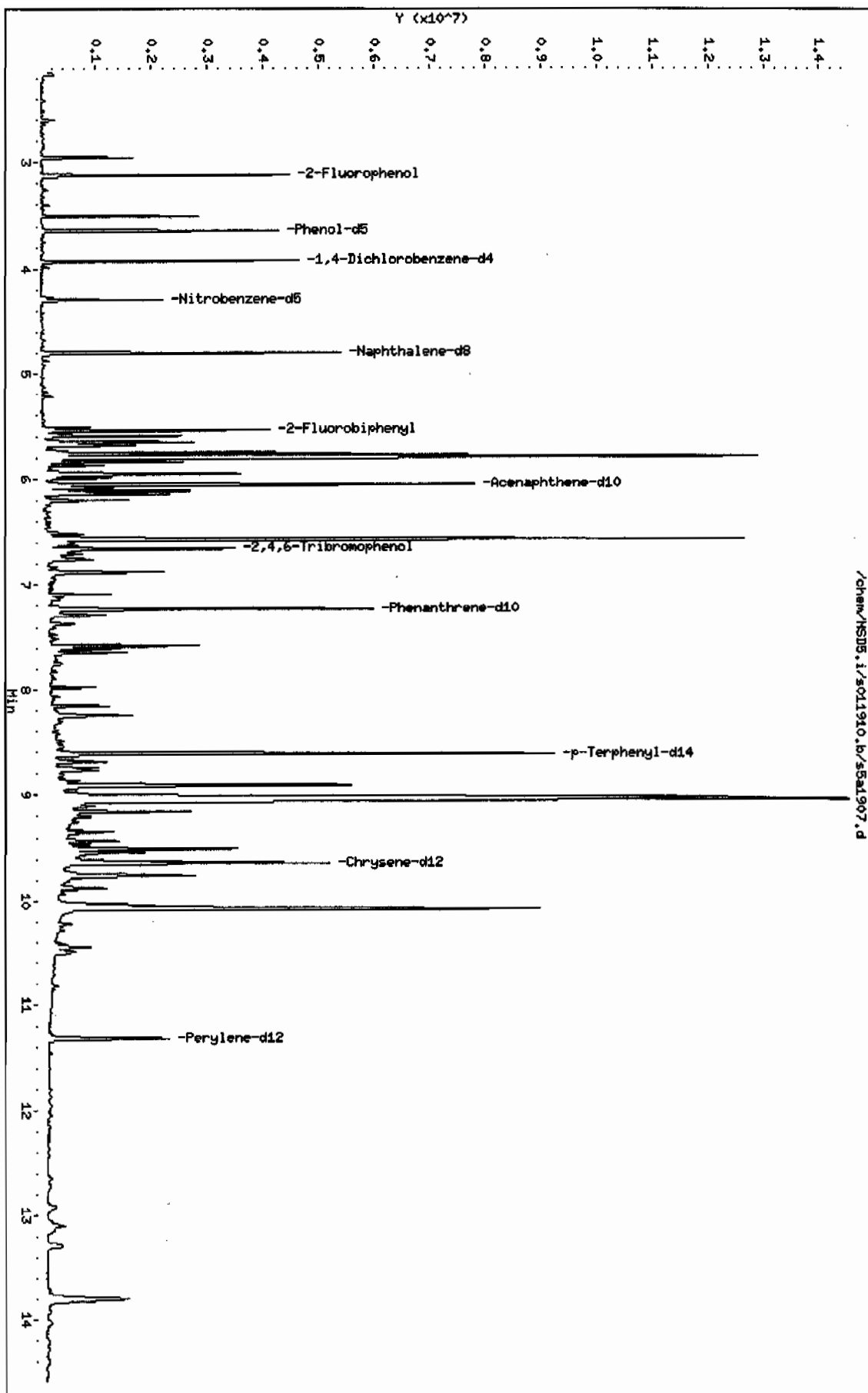
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.954	1145619	13.6016582	496	0		0	10
Unknown					CAS #:		
5.595	2174249	13.0742669	476	0		0	46
Di-epi-.alpha.-cedrene-(I)					CAS #: 21996-77-0		
5.672	940934	5.65805766	206	92	NIST05.L	59867	46
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro					CAS #: 30021-74-0		
5.689	1329719	7.99590982	291	83	NIST05.L	60068	46
1H-3a,7-Methanoazulene, octahydro-3,8,8-					CAS #: 546-28-1		
5.842	2400587	14.4352900	526	95	NIST05.L	60040	46
Unknown					CAS #:		
5.960	4473334	26.8992052	980	0		0	46
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex					CAS #: 469-61-4		
5.995	967865	5.81999809	212	83	NIST05.L	60061	46
2,4,6-Octatriene, 2,6-dimethyl-					CAS #: 673-84-7		
6.113	2288301	13.7600873	501	91	NIST05.L	15244	46
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr					CAS #: 19912-83-5		
6.142	2760492	16.5994832	605	97	NIST05.L	59903	46
1,3-Cyclopentadiene, 1,2,3,4,5-pentameth					CAS #: 4045-44-7		
6.201	1405354	8.45072485	308	90	NIST05.L	15328	46
Unknown					CAS #:		
6.754	1110477	8.43867093	308	0		0	67
Unknown					CAS #:		
6.878	2876773	21.8609999	797	0		0	67
Unknown					CAS #:		
7.089	967130	7.34935436	268	0		0	67
Unknown					CAS #:		
7.289	1314731	9.99082092	364	0		0	67
Hexadecenoic acid, Z-11-					CAS #: 2416-20-8		
7.583	2535510	19.2676926	702	95	NIST05.L	94748	67

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
n-Hexadecanoic acid					CAS #: 57-10-3		
7.607	1067577	8.11266854	296	98	NIST05.L	96235	67
Cedran-diol, 8S,14-					CAS #: 62600-05-9		
7.648	1279416	9.72246016	354	87	NIST05.L	83830	67
9-Octadecenoic acid, (E)-					CAS #: 112-79-8		
8.248	2119511	16.1064617	587	98	NIST05.L	113363	67
Unknown					CAS #:		
8.913	6296574	55.8040622	2030	0		0	91
Unknown					CAS #:		
9.160	2670751	23.6698162	862	0		0	91
Unknown					CAS #:		
9.430	1376437	12.1988171	444	0		0	91
Unknown					CAS #:		
9.501	3325364	29.4713984	1070	0		0	91
Unknown					CAS #:		
9.536	1884591	16.7023923	609	0		0	91
Podocarpa-8,11,13-trien-3-one, 14-isopro					CAS #: 18326-16-4		
9.624	2682055	23.7699968	866	90	NIST05.L	133599	91
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10					CAS #: 564-73-8		
9.877	995039	8.81864280	321	83	NIST05.L	126178	91
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he					CAS #: 511-05-7		
10.042	3008963	26.6672606	972	95	NIST05.L	125029	91
Unknown					CAS #:		
10.083	12328263	109.260553	3980	0		0	91
Unknown					CAS #:		
10.442	1288974	11.4236686	416	0		0	91
Unknown					CAS #:		
10.489	1410328	15.6893761	572	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.807	4288306	47.7058329	1740	94	NIST05.L	174399	98

Data File: /chem/MS05.1/sol1910.b/s5a1907.d
Date: 19-JAN-2010 12:35
Client ID: RE12-10-7262
Sample Info: 124462600194284011SVH111LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: MS05.1
Operator: RHB
Column diameter: 0.20



Date : 19-JAN-2010 12:38

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001/94284011/SVM11/LANL

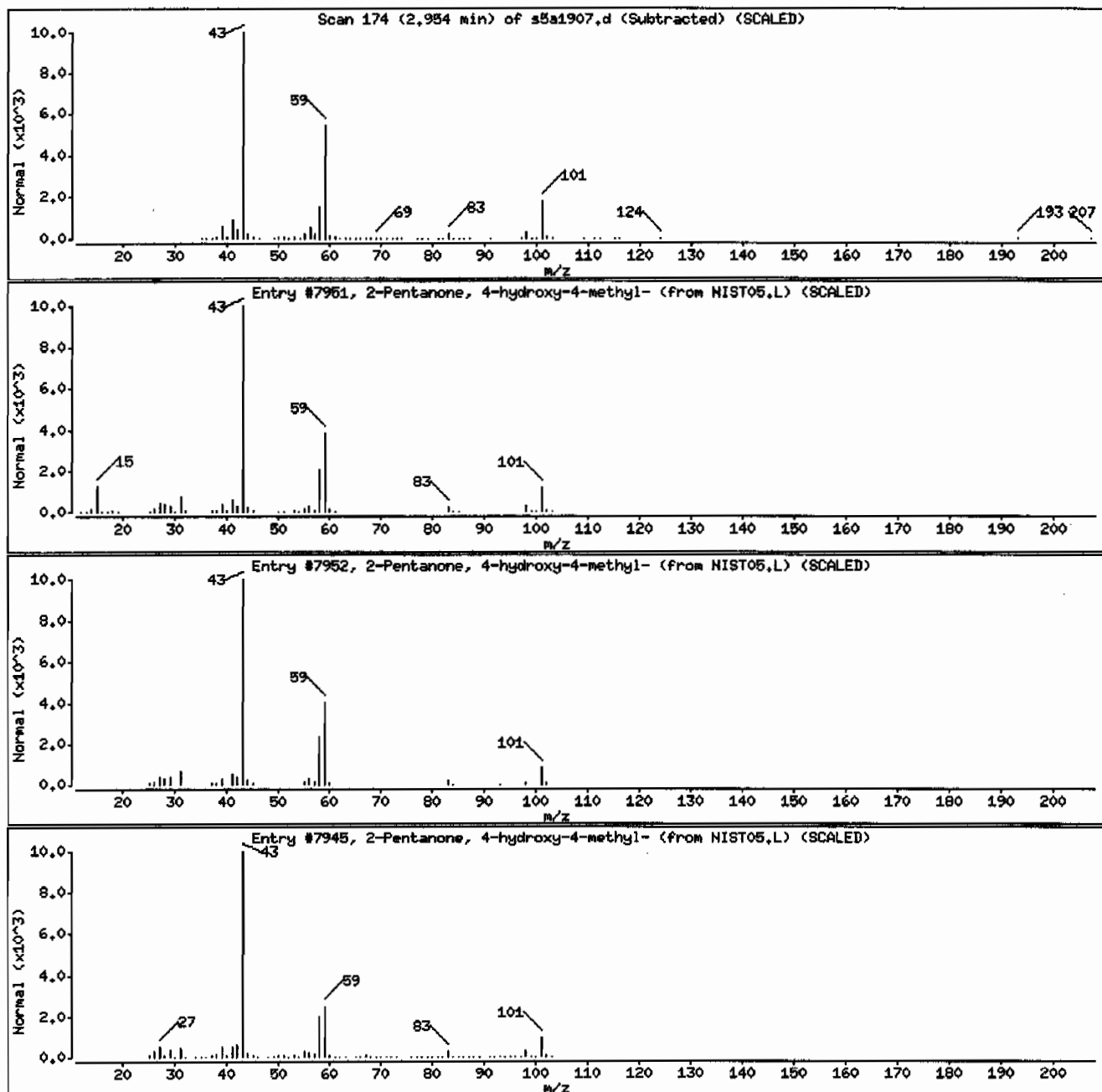
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7961	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7962	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7946	38	C6H12O2	116



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.1

Sample Info: I244626001194284011SVH11ILANL

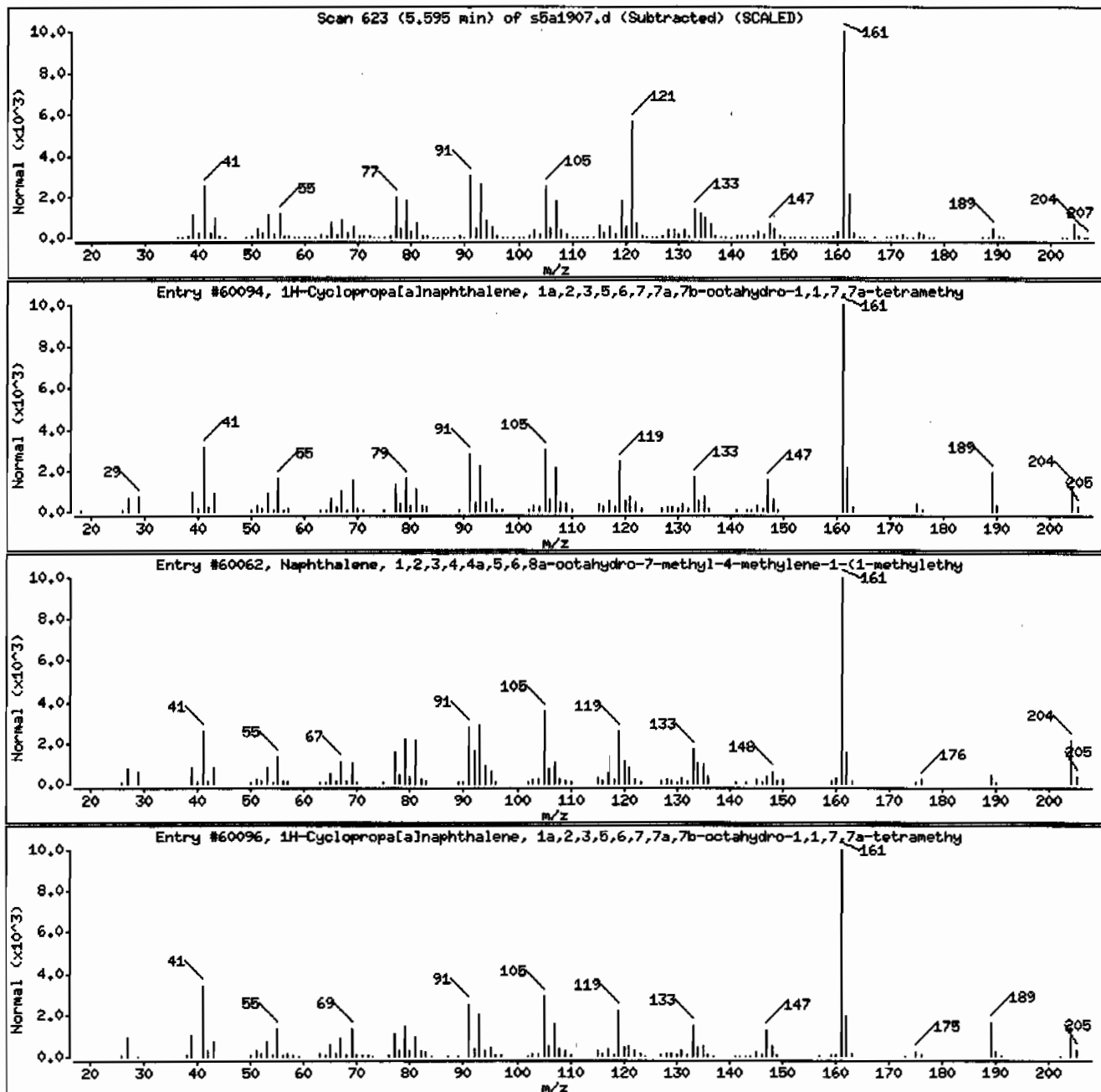
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cyclopropa[<i>a</i>]naphthalene, 1a,2,3,5,6,	17334-55-3	NIST05.L	60094	78	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	39029-41-9	NIST05.L	60062	72	C15H24	204
1H-Cyclopropa[<i>a</i>]naphthalene, 1a,2,3,5,6,	17334-55-3	NIST05.L	60096	72	C15H24	204



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH111LANL

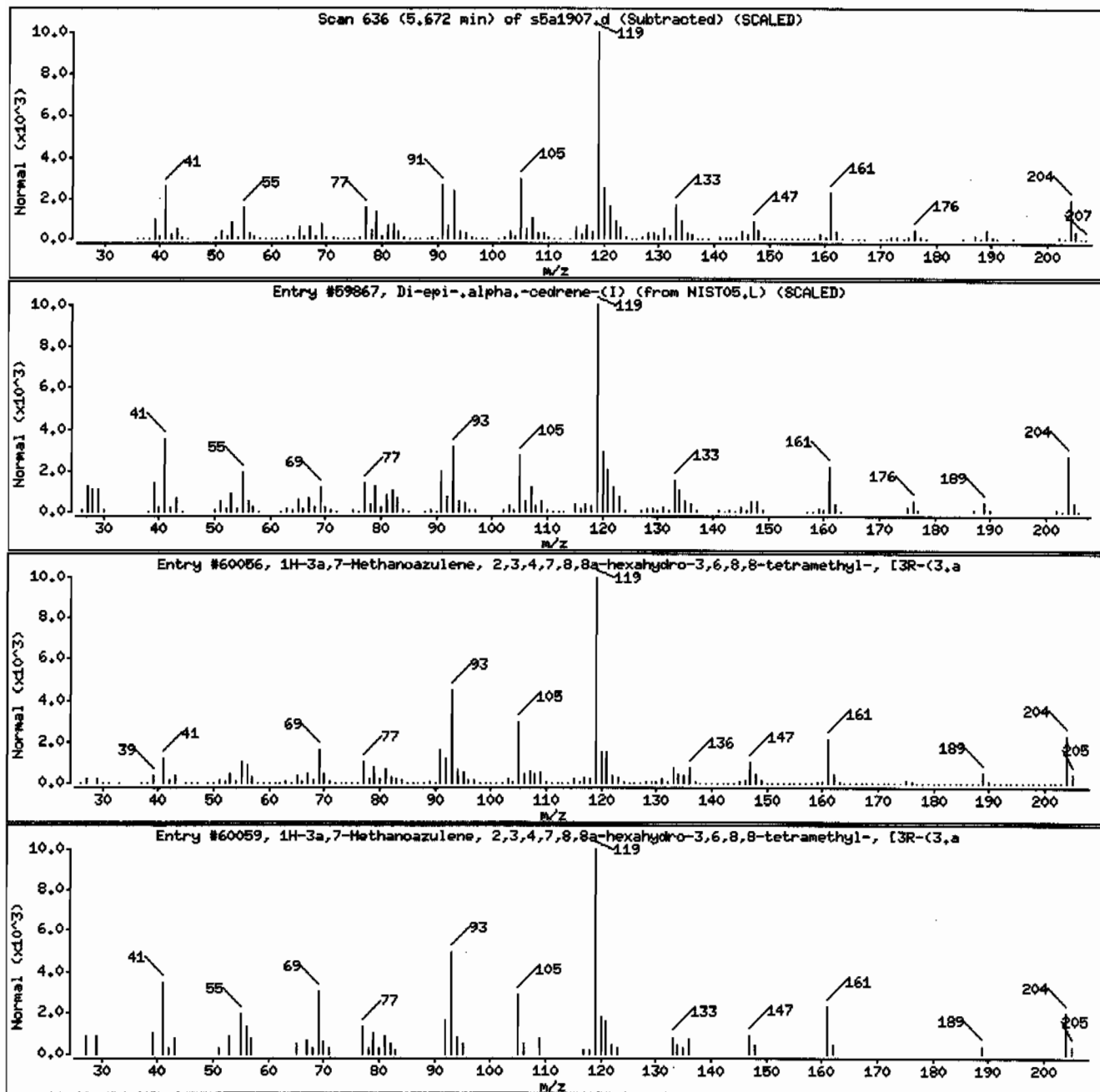
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Di-epi-,alpha,-cedrene-(I)	21996-77-0	NIST05.L	59867	92	C15H24	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60056	83	C15H24	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60059	81	C15H24	204



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH11ILANL

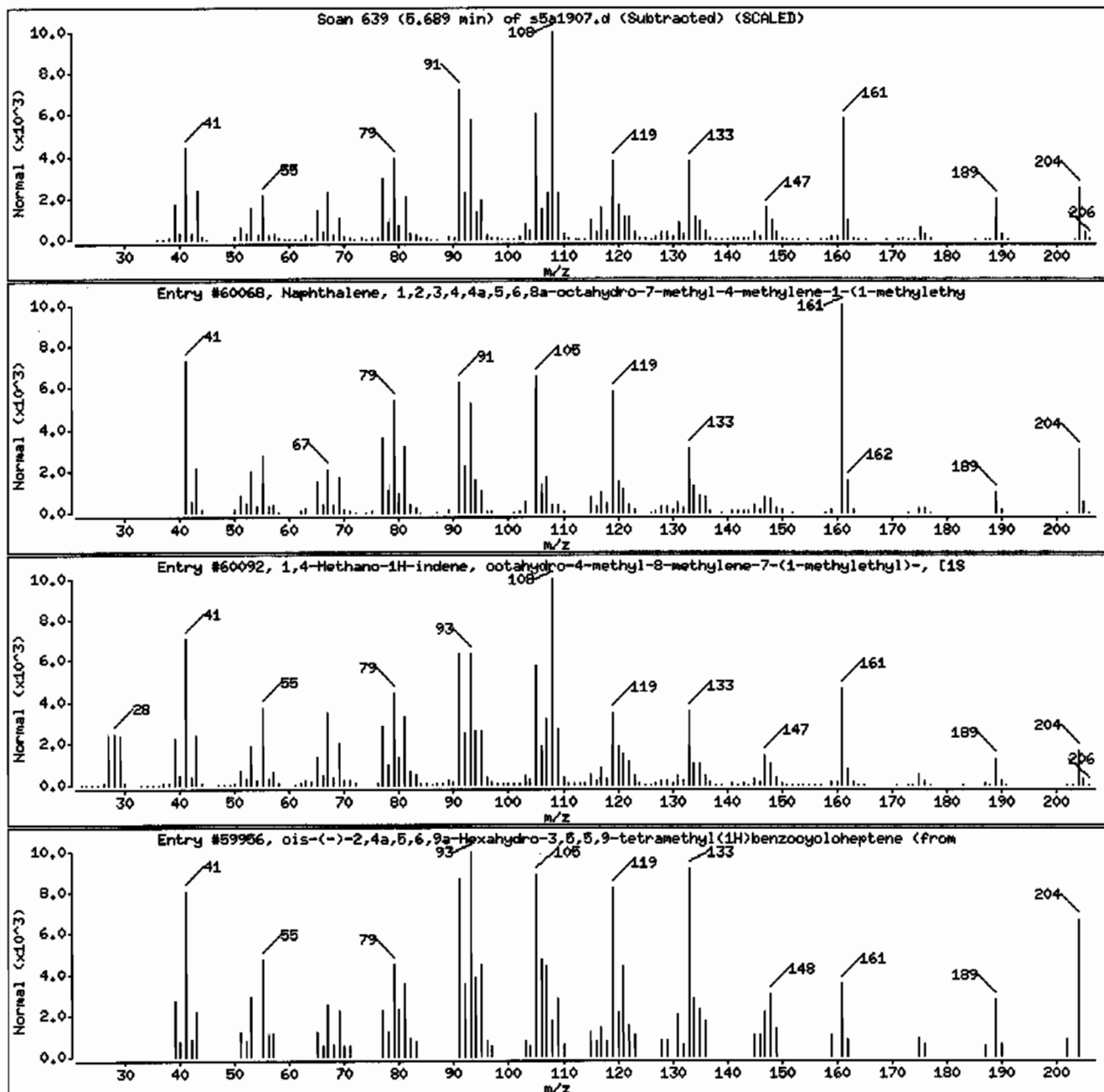
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60068	83	C18H24	204
1,4-Methano-1H-indene, octahydro-4-methy	3650-28-0	NIST05.L	60092	83	C15H24	204
cis-(-)-2,4a,5,6,9a-Hexahydro-3,5,6,9-te	1000104-20-1	NIST05.L	59956	80	C15H24	204



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH11ILANL

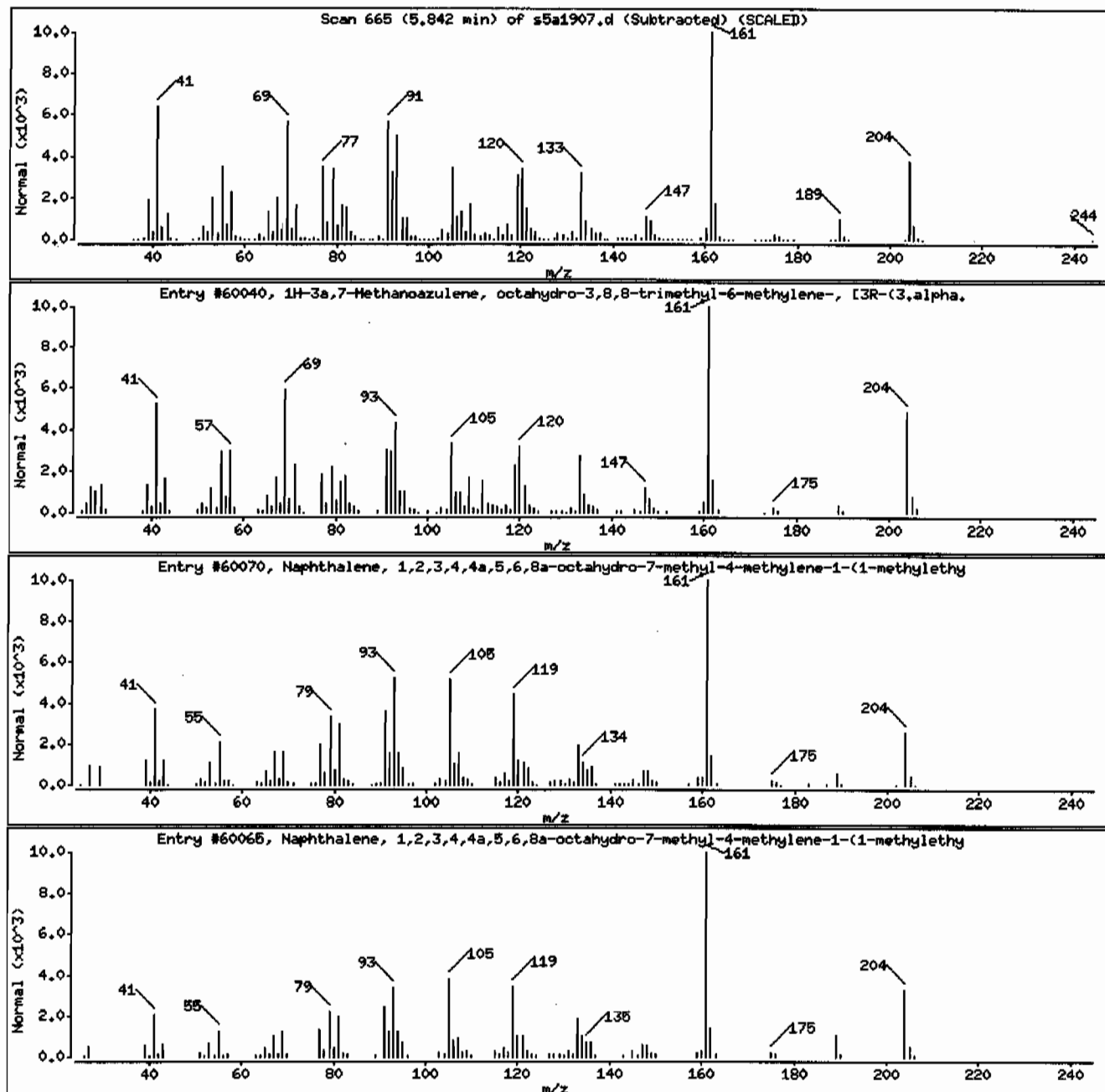
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-3a,7-Methanoazulene, octahydro-3,8,8-	546-28-1	NIST05.L	60040	95	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60070	94	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60065	89	C15H24	204



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.1

Sample Info: 1244626001194284011SVH111LANL

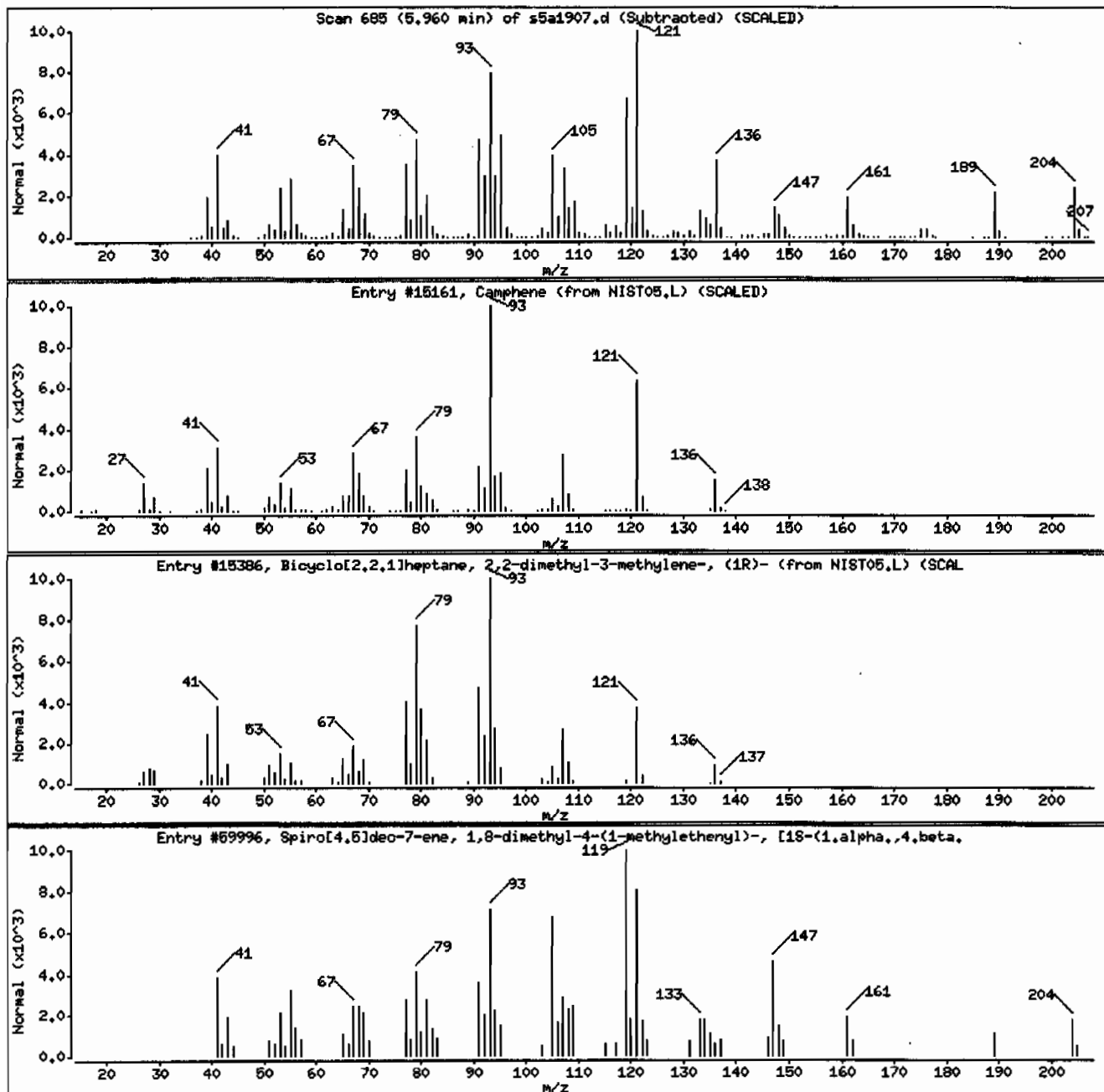
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Camphene	79-92-5	NIST05.L	15161	78	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-methylene-	5794-03-6	NIST05.L	15386	78	C10H16	136
Spiro[4.5]dec-7-ene, 1,8-dimethyl-4-(1-methylethenyl)-, [1S-(1.alpha.,4.beta.)]	24048-44-0	NIST05.L	59996	70	C15H24	204



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 124462600194284011SVH111LANL

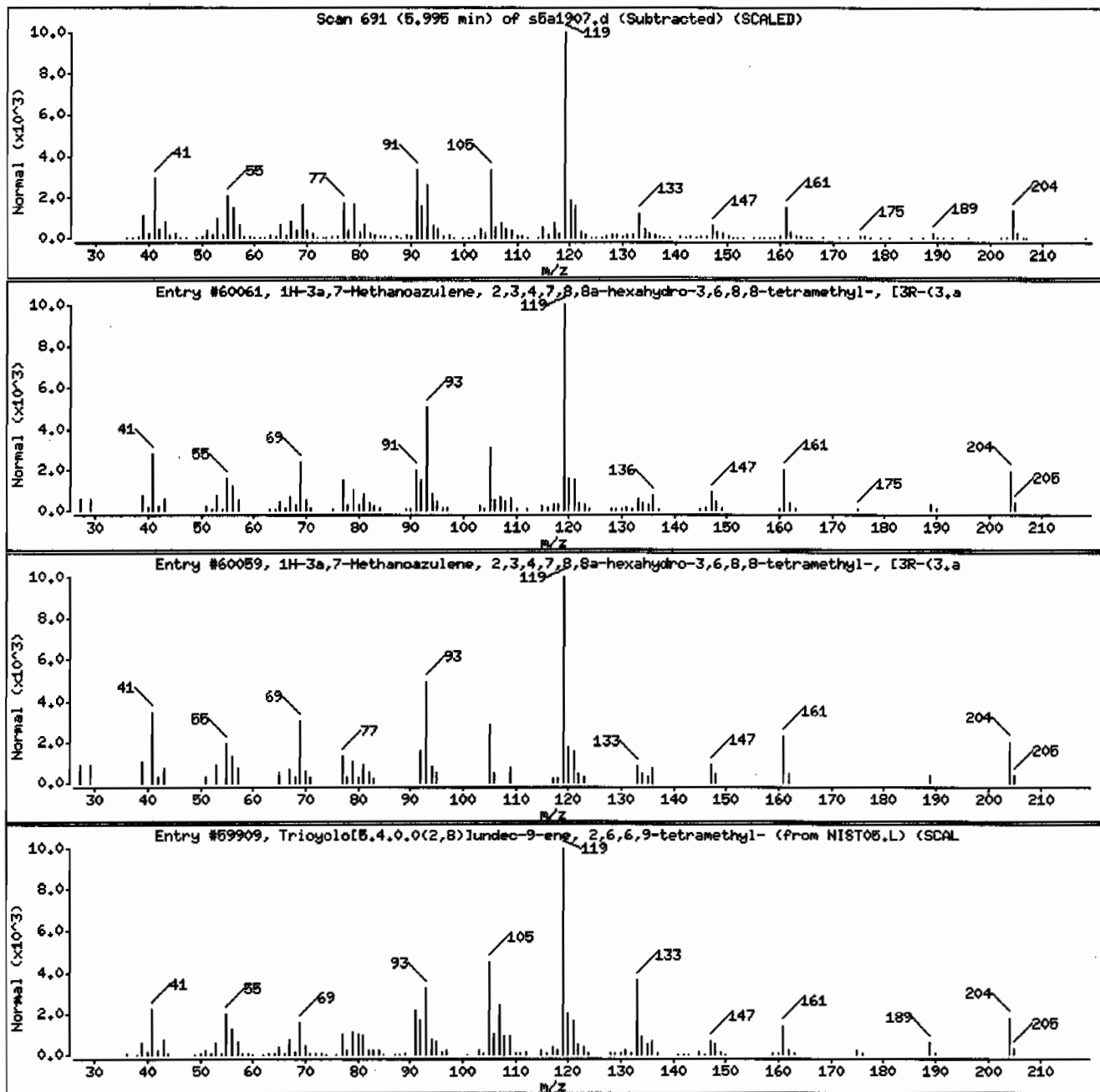
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60061	83	C15H24	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60059	81	C15H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	72	C15H24	204



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH11ILANL

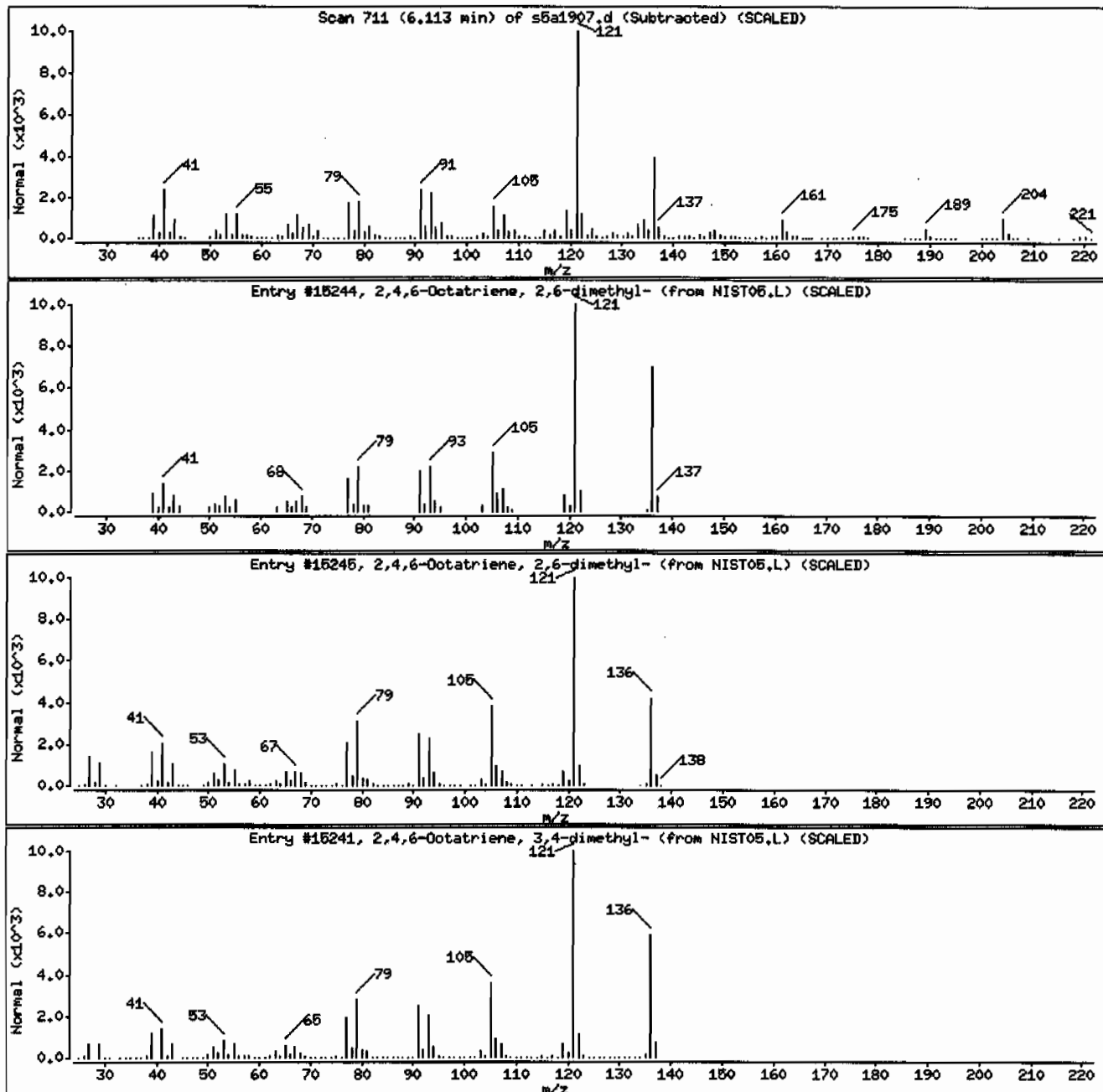
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5HS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15244	91	C ₁₀ H ₁₆	136
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15245	83	C ₁₀ H ₁₆	136
2,4,6-Octatriene, 3,4-dimethyl-	57396-75-5	NIST05.L	15241	81	C ₁₀ H ₁₆	136



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: HSD5.1

Sample Info: 124462600194284011SVH11ILANL

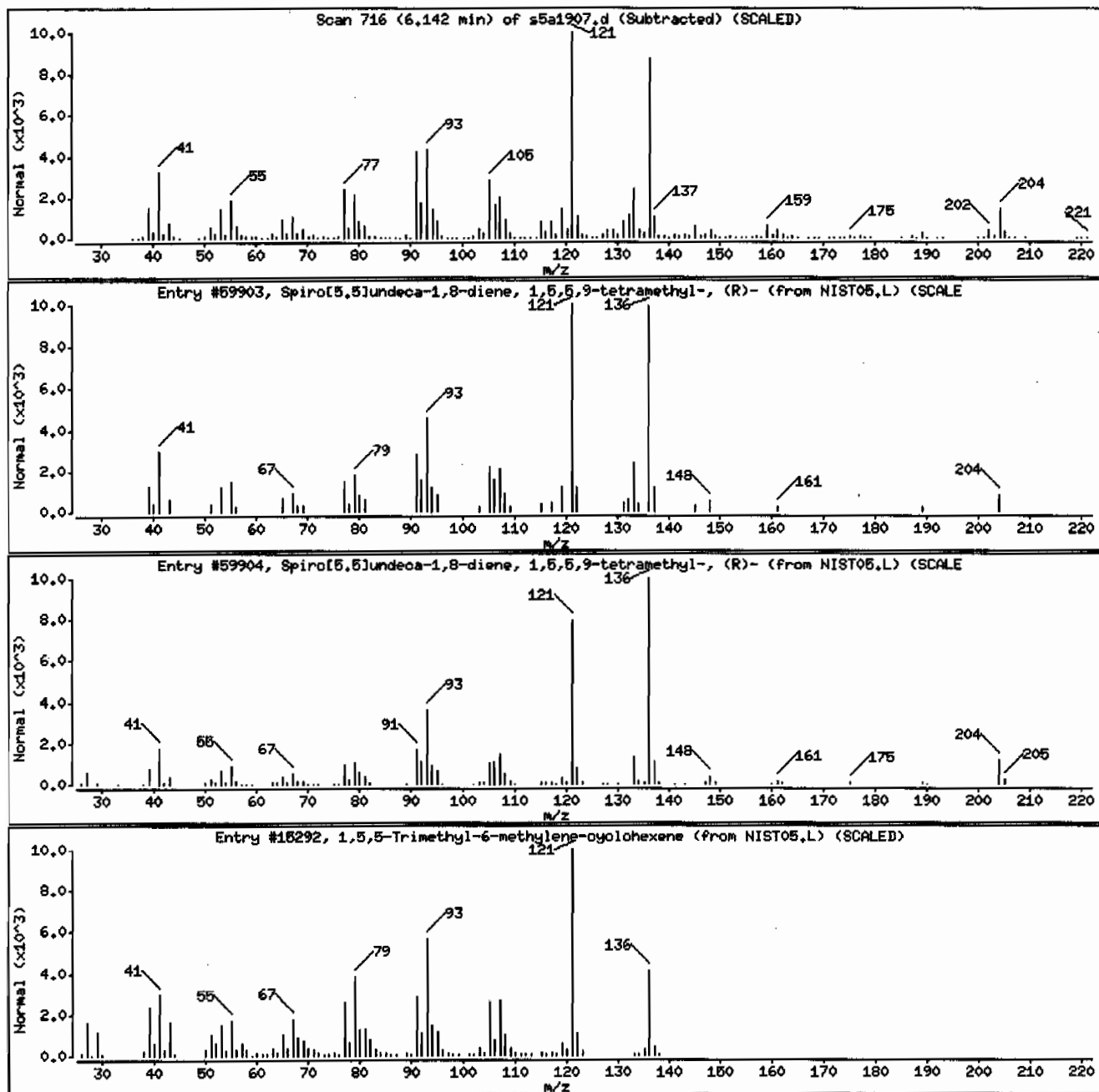
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	19912-83-5	NIST05.L	59903	97	C15H24	204
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	19912-83-5	NIST05.L	59904	92	C15H24	204
1,5,5-Trimethyl-6-methylene-cyclohexene	514-95-4	NIST05.L	15292	91	C10H16	136



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011ISVH11ILANL

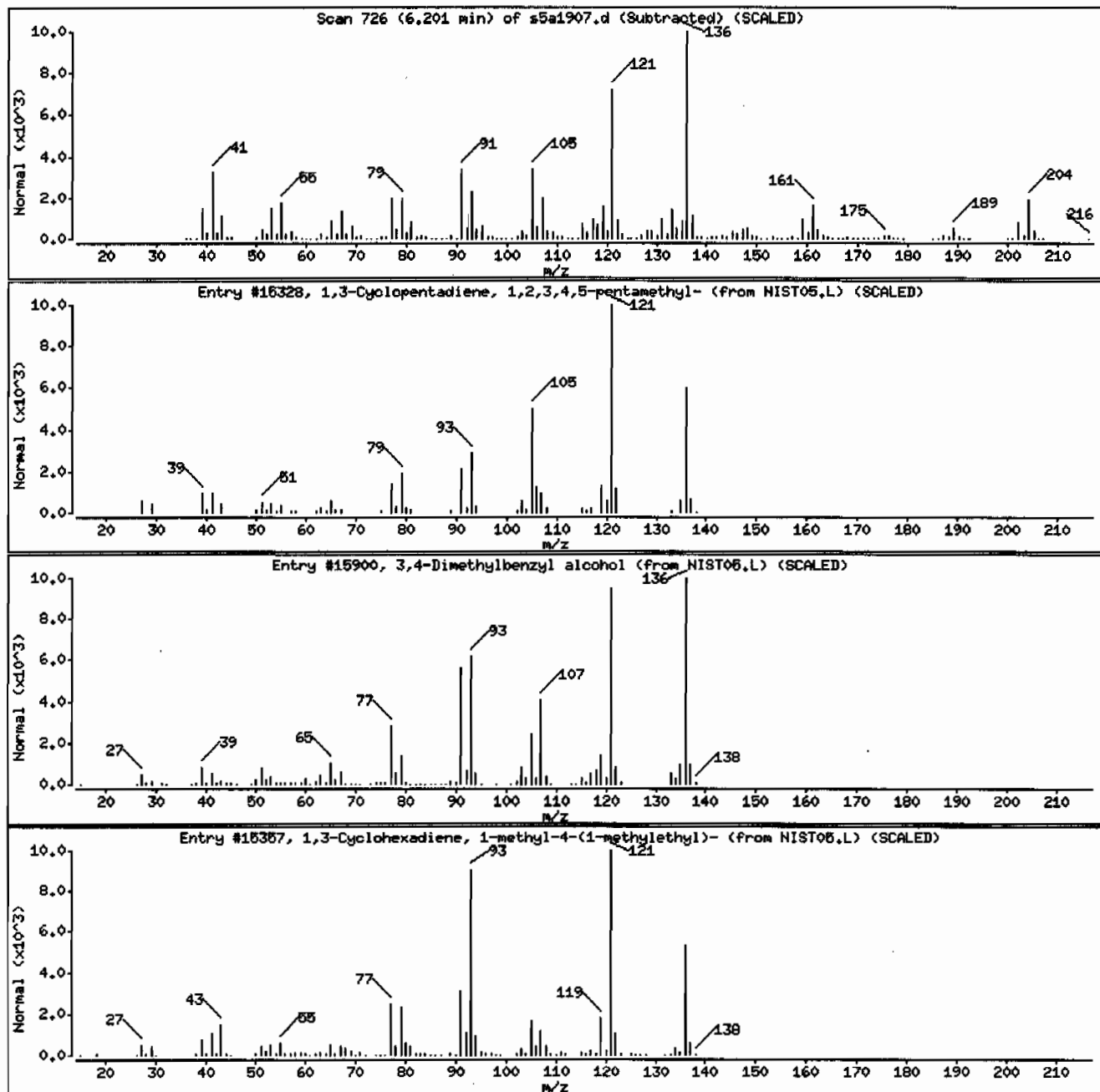
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,3-Cyclopentadiene, 1,2,3,4,5-pentameth	4045-44-7	NIST05.L	15328	90	C10H16	136
3,4-Dimethylbenzyl alcohol	6966-10-5	NIST05.L	15900	70	C9H12O	136
1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	99-86-5	NIST05.L	15357	60	C10H16	136



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: HSD5.i

Sample Info: 1244626001194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

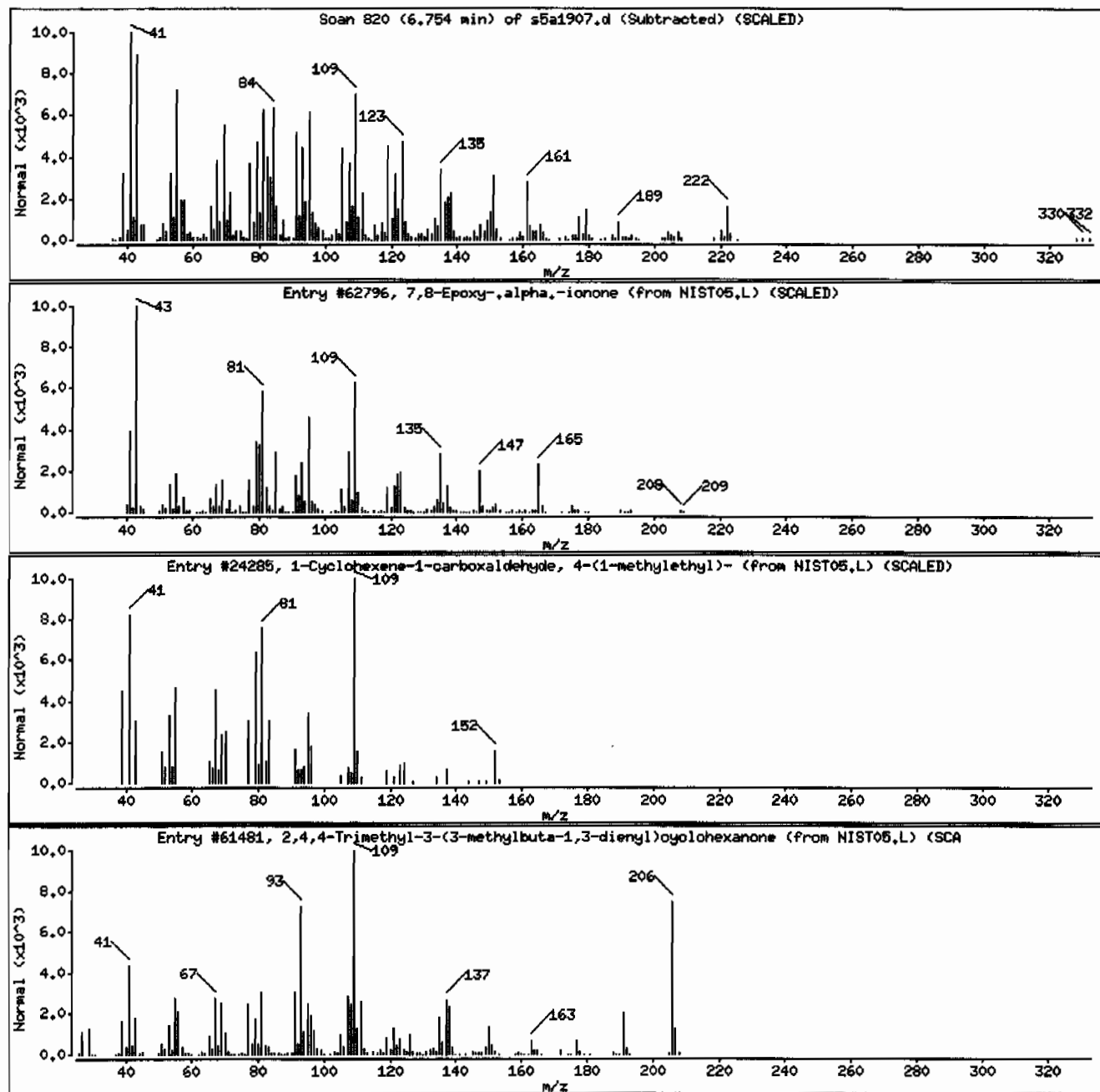
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7,8-Epoxy-.alpha.-ionone

CAS Number	Library	Entry	Quality	Formula	Weight
37079-64-4	NIST05.L	62796	46	C13H20O2	208
21391-98-0	NIST05.L	24285	44	C10H16O	152
97452-05-6	NIST05.L	61481	43	C14H22O	206

1-Cyclohexene-1-carboxaldehyde, 4-(1-met

2,4,4-Trimethyl-3-(3-methylbuta-1,3-dien



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: HSD5.i

Sample Info: 1244626001/94284011/SVH11/LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

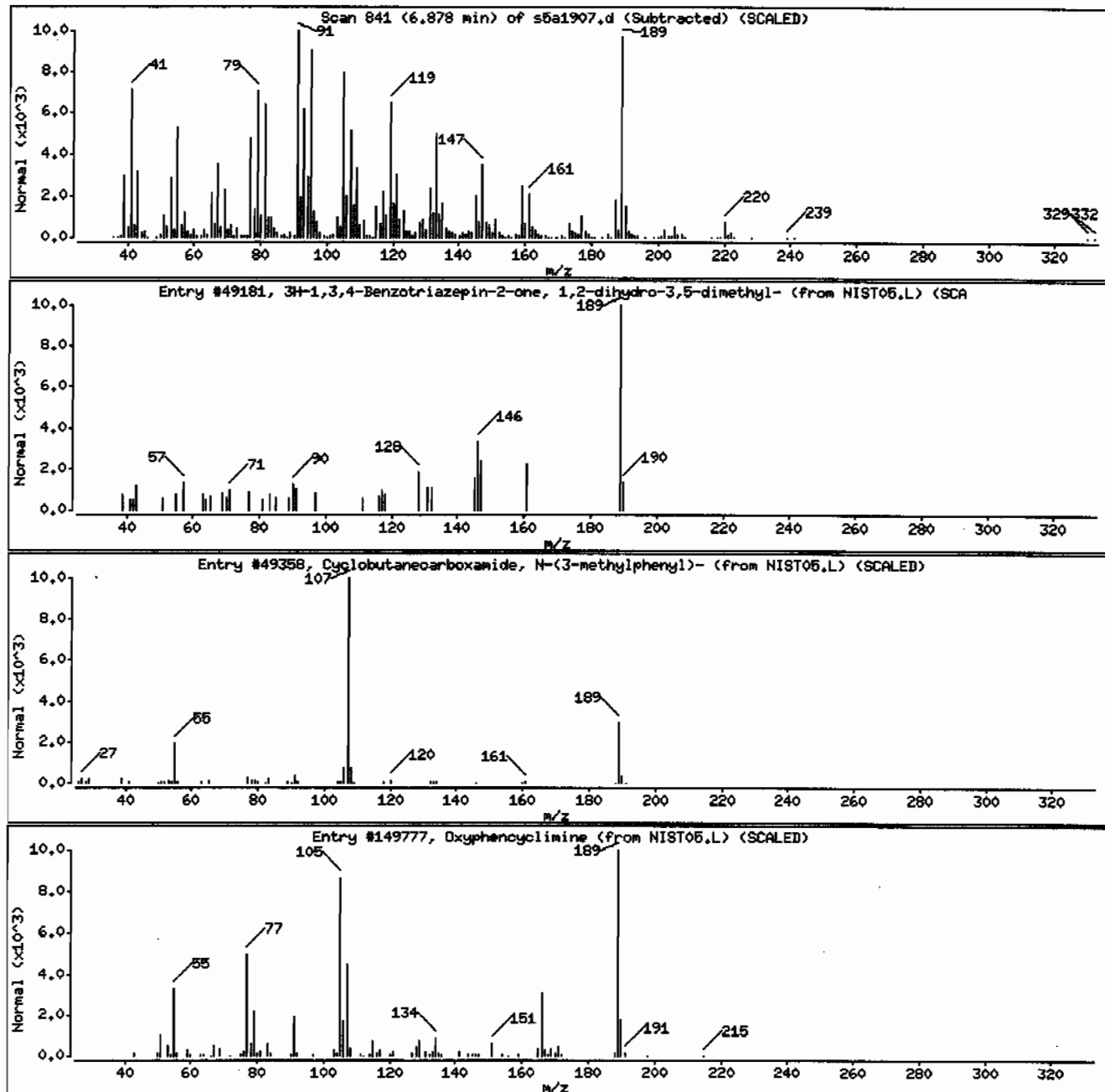
Unknown

3H-1,3,4-Benzotriazepin-2-one, 1,2-dihyd

CAS Number	Library	Entry	Quality	Formula	Weight
105999-05-1	NIST05.L	49181	42	C10H11N3O	189
1000307-04-7	NIST05.L	49358	18	C12H15NO	189
125-53-1	NIST05.L	149777	18	C20H26N2O3	344

Cyclobutanecarboxamide, N-(3-methylpheny

Oxyphenocyclimine



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: HSD5.i

Sample Info: 1244626001/94284011/SVM11/LANL

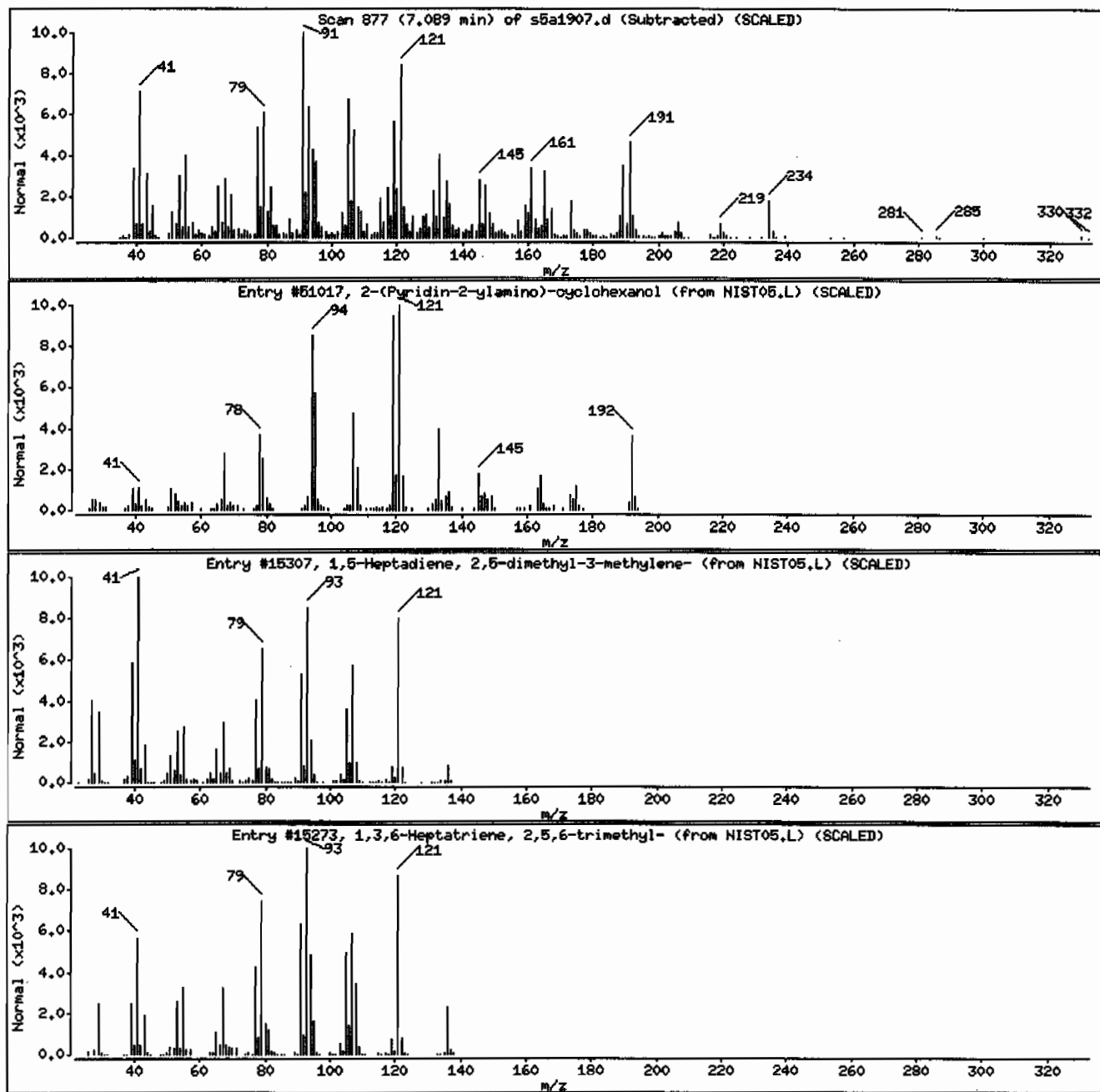
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-(Pyridin-2-ylamino)-cyclohexanol	1000194-39-2	NIST05.L	51017	38	C ₁₁ H ₁₆ N ₂ O	192
1,5-Heptadiene, 2,5-dimethyl-3-methylene	74663-83-5	NIST05.L	15307	30	C ₁₀ H ₁₆	136
1,3,6-Heptatriene, 2,5,6-trimethyl-	42123-66-0	NIST05.L	15273	25	C ₁₀ H ₁₆	136



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVMI11LANL

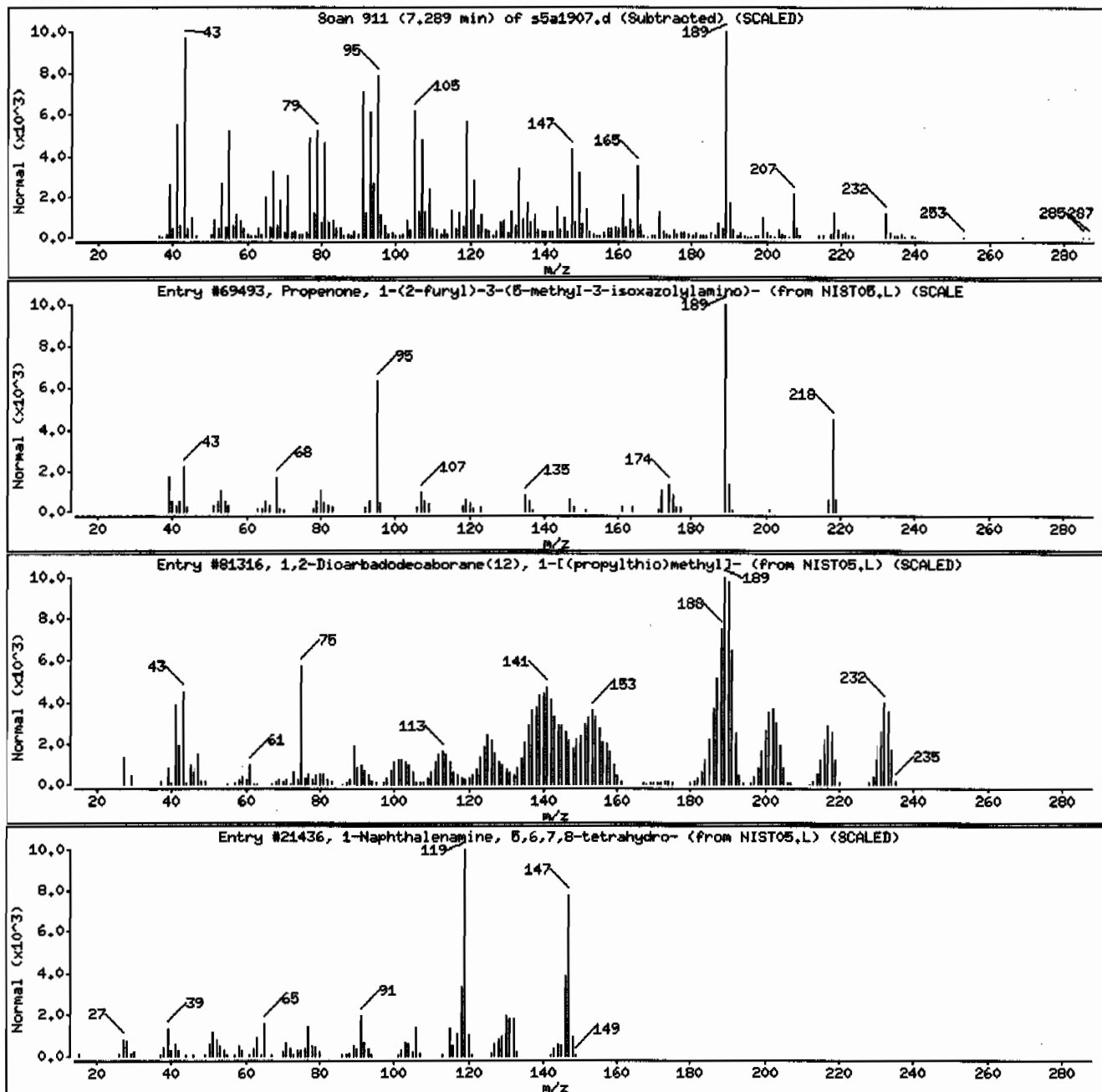
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propenone, 1-(2-furyl)-3-(5-methyl-3-iso	186957-33-5	NIST05.L	69493	43	C11H10N2O3	218
1,2-Dicarbododecaborane(12), 1-[(propylt	62906-36-9	NIST05.L	81316	25	C6H20B10S	234
1-Naphthalenamine, 5,6,7,8-tetrahydro-	2217-41-6	NIST05.L	21436	25	C10H11N	147



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH111LANL

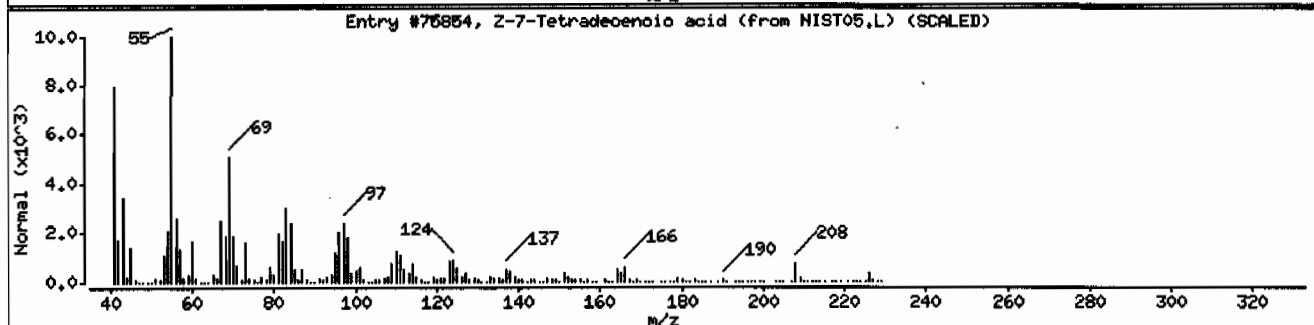
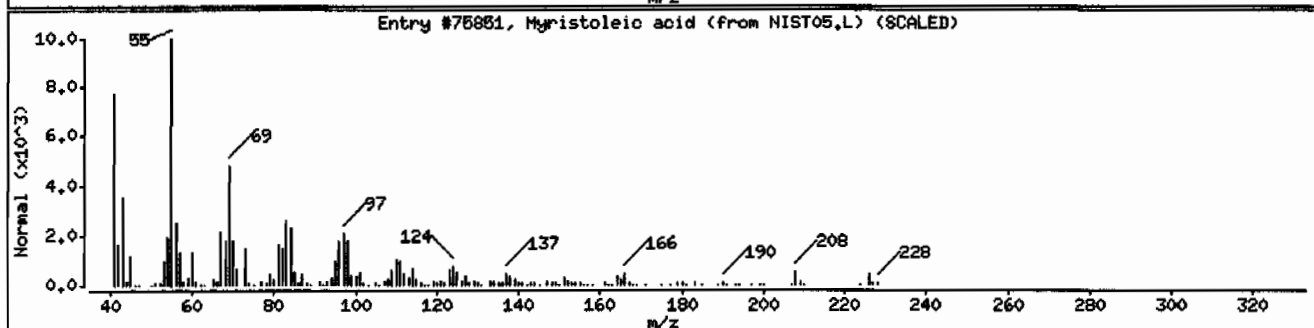
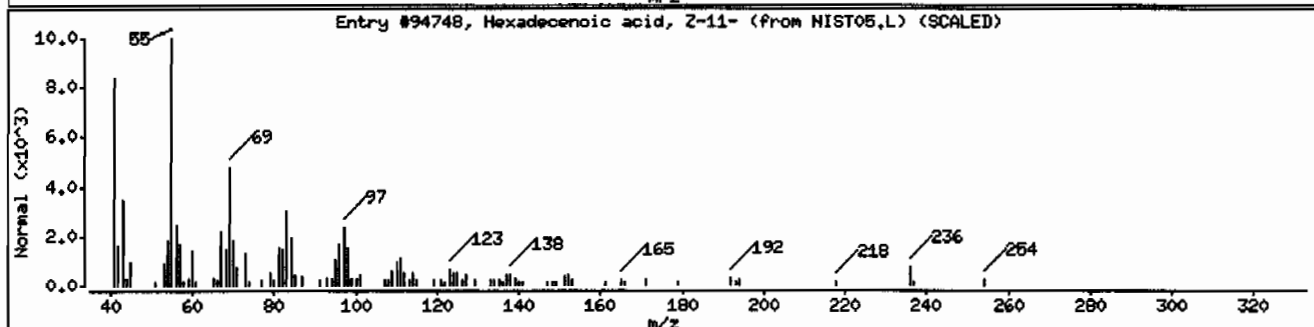
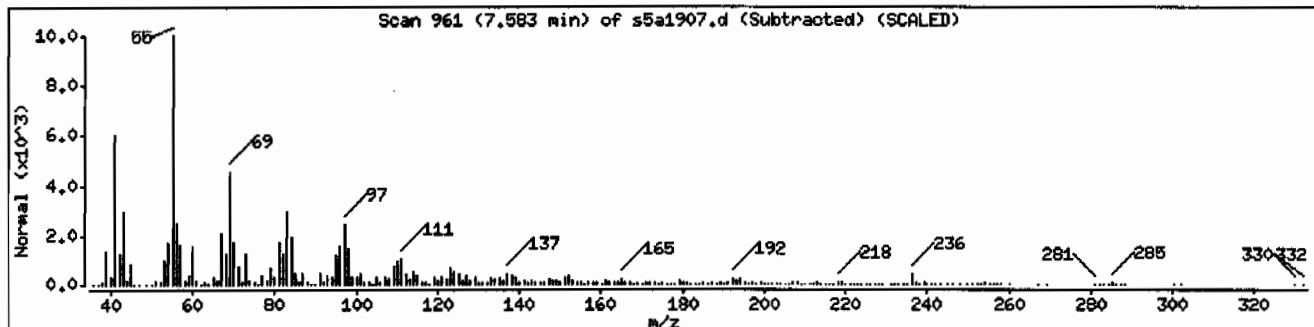
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecenoic acid, Z-11-	2416-20-8	NIST05.L	94748	95	C16H30O2	254
Myristoleic acid	544-64-9	NIST05.L	75851	91	C14H26O2	226
Z-7-Tetradecenoic acid	1000130-98-4	NIST05.L	75854	91	C14H26O2	226



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH11ILANL

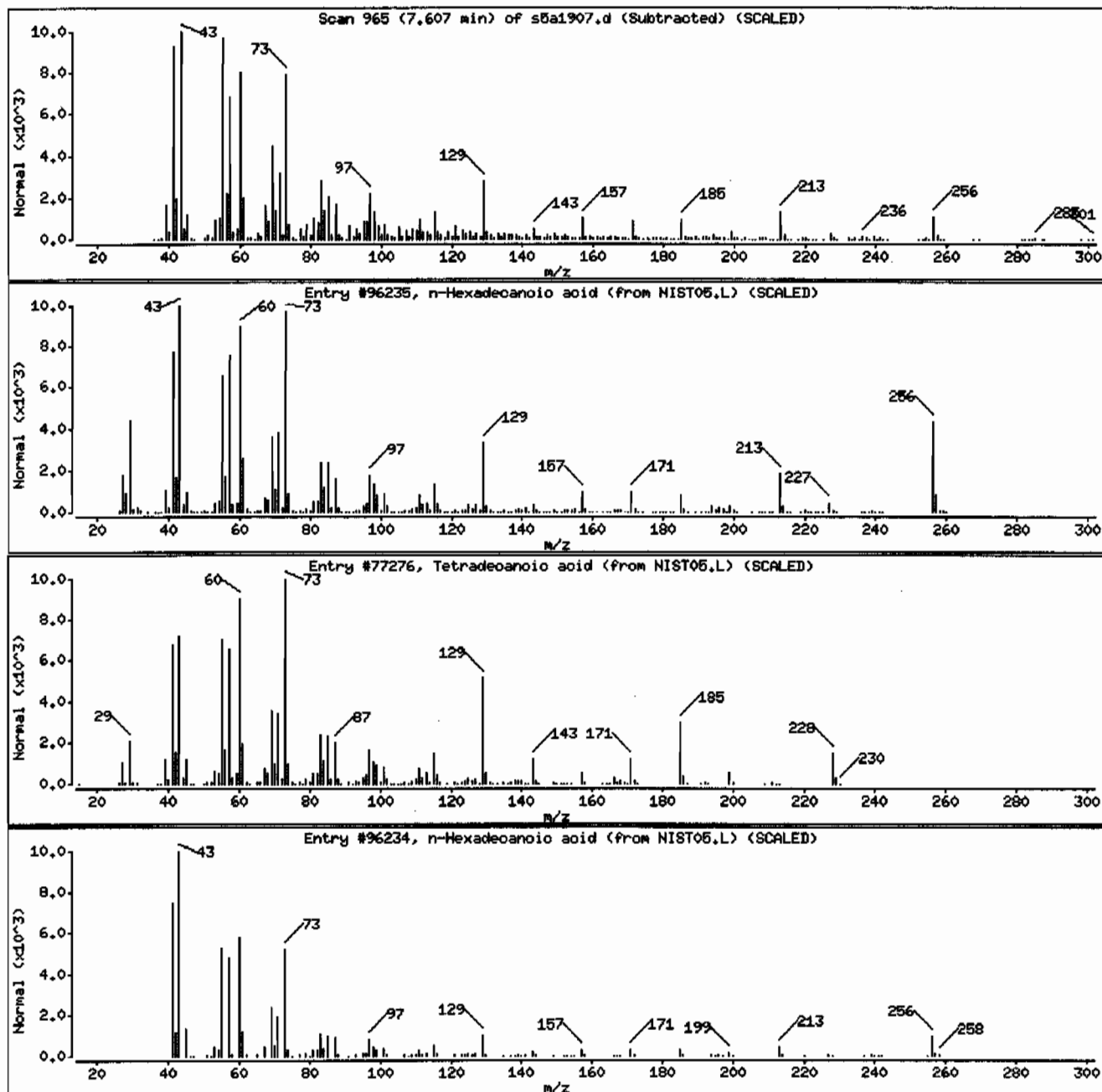
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	98	C16H32O2	256
Tetradecanoic acid	544-63-8	NIST05.L	77276	95	C14H28O2	228
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	95	C16H32O2	256



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.1

Sample Info: 1244626001/94284011/SVM11/LANL

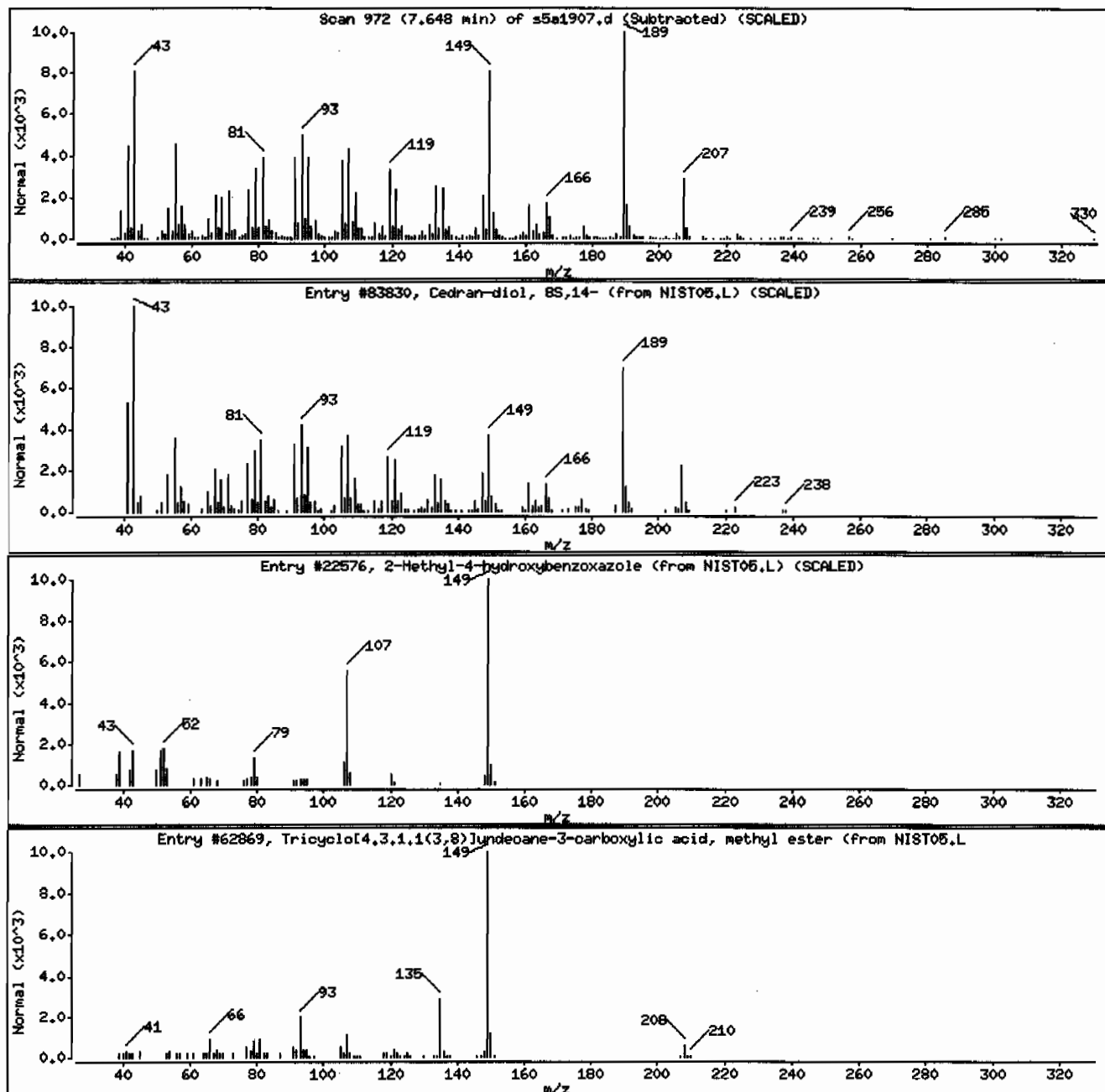
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	87	C ₁₅ H ₂₆ O ₂	238
2-Methyl-4-hydroxybenzoxazole	51110-60-2	NIST05.L	22576	25	C ₈ H ₇ N ₂ O ₂	149
Tricyclo[4.3.1.1(3,8)]undecane-3-carboxy	31061-61-7	NIST05.L	62869	18	C ₁₃ H ₂₀ O ₂	208



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011ISVH11ILANL

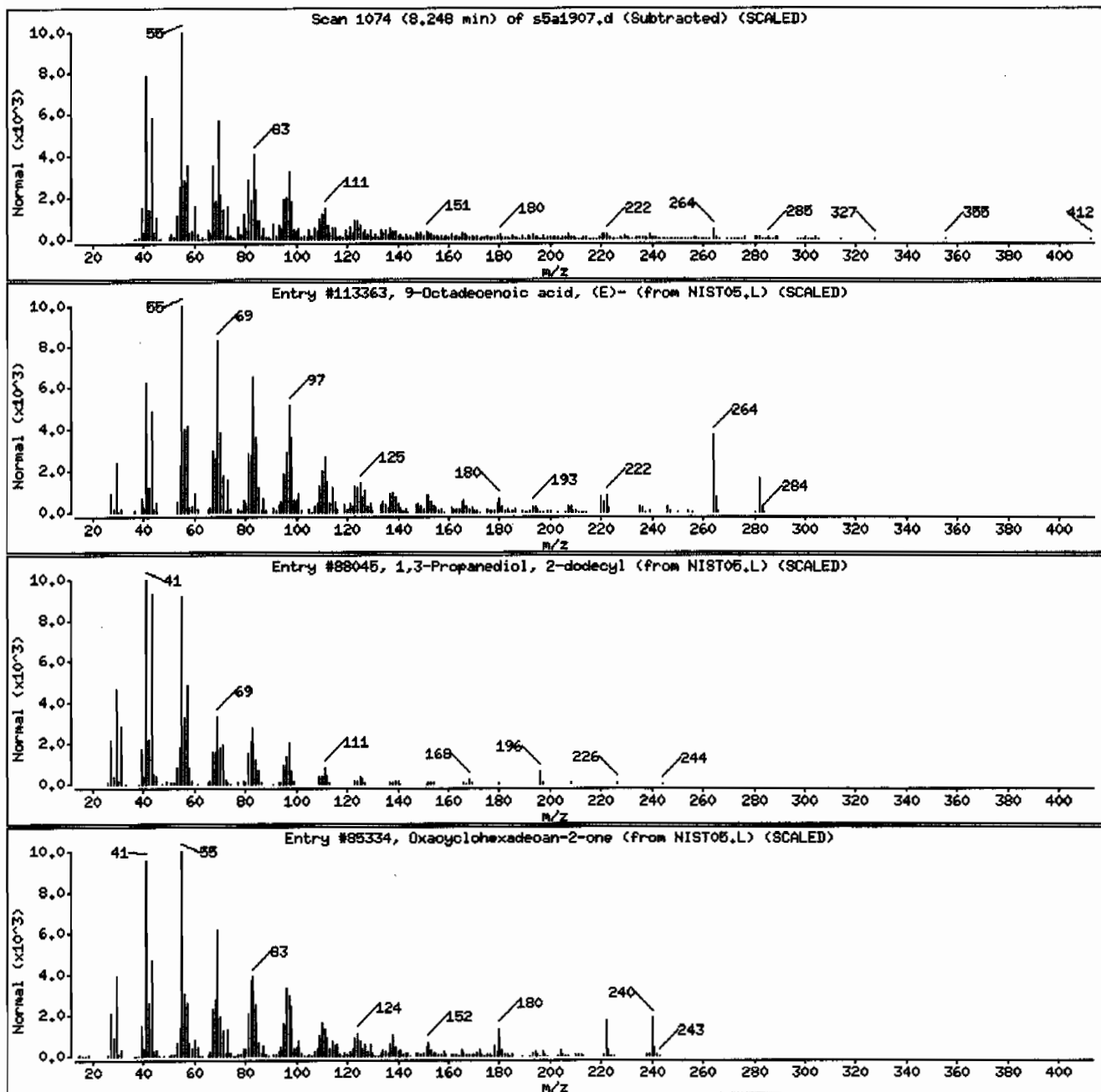
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenoic acid, (E)-	112-79-8	NIST05.L	113363	98	C18H34O2	282
1,3-Propanediol, 2-dodecyl	10395-09-2	NIST05.L	88045	90	C15H32O2	244
Oxacyclohexadecan-2-one	106-02-5	NIST05.L	85334	90	C16H28O2	240



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH11ILANL

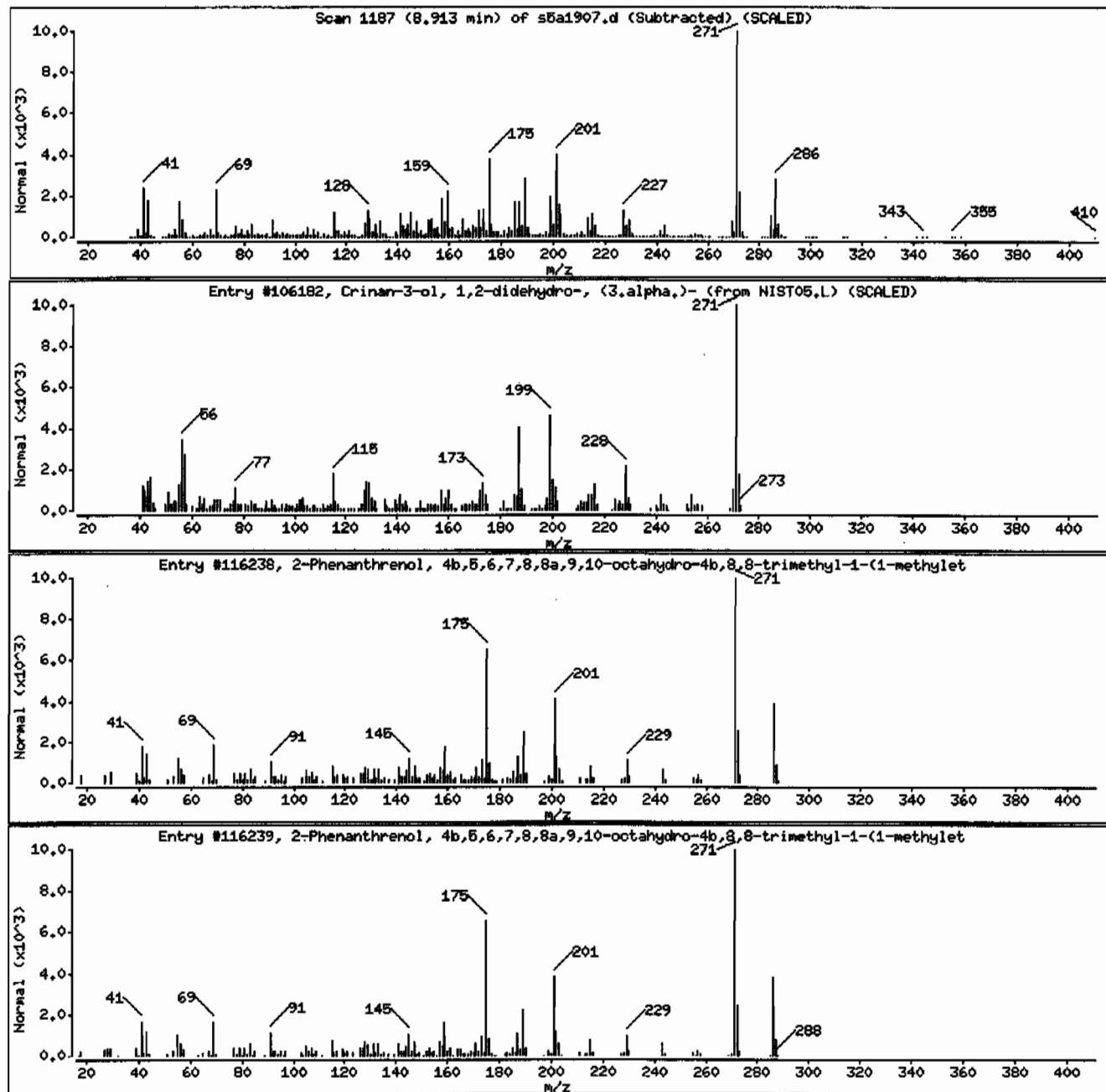
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Crinan-3-ol, 1,2-didehydro-, (3.alpha.)-	510-67-8	NIST05.L	106182	45	C16H17NO3	271
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	45	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	43	C20H30O	286



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011ISVM11ILANL

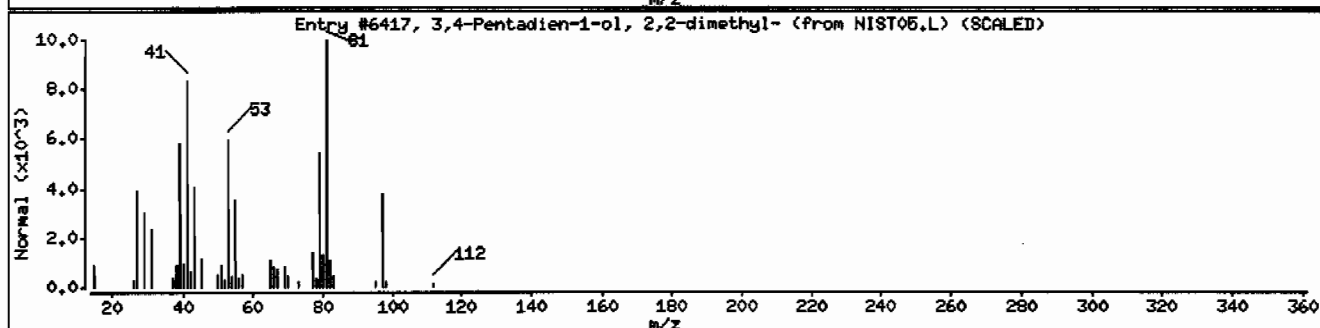
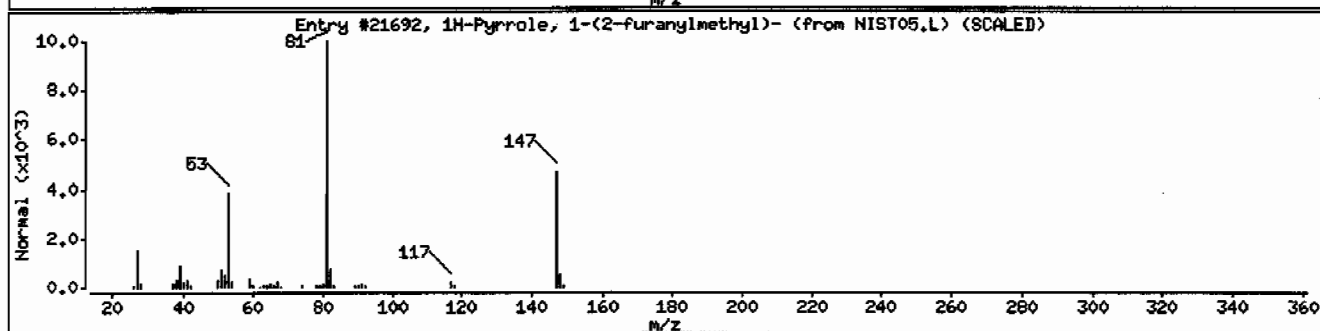
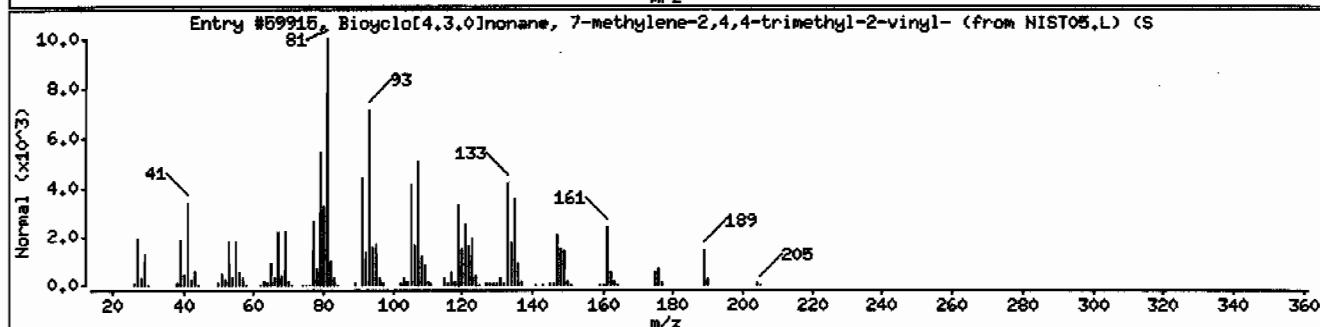
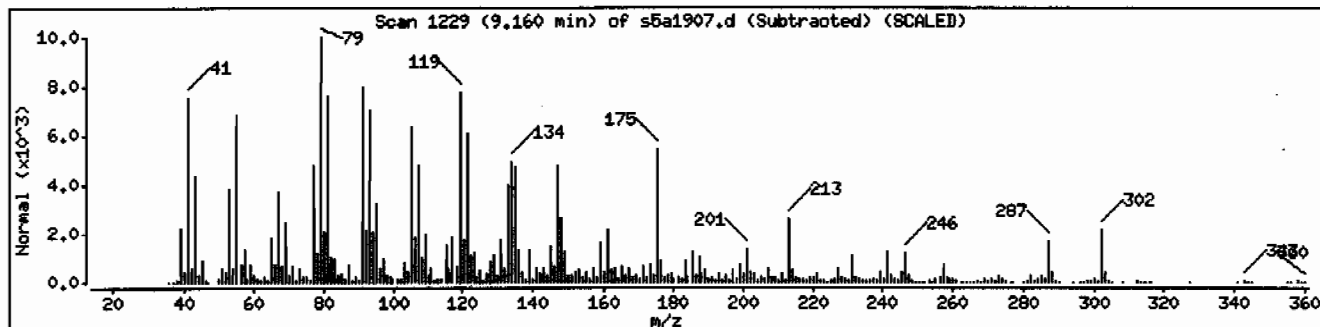
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	38	C15H24	204
1H-Pyrrole, 1-(2-furanylmethyl)-	1438-94-4	NIST05.L	21692	38	C9H9NO	147
3,4-Pentadien-1-ol, 2,2-dimethyl-	4058-52-0	NIST05.L	6417	30	C7H12O	112



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH111LANL

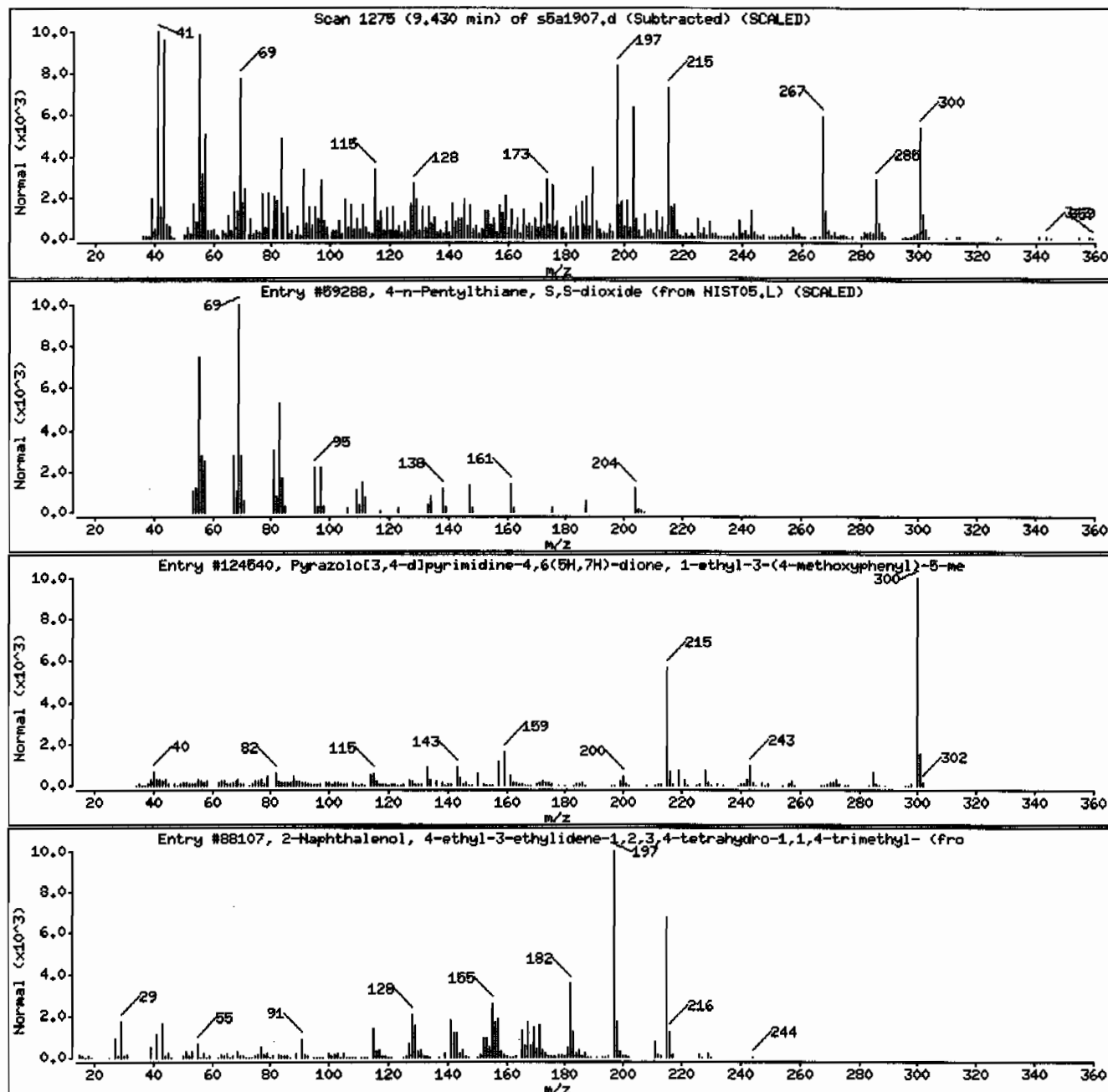
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-n-Pentylthiane, S,S-dioxide	65865-33-0	NIST05.L	59288	45	C10H20O2S	204
Pyrazolo[3,4-d]pyrimidine-4,6(5H,7H)-dio	144294-67-7	NIST05.L	124540	38	C15H16N4O3	300
2-Naphthalenol, 4-ethyl-3-ethylidene-1,2	119262-28-1	NIST05.L	88107	30	C17H24O	244



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH11ILANL

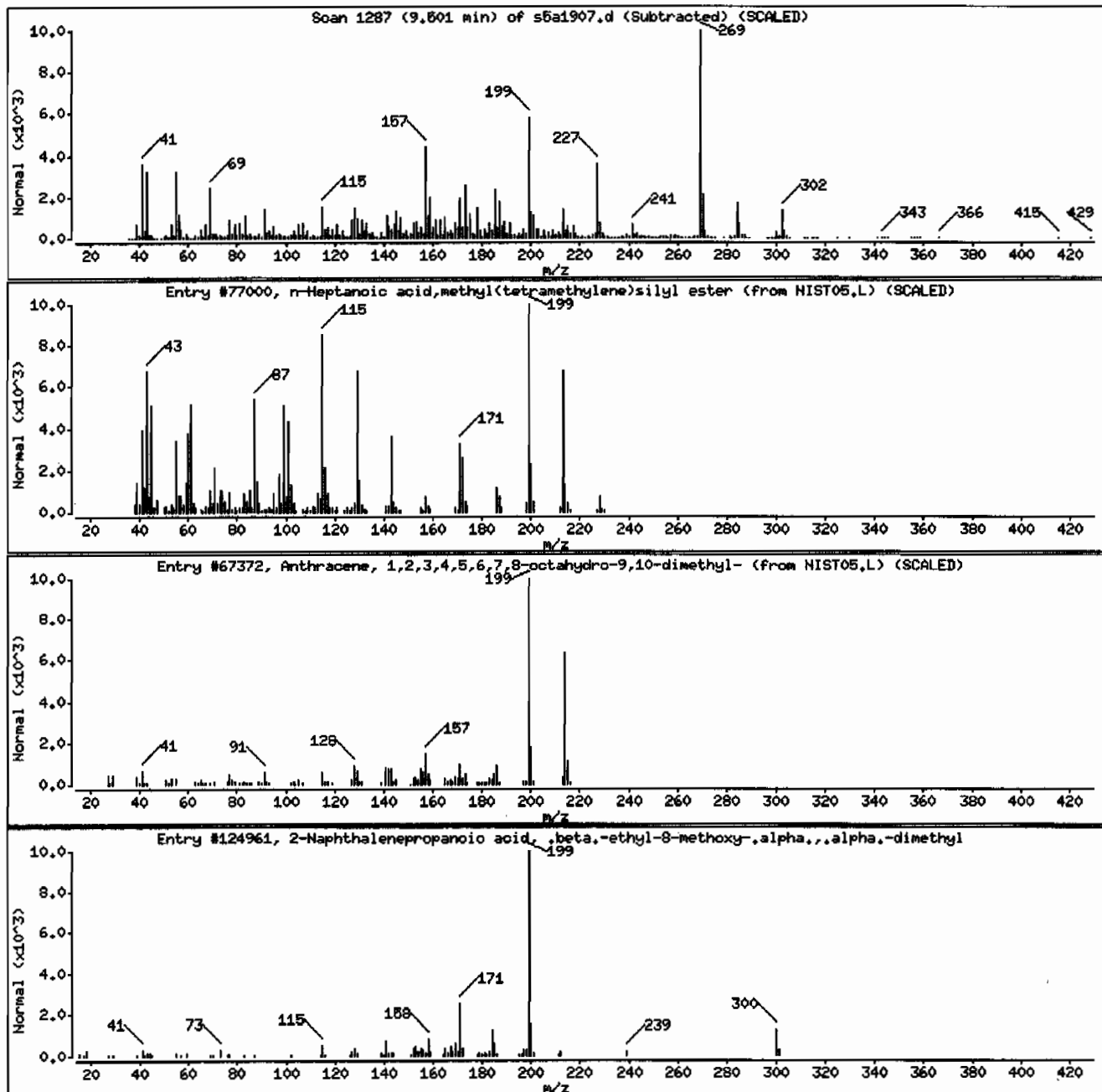
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
n-Heptanoic acid,methyl(tetramethylene)s	1000217-03-6	NIST05.L	77000	53	C12H24O2Si	228
Anthracene, 1,2,3,4,5,6,7,8-octahydro-9,	42173-25-1	NIST05.L	67372	42	C16H22	214
2-Naphthalenepropanoic acid, .beta.-ethy	57289-69-7	NIST05.L	124961	41	C19H24O3	300



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 12446260011942840111SVH111LANL

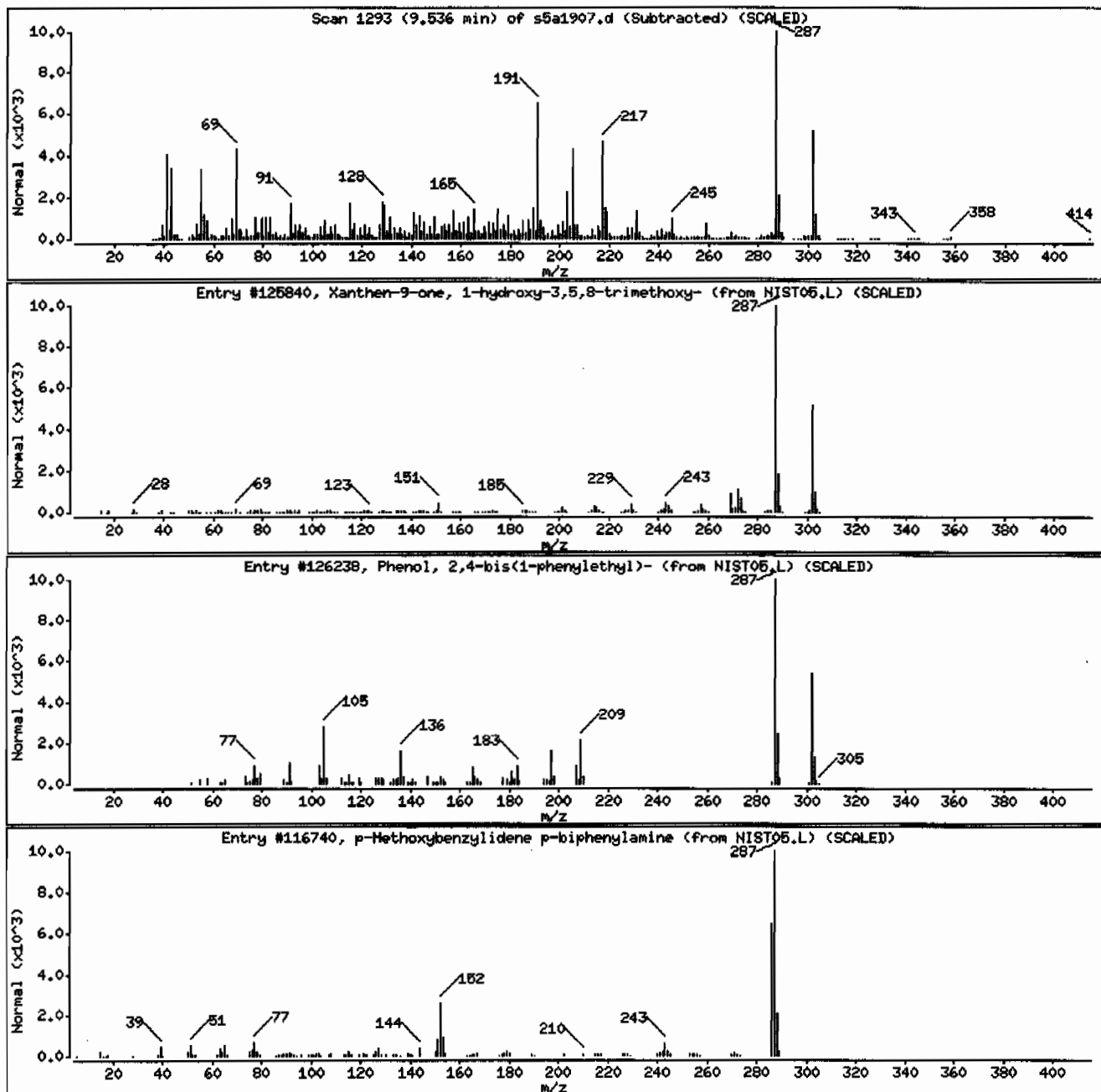
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Xanthen-9-one, 1-hydroxy-3,5,8-trimethoxy	49599-09-9	NIST05.L	125840	41	C ₁₆ H ₁₄ O ₆	302
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	41	C ₂₂ H ₂₂ O	302
p-Methoxybenzylidene p-biphenylamine	25543-63-9	NIST05.L	116740	36	C ₂₀ H ₁₇ NO	287



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.1

Sample Info: 1244626001194284011SVMI11LANL

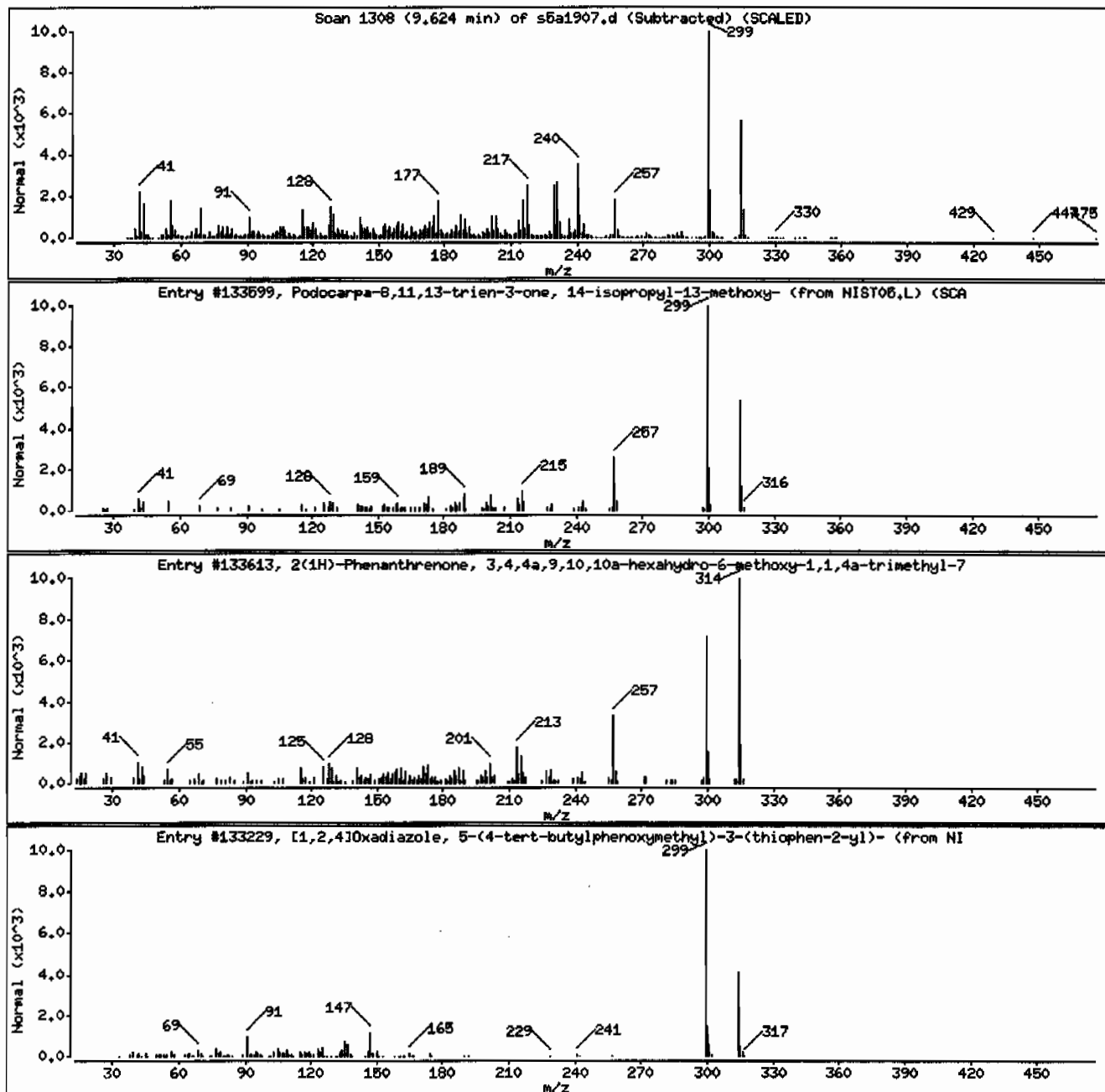
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Podocarpa-8,11,13-trien-3-one, 14-isopro	18326-16-4	NIST05.L	133599	90	C ₂₁ H ₃₀ O ₂	314
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	18326-89-8	NIST05.L	133613	51	C ₂₁ H ₃₀ O ₂	314
[1,2,4]Oxadiazole, 5-(4-tert-butylphenox	1000304-93-9	NIST05.L	133229	43	C ₁₇ H ₁₈ N ₂ O ₂ S	314



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 124462600194284011SVH111LANL

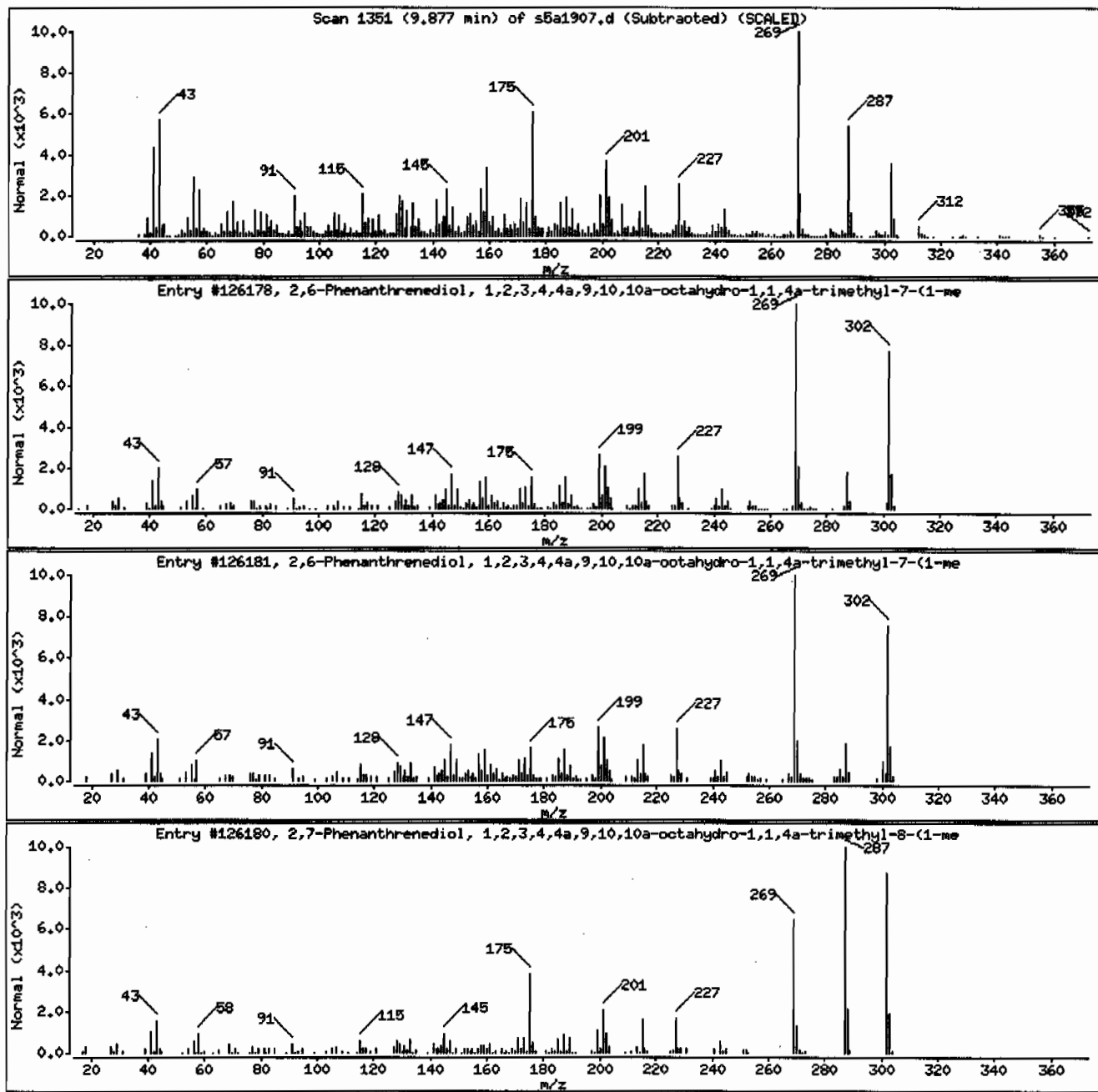
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	864-73-8	NIST05.L	126178	83	C ₂₀ H ₃ O ₂	302
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	864-73-8	NIST05.L	126181	76	C ₂₀ H ₃ O ₂	302
2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	3772-56-3	NIST05.L	126180	58	C ₂₀ H ₃ O ₂	302



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: 1244626001194284011SVH111LANL

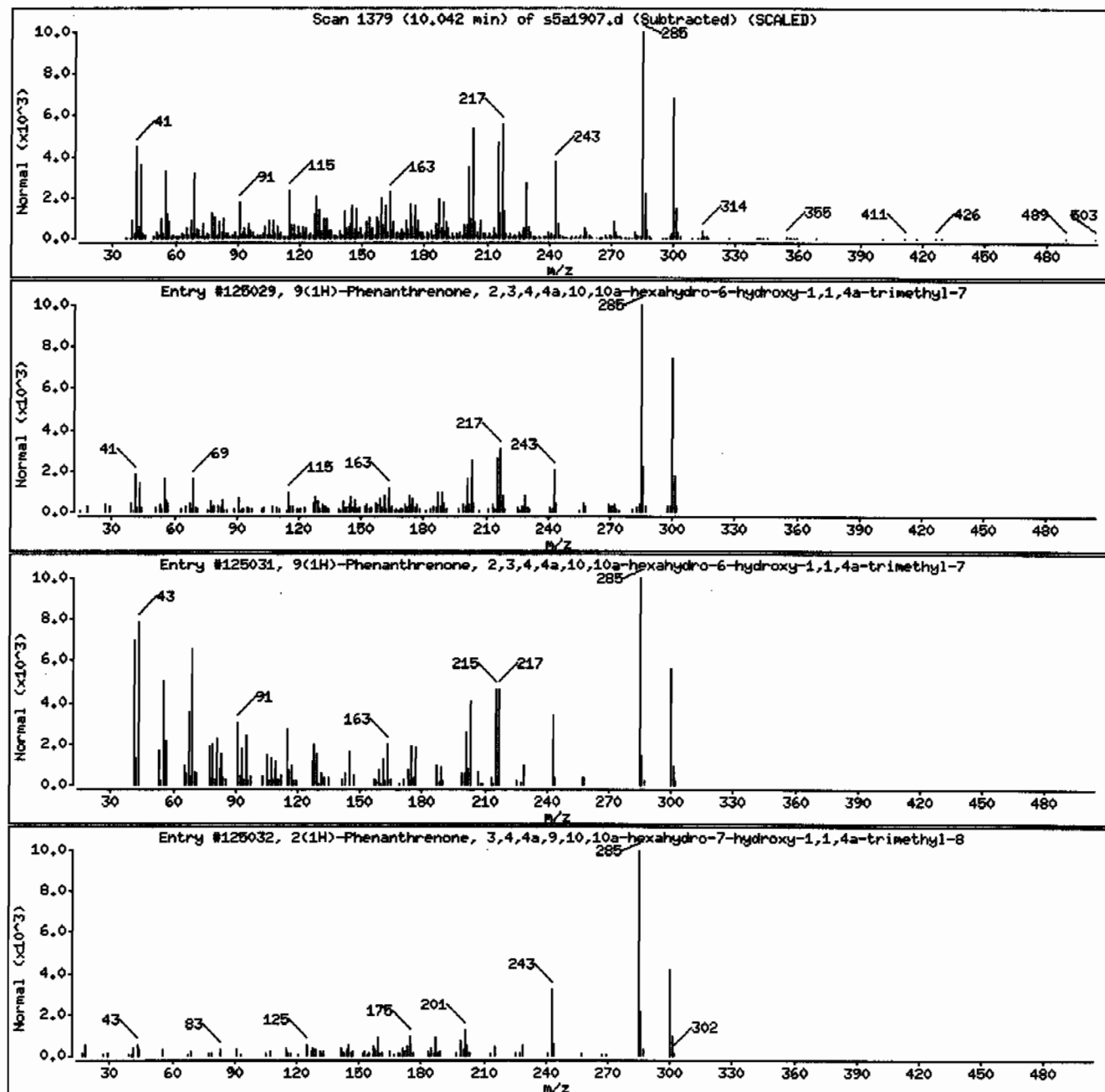
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-05-7	NIST05.L	125029	96	C ₂₀ H ₂₈ O ₂	300
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-05-7	NIST05.L	125031	93	C ₂₀ H ₂₈ O ₂	300
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	6755-93-7	NIST05.L	125032	70	C ₂₀ H ₂₈ O ₂	300



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.1

Sample Info: I244626001194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

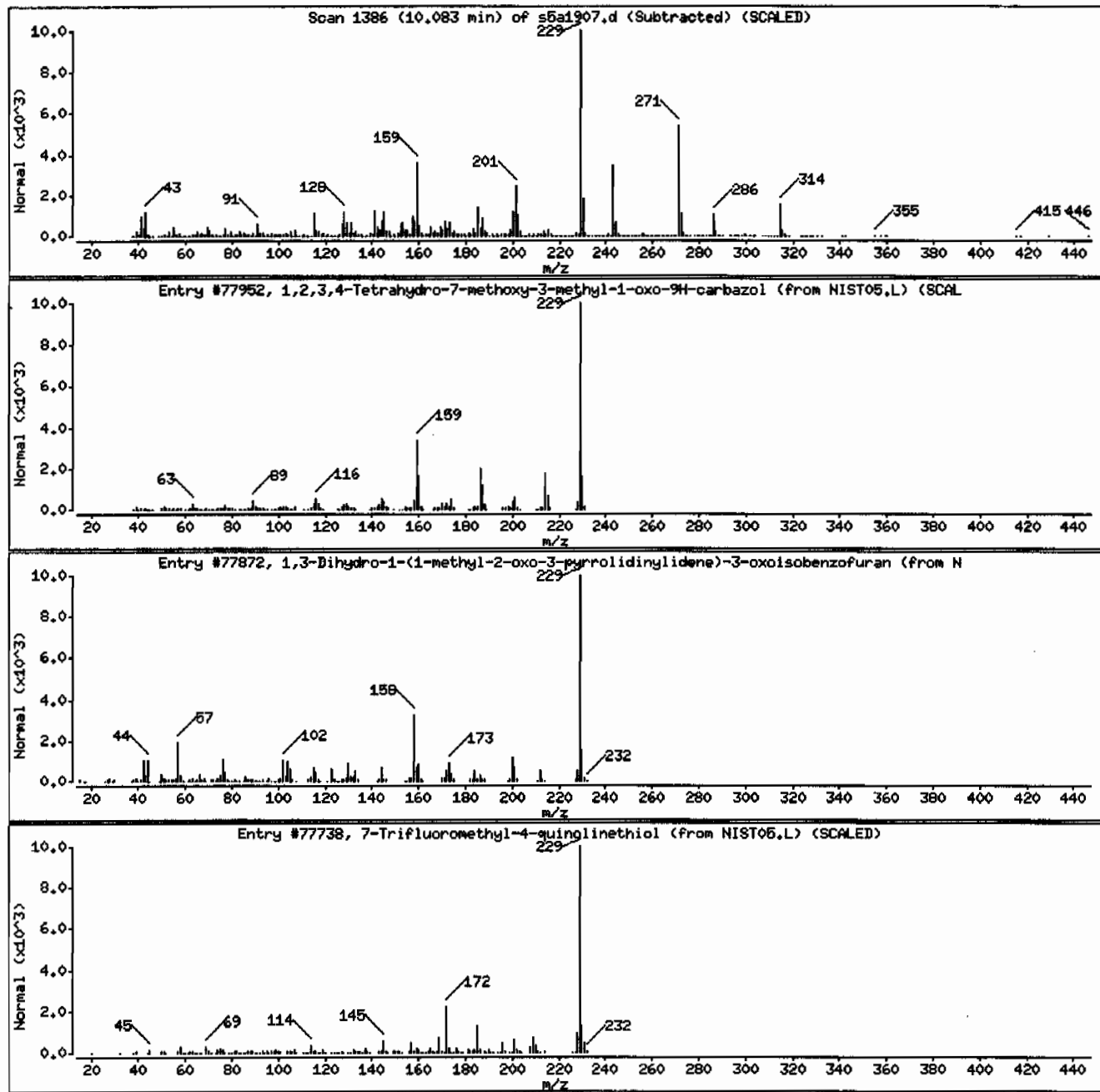
Column phase: J&W DB-SMS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-	32550-51-9	NIST05.L	77952	50	C14H15NO2	229
1,3-Dihydro-1-(1-methyl-2-oxo-3-pyrrolid	3988-53-2	NIST05.L	77872	35	C13H11NO3	229
7-Trifluoromethyl-4-quinolinethiol	64415-07-2	NIST05.L	77738	30	C10H6F3NS	229



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.i

Sample Info: I244626001194284011SVMI1ILANL

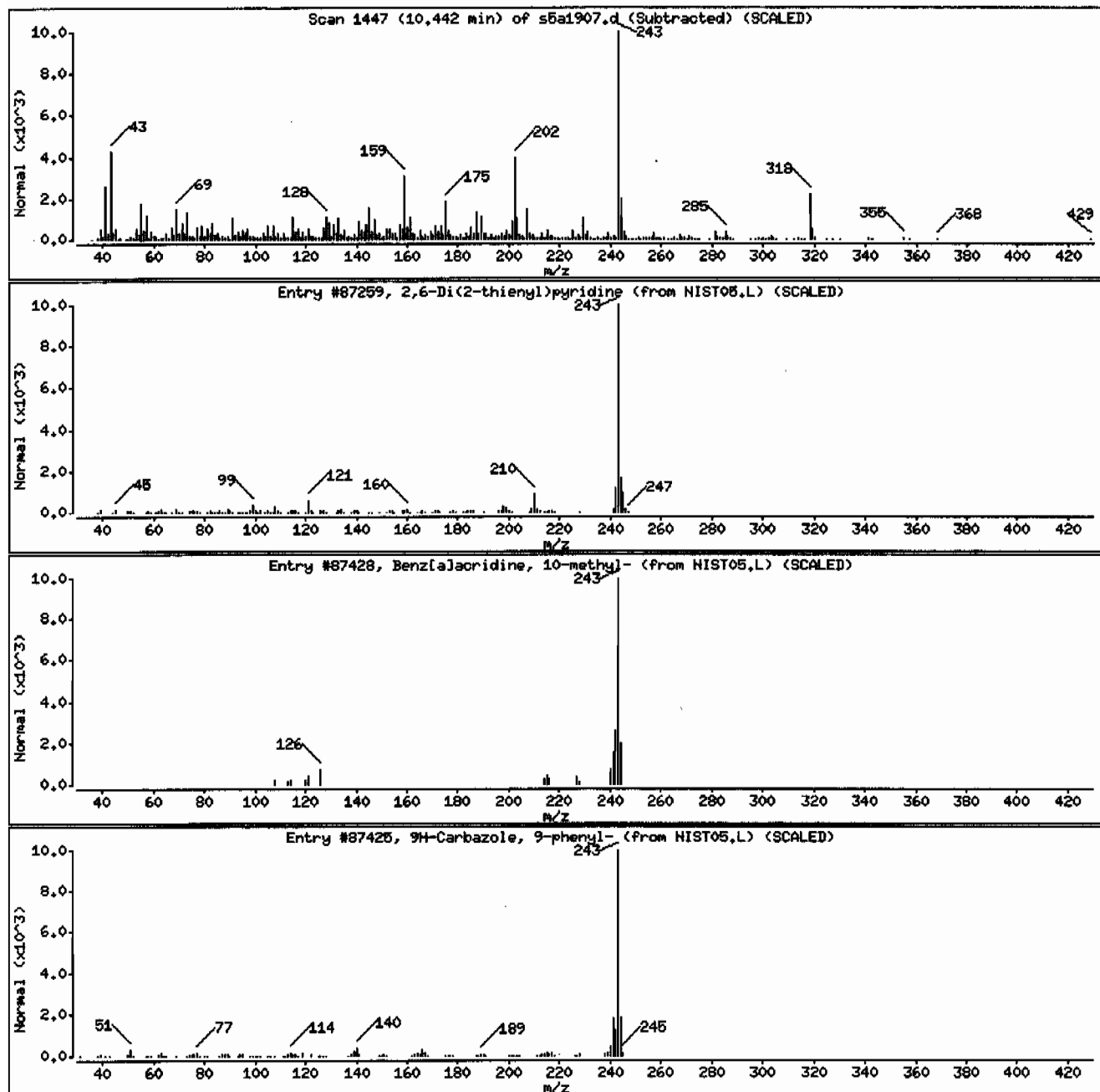
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,6-Di(2-thienyl)pyridine	35299-71-9	NIST05.L	87269	38	C13H9NS2	243
Benz[<i>a</i>]acridine, 10-methyl-	3781-67-7	NIST05.L	87428	38	C18H13N	243
9H-Carbazole, 9-phenyl-	1150-62-5	NIST05.L	87426	38	C18H13N	243



Date: 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: MSD5.1

Sample Info: 1244626001194284011ISVH11ILANL

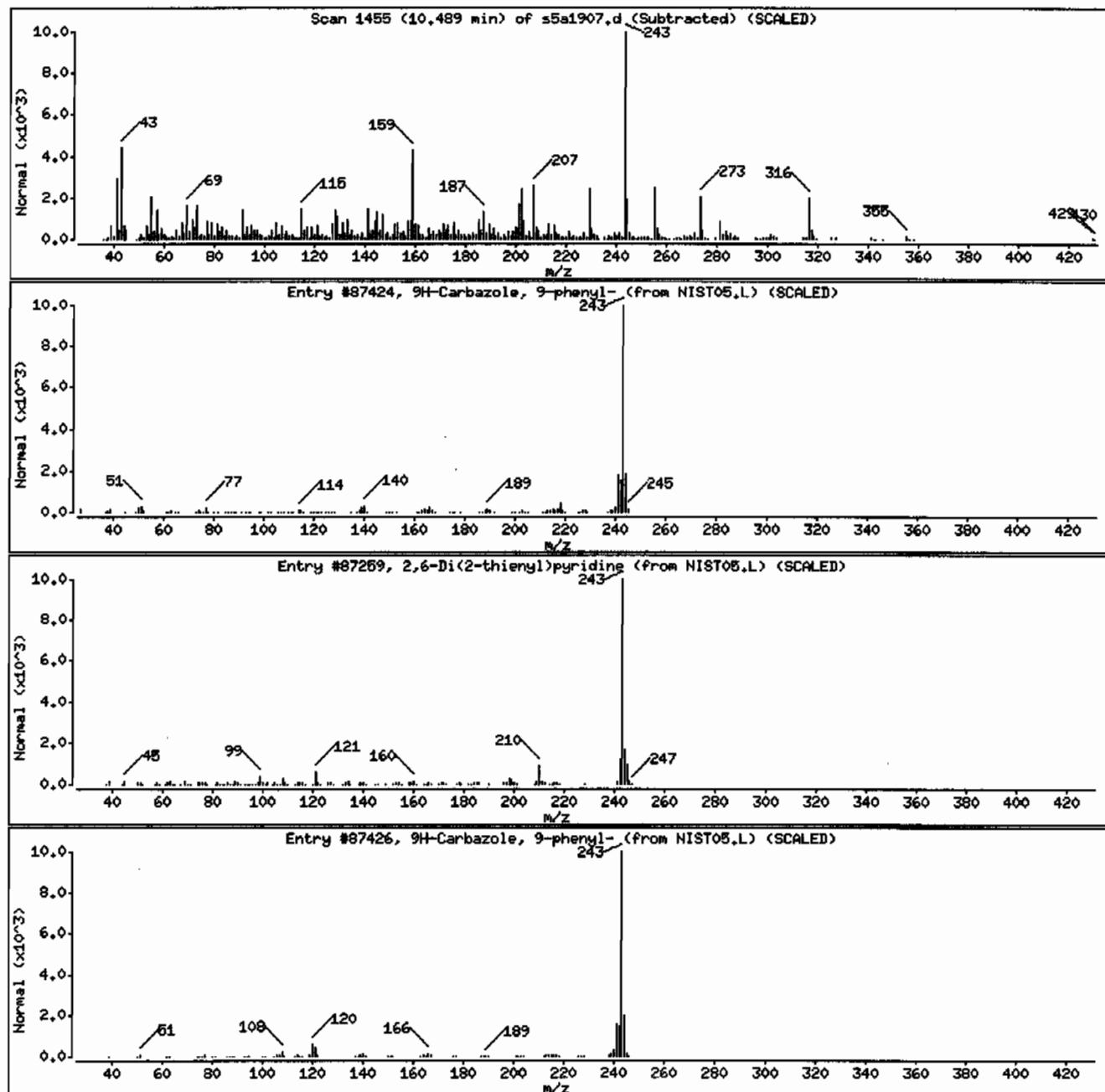
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9H-Carbazole, 9-phenyl-	1150-62-5	NIST05.L	87424	30	C18H13N	243
2,6-Di(2-thienyl)pyridine	35299-71-9	NIST05.L	87259	30	C13H9NS2	243
9H-Carbazole, 9-phenyl-	1150-62-5	NIST05.L	87426	25	C18H13N	243



Date : 19-JAN-2010 12:35

Client ID: RE12-10-7262

Instrument: HSD5.i

Sample Info: 1244626001194284011SVH111LANL

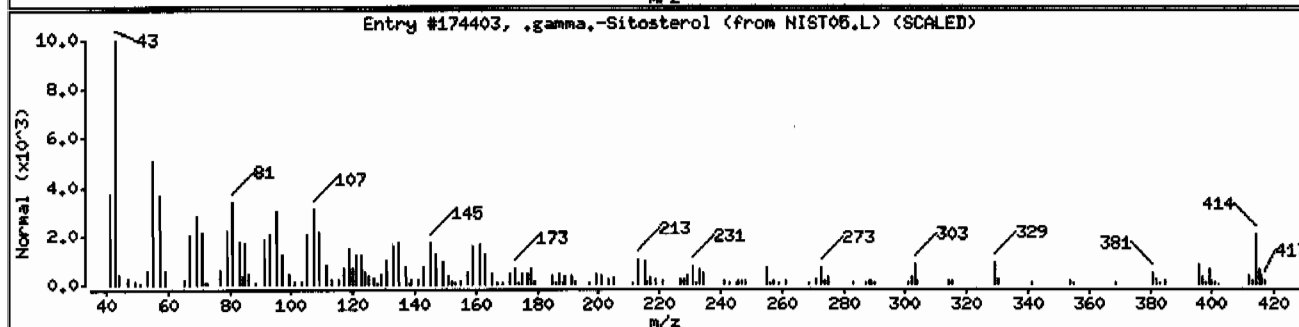
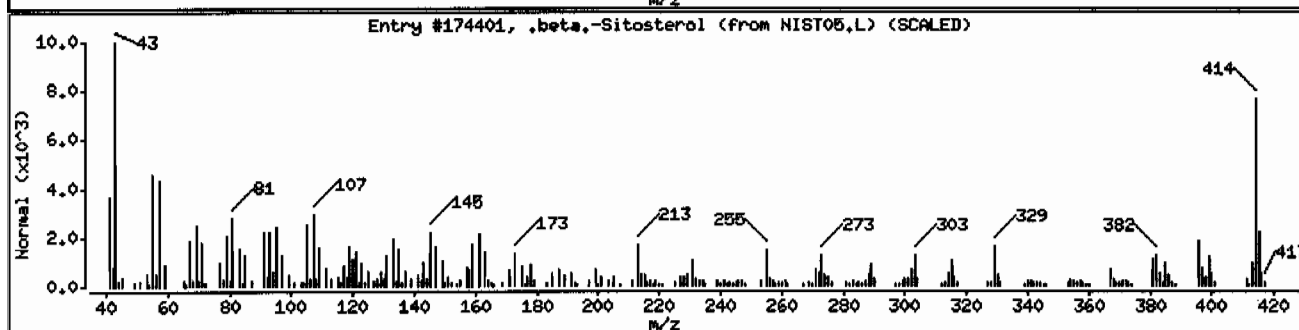
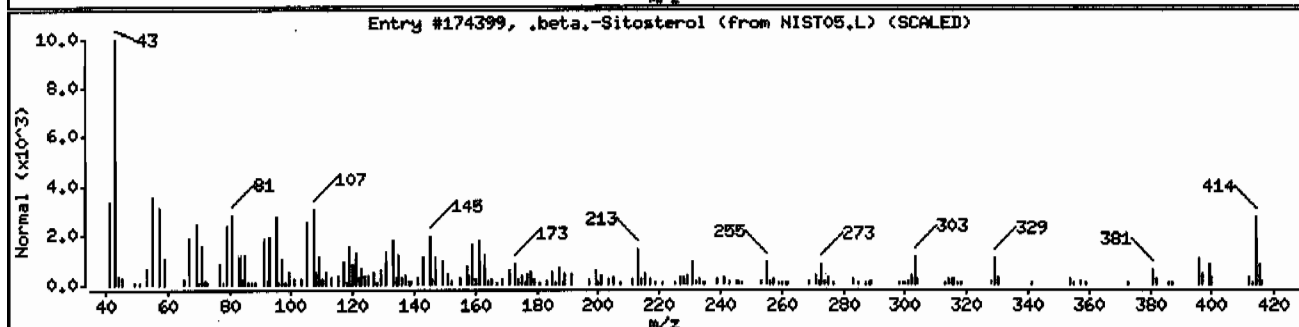
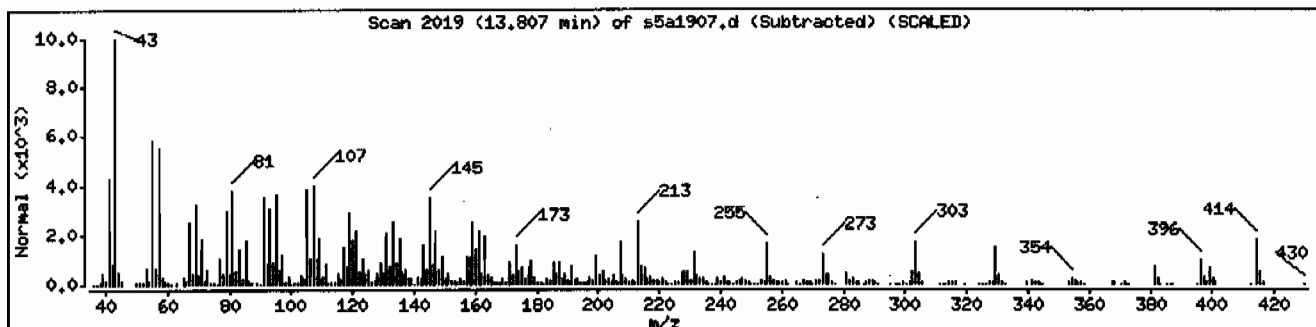
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-8	NIST05.L	174399	94	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-8	NIST05.L	174401	93	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	93	C ₂₉ H ₅₀ O	414



Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1225

Lab Sample ID: 244626008

Client ID: RE12-10-7263

Batch ID: 942840

Run Date: 01/19/2010 16:05

Prep Date: 01/18/2010 20:10

Data File: s5a1916.d

Date Collected: 01/08/2010 12:00

Date Received: 01/13/2010 08:55

Client: LANL010

Method: SW846 8270C

Inst: MSD5J

Analyst: RMB

Aliquot: 30.02 g

Column: J&W DB-5MS

Matrix: R

%Moisture: 5.6

Project: LANL01004

SOP Ref: GL-OA-E-009

Dilution: 1

Inj. Vol: .5 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	353	ug/kg	70.6	353
108-95-2	Phenol	U	353	ug/kg	70.6	353
95-57-8	2-Chlorophenol	U	353	ug/kg	70.6	353
106-46-7	1,4-Dichlorobenzene	U	353	ug/kg	70.6	353
621-64-7	N-Nitrosodipropylamine	U	353	ug/kg	70.6	353
59-50-7	4-Chloro-3-methylphenol	U	353	ug/kg	70.6	353
83-32-9	Acenaphthene	U	35.3	ug/kg	11.6	35.3
121-14-2	2,4-Dinitrotoluene	U	353	ug/kg	35.3	353
100-02-7	4-Nitrophenol	U	353	ug/kg	116	353
87-86-5	Pentachlorophenol	U	353	ug/kg	88.2	353
129-00-0	Pyrene	U	35.3	ug/kg	10.6	35.3
110-86-1	Pyridine	U	353	ug/kg	70.6	353
62-53-3	Aniline	U	353	ug/kg	106	353
111-44-4	bis(2-Chloroethyl) ether	U	353	ug/kg	70.6	353
541-73-1	1,3-Dichlorobenzene	U	353	ug/kg	70.6	353
100-51-6	Benzyl alcohol	U	353	ug/kg	106	353
95-50-1	1,2-Dichlorobenzene	U	353	ug/kg	70.6	353
108-60-1	bis(2-Chloroisopropyl)ether	U	353	ug/kg	70.6	353
95-48-7	o-Cresol	U	353	ug/kg	70.6	353
65794-96-9	m,p-Cresols	U	353	ug/kg	106	353
67-72-1	Hexachloroethane	U	353	ug/kg	70.6	353
98-95-3	Nitrobenzene	U	353	ug/kg	70.6	353
78-59-1	Isophorone	U	353	ug/kg	70.6	353
88-75-5	2-Nitrophenol	U	353	ug/kg	70.6	353
105-67-9	2,4-Dimethylphenol	U	353	ug/kg	123	353
111-91-1	bis(2-Chloroethoxy)methane	U	353	ug/kg	70.6	353
120-83-2	2,4-Dichlorophenol	U	353	ug/kg	70.6	353
65-85-0	Benzoic acid	U	706	ug/kg	176	706
91-20-3	Naphthalene	U	35.3	ug/kg	10.6	35.3
106-47-8	4-Chloroaniline	U	353	ug/kg	70.6	353
87-68-3	Hexachlorobutadiene	U	353	ug/kg	70.6	353
91-57-6	2-Methylnaphthalene	U	35.3	ug/kg	7.06	35.3
77-47-4	Hexachlorocyclopentadiene	U	353	ug/kg	70.6	353
88-06-2	2,4,6-Trichlorophenol	U	353	ug/kg	70.6	353
95-95-4	2,4,5-Trichlorophenol	U	353	ug/kg	70.6	353
91-58-7	2-Chloronaphthalene	U	35.3	ug/kg	11.6	35.3
88-74-4	2-Nitroaniline	U	353	ug/kg	70.6	353
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	353	ug/kg	70.6	353

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626008	Date Received: 01/13/2010 08:55	% Moisture: 5.6
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7263	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 16:05	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s5a1916.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	353	ug/kg	70.6	353
606-20-2	2,6-Dinitrotoluene	U	353	ug/kg	35.3	353
208-96-8	Acenaphthylene	U	35.3	ug/kg	10.6	35.3
51-28-5	2,4-Dinitrophenol	U	706	ug/kg	134	706
132-64-9	Dibenzofuran	U	353	ug/kg	70.6	353
84-66-2	Diethylphthalate	U	353	ug/kg	70.6	353
86-73-7	Fluorene	U	35.3	ug/kg	10.6	35.3
7005-72-3	4-Chlorophenylphenylether	U	353	ug/kg	70.6	353
534-52-1	2-Methyl-4,6-dinitrophenol	U	353	ug/kg	70.6	353
100-01-6	4-Nitroaniline	U	353	ug/kg	106	353
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	353	ug/kg	70.6	353
122-66-7	Azobenzene	U	353	ug/kg	70.6	353
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	353	ug/kg	70.6	353
118-74-1	Hexachlorobenzene	U	353	ug/kg	70.6	353
85-01-8	Phenanthrene	U	35.3	ug/kg	10.6	35.3
120-12-7	Anthracene	U	35.3	ug/kg	7.06	35.3
84-74-2	Di-n-butylphthalate	U	353	ug/kg	70.6	353
206-44-0	Fluoranthene	U	35.3	ug/kg	10.6	35.3
85-68-7	Butylbenzylphthalate	U	353	ug/kg	70.6	353
56-55-3	Benzo(a)anthracene	U	35.3	ug/kg	10.6	35.3
91-94-1	3,3'-Dichlorobenzidine	U	353	ug/kg	106	353
218-01-9	Chrysene	U	35.3	ug/kg	10.6	35.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	353	ug/kg	70.6	353
117-84-0	Di-n-octylphthalate	U	353	ug/kg	70.6	353
205-99-2	Benzo(b)fluoranthene	U	35.3	ug/kg	10.6	35.3
207-08-9	Benzo(k)fluoranthene	U	35.3	ug/kg	10.6	35.3
50-32-8	Benzo(a)pyrene	U	35.3	ug/kg	10.6	35.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.3	ug/kg	10.6	35.3
53-70-3	Dibenzo(a,h)anthracene	U	35.3	ug/kg	10.6	35.3
191-24-2	Benzo(ghi)perylene	U	35.3	ug/kg	10.6	35.3
120-82-1	1,2,4-Trichlorobenzene	U	353	ug/kg	70.6	353

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	590	ug/kg		J
	Unknown Aldol Condensate	2.95	485	ug/kg		JA

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626008	Date Received: 01/13/2010 08:55	%Moisture: 5.6
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7263	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 16:05	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s5a1916.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	5.6	264	ug/kg		J
469-61-4	1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	5.65	393	ug/kg	97	NJ
3650-28-0	1,4-Methano-1H-indene, octahydro-4-methy	5.69	194	ug/kg	99	NJ
	Unknown	5.76	904	ug/kg		J
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	3580	ug/kg	99	NJ
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-	5.84	322	ug/kg	96	NJ
470-40-6	Thujopsene	5.96	767	ug/kg	90	NJ
	Unknown	6	194	ug/kg		J
56816-08-1	Cyclohexene, 5-methyl-3-(1-methylethenyl	6.09	200	ug/kg	92	NJ
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	6.11	367	ug/kg	91	NJ
19912-83-5	Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	6.14	534	ug/kg	95	NJ
	Unknown	6.2	190	ug/kg		J
77-53-2	Cedrol	6.57	3240	ug/kg	93	NJ
	Unknown	6.88	553	ug/kg		J
	Unknown	7.29	207	ug/kg		J
62600-05-9	Cedran-diol, 8S,14-	7.65	278	ug/kg	87	NJ
	Unknown	8.91	405	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	5670	ug/kg	99	NJ
	Unknown	9.54	180	ug/kg		J
6755-93-7	2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	9.75	399	ug/kg	93	NJ
	Unknown	9.88	184	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.03	256	ug/kg	96	NJ
	Unknown	10.08	2390	ug/kg		J
	Unknown	10.49	260	ug/kg		J
	Unknown	12.74	408	ug/kg		J
	Unknown	13.31	740	ug/kg		J
	Unknown	13.55	2140	ug/kg		J
	Unknown	13.8	558	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1916.d
Lab Smp Id: 244626008 Client Smp ID: RE12-10-7263
Inj Date : 19-JAN-2010 16:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626008|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	5.58840	% 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	3.931	3.940	(1.000)	590066	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1972705	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1143718	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2091039	40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1897347	40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1444145	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	909284	62.1366	2190
\$ 5 Phenol-d5	99	3.649	3.651	(0.928)	1091602	60.4872	2130
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	521473	34.4280	1210
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	1013987	33.5143	1180
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	283721	78.0491	2750
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.893)	1176809	39.5010	1390

ION RATIO REPORT

SV REPORT

Data file: s5a1916.d

Report Date: 01/20/2010 07:05

Lab. ID: 244626008

SampleType: SAMPLE

Injection Date: 19-JAN-2010 16:05

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626008|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	61339	3.65	3.72	80-120	100	(T)
93	370	3.65	3.72	210-270	1	(QT)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	73449	4.30	4.18	80-120	100	(T)
42	44480	4.30	4.18	44-104	61	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	1922	4.57	4.57	80-120	100	()
122	1190	4.55	4.57	39- 99	62	()
77	2342	4.55	4.57	34- 94	122	(Q)

40	2-Chloronaphthalene	CAS#: 91-58-7				
162	8633	5.65	5.66	80-120	100	()
164	102	5.65	5.66	4- 64	1	(Q)
127	1907	5.65	5.66	9- 69	22	()

42	o-Nitroaniline	CAS#: 88-74-4				
65	44118	5.76	5.71	80-120	100	()
92	129812	5.76	5.71	31- 91	294	(Q)
138	12839	5.80	5.71	70-130	29	(QT)

41	m-Nitroaniline	CAS#: 99-09-2				
138	12890	5.80	6.01	80-120	100	(T)
92	285509	5.80	6.01	82-142	2215	(QT)
108	247866	5.80	6.01	0- 40	1923	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
43 Dimethylphthalate				CAS#: 131-11-3		
163	69368	5.80	5.82	80-120	100	()
164	8045	5.80	5.82	0- 40	12	()
<hr/>						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	156618	6.06	5.88	80-120	100	(T)
63	4539	6.06	5.88	61-121	3	(QT)
<hr/>						
45 Acenaphthylene				CAS#: 208-96-8		
152	31572	6.03	5.96	80-120	100	(T)
151	8659	6.03	5.96	0- 50	27	(T)
153	32910	6.03	5.96	0- 44	104	(QT)
<hr/>						
47 Acenaphthene				CAS#: 83-32-9		
154	26428	6.03	6.09	80-120	100	()
153	32910	6.03	6.09	71-131	125	()
152	31572	6.03	6.09	19- 79	119	(Q)
<hr/>						
50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	156494	6.06	6.17	80-120	100	(T)
89	3669	6.06	6.17	47-107	2	(QT)
63	3875	6.06	6.17	23- 83	2	(QT)
<hr/>						
51 Diethylphthalate				CAS#: 84-66-2		
149	274186	6.57	6.33	80-120	100	(T)
177	71603	6.57	6.33	0- 53	26	(T)
150	960785	6.57	6.33	0- 43	350	(QT)
<hr/>						
52 4-Nitrophenol				CAS#: 100-02-7		
139	397	6.08	6.10	80-120	100	()
109	12089	6.06	6.10	41-101	3039	(Q)
65	26822	6.09	6.10	72-132	6742	(Q)
<hr/>						
53 Fluorene				CAS#: 86-73-7		
166	53623	6.57	6.47	80-120	100	(T)
165	144746	6.57	6.47	56-116	270	(QT)
167	12133	6.57	6.47	0- 44	23	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	1174	6.65	6.49	80-120	100	(T)
105	13146	6.60	6.49	12- 72	1119	(QT)
51	2387	6.65	6.49	42-102	203	(QT)
<hr/>						
56 p-Nitroaniline				CAS#: 100-01-6		
138	24932	6.57	6.47	80-120	100	(T)
108	248226	6.57	6.47	45-105	996	(QT)
92	69077	6.57	6.47	18- 78	277	(QT)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
58	1,2-Diphenylhydrazine			CAS#: 122-66-7		
77	244810	6.57	6.57	80-120	100	()
105	236983	6.57	6.57	0- 47	97	(Q)
182	264	6.57	6.57	0- 57	0	()

61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	20457	6.66	6.84	80-120	100	(T)
141	127861	6.65	6.83	43-103	625	(QT)
250	38685	6.66	6.84	68-128	189	(QT)

99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	617	13.09	13.12	80-120	100	()
138	602	13.10	13.12	1- 61	98	(Q)

Q qualifier indicates ion failed ratio requirement						

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1916.d
 Lab Smp Id: 244626008 Client Smp ID: RE12-10-7263
 Inj Date : 19-JAN-2010 16:05
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626008|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	5.58840	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3575338	40.000
* 46 Acenaphthene-d10	6.060	6213605	40.000
* 67 Phenanthrene-d10	7.231	5428318	40.000
* 91 Chrysene-d12	9.642	5964424	40.000
* 98 Perylene-d12	11.330	3795895	40.000

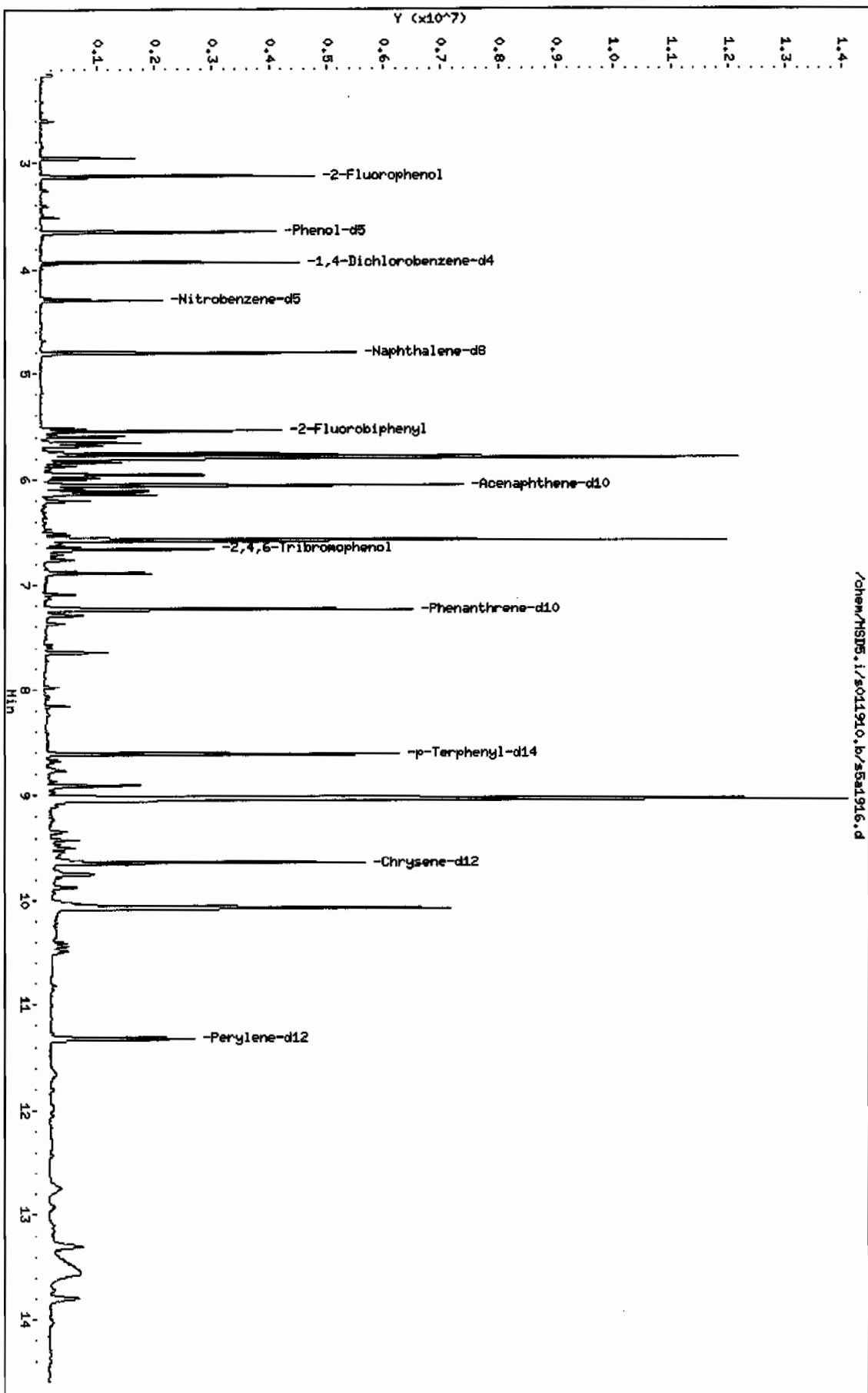
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.031	1495178	16.7276774	590	0		0	10
Unknown Aldol Condensate					CAS #:		
2.954	1227637	13.7345019	484	0		0	10
Unknown					CAS #:		
5.596	1163904	7.49261961	264	0		0	46
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex					CAS #: 469-61-4		
5.654	1730998	11.1432774	393	97	NIST05.L	60056	46
1,4-Methano-1H-indene, octahydro-4-methy					CAS #: 3650-28-0		
5.690	852521	5.48808994	194	99	NIST05.L	60093	46
Unknown					CAS #:		
5.760	3978212	25.6096859	904	0		0	46
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.795	15761379	101.463668	3580	99	NIST05.L	60024	46
1H-3a,7-Methanoazulene, octahydro-3,8,8-					CAS #: 546-28-1		
5.843	1416432	9.11826265	322	96	NIST05.L	60040	46
Thujopsene					CAS #: 470-40-6		
5.960	3375122	21.7273049	767	90	NIST05.L	59785	46
Unknown					CAS #:		
5.995	852554	5.48830582	194	0		0	46
Cyclohexene, 5-methyl-3-(1-methylethenyl					CAS #: 56816-08-1		
6.090	879597	5.66239349	200	92	NIST05.L	15381	46
2,4,6-Octatriene, 2,6-dimethyl-					CAS #: 673-84-7		
6.113	1616789	10.4080569	367	91	NIST05.L	15244	46
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr					CAS #: 19912-83-5		
6.143	2352411	15.1436126	534	95	NIST05.L	59903	46
Unknown					CAS #:		
6.201	836941	5.38779420	190	0		0	46
Cedrol					CAS #: 77-53-2		
6.572	14264163	91.8253575	3240	93	NIST05.L	72887	46

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
6.884	2127806	15.6793025	553	0		0	67
Unknown					CAS #:		
7.290	796314	5.86784983	207	0		0	67
Cedran-diol, 8S,14-					CAS #: 62600-05-9		
7.648	1069010	7.87728546	278	87	NIST05.L	83830	67
Unknown					CAS #:		
8.907	1709826	11.4668325	404	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
9.036	23969392	160.749069	5670	99	NIST05.L	116239	91
Unknown					CAS #:		
9.536	761959	5.11002278	180	0		0	91
2 (1H)-Phenanthrenone, 3,4,4a,9,10,10a-he					CAS #: 6755-93-7		
9.754	1685083	11.3008911	399	93	NIST05.L	125032	91
Unknown					CAS #:		
9.878	776213	5.20561555	184	0		0	91
9 (1H)-Phenanthrenone, 2,3,4,4a,10,10a-he					CAS #: 511-05-7		
10.031	1080692	7.24758906	256	96	NIST05.L	125031	91
Unknown					CAS #:		
10.078	10115424	67.8383934	2390	0		0	91
Unknown					CAS #:		
10.489	699925	7.37559518	260	0		0	98
Unknown					CAS #:		
12.742	1097824	11.5685340	408	0		0	98
Unknown					CAS #:		
13.307	1990901	20.9795093	740	0		0	98
Unknown					CAS #:		
13.554	5766659	60.7673034	2140	0		0	98
Unknown					CAS #:		
13.801	1500007	15.8066197	558	0		0	98

Data File: /chem/HSD5.i/s011910.b/s5a1916.d
Date: 19-JAN-2010 16:05
Client ID: REL2-10-7263
Sample Info: 1244626008194284011SWH11LANL
Volume Injected (uL): 0.5
Column phase: JMW DB-SHS

Instrument: HSD5.i
Operator: RMB
Column diameter: 0.20



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.1

Sample Info: 1244626008194284011ISVH11ILANL

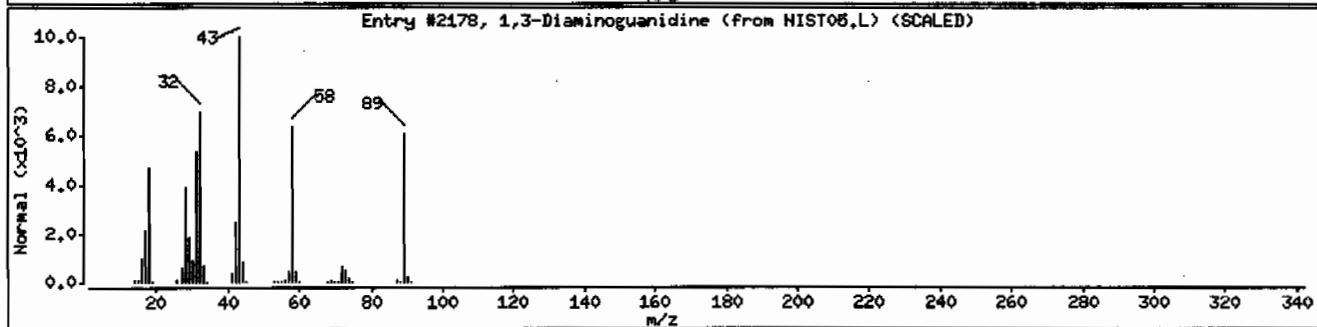
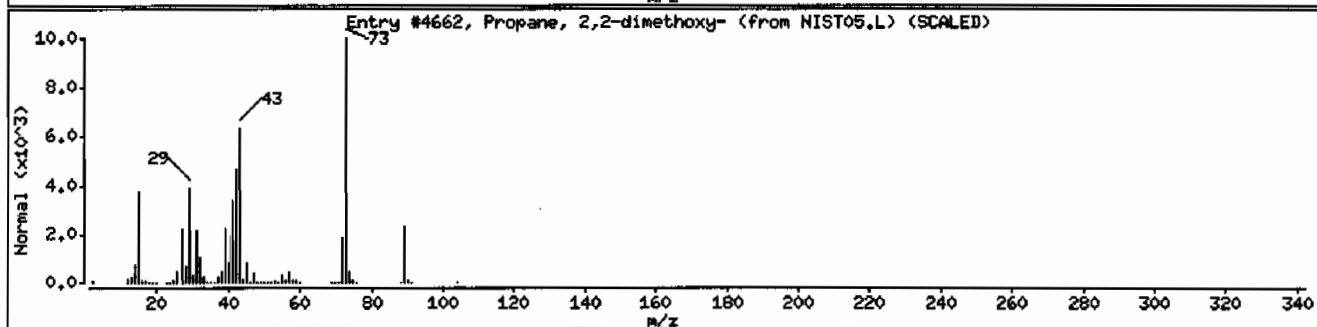
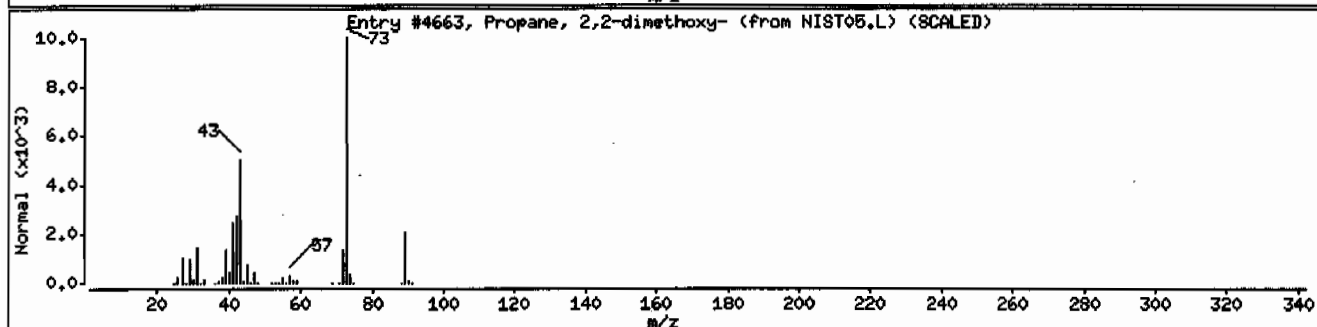
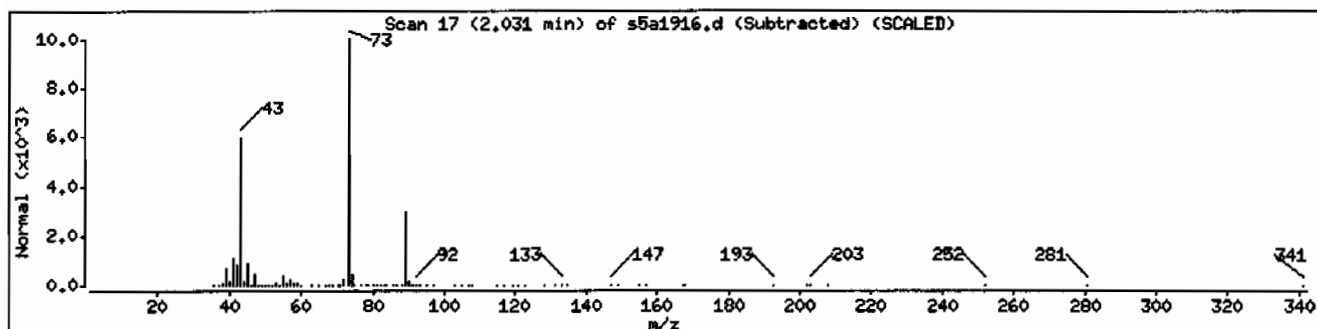
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	9	CH7N5	89



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.1

Sample Info: 1244626008194284011ISVM11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown Aldol Condensate

2-Pentanone, 4-hydroxy-4-methyl-

CAS Number

123-42-2

Library

NIST05.L

Entry

7952

Quality

45

Formula

C6H12O2

Weight

116

2-Pentanone, 4-hydroxy-4-methyl-

123-42-2

NIST05.L

7951

45

C6H12O2

116

2-Pentanone, 4-hydroxy-4-methyl-

123-42-2

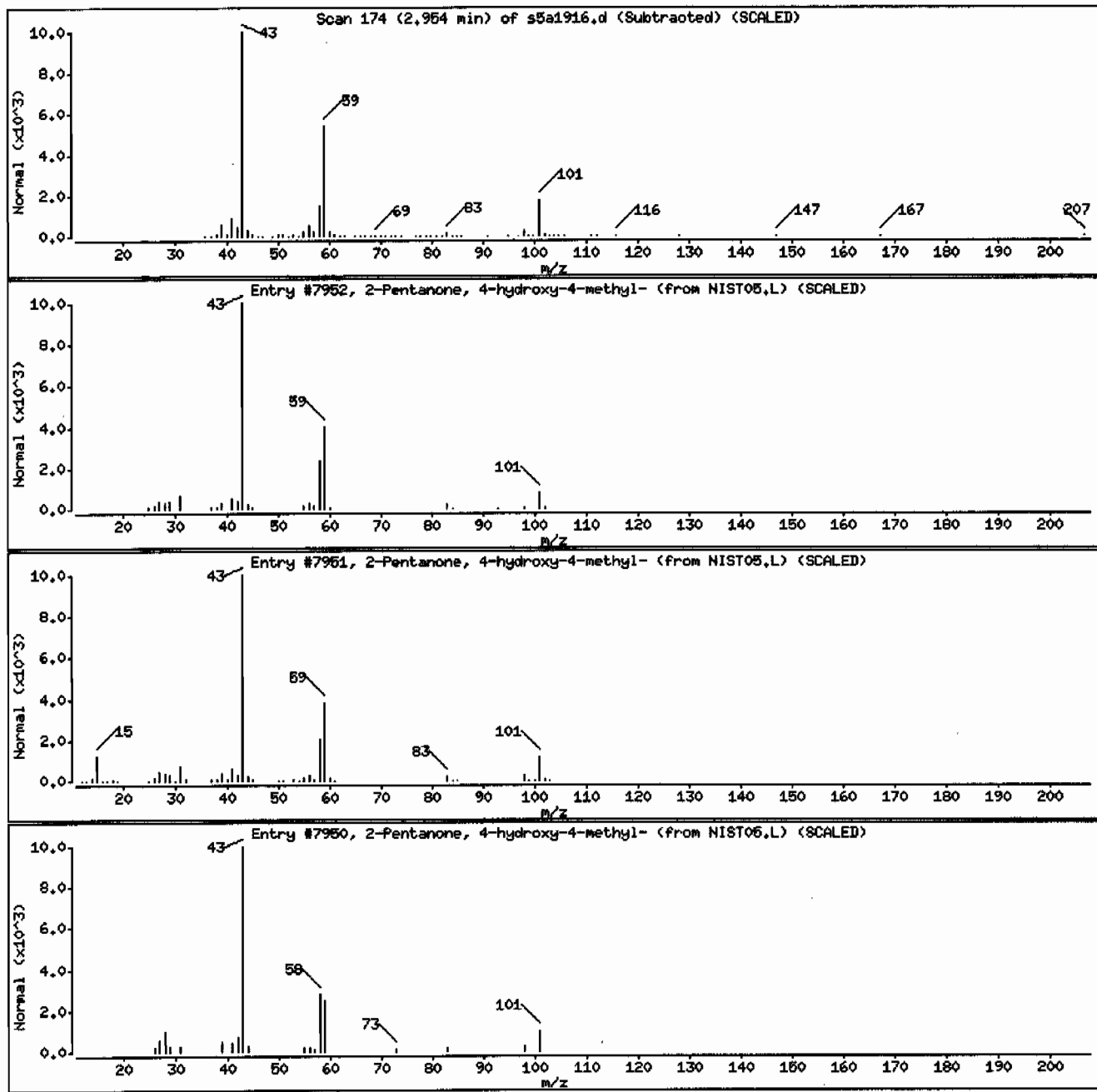
NIST05.L

7950

25

C6H12O2

116



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: I244626008194284011ISVH11ILANL

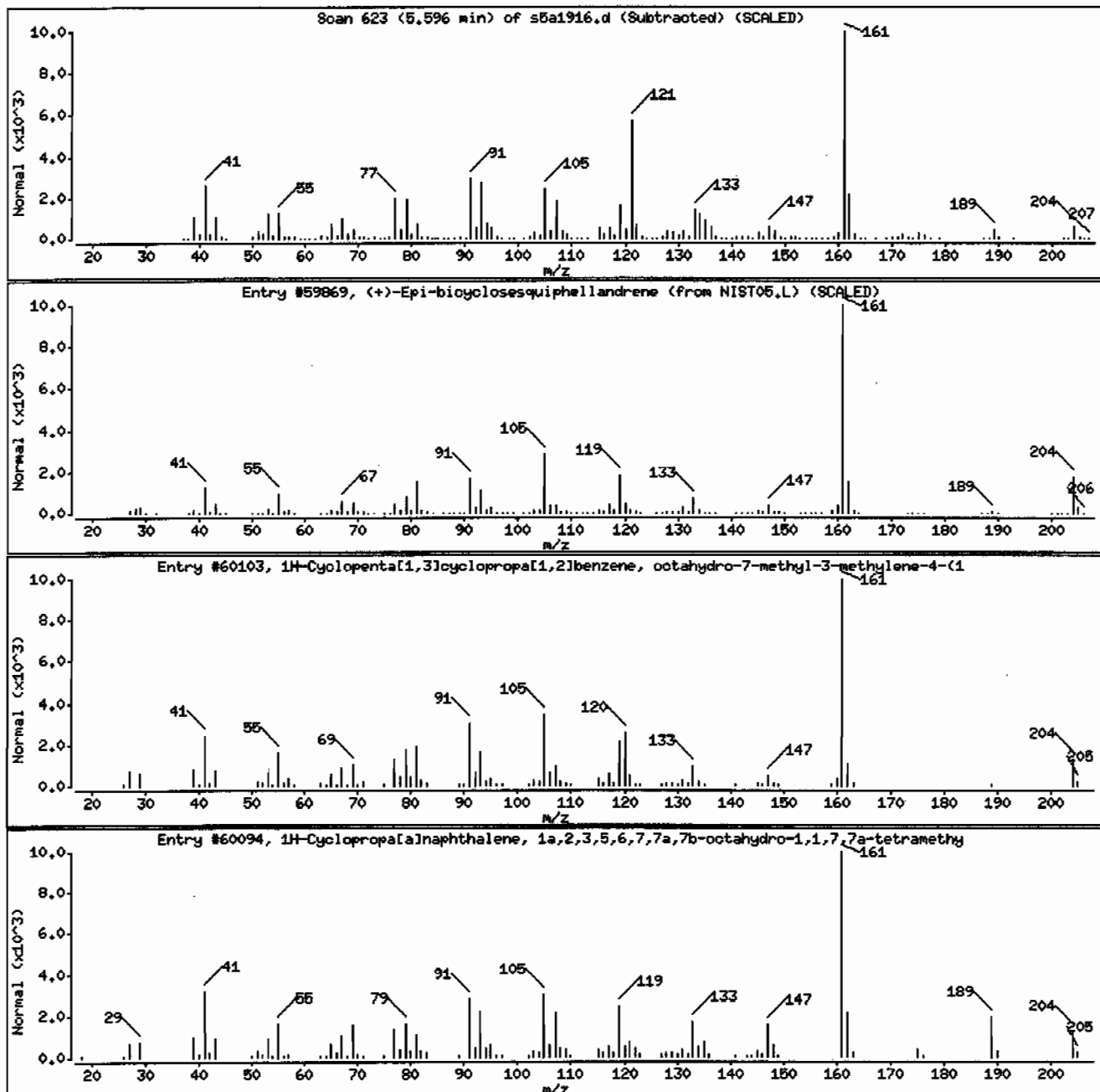
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(+)-Epi-bicyclosesquiphellandrene	64324-03-7	NIST05.L	59869	64	C ₁₅ H ₂₄	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60103	64	C ₁₅ H ₂₄	204
1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,	17334-55-3	NIST05.L	60094	64	C ₁₅ H ₂₄	204



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: I244626008194284011SVH11ILANL

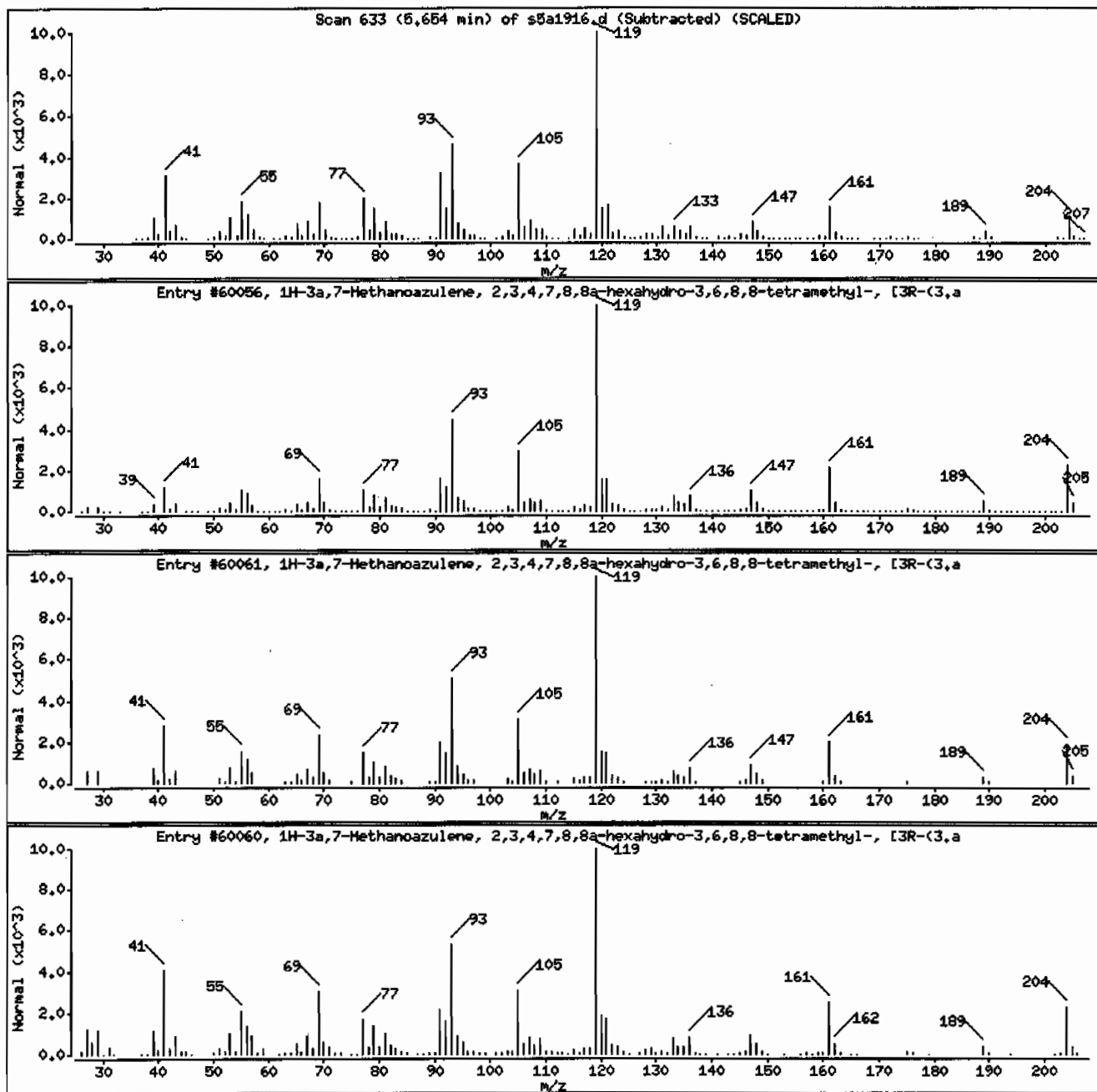
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60056	97	C15H24	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60061	95	C15H24	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60060	95	C15H24	204



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: I244626008194284011ISVH11ILANL

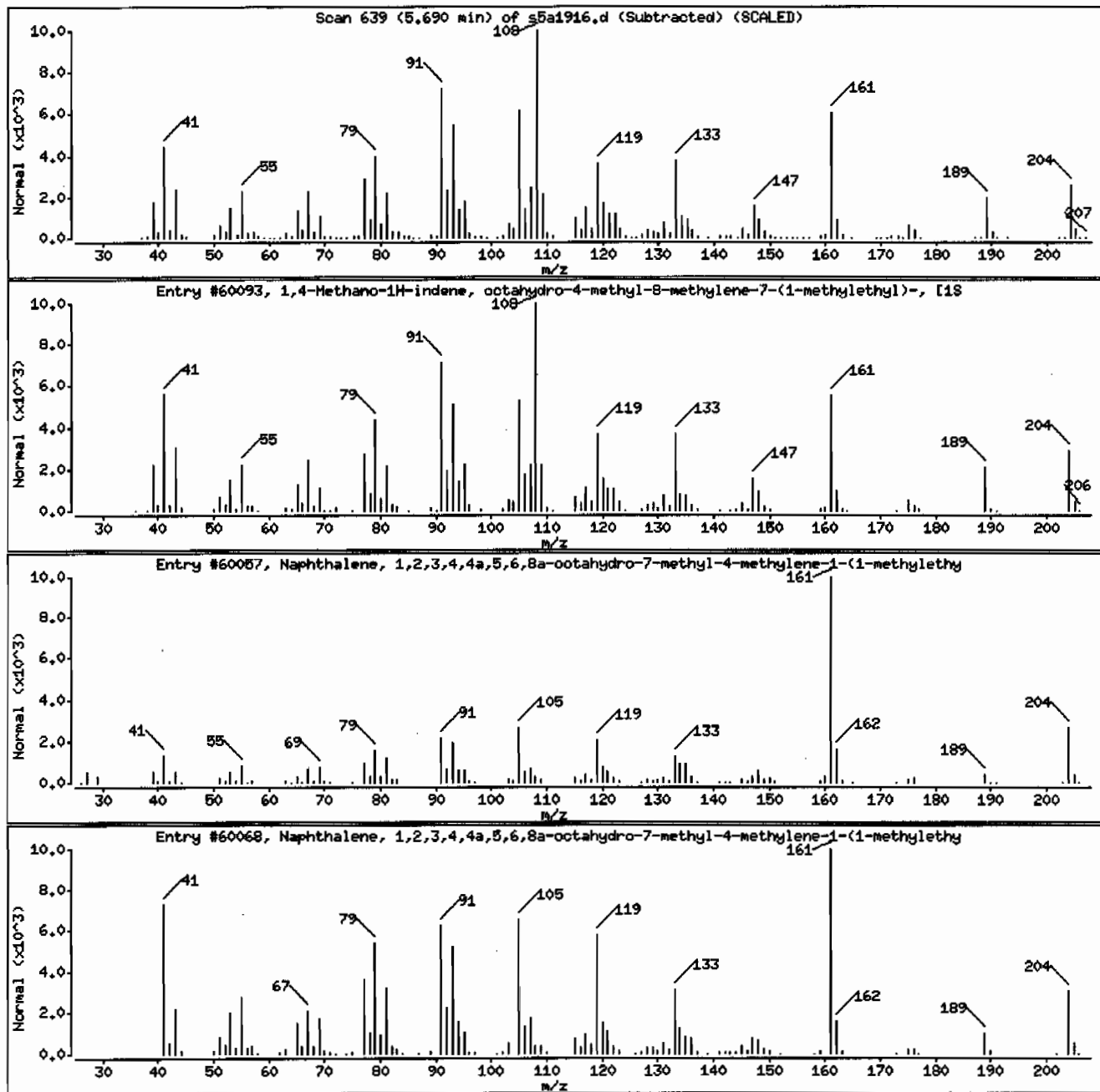
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methano-1H-indene, octahydro-4-methyl-	3650-28-0	NIST05.L	60093	99	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	39029-41-9	NIST05.L	60067	95	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60068	83	C15H24	204



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194294011ISVH11ILANL

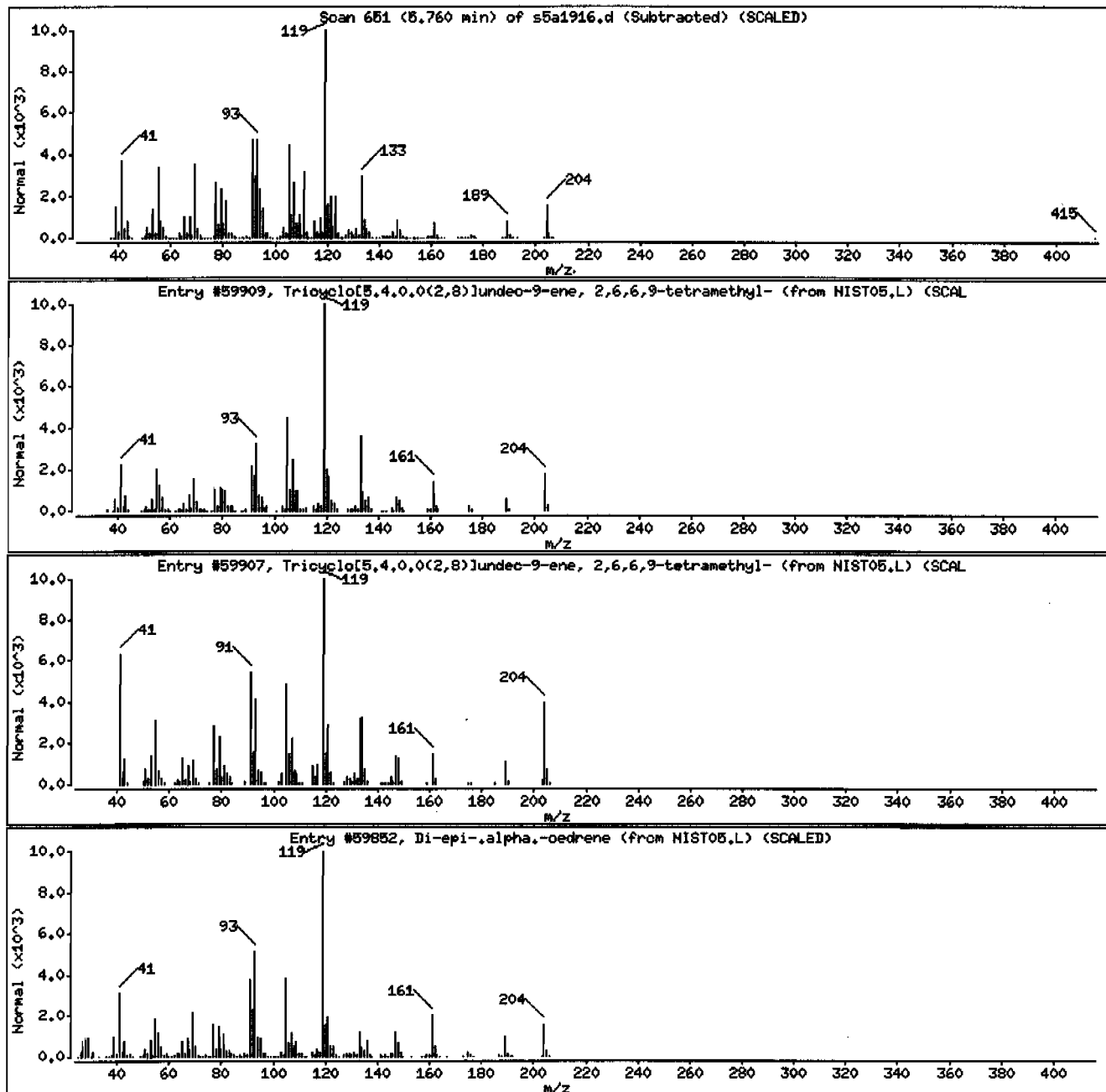
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	78	C18H24	204
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59907	70	C18H24	204
Di-epi-,alpha.-cedrene	1000156-13-3	NIST05.L	59852	68	C18H24	204



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011ISVM11ILANL

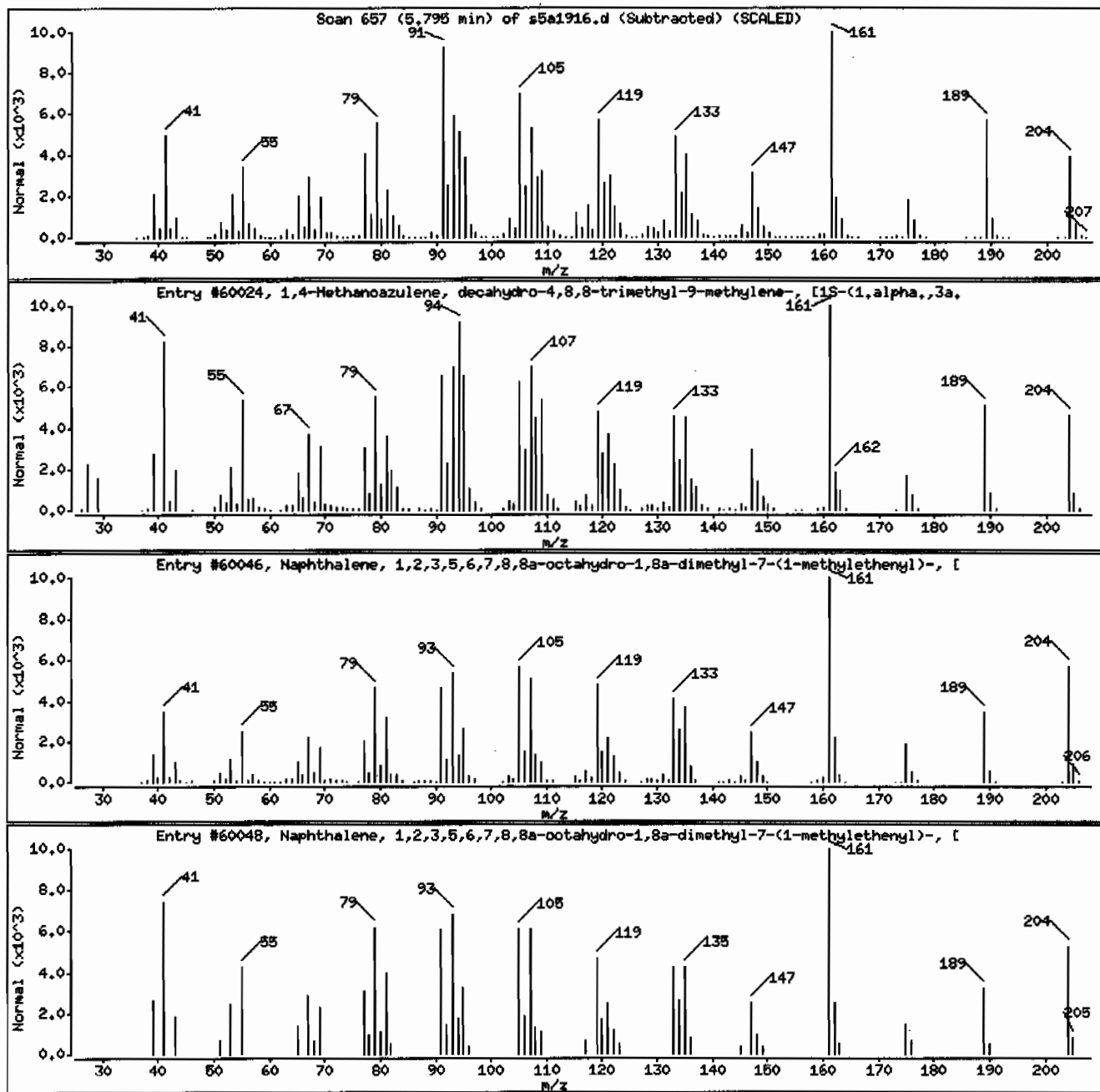
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	97	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60048	95	C15H24	204



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.1

Sample Info: 1244626008194284011SVH111LANL

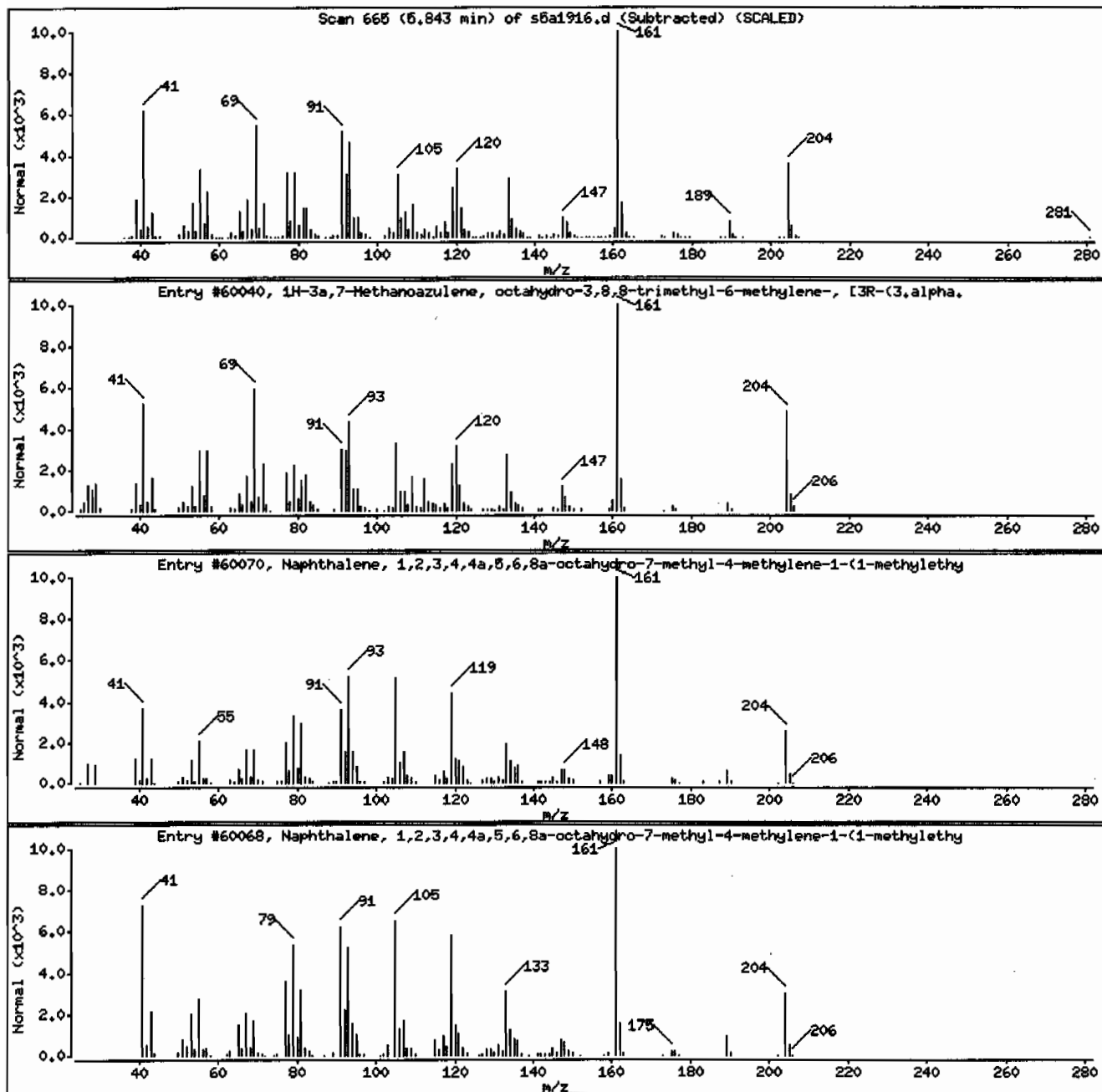
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-3a,7-Methanoazulene, octahydro-3,8,8-	546-28-1	NIST05.L	60040	96	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60070	94	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60068	90	C15H24	204



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.1

Sample Info: 1244626008194284011SVH11LANL

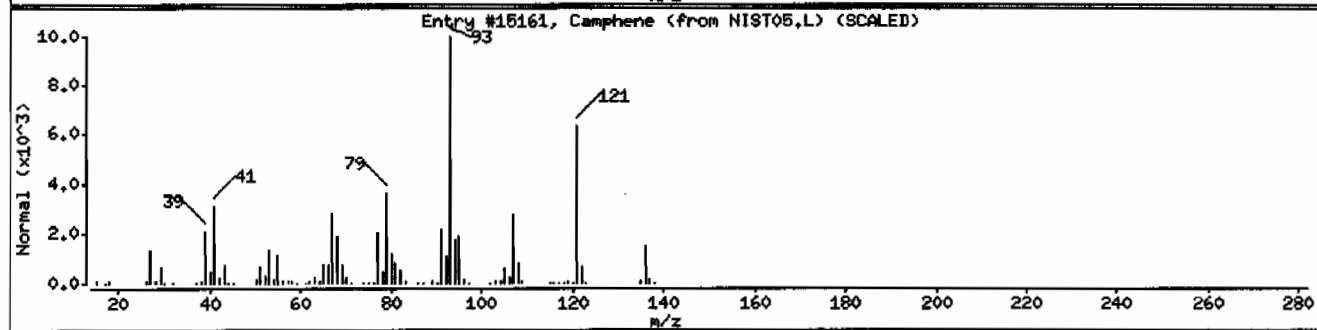
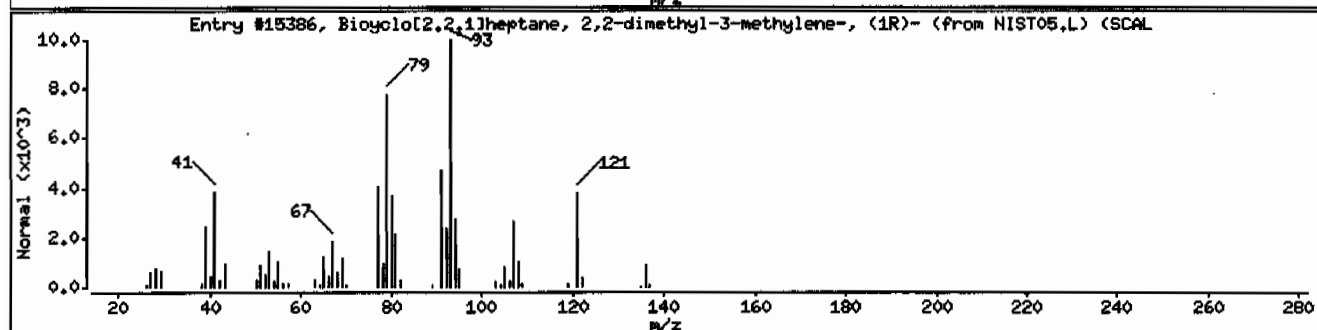
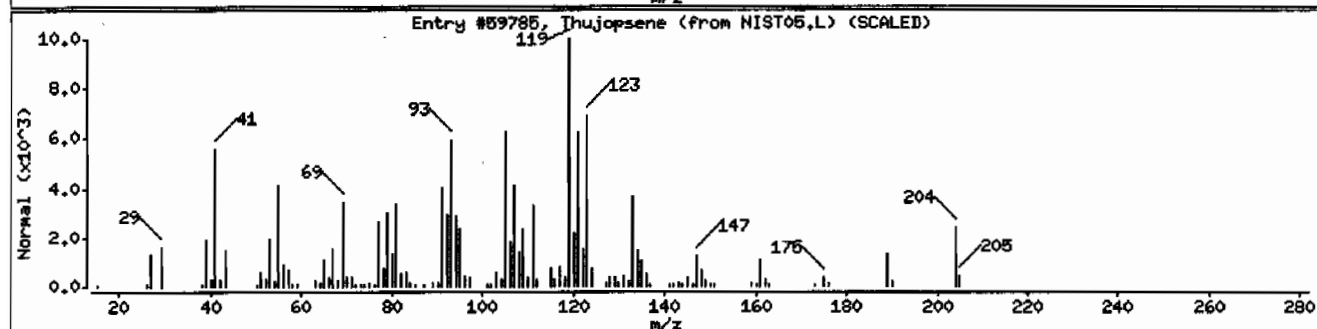
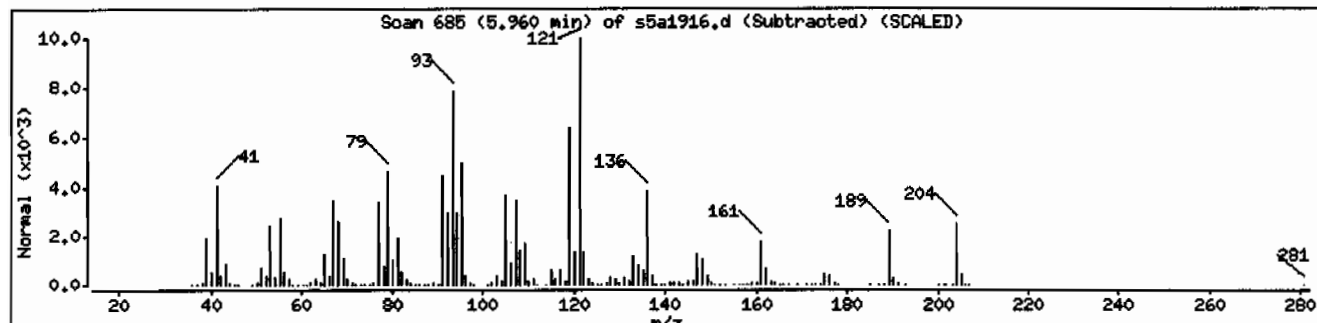
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Thujopsene	470-40-6	NIST05.L	59785	90	C ₁₅ H ₂₄	204
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-me	5794-03-6	NIST05.L	15386	83	C ₁₀ H ₁₆	136
Camphene	79-92-5	NIST05.L	15161	83	C ₁₀ H ₁₆	136



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.1

Sample Info: I244626008194284011SVH11ILANL

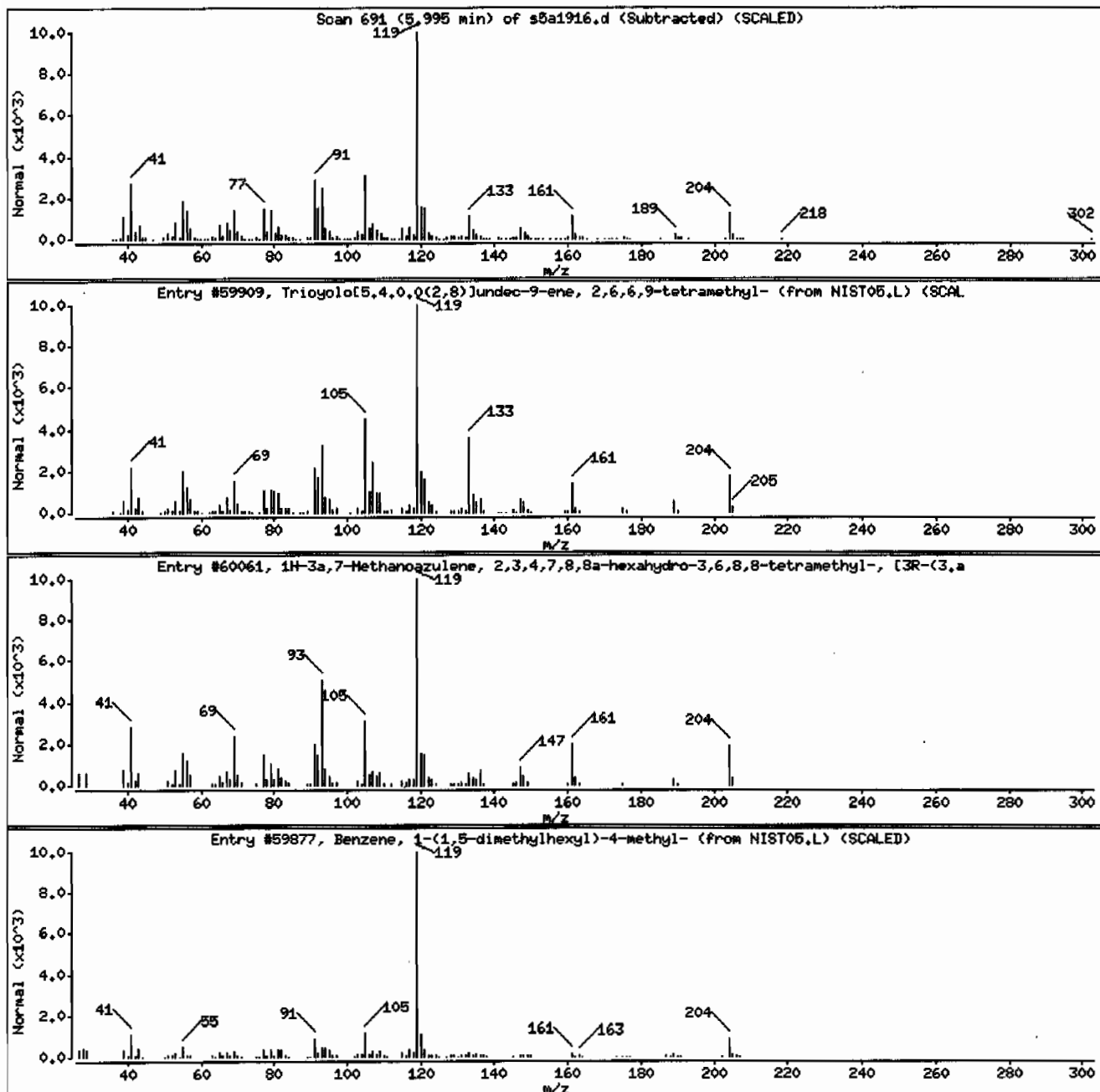
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	5989-08-2	NIST05.L	59909	72	C15H24	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60061	64	C15H24	204
Benzene, 1-(1,5-dimethylhexyl)-4-methyl-	1461-02-5	NIST05.L	59877	53	C18H24	204



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: 1244626008194284011SVH11ILANL

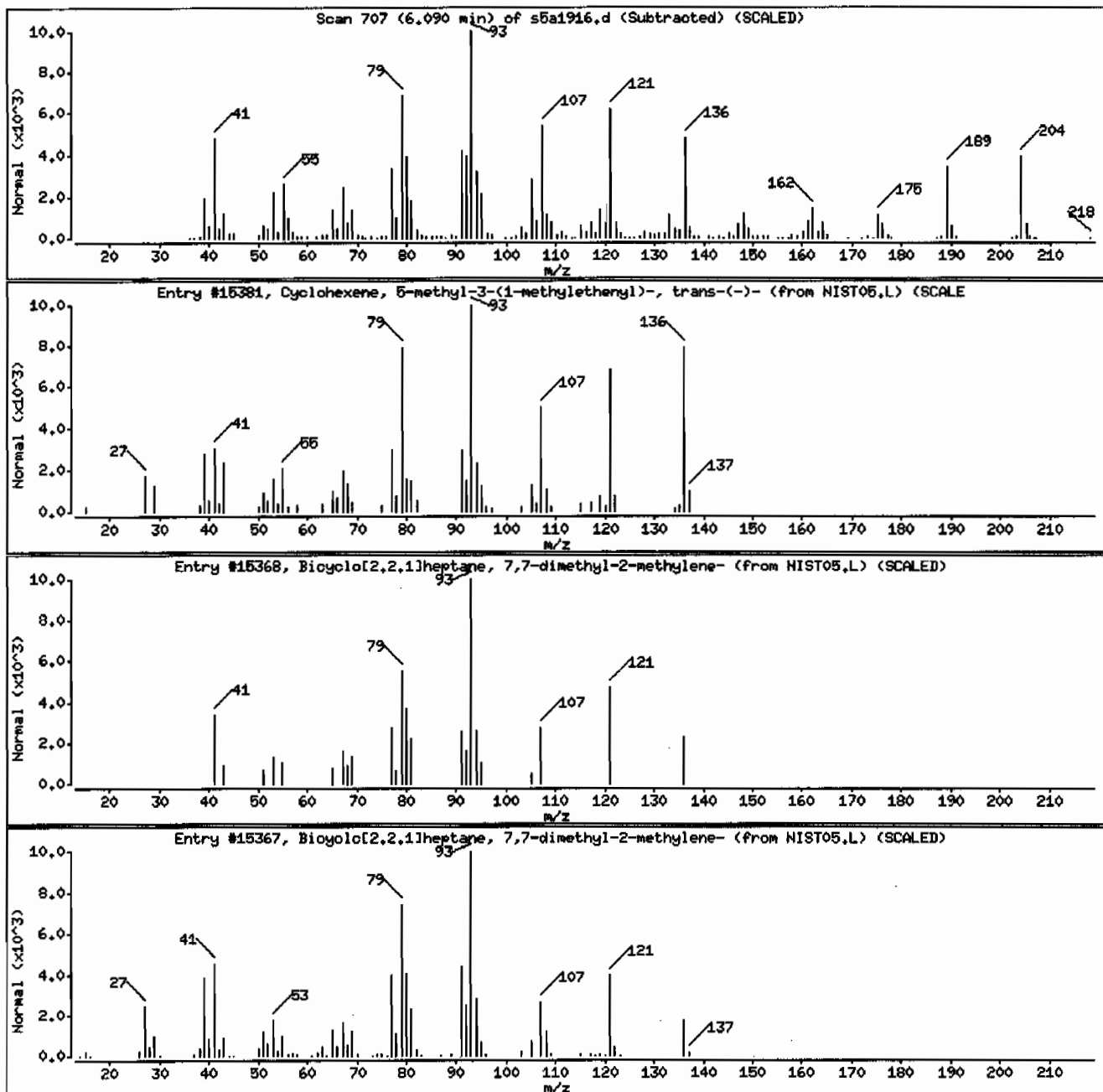
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexene, 5-methyl-3-(1-methylethenyl)	56816-08-1	NIST05.L	15381	92	C10H16	136
Bicyclo[2.2.1]heptane, 7,7-dimethyl-2-me	471-84-1	NIST05.L	15368	91	C10H16	136
Bicyclo[2.2.1]heptane, 7,7-dimethyl-2-me	471-84-1	NIST05.L	15367	70	C10H16	136



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: 1244626008194284011ISVH11ILANL

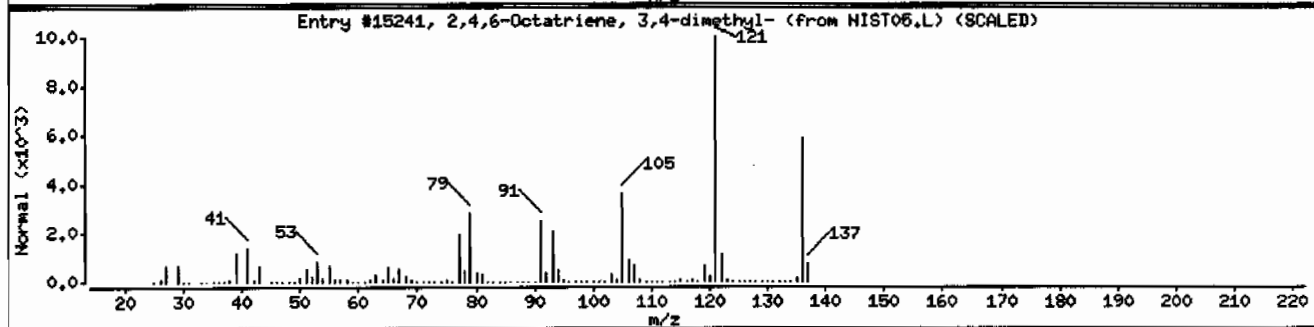
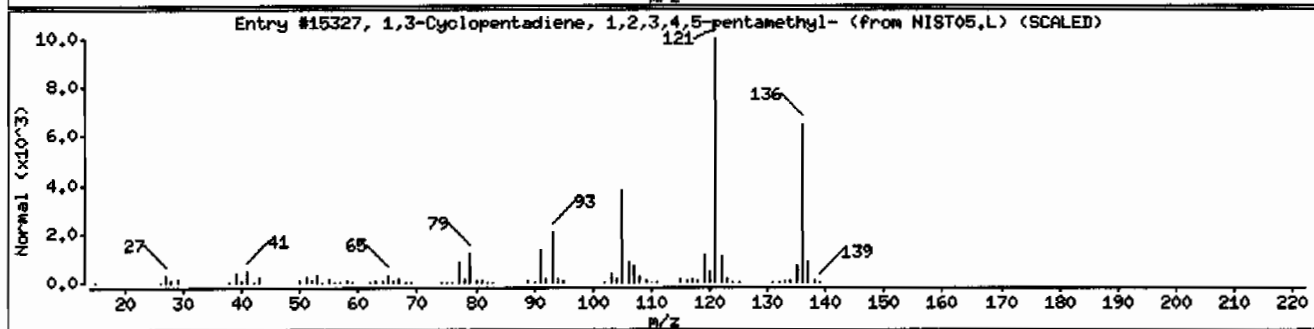
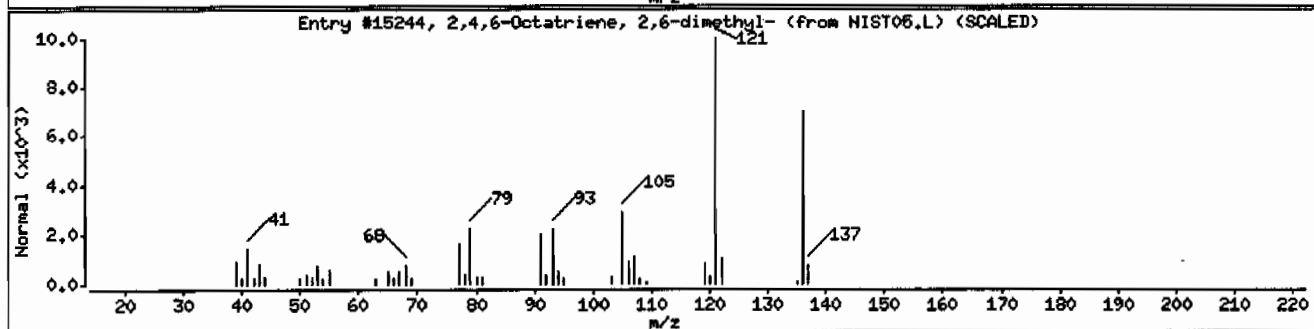
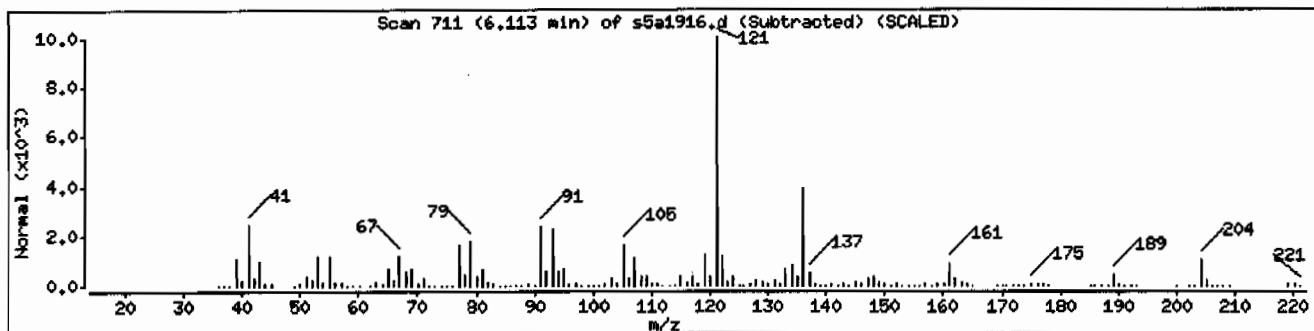
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,4,6-Octatriene, 2,6-dimethyl-	673-84-7	NIST05.L	15244	91	C10H16	136
1,3-Cyclopentadiene, 1,2,3,4,5-pentameth	4045-44-7	NIST05.L	15327	87	C10H16	136
2,4,6-Octatriene, 3,4-dimethyl-	57396-75-5	NIST05.L	15241	87	C10H16	136



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.1

Sample Info: 1244626008194284011ISVH11ILANL

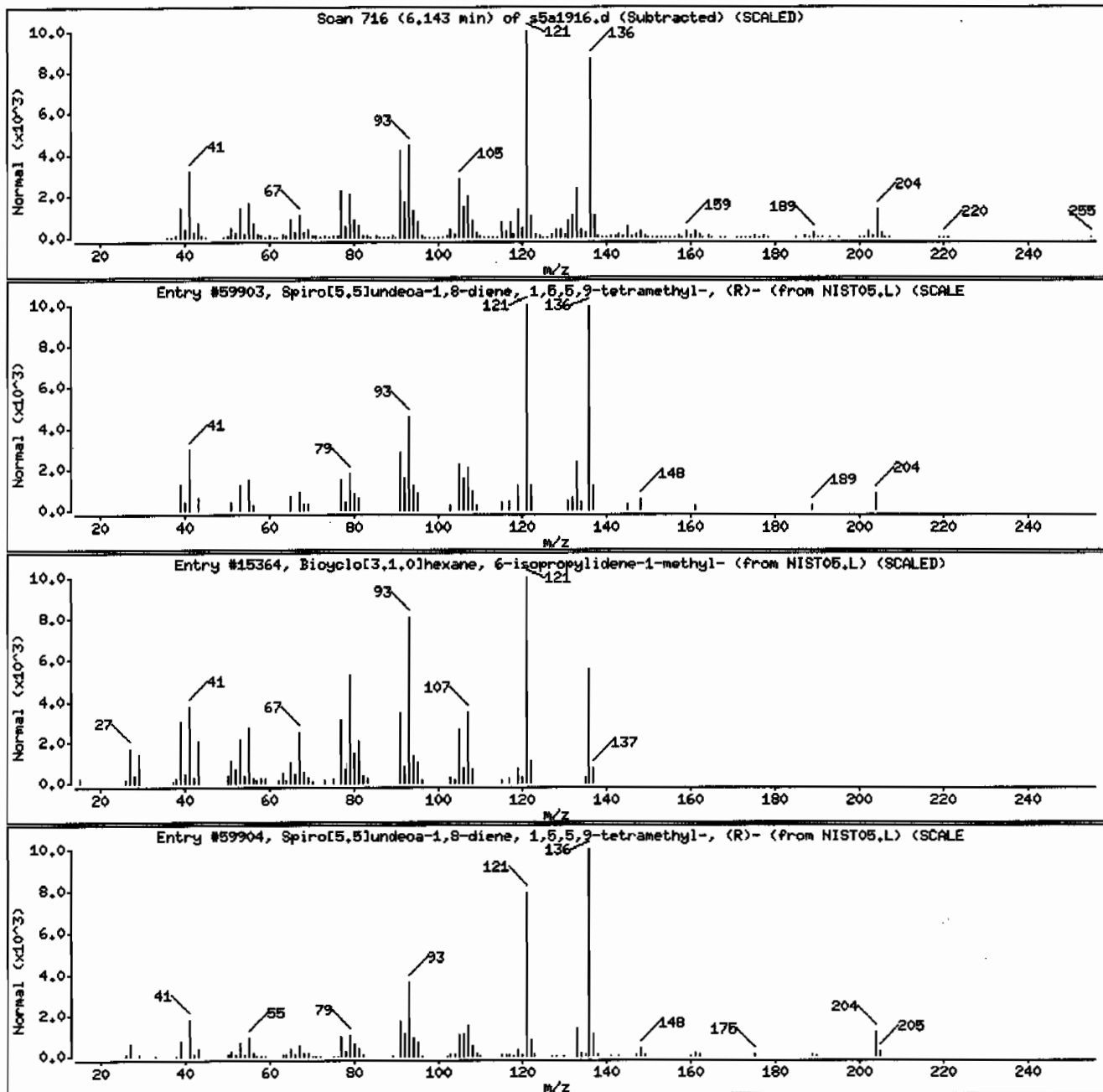
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	19912-83-5	NIST05.L	59903	96	C15H24	204
Bicyclo[3.1.0]hexane, 6-isopropylidene-1	24524-57-0	NIST05.L	15364	93	C10H16	136
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	19912-83-5	NIST05.L	59904	93	C15H24	204



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011SVH111LANL

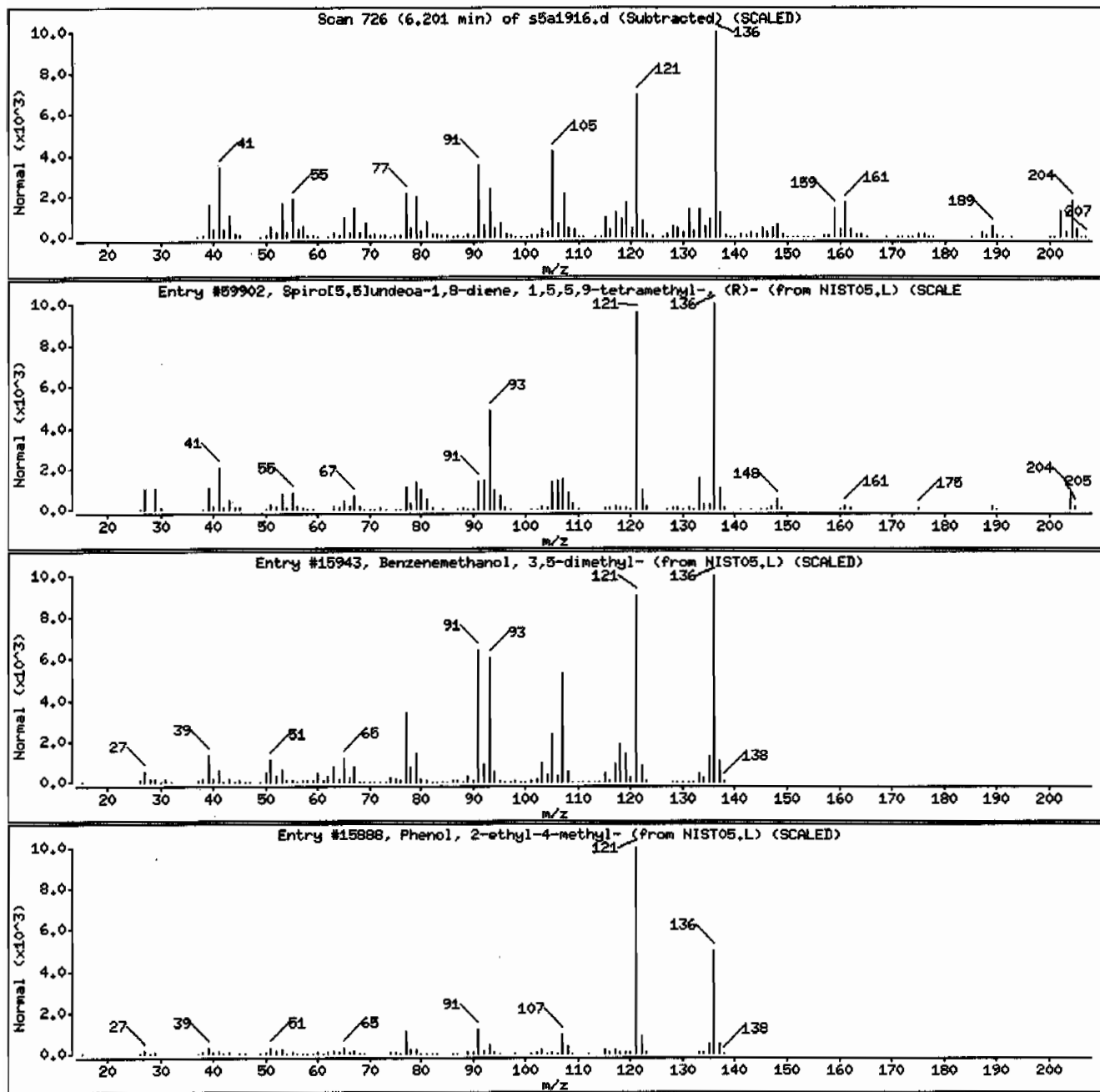
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Spiro[5.5]undeca-1,8-diene, 1,5,5,9-tetr	19912-83-5	NIST05.L	59902	60	C18H24	204
Benzenemethanol, 3,5-dimethyl-	27129-87-9	NIST05.L	15943	53	C9H12O	136
Phenol, 2-ethyl-4-methyl-	3855-26-3	NIST05.L	15888	52	C9H12O	136



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD6.1

Sample Info: 1244626008194284011SVH11ILANL

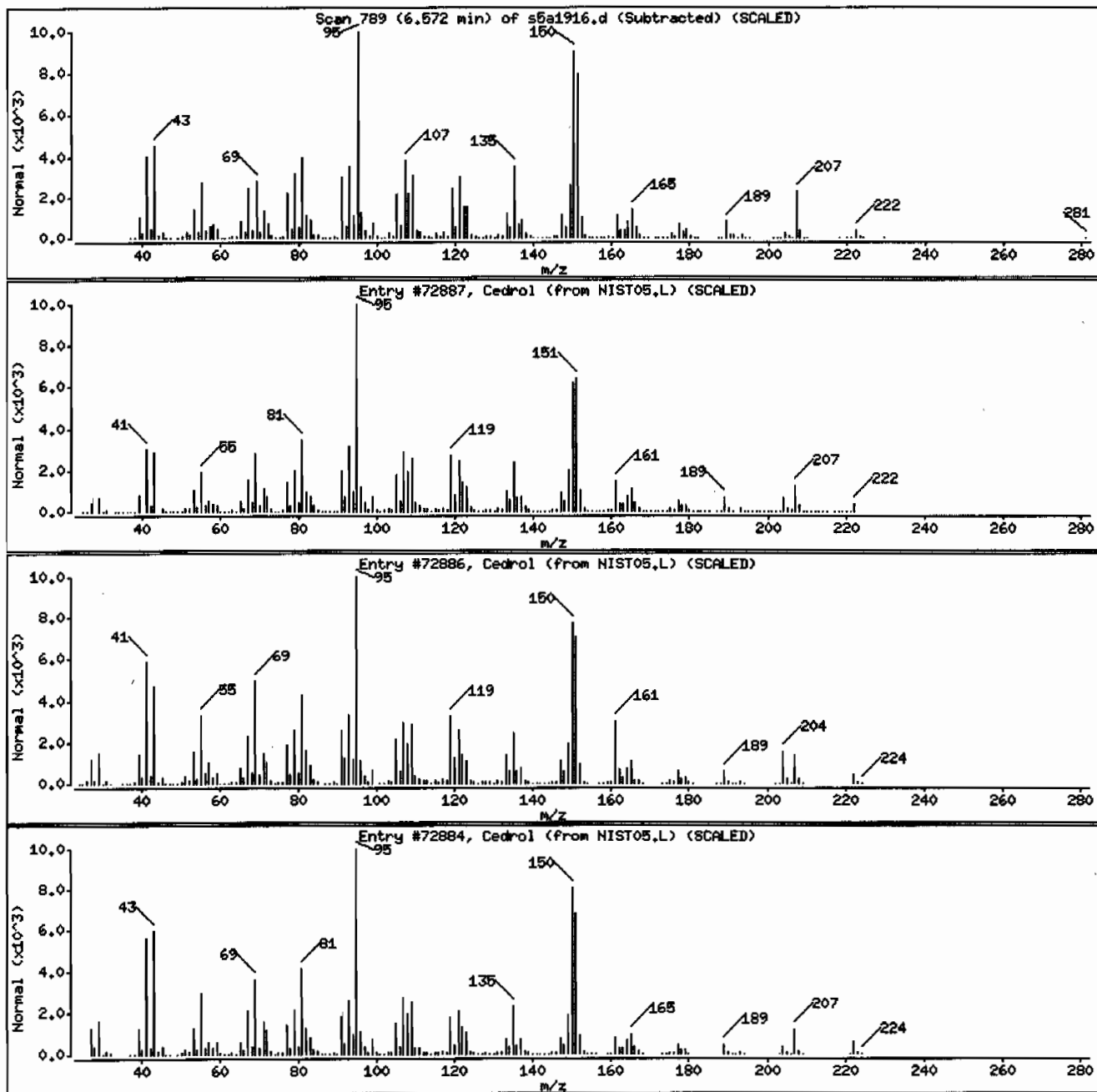
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72887	93	C ₁₅ H ₂₆ O	222
Cedrol	77-53-2	NIST05.L	72886	91	C ₁₅ H ₂₆ O	222
Cedrol	77-53-2	NIST05.L	72884	91	C ₁₅ H ₂₆ O	222



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: I244626008194284011ISVM11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

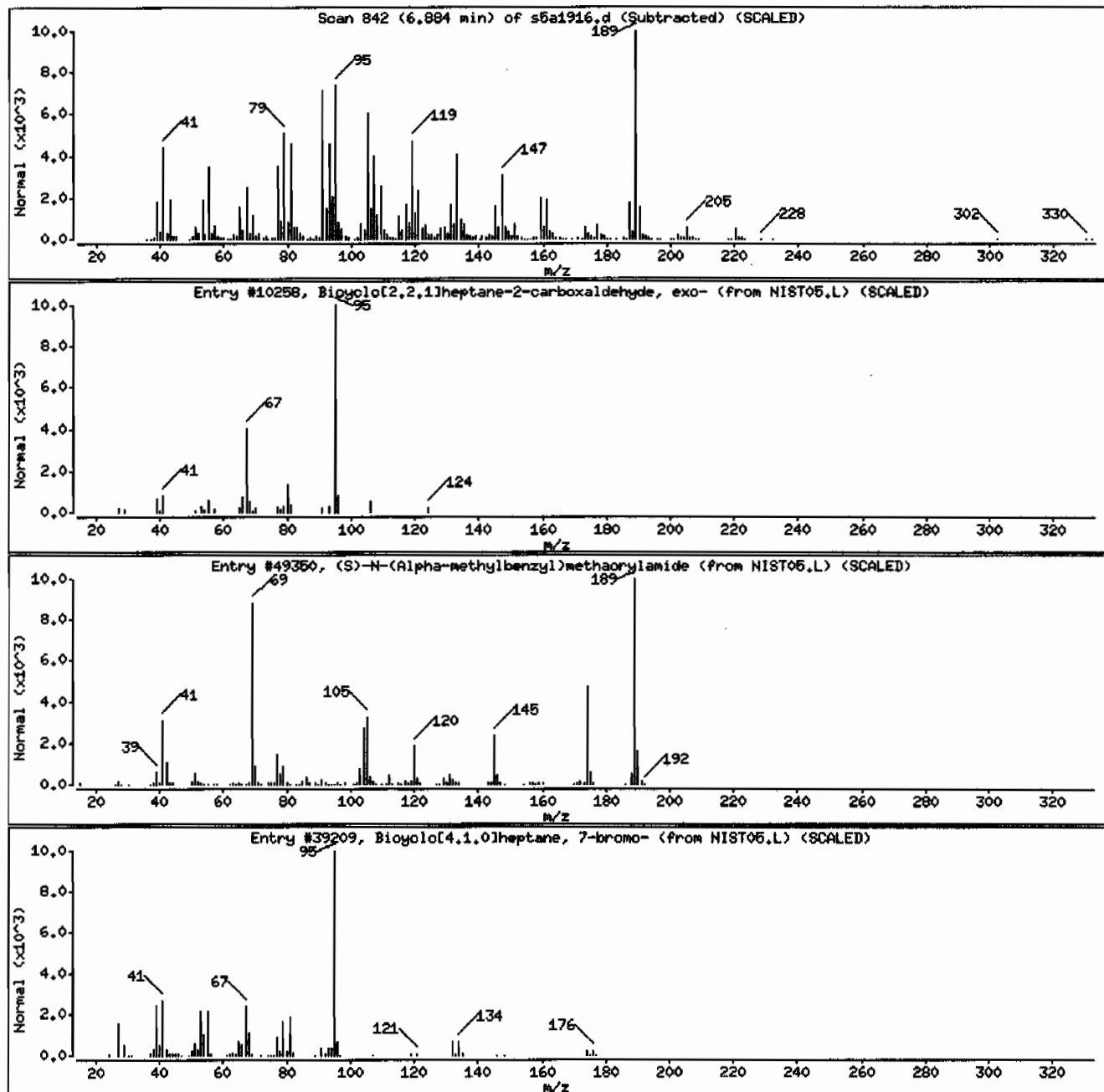
Column diameter: 0.20

Library Search Compound Hatch

Unknown

Biocyclo[2,2,1]heptane-2-carboxaldehyde,
(S)-N-(Alpha-methylbenzyl)methacrylamide
Biocyclo[4,1,0]heptane, 7-bromo-

CAS Number	Library	Entry	Quality	Formula	Weight
3574-55-8	NIST05.L	10258	11	C8H12O	124
56598-33-5	NIST05.L	49350	11	C12H15NO	189
1121-39-7	NIST05.L	39209	11	C7H11Br	174



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.1

Sample Info: 12446260081942840111SVH111LANL

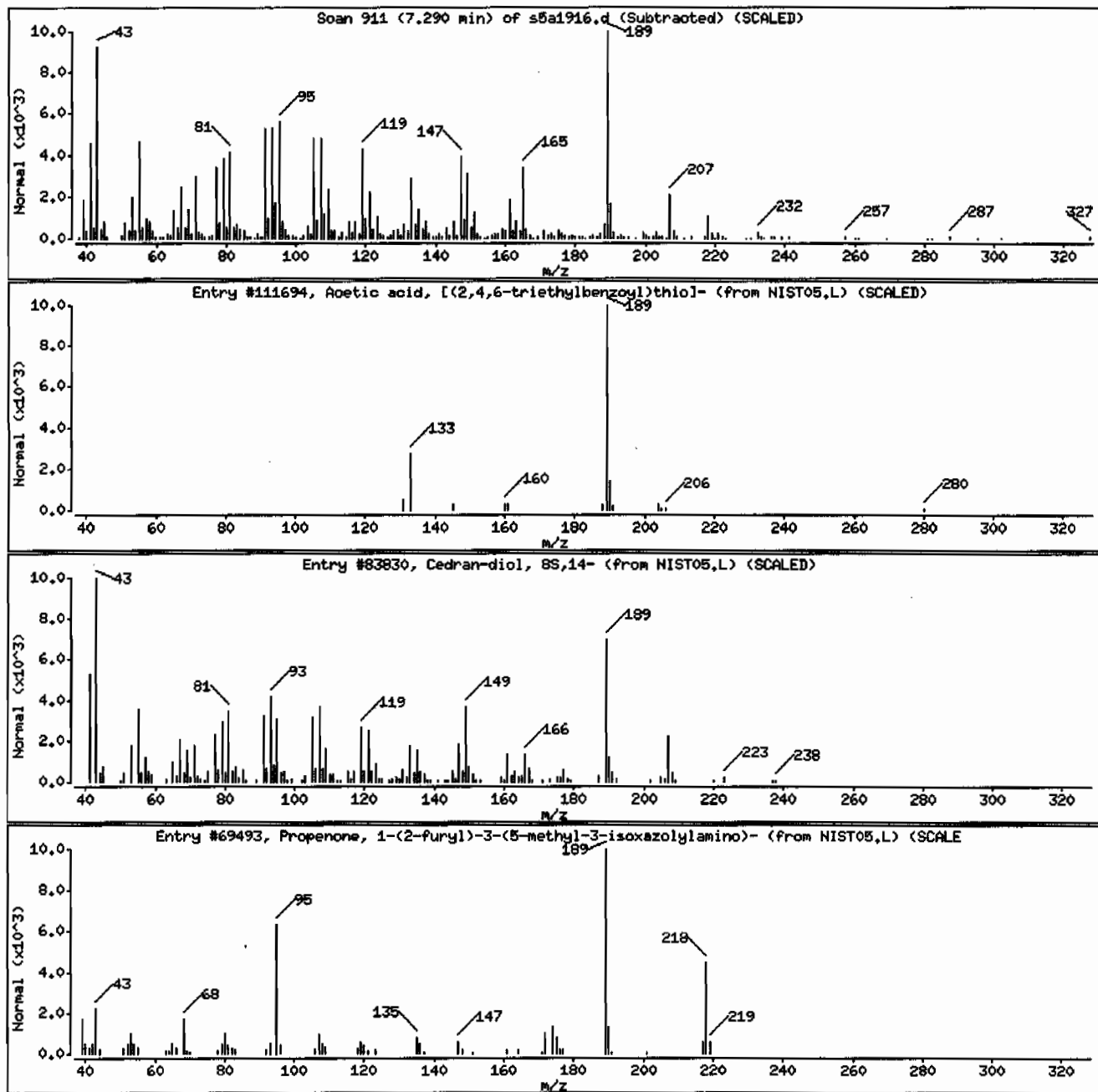
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, [(2,4,6-triethylbenzoyl)thio]	67902-78-7	NIST05.L	111694	38	C15H20O3S	280
Cedran-diol, 8S,14-	62600-08-9	NIST05.L	83830	32	C15H26O2	238
Propenone, 1-(2-furyl)-3-(5-methyl-3-iso	186967-33-5	NIST05.L	69493	30	C11H10N2O3	218



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011ISVH11ILANL

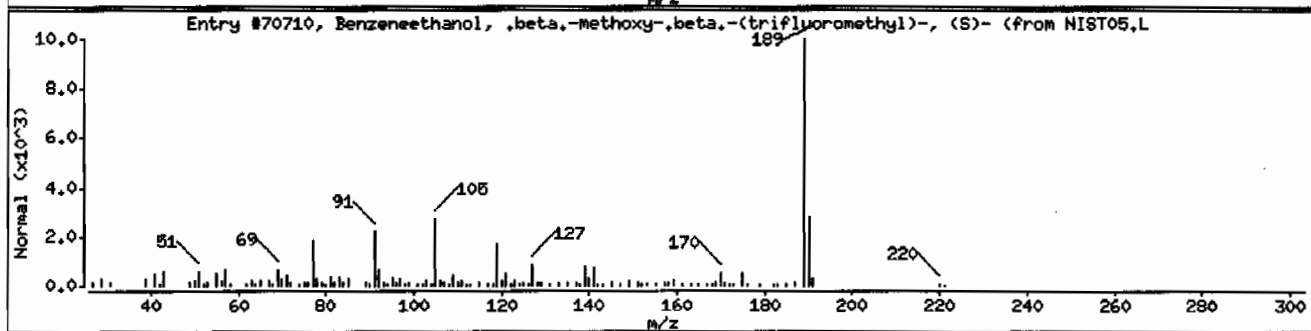
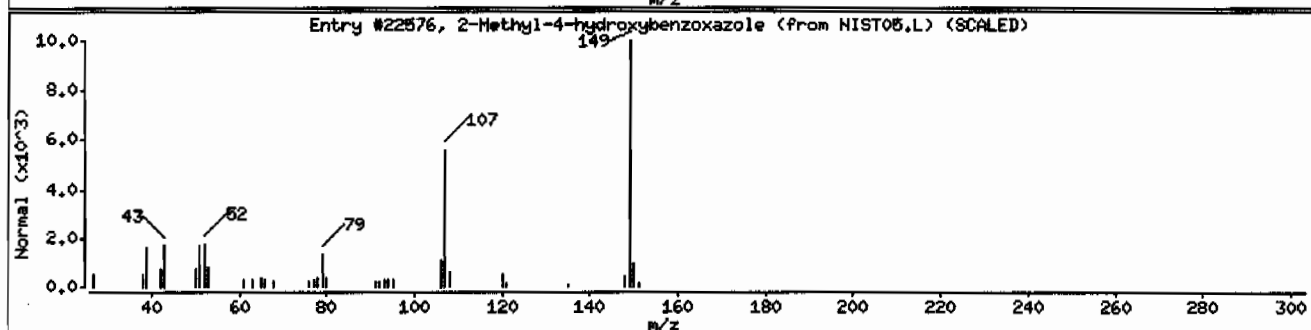
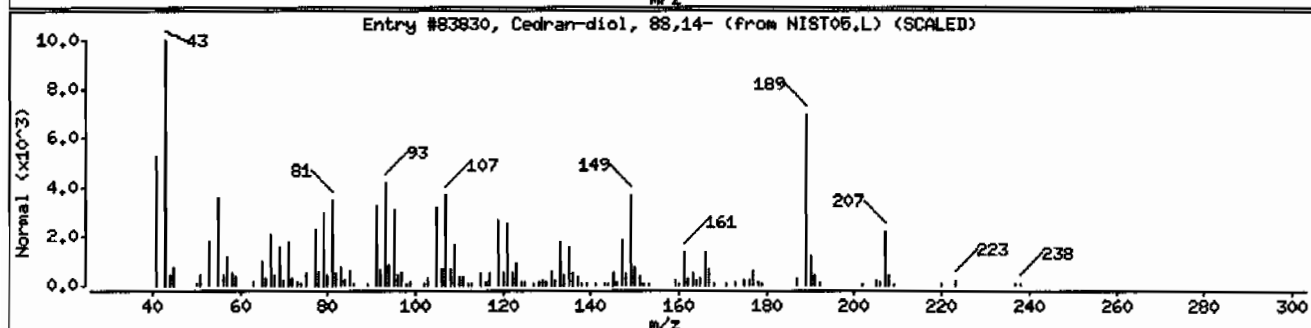
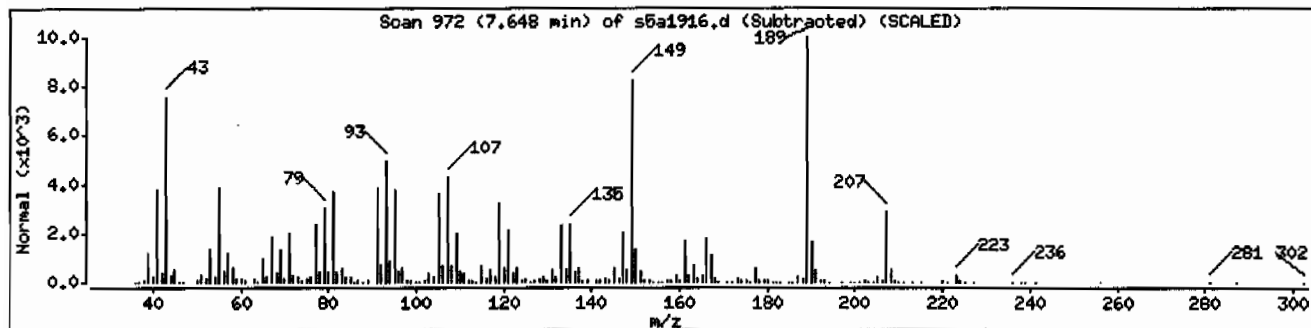
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	87	C15H26O2	238
2-Methyl-4-hydroxybenzoxazole	51110-60-2	NIST05.L	22576	25	C8H7NO2	149
Benzeneethanol, .beta.-methoxy-.beta.-t	52356-17-9	NIST05.L	70710	14	C10H11F3O2	220



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: 1244626008194284011SVH11LANL

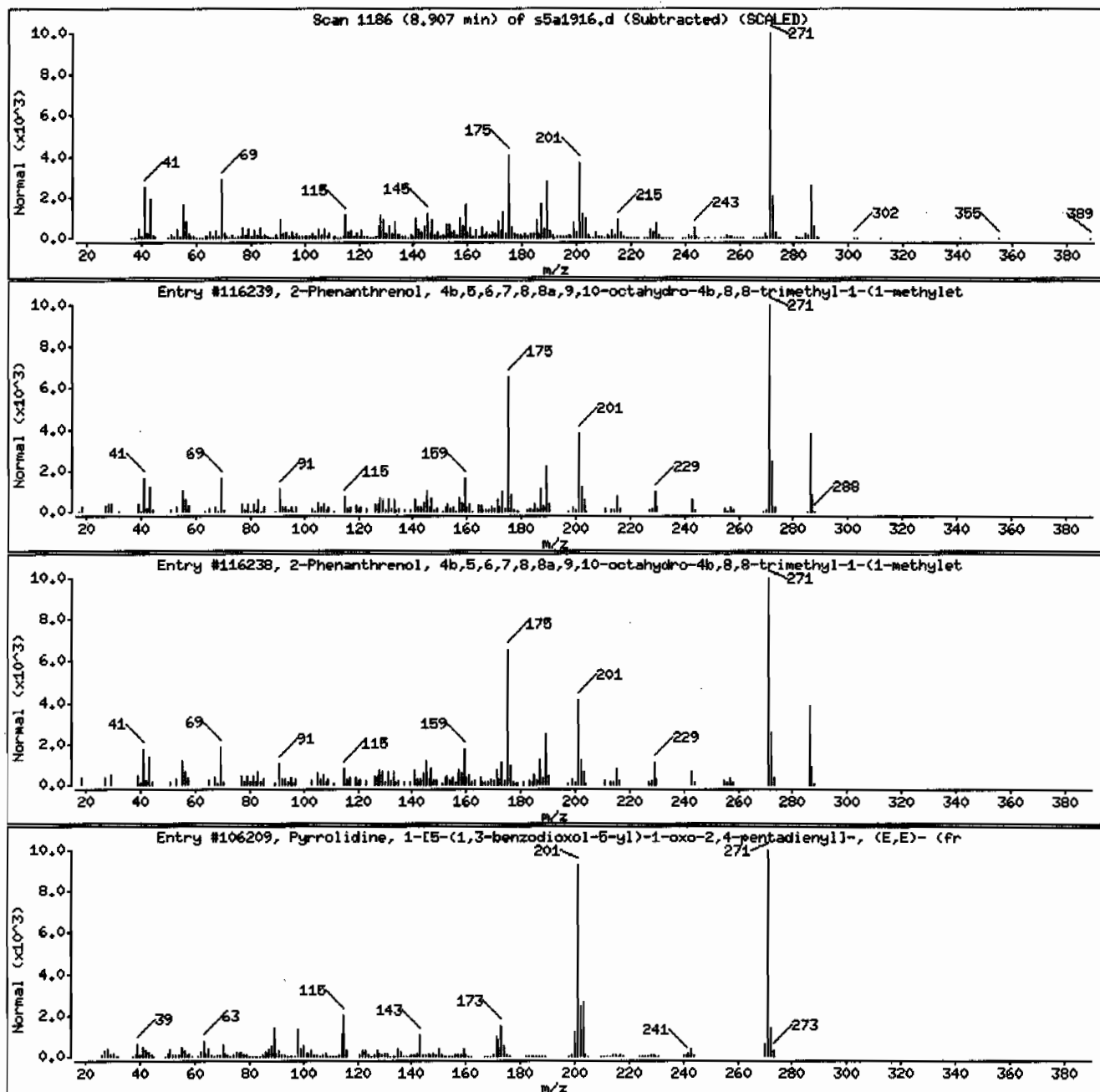
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	93	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	86	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	43	C16H17NO3	271



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011SVH11LANL

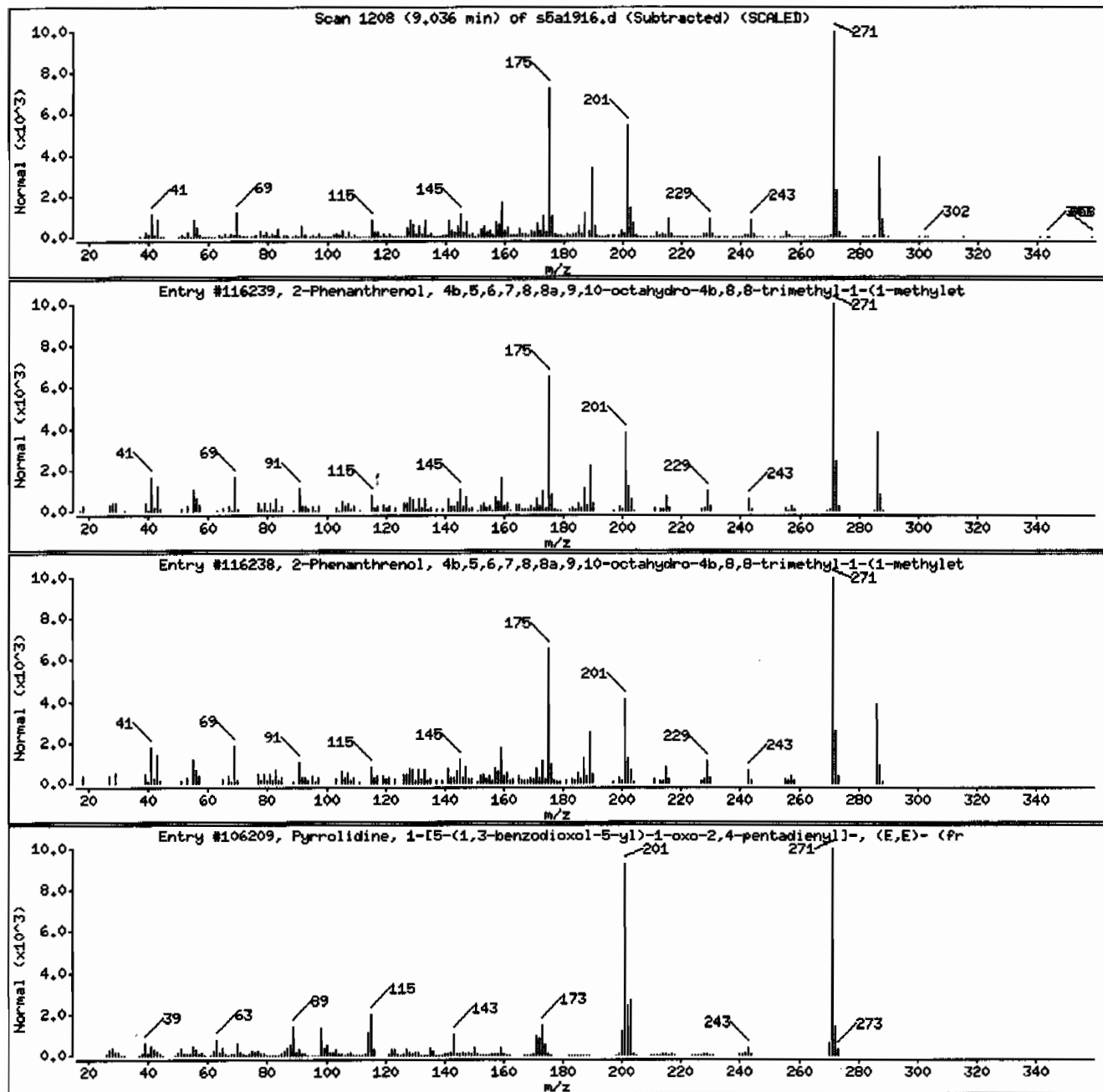
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	99	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	94	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)	25924-78-1	NIST05.L	106209	38	C16H17NO3	271



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626006194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

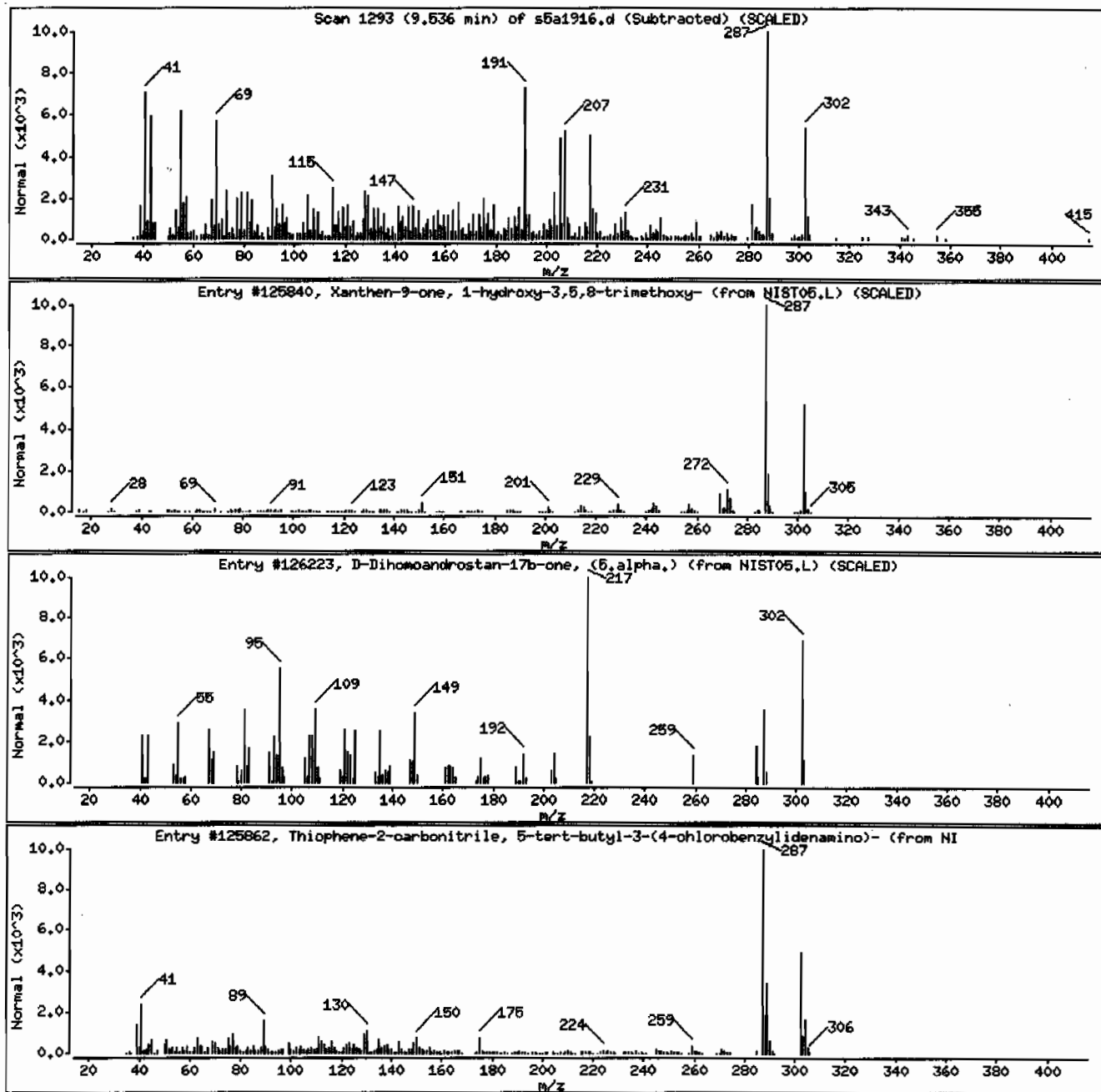
Unknown

Xanthen-9-one, 1-hydroxy-3,5,8-trimethox

CAS Number	Library	Entry	Quality	Formula	Weight
49599-09-9	NIST05.L	125840	58	C16H14O6	302
32319-07-6	NIST05.L	126223	53	C21H34O	302
1000268-00-9	NIST05.L	125862	46	C16H15C1N2S	302

D-Dihomoandrostan-17b-one, (6.alpha.)

Thiophene-2-carbonitrile, 5-tert-butyl-3



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: 1244626008194284011SVH111LANL

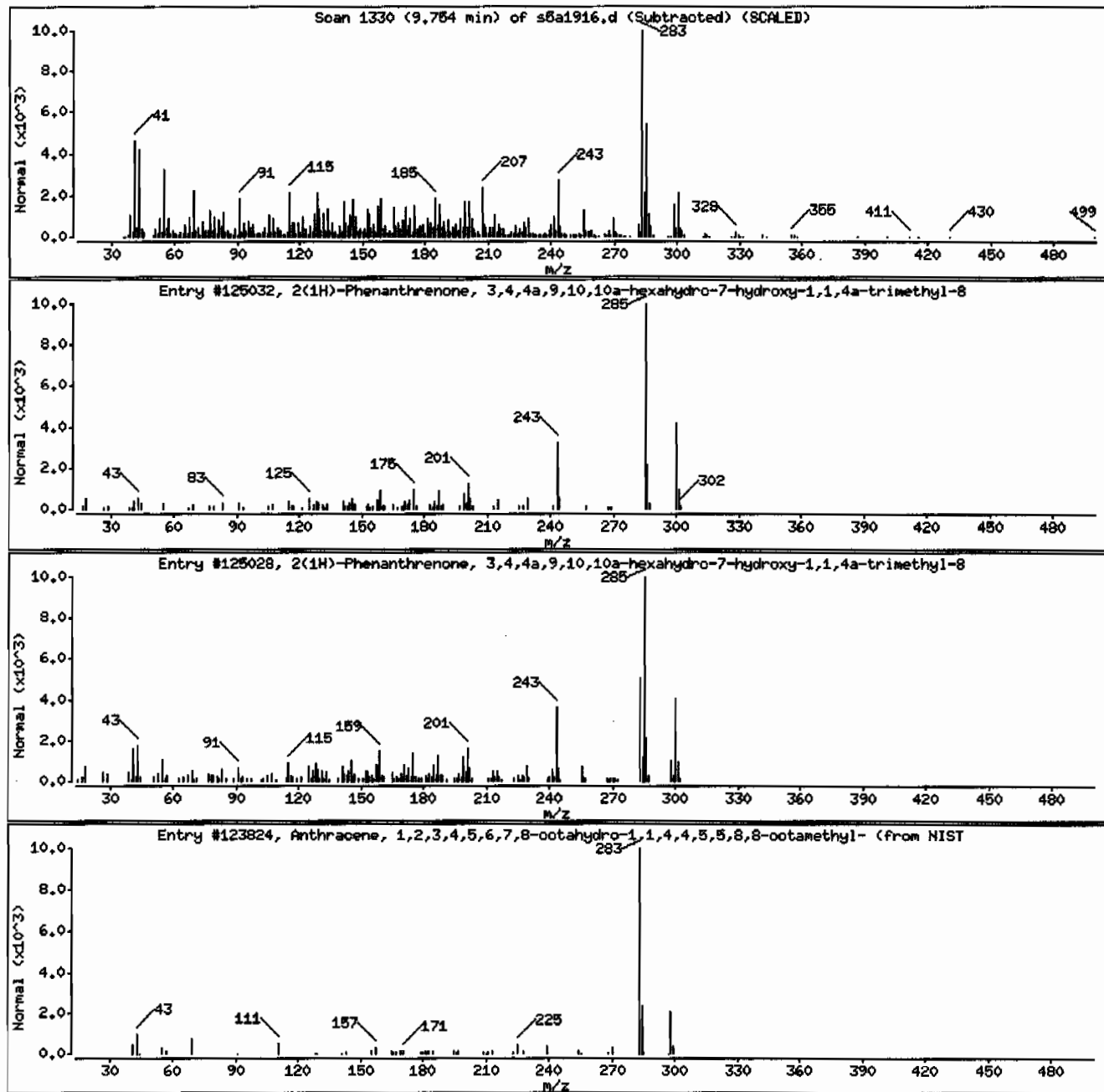
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	6755-93-7	NIST05.L	125032	93	C20H28O2	300
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	6755-93-7	NIST05.L	125028	89	C20H28O2	300
Anthracene, 1,2,3,4,5,6,7,8-octahydro-1,	22306-30-5	NIST05.L	123824	46	C22H34	298



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: 1244626008194284011ISVM11ILANL

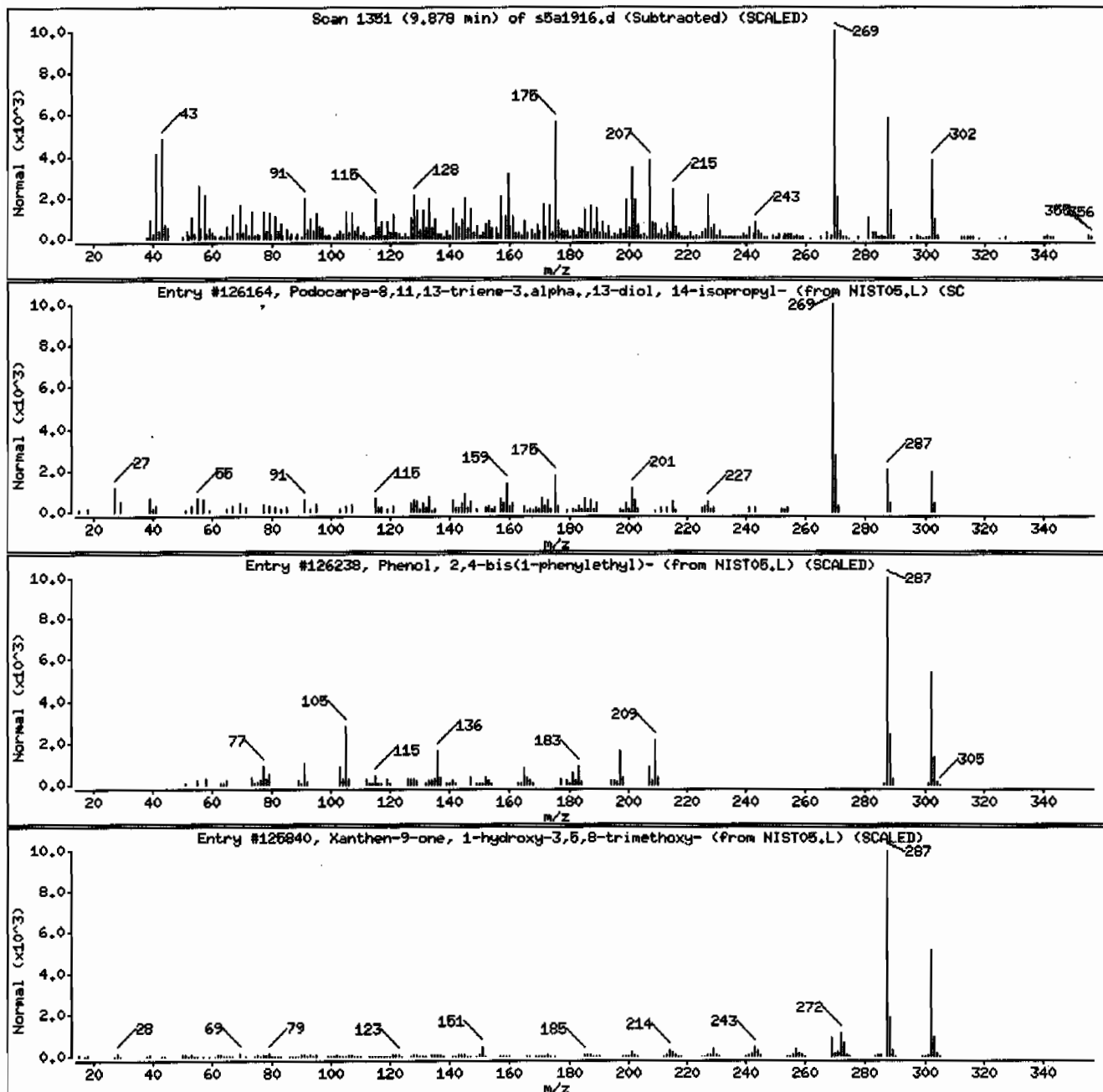
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Podocarpa-8,11,13-triene-3, alpha., 13-dio	18326-87-6	NIST05.L	126164	55	C20H30O2	302
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	47	C22H22O	302
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	126840	47	C16H14O6	302



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011ISVM11ILANL

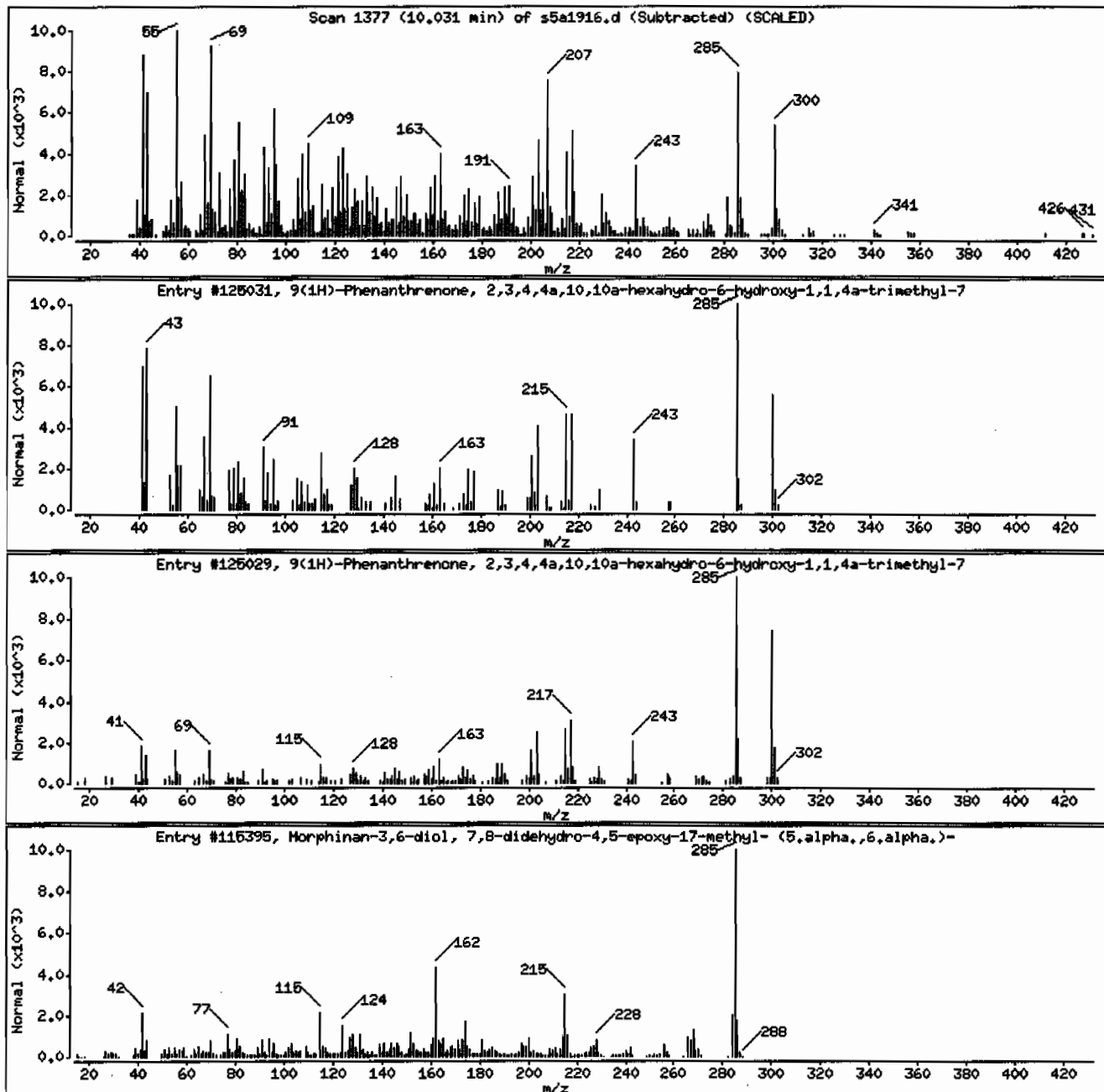
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-08-7	NIST05.L	125031	96	C ₂₀ H ₂ O ₂	300
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-08-7	NIST05.L	125029	90	C ₂₀ H ₂ O ₂	300
Morphinan-3,6-diol, 7,8-didehydro-4,5-ep	57-27-2	NIST05.L	116395	44	C ₁₇ H ₁₉ N ₃ O	285



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.1

Sample Info: 1244626008194284011ISVM11ILANL

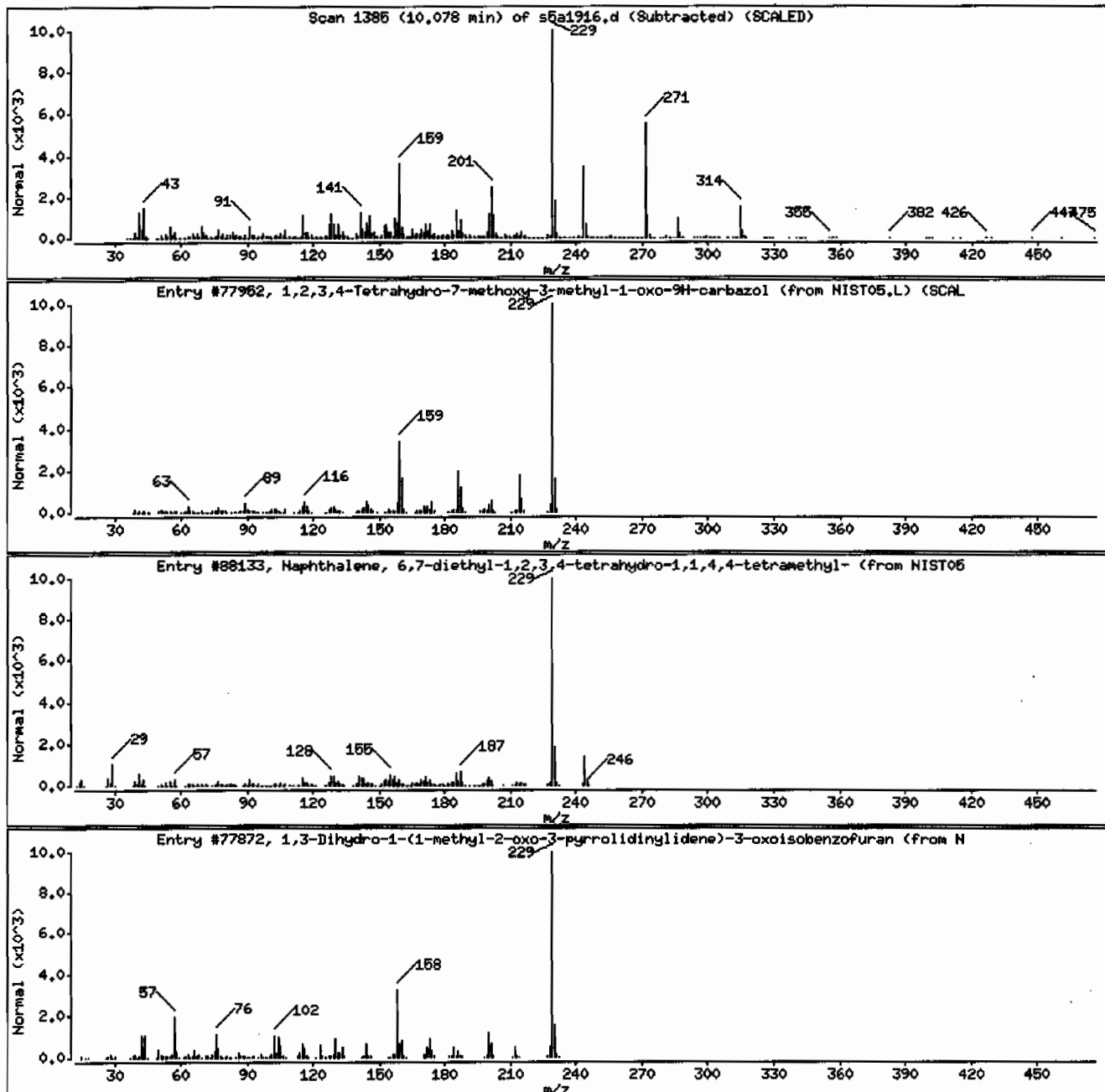
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-Naphthalene, 6,7-diethyl-1,2,3,4-tetrahy	32850-51-9	NIST05.L	77952	50	C14H15NO2	229
1,3-Dihydro-1-(1-methyl-2-oxo-3-pyrrolid	55741-10-1	NIST05.L	88133	50	C18H28	244
	3988-53-2	NIST05.L	77872	35	C13H11NO3	229



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: 1244626008194284011SVH111LANL

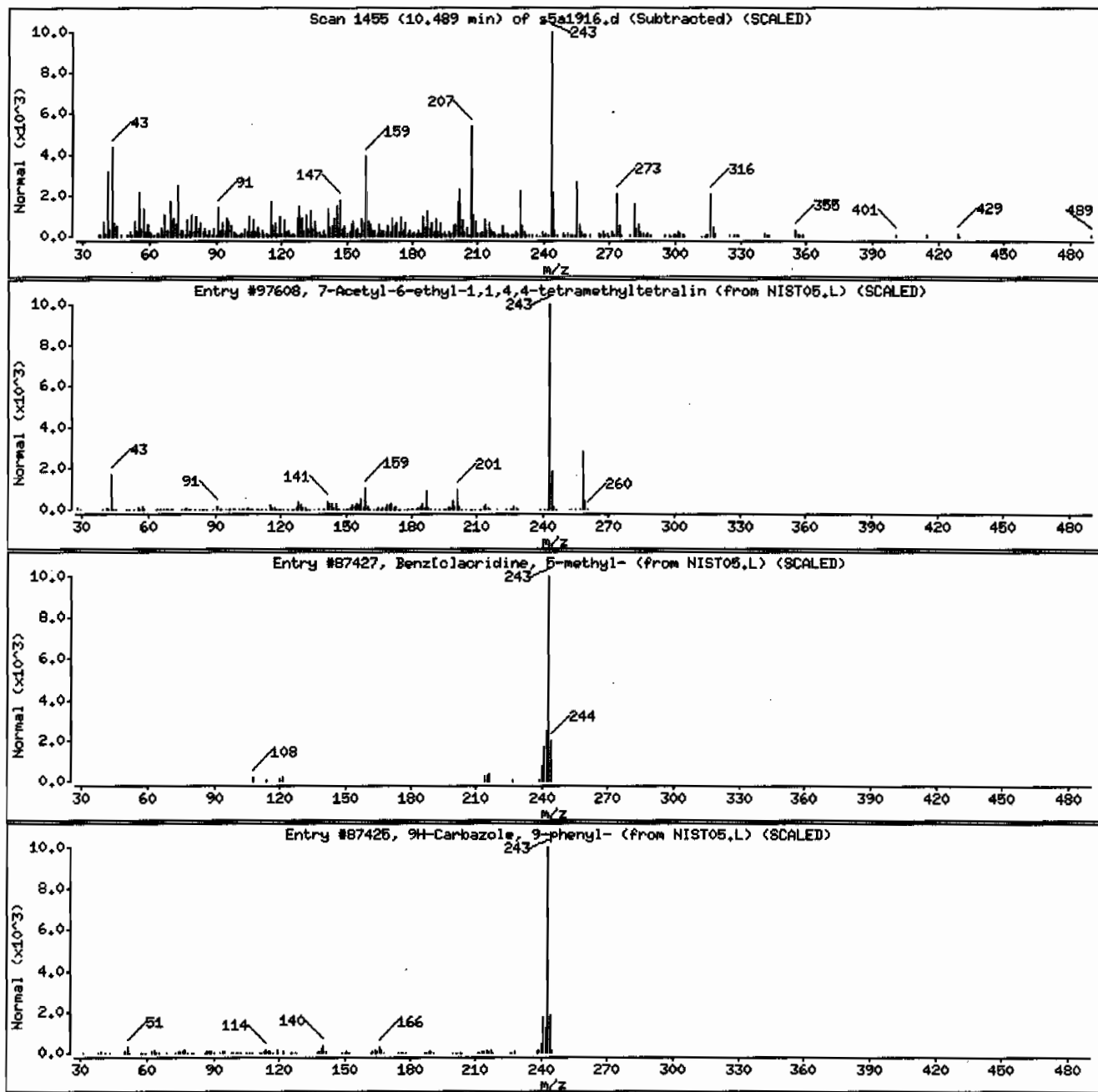
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Acetyl-6-ethyl-1,1,4,4-tetramethyltetra	88-29-9	NIST05.L	97608	27	C18H26O	258
Benz[<i>a</i>]acridine, 5-methyl-	3819-87-7	NIST05.L	87427	25	C18H13N	243
9H-Carbazole, 9-phenyl-	1150-62-5	NIST05.L	87425	25	C18H13N	243



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011SVH11ILANL

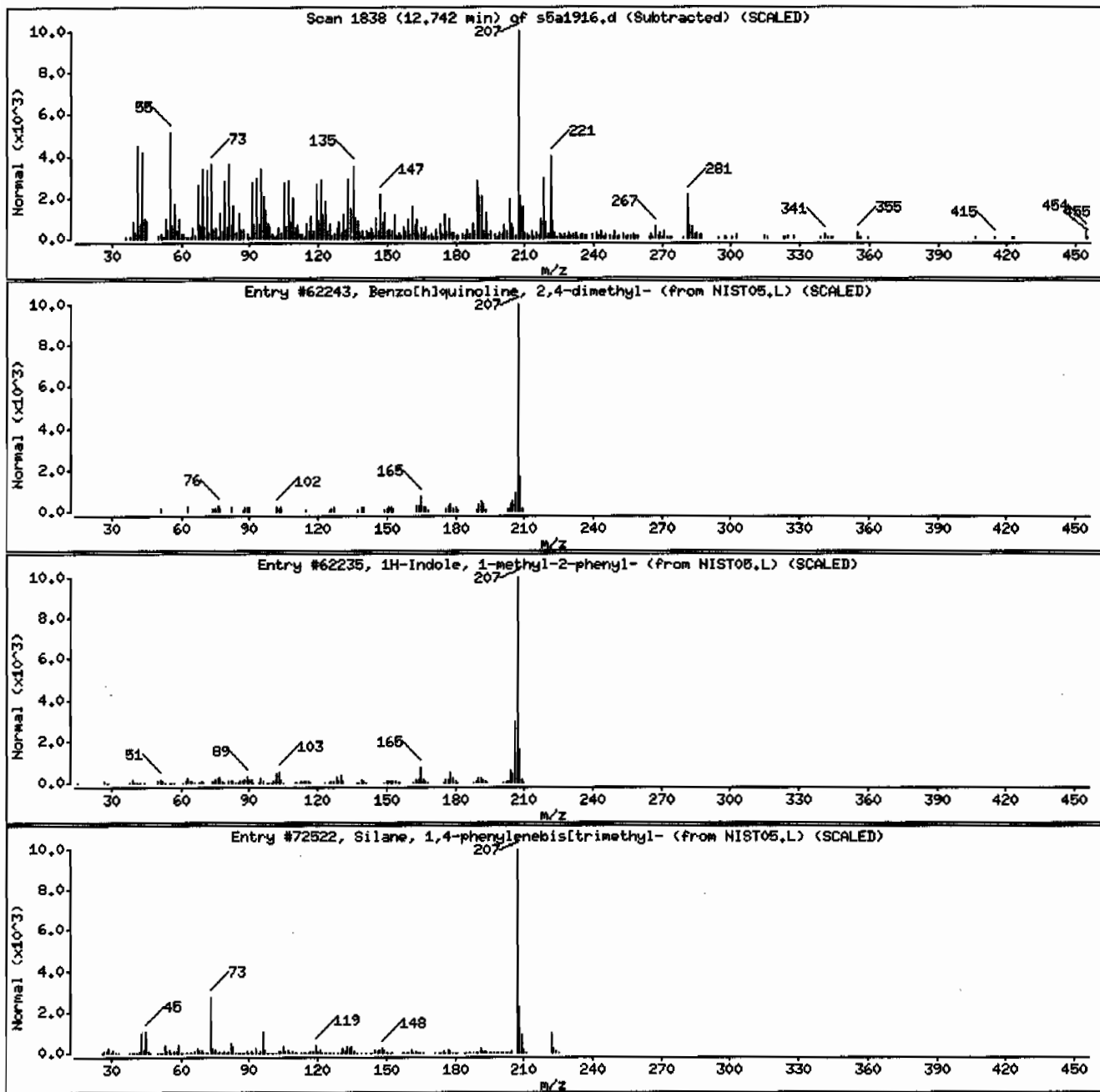
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62235	30	C15H13N	207
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	30	C12H22Si2	222



Date : 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011ISVH11ILANL

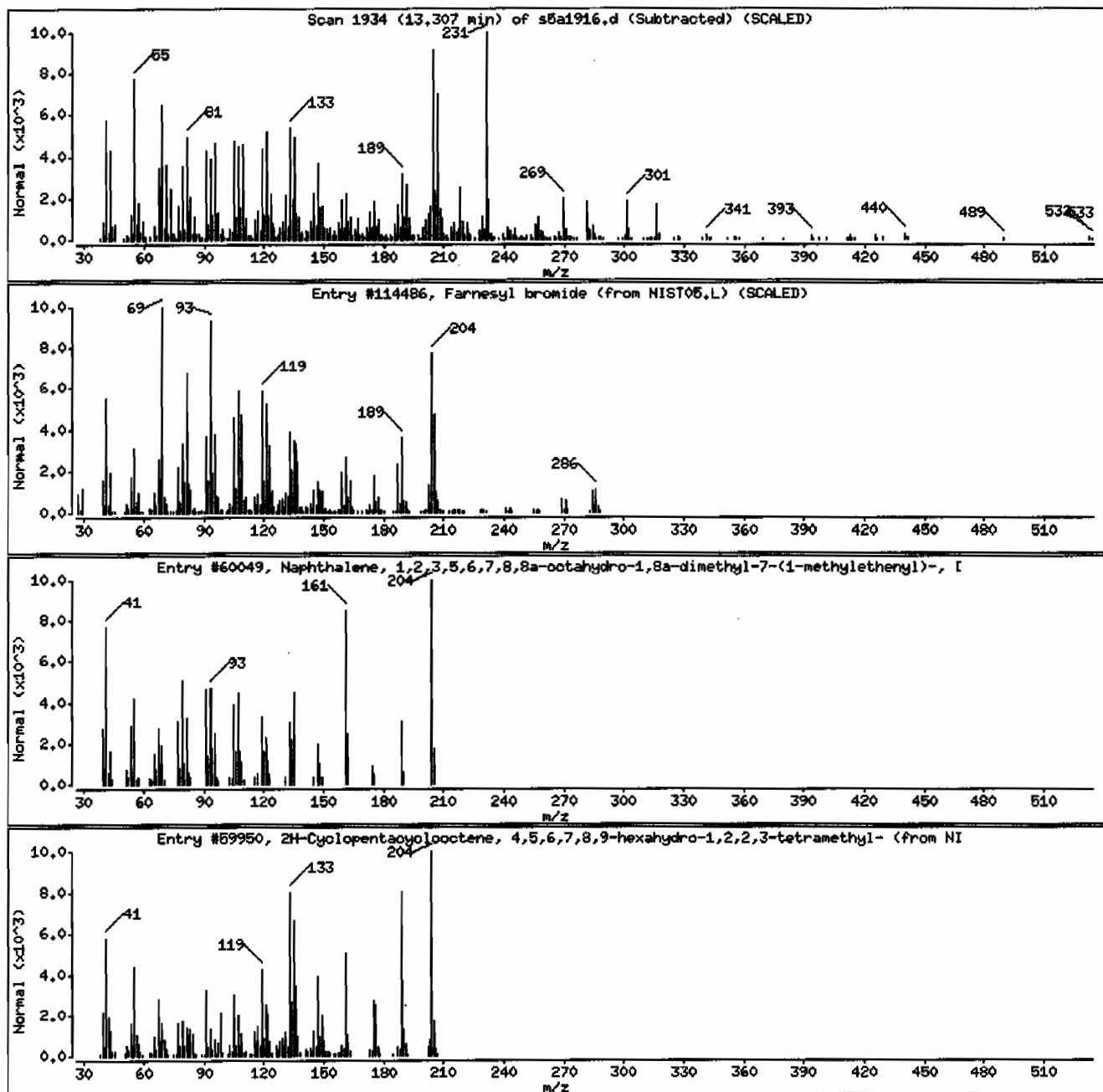
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Farnesyl bromide	6874-67-5	NIST05.L	114486	45	C ₁₅ H ₂₆ Br	284
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	38	C ₁₅ H ₂₄	204
2H-Cyclopentacyclooctene, 4,5,6,7,8,9-he	1000221-85-8	NIST05.L	59950	38	C ₁₅ H ₂₄	204



Date: 19-JAN-2010 16:08

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011SVH111LANL

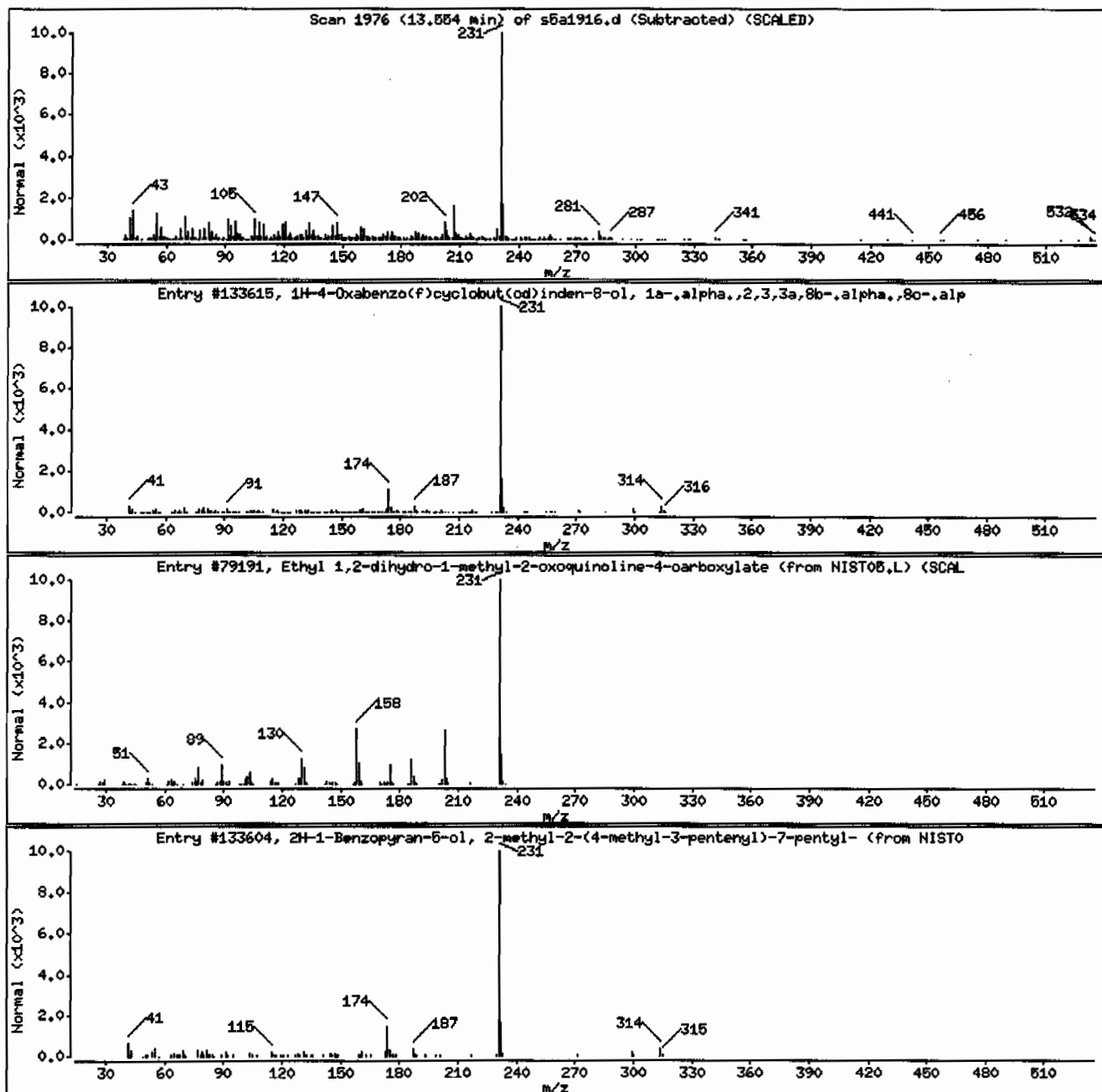
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-4-Oxabenzo(f)cyclobut(od)inden-8-ol,	21366-63-2	NIST05.L	133615	59	C21H30O2	314
Ethyl 1,2-dihydro-1-methyl-2-oxoquinolin	27330-23-0	NIST05.L	79191	59	C13H13N03	231
2H-1-Benzopyran-6-ol, 2-methyl-2-(4-meth	20675-51-8	NIST05.L	133604	59	C21H30O2	314



Date: 19-JAN-2010 16:05

Client ID: RE12-10-7263

Instrument: MSD5.i

Sample Info: 1244626008194284011ISVH11ILANL

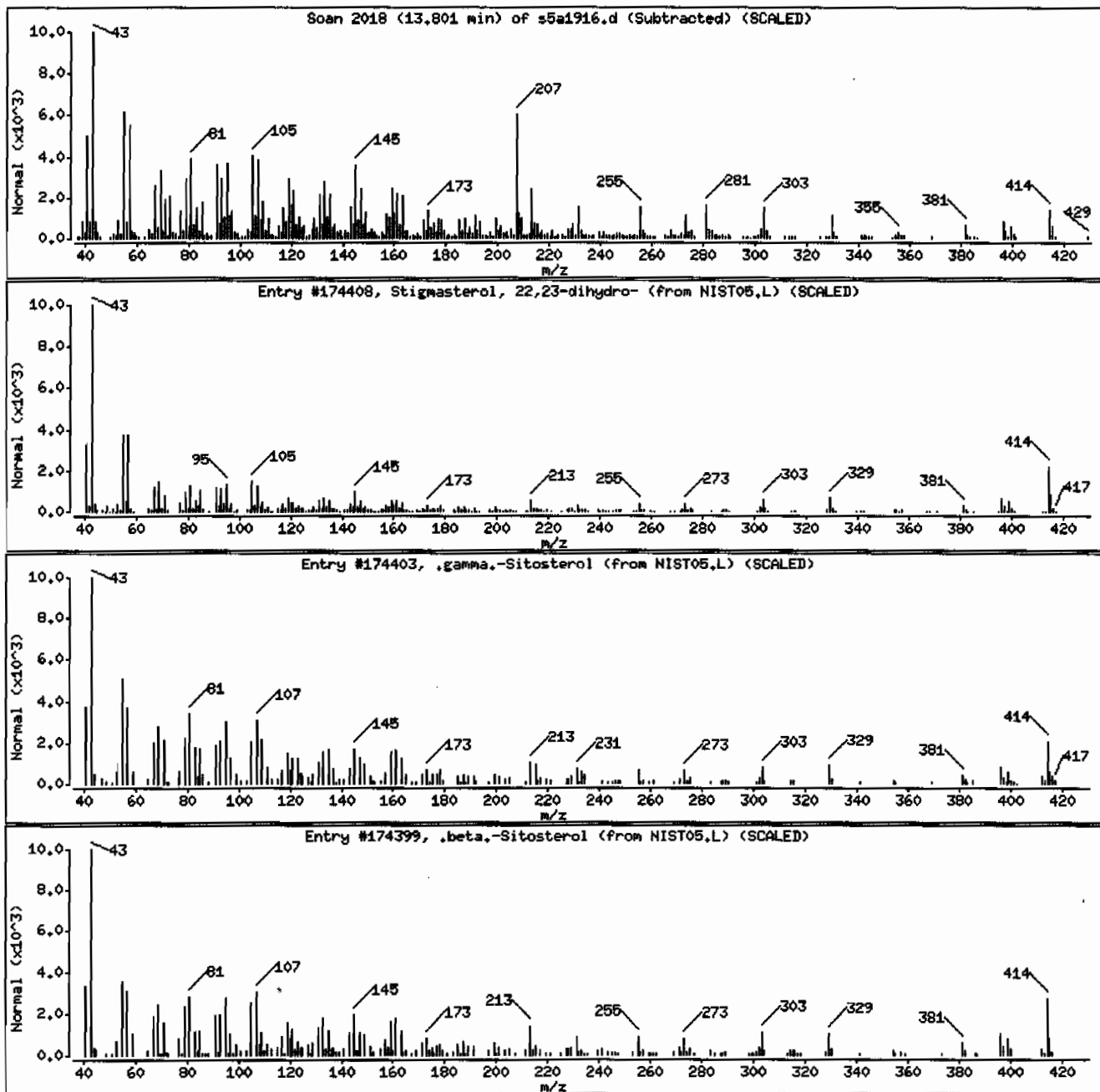
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	78	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	64	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	42	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1225
Lab Sample ID: 244626012

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 11
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7264
Batch ID: 942840
Run Date: 01/19/2010 17:37
Prep Date: 01/18/2010 20:10
Data File: s5a1920.d

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

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626012

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.J
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 11
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7264
Batch ID: 942840
Run Date: 01/19/2010 17:37
Prep Date: 01/18/2010 20:10
Data File: s5a1920.d

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	696	ug/kg		JA
79-92-5	Camphene	3.61	452	ug/kg	96	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626012	Date Received: 01/13/2010 08:55	%Moisture: 11
Client ID: RE12-10-7264	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 17:37	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1920.d	Aliquot: 30.04 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	4.58	315	ug/kg		J
	Unknown	9.01	480	ug/kg		J
	Unknown	9.03	384	ug/kg		J
	Unknown	9.83	337	ug/kg		J
	Unknown	9.86	618	ug/kg		J
	Unknown	9.93	477	ug/kg		J
	Unknown	9.97	271	ug/kg		J
	Unknown	10.02	414	ug/kg		J
3386-33-2	Octadecane, 1-chloro-	10.06	391	ug/kg	96	NJ
56221-91-1	13-Tetradecen-1-ol acetate	10.08	534	ug/kg	96	NJ
	Unknown	10.1	327	ug/kg		J
	Unknown	10.14	409	ug/kg		J
	Unknown	10.17	407	ug/kg		J
	Unknown	10.24	319	ug/kg		J
	Unknown	10.28	388	ug/kg		J
	Unknown	10.32	396	ug/kg		J
	Unknown	10.42	681	ug/kg		J
	Unknown	10.52	520	ug/kg		J
	Unknown	10.71	612	ug/kg		J
112-95-8	Eicosane	10.82	954	ug/kg	97	NJ
504-57-4	10-Nonadecanone	11.77	608	ug/kg	90	NJ
112-95-8	Eicosane	11.81	417	ug/kg	98	NJ
	Unknown	11.88	1390	ug/kg		J
	Unknown	12.06	642	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	12.93	489	ug/kg	91	NJ
	Unknown	13.29	568	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.81	908	ug/kg	97	NJ
	Unknown	14.29	404	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1920.d
Lab Smp Id: 244626012 Client Smp ID: RE12-10-7264
Inj Date : 19-JAN-2010 17:37
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626012|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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	30.04000	weight of sample
M	11.02270	% 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	3.931	3.940	(1.000)	539497	40.0000	
* 29 Naphthalene-d8		136	4.801	4.807	(1.000)	1870088	40.0000	
* 46 Acenaphthene-d10		164	6.060	6.063	(1.000)	1103031	40.0000	
* 67 Phenanthrene-d10		188	7.231	7.234	(1.000)	2024626	40.0000	
* 91 Chrysene-d12		240	9.648	9.646	(1.000)	1723347	40.0000	
* 98 Perylene-d12		264	11.336	11.331	(1.000)	1119575	40.0000	
\$ 3 2-Fluorophenol		112	3.125	3.121	(0.795)	944977	70.6287	2640
\$ 5 Phenol-d5		99	3.654	3.651	(0.930)	1165248	70.6203	2640
\$ 20 Nitrobenzene-d5		82	4.296	4.301	(0.895)	543264	37.8348	1420
\$ 39 2-Fluorobiphenyl		172	5.543	5.548	(0.915)	1110938	38.0732	1420
\$ 60 2,4,6-Tribromophenol		329	6.660	6.661	(1.099)	322200	91.9038	3440
\$ 81 p-Terphenyl-d14		244	8.613	8.611	(0.893)	1280988	47.3392	1770

ION RATIO REPORT

SV REPORT

Data file: s5a1920.d

Report Date: 01/20/2010 07:08

Lab. ID: 244626012

SampleType: SAMPLE

Injection Date: 19-JAN-2010 17:37

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626012|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	64409	3.65	3.72	80-120	100	(T)
93	105617	3.61	3.72	210-270	164	(QT)

6 Phenol		CAS#: 108-95-2				
94	49382	3.51	3.66	80-120	100	(T)
66	10814	3.51	3.66	14- 74	22	(T)
65	39391	3.51	3.66	0- 30	80	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	76453	4.30	4.18	80-120	100	(T)
42	47439	4.30	4.18	44-104	62	(T)

22 Isophorone		CAS#: 78-59-1				
82	547447	4.30	4.47	80-120	100	(T)
138	367	4.30	4.47	0- 49	0	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	31495	4.54	4.57	80-120	100	()
122	19058	4.54	4.57	39- 99	61	()
77	20354	4.54	4.57	34- 94	65	()

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	9942	5.79	5.66	80-120	100	(T)
164	803	5.79	5.66	4- 64	8	(T)
127	949	5.79	5.66	9- 69	10	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

43 Dimethylphthalate				CAS#: 131-11-3		
163	200330	6.06	5.82	80-120	100	(T)
164	1103031	6.06	5.82	0- 40	551	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	151727	6.06	5.88	80-120	100	(T)
63	2292	6.06	5.88	61-121	2	(QT)

48 2,4-Dinitrophenol				CAS#: 51-28-5		
184	238	6.05	6.08	80-120	100	()
154	3841	6.06	6.09	1306-1366	1610	(Q)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	151892	6.06	6.17	80-120	100	(T)
89	3579	6.06	6.17	47-107	2	(QT)
63	2292	6.06	6.17	23- 83	2	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	719	6.11	6.10	80-120	100	()
109	2021	6.14	6.10	41-101	281	(Q)
65	5851	6.12	6.10	72-132	813	(Q)

53 Fluorene				CAS#: 86-73-7		
166	18172	6.65	6.47	80-120	100	(T)
165	17970	6.65	6.47	56-116	99	(T)
167	6601	6.65	6.47	0- 44	36	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	105	6.52	6.49	80-120	100	()
105	4636	6.62	6.49	12- 72	4378	(QT)
51	1417	6.48	6.49	42-102	1339	(Q)

61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	22418	6.66	6.84	80-120	100	(T)
141	144098	6.65	6.83	43-103	643	(QT)
250	45062	6.66	6.84	68-128	201	(QT)

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	615	13.10	13.12	80-120	100	()
138	38324	13.15	13.12	1- 61	6231	(Q)

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	1124	13.15	13.13	80-120	100	()
139	5973	13.15	13.12	0- 30	531	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1920.d
Lab Smp Id: 244626012 Client Smp ID: RE12-10-7264
Inj Date : 19-JAN-2010 17:37
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626012|942840|1|SVM|1|LANL
Misc Info : |MSD8270 S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	11.02270	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3388694	40.000
* 29 Naphthalene-d8	4.801	4177255	40.000
* 91 Chrysene-d12	9.648	4691458	40.000
* 98 Perylene-d12	11.336	3384809	40.000

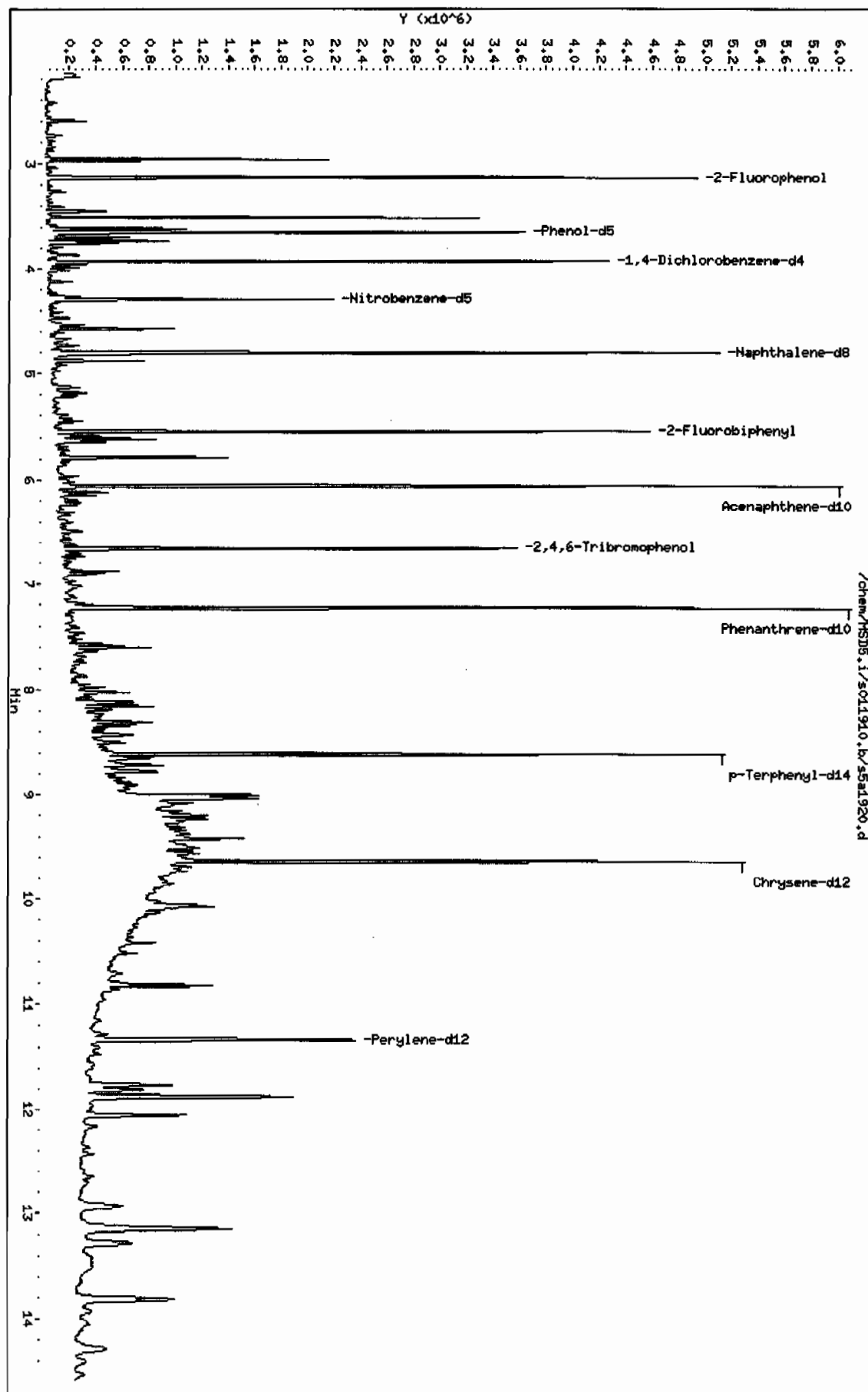
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.954	1575260	18.5943032	696	0		0	10
Camphene					CAS #: 79-92-5		
3.613	1024279	12.0905502	452	96	NIST05.L	15152	10
Unknown					CAS #:		
4.578	879764	8.42432447	315	0		0	29
Unknown					CAS #:		
9.007	1504023	12.8235054	480	0		0	91
Unknown					CAS #:		
9.031	1204225	10.2673844	384	0		0	91
Unknown					CAS #:		
9.831	1058006	9.02070288	337	0		0	91
Unknown					CAS #:		
9.860	1938042	16.5240080	618	0		0	91
Unknown					CAS #:		
9.931	1495761	12.7530548	477	0		0	91
Unknown					CAS #:		
9.972	849786	7.24538693	271	0		0	91
Unknown					CAS #:		
10.025	1298351	11.0699114	414	0		0	91
Octadecane, 1-chloro-					CAS #: 3386-33-2		
10.060	1226271	10.4553477	391	96	NIST05.L	117263	91
13-Tetradecen-1-ol acetate					CAS #: 56221-91-1		
10.078	1675036	14.2815799	534	96	NIST05.L	94752	91
Unknown					CAS #:		
10.101	1024615	8.73600118	327	0		0	91
Unknown					CAS #:		
10.136	1283492	10.9432257	409	0		0	91
Unknown					CAS #:		
10.166	1275093	10.8716111	407	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown				CAS #:			
10.236	1000346	8.52908258	319	0		0	91
Unknown				CAS #:			
10.278	1216179	10.3693042	388	0		0	91
Unknown				CAS #:			
10.325	1242503	10.5937447	396	0		0	91
Unknown				CAS #:			
10.419	2135851	18.2105499	681	0		0	91
Unknown				CAS #:			
10.519	1175522	13.8917307	520	0		0	98
Unknown				CAS #:			
10.713	1383841	16.3535499	612	0		0	98
Eicosane				CAS #: 112-95-8			
10.825	2157696	25.4985803	954	97	NIST05.L	113488	98
10-Nonadecanone				CAS #: 504-57-4			
11.766	1374743	16.2460237	608	90	NIST05.L	113462	98
Eicosane				CAS #: 112-95-8			
11.813	944291	11.1591670	417	98	NIST05.L	113492	98
Unknown				CAS #:			
11.877	3135209	37.0503390	1390	0		0	98
Unknown				CAS #:			
12.060	1452930	17.1700041	642	0		0	98
Pyridine-3-carboxamide, oxime, N-(2-trif				CAS #: 288246-53-7			
12.930	1106835	13.0800294	489	91	NIST05.L	112295	98
Unknown				CAS #:			
13.289	1284096	15.1748033	568	0		0	98
.gamma.-Sitosterol				CAS #: 83-47-6			
13.813	2054619	24.2804700	908	97	NIST05.L	174402	98
Unknown				CAS #:			
14.289	913216	10.7919278	404	0		0	98

Data File: /chem/MSDS.i/s011910.b/s5a1920.d
 Date: 19-JAN-2010 17:37
 Client ID: RE12-10-7264
 Sample Info: 1244626012194284011/SNH11/LANL
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-5MS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH11.LANL

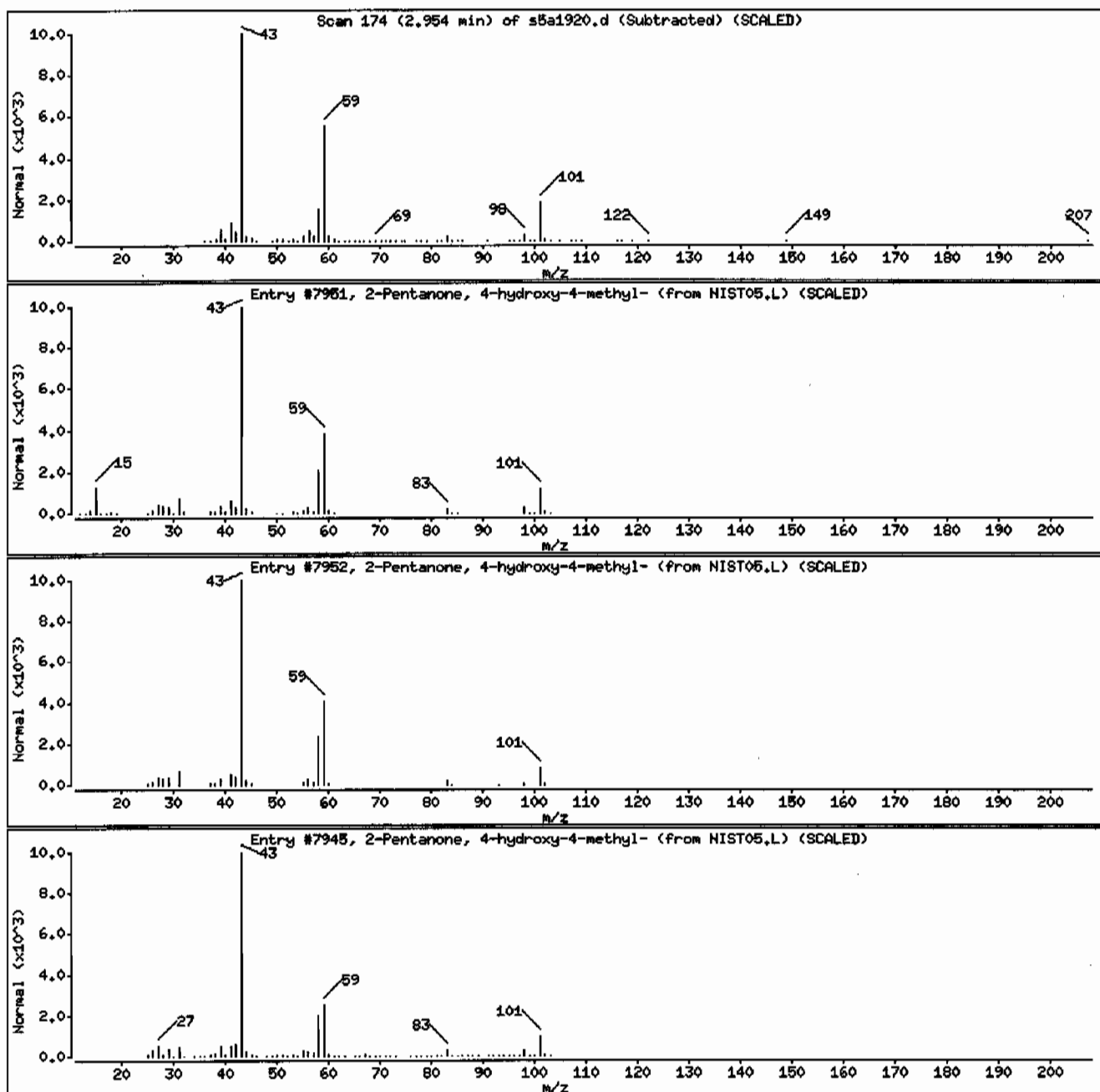
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	46	C6H12O2	116



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: HSD5.i

Sample Info: 1244626012194284011SVH111LANL

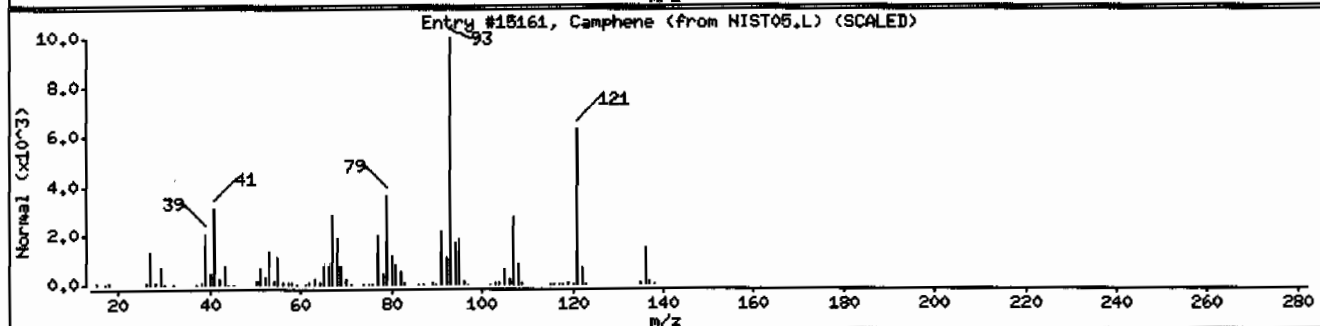
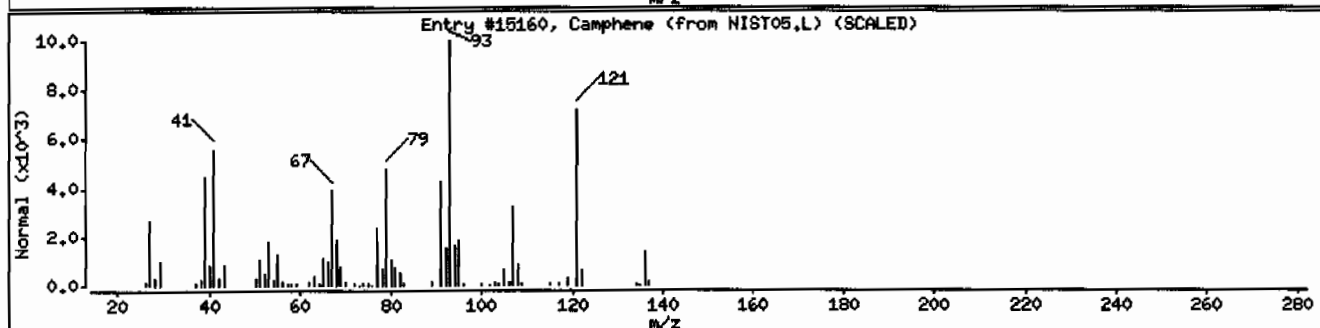
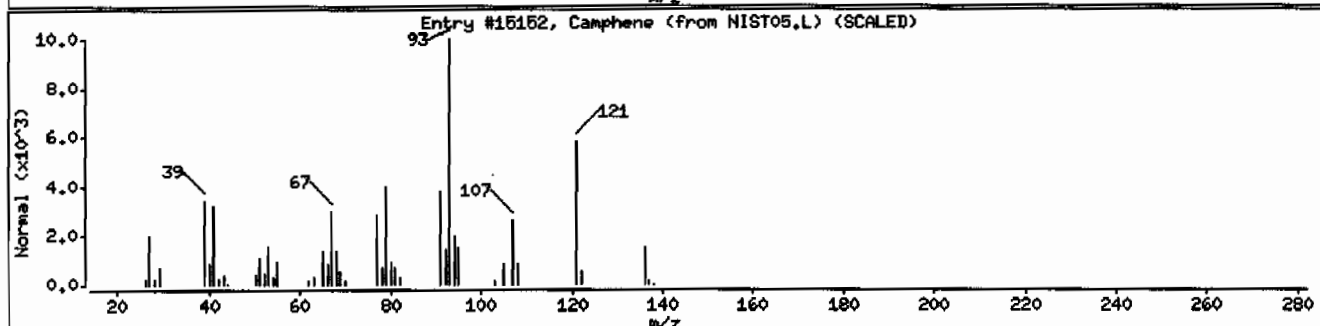
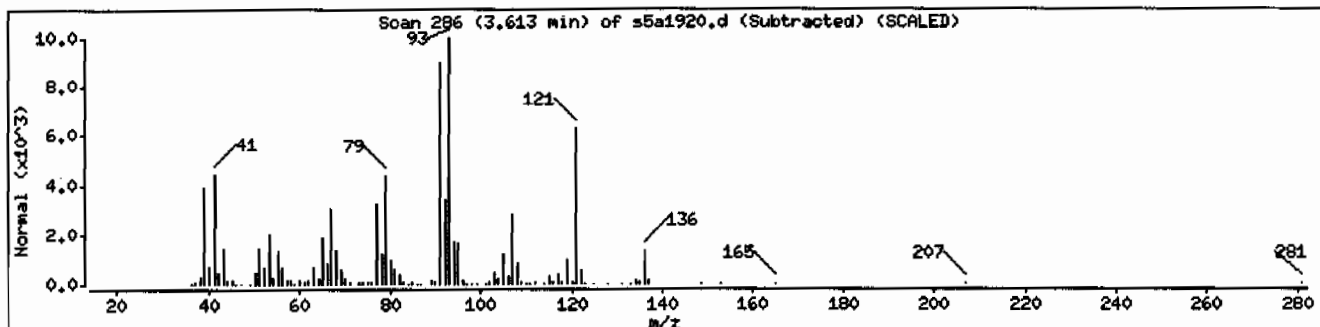
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Camphene	79-92-5	NIST05.L	15152	96	C ₁₀ H ₁₆	136
Camphene	79-92-5	NIST05.L	15160	96	C ₁₀ H ₁₆	136
Camphene	79-92-5	NIST05.L	15161	96	C ₁₀ H ₁₆	136



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: I244626012194284011SVH11ILANL

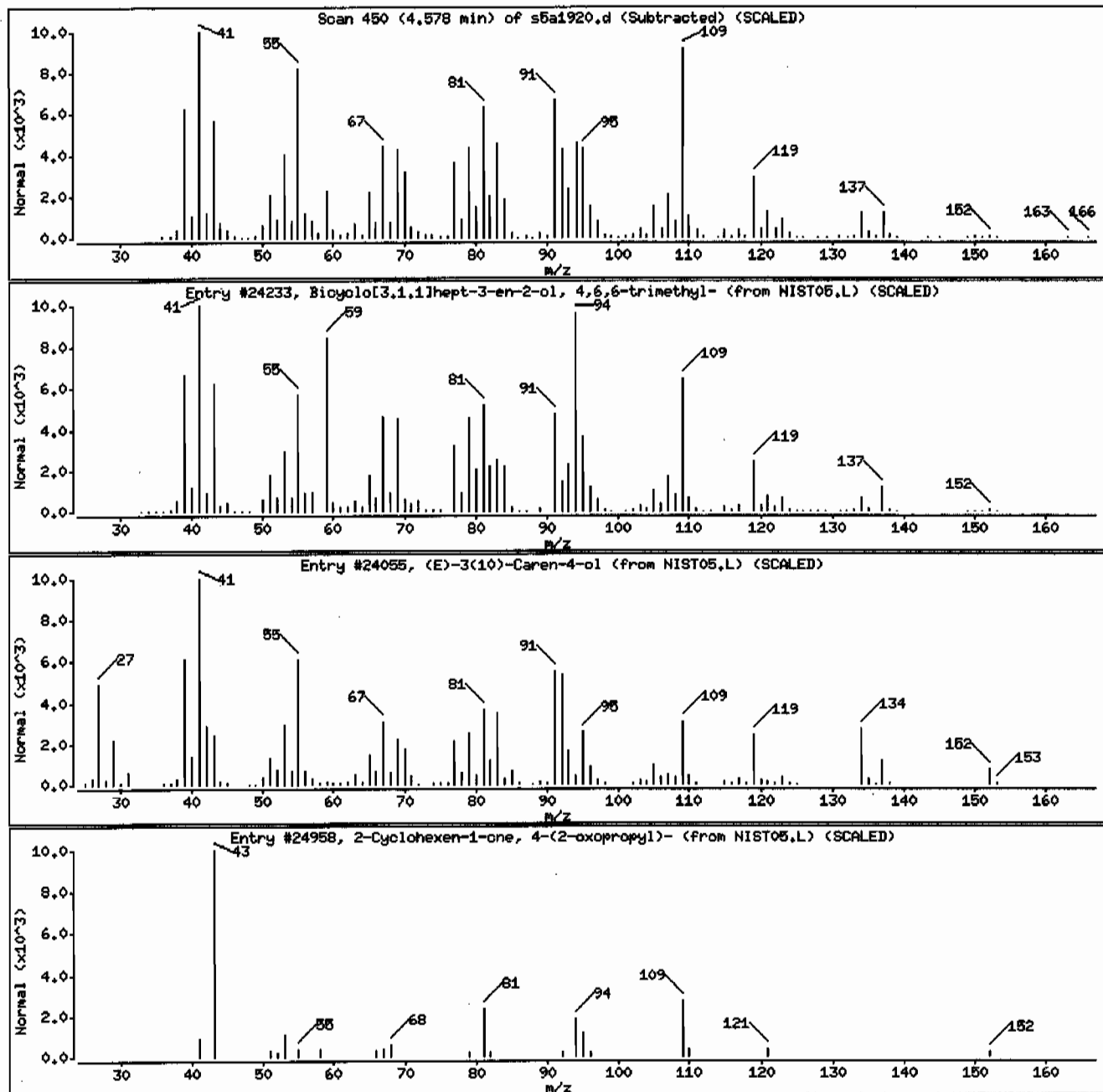
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3.1.1]hept-3-en-2-ol, 4,6,6-trimethyl-	473-67-6	NIST05.L	24233	56	C10H16O	152
(E)-3(10)-Caren-4-ol	1753-35-1	NIST05.L	24055	53	C10H16O	152
2-Cyclohexen-1-one, 4-(2-oxopropyl)-	56051-94-6	NIST05.L	24958	50	C9H12O2	152



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH11ILANL

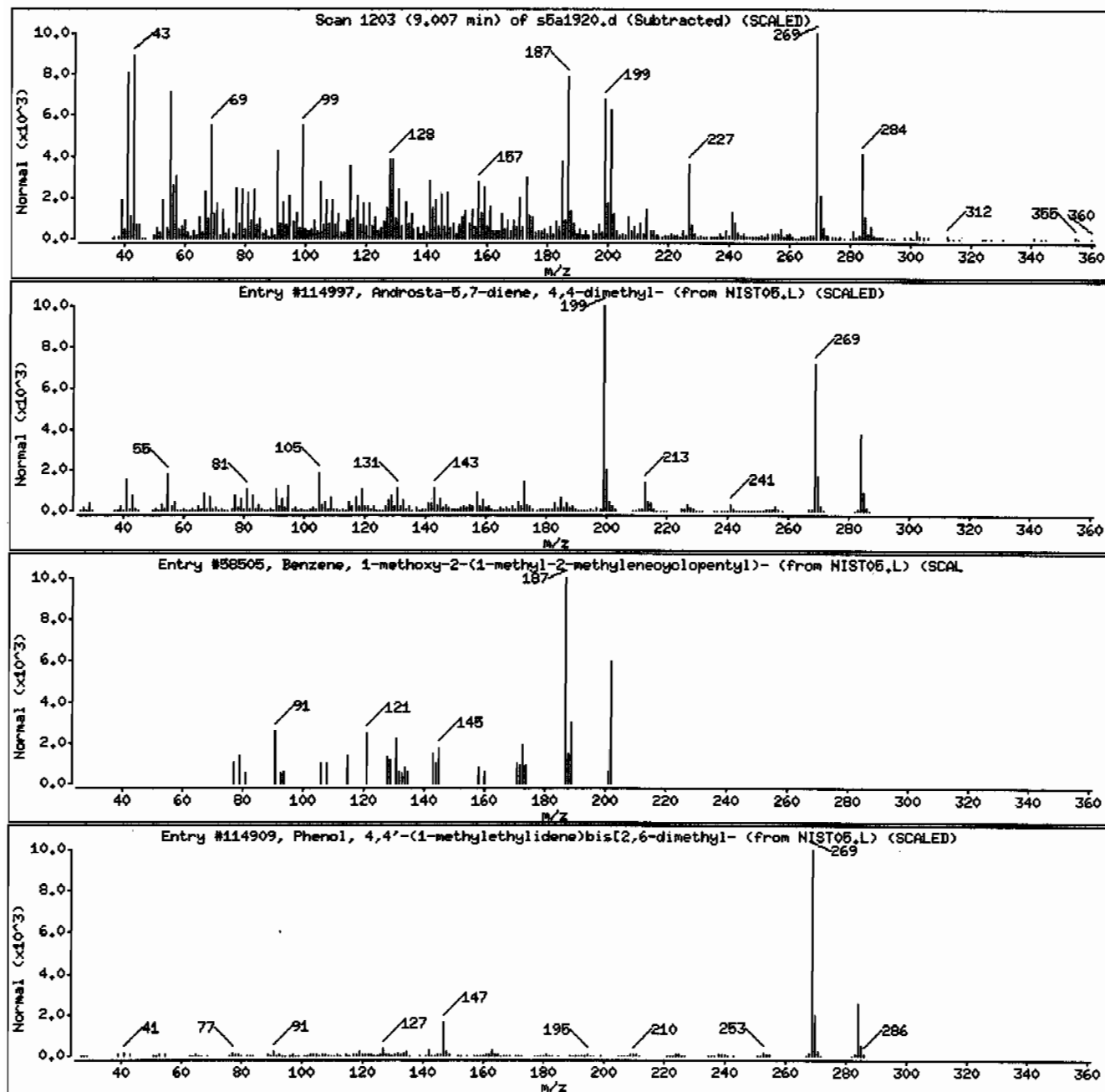
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Androsta-5,7-diene, 4,4-dimethyl-	1000194-15-2	NIST05.L	114997	72	C21H32	284
Benzene, 1-methoxy-2-(1-methyl-2-methyle	39877-94-6	NIST05.L	58505	41	C14H18O	202
Phenol, 4,4'-(1-methylethylidene)bis[2,6	5613-46-7	NIST05.L	114909	38	C19H24O2	284



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVMI1ILANL

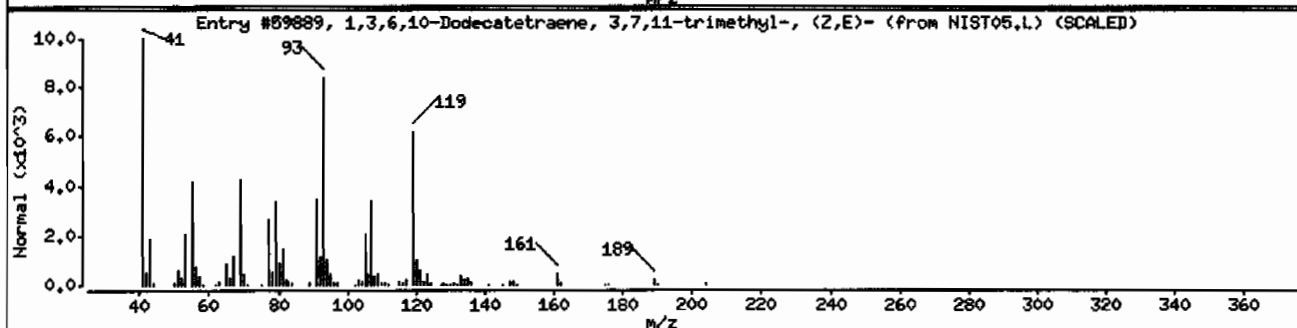
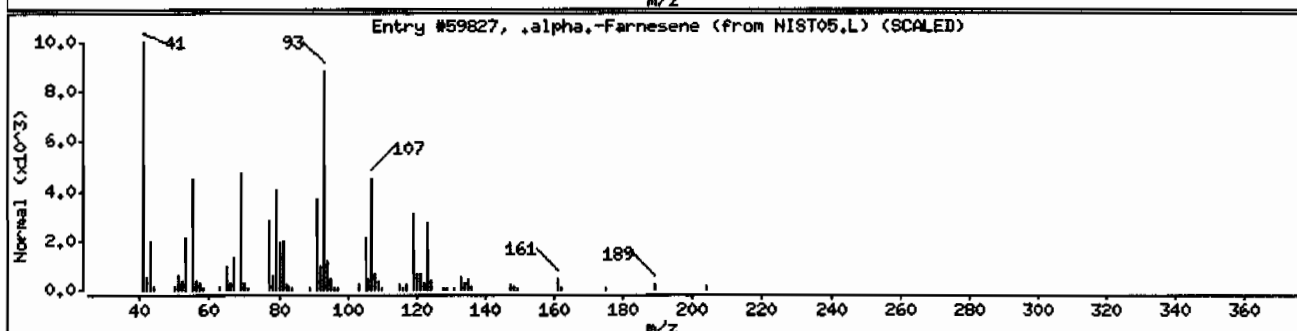
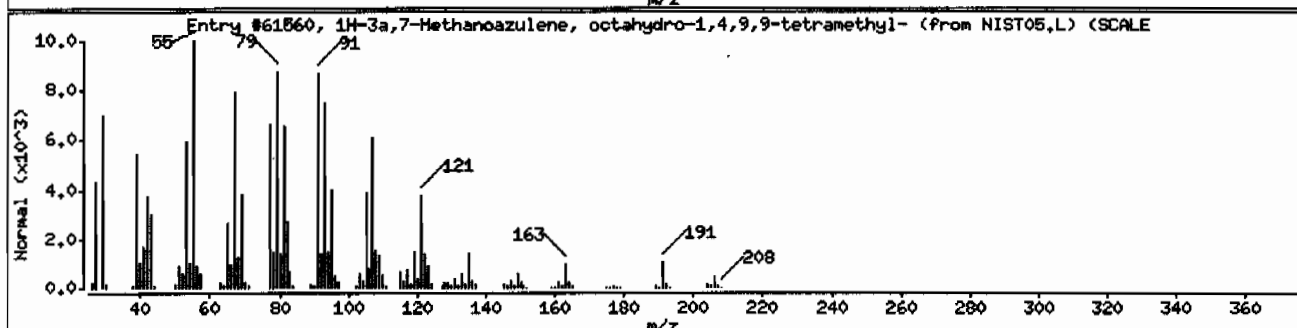
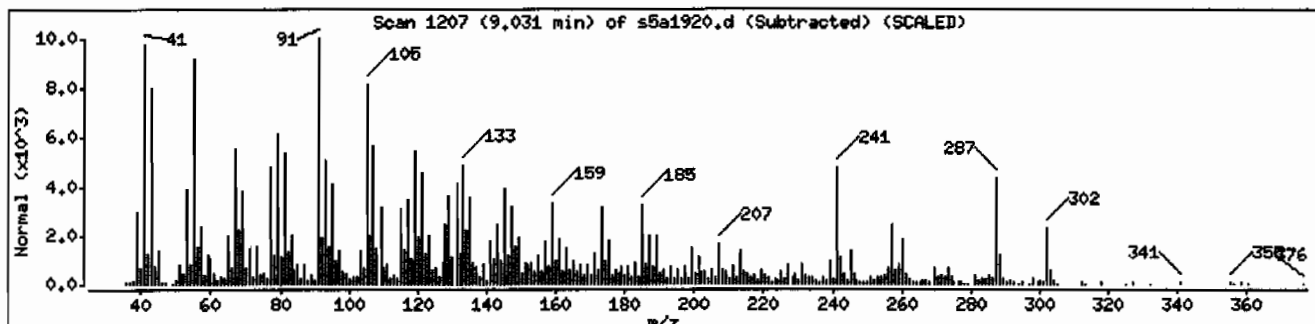
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-3a,7-Methanoazulene, octahydro-1,4,9,	25491-20-7	NIST05.L	61560	42	C15H26	206
.alpha.-Farnesene	502-61-4	NIST05.L	59827	41	C15H24	204
1,3,6,10-Dodecatetraene, 3,7,11-trimethy	26560-14-5	NIST05.L	59889	38	C15H24	204



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVMI1ILANL

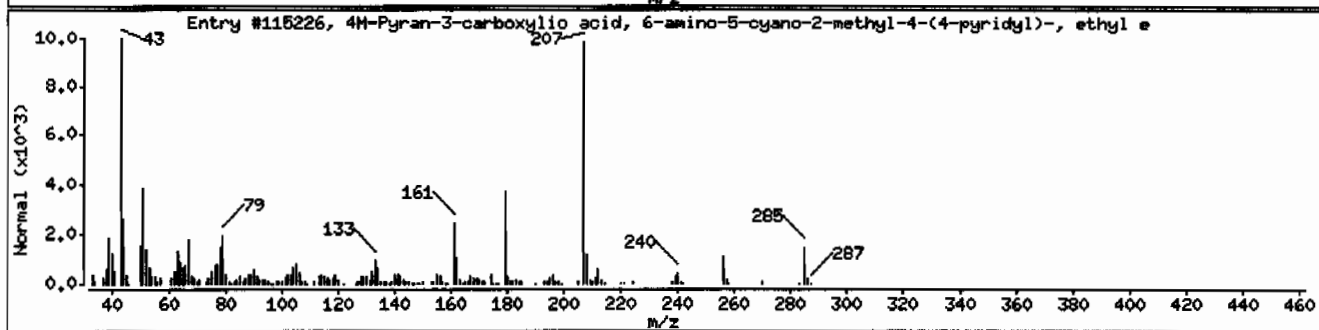
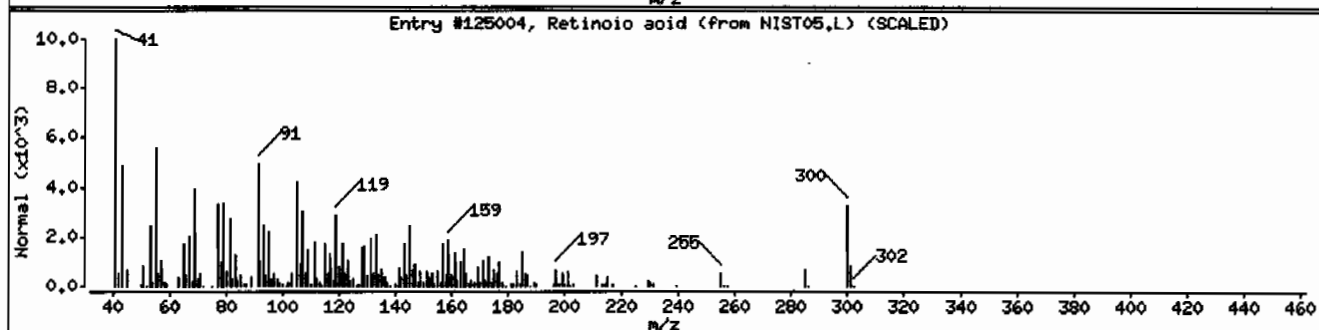
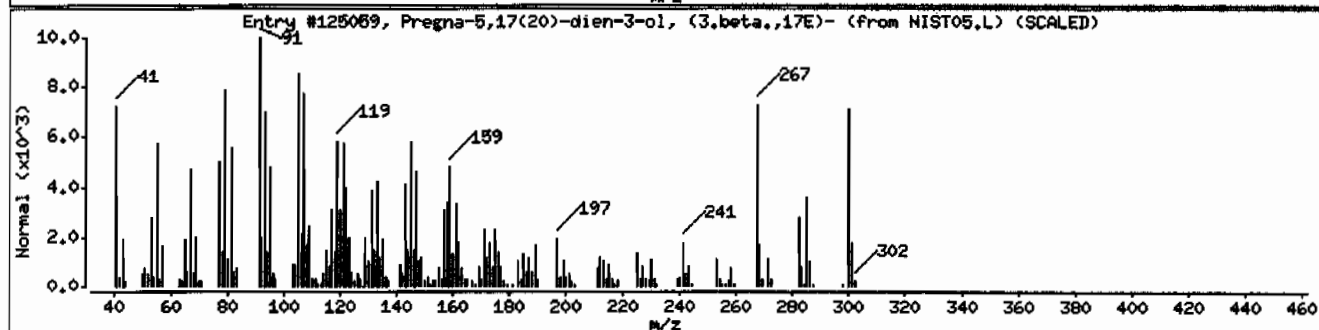
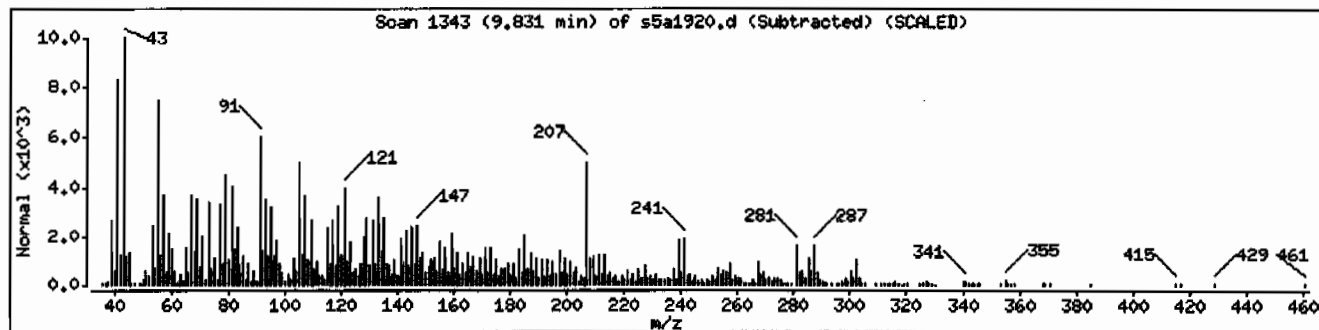
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pregna-5,17(20)-dien-3-ol, (3.beta.,17E)	1159-25-7	NIST05.L	125069	45	C21H32O	300
Retinoic acid	302-79-4	NIST05.L	125004	25	C20H28O2	300
4H-Pyran-3-carboxylic acid, 6-amino-5-ox	227177-00-6	NIST05.L	115226	11	C10H10N3O3	286



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011ISVH11ILANL

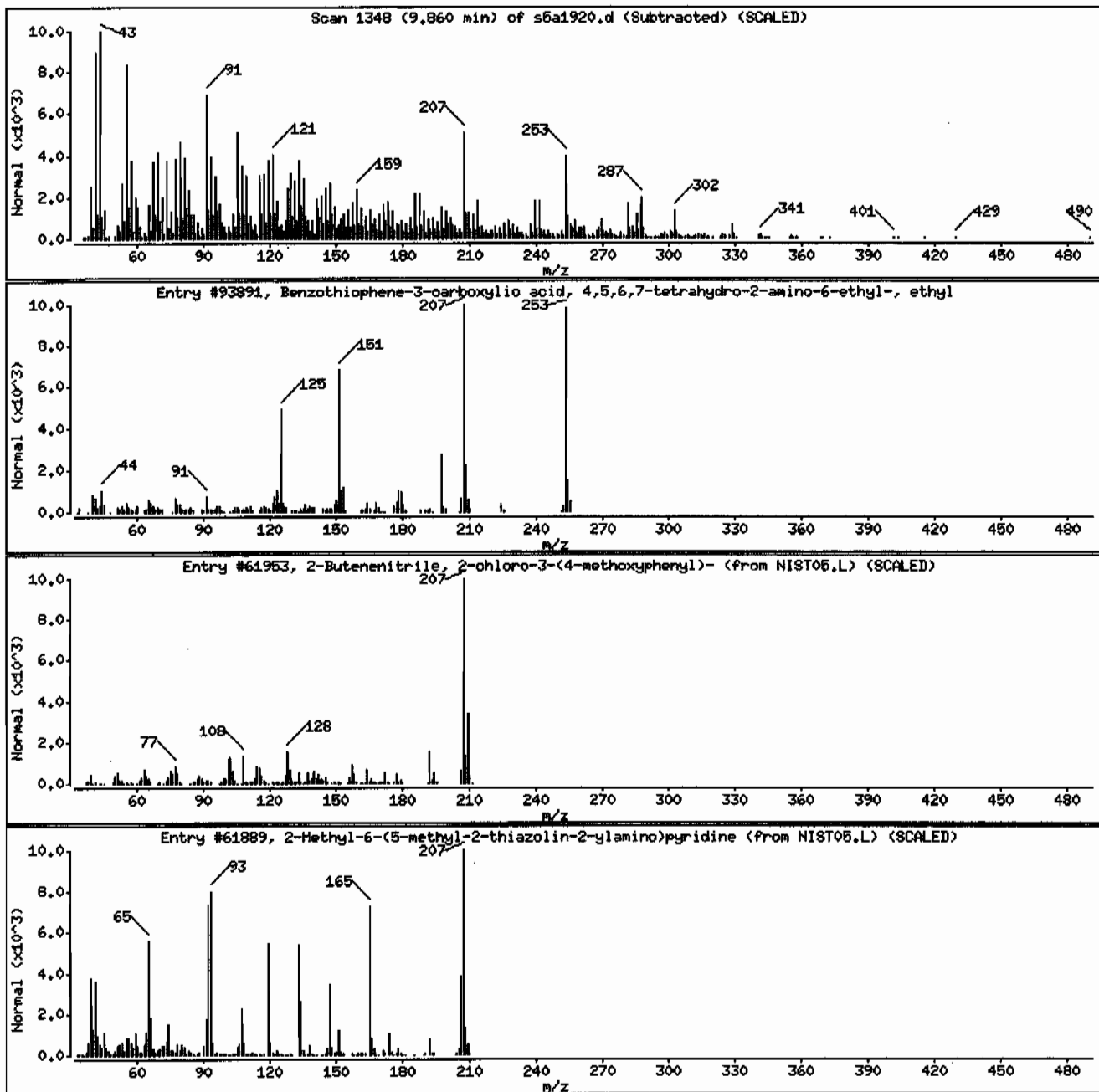
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	64	C13H9NO2S	253
2-Butenenitrile, 2-chloro-3-(4-methoxyph	1000305-66-7	NIST05.L	61953	25	C11H10ClNO	207
2-Methyl-6-(5-methyl-2-thiazolin-2-ylam	339352-50-0	NIST05.L	61889	25	C10H13N3S	207



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch

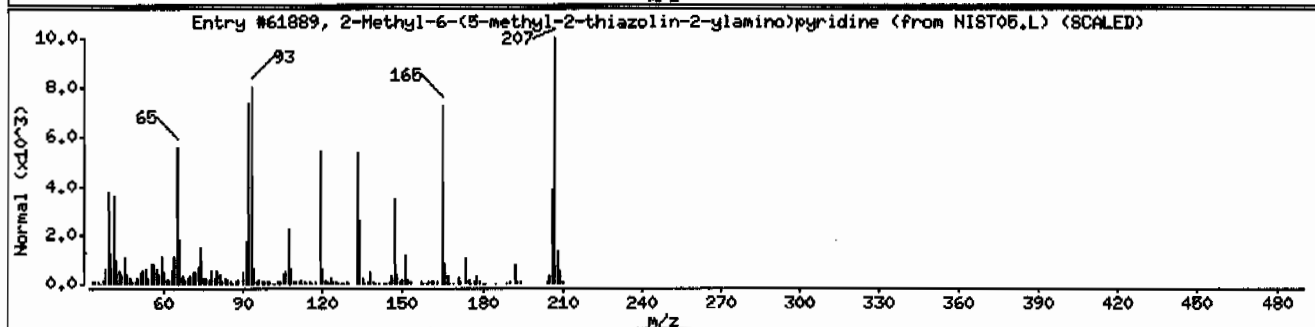
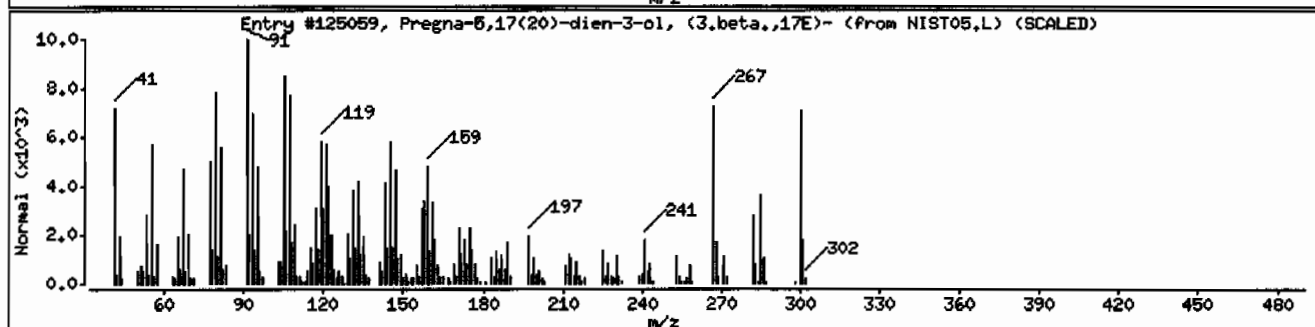
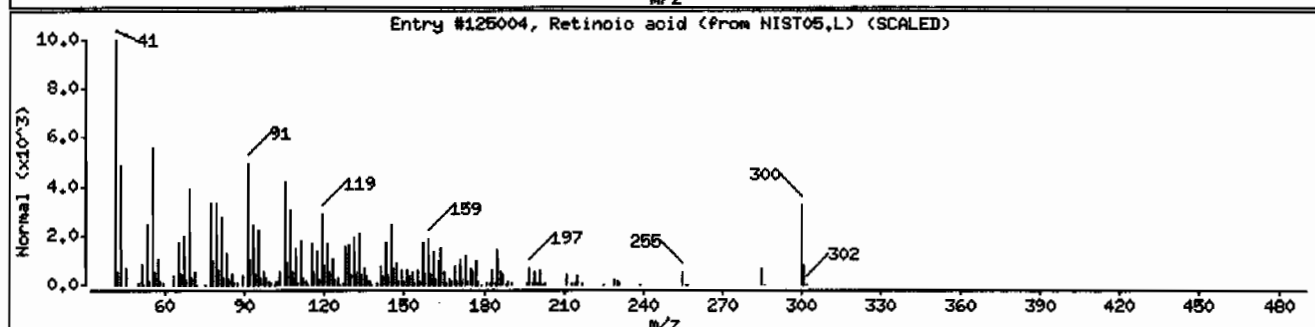
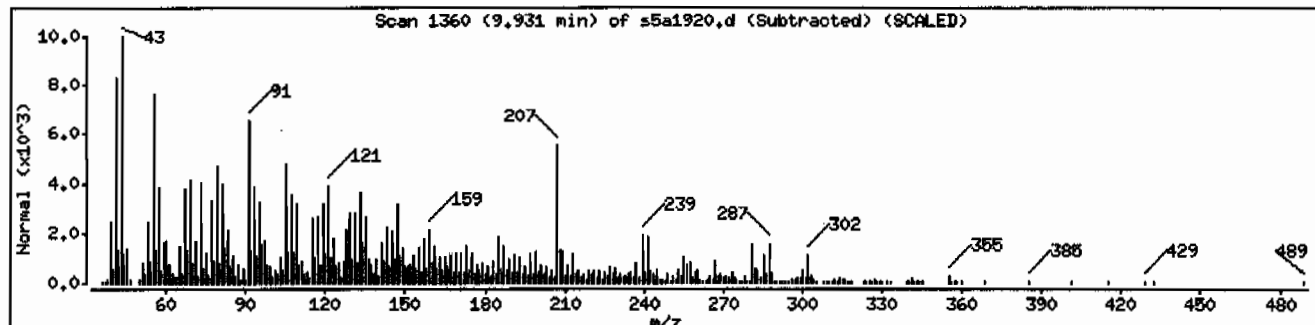
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Retinoic acid

Pregna-5,17(20)-dien-3-ol, (3.beta.,17E)

2-Methyl-6-(5-methyl-2-thiazolin-2-ylamino)

CAS Number	Library	Entry	Quality	Formula	Weight
302-79-4	NIST05.L	125004	46	C20H28O2	300
1159-25-7	NIST05.L	125059	35	C21H32O	300
339352-50-0	NIST05.L	61889	20	C10H13N3S	207



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: HSD5.i

Sample Info: 1244626012194284011SVH111LANL

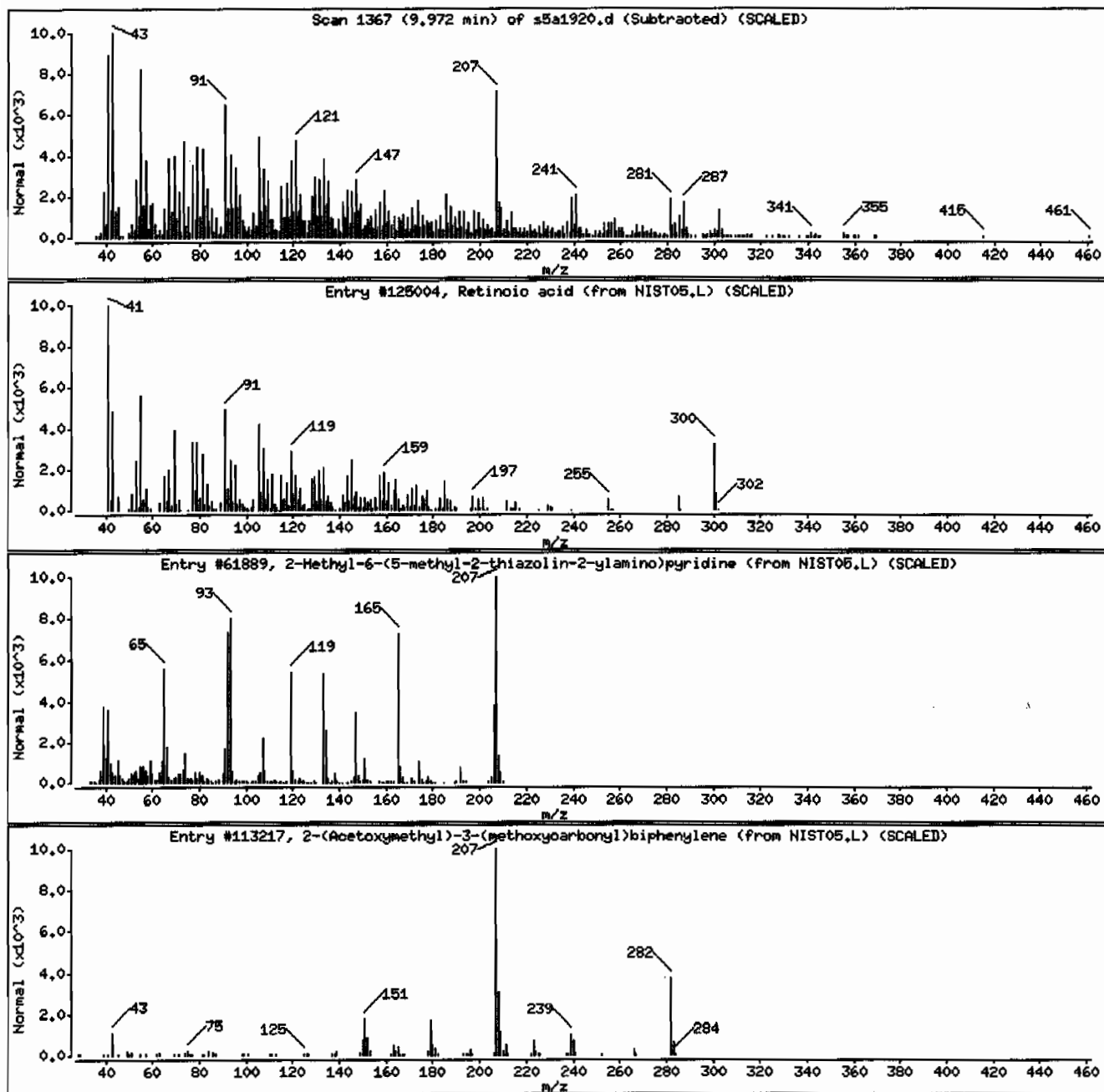
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	46	C ₂₀ H ₂₈ O ₂	300
2-Methyl-6-(5-methyl-2-thiazolin-2-ylamino)	339352-50-0	NIST05.L	61889	38	C ₁₀ H ₁₃ N ₃ S	207
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	25	C ₁₇ H ₁₄ O ₄	282



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011ISVH11ILANL

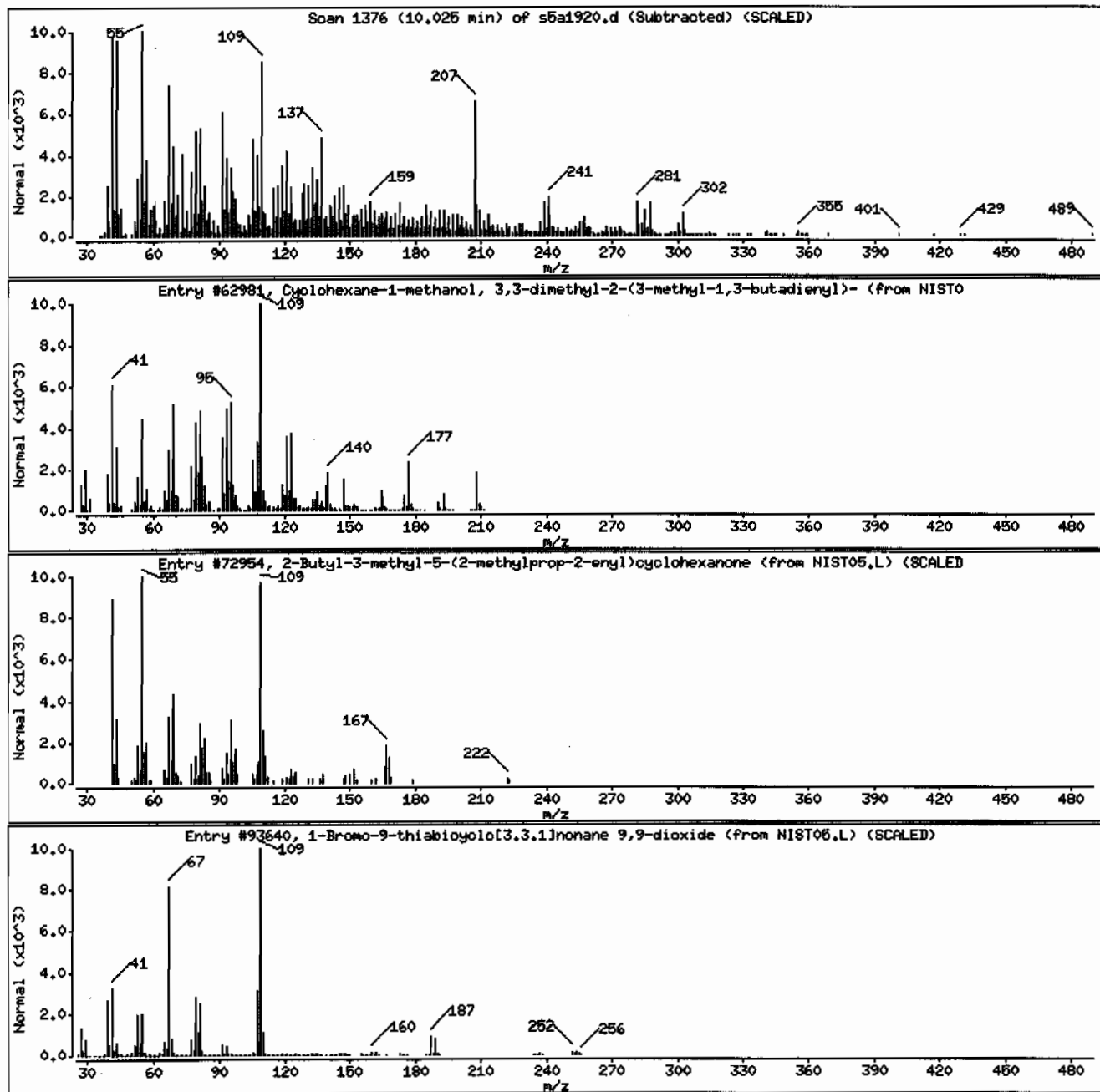
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	50	C14H24O	208
2-Butyl-3-methyl-5-(2-methylprop-2-enyl)	1000281-10-7	NIST05.L	72954	45	C15H26O	222
1-Bromo-9-thiabicyclo[3.3.1]nonane 9,9-d	19669-16-0	NIST05.L	93640	45	C8H13BrO2S	252



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011ISVM111LANL

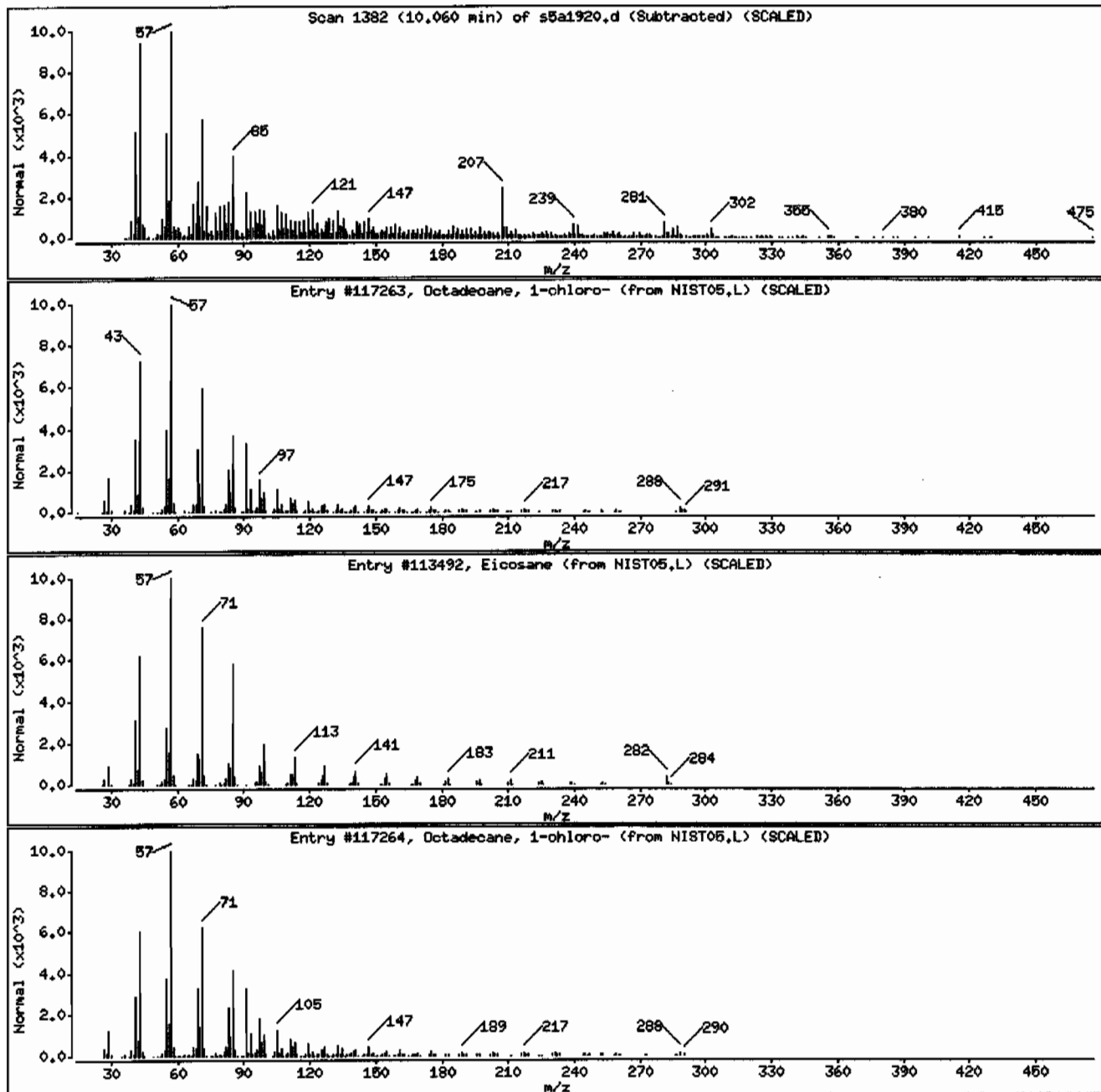
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117263	96	C18H37Cl	288
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	92	C18H37Cl	288



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.1

Sample Info: 1244626012194284011SVMI1ILANL

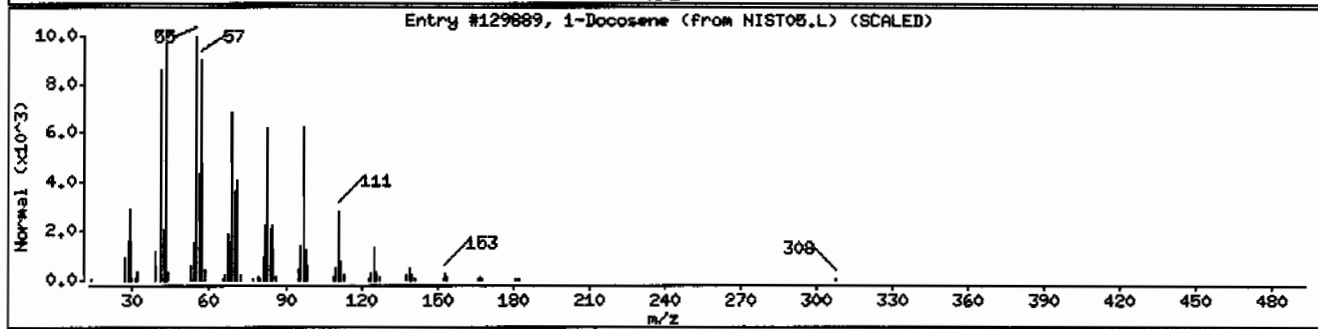
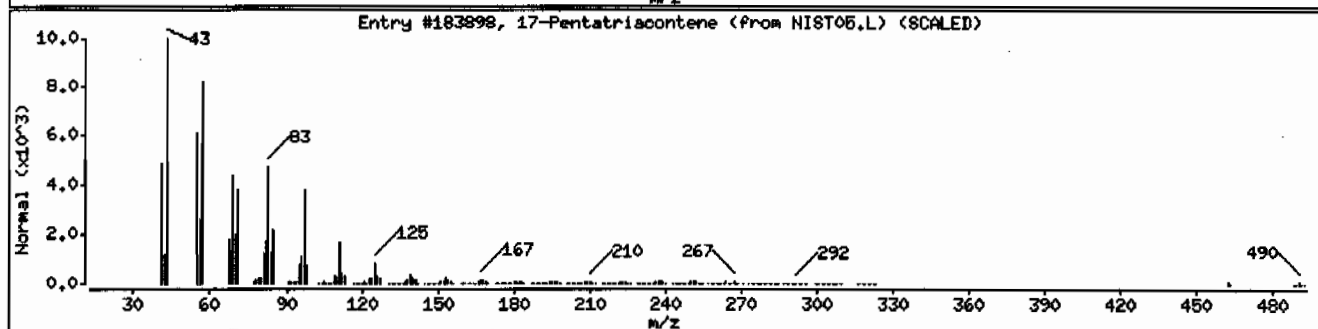
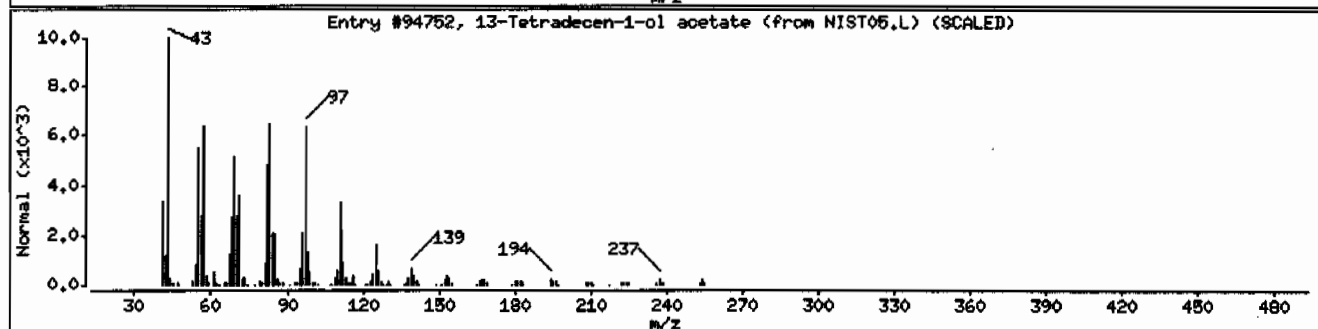
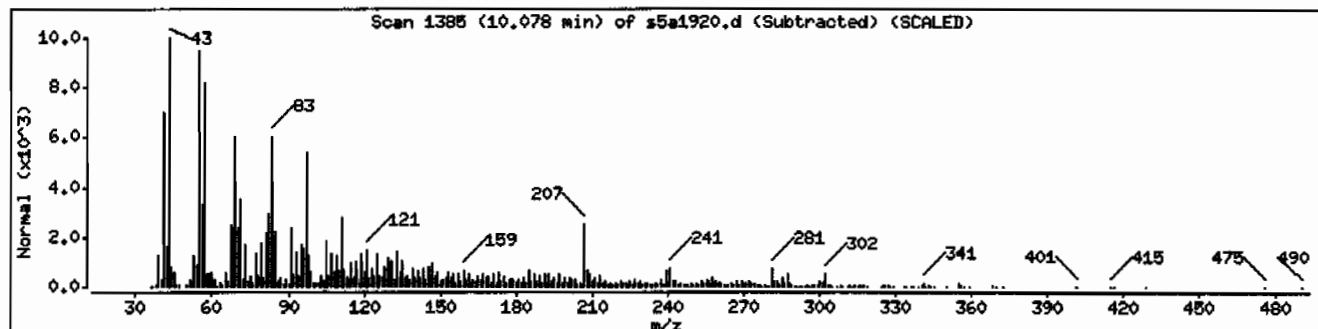
Volume Injected (uL): 0.5

Operator: RMB

Column phase: 3&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	96	C16H30O2	254
17-Pentatriacontene	6971-40-0	NIST05.L	183898	96	C35H70	491
1-Docosene	1599-67-3	NIST05.L	129889	94	C22H44	308



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.1

Sample Info: 12446260121942840111SVH111LANL

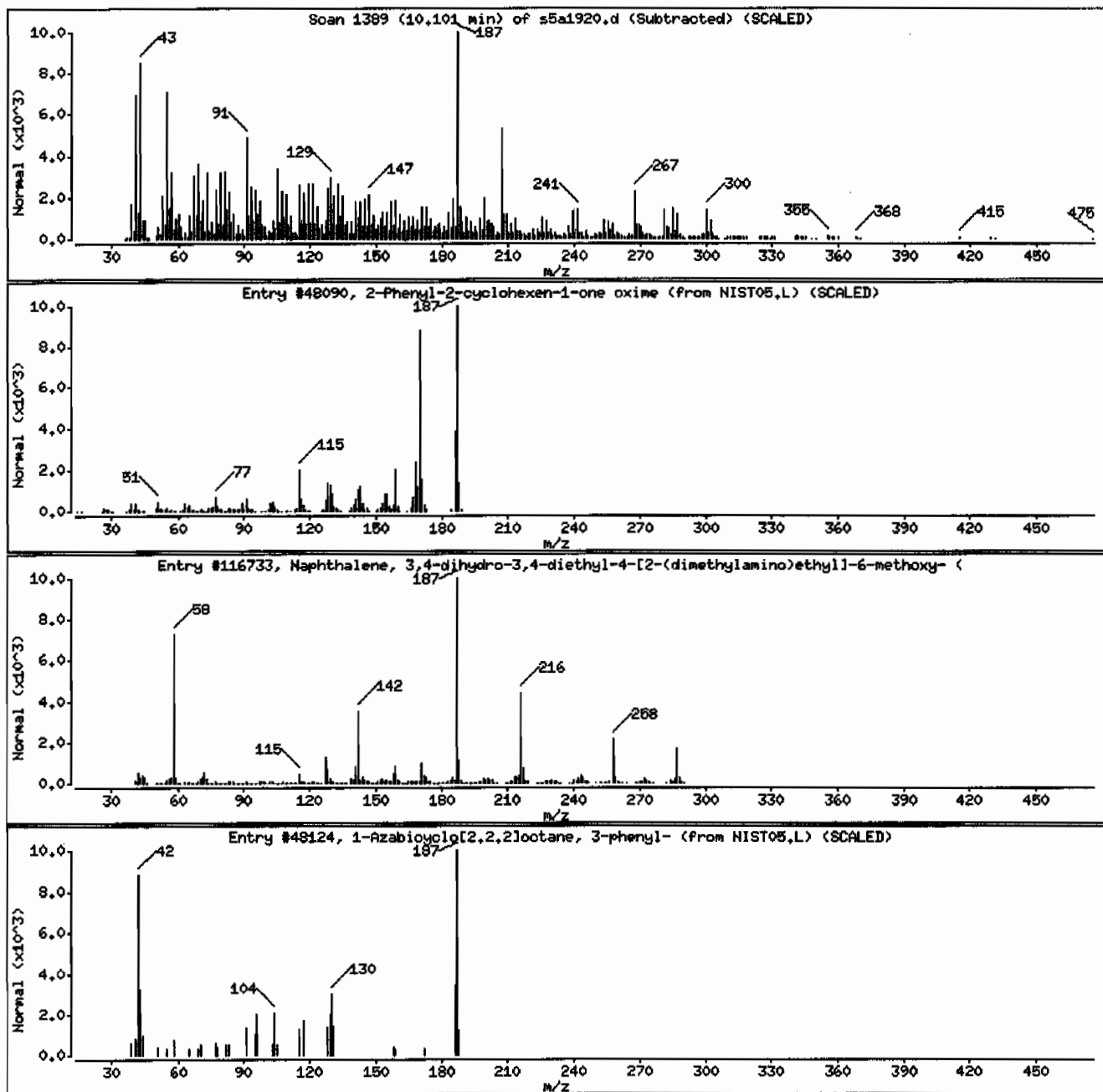
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenyl-2-cyclohexen-1-one oxime	56923-15-0	NIST05.L	48090	42	C ₁₂ H ₁₃ NO	187
Naphthalene, 3,4-dihydro-3,4-diethyl-4-[	1000128-54-5	NIST05.L	116733	38	C ₁₉ H ₂₉ NO	287
1-Azabicyclo[2.2.2]octane, 3-phenyl-	58822-88-1	NIST05.L	48124	38	C ₁₃ H ₁₇ N	187



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.1

Sample Info: 1244626012194284011SVH11ILANL

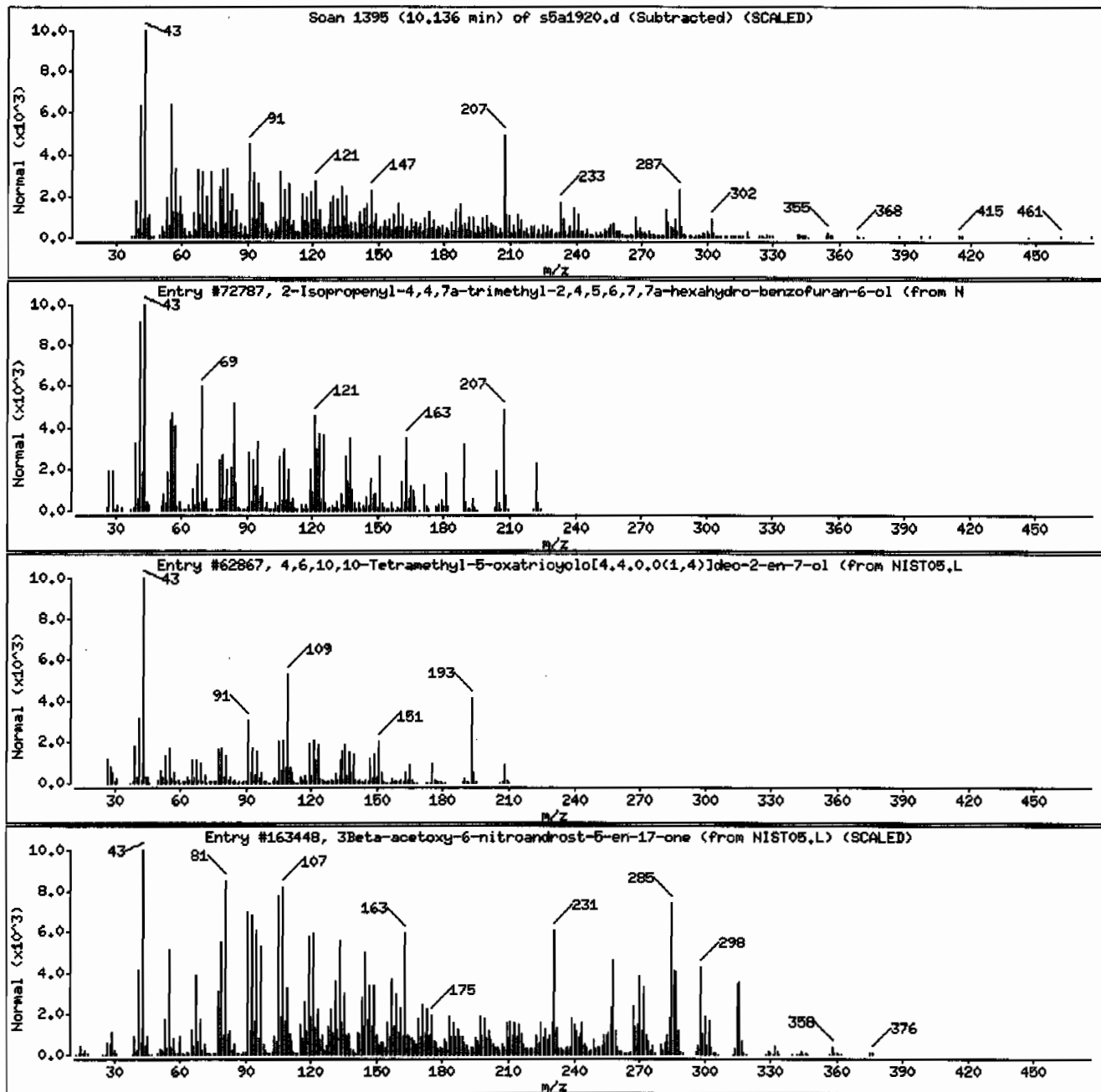
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Isopropenyl-4,4,7a-trimethyl-2,4,5,6,7	1000189-13-5	NIST05.L	72787	25	C ₁₄ H ₂₂ O ₂	222
4,6,10,10-Tetramethyl-5-oxatricyclo[4.4.	97371-50-1	NIST05.L	62867	25	C ₁₃ H ₂₀ O ₂	208
3Beta-acetoxy-6-nitroandrost-5-en-17-one	31559-86-1	NIST05.L	163448	15	C ₂₁ H ₂₉ N ₂ O ₅	376



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: HSD5.i

Sample Info: 1244626012194284011ISVM111LANL

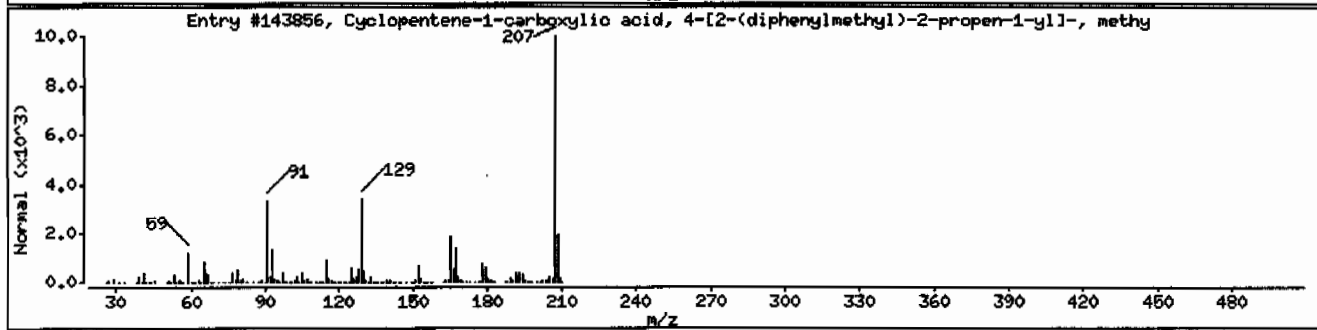
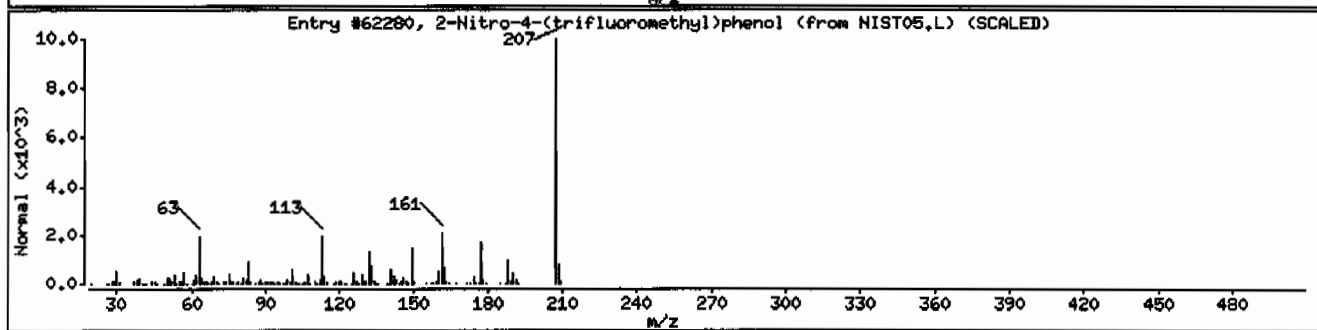
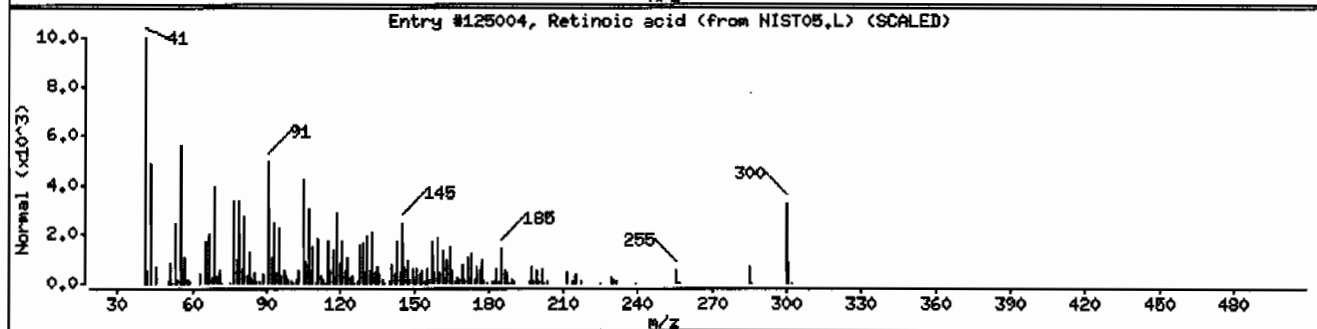
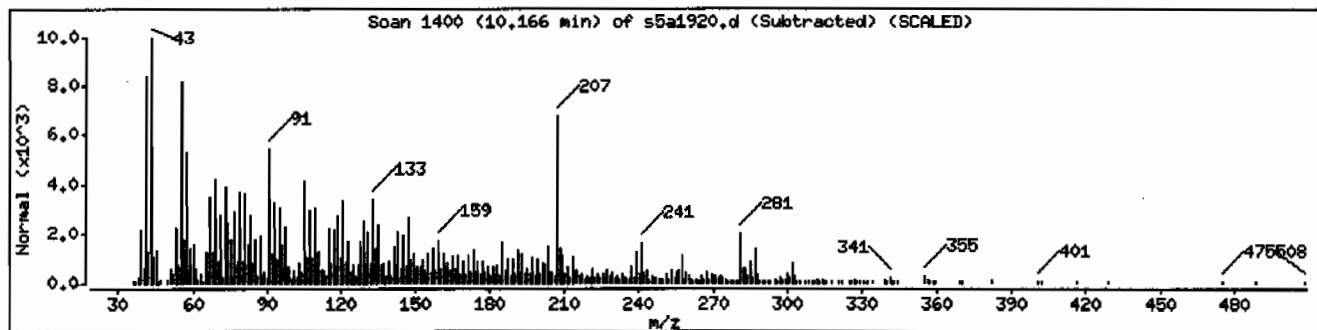
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	53	C ₂₀ H ₂₈ O ₂	300
2-Nitro-4-(trifluoromethyl)phenol	400-99-7	NIST05.L	62280	25	C ₇ H ₄ F ₃ N ₃ O ₃	207
Cyclopentene-1-carboxylic acid, 4-[2-(di	1000159-40-6	NIST05.L	143856	25	C ₂₃ H ₂₄ O ₂	332



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH111LANL

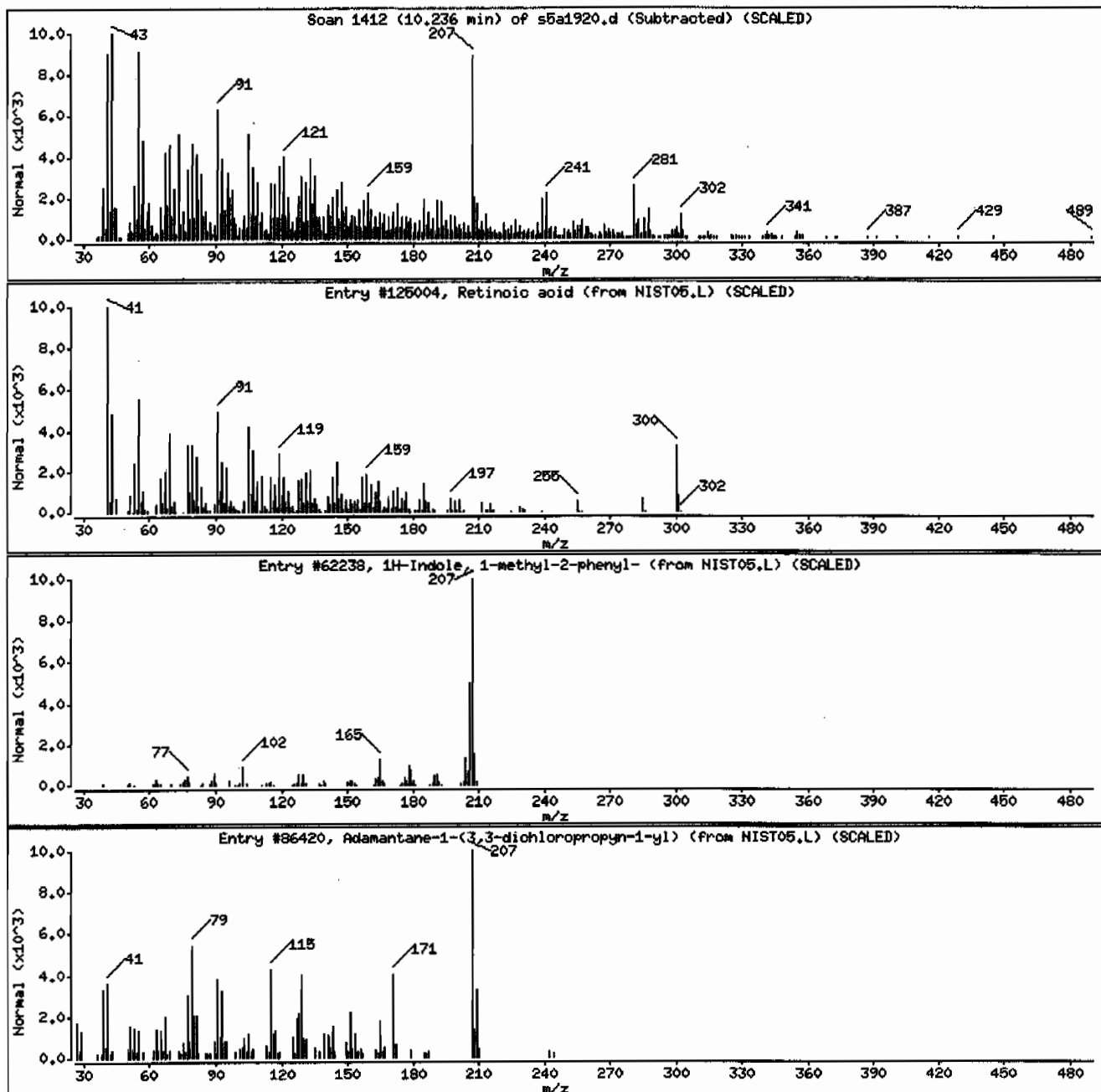
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Retinoic acid	302-79-4	NIST05.L	125004	56	C ₂₀ H ₂₈ O ₂	300
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62238	38	C ₁₅ H ₁₃ N	207
Adamantane-1-(3,3-dichloropropyn-1-yl)	139185-48-1	NIST05.L	86420	30	C ₁₃ H ₁₆ Cl ₂	242



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: HSD5.i

Sample Info: I244626012194284011ISVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

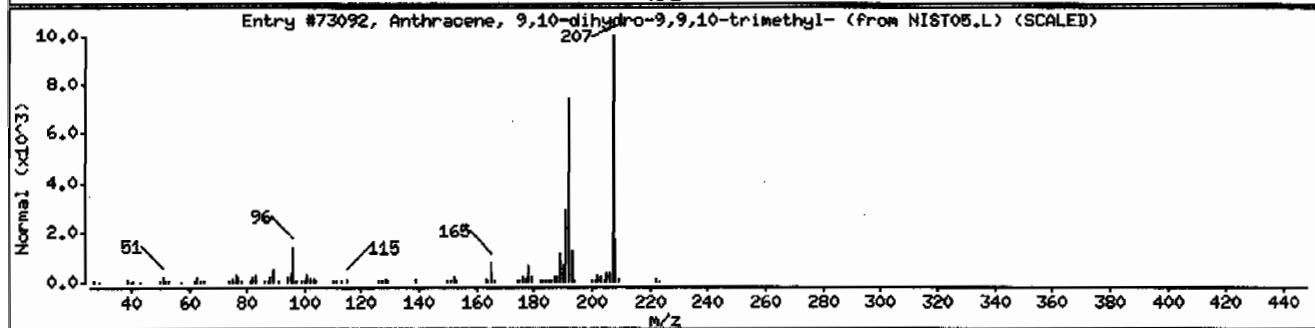
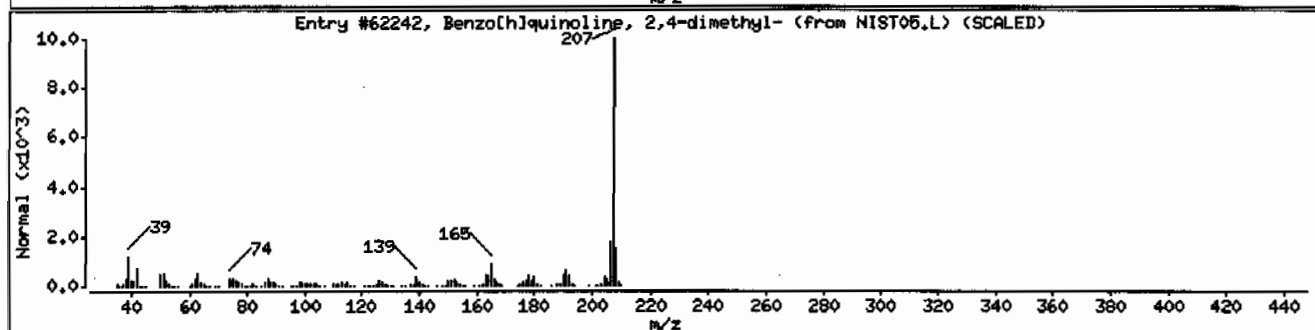
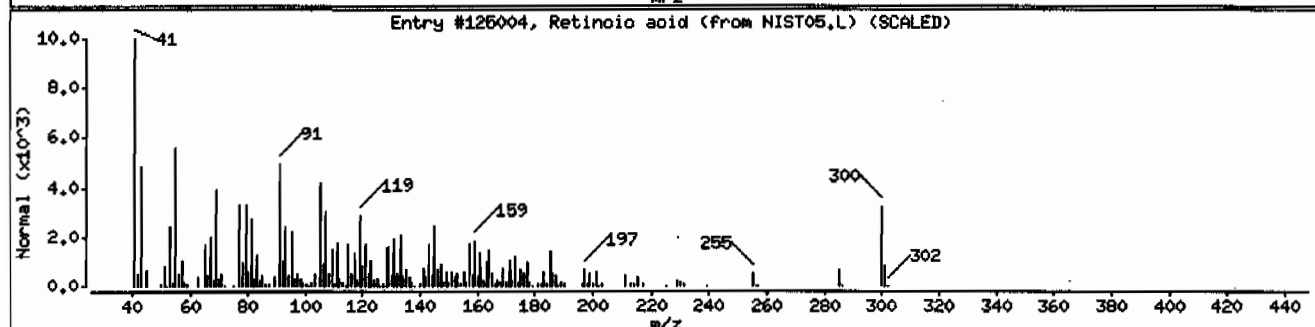
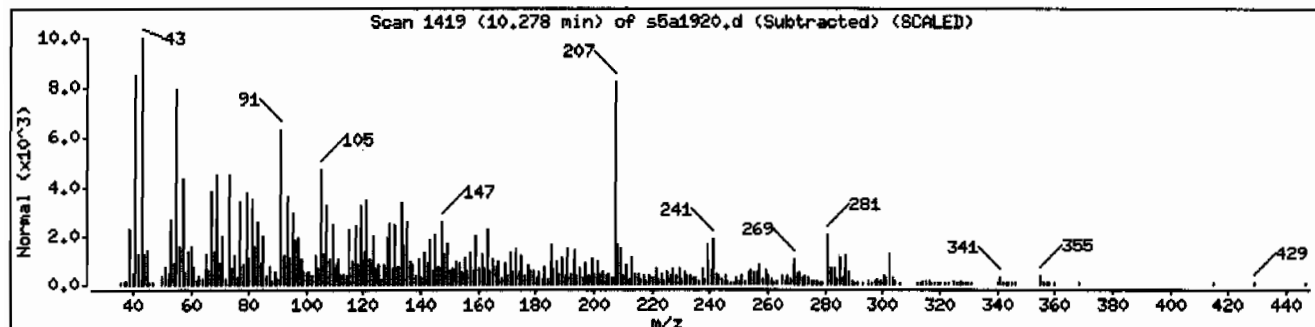
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Retinoic acid	302-79-4	NIST05.L	126004	46	C ₂₀ H ₂₈ O ₂	300
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62242	42	C ₁₅ H ₁₃ N	207
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	38	C ₁₇ H ₁₈	222



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: HSD5.i

Sample Info: 1244626012194284011SVH111LANL

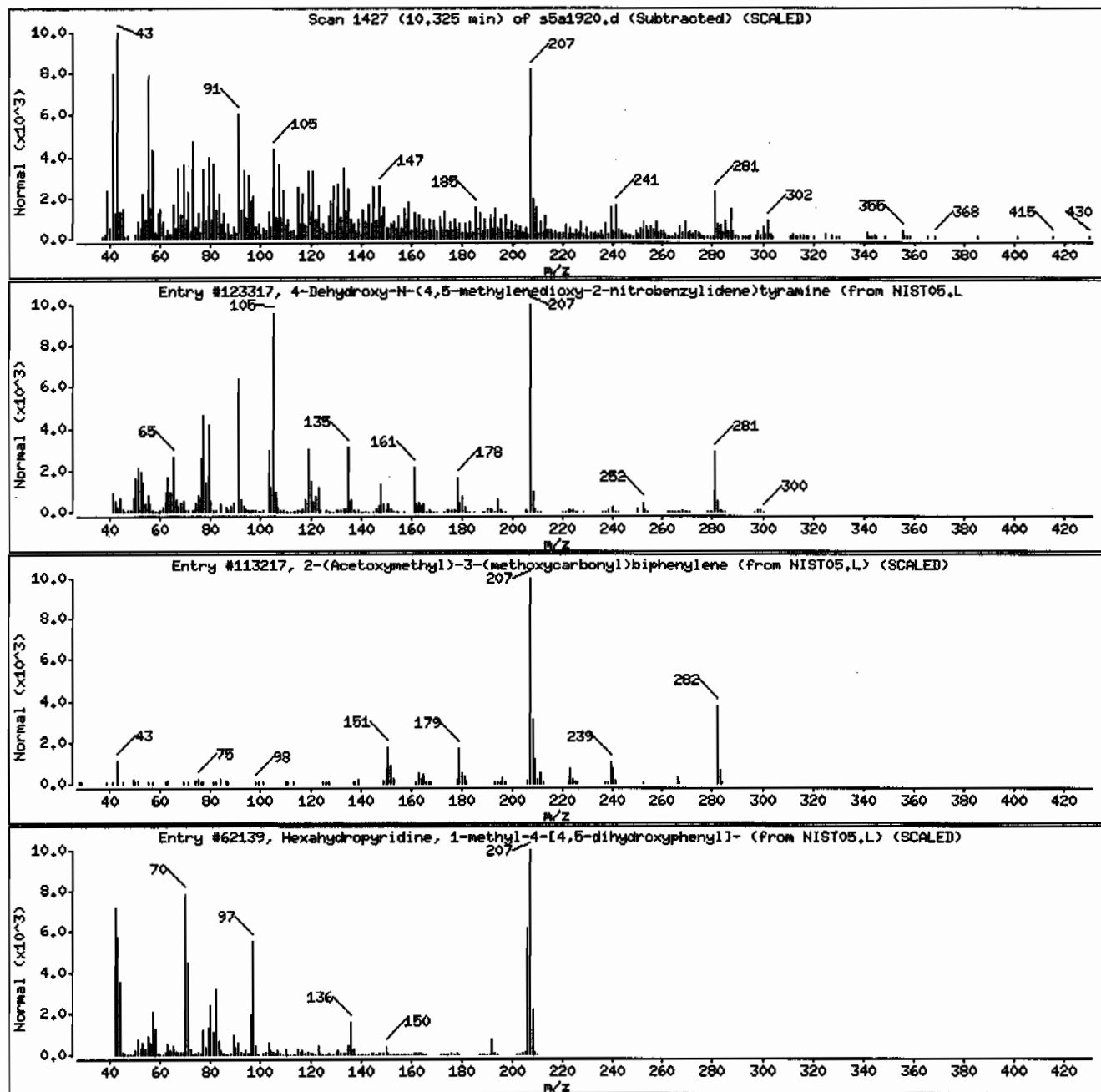
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	46	C16H14N2O4	298
2-(Acetoxymethyl)-3-(methoxycarbonyl)bip	93103-70-9	NIST05.L	113217	42	C17H14O4	282
Hexahydropyridine, 1-methyl-4-[4,5-dihy	94427-47-1	NIST05.L	62139	38	C12H17N02	207



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: HSD5.i

Sample Info: 1244626012194284011SVH11ILANL

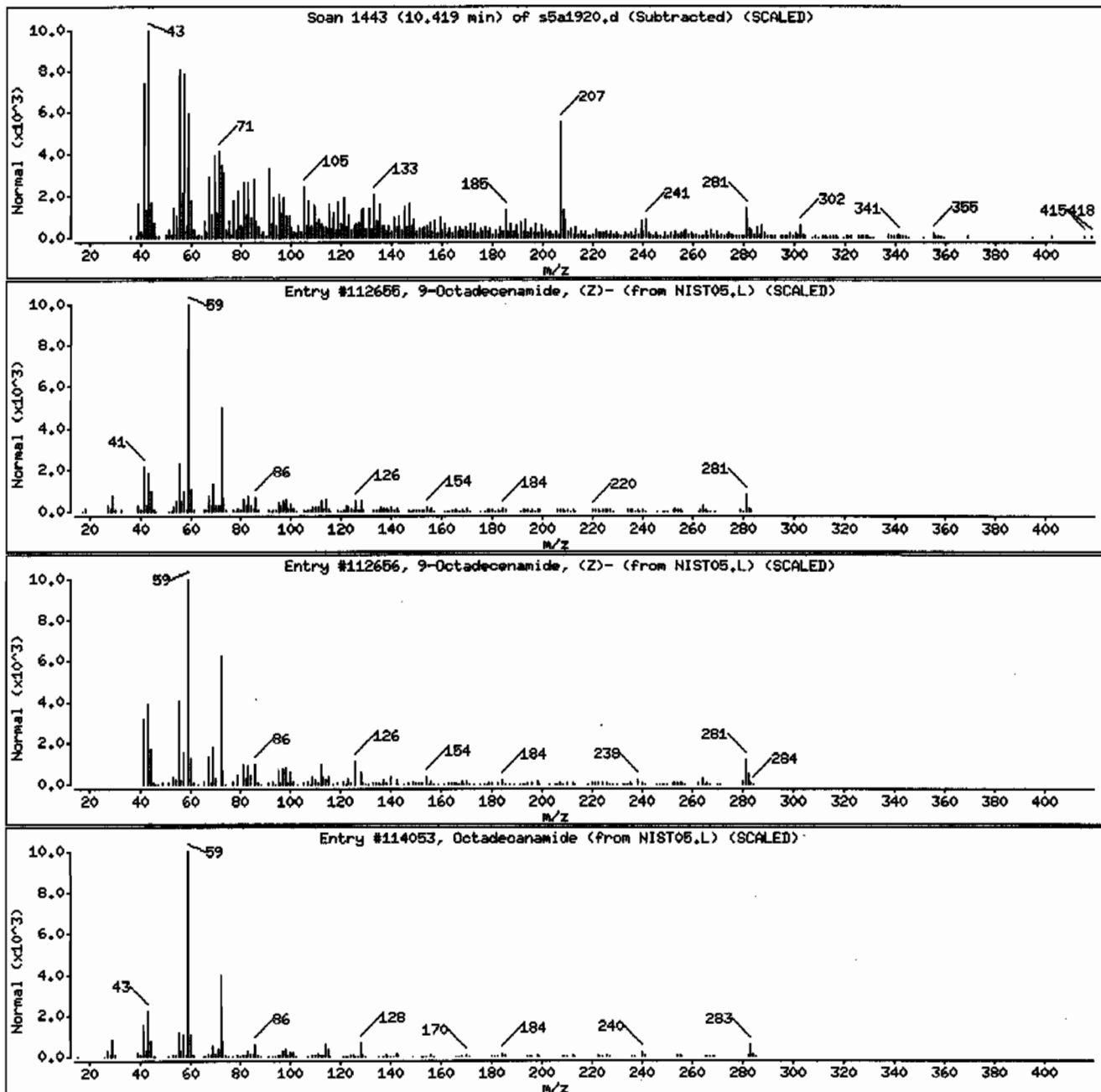
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	38	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	35	C18H35NO	281
Octadecanamide	124-26-5	NIST05.L	114053	35	C18H37NO	283



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.1

Sample Info: 1244626012194284011SVH111LANL

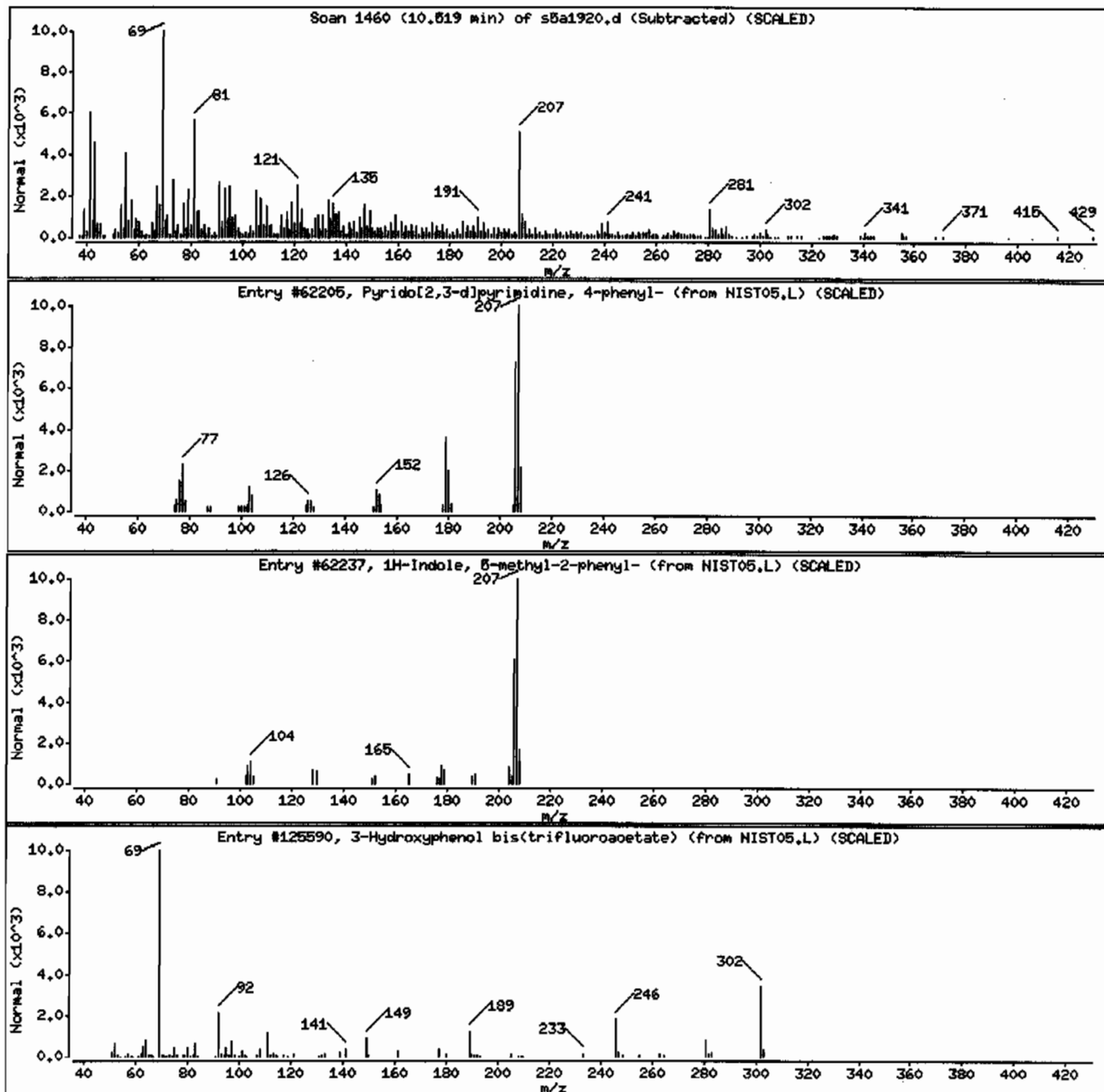
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	41	C13H9N3	207
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	38	C15H13N	207
3-Hydroxyphenol bis(trifluoroacetate)	34065-72-0	NIST05.L	125590	27	C10H4F6O4	302



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011ISVH11ILANL

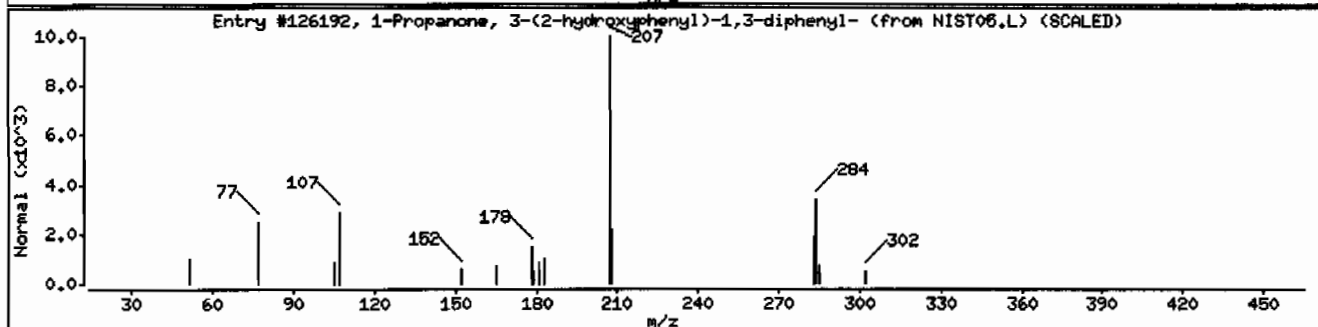
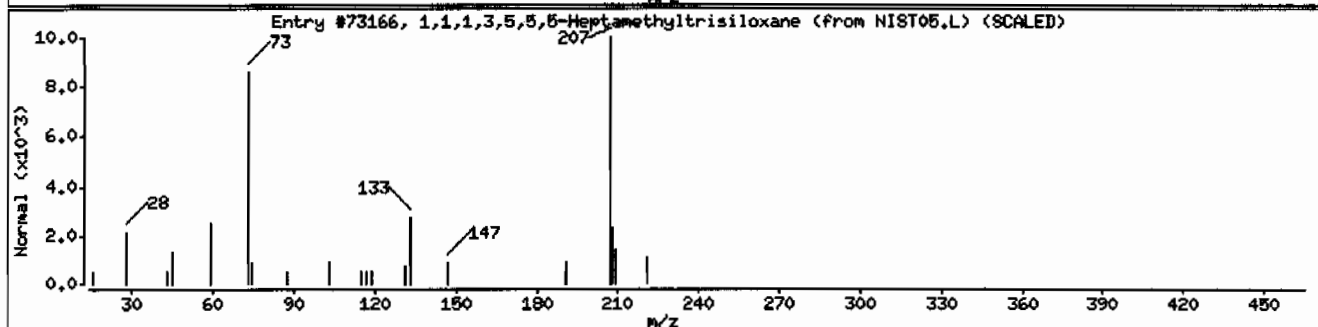
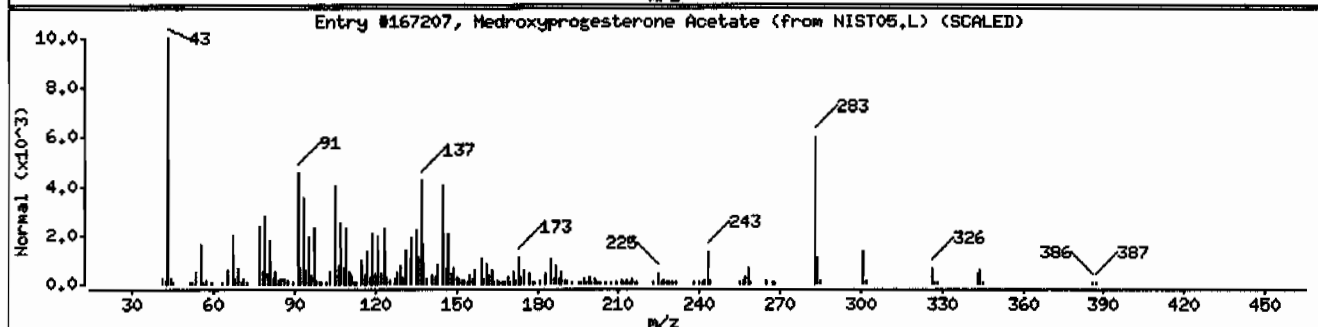
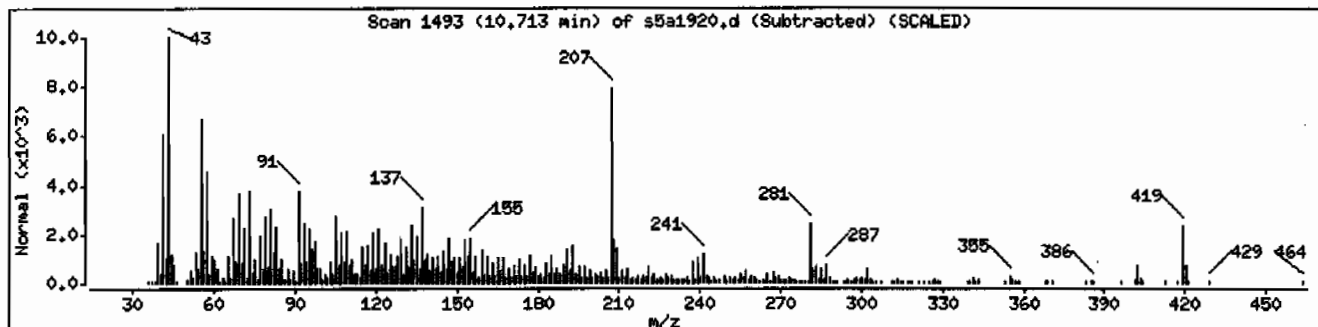
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Medroxyprogesterone Acetate	71-58-9	NIST05.L	167207	47	C ₂₄ H ₃₄ O ₄	386
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	38	C ₇ H ₂₂ O ₂ Si ₃	222
1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip	4376-83-4	NIST05.L	126192	38	C ₂₁ H ₁₈ O ₂	302



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH111LANL

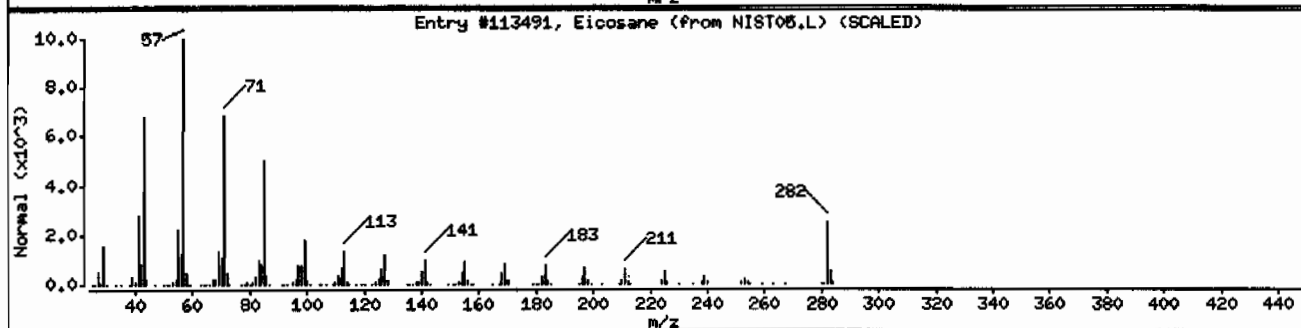
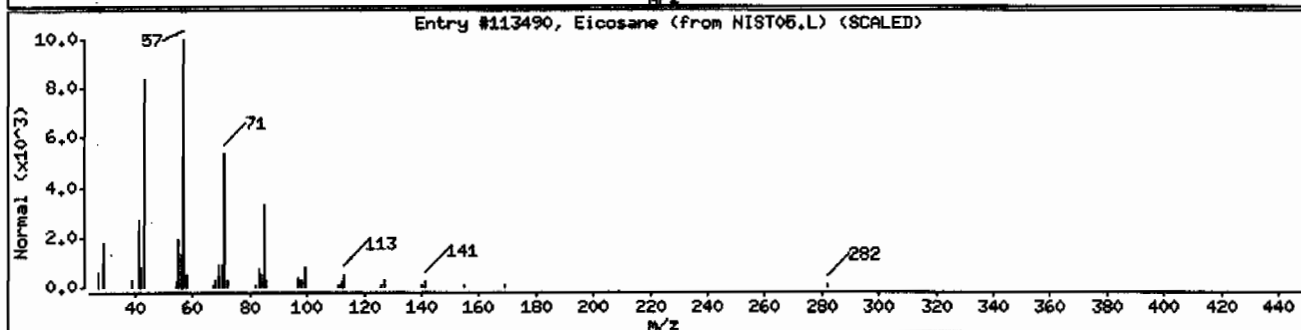
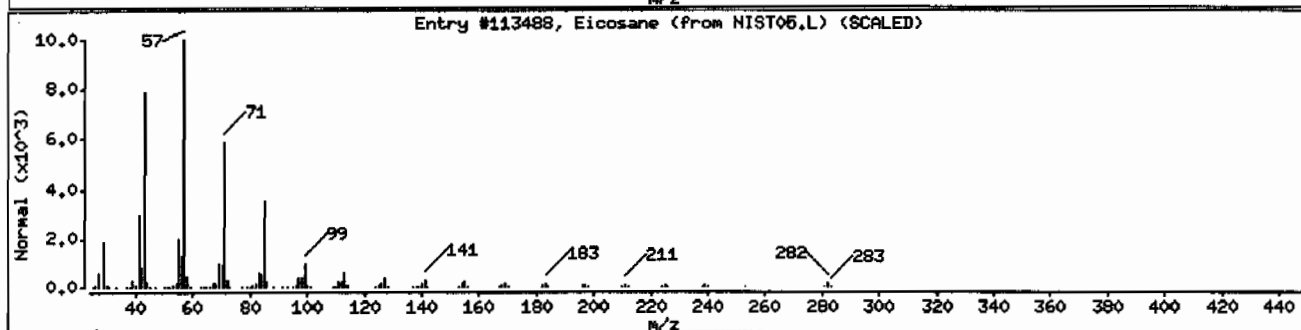
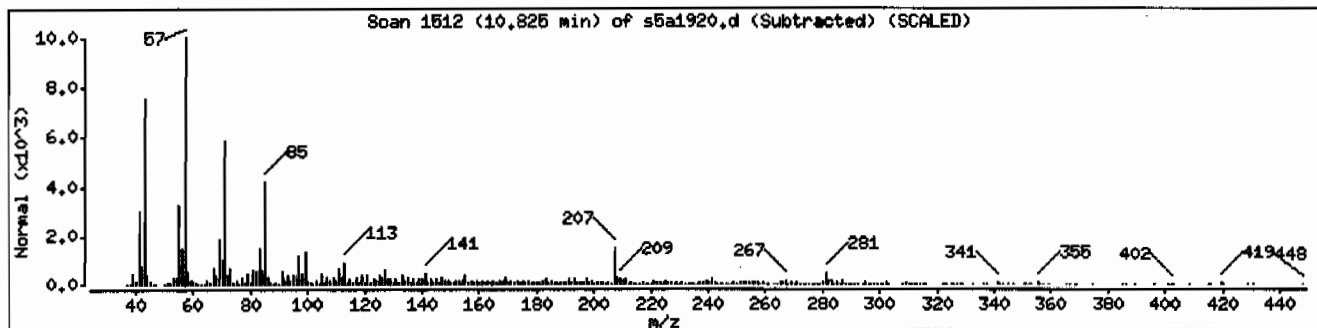
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113488	97	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113491	95	C ₂₀ H ₄₂	282



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: HSD5.i

Sample Info: 1244626012194284011SVH111LANL

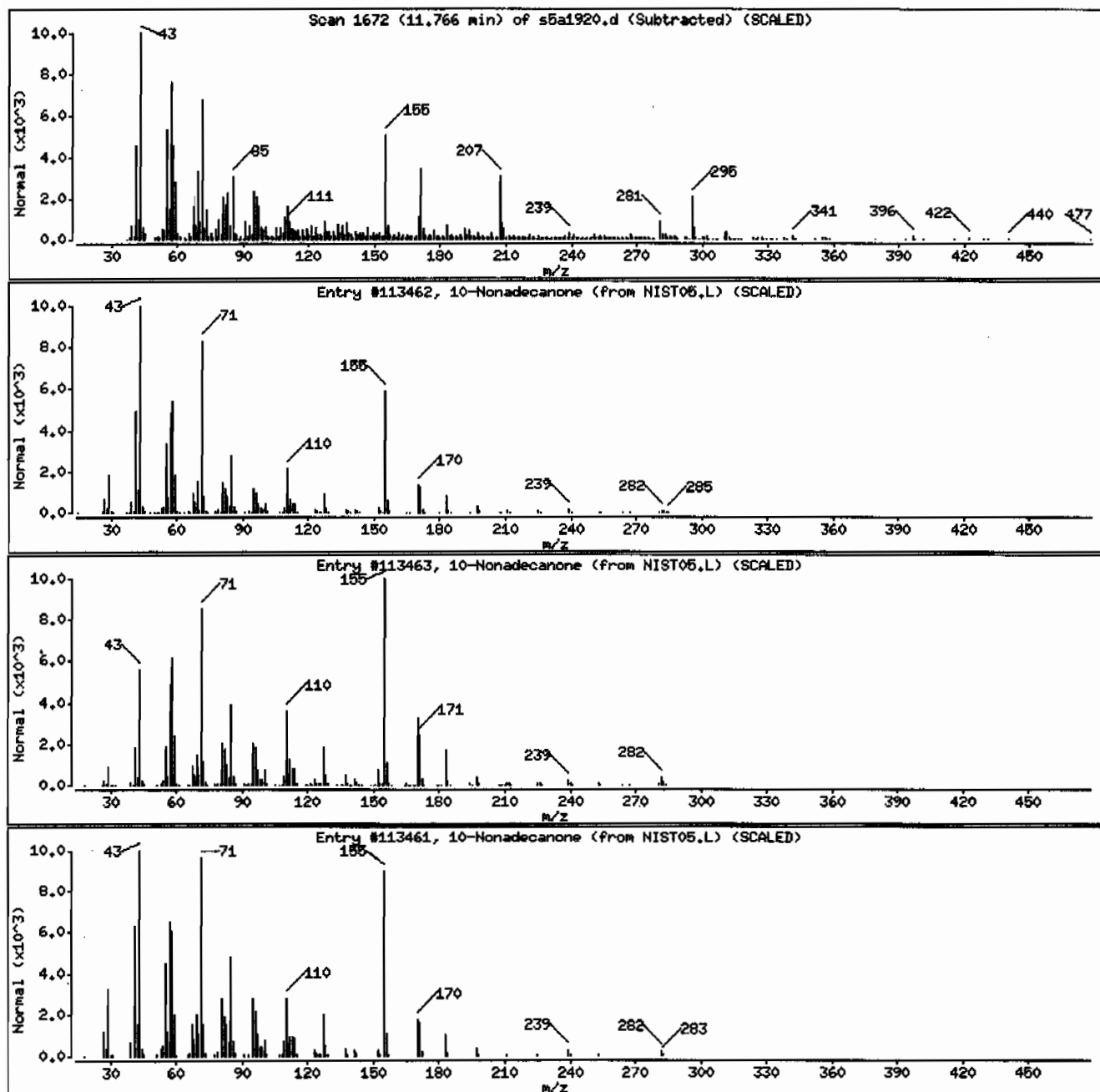
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
10-Nonadecanone	504-57-4	NIST05.L	113462	90	C19H38O	282
10-Nonadecanone	504-57-4	NIST05.L	113463	55	C19H38O	282
10-Nonadecanone	504-57-4	NIST05.L	113461	38	C19H38O	282



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH111LANL

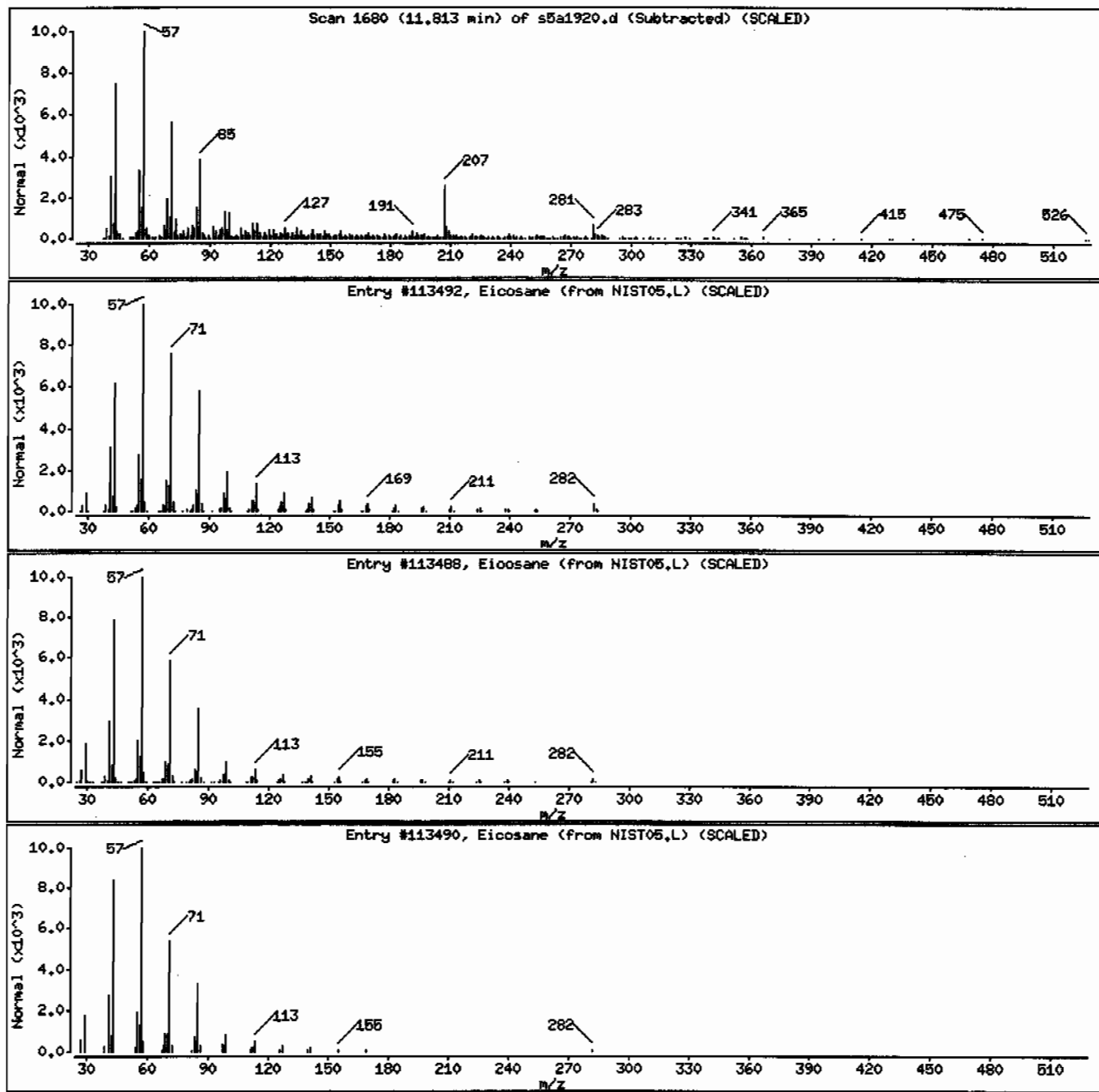
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-96-8	NIST05.L	113492	98	C ₂₀ H ₄₂	282
Eicosane	112-96-8	NIST05.L	113488	98	C ₂₀ H ₄₂	282
Eicosane	112-96-8	NIST05.L	113490	96	C ₂₀ H ₄₂	282



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.1

Sample Info: 12446260121942840111SVH111LANL

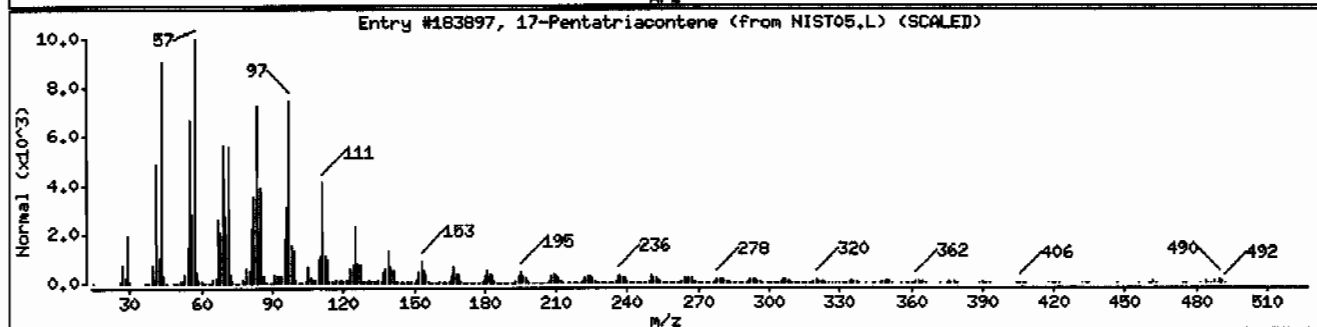
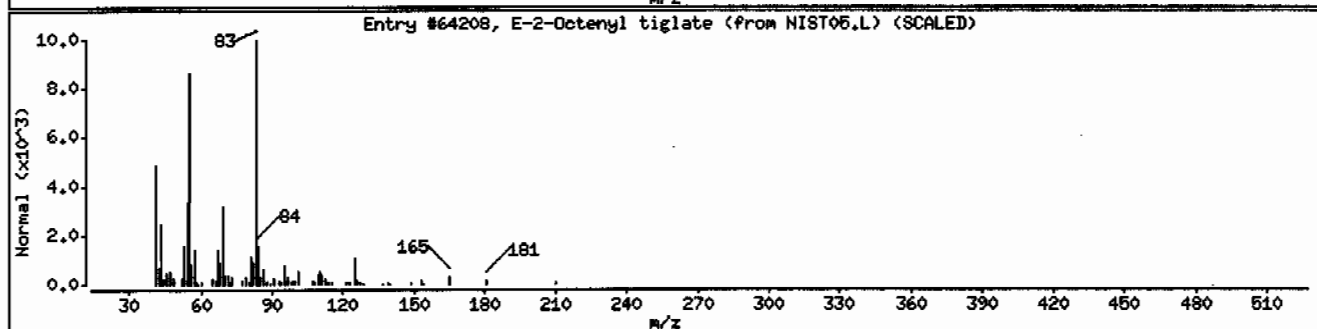
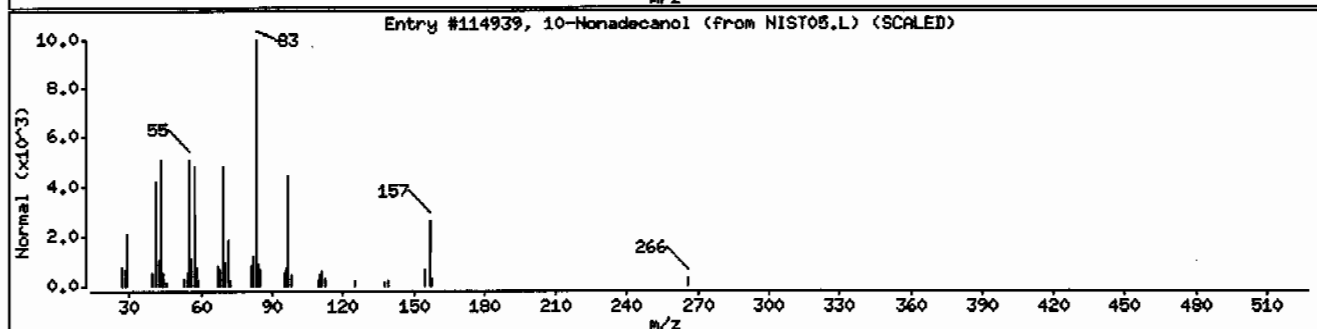
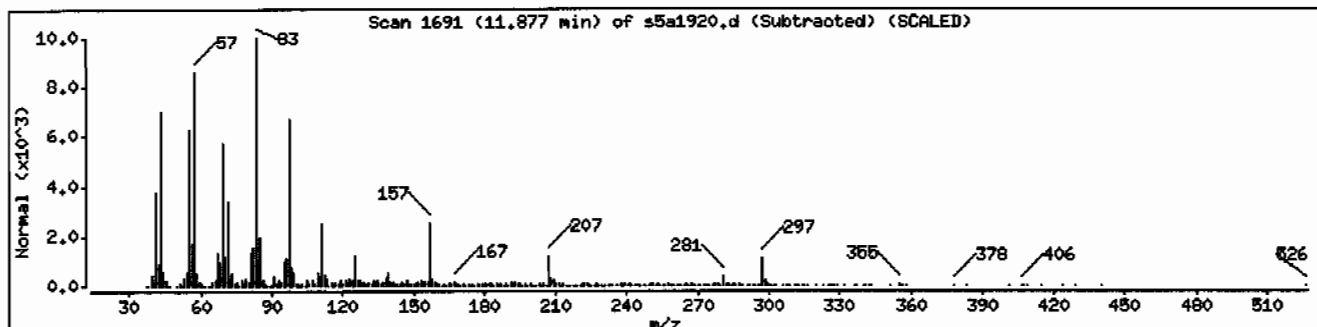
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
10-Nonadecanol	16840-84-9	NIST05.L	114939	64	C19H40O	284
E-2-Octenyl tiglate	84271-97-6	NIST05.L	64208	46	C13H22O2	210
17-Pentatriacontene	6971-40-0	NIST05.L	183897	38	C35H70	491



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVMI1ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

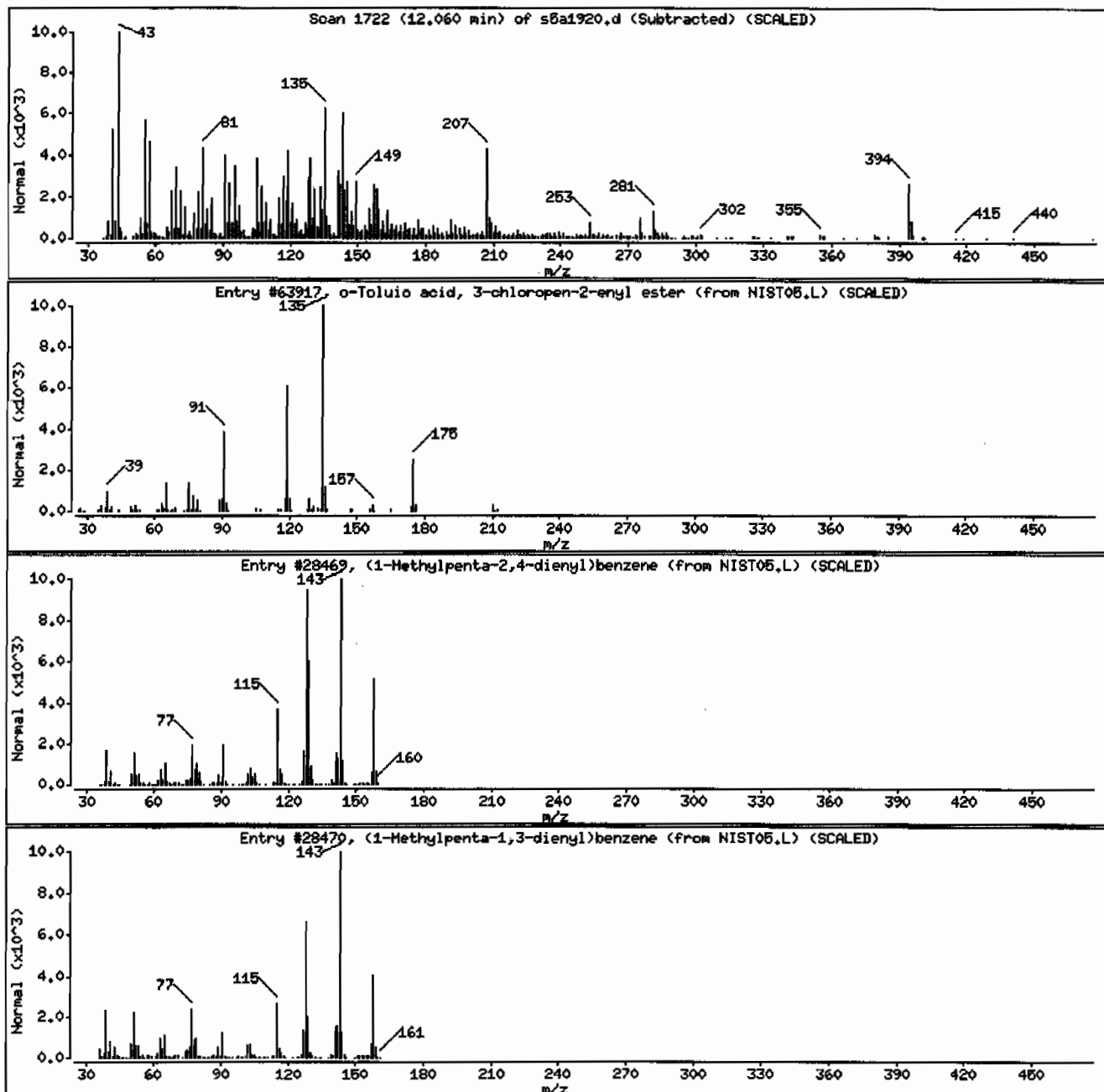
Unknown

o-Toluic acid, 3-chloroprop-2-enyl ester

CAS Number	Library	Entry	Quality	Formula	Weight
1000292-51-8	NIST05.L	63917	14	C11H11ClO2	210
1000210-01-1	NIST05.L	28469	12	C12H14	158
116669-49-9	NIST05.L	28470	11	C12H14	158

(1-Methylpenta-2,4-dienyl)benzene

(1-Methylpenta-1,3-dienyl)benzene



Date : 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH11/LANL

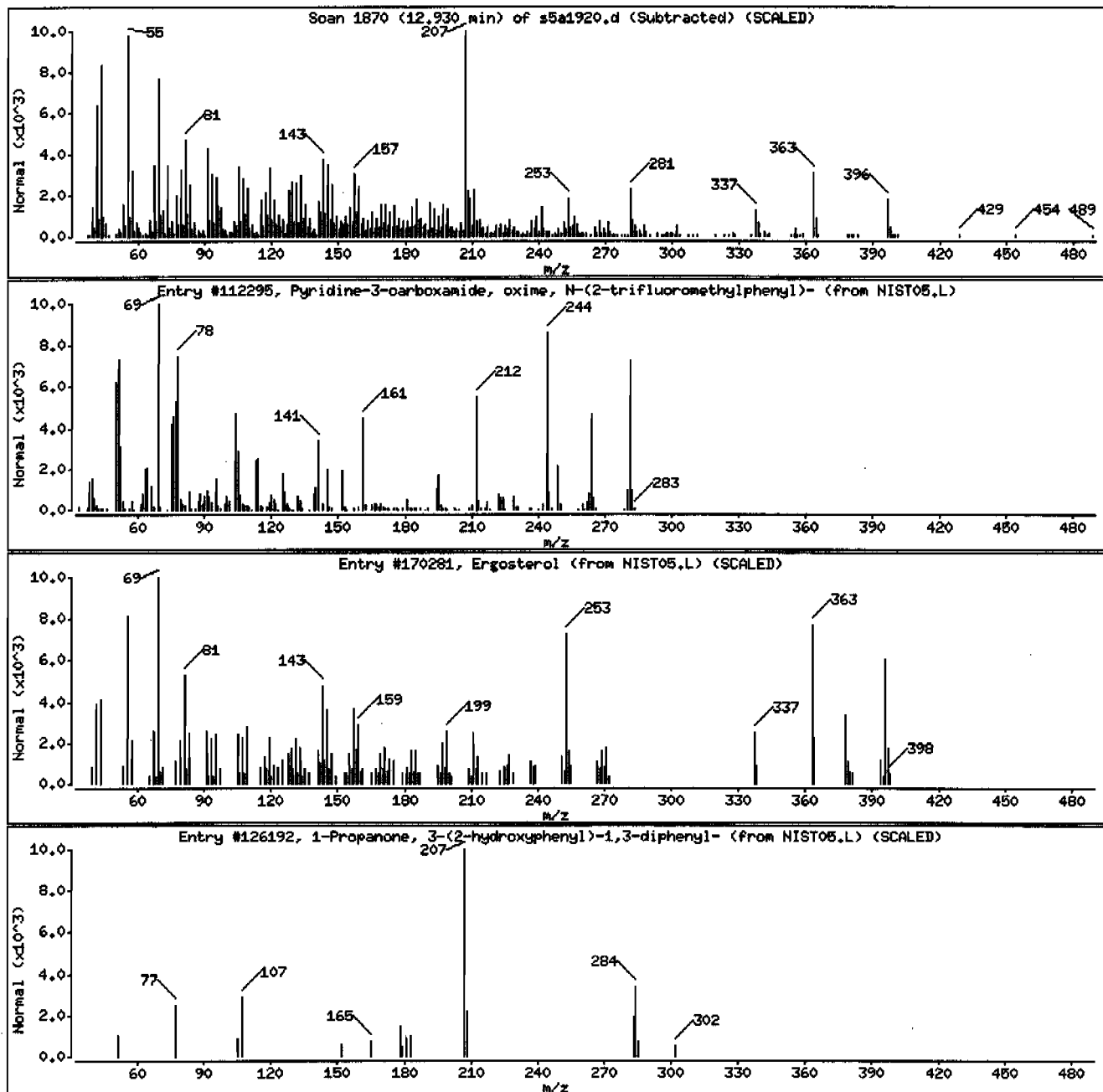
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	91	C13H10F3N3O	281
Ergosterol	57-87-4	NIST05.L	170281	64	C28H44O	396
1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip	4376-83-4	NIST05.L	126192	35	C21H18O2	302



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH111LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

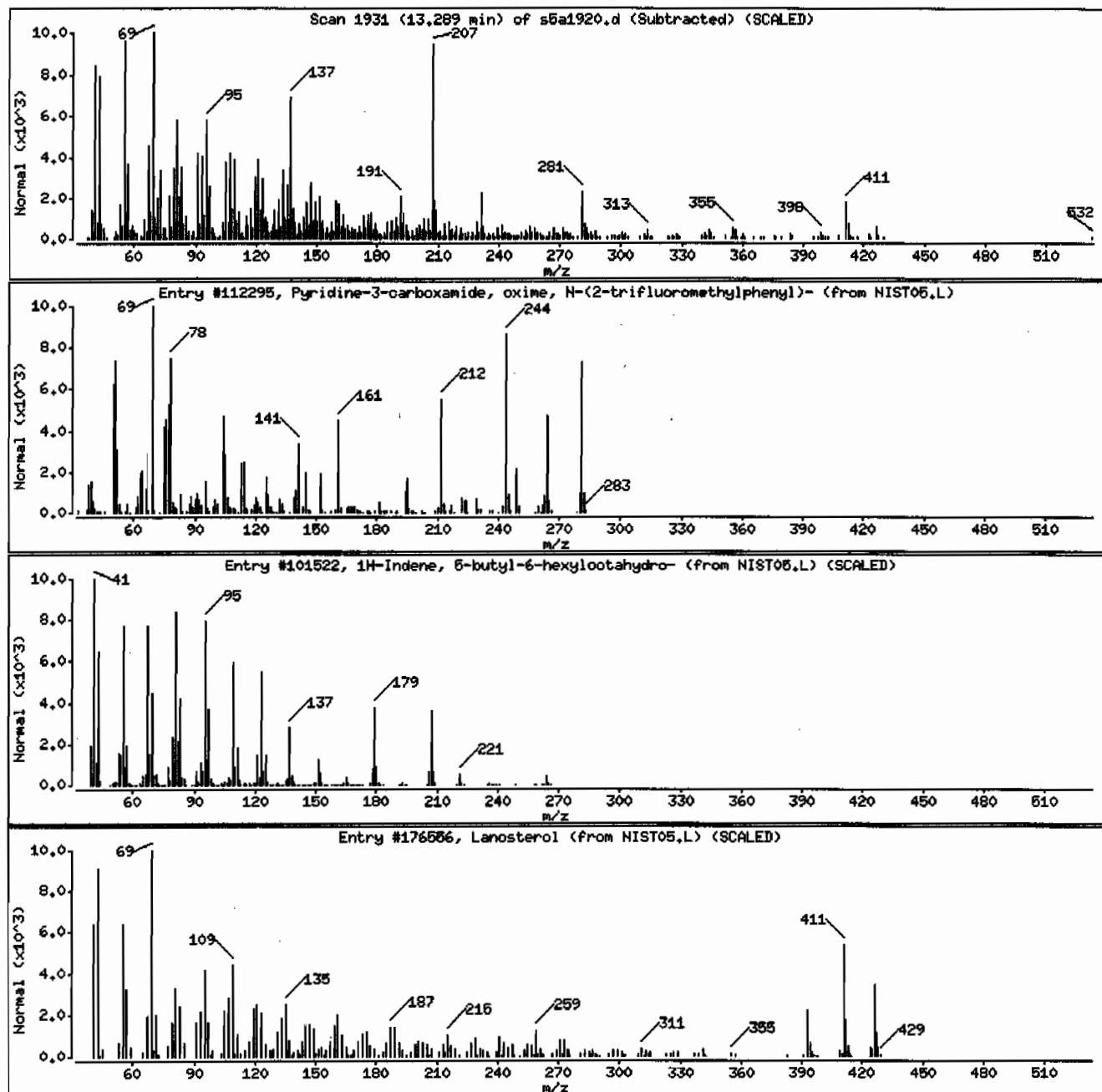
Unknown

Pyridine-3-carboxamide, oxime, N-(2-trif

CAS Number	Library	Entry	Quality	Formula	Weight
288246-83-7	NIST05.L	112295	91	C13H10F3N3O	281
55044-36-5	NIST05.L	101522	46	C19H36	264
79-63-0	NIST05.L	176556	43	C30H50O	426

1H-Indene, 5-butyl-6-hexyloctahydro-

Lanosterol



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: 1244626012194284011SVH111LANL

Volume Injected (uL): 0.5

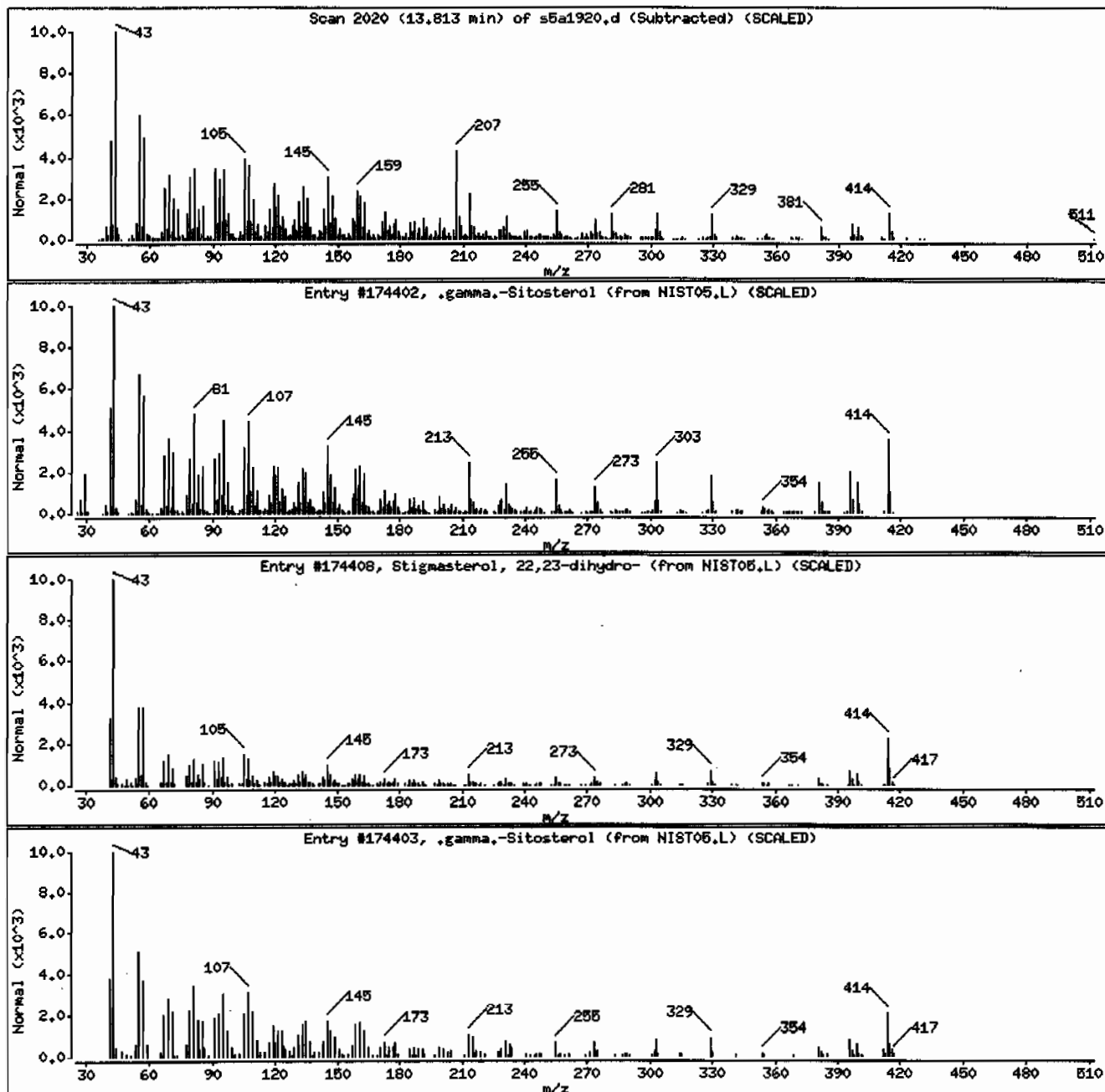
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	97	C ₂₉ H ₅₀ O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	92	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	86	C ₂₉ H ₅₀ O	414



Date: 19-JAN-2010 17:37

Client ID: RE12-10-7264

Instrument: MSD5.i

Sample Info: I244626012194284011SVMI1ILANL

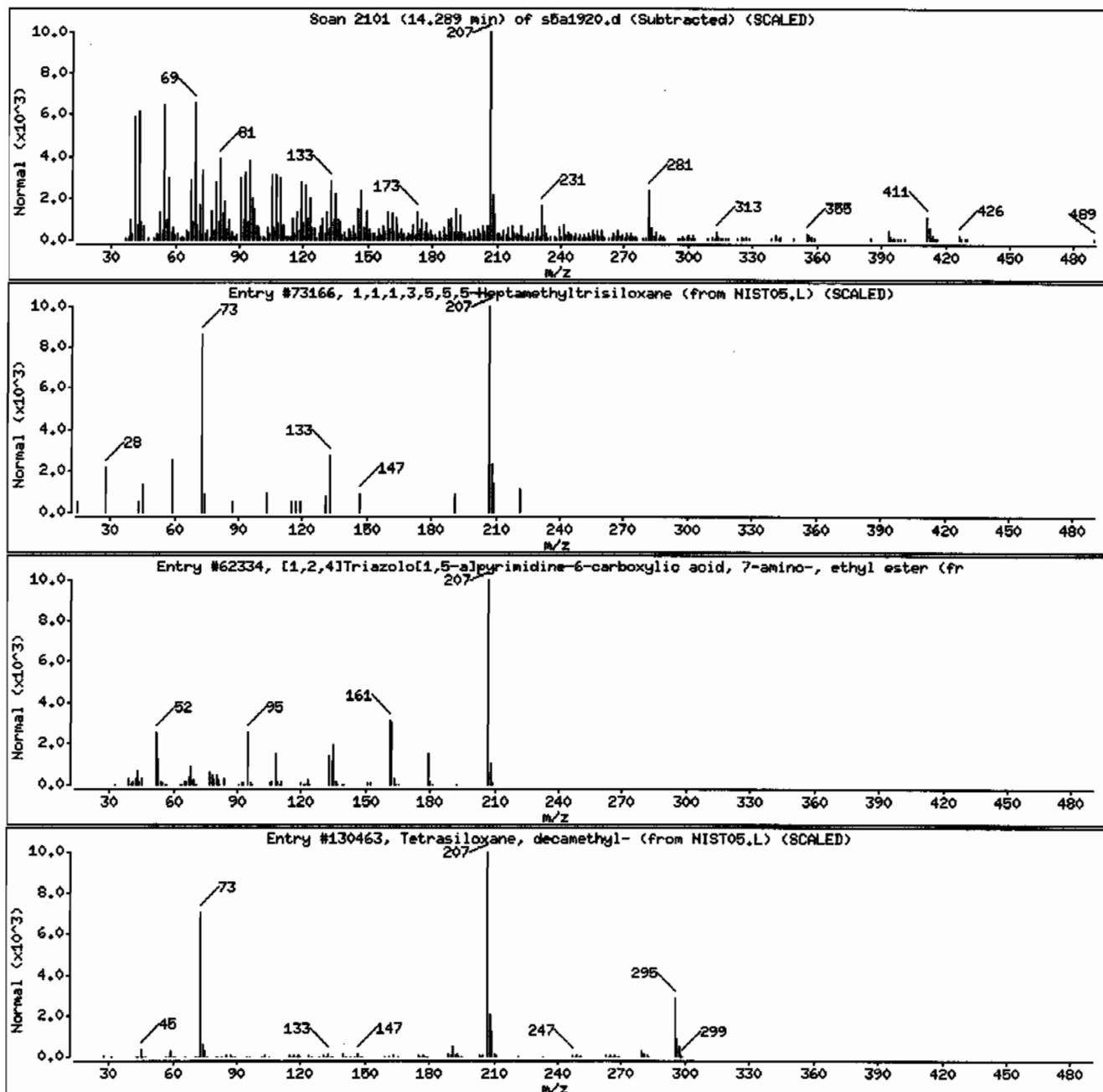
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C7H22O2Si3	222
[1,2,4]Triazolo[1,5-a]pyrimidine-6-carbo	1000316-75-8	NIST05.L	62334	38	C8H9N5O2	207
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130463	35	C10H30O3Si4	310



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

Page 1 of 3

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626005	Date Received: 01/13/2010 08:55	% Moisture: 6.2
Client ID: RE12-10-7265	Client: LANL010	Project: LANL01004
Batch ID: 942840	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/19/2010 14:55	Inst: MSD5.I	Dilution: 1
Prep Date: 01/18/2010 20:10	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a1913.d	Aliquot: 30.04 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	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.7	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

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

SDG Number: 10-1225
Lab Sample ID: 244626005

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7265
Batch ID: 942840
Run Date: 01/19/2010 14:55
Prep Date: 01/18/2010 20:10
Data File: s5a1913.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	884	ug/kg		J
79-09-4	Propanoic acid	2.15	172	ug/kg	81	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 3 of 3

SDG Number: 10-1225
Lab Sample ID: 244626005

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
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
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	481	ug/kg		JA
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.02	546	ug/kg	90	NJ
301-02-0	9-Octadecenamide, (Z)-	10.41	234	ug/kg	90	NJ
	Unknown	10.81	152	ug/kg		J
	Unknown	11.96	389	ug/kg		J
	Unknown	12.72	352	ug/kg		J
	Unknown	13.12	228	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1913.d
Lab Smp Id: 244626005 Client Smp ID: RE12-10-7265
Inj Date : 19-JAN-2010 14:55
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626005|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	6.15810	% 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	3.931	3.940	(1.000)	550904	40.0000	
* 29 Naphthalene-d8		136	4.802	4.807	(1.000)	1906469	40.0000	
* 46 Acenaphthene-d10		164	6.054	6.063	(1.000)	1149762	40.0000	
* 67 Phenanthrene-d10		188	7.231	7.234	(1.000)	2109667	40.0000	
* 91 Chrysene-d12		240	9.642	9.646	(1.000)	1928520	40.0000	
* 98 Perylene-d12		264	11.325	11.331	(1.000)	1653044	40.0000	
\$ 3 2-Fluorophenol		112	3.125	3.121	(0.795)	949784	69.5181	2470
\$ 5 Phenol-d5		99	3.649	3.651	(0.928)	1142118	67.7852	2400
\$ 20 Nitrobenzene-d5		82	4.296	4.301	(0.895)	545944	37.2959	1320
\$ 39 2-Fluorobiphenyl		172	5.543	5.548	(0.915)	1082520	35.5914	1260
\$ 60 2,4,6-Tribromophenol		329	6.654	6.661	(1.099)	298029	81.5542	2890
\$ 81 p-Terphenyl-d14		244	8.607	8.611	(0.893)	1276964	42.1700	1500

ION RATIO REPORT

SV REPORT

Data file: s5a1913.d

Report Date: 01/20/2010 07:04

Lab. ID: 244626005

SampleType: SAMPLE

Injection Date: 19-JAN-2010 14:55

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626005|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

4 Aniline		CAS#: 62-53-3				
66	63199	3.65	3.72	80-120	100	(T)
93	3241	3.61	3.72	210-270	5	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	74737	4.30	4.18	80-120	100	(T)
42	45839	4.29	4.18	44-104	61	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	7548	4.53	4.57	80-120	100	()
122	5620	4.54	4.57	39- 99	74	()
77	7472	4.57	4.57	34- 94	99	(Q)

43 Dimethylphthalate		CAS#: 131-11-3				
163	208675	6.05	5.82	80-120	100	(T)
164	1149762	6.05	5.82	0- 40	551	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	156499	6.05	5.88	80-120	100	(T)
63	1900	6.05	5.88	61-121	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	156499	6.05	6.17	80-120	100	(T)
89	3762	6.05	6.17	47-107	2	(QT)
63	1900	6.05	6.17	23- 83	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52	4-Nitrophenol		CAS#:	100-02-7		
139	184	6.23	6.10	80-120	100	(T)
109	417	6.21	6.10	41-101	226	(QT)
65	321	6.28	6.10	72-132	174	(QT)

53	Fluorene		CAS#:	86-73-7		
166	17696	6.65	6.47	80-120	100	(T)
165	17186	6.65	6.47	56-116	97	(T)
167	6153	6.65	6.47	0- 44	35	(T)

55	2-Methyl-4,6-dinitrophenol		CAS#:	534-52-1		
198	1242	6.65	6.49	80-120	100	(T)
105	2699	6.65	6.49	12- 72	217	(QT)
51	2477	6.65	6.49	42-102	199	(QT)

61	4-Bromophenylphenylether		CAS#:	101-55-3		
248	21254	6.65	6.84	80-120	100	(T)
141	138125	6.65	6.83	43-103	650	(QT)
250	42427	6.65	6.84	68-128	200	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1913.d
 Lab Smp Id: 244626005 Client Smp ID: RE12-10-7265
 Inj Date : 19-JAN-2010 14:55
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626005|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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	30.04000	weight of sample
M	6.15810	% moisture

Cpnd Variable

Local Compound Variable

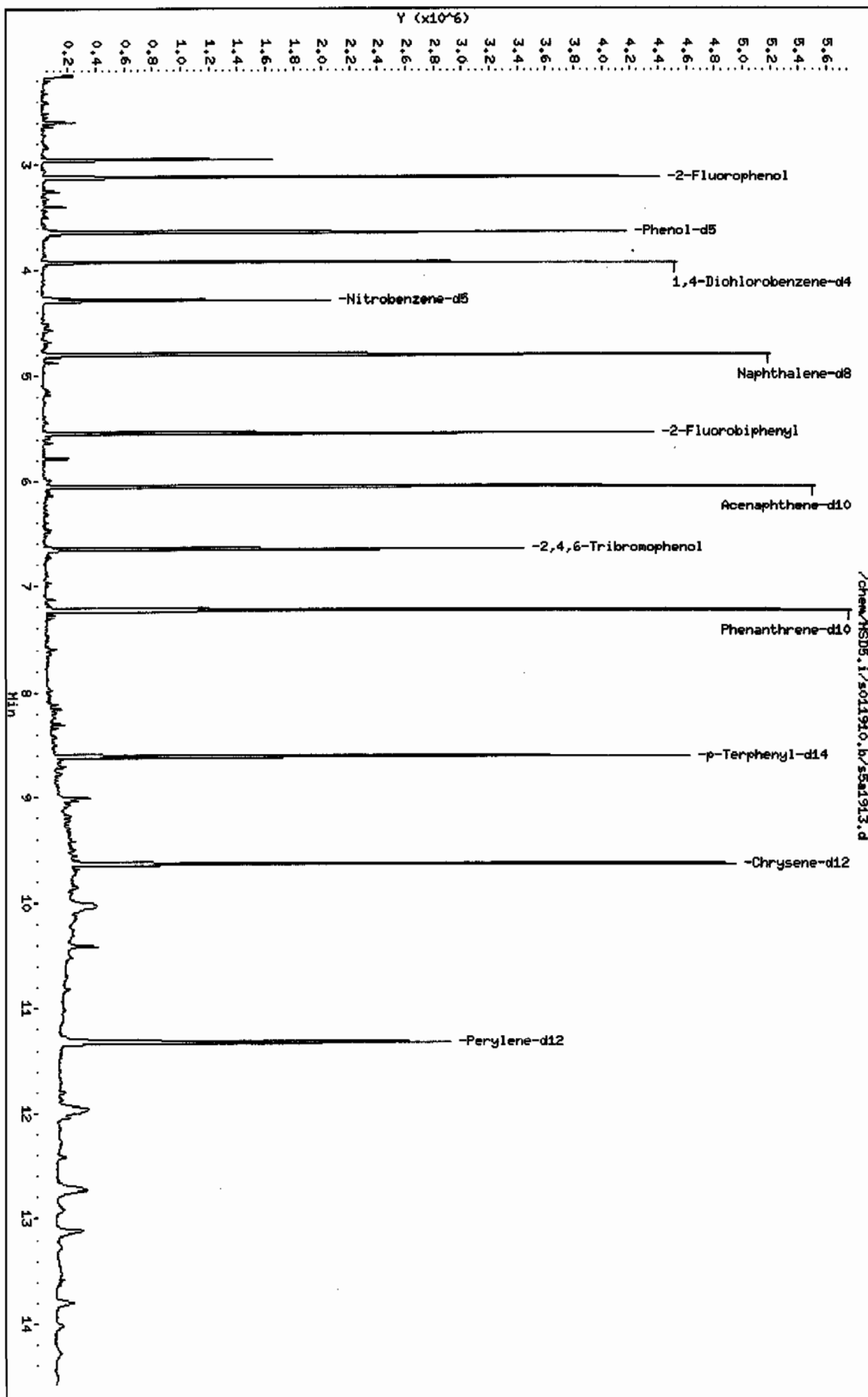
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3348595	40.000
* 91 Chrysene-d12	9.642	5714768	40.000
* 98 Perylene-d12	11.325	4913439	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.025	2086233	24.9206976	884	0		0	10
Propanoic acid					CAS #: 79-09-4		
2.155	406322	4.85363852	172	81	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.955	1135314	13.5616790	481	0		0	10
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
10.025	2199188	15.3930150	546	90	NIST05.L	112295	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
10.407	944167	6.60861151	234	90	NIST05.L	112655	91
Unknown					CAS #:		
10.813	525728	4.27991619	152	0		0	98
Unknown					CAS #:		
11.960	1345935	10.9571742	389	0		0	98
Unknown					CAS #:		
12.725	1219176	9.92523717	352	0		0	98
Unknown					CAS #:		
13.119	789508	6.42733532	228	0		0	98

Data File: /chem/MSD5.1/s011910.b/s5a1913.d
 Date: 19-JAN-2010 14:55
 Client ID: RE12-10-7265
 Sample Info: 1244626005194284011/SNH11/LNL
 Volume Injected (uL): 0.5
 Column phase: JMI DB-SHS

Instrument: MSD5.1
 Operator: RHB
 Column diameter: 0.20



Date : 19-JAN-2010 14:55

Client ID: RE12-10-7265

Instrument: MSD5.i

Sample Info: 1244626005194284011SVMI11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

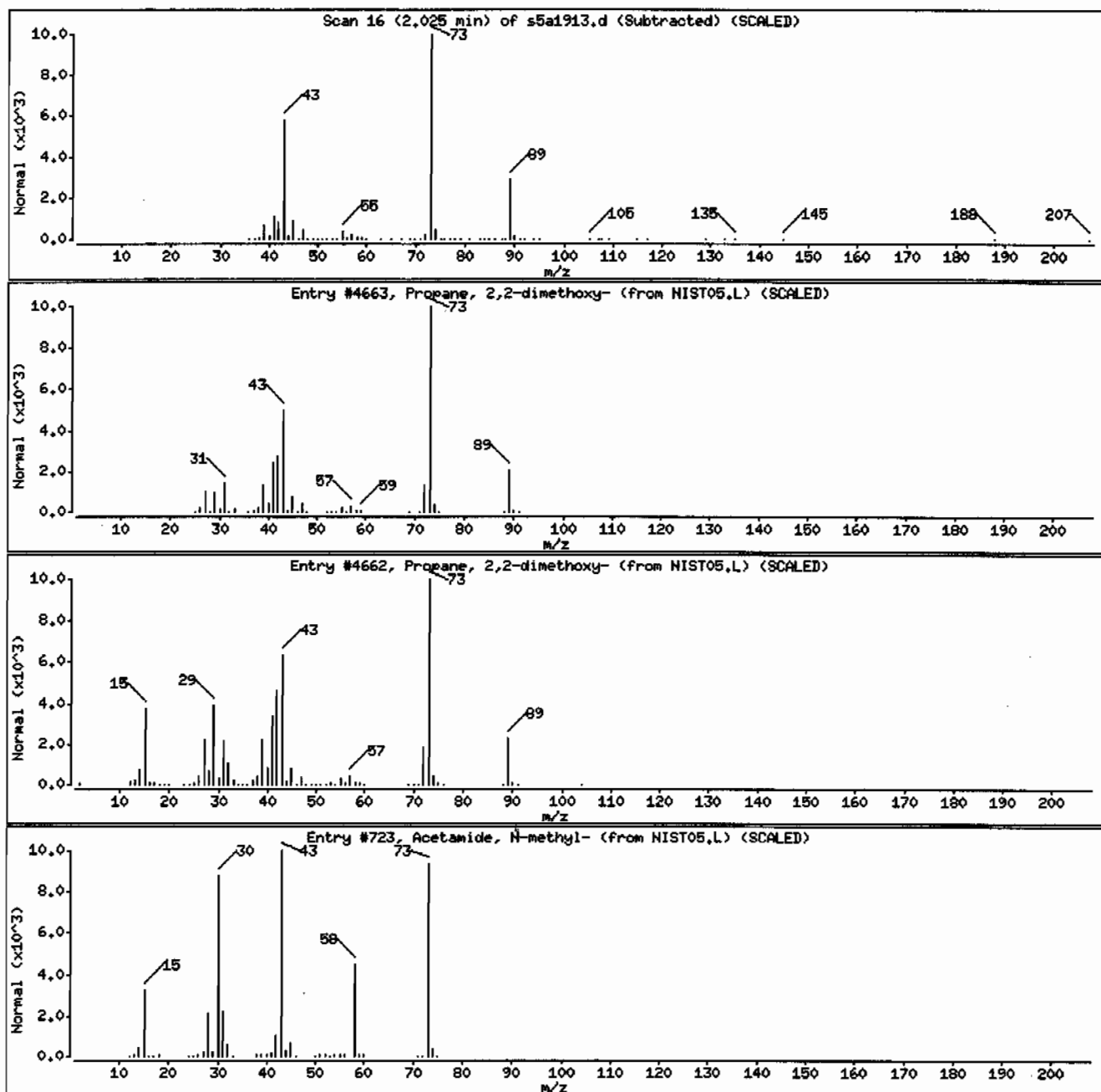
Library Search Compound Match
Unknown

Propane, 2,2-dimethoxy-

CAS Number	Library	Entry	Quality	Formula	Weight
77-76-9	NIST05.L	4663	72	C5H12O2	104
77-76-9	NIST05.L	4662	50	C5H12O2	104
79-16-3	NIST05.L	723	9	C3H7NO	73

Propane, 2,2-dimethoxy-

Acetamide, N-methyl-



Date : 19-JAN-2010 14:55

Client ID: RE12-10-7265

Instrument: MSD5.i

Sample Info: 1244626005194284011|SVH11|LANL

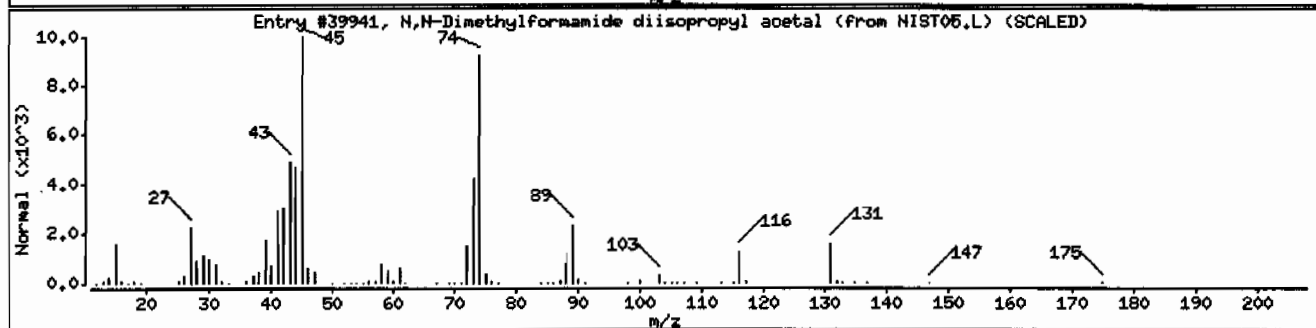
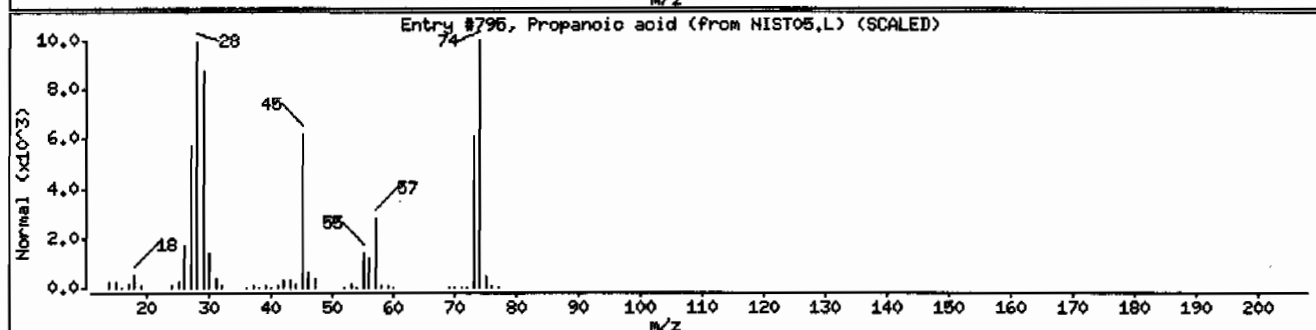
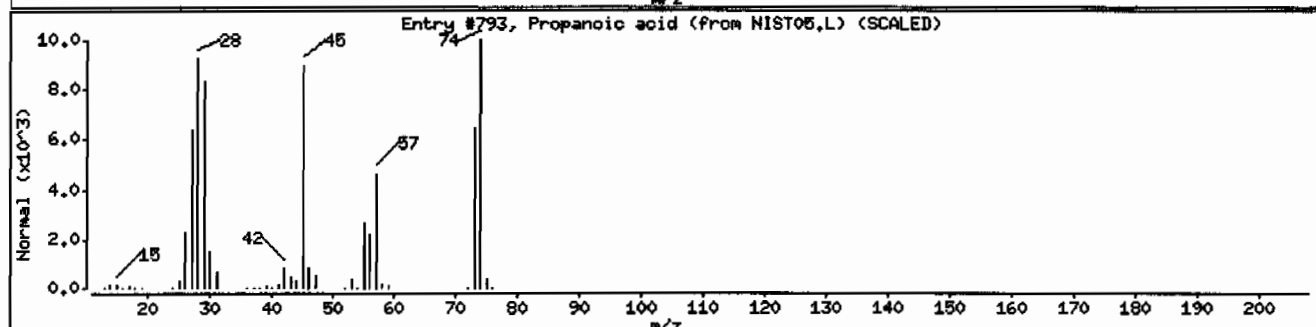
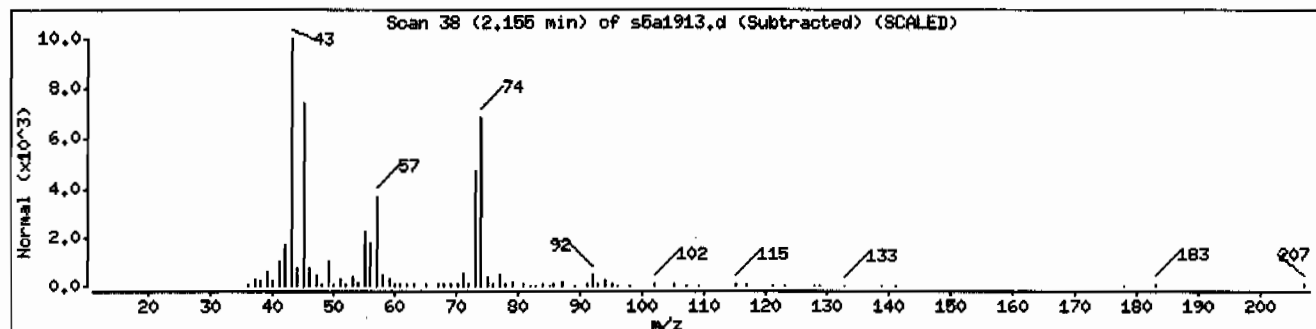
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	81	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	72	C3H6O2	74
N,N-Dimethylformamide diisopropyl acetal	18503-89-4	NIST05.L	39941	50	C9H21NO2	175



Date : 19-JAN-2010 14:58

Client ID: RE12-10-7265

Instrument: HSD5.i

Sample Info: I244626005194284011SVH11ILANL

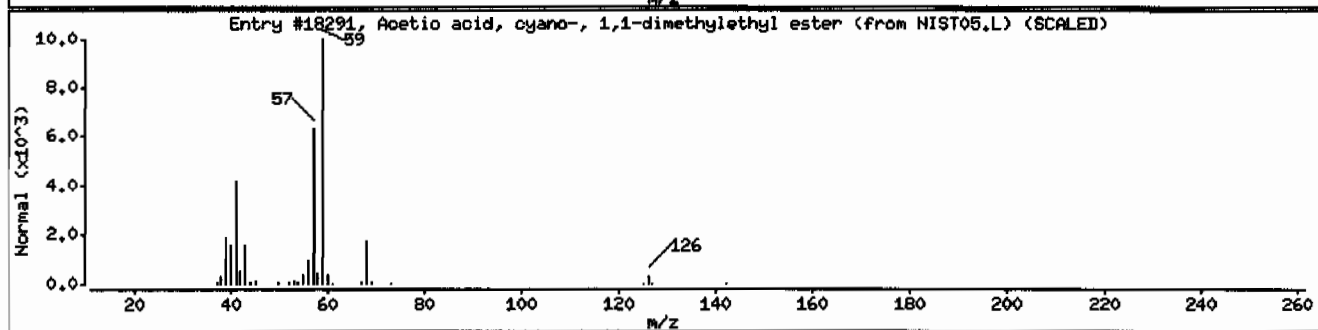
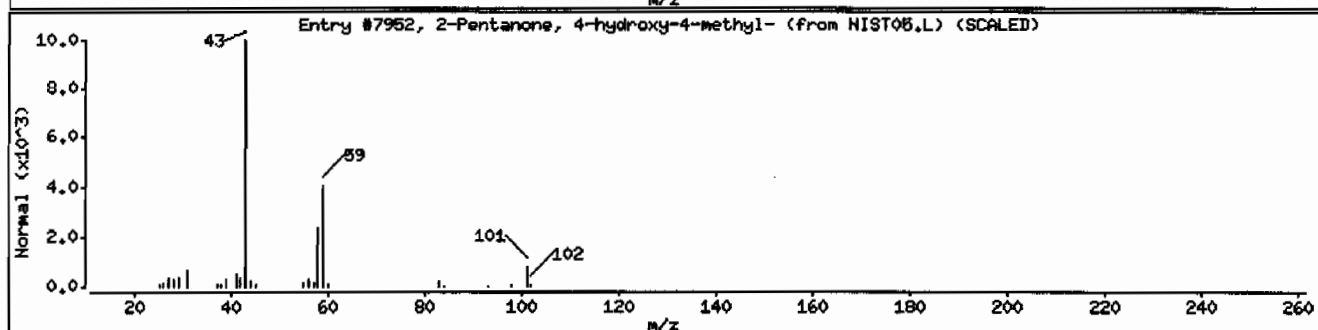
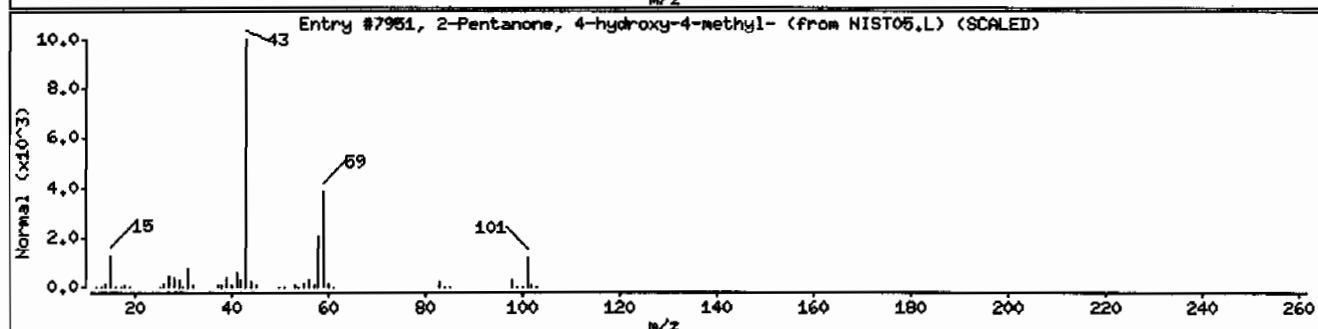
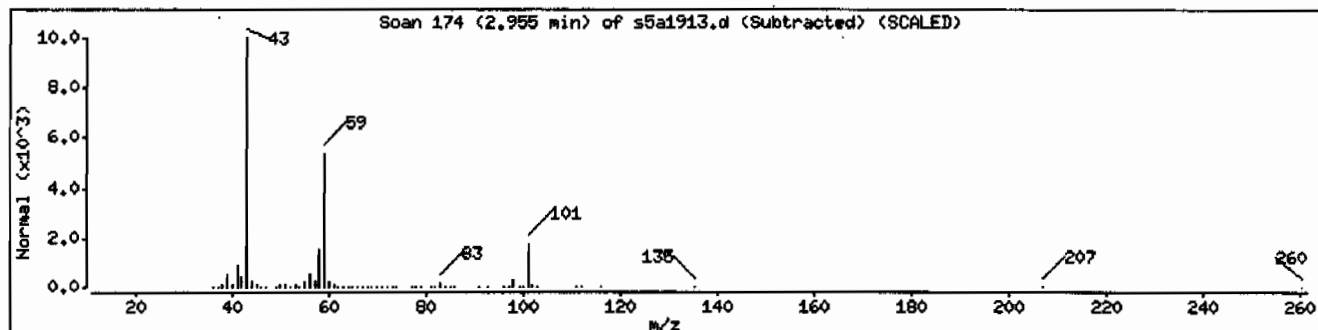
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C ₆ H ₁₂ O ₂	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C ₆ H ₁₂ O ₂	116
Acetic acid, cyano-, 1,1-dimethylethyl ester	1116-98-9	NIST05.L	18291	23	C ₇ H ₁₁ NO ₂	141



Date : 19-JAN-2010 14:55

Client ID: RE12-10-7265

Instrument: HSD5.i

Sample Info: 1244626005194284011SVH11ILANL

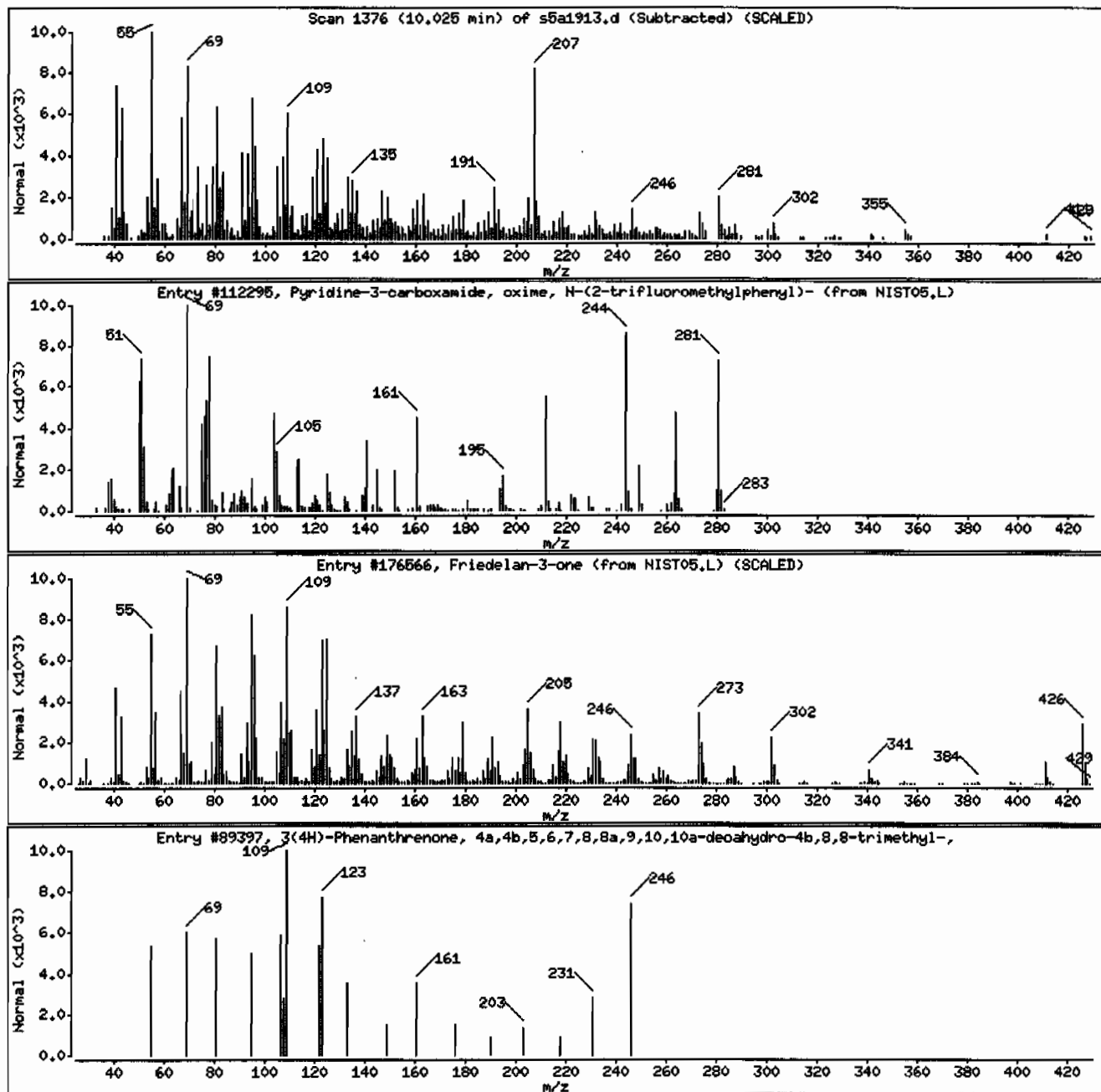
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	90	C13H10F3N3O	281
Friedelan-3-one	559-74-0	NIST05.L	176566	78	C30H50O	426
3(4H)-Phenanthrenone, 4a,4b,5,6,7,8,8a,9	57684-12-5	NIST05.L	89397	50	C17H26O	246



Date: 19-JAN-2010 14:58

Client ID: RE12-10-7265

Instrument: MSD5.1

Sample Info: 1244626005194284011SVMI1ILANL

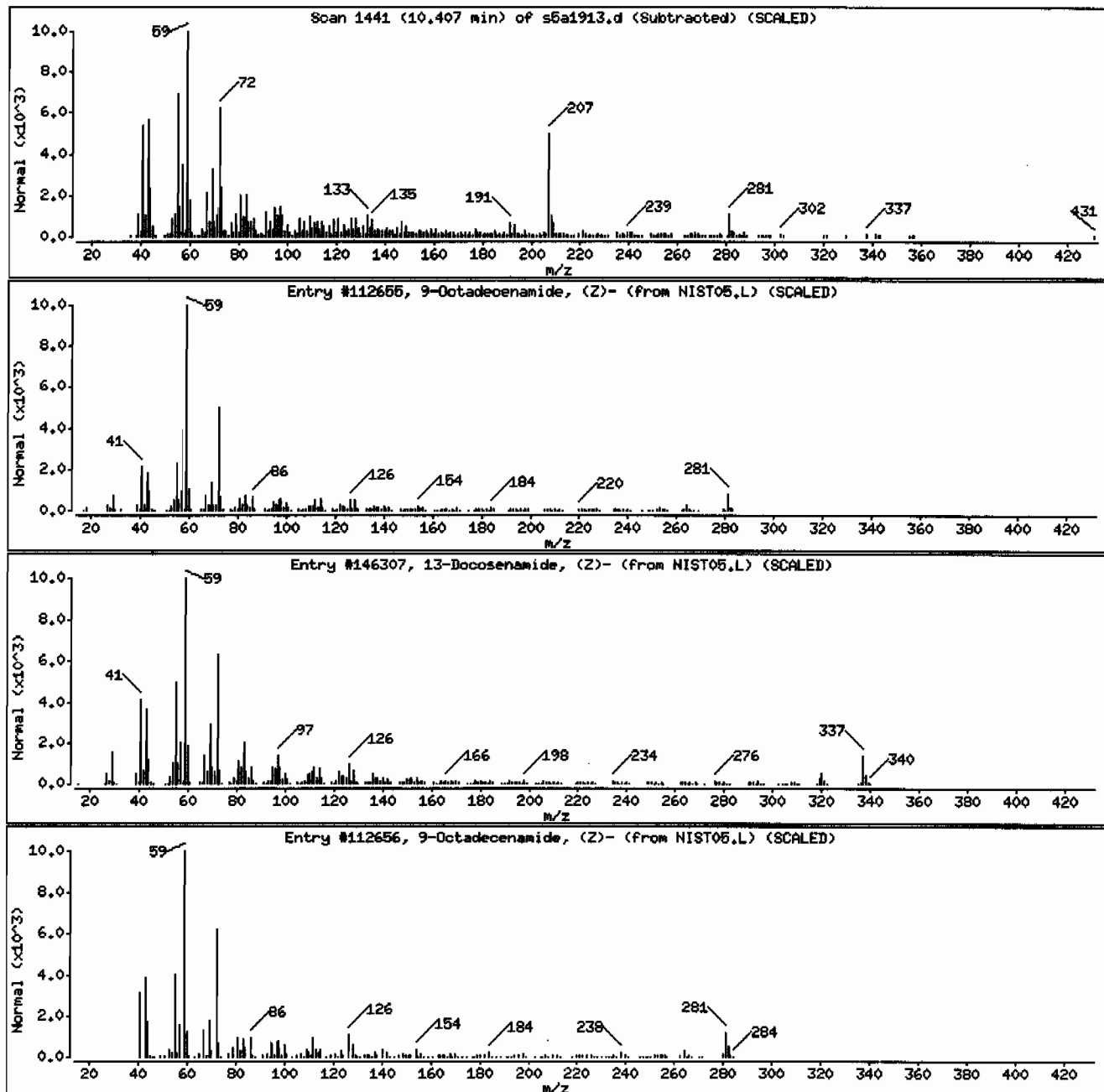
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	87	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	85	C18H35NO	281



Date: 19-JAN-2010 14:55

Client ID: RE12-10-7265

Instrument: MSD5.i

Sample Info: 1244626005194284011SVH111LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

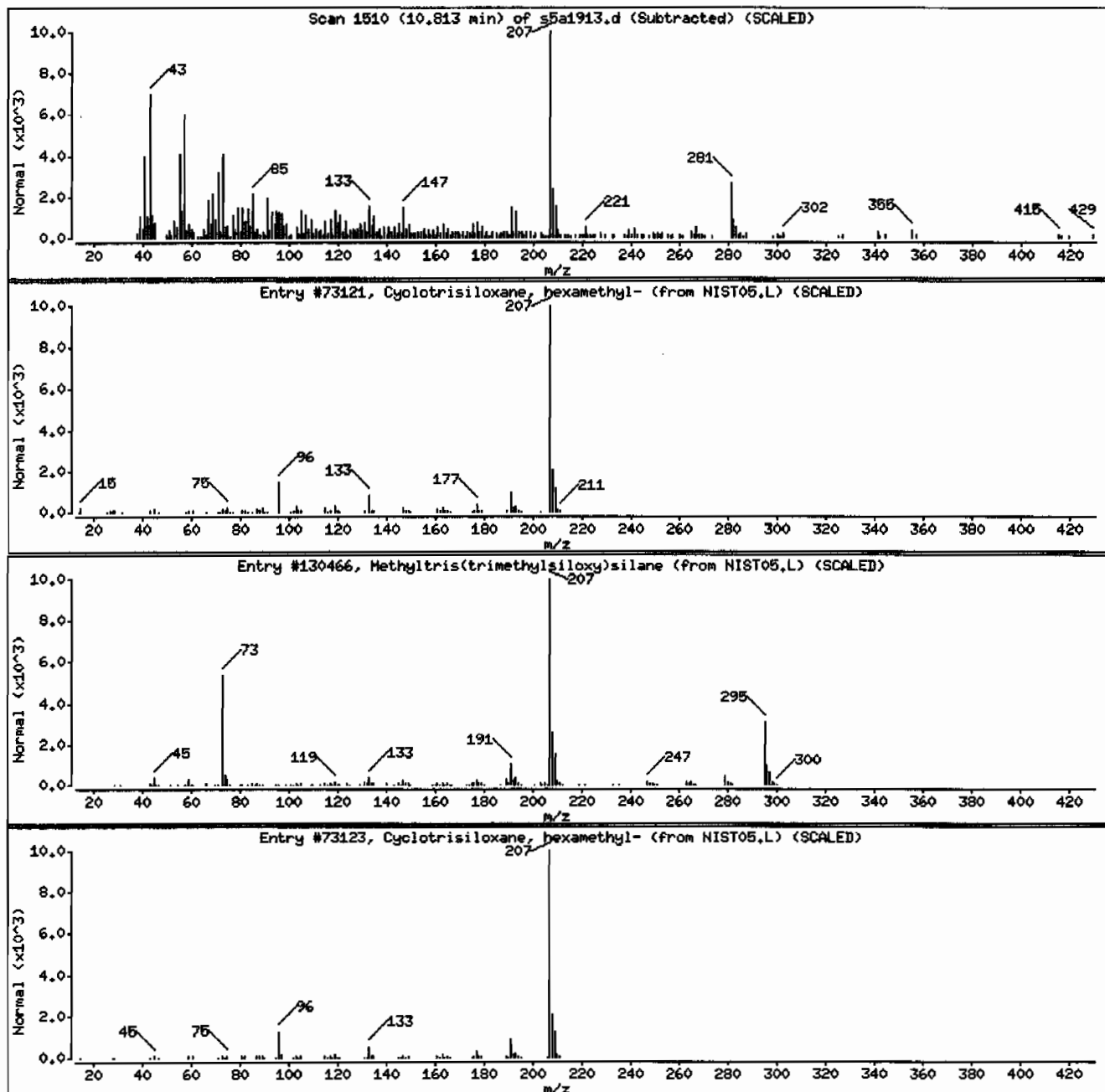
Column diameter: 0.20

Library Search Compound Match

Unknown

Cyclotrisiloxane, hexamethyl-
Methyltris(trimethylsiloxy)silane
Cyclotrisiloxane, hexamethyl-

CAS Number	Library	Entry	Quality	Formula	Weight
541-05-9	NIST05.L	73121	50	C ₆ H ₁₈ O ₃ Si ₃	222
17928-28-8	NIST05.L	130466	50	C ₁₀ H ₃₀ O ₃ Si ₄	310
541-05-9	NIST05.L	73123	50	C ₆ H ₁₈ O ₃ Si ₃	222



Date: 19-JAN-2010 14:55

Client ID: RE12-10-7265

Instrument: HSD5.i

Sample Info: 1244626005194284011SVH111LANL

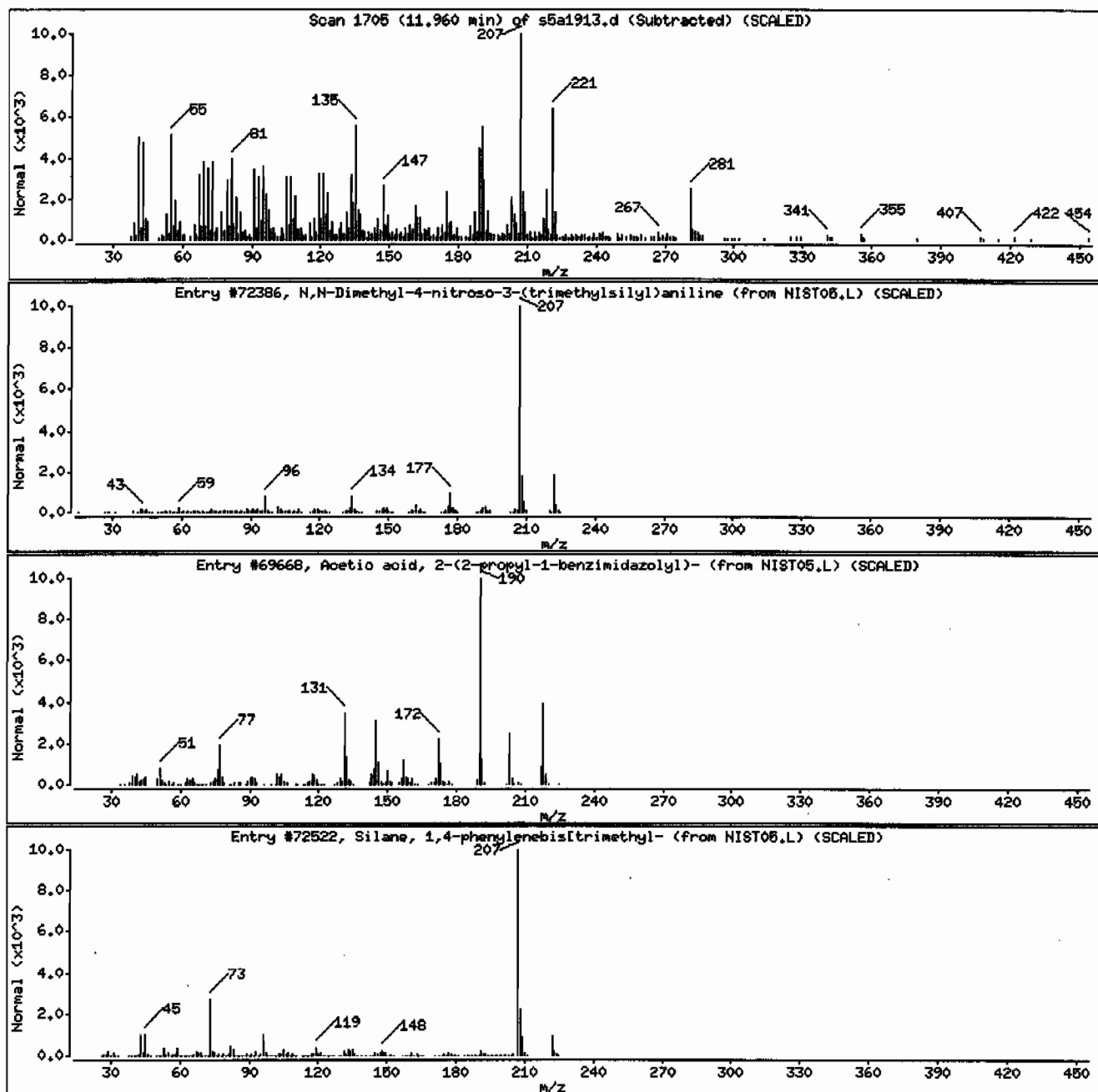
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	38	C ₁₁ H ₁₈ N ₂ O _{Si}	222
Acetic acid, 2-(2-propyl-1-benzimidazolyl)	331736-92-6	NIST05.L	69668	25	C ₁₂ H ₁₄ N ₂ O ₂	218
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	25	C ₁₂ H ₂₂ Si ₂	222



Date : 19-JAN-2010 14:55

Client ID: RE12-10-7265

Instrument: MSD5.i

Sample Info: 1244626005194284011SVH111LANL

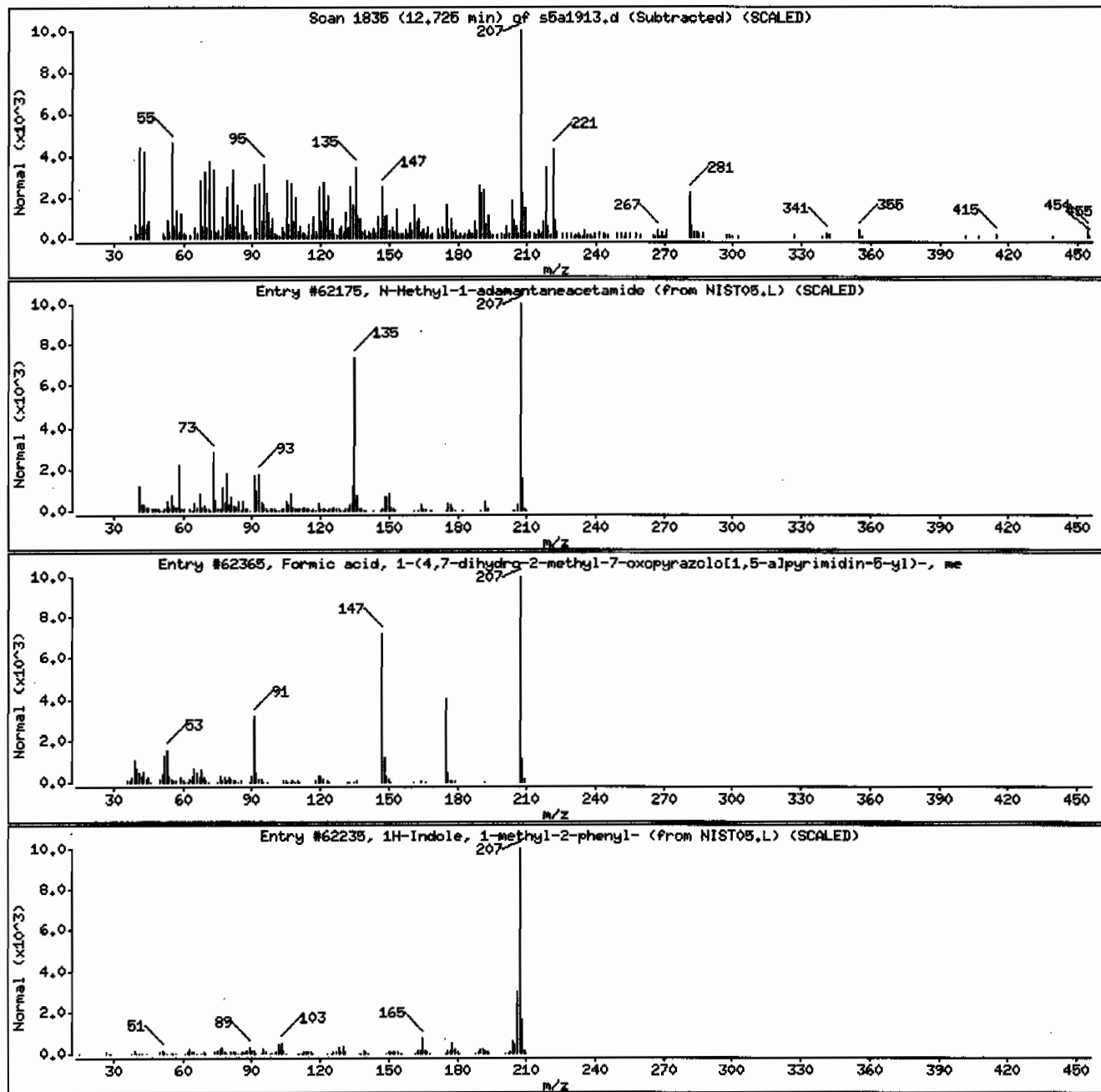
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-6	NIST05.L	62175	38	C13H21NO	207
Formic acid, 1-(4,7-dihydro-2-methyl-7-o	1000267-28-6	NIST05.L	62365	30	C9H9N3O3	207
1H-Indole, 1-methyl-2-phenyl-	3558-24-5	NIST05.L	62235	30	C15H13N	207



Date: 19-JAN-2010 14:55

Client ID: RE12-10-7265

Instrument: MSD5.i

Sample Info: 1244626005194284011SVH11ILANL

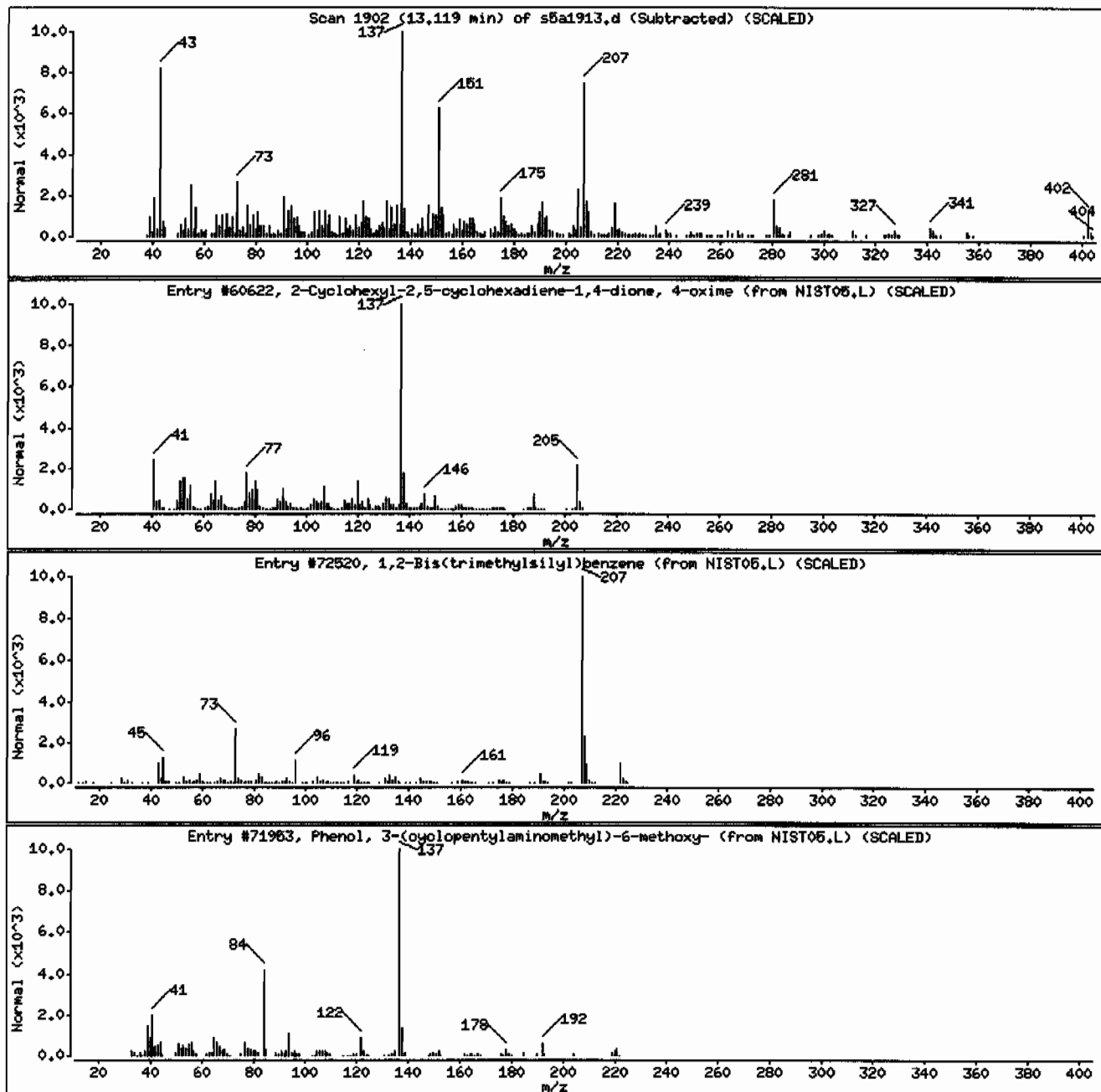
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Cyclohexyl-2,5-cyclohexadiene-1,4-dione	107244-64-2	NIST05.L	60622	38	C12H16NO2	205
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	30	C12H22Si2	222
Phenol, 3-(cyclopentylaminomethyl)-6-met	332382-83-9	NIST05.L	71963	25	C13H19NO2	221



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

SDG Number: 10-1225
Lab Sample ID: 244626002

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7266
Batch ID: 942840
Run Date: 01/19/2010 13:45
Prep Date: 01/18/2010 20:10
Data File: s5a1910.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	415	ug/kg	83.0	415
108-95-2	Phenol	U	415	ug/kg	83.0	415
95-57-8	2-Chlorophenol	U	415	ug/kg	83.0	415
106-46-7	1,4-Dichlorobenzene	U	415	ug/kg	83.0	415
621-64-7	N-Nitrosodipropylamine	U	415	ug/kg	83.0	415
59-50-7	4-Chloro-3-methylphenol	U	415	ug/kg	83.0	415
83-32-9	Acenaphthene	U	41.5	ug/kg	13.7	41.5
121-14-2	2,4-Dinitrotoluene	U	415	ug/kg	41.5	415
100-02-7	4-Nitrophenol	U	415	ug/kg	137	415
87-86-5	Pentachlorophenol	U	415	ug/kg	104	415
129-00-0	Pyrene	U	41.5	ug/kg	12.4	41.5
110-86-1	Pyridine	U	415	ug/kg	83.0	415
62-53-3	Aniline	U	415	ug/kg	124	415
111-44-4	bis(2-Chloroethyl) ether	U	415	ug/kg	83.0	415
541-73-1	1,3-Dichlorobenzene	U	415	ug/kg	83.0	415
100-51-6	Benzyl alcohol	U	415	ug/kg	124	415
95-50-1	1,2-Dichlorobenzene	U	415	ug/kg	83.0	415
108-60-1	bis(2-Chloroisopropyl) ether	U	415	ug/kg	83.0	415
95-48-7	o-Cresol	U	415	ug/kg	83.0	415
65794-96-9	m,p-Cresols	U	415	ug/kg	124	415
67-72-1	Hexachloroethane	U	415	ug/kg	83.0	415
98-95-3	Nitrobenzene	U	415	ug/kg	83.0	415
78-59-1	Isophorone	U	415	ug/kg	83.0	415
88-75-5	2-Nitrophenol	U	415	ug/kg	83.0	415
105-67-9	2,4-Dimethylphenol	U	415	ug/kg	145	415
111-91-1	bis(2-Chloroethoxy)methane	U	415	ug/kg	83.0	415
120-83-2	2,4-Dichlorophenol	U	415	ug/kg	83.0	415
65-85-0	Benzoic acid	U	830	ug/kg	207	830
91-20-3	Naphthalene	U	41.5	ug/kg	12.4	41.5
106-47-8	4-Chloroaniline	U	415	ug/kg	83.0	415
87-68-3	Hexachlorobutadiene	U	415	ug/kg	83.0	415
91-57-6	2-Methylnaphthalene	U	41.5	ug/kg	8.30	41.5
77-47-4	Hexachlorocyclopentadiene	U	415	ug/kg	83.0	415
88-06-2	2,4,6-Trichlorophenol	U	415	ug/kg	83.0	415
95-95-4	2,4,5-Trichlorophenol	U	415	ug/kg	83.0	415
91-58-7	2-Chloronaphthalene	U	41.5	ug/kg	13.7	41.5
88-74-4	2-Nitroaniline	U	415	ug/kg	83.0	415
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	415	ug/kg	83.0	415

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

SDG Number: 10-1225
Lab Sample ID: 244626002

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7266
Batch ID: 942840
Run Date: 01/19/2010 13:45
Prep Date: 01/18/2010 20:10
Data File: s5a1910.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	415	ug/kg	83.0	415
606-20-2	2,6-Dinitrotoluene	U	415	ug/kg	41.5	415
208-96-8	Acenaphthylene	U	41.5	ug/kg	12.4	41.5
51-28-5	2,4-Dinitrophenol	U	830	ug/kg	158	830
132-64-9	Dibenzofuran	U	415	ug/kg	83.0	415
84-66-2	Diethylphthalate	U	415	ug/kg	83.0	415
86-73-7	Fluorene	U	41.5	ug/kg	12.4	41.5
7005-72-3	4-Chlorophenylphenylether	U	415	ug/kg	83.0	415
534-52-1	2-Methyl-4,6-dinitrophenol	U	415	ug/kg	83.0	415
100-01-6	4-Nitroaniline	U	415	ug/kg	124	415
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	415	ug/kg	83.0	415
122-66-7	Azobenzene	U	415	ug/kg	83.0	415
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	415	ug/kg	83.0	415
118-74-1	Hexachlorobenzene	U	415	ug/kg	83.0	415
85-01-8	Phenanthrene	U	41.5	ug/kg	12.4	41.5
120-12-7	Anthracene	U	41.5	ug/kg	8.30	41.5
84-74-2	Di-n-butylphthalate	U	415	ug/kg	83.0	415
206-44-0	Fluoranthene	U	41.5	ug/kg	12.4	41.5
85-68-7	Butylbenzylphthalate	U	415	ug/kg	83.0	415
56-55-3	Benzo(a)anthracene	U	41.5	ug/kg	12.4	41.5
91-94-1	3,3'-Dichlorobenzidine	U	415	ug/kg	124	415
218-01-9	Chrysene	U	41.5	ug/kg	12.4	41.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	415	ug/kg	83.0	415
117-84-0	Di-n-octylphthalate	U	415	ug/kg	83.0	415
205-99-2	Benzo(b)fluoranthene	U	41.5	ug/kg	12.4	41.5
207-08-9	Benzo(k)fluoranthene	U	41.5	ug/kg	12.4	41.5
50-32-8	Benzo(a)pyrene	U	41.5	ug/kg	12.4	41.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.5	ug/kg	12.4	41.5
53-70-3	Dibenzo(a,h)anthracene	U	41.5	ug/kg	12.4	41.5
191-24-2	Benzo(ghi)perylene	U	41.5	ug/kg	12.4	41.5
120-82-1	1,2,4-Trichlorobenzene	U	415	ug/kg	83.0	415

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.17	204	ug/kg	90	NJ
	Unknown Aldol Condensate	2.95	467	ug/kg		JA

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

SDG Number: 10-1225
Lab Sample ID: 244626002

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7266
Batch ID: 942840
Run Date: 01/19/2010 13:45
Prep Date: 01/18/2010 20:10
Data File: s5a1910.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
23986-74-5	1,6-Cyclodecadiene, 1-methyl-5-methylene	6.02	169	ug/kg	96	NJ
	Unknown	9.72	267	ug/kg		J
	Unknown	10.04	919	ug/kg		J
	Unknown	10.7	216	ug/kg		J
	Unknown	10.82	234	ug/kg		J
112-95-8	Eicosane	11.8	170	ug/kg	96	NJ
	Unknown	11.87	355	ug/kg		J
	Unknown	12.28	198	ug/kg		J
	Unknown	12.3	255	ug/kg		J
	Unknown	13.29	205	ug/kg		J
83-46-5	Unknown	13.41	479	ug/kg		J
	.beta.-Sitosterol	13.79	494	ug/kg	97	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1910.d
Lab Smp Id: 244626002 Client Smp ID: RE12-10-7266
Inj Date : 19-JAN-2010 13:45
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626002|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	19.73610	% 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	3.931	3.940	(1.000)	578529	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1901847	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1116536	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2006694	40.0000	
* 91 Chrysene-d12	240	9.636	9.646	(1.000)	1662344	40.0000	
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1159475	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	941369	65.6120	2720
\$ 5 Phenol-d5	99	3.648	3.651	(0.928)	1142448	64.5671	2680
\$ 20 Nitrobenzene-d5	82	4.295	4.301	(0.895)	532334	36.4545	1510
\$ 39 2-Fluorobiphenyl	172	5.542	5.548	(0.915)	1027156	34.7761	1440
\$ 60 2,4,6-Tribromophenol	329	6.654	6.661	(1.098)	285608	80.4810	3340
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.893)	1159242	44.4122	1840

ION RATIO REPORT

SV REPORT

Data file: s5a1910.d

Report Date: 01/19/2010 13:58

Lab. ID: 244626002

SampleType: SAMPLE

Injection Date: 19-JAN-2010 13:45

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626002|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	64294	3.65	3.72	80-120	100	(T)
93	2057	3.61	3.72	210-270	3	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	75493	4.30	4.18	80-120	100	(T)
42	44997	4.30	4.18	44-104	60	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	3551	4.54	4.57	80-120	100	()
122	2771	4.55	4.57	39- 99	78	()
77	3239	4.58	4.57	34- 94	91	()

43 Dimethylphthalate		CAS#: 131-11-3				
163	203293	6.06	5.82	80-120	100	(T)
164	1116536	6.06	5.82	0- 40	549	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	153921	6.06	5.88	80-120	100	(T)
63	2179	6.06	5.88	61-121	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	153921	6.06	6.17	80-120	100	(T)
89	2868	6.05	6.17	47-107	2	(QT)
63	2179	6.06	6.17	23- 83	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52	4-Nitrophenol		CAS#:	100-02-7		
139	836	6.12	6.10	80-120	100	()
109	1817	6.14	6.10	41-101	217	(Q)
65	6561	6.12	6.10	72-132	784	(Q)

53	Fluorene		CAS#:	86-73-7		
166	16427	6.65	6.47	80-120	100	(T)
165	16455	6.65	6.47	56-116	100	(T)
167	5953	6.65	6.47	0- 44	36	(T)

55	2-Methyl-4,6-dinitrophenol		CAS#:	534-52-1		
198	1155	6.65	6.49	80-120	100	(T)
105	5656	6.66	6.49	12- 72	489	(QT)
51	2140	6.65	6.49	42-102	185	(QT)

61	4-Bromophenylphenylether		CAS#:	101-55-3		
248	20358	6.65	6.84	80-120	100	(T)
141	128885	6.65	6.83	43-103	633	(QT)
250	40004	6.65	6.84	68-128	196	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1910.d
 Lab Smp Id: 244626002 Client Smp ID: RE12-10-7266
 Inj Date : 19-JAN-2010 13:45
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626002|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	19.73610	% moisture

Cpnd Variable

Local Compound Variable

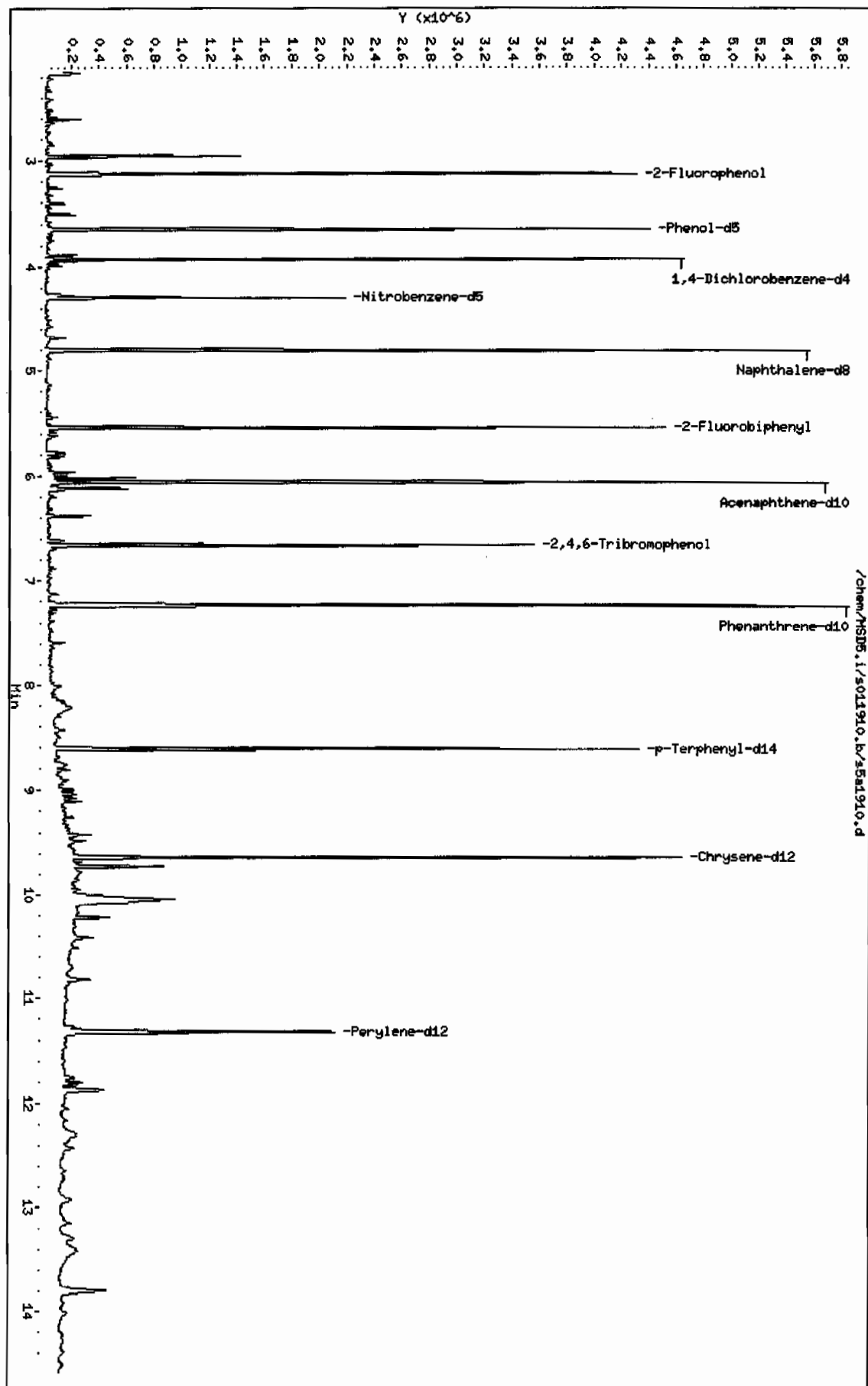
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.931	3482169	40.000
* 46 Acenaphthene-d10	6.060	4892477	40.000
* 91 Chrysene-d12	9.636	4517337	40.000
* 98 Perylene-d12	11.324	3313844	40.000

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	
Propanoic acid					CAS #: 79-09-4		
2.166	427626	4.91217767	204	90	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.954	979717	11.2541013	467	0		0	10
1,6-Cyclodecadiene, 1-methyl-5-methylene					CAS #: 23986-74-5		
6.019	499145	4.08092091	169	96	NIST05.L	59960	46
Unknown					CAS #:		
9.724	725809	6.42687394	267	0		0	91
Unknown					CAS #:		
10.042	2502434	22.1584848	919	0		0	91
Unknown					CAS #:		
10.701	431639	5.21012745	216	0		0	98
Unknown					CAS #:		
10.819	466694	5.63326240	234	0		0	98
Eicosane					CAS #: 112-95-8		
11.801	339106	4.09320857	170	96	NIST05.L	113489	98
Unknown					CAS #:		
11.866	708205	8.54843658	355	0		0	98
Unknown					CAS #:		
12.283	395201	4.77030576	198	0		0	98
Unknown					CAS #:		
12.301	508932	6.14309552	255	0		0	98
Unknown					CAS #:		
13.295	409815	4.94670661	205	0		0	98
Unknown					CAS #:		
13.412	955517	11.5336416	478	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.795	985594	11.8966893	494	97	NIST05.L	174399	98

Data File: /chem/MSDS.i/s011910.b/s5a1910.d
Date: 19-JAN-2010 13:45
Client ID: RE12-10-7266
Sample Info: 1246260021942840115W111L1A1L
Volume Injected (ul): 0.5
Column phase: 38M DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVH111LANL

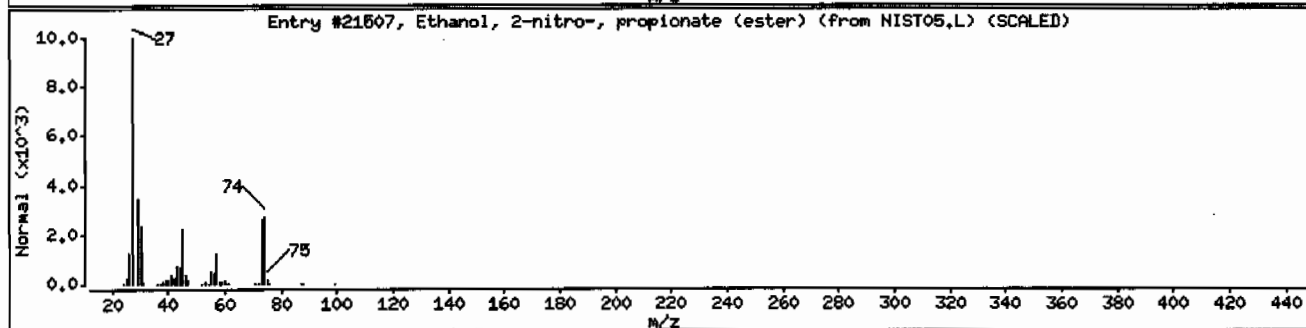
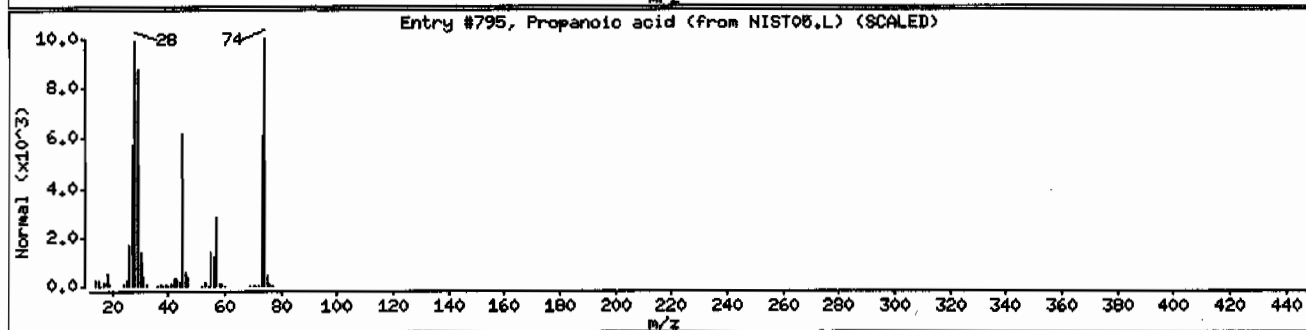
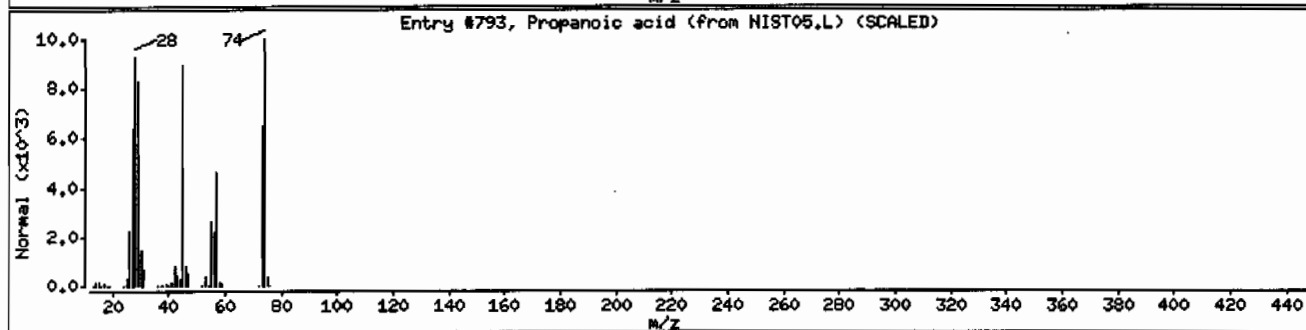
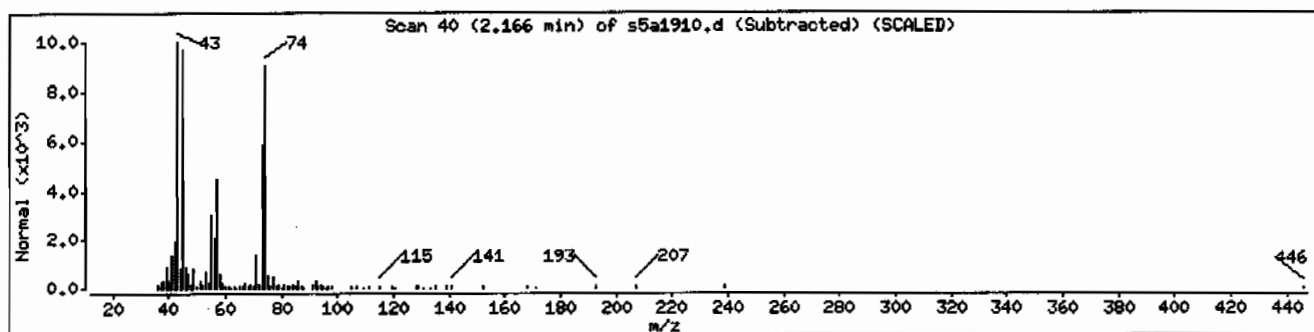
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Height
Propanoic acid	79-09-4	NIST05.L	793	90	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	86	C3H6O2	74
Ethanol, 2-nitro-, propionate (ester)	5390-28-3	NIST05.L	21507	72	C5H9NO4	147



Date: 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011ISVM11ILANL

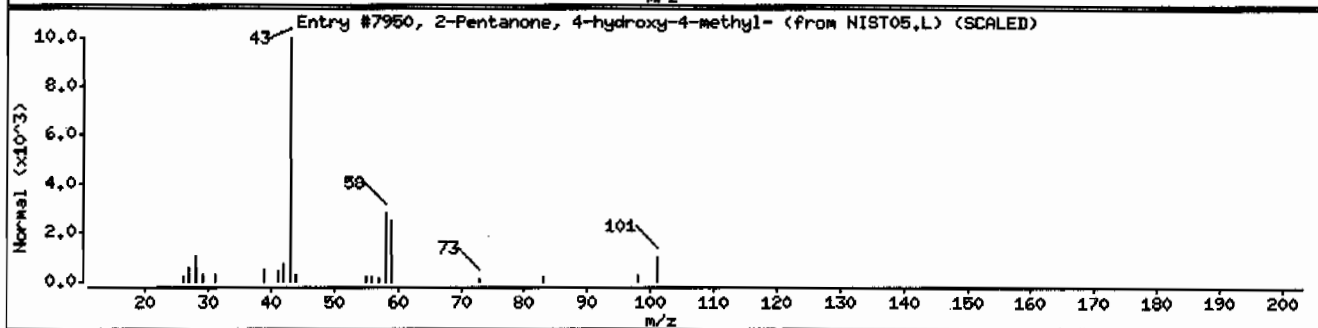
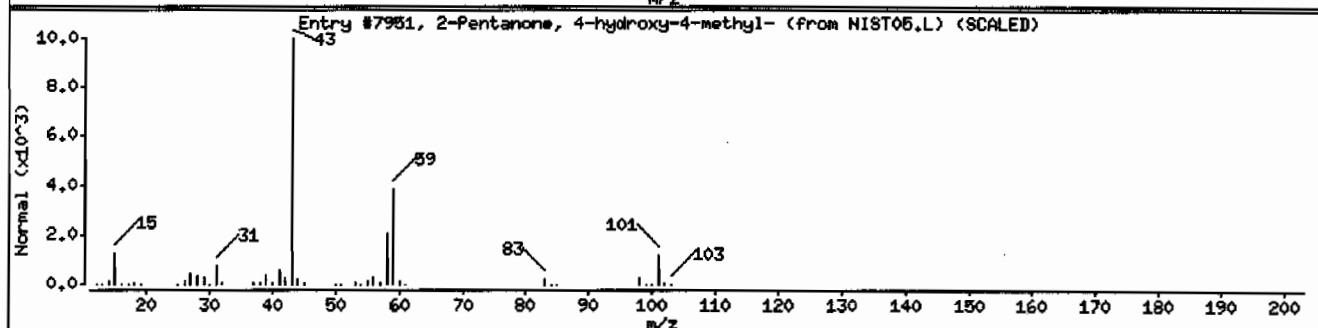
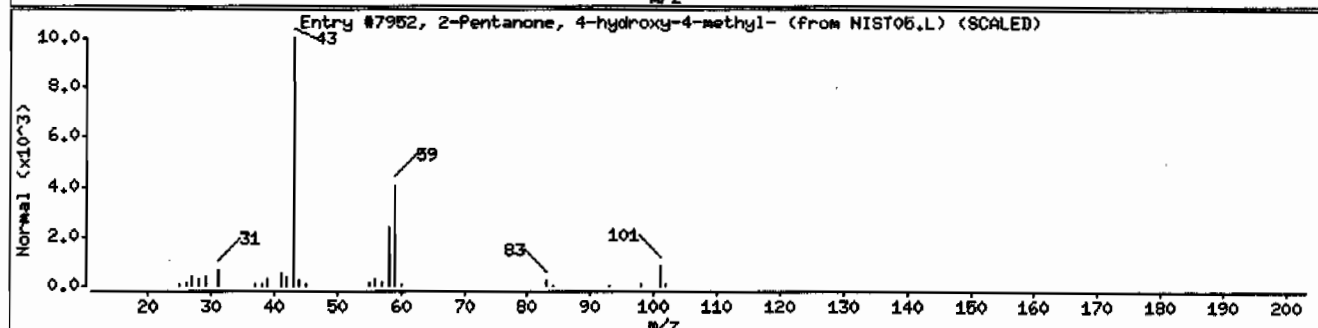
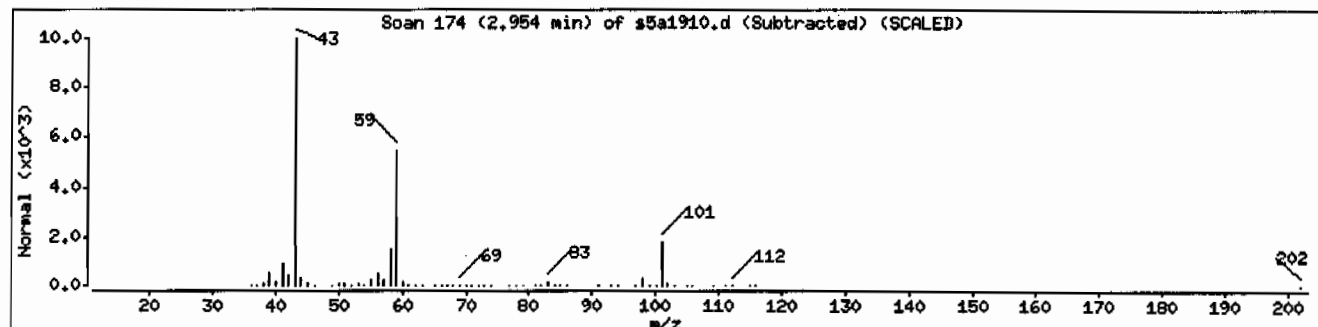
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7962	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7960	25	C6H12O2	116



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.1

Sample Info: 1244626002194284011SVH11ILANL

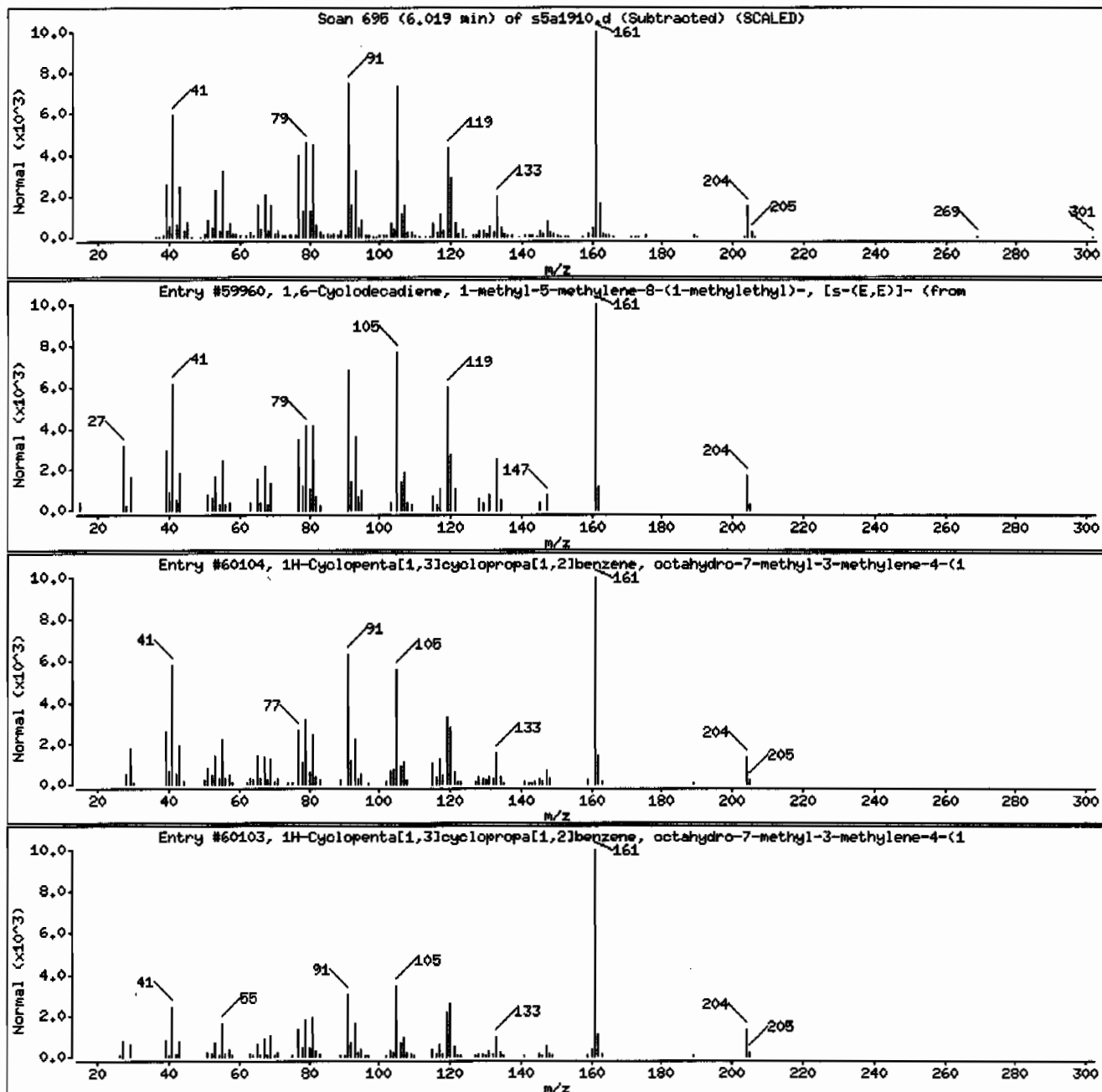
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,6-Cyclodecadiene, 1-methyl-5-methylene	23986-74-5	NIST05.L	59960	96	C15H24	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60104	94	C15H24	204
1H-Cyclopenta[1,3]cyclopropa[1,2]benzene	13744-15-5	NIST05.L	60103	92	C15H24	204



Date : 19-JAN-2010 13:48

Client ID: RE12-10-7266

Instrument: HSD5.1

Sample Info: 1244626002194284011SVH11ILANL

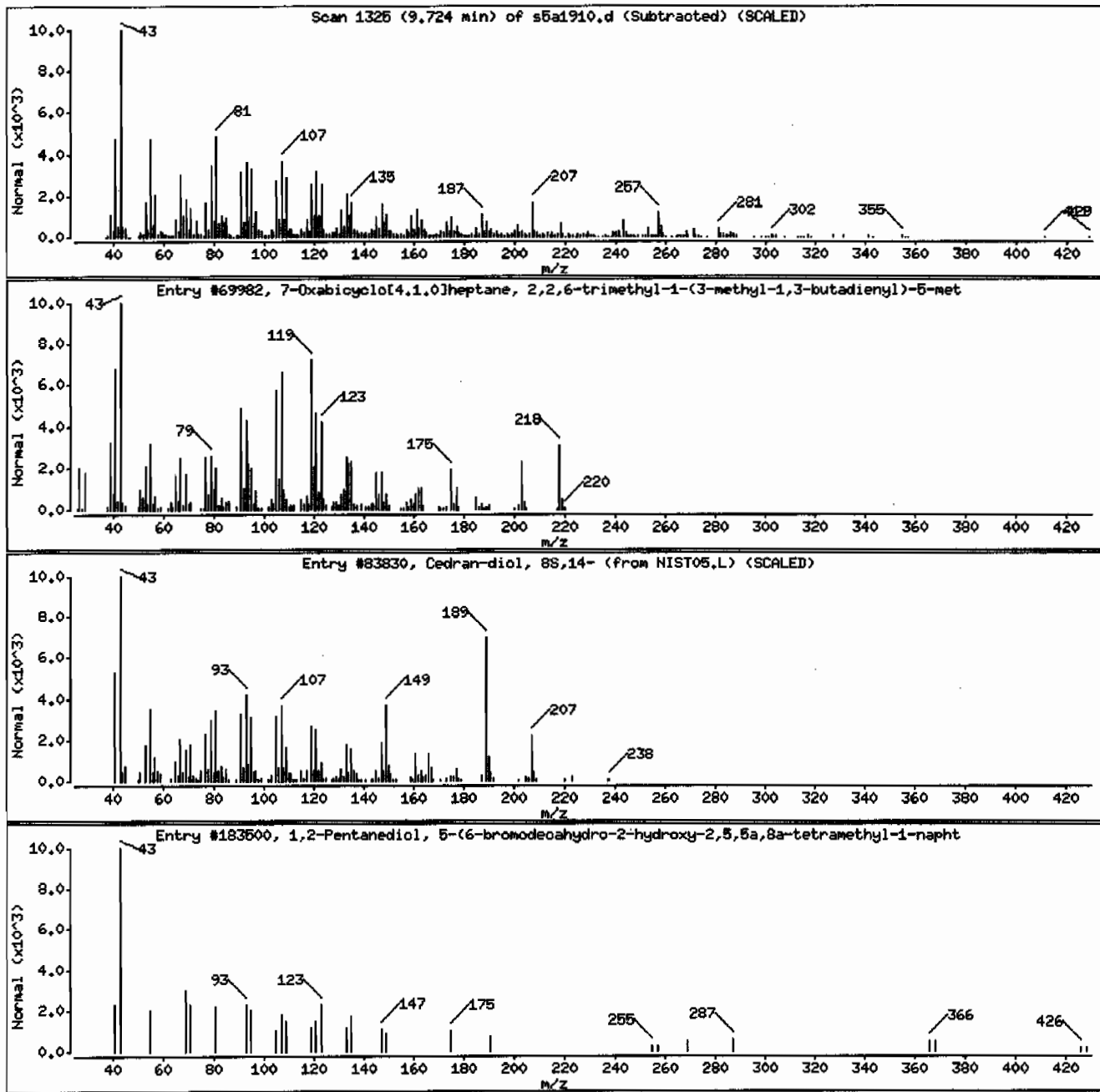
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	38	C15H22O	218
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	38	C15H26O2	238
1,2-Pentanediol, 5-(6-bromodecahydro-2-h	115334-14-0	NIST05.L	183500	37	C24H39BrO5	486



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVH111LANL

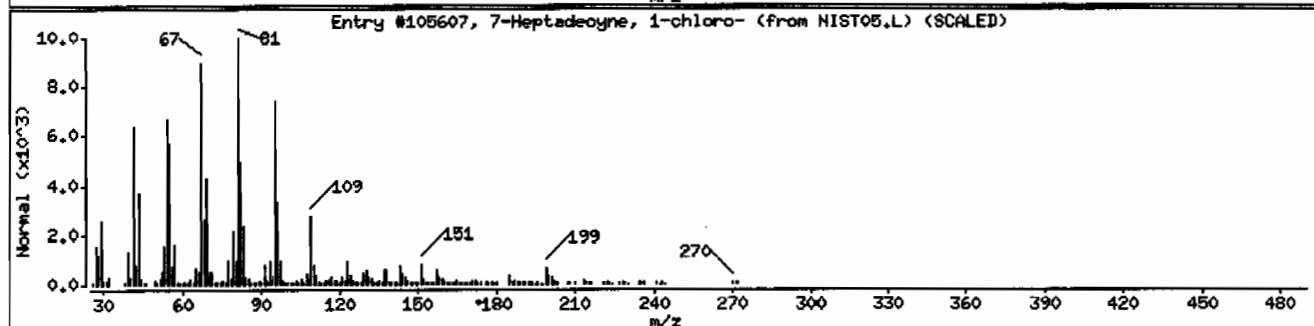
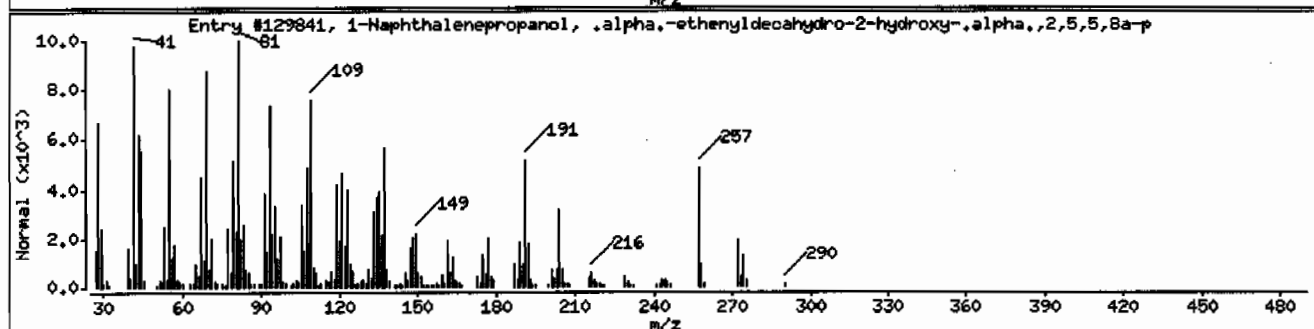
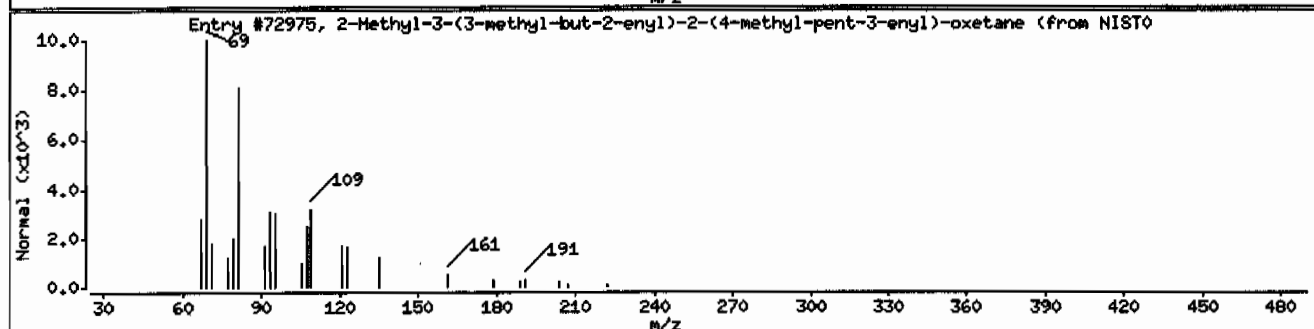
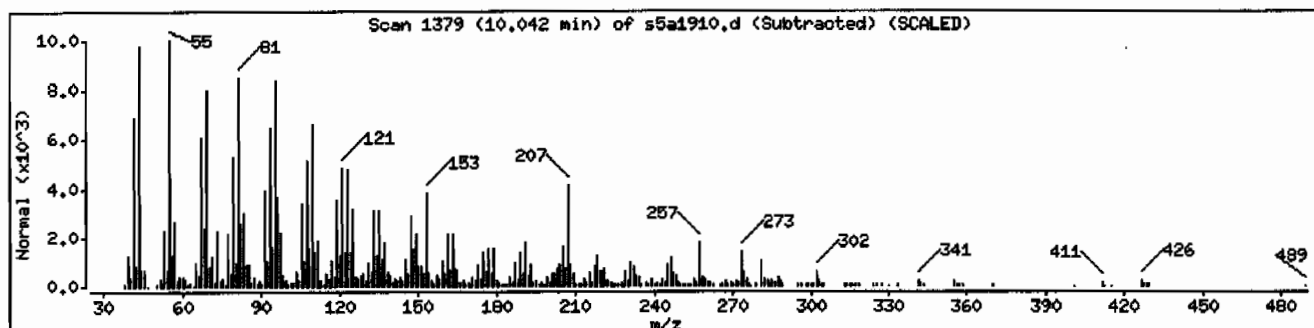
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-3-(3-methyl-but-2-enyl)-2-(4-me	1000144-10-2	NIST05.L	72975	56	C15H26O	222
1-Naphthalenepropanol, .alpha.-ethenylde	515-03-7	NIST05.L	129841	46	C20H36O2	308
7-Heptadeoyne, 1-chloro-	56554-74-6	NIST05.L	105607	42	C17H31Cl	270



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVMI1ILANL

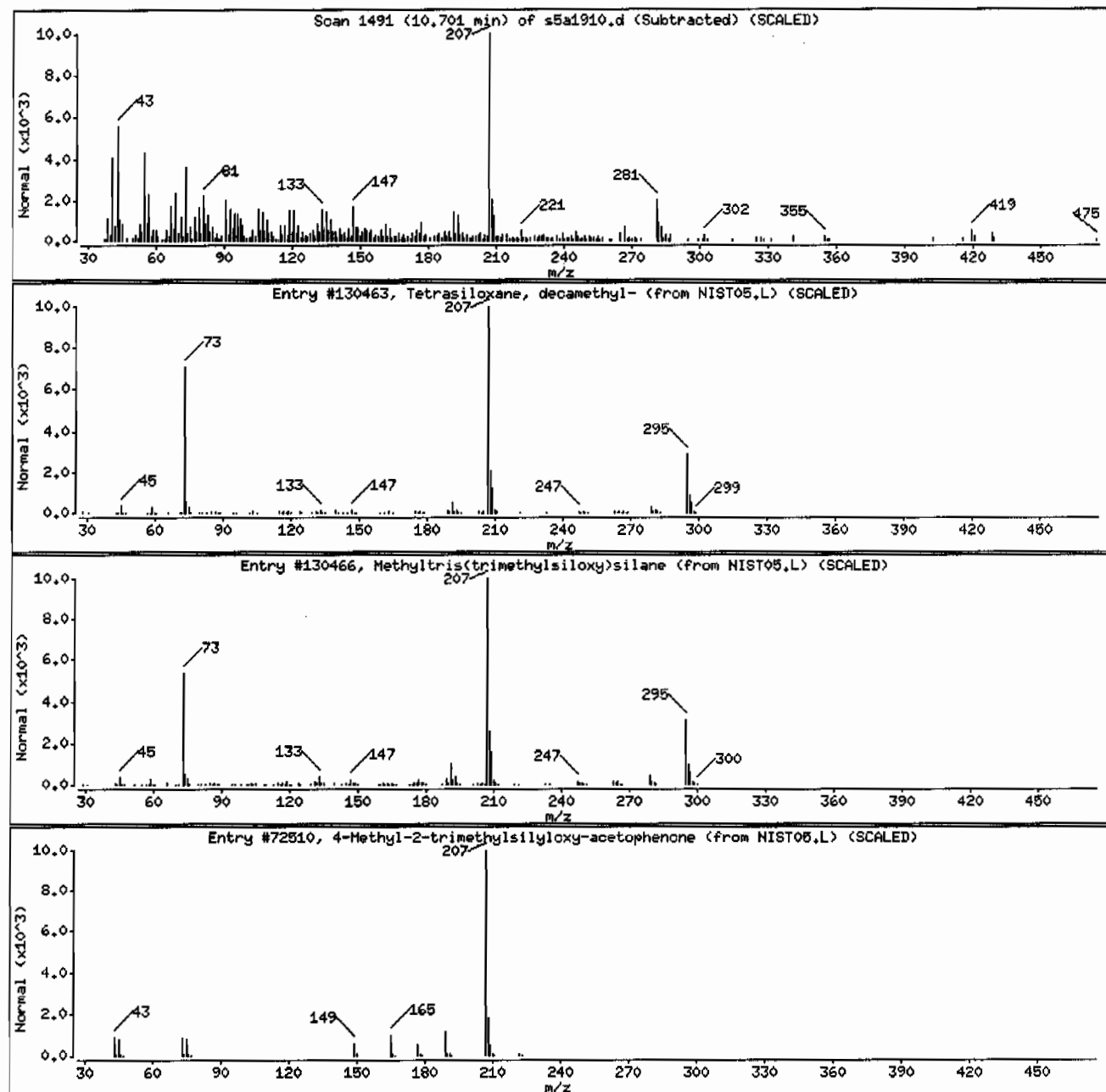
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130463	59	C ₁₀ H ₃₀ O ₃ Si ₄	310
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	59	C ₁₀ H ₃₀ O ₃ Si ₄	310
4-Methyl-2-trimethylsilyloxy-acetophenone	97389-70-3	NIST05.L	72510	52	C ₁₂ H ₁₈ O ₂ Si ₃	222



Date: 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVH111LANL

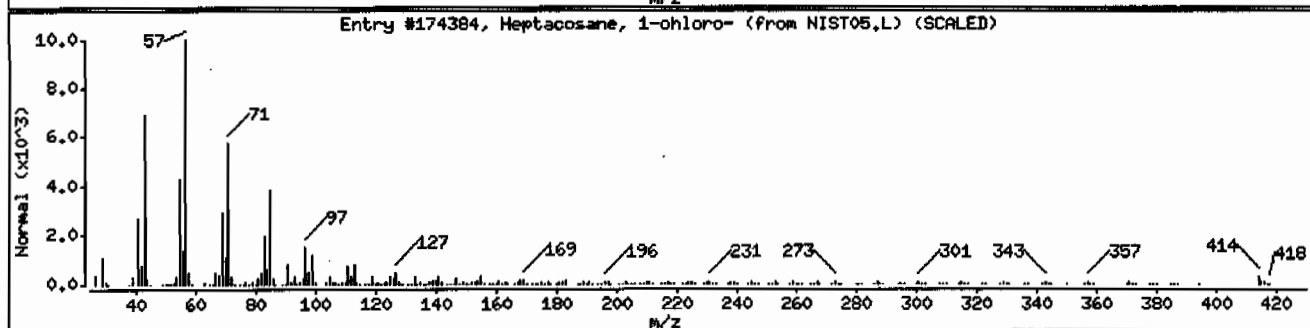
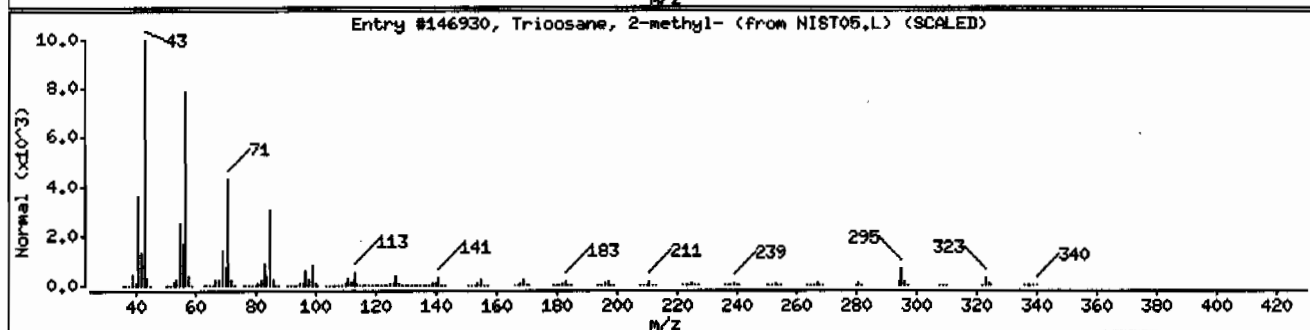
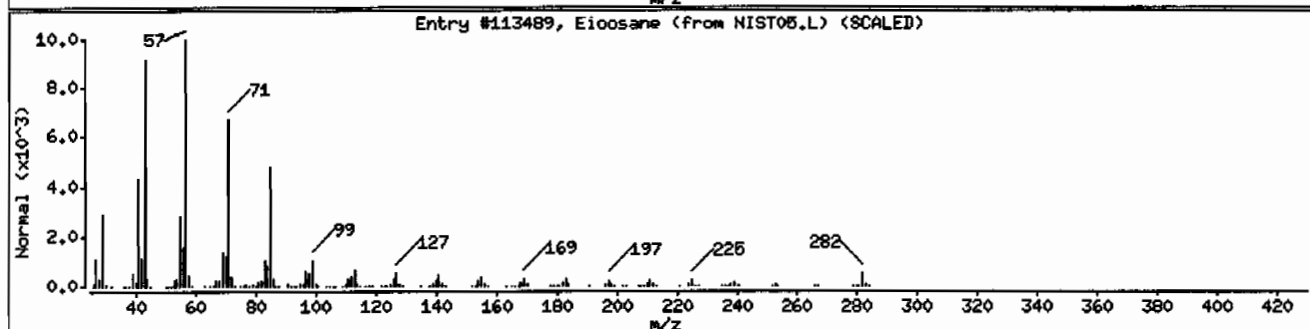
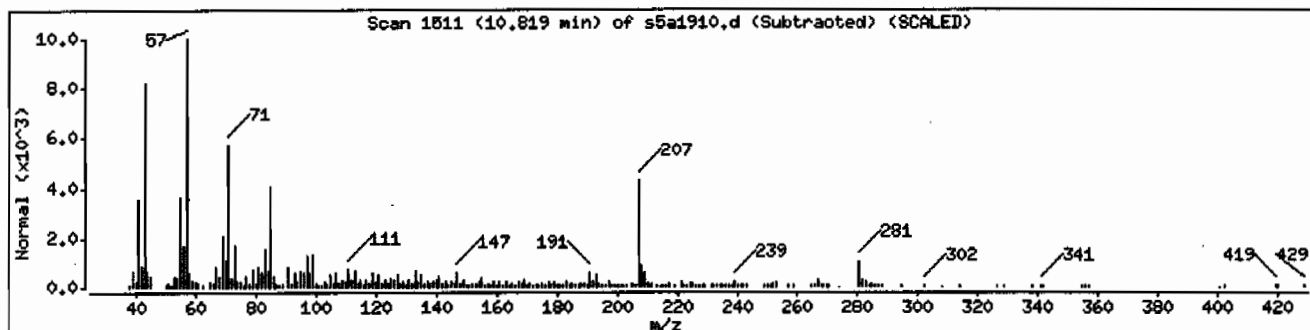
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-96-8	NIST05.L	113489	95	C20H42	282
Tricosane, 2-methyl-	1928-30-9	NIST05.L	146930	90	C24H50	338
Heptacosane, 1-chloro-	62016-79-9	NIST05.L	174384	60	C27H55Cl	414



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVH11ILANL

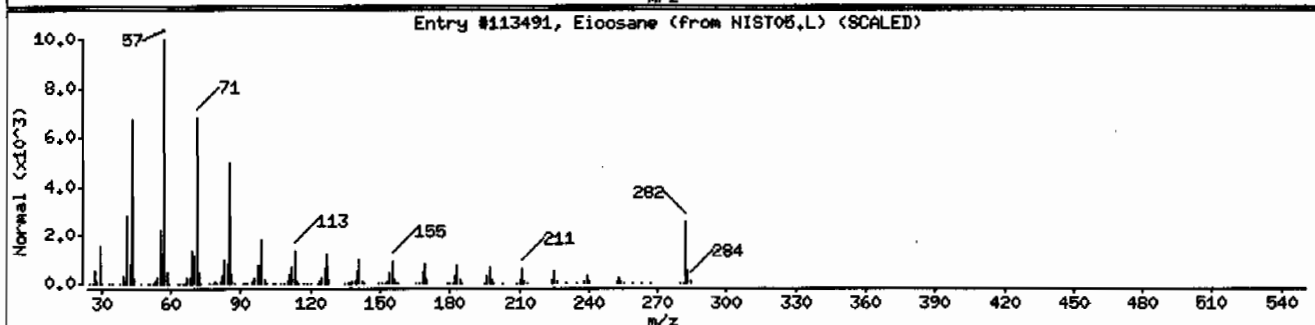
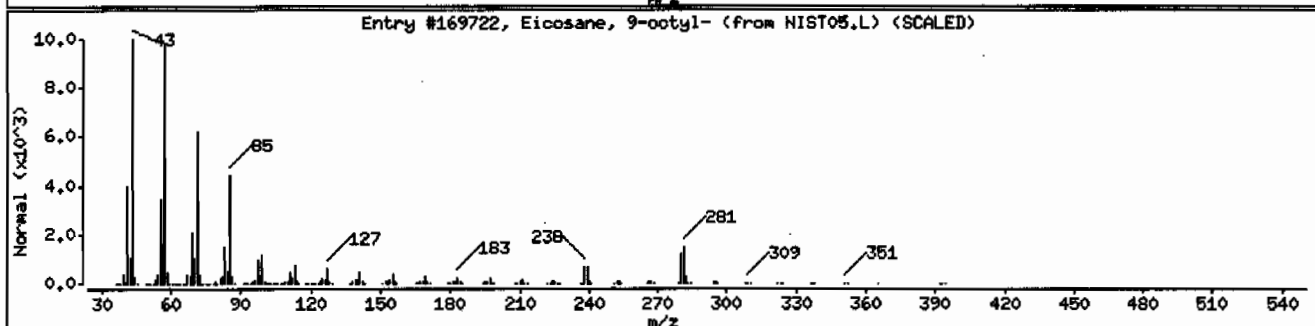
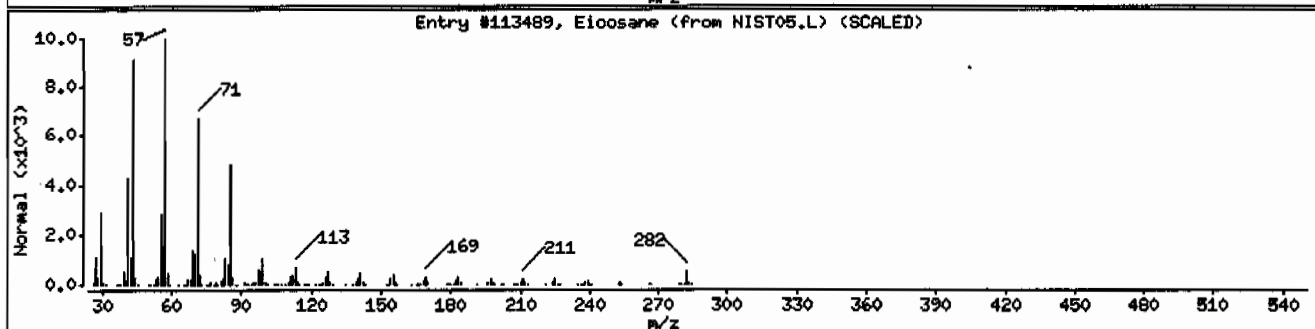
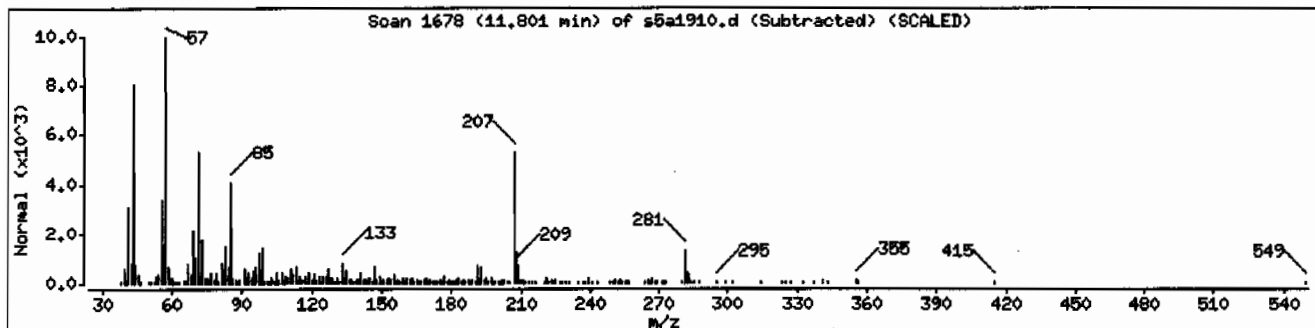
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-96-8	NIST05.L	113489	96	C ₂₀ H ₄₂	282
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	64	C ₂₈ H ₅₈	394
Eicocene	112-96-8	NIST05.L	113491	64	C ₂₀ H ₄₂	282



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVMI11LANL

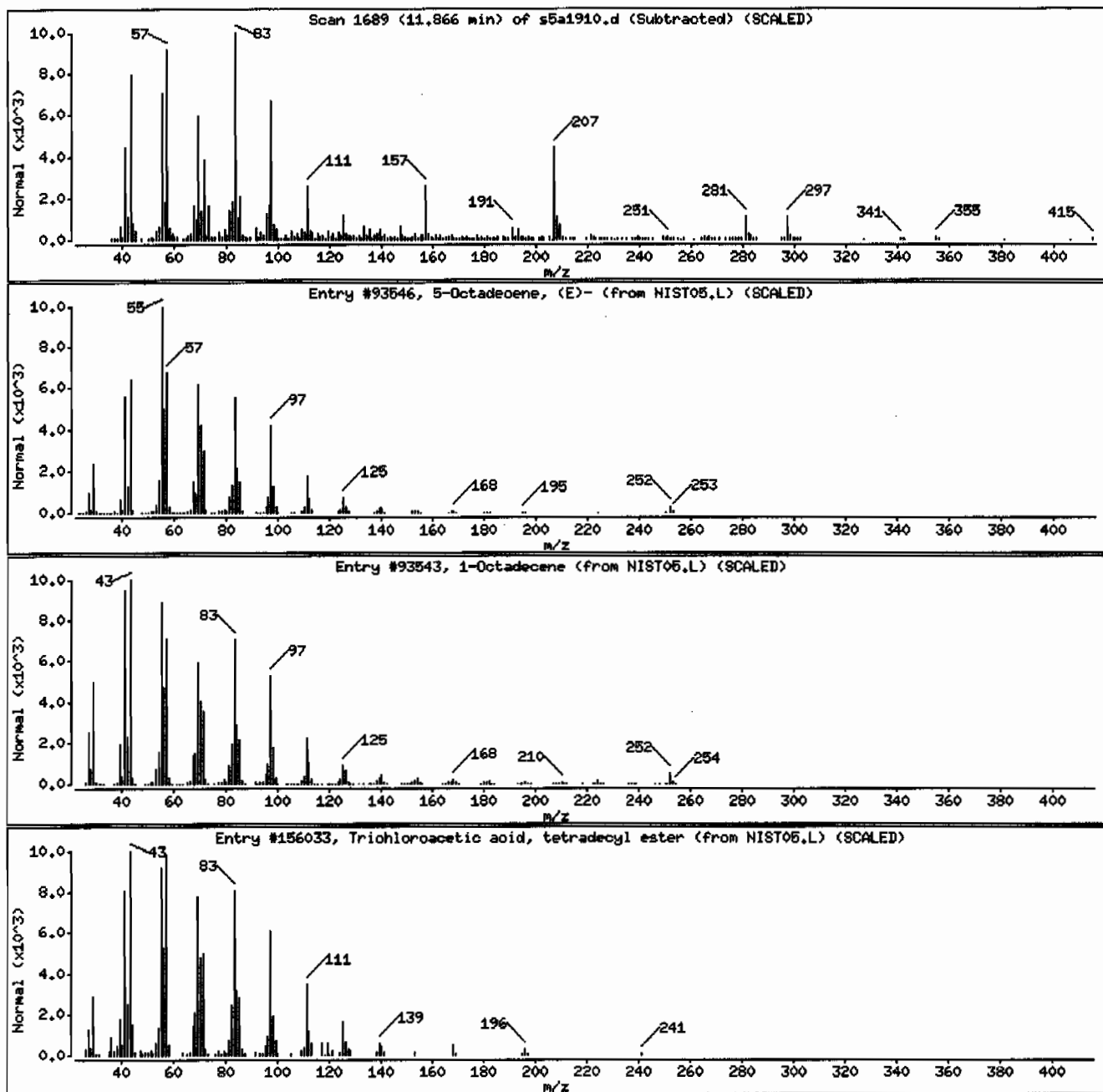
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Octadecene, (E)-	7206-21-5	NIST05.L	93546	70	C18H36	252
1-Octadecene	112-88-9	NIST05.L	93543	49	C18H36	252
Trichloroacetic acid, tetradecyl ester	74339-52-9	NIST05.L	156033	46	C16H29Cl3O2	358



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: HSD5.1

Sample Info: 1244626002194284011SVMI1ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

1,2-Bis(trimethylsilyl)benzene

CAS Number

17181-09-6

Library

NIST05.L

Entry

72520

Quality

50

Formula

C12H22Si2

Weight

222

9,10-Methanoanthracen-11-ol, 9,10-dihydro

126615-74-5

NIST05.L

92233

38

C18H18O

250

Cyclotrisiloxane, hexamethyl-

541-08-9

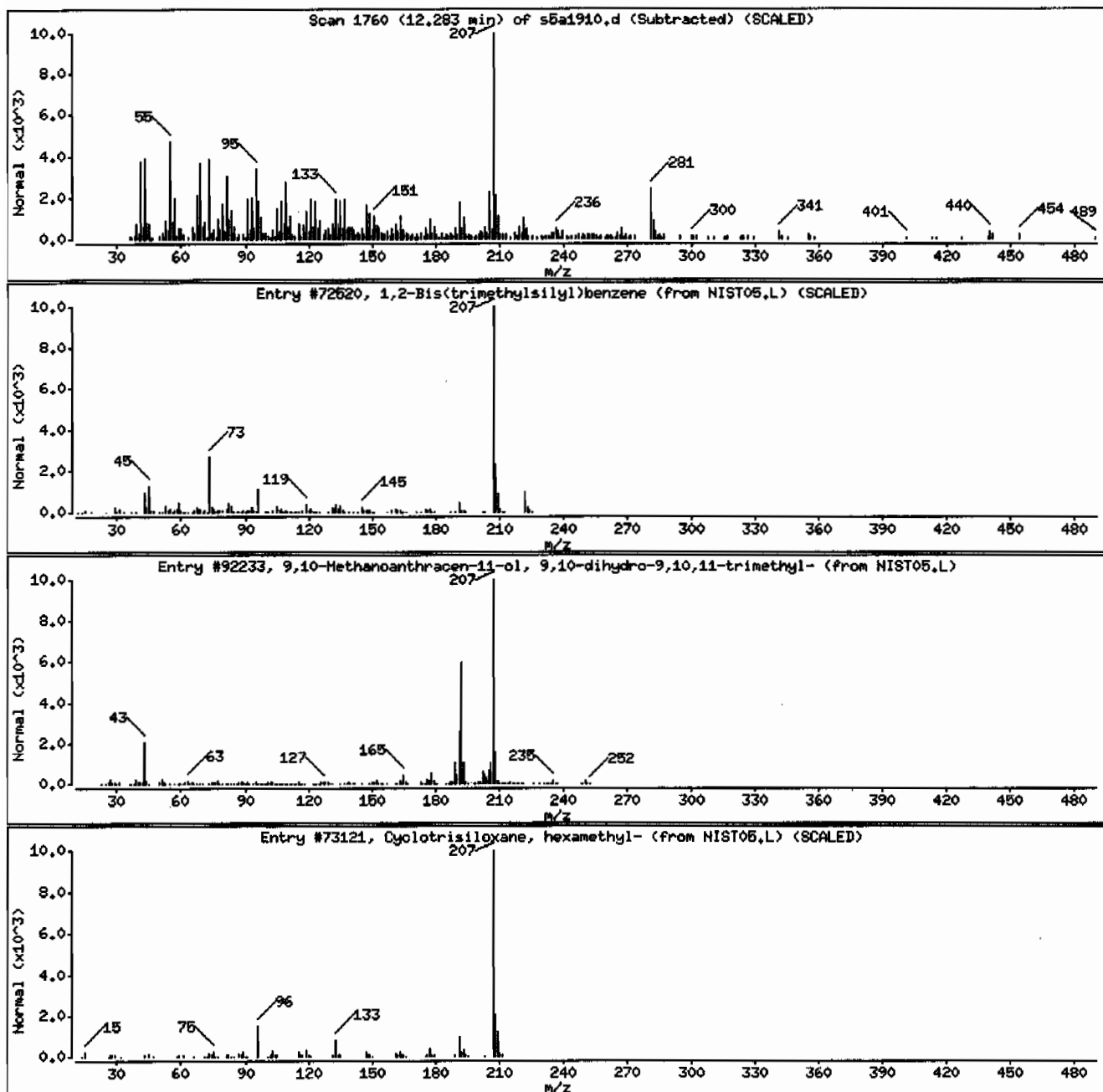
NIST05.L

73121

38

C6H18O3Si3

222



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVH11ILANL

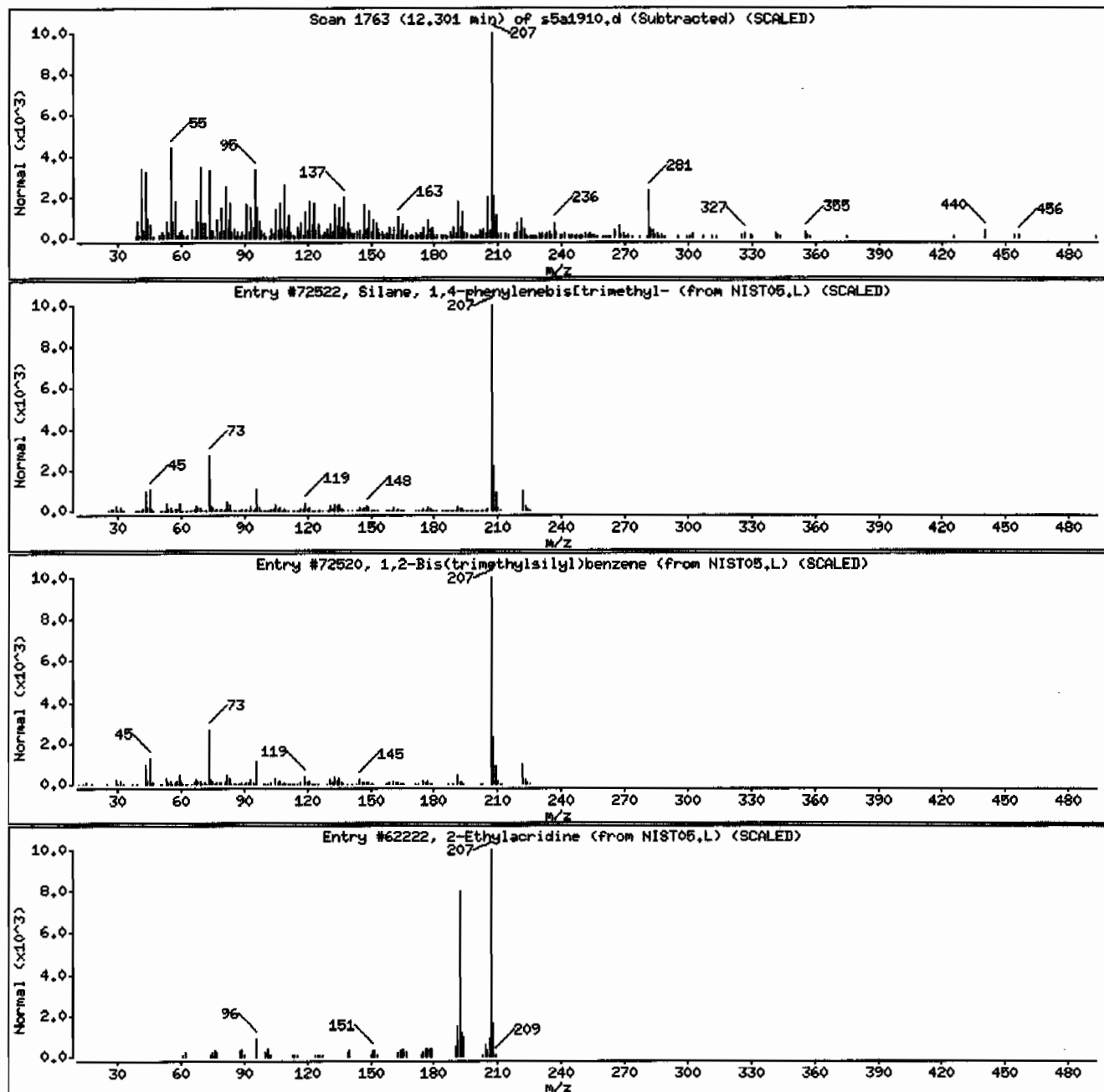
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	50	C12H22Si2	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	45	C12H22Si2	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	41	C15H13N	207



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: HSD5.i

Sample Info: 1244626002194284011ISVH111LANL

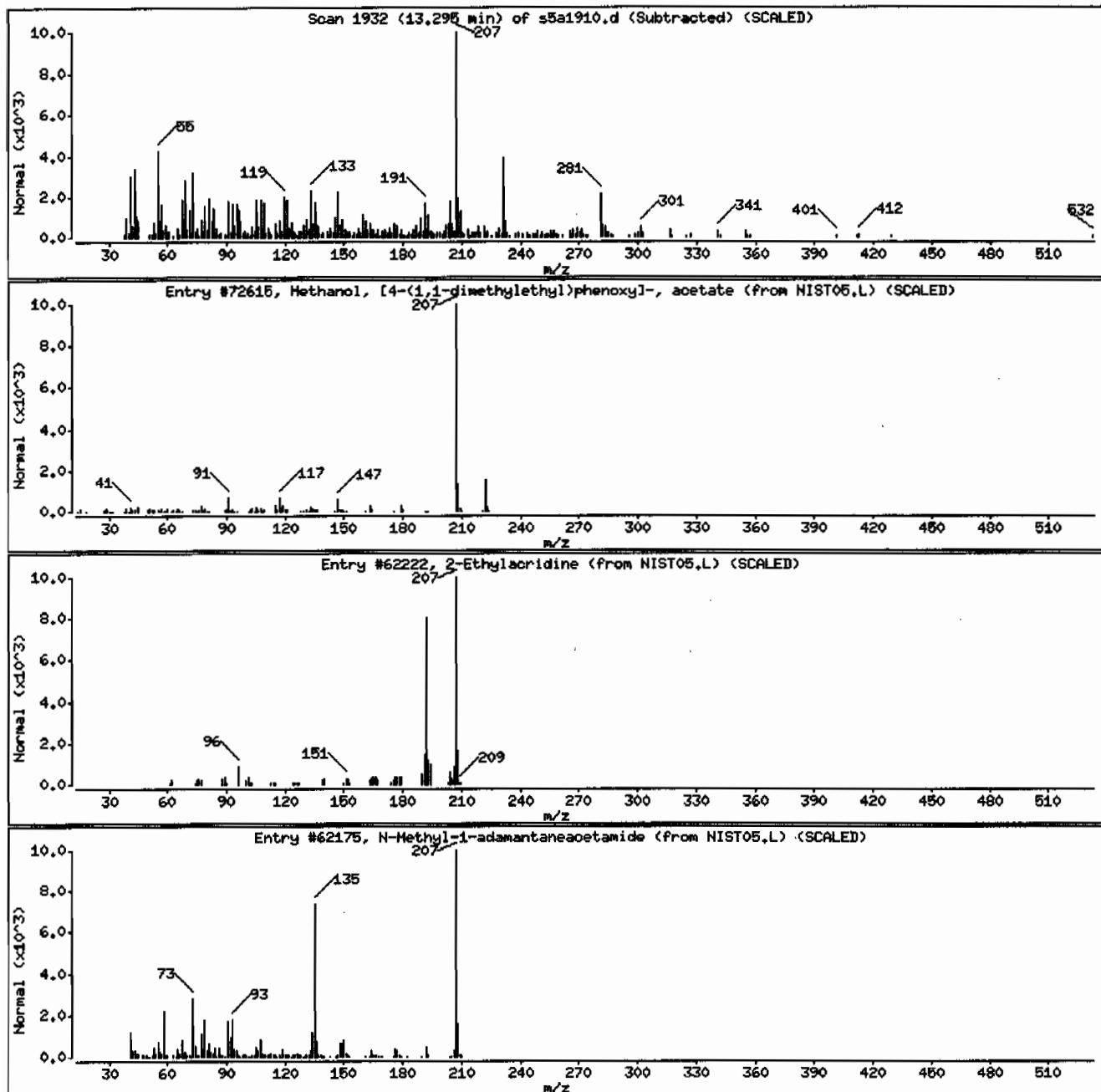
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methanol, [4-(1,1-dimethylethyl)phenoxy]	54889-98-4	NIST05.L	72615	38	C13H18O3	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207



Date : 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: I244626002194284011SVMI11LANL

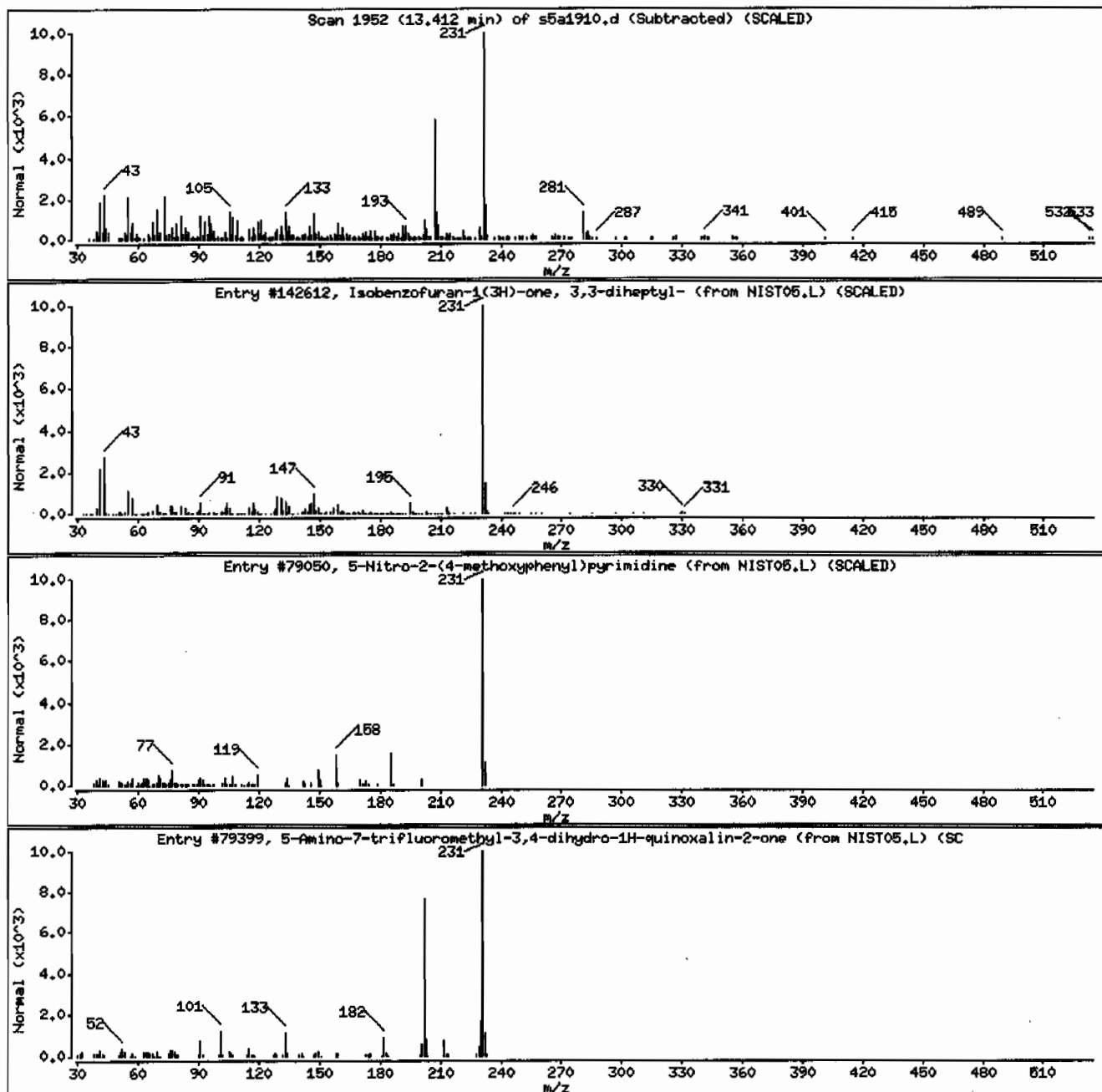
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Isobenzofuran-1(3H)-one, 3,3-diheptyl-	299420-15-8	NIST05.L	142612	38	C22H34O2	330
5-Nitro-2-(4-methoxyphenyl)pyrimidine	344303-88-4	NIST05.L	79050	38	C11H9N3O3	231
5-Amino-7-trifluoromethyl-3,4-dihydro-1H	1000318-26-6	NIST05.L	79399	38	C9H8F3N3O	231



Date: 19-JAN-2010 13:45

Client ID: RE12-10-7266

Instrument: MSD5.i

Sample Info: 1244626002194284011SVH11ILANL

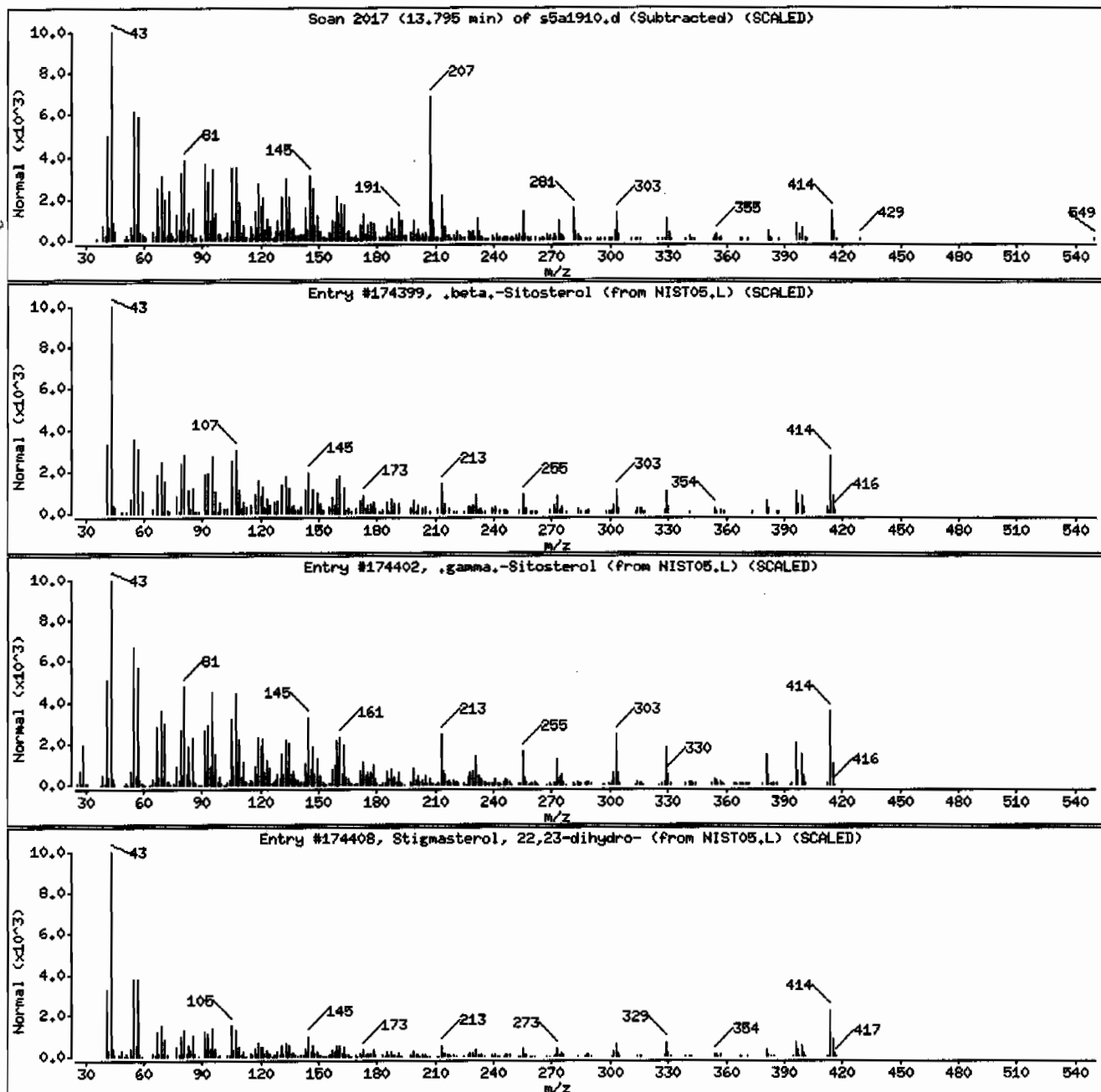
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	97	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C ₂₉ H ₅₀ O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	93	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1225
Lab Sample ID: 244626011

Client ID: RE12-10-7267
Batch ID: 942840
Run Date: 01/19/2010 17:14
Prep Date: 01/18/2010 20:10
Data File: s5a1919.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.J
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	358	ug/kg	71.6	358
108-95-2	Phenol	U	358	ug/kg	71.6	358
95-57-8	2-Chlorophenol	U	358	ug/kg	71.6	358
106-46-7	1,4-Dichlorobenzene	U	358	ug/kg	71.6	358
621-64-7	N-Nitrosodipropylamine	U	358	ug/kg	71.6	358
59-50-7	4-Chloro-3-methylphenol	U	358	ug/kg	71.6	358
83-32-9	Acenaphthene	U	35.8	ug/kg	11.8	35.8
121-14-2	2,4-Dinitrotoluene	U	358	ug/kg	35.8	358
100-02-7	4-Nitrophenol	U	358	ug/kg	118	358
87-86-5	Pentachlorophenol	U	358	ug/kg	89.5	358
129-00-0	Pyrene	U	35.8	ug/kg	10.7	35.8
110-86-1	Pyridine	U	358	ug/kg	71.6	358
62-53-3	Aniline	U	358	ug/kg	107	358
111-44-4	bis(2-Chloroethyl) ether	U	358	ug/kg	71.6	358
541-73-1	1,3-Dichlorobenzene	U	358	ug/kg	71.6	358
100-51-6	Benzyl alcohol	U	358	ug/kg	107	358
95-50-1	1,2-Dichlorobenzene	U	358	ug/kg	71.6	358
108-60-1	bis(2-Chloroisopropyl)ether	U	358	ug/kg	71.6	358
95-48-7	o-Cresol	U	358	ug/kg	71.6	358
65794-96-9	m,p-Cresols	U	358	ug/kg	107	358
67-72-1	Hexachloroethane	U	358	ug/kg	71.6	358
98-95-3	Nitrobenzene	U	358	ug/kg	71.6	358
78-59-1	Isophorone	U	358	ug/kg	71.6	358
88-75-5	2-Nitrophenol	U	358	ug/kg	71.6	358
105-67-9	2,4-Dimethylphenol	U	358	ug/kg	125	358
111-91-1	bis(2-Chloroethoxy)methane	U	358	ug/kg	71.6	358
120-83-2	2,4-Dichlorophenol	U	358	ug/kg	71.6	358
65-85-0	Benzoic acid	U	716	ug/kg	179	716
91-20-3	Naphthalene	U	35.8	ug/kg	10.7	35.8
106-47-8	4-Chloroaniline	U	358	ug/kg	71.6	358
87-68-3	Hexachlorobutadiene	U	358	ug/kg	71.6	358
91-57-6	2-Methylnaphthalene	U	35.8	ug/kg	7.16	35.8
77-47-4	Hexachlorocyclopentadiene	U	358	ug/kg	71.6	358
88-06-2	2,4,6-Trichlorophenol	U	358	ug/kg	71.6	358
95-95-4	2,4,5-Trichlorophenol	U	358	ug/kg	71.6	358
91-58-7	2-Chloronaphthalene	U	35.8	ug/kg	11.8	35.8
88-74-4	2-Nitroaniline	U	358	ug/kg	71.6	358
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	358	ug/kg	71.6	358

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 2 of 3

SDG Number: 10-1225
Lab Sample ID: 244626011

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 7.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7267
Batch ID: 942840
Run Date: 01/19/2010 17:14
Prep Date: 01/18/2010 20:10
Data File: s5a1919.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	358	ug/kg	71.6	358
606-20-2	2,6-Dinitrotoluene	U	358	ug/kg	35.8	358
208-96-8	Acenaphthylene	U	35.8	ug/kg	10.7	35.8
51-28-5	2,4-Dinitrophenol	U	716	ug/kg	136	716
132-64-9	Dibenzofuran	U	358	ug/kg	71.6	358
84-66-2	Diethylphthalate	U	358	ug/kg	71.6	358
86-73-7	Fluorene	U	35.8	ug/kg	10.7	35.8
7005-72-3	4-Chlorophenylphenylether	U	358	ug/kg	71.6	358
534-52-1	2-Methyl-4,6-dinitrophenol	U	358	ug/kg	71.6	358
100-01-6	4-Nitroaniline	U	358	ug/kg	107	358
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	358	ug/kg	71.6	358
122-66-7	Azobenzene	U	358	ug/kg	71.6	358
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	358	ug/kg	71.6	358
118-74-1	Hexachlorobenzene	U	358	ug/kg	71.6	358
85-01-8	Phenanthrene	U	35.8	ug/kg	10.7	35.8
120-12-7	Anthracene	U	35.8	ug/kg	7.16	35.8
84-74-2	Di-n-butylphthalate	U	358	ug/kg	71.6	358
206-44-0	Fluoranthene	U	35.8	ug/kg	10.7	35.8
85-68-7	Butylbenzylphthalate	U	358	ug/kg	71.6	358
56-55-3	Benzo(a)anthracene	U	35.8	ug/kg	10.7	35.8
91-94-1	3,3'-Dichlorobenzidine	U	358	ug/kg	107	358
218-01-9	Chrysene	U	35.8	ug/kg	10.7	35.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	358	ug/kg	71.6	358
117-84-0	Di-n-octylphthalate	U	358	ug/kg	71.6	358
205-99-2	Benzo(b)fluoranthene	U	35.8	ug/kg	10.7	35.8
207-08-9	Benzo(k)fluoranthene	U	35.8	ug/kg	10.7	35.8
50-32-8	Benzo(a)pyrene	U	35.8	ug/kg	10.7	35.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.8	ug/kg	10.7	35.8
53-70-3	Dibenzo(a,h)anthracene	U	35.8	ug/kg	10.7	35.8
191-24-2	Benzo(ghi)perylene	U	35.8	ug/kg	10.7	35.8
120-82-1	1,2,4-Trichlorobenzene	U	358	ug/kg	71.6	358

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.18	243	ug/kg	90	NJ
	Unknown Aldol Condensate	2.96	605	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 3 of 3

SDG Number: 10-1225
Lab Sample ID: 244626011

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
1058-61-3	Stigmast-4-en-3-one	8.28	288	ug/kg	93	NJ
	Unknown	9.46	185	ug/kg		J
559-74-0	Friedelan-3-one	10.06	745	ug/kg	93	NJ
	Unknown	10.34	234	ug/kg		J
112-84-5	13-Docosenamide, (Z)-	10.41	203	ug/kg	87	NJ
	Unknown	10.52	228	ug/kg		J
	Unknown	10.72	464	ug/kg		J
	Unknown	11.01	237	ug/kg		J
	Unknown	11.67	813	ug/kg		J
	Unknown	12.05	400	ug/kg		J
	Unknown	12.32	332	ug/kg		J
	Unknown	12.76	879	ug/kg		J
	Unknown	13.31	185	ug/kg		J
	Unknown	13.55	320	ug/kg		J
	Unknown	14.33	146	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1919.d
Lab Smp Id: 244626011 Client Smp ID: RE12-10-7267
Inj Date : 19-JAN-2010 17:14
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626011|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	7.11630	% 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	3.931	3.940	(1.000)	615031		40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	2036027		40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1202283		40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2154152		40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1798689		40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1163061		40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	951535		62.3845	2230
\$ 5 Phenol-d5	99	3.649	3.651	(0.928)	1160380		61.6884	2210
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	546196		34.9388	1250
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	1082712		34.0427	1220
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	308674		80.7772	2890
\$ 81 p-Terphenyl-d14	244	8.613	8.611	(0.893)	1297787		45.9511	1640

ION RATIO REPORT

SV REPORT

Data file: s5a1919.d

Report Date: 01/20/2010 07:07

Lab. ID: 244626011

SampleType: SAMPLE

Injection Date: 19-JAN-2010 17:14

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626011|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

4 Aniline		CAS#: 62-53-3				
66	62973	3.65	3.72	80-120	100	(T)
93	1369	3.61	3.72	210-270	2	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	75848	4.30	4.18	80-120	100	(T)
42	42226	4.30	4.18	44-104	56	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	3736	4.55	4.57	80-120	100	()
122	1979	4.55	4.57	39- 99	53	()
77	1362	4.58	4.57	34- 94	36	()

43 Dimethylphthalate		CAS#: 131-11-3				
163	219864	6.06	5.82	80-120	100	(T)
164	1202283	6.06	5.82	0- 40	547	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	165630	6.06	5.88	80-120	100	(T)
63	2080	6.06	5.88	61-121	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	165630	6.06	6.17	80-120	100	(T)
89	2530	6.06	6.17	47-107	2	(QT)
63	2080	6.06	6.17	23- 83	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

52 4-Nitrophenol			CAS#: 100-02-7			
139	139	6.30	6.10	80-120	100	(T)
109	642	6.28	6.10	41-101	461	(QT)
65	1745	6.32	6.10	72-132	1252	(QT)

53 Fluorene			CAS#: 86-73-7			
166	17536	6.65	6.47	80-120	100	(T)
165	16552	6.65	6.47	56-116	94	(T)
167	6418	6.65	6.47	0- 44	37	(T)

55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	1078	6.65	6.49	80-120	100	(T)
105	2524	6.65	6.49	12- 72	234	(QT)
51	1912	6.65	6.49	42-102	177	(QT)

61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	21764	6.65	6.84	80-120	100	(T)
141	138152	6.65	6.83	43-103	635	(QT)
250	42920	6.65	6.84	68-128	197	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1919.d
Lab Smp Id: 244626011 Client Smp ID: RE12-10-7267
Inj Date : 19-JAN-2010 17:14
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626011|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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	30.06000	weight of sample
M	7.11630	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3706646	40.000
* 67 Phenanthrene-d10	7.231	5397847	40.000
* 91 Chrysene-d12	9.642	4925313	40.000
* 98 Perylene-d12	11.330	3366709	40.000

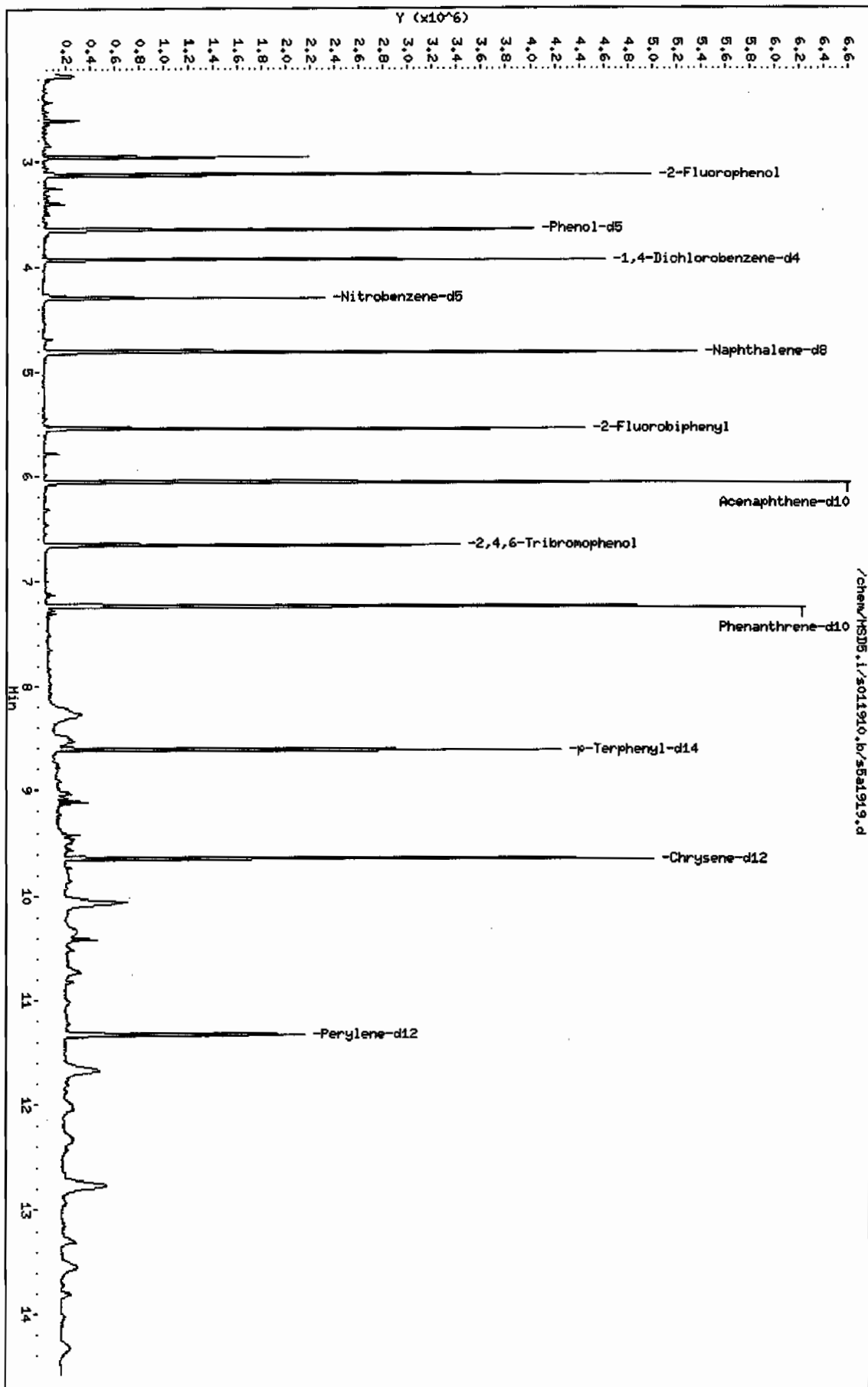
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Propanoic acid					CAS #: 79-09-4		
2.178	629365	6.79174785	243	90	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.960	1566078	16.9002115	605	0		0	10
Stigmast-4-en-3-one					CAS #: 1058-61-3		
8.278	1086756	8.05325192	288	93	NIST05.L	173936	67
Unknown					CAS #:		
9.460	635977	5.16496918	185	0		0	91
Friedelan-3-one					CAS #: 559-74-0		
10.060	2562960	20.8145920	745	93	NIST05.L	176566	91
Unknown					CAS #:		
10.336	805409	6.54098019	234	0		0	91
13-Docosenamide, (2)-					CAS #: 112-84-5		
10.413	698003	5.66870344	203	87	NIST05.L	146307	91
Unknown					CAS #:		
10.519	535105	6.35760409	228	0		0	98
Unknown					CAS #:		
10.725	1089845	12.9484917	464	0		0	98
Unknown					CAS #:		
11.013	558040	6.63009942	237	0		0	98
Unknown					CAS #:		
11.672	1910107	22.6940538	813	0		0	98
Unknown					CAS #:		
12.048	938935	11.1555185	400	0		0	98
Unknown					CAS #:		
12.319	780054	9.26785259	332	0		0	98
Unknown					CAS #:		
12.760	2065095	24.5354667	879	0		0	98
Unknown					CAS #:		
13.307	435700	5.17656967	185	0		0	98

RT	CONCENTRATIONS				QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	
Unknown					CAS #:		
13.548	752689	8.94272242	320	0		0	98
Unknown					CAS #:		
14.330	342317	4.06707526	146	0		0	98

Data File: /chem/HSD5.i/5011910.b/55a1919.d
 Date: 19-JAN-2010 17:14
 Client ID: RE12-10-7267
 Sample Info: 124462601194284011SVH11LNL
 Volume Injected (uL): 0.5
 Column Phase: JMW DB-RMS

Instrument: HSD5.i
 Operator: RMB
 Column diameter: 0.20



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: I244626011/94284011/1SVH11/LANL

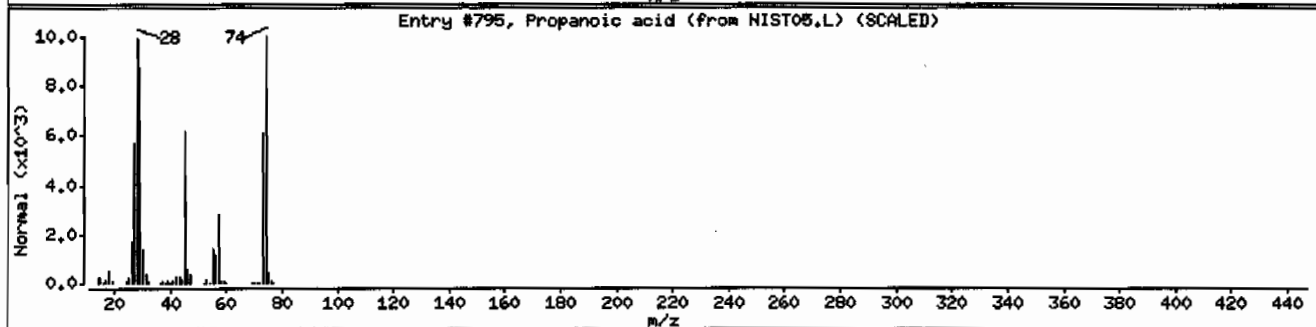
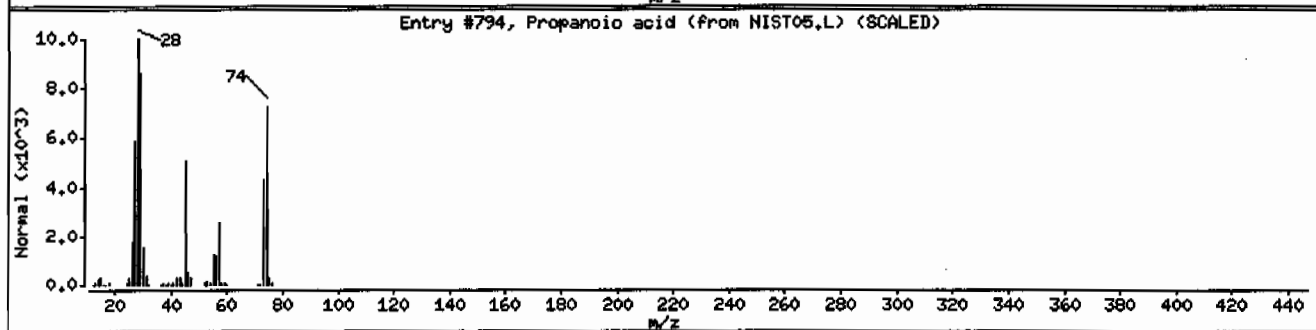
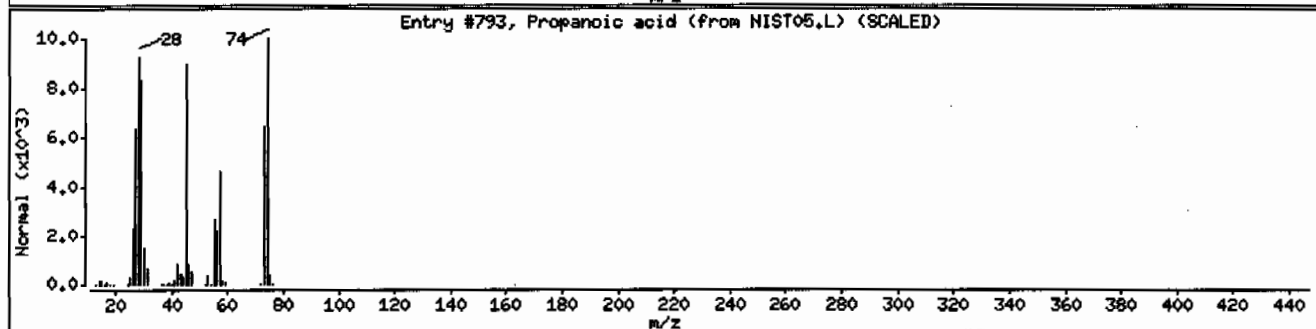
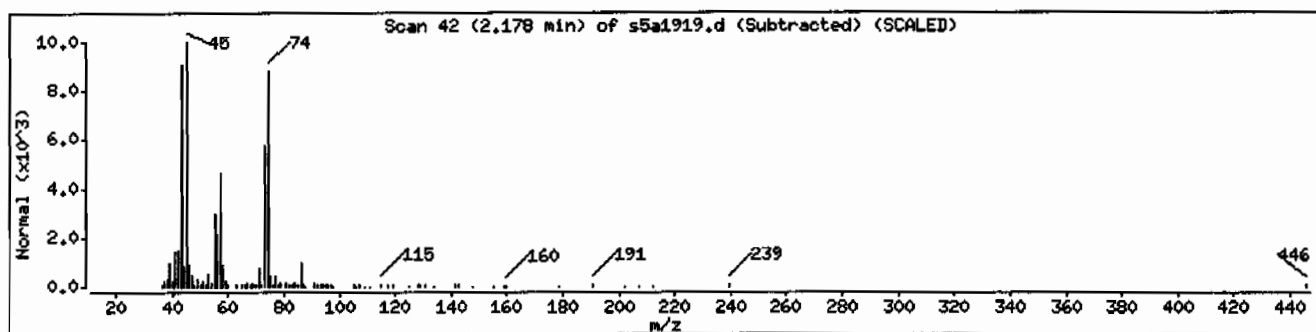
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	90	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	78	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	50	C3H6O2	74



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.1

Sample Info: 124462601194284011SVMI1ILANL

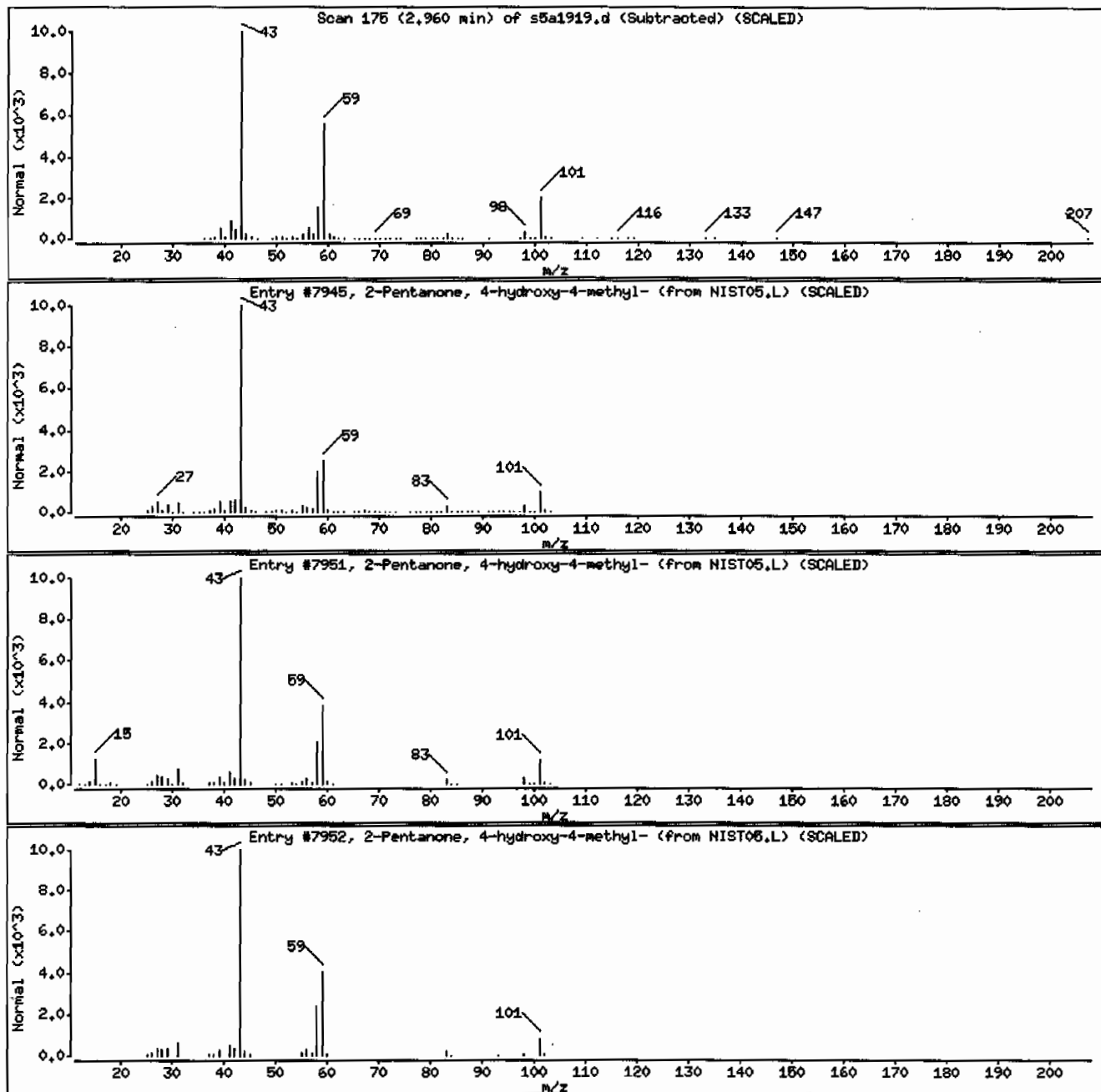
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	47	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116



Date: 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: 12446260111942840111SVH111LANL

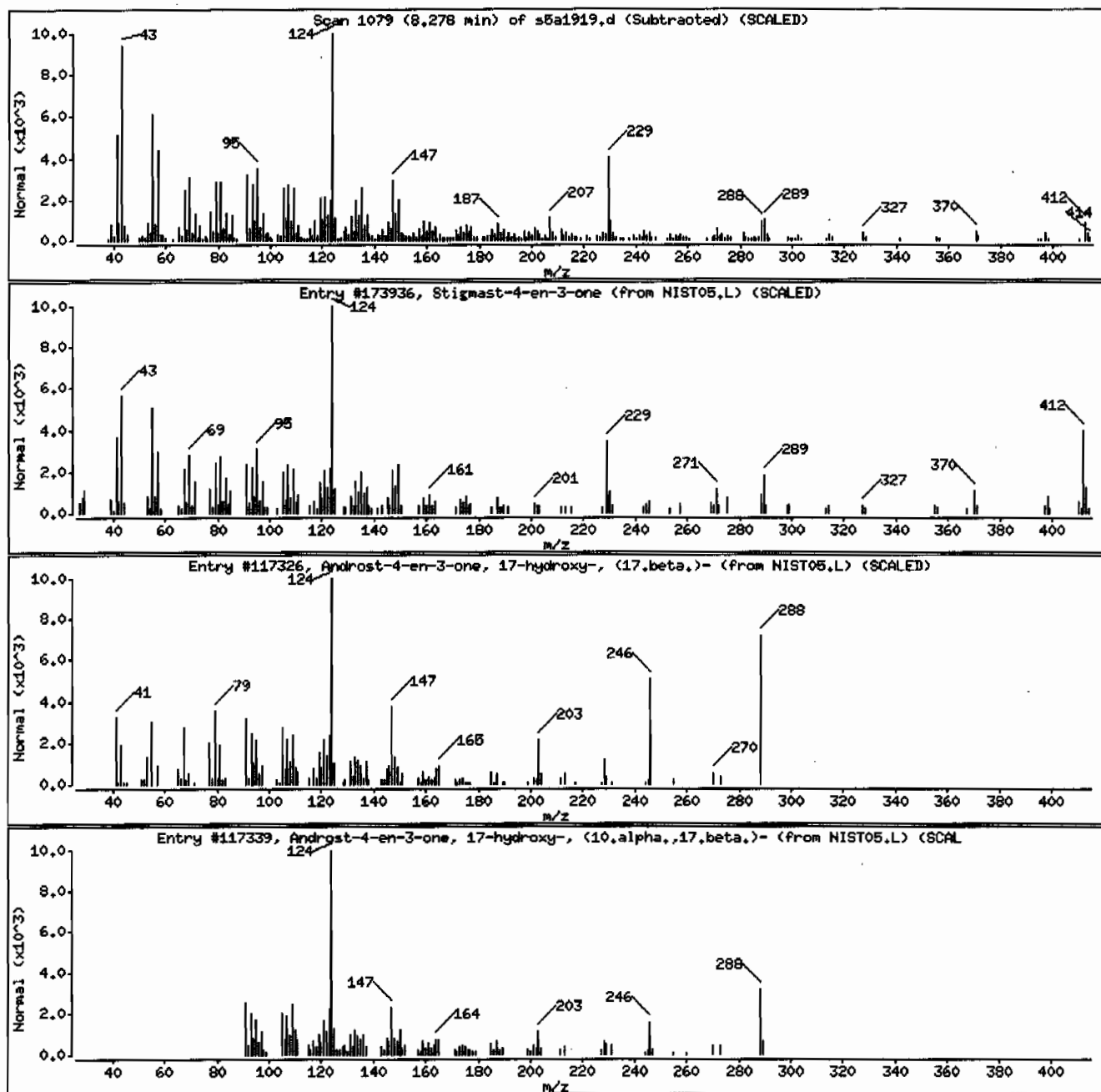
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	93	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (17.bet	58-22-0	NIST05.L	117326	83	C19H28O2	288
Androst-4-en-3-one, 17-hydroxy-, (10.alp	604-39-7	NIST05.L	117339	46	C19H28O2	288



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: HSD5.i

Sample Info: I24462601194284011ISVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

1,1,1,3,5,5-Heptamethyltrisiloxane

CAS Number

1873-88-7

Library

NIST05.L

Entry

73166

Quality

22

Formula

C7H22O2Si3

Weight

222

Cedran-diol, 8S,14-

62600-05-9

NIST05.L

83830

22

C15H26O2

238

4-Hydroxy-.beta.-ionone

15401-34-0

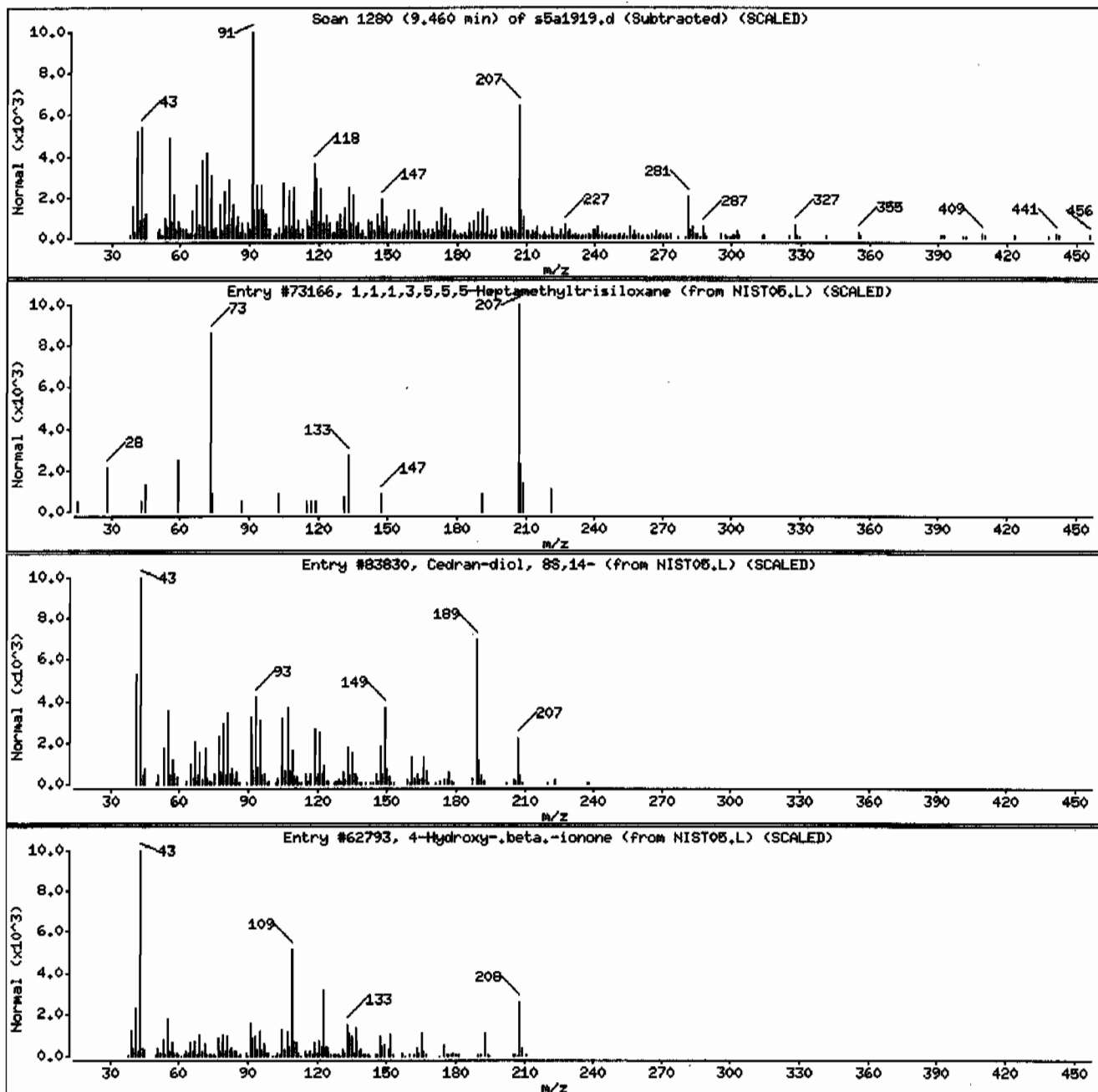
NIST05.L

62793

22

C13H20O2

208



Date: 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: HSD5.i

Sample Info: 1244626011/94284011/1SVH111LANL

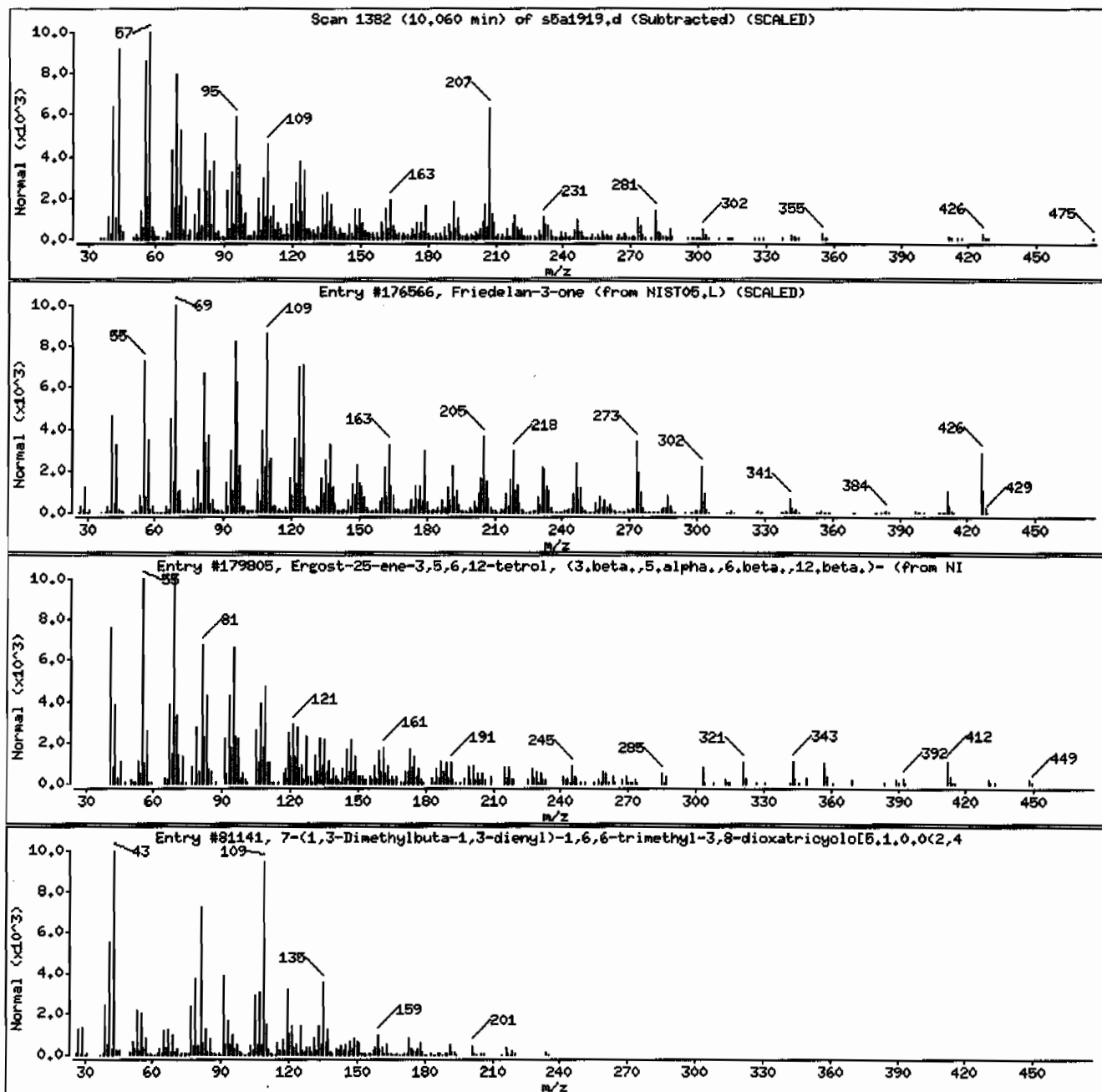
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	659-74-0	NIST05.L	176566	93	C30H50O	426
Ergost-25-ene-3,5,6,12-tetrol, (3.beta.,	56052-97-2	NIST05.L	179805	52	C28H48O4	448
7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr	1000190-22-7	NIST05.L	81141	44	C15H22O2	234



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: 1244626011|94284011|SVH11|LANL

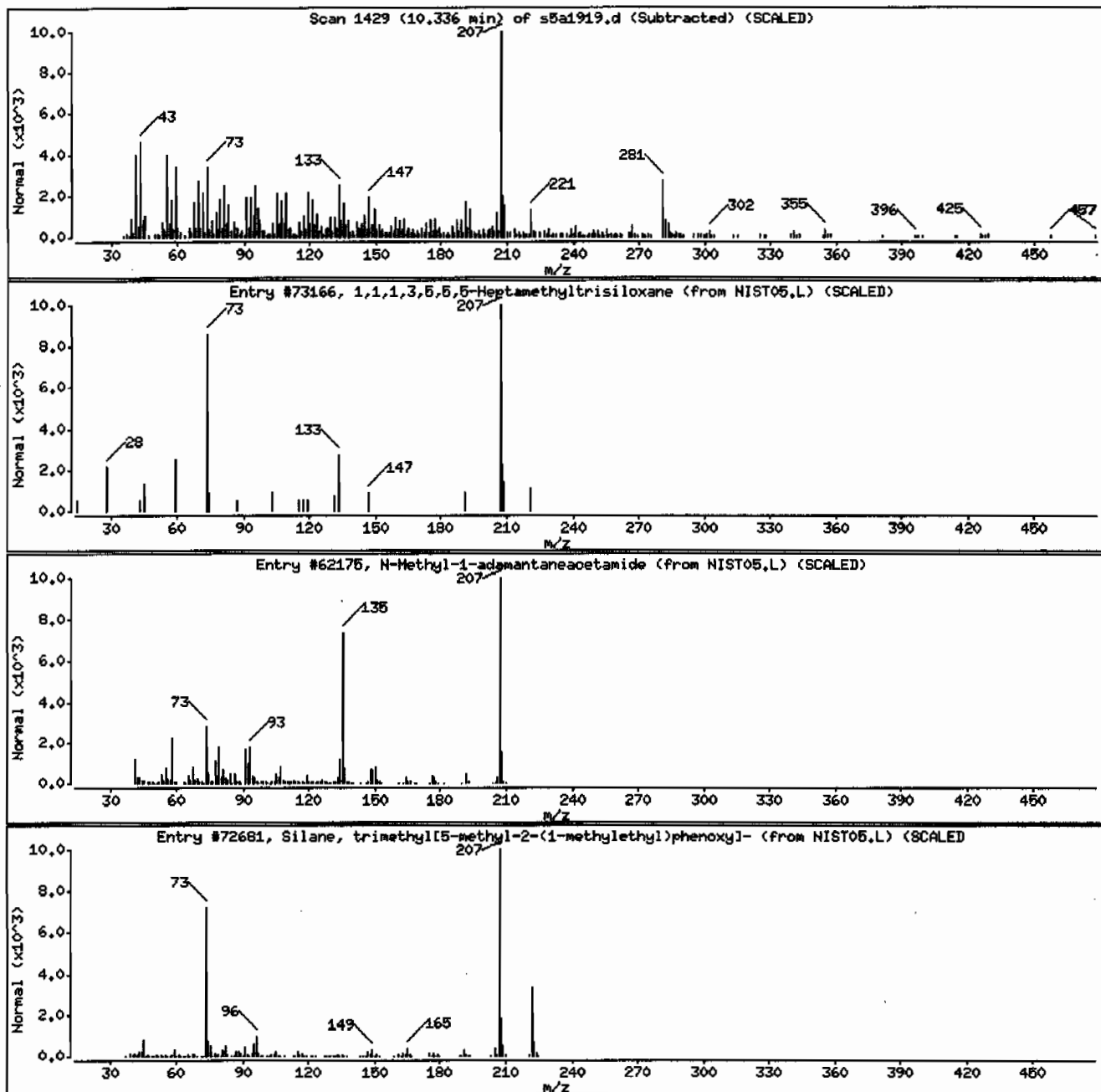
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C7H22O2Si3	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	41	C13H21NO	207
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	38	C13H22OSi	222



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: 1244626011/94284011/SVM111LANL

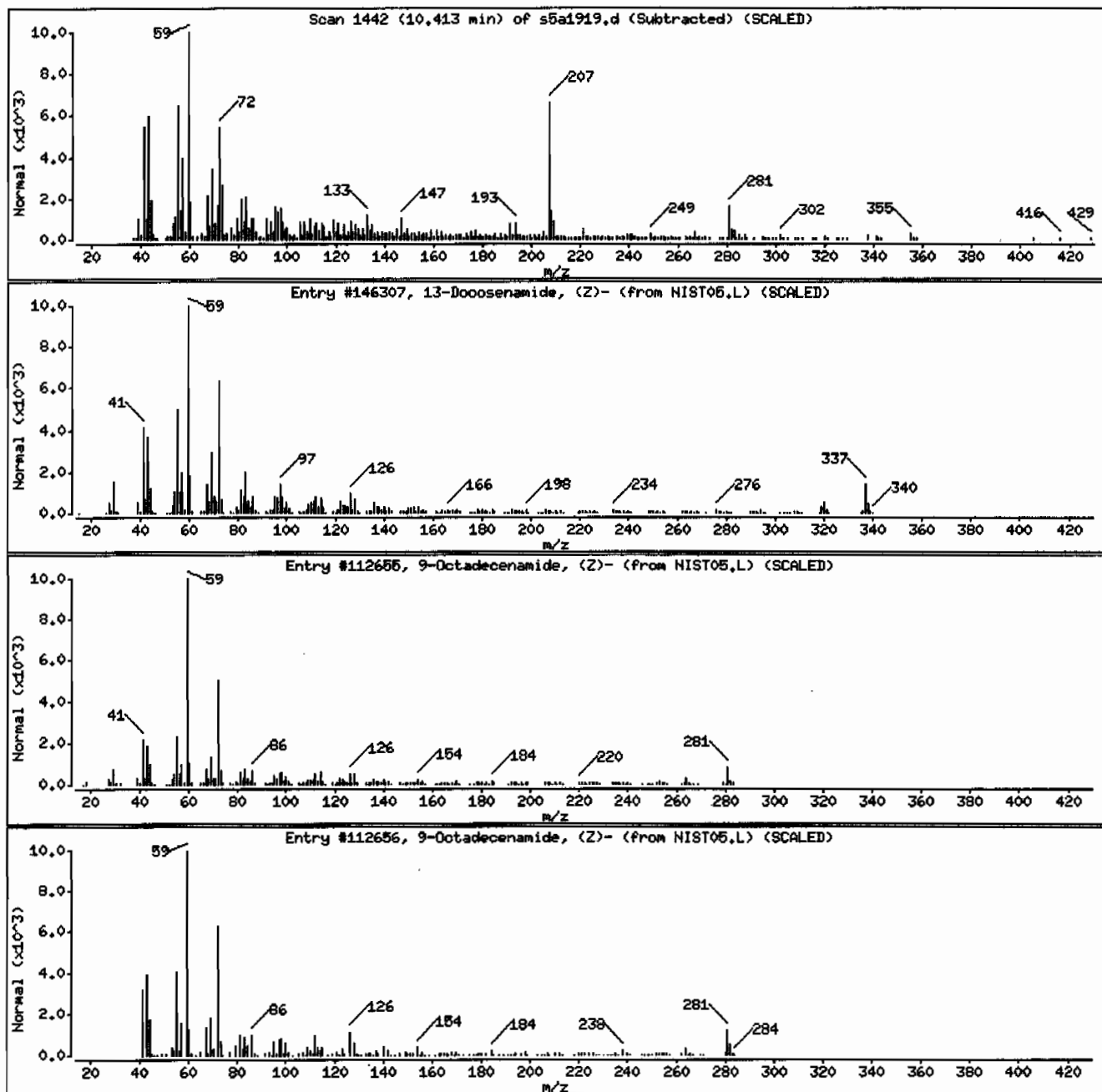
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	87	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	78	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	78	C18H35NO	281



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: I24462601194284011ISVM11ILANL

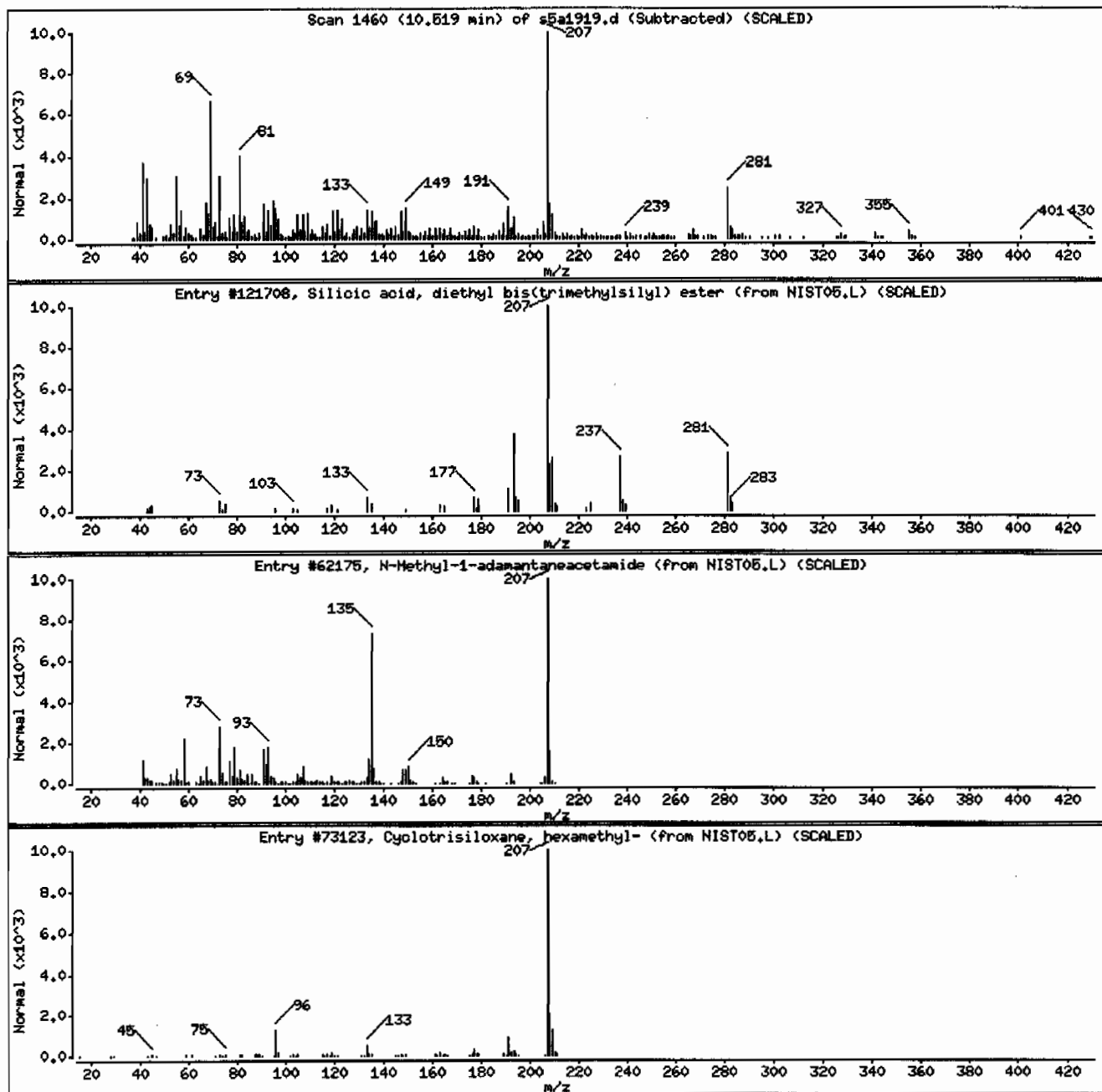
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silicic acid, diethyl bis(trimethylsilyl)	3555-45-1	NIST05.L	121708	59	C10H28O4Si3	296
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	58	C13H21NO	207
Cyclotrisiloxane, hexamethyl-	541-06-9	NIST05.L	73123	50	C6H18O3Si3	222



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: 12446260111942840111SVH111LANL

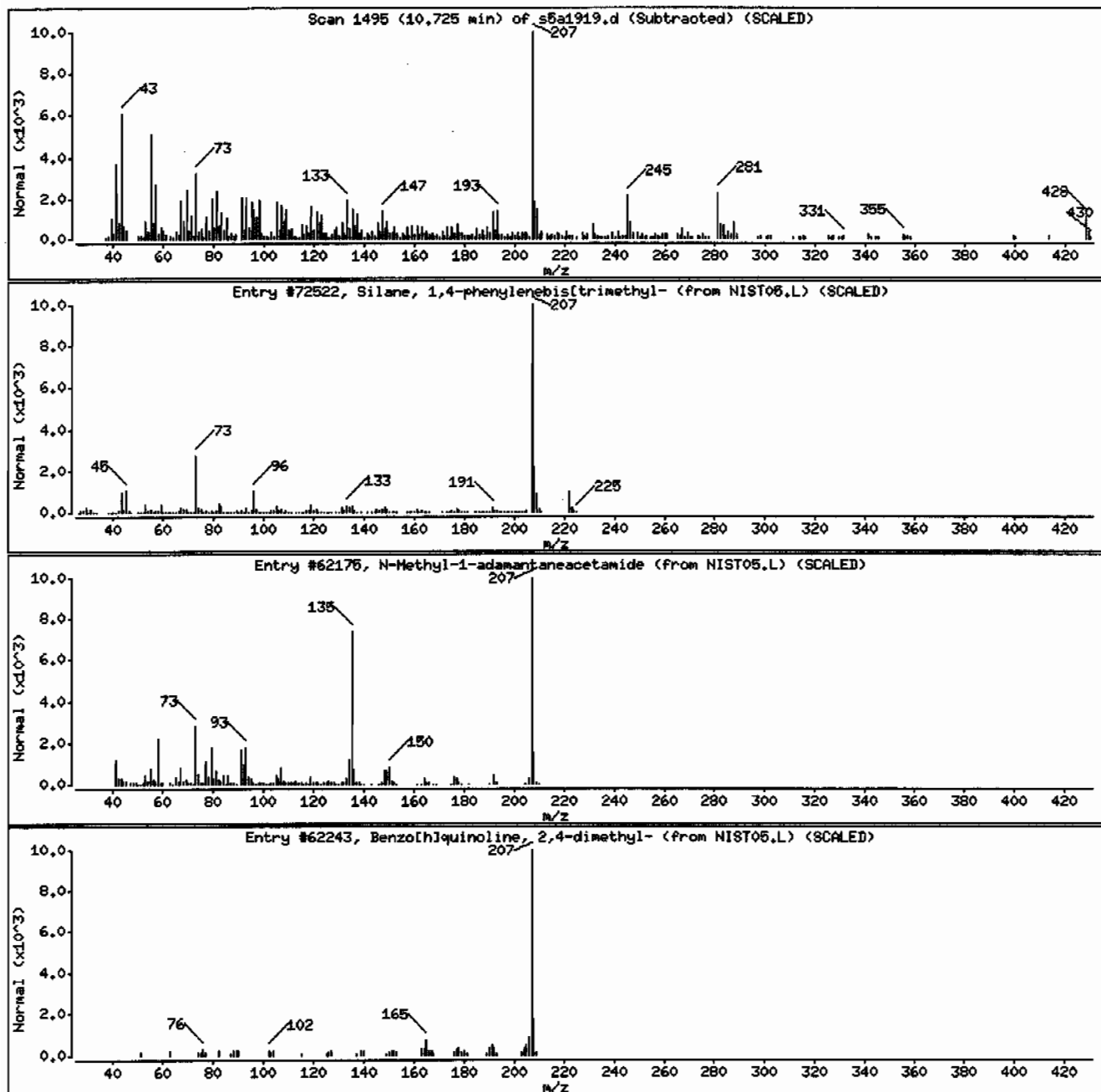
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	72622	47	C ₁₂ H ₂₂ Si ₂	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	47	C ₁₃ H ₂₁ NO	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	43	C ₁₅ H ₁₃ N	207



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: HSD5.i

Sample Info: I24462601194294011SVH11ILANL

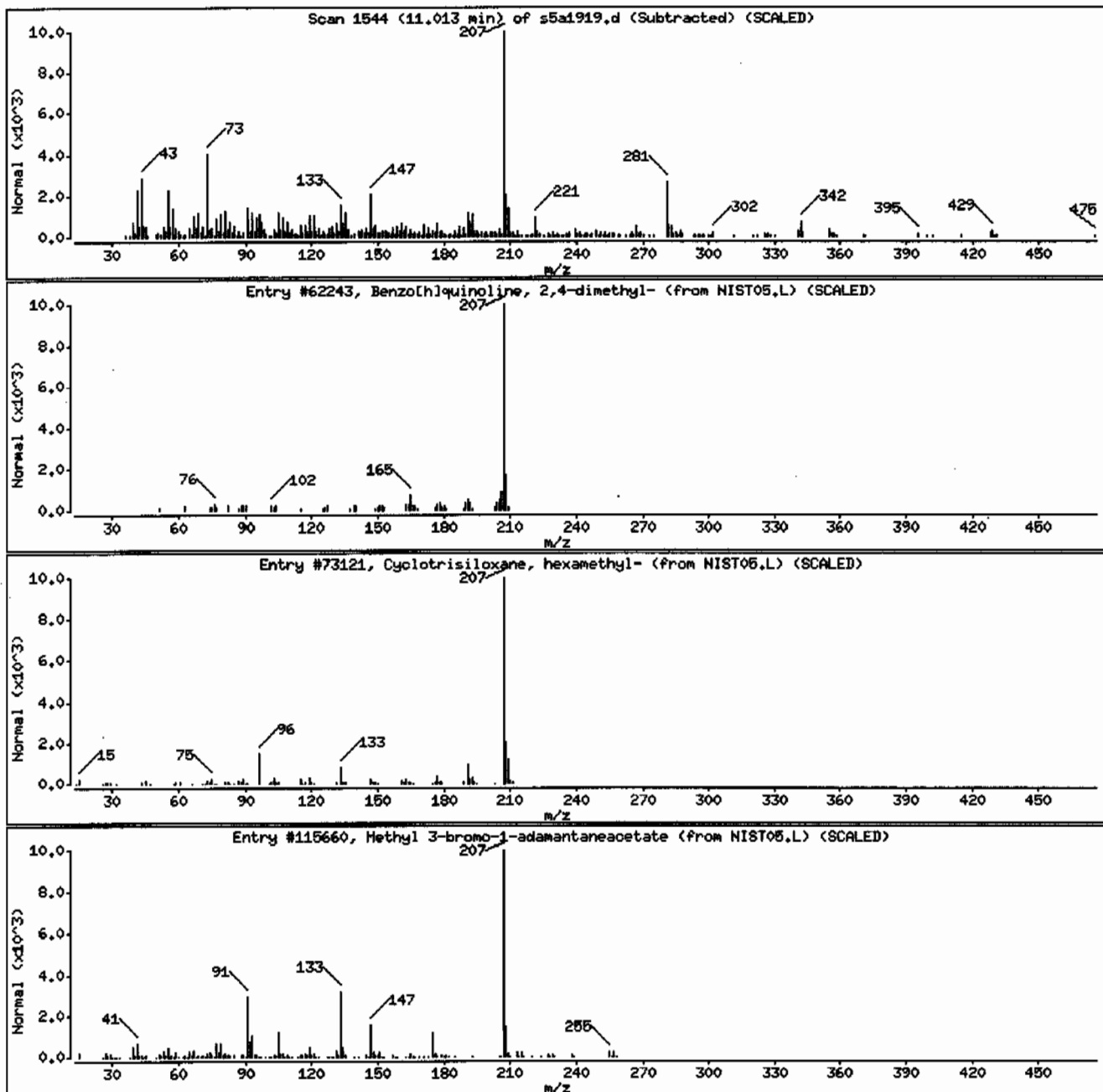
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	60	C15H13N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	50	C6H18O3Si3	222
Methyl 3-bromo-1-adamantaneacetate	14575-01-0	NIST05.L	115660	50	C13H19BrO2	286



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: HSD5.i

Sample Info: 124462601194284011SVH11ILANL

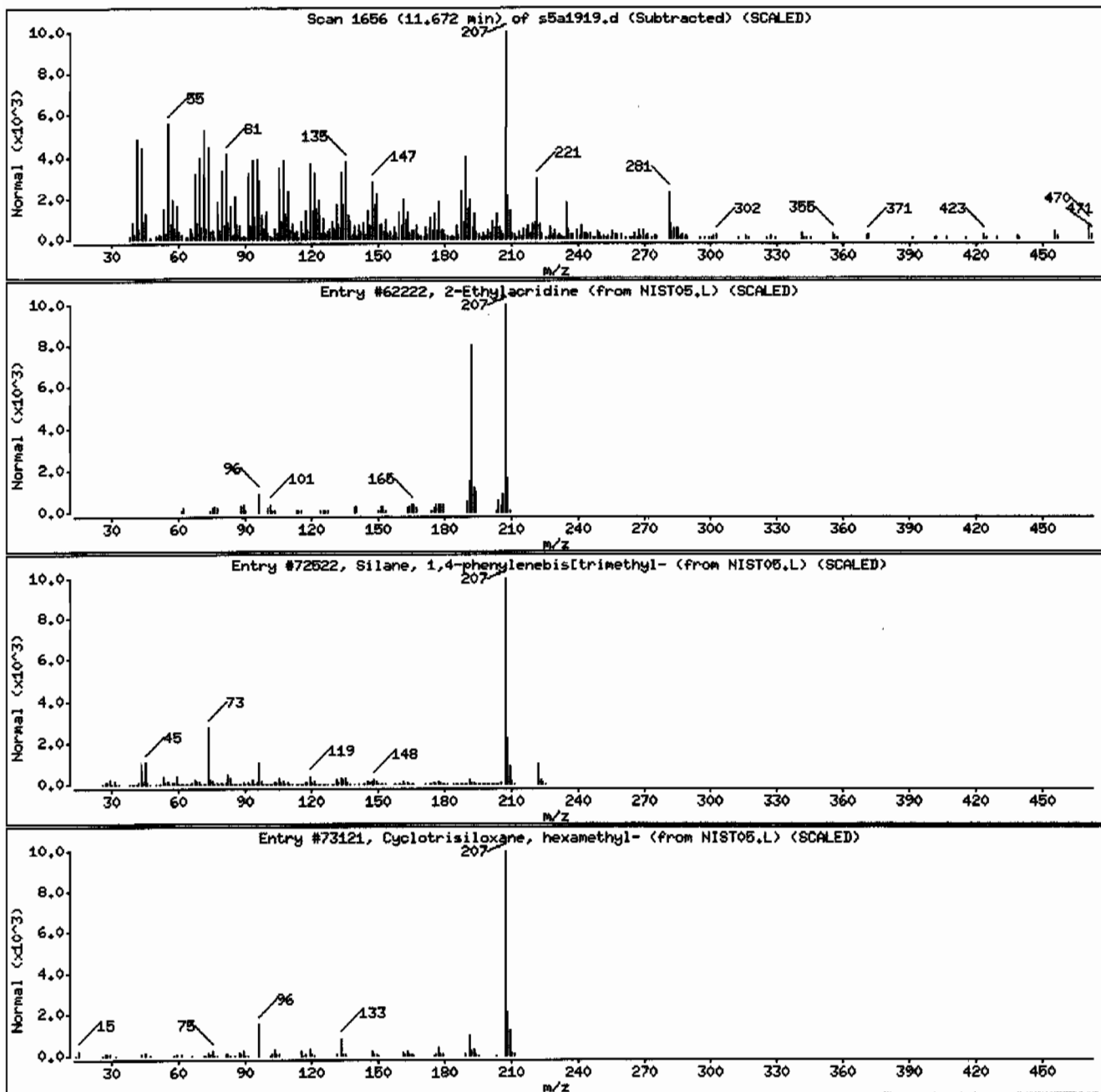
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	42	C18H13N	207
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	25	C12H22Si2	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	25	C6H18O3Si3	222



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.1

Sample Info: 1244626011/94284011/ISVH11/LANL

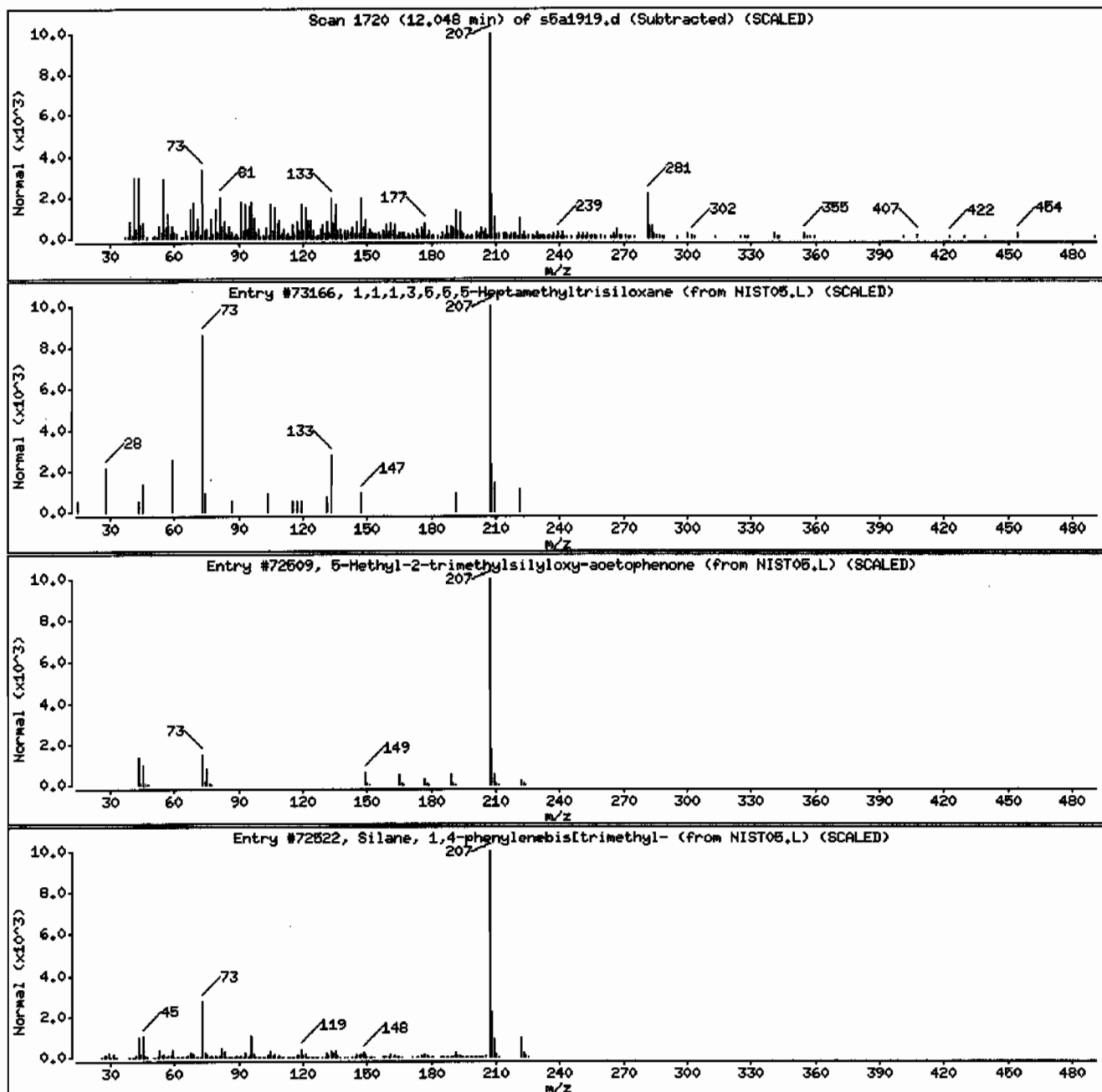
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1673-88-7	NIST05.L	73166	64	C7H22O2Si3	222
5-Methyl-2-trimethylsilyloxy-acetophenon	97389-69-0	NIST05.L	72509	50	C12H18O2Si	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	50	C12H22Si2	222



Date: 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: HSD5.i

Sample Info: I244626011194284011ISVH11ILANL

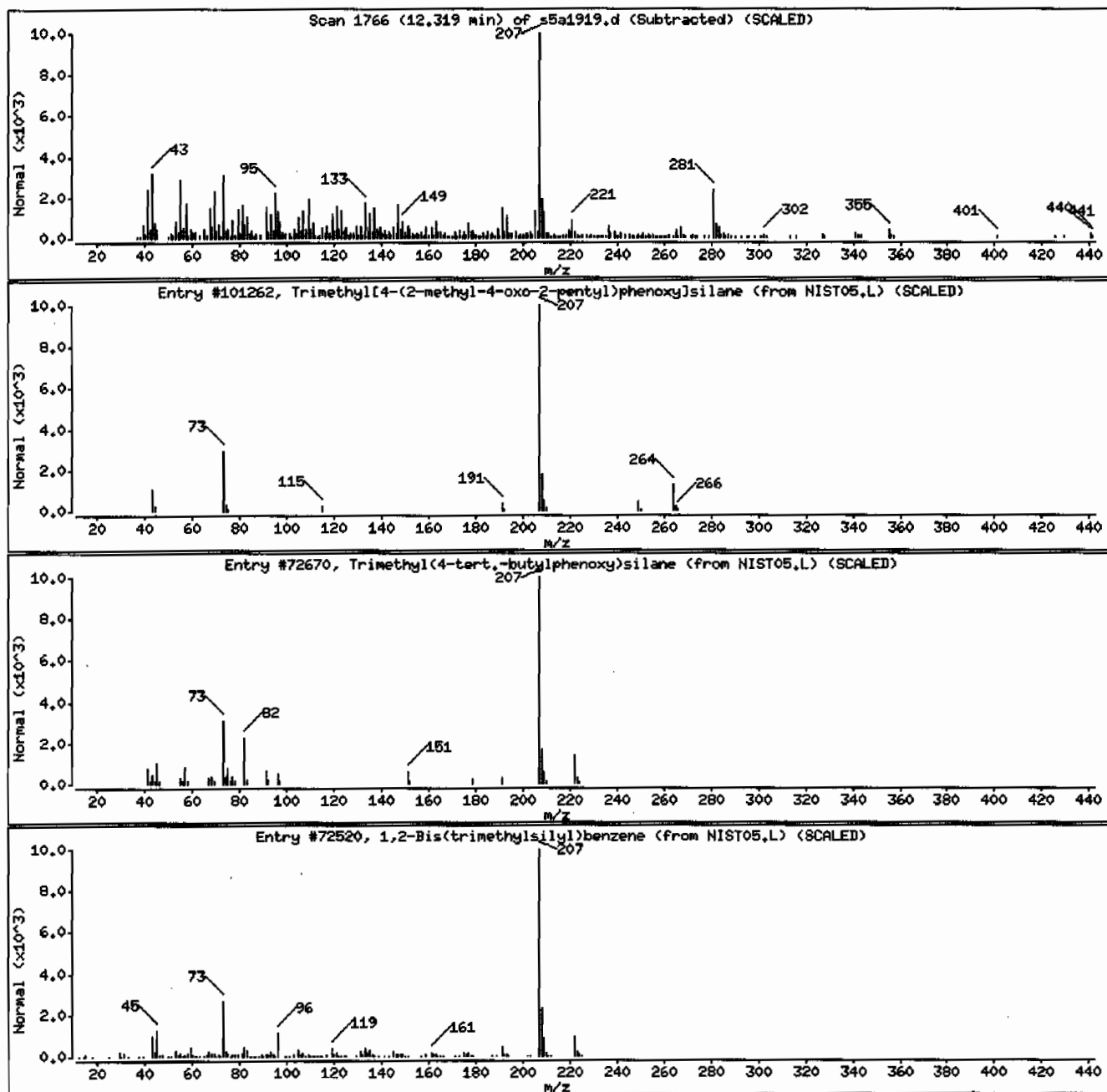
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Trimethyl[4-(2-methyl-4-oxo-2-pentyl)phe	1000283-54-9	NIST05.L	101262	53	C15H24O2Si	264
Trimethyl(4-tert.-butylphenoxy)silane	25237-79-0	NIST05.L	72670	50	C13H22OSi	222
1,2-Bis(trimethylsilyl)benzene	17181-09-6	NIST05.L	72520	50	C12H22Si2	222



Date: 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: 12446260111942840111SVH111LANL

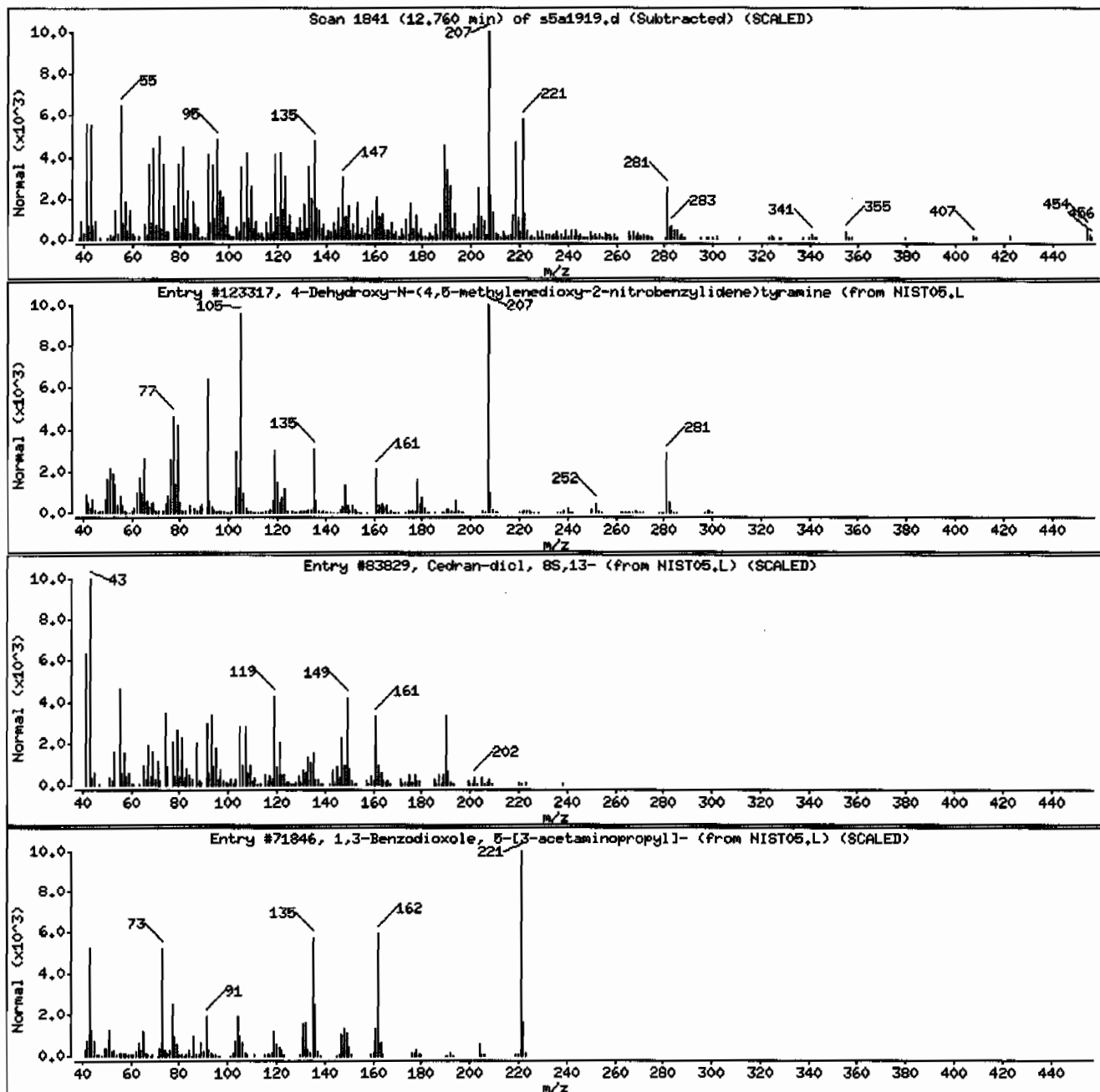
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	30	C16H14N2O4	298
Cedran-diol, 8S,13-	88588-48-1	NIST05.L	83829	25	C15H26O2	238
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: I244626011/94284011/ISVH11/LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Silane, trimethyl[5-methyl-2-(1-methylet

CAS Number

Library

Entry

Quality

Formula

Weight

Benzo[h]quinoline, 2,4-dimethyl-

605-67-4

NIST05.L

62243

43

C18H13N

207

Silane, trimethyl[5-methyl-2-(1-methylet

55012-80-1

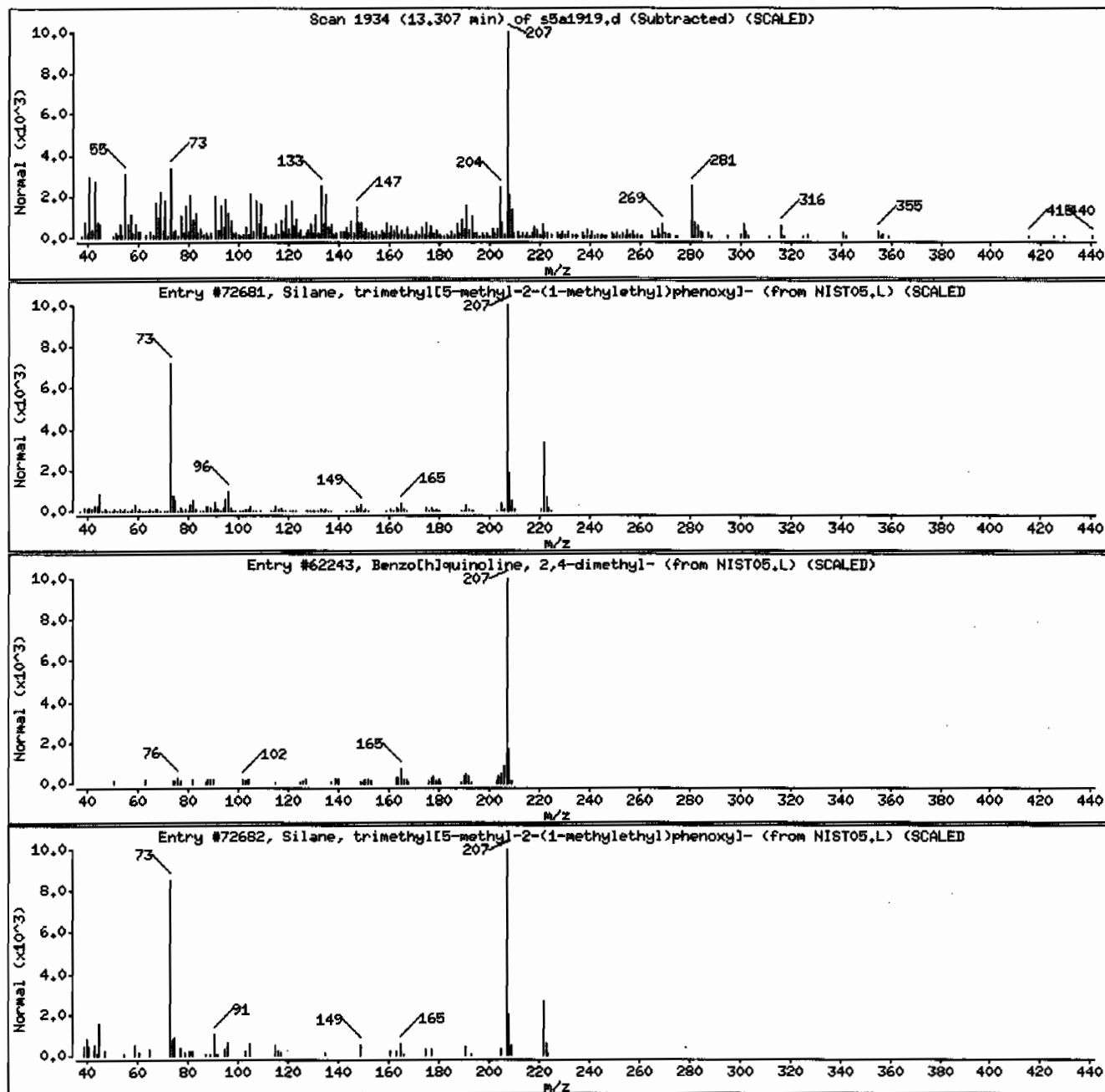
NIST05.L

72682

43

C13H22OSi

222



Date: 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: HSD5.i

Sample Info: 1244626011/94284011/ISVH11/LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

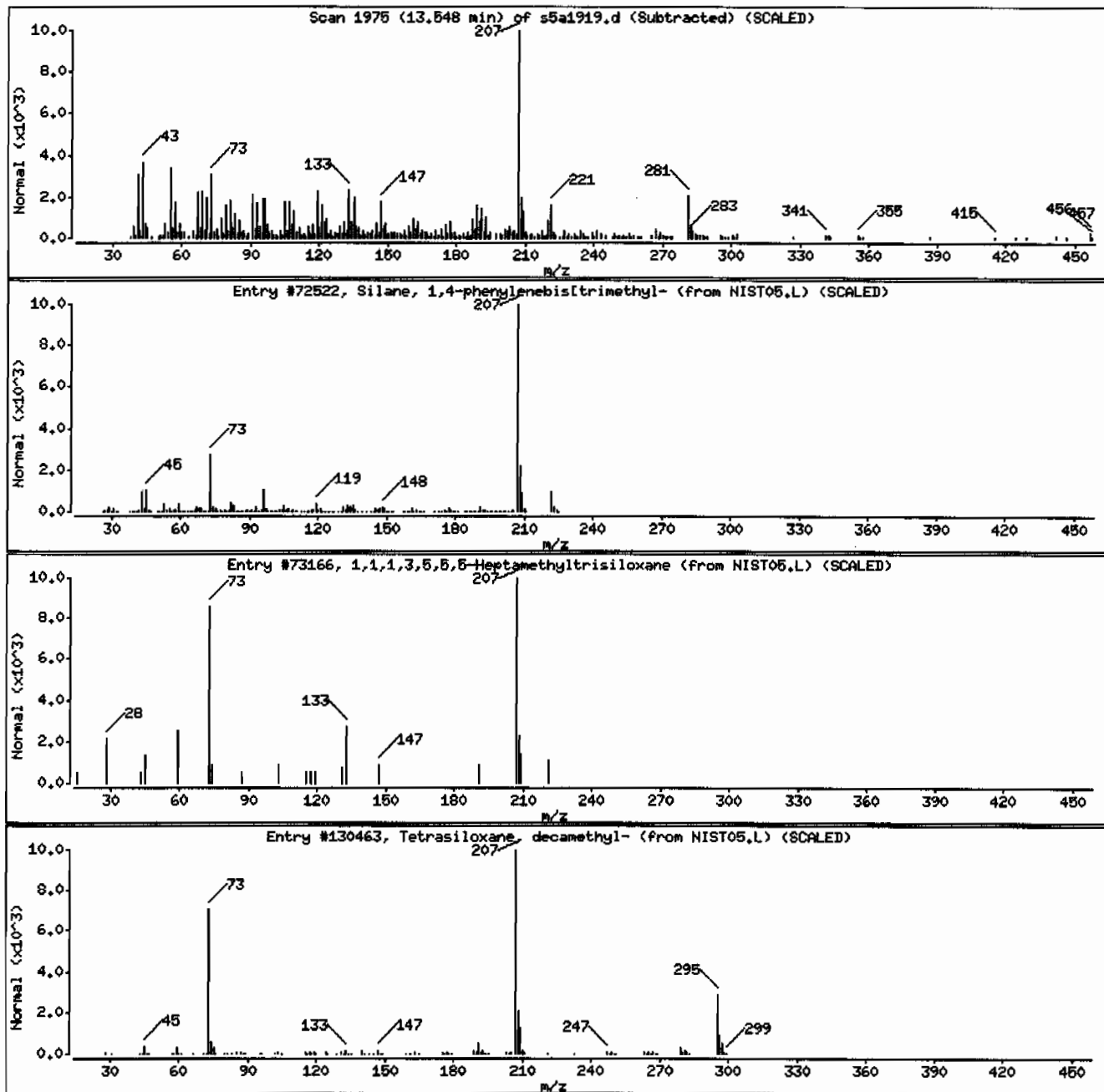
Unknown

Silane, 1,4-phenylenebis(trimethyl-

CAS Number	Library	Entry	Quality	Formula	Weight
13183-70-5	NIST05.L	72522	55	C ₁₂ H ₂₂ Si ₂	222
1873-88-7	NIST05.L	73166	43	C ₇ H ₂₂ O ₂ Si ₃	222
141-62-8	NIST05.L	130463	43	C ₁₀ H ₃₀ O ₃ Si ₄	310

1,1,1,3,5,5-Heptamethyltrisiloxane

Tetrasiloxane, decamethyl-



Date : 19-JAN-2010 17:14

Client ID: RE12-10-7267

Instrument: MSD5.i

Sample Info: 124462601194284011SVH11ILANL

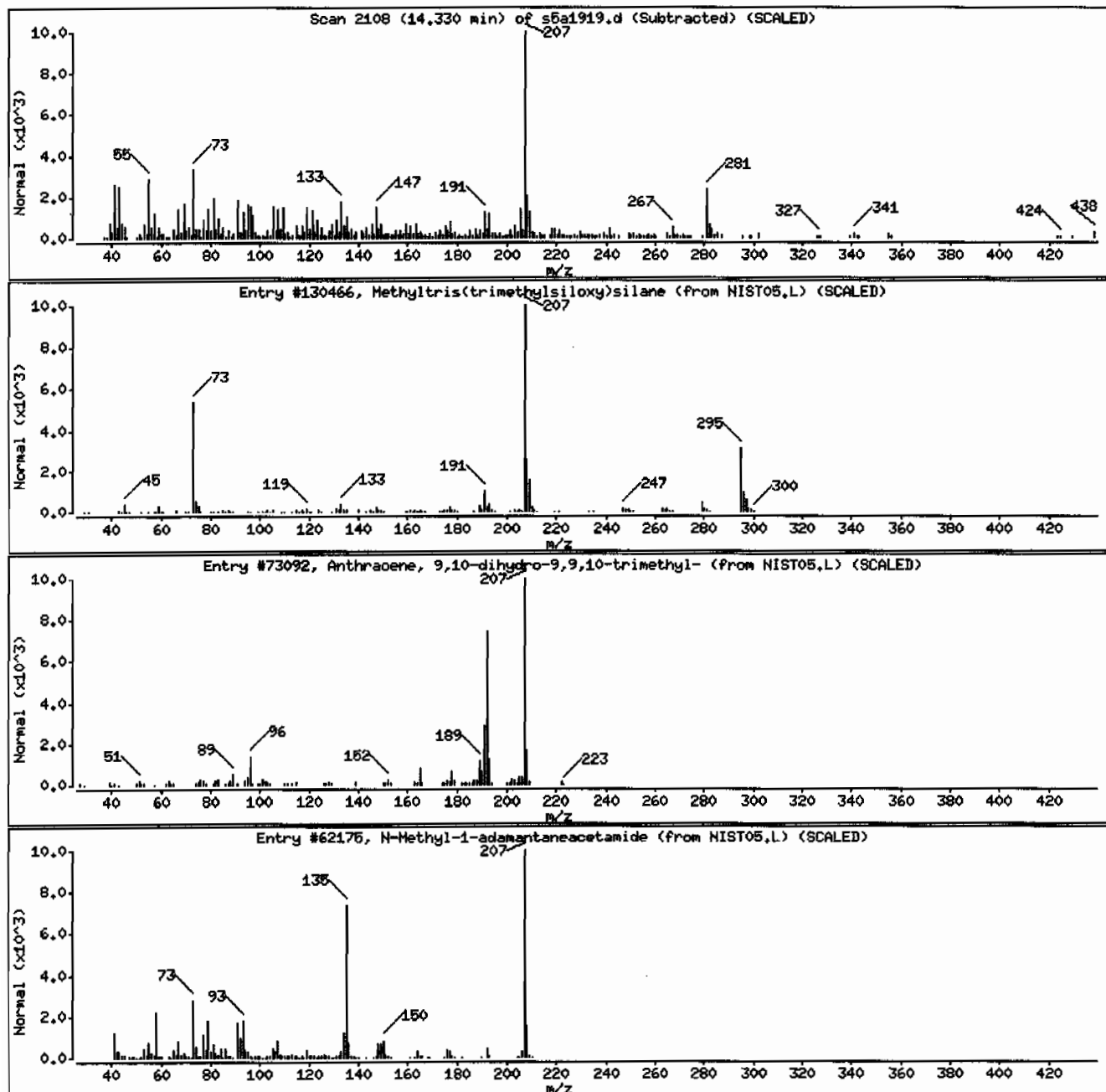
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	53	C10H30O3Si4	310
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	52	C17H18	222
N-Methyl-1-adamantanecetamide	31897-93-5	NIST05.L	62175	52	C13H21NO	207



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

SDG Number: 10-1225
Lab Sample ID: 244626004

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

Client ID: RE12-10-7268
Batch ID: 942840
Run Date: 01/19/2010 14:32
Prep Date: 01/18/2010 20:10
Data File: s5a1912.d

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

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

SDG Number: 10-1225
Lab Sample ID: 244626004

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSDS.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	369	ug/kg	73.9	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	369	ug/kg	73.9	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.9	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.9	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.9	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.9	369
122-66-7	Azobenzene	U	369	ug/kg	73.9	369
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.9	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.9	369
85-01-8	Phenanthrene	U	36.9	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.39	36.9
84-74-2	Di-n-butylphthalate	U	369	ug/kg	73.9	369
206-44-0	Fluoranthene	U	36.9	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.9	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	U	36.9	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.9	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.9	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.9	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	4290	ug/kg		J
79-09-4	Propanoic acid	2.17	214	ug/kg	87	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626004

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	451	ug/kg		JA
559-74-0	Friedelan-3-one	10.02	245	ug/kg	90	NJ
	Unknown	10.05	389	ug/kg		J
301-02-0	9-Octadecenamide, (Z)-	10.41	193	ug/kg	89	NJ
	Unknown	10.51	160	ug/kg		J
	Unknown	12.72	264	ug/kg		J
	Unknown	12.92	229	ug/kg		J
	Unknown	13.31	555	ug/kg		J
83-46-5	.beta.-Sitosterol	13.79	309	ug/kg	96	NJ
	Unknown	14.32	152	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1912.d
Lab Smp Id: 244626004 Client Smp ID: RE12-10-7268
Inj Date : 19-JAN-2010 14:32
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626004|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	9.81270	% 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	3.931	3.940	(1.000)	567736	40.0000		
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1918377	40.0000		
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1137042	40.0000		
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2044076	40.0000		
* 91 Chrysene-d12	240	9.636	9.646	(1.000)	1787573	40.0000		
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1331938	40.0000		
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	1028417	73.0418		2700
\$ 5 Phenol-d5	99	3.648	3.651	(0.928)	1235449	71.1506		2630
\$ 20 Nitrobenzene-d5	82	4.295	4.301	(0.895)	580933	39.4398		1460
\$ 39 2-Fluorobiphenyl	172	5.542	5.548	(0.915)	1139868	37.8962		1400
\$ 60 2,4,6-Tribromophenol	329	6.654	6.661	(1.098)	315540	87.3119		3220
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.893)	1261593	44.9474		1660

ION RATIO REPORT

SV REPORT

Data file: s5a1912.d

Report Date: 01/19/2010 14:46

Lab. ID: 244626004

SampleType: SAMPLE

Injection Date: 19-JAN-2010 14:32

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626004|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

4 Aniline		CAS#: 62-53-3				
66	67911	3.65	3.72	80-120	100	(T)
93	3056	3.61	3.72	210-270	5	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	79261	4.30	4.18	80-120	100	(T)
42	49620	4.30	4.18	44-104	63	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	4977	4.55	4.57	80-120	100	()
122	5062	4.54	4.57	39- 99	102	(Q)
77	5061	4.54	4.57	34- 94	102	(Q)

43 Dimethylphthalate		CAS#: 131-11-3				
163	207905	6.06	5.82	80-120	100	(T)
164	1137042	6.06	5.82	0- 40	547	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	154077	6.06	5.88	80-120	100	(T)
63	1965	6.06	5.88	61-121	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	153743	6.06	6.17	80-120	100	(T)
89	2610	6.06	6.17	47-107	2	(QT)
63	1965	6.06	6.17	23- 83	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52 4-Nitrophenol		CAS#: 100-02-7				
139	274	6.20	6.10	80-120	100	(T)
109	280	6.16	6.10	41-101	102	(QT)
65	639	6.18	6.10	72-132	233	(QT)

53 Fluorene		CAS#: 86-73-7				
166	17517	6.65	6.47	80-120	100	(T)
165	17409	6.65	6.47	56-116	99	(T)
167	6558	6.65	6.47	0- 44	37	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	1127	6.65	6.49	80-120	100	(T)
105	2774	6.65	6.49	12- 72	246	(QT)
51	2111	6.65	6.49	42-102	187	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	21745	6.65	6.84	80-120	100	(T)
141	143115	6.65	6.83	43-103	658	(QT)
250	43649	6.65	6.84	68-128	201	(QT)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	1596	13.08	13.12	80-120	100	()
138	1090	13.08	13.12	1- 61	68	(Q)

100 Dibenzo(a,h)anthracene		CAS#: 53-70-3				
278	145	13.07	13.13	80-120	100	()
139	499	13.05	13.12	0- 30	343	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1912.d
Lab Smp Id: 244626004 Client Smp ID: RE12-10-7268
Inj Date : 19-JAN-2010 14:32
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626004|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	9.81270	% moisture

Cpnd Variable Local Compound Variable

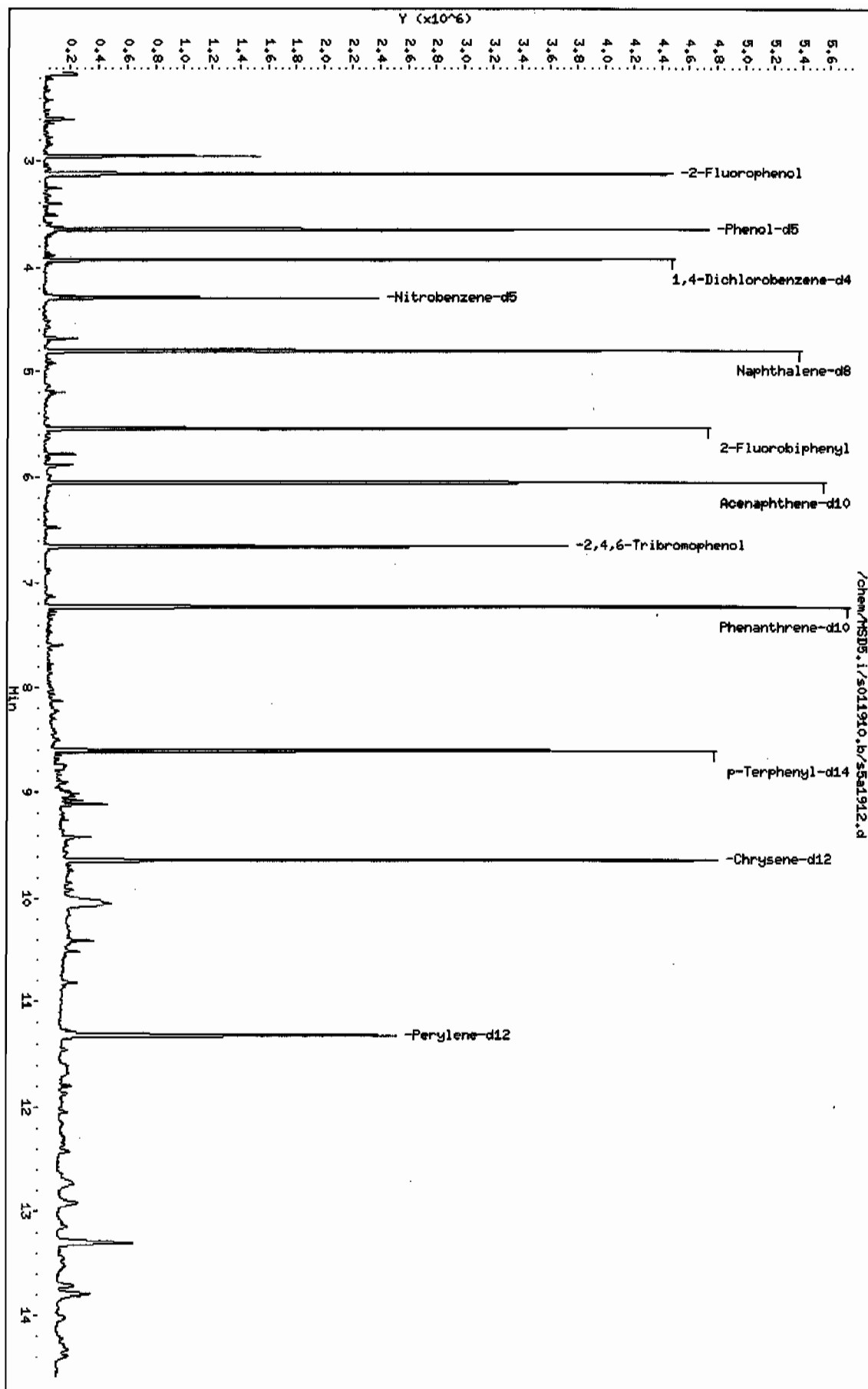
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3467760	40.000
* 91 Chrysene-d12	9.636	4914509	40.000
* 98 Perylene-d12	11.324	3702712	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.031	10071944	116.178072	4290	0		0	10
Propanoic acid					CAS #: 79-09-4		
2.166	502385	5.79492196	214	87	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.954	1057989	12.2037151	451	0		0	10
Friedelan-3-one					CAS #: 559-74-0		
10.024	814953	6.63303692	245	90	NIST05.L	176566	91
Unknown					CAS #:		
10.054	1293996	10.5320453	389	0		0	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
10.407	642802	5.23187312	193	89	NIST05.L	112655	91
Unknown					CAS #:		
10.513	401569	4.33811056	160	0		0	98
Unknown					CAS #:		
12.724	660183	7.13188477	264	0		0	98
Unknown					CAS #:		
12.918	572504	6.18469440	228	0		0	98
Unknown					CAS #:		
13.307	1390348	15.0197729	555	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.795	773517	8.35621913	309	96	NIST05.L	174399	98
Unknown					CAS #:		
14.324	381039	4.11632663	152	0		0	98

Data File: /chem/MS05.1/s011910.b/s5a1912.d
 Date: 19-JAN-2010 14:32
 Client ID: RE12-10-7268
 Sample Info: 1244626004/9428401/1SM11/LANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MS05.1
 Operator: RMB
 Column diameter: 0.20



Date: 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.i

Sample Info: I244626004194284011SVMI11LANL

Volume Injected (uL): 0.5

Operator: RMB

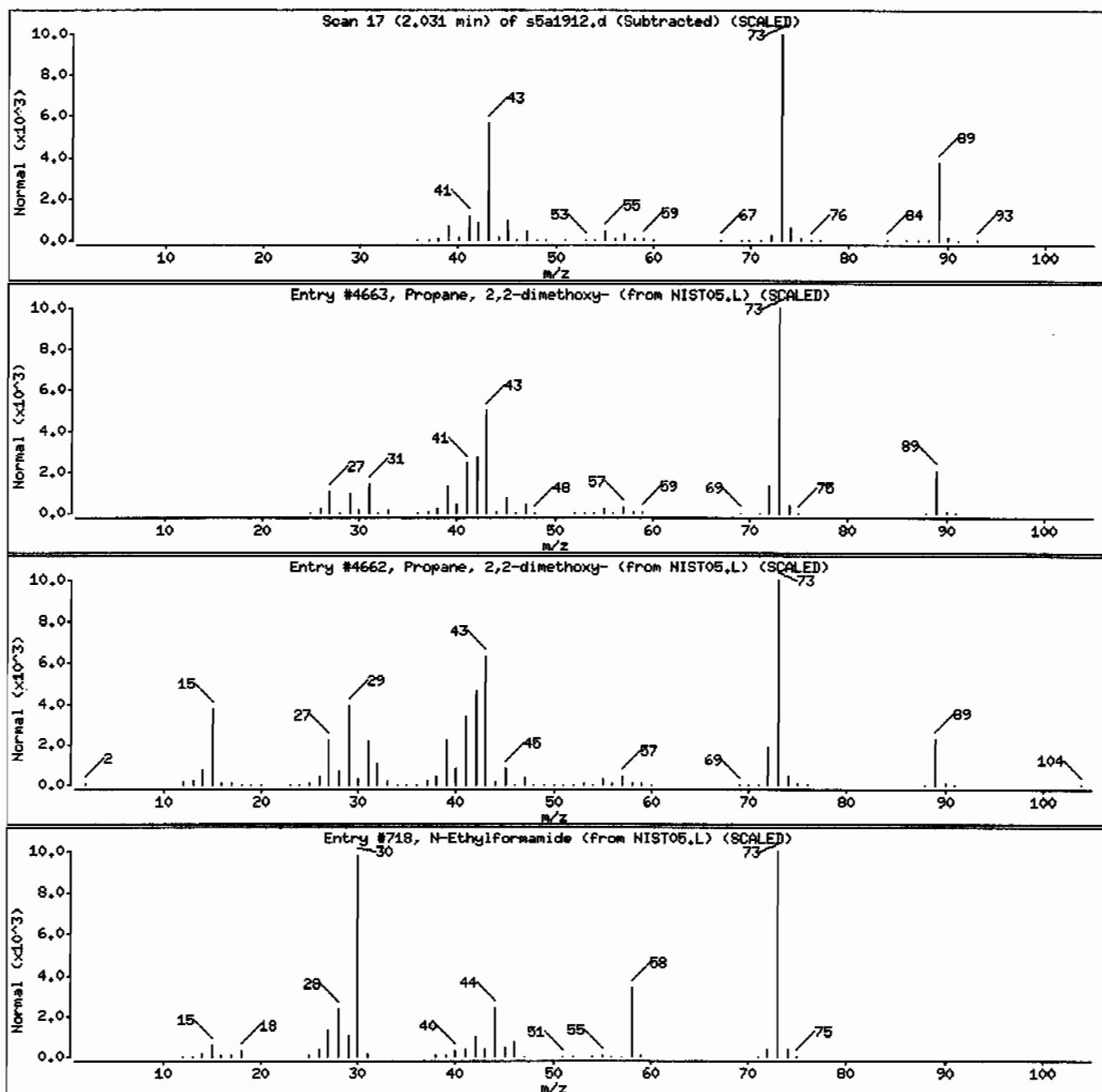
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	34	C5H12O2	104
N-Ethylformamide	627-45-2	NIST05.L	718	9	C3H7NO	73



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.i

Sample Info: I244626004194284011ISVH11ILANL

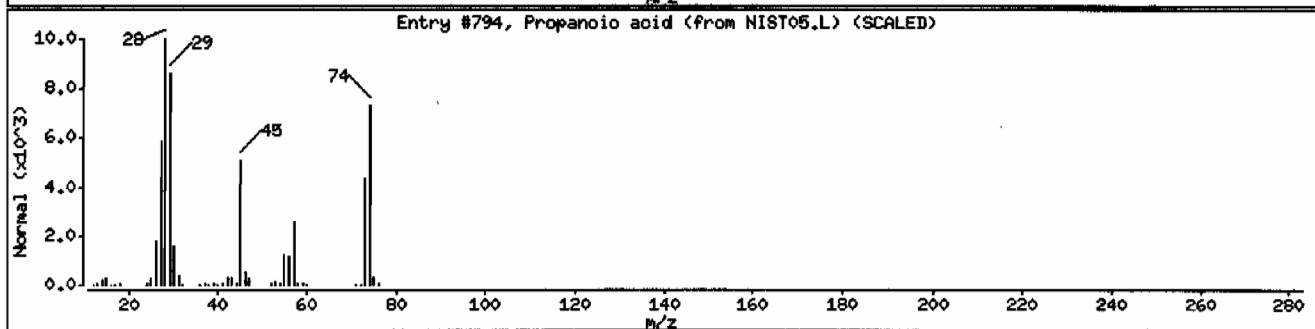
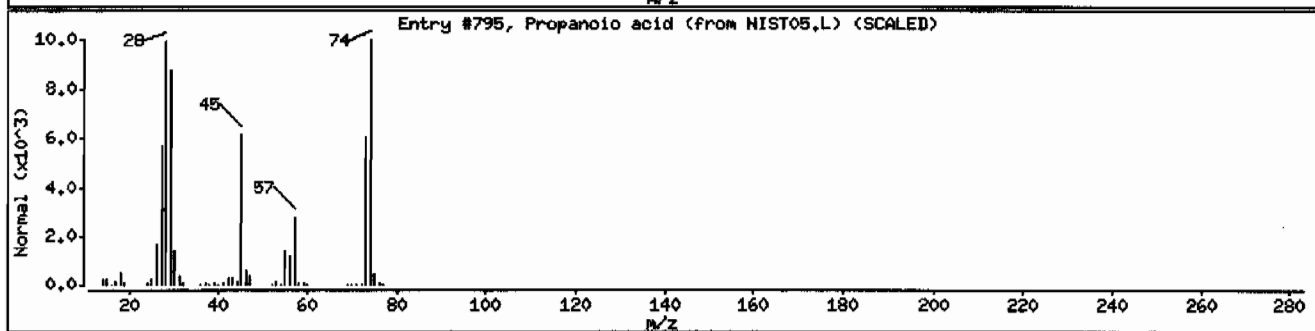
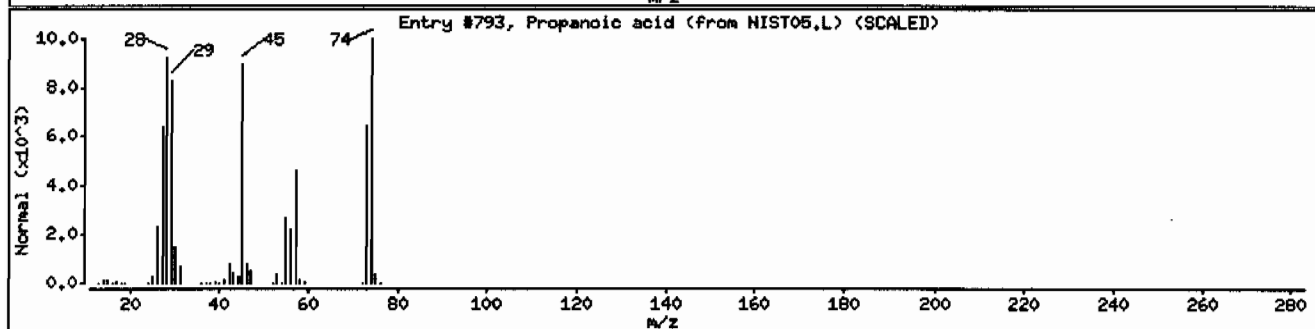
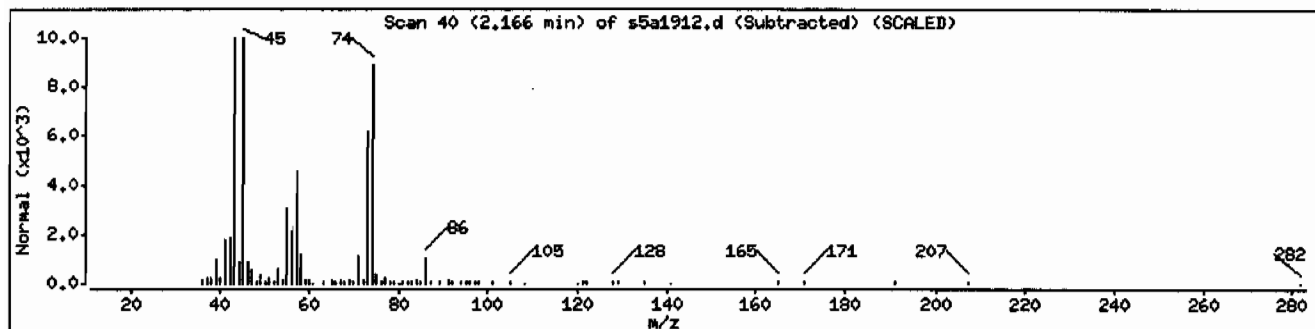
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	87	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	80	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	58	C3H6O2	74



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.i

Sample Info: 1244626004194284011SVMI1ILANL

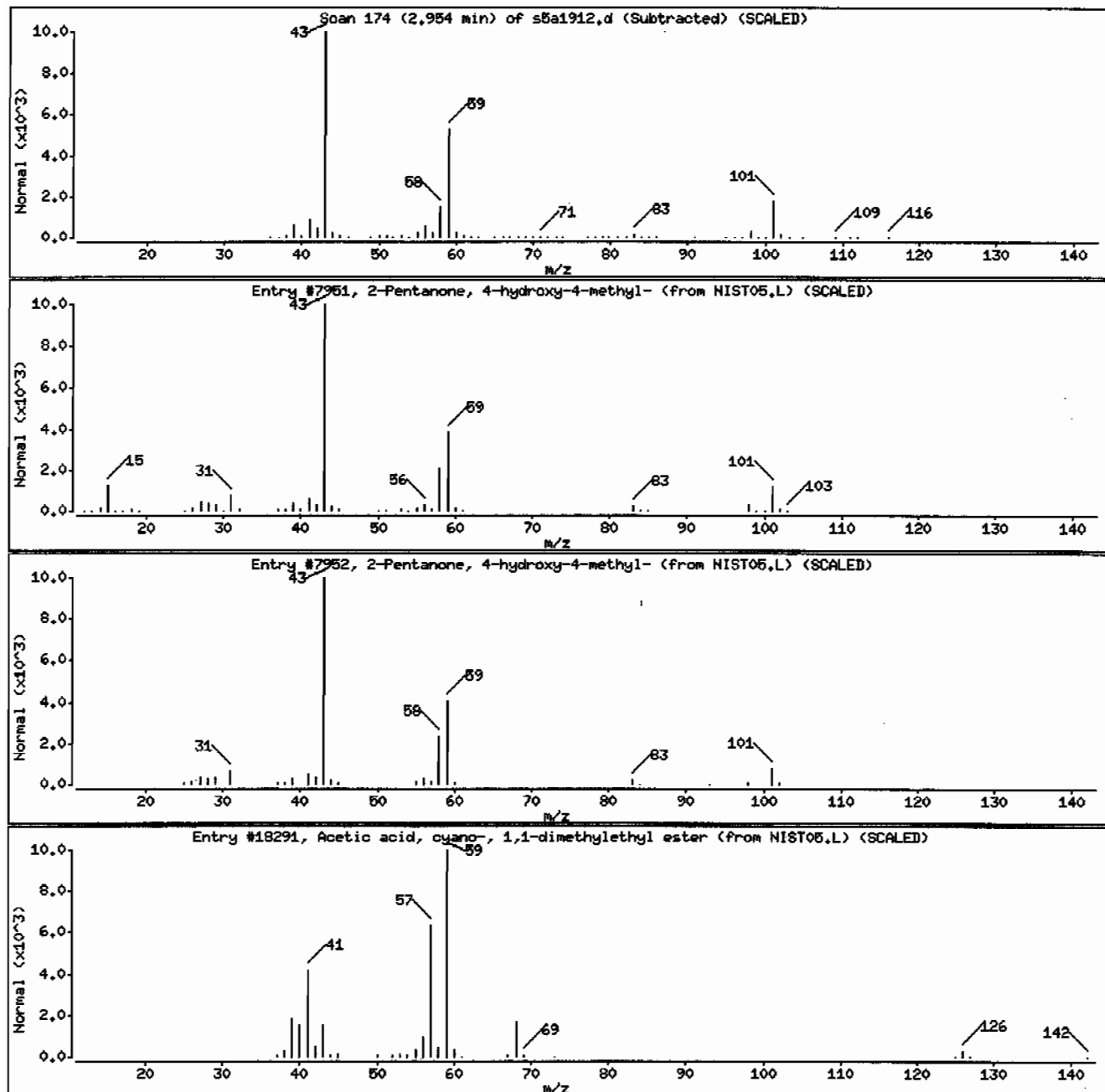
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: HSD5.1

Sample Info: 1244626004194284011SVH111LANL

Volume Injected (uL): 0.5

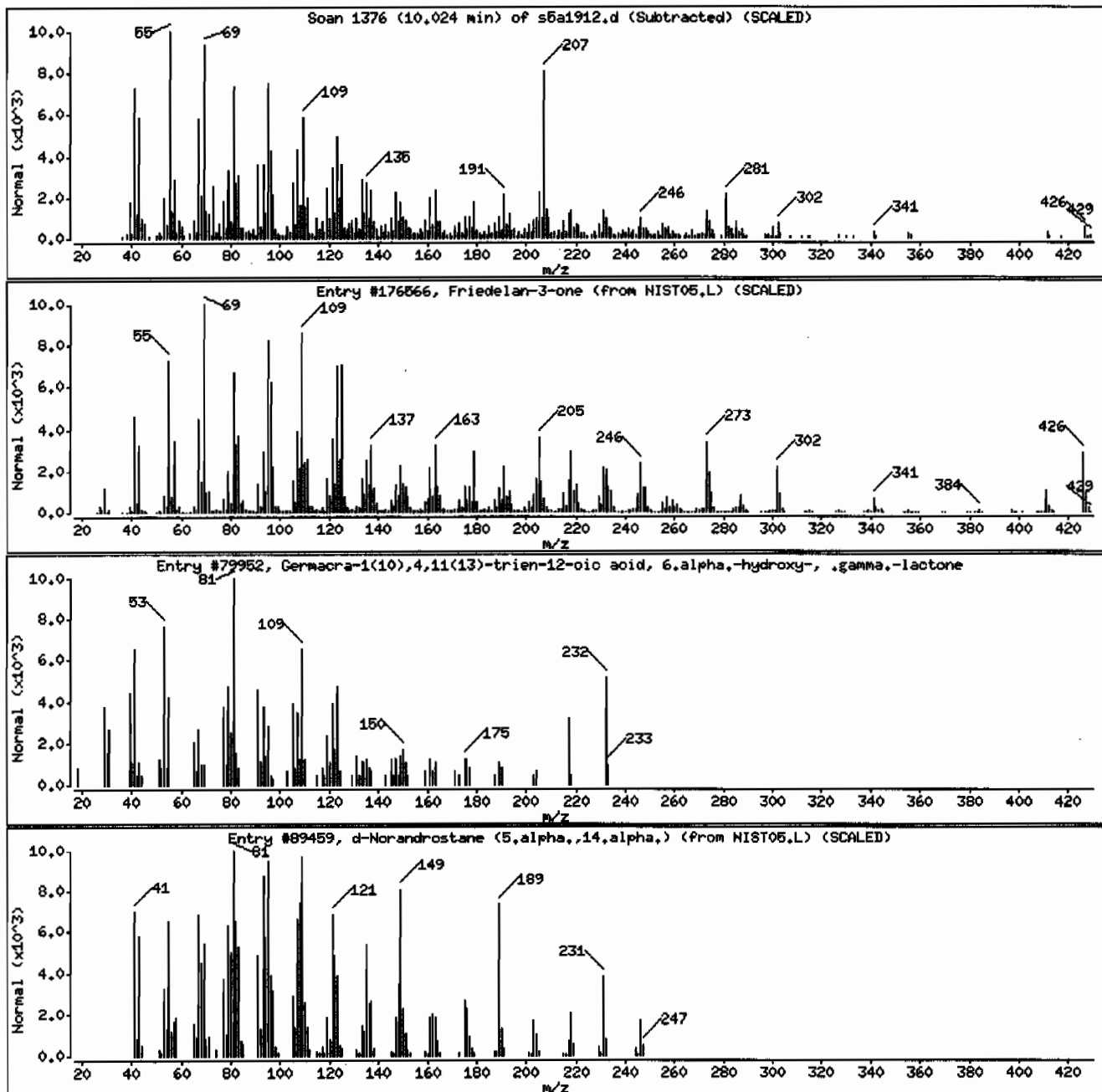
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	90	C30H50O	426
Germacra-1(10),4,11(13)-trien-12-oic aci	853-21-9	NIST05.L	79952	50	C15H20O2	232
d-Norandrostane (5,α,.,14,α,.)	1000281-13-8	NIST05.L	89459	45	C18H30	246



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.1

Sample Info: 1244626004194284011ISVM111LANL

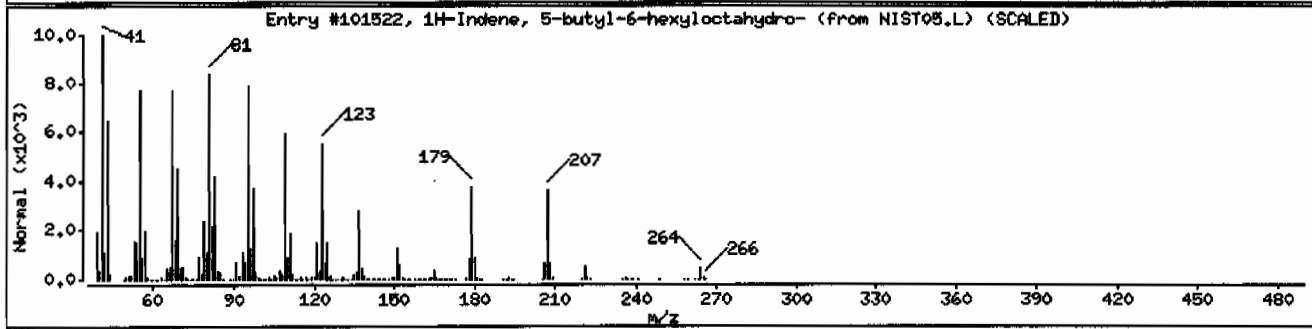
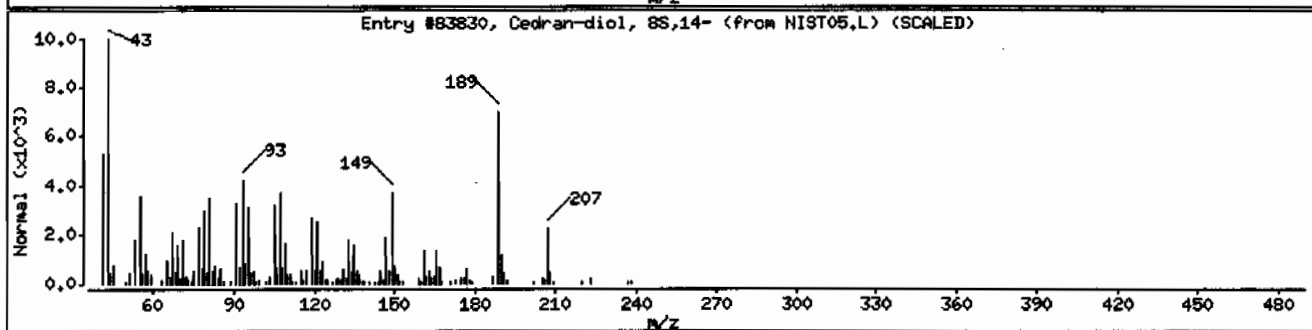
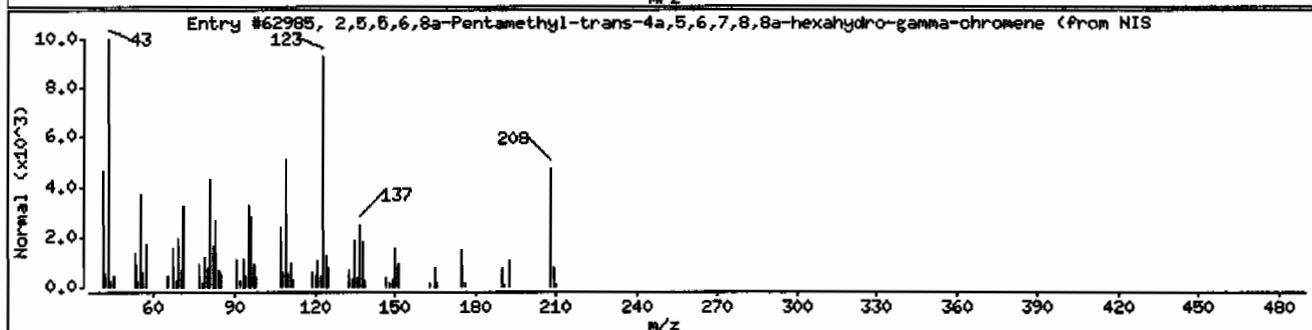
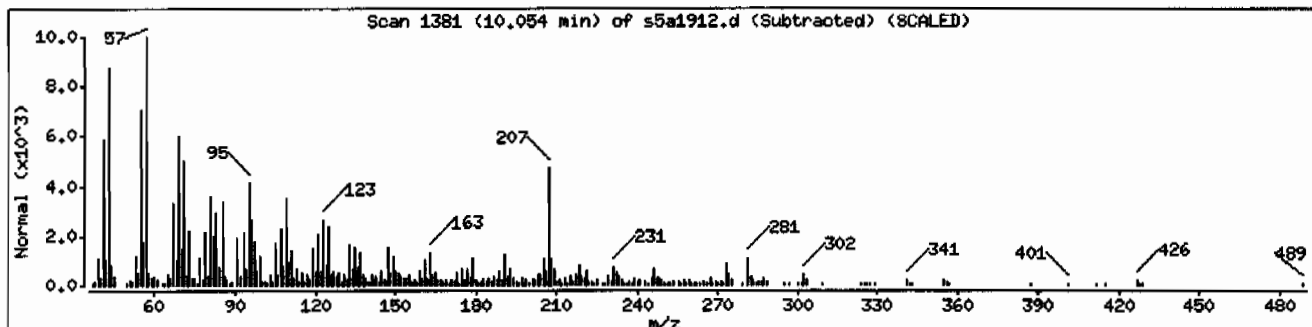
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,5,6,8a-Pentamethyl-trans-4a,5,6,7,8,	1000216-77-8	NIST05.L	62985	30	C14H24O	208
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	25	C15H26O2	238
1H-Indene, 5-butyl-6-hexyloctahydro-	88044-36-5	NIST05.L	101522	25	C19H36	264



Date: 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: HSD5.1

Sample Info: 1244626004194284011SVH11ILANL

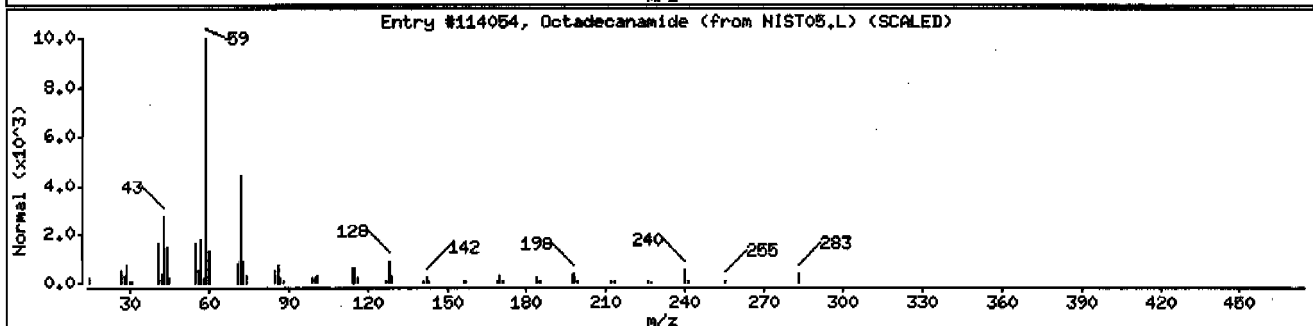
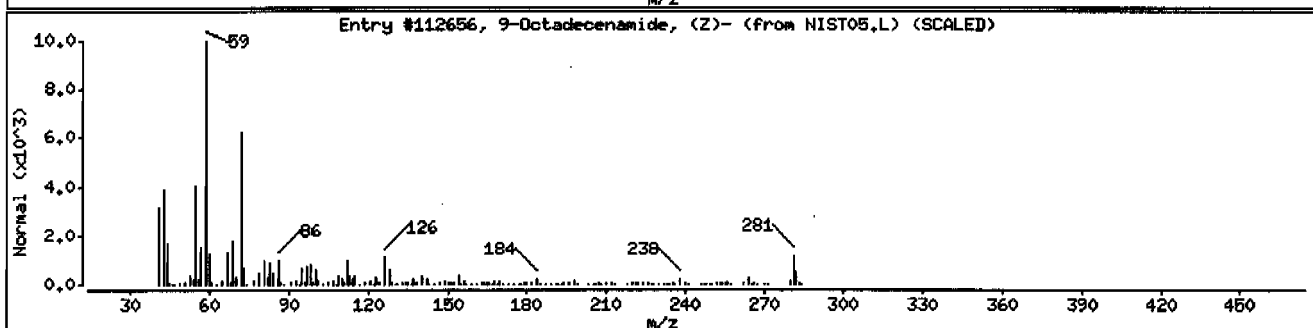
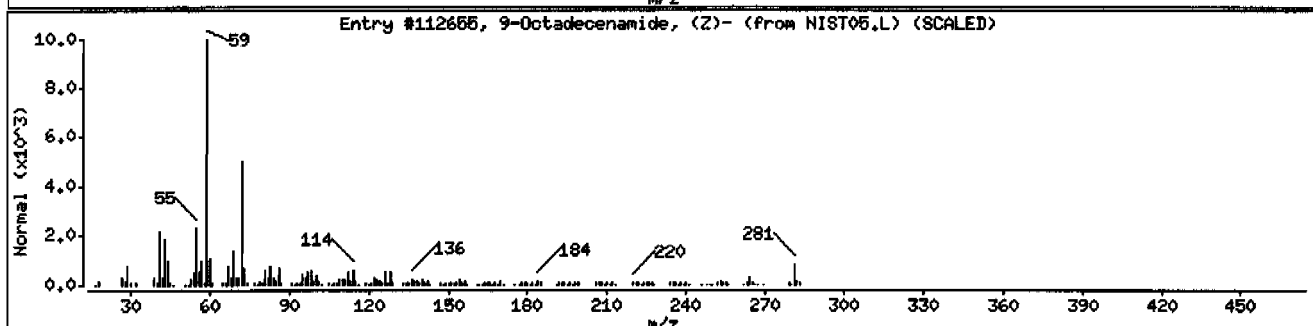
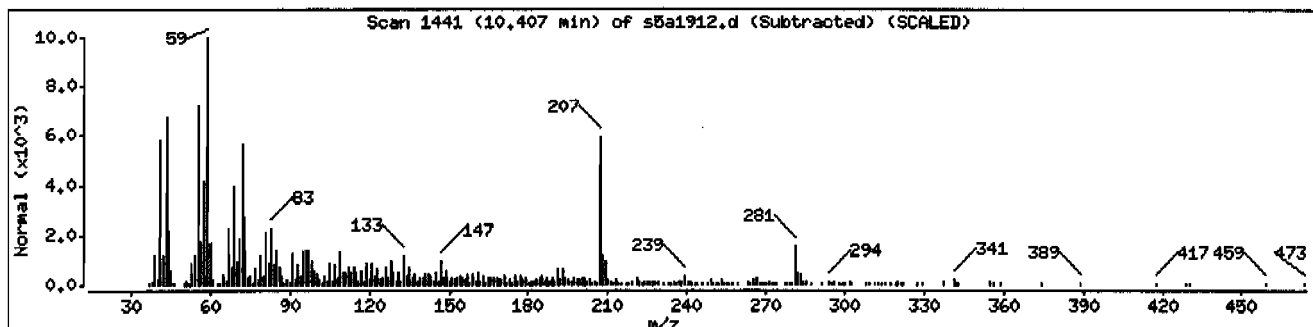
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	89	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	70	C18H35NO	281
Octadecanamide	124-26-5	NIST05.L	114054	64	C18H37NO	283



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.i

Sample Info: 1244626004194284011SVH11LANL

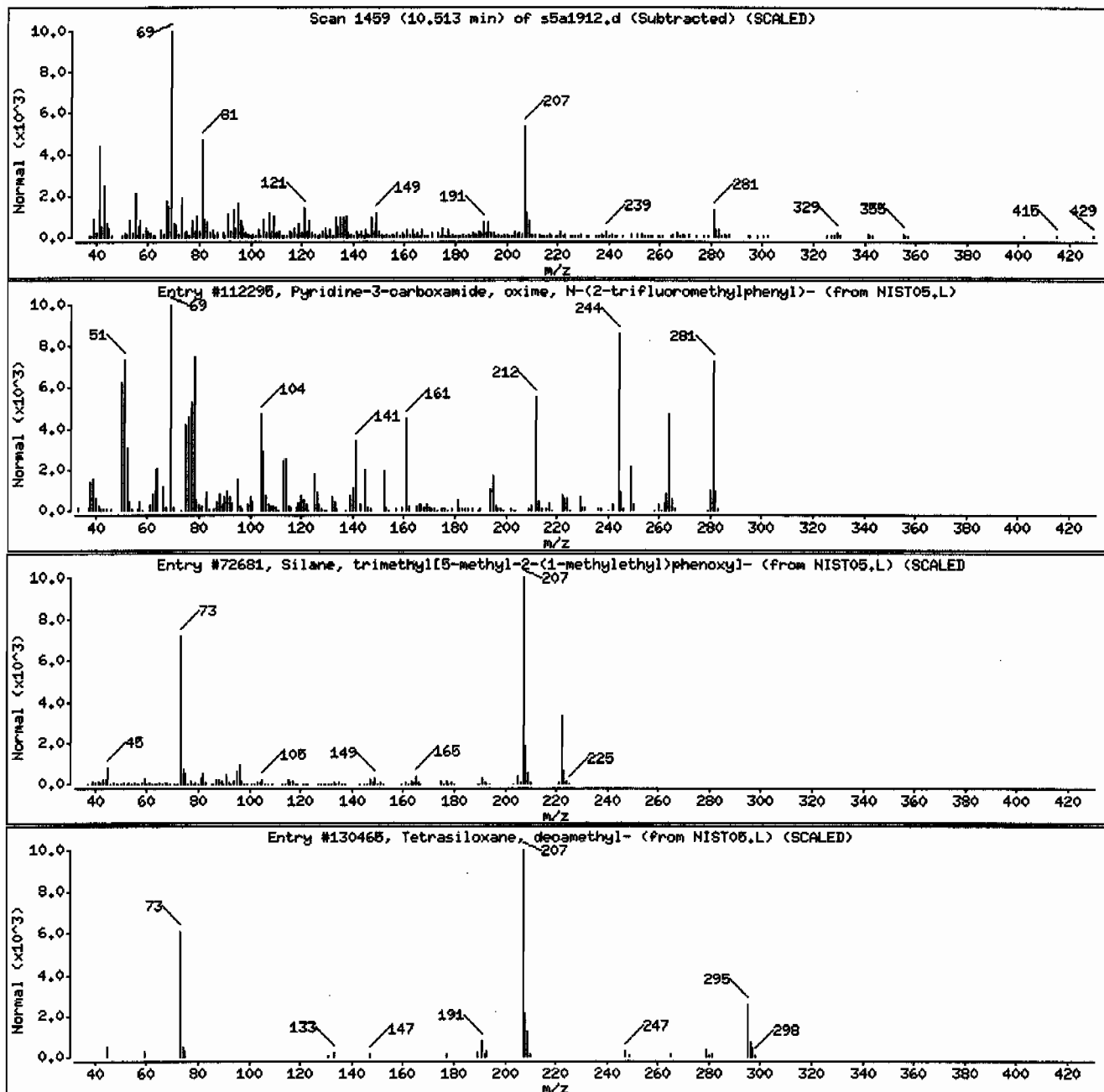
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyridine-3-carboxamide, oxime, N-(2-trif	288246-53-7	NIST05.L	112295	38	C13H10F3N3O	281
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	27	C13H22OSi	222
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	22	C10H30O3Si4	310



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.i

Sample Info: I244626004I94284011ISVM11ILANL

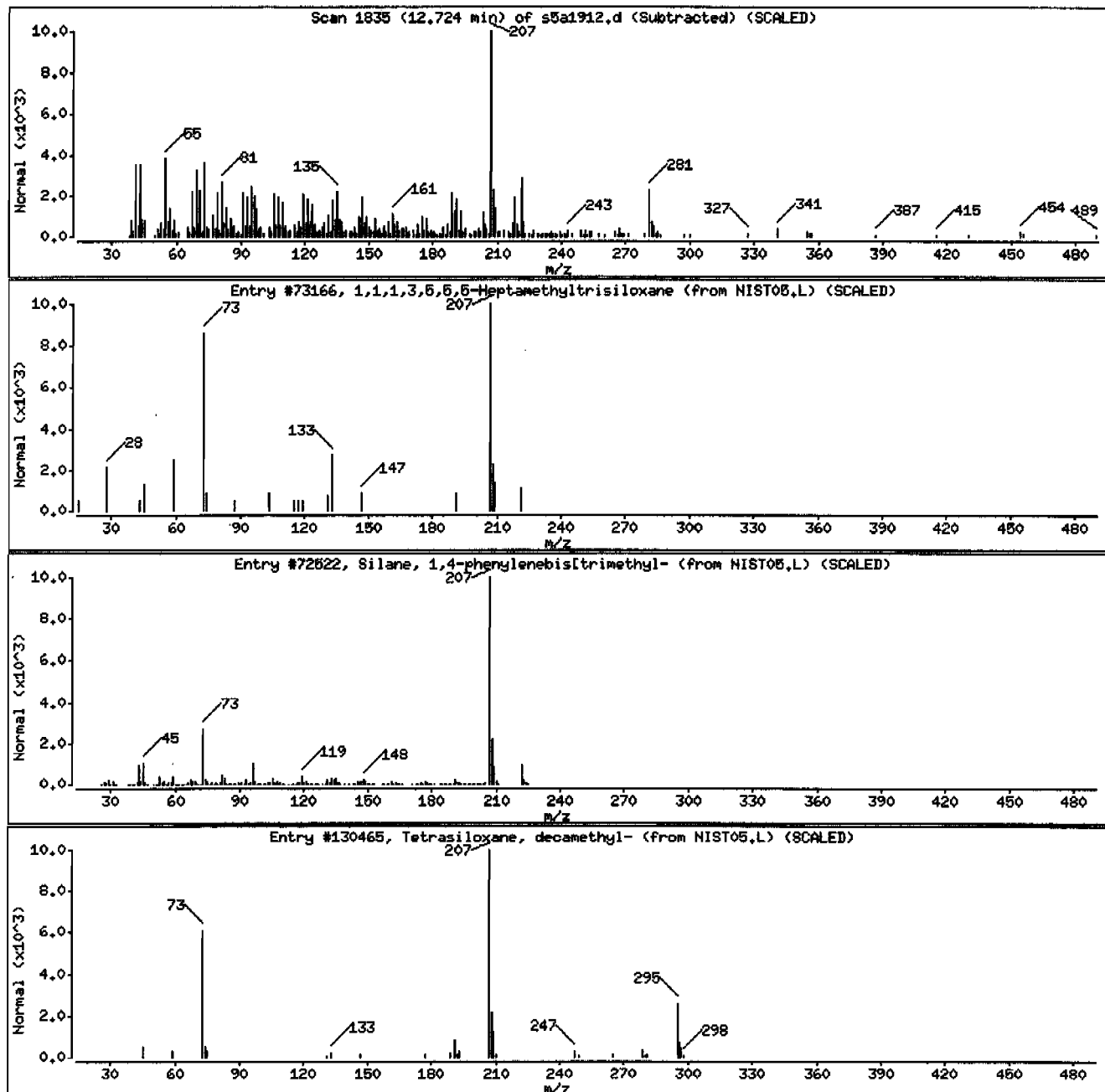
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	36	C7H22O2Si3	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72822	30	C12H22Si2	222
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	27	C10H30O3Si4	310



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.1

Sample Info: 12446260041942840111SVH111LANL

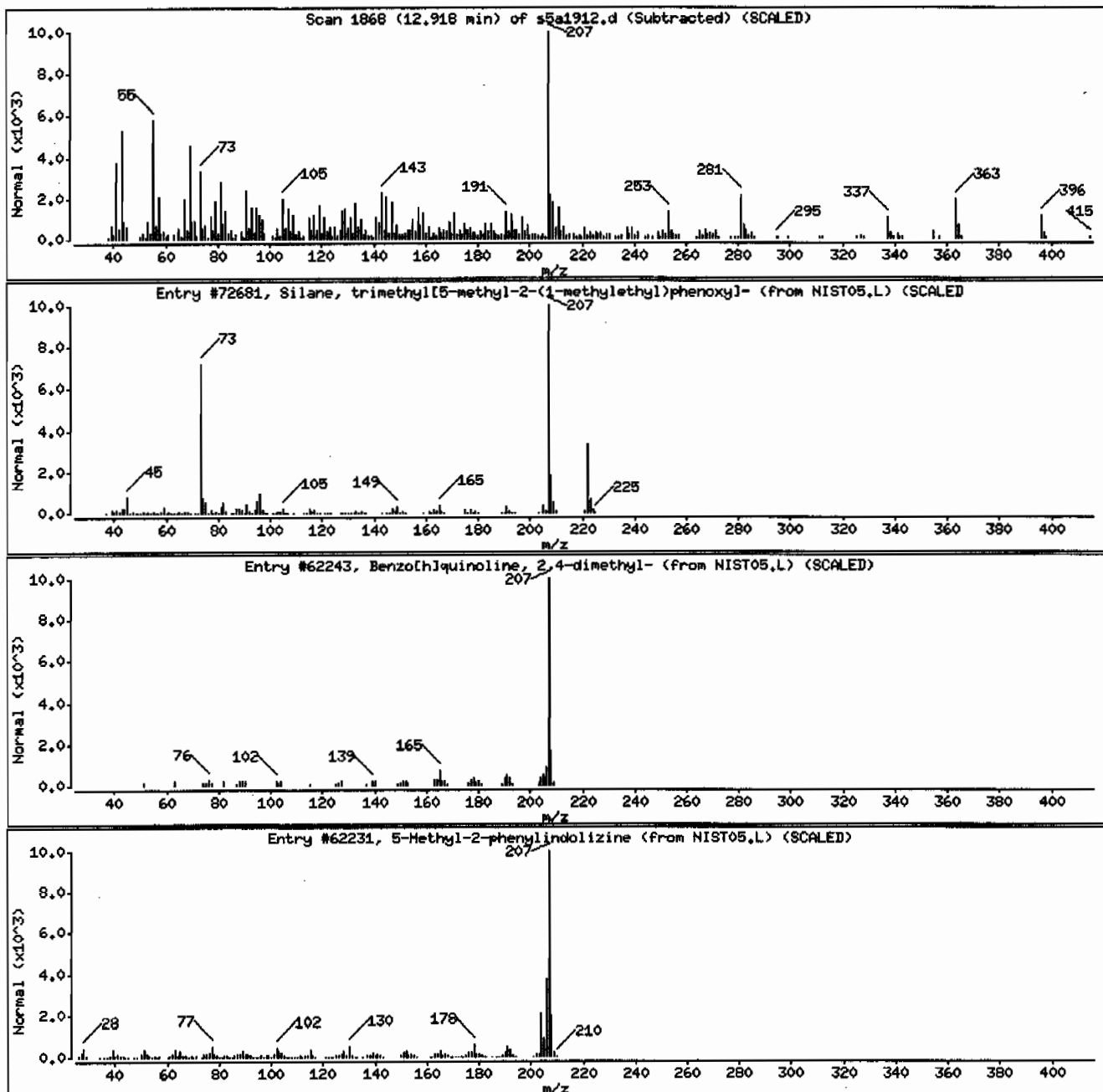
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	43	C13H22OSi	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	38	C15H13N	207



Date: 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.1

Sample Info: 1244626004194284011SVMI1ILANL

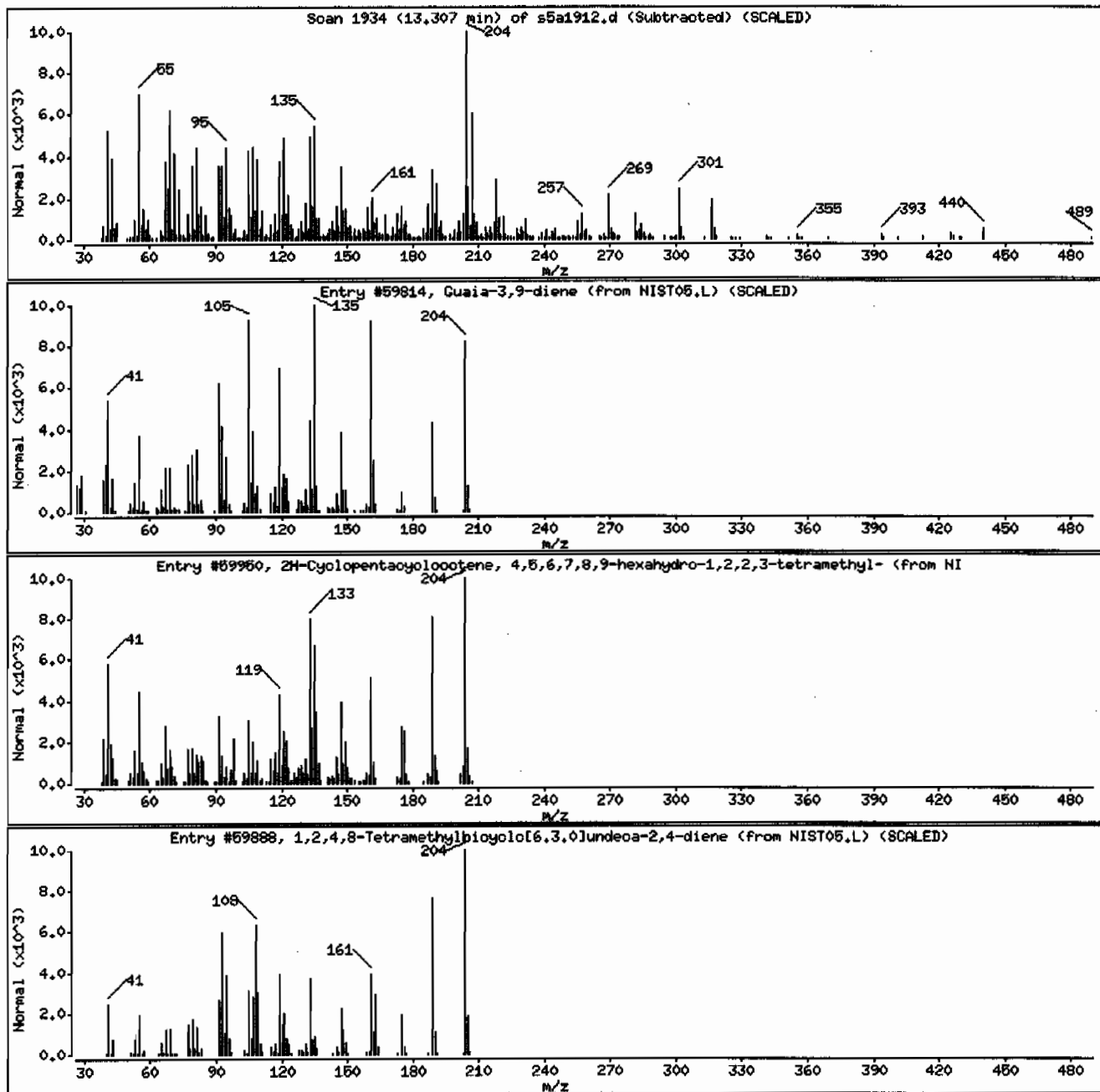
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Guai-3,9-diene	489-83-8	NIST05.L	59814	55	C15H24	204
2H-Cyclopentacyclooctene, 4,6,6,7,8,9-hexa-	1000221-88-8	NIST05.L	59950	50	C15H24	204
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	49	C15H24	204



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: HSD5.i

Sample Info: 1244626004194284011SVH11ILANL

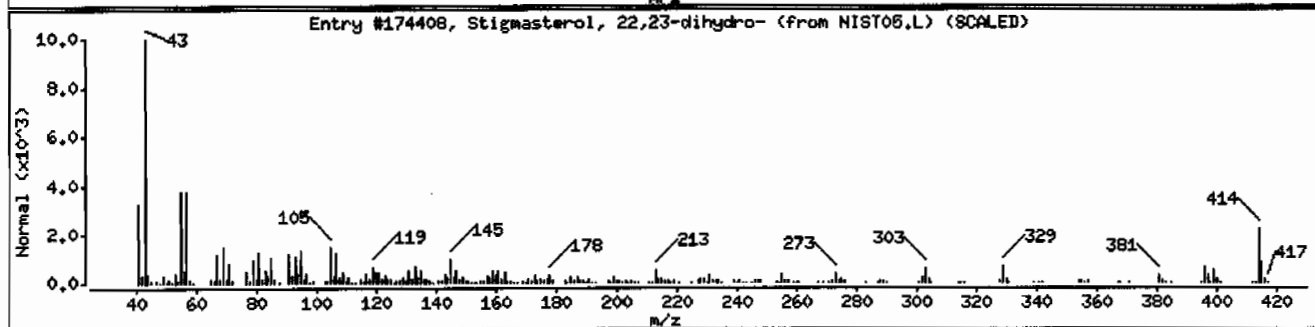
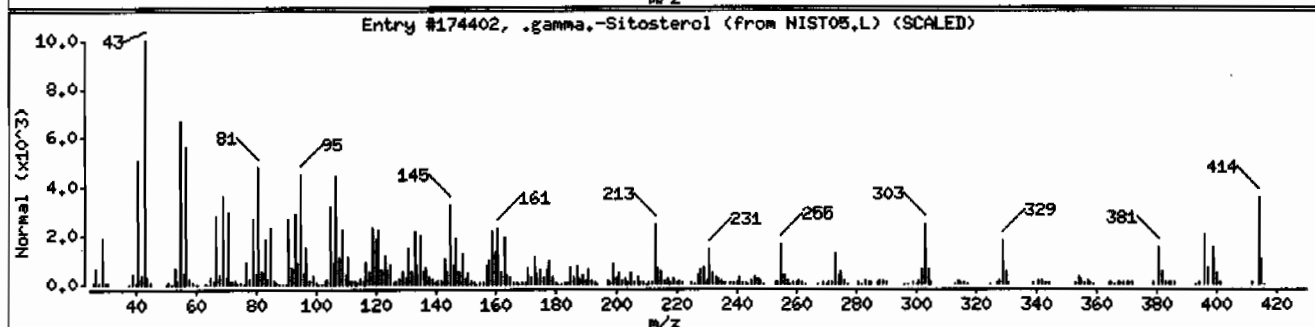
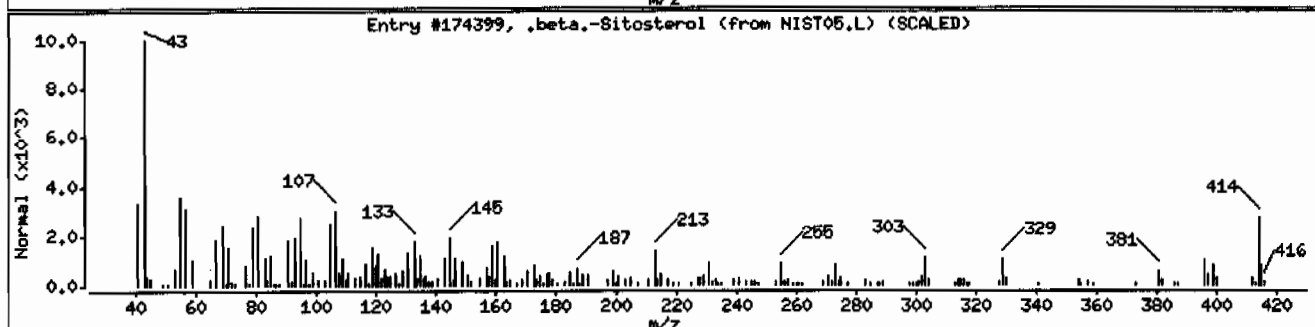
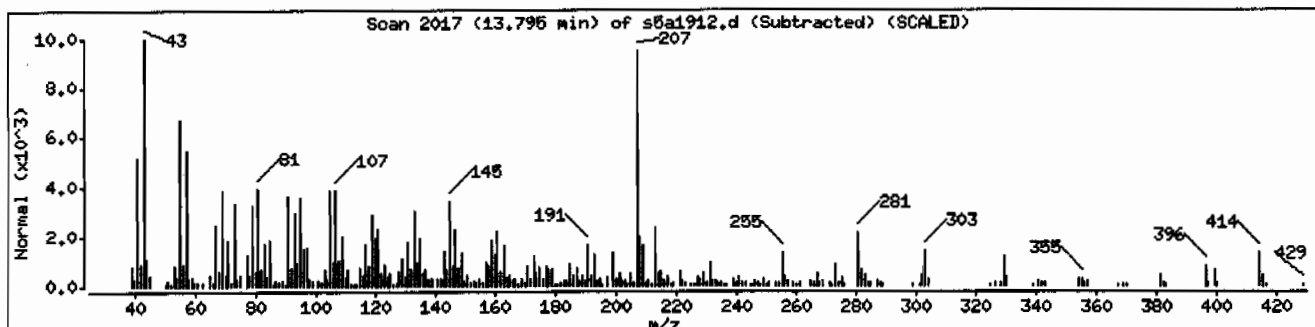
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-SMS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	96	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	94	C ₂₉ H ₅₀ O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	90	C ₂₉ H ₅₀ O	414



Date : 19-JAN-2010 14:32

Client ID: RE12-10-7268

Instrument: MSD5.i

Sample Info: 1244626004194284011SVMI1ILANL

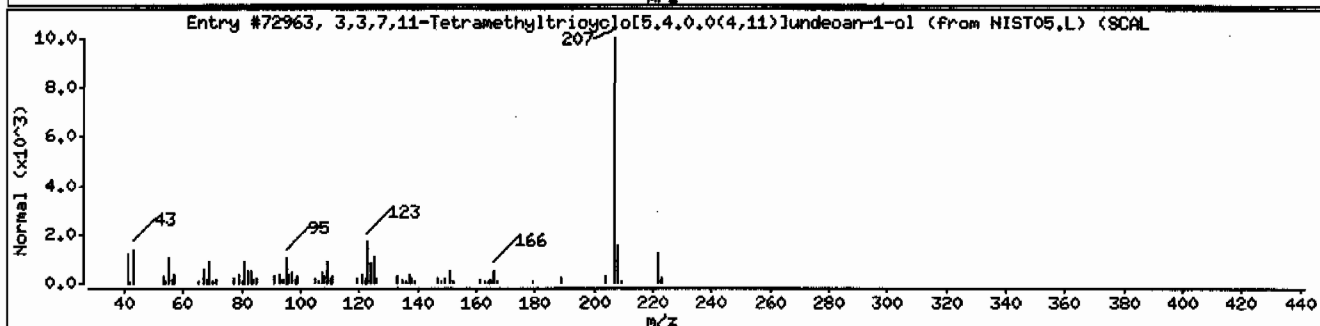
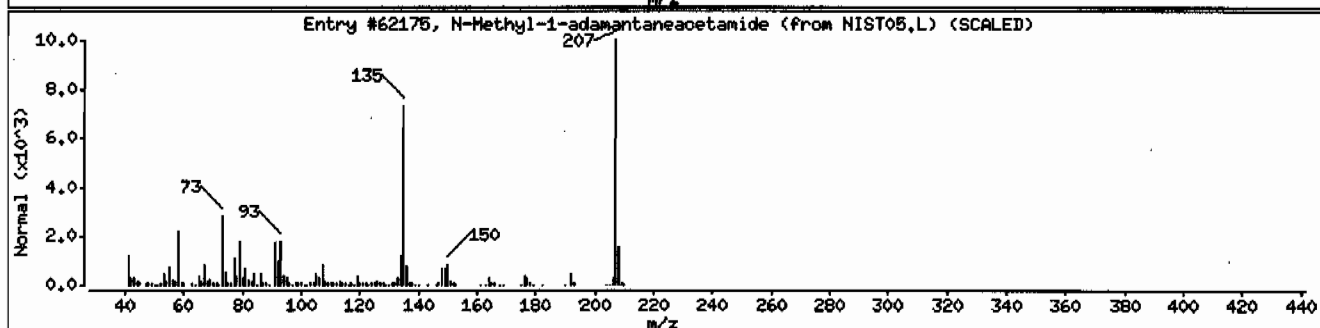
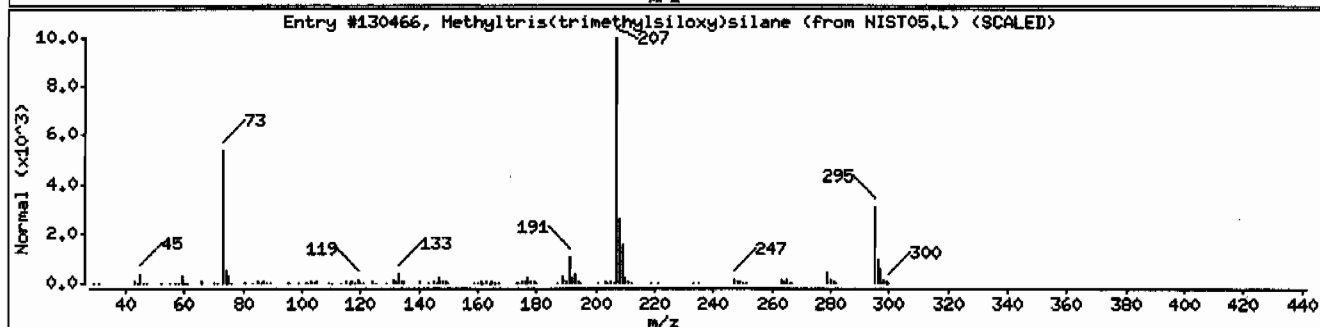
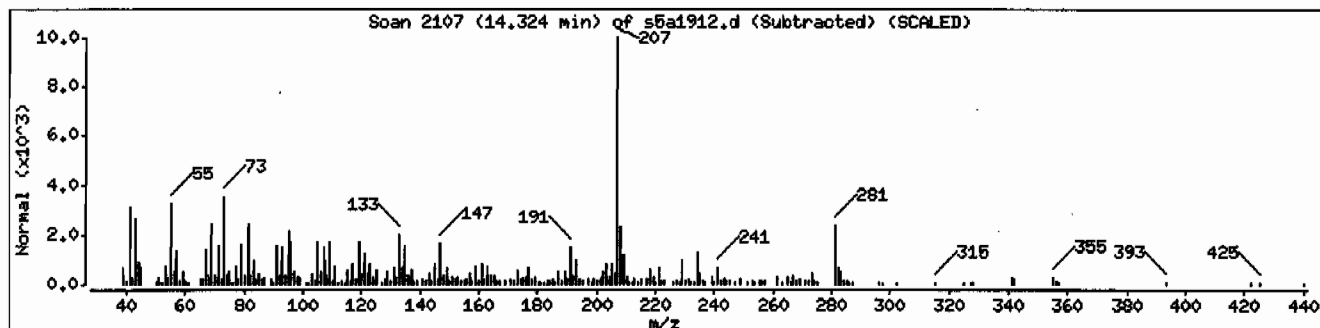
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	47	C10H30O3Si4	310
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	43	C13H21NO	207
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1)]undecan-1-ol	117591-80-7	NIST05.L	72963	43	C15H26O	222



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626014

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7269
Batch ID: 942840
Run Date: 01/19/2010 18:24
Prep Date: 01/18/2010 20:10
Data File: s5a1922.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	354	ug/kg	70.8	354
108-95-2	Phenol	U	354	ug/kg	70.8	354
95-57-8	2-Chlorophenol	U	354	ug/kg	70.8	354
106-46-7	1,4-Dichlorobenzene	U	354	ug/kg	70.8	354
621-64-7	N-Nitrosodipropylamine	U	354	ug/kg	70.8	354
59-50-7	4-Chloro-3-methylphenol	U	354	ug/kg	70.8	354
83-32-9	Acenaphthene	U	35.4	ug/kg	11.7	35.4
121-14-2	2,4-Dinitrotoluene	U	354	ug/kg	35.4	354
100-02-7	4-Nitrophenol	U	354	ug/kg	117	354
87-86-5	Pentachlorophenol	U	354	ug/kg	88.5	354
129-00-0	Pyrene	U	35.4	ug/kg	10.6	35.4
110-86-1	Pyridine	U	354	ug/kg	70.8	354
62-53-3	Aniline	U	354	ug/kg	106	354
111-44-4	bis(2-Chloroethyl) ether	U	354	ug/kg	70.8	354
541-73-1	1,3-Dichlorobenzene	U	354	ug/kg	70.8	354
100-51-6	Benzyl alcohol	U	354	ug/kg	106	354
95-50-1	1,2-Dichlorobenzene	U	354	ug/kg	70.8	354
108-60-1	bis(2-Chloroisopropyl)ether	U	354	ug/kg	70.8	354
95-48-7	o-Cresol	U	354	ug/kg	70.8	354
65794-96-9	m,p-Cresols	U	354	ug/kg	106	354
67-72-1	Hexachloroethane	U	354	ug/kg	70.8	354
98-95-3	Nitrobenzene	U	354	ug/kg	70.8	354
78-59-1	Isophorone	U	354	ug/kg	70.8	354
88-75-5	2-Nitrophenol	U	354	ug/kg	70.8	354
105-67-9	2,4-Dimethylphenol	U	354	ug/kg	124	354
111-91-1	bis(2-Chloroethoxy)methane	U	354	ug/kg	70.8	354
120-83-2	2,4-Dichlorophenol	U	354	ug/kg	70.8	354
65-85-0	Benzoic acid	U	708	ug/kg	177	708
91-20-3	Naphthalene	U	35.4	ug/kg	10.6	35.4
106-47-8	4-Chloroaniline	U	354	ug/kg	70.8	354
87-68-3	Hexachlorobutadiene	U	354	ug/kg	70.8	354
91-57-6	2-Methylnaphthalene	U	35.4	ug/kg	7.08	35.4
77-47-4	Hexachlorocyclopentadiene	U	354	ug/kg	70.8	354
88-06-2	2,4,6-Trichlorophenol	U	354	ug/kg	70.8	354
95-95-4	2,4,5-Trichlorophenol	U	354	ug/kg	70.8	354
91-58-7	2-Chloronaphthalene	U	35.4	ug/kg	11.7	35.4
88-74-4	2-Nitroaniline	U	354	ug/kg	70.8	354
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	354	ug/kg	70.8	354

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

SDG Number: 10-1225
Lab Sample ID: 244626014

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.04 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7269
Batch ID: 942840
Run Date: 01/19/2010 18:24
Prep Date: 01/18/2010 20:10
Data File: s5a1922.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	354	ug/kg	70.8	354
606-20-2	2,6-Dinitrotoluene	U	354	ug/kg	35.4	354
208-96-8	Acenaphthylene	U	35.4	ug/kg	10.6	35.4
51-28-5	2,4-Dinitrophenol	U	708	ug/kg	135	708
132-64-9	Dibenzofuran	U	354	ug/kg	70.8	354
84-66-2	Diethylphthalate	U	354	ug/kg	70.8	354
86-73-7	Fluorene	U	35.4	ug/kg	10.6	35.4
7005-72-3	4-Chlorophenylphenylether	U	354	ug/kg	70.8	354
534-52-1	2-Methyl-4,6-dinitrophenol	U	354	ug/kg	70.8	354
100-01-6	4-Nitroaniline	U	354	ug/kg	106	354
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	354	ug/kg	70.8	354
122-66-7	Azobenzene	U	354	ug/kg	70.8	354
101-55-3	1,2-Diphenylhydrazine 4-Bromophenylphenylether	U	354	ug/kg	70.8	354
118-74-1	Hexachlorobenzene	U	354	ug/kg	70.8	354
85-01-8	Phenanthrene	U	35.4	ug/kg	10.6	35.4
120-12-7	Anthracene	U	35.4	ug/kg	7.08	35.4
84-74-2	Di-n-butylphthalate	U	354	ug/kg	70.8	354
206-44-0	Fluoranthene	U	35.4	ug/kg	10.6	35.4
85-68-7	Butylbenzylphthalate	U	354	ug/kg	70.8	354
56-55-3	Benzo(a)anthracene	U	35.4	ug/kg	10.6	35.4
91-94-1	3,3'-Dichlorobenzidine	U	354	ug/kg	106	354
218-01-9	Chrysene	U	35.4	ug/kg	10.6	35.4
117-81-7	bis(2-Ethylhexyl)phthalate	U	354	ug/kg	70.8	354
117-84-0	Di-n-octylphthalate	U	354	ug/kg	70.8	354
205-99-2	Benzo(b)fluoranthene	U	35.4	ug/kg	10.6	35.4
207-08-9	Benzo(k)fluoranthene	U	35.4	ug/kg	10.6	35.4
50-32-8	Benzo(a)pyrene	U	35.4	ug/kg	10.6	35.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.4	ug/kg	10.6	35.4
53-70-3	Dibenzo(a,h)anthracene	U	35.4	ug/kg	10.6	35.4
191-24-2	Benzo(ghi)perylene	U	35.4	ug/kg	10.6	35.4
120-82-1	1,2,4-Trichlorobenzene	U	354	ug/kg	70.8	354

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	396	ug/kg		J
79-09-4	Propanoic acid	2.17	185	ug/kg	90	NJ

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626014	Date Received: 01/13/2010 08:55	%Moisture: 6
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7269	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 18:24	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5a1922.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 Aldol Condensate	2.96	538	ug/kg		JA
	Unknown	10.05	195	ug/kg		J
	Unknown	10.71	157	ug/kg		J
	Unknown	12	741	ug/kg		J
	Unknown	12.76	1320	ug/kg		J
	Unknown	13.53	341	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1922.d
Lab Smp Id: 244626014 Client Smp ID: RE12-10-7269
Inj Date : 19-JAN-2010 18:24
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626014|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	5.99750	% 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	3.931	3.940	(1.000)	599098		40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1981883		40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1171378		40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2073430		40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1604123		40.0000	
* 98 Perylene-d12	264	11.325	11.331	(1.000)	1014624		40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	952466		64.1062	2270
\$ 5 Phenol-d5	99	3.649	3.651	(0.928)	1129459		61.6414	2180
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	541578		35.5898	1260
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	1054054		34.0160	1200
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	285136		76.5862	2710
\$ 81 p-Terphenyl-d14	244	8.613	8.611	(0.893)	1226325		48.6874	1720

ION RATIO REPORT

SV REPORT

Data file: s5a1922.d

Report Date: 01/20/2010 07:09

Lab. ID: 244626014

SampleType: SAMPLE

Injection Date: 19-JAN-2010 18:24

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626014|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	63840	3.65	3.72	80-120	100	(T)
93	420	3.65	3.72	210-270	1	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	76967	4.30	4.18	80-120	100	(T)
42	44765	4.30	4.18	44-104	58	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	1616	4.57	4.57	80-120	100	()
122	641	4.60	4.57	39- 99	40	()
77	926	4.57	4.57	34- 94	57	()

43 Dimethylphthalate		CAS#: 131-11-3				
163	214176	6.06	5.82	80-120	100	(T)
164	1171378	6.06	5.82	0- 40	547	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	160963	6.06	5.88	80-120	100	(T)
63	1869	6.06	5.88	61-121	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	160963	6.06	6.17	80-120	100	(T)
89	2216	6.06	6.17	47-107	1	(QT)
63	1869	6.06	6.17	23- 83	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
52 4-Nitrophenol		CAS#: 100-02-7				
139	302	6.05	6.10	80-120	100	()
109	2484	6.06	6.10	41-101	822	(Q)
65	5368	6.06	6.10	72-132	1777	(Q)
<hr/>						
53 Fluorene		CAS#: 86-73-7				
166	15726	6.65	6.47	80-120	100	(T)
165	15401	6.65	6.47	56-116	98	(T)
167	5921	6.66	6.47	0- 44	38	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	1233	6.65	6.49	80-120	100	(T)
105	2471	6.65	6.49	12- 72	200	(QT)
51	2214	6.65	6.49	42-102	180	(QT)
<hr/>						
61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	19612	6.66	6.84	80-120	100	(T)
141	128572	6.65	6.83	43-103	656	(QT)
250	39107	6.66	6.84	68-128	199	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1922.d
 Lab Smp Id: 244626014 Client Smp ID: RE12-10-7269
 Inj Date : 19-JAN-2010 18:24
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626014|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	5.99750	% moisture

Cpnd Variable

Local Compound Variable

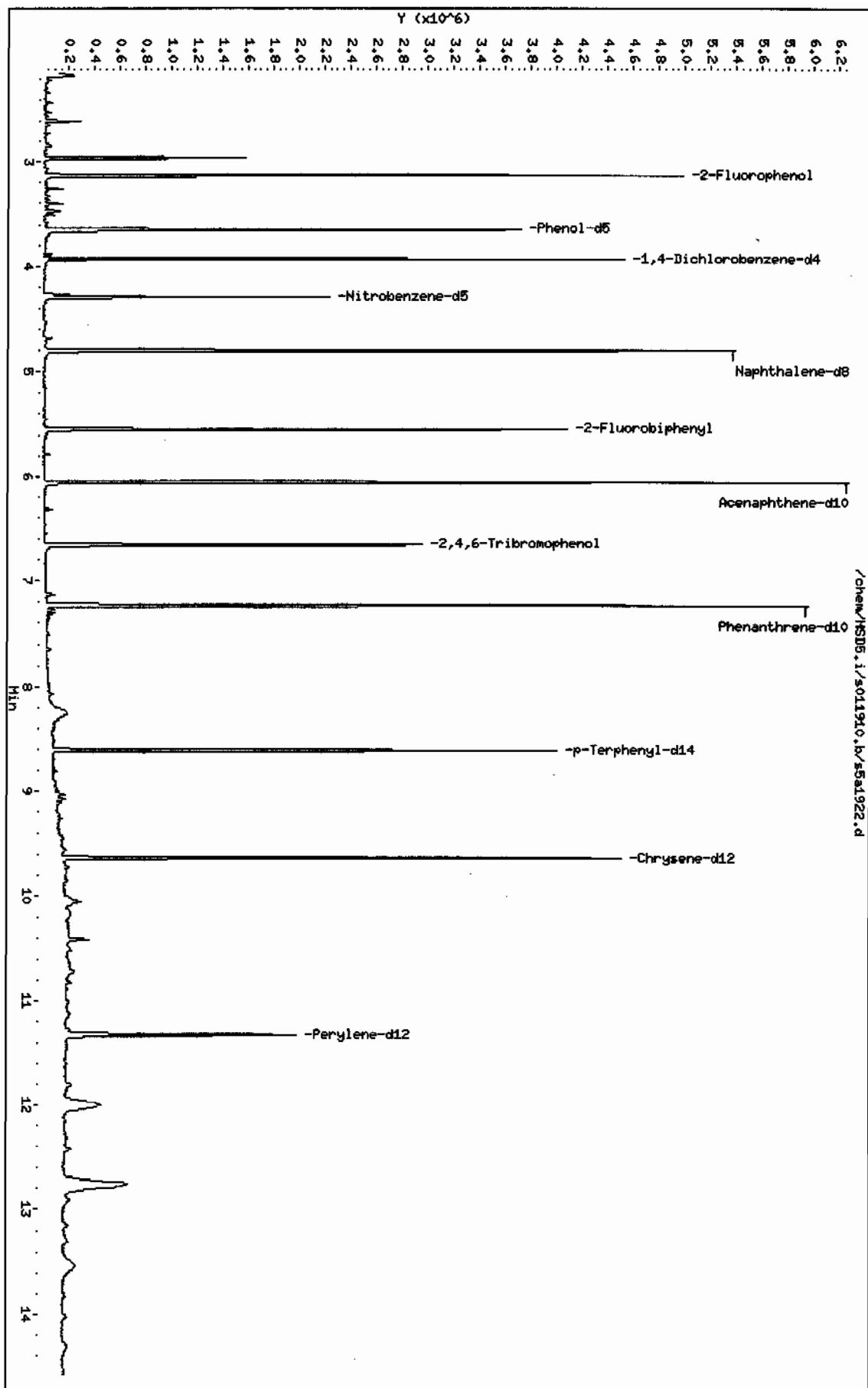
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3609725	40.000
* 91 Chrysene-d12	9.642	4292598	40.000
* 98 Perylene-d12	11.325	2770449	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown				CAS #:			
2.031	1010331	11.1956509	396	0		0	10
Propanoic acid				CAS #: 79-09-4			
2.172	470999	5.21922266	185	90	NIST05.L	793	10
Unknown Aldol Condensate				CAS #:			
2.960	1371071	15.1930729	538	0		0	10
Unknown				CAS #:			
10.054	591520	5.51199756	195	0		0	91
Unknown				CAS #:			
10.707	306423	4.42415559	157	0		0	98
Unknown				CAS #:			
11.995	1449822	20.9326588	741	0		0	98
Unknown				CAS #:			
12.760	2578234	37.2247683	1320	0		0	98
Unknown				CAS #:			
13.530	667566	9.63838244	341	0		0	98

Data File: /chem/MSD5.1/s011910.b/s5a1922.d
 Date: 19-JAN-2010 18:24
 Client ID: RE12-10-7269
 Sample Info: 1244626014194284011SVH11L1ANL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD5.1
 Operator: RMB
 Column diameter: 0.20



Date: 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: HSD5.i

Sample Info: 1244626014194284011ISVM111LANL

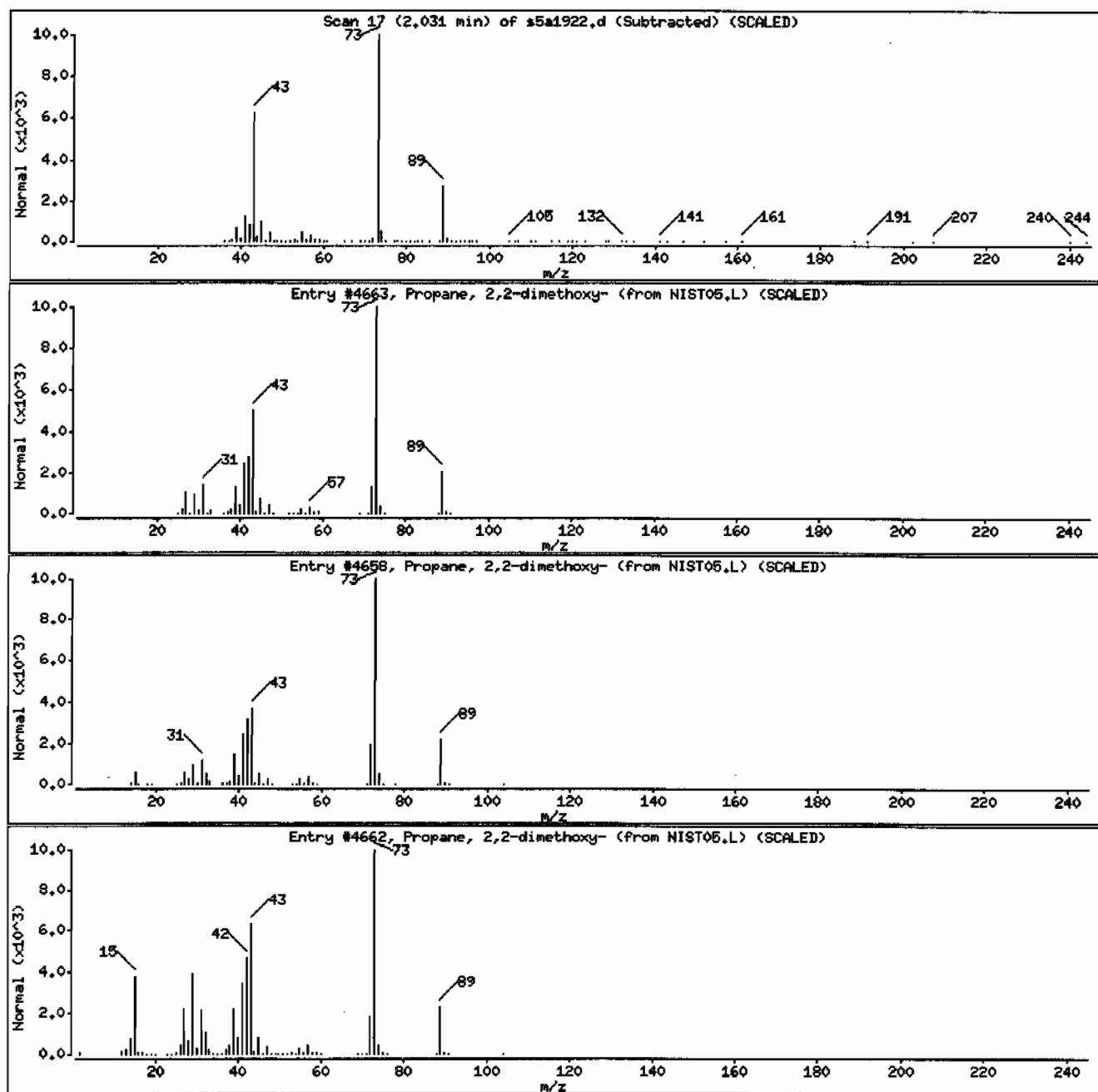
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	64	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	56	C5H12O2	104



Date : 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: MSD5.i

Sample Info: 1244626014194284011ISVH11ILANL

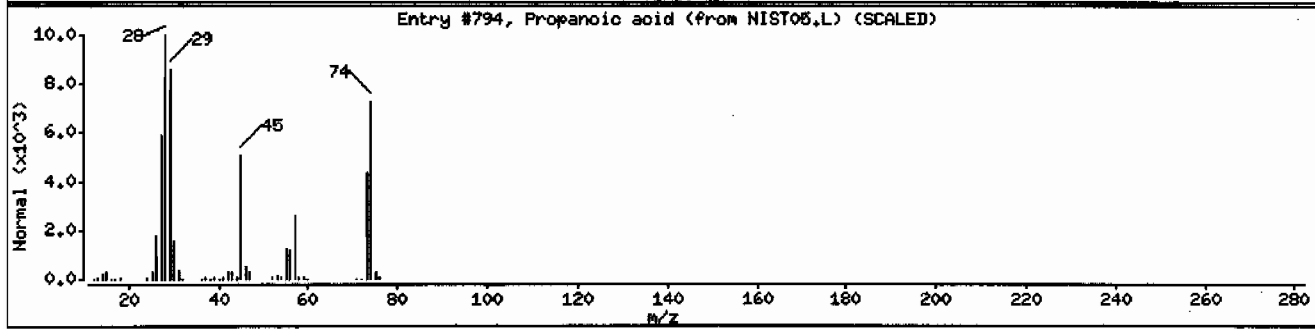
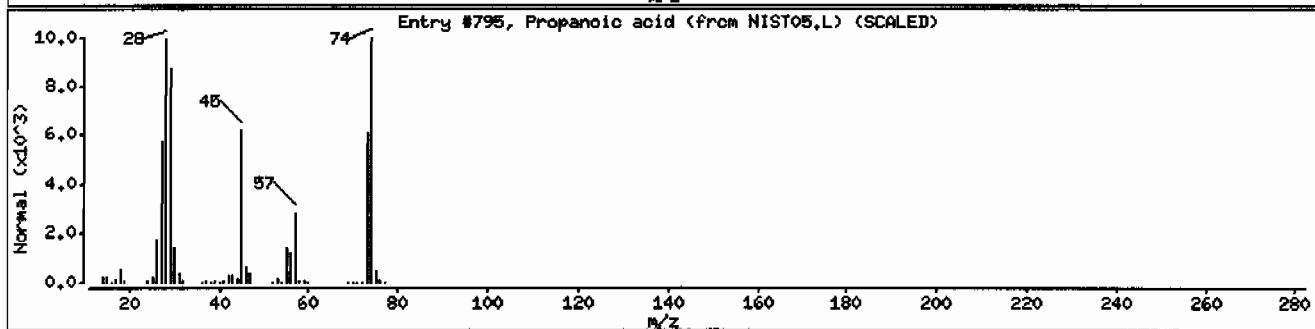
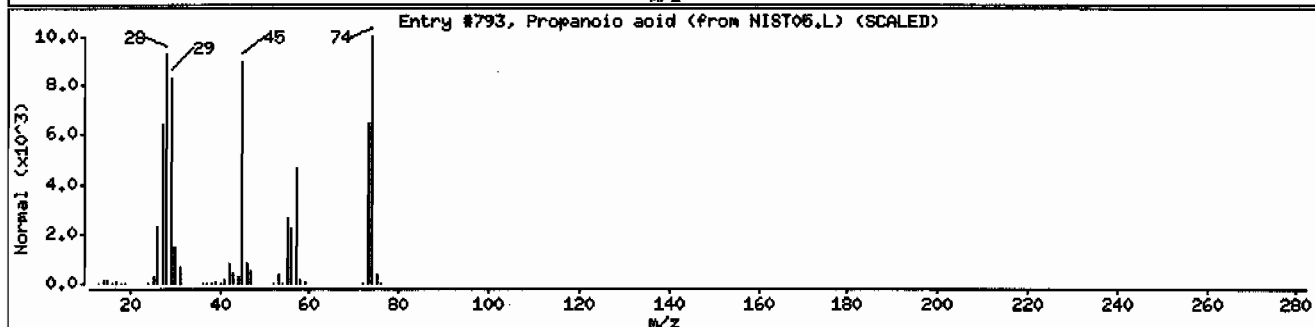
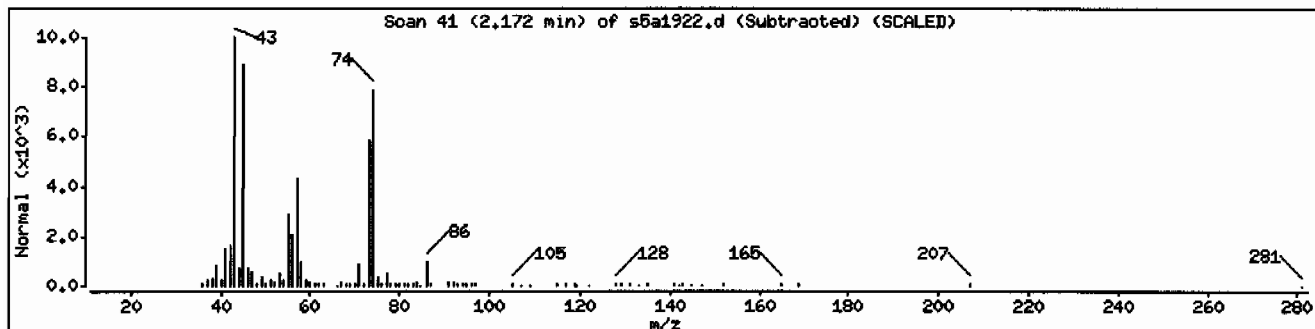
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	90	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	50	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	50	C3H6O2	74



Date : 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: HSD5.i

Sample Info: 12446260141942840111SVH111LANL

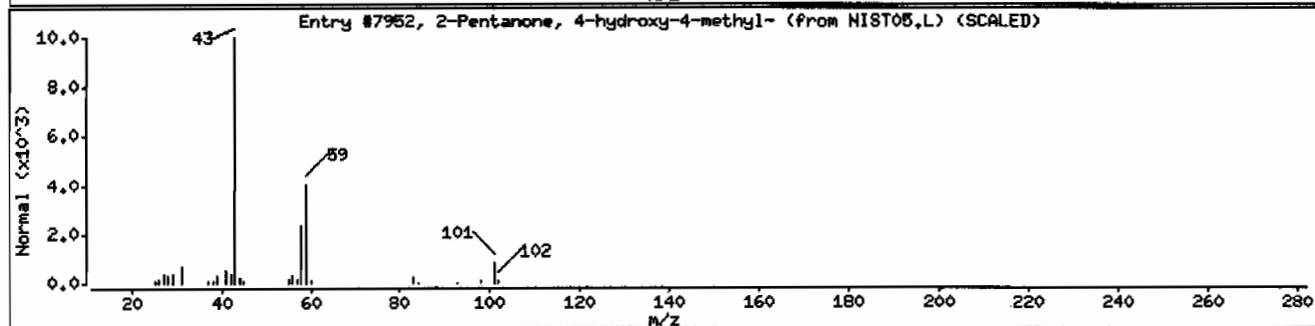
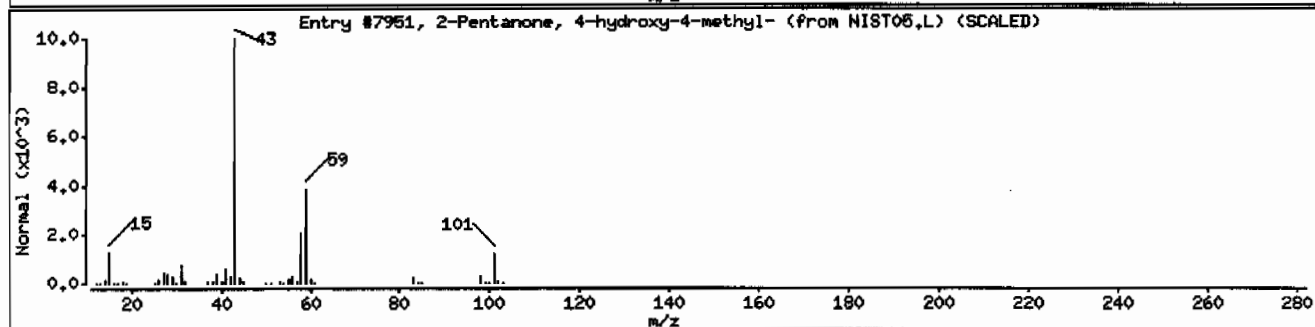
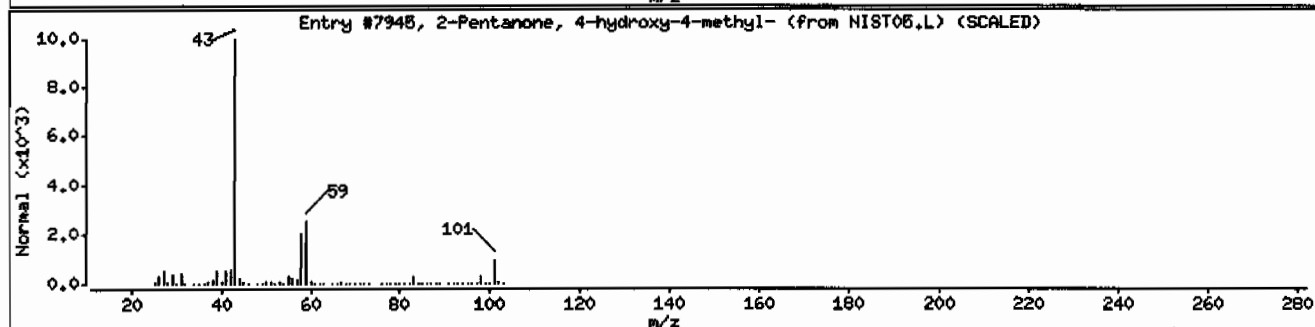
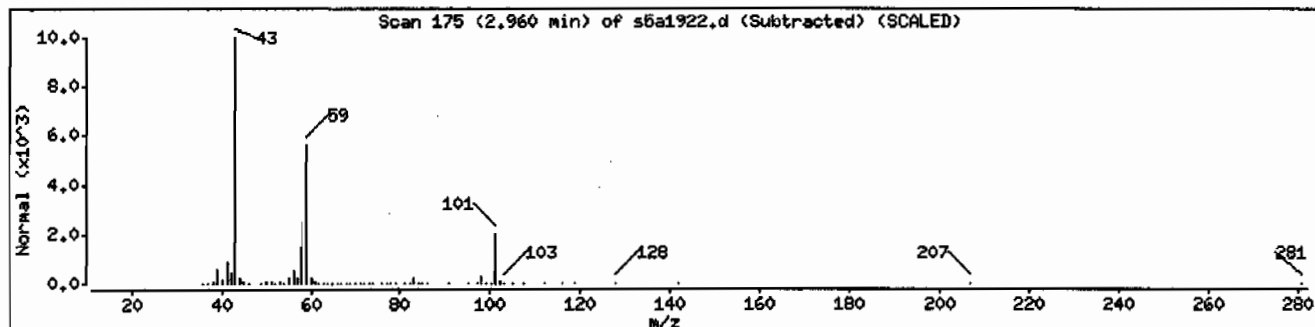
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	40	C6H12O2	116



Date: 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: MSD5.i

Sample Info: 1244626014194284011SVH111LANL

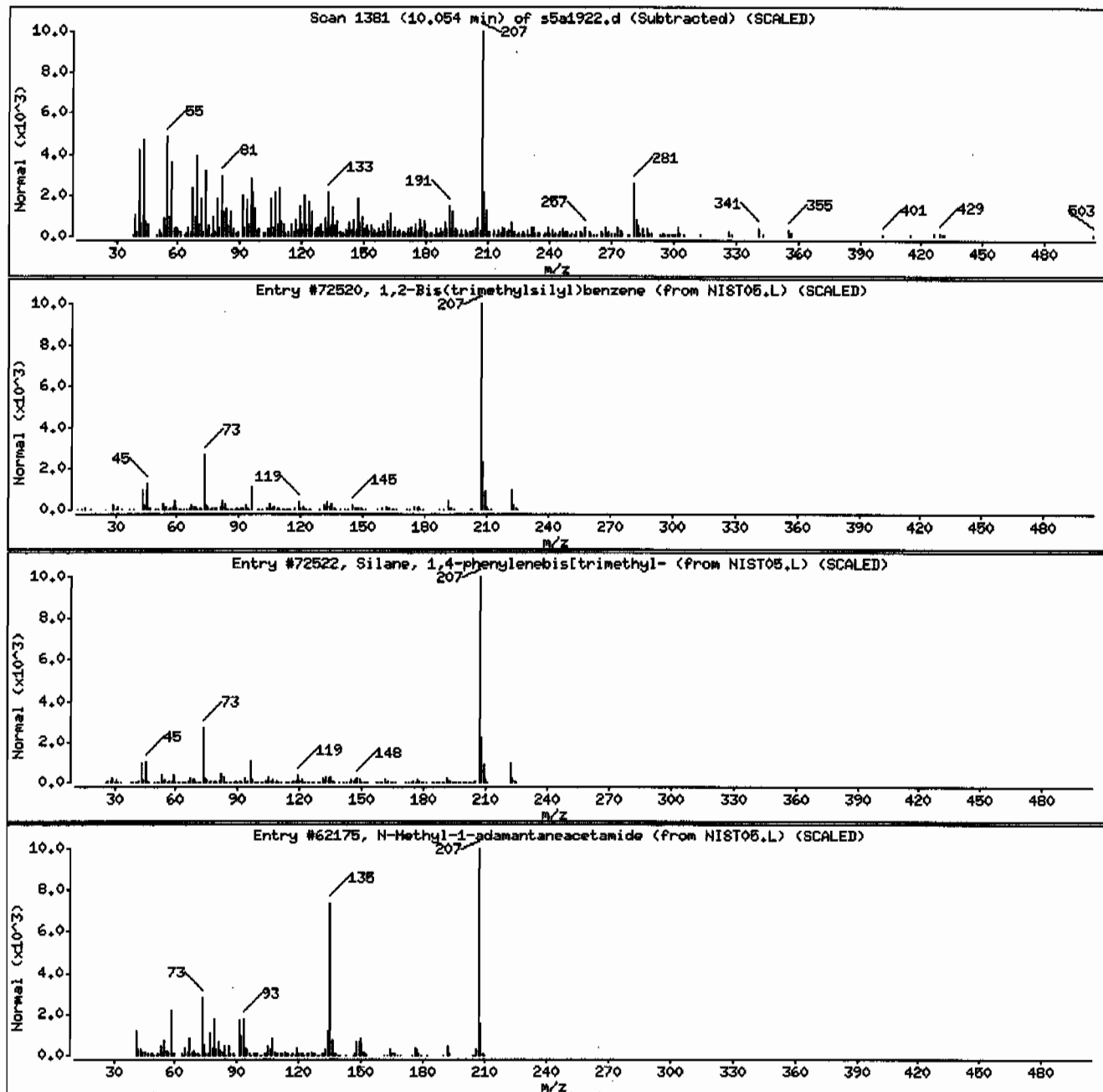
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17181-09-6	NIST05.L	72520	53	C ₁₂ H ₂₂ Si ₂	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	46	C ₁₂ H ₂₂ Si ₂	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	45	C ₁₃ H ₂₁ NO	207



Date : 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: MSD5.i

Sample Info: I2446260141942840111SVH111LANL

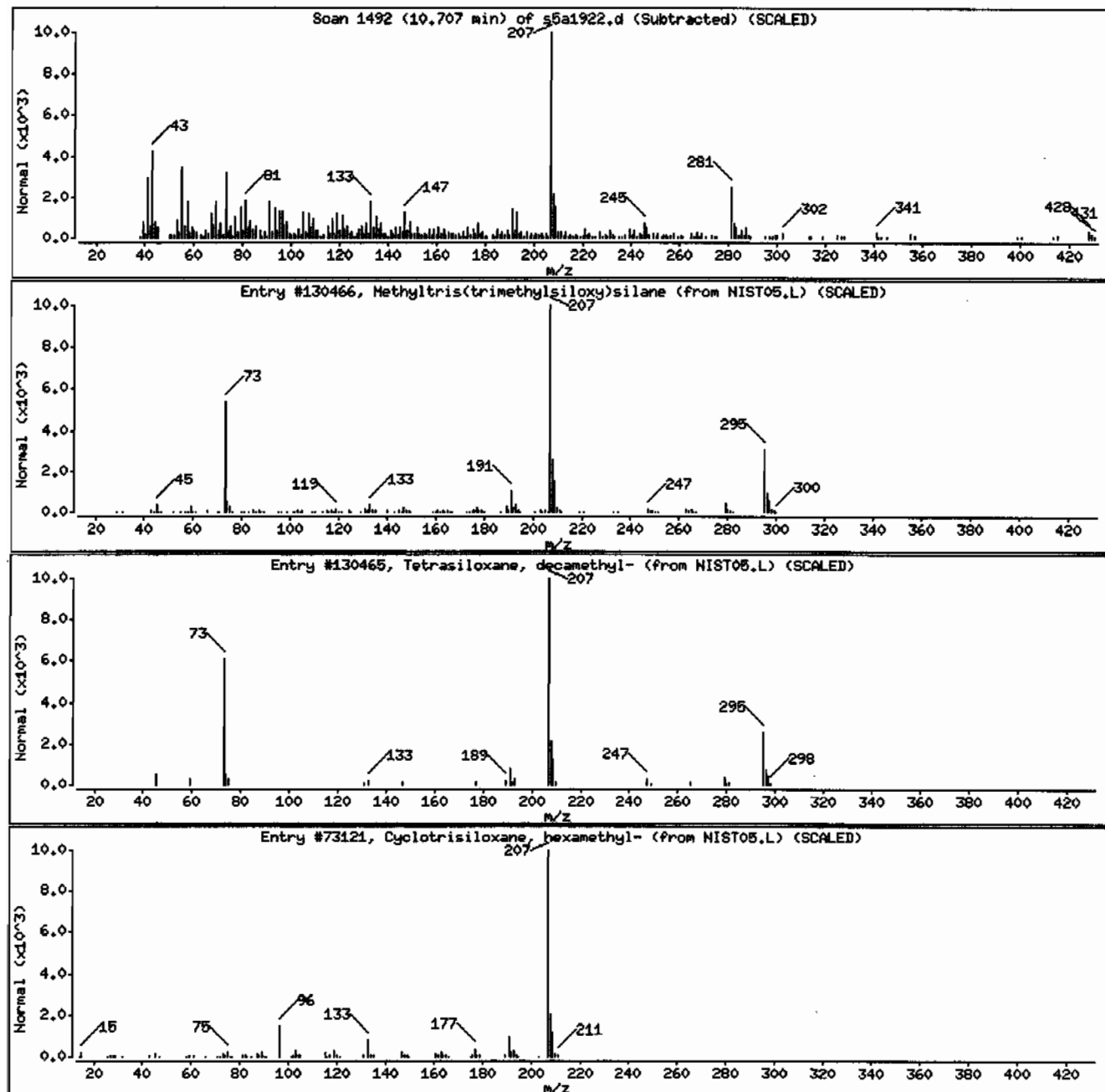
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	53	C ₁₀ H ₃₀ O ₃ Si ₄	310
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	47	C ₁₀ H ₃₀ O ₃ Si ₄	310
Cyclotrisiloxane, hexamethyl-	641-06-9	NIST05.L	73121	47	C ₆ H ₁₈ O ₃ Si ₃	222



Date : 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: MSD5.i

Sample Info: 1244626014194284011ISVH11ILANL

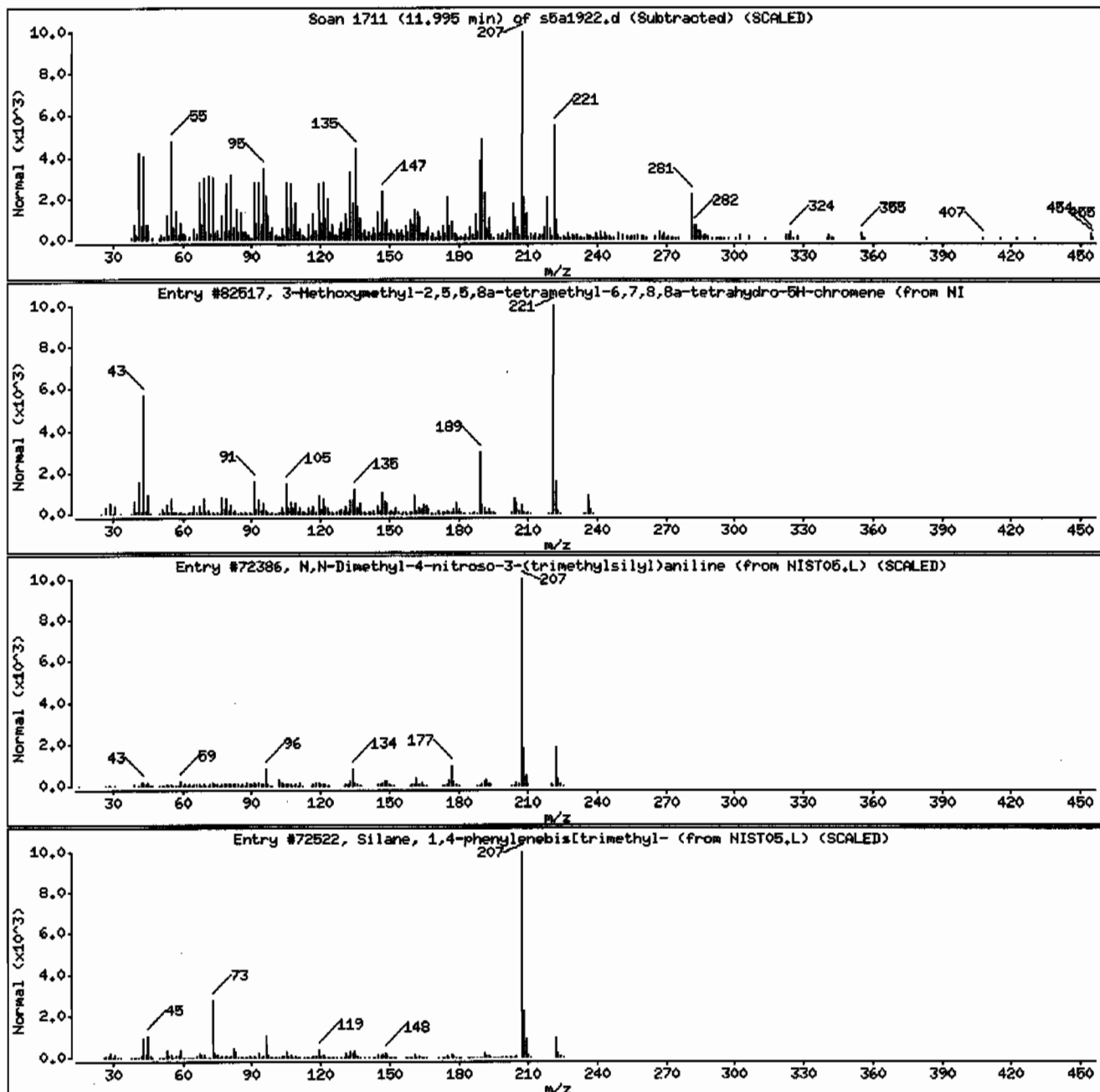
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	47	C15H24O2	236
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	38	C11H18N2OSi	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	25	C12H22Si2	222



Date : 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: HSD5.1

Sample Info: 1244626014194284011ISVM11ILANL

Volume Injected (uL): 0.5

Operator: RMB

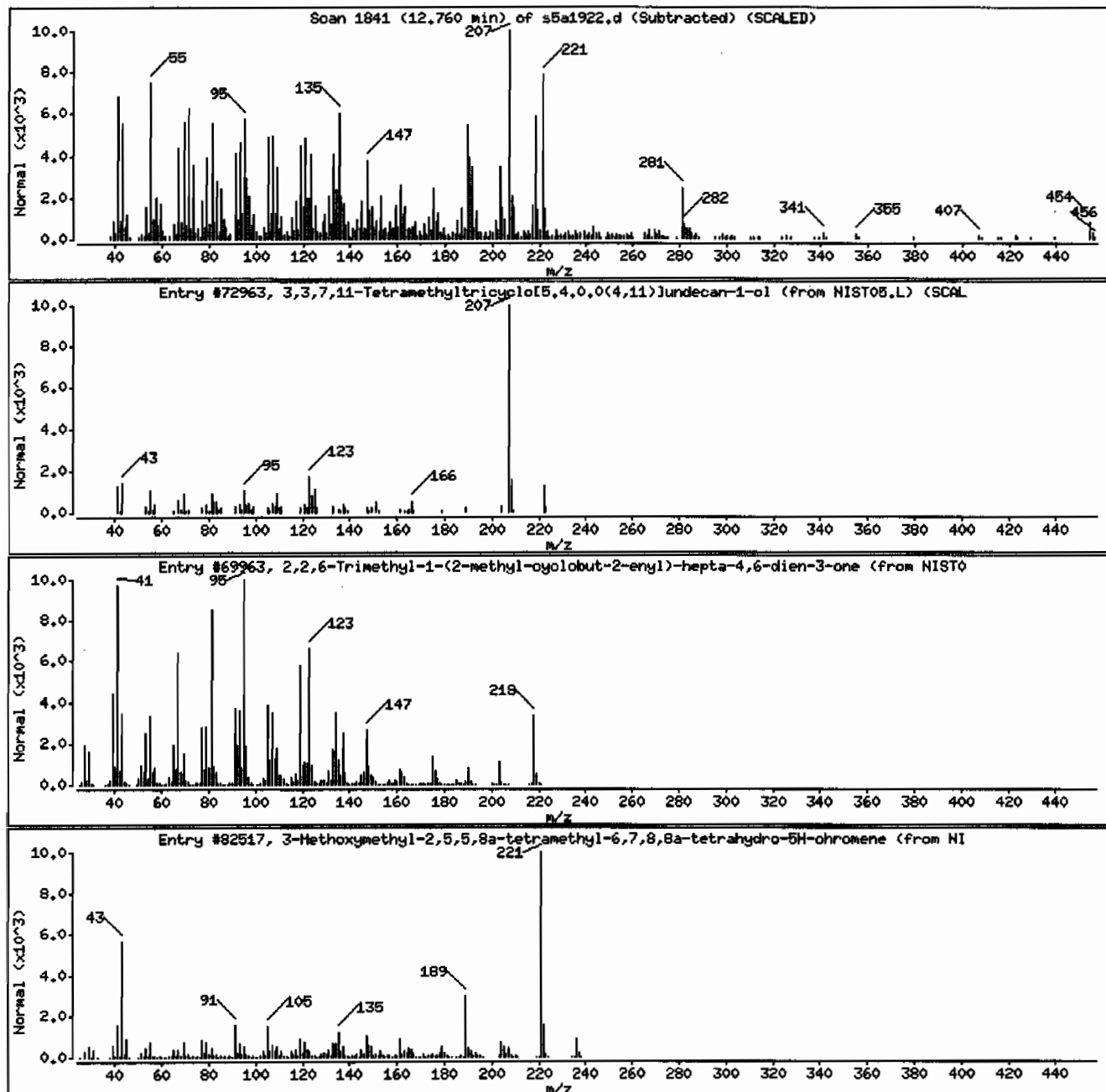
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1	117591-80-7	NIST05.L	72963	35	C16H26O	222
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-yl	1000188-72-8	NIST05.L	69963	25	C15H22O	218
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	25	C15H24O2	236



Date : 19-JAN-2010 18:24

Client ID: RE12-10-7269

Instrument: MSD5.i

Sample Info: 1244626014194284011ISVH11ILANL

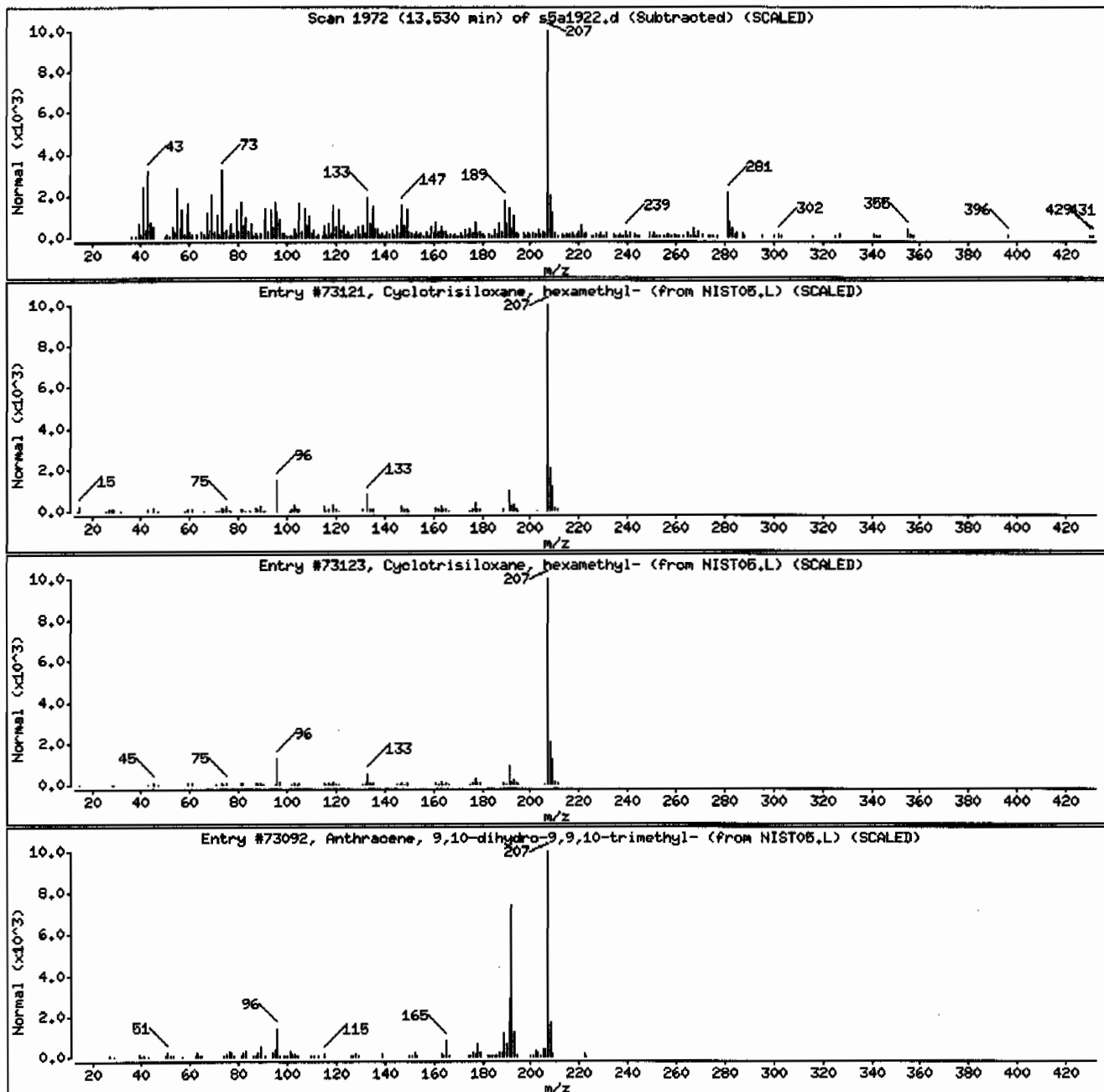
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-SMS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	64	C ₆ H ₁₈ O ₃ Si ₃	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	58	C ₆ H ₁₈ O ₃ Si ₃	222
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	55	C ₁₇ H ₁₈	222



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

SDG Number: 10-1225
Lab Sample ID: 244626013

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7270
Batch ID: 942840
Run Date: 01/19/2010 18:01
Prep Date: 01/18/2010 20:10
Data File: s5a1921.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	379	ug/kg	75.7	379
108-95-2	Phenol	U	379	ug/kg	75.7	379
95-57-8	2-Chlorophenol	U	379	ug/kg	75.7	379
106-46-7	1,4-Dichlorobenzene	U	379	ug/kg	75.7	379
621-64-7	N-Nitrosodipropylamine	U	379	ug/kg	75.7	379
59-50-7	4-Chloro-3-methylphenol	U	379	ug/kg	75.7	379
83-32-9	Acenaphthene	U	37.9	ug/kg	12.5	37.9
121-14-2	2,4-Dinitrotoluene	U	379	ug/kg	37.9	379
100-02-7	4-Nitrophenol	U	379	ug/kg	125	379
87-86-5	Pentachlorophenol	U	379	ug/kg	94.7	379
129-00-0	Pyrene	U	37.9	ug/kg	11.4	37.9
110-86-1	Pyridine	U	379	ug/kg	75.7	379
62-53-3	Aniline	U	379	ug/kg	114	379
111-44-4	bis(2-Chloroethyl) ether	U	379	ug/kg	75.7	379
541-73-1	1,3-Dichlorobenzene	U	379	ug/kg	75.7	379
100-51-6	Benzyl alcohol	U	379	ug/kg	114	379
95-50-1	1,2-Dichlorobenzene	U	379	ug/kg	75.7	379
108-60-1	bis(2-Chloroisopropyl)ether	U	379	ug/kg	75.7	379
95-48-7	o-Cresol	U	379	ug/kg	75.7	379
65794-96-9	m,p-Cresols	U	379	ug/kg	114	379
67-72-1	Hexachloroethane	U	379	ug/kg	75.7	379
98-95-3	Nitrobenzene	U	379	ug/kg	75.7	379
78-59-1	Isophorone	U	379	ug/kg	75.7	379
88-75-5	2-Nitrophenol	U	379	ug/kg	75.7	379
105-67-9	2,4-Dimethylphenol	U	379	ug/kg	133	379
111-91-1	bis(2-Chloroethoxy)methane	U	379	ug/kg	75.7	379
120-83-2	2,4-Dichlorophenol	U	379	ug/kg	75.7	379
65-85-0	Benzoic acid	J	608	ug/kg	189	757
91-20-3	Naphthalene	U	37.9	ug/kg	11.4	37.9
106-47-8	4-Chloroaniline	U	379	ug/kg	75.7	379
87-68-3	Hexachlorobutadiene	U	379	ug/kg	75.7	379
91-57-6	2-Methylnaphthalene	U	37.9	ug/kg	7.57	37.9
77-47-4	Hexachlorocyclopentadiene	U	379	ug/kg	75.7	379
88-06-2	2,4,6-Trichlorophenol	U	379	ug/kg	75.7	379
95-95-4	2,4,5-Trichlorophenol	U	379	ug/kg	75.7	379
91-58-7	2-Chloronaphthalene	U	37.9	ug/kg	12.5	37.9
88-74-4	2-Nitroaniline	U	379	ug/kg	75.7	379
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	379	ug/kg	75.7	379

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

SDG Number: 10-1225
Lab Sample ID: 244626013

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7270
Batch ID: 942840
Run Date: 01/19/2010 18:01
Prep Date: 01/18/2010 20:10
Data File: s5a1921.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	379	ug/kg	75.7	379
606-20-2	2,6-Dinitrotoluene	U	379	ug/kg	37.9	379
208-96-8	Acenaphthylene	U	37.9	ug/kg	11.4	37.9
51-28-5	2,4-Dinitrophenol	U	757	ug/kg	144	757
132-64-9	Dibenzofuran	U	379	ug/kg	75.7	379
84-66-2	Diethylphthalate	U	379	ug/kg	75.7	379
86-73-7	Fluorene	U	37.9	ug/kg	11.4	37.9
7005-72-3	4-Chlorophenylphenylether	U	379	ug/kg	75.7	379
534-52-1	2-Methyl-4,6-dinitrophenol	U	379	ug/kg	75.7	379
100-01-6	4-Nitroaniline	U	379	ug/kg	114	379
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	379	ug/kg	75.7	379
122-66-7	Azobenzene	U	379	ug/kg	75.7	379
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	379	ug/kg	75.7	379
118-74-1	Hexachlorobenzene	U	379	ug/kg	75.7	379
85-01-8	Phenanthrene	U	37.9	ug/kg	11.4	37.9
120-12-7	Anthracene	U	37.9	ug/kg	7.57	37.9
84-74-2	Di-n-butylphthalate	U	379	ug/kg	75.7	379
206-44-0	Fluoranthene	U	37.9	ug/kg	11.4	37.9
85-68-7	Butylbenzylphthalate	U	379	ug/kg	75.7	379
56-55-3	Benzo(a)anthracene	U	37.9	ug/kg	11.4	37.9
91-94-1	3,3'-Dichlorobenzidine	U	379	ug/kg	114	379
218-01-9	Chrysene	U	37.9	ug/kg	11.4	37.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	379	ug/kg	75.7	379
117-84-0	Di-n-octylphthalate	U	379	ug/kg	75.7	379
205-99-2	Benzo(b)fluoranthene	U	37.9	ug/kg	11.4	37.9
207-08-9	Benzo(k)fluoranthene	U	37.9	ug/kg	11.4	37.9
50-32-8	Benzo(a)pyrene	U	37.9	ug/kg	11.4	37.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.9	ug/kg	11.4	37.9
53-70-3	Dibenzo(a,h)anthracene	U	37.9	ug/kg	11.4	37.9
191-24-2	Benzo(ghi)perylene	U	37.9	ug/kg	11.4	37.9
120-82-1	1,2,4-Trichlorobenzene	U	379	ug/kg	75.7	379

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.96	709	ug/kg		JA
7785-70-8	1R- α -Pinene	3.51	812	ug/kg	97	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626013

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.17 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.5
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7270
Batch ID: 942840
Run Date: 01/19/2010 18:01
Prep Date: 01/18/2010 20:10
Data File: s5a1921.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	9.01	227	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.08	244	ug/kg	98	NJ
	Unknown	9.11	367	ug/kg		J
	Unknown	9.25	278	ug/kg		J
	Unknown	9.34	185	ug/kg		J
6971-40-0	17-Pentatriacontene	9.42	301	ug/kg	93	NJ
62600-05-9	Cedran-diol, 8S,14-	9.48	336	ug/kg	83	NJ
	Unknown	9.57	276	ug/kg		J
	Unknown	9.6	312	ug/kg		J
	Unknown	9.7	254	ug/kg		J
	Unknown	9.73	415	ug/kg		J
	Unknown	9.77	189	ug/kg		J
	Unknown	9.78	272	ug/kg		J
110936-78-2	7-Oxodehydroabietic acid, methyl ester	9.86	273	ug/kg	89	NJ
	Unknown	9.93	229	ug/kg		J
	Unknown	9.96	205	ug/kg		J
	Unknown	10.05	491	ug/kg		J
629-96-9	1-Eicosanol	10.08	468	ug/kg	83	NJ
	Unknown	10.17	214	ug/kg		J
	Unknown	10.22	353	ug/kg		J
	Unknown	10.29	312	ug/kg		J
	Unknown	10.42	203	ug/kg		J
	Unknown	10.72	367	ug/kg		J
	Unknown	11.67	673	ug/kg		J
	Unknown	12.75	582	ug/kg		J
	Unknown	13.32	1800	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	2070	ug/kg	93	NJ
	Unknown	14.34	407	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1921.d
Lab Smp Id: 244626013 Client Smp ID: RE12-10-7270
Inj Date : 19-JAN-2010 18:01
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626013|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	12.48100	% 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	3.931	3.940	(1.000)	579034	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	2027198	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1165977	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2124732	40.0000	
* 91 Chrysene-d12	240	9.648	9.646	(1.000)	1763187	40.0000	
* 98 Perylene-d12	264	11.336	11.331	(1.000)	1124360	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	967433	67.3698	2550
\$ 5 Phenol-d5	99	3.649	3.651	(0.928)	1247090	70.4196	2670
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	560069	35.9822	1360
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	1146827	37.1814	1410
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	323779	87.3684	3310
\$ 81 p-Terphenyl-d14	244	8.613	8.611	(0.893)	1259981	45.5108	1720

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
27 Benzoic acid	105	4.543	4.571	(0.946)	21182	16.0568	608(a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5a1921.d

Report Date: 01/20/2010 07:08

Lab. ID: 244626013

SampleType: SAMPLE

Injection Date: 19-JAN-2010 18:01

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626013|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	223638	2.21	2.42	80-120	100	(T)
42	13891	2.21	2.42	69-129	6	(QT)
43	11584	2.20	2.42	13- 73	5	(QT)

4 Aniline				CAS#: 62-53-3		
66	68055	3.65	3.72	80-120	100	(T)
93	8484	3.61	3.72	210-270	12	(QT)

6 Phenol				CAS#: 108-95-2		
94	70578	3.75	3.66	80-120	100	(T)
66	13445	3.75	3.66	14- 74	19	(T)
65	40228	3.75	3.66	0- 30	57	(QT)

15 o-Cresol				CAS#: 95-48-7		
107	33672	3.89	4.06	80-120	100	(T)
108	7768	3.89	4.06	86-146	23	(QT)
77	162447	3.89	4.06	19- 79	482	(QT)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	80130	4.30	4.18	80-120	100	(T)
42	47215	4.30	4.18	44-104	59	(T)

22 Isophorone				CAS#: 78-59-1		
82	564348	4.30	4.47	80-120	100	(T)
138	272	4.35	4.47	0- 49	0	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
27 Benzoic acid			CAS#: 65-85-0			
105	21182	4.54	4.57	80-120	100	()
122	17430	4.54	4.57	39- 99	82	()
77	19262	4.54	4.57	34- 94	91	()
<hr/>						
40 2-Chloronaphthalene			CAS#: 91-58-7			
162	35392	5.79	5.66	80-120	100	(T)
164	2469	5.79	5.66	4- 64	7	(T)
127	3149	5.79	5.66	9- 69	9	(QT)
<hr/>						
42 o-Nitroaniline			CAS#: 88-74-4			
65	46610	5.79	5.71	80-120	100	(T)
92	54989	5.79	5.71	31- 91	118	(QT)
138	4061	5.79	5.71	70-130	9	(QT)
<hr/>						
43 Dimethylphthalate			CAS#: 131-11-3			
163	212005	6.06	5.82	80-120	100	(T)
164	1165977	6.06	5.82	0- 40	550	(QT)
<hr/>						
44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	8102	5.90	5.88	80-120	100	()
63	3576	5.90	5.88	61-121	44	(Q)
<hr/>						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	158432	6.06	6.17	80-120	100	(T)
89	2810	6.06	6.17	47-107	2	(QT)
63	1913	6.06	6.17	23- 83	1	(QT)
<hr/>						
52 4-Nitrophenol			CAS#: 100-02-7			
139	331	6.20	6.10	80-120	100	(T)
109	867	6.14	6.10	41-101	262	(Q)
65	1215	6.23	6.10	72-132	367	(QT)
<hr/>						
53 Fluorene			CAS#: 86-73-7			
166	17723	6.65	6.47	80-120	100	(T)
165	17532	6.65	6.47	56-116	99	(T)
167	6010	6.65	6.47	0- 44	34	(T)
<hr/>						
55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	1259	6.65	6.49	80-120	100	(T)
105	2491	6.65	6.49	12- 72	198	(QT)
51	2170	6.65	6.49	42-102	172	(QT)
<hr/>						
61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	22281	6.66	6.84	80-120	100	(T)
141	145221	6.65	6.83	43-103	652	(QT)
250	44867	6.65	6.84	68-128	201	(QT)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	931	13.10	13.12	80-120	100	()
138	2200	13.14	13.12	1- 61	236	(Q)

100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	253	12.93	13.13	80-120	100	(T)
139	1174	12.89	13.12	0- 30	463	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1921.d
 Lab Smp Id: 244626013 Client Smp ID: RE12-10-7270
 Inj Date : 19-JAN-2010 18:01
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626013|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.17000	weight of sample
M	12.48100	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3519732	40.000
* 91 Chrysene-d12	9.648	6232254	40.000
* 98 Perylene-d12	11.336	3277244	40.000

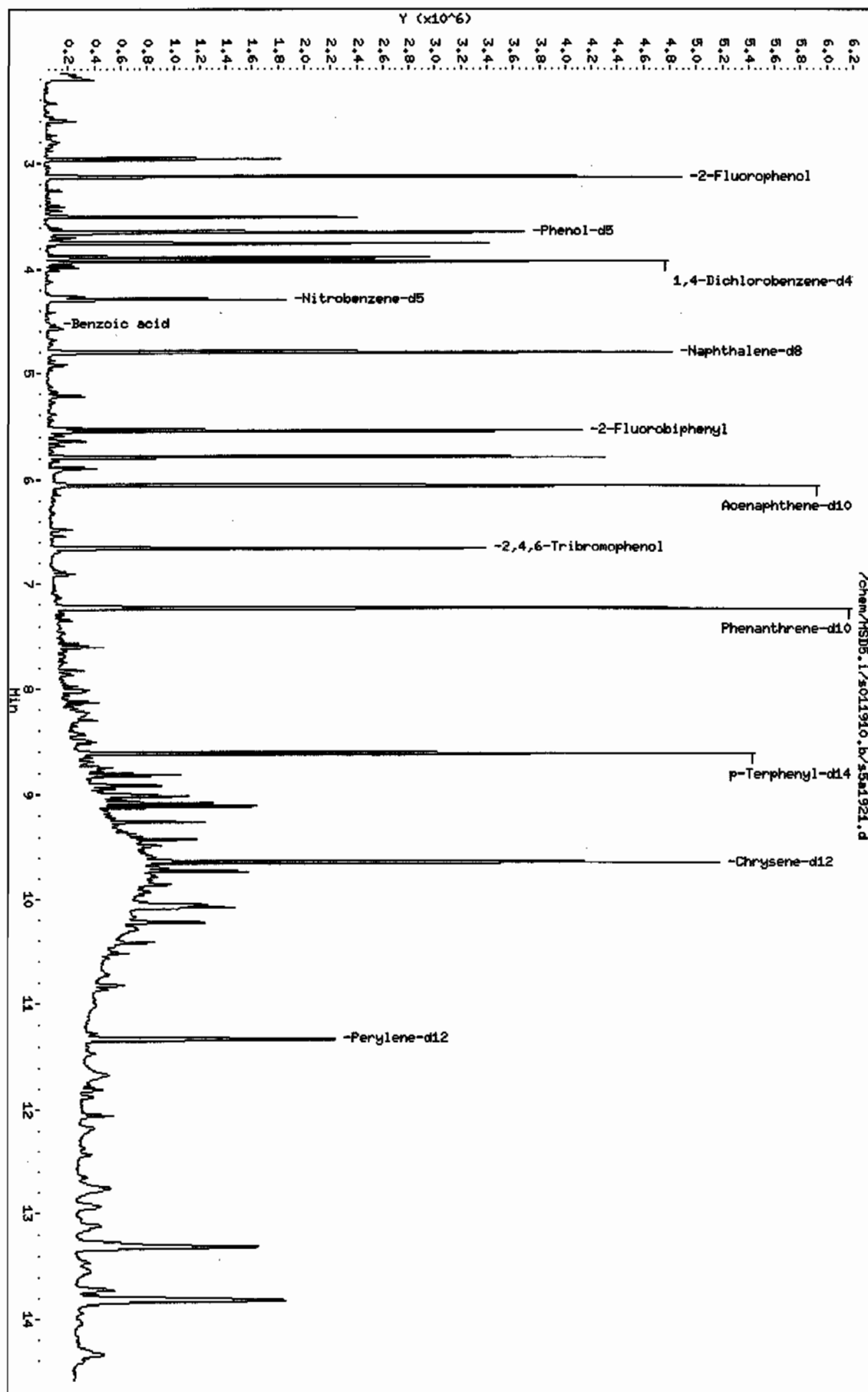
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown Aldol Condensate					CAS #:		
2.960	1647608	18.7242427	709	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.507	1887319	21.4484329	812	97	NIST05.L	15188	10
Unknown					CAS #:		
9.013	932109	5.98248051	226	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.078	1005144	6.45123963	244	98	NIST05.L	133618	91
Unknown					CAS #:		
9.107	1507954	9.67838772	366	0		0	91
Unknown					CAS #:		
9.254	1144745	7.34722722	278	0		0	91
Unknown					CAS #:		
9.336	760185	4.87903546	185	0		0	91
17-Pentatriacontene					CAS #: 6971-40-0		
9.425	1238616	7.94971560	301	93	NIST05.L	183898	91
Cedran-diol, 8S,14-					CAS #: 62600-05-9		
9.483	1380405	8.85974777	336	83	NIST05.L	83830	91
Unknown					CAS #:		
9.566	1136125	7.29190273	276	0		0	91
Unknown					CAS #:		
9.595	1285123	8.24820384	312	0		0	91
Unknown					CAS #:		
9.701	1046055	6.71381521	254	0		0	91
Unknown					CAS #:		
9.730	1705727	10.9477367	415	0		0	91
Unknown					CAS #:		
9.766	777768	4.99188674	189	0		0	91
Unknown					CAS #:		
9.783	1118790	7.18064179	272	0		0	91

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
7-Oxodehydroabiatic acid, methyl ester				CAS #: 110936-78-2			
9.860	1122412	7.20389319	273	89	NIST05.L	141448	91
Unknown				CAS #:			
9.930	943090	6.05295959	229	0		0	91
Unknown				CAS #:			
9.960	843945	5.41662758	205	0		0	91
Unknown				CAS #:			
10.054	2021485	12.9743402	491	0		0	91
1-Eicosanol				CAS #: 629-96-9			
10.078	1926056	12.3618542	468	83	NIST05.L	123792	91
Unknown				CAS #:			
10.172	880982	5.65433837	214	0		0	91
Unknown				CAS #:			
10.225	1452870	9.32484615	353	0		0	91
Unknown				CAS #:			
10.289	1284367	8.24335321	312	0		0	91
Unknown				CAS #:			
10.419	834256	5.35444236	203	0		0	91
Unknown				CAS #:			
10.719	793333	9.68293144	367	0		0	98
Unknown				CAS #:			
11.672	1456798	17.7807706	673	0		0	98
Unknown				CAS #:			
12.754	1259427	15.3717748	582	0		0	98
Unknown				CAS #:			
13.318	3893458	47.5211150	1800	0		0	98
.gamma.-Sitosterol				CAS #: 83-47-6			
13.824	4478022	54.6559325	2070	93	NIST05.L	174403	98
Unknown				CAS #:			
14.342	881004	10.7529839	407	0		0	98

Data File: /chem/HSD5.1/s011910.b/s5a1921.d
 Date: 19-JAN-2010 18:01
 Client ID: RE12-10-7270
 Sample Info: 12446260131942940115M111LNL
 Volume Injected (uL): 0.5
 Column Phase: J&H DB-5MS

Instrument: HSD5.1
 Operator: RMB
 Column diameter: 0.20



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.1

Sample Info: J2446260131942840111SVH11ILANL

Volume Injected (uL): 0.5

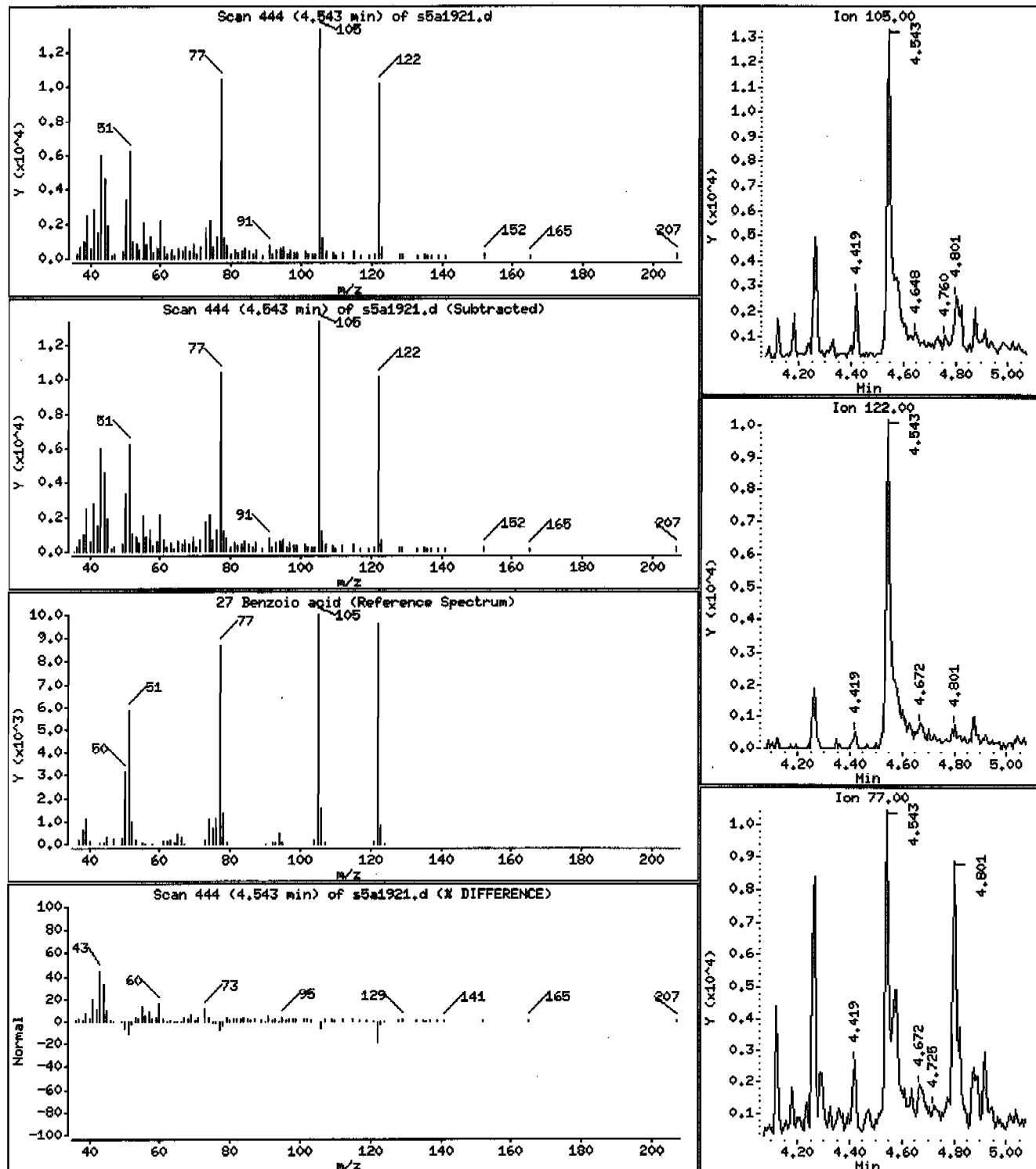
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 608 ug/Kg



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.i

Sample Info: 1244626013194284011ISVM11ILANL

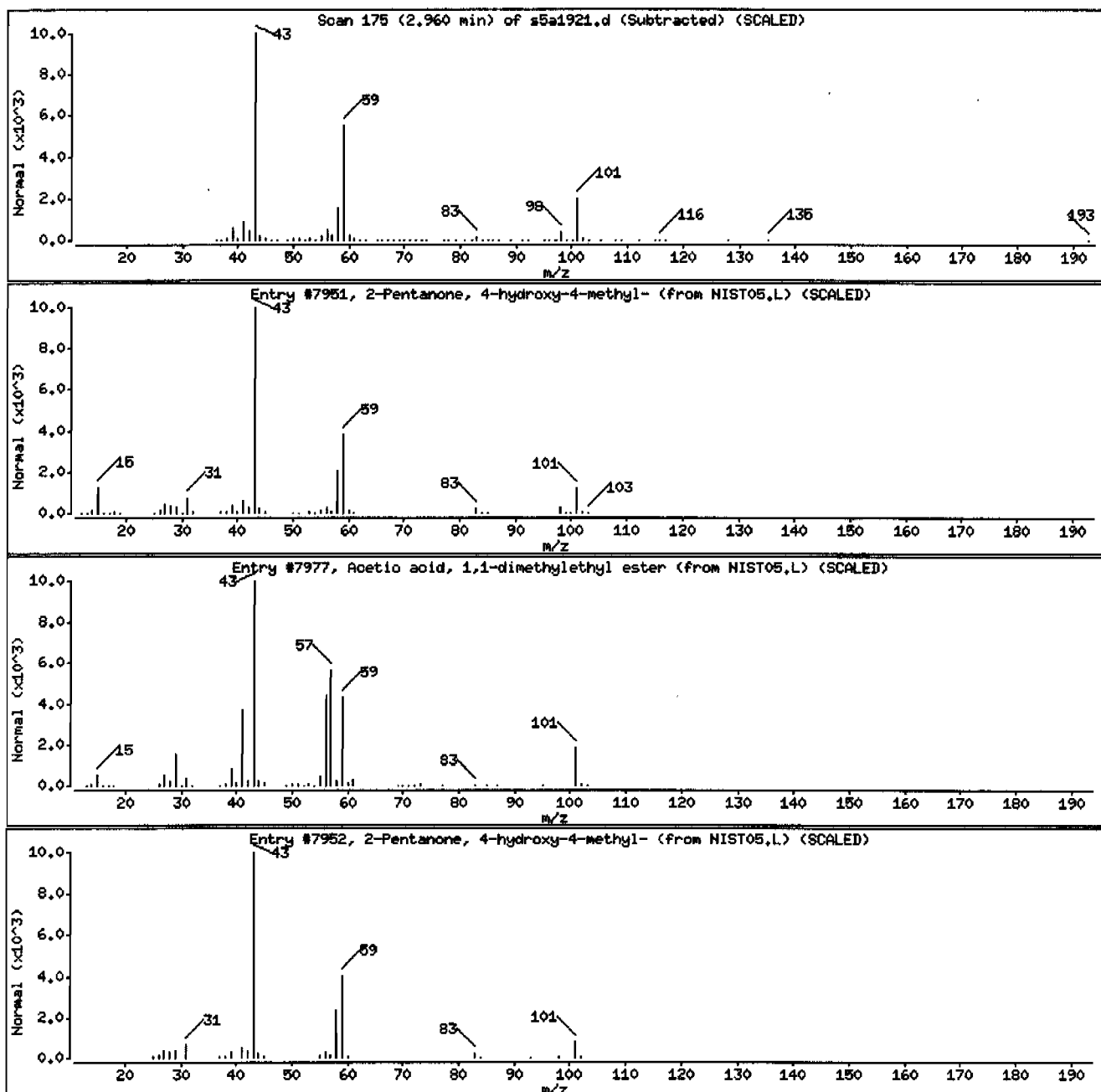
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	33	C6H12O2	116



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH11ILANL

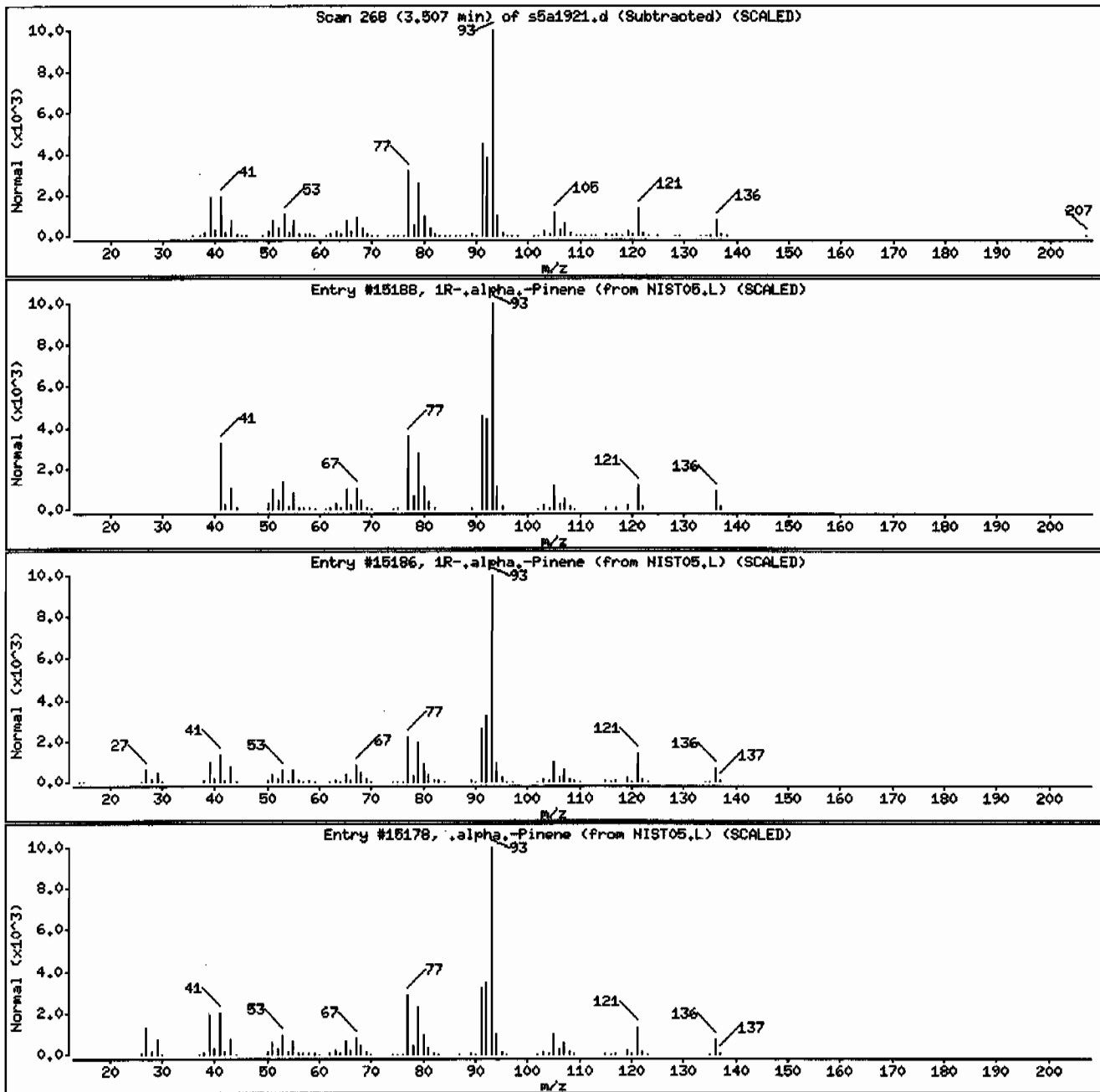
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.i

Sample Info: I244626013I94284011ISVH11ILANL

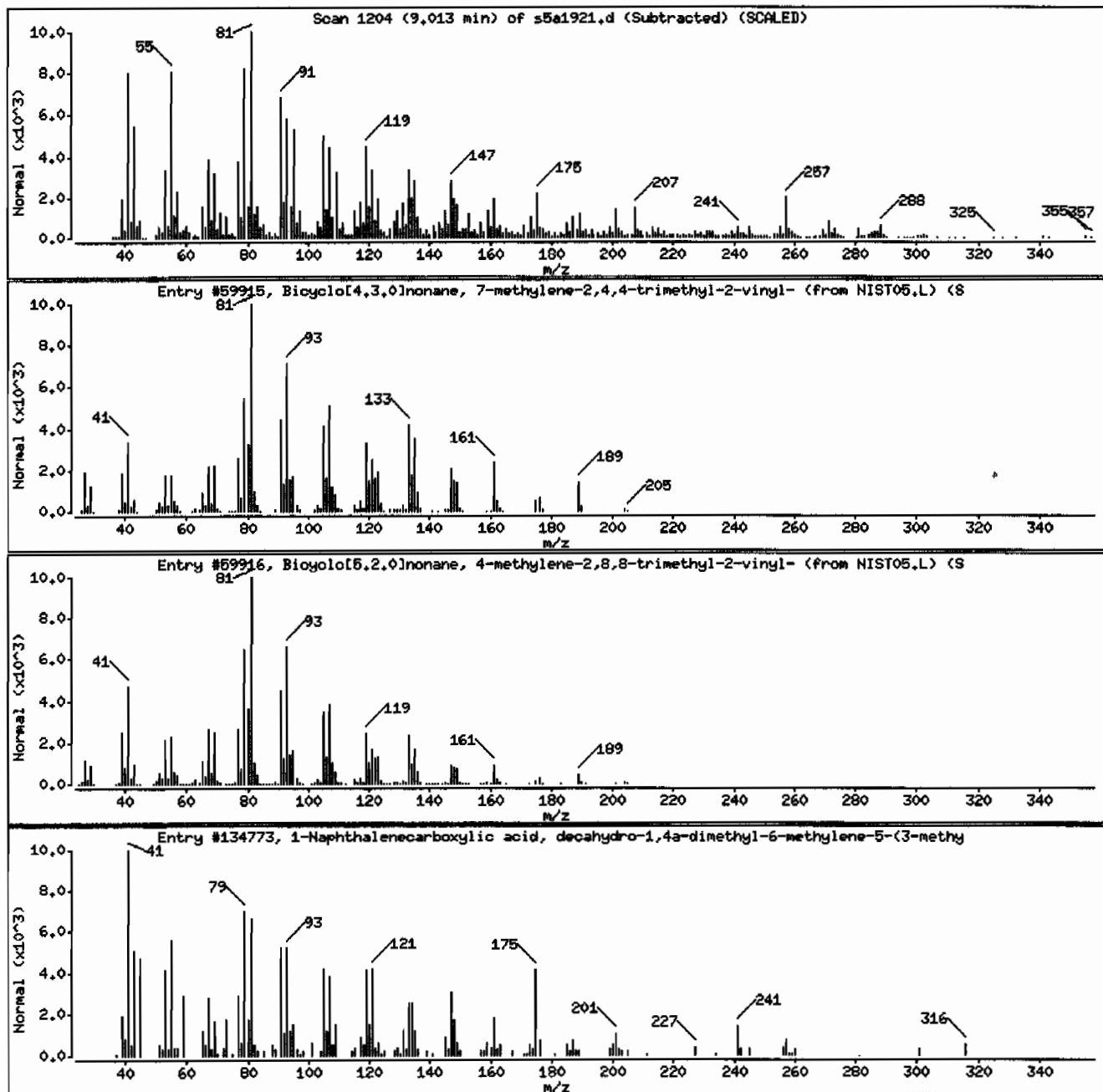
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	78	C15H24	204
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	78	C15H24	204
1-Naphthalenecarboxylic acid, decahydro-	10178-35-5	NIST05.L	134773	46	C21H32O2	316



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011ISVM11ILANL

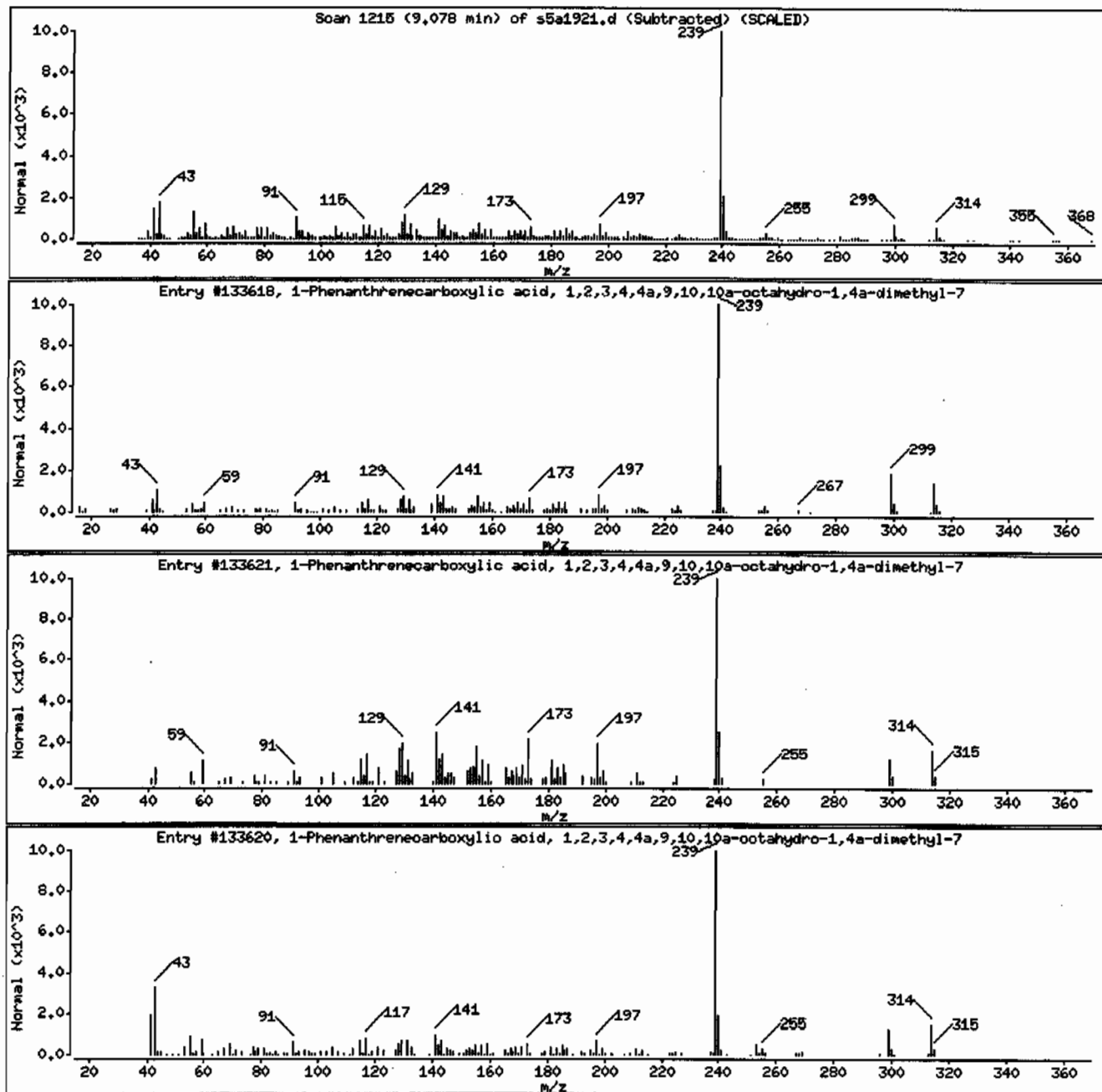
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	95	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.1

Sample Info: 1244626013194284011SVH111LANL

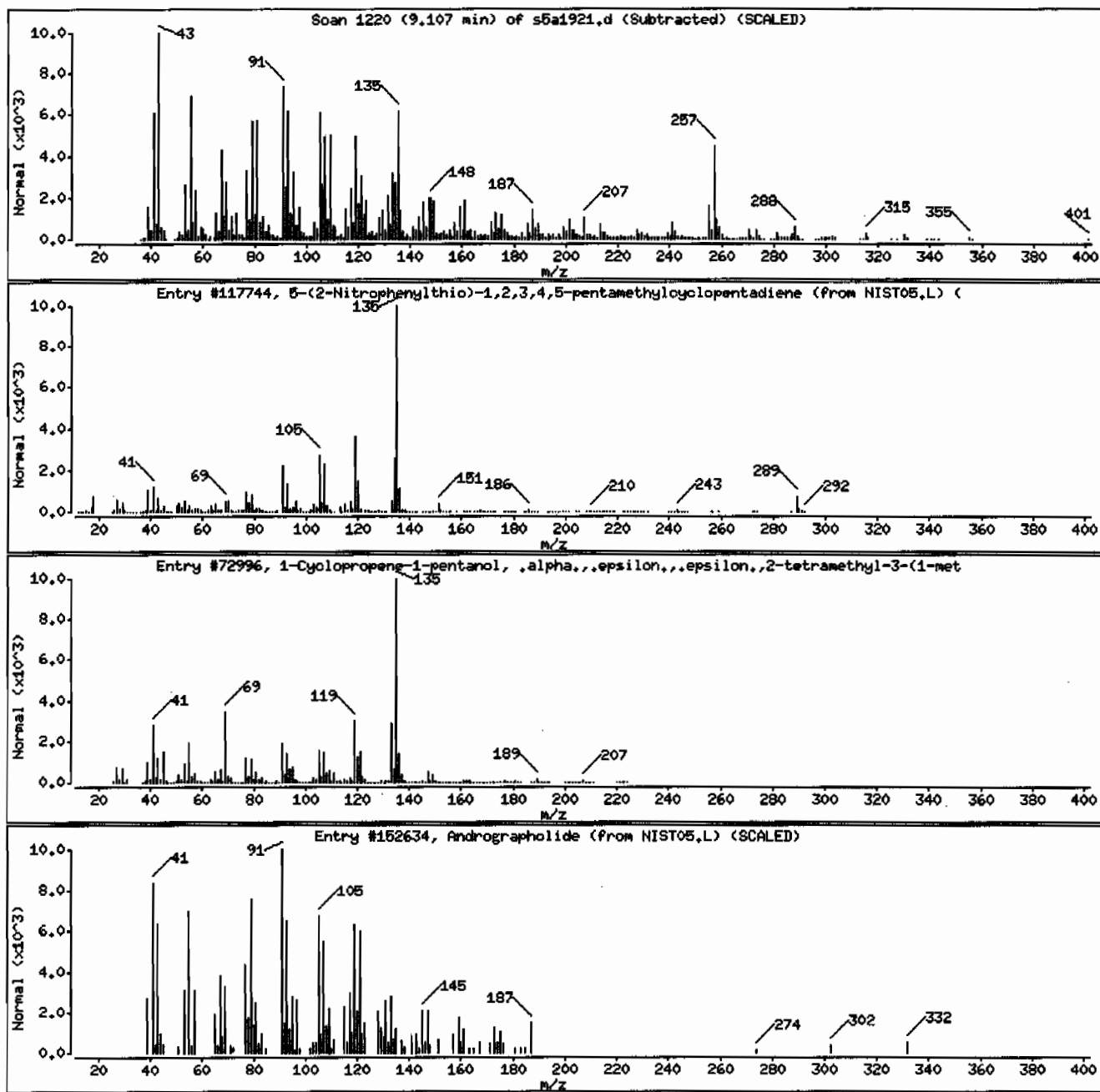
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-(2-Nitrophenylthio)-1,2,3,4,5-pentamethy	187338-98-3	NIST05.L	117744	46	C ₁₆ H ₁₉ N ₂ O ₂ S	289
1-Cyclopropene-1-pentanol, .alpha.,.epsi	90165-06-3	NIST05.L	72996	43	C ₁₅ H ₂₆ O	222
Andrographolide	5508-58-7	NIST05.L	152634	41	C ₂₀ H ₃₀ O ₅	350



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH11ILANL

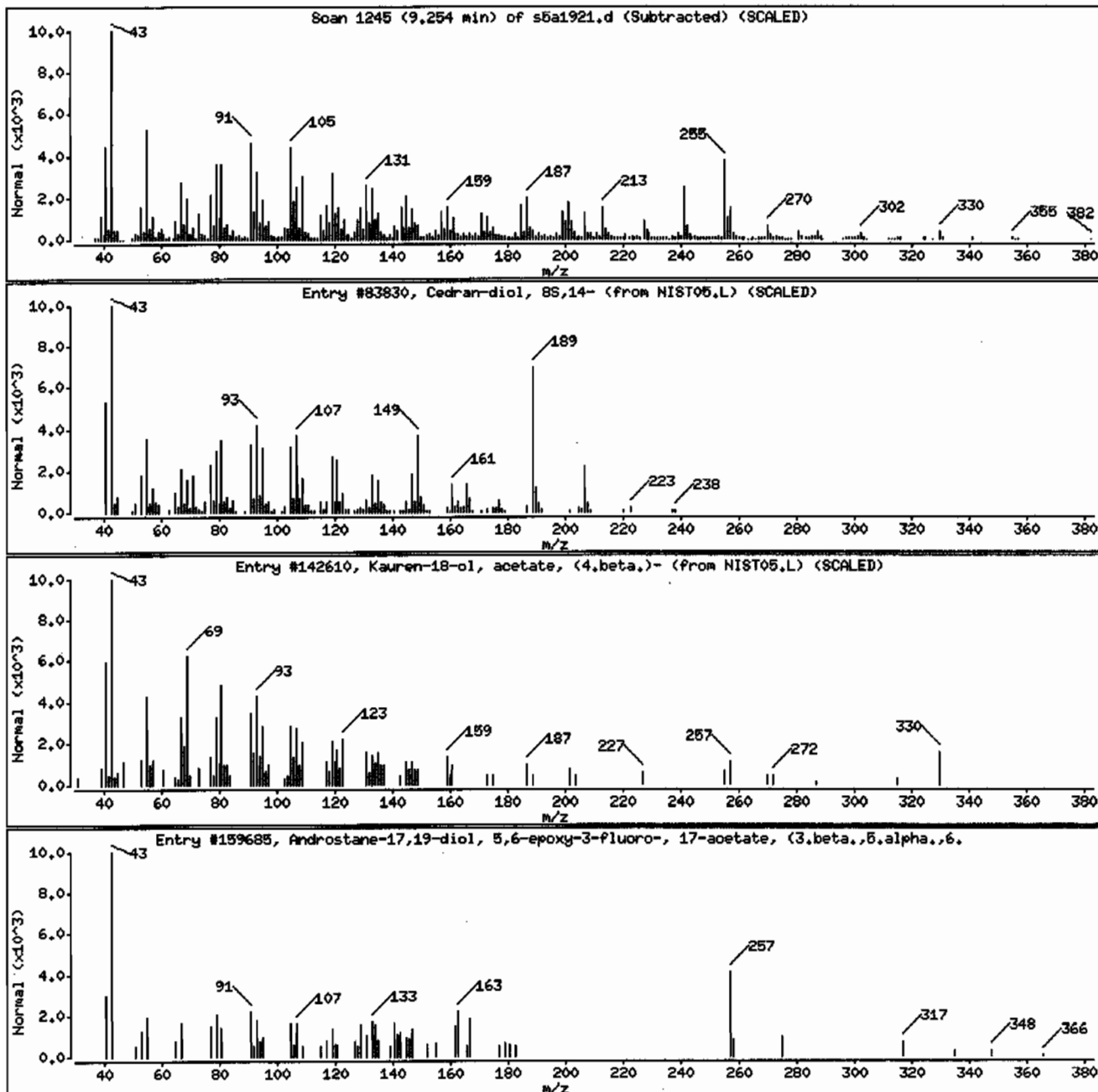
Volume Injected (uL): 0.5

Operator: RMS

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	15	C15H26O2	238
Kauren-18-ol, acetate, (4,beta.)-	72150-74-4	NIST05.L	142610	10	C22H34O2	330
Androstane-17,19-diol, 5,6-epoxy-3-fluor	40242-94-2	NIST05.L	159685	9	C21H31FO4	366



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.1

Sample Info: 12446260131942840111SVM111LANL

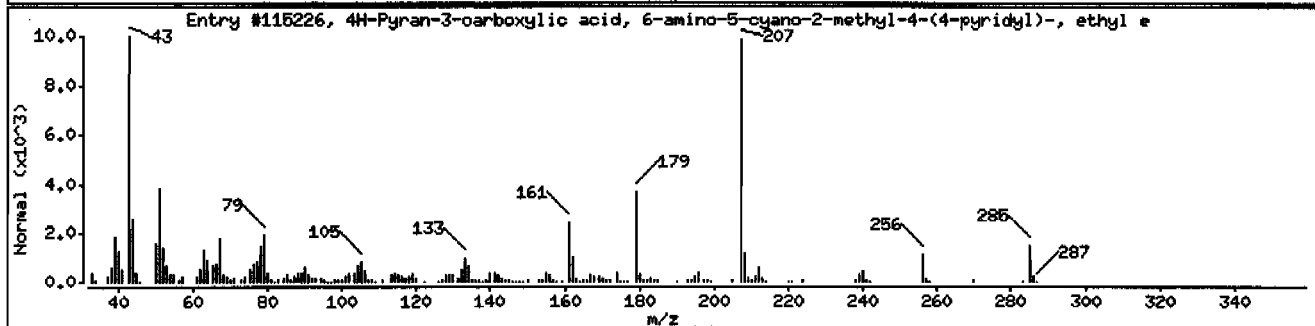
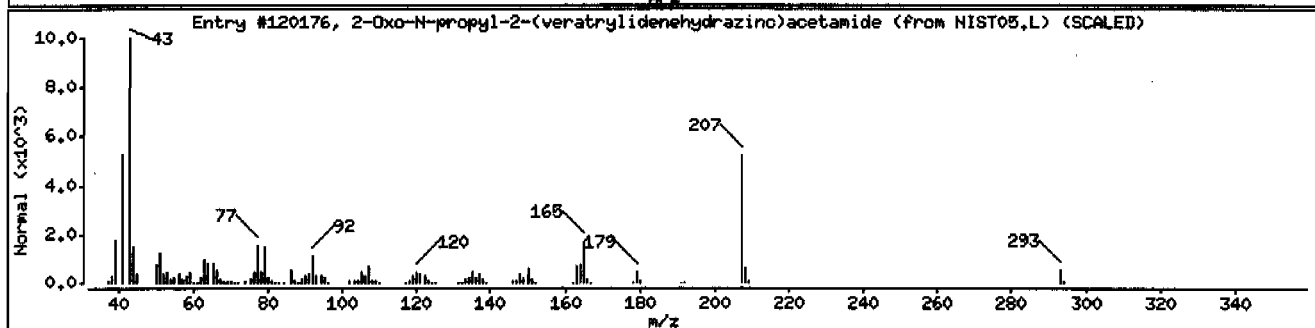
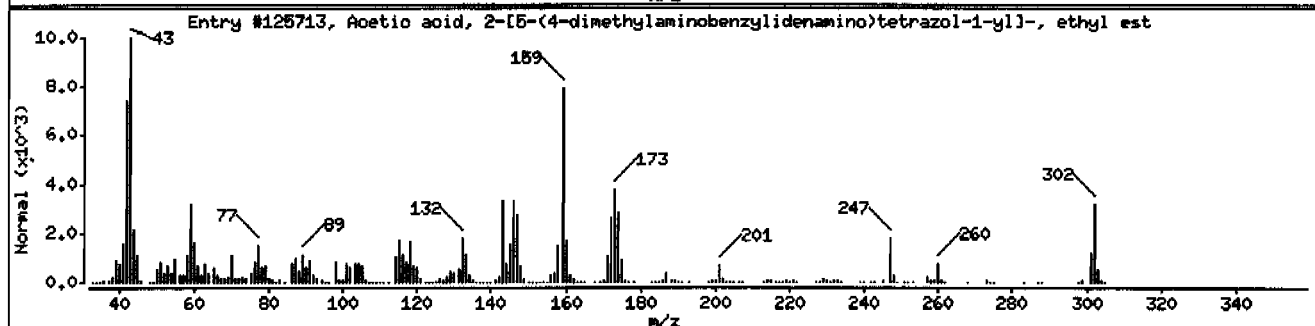
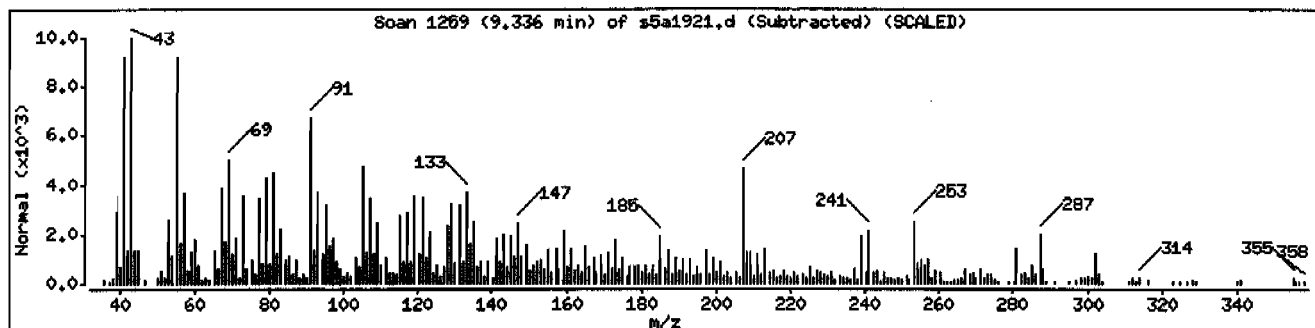
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-[5-(4-dimethylaminobenzyl	330991-40-7	NIST05.L	125713	15	C14H18N6O2	302
2-Oxo-N-propyl-2-(veratrylidenehydrazino	339241-37-1	NIST05.L	120176	10	C14H19N3O4	293
4H-Pyran-3-carboxylic acid, 6-amino-5-cy	227177-00-6	NIST05.L	115226	10	C15H15N3O3	285



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH111LANL

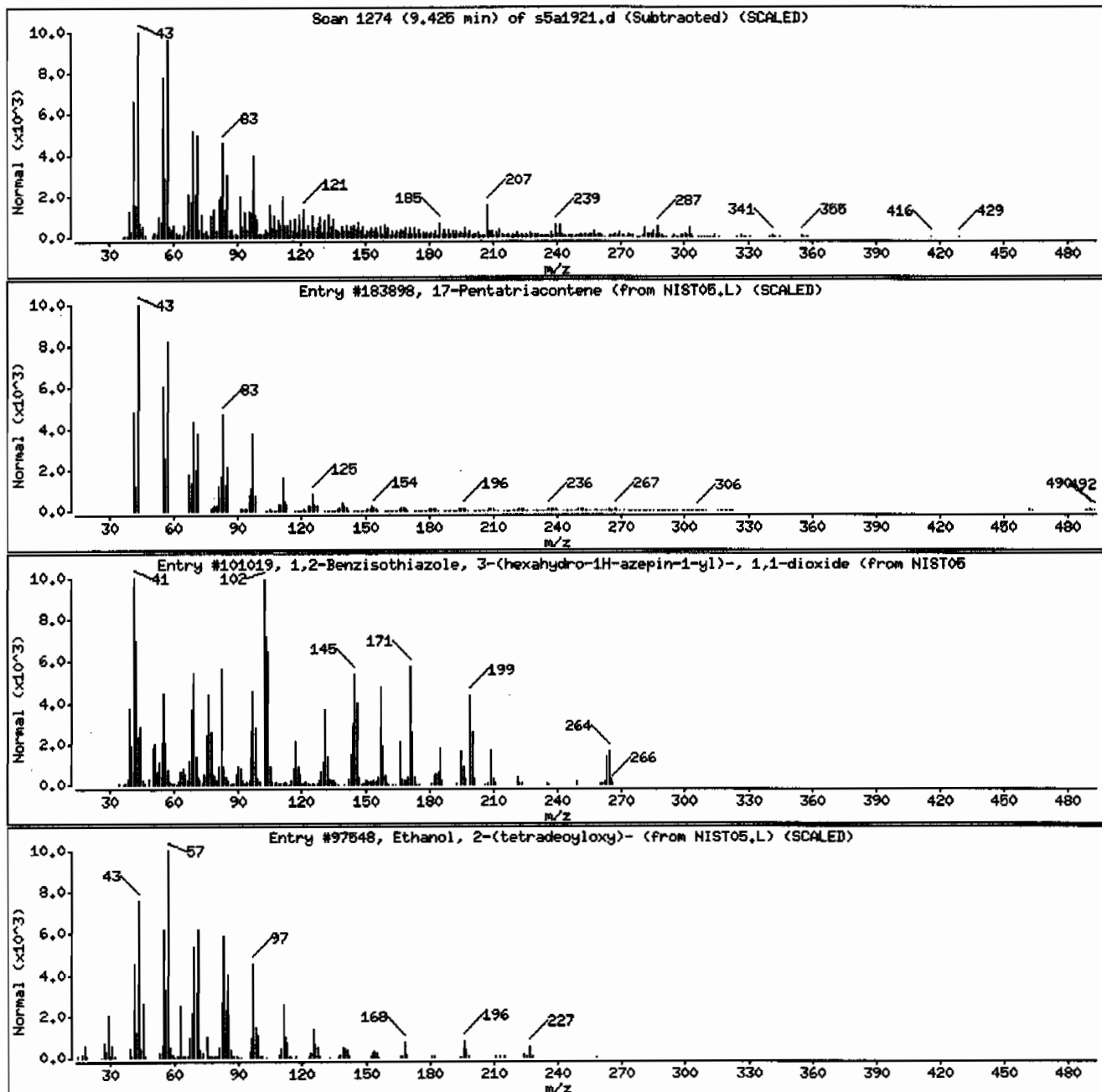
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
17-Pentatriacontene	6971-40-0	NIST05.L	183898	93	C ₃₅ H ₇₀	491
1,2-Benzisothiazole, 3-(hexahydro-1H-aze	309735-29-3	NIST05.L	101019	91	C ₁₃ H ₁₆ N ₂ O ₂ S	264
Ethanol, 2-(tetradecyloxy)-	2136-70-1	NIST05.L	97548	81	C ₁₆ H ₃₄ O ₂	258



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVMI1ILANL

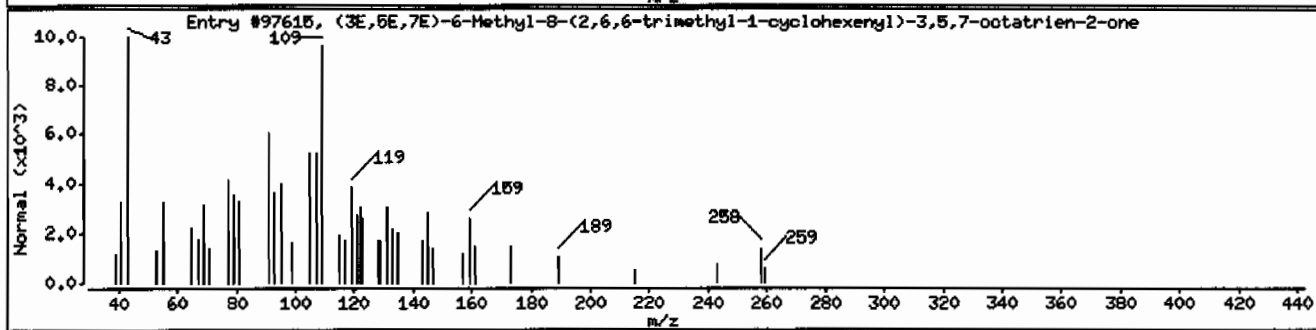
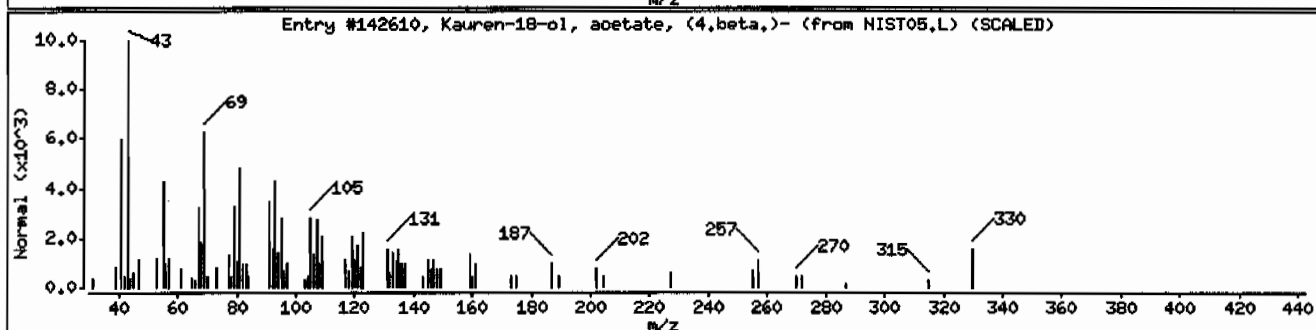
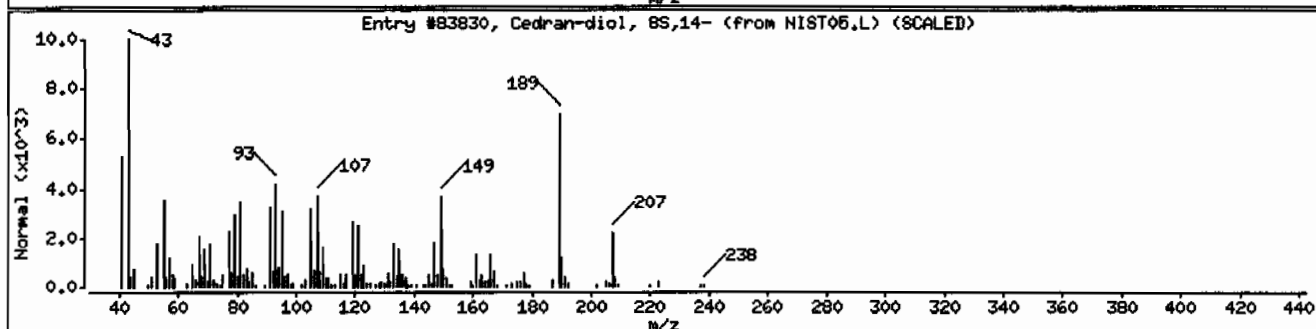
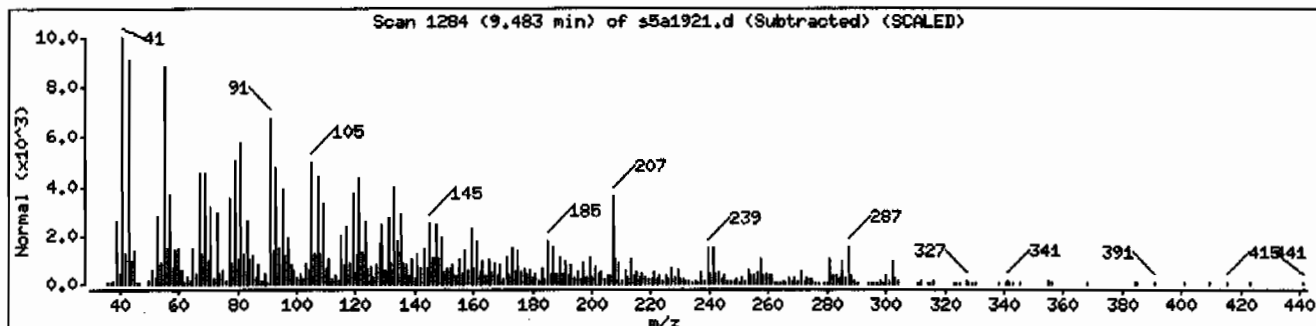
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	83	C ₁₅ H ₂₆ O ₂	238
Kauren-18-ol, acetate, (4,β)-	72150-74-4	NIST05.L	142610	60	C ₂₂ H ₃₄ O ₂	330
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	55	C ₁₈ H ₂₆ O	258



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011ISVH11ILANL

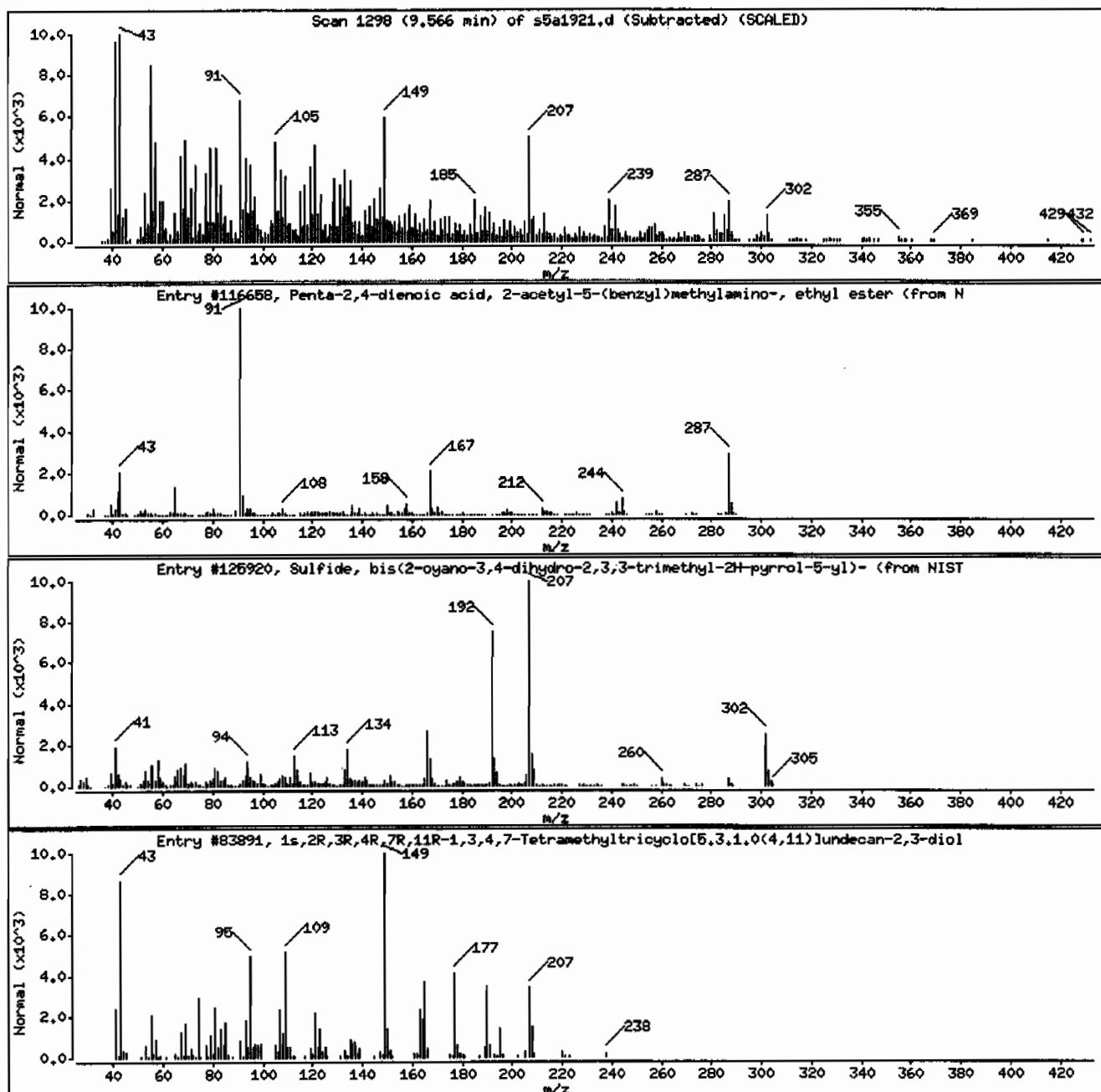
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Penta-2,4-dienoic acid, 2-acetyl-5-(benz	39619-47-1	NIST05.L	116658	25	C17H21NO3	287
Sulfide, bis(2-cyano-3,4-dihydro-2,3,3-t	1000190-79-0	NIST05.L	125920	20	C16H22N4S	302
1s,2R,3R,4R,7R,11R-1,3,4,7-Tetramethyltr	137238-45-1	NIST05.L	83891	18	C18H26O2	238



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011ISVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

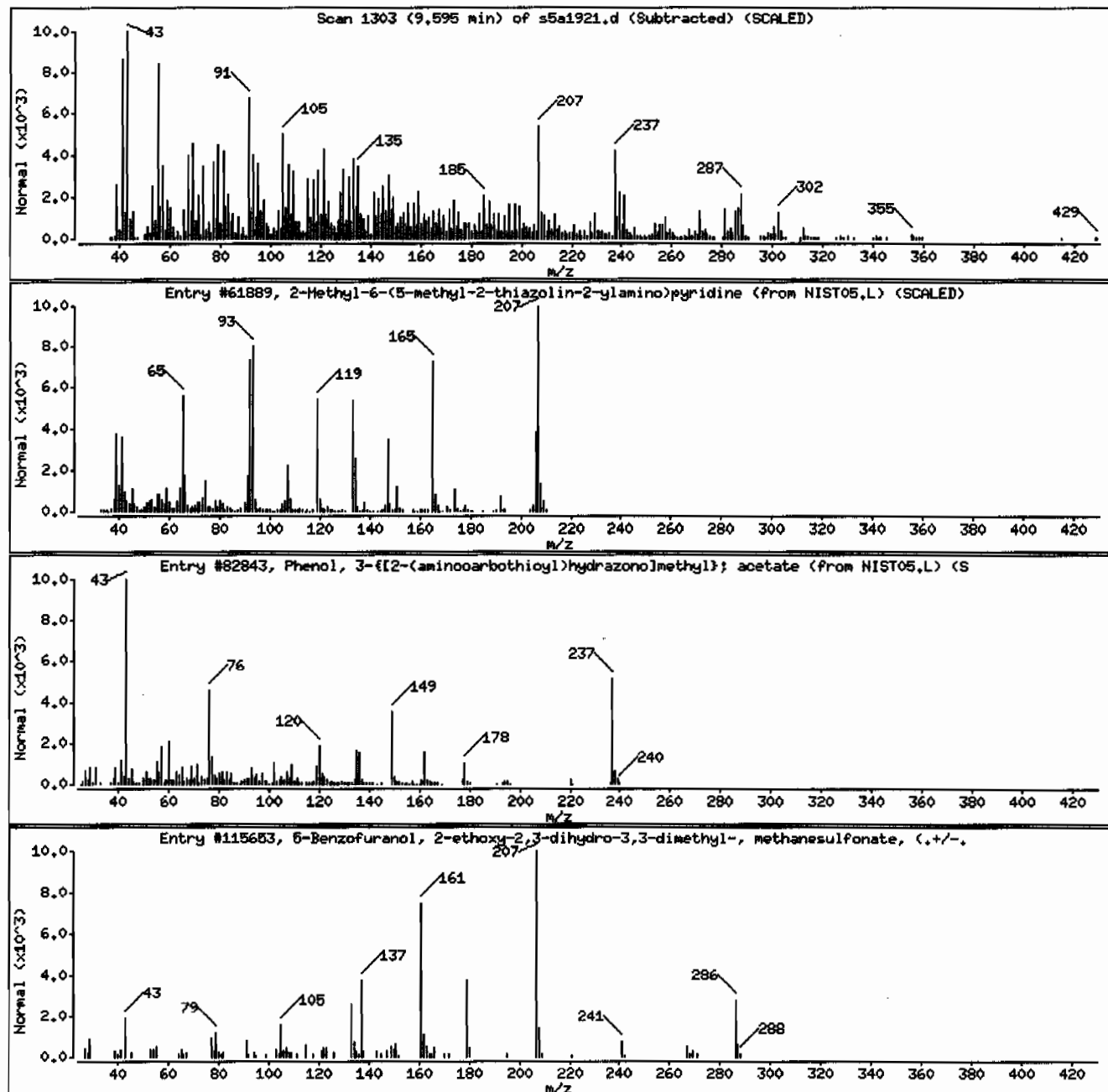
Unknown

2-Methyl-6-(5-methyl-2-thiazolin-2-ylami

CAS Number	Library	Entry	Quality	Formula	Weight
339352-60-0	NIST05.L	61889	25	C10H13N3S	207
1000196-84-6	NIST05.L	82843	25	C10H11N3O2S	237
26225-79-6	NIST05.L	115653	18	C13H18O5S	286

Phenol, 3-([2-(aminocarbothioyl)hydrazon

5-Benzofuranol, 2-ethoxy-2,3-dihydro-3,3



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.i

Sample Info: 1244626013194284011SVH111LANL

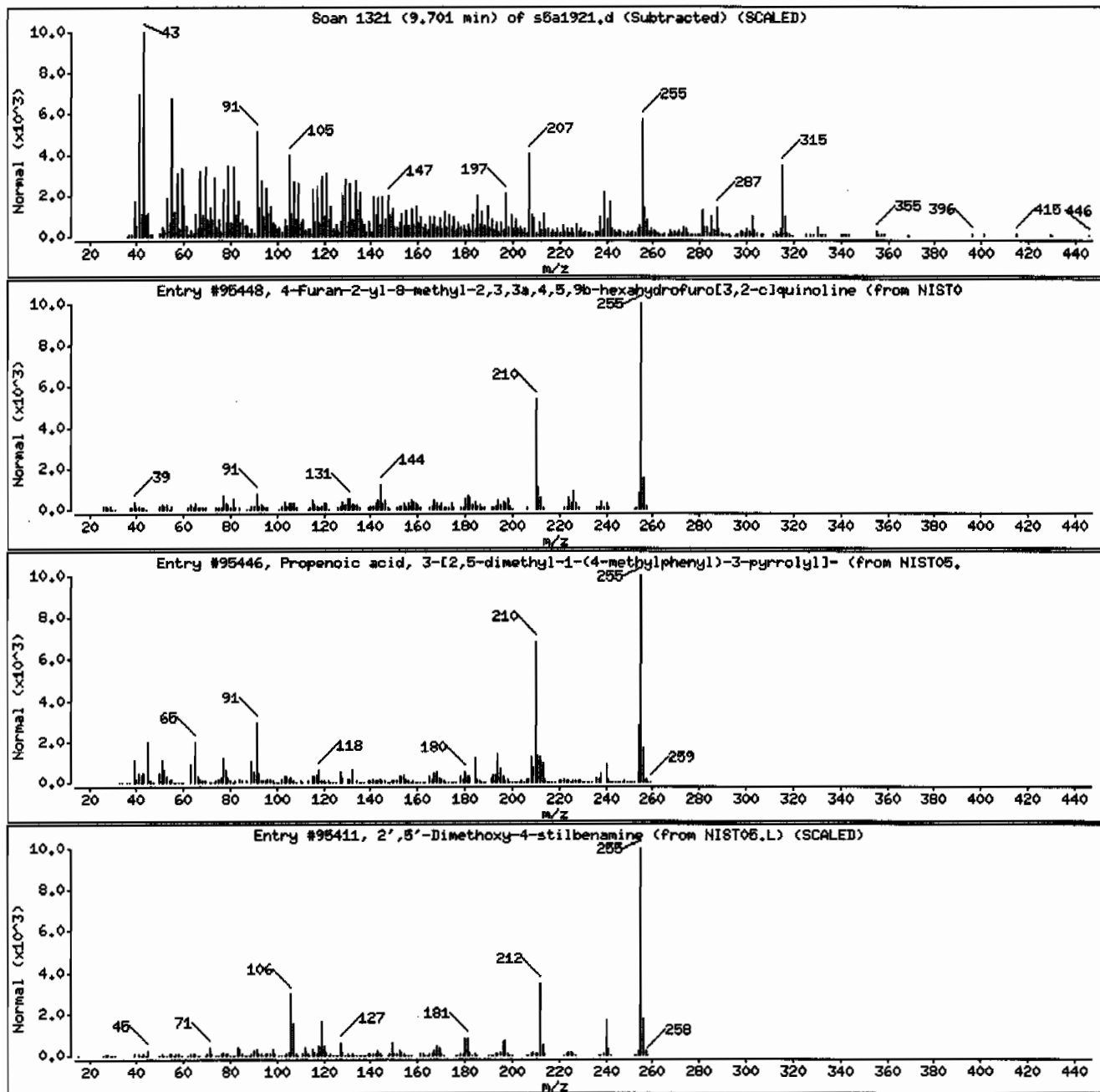
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-Furan-2-yl-8-methyl-2,3,3a,4,5,9b-hexa	1000310-81-2	NIST05.L	95448	45	C16H17NO2	255
Propenoic acid, 3-[2,5-dimethyl-1-(4-met	299922-81-3	NIST05.L	95446	41	C16H17NO2	255
2',5'-Dimethoxy-4-stilbenamine	5803-81-0	NIST05.L	95411	25	C16H17NO2	255



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.1

Sample Info: 1244626013194284011SVH11ILANL

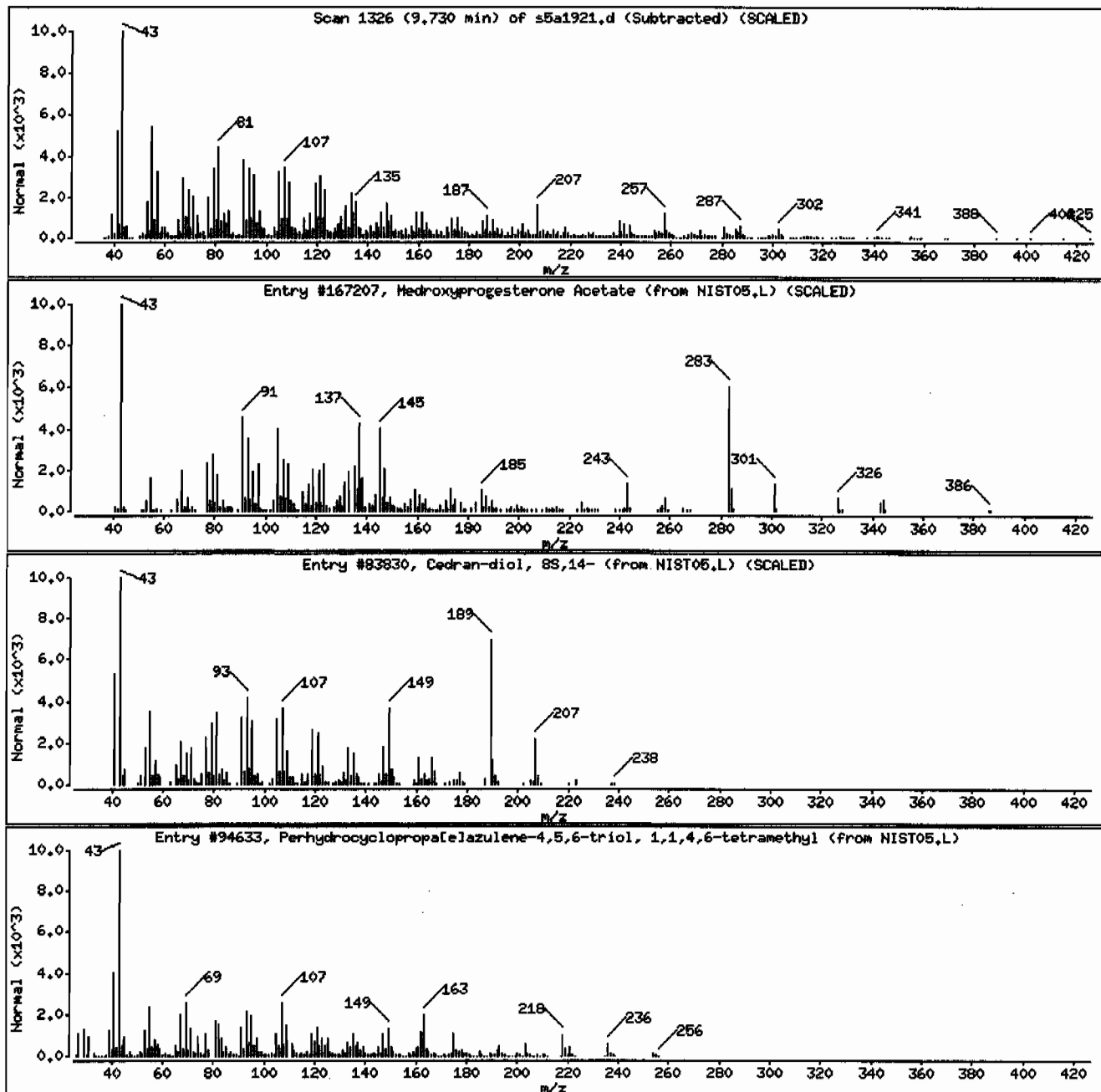
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Medroxyprogesterone Acetate	71-58-9	NIST05.L	167207	72	C24H34O4	386
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	70	C15H26O2	238
Perhydrocyclopropafelazulene-4,5,6-triol	1000197-87-8	NIST05.L	94633	43	C15H26O3	264



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.1

Sample Info: 12446260131942840111SVH111LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

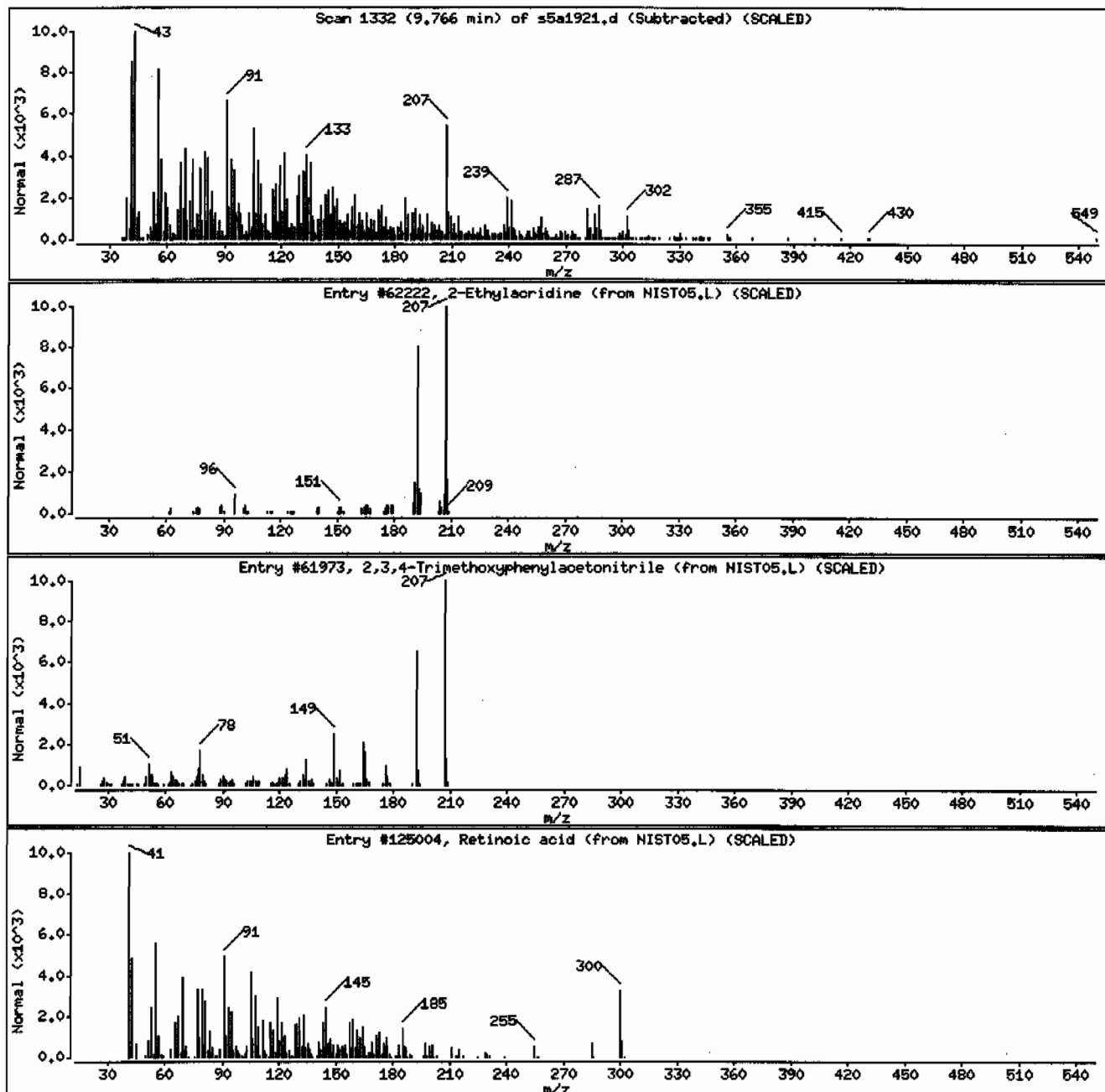
Unknown

2-Ethylacridine

2,3,4-Trimethoxyphenylacetonitrile

Retinoic acid

CAS Number	Library	Entry	Quality	Formula	Weight
55751-83-2	NIST05.L	62222	25	C ₁₅ H ₁₃ N	207
68913-85-9	NIST05.L	61973	25	C ₁₁ H ₁₃ NO ₃	207
302-79-4	NIST05.L	125004	20	C ₂₀ H ₂₈ O ₂	300



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVMI1ILANL

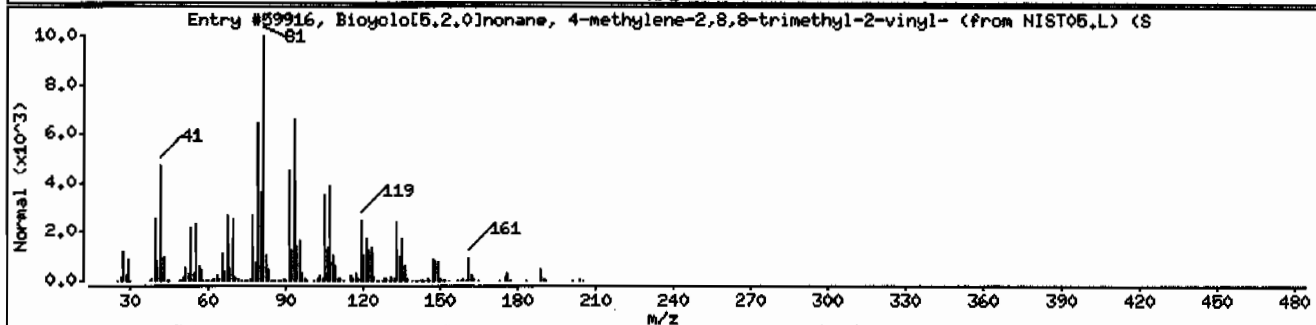
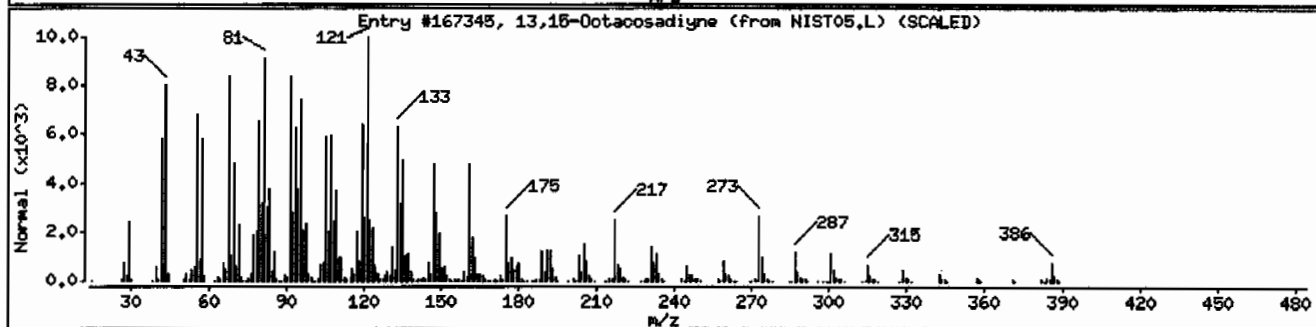
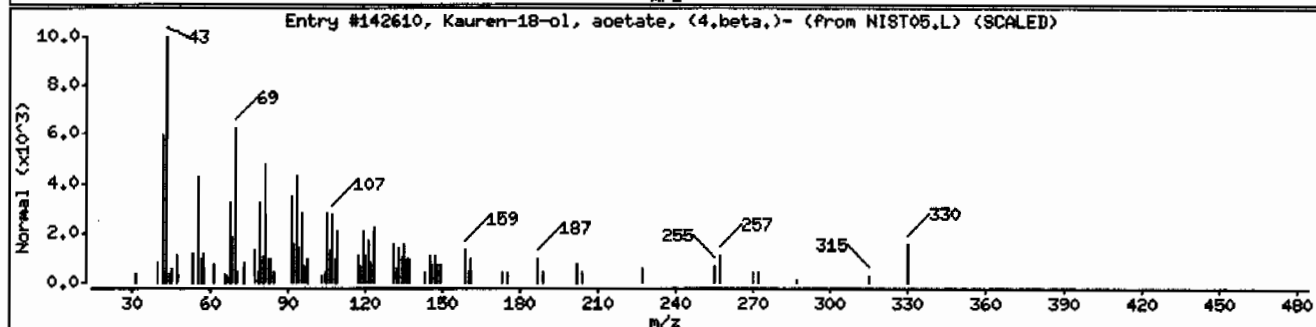
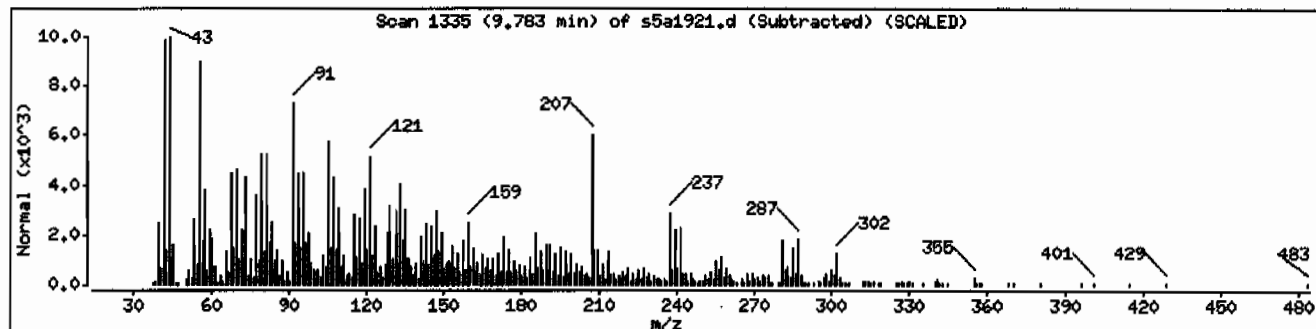
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Kauren-18-ol, acetate, (4,beta,)-	72150-74-4	NIST05.L	142610	50	C22H34O2	330
13,15-Octacosadiyne	24643-46-7	NIST05.L	167345	49	C28H50	386
Bicyclo[5.2.0]nonane, 4-methylene-2,8,8-	1000159-38-2	NIST05.L	59916	38	C15H24	204



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.i

Sample Info: I244626013194284011SVH11ILANL

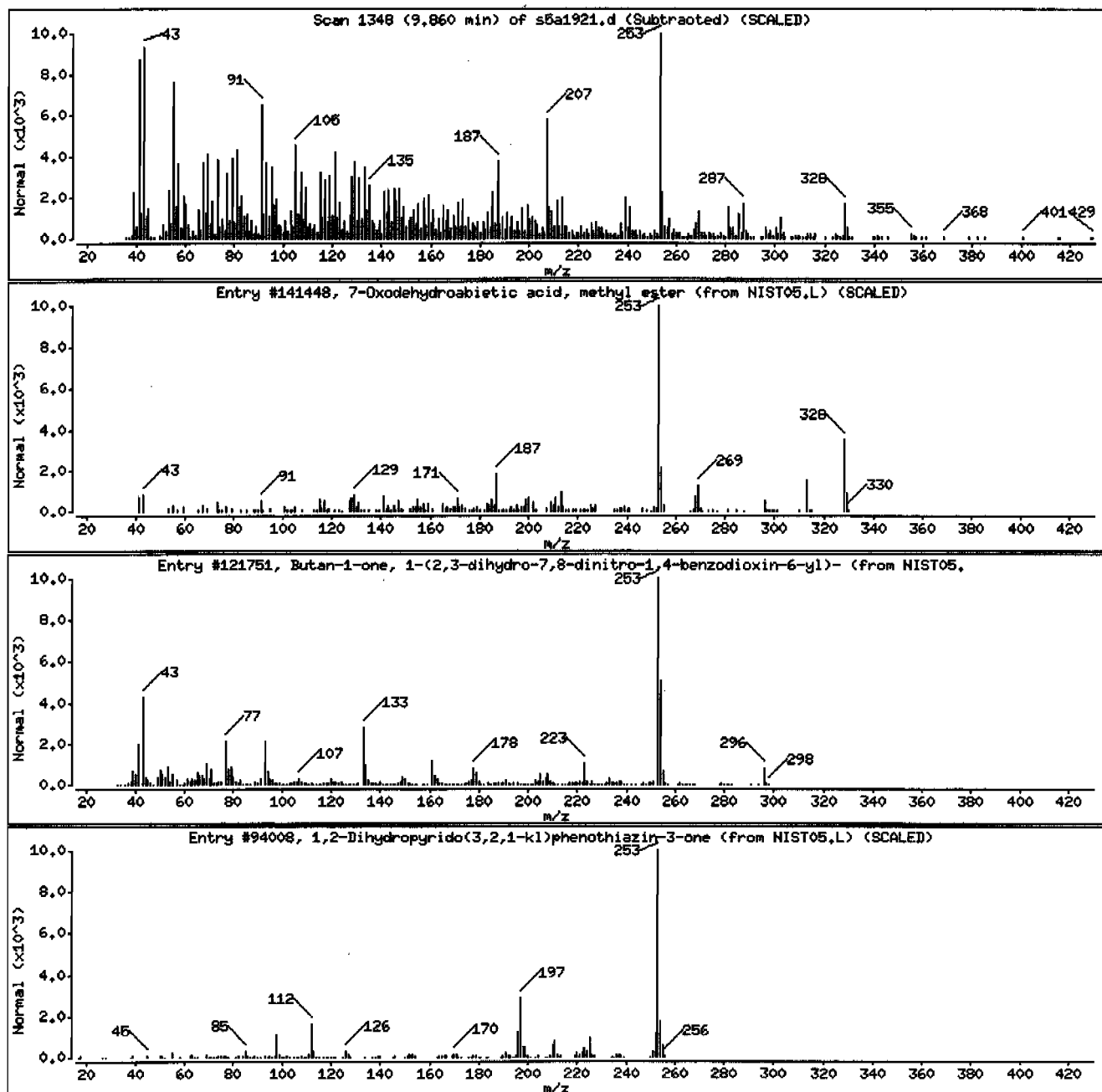
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
7-Oxodehydroabiatic acid, methyl ester	110936-78-2	NIST05.L	141448	89	C ₂₁ H ₂₈ O ₃	328
Butan-1-one, 1-(2,3-dihydro-7,8-dinitro-	1000273-76-9	NIST05.L	121751	50	C ₁₂ H ₁₂ N ₂ O ₇	296
1,2-Dihydropyrido(3,2,1-k1)phenothiazin-	69513-42-4	NIST05.L	94008	49	C ₁₅ H ₁₁ NOS	253



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: I244626013194284011ISVH11ILANL

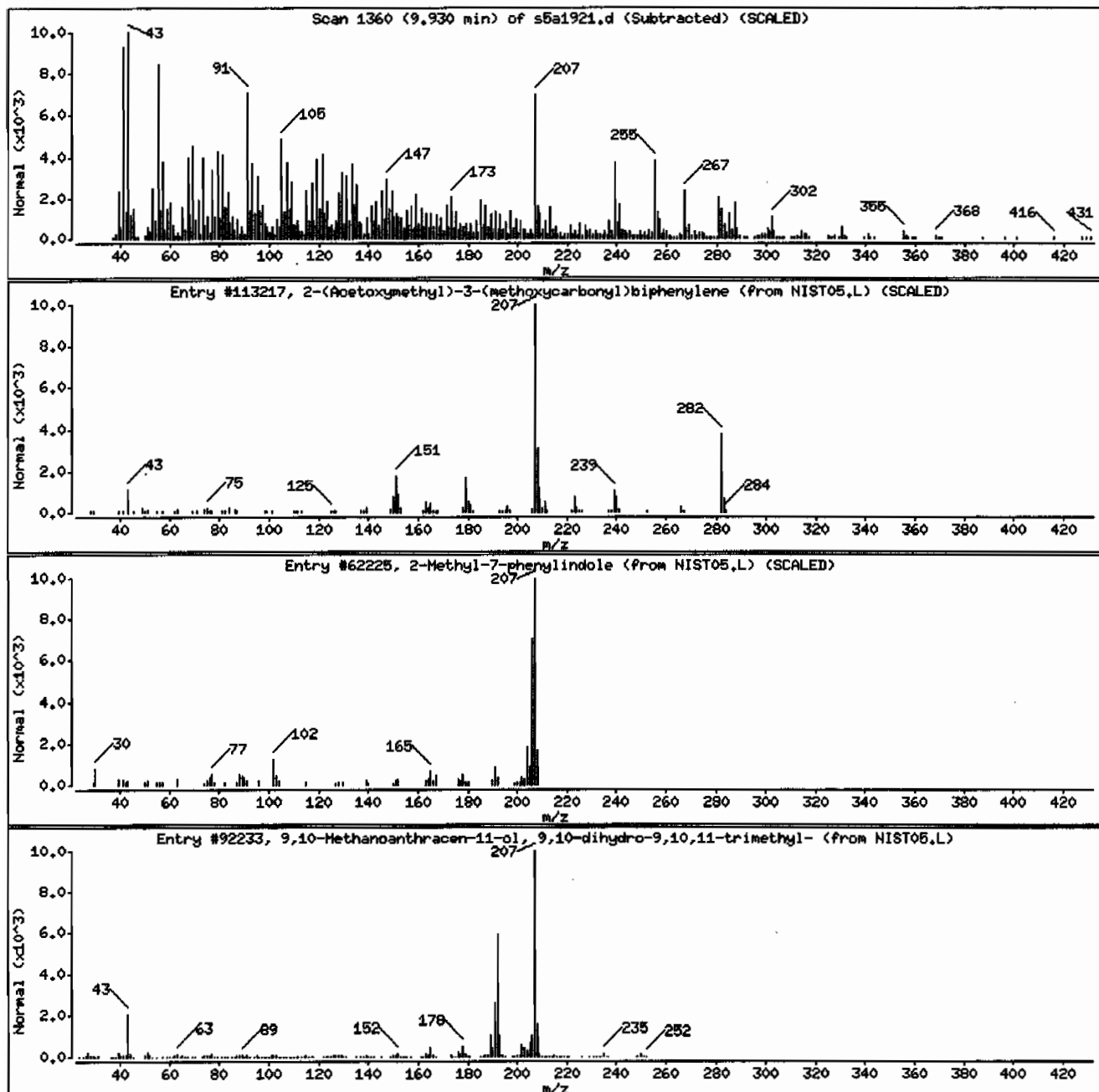
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	18	C17H14O4	282
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	15	C15H13N	207
9,10-Methanoanthracen-11-ol, 9,10-dihydr	126615-74-5	NIST05.L	92233	15	C18H18O	250



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.1

Sample Info: 1244626013194284011SVMI11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

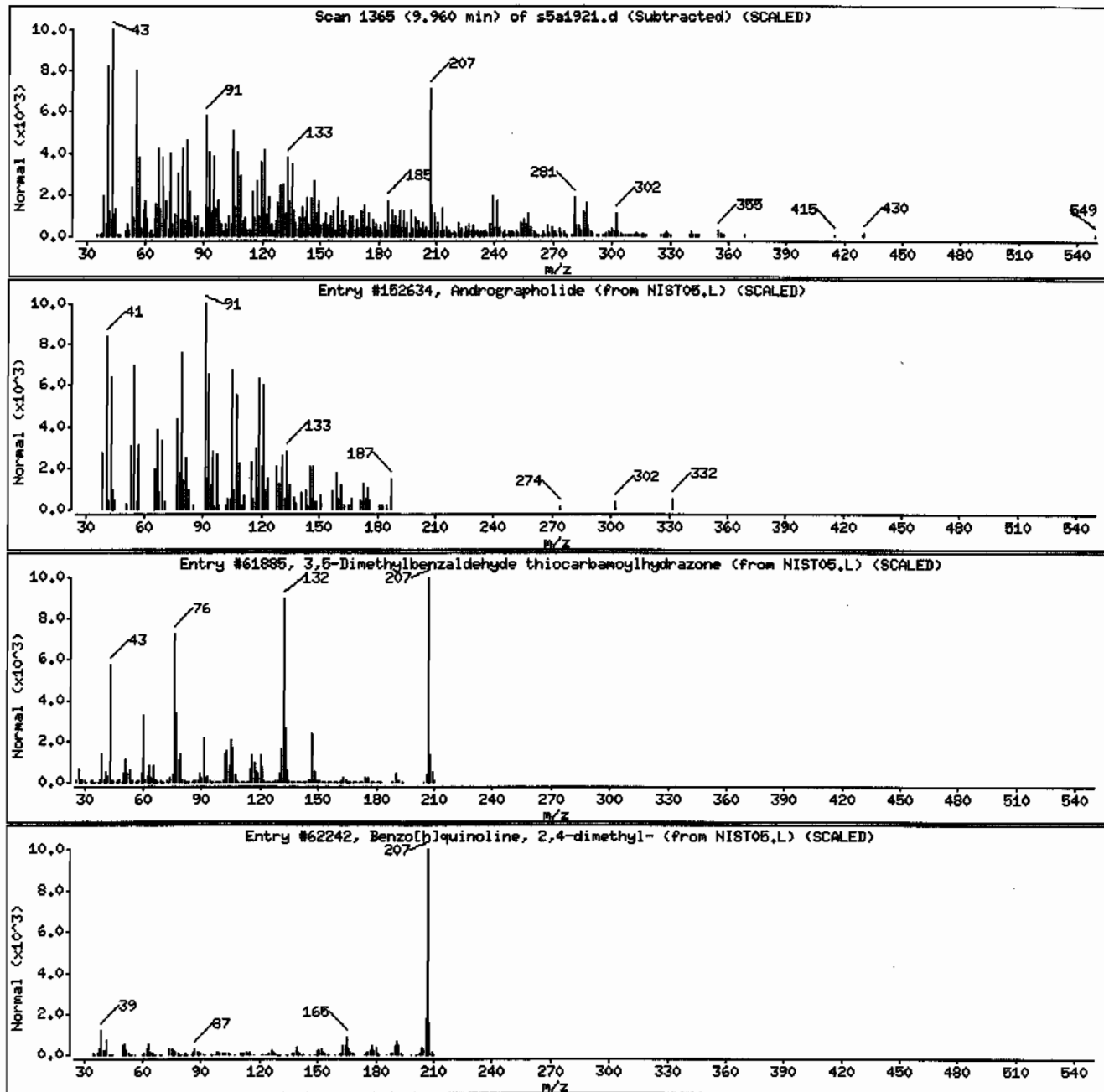
Unknown

Andrographolide

3,5-Dimethylbenzaldehyde thiocarbamoylhy

Benzo[h]quinoline, 2,4-dimethyl-

CAS Number	Library	Entry	Quality	Formula	Weight
5508-58-7	NIST05.L	152634	35	C20H30O5	350
1000195-15-1	NIST05.L	61885	30	C10H13N3S	207
605-67-4	NIST05.L	62242	25	C15H13N	207



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVMI1ILANL

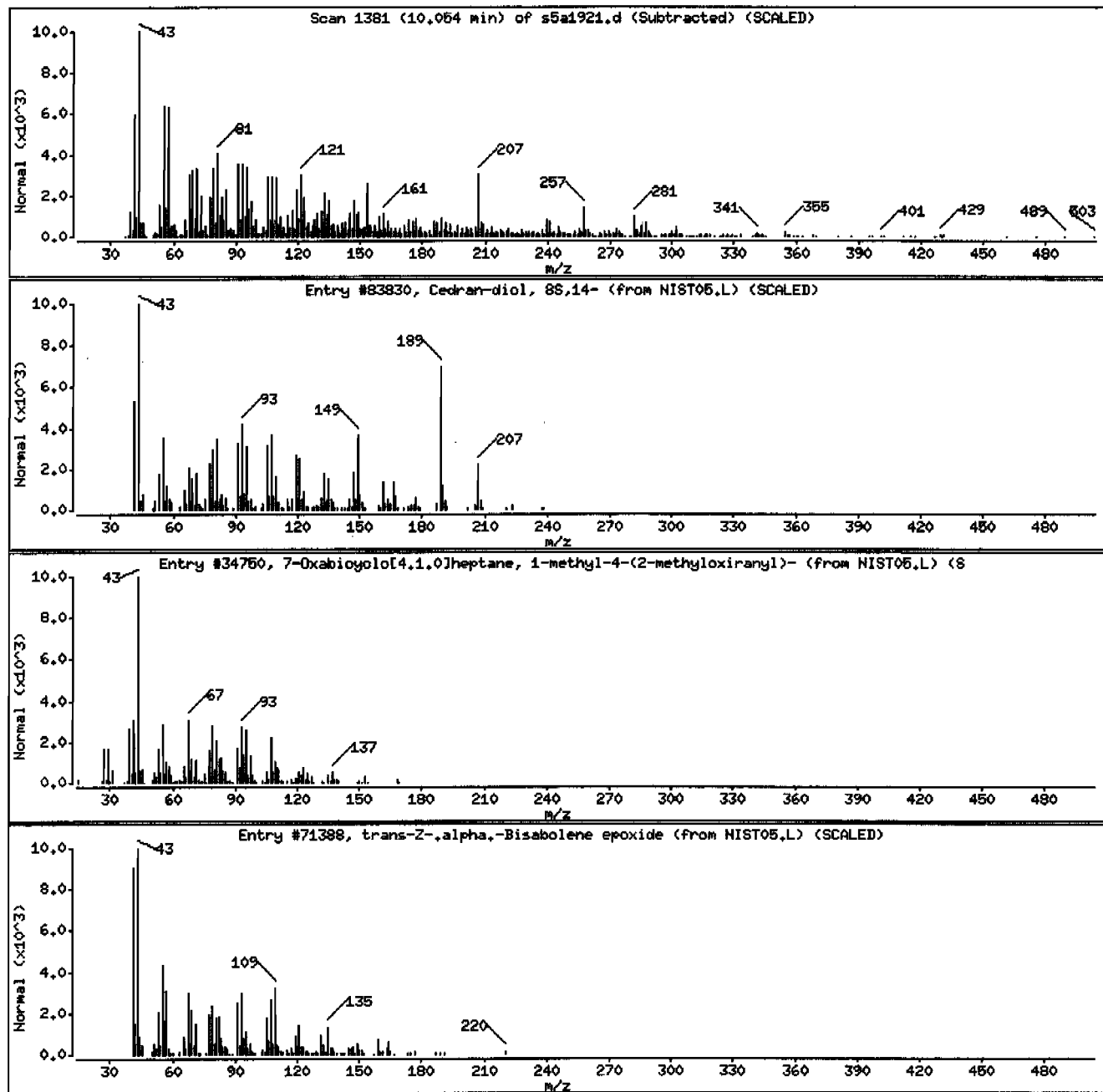
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	56	C ₁₅ H ₂₆ O ₂	238
7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(	96-08-2	NIST05.L	34750	44	C ₁₀ H ₁₆ O ₂	168
trans-Z-,alpha,-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	40	C ₁₅ H ₂₄ O	220



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011ISVH11ILANL

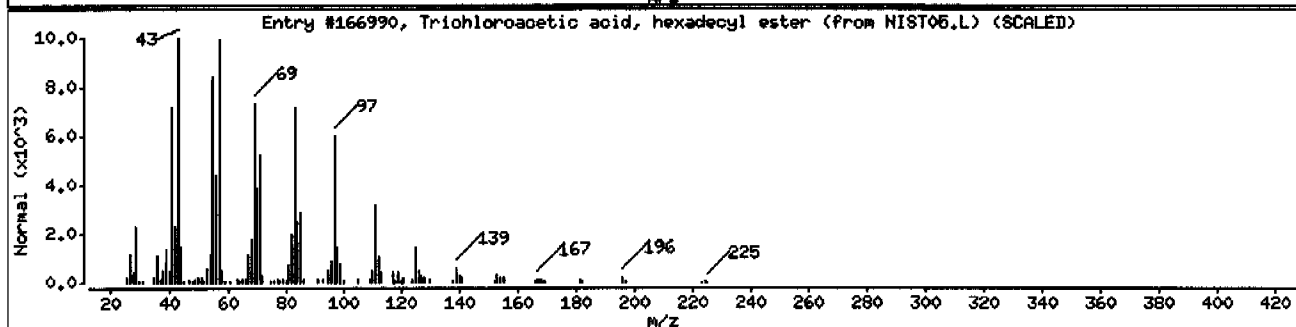
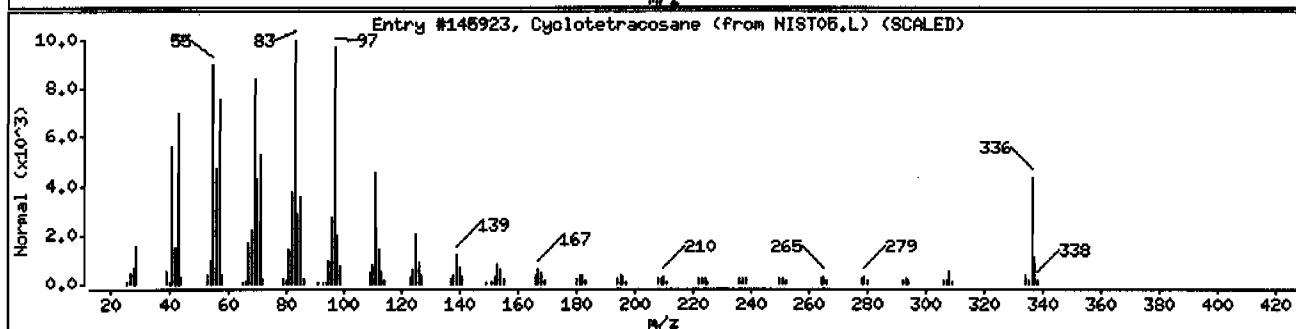
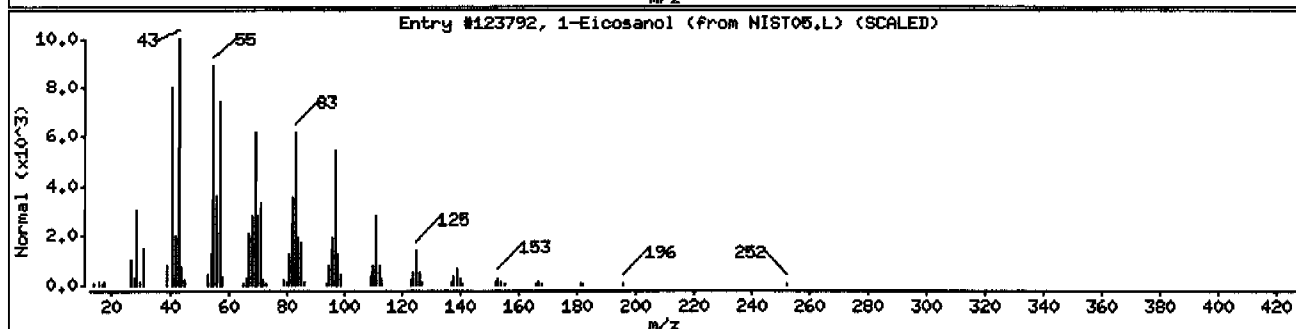
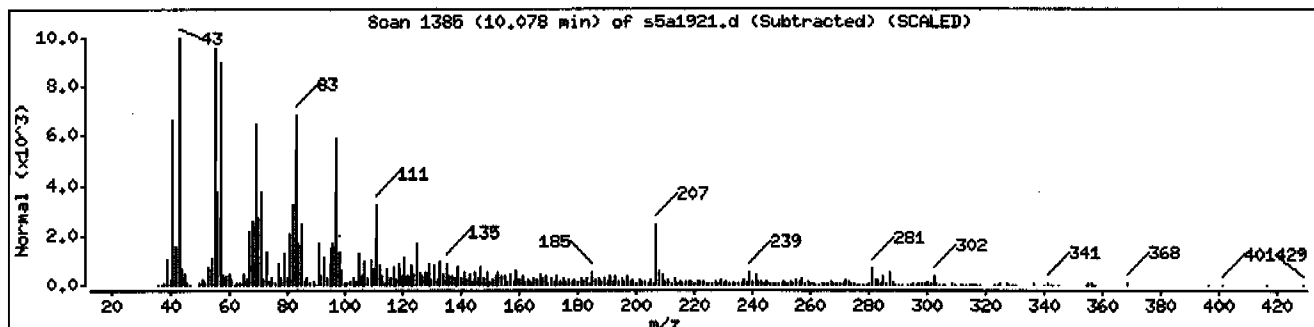
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Eicosanol	629-96-9	NIST05.L	123792	83	C20H42O	298
Cyclotetracosane	297-03-0	NIST05.L	145923	70	C24H48	336
Trichloroacetic acid, hexadecyl ester	74339-84-1	NIST05.L	166990	70	C18H33Cl3O2	386



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011ISVH11ILANL

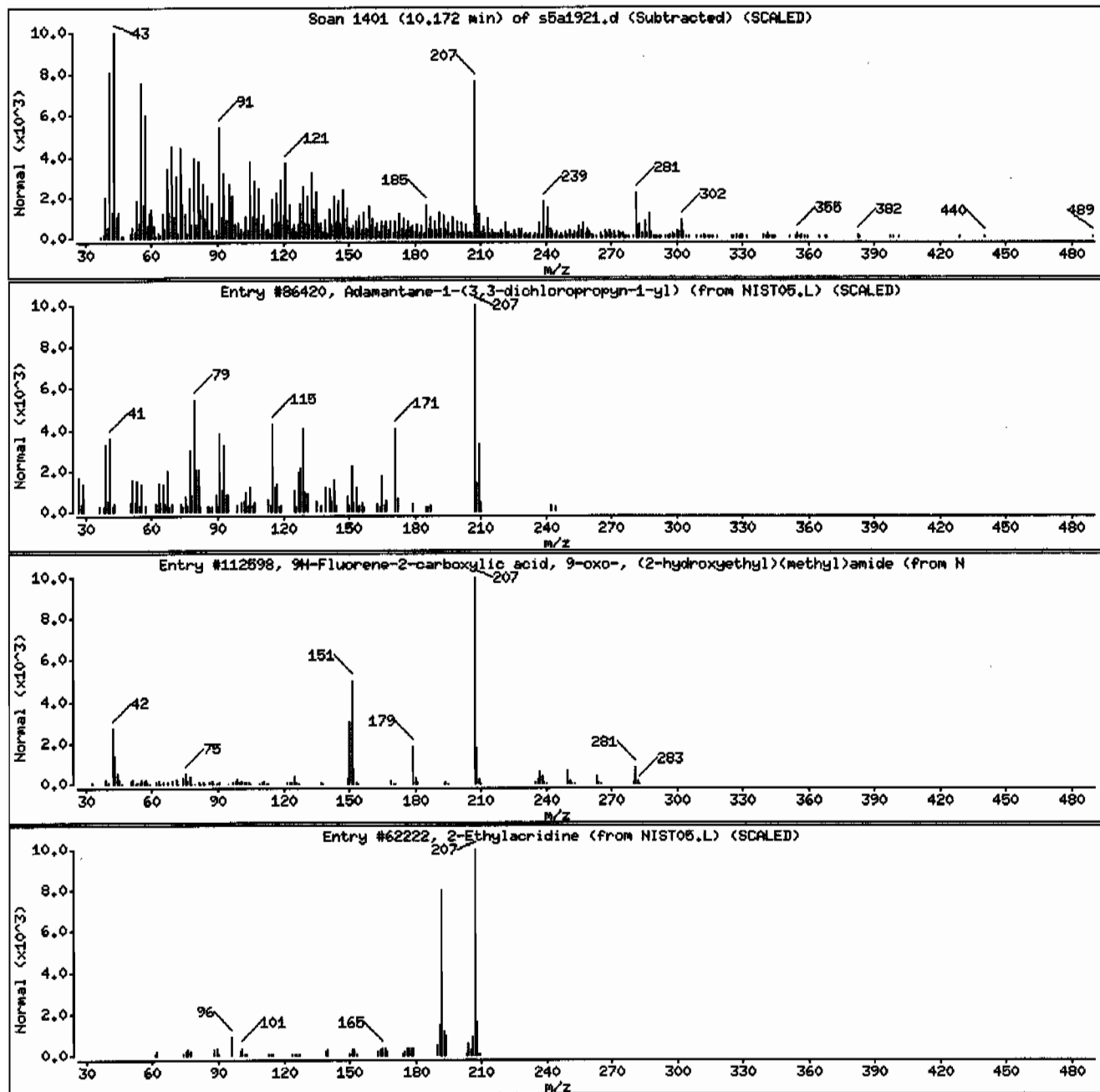
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Adamantane-1-(3,3-dichloropropyn-1-yl)	139185-48-1	NIST05.L	86420	45	C13H16Cl2	242
9H-Fluorene-2-carboxylic acid, 9-oxo-, (	1000316-02-1	NIST05.L	112598	41	C17H15NO3	281
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C16H13N	207



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH111LANL

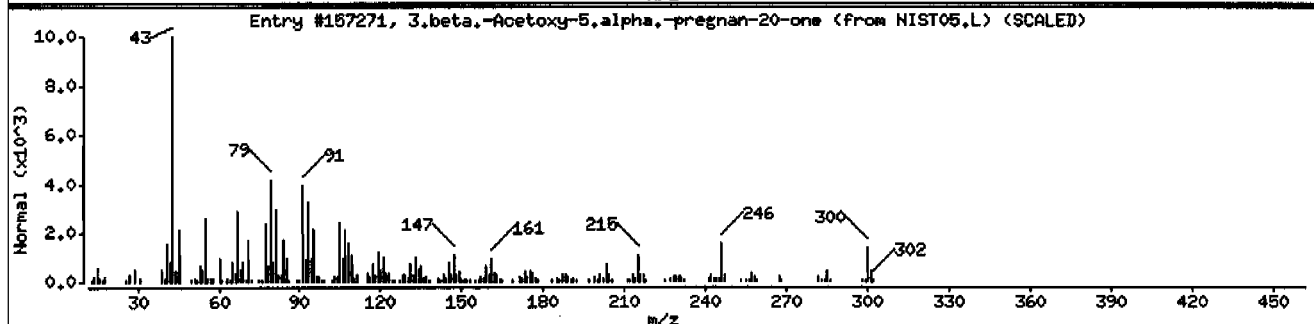
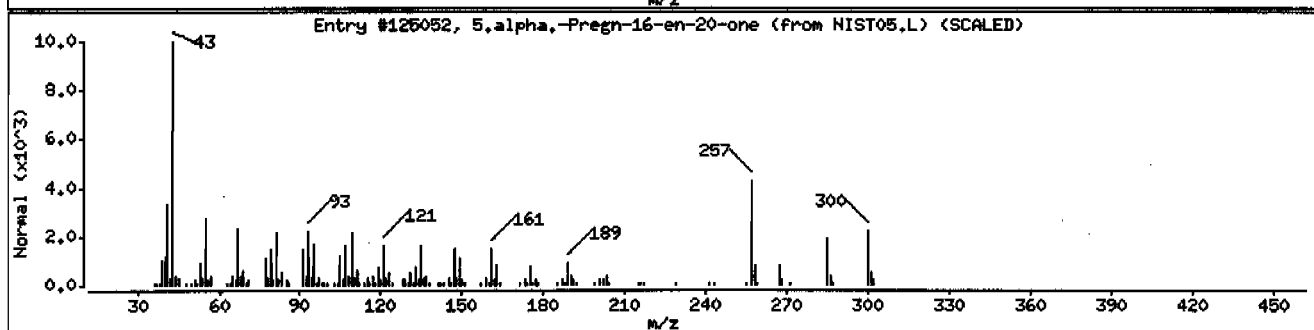
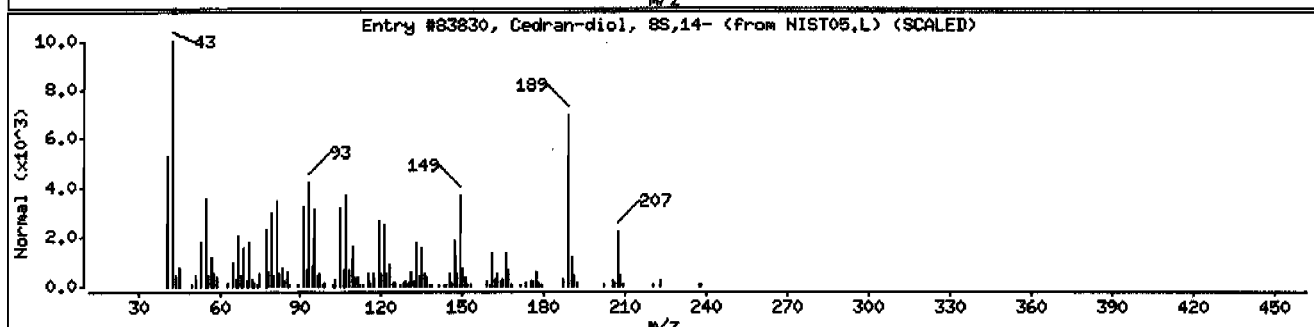
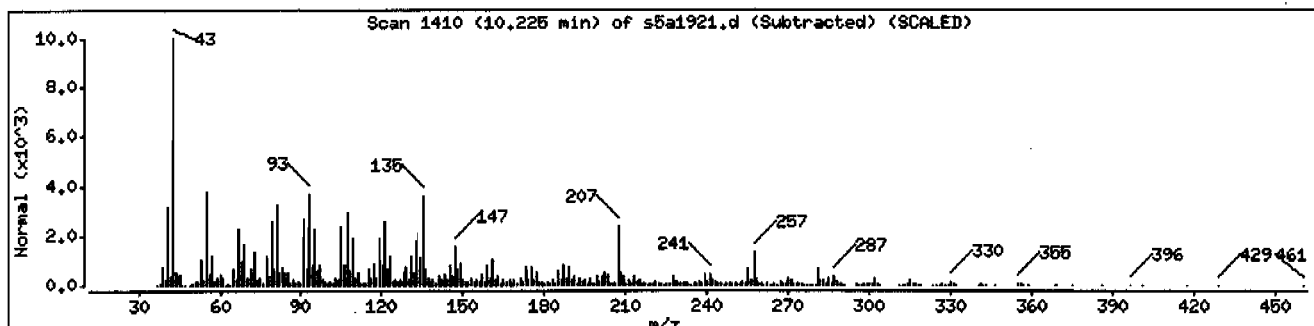
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	68	C15H26O2	238
5,alpha.-Pregn-16-en-20-one	3752-04-3	NIST05.L	125052	25	C21H32O	300
3,beta.-Acetoxy-5,alpha.-pregnan-20-one	906-83-2	NIST05.L	157271	25	C23H36O3	360



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.i

Sample Info: 1244626013194284011SVH11ILANL

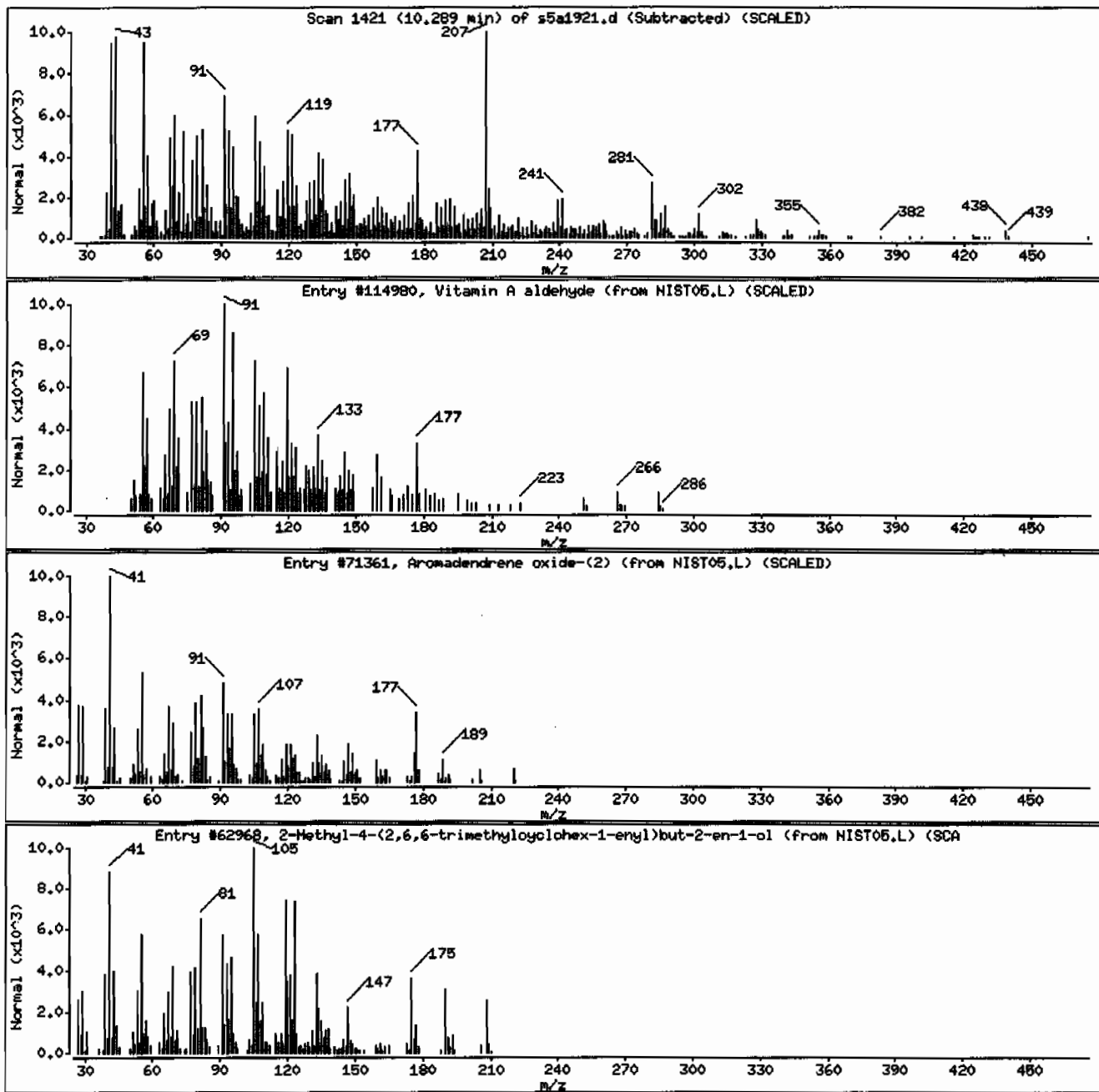
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Vitamin A aldehyde	116-31-4	NIST05.L	114980	38	C ₂₀ H ₂₈ O	284
Aromadendrene oxide-(2)	1000151-98-6	NIST05.L	71361	38	C ₁₅ H ₂₄ O	220
2-Methyl-4-(2,6,6-trimethylcyclohex-1-en	62924-17-8	NIST05.L	62968	38	C ₁₄ H ₂₄ O	208



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: I244626013194284011ISVMI1ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

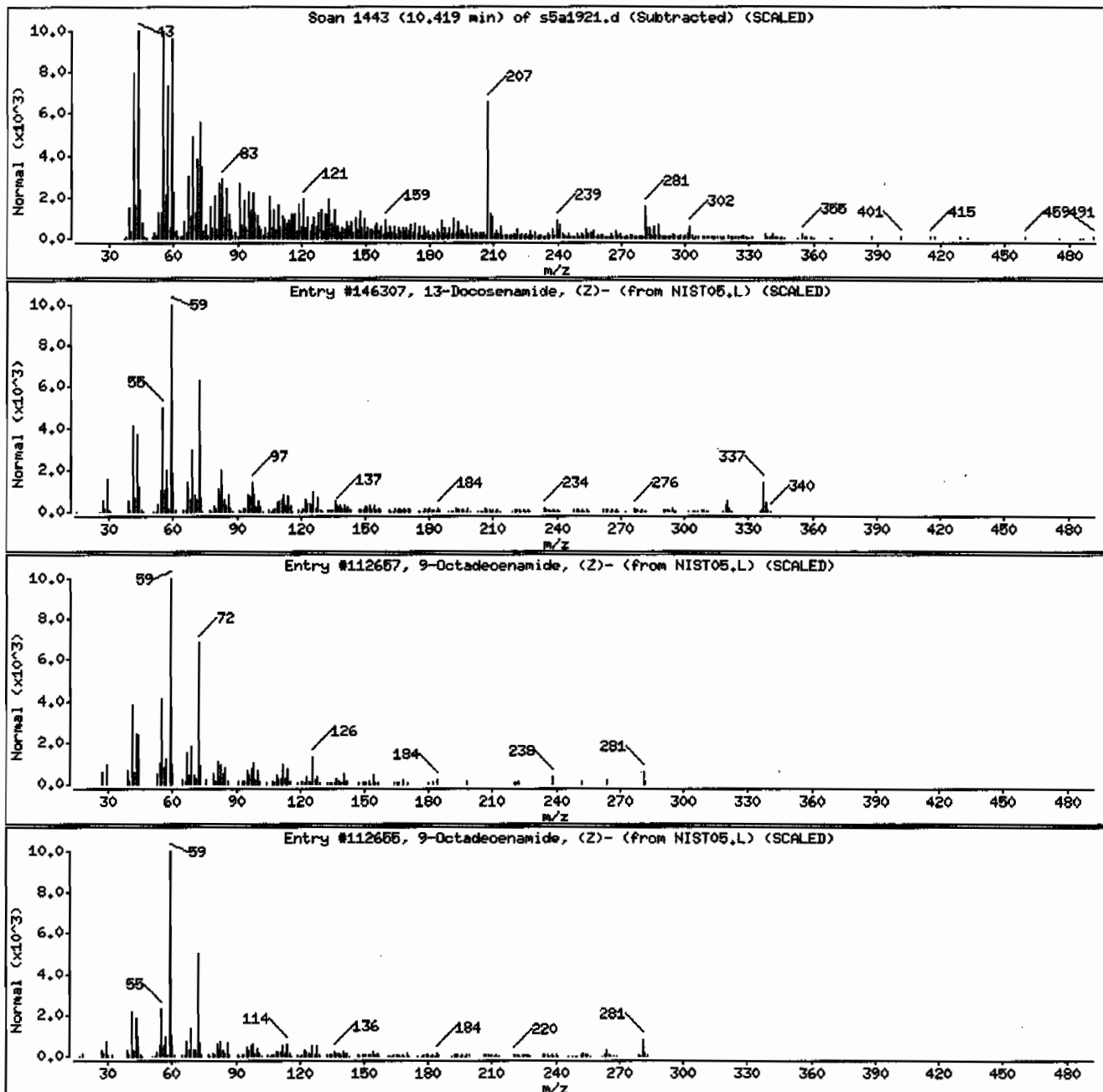
Unknown

13-Docosenamide, (Z)-

CAS Number	Library	Entry	Quality	Formula	Weight
112-84-5	NIST05.L	146307	64	C22H43NO	337
301-02-0	NIST05.L	112657	64	C18H35NO	281
301-02-0	NIST05.L	112655	55	C18H35NO	281

9-Octadecenamide, (Z)-

9-Octadecenamide, (Z)-



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH11ILANL

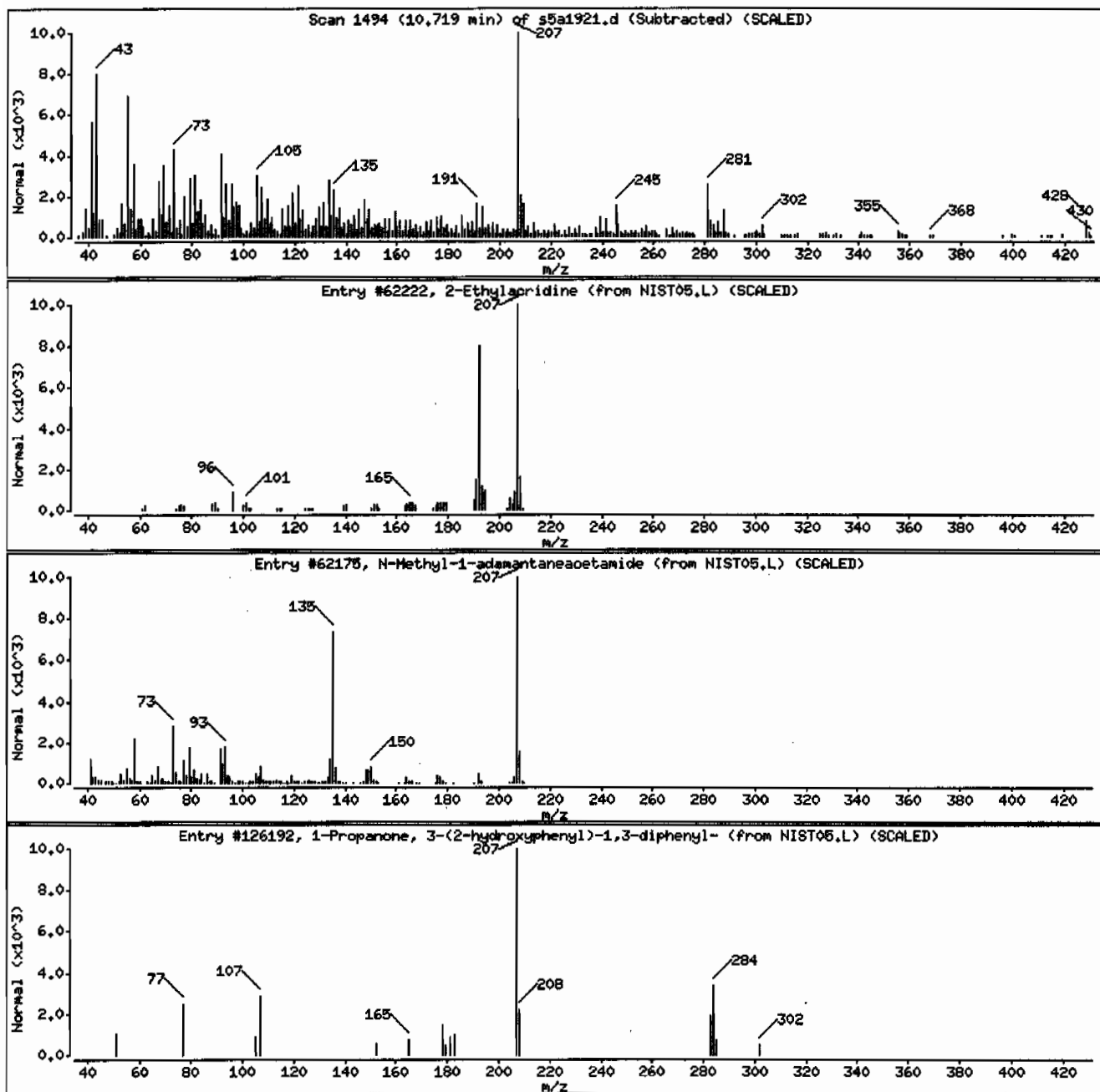
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	46	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	46	C13H21NO	207
1-Propanone, 3-(2-hydroxyphenyl)-1,3-dip	4376-83-4	NIST05.L	126192	45	C21H18O2	302



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH11ILANL

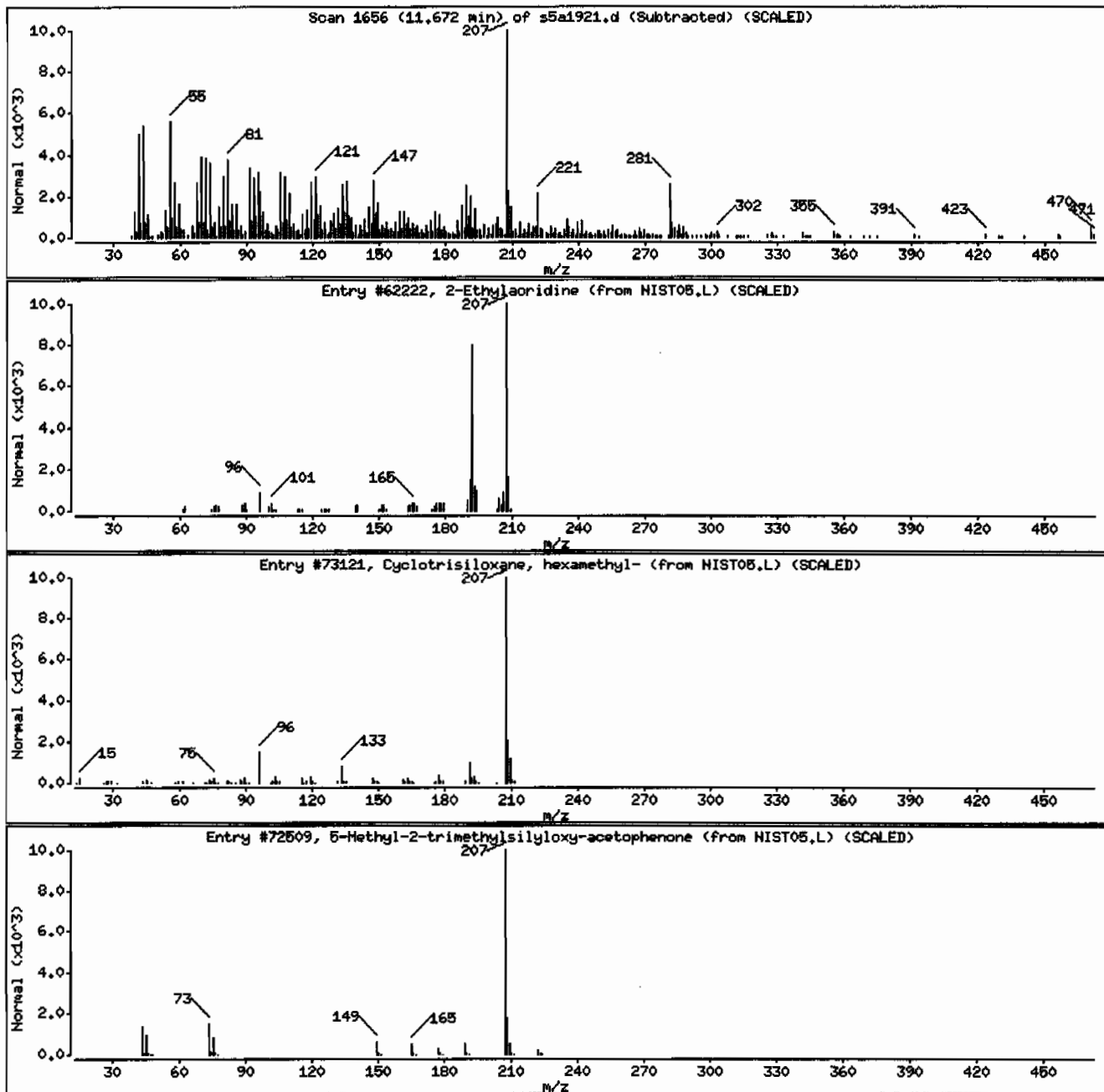
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	45	C15H13N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C6H18O3Si3	222
5-Methyl-2-trimethylsilyloxy-acetophenon	97389-69-0	NIST05.L	72509	38	C12H18O2Si	222



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: HSD5.i

Sample Info: 1244626013194284011SVH111LANL

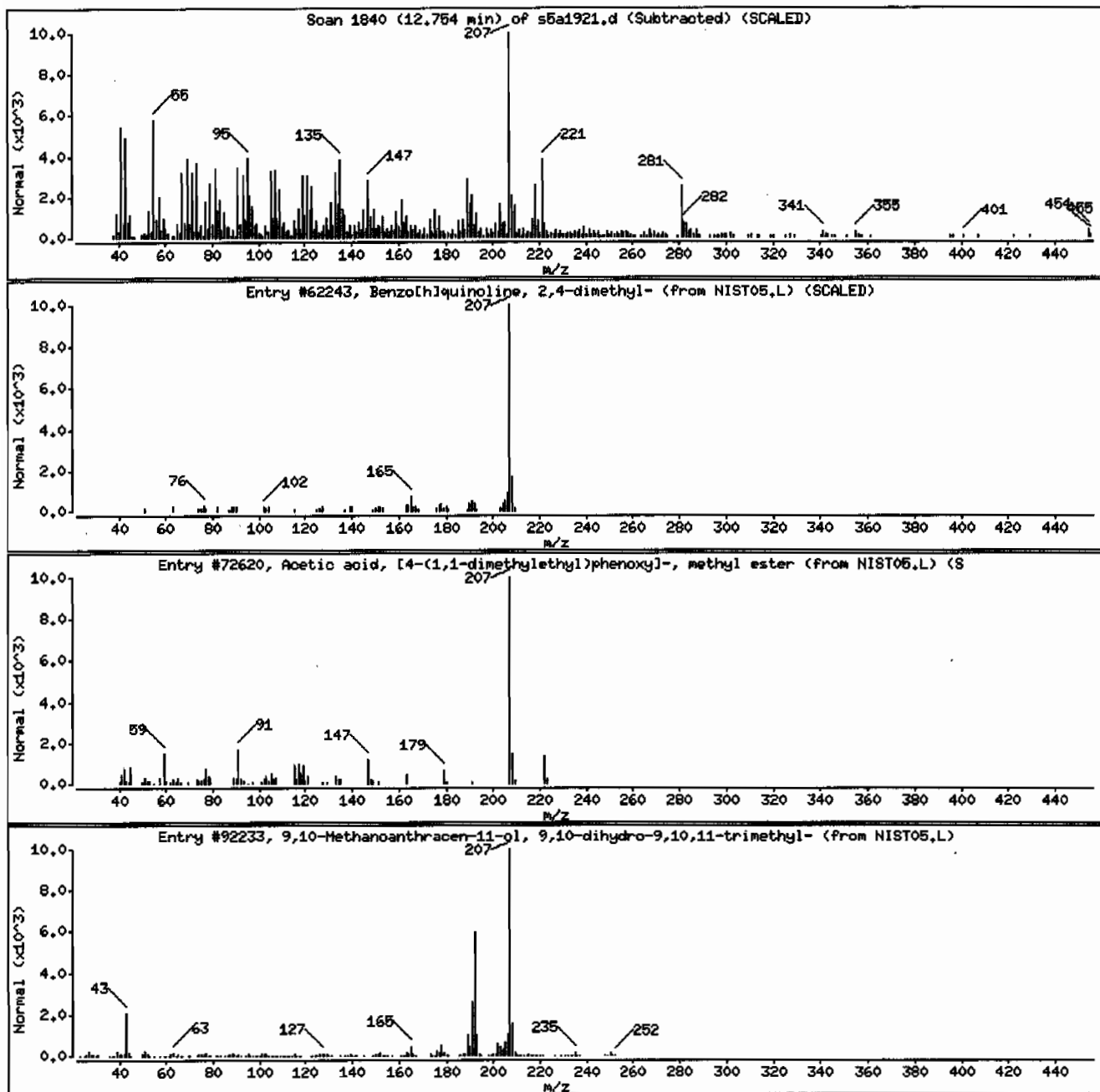
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-SMS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207
Acetic acid, [4-(1,1-dimethylethyl)pheno	98530-52-3	NIST05.L	72620	30	C13H18O3	222
9,10-Methanoanthracen-11-ol, 9,10-dihydr	126615-74-5	NIST05.L	92233	25	C18H18O	250



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.1

Sample Info: I244626013194284011ISVH11ILANL

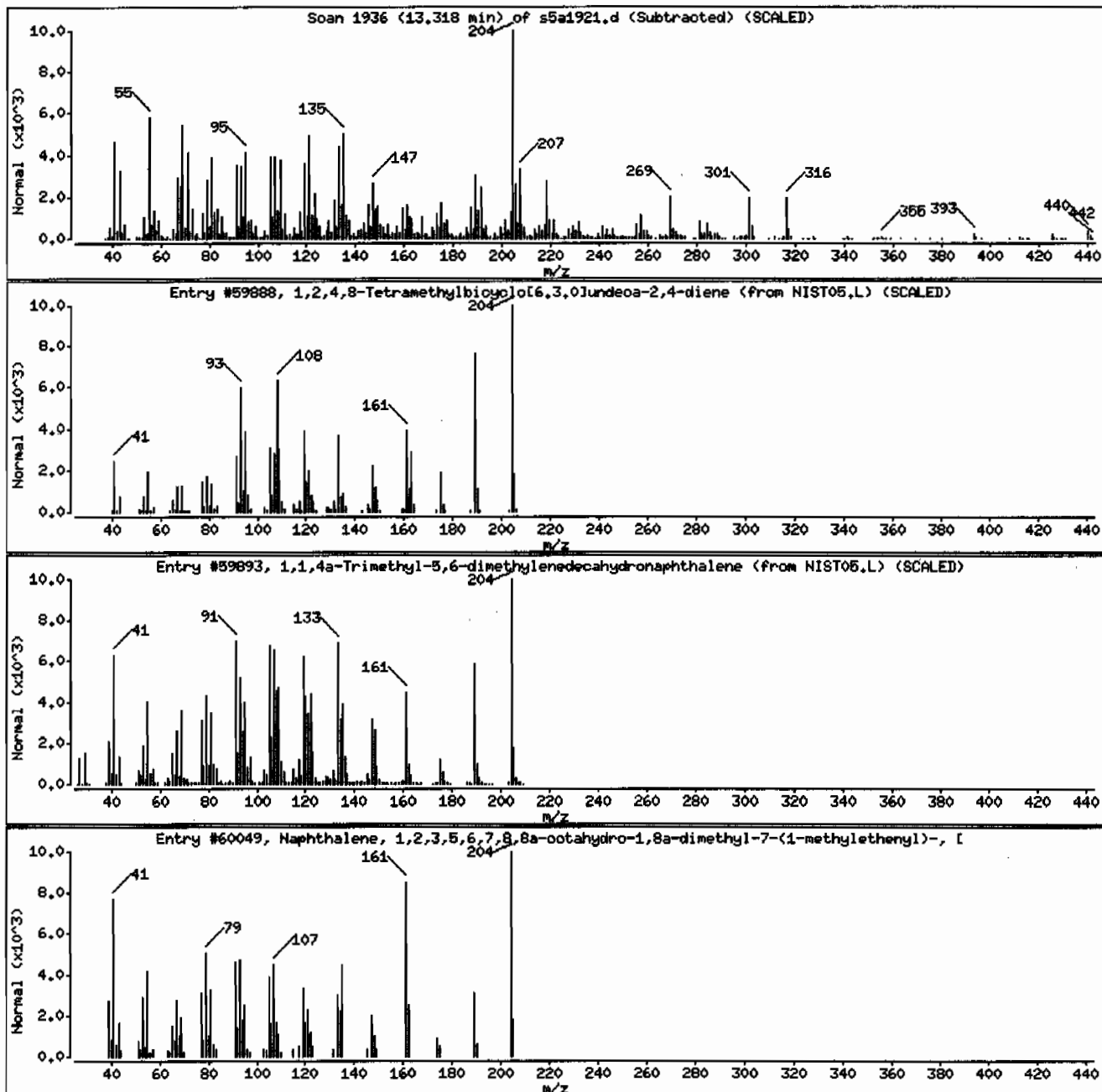
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-	137235-51-9	NIST05.L	59888	70	C ₁₅ H ₂₄	204
1,1,4a-Trimethyl-5,6-dimethylenedecahydr	1000193-60-8	NIST05.L	59893	53	C ₁₅ H ₂₄	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	45	C ₁₅ H ₂₄	204



Date : 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH111LANL

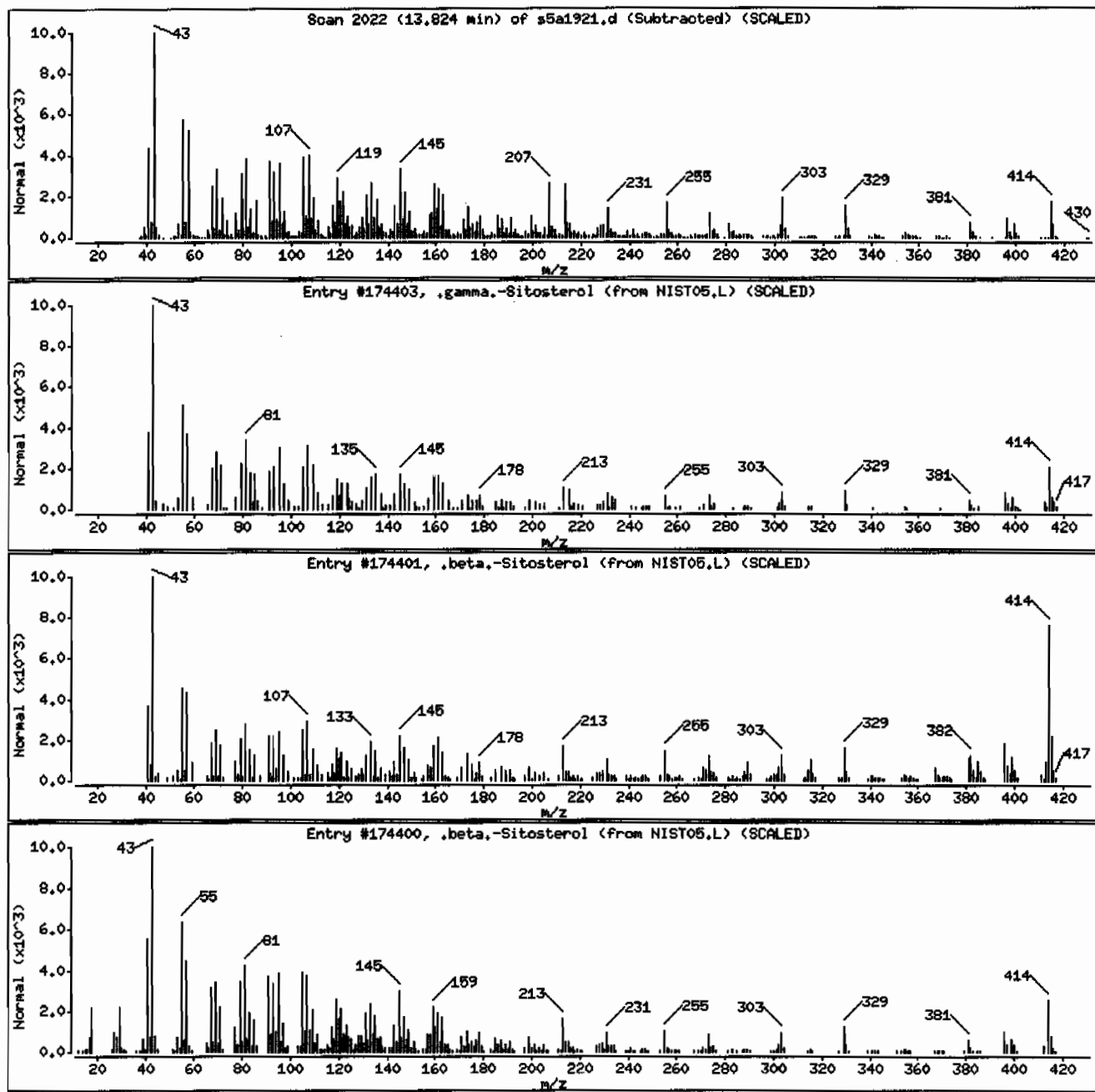
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	93	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	90	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	83	C ₂₉ H ₅₀ O	414



Date: 19-JAN-2010 18:01

Client ID: RE12-10-7270

Instrument: MSD5.i

Sample Info: 1244626013194284011SVH111LANL

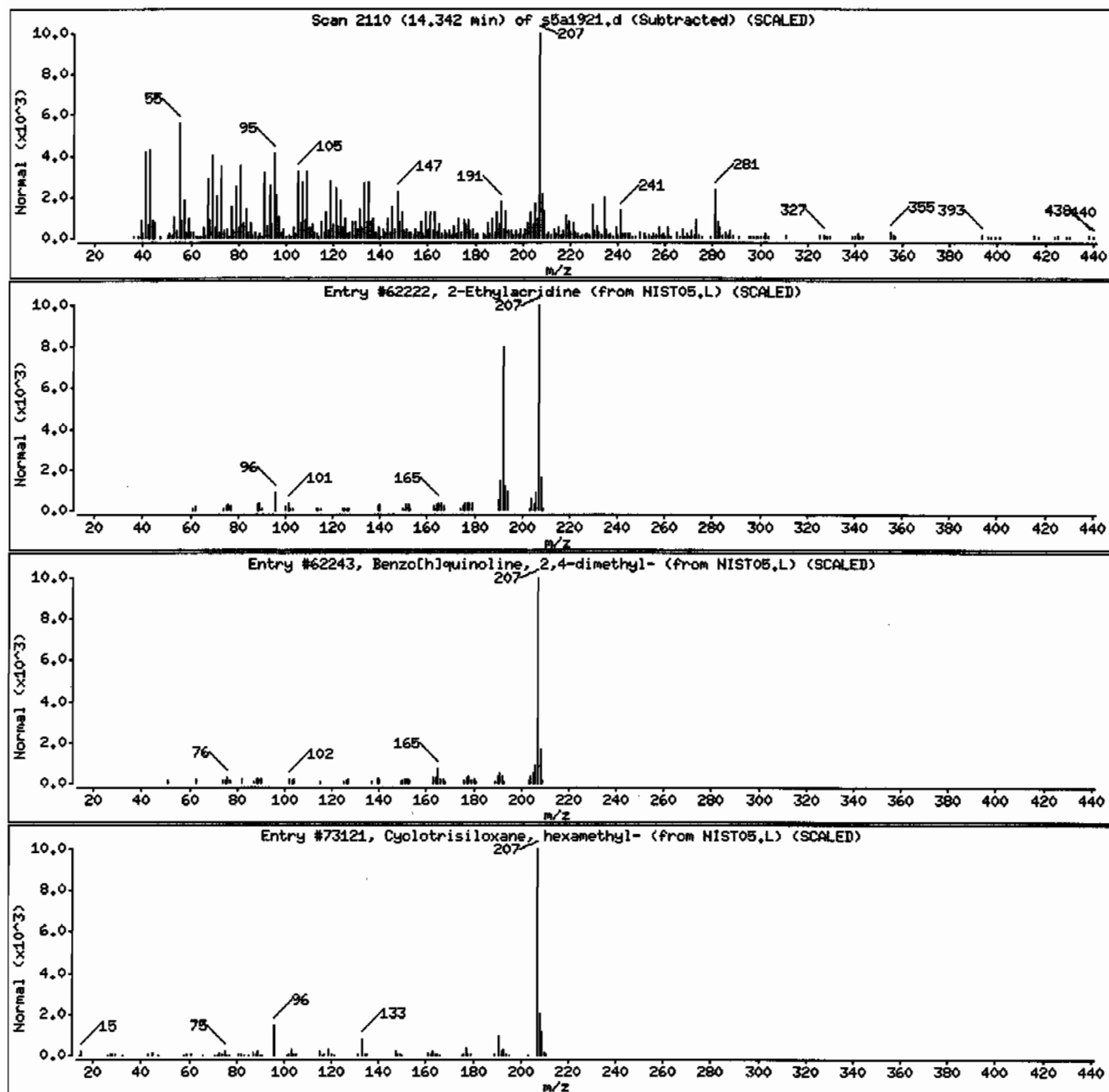
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55761-83-2	NIST05.L	62222	42	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C6H18OSi3	222



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

SDG Number: 10-1225
Lab Sample ID: 244626009

Client ID: RE12-10-7271
Batch ID: 942840
Run Date: 01/19/2010 16:28
Prep Date: 01/18/2010 20:10
Data File: s5a1917.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	360	ug/kg	71.9	360
108-95-2	Phenol	U	360	ug/kg	71.9	360
95-57-8	2-Chlorophenol	U	360	ug/kg	71.9	360
106-46-7	1,4-Dichlorobenzene	U	360	ug/kg	71.9	360
621-64-7	N-Nitrosodipropylamine	U	360	ug/kg	71.9	360
59-50-7	4-Chloro-3-methylphenol	U	360	ug/kg	71.9	360
83-32-9	Acenaphthene	U	36.0	ug/kg	11.9	36.0
121-14-2	2,4-Dinitrotoluene	U	360	ug/kg	36.0	360
100-02-7	4-Nitrophenol	U	360	ug/kg	119	360
87-86-5	Pentachlorophenol	U	360	ug/kg	89.9	360
129-00-0	Pyrene	U	36.0	ug/kg	10.8	36.0
110-86-1	Pyridine	U	360	ug/kg	71.9	360
62-53-3	Aniline	U	360	ug/kg	108	360
111-44-4	bis(2-Chloroethyl) ether	U	360	ug/kg	71.9	360
541-73-1	1,3-Dichlorobenzene	U	360	ug/kg	71.9	360
100-51-6	Benzyl alcohol	U	360	ug/kg	108	360
95-50-1	1,2-Dichlorobenzene	U	360	ug/kg	71.9	360
108-60-1	bis(2-Chloroisopropyl)ether	U	360	ug/kg	71.9	360
95-48-7	o-Cresol	U	360	ug/kg	71.9	360
65794-96-9	m,p-Cresols	U	360	ug/kg	108	360
67-72-1	Hexachloroethane	U	360	ug/kg	71.9	360
98-95-3	Nitrobenzene	U	360	ug/kg	71.9	360
78-59-1	Isophorone	U	360	ug/kg	71.9	360
88-75-5	2-Nitrophenol	U	360	ug/kg	71.9	360
105-67-9	2,4-Dimethylphenol	U	360	ug/kg	126	360
111-91-1	bis(2-Chloroethoxy)methane	U	360	ug/kg	71.9	360
120-83-2	2,4-Dichlorophenol	U	360	ug/kg	71.9	360
65-85-0	Benzoic acid	U	719	ug/kg	180	719
91-20-3	Naphthalene	U	36.0	ug/kg	10.8	36.0
106-47-8	4-Chloroaniline	U	360	ug/kg	71.9	360
87-68-3	Hexachlorobutadiene	U	360	ug/kg	71.9	360
91-57-6	2-Methylnaphthalene	U	36.0	ug/kg	7.19	36.0
77-47-4	Hexachlorocyclopentadiene	U	360	ug/kg	71.9	360
88-06-2	2,4,6-Trichlorophenol	U	360	ug/kg	71.9	360
95-95-4	2,4,5-Trichlorophenol	U	360	ug/kg	71.9	360
91-58-7	2-Chloronaphthalene	U	36.0	ug/kg	11.9	36.0
88-74-4	2-Nitroaniline	U	360	ug/kg	71.9	360
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	360	ug/kg	71.9	360

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

SDG Number: 10-1225
Lab Sample ID: 244626009

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 7.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7271
Batch ID: 942840
Run Date: 01/19/2010 16:28
Prep Date: 01/18/2010 20:10
Data File: s5a1917.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	360	ug/kg	71.9	360
606-20-2	2,6-Dinitrotoluene	U	360	ug/kg	36.0	360
208-96-8	Acenaphthylene	U	36.0	ug/kg	10.8	36.0
51-28-5	2,4-Dinitrophenol	U	719	ug/kg	137	719
132-64-9	Dibenzofuran	U	360	ug/kg	71.9	360
84-66-2	Diethylphthalate	U	360	ug/kg	71.9	360
86-73-7	Fluorene	U	36.0	ug/kg	10.8	36.0
7005-72-3	4-Chlorophenylphenylether	U	360	ug/kg	71.9	360
534-52-1	2-Methyl-4,6-dinitrophenol	U	360	ug/kg	71.9	360
100-01-6	4-Nitroaniline	U	360	ug/kg	108	360
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	360	ug/kg	71.9	360
122-66-7	Azobenzene	U	360	ug/kg	71.9	360
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	360	ug/kg	71.9	360
118-74-1	Hexachlorobenzene	U	360	ug/kg	71.9	360
85-01-8	Phenanthrene	U	36.0	ug/kg	10.8	36.0
120-12-7	Anthracene	U	36.0	ug/kg	7.19	36.0
84-74-2	Di-n-butylphthalate	U	360	ug/kg	71.9	360
206-44-0	Fluoranthene	U	36.0	ug/kg	10.8	36.0
85-68-7	Butylbenzylphthalate	U	360	ug/kg	71.9	360
56-55-3	Benzo(a)anthracene	U	36.0	ug/kg	10.8	36.0
91-94-1	3,3'-Dichlorobenzidine	U	360	ug/kg	108	360
218-01-9	Chrysene	U	36.0	ug/kg	10.8	36.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	360	ug/kg	71.9	360
117-84-0	Di-n-octylphthalate	U	360	ug/kg	71.9	360
205-99-2	Benzo(b)fluoranthene	U	36.0	ug/kg	10.8	36.0
207-08-9	Benzo(k)fluoranthene	U	36.0	ug/kg	10.8	36.0
50-32-8	Benzo(a)pyrene	U	36.0	ug/kg	10.8	36.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.0	ug/kg	10.8	36.0
53-70-3	Dibenzo(a,h)anthracene	U	36.0	ug/kg	10.8	36.0
191-24-2	Benzo(ghi)perylene	U	36.0	ug/kg	10.8	36.0
120-82-1	1,2,4-Trichlorobenzene	U	360	ug/kg	71.9	360

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	527	ug/kg		J
	Unknown	2.17	197	ug/kg		J

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

SDG Number: 10-1225
Lab Sample ID: 244626009

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.09 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 7.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.2	208	ug/kg	91	NJ
	Unknown Aldol Condensate	2.96	638	ug/kg		JA
7785-70-8	1R-.alpha.-Pinene	3.51	396	ug/kg	97	NJ
13466-78-9	3-Carene	3.9	227	ug/kg	96	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.08	161	ug/kg	98	NJ
	Unknown	9.11	189	ug/kg		J
295-48-7	Cyclopentadecane	9.42	236	ug/kg	95	NJ
	Unknown	9.7	169	ug/kg		J
112-95-8	Eicosane	9.73	215	ug/kg	95	NJ
	Unknown	9.86	171	ug/kg		J
	Unknown	10.06	1270	ug/kg		J
	Unknown	10.41	188	ug/kg		J
	Unknown	10.52	248	ug/kg		J
	Unknown	12.3	191	ug/kg		J
	Unknown	12.92	295	ug/kg		J
	Unknown	13.11	220	ug/kg		J
14021-23-9	D-Friedoolean-14-ene, 3-methoxy-, (3.bet	13.32	3100	ug/kg	83	NJ
	Unknown	13.46	359	ug/kg		J
	Unknown	13.73	742	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.81	1110	ug/kg	93	NJ
	Unknown	14.34	590	ug/kg		J
	Unknown	14.4	248	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1917.d
 Lab Smp Id: 244626009 Client Smp ID: RE12-10-7271
 Inj Date : 19-JAN-2010 16:28
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626009|942840|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	7.57100	% 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	3.931	3.940	(1.000)	568965	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1912920	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1142685	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2051513	40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1775679	40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1260571	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	956968	67.8204	2440
\$ 5 Phenol-d5	99	3.648	3.651	(0.928)	1155107	66.3799	2390
\$ 20 Nitrobenzene-d5	82	4.295	4.301	(0.895)	548769	37.3625	1340
\$ 39 2-Fluorobiphenyl	172	5.542	5.548	(0.915)	1095523	36.2420	1300
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	312335	85.9983	3090
\$ 81 p-Terphenyl-d14	244	8.613	8.611	(0.893)	1242435	44.5613	1600

ION RATIO REPORT

SV REPORT

Data file: s5a1917.d

Report Date: 01/20/2010 07:06

Lab. ID: 244626009

SampleType: SAMPLE

Injection Date: 19-JAN-2010 16:28

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626009|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline CAS#: 62-53-3						
66	64020	3.65	3.72	80-120	100	(T)
93	2911	3.61	3.72	210-270	5	(QT)

17 N-Nitrosodipropylamine CAS#: 621-64-7						
70	79887	4.30	4.18	80-120	100	(T)
42	46981	4.30	4.18	44-104	59	(T)

27 Benzoic acid CAS#: 65-85-0						
105	8133	4.55	4.57	80-120	100	()
122	5856	4.54	4.57	39- 99	72	()
77	5293	4.57	4.57	34- 94	65	()

40 2-Chloronaphthalene CAS#: 91-58-7						
162	20289	5.79	5.66	80-120	100	(T)
164	1315	5.79	5.66	4- 64	6	(T)
127	1666	5.79	5.66	9- 69	8	(QT)

42 o-Nitroaniline CAS#: 88-74-4						
65	27069	5.79	5.71	80-120	100	(T)
92	31730	5.79	5.71	31- 91	117	(QT)
138	2330	5.79	5.71	70-130	9	(QT)

43 Dimethylphthalate CAS#: 131-11-3						
163	202745	6.06	5.82	80-120	100	(T)
164	1142685	6.06	5.82	0- 40	564	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	153419	6.06	5.88	80-120	100	(T)
63	1708	6.06	5.88	61-121	1	(QT)
<hr/>						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	153419	6.06	6.17	80-120	100	(T)
89	3179	6.06	6.17	47-107	2	(QT)
63	1708	6.06	6.17	23- 83	1	(QT)
<hr/>						
52	4-Nitrophenol			CAS#: 100-02-7		
139	337	6.19	6.10	80-120	100	(T)
109	391	6.18	6.10	41-101	116	(QT)
65	1327	6.18	6.10	72-132	393	(QT)
<hr/>						
53	Fluorene			CAS#: 86-73-7		
166	16968	6.65	6.47	80-120	100	(T)
165	17331	6.65	6.47	56-116	102	(T)
167	6061	6.65	6.47	0- 44	36	(T)
<hr/>						
55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	1188	6.65	6.49	80-120	100	(T)
105	2653	6.65	6.49	12- 72	223	(QT)
51	2125	6.65	6.49	42-102	179	(QT)
<hr/>						
61	4-Bromophenylphenylether			CAS#: 101-55-3		
248	21928	6.65	6.84	80-120	100	(T)
141	139362	6.65	6.83	43-103	636	(QT)
250	44040	6.65	6.84	68-128	201	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1917.d
 Lab Smp Id: 244626009 Client Smp ID: RE12-10-7271
 Inj Date : 19-JAN-2010 16:28
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626009|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	7.57100	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.931	3454261	40.000
* 91 Chrysene-d12	9.642	5479644	40.000
* 98 Perylene-d12	11.330	3366606	40.000

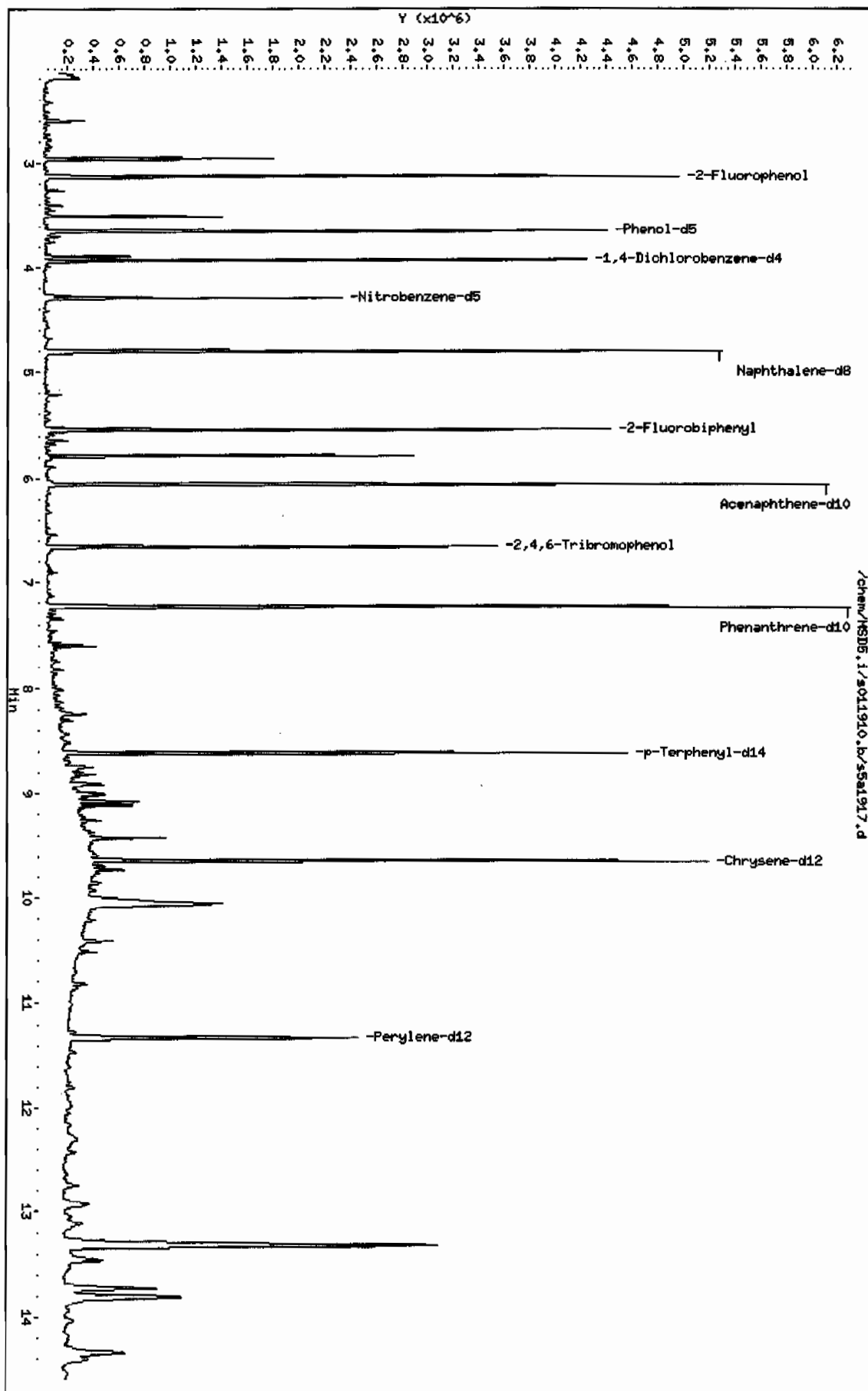
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.031	1264682	14.6448873	526	0		0	10
Unknown					CAS #:		
2.172	473177	5.47934660	197	0		0	10
Propanoic acid					CAS #: 79-09-4		
2.201	499065	5.77912232	208	91	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.960	1533459	17.7572986	638	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
3.507	950072	11.0017369	396	97	NIST05.L	15188	10
3-Carene					CAS #: 13466-78-9		
3.895	544150	6.30119940	226	96	NIST05.L	15156	10
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.077	615160	4.49051111	161	98	NIST05.L	133618	91
Unknown					CAS #:		
9.107	719238	5.25024900	189	0		0	91
Cyclopentadecane					CAS #: 295-48-7		
9.419	899223	6.56409685	236	95	NIST05.L	64459	91
Unknown					CAS #:		
9.695	644733	4.70638247	169	0		0	91
Eicosane					CAS #: 112-95-8		
9.730	818075	5.97173949	215	95	NIST05.L	113492	91
Unknown					CAS #:		
9.860	650396	4.74772694	171	0		0	91
Unknown					CAS #:		
10.060	4833864	35.2859660	1270	0		0	91
Unknown					CAS #:		
10.413	716316	5.22892075	188	0		0	91
Unknown					CAS #:		
10.519	581061	6.90381883	248	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
12.301	447633	5.31850717	191	0		0	98
Unknown					CAS #:		
12.924	690623	8.20557011	295	0		0	98
Unknown					CAS #:		
13.112	515091	6.12000286	220	0		0	98
D-Friedoolean-14-ene, 3-methoxy-, (3.bet					CAS #: 14021-23-9		
13.324	7264411	86.3113667	3100	83	NIST05.L	178753	98
Unknown					CAS #:		
13.460	841306	9.99589076	359	0		0	98
Unknown					CAS #:		
13.730	1736498	20.6320249	742	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.812	2601556	30.9101326	1110	93	NIST05.L	174403	98
Unknown					CAS #:		
14.342	1381966	16.4196935	590	0		0	98
Unknown					CAS #:		
14.401	579882	6.88980530	248	0		0	98

Data File: /chem/MSDS.1/s011910.b/s5a1917.d
Date: 19-JAN-2010 16:28
Client ID: RE12-10-7271
Sample Infor: 124462609194284011SVH11L16NL
Volume Injected (uL): 0.5
Column Phase: 3uM DB-SHS

Instrument: MSD5.1
Operator: RMB
Column diameter: 0.20



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: I2446260091942840118VH11ILANL

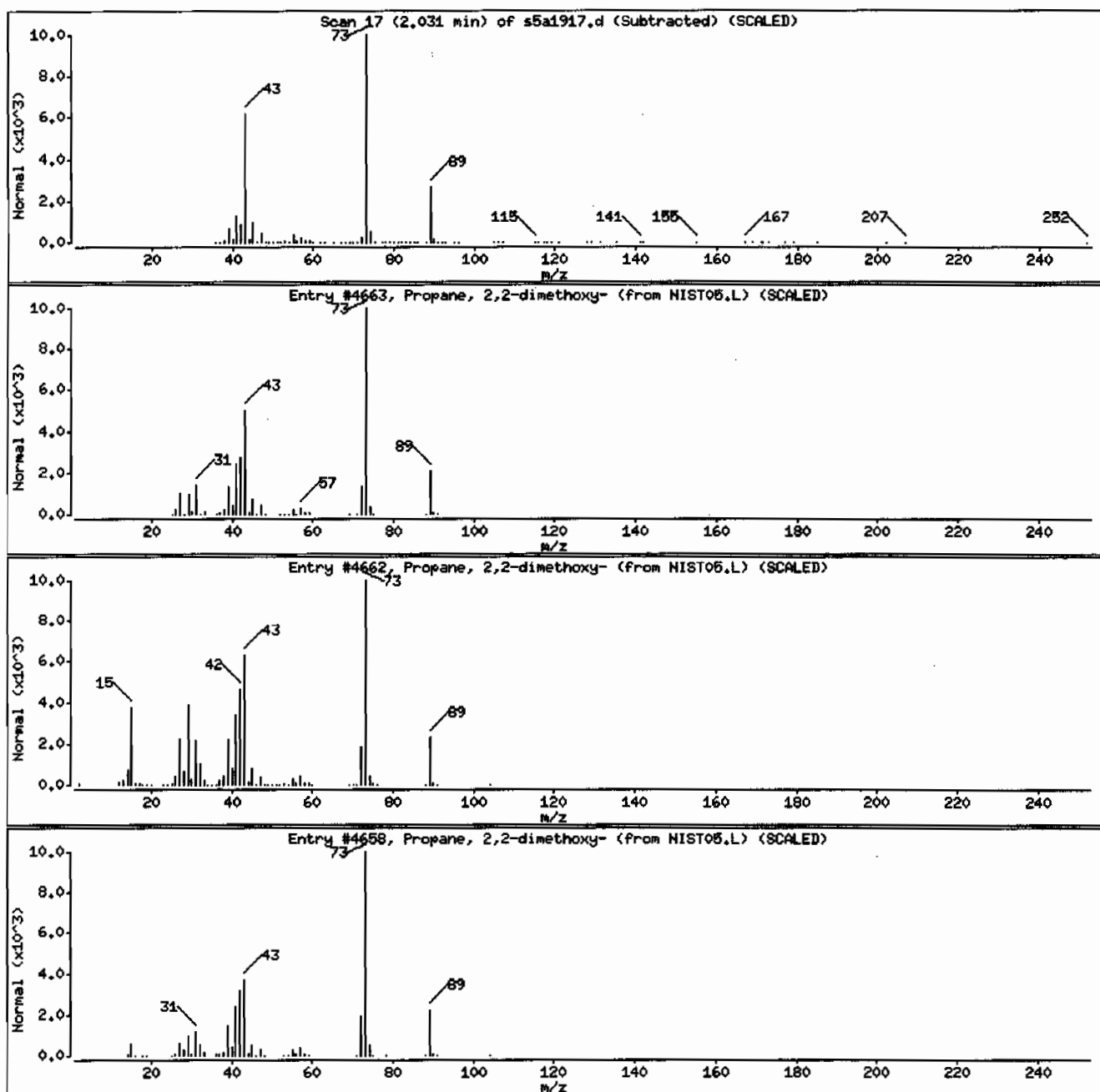
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	78	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	40	C5H12O2	104



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVH11ILANL

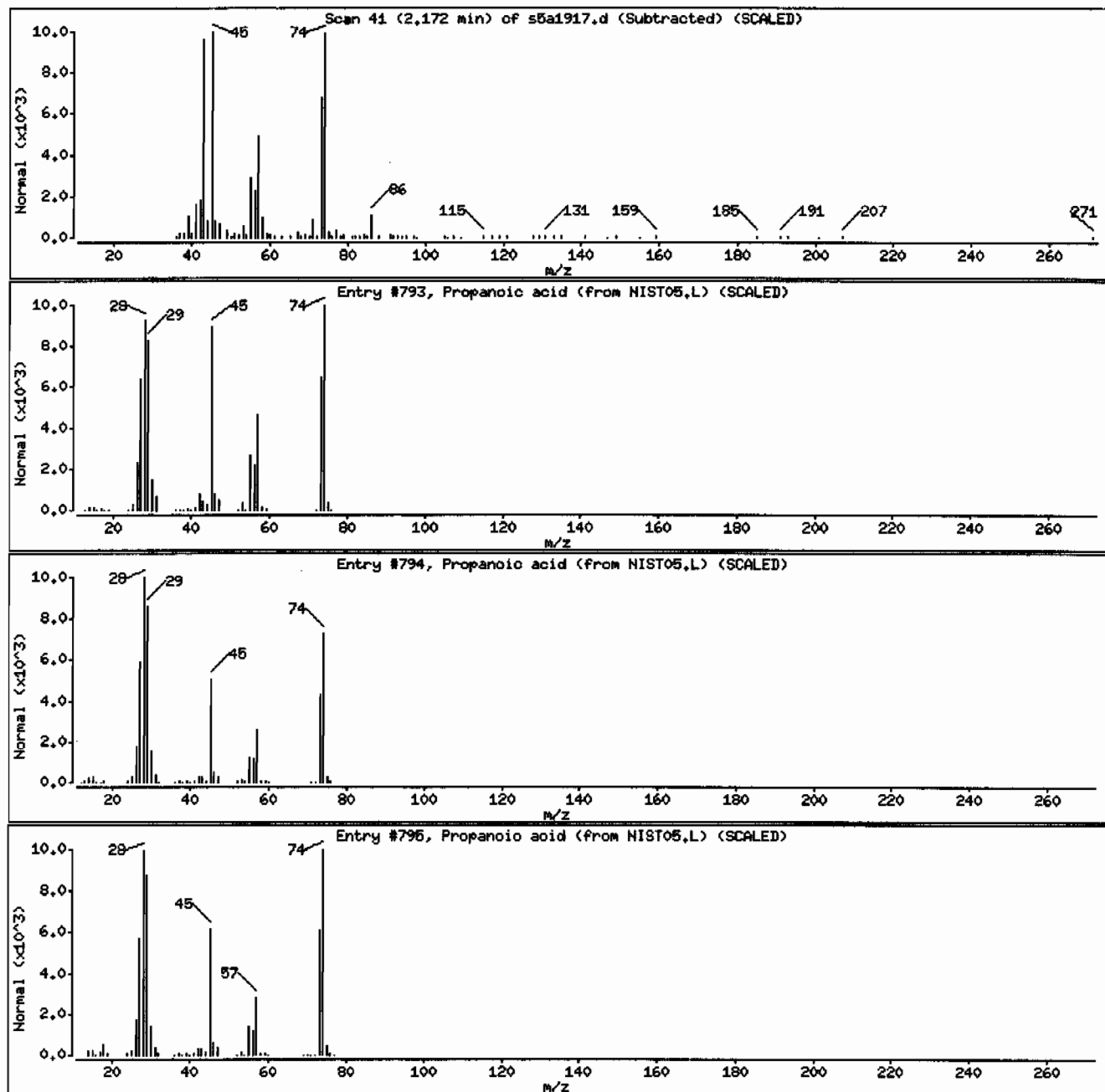
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanoic acid	79-09-4	NIST05.L	793	87	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	80	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	72	C3H6O2	74



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.1

Sample Info: 1244626009194284011SVMI1ILANL

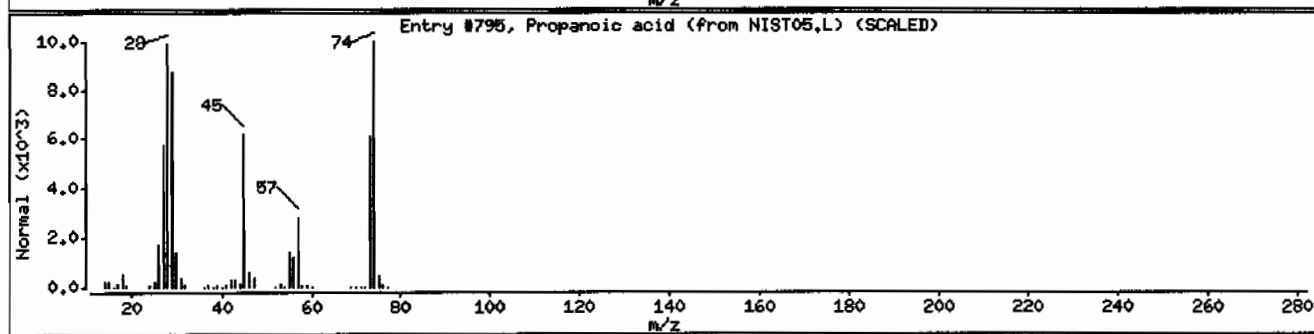
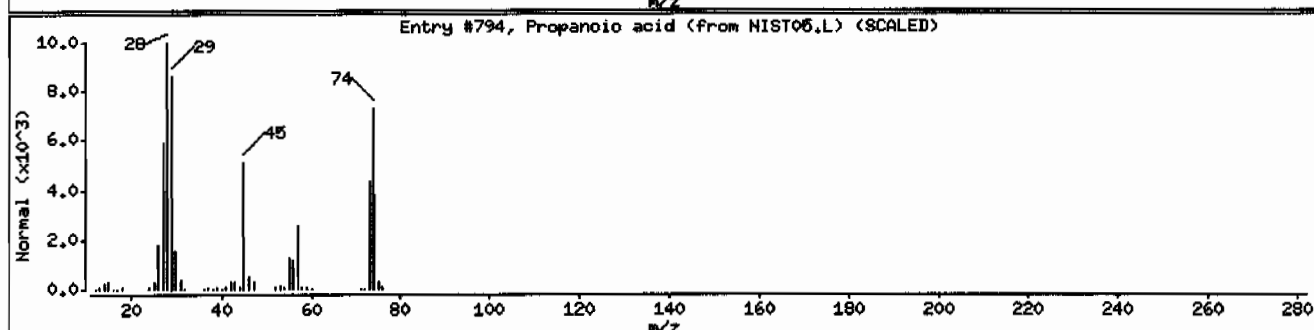
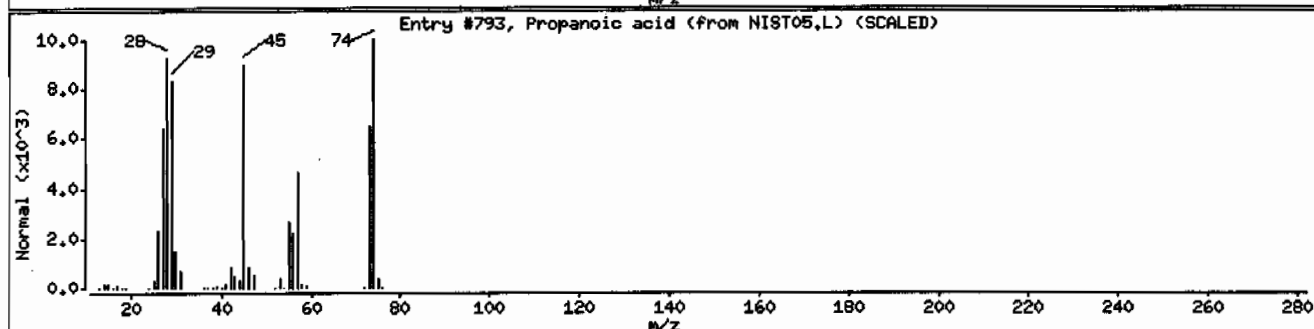
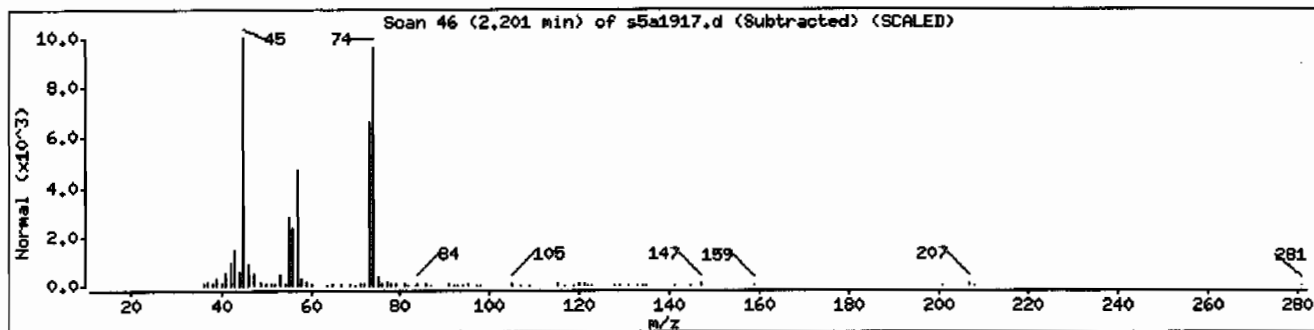
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	91	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	90	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	90	C3H6O2	74



Date: 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVH11ILANL

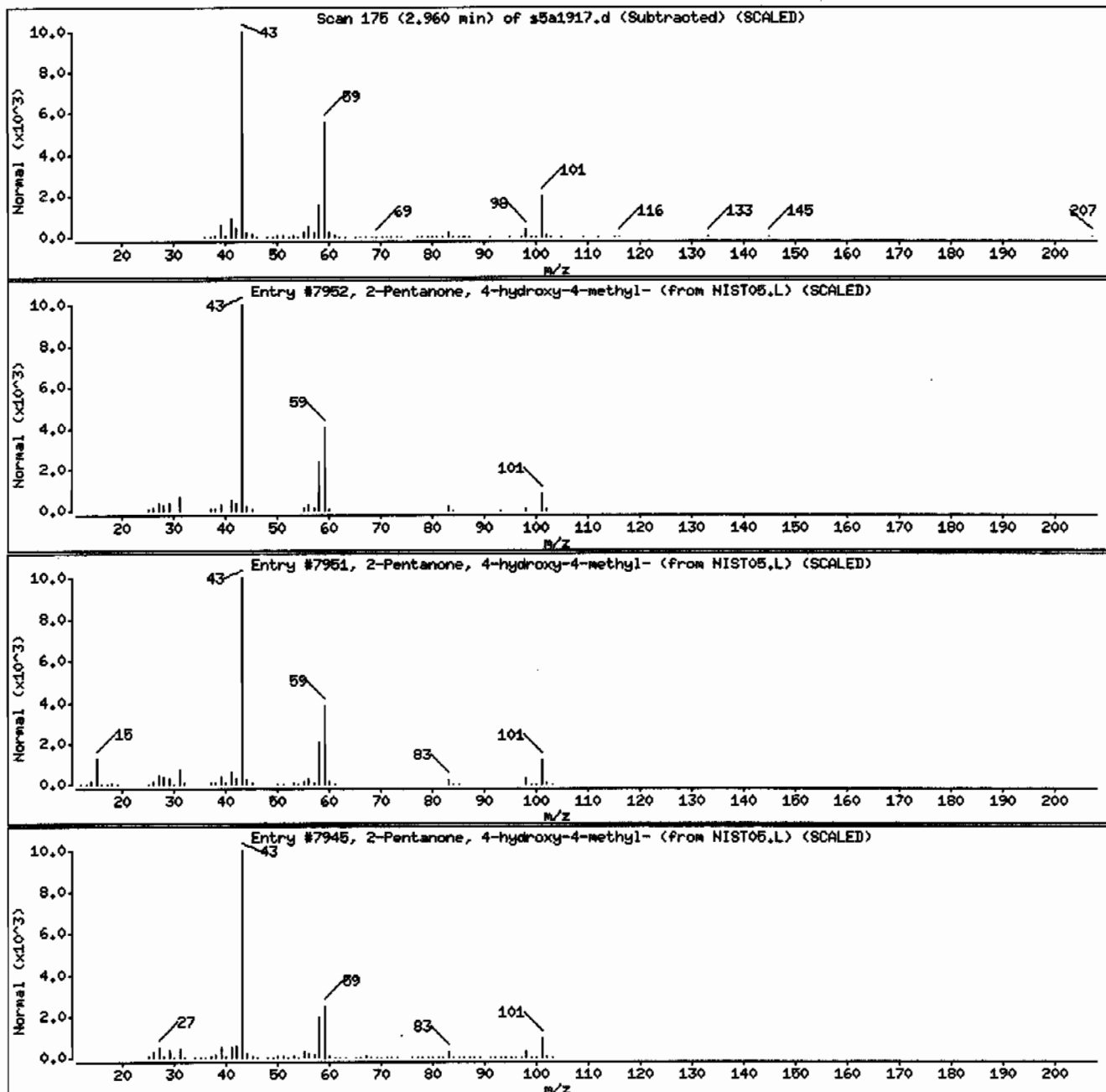
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	45	C6H12O2	116



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.1

Sample Info: 1244626009194284011ISVH11ILANL

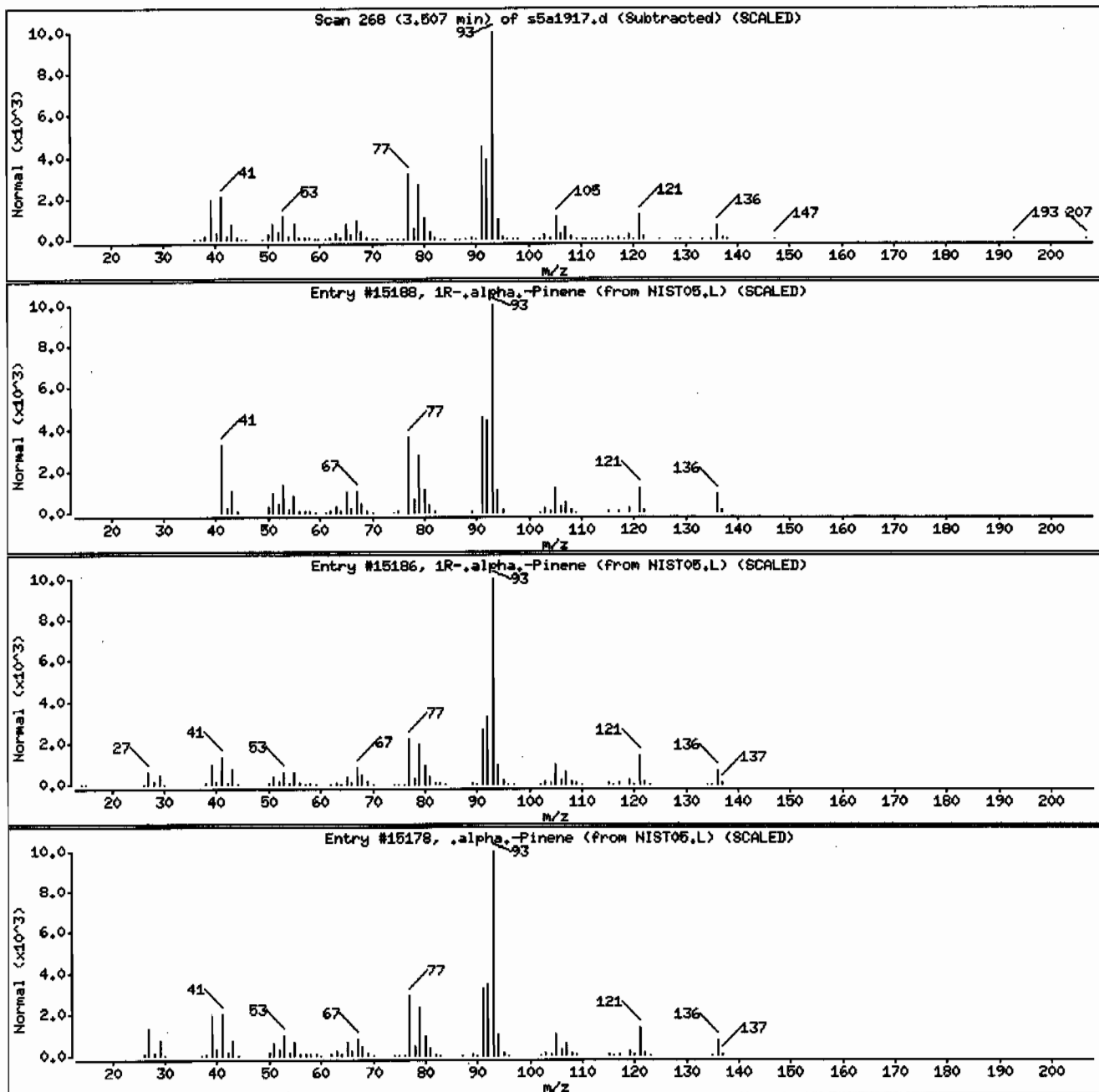
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	97	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.i

Sample Info: I244626009194284011SVMI11LANL

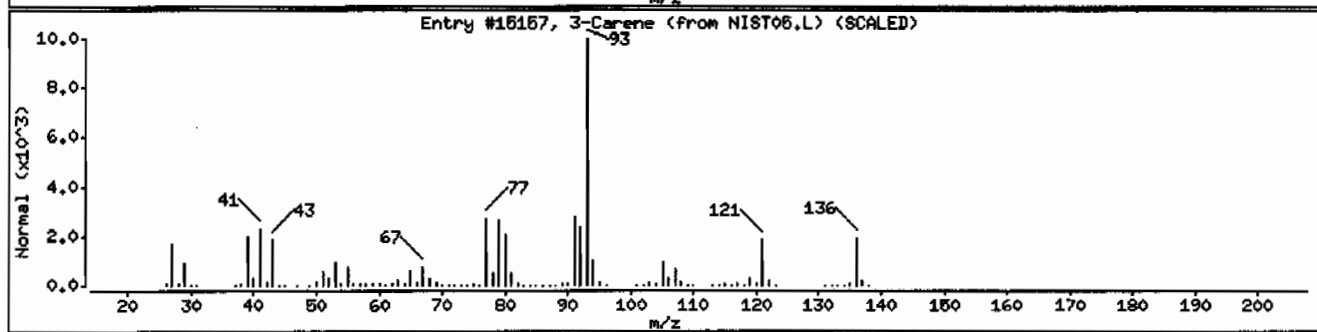
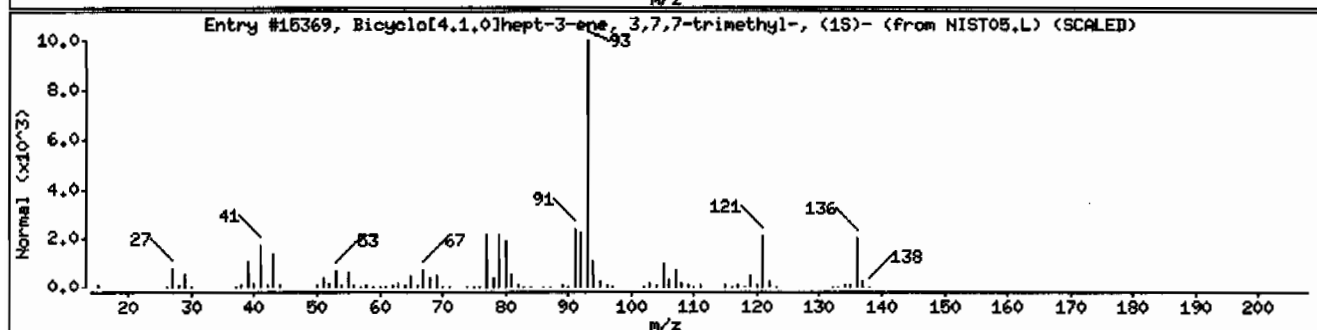
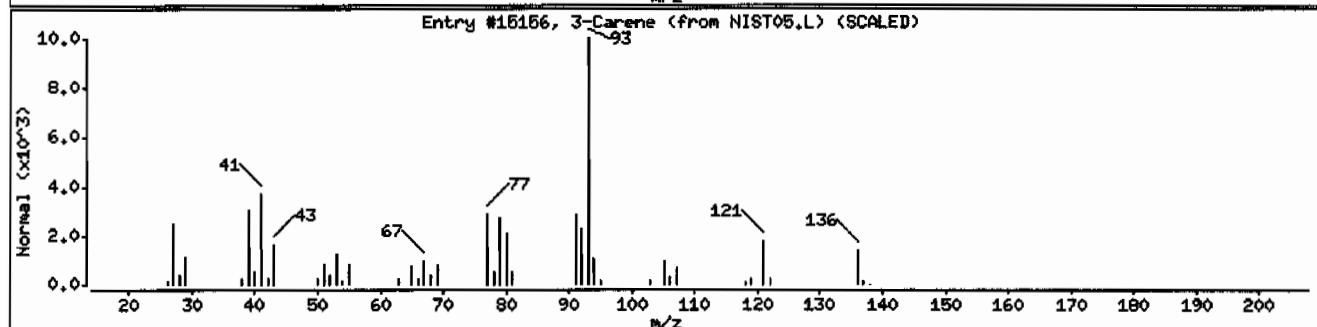
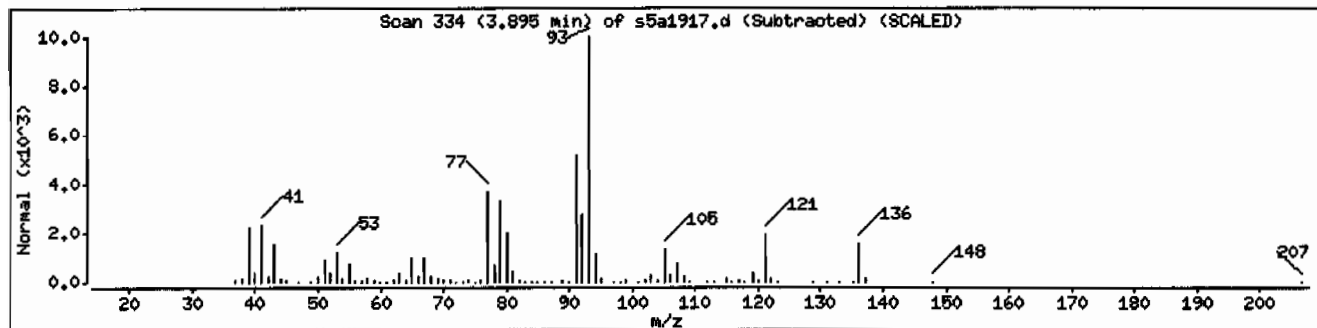
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	498-15-7	NIST05.L	15369	95	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	95	C10H16	136



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.1

Sample Info: 1244626009194284011ISVH11ILANL

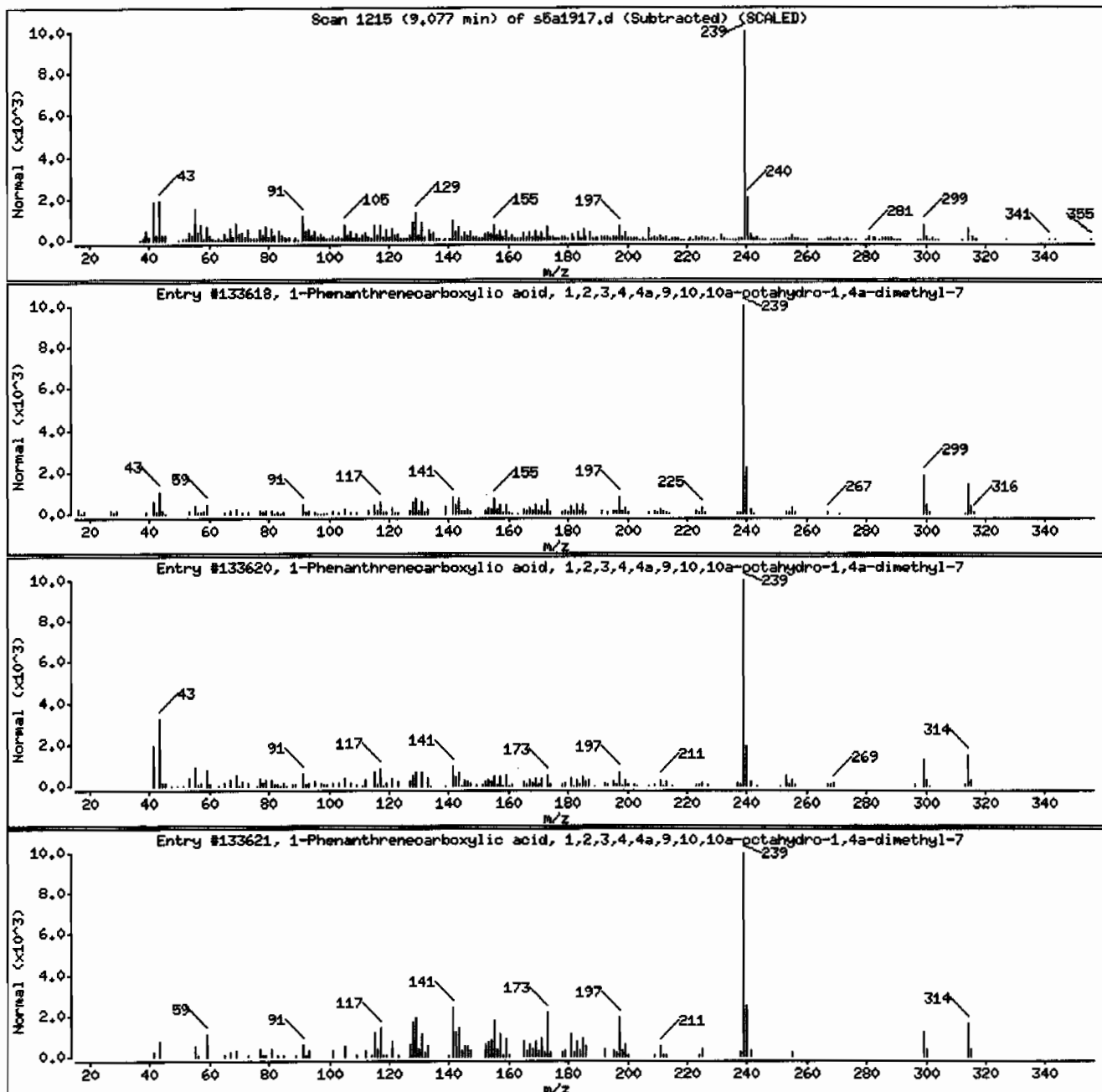
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	93	C21H30O2	314



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVMI1ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-SMS

Column diameter: 0.20

Library Search Compound Match

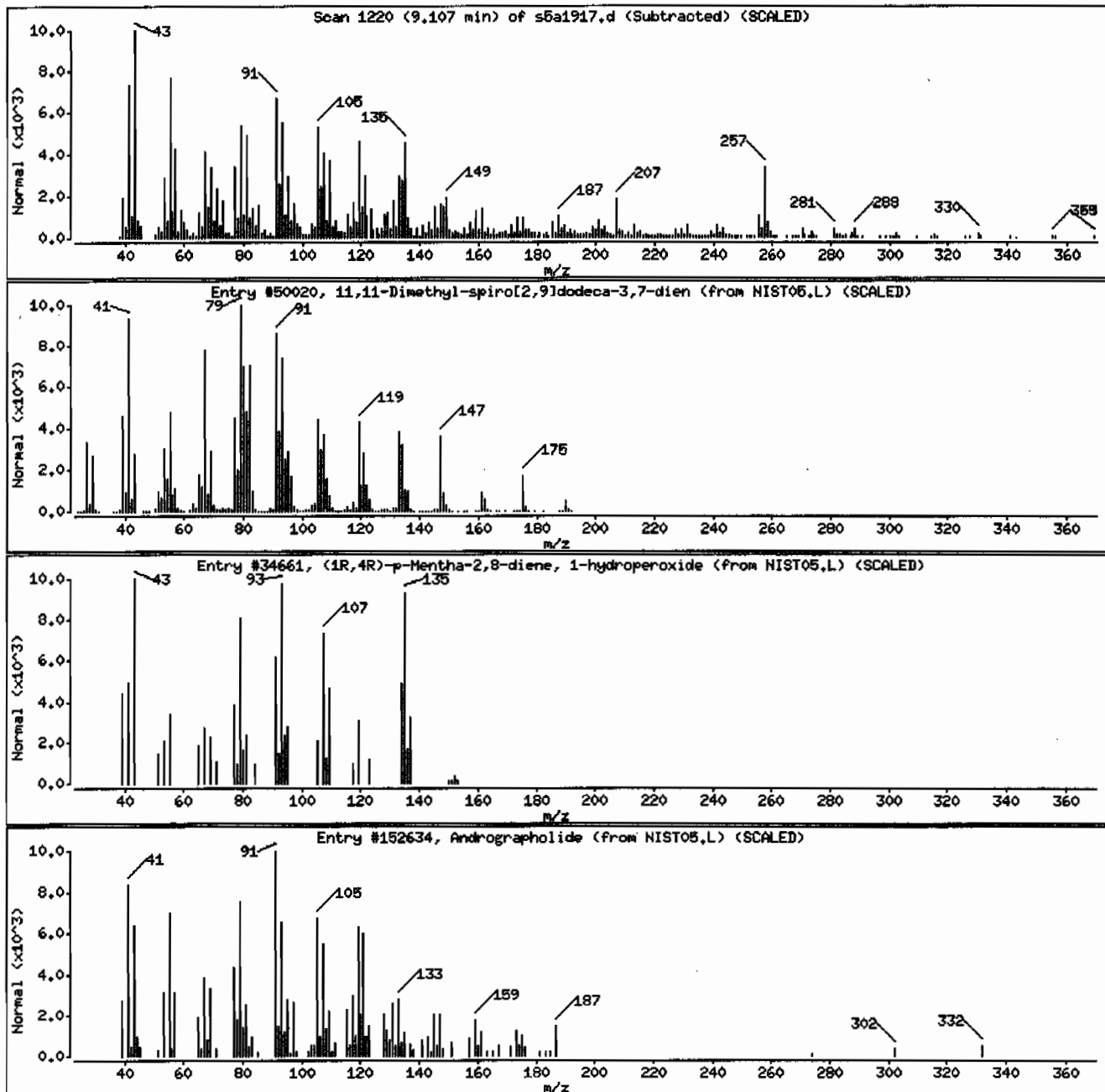
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11,11-Dimethyl-spiro[2,9]dodeca-3,7-dien

CAS Number	Library	Entry	Quality	Formula	Weight
1000062-28-4	NIST05.L	50020	58	C14H22	190
1000292-74-0	NIST05.L	34661	50	C10H16O2	168
5508-58-7	NIST05.L	152634	46	C20H30O5	350

(1R,4R)-p-Mentha-2,8-diene, 1-hydroperox

Andrographolide



Date: 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.i

Sample Info: 1244626009194294011SVH11ILANL

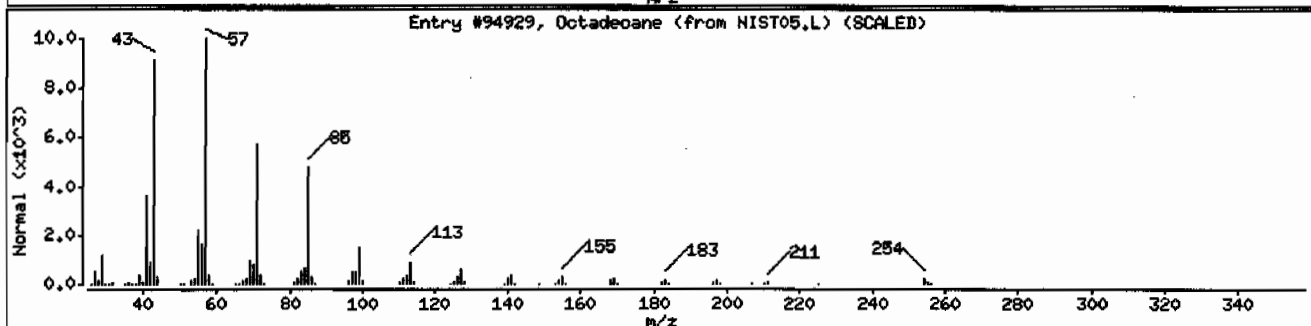
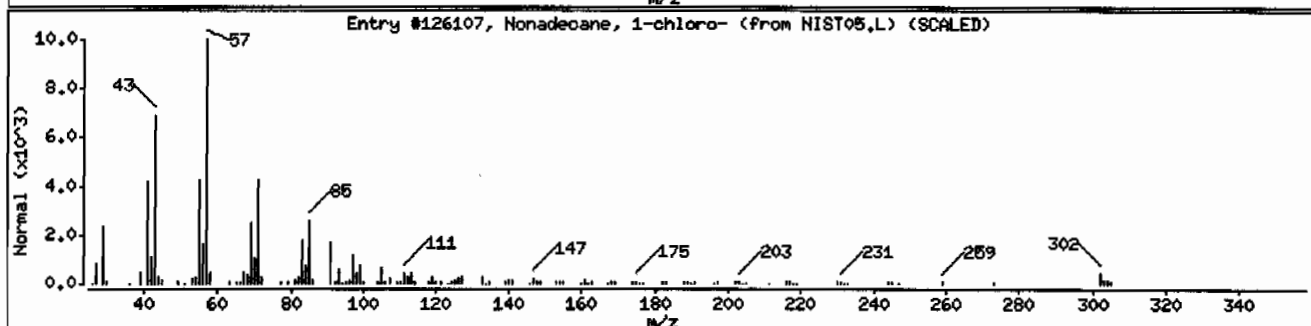
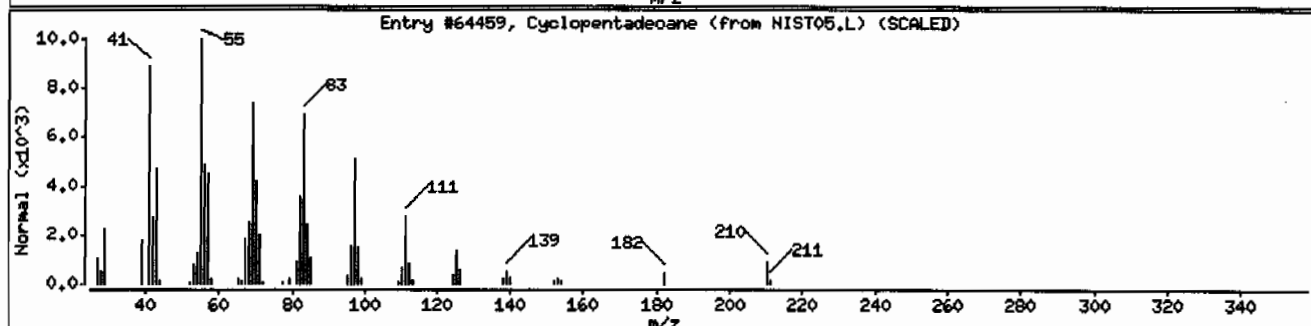
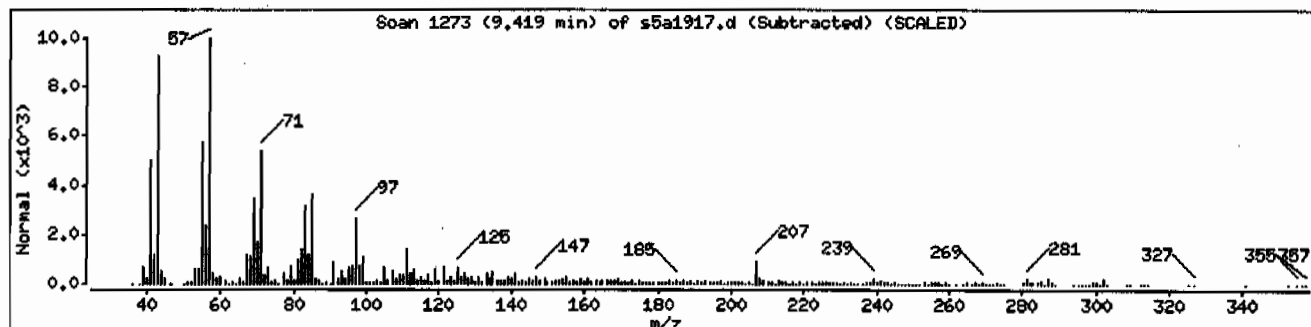
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentadecane	295-48-7	NIST05.L	64459	95	C15H30	210
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	93	C19H39Cl	302
Octadecane	593-45-3	NIST05.L	94929	90	C18H38	254



Date: 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVH11ILANL

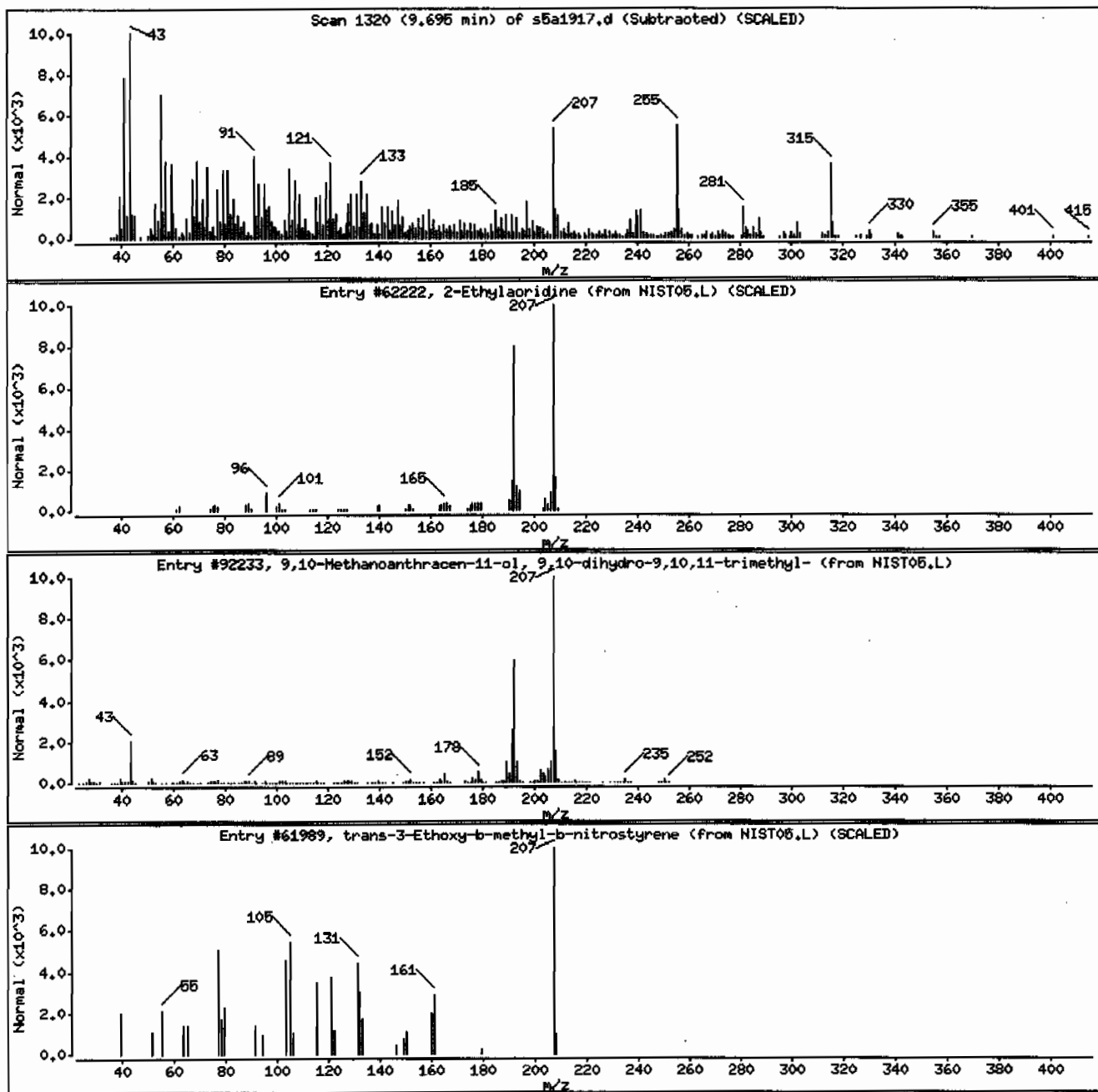
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	44	C15H13N	207
9,10-Methanthracene-11-ol, 9,10-dihydro	126615-74-5	NIST05.L	92233	25	C18H18O	260
trans-3-Ethoxy-b-methyl-b-nitrostyrene	23037-46-9	NIST05.L	61989	22	C11H13NO3	207



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011ISVH11ILANL

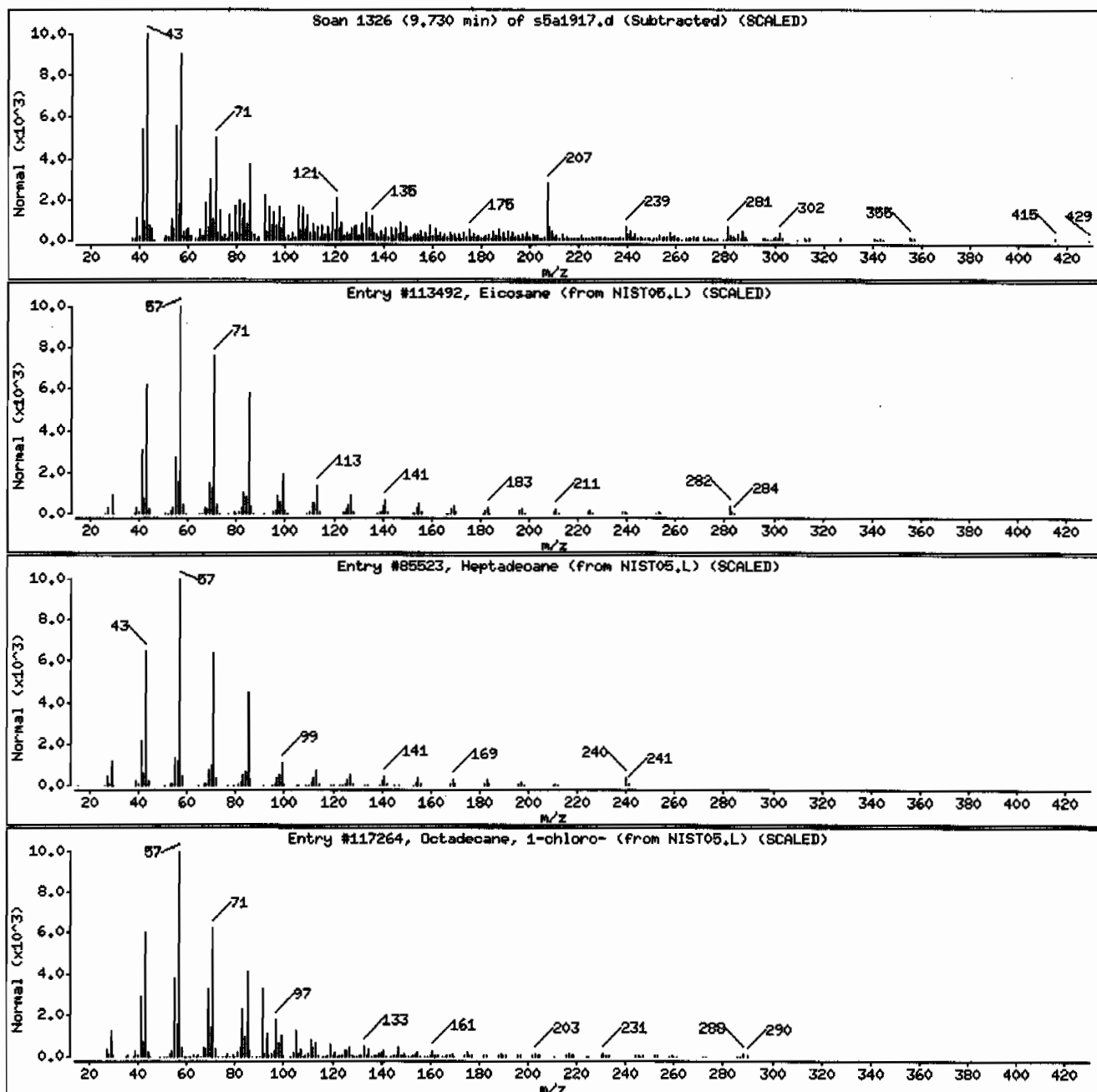
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282
Heptadecane	629-78-7	NIST05.L	85523	95	C17H36	240
Octadecane, 1-chloro-	3386-33-2	NIST05.L	117264	95	C18H37Cl	288



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVH11ILANL

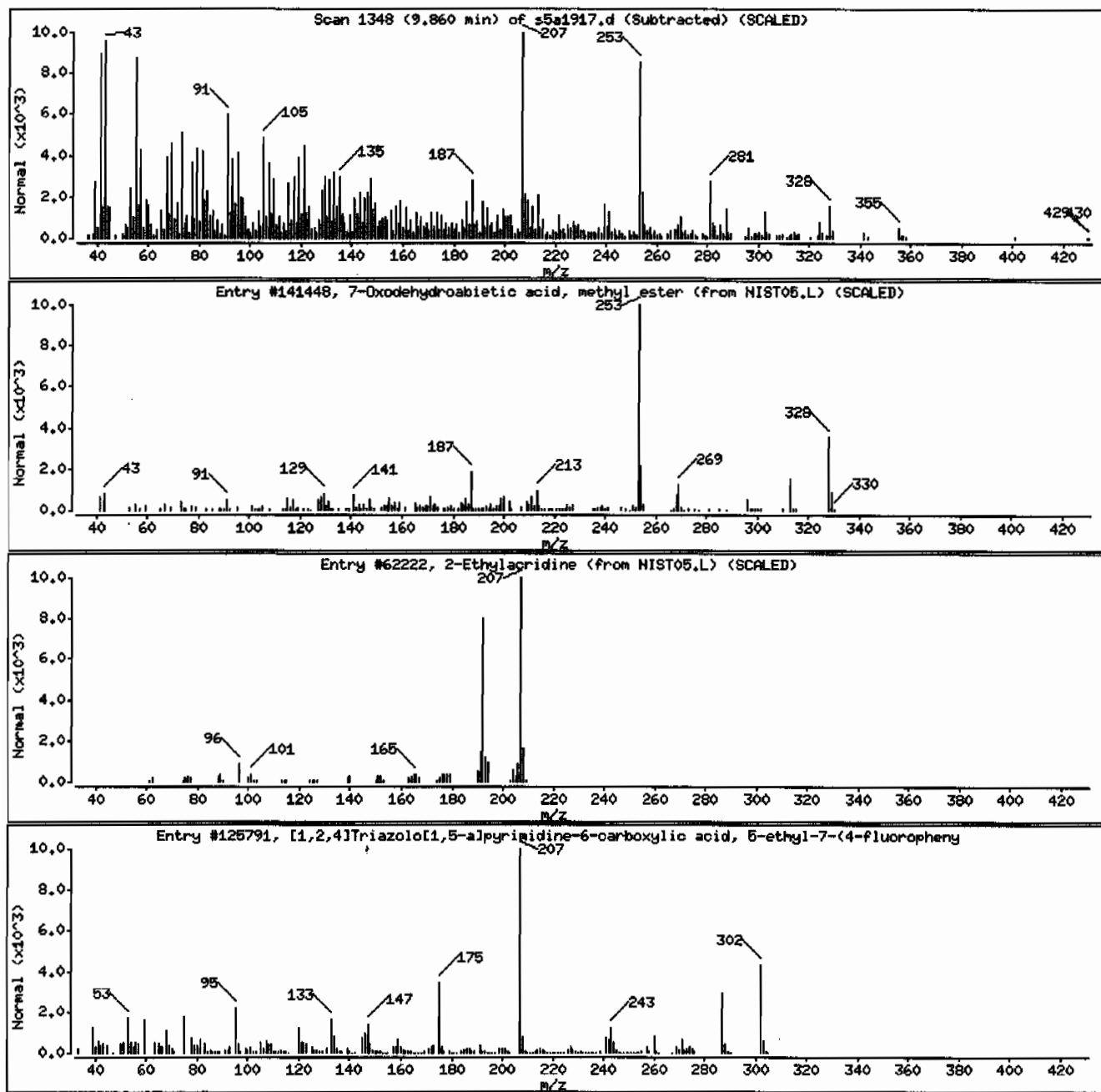
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxodehydroabietic acid, methyl ester	110936-78-2	NIST05.L	141448	62	C ₂₁ H ₂₈ O ₃	328
2-Ethylacridine	55751-83-2	NIST05.L	62222	47	C ₁₅ H ₁₃ N	207
[1,2,4]Triazol[1,5-a]pyrimidine-6-carbo	1000317-15-2	NIST05.L	125791	30	C ₁₅ H ₁₅ N ₄ O ₂	302



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.i

Sample Info: 1244626009194284011SVH11ILANL

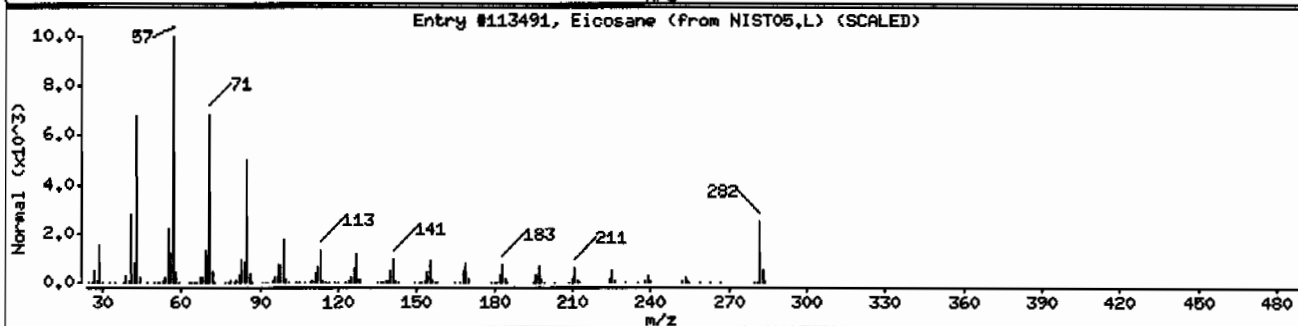
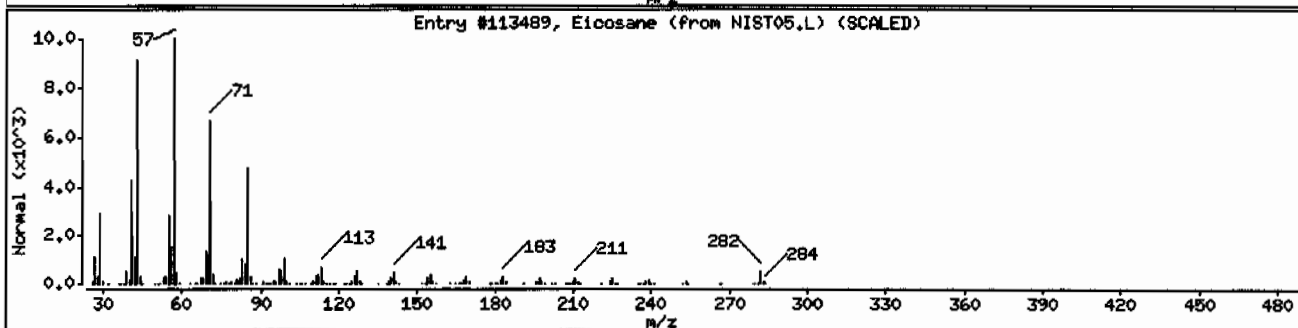
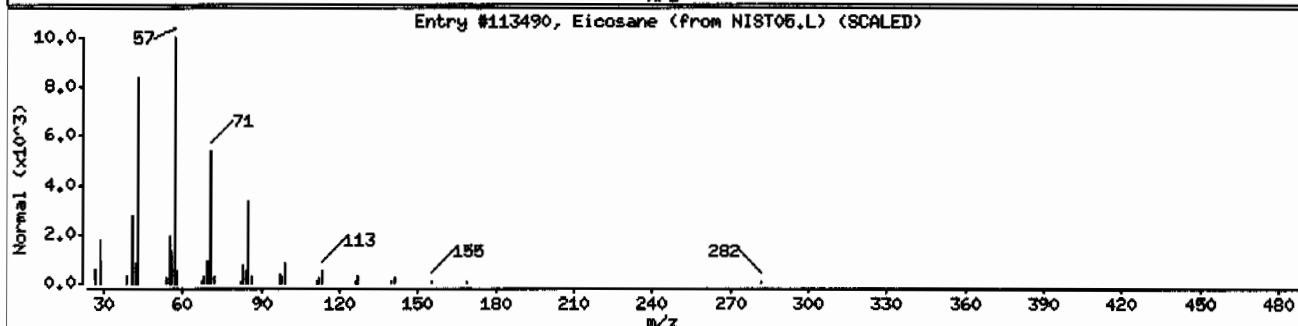
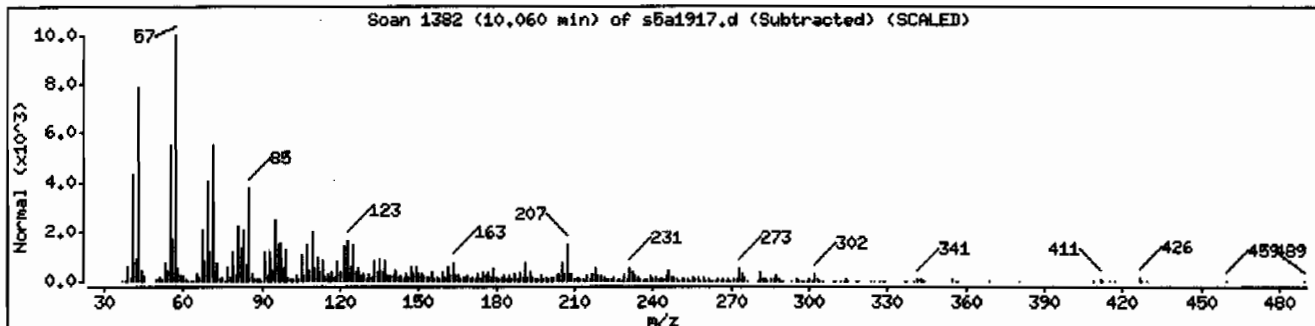
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	93	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	86	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113491	83	C ₂₀ H ₄₂	282



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.i

Sample Info: 1244626009194284011SVH11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

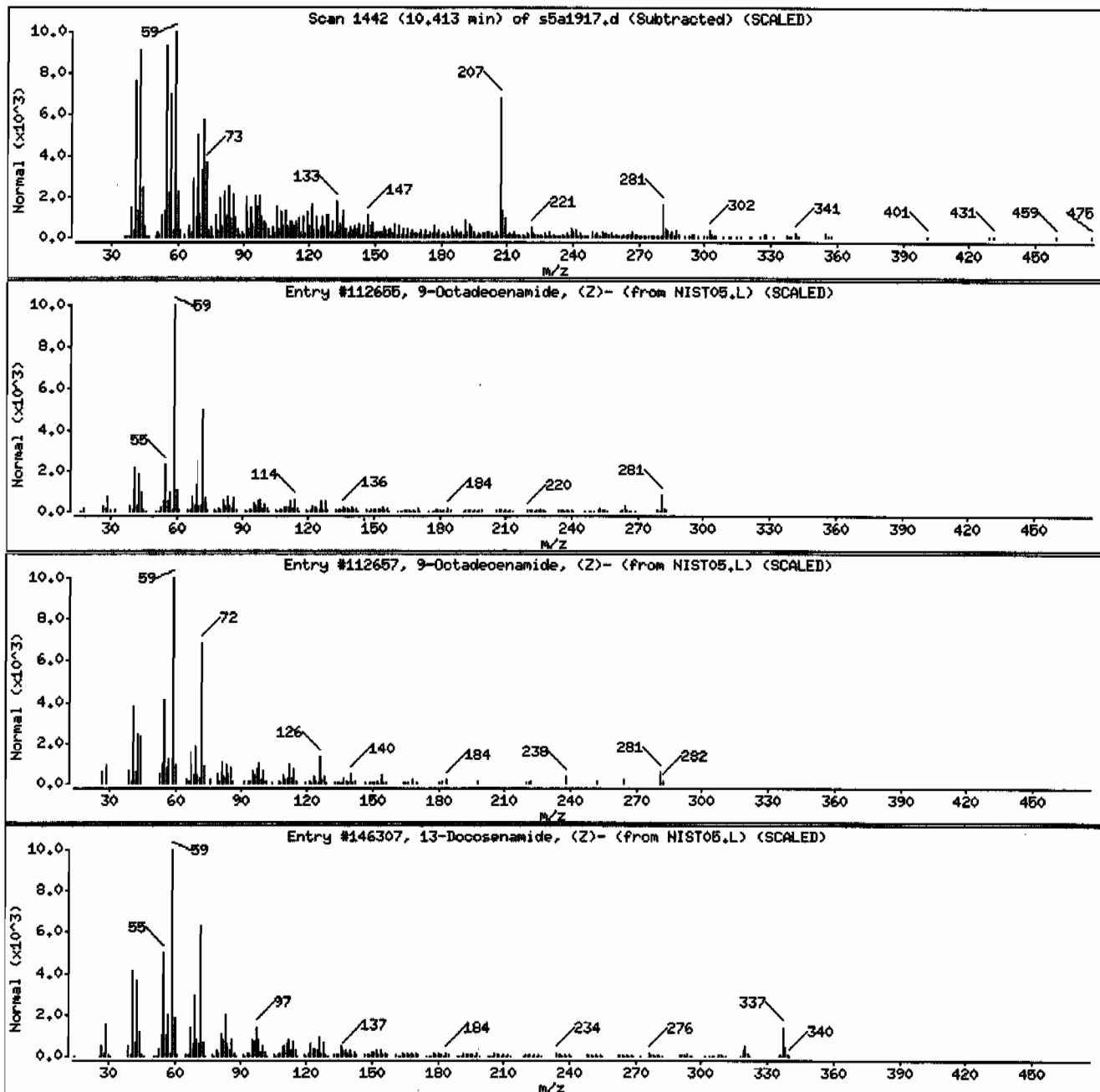
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9-Octadecenamide, (Z)-

CAS Number	Library	Entry	Quality	Formula	Weight
301-02-0	NIST05.L	112655	70	C18H35NO	281
301-02-0	NIST05.L	112657	62	C18H35NO	281
112-84-5	NIST05.L	146307	50	C22H43NO	337

9-Octadecenamide, (Z)-

13-Docosenamide, (Z)-



Date: 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVH111LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

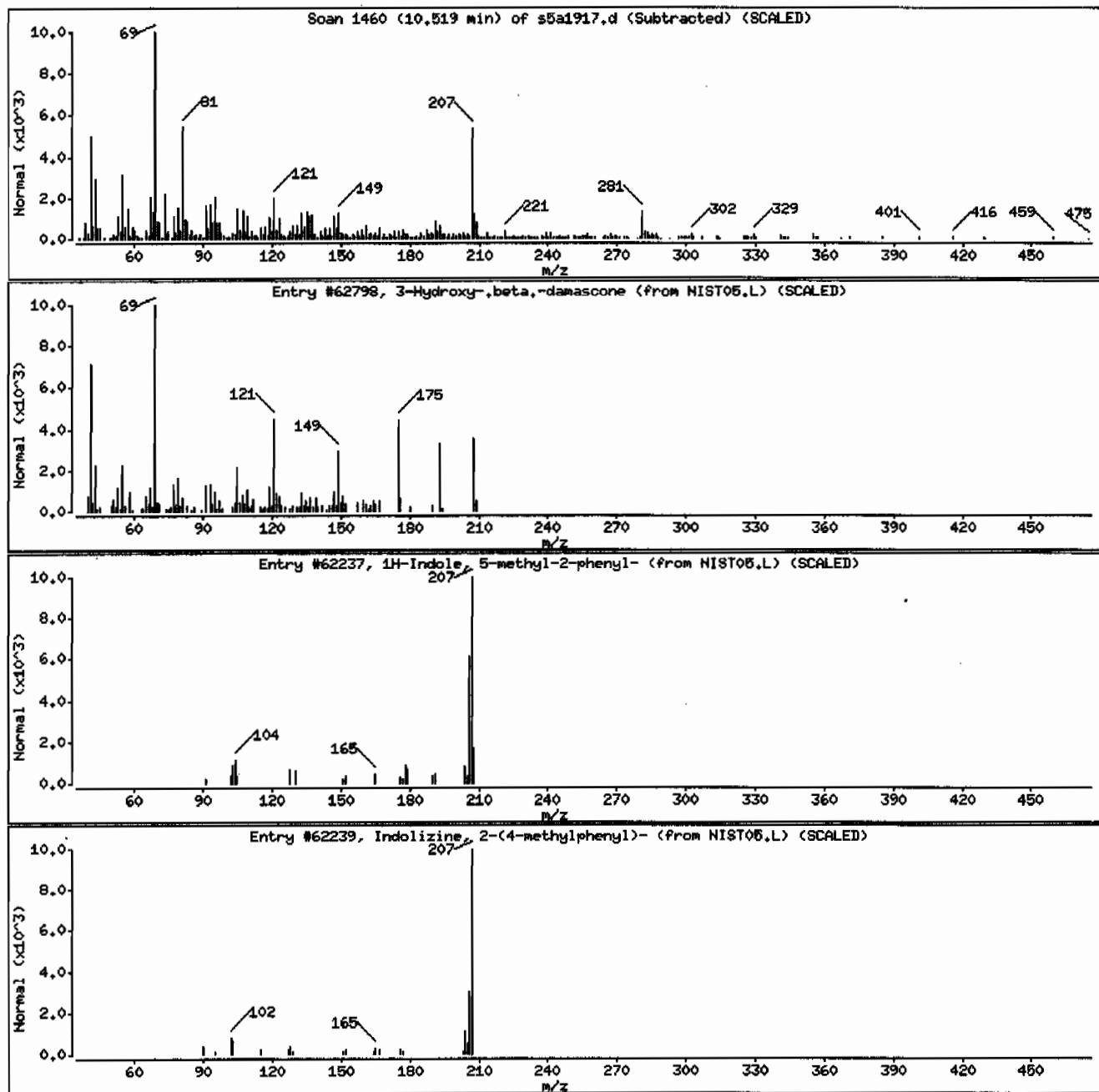
Unknown

3-Hydroxy-.beta.-damascone

CAS Number	Library	Entry	Quality	Formula	Weight
1000314-35-7	NIST05.L	62798	38	C13H20O2	208
13228-36-9	NIST05.L	62237	35	C15H13N	207
7496-81-3	NIST05.L	62239	22	C15H13N	207

1H-Indole, 5-methyl-2-phenyl-

Indolizine, 2-(4-methylphenyl)-



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.i

Sample Info: 1244626009194284011SVH11ILANL

Volume Injected (uL): 0.5

Operator: RHB

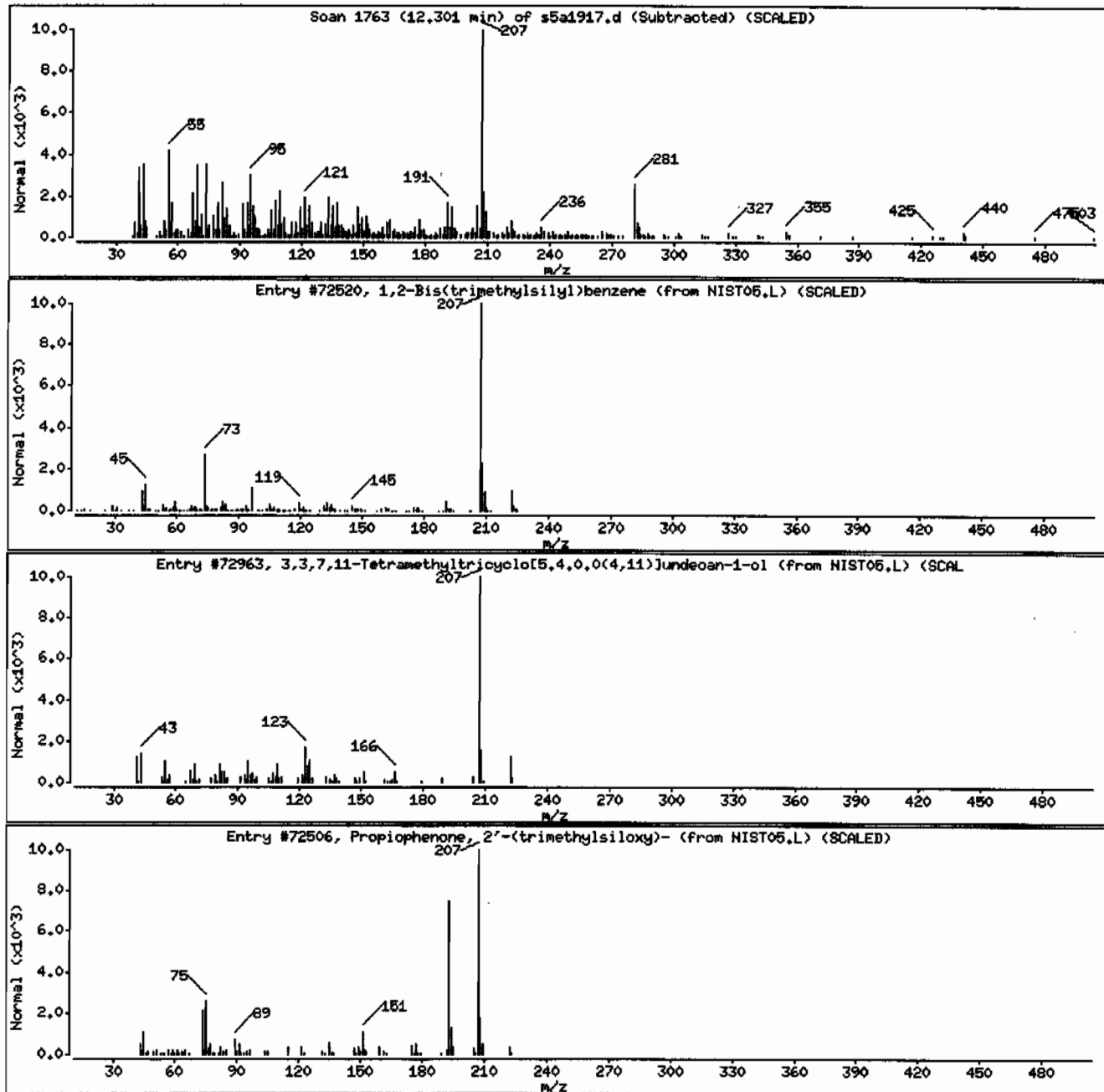
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	53	C ₁₂ H ₂₂ Si ₂	222
3,3,7,11-Tetramethyltricyclo[5.4.0.0(4,1)]undecan-1-ol	117591-80-7	NIST05.L	72963	53	C ₁₅ H ₂₆ O	222
Propiophenone, 2'-(trimethylsiloxy)-	33342-87-9	NIST05.L	72506	49	C ₁₂ H ₁₈ O ₂ Si	222



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011ISVH11ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch

Unknown

Ergosterol

CAS Number

Library

Entry

Quality

Formula

Weight

57-87-4

NIST05.L

170282

62

C28H44O

396

Ergosterol

57-87-4

NIST05.L

170280

50

C28H44O

396

Ergosterol

57-87-4

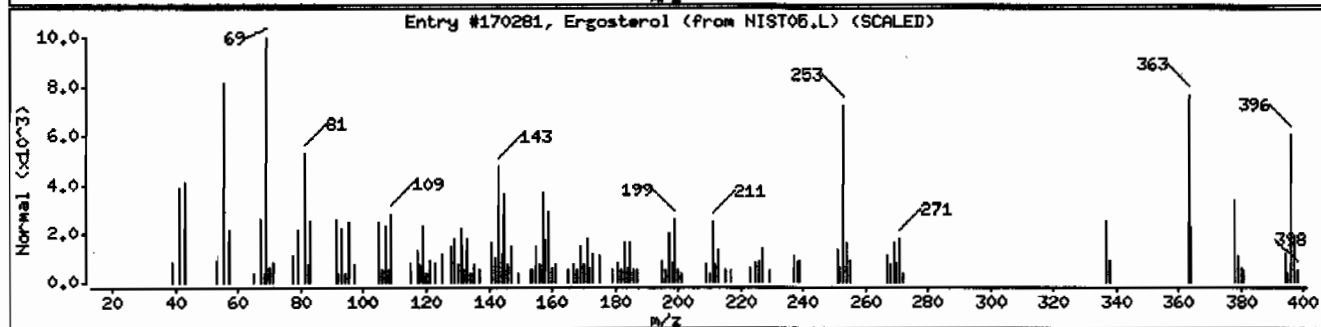
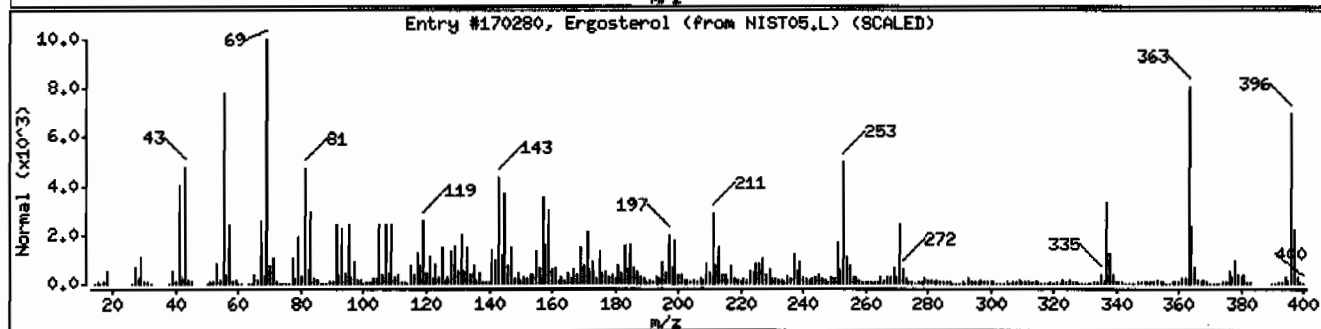
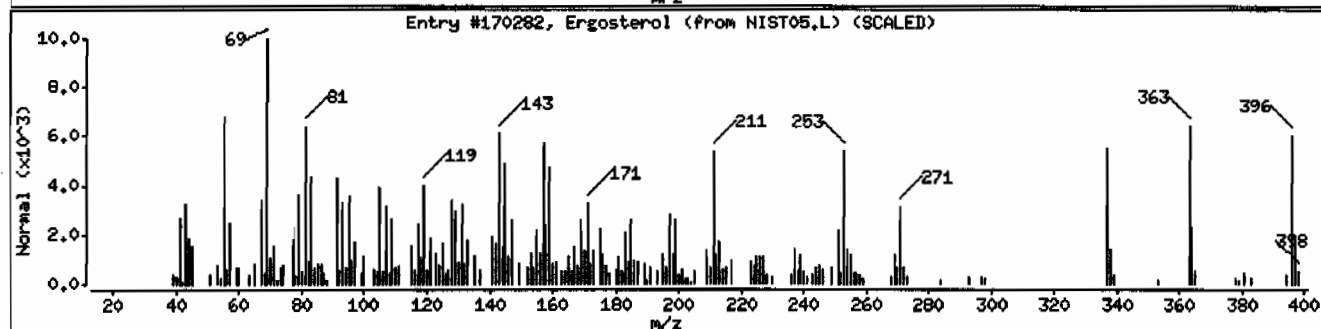
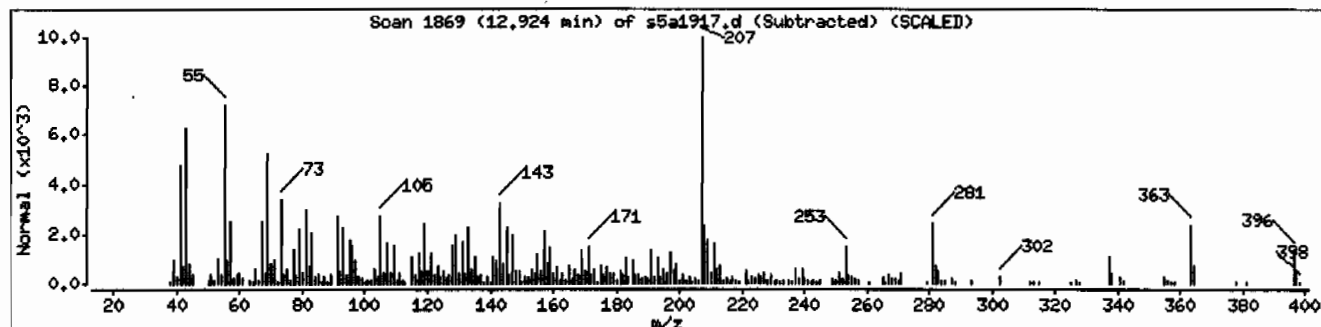
NIST05.L

170281

42

C28H44O

396



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVMI11LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

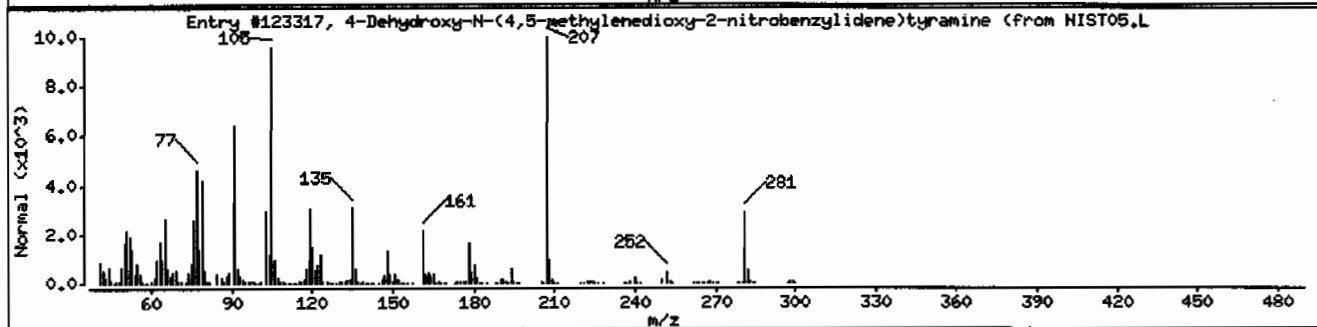
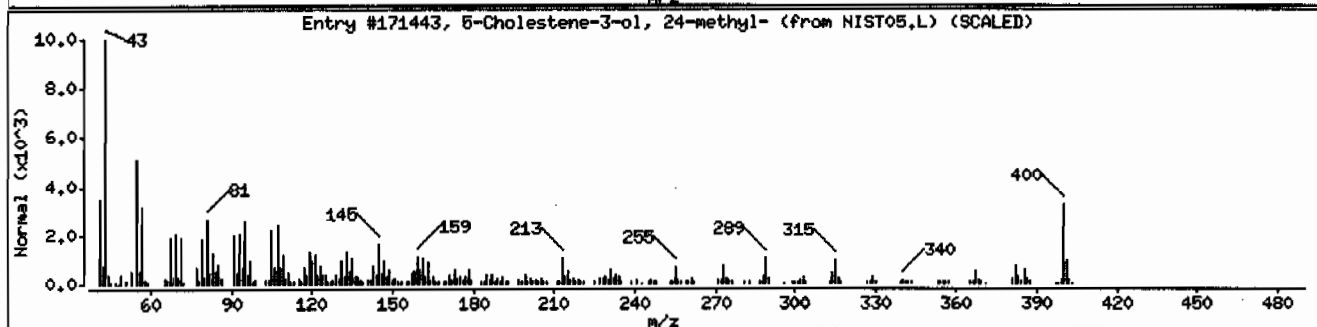
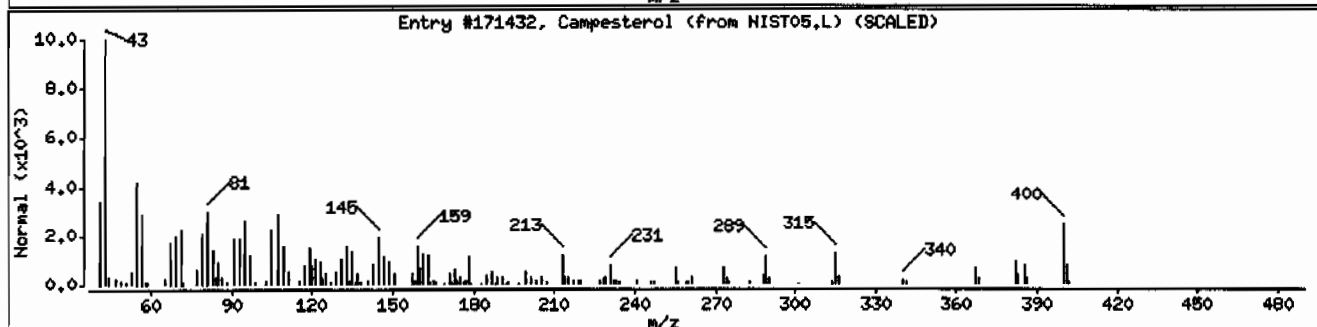
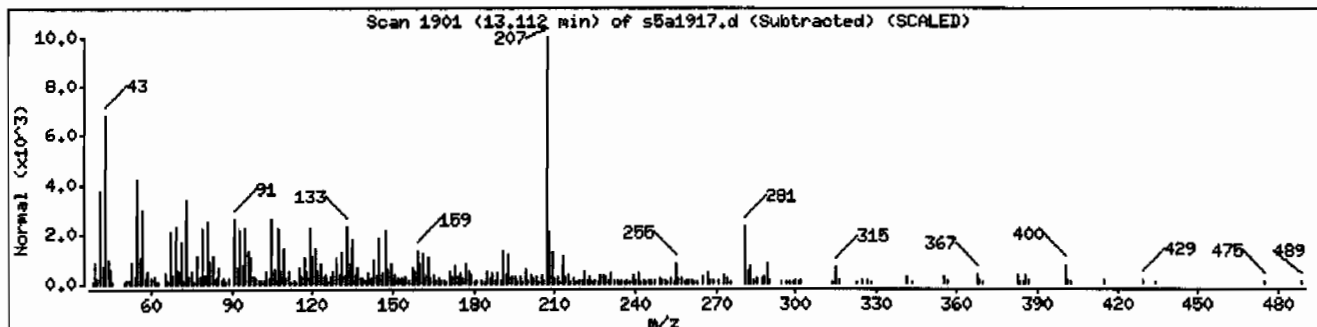
Unknown

Campesterol

5-Cholestene-3-ol, 24-methyl-

4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr

CAS Number	Library	Entry	Quality	Formula	Weight
474-62-4	NIST05.L	171432	56	C ₂₈ H ₄₈ O	400
1000214-17-4	NIST05.L	171443	56	C ₂₈ H ₄₈ O	400
1000111-66-9	NIST05.L	123317	38	C ₁₆ H ₁₄ N ₂ O ₄	298



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.1

Sample Info: 1244626009194284011SVH111LANL

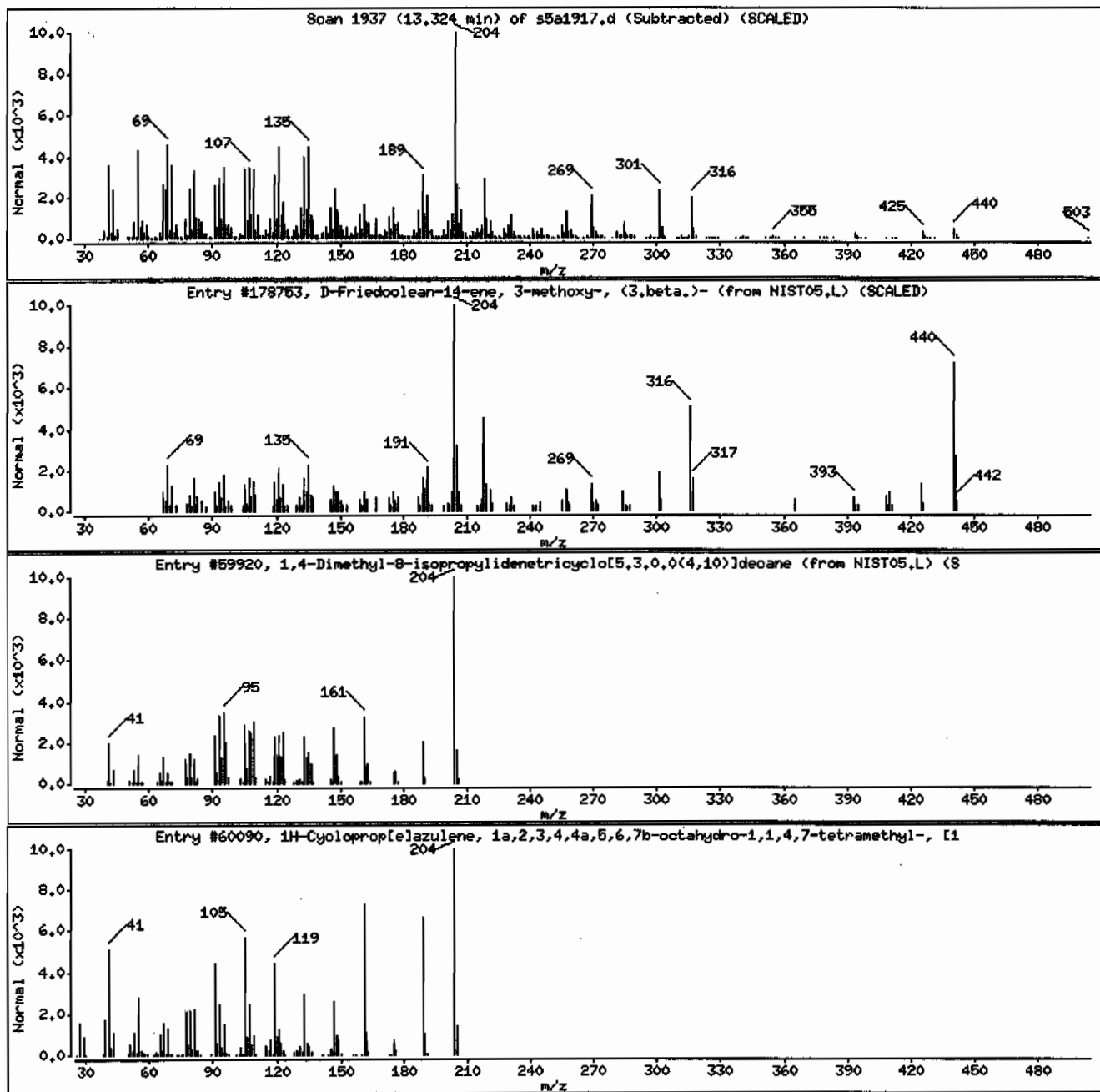
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
D-Friedoolean-14-ene, 3-methoxy-, (3,bet	14021-23-9	NIST05.L	178753	83	C31H52O	440
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	50	C15H24	204
1H-Cycloprop[elazulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60090	46	C15H24	204



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011SVMI11LANL

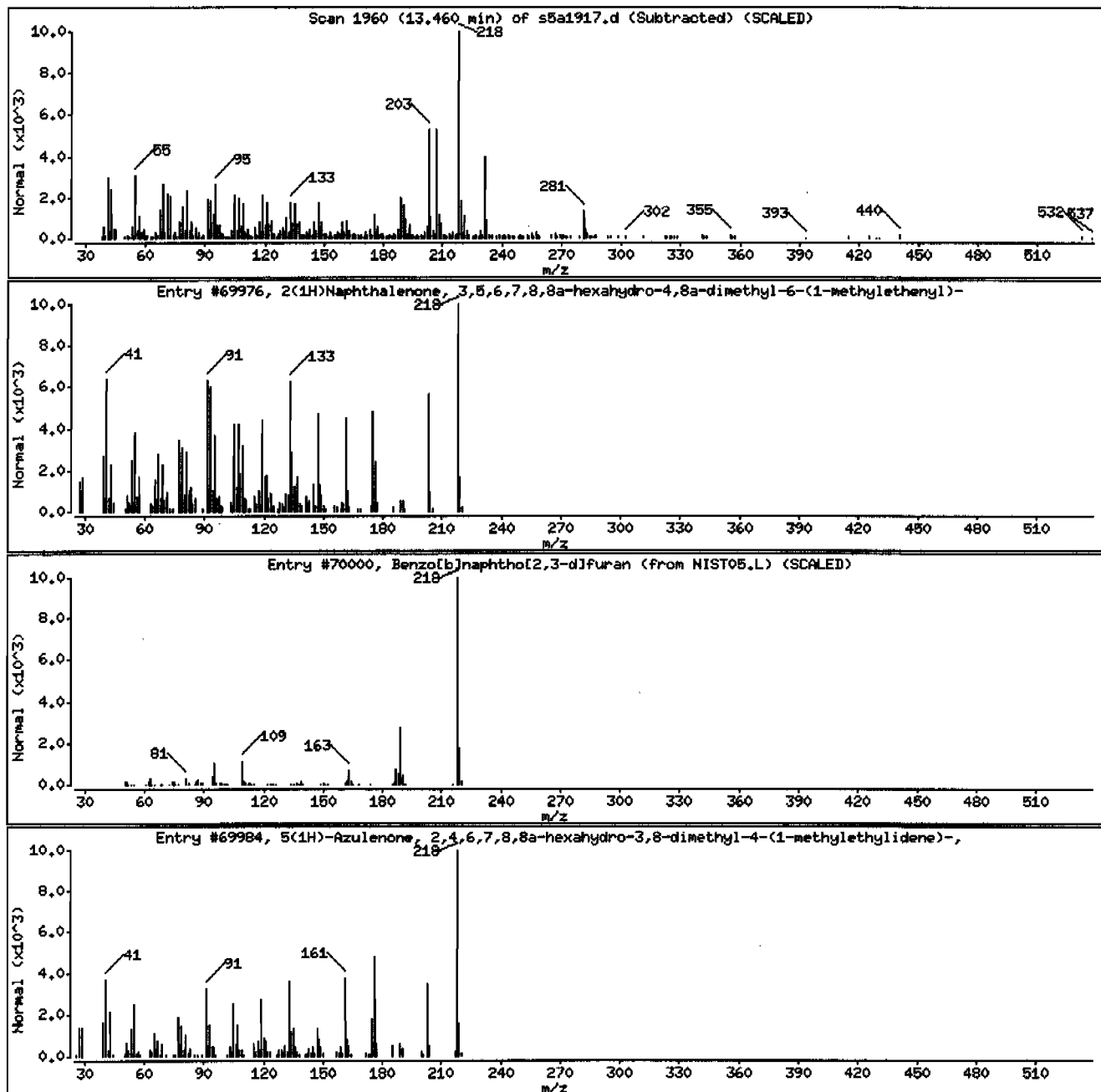
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-8	NIST05.L	69976	43	C15H22O	218
Benzo[b]naphtho[2,3-d]furan	243-42-5	NIST05.L	70000	42	C16H10O	218
5(1H)-Azulenone, 2,4,6,7,8,8a-hexahydro-	6754-66-1	NIST05.L	69984	41	C15H22O	218



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.i

Sample Info: 1244626009194284011SVMI11LANL

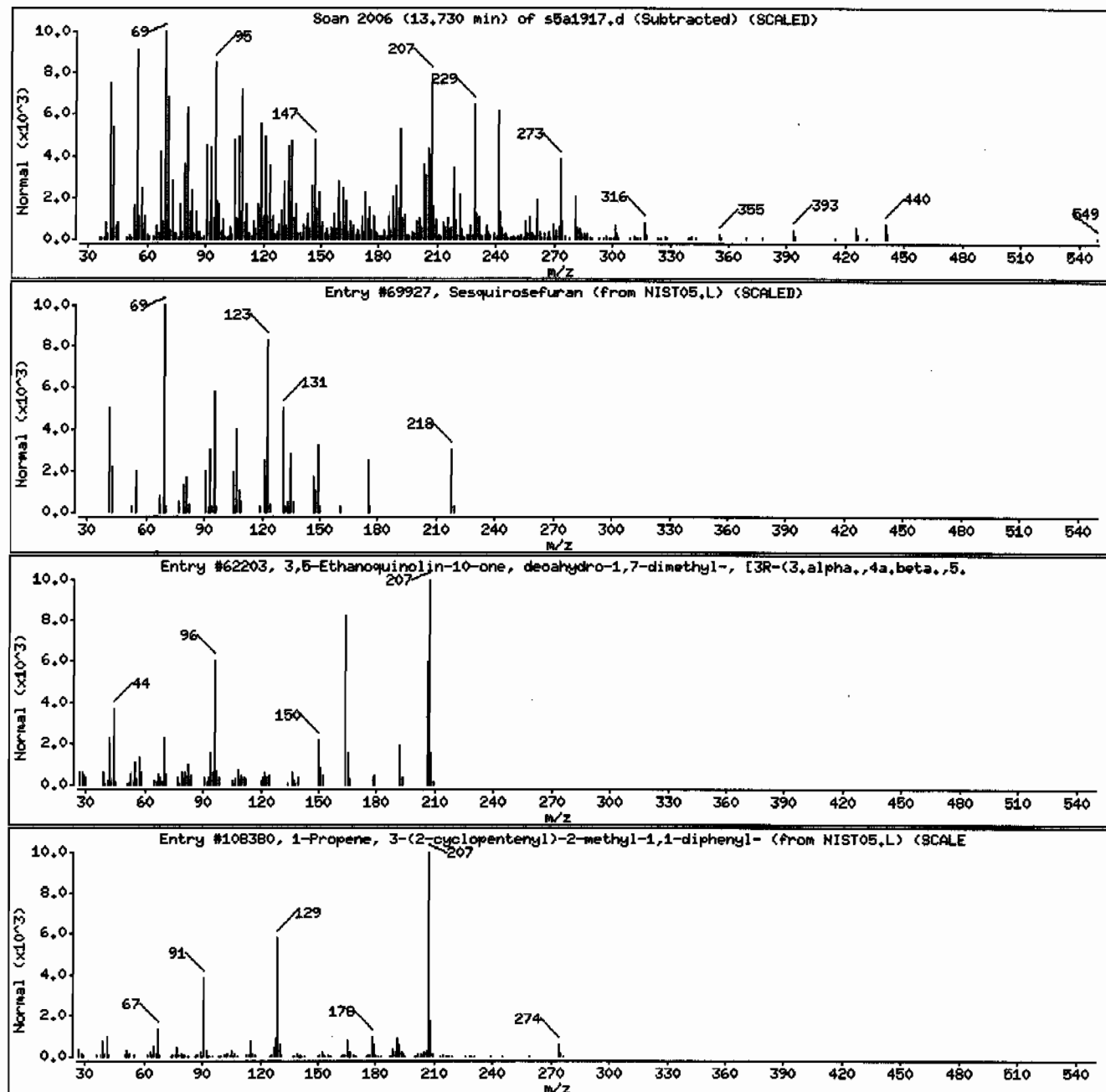
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Sesquirosefuran	39007-93-7	NIST05.L	69927	44	C16H22O	218
3,5-Ethanoquinolin-10-one, decahydro-1,7	21041-42-9	NIST05.L	62203	41	C13H21NO	207
1-Propene, 3-(2-cyclopentyl)-2-methyl-	1000184-23-3	NIST05.L	108380	25	C21H22	274



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011ISVH11ILANL

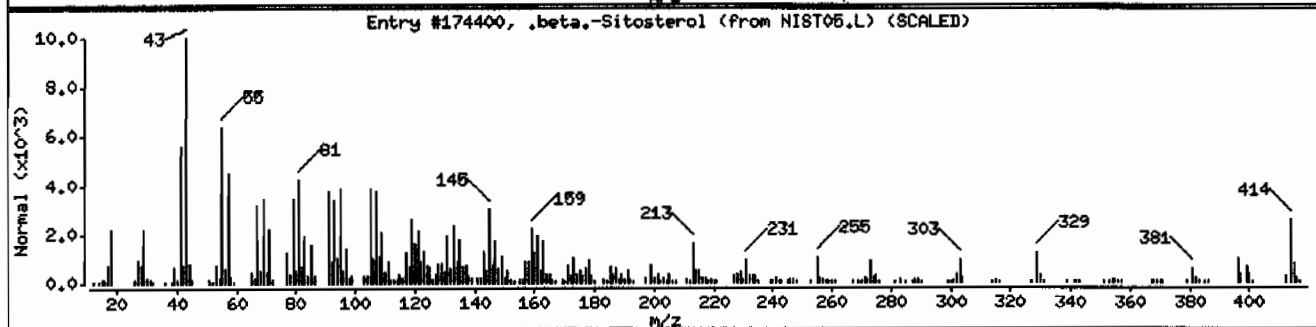
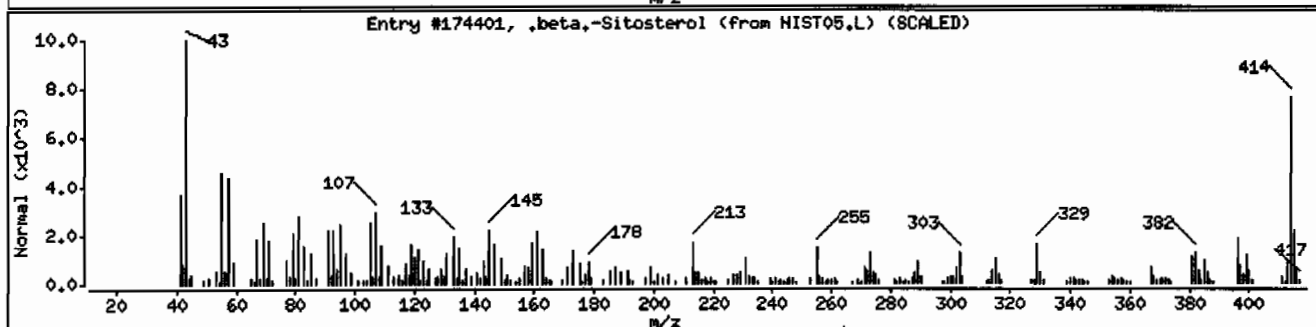
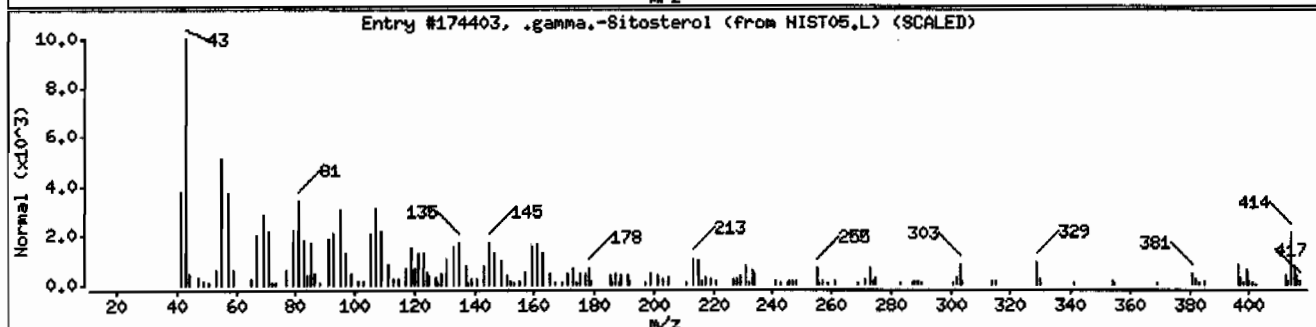
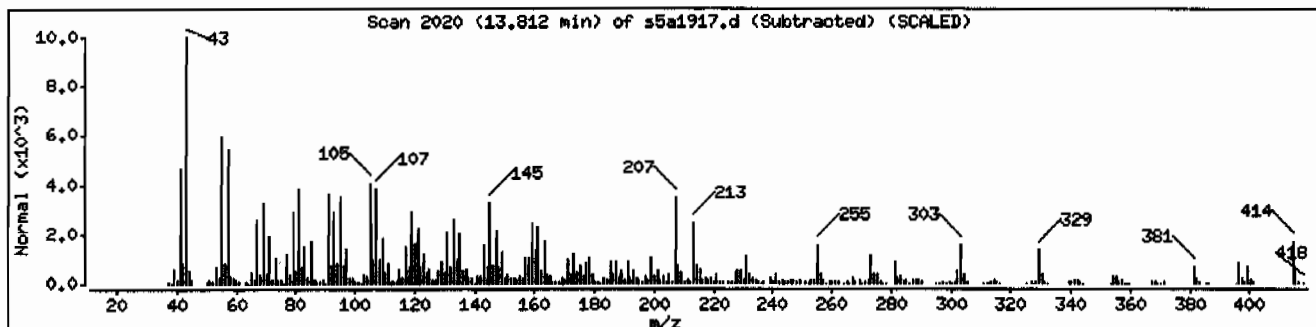
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	93	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	90	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	81	C29H50O	414



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: MSD5.i

Sample Info: 1244626009194284011ISVH11ILANL

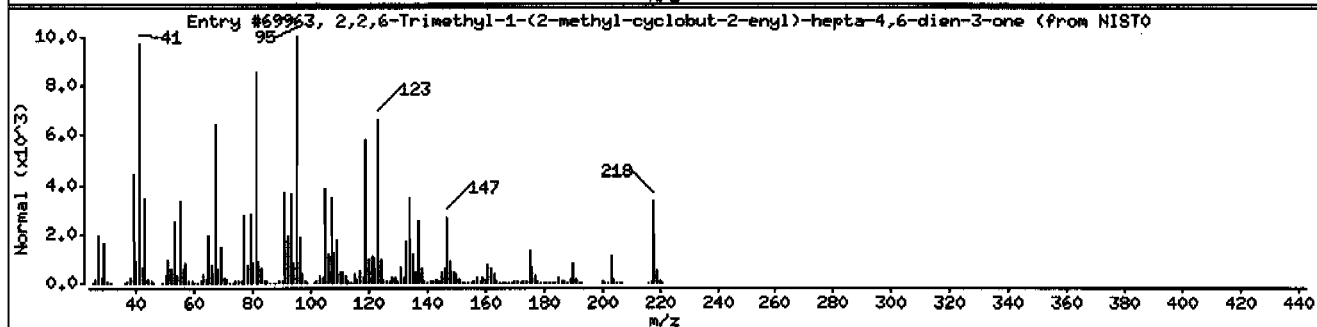
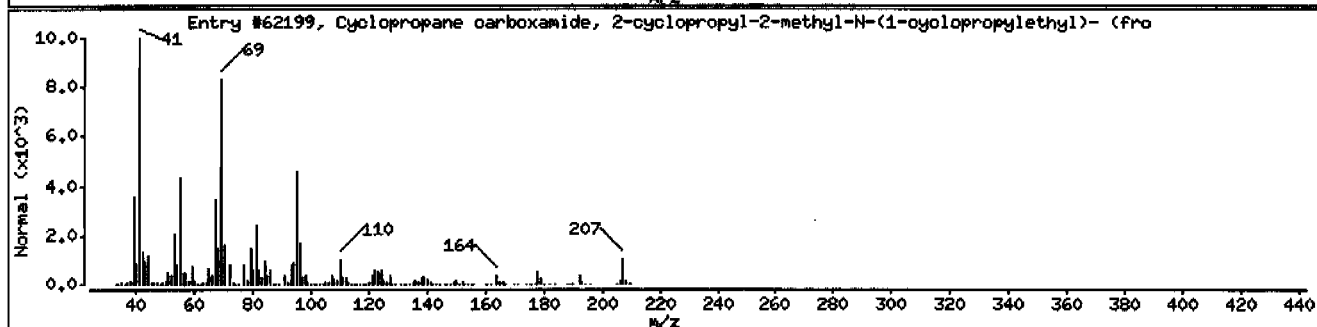
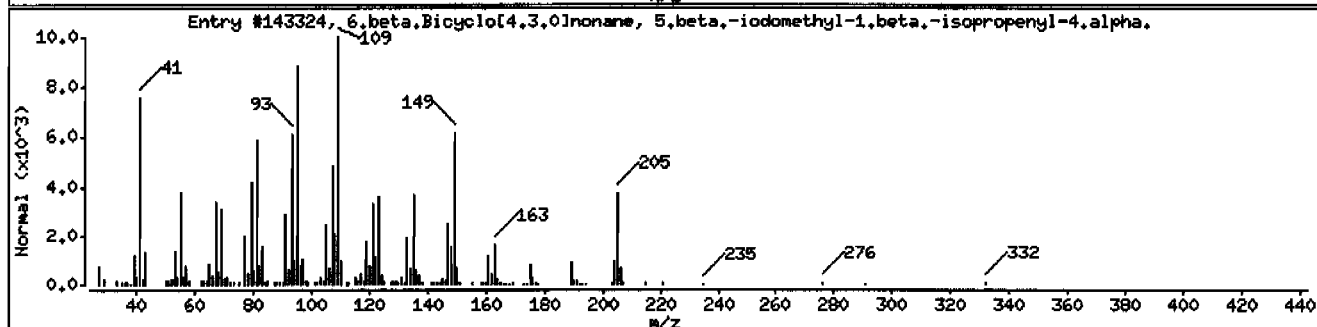
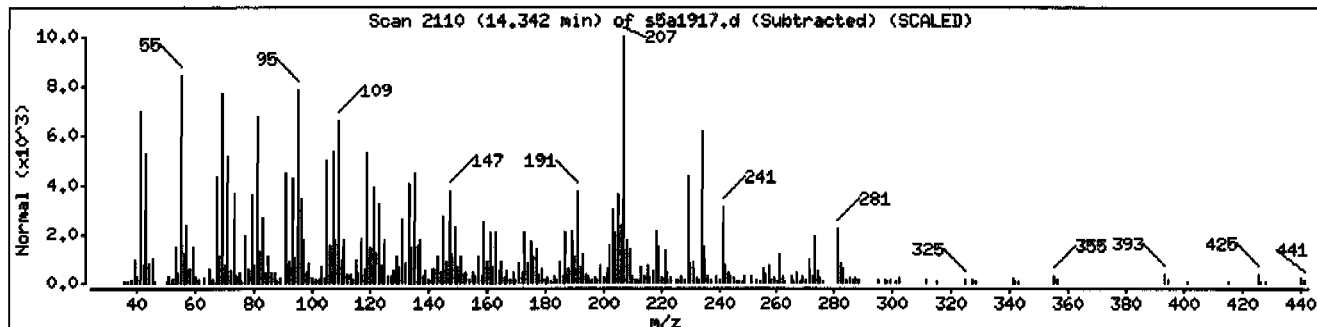
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
6, beta, Bicyclo[4.3.0]nonane, 5, beta, -iod	1000195-85-9	NIST05.L	143324	25	C18H26I	332
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	22	C13H21NO	207
2,2,6-Trimethyl-1-(2-methyl-cyclobut-2-e	1000188-72-8	NIST05.L	69963	20	C15H22O	218



Date : 19-JAN-2010 16:28

Client ID: RE12-10-7271

Instrument: HSD5.i

Sample Info: 1244626009194284011SVMI1ILANL

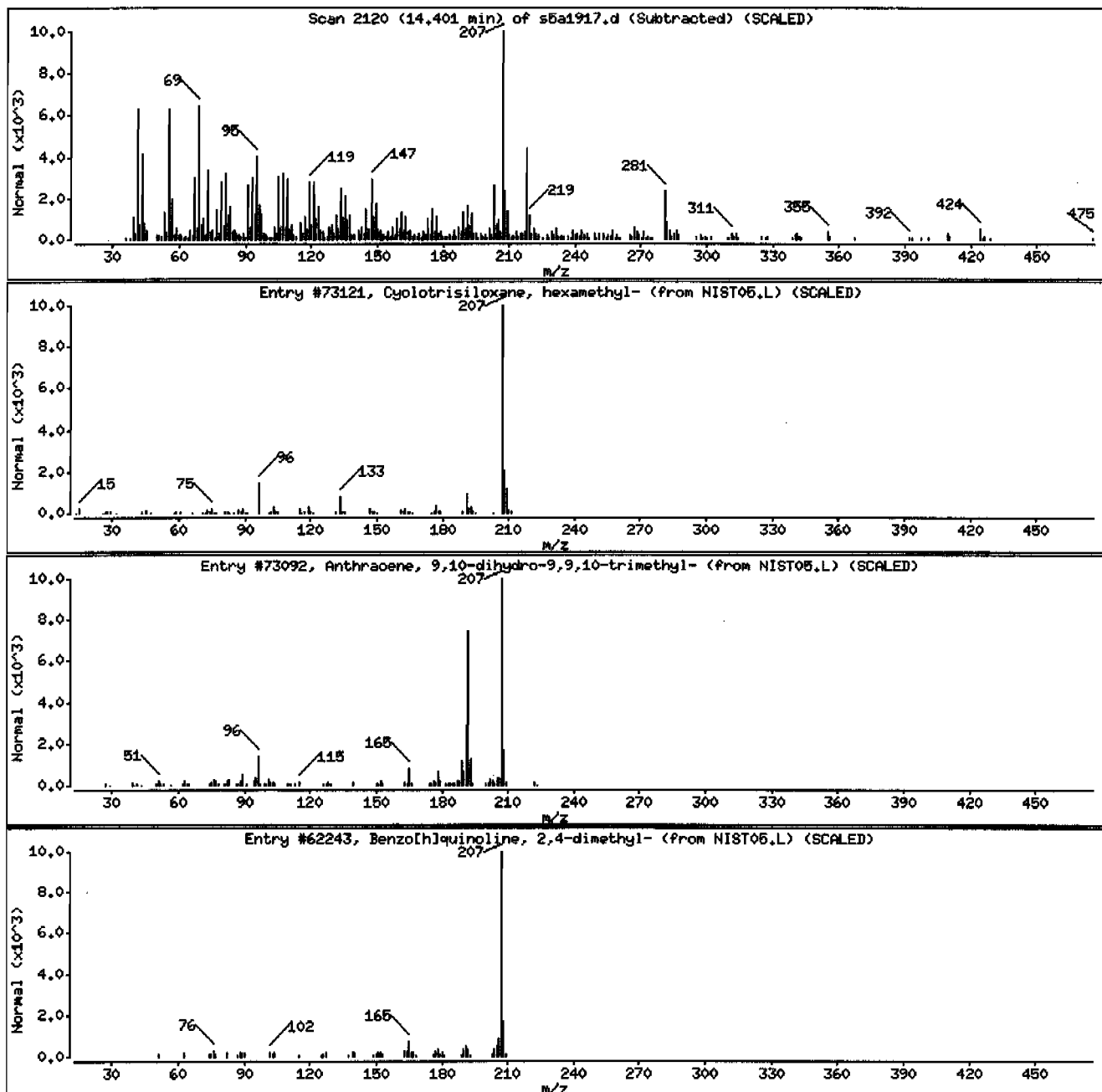
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Hatch	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	30	C6H18O3Si3	222
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	30	C17H18	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	25	C18H13N	207



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

SDG Number: 10-1225
Lab Sample ID: 244626016

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7282
Batch ID: 942840
Run Date: 01/19/2010 19:10
Prep Date: 01/18/2010 20:10
Data File: s5a1924.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	355	ug/kg	70.9	355
108-95-2	Phenol	U	355	ug/kg	70.9	355
95-57-8	2-Chlorophenol	U	355	ug/kg	70.9	355
106-46-7	1,4-Dichlorobenzene	U	355	ug/kg	70.9	355
621-64-7	N-Nitrosodipropylamine	U	355	ug/kg	70.9	355
59-50-7	4-Chloro-3-methylphenol	U	355	ug/kg	70.9	355
83-32-9	Acenaphthene	U	35.5	ug/kg	11.7	35.5
121-14-2	2,4-Dinitrotoluene	U	355	ug/kg	35.5	355
100-02-7	4-Nitrophenol	U	355	ug/kg	117	355
87-86-5	Pentachlorophenol	U	355	ug/kg	88.6	355
129-00-0	Pyrene	U	35.5	ug/kg	10.6	35.5
110-86-1	Pyridine	U	355	ug/kg	70.9	355
62-53-3	Aniline	U	355	ug/kg	106	355
111-44-4	bis(2-Chloroethyl) ether	U	355	ug/kg	70.9	355
541-73-1	1,3-Dichlorobenzene	U	355	ug/kg	70.9	355
100-51-6	Benzyl alcohol	U	355	ug/kg	106	355
95-50-1	1,2-Dichlorobenzene	U	355	ug/kg	70.9	355
108-60-1	bis(2-Chloroisopropyl)ether	U	355	ug/kg	70.9	355
95-48-7	o-Cresol	U	355	ug/kg	70.9	355
65794-96-9	m,p-Cresols	U	355	ug/kg	106	355
67-72-1	Hexachloroethane	U	355	ug/kg	70.9	355
98-95-3	Nitrobenzene	U	355	ug/kg	70.9	355
78-59-1	Isophorone	U	355	ug/kg	70.9	355
88-75-5	2-Nitrophenol	U	355	ug/kg	70.9	355
105-67-9	2,4-Dimethylphenol	U	355	ug/kg	124	355
111-91-1	bis(2-Chloroethoxy)methane	U	355	ug/kg	70.9	355
120-83-2	2,4-Dichlorophenol	U	355	ug/kg	70.9	355
65-85-0	Benzoic acid	U	709	ug/kg	177	709
91-20-3	Naphthalene	U	35.5	ug/kg	10.6	35.5
106-47-8	4-Chloroaniline	U	355	ug/kg	70.9	355
87-68-3	Hexachlorobutadiene	U	355	ug/kg	70.9	355
91-57-6	2-Methylnaphthalene	U	35.5	ug/kg	7.09	35.5
77-47-4	Hexachlorocyclopentadiene	U	355	ug/kg	70.9	355
88-06-2	2,4,6-Trichlorophenol	U	355	ug/kg	70.9	355
95-95-4	2,4,5-Trichlorophenol	U	355	ug/kg	70.9	355
91-58-7	2-Chloronaphthalene	U	35.5	ug/kg	11.7	35.5
88-74-4	2-Nitroaniline	U	355	ug/kg	70.9	355
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	355	ug/kg	70.9	355

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

SDG Number: 10-1225
Lab Sample ID: 244626016

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7282
Batch ID: 942840
Run Date: 01/19/2010 19:10
Prep Date: 01/18/2010 20:10
Data File: s5a1924.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	355	ug/kg	70.9	355
606-20-2	2,6-Dinitrotoluene	U	355	ug/kg	35.5	355
208-96-8	Acenaphthylene	U	35.5	ug/kg	10.6	35.5
51-28-5	2,4-Dinitrophenol	U	709	ug/kg	135	709
132-64-9	Dibenzofuran	U	355	ug/kg	70.9	355
84-66-2	Diethylphthalate	U	355	ug/kg	70.9	355
86-73-7	Fluorene	U	35.5	ug/kg	10.6	35.5
7005-72-3	4-Chlorophenylphenylether	U	355	ug/kg	70.9	355
534-52-1	2-Methyl-4,6-dinitrophenol	U	355	ug/kg	70.9	355
100-01-6	4-Nitroaniline	U	355	ug/kg	106	355
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	355	ug/kg	70.9	355
122-66-7	Azobenzene	U	355	ug/kg	70.9	355
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	355	ug/kg	70.9	355
118-74-1	Hexachlorobenzene	U	355	ug/kg	70.9	355
85-01-8	Phenanthrene	U	35.5	ug/kg	10.6	35.5
120-12-7	Anthracene	U	35.5	ug/kg	7.09	35.5
84-74-2	Di-n-butylphthalate	U	355	ug/kg	70.9	355
206-44-0	Fluoranthene	U	35.5	ug/kg	10.6	35.5
85-68-7	Butylbenzylphthalate	U	355	ug/kg	70.9	355
56-55-3	Benzo(a)anthracene	U	35.5	ug/kg	10.6	35.5
91-94-1	3,3'-Dichlorobenzidine	U	355	ug/kg	106	355
218-01-9	Chrysene	U	35.5	ug/kg	10.6	35.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	355	ug/kg	70.9	355
117-84-0	Di-n-octylphthalate	U	355	ug/kg	70.9	355
205-99-2	Benzo(b)fluoranthene	U	35.5	ug/kg	10.6	35.5
207-08-9	Benzo(k)fluoranthene	U	35.5	ug/kg	10.6	35.5
50-32-8	Benzo(a)pyrene	U	35.5	ug/kg	10.6	35.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.5	ug/kg	10.6	35.5
53-70-3	Dibenzo(a,h)anthracene	U	35.5	ug/kg	10.6	35.5
191-24-2	Benzo(ghi)perylene	U	35.5	ug/kg	10.6	35.5
120-82-1	1,2,4-Trichlorobenzene	U	355	ug/kg	70.9	355

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.03	375	ug/kg		J
79-09-4	Propanoic acid	2.17	174	ug/kg	90	NJ

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

SDG Number: 10-1225
Lab Sample ID: 244626016

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7282
Batch ID: 942840
Run Date: 01/19/2010 19:10
Prep Date: 01/18/2010 20:10
Data File: s5a1924.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.95	606	ug/kg		JA
58-22-0	Androst-4-en-3-one, 17-hydroxy-, (17.bet	8.27	206	ug/kg	81	NJ
559-74-0	Friedelan-3-one	10.06	574	ug/kg	97	NJ
	Unknown	10.34	181	ug/kg		J
112-84-5	13-Docosenamide, (Z)-	10.41	160	ug/kg	95	NJ
	Unknown	10.72	211	ug/kg		J
	Unknown	11.67	473	ug/kg		J
	Unknown	12.32	227	ug/kg		J
	Unknown	12.76	497	ug/kg		J
	Unknown	13.55	226	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1924.d
Lab Smp Id: 244626016 Client Smp ID: RE12-10-7282
Inj Date : 19-JAN-2010 19:10
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626016|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	6.19840	% 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	3.931	3.940	(1.000)	574544	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	2023908	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1166780	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2162299	40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1919542	40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1475104	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	909458	63.8275	2260
\$ 5 Phenol-d5	99	3.648	3.651	(0.928)	1118807	63.6696	2260
\$ 20 Nitrobenzene-d5	82	4.290	4.301	(0.893)	521791	33.5775	1190
\$ 39 2-Fluorobiphenyl	172	5.542	5.548	(0.915)	1024028	33.1772	1180
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	295172	79.5943	2820
\$ 81 p-Terphenyl-d14	244	8.613	8.611	(0.893)	1260461	41.8197	1480

ION RATIO REPORT

SV REPORT

Data file: s5a1924.d

Report Date: 01/20/2010 07:09

Lab. ID: 244626016

SampleType: SAMPLE

Injection Date: 19-JAN-2010 19:10

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626016|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline	CAS#: 62-53-3				
66	60298	3.65	3.72	80-120	100	(T)
93	1643	3.61	3.72	210-270	3	(QT)

17	N-Nitrosodipropylamine	CAS#: 621-64-7				
70	74949	4.29	4.18	80-120	100	(T)
42	43957	4.29	4.18	44-104	59	(T)

27	Benzoic acid	CAS#: 65-85-0				
105	3232	4.57	4.57	80-120	100	()
122	1392	4.55	4.57	39- 99	43	()
77	1686	4.55	4.57	34- 94	52	()

43	Dimethylphthalate	CAS#: 131-11-3				
163	211816	6.06	5.82	80-120	100	(T)
164	1166780	6.06	5.82	0- 40	551	(QT)

44	2,6-Dinitrotoluene	CAS#: 606-20-2				
165	157660	6.06	5.88	80-120	100	(T)
63	1895	6.06	5.88	61-121	1	(QT)

50	2,4-Dinitrotoluene	CAS#: 121-14-2				
165	157660	6.06	6.17	80-120	100	(T)
89	2549	6.06	6.17	47-107	2	(QT)
63	1895	6.06	6.17	23- 83	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52 4-Nitrophenol		CAS#: 100-02-7				
139	305	6.11	6.10	80-120	100	()
109	288	6.13	6.10	41-101	94	()
65	869	6.12	6.10	72-132	284	(Q)

53 Fluorene		CAS#: 86-73-7				
166	17757	6.65	6.47	80-120	100	(T)
165	16750	6.65	6.47	56-116	94	(T)
167	6231	6.65	6.47	0- 44	35	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	1091	6.65	6.49	80-120	100	(T)
105	2211	6.65	6.49	12- 72	203	(QT)
51	1933	6.65	6.49	42-102	177	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	21236	6.66	6.84	80-120	100	(T)
141	133557	6.65	6.83	43-103	629	(QT)
250	41532	6.66	6.84	68-128	196	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1924.d
 Lab Smp Id: 244626016 Client Smp ID: RE12-10-7282
 Inj Date : 19-JAN-2010 19:10
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626016|942840|1|SVM|1|LANL
 Misc Info : |MSD8270_S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 24
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	6.19840	% moisture

Cpnd Variable

Local Compound Variable

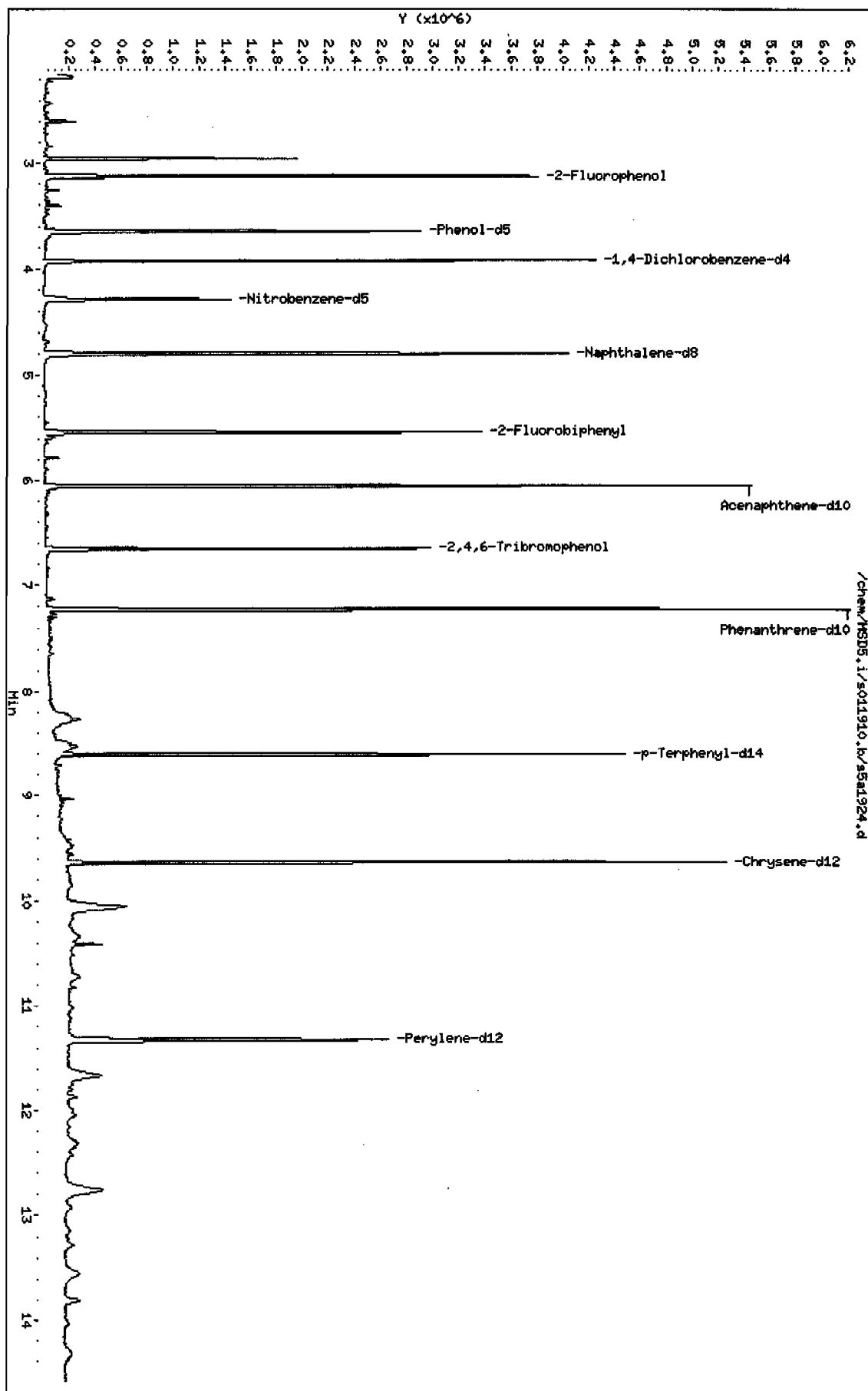
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.931	3506301	40.000
* 67 Phenanthrene-d10	7.231	5418379	40.000
* 91 Chrysene-d12	9.642	5034865	40.000
* 98 Perylene-d12	11.330	4014277	40.000

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

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.031	927229	10.5778610	375	0		0	10
Propanoic acid					CAS #: 79-09-4		
2.172	431271	4.91995036	174	90	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.954	1498216	17.0916968	606	0		0	10
Androst-4-en-3-one, 17-hydroxy-, (17.bet					CAS #: 58-22-0		
8.266	788180	5.81856693	206	81	NIST05.L	117326	67
Friedelan-3-one					CAS #: 559-74-0		
10.060	2037509	16.1871952	574	97	NIST05.L	176566	91
Unknown					CAS #:		
10.342	642004	5.10046676	181	0		0	91
13-Docosenamide, (Z)-					CAS #: 112-84-5		
10.413	567395	4.50772961	160	95	NIST05.L	146307	91
Unknown					CAS #:		
10.724	596406	5.94284281	211	0		0	98
Unknown					CAS #:		
11.671	1337801	13.3304281	473	0		0	98
Unknown					CAS #:		
12.319	642995	6.40707975	227	0		0	98
Unknown					CAS #:		
12.760	1407087	14.0208235	497	0		0	98
Unknown					CAS #:		
13.548	640962	6.38682031	226	0		0	98

Data File: /chem/MSDS.i/s011910.b/s5a1924.d
 Date: 19-JAN-2010 19:10
 Client ID: RE12-10-7282
 Sample Info: 124462604194284011SVH11LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MSD5.1
 Operator: RHB
 Column diameter: 0.20



Date : 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: HSD5.i

Sample Info: 1244626016194284011SVH111LANL

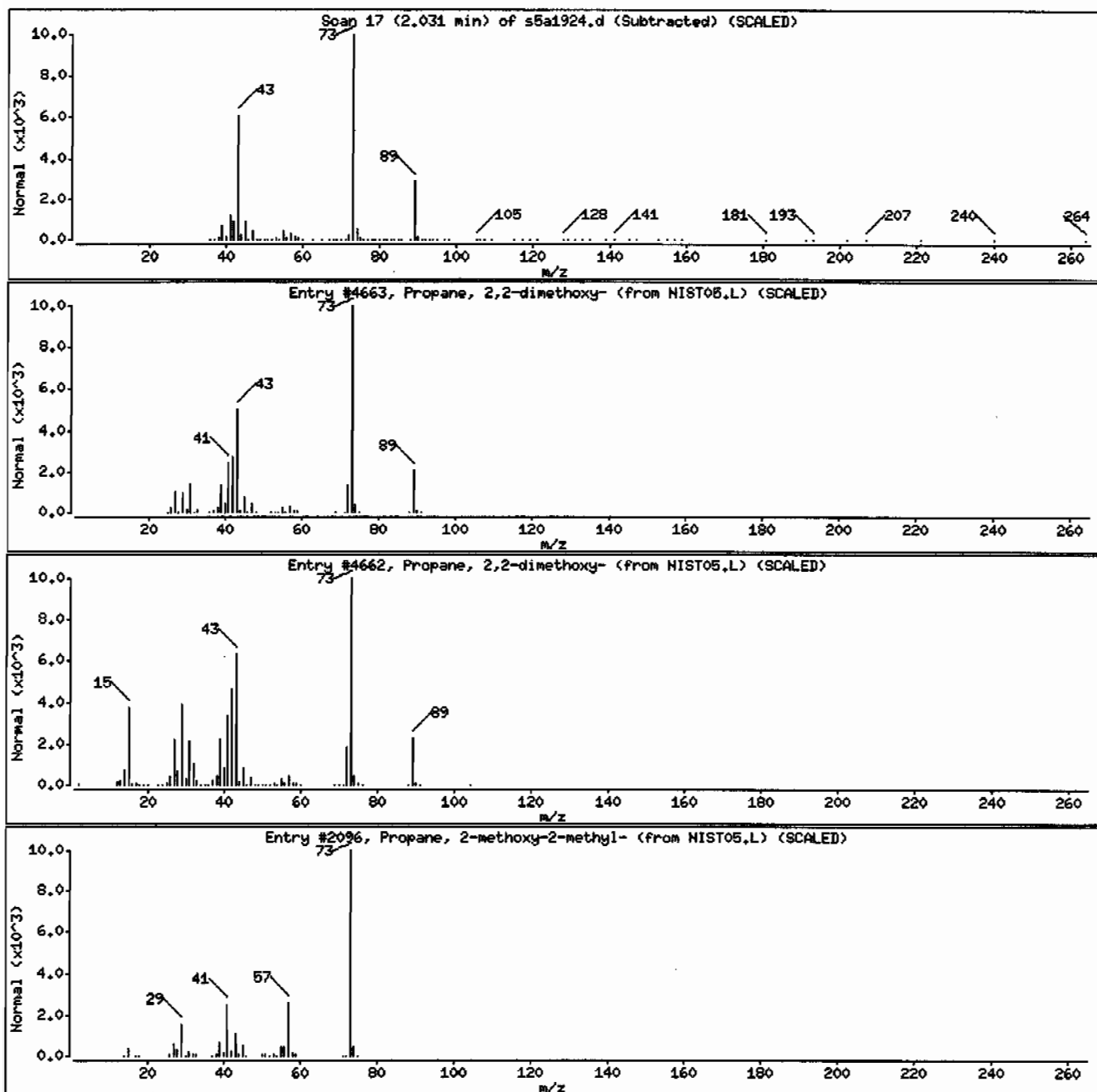
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	78	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2096	17	C5H12O	88



Date : 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: MSD5.i

Sample Info: 1244626016194284011ISVM11ILANL

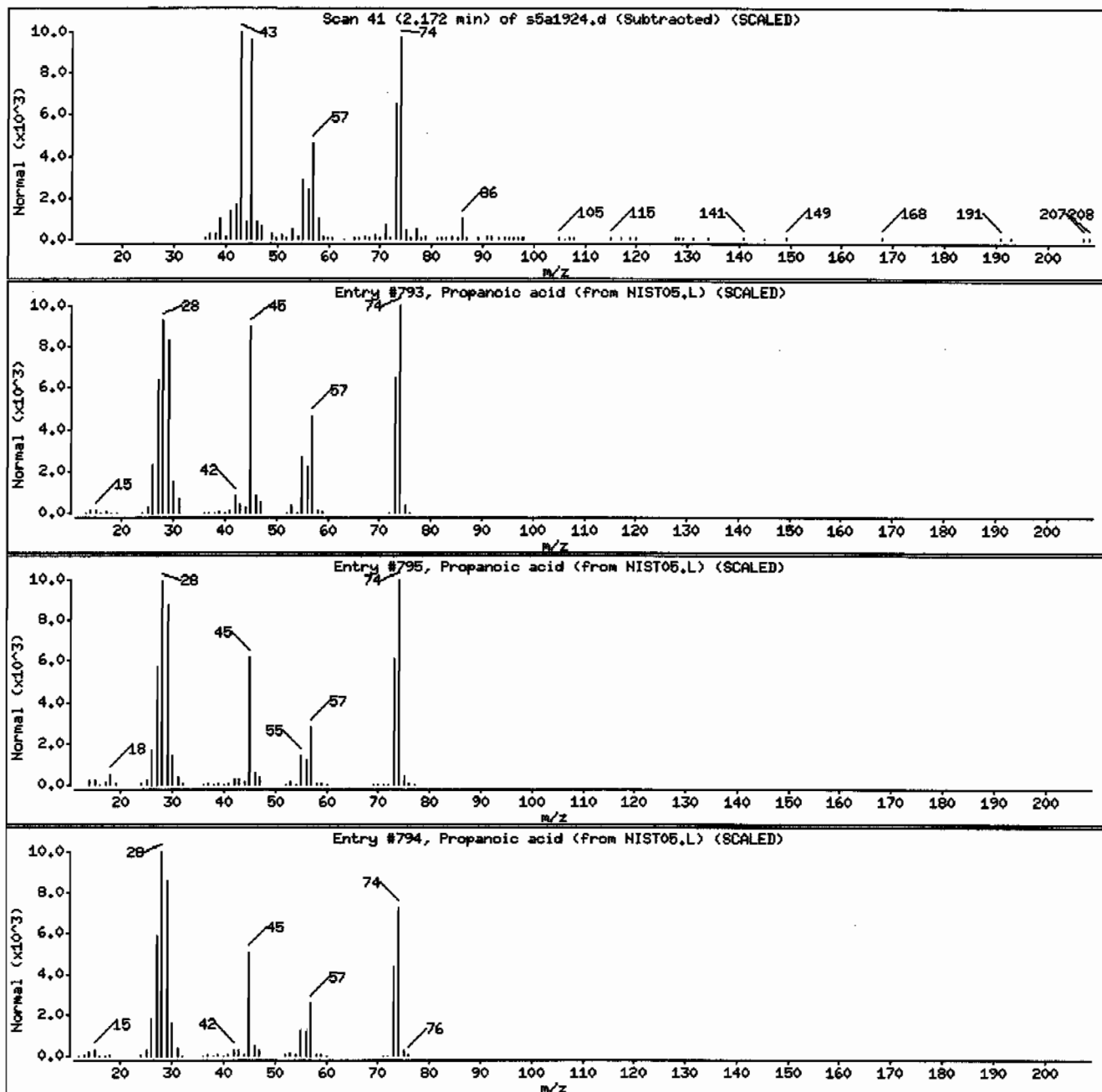
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	90	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	86	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	80	C3H6O2	74



Date: 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: MSD5.1

Sample Info: 1244626016194284011SVMI1ILANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

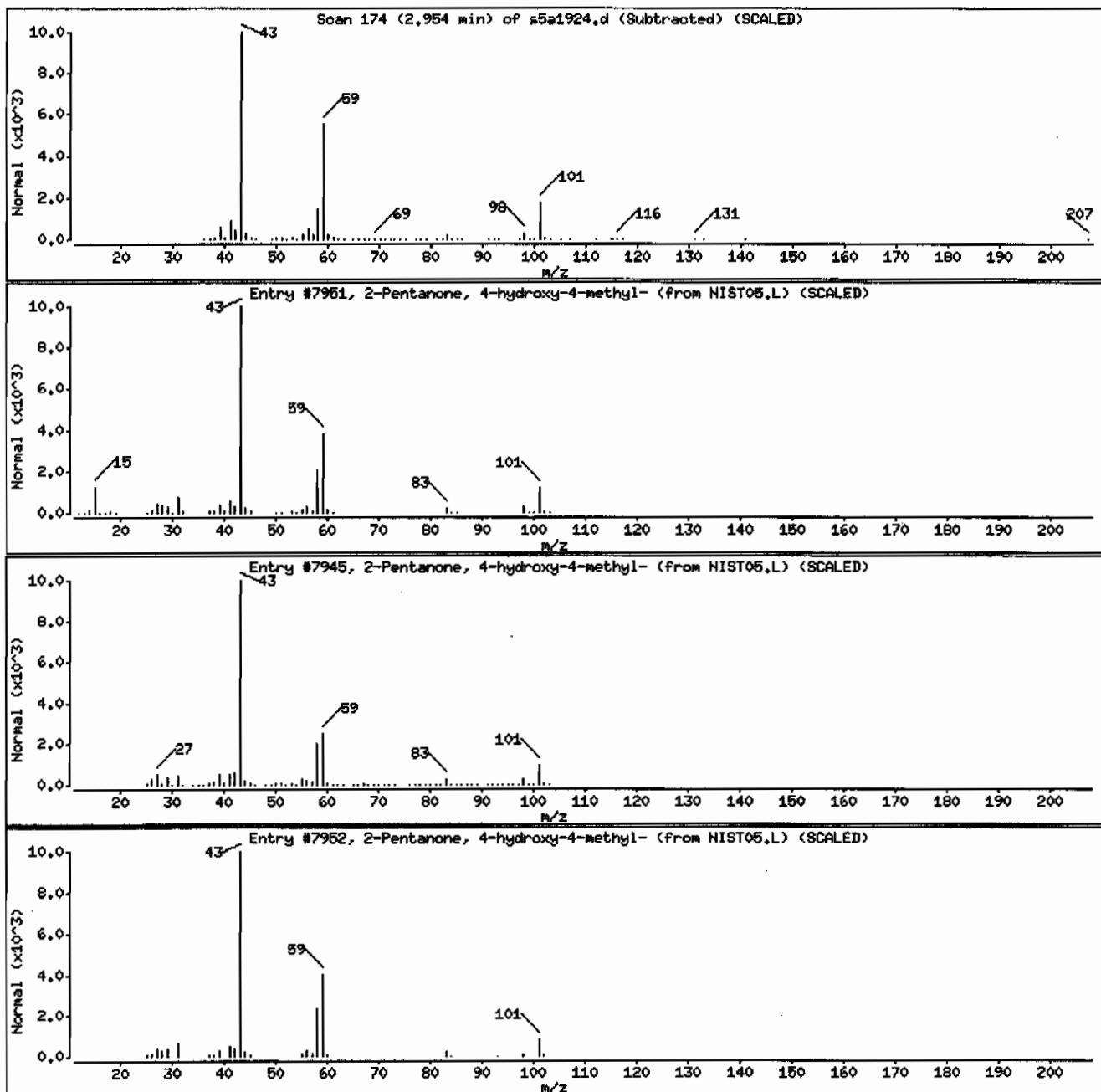
Unknown Aldol Condensate

2-Pentanone, 4-hydroxy-4-methyl-

CAS Number	Library	Entry	Quality	Formula	Weight
123-42-2	NIST05.L	7951	59	C6H12O2	116
123-42-2	NIST05.L	7945	59	C6H12O2	116
123-42-2	NIST05.L	7952	38	C6H12O2	116

2-Pentanone, 4-hydroxy-4-methyl-

2-Pentanone, 4-hydroxy-4-methyl-



Date: 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: MSD5.i

Sample Info: 1244626016194284011SVMI1ILANL

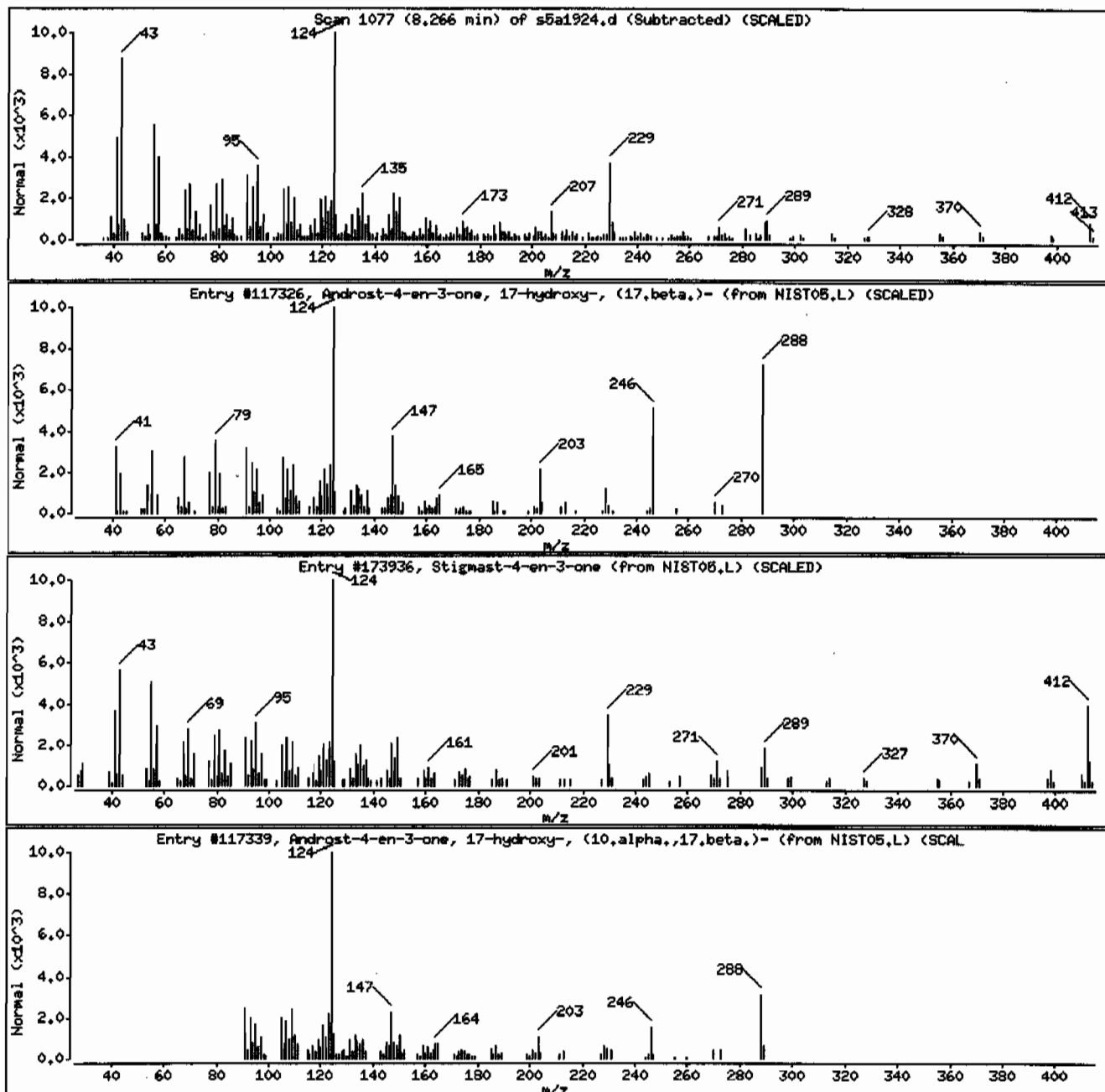
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Androst-4-en-3-one, 17-hydroxy-, (17,bet	58-22-0	NIST05.L	117326	81	C19H28O2	288
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	55	C29H48O	412
Androst-4-en-3-one, 17-hydroxy-, (10,alp	604-39-7	NIST05.L	117339	50	C19H28O2	288



Date : 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: MSD5.i

Sample Info: 1244626016194284011SVH11ILANL

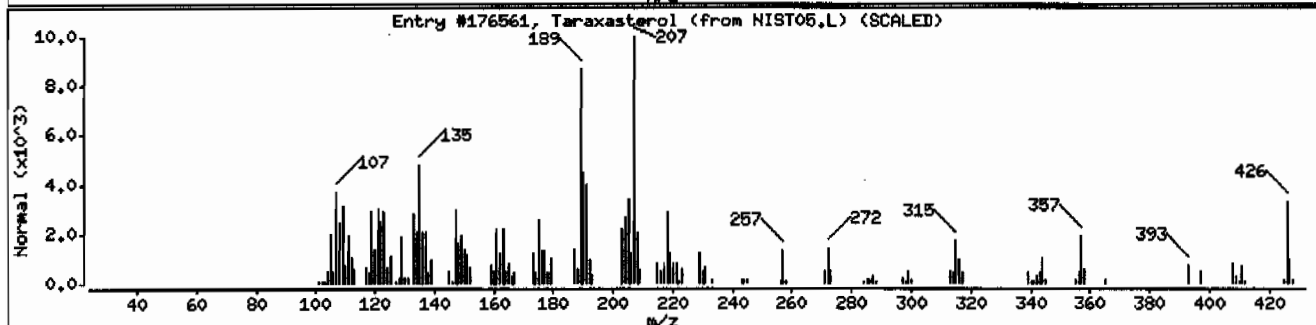
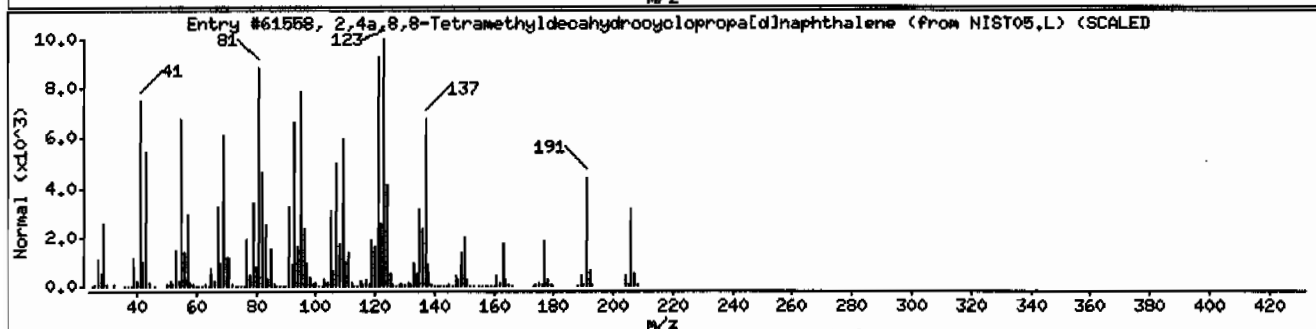
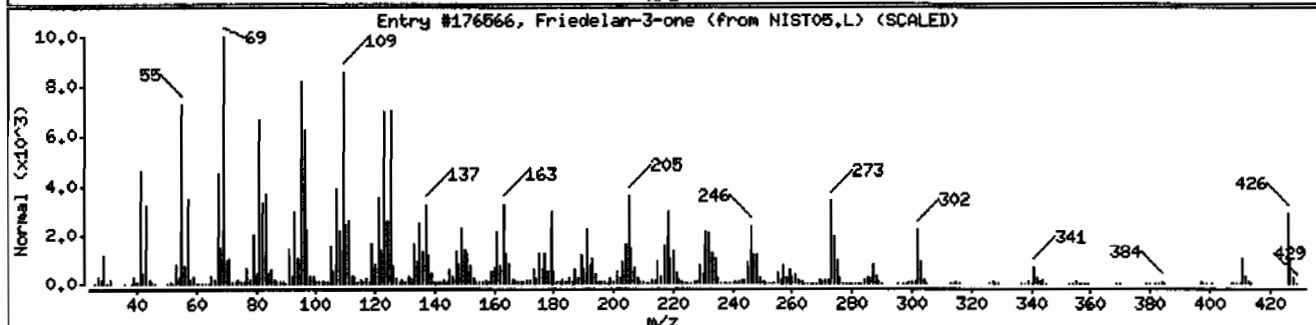
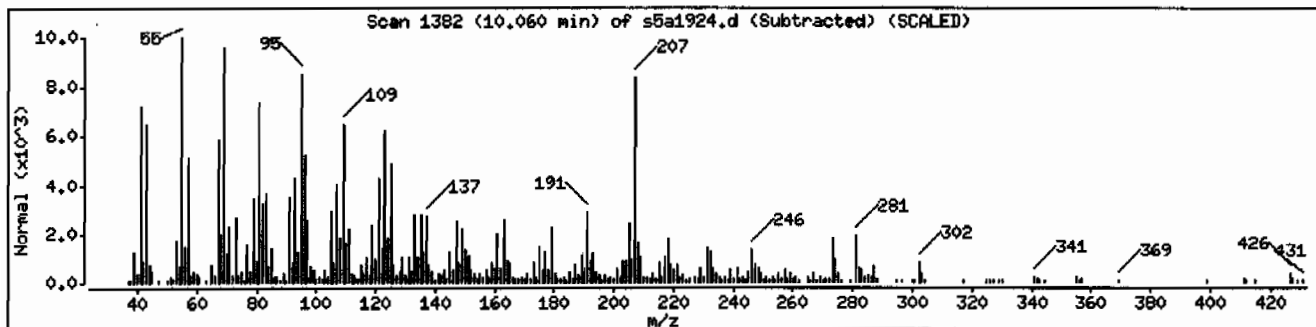
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Friedelan-3-one	559-74-0	NIST05.L	176566	97	C ₃₀ H ₅₀ O	426
2,4a,8,8-Tetramethyldecahydrocyclopropa[	74022-04-1	NIST05.L	61558	81	C ₁₅ H ₂₆	206
Taraxasterol	1059-14-9	NIST05.L	176561	48	C ₃₀ H ₅₀ O	426



Date: 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: HSD5.i

Sample Info: 1244626016194284011SVH111LANL

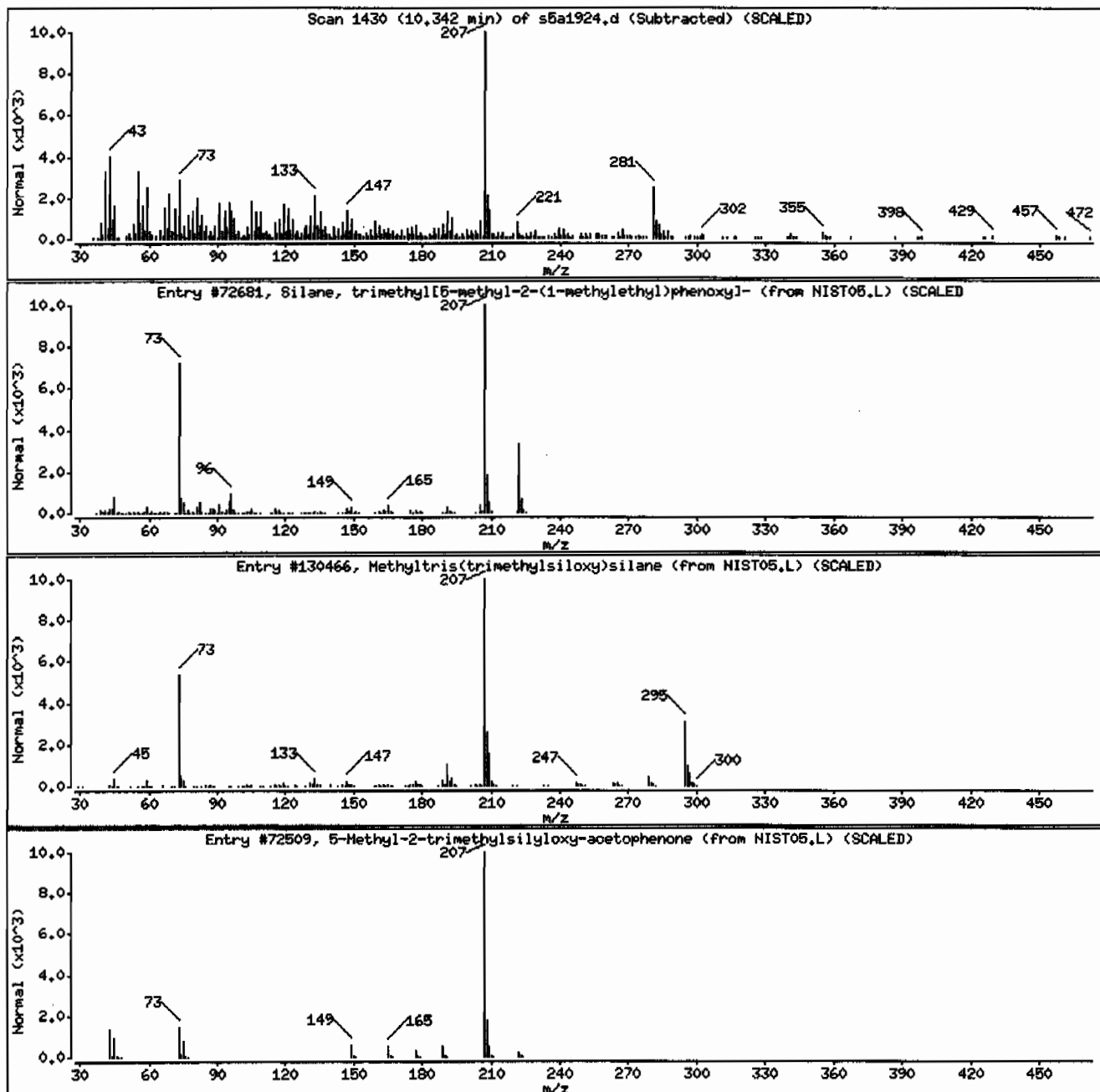
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, trimethyl[5-methyl-2-(1-methylethyl)phenoxy]-	85012-80-1	NIST05.L	72681	60	C13H22OSi	222
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	50	C10H30O3Si4	310
5-Methyl-2-trimethylsilyloxy-acetophenone	97389-69-0	NIST05.L	72509	49	C12H18O2Si	222



Date: 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: HSD5.i

Sample Info: 1244626016194284011SVH111LANL

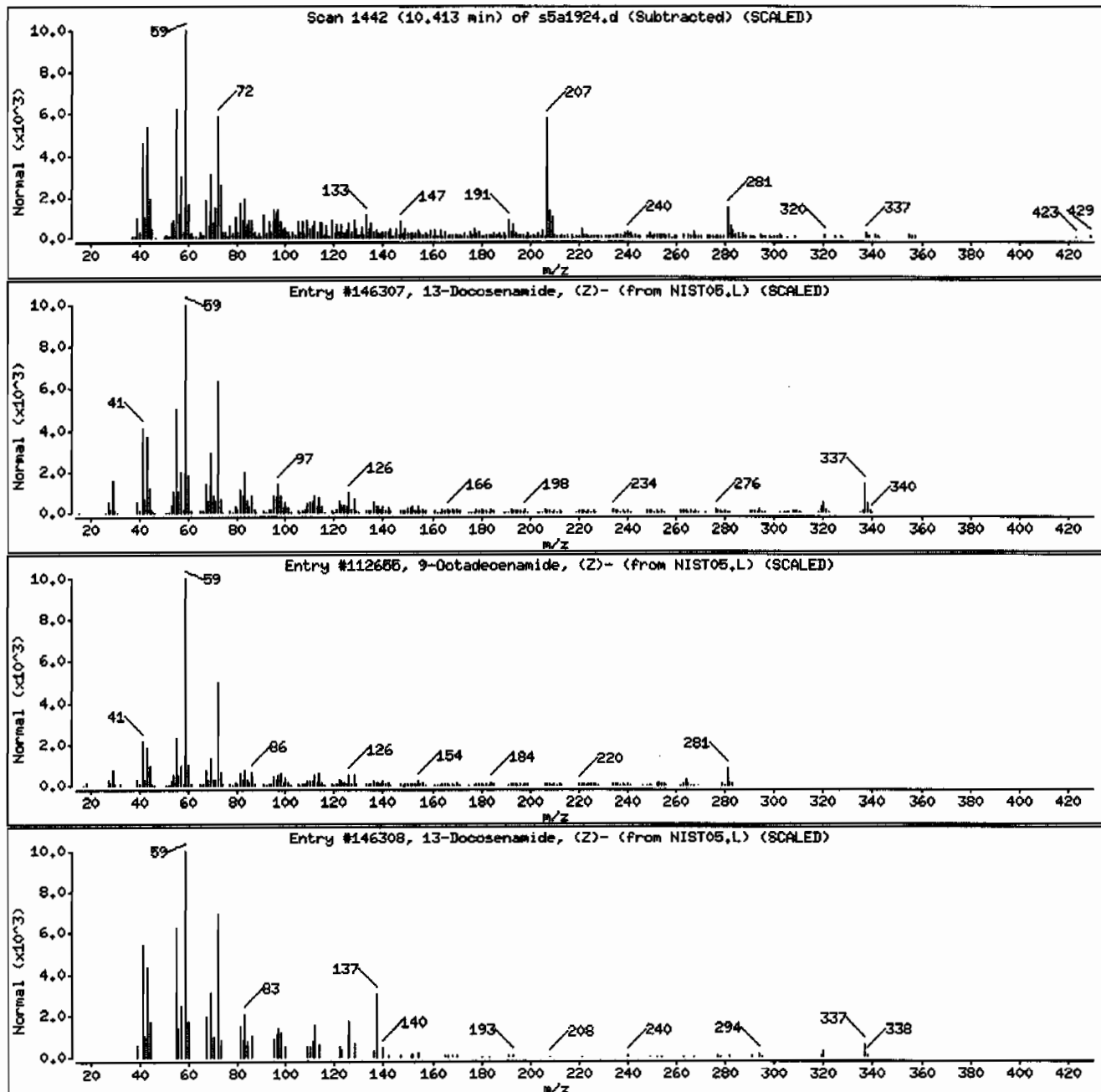
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	96	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112685	70	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	64	C22H43NO	337



Date: 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: MSD5.i

Sample Info: 1244626016194284011SVH111LANL

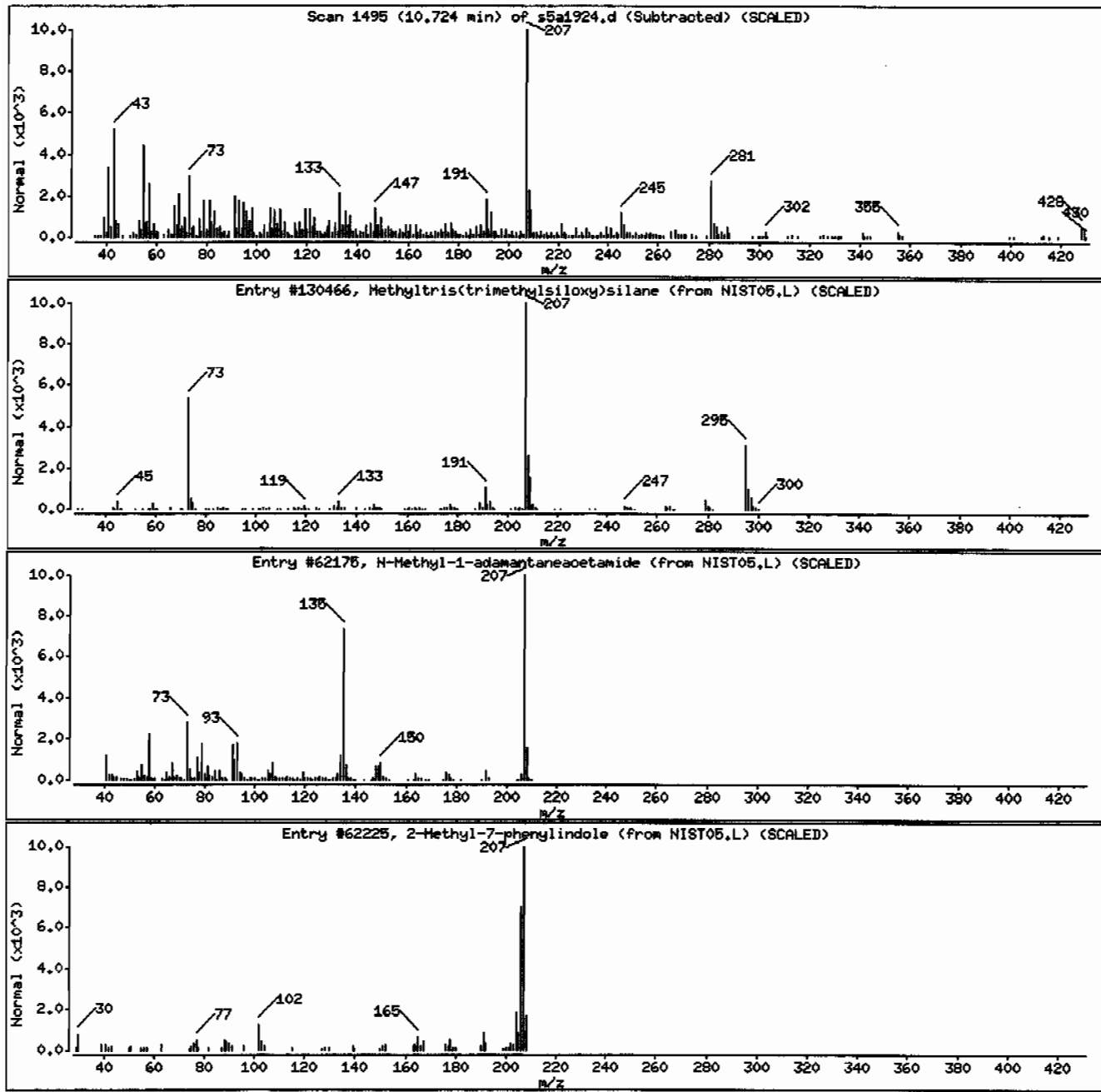
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	50	C10H30O3Si4	310
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	49	C13H21NO	207
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	43	C15H13N	207



Date : 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: MSD5.i

Sample Info: I244626016194284011SVH11ILANL

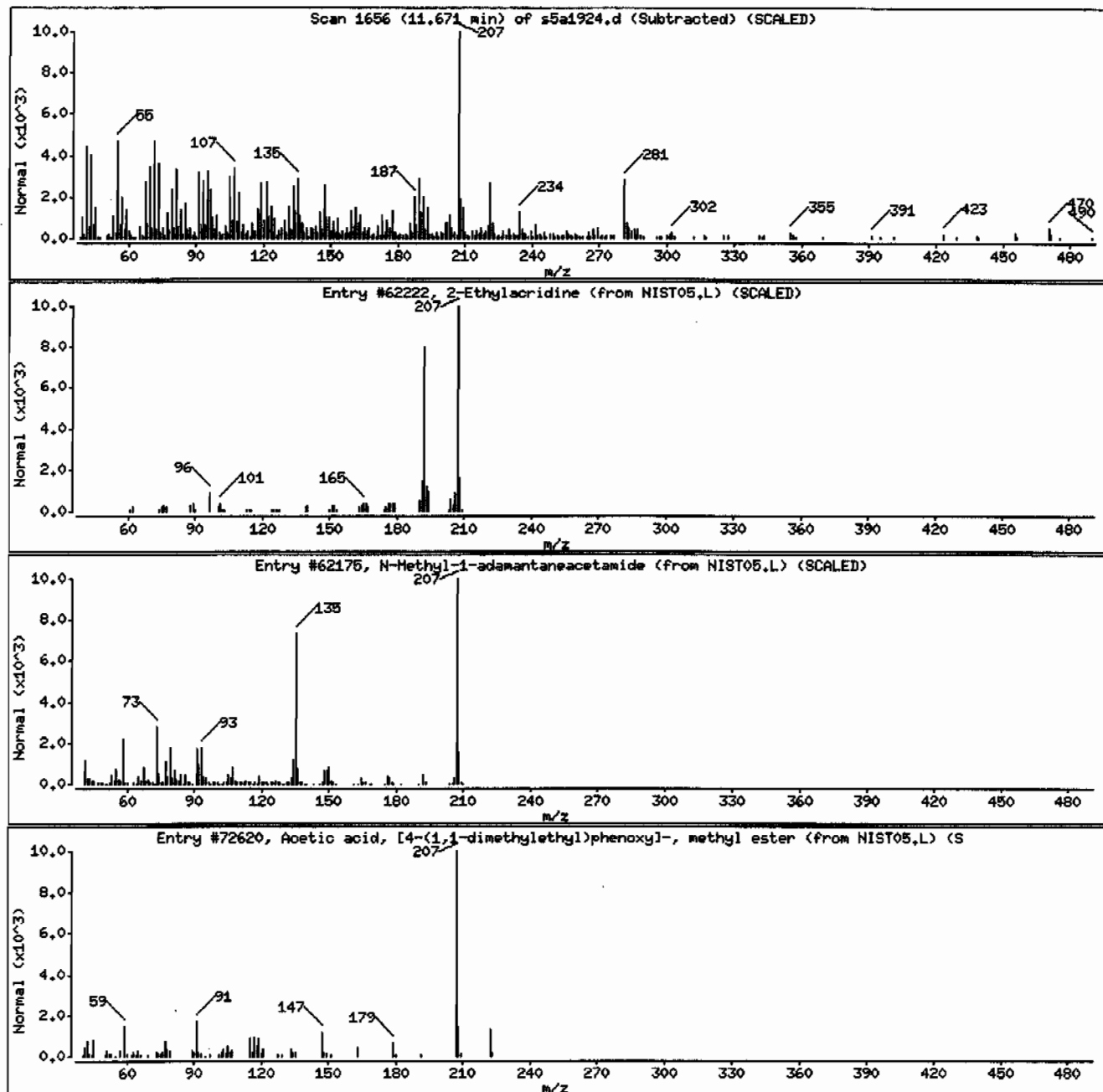
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	88751-83-2	NIST05.L	62222	46	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	42	C13H21NO	207
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-82-3	NIST05.L	72620	41	C13H18O3	222



Date : 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: HSD5.i

Sample Info: 1244626016194284011ISVH11ILANL

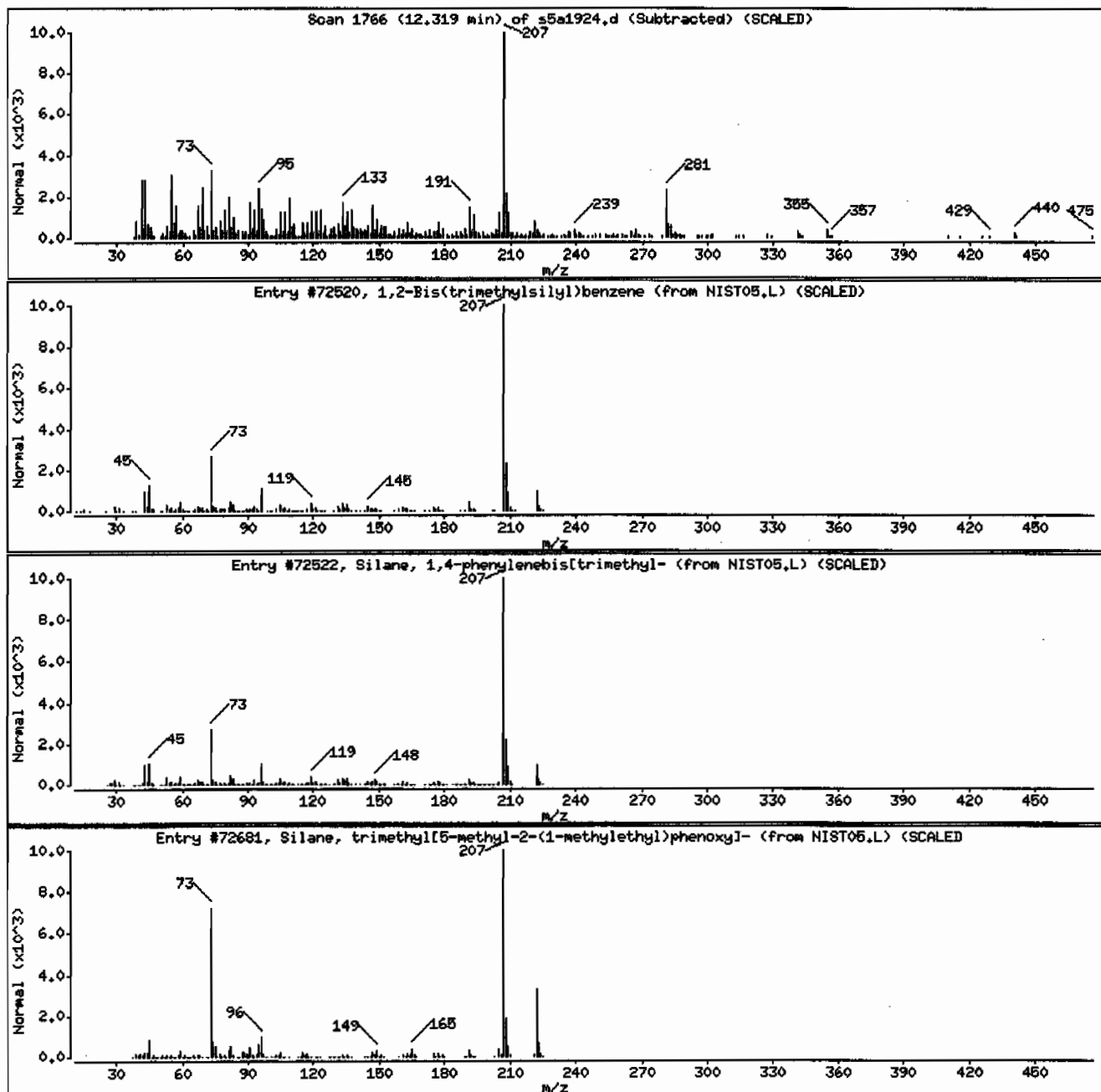
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	60	C ₁₂ H ₂₂ Si ₂	222
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	53	C ₁₂ H ₂₂ Si ₂	222
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05.L	72681	52	C ₁₃ H ₂₂ OSi	222



Date : 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: MSD5.1

Sample Info: 1244626016194284011ISWH11ILANL

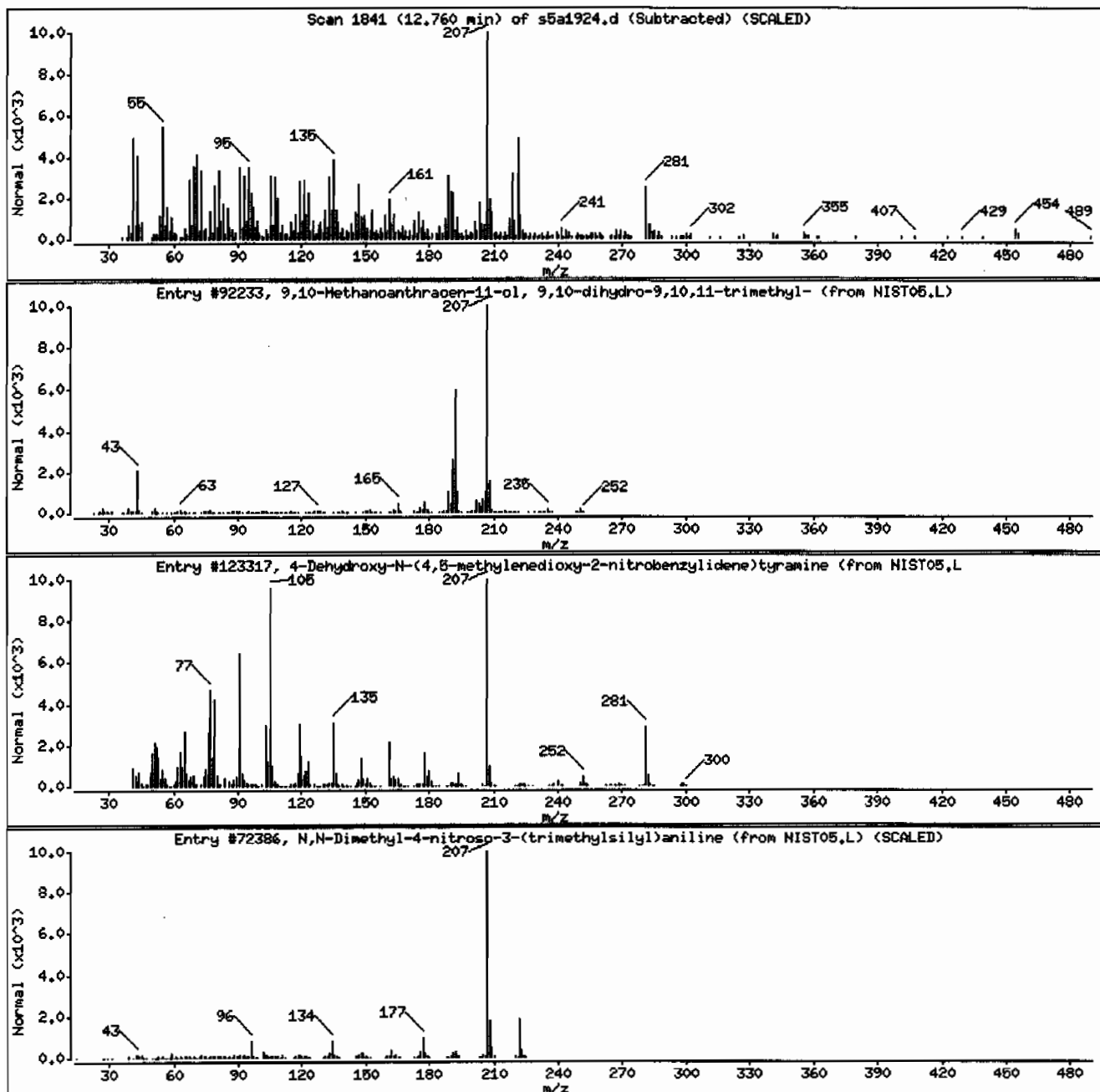
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9,10-Methanoanthracen-11-ol, 9,10-dihydr	126616-74-6	NIST05.L	92233	41	C18H18O	250
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitr	1000111-66-9	NIST05.L	123317	38	C16H14N2O4	298
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl	17993-84-9	NIST05.L	72386	38	C11H18N2OSi	222



Date: 19-JAN-2010 19:10

Client ID: RE12-10-7282

Instrument: HSD5.i

Sample Info: 12446260161942840111SVH111LANL

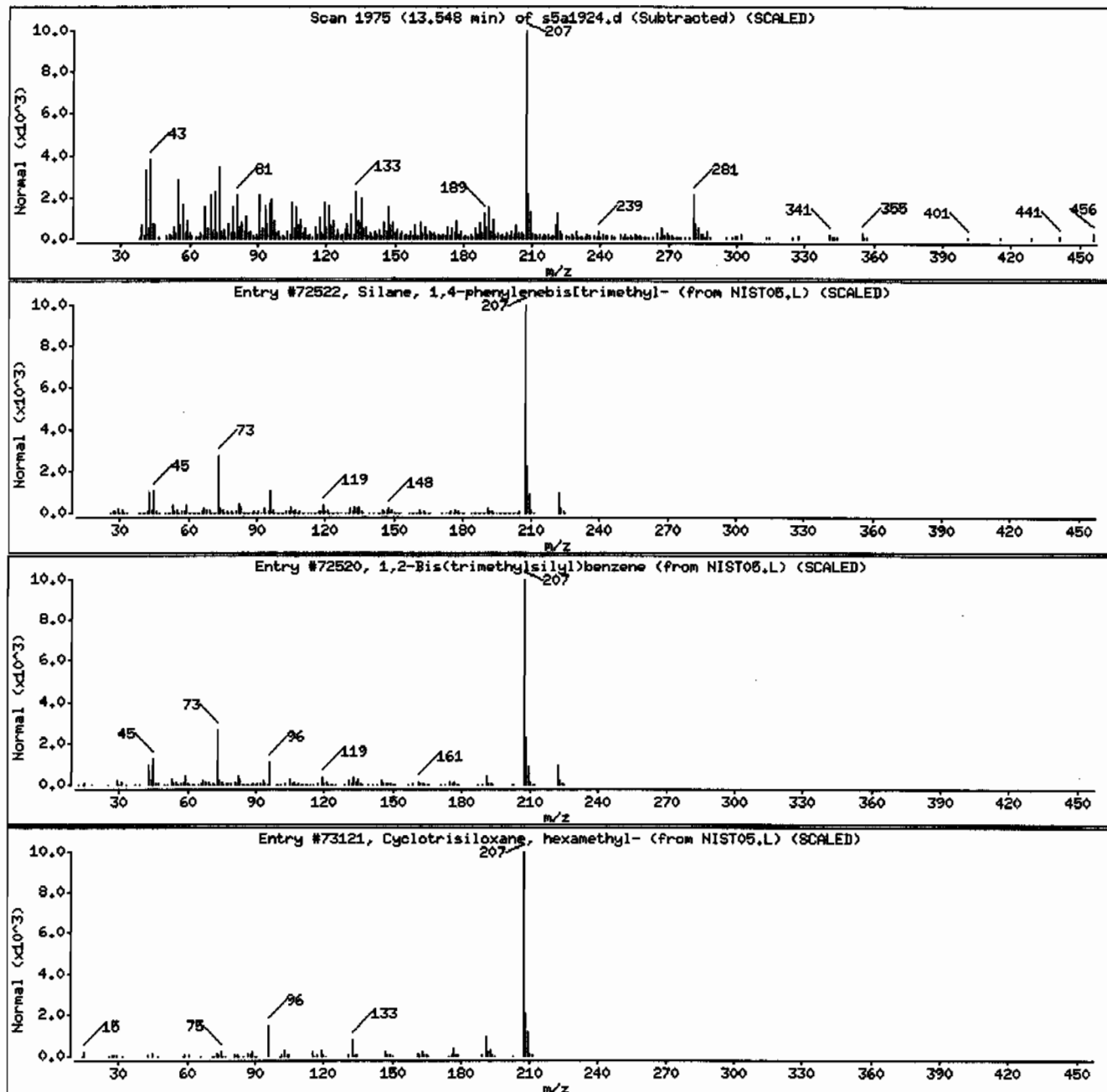
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&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	62	C12H22Si2	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	58	C12H22Si2	222
Cyclotrisiloxane, hexamethyl-	841-06-9	NIST05.L	73121	50	C6H18O3Si3	222



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

SDG Number: 10-1225
Lab Sample ID: 244626015

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7283
Batch ID: 942840
Run Date: 01/19/2010 18:47
Prep Date: 01/18/2010 20:10
Data File: s5a1923.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	407	ug/kg	81.5	407
108-95-2	Phenol	U	407	ug/kg	81.5	407
95-57-8	2-Chlorophenol	U	407	ug/kg	81.5	407
106-46-7	1,4-Dichlorobenzene	U	407	ug/kg	81.5	407
621-64-7	N-Nitrosodipropylamine	U	407	ug/kg	81.5	407
59-50-7	4-Chloro-3-methylphenol	U	407	ug/kg	81.5	407
83-32-9	Acenaphthene	U	40.7	ug/kg	13.4	40.7
121-14-2	2,4-Dinitrotoluene	U	407	ug/kg	40.7	407
100-02-7	4-Nitrophenol	U	407	ug/kg	134	407
87-86-5	Pentachlorophenol	U	407	ug/kg	102	407
129-00-0	Pyrene	U	40.7	ug/kg	12.2	40.7
110-86-1	Pyridine	U	407	ug/kg	81.5	407
62-53-3	Aniline	U	407	ug/kg	122	407
111-44-4	bis(2-Chloroethyl) ether	U	407	ug/kg	81.5	407
541-73-1	1,3-Dichlorobenzene	U	407	ug/kg	81.5	407
100-51-6	Benzyl alcohol	U	407	ug/kg	122	407
95-50-1	1,2-Dichlorobenzene	U	407	ug/kg	81.5	407
108-60-1	bis(2-Chloroisopropyl)ether	U	407	ug/kg	81.5	407
95-48-7	o-Cresol	U	407	ug/kg	81.5	407
65794-96-9	m,p-Cresols	U	407	ug/kg	122	407
67-72-1	Hexachloroethane	U	407	ug/kg	81.5	407
98-95-3	Nitrobenzene	U	407	ug/kg	81.5	407
78-59-1	Isophorone	U	407	ug/kg	81.5	407
88-75-5	2-Nitrophenol	U	407	ug/kg	81.5	407
105-67-9	2,4-Dimethylphenol	U	407	ug/kg	143	407
111-91-1	bis(2-Chloroethoxy)methane	U	407	ug/kg	81.5	407
120-83-2	2,4-Dichlorophenol	U	407	ug/kg	81.5	407
65-85-0	Benzoic acid	J	645	ug/kg	204	815
91-20-3	Naphthalene	U	40.7	ug/kg	12.2	40.7
106-47-8	4-Chloroaniline	U	407	ug/kg	81.5	407
87-68-3	Hexachlorobutadiene	U	407	ug/kg	81.5	407
91-57-6	2-Methylnaphthalene	U	40.7	ug/kg	8.15	40.7
77-47-4	Hexachlorocyclopentadiene	U	407	ug/kg	81.5	407
88-06-2	2,4,6-Trichlorophenol	U	407	ug/kg	81.5	407
95-95-4	2,4,5-Trichlorophenol	U	407	ug/kg	81.5	407
91-58-7	2-Chloronaphthalene	U	40.7	ug/kg	13.4	40.7
88-74-4	2-Nitroaniline	U	407	ug/kg	81.5	407
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	407	ug/kg	81.5	407

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

SDG Number: 10-1225
Lab Sample ID: 244626015

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 18.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7283
Batch ID: 942840
Run Date: 01/19/2010 18:47
Prep Date: 01/18/2010 20:10
Data File: s5a1923.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	407	ug/kg	81.5	407
606-20-2	2,6-Dinitrotoluene	U	407	ug/kg	40.7	407
208-96-8	Acenaphthylene	U	40.7	ug/kg	12.2	40.7
51-28-5	2,4-Dinitrophenol	U	815	ug/kg	155	815
132-64-9	Dibenzofuran	U	407	ug/kg	81.5	407
84-66-2	Diethylphthalate	U	407	ug/kg	81.5	407
86-73-7	Fluorene	U	40.7	ug/kg	12.2	40.7
7005-72-3	4-Chlorophenylphenylether	U	407	ug/kg	81.5	407
534-52-1	2-Methyl-4,6-dinitrophenol	U	407	ug/kg	81.5	407
100-01-6	4-Nitroaniline	U	407	ug/kg	122	407
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	407	ug/kg	81.5	407
122-66-7	Azobenzene	U	407	ug/kg	81.5	407
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	407	ug/kg	81.5	407
118-74-1	Hexachlorobenzene	U	407	ug/kg	81.5	407
85-01-8	Phenanthrene	U	40.7	ug/kg	12.2	40.7
120-12-7	Anthracene	U	40.7	ug/kg	8.15	40.7
84-74-2	Di-n-butylphthalate	U	407	ug/kg	81.5	407
206-44-0	Fluoranthene	U	40.7	ug/kg	12.2	40.7
85-68-7	Butylbenzylphthalate	U	407	ug/kg	81.5	407
56-55-3	Benzo(a)anthracene	U	40.7	ug/kg	12.2	40.7
91-94-1	3,3'-Dichlorobenzidine	U	407	ug/kg	122	407
218-01-9	Chrysene	U	40.7	ug/kg	12.2	40.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	407	ug/kg	81.5	407
117-84-0	Di-n-octylphthalate	U	407	ug/kg	81.5	407
205-99-2	Benzo(b)fluoranthene	U	40.7	ug/kg	12.2	40.7
207-08-9	Benzo(k)fluoranthene	U	40.7	ug/kg	12.2	40.7
50-32-8	Benzo(a)pyrene	U	40.7	ug/kg	12.2	40.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.7	ug/kg	12.2	40.7
53-70-3	Dibenzo(a,h)anthracene	U	40.7	ug/kg	12.2	40.7
191-24-2	Benzo(ghi)perylene	U	40.7	ug/kg	12.2	40.7
120-82-1	1,2,4-Trichlorobenzene	U	407	ug/kg	81.5	407

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	5.69	587	ug/kg	87	NJ
	Unknown	5.76	634	ug/kg		J

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 244626015	Date Received: 01/13/2010 08:55	%Moisture: 18.2
	Client: LANL010	Project: LANL01004
Client ID: RE12-10-7283	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 18:47	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a1923.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.8	5610	ug/kg	99	NJ
	Unknown	5.96	636	ug/kg		J
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcycl	6.14	752	ug/kg	94	NJ
77-53-2	Cedrol	6.57	3250	ug/kg	94	NJ
473-16-5	2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	6.7	587	ug/kg	95	NJ
	Unknown	6.88	1160	ug/kg		J
1000130-97-9	E-15-Heptadecenal	8.77	558	ug/kg	98	NJ
	Unknown	8.92	2020	ug/kg		J
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	9.04	7030	ug/kg	99	NJ
	Unknown	9.35	412	ug/kg		J
	Unknown	9.37	450	ug/kg		J
1599-67-3	1-Docosene	9.42	935	ug/kg	99	NJ
	Unknown	9.47	575	ug/kg		J
	Unknown	9.51	880	ug/kg		J
	Unknown	9.56	582	ug/kg		J
	Unknown	9.59	463	ug/kg		J
18326-16-4	Podocarpa-8,11,13-trien-3-one, 14-isopro	9.62	715	ug/kg	91	NJ
6755-93-7	2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	9.76	1180	ug/kg	98	NJ
3772-56-3	2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	9.88	541	ug/kg	98	NJ
	Unknown	9.94	629	ug/kg		J
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	10.04	759	ug/kg	95	NJ
	Unknown	10.08	1760	ug/kg		J
	Unknown	10.26	450	ug/kg		J
288246-53-7	Pyridine-3-carboxamide, oxime, N-(2-trif	10.51	1080	ug/kg	93	NJ
2883-08-1	Cyclohexane, 1,1'-(2-methyl-1,3-propaned	11.88	895	ug/kg	89	NJ
112-95-8	Eicosane	13.17	1360	ug/kg	95	NJ
	Unknown	13.31	806	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	1750	ug/kg	92	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1923.d
Lab Smp Id: 244626015 Client Smp ID: RE12-10-7283
Inj Date : 19-JAN-2010 18:47
Operator : RMB Inst ID: MSD5.i
Smp Info : |244626015|942840|1|SVM|1|LANL
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	18.19770	% 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	3.937	3.940	(1.000)	595460	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	2008158	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1153650	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2123067	40.0000	
* 91 Chrysene-d12	240	9.648	9.646	(1.000)	1715822	40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1039158	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.794)	828036	56.0719	2280
\$ 5 Phenol-d5	99	3.648	3.651	(0.927)	1031628	56.6462	2310
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	471501	30.5793	1240
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	946852	31.0260	1260
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	266473	72.6733	2960
\$ 81 p-Terphenyl-d14	244	8.613	8.611	(0.893)	1057768	39.2615	1600

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====		=====	=====	=====
27 Benzoic acid	105	4.537	4.571	(0.945)		19021	15.8266	645 (a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5a1923.d

Report Date: 01/20/2010 07:09

Lab. ID: 244626015

SampleType: SAMPLE

Injection Date: 19-JAN-2010 18:47

Operator: RMB

Instrument: MSD5.i

Sample Info: |244626015|942840|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN091223-01

Comment:

Method used: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1225

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
1 N-Methyl-N-nitrosomethylamine				CAS#: 62-75-9		
74	280935	2.23	2.42	80-120	100	(T)
42	20476	2.23	2.42	69-129	7	(QT)
43	16517	2.23	2.42	13- 73	6	(QT)

4 Aniline				CAS#: 62-53-3		
66	54119	3.65	3.72	80-120	100	(T)
93	10846	3.61	3.72	210-270	20	(QT)

17 N-Nitrosodipropylamine				CAS#: 621-64-7		
70	68298	4.30	4.18	80-120	100	(T)
42	39758	4.30	4.18	44-104	58	(T)

22 Isophorone				CAS#: 78-59-1		
82	475370	4.30	4.47	80-120	100	(T)
138	571	4.36	4.47	0- 49	0	(T)

27 Benzoic acid				CAS#: 65-85-0		
105	19021	4.54	4.57	80-120	100	()
122	12554	4.54	4.57	39- 99	66	()
77	11645	4.54	4.57	34- 94	61	()

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	20062	5.69	5.66	80-120	100	()
164	360	5.74	5.66	4- 64	2	(QT)
127	2740	5.69	5.66	9- 69	14	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
42 o-Nitroaniline		CAS#: 88-74-4				
65	28074	5.69	5.71	80-120	100	()
92	48739	5.69	5.71	31- 91	174	(Q)
138	534	5.60	5.71	70-130	2	(QT)
<hr/>						
41 m-Nitroaniline		CAS#: 99-09-2				
138	24732	5.80	6.01	80-120	100	(T)
92	382441	5.80	6.01	82-142	1546	(QT)
108	407775	5.80	6.01	0- 40	1649	(QT)
<hr/>						
43 Dimethylphthalate		CAS#: 131-11-3				
163	131144	5.80	5.82	80-120	100	()
164	15544	5.80	5.82	0- 40	12	()
<hr/>						
44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	157885	6.06	5.88	80-120	100	(T)
63	5255	6.06	5.88	61-121	3	(QT)
<hr/>						
48 2,4-Dinitrophenol		CAS#: 51-28-5				
184	495	6.33	6.08	80-120	100	(T)
154	543	6.31	6.09	1306-1366	110	(QT)
<hr/>						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	157885	6.06	6.17	80-120	100	(T)
89	5122	6.06	6.17	47-107	3	(QT)
63	4701	6.06	6.17	23- 83	3	(QT)
<hr/>						
51 Diethylphthalate		CAS#: 84-66-2				
149	247517	6.57	6.33	80-120	100	(T)
177	63337	6.57	6.33	0- 53	26	(T)
150	851759	6.57	6.33	0- 43	344	(QT)
<hr/>						
52 4-Nitrophenol		CAS#: 100-02-7				
139	1717	6.08	6.10	80-120	100	()
109	21077	6.09	6.10	41-101	1227	(Q)
65	25963	6.06	6.10	72-132	1512	(Q)
<hr/>						
53 Fluorene		CAS#: 86-73-7				
166	11049	6.52	6.47	80-120	100	()
165	8003	6.52	6.47	56-116	72	()
167	2097	6.52	6.47	0- 44	19	()
<hr/>						
55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	438	6.55	6.49	80-120	100	(T)
105	214726	6.57	6.49	12- 72	48937	(QT)
51	31872	6.57	6.49	42-102	7264	(QT)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
56 p-Nitroaniline		CAS#: 100-01-6				
138	22444	6.57	6.47	80-120	100	(T)
108	222339	6.57	6.47	45-105	991	(QT)
92	63293	6.57	6.47	18- 78	282	(QT)
<hr/>						
58 1,2-Diphenylhydrazine		CAS#: 122-66-7				
77	213444	6.57	6.57	80-120	100	()
105	214726	6.57	6.57	0- 47	101	(Q)
182	416	6.57	6.57	0- 57	0	()
<hr/>						
79 Pyrene		CAS#: 129-00-0				
202	18191	8.62	8.51	80-120	100	(T)
200	34264	8.62	8.51	0- 50	188	(QT)
101	4266	8.62	8.51	0- 44	23	(T)
<hr/>						
89 Benzo(a)anthracene		CAS#: 56-55-3				
228	10940	9.65	9.63	80-120	100	()
226	2842	9.67	9.63	0- 57	26	()
229	52559	9.62	9.63	0- 50	480	(Q)
<hr/>						
92 Chrysene		CAS#: 218-01-9				
228	10849	9.51	9.67	80-120	100	(T)
229	17634	9.47	9.67	0- 51	163	(QT)
226	3667	9.51	9.67	0- 60	34	(T)
<hr/>						
99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	1349	13.11	13.12	80-120	100	()
138	1099	13.11	13.12	1- 61	82	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1923.d
 Lab Smp Id: 244626015 Client Smp ID: RE12-10-7283
 Inj Date : 19-JAN-2010 18:47
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244626015|942840|1|SVM|1|LANL
 Misc Info : |MSD8270 S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 23
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	18.19770	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Acenaphthene-d10	6.060	6534652	40.000
* 67 Phenanthrene-d10	7.231	5913502	40.000
* 91 Chrysene-d12	9.648	6655237	40.000
* 98 Perylene-d12	11.330	3159847	40.000

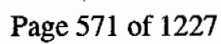
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro					CAS #: 39029-41-9		
5.690	2355264	14.4170714	587	87	NIST05.L	60057	46
Unknown					CAS #:		
5.760	2540794	15.5527450	634	0		0	46
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.801	22492103	137.678960	5610	99	NIST05.L	60024	46
Unknown					CAS #:		
5.960	2551426	15.6178215	636	0		0	46
Benzene, 1-methyl-4-(1,2,2-trimethylcycl					CAS #: 16982-00-6		
6.137	3017571	18.4711984	752	94	NIST05.L	58540	46
Cedrol					CAS #: 77-53-2		
6.572	13030626	79.7632447	3250	94	NIST05.L	72887	46
2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a					CAS #: 473-16-5		
6.695	2131854	14.4202428	587	95	NIST05.L	73025	67
Unknown					CAS #:		
6.884	4194837	28.3746353	1160	0		0	67
E-15-Heptadecenal					CAS #: 1000130-97-9		
8.766	2281097	13.7100866	558	98	NIST05.L	93518	91
Unknown					CAS #:		
8.919	8268868	49.6984124	2020	0		0	91
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa					CAS #: 511-15-9		
9.036	28694631	172.463458	7020	99	NIST05.L	116239	91
Unknown					CAS #:		
9.348	1684109	10.1220071	412	0		0	91
Unknown					CAS #:		
9.366	1839115	11.0536408	450	0		0	91
1-Docosene					CAS #: 1599-67-3		
9.425	3819193	22.9545088	935	99	NIST05.L	129888	91
Unknown					CAS #:		
9.472	2350101	14.1248197	575	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
9.507	3595553	21.6103662	880	0		0	91
Unknown					CAS #:		
9.560	2376448	14.2831766	582	0		0	91
Unknown					CAS #:		
9.589	1891055	11.3658130	463	0		0	91
Podocarpa-8,11,13-trien-3-one, 14-isopro					CAS #: 18326-16-4		
9.625	2920100	17.5506869	715	91	NIST05.L	133599	91
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he					CAS #: 6755-93-7		
9.760	4817830	28.9566247	1180	98	NIST05.L	125032	91
2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10					CAS #: 3772-56-3		
9.883	2209730	13.2811477	541	98	NIST05.L	126180	91
Unknown					CAS #:		
9.936	2569511	15.4435421	629	0		0	91
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he					CAS #: 511-05-7		
10.042	3099925	18.6314893	759	95	NIST05.L	125031	91
Unknown					CAS #:		
10.078	7169021	43.0879942	1760	0		0	91
Unknown					CAS #:		
10.260	1836047	11.0352009	450	0		0	91
Pyridine-3-carboxamide, oxime, N-(2-trif					CAS #: 288246-53-7		
10.513	2102925	26.6205901	1080	93	NIST05.L	112295	98
Cyclohexane, 1,1'-(2-methyl-1,3-propaned					CAS #: 2883-08-1		
11.877	1736558	21.9828042	895	89	NIST05.L	73082	98
Eicosane					CAS #: 112-95-8		
13.166	2631212	33.3080885	1360	95	NIST05.L	113491	98
Unknown					CAS #:		
13.313	1562223	19.7759328	806	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.818	3396256	42.9926558	1750	92	NIST05.L	174403	98

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20

[/chem/MSDS.1/s011910.b/s5a1923.d](#)



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011SVH111LANL

Volume Injected (uL): 0.5

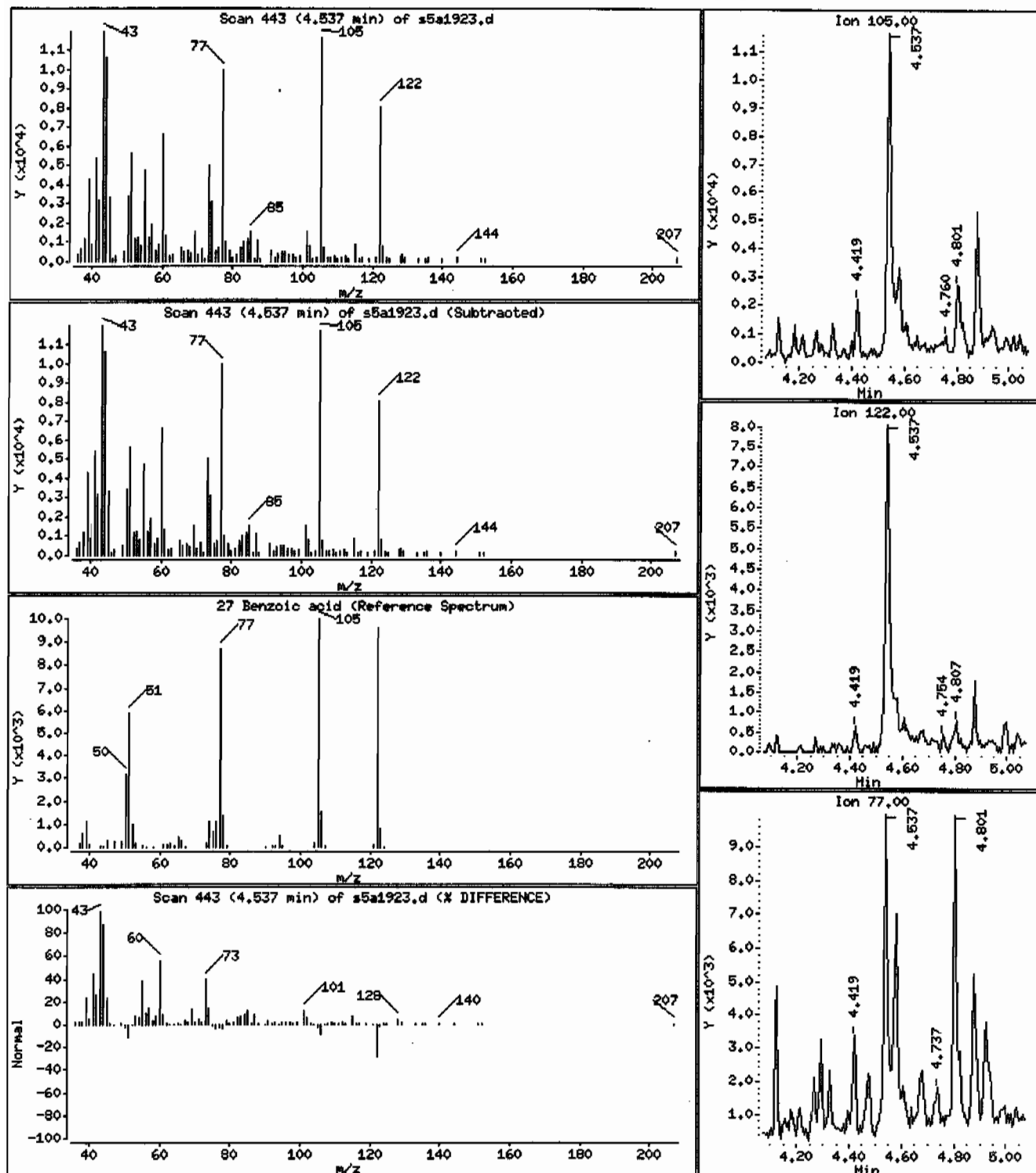
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 645 ug/Kg



Date : 19-JAN-2010 16:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: I244626015194284011ISVH11ILANL

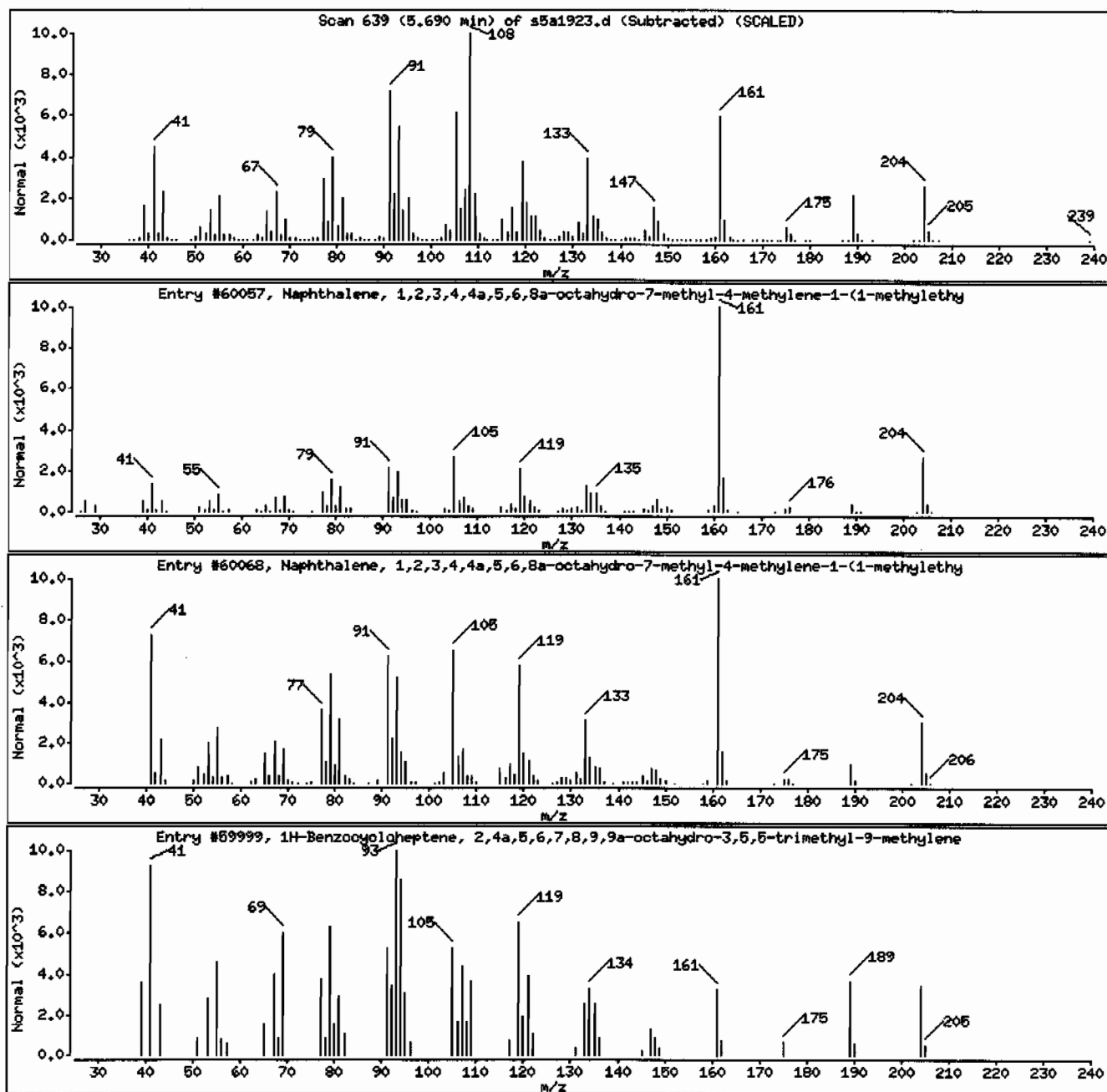
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	39029-41-9	NIST05.L	60057	87	C15H24	204
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro	30021-74-0	NIST05.L	60068	83	C15H24	204
1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-	3853-83-6	NIST05.L	59999	70	C15H24	204



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626018194284011SVH11ILANL

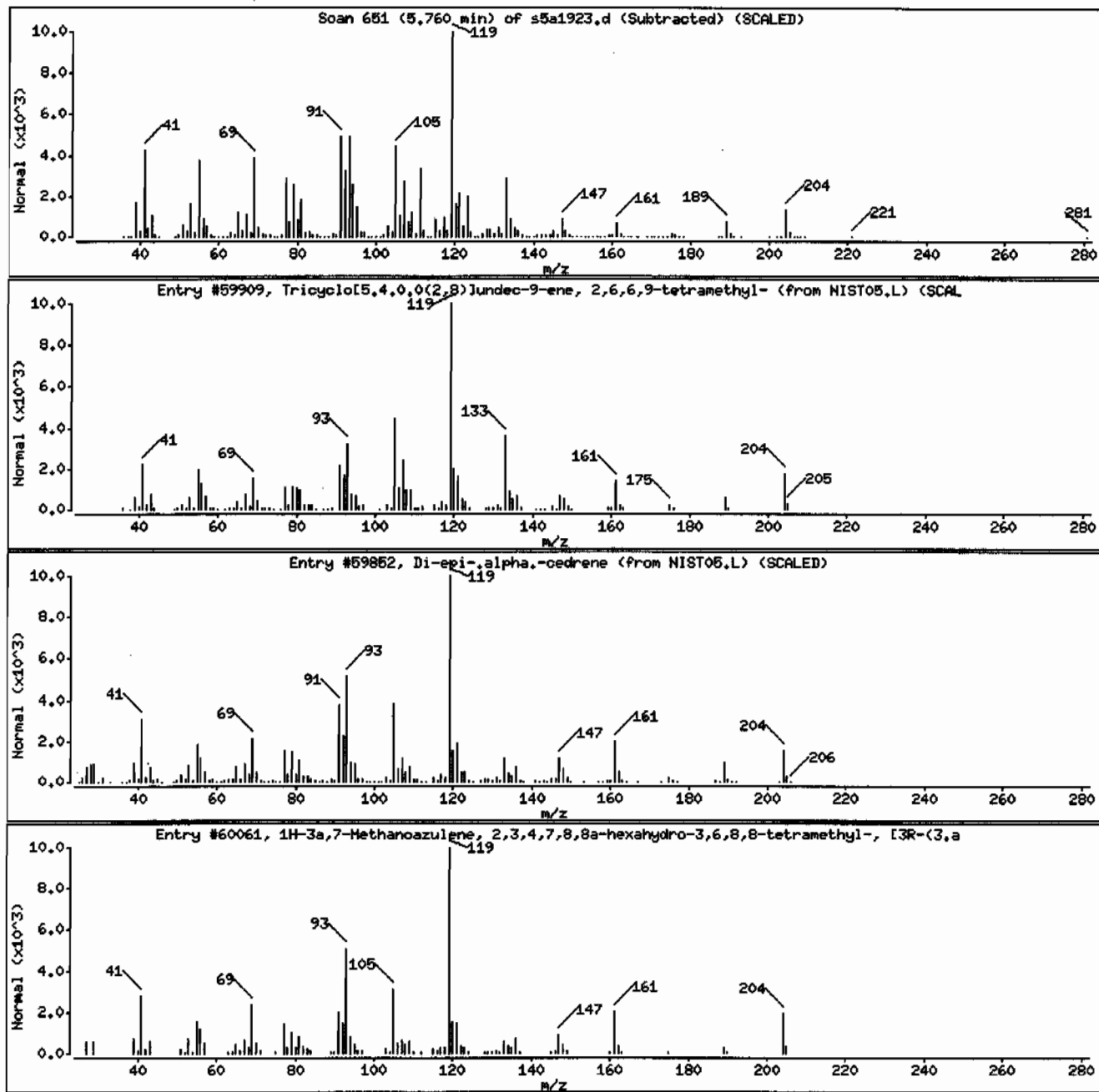
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6	6989-08-2	NIST05.L	59909	70	C ₁₅ H ₂₄	204
Di-epi-.alpha.-cedrene	1000166-13-3	NIST05.L	59852	58	C ₁₅ H ₂₄	204
1H-3a,7-Methanoazulene, 2,3,4,7,8,8a-hex	469-61-4	NIST05.L	60061	53	C ₁₅ H ₂₄	204



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: HSD5.i

Sample Info: 1244626015194284011/ISVH11/LANL

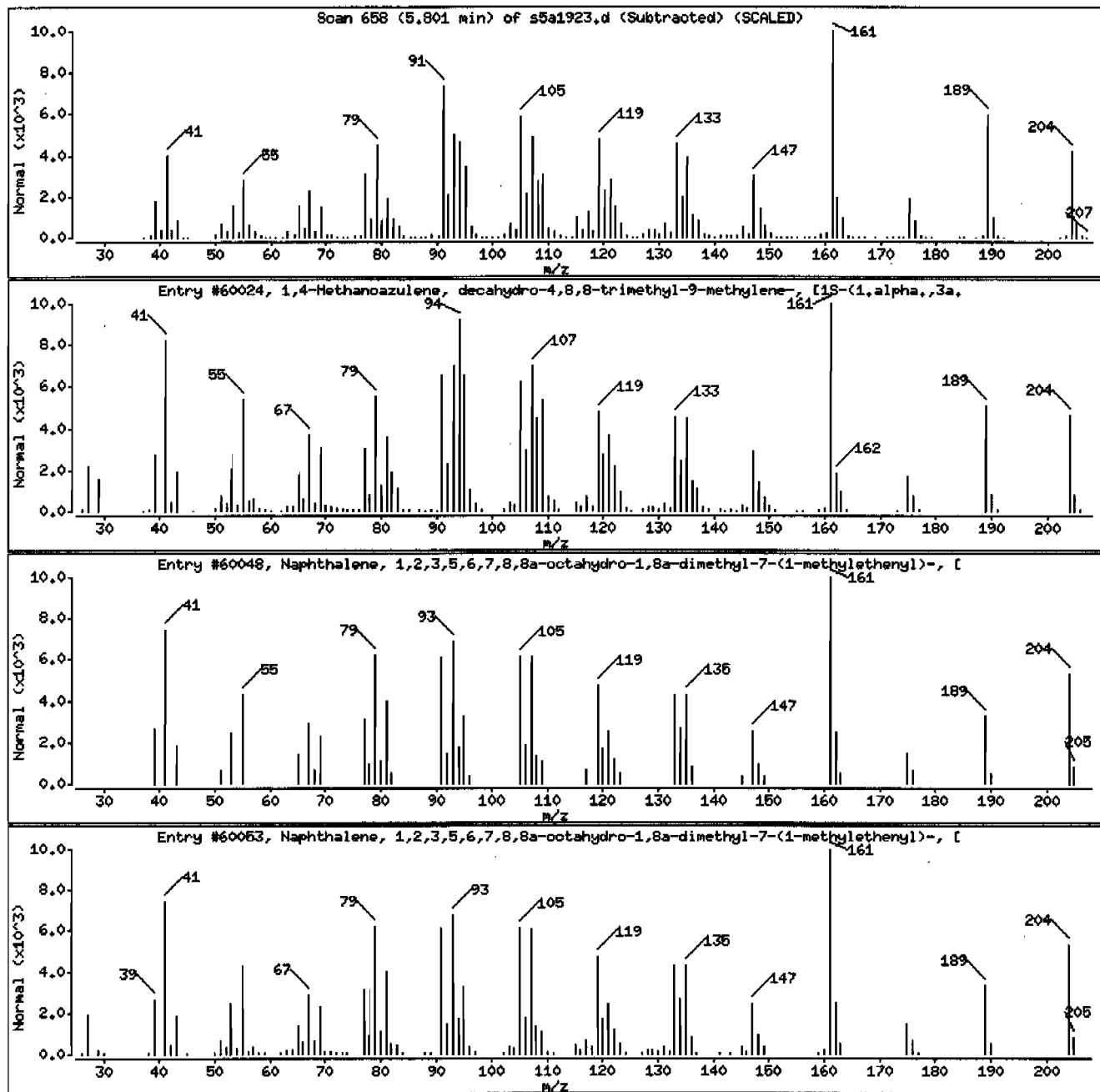
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	476-20-7	NIST05.L	60024	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60048	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60053	98	C15H24	204



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 12446260151942840111SVH111LANL

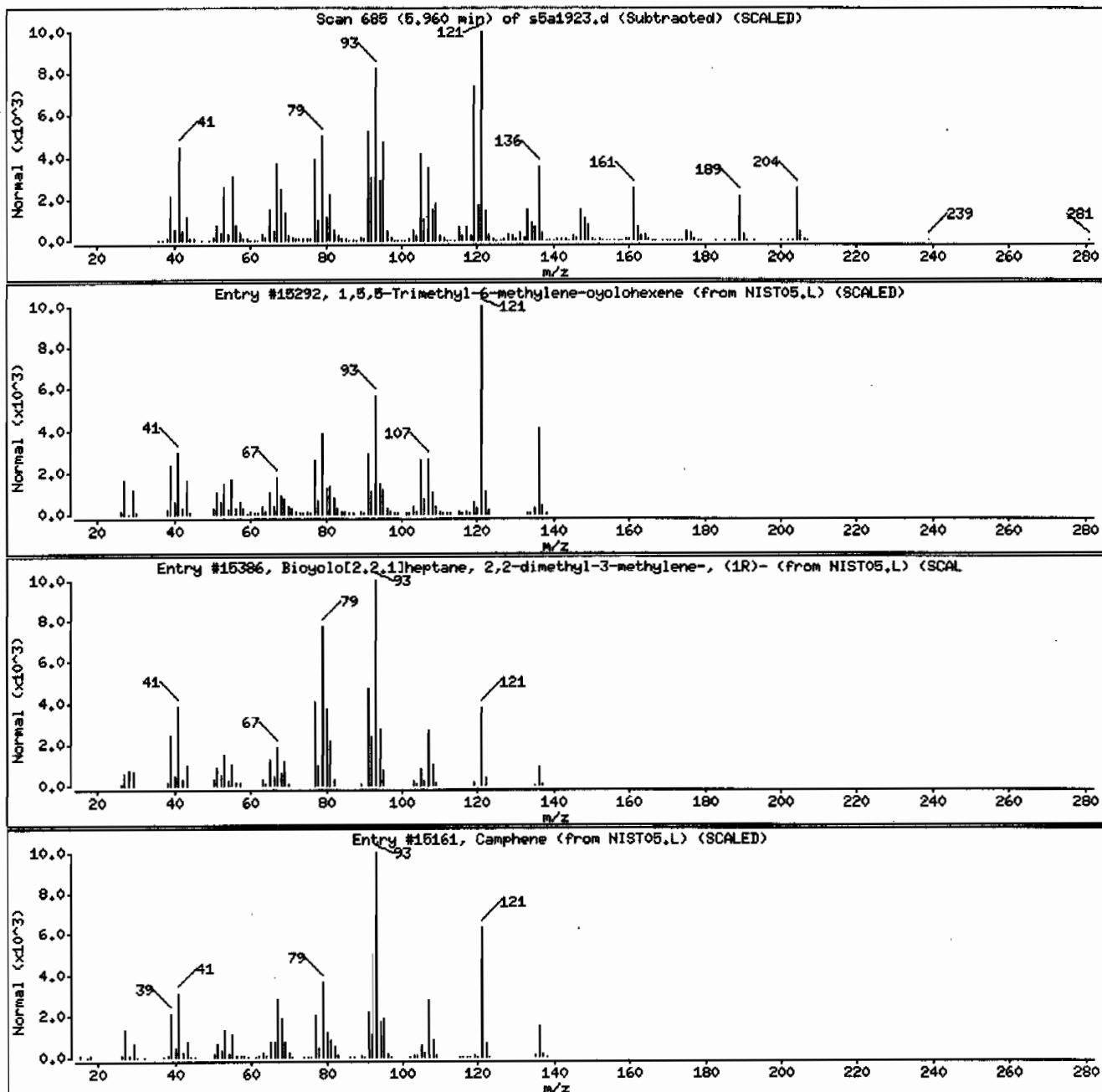
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,5,5-Trimethyl-6-methylene-cyclohexene	514-95-4	NIST05.L	15292	70	C10H16	136
Bicyclo[2.2.1]heptane, 2,2-dimethyl-3-methylene-	5794-03-6	NIST05.L	15386	70	C10H16	136
Camphene	79-92-5	NIST05.L	15161	70	C10H16	136



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011ISVH11ILANL

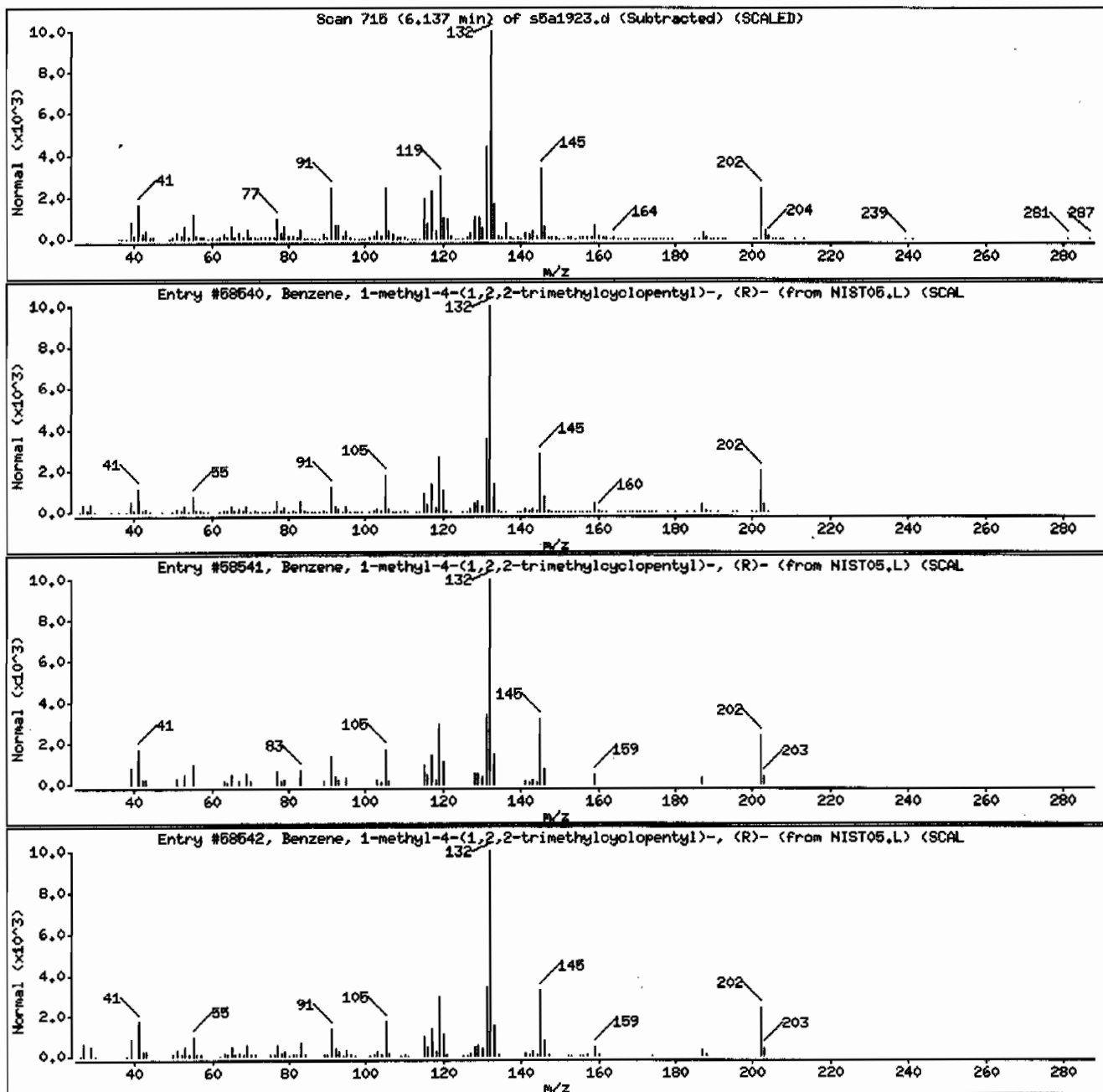
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58540	94	C15H22	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58541	93	C15H22	202
Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)	16982-00-6	NIST05.L	58542	93	C15H22	202



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: I244626015194284011ISVH11ILANL

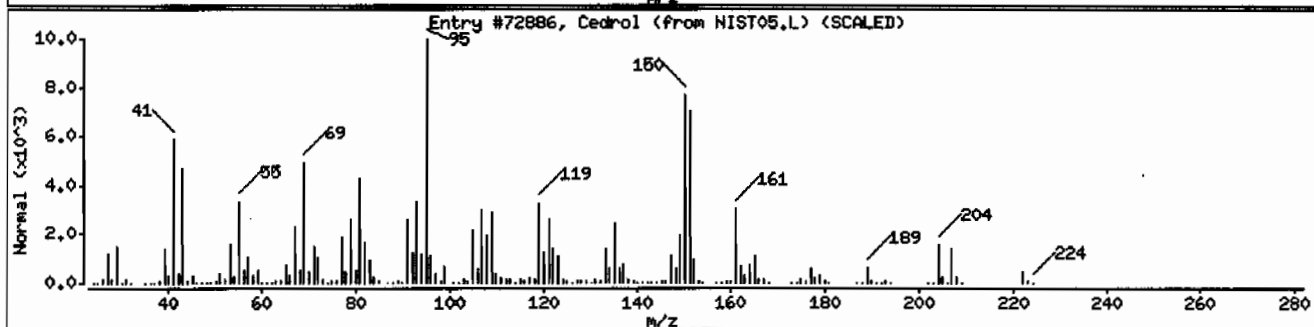
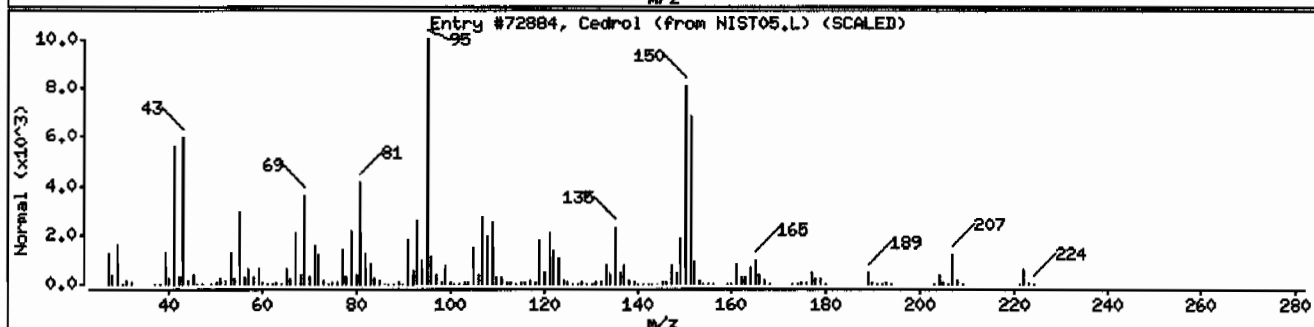
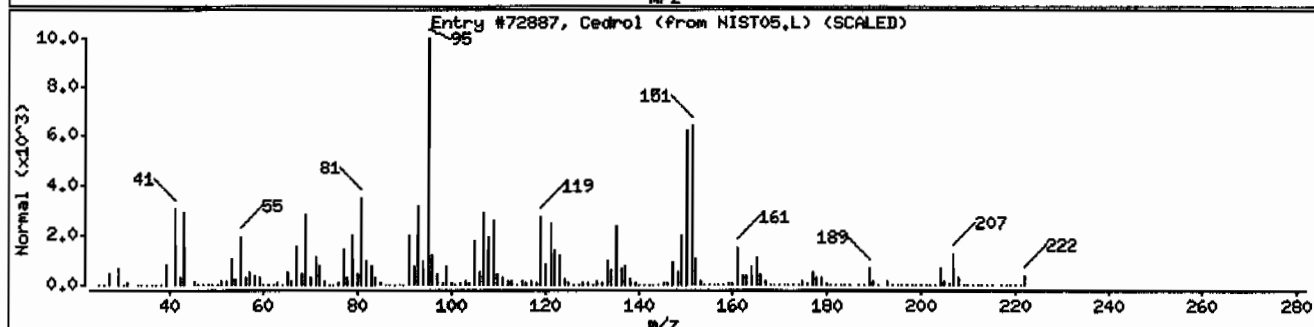
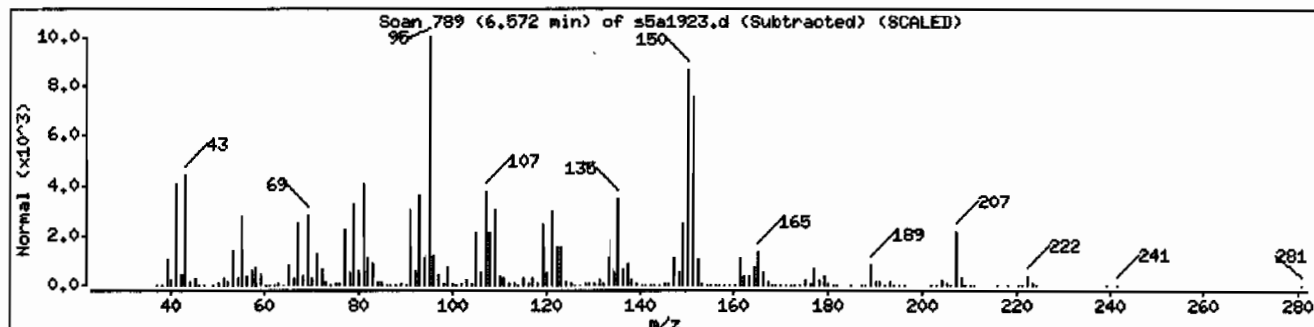
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cedrol	77-53-2	NIST05.L	72887	94	C ₁₅ H ₂₆ O	222
Cedrol	77-53-2	NIST05.L	72884	91	C ₁₅ H ₂₆ O	222
Cedrol	77-53-2	NIST05.L	72886	91	C ₁₅ H ₂₆ O	222



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011ISVH11ILANL

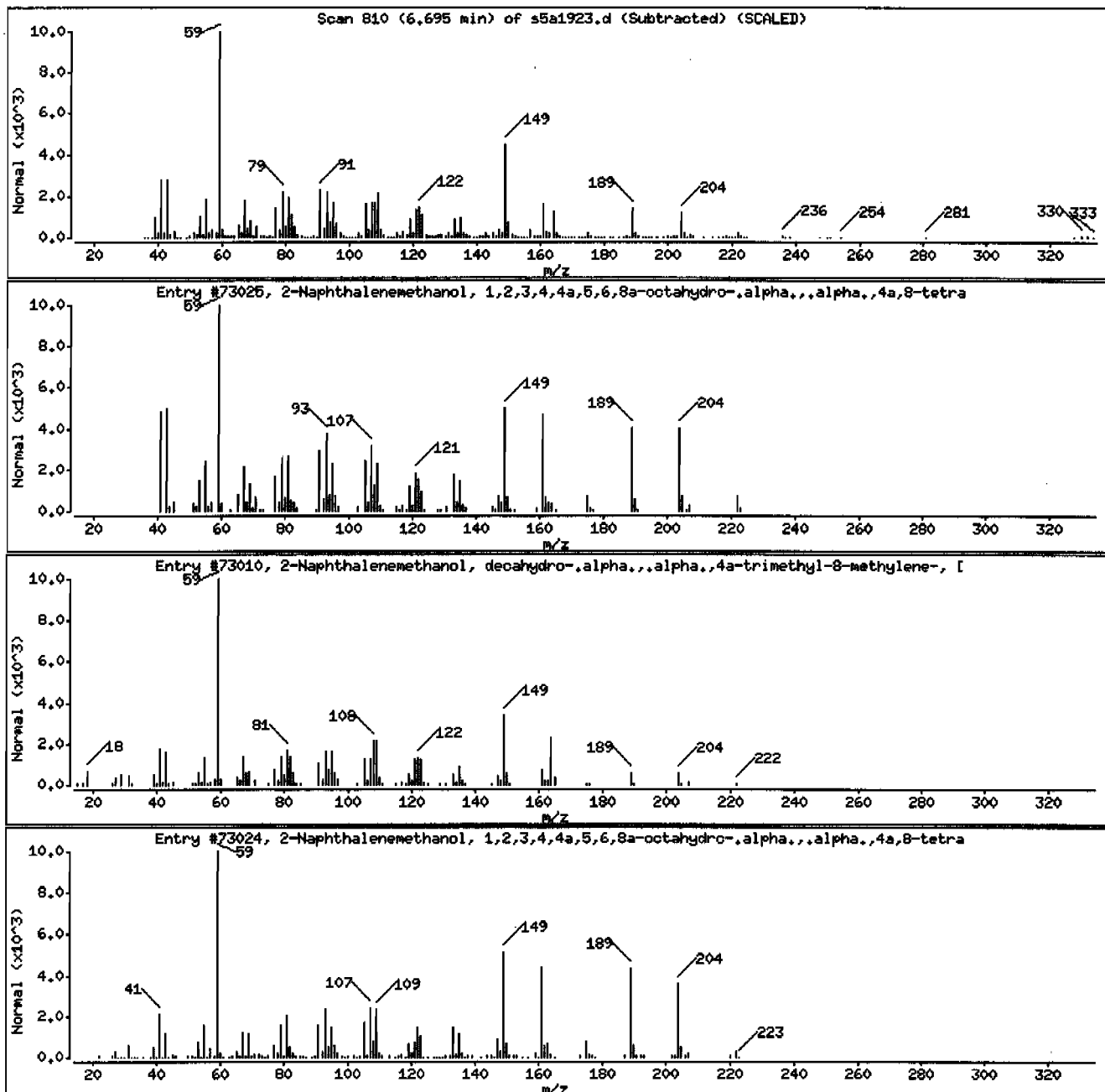
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	473-16-5	NIST05.L	73025	96	C15H26O	222
2-Naphthalenemethanol, decahydro-.alpha.	473-15-4	NIST05.L	73010	90	C15H26O	222
2-Naphthalenemethanol, 1,2,3,4,4a,5,6,8a	473-16-5	NIST05.L	73024	72	C15H26O	222



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: HSD5.i

Sample Info: 1244626015194284011SVH111LANL

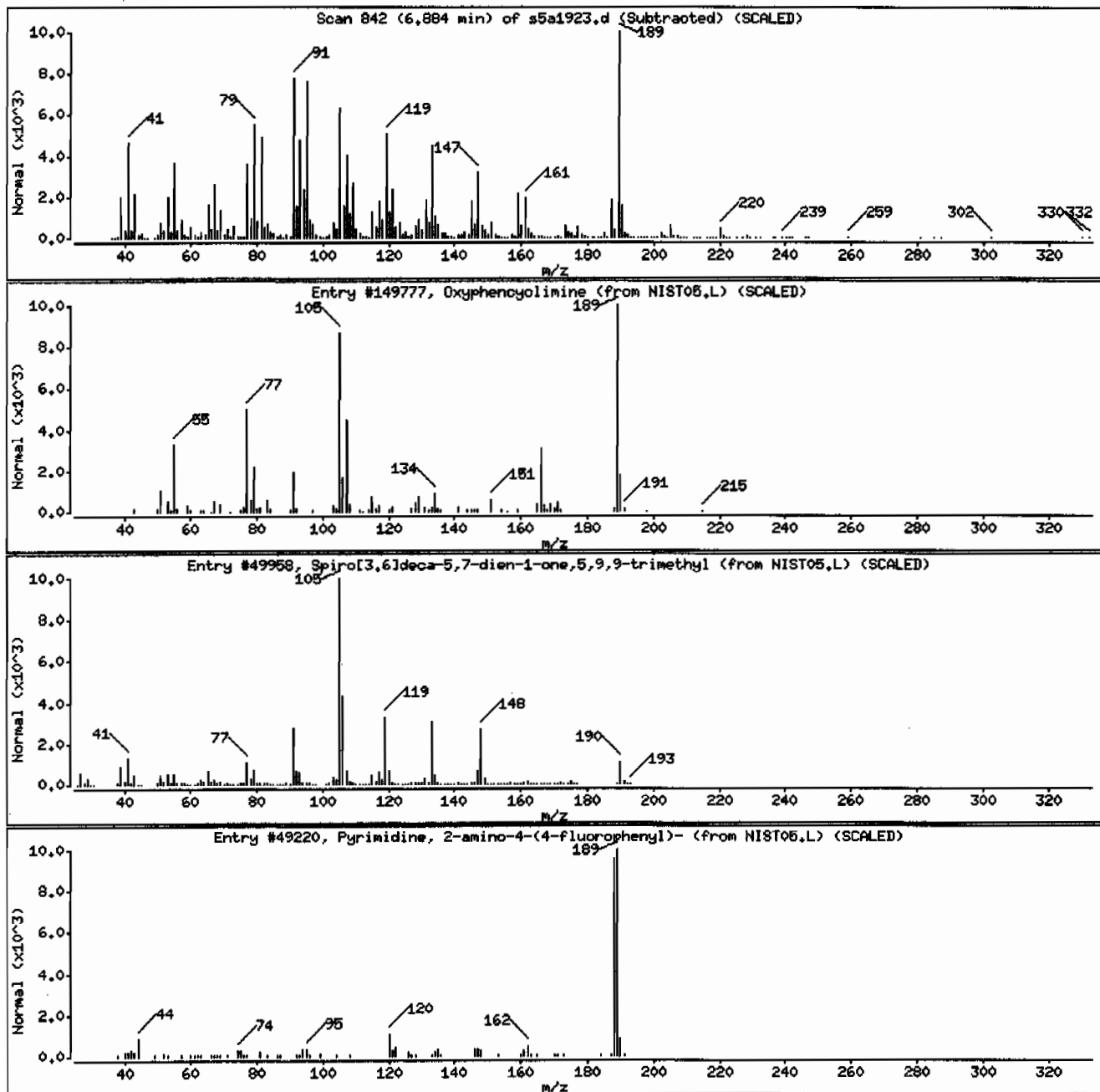
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Oxyphenylimine	125-53-1	NIST05.L	149777	18	C20H28N2O3	344
Spiro[3.6]deca-5,7-dien-1-one,5,9,9-trim	81532-19-6	NIST05.L	49958	15	C13H18O	190
Pyrimidine, 2-amino-4-(4-fluorophenyl)-	85979-49-3	NIST05.L	49220	11	C10H8FN3	189



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: I244626015194284011SVH11ILANL

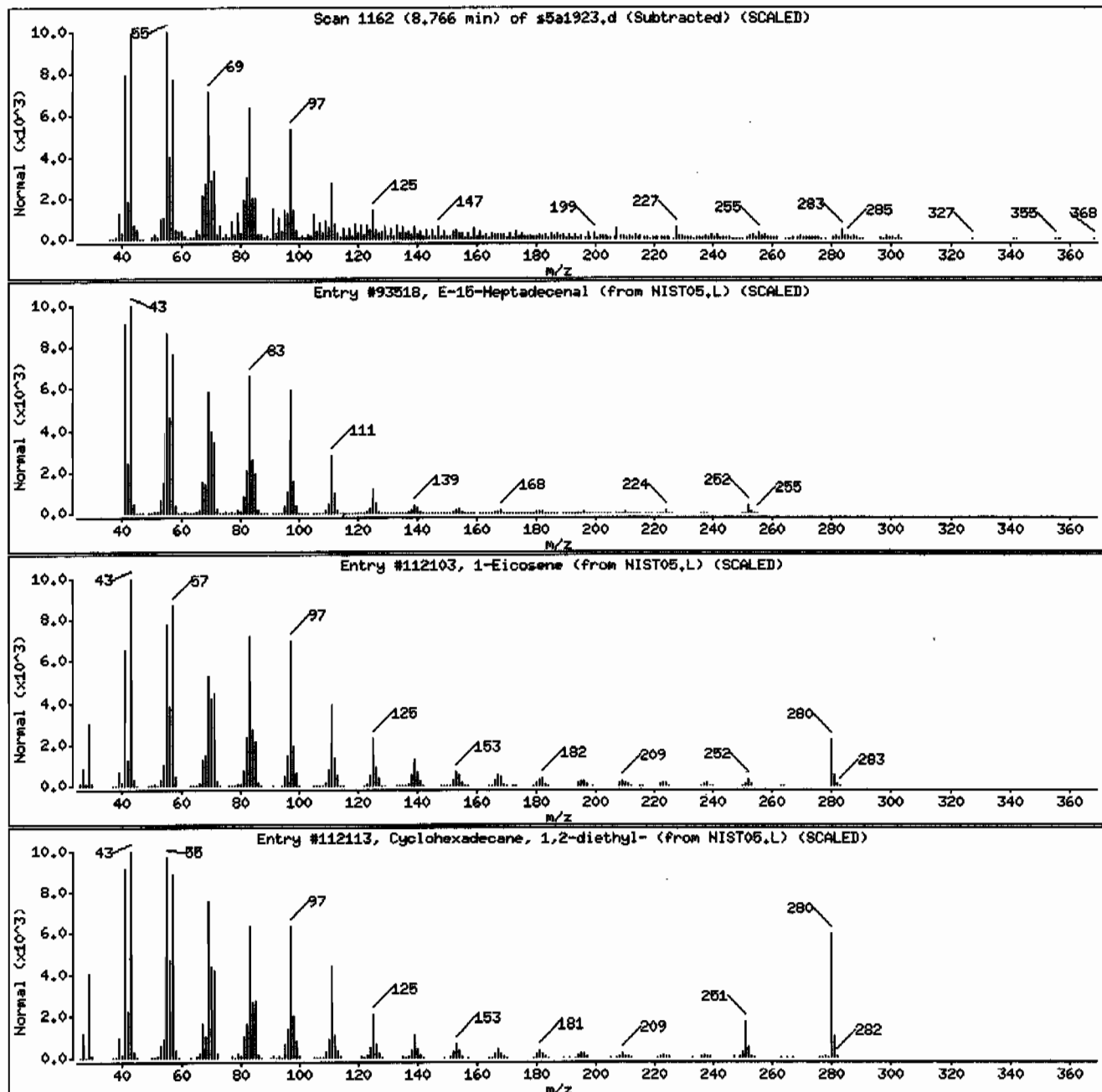
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
E-15-Heptadecenal	1000130-97-9	NIST05.L	93518	98	C17H32O	252
1-Eicosene	3452-07-1	NIST05.L	112103	97	C20H40	280
Cyclohexadecane, 1,2-diethyl-	1000155-85-3	NIST05.L	112113	96	C20H40	280



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7263

Instrument: HSD5.i

Sample Info: 1244626015194284011SVH111LANL

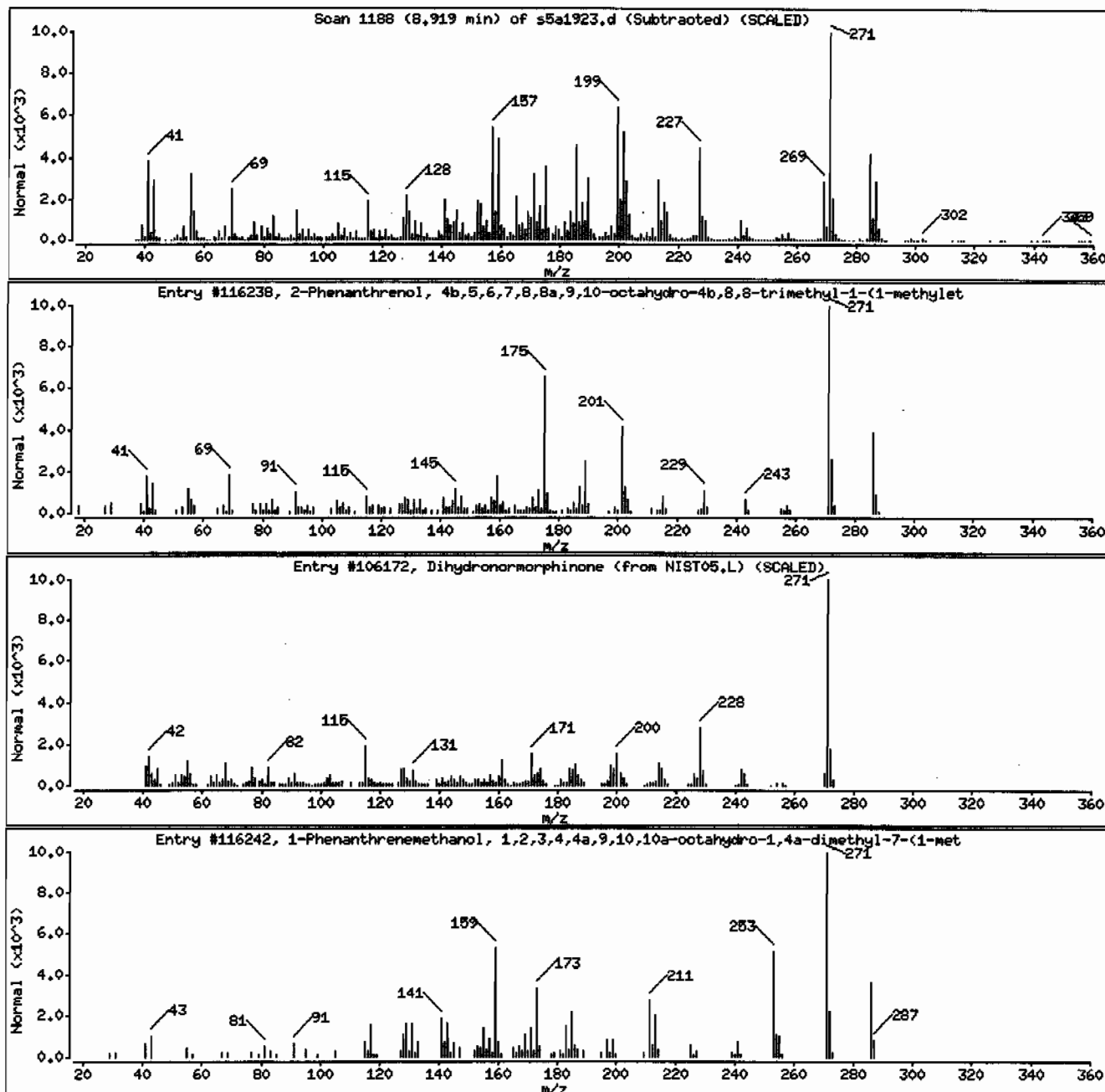
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-SHS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	53	C20H30O	286
Dihydronormorphine	14696-23-2	NIST05.L	106172	43	C16H17NO3	271
1-Phenanthrenemethanol, 1,2,3,4,4a,9,10,	24035-43-6	NIST05.L	116242	38	C20H30O	286



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.1

Sample Info: 1244626015194284011SVH111LANL

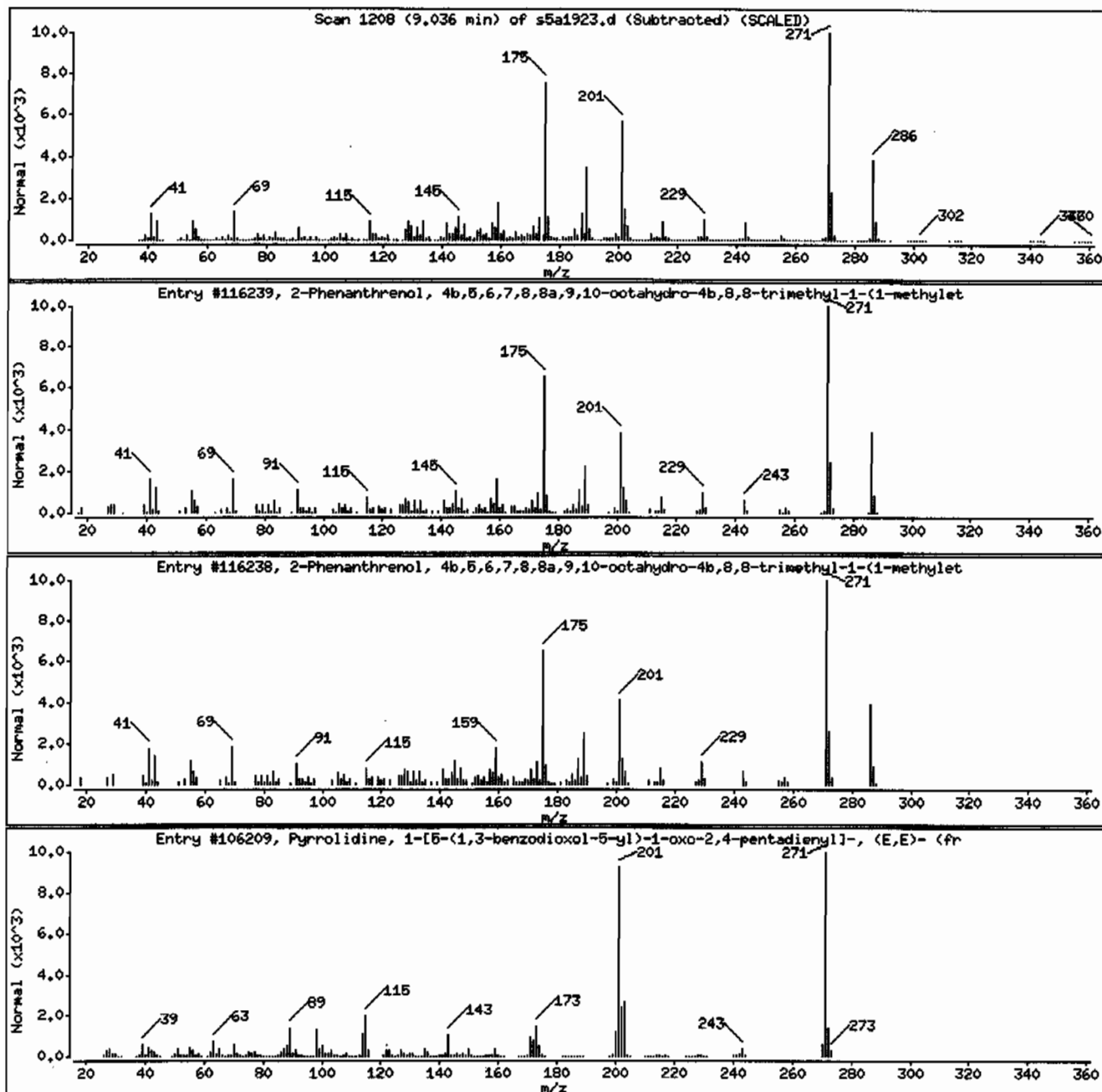
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116239	99	C20H30O	286
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octa	511-15-9	NIST05.L	116238	94	C20H30O	286
Pyrrolidine, 1-[5-(1,3-benzodioxol-5-yl)-1-oxo-2,4-pentadienyl]-, (E,E)- (fr	25924-78-1	NIST05.L	106209	38	C16H17NO3	271



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: HSD5.i

Sample Info: 1244626015194284011ISVH111LANL

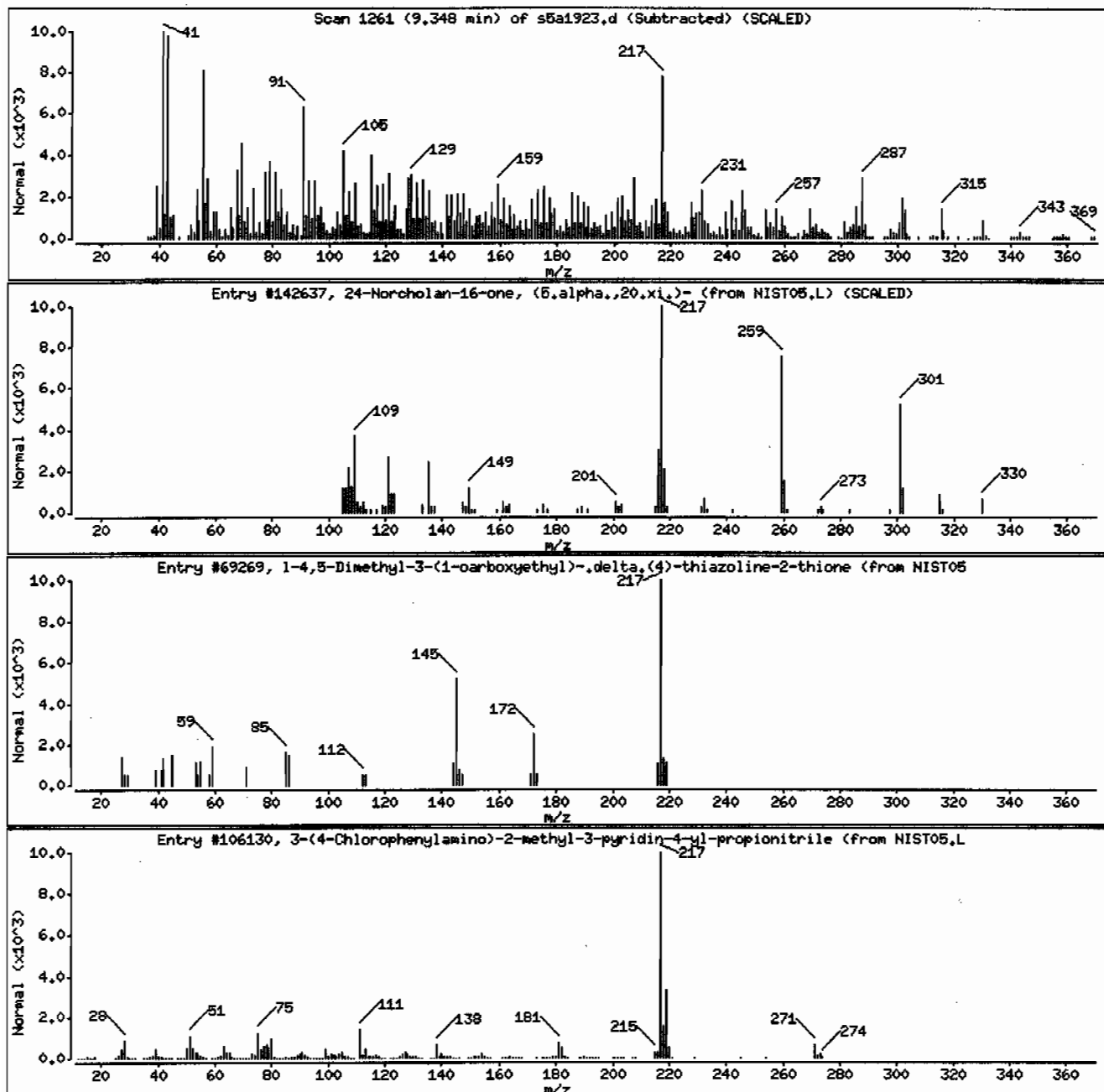
Volume Injected (uL): 0.5

Operator: RMS

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
24-Norcholan-16-one, (5.alpha.,20.xi.)-	69831-76-1	NIST05.L	142637	46	C23H38O	330
1-4,5-Dimethyl-3-(1-carboxyethyl)-.delta.	75624-96-3	NIST05.L	69269	38	C8H11NO2S2	217
3-(4-Chlorophenylamino)-2-methyl-3-pyrid	1000287-69-2	NIST05.L	106130	38	C15H14ClN3	271



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011ISVM11ILANL

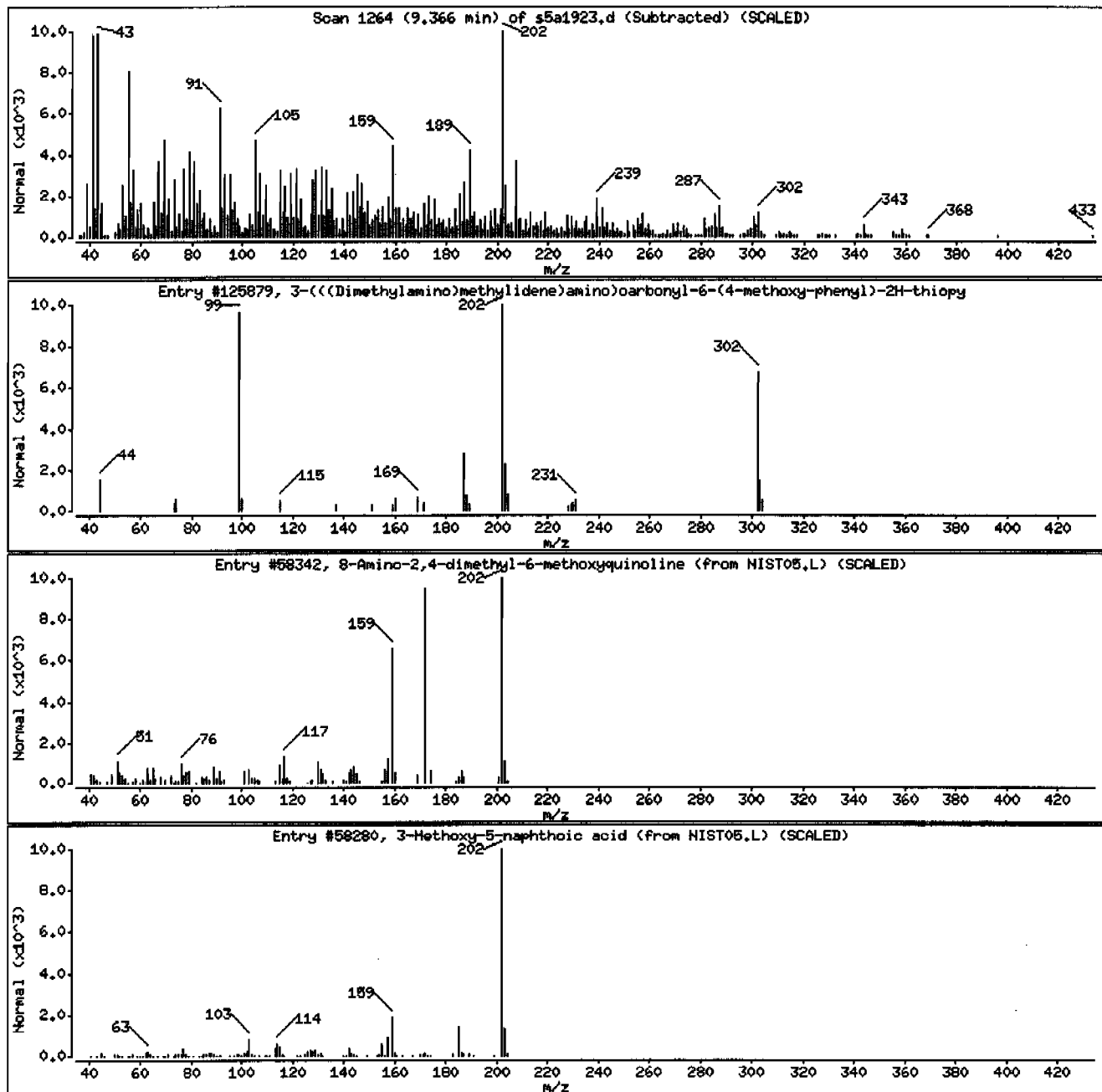
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-(((Dimethylamino)methylidene)amino)car	89607-78-7	NIST05.L	126879	46	C16H18N2O2S	302
8-Amino-2,4-dimethyl-6-methoxyquinoline	54232-18-7	NIST05.L	58342	38	C12H14N2O	202
3-Methoxy-5-naphthoic acid	7498-58-0	NIST05.L	58280	38	C12H10O3	202



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011SVH11ILANL

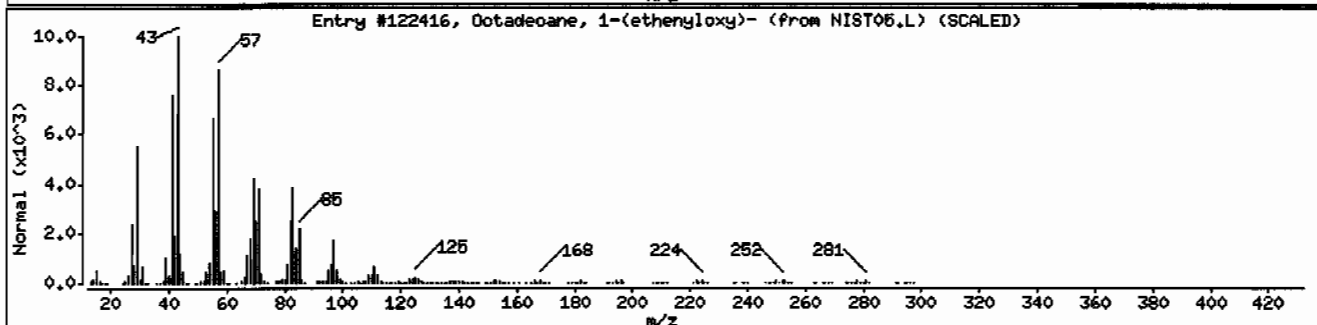
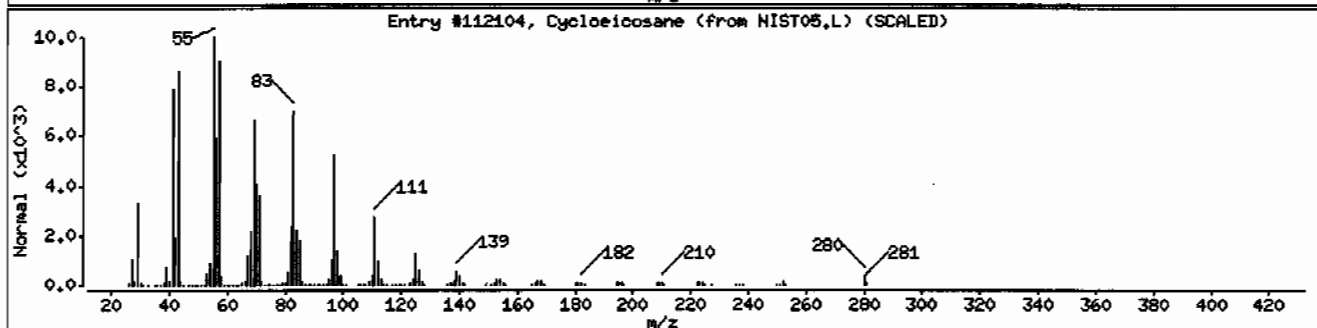
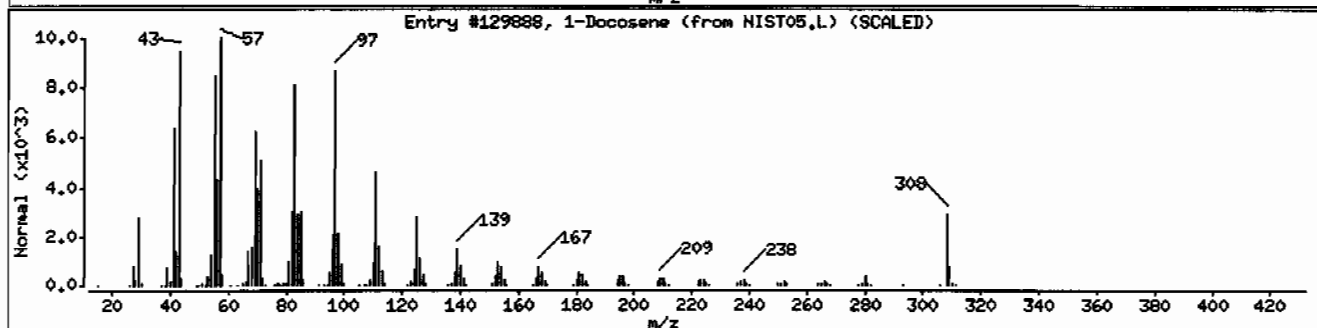
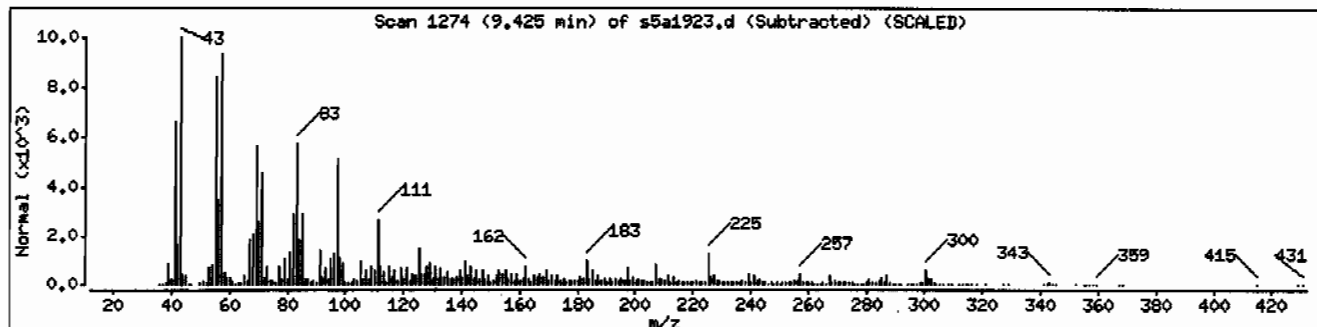
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129888	99	C22H44	308
Cycloeicosane	296-86-0	NIST05.L	112104	90	C20H40	280
Octadecane, 1-(ethenyl)-	930-02-9	NIST05.L	122416	83	C20H40O	296



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.1

Sample Info: 12446260151942840111SVH111LANL

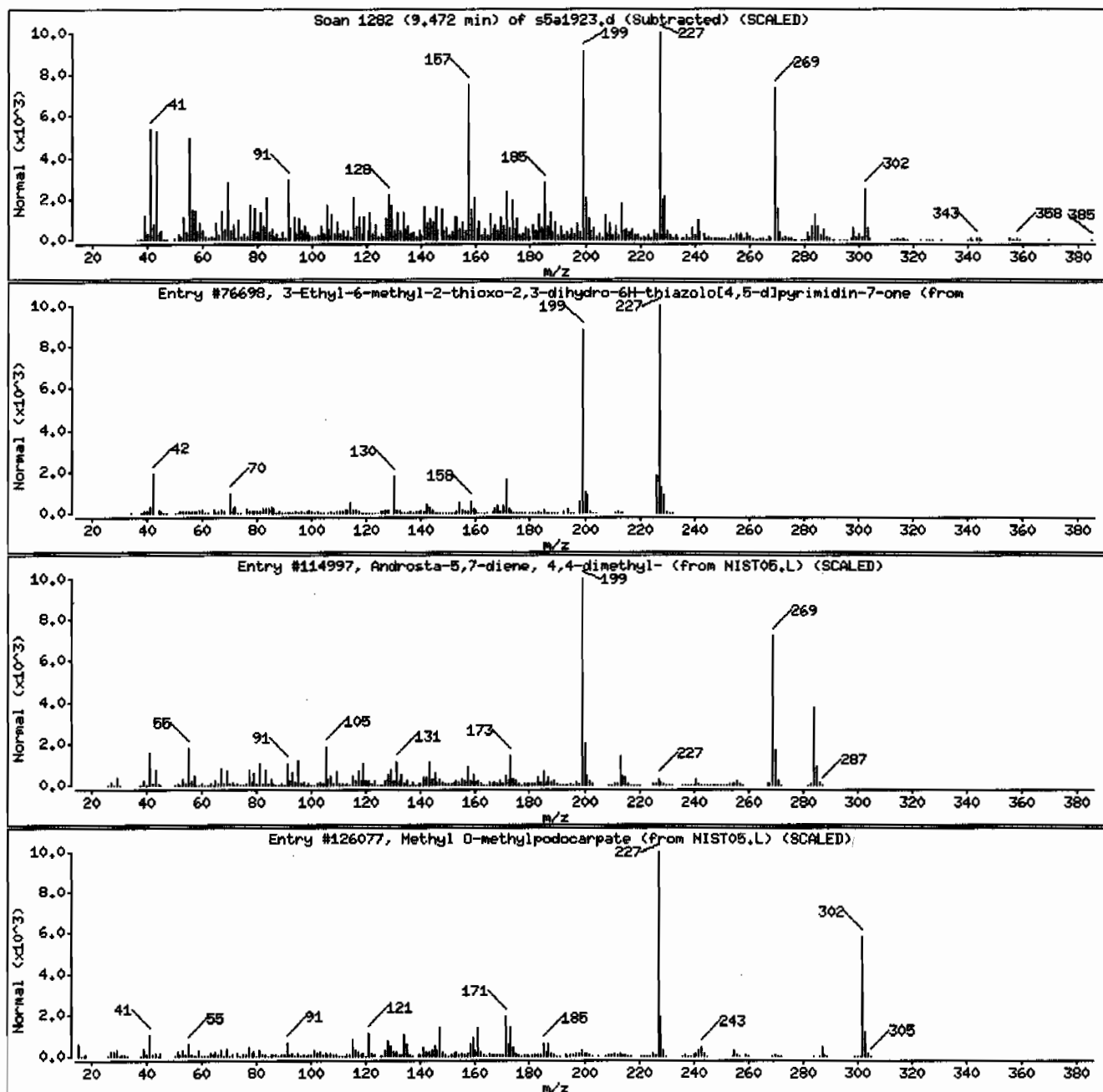
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Ethyl-6-methyl-2-thioxo-2,3-dihydro-6H	1000275-34-5	NIST05.L	76698	38	C8H9N3OS2	227
Androsta-5,7-diene, 4,4-dimethyl-	1000194-15-2	NIST05.L	114997	38	C21H32	284
Methyl O-methylpodocarpate	1231-74-9	NIST05.L	126077	35	C19H26O3	302



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011ISVM11ILANL

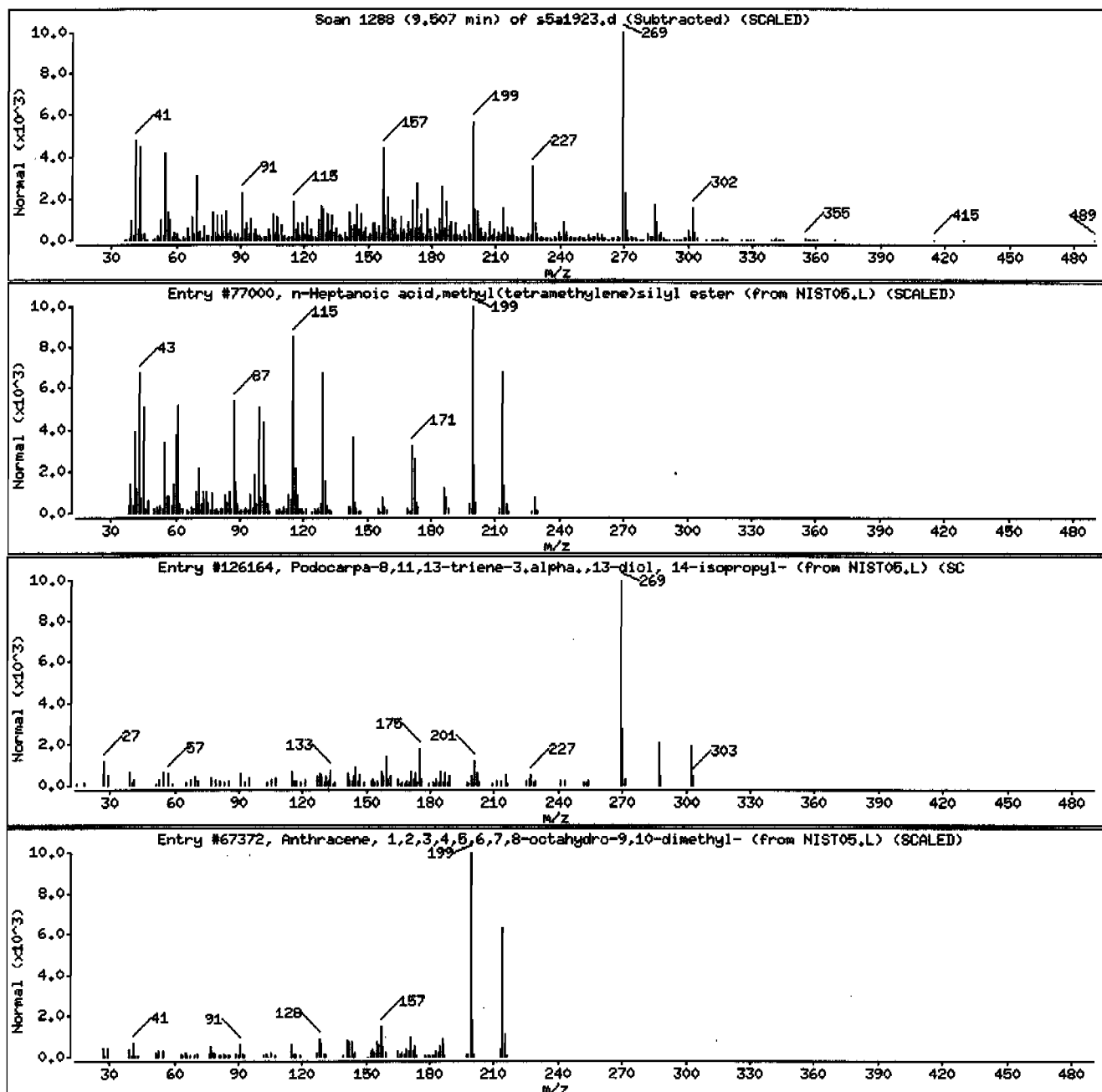
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
n-Heptanoic acid,methyl(tetramethylene)s	1000217-03-6	NIST05.L	77000	59	C12H24O2S1	228
Podocarpa-8,11,13-triene-3.alpha.,13-dio	18325-87-6	NIST05.L	126164	38	C20H30O2	302
Anthracene, 1,2,3,4,5,6,7,8-octahydro-9,	42173-25-1	NIST05.L	67372	38	C16H22	214



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.1

Sample Info: 1244626015194284011SVH11ILANL

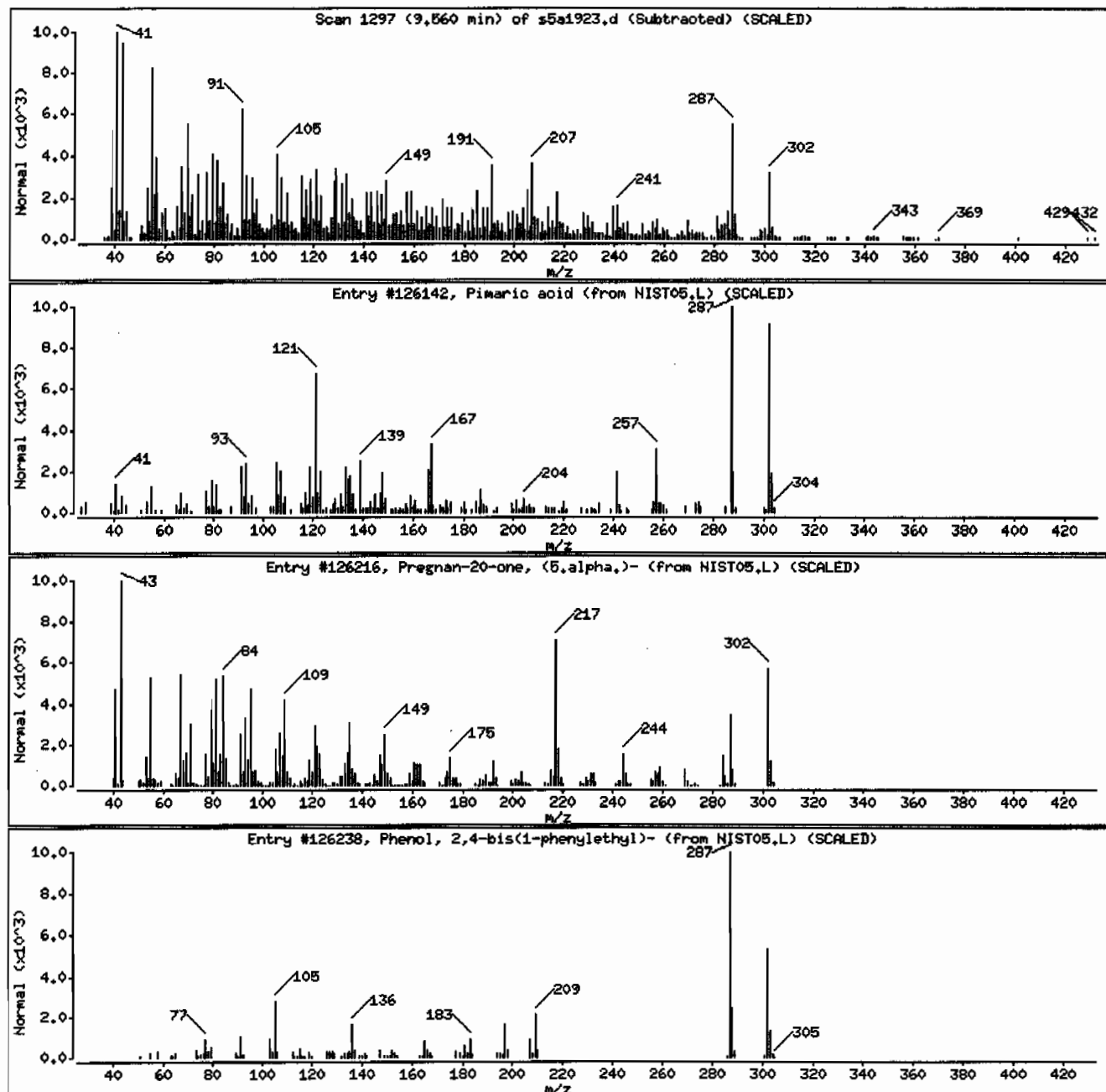
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pimaric acid	127-27-5	NIST05.L	126142	56	C ₂₀ H ₃₀ O ₂	302
Pregnan-20-one, (5.alpha.)-	848-62-4	NIST05.L	126216	44	C ₂₁ H ₃₄ O	302
Phenol, 2,4-bis(1-phenylethyl)-	2769-94-0	NIST05.L	126238	42	C ₂₂ H ₂₂ O	302



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.1

Sample Info: 1244626015194284011ISVMI1ILANL

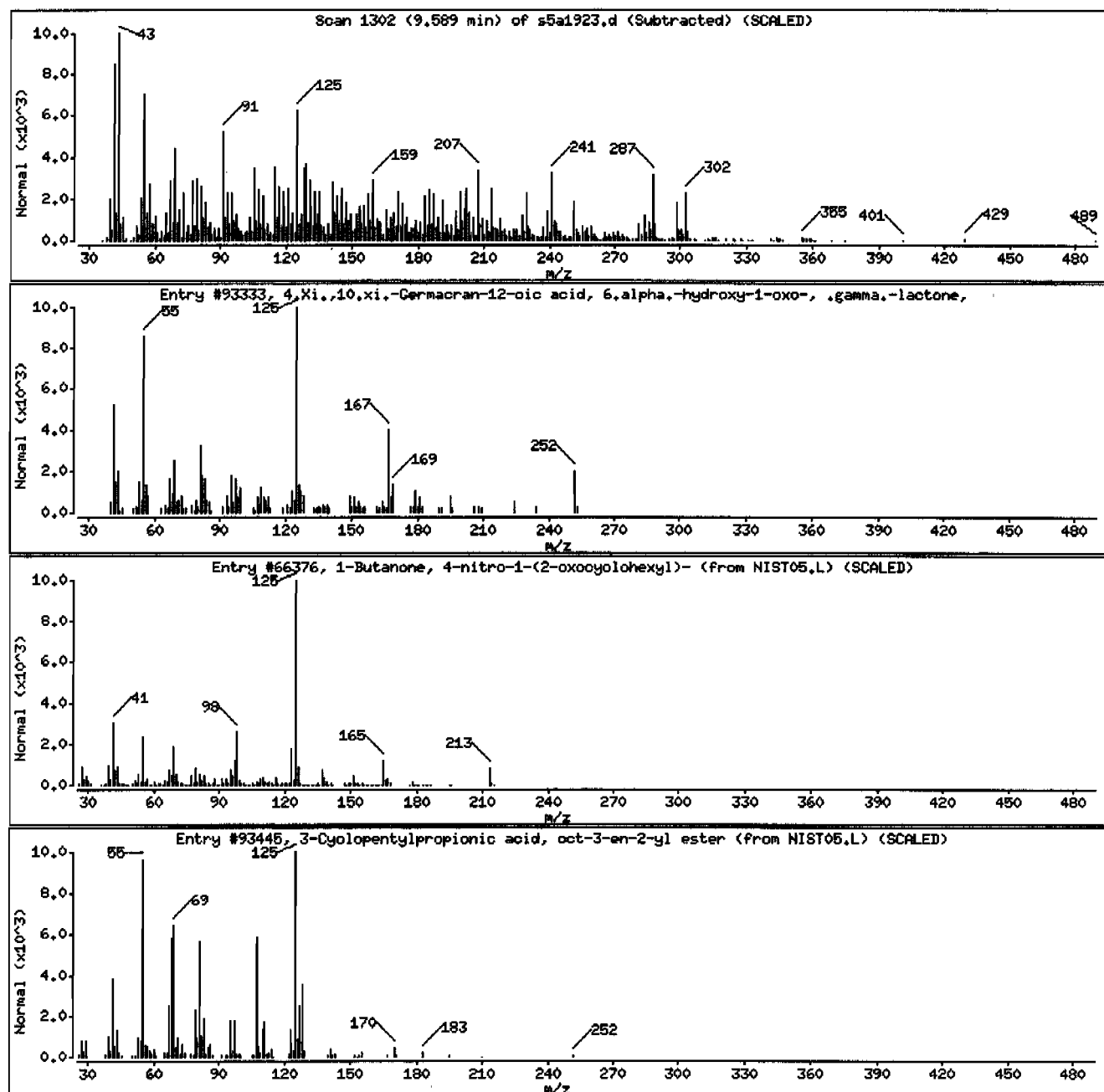
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4,xi.,10.xi.-Germacran-12-oic acid, 6.alpha.	19906-67-3	NIST05.L	93333	41	C15H24O3	252
1-Butanone, 4-nitro-1-(2-oxocyclohexyl)-	79630-88-9	NIST05.L	66376	35	C10H15NO4	213
3-Cyclopentylpropionic acid, oct-3-en-2-	1000292-46-8	NIST05.L	93445	25	C16H28O2	252



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: HSD5.i

Sample Info: 1244626015194284011ISVMI1ILANL

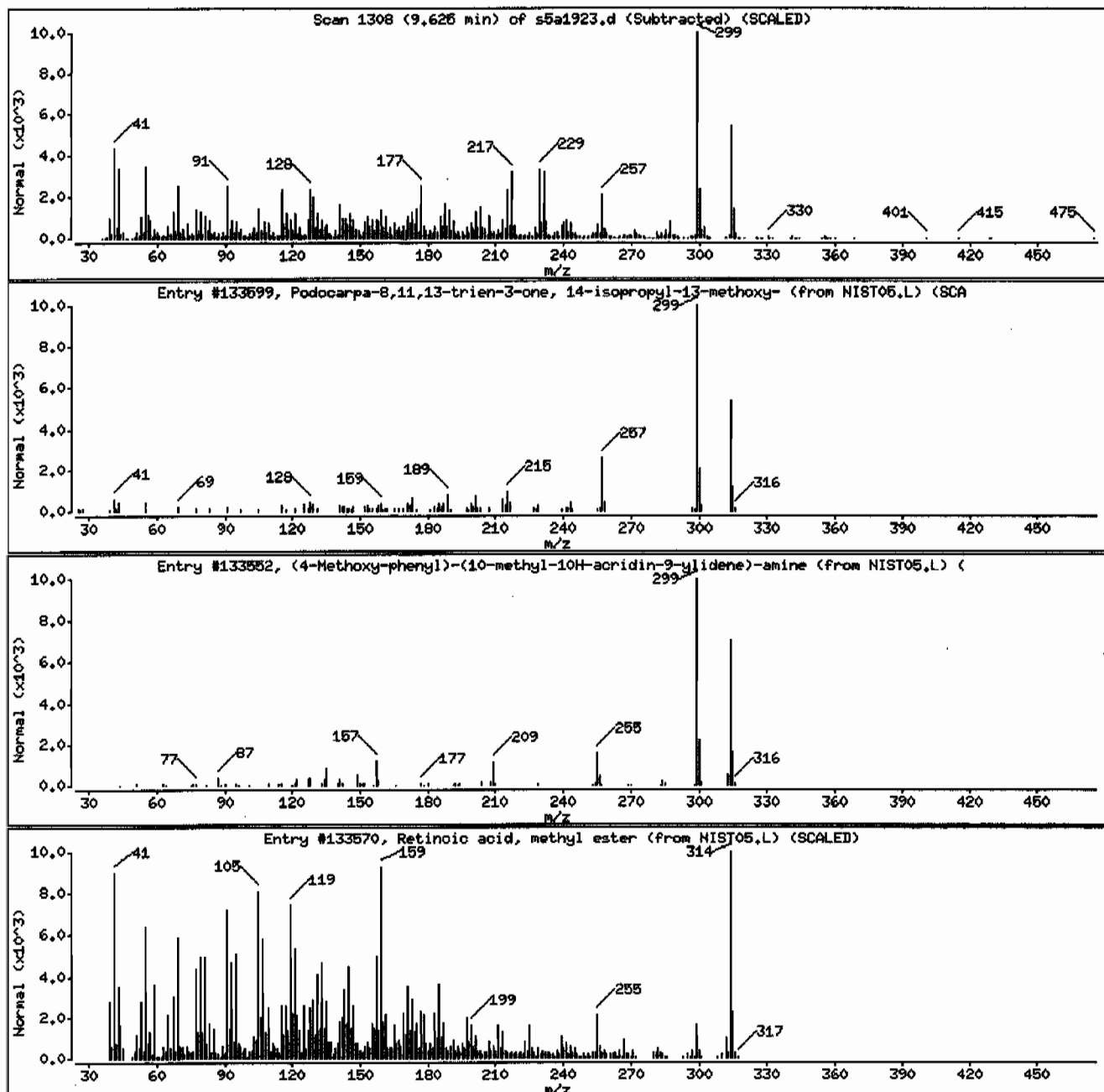
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Podocarpa-8,11,13-trien-3-one, 14-isopro	18326-16-4	NIST05.L	133599	91	C21H30O2	314
(4-Methoxy-phenyl)-(10-methyl-10H-acridi	1000317-66-5	NIST05.L	133552	46	C21H18N2O	314
Retinoic acid, methyl ester	339-16-2	NIST05.L	133570	45	C21H30O2	314



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626018194284011SVH111LANL

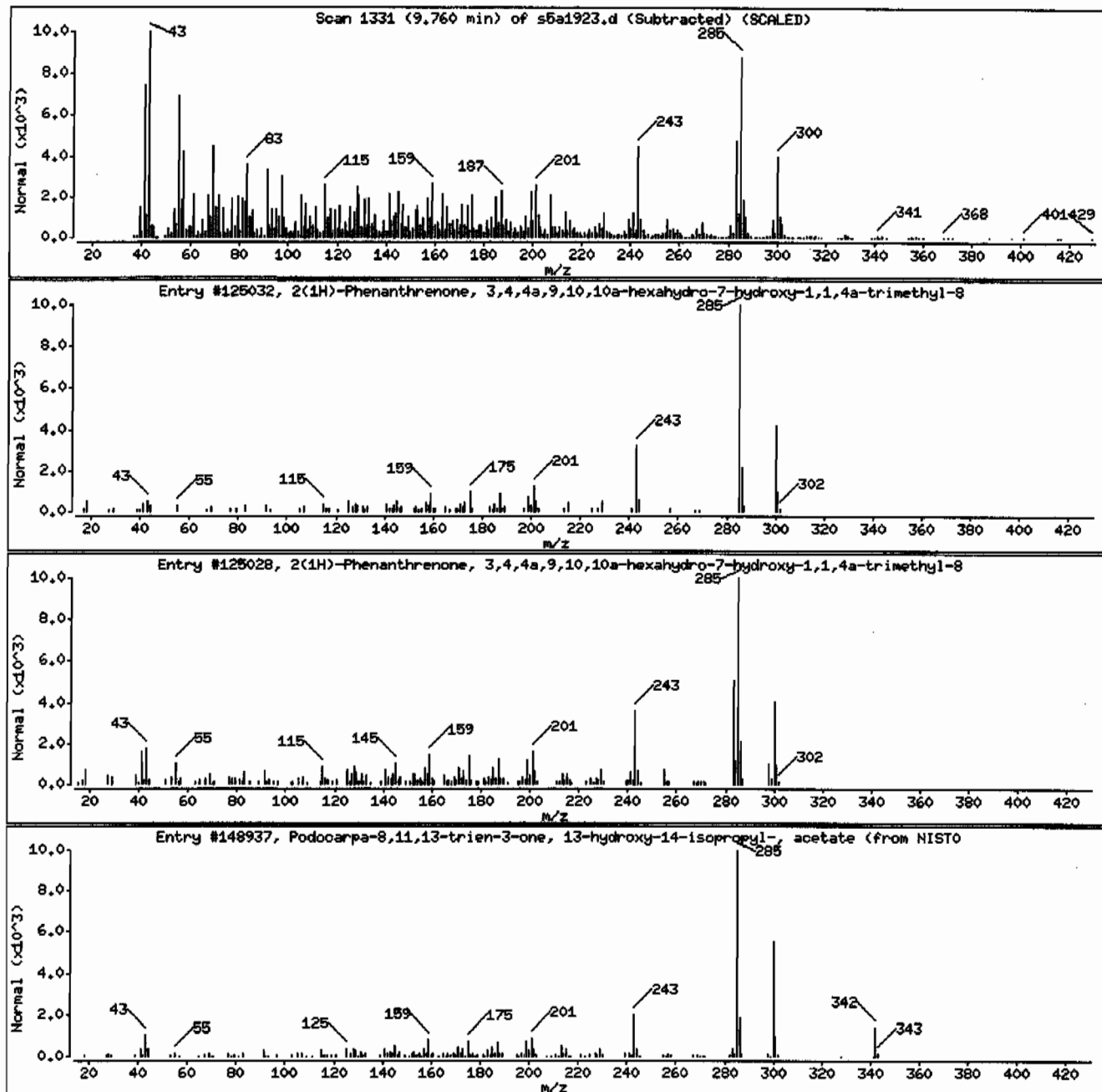
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	6755-93-7	NIST05.L	125032	98	C20H28O2	300
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	6755-93-7	NIST05.L	125028	91	C20H28O2	300
Podocarpa-8,11,13-trien-3-one, 13-hydrox	18468-20-7	NIST05.L	148937	68	C22H30O3	342



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194294011SVMI1ILANL

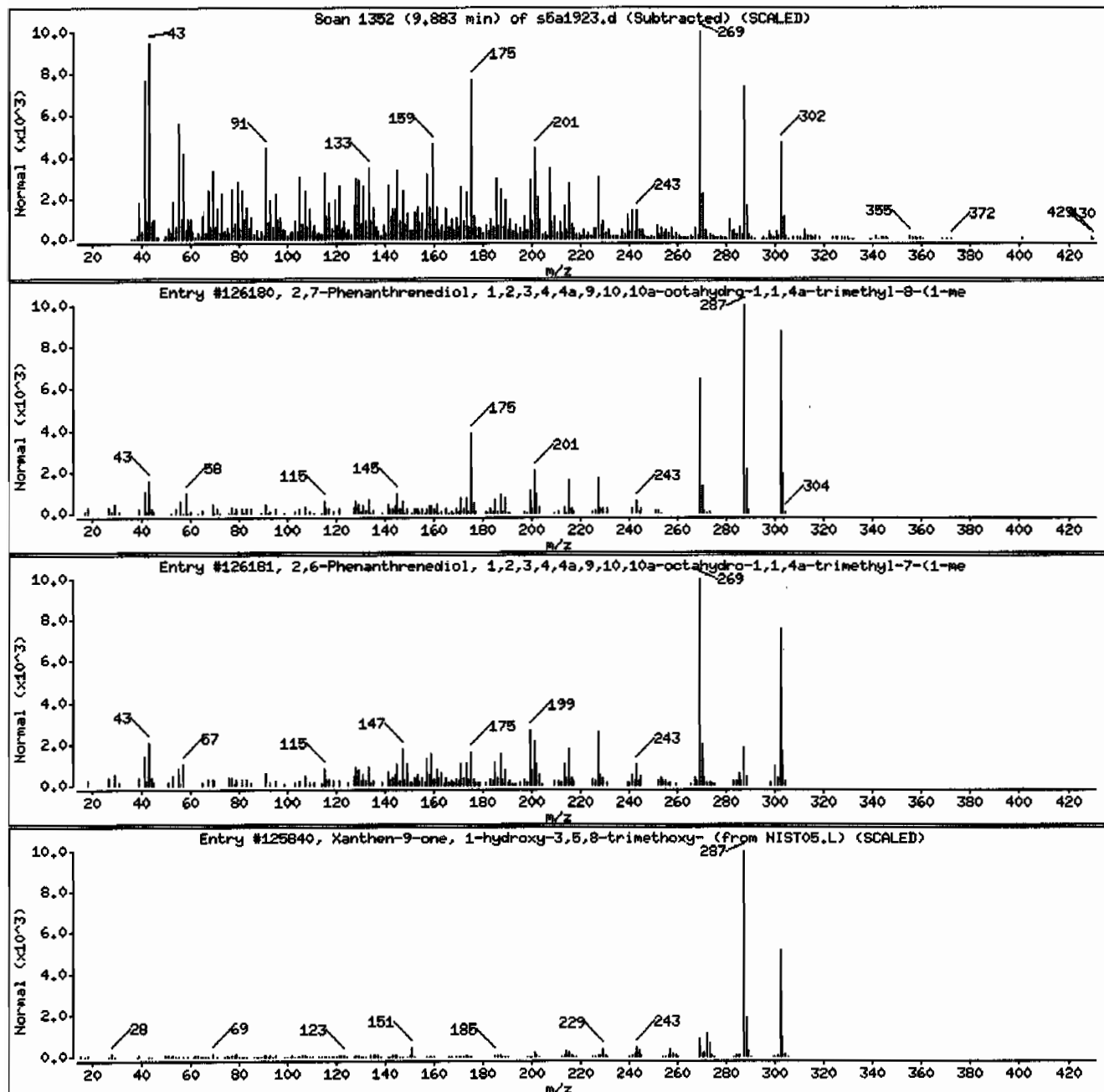
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,7-Phenanthrenediol, 1,2,3,4,4a,9,10,10	3772-56-3	NIST05.L	126180	98	C20H30O2	302
2,6-Phenanthrenediol, 1,2,3,4,4a,9,10,10	564-73-8	NIST05.L	126181	86	C20H30O2	302
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	125840	51	C16H14O6	302



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011ISVM11ILANL

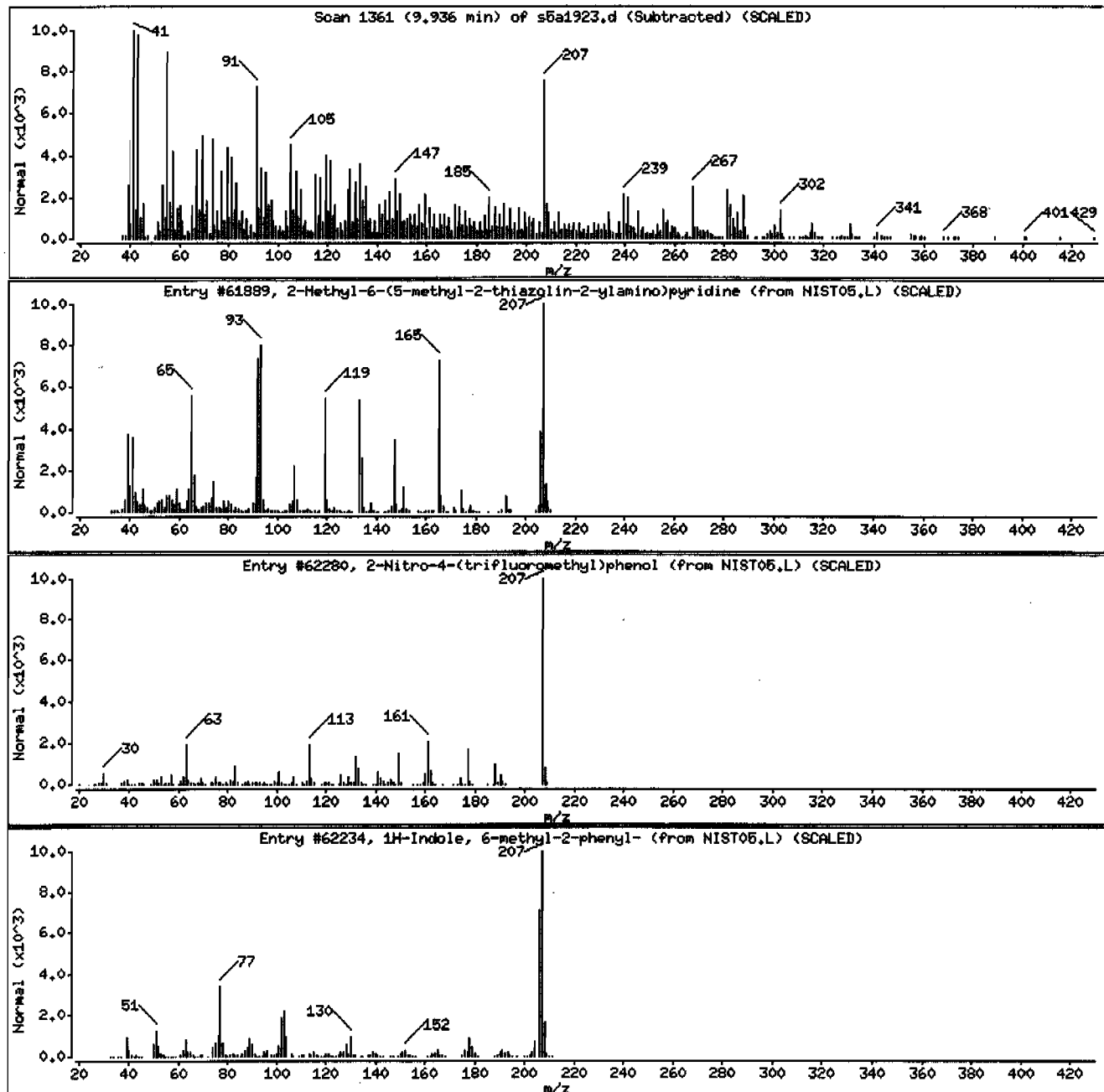
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-6-(5-methyl-2-thiazolin-2-ylamino)pyridine	339352-50-0	NIST05.L	61889	38	C10H13N3S	207
2-Nitro-4-(trifluoromethyl)phenol	400-99-7	NIST05.L	62280	35	C7H4F3NO3	207
1H-Indole, 6-methyl-2-phenyl-	66354-87-8	NIST05.L	62234	20	C15H13N	207



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011ISVH11ILANL

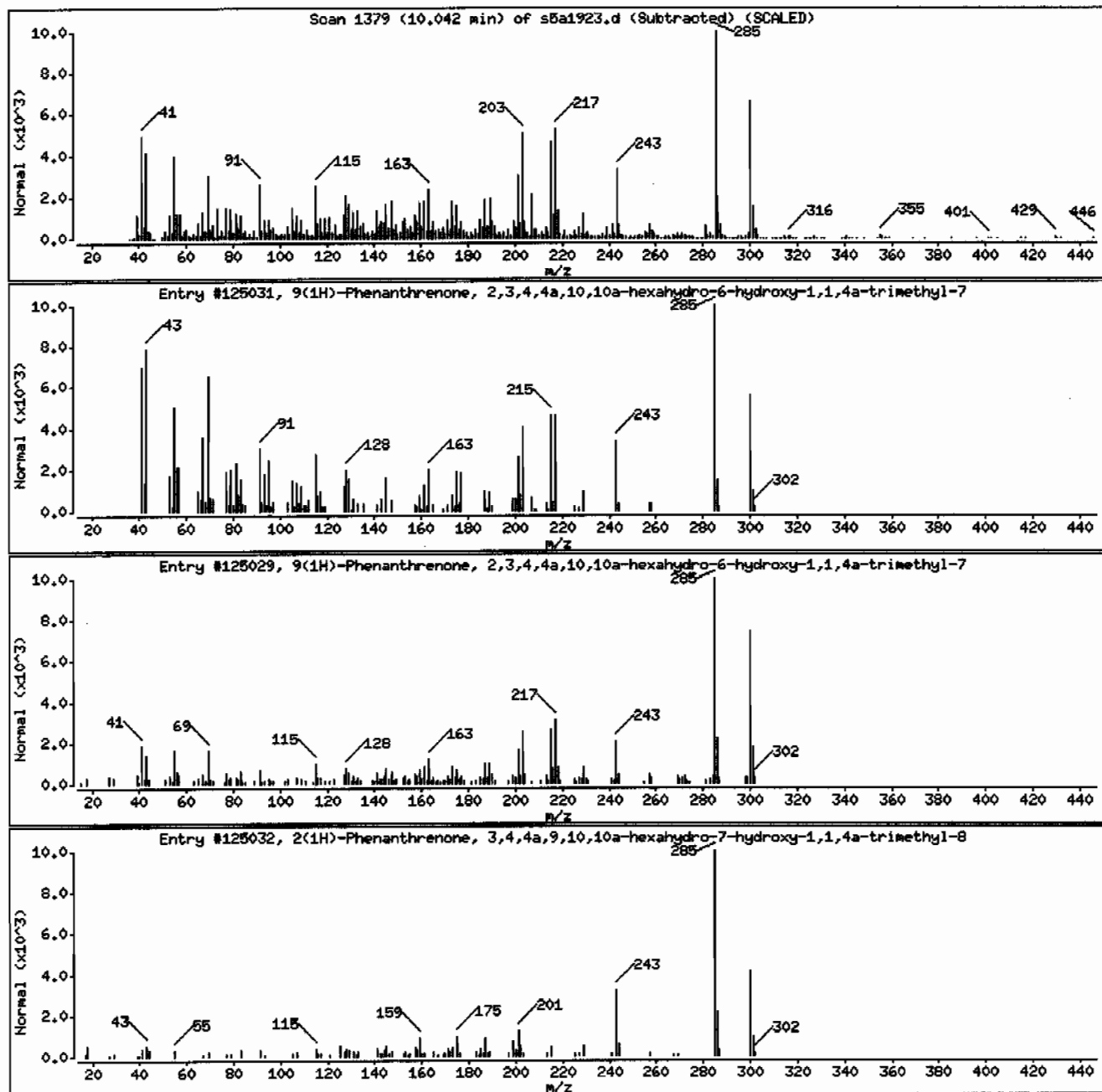
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Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-05-7	NIST05.L	125031	95	C20H28O2	300
9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-he	511-05-7	NIST05.L	125029	94	C20H28O2	300
2(1H)-Phenanthrenone, 3,4,4a,9,10,10a-he	6755-93-7	NIST05.L	125032	55	C20H28O2	300



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.1

Sample Info: 1244626015194284011SVH111LANL

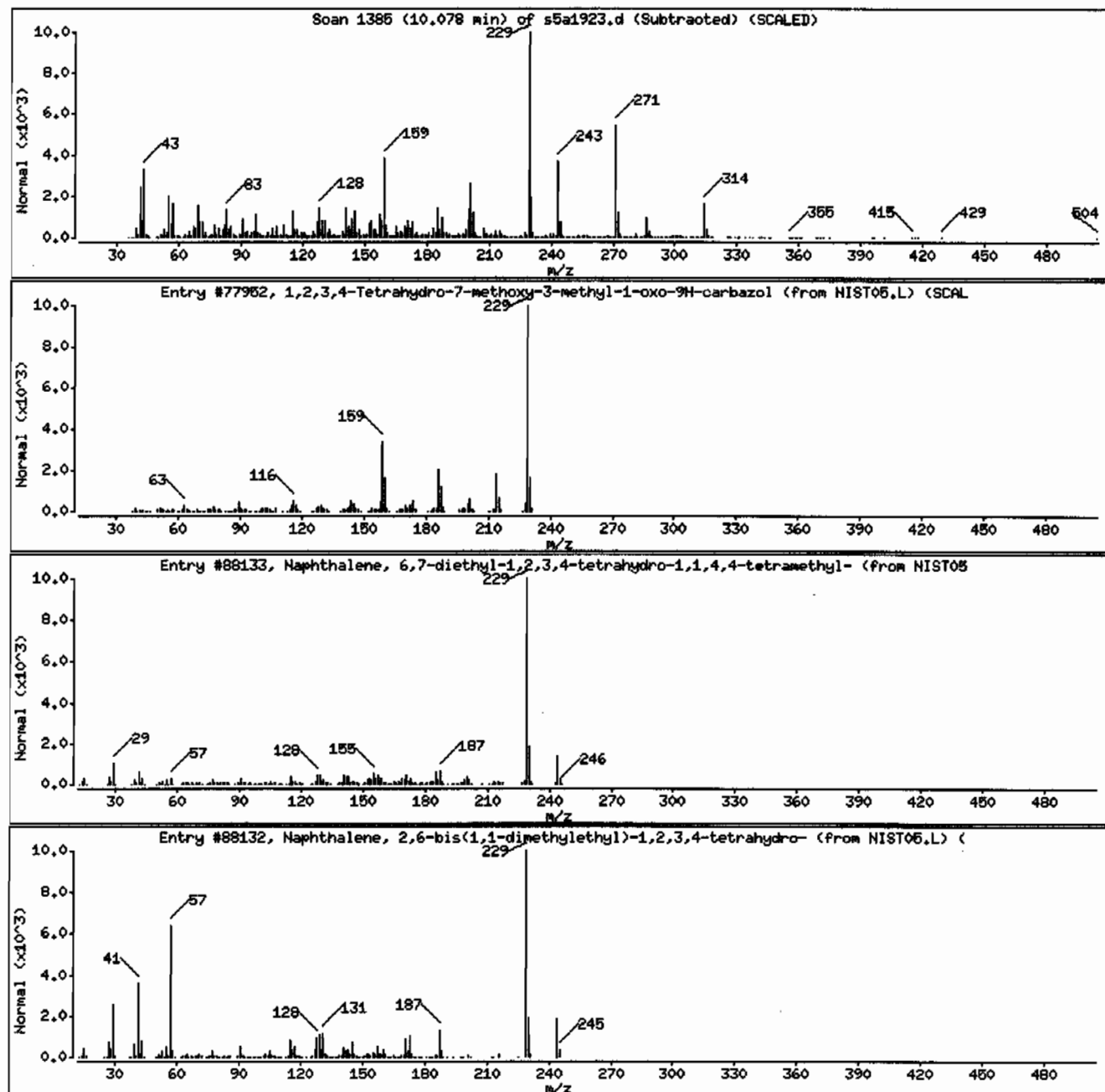
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2,3,4-Tetrahydro-7-methoxy-3-methyl-1-Naphthalene, 6,7-diethyl-1,2,3,4-tetrahy	32550-51-9	NIST05.L	77962	55	C14H15NO2	229
Naphthalene, 2,6-bis(1,1-dimethylethyl)-	55741-10-1	NIST05.L	88133	38	C18H28	244
Naphthalene, 2,6-bis(1,1-dimethylethyl)-	42981-76-0	NIST05.L	88132	30	C18H28	244



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011SVMI11LANL

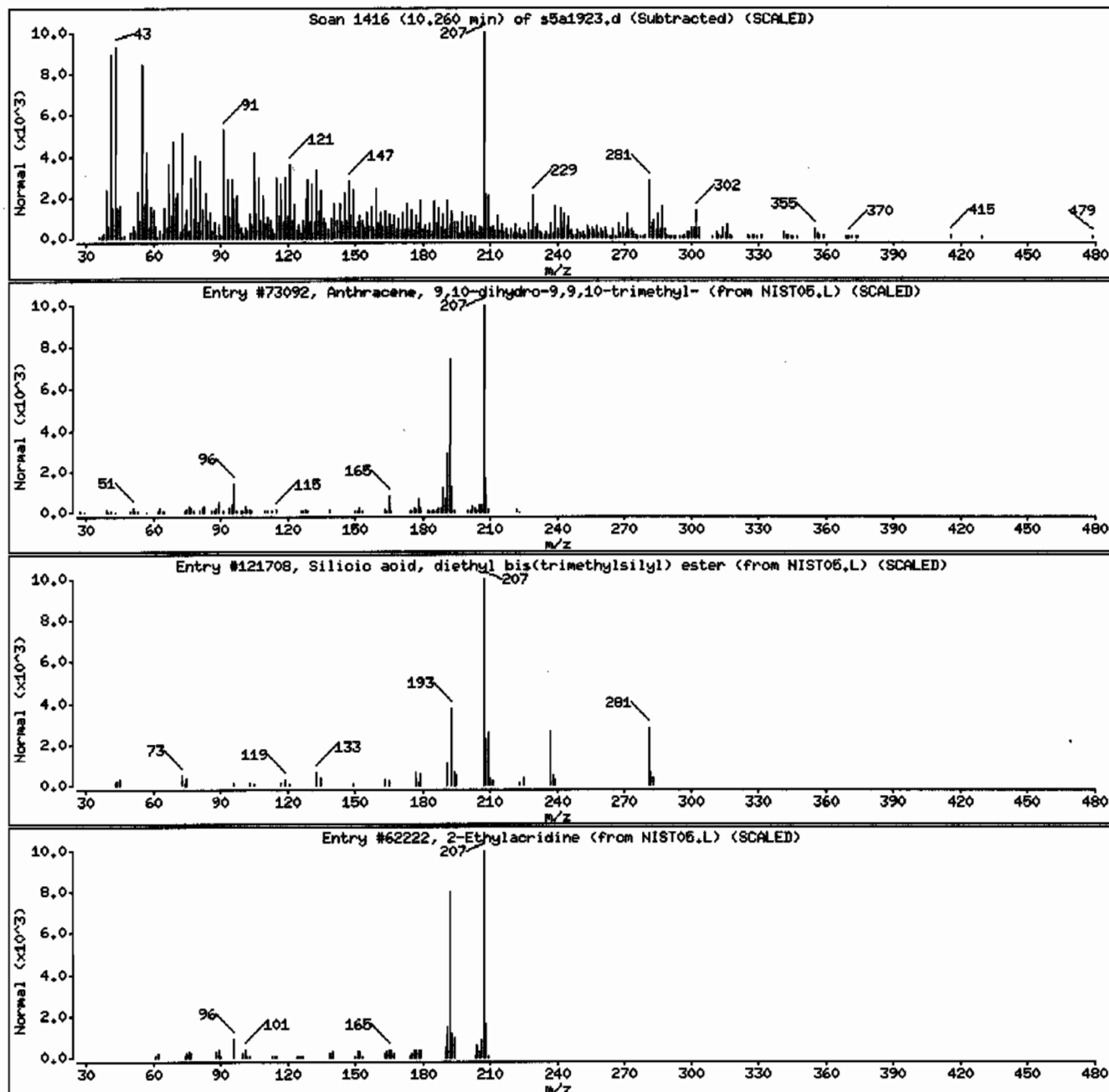
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Anthracene, 9,10-dihydro-9,9,10-trimethyl	14923-29-6	NIST05.L	73092	55	C17H18	222
Silicic acid, diethyl bis(trimethylsilyl)	3555-45-1	NIST05.L	121708	49	C10H28O4Si3	296
2-Ethylacridine	55751-83-2	NIST05.L	62222	42	C18H13N	207



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.1

Sample Info: 12446260151942840111SVM111LANL

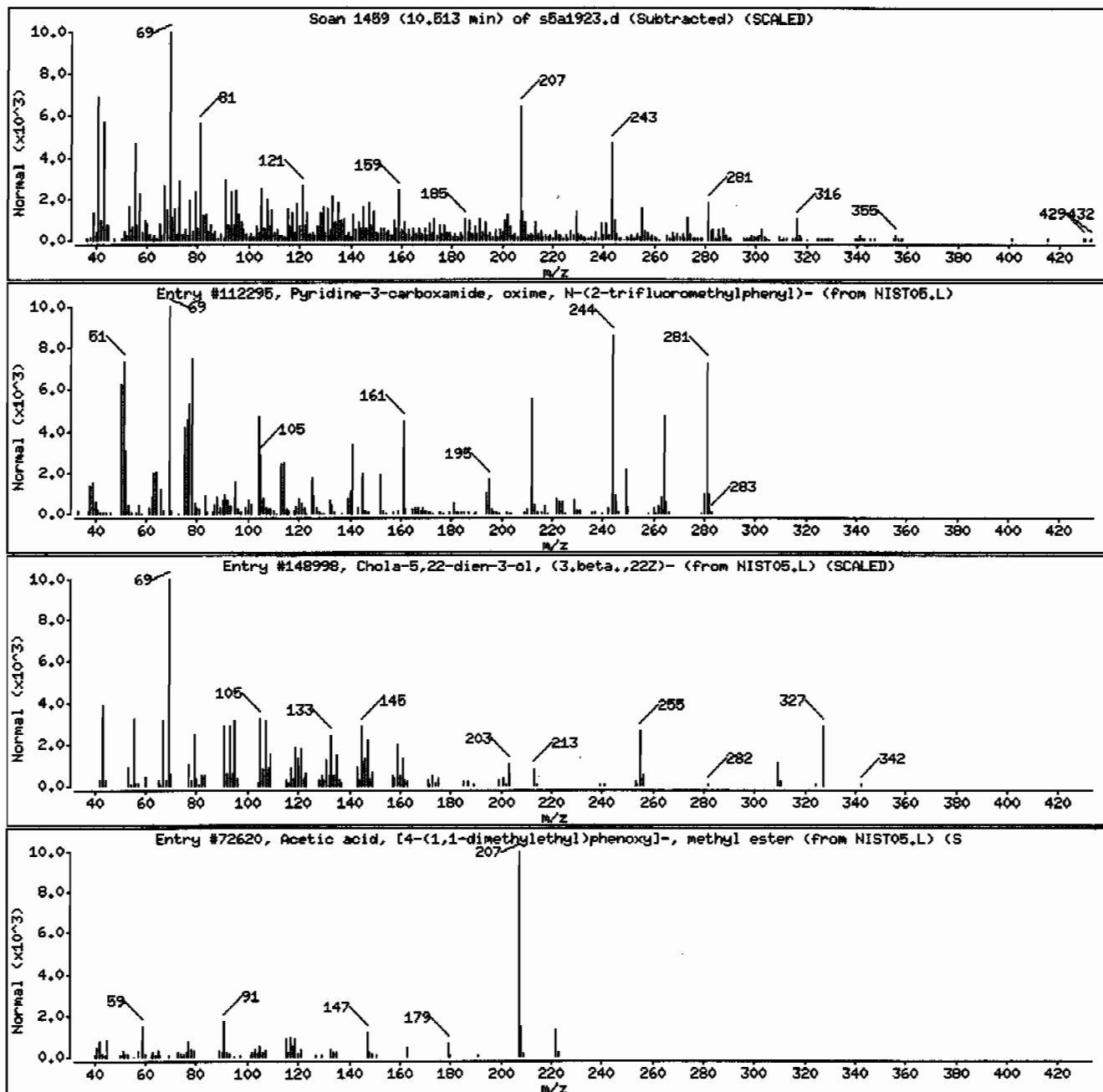
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pyridine-3-carboxamide, oxime, N-(2-trifluoromethylphenyl)-	288246-53-7	NIST05.L	112295	93	C13H10F3N3O	281
Chola-5,22-dien-3-ol, (3.beta.,22Z)-	57897-14-5	NIST05.L	148998	27	C24H38O	342
Acetic acid, [4-(1,1-dimethylethyl)pheno	88530-52-3	NIST05.L	72620	26	C13H18O3	222



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: HSD5.1

Sample Info: 1244626015194284011SVH11ILANL

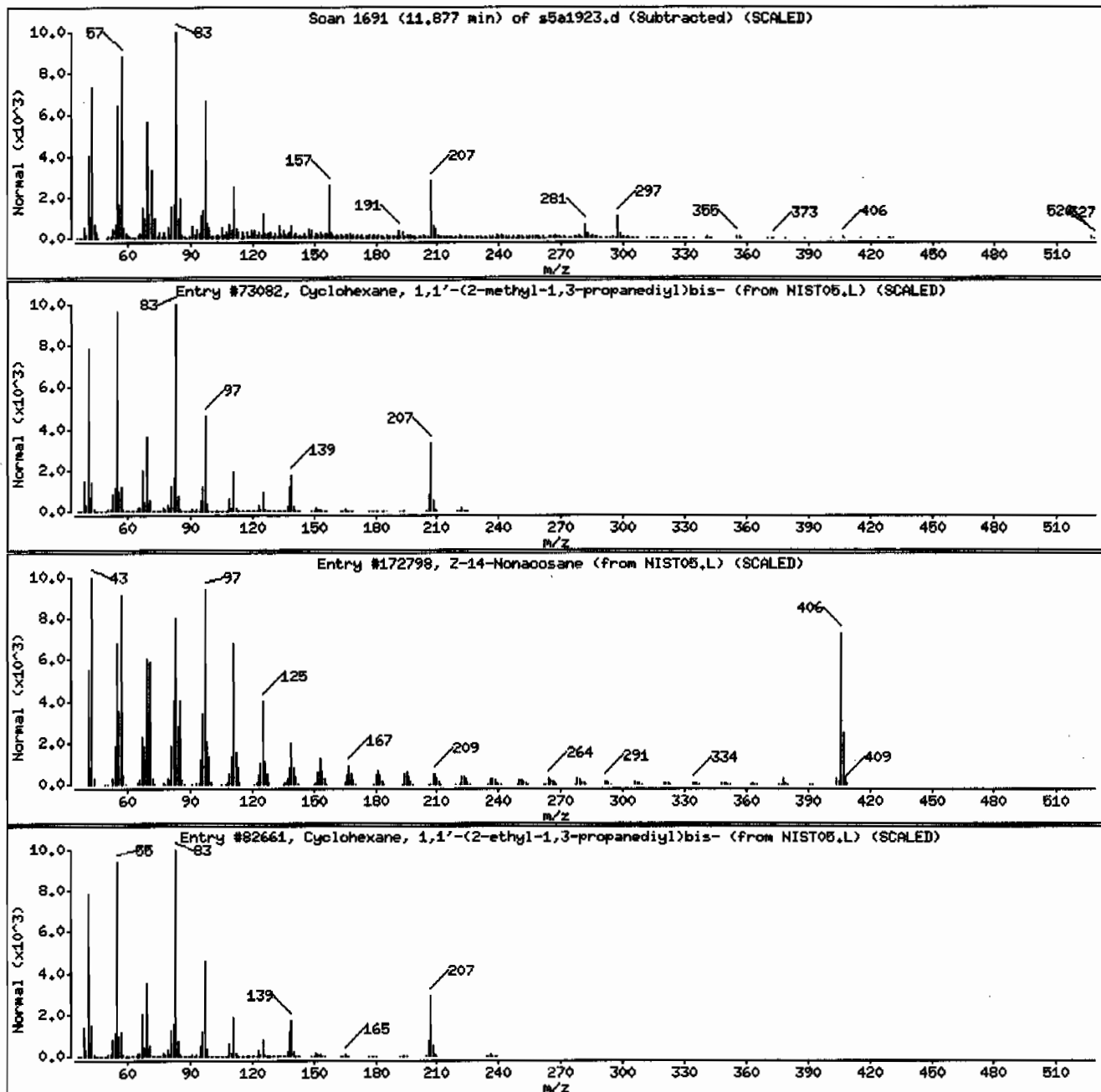
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane, 1,1'-(2-methyl-1,3-propanedi	2883-08-1	NIST05.L	73082	89	C16H30	222
Z-14-Nonacosane	1000131-18-9	NIST05.L	172798	72	C29H58	406
Cyclohexane, 1,1'-(2-ethyl-1,3-propanedi	54833-34-0	NIST05.L	82661	68	C17H32	236



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011SVH111LANL

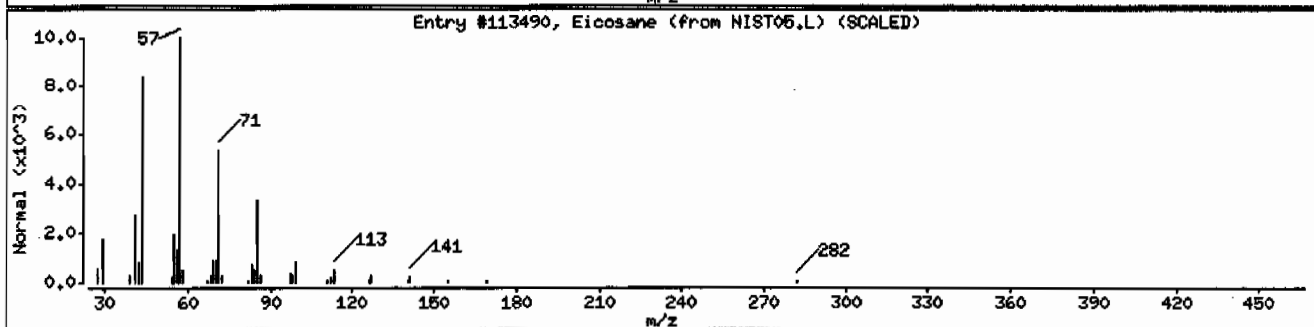
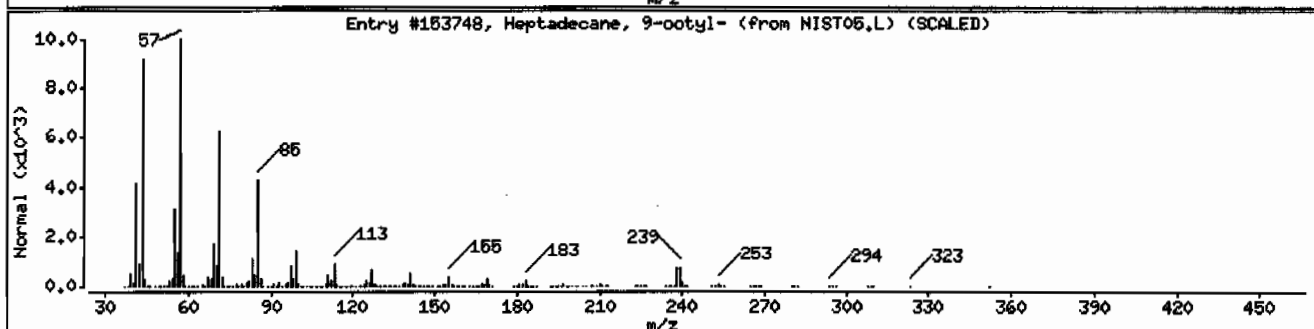
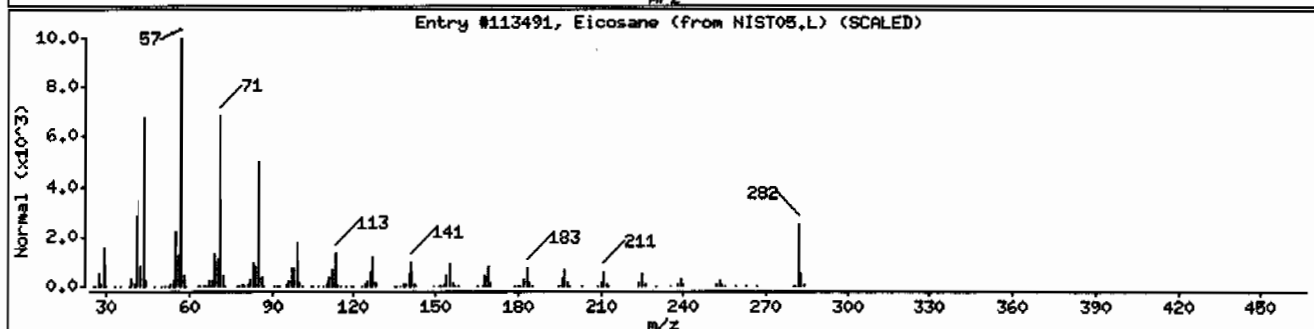
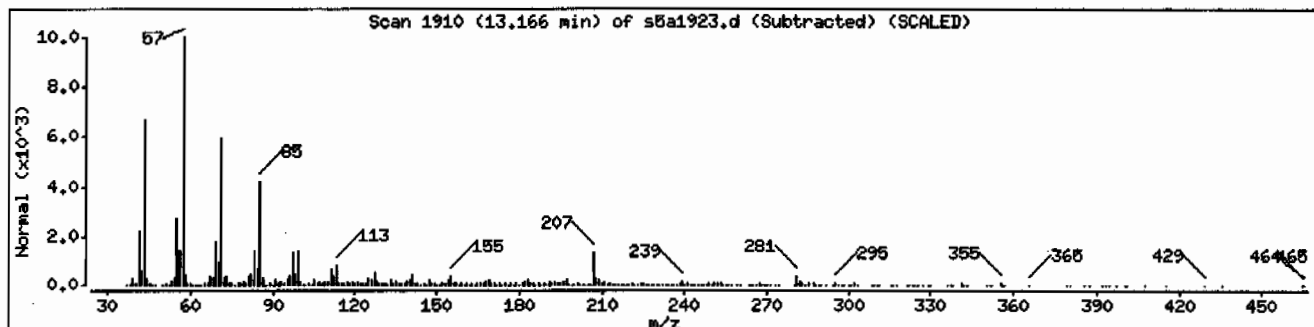
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113491	96	C ₂₀ H ₄₂	282
Heptadecane, 9-octyl-	7225-64-1	NIST05.L	153748	94	C ₂₅ H ₅₂	352
Eicosane	112-95-8	NIST05.L	113490	93	C ₂₀ H ₄₂	282



Date : 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626018194284011ISVH11ILANL

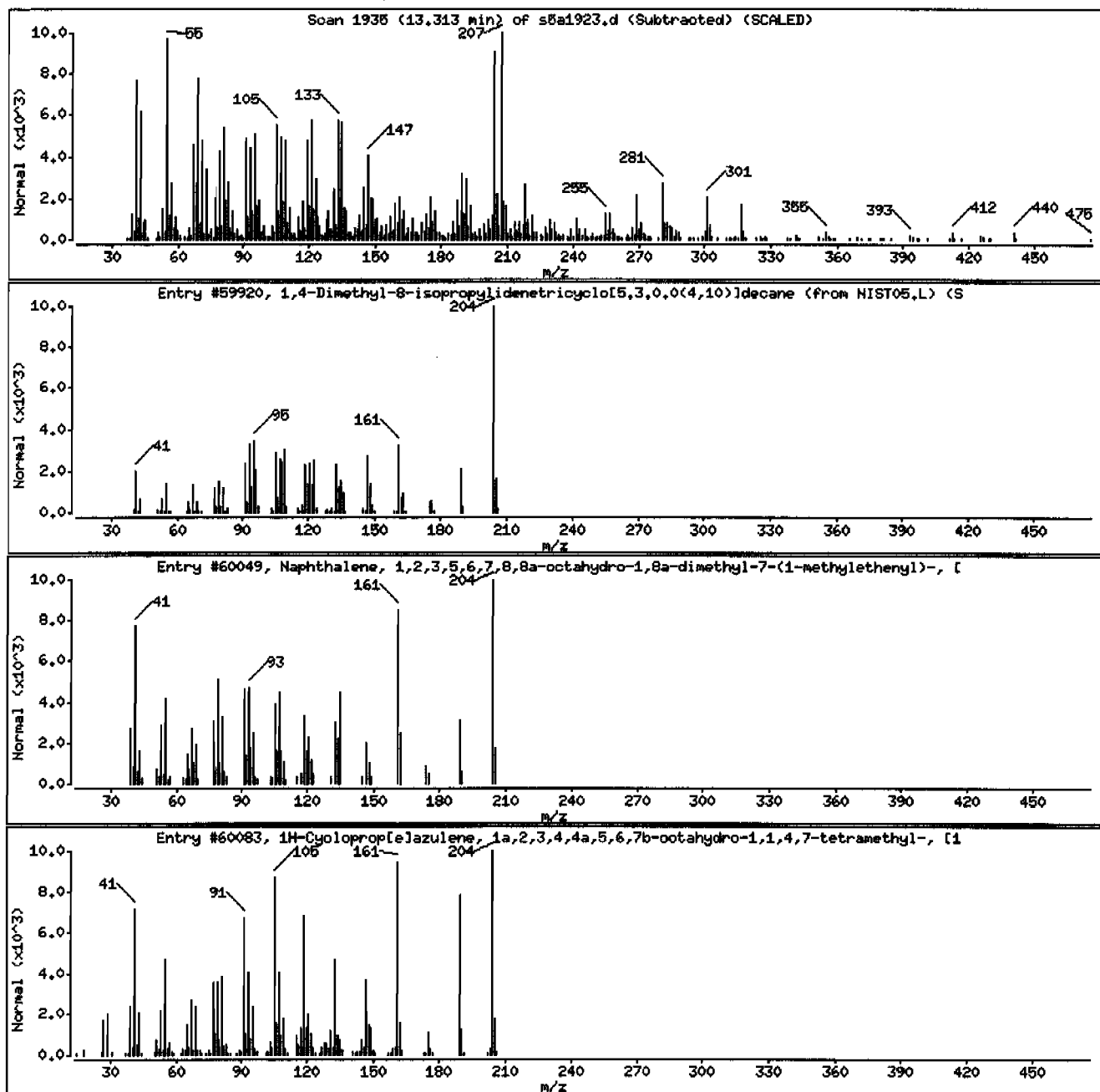
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Dimethyl-8-isopropylidenetricyclo[5,	1000140-07-7	NIST05.L	59920	78	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	60	C15H24	204
1H-Cycloprop[elazulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60083	46	C15H24	204



Date: 19-JAN-2010 18:47

Client ID: RE12-10-7283

Instrument: MSD5.i

Sample Info: 1244626015194284011SVH11LANL

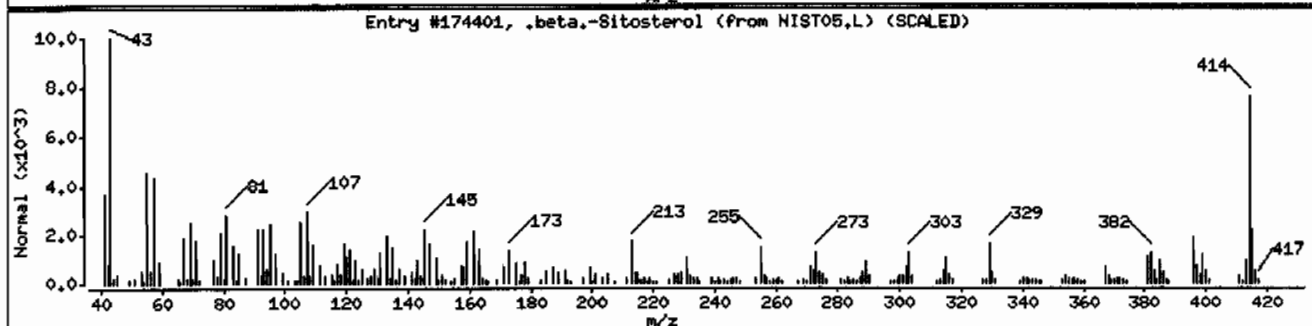
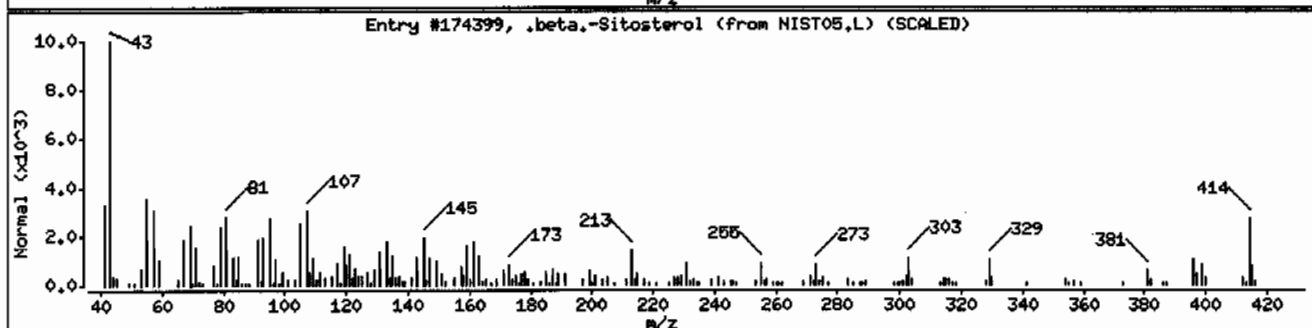
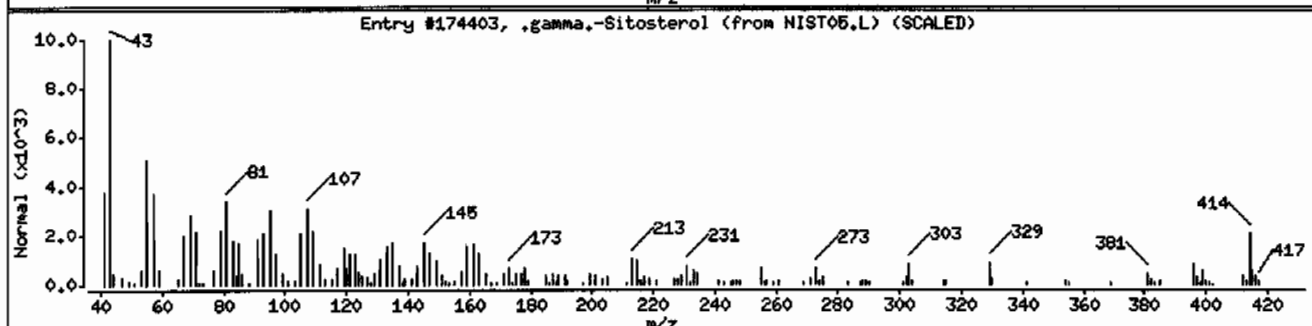
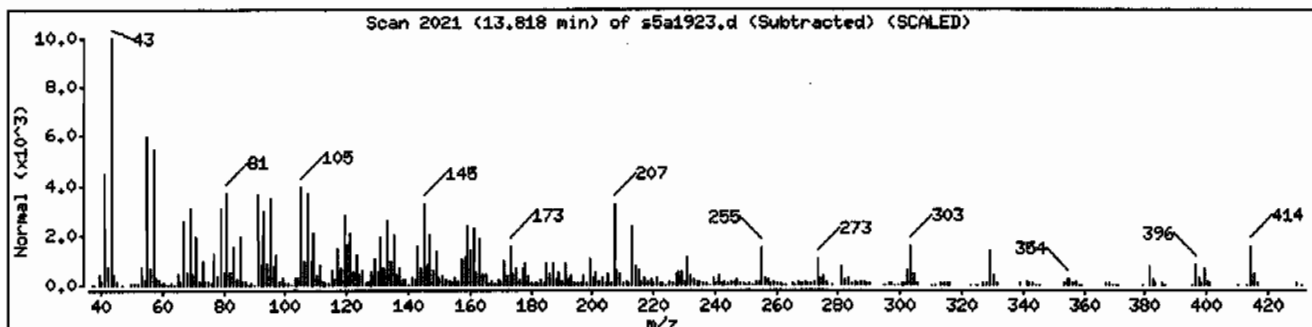
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	92	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	68	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	64	C ₂₉ H ₅₀ O	414



Standard Data

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde	10	20	40	50	80	100	120	
Acetophenone	10	20	40	50	80	100	120	
Caprolactam	10	20	40	50	80	100	120	
1,1'-Biphenyl	10	20	40	50	80	100	120	
Atrazine	10	20	40	50	80	100	120	
Benzidine	10	20	40	50	80	100	120	
3,3'-Dichlorobenzidene	10	20	40	50	80	100	120	
1,4-Dioxane	10	20	40	50	80	100	120	
Methyl methacrylate	10	20	40	50	80	100	120	
Ethyl methacrylate	10	20	40	50	80	100	120	
2-Picoline	10	20	40	50	80	100	120	
N-Nitrosomethylethylamine	10	20	40	50	80	100	120	
Methyl methanesulfonate	10	20	40	50	80	100	120	
N-Nitrosodiethylamine	10	20	40	50	80	100	120	
Ethyl methanesulfonate	10	20	40	50	80	100	120	
Pentachloroethane	10	20	40	50	80	100	120	
N-Nitrosopyrrolidine	10	20	40	50	80	100	120	
N-Nitrosomorpholine	10	20	40	50	80	100	120	
o-Toluidine	10	20	40	50	80	100	120	
N-Nitrosopiperidine	10	20	40	50	80	100	120	
a,a-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: 19-Jan-2010 10:49

Calibration History

Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Start Cal Date: 05-JAN-2010 08:21
End Cal Date : 06-JAN-2010 14:25

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
05-JAN-2010 08:21	MEGAIIICARE	/chem/MSD5.i/s010510.b/s5a0503.d
Cal Level: 2 , Cal Amount: 10.00000		
06-JAN-2010 12:06	nev	/chem/MSD5.i/s010510.b/s5a0537.d
06-JAN-2010 09:26	pest	/chem/MSD5.i/s010510.b/s5a0530.d
05-JAN-2010 15:39	hex	/chem/MSD5.i/s010510.b/s5a0520.d
05-JAN-2010 12:58	ap12	/chem/MSD5.i/s010510.b/s5a0513.d
05-JAN-2010 08:49	MEGAIIICARE	/chem/MSD5.i/s010510.b/s5a0504.d
Cal Level: 3 , Cal Amount: 20.00000		
06-JAN-2010 12:29	nev	/chem/MSD5.i/s010510.b/s5a0538.d
06-JAN-2010 09:49	pest	/chem/MSD5.i/s010510.b/s5a0531.d
05-JAN-2010 16:02	hex	/chem/MSD5.i/s010510.b/s5a0521.d
05-JAN-2010 13:21	ap12	/chem/MSD5.i/s010510.b/s5a0514.d
05-JAN-2010 09:17	MEGAIIICARE	/chem/MSD5.i/s010510.b/s5a0505.d
Cal Level: 4 , Cal Amount: 40.00000		
06-JAN-2010 12:53	nev	/chem/MSD5.i/s010510.b/s5a0539.d
06-JAN-2010 10:12	pest	/chem/MSD5.i/s010510.b/s5a0532.d
05-JAN-2010 16:24	hex	/chem/MSD5.i/s010510.b/s5a0522.d
05-JAN-2010 13:44	ap12	/chem/MSD5.i/s010510.b/s5a0515.d
05-JAN-2010 09:45	MEGAIIICARE	/chem/MSD5.i/s010510.b/s5a0506.d
Cal Level: 5 , Cal Amount: 50.00000		
06-JAN-2010 13:16	nev	/chem/MSD5.i/s010510.b/s5a0540.d
06-JAN-2010 10:35	pest	/chem/MSD5.i/s010510.b/s5a0533.d
05-JAN-2010 16:47	hex	/chem/MSD5.i/s010510.b/s5a0523.d
05-JAN-2010 14:07	ap12	/chem/MSD5.i/s010510.b/s5a0516.d
05-JAN-2010 10:13	MEGAIIICARE	/chem/MSD5.i/s010510.b/s5a0507.d
Cal Level: 6 , Cal Amount: 80.00000		
06-JAN-2010 13:39	nev	/chem/MSD5.i/s010510.b/s5a0541.d
06-JAN-2010 10:58	pest	/chem/MSD5.i/s010510.b/s5a0534.d
05-JAN-2010 17:10	hex	/chem/MSD5.i/s010510.b/s5a0524.d
05-JAN-2010 14:30	ap12	/chem/MSD5.i/s010510.b/s5a0517.d
05-JAN-2010 10:42	MEGAIIICARE	/chem/MSD5.i/s010510.b/s5a0508.d
Cal Level: 7 , Cal Amount: 100.00000		

06-JAN-2010	14:02	nev	/chem/MSD5.i/s010510.b/s5a0542.d
06-JAN-2010	11:21	pest	/chem/MSD5.i/s010510.b/s5a0535.d
05-JAN-2010	17:32	hex	/chem/MSD5.i/s010510.b/s5a0525.d
05-JAN-2010	14:53	ap12	/chem/MSD5.i/s010510.b/s5a0518.d
05-JAN-2010	11:10	MEGAICARE	/chem/MSD5.i/s010510.b/s5a0509.d

Cal Level: 8 , Cal Amount: 120.00000			
06-JAN-2010	14:25	nev	/chem/MSD5.i/s010510.b/s5a0543.d
06-JAN-2010	11:43	pest	/chem/MSD5.i/s010510.b/s5a0536.d
05-JAN-2010	15:16	ap12	/chem/MSD5.i/s010510.b/s5a0519.d
05-JAN-2010	11:38	MEGAICARE	/chem/MSD5.i/s010510.b/s5a0510.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0			
19-JAN-2010	10:21	MEGAICARE	/chem/MSD5.i/s011910.b/s5a1902.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 05-JAN-2010 08:21
 End Cal Date : 06-JAN-2010 14:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Cal Date : 19-Jan-2010 10:48 rmb

Calibration File Names:

Level 1: /chem/MSD5.i/s010510.b/s5a0503.d
 Level 2: /chem/MSD5.i/s010510.b/s5a0537.d
 Level 3: /chem/MSD5.i/s010510.b/s5a0538.d
 Level 4: /chem/MSD5.i/s010510.b/s5a0539.d
 Level 5: /chem/MSD5.i/s010510.b/s5a0540.d
 Level 6: /chem/MSD5.i/s010510.b/s5a0541.d
 Level 7: /chem/MSD5.i/s010510.b/s5a0542.d
 Level 8: /chem/MSD5.i/s010510.b/s5a0543.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
1 N-Methyl-N-nitrosomethylamine	++++ 0.56392	0.60168 0.57492	0.60436	0.61687	0.60783	0.59199	AVRG		0.59451		3.18493
2 Pyridine	++++ 0.80002	0.82414 0.81897	0.81597	0.82898	0.83066	0.80196	AVRG				
4 Aniline	++++ 0.47853	0.53231 0.48154	0.51667	0.50774	0.50536	0.48725	AVRG		0.81724		1.49870
209 Benzaldehyde	++++ ++++	0.92100 0.75644	0.94578	0.89295	++++	0.82020	AVRG		0.50134		3.95817
6 Phenol	++++ 1.14415	1.29285 1.12346	1.28692	1.25839	1.25522	1.16949	AVRG		0.86728		8.97019
							AVRG		1.21864		5.81319

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
7 bis (2-Chloroethyl) ether	1.00983 0.83286	1.01785 0.80569	0.94420	0.93518	0.92205	0.84402	AVRG		0.91396		8.73413
8 2-Chlorophenol	++++ 0.98681	1.07356 0.98526	1.07344	1.06538	1.05073	0.99796	AVRG		1.03330		4.00640
203 n-Decane	++++ 0.99726	1.61448 0.88772	1.49548	1.34412	1.28232	1.05572	AVRG		1.23959		21.72463
9 1,3-Dichlorobenzene	++++ 1.06486	1.17215 1.03617	1.17216	1.15807	1.14319	1.08120	AVRG		1.11826		5.02964
11 1,4-Dichlorobenzene	++++ 1.04072	1.17667 1.00783	1.17551	1.15287	1.14606	1.06723	AVRG		1.10956		6.25951
12 Benzyl alcohol	++++ 0.66037	0.69641 0.66507	0.69406	0.69303	0.69244	0.67197	AVRG		0.68191		2.27112
13 1,2-Dichlorobenzene	++++ 0.86501	1.11234 0.80711	1.08973	1.05062	1.03198	0.90006	AVRG		0.97955		12.27506
14 bis (2-Chloroisopropyl) ether	++++ 1.60491	2.08722 1.53342	1.99778	1.86060	1.82612	1.65924	AVRG		1.79561		11.47595
15 o-Cresol	++++ 0.63235	0.82031 0.58390	0.80621	0.77347	0.75499	0.65417	AVRG		0.71791		12.97823

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Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
16 Acetophenone	++++	1.12507	1.18754	1.15721	++++	1.08904	AVRG		1.12258		4.72418
	++++	1.05402									
17 N-Nitrosodipropylamine	0.58398	0.65931	0.62258	0.63285	0.62008	0.59856	AVRG		0.60391		6.06720
	0.56181	0.55212									
18 m,p-Cresols	++++	1.00834	1.01404	1.04775	1.04014	1.01984	AVRG		1.02193		1.56038
	1.00592	1.01747									
19 Hexachloroethane	++++	0.48678	0.47955	0.48237	0.47258	0.43783	AVRG		0.45803		6.27631
	0.42970	0.41736									
21 Nitrobenzene	++++	0.32660	0.30568	0.28758	0.27934	0.25512	AVRG		0.27592		12.22218
	0.23914	0.23801									
22 Isophorone	++++	0.61683	0.58060	0.53957	0.52438	0.47923	AVRG		0.52404		11.37227
	0.46251	0.46518									
23 2-Nitrophenol	++++	0.12872	0.13817	0.13776	0.13560	0.12898	AVRG		0.13005		5.81691
	0.12191	0.11919									
24 2,4-Dimethylphenol	++++	0.29403	0.31174	0.26176	0.24869	0.22846	AVRG		0.26000		14.34679
	0.21532	++++									
25 bis(2-Chloroethoxy)methane	++++	0.36536	0.35215	0.32576	0.31701	0.28326	AVRG		0.31106		12.84228
	0.26989	0.26396									

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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^2
26 2,4-Dichlorophenol	++++ 0.19198	0.20899 0.19411	0.21531	0.20937	0.21725	0.20076	AVRG		0.20539		4.85397
27 Benzoic acid	++++ 478254	++++ 571122	33960	124214	187154	373760	LINR	0.33988	0.16978		0.99286
28 1,2,4-Trichlorobenzene	++++ 0.22568	0.28702 0.22001	0.27935	0.26612	0.26073	0.23707	AVRG		0.25371		10.38885
30 Naphthalene	0.90683 0.62203	0.89606 ++++	0.85471	0.80187	0.77070	0.66103	AVRG		0.78760		14.13908
204 alpha-Terpineol	++++ ++++	0.30152 ++++	0.28075	0.24842	0.24296	0.20255	AVRG		0.25524		14.87588
31 4-Chloroaniline	++++ 0.31089	0.37980 0.30851	0.36079	0.36457	0.35928	0.32796	AVRG		0.34454		8.23540
189 Caprolactam	++++ ++++	17378 343077	39729	86829	++++	228154	LINR	0.10774	0.09582		0.99993
32 Hexachlorobutadiene	++++ 0.13637	0.16600 0.13419	0.16011	0.15797	0.15496	0.14380	AVRG		0.15048		8.22423
33 4-Chloro-3-methylphenol	++++ 0.19409	0.20987 0.19407	0.22081	0.22519	0.22001	0.20165	AVRG		0.20939		6.23199

GEL Laboratories LLC

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 Cal Date : 19-Jan-2010 10:48 rmb

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
34 2-Methylnaphthalene	0.5336 0.42815	0.57194 0.40190	0.55001 0.49827	0.52026 0.49827	0.49827	0.45090	AVRG		0.49435		12.36274
35 1-Methylnaphthalene	0.52554 0.40991	0.56288 0.38953	0.53836 0.49153	0.50921 0.49153	0.49153	0.43368	AVRG		0.48258		13.22802
36 Hexachlorocyclopentadiene	++++ 0.21802	0.22432 0.23446	0.22721 0.23446	0.24669 0.23561	0.23561	0.24607	AVRG		0.23320		4.63359
208 1,1'-Biphenyl	++++ ++++	1.17335 0.95224	1.25981	1.18470	++++	1.08141	AVRG		1.13030		10.43813
205 2,3-Dichloroaniline	++++ 0.45334	0.50365 0.43807	0.50697	0.51727	0.50826	0.47428	AVRG		0.48598		6.35673
37 2,4,6-Trichlorophenol	++++ 0.28767	0.24557 0.26619	0.27051	0.29501	0.29989	0.28467	AVRG		0.27850		6.79942
38 2,4,5-Trichlorophenol	++++ 0.30254	0.26914 0.31836	0.30331	0.32718	0.33231	0.31827	AVRG		0.31016		6.84038
40 2-Chloronaphthalene	0.86992 0.81137	0.94306 0.77497	0.93216	0.91783	0.91010	0.83148	AVRG		0.87386		7.09785
42 o-Nitroaniline	++++ 0.28171	0.26027 0.28425	0.28272	0.29628	0.29293	0.28627	AVRG		0.28349		4.08356

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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
41 m-Nitroaniline	++++ 0.20547	0.21305 0.22125	0.19674 0.22125	0.21941 0.22125	0.21590 0.22125	0.21748 0.22125	AVRG		0.21276		4.10704
43 Dimethylphthalate	++++ 0.96194	1.10010 0.96311	1.07323 0.96311	1.03773 0.96311	1.03867 0.96311	0.98687 0.96311	AVRG		1.02309		5.28616
44 2,6-Dinitrotoluene	++++ 0.23024	0.23644 0.23459	0.24612 0.23459	0.24549 0.23459	0.24706 0.23459	0.23743 0.23459	AVRG		0.23962		2.74818
45 Acenaphthylene	1.46006 1.31841	1.54997 1.24618	1.52248 1.24618	1.47469 1.24618	1.47326 1.24618	1.35224 1.24618	AVRG		1.42466		7.49350
47 Acenaphthene	0.90755 0.79355	0.94025 0.74660	0.91212 0.74660	0.91818 0.74660	0.91102 0.74660	0.82470 0.74660	AVRG		0.86925		8.16286
48 2,4-Dinitrophenol	++++ 1.18971	++++ 1.74001	9111 1.31018	34897 1.30074	49003 1.29655	108260 1.19680	AVRG	0.42263	0.09896		0.99240
49 Dibenzofuran	++++ 1.15712	1.32340 1.13474	1.31018 0.30127	1.30074 0.30966	1.29655 0.31038	1.19680 0.30754	AVRG		1.24565		6.41904
50 2,4-Dinitrotoluene	++++ 0.29796	0.28018 0.31209	0.30127 0.31209	0.30966 0.31209	0.31038 0.31209	0.30754 0.31209	AVRG		0.30273		3.69515
51 Diethylphthalate	++++ 0.98424	1.16895 0.94920	1.11968 0.94920	1.08617 0.94920	1.09194 0.94920	1.00740 0.94920	AVRG		1.05823		7.51016

GEL Laboratories LLC

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 Cal Date : 19-Jan-2010 10:48 rmb

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
52 4-Nitrophenol	++++ 240094	11455 327378	29901	88625	110435	221460	LINR	0.19761	0.17478		0.99653
53 Fluorene	1.01956 0.95139	1.12349 0.92174	1.11598	1.10997	1.09264	0.99450	AVRG		1.04116		7.67724
54 4-Chlorophenylphenylether	++++ 0.52679	0.57726 0.50659	0.56339	0.56572	0.56801	0.53722	AVRG		0.54928		4.74595
55 2-Methyl-4,6-dinitrophenol	++++ 205560	8960 301854	23735	71371	96456	187642	LINR	0.22809	0.08469		0.99612
56 p-Nitroaniline	++++ 0.16174	0.16847 0.18462	0.16742	0.17651	0.16596	0.17409	AVRG		0.17126		4.49446
133 Diphenylamine	++++ 0.45496	0.51944 0.43044	0.50385	0.49568	0.50499	0.46731	AVRG		0.48238		6.66350
58 1,2-Diphenylhydrazine	++++ 0.51828	0.65843 0.45924	0.62647	0.58999	0.59560	0.52910	AVRG		0.56816		12.16358
59 Tributylphosphate	++++ 1.08616	1.33123 1.00411	1.37263	1.32751	1.31958	1.17651	AVRG		1.23111		11.61546
61 4-Bromophenylphenylether	++++ 0.17694	0.18216 0.16805	0.17949	0.18028	0.18925	0.17816	AVRG		0.17919		3.54165

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 Cal Date : 19-Jan-2010 10:48 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
63 Hexachlorobenzene	++++ 0.17857	0.18532 0.17077	0.18319 0.17077	0.18186 0.17077	0.19193 0.17077	0.17927 0.17077	AVRG		0.18156		3.59119
207 Atrazine	++++ 0.04257	0.04257 0.01430	0.04481 0.01430	0.03450 0.01430	++++ 0.01430	0.02811 0.01430	AVRG		0.03286		37.48021<-
65 Pentachlorophenol	++++ 257286	12502 351684	32789 351684	92647 351684	123698 351684	227147 351684	LINR	0.16665	0.09910		0.99917
206 n-Octadecane	++++ 0.29739	0.55672 0.25204	0.50875 0.25204	0.44965 0.25204	0.43660 0.25204	0.32797 0.25204	AVRG		0.40416		28.15304<-
68 Phenanthrene	0.79996 0.73413	0.82472 0.69357	0.81503 0.69357	0.80738 0.69357	0.81686 0.69357	0.74752 0.69357	AVRG		0.77989		6.19942
69 Anthracene	0.78018 0.72181	0.84074 0.70160	0.82103 0.70160	0.81248 0.70160	0.81975 0.70160	0.75186 0.70160	AVRG		0.78118		6.54890
72 Di-n-butylphthalate	++++ 0.86373	1.11680 0.80374	1.08795 0.80374	1.01747 0.80374	1.04305 0.80374	0.90172 0.80374	AVRG		0.97635		12.28834
76 Fluoranthene	0.80532 0.82230	0.89505 0.79442	0.89508 0.79442	0.90079 0.79442	0.90093 0.79442	0.84160 0.79442	AVRG		0.85744		5.41563
77 Benzidine	++++ 83198	83198 866541	119870 866541	207819 866541	++++ 866541	520802 866541	LINR	-0.08564	0.21048		0.99601

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	\$RSD or R^2
79 Pyrene	1.09138 0.90131	1.11299 0.84211	1.08525	1.04403	1.08722	0.95800	AVRG		1.01529		10.02337
85 Butylbenzylphthalate	++++ 0.43784	0.51217 0.41448	0.51851	0.48934	0.52646	0.46557	AVRG		0.48062		8.92500
89 Benzo(a)anthracene	0.86581 0.80735	0.86539 0.80459	0.86246	0.86601	0.88599	0.83710	AVRG		0.84934		3.51489
90 3,3'-Dichlorobenzidine	++++ ++++	0.24476 0.29473	0.26954	0.27690	++++	0.28523	AVRG		0.27423		6.91638
92 Chrysene	0.77178 0.73005	0.80074 0.72102	0.80787	0.79632	0.79406	0.75492	AVRG		0.77209		4.33491
93 bis(2-Ethylhexyl)phthalate	0.68582 0.56828	0.76341 0.53176	0.74227	0.68452	0.72567	0.60529	AVRG		0.66338		12.84174
94 Di-n-octylphthalate	++++ 1.15335	1.36548 1.01068	1.42558	1.30173	1.48420	1.22606	AVRG		1.28101		12.83294
95 Benzo(b)fluoranthene	0.77288 0.92629	0.87976 0.97146	0.88603	0.93843	0.96543	0.92099	AVRG		0.90766		7.00428
96 Benzo(k)fluoranthene	0.75065 0.92874	0.87496 0.84514	0.92431	0.89366	0.96051	0.94448	AVRG		0.89031		7.62815

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 05-JAN-2010 08:21
 End Cal Date : 06-JAN-2010 14:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Cal Date : 19-Jan-2010 10:48 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Coefficients b	m1	m2	%RSD or R^2
97 Benzo(a)pyrene	0.63026	0.73955	0.77044	0.80572	0.82038	0.81264	AVRG	0.77742		8.51619
99 Indeno(1,2,3-cd)pyrene	6709	118547	253229	660710	666010	1305476	LINR	0.07239	0.75852	0.99612
100 Dibenzo(a,h)anthracene	4635	91327	194564	535195	525747	1054759	LINR	0.09168	0.62368	0.99506
101 Benzo(ghi)perylene	0.40800	0.54447	0.56363	0.60189	0.57993	0.57168	AVRG	0.56118		11.93662
102 1,4-Dioxane	++++	0.37172	0.32777	0.36252	++++	0.35066	AVRG	0.35034		5.03211
103 Methyl methacrylate	++++	0.33902	0.18995	0.18679	++++	0.19013	AVRG	0.19020		2.07071
104 Ethyl methacrylate	++++	0.18739	0.83965	0.81396	++++	0.76218	AVRG	0.79064		5.20264
105 2-Picoline	++++	0.73669	1.27993	1.22822	++++	1.15580	AVRG	1.20530		5.06149
106 N-Nitrosomethylethylamine	++++	1.13035	0.42694	0.42388	++++	0.44282	AVRG	0.42573		4.41372

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 Cal Date : 19-Jan-2010 10:48 rmb

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	++++	0.49715	0.53533	0.51057	++++	0.50167	AVRG		0.50673		3.51216
	++++	0.48893									
108 N-Nitrosodiethylamine	++++	0.40307	0.42436	0.41312	++++	0.43211	AVRG		0.41971		2.75306
	++++	0.42588									
109 Ethyl Methanesulfonate	++++	0.63621	0.67228	0.64354	++++	0.63135	AVRG		0.64256		2.72101
	++++	0.62943									
110 Pentachloroethane	++++	0.30893	0.33024	0.32096	++++	0.32066	AVRG		0.31977		2.38199
	++++	0.31808									
111 N-Nitrosopyrrolidine	++++	0.36827	0.38604	0.40197	++++	0.43245	AVRG		0.40441		7.07162
	++++	0.43332									
113 N-Nitrosomorpholine	++++	0.50792	0.52969	0.50302	++++	0.51744	AVRG		0.51508		1.99186
	++++	0.51735									
114 o-Toluidine	++++	1.54043	1.60475	1.57505	++++	1.50592	AVRG		1.52533		5.17958
	++++	1.40050									
115 N-Nitrosopiperidine	++++	0.12530	0.13153	0.13438	++++	0.13937	AVRG		0.13348		4.05949
	++++	0.13683									
116 a,a-Dimethylphenethylamine	++++	0.70337	0.72973	0.76978	++++	0.83930	AVRG		0.77645		8.03435
	++++	0.84008									

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 Cal Date : 19-Jan-2010 10:48 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
117 Triethylphosphorothioate	++++ 0.14822	0.14783 0.14442	0.14833	0.15416	0.15466	0.15300	AVRG		0.15009		2.57840
118 2,6-Dichlorophenol	++++ ++++	0.16885 0.21645	0.18504	0.19740	++++	0.21626	AVRG		0.19680		10.42809
119 Hexachloropropene	++++ ++++	0.09017 0.11927	0.09651	0.10501	++++	0.12112	AVRG		0.10641		12.82796
120 p-Phenylenediamine	++++ ++++	0.13074 0.10919	0.16464	0.16825	++++	0.20469	AVRG		0.15550		23.68041
121 N-Nitrosodi-n-butylamine	++++ ++++	0.19243 0.15952	0.17632	0.16321	++++	0.16759	AVRG		0.17181		7.63641
122 Saffrole	++++ ++++	0.18688 0.18724	0.19626	0.19376	++++	0.19566	AVRG		0.19196		2.37955
123 1,2,4,5-Tetrachlorobenzene	++++ ++++	0.46397 0.41002	0.48717	0.47238	++++	0.44819	AVRG		0.45635		6.46181
124 Isosafrole	++++ ++++	0.29986 0.32162	0.33224	0.32567	++++	0.32763	AVRG		0.32140		3.93184
125 1,4-Naphthoquinone	++++ ++++	0.26575 0.26408	0.32398	0.34122	++++	0.27203	AVRG		0.29341		12.40909

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 Cal Date : 19-Jan-2010 10:48 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
126 m-Dinitrobenzene	++++ 0.17893	0.14819 0.18795	0.17055	0.18066	0.18640	0.18415	AVRG		0.17669		7.82704
127 Pentachlorobenzene	++++ ++++	0.40776 0.38828	0.42518	0.41534	++++	0.41377	AVRG		0.41007		3.39927
128 1-Naphthylamine	++++ ++++	0.72762 0.74737	0.80933	0.81550	++++	0.81167	AVRG		0.78230		5.31122
129 2-Naphthylamine	++++ ++++	0.77252 0.77937	0.87164	0.69214	++++	0.79156	AVRG		0.78145		8.16788
130 2,3,4,6-Tetrachlorophenol	++++ 391940	25044 530995	58324	145004	193603	337306	LINR	0.14696	0.27529		0.99866
131 5-Nitro-o-toluidine	++++ ++++	0.19905 0.28774	0.25857	0.26185	++++	0.28362	AVRG		0.25817		13.73638
132 Thionazin	++++ 0.17550	0.18780 0.16600	0.18311	0.18465	0.18591	0.17793	AVRG		0.18013		4.22399
134 Sulfotepp	++++ 0.08848	0.08992 0.08376	0.09027	0.09183	0.09271	0.09045	AVRG		0.08963		3.26308
135 Phorate	++++ 0.33437	0.41116 0.30216	0.41593	0.38362	0.37361	0.35431	AVRG		0.36788		11.14605

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 Cal Date : 19-Jan-2010 10:48 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Coefficients ml	ml m2	%RSD or R ²
136 1,3,5-Trinitrobenzene	++++ 18770	471608	38921	103148	++++	307888	LINR 0.17886	0.12488	0.99889
137 Phenacetin	++++ 0.24074	0.25736	0.26215	0.26052	++++	0.25551	AVRG 0.25526		3.33797
138 Diallate	++++ 0.25201	0.19522	0.26705	0.23091	++++	0.21053	AVRG 0.23114		12.68714
139 Dimethoate	++++ 0.23500	0.20542	0.22193	0.23232	0.23839	0.23725	AVRG 0.22809		5.09517
140 4-Aminobiphenyl	++++ 0.55016	0.35287	0.53689	0.49001	++++	0.44480	AVRG 0.47494		16.82194
141 Pentachloronitrobenzene	++++ 0.06928	0.06576	0.07542	0.07114	++++	0.07160	AVRG 0.07064		4.98923
142 Pronamide	++++ 0.26956	0.21779	0.29817	0.27159	++++	0.24798	AVRG 0.26102		11.50002
143 Dinoseb	++++ 14609	489176	40146	120125	161049	306980	LINR 0.21025	0.13673	0.99656
144 Disulfoton	++++ 0.28872	0.36292	0.35575	0.33128	0.32567	0.30301	AVRG 0.31812		11.60966

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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
145 Methyl parathion	++++ 0.19217	0.15317 0.18798	0.17382	0.18634	0.19157	0.19081	AVRG		0.18227		7.83913
146 4-Nitroquinoline-1-oxide	++++ 0.01377	0.01377	0.01547	0.01720	++++	0.01430	AVRG		0.01407		20.03521
147 Methapyrilene	++++ 0.42810	0.35377	0.46356	0.43308	++++	0.39005	AVRG		0.41371		10.26920
148 Isodrin	++++ 0.10607	0.09843	0.11554	0.10602	++++	0.10283	AVRG		0.10578		5.94218
149 Aramite	++++ 0.04599	0.04875	0.05159	0.04997	++++	0.05024	AVRG		0.04931		4.27978
150 Kepone	++++ 0.07114	0.07460	0.07924	0.07238	++++	0.07407	AVRG		0.07429		4.16121
151 p-(Dimethylamino)azobenzene	++++ 0.26657	0.23843	0.29776	0.27961	++++	0.26269	AVRG		0.26901		8.14447
152 Chlorobenzilate	++++ 0.28225	0.26853	0.32445	0.29604	++++	0.30029	AVRG		0.29431		7.12128
153 3,3'-Dimethylbenzidine	++++ 0.48124	0.40788	0.49297	0.43601	++++	0.42786	AVRG		0.44919		8.08801

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 Cal Date : 19-Jan-2010 10:48 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
154 Famphur	++++ 0.40118	0.28027 0.38248	0.33003	0.36616	0.38738	0.39999	AVRG		0.36393		12.15202
155 2-Acetylaminofluorene	++++ 1264833	47321 104628	104628	272723	++++	766805	LINR	0.14476	0.33678		0.99964
157 7,12Dimethylbenz(a)anthracene	++++ 0.48249	0.45159 0.48249	0.50078	0.48460	++++	0.50061	AVRG		0.48401		4.14588
158 3-Methylcholanthrene	++++ 0.36854	0.28933 0.36854	0.33549	0.34334	++++	0.35935	AVRG		0.33921		9.06881
26 Phthalic anhydride	++++ 305648	19875 382974	30292	115319	152300	263982	LINR	0.10484	0.10306		0.99487
173 Carbazole	0.61815 0.56756	0.68768 0.56776	0.60315	0.57235	0.57097	0.58141	AVRG		0.59613		6.93124
174 Hexachlorophene	++++ 3216878	465068 ++++	1369075	1819555	2342006	2903825	LINR	5.18418	0.06522		0.99568
179 Dibenzo(a,e)pyrene	++++ 696659	38356 1061562	88310	260797	252606	504258	LINR	0.18048	0.32546		0.99092
185 (2,3-Dibromopropyl)phosphate	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00

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 Cal Date : 19-Jan-2010 10:48 rmb

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
184 p-Benzquinone	++++ 115792	8149 158015	17103	41083	57940	90861	LNLR	0.18045	0.16674		0.99202
191 Parathion	++++ 0.07149	0.05369 0.07167	0.05960	0.06519	0.06892	0.07094	AVRG		0.06593		10.51462
192 Methoxychlor	++++ 0.48429	0.52319 0.50960	0.56885	0.56986	0.61174	0.54725	AVRG		0.54497		7.87874
210 m-Toluidine	++++ 1.27755	1.15590 1.23332	1.13090	1.29468	1.26551	1.28269	AVRG		1.23436		5.29864
211 p-Toluidine	++++ 0.93840	1.09425 0.97584	0.98043	0.93742	1.00216	0.93622	AVRG		0.98068		5.74088
212 Cis Diallate	++++ ++++	0.24426 0.24183	0.27644	0.24776	++++	0.24915	AVRG		0.25189		5.56655
213 Trans Diallate	++++ ++++	0.29648 0.22967	0.31418	0.27165	++++	0.24769	AVRG		0.27193		12.68714
214 1,4-Dinitrobenzene	++++ 0.18150	0.13082 0.18942	0.15430	0.17983	0.18780	0.18683	AVRG		0.17293		12.77281
215 2-Ethoxyethanol	++++ 0.67681	0.73271 0.67742	0.73985	0.72223	0.72166	0.67696	AVRG		0.70680		4.03319

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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 ²
	100	120									
	Level 7	Level 8									
216 Methylenebis(2-chloroaniline)	++++ 0.12253	0.10869 0.13841	0.11509 0.12522	0.12893 0.13198			AVRG		0.12441		8.11823
229 2,2'-Dichlorobenzil	++++ 0.61630	0.56000 0.57303	0.61845 0.63669	0.66691 0.59979			AVRG		0.61017		5.99705
230 4-Chlorothioanisole	++++ 0.24674	0.21206 0.23343	0.22785 0.24603	0.24332 0.24988			AVRG		0.23704		5.71316
231 4-Chlorothiophenol	++++ 678460	23256 879205	88326 248426	273990 540018			LINR	0.22385	0.21267		0.99809
232 bis(p-Chlorophenyl)sulfone	++++ 0.36302	0.36234 0.34730	0.37196 0.36548	0.38857 0.35230			AVRG		0.36442		3.69430
233 bis(p-Chlorophenyl)disulfide	++++ 0.13938	0.10805 0.13432	0.12976 0.13321	0.14786 0.13206			AVRG		0.13209		9.22893
234 Diphenyl disulfide	++++ 0.21225	0.21433 0.20248	0.22704 0.22300	0.22745 0.21175			AVRG		0.21690		4.26801
235 Diphenyl sulfide	++++ 0.71262	0.74037 0.66259	0.76379 0.76558	0.77229 0.75018			AVRG		0.73820		5.27172
236 Phenyl sulfone	++++ 0.39193	0.41200 0.37639	0.41885 0.40986	0.41164 0.39249			AVRG		0.40188		3.78222

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 Cal Date : 19-Jan-2010 10:48 xmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
237 Hydroxymethyl phthalimide	++++ 0.16944	0.13345 0.15663	0.17049 0.17360	0.18661 0.18982	0.18982 0.18982	0.17468 0.17468	AVRG AVRG	0.16873	0.16873	11.33483	
238 Phthalic acid	++++ 518772	18191 642794	61252 61252	173609 173609	220071 220071	424683 424683	LINR LINR	0.21995	0.16003	0.99625	
239 Thiophenol	++++ 1043710	52552 1285423	173692 173692	429443 429443	479869 479869	866255 866255	LINR LINR	0.10121	1.06558	0.99792	
240 bis(Chloromethyl)ether	++++ 0.86320	0.96674 0.79621	0.94397 0.94397	0.91488 0.91488	0.89081 0.89081	0.87783 0.87783	AVRG AVRG	0.89338		6.29984	
241 Octachlorostyrene	++++ 0.07256	0.06487 0.06738	0.06936 0.06936	0.07086 0.07086	0.07364 0.07364	0.07192 0.07192	AVRG AVRG	0.07008		4.42931	
M 225 Trichlorophenols	++++ 0.29511	0.25736 0.29228	0.28691 0.28691	0.31109 0.31109	0.31610 0.31610	0.30147 0.30147	AVRG AVRG	0.29433		6.55390	
M 226 Tetrachlorophenols	++++ 391940	25044 530995	58324 58324	145004 145004	193603 193603	337306 337306	LINR LINR	0.14696	0.27529	0.99866	
M 227 Benzo(b,k)fluoranthene	0.76177	0.87736	0.90517	0.91605	0.96297	0.93273	AVRG	0.89898		6.74801	
M 228 TTO Sum Semivolatiles	++++ ++++	++++ ++++	++++ ++++	++++ ++++	++++ ++++	++++ ++++	AVRG AVRG	0.000e+00		0.000e+00	

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 Method file : /chem/MSD5.1/s011910.b/MSD5-M8270C-010510.m
 Cal Date : 19-Jan-2010 10:48 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	RSR or R^2
\$ 3 2-Fluorophenol	++++ 0.95815	1.00892 0.95110	1.02984	1.02656	1.01245	0.95898	AVRG		0.99200		3.48640
\$ 5 Phenol-d5	++++ 1.17157	1.27448 1.16407	1.25292	1.25402	1.25041	1.19615	AVRG		1.22338		3.67027
\$ 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	++++ 0.27013	0.34857 0.27584	0.33951	0.31944	0.31085	0.28554	AVRG		0.30713		10.07527
\$ 39 2-Fluorobiphenyl	++++ 0.96910	1.15449 0.91246	1.14554	1.12686	1.10095	0.99756	AVRG		1.05814		9.15434
\$ 60 2,4,6-Tribromophenol	++++ 0.14244	0.09542 0.14450	0.11122	0.12451	0.13351	0.13834	AVRG		0.12713		14.24614
\$ 81 p-Terphenyl-d14	++++ 0.57181	0.66125 0.55461	0.66473	0.65020	0.68566	0.60826	AVRG		0.62807		8.01491

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Method file : /chem/MSD5.1/s011910.b/MSD5-M8270C-010510.m
Cal Date : 19-Jan-2010 10:48 rmb

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

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 12:29
Lab File ID: s5a0512.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 11:38
Lab Sample ID: WBN091223-17.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND		RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
\$ 3	2-Fluorophenol	0.99200	0.98589	0.98589	0.000	-0.61563	60.00000	Averaged
\$ 5	Phenol-d5	1.22338	1.18606	1.18606	0.000	-3.05014	60.00000	Averaged
\$ 20	Nitrobenzene-d5	0.30713	0.31357	0.31357	0.000	2.09916	60.00000	Averaged
\$ 39	2-Fluorobiphenyl	1.05814	1.09204	1.09204	0.000	3.20353	60.00000	Averaged
\$ 60	2,4,6-Tribromophenol	0.12713	0.12659	0.12659	0.000	-0.42919	60.00000	Averaged
\$ 81	p-Terphenyl-d14	0.62807	0.66568	0.66568	0.000	5.98755	60.00000	Averaged
1	N-Methyl-N-nitrosomethylami	0.59451	0.57144	0.57144	0.000	-3.88053	60.00000	Averaged
2	Pyridine	0.81724	0.82683	0.82683	0.000	1.17338	60.00000	Averaged
4	Aniline	0.50134	0.49946	0.49946	0.000	-0.37612	60.00000	Averaged
6	Phenol	1.21864	1.18810	1.18810	0.001	-2.50588	20.00000	Averaged|ccc
7	bis(2-Chloroethyl) ether	0.91396	0.87044	0.87044	0.000	-4.76166	60.00000	Averaged
8	2-Chlorophenol	1.03330	1.00009	1.00009	0.000	-3.21470	60.00000	Averaged
203	n-Decane	1.24052	1.22124	1.22124	0.000	-1.55428	60.00000	Averaged
9	1,3-Dichlorobenzene	1.11826	1.10326	1.10326	0.000	-1.34119	60.00000	Averaged
11	1,4-Dichlorobenzene	1.10956	1.08204	1.08204	0.001	-2.47984	20.00000	Averaged|ccc
13	1,2-Dichlorobenzene	0.97955	1.00197	1.00197	0.000	2.28836	60.00000	Averaged
14	bis(2-Chloroisopropyl)ether	1.79561	1.76251	1.76251	0.000	-1.84363	60.00000	Averaged
12	Benzyl alcohol	0.68191	0.66486	0.66486	0.000	-2.49934	60.00000	Averaged
15	o-Cresol	0.71791	0.71066	0.71066	0.000	-1.01011	60.00000	Averaged
18	m,p-Cresols	1.02193	1.01713	1.01713	0.000	-0.46949	60.00000	Averaged
17	N-Nitrosodipropylamine	0.60391	0.60439	0.60439	0.050	0.08018	60.00000	Averaged|spcc
19	Hexachloroethane	0.45803	0.43899	0.43899	0.000	-4.15529	60.00000	Averaged
21	Nitrobenzene	0.27592	0.28190	0.28190	0.000	2.16578	60.00000	Averaged
22	Isophorone	0.52404	0.51130	0.51130	0.000	-2.43216	60.00000	Averaged
23	2-Nitrophenol	0.13005	0.13188	0.13188	0.001	1.40654	20.00000	Averaged|ccc
24	2,4-Dimethylphenol	0.26000	0.24103	0.24103	0.000	-7.29554	60.00000	Averaged
25	bis(2-Chloroethoxy)methane	0.31106	0.30308	0.30308	0.000	-2.56510	60.00000	Averaged
26	2,4-Dichlorophenol	0.20539	0.20573	0.20573	0.001	0.16229	20.00000	Averaged|ccc
27	Benzoic acid	43.27553	40.00000	0.12598	0.000	8.18881	60.00000	Linear
28	1,2,4-Trichlorobenzene	0.25371	0.24714	0.24714	0.000	-2.58845	60.00000	Averaged
30	Naphthalene	0.78760	0.81978	0.81978	0.000	4.08512	60.00000	Averaged
204	alpha-Terpineol	0.25524	0.22388	0.22388	0.000	-12.28424	60.00000	Averaged
31	4-Chloroaniline	0.34454	0.36098	0.36098	0.000	4.77058	60.00000	Averaged
32	Hexachlorobutadiene	0.15048	0.15123	0.15123	0.001	0.49613	20.00000	Averaged|ccc
33	4-Chloro-3-methylphenol	0.20939	0.21475	0.21475	0.001	2.56300	20.00000	Averaged|ccc
34	2-Methylnaphthalene	0.49435	0.56037	0.56037	0.000	13.35472	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 12:29
Lab File ID: s5a0512.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 11:38
Lab Sample ID: WBN091223-17.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.48258	0.52529	0.52529	0.000	8.85001	Averaged
36 Hexachlorocyclopentadiene	0.23320	0.17370	0.17370	0.050	-25.51571	Averaged|spcc
205 2,3-Dichloroaniline	0.48598	0.48645	0.48645	0.000	0.09715	Averaged
37 2,4,6-Trichlorophenol	0.27850	0.27975	0.27975	0.001	0.44696	Averaged|ccc
38 2,4,5-Trichlorophenol	0.31016	0.32095	0.32095	0.000	3.47953	Averaged
40 2-Chloronaphthalene	0.87386	0.86789	0.86789	0.000	-0.68294	Averaged
42 o-Nitroaniline	0.28349	0.28429	0.28429	0.000	0.28213	Averaged
41 m-Nitroaniline	0.21276	0.21557	0.21557	0.000	1.32095	Averaged
43 Dimethylphthalate	1.02309	1.02836	1.02836	0.000	0.51489	Averaged
44 2,6-Dinitrotoluene	0.23962	0.23431	0.23431	0.000	-2.21807	Averaged
50 2,4-Dinitrotoluene	0.30273	0.30891	0.30891	0.000	2.04140	Averaged
45 Acenaphthylene	1.42466	1.56830	1.56830	0.000	10.08265	Averaged
47 Acenaphthene	0.86925	0.94508	0.94508	0.001	8.72419	Averaged|ccc
48 2,4-Dinitrophenol	39.51219	40.00000	0.05593	0.050	-1.21952	Linear|spcc
49 Dibenzofuran	1.24565	1.23814	1.23814	0.000	-0.60256	Averaged
51 Diethylphthalate	1.05822	1.08156	1.08156	0.000	2.20474	Averaged
52 4-Nitrophenol	43.35716	40.00000	0.15491	0.050	8.39290	Linear|spcc
53 Fluorene	1.04116	1.16236	1.16236	0.000	11.64150	Averaged
54 4-Chlorophenylphenylether	0.54928	0.54913	0.54913	0.000	-0.02699	Averaged
55 2-Methyl-4,6-dinitrophenol	45.65666	40.00000	0.07735	0.000	14.14165	Linear
56 p-Nitroaniline	0.17126	0.16889	0.16889	0.000	-1.38331	Averaged
133 Diphenylamine	0.48238	0.47918	0.47918	0.001	-0.66262	Averaged|ccc
58 1,2-Diphenylhydrazine	0.56816	0.57277	0.57277	0.000	0.81103	Averaged
61 4-Bromophenylphenylether	0.17919	0.17218	0.17218	0.000	-3.91443	Averaged
63 Hexachlorobenzene	0.18156	0.17105	0.17105	0.000	-5.78874	Averaged
65 Pentachlorophenol	39.90292	40.00000	0.08235	0.001	-0.24271	Linear|ccc
206 n-Octadecane	0.40416	0.42903	0.42903	0.000	6.15429	Averaged
68 Phenanthrene	0.77989	0.83345	0.83345	0.000	6.86728	Averaged
69 Anthracene	0.78118	0.85578	0.85578	0.000	9.54971	Averaged
72 Di-n-butylphthalate	0.97635	1.01661	1.01661	0.000	4.12290	Averaged
76 Fluoranthene	0.85744	0.95622	0.95622	0.001	11.52033	Averaged|ccc
79 Pyrene	1.01529	1.05256	1.05256	0.000	3.67140	Averaged
85 Butylbenzylphthalate	0.48062	0.47847	0.47847	0.000	-0.44815	Averaged
89 Benzo(a)anthracene	0.84934	0.90825	0.90825	0.000	6.93670	Averaged
92 Chrysene	0.77209	0.83424	0.83424	0.000	8.04902	Averaged
93 bis(2-Ethylhexyl)phthalate	0.66338	0.66727	0.66727	0.000	0.58616	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 12:29
Lab File ID: s5a0512.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 11:38
Lab Sample ID: WBN091223-17.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.28101	1.25168	1.25168	0.001	-2.28947	20.00000	Averaged|ccc
95 Benzo(b)fluoranthene	0.90766	0.96663	0.96663	0.000	6.49706	60.00000	Averaged|
96 Benzo(k)fluoranthene	0.89031	0.96981	0.96981	0.000	8.93015	60.00000	Averaged|
97 Benzo(a)pyrene	0.77742	0.85130	0.85130	0.001	9.50338	20.00000	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	42.91361	40.00000	0.75886	0.000	7.28402	60.00000	Linear|
100 Dibenzo(a,h)anthracene	42.66667	40.00000	0.60808	0.000	6.66667	60.00000	Linear|
101 Benzo(ghi)perylene	0.56118	0.64923	0.64923	0.000	15.69111	60.00000	Averaged|
126 m-Dinitrobenzene	0.17669	0.17548	0.17548	0.000	-0.68799	60.00000	Averaged|
130 2,3,4,6-Tetrachlorophenol	40.44488	40.00000	0.23789	0.000	1.11220	60.00000	Linear|
143 Dinoseb	37.33467	40.00000	0.09887	0.000	-6.66333	60.00000	Linear|
173 Carbazole	0.59613	0.57799	0.57799	0.000	-3.04242	60.00000	Averaged|
184 p-Benzoquinone	48.18680	40.00000	0.17078	0.000	20.46699	60.00000	Linear|
192 Methoxychlor	0.54497	0.52567	0.52567	0.000	-3.54198	60.00000	Averaged|
211 p-Toluidine	0.98067	0.88367	0.88367	0.000	-9.89153	60.00000	Averaged|
210 m-Toluidine	1.23436	1.36896	1.36896	0.000	10.90465	60.00000	Averaged|
26 Phthalic anhydride	57.02859	40.00000	0.13613	0.000	42.57147	60.00000	Linear|
179 Dibenzo(a,e)pyrene	31.90406	40.00000	0.20084	0.000	-20.23984	60.00000	Linear|
214 1,4-Dinitrobenzene	0.17293	0.17647	0.17647	0.000	2.04965	60.00000	Averaged|
215 2-Ethoxyethanol	0.70680	0.71987	0.71987	0.000	1.84835	60.00000	Averaged|
216 Methylenebis(2-chloroanilin	0.12441	0.12854	0.12854	0.000	3.32115	60.00000	Averaged|
M 225 Trichlorophenols	0.29433	0.30035	0.30035	0.000	2.04466	60.00000	Averaged|
M 226 Tetrachlorophenols	40.44488	40.00000	0.23789	0.000	1.11220	60.00000	Linear|
M 227 Benzo(b,k)fluoranthene	0.89898	0.96822	0.96822	0.000	7.70183	60.00000	Averaged

Data File: /chem/MSD5.i/s010510.b/s5a0512.d
Report Date: 05-Jan-2010 12:49

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Data file : /chem/MSD5.i/s010510.b/s5a0512.d
Lab Smp Id: WBN091223-17.1 Client Smp ID: MEGAICV
Inj Date : 05-JAN-2010 12:29
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091223-17.1|40 PPM|1|SVM|1|MEGAICV
Misc Info : |MSD8270|WBN091208-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m
Meth Date : 05-Jan-2010 12:48 rmb Quant Type: ISTD
Cal Date : 05-JAN-2010 11:38 Cal File: s5a0510.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAICARE.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152		3.993	3.993	(1.000)	368438	40.0000	
* 29 Naphthalene-d8	136		4.864	4.864	(1.000)	1375001	40.0000	
* 46 Acenaphthene-d10	164		6.121	6.121	(1.000)	740435	40.0000	
* 67 Phenanthrene-d10	188		7.296	7.296	(1.000)	1348058	40.0000	
* 91 Chrysene-d12	240		9.718	9.718	(1.000)	1268614	40.0000	
* 98 Perylene-d12	264		11.442	11.442	(1.000)	1092324	40.0000	
\$ 3 2-Fluorophenol	112		3.165	3.165	(0.793)	363240	40.0000	39.8
\$ 5 Phenol-d5	99		3.699	3.699	(0.926)	436990	40.0000	38.8
\$ 20 Nitrobenzene-d5	82		4.354	4.354	(0.895)	431164	40.0000	40.8
\$ 39 2-Fluorobiphenyl	172		5.601	5.601	(0.915)	808582	40.0000	41.3
\$ 60 2,4,6-Tribromophenol	329		6.718	6.718	(1.098)	93731	40.0000	39.8
\$ 81 p-Terphenyl-d14	244		8.678	8.678	(0.893)	844492	40.0000	42.4
1 N-Methyl-N-nitrosomethylamine	74		2.462	2.462	(0.616)	210540	40.0000	38.4

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
-----	----	---	-----	-----	-----	-----	-----
2 Pyridine	79	2.495	2.495	(0.625)	304636	40.0000	40.5
4 Aniline	66	3.776	3.776	(0.946)	184019	40.0000	39.8
6 Phenol	94	3.709	3.709	(0.929)	437742	40.0000	39.0 (Q)
7 bis(2-Chloroethyl) ether	63	3.791	3.791	(0.949)	320703	40.0000	38.1
8 2-Chlorophenol	128	3.853	3.853	(0.965)	368470	40.0000	38.7
203 n-Decane	43	3.839	3.839	(0.961)	449952	40.0000	39.4
9 1,3-Dichlorobenzene	146	3.959	3.959	(0.992)	406483	40.0000	39.5
11 1,4-Dichlorobenzene	146	4.003	4.003	(1.002)	398665	40.0000	39.0
13 1,2-Dichlorobenzene	146	4.108	4.108	(1.029)	369162	40.0000	40.9
14 bis(2-Chloroisopropyl) ether	45	4.133	4.133	(1.035)	649375	40.0000	39.3
12 Benzyl alcohol	108	4.056	4.056	(1.016)	244961	40.0000	39.0
15 o-Cresol	107	4.104	4.104	(1.028)	261835	40.0000	39.6
18 m,p-Cresols	107	4.205	4.205	(1.053)	374750	40.0000	39.8
17 N-Nitrosodipropylamine	70	4.229	4.229	(1.059)	222682	40.0000	40.0
19 Hexachloroethane	117	4.340	4.340	(1.087)	161742	40.0000	38.3
21 Nitrobenzene	77	4.369	4.369	(0.898)	387614	40.0000	40.9
22 Isophorone	82	4.523	4.523	(0.930)	703036	40.0000	39.0
23 2-Nitrophenol	139	4.585	4.585	(0.943)	181331	40.0000	40.6
24 2,4-Dimethylphenol	122	4.571	4.571	(0.940)	331416	40.0000	37.1
25 bis(2-Chloroethoxy) methane	93	4.643	4.643	(0.954)	416731	40.0000	39.0
26 2,4-Dichlorophenol	162	4.744	4.744	(0.975)	282875	40.0000	40.1
27 Benzoic acid	105	4.624	4.624	(0.950)	173217	40.0000	43.3
28 1,2,4-Trichlorobenzene	180	4.812	4.812	(0.989)	339823	40.0000	39.0
30 Naphthalene	128	4.879	4.879	(1.003)	1127193	40.0000	41.6 (Q)
204 alpha-Terpineol	59	4.850	4.850	(0.997)	307842	40.0000	35.1
31 4-Chloroaniline	127	4.889	4.889	(1.005)	496347	40.0000	41.9
32 Hexachlorobutadiene	225	4.942	4.942	(1.016)	207943	40.0000	40.2
33 4-Chloro-3-methylphenol	107	5.197	5.197	(1.068)	295284	40.0000	41.0
34 2-Methylnaphthalene	142	5.360	5.360	(1.102)	770505	40.0000	45.3
35 1-Methylnaphthalene	142	5.433	5.433	(1.117)	722270	40.0000	43.5
36 Hexachlorocyclopentadiene	237	5.462	5.462	(0.892)	128611	40.0000	29.8
205 2,3-Dichloroaniline	161	5.553	5.553	(0.907)	360183	40.0000	40.0
37 2,4,6-Trichlorophenol	196	5.543	5.543	(0.906)	207134	40.0000	40.2
38 2,4,5-Trichlorophenol	196	5.572	5.572	(0.910)	237644	40.0000	41.4
40 2-Chloronaphthalene	162	5.712	5.712	(0.933)	642618	40.0000	39.7
42 o-Nitroaniline	65	5.765	5.765	(0.942)	210498	40.0000	40.1
41 m-Nitroaniline	138	6.064	6.064	(0.991)	159614	40.0000	40.5
43 Dimethylphthalate	163	5.876	5.876	(0.960)	761434	40.0000	40.2
44 2,6-Dinitrotoluene	165	5.929	5.929	(0.969)	173490	40.0000	39.1
50 2,4-Dinitrotoluene	165	6.227	6.227	(1.017)	228725	40.0000	40.8
45 Acenaphthylene	152	6.020	6.020	(0.983)	1161227	40.0000	44.0
47 Acenaphthene	154	6.145	6.145	(1.004)	699772	40.0000	43.5
48 2,4-Dinitrophenol	184	6.136	6.136	(1.002)	41412	40.0000	39.5
49 Dibenzofuran	168	6.271	6.271	(1.024)	916763	40.0000	39.8
51 Diethylphthalate	149	6.386	6.386	(1.043)	800822	40.0000	40.9
52 4-Nitrophenol	139	6.145	6.145	(1.004)	114703	40.0000	43.4
53 Fluorene	166	6.535	6.535	(1.068)	860655	40.0000	44.6

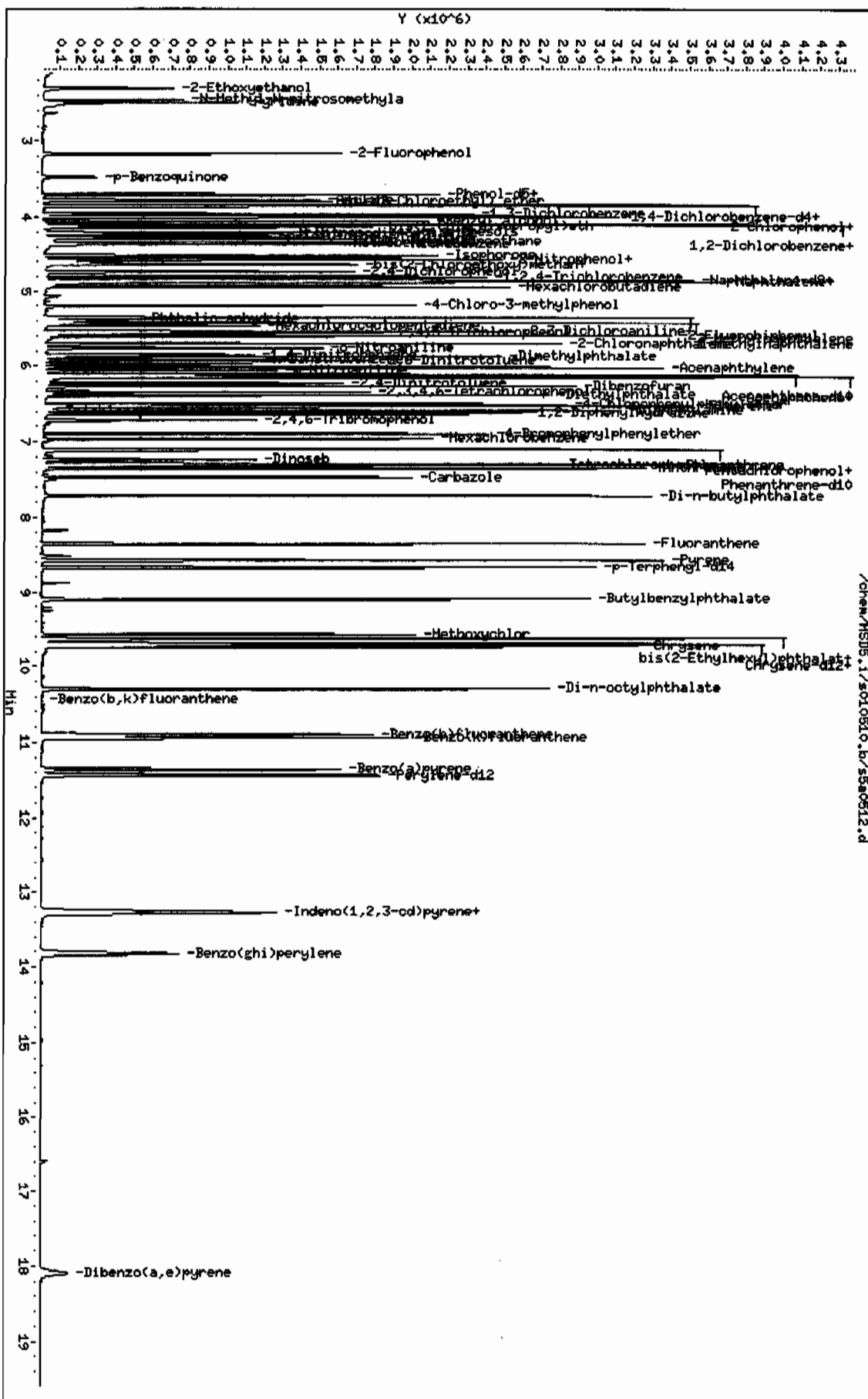
Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.507	6.507 (1.063)	406598	40.0000	40.0
55 2-Methyl-4,6-dinitrophenol	198	6.545	6.545 (0.897)	104269	40.0000	45.6
56 p-Nitroaniline	138	6.526	6.526 (1.066)	125051	40.0000	39.4
133 Diphenylamine	169	6.593	6.593 (0.904)	645968	40.0000	39.7
58 1,2-Diphenylhydrazine	77	6.632	6.632 (0.909)	772122	40.0000	40.3
61 4-Bromophenylphenylether	248	6.897	6.897 (0.945)	232104	40.0000	38.4
63 Hexachlorobenzene	284	6.969	6.969 (0.955)	230585	40.0000	37.7
65 Pentachlorophenol	266	7.118	7.118 (0.976)	111007	40.0000	39.9
206 n-Octadecane	57	7.104	7.104 (0.974)	578361	40.0000	42.5
68 Phenanthrene	178	7.315	7.315 (1.003)	1123542	40.0000	42.7
69 Anthracene	178	7.359	7.359 (1.009)	1153642	40.0000	43.8
72 Di-n-butylphthalate	149	7.715	7.715 (1.057)	1370444	40.0000	41.6
76 Fluoranthene	202	8.360	8.360 (1.146)	1289035	40.0000	44.6
79 Pyrene	202	8.577	8.577 (0.883)	1335296	40.0000	41.5
85 Butylbenzylphthalate	149	9.107	9.107 (0.937)	606994	40.0000	39.8
89 Benzo(a)anthracene	228	9.704	9.704 (0.998)	1152223	40.0000	42.8
92 Chrysene	228	9.742	9.742 (1.002)	1058329	40.0000	43.2
93 bis(2-Ethylhexyl)phthalate	149	9.632	9.632 (0.991)	846502	40.0000	40.2
94 Di-n-octylphthalate	149	10.301	10.301 (0.900)	1367243	40.0000	39.1
95 Benzo(b)fluoranthene	252	10.908	10.908 (0.953)	1055873	40.0000	42.6(H)
96 Benzo(k)fluoranthene	252	10.941	10.941 (0.956)	1059350	40.0000	43.6
97 Benzo(a)pyrene	252	11.360	11.360 (0.993)	929893	40.0000	43.8
99 Indeno(1,2,3-cd)pyrene	276	13.267	13.267 (1.159)	828920	40.0000	42.9
100 Dibenzo(a,h)anthracene	278	13.282	13.282 (1.161)	664220	40.0000	42.7
101 Benzo(ghi)perylene	276	13.831	13.831 (1.209)	709170	40.0000	46.3
126 m-Dinitrobenzene	168	5.914	5.914 (0.966)	129928	40.0000	39.7
130 2,3,4,6-Tetrachlorophenol	232	6.348	6.348 (1.037)	176142	40.0000	40.4(H)
143 Dinoseb	211	7.238	7.238 (0.992)	133289	40.0000	37.3
173 Carbazole	167	7.474	7.474 (1.024)	779167	40.0000	38.8
184 p-Benzoquinone	54	3.473	3.473 (0.870)	62922	40.0000	48.2
192 Methoxychlor	227	9.579	9.579 (0.986)	666868	40.0000	38.6
211 p-Toluidine	106	4.267	4.267 (1.069)	325578	40.0000	36.0
210 m-Toluidine	106	4.291	4.291 (1.075)	504378	40.0000	44.4
26 Phthalic anhydride	104	5.389	5.389 (1.108)	187183	40.0000	57.0
179 Dibenzo(a,e)pyrene	302	18.097	18.097 (1.582)	219387	40.0000	31.9(H)
214 1,4-Dinitrobenzene	75	5.856	5.856 (0.957)	130668	40.0000	40.8
215 2-Ethoxyethanol	59	2.303	2.303 (0.577)	265227	40.0000	40.7
216 Methylenebis(2-chloroaniline)	231	9.641	9.641 (0.992)	163064	40.0000	41.3(Q)
M 225 Trichlorophenols	196			444778	80.0000	81.6
M 226 Tetrachlorophenols	232			176142	40.0000	40.4
M 227 Benzo(b,k)fluoranthene	252			2115223	80.0000	86.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MS05.1/s010310.b/s5a0512.d
 Date: 05-JUN-2010 12:29
 Client ID: MEGACIV
 Sample Info: MEGACIV223-17.1140 PPM11SWH11MEGACIV
 Volume Injected (uL): 0.5
 Column phase: 30M DB-SMS

Instrument: MS05.1
 Operator: RMB
 Column diameter: 0.20



Data File: /chem/MSD5.i/s010510.b/s5a0526.d
Report Date: 06-Jan-2010 08:08

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 17:55
Lab File ID: s5a0526.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 17:32
Lab Sample ID: WBN100103-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86728	0.75212	0.75212	0.010	-13.27728	60.00000	Averaged
16 Acetophenone	1.12258	1.11638	1.11638	0.010	-0.55224	60.00000	Averaged
189 Caprolactam	43.68381	40.00000	0.09432	0.010	9.20953	60.00000	Linear
208 1,1'-Biphenyl	1.13030	1.21150	1.21150	0.010	7.18402	60.00000	Averaged
207 Atrazine	0.03286	0.04079	0.04079	0.010	24.14841	60.00000	Averaged
77 Benzidine	41.85292	40.00000	0.23826	0.010	4.63229	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.27423	0.26897	0.26897	0.010	-1.91801	60.00000	Averaged
102 1,4-Dioxane	0.35034	0.41126	0.41126	0.010	17.38790	60.00000	Averaged
103 Methyl methacrylate	0.19020	0.23703	0.23703	0.010	24.62514	60.00000	Averaged
104 Ethyl methacrylate	0.79064	0.95373	0.95373	0.010	20.62765	60.00000	Averaged
105 2-Picoline	1.20530	1.15374	1.15374	0.010	-4.27823	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.42573	0.43567	0.43567	0.010	2.33571	60.00000	Averaged
107 Methyl methanesulfonate	0.50673	0.55961	0.55961	0.010	10.43462	60.00000	Averaged
108 N-Nitrosodiethylamine	0.41971	0.42676	0.42676	0.010	1.67940	60.00000	Averaged
109 Ethyl Methanesulfonate	0.64256	0.80489	0.80489	0.010	25.26191	60.00000	Averaged
110 Pentachloroethane	0.31977	0.43517	0.43517	0.010	36.08674	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.40441	0.41200	0.41200	0.010	1.87564	60.00000	Averaged
113 N-Nitrosomorpholine	0.51508	0.55362	0.55362	0.010	7.48212	60.00000	Averaged
114 o-Toluidine	1.52533	1.52910	1.52910	0.010	0.24740	60.00000	Averaged
115 N-Nitrosopiperidine	0.13348	0.13472	0.13472	0.010	0.92414	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.77645	0.84685	0.84685	0.010	9.06604	60.00000	Averaged
118 2,6-Dichlorophenol	0.19680	0.21685	0.21685	0.010	10.18785	60.00000	Averaged
119 Hexachloropropene	0.10641	0.17502	0.17502	0.010	64.46898	60.00000	Averaged
120 p-Phenylenediamine	0.15550	0.18572	0.18572	0.010	19.43068	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17181	0.18680	0.18680	0.010	8.72325	60.00000	Averaged
122 Safrrole	0.19196	0.22555	0.22555	0.010	17.49521	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.45635	0.49639	0.49639	0.010	8.77408	60.00000	Averaged
124 Isosafrole	0.32140	0.43916	0.43916	0.010	36.63815	60.00000	Averaged
125 1,4-Naphthoquinone	0.29341	0.34417	0.34417	0.010	17.30012	60.00000	Averaged
127 Pentachlorobenzene	0.41007	0.42925	0.42925	0.010	4.67798	60.00000	Averaged
128 1-Naphthylamine	0.78230	0.83484	0.83484	0.010	6.71678	60.00000	Averaged
129 2-Naphthylamine	0.78145	0.87149	0.87149	0.010	11.52225	60.00000	Averaged
131 5-Nitro-o-toluidine	0.25817	0.26779	0.26779	0.010	3.72690	60.00000	Averaged
136 1,3,5-Trinitrobenzene	56.36703	40.00000	0.15365	0.010	40.91758	60.00000	Linear
137 Phenacetin	0.25526	0.27157	0.27157	0.010	6.38969	60.00000	Averaged
138 Diallate	0.23114	0.22075	0.22075	0.010	-4.49521	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 17:55
Lab File ID: s5a0526.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 17:32
Lab Sample ID: WBN100103-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.25189	0.31917	0.31917	0.010	26.71116	60.00000	Averaged
213 Trans Diallate	0.27193	0.25971	0.25971	0.010	-4.49521	60.00000	Averaged
140 4-Aminobiphenyl	0.47494	0.48744	0.48744	0.010	2.63182	60.00000	Averaged
141 Pentachloronitrobenzene	0.07064	0.07555	0.07555	0.010	6.94925	60.00000	Averaged
142 Pronamide	0.26102	0.28974	0.28974	0.010	11.00218	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01407	0.01534	0.01534	0.010	9.02233	60.00000	Averaged
147 Methapyrilene	0.41371	0.43493	0.43493	0.010	5.12861	60.00000	Averaged
148 Isodrin	0.10578	0.09832	0.09832	0.010	-7.05419	60.00000	Averaged
149 Aramite	0.04931	0.04543	0.04543	0.010	-7.85515	60.00000	Averaged
150 Kepone	0.07429	0.07616	0.07616	0.010	2.52491	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.26901	0.26943	0.26943	0.010	0.15689	60.00000	Averaged
152 Chlorobenzilate	0.29431	0.30452	0.30452	0.010	3.46835	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.44919	0.40066	0.40066	0.010	-10.80342	60.00000	Averaged
155 2-Acetylaminofluorene	39.87515	40.00000	0.28698	0.010	-0.31212	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.48401	0.45352	0.45352	0.010	-6.30070	60.00000	Averaged
158 3-Methylcholanthrene	0.33921	0.34785	0.34785	0.010	2.54688	60.00000	Averaged

Data File: /chem/MSD5.i/s010510.b/s5a0526.d
Report Date: 06-Jan-2010 08:08

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Data file : /chem/MSD5.i/s010510.b/s5a0526.d
Lab Smp Id: WBN100103-08.1 Client Smp ID: AP12ICV
Inj Date : 05-JAN-2010 17:55
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN100103-08.1|40 PPM|1|SVM|1|AP12ICV
Misc Info : |MSD8270|WBN091208-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m
Meth Date : 06-Jan-2010 08:08 rmb Quant Type: ISTD
Cal Date : 05-JAN-2010 16:24 Cal File: s5a0522.d
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.990	3.990	(1.000)	397349	40.0000	
* 29 Naphthalene-d8	136	4.854	4.854	(1.000)	1386419	40.0000	
* 46 Acenaphthene-d10	164	6.113	6.113	(1.000)	804456	40.0000	
* 67 Phenanthrene-d10	188	7.290	7.290	(1.000)	1465645	40.0000	
* 91 Chrysene-d12	240	9.707	9.707	(1.000)	1331973	40.0000	
* 98 Perylene-d12	264	11.431	11.431	(1.000)	1039315	40.0000	
209 Benzaldehyde	77	3.708	3.708	(0.929)	298856	40.0000	34.7
16 Acetophenone	105	4.237	4.237	(1.062)	443592	40.0000	39.8
189 Caprolactam	113	5.125	5.125	(1.056)	130769	40.0000	43.7
208 1,1'-Biphenyl	154	5.678	5.678	(0.929)	974602	40.0000	42.9
207 Atrazine	173	6.984	6.984	(0.958)	59788	40.0000	49.6
77 Benzidine	184	8.442	8.442	(0.870)	317353	40.0000	41.8
90 3,3'-Dichlorobenzidine	252	9.637	9.637	(0.993)	358262	40.0000	39.2

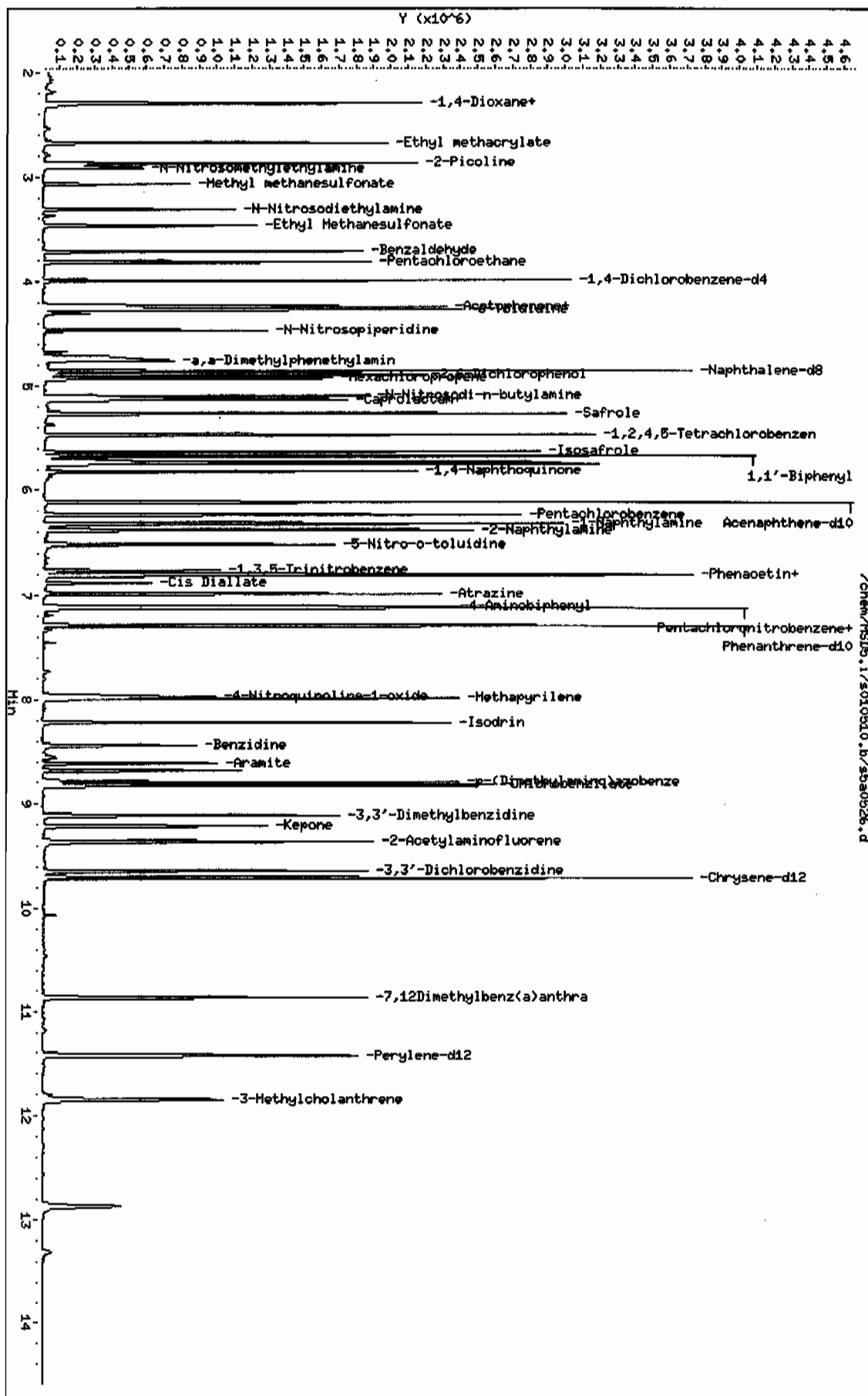
Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
102 1,4-Dioxane	88	2.302	2.302 (0.577)	163412	40.0000	47.0
103 Methyl methacrylate	100	2.296	2.296 (0.575)	94184	40.0000	49.8
104 Ethyl methacrylate	69	2.678	2.678 (0.671)	378962	40.0000	48.2
105 2-Picoline	93	2.872	2.872 (0.720)	458437	40.0000	38.3
106 N-Nitrosomethylethylamine	88	2.919	2.919 (0.732)	173113	40.0000	40.9
107 Methyl methanesulfonate	80	3.072	3.072 (0.770)	222359	40.0000	44.2
108 N-Nitrosodiethylamine	102	3.313	3.313 (0.830)	169572	40.0000	40.7
109 Ethyl Methanesulfonate	79	3.466	3.466 (0.869)	319821	40.0000	50.1
110 Pentachloroethane	167	3.813	3.813 (0.956)	172914	40.0000	54.4
111 N-Nitrosopyrrolidine	100	4.225	4.225 (1.059)	163707	40.0000	40.8 (Q)
113 N-Nitrosomorpholine	56	4.243	4.243 (1.063)	219982	40.0000	43.0
114 o-Toluidine	106	4.266	4.266 (1.069)	607588	40.0000	40.1
115 N-Nitrosopiperidine	114	4.466	4.466 (0.920)	186776	40.0000	40.4
116 a,a-Dimethylphenethylamine	58	4.754	4.754 (0.979)	1174082	40.0000	43.6 (H)
118 2,6-Dichlorophenol	162	4.896	4.896 (1.008)	300644	40.0000	44.1
119 Hexachloropropene	213	4.931	4.931 (1.016)	242646	40.0000	65.8
120 p-Phenylenediamine	108	5.131	5.131 (1.057)	257481	40.0000	47.8
121 N-Nitrosodi-n-butylamine	84	5.096	5.096 (1.050)	258982	40.0000	43.5 (Q)
122 Safrole	162	5.266	5.266 (1.085)	312703	40.0000	47.0
123 1,2,4,5-Tetrachlorobenzene	216	5.472	5.472 (0.895)	399320	40.0000	43.5
124 Isosafrole	162	5.637	5.637 (0.922)	353286	40.0000	54.6
125 1,4-Naphthoquinone	158	5.825	5.825 (0.953)	276873	40.0000	46.9
127 Pentachlorobenzene	250	6.231	6.231 (1.019)	345311	40.0000	41.9
128 1-Naphthylamine	143	6.319	6.319 (1.034)	671596	40.0000	42.7
129 2-Naphthylamine	143	6.378	6.378 (1.043)	701073	40.0000	44.6
131 5-Nitro-o-toluidine	152	6.513	6.513 (1.065)	215424	40.0000	41.5
136 1,3,5-Trinitrobenzene	75	6.760	6.760 (0.927)	225192	40.0000	56.4
137 Phenacetin	108	6.807	6.807 (0.934)	398022	40.0000	42.6 (Q)
138 Diallate	86	6.801	6.801 (0.933)	323547	40.0000	38.2
212 Cis Diallate	86	6.878	6.878 (0.944)	70169	6.00000	7.6 (a)
213 Trans Diallate	86	6.801	6.801 (0.933)	323547	34.0000	32.5
140 4-Aminobiphenyl	169	7.101	7.101 (0.974)	714418	40.0000	41.0
141 Pentachloronitrobenzene	237	7.125	7.125 (0.977)	110730	40.0000	42.8 (Q)
142 Pronamide	173	7.119	7.119 (0.977)	424651	40.0000	44.4
146 4-Nitroquinoline-1-oxide	101	7.960	7.960 (1.092)	22482	40.0000	43.6
147 Methapyrilene	58	7.995	7.995 (1.097)	637453	40.0000	42.0
148 Isodrin	193	8.225	8.225 (1.128)	144096	40.0000	37.2
149 Aramite	185	8.619	8.619 (1.182)	66591	40.0000	36.8
150 Kepone	272	9.213	9.213 (1.264)	111627	40.0000	41.0
151 p-(Dimethylamino)azobenzene	120	8.795	8.795 (0.906)	358877	40.0000	40.1
152 Chlorobenzilate	251	8.831	8.831 (0.910)	405612	40.0000	41.4
153 3,3'-Dimethylbenzidine	212	9.113	9.113 (0.939)	533673	40.0000	35.7
155 2-Acetylaminofluorene	181	9.360	9.360 (0.964)	382249	40.0000	39.9
157 7,12Dimethylbenz (a) anthracene	256	10.872	10.872 (0.951)	471347	40.0000	37.5
158 3-Methylcholanthrene	268	11.848	11.848 (1.037)	361523	40.0000	41.0 (Q)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: /chem/MSDS.i/s010510.b/s5a0526.d
 Date: 05-JUN-2010 17:55
 Client ID: AP12ICV
 Sample Info: MBN400103-08.1140 PPH11SVH11AP12ICV
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MSD5.1
 Operator: RHB
 Column diameter: 0.20



Data File: /chem/MSD5.i/s011910.b/s5a1902.d
Report Date: 19-Jan-2010 11:15

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 19-JAN-2010 10:21
Lab File ID: s5a1902.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD
Method: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.99200	0.96436	0.96436	0.000	-2.78594	60.00000	Averaged
5 Phenol-d5	1.22338	1.20944	1.20944	0.000	-1.13911	60.00000	Averaged
20 Nitrobenzene-d5	0.30713	0.29381	0.29381	0.000	-4.33602	60.00000	Averaged
39 2-Fluorobiphenyl	1.05814	1.02265	1.02265	0.000	-3.35419	60.00000	Averaged
60 2,4,6-Tribromophenol	0.12713	0.11686	0.11686	0.000	-8.08281	60.00000	Averaged
81 p-Terphenyl-d14	0.62807	0.59395	0.59395	0.000	-5.43399	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.59451	0.59263	0.59263	0.000	-0.31579	60.00000	Averaged
2 Pyridine	0.81724	0.77611	0.77611	0.000	-5.03315	60.00000	Averaged
4 Aniline	0.50134	0.49475	0.49475	0.000	-1.31507	60.00000	Averaged
6 Phenol	1.21864	1.21480	1.21480	0.001	-0.31508	20.00000	Averaged|ccc
7 bis(2-Chloroethyl) ether	0.91396	0.90058	0.90058	0.000	-1.46442	60.00000	Averaged
8 2-Chlorophenol	1.03330	1.00817	1.00817	0.000	-2.43247	60.00000	Averaged
203 n-Decane	1.23959	1.29318	1.29318	0.000	4.32360	60.00000	Averaged
9 1,3-Dichlorobenzene	1.11826	1.06160	1.06160	0.000	-5.06641	60.00000	Averaged
11 1,4-Dichlorobenzene	1.10956	1.07563	1.07563	0.001	-3.05757	20.00000	Averaged|ccc
13 1,2-Dichlorobenzene	0.97955	0.99252	0.99252	0.000	1.32432	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.79561	1.76821	1.76821	0.000	-1.52609	60.00000	Averaged
12 Benzyl alcohol	0.68191	0.66128	0.66128	0.000	-3.02546	60.00000	Averaged
15 o-Cresol	0.71791	0.73898	0.73898	0.000	2.93442	60.00000	Averaged
18 m,p-Cresols	1.02193	1.01510	1.01510	0.000	-0.66797	60.00000	Averaged
17 N-Nitrosodipropylamine	0.60391	0.61300	0.61300	0.050	1.50476	60.00000	Averaged|spcc
19 Hexachloroethane	0.45803	0.42758	0.42758	0.000	-6.64719	60.00000	Averaged
21 Nitrobenzene	0.27592	0.29229	0.29229	0.000	5.93071	60.00000	Averaged
22 Isophorone	0.52404	0.51342	0.51342	0.000	-2.02702	60.00000	Averaged
23 2-Nitrophenol	0.13005	0.12617	0.12617	0.001	-2.98453	20.00000	Averaged|ccc
24 2,4-Dimethylphenol	0.26000	0.24483	0.24483	0.000	-5.83211	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31106	0.31181	0.31181	0.000	0.24286	60.00000	Averaged
26 2,4-Dichlorophenol	0.20539	0.21342	0.21342	0.001	3.91010	20.00000	Averaged|ccc
27 Benzoic acid	37.10465	40.00000	0.09978	0.000	-7.23839	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.25371	0.24820	0.24820	0.000	-2.17387	60.00000	Averaged
30 Naphthalene	0.78760	0.73883	0.73883	0.000	-6.19293	60.00000	Averaged
204 alpha-Terpineol	0.25524	0.23663	0.23663	0.000	-7.29178	60.00000	Averaged
31 4-Chloroaniline	0.34454	0.35862	0.35862	0.000	4.08590	60.00000	Averaged
32 Hexachlorobutadiene	0.15048	0.14589	0.14589	0.001	-3.05089	20.00000	Averaged|ccc
33 4-Chloro-3-methylphenol	0.20939	0.22032	0.22032	0.001	5.22047	20.00000	Averaged|ccc
34 2-Methylnaphthalene	0.49435	0.48763	0.48763	0.000	-1.35946	60.00000	Averaged

GEL Laboratories LLC
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 19-JAN-2010 10:21
Lab File ID: s5a1902.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD
Method: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.48258	0.47648	0.47648|0.000	-1.26435	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.23320	0.16693	0.16693|0.050	-28.41867	60.00000	Averaged|spcc
205 2,3-Dichloroaniline	0.48598	0.47200	0.47200|0.000	-2.87669	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27850	0.30047	0.30047|0.001	7.88832	20.00000	Averaged|ccc
38 2,4,5-Trichlorophenol	0.31016	0.31118	0.31118|0.000	0.32888	60.00000	Averaged
40 2-Chloronaphthalene	0.87386	0.85750	0.85750|0.000	-1.87205	60.00000	Averaged
42 o-Nitroaniline	0.28349	0.30170	0.30170|0.000	6.42486	60.00000	Averaged
41 m-Nitroaniline	0.21276	0.21792	0.21792|0.000	2.42442	60.00000	Averaged
43 Dimethylphthalate	1.02309	0.96893	0.96893|0.000	-5.29366	60.00000	Averaged
44 2,6-Dinitrotoluene	0.23962	0.22754	0.22754|0.000	-5.04448	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30273	0.28461	0.28461|0.000	-5.98592	60.00000	Averaged
45 Acenaphthylene	1.42466	1.35988	1.35988|0.000	-4.54723	60.00000	Averaged
47 Acenaphthene	0.86925	0.85751	0.85751|0.001	-1.34980	20.00000	Averaged|ccc
48 2,4-Dinitrophenol	42.79514	40.00000	0.06405|0.050	6.98785	60.00000	Linear|spcc
49 Dibenzofuran	1.24565	1.20116	1.20116|0.000	-3.57173	60.00000	Averaged
51 Diethylphthalate	1.05823	1.02156	1.02156|0.000	-3.46519	60.00000	Averaged
52 4-Nitrophenol	47.61891	40.00000	0.17354|0.050	19.04727	60.00000	Linear|spcc
53 Fluorene	1.04116	1.02415	1.02415|0.000	-1.63333	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54928	0.49124	0.49124|0.000	-10.56691	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	36.31144	40.00000	0.05756|0.000	-9.22139	60.00000	Linear
56 p-Nitroaniline	0.17126	0.18738	0.18738|0.000	9.41254	60.00000	Averaged
133 Diphenylamine	0.48238	0.46644	0.46644|0.001	-3.30557	20.00000	Averaged|ccc
58 1,2-Diphenylhydrazine	0.56816	0.57307	0.57307|0.000	0.86511	60.00000	Averaged
61 4-Bromophenylphenylether	0.17919	0.16438	0.16438|0.000	-8.26610	60.00000	Averaged
63 Hexachlorobenzene	0.18156	0.16287	0.16287|0.000	-10.29143	60.00000	Averaged
65 Pentachlorophenol	37.40057	40.00000	0.07615|0.001	-6.49857	20.00000	Linear|ccc
206 n-Octadecane	0.40416	0.42101	0.42101|0.000	4.17039	60.00000	Averaged
68 Phenanthrene	0.77989	0.74334	0.74334|0.000	-4.68681	60.00000	Averaged
69 Anthracene	0.78118	0.75046	0.75046|0.000	-3.93265	60.00000	Averaged
72 Di-n-butylphthalate	0.97635	0.94401	0.94401|0.000	-3.31206	60.00000	Averaged
76 Fluoranthene	0.85744	0.82468	0.82468|0.001	-3.82022	20.00000	Averaged|ccc
79 Pyrene	1.01529	0.94554	0.94554|0.000	-6.86977	60.00000	Averaged
85 Butylbenzylphthalate	0.48062	0.45566	0.45566|0.000	-5.19378	60.00000	Averaged
89 Benzo(a)anthracene	0.84934	0.82773	0.82773|0.000	-2.54387	60.00000	Averaged
92 Chrysene	0.77209	0.75937	0.75937|0.000	-1.64864	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.66338	0.65289	0.65289 0.000	-1.58013	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 19-JAN-2010 10:21
Lab File ID: s5a1902.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD
Method: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
94 Di-n-octylphthalate	1.28101	1.16595	1.16595	0.001	-8.98172	Averaged|ccc
95 Benzo(b)fluoranthene	0.90766	0.85135	0.85135	0.000	-6.20358	Averaged|
96 Benzo(k)fluoranthene	0.89031	0.84421	0.84421	0.000	-5.17715	Averaged|
97 Benzo(a)pyrene	0.77742	0.76225	0.76225	0.001	-1.95098	Averaged|ccc
99 Indeno(1,2,3-cd)pyrene	42.15570	40.00000	0.74449	0.000	5.38926	Linear|
100 Dibenzo(a,h)anthracene	43.06322	40.00000	0.61426	0.000	7.65805	Linear|
101 Benzo(ghi)perylene	0.56118	0.62387	0.62387	0.000	11.17128	Averaged|
126 m-Dinitrobenzene	0.17669	0.16401	0.16401	0.000	-7.17932	Averaged|
130 2,3,4,6-Tetrachlorophenol	38.89617	40.00000	0.22723	0.000	-2.75958	Linear|
143 Dinoseb	33.77912	40.00000	0.08672	0.000	-15.55220	Linear|
173 Carbazole	0.59613	0.54060	0.54060	0.000	-9.31576	Averaged|
184 p-Benzoquinone	25.05673	40.00000	0.07436	0.000	-37.35817	Linear|
192 Methoxychlor	0.54497	0.48529	0.48529	0.000	-10.95069	Averaged|
211 p-Toluidine	0.98068	0.93750	0.93750	0.000	-4.40293	Averaged|
210 m-Toluidine	1.23436	1.13810	1.13810	0.000	-7.79818	Averaged|
26 Phthalic anhydride	37.00446	40.00000	0.08454	0.000	-7.48884	Linear|
179 Dibenzo(a,e)pyrene	52.89230	40.00000	0.37161	0.000	32.23074	Linear|
214 1,4-Dinitrobenzene	0.17293	0.17850	0.17850	0.000	3.22180	Averaged|
215 2-Ethoxyethanol	0.70680	0.67546	0.67546	0.000	-4.43458	Averaged|
216 Methylenebis(2-chloroanilin	0.12441	0.11556	0.11556	0.000	-7.10832	Averaged|
M 225 Trichlorophenols	0.29433	0.30583	0.30583	0.000	3.90532	Averaged|
M 226 Tetrachlorophenols	38.89617	40.00000	0.22723	0.000	-2.75958	Linear
M 227 Benzo(b,k)fluoranthene	0.89898	0.84778	0.84778	0.000	-5.69532	Averaged

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Data file : /chem/MSD5.i/s011910.b/s5a1902.d
 Lab Smp Id: WBN091225-12.3 Client Smp ID: MEGACVS
 Inj Date : 19-JAN-2010 10:21
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN091225-12.3|40 PPM|1|SVM|1|MEGACVS
 Misc Info : |MSD8270|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAIICARE.sub
 Target Version: 3.50
 Processing Host: Kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.940	3.940	(1.000)	541987	40.0000	
* 29 Naphthalene-d8	136	4.807	4.807	(1.000)	2004415	40.0000	
* 46 Acenaphthene-d10	164	6.063	6.063	(1.000)	1072158	40.0000	
* 67 Phenanthrene-d10	188	7.234	7.234	(1.000)	1943353	40.0000	
* 91 Chrysene-d12	240	9.646	9.646	(1.000)	1806290	40.0000	
* 98 Perylene-d12	264	11.331	11.331	(1.000)	1618959	40.0000	
\$ 3 2-Fluorophenol	112	3.121	3.121	(0.792)	522672	40.0000	38.9
\$ 5 Phenol-d5	99	3.651	3.651	(0.927)	655501	40.0000	39.5
\$ 20 Nitrobenzene-d5	82	4.301	4.301	(0.895)	588916	40.0000	38.3
\$ 39 2-Fluorobiphenyl	172	5.548	5.548	(0.915)	1096439	40.0000	38.6
\$ 60 2,4,6-Tribromophenol	329	6.661	6.661	(1.098)	125291	40.0000	36.8
\$ 81 p-Terphenyl-d14	244	8.611	8.611	(0.893)	1072837	40.0000	37.8
1 N-Methyl-N-nitrosomethylamine	74	2.418	2.418	(0.614)	321199	40.0000	39.9

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
2 Pyridine	79	2.452	2.452	(0.622)	420641	40.0000	38.0
4 Aniline	66	3.723	3.723	(0.945)	268148	40.0000	39.5
6 Phenol	94	3.661	3.661	(0.929)	658406	40.0000	39.9 (Q)
7 bis(2-Chloroethyl) ether	63	3.738	3.738	(0.949)	488100	40.0000	39.4
8 2-Chlorophenol	128	3.805	3.805	(0.966)	546415	40.0000	39.0
203 n-Decane	43	3.786	3.786	(0.961)	700887	40.0000	41.7
9 1,3-Dichlorobenzene	146	3.906	3.906	(0.991)	575375	40.0000	38.0
11 1,4-Dichlorobenzene	146	3.950	3.950	(1.002)	582978	40.0000	38.8
13 1,2-Dichlorobenzene	146	4.055	4.055	(1.029)	537934	40.0000	40.5
14 bis(2-Chloroisopropyl) ether	45	4.084	4.084	(1.037)	958347	40.0000	39.4
12 Benzyl alcohol	108	4.003	4.003	(1.016)	358403	40.0000	38.8
15 o-Cresol	107	4.055	4.055	(1.029)	400518	40.0000	41.2
18 m,p-Cresols	107	4.157	4.157	(1.055)	550173	40.0000	39.7
17 N-Nitrosodipropylamine	70	4.176	4.176	(1.060)	332237	40.0000	40.6
19 Hexachloroethane	117	4.287	4.287	(1.088)	231743	40.0000	37.3
21 Nitrobenzene	77	4.316	4.316	(0.898)	585869	40.0000	42.4
22 Isophorone	82	4.470	4.470	(0.930)	1029110	40.0000	39.2
23 2-Nitrophenol	139	4.527	4.527	(0.942)	252890	40.0000	38.8
24 2,4-Dimethylphenol	122	4.523	4.523	(0.941)	490750	40.0000	37.7
25 bis(2-Chloroethoxy)methane	93	4.590	4.590	(0.955)	624999	40.0000	40.1
26 2,4-Dichlorophenol	162	4.691	4.691	(0.976)	427792	40.0000	41.6
27 Benzoic acid	105	4.571	4.571	(0.951)	200009	40.0000	37.1
28 1,2,4-Trichlorobenzene	180	4.758	4.758	(0.990)	497487	40.0000	39.1
30 Naphthalene	128	4.821	4.821	(1.003)	1480914	40.0000	37.5 (Q)
204 alpha-Terpineol	59	4.797	4.797	(0.998)	474300	40.0000	37.1
31 4-Chloroaniline	127	4.836	4.836	(1.006)	718824	40.0000	41.6
32 Hexachlorobutadiene	225	4.889	4.889	(1.017)	292431	40.0000	38.8
33 4-Chloro-3-methylphenol	107	5.149	5.149	(1.071)	441605	40.0000	42.1
34 2-Methylnaphthalene	142	5.303	5.303	(1.103)	977408	40.0000	39.4
35 1-Methylnaphthalene	142	5.380	5.380	(1.119)	955058	40.0000	39.5
36 Hexachlorocyclopentadiene	237	5.409	5.409	(0.892)	178972	40.0000	28.6
205 2,3-Dichloroaniline	161	5.500	5.500	(0.907)	506054	40.0000	38.8 (H)
37 2,4,6-Trichlorophenol	196	5.490	5.490	(0.905)	322152	40.0000	43.2 (H)
38 2,4,5-Trichlorophenol	196	5.519	5.519	(0.910)	333634	40.0000	40.1
40 2-Chloronaphthalene	162	5.659	5.659	(0.933)	919377	40.0000	39.2 (H)
42 o-Nitroaniline	65	5.712	5.712	(0.942)	323474	40.0000	42.6
41 m-Nitroaniline	138	6.010	6.010	(0.991)	233640	40.0000	41.0
43 Dimethylphthalate	163	5.823	5.823	(0.960)	1038850	40.0000	37.9
44 2,6-Dinitrotoluene	165	5.876	5.876	(0.969)	243954	40.0000	38.0
50 2,4-Dinitrotoluene	165	6.174	6.174	(1.018)	305142	40.0000	37.6
45 Acenaphthylene	152	5.962	5.962	(0.983)	1458004	40.0000	38.2
47 Acenaphthene	154	6.088	6.088	(1.004)	919391	40.0000	39.5
48 2,4-Dinitrophenol	184	6.083	6.083	(1.003)	68673	40.0000	42.8
49 Dibenzofuran	168	6.213	6.213	(1.025)	1287829	40.0000	38.6
51 Diethylphthalate	149	6.328	6.328	(1.044)	1095269	40.0000	38.6 (H)
52 4-Nitrophenol	139	6.097	6.097	(1.006)	186057	40.0000	47.6
53 Fluorene	166	6.473	6.473	(1.067)	1098053	40.0000	39.3

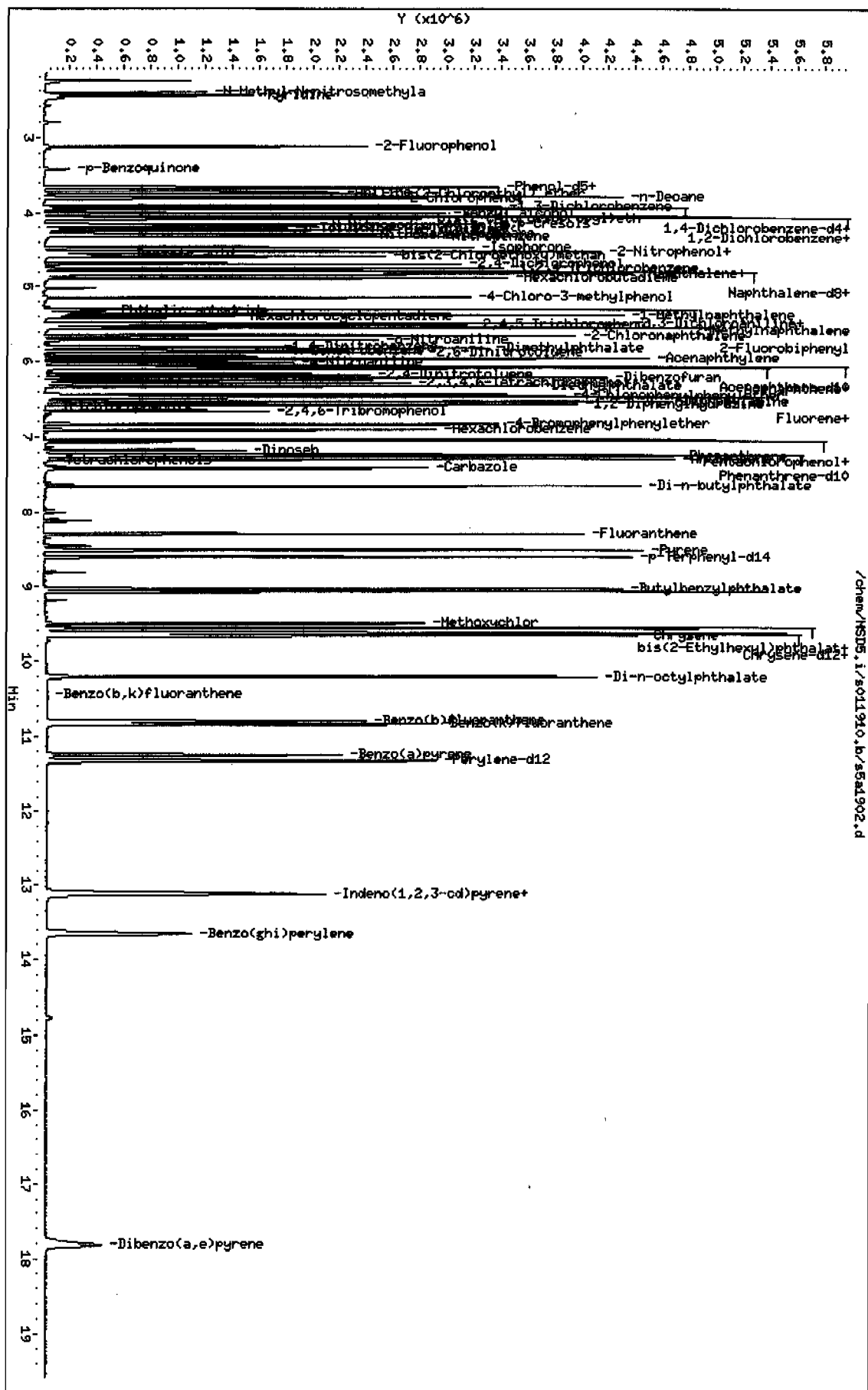
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.449	6.449	(1.064)	526687	40.0000	35.8
55 2-Methyl-4,6-dinitrophenol	198	6.487	6.487	(0.897)	111863	40.0000	36.3
56 p-Nitroaniline	138	6.468	6.468	(1.067)	200898	40.0000	43.8
133 Diphenylamine	169	6.535	6.535	(0.903)	906448	40.0000	38.7
58 1,2-Diphenylhydrazine	77	6.574	6.574	(0.909)	1113684	40.0000	40.3
61 4-Bromophenylphenylether	248	6.839	6.839	(0.945)	319446	40.0000	36.7
63 Hexachlorobenzene	284	6.911	6.911	(0.955)	316523	40.0000	35.9 (H)
65 Pentachlorophenol	266	7.060	7.060	(0.976)	147979	40.0000	37.4
206 n-Octadecane	57	7.046	7.046	(0.974)	818180	40.0000	41.7
68 Phenanthrene	178	7.253	7.253	(1.003)	1444577	40.0000	38.1
69 Anthracene	178	7.296	7.296	(1.009)	1458407	40.0000	38.4
72 Di-n-butylphthalate	149	7.652	7.652	(1.058)	1834554	40.0000	38.7
76 Fluoranthene	202	8.298	8.298	(1.147)	1602646	40.0000	38.5
79 Pyrene	202	8.510	8.510	(0.882)	1707919	40.0000	37.2 (H)
85 Butylbenzylphthalate	149	9.039	9.039	(0.937)	823057	40.0000	37.9 (H)
89 Benzo(a)anthracene	228	9.632	9.632	(0.998)	1495123	40.0000	39.0 (H)
92 Chrysene	228	9.670	9.670	(1.002)	1371634	40.0000	39.3
93 bis(2-Ethylhexyl)phthalate	149	9.564	9.564	(0.992)	1179317	40.0000	39.4
94 Di-n-octylphthalate	149	10.219	10.219	(0.902)	1887632	40.0000	36.4
95 Benzo(b)fluoranthene	252	10.807	10.807	(0.954)	1378303	40.0000	37.5 (H)
96 Benzo(k)fluoranthene	252	10.845	10.845	(0.957)	1366749	40.0000	37.9
97 Benzo(a)pyrene	252	11.254	11.254	(0.993)	1234051	40.0000	39.2 (H)
99 Indeno(1,2,3-cd)pyrene	276	13.118	13.118	(1.158)	1205294	40.0000	42.2
100 Dibenzo(a,h)anthracene	278	13.127	13.127	(1.159)	994466	40.0000	43.1
101 Benzo(ghi)perylene	276	13.662	13.662	(1.206)	1010014	40.0000	44.5
126 m-Dinitrobenzene	168	5.861	5.861	(0.967)	175840	40.0000	37.1
130 2,3,4,6-Tetrachlorophenol	232	6.290	6.290	(1.037)	243628	40.0000	38.9
143 Dinoseb	211	7.176	7.176	(0.992)	168529	40.0000	33.8
173 Carbazole	167	7.412	7.412	(1.025)	1050567	40.0000	36.3
184 p-Benzoquinone	54	3.420	3.420	(0.868)	40303	40.0000	25.0
192 Methoxychlor	227	9.511	9.511	(0.986)	876577	40.0000	35.6
211 p-Toluidine	106	4.214	4.214	(1.070)	508111	40.0000	38.2 (H)
210 m-Toluidine	106	4.238	4.238	(1.076)	616837	40.0000	36.9
26 Phthalic anhydride	104	5.336	5.336	(1.110)	169452	40.0000	37.0
179 Dibenzo(a,e)pyrene	302	17.832	17.832	(1.574)	601626	40.0000	52.9
214 1,4-Dinitrobenzene	75	5.803	5.803	(0.957)	191382	40.0000	41.3 (H)
215 2-Ethoxyethanol	59	2.259	2.259	(0.573)	366091	40.0000	38.2
216 Methylenebis(2-chloroaniline)	231	9.574	9.574	(0.992)	208739	40.0000	37.2 (Q)
M 225 Trichlorophenols	196				655786	80.0000	83.1
M 226 Tetrachlorophenols	232				243628	40.0000	38.9
M 227 Benzo(b,k)fluoranthene	252				2745052	80.0000	75.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSDS.i/s011910.b/s5a1902.d
 Date: 19-JAN-2010 10:21
 Client ID: NEGACVS
 Sample Info: IBERN091225-12.3140 PPH11SWH11NEGACVS
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-5MS

Instrument: MSD5.1
 Operator: RMB
 Column diameter: 0.20



Data File: /chem/MSD5.i/s011910.b/s5a1903.d
Report Date: 19-Jan-2010 11:13

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 19-JAN-2010 10:50
Lab File ID: s5a1903.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN100103-03.5 Quant Type: ISTD
Method: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86728	0.91783	0.91783	0.000	5.82958	60.00000	Averaged
16 Acetophenone	1.12258	1.25006	1.25006	0.000	11.35648	60.00000	Averaged
189 Caprolactam	45.28126	40.00000	0.09815	0.000	13.20314	60.00000	Linear
208 1,1'-Biphenyl	1.13030	1.25833	1.25833	0.000	11.32701	60.00000	Averaged
207 Atrazine	0.03286	0.04546	0.04546	0.000	38.34806	60.00000	Averaged
77 Benzidine	48.38073	40.00000	0.27261	0.000	20.95182	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.27423	0.31913	0.31913	0.000	16.37184	60.00000	Averaged
102 1,4-Dioxane	0.35034	0.38262	0.38262	0.000	9.21552	60.00000	Averaged
103 Methyl methacrylate	0.19020	0.20911	0.20911	0.000	9.94684	60.00000	Averaged
104 Ethyl methacrylate	0.79064	0.86114	0.86114	0.000	8.91772	60.00000	Averaged
105 2-Picoline	1.20530	1.29180	1.29180	0.000	7.17592	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.42573	0.47745	0.47745	0.000	12.14993	60.00000	Averaged
107 Methyl methanesulfonate	0.50673	0.53221	0.53221	0.000	5.02853	60.00000	Averaged
108 N-Nitrosodiethylamine	0.41971	0.47707	0.47707	0.000	13.66599	60.00000	Averaged
109 Ethyl Methanesulfonate	0.64256	0.67420	0.67420	0.000	4.92388	60.00000	Averaged
110 Pentachloroethane	0.31977	0.33467	0.33467	0.000	4.65844	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.40441	0.51426	0.51426	0.000	27.16219	60.00000	Averaged
113 N-Nitrosomorpholine	0.51508	0.62415	0.62415	0.000	21.17372	60.00000	Averaged
114 o-Toluidine	1.52533	1.71745	1.71745	0.000	12.59547	60.00000	Averaged
115 N-Nitrosopiperidine	0.13348	0.15561	0.15561	0.000	16.57720	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.77645	0.91906	0.91906	0.000	18.36609	60.00000	Averaged
118 2,6-Dichlorophenol	0.19680	0.23771	0.23771	0.000	20.78887	60.00000	Averaged
119 Hexachloropropene	0.10641	0.11796	0.11796	0.000	10.85015	60.00000	Averaged
120 p-Phenylenediamine	0.15550	0.30321	0.30321	0.000	94.98758	60.00000	Averaged<-
121 N-Nitrosodi-n-butylamine	0.17181	0.19950	0.19950	0.000	16.11531	60.00000	Averaged
122 Safrrole	0.19196	0.21958	0.21958	0.000	14.38875	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.45635	0.50547	0.50547	0.000	10.76380	60.00000	Averaged
124 Isosafrole	0.32140	0.36623	0.36623	0.000	13.94748	60.00000	Averaged
125 1,4-Naphthoquinone	0.29341	0.33615	0.33615	0.000	14.56535	60.00000	Averaged
127 Pentachlorobenzene	0.41007	0.44639	0.44639	0.000	8.85778	60.00000	Averaged
128 1-Naphthylamine	0.78230	0.94658	0.94658	0.000	21.00032	60.00000	Averaged
129 2-Naphthylamine	0.78145	1.02845	1.02845	0.000	31.60894	60.00000	Averaged
131 5-Nitro-o-toluidine	0.25817	0.31514	0.31514	0.000	22.06704	60.00000	Averaged
136 1,3,5-Trinitrobenzene	41.24420	40.00000	0.10643	0.000	3.11051	60.00000	Linear
137 Phenacetin	0.25526	0.29519	0.29519	0.000	15.64413	60.00000	Averaged
138 Diallate	0.23114	0.24964	0.24964	0.000	8.00026	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 19-JAN-2010 10:50
 Lab File ID: s5a1903.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
 Analysis Type: WATER Init. Cal. Times: 08:21 14:25
 Lab Sample ID: WBN100103-03.5 Quant Type: ISTD
 Method: /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.25189	0.25587	0.25587	0.000	1.58114	60.00000	Averaged
213 Trans Diallate	0.27193	0.29369	0.29369	0.000	8.00026	60.00000	Averaged
140 4-Aminobiphenyl	0.47494	0.59874	0.59874	0.000	26.06497	60.00000	Averaged
141 Pentachloronitrobenzene	0.07064	0.07837	0.07837	0.000	10.94032	60.00000	Averaged
142 Pronamide	0.26102	0.28513	0.28513	0.000	9.23880	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01407	0.01760	0.01760	0.000	25.09304	60.00000	Averaged
147 Methapyrilene	0.41371	0.43068	0.43068	0.000	4.10038	60.00000	Averaged
148 Isodrin	0.10578	0.10472	0.10472	0.000	-0.99873	60.00000	Averaged
149 Aramite	0.04931	0.05235	0.05235	0.000	6.16417	60.00000	Averaged
150 Kepone	0.07429	0.07401	0.07401	0.000	-0.36880	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.26901	0.29332	0.29332	0.000	9.03818	60.00000	Averaged
152 Chlorobenzilate	0.29431	0.30353	0.30353	0.000	3.13046	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.44919	0.44952	0.44952	0.000	0.07351	60.00000	Averaged
155 2-Acetylaminofluorene	46.87083	40.00000	0.34588	0.000	17.17708	60.00000	Linear
157 7,12Dimethylbenz(a)anthrace	0.48401	0.47505	0.47505	0.000	-1.85154	60.00000	Averaged
158 3-Methylcholanthrene	0.33921	0.39924	0.39924	0.000	17.69771	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1903.d
Lab Smp Id: WBN100103-03.5 Client Smp ID: AP12CVS
Inj Date : 19-JAN-2010 10:50
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN100103-03.5|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:13 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ON-COL
						(ng/ul) (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.937	3.937	(1.000)	567180	40.0000
* 29 Naphthalene-d8	136	4.801	4.801	(1.000)	1893913	40.0000
* 46 Acenaphthene-d10	164	6.060	6.060	(1.000)	1118093	40.0000
* 67 Phenanthrene-d10	188	7.231	7.231	(1.000)	2028016	40.0000
* 91 Chrysene-d12	240	9.636	9.636	(1.000)	1947950	40.0000
* 98 Perylene-d12	264	11.324	11.324	(1.000)	1753433	40.0000
209 Benzaldehyde	77	3.660	3.660	(0.930)	520577	40.0000 42.3
16 Acetophenone	105	4.184	4.184	(1.063)	709011	40.0000 44.5 (H)
189 Caprolactam	113	5.078	5.078	(1.058)	185884	40.0000 45.3
208 1,1'-Biphenyl	154	5.625	5.625	(0.928)	1406933	40.0000 44.5
207 Atrazine	173	6.931	6.931	(0.958)	92191	40.0000 55.3
77 Benzydine	184	8.378	8.378	(0.869)	531026	40.0000 48.4
90 3,3'-Dichlorobenzidine	252	9.572	9.572	(0.993)	621644	40.0000 46.5

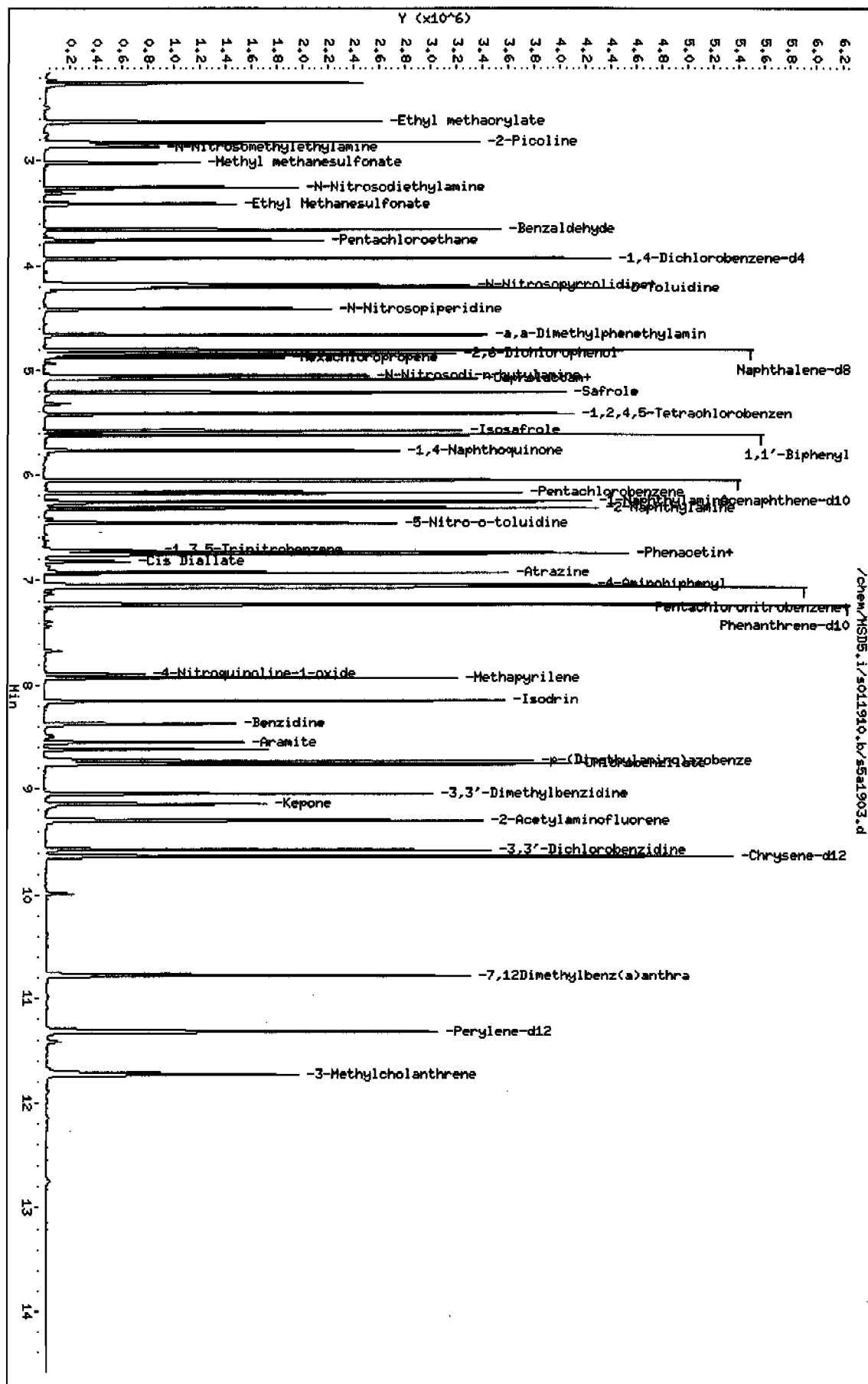
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
102 1,4-Dioxane	88	2.260	2.260	(0.574)	217017	40.0000	43.7
103 Methyl methacrylate	100	2.254	2.254	(0.573)	118605	40.0000	44.0
104 Ethyl methacrylate	69	2.631	2.631	(0.668)	488423	40.0000	43.6
105 2-Picoline	93	2.825	2.825	(0.718)	732681	40.0000	42.9
106 N-Nitrosomethylethylamine	88	2.872	2.872	(0.730)	270801	40.0000	44.8
107 Methyl methanesulfonate	80	3.025	3.025	(0.768)	301860	40.0000	42.0
108 N-Nitrosodiethylamine	102	3.260	3.260	(0.828)	270583	40.0000	45.5
109 Ethyl Methanesulfonate	79	3.419	3.419	(0.868)	382394	40.0000	42.0
110 Pentachloroethane	167	3.760	3.760	(0.955)	189818	40.0000	41.9
111 N-Nitrosopyrrolidine	100	4.172	4.172	(1.060)	291678	40.0000	50.9 (Q)
113 N-Nitrosomorpholine	56	4.196	4.196	(1.066)	354004	40.0000	48.5
114 o-Toluidine	106	4.213	4.213	(1.070)	974105	40.0000	45.0
115 N-Nitrosopiperidine	114	4.413	4.413	(0.919)	294717	40.0000	46.6
116 a,a-Dimethylphenethylamine	58	4.654	4.654	(0.969)	1740611	40.0000	47.3
118 2,6-Dichlorophenol	162	4.843	4.843	(1.009)	450206	40.0000	48.3
119 Hexachloropropene	213	4.872	4.872	(1.015)	223404	40.0000	44.3
120 p-Phenylenediamine	108	5.078	5.078	(1.058)	574251	40.0000	78.0
121 N-Nitrosodi-n-butylamine	84	5.048	5.048	(1.051)	377835	40.0000	46.4 (Q)
122 Safrole	162	5.213	5.213	(1.086)	415873	40.0000	45.8
123 1,2,4,5-Tetrachlorobenzene	216	5.419	5.419	(0.894)	565157	40.0000	44.3
124 Isosafrole	162	5.584	5.584	(0.921)	409482	40.0000	45.6
125 1,4-Naphthoquinone	158	5.772	5.772	(0.952)	375847	40.0000	45.8
127 Pentachlorobenzene	250	6.178	6.178	(1.019)	499103	40.0000	43.5
128 1-Naphthylamine	143	6.260	6.260	(1.033)	1058370	40.0000	48.4
129 2-Naphthylamine	143	6.319	6.319	(1.043)	1149907	40.0000	52.6
131 5-Nitro-o-toluidine	152	6.460	6.460	(1.066)	352352	40.0000	48.8
136 1,3,5-Trinitrobenzene	75	6.713	6.713	(0.928)	215846	40.0000	41.2 (H)
137 Phenacetin	108	6.754	6.754	(0.934)	598651	40.0000	46.2 (Q)
138 Diallate	86	6.742	6.742	(0.932)	506267	40.0000	43.2
212 Cis Diallate	86	6.819	6.819	(0.943)	77837	6.00000	6.1 (a)
213 Trans Diallate	86	6.742	6.742	(0.932)	506267	34.0000	36.7
140 4-Aminobiphenyl	169	7.042	7.042	(0.974)	1214248	40.0000	50.4
141 Pentachloronitrobenzene	237	7.066	7.066	(0.977)	158935	40.0000	44.4 (Q)
142 Pronamide	173	7.060	7.060	(0.976)	578256	40.0000	43.7
146 4-Nitroquinoline-1-oxide	101	7.895	7.895	(1.092)	35694	40.0000	50.0 (H)
147 Methapyrilene	58	7.931	7.931	(1.097)	873418	40.0000	41.6
148 Isodrin	193	8.154	8.154	(1.128)	212376	40.0000	39.6
149 Aramite	185	8.554	8.554	(1.183)	106161	40.0000	42.5
150 Kepone	272	9.142	9.142	(1.264)	150099	40.0000	39.8
151 p-(Dimethylamino)azobenzene	120	8.731	8.731	(0.906)	571381	40.0000	43.6
152 Chlorobenzilate	251	8.760	8.760	(0.909)	591252	40.0000	41.2
153 3,3'-Dimethylbenzidine	212	9.048	9.048	(0.939)	875646	40.0000	40.0
155 2-Acetylaminofluorene	181	9.295	9.295	(0.965)	673758	40.0000	46.9
157 7,12Dimethylbenz(a)anthracene	256	10.777	10.777	(0.952)	832971	40.0000	39.2
158 3-Methylcholanthrene	268	11.730	11.730	(1.036)	700041	40.0000	47.1 (QH)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: /chem/MSDS.1/5011910.b/55a1903.d
 Date: 19-JAN-2010 10:50
 Client ID: AP12CVS
 Sample Info: IABN000103-03.5140 PPH11(SM11)AP12CVS
 Volume Injected (uL): 0.5
 Column phase: JSM DB-SMS

Instrument: MSD5.1
 Operator: RMB
 Column diameter: 0.20



QC Data

Data File: /chem/MSD5.i/s010510.b/s5a0501.d

Page 1

Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.1

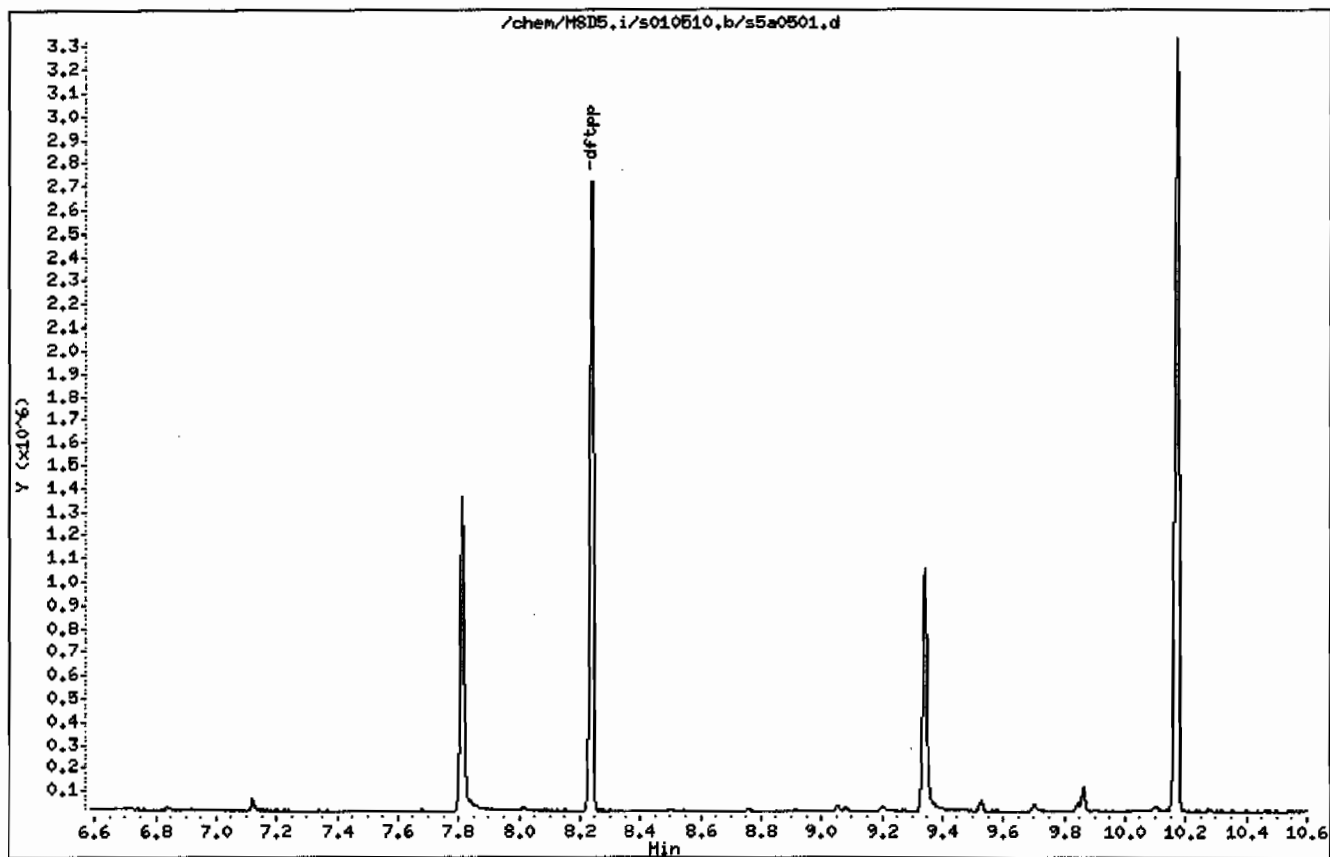
Sample Info: IWBNO91128-01I50PPH11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 08-JAN-2010 07:45

Client ID: DFTPP

Instrument: HSD5.i

Sample Info: IWBH091128-01I50PPH11SVHF11IDFTPP

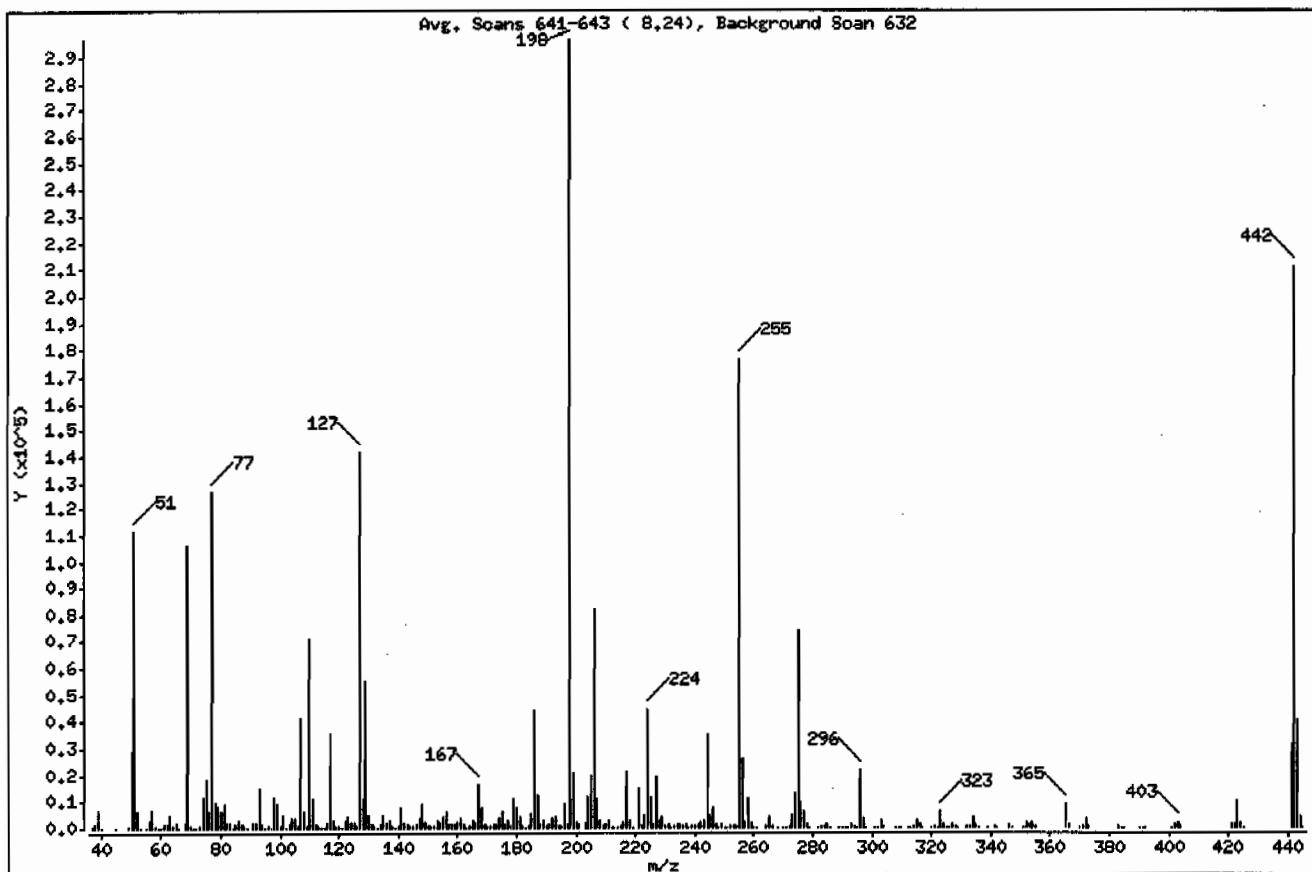
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	37.38
68	Less than 2.00% of mass 69	0.60 (1.68)
69	Mass 69 relative abundance	35.61
70	Less than 2.00% of mass 69	0.18 (0.52)
127	40.00 - 60.00% of mass 198	47.54
197	Less than 1.00% of mass 198	0.49
199	5.00 - 9.00% of mass 198	6.96
275	10.00 - 30.00% of mass 198	24.84
365	Greater than 1.00% of mass 198	2.90
441	Present, but less than mass 443	10.47
442	Greater than 40.00% of mass 198	70.97
443	17.00 - 23.00% of mass 442	13.58 (19.13)

Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBH091128-01150PPH11SVHF11DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-SHS

Column diameter: 0.20

Data File: s5a0501.d

Spectrum: Avg. Scans 641-643 (8.24), Background Scan 632

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	397	124.00	1924	201.00	1370	286.00	138
38.00	1056	125.00	1718	203.00	2231	289.00	291
39.00	7142	126.00	501	204.00	11815	290.00	158
40.00	326	127.00	141184	205.00	19576	291.00	47
45.00	138	128.00	10962	206.00	82152	292.00	209
49.00	741	129.00	55600	207.00	11227	293.00	1305
50.00	29008	130.00	4989	208.00	2846	294.00	360
51.00	111016	131.00	1026	209.00	787	295.00	259
52.00	5923	132.00	595	210.00	1342	296.00	21936
53.00	196	133.00	297	211.00	3068	297.00	3104
55.00	78	134.00	1691	212.00	215	298.00	120
56.00	3068	135.00	4483	213.00	249	301.00	335
57.00	7112	136.00	2037	214.00	43	302.00	281
58.00	360	137.00	2500	215.00	992	303.00	2566
59.00	112	138.00	543	216.00	1736	304.00	731
60.00	38	139.00	298	217.00	21416	308.00	255
61.00	1313	140.00	680	218.00	3054	309.00	209
62.00	1652	141.00	7283	219.00	216	310.00	232
63.00	4661	142.00	2123	221.00	14930	312.00	54
64.00	604	143.00	1568	222.00	1023	313.00	142
65.00	2336	144.00	391	223.00	4797	314.00	1019
66.00	174	145.00	394	224.00	44312	315.00	2424
68.00	1780	146.00	1300	225.00	11886	316.00	1308
69.00	105760	147.00	3657	226.00	1125	317.00	184
70.00	547	148.00	8561	227.00	19416	320.00	70
71.00	37	149.00	1877	228.00	2939	321.00	651
72.00	48	150.00	515	229.00	4164	322.00	264
73.00	910	151.00	948	230.00	660	323.00	6293
74.00	11695	152.00	424	231.00	1526	324.00	1245
75.00	18136	153.00	2532	232.00	295	325.00	44
76.00	5897	154.00	1927	233.00	369	326.00	156
77.00	126592	155.00	4231	234.00	1192	327.00	1340
78.00	9297	156.00	6072	235.00	1351	328.00	541
79.00	8029	157.00	1058	236.00	858	329.00	63
80.00	6450	158.00	1379	237.00	1459	332.00	514

Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: INBN091128-01150PPH11SVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a0501.d

Spectrum: Avg. Scans 641-643 (8.24), Background Scan 632

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	9121	159.00	1030	238.00	123	333.00	553
82.00	2368	160.00	2381	239.00	707	334.00	3949
83.00	2087	161.00	3496	240.00	566	335.00	1152
84.00	129	162.00	1129	241.00	1198	336.00	137
85.00	1643	163.00	302	242.00	2382	339.00	59
86.00	2862	164.00	438	243.00	2524	341.00	589
87.00	1080	165.00	2512	244.00	34552	342.00	207
88.00	477	166.00	2314	245.00	4897	346.00	1577
89.00	200	167.00	16149	246.00	7419	347.00	273
91.00	1971	168.00	7586	247.00	1417	351.00	59
92.00	2280	169.00	1403	248.00	316	352.00	2068
93.00	14878	170.00	535	249.00	1179	353.00	1162
94.00	1034	171.00	671	250.00	140	354.00	1836
95.00	174	172.00	1410	251.00	302	355.00	359
96.00	660	173.00	1618	252.00	366	356.00	8624
97.00	189	174.00	3292	253.00	713	366.00	1385
98.00	11715	175.00	6244	254.00	987	370.00	105
99.00	8794	176.00	1411	255.00	175936	371.00	514
100.00	769	177.00	2630	256.00	26216	372.00	3292
101.00	5054	178.00	954	257.00	1895	373.00	754
102.00	286	179.00	11078	258.00	11231	383.00	866
103.00	1657	180.00	7449	259.00	1742	384.00	269
104.00	3242	181.00	3773	260.00	288	385.00	49
105.00	3100	182.00	689	261.00	263	390.00	305
106.00	763	183.00	298	264.00	409	391.00	296
107.00	40888	184.00	870	265.00	3986	392.00	249
108.00	5960	185.00	5523	266.00	894	401.00	225
109.00	1002	186.00	44160	268.00	153	402.00	1229
110.00	71288	187.00	12583	270.00	237	403.00	1737
111.00	11111	188.00	1153	271.00	295	404.00	569
112.00	1371	189.00	2634	272.00	442	421.00	1593
113.00	496	190.00	491	273.00	5008	422.00	1243
114.00	107	191.00	1157	274.00	12958	423.00	10565
115.00	48	192.00	3591	275.00	73760	424.00	2373
116.00	2264	193.00	4145	276.00	9884	425.00	65

Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNO91128-01150PPH11|SVNF11|DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-SHS

Column diameter: 0.20

Data File: s5a0501.d

Spectrum: Avg. Scans 641-643 (8.24), Background Scan 632

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	35768	194.00	793	277.00	6388	441.00	31080
118.00	2592	195.00	457	278.00	1073	442.00	210752
119.00	418	196.00	8975	279.00	213	443.00	40320
120.00	457	197.00	1444	282.00	104	444.00	4308
121.00	214	198.00	296960	283.00	702	445.00	57
122.00	2897	199.00	20656	284.00	445		
123.00	4122	200.00	1746	285.00	1234		

Data File: /chem/MSD5.i/s011910,b/s5a1901.d

Page 1

Date : 19-JAN-2010 10:07

Client ID: DFTPP

Instrument: MSD5.i

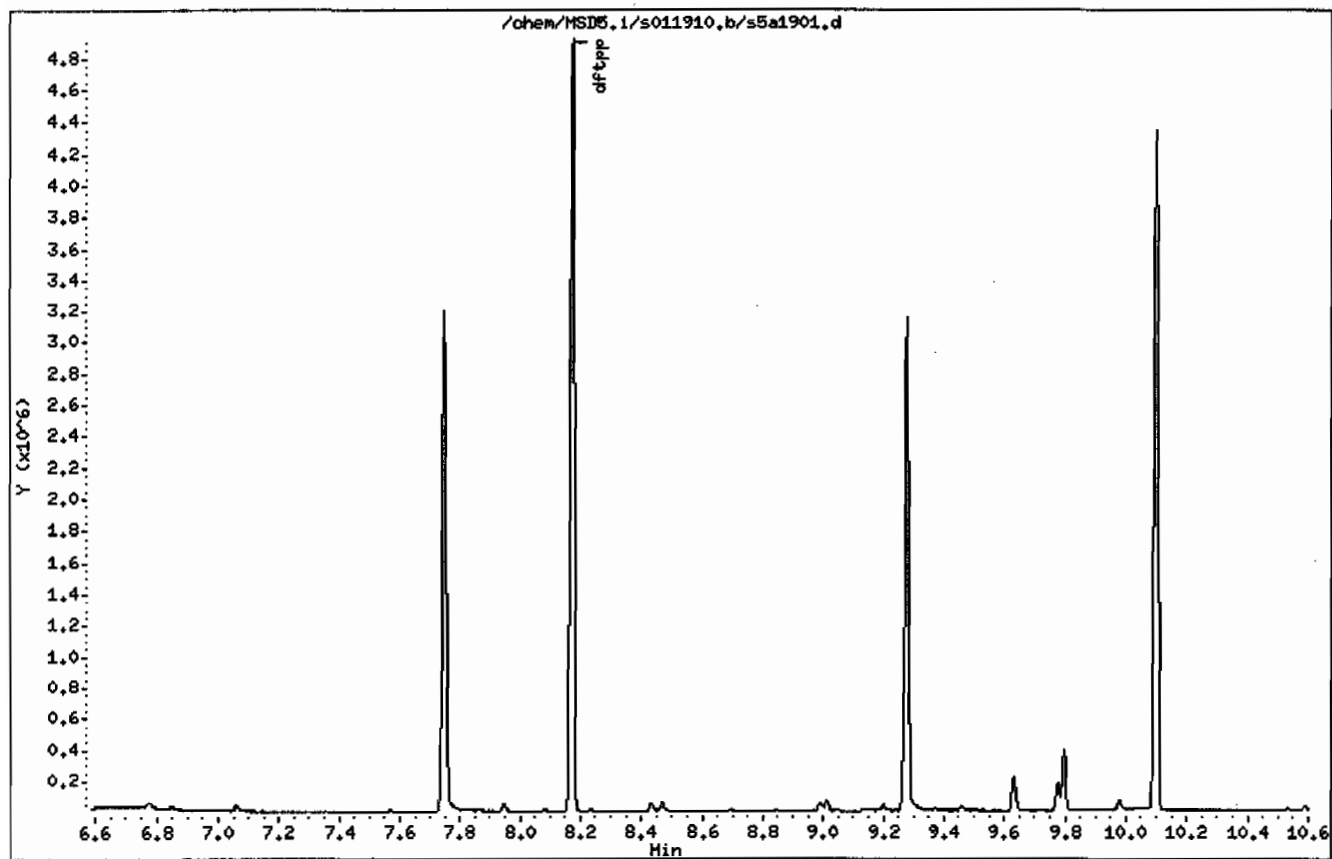
Sample Info: INBN100107-01150PPH11SVHF111DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5HS

Column diameter: 0.20



Date : 19-JAN-2010 10:07

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNI00107-01150PPH11SVHF11DFTPP

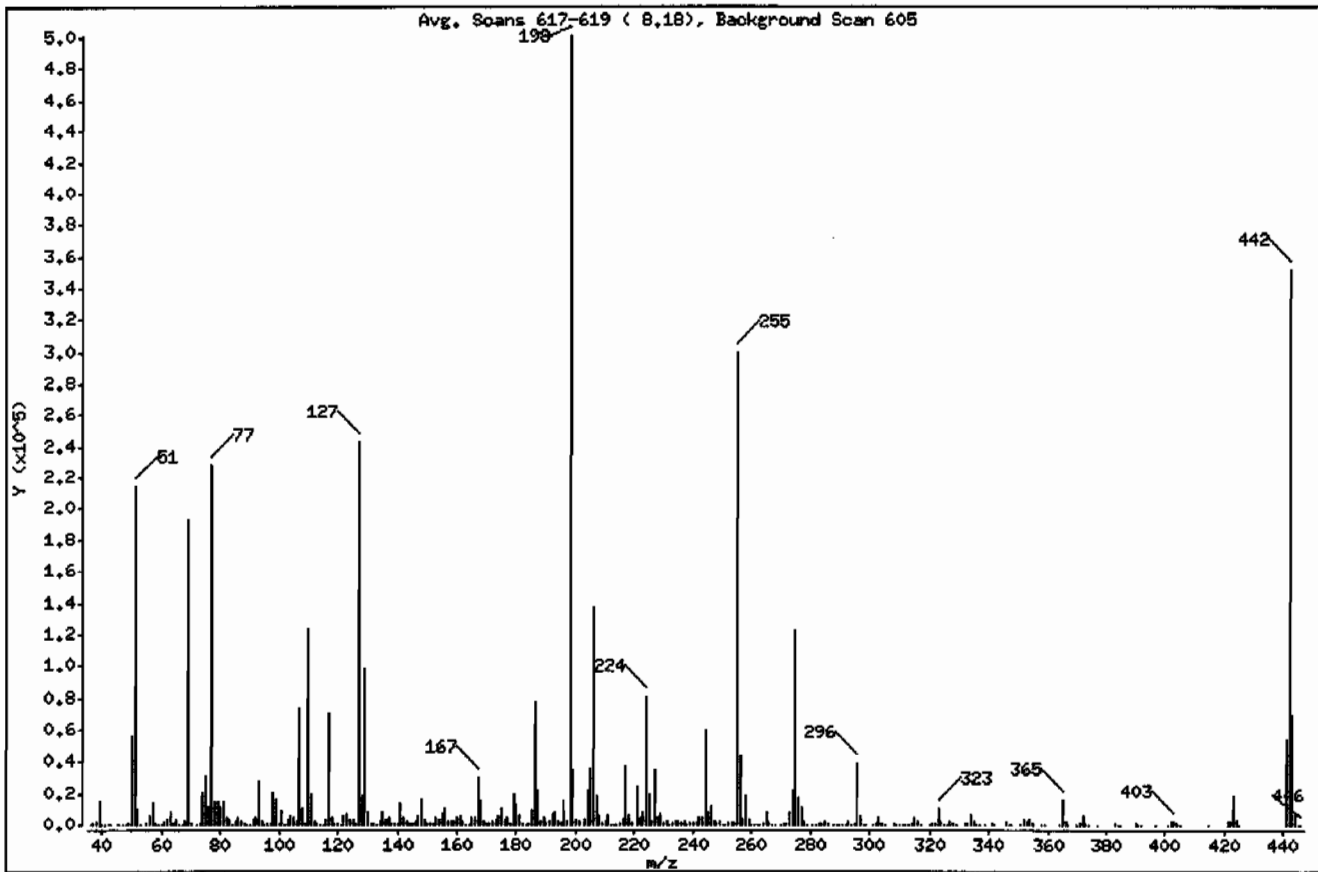
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	42.87
68	Less than 2.00% of mass 69	0.57 (1.48)
69	Mass 69 relative abundance	38.66
70	Less than 2.00% of mass 69	0.24 (0.63)
127	40.00 - 60.00% of mass 198	48.56
197	Less than 1.00% of mass 198	0.47
199	5.00 - 9.00% of mass 198	6.81
275	10.00 - 30.00% of mass 198	24.38
365	Greater than 1.00% of mass 198	3.13
441	Present, but less than mass 443	10.84
442	Greater than 40.00% of mass 198	70.23
443	17.00 - 23.00% of mass 442	13.82 (19.68)

Date : 19-JAN-2010 10:07

Client ID: DFTPP

Instrument: MSDS.1

Sample Info: INBN100107-01150PPH11SVMF11DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-SMS

Column diameter: 0.20

Data File: s5a1901.d

Spectrum: Avg. Scans 617-619 (8.18), Background Scan 605

Location of Maximum: 198.00

Number of points: 334

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	126	123.00	7037	208.00	5296	296.00	38728
37.00	746	124.00	3316	209.00	1554	297.00	5448
38.00	2260	125.00	3268	210.00	2111	298.00	417
39.00	14893	126.00	738	211.00	5652	299.00	48
40.00	475	127.00	243456	212.00	472	301.00	489
41.00	226	128.00	18896	213.00	331	302.00	597
42.00	125	129.00	98128	214.00	283	303.00	4424
43.00	217	130.00	8639	215.00	1617	304.00	1045
45.00	67	131.00	1569	216.00	3029	305.00	232
46.00	65	132.00	1175	217.00	37224	308.00	586
47.00	50	133.00	250	218.00	5216	309.00	309
48.00	101	134.00	2487	219.00	588	310.00	464
49.00	1526	135.00	7551	221.00	24640	311.00	90
50.00	56064	136.00	3387	222.00	5112	312.00	85
51.00	214912	137.00	4484	223.00	8217	313.00	278
52.00	10785	138.00	1048	224.00	80712	314.00	1688
53.00	446	139.00	684	225.00	19920	315.00	4423
55.00	830	140.00	1211	226.00	2128	316.00	2382
56.00	6160	141.00	13302	227.00	34144	317.00	279
57.00	13716	142.00	4666	228.00	4751	320.00	56
58.00	794	143.00	2631	229.00	6741	321.00	1055
59.00	253	144.00	834	230.00	860	322.00	597
60.00	177	145.00	711	231.00	2582	323.00	10867
61.00	2235	146.00	2383	232.00	335	324.00	2073
62.00	3147	147.00	6087	233.00	714	325.00	226
63.00	7824	148.00	16054	234.00	2075	326.00	56
64.00	1241	149.00	3018	235.00	2486	327.00	2033
65.00	3964	150.00	1075	236.00	1637	328.00	1358
66.00	450	151.00	1457	237.00	2717	329.00	212
67.00	334	152.00	897	238.00	281	332.00	839
68.00	2859	153.00	4542	239.00	1581	333.00	1021
69.00	193792	154.00	3007	240.00	1089	334.00	6535
70.00	1217	155.00	7214	241.00	1642	335.00	1965
72.00	44	156.00	10816	242.00	4558	336.00	240
73.00	1603	157.00	1876	243.00	4135	337.00	54

Date : 19-JAN-2010 10:07

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IMBH100107-01150PPH11SVHF11DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a1901.d

Spectrum: Avg. Scans 617-619 (8.18), Background Scan 605

Location of Maximum: 198.00

Number of points: 334

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	21176	158.00	2769	244.00	59768	339.00	203
75.00	31640	159.00	1932	245.00	8332	341.00	1196
76.00	11361	160.00	4340	246.00	11879	342.00	382
77.00	228672	161.00	6236	247.00	2543	346.00	2470
78.00	15518	162.00	1836	248.00	632	347.00	467
79.00	15208	163.00	516	249.00	2018	348.00	57
80.00	11664	164.00	437	250.00	351	351.00	172
81.00	15301	165.00	4811	251.00	548	352.00	3544
82.00	4130	166.00	4036	252.00	675	353.00	2516
83.00	3755	167.00	29992	253.00	1219	354.00	3683
84.00	211	168.00	14992	254.00	1658	355.00	735
85.00	2796	169.00	2588	255.00	299072	358.00	127
86.00	4521	170.00	801	256.00	43736	359.00	52
87.00	2369	171.00	856	257.00	3587	364.00	44
88.00	618	172.00	2342	258.00	18856	365.00	15711
89.00	326	173.00	3026	259.00	3372	366.00	2386
90.00	44	174.00	5837	260.00	426	367.00	222
91.00	3491	175.00	9977	261.00	455	370.00	247
92.00	4327	176.00	2993	262.00	126	371.00	845
93.00	27960	177.00	4831	263.00	190	372.00	5589
94.00	2105	178.00	1548	264.00	588	373.00	1210
95.00	281	179.00	19304	265.00	7871	374.00	47
96.00	1169	180.00	12948	266.00	1287	377.00	127
97.00	582	181.00	5801	267.00	102	383.00	1199
98.00	21312	182.00	1152	268.00	210	384.00	420
99.00	16131	183.00	280	270.00	414	385.00	112
100.00	1357	184.00	1515	271.00	738	390.00	706
101.00	9155	185.00	9667	272.00	797	391.00	387
102.00	503	186.00	76800	273.00	8471	392.00	144
103.00	3176	187.00	22176	274.00	22456	397.00	66
104.00	5726	188.00	2102	275.00	122232	401.00	288
105.00	5008	189.00	4791	276.00	16912	402.00	2292
106.00	1772	190.00	866	277.00	12062	403.00	2807
107.00	73328	191.00	2116	278.00	1790	404.00	1270
108.00	10680	192.00	6605	279.00	524	405.00	221

Date : 19-JAN-2010 10:07

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBH100107-01150PPH11SVNF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a1901.d

Spectrum: Avg. Scans 617-619 (8.18), Background Scan 605

Location of Maximum: 198.00

Number of points: 334

m/z	Y	m/z	Y	m/z	Y	m/z	Y
109.00	1679	193.00	7910	281.00	182	415.00	153
110.00	123336	194.00	1816	282.00	276	421.00	2354
111.00	19960	195.00	883	283.00	1329	422.00	2465
112.00	2488	196.00	14953	284.00	879	423.00	18232
113.00	811	197.00	2347	285.00	1999	424.00	3805
114.00	117	198.00	501312	286.00	587	425.00	262
115.00	29	199.00	34128	288.00	48	441.00	54336
116.00	3989	200.00	3004	289.00	456	442.00	352064
117.00	69936	201.00	2711	290.00	489	443.00	69288
118.00	4714	203.00	3850	291.00	414	444.00	6339
119.00	596	204.00	21528	292.00	522	445.00	216
120.00	798	205.00	35192	293.00	2432	446.00	44
121.00	342	206.00	137088	294.00	423		
122.00	5510	207.00	18992	295.00	766		

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

Page 1 of 2

SDG Number: 10-1225		Matrix: SOIL
Lab Sample ID: 1202018608		
Client Sample: QC for batch 942836	Client: LANL010	Project: QC
Client ID: MB for batch 942836	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 11:25	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a1904.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	333	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1225

Matrix: SOIL

Lab Sample ID: 1202018608

Client Sample: QC for batch 942836

Client: LANL010

Project: QC

Client ID: MB for batch 942836

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 942840

Inst: MSD5.I

Dilution: 1

Run Date: 01/19/2010 11:25

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 01/18/2010 20:10

Aliquot: 30 g

Final Volume: 1 mL

Data File: s5a1904.d

Column: J&W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	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	2.03	2920	ug/kg		J
	Unknown Aldol Condensate	2.95	383	ug/kg		JA

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1904.d
Lab Smp Id: 1202018608 Client Smp ID: SBLK01
Inj Date : 19-JAN-2010 11:25
Operator : RMB Inst ID: MSD5.i
Smp Info : |1202018608|942840|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	565270	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1914408	40.0000	
* 46 Acenaphthene-d10	164	6.054	6.063	(1.000)	1111752	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	1993309	40.0000	
* 91 Chrysene-d12	240	9.636	9.646	(1.000)	1778328	40.0000	
* 98 Perylene-d12	264	11.324	11.331	(1.000)	1573958	40.0000	
\$ 3 2-Fluorophenol	112	3.119	3.121	(0.794)	1025873	73.1790	2440
\$ 5 Phenol-d5	99	3.648	3.651	(0.928)	1223841	70.7895	2360
\$ 20 Nitrobenzene-d5	82	4.295	4.301	(0.895)	566262	38.5235	1280
\$ 39 2-Fluorobiphenyl	172	5.542	5.548	(0.915)	1075916	36.5837	1220
\$ 60 2,4,6-Tribromophenol	329	6.654	6.661	(1.099)	247682	70.0942	2340
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.893)	1194335	42.7723	1420

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1904.d
Lab Smp Id: 1202018608 Client Smp ID: SBLK01
Inj Date : 19-JAN-2010 11:25
Operator : RMB Inst ID: MSD5.i
Smp Info : |1202018608|942840|1|SVM|1|SBLK01
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

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

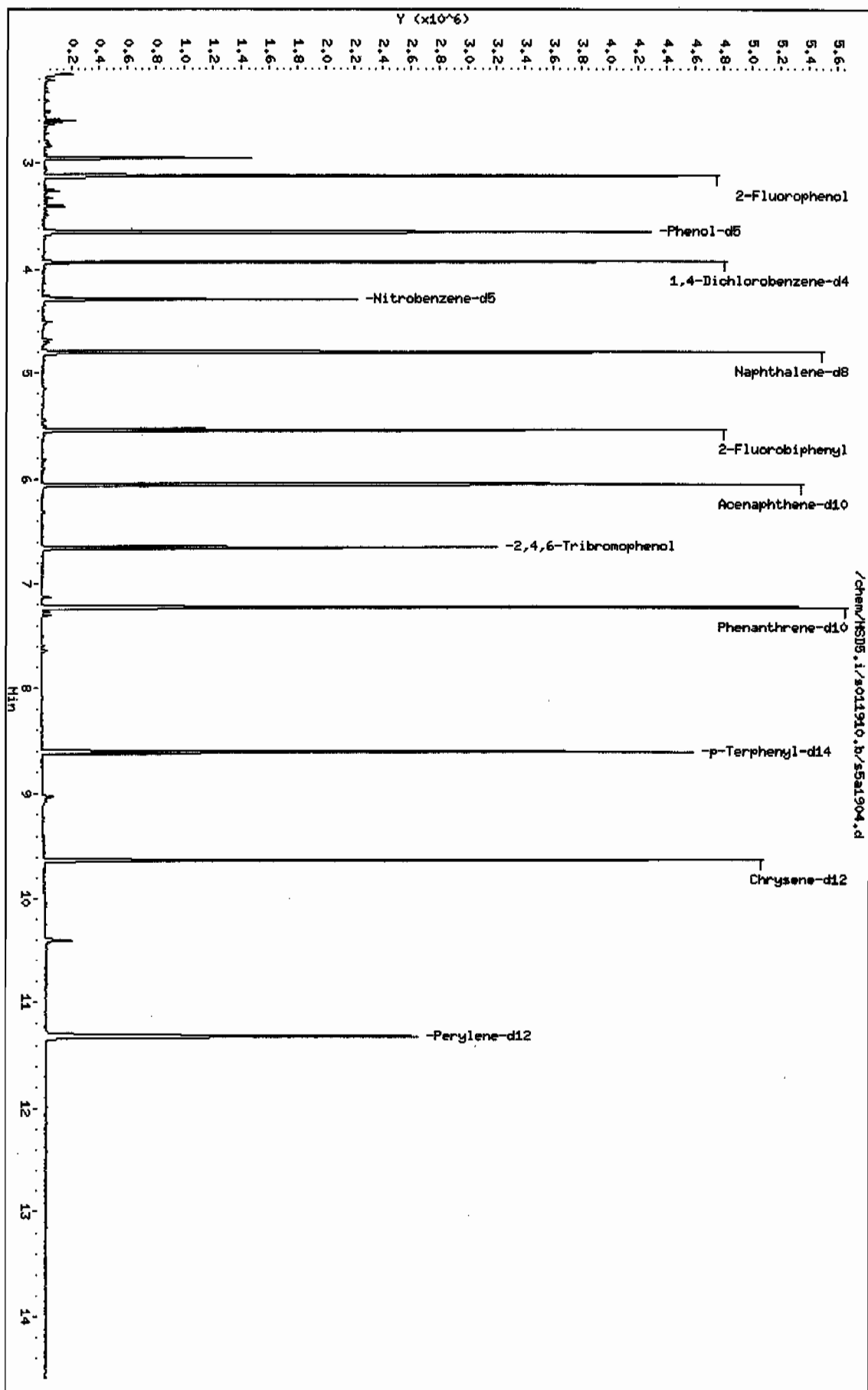
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.931	3465792	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown							
2.031	7586372	87.5571278	2920	0		0	10
Unknown Aldol Condensate							
2.954	994435	11.4771455	382	0		0	10

Data File: /chem/MSDB.i/s011910.b/s5a1904.d
Date: 19-JAN-2010 11:25
Client ID: SBLK01
Sample Info: 11202018608194284011SM11SBLK01
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: MSDB.1
Operator: RMB
Column diameter: 0.20



Date : 19-JAN-2010 11:25

Client ID: SBLK01

Instrument: MSD5.1

Sample Info: 11202018608194284011SVMI11SBLK01

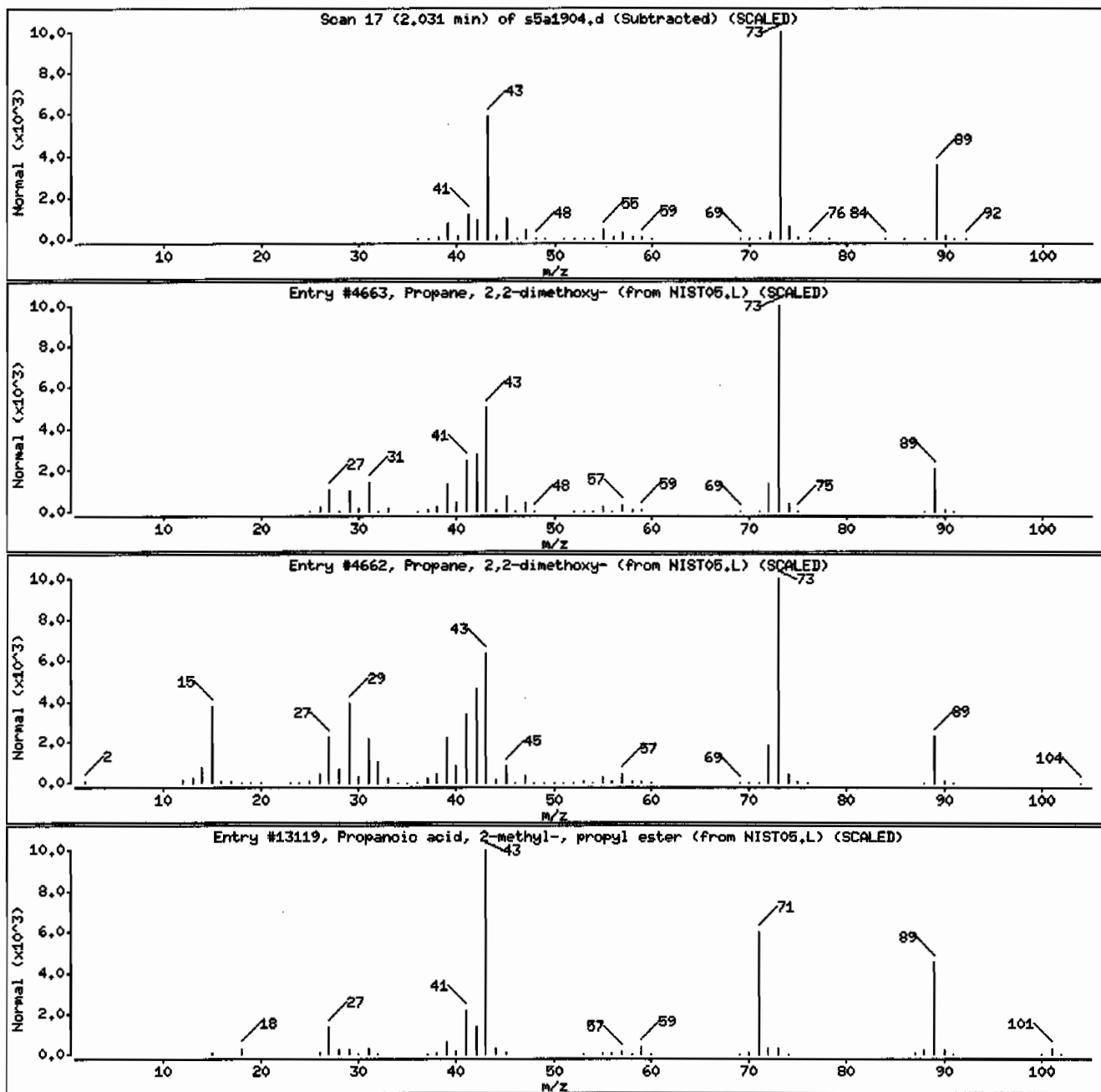
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	40	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	38	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	25	C7H14O2	130



Date : 19-JAN-2010 11:25

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: I1202018608194284011SVH111SBLK01

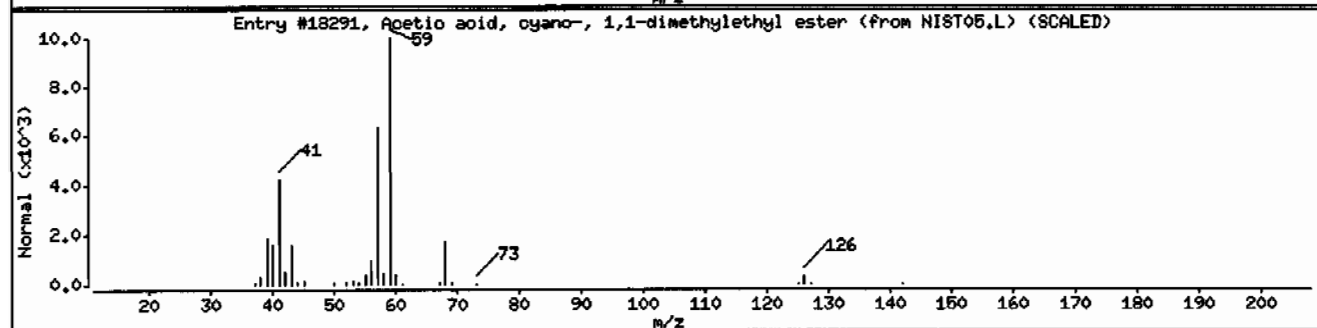
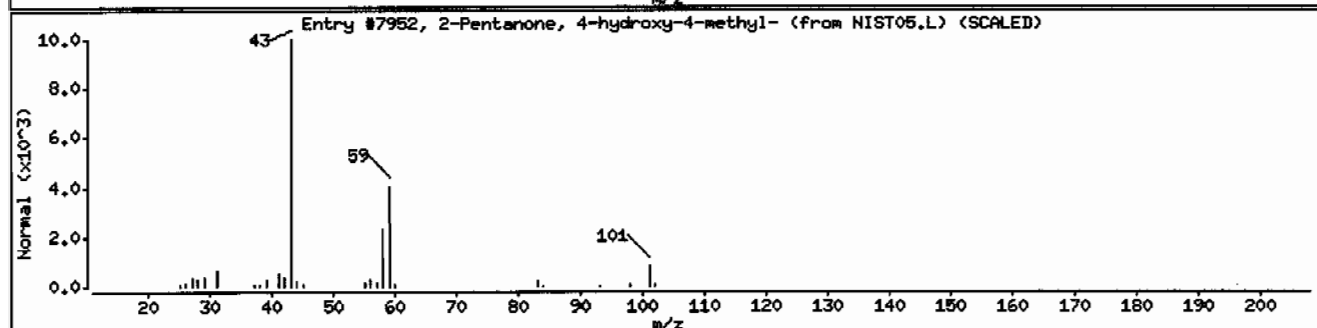
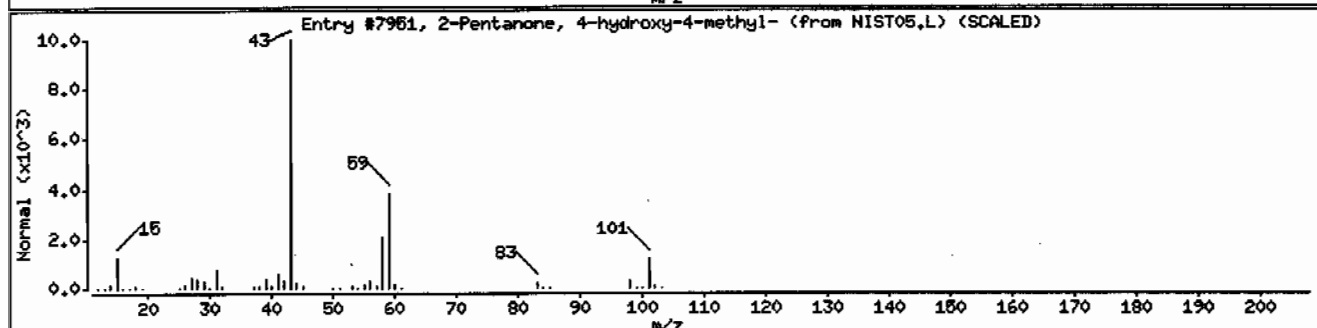
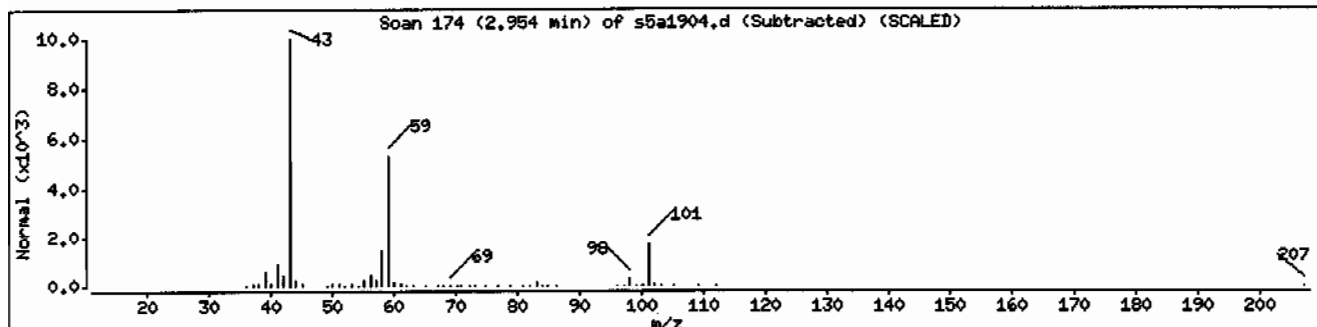
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1225

Matrix: SOIL

Lab Sample ID: 1202018609

Client Sample: QC for batch 942836

Client: LANL010

Project: QC

Client ID: LCS for batch 942836

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 942840

Inst: MSD5.I

Dilution: 1

Run Date: 01/19/2010 11:48

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 01/18/2010 20:10

Aliquot: 30 g

Final Volume: 1 mL

Data File: s5a1905.d

Column: J&W DB-SMS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1200	ug/kg	66.7	333
108-95-2	Phenol		1310	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1290	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1250	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1340	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1450	ug/kg	66.7	333
83-32-9	Acenaphthene		1350	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1360	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1800	ug/kg	110	333
87-86-5	Pentachlorophenol		1480	ug/kg	83.3	333
129-00-0	Pyrene		1260	ug/kg	10.0	33.3
110-86-1	Pyridine		1350	ug/kg	66.7	333
62-53-3	Aniline		1360	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1240	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1220	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1560	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1350	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1280	ug/kg	66.7	333
95-48-7	o-Cresol		1380	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1450	ug/kg	100	333
67-72-1	Hexachloroethane		1190	ug/kg	66.7	333
98-95-3	Nitrobenzene		1410	ug/kg	66.7	333
78-59-1	Isophorone		1340	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1370	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1300	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1290	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1400	ug/kg	66.7	333
65-85-0	Benzoic acid		2740	ug/kg	167	667
91-20-3	Naphthalene		1270	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1410	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1350	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1390	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1120	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1500	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1450	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1380	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1480	ug/kg	66.7	333
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1520	ug/kg	66.7	333

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 1202018609
Client Sample: QC for batch 942836
Client ID: LCS for batch 942836
Batch ID: 942840
Run Date: 01/19/2010 11:48
Prep Date: 01/18/2010 20:10
Data File: s5a1905.d

Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
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
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate		1340	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1320	ug/kg	33.3	333
208-96-8	Acenaphthylene		1340	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1690	ug/kg	127	667
132-64-9	Dibenzofuran		1620	ug/kg	66.7	333
84-66-2	Diethylphthalate		1360	ug/kg	66.7	333
86-73-7	Fluorene		1310	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1320	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1330	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1900	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1360	ug/kg	66.7	333
122-66-7	Azobenzene		1400	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1240	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1270	ug/kg	66.7	333
85-01-8	Phenanthrene		1330	ug/kg	10.0	33.3
120-12-7	Anthracene		1350	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1330	ug/kg	66.7	333
206-44-0	Fluoranthene		1380	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1330	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1360	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1300	ug/kg	100	333
218-01-9	Chrysene		1400	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1350	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1180	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1370	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1300	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1390	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1570	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1600	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1660	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1320	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1905.d
 Lab Smp Id: 1202018609 Client Smp ID: SBLK01LCS
 Inj Date : 19-JAN-2010 11:48
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202018609|942840|1|SVM|1|SBLK01LCS
 Misc Info : |MSD8270_S|WBN091223-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
 Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 5 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1225.sub
 Target Version: 3.50
 Processing Host: kilroy

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ng/ul) (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.931	3.940	(1.000)	564984	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	2042405	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1084701	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2018867	40.0000	
* 91 Chrysene-d12	240	9.642	9.646	(1.000)	1934386	40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1814874	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.795)	1032744	73.7064	2460
\$ 5 Phenol-d5	99	3.649	3.651	(0.928)	1221162	70.6703	2360
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	634800	40.4798	1350
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	1084757	37.8042	1260
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	287840	83.4905	2780
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.893)	1265137	41.6527	1390

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.660	3.661	(0.931)	675409	39.2388	1310 (Q)
8 2-Chlorophenol	128	3.802	3.805	(0.967)	564927	38.7068	1290
11 1,4-Dichlorobenzene	146	3.943	3.950	(1.003)	585869	37.3831	1250
17 N-Nitrosodipropylamine	70	4.172	4.176	(1.061)	343318	40.2484	1340 (Q)
28 1,2,4-Trichlorobenzene	180	4.754	4.758	(0.990)	512213	39.5394	1320
33 4-Chloro-3-methylphenol	107	5.149	5.149	(1.072)	464197	43.4185	1450
47 Acenaphthene	154	6.084	6.088	(1.004)	951404	40.3619	1340
50 2,4-Dinitrotoluene	165	6.172	6.174	(1.018)	334174	40.7073	1360
52 4-Nitrophenol	139	6.101	6.097	(1.007)	218895	54.0881	1800
65 Pentachlorophenol	266	7.060	7.060	(0.976)	188144	44.2811	1480
79 Pyrene	202	8.507	8.510	(0.882)	1856090	37.8030	1260
2 Pyridine	79	2.472	2.452	(0.629)	468087	40.5509	1350
4 Aniline	66	3.713	3.723	(0.945)	288907	40.7988	1360 (Q)
7 bis(2-Chloroethyl) ether	63	3.731	3.738	(0.949)	479229	37.1228	1240
9 1,3-Dichlorobenzene	146	3.902	3.906	(0.993)	577575	36.5671	1220
12 Benzyl alcohol	108	4.002	4.003	(1.018)	451582	46.8851	1560
13 1,2-Dichlorobenzene	146	4.049	4.055	(1.030)	561738	40.6005	1350
14 bis(2-Chloroisopropyl) ether	45	4.078	4.084	(1.037)	976947	38.5196	1280
15 o-Cresol	107	4.054	4.055	(1.031)	419007	41.3212	1380
18 m,p-Cresols	107	4.149	4.157	(1.055)	626044	43.3718	1440
19 Hexachloroethane	117	4.278	4.287	(1.088)	231717	35.8173	1190
21 Nitrobenzene	77	4.307	4.316	(0.897)	597910	42.4388	1410
22 Isophorone	82	4.460	4.470	(0.929)	1071949	40.0612	1340
23 2-Nitrophenol	139	4.525	4.527	(0.942)	272607	41.0538	1370
24 2,4-Dimethylphenol	122	4.519	4.523	(0.941)	519088	39.1012	1300
25 bis(2-Chloroethoxy)methane	93	4.584	4.590	(0.955)	616470	38.8144	1290
26 2,4-Dichlorophenol	162	4.684	4.691	(0.976)	439145	41.8735	1400
27 Benzoic acid	105	4.590	4.571	(0.956)	595137	82.2480	2740
30 Naphthalene	128	4.819	4.821	(1.004)	1534202	38.1500	1270 (Q)
31 4-Chloroaniline	127	4.831	4.836	(1.006)	744758	42.3341	1410
32 Hexachlorobutadiene	225	4.884	4.889	(1.017)	311220	40.5037	1350
34 2-Methylnaphthalene	142	5.301	5.303	(1.104)	1051978	41.6766	1390
36 Hexachlorocyclopentadiene	237	5.401	5.409	(0.891)	212982	33.6796	1120
37 2,4,6-Trichlorophenol	196	5.490	5.490	(0.906)	339818	44.9956	1500
38 2,4,5-Trichlorophenol	196	5.519	5.519	(0.911)	366574	43.5839	1450
40 2-Chloronaphthalene	162	5.654	5.659	(0.933)	978669	41.2994	1380
42 o-Nitroaniline	65	5.707	5.712	(0.942)	341455	44.4167	1480
41 m-Nitroaniline	138	6.007	6.010	(0.991)	263013	45.5872	1520
43 Dimethylphthalate	163	5.813	5.823	(0.959)	1111802	40.0740	1340
44 2,6-Dinitrotoluene	165	5.872	5.876	(0.969)	257182	39.5788	1320
45 Acenaphthylene	152	5.960	5.962	(0.983)	1558495	40.3407	1340
48 2,4-Dinitrophenol	184	6.078	6.083	(1.003)	90941	50.7941	1690 (Q)
49 Dibenzofuran	168	6.207	6.213	(1.024)	1640323	48.5606	1620
51 Diethylphthalate	149	6.325	6.328	(1.044)	1173117	40.8802	1360
53 Fluorene	166	6.472	6.473	(1.068)	1107939	39.2418	1310
54 4-Chlorophenylphenylether	204	6.443	6.449	(1.063)	587936	39.4716	1320
55 2-Methyl-4,6-dinitrophenol	198	6.484	6.487	(0.897)	131380	39.8607	1330

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.466	6.468	(1.067)	264456	56.9449	1900
133 Diphenylamine	169	6.531	6.535	(0.903)	990609	40.6879	1360
58 1,2-Diphenylhydrazine	77	6.572	6.574	(0.909)	1205835	42.0505	1400
61 4-Bromophenylphenylether	248	6.831	6.839	(0.945)	337593	37.3276	1240
63 Hexachlorobenzene	284	6.907	6.911	(0.955)	349606	38.1516	1270
68 Phenanthrene	178	7.248	7.253	(1.002)	1572985	39.9614	1330
69 Anthracene	178	7.295	7.296	(1.009)	1599668	40.5724	1350
72 Di-n-butylphthalate	149	7.648	7.652	(1.058)	1967339	39.9232	1330
76 Fluoranthene	202	8.295	8.298	(1.147)	1794519	41.4666	1380
85 Butylbenzylphthalate	149	9.037	9.039	(0.937)	925159	39.8041	1330
89 Benzo(a)anthracene	228	9.631	9.632	(0.999)	1677563	40.8428	1360
90 3,3'-Dichlorobenzidine	252	9.578	9.572	(0.993)	515256	38.8529	1300
92 Chrysene	228	9.666	9.670	(1.002)	1572894	42.1256	1400
93 bis(2-Ethylhexyl)phthalate	149	9.560	9.564	(0.991)	1300489	40.5381	1350
94 Di-n-octylphthalate	149	10.213	10.219	(0.901)	2060347	35.4487	1180
95 Benzo(b)fluoranthene	252	10.807	10.807	(0.954)	1690404	41.0470	1370
96 Benzo(k)fluoranthene	252	10.842	10.845	(0.957)	1578140	39.0678	1300
97 Benzo(a)pyrene	252	11.248	11.254	(0.993)	1475752	41.8382	1390
99 Indeno(1,2,3-cd)pyrene	276	13.113	13.118	(1.157)	1517135	46.9787	1560
100 Dibenzo(a,h)anthracene	278	13.124	13.127	(1.158)	1257711	48.1132	1600
101 Benzo(ghi)perylene	276	13.660	13.662	(1.206)	1270374	49.8937	1660
1 N-Methyl-N-nitrosomethylamine	74	2.425	2.418	(0.617)	302483	36.0218	1200

QC Flag Legend

Q - Qualifier signal failed the ratio test.

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

Page 1 of 2

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 1202018610	Date Received: 01/13/2010 08:55	% Moisture: 8.9
Client Sample: QC for batch 942836	Client: LANL010	Project: QC
Client ID: RE12-10-7262MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 12:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5a1908.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1110	ug/kg	73.1	365
108-95-2	Phenol		1290	ug/kg	73.1	365
95-57-8	2-Chlorophenol		1260	ug/kg	73.1	365
106-46-7	1,4-Dichlorobenzene		1170	ug/kg	73.1	365
621-64-7	N-Nitrosodipropylamine		1320	ug/kg	73.1	365
59-50-7	4-Chloro-3-methylphenol		1520	ug/kg	73.1	365
83-32-9	Acenaphthene		1320	ug/kg	12.1	36.5
121-14-2	2,4-Dinitrotoluene		1320	ug/kg	36.5	365
100-02-7	4-Nitrophenol		1850	ug/kg	121	365
87-86-5	Pentachlorophenol		1710	ug/kg	91.3	365
129-00-0	Pyrene		1340	ug/kg	11.0	36.5
110-86-1	Pyridine		1170	ug/kg	73.1	365
62-53-3	Aniline		1340	ug/kg	110	365
111-44-4	bis(2-Chloroethyl) ether		1170	ug/kg	73.1	365
541-73-1	1,3-Dichlorobenzene		1160	ug/kg	73.1	365
100-51-6	Benzyl alcohol		1530	ug/kg	110	365
95-50-1	1,2-Dichlorobenzene		1280	ug/kg	73.1	365
108-60-1	bis(2-Chloroisopropyl)ether		1230	ug/kg	73.1	365
95-48-7	o-Cresol		1380	ug/kg	73.1	365
65794-96-9	m,p-Cresols		1450	ug/kg	110	365
67-72-1	Hexachloroethane		1150	ug/kg	73.1	365
98-95-3	Nitrobenzene		1360	ug/kg	73.1	365
78-59-1	Isophorone		1320	ug/kg	73.1	365
88-75-5	2-Nitrophenol		1400	ug/kg	73.1	365
105-67-9	2,4-Dimethylphenol		1320	ug/kg	128	365
111-91-1	bis(2-Chloroethoxy)methane		1270	ug/kg	73.1	365
120-83-2	2,4-Dichlorophenol		1390	ug/kg	73.1	365
65-85-0	Benzoic acid		3400	ug/kg	183	731
91-20-3	Naphthalene		1230	ug/kg	11.0	36.5
106-47-8	4-Chloroaniline		1350	ug/kg	73.1	365
87-68-3	Hexachlorobutadiene		1300	ug/kg	73.1	365
91-57-6	2-Methylnaphthalene		1360	ug/kg	7.31	36.5
77-47-4	Hexachlorocyclopentadiene		1020	ug/kg	73.1	365
88-06-2	2,4,6-Trichlorophenol		1560	ug/kg	73.1	365
95-95-4	2,4,5-Trichlorophenol		1440	ug/kg	73.1	365
91-58-7	2-Chloronaphthalene		1370	ug/kg	12.1	36.5
88-74-4	2-Nitroaniline		1450	ug/kg	73.1	365
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1450	ug/kg	73.1	365

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 1202018610	Date Received: 01/13/2010 08:55	%Moisture: 8.9
Client Sample: QC for batch 942836	Client: LANL010	Project: QC
Client ID: RE12-10-7262MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 12:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.04 g	Final Volume: 1 mL
Data File: s5a1908.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate		1340	ug/kg	73.1	365
606-20-2	2,6-Dinitrotoluene		1310	ug/kg	36.5	365
208-96-8	Acenaphthylene		1290	ug/kg	11.0	36.5
51-28-5	2,4-Dinitrophenol		1610	ug/kg	139	731
132-64-9	Dibenzofuran		1590	ug/kg	73.1	365
84-66-2	Diethylphthalate		1390	ug/kg	73.1	365
86-73-7	Fluorene		1340	ug/kg	11.0	36.5
7005-72-3	4-Chlorophenylphenylether		1330	ug/kg	73.1	365
534-52-1	2-Methyl-4,6-dinitrophenol		1380	ug/kg	73.1	365
100-01-6	4-Nitroaniline		1860	ug/kg	110	365
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1370	ug/kg	73.1	365
122-66-7	Azobenzene		936	ug/kg	73.1	365
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1250	ug/kg	73.1	365
118-74-1	Hexachlorobenzene		1270	ug/kg	73.1	365
85-01-8	Phenanthrene		1330	ug/kg	11.0	36.5
120-12-7	Anthracene		1350	ug/kg	7.31	36.5
84-74-2	Di-n-butylphthalate		1390	ug/kg	73.1	365
206-44-0	Fluoranthene		1350	ug/kg	11.0	36.5
85-68-7	Butylbenzylphthalate		818	ug/kg	73.1	365
56-55-3	Benzo(a)anthracene		1420	ug/kg	11.0	36.5
91-94-1	3,3'-Dichlorobenzidine		792	ug/kg	110	365
218-01-9	Chrysene		1400	ug/kg	11.0	36.5
117-81-7	bis(2-Ethylhexyl)phthalate		1400	ug/kg	73.1	365
117-84-0	Di-n-octylphthalate		1540	ug/kg	73.1	365
205-99-2	Benzo(b)fluoranthene		1420	ug/kg	11.0	36.5
207-08-9	Benzo(k)fluoranthene		1490	ug/kg	11.0	36.5
50-32-8	Benzo(a)pyrene		1430	ug/kg	11.0	36.5
193-39-5	Indeno(1,2,3-cd)pyrene		1240	ug/kg	11.0	36.5
53-70-3	Dibenzo(a,h)anthracene		1280	ug/kg	11.0	36.5
191-24-2	Benzo(ghi)perylene		1210	ug/kg	11.0	36.5
120-82-1	1,2,4-Trichlorobenzene		1280	ug/kg	73.1	365

Data File: /chem/MSD5.i/s011910.b/s5a1908.d
Report Date: 19-Jan-2010 13:49

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1908.d
Lab Smp Id: 1202018610 Client Smp ID: RE12-10-7262MS
Inj Date : 19-JAN-2010 12:59
Operator : RMB Inst ID: MSD5.i
Smp Info : |1202018610|942840|1|SVM|1|LANL26001MS
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.04000	weight of sample
M	8.86210	% 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	3.937	3.940	(1.000)	557082	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	2019682	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1086506	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	2011310	40.0000	
* 91 Chrysene-d12	240	9.648	9.646	(1.000)	1771034	40.0000	
* 98 Perylene-d12	264	11.330	11.331	(1.000)	1292417	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.794)	883621	63.9581	2340
\$ 5 Phenol-d5	99	3.649	3.651	(0.927)	1066908	62.6192	2290
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	545050	35.1477	1280
\$ 39 2-Fluorobiphenyl	172	5.543	5.548	(0.915)	962528	33.4887	1220
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	277847	80.4581	2940
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.892)	1091778	39.2606	1430

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.660	3.661	(0.930)	597477	35.2036	1280 (Q)
8 2-Chlorophenol	128	3.801	3.805	(0.966)	494727	34.3778	1260
11 1,4-Dichlorobenzene	146	3.943	3.950	(1.001)	494353	31.9911	1170
17 N-Nitrosodipropylamine	70	4.172	4.176	(1.060)	304423	36.1948	1320 (Q)
28 1,2,4-Trichlorobenzene	180	4.754	4.758	(0.990)	448222	34.9890	1280
33 4-Chloro-3-methylphenol	107	5.154	5.149	(1.073)	439988	41.6172	1520
47 Acenaphthene	154	6.084	6.088	(1.004)	851185	36.0503	1320
50 2,4-Dinitrotoluene	165	6.172	6.174	(1.018)	297952	36.2347	1320
52 4-Nitrophenol	139	6.107	6.097	(1.008)	203416	50.7509	1850 (Q)
65 Pentachlorophenol	266	7.060	7.060	(0.976)	200031	46.8080	1710
79 Pyrene	202	8.513	8.510	(0.882)	1646819	36.6345	1340
2 Pyridine	79	2.472	2.452	(0.628)	364422	32.0181	1170
4 Aniline	66	3.713	3.723	(0.943)	257000	36.8078	1340 (Q)
7 bis(2-Chloroethyl) ether	63	3.731	3.738	(0.948)	407572	32.0198	1170
9 1,3-Dichlorobenzene	146	3.901	3.906	(0.991)	496218	31.8618	1160
12 Benzyl alcohol	108	4.001	4.003	(1.016)	397208	41.8248	1530
13 1,2-Dichlorobenzene	146	4.048	4.055	(1.028)	477181	34.9782	1280
14 bis(2-Chloroisopropyl) ether	45	4.078	4.084	(1.036)	842725	33.6987	1230
15 o-Cresol	107	4.054	4.055	(1.030)	376728	37.6788	1380
18 m,p-Cresols	107	4.148	4.157	(1.054)	564707	39.6774	1450
19 Hexachloroethane	117	4.278	4.287	(1.087)	200136	31.3744	1140
21 Nitrobenzene	77	4.313	4.316	(0.898)	517870	37.1713	1360
22 Isophorone	82	4.460	4.470	(0.929)	953229	36.0252	1320
23 2-Nitrophenol	139	4.525	4.527	(0.942)	250938	38.2157	1400
24 2,4-Dimethylphenol	122	4.519	4.523	(0.941)	475922	36.2529	1320
25 bis(2-Chloroethoxy)methane	93	4.584	4.590	(0.955)	545216	34.7143	1270
26 2,4-Dichlorophenol	162	4.690	4.691	(0.977)	394909	38.0792	1390
27 Benzoic acid	105	4.596	4.571	(0.957)	680695	93.0011	3400
30 Naphthalene	128	4.819	4.821	(1.004)	1343724	33.7894	1230 (Q)
31 4-Chloroaniline	127	4.837	4.836	(1.007)	645113	37.0826	1350
32 Hexachlorobutadiene	225	4.884	4.889	(1.017)	269615	35.4838	1300
34 2-Methylnaphthalene	142	5.301	5.303	(1.104)	926290	37.1100	1360
36 Hexachlorocyclopentadiene	237	5.401	5.409	(0.891)	177195	27.9739	1020
37 2,4,6-Trichlorophenol	196	5.490	5.490	(0.906)	323109	42.7120	1560
38 2,4,5-Trichlorophenol	196	5.525	5.519	(0.912)	331538	39.3528	1440
40 2-Chloronaphthalene	162	5.654	5.659	(0.933)	889830	37.4880	1370
42 o-Nitroaniline	65	5.713	5.712	(0.943)	305809	39.7137	1450
41 m-Nitroaniline	138	6.007	6.010	(0.991)	229379	39.6915	1450
43 Dimethylphthalate	163	5.813	5.823	(0.959)	1016435	36.5757	1340
44 2,6-Dinitrotoluene	165	5.872	5.876	(0.969)	232938	35.7883	1310
45 Acenaphthylene	152	5.960	5.962	(0.984)	1362886	35.2189	1290
48 2,4-Dinitrophenol	184	6.078	6.083	(1.003)	73161	44.1229	1610 (Q)
49 Dibenzofuran	168	6.213	6.213	(1.025)	1474783	43.5874	1590
51 Diethylphthalate	149	6.331	6.328	(1.045)	1092119	37.9944	1390
53 Fluorene	166	6.472	6.473	(1.068)	1035223	36.6054	1340
54 4-Chlorophenylphenylether	204	6.448	6.449	(1.064)	542408	36.3545	1330
55 2-Methyl-4,6-dinitrophenol	198	6.490	6.487	(0.898)	122176	37.8147	1380

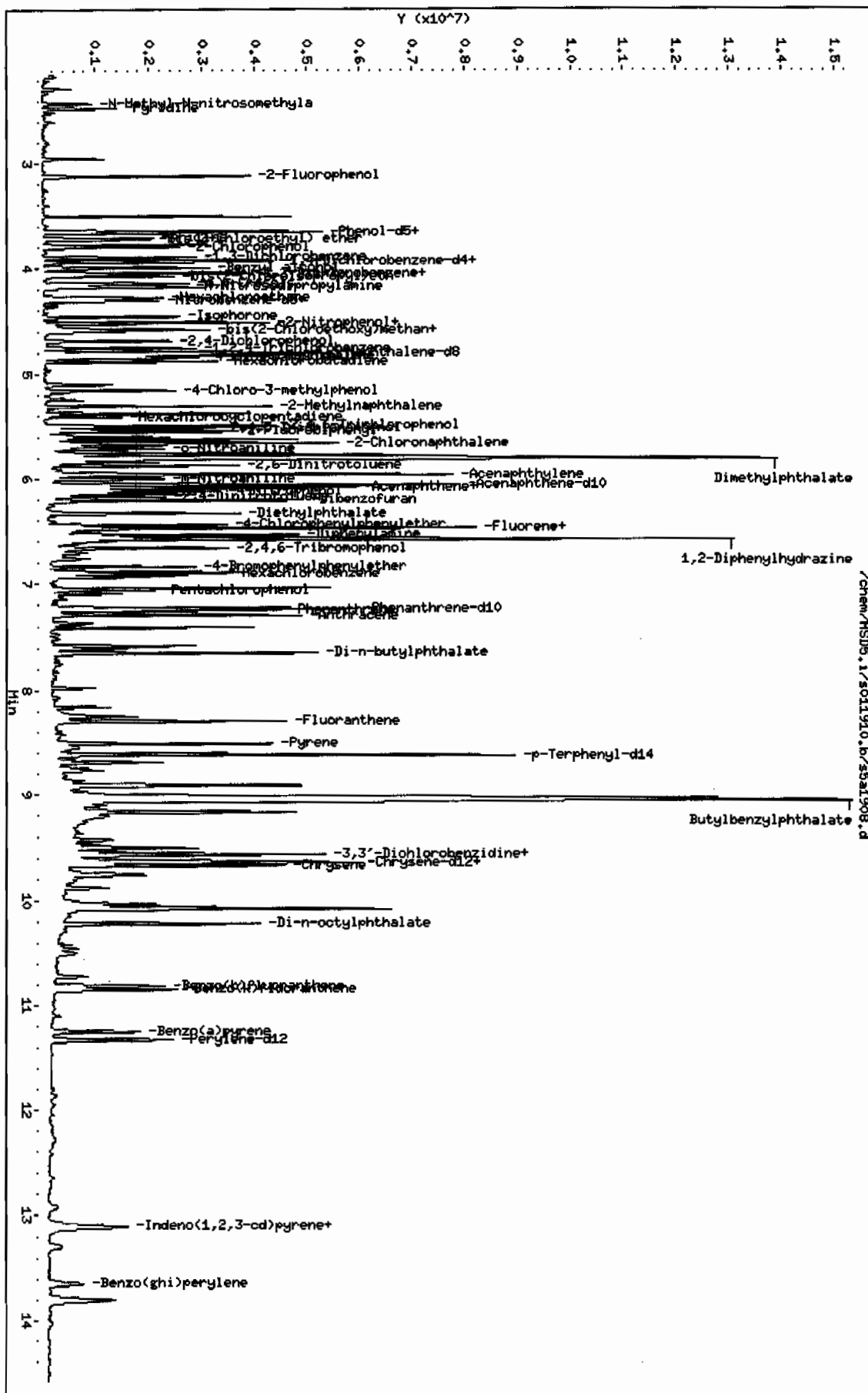
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
56 p-Nitroaniline		138	6.472	6.468	(1.068)	236635	50.8695	1860
133 Diphenylamine		169	6.537	6.535	(0.904)	908593	37.4594	1370
58 1,2-Diphenylhydrazine		77	6.572	6.574	(0.909)	731931	25.6202	936 (Q)
61 4-Bromophenylphenylether		248	6.837	6.839	(0.945)	307875	34.1696	1250
63 Hexachlorobenzene		284	6.907	6.911	(0.955)	318097	34.8435	1270
68 Phenanthrene		178	7.254	7.253	(1.003)	1422886	36.2840	1320
69 Anthracene		178	7.295	7.296	(1.009)	1448174	36.8681	1350
72 Di-n-butylphthalate		149	7.648	7.652	(1.058)	1869756	38.0855	1390
76 Fluoranthene		202	8.295	8.298	(1.147)	1592449	36.9355	1350
85 Butylbenzylphthalate		149	9.048	9.039	(0.938)	476835	22.4076	818
89 Benzo (a) anthracene		228	9.636	9.632	(0.999)	1463465	38.9166	1420
90 3,3'-Dichlorobenzidine		252	9.583	9.572	(0.993)	263332	21.6881	792
92 Chrysene		228	9.672	9.670	(1.002)	1306287	38.2121	1400
93 bis(2-Ethylhexyl)phthalate		149	9.566	9.564	(0.991)	1128907	38.4354	1400
94 Di-n-octylphthalate		149	10.219	10.219	(0.902)	1745176	42.1642	1540
95 Benzo (b) fluoranthene		252	10.807	10.807	(0.954)	1137017	38.7705	1420
96 Benzo (k) fluoranthene		252	10.842	10.845	(0.957)	1173610	40.7982	1490
97 Benzo (a) pyrene		252	11.248	11.254	(0.993)	981498	39.0744	1430
99 Indeno (1,2,3-cd) pyrene		276	13.101	13.118	(1.156)	759612	33.8900	1240
100 Dibenzo (a,h) anthracene		278	13.118	13.127	(1.158)	630960	34.9782	1280
101 Benzo (ghi) perylene		276	13.648	13.662	(1.205)	600366	33.1112	1210
1 N-Methyl-N-nitrosomethylamine		74	2.425	2.418	(0.616)	252263	30.4675	1110

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSDS.i/5011910.b/55s1908.d
 Date: 19-JUN-2010 12:59
 Client ID: REL2-10-7262MS
 Sample Info: 11202018610194284011SVH11LNL2601HS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-BMS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20



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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 1202018611	Date Received: 01/13/2010 08:55	%Moisture: 8.9
Client Sample: QC for batch 942836	Client: LANL010	Project: QC
Client ID: RE12-10-7262MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 13:22	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s5a1909.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine		1190	ug/kg	72.9	364
108-95-2	Phenol		1410	ug/kg	72.9	364
95-57-8	2-Chlorophenol		1360	ug/kg	72.9	364
106-46-7	1,4-Dichlorobenzene		1270	ug/kg	72.9	364
621-64-7	N-Nitrosodipropylamine		1400	ug/kg	72.9	364
59-50-7	4-Chloro-3-methylphenol		1620	ug/kg	72.9	364
83-32-9	Acenaphthene		1410	ug/kg	12.0	36.4
121-14-2	2,4-Dinitrotoluene		1430	ug/kg	36.4	364
100-02-7	4-Nitrophenol		1980	ug/kg	120	364
87-86-5	Pentachlorophenol		1830	ug/kg	91.1	364
129-00-0	Pyrene		1350	ug/kg	10.9	36.4
110-86-1	Pyridine		1230	ug/kg	72.9	364
62-53-3	Aniline		1470	ug/kg	109	364
111-44-4	bis(2-Chloroethyl) ether		1270	ug/kg	72.9	364
541-73-1	1,3-Dichlorobenzene		1250	ug/kg	72.9	364
100-51-6	Benzyl alcohol		1650	ug/kg	109	364
95-50-1	1,2-Dichlorobenzene		1380	ug/kg	72.9	364
108-60-1	bis(2-Chloroisopropyl)ether		1320	ug/kg	72.9	364
95-48-7	o-Cresol		1490	ug/kg	72.9	364
65794-96-9	m,p-Cresols		1580	ug/kg	109	364
67-72-1	Hexachloroethane		1270	ug/kg	72.9	364
98-95-3	Nitrobenzene		1470	ug/kg	72.9	364
78-59-1	Isophorone		1420	ug/kg	72.9	364
88-75-5	2-Nitrophenol		1500	ug/kg	72.9	364
105-67-9	2,4-Dimethylphenol		1430	ug/kg	128	364
111-91-1	bis(2-Chloroethoxy)methane		1360	ug/kg	72.9	364
120-83-2	2,4-Dichlorophenol		1510	ug/kg	72.9	364
65-85-0	Benzoic acid		3410	ug/kg	182	729
91-20-3	Naphthalene		1320	ug/kg	10.9	36.4
106-47-8	4-Chloroaniline		1510	ug/kg	72.9	364
87-68-3	Hexachlorobutadiene		1400	ug/kg	72.9	364
91-57-6	2-Methylnaphthalene		1470	ug/kg	7.29	36.4
77-47-4	Hexachlorocyclopentadiene		1110	ug/kg	72.9	364
88-06-2	2,4,6-Trichlorophenol		1660	ug/kg	72.9	364
95-95-4	2,4,5-Trichlorophenol		1560	ug/kg	72.9	364
91-58-7	2-Chloronaphthalene		1480	ug/kg	12.0	36.4
88-74-4	2-Nitroaniline		1540	ug/kg	72.9	364
99-09-2	o-Nitroaniline					
	3-Nitroaniline		1590	ug/kg	72.9	364

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

SDG Number: 10-1225	Date Collected: 01/08/2010 12:00	Matrix: R
Lab Sample ID: 1202018611	Date Received: 01/13/2010 08:55	%Moisture: 8.9
Client Sample: QC for batch 942836	Client: LANL010	Project: QC
Client ID: RE12-10-7262MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 942840	Inst: MSD5.I	Dilution: 1
Run Date: 01/19/2010 13:22	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/18/2010 20:10	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s5a1909.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate		1460	ug/kg	72.9	364
606-20-2	2,6-Dinitrotoluene		1410	ug/kg	36.4	364
208-96-8	Acenaphthylene		1400	ug/kg	10.9	36.4
51-28-5	2,4-Dinitrophenol		1680	ug/kg	138	729
132-64-9	Dibenzofuran		1710	ug/kg	72.9	364
84-66-2	Diethylphthalate		1480	ug/kg	72.9	364
86-73-7	Fluorene		1440	ug/kg	10.9	36.4
7005-72-3	4-Chlorophenylphenylether		1430	ug/kg	72.9	364
534-52-1	2-Methyl-4,6-dinitrophenol		1460	ug/kg	72.9	364
100-01-6	4-Nitroaniline		2010	ug/kg	109	364
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1460	ug/kg	72.9	364
122-66-7	Azobenzene		955	ug/kg	72.9	364
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1340	ug/kg	72.9	364
118-74-1	Hexachlorobenzene		1370	ug/kg	72.9	364
85-01-8	Phenanthrene		1420	ug/kg	10.9	36.4
120-12-7	Anthracene		1430	ug/kg	7.29	36.4
84-74-2	Di-n-butylphthalate		1460	ug/kg	72.9	364
206-44-0	Fluoranthene		1470	ug/kg	10.9	36.4
85-68-7	Butylbenzylphthalate		817	ug/kg	72.9	364
56-55-3	Benzo(a)anthracene		1510	ug/kg	10.9	36.4
91-94-1	3,3'-Dichlorobenzidine		890	ug/kg	109	364
218-01-9	Chrysene		1480	ug/kg	10.9	36.4
117-81-7	bis(2-Ethylhexyl)phthalate		1440	ug/kg	72.9	364
117-84-0	Di-n-octylphthalate		1570	ug/kg	72.9	364
205-99-2	Benzo(b)fluoranthene		1500	ug/kg	10.9	36.4
207-08-9	Benzo(k)fluoranthene		1600	ug/kg	10.9	36.4
50-32-8	Benzo(a)pyrene		1510	ug/kg	10.9	36.4
193-39-5	Indeno(1,2,3-cd)pyrene		1300	ug/kg	10.9	36.4
53-70-3	Dibenzo(a,h)anthracene		1330	ug/kg	10.9	36.4
191-24-2	Benzo(ghi)perylene		1260	ug/kg	10.9	36.4
120-82-1	1,2,4-Trichlorobenzene		1370	ug/kg	72.9	364

GEL Laboratories LLC

Data file : /chem/MSD5.i/s011910.b/s5a1909.d
Lab Smp Id: 1202018611 Client Smp ID: RE12-10-7262MSD
Inj Date : 19-JAN-2010 13:22
Operator : RMB Inst ID: MSD5.i
Smp Info : |1202018611|942840|1|SVM|1|LANL26001MSD
Misc Info : |MSD8270_S|WBN091223-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s011910.b/MSD5-M8270C-010510.m
Meth Date : 19-Jan-2010 11:15 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1225.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	8.86210	% 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	3.937	3.940	(1.000)	520556	40.0000	
* 29 Naphthalene-d8	136	4.801	4.807	(1.000)	1902956	40.0000	
* 46 Acenaphthene-d10	164	6.060	6.063	(1.000)	1024931	40.0000	
* 67 Phenanthrene-d10	188	7.231	7.234	(1.000)	1904323	40.0000	
* 91 Chrysene-d12	240	9.648	9.646	(1.000)	1796933	40.0000	
* 98 Perylene-d12	264	11.331	11.331	(1.000)	1361144	40.0000	
\$ 3 2-Fluorophenol	112	3.125	3.121	(0.794)	901855	69.8582	2540
\$ 5 Phenol-d5	99	3.655	3.651	(0.928)	1067933	67.0774	2440
\$ 20 Nitrobenzene-d5	82	4.296	4.301	(0.895)	550585	37.6824	1370
\$ 39 2-Fluorobiphenyl	172	5.549	5.548	(0.916)	987308	36.4146	1330
\$ 60 2,4,6-Tribromophenol	329	6.660	6.661	(1.099)	283779	87.1127	3170
\$ 81 p-Terphenyl-d14	244	8.607	8.611	(0.892)	1128672	40.0023	1460

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.660	3.661	(0.930)	612402	38.6148	1410 (Q)
8 2-Chlorophenol	128	3.802	3.805	(0.966)	501151	37.2677	1360
11 1,4-Dichlorobenzene	146	3.949	3.950	(1.003)	503285	34.8543	1270
17 N-Nitrosodipropylamine	70	4.172	4.176	(1.060)	301693	38.3871	1400 (Q)
28 1,2,4-Trichlorobenzene	180	4.754	4.758	(0.990)	455561	37.7432	1370
33 4-Chloro-3-methylphenol	107	5.154	5.149	(1.073)	443208	44.4932	1620
47 Acenaphthene	154	6.084	6.088	(1.004)	862810	38.7380	1410
50 2,4-Dinitrotoluene	165	6.172	6.174	(1.018)	303811	39.1668	1430
52 4-Nitrophenol	139	6.107	6.097	(1.008)	207877	54.3211	1980
65 Pentachlorophenol	266	7.060	7.060	(0.976)	206069	50.3429	1830
79 Pyrene	202	8.513	8.510	(0.882)	1689919	37.0514	1350
2 Pyridine	79	2.472	2.452	(0.628)	359270	33.7802	1230
4 Aniline	66	3.713	3.723	(0.943)	262966	40.3049	1470 (Q)
7 bis(2-Chloroethyl) ether	63	3.731	3.738	(0.948)	413129	34.7337	1260
9 1,3-Dichlorobenzene	146	3.902	3.906	(0.991)	499378	34.3146	1250
12 Benzyl alcohol	108	4.002	4.003	(1.016)	401386	45.2303	1650
13 1,2-Dichlorobenzene	146	4.049	4.055	(1.028)	482327	37.8362	1380
14 bis(2-Chloroisopropyl) ether	45	4.078	4.084	(1.036)	846177	36.2110	1320
15 o-Cresol	107	4.054	4.055	(1.030)	380936	40.7730	1480
18 m,p-Cresols	107	4.154	4.157	(1.055)	575895	43.3026	1580
19 Hexachloroethane	117	4.278	4.287	(1.087)	207013	34.7296	1260
21 Nitrobenzene	77	4.313	4.316	(0.898)	529143	40.3101	1470
22 Isophorone	82	4.466	4.470	(0.930)	974116	39.0728	1420
23 2-Nitrophenol	139	4.525	4.527	(0.942)	254467	41.1302	1500
24 2,4-Dimethylphenol	122	4.519	4.523	(0.941)	483852	39.1178	1420
25 bis(2-Chloroethoxy)methane	93	4.584	4.590	(0.955)	553565	37.4078	1360
26 2,4-Dichlorophenol	162	4.690	4.691	(0.977)	406256	41.5761	1510
27 Benzoic acid	105	4.596	4.571	(0.957)	647192	93.7238	3410
30 Naphthalene	128	4.819	4.821	(1.004)	1359054	36.2712	1320 (Q)
31 4-Chloroaniline	127	4.837	4.836	(1.007)	677668	41.3433	1510
32 Hexachlorobutadiene	225	4.884	4.889	(1.017)	275004	38.4131	1400
34 2-Methylnaphthalene	142	5.301	5.303	(1.104)	950196	40.4028	1470
36 Hexachlorocyclopentadiene	237	5.401	5.409	(0.891)	181944	30.4493	1110
37 2,4,6-Trichlorophenol	196	5.490	5.490	(0.906)	324985	45.5408	1660
38 2,4,5-Trichlorophenol	196	5.525	5.519	(0.912)	340097	42.7940	1560
40 2-Chloronaphthalene	162	5.654	5.659	(0.933)	906805	40.4983	1480
42 o-Nitroaniline	65	5.713	5.712	(0.943)	307401	42.3189	1540
41 m-Nitroaniline	138	6.007	6.010	(0.991)	238063	43.6690	1590
43 Dimethylphthalate	163	5.819	5.823	(0.960)	1050047	40.0552	1460
44 2,6-Dinitrotoluene	165	5.872	5.876	(0.969)	237557	38.6906	1410
45 Acenaphthylene	152	5.960	5.962	(0.983)	1398898	38.3213	1400
48 2,4-Dinitrophenol	184	6.084	6.083	(1.004)	73891	46.0463	1680 (Q)
49 Dibenzofuran	168	6.213	6.213	(1.025)	1497729	46.9249	1710
51 Diethylphthalate	149	6.331	6.328	(1.045)	1099196	40.5380	1480
53 Fluorene	166	6.472	6.473	(1.068)	1054342	39.5212	1440
54 4-Chlorophenylphenylether	204	6.448	6.449	(1.064)	551055	39.1530	1430
55 2-Methyl-4,6-dinitrophenol	198	6.490	6.487	(0.898)	125232	40.1847	1460

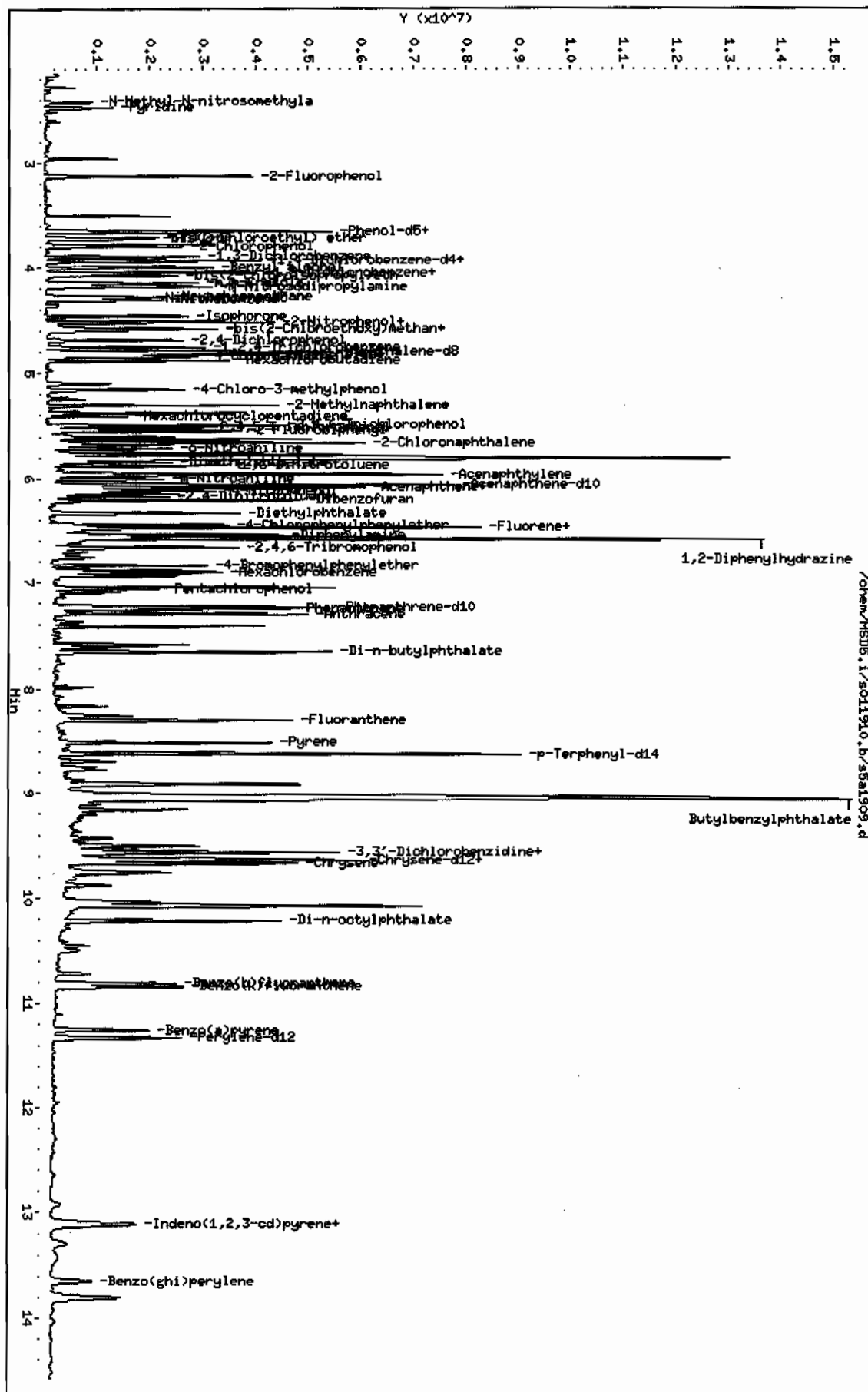
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
56 p-Nitroaniline		138	6.472	6.468	(1.068)	241570	55.0502	2000
133 Diphenylamine		169	6.543	6.535	(0.905)	918970	40.0158	1460
58 1,2-Diphenylhydrazine		77	6.572	6.574	(0.909)	708895	26.2079	955 (Q)
61 4-Bromophenylphenylether		248	6.837	6.839	(0.945)	313509	36.7498	1340
63 Hexachlorobenzene		284	6.907	6.911	(0.955)	324455	37.5366	1370
68 Phenanthrene		178	7.254	7.253	(1.003)	1450230	39.0589	1420
69 Anthracene		178	7.295	7.296	(1.009)	1460654	39.2749	1430
72 Di-n-butylphthalate		149	7.648	7.652	(1.058)	1861047	40.0378	1460
76 Fluoranthene		202	8.295	8.298	(1.147)	1644581	40.2877	1470
85 Butylbenzylphthalate		149	9.048	9.039	(0.938)	484175	22.4246	817
89 Benzo (a) anthracene		228	9.636	9.632	(0.999)	1577800	41.3523	1510
90 3,3'-Dichlorobenzidine		252	9.584	9.572	(0.993)	300815	24.4181	890
92 Chrysene		228	9.672	9.670	(1.002)	1409031	40.6236	1480
93 bis (2-Ethylhexyl) phthalate		149	9.566	9.564	(0.991)	1176971	39.4942	1440
94 Di-n-octylphthalate		149	10.219	10.219	(0.902)	1880885	43.1484	1570
95 Benzo (b) fluoranthene		252	10.813	10.807	(0.954)	1269821	41.1127	1500
96 Benzo (k) fluoranthene		252	10.848	10.845	(0.957)	1328240	43.8422	1600
97 Benzo (a) pyrene		252	11.254	11.254	(0.993)	1097824	41.4987	1510
99 Indeno (1,2,3-cd) pyrene		276	13.107	13.118	(1.157)	845031	35.6344	1300
100 Dibenzo (a,h) anthracene		278	13.124	13.127	(1.158)	694801	36.4054	1330
101 Benzo (ghi) perylene		276	13.654	13.662	(1.205)	658891	34.5041	1260
1 N-Methyl-N-nitrosomethylamine		74	2.425	2.418	(0.616)	251973	32.5678	1190

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSDS.i/s011910.b/s5a1909.d
 Date: 19-JUN-2010 13:22
 Client ID: REL2-10-7262HSD
 Sample Info: 1120201861194284011SVH11.LANL26004HSD
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: MSD5.1
 Operator: RHB
 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: 942836 Verified by: _____
 Analyst: Alberto Velasco
 Method: SW846 3550B
 Lab SOP: GL-OA-E-010 REV# 18
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202018608 MB	18-JAN-2010 20:10:25	30	1	0.03333
1202018609 LCS	18-JAN-2010 20:10:25	30	1	0.03333
244626001	18-JAN-2010 20:10:25	30.11	1	0.03321
1202018610 MS (2446260001)	18-JAN-2010 20:10:25	30.04	1	0.03329
1202018611 MSD (244626001)	18-JAN-2010 20:10:25	30.12	1	0.0332
244626002	18-JAN-2010 20:10:25	30.03	1	0.0333
244626003	18-JAN-2010 20:10:25	30.04	1	0.03329
244626004	18-JAN-2010 20:10:25	30.01	1	0.03332
244626005	18-JAN-2010 20:10:25	30.04	1	0.03329
244626006	18-JAN-2010 20:10:25	30.17	1	0.03315
244626007	18-JAN-2010 20:10:25	30.16	1	0.03316
244626008	18-JAN-2010 20:10:25	30.02	1	0.03331
244626009	18-JAN-2010 20:10:25	30.09	1	0.03323
244626010	18-JAN-2010 20:10:25	30.05	1	0.03328
244626011	18-JAN-2010 20:10:25	30.06	1	0.03327
244626012	18-JAN-2010 20:10:25	30.04	1	0.03329
244626013	18-JAN-2010 20:10:25	30.17	1	0.03315
244626014	18-JAN-2010 20:10:25	30.04	1	0.03329
244626015	18-JAN-2010 20:10:25	30.01	1	0.03332
244626016	18-JAN-2010 20:10:25	30.07	1	0.03326

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202018609	BNA LCS w/o Benzidine 50ppm	UE091217-12A	1	mL	Verified By: AJS
LCS	1202018609	BENZIDINE LCS	UE100108-21	1	mL	Final Solvent: CH2Cl2
MS	1202018610	BNA LCS w/o Benzidine 50ppm	UE091217-12A	1	mL	
MS	1202018610	BENZIDINE LCS	UE100108-21	1	mL	
MSD	1202018611	BNA LCS w/o Benzidine 50ppm	UE091217-12A	1	mL	
MSD	1202018611	BENZIDINE LCS	UE100108-21	1	mL	
SURR	All	BNA for all Surrogate	UE100108-10	1	mL	
REGNT	All	Acetone	1255284	150	mL	
REGNT	All	Methylene Chloride	1256305-D	150	mL	
SOURC	All	SODIUM SULFATE	1248200	30	g	

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 01/05/2010

METHOD: 8270C MSD5-DFTPP8270D.m

OPERATOR: rmb

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 239699-D

Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN091213-01 Internal Std ID: WBN091223-01

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/MSD5.i/s010510.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
Is5a0501-D.d	WBN091128-01	rmb	05-JAN-2010 07:45	150PPM	Is010510	1.0	DFTPP	
Is5a0501.d	WBN091128-01	rmb	05-JAN-2010 07:45	150PPM	Is010510	1.0	DFTPP	
Is5a0502.d	Instrument blank	RMB	05-JAN-2010 07:58		Is010510	1.0		
Is5a0503-TEST.d	WBN091225-09	RMB	05-JAN-2010 08:21	11 PPM	Is010510	1.0	MEGICAL001	8270D linear test
Is5a0503.d	WBN091225-09	RMB	05-JAN-2010 08:21	11 PPM	Is010510	1.0	MEGICAL001	
Is5a0504-TEST.d	WBN091225-10	RMB	05-JAN-2010 08:49	110 PPM	Is010510	1.0	MEGICAL010	8270D linear test
Is5a0504.d	WBN091225-10	RMB	05-JAN-2010 08:49	110 PPM	Is010510	1.0	MEGICAL010	
Is5a0505.d	WBN091225-11	RMB	05-JAN-2010 09:17	120 PPM	Is010510	1.0	MEGICAL020	
Is5a0506.d	WBN091225-12.1	RMB	05-JAN-2010 09:45	140 PPM	Is010510	1.0	MEGICAL040	
Is5a0507.d	WBN091225-13	RMB	05-JAN-2010 10:13	150 PPM	Is010510	1.0	MEGICAL050	
Is5a0508.d	WBN091225-14	RMB	05-JAN-2010 10:42	180 PPM	Is010510	1.0	MEGICAL080	
Is5a0509.d	WBN091225-15	RMB	05-JAN-2010 11:10	100 PPM	Is010510	1.0	MEGICAL100	
Is5a0510.d	WBN091225-16	RMB	05-JAN-2010 11:38	1120 PPM	Is010510	1.0	MEGICAL120	
Is5a0511.d	Instrument blank	RMB	05-JAN-2010 12:06		Is010510	1.0		
Is5a0512-625.d	WBN091223-17.1	RMB	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICALV	MEGICALV - 625 - 010510
Is5a0512-8270D.d	WBN091223-17.1	RMB	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICALV	MEGICALV - 8270D - 010510
Is5a0512-BOE.d	WBN091223-17.1	RMB	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICALV	MEGICALV - BOE - 010510
Is5a0512.d	WBN091223-17.1	RMB	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICALV	MEGICALV - 8270C - 010510
Is5a0513-TEST.d	WBN100103-01	RMB	05-JAN-2010 12:58	110 PPM	Is010510	1.0	AP12ICAL010	8270D linear test

Isa0513.d	WBN100103-01	RMB	05-JAN-2010 12:58	110 PPM	s010510	1.0|AP12ICAL010|
Isa0514.d	WBN100103-02	RMB	05-JAN-2010 13:21	20 PPM	s010510	1.0|AP12ICAL020|
Isa0515.d	WBN100103-03.1	RMB	05-JAN-2010 13:44	40 PPM	s010510	1.0|AP12ICAL040|
Isa0516.d	WBN100103-04	RMB	05-JAN-2010 14:07	50 PPM	s010510	1.0|AP12ICAL050|
Isa0517.d	WBN100103-05	RMB	05-JAN-2010 14:30	80 PPM	s010510	1.0|AP12ICAL080|
Isa0518.d	WBN100103-06	RMB	05-JAN-2010 14:53	100 PPM	s010510	1.0|AP12ICAL100|
Isa0519.d	WBN100103-07	RMB	05-JAN-2010 15:16	120 PPM	s010510	1.0|AP12ICAL120|
Isa0520.d	WBN091202-16	RMB	05-JAN-2010 15:39	1500 PPM	s010510	1.0|HEXICAL500|
Isa0521.d	WBN091202-15	RMB	05-JAN-2010 16:02	1000 PPM	s010510	1.0|HEXICAL1000|
Isa0522.d	WBN091202-14	RMB	05-JAN-2010 16:24	1250 PPM	s010510	1.0|HEXICAL1250|
Isa0523.d	WBN091202-13	RMB	05-JAN-2010 16:47	1500 PPM	s010510	1.0|HEXICAL1500|
Isa0524.d	WBN091202-12	RMB	05-JAN-2010 17:10	11750 PPM	s010510	1.0|HEXICAL1750|
Isa0525.d	UBN090928-02	RMB	05-JAN-2010 17:32	12000 PPM	s010510	1.0|HEXICAL2000|
Isa0526-625.d	WBN100103-08.1	RMB	05-JAN-2010 17:55	140 PPM	s010510	1.0|AP12ICV | AP12ICV - 625 - 010510
Isa0526-8270D.d	WBN100103-08.1	RMB	05-JAN-2010 17:55	140 PPM	s010510	1.0|AP12ICV | AP12ICV - 8270D - 010510
Isa0526.d	WBN100103-08.1	RMB	05-JAN-2010 17:55	140 PPM	s010510	1.0|AP12ICV | AP12ICV - 8270C - 010510
Isa0527-625.d	WBN100103-10.4	RMB	05-JAN-2010 18:18	1250 PPM	s010510	1.0|HEXICV | HEXICV - 625 - 010510
Isa0527-8270D.d	WBN100103-10.4	RMB	05-JAN-2010 18:18	1250 PPM	s010510	1.0|HEXICV | HEXICV - 8270D - 010510
Isa0527.d	WBN100103-10.4	RMB	05-JAN-2010 18:18	1250 PPM	s010510	1.0|HEXICV | HEXICV - 8270C - 010510
Isa0528-D.d	WBN091128-01	Rmb	06-JAN-2010 08:51	150PPM	s010510	1.0|DFTPP |
Isa0528.d	WBN091128-01	Rmb	06-JAN-2010 08:51	150PPM	s010510	1.0|DFTPP |
Isa0529.d	Instrument blank	RMB	06-JAN-2010 09:04		s010510	1.0|
Isa0530.d	WBN100103-25	RMB	06-JAN-2010 09:26	10 PPM	s010510	1.0|PESTICAL010|
Isa0531.d	WBN100103-24	RMB	06-JAN-2010 09:49	20 PPM	s010510	1.0|PESTICAL020|
Isa0532.d	WBN100103-23.1	RMB	06-JAN-2010 10:12	40 PPM	s010510	1.0|PESTICAL040|
Isa0533.d	WBN100103-22	RMB	06-JAN-2010 10:35	50 PPM	s010510	1.0|PESTICAL050|
Isa0534.d	WBN100103-21	RMB	06-JAN-2010 10:58	80 PPM	s010510	1.0|PESTICAL080|

Isa0535.d	WBN100103-20	RMB	06-JAN-2010 11:21	100 PPM	s010510	1.0|PESTICAL100|	
Isa0536.d	WBN100103-19	RMB	06-JAN-2010 11:43	120 PPM	s010510	1.0|PESTICAL120|	
Isa0537-TEST.d	UBN091117-01	RMB	06-JAN-2010 12:06	10 PPM	s010510	1.0|NEVADAICAL010| 8270D linear test	
Isa0537.d	UBN091117-01	RMB	06-JAN-2010 12:06	10 PPM	s010510	1.0|NEVADAICAL010|	
Isa0538.d	UBN091117-02	RMB	06-JAN-2010 12:29	120 PPM	s010510	1.0|NEVADAICAL020|	
Isa0539.d	UBN091117-03	RMB	06-JAN-2010 12:53	140 PPM	s010510	1.0|NEVADAICAL040|	
Isa0540.d	UBN091117-04	RMB	06-JAN-2010 13:16	150 PPM	s010510	1.0|NEVADAICAL050|	
Isa0541.d	UBN091117-05	RMB	06-JAN-2010 13:39	180 PPM	s010510	1.0|NEVADAICAL080|	
Isa0542.d	UBN091117-06	RMB	06-JAN-2010 14:02	100 PPM	s010510	1.0|NEVADAICAL100|	
Isa0543.d	UBN091117-07	RMB	06-JAN-2010 14:25	120 PPM	s010510	1.0|NEVADAICAL120|	
Isa0544-625.d	WBN100103-26.1	RMB	06-JAN-2010 14:48	140 PPM	s010510	1.0|PESTICV | PESTICV - 625 - 010510	
Isa0544-8270D.d	WBN100103-26.1	RMB	06-JAN-2010 14:48	140 PPM	s010510	1.0|PESTICV | PESTICV - 8270D - 010510	
Isa0544.d	WBN100103-26.1	RMB	06-JAN-2010 14:48	140 PPM	s010510	1.0|PESTICV | PESTICV - 8270C - 010510	

Instrument Batch: /chem/MSD5.i/s010510.b

Page: 1

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 01/19/2010

METHOD: 8270C MSD5-DFTPPx.m

OPERATOR: rmb

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 1253574-D

Multiplier Voltage: 1447 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN091223-01

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/MSD5.i/s011910.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s5a1901.d	WBN100107-01	rmb	19-JAN-2010 10:07	150PPM	s011910	1.0	DFTPP	
s5a1902.d	WBN091225-12.3	RMB	19-JAN-2010 10:21	140 PPM	s011910	1.0	MEGACVS	541987
s5a1903.d	WBN100103-03.5	RMB	19-JAN-2010 10:50	140 PPM	s011910	1.0	API2CVS	
s5a1904.d	1202018608	RMB	19-JAN-2010 11:25	1942840	110-1225	1.0	SBLK01	
s5a1905.d	1202018609	RMB	19-JAN-2010 11:48	1942840	110-1225	1.0	SBLK01LCS	
s5a1906.d	244514003	RMB	19-JAN-2010 12:11	1941600	110-1182	2.0	LANL	Fail IS - confirmed by s5a1925
s5a1907.d	244626001	RMB	19-JAN-2010 12:35	1942840	110-1225	1.0	LANL	
s5a1908.d	1202018610	RMB	19-JAN-2010 12:59	1942840	110-1225	1.0	LANL26001MSD	
s5a1909.d	1202018611	RMB	19-JAN-2010 13:22	1942840	110-1225	1.0	LANL26001MSD	
s5a1910.d	244626002	RMB	19-JAN-2010 13:45	1942840	110-1225	1.0	LANL	
s5a1911.d	244626003	RMB	19-JAN-2010 14:09	1942840	110-1225	1.0	LANL	
s5a1912.d	244626004	RMB	19-JAN-2010 14:32	1942840	110-1225	1.0	LANL	
s5a1913.d	244626005	RMB	19-JAN-2010 14:55	1942840	110-1225	1.0	LANL	
s5a1914.d	244626006	RMB	19-JAN-2010 15:18	1942840	110-1225	1.0	LANL	
s5a1915.d	244626007	RMB	19-JAN-2010 15:42	1942840	110-1225	1.0	LANL	
s5a1916.d	244626008	RMB	19-JAN-2010 16:05	1942840	110-1225	1.0	LANL	
s5a1917.d	244626009	RMB	19-JAN-2010 16:28	1942840	110-1225	1.0	LANL	
s5a1918.d	244626010	RMB	19-JAN-2010 16:51	1942840	110-1225	1.0	LANL	
s5a1919.d	244626011	RMB	19-JAN-2010 17:14	1942840	110-1225	1.0	LANL	

|s5a1920.d	|244626012	|RMB	|19-JAN-2010 17:37	|942840	|10-1225	|1.0|LANL	|
|s5a1921.d	|244626013	|RMB	|19-JAN-2010 18:01	|942840	|10-1225	|1.0|LANL	|
|s5a1922.d	|244626014	|RMB	|19-JAN-2010 18:24	|942840	|10-1225	|1.0|LANL	|
|s5a1923.d	|244626015	|RMB	|19-JAN-2010 18:47	|942840	|10-1225	|1.0|LANL	|
|s5a1924.d	|244626016	|RMB	|19-JAN-2010 19:10	|942840	|10-1225	|1.0|LANL	|
|s5a1925.d	|244514003	|RMB	|19-JAN-2010 19:33	|941600	|10-1182	|2.0|LANL	|DOSE - fail IS - confirms s5a1906

LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1225**

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: 941664

Prep Batch Number: 941663

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
244626001	RE12-10-7262
244626002	RE12-10-7266
244626003	RE12-10-7258
244626004	RE12-10-7268
244626005	RE12-10-7265
244626006	RE12-10-7261
244626007	RE12-10-7259
244626008	RE12-10-7263
244626009	RE12-10-7271
244626010	RE12-10-7260
244626011	RE12-10-7267
244626012	RE12-10-7264
244626013	RE12-10-7270
244626014	RE12-10-7269
244626015	RE12-10-7283
244626016	RE12-10-7282
1202015510	Method Blank (MB)
1202015511	Laboratory Control Sample (LCS)
1202015512	244626001(RE12-10-7262) Matrix Spike (MS)
1202015513	244626001(RE12-10-7262) 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.

10-1225-EXPLCMS

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Primary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 244626001 (RE12-10-7262) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for Tetryl was 53.1%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported. Please see data exception report 785204.

Internal Standard (ISTD) Acceptance

The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

Secondary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 244626001 (RE12-10-7262) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance

The internal standards were not added to the secondary analyte extracts.

Technical Information**Holding Time Specifications**

All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with HPLC grade water. The samples in this SDG in this analytical batch for this analysis did not require any additional dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG in this analytical batch for this analysis except for dilutions.

Miscellaneous Information**Data Exception (DER) Documentation**

Data exception report 785204 was generated for this SDG.

The MS/MSD RPD for Tetryl was 53.1%. The acceptance limits are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported.

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: Hester DK Maine Date: 02/02/10

SAMPLE DATA SUMMARY

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626001

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130015a

Date Analyzed: 30-JAN-10 18:35

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: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626001

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250072.wiff

Date Analyzed: 26-JAN-10 05:08

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7266

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626002

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130018a

Date Analyzed: 30-JAN-10 20:04

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7266

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626002

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250075.wiff

Date Analyzed: 26-JAN-10 05:55

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7258

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626003

Sample Amount 2

Moisture: 14.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130019a

Date Analyzed: 30-JAN-10 20:33

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		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7258

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626003

Sample Amount 2

Moisture: 14.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250076.wiff

Date Analyzed: 26-JAN-10 06:11

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: RE12-10-7268

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626004

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130020a

Date Analyzed: 30-JAN-10 21:03

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: RE12-10-7268

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626004

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250077.wiff

Date Analyzed: 26-JAN-10 06:26

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: RE12-10-7265

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626005

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130021a

Date Analyzed: 30-JAN-10 21:32

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7265

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626005

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250078.wiff

Date Analyzed: 26-JAN-10 06:42

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: RE12-10-7261

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626006

Sample Amount 2

Moisture: 13.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130022a

Date Analyzed: 30-JAN-10 22:02

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: RE12-10-7261

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626006

Sample Amount 2

Moisture: 13.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250079.wiff

Date Analyzed: 26-JAN-10 06:58

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7259

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626007

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130026a

Date Analyzed: 31-JAN-10 00:00

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7259

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626007

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250083.wiff

Date Analyzed: 26-JAN-10 08:00

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: RE12-10-7263

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626008

Sample Amount 2

Moisture: 5.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130027a

Date Analyzed: 31-JAN-10 00:29

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7263

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626008

Sample Amount 2

Moisture: 5.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250084.wiff

Date Analyzed: 26-JAN-10 08:16

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7271

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626009

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130028a

Date Analyzed: 31-JAN-10 00:59

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: RE12-10-7271

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626009

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250085.wiff

Date Analyzed: 26-JAN-10 08:32

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: RE12-10-7260

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626010

Sample Amount 2

Moisture: 19.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130029a

Date Analyzed: 31-JAN-10 01:28

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: RE12-10-7260

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626010

Sample Amount 2

Moisture: 19.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 241663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250086.wiff

Date Analyzed: 26-JAN-10 08:48

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7267

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626011

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130030a

Date Analyzed: 31-JAN-10 01:58

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: RE12-10-7267

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626011

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250087.wiff

Date Analyzed: 26-JAN-10 09:03

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7264

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626012

Sample Amount 2

Moisture: 11.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130031a

Date Analyzed: 31-JAN-10 02:27

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: RE12-10-7264

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626012

Sample Amount 2

Moisture: 11.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250088.wiff

Date Analyzed: 26-JAN-10 09:19

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7270

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626013

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130032a

Date Analyzed: 31-JAN-10 02:57

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: RE12-10-7270

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626013

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250089.wiff

Date Analyzed: 26-JAN-10 09:35

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7269

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626014

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130033a

Date Analyzed: 31-JAN-10 03:26

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7269

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626014

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250090.wiff

Date Analyzed: 26-JAN-10 09:50

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: RE12-10-7283

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626015

Sample Amount 2

Moisture: 18.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130034a

Date Analyzed: 31-JAN-10 03:56

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: RE12-10-7283

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626015

Sample Amount 2

Moisture: 18.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250091.wiff

Date Analyzed: 26-JAN-10 10:06

Units: ug/kg

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

*Concentration =

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: RE12-10-7282

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626016

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130035a

Date Analyzed: 31-JAN-10 04:25

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: RE12-10-7282

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626016

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250092.wiff

Date Analyzed: 26-JAN-10 10:22

Units: ug/kg

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

*Concentration =

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

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
244626001	RE12-10-7262	123	73.7 - 133.3	
244626001	RE12-10-7262	113	73.7 - 133.3	
244626002	RE12-10-7266	109	73.7 - 133.3	
244626002	RE12-10-7266	114	73.7 - 133.3	
244626003	RE12-10-7258	104	73.7 - 133.3	
244626003	RE12-10-7258	117	73.7 - 133.3	
244626004	RE12-10-7268	113	73.7 - 133.3	
244626004	RE12-10-7268	117	73.7 - 133.3	
244626005	RE12-10-7265	108	73.7 - 133.3	
244626005	RE12-10-7265	117	73.7 - 133.3	
244626006	RE12-10-7261	120	73.7 - 133.3	
244626006	RE12-10-7261	118	73.7 - 133.3	
244626007	RE12-10-7259	113	73.7 - 133.3	
244626007	RE12-10-7259	116	73.7 - 133.3	
244626008	RE12-10-7263	113	73.7 - 133.3	
244626008	RE12-10-7263	117	73.7 - 133.3	
244626009	RE12-10-7271	113	73.7 - 133.3	
244626009	RE12-10-7271	119	73.7 - 133.3	
244626010	RE12-10-7260	102	73.7 - 133.3	
244626010	RE12-10-7260	114	73.7 - 133.3	
244626011	RE12-10-7267	109	73.7 - 133.3	
244626011	RE12-10-7267	118	73.7 - 133.3	
244626012	RE12-10-7264	105	73.7 - 133.3	
244626012	RE12-10-7264	114	73.7 - 133.3	
244626013	RE12-10-7270	112	73.7 - 133.3	
244626013	RE12-10-7270	114	73.7 - 133.3	
244626014	RE12-10-7269	107	73.7 - 133.3	
244626014	RE12-10-7269	118	73.7 - 133.3	
244626015	RE12-10-7283	95.4	73.7 - 133.3	
244626015	RE12-10-7283	117	73.7 - 133.3	
244626016	RE12-10-7282	110	73.7 - 133.3	
244626016	RE12-10-7282	118	73.7 - 133.3	
1202015510	MB for batch 941663	108	73.7 - 133.3	
1202015510	MB for batch 941663	113	73.7 - 133.3	
1202015511	LCS for batch 941663	122	73.7 - 133.3	
1202015511	LCS for batch 941663	114	73.7 - 133.3	
1202015512	RE12-10-7262(244626001MS)	117	73.7 - 133.3	

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
1202015512	RE12-10-7262(244626001MS)	117	73.7 - 133.3	
1202015513	RE12-10-7262(244626001MSD)	118	73.7 - 133.3	
1202015513	RE12-10-7262(244626001MSD)	115	73.7 - 133.3	

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) 10-1225

Extract Batch Code: 941663

Date Extracted: 21-JAN-10

GEL LCS ID: 1202015511

GEL LCSDUP ID:

Analysis Date/Time: 30-JAN-10 18:06

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
Nitrobenzene	5000	5390	108					71.8 – 126
PETN	5000	5630	113					64.6 – 147
1,3,5-Trinitrobenzene	5000	4170	83.4					62.1 – 124
2,4-Dinitrotoluene	5000	6330	127					82.7 – 132
HMX	5000	5190	104					66.5 – 142
4-Amino-2,6-dinitrotoluene	5000	5520	110					85.6 – 133
2-Amino-4,6-dinitrotoluene	5000	5700	114					84.2 – 149
2,6-Dinitrotoluene	5000	5590	112					86.9 – 122
2,4,6-Trinitrotoluene	5000	5320	106					78.3 – 132
RDX	5000	5790	116					78.7 – 144
Tetryl	5000	2300	46.1					31.2 – 119
m-Dinitrobenzene	5000	5290	106					80.9 – 127
m-Nitrotoluene	5000	5140	103					71.9 – 126
o-Nitrotoluene	5000	5640	113					75 – 123
p-Nitrotoluene	5000	5940	119					73.7 – 124

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) 10-1225

Extract Batch Code: 941663

Date Extracted: 21-JAN-10

GEL LCS ID: 1202015511

GEL LCSDUP ID:

Analysis Date/Time: 26-JAN-10 04:52

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	5440	109					64.8 - 128
2,6-Diamino-4-nitrotoluene	5000	5260	105					69.6 - 133
3,5-Dinitroaniline	5000	5740	115					77.3 - 123
TATB	5000	7550	151					46.8 - 166
tris(o-cresyl) phosphate	5000	5090	102					84.3 - 120

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: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Extract Batch Code: 941663

Date Extracted: 21-JAN-10

GEL Spike ID: 1202015512

GEL SpikeDup ID: 1202015513

Analysis Date/Time: 30-JAN-10 19:05

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
1,3,5-Trinitrobenzene	5000	0	4580	91.7	4410	88.3	3.76	30	70.7 - 130
2,4,6-Trinitrotoluene	5000	0	5290	106	5270	105	.367	30	83.4 - 138
2,4-Dinitrotoluene	5000	0	6120	122	5760	115	6.08	30	79.1 - 137
2,6-Dinitrotoluene	5000	0	5470	109	5260	105	3.93	30	85.4 - 125
2-Amino-4,6-dinitrotoluene	5000	0	5670	114	5630	113	.878	30	77.4 - 154
4-Amino-2,6-dinitrotoluene	5000	0	5200	104	5170	103	.452	30	77.3 - 140
HMX	5000	0	5820	116	5060	101	14.1	30	66.7 - 144
Nitrobenzene	5000	0	5380	108	5240	105	2.6	30	70.4 - 129
PETN	5000	0	5660	113	5270	105	7.11	30	61.9 - 153
RDX	5000	0	6160	123	5490	110	11.4	30	73 - 140
Tetryl	5000	0	4430	88.6	2570	51.4	53.1 *	30	46.8 - 138
m-Dinitrobenzene	5000	0	4900	97.9	5090	102	3.8	30	83.5 - 126
m-Nitrotoluene	5000	0	5240	105	5500	110	4.81	30	68.6 - 135
o-Nitrotoluene	5000	0	5480	110	5220	104	4.87	30	71.2 - 131
p-Nitrotoluene	5000	0	5490	110	5360	107	2.3	30	69.3 - 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: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Extract Batch Code: 241663

Date Extracted:21-JAN-10

GEL Spike ID: 1202015512

GEL SpikeDup ID:1202015513

Analysis Date/Time: 26-JAN-10 05:23

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	4890	97.8	4870	97.4	.41	30	51.6 - 127
2,6-Diamino-4-nitrotoluene	5000	0	4580	91.6	5140	103	11.5	30	58.9 - 135
3,5-Dinitroaniline	5000	0	5580	112	5590	112	.179	30	72.8 - 125
tris(o-cresyl) phosphate	5000	0	5080	102	5050	101	.592	30	79.1 - 124
TATB	5000	0	6010	120	6320	126	5.03	30	43.9 - 166

#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): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 30-JAN-10 11:42

GEL Data File: EXP0130001a

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	560.476
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	539.001
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\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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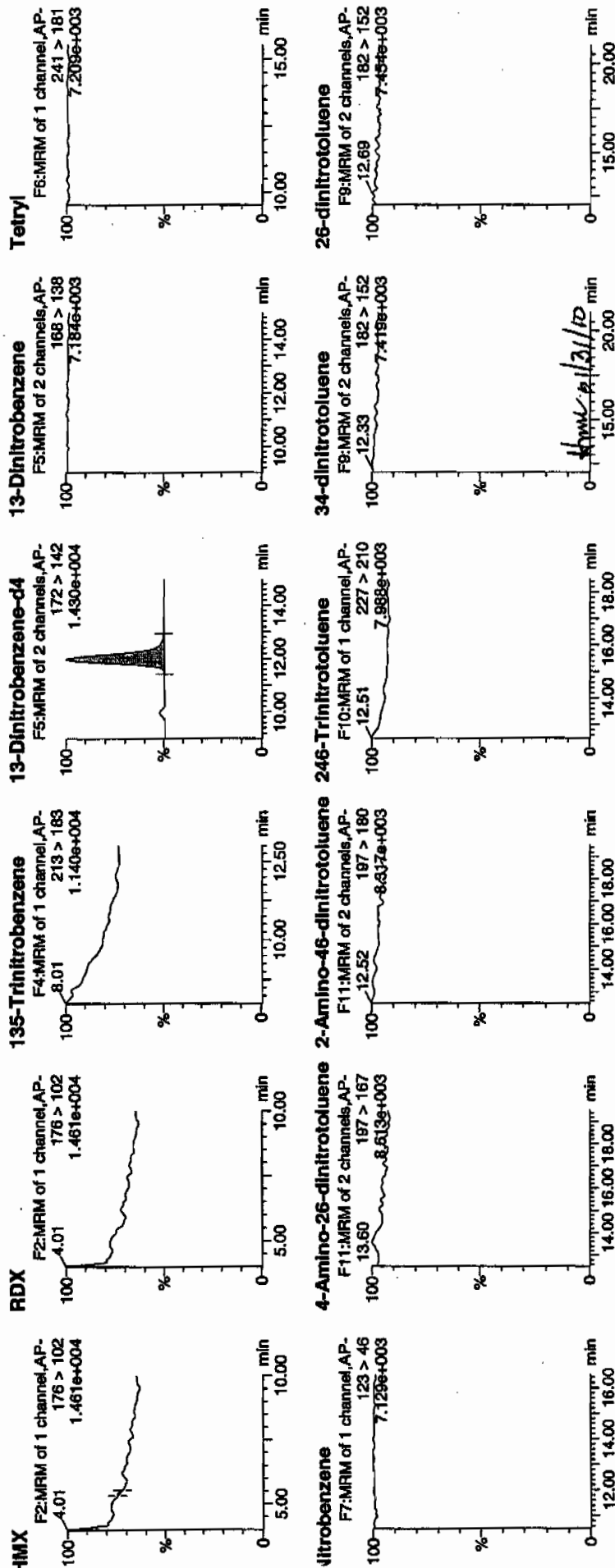
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Date: 30-Jan-2010

Time: 11:42:23

ID: XIBLK01

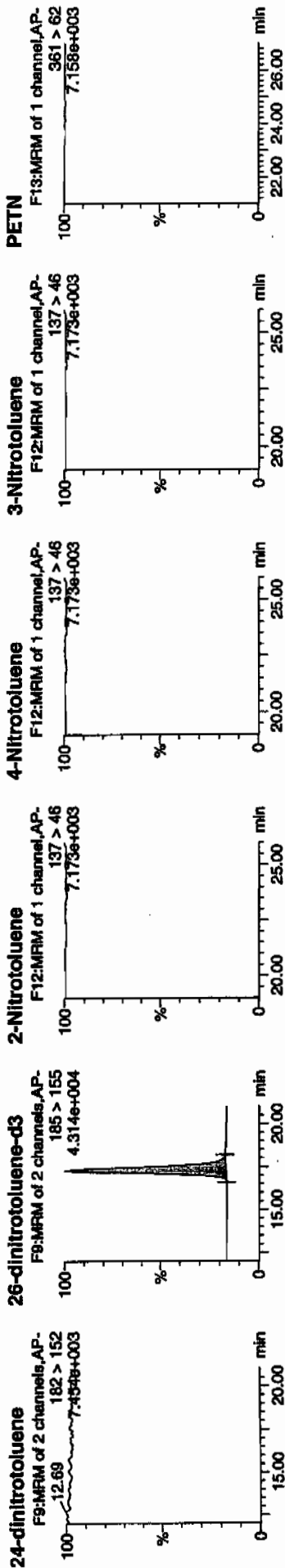
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Printed: Sun Jan 31 11:57:34 2010, Page 2 of 77

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSL\YNN\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



NAME	AREA	STATUS	MRM	MOI	MASS	MM	31-Jan-10	11:36:39
XIBLK01	176 > 102	2836.002						
XIBLK01	RDX	2836.002						
XIBLK01	135-Trinitrobenzene	2836.002						
XIBLK01	13-Dinitrobenzene-d4	2836.002						
XIBLK01	13-Dinitrobenzene	2836.002						
XIBLK01	Tetryl	2836.002						
XIBLK01	Nitrobenzene	2836.002						
XIBLK01	4-Amino-26-dinitrotoluene	15345.441						
XIBLK01	2-Amino-46-dinitrotoluene	15345.441						
XIBLK01	246-Trinitrotoluene	15345.441						
XIBLK01	34-dinitrotoluene	15345.441						
XIBLK01	26-dinitrotoluene	15345.441						
XIBLK01	24-dinitrotoluene	15345.441						
XIBLK01	26-dinitrotoluene-d3	15345.441						
XIBLK01	2-Nitrotoluene	15345.441						
XIBLK01	4-Nitrotoluene	15345.441						
XIBLK01	3-Nitrotoluene	15345.441						
XIBLK01	PETN	15345.441						
		17.29	15345.441					
		185 > 155						
		137 > 46						
		137 > 46						
		137 > 46						
		361 > 62						
		2836.002	2836.002	bb				
		560.4760	112.1	12.1	440.9			
		15345.441	15345.441	bb				
		539.0013	107.8	7.8	942.3			

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 30-JAN-10 12:12

GEL Data File: EXP0130002a

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	506.079
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	555.642
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
 3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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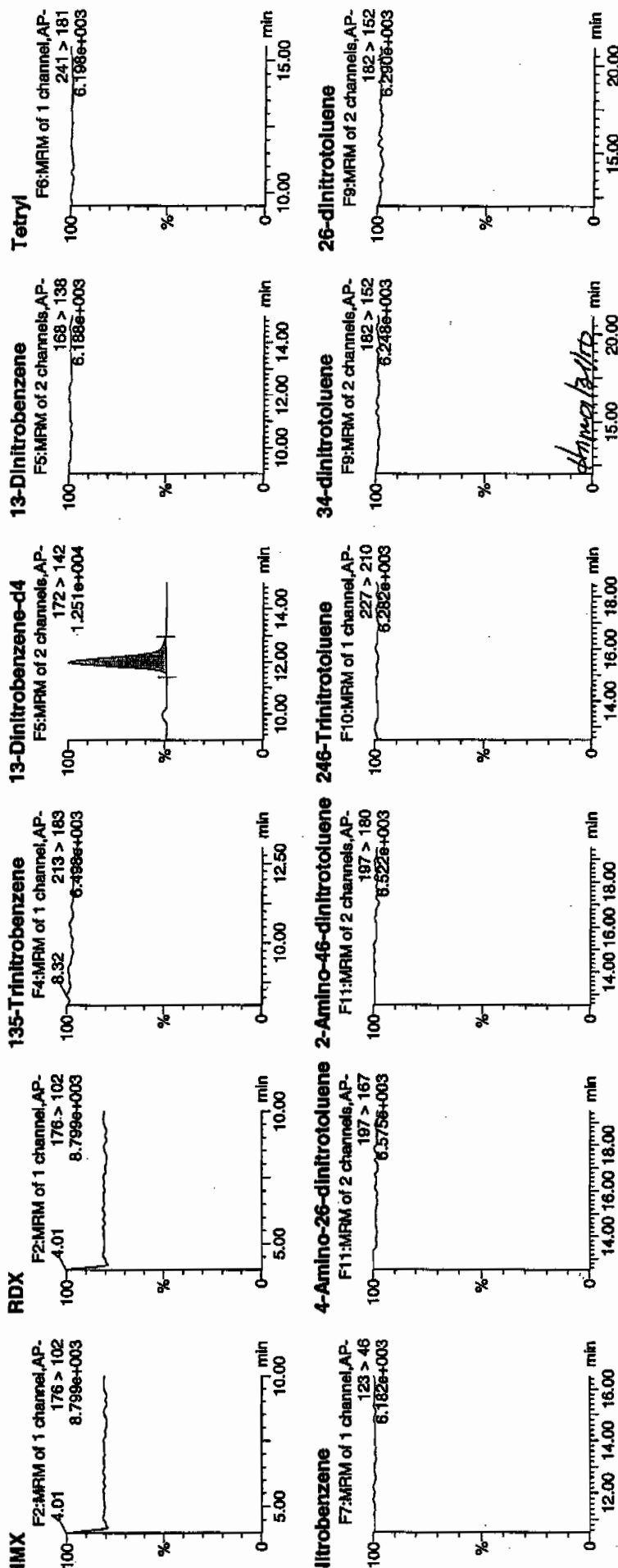
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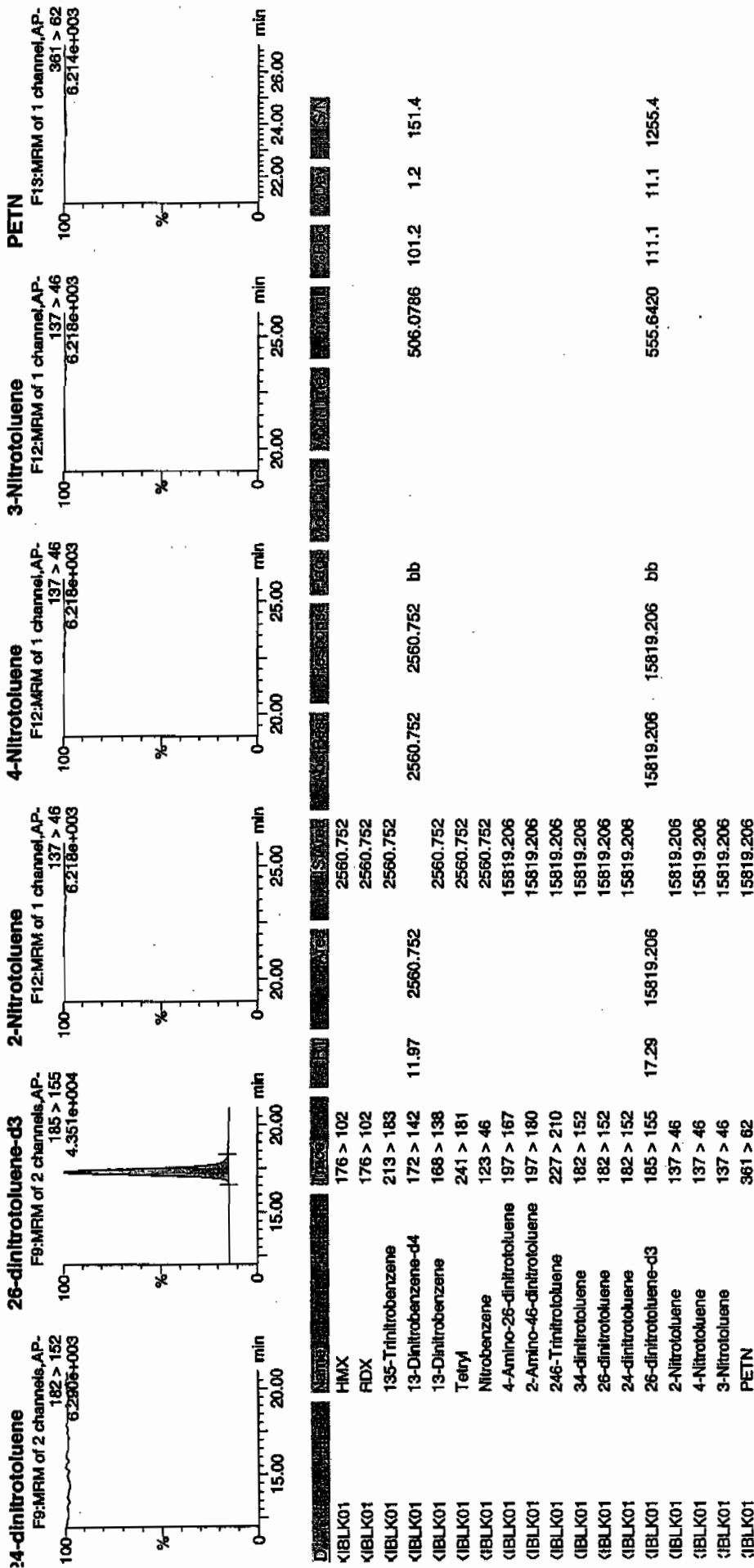
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1/31/10



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Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 10:28

GEL Data File: EXS01250001.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

See 1/27/10

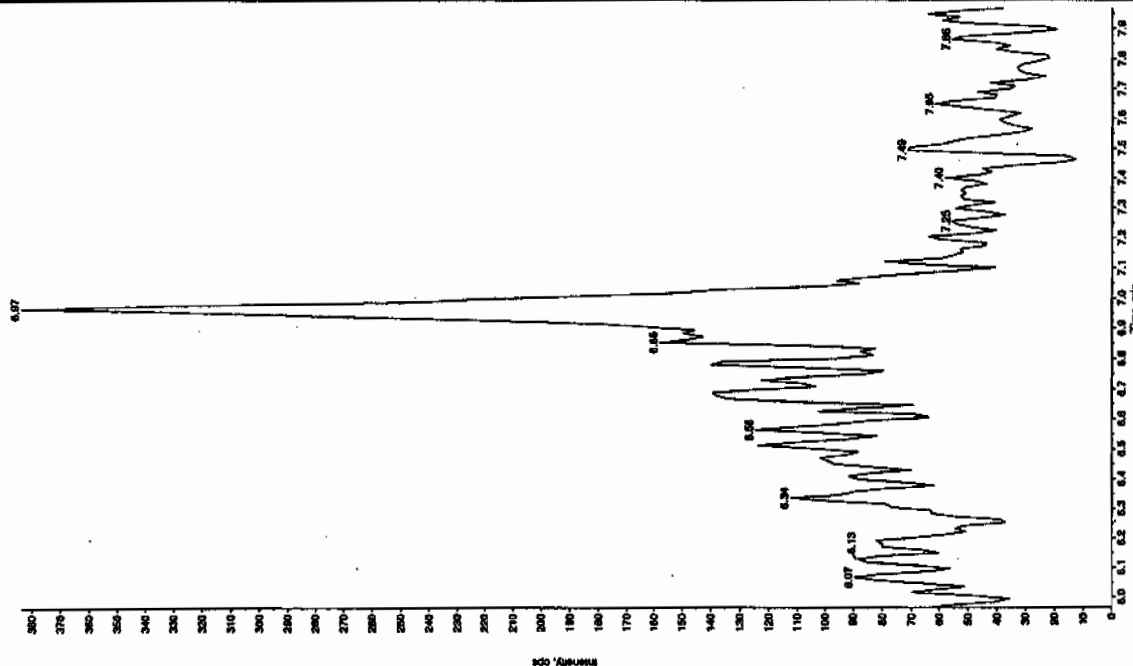
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 Peak Name: "35-Chlorophyll" Mass(es): "162.048.0 amu"
 Comment: "LMSERP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:28:30 AM
 Modified: No



Sample Name: "281X01" Sample ID: "TILER" File: "EX01260001.wdf"
 Peak Name: "35-Chlorophyll" Mass(es): "257.2204.8 amu"
 Comment: "LMSERP_B" Annotation: "1"

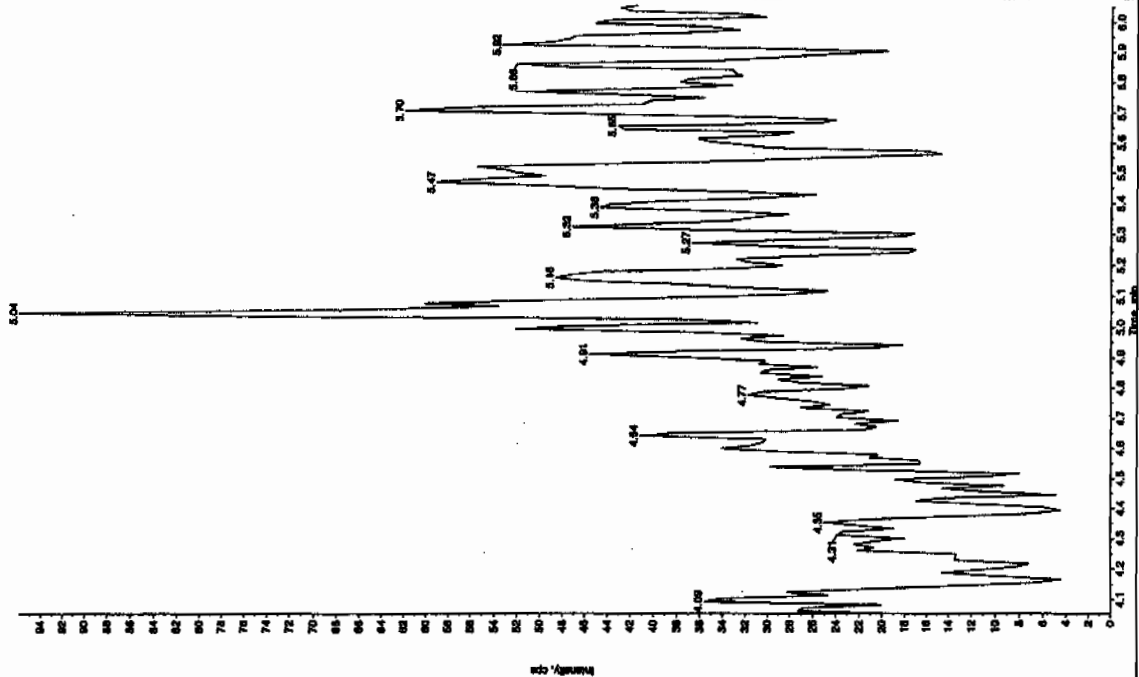
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 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:28:30 AM
 Modified: No



See 1/27/10

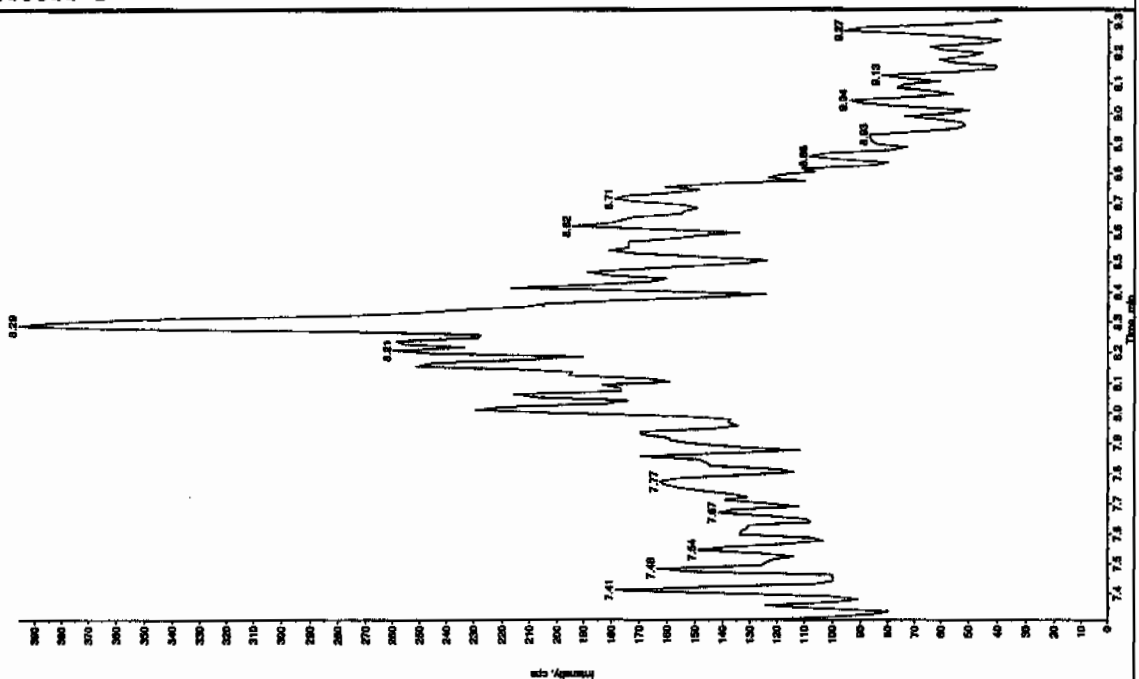
Sample Name: "XBL001" Sample ID: "111ER" File: "EXS01250001.wit"
 Peak Name: "26-Dinitro-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMS001_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1.75/2010 ng/mL
 Acq. Time: 10:28:30 AM
 Modified: No

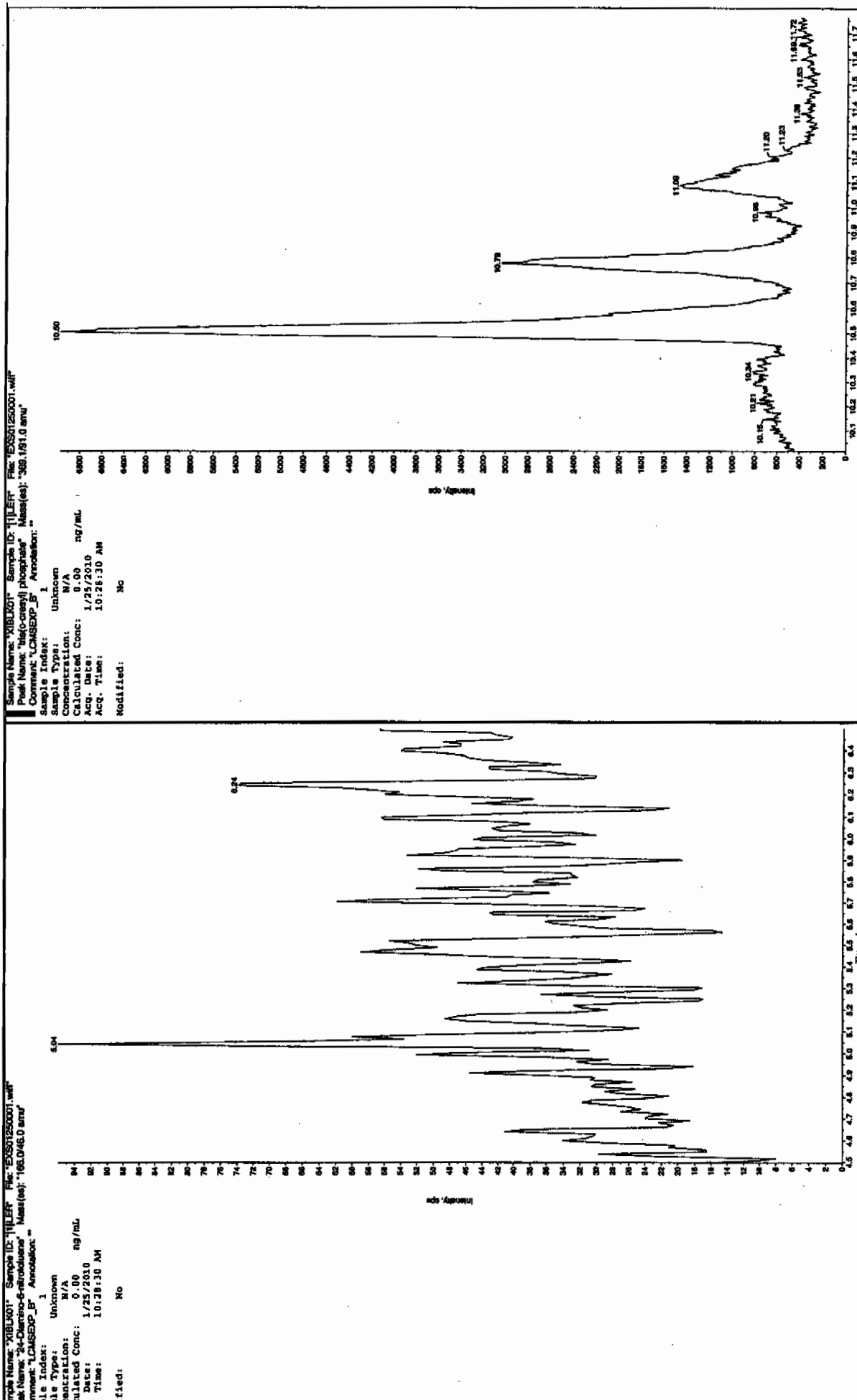


Sample Name: "XBL001" Sample ID: "111ER" File: "EXS01250001.wit"
 Peak Name: "24-Dinitrotoluene" Mass(es): "182.1751.9 amu"
 Comment: "LCMS001_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1.75/2010 ng/mL
 Acq. Time: 10:28:30 AM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 10:46

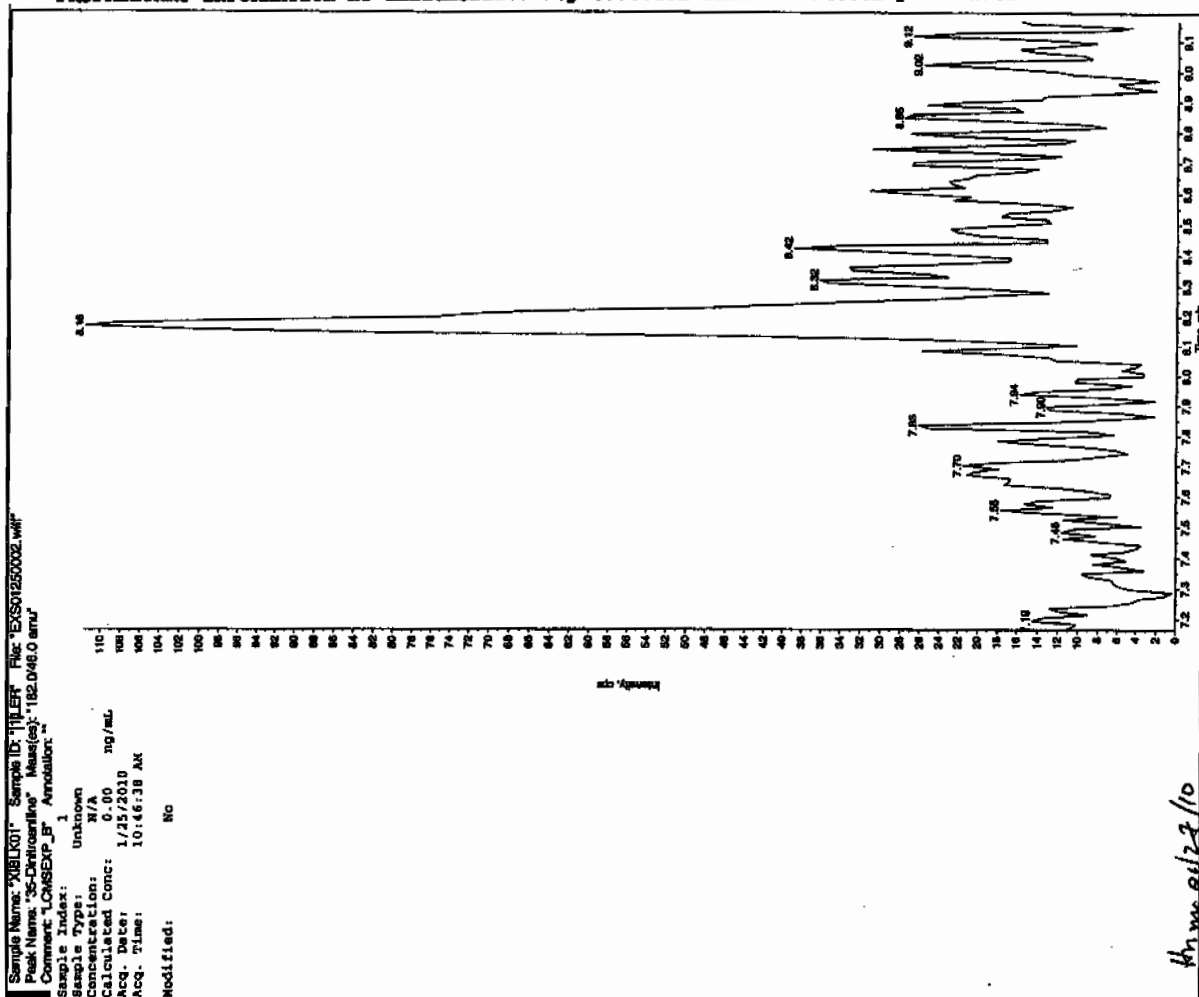
GEL Data File: EXS01250002.wiff

Instrument ID: LCMSMS

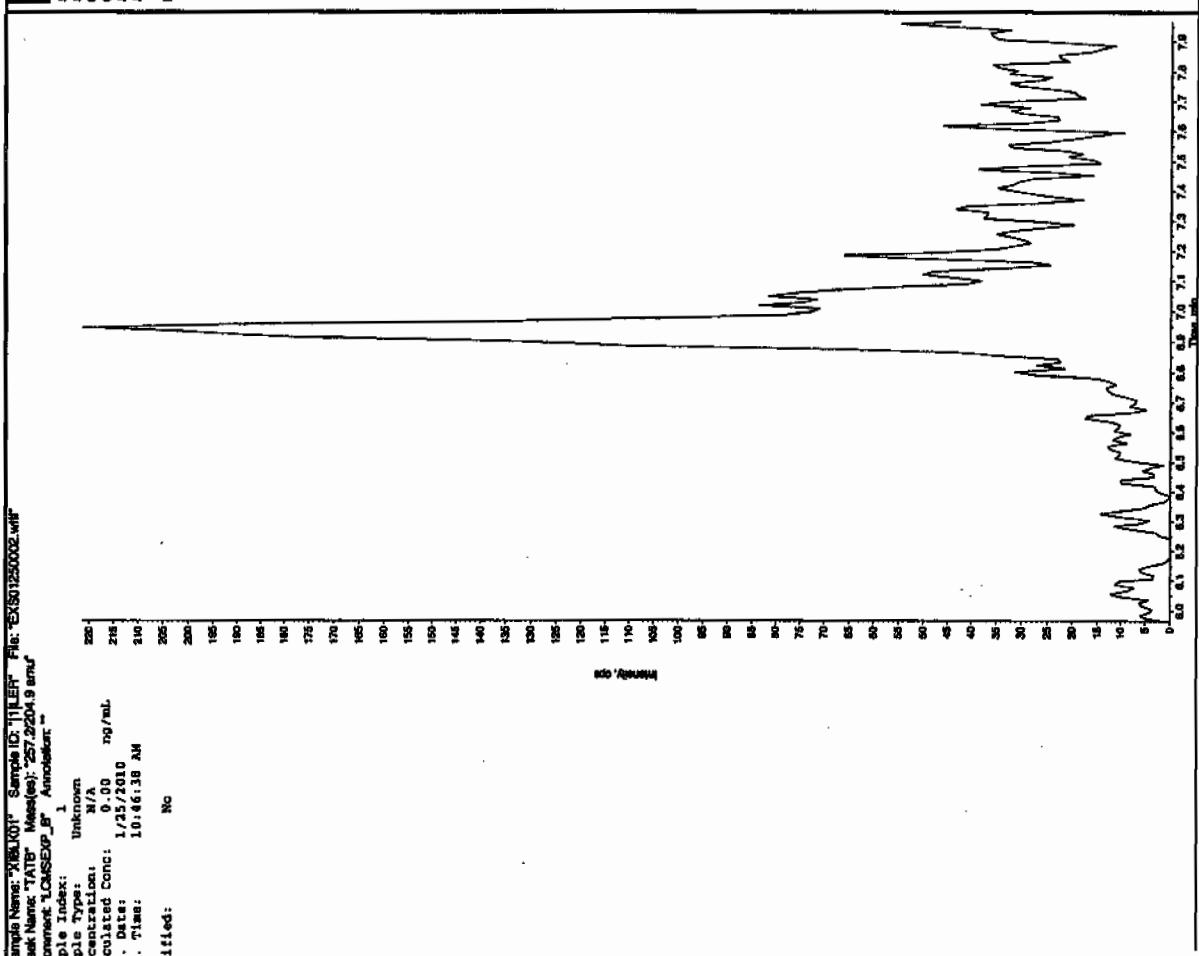
Column: Phenomenex Ultracarb 5u ODS(20)

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

See 1/27/10



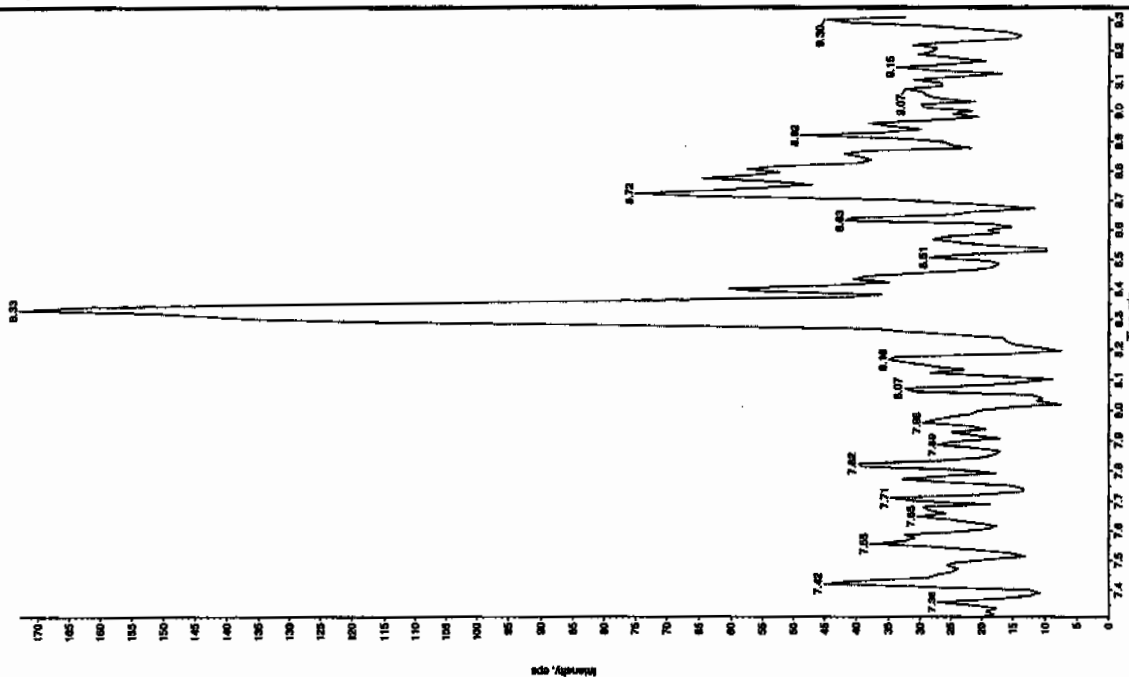
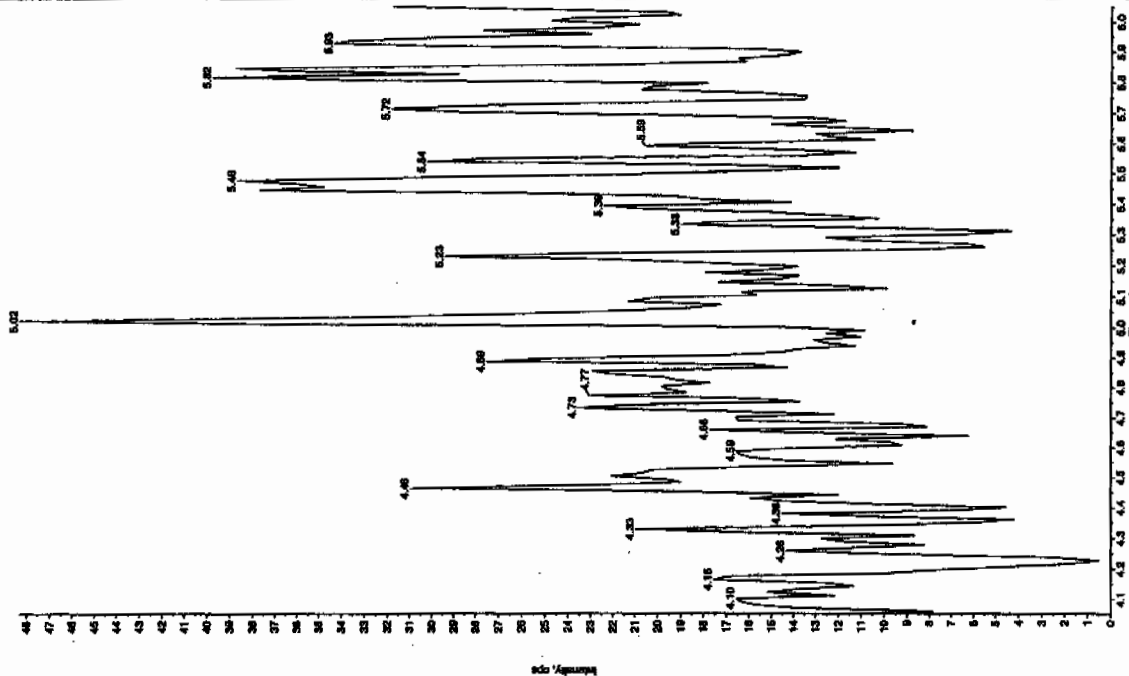
4/11/2010



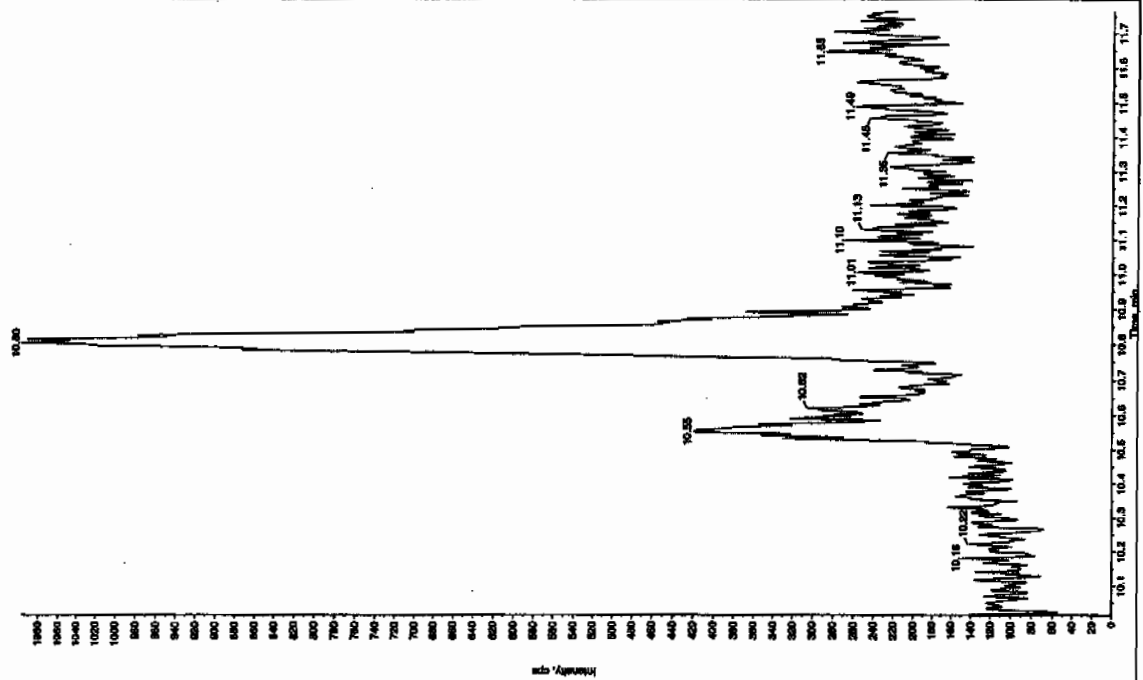
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: 'XBL101' Sample ID: '11111' File: 'EXS01250022.wif'
 Peak Name: '34-Dinitrofluorene' Mass(es): '166.046.0 amu'
 Concentration: 'LCMS0P_B' Annotation: '1'
 Sample Index: '1'
 Sample Type: 'Unknown'
 Concentration: 'N/A'
 Calculated Conc: '0.00 ng/mL'
 Acq. Date: '1/25/2010'
 Acq. Time: '10:46:38 AM'
 Modified: 'No'

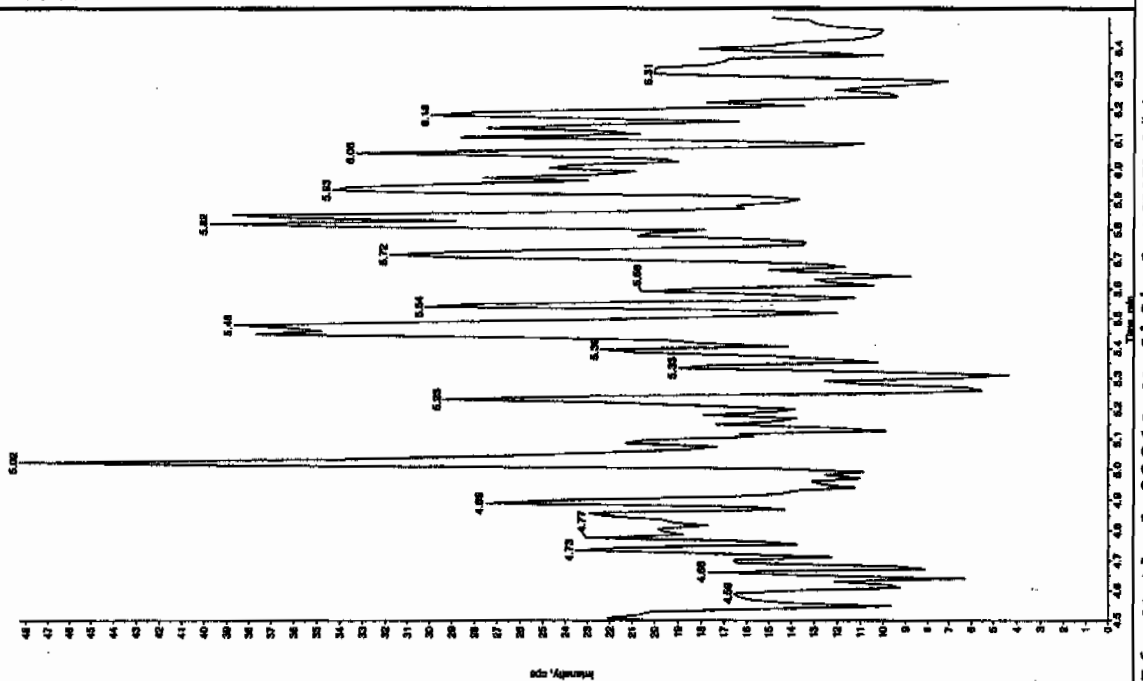
Sample Name: 'XBL101' Sample ID: '11111' File: 'EXS01250022.wif'
 Peak Name: '34-Dinitrofluorene' Mass(es): '162.1751.9 amu'
 Concentration: 'LCMS0P_B' Annotation: '1'
 Sample Index: '1'
 Sample Type: 'Unknown'
 Concentration: 'N/A'
 Calculated Conc: '0.00 ng/mL'
 Acq. Date: '1/25/2010'
 Acq. Time: '10:46:38 AM'
 Modified: 'No'



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name:	24-OXO-DHEA	Sample ID:	15600002
File:	15600002	File:	15600002
Mass (amu):	156.046.9	Mass (amu):	156.046.9
Annotation:	1	Annotation:	1
Index:	1	Index:	1
Unknown:	Unknown	Unknown:	Unknown
Concentration:	N/A	Concentration:	N/A
Calculated Conc:	1.25/20.0	Calculated Conc:	1.25/20.0
Time:	10:46:38 AM	Time:	10:46:38 AM
Fired:	No	Fired:	No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 30-JAN-10 15:38

GEL Data File: EXP0130009a

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	538.349
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	553.342
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\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130009a

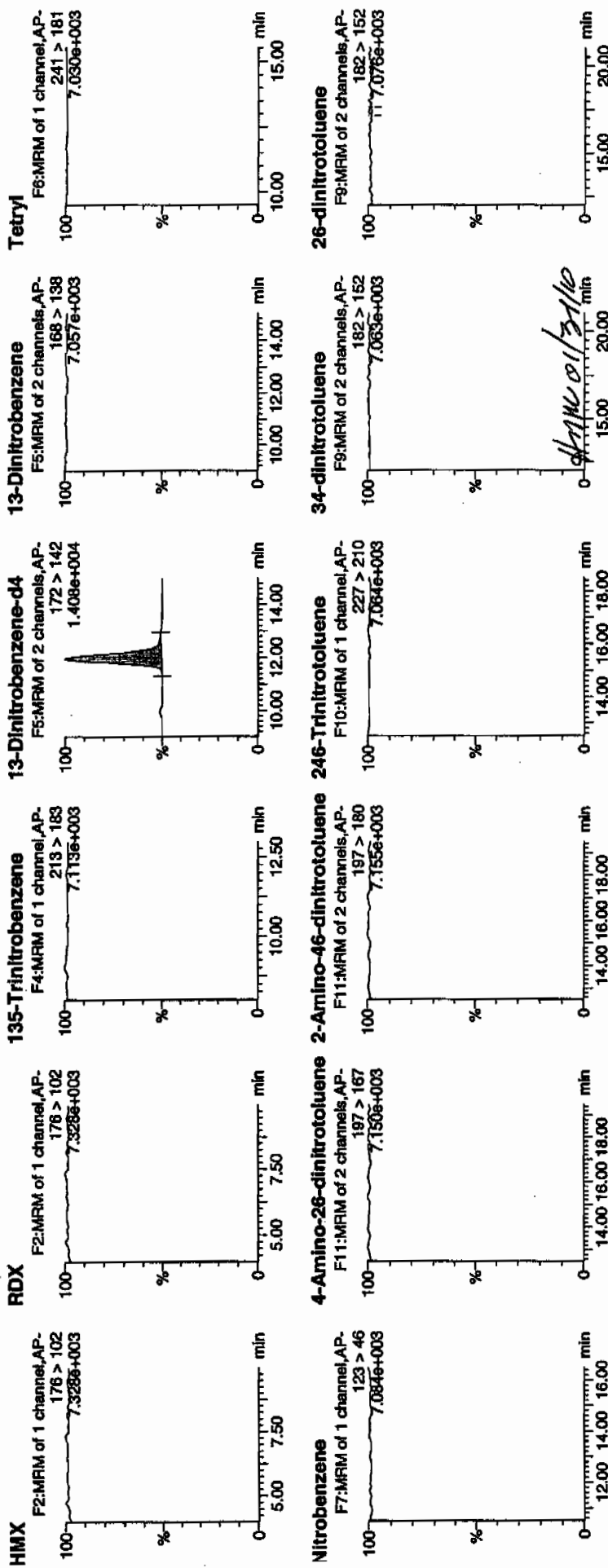
Date: 30-Jan-2010

Time: 15:38:44

ID: XIBLK02

Vial: 1:1,A

1/31/10

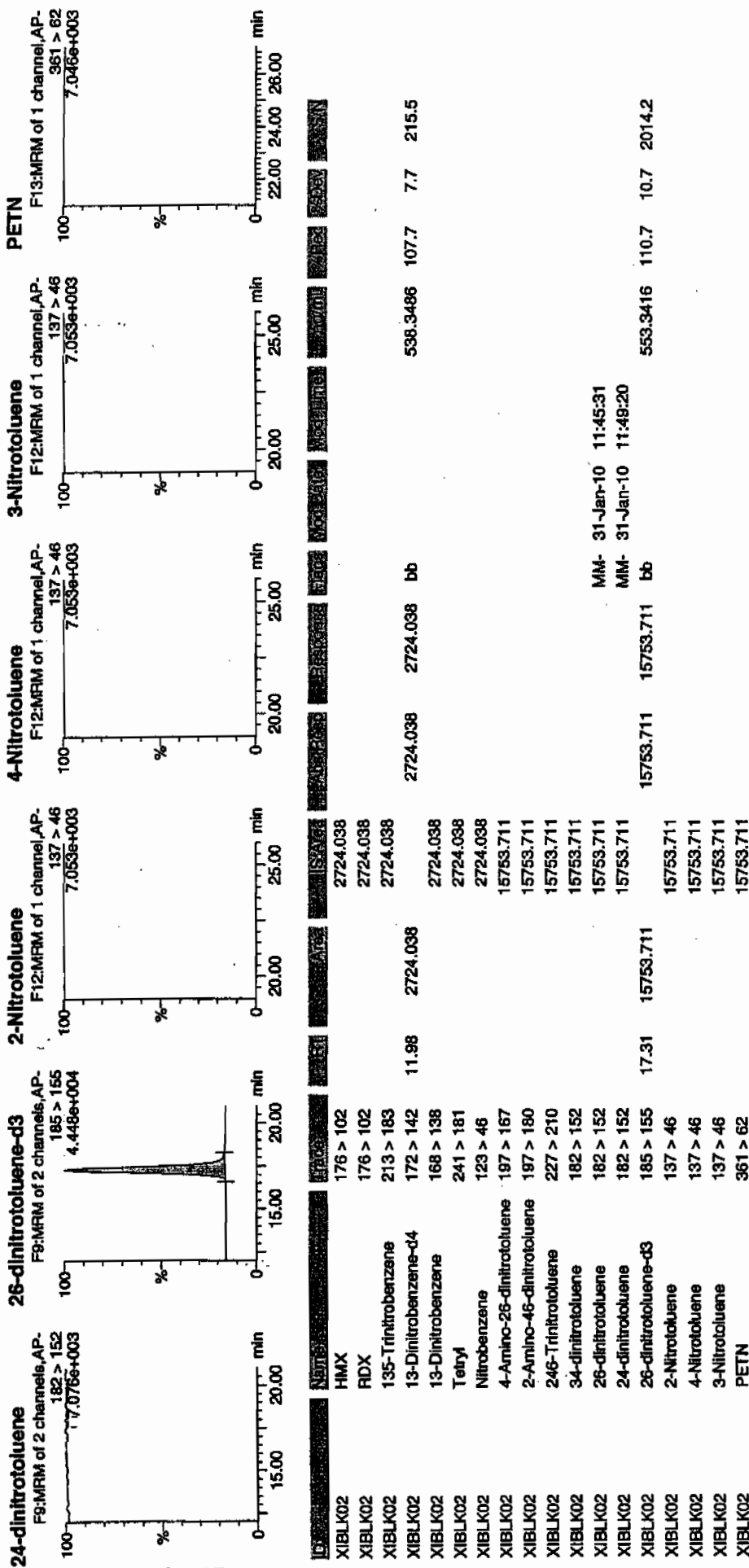


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Jan 31 11:57:34 2010, Page 18 of 77

Dataset: C:\MASSLYNX\New_Exp\PROV013010expA.qld, Time: Sun Jan 31 11:56:40 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 30-JAN-10 16:37

GEL Data File: EXP0130011a

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	524.847
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	505.769
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\013010expA.qtd, Time: Sun Jan 31 11:56:40 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0130011a

Date: 30-Jan-2010

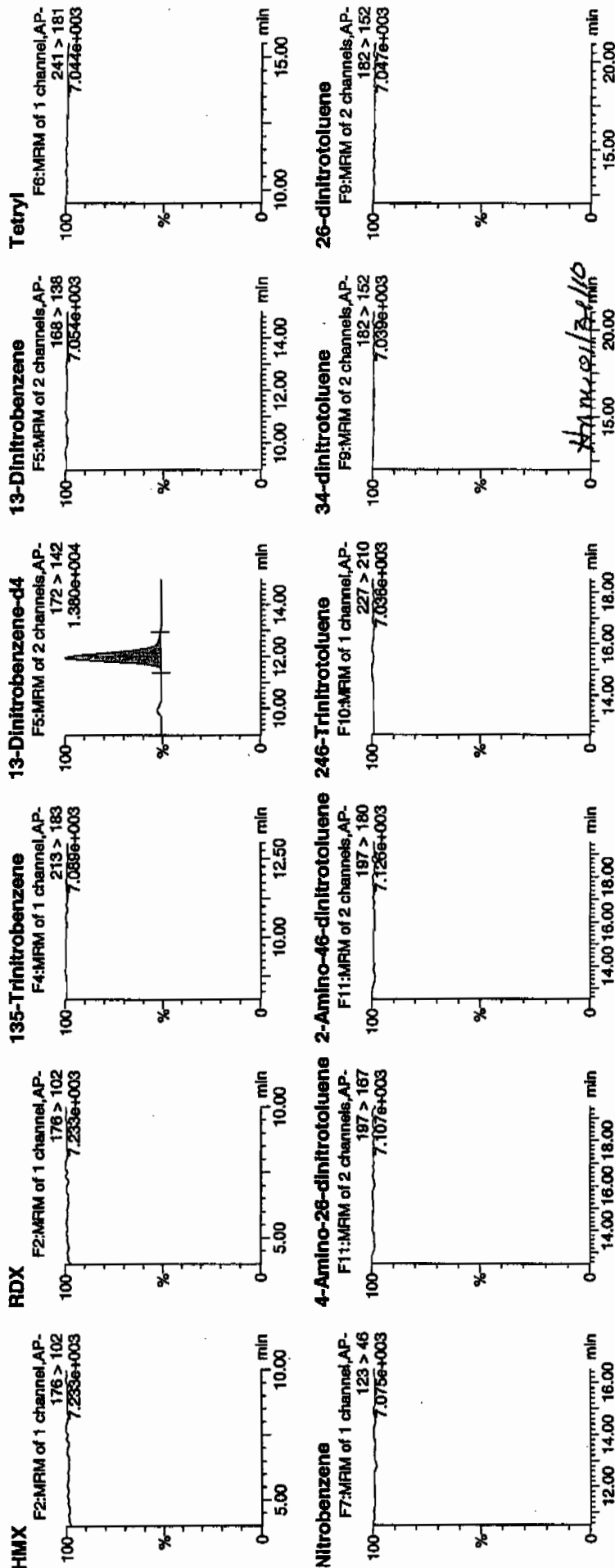
Time: 16:37:41

ID: XIBLK03

Vial: 1:1,A

1/31/10

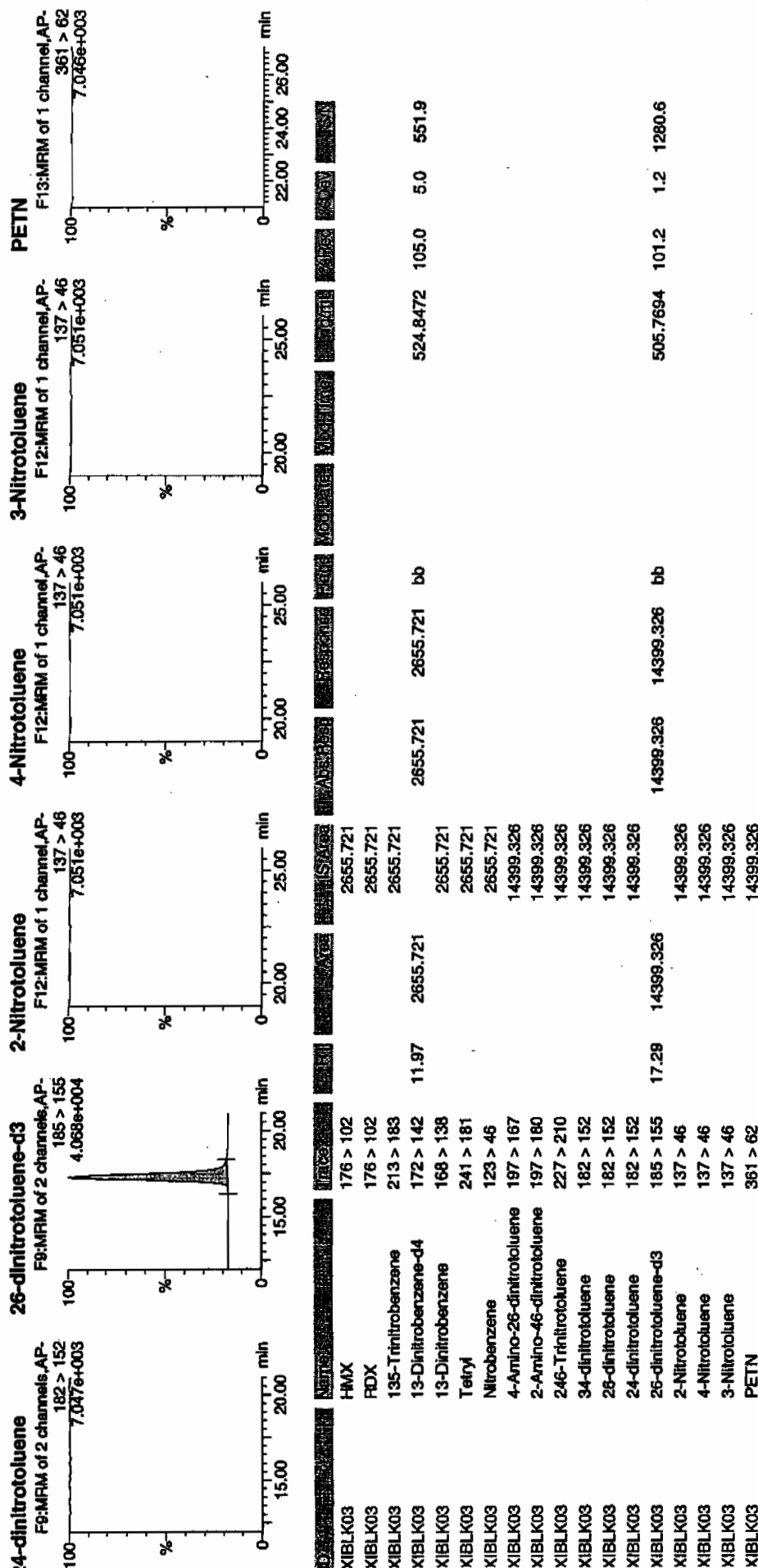
Page 765 of 1227



Printed: Sun Jan 31 11:57:34 2010, Page 22 of 77

Quantify Sample Report
JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qtd, Time: Sun Jan 31 11:56:40 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 30-JAN-10 23:01

GEL Data File: EXP0130024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	553.135
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	631.644
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
SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130024a

Date: 30-Jan-2010

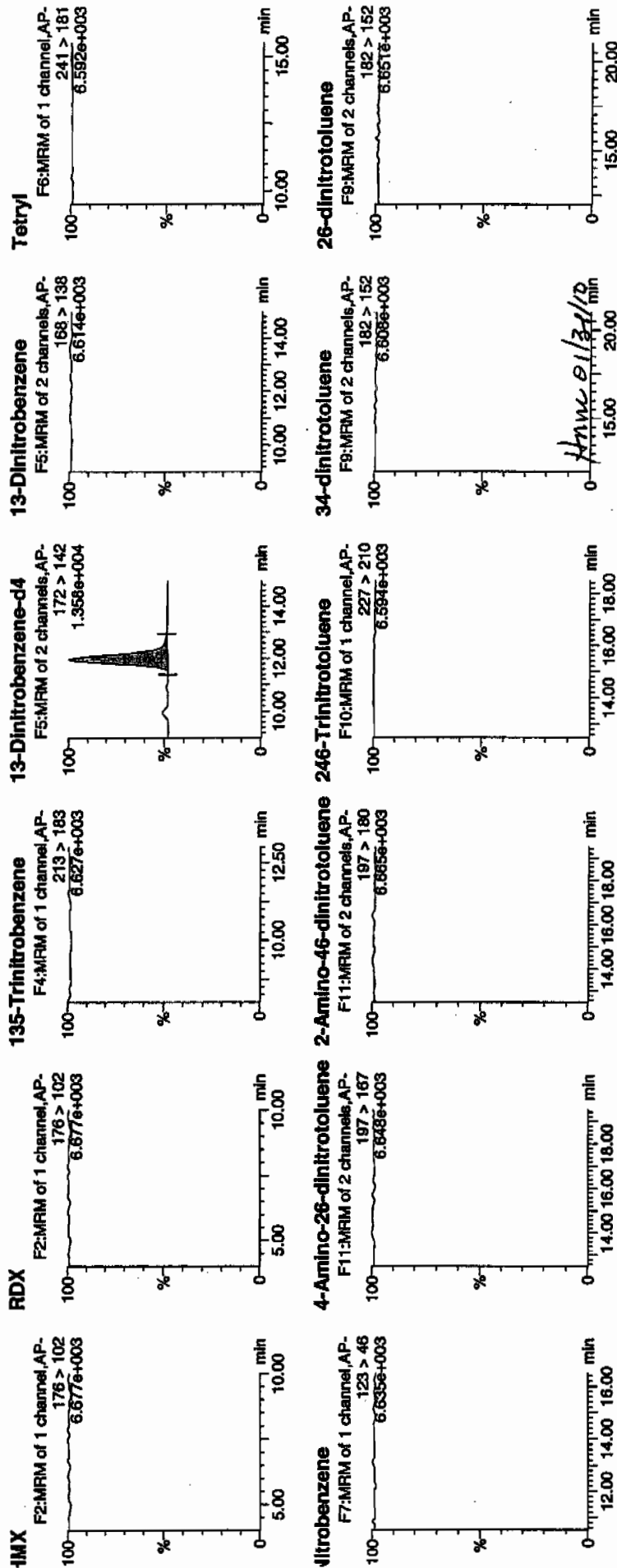
Time: 23:01:17

D: XIBLK04

File: 1:1,A

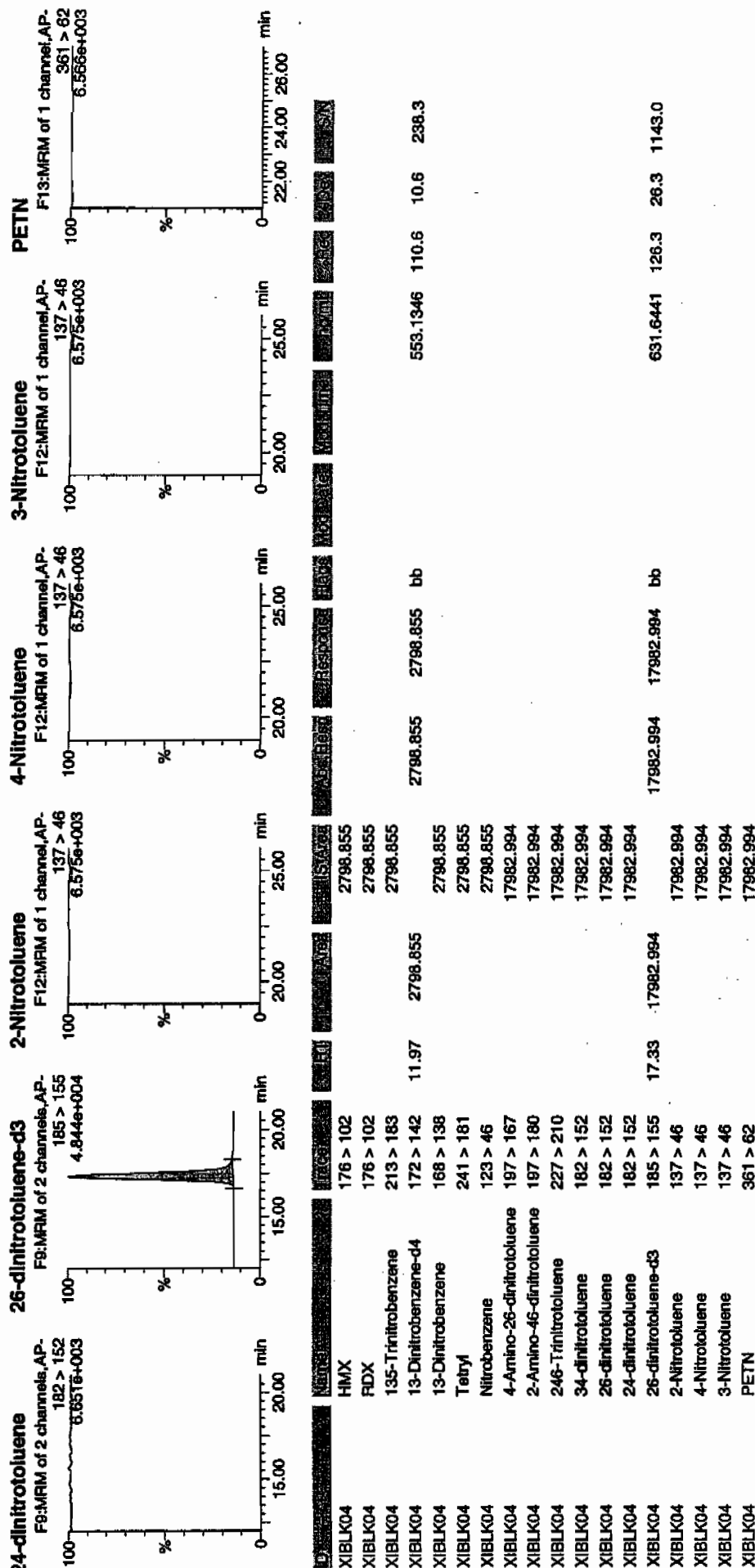
1/31/10

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Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PROV013010expA.qtd, Time: Sun Jan 31 11:56:40 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 31-JAN-10 05:24

GEL Data File: EXP0130037a

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	580.937
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	593.69
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Sun Jan 31 11:57:34 2010, Page 73 of 77

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130037a

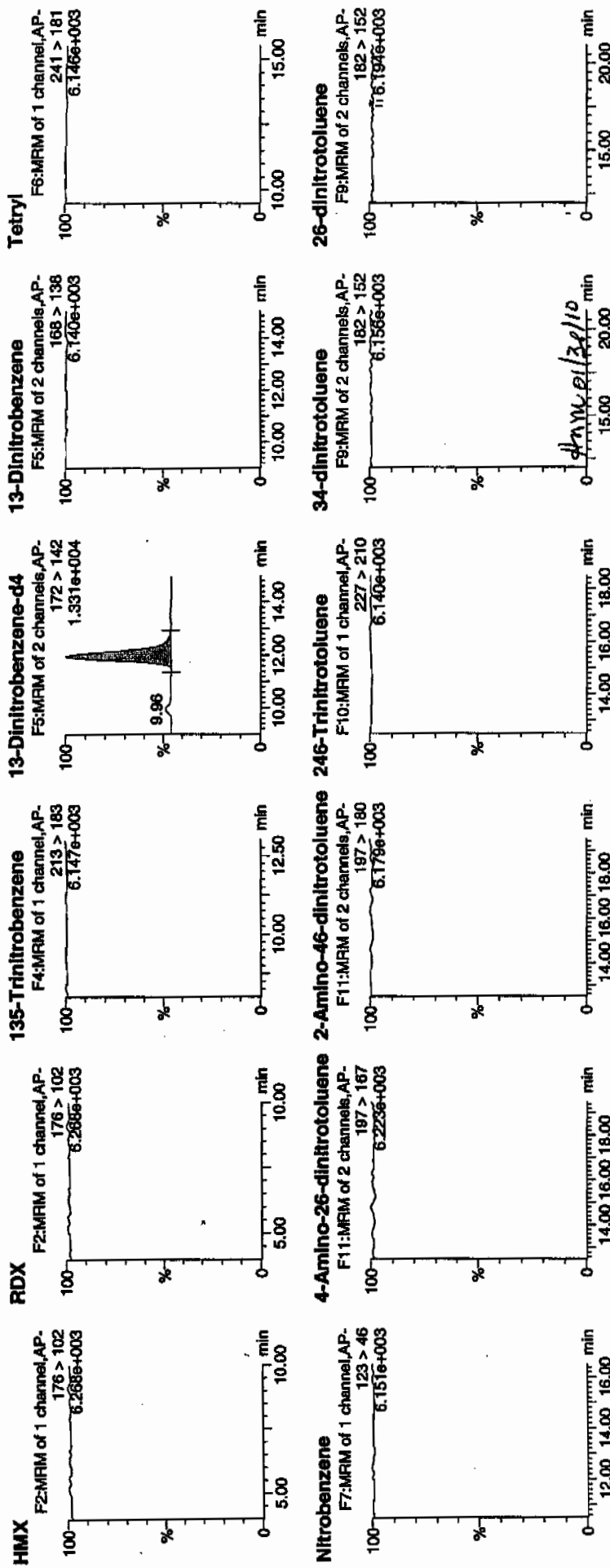
Date: 31-Jan-2010

Time: 05:24:58

ID: XIBLK05

Vial: 1:1,A

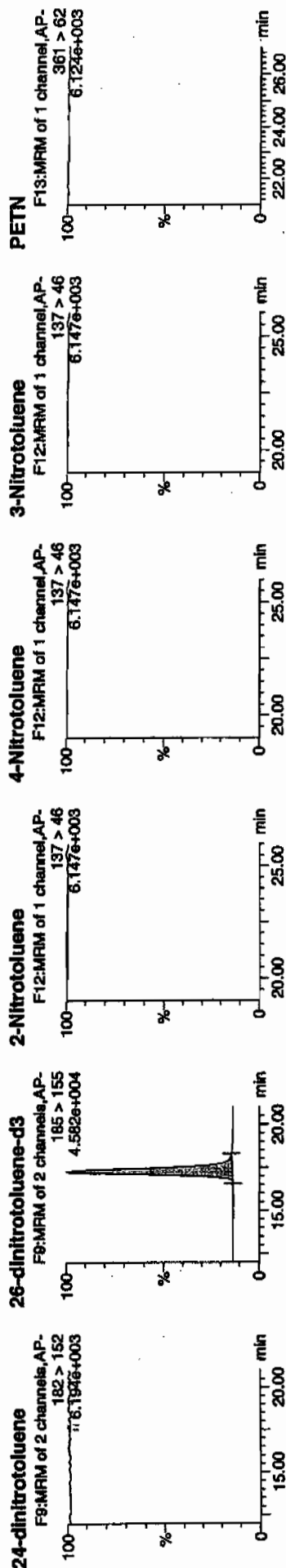
1/31/10



Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 25-JAN-10 12:54

GEL Data File: EXS01250010.wiff

Instrument ID: LCMSMS

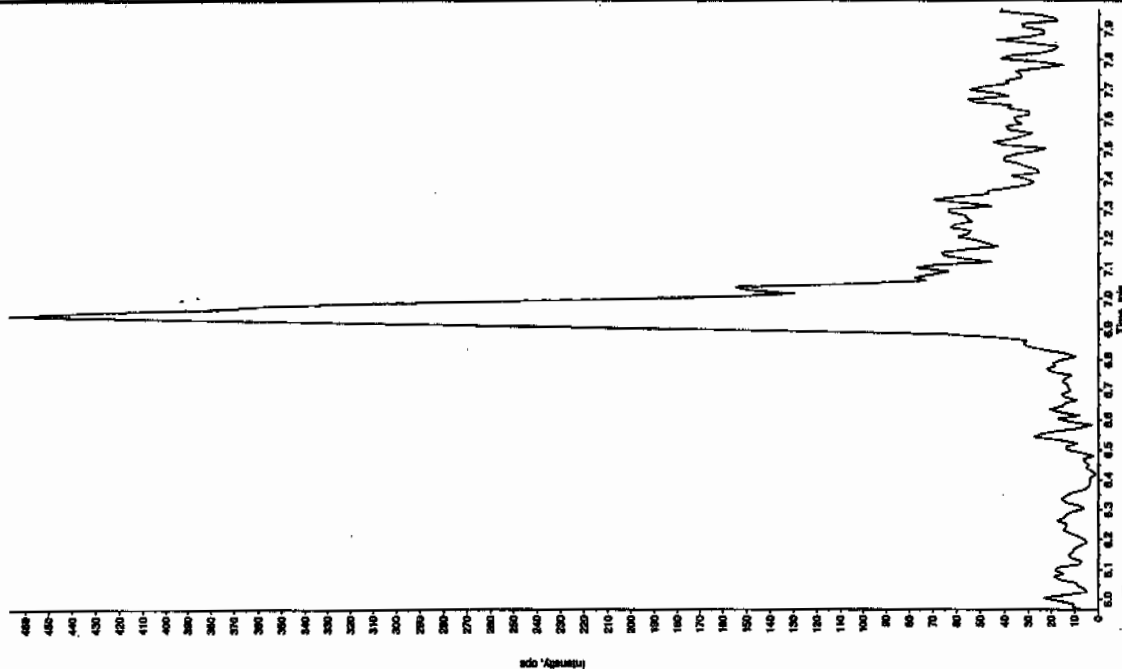
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.7
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 112710

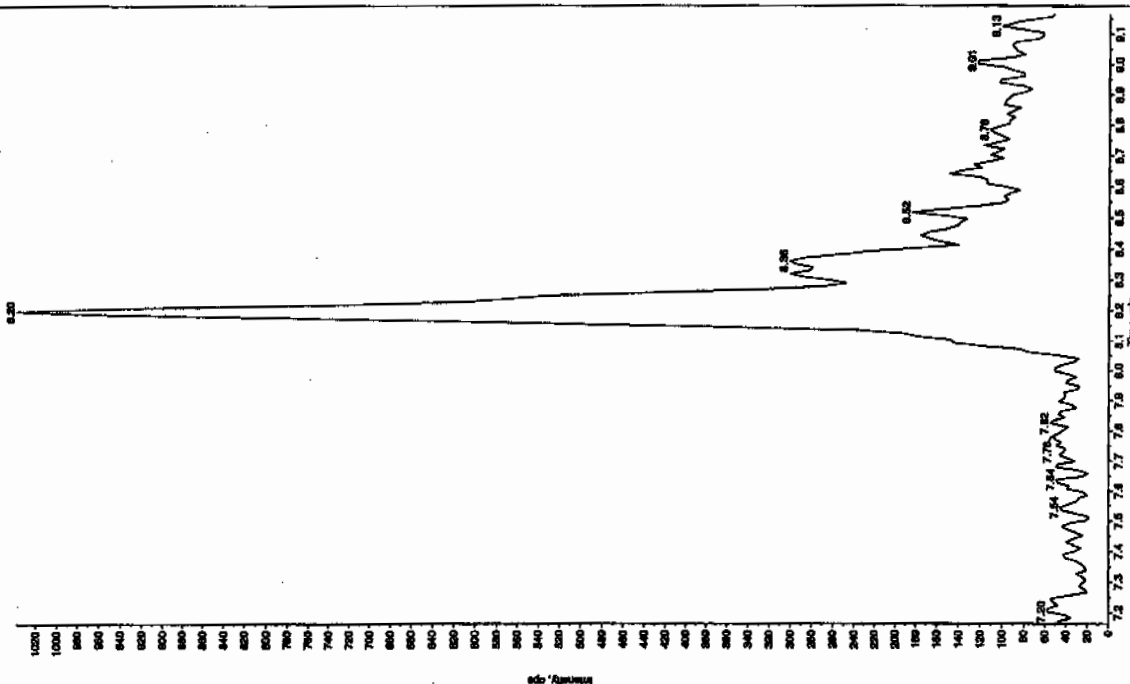
Sample Name: "XIBL002" Sample ID: "111ER" File: "EX001250010.wif"
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCMS EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/25/2010
 Acq. Date: 12/24/10 PM
 Acq. Time: 12:54:10 PM
 Modified: NO



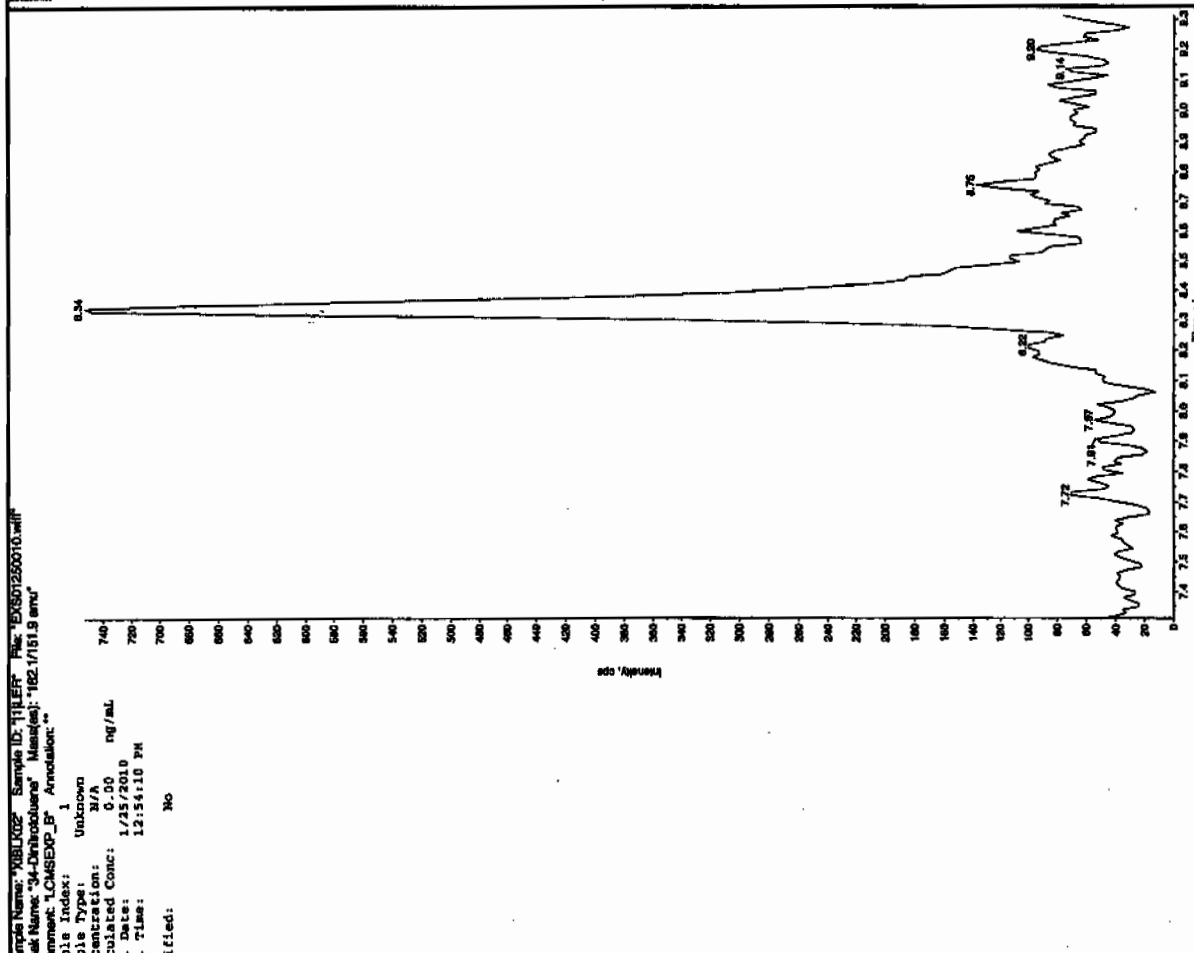
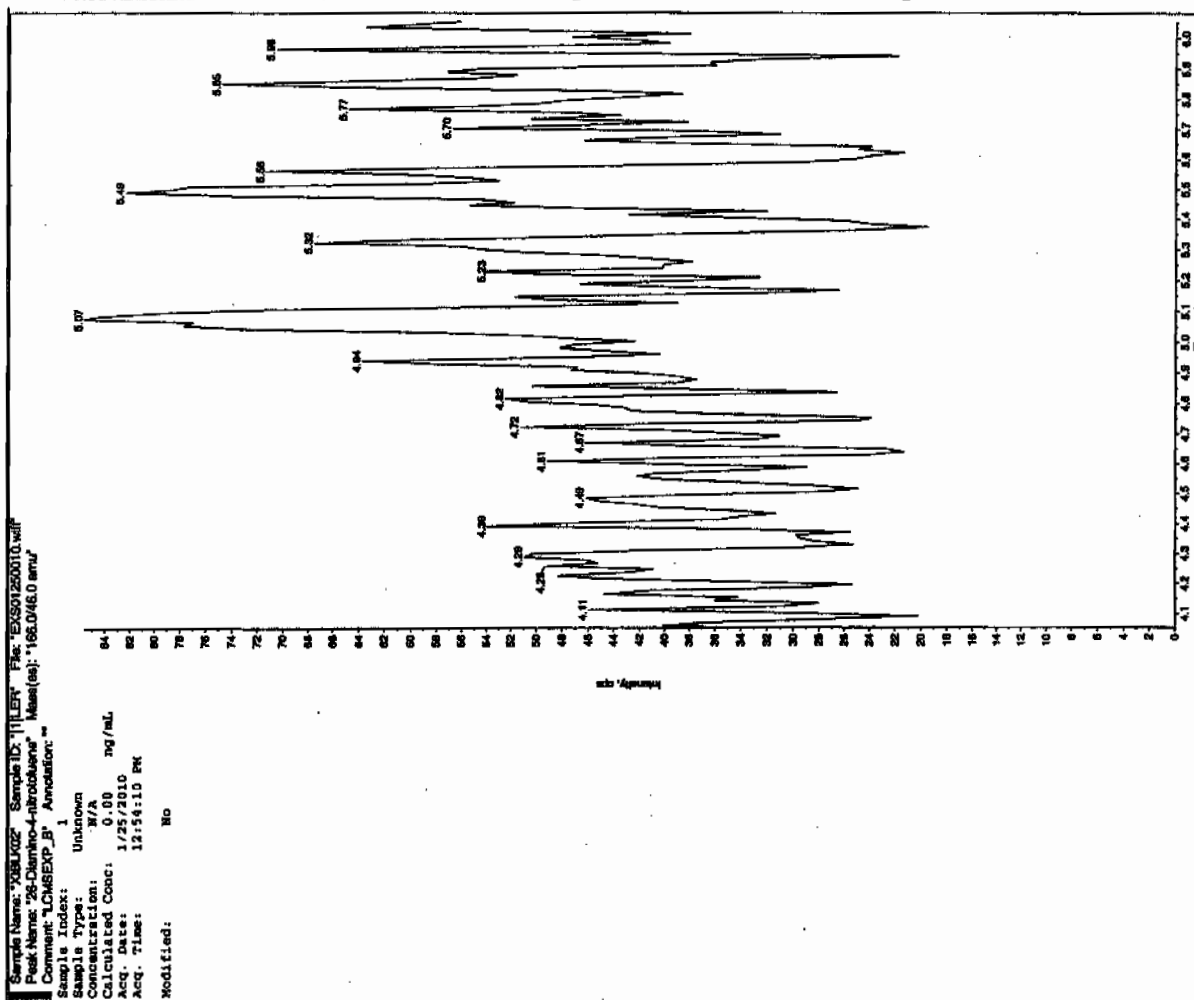
Sample Name: "XIBL002" Sample ID: "111ER" File: "EX001250010.wif"
 Peak Name: "3S-Diethanolamine" Mass(es): "182.0/46.0 amu"
 Comment: "LCMS EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/25/2010
 Acq. Date: 12/24/10 PM
 Acq. Time: 12:54:10 PM
 Modified: NO

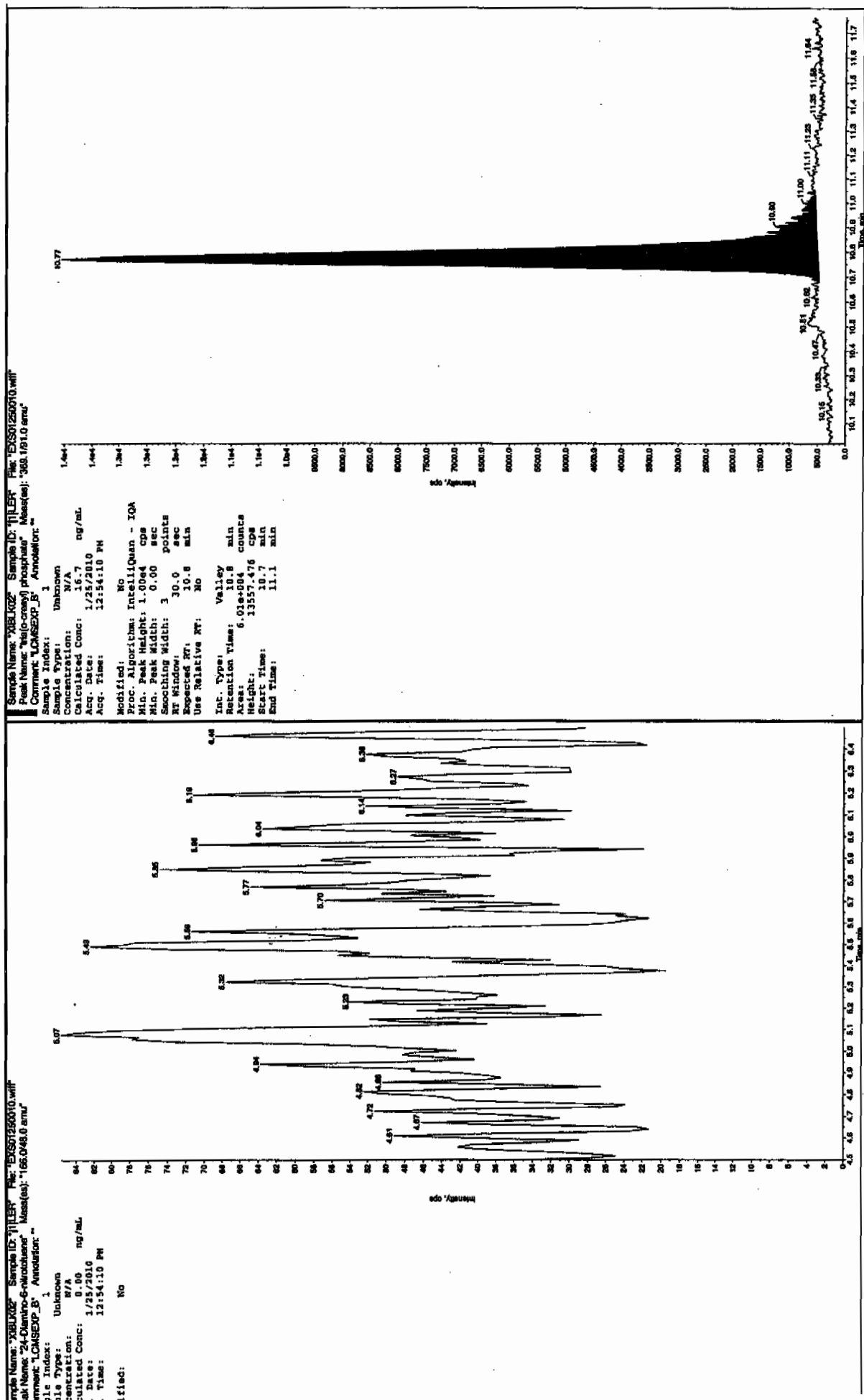


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

See 01/27/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 25-JAN-10 13:25

GEL Data File: EXS01250012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Ken 1/27/10

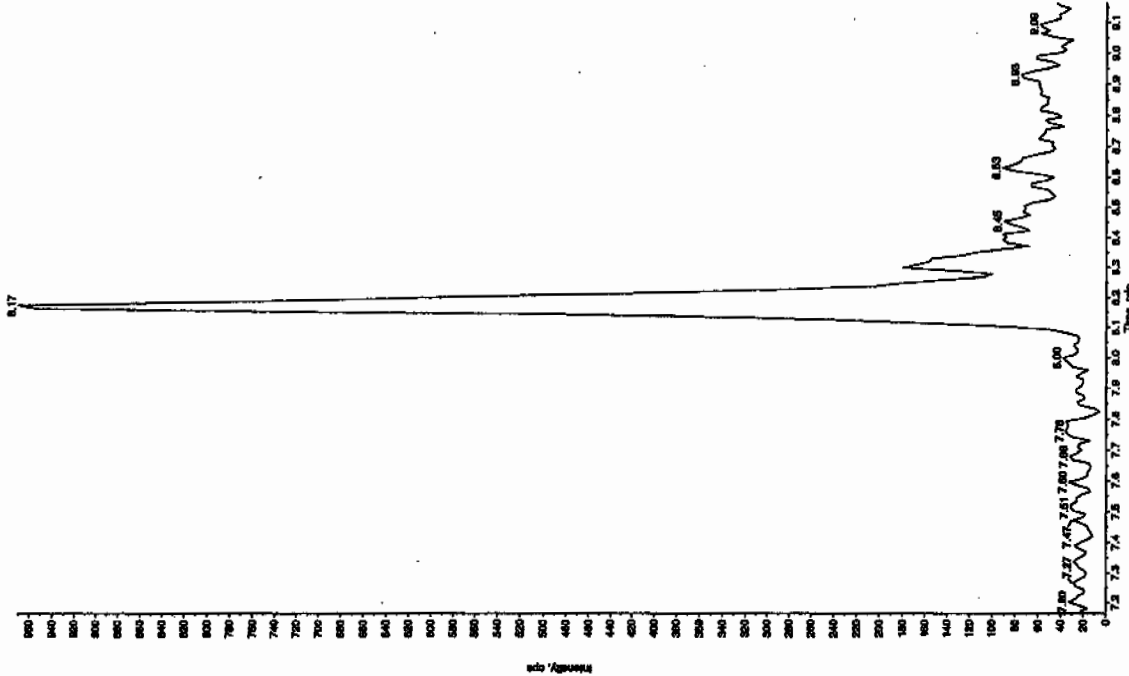
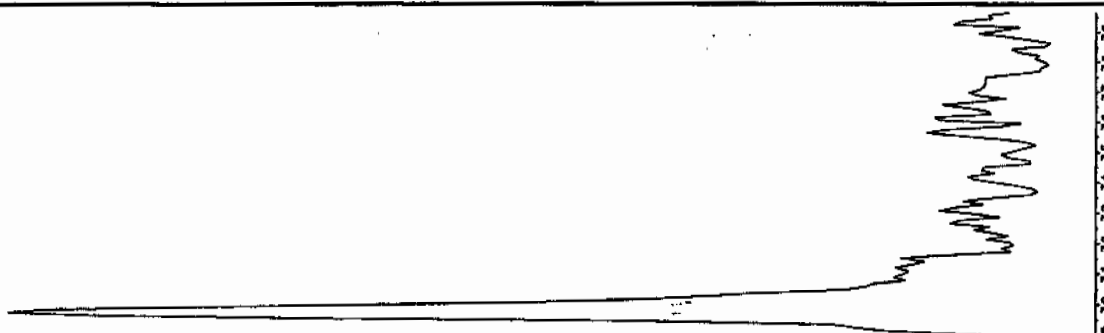
Sample Name: "VIAL K03" Sample ID: "VIAL K03" File: "EX01250012.mlf"
 Peak Name: "TATB" Mass(es): "257.204.9 amu"
 Concent: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/25/2010
 Time: 1:25:34 PM
 Modified: No



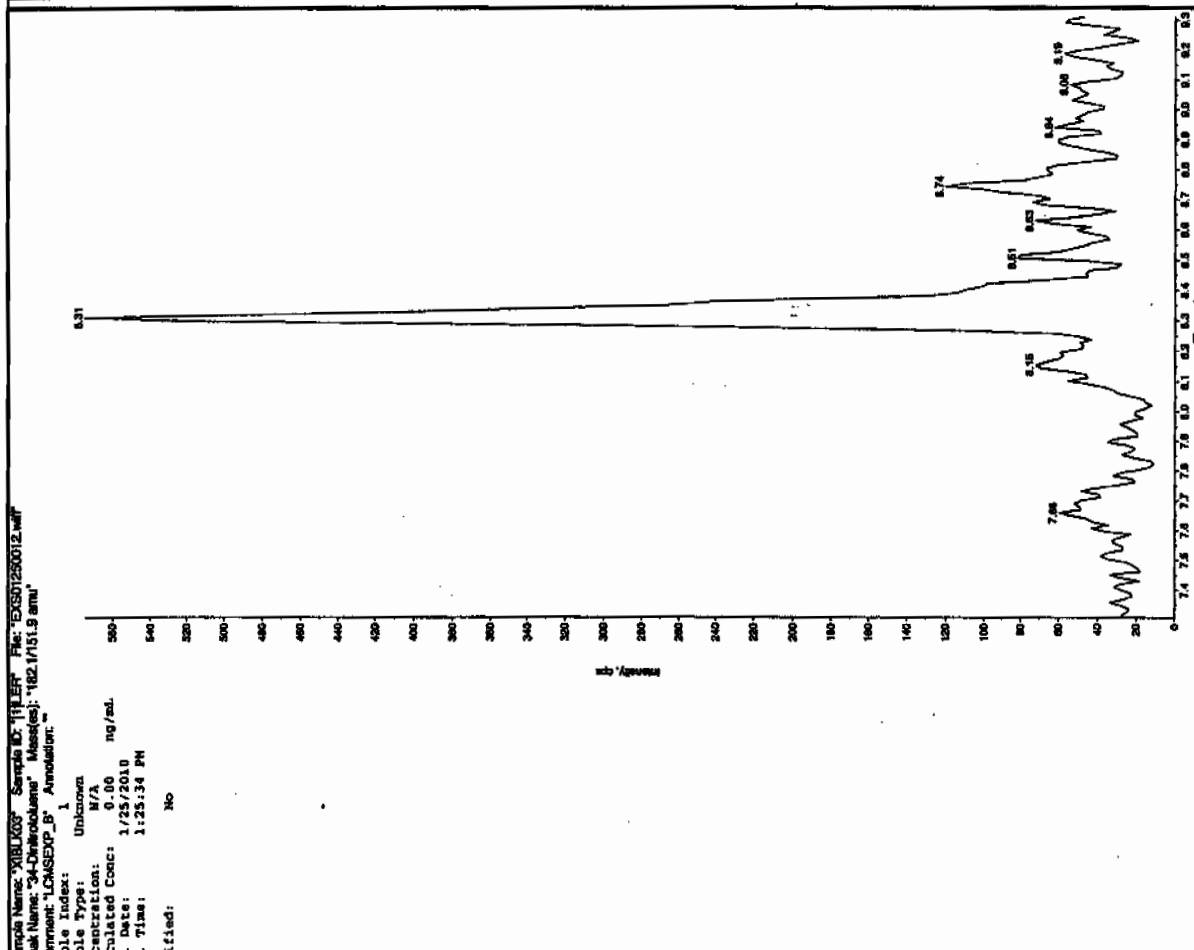
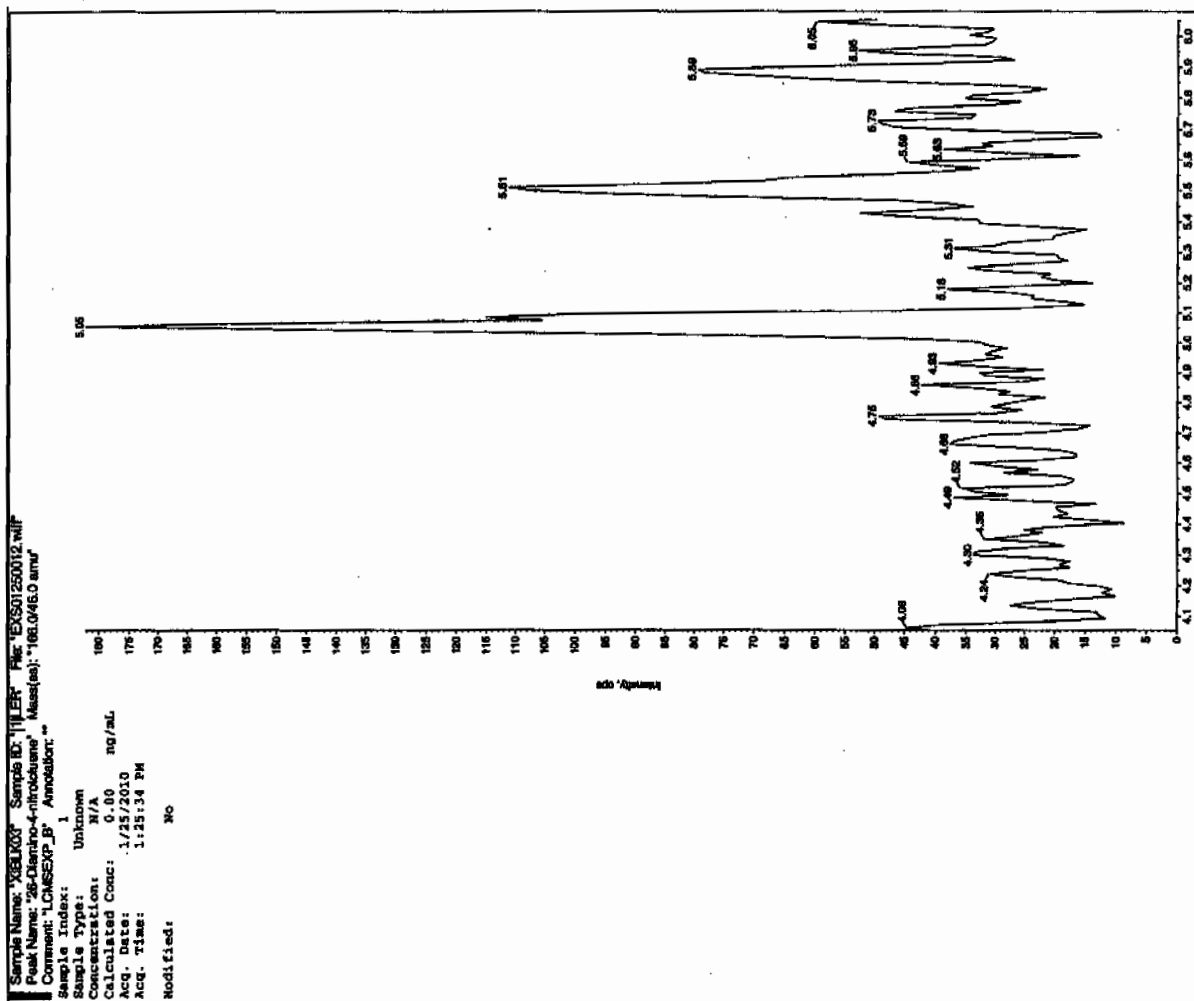
Sample Name: "VIAL K03" Sample ID: "VIAL K03" File: "EX01250012.mlf"
 Peak Name: "TATB" Mass(es): "182.046.0 amu"
 Concent: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/25/2010
 Time: 1:25:34 PM
 Modified: No

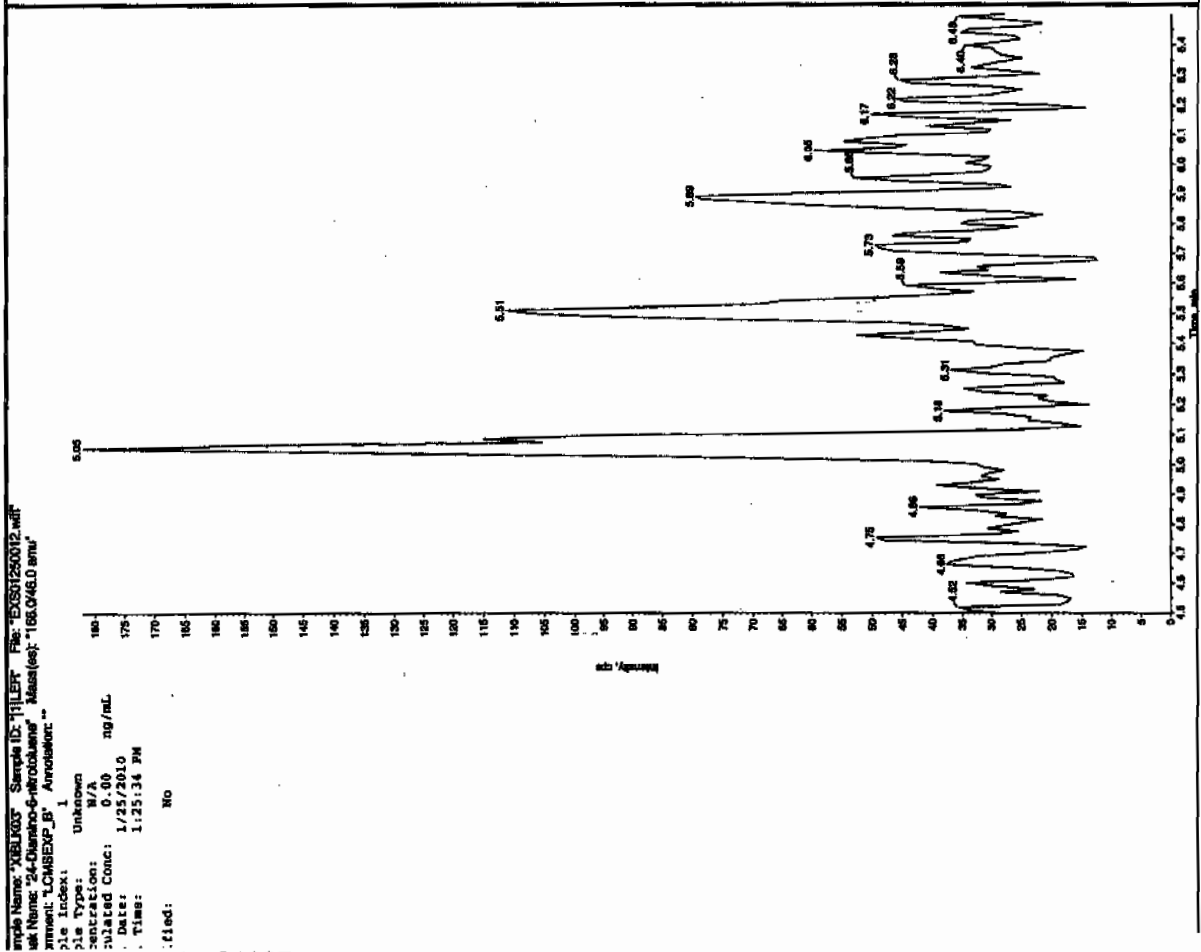
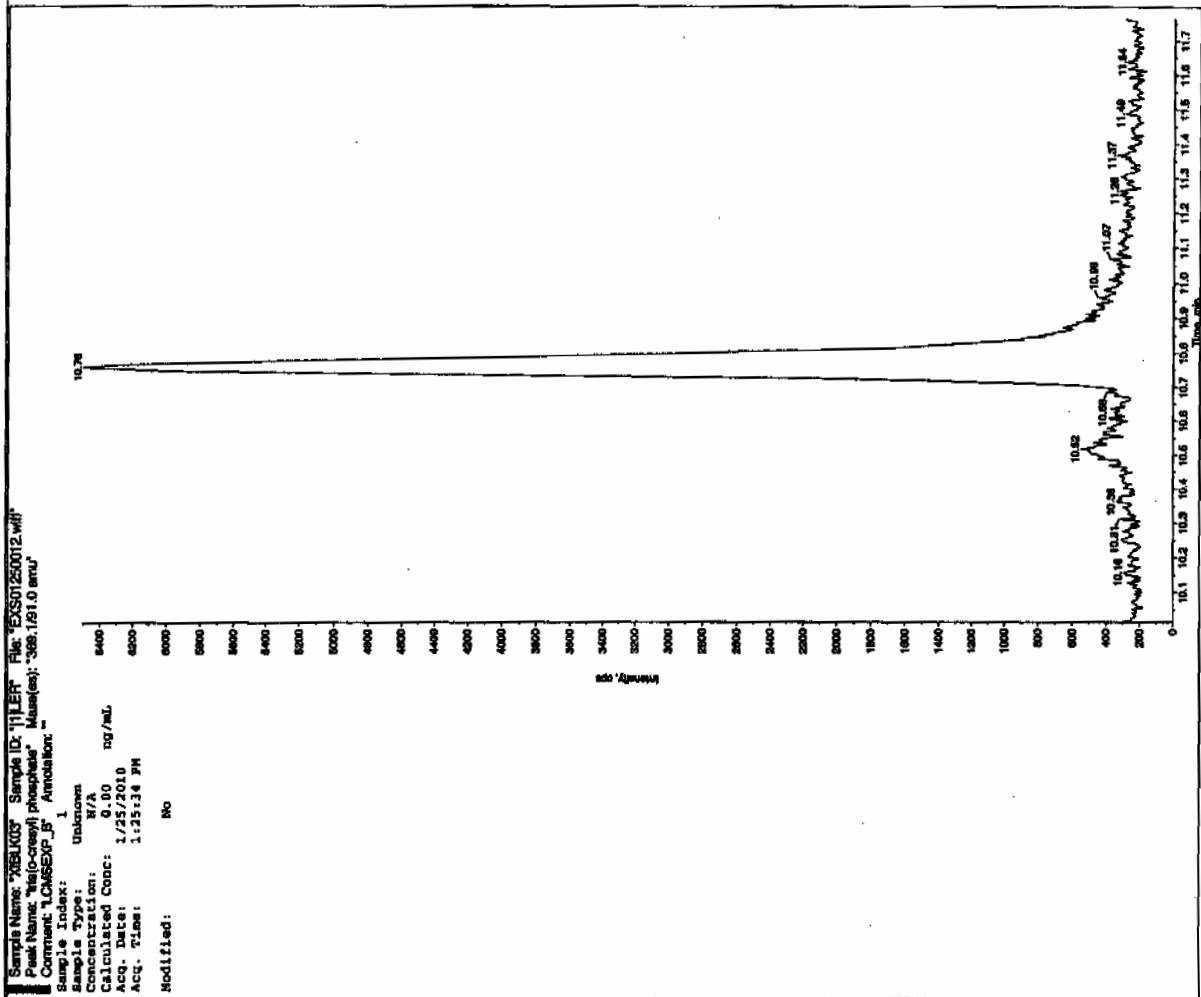


Ken 01/27/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 25-JAN-10 14:28

GEL Data File: EXS01250016.wiff

Instrument ID: LCMSMS

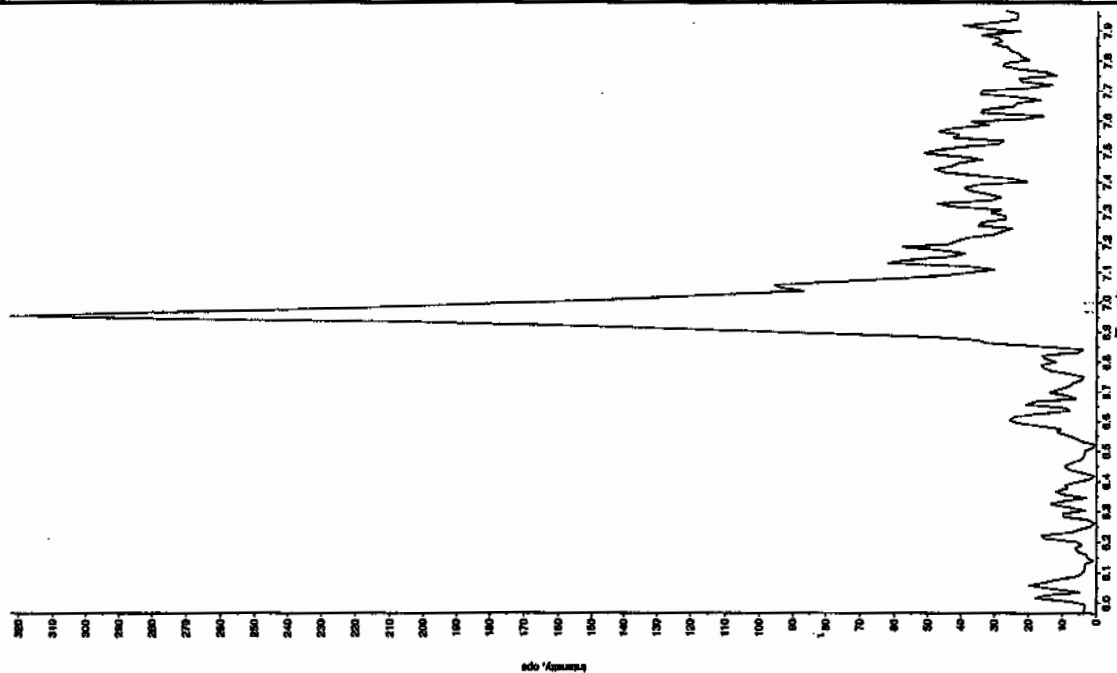
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 11/27/10

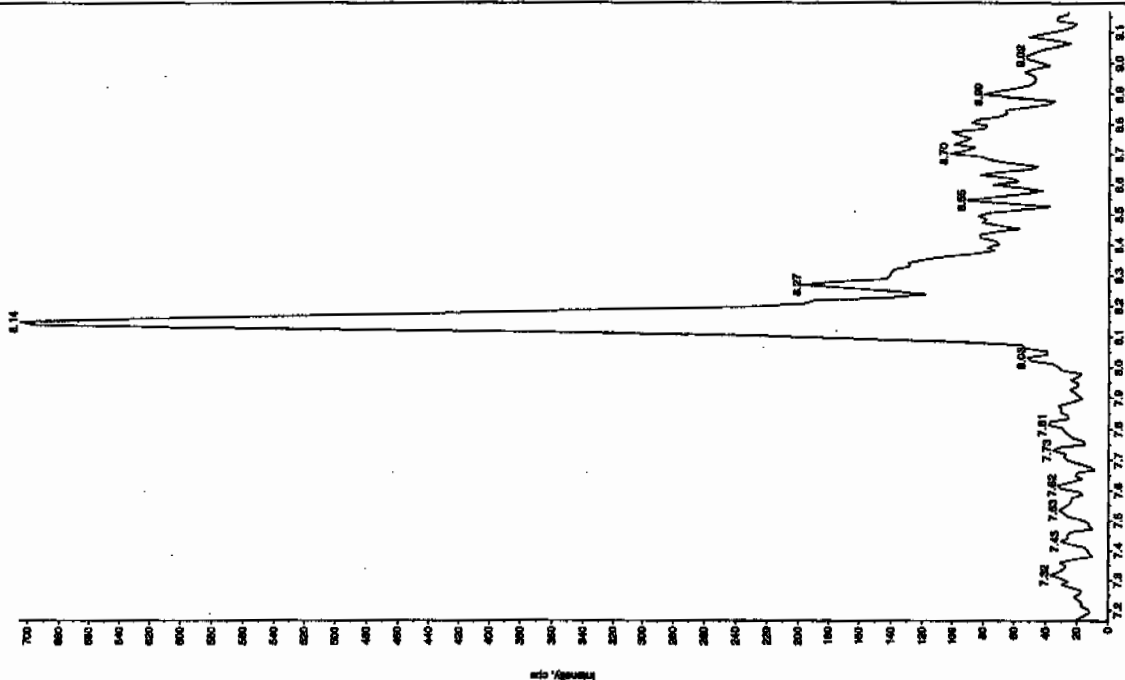
Sample Name: "8321A" Sample ID: "H111EP" File: "EX50120016.wif"
 Peak Name: "TATP" Mass(es): "257.2204.8 amu"
 Comment: "LCMSSEXP_B" Annotation: ""

File Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/25/2010
 Acq. Time: 2:28:22 PM
 Modified: No



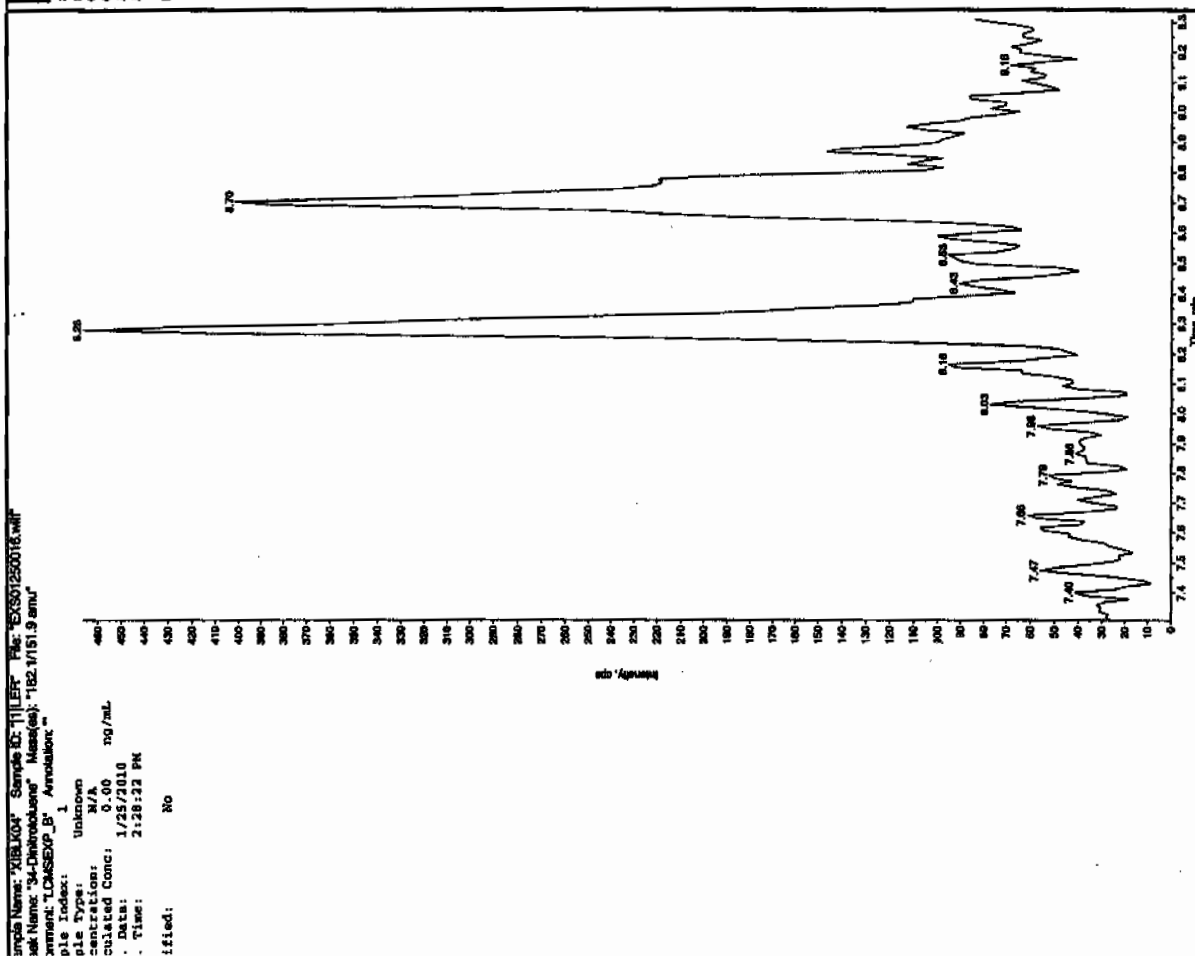
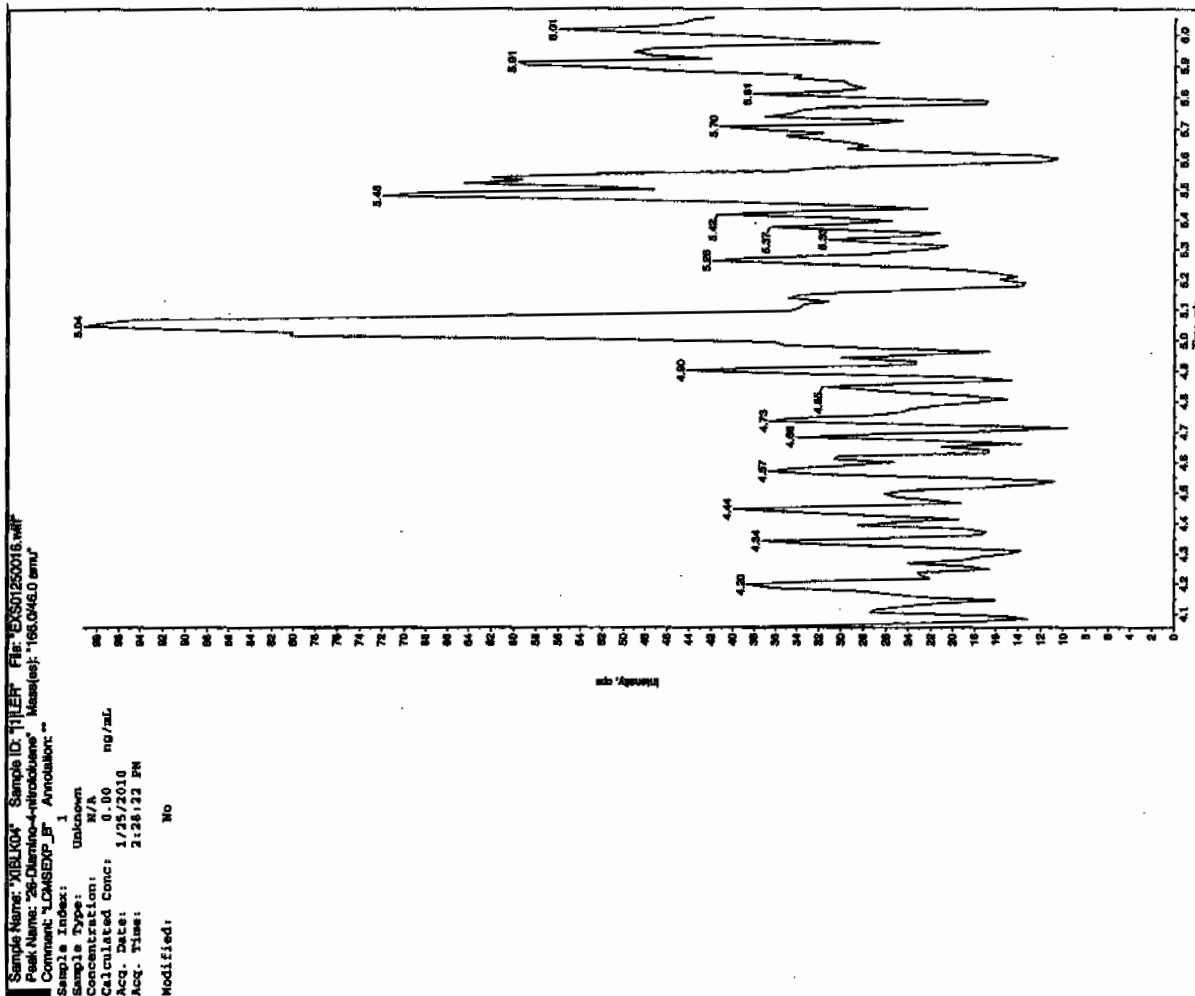
Sample Name: "8321A" Sample ID: "H111EP" File: "EX50120016.wif"
 Peak Name: "TATP" Mass(es): "257.2204.8 amu"
 Comment: "LCMSSEXP_B" Annotation: ""

File Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/25/2010
 Acq. Time: 2:28:22 PM
 Modified: No



Jan 01/27/10

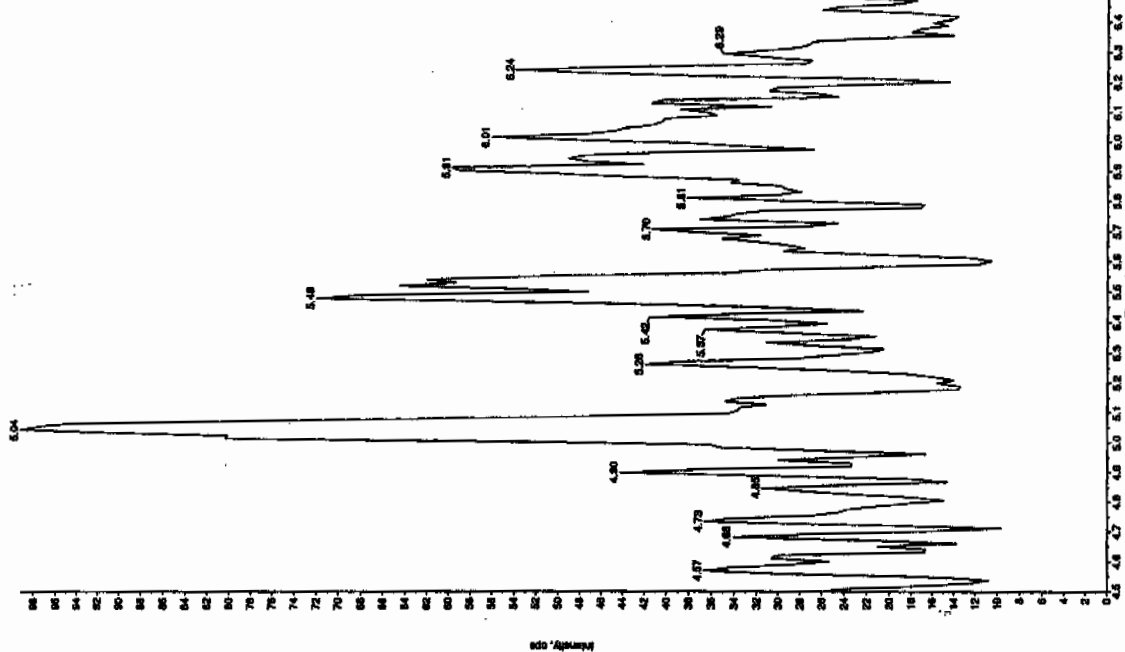
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

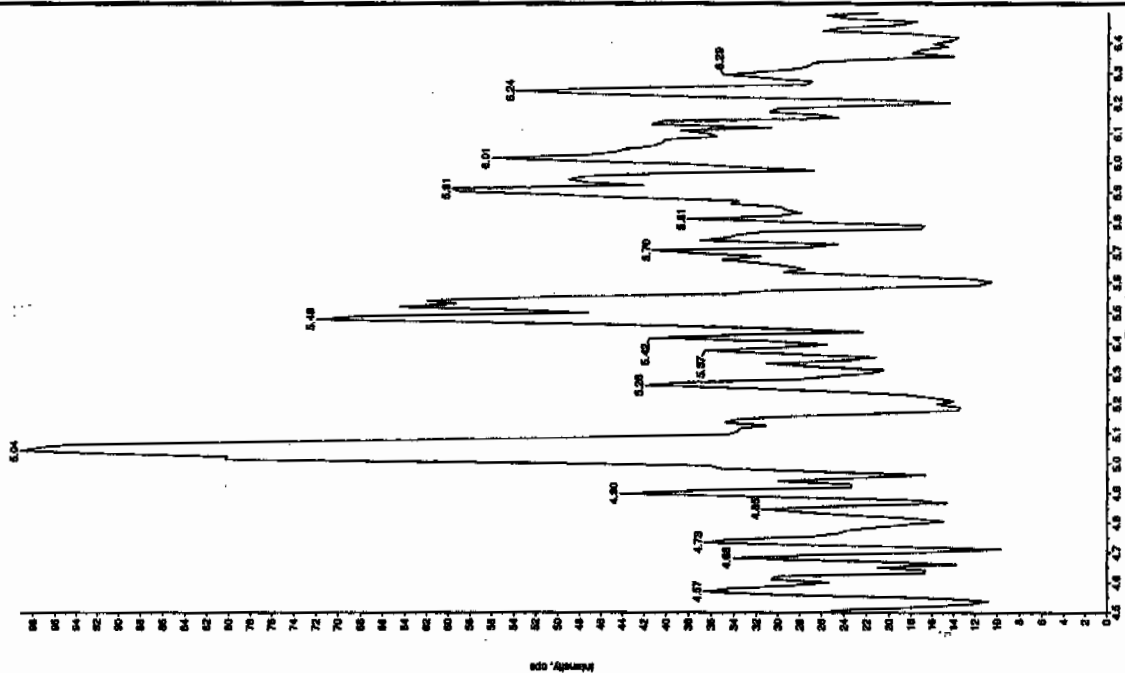
Sample Name: "XBLK04" Sample ID: "111ER" File: "EXS07250016.wif"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "358.161.0 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: W/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 2:28:22 PM
 Modified: No



Sample Name: "XBLK04" Sample ID: "111ER" File: "EXS07250016.wif"
 Peak Name: "24-Diamino-6-nitrothiophene" Mass(es): "165.046.0 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: W/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 2:28:22 PM
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 25-JAN-10 16:49

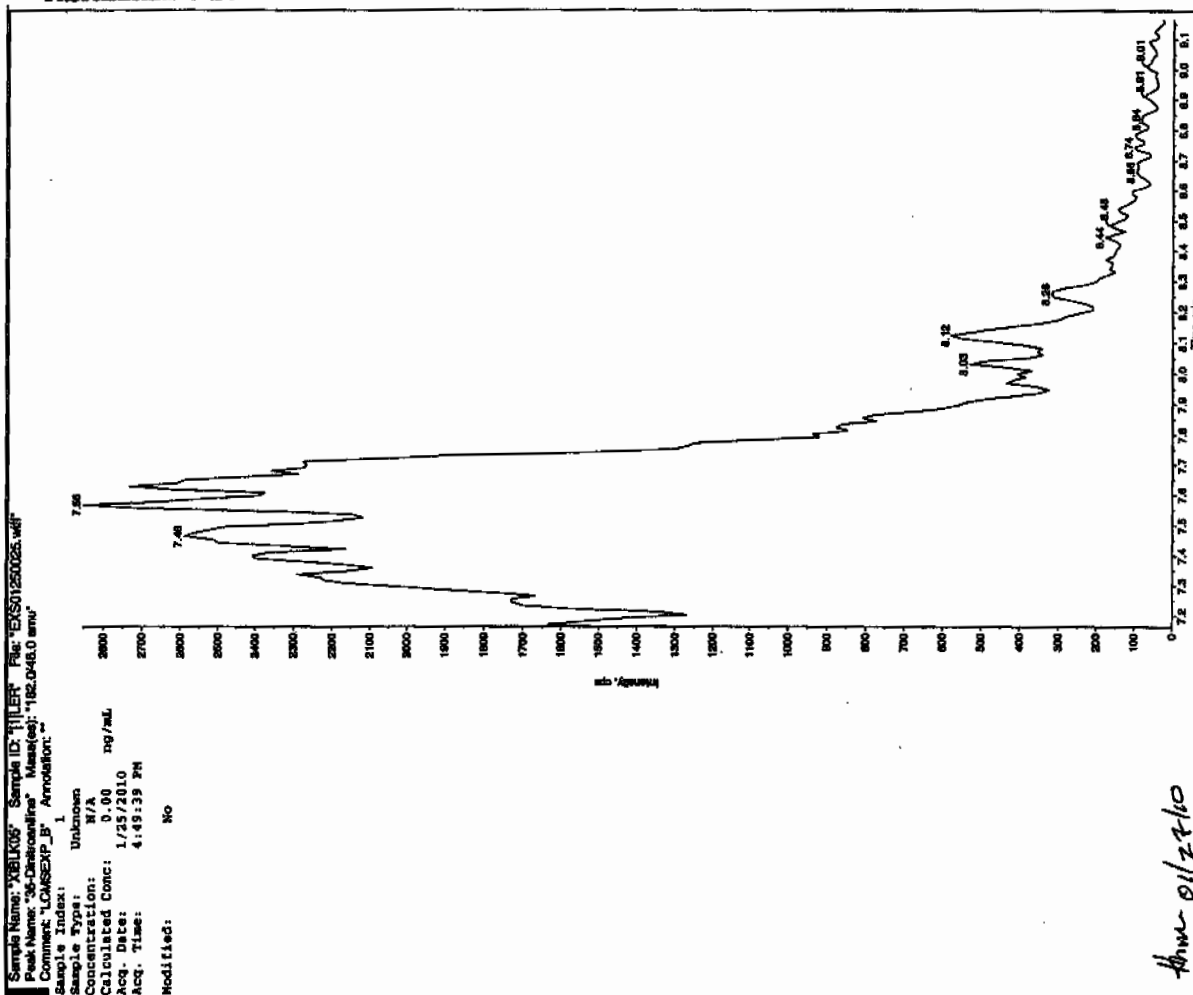
GEL Data File: EXS01250025.wiff

Instrument ID: LCMSMS

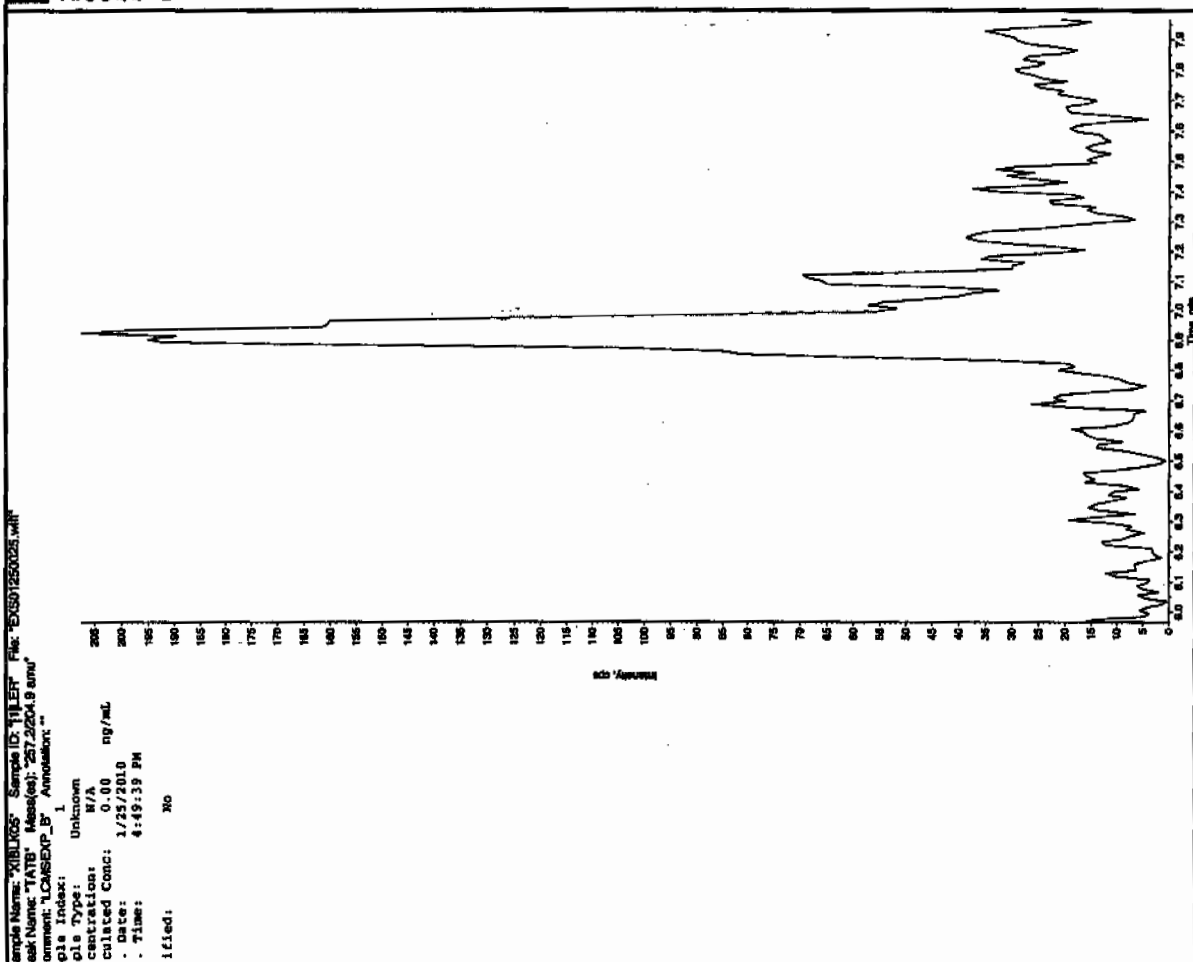
Column: Phenomenex Ultracarb 5u ODS(20)

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

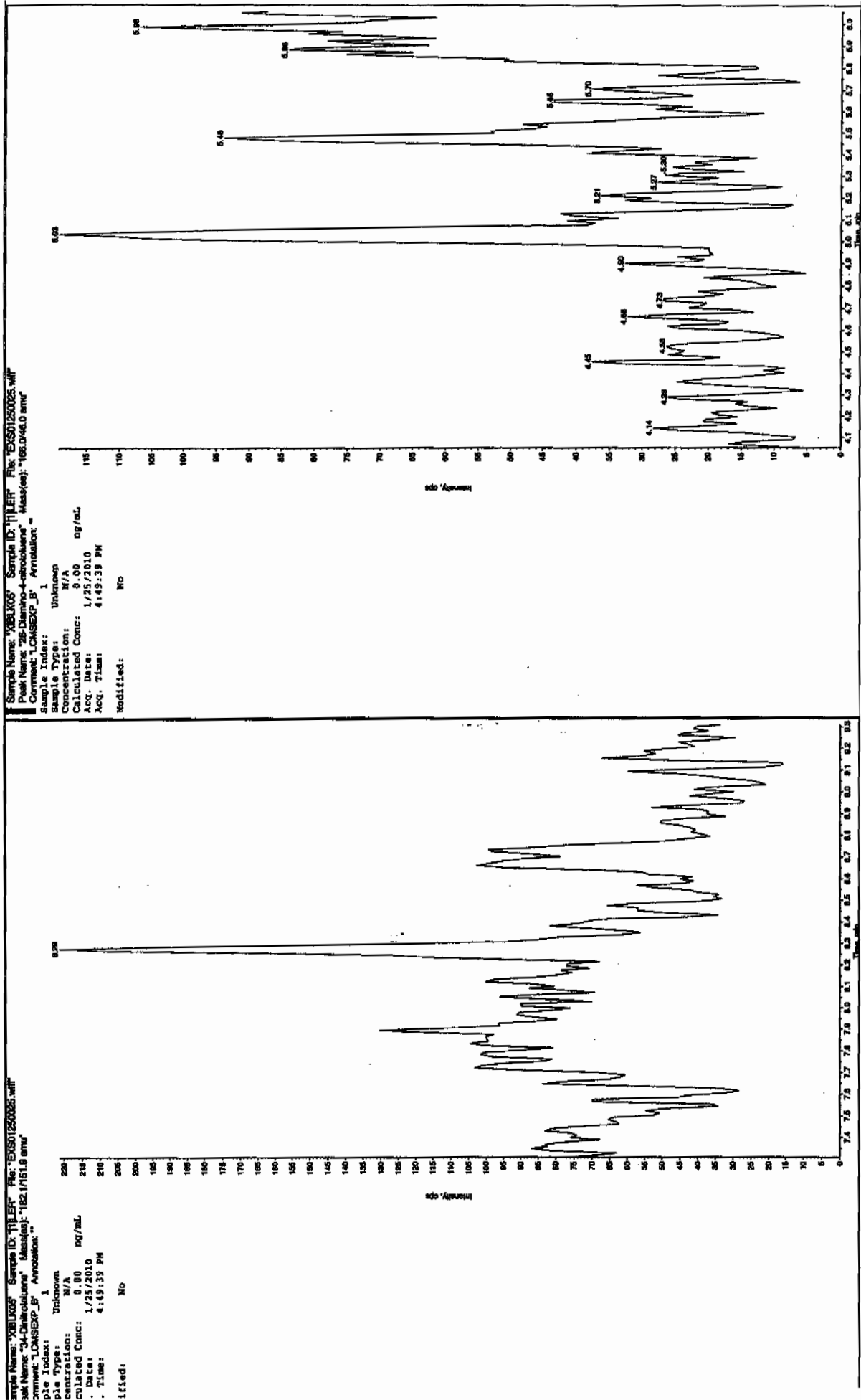
Len 11/27/10



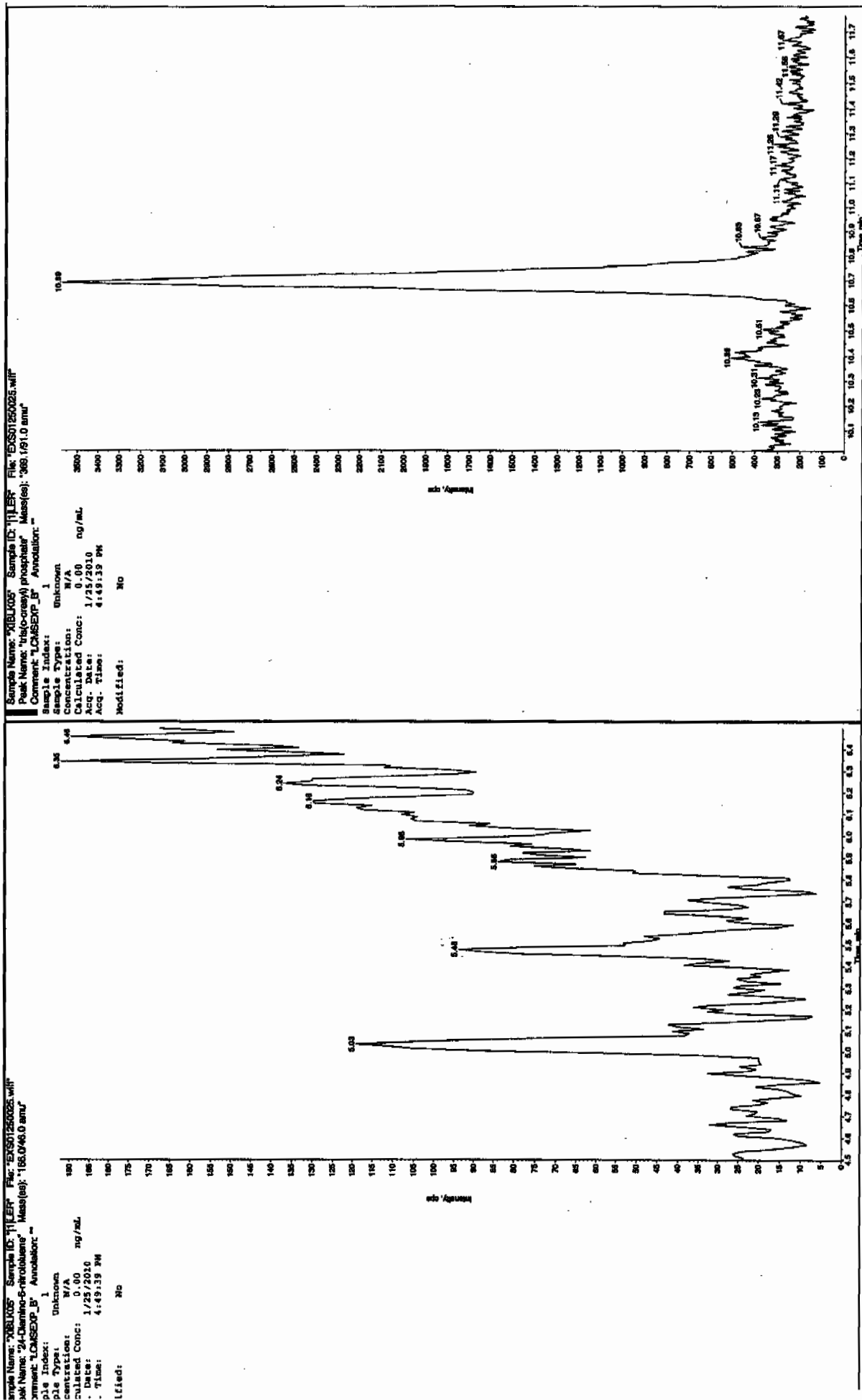
thru 8/12/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK06

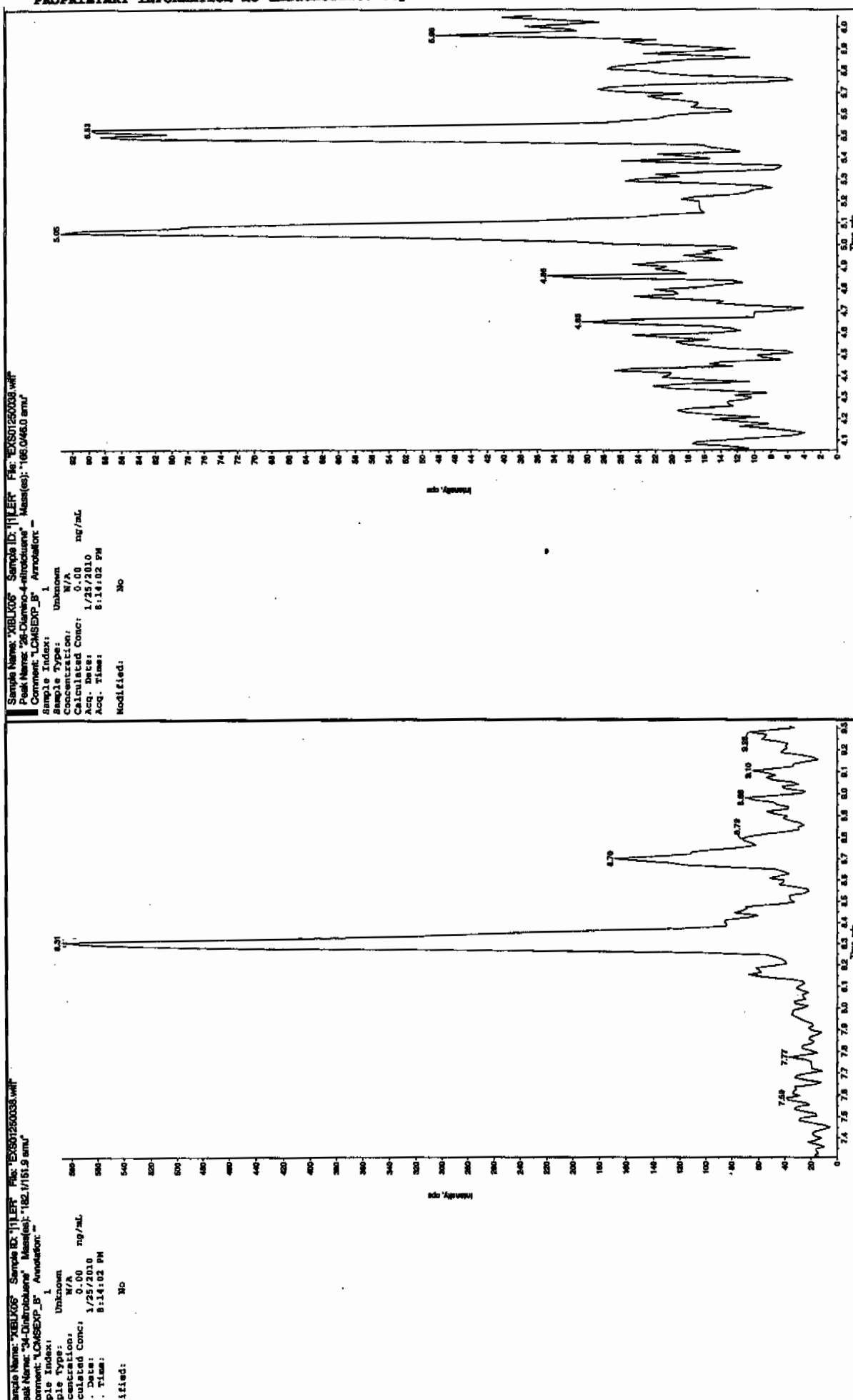
Analysis Date: 25-JAN-10 20:14

GEL Data File: EXS01250038.wiff

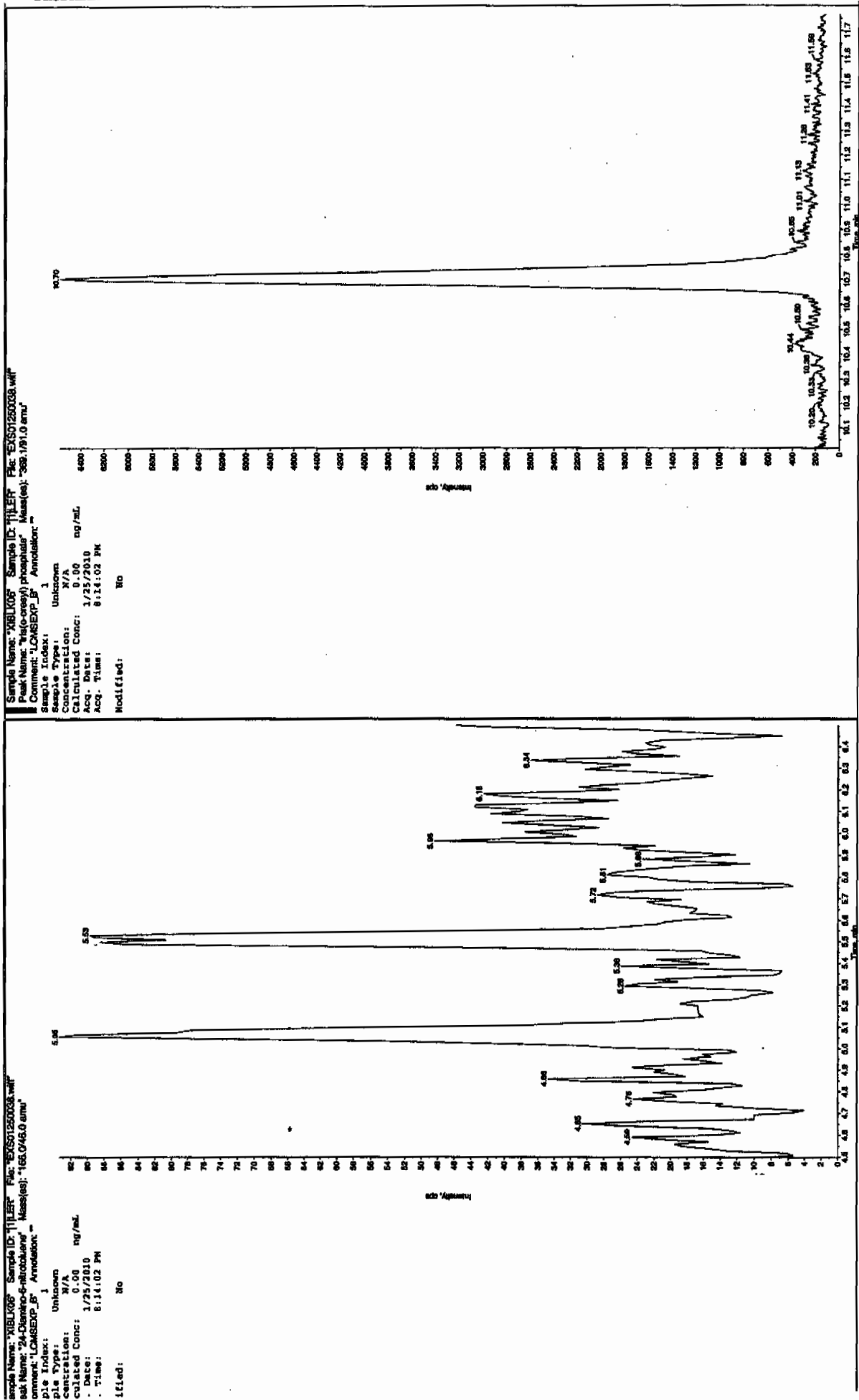
Instrument ID: LCMSMS

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



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 25-JAN-10 22:19

GEL Data File: EXS01250046.wiff

Instrument ID: LCMSMS

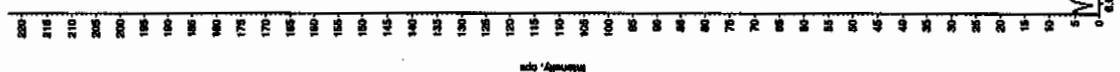
Column: Phenomenex Ultracarb 5u ODS(20)

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

See 112710

Sample Name: 788107 Sample ID: 788107 File: EX501250046.wif
Peak Name: 35-Dinitroamine Mass(es): 182.046.0 amu
Comment: LCMSEXP_5 Annotation: 1

Sample Type: Unknown
Concentration: 0.00 ng/mL
Acq. Date: 1/25/2010
Acq. Time: 10:19:41 PM
Modified: No



Sample Name: 788107 Sample ID: 788107 File: EX501250046.wif
Peak Name: 35-Dinitroamine Mass(es): 182.046.0 amu
Comment: LCMSEXP_5 Annotation: 1

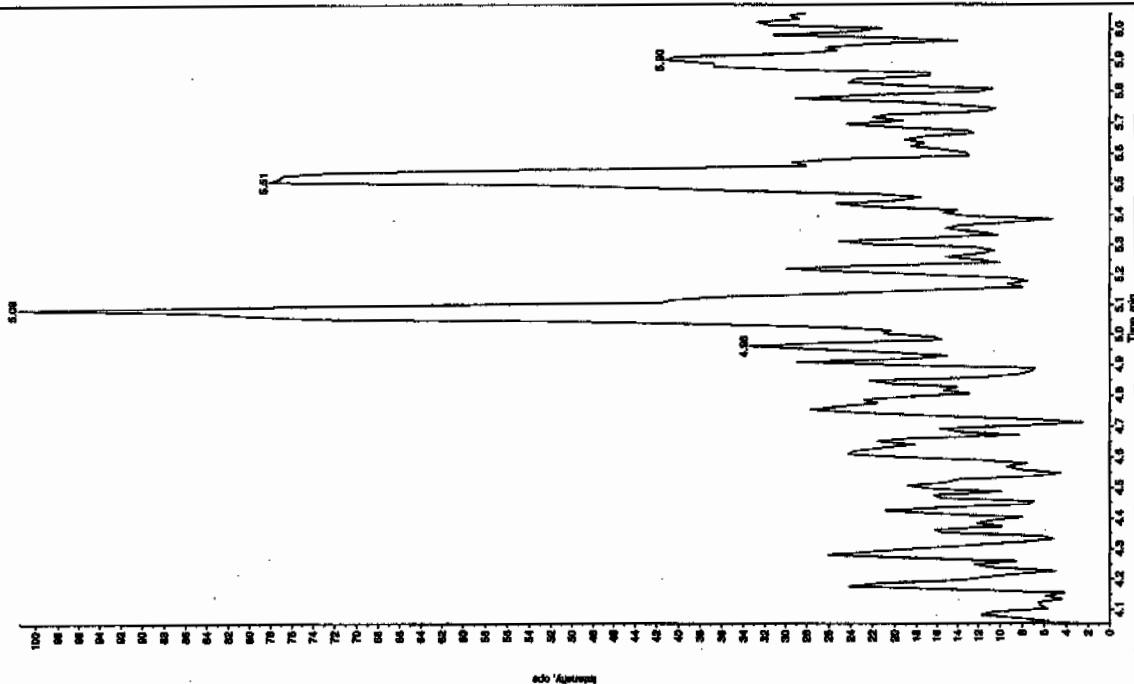
Sample Type: Unknown
Concentration: 0.00 ng/mL
Acq. Date: 1/25/2010
Acq. Time: 10:19:41 PM
Modified: No



See 112710

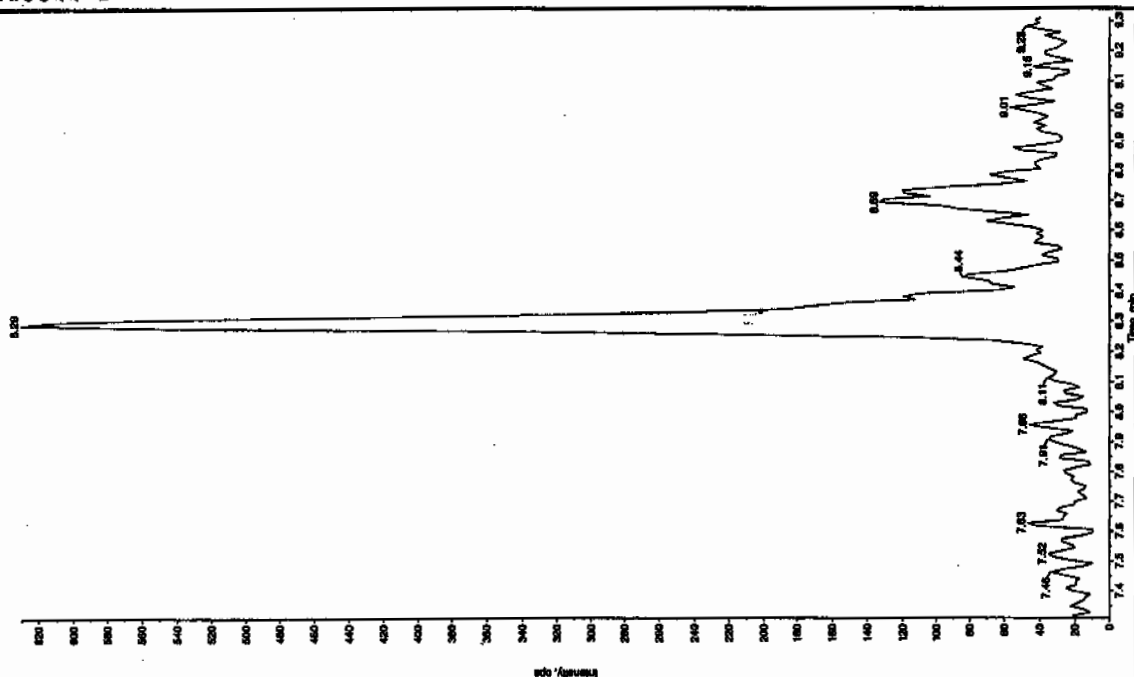
Sample Name: "XBL007" Sample ID: "11111" File: "XBL007250046.wsf"
 Peak Name: "34-Diethoxybenzene" Mass(es): "162.046.0 amu"
 Comment: "LCMS/EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:19:41 PM
 Modified: No



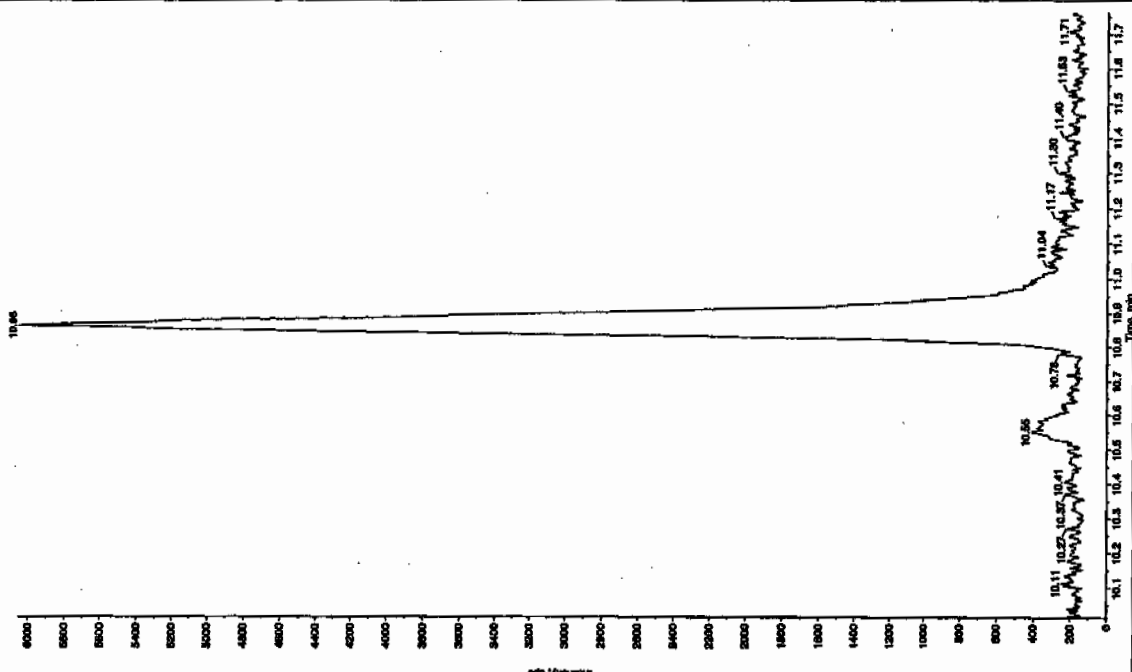
Sample Name: "XBL007" Sample ID: "11111" File: "XBL007250046.wsf"
 Peak Name: "34-Diethoxybenzene" Mass(es): "162.046.0 amu"
 Comment: "LCMS/EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:19:41 PM
 Modified: No



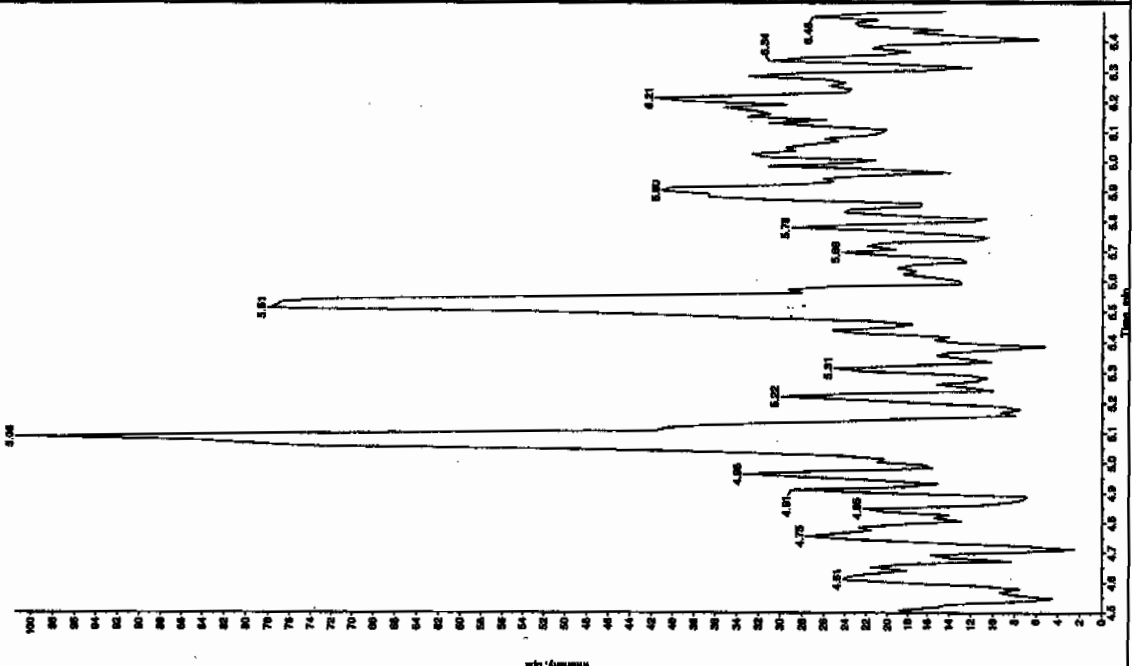
Sample Name: "2081007" Sample ID: "111111" File: "EX501250046.wif"
 Peak Name: "24-Diamino-6-alkyl-2-oxo-1,2,3,4-tetrahydropyrimidin-5-carboxamide" Mass(es): "385.181.0 amu"
 Concentration: "1.00E-05" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/25/2010
 Acq. Date: 10:19:41 PM
 Modified: No



Sample Name: "2081007" Sample ID: "111111" File: "EX501250046.wif"
 Peak Name: "24-Diamino-6-alkyl-2-oxo-1,2,3,4-tetrahydropyrimidin-5-carboxamide" Mass(es): "180.046.0 amu"
 Concentration: "1.00E-05" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/25/2010
 Acq. Date: 10:19:41 PM
 Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 26-JAN-10 01:44

GEL Data File: EXS01250059.wiff

Instrument ID: LCMSMS

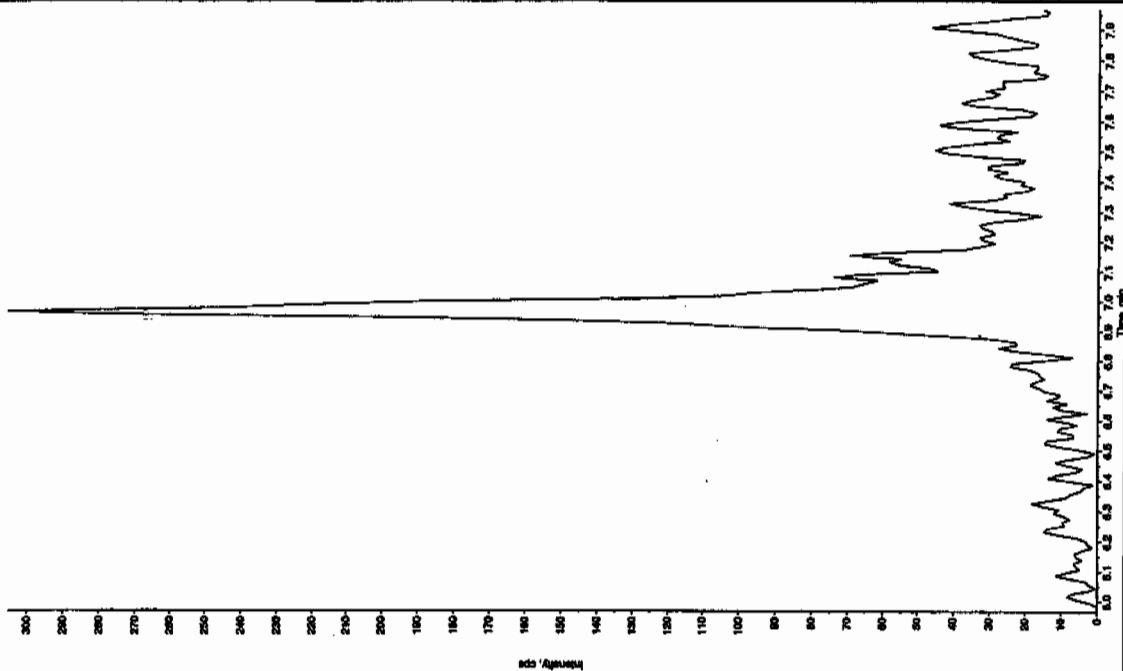
Column: Phenomenex Ultracarb 5u ODS(20)

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

See 1/27/10

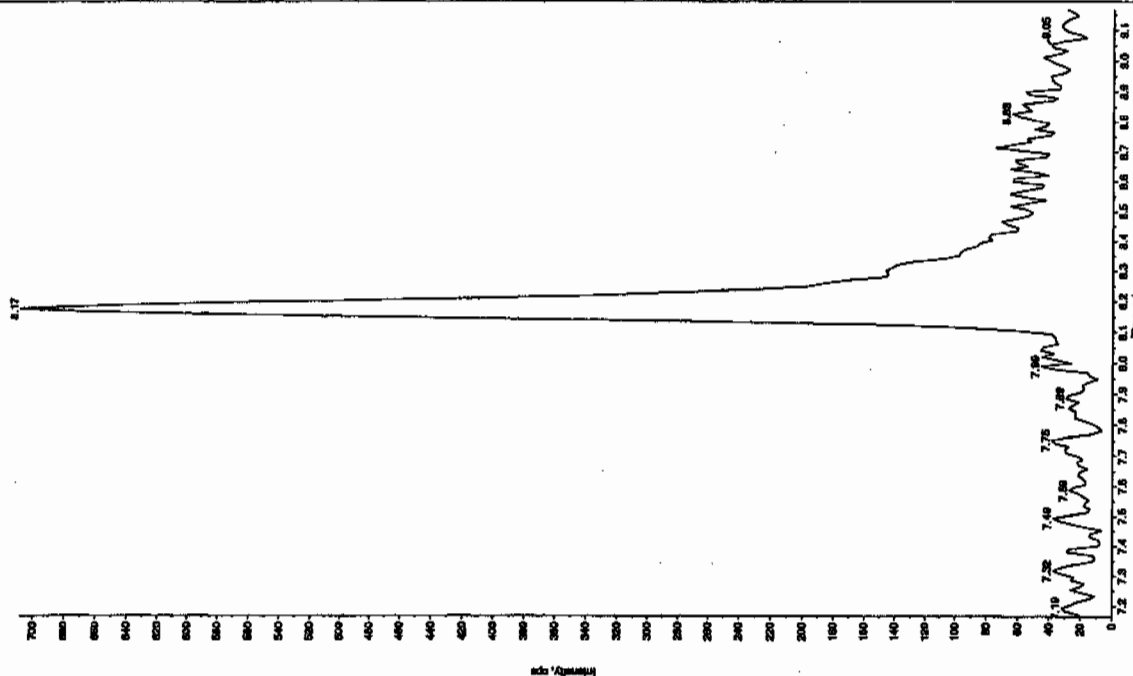
Sample Name: "XBLK08" Sample ID: "11111" File: "EXS01250055.will"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMS EXP_B" Annotation: ""

File Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ug/mL
 Date: 1/25/2010
 Time: 1:44:00 AM
 Modified: No

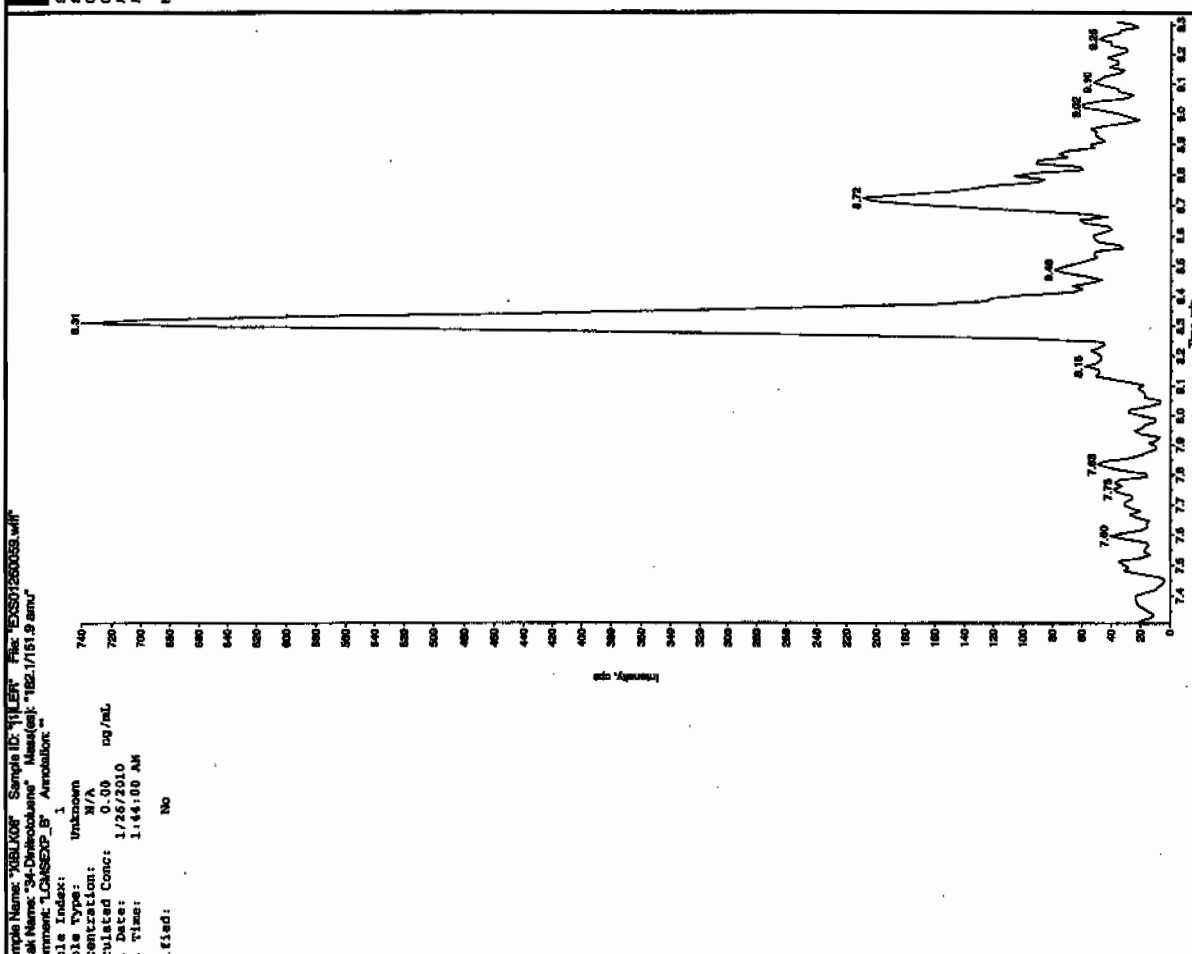
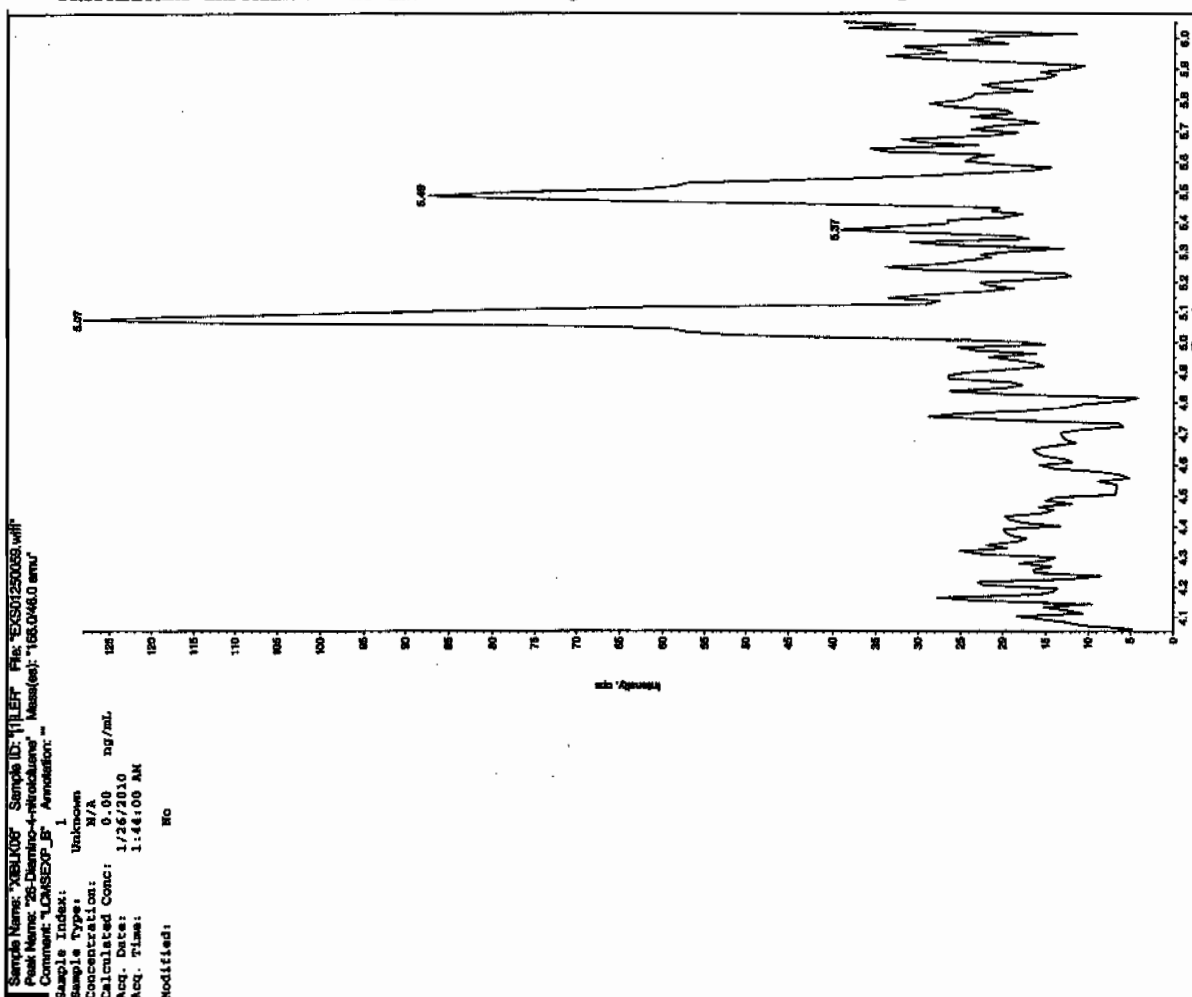


Sample Name: "XBLK08" Sample ID: "11111" File: "EXS01250055.will"
 Peak Name: "3S-Dichloromethane" Mass(es): "182.046.0 amu"
 Comment: "LCMS EXP_B" Annotation: ""

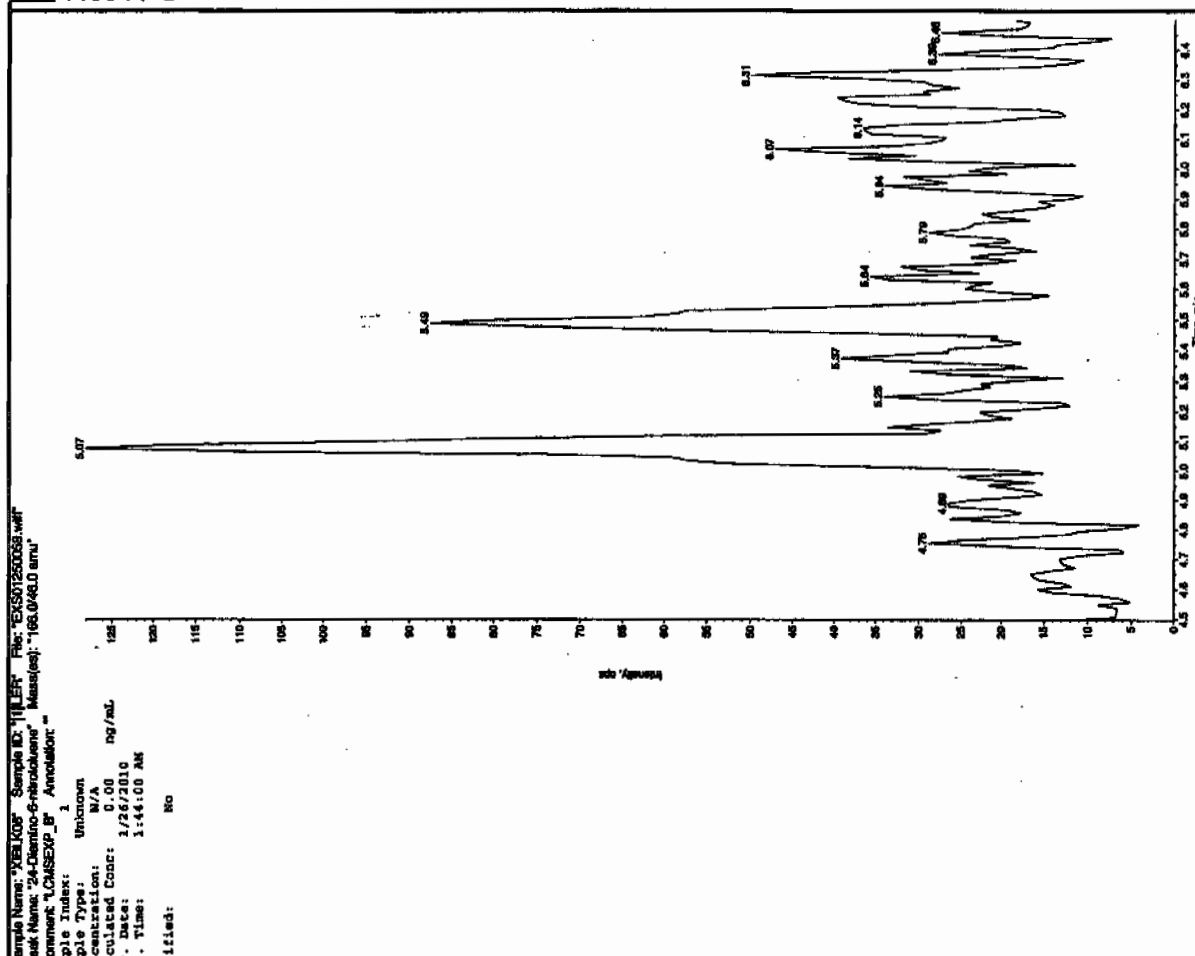
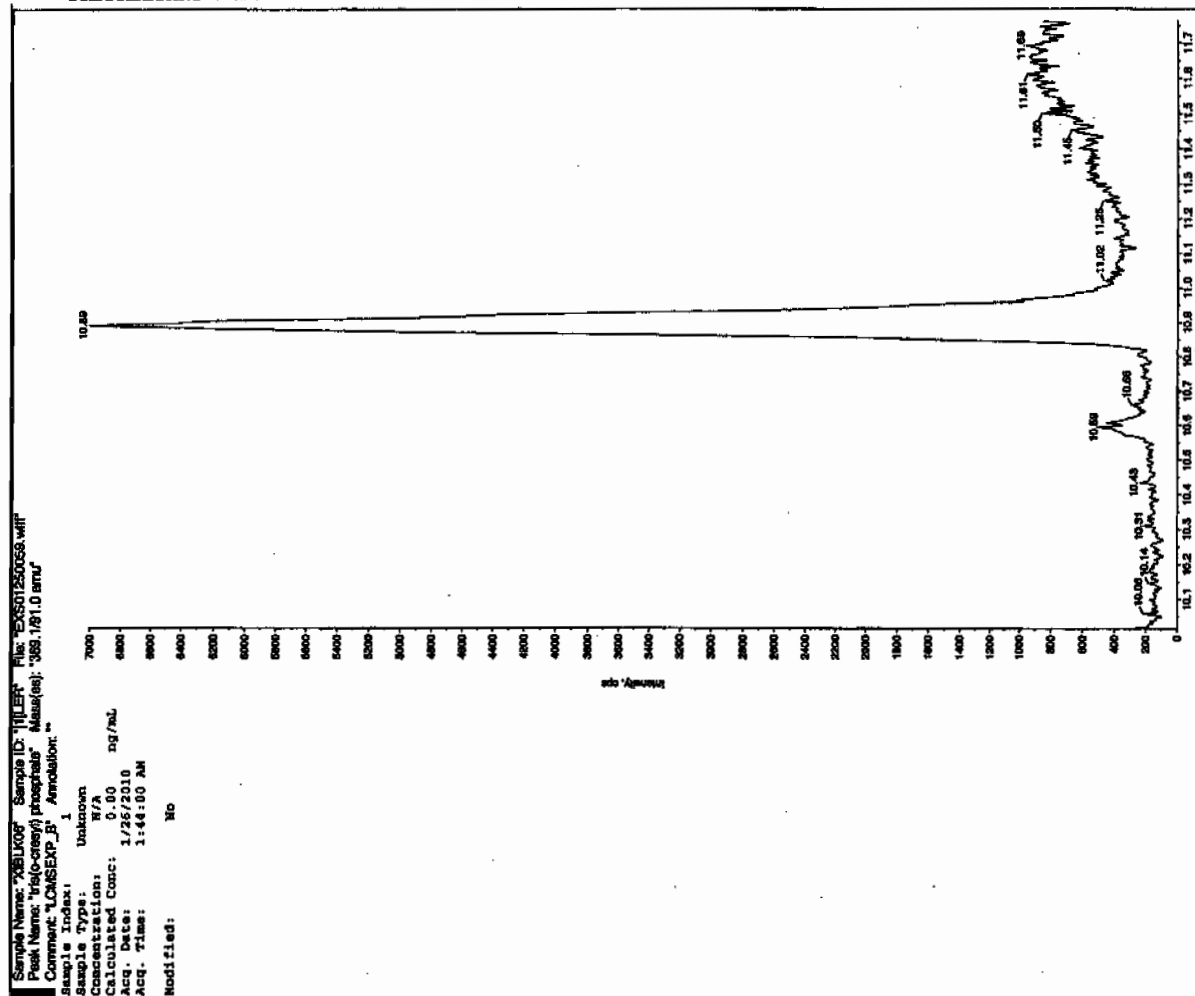
File Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ug/mL
 Date: 1/26/2010
 Time: 1:44:00 AM
 Modified: No



See 1/27/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 26-JAN-10 04:05

GEL Data File: EXS01250068.wiff

Instrument ID: LCMSMS

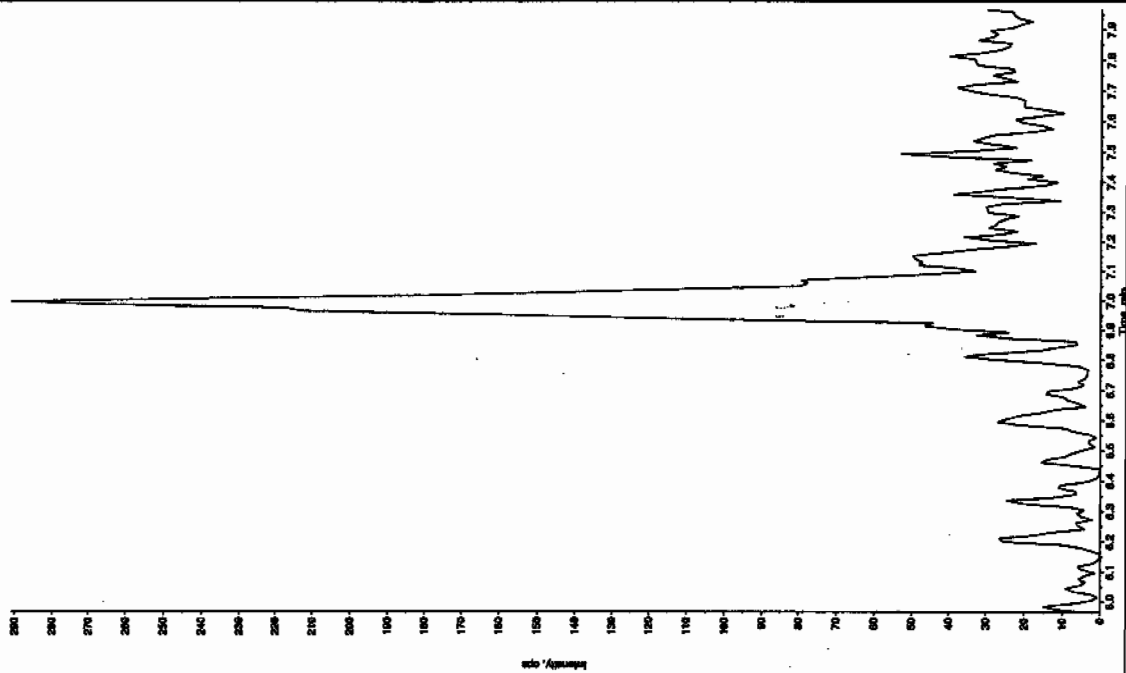
Column: Phenomenex Ultracarb 5u ODS(20)

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 112710

Sample Name: "XBL103" Sample ID: "TILER" File: "EX501250088.wif"
 Peak Name: "TATP" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

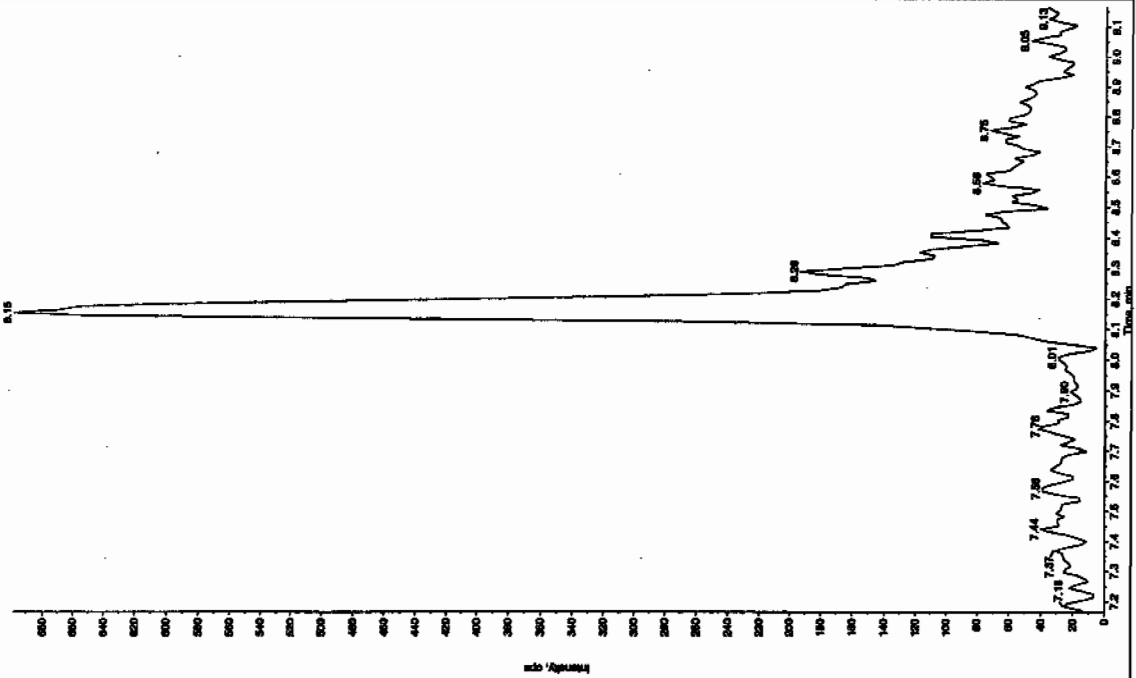
File Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/26/2010
 Acq. Time: 4:05:24 AM
 Modified: No



Run 012710

Sample Name: "XBL103" Sample ID: "TILER" File: "EX501250088.wif"
 Peak Name: "3S-Diuron" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

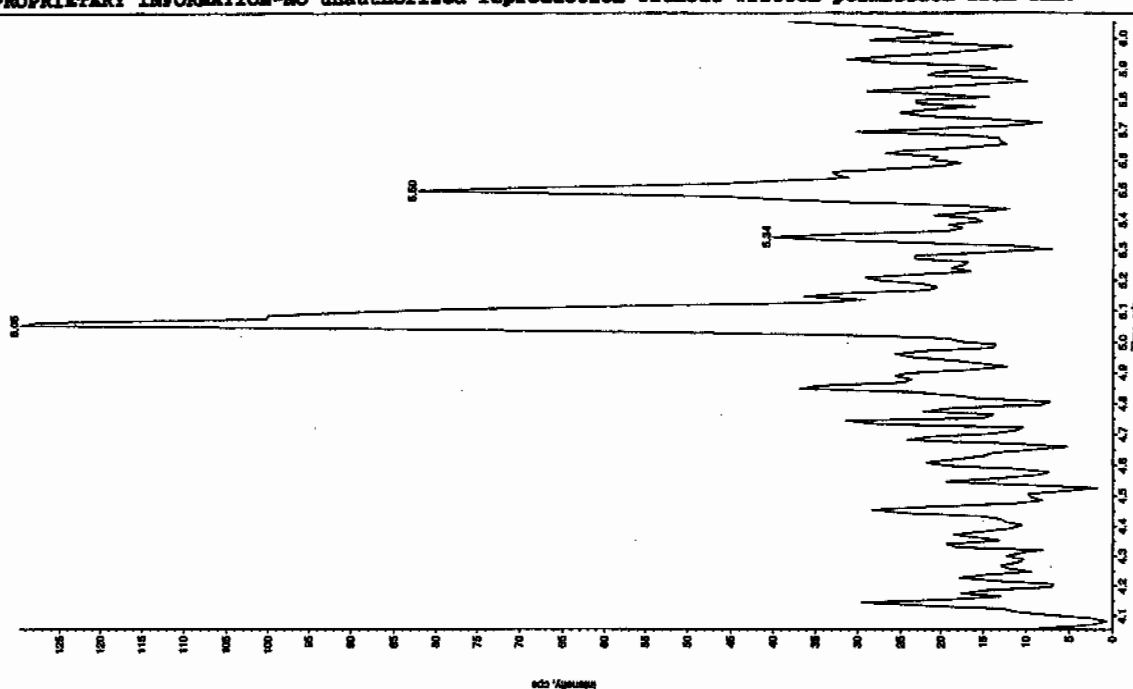
File Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/26/2010
 Acq. Time: 4:05:24 AM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

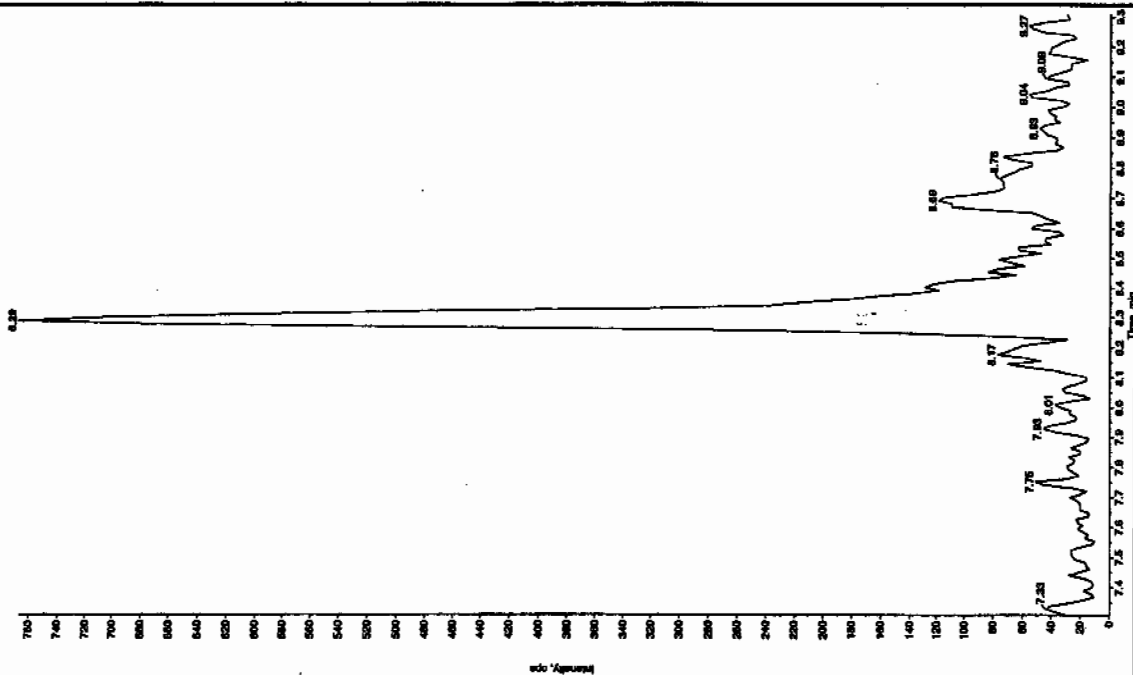
Sample Name: "XBL009" Sample ID: "HLEF" File: "EXS01250068.wif"
Peak Name: "35-Dinitro-4-nitrofluorene" Mass(es): "166.0468.0 amu"
Comment: "LCMSXP_B" Annotation: "1"

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 1/26/2010
Acq. Time: 4:05:24 AM
Modified: No

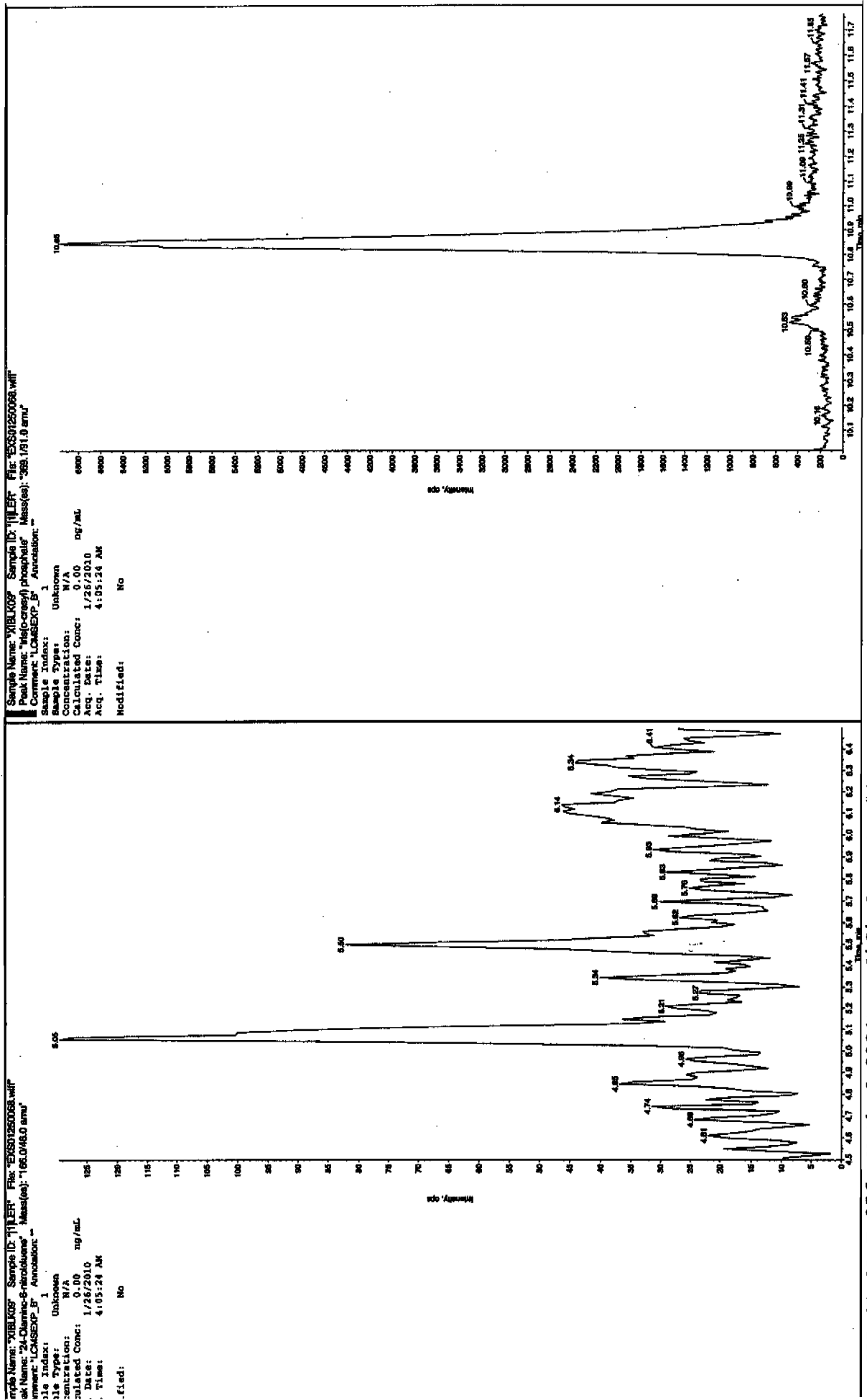


Sample Name: "XBL009" Sample ID: "HLEF" File: "EXS01250068.wif"
Peak Name: "34-Dinitrofluorene" Mass(es): "162.1161.8 amu"
Comment: "LCMSXP_B" Annotation: "1"

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 1/26/2010
Acq. Time: 4:05:24 AM
Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 26-JAN-10 07:29

GEL Data File: EXS01250081.wiff

Instrument ID: LCMSMS

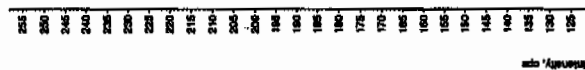
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.2
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 1/27/10

Sample Name: "XBLK10" Sample ID: "111ER" File: "EXS01250061.wif"
 Peak Name: "TATP" 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: 1/26/2010
 Acq. Time: 7:29:33 AM
 Modified: No



Sample Name: "XBLK10" Sample ID: "111ER" File: "EXS01250061.wif"
 Peak Name: "3S-Orthoquinoline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:29:33 AM
 Modified: No

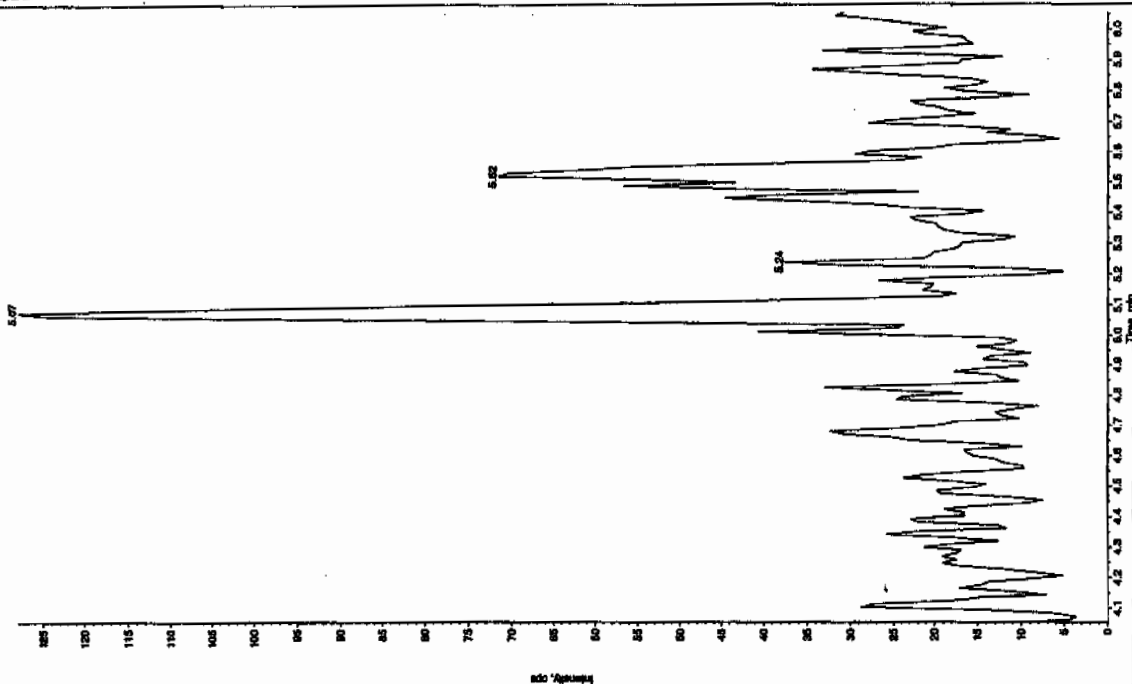


See 1/27/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

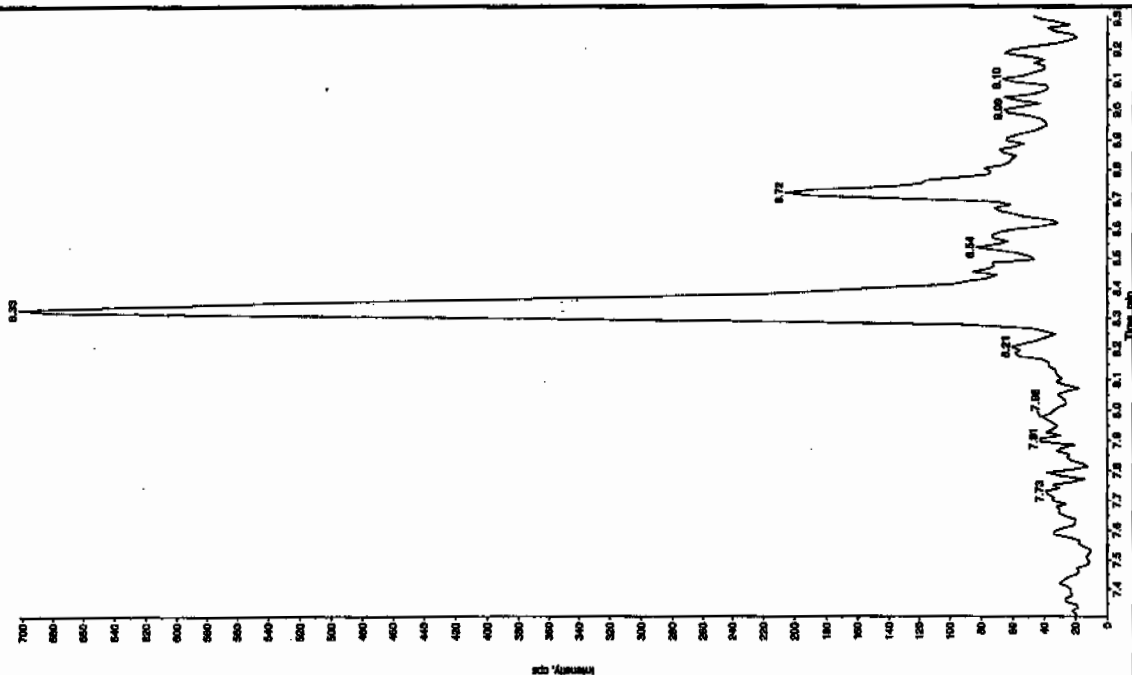
Sample Name: "XIBLX10" Sample ID: "11ER" File: "E0501250081.wht"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: W/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:29:33 AM
 Modified: No



Sample Name: "XIBLX10" Sample ID: "11ER" File: "E0501250081.wht"
 Peak Name: "34-Diaminotoluene" Mass(es): "162.151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

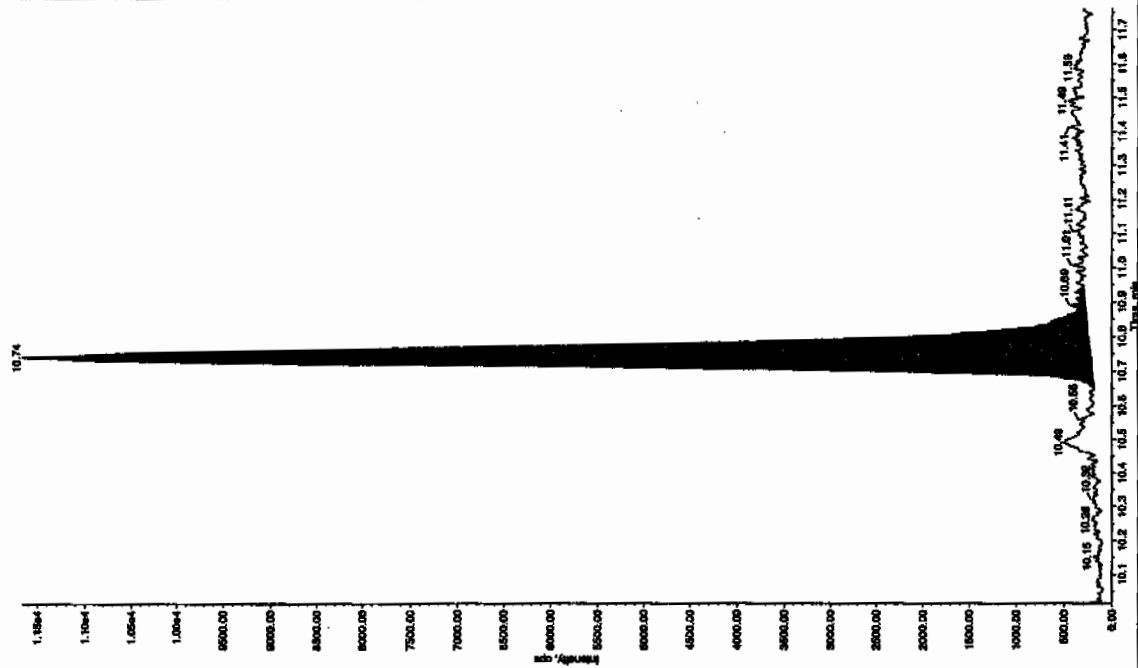
Sample Index: 1
 Sample Type: Unknown
 Concentration: W/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:29:33 AM
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

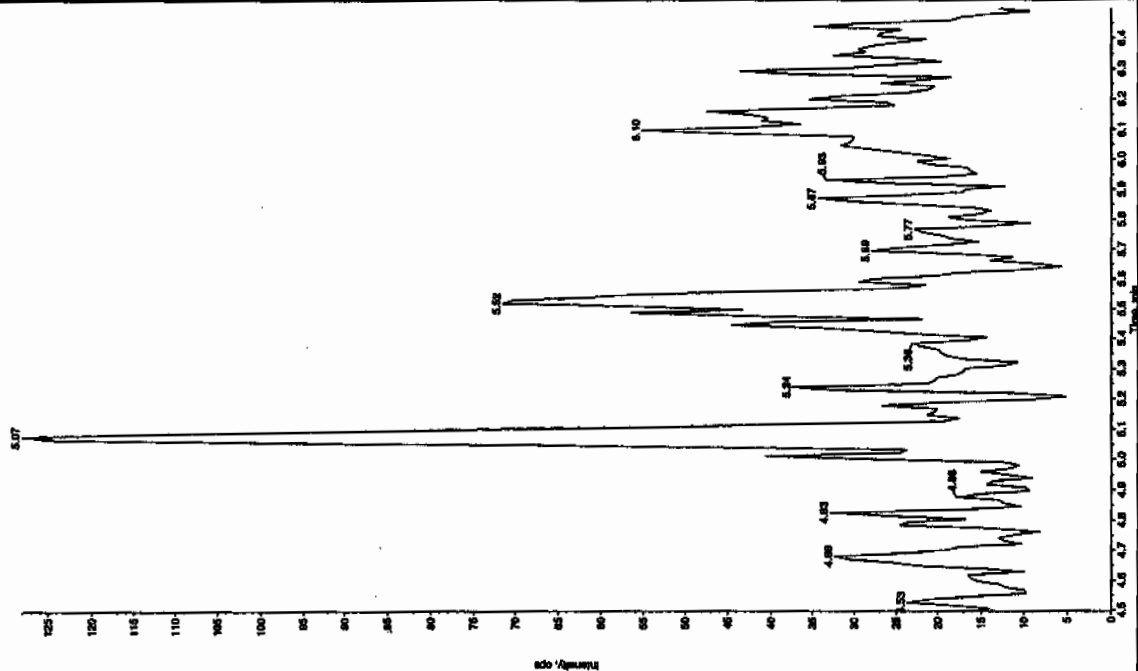
Sample Name: "XBLK10" Sample ID: "J11ER" File: "EX301250081.wml"
 Peak Name: "Vib(0-oreg) phosphatase" Mass(es): "388.181.0 amu"
 Comment: "LCMS-EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 16.2 ng/mL
 Acq. Date: 1/26/2018
 Acq. Time: 7:29:33 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IGA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 3.00 points
 Smoothing Width: 30.0 sec
 RT Window: 10.8 min
 Expected RT: No
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.7 min
 Area: 4.74e+004 counts
 Height: 11444.225 cps
 Start Time: 10.7 min
 End Time: 10.9 min



Sample Name: "XBLK10" Sample ID: "J11ER" File: "EX301250081.wml"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMS-EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/26/2018
 Acq. Time: 7:29:33 AM
 Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1225

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 26-JAN-10 10:53

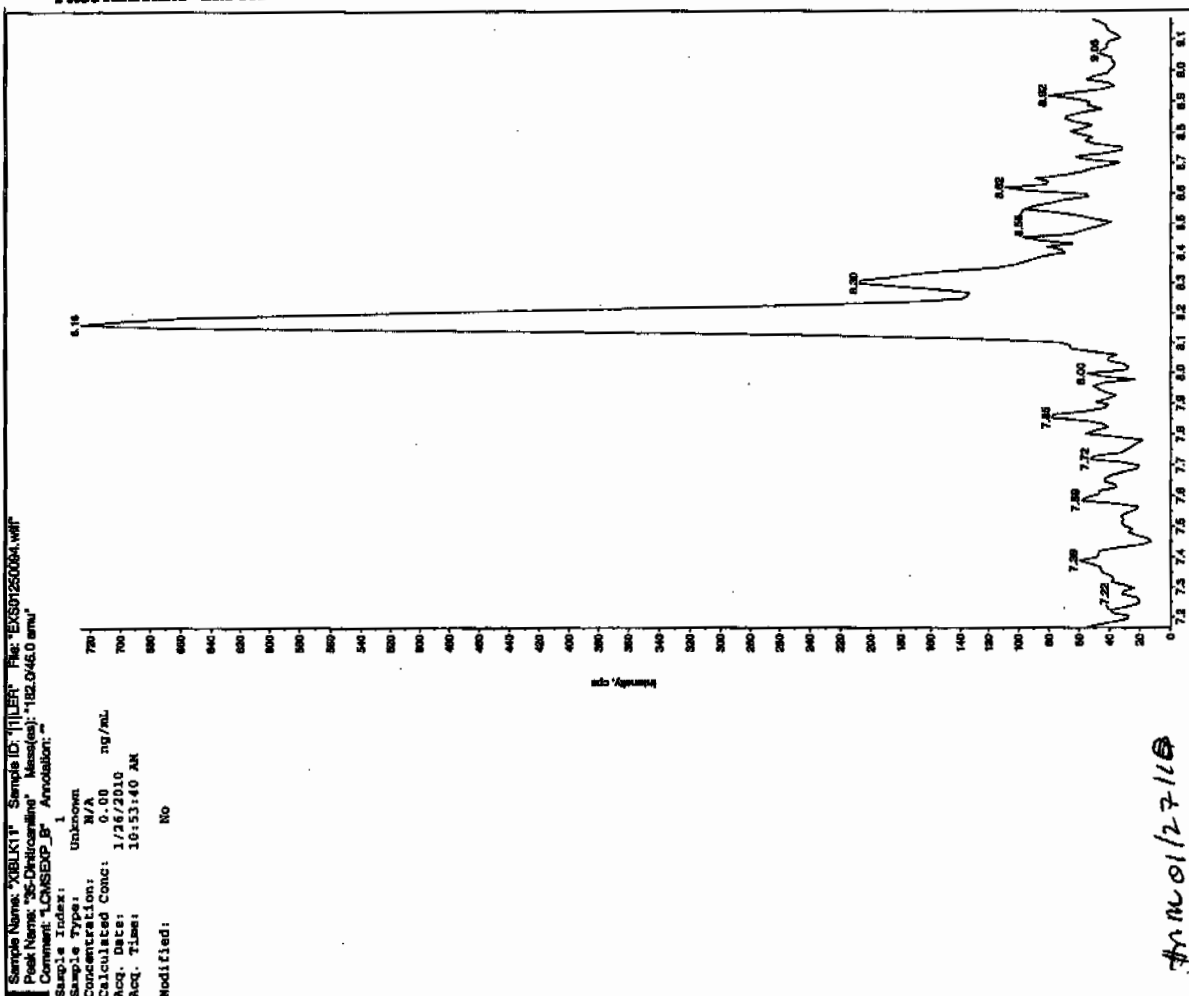
GEL Data File: EXS01250094.wiff

Instrument ID: LCMSMS

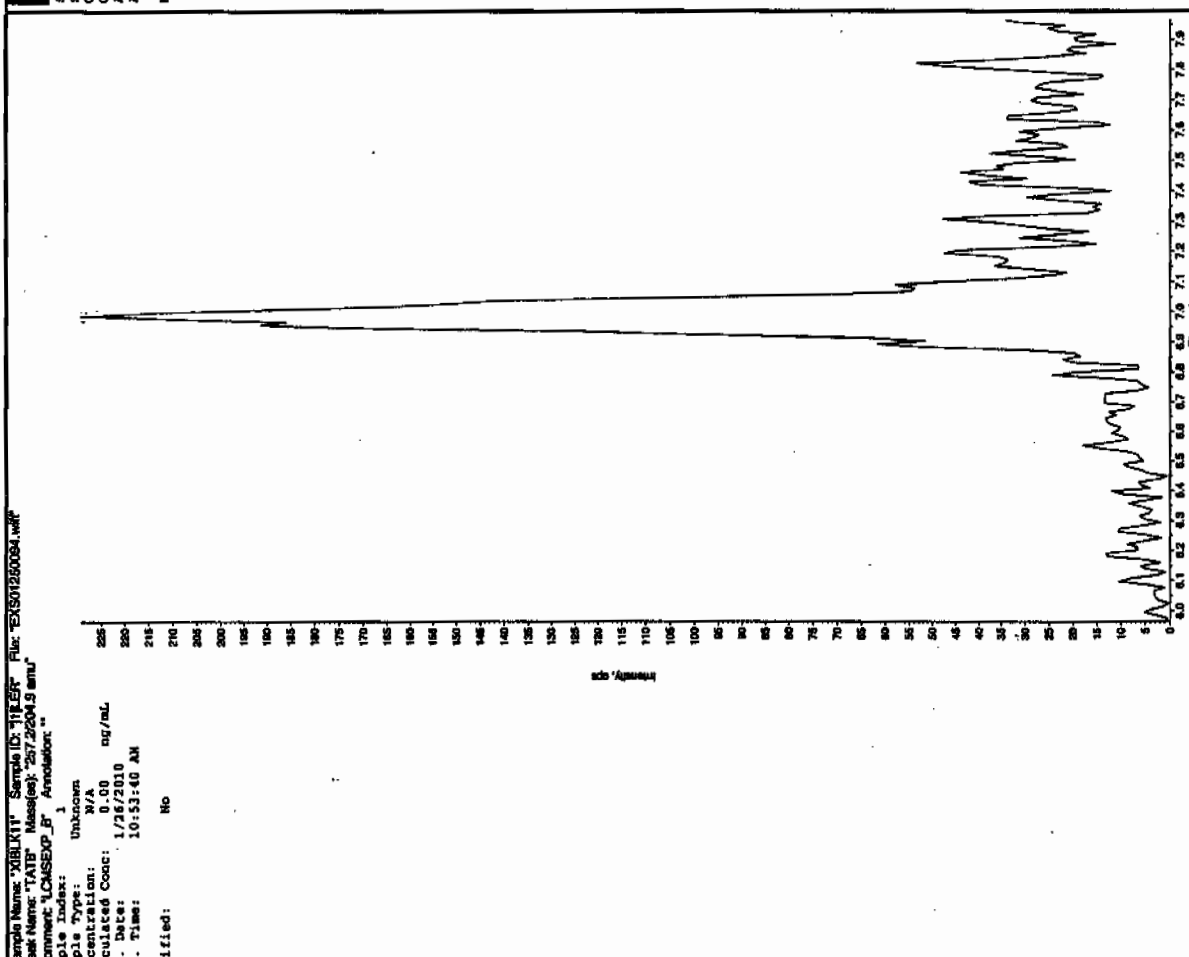
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.4
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 127110



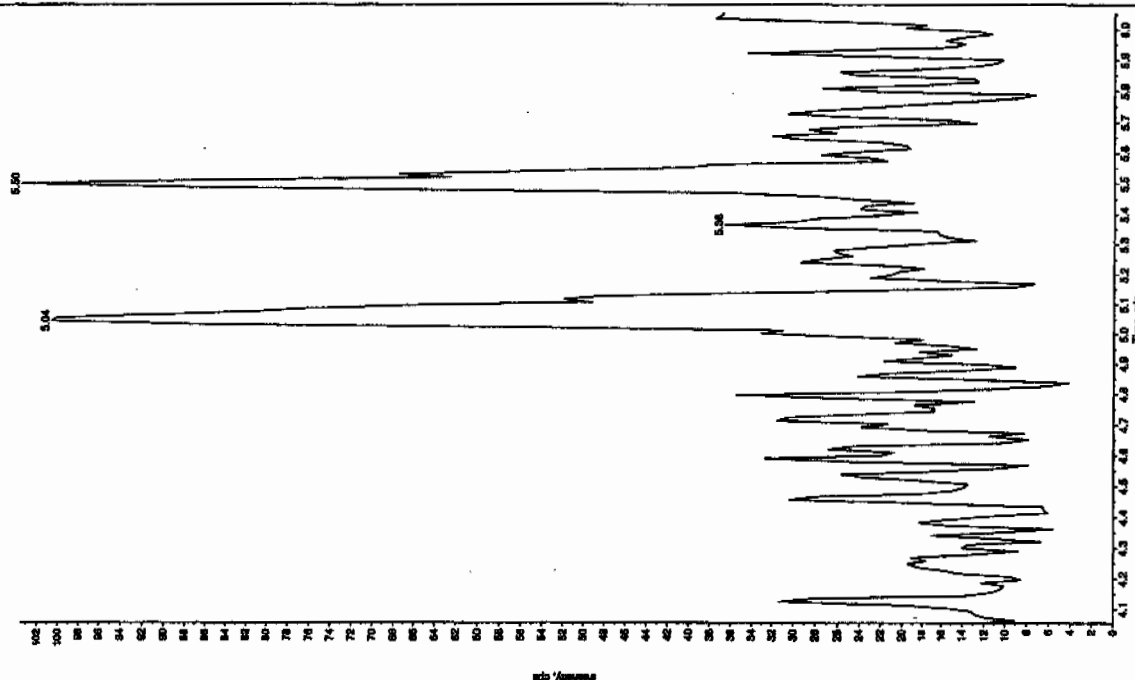
Amc 01/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

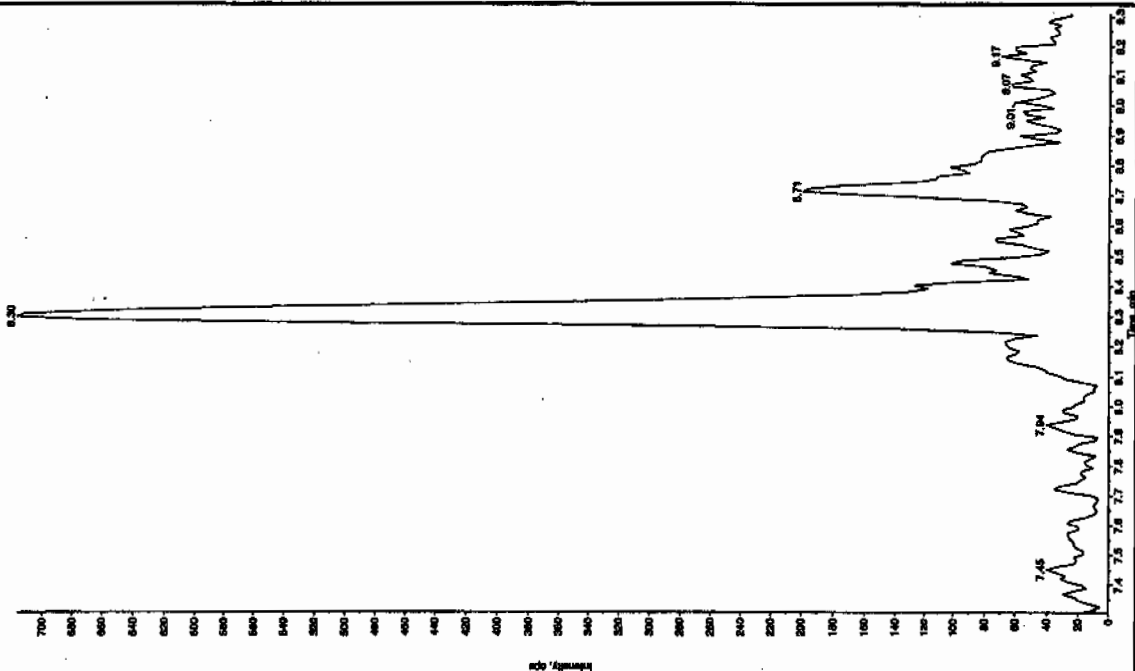
Sample Name: "XBLK11" Sample ID: "1111" File: "EXS01250084.wit"
 Peak Name: "28-Dinitro-4-nitrobenzene" Mass(es): "166.046.0 amu"
 Comment: "LCMSXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 10:53:40 AM
 Modified: No



Sample Name: "XBLK11" Sample ID: "1111" File: "EXS01250084.wit"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1715.9 amu"
 Comment: "LCMSXP_B" Annotation: "

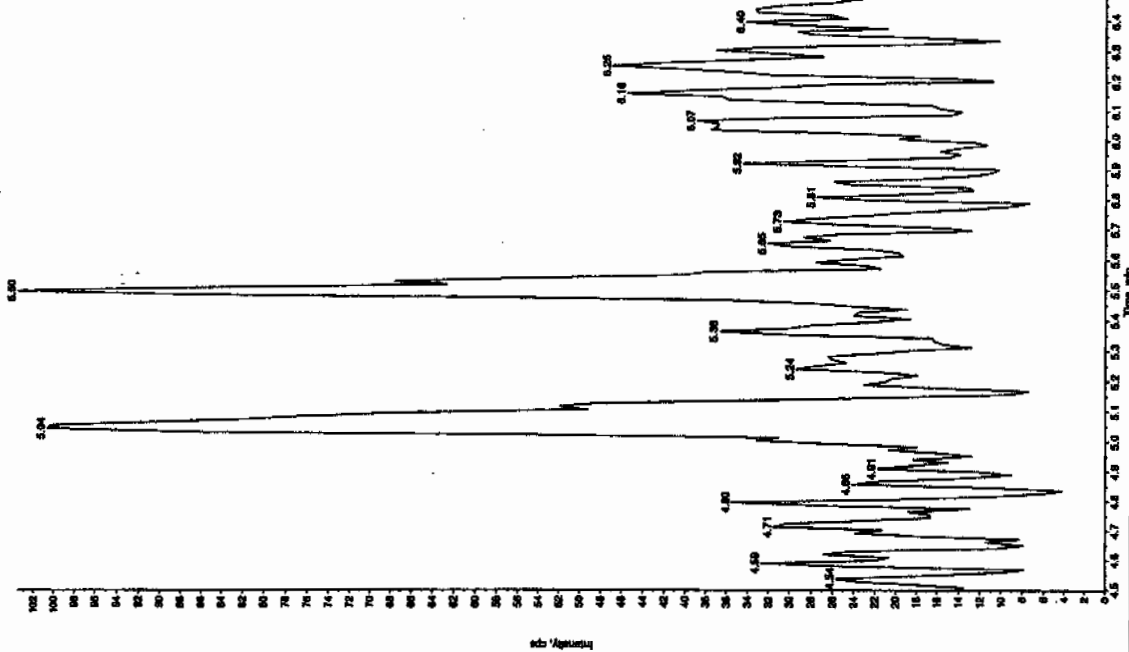
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 10:53:40 AM
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLUK11" Sample ID: "T1LER" File: "EX0126094.will"
 Peak Name: "24-Diamino-6-nitrothiophene" Mass(es): "165.046.0 amu"
 Comment: "LCMS/EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1.26 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 10:53:40 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.08e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 10.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 5.13e+004 counts
 Height: 13166.553 cps
 Start Time: 10.7 min
 End Time: 11.1 min



Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ;Most useful general purpose calibrant for all low
 ;MW applications, including MS/MS work.
 ;At high resolution, readily covers from m/z 50-2000.
 ;At reduced resolution, can be used to over m/z 3000.
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
 Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

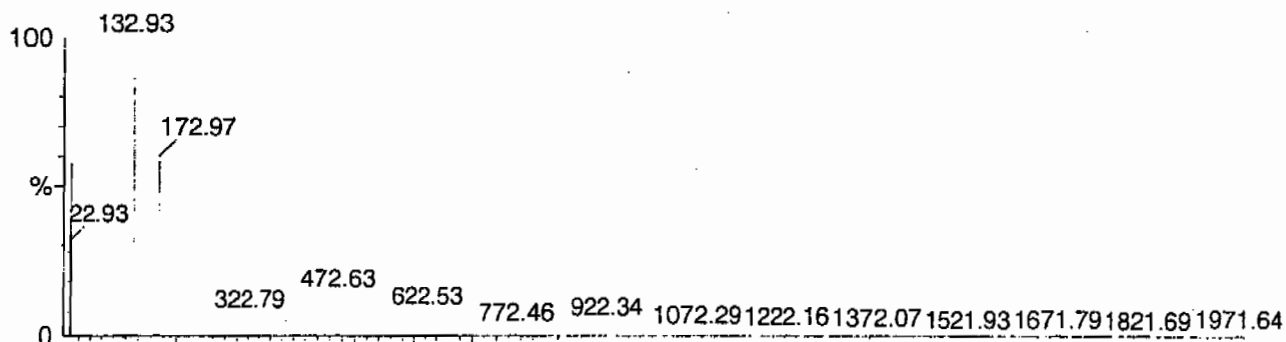
Calibration Report - MS1 Static

Page 1 of 1

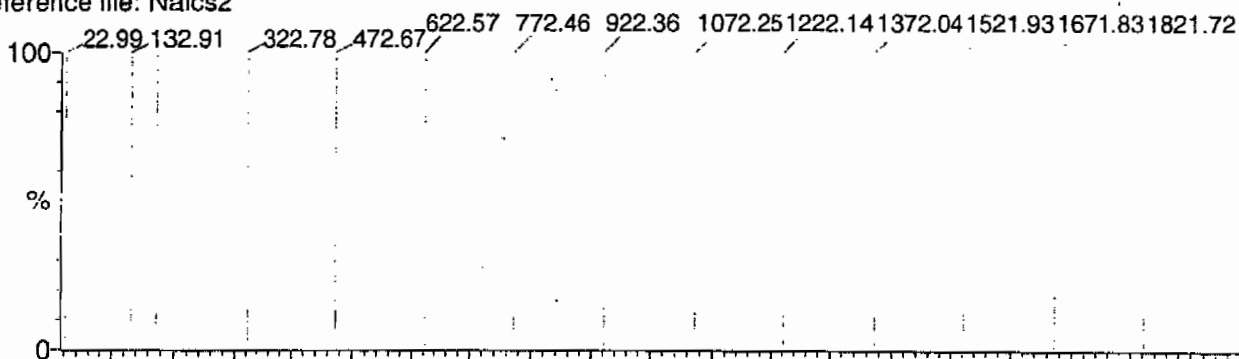
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

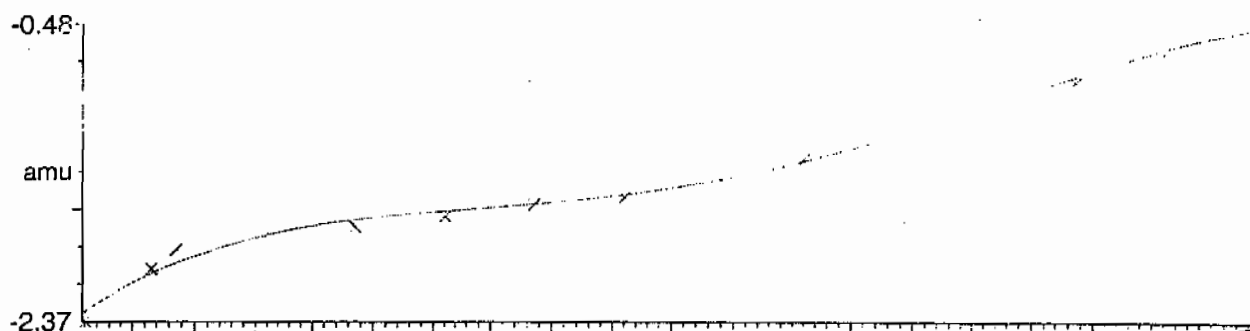
15 matches of 15 tested references



Reference file: Naics2

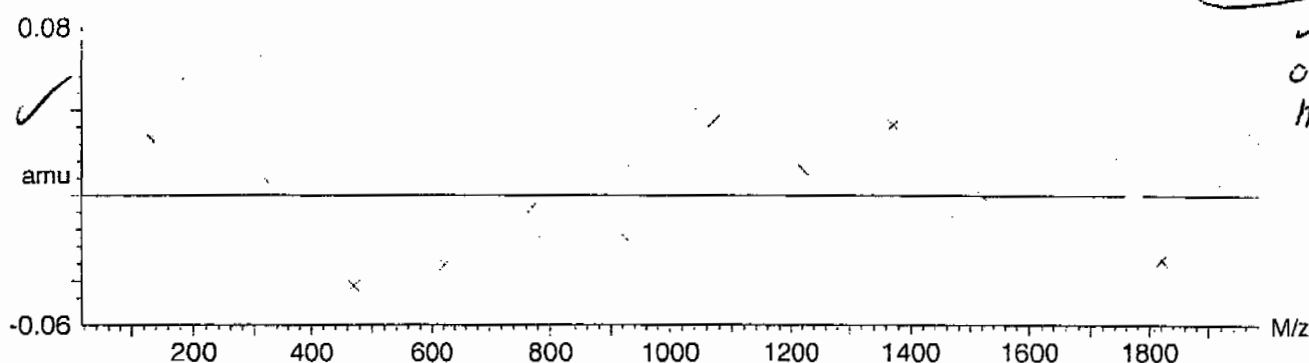


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$



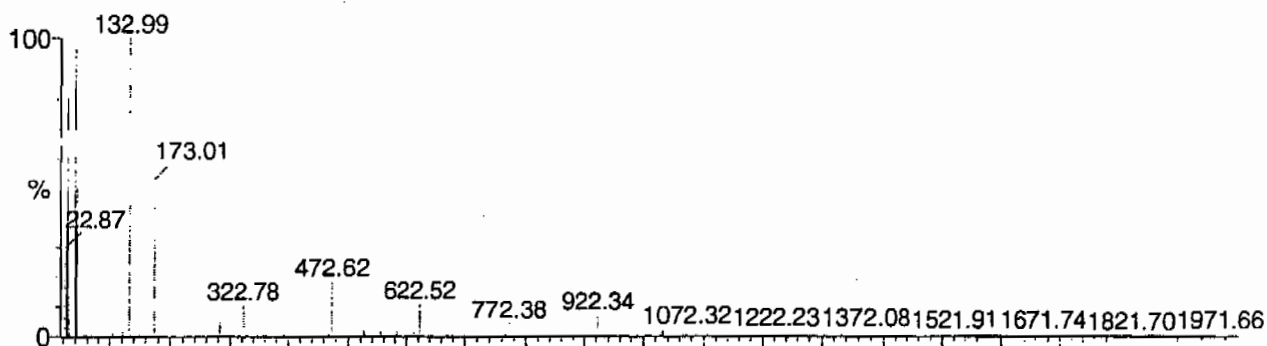
Calibration Report - MS1 Scanning

Page 1 of 1

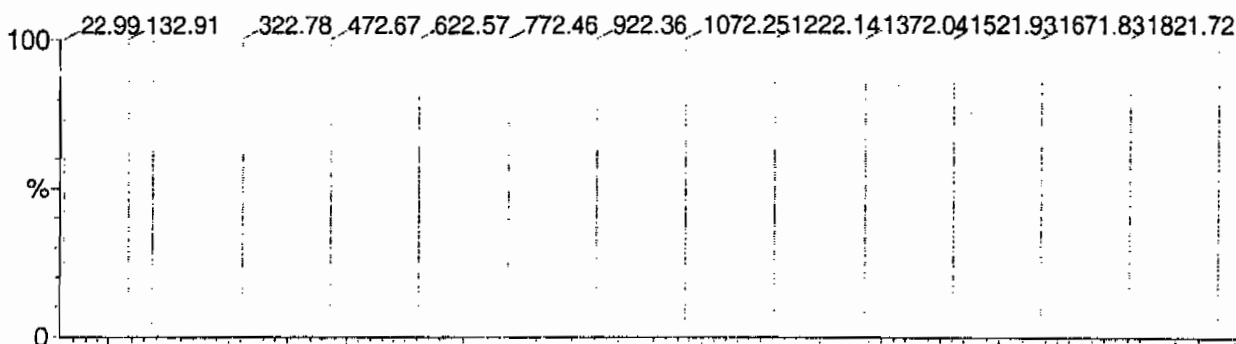
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

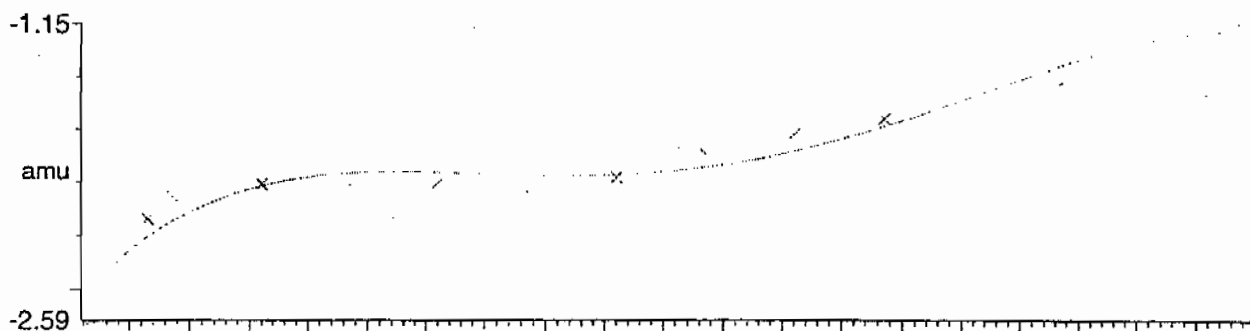
15 matches of 15 tested references



Reference file: Naics2

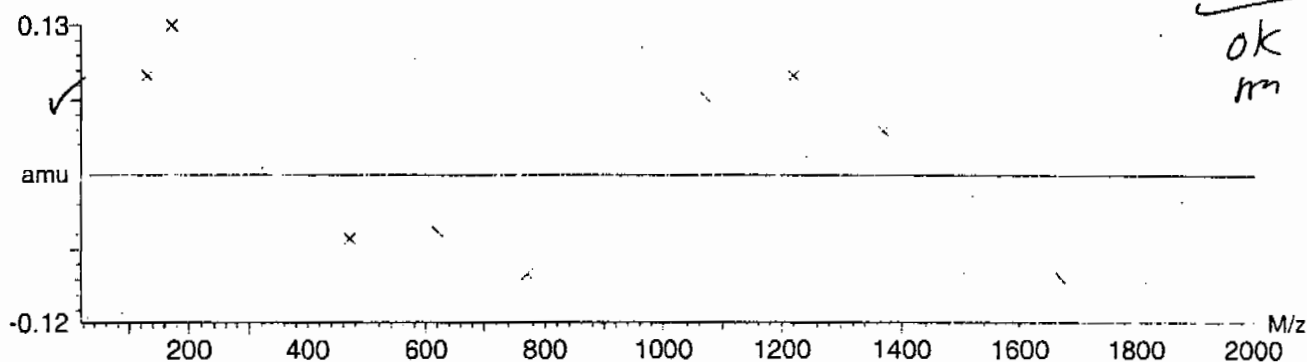


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-5.432715 \times 10^{-9} \pm 0.069858$



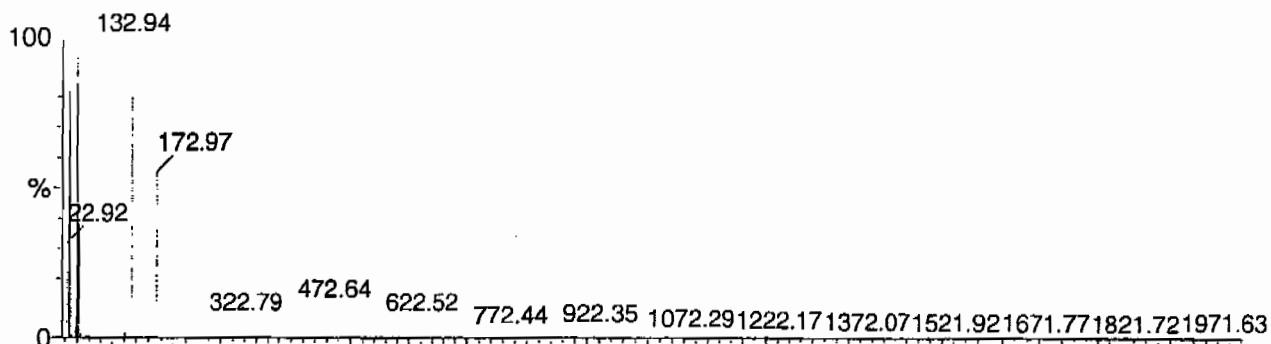
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

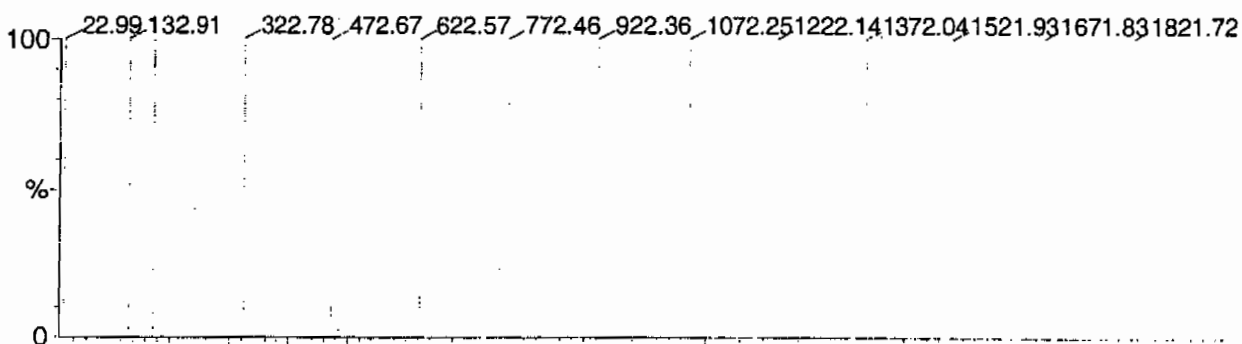
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

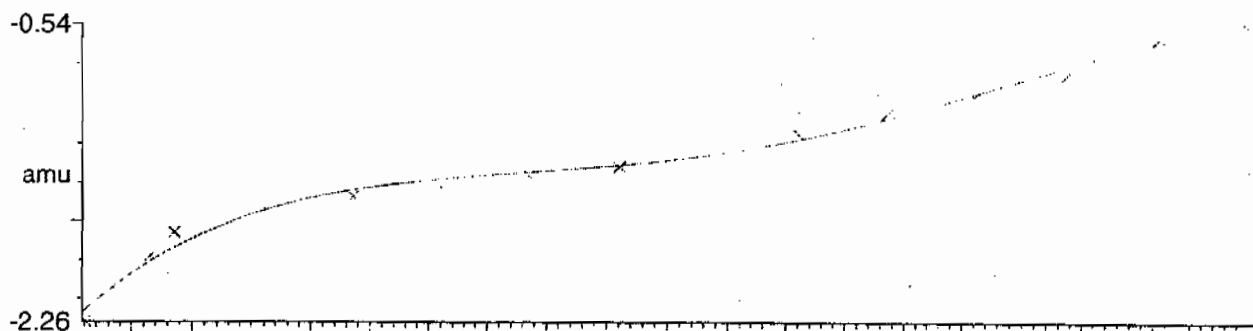
15 matches of 15 tested references



Reference file: Naics2

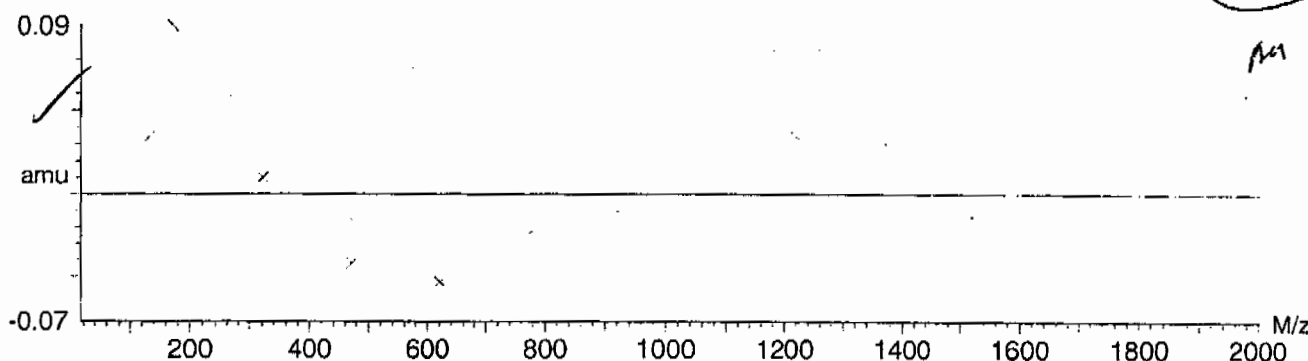


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639e-9 \pm 0.040487$



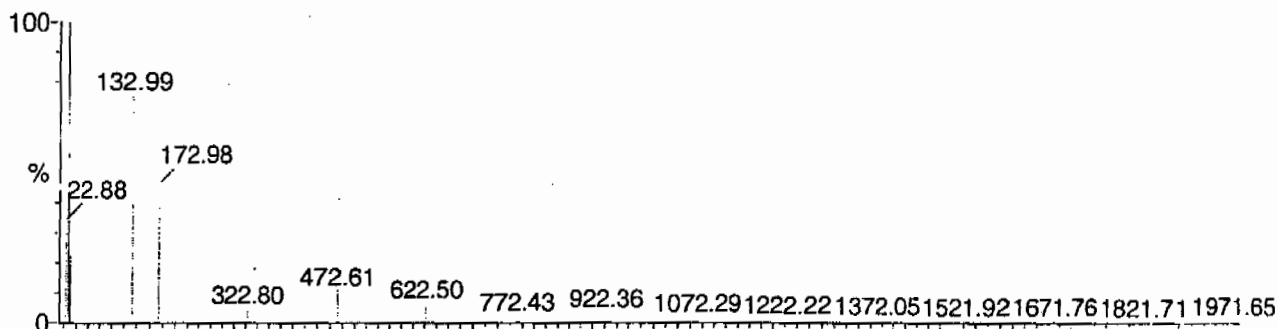
Calibration Report - MS2 Static

Page 1 of 1

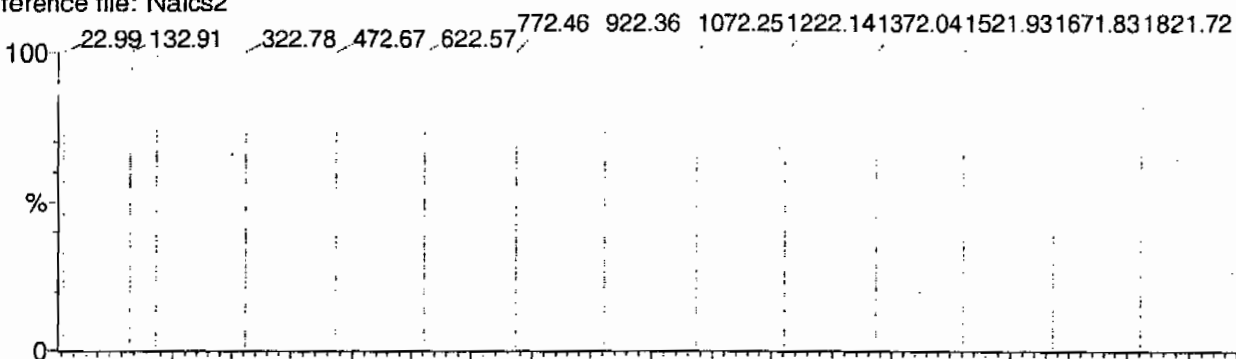
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

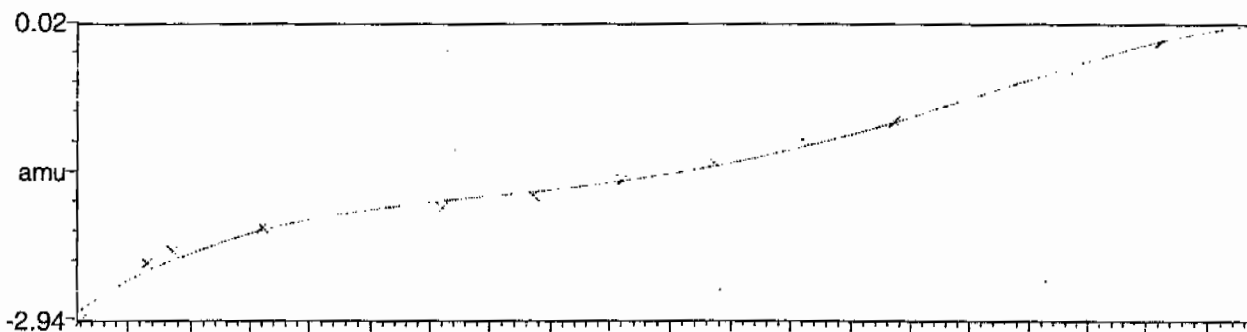
15 matches of 15 tested references.



Reference file: Naics2

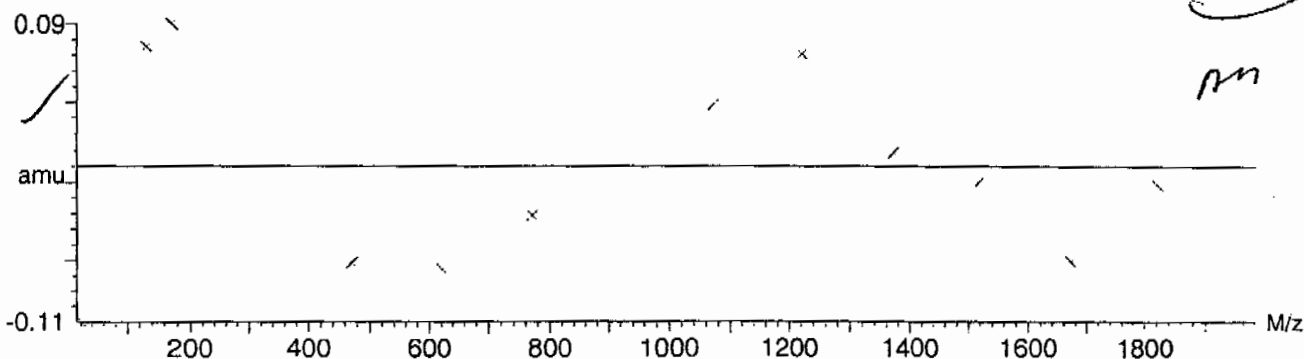


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910e-9 \pm 0.057803$



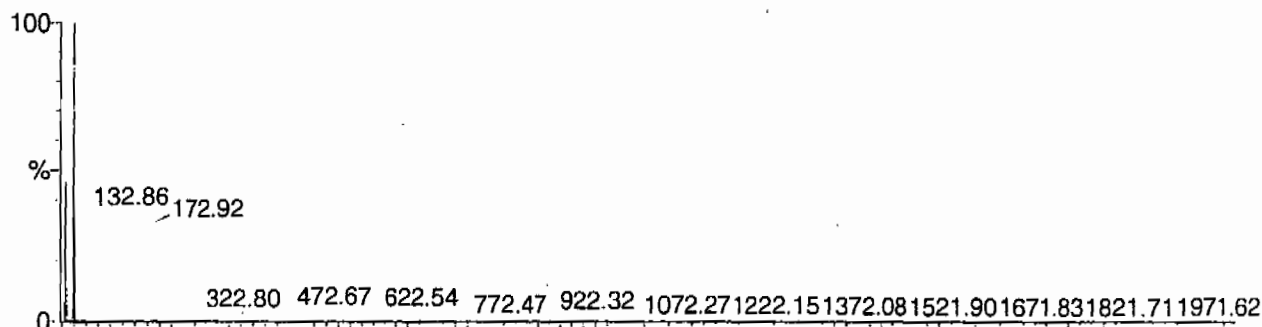
Calibration Report - MS2 Scanning

Page 1 of 1

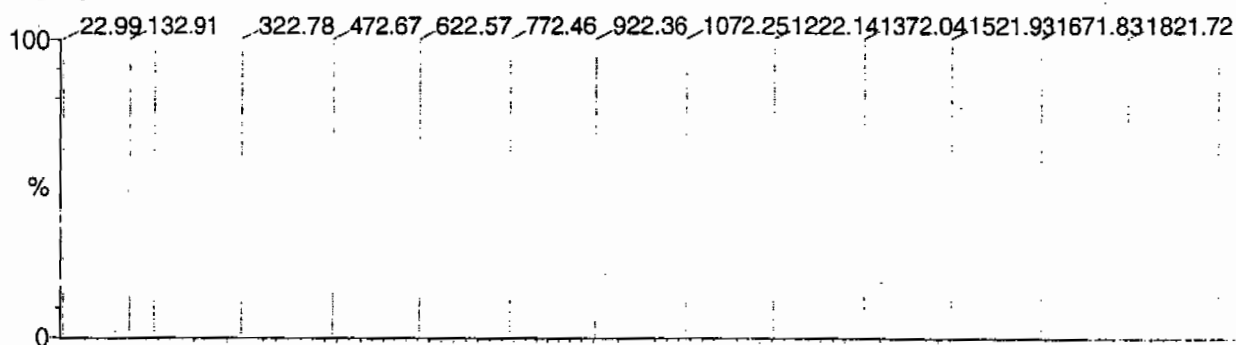
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

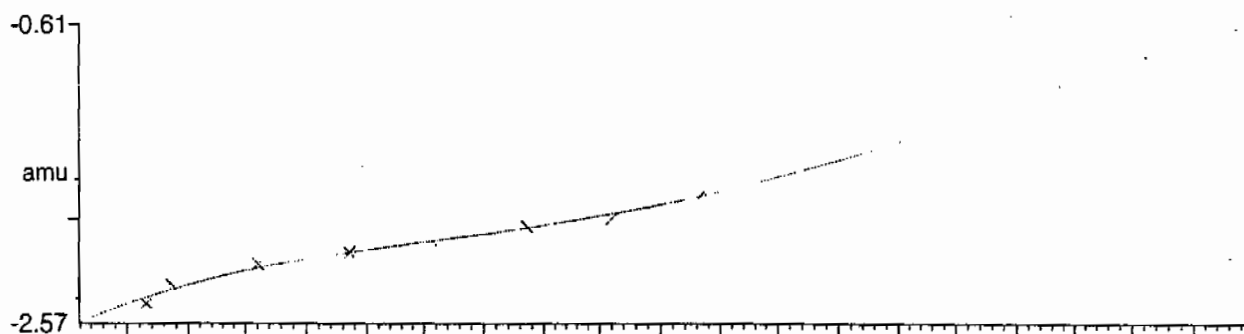
14 matches of 15 tested references



Reference file: Naics2

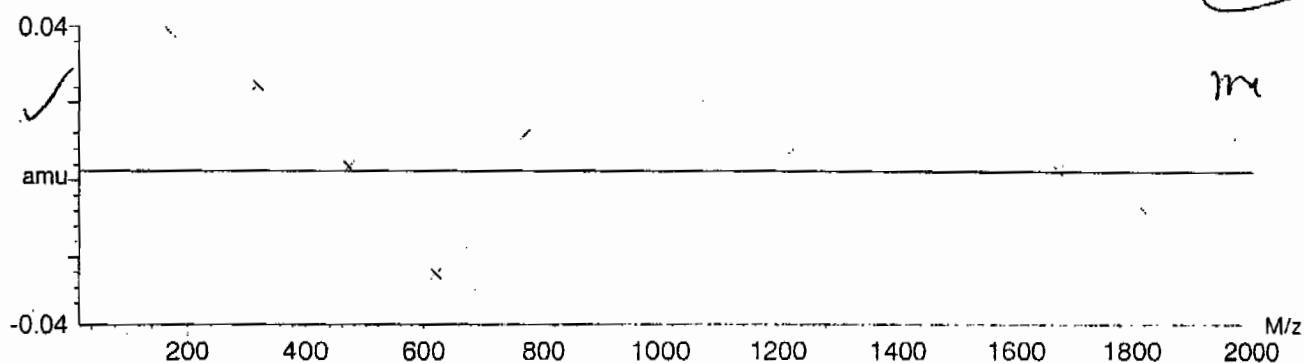


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502 \times 10^{-9} \pm 0.025622$



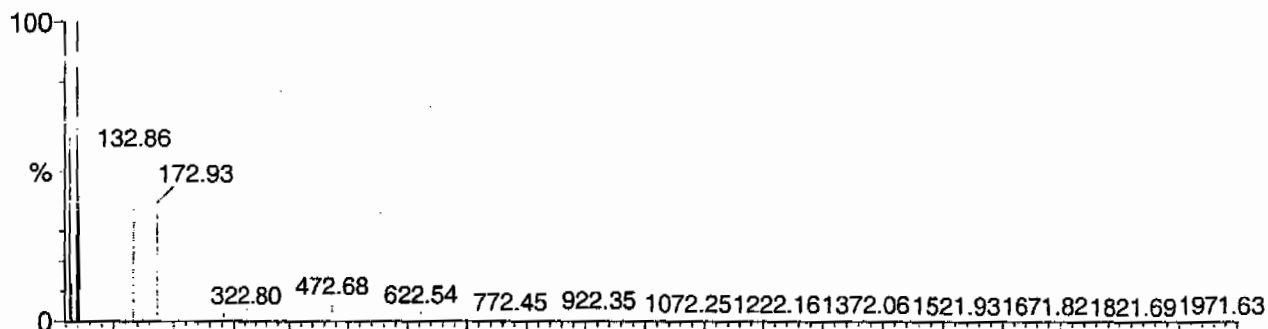
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

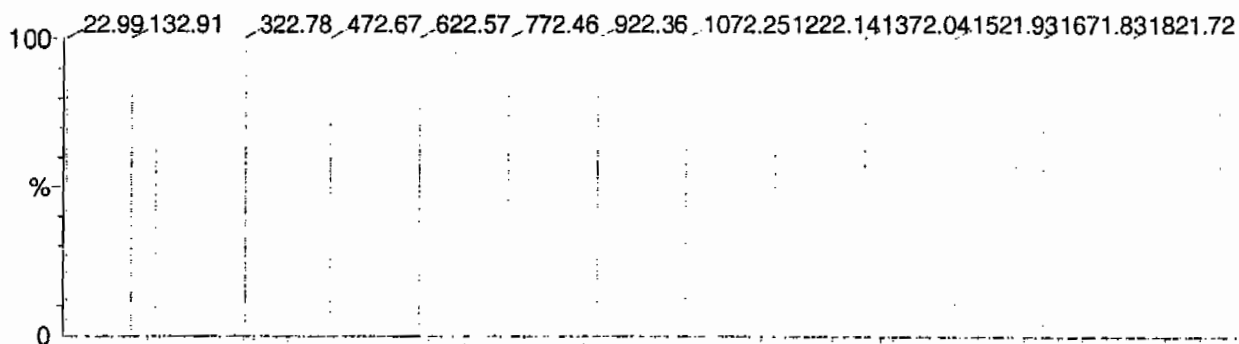
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

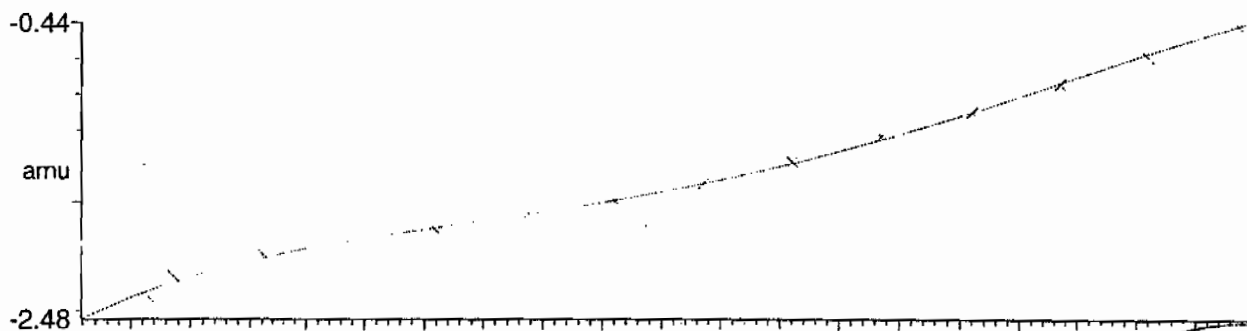
14 matches of 15 tested references



Reference file: Naics2

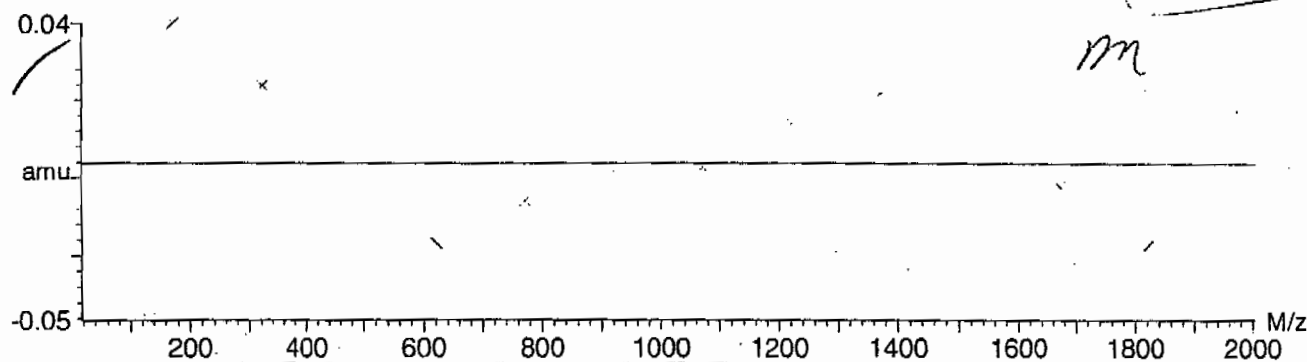


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

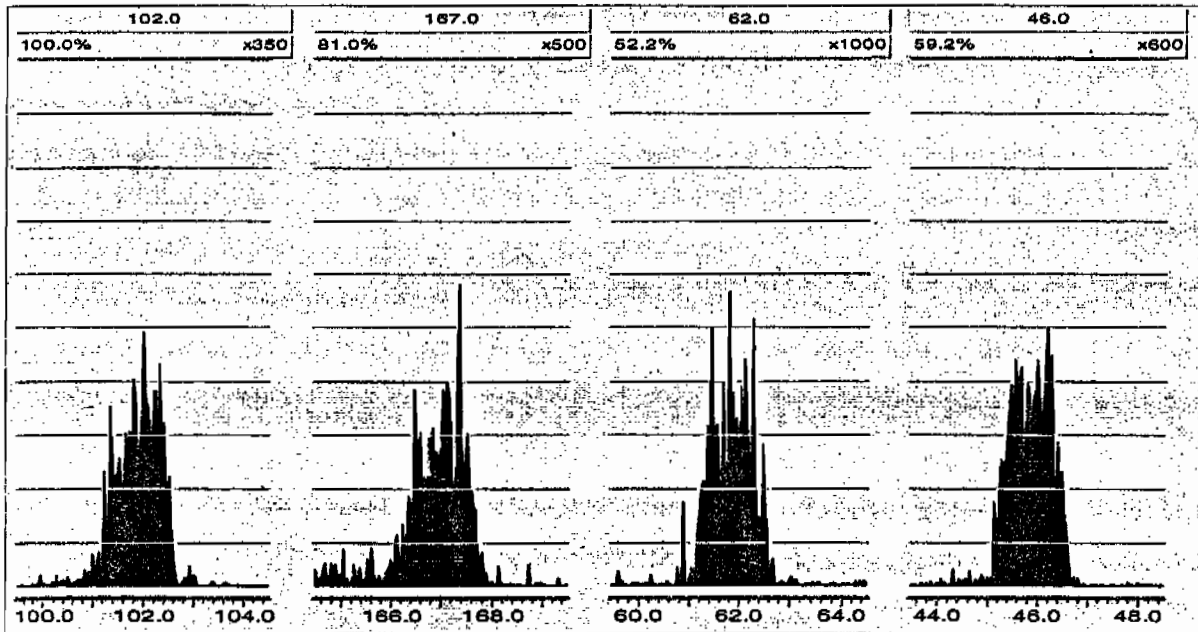


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Sat Jan 30 11:40:54 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

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) #
			2529.997	11.976	14235.05	17.29
Upper Limit			3288.9961	12.476	18505.565	17.79
Lower Limit			1770.9979	11.476	9964.535	16.79
MB for batch 941663	30-jan-10 17:36	EXP0130013a	2472.1	11.973	12888.2	17.288
LCS for batch 941663	30-jan-10 18:06	EXP0130014a	2501.78	11.972	13437.8	17.292
RE12-10-7262	30-jan-10 18:35	EXP0130015a	2365.56	11.97	13313.2	17.281
RE12-10-7262(244626001MS)	30-jan-10 19:05	EXP0130016a	2515.22	11.971	13948.9	17.291
RE12-10-7262(244626001MSD)	30-jan-10 19:34	EXP0130017a	2589.57	11.953	14510.6	17.269
RE12-10-7266	30-jan-10 20:04	EXP0130018a	2846.71	11.972	15580.7	17.271
RE12-10-7258	30-jan-10 20:33	EXP0130019a	2572	11.972	14760.9	17.27
RE12-10-7268	30-jan-10 21:03	EXP0130020a	2741.35	11.953	15999.6	17.27
RE12-10-7265	30-jan-10 21:32	EXP0130021a	3011.67	11.972	16224.8	17.271
RE12-10-7261	30-jan-10 22:02	EXP0130022a	2965.92	11.974	15177.5	17.267
RE12-10-7259	31-jan-10 00:00	EXP0130026a	2850.87	11.951	16516.6	17.267
RE12-10-7263	31-jan-10 00:29	EXP0130027a	3079.02	11.953	15994.8	17.269
RE12-10-7271	31-jan-10 00:59	EXP0130028a	3140.3	11.947	17938.4	17.267
RE12-10-7260	31-jan-10 01:28	EXP0130029a	2864.87	11.953	17664.5	17.269
RE12-10-7267	31-jan-10 01:58	EXP0130030a	2977.96	11.947	17161	17.266
RE12-10-7264	31-jan-10 02:27	EXP0130031a	2907.55	11.953	16860	17.269
RE12-10-7270	31-jan-10 02:57	EXP0130032a	2892.73	11.972	16280.7	17.266
RE12-10-7269	31-jan-10 03:26	EXP0130033a	2947.49	11.952	16849.9	17.269
RE12-10-7283	31-jan-10 03:56	EXP0130034a	3067.45	11.95	18321	17.269
RE12-10-7282	31-jan-10 04:25	EXP0130035a	3137.14	11.946	17410.2	17.271

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: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626001

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130015a

Date Analyzed: 30-JAN-10 18:35

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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uantify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010.

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130015a

Date: 30-Jan-2010

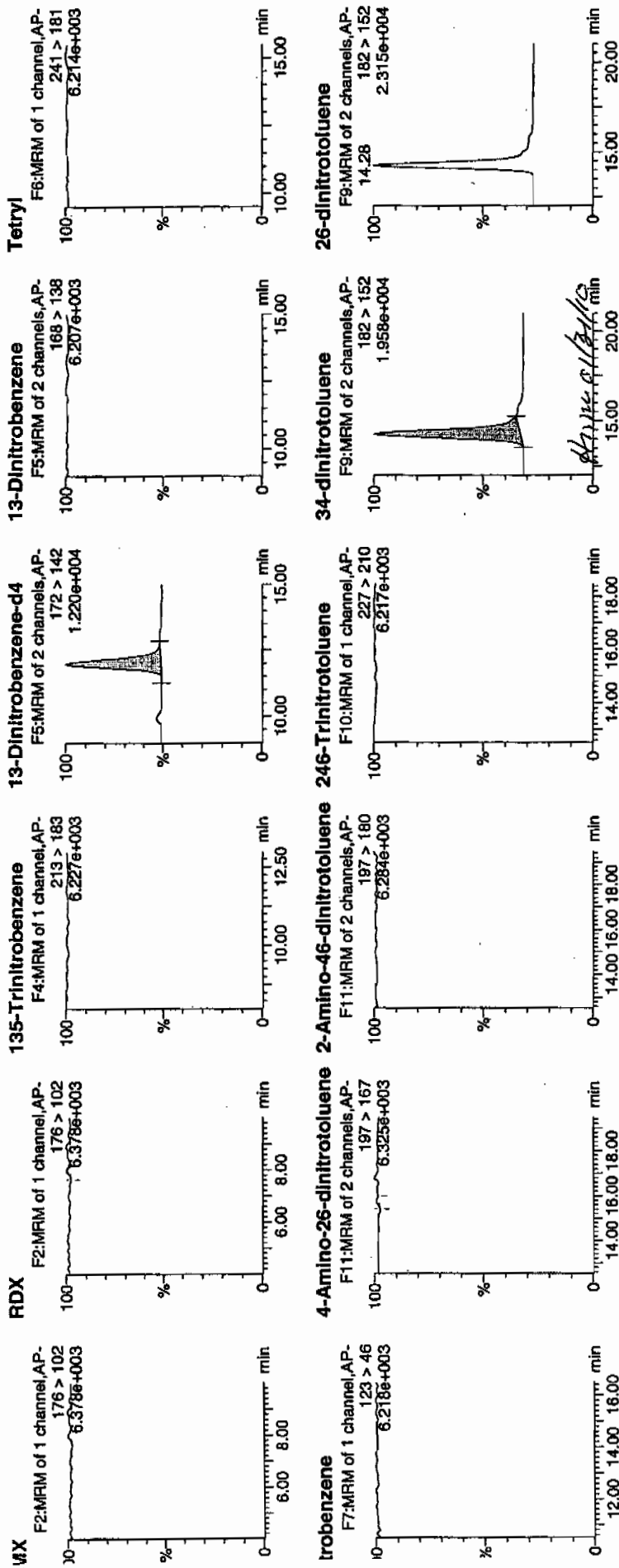
Time: 18:35:39

Sample: 244626001

Label: 1:4,C

1477
1/31/10

Handwritten: 244626001 / 244626001 / 244626001

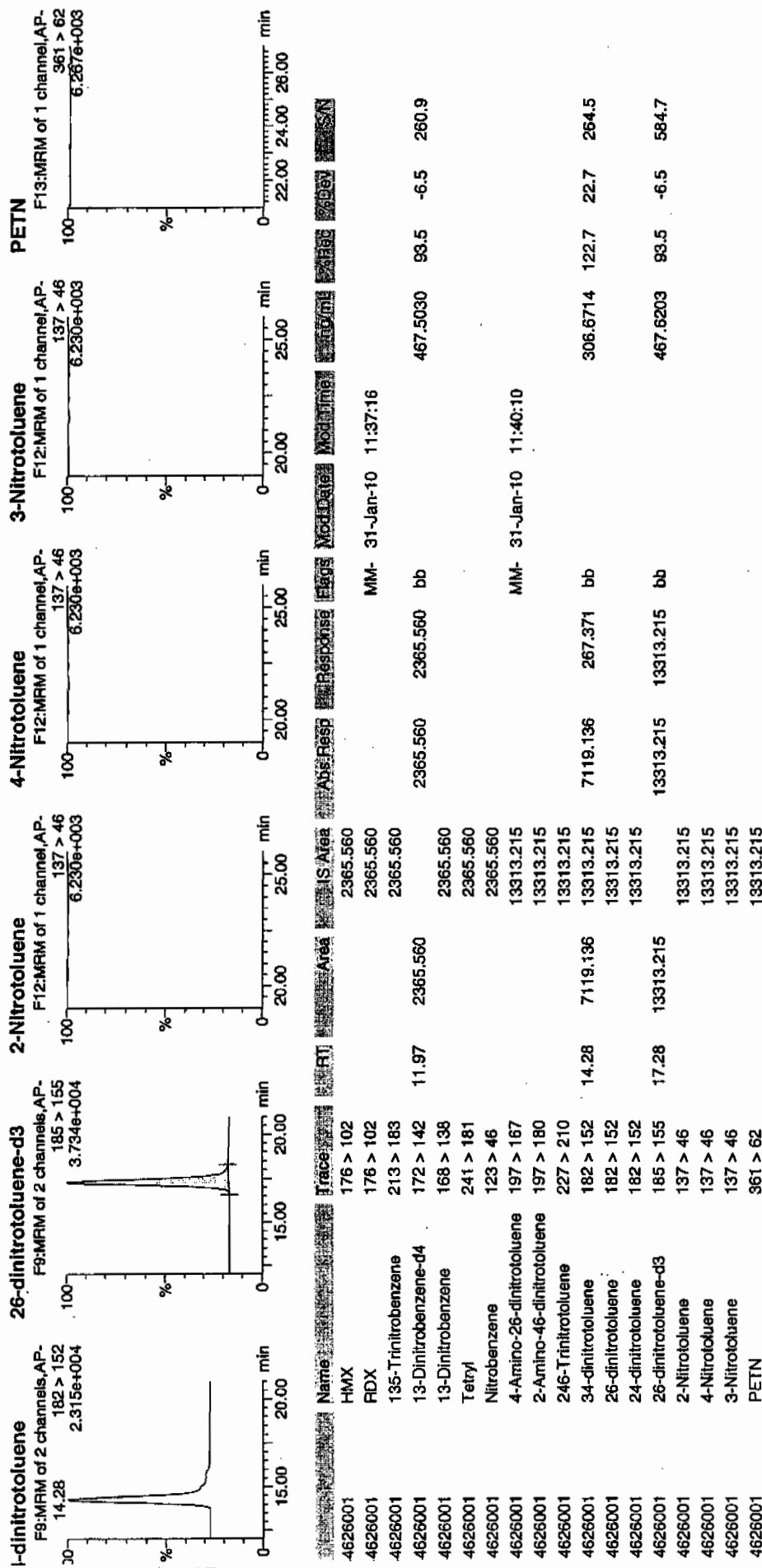


Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Jan 31 11:57:34 2010, Page 30 of 77

Dataset: C:\MASSLYN\New_Exp\PRO1013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626001

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250072.wiff

Date Analyzed: 26-JAN-10 05:08

Units: ug/kg

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

*Concentration =

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

Ken 1/27/10

File Name: "941864121" Sample ID: "941864121" File: "EX801250072.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation:

Sample Index: 1

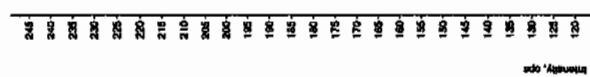
Sample Type: Unknown

Calculated Conc: 0.00 ng/mL

Date: 1/26/2010

Time: 5:08:13 AM

Modified: No



File Name: "24468601" Sample ID: "941864121" File: "EX801250072.wif"

Peak Name: "3S-Dinitroarsine" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation:

Sample Index: 1

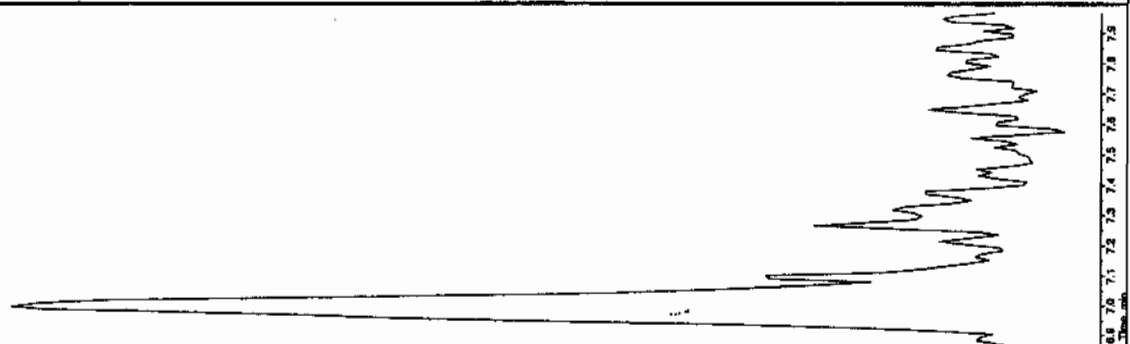
Sample Type: Unknown

Calculated Conc: 0.00 ng/mL

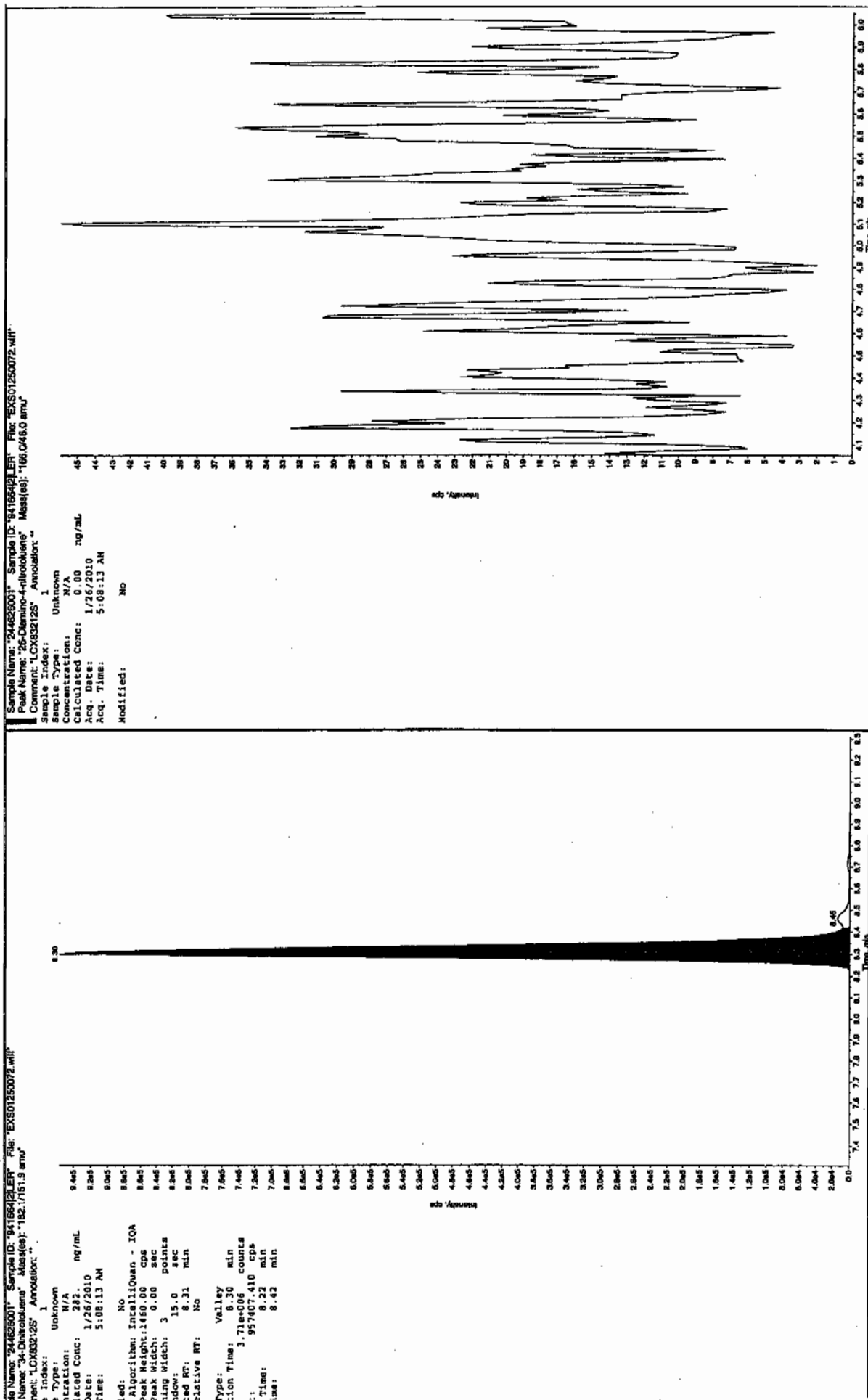
Date: 1/26/2010

Time: 5:08:13 AM

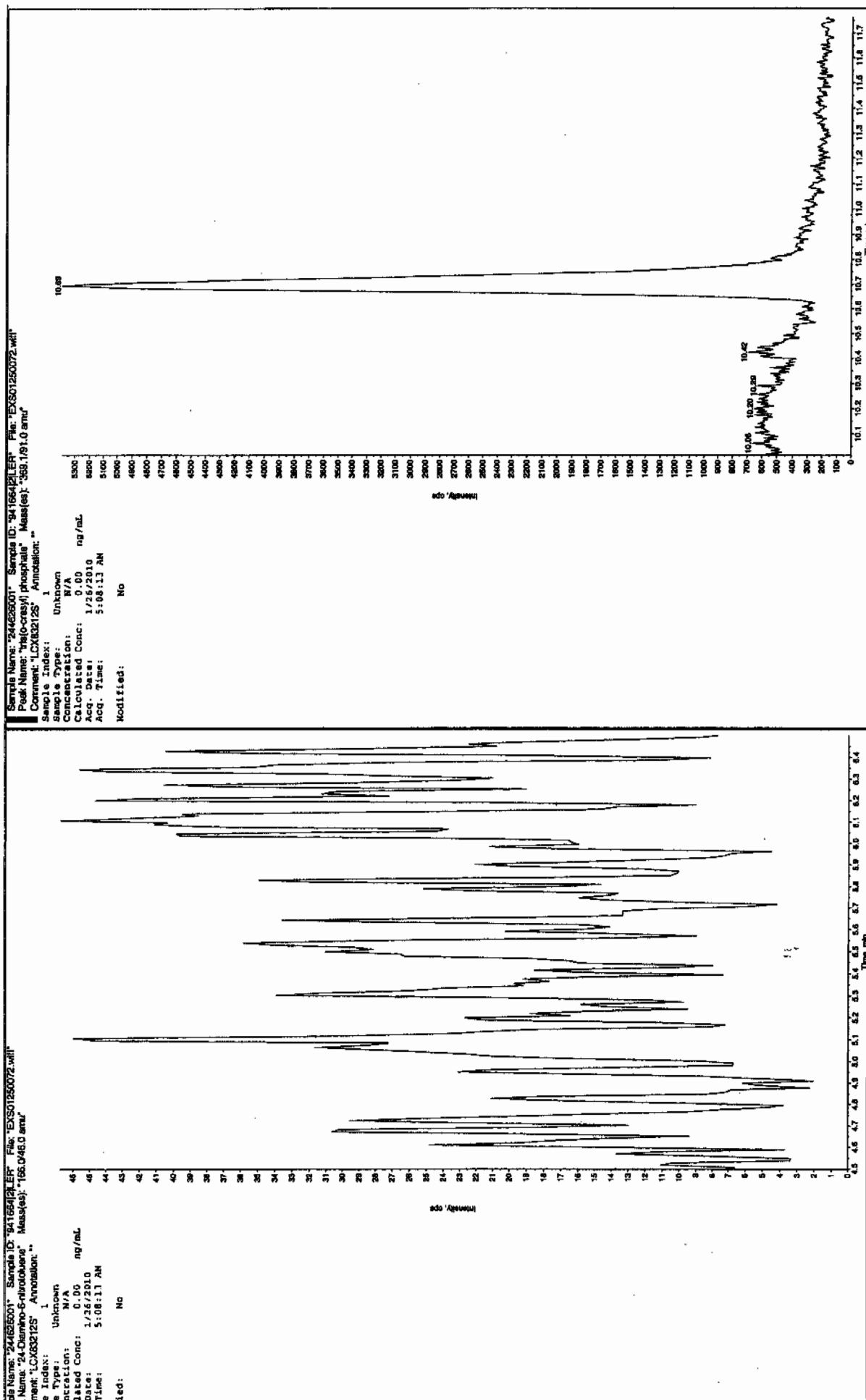
Modified: No



Amr 01/27/10



J, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7266

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626002

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130018a

Date Analyzed: 30-JAN-10 20:04

Units: ug/kg

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

*Concentration =

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

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130018a

Date: 30-Jan-2010

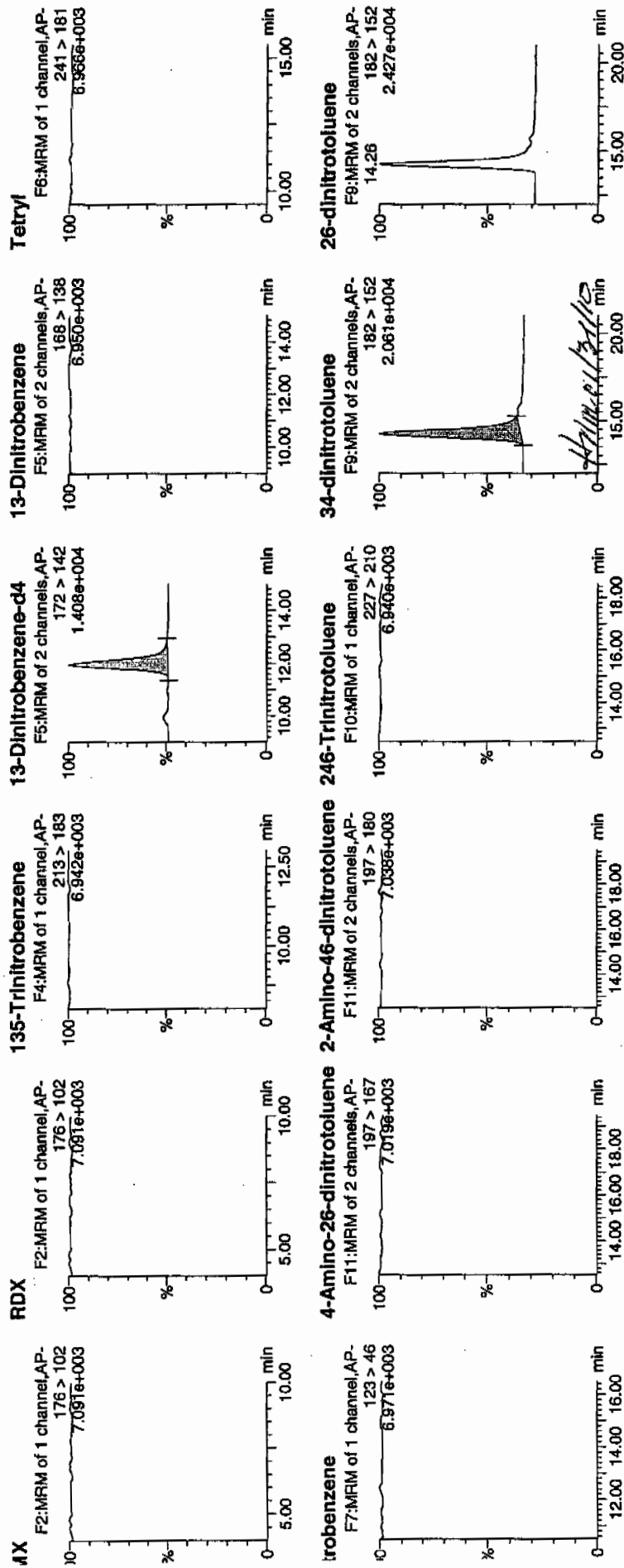
Time: 20:04:20

Page: 244626002

Sample: 1:4,F

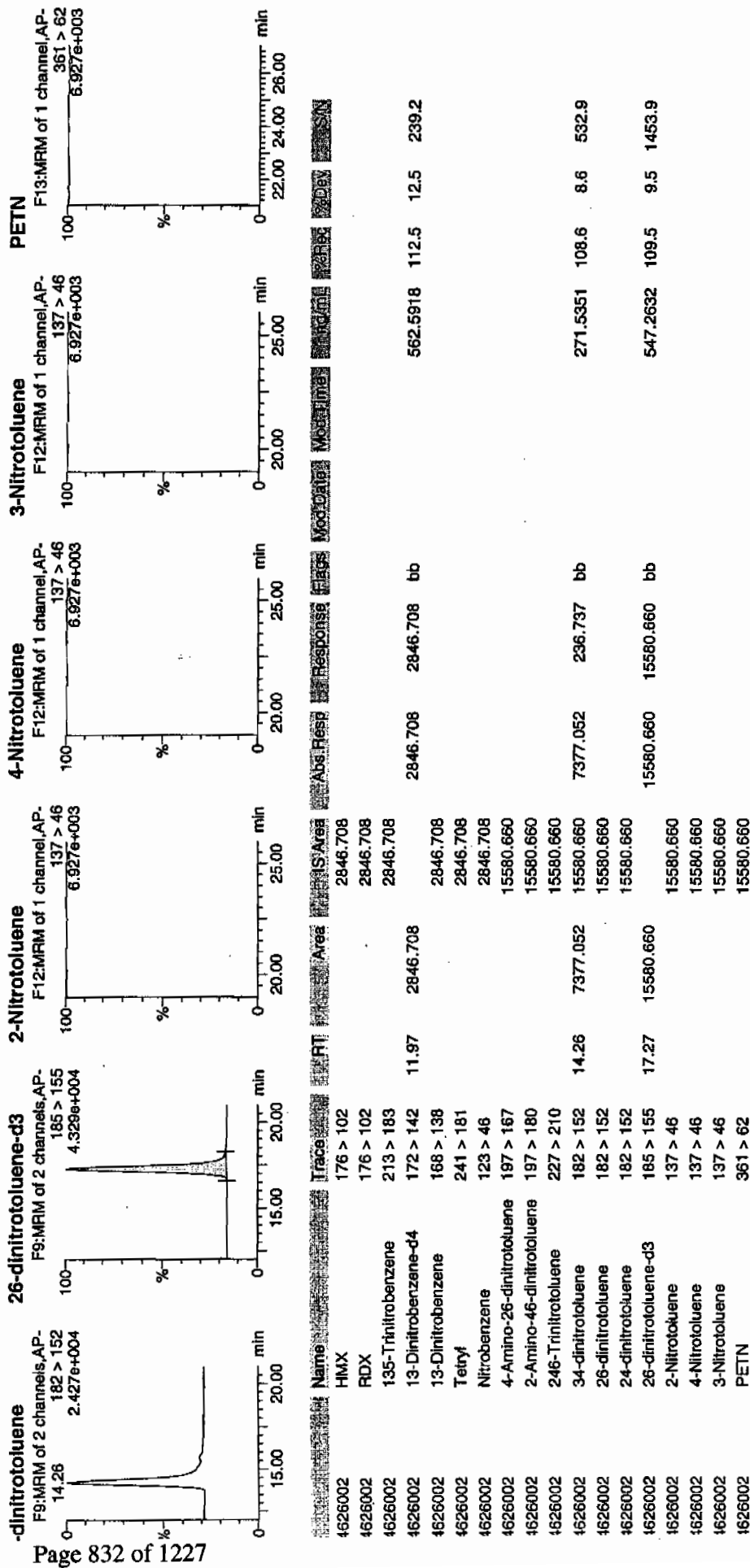
1/31/10

941664 / 8000 / 21



Identify Sample Report
IL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7266

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626002

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250075.wiff

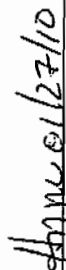
Date Analyzed: 26-JAN-10 05:55

Units: ug/kg

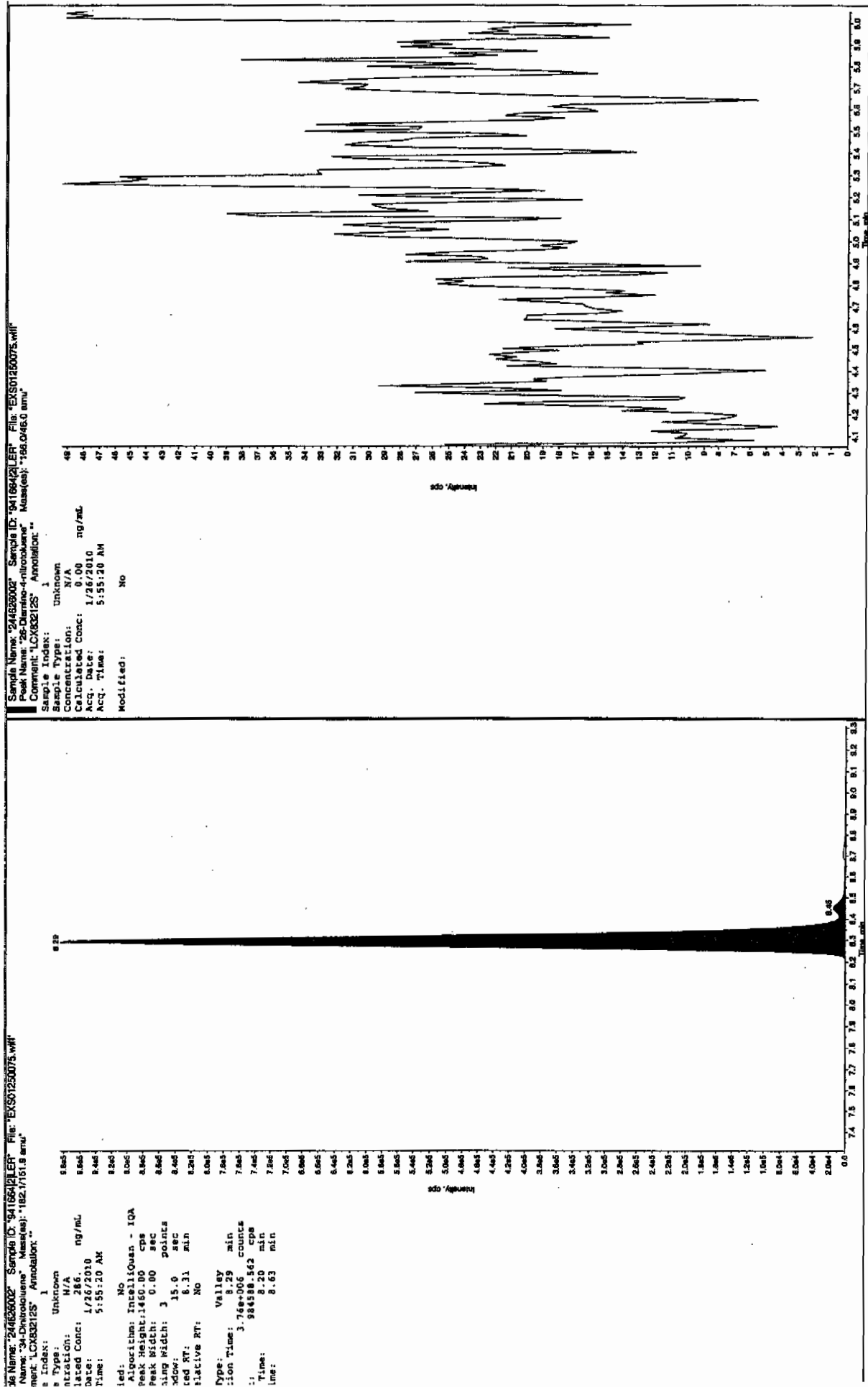
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

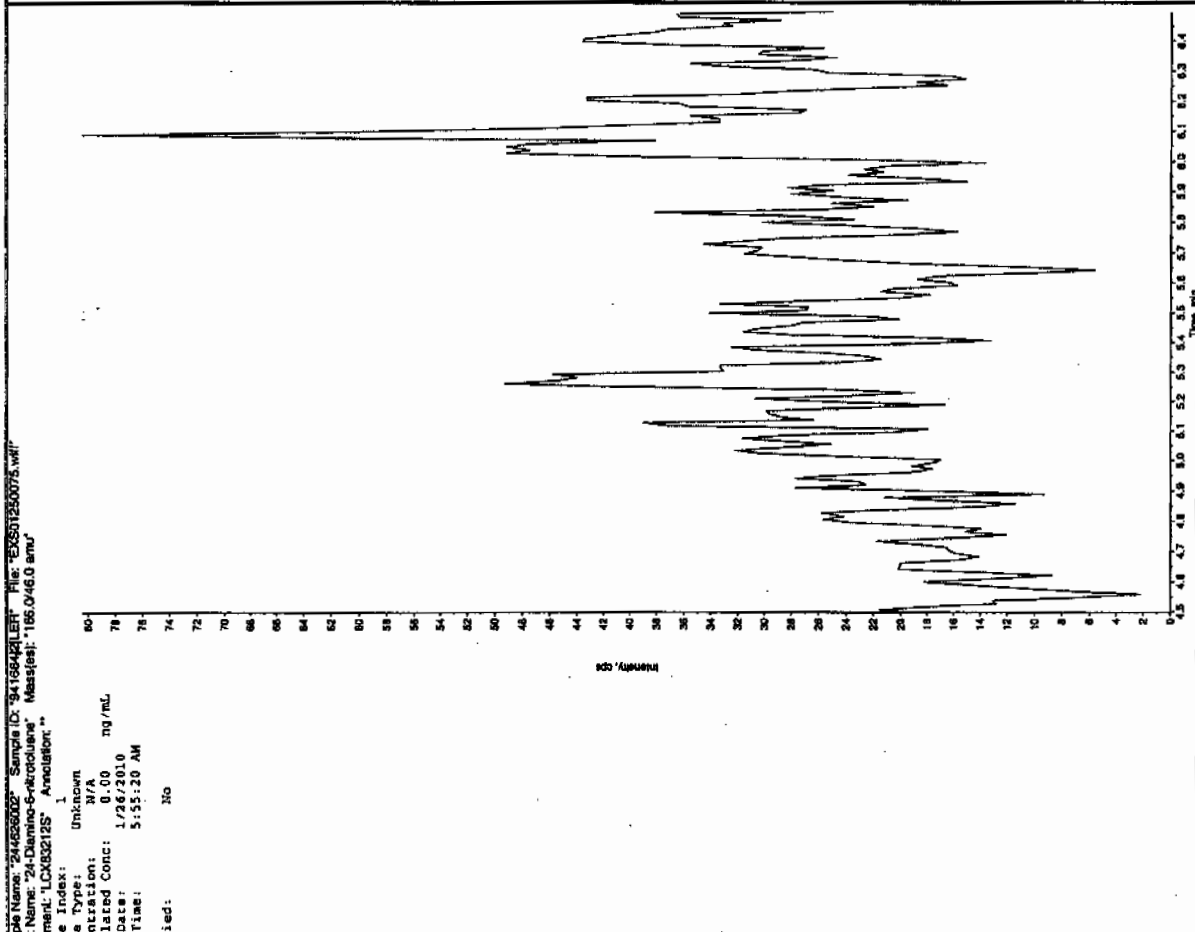
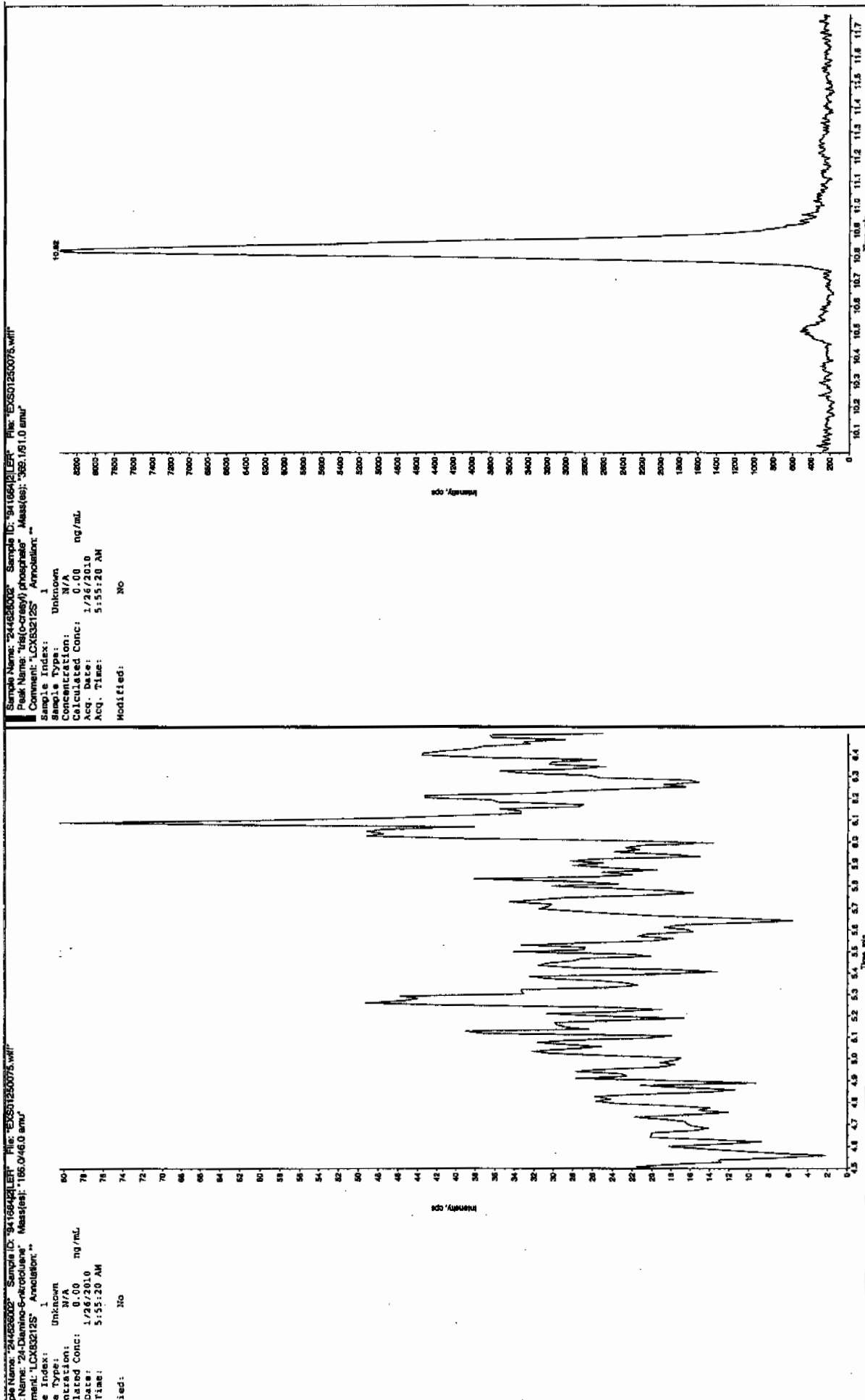
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7258

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626003

Sample Amount 2

Moisture: 14.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130019a

Date Analyzed: 30-JAN-10 20:33

Units: ug/kg

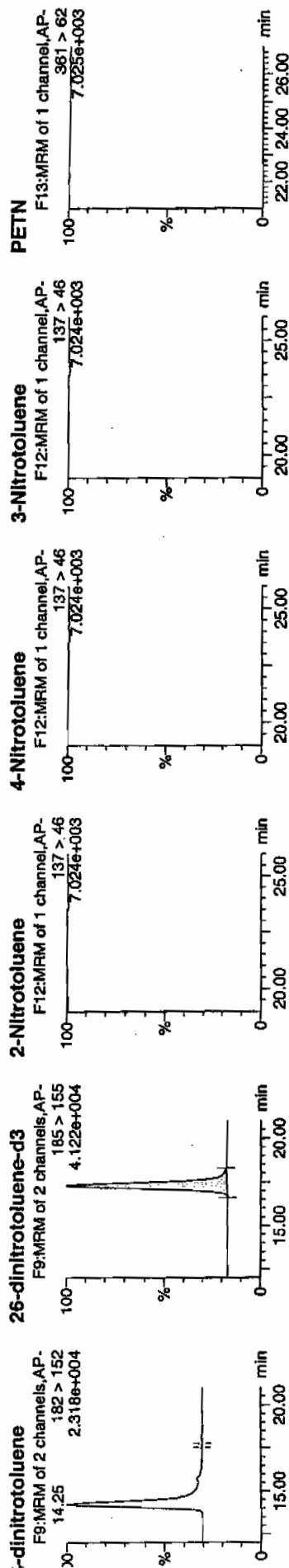
Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	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

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



Name	Trace	RT	Area	IS Area	Response	Flags	ModTime	ModBy	ModBy
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4626003	RDX	176 > 102		2571.996					
4626003	135-Trinitrobenzene	213 > 183		2571.996					
4626003	13-Dinitrobenzene-d4	172 > 142	11.97	2571.996					
4626003	13-Dinitrobenzene	168 > 138		2571.996					
4626003	Tetryl	241 > 181		2571.996					
4626003	Nitrobenzene	123 > 46		2571.996					
4626003	4-Amino-26-dinitrotoluene	197 > 167		14760.931					
4626003	2-Amino-46-dinitrotoluene	197 > 180		14760.931					
4626003	246-Trinitrotoluene	227 > 210		14760.931					
4626003	34-dinitrotoluene	182 > 152	14.25	6697.366					
4626003	26-dinitrotoluene	182 > 152		14760.931					
4626003	24-dinitrotoluene	182 > 152		14760.931					
4626003	26-dinitrotoluene-d3	185 > 155	17.27	14760.931					
4626003	2-Nitrotoluene	137 > 46		14760.931					
4626003	4-Nitrotoluene	137 > 46		14760.931					
4626003	3-Nitrotoluene	137 > 46		14760.931					
4626003	PETN	361 > 62		14760.931					
					2571.996	2571.996	bb		
					2571.996	2571.996	bb		
					6697.366	226.861	MM-	31-Jan-10	11:46:12
					14760.931	14760.931	MM-	31-Jan-10	11:50:37
					14760.931	14760.931	bb		
					2571.996	2571.996	bb		
					508.3007	101.7	1.7		
					378.2				
					280.2071	104.1	4.1		
					681.0				
					518.4706	103.7	3.7		
					1284.1				

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7258

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626003

Sample Amount 2

Moisture: 14.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250076.wiff

Date Analyzed: 26-JAN-10 06:11

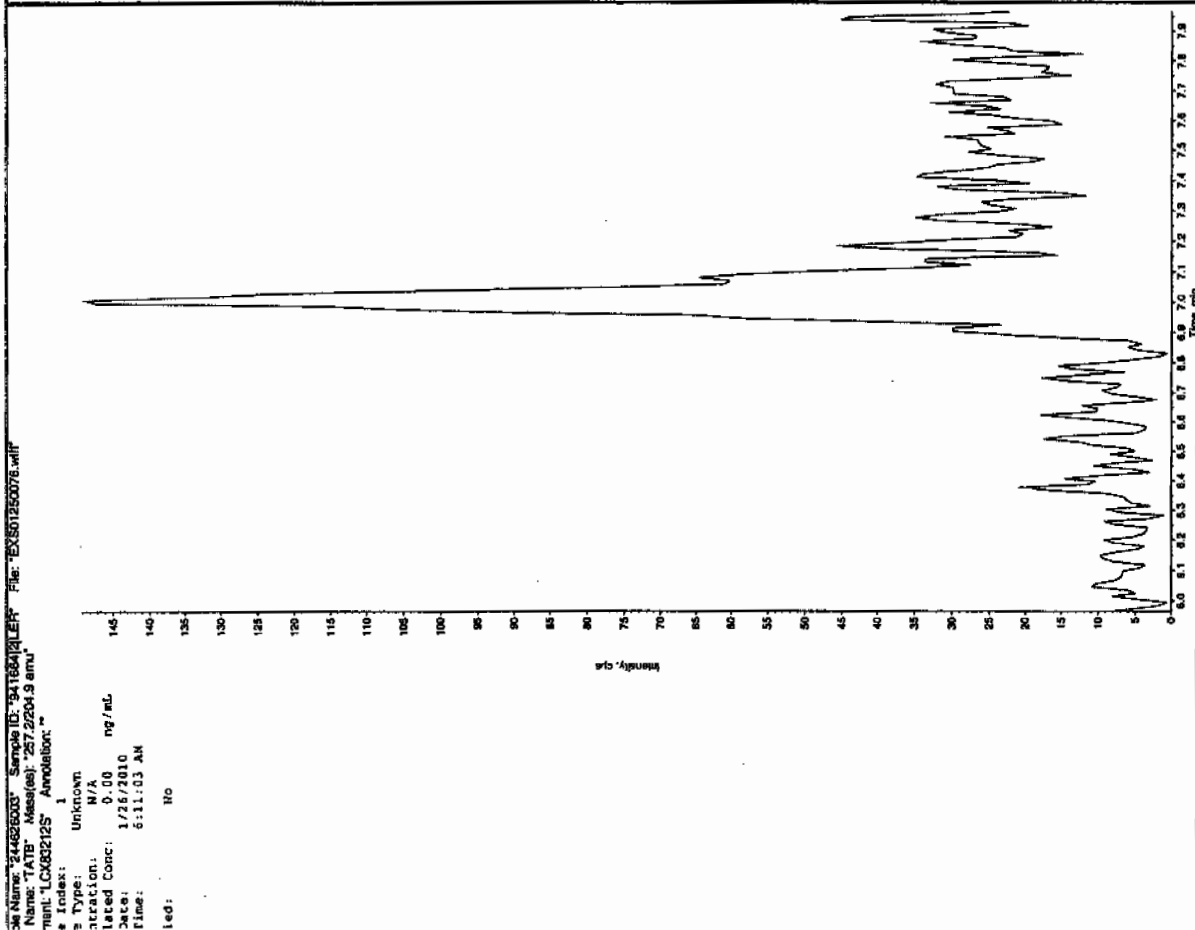
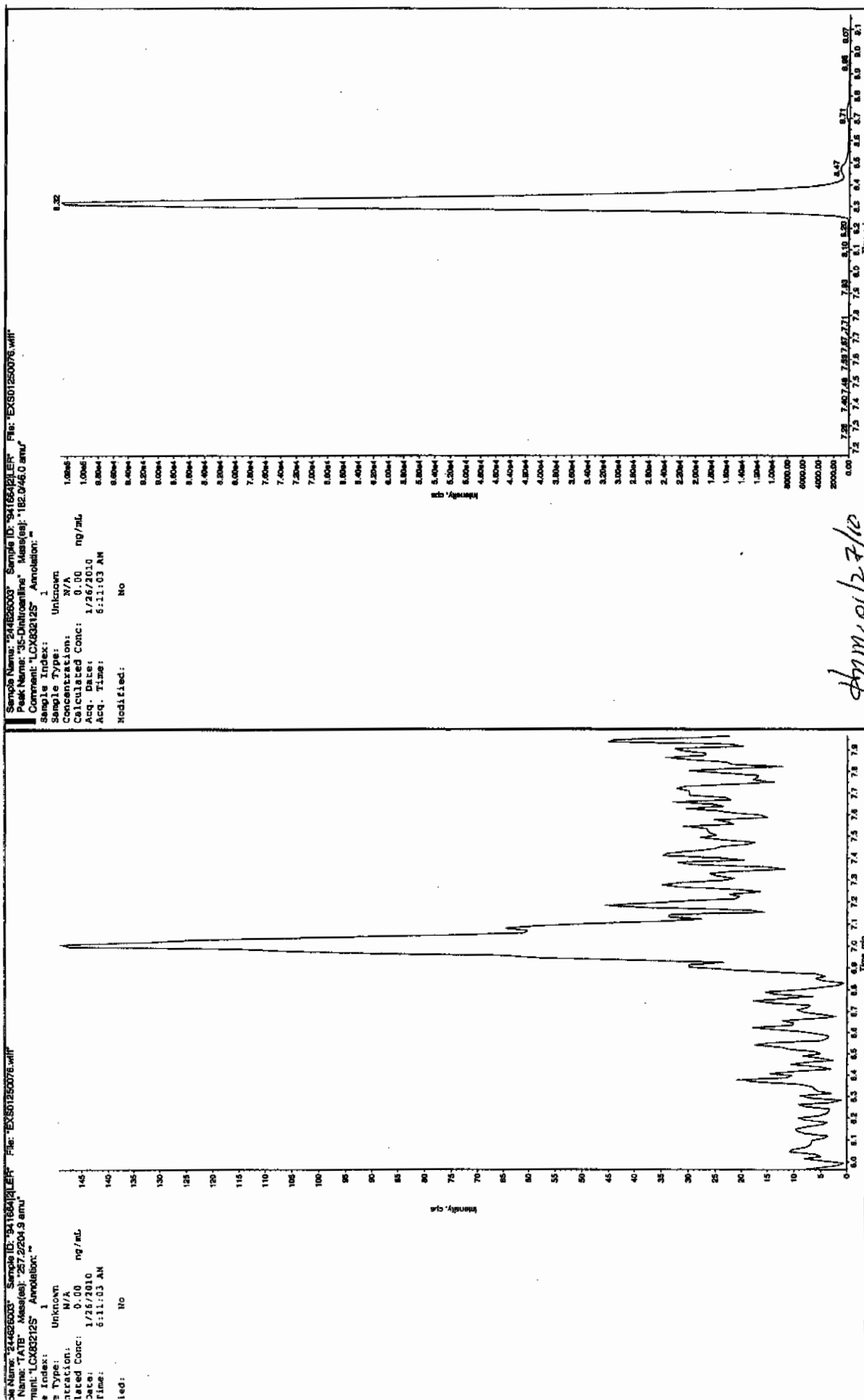
Units: ug/kg

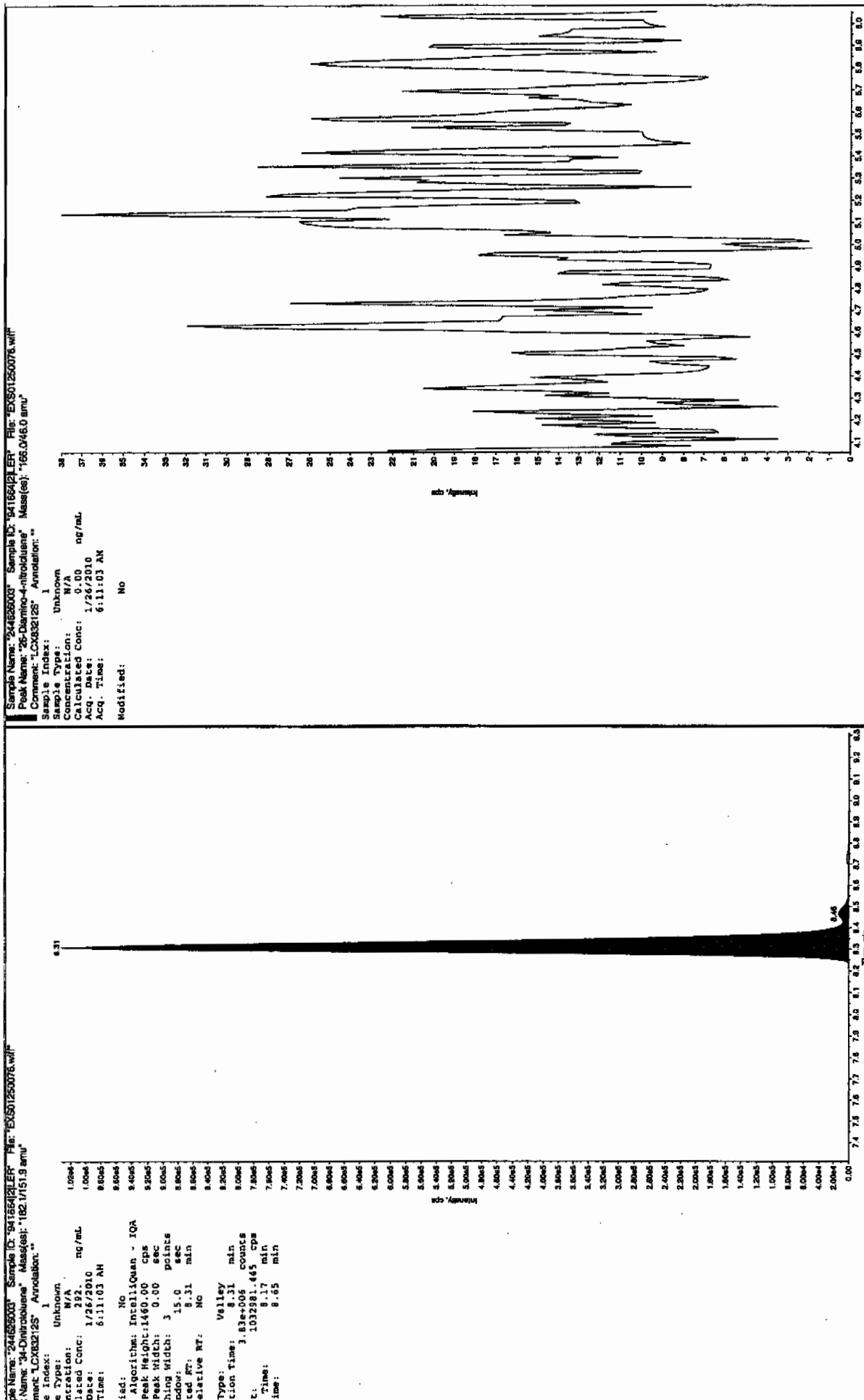
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

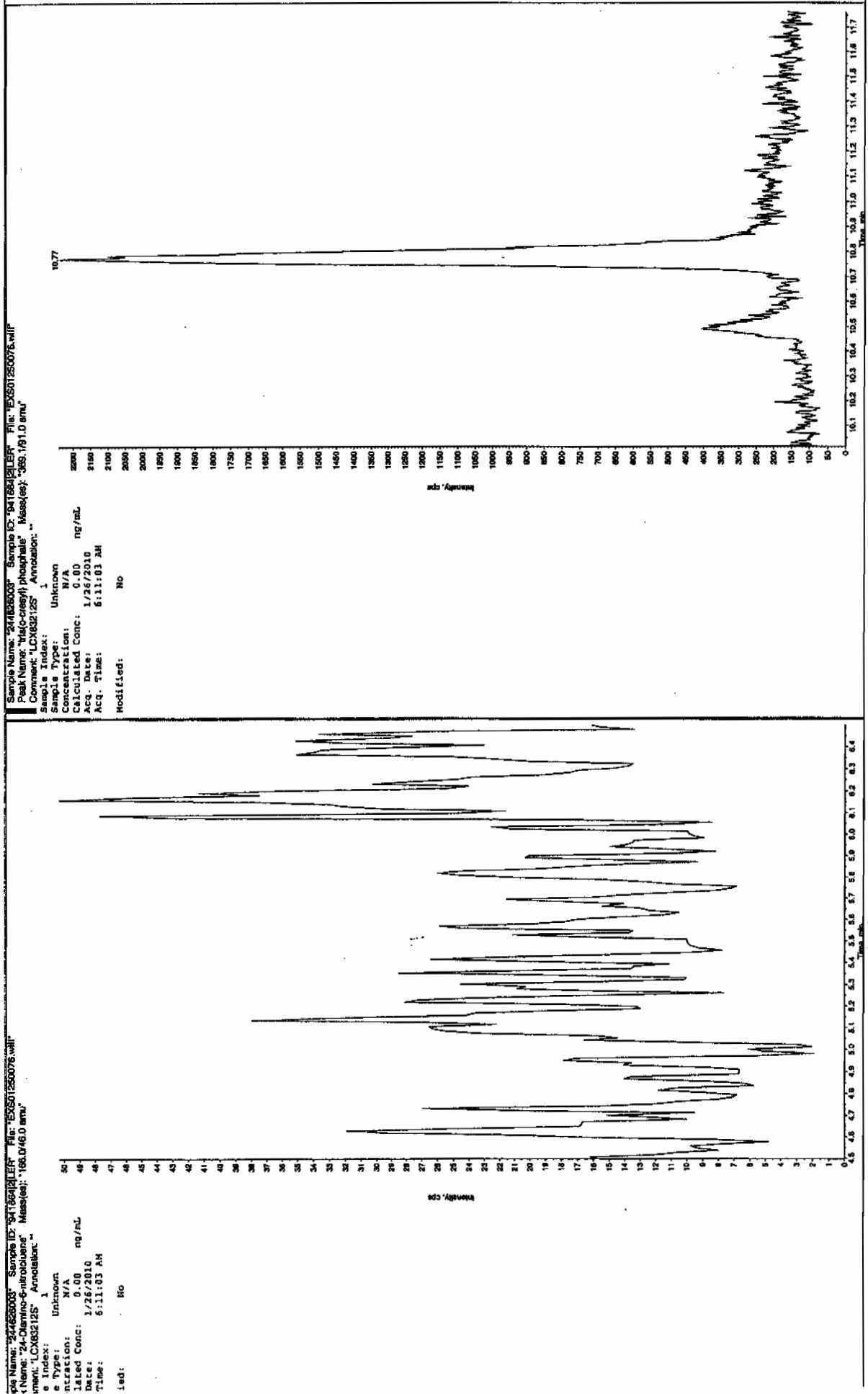
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

2017/10





J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7268

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626004

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130020a

Date Analyzed: 30-JAN-10 21:03

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\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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Date: 30-Jan-2010

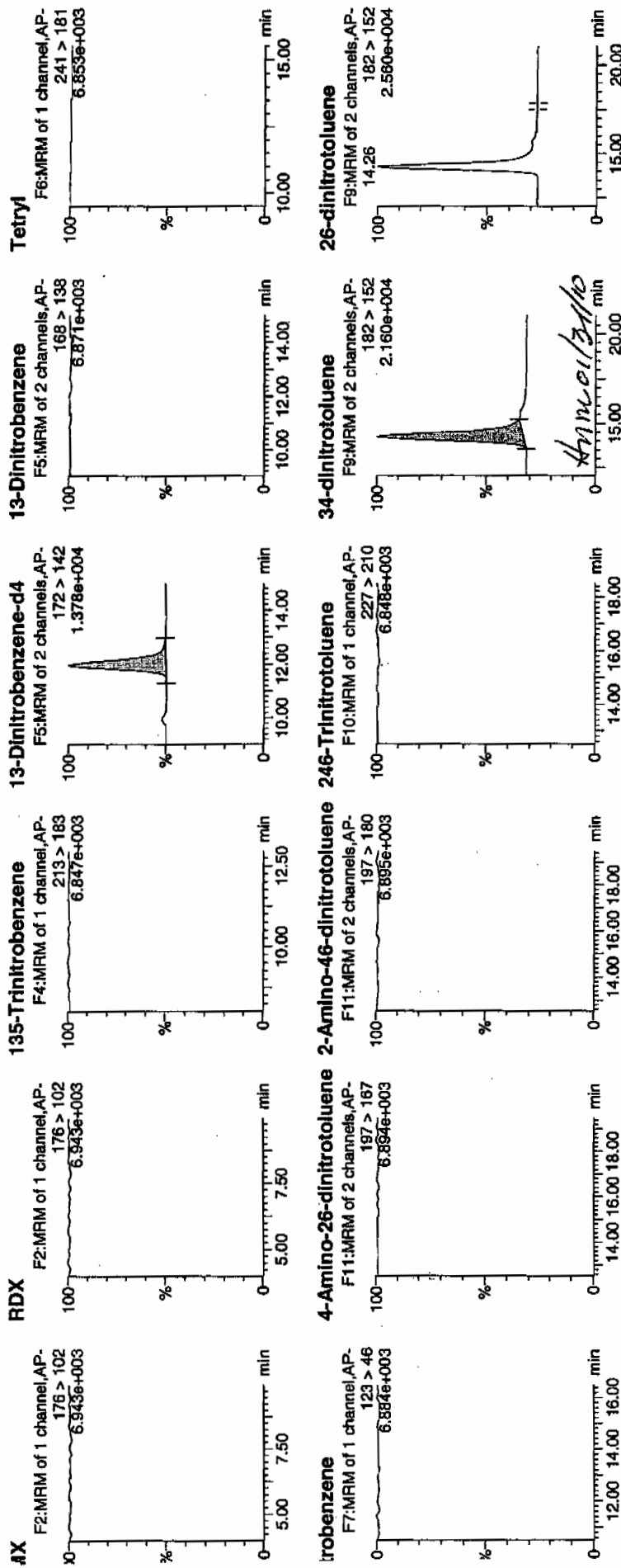
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Sample: 244626004

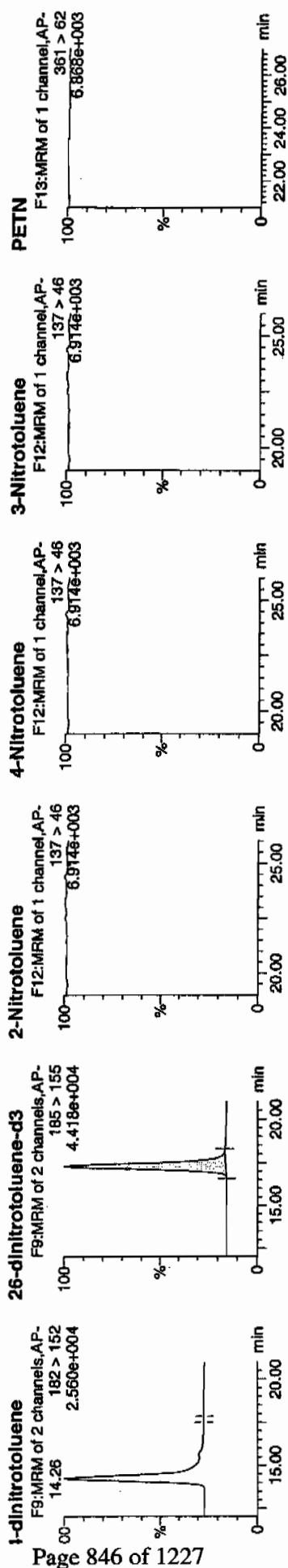
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14577
1/31/10

194664 / 8000 / 21



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Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flag	Mod Date	Point	Value	Unit
44626004	HMIX	176 > 102		2741.353							
44626004	RDX	176 > 102		2741.353							
44626004	135-Trinitrobenzene	213 > 183		2741.353							
44626004	13-Dinitrobenzene-d4	172 > 142	11.95	2741.353	2741.353	2741.353	bb		541.7706	108.4	8.4
44626004	13-Dinitrobenzene	168 > 138		2741.353							
44626004	Teityl	241 > 181		2741.353							
44626004	Nitrobenzene	123 > 46		15999.620							
44626004	4-Amino-26-dinitrotoluene	197 > 167		15999.620							
44626004	2-Amino-46-dinitrotoluene	197 > 180		15999.620							
44626004	246-Trinitrotoluene	227 > 210		15999.620							
44626004	34-dinitrotoluene	182 > 152	14.26	15999.620	7890.160	246.573	bb	31-Jan-10	282.8167	113.1	13.1
44626004	26-dinitrotoluene	182 > 152		15999.620				MM-			
44626004	24-dinitrotoluene	182 > 152		15999.620				MM-			
44626004	26-dinitrotoluene-d3	185 > 155	17.27	15999.620	15999.620	15999.620	bb	31-Jan-10	561.9790	112.4	12.4
44626004	2-Nitrotoluene	137 > 46		15999.620							
44626004	4-Nitrotoluene	137 > 46		15999.620							
44626004	3-Nitrotoluene	137 > 46		15999.620							
44626004	PETN	361 > 62		15999.620							

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7268

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626004

Sample Amount 2

Moisture: 2.8

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250077.wiff

Date Analyzed: 26-JAN-10 06:26

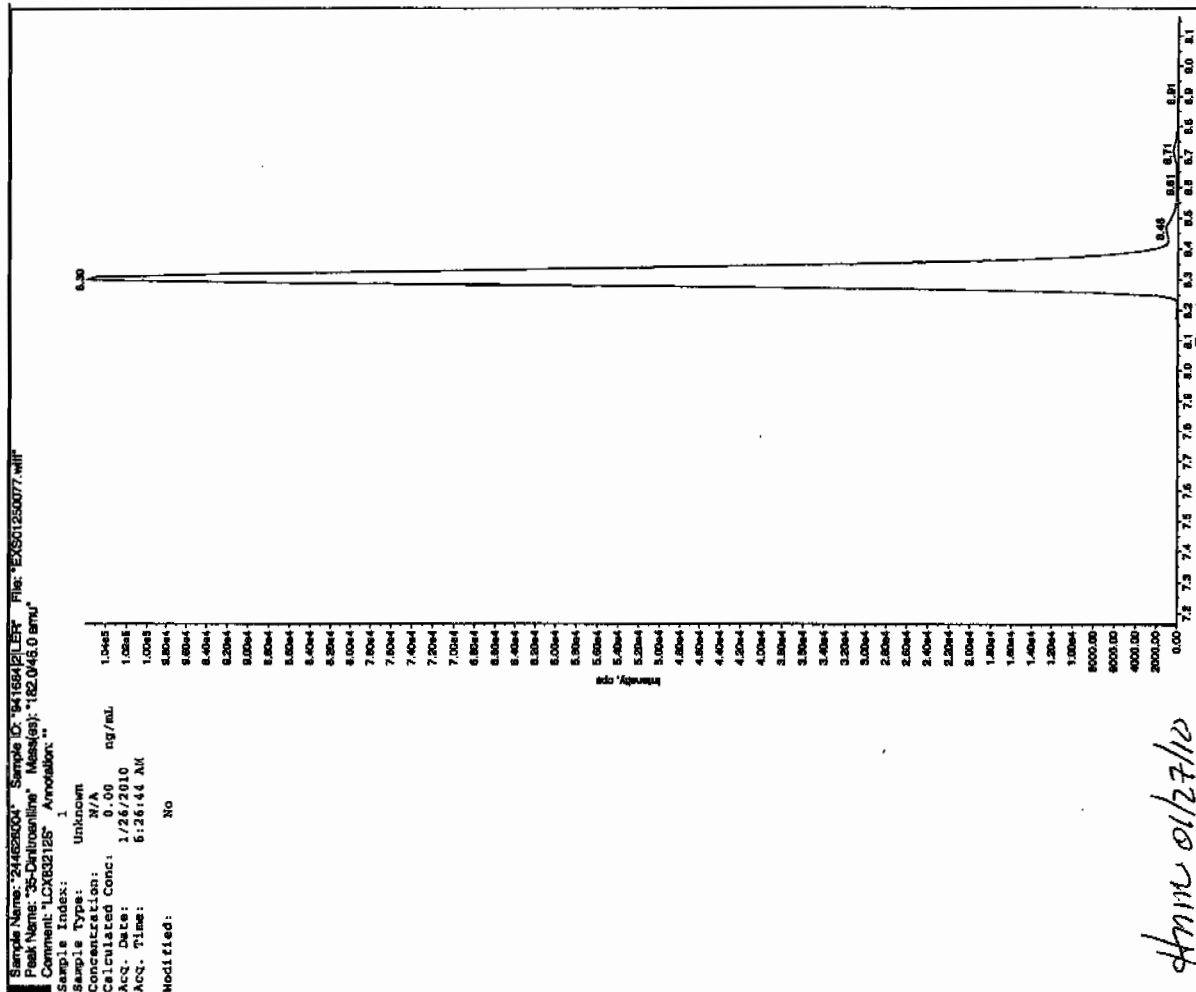
Units: ug/kg

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

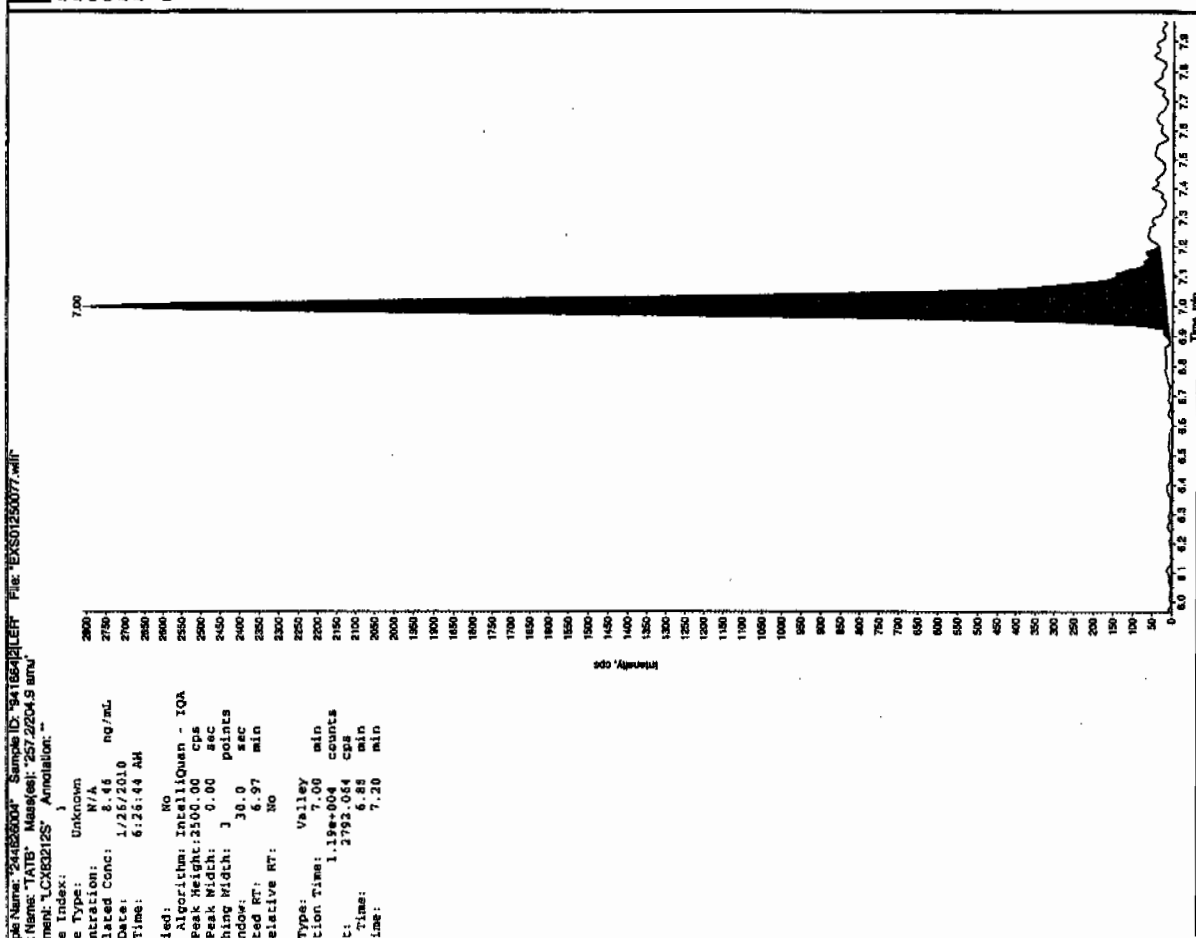
*Concentration =

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

Run 1127110



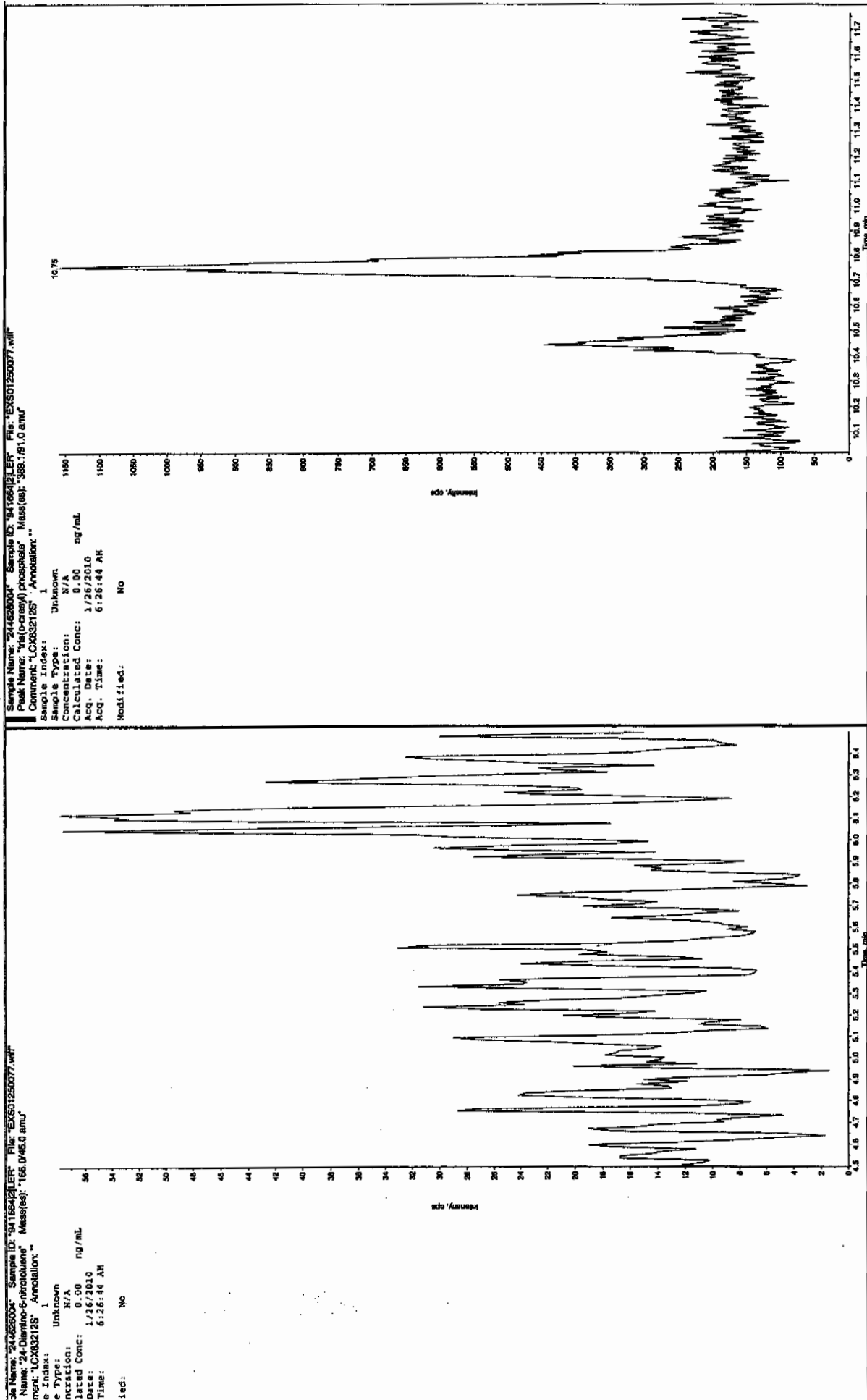
Run 0127110



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7265

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626005

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130021a

Date Analyzed: 30-JAN-10 21:32

Units: ug/kg

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

*Concentration =

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

uantify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

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ate: 30-Jan-2010

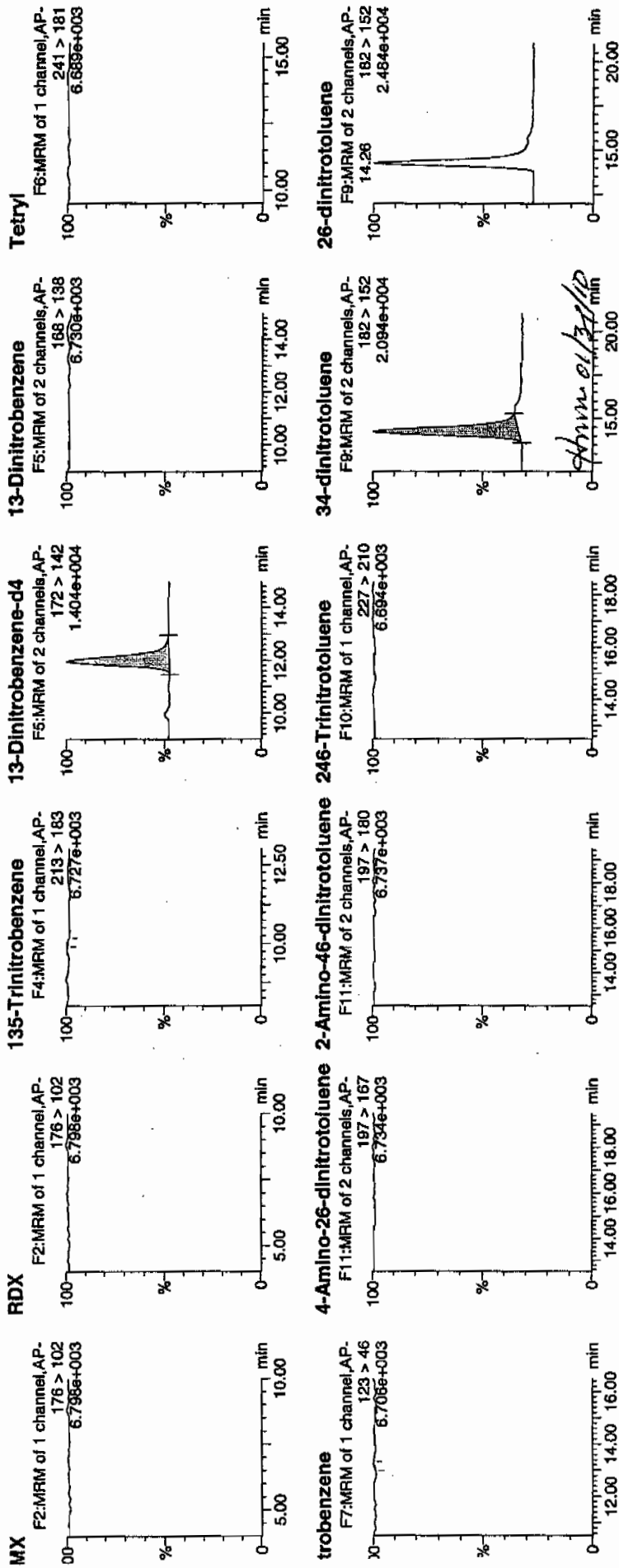
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1/3/10

21

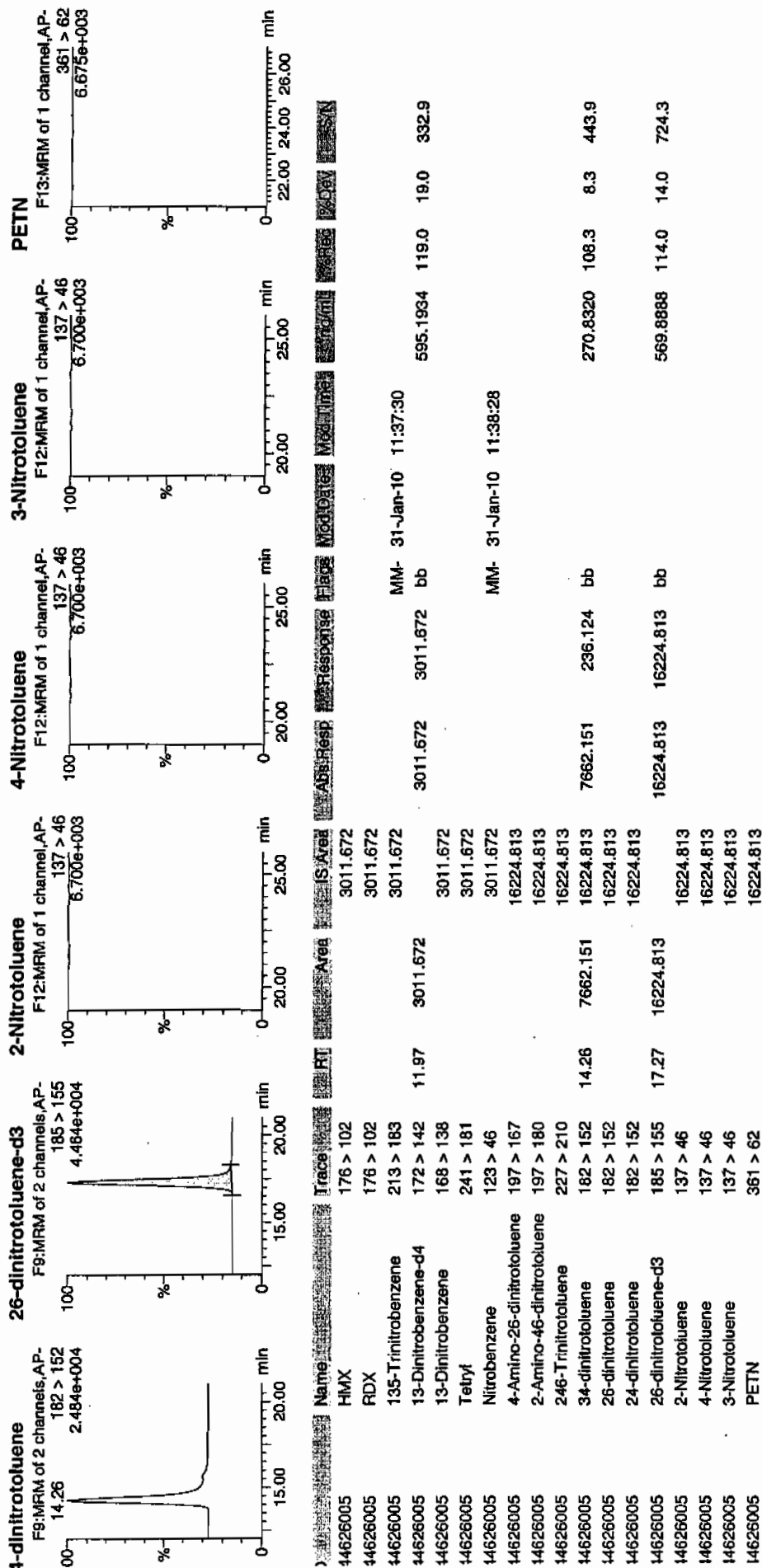


Identify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYN\New_Exp\PRO1013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7265

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626005

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250078.wiff

Date Analyzed: 26-JAN-10 06:42

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 =

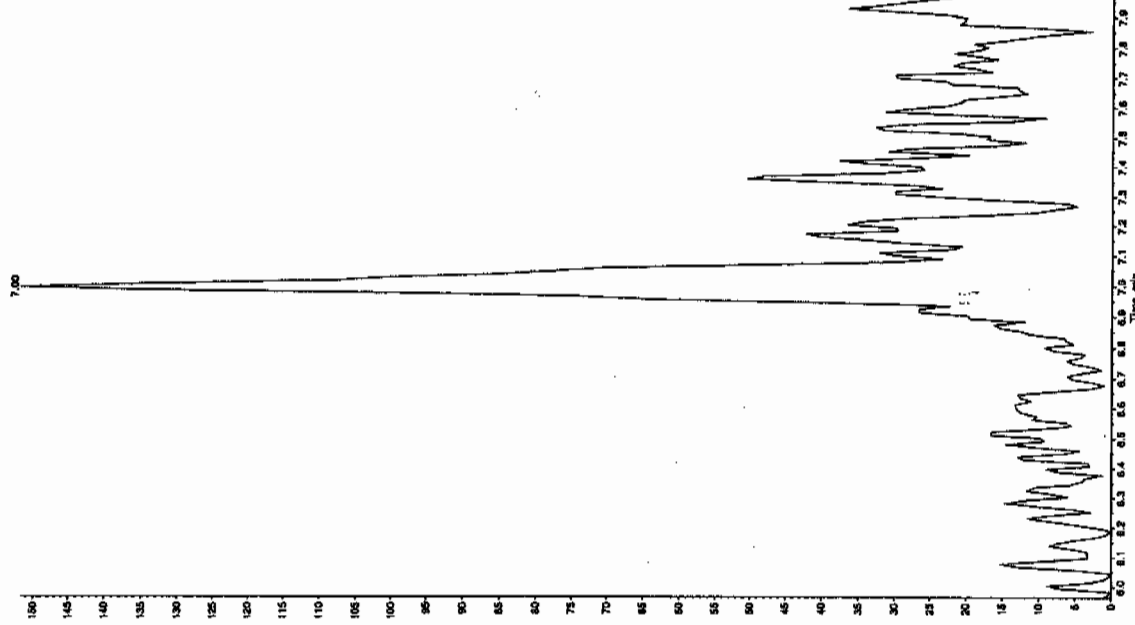
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

See 112710

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 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
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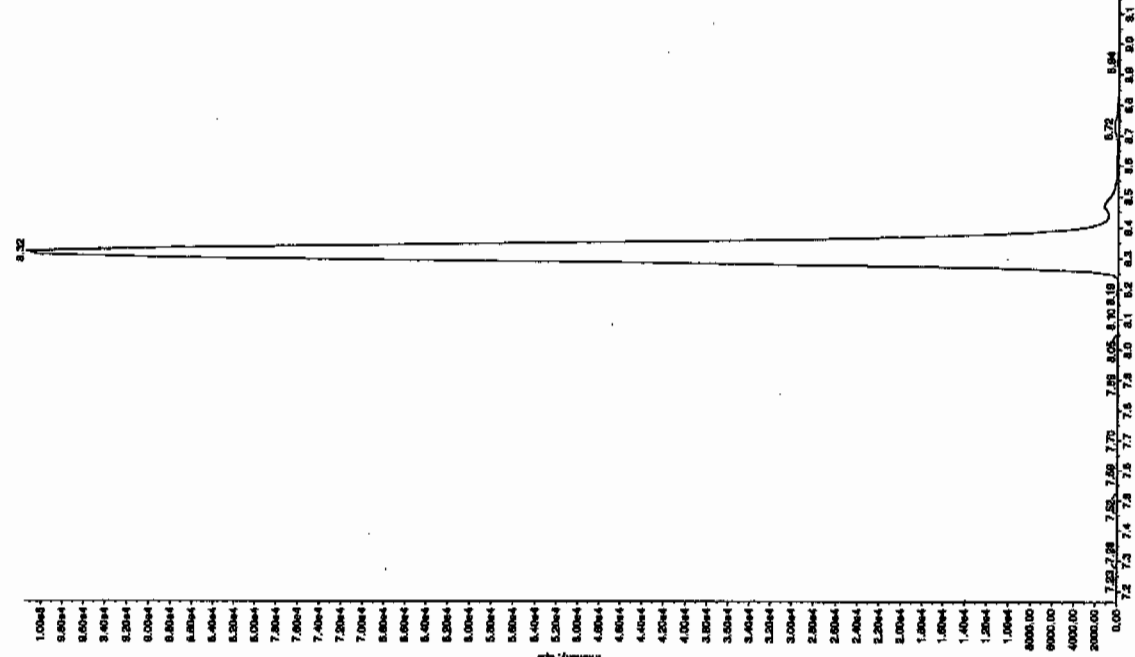
Intensity, cps



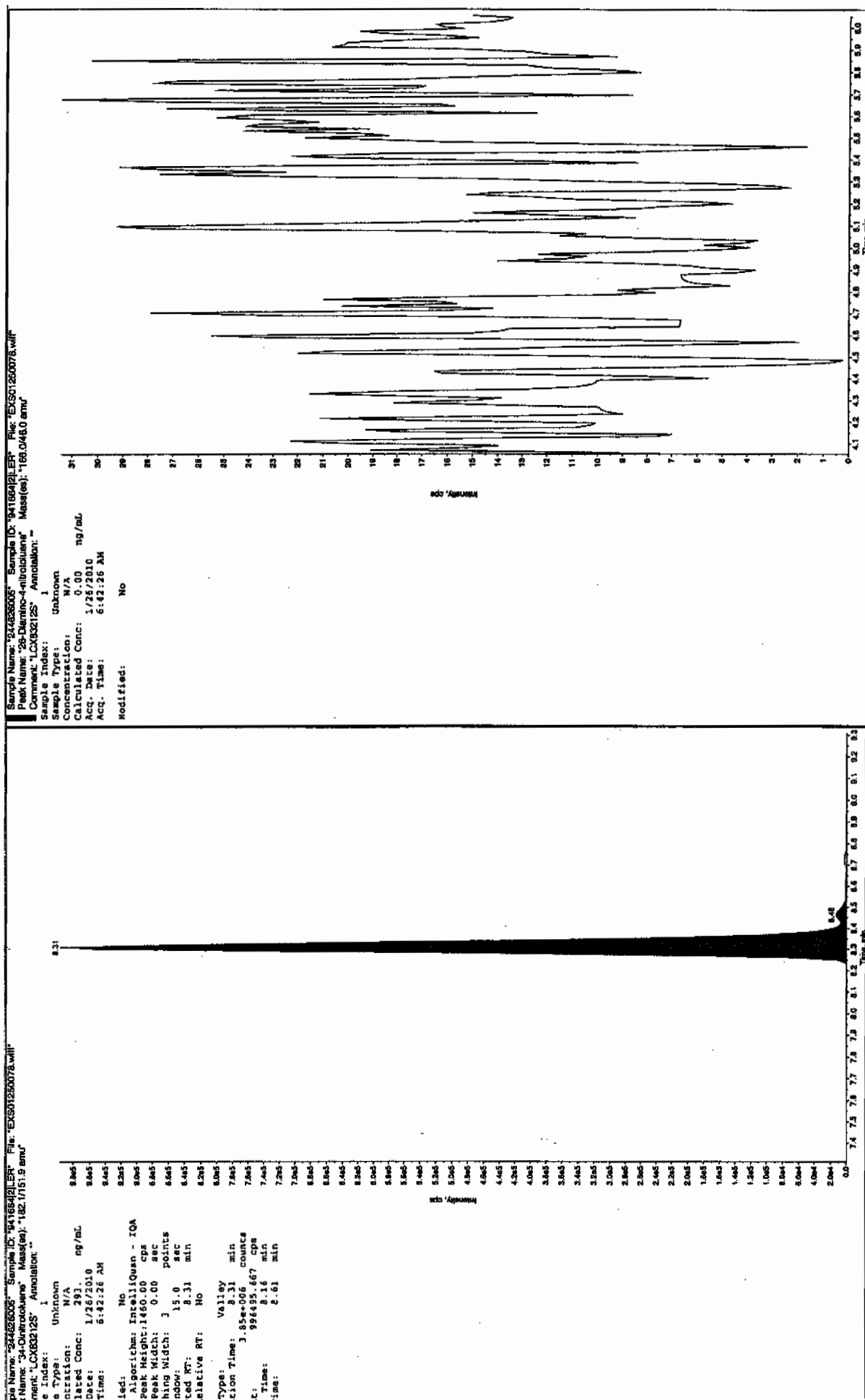
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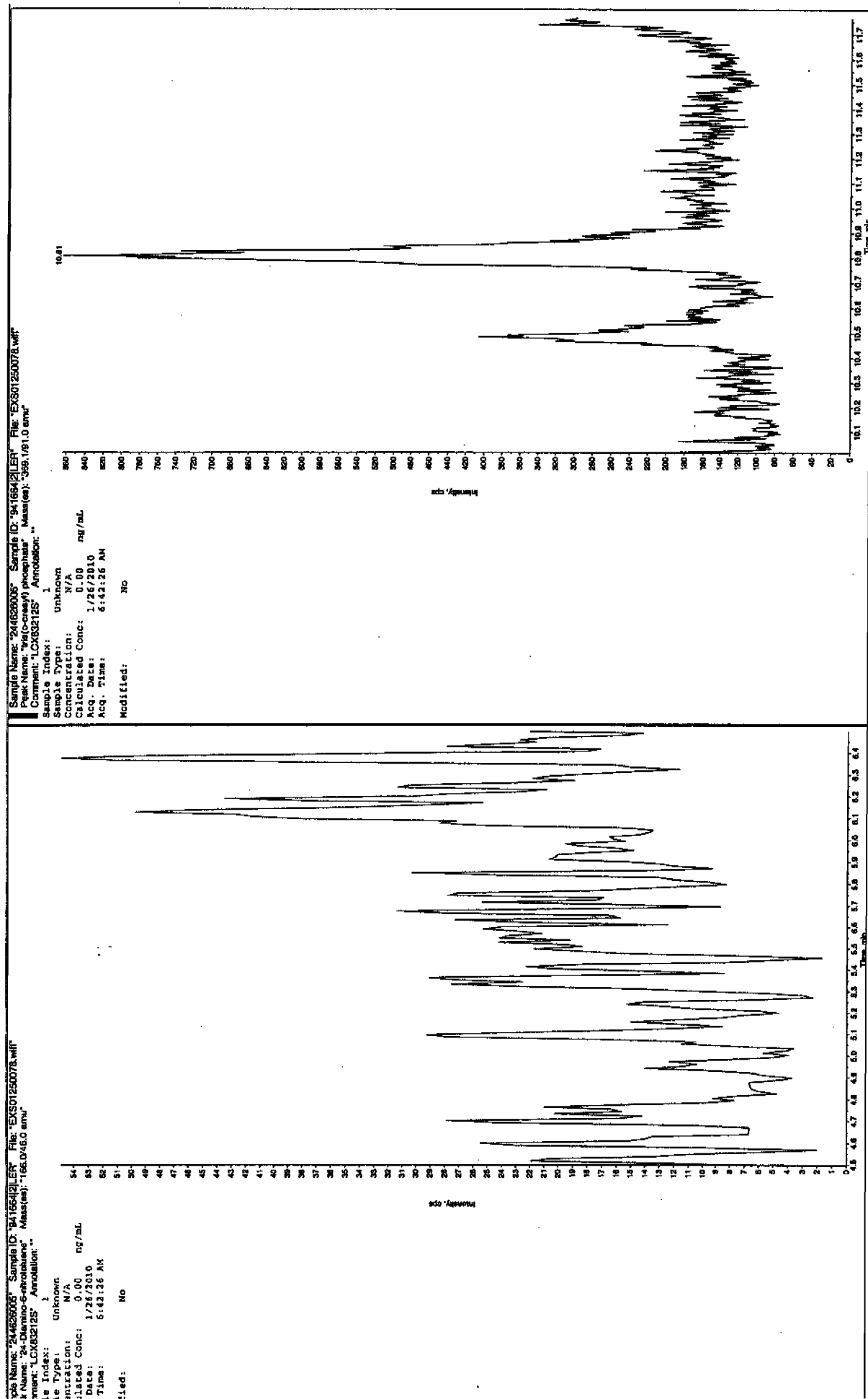
Intensity, cps



See 112710



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7261

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626006

Sample Amount 2

Moisture: 13.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130022a

Date Analyzed: 30-JAN-10 22:02

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

uantify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

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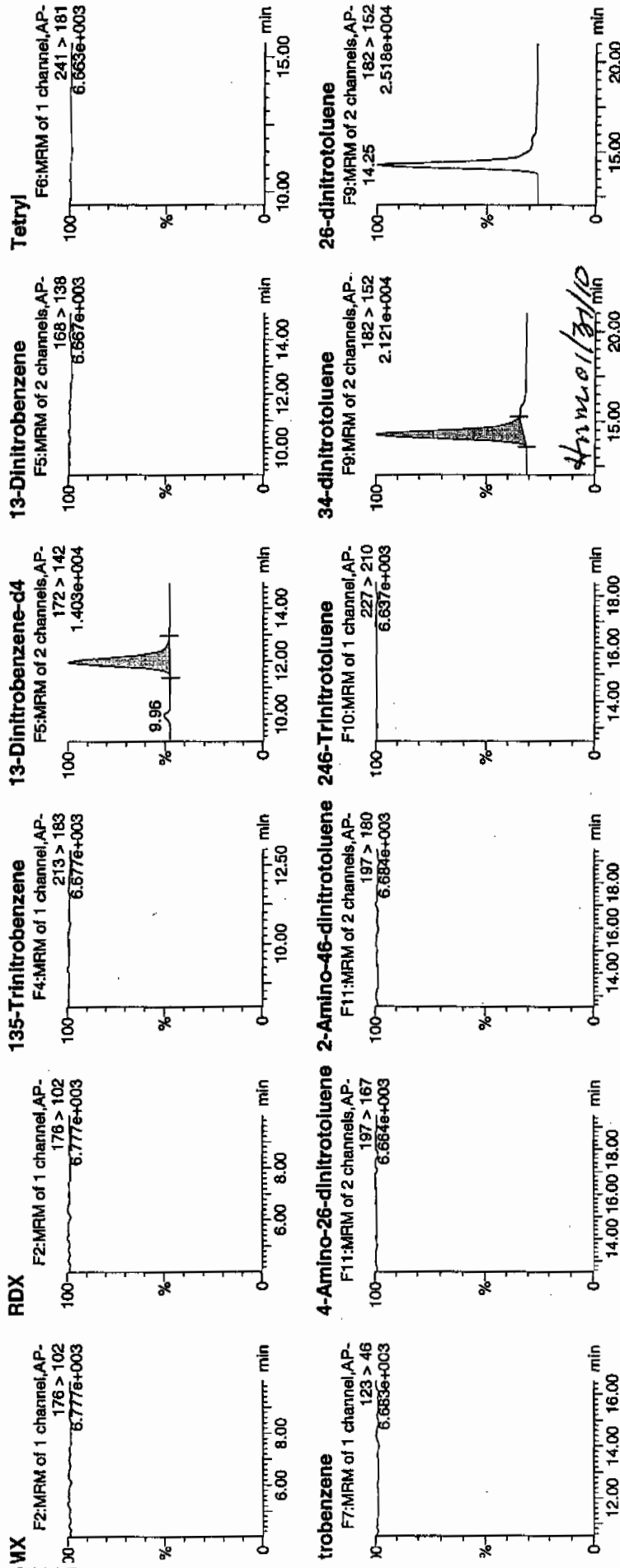
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12/10

LANC 94664 / 2022

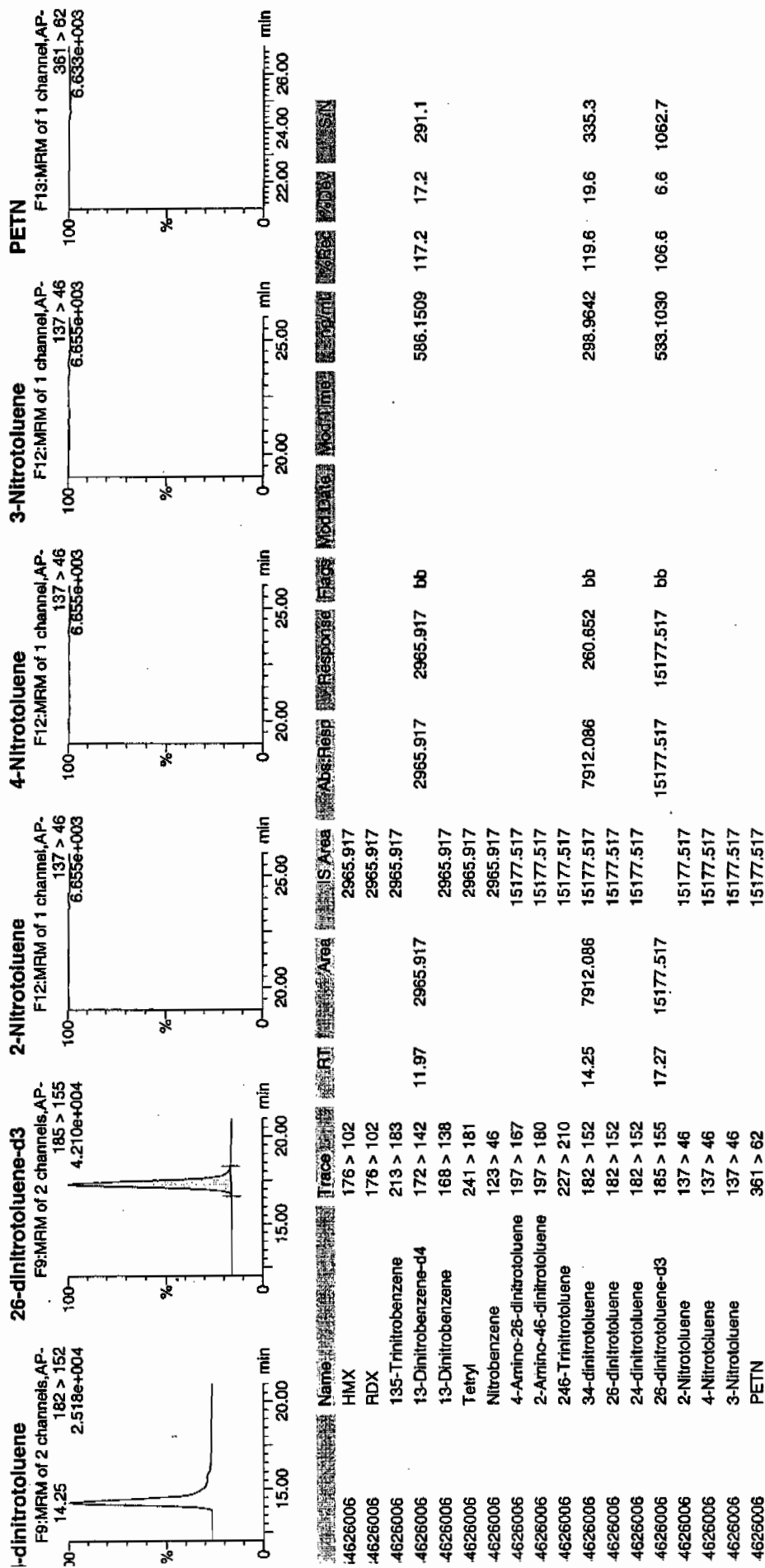


Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Sun Jan 31 11:57:34 2010, Page 44 of 77

Dataset: C:\MASSLYNX\New_Exp\PRO1013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7261

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626006

Sample Amount 2

Moisture: 13.3

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250079.wiff

Date Analyzed: 26-JAN-10 06:58

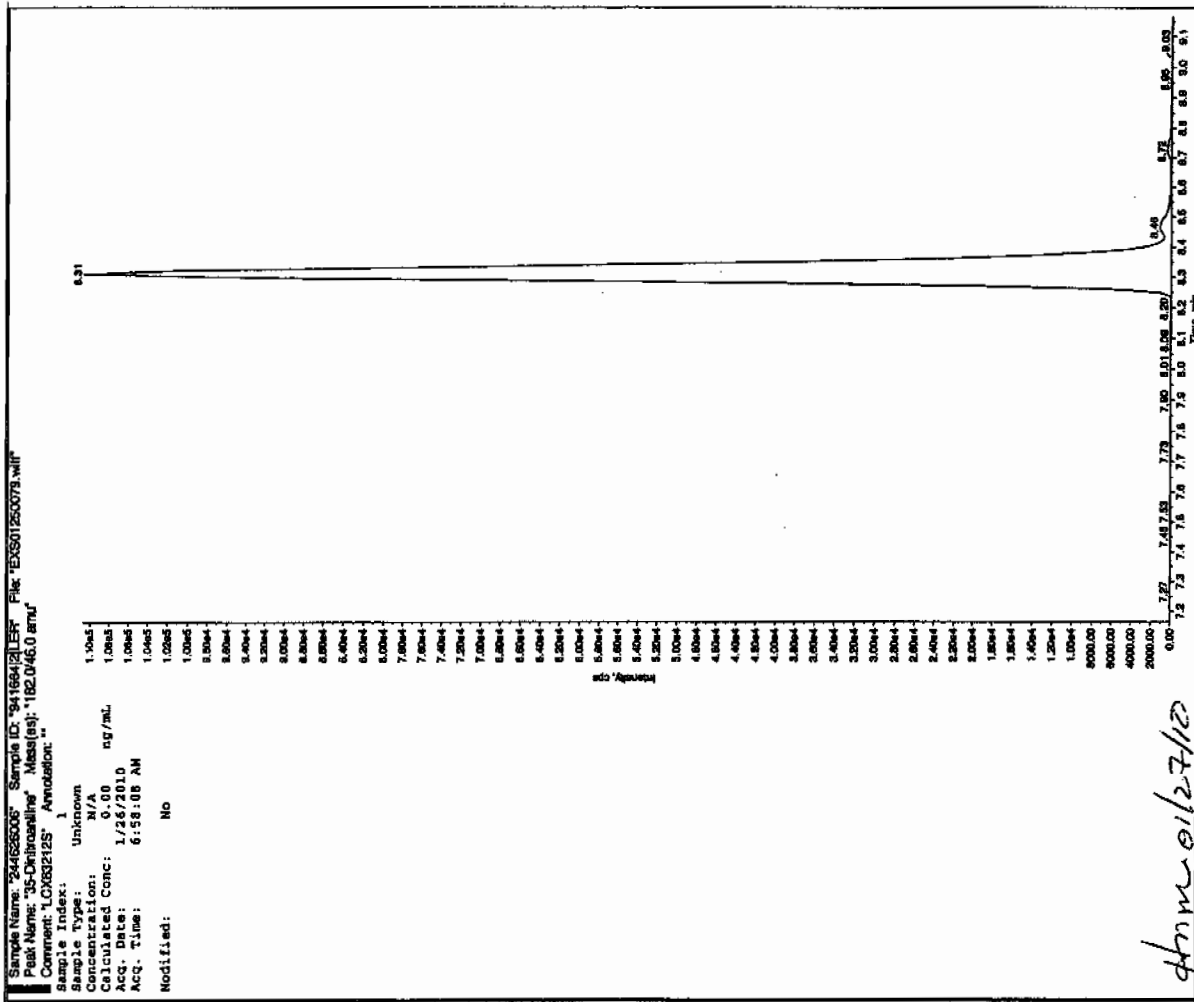
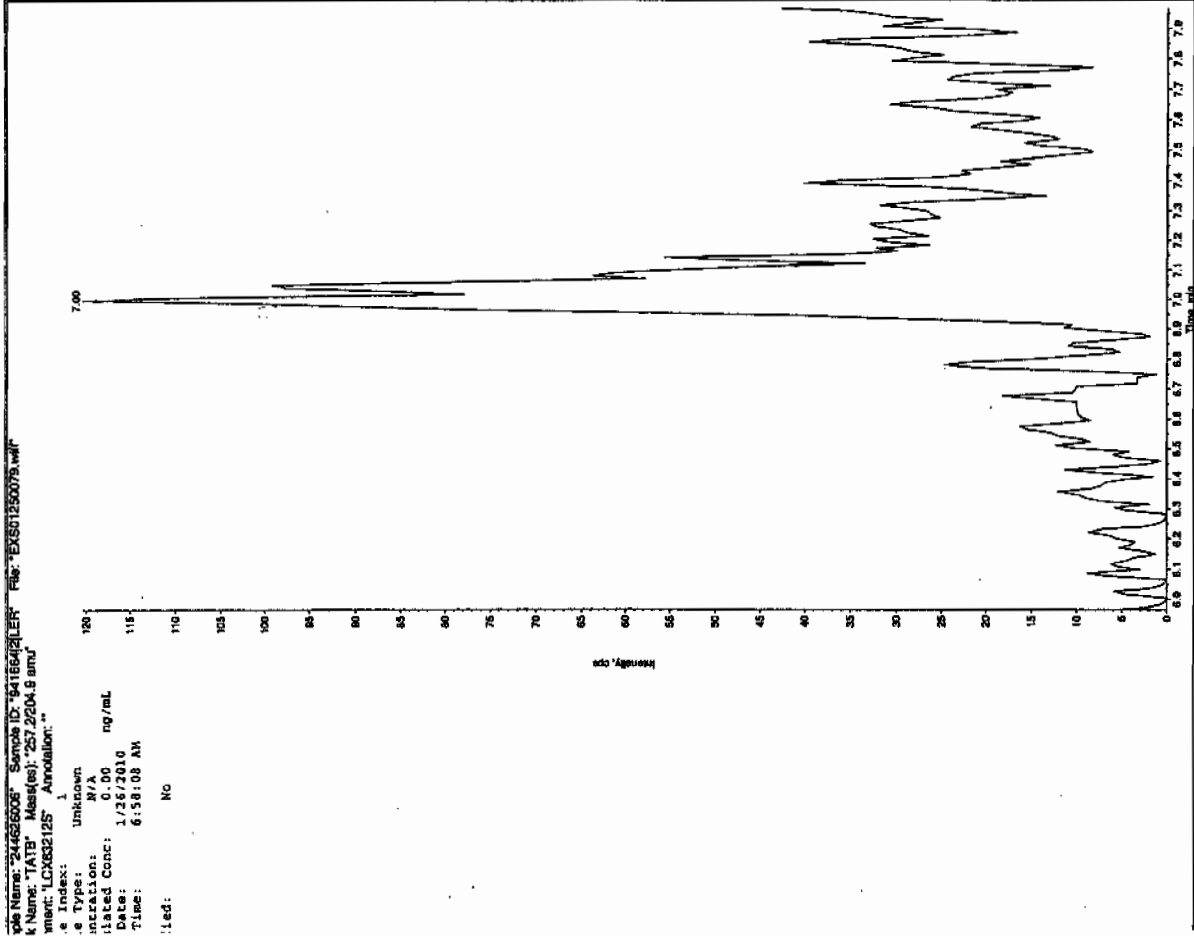
Units: ug/kg

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

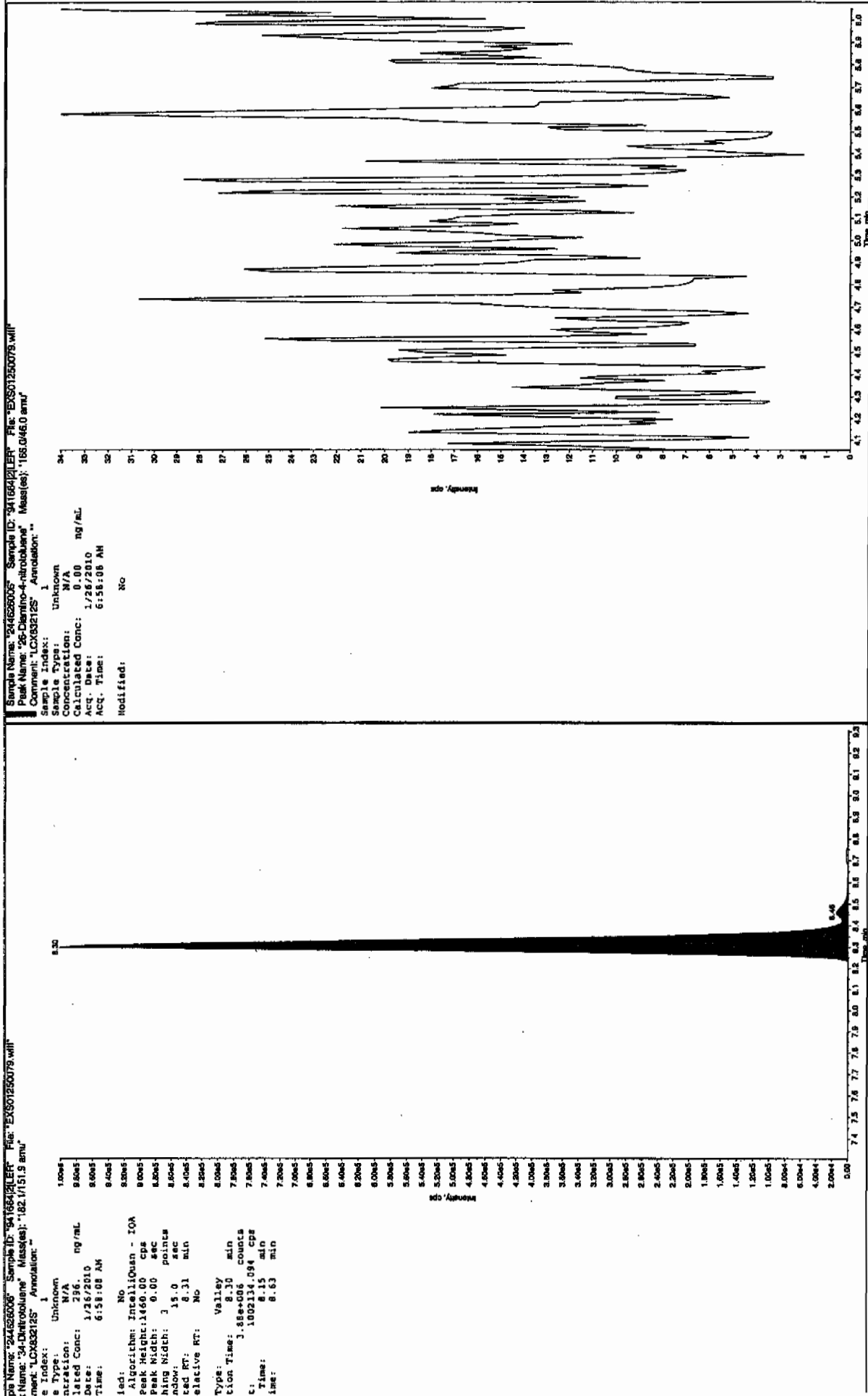
*Concentration =

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

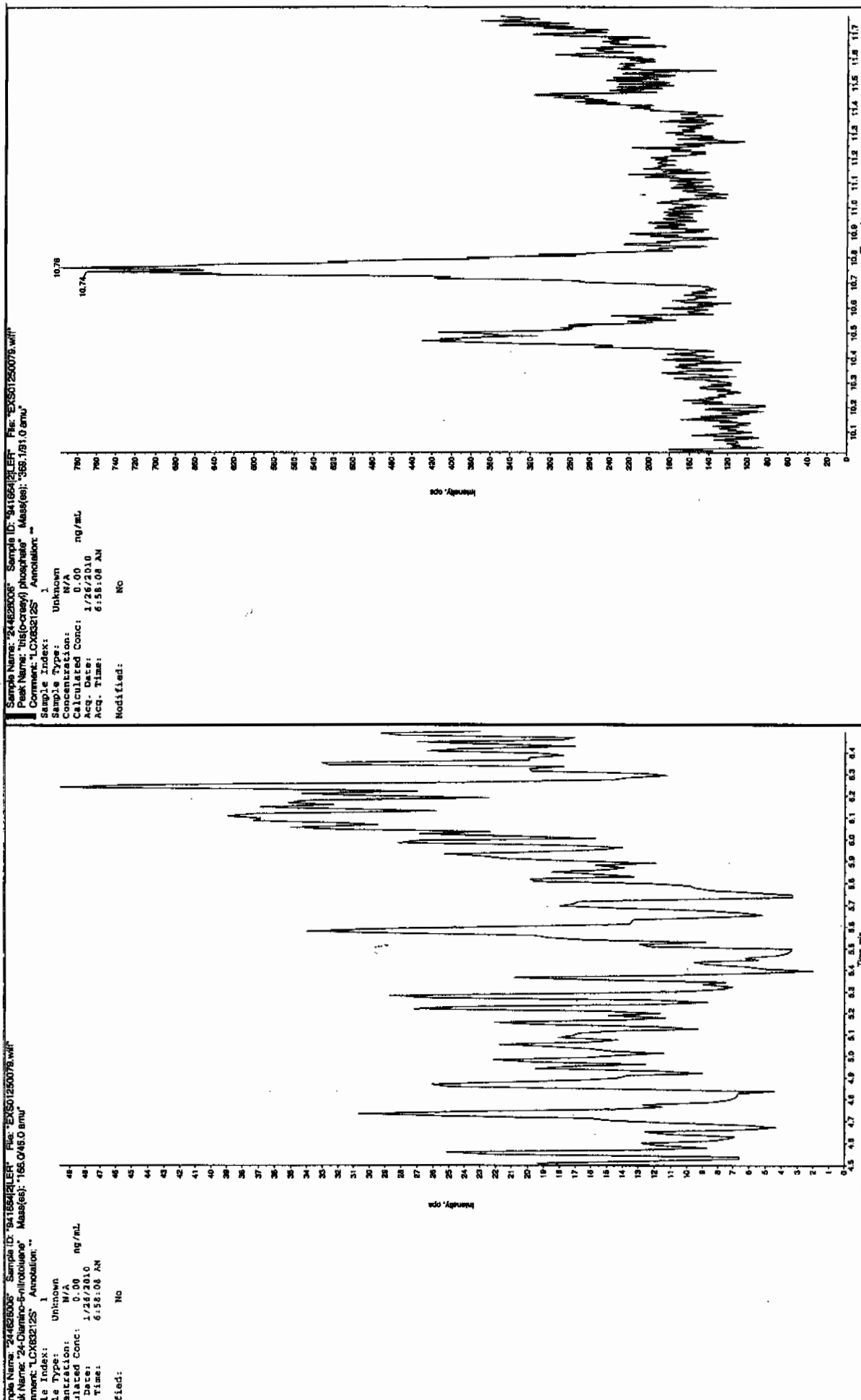
den 11/27/10



den 01/27/10



J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7259

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626007

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130026a

Date Analyzed: 31-JAN-10 00:00

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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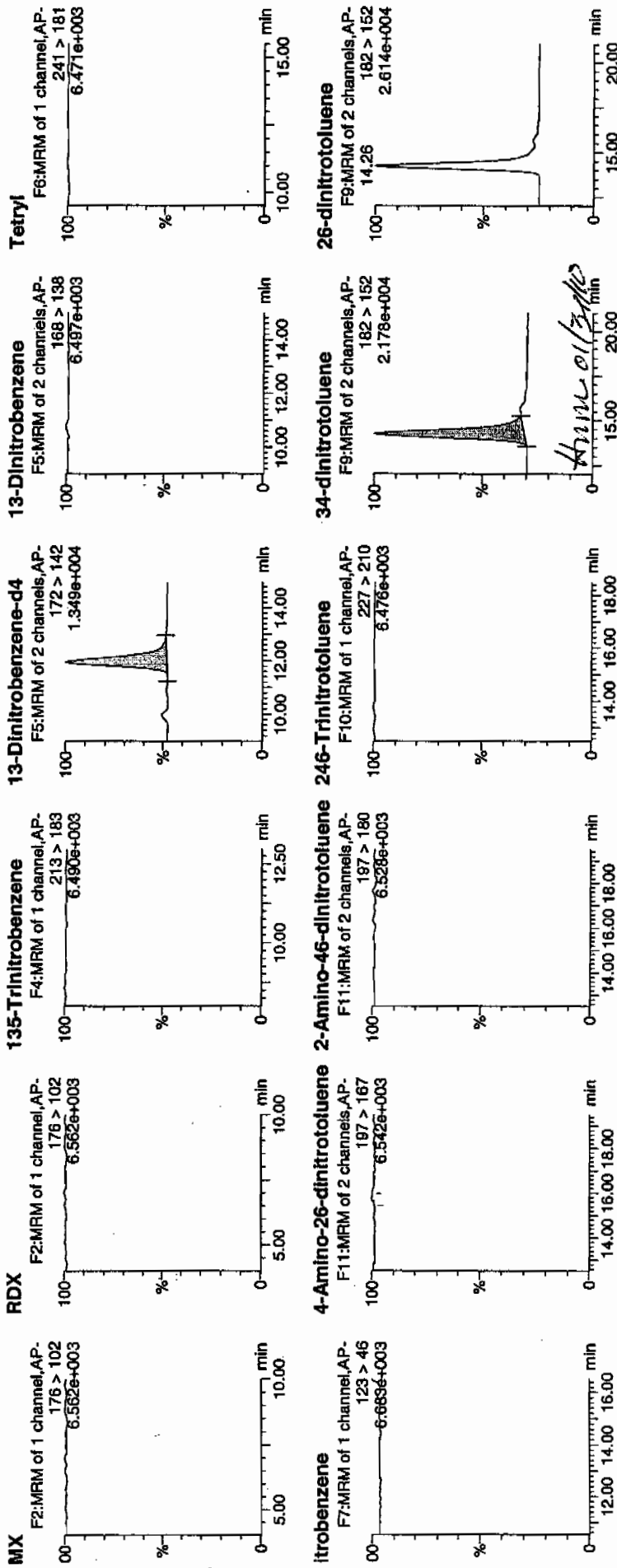
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Page: 244626007

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1/31/10

ANU 941664 / 80121

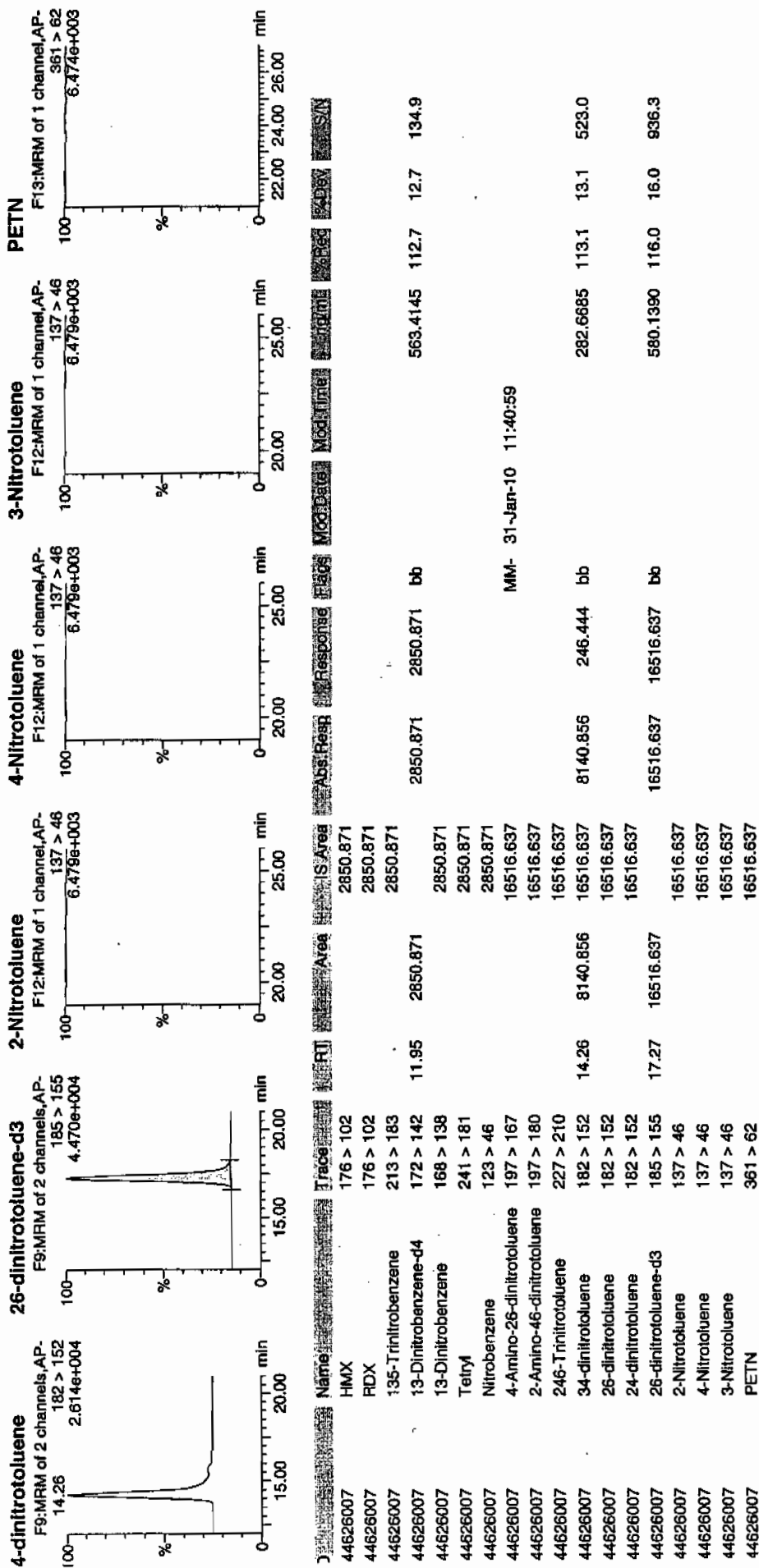


Quantify Sample Report

IEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp\PROV013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7259

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626007

Sample Amount 2

Moisture: 6.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250083.wiff

Date Analyzed: 26-JAN-10 08:00

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

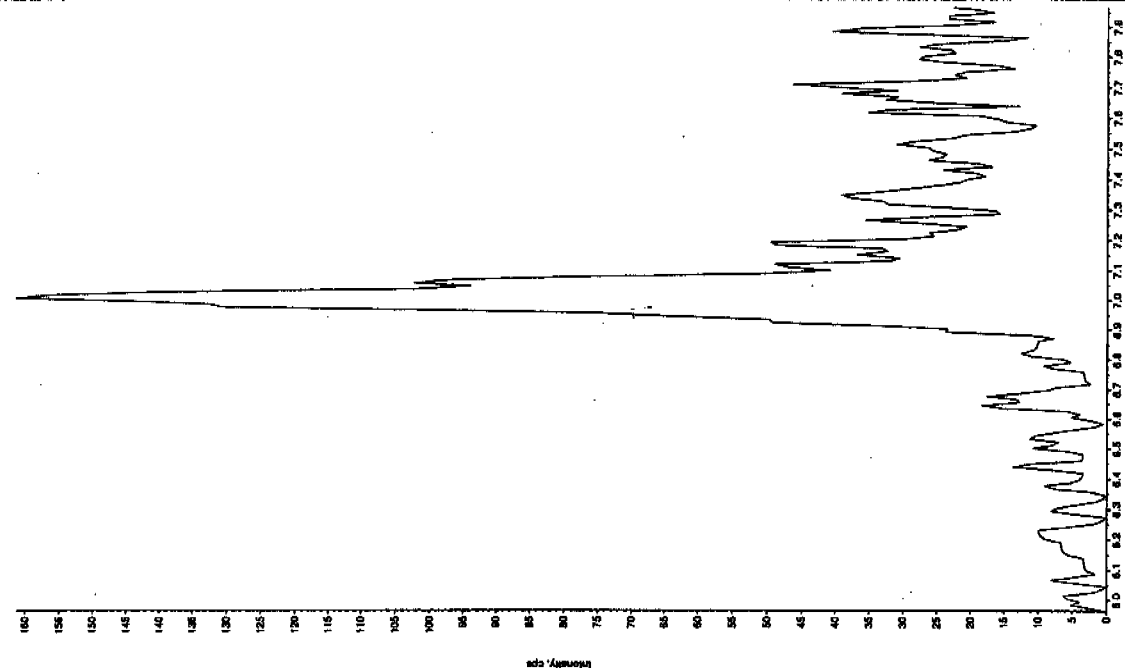
See 112710

Sample Name: "244826007" Sample ID: "941664121" File: "EX501250083.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 1/26/2010
Acq. Time: 8:00:58 AM
Modified: No

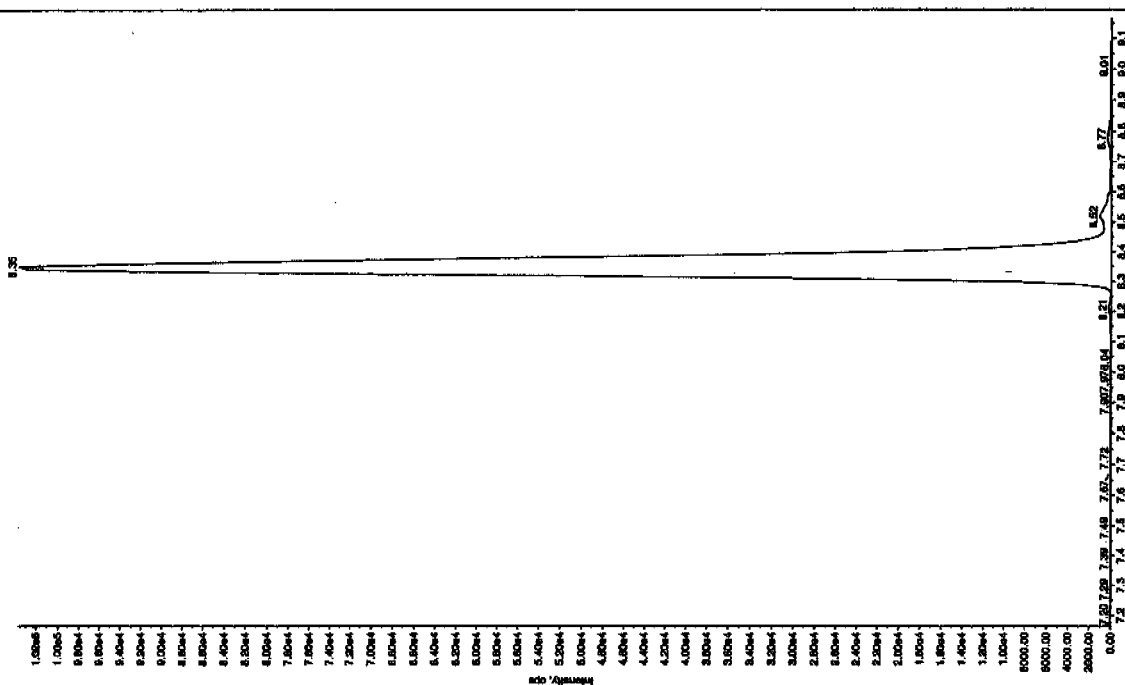


Sample Name: "244826007" Sample ID: "941664121" File: "EX501250083.wif"

Peak Name: "35-Dechloroallene" Mass(es): "182.0/46.0 amu"

Comment: "LCX83212S" Annotation: "

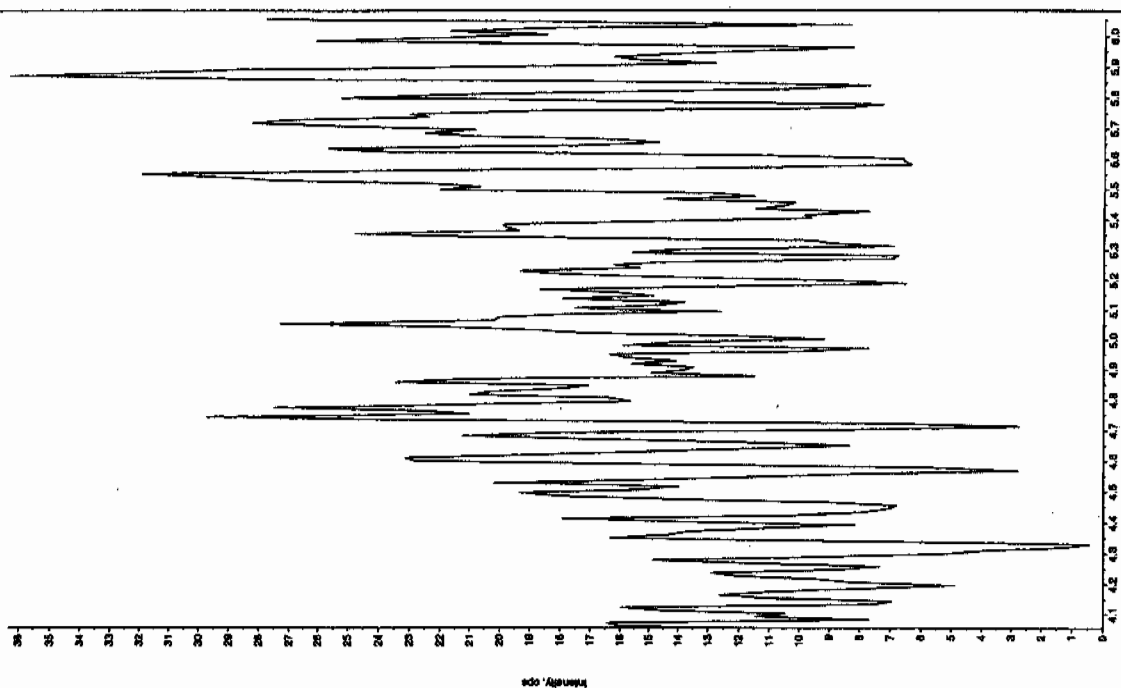
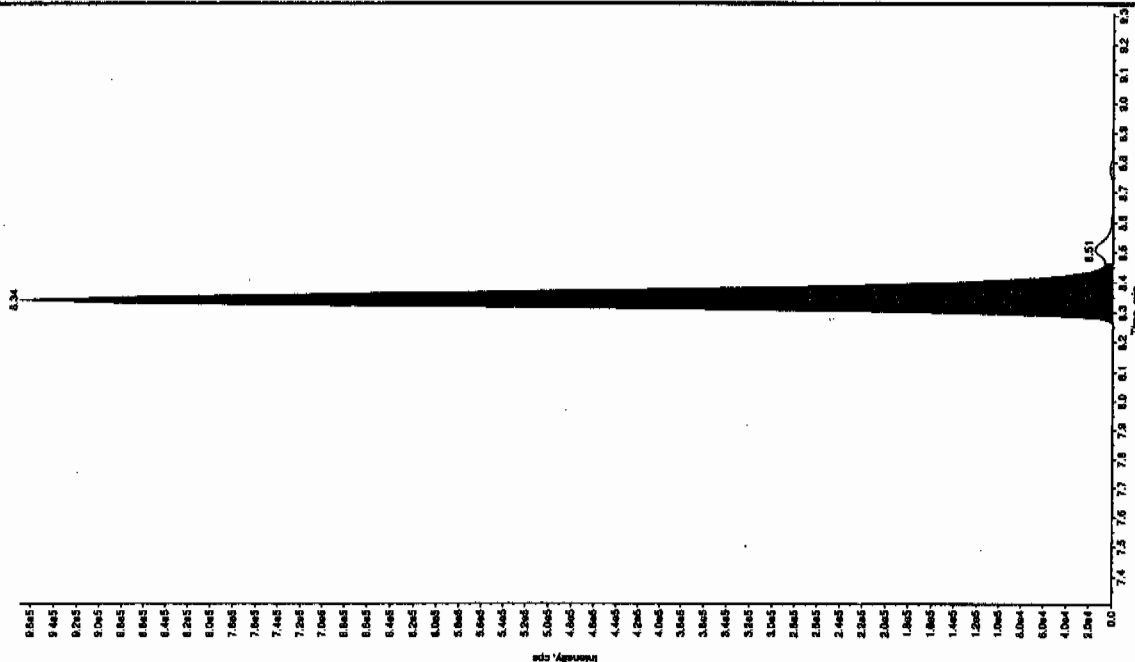
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 1/25/2010
Acq. Time: 8:00:58 AM
Modified: No

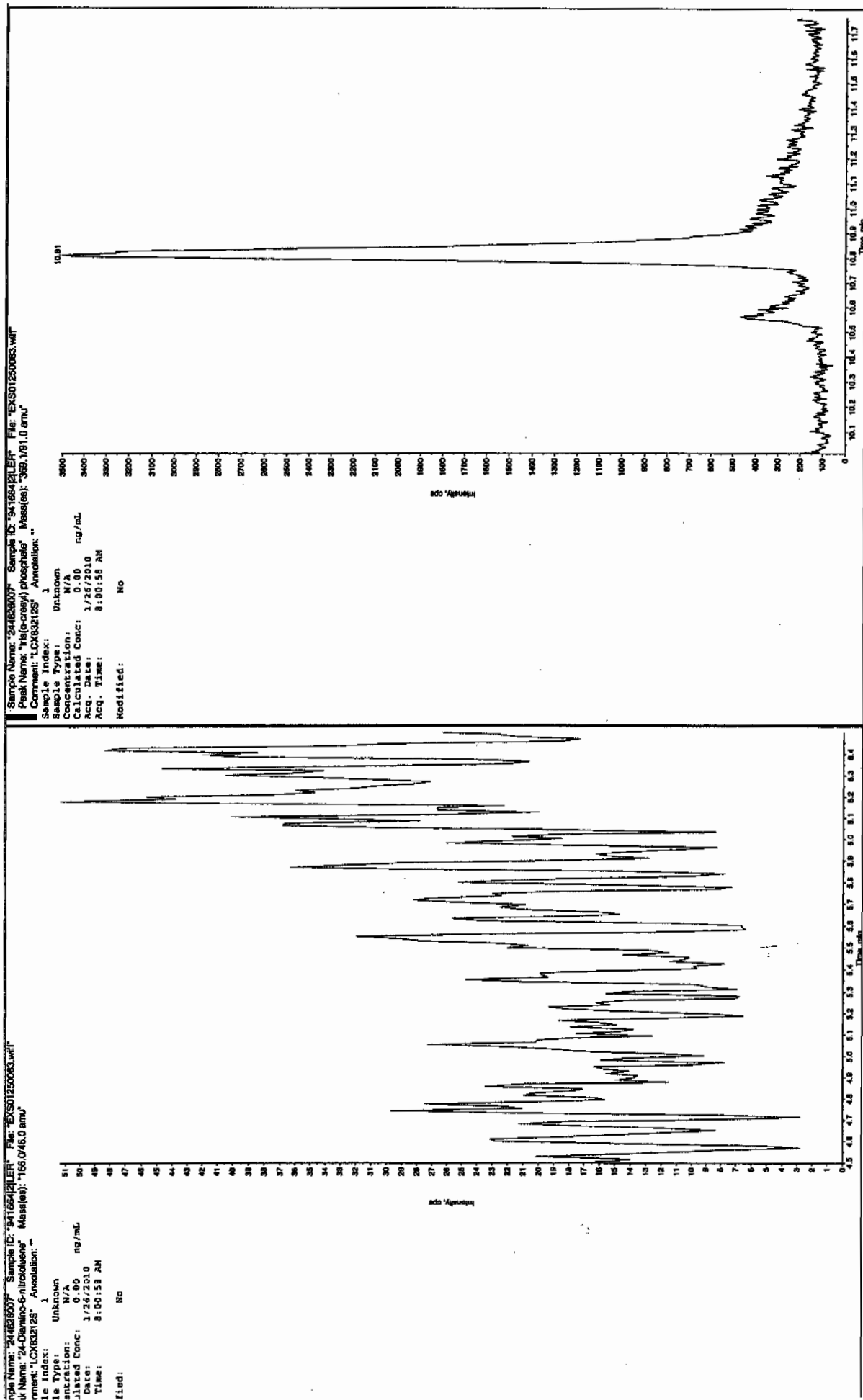


See 112710

Sample Name: "244629007" Sample ID: "941654121LER" File: "EX501250083.wif"
 L1 Name: "34-Oxirizobluene" Mass(es): "182.1/151.9 amu"
 Comment: "LCX683212S" Annotation: ""

Index:	Unknown	
Concentration:	230	ng/mL
Dilution:	N/A	
Date:	1/26/2010	
Time:	8:00:58 AM	
Id:	No	
Algo:	Algo: InterQuant - 10A	
Peak Weight:	1450.00	cps
Peak Width:	0.00	sec
Binding Width:	3	points
Binding Time:	15.0	sec
Relative RT:	8.31	min
Relative RT:	No	
Type:	Valley	
Retention Time:	3.30e+006	cps
Count:	56951380	cps
Time:	8.24	min
Time:	8.46	min





IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7263

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626008

Sample Amount 2

Moisture: 5.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130027a

Date Analyzed: 31-JAN-10 00:29

Units: ug/kg

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

*Concentration =

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

Quantity Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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ate: 31-Jan-2010

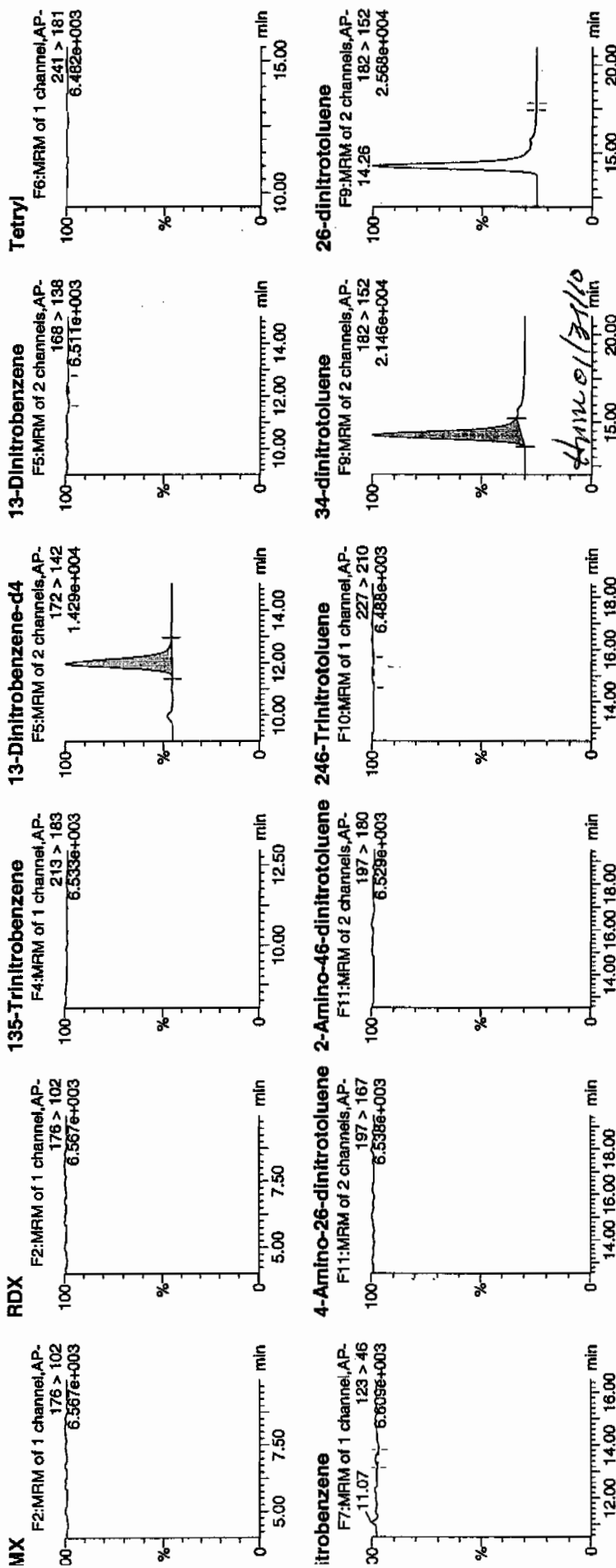
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i: 244626008

al: 1:5,F

1/31/10

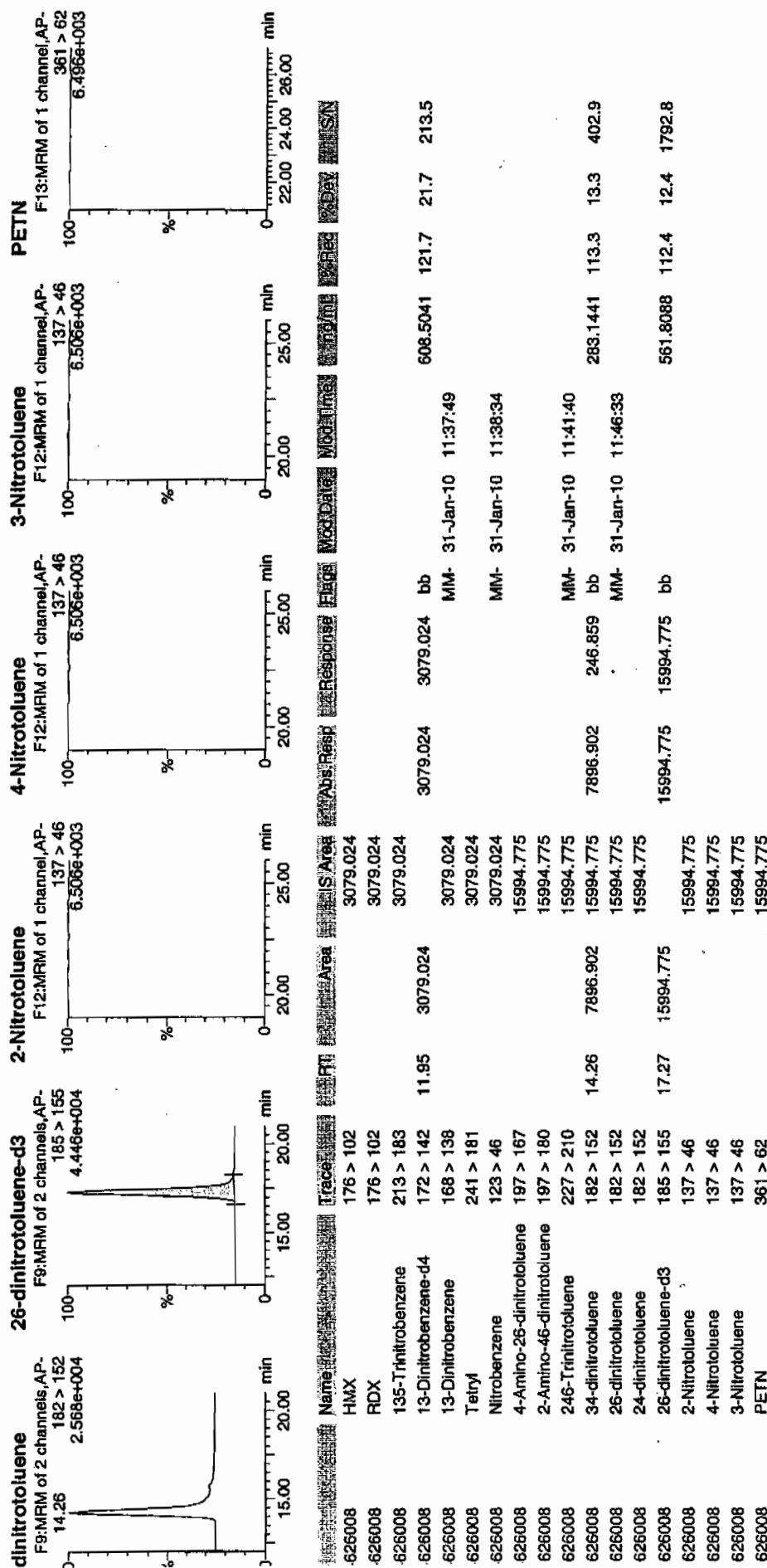
74664 / 8044 / 21



Printed: Sun Jan 31 11:57:34 2010, Page 54 of 77

antify Sample Report
L Laboratories, LLC / Analyst: Michael A. Penny

lasest: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7263

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626008

Sample Amount 2

Moisture: 5.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250084.wiff

Date Analyzed: 26-JAN-10 08:16

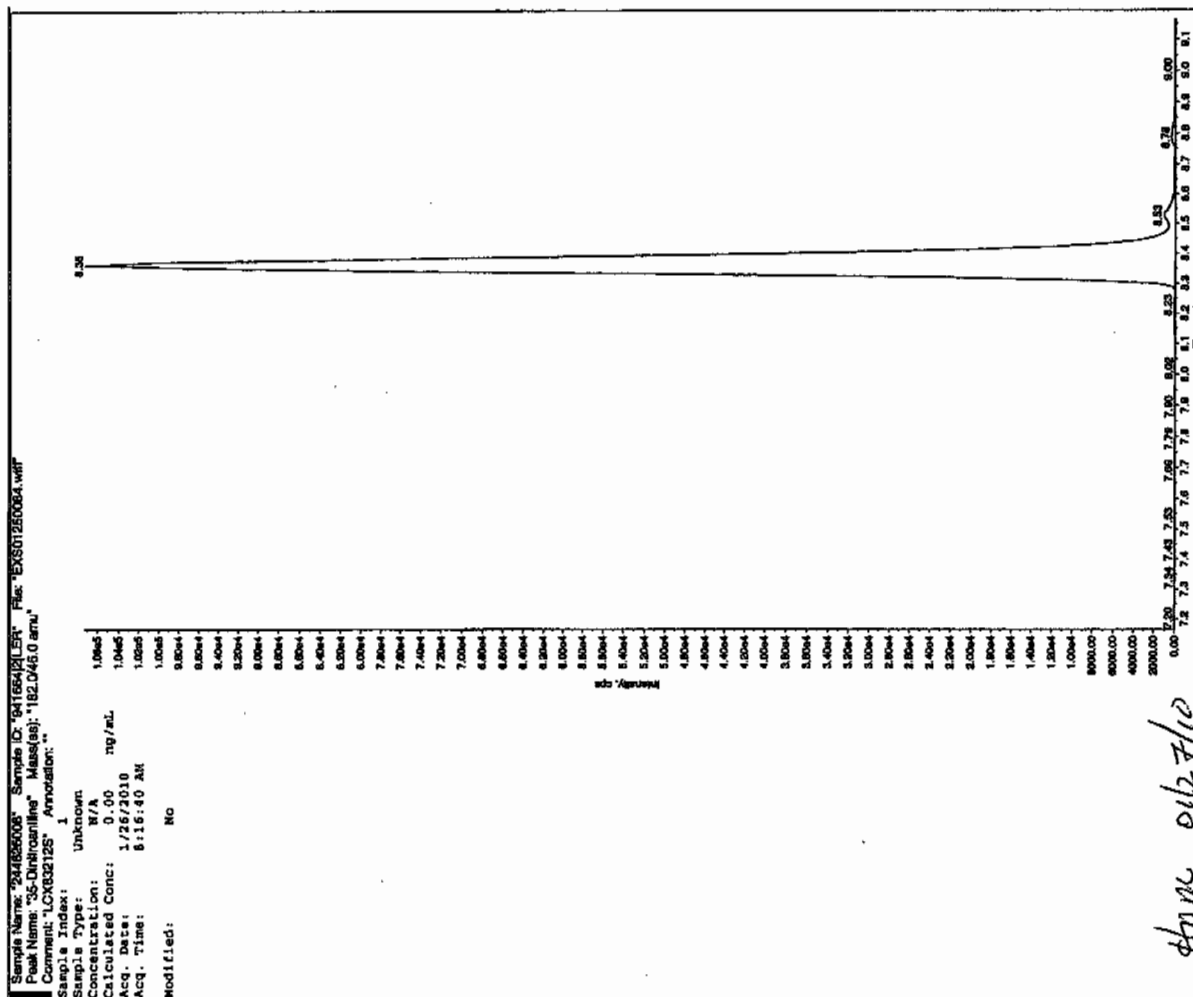
Units: ug/kg

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

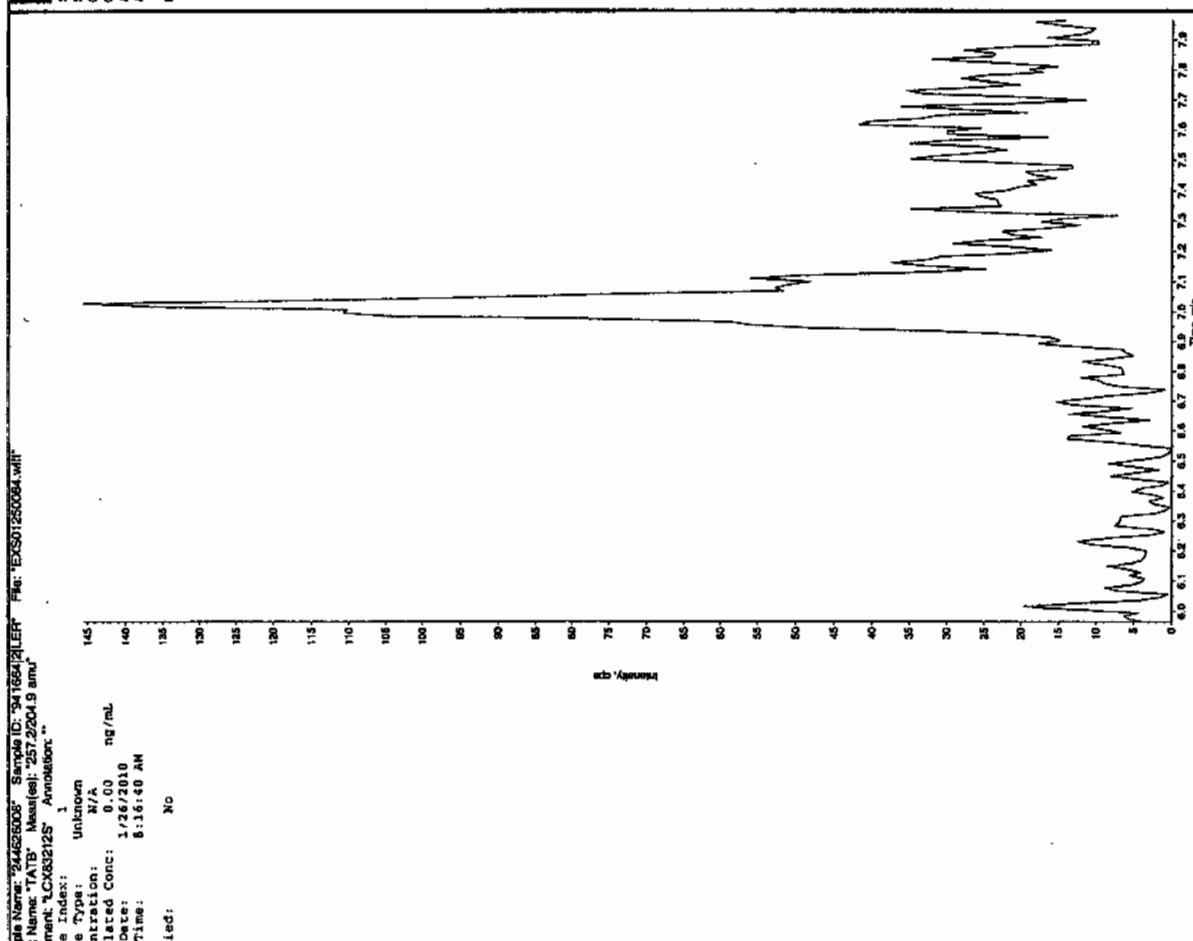
*Concentration =

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

OK 11/27/10



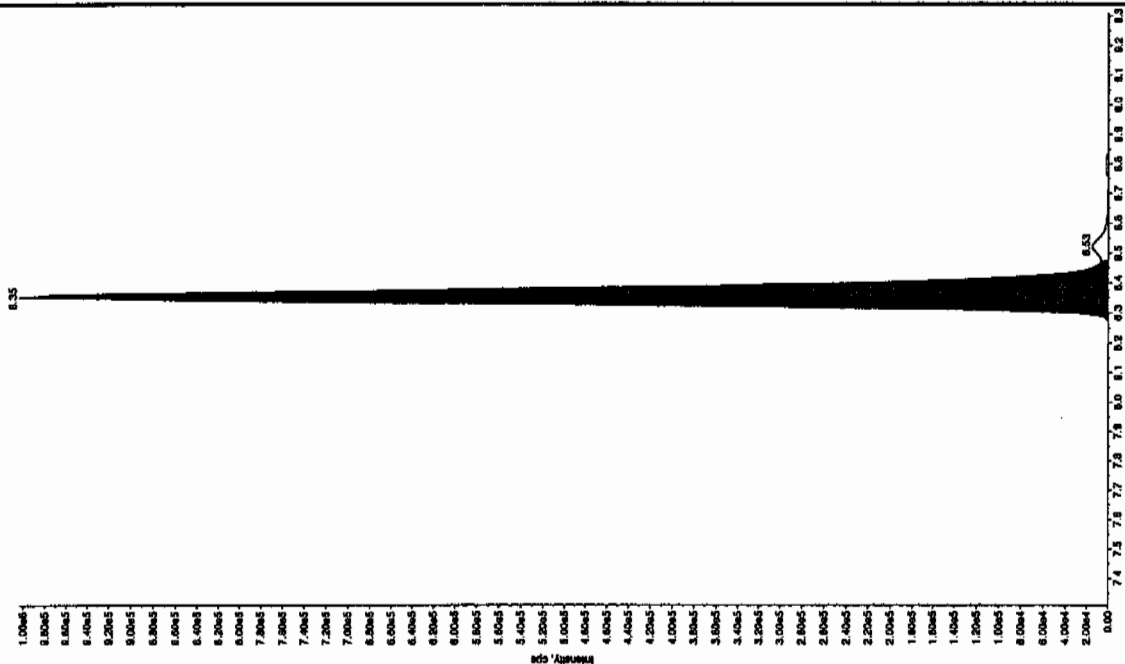
OK 01/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

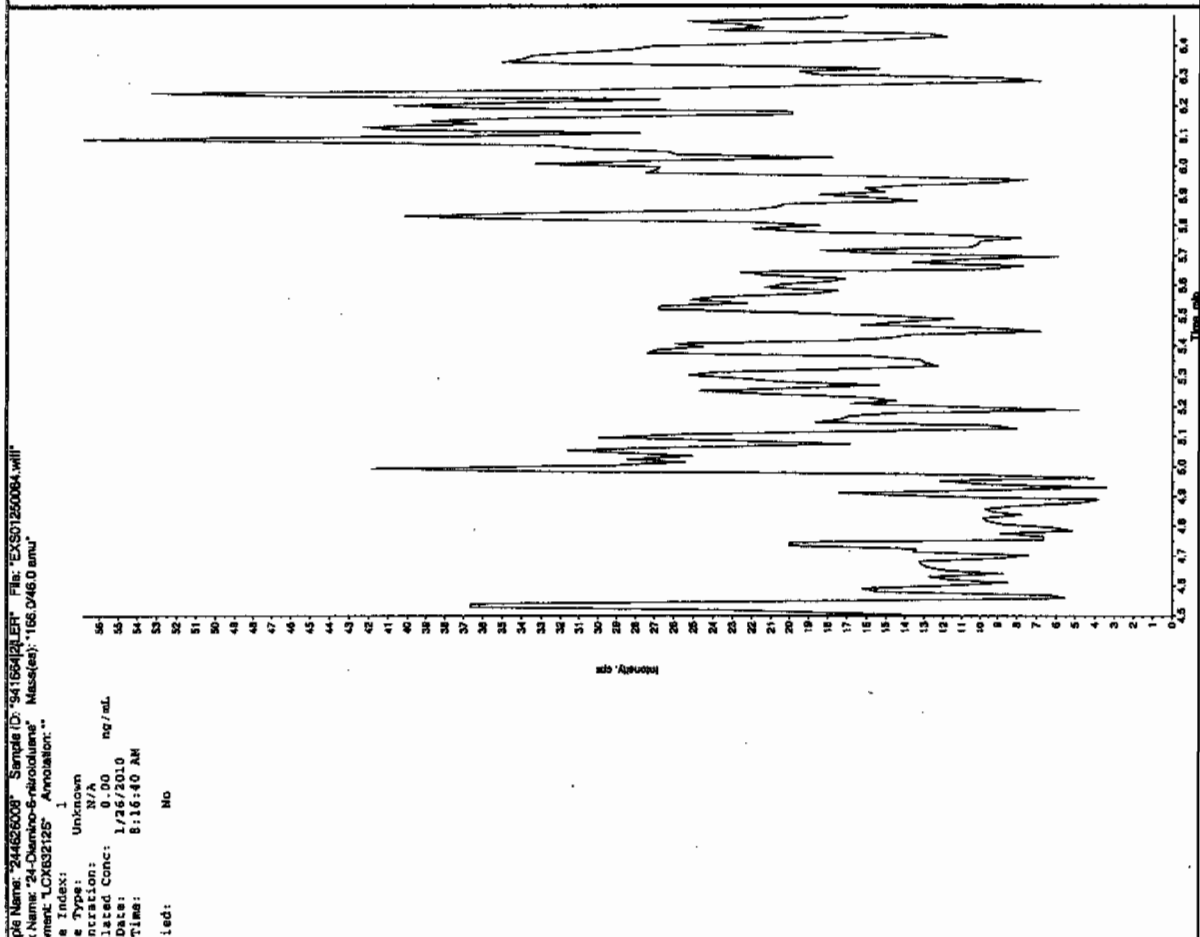
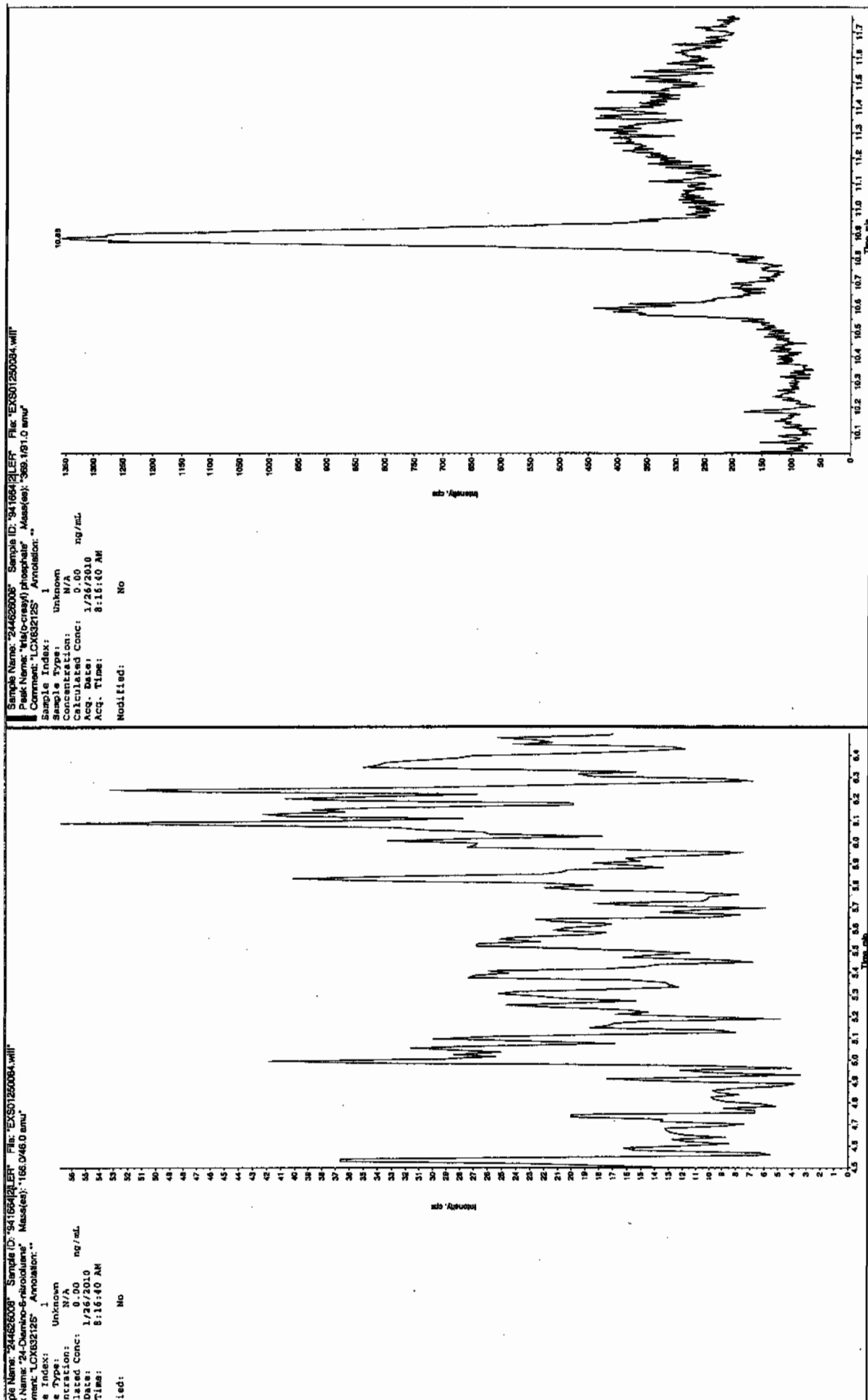
Sample Name: "24462608" Sample ID: "94188421" File: "EXS01250084.wiff"
Peak Name: "2,6-Diamino-4-nitrotoluene" Mass(es): "166.046,0 amu"

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Acq. Date:	1/25/2010	
Acq. Time:	8:16:40 AM	
Modified:	No	



e Type:	Unknown				
Iteration:	N/A				
Iated Conc:	293				
Date:	1/26/2010				
Time:	8:16:40 AM				
ted:	HC				
Algorithm:	IntelliQuan - IQA				
Peak height:	1460.00	cps			
Peak Width:	6.00	sec			
Peak Width:	3.0	points			
ndow:	15.0	sec			
ed RT:	8.31	min			
Relative RT:	No				
Type:	Valley				
Time:	8.35	min			
t:	3,856,906	counts			
Time:	1,003,169	385 cps			
ime:	8.25	min			
	8.47	min			

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7271

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626009

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130028a

Date Analyzed: 31-JAN-10 00:59

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		

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

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File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130028a

Date: 31-Jan-2010

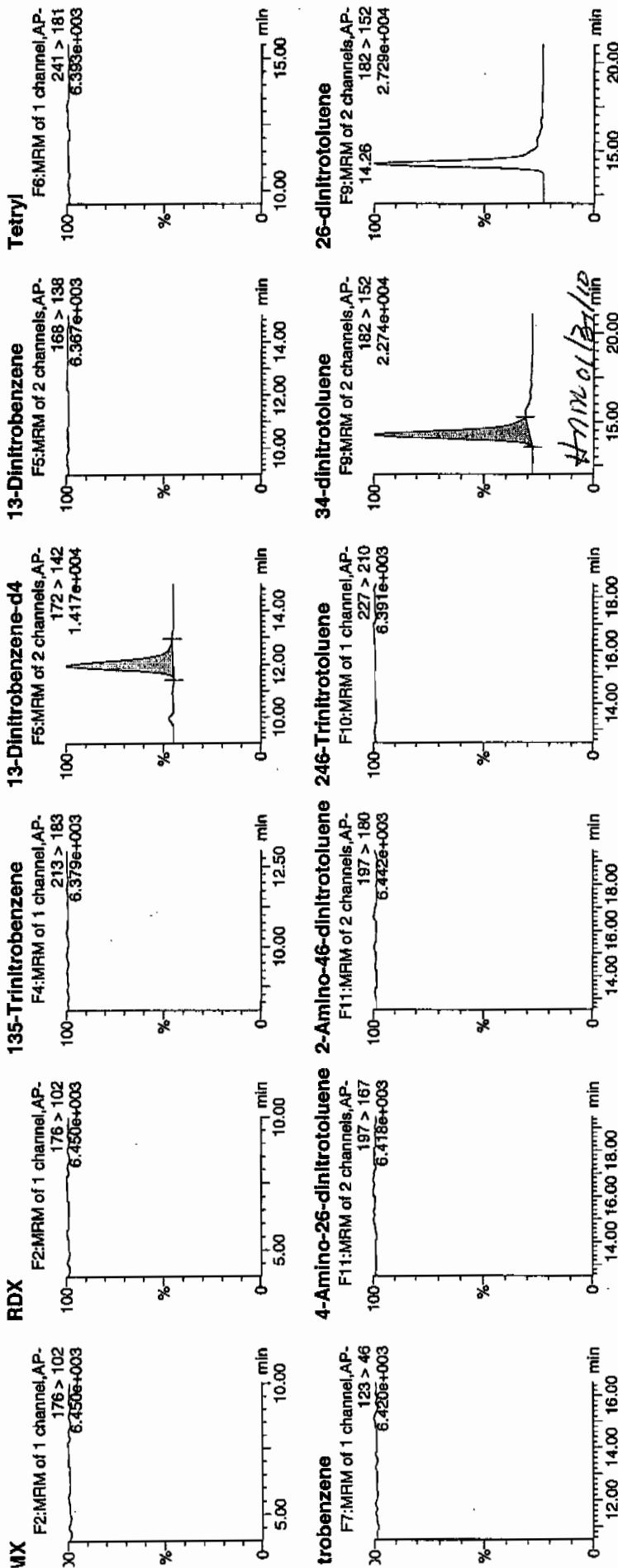
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Sample: 244626009

Lot: 1:6,A

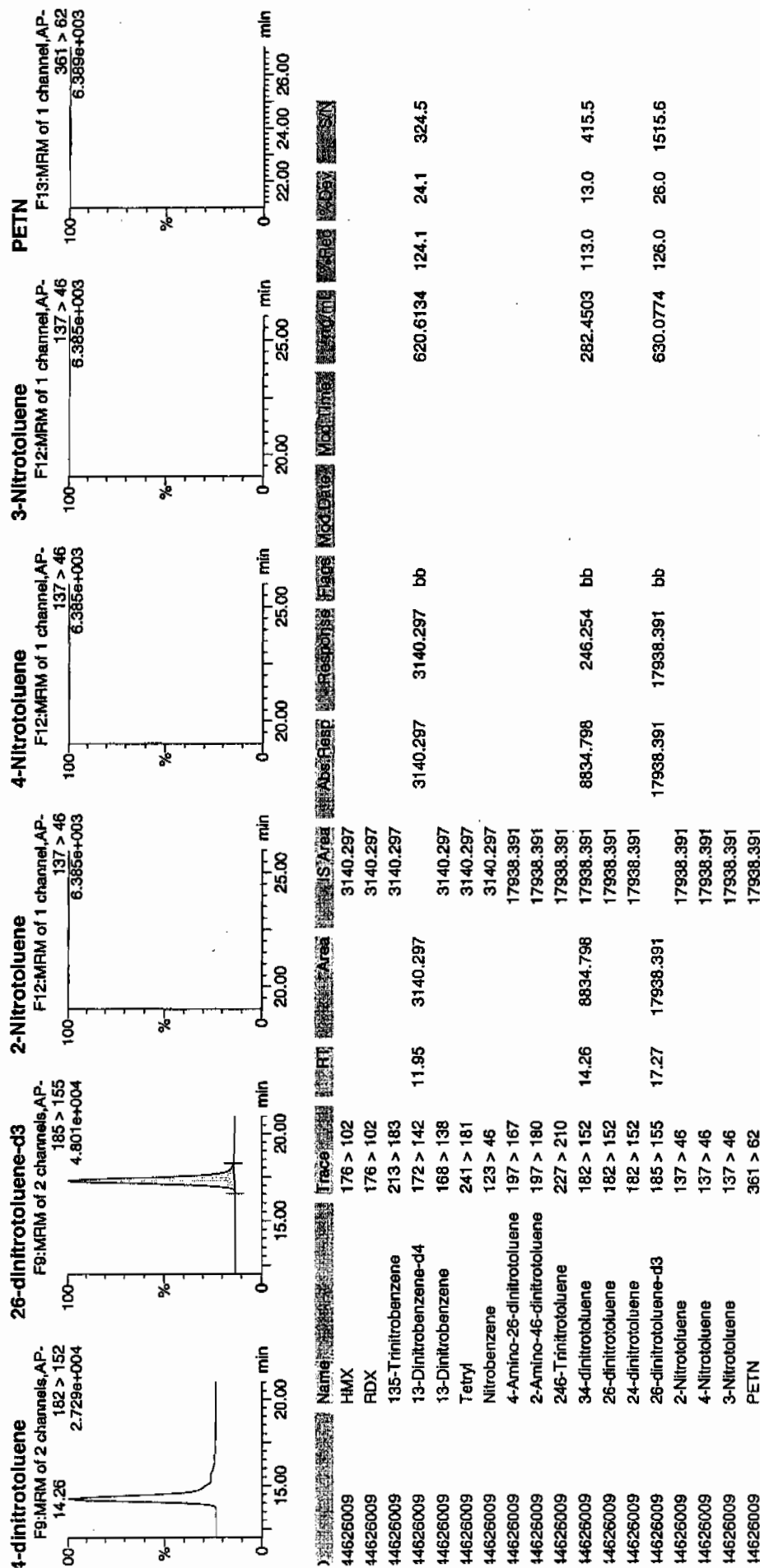
1/3/10

1941664 / 2023 / 21



Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7271

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626009

Sample Amount 2

Moisture: 7.6

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250085.wiff

Date Analyzed: 26-JAN-10 08:32

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 1127110

Sample Name: "24482503" Sample ID: "941894121" File: "EX501250035.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

Sample Type: Unknown

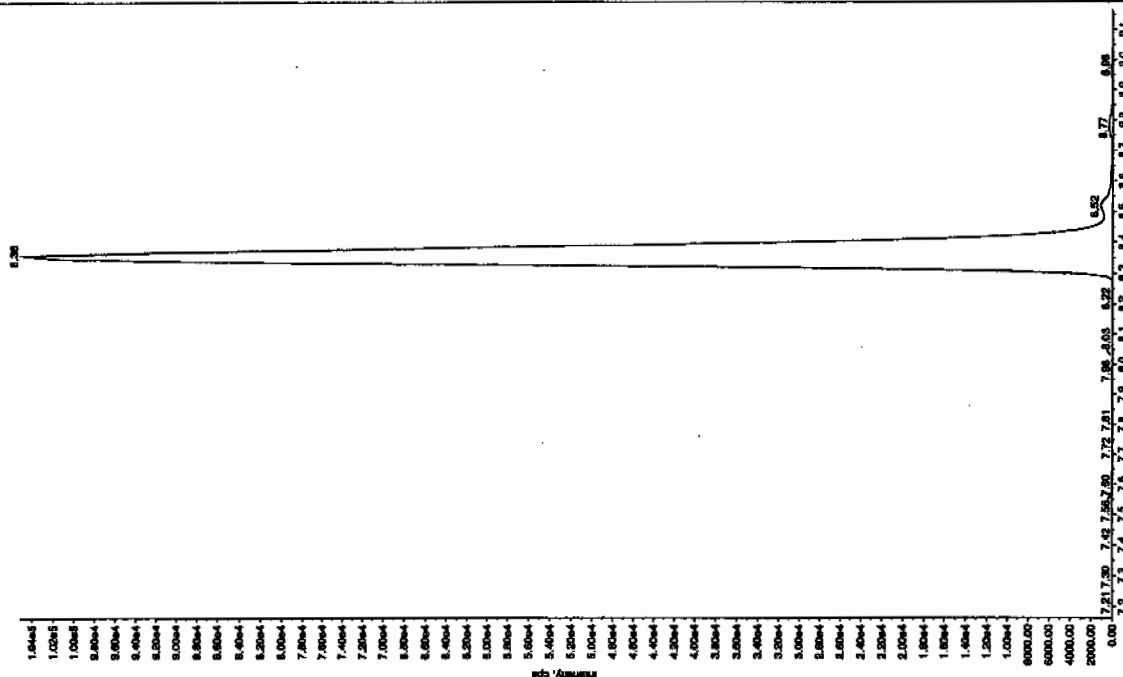
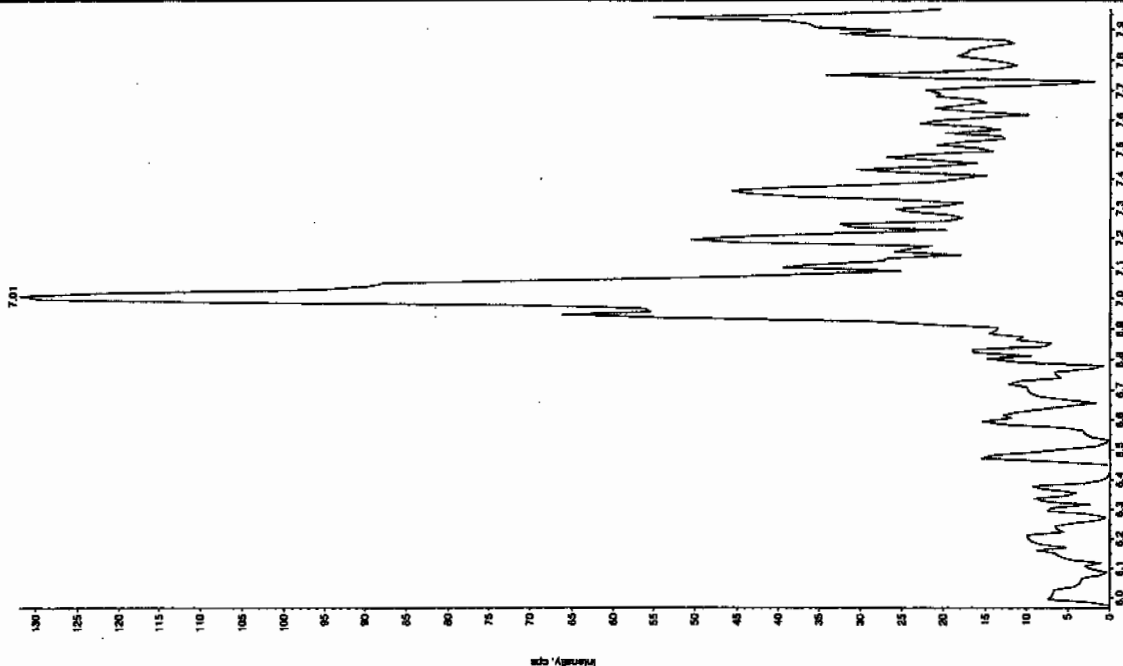
Concentration: 0.00 ng/mL

Calculated Conc: 1/26/2010

Acq. Date: 8:32:22 AM

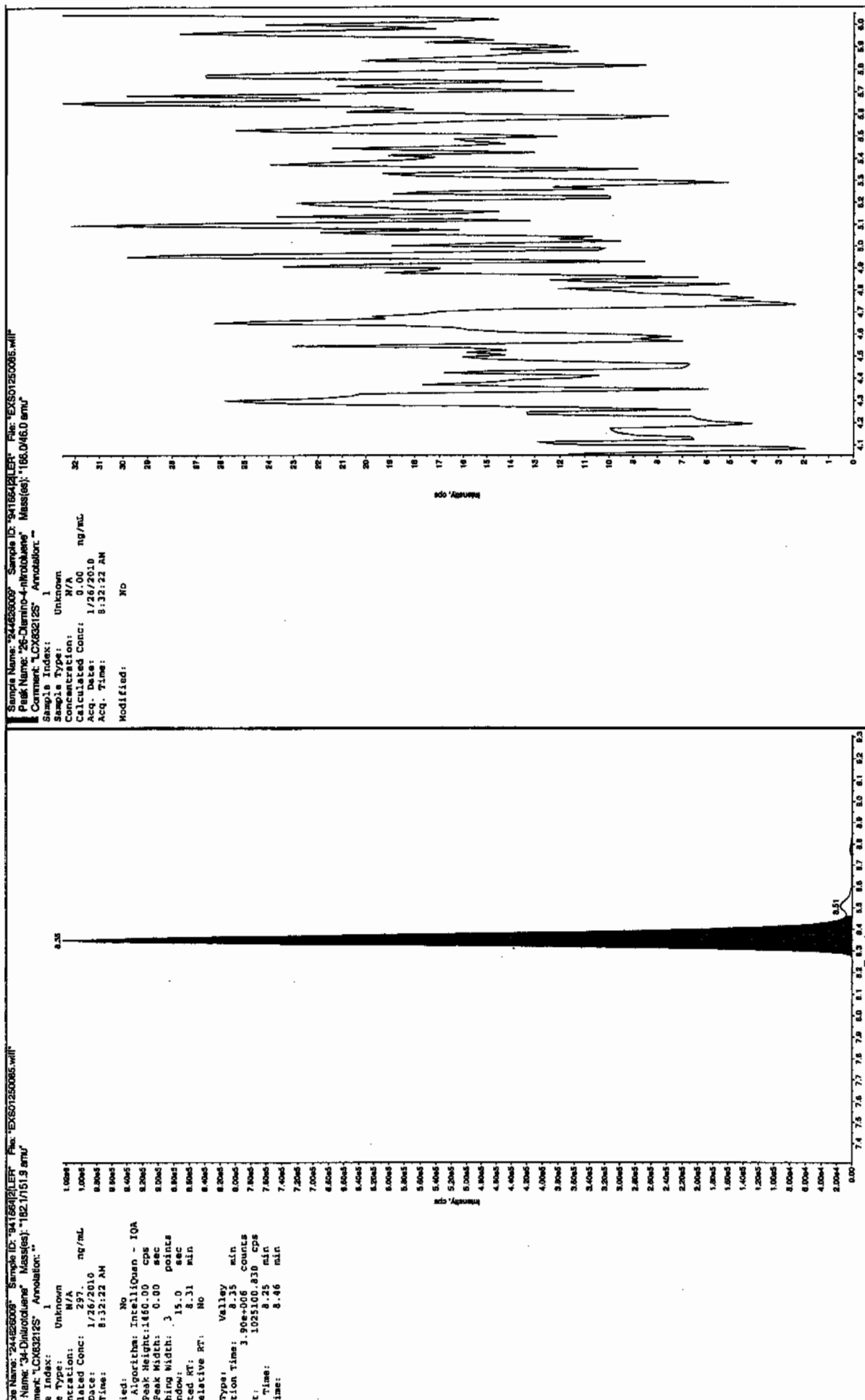
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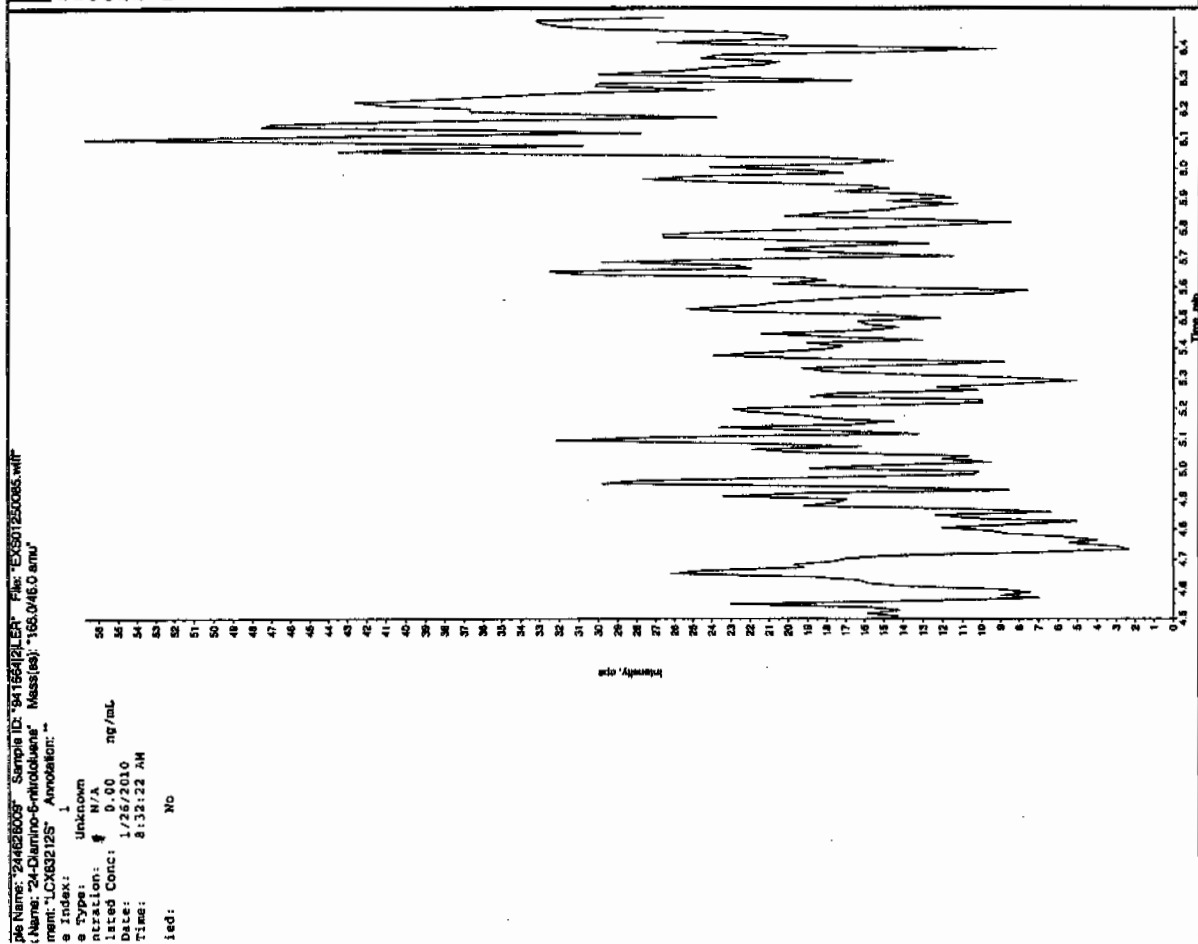
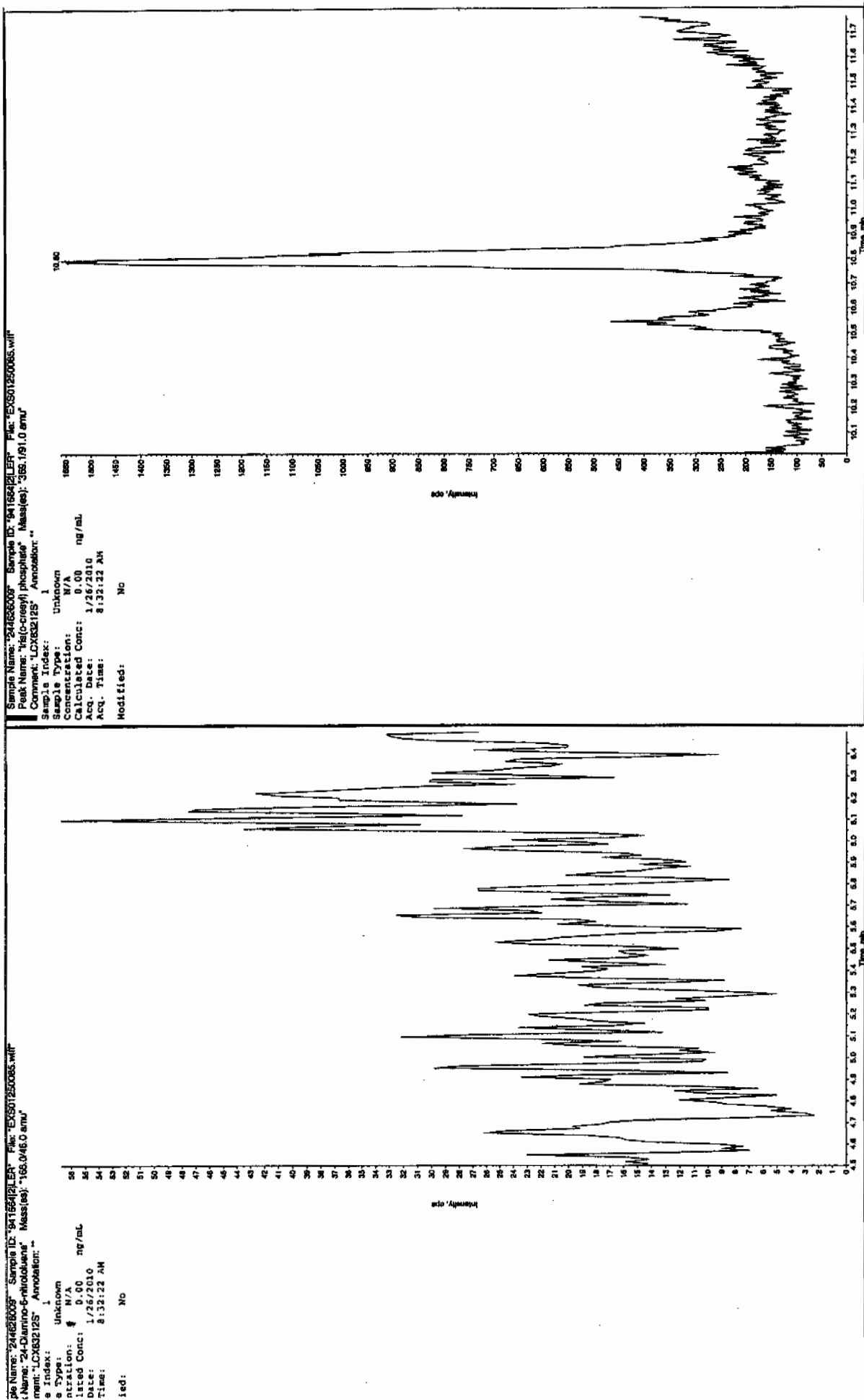
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See 1127110

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7260

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626010

Sample Amount 2

Moisture: 19.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130029a

Date Analyzed: 31-JAN-10 01:28

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

uantify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

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ate: 31-Jan-2010

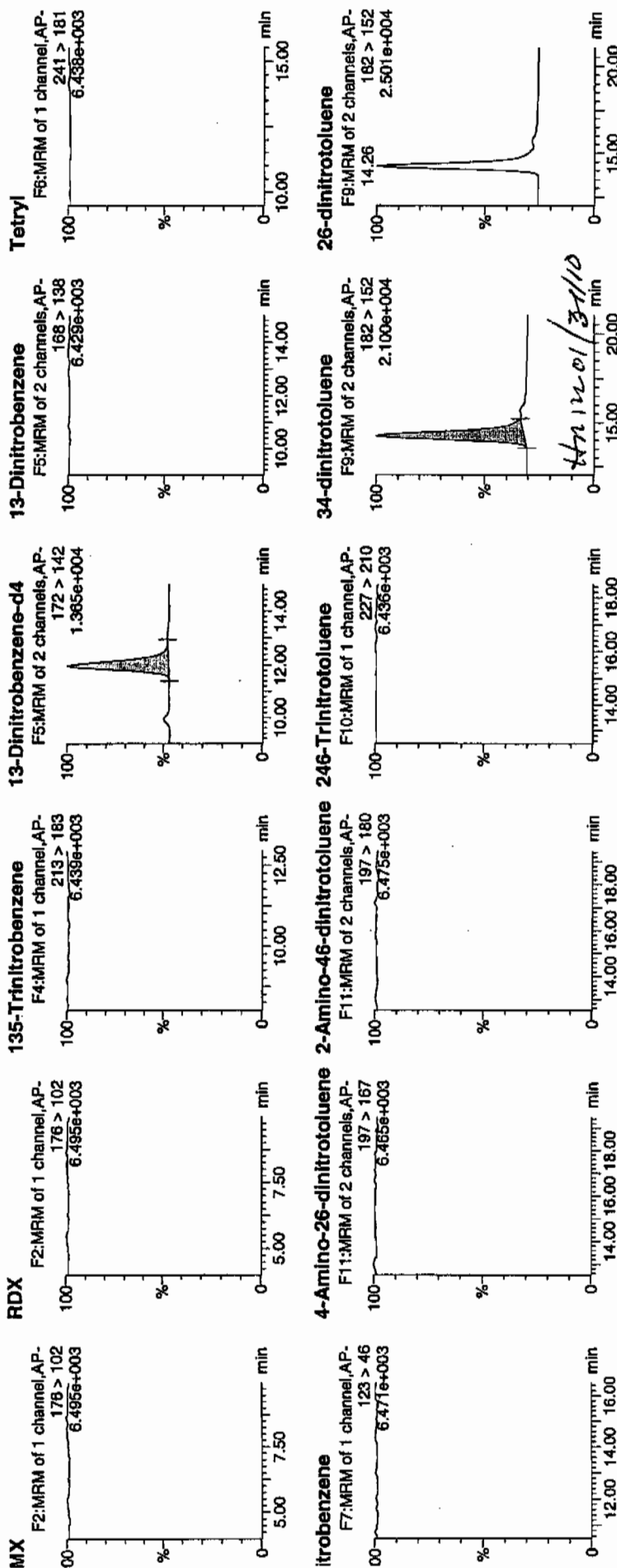
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i: 244626010

al: 1:6,B

1/31/10

lane 194664 / 121

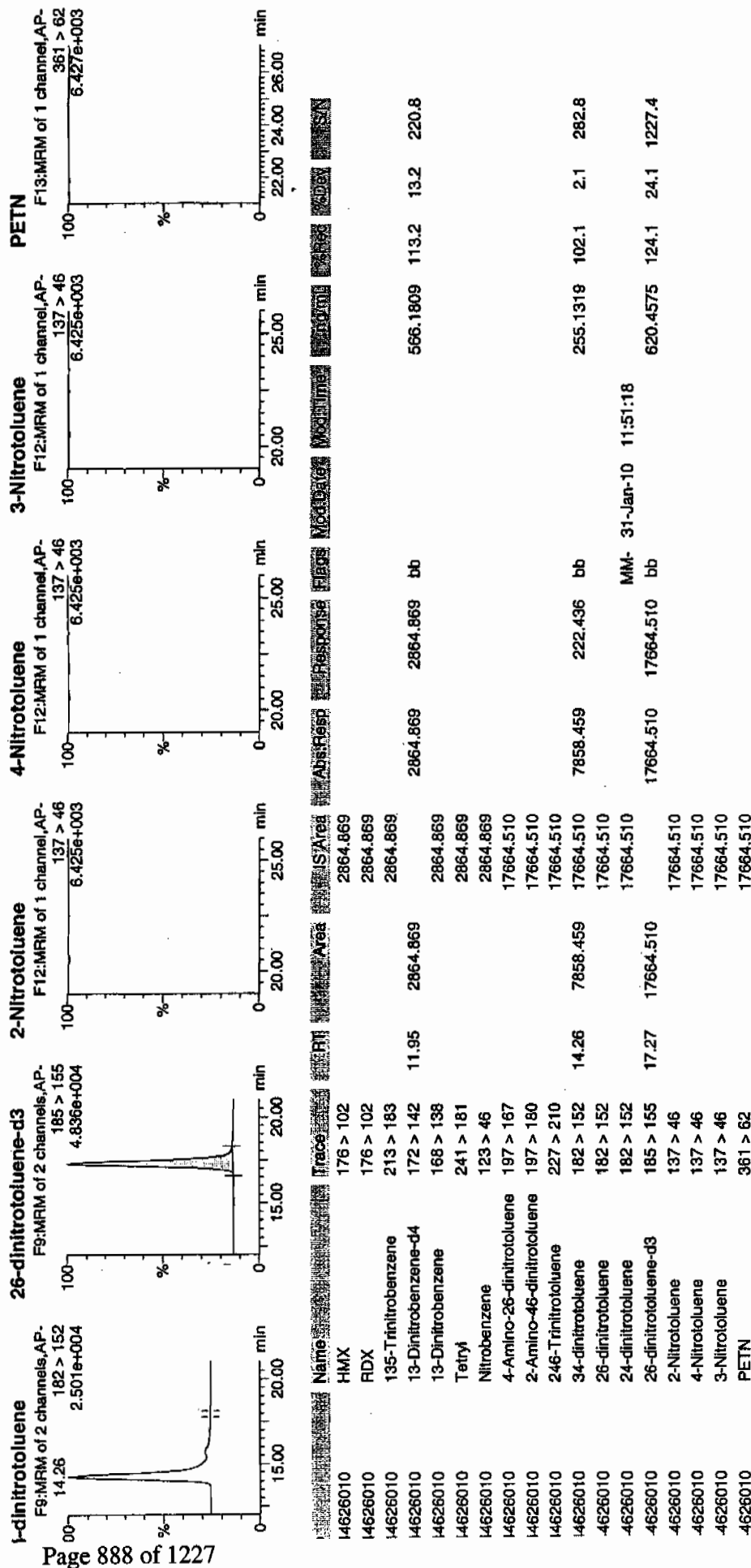


Quantify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Jan 31 11:57:34 2010, Page 58 of 77

Dataset: C:\MASSLYNX\New_Exp\PRO1013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7260

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626010

Sample Amount 2

Moisture: 19.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250086.wiff

Date Analyzed: 26-JAN-10 08:48

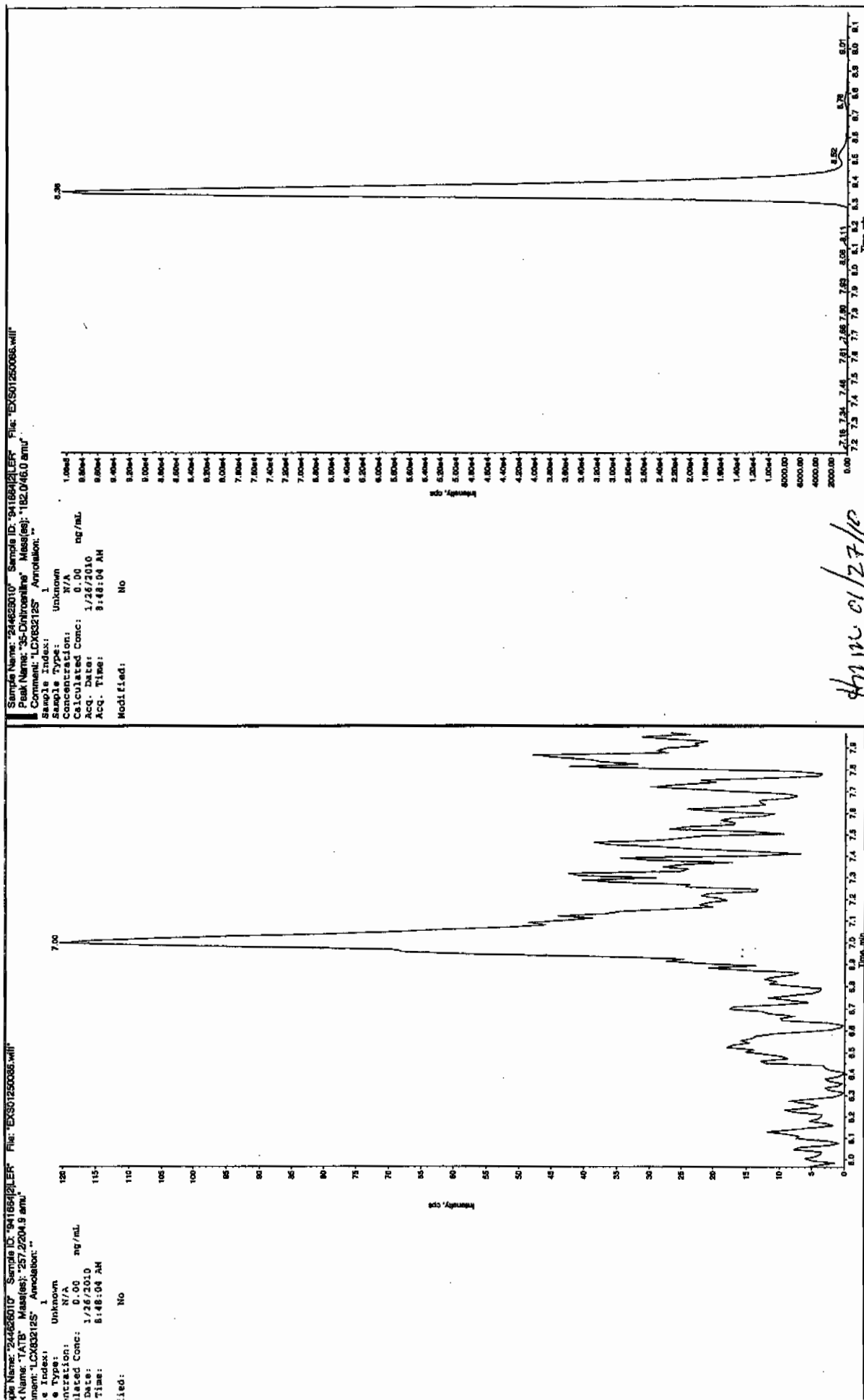
Units: ug/kg

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

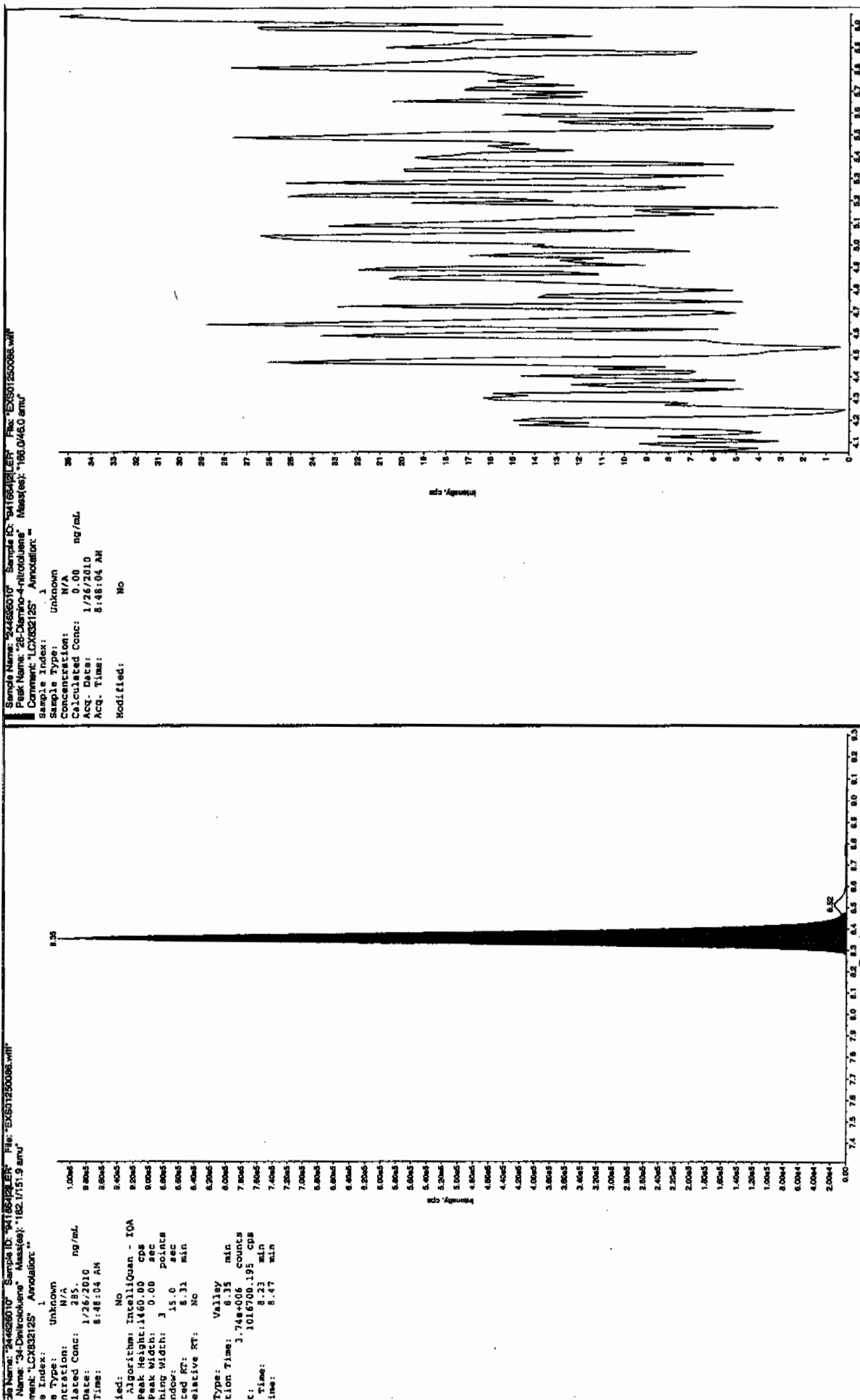
*Concentration =

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

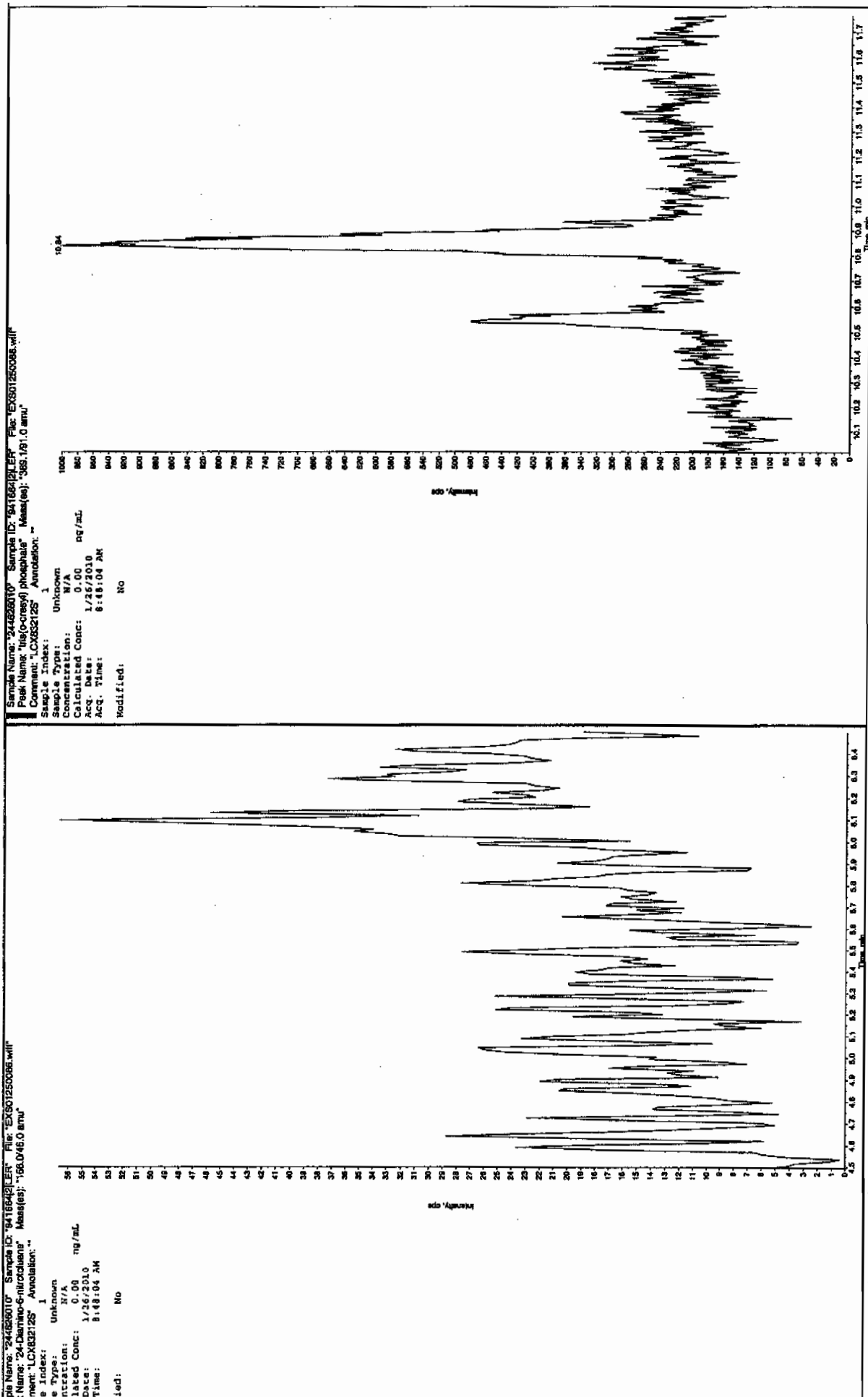
Ken 1/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7267

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626011

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130030a

Date Analyzed: 31-JAN-10 01:58

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

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

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Date: 31-Jan-2010

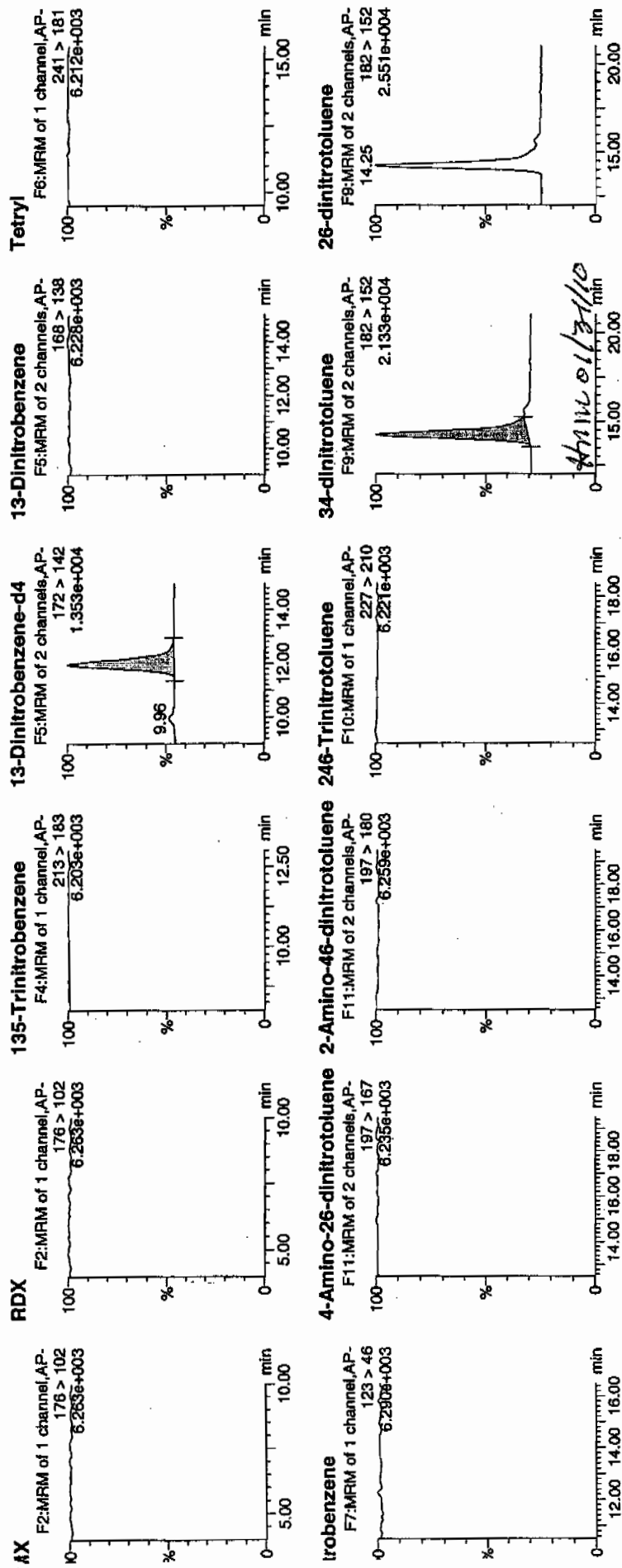
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Sample: 244626011

Anal: 1:6,C

1/31/10

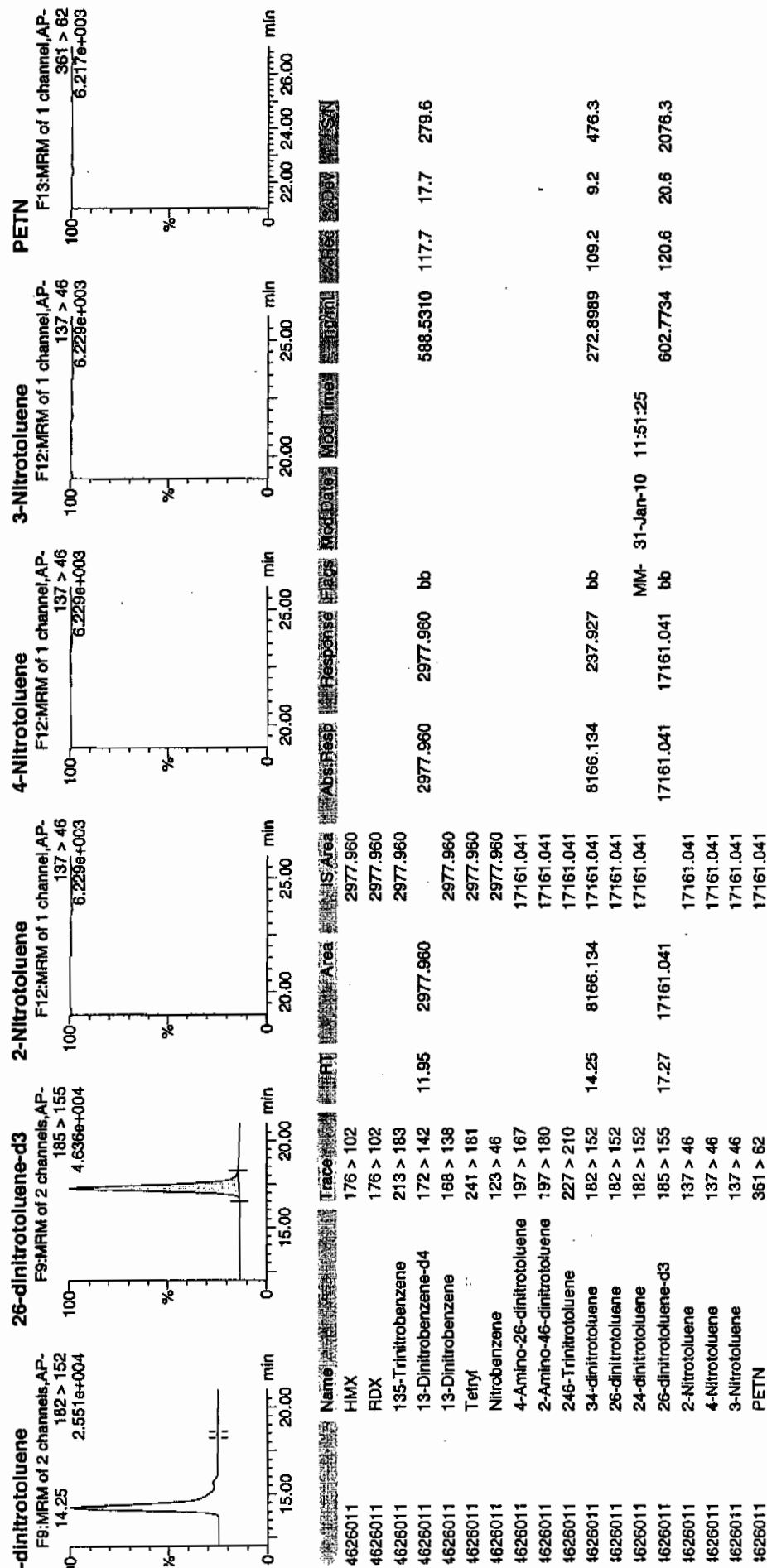
Handwritten notes: 941664 / 5033 / 21



Printed: Sun Jan 31 11:57:34 2010, Page 60 of 77

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7267

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626011

Sample Amount 2

Moisture: 7.1

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250087.wiff

Date Analyzed: 26-JAN-10 09:03

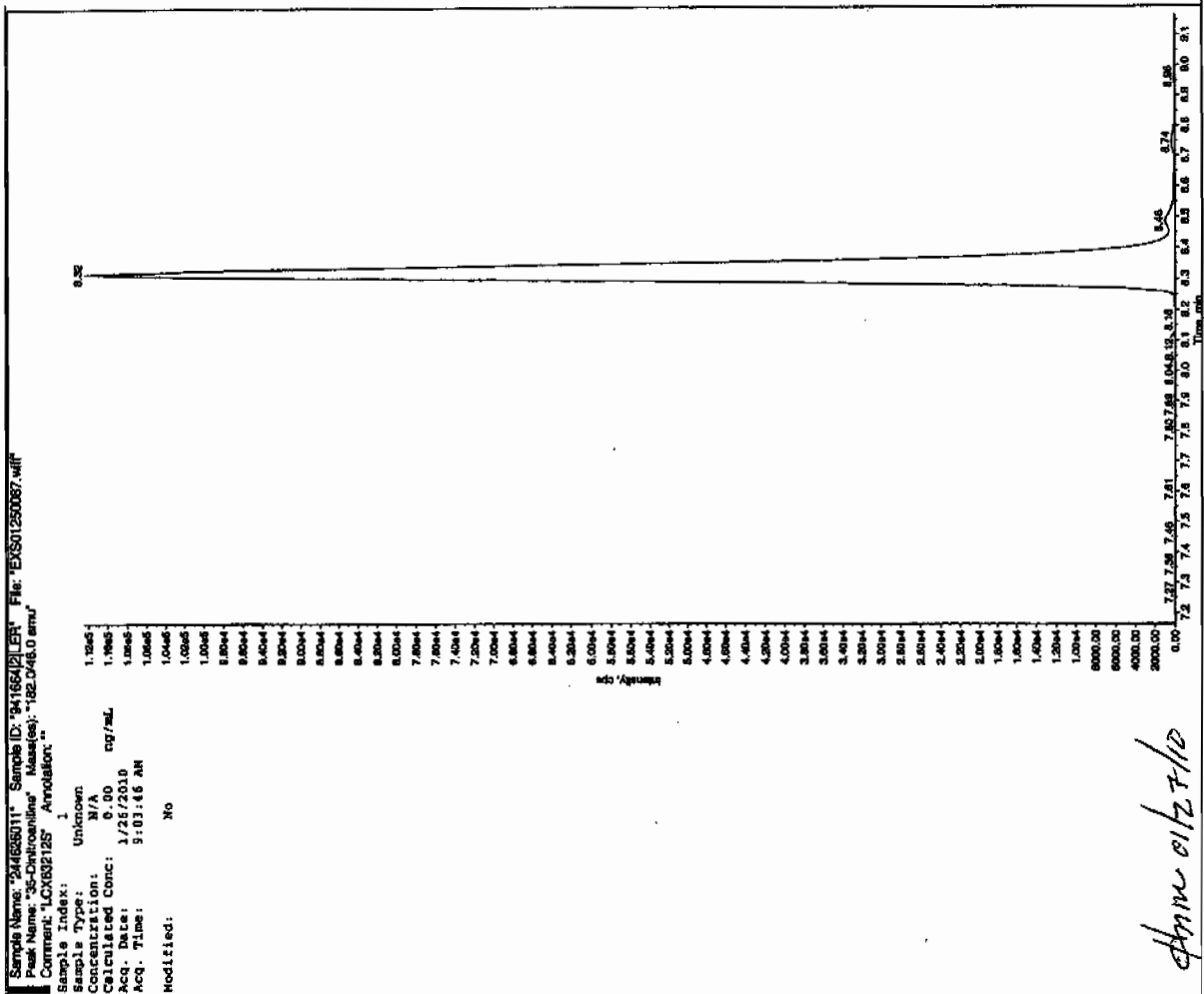
Units: ug/kg

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

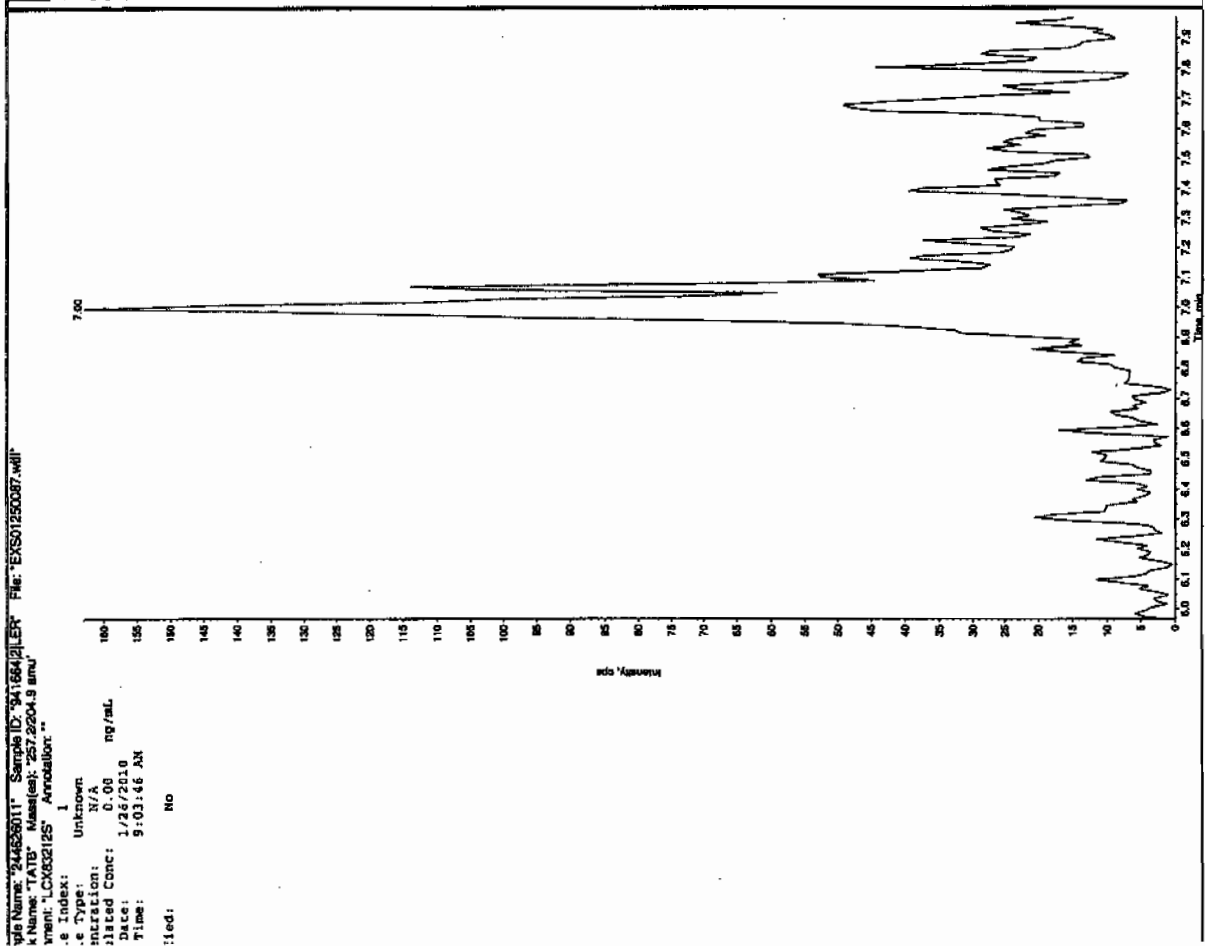
*Concentration =

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

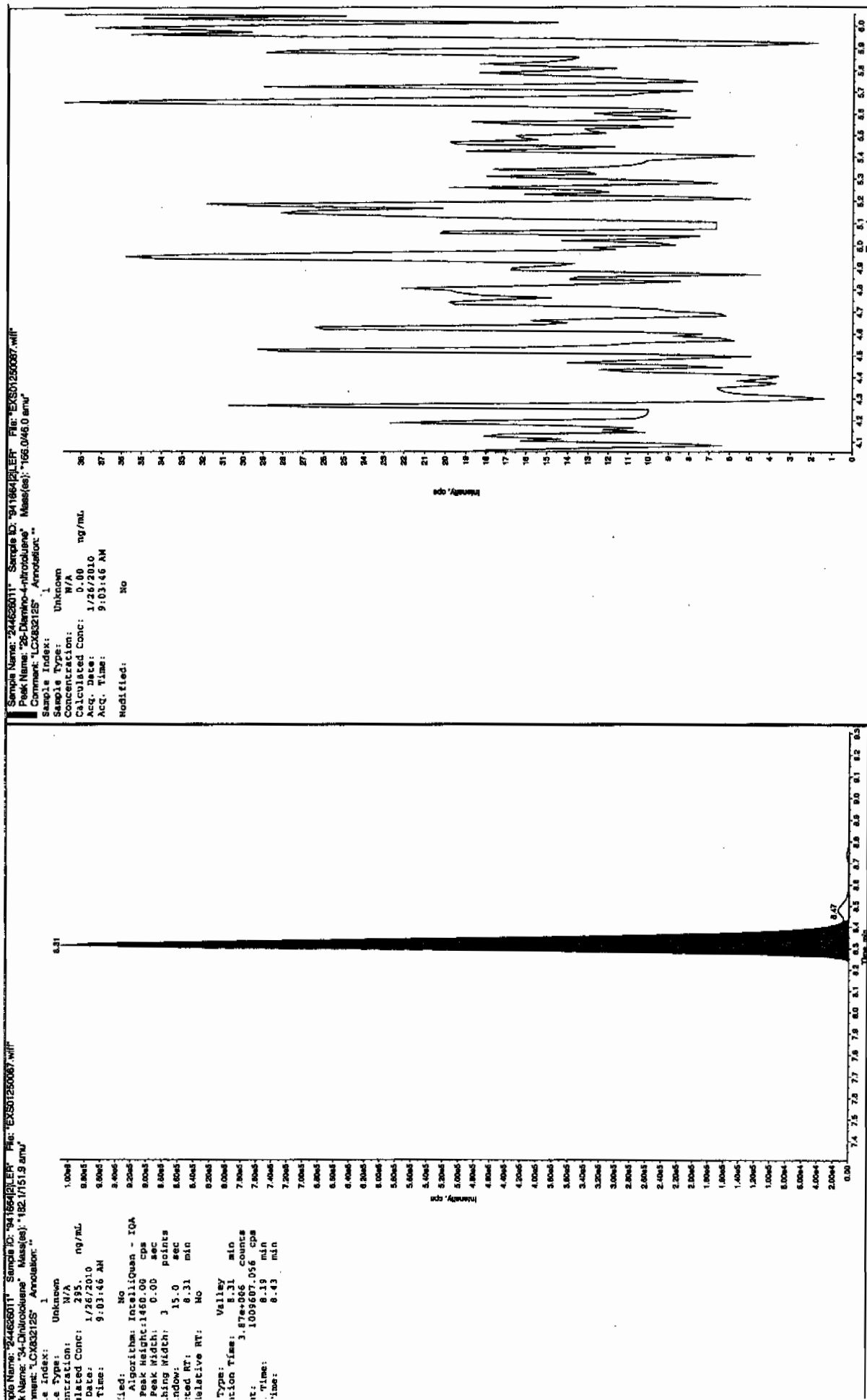
Run 1/27/10



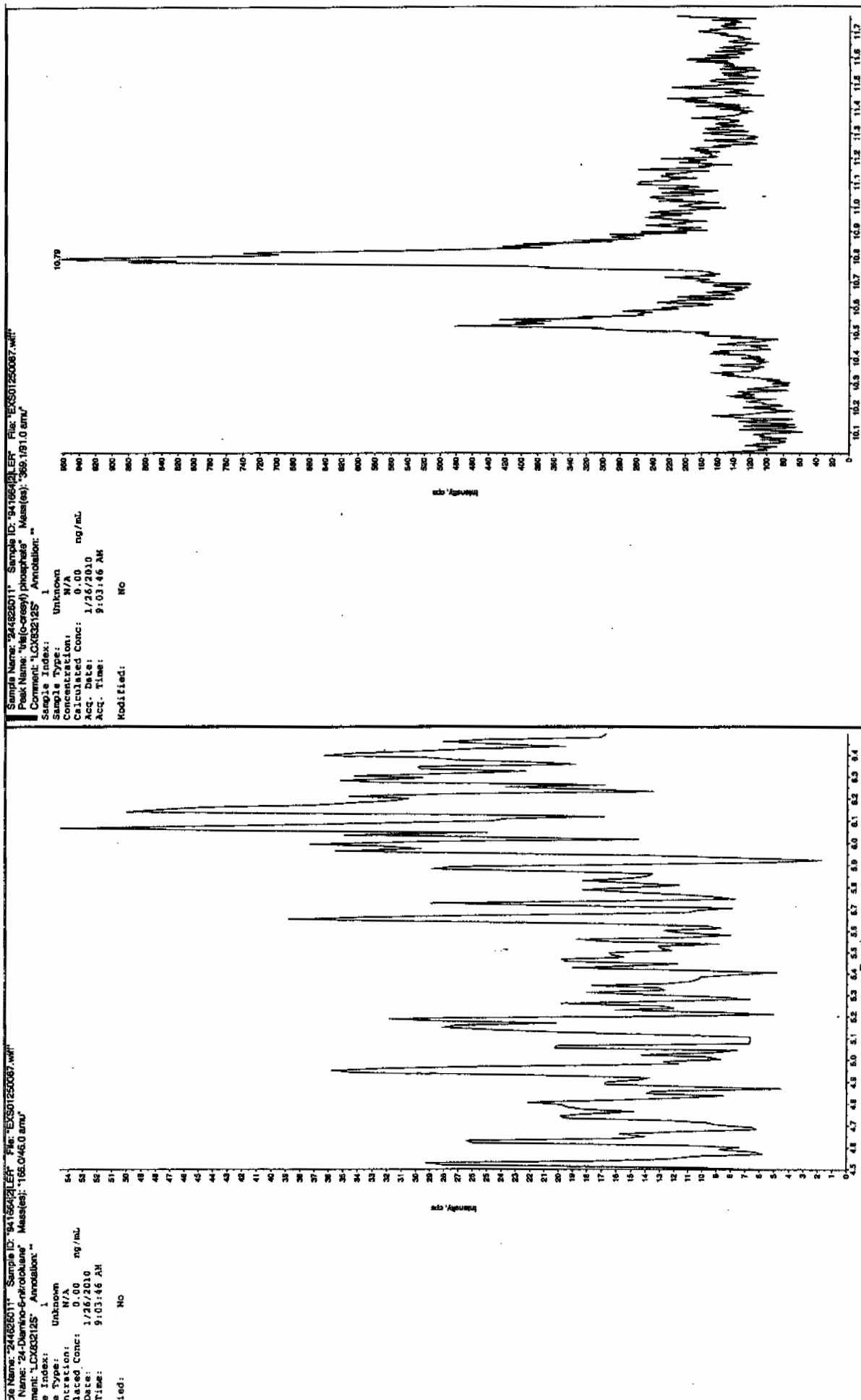
Run 01/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7264

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626012

Sample Amount 2

Moisture: 11.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130031a

Date Analyzed: 31-JAN-10 02:27

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\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130031a

Date: 31-Jan-2010

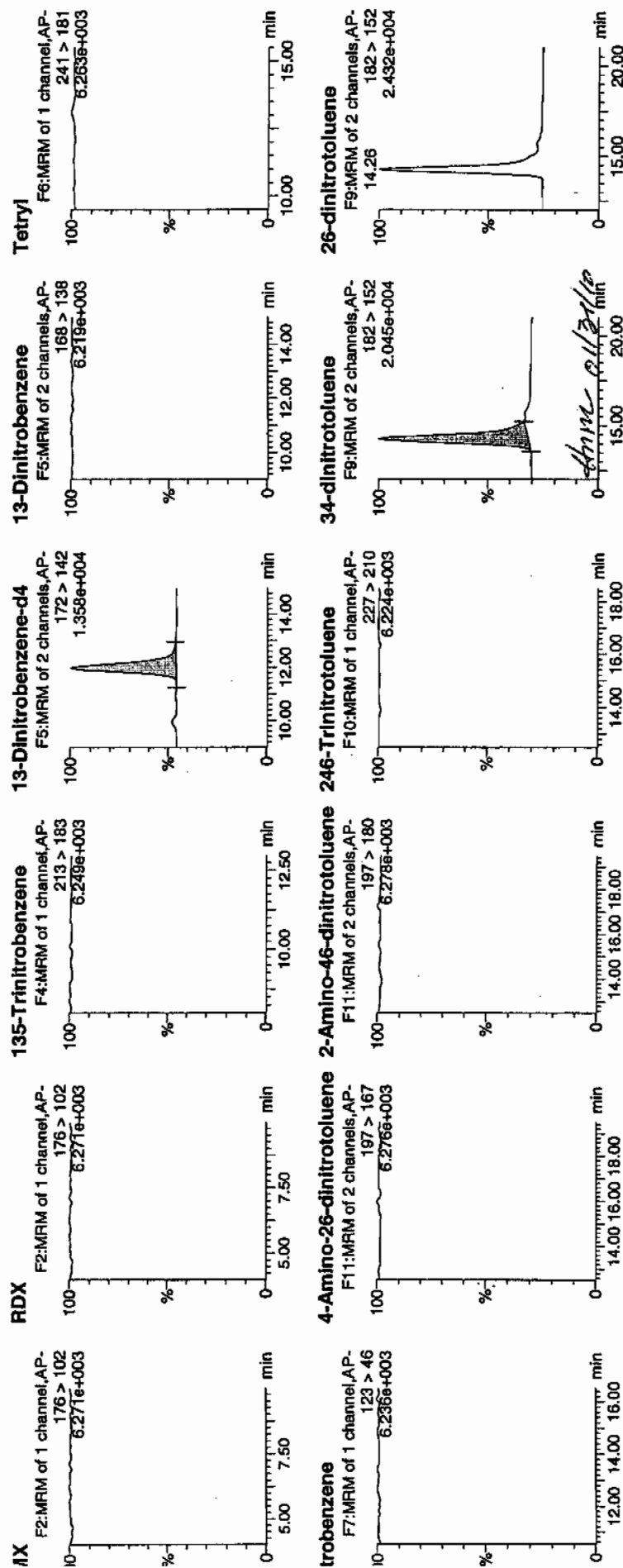
Time: 02:27:44

Sample: 244626012

Alt: 1:6,D

1/31/10

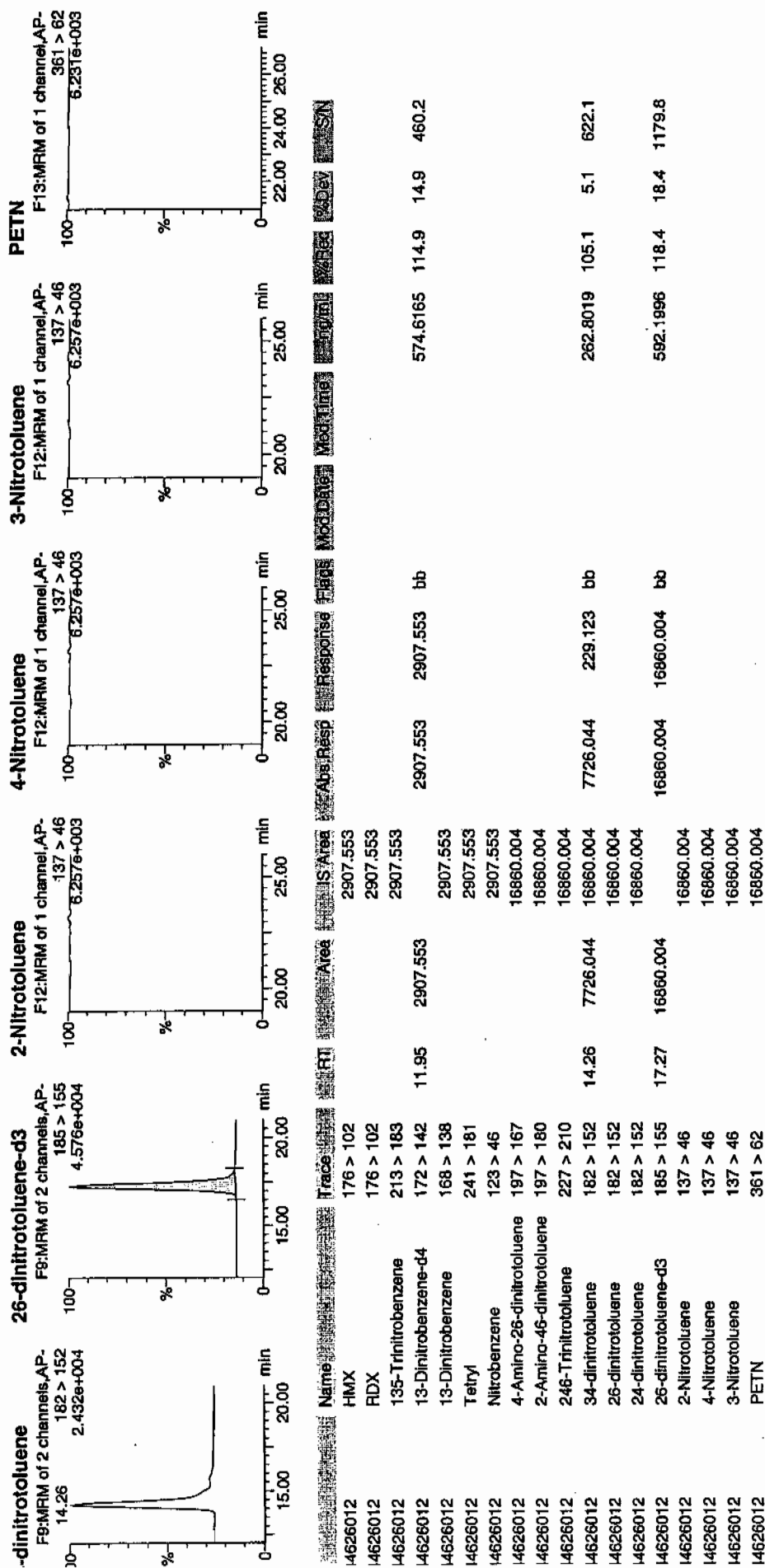
WAV 941664 / 8025 / 21



Printed: Sun Jan 31 11:57:34 2010, Page 62 of 77

Identify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7264

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626012

Sample Amount 2

Moisture: 11.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250088.wiff

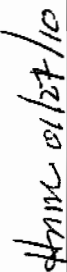
Date Analyzed: 26-JAN-10 09:19

Units: ug/kg

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

*Concentration =

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

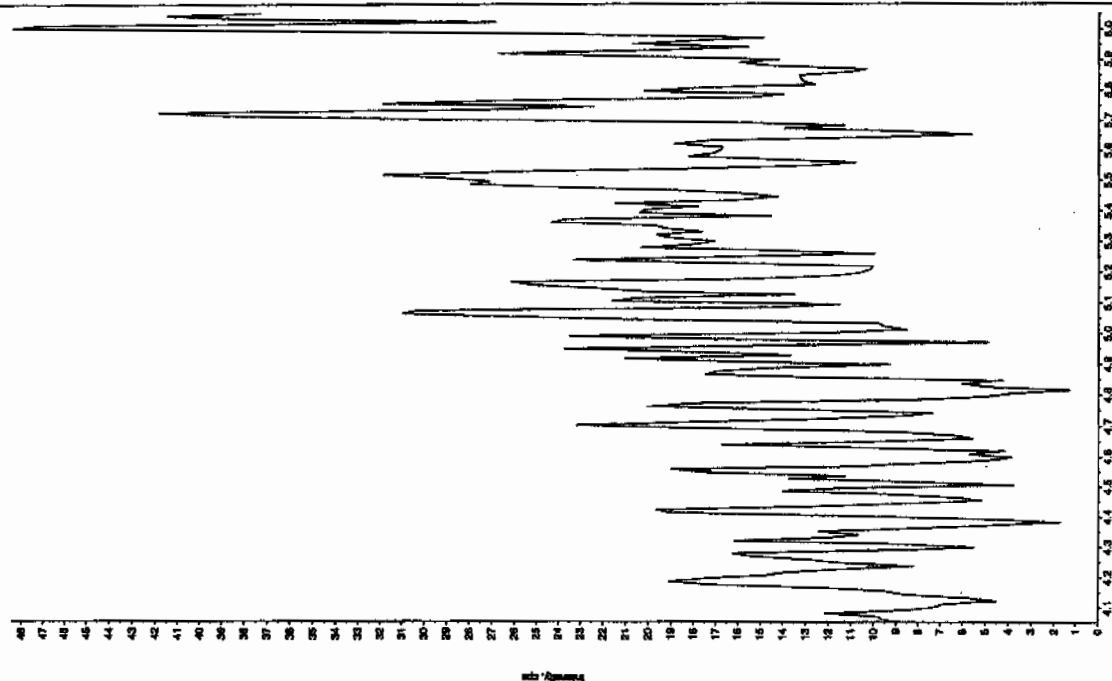
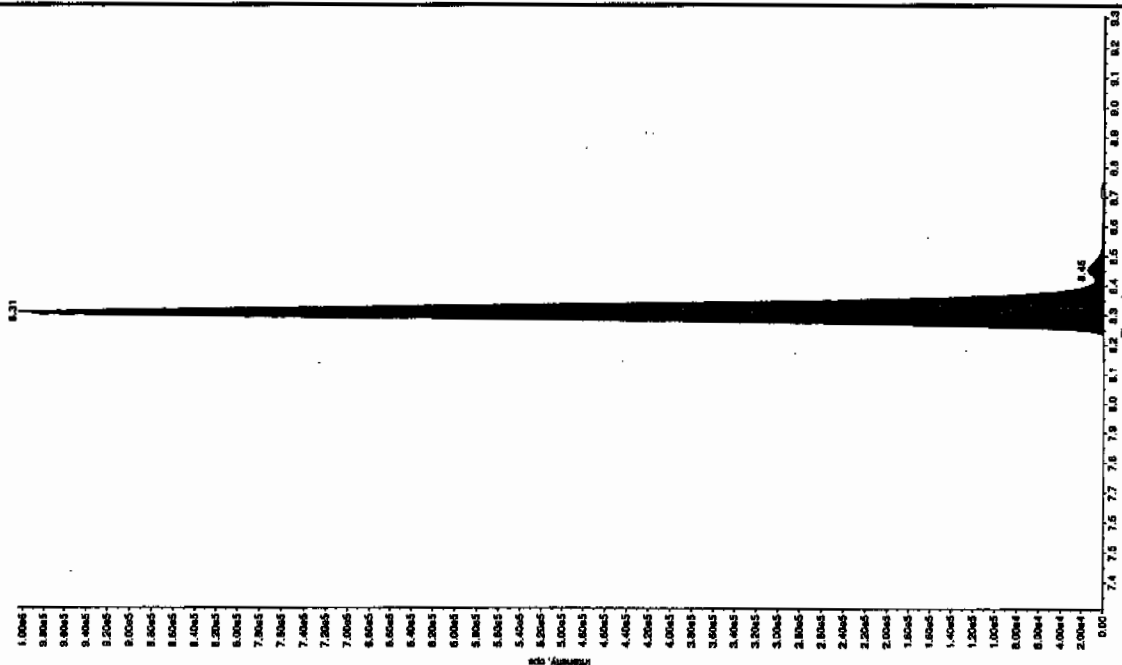


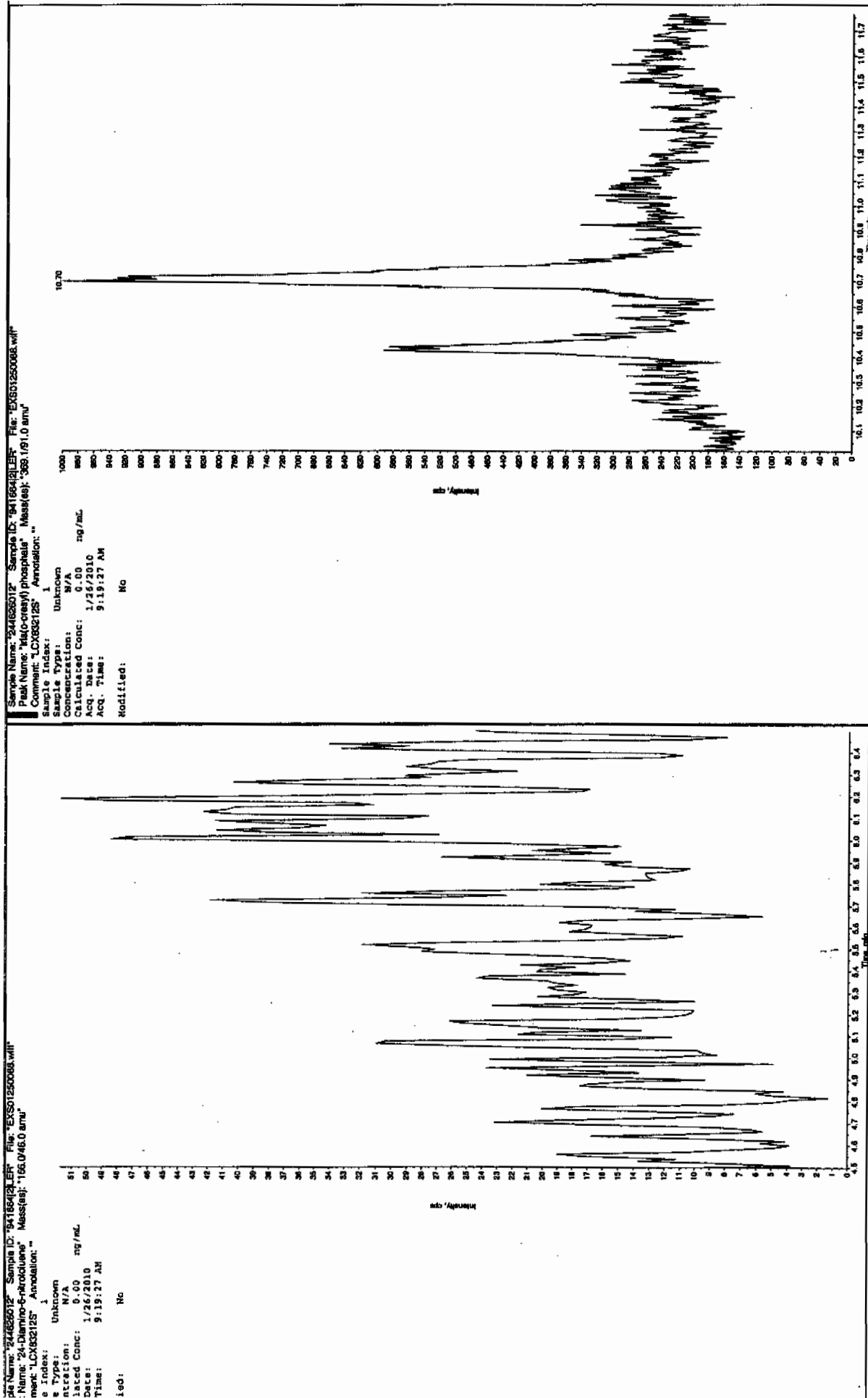
Sample Name: 244626012 Sample ID: 9416641211 File: EX501250088.wml
 Peak Name: 26-Dienio-4-ethoxydione Mass(es): 186.046.0 amu
 Comment: LCX32125 Annotation: -

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/26/2010 ng/mL
 Acq. Date: 9/19/27 AM
 Acq. Time: 9:19:27 AM
 Modified: NO

File Name: 244626012 Sample ID: 9416641211 File: EX501250088.wml
 Name: 24-Dienio-4-ethoxydione Mass(es): 186.046.0 amu
 Comment: LCX32125 Annotation: -

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/26/2010 ng/mL
 Acq. Date: 9/19/27 AM
 Acq. Time: 9:19:27 AM
 Modified: NO
 Algorithm: IntelliQuan - IOA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Peak Width: 3 points
 Window: 15.0 sec
 Ret RT: 8.31 min
 Relative RT: No
 Type: Valley
 Ret Time: 8.31 min
 Counts: 3.74e+006
 Time: 100686.707 cps
 Time: 8.22 min
 Time: 8.63 min





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7270

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626013

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130032a

Date Analyzed: 31-JAN-10 02:57

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

Printed: Sun Jan 31 11:57:34 2010, Page 63 of 77

Quantify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\1013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0130032a

Date: 31-Jan-2010

Time: 02:57:14

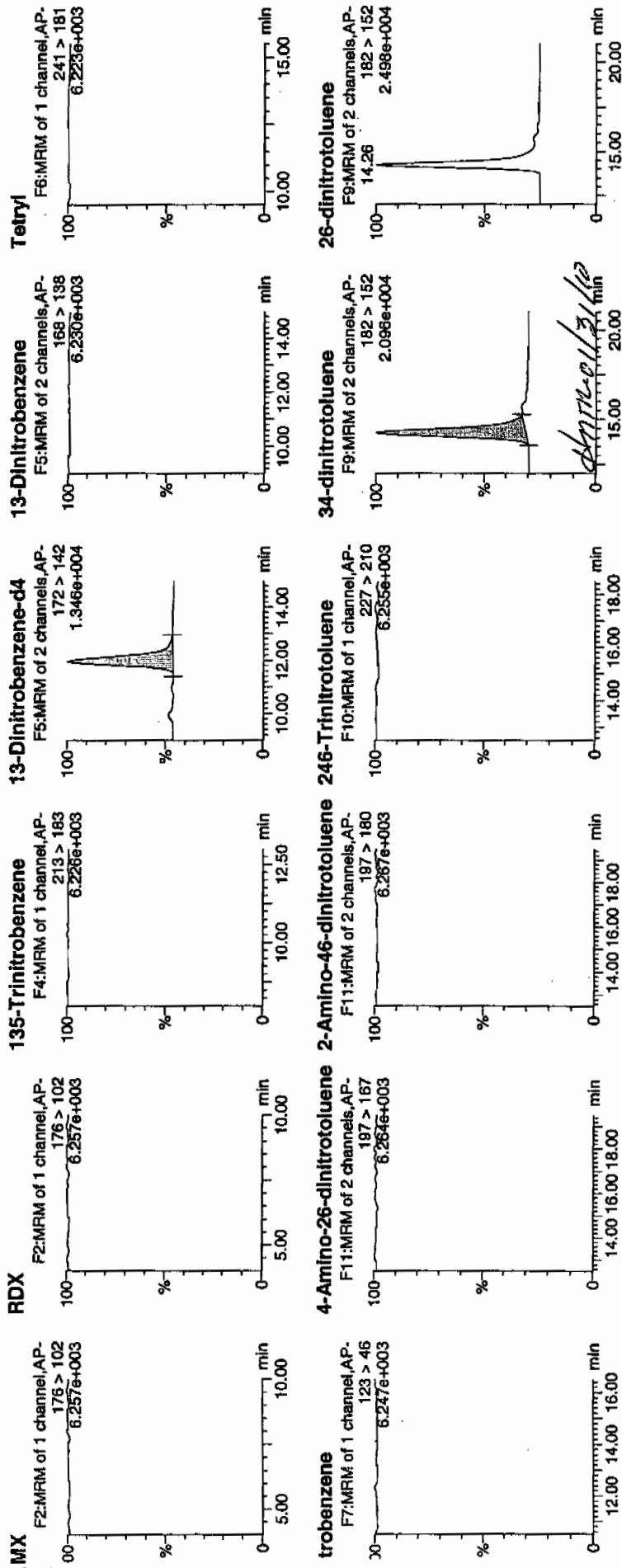
File: 244626013

Label: 1:6,E

1077

1/14/10

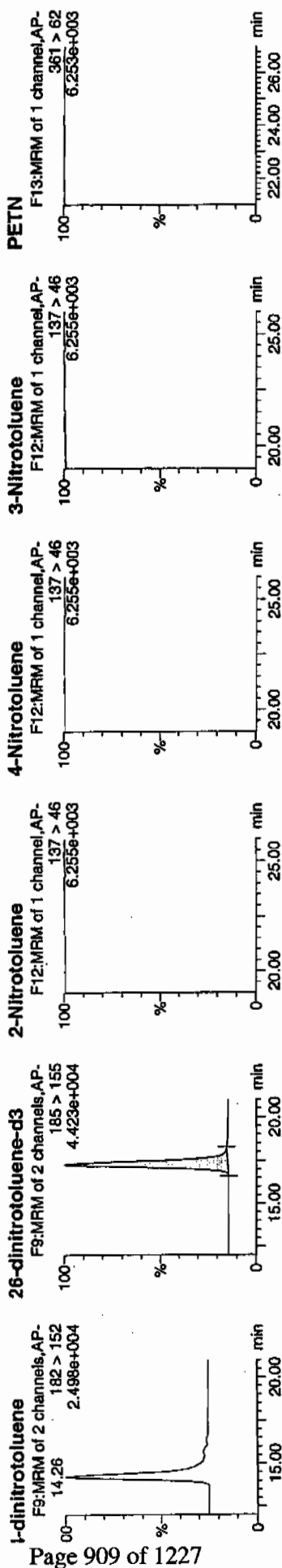
WAV 941664 / 5072 / 21



Printed: Sun Jan 31 11:57:34 2010, Page 64 of 77

Quantity Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



Name	RT	Area	S:Area	Abs:Resp	Response	Flags	Mod:Time	%Rec	%Dev
44626013	14.26								
44626013	176 > 102		2892.726						
44626013	176 > 102		2892.726						
44626013	213 > 183		2892.726						
44626013	172 > 142	11.97	2892.726						
44626013	168 > 138		2892.726						
44626013	241 > 181		2892.726						
44626013	123 > 46		2892.726						
44626013	197 > 167		16280.693						
44626013	197 > 180		16280.693						
44626013	227 > 210		16280.693						
44626013	182 > 152	14.26	7981.774						
44626013	182 > 152		16280.693						
44626013	182 > 152		16280.693						
44626013	185 > 155	17.27	16280.693						
44626013	137 > 46		16280.693						
44626013	137 > 46		16280.693						
44626013	137 > 46		16280.693						
44626013	361 > 62		16280.693						
				2892.726	2892.726	bb			
				7981.774	245.130	bb			
				16280.693	16280.693	bb			
				571.6863	114.3				
				571.6863	114.3				
				281.1612	112.5				
				571.8516	114.4				
				1704.2	14.4				

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7270

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626013

Sample Amount 2

Moisture: 12.5

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250089.wiff

Date Analyzed: 26-JAN-10 09:35

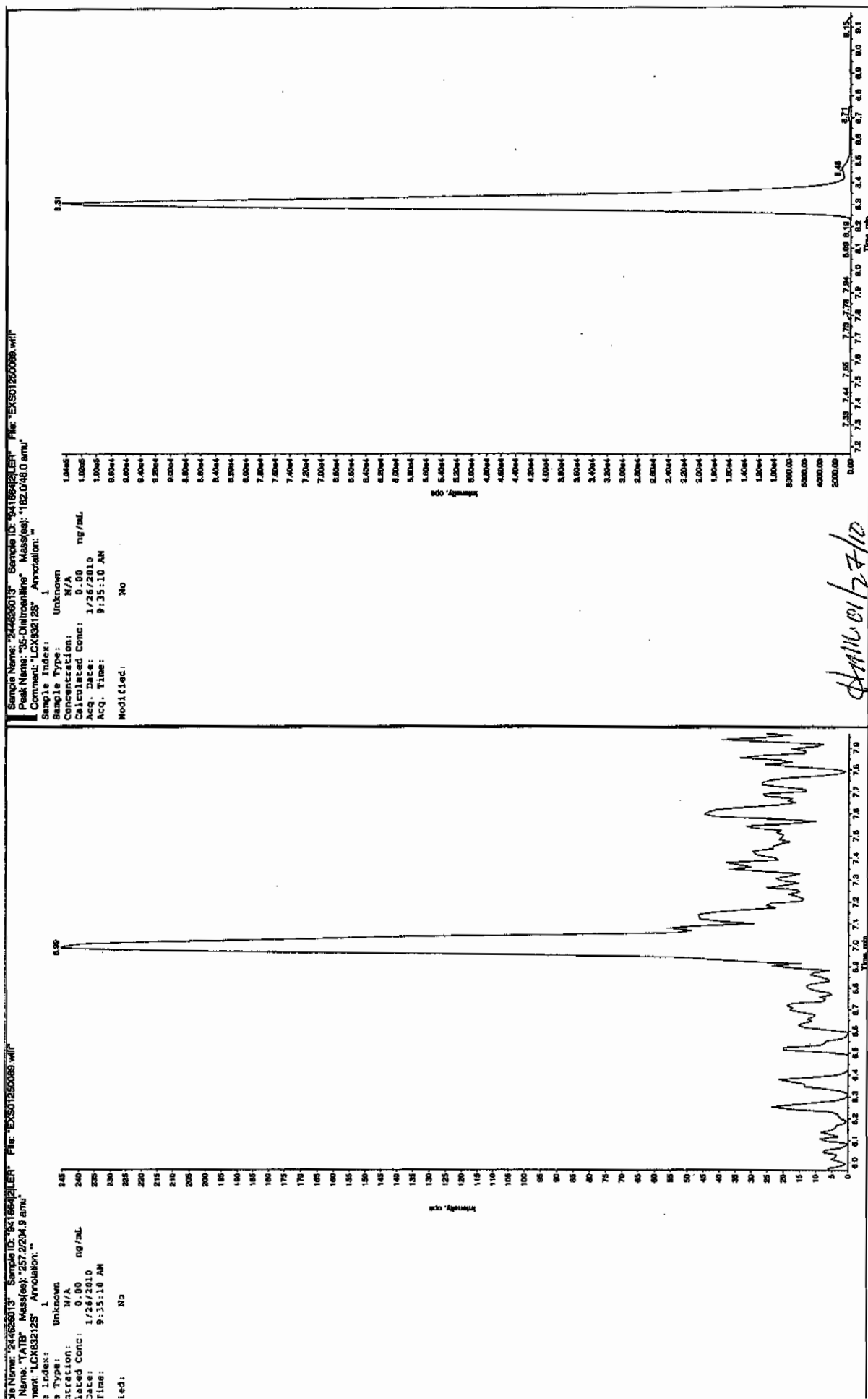
Units: ug/kg

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

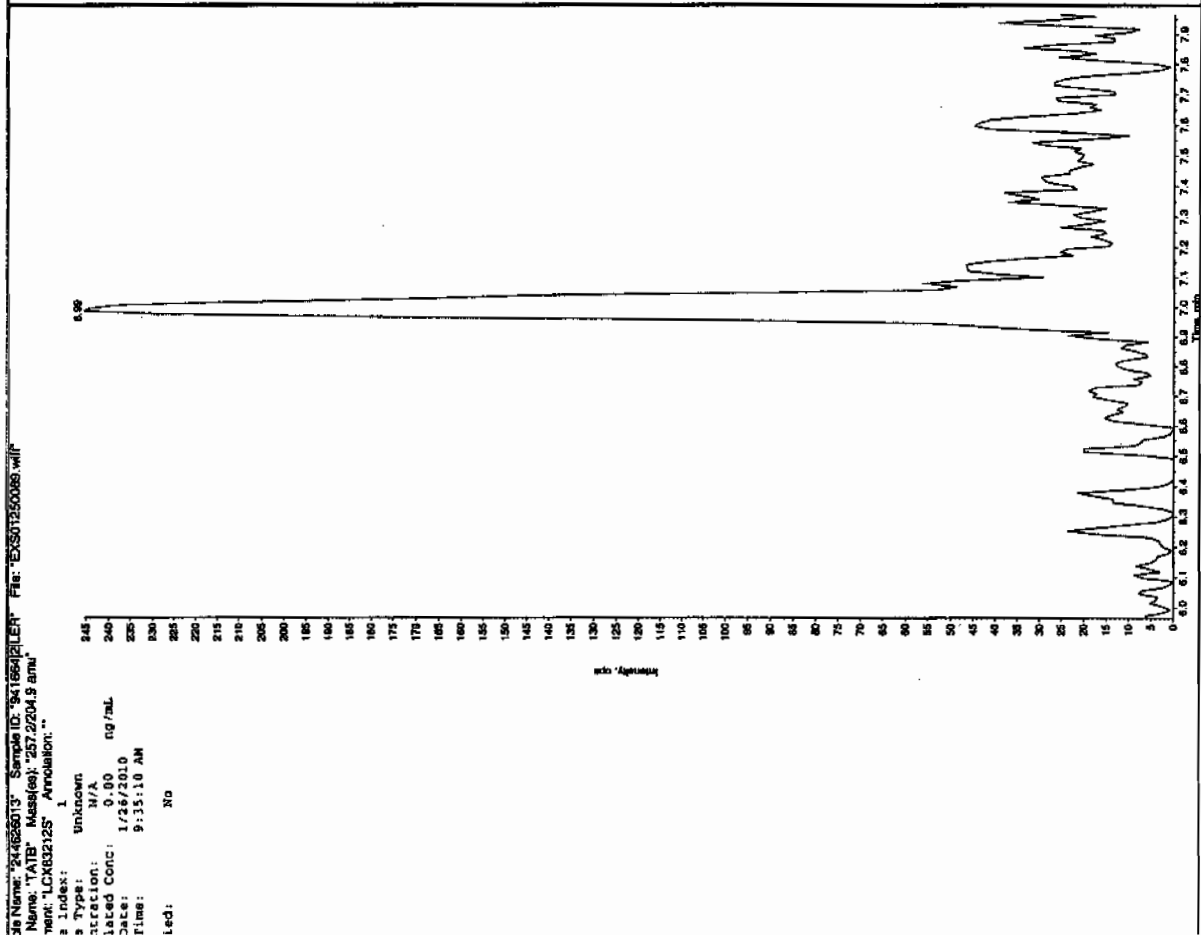
*Concentration =

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

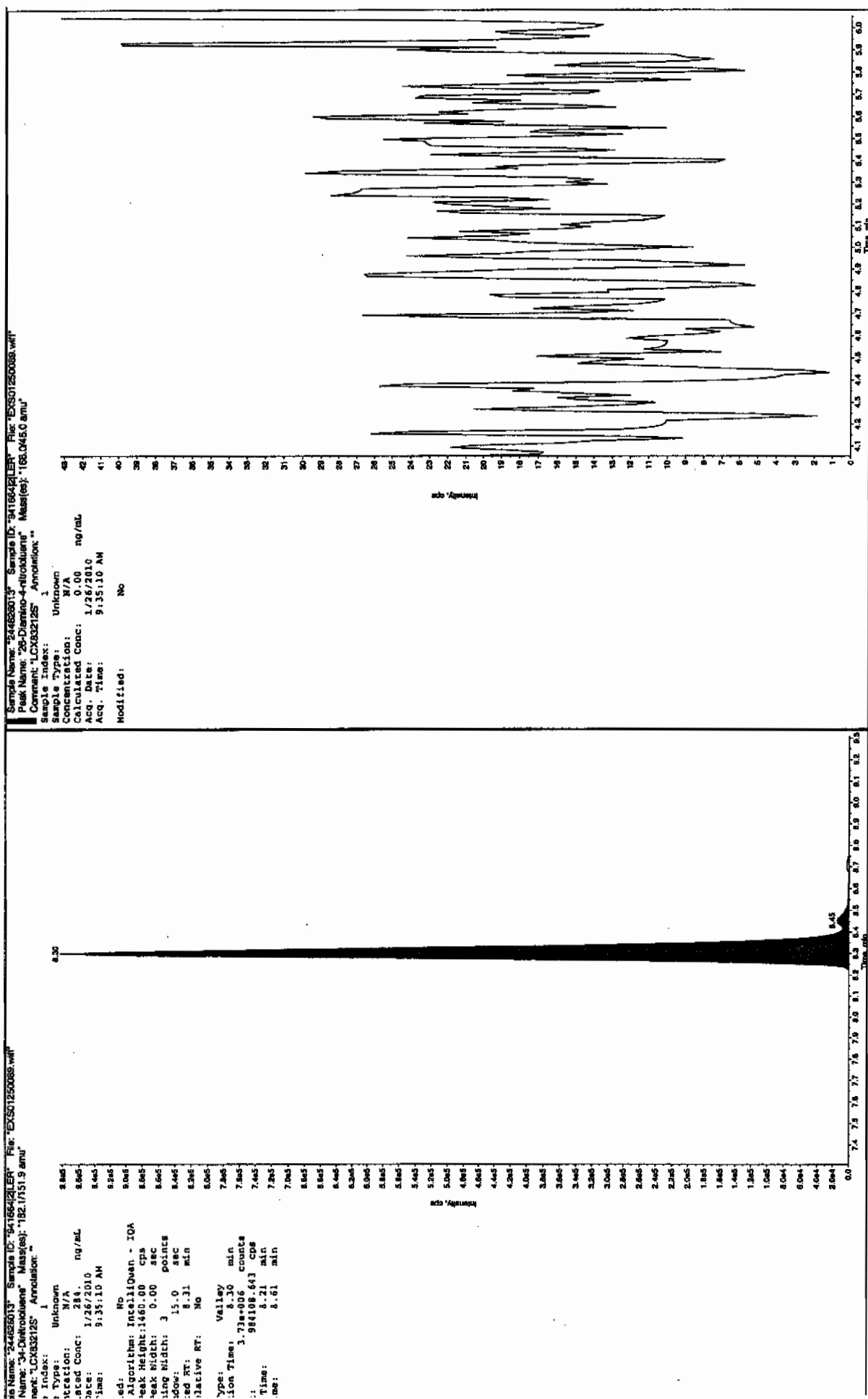
See 1/27/10



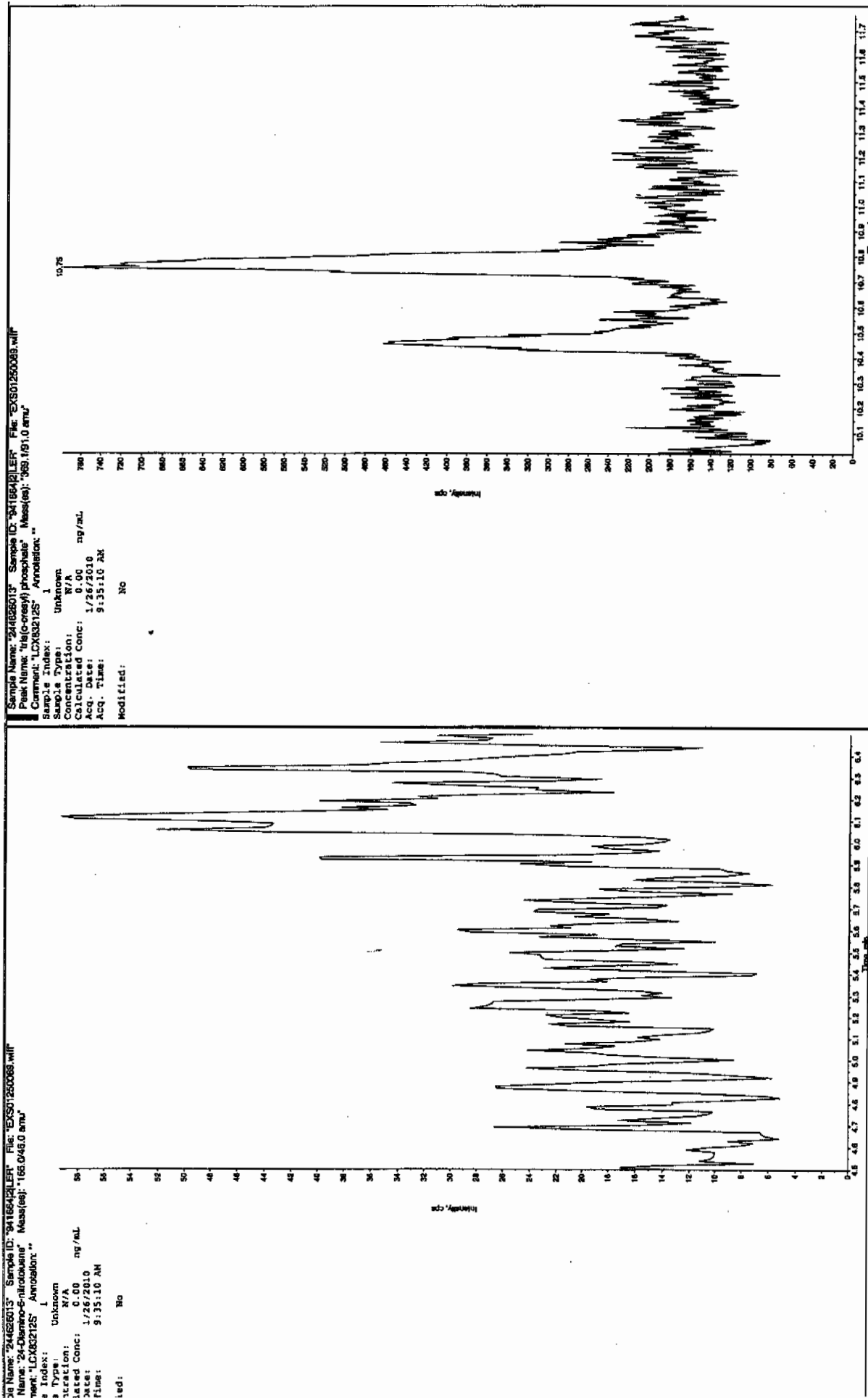
See 1/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7269

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626014

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130033a

Date Analyzed: 31-JAN-10 03:26

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

Printed: Sun Jan 31 11:57:34 2010, Page 65 of 77

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130033a

Date: 31-Jan-2010

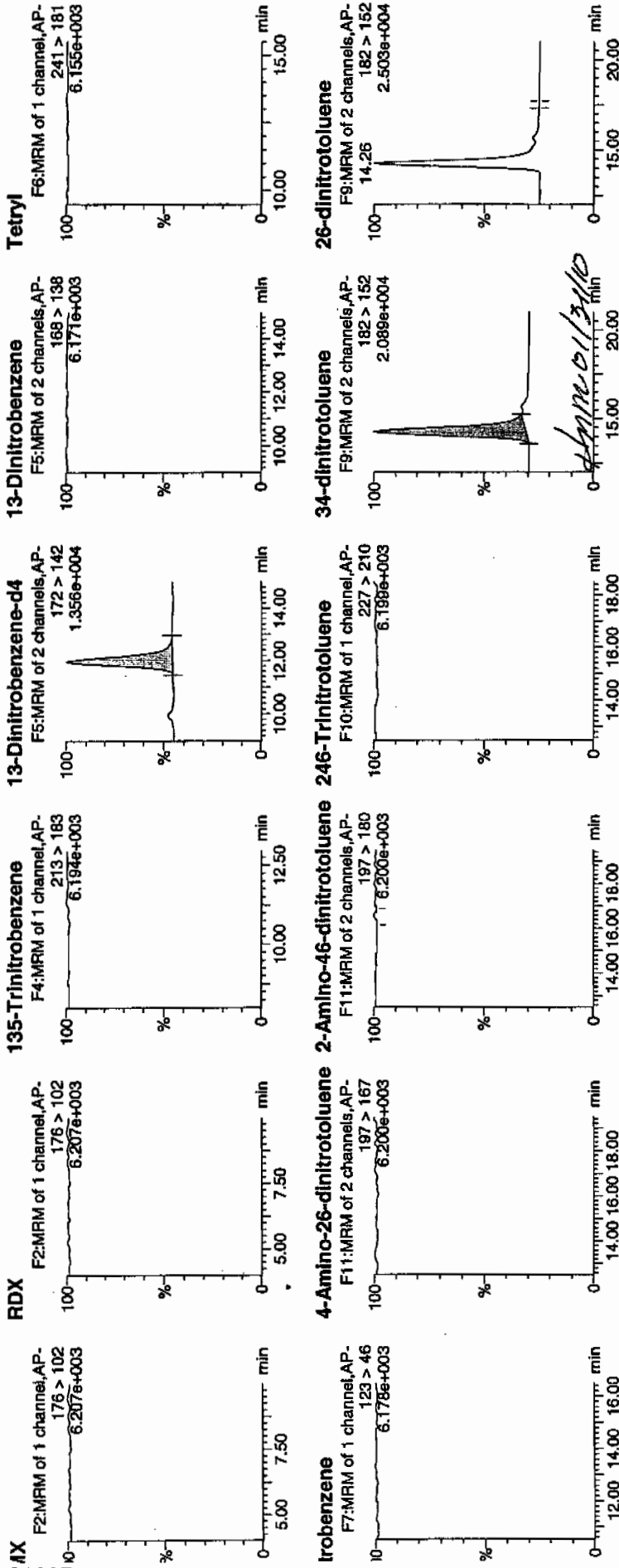
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Sample: 244626014

Injection: 1:6,F

not
1/31/10

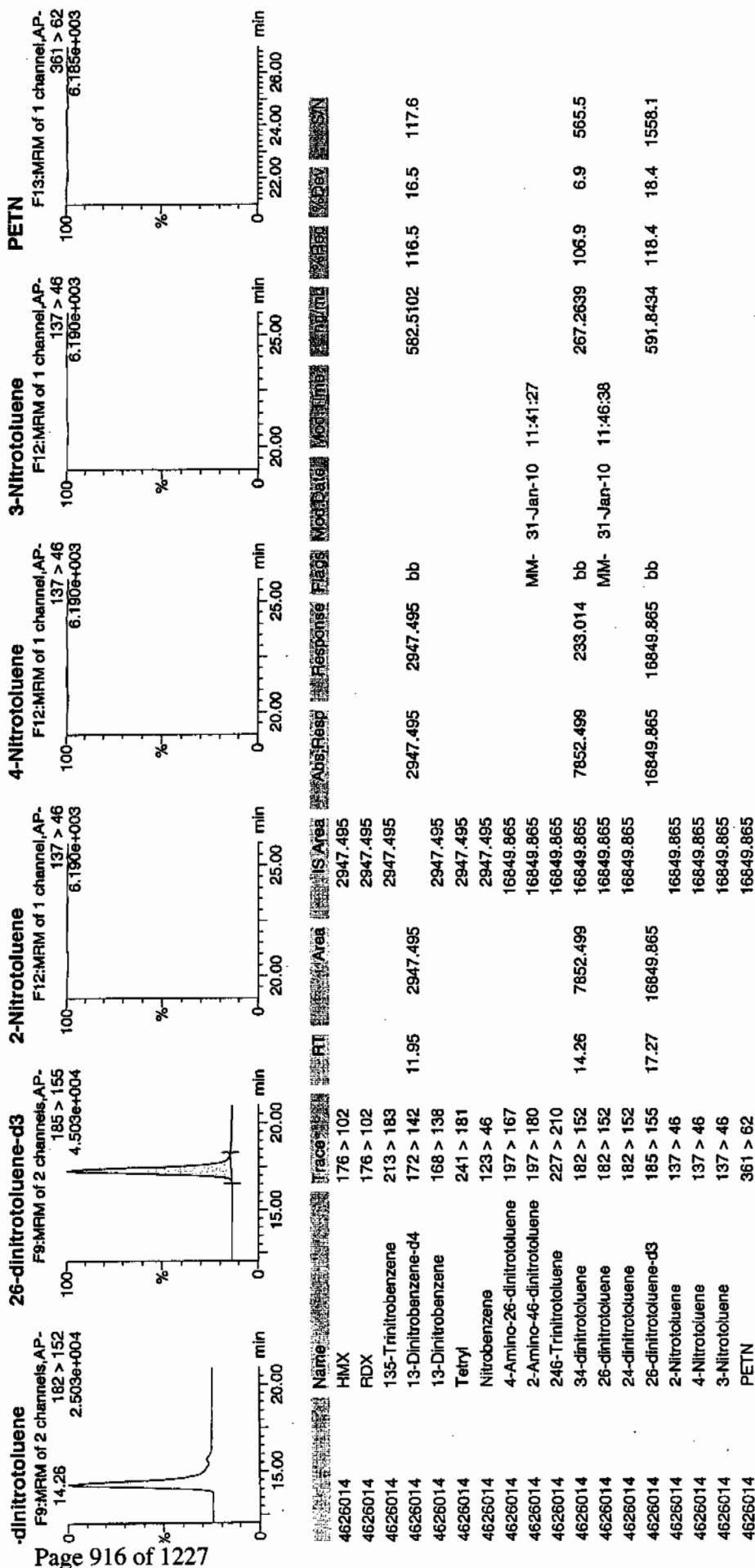
WAV 94664 / Solas 121



Printed: Sun Jan 31 11:57:34 2010, Page 66 of 77

Identify Sample Report
 IL Laboratories, LLC / Analyst: Michael A. Penny

taset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7269

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626014

Sample Amount 2

Moisture: 6.0

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250090.wiff

Date Analyzed: 26-JAN-10 09:50

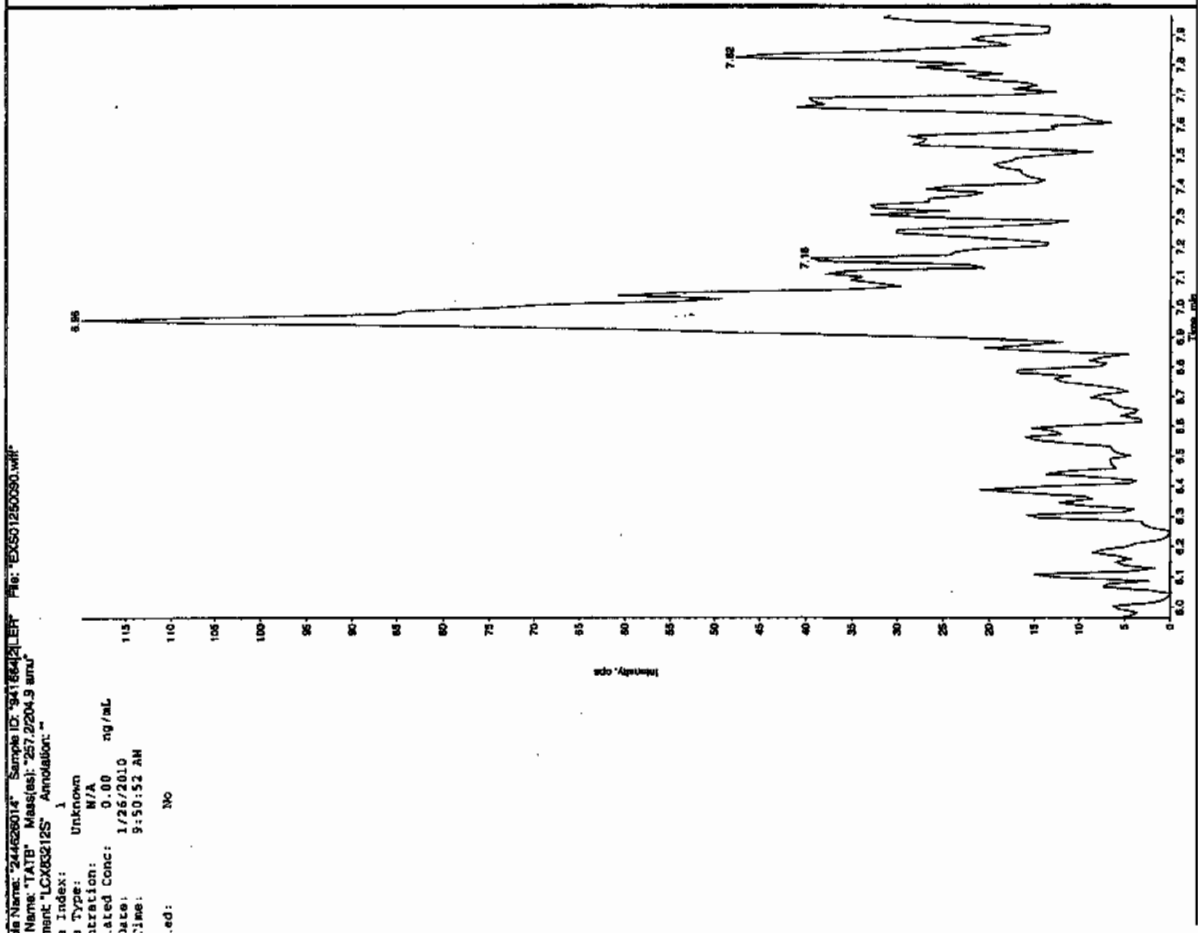
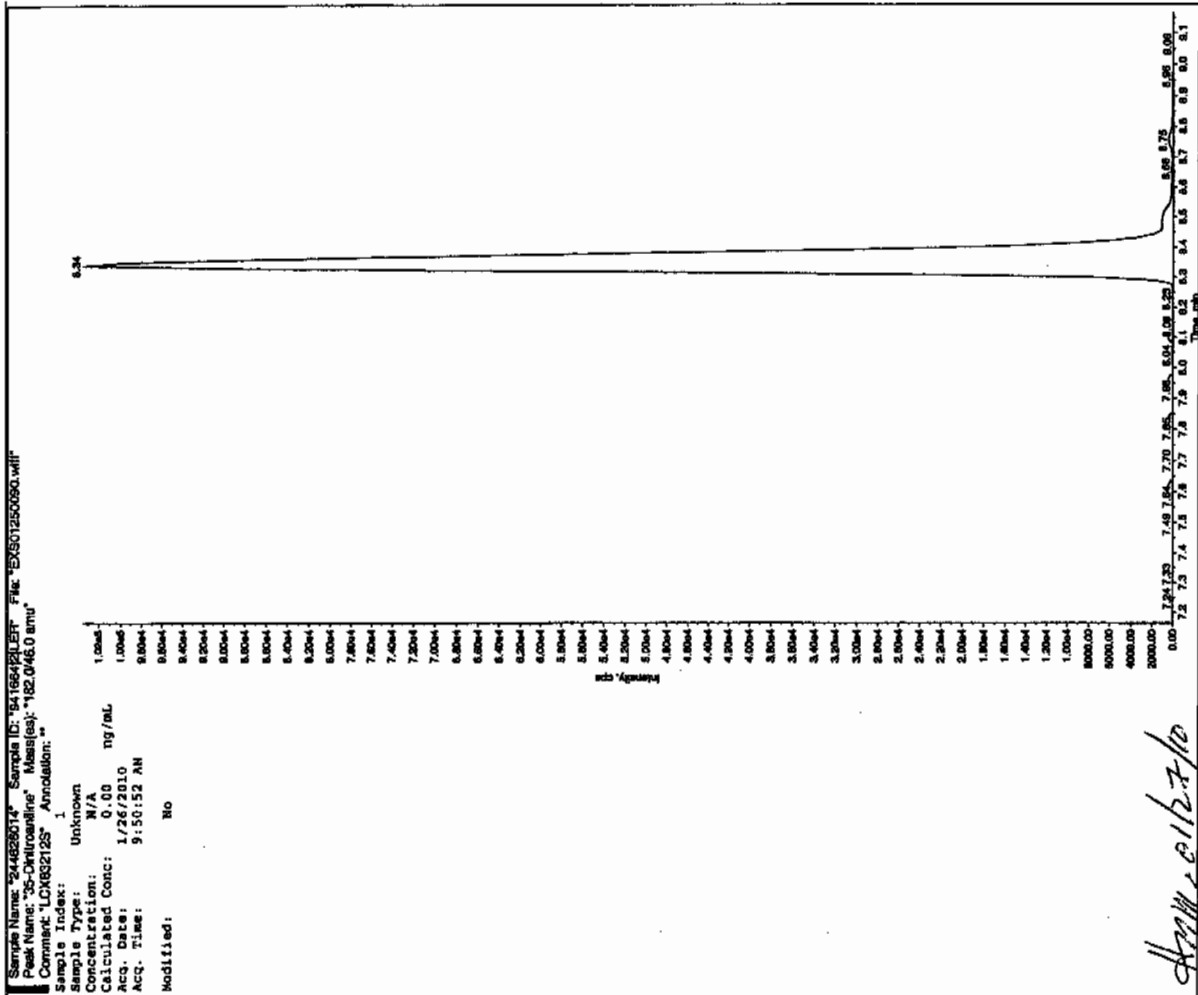
Units: ug/kg

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

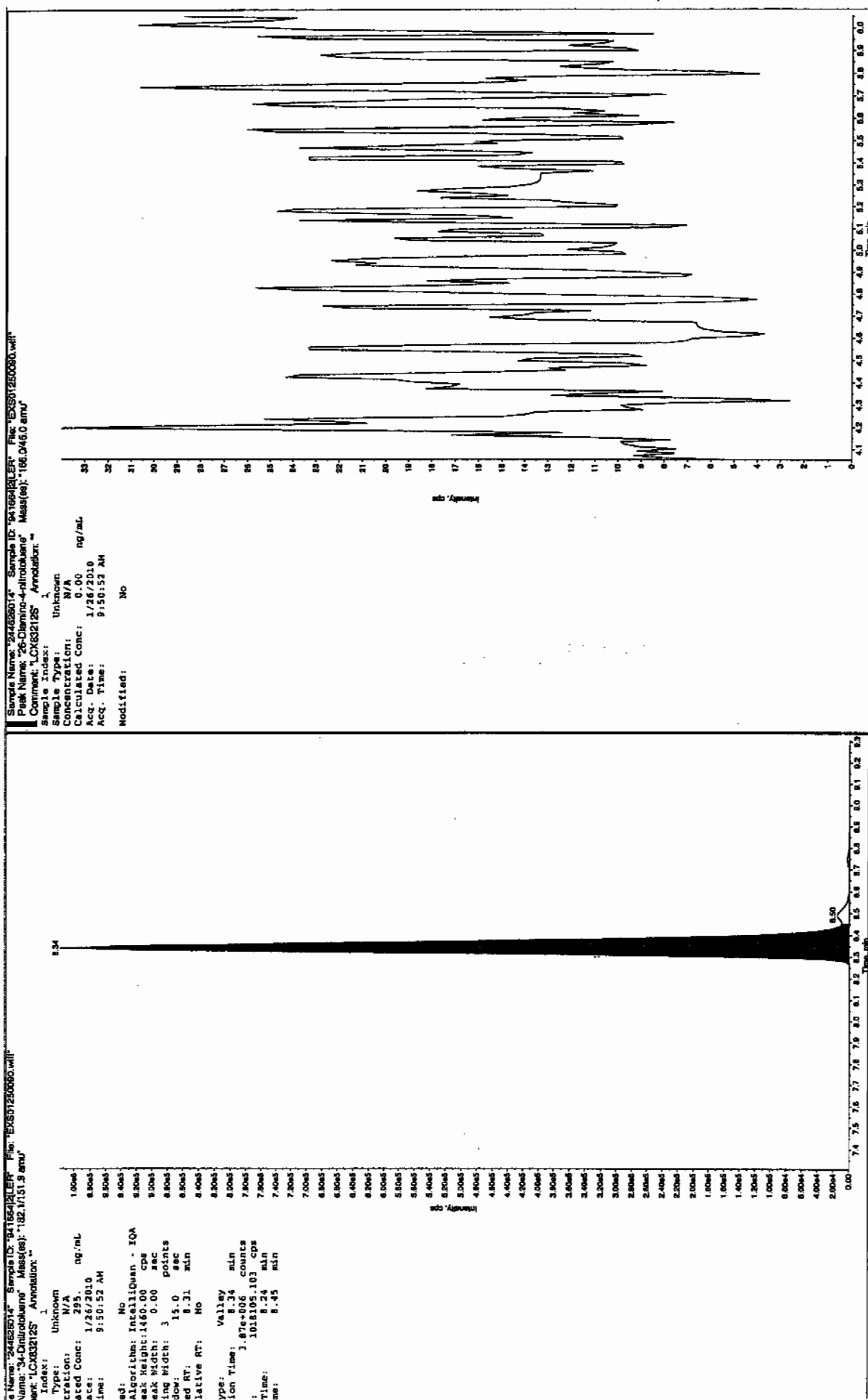
*Concentration =

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

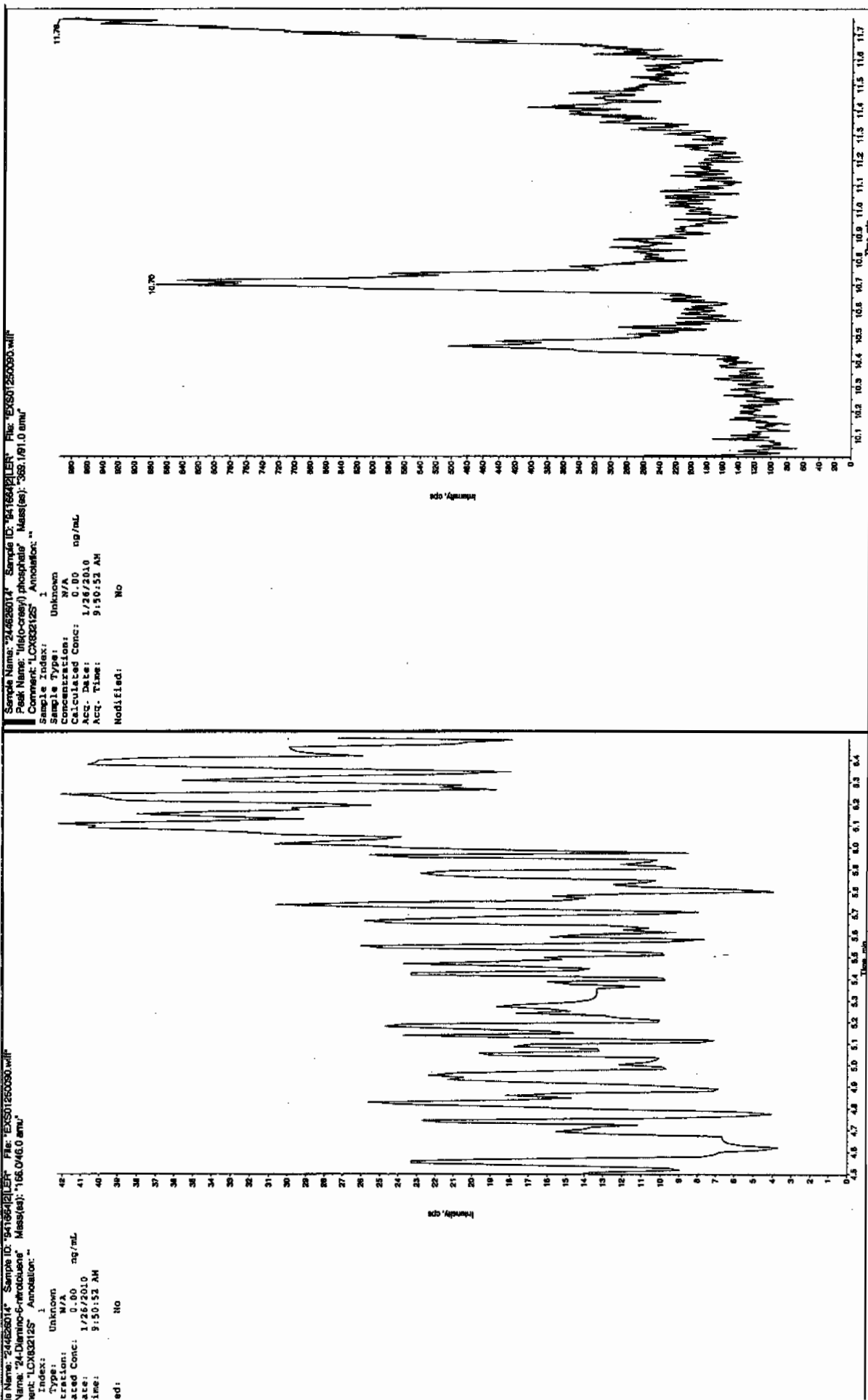
dan 1/27/10



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7283

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626015

Sample Amount 2

Moisture: 18.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130034a

Date Analyzed: 31-JAN-10 03:56

Units: ug/kg

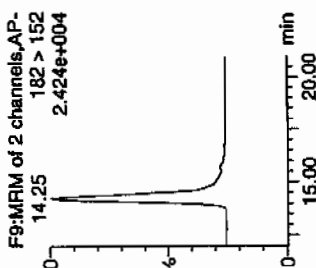
Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	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 =

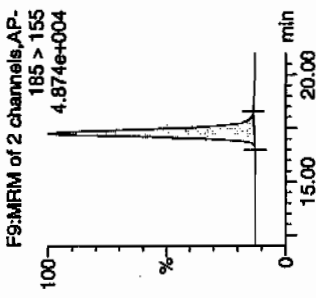
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

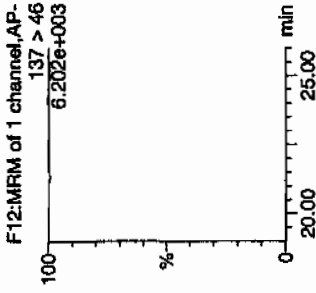
dinitrotoluene



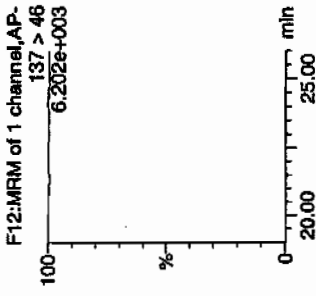
26-dinitrotoluene-d3



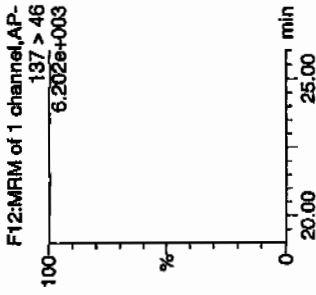
2-Nitrotoluene



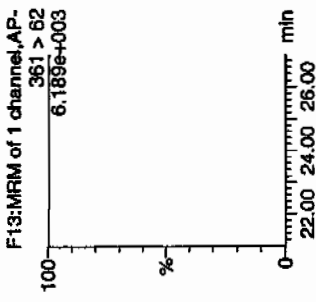
4-Nitrotoluene



3-Nitrotoluene



PETN

[illegible]

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7283

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626015

Sample Amount 2

Moisture: 18.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250091.wiff

Date Analyzed: 26-JAN-10 10:06

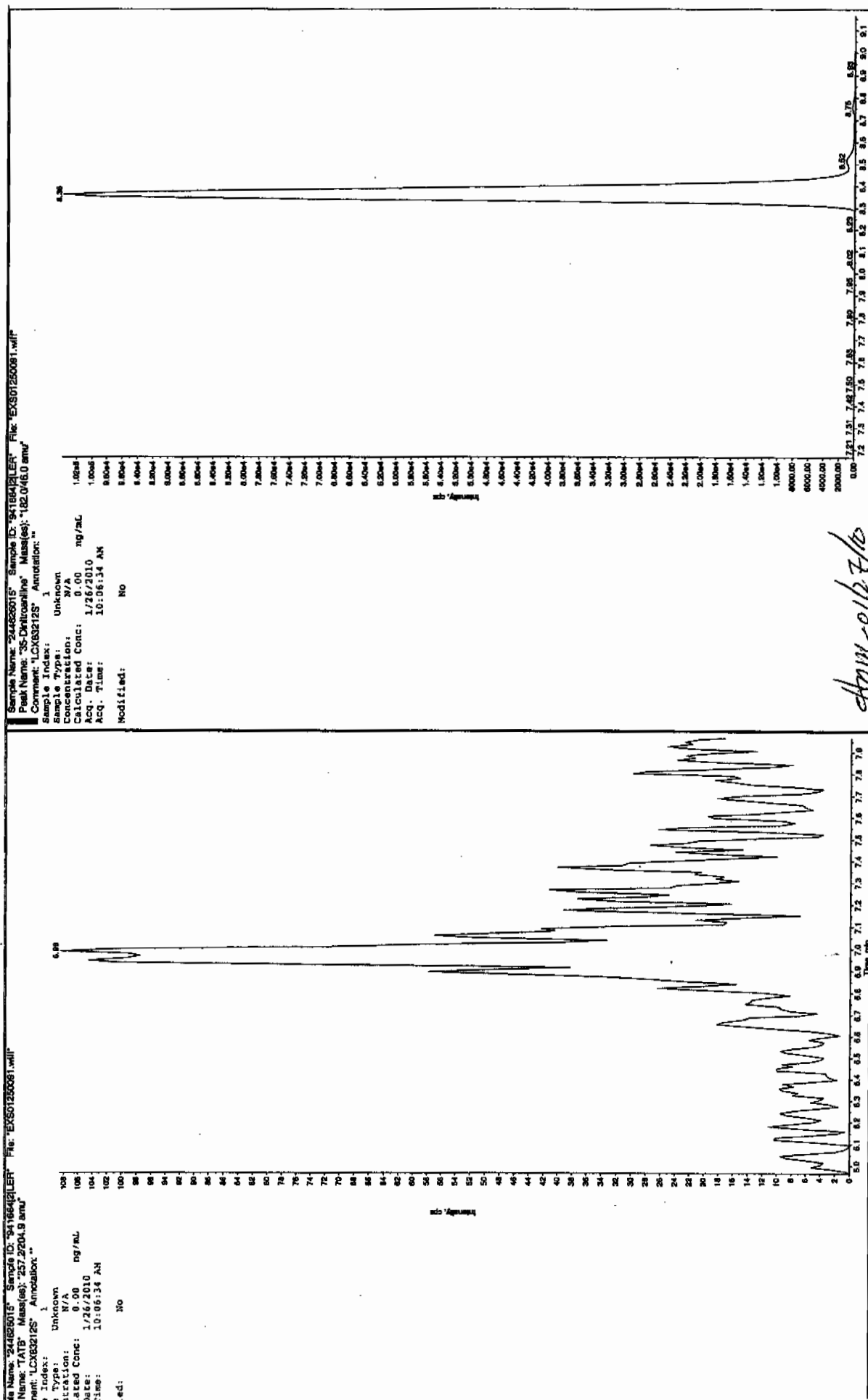
Units: ug/kg

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

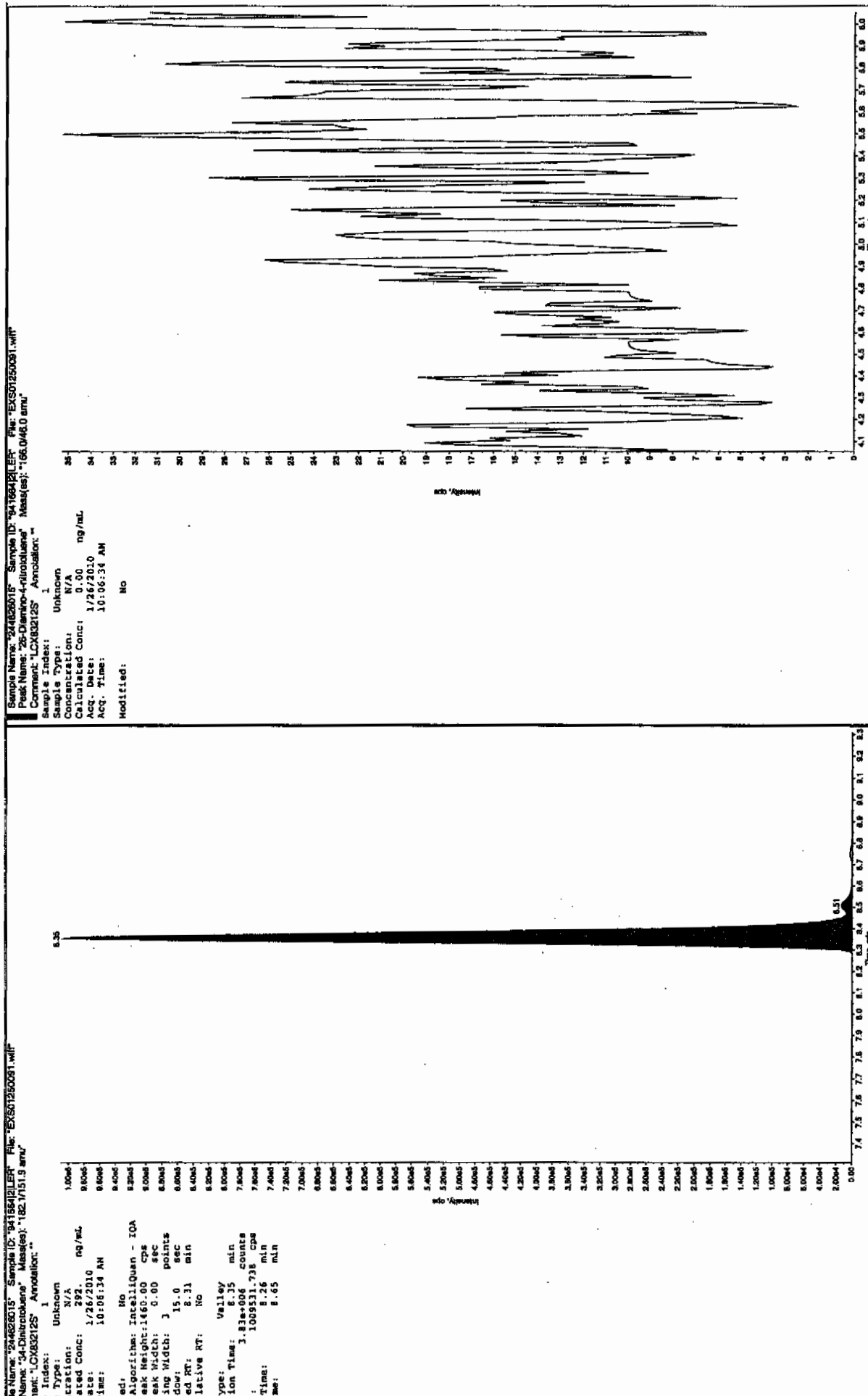
*Concentration =

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

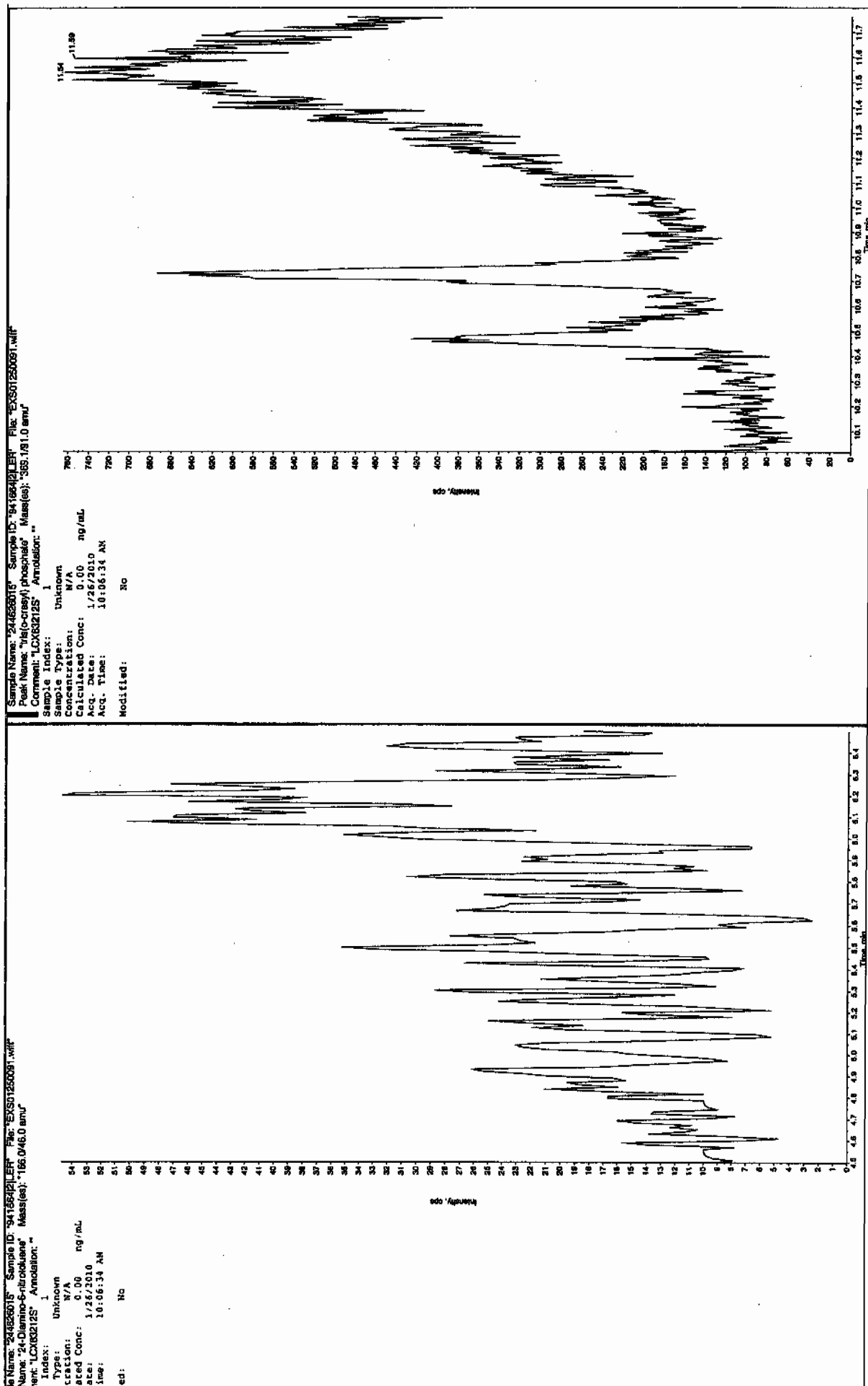
See 112710



Ann-012710



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7282

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626016

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130035a

Date Analyzed: 31-JAN-10 04:25

Units: ug/kg

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

*Concentration =

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

Printed: Sun Jan 31 11:57:34 2010, Page 69 of 77

Identify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

File: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130035a

Date: 31-Jan-2010

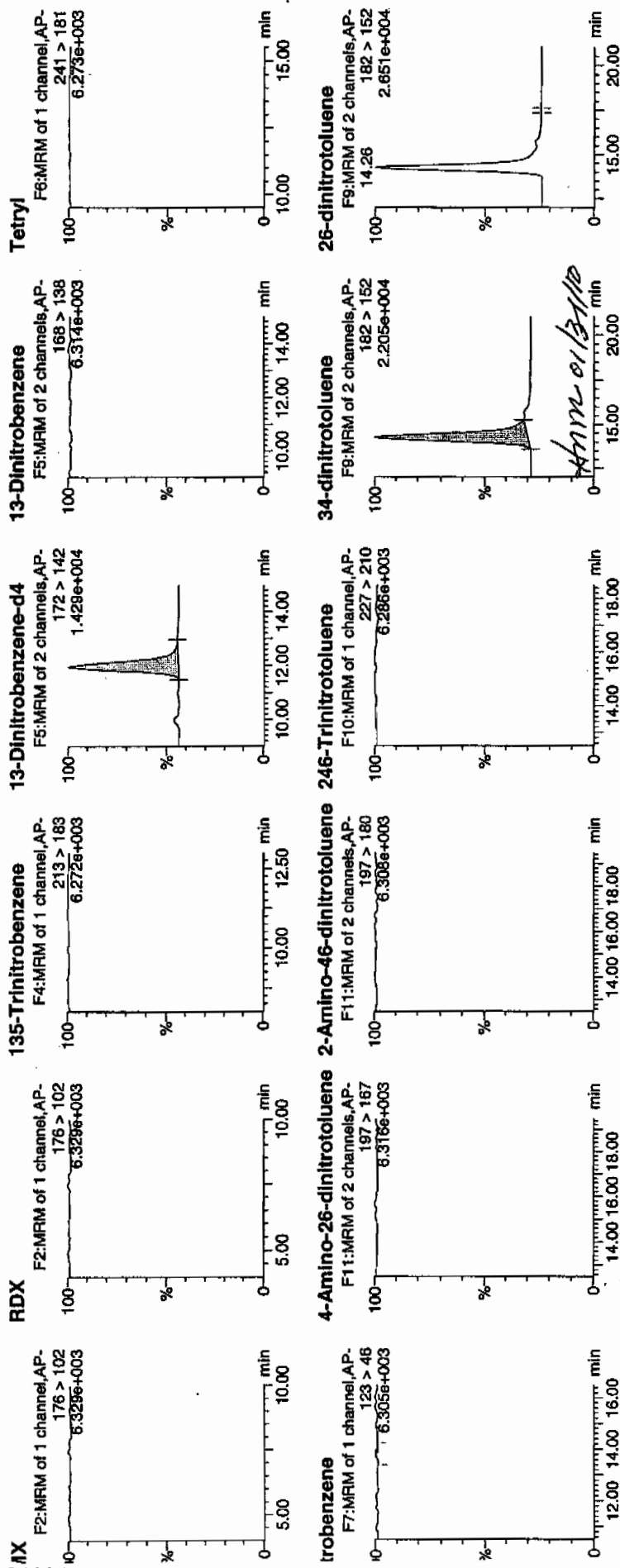
Time: 04:25:43

Sample: 244626016

Label: 1:7,B

10/17
1/31/10

WAVU 941664 / 80222 / 21



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7282

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 244626016

Sample Amount 2

Moisture: 6.2

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250092.wiff

Date Analyzed: 26-JAN-10 10:22

Units: ug/kg

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

*Concentration =

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

Run 1127110

Sample Name: "244628016" Sample ID: "94166421" File: "EX601250082.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/28/2010

Acq. Time: 10:22:17 AM

Modified: No

Sample Name: "244628016" Sample ID: "94166421" File: "EX601250082.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

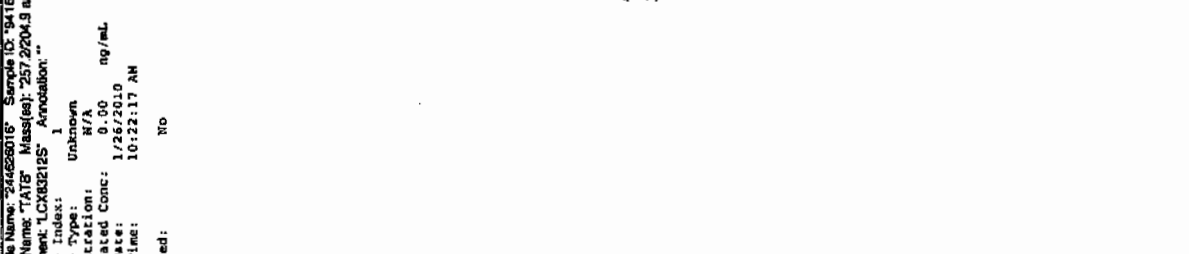
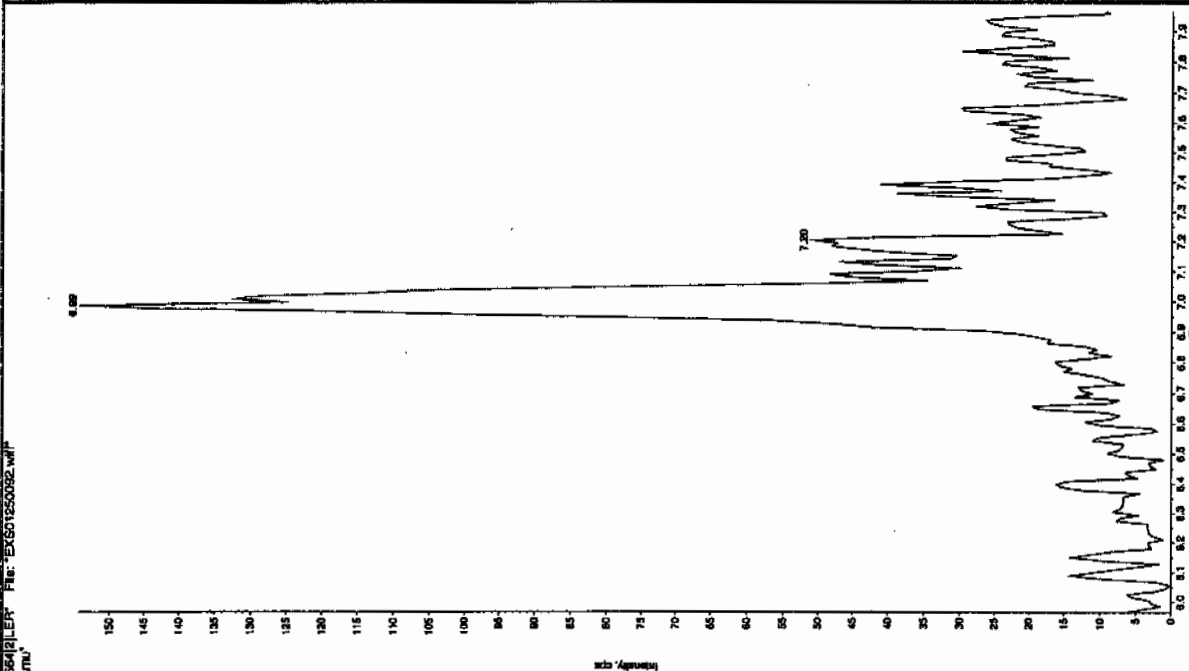
Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/28/2010

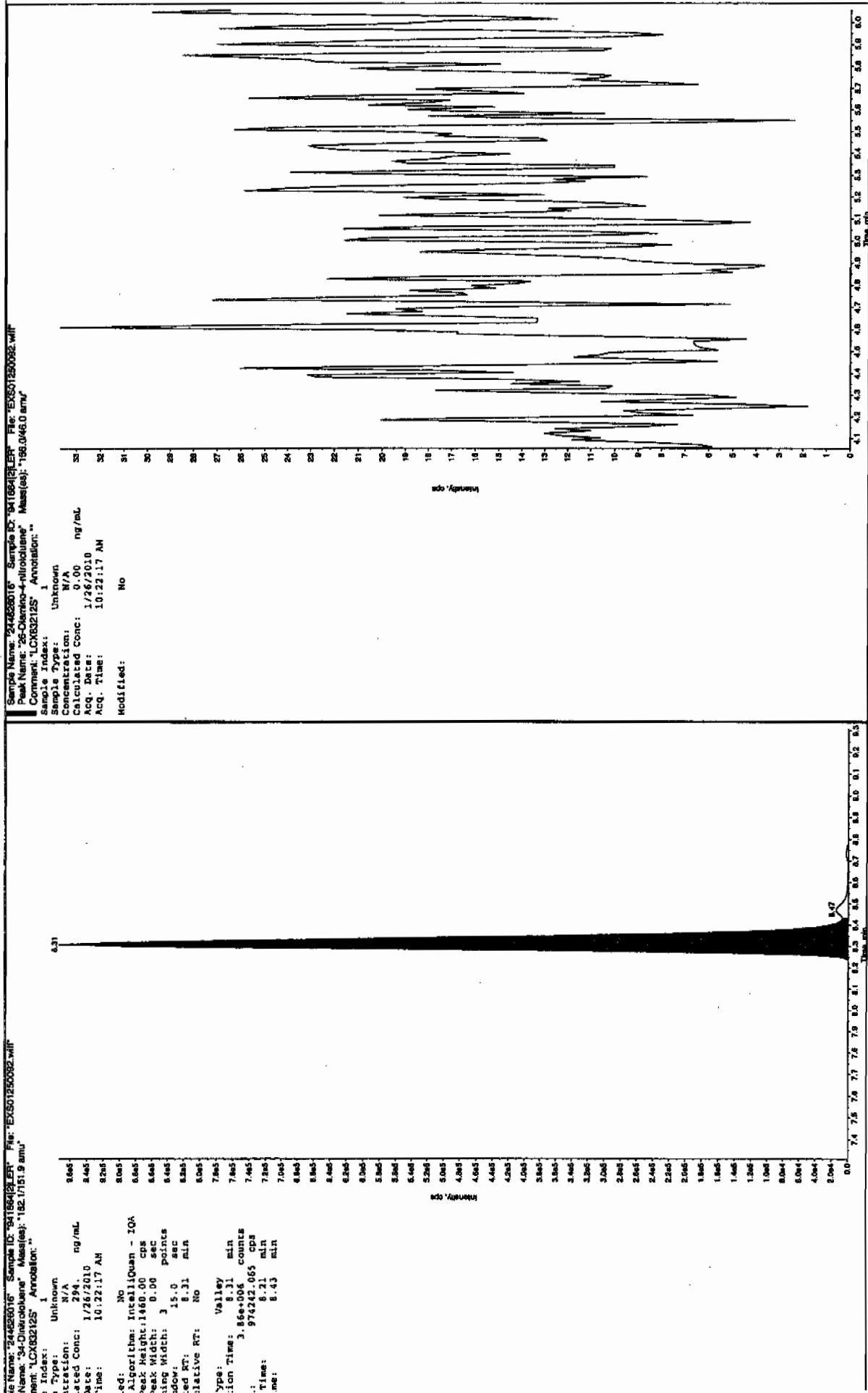
Acq. Time: 10:22:17 AM

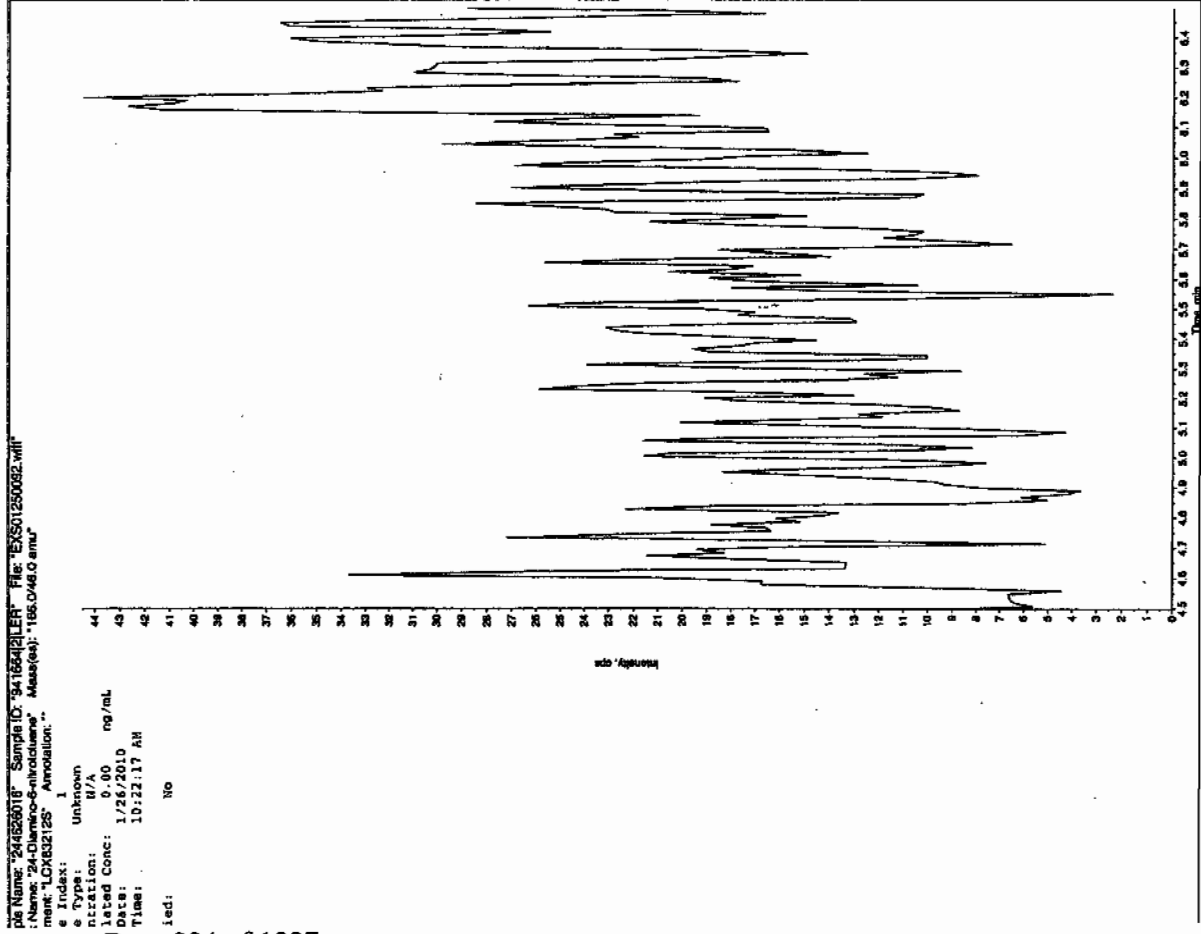
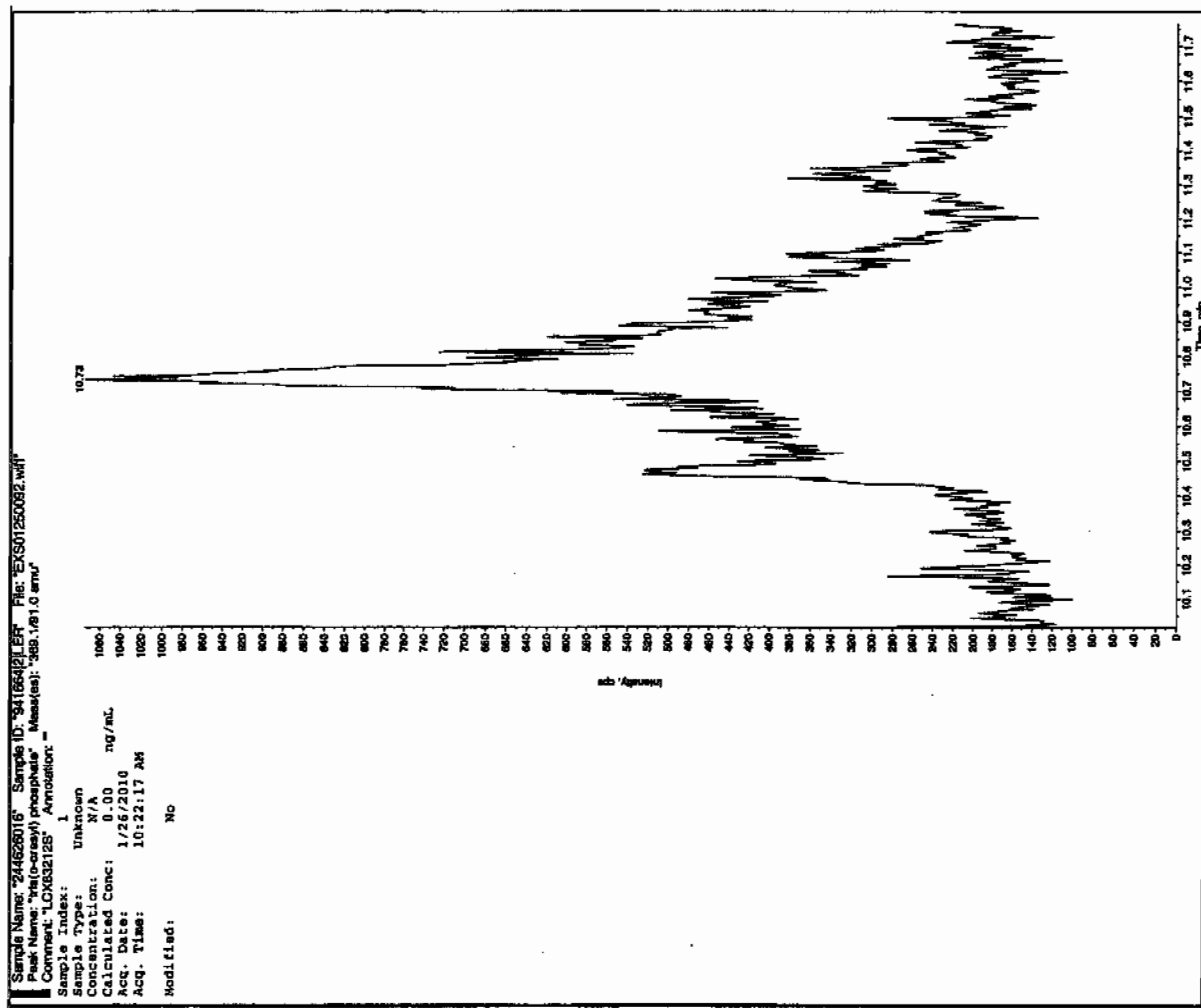
Modified: No



J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Run 1127110





SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

STANDARDS DATA

**SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels**

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
Primary Analytes								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1725

Lab Code: GEL

Run Date: 25-JAN-10.30-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0130003a	EXP0130004a	EXP0130005a	EXP0130006a	EXP0130007a	EXP0130008a			
Parame									
1,3,5-Trinitrobenzene	4.525	4.513	3.394	3.181	3.226	3.136	3.663	18.275	
1,3-Dinitrobenzene-d4	5.561	5.197	5.063	5.219	4.671	4.649	5.060	6.932	
2,4,6-Trinitrotoluene	.321	.282	.314	.323	.341	.319	0.317	6.138	
2,4-Dinitrotoluene	.226	.209	.243	.241	.259	.257	0.239	7.908	
2,6-Dinitrotoluene	1.132	1.074	1.101	1.104	1.124	1.111	1.108	1.83	
2,6-Dinitrotoluene-d3	30.964	30.164	30.828	28.142	25.404	25.32	28.470	9.17	
2-Amino-4,6-dinitrotoluene	.356	.411	.347	.384	.406	.389	0.382	6.796	
3,4-Dinitrotoluene	.836	.723	.87	.843	1.014	.946	0.872	11.47	
4-Amino-2,6-dinitrotoluene	.37	.267	.276	.306	.309	.295	0.304	11.962	
HMX	2.783	2.816	3.071	2.99	3.295	3.025	2.997	6.225	
Nitrobenzene	.627	.975	.826	.752	.854	.823	0.810	14.258	
RDX	1.733	1.99	1.871	1.969	2.163	2.081	1.968	7.739	
Tetryl	1.135	1.25	1.032	.865	.977	.805	1.011	16.402	
m-Dinitrobenzene	1.202	1.274	1.196	1.09	1.237	1.164	1.194	5.305	
m-Nitrotoluene	.085	.091	.089	.093	.1	.1	0.093	6.216	
o-Nitrotoluene	.163	.157	.144	.154	.171	.163	0.159	5.79	
p-Nitrotoluene	.084	.075	.076	.074	.083	.079	0.079	5.251	

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: 10-1225

Lab Code: GEL

Run Date: 25-JAN-10 30-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0130003a	EXP0130004a	EXP0130005a	EXP0130006a	EXP0130007a	EXP0130008a					
Paramname:											
PETN	1860.8	3587.49	12282.3	20544.7	34284.6	36947.6	2.172	-0006868	1.024	.9976	

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

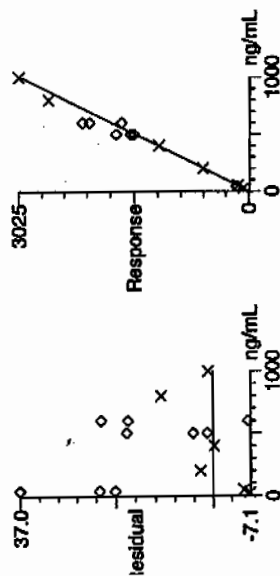
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

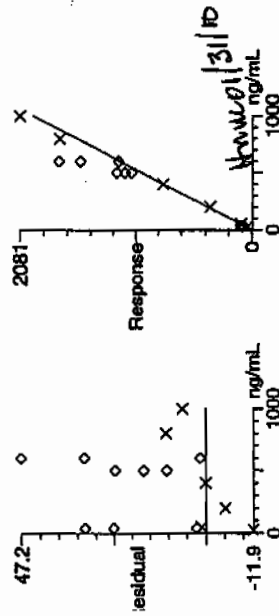
Method: C:\MASSLYNX\New_Exp.PRO\Method\B013010expa.mdb, Time: Sun Jan 31 11:35:55 2010
alibration: Untitled, Time: Sun Jan 31 11:56:40 2010

Page 939 of 1227

ompound name: HMX
esponse Factor: 2.9968
RF SD: 0.186538, % Relative SD: 6.22456
esponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
urve type: RF



ompound name: RDX
esponse Factor: 1.96785
RF SD: 0.152293, % Relative SD: 7.73903
esponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
urve type: RF



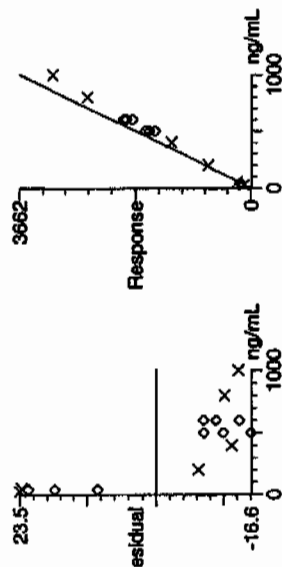
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1/31/10

uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

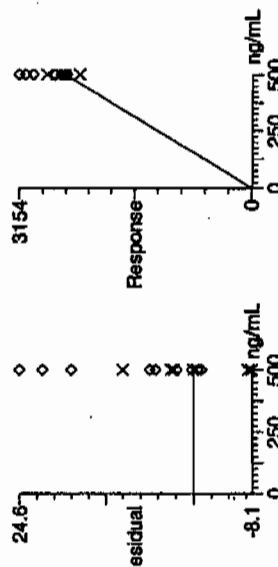
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ompound name: 135-Trinitrobenzene
esponse Factor: 3.66235
RF SD: 0.689276, % Relative SD: 18.2745
esponse type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
urve type: RIF

Page 940 of 1227



ompound name: 13-Dinitrobenzene-d4
esponse Factor: 5.05999
RF SD: 0.350778, % Relative SD: 6.93239
esponse type: External Std, Area
urve type: RIF



Quantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

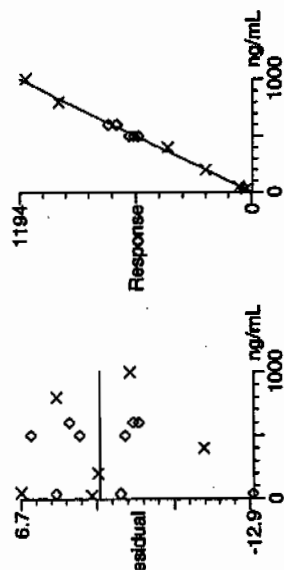
Compound name: 13-Dinitrobenzene

Response Factor: 1.1939

RF SD: 0.0633346, % Relative SD: 5.30484

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

Curve type: RF



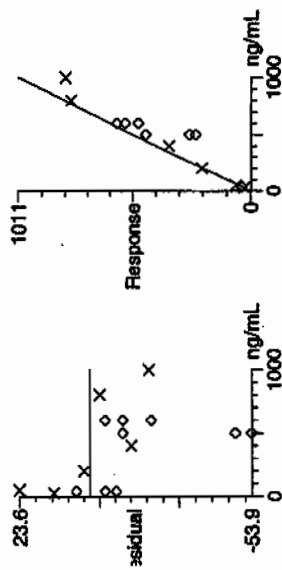
Compound name: Tetraol

Response Factor: 1.01055

RF SD: 0.165748, % Relative SD: 16.4018

Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)

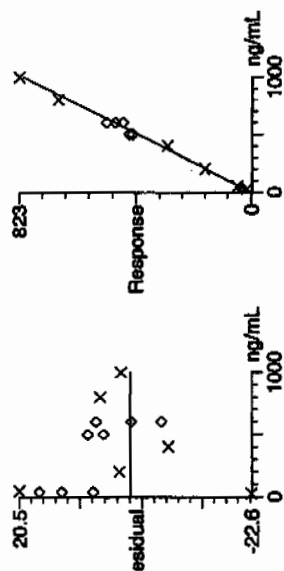
Curve type: RF



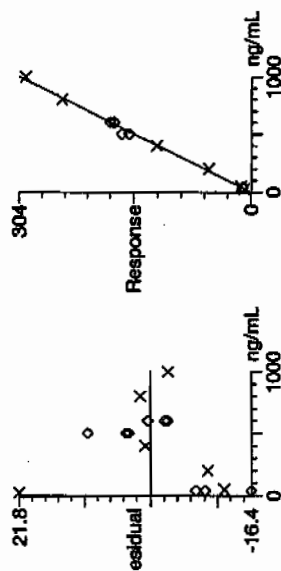
Quantify Calibration Report
EL Laboratories, LLC / Analyst: Michael A. Penny

atasset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

compound name: Nitrobenzene
response factor: 0.809352
RF SD: 0.115396, % Relative SD: 14.2578
response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
curve type: RF



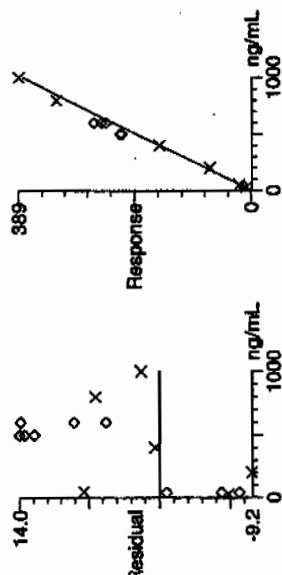
compound name: 4-Amino-26-dinitrotoluene
response factor: 0.303919
RF SD: 0.0363544, % Relative SD: 11.9619
response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
curve type: RF



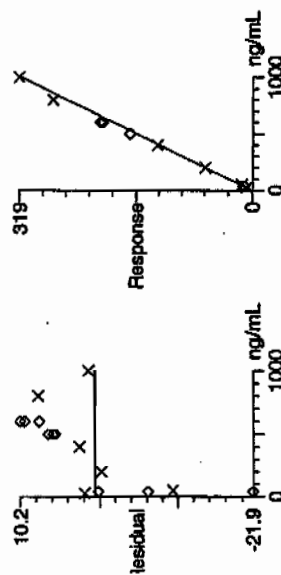
Quantify Calibration Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.381792
RF SD: 0.0259456, % Relative SD: 6.79574
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



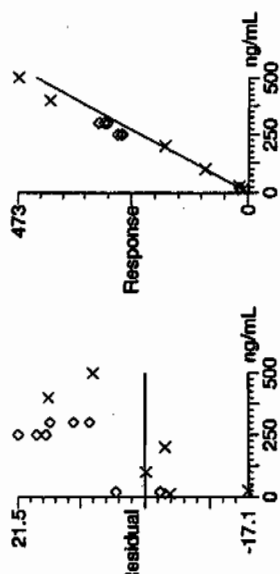
Compound name: 246-Trinitrotoluene
Response Factor: 0.3167
RF SD: 0.019438, % Relative SD: 6.13765
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



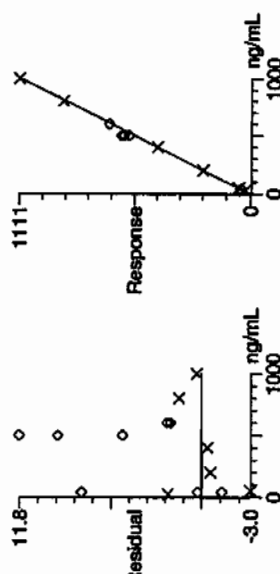
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

ompound name: 34-dinitrotoluene
esponse Factor: 0.871849
RF SD: 0.0999989, % Relative SD: 11.4698
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



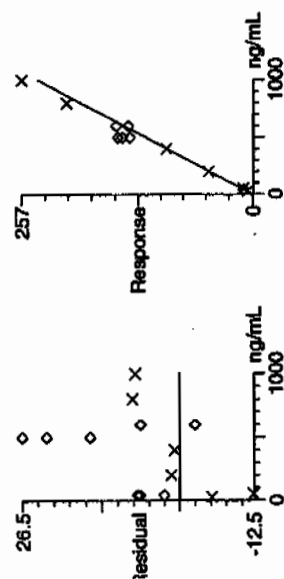
ompound name: 26-dinitrotoluene
esponse Factor: 1.10782
RF SD: 0.0202751, % Relative SD: 1.83018
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



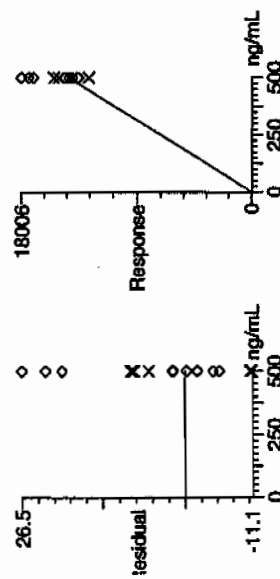
Quantify Calibration Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp\PRO1013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.239297
RF SD: 0.0189225, % Relative SD: 7.90755
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



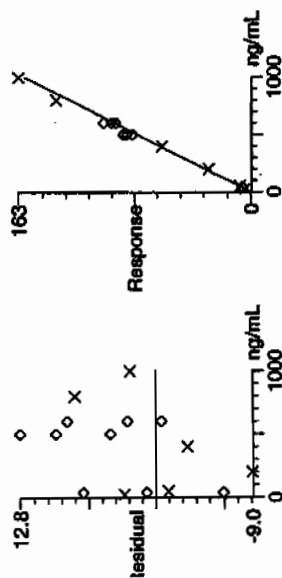
Compound name: 26-dinitrotoluene-d3
Response Factor: 26.4701
RF SD: 2.61066, % Relative SD: 9.16981
Response type: External Std, Area
Curve type: RF



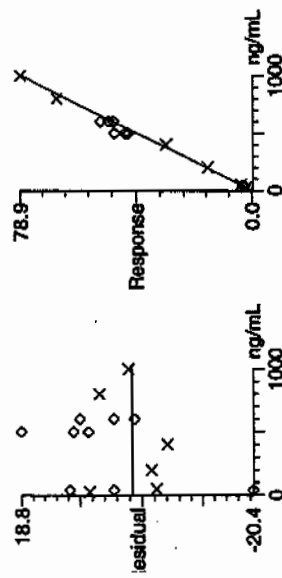
Quantify Calibration Report
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Compound name: 2-Nitrotoluene
 Response Factor: 0.1158585
 R² SD: 0.00918252, % Relative SD: 5.79026
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RIF



Compound name: 4-Nitrotoluene
 Response Factor: 0.0784244
 R² SD: 0.00411806, % Relative SD: 5.25099
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RIF

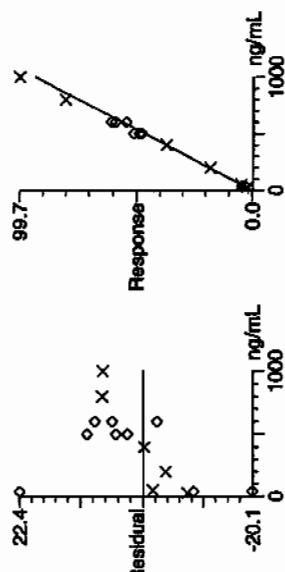


uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

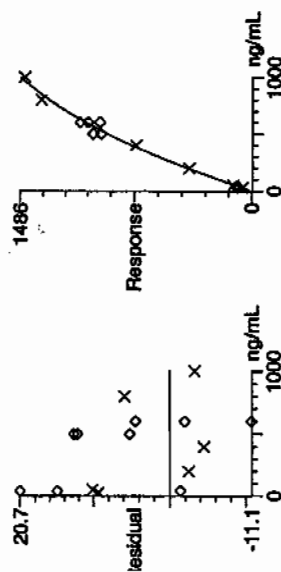
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ompound name: 3-Nitrotoluene
esponse Factor: 0.093076
RF SD: 0.00578561, % Relative SD: 6.21601
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF

Page 947 of 1227



ompound name: PETN
oefficient of Determination: 0.997596
alibration curve: $-0.000686838 \cdot x^2 + 2.17215 \cdot x + 1.02421$
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0130010a

Analysis Date: 30-JAN-10 16:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	512.791	85	
1,3-Dinitrobenzene-d4	500	530.442	106	
2,4,6-Trinitrotoluene	600	645.612	108	
2,4-Dinitrotoluene	600	640.921	107	
2,6-Dinitrotoluene	600	613.468	102	
2,6-Dinitrotoluene-d3	500	477.07	95	
2-Amino-4,6-dinitrotoluene	600	631.588	105	
3,4-Dinitrotoluene	300	347.98	116	
4-Amino-2,6-dinitrotoluene	600	602.128	100	
HMX	600	558.672	93	
Nitrobenzene	600	565.728	94	
PETN	600	588.049	98	
RDX	600	608.568	101	
Tetryl	600	474.83	79	*
m-Dinitrobenzene	600	580.747	97	
m-Nitrotoluene	600	651.608	109	
o-Nitrotoluene	600	616.407	103	
p-Nitrotoluene	600	617.78	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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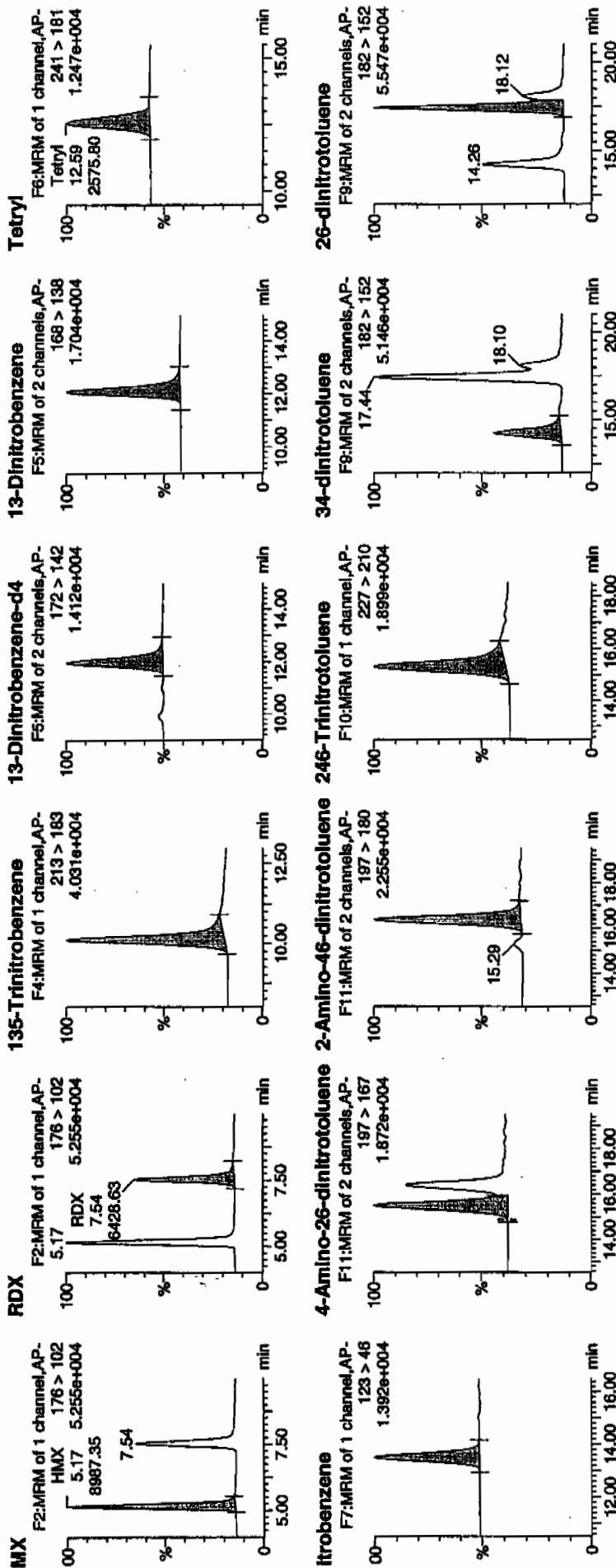
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: WXX100130-07ICV

ial: 1:1,B

1/31/10

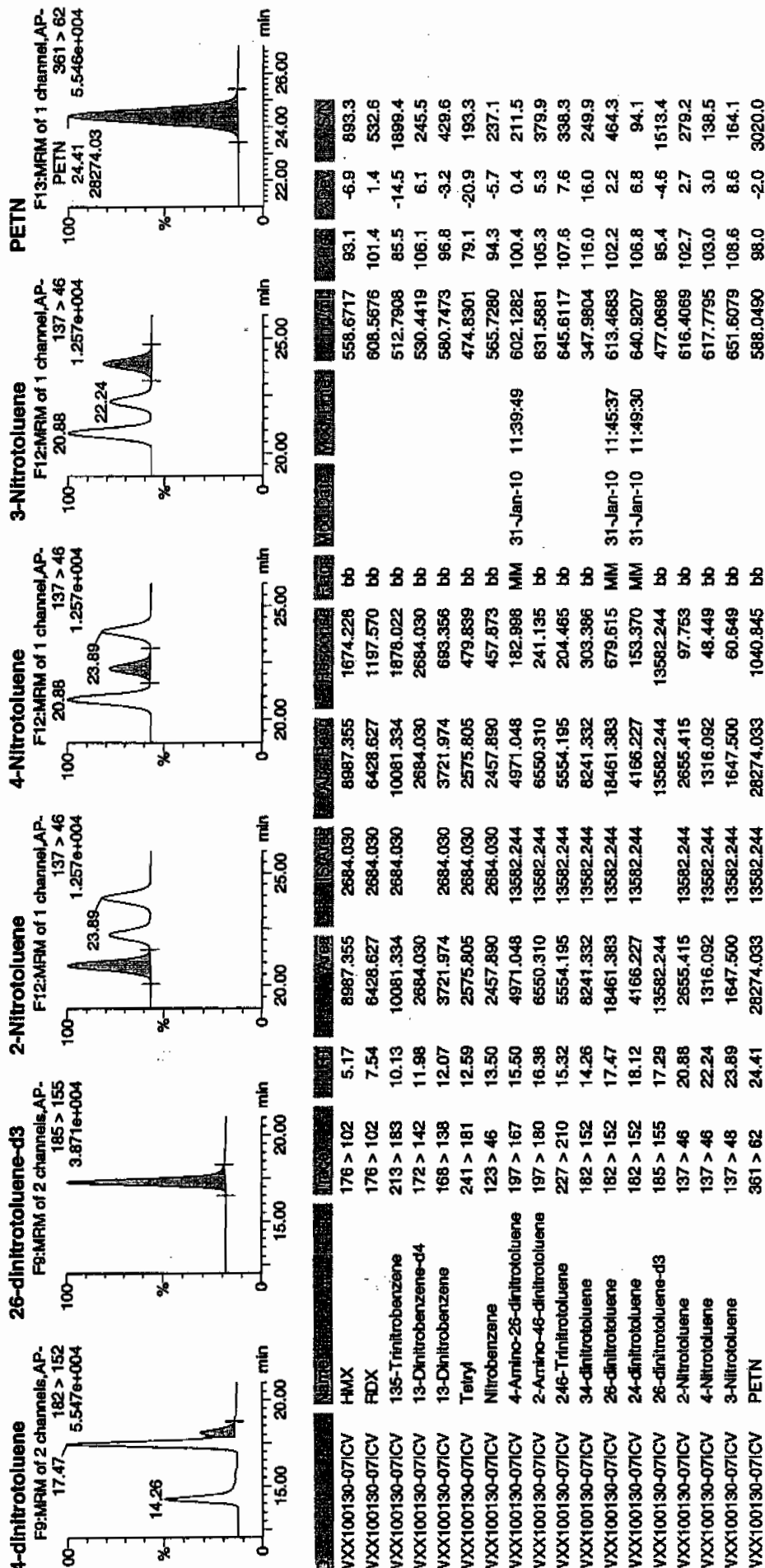


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Printed: Sun Jan 31 11:57:34 2010, Page 20 of 77

Quantify Sample Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

latasat: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/30/10
 Time of Injection: 1608
 Standard Number: WXX100130-07ICV
 Data File: EXP0130010a

HMX	93.1
RDX	101.4
135-TNB	85.5
13-DNB	96.8
Tetryl	79.1
Nitrobenzene	94.3
4A-26-DNT	100.4
2A-46-DNT	105.3
246-TNT	107.6
34-DNT(surr)	116.0
26-DNT	102.2
24-DNT	106.8
2-NT	102.7
4-NT	103.0
3-NT	108.6
PETN	98.0
Total	1600.8

MTT
1/31/10

Average

100.1

WXX 01/30/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1225

Lab Code: GEL

Run Date: 25-JAN-10.30-JAN-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC I-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS01250003.wif	EXS01250004.wif	EXS01250005.wif	EXS01250006.wif	EXS01250007.wif	EXS01250008.wif	EXS01250009.wif					
Paraname:												
2,4-Diamino-6-nitrotoluene	124000	243000	556000	1130000	1930000	2390000	4860000	-20500	2450	-0.006	.9993	
2,6-Diamino-4-nitrotoluene	196000	379000	859000	1770000	2910000	3810000	7350000	-50100	3930	-0.114	.9996	
3,4-Dinitrotoluene	318000	666000	1460000	3270000	4740000	5910000	10800000	-61500	14400	-3.5	.9975	
3,5-Dinitroaniline	504000	1060000	2200000	4760000	6820000	8600000	14400000	-27700	10200	-1.48	.9998	
TATB	71000	141000	345000	692000	1070000	1350000	2660000	-94.4	1410	-0.043	.9998	
tris(o-cresyl) phosphate	456000	2410000	5510000	10100000	15300000	19000000	29700000	-337000	23800	-4.41	.9996	

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

012510ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-94.4			
a1	1.41e+003			
a2	-0.043			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.77e+004			
a1	1.02e+004			
a2	-1.48			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.15e+004			
a1	1.44e+004			
a2	-3.5			
Correlation coefficient 0.9975				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.01e+004			
a1	3.93e+003			
a2	-0.114			
Correlation coefficient 0.9996				
Use Area				

See
1/27/10

Amu 1/27/10

012510ICAL

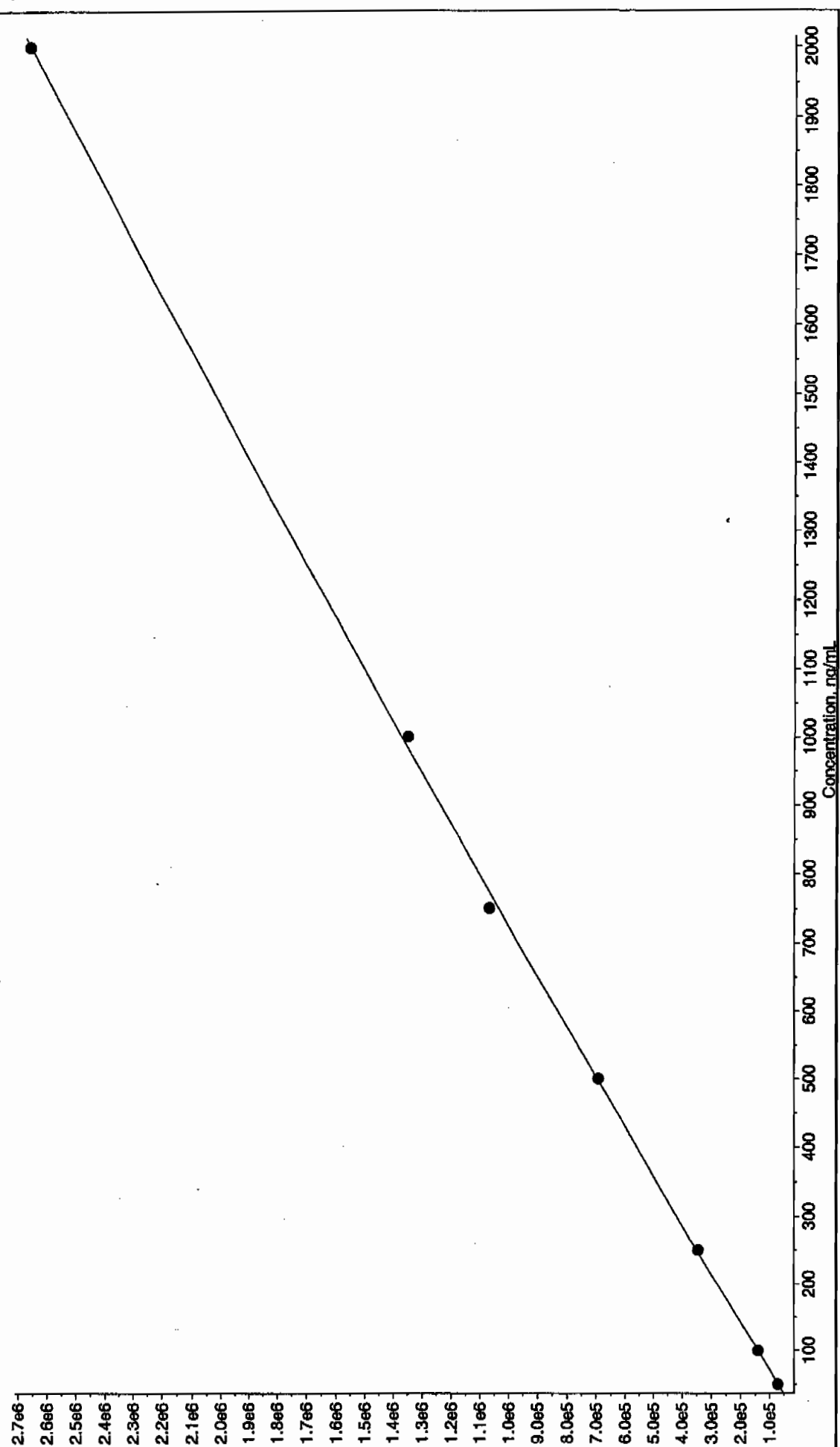
Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.05e+004			
a1	2.45e+003			
a2	-0.00578			
Correlation coefficient 0.9993				
Use Area				

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

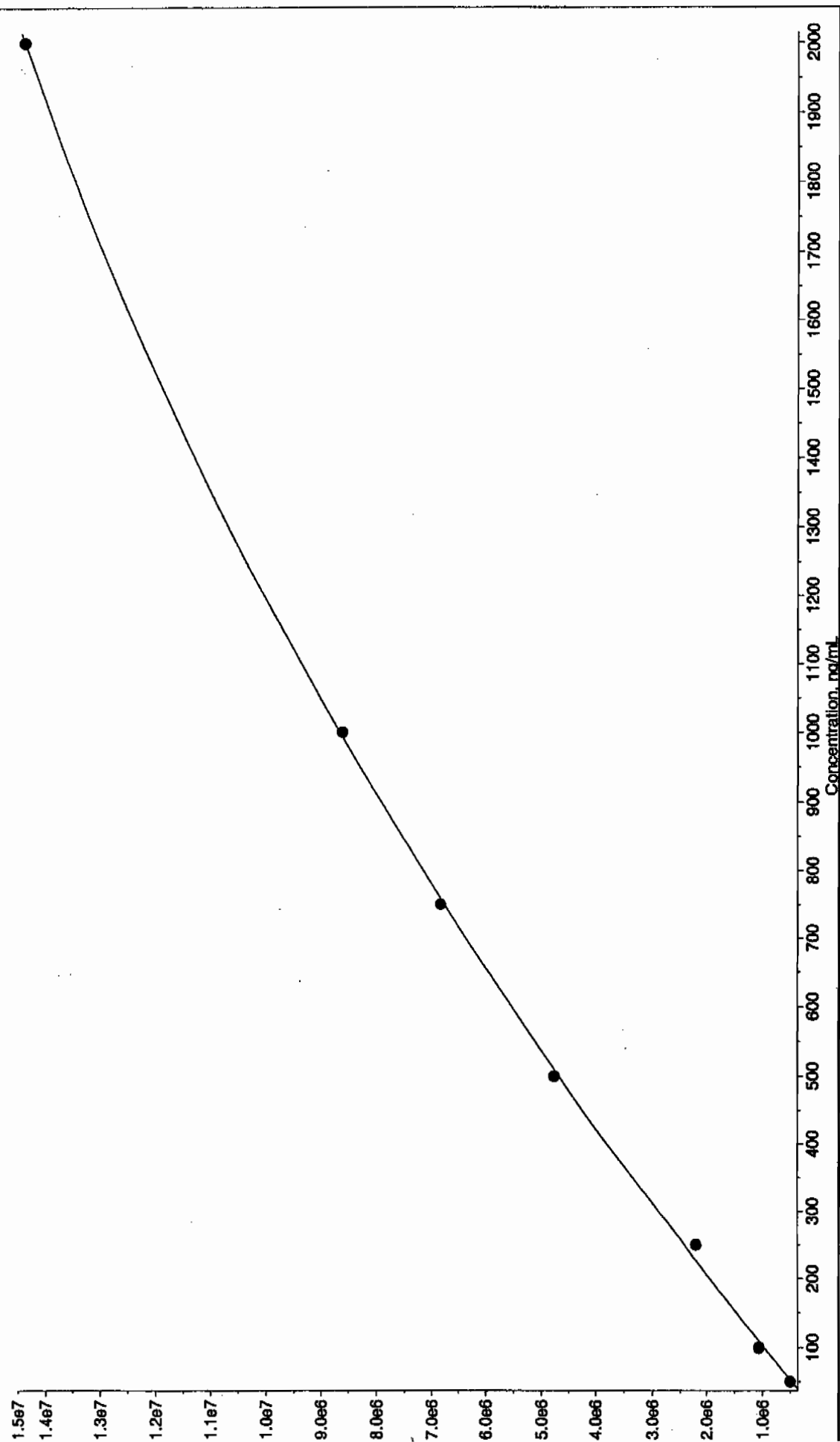
Fit	Quadratic	Weighting	None	Iterate No
a0	-3.37e+005			
a1	2.38e+004			
a2	-4.41			
Correlation coefficient 0.9996				
Use Area				

012510.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.043 x^2 + 1.41e+003 x + -94.4$ ($r = 0.9998$)



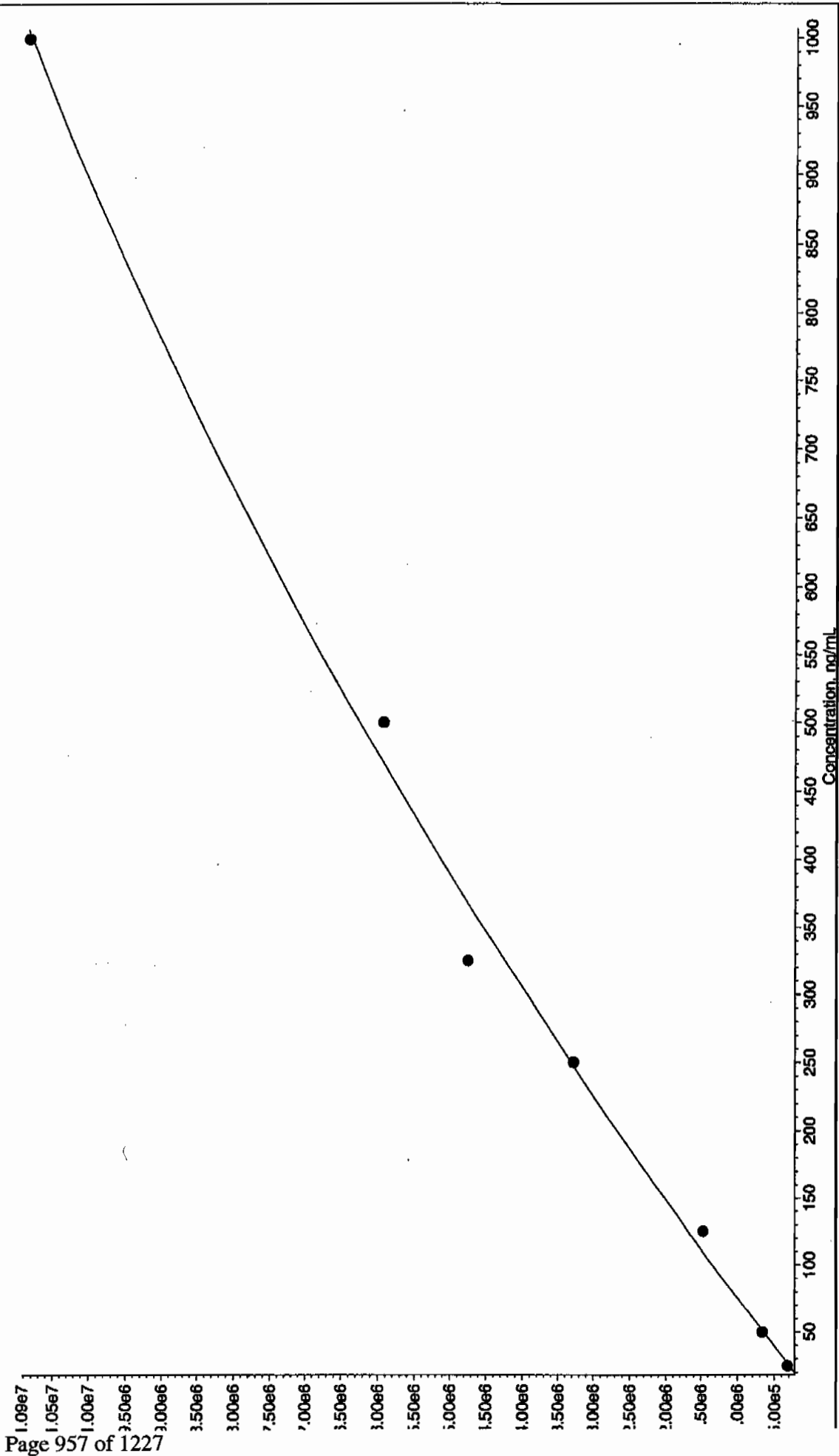
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012510.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -1.48 x^2 + 1.02e+004 x + -2.77e+004$ ($r = 0.9998$)



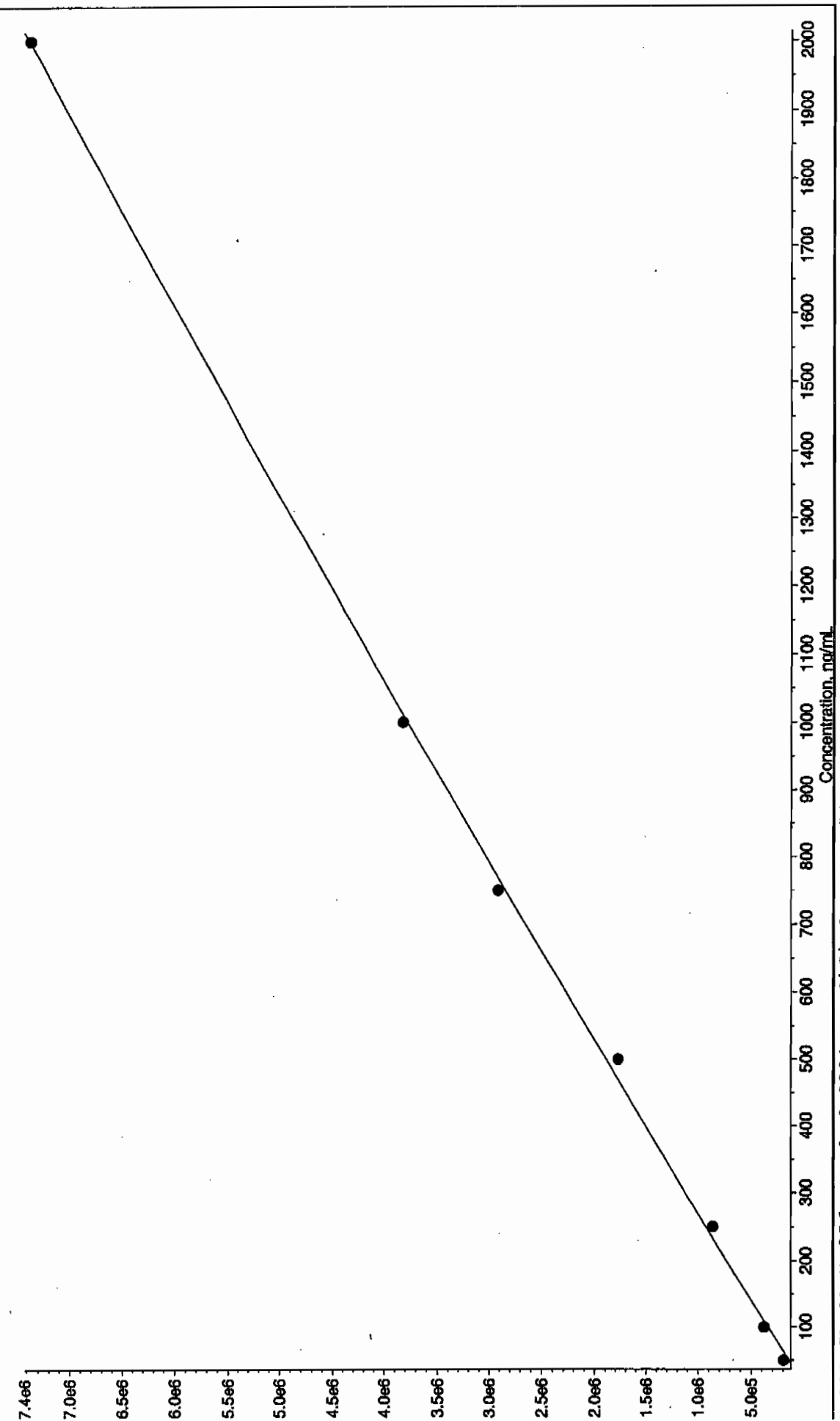
J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

J12510.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -3.5 \times 10^{-4} x^2 + 1.44 \times 10^{-4} x + -6.15 \times 10^{-4}$ ($r = 0.9975$)



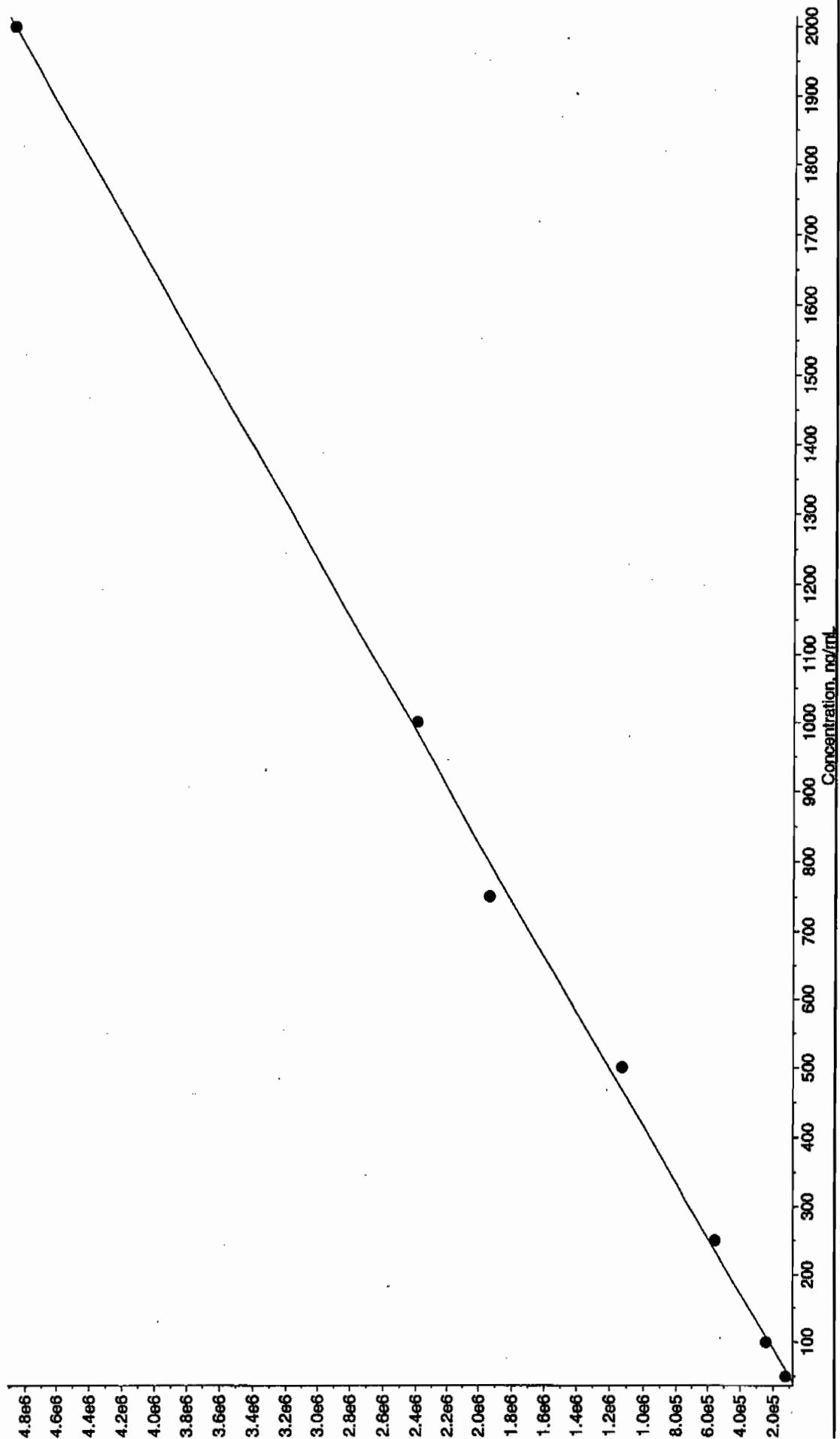
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012510.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.114 x^2 + 3.93e+003 x + -5.01e+004$ ($r = 0.9996$)



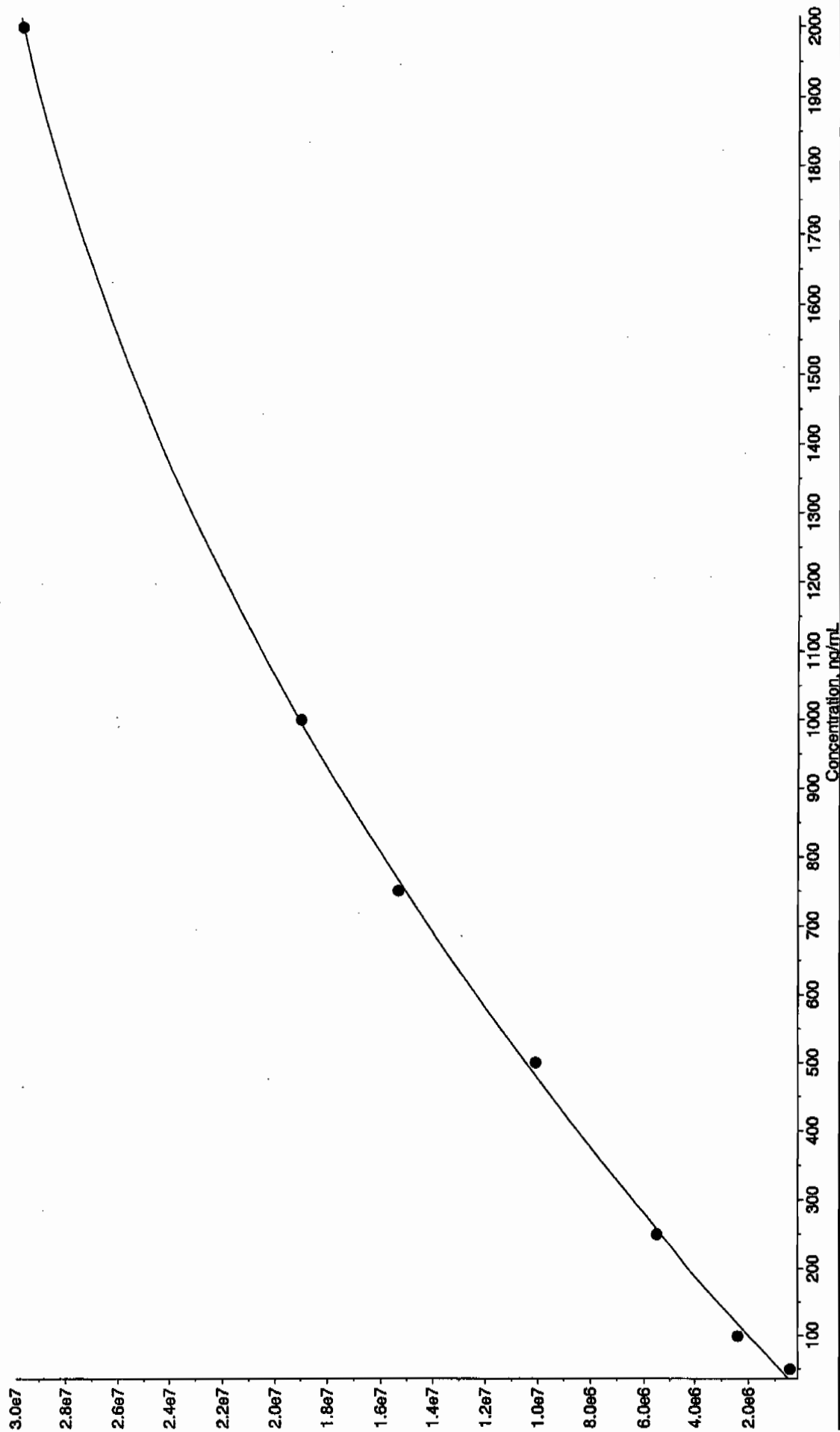
J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

J12510.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.00578 x^2 + 2.45e+003 x + -2.05e+004$ ($r = 0.9993$)



J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

312510.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -4.41 x^2 + 2.38e+004 x + -3.37e+005$ ($r = 0.9996$)



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01250011.wiff

Analysis Date: 25-JAN-10 13:09

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	486	97	
2,6-Diamino-4-nitrotoluene	500	478	96	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	485	97	
TATB	500	478	96	
tris(o-cresyl) phosphate	500	509	102	

Recovery Limits:

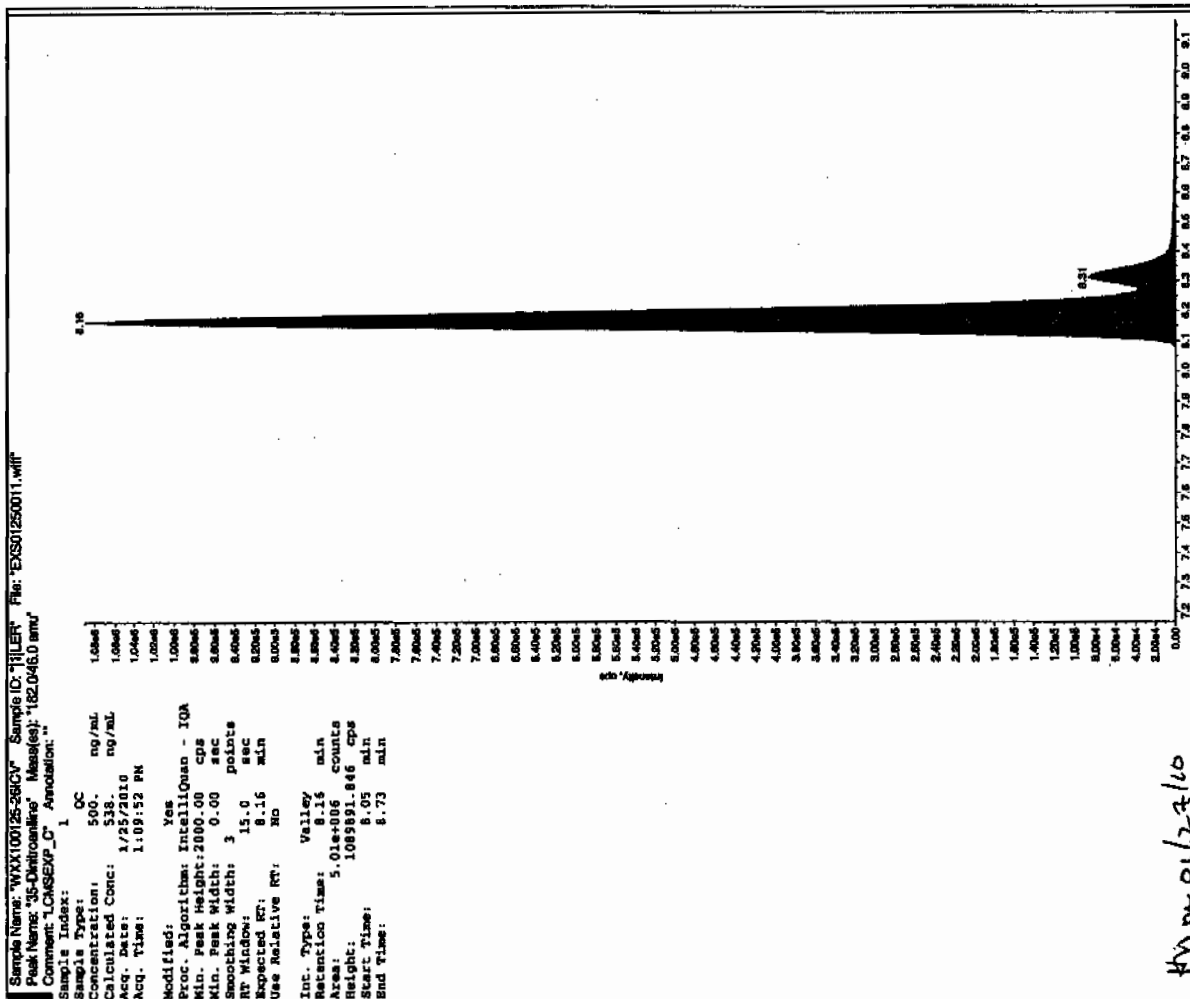
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

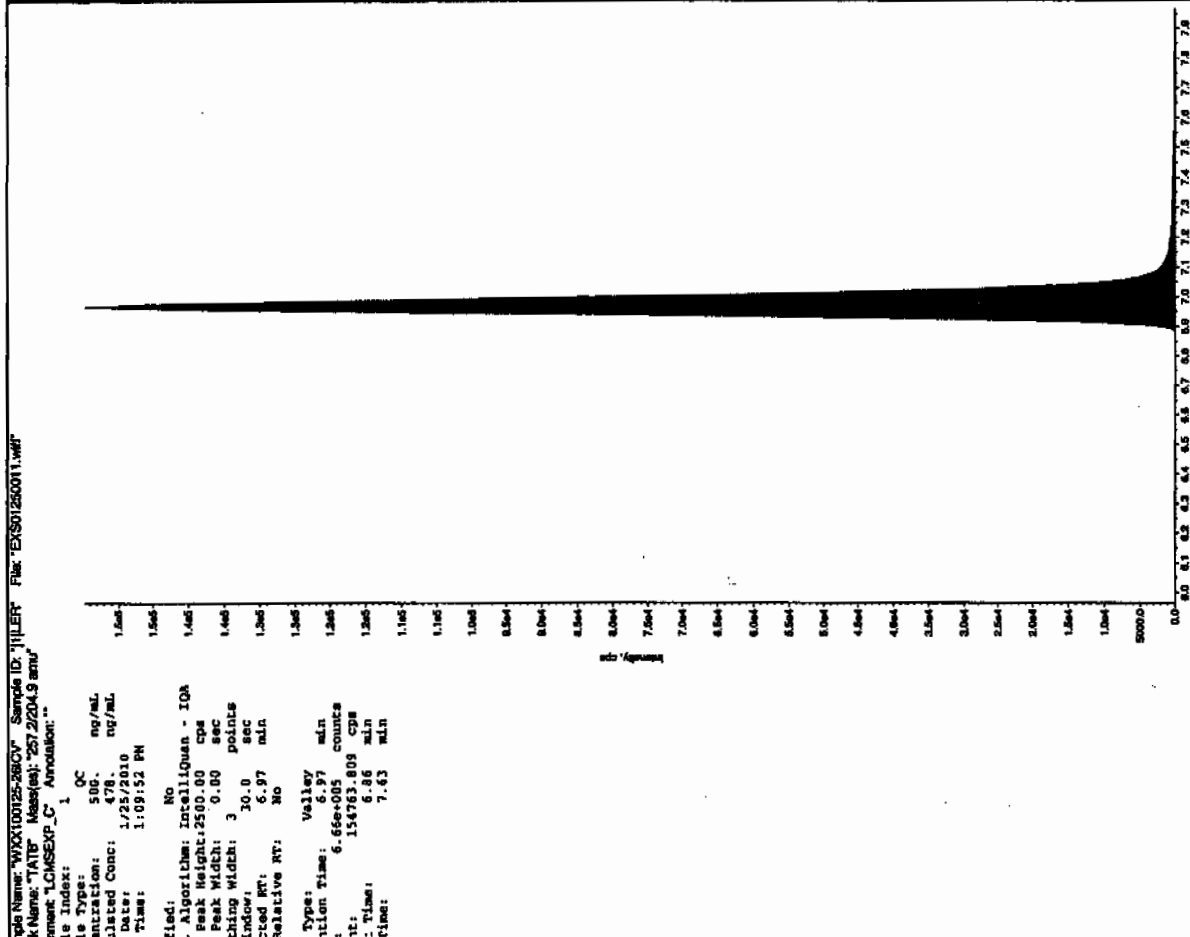
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 12/7/10

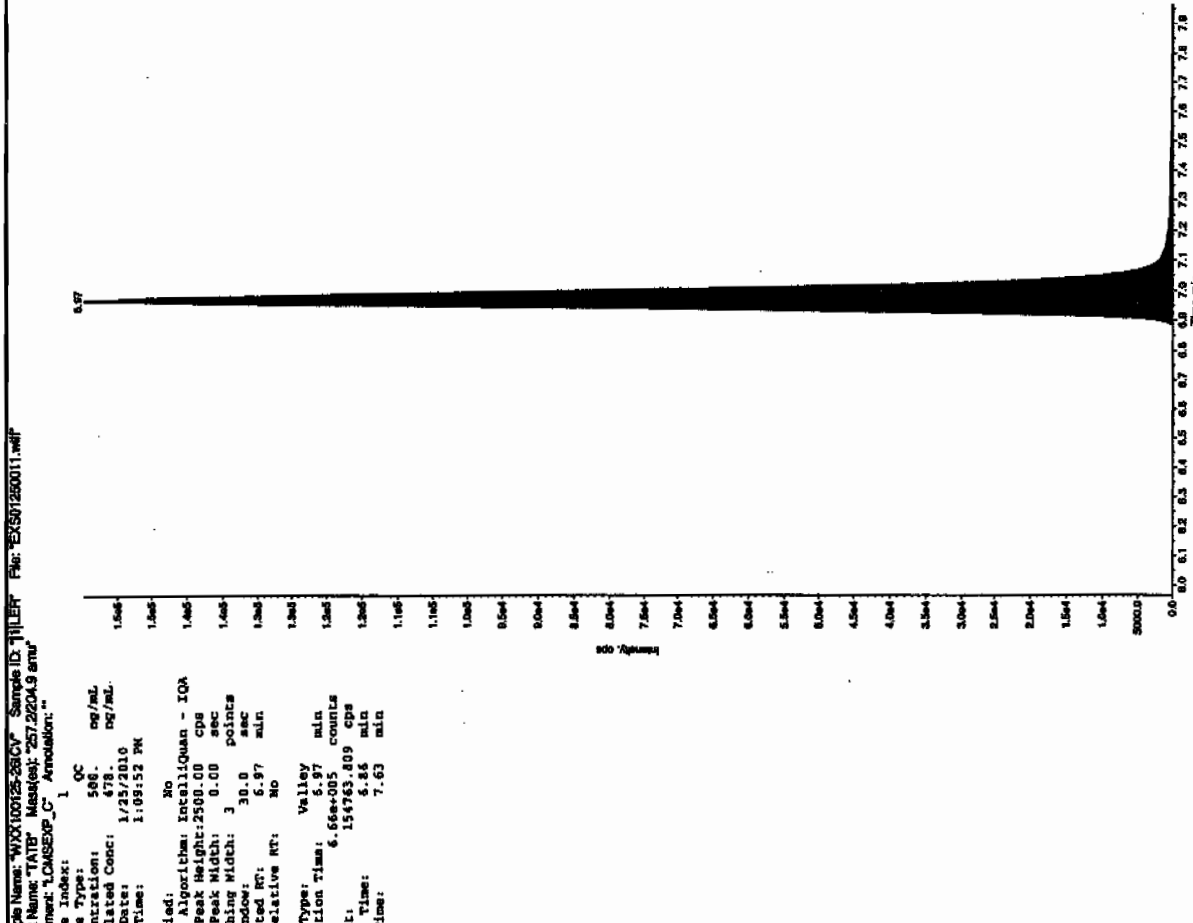
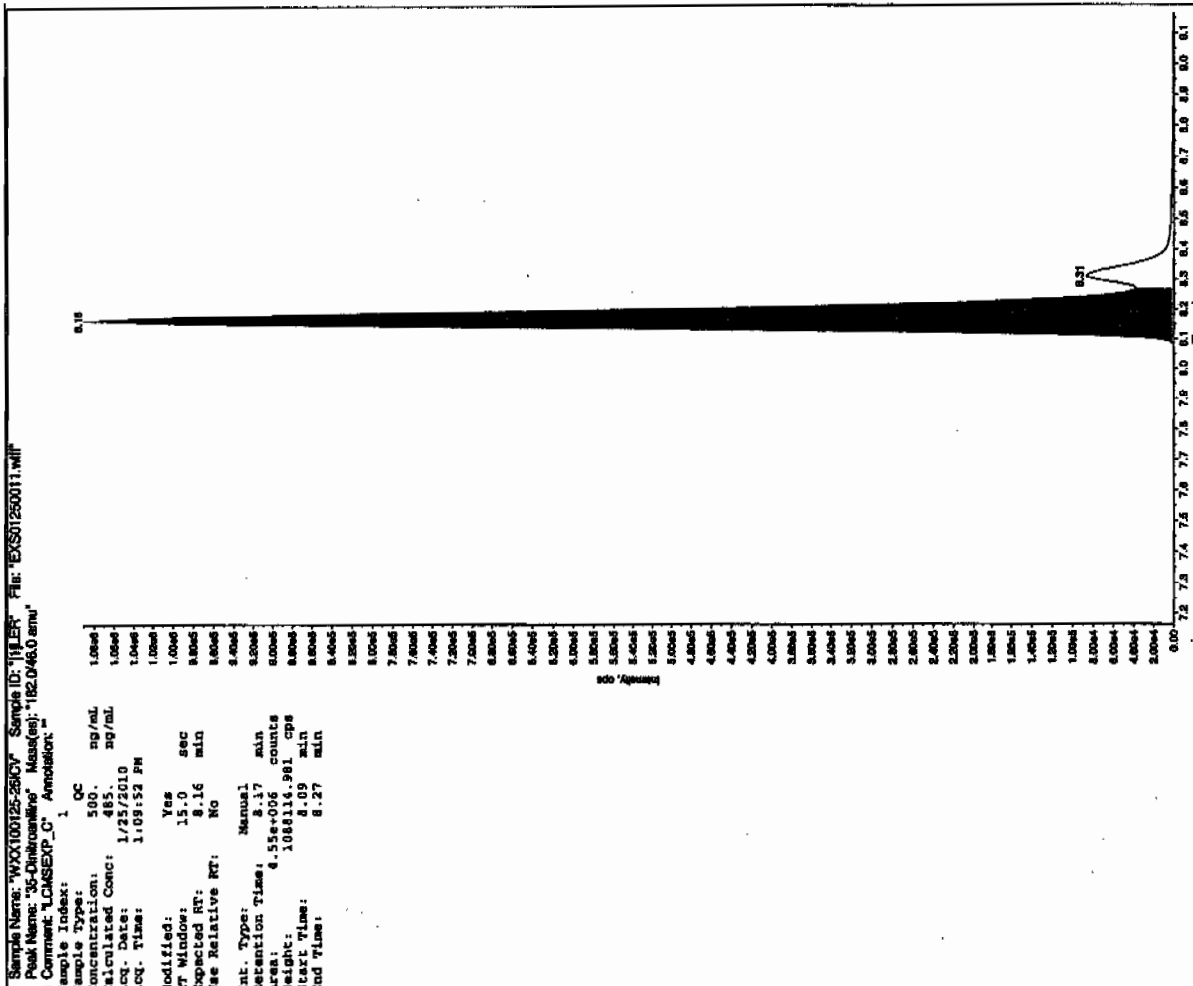


4.15 min 01/27/10

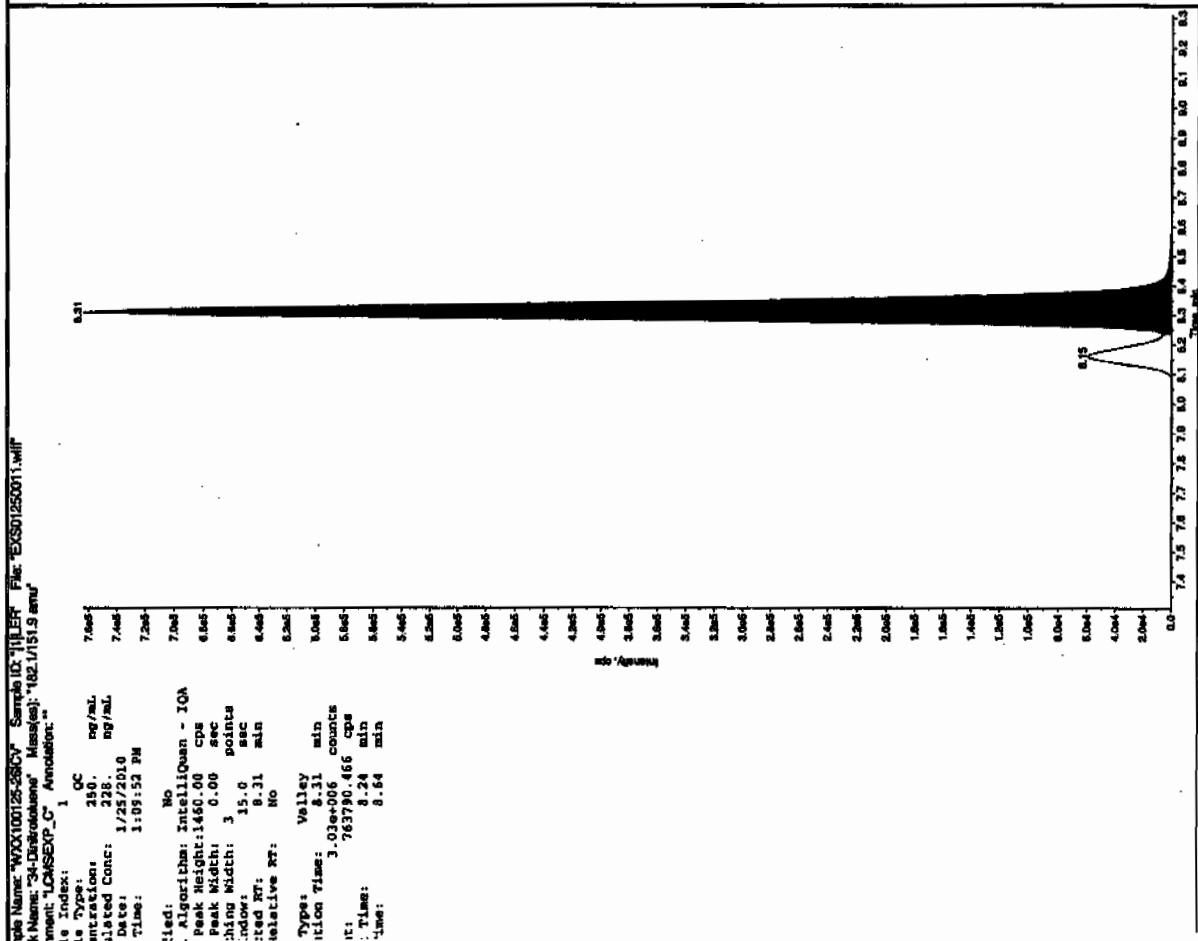
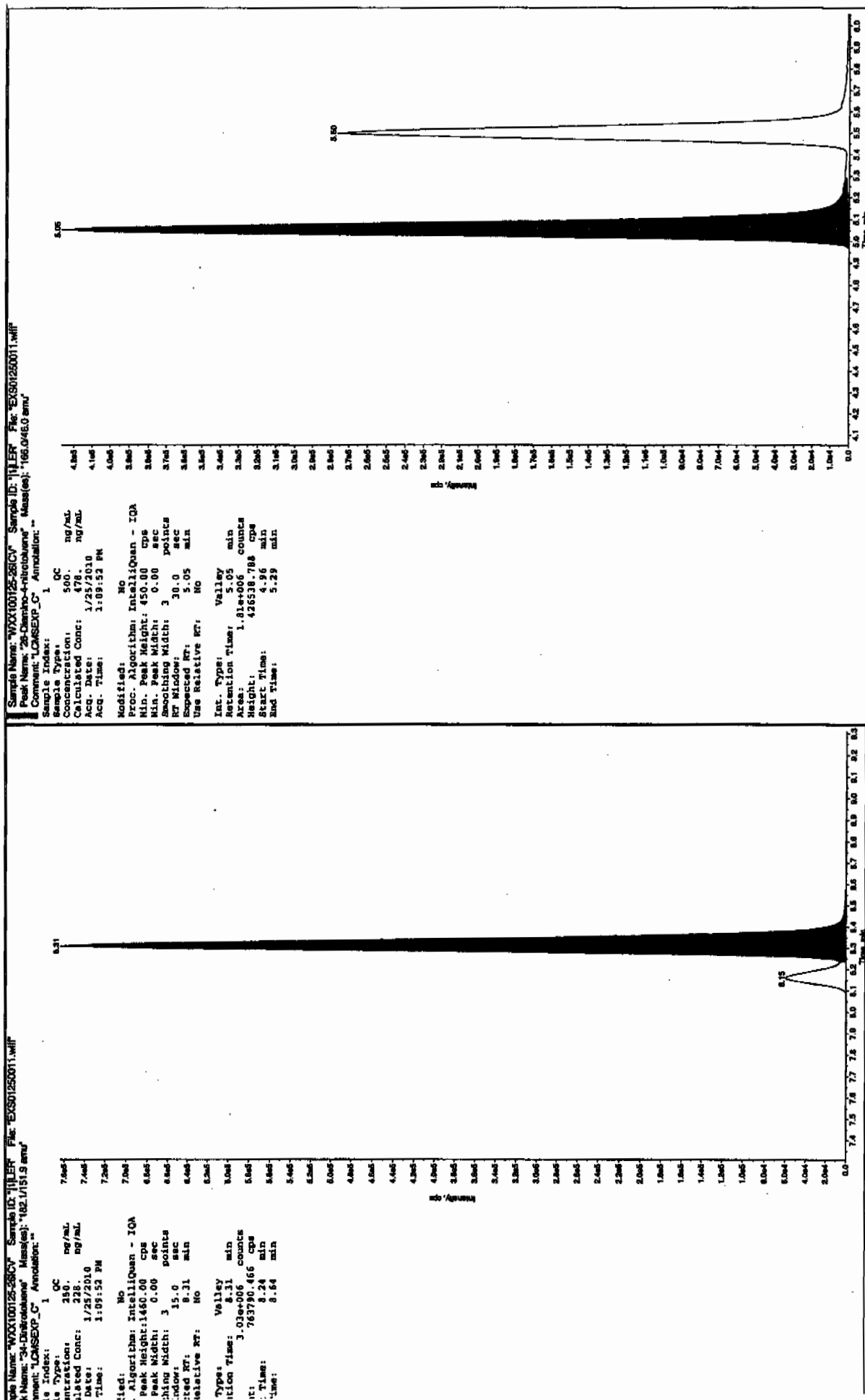


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

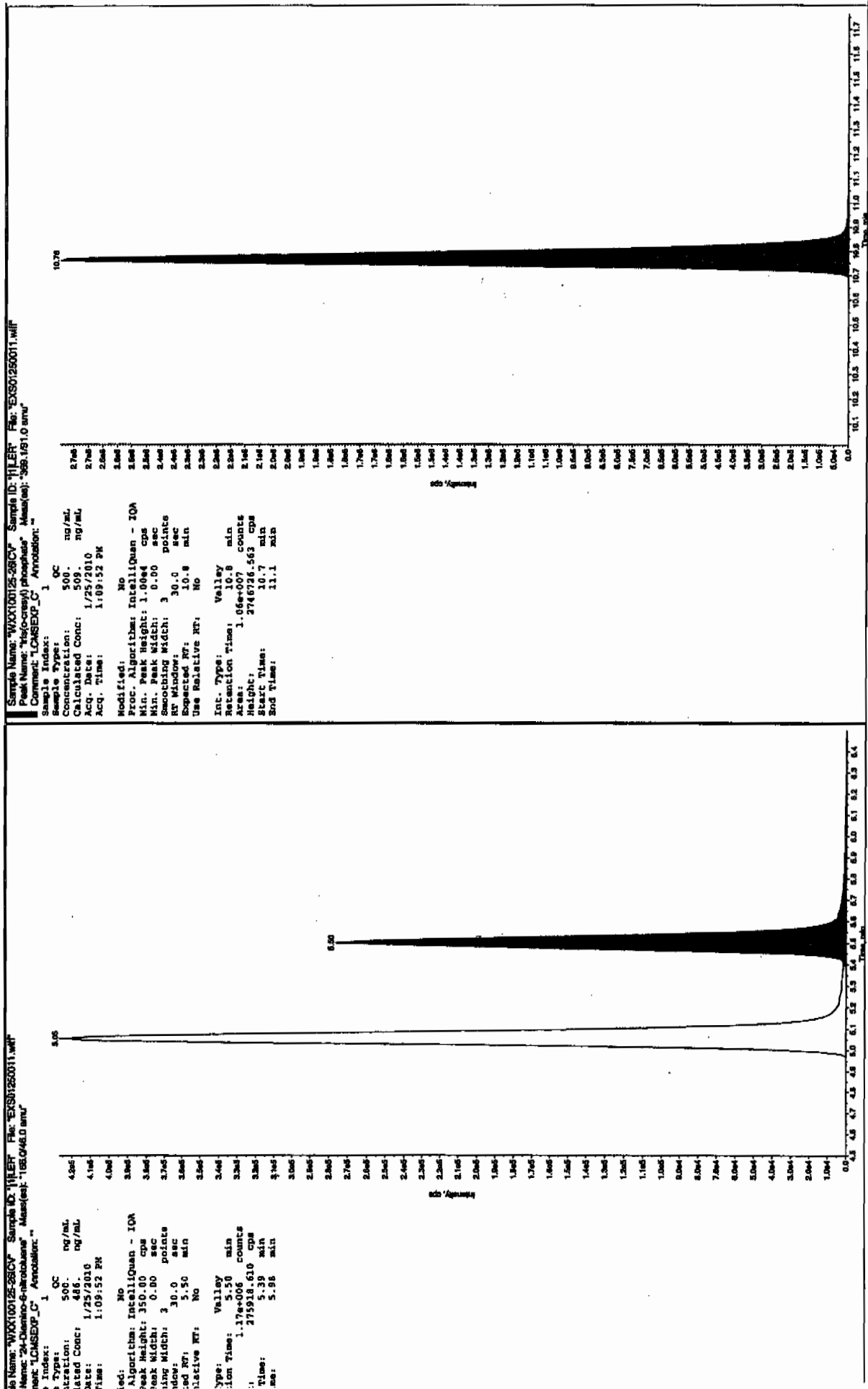
after Jan 11/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0130012a

Analysis Date: 30-JAN-10 17:07

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.859	122	
1,3-Dinitrobenzene-d4	500	501.182	100	
2,4,6-Trinitrotoluene	40	37.04	93	
2,4-Dinitrotoluene	40	42.922	107	
2,6-Dinitrotoluene	40	43.129	108	
2,6-Dinitrotoluene-d3	500	510.913	102	
2-Amino-4,6-dinitrotoluene	40	36.84	92	
3,4-Dinitrotoluene	20	19.516	98	
4-Amino-2,6-dinitrotoluene	40	33.43	84	
HMX	40	48.644	122	
Nitrobenzene	40	44.996	112	
PETN	40	48.287	121	
RDX	40	40.956	102	
Tetryl	40	41.931	105	
m-Dinitrobenzene	40	34.848	87	
m-Nitrotoluene	40	48.958	122	
o-Nitrotoluene	40	40.363	101	
p-Nitrotoluene	40	44.173	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Sun Jan 31 11:57:34 2010, Page 23 of 77

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

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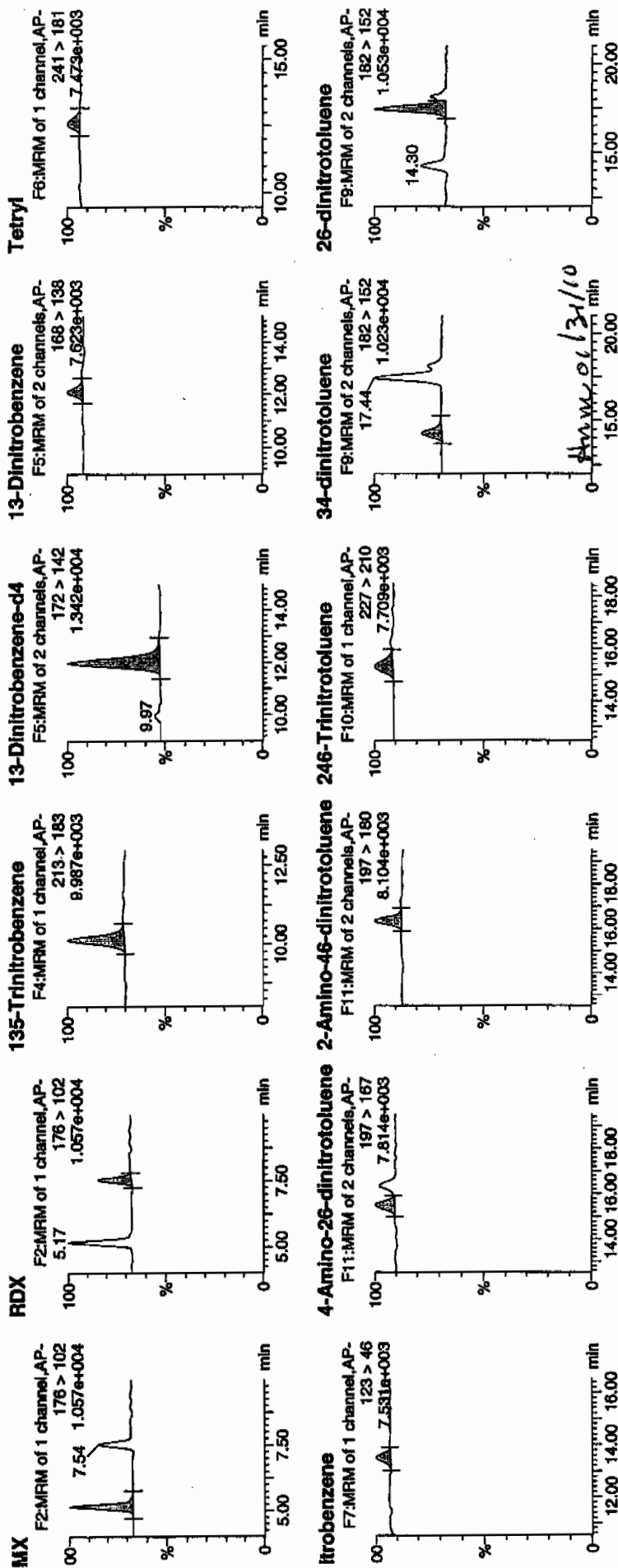
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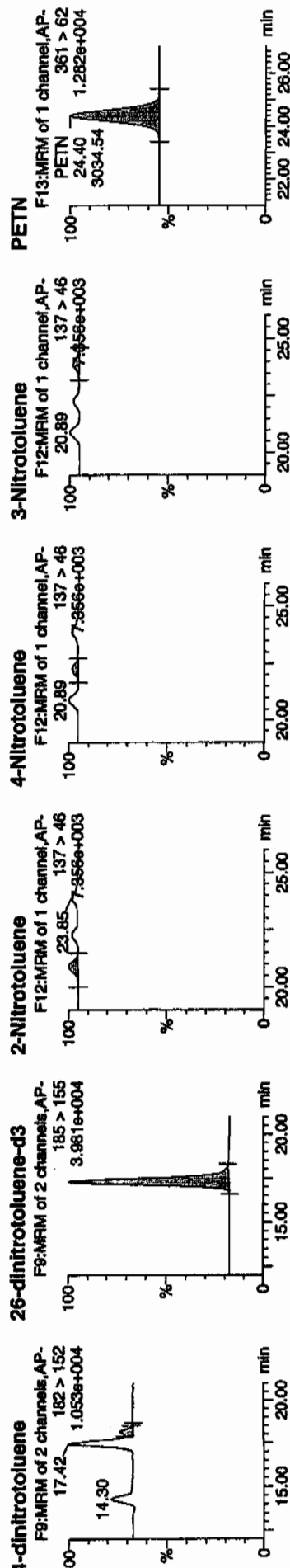
ix: WXX100130-08CRI

ial: 1:1,C

Page 967 of 1227



atset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



NAME	RT	AREA	BASE	PREC	REPEAT	ACQTIME	CONF	SA			
HMZ	176 > 102	5.17	739.366	2535.975	739.366	145.775	bb	48.6437	121.6	21.6	54.4
RDX	176 > 102	7.54	408.779	2535.975	408.779	80.598	bb	40.9564	102.4	2.4	28.5
135-Trinitrobenzene	213 > 183	10.13	907.570	2535.975	907.570	178.939	bb	48.8590	122.1	22.1	112.2
13-Dinitrobenzene-d4	172 > 142	11.98	2535.975		2535.975	2535.975	bb	501.1820	100.2	0.2	194.7
13-Dinitrobenzene	168 > 138	12.11	211.016	2535.975	211.016	41.805	bb	34.8475	87.1	-12.9	15.5
Tetryl	241 > 181	12.59	214.915	2535.975	214.915	42.373	bb	41.9309	104.8	4.8	27.7
Nitrobenzene	123 > 46	13.50	184.709	2535.975	184.709	36.418	bb	44.9962	112.5	12.5	19.5
4-Amino-26-dinitrotoluene	197 > 167	15.53	295.571	14545.758	295.571	10.160	MM	33.4301	83.6	-16.4	15.0
2-Amino-46-dinitrotoluene	197 > 180	16.35	409.179	14545.758	409.179	14.065	bb	36.8401	92.1	-7.9	31.1
246-Trinitrotoluene	227 > 210	15.32	341.261	14545.758	341.261	11.731	bb	37.0401	92.6	-7.4	19.6
34-dinitrotoluene	182 > 152	14.30	494.988	14545.758	494.988	17.015	bb	19.5158	97.6	-2.4	39.7
26-dinitrotoluene	182 > 152	17.42	1389.976	14545.758	1389.976	47.779	MM	43.1291	107.8	7.8	73.7
24-dinitrotoluene	182 > 152	18.16	298.804	14545.758	298.804	10.271	MM	42.9223	107.3	7.3	15.9
26-dinitrotoluene-d3	185 > 155	17.29	14545.758		14545.758	14545.758	bb	510.9128	102.2	2.2	1358.9
2-Nitrotoluene	137 > 46	20.89	186.216	14545.758	186.216	6.401	bb	40.3634	100.9	0.9	45.6
4-Nitrotoluene	137 > 46	22.31	100.781	14545.758	100.781	3.464	bb	44.1734	110.4	10.4	25.9
3-Nitrotoluene	137 > 46	23.85	132.564	14545.758	132.564	4.557	bb	48.9578	122.4	22.4	30.7
PETN	361 > 62	24.40	3034.541	14545.758	3034.541	104.310	bb	48.2874	120.7	20.7	753.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/30/10
 Time of Injection 1707
 Standard Number WXX100130-08CRI
 Data File EXP0130012a

HMX	121.6
RDX	102.4
135-TNB	122.1
13-DNB	87.1
Tetryl	104.8
Nitrobenzene	112.5
4A-26-DNT	83.6
2A-46-DNT	92.1
246-TNT	92.6
34-DNT(surr)	97.6
26-DNT	107.8
24-DNT	107.3
2-NT	100.9
4-NT	110.4
3-NT	122.4
PETN	120.7

11/31/10

Total 1685.9

done 01/31/10

Average 105.4

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0130023a

Analysis Date: 30-JAN-10 22:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	537.19	90	
1,3-Dinitrobenzene-d4	500	526.245	105	
2,4,6-Trinitrotoluene	600	661.422	110	
2,4-Dinitrotoluene	600	639.949	107	
2,6-Dinitrotoluene	600	613.284	102	
2,6-Dinitrotoluene-d3	500	498.689	100	
2-Amino-4,6-dinitrotoluene	600	650.966	108	
3,4-Dinitrotoluene	300	327.55	109	
4-Amino-2,6-dinitrotoluene	600	586.225	98	
HMX	600	727.325	121	*
Nitrobenzene	600	599.285	100	
PETN	600	627.514	105	
RDX	600	883.201	147	*
Tetryl	600	531.439	89	
m-Dinitrobenzene	600	583.497	97	
m-Nitrotoluene	600	633.05	106	
o-Nitrotoluene	600	650.807	108	
p-Nitrotoluene	600	652.02	109	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
 iEL Laboratories, LLC / Analyst : Michael A. Penny

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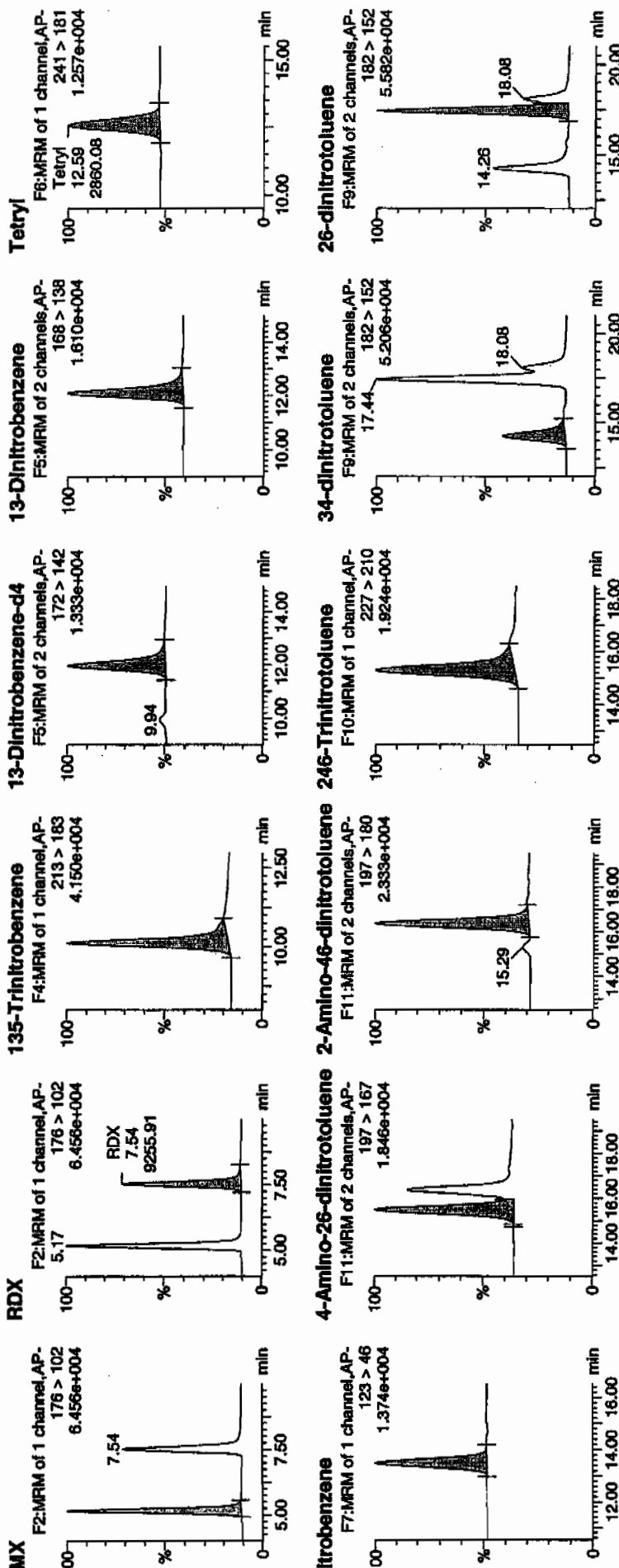
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ial: 1:1,B

Handwritten: 1/31/10

Page 971 of 1227



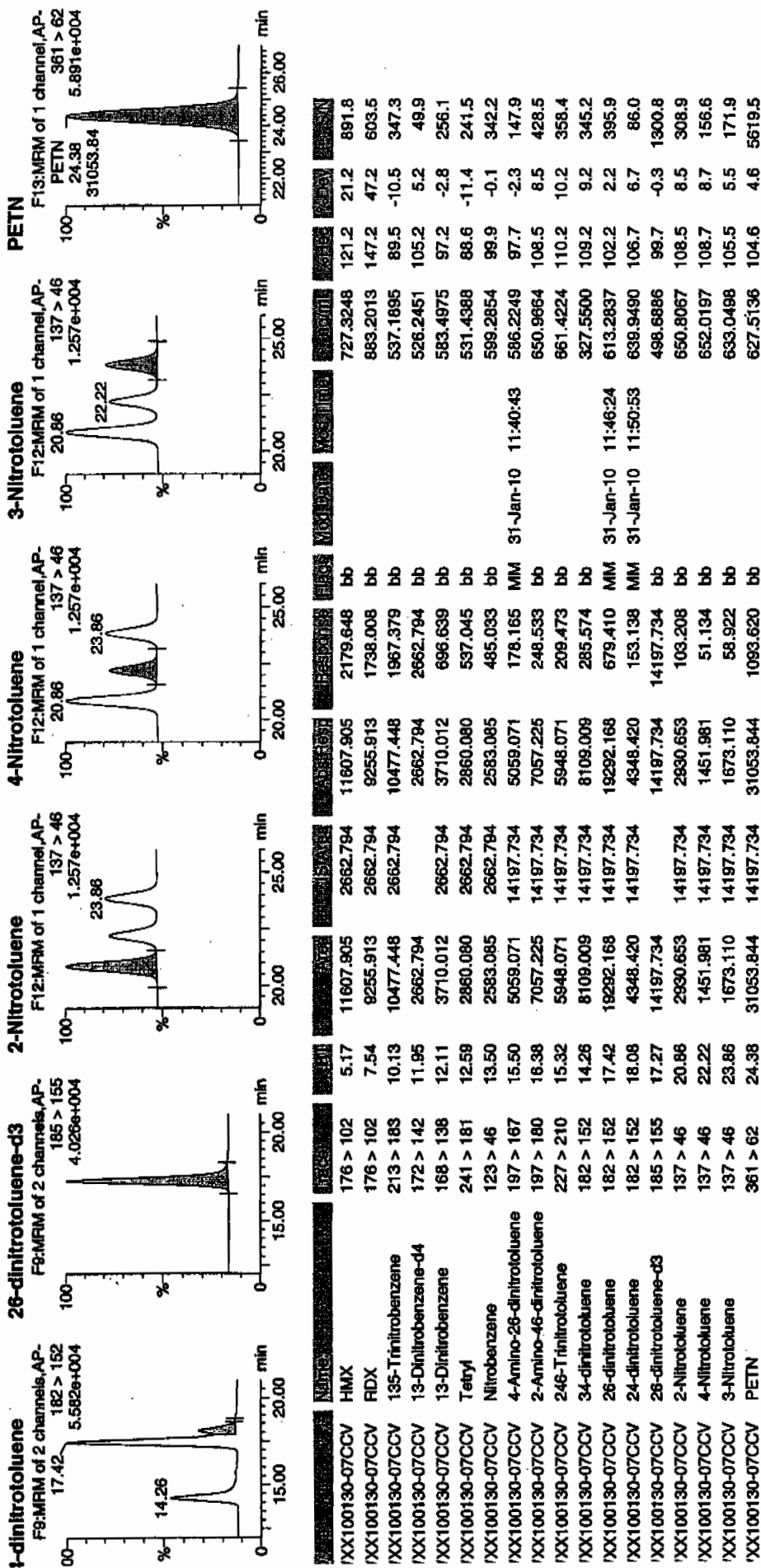
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untify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Jan 31 11:57:34 2010, Page 46 of 77

atasset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/30/10
 Time of Injection: 2231
 Standard Number: WXX100130-07CCV
 Data File: EXP0130023a

HMX	121.2
RDX	147.2
135-TNB	89.5
13-DNB	97.2
Tetryl	88.6
Nitrobenzene	99.9
4A-26-DNT	97.7
2A-46-DNT	108.5
246-TNT	110.2
34-DNT(surr)	109.2
26-DNT	102.2
24-DNT	106.7
2-NT	108.5
4-NT	108.7
3-NT	105.5
PETN	104.6

*WAP
1/31/10*

Total 1705.4

Average 106.6

Handwritten: 1705.4/16 = 106.6

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): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0130025a

Analysis Date: 30-JAN-10 23:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	46.981	117	
1,3-Dinitrobenzene-d4	500	586.621	117	
2,4,6-Trinitrotoluene	40	39.807	100	
2,4-Dinitrotoluene	40	42.742	107	
2,6-Dinitrotoluene	40	39.496	99	
2,6-Dinitrotoluene-d3	500	599.251	120	
2-Amino-4,6-dinitrotoluene	40	37.547	94	
3,4-Dinitrotoluene	20	19.5	97	
4-Amino-2,6-dinitrotoluene	40	37.074	93	
HMX	40	47.468	119	
Nitrobenzene	40	42.709	107	
PETN	40	46.217	116	
RDX	40	49.488	124	
Tetryl	40	36.387	91	
m-Dinitrobenzene	40	41.488	104	
m-Nitrotoluene	40	31.965	80	
o-Nitrotoluene	40	37.471	94	
p-Nitrotoluene	40	31.832	80	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

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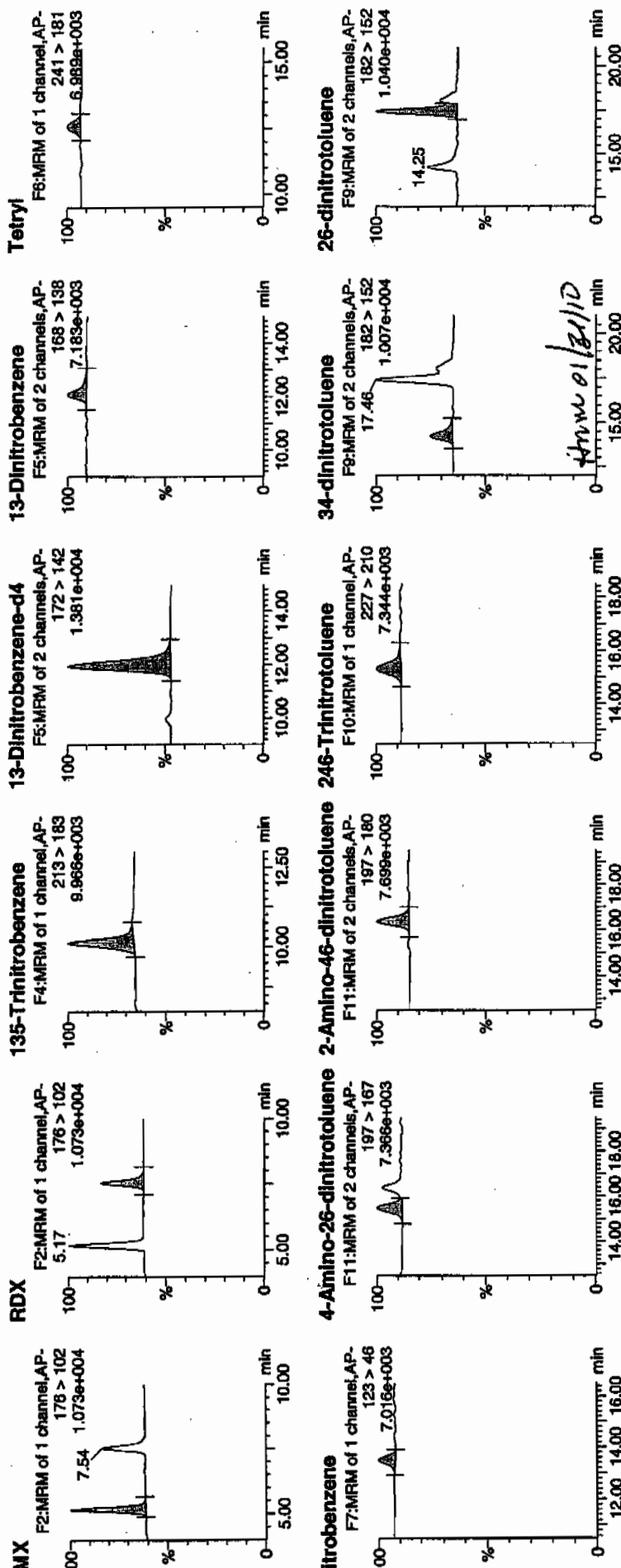
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je: WXX100130-08CRI

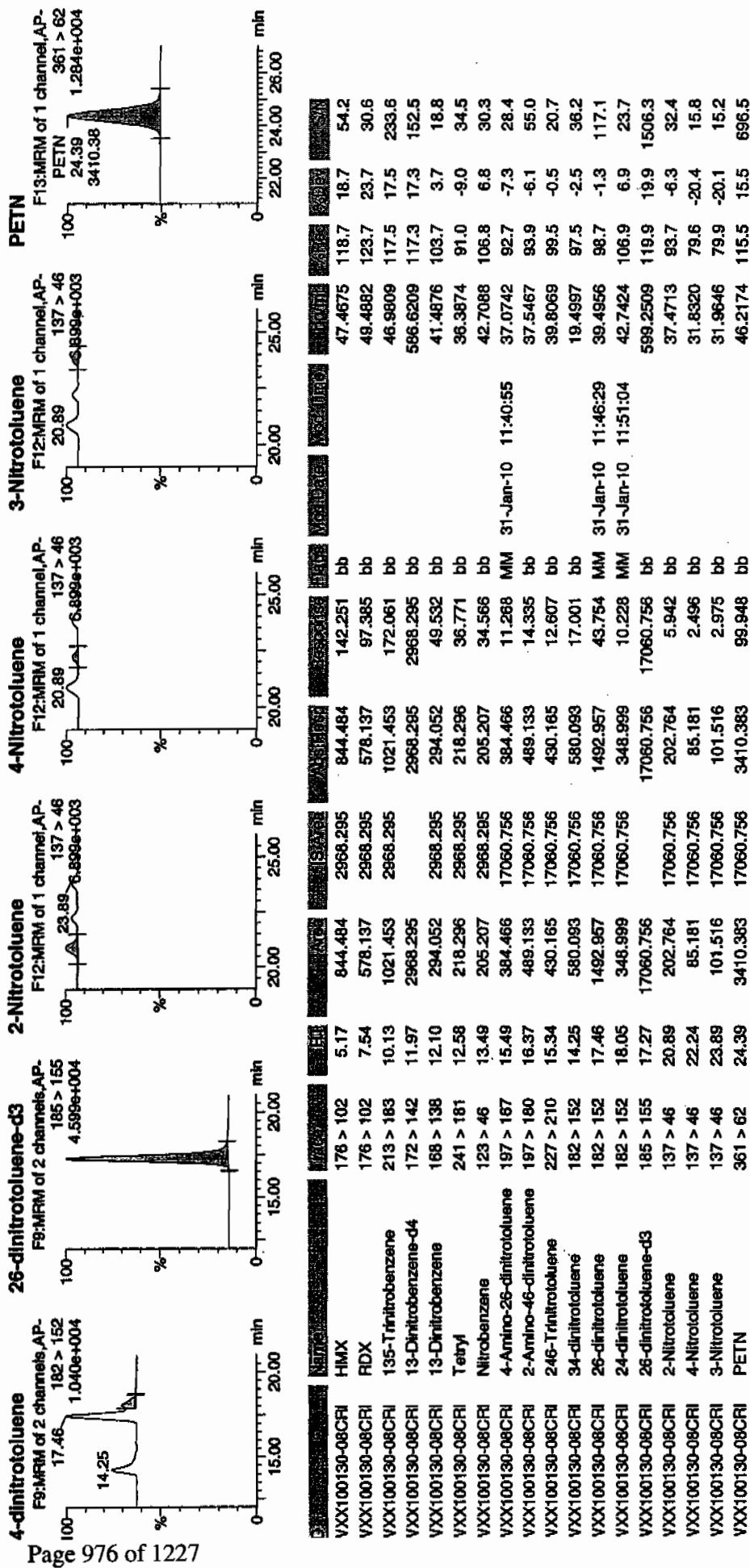
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11/21/10

Page 975 of 1227



Dataset: C:\MASSLYN\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/30/10
 Time of Injection 2330
 Standard Number WXX100130-08CRI
 Data File EXP0130025a

HMX	118.7
RDX	123.7
135-TNB	117.5
13-DNB	103.7
Tetryl	91.0
Nitrobenzene	106.8
4A-26-DNT	92.7
2A-46-DNT	93.9
246-TNT	99.5
34-DNT(surr)	97.5
26-DNT	98.7
24-DNT	106.9
2-NT	93.7
4-NT	79.6
3-NT	79.9
PETN	115.5

WTT
1/31/10

Total 1619.3

Average 101.2

WTT 1/31/10

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): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0130036a

Analysis Date: 31-JAN-10 04:55

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	550.302	92	
1,3-Dinitrobenzene-d4	500	607.117	121	*
2,4,6-Trinitrotoluene	600	657.446	110	
2,4-Dinitrotoluene	600	584.015	97	
2,6-Dinitrotoluene	600	612.034	102	
2,6-Dinitrotoluene-d3	500	612.824	123	*
2-Amino-4,6-dinitrotoluene	600	683.272	114	
3,4-Dinitrotoluene	300	335.873	112	
4-Amino-2,6-dinitrotoluene	600	583.329	97	
HMX	600	697.444	116	
Nitrobenzene	600	637.365	106	
PETN	600	533.449	89	
RDX	600	787.745	131	*
Tetryl	600	568.921	95	
m-Dinitrobenzene	600	615.291	103	
m-Nitrotoluene	600	584.104	97	
o-Nitrotoluene	600	596.74	99	
p-Nitrotoluene	600	597.746	100	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

ataset: C:\MASSLYNX\New_Exp\PRO1013010expA.qld, Time: Sun Jan 31 11:56:40 2010

ame: C:\MASSLYNX\NEW_EXP\PROData\EXP0130036a

ate: 31-Jan-2010

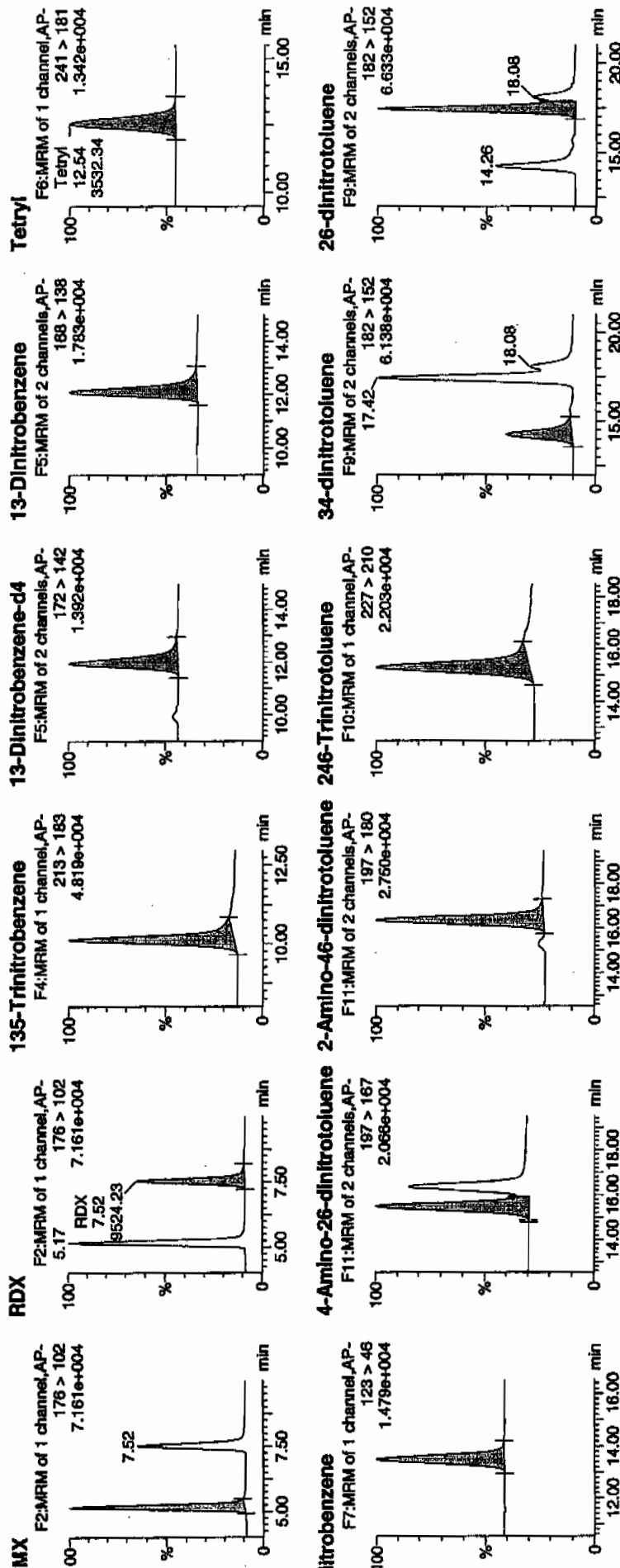
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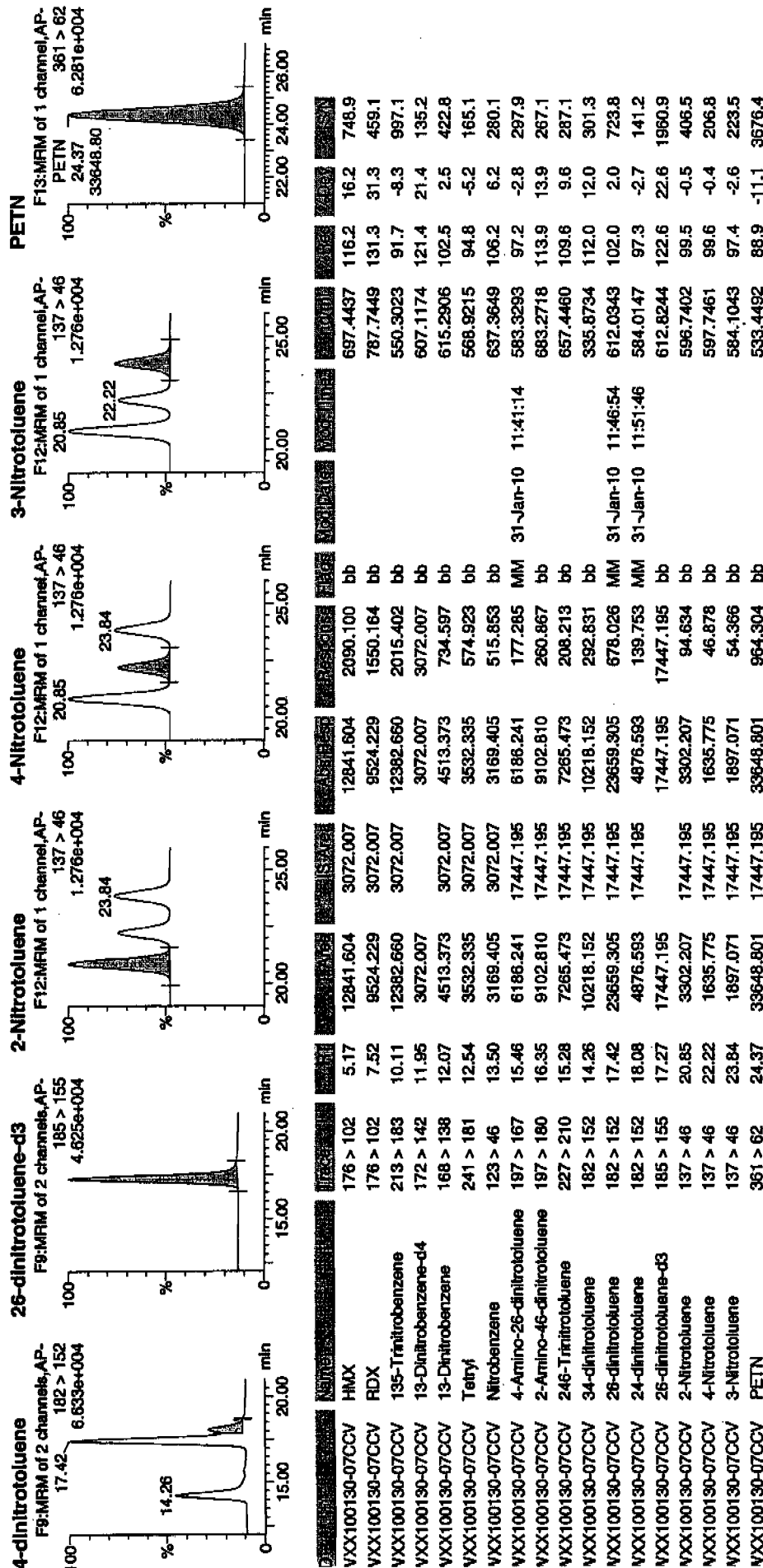
1/31/10
MMP

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1/31/10
MMP

Dataset: C:\MASSLYNX\New_Exp_PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/31/10
 Time of Injection: 0455
 Standard Number: WXX100130-07CCV
 Data File: EXP0130036a

HMX	116.2
RDX	131.3
135-TNB	91.7
13-DNB	102.5
Tetryl	94.8
Nitrobenzene	106.2
4A-26-DNT	97.2
2A-46-DNT	113.9
246-TNT	109.6
34-DNT(surr)	112.0
26-DNT	102.0
24-DNT	97.3
2-NT	99.5
4-NT	99.6
3-NT	97.4
PETN	88.9

*1007
1/31/10*

Total 1660.1

Average 103.8

Handwritten signature

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0130038a

Analysis Date: 31-JAN-10 05:54

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.002	110	
1,3-Dinitrobenzene-d4	500	623.225	125	
2,4,6-Trinitrotoluene	40	31.23	78	
2,4-Dinitrotoluene	40	41.079	103	
2,6-Dinitrotoluene	40	40.106	100	
2,6-Dinitrotoluene-d3	500	632.463	126	
2-Amino-4,6-dinitrotoluene	40	39.738	99	
3,4-Dinitrotoluene	20	20.971	105	
4-Amino-2,6-dinitrotoluene	40	36.482	91	
HMX	40	54.78	137	*
Nitrobenzene	40	46.685	117	
PETN	40	39.434	99	
RDX	40	52.465	131	*
Tetryl	40	37.945	95	
m-Dinitrobenzene	40	39.327	98	
m-Nitrotoluene	40	36.277	91	
o-Nitrotoluene	40	42.788	107	
p-Nitrotoluene	40	41.194	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

Dataset: C:\MASSLYNX\New_Exp\PROV013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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late: 31-Jan-2010

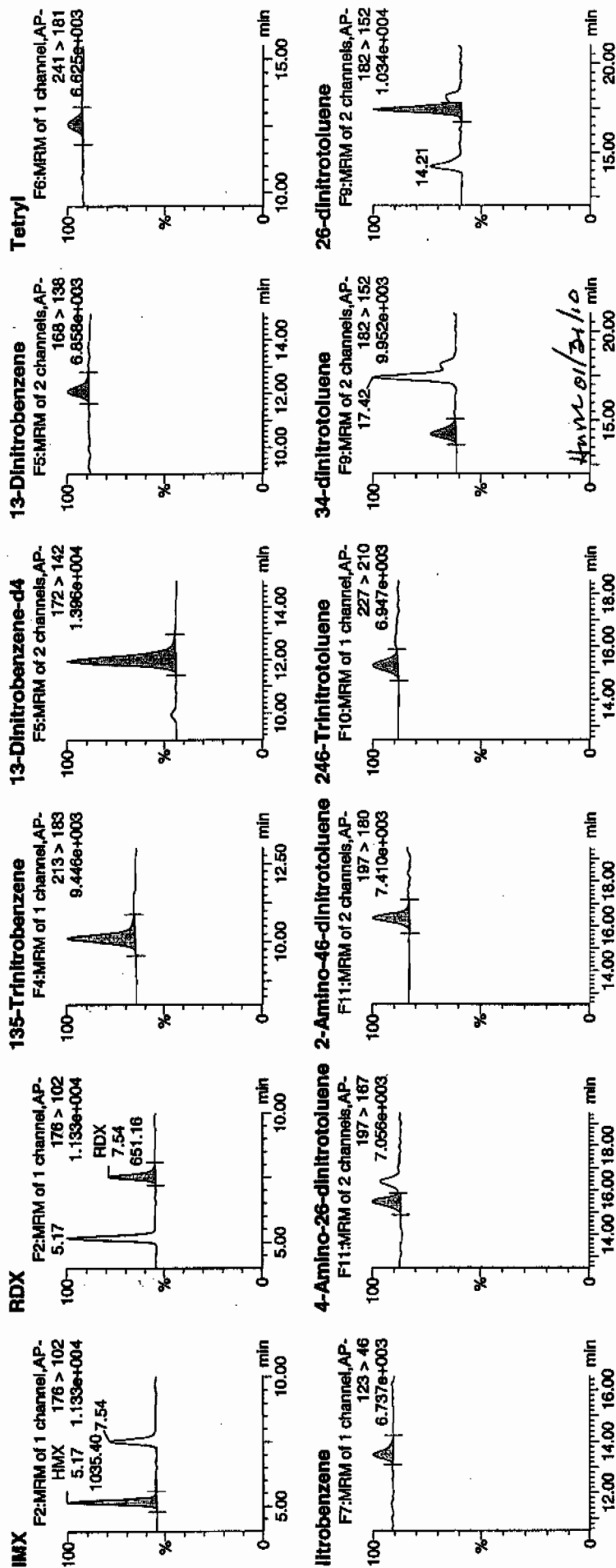
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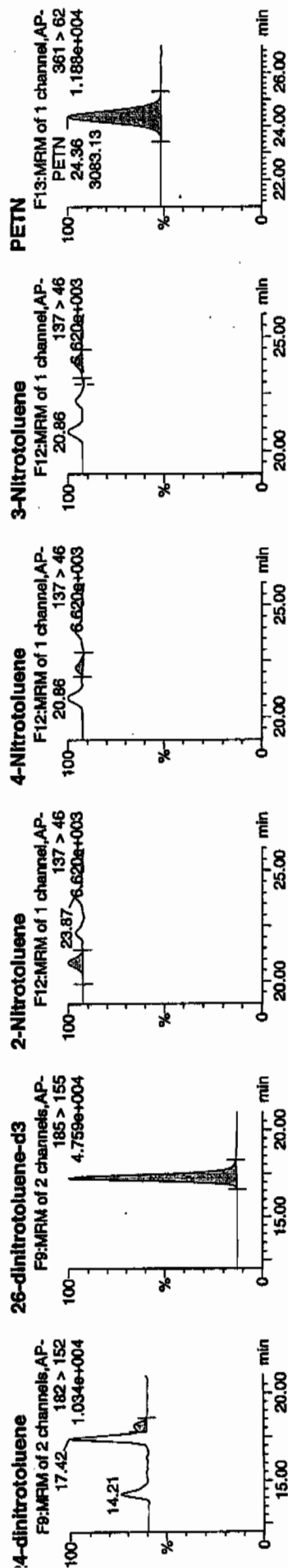
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1/31/10

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Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



Dose	Route	Time	Age	Sex	Weight	Food	Water	Urine	Feces	Bile	Mortality	Avg. Body Weight	Survival	
WXX100130-08CRI	HMX	176 > 102	5.17	1035.397	3153.509	184.166	bb	1035.397	164.166	bb	54.7804	137.0	37.0	248.1
WXX100130-08CRI	RDX	176 > 102	7.54	651.156	3153.509	103.243	bb	651.156	103.243	bb	52.4849	131.2	31.2	130.4
WXX100130-08CRI	135-Trinitrobenzene	213 > 183	10.13	1016.387	3153.509	161.152	bb	1016.387	161.152	bb	44.0022	110.0	10.0	117.3
WXX100130-08CRI	13-Dinitrobenzene-d4	172 > 142	11.85	3153.509	3153.509	3153.509	bb	3153.509	3153.509	bb	623.2245	124.6	24.6	278.0
WXX100130-08CRI	13-Dinitrobenzene	168 > 138	12.10	296.127	3153.509	46.952	bb	296.127	46.952	bb	39.3265	98.3	-1.7	31.0
WXX100130-08CRI	Tetryl	241 > 181	12.58	241.845	3153.509	38.945	bb	241.845	38.945	bb	37.9451	94.9	-5.1	22.8
WXX100130-08CRI	Nitrobenzene	123 > 46	13.50	238.310	3153.509	37.785	bb	238.310	37.785	bb	46.6854	116.7	16.7	23.4
WXX100130-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.46	399.291	18006.311	11.088	MM	399.291	11.088	MM	31-Jan-10	11:41:21	-8.8	23.4
WXX100130-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.37	546.364	18006.311	15.171	bb	546.364	15.171	bb	39.7375	99.3	-0.7	54.7
WXX100130-08CRI	246-Trinitrotoluene	227 > 210	15.28	356.181	18006.311	9.890	bb	356.181	9.890	bb	31.2297	78.1	-21.9	60.3
WXX100130-08CRI	34-dinitrotoluene	182 > 152	14.25	658.444	18006.311	18.284	bb	658.444	18.284	bb	20.9712	104.9	4.9	19.9
WXX100130-08CRI	26-dinitrotoluene	182 > 152	17.42	1600.063	18006.311	44.431	MM	1600.063	44.431	MM	31-Jan-10	11:47:05	0.3	55.8
WXX100130-08CRI	24-dinitrotoluene	182 > 152	18.14	354.004	18006.311	9.830	MM	354.004	9.830	MM	31-Jan-10	11:52:14	2.7	9.1
WXX100130-08CRI	26-dinitrotoluene-d3	185 > 155	17.27	18006.311	18006.311	18006.311	bb	18006.311	18006.311	bb	632.4631	128.5	26.5	674.6
WXX100130-08CRI	2-Nitrotoluene	137 > 46	20.86	244.365	18006.311	6.786	bb	244.365	6.786	bb	42.7879	107.0	7.0	62.1
WXX100130-08CRI	4-Nitrotoluene	137 > 46	22.21	116.344	18006.311	3.231	bb	116.344	3.231	bb	41.1944	103.0	3.0	30.5
WXX100130-08CRI	3-Nitrotoluene	137 > 46	23.87	121.598	18006.311	3.377	MM	121.598	3.377	MM	31-Jan-10	11:52:27	-9.3	29.0
WXX100130-08CRI	PETN	361 > 62	24.36	3083.130	18006.311	85.612	bb	3083.130	85.612	bb	39.4339	98.6	-1.4	350.8

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/31/10
 Time of Injection 0554
 Standard Number WXX100130-08CRI
 Data File EXP0130038a

HMX	137.0
RDX	131.2
135-TNB	110.0
13-DNB	98.3
Tetryl	94.9
Nitrobenzene	116.7
4A-26-DNT	91.2
2A-46-DNT	99.3
246-TNT	78.1
34-DNT(surr)	104.9
26-DNT	100.3
24-DNT	102.7
2-NT	107.0
4-NT	103.0
3-NT	90.7
PETN	98.6

*diff
1/31/10*

Total 1663.9

Average 104.0

WXX100130-08CRI

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): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250013.wiff

Analysis Date: 25-JAN-10 13:41

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	106	106	
3,4-Dinitrotoluene	50	46.7	94	
3,5-Dinitroaniline	100	104	104	
TATB	100	96.4	96	
tris(o-cresyl) phosphate	100	117	117	

Recovery Limits:

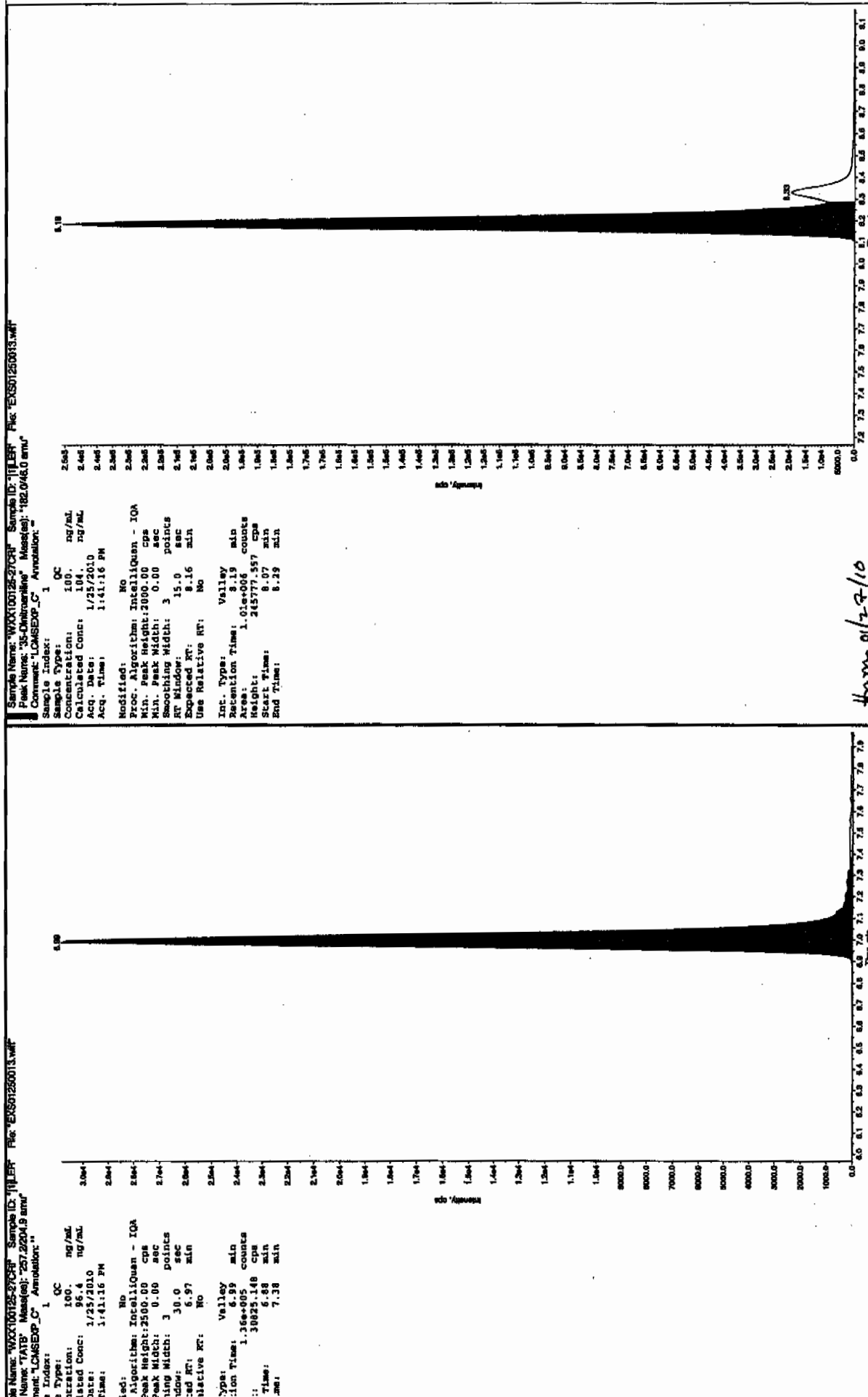
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

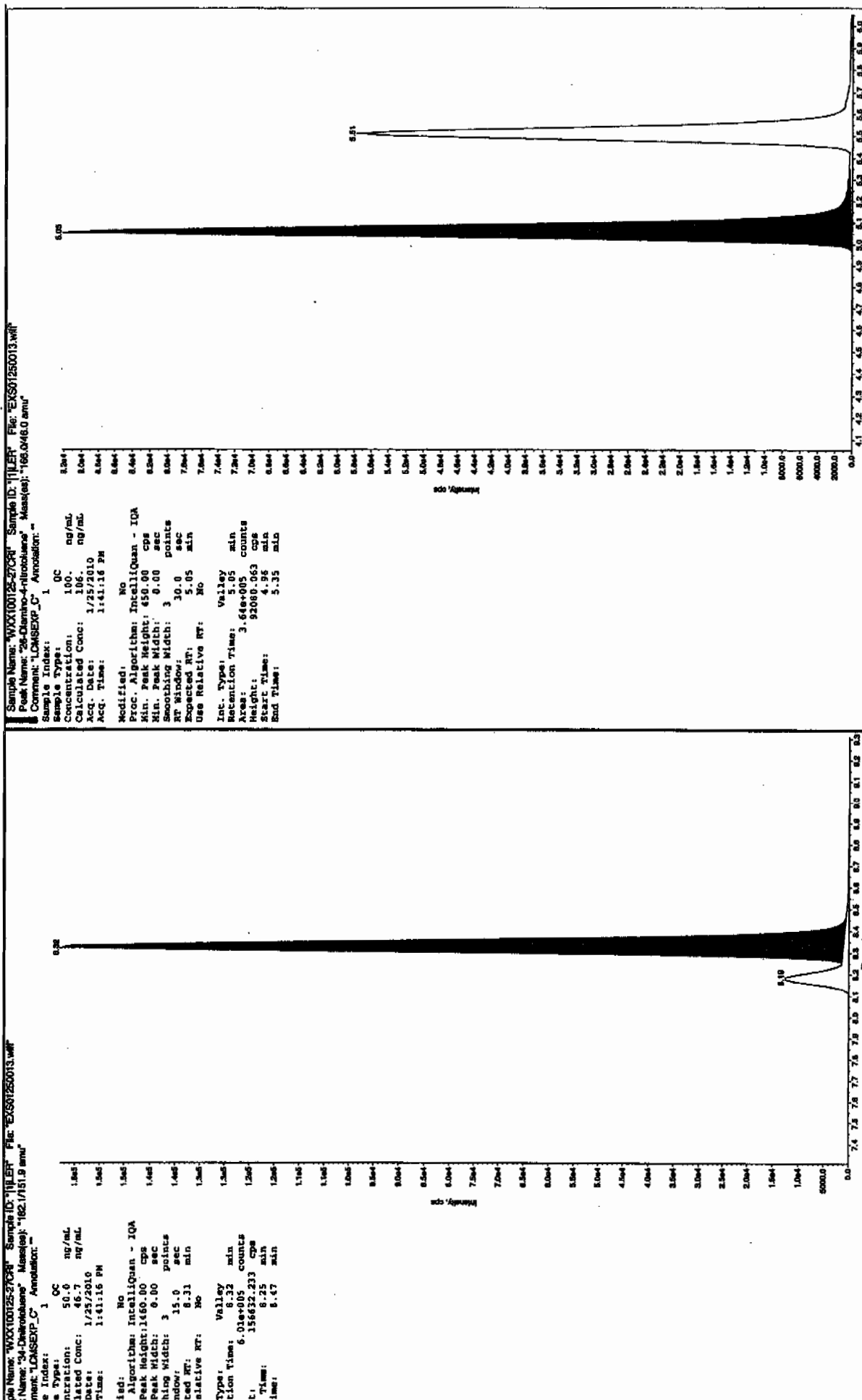
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

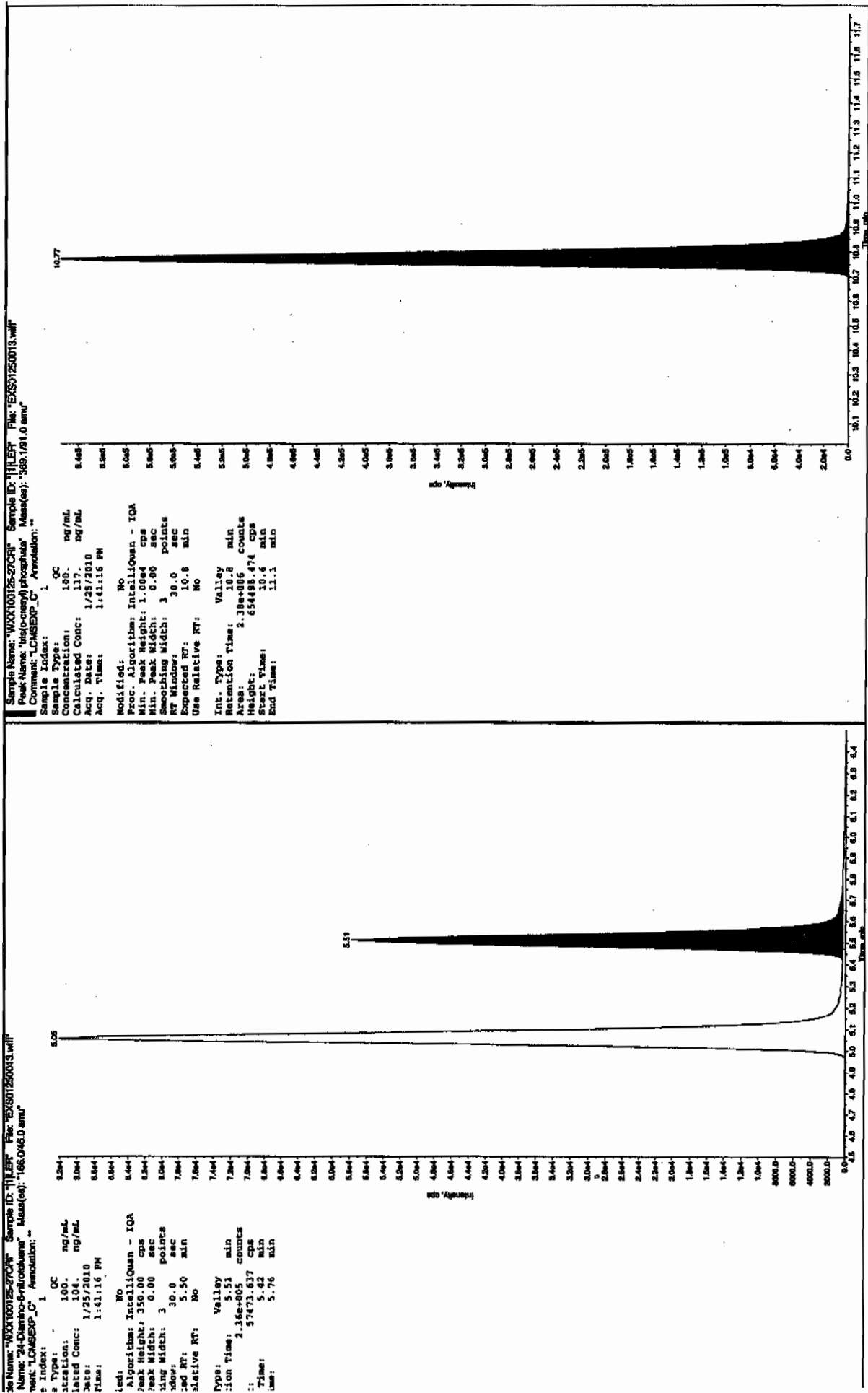
See 1127110



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250024.wiff

Analysis Date: 25-JAN-10 16:33

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	456	91	
2,6-Diamino-4-nitrotoluene	500	429	86	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	523	105	
TATB	500	534	107	
tris(o-cresyl) phosphate	500	455	91	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

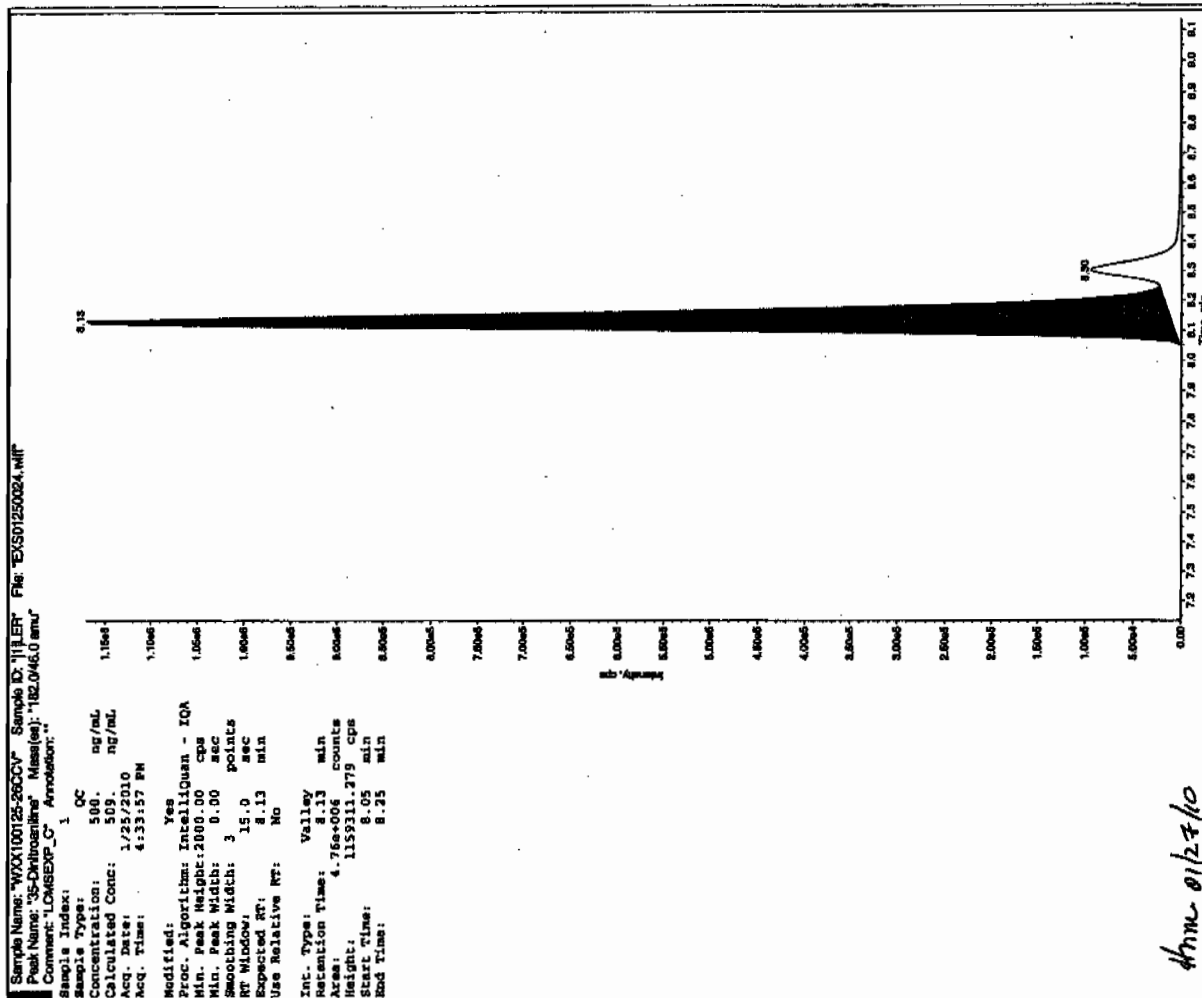
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

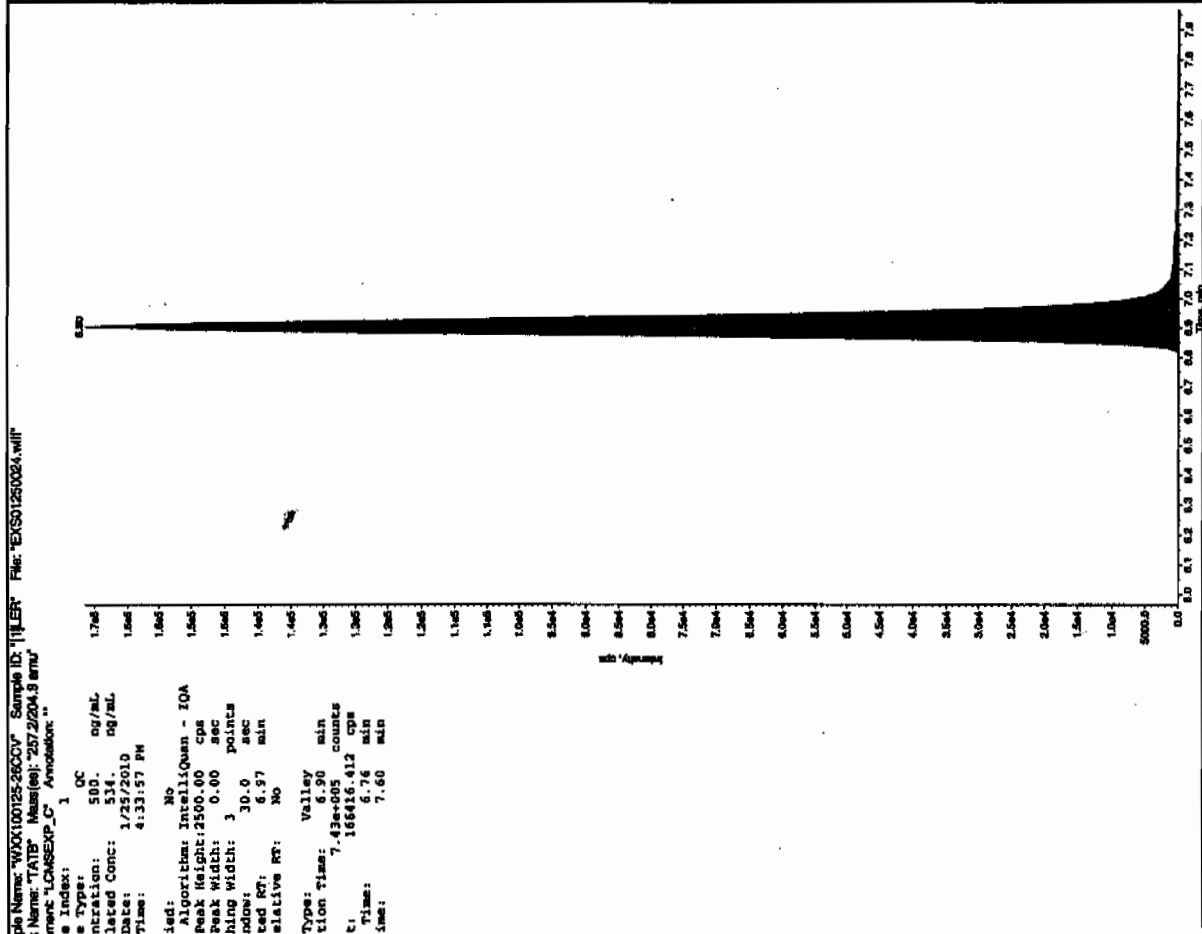
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Scan 1127110

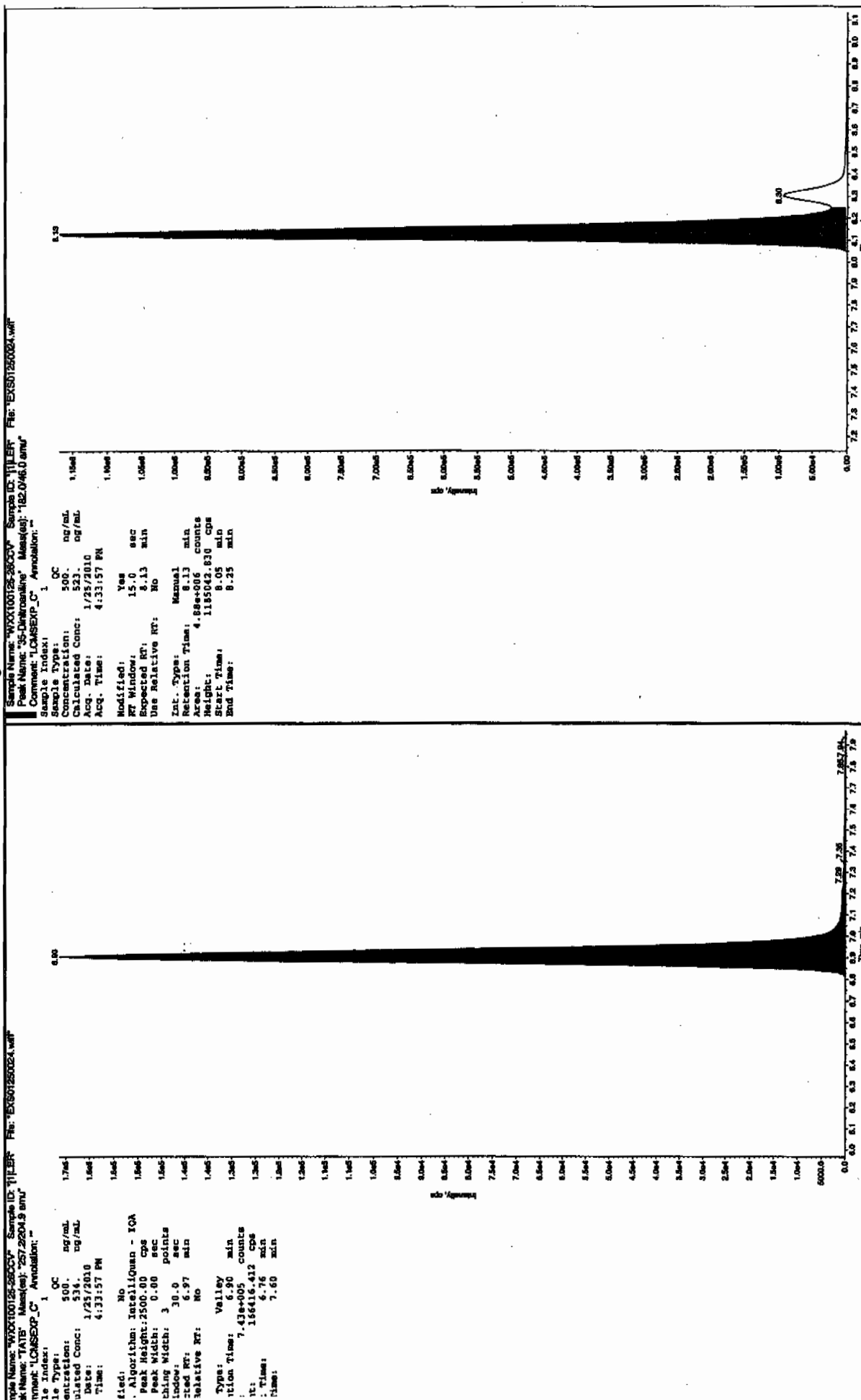


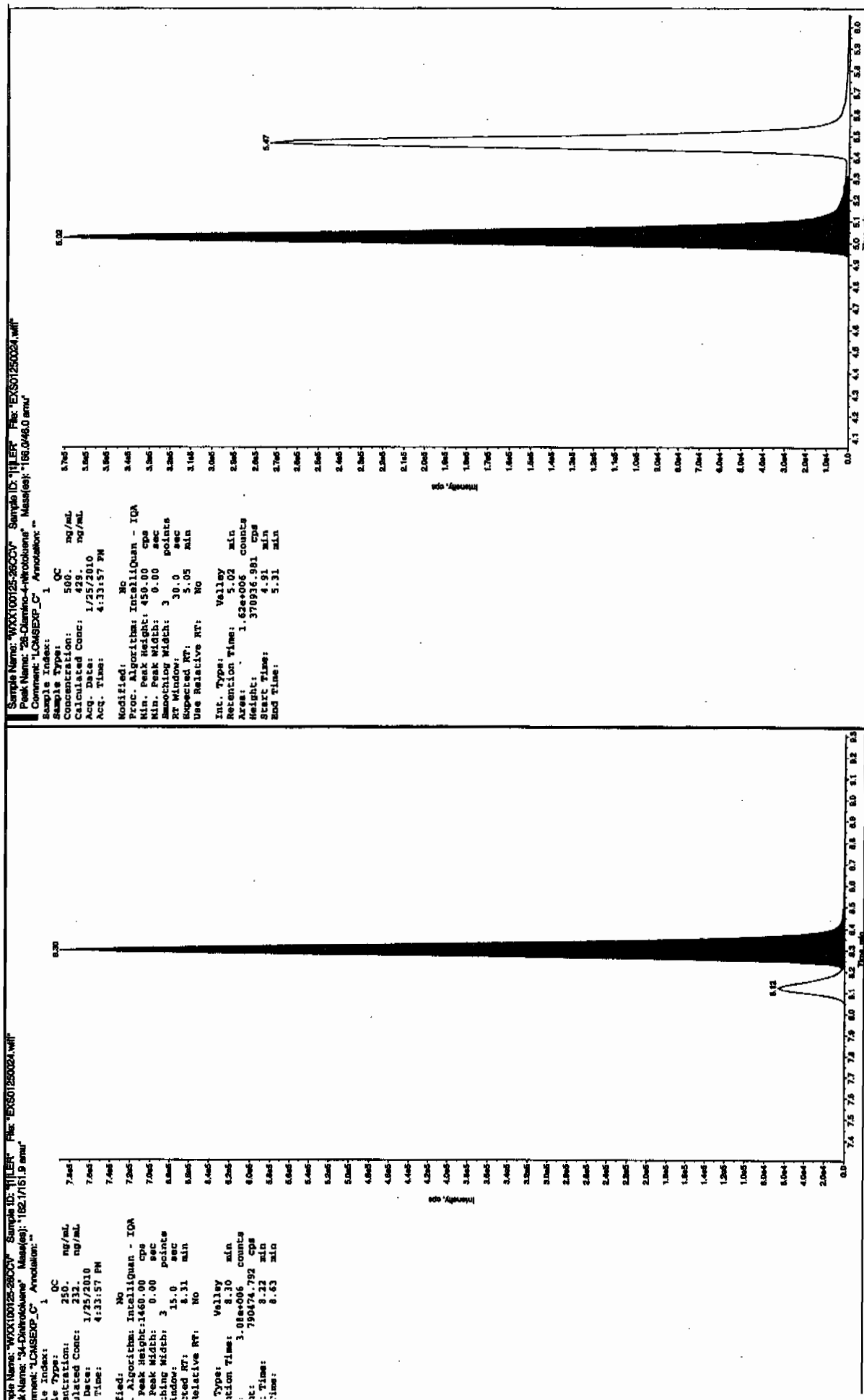
4mm 01/27/10

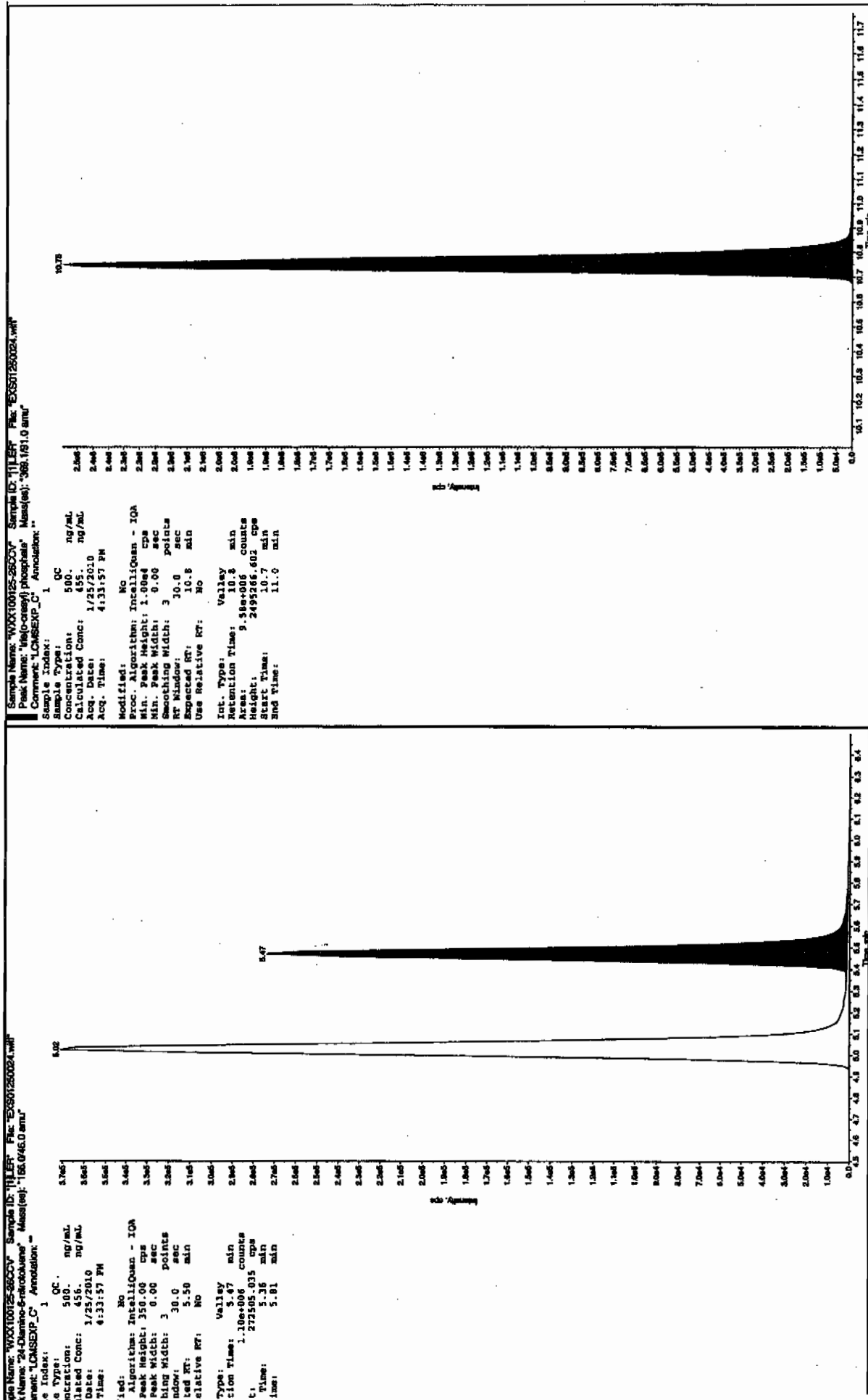


J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 11/2010







, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250026.wiff

Analysis Date: 25-JAN-10 17:05

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	108	108	
3,4-Dinitrotoluene	50	46.3	93	
3,5-Dinitroaniline	100	105	105	
TATB	100	99.8	100	
tris(o-cresyl) phosphate	100	110	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

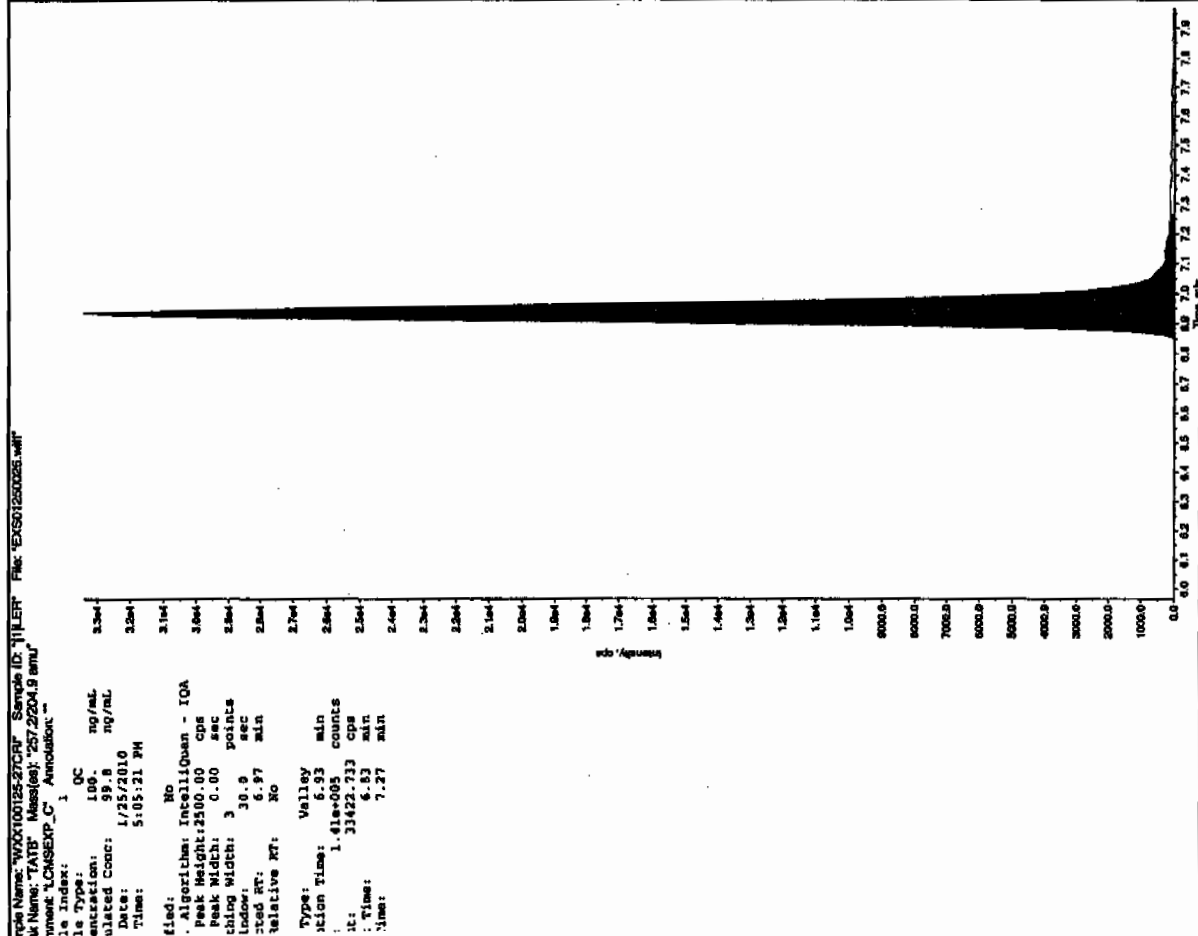
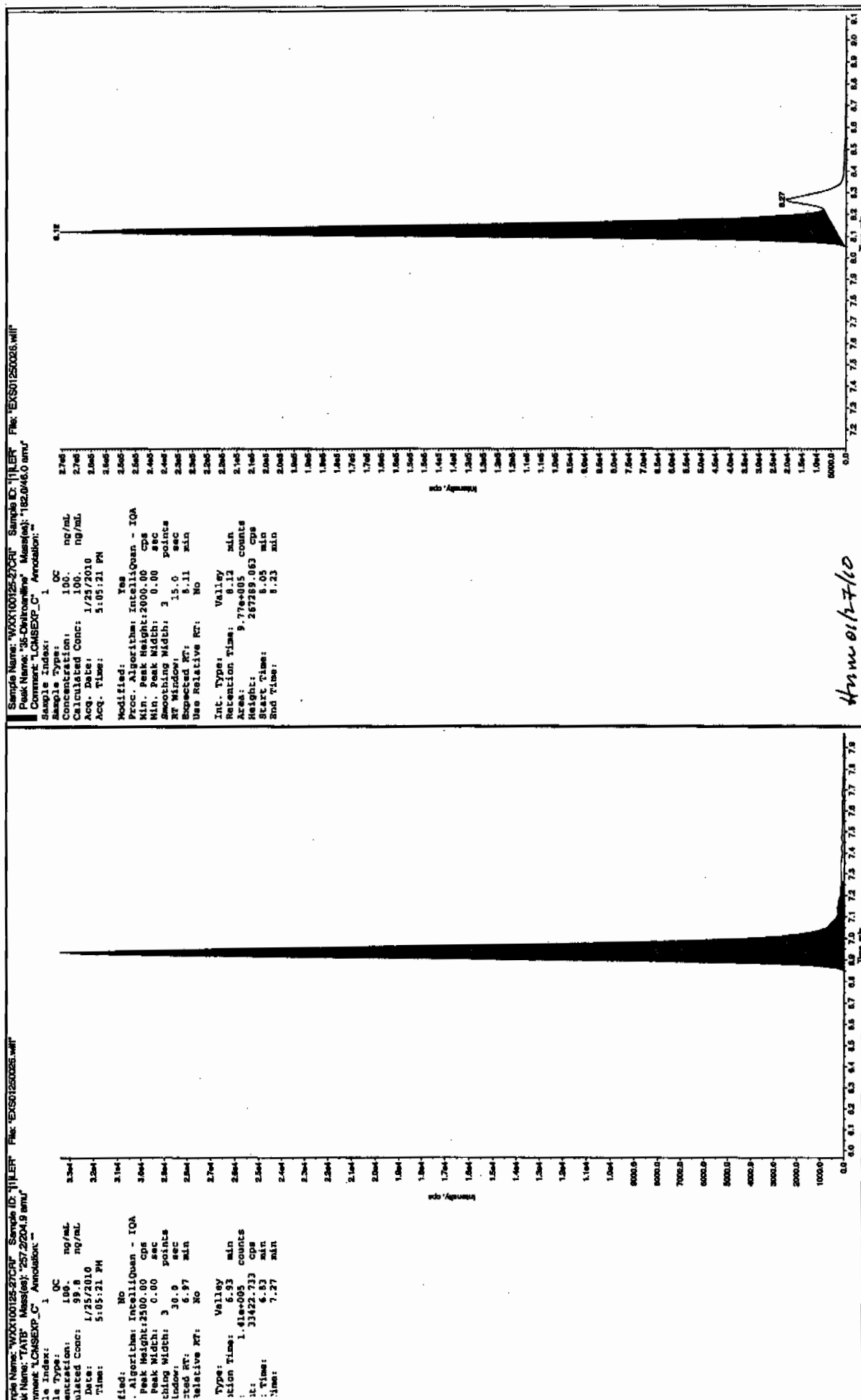
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

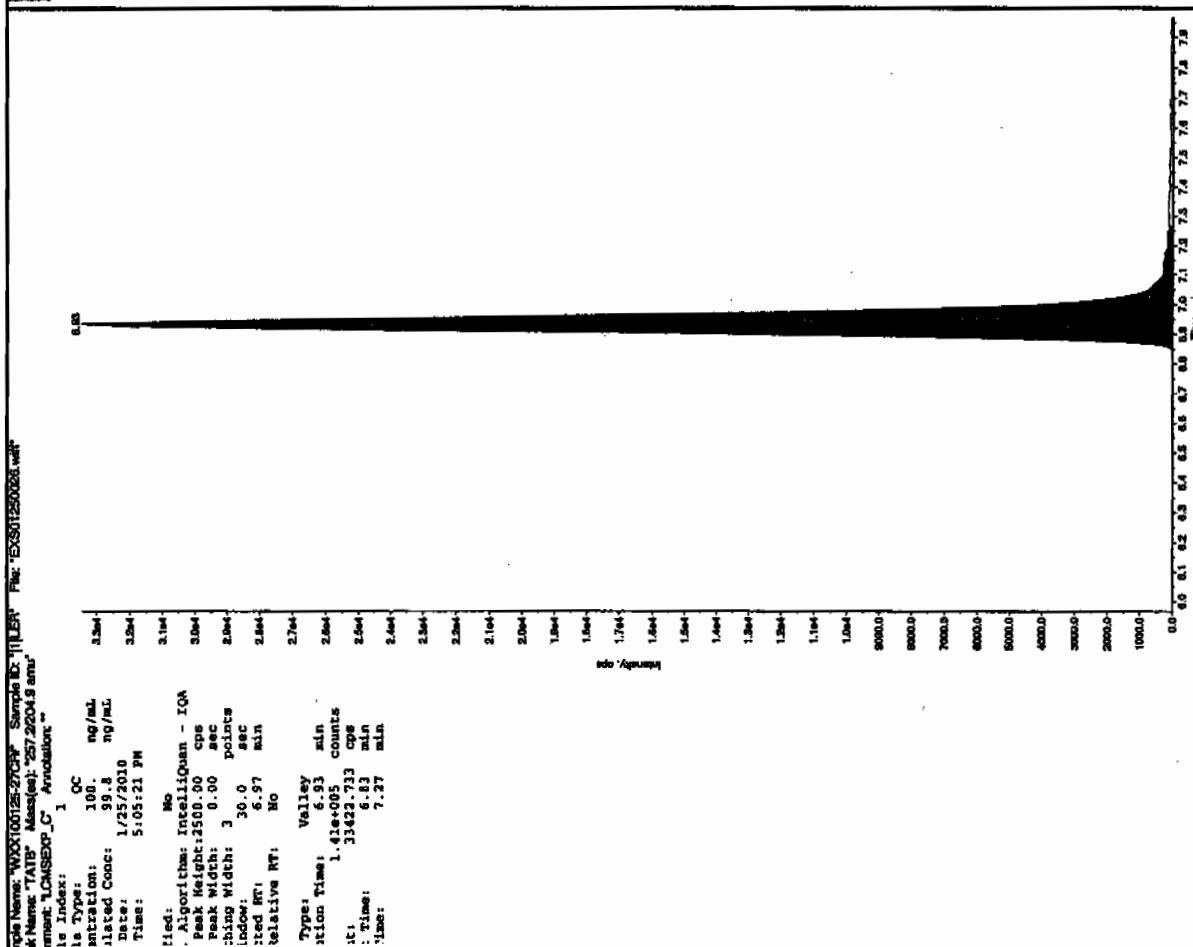
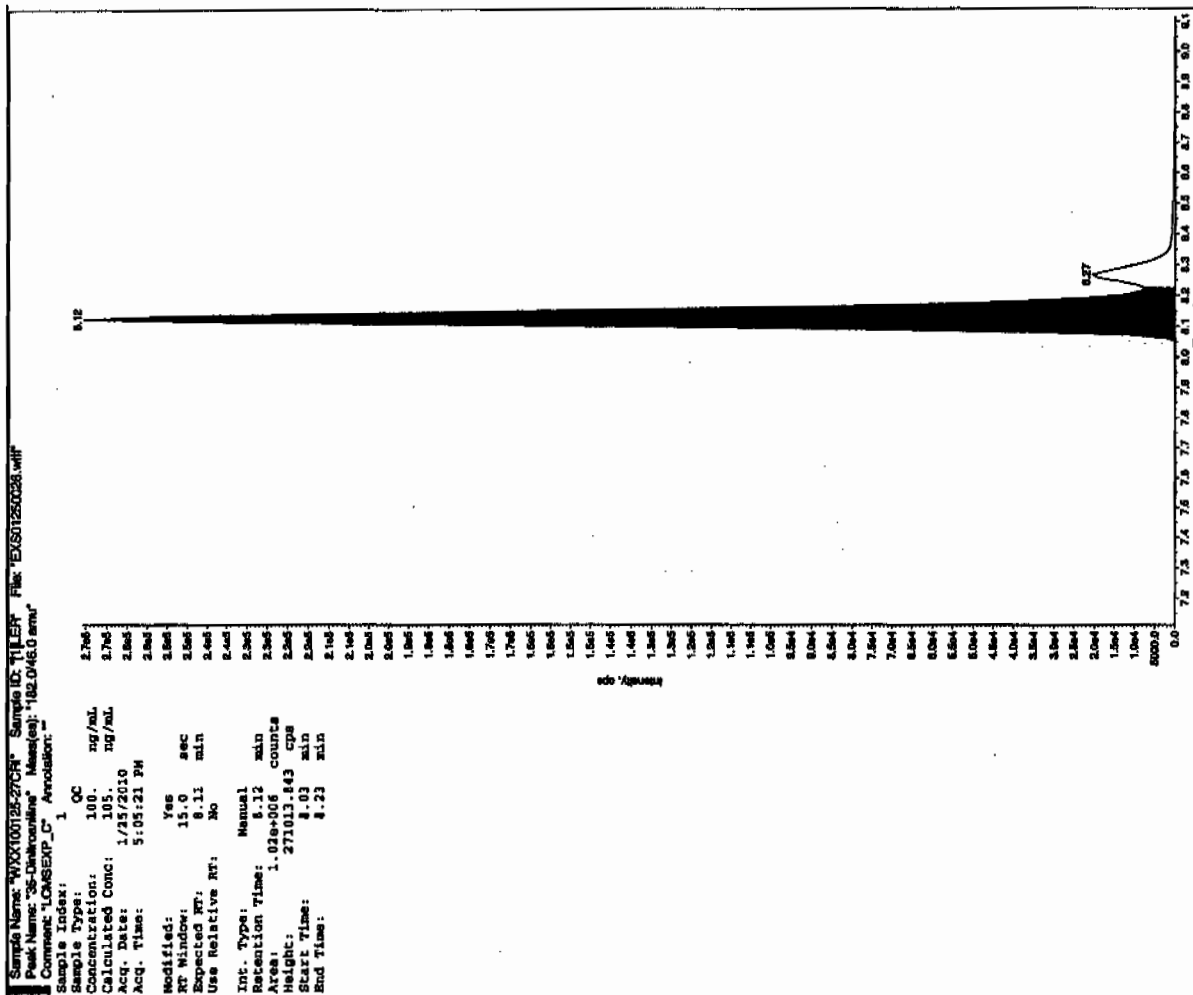
Column used to flag Recovery outside of Limits

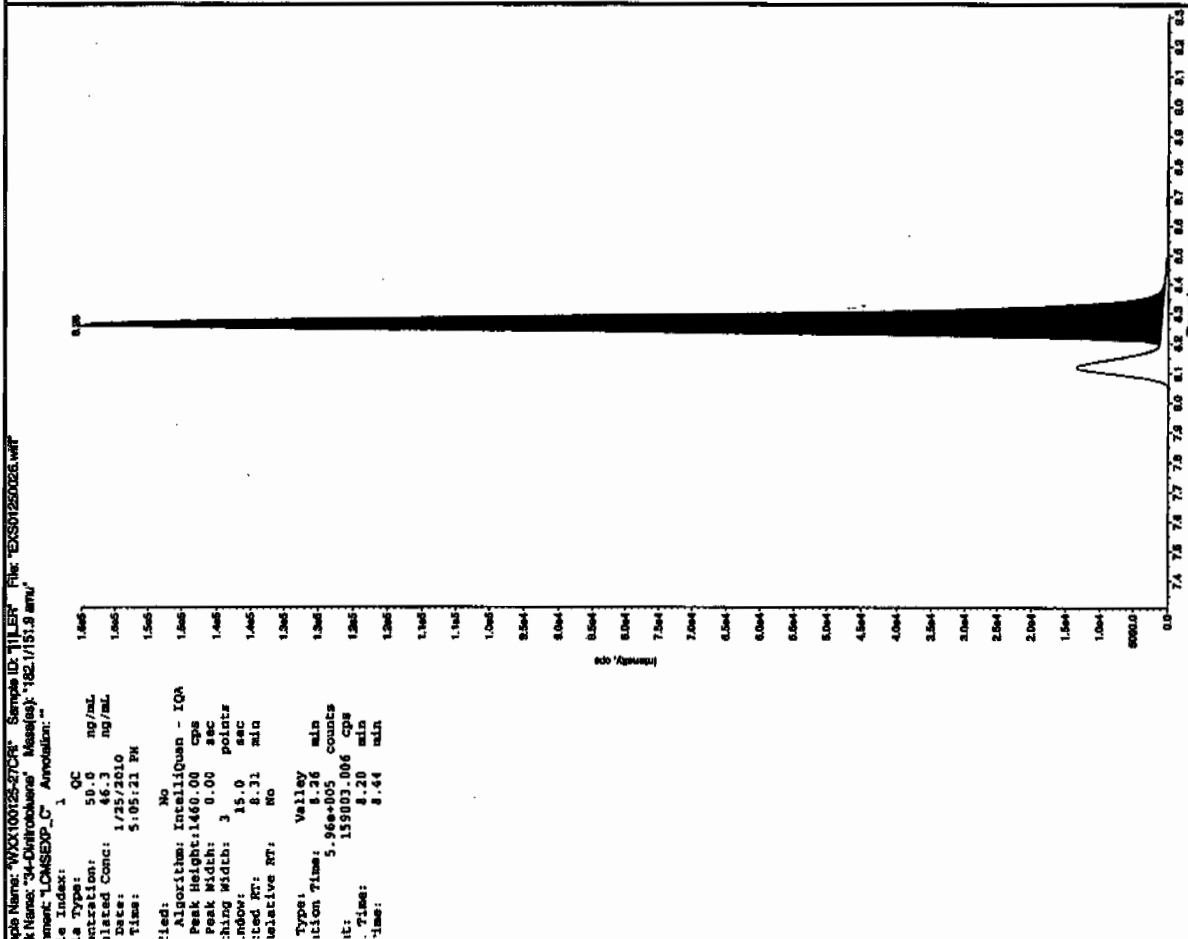
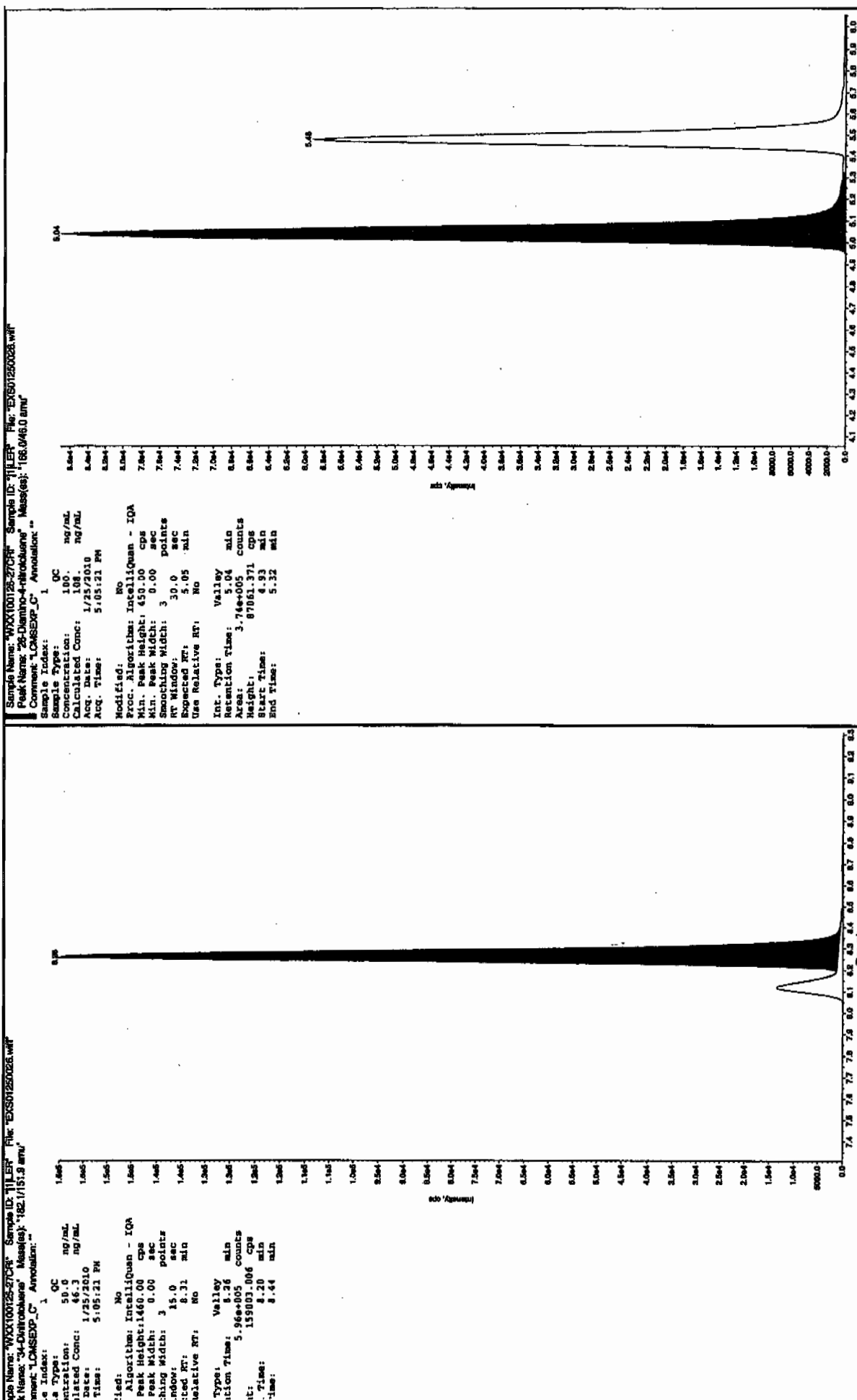
* Value outside of Recovery Limits

Before Scan 1127110



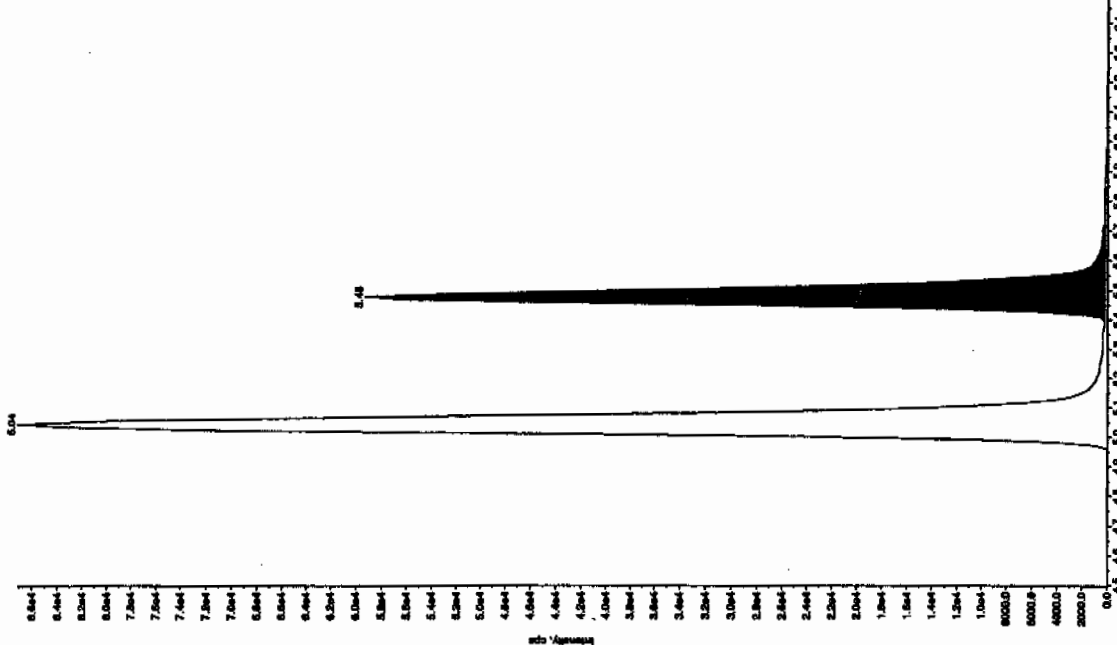
after scan 167/10





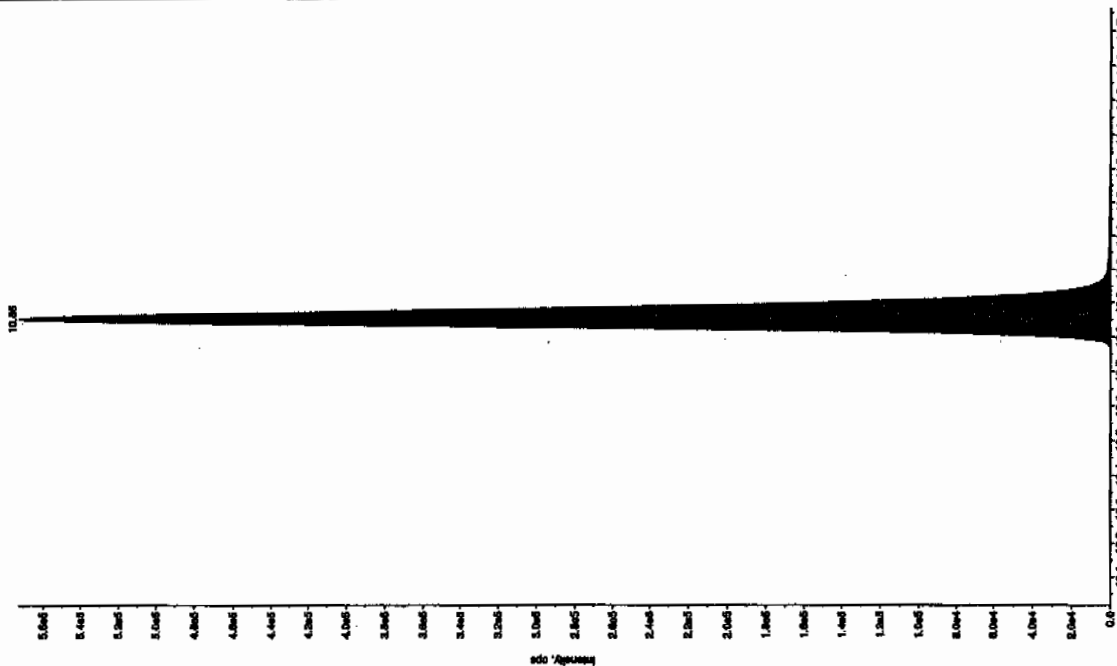
Sample Name: "W0X100125-2704" Sample ID: "11111" File: "EX0101250028.wif"
 Peak Name: "24-Chloro-6-nitrofluorene" Mass(es): "168.04610 amu"
 Comment: "LCMS2P_C" Annotation: ""

Sample Index: 1
 Sample Type: 100 ng/mL
 Concentrated Conc: 1/25/2010
 Acq. Date: 5:05:21 PM
 Acq. Time: 5:05:21 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Peak Height: 2.35e5 counts
 Peak Width: 2.35e5 counts
 Start Time: 10.8 min
 End Time: 11.1 min



Sample Name: "W0X100125-2704" Sample ID: "11111" File: "EX0101250028.wif"
 Peak Name: "24-Chloro-6-nitrofluorene" Mass(es): "368.19110 amu"
 Comment: "LCMS2P_C" Annotation: ""

Sample Index: 1
 Sample Type: 100 ng/mL
 Concentrated Conc: 1/25/2010
 Acq. Date: 5:05:21 PM
 Acq. Time: 5:05:21 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Peak Height: 2.35e5 counts
 Peak Width: 2.35e5 counts
 Start Time: 10.8 min
 End Time: 11.1 min



7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250037.wiff

Analysis Date: 25-JAN-10 19:58

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	471	94	
2,6-Diamino-4-nitrotoluene	500	433	87	
3,4-Dinitrotoluene	250	219	88	
3,5-Dinitroaniline	500	494	99	
TATB	500	508	102	
tris(o-cresyl) phosphate	500	486	97	

Recovery Limits:

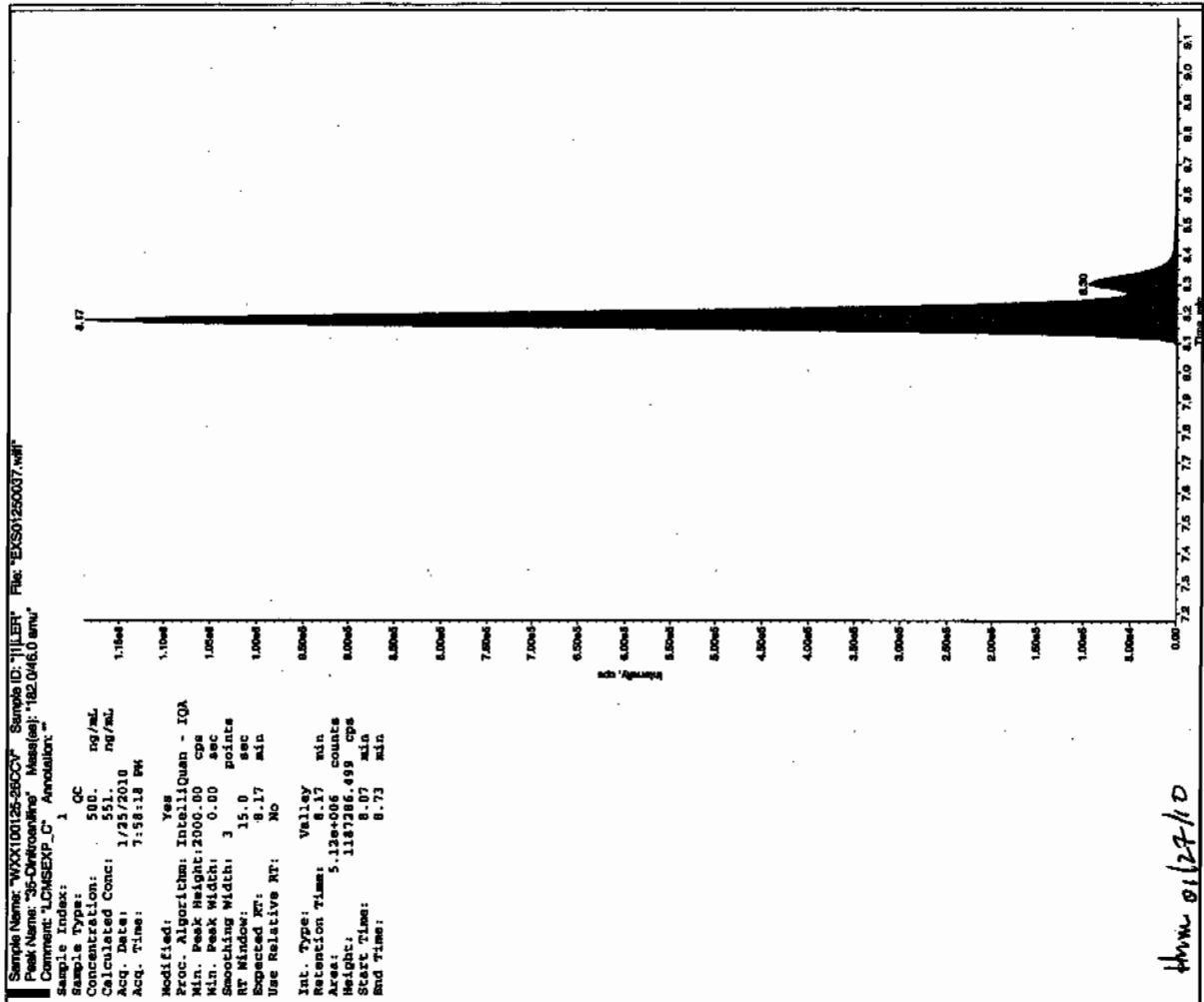
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

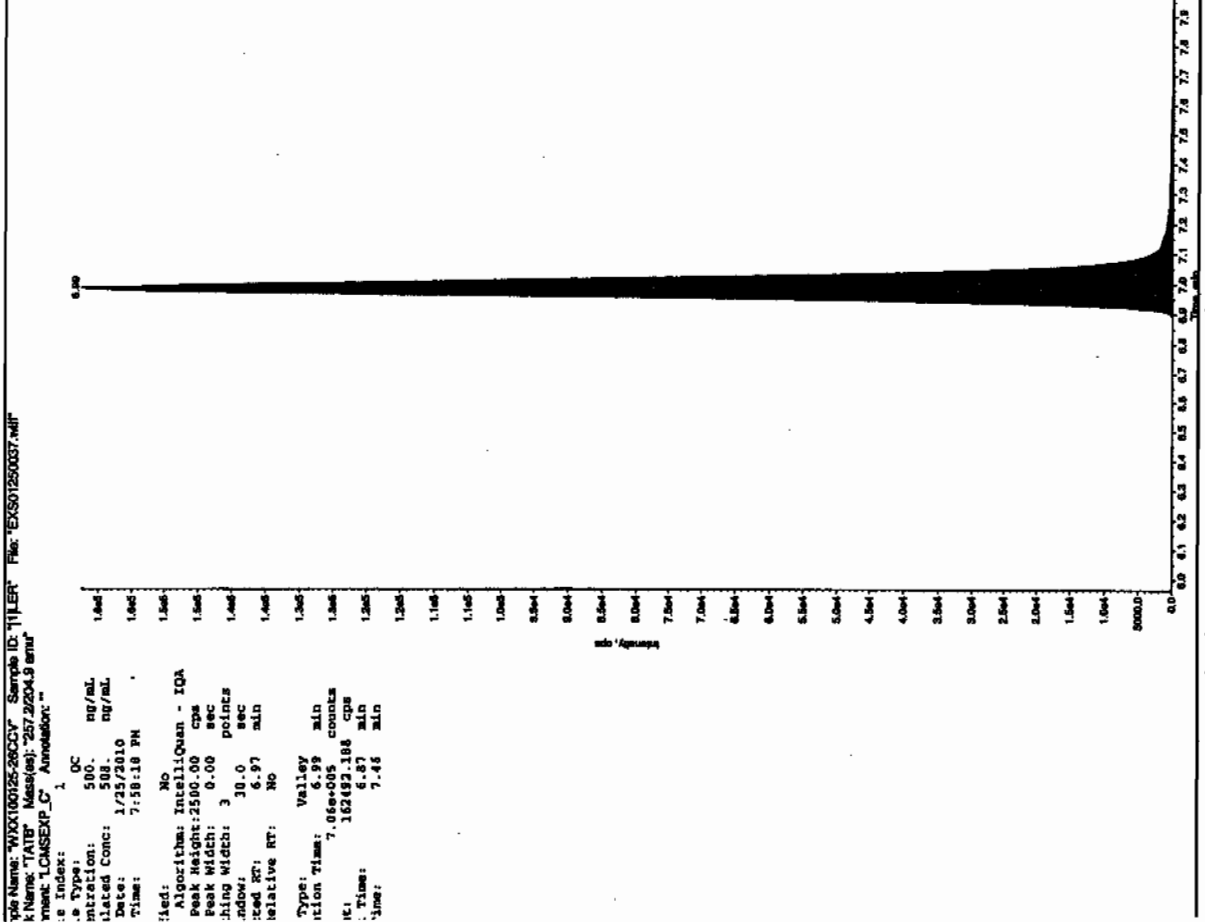
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before 11/27/10

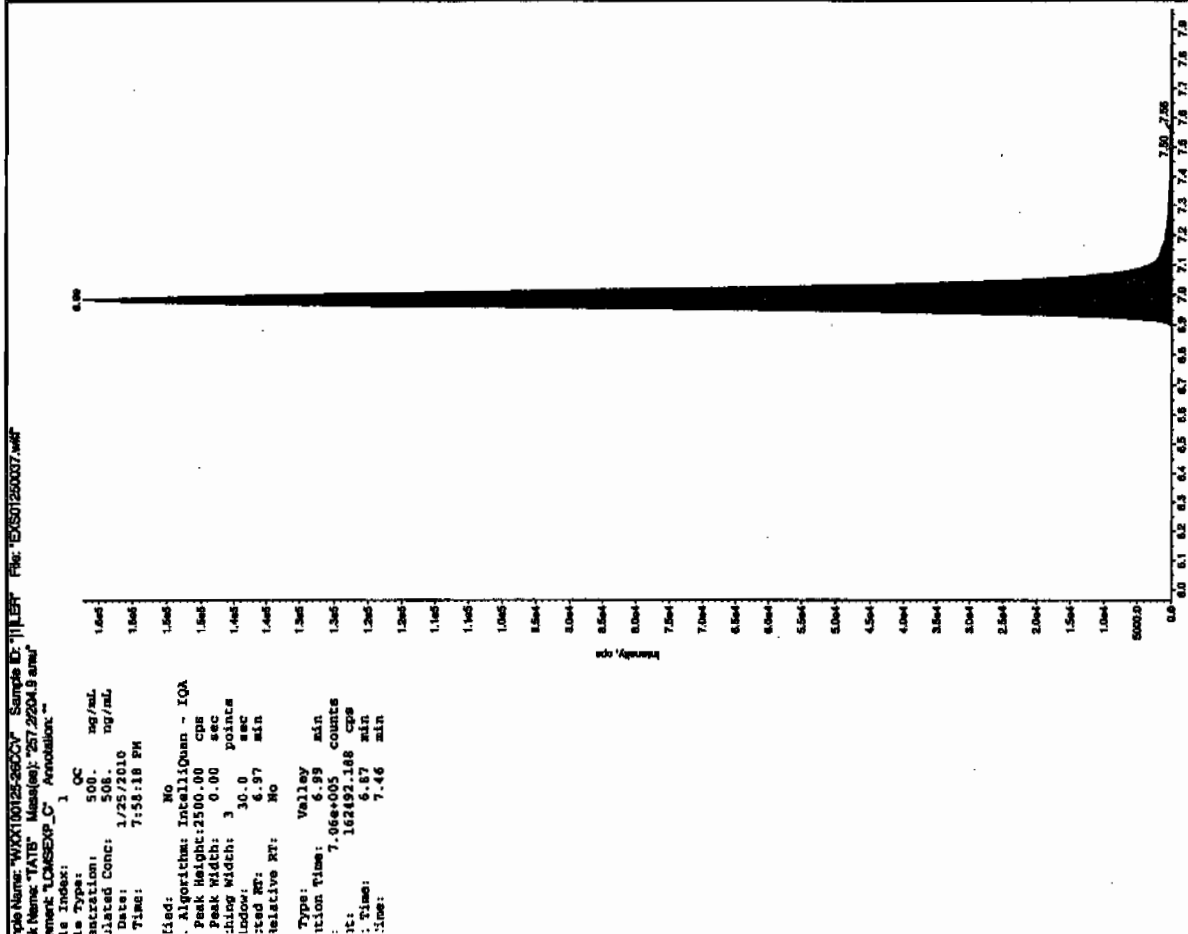
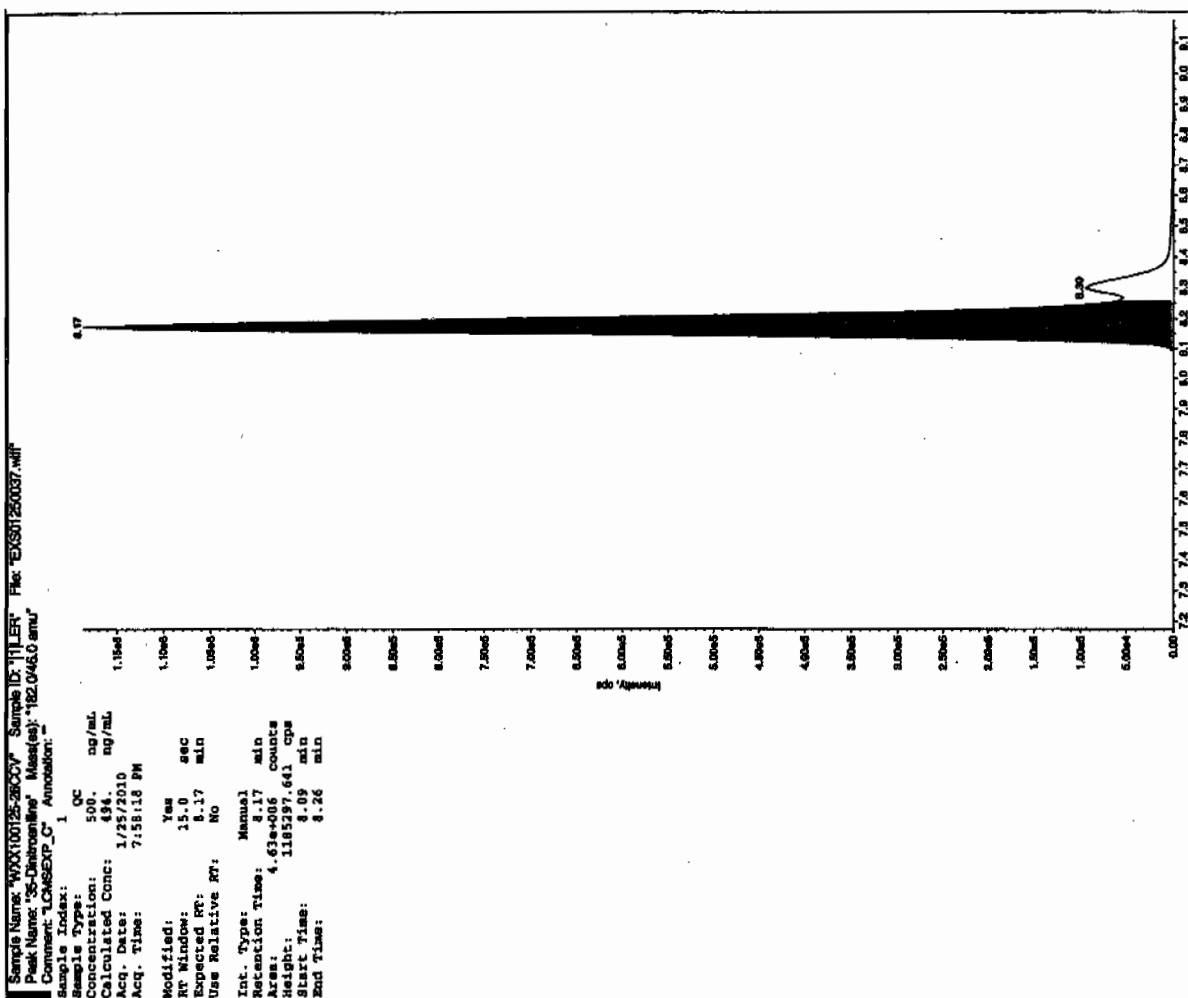


After 01/27/10

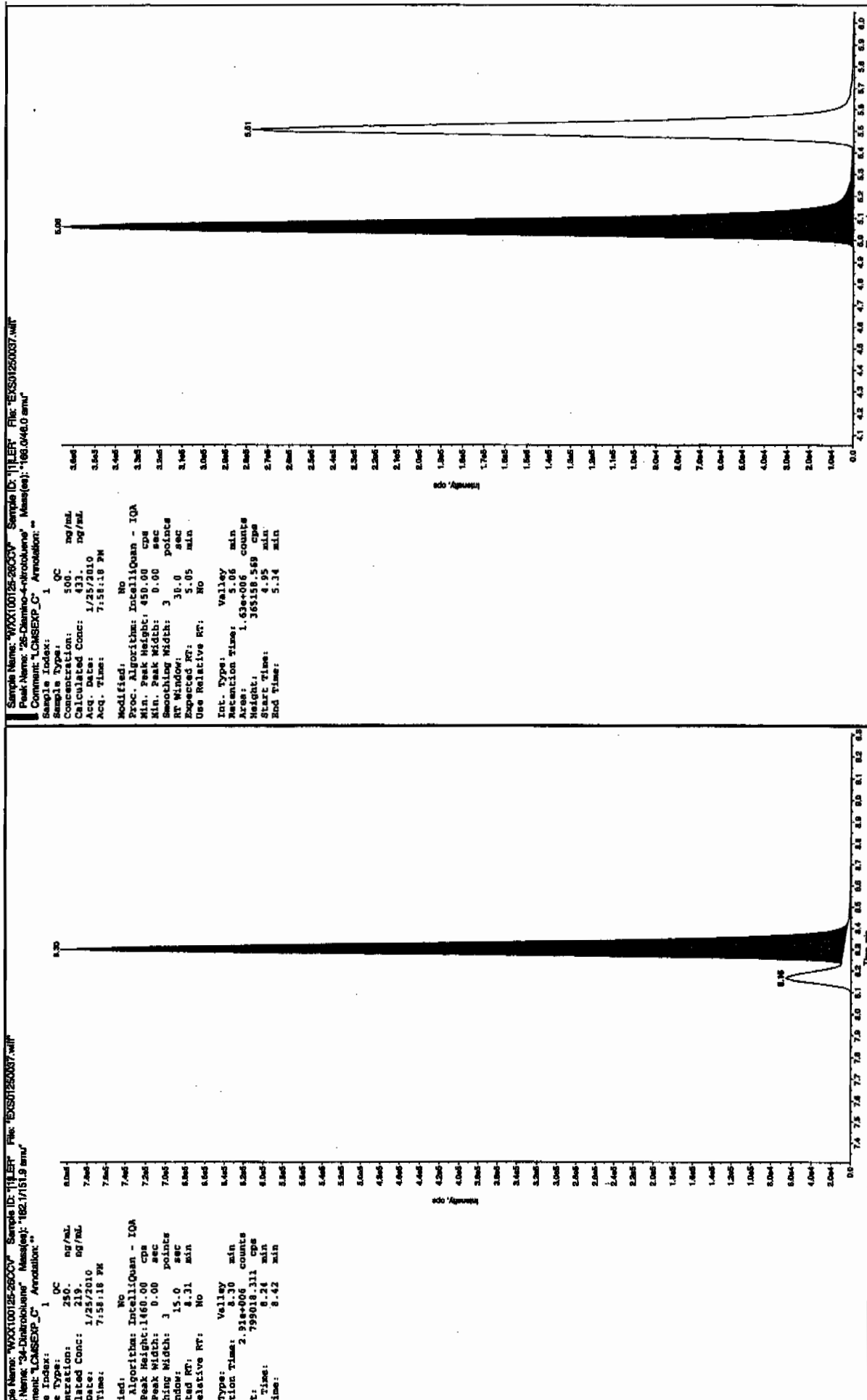


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

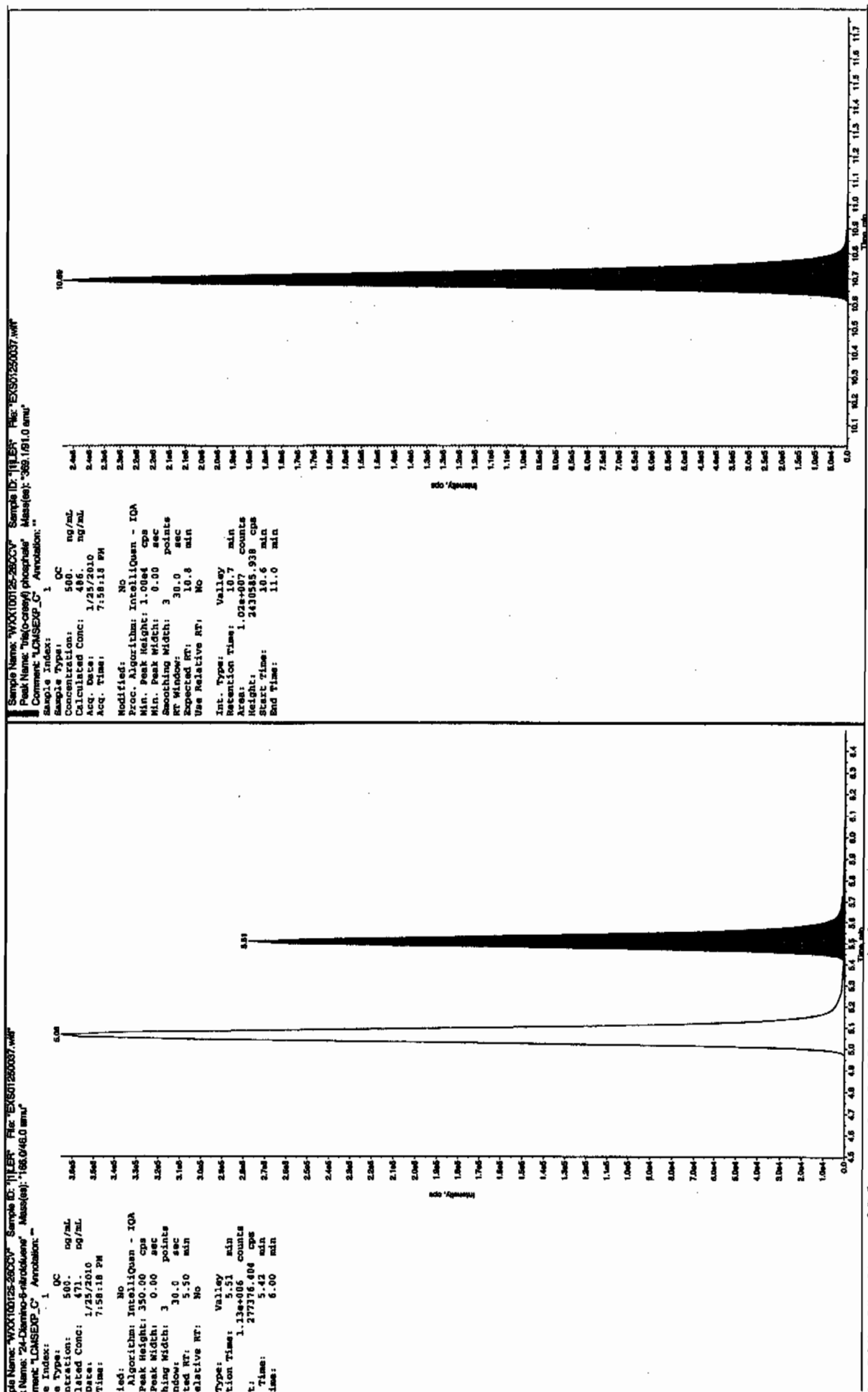
after Jan 11/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250039.wiff

Analysis Date: 25-JAN-10 20:29

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	97.3	97	
3,4-Dinitrotoluene	50	46.6	93	
3,5-Dinitroaniline	100	104	104	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	111	111	

Recovery Limits:

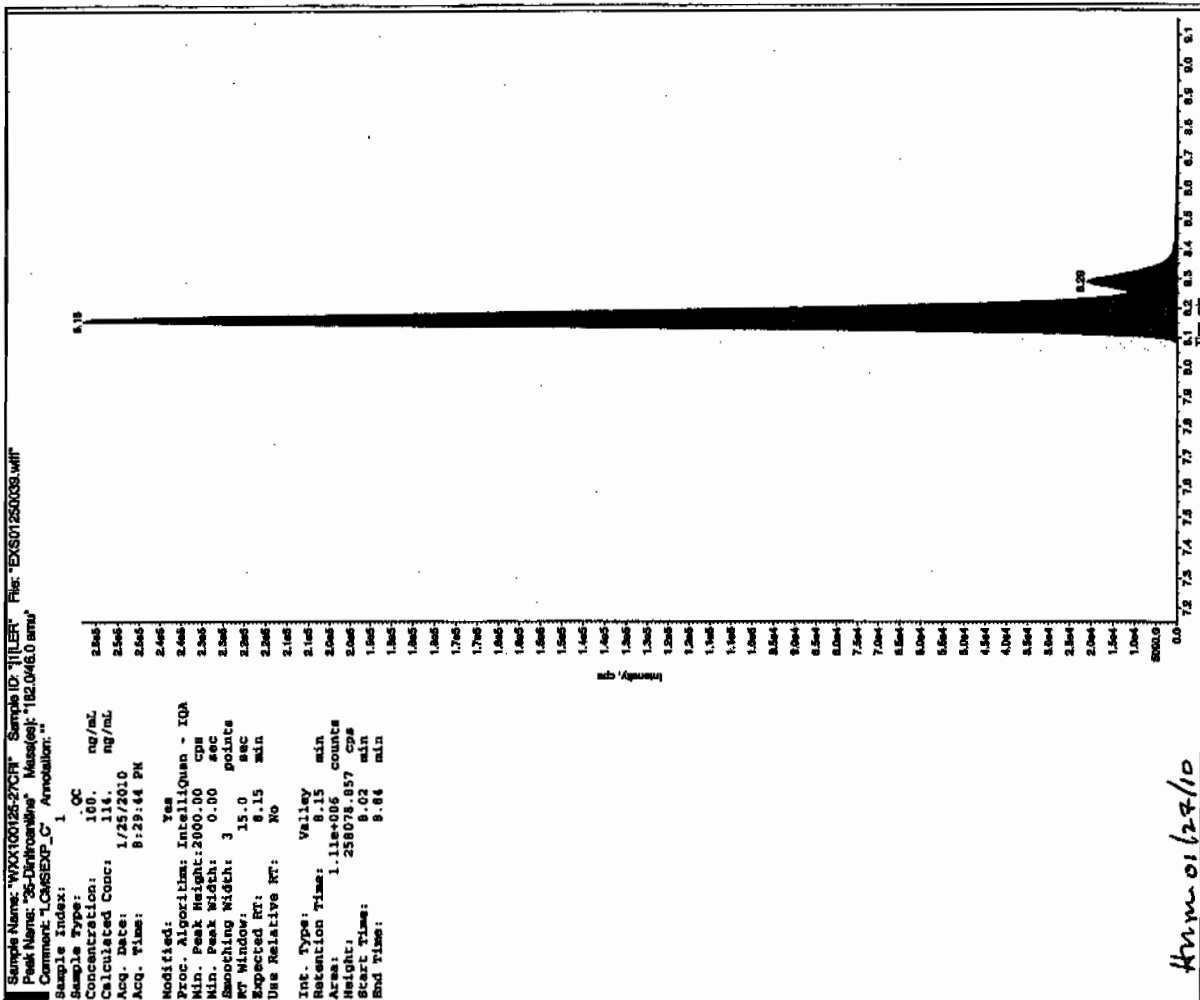
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

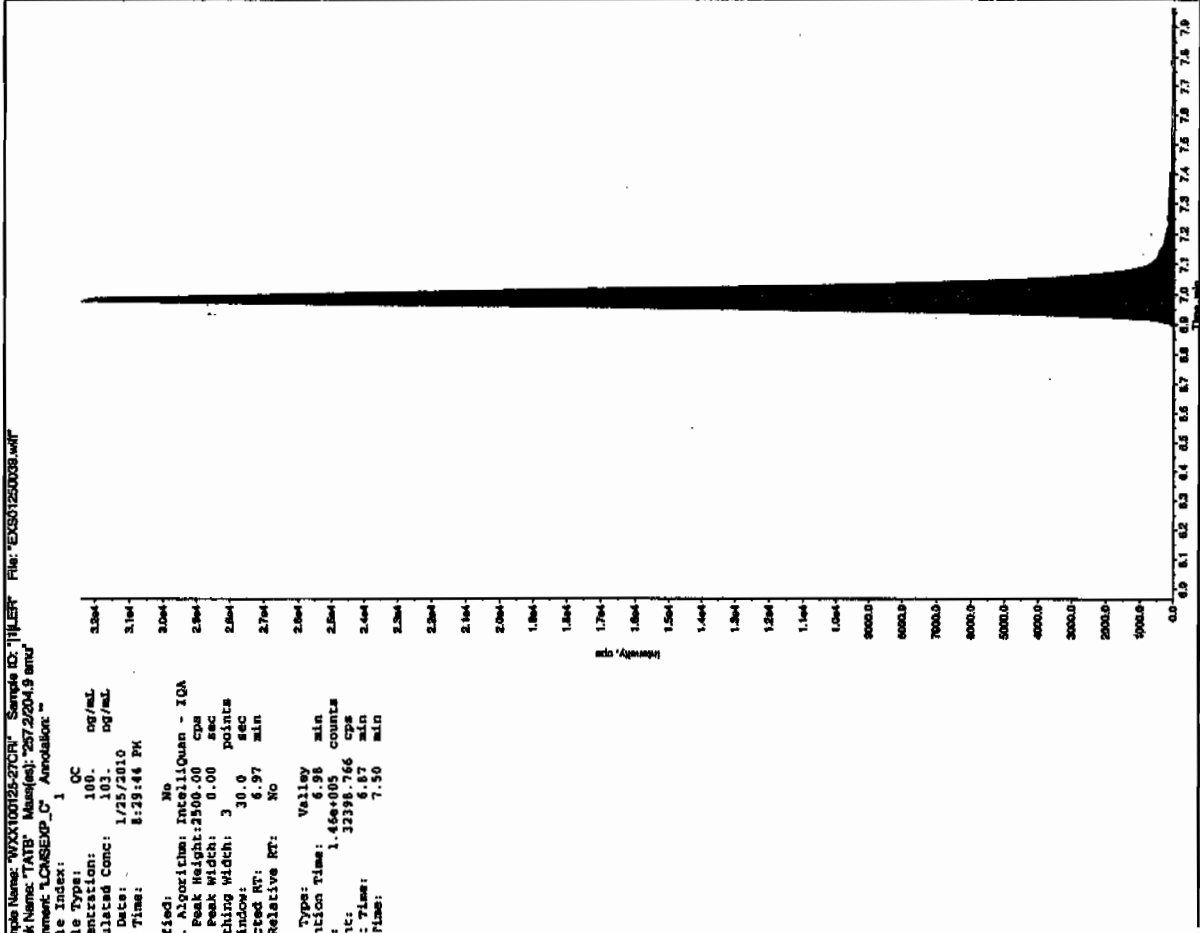
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 11/27/10

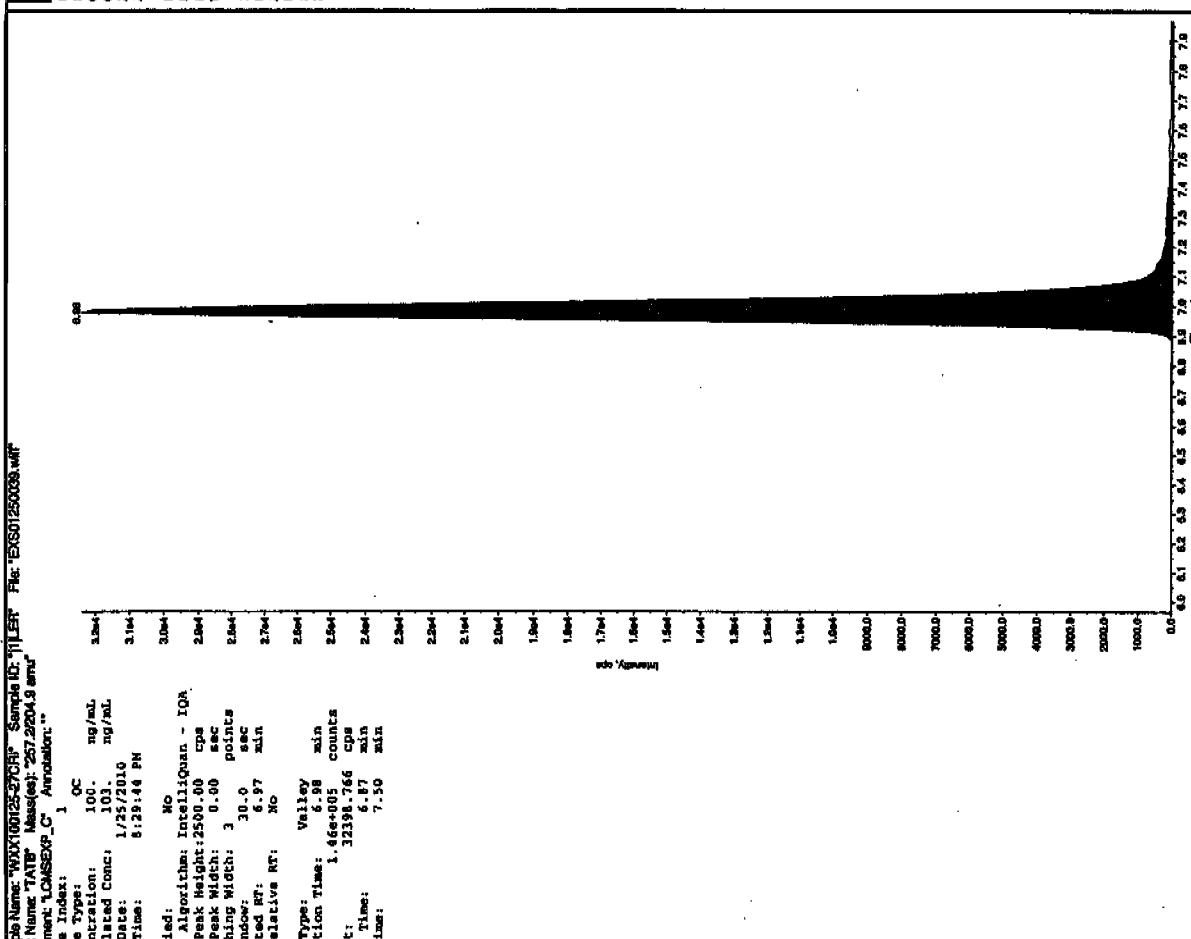
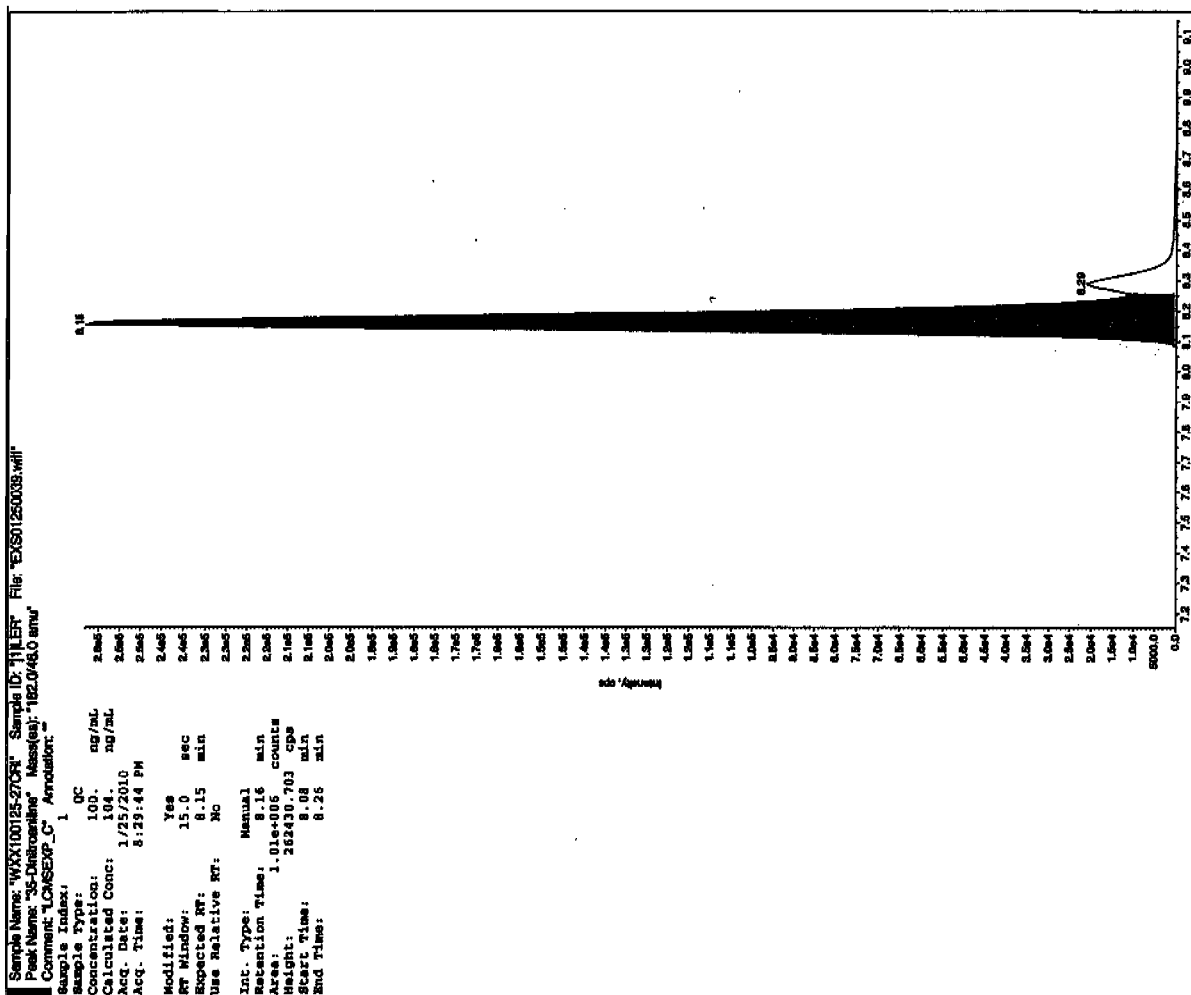


Ann-01/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

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L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

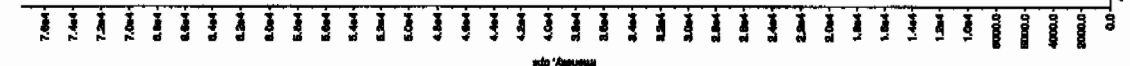
File Name: "W00100125-27039" Sample ID: "T1LRF" File: "EX01250038.wif"
 Peak Name: "28-Diamino-4-nitrobenzene" Mass(es): "182.17151 amu"
 Comment: "LCMS-EXP_C" Annotation: ""

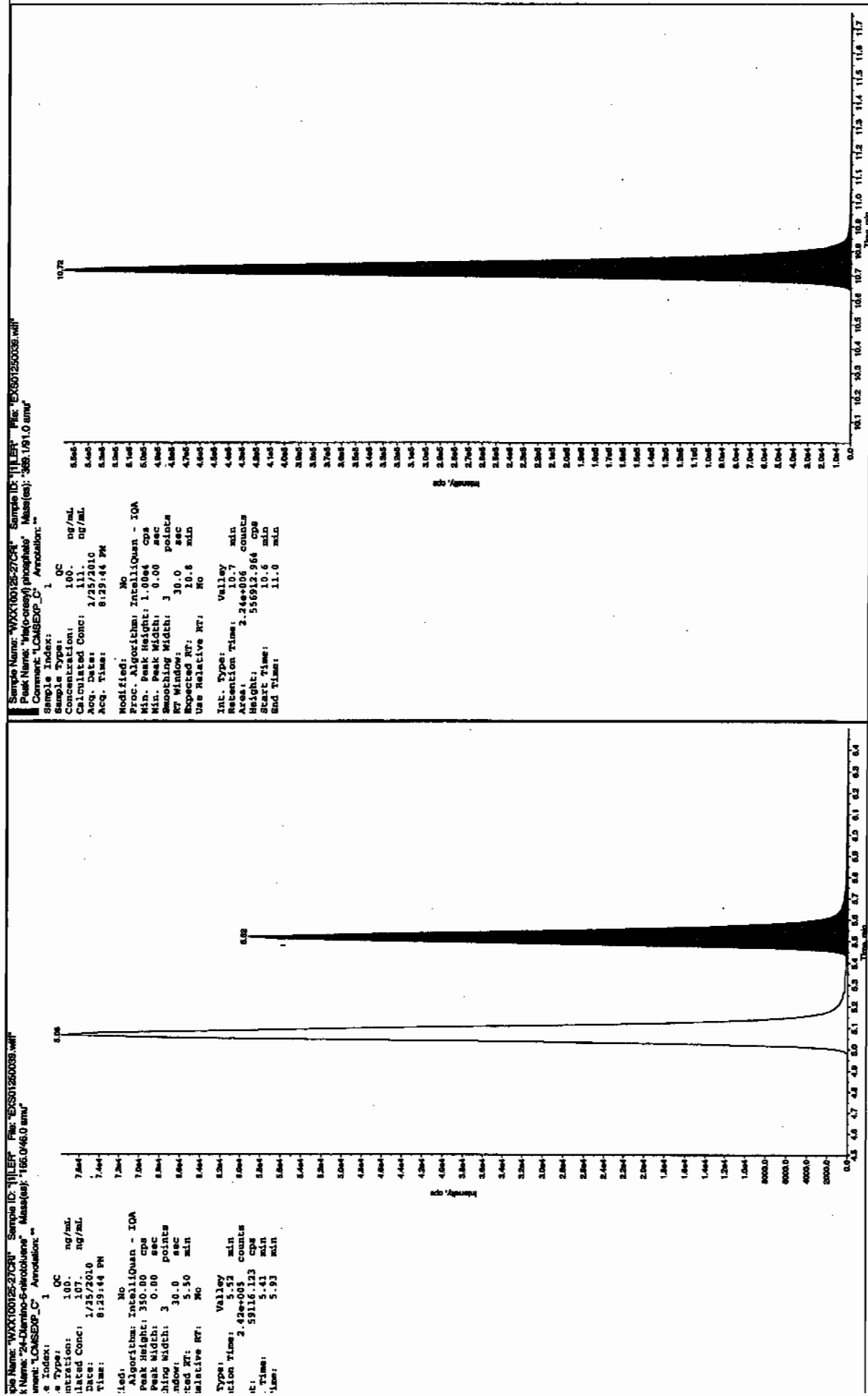
Sample Index: 1
 Sample Type: QC
 Concentration: 100.0 ng/mL
 Calculated Conc: 173.3 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 8:29:44 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.29 min
 Area: 6.00e+005 counts
 Height: 15537.292 cps
 Start Time: 8.22 min
 End Time: 8.32 min



Sample Name: "W00100125-27039" Sample ID: "T1LRF" File: "EX01250038.wif"
 Peak Name: "28-Diamino-4-nitrobenzene" Mass(es): "186.04610 amu"
 Comment: "LCMS-EXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100.0 ng/mL
 Calculated Conc: 173.3 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 8:29:44 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Peak Height: 450.00 cps
 Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.06 min
 Area: 3.32e+005 counts
 Height: 77676.033 cps
 Start Time: 4.96 min
 End Time: 5.28 min





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250045.wiff

Analysis Date: 25-JAN-10 22:04

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	503	101	
3,4-Dinitrotoluene	250	214	85	
3,5-Dinitroaniline	500	499	100	
TATB	500	482	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 11/27/10

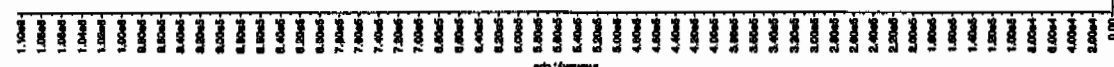
File Name: "WXX100125-280CV" Sample ID: "11187" File: "EX501250045.wif"
 Peak Name: "TATP" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 482. ng/mL
 Date: 1/25/2010
 Acq. Time: 10:04:00 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2500.00 cps
 Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.98 min
 Area: 6.72e+005 counts
 Height: 150136.551 cps
 Start Time: 6.87 min
 End Time: 7.43 min

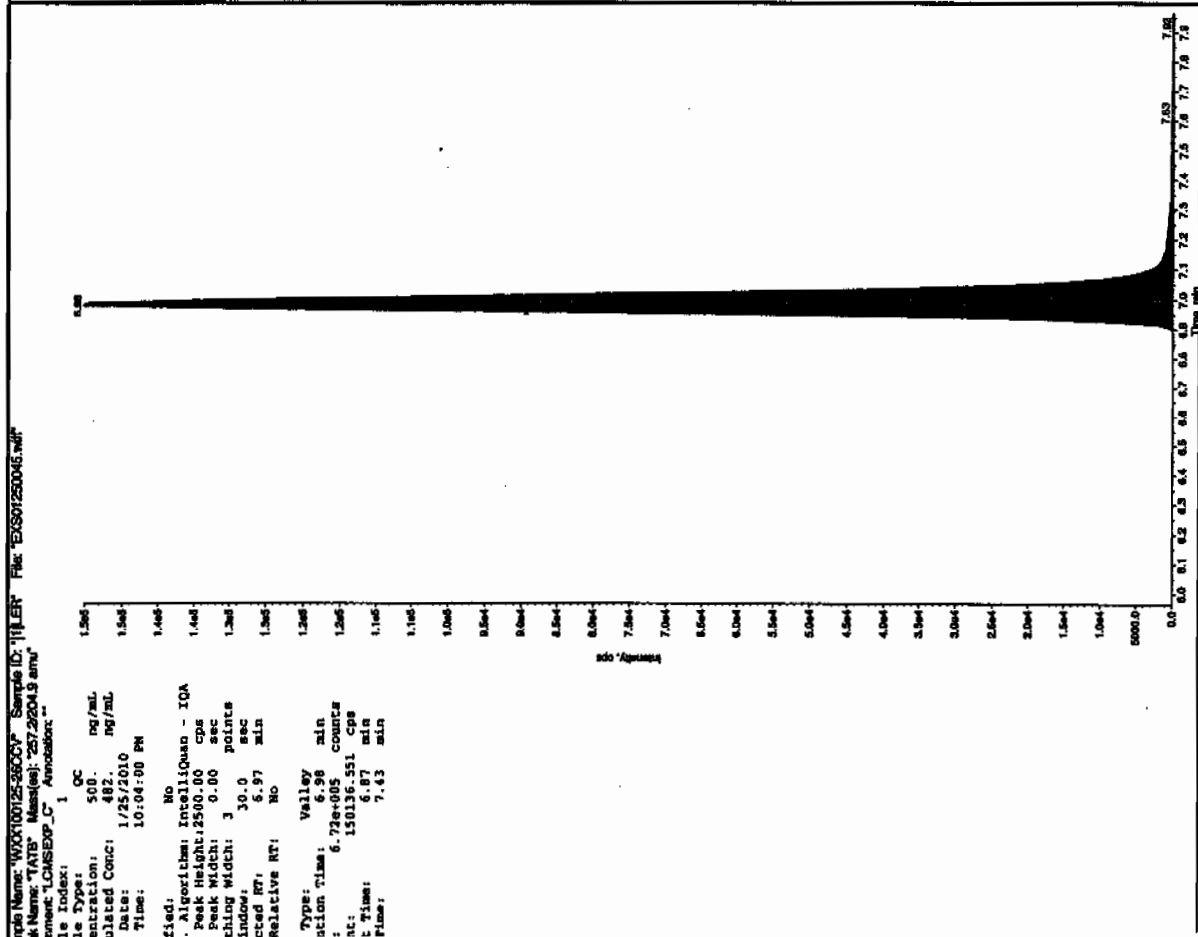
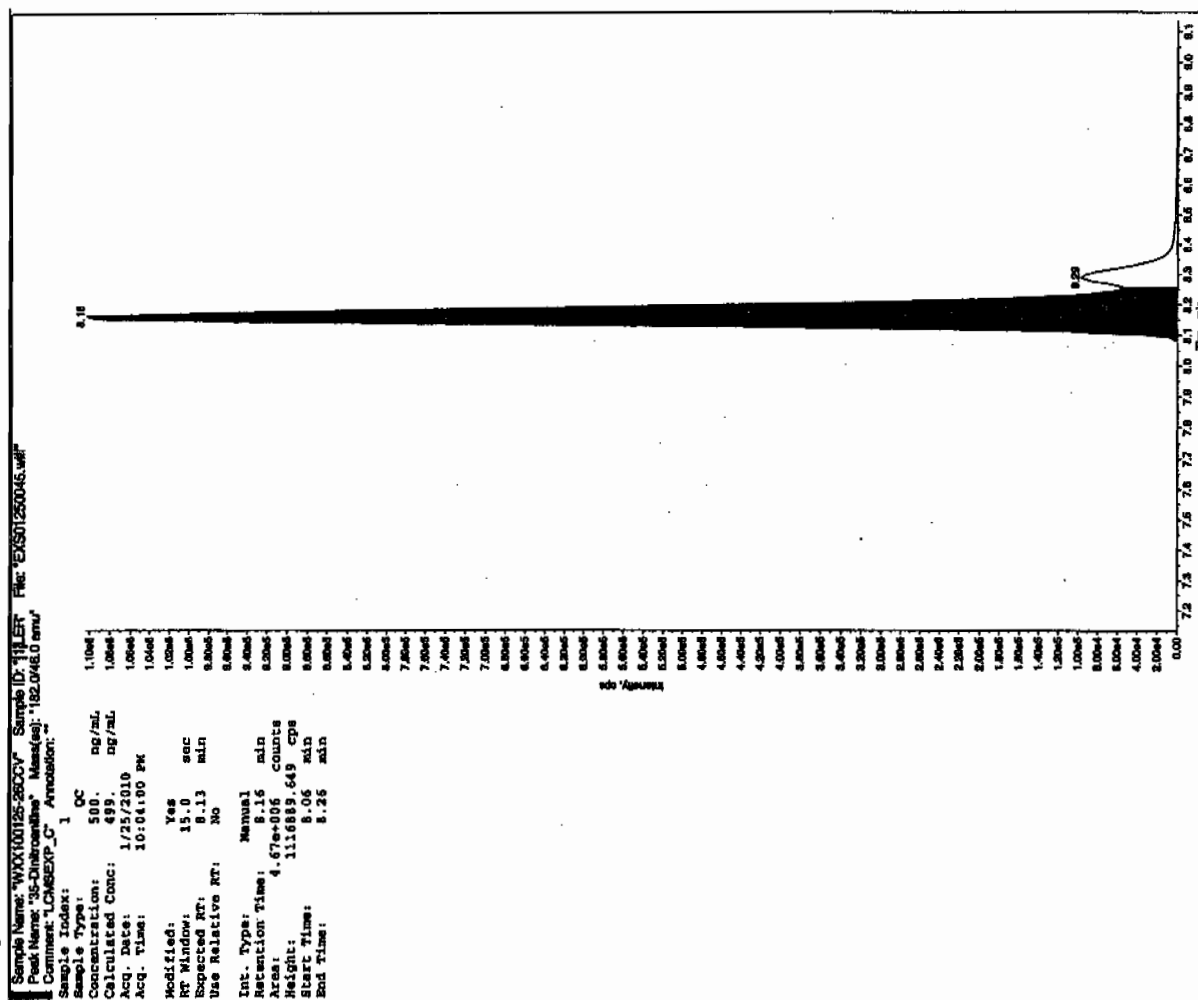


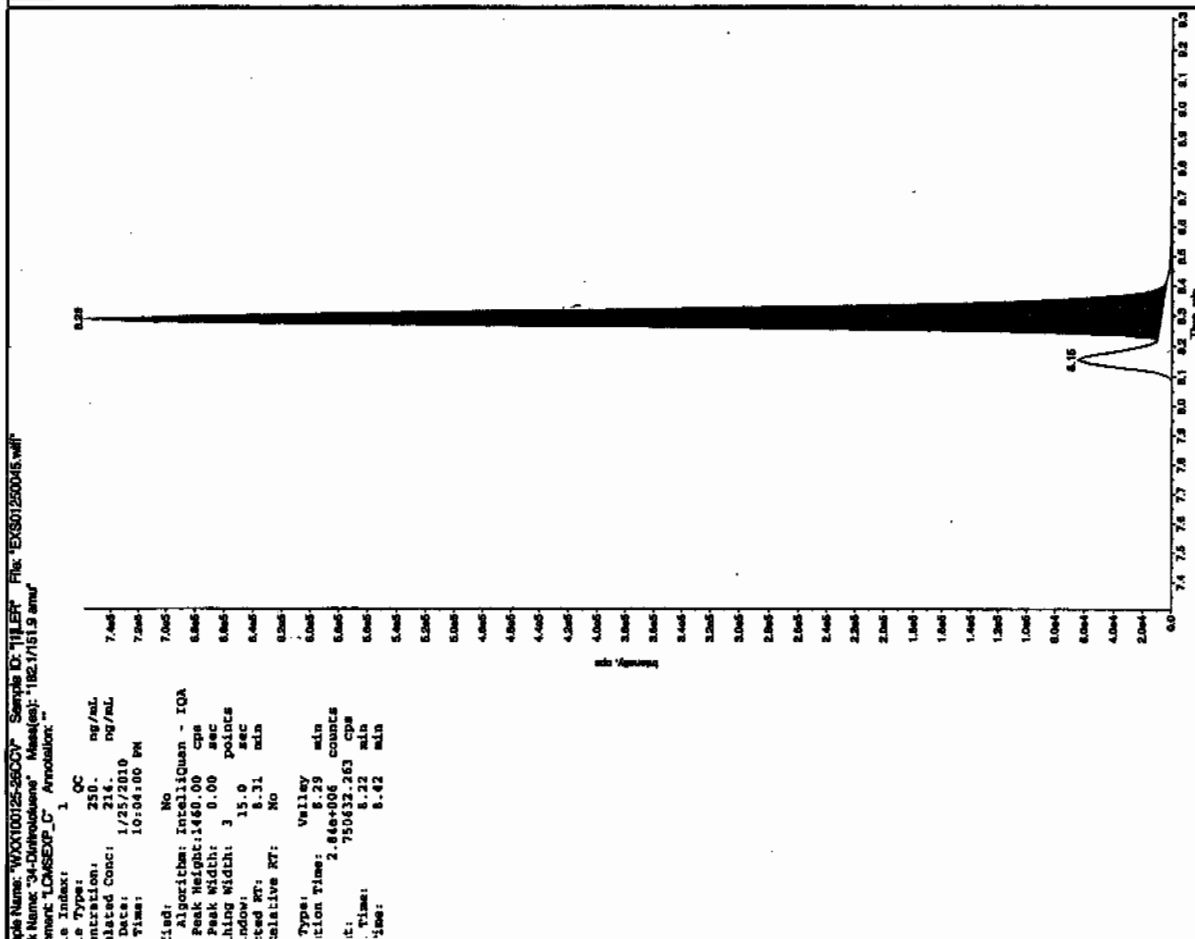
File Name: "WXX100125-280CV" Sample ID: "11187" File: "EX501250045.wif"
 Peak Name: "3S-Dibenzodioxole" Mass(es): "182.0463.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

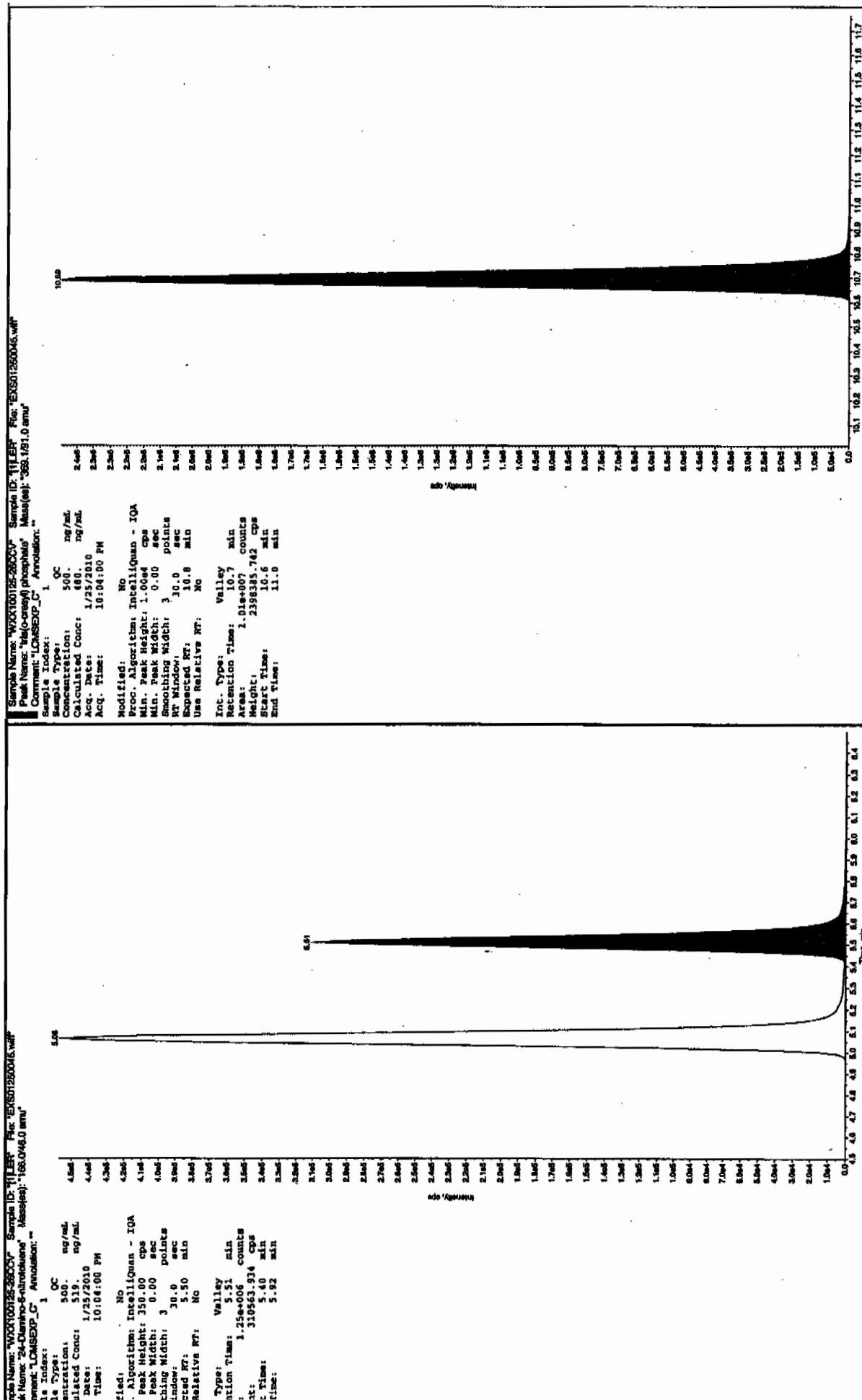
Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 551. ng/mL
 Date: 1/25/2010
 Acq. Time: 10:04:00 PM
 Modified: Yes
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.13 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.16 min
 Area: 5.11e+006 counts
 Height: 1103401.855 cps
 Start Time: 8.05 min
 End Time: 8.72 min



Ann-01/27/10







L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250047.wiff

Analysis Date: 25-JAN-10 22:35

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	121	121	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.2	96	
3,5-Dinitroaniline	100	102	102	
TATB	100	101	101	
tris(o-cresyl) phosphate	100	113	113	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

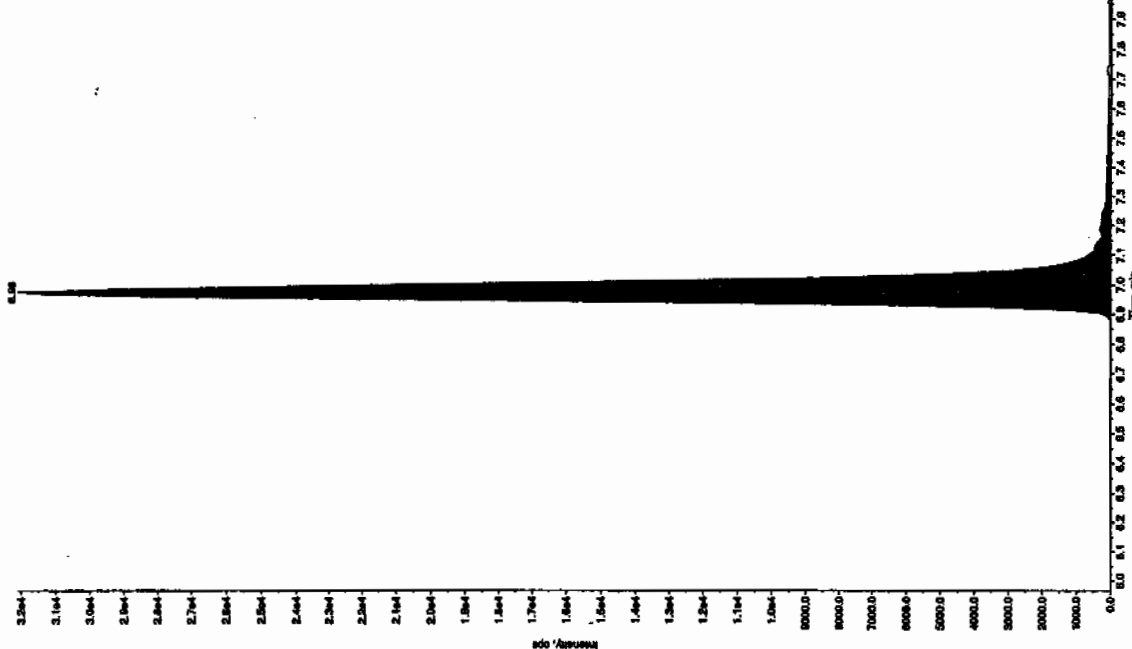
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

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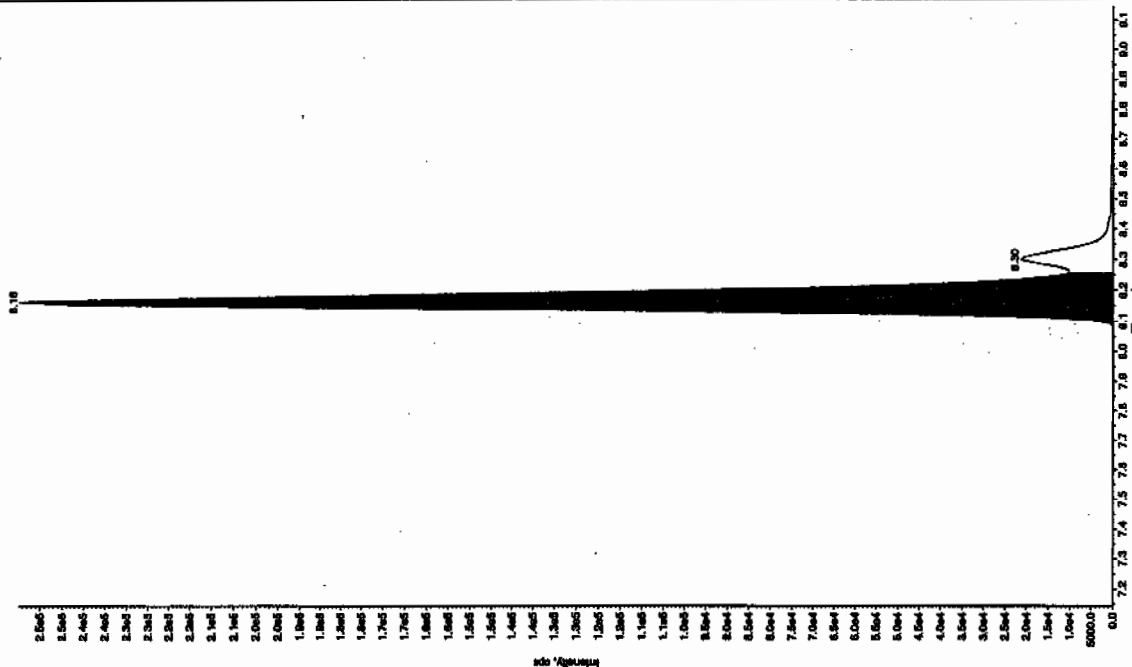
File Name: "WXX100125-2708" Sample ID: "111ER" File: "EX501250047.mf"
 Name: "TATB" Mass(es): "257.2204.9 amu"
 Name: "LCMSExp_C" Annotation: "

1a Index: 1
 1b Type: OC
 1c Concentration: 100. ng/mL
 1d Calculated Conc: 101. ng/mL
 1e Date: 1/25/2010
 1f Time: 10:35:24 PM
 1g Method: 1
 1h Algorithm: IntelliQuan - IOA
 1i Peak Height: 2500.00 cps
 1j Peak Width: 0.00 sec
 1k Smoothing Width: 30.0 points
 1l RT Min: 6.37 min
 1m Requested RT: 6.37 min
 1n Use Relative RT: No
 1o Type: Valley
 1p Retention Time: 6.38 min
 1q Area: 1.42e+005 counts
 1r Height: 32080.544 cps
 1s Start Time: 6.05 min
 1t End Time: 7.58 min

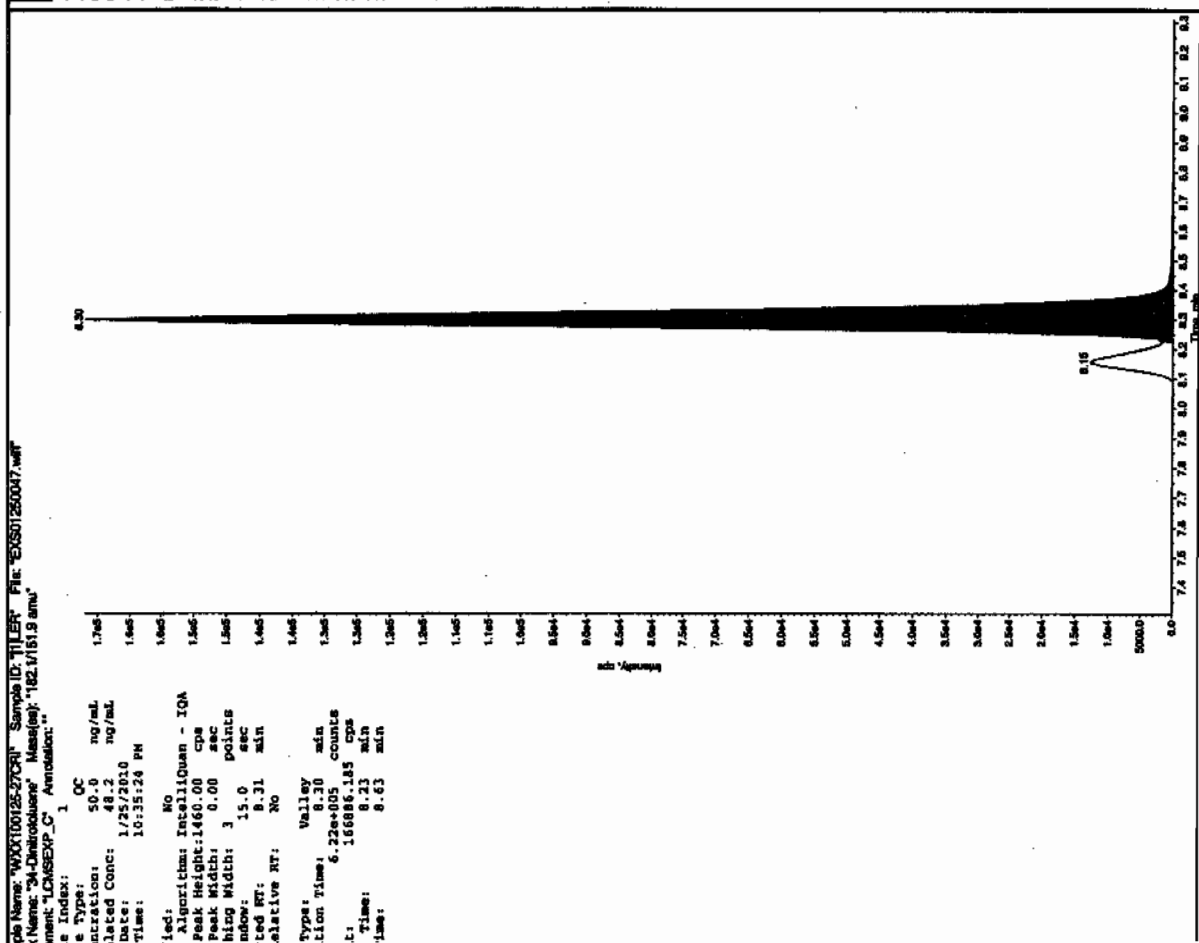
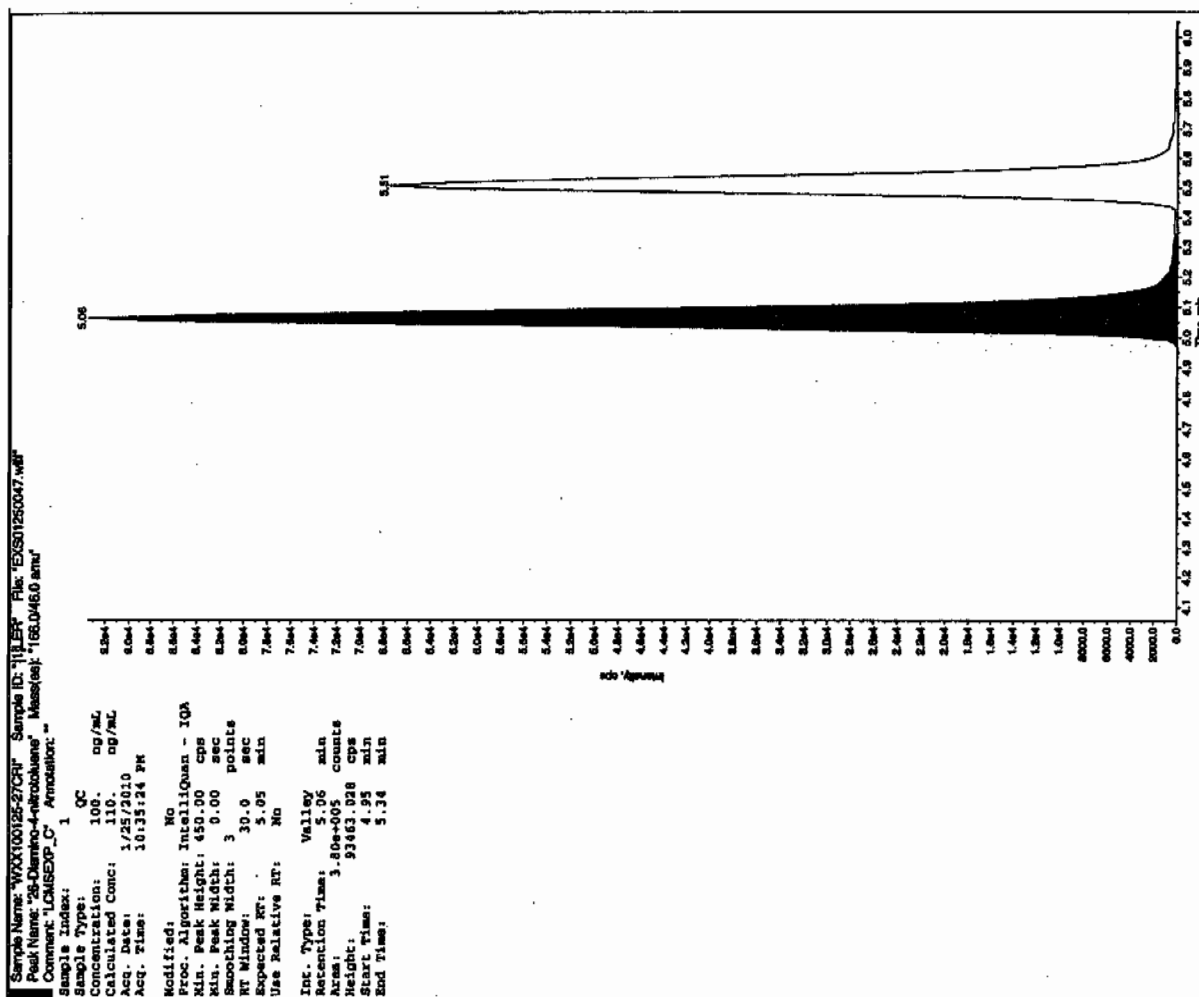


File Name: "WXX100125-2708" Sample ID: "111ER" File: "EX501250047.mf"
 Name: "TATB" Mass(es): "182.046.0 amu"
 Name: "LCMSExp_C" Annotation: "

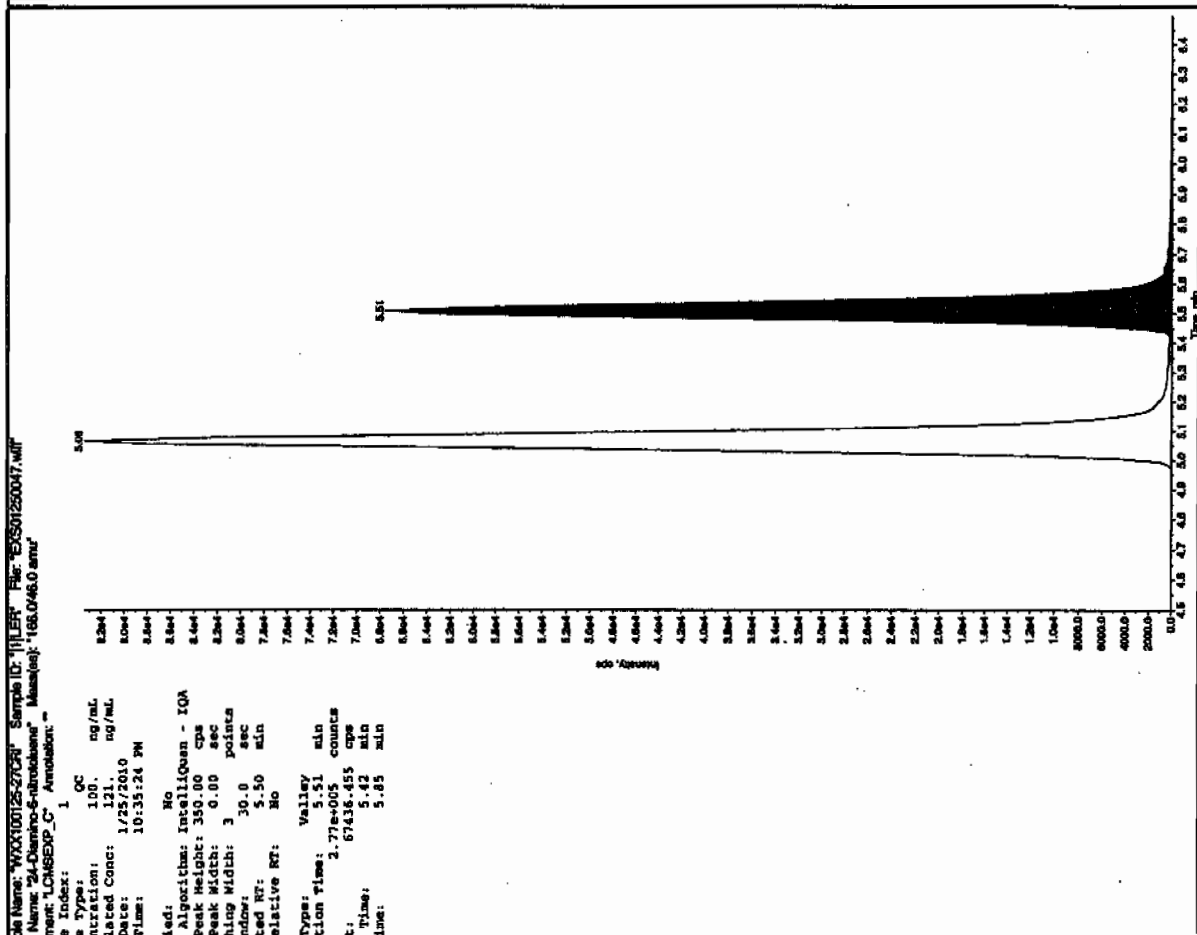
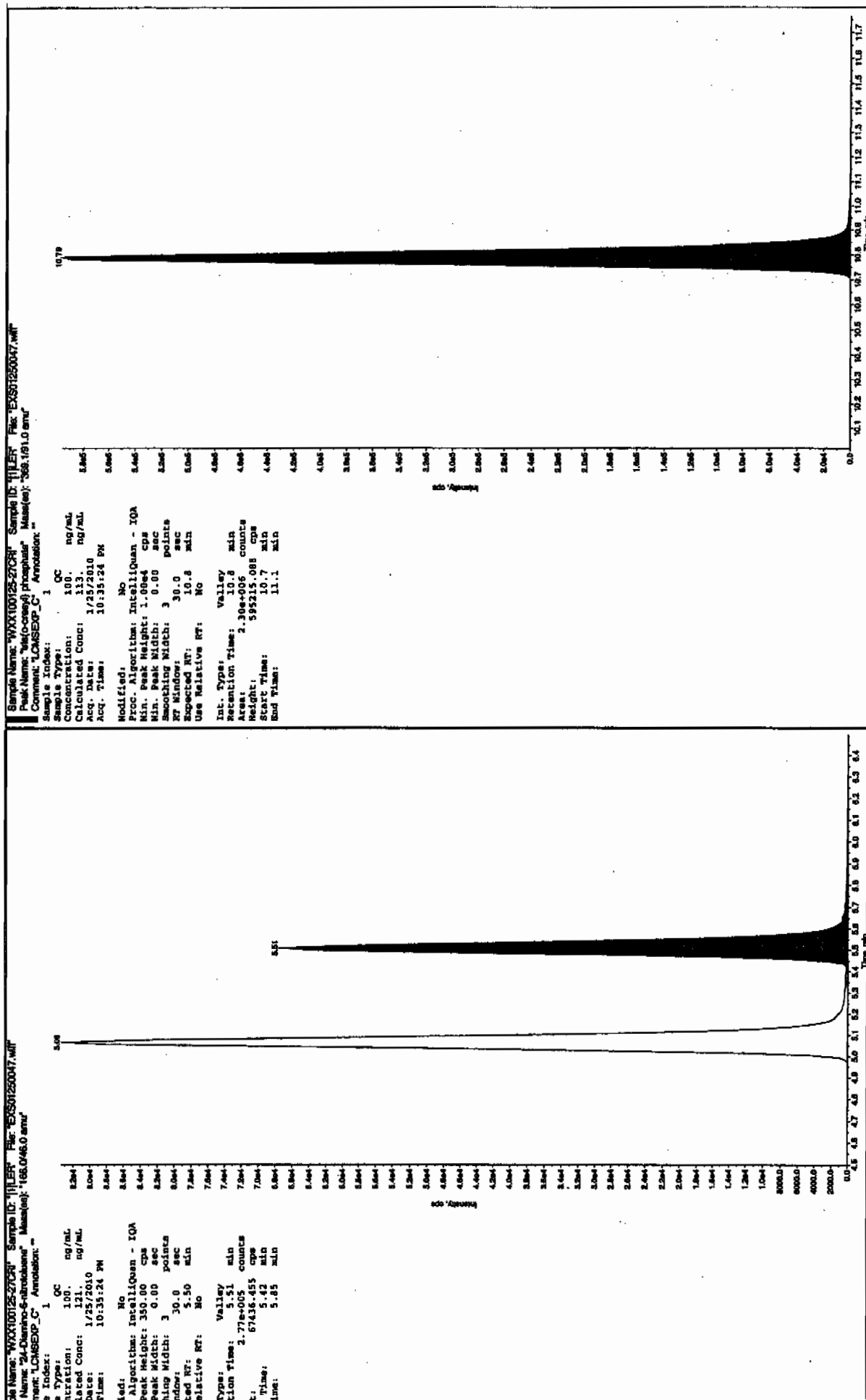
1a Index: 1
 1b Type: OC
 1c Concentration: 100. ng/mL
 1d Calculated Conc: 101. ng/mL
 1e Date: 1/25/2010
 1f Time: 10:35:24 PM
 1g Method: 1
 1h Algorithm: IntelliQuan - IOA
 1i Peak Height: 2000.00 cps
 1j Peak Width: 0.00 sec
 1k Smoothing Width: 30.0 points
 1l RT Min: 8.14 min
 1m Requested RT: 8.14 min
 1n Use Relative RT: No
 1o Type: Valley
 1p Retention Time: 8.16 min
 1q Area: 9.95e+005 counts
 1r Height: 254754.974 cps
 1s Start Time: 8.07 min
 1t End Time: 8.26 min



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L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250058.wiff

Analysis Date: 26-JAN-10 01:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	510	102	
2,6-Diamino-4-nitrotoluene	500	472	95	
3,4-Dinitrotoluene	250	227	91	
3,5-Dinitroaniline	500	493	99	
TATB	500	507	101	
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

Before Dec 11/27/10

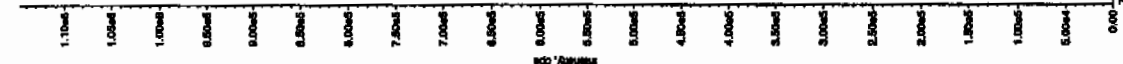
File Name: "WXX100125-280CV" Sample ID: "111ER" File: "EXS01250058.wif"
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 507. ng/mL
 Date: 1/26/2010
 Acq. Time: 1:28:18 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.98 min
 Area: 7.06e+005 counts
 Height: 161400.460 cps
 Start Time: 6.83 min
 End Time: 7.63 min

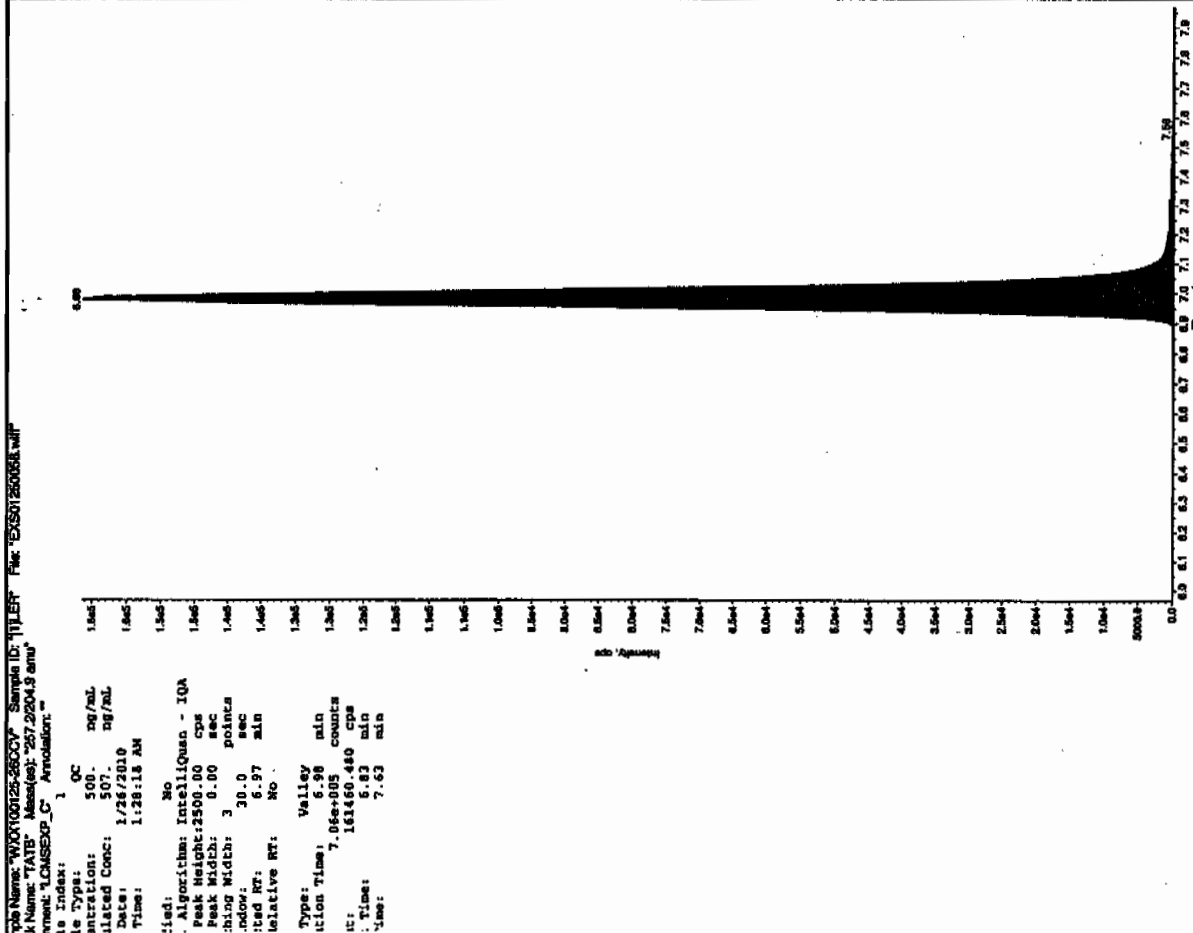
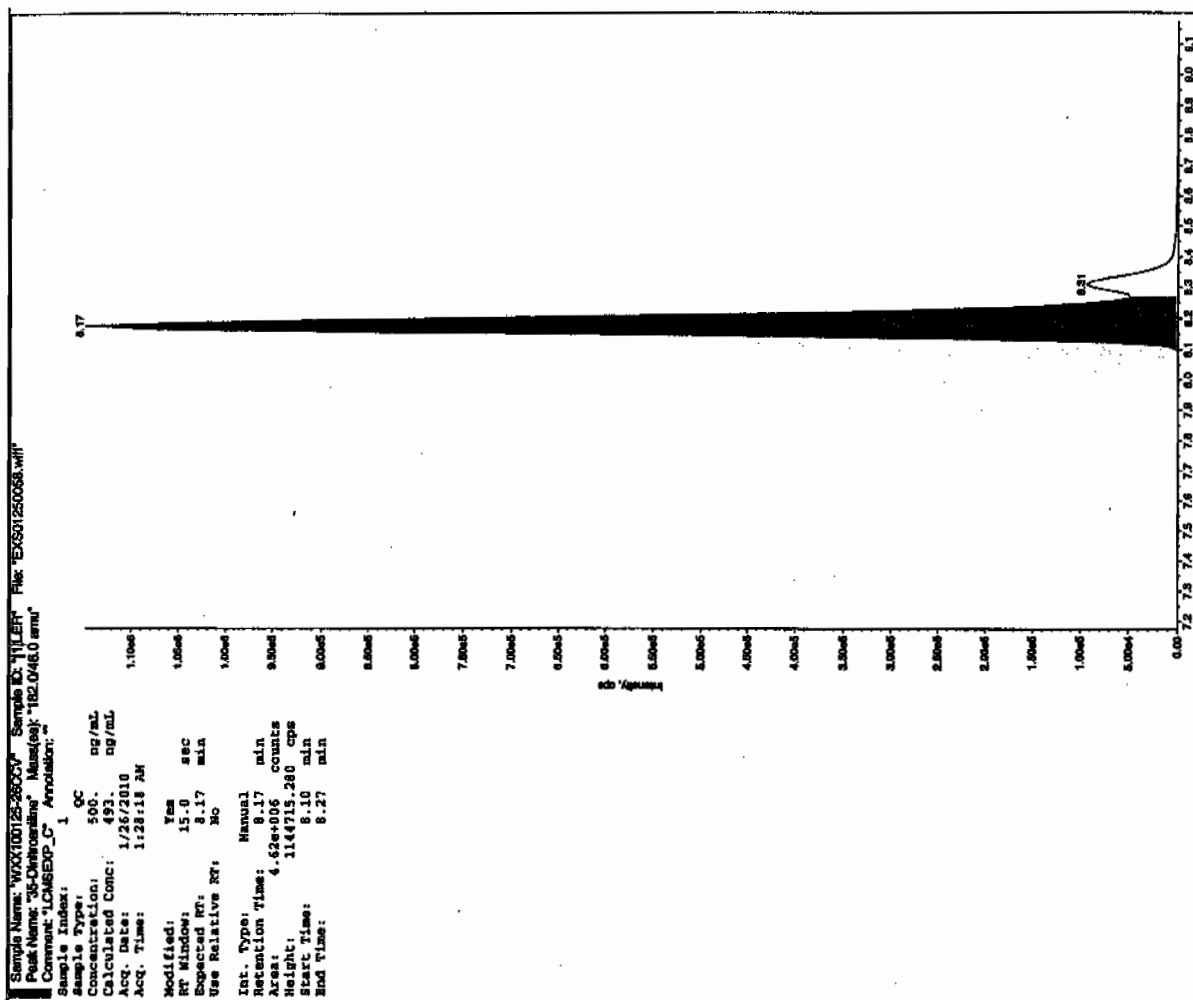


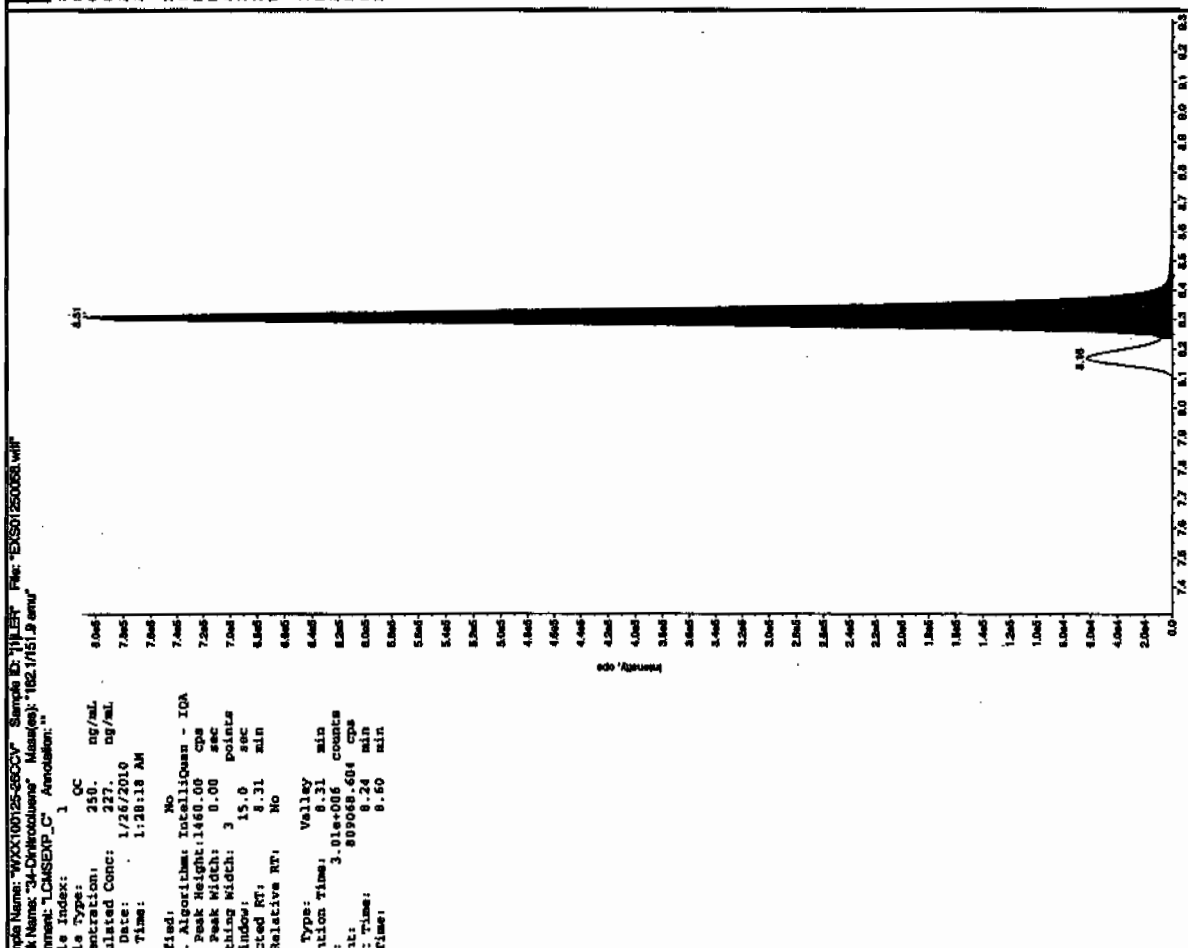
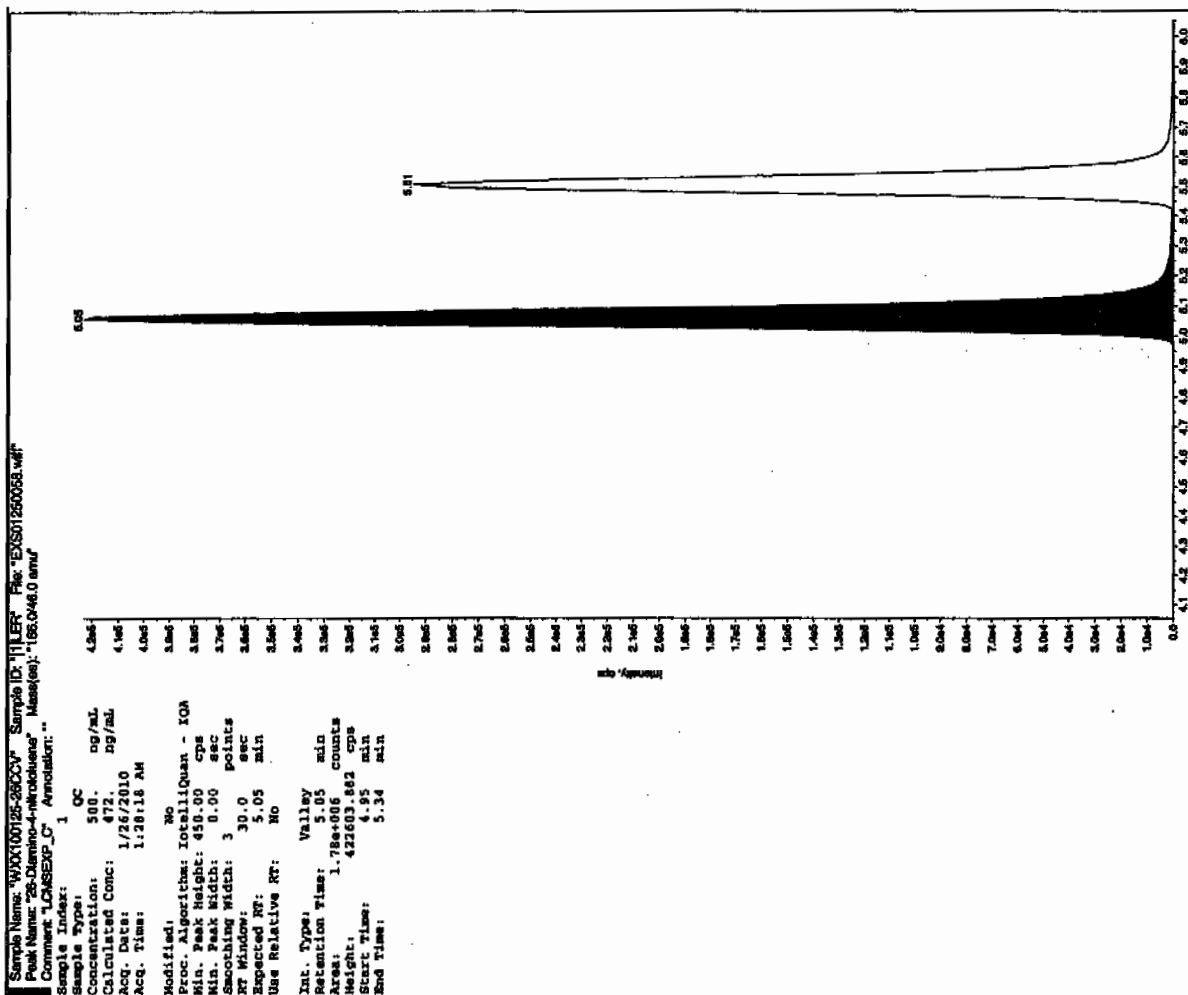
File Name: "WXX100125-280CV" Sample ID: "111ER" File: "EXS01250058.wif"
 Peak Name: "35-Dehydroline" Mass(es): "182.0/46.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 546. ng/mL
 Date: 1/26/2010
 Acq. Time: 1:28:18 AM
 Modified: Yes
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.17 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.17 min
 Area: 5.08e+006 counts
 Height: 1146952.148 cps
 Start Time: 8.06 min
 End Time: 8.74 min

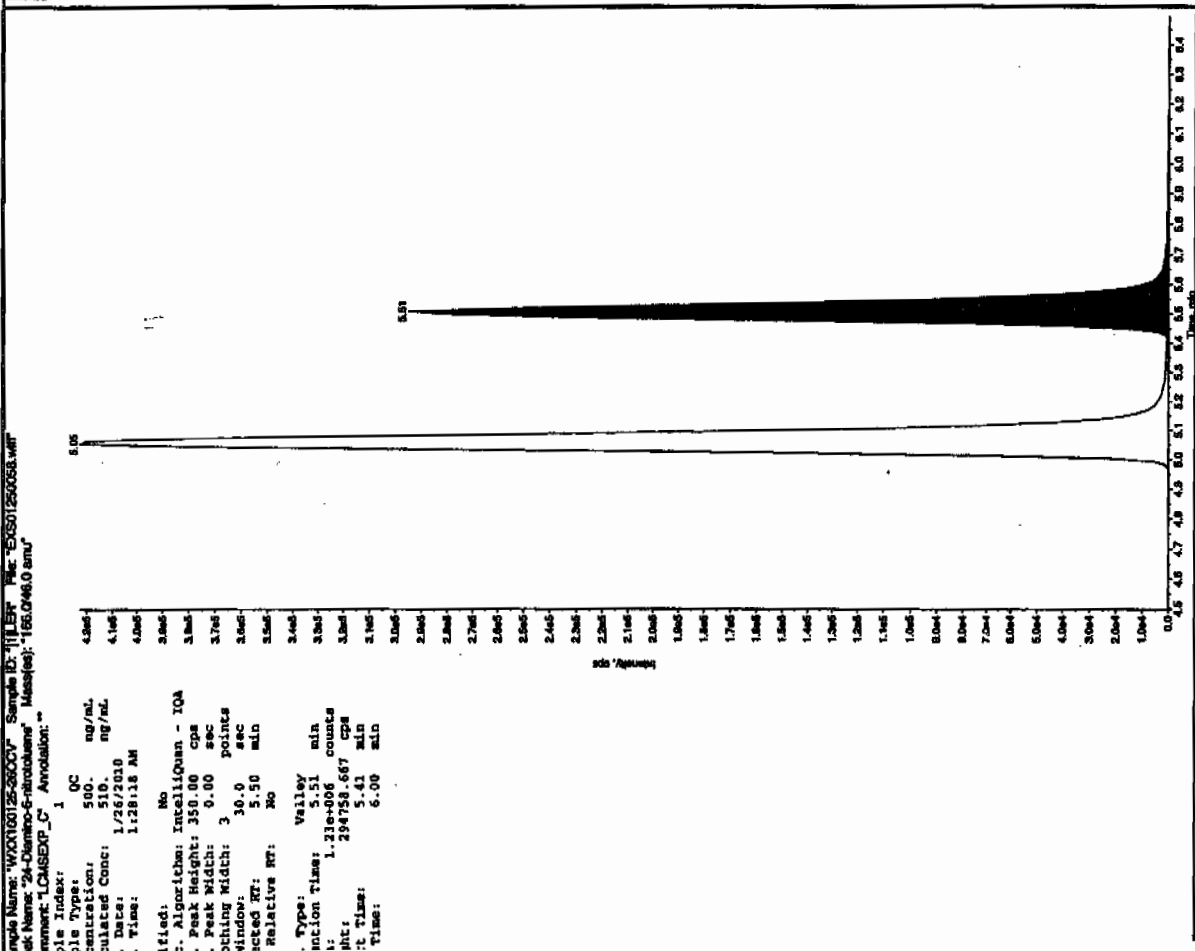
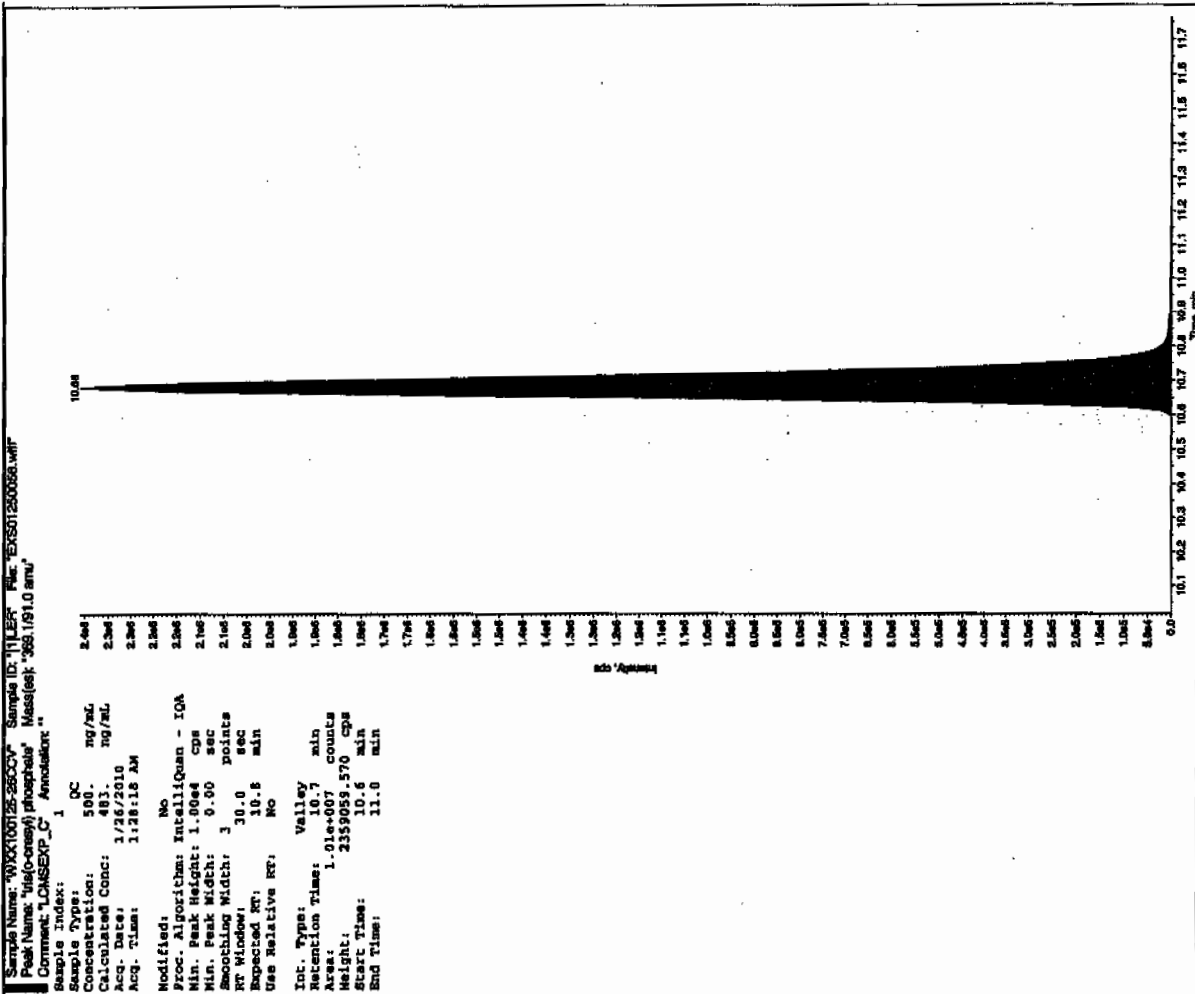


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L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250060.wiff

Analysis Date: 26-JAN-10 01:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	111	111	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	47.7	95	
3,5-Dinitroaniline	100	103	103	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	112	112	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

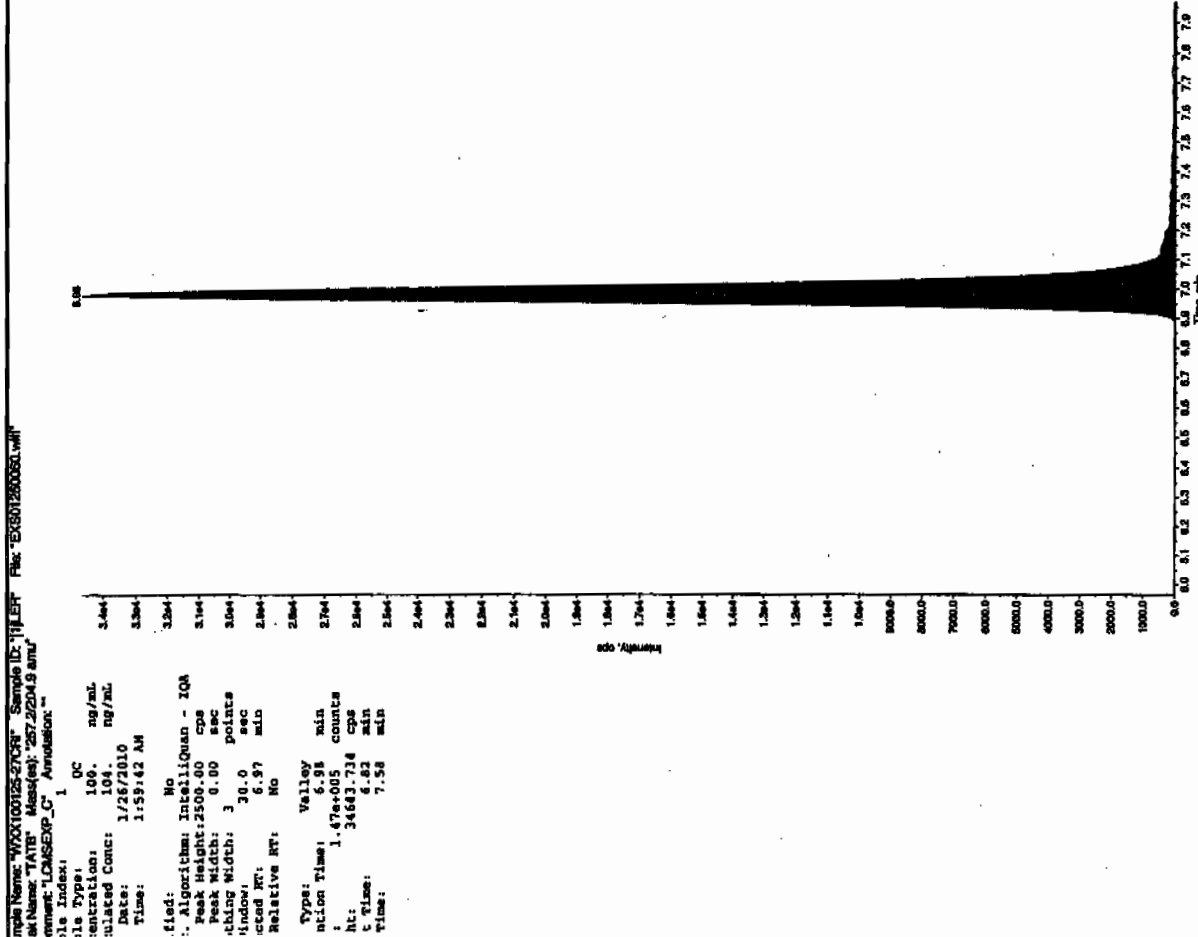
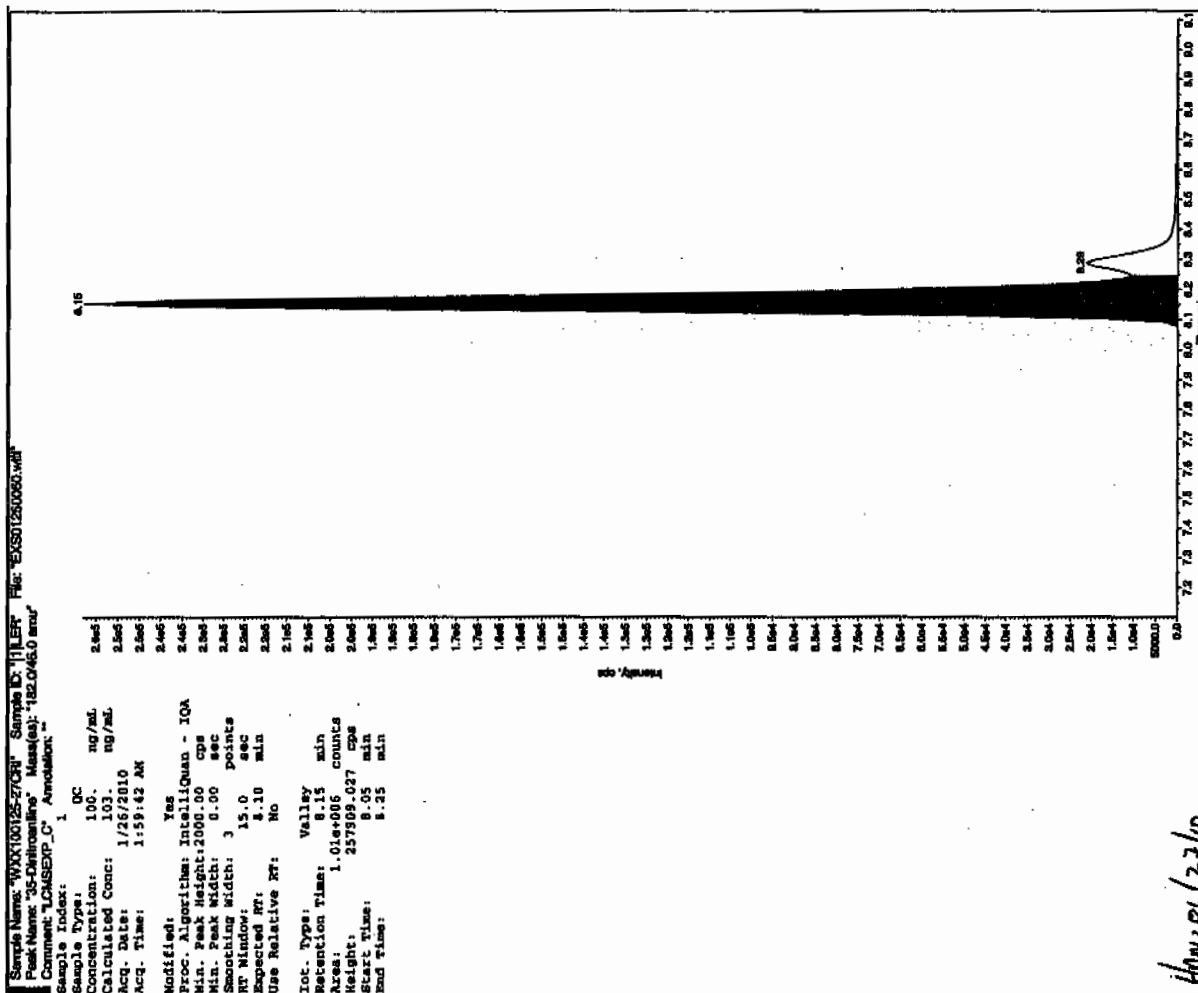
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

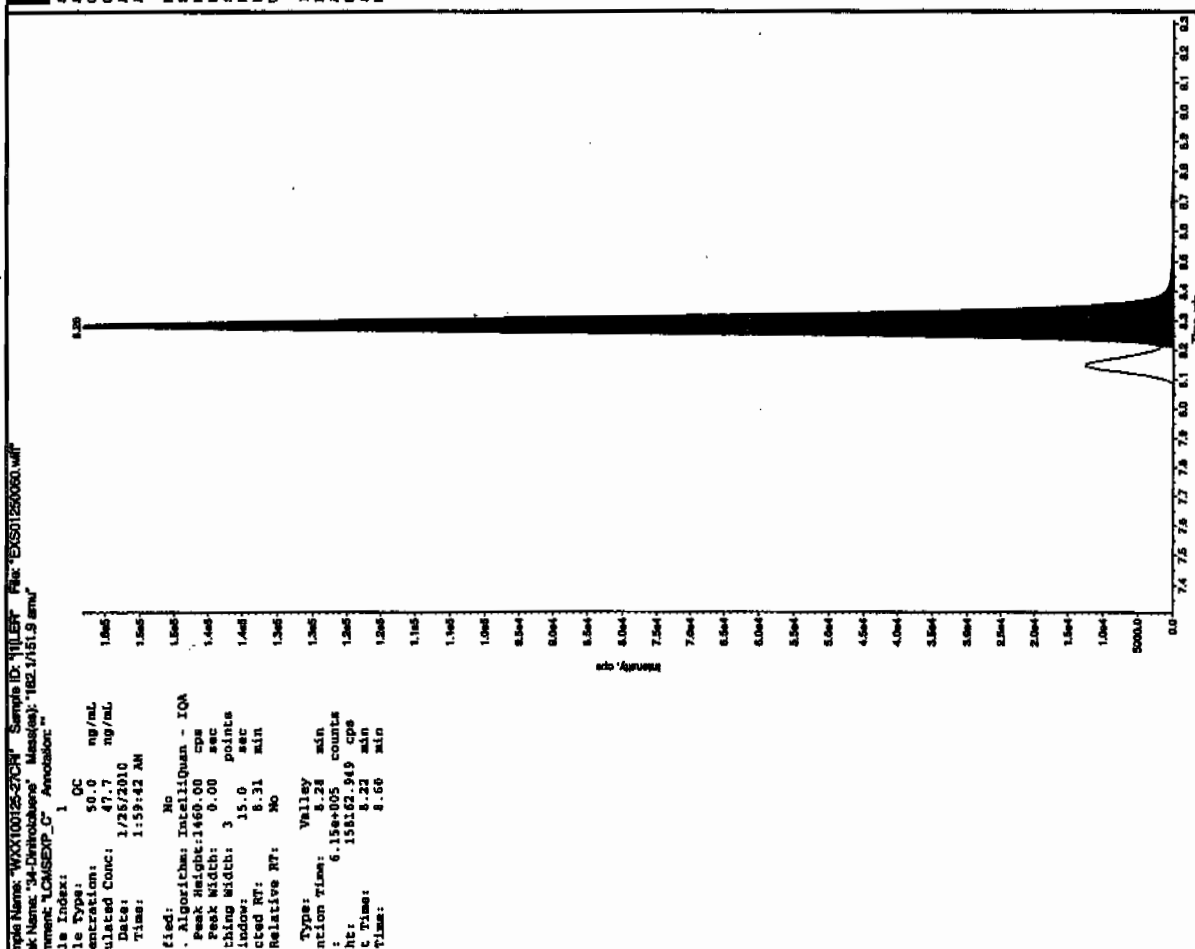
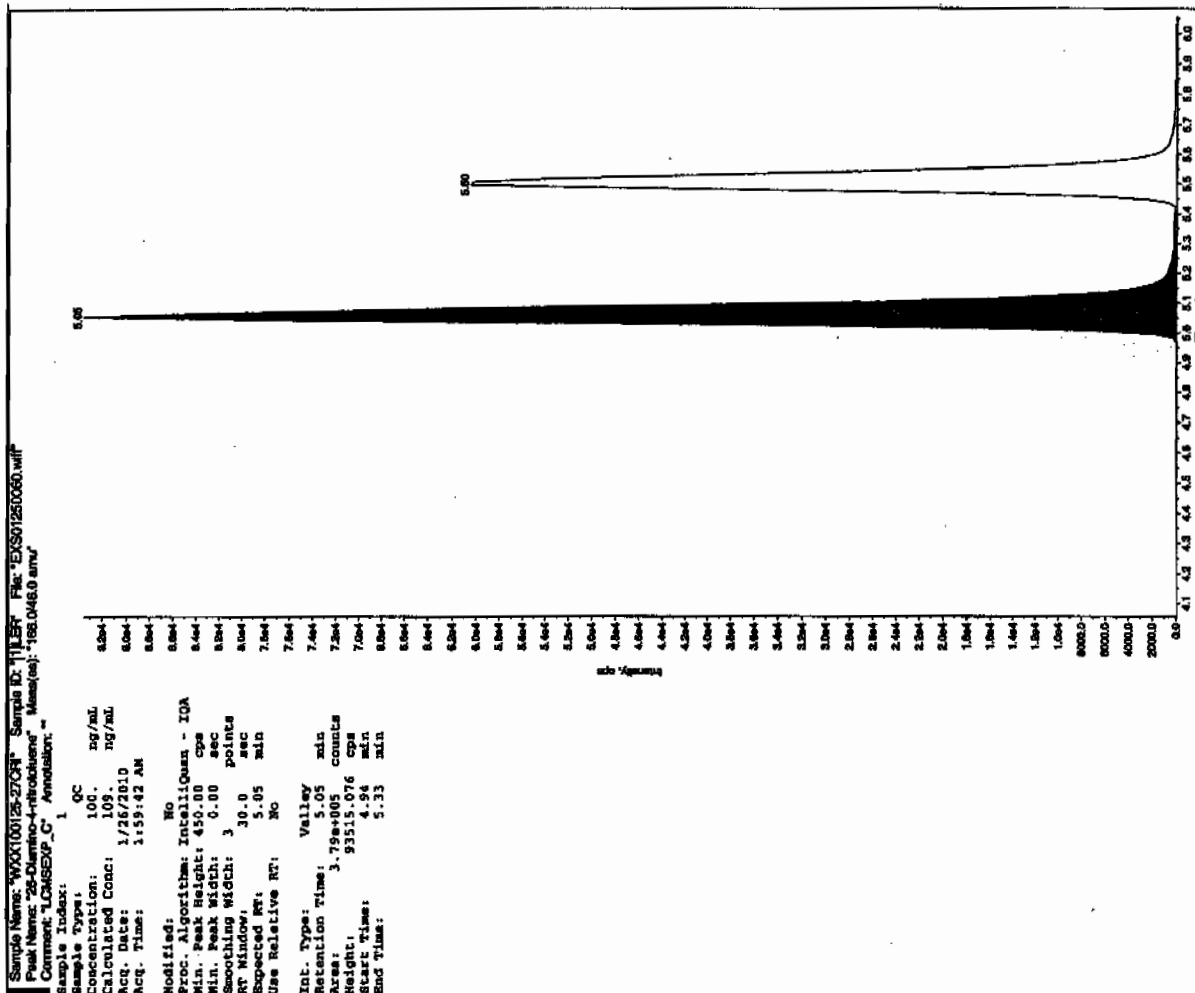
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

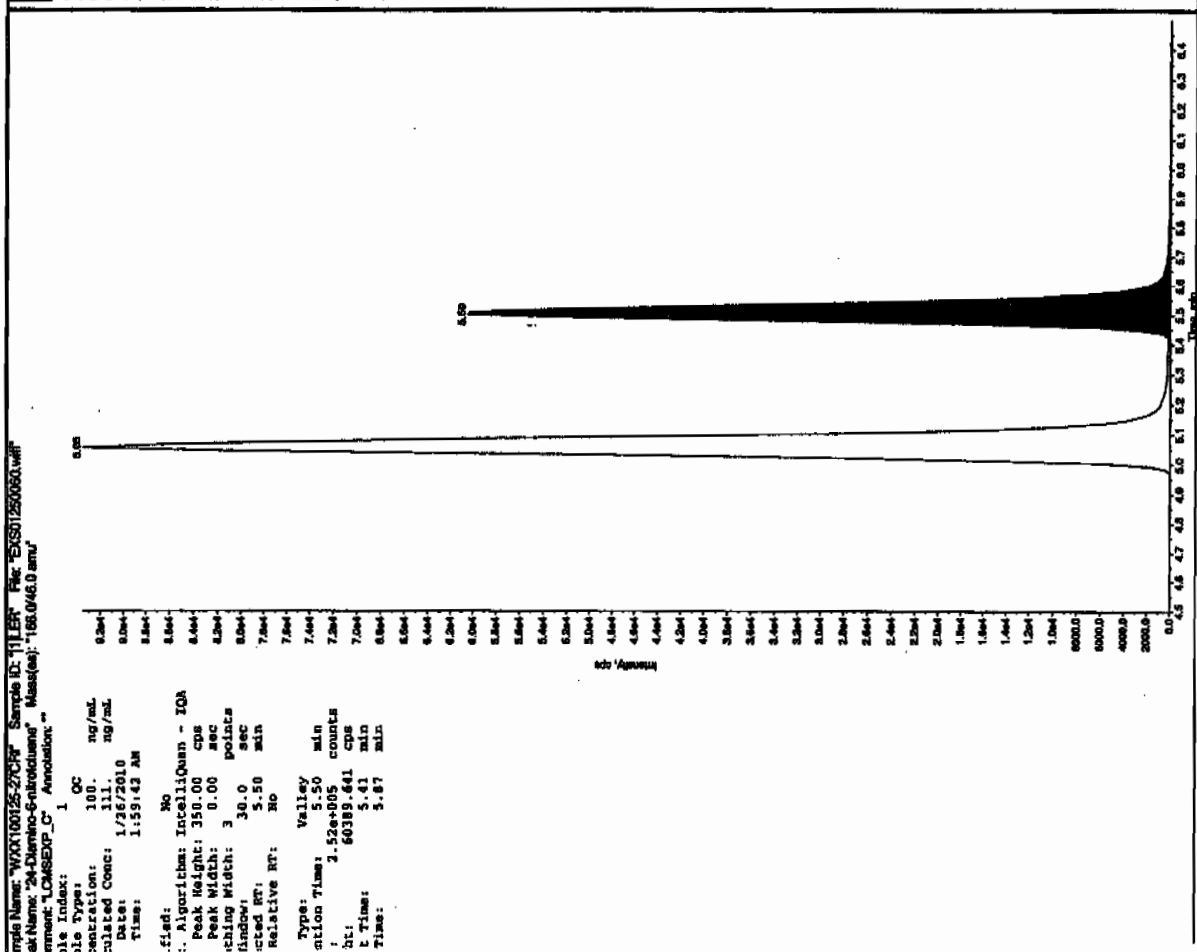
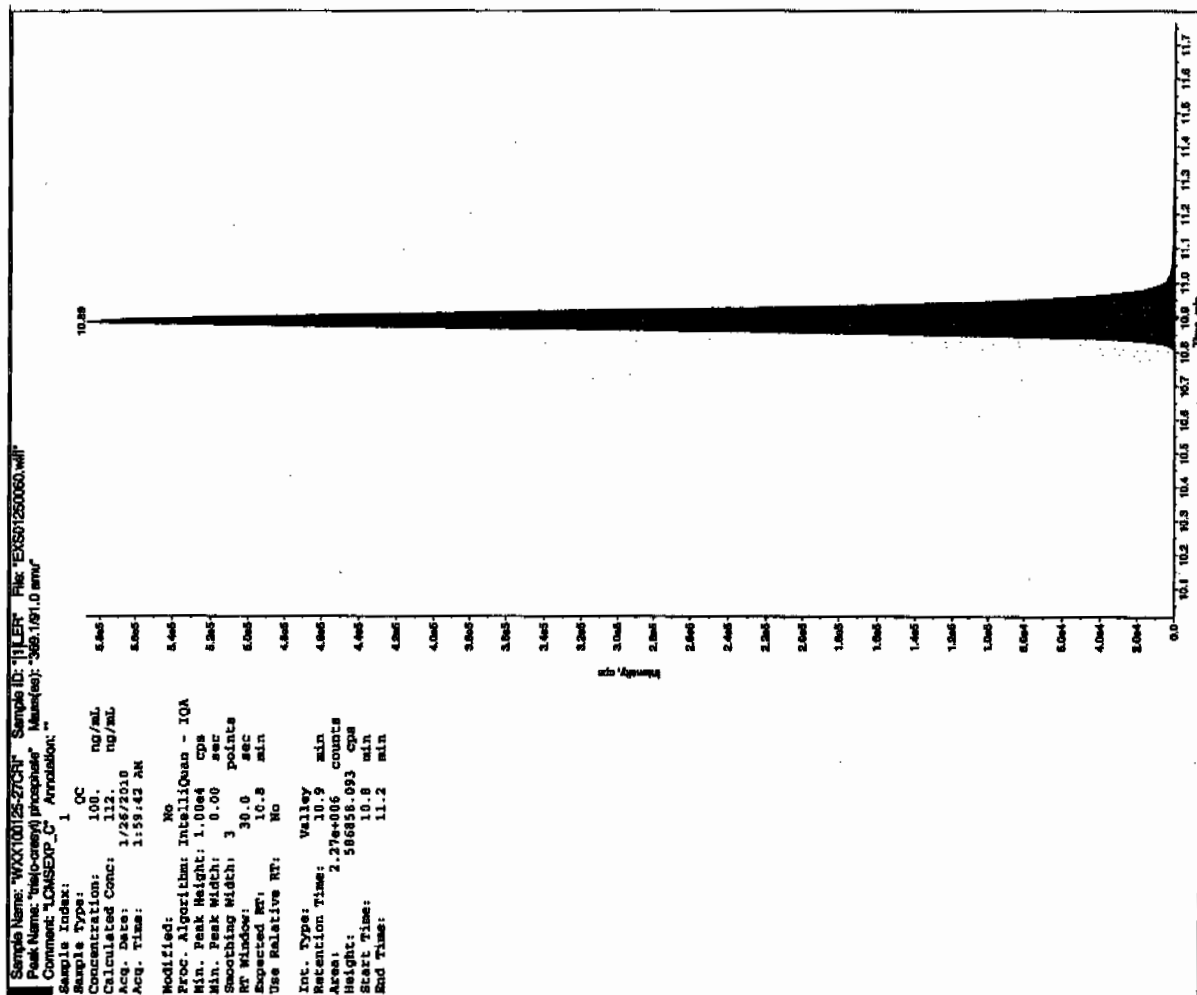
for 1127110



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250067.wiff

Analysis Date: 26-JAN-10 03:49

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	523	105	
2,6-Diamino-4-nitrotoluene	500	495	99	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	513	103	
TATB	500	525	105	
tris(o-cresyl) phosphate	500	481	96	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Refon den 12710

Sample Name: "WXX100125-2803V" Sample ID: "11187" File: "EX01250067.wif"

Peak Name: "TATB" Mass(es): "257.2/204.9 amu"

Comment: "LCMSXP_C" Annotation: "

Sample Index: 1

Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 525. ng/mL

Acq. Date: 1/26/2010

Acq. Time: 3:49:41 AM

Modified: No

Proc. Algorithm: IntelliQuan - IQA

Peak Height: 2568.00 cps

Peak Width: 8.00 points

Smoothing Width: 30.0 sec

RT Window: 15.0 sec

Expected RT: 6.97 min

Use Relative RT: No

Int. Type: Valley

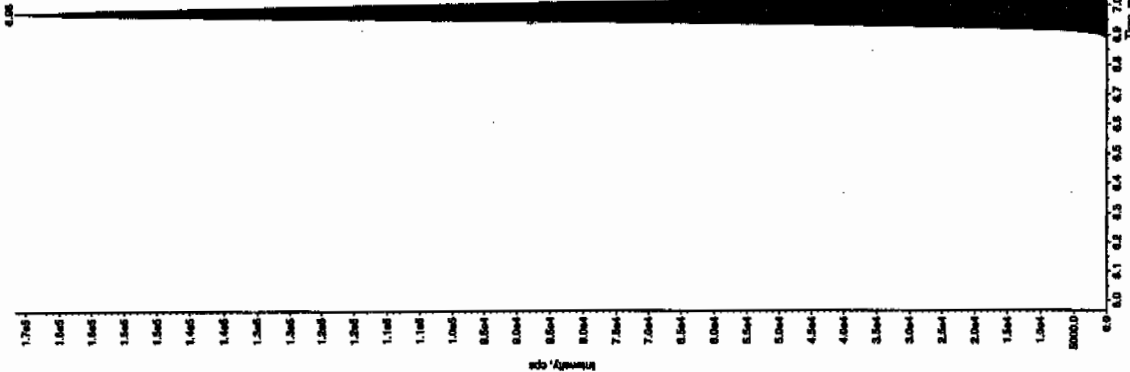
Retention Time: 6.98 min

Area: 7.30e+005 counts

Height: 166532.516 cps

Start Time: 5.86 min

End Time: 7.51 min



Sample Name: "WXX100125-2803V" Sample ID: "11187" File: "EX01250067.wif"

Peak Name: "35-Dibromobenzene" Mass(es): "182.0/183.0 amu"

Comment: "LCMSXP_C" Annotation: "

Sample Index: 1

Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 564. ng/mL

Acq. Date: 1/26/2010

Acq. Time: 3:49:41 AM

Modified: Yes

Proc. Algorithm: IntelliQuan - IQA

Peak Height: 2000.00 cps

Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.15 min

Use Relative RT: No

Int. Type: Valley

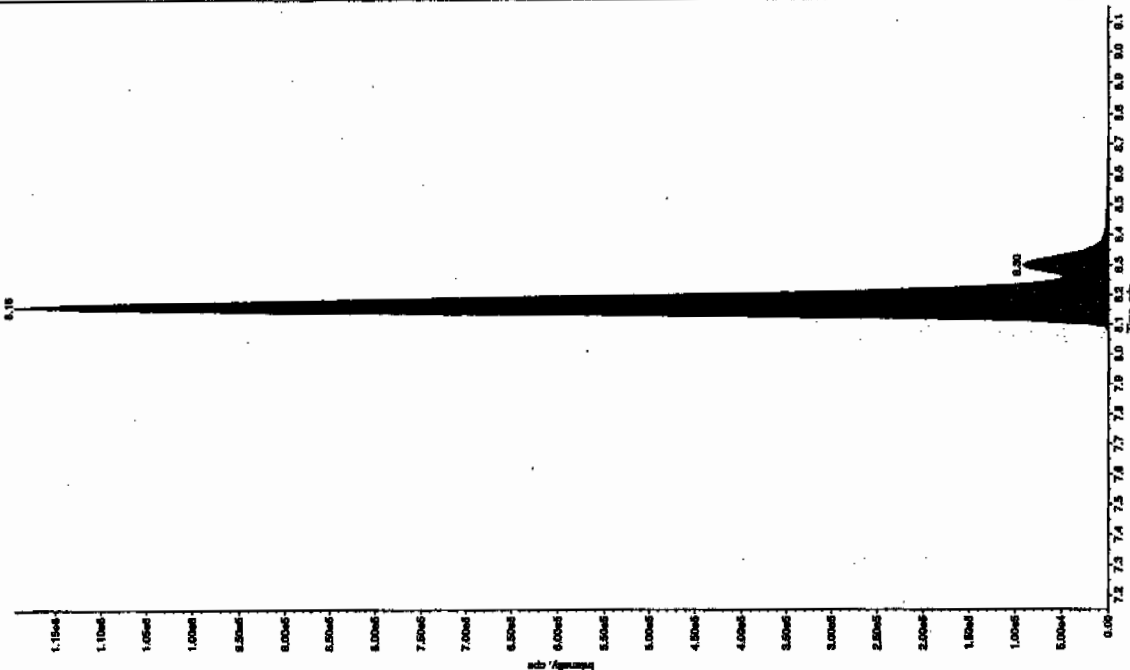
Retention Time: 8.16 min

Area: 5.23e+006 counts

Height: 1193349.243 cps

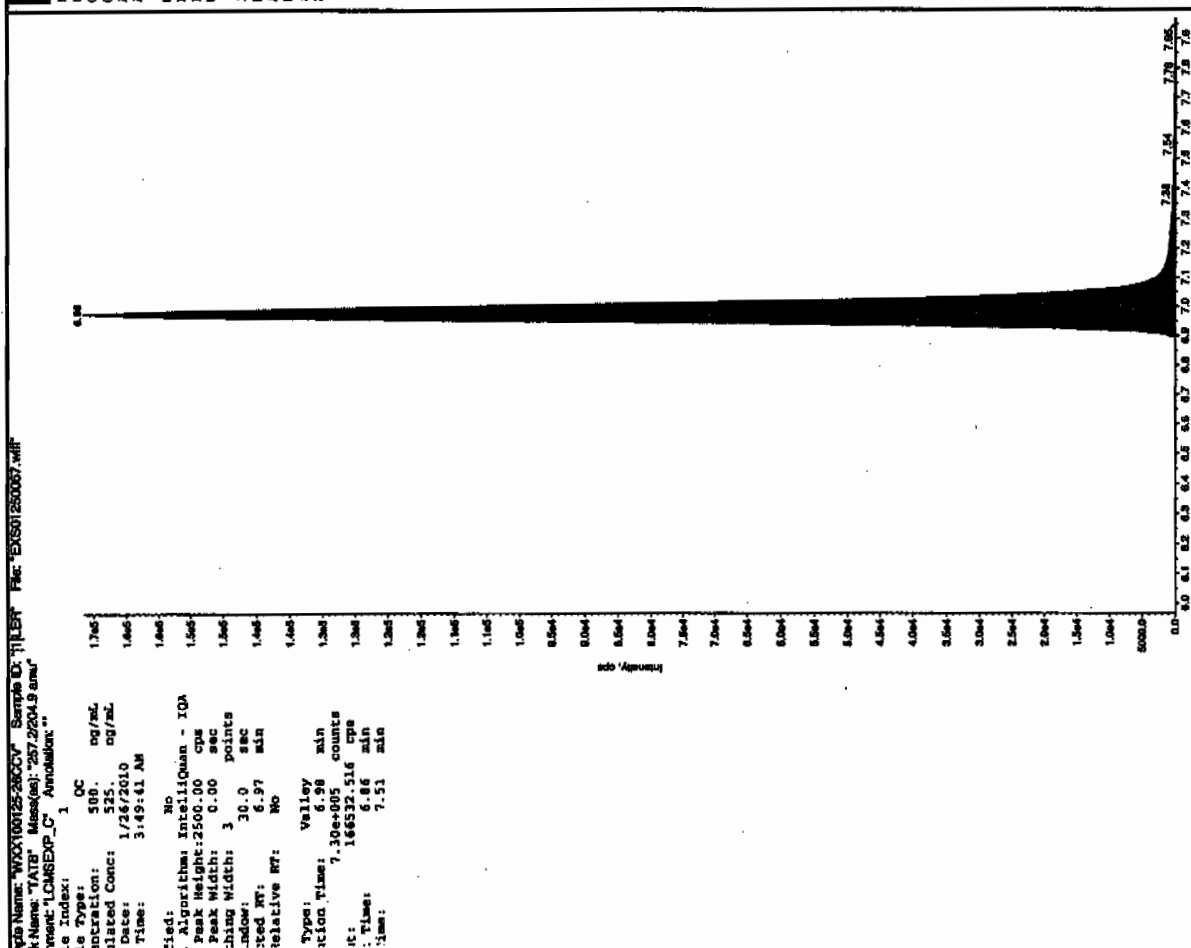
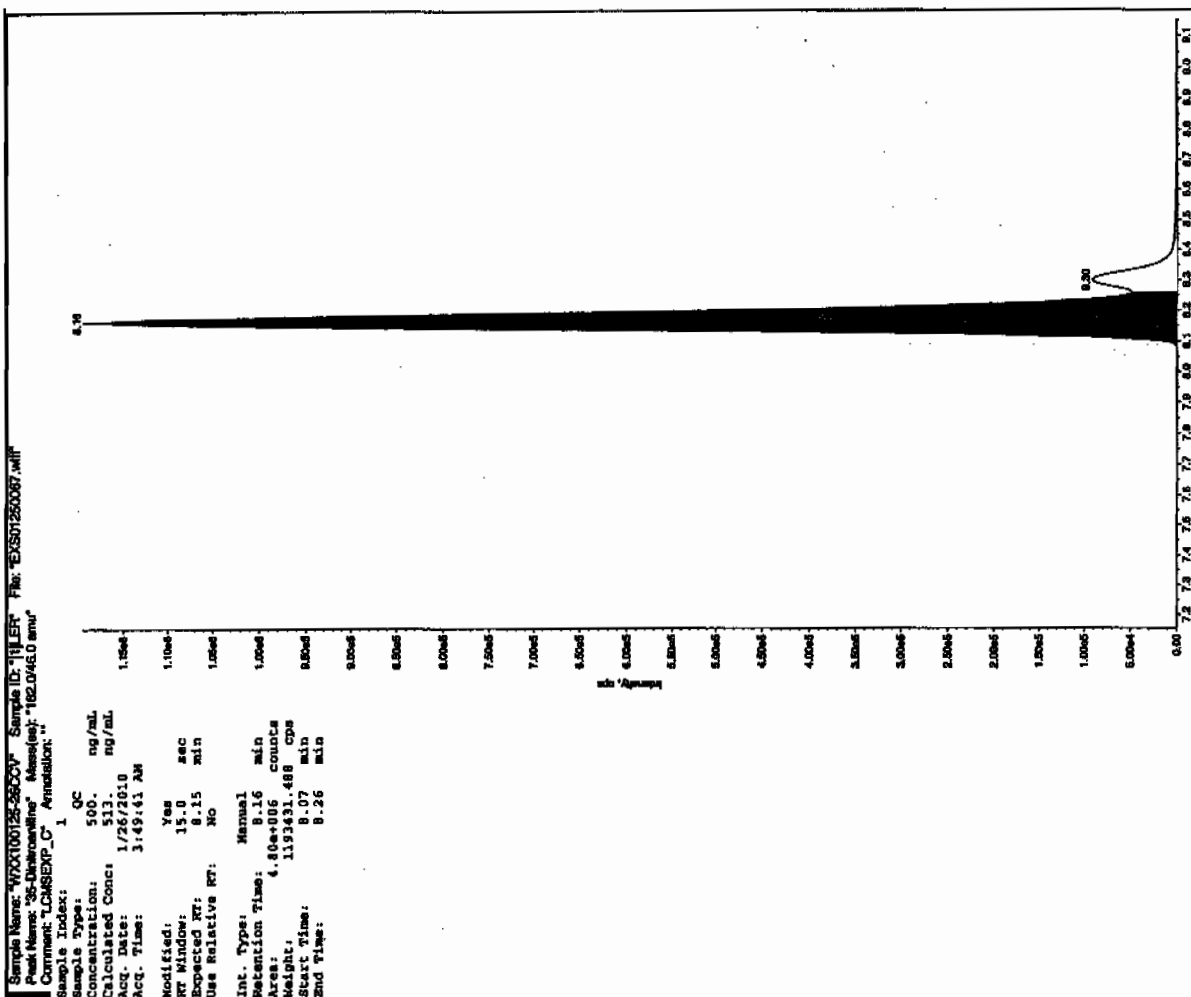
Start Time: 8.06 min

End Time: 8.66 min

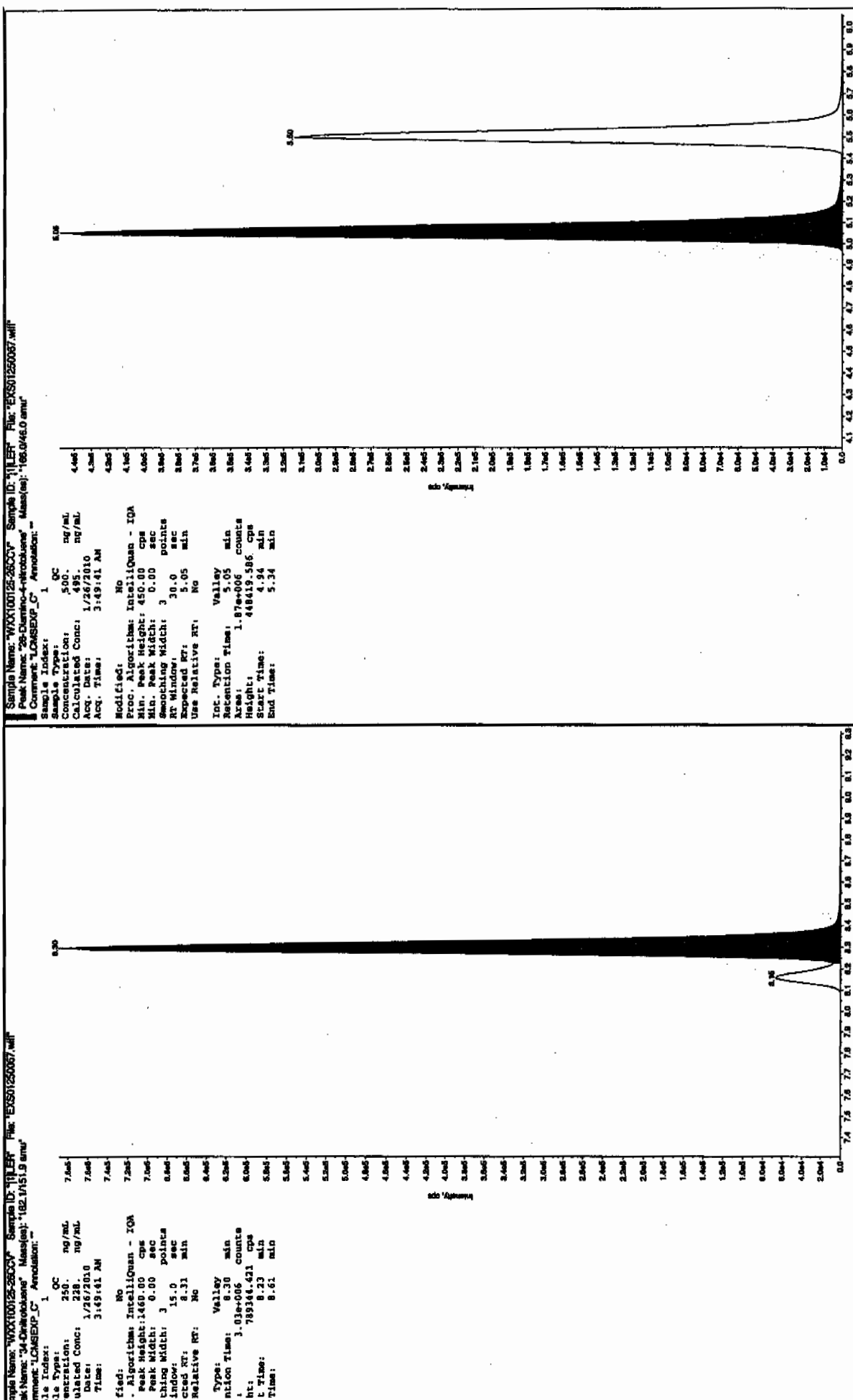


1/27/10

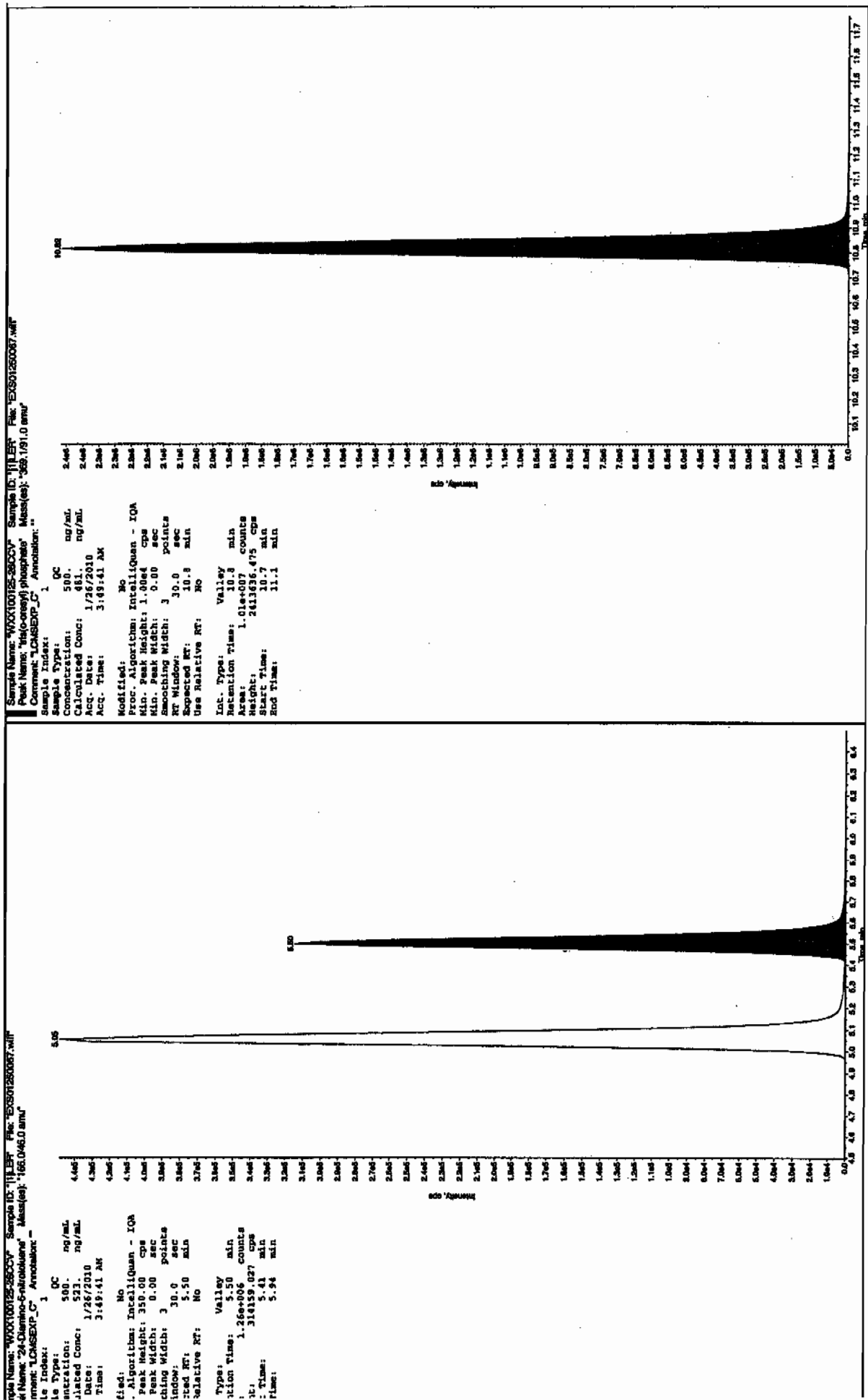
after Jan 11/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250069.wiff

Analysis Date: 26-JAN-10 04:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	112	112	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.2	96	
3,5-Dinitroaniline	100	108	108	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	111	111	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 16 2010

Sample Name: "WXX100125-2207" Sample ID: "JULIF" File: "EX501250088.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: 107. ng/mL
 Date: 1/26/2010
 Acq. Date: 1/26/2010
 Acq. Time: 4:21:06 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Type: Valley
 Retention Time: 6.99 min
 Area: 1.51e+005 counts
 Height: 35872.509 cps
 Start Time: 6.88 min
 End Time: 7.48 min



Sample Name: "WXX100125-2707" Sample ID: "JULIF" File: "EX501250088.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: 119. ng/mL
 Date: 1/26/2010
 Acq. Date: 1/26/2010
 Acq. Time: 4:21:06 AM
 Modified: Yes
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.15 min
 Use Relative RT: No
 Type: Valley
 Retention Time: 8.17 min
 Area: 1.15e+006 counts
 Height: 27393.524 cps
 Start Time: 8.06 min
 End Time: 8.71 min



Amc 01/26/10

after scan 1127110

Sample Name: "WXX100125-2708" Sample ID: "1127" File: "EX801250081.wif"

Peak Name: "TATB" Mass(es): "257.2704.9 amu"

Comment: "LCMSXP_C" Annotation: "

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 107. ng/mL

Acq. Date: 1/26/2010

Acq. Time: 4:21:06 AM

Modified: No

RT Window: 15.0 sec

Expected RT: 8.15 min

Use Relative RT: No

Int. Type: Manual

Retention Time: 8.17 min

Area: 1.05e+006 counts

Height: 275780.159 cps

Start Time: 8.10 min

End Time: 8.27 min

Sample Name: "WXX100125-2708" Sample ID: "1127" File: "EX801250081.wif"

Peak Name: "TATB" Mass(es): "257.2704.9 amu"

Comment: "LCMSXP_C" Annotation: "

Sample Index: 1

Sample Type: QC

Concentration: 100. ng/mL

Calculated Conc: 107. ng/mL

Acq. Date: 1/26/2010

Acq. Time: 4:21:06 AM

Modified: No

RT Window: 15.0 sec

Expected RT: 8.15 min

Use Relative RT: No

Int. Type: Valley

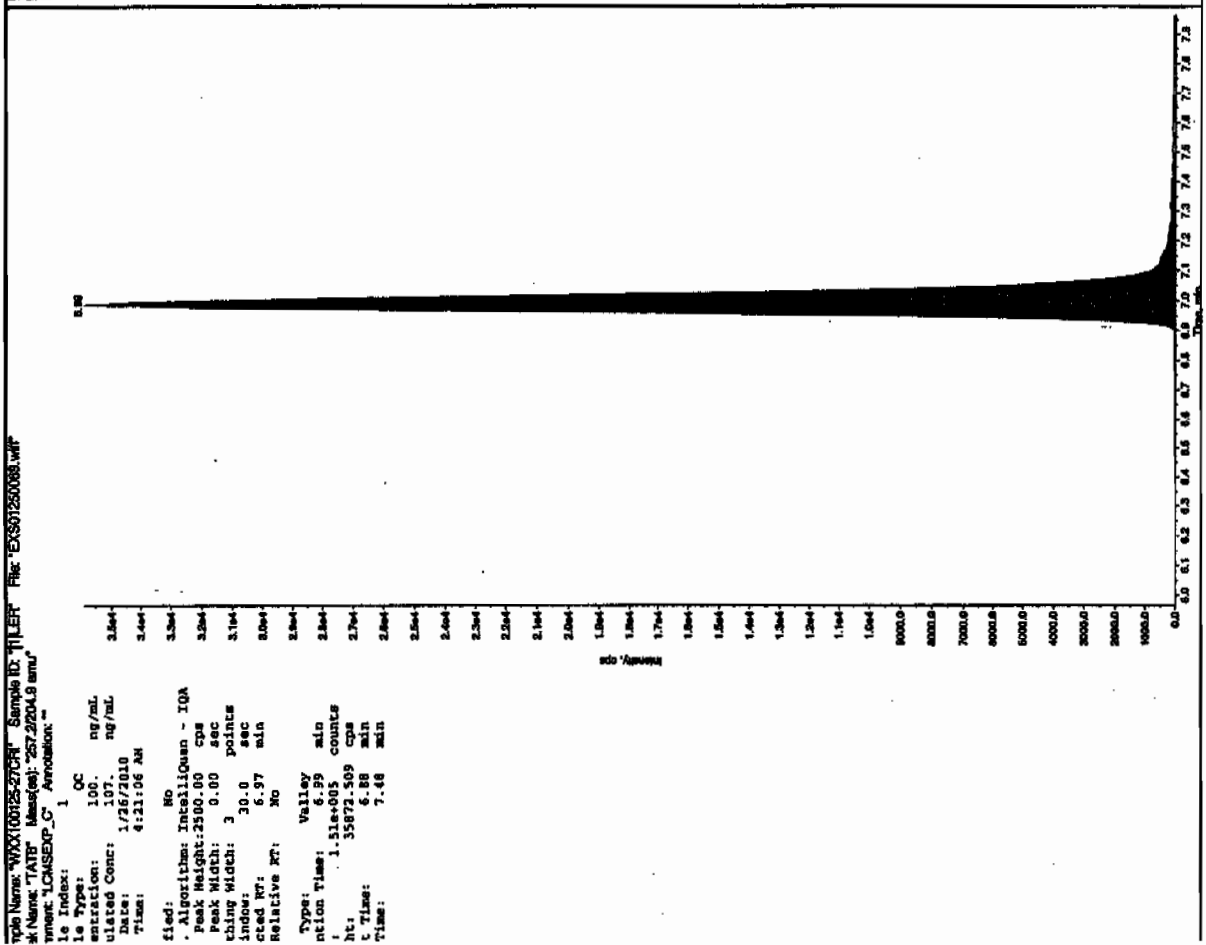
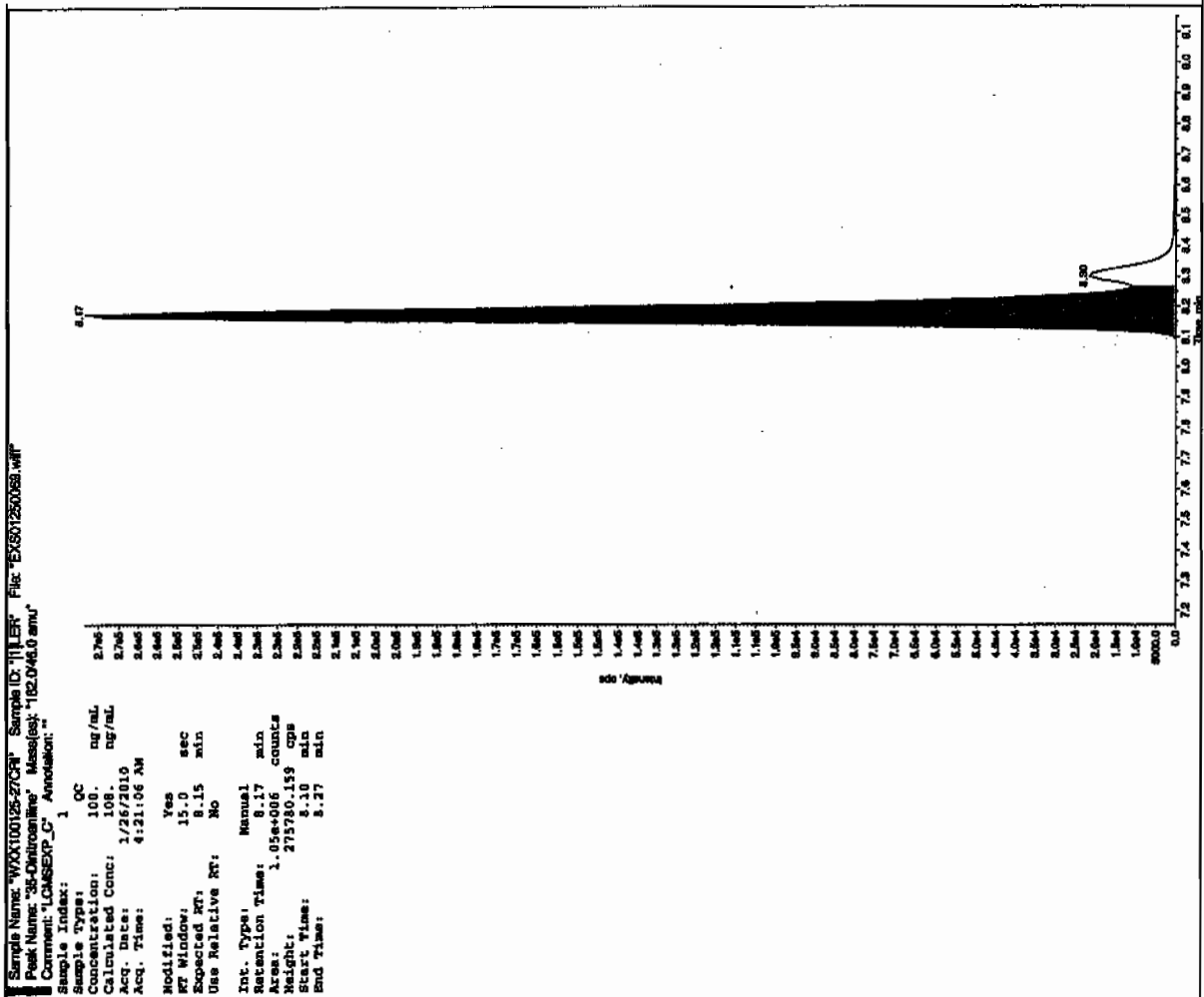
Retention Time: 6.99 min

Area: 1.51e+005 counts

Height: 35872.509 cps

Start Time: 6.88 min

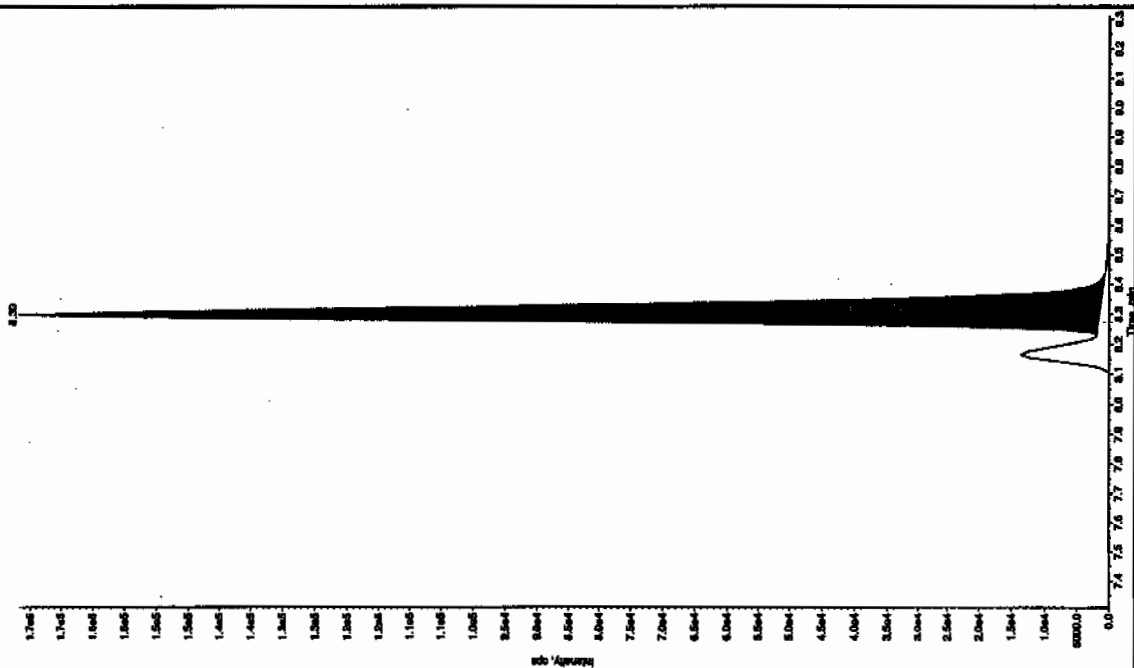
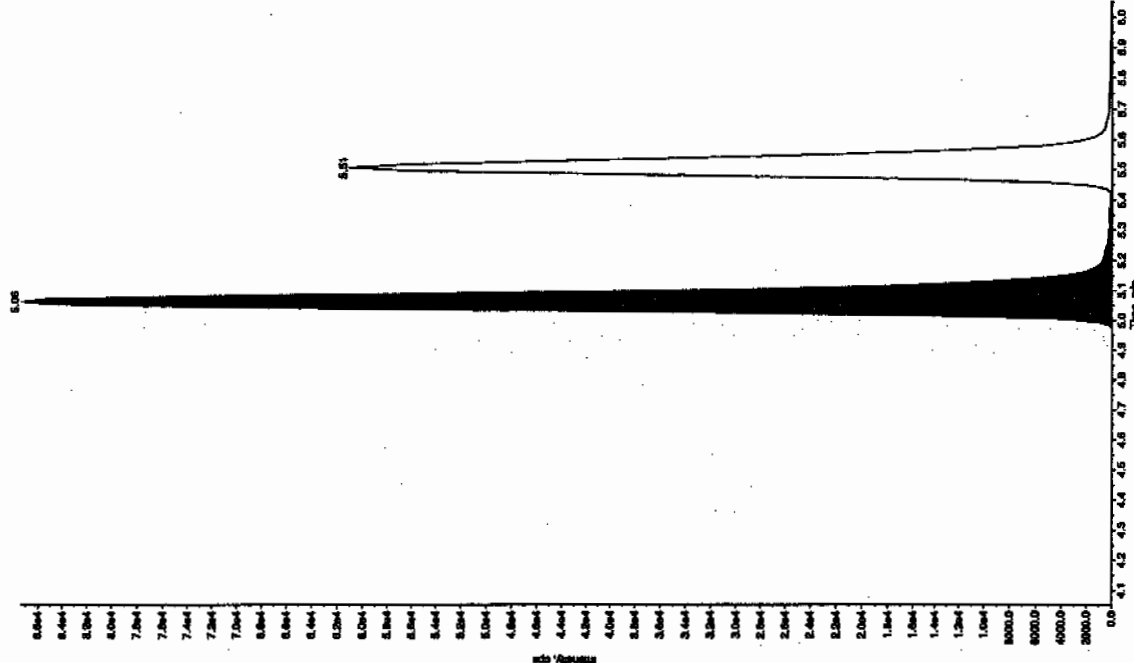
End Time: 7.48 min

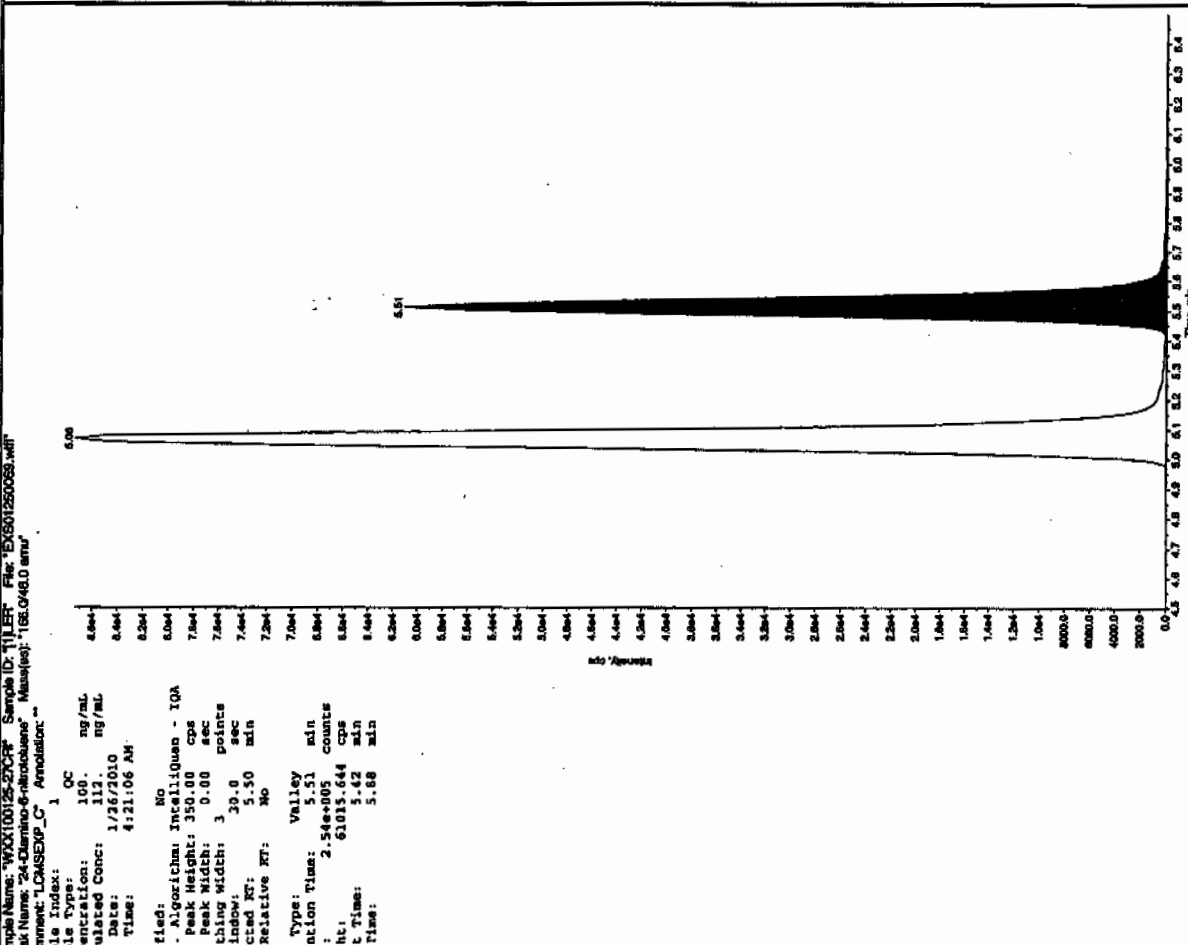
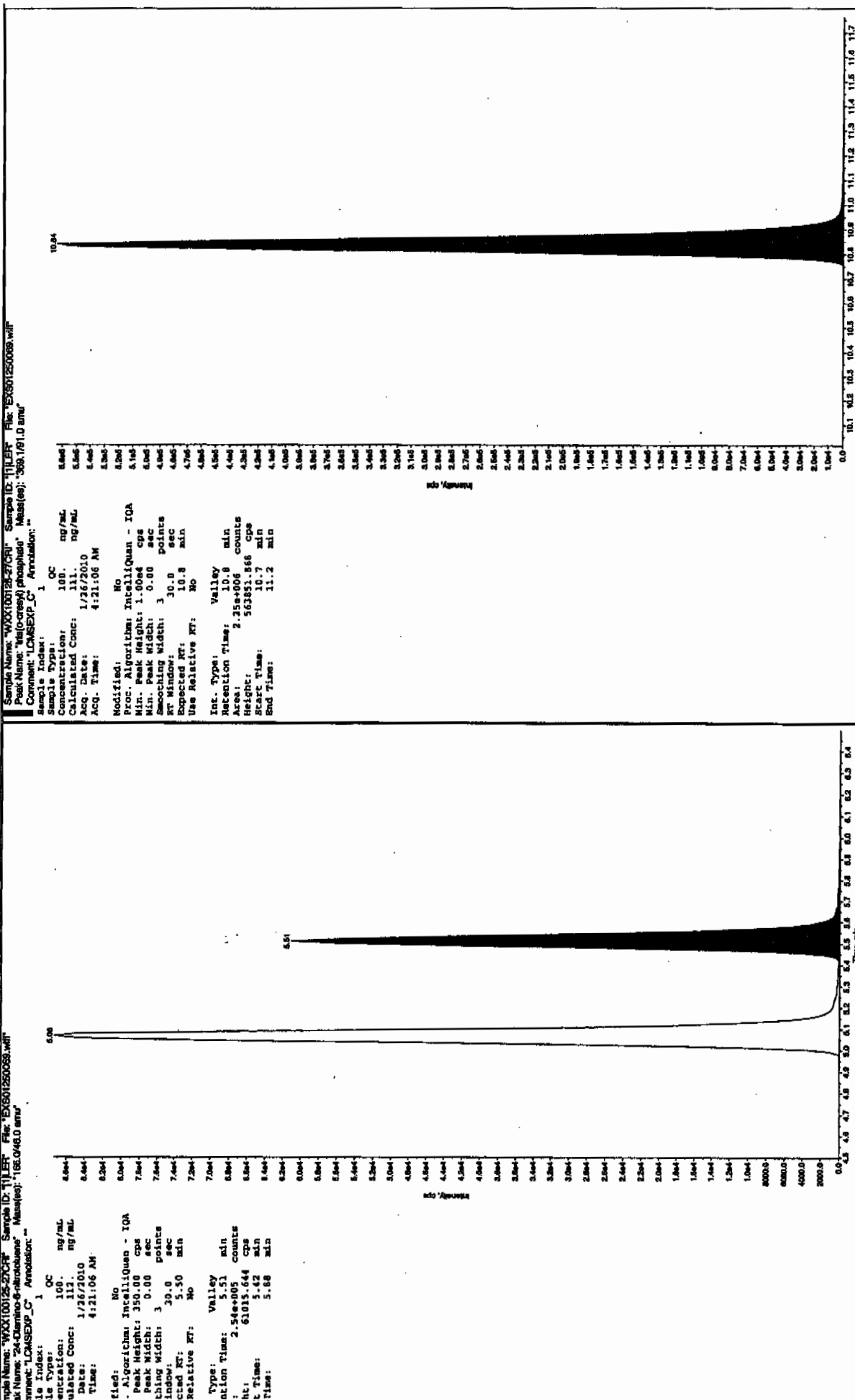


Sample Name: W00100125-2704 Sample ID: 11111111 File: EX001250080.wif
 Peak Name: 34-Deoxy-4-Hydroxy-1,2:1,16:1,5 and
 Comment: LCMSEXP_C Association:

Sample Index: 1
 Sample Type: 100
 Concentration: 100 ng/mL
 Calculated Conc: 110 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 4:21:06 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: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.06 min
 Peak Height: 3,816,005 counts
 Peak Width: 0.00 sec
 Start Time: 4.93 min
 End Time: 5.32 min

Sample Index: 1
 Sample Type: 100
 Concentration: 100 ng/mL
 Calculated Conc: 110 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 4:21:06 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: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.06 min
 Peak Height: 3,816,005 counts
 Peak Width: 0.00 sec
 Start Time: 4.93 min
 End Time: 5.32 min





L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250080.wiff

Analysis Date: 26-JAN-10 07:13

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	493	99	
3,4-Dinitrotoluene	250	236	95	
3,5-Dinitroaniline	500	539	108	
TATB	500	538	108	
tris(o-cresyl) phosphate	500	504	101	

Recovery Limits:

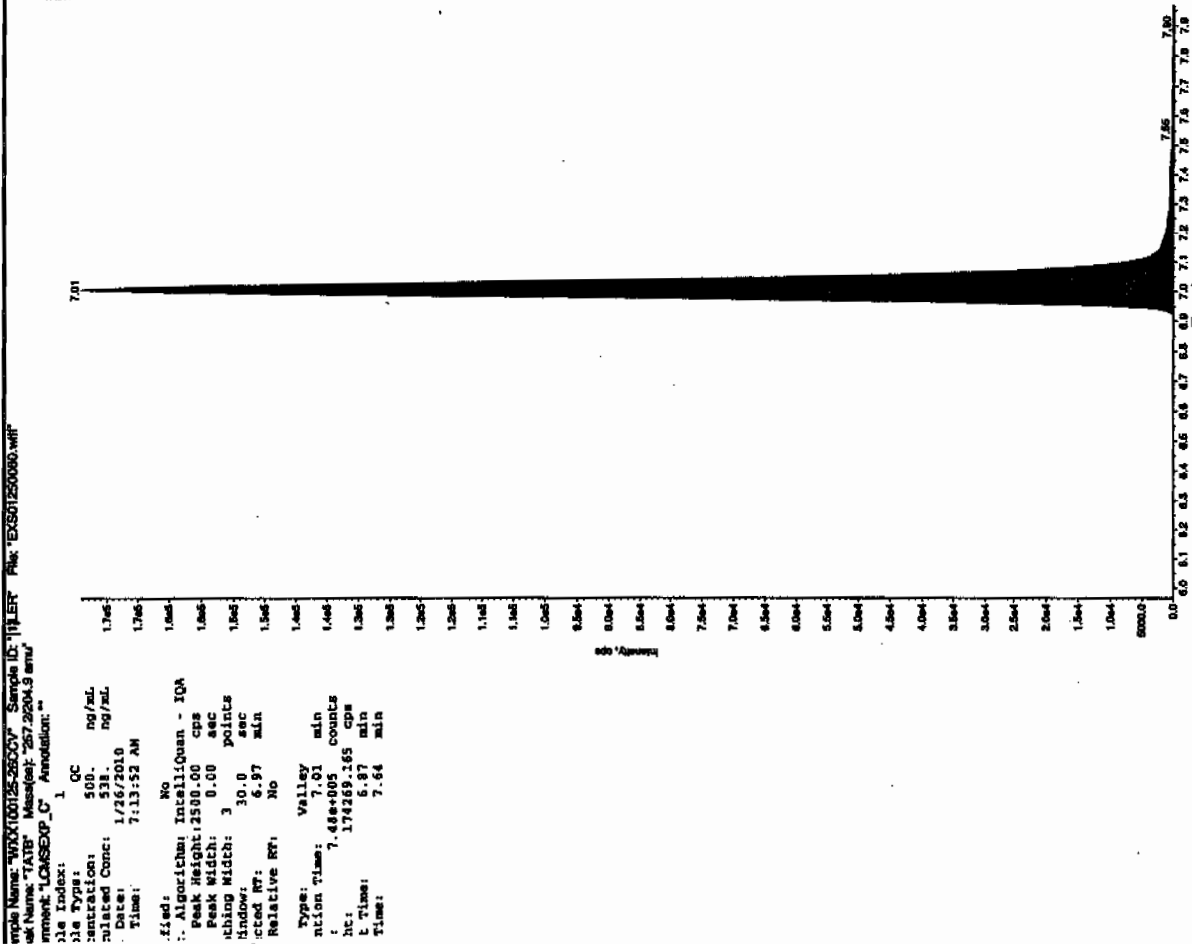
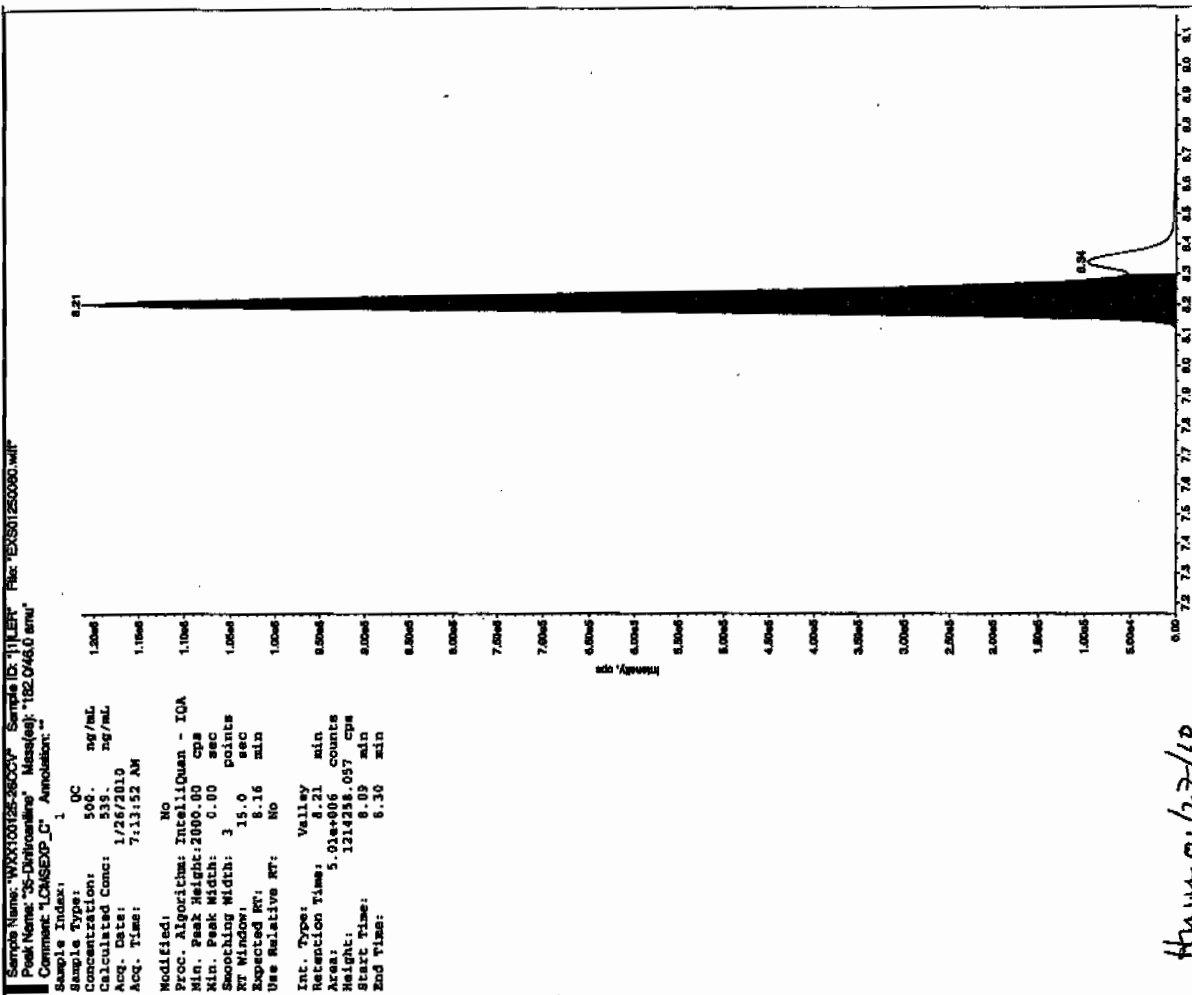
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 1/27/10

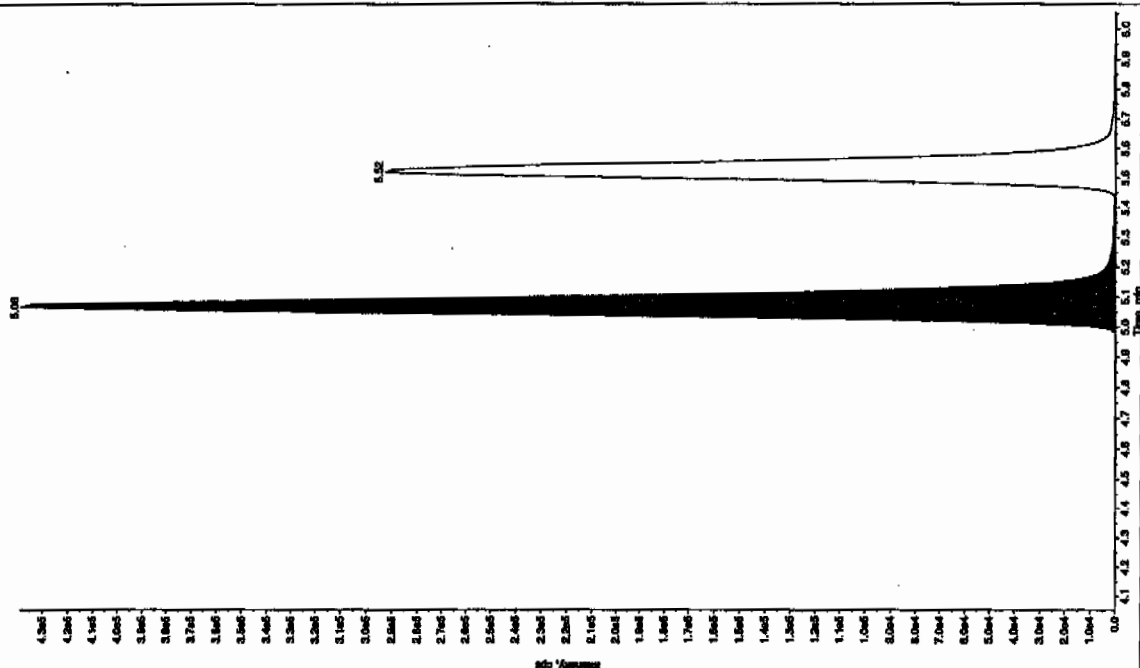


Hum 01/27/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

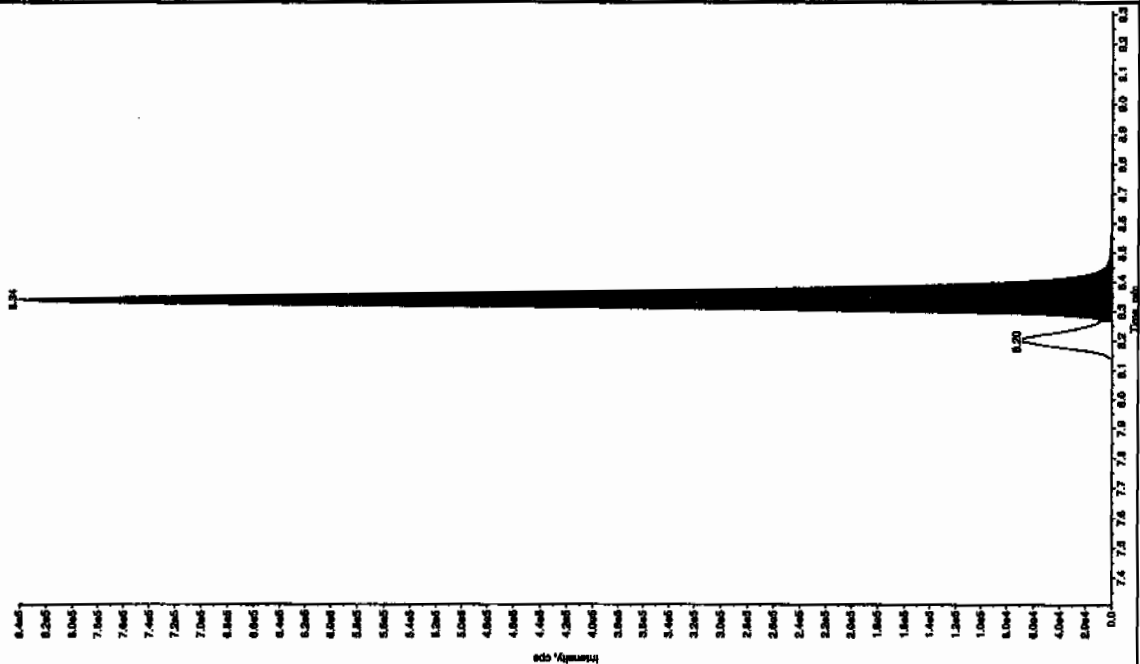
Sample Name: "W00100125-2800" Sample ID: "JLER" File: "EX01250000.wif"
 Peak Name: "28-Diethyl-4-hydroxybenzoate" Mass(es): "186.046.0 amu"
 Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 493. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:13:52 AM
 Modified: NO
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: NO
 Int. Type: Valley
 Retention Time: 5.06 min
 Area: 1.86e+006 counts
 Height: 438609.283 cps
 Start Time: 4.96 min
 End Time: 5.35 min

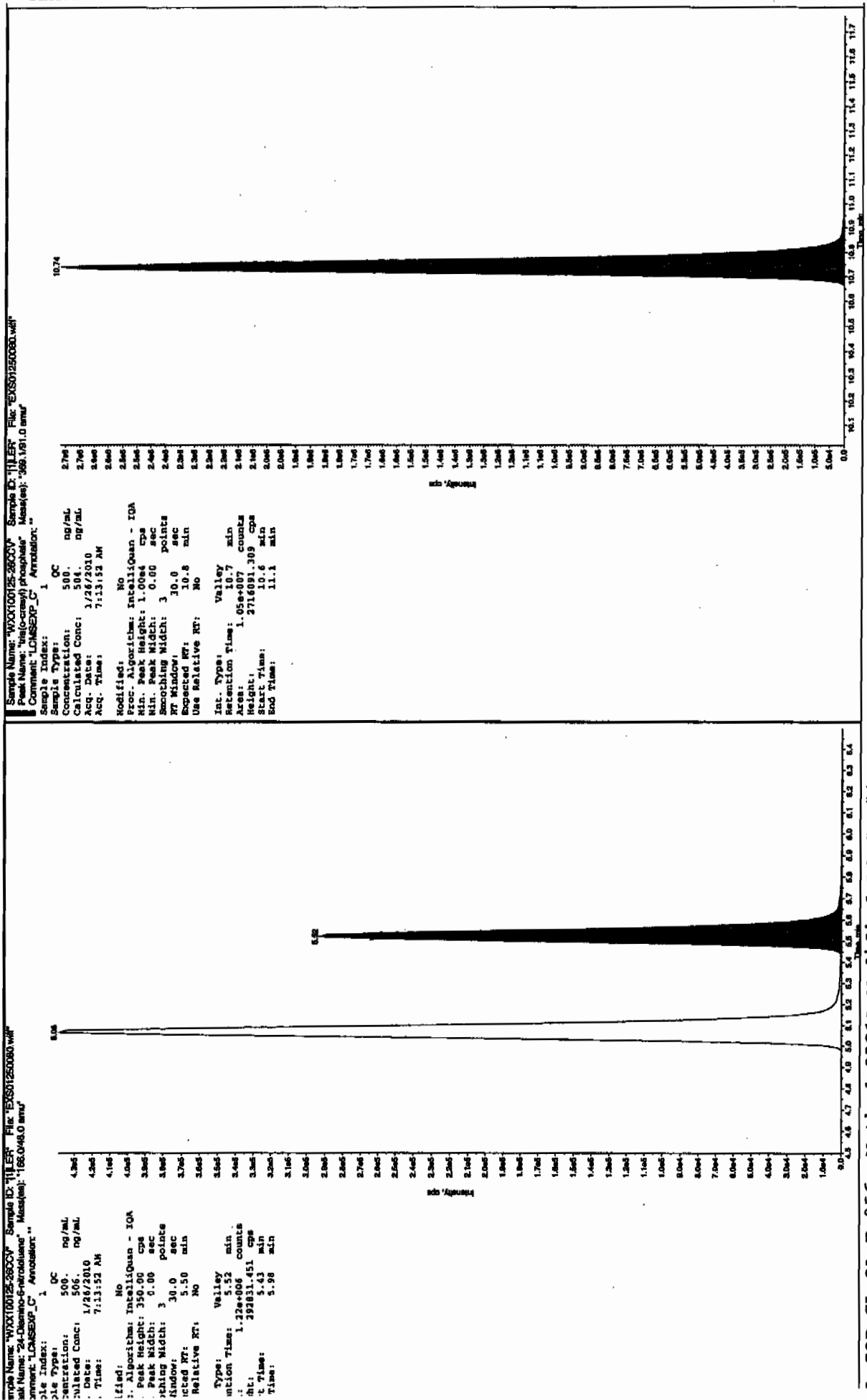


Sample Name: "W00100125-2800" Sample ID: "JLER" File: "EX01250000.wif"
 Peak Name: "28-Diethyl-4-hydroxybenzoate" Mass(es): "186.046.0 amu"
 Comment: "LCMS-EXP-C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 250. ng/mL
 Calculated Conc: 238. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:13:52 AM
 Modified: NO
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: NO
 Int. Type: Valley
 Retention Time: 8.36 min
 Area: 3.16e+006 counts
 Height: 84017.932 cps
 Start Time: 8.27 min
 End Time: 8.64 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250082.wiff

Analysis Date: 26-JAN-10 07:45

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	111	111	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.5	97	
3,5-Dinitroaniline	100	109	109	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	116	116	

Recovery Limits:

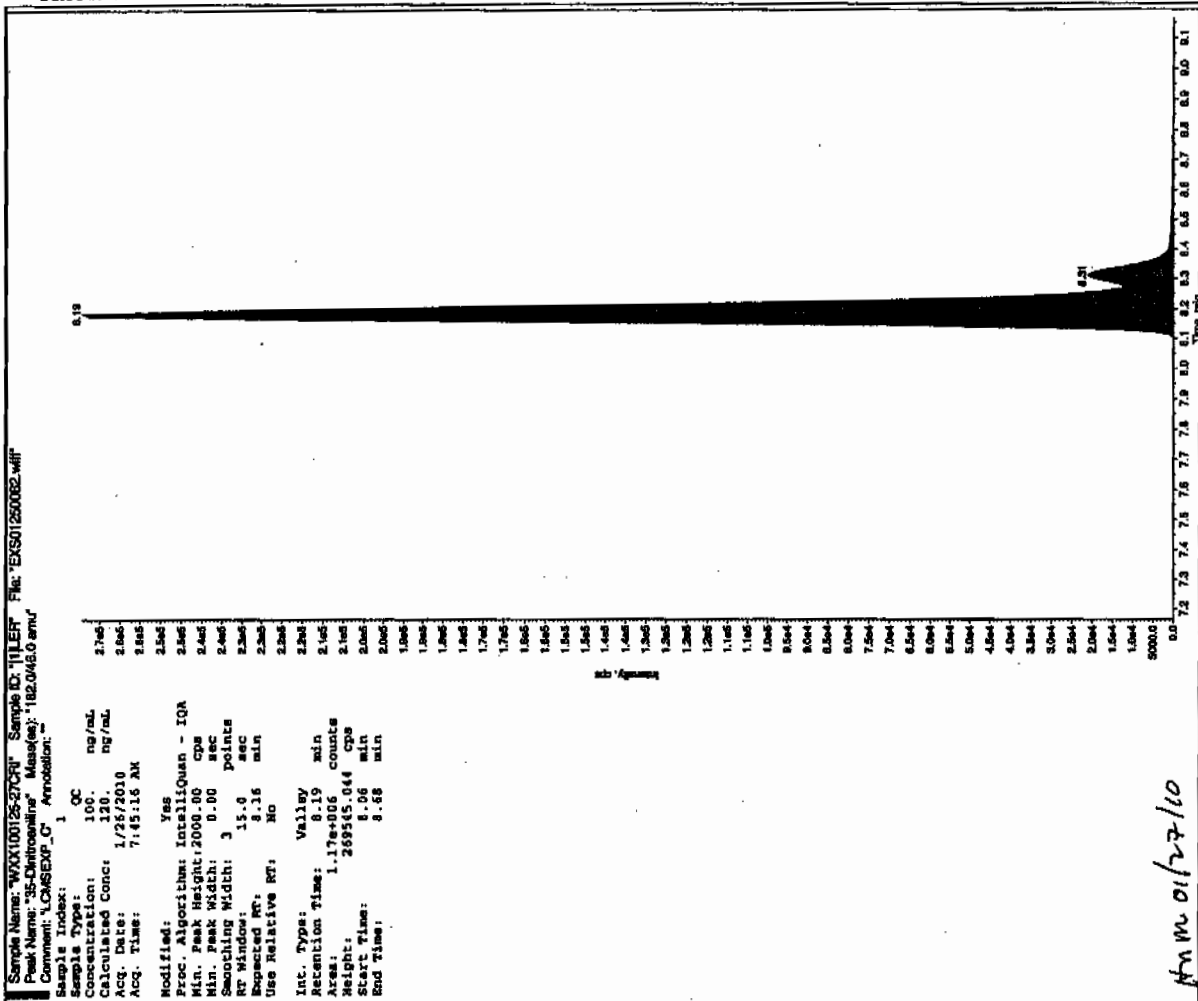
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

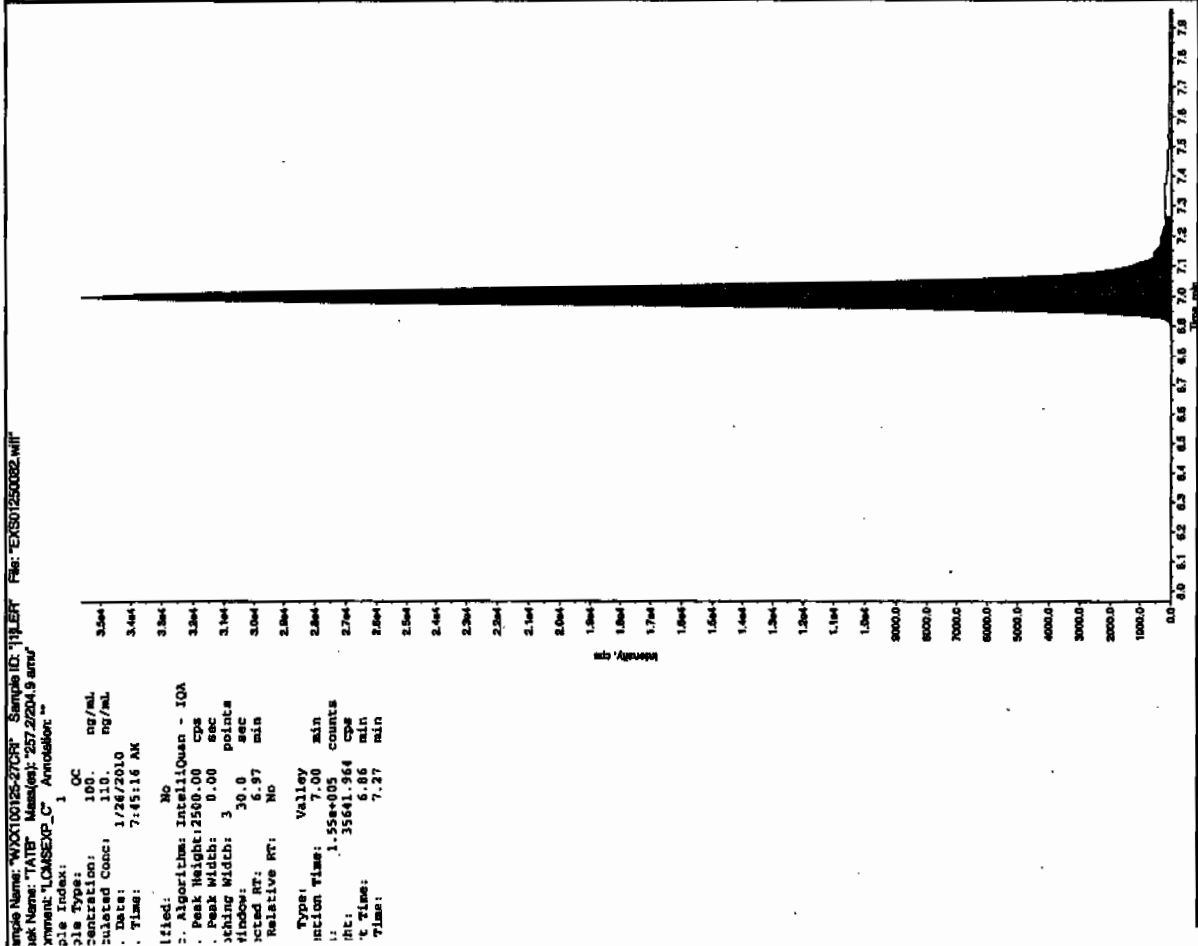
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before 2/27/10

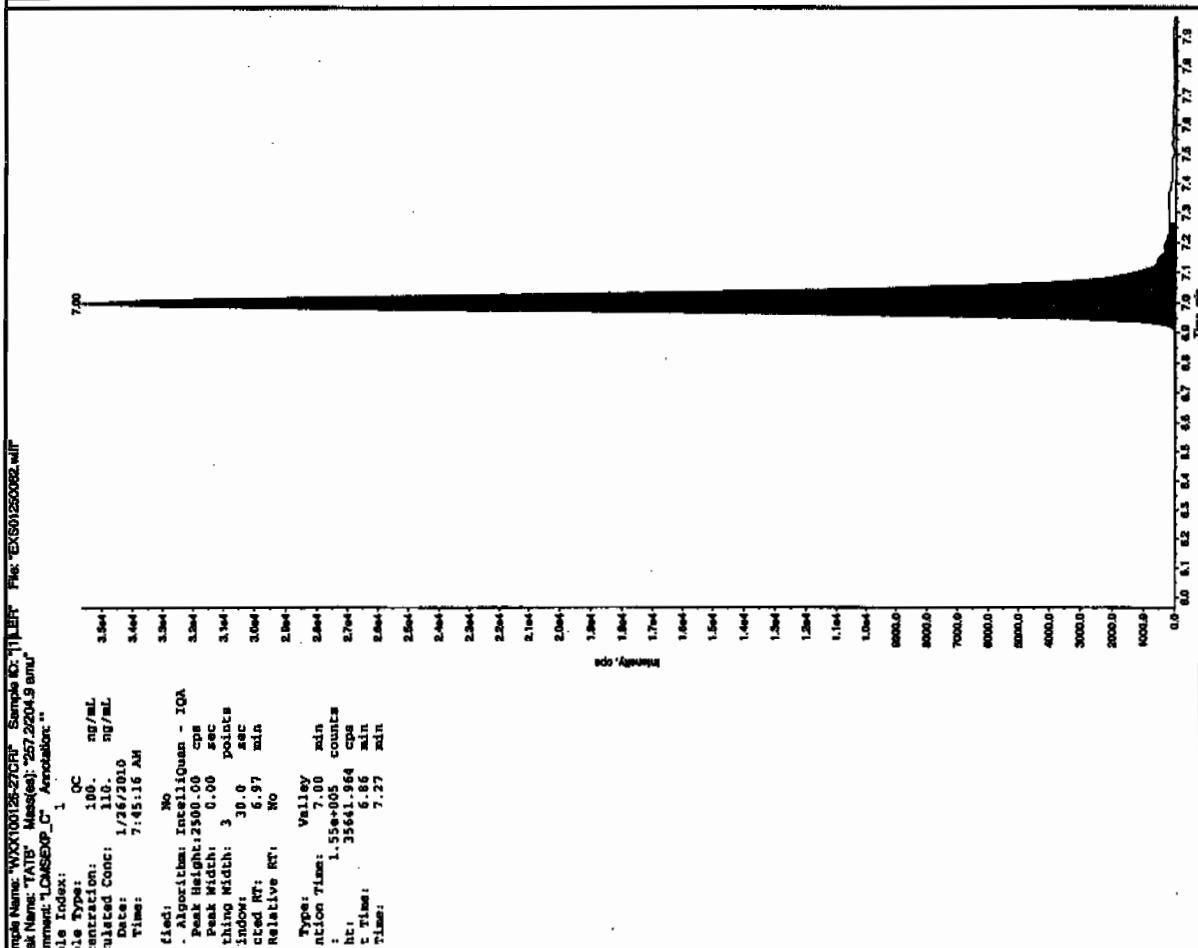
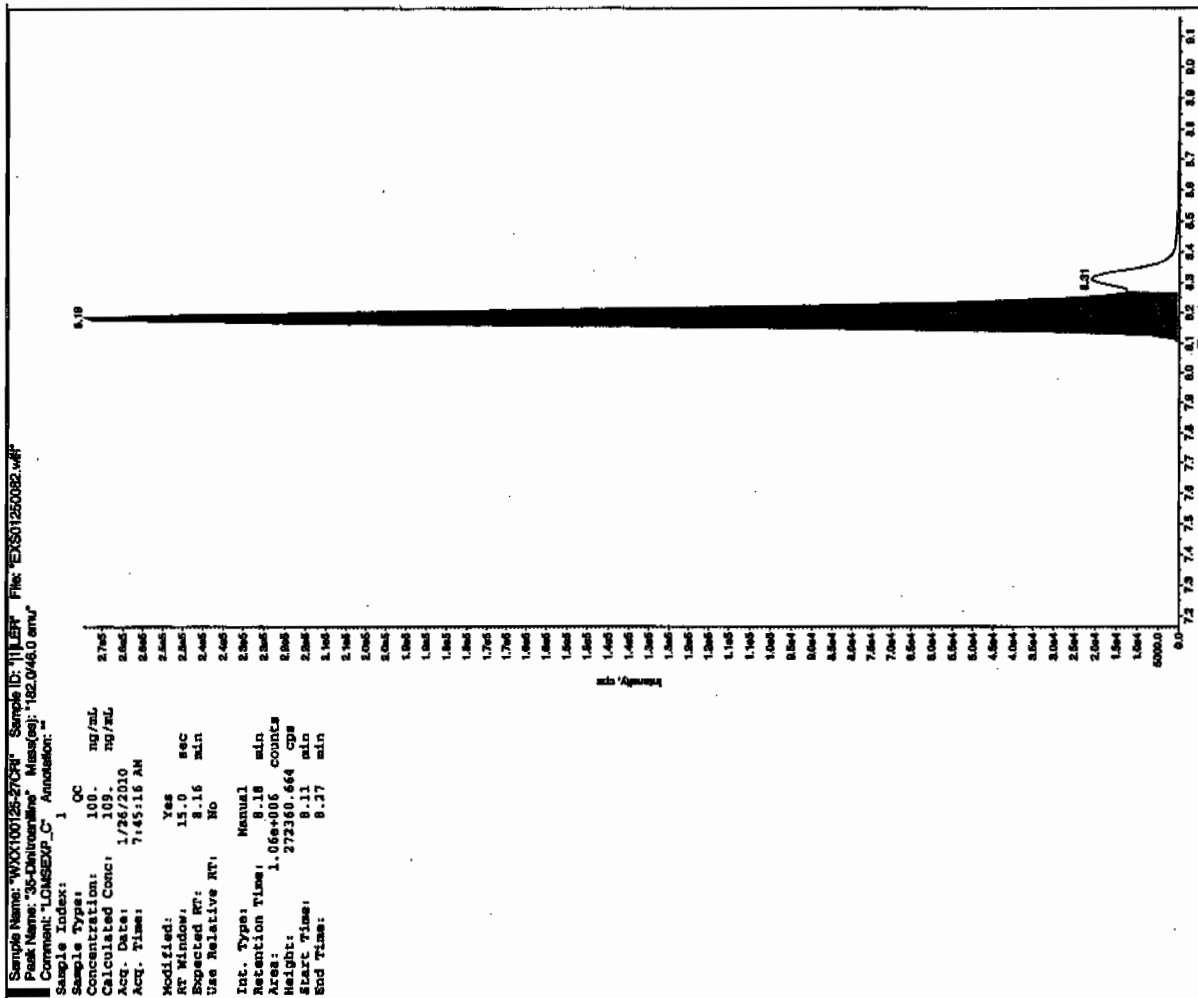


After 01/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

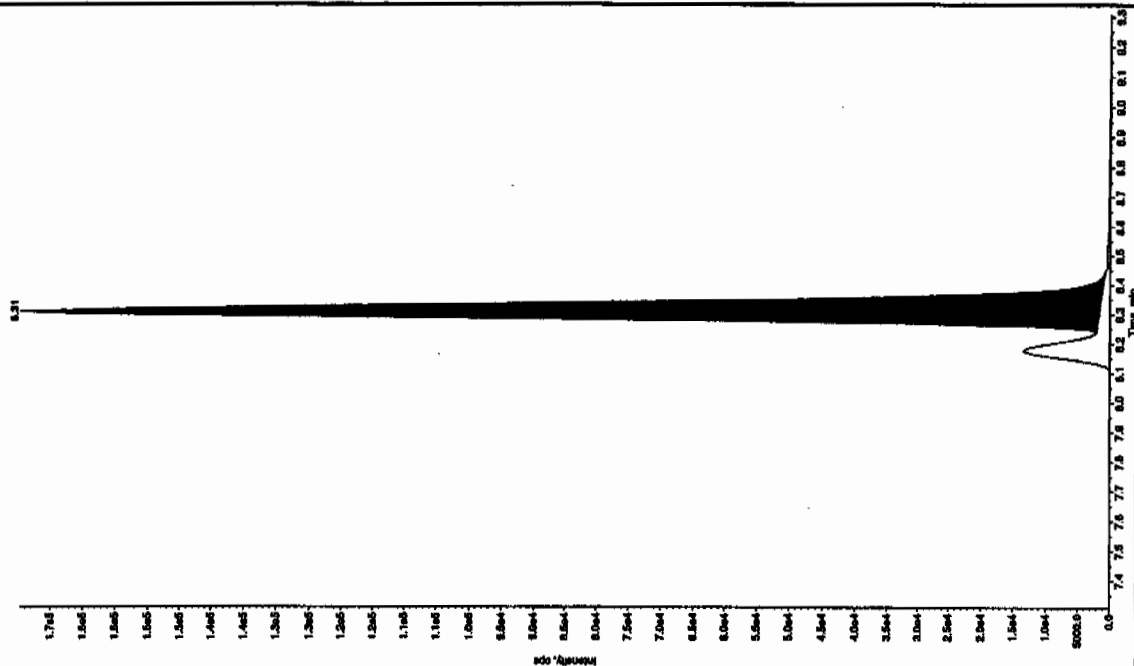
after scan 1127110



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

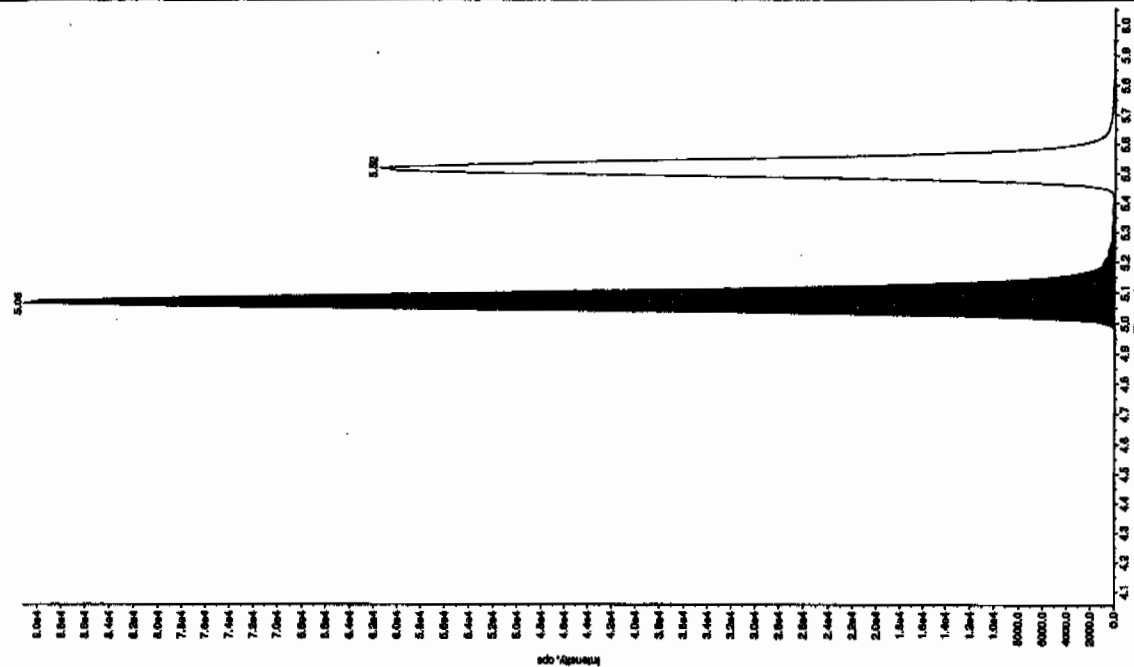
Sample Name: "WXX100125-2704" Sample ID: "11111" File: "EX50125002.wif"
 Peak Name: "34-Dinitro-4-nitrobenzene" Mass(es): "182.17151.9amu"
 Comment: "LCMSSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: OC
 Concentration: 50.0 ng/mL
 Calculated Conc: 48.5 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:45:16 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 8.31 min
 Observed RT: 8.31 min
 Use Relative RT: No
 ID. Type: Valley
 Retention Time: 8.31 min
 Area: 6.27e+005 counts
 Height: 168193.405 cps
 Start Time: 8.24 min
 End Time: 8.44 min

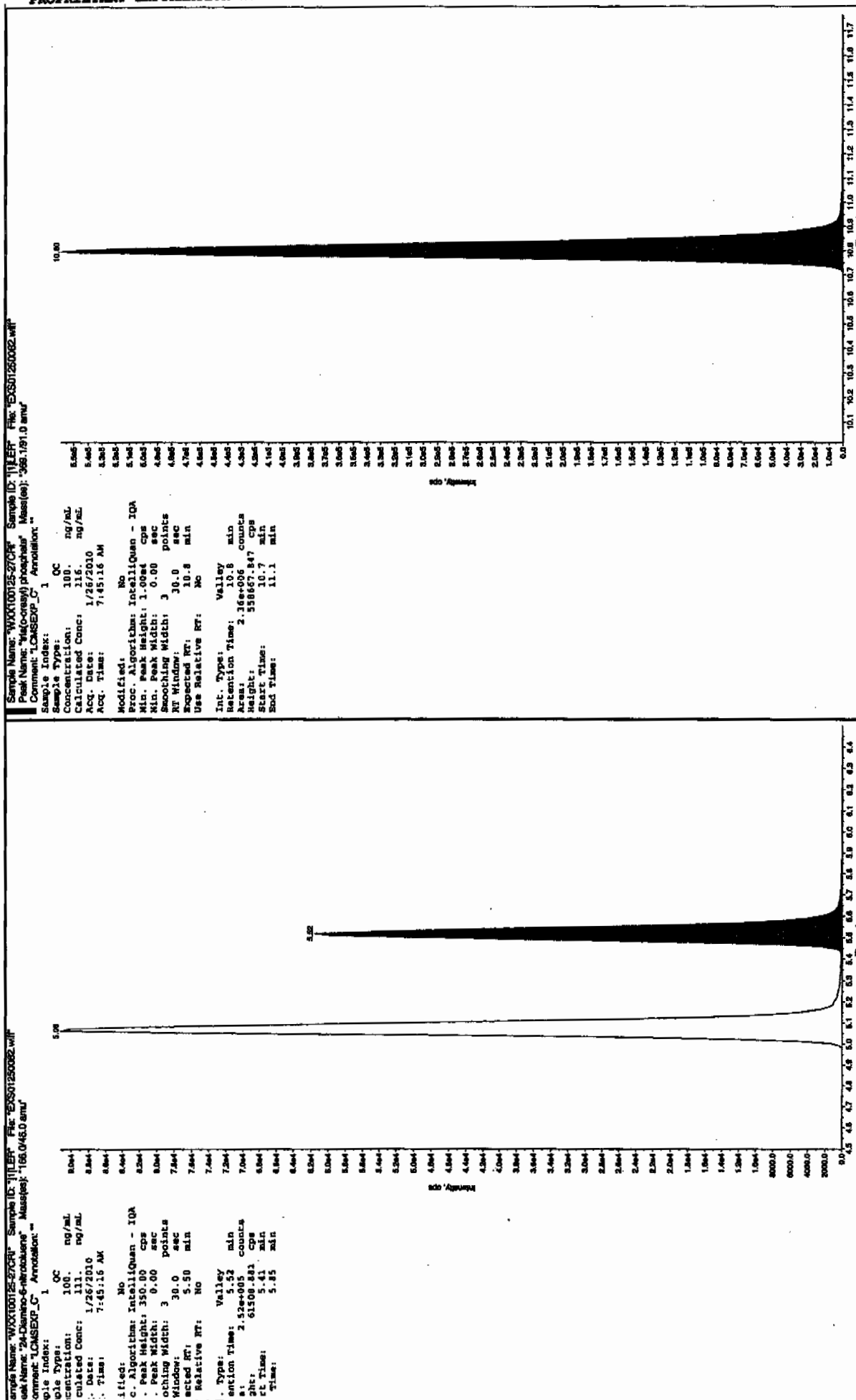


Sample Name: "WXX100125-2704" Sample ID: "11111" File: "EX50125002.wif"
 Peak Name: "29-Dinitro-4-nitrobenzene" Mass(es): "166.0448.0amu"
 Comment: "LCMSSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 110. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:45:16 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Observed RT: 5.05 min
 Use Relative RT: No
 ID. Type: Valley
 Retention Time: 5.05 min
 Area: 3.81e+005 counts
 Height: 91296.703 cps
 Start Time: 4.97 min
 End Time: 5.35 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250093.wiff

Analysis Date: 26-JAN-10 10:37

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	492	98	
2,6-Diamino-4-nitrotoluene	500	457	91	
3,4-Dinitrotoluene	250	226	90	
3,5-Dinitroaniline	500	545	109	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	515	103	

Recovery Limits:

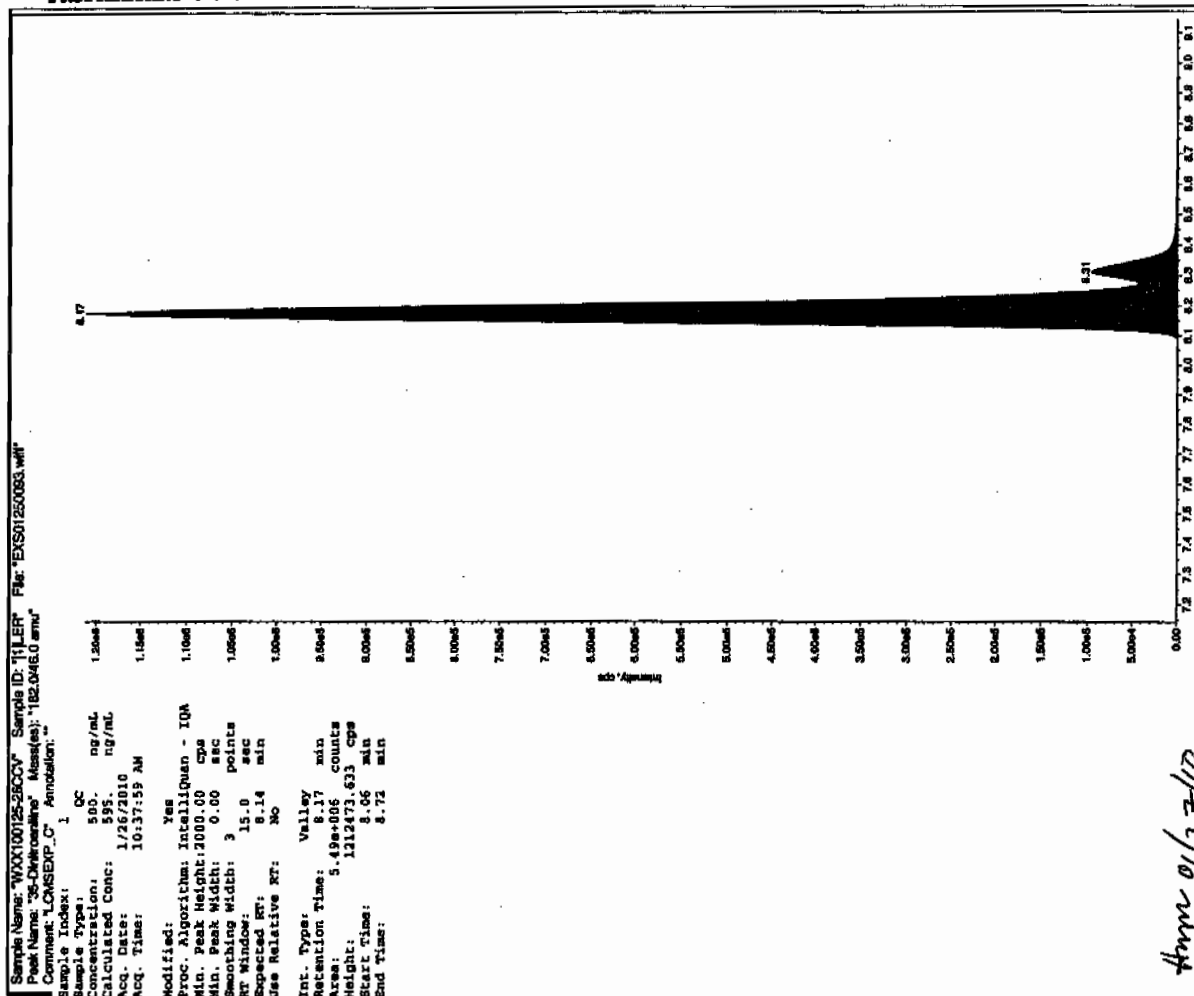
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

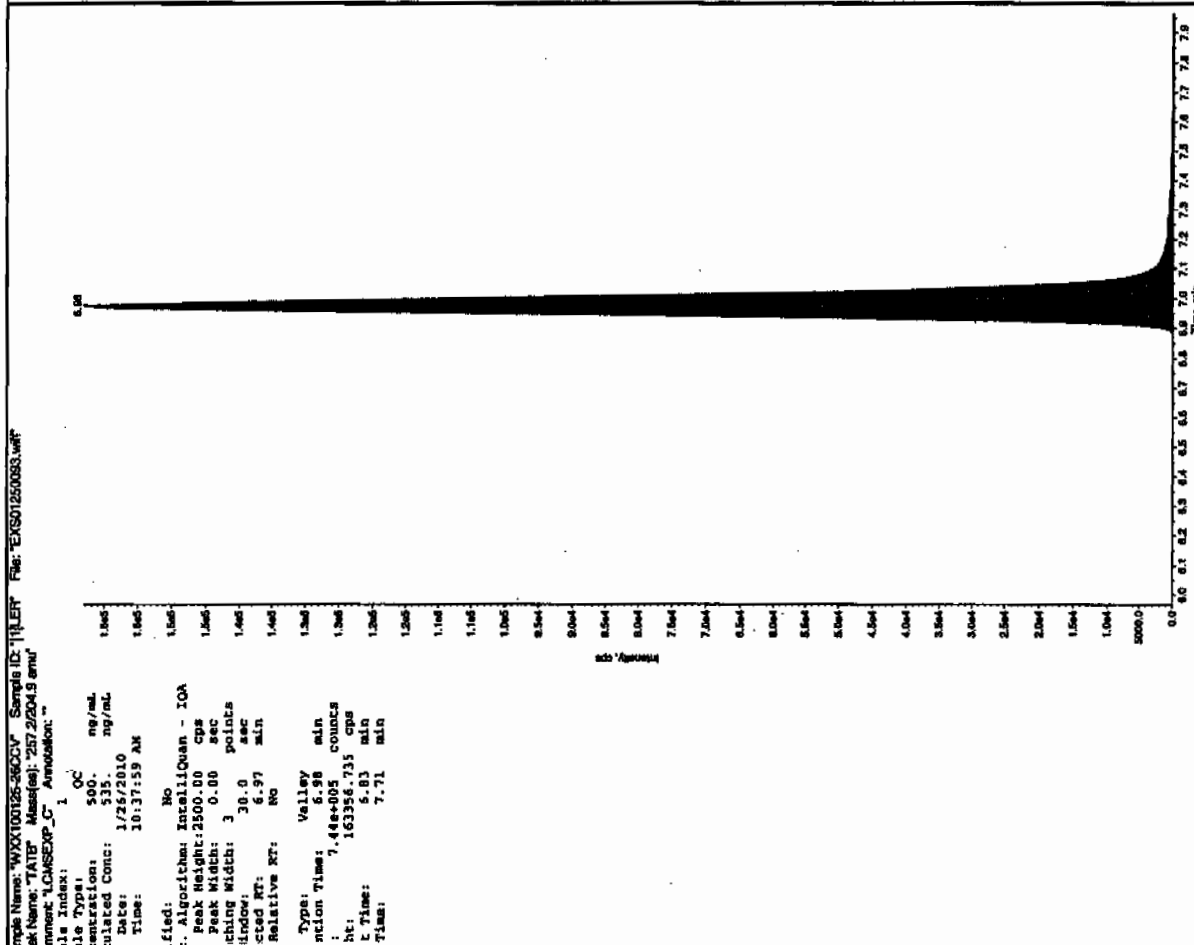
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 11/27/10



Ann 01/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 11/27/10

Sample Name: "WXX100125-2803V" Sample ID: "T11ER" File: "EXS01250093.wif"

Peak Name: "TATB" Mass(es): "257.22049 amu"

Comment: "LCMS-EXP_C" Annotation: "

File Index: 1

Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 545. ng/mL
Acq. Date: 1/26/2010
Acq. Time: 10:37:59 AM

Modified: Yes
RT Window: 15.0 sec
Reported RT: 8.14 min
Use Relative RT: No

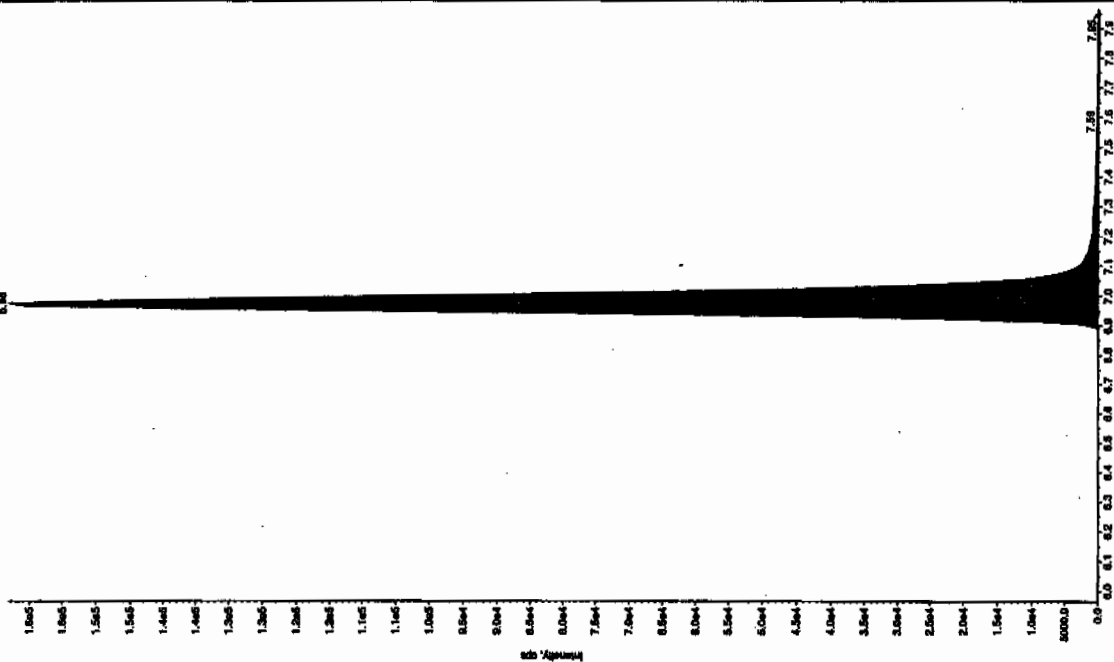
Int. Type: Manual
Retention Time: 8.17 min
Area: 5.07e+006 counts
Height: 1212610.817 cps

Start Time: 8.08 min
End Time: 8.28 min

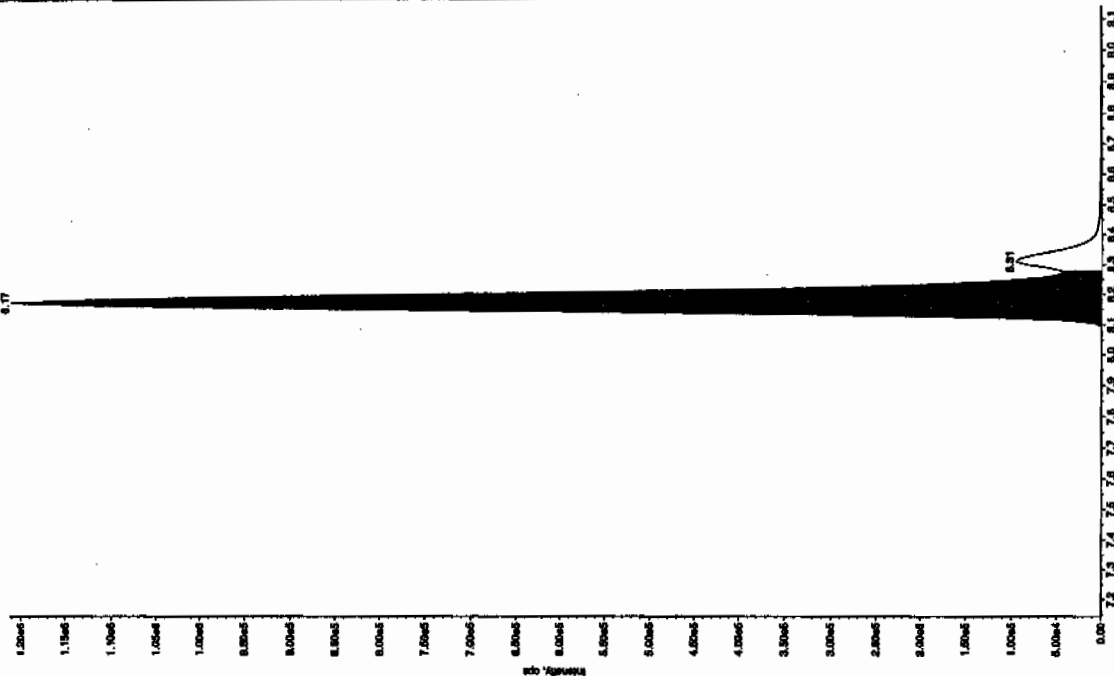
Type: Valley
Retention Time: 6.98 min
Area: 7.44e+005 counts
Height: 163356.735 cps

Start Time: 6.83 min
End Time: 7.71 min

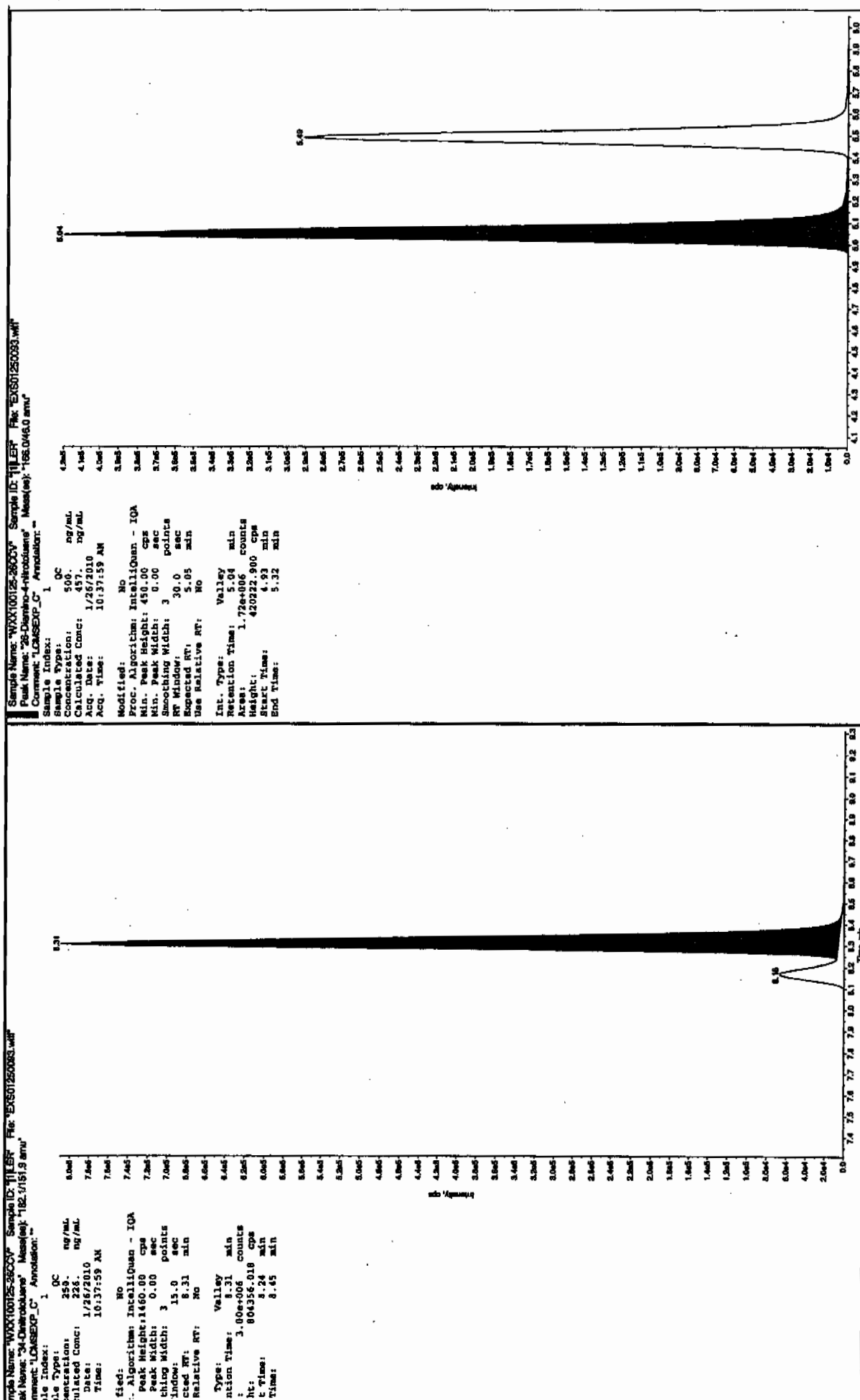
0.00



0.17



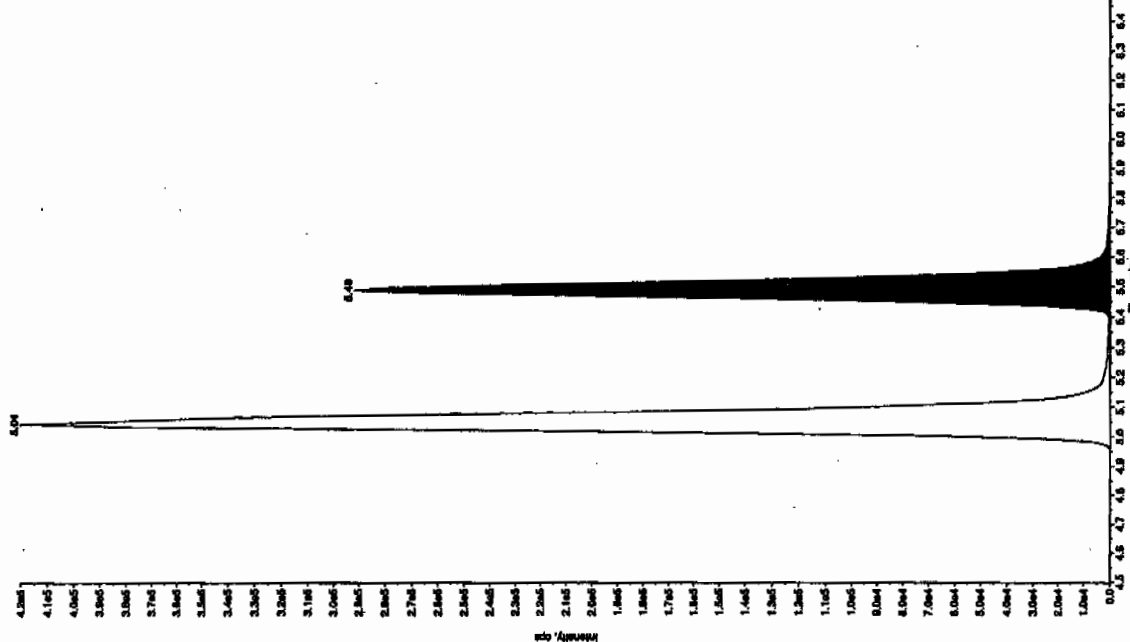
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

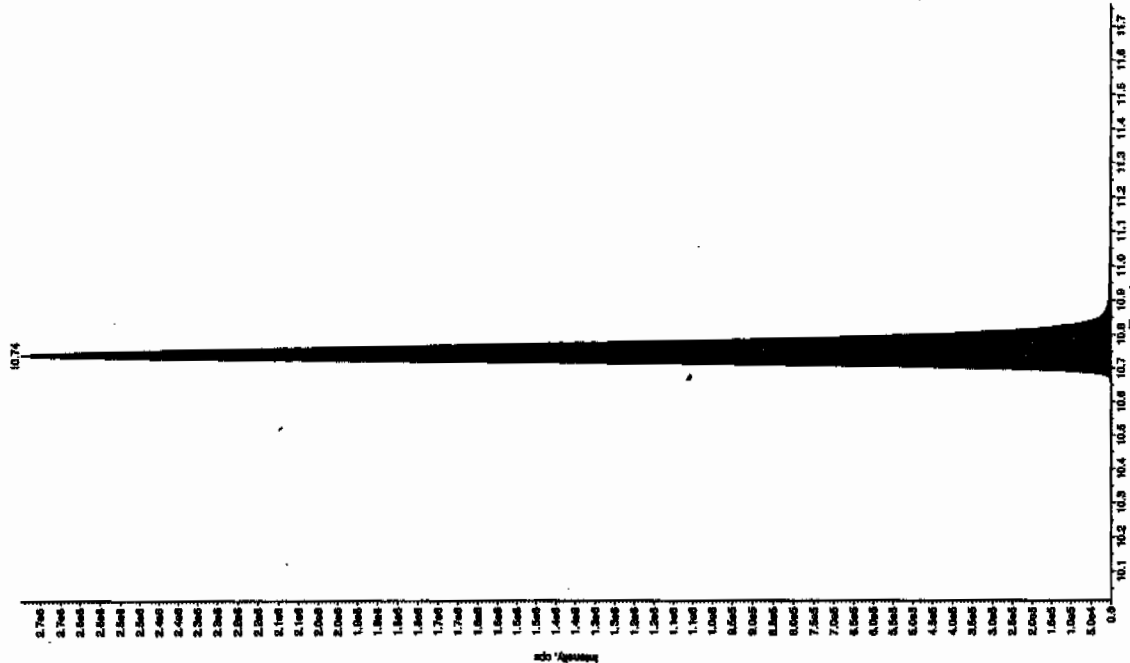
Sample Name: WXX100125-2603Y Sample ID: 111EP File: EX501250033.wif
 Peak Name: 264-Dimino-6-antidimino Mass(es): 186.046.0 amu
 Comment: LCMSSEXP_C Annotation: "

File Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 492. ng/mL
 Date: 1/26/2010
 Time: 10:37:59 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Window: 30.0 sec
 Expected RT: 5.50 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.49 min
 Area: 1.19e+006 counts
 Height: 291516.205 cps
 Start Time: 5.38 min
 End Time: 5.96 min



Sample Name: WXX100125-2603Y Sample ID: 111EP File: EX501250033.wif
 Peak Name: 100-cresol phosphate Mass(es): 308.191.0 amu
 Comment: LCMSSEXP_C Annotation: "

File Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 515. ng/mL
 Date: 1/26/2010
 Time: 10:37:59 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 30.0 points
 Window: 30.0 sec
 Expected RT: 10.6 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.7 min
 Area: 1.07e+007 counts
 Height: 2749219.727 cps
 Start Time: 10.7 min
 End Time: 11.1 min



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1225

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250095.wiff

Analysis Date: 26-JAN-10 11:09

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	101	101	
2,6-Diamino-4-nitrotoluene	100	107	107	
3,4-Dinitrotoluene	50	50.1	100	
3,5-Dinitroaniline	100	110	110	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	118	118	

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%

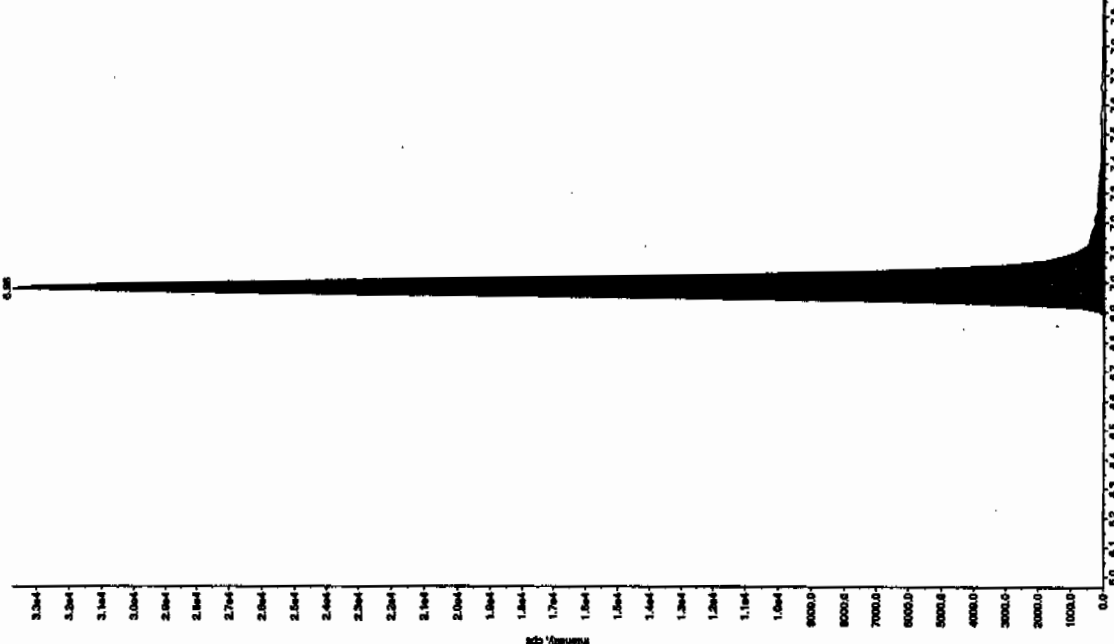
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

262167110

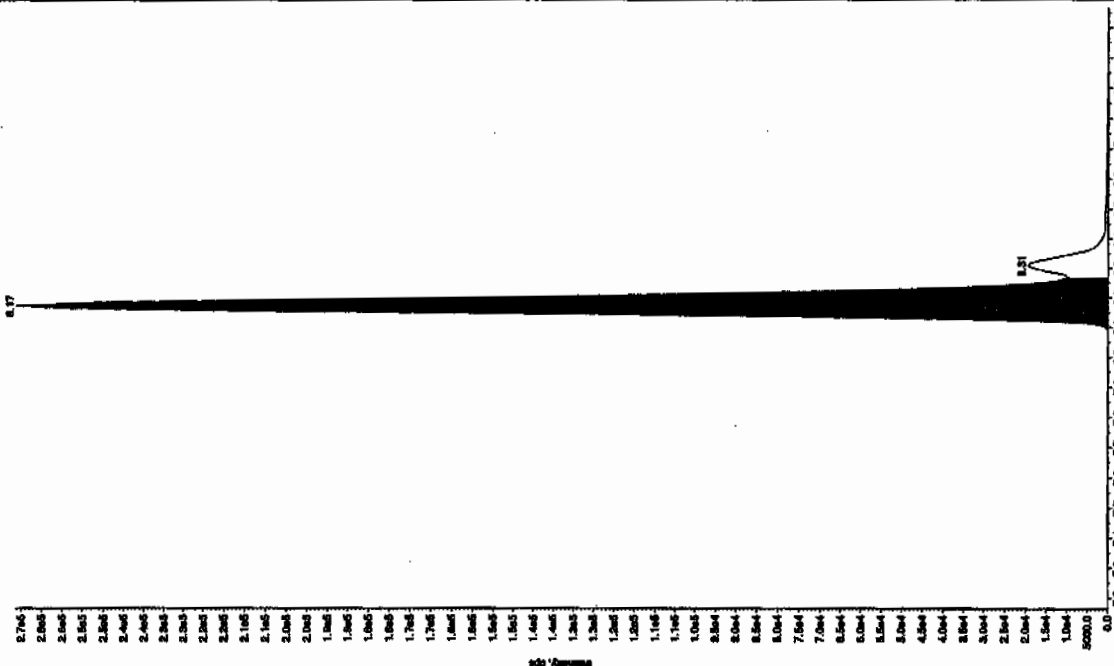
Sample Name: "WXX100125-2709" Sample ID: "111ER" File: "EX50125005.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMS-EXP_C" Annotation: "

File Index: 1
 Sample Type: 100
 Concentration: 100 ng/mL
 Calculated Conc: 1/26/2010
 Date: 11/09/22 AM
 Acq. Time: 11:09:22 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: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.97 min
 Area: 1.54e+005 counts
 Height: 33757.034 cps
 Start Time: 6.81 min
 End Time: 7.46 min

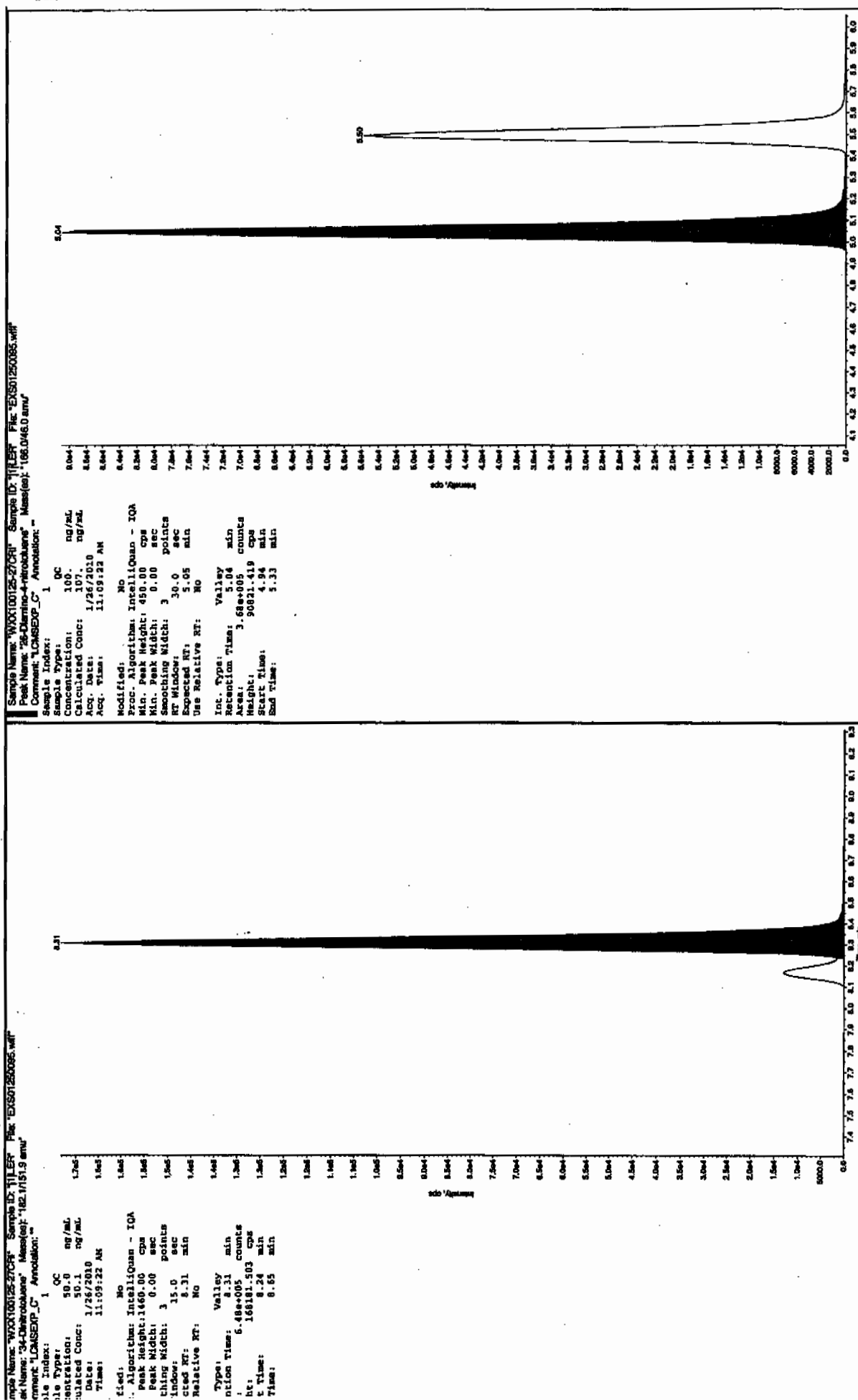


Sample Name: "WXX100125-2709" Sample ID: "111ER" File: "EX50125005.wif"
 Peak Name: "3S-Dinitroarsine" Mass(es): "182.046.0 amu"
 Comment: "LCMS-EXP_C" Annotation: "

File Index: 1
 Sample Type: 100
 Concentration: 100 ng/mL
 Calculated Conc: 1/26/2010
 Date: 11/09/22 AM
 Acq. Time: 11:09:22 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: 8.17 min
 Area: 1.07e+006 counts
 Height: 266332.703 cps
 Start Time: 8.01 min
 End Time: 8.27 min

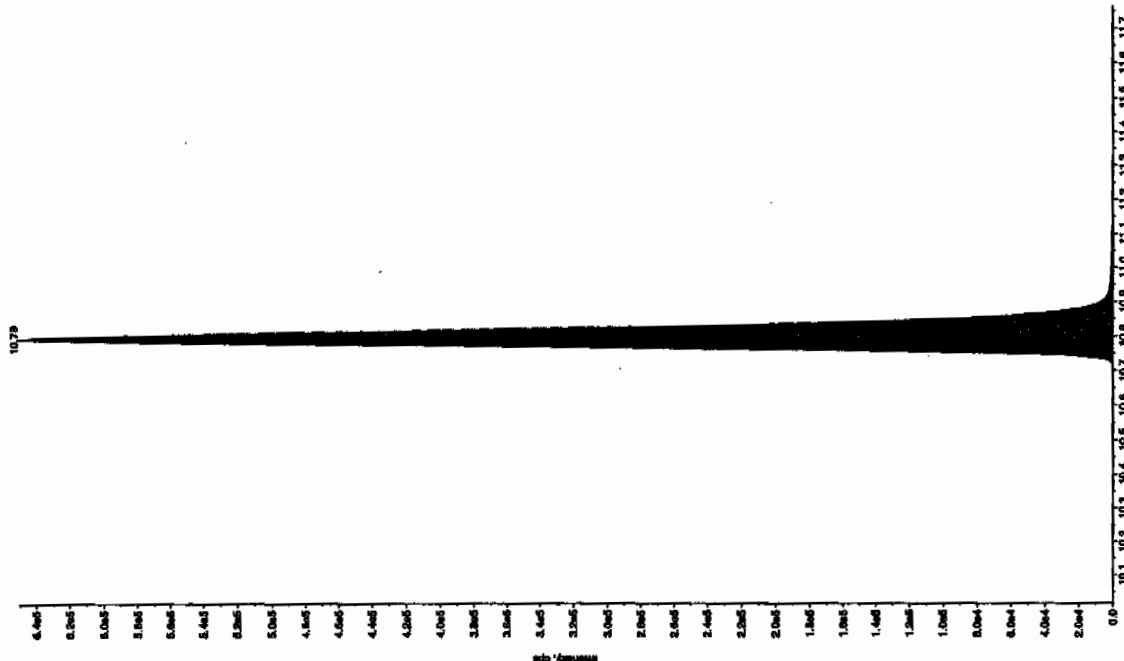


Height: 10



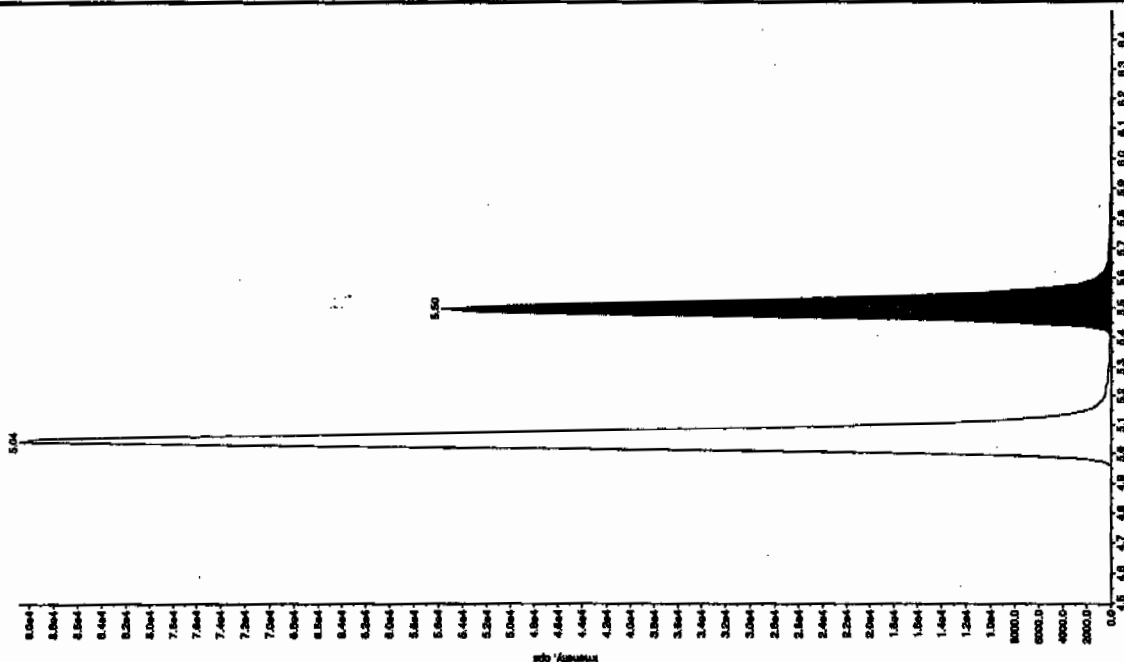
Sample Name: "WXX100125-2709" Sample ID: "T1LER" File: "EXS01250095.wif"
 Peak Name: "24-Diamino-6-phosphorib" Mass(es): "358.1091.0 amu"

Comment: "LCMSDEP_C" Annotation: "
 Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 118. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 11:09:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 3.00 sec
 Retention Time Window: 30.0 min
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 2.42e+006 counts
 Height: 650371.825 cps
 Start Time: 10.7 min
 End Time: 11.1 min



Sample Name: "WXX100125-2709" Sample ID: "T1LER" File: "EXS01250095.wif"
 Peak Name: "24-Diamino-6-phosphorib" Mass(es): "166.0461.0 amu"

Comment: "LCMSDEP_C" Annotation: "
 Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 101. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 11:09:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 3.00 sec
 Retention Time Window: 30.0 min
 Expected RT: 5.50 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.50 min
 Area: 2.28e+005 counts
 Height: 55690.258 cps
 Start Time: 5.39 min
 End Time: 5.89 min



QUALITY CONTROL DATA

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 941663

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015510

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130013a

Date Analyzed: 30-JAN-10 17:36

Units: ug/kg

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

*Concentration =

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

atset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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ate: 30-Jan-2010

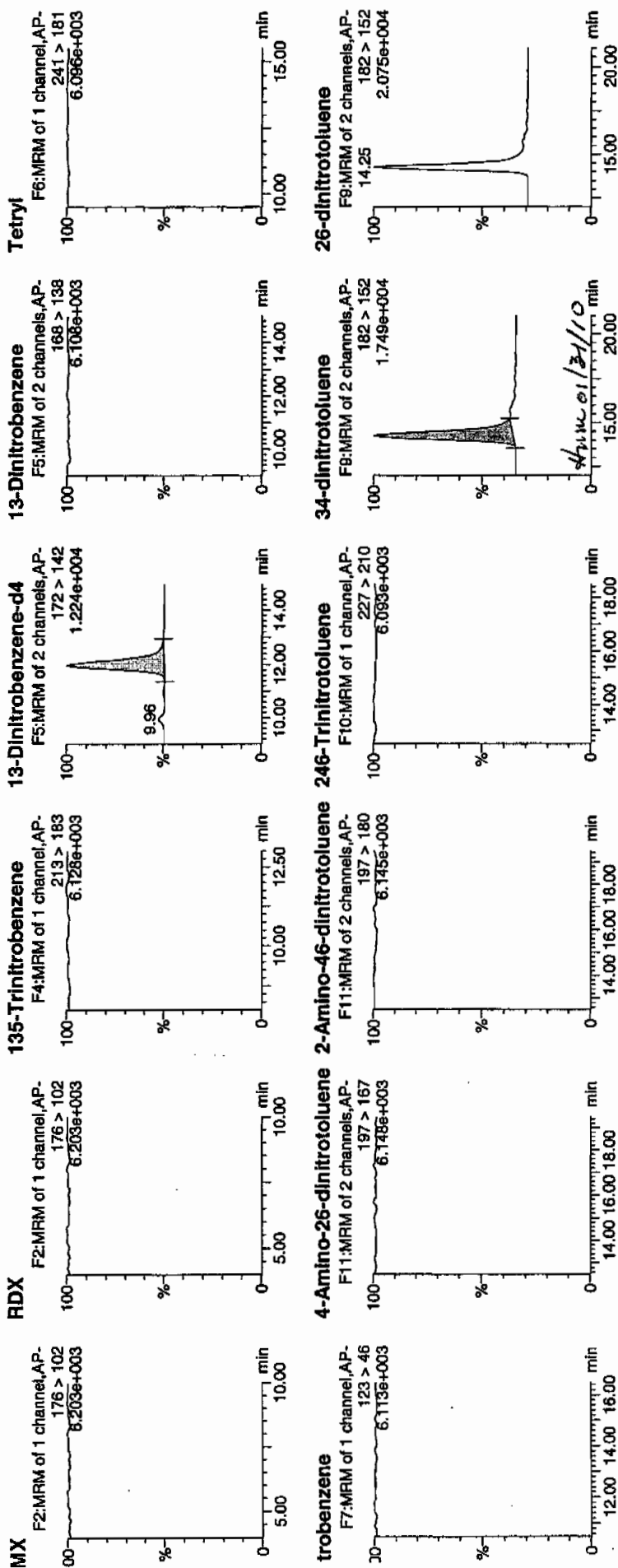
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l: 1202015510

ial: 1:4,A

1/3/10

941664 / 121

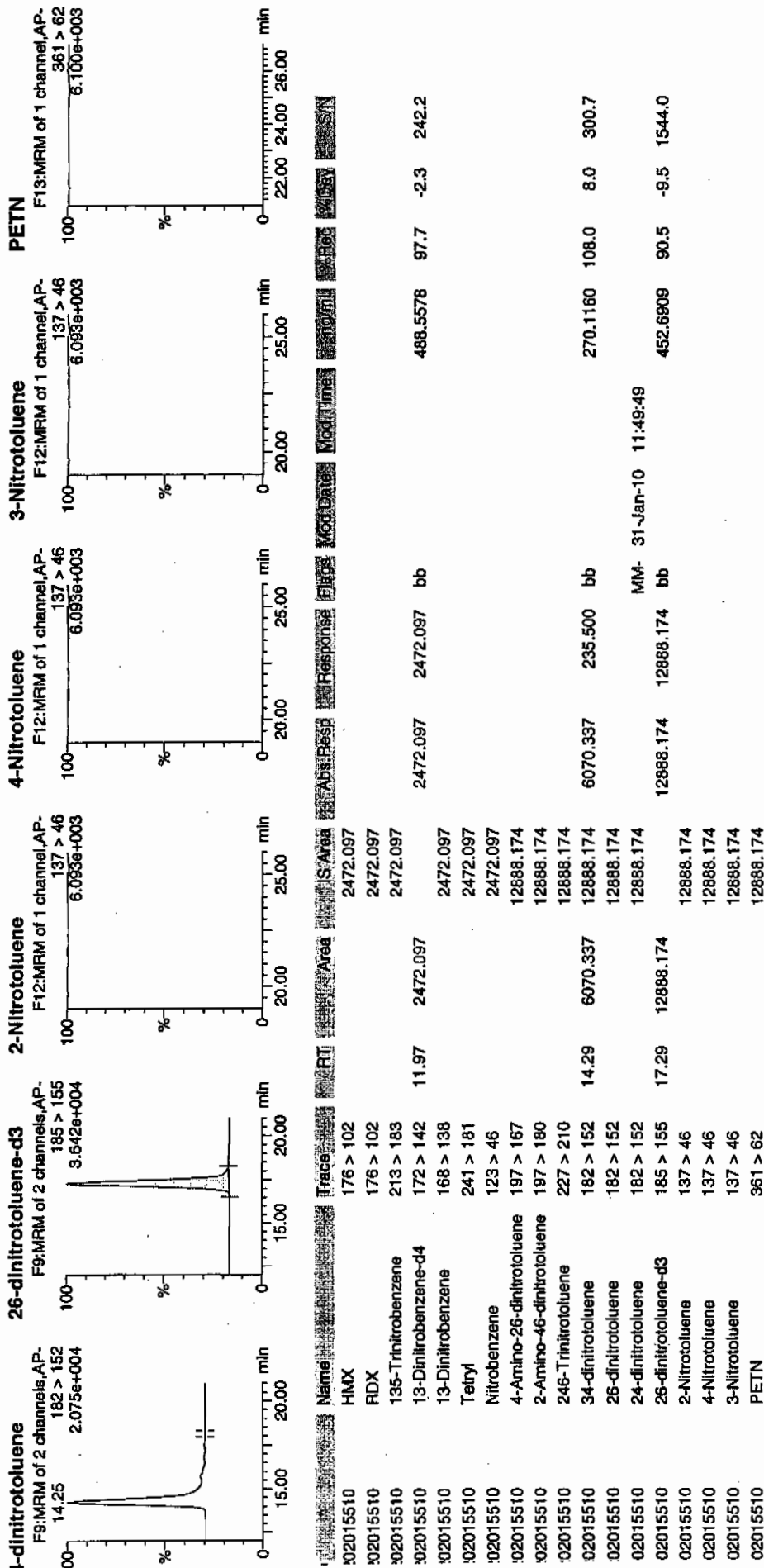


uantify Sample Report

EL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Sun Jan 31 11:57:34 2010, Page 26 of 77

atset: C:\MASSLYNXNew_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 941663

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015510

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250070.wiff

Date Analyzed: 26-JAN-10 04:36

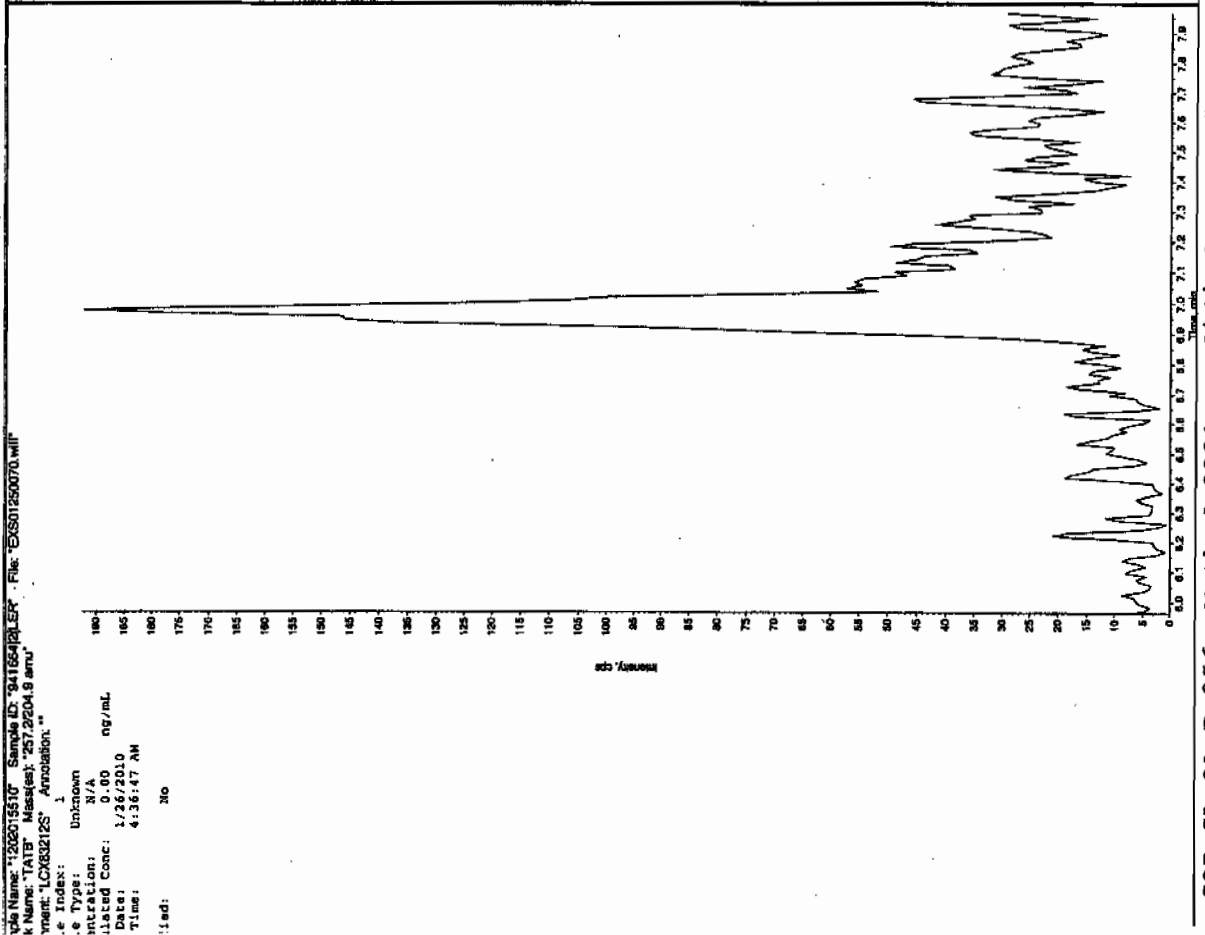
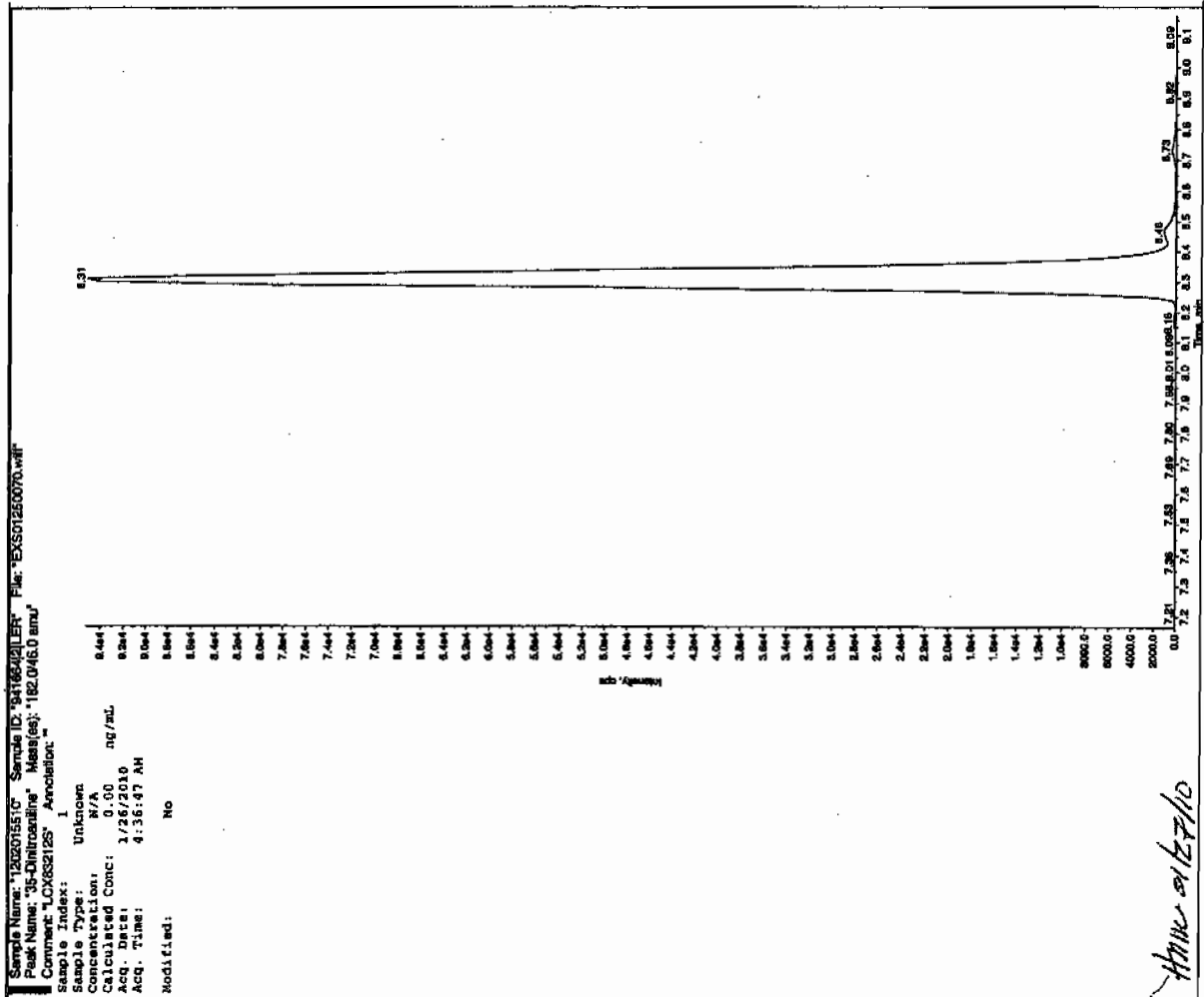
Units: ug/kg

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

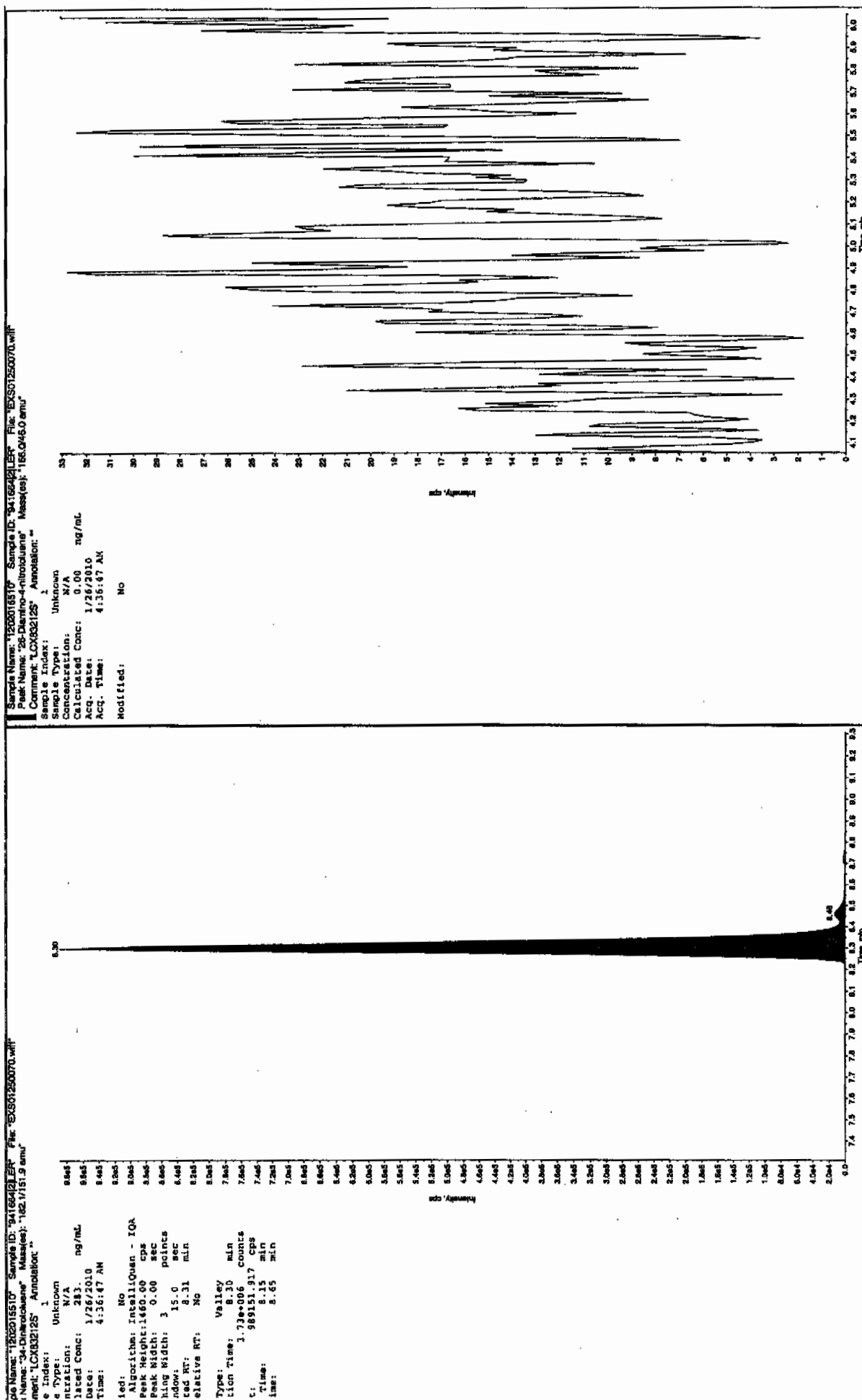
*Concentration =

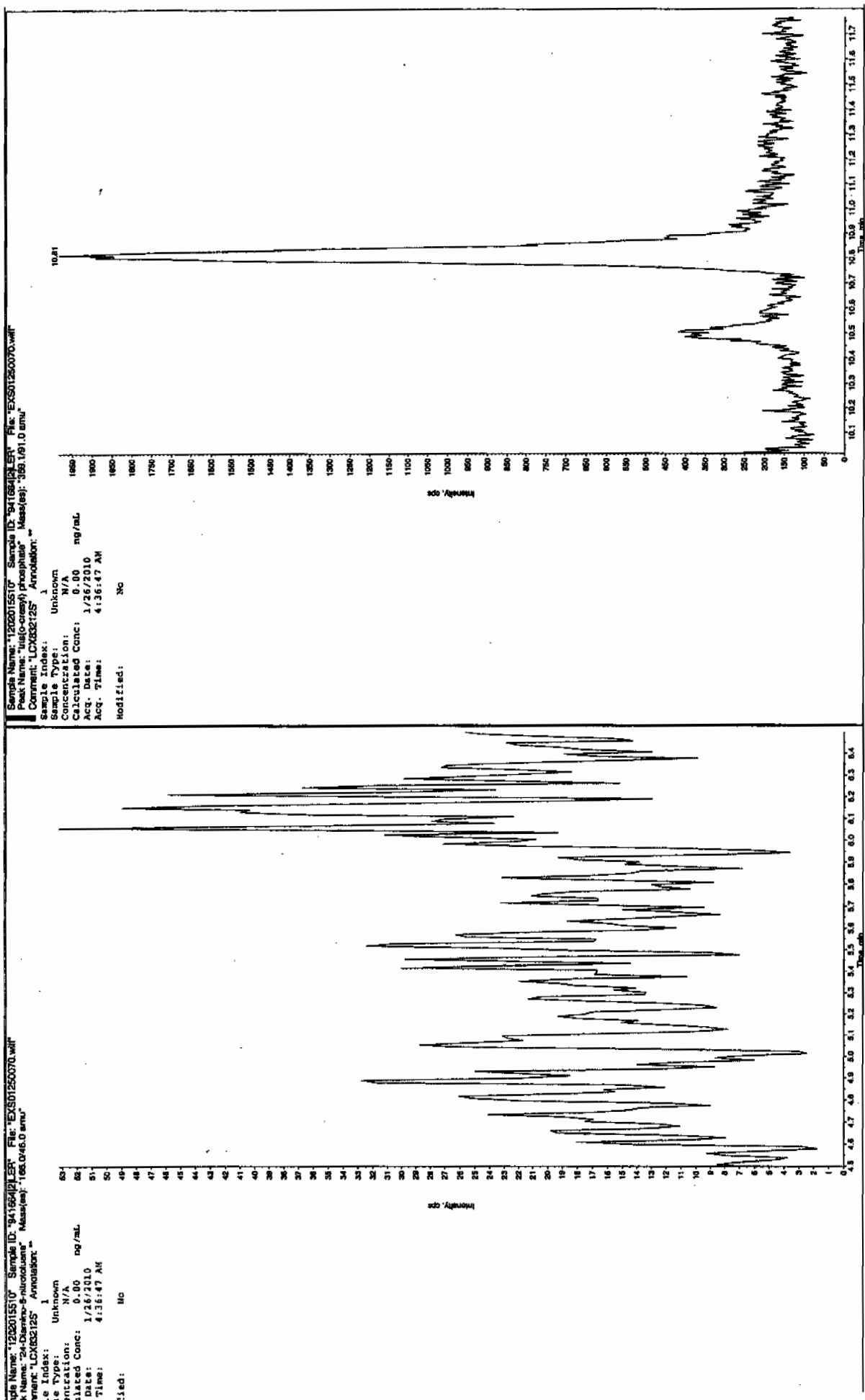
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Ken 1/27/10



J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 941663

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015511

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130014a

Date Analyzed: 30-JAN-10 18:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5320	
121-14-2	2,4-Dinitrotoluene	6330	
121-82-4	RDX	5790	
19406-51-0	4-Amino-2,6-dinitrotoluene	5520	
2691-41-0	HMX	5190	
35572-78-2	2-Amino-4,6-dinitrotoluene	5700	
479-45-8	Tetryl	2300	
606-20-2	2,6-Dinitrotoluene	5590	
78-11-5	PETN	5630	
88-72-2	o-Nitrotoluene	5640	
98-95-3	Nitrobenzene	5390	
99-08-1	m-Nitrotoluene	5140	
99-35-4	1,3,5-Trinitrobenzene	4170	
99-65-0	m-Dinitrobenzene	5290	
99-99-0	p-Nitrotoluene	5940	

*Concentration =

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

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Date: 30-Jan-2010

me: 18:06:09

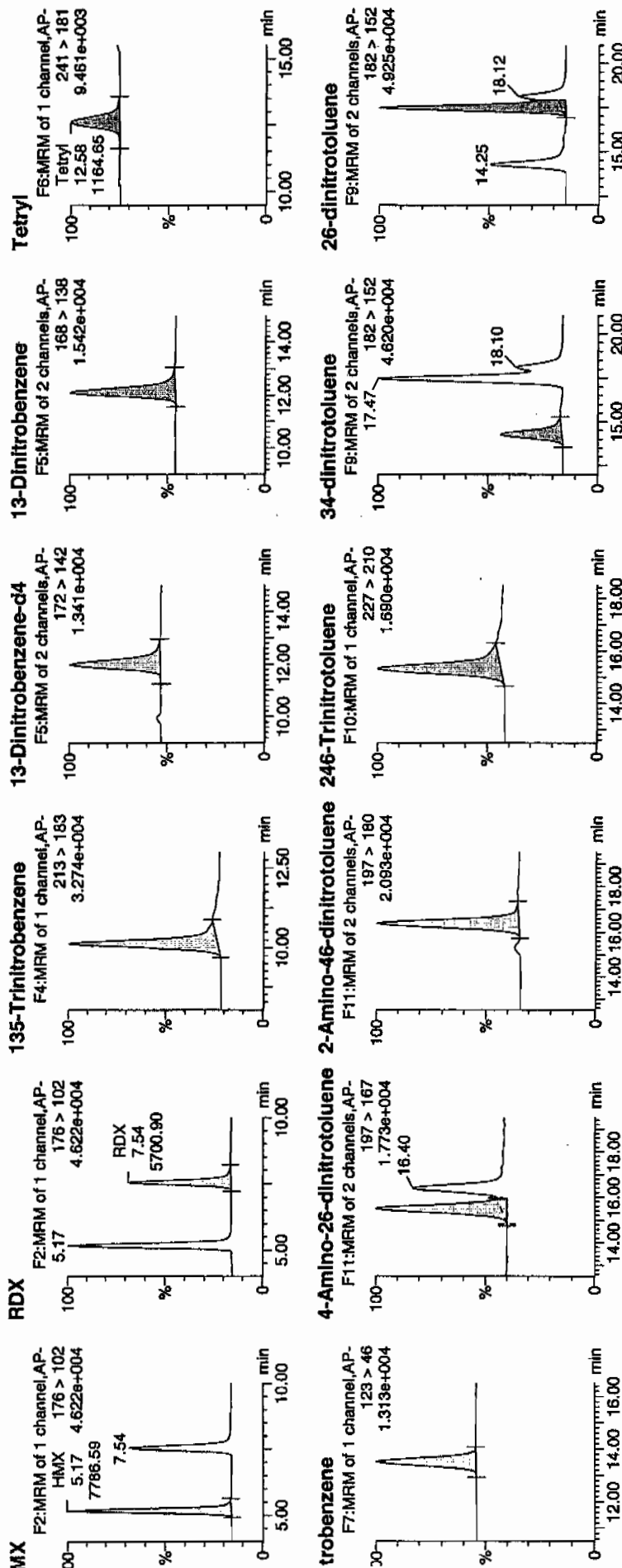
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al: 1:4,B

1477

1/31/10

lane 941664 / source / CS / 21



47mm 1/31/10

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4-dinitrotoluene

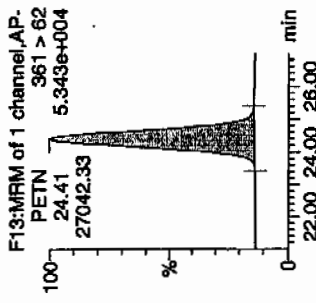
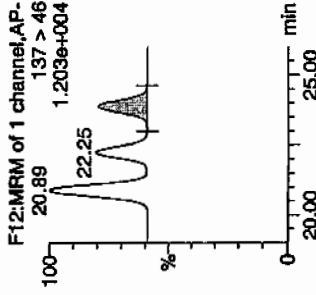
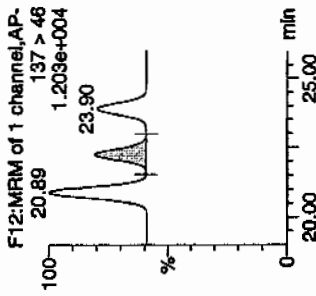
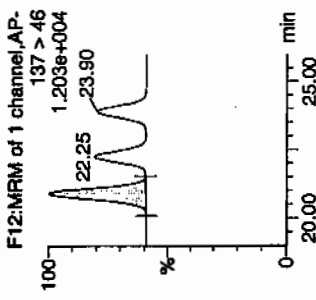
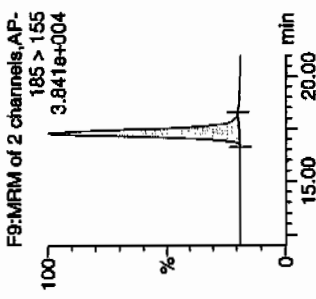
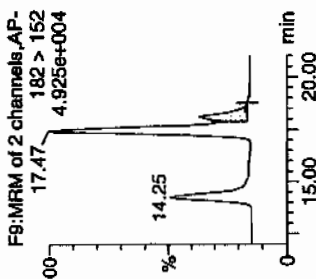
26-dinitrotoluene-d3

2-Nitrotoluene

4-Nitrotoluene

3-Nitrotoluene

PETN



Name	Fracs	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Intom	Req	Comp	SN
HMIX	176 > 102	5.17	7786.591	2501.782	7786.591	1556.209	bb			519.2801	103.9	3.9	1020.5
RDX	176 > 102	7.54	5700.897	2501.782	5700.897	1139.367	bb			578.9909	115.8	15.8	836.1
135-Trinitrobenzene	213 > 183	10.14	7645.864	2501.782	7645.864	1528.084	bb			417.2407	83.4	-16.6	176.9
13-Dinitrobenzene-d4	172 > 142	11.97	2501.782	2501.782	2501.782	2501.782	bb			494.4244	98.9	-1.1	253.8
13-Dinitrobenzene	168 > 138	12.10	3161.302	2501.782	3161.302	631.810	bb			529.1975	105.8	5.8	208.8
Tetryl	241 > 181	12.58	1164.648	2501.782	1164.648	232.764	bb			230.3339	46.1	-53.9	162.3
Nitrobenzene	123 > 46	13.50	2181.165	2501.782	2181.165	435.922	bb			538.6066	107.7	7.7	201.1
4-Amino-26-dinitrotoluene	197 > 167	15.49	4504.784	13437.756	4504.784	167.617	MM	31-Jan-10	11:40:06	551.5181	110.3	10.3	195.3
2-Amino-46-dinitrotoluene	197 > 180	16.37	5847.919	13437.756	5847.919	217.593	bb			569.9257	114.0	14.0	276.9
246-Trinitrotoluene	182 > 210	15.31	4526.924	13437.756	4526.924	168.440	bb			531.8612	106.4	6.4	147.3
34-dinitrotoluene	227 > 152	14.30	7118.911	13437.756	7118.911	284.885	bb			303.8196	121.5	21.5	463.0
26-dinitrotoluene	182 > 152	17.47	16646.428	13437.756	16646.428	619.390	MM	31-Jan-10	11:45:54	559.1054	111.8	11.8	588.3
24-dinitrotoluene	182 > 152	18.12	4068.081	13437.756	4068.081	151.368	MM	31-Jan-10	11:49:57	632.5513	126.5	26.5	141.1
26-dinitrotoluene-d3	185 > 155	17.29	13437.756	13437.756	13437.756	13437.756	bb			471.9948	94.4	-5.6	852.7
2-Nitrotoluene	137 > 46	20.89	2404.083	13437.756	2404.083	89.453	bb			564.0652	112.8	12.8	359.7
4-Nitrotoluene	137 > 46	22.25	1252.305	13437.756	1252.305	46.597	bb			594.1583	118.8	18.8	189.9
3-Nitrotoluene	137 > 46	23.90	1285.459	13437.756	1285.459	47.830	bb			513.8826	102.8	2.8	179.8
PETN	361 > 62	24.41	27042.328	13437.756	27042.328	1006.207	bb			562.9774	112.6	12.6	2884.0

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 941663

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015511

Sample Amount 2

Moisture:

Amount Units g

Date Received: 14-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250071.wiff

Date Analyzed: 26-JAN-10 04:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7550	
59229-75-3	2,6-Diamino-4-nitrotoluene	5260	
618-87-1	3,5-Dinitroaniline	5740	
6629-29-4	2,4-Diamino-6-nitrotoluene	5440	
78-30-8	tris(o-cresyl) phosphate	5090	

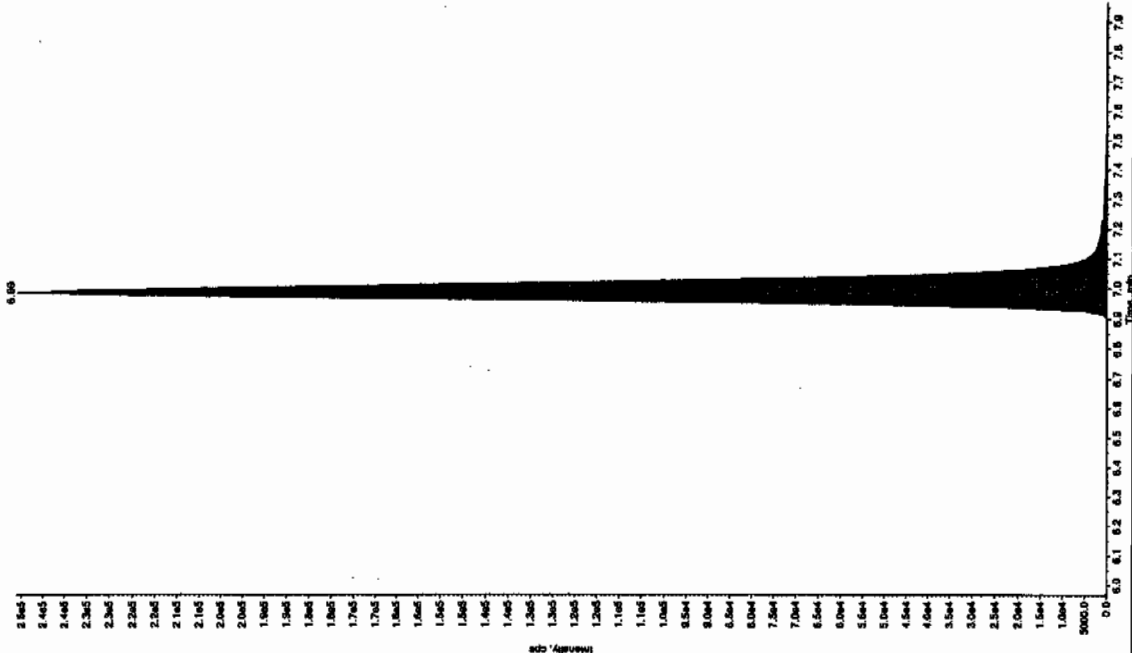
*Concentration =

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

Before 1/27/10

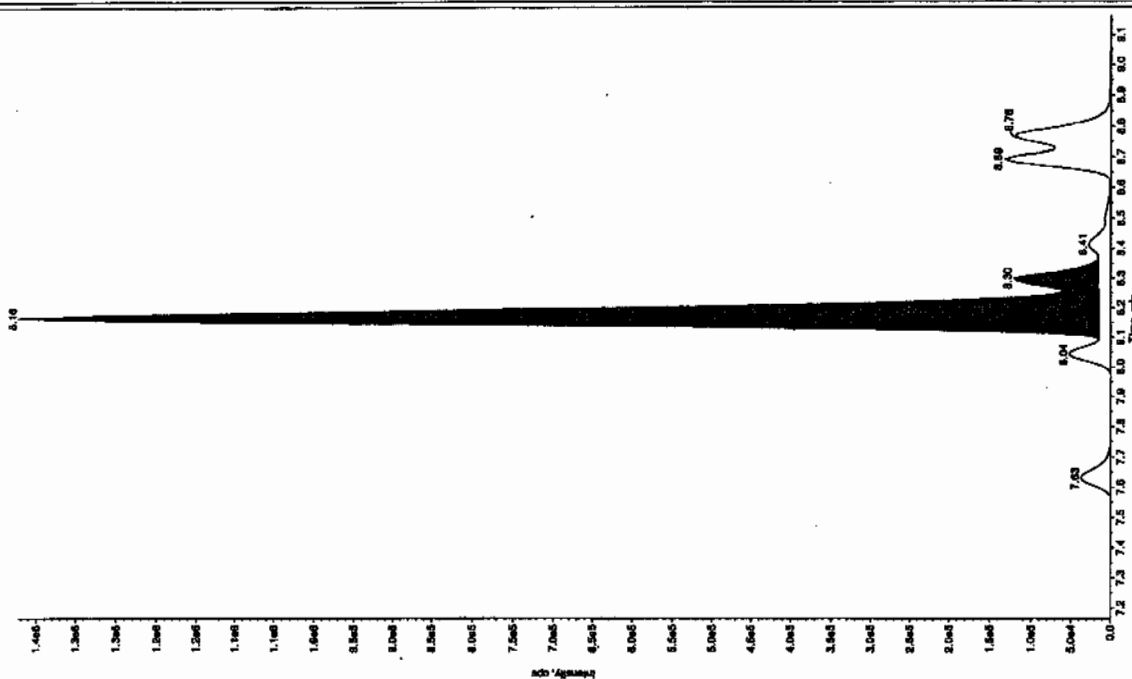
File Name: "120201551" Sample ID: "8416642LER" File: "EX501250071.wif"
 Peak Name: "TATB" Mass(es): "257.2204.8 amu"
 Concentration: "1.048000" Amplitude: "1.048000"

Sample Index: 1
 Sample Name: Unknown
 Sample Type: N/A
 Concentration: 755. ng/mL
 Date: 1/26/2010
 Time: 4:52:29 AM
 Method: 8321A-Modified LCMSMS#4
 Algorithm: IntelliQuan - IQA
 Peak Height: 2500.00 cps
 Peak Width: 0.00 sec
 Ring Width: 3 points
 Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Type: Valley
 Retention Time: 6.99 min
 Area: 1.048006 counts
 Height: 246112.930 cps
 Start Time: 5.83 min
 End Time: 7.83 min



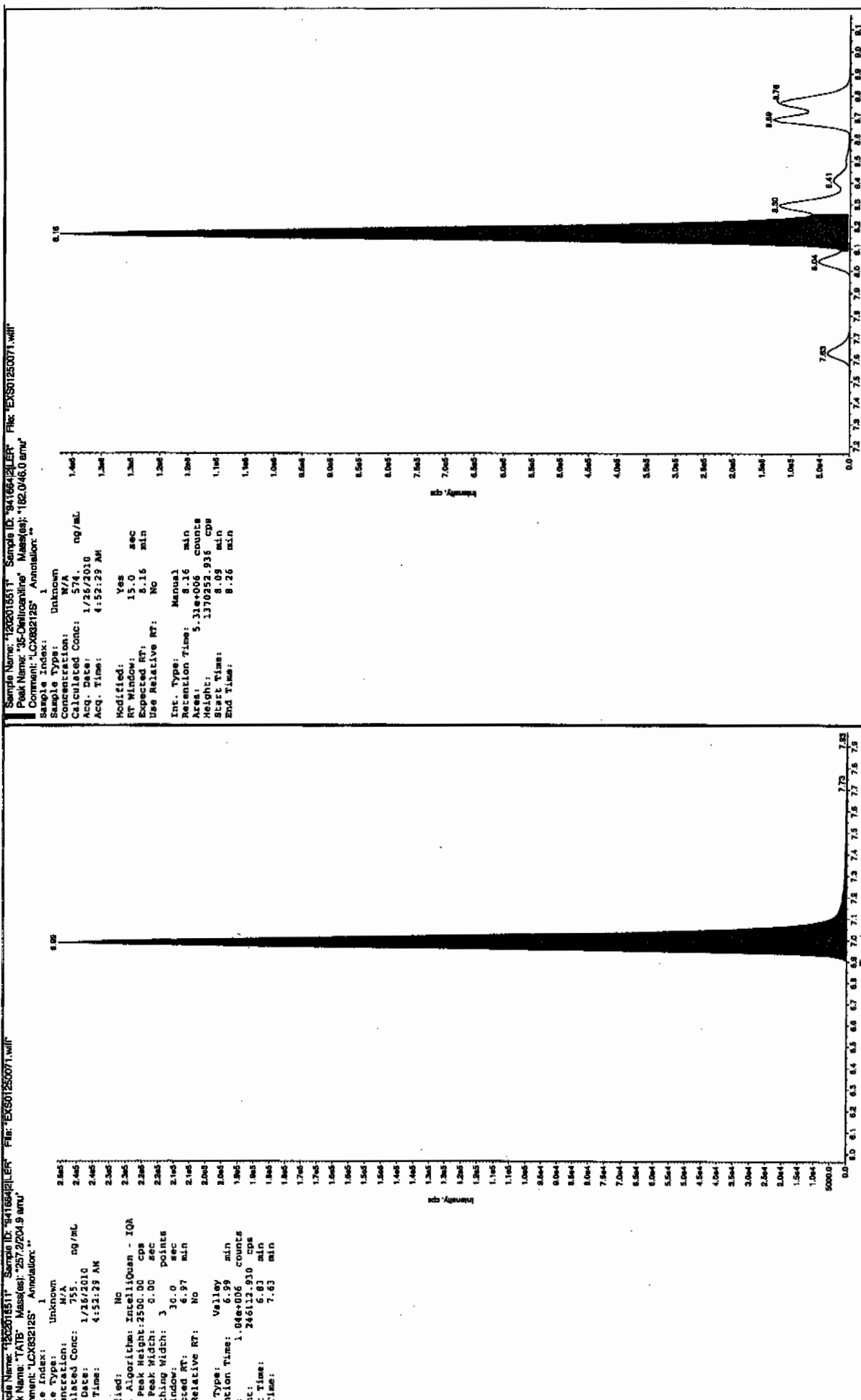
File Name: "120201551" Sample ID: "8416642LER" File: "EX501250071.wif"
 Peak Name: "TATB" Mass(es): "182.0460.0 amu"
 Concentration: "1.048000" Amplitude: "1.048000"

Sample Index: 1
 Sample Name: Unknown
 Sample Type: N/A
 Concentration: 605. ng/mL
 Date: 1/26/2010
 Time: 4:52:29 AM
 Method: 8321A-Modified LCMSMS#4
 Algorithm: IntelliQuan - IQA
 Peak Height: 2000.00 cps
 Peak Width: 0.00 sec
 Ring Width: 3 points
 Window: 15.0 sec
 Expected RT: 8.16 min
 Use Relative RT: No
 Type: Valley
 Retention Time: 8.16 min
 Area: 5.578006 counts
 Height: 1358524.902 cps
 Start Time: 8.09 min
 End Time: 8.37 min

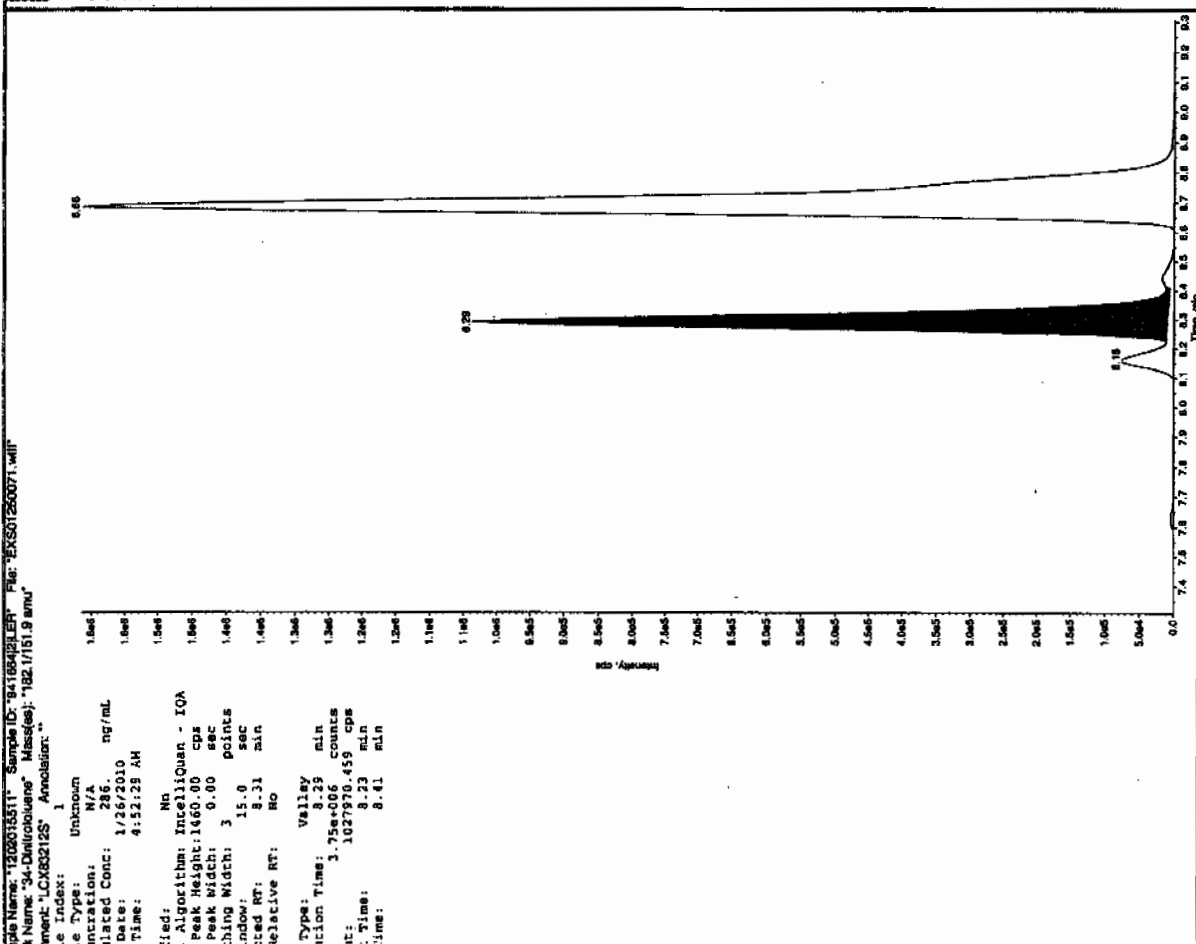
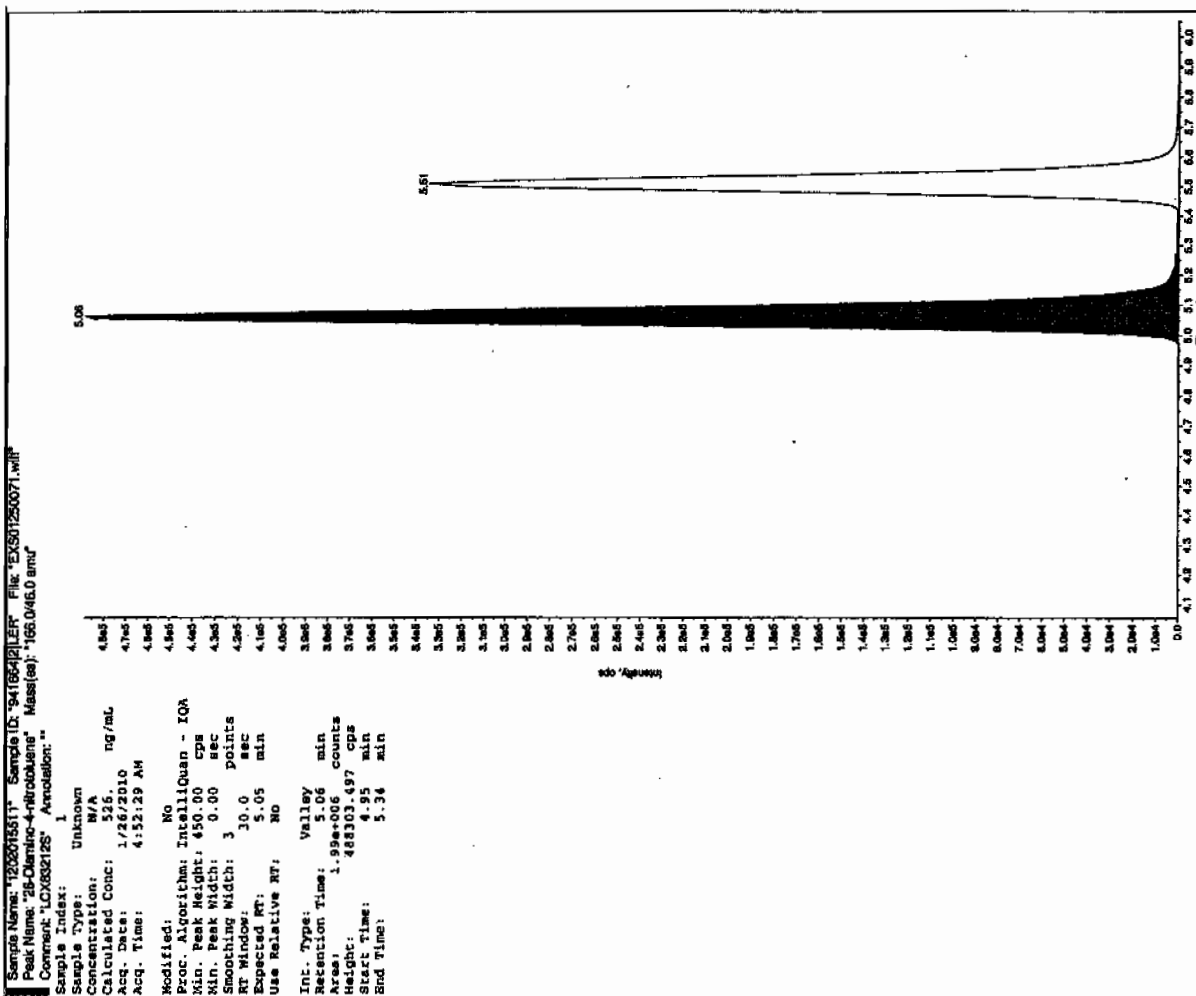


After 1/27/10

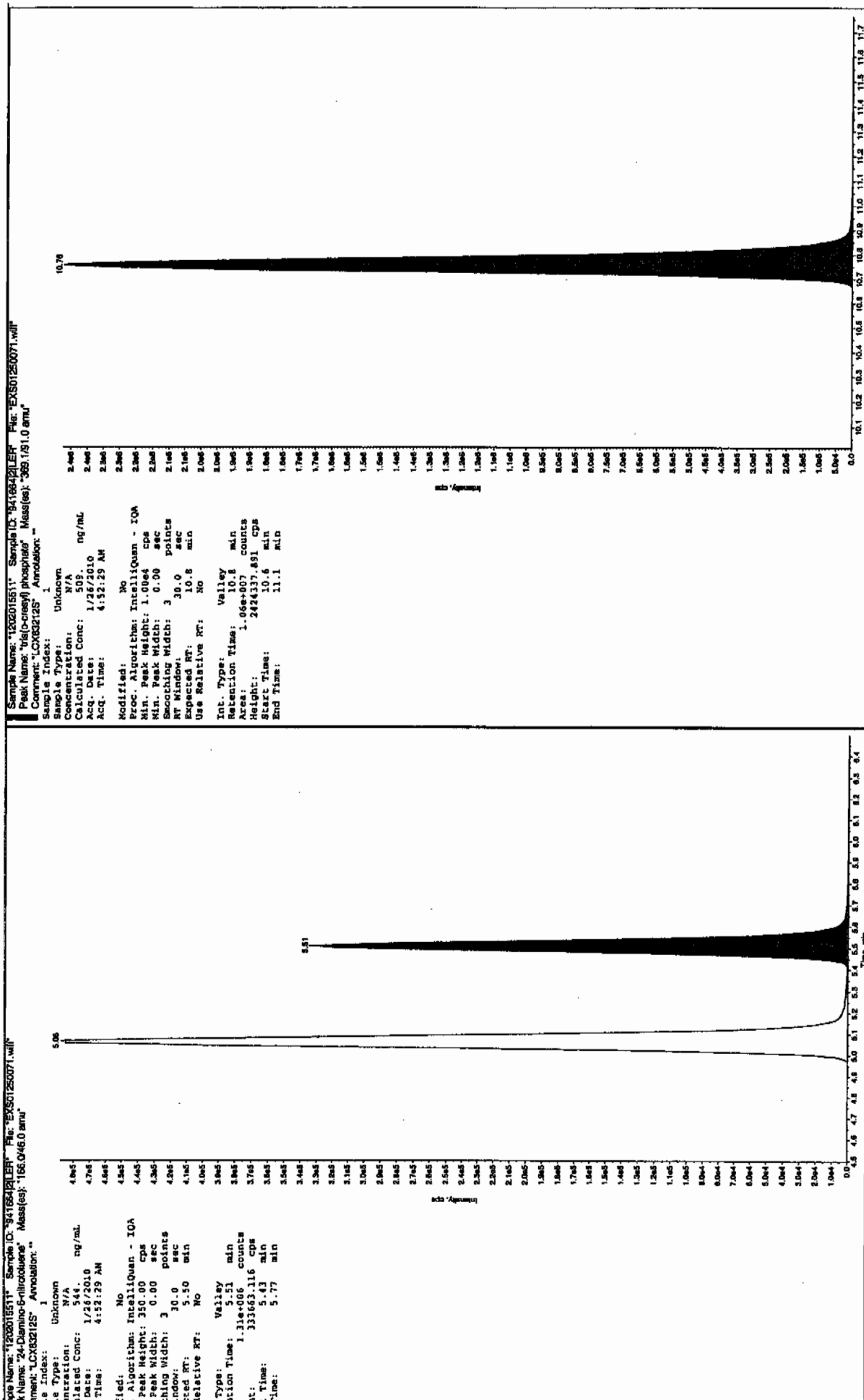
after scan 11/27/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262(244626001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015512

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130016a

Date Analyzed: 30-JAN-10 19:05

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5290	
121-14-2	2,4-Dinitrotoluene	6120	
121-82-4	RDX	6160	
19406-51-0	4-Amino-2,6-dinitrotoluene	5200	
2691-41-0	HMX	5820	
35572-78-2	2-Amino-4,6-dinitrotoluene	5670	
479-45-8	Tetryl	4430	
606-20-2	2,6-Dinitrotoluene	5470	
78-11-5	PETN	5660	
88-72-2	o-Nitrotoluene	5480	
98-95-3	Nitrobenzene	5380	
99-08-1	m-Nitrotoluene	5240	
99-35-4	1,3,5-Trinitrobenzene	4580	
99-65-0	m-Dinitrobenzene	4900	
99-99-0	p-Nitrotoluene	5490	

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0130016a

Date: 30-Jan-2010

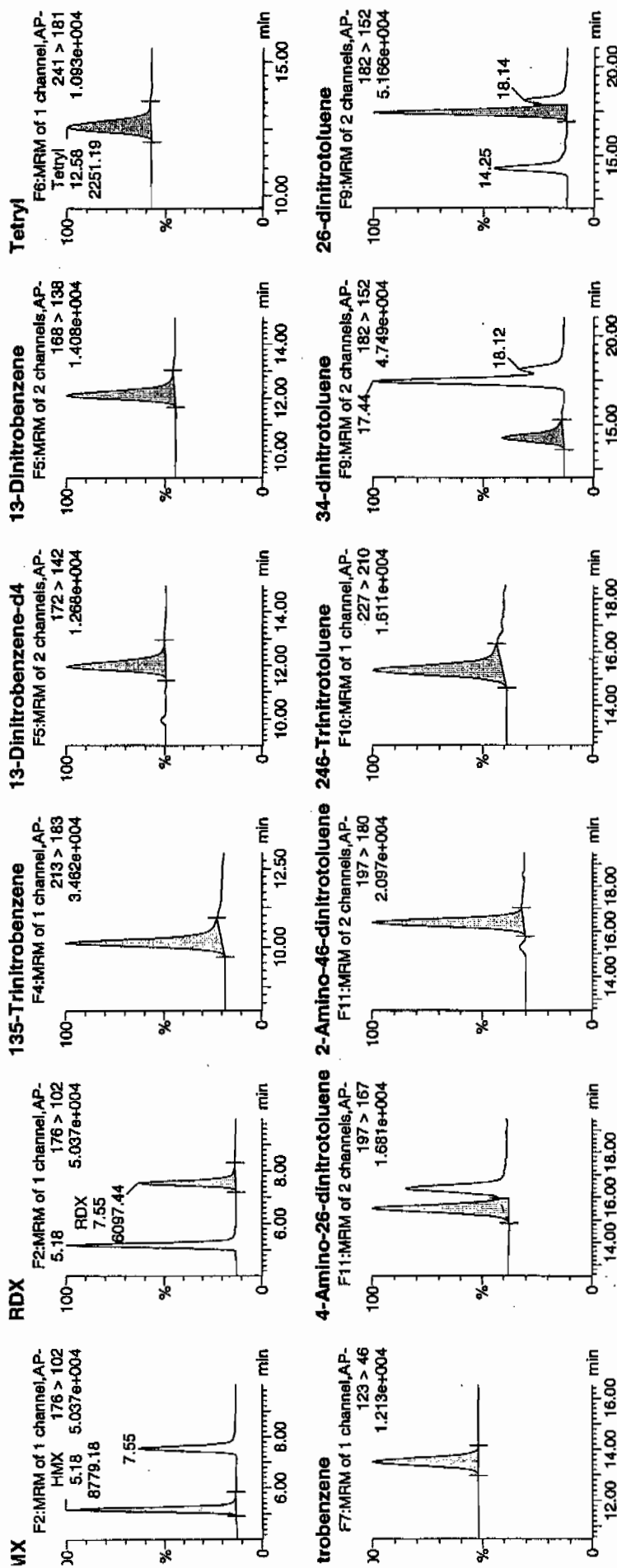
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Page: 1202015512

Alt: 1:4,D

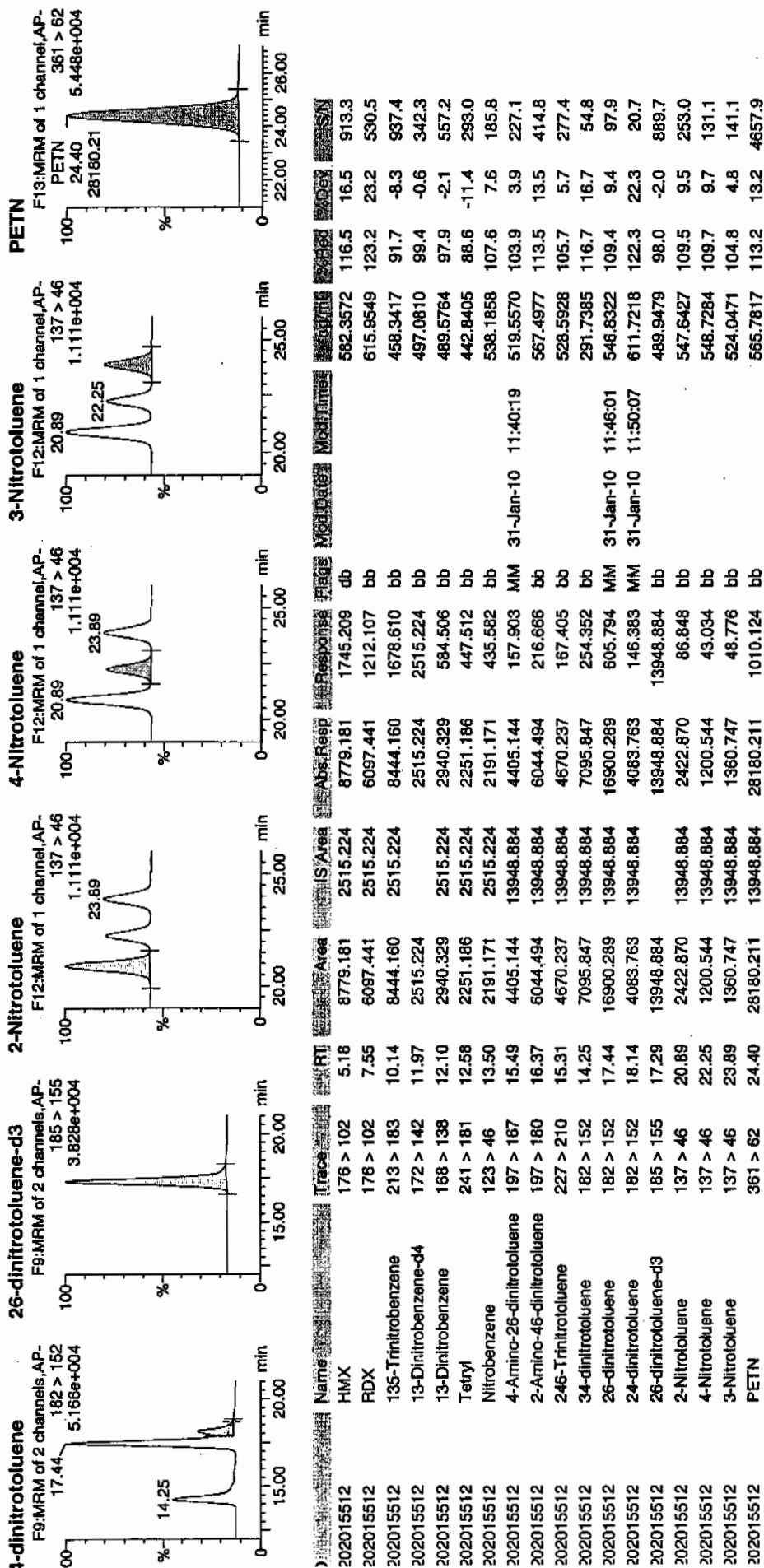
100%
1/31/10

24462600148 | 21

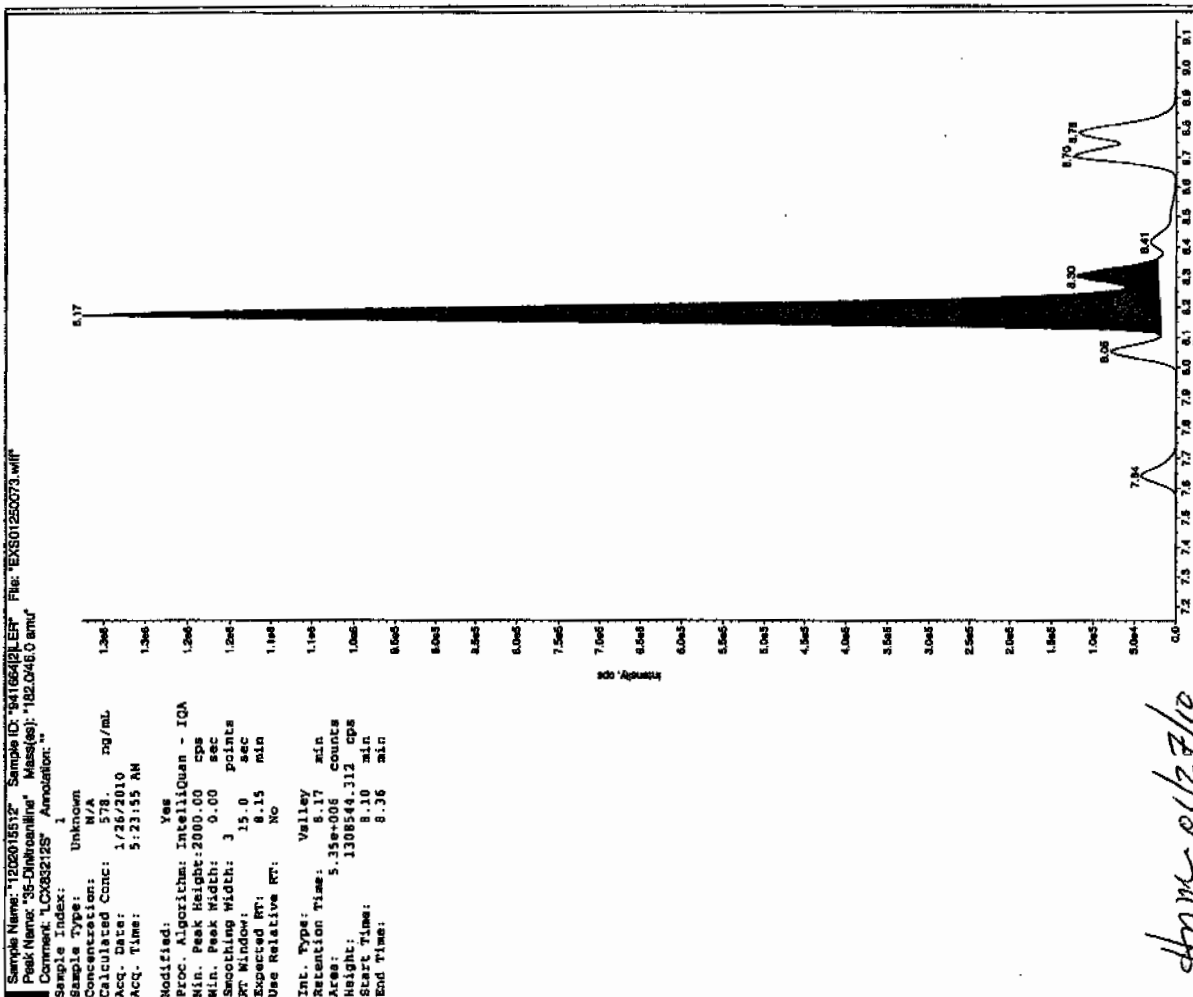


Amu 81/31/10

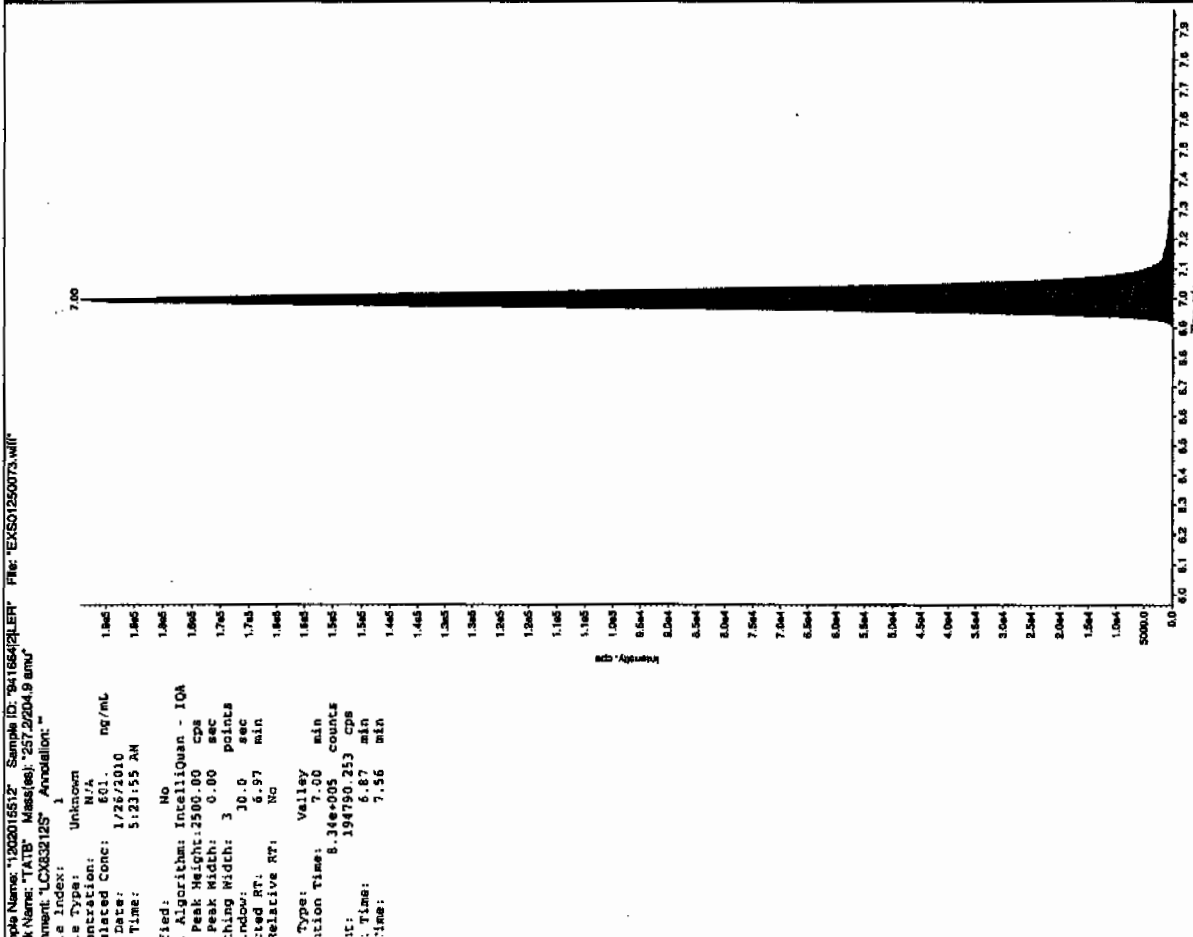
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Before Scan 112710



After Scan 0112710



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262(244626001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015512

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250073.wiff

Date Analyzed: 26-JAN-10 05:23

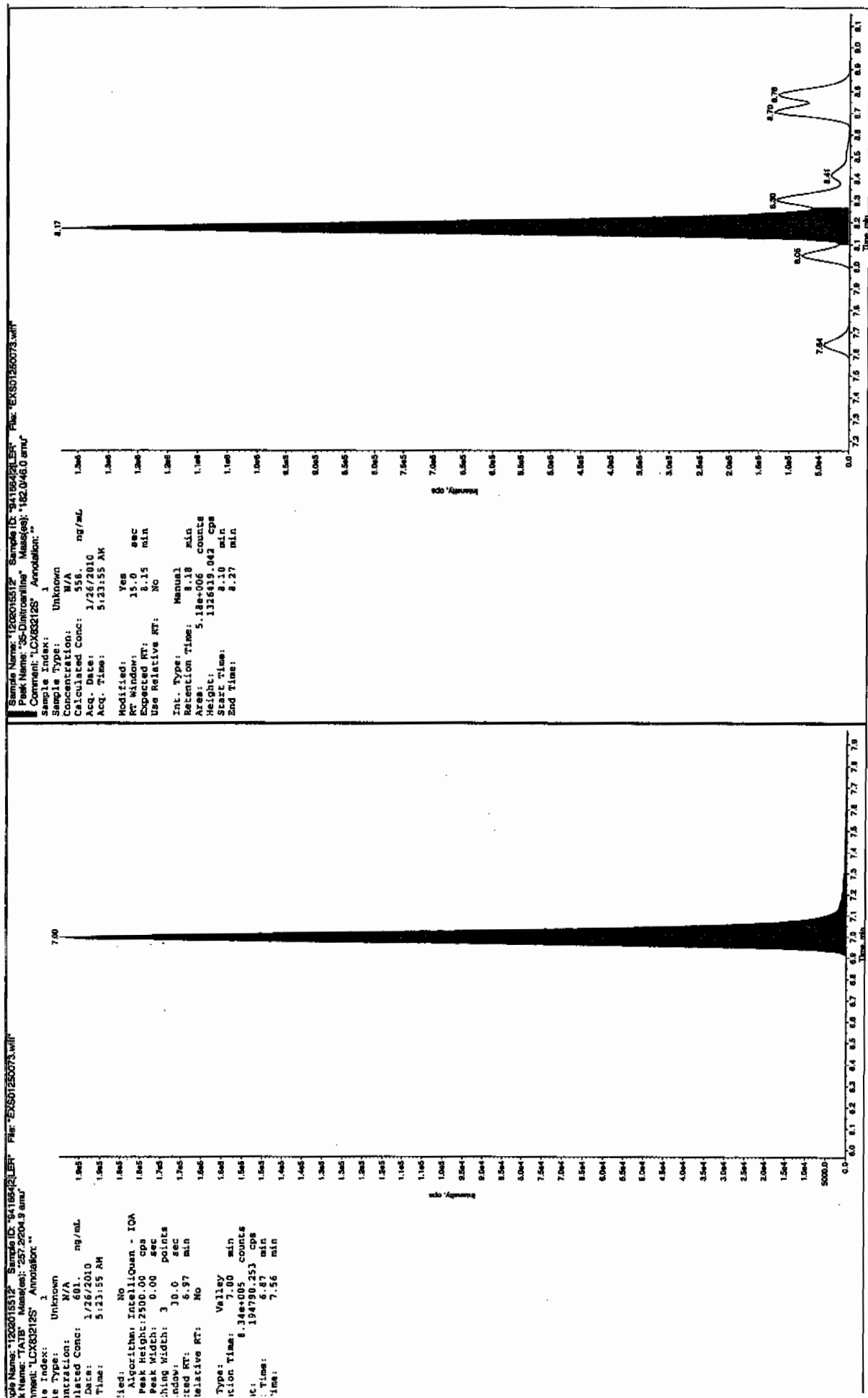
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6010	
59229-75-3	2,6-Diamino-4-nitrotoluene	4580	
618-87-1	3,5-Dinitroaniline	5580	
6629-29-4	2,4-Diamino-6-nitrotoluene	4890	
78-30-8	tris(o-cresyl) phosphate	5080	

*Concentration =

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

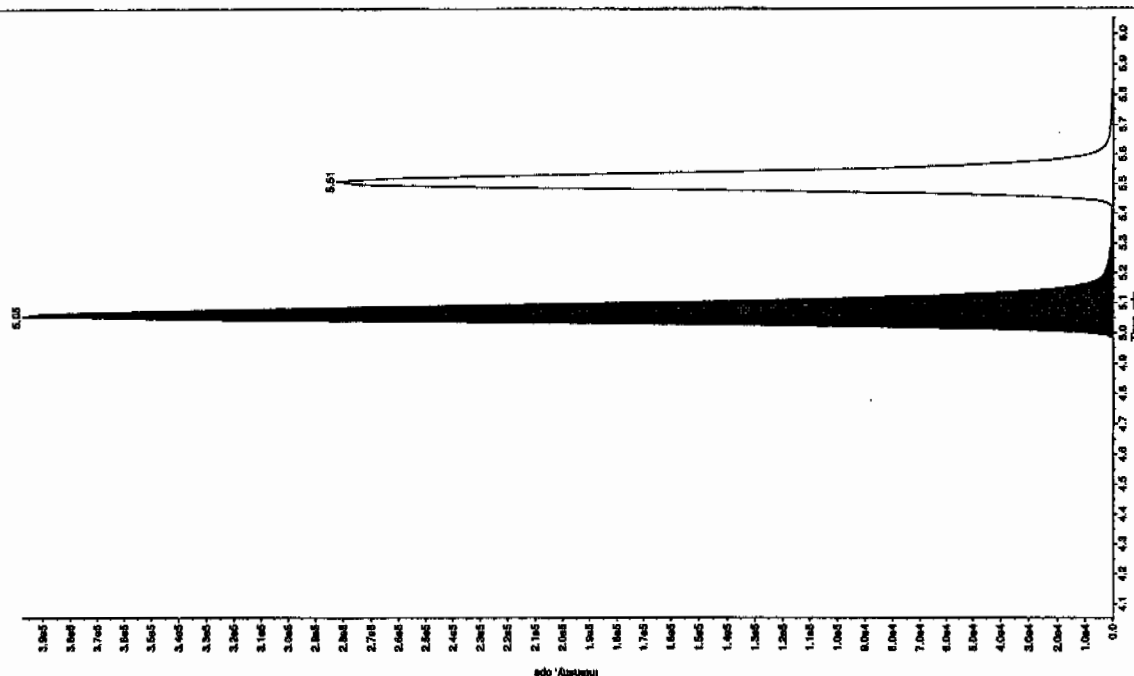
after scan 112710



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

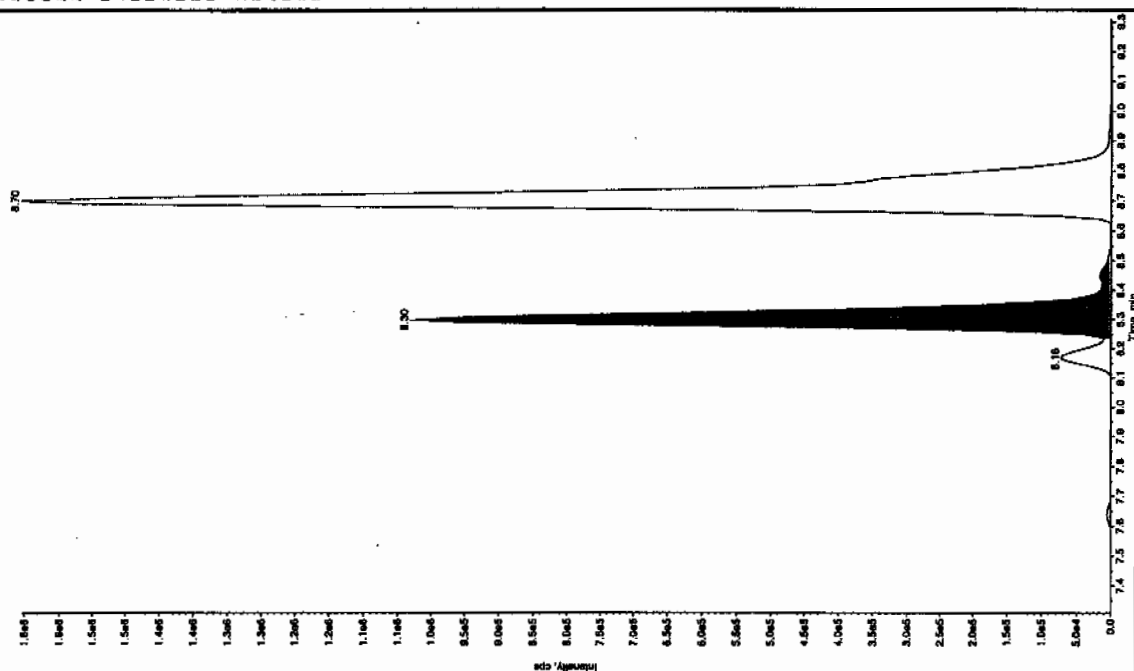
Sample Name: "120201512" Sample ID: "94166421ER" File: "EX501250073.wif"
 Peak Name: "26-Diamino-4-nitrophenol" Mass(es): "186.046.0 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 458. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 5:23:55 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.05 min
 Area: 1.73e+006 counts
 Height: 397456.055 cps
 Start Time: 4.96 min
 End Time: 5.35 min

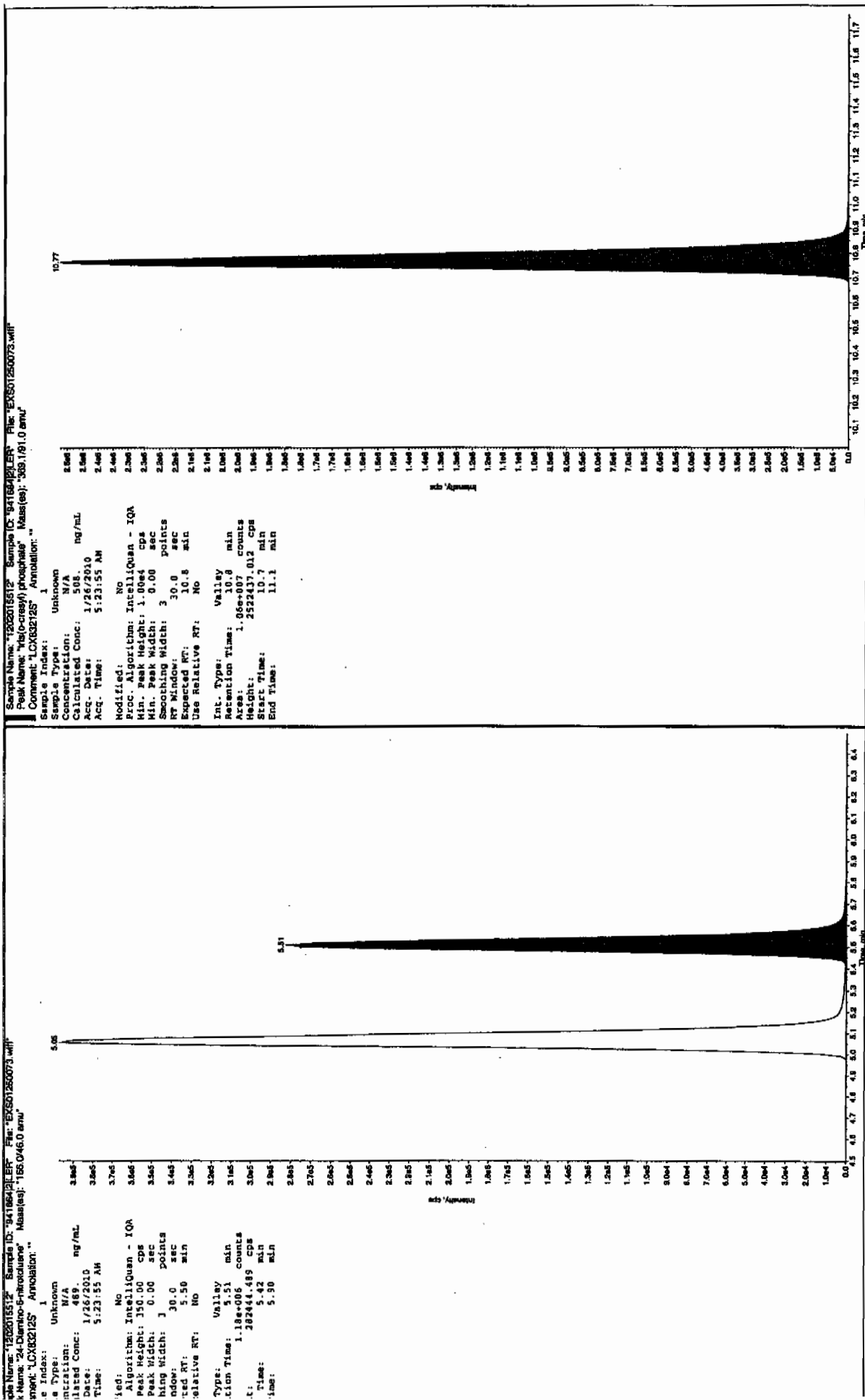


Sample Name: "120201512" Sample ID: "94166421ER" File: "EX501250073.wif"
 Peak Name: "34-Dinitrophenol" Mass(es): "182.0751.9 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 293. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 5:23:55 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.30 min
 Area: 3.85e+006 counts
 Height: 1026688.354 cps
 Start Time: 8.24 min
 End Time: 8.52 min



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262(244626001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015513

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0130017a

Date Analyzed: 30-JAN-10 19:34

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5270	
121-14-2	2,4-Dinitrotoluene	5760	
121-82-4	RDX	5490	
19406-51-0	4-Amino-2,6-dinitrotoluene	5170	
2691-41-0	HMX	5060	
35572-78-2	2-Amino-4,6-dinitrotoluene	5630	
479-45-8	Tetryl	2570	
606-20-2	2,6-Dinitrotoluene	5260	
78-11-5	PETN	5270	
88-72-2	o-Nitrotoluene	5220	
98-95-3	Nitrobenzene	5240	
99-08-1	m-Nitrotoluene	5500	
99-35-4	1,3,5-Trinitrobenzene	4410	
99-65-0	m-Dinitrobenzene	5090	
99-99-0	p-Nitrotoluene	5360	

*Concentration =

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

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO13010expA.qld, Time: Sun Jan 31 11:56:40 2010

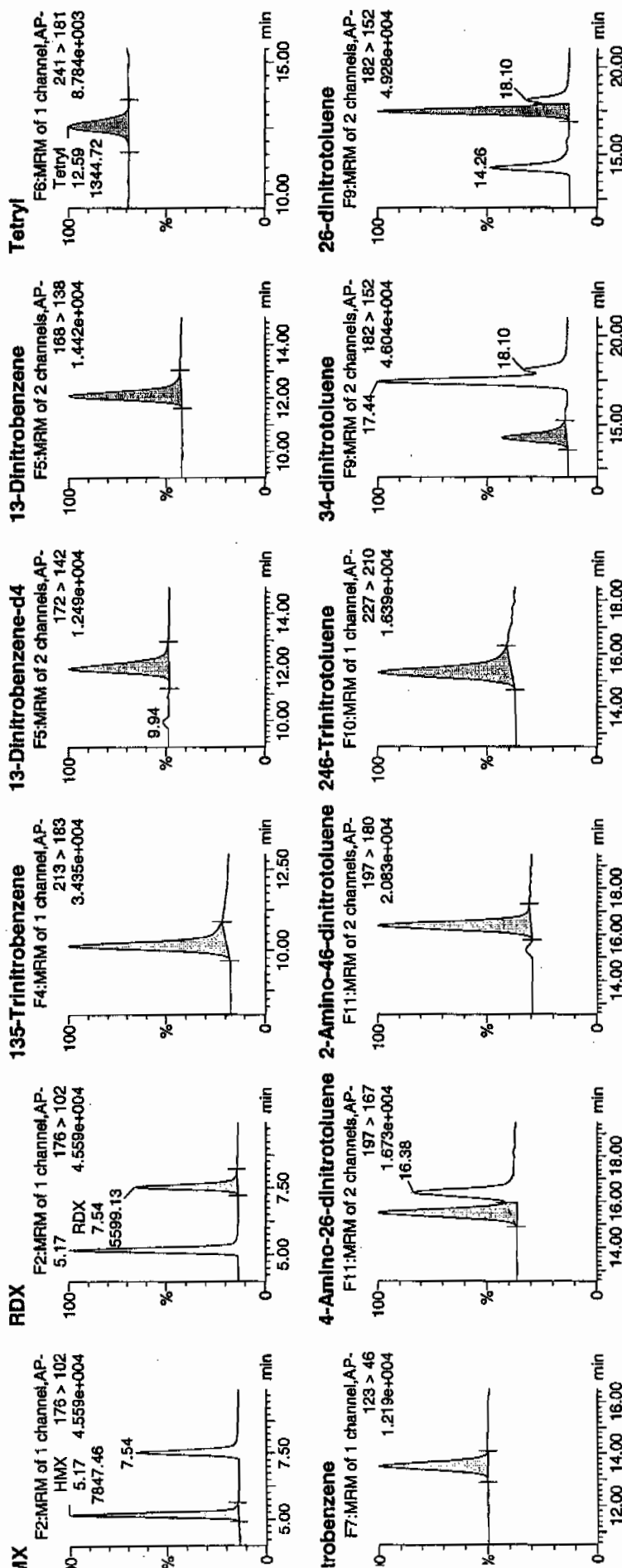
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al: 1-4,E

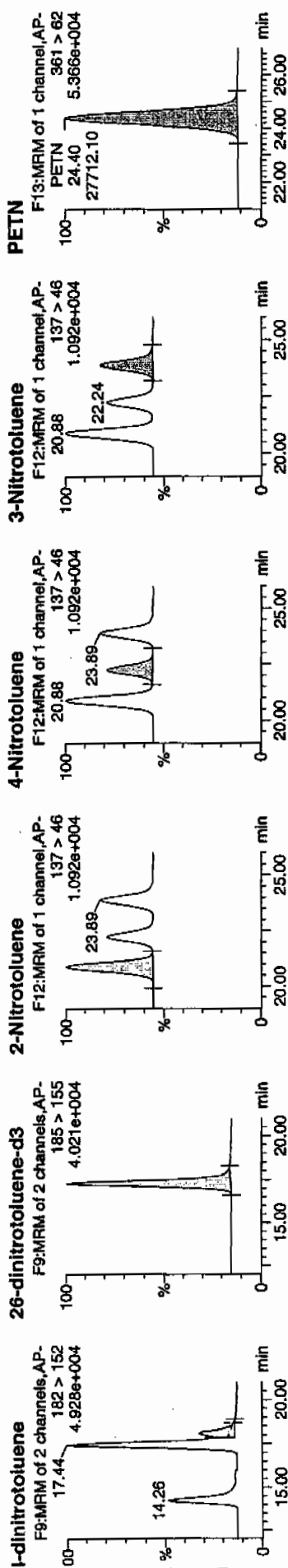
File: 941664 / 941664 / 244626001\MSD / 21



Handwritten signature: HMM 1/31/10

Dataset: C:\MASSLYN\New_Exp.PRO\013010expA.qld, Time: Sun Jan 31 11:56:40 2010

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Name	Trace	RT	Area	IS Area	Ass Resp	Response	Flags	Mod Date	Mod Time	Mod User	Mod Dev	Mod SN		
02015513	HMx	176 > 102	5.17	7847.458	2589.566	7847.458	1515.207	bb		505.6082	101.1	1.1	780.3	
02015513	RDX	176 > 102	7.54	5599.125	2589.566	5599.125	1081.093	bb		549.3779	109.9	9.9	478.0	
02015513	135-Trinitrobenzene	213 > 183	10.13	8373.051	2589.566	8373.051	1616.690	bb		441.4346	88.3	-11.7	1140.5	
02015513	13-Dinitrobenzene-d4	172 > 142	11.95	2589.566	2589.566	2589.566	2589.566	bb		511.7731	102.4	2.4	197.5	
02015513	13-Dinitrobenzene	168 > 138	12.11	3144.358	2589.566	3144.358	807.121	bb		508.5179	101.7	1.7	370.4	
02015513	Tetryl	241 > 181	12.59	1344.722	2589.566	1344.722	259.642	bb		256.9320	51.4	-48.6	57.1	
02015513	Nitrobenzene	123 > 46	13.50	2198.010	2589.566	2198.010	424.397	bb		524.3669	104.9	4.9	155.8	
02015513	4-Amino-26-dinitrotoluene	197 > 167	15.50	4561.871	14510.559	4561.871	157.191	MM	31-Jan-10	11:40:28	517.2153	103.4	3.4	100.8
02015513	2-Amino-46-dinitrotoluene	197 > 180	16.38	6232.943	14510.559	6232.943	214.773	bb		562.5390	112.5	12.5	382.2	
02015513	246-Trinitrotoluene	187 > 210	15.32	4840.492	14510.559	4840.492	166.792	bb		526.6562	105.3	5.3	280.3	
02015513	34-dinitrotoluene	282 > 152	14.26	7484.349	14510.559	7484.349	257.893	bb		295.8004	118.3	18.3	318.8	
02015513	26-dinitrotoluene	182 > 152	17.44	16903.715	14510.559	16903.715	582.463	MM	31-Jan-10	11:46:06	525.7720	105.2	5.2	500.2
02015513	24-dinitrotoluene	182 > 152	18.10	3997.545	14510.559	3997.545	137.746	MM	31-Jan-10	11:50:31	575.6283	115.1	15.1	107.4
02015513	26-dinitrotoluene-d3	185 > 155	17.27	14510.559	14510.559	14510.559	14510.559	bb		509.6764	101.9	1.9	893.6	
02015513	2-Nitrotoluene	137 > 46	20.88	2400.655	14510.559	2400.655	82.721	bb		521.6176	104.3	4.3	134.4	
02015513	4-Nitrotoluene	137 > 46	22.24	1220.540	14510.559	1220.540	42.057	bb		536.2739	107.3	7.3	69.6	
02015513	3-Nitrotoluene	137 > 46	23.89	1485.230	14510.559	1485.230	51.178	bb		549.8472	110.0	10.0	80.0	
02015513	PETN	361 > 62	24.40	27712.102	14510.559	27712.102	954.894	bb		526.9321	105.4	5.4	3792.4	

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE12-10-7262(244626001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1225

Matrix: SOIL

GEL Sample ID: 1202015513

Sample Amount 2

Moisture: 8.9

Amount Units g

Date Received: 13-JAN-10

Extraction Type Sonication

Extraction Batch ID: 941663

Concentrated Extract Volume (mL) 10

Date Extracted: 21-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250074.wiff

Date Analyzed: 26-JAN-10 05:39

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6320	
59229-75-3	2,6-Diamino-4-nitrotoluene	5140	
618-87-1	3,5-Dinitroaniline	5590	
6629-29-4	2,4-Diamino-6-nitrotoluene	4870	
78-30-8	tris(o-cresyl) phosphate	5050	

*Concentration =

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

Before Dec 11/27/10

File: "EXS01250074.will"

Sample Name: "122015513" Sample ID: "94165421.ER"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX832125" Annotation: ""

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 545. ng/mL

Acq. Date: 1/26/2010

Acq. Time: 5:39:38 AM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 3.00 sec

Smoother Width: 30.0 points

Integration: 30.0 sec

Expected RT: 6.97 min

Use Relative RT: No

Int. Type: Valley

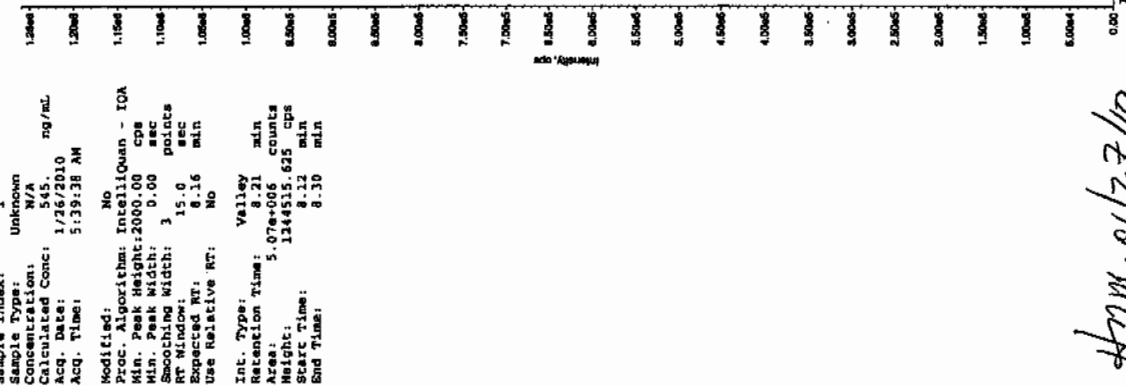
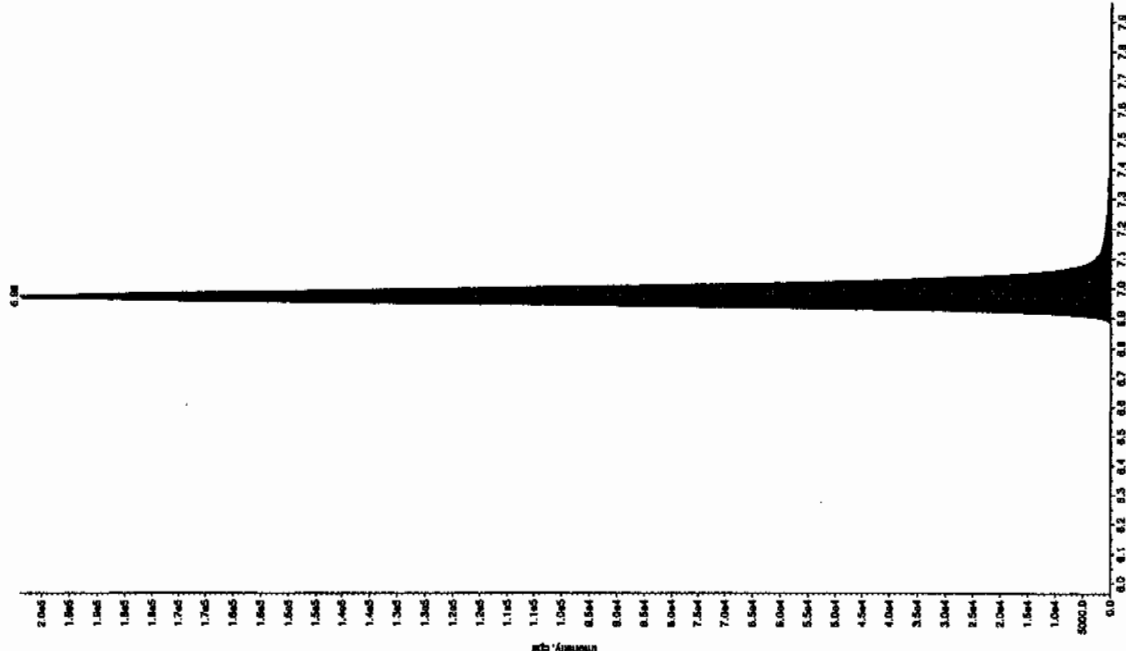
Retention Time: 6.98 min

Area: 8.76e+005 counts

Height: 198944.885 cps

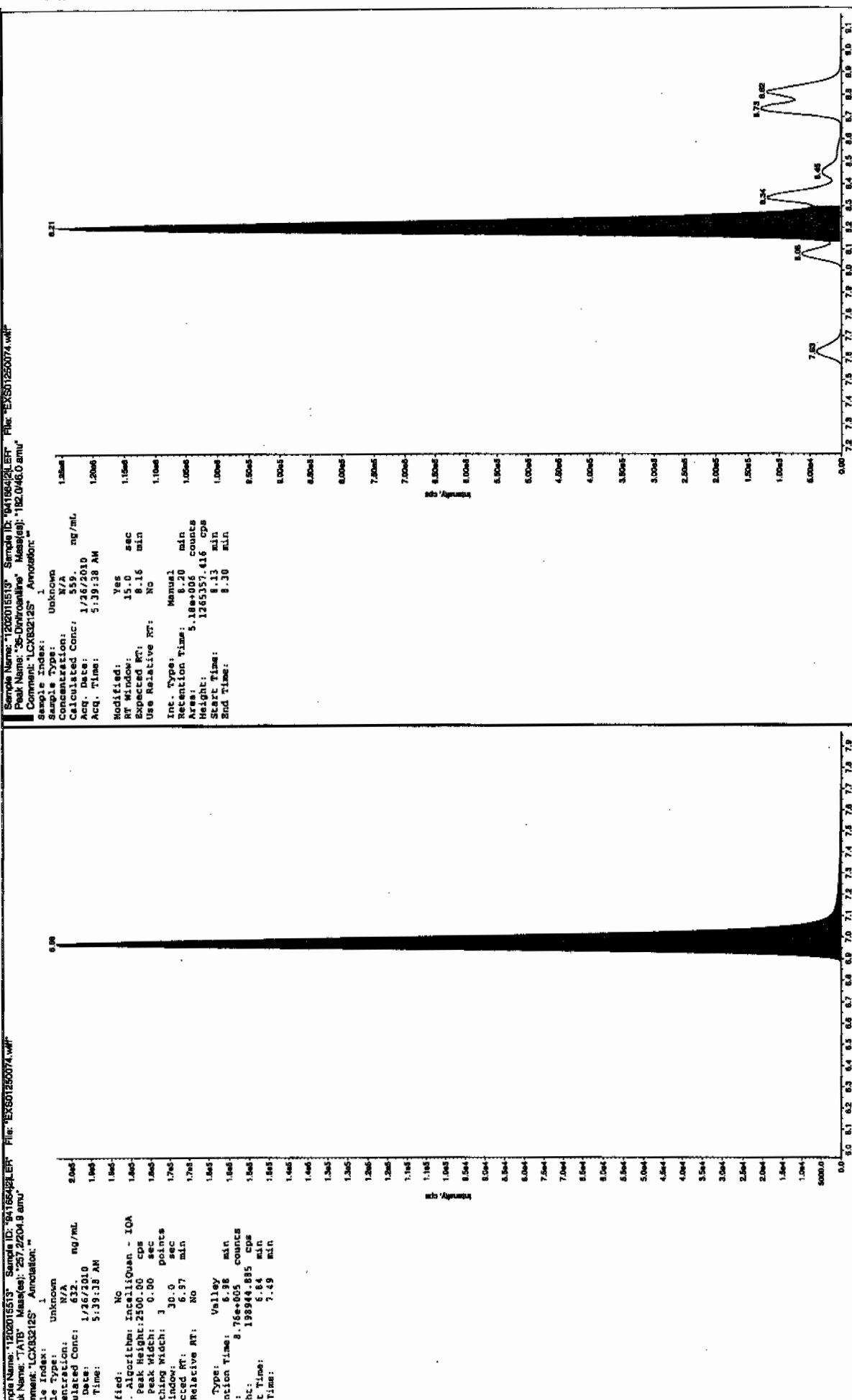
Start Time: 6.84 min

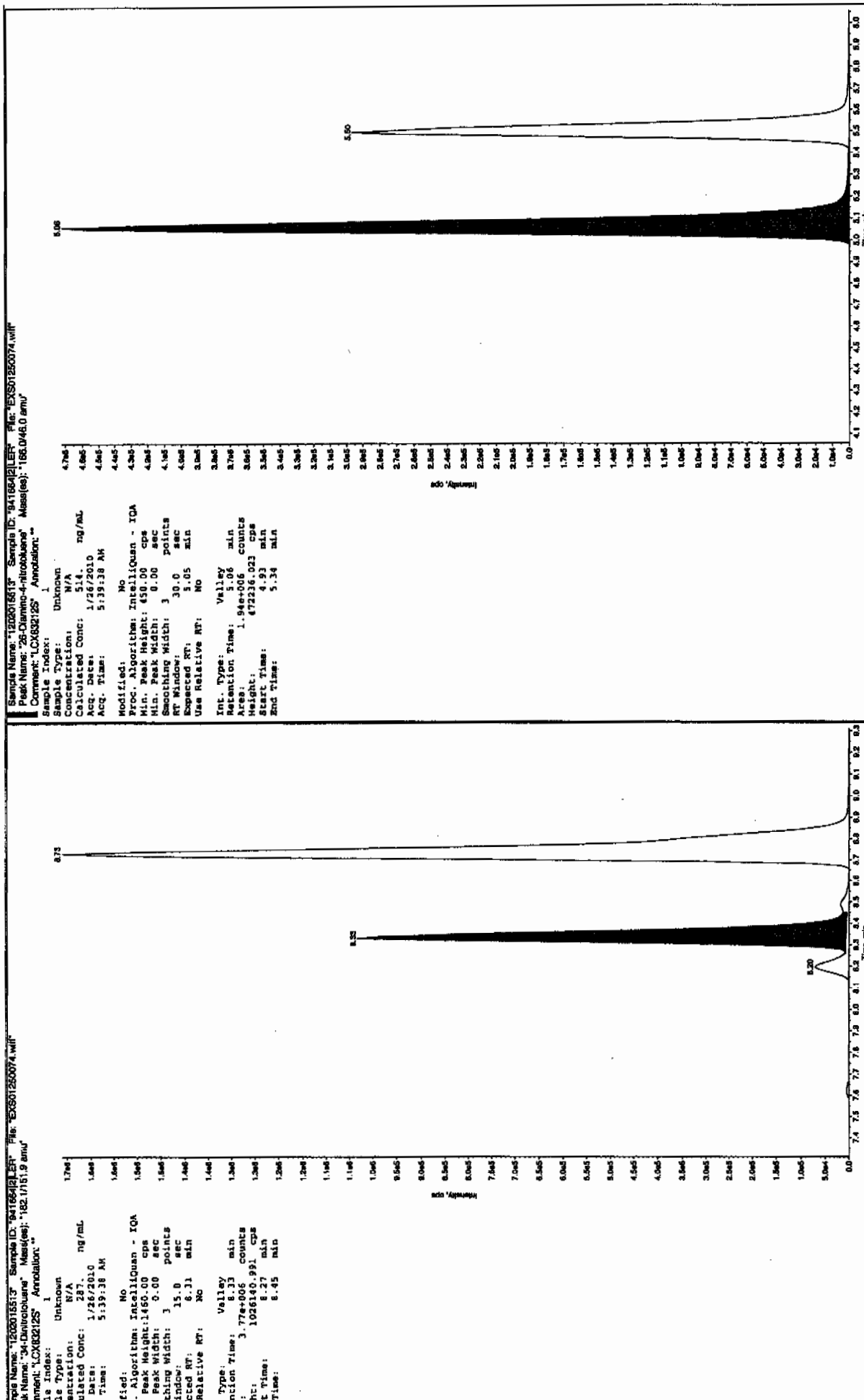
End Time: 7.49 min



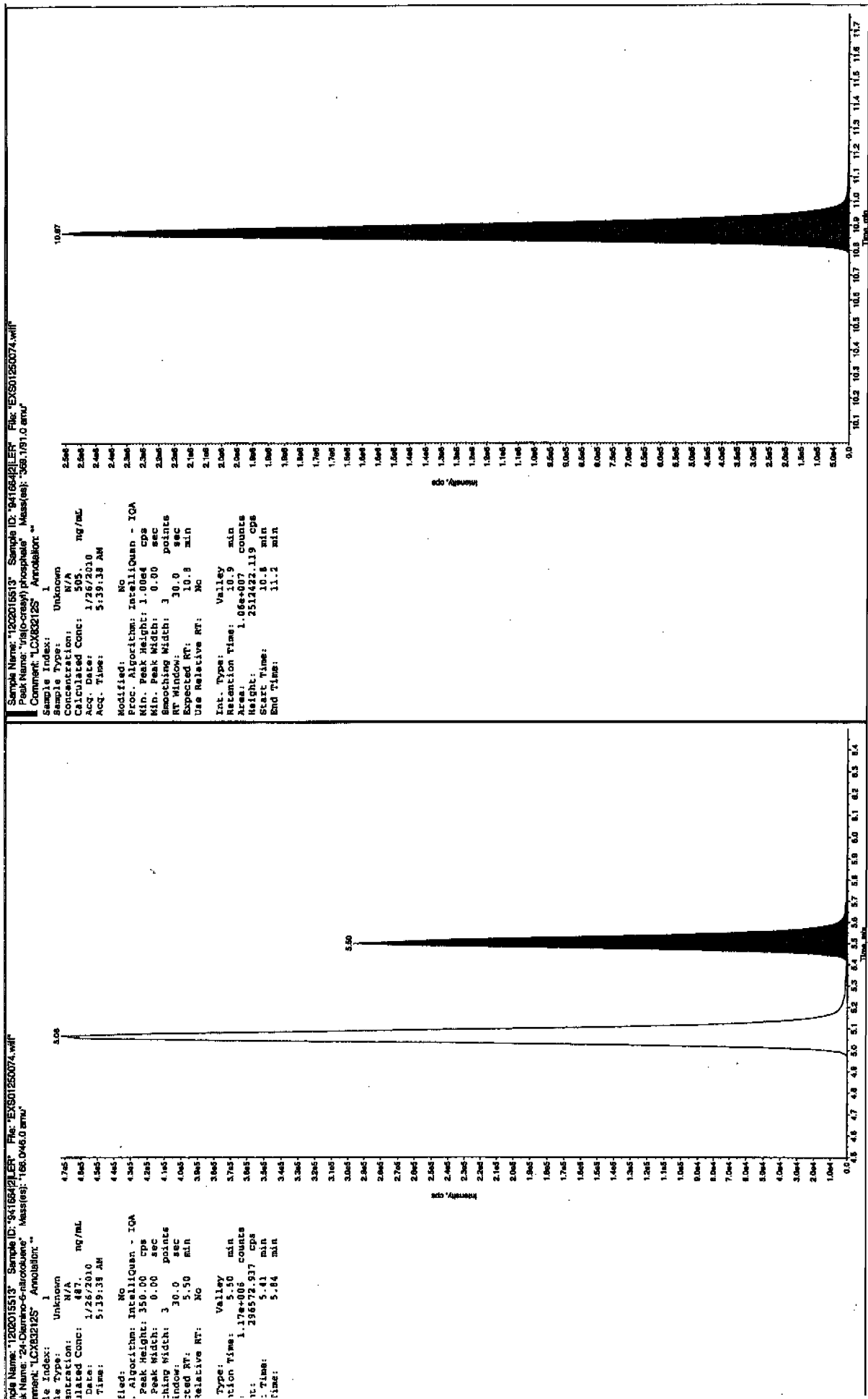
After 01/27/10

after scan 1127110





IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



MISCELLANEOUS DATA

Prep Logbook

Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 941663 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)
1202015510 MB	21-JAN-2010 16:27:22	2	10	5
1202015511 LCS	21-JAN-2010 16:27:22	2	10	5
244626001	21-JAN-2010 16:27:22	2	10	5
1202015512 MS (244626001)	21-JAN-2010 16:27:22	2	10	5
1202015513 MSD (244626001)	21-JAN-2010 16:27:22	2	10	5
244626002	21-JAN-2010 16:27:22	2	10	5
244626003	21-JAN-2010 16:27:22	2	10	5
244626004	21-JAN-2010 16:27:22	2	10	5
244626005	21-JAN-2010 16:27:22	2	10	5
244626006	21-JAN-2010 16:27:22	2	10	5
244626007	21-JAN-2010 16:27:22	2	10	5
244626008	21-JAN-2010 16:27:22	2	10	5
244626009	21-JAN-2010 16:27:22	2	10	5
244626010	21-JAN-2010 16:27:22	2	10	5
244626011	21-JAN-2010 16:27:22	2	10	5
244626012	21-JAN-2010 16:27:22	2	10	5
244626013	21-JAN-2010 16:27:22	2	10	5
244626014	21-JAN-2010 16:27:22	2	10	5
244626015	21-JAN-2010 16:27:22	2	10	5
244626016	21-JAN-2010 16:27:22	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202015511	8321 Explosives LCS	DX091230-03	.1	mL	Final Solvent: ACN
LCS	1202015511	8321 LANL Explosives Mix 10mg/L	UXX100108-01.1	1	mL	
MS	1202015512	8321 Explosives LCS	DX091230-03	.1	mL	
MS	1202015512	8321 LANL Explosives Mix 10mg/L	UXX100108-01.1	1	mL	
MSD	1202015513	8321 Explosives LCS	DX091230-03	.1	mL	
MSD	1202015513	8321 LANL Explosives Mix 10mg/L	UXX100108-01.1	1	mL	
SURR	All	3,4-Dinitrochlorobenzene (8330 Sur.) 100ppm	EXP100121-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCM SMS #1

Date: 01/30/10
 Extr. Injection Volume: 50ul
 Sequence Number: 013010expA
 Initial Calibration Date: 01/30/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX091230-01.4
 Mobile Phase Lot#: 1261302, 1250738
 Standard-Samp Reagent Lot#: 1260901, 1246195
 Reviewed BY: *hmc*
 Date: *01/31/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100130-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0130001a	XIBLK01	MAP	1/30/10 11:42			1		USE	B
EXP0130002a	XIBLK01	MAP	1/30/10 12:12			1		USE	B
EXP0130003a	WXXICAL-01	MAP	1/30/10 12:41			1		USE	I
EXP0130004a	WXXICAL-02	MAP	1/30/10 13:11			1		USE	I
EXP0130005a	WXXICAL-03	MAP	1/30/10 13:40			1		USE	I
EXP0130006a	WXXICAL-04	MAP	1/30/10 14:10			1		USE	I
EXP0130007a	WXXICAL-05	MAP	1/30/10 14:39			1		USE	I
EXP0130008a	WXXICAL-06	MAP	1/30/10 15:09			1		USE	I
EXP0130009a	XIBLK02	MAP	1/30/10 15:38			1		USE	B
EXP0130010a	WXXICV	MAP	1/30/10 16:08			1		USE	C
EXP0130011a	XIBLK03	MAP	1/30/10 16:37			1		USE	B
EXP0130012a	WXXCRI	MAP	1/30/10 17:07			1		USE	C
EXP0130013a	1202015510	MAP	1/30/10 17:36	941664	10-1225	2	LANL	USE	S
EXP0130014a	1202015511	MAP	1/30/10 18:06	941664	10-1225	2	LANL	USE	S
EXP0130015a	244626001	MAP	1/30/10 18:35	941664	10-1225	2	LANL	USE	S
EXP0130016a	1202015512	MAP	1/30/10 19:05	941664	10-1225	2	LANL	USE	S
EXP0130017a	1202015513	MAP	1/30/10 19:34	941664	10-1225	2	LANL	USE	S
EXP0130018a	244626002	MAP	1/30/10 20:04	941664	10-1225	2	LANL	USE	S
EXP0130019a	244626003	MAP	1/30/10 20:33	941664	10-1225	2	LANL	USE	S
EXP0130020a	244626004	MAP	1/30/10 21:03	941664	10-1225	2	LANL	USE	S
EXP0130021a	244626005	MAP	1/30/10 21:32	941664	10-1225	2	LANL	USE	S
EXP0130022a	244626006	MAP	1/30/10 22:02	941664	10-1225	2	LANL	USE	S
EXP0130023a	WXXCCV	MAP	1/30/10 22:31			1		USE	C
EXP0130024a	XIBLK04	MAP	1/30/10 23:01			1		USE	B
EXP0130025a	WXXCRI	MAP	1/30/10 23:30			1		USE	C
EXP0130026a	244626007	MAP	1/31/10 0:00	941664	10-1225	2	LANL	USE	S
EXP0130027a	244626008	MAP	1/31/10 0:29	941664	10-1225	2	LANL	USE	S
EXP0130028a	244626009	MAP	1/31/10 0:59	941664	10-1225	2	LANL	USE	S
EXP0130029a	244626010	MAP	1/31/10 1:28	941664	10-1225	2	LANL	USE	S

EXP0130030a	244626011	MAP	1/31/10 1:58	941664	10-1225	2	LANL	USE	S
EXP0130031a	244626012	MAP	1/31/10 2:27	941664	10-1225	2	LANL	USE	S
EXP0130032a	244626013	MAP	1/31/10 2:57	941664	10-1225	2	LANL	USE	S
EXP0130033a	244626014	MAP	1/31/10 3:26	941664	10-1225	2	LANL	USE	S
EXP0130034a	244626015	MAP	1/31/10 3:56	941664	10-1225	2	LANL	USE	S
EXP0130035a	244626016	MAP	1/31/10 4:25	941664	10-1225	2	LANL	USE	S
EXP0130036a	WXXCCV	MAP	1/31/10 4:55			1		USE	C
EXP0130037a	XIBLK05	MAP	1/31/10 5:24			1		USE	B
EXP0130038a	WXXCRI	MAP	1/31/10 5:54			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 01/25/10
 Extr. Injection Volume: 10uL
 Sequence Number: 012510exs
 Initial Calibration Date: 012510
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1250738, 1246467
 Standard-Samp Reagent Lot#: 1246195, 1253092
 Reviewed By: *[Signature]*
 Date: 01/27/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100125-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01250001.wiff	XIBLK01	LER	1/25/2010 10:28			1		USE	B
EXS01250002.wiff	XIBLK01	LER	1/25/2010 10:46			1		USE	B
EXS01250003.wiff	WXXICAL-19	LER	1/25/2010 11:02			1		USE	I
EXS01250004.wiff	WXXICAL-20	LER	1/25/2010 11:18			1		USE	I
EXS01250005.wiff	WXXICAL-21	LER	1/25/2010 11:33			1		USE	I
EXS01250006.wiff	WXXICAL-22	LER	1/25/2010 11:51			1		USE	I
EXS01250007.wiff	WXXICAL-23	LER	1/25/2010 12:07			1		USE	I
EXS01250008.wiff	WXXICAL-24	LER	1/25/2010 12:22			1		USE	I
EXS01250009.wiff	WXXICAL-25	LER	1/25/2010 12:38			1		USE	I
EXS01250010.wiff	XIBLK02	LER	1/25/2010 12:54			1		USE	B
EXS01250011.wiff	WXXICV	LER	1/25/2010 13:09			1		USE	C
EXS01250012.wiff	XIBLK03	LER	1/25/2010 13:25			1		USE	B
EXS01250013.wiff	WXXCRI	LER	1/25/2010 13:41			1		USE	C
EXS01250014.wiff	1202015503	LER	1/25/2010 13:56		VARIOUS	2	LANL	USE	S
EXS01250015.wiff	1202015504	LER	1/25/2010 14:12	941660	10-1214	2	LANL	USE	S
EXS01250016.wiff	XIBLK04	LER	1/25/2010 14:28			1		USE	B
EXS01250017.wiff	1202017300	LER	1/25/2010 14:44	942335	VARIOUS	2	LANL	USE	S
EXS01250018.wiff	1202017301	LER	1/25/2010 14:59	942335	VARIOUS	2	LANL	USE	S
EXS01250019.wiff	244847001	LER	1/25/2010 15:15	942335	10-1262	2	LANL	USE	S
EXS01250020.wiff	1202017302	LER	1/25/2010 15:31	942335	10-1262	2	LANL	USE	S
EXS01250021.wiff	1202017303	LER	1/25/2010 15:46	942335	10-1262	2	LANL	USE	S
EXS01250022.wiff	244847002	LER	1/25/2010 16:02	942335	10-1262	2	LANL	DUSE-RA	S
EXS01250023.wiff	244847003	LER	1/25/2010 16:18	942335	10-1262	2	LANL	USE	S
EXS01250024.wiff	WXXCCV	LER	1/25/2010 16:33			1		USE	C
EXS01250025.wiff	XIBLK05	LER	1/25/2010 16:49			1		USE	B
EXS01250026.wiff	WXXCRI	LER	1/25/2010 17:05			1		USE	C
EXS01250027.wiff	244847004	LER	1/25/2010 17:21	942335	10-1262	2	LANL	USE	S
EXS01250028.wiff	244852001	LER	1/25/2010 17:36	942335	10-1263	2	LANL	USE	S
EXS01250029.wiff	244852002	LER	1/25/2010 17:52	942335	10-1263	2	LANL	USE	S
EXS01250030.wiff	244852003	LER	1/25/2010 18:08	942335	10-1263	2	LANL	USE	S

EXS01250031.wiff	244852004	LER	1/25/2010 18:24	942335	10-1263	2	LANL	USE	S
EXS01250032.wiff	244881001	LER	1/25/2010 18:39	942335	10-1264-1	2	LANL	USE	S
EXS01250033.wiff	244881002	LER	1/25/2010 18:55	942335	10-1264-1	2	LANL	USE	S
EXS01250034.wiff	244881003	LER	1/25/2010 19:11	942335	10-1264-1	2	LANL	USE	S
EXS01250035.wiff	244881004	LER	1/25/2010 19:26	942335	10-1264-1	2	LANL	USE	S
EXS01250036.wiff	244905001	LER	1/25/2010 19:42	942335	10-1277	2	LANL	USE	S
EXS01250037.wiff	WXXCCV	LER	1/25/2010 19:58			1		USE	C
EXS01250038.wiff	XIBLK06	LER	1/25/2010 20:14			1		USE	B
EXS01250039.wiff	WXXCRI	LER	1/25/2010 20:29			1		USE	C
EXS01250040.wiff	244905002	LER	1/25/2010 20:45	942335	10-1277	2	LANL	USE	S
EXS01250041.wiff	244905003	LER	1/25/2010 21:01	942335	10-1277	2	LANL	USE	S
EXS01250042.wiff	244905004	LER	1/25/2010 21:16	942335	10-1277	2	LANL	USE	S
EXS01250043.wiff	244905005	LER	1/25/2010 21:32	942335	10-1277	2	LANL	USE	S
EXS01250044.wiff	244905006	LER	1/25/2010 21:48	942335	10-1277	2	LANL	USE	S
EXS01250045.wiff	WXXCCV	LER	1/25/2010 22:04			1		USE	C
EXS01250046.wiff	XIBLK07	LER	1/25/2010 22:19			1		USE	B
EXS01250047.wiff	WXXCRI	LER	1/25/2010 22:35			1		USE	C
EXS01250048.wiff	1202017304	LER	1/25/2010 22:51	942337	VARIOUS	2	LANL	USE	S
EXS01250049.wiff	1202017305	LER	1/25/2010 23:06	942337	VARIOUS	2	LANL	USE	S
EXS01250050.wiff	244909001	LER	1/25/2010 23:22	942337	10-1279	2	LANL	USE	S
EXS01250051.wiff	244909002	LER	1/25/2010 23:38	942337	10-1279	2	LANL	USE	S
EXS01250052.wiff	244909003	LER	1/25/2010 23:54	942337	10-1279	2	LANL	USE	S
EXS01250053.wiff	244909004	LER	1/26/2010 0:09	942337	10-1279	2	LANL	USE	S
EXS01250054.wiff	244910002	LER	1/26/2010 0:25	942337	10-1281	2	LANL	USE	S
EXS01250055.wiff	1202017306	LER	1/26/2010 0:41	942337	10-1281	2	LANL	USE	S
EXS01250056.wiff	1202017307	LER	1/26/2010 0:56	942337	10-1281	2	LANL	USE	S
EXS01250057.wiff	244910003	LER	1/26/2010 1:12	942337	10-1281	2	LANL	USE	S
EXS01250058.wiff	WXXCCV	LER	1/26/2010 1:28			1		USE	C
EXS01250059.wiff	XIBLK08	LER	1/26/2010 1:44			1		USE	B
EXS01250060.wiff	WXXCRI	LER	1/26/2010 1:59			1		USE	C
EXS01250061.wiff	244910004	LER	1/26/2010 2:15	942337	10-1281	2	LANL	USE	S
EXS01250062.wiff	244910005	LER	1/26/2010 2:31	942337	10-1281	2	LANL	USE	S
EXS01250063.wiff	244910006	LER	1/26/2010 2:46	942337	10-1281	2	LANL	USE	S
EXS01250064.wiff	244910007	LER	1/26/2010 3:02	942337	10-1281	2	LANL	USE	S
EXS01250065.wiff	244910008	LER	1/26/2010 3:18	942337	10-1281	2	LANL	USE	S
EXS01250066.wiff	244910009	LER	1/26/2010 3:33	942337	10-1281	2	LANL	USE	S
EXS01250067.wiff	WXXCCV	LER	1/26/2010 3:49			1		USE	C

EXS01250068.wiff	XIBLK09	LER	1/26/2010 4:05				1	USE	B
EXS01250069.wiff	WXXCRI	LER	1/26/2010 4:21				1	USE	C
EXS01250070.wiff	1202015510	LER	1/26/2010 4:36	941664	10-1225		2	LANL	S
EXS01250071.wiff	1202015511	LER	1/26/2010 4:52	941664	10-1225		2	LANL	S
EXS01250072.wiff	244626001	LER	1/26/2010 5:08	941664	10-1225		2	LANL	S
EXS01250073.wiff	1202015512	LER	1/26/2010 5:23	941664	10-1225		2	LANL	S
EXS01250074.wiff	1202015513	LER	1/26/2010 5:39	941664	10-1225		2	LANL	S
EXS01250075.wiff	244626002	LER	1/26/2010 5:55	941664	10-1225		2	LANL	S
EXS01250076.wiff	244626003	LER	1/26/2010 6:11	941664	10-1225		2	LANL	S
EXS01250077.wiff	244626004	LER	1/26/2010 6:26	941664	10-1225		2	LANL	S
EXS01250078.wiff	244626005	LER	1/26/2010 6:42	941664	10-1225		2	LANL	S
EXS01250079.wiff	244626006	LER	1/26/2010 6:58	941664	10-1225		2	LANL	S
EXS01250080.wiff	WXXCCV	LER	1/26/2010 7:13				1	USE	C
EXS01250081.wiff	XIBLK10	LER	1/26/2010 7:29				1	USE	B
EXS01250082.wiff	WXXCRI	LER	1/26/2010 7:45				1	USE	C
EXS01250083.wiff	244626007	LER	1/26/2010 8:00	941664	10-1225		2	LANL	S
EXS01250084.wiff	244626008	LER	1/26/2010 8:16	941664	10-1225		2	LANL	S
EXS01250085.wiff	244626009	LER	1/26/2010 8:32	941664	10-1225		2	LANL	S
EXS01250086.wiff	244626010	LER	1/26/2010 8:48	941664	10-1225		2	LANL	S
EXS01250087.wiff	244626011	LER	1/26/2010 9:03	941664	10-1225		2	LANL	S
EXS01250088.wiff	244626012	LER	1/26/2010 9:19	941664	10-1225		2	LANL	S
EXS01250089.wiff	244626013	LER	1/26/2010 9:35	941664	10-1225		2	LANL	S
EXS01250090.wiff	244626014	LER	1/26/2010 9:50	941664	10-1225		2	LANL	S
EXS01250091.wiff	244626015	LER	1/26/2010 10:06	941664	10-1225		2	LANL	S
EXS01250092.wiff	244626016	LER	1/26/2010 10:22	941664	10-1225		2	LANL	S
EXS01250093.wiff	WXXCCV	LER	1/26/2010 10:37				1	USE	C
EXS01250094.wiff	XIBLK11	LER	1/26/2010 10:53				1	USE	B
EXS01250095.wiff	WXXCRI	LER	1/26/2010 11:09				1	USE	C
EXS01250096.wiff	244847002	LER	1/26/2010 11:25	942335	10-1262		2	LANL	S
EXS01250097.wiff	XIBLK12	LER	1/26/2010 11:40				1	USE	B
EXS01250098.wiff	1202015498	LER	1/26/2010 11:56	941658	VARIOUS		2	LANL	S
EXS01250099.wiff	1202015499	LER	1/26/2010 12:12	941658	VARIOUS		2	LANL	S
EXS01250100.wiff	244597001	LER	1/26/2010 12:27	941658	10-1209		2	LANL	S
EXS01250101.wiff	244599001	LER	1/26/2010 12:43	941658	10-1210		2	LANL	S
EXS01250102.wiff	1202015500	LER	1/26/2010 12:59	941658	10-1210		2	LANL	S
EXS01250103.wiff	1202015501	LER	1/26/2010 13:15	941658	10-1210		2	LANL	S
EXS01250104.wiff	244599002	LER	1/26/2010 13:30	941658	10-1210		2	LANL	S

EXS01250105.wiff	244599003	LER	1/26/2010 13:46	941658	10-1210	2	LANL	USE	S
EXS01250106.wiff	WXXCCV	LER	1/26/2010 14:02		1			USE	C
EXS01250107.wiff	XIBLK13	LER	1/26/2010 14:17		1			USE	B
EXS01250108.wiff	WXXCRI	LER	1/26/2010 14:33		1			USE	C
EXS01250109.wiff	244599004	LER	1/26/2010 14:49	941658	10-1210	2	LANL	USE	S
EXS01250110.wiff	244599005	LER	1/26/2010 15:05	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250111.wiff	244599006	LER	1/26/2010 15:20	941658	10-1210	2	LANL	USE	S
EXS01250112.wiff	244599007	LER	1/26/2010 15:36	941658	10-1210	2	LANL	USE	S
EXS01250113.wiff	244599008	LER	1/26/2010 15:52	941658	10-1210	2	LANL	USE	S
EXS01250114.wiff	244599009	LER	1/26/2010 16:07	941658	10-1210	2	LANL	USE	S
EXS01250115.wiff	244599010	LER	1/26/2010 16:23	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250116.wiff	244599011	LER	1/26/2010 16:39	941658	10-1210	2	LANL	USE	S
EXS01250117.wiff	244599012	LER	1/26/2010 16:55	941658	10-1210	2	LANL	USE	S
EXS01250118.wiff	244599013	LER	1/26/2010 17:10	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250119.wiff	WXXCCV	LER	1/26/2010 17:26		1			USE	C
EXS01250120.wiff	XIBLK14	LER	1/26/2010 17:42		1			USE	B
EXS01250121.wiff	WXXCRI	LER	1/26/2010 17:57		1			USE	C
EXS01250122.wiff	1202017308	LER	1/26/2010 18:13	942339	VARIOUS	2	LANL	USE	S
EXS01250123.wiff	1202017309	LER	1/26/2010 18:29	942339	VARIOUS	2	LANL	USE	S
EXS01250124.wiff	244916002	LER	1/26/2010 18:45	942339	10-1284	2	LANL	USE	S
EXS01250125.wiff	244916003	LER	1/26/2010 19:00	942339	10-1284	2	LANL	USE	S
EXS01250126.wiff	244917002	LER	1/26/2010 19:16	942339	10-1285	2	LANL	USE	S
EXS01250127.wiff	244917003	LER	1/26/2010 19:32	942339	10-1285	2	LANL	USE	S
EXS01250128.wiff	244917004	LER	1/26/2010 19:47	942339	10-1285	2	LANL	USE	S
EXS01250129.wiff	244923001	LER	1/26/2010 20:03	942339	10-1287	2	LANL	USE	S
EXS01250130.wiff	1202017310	LER	1/26/2010 20:19	942339	10-1287	2	LANL	USE	S
EXS01250131.wiff	1202017311	LER	1/26/2010 20:34	942339	10-1287	2	LANL	USE	S
EXS01250132.wiff	WXXCCV	LER	1/26/2010 20:50		1			USE	C
EXS01250133.wiff	XIBLK15	LER	1/26/2010 21:06		1			USE	B
EXS01250134.wiff	WXXCRI	LER	1/26/2010 21:22		1			USE	C
EXS01250135.wiff	244923002	LER	1/26/2010 21:37	942339	10-1287	2	LANL	USE	S
EXS01250136.wiff	244923003	LER	1/26/2010 21:53	942339	10-1287	2	LANL	USE	S
EXS01250137.wiff	244923004	LER	1/26/2010 22:09	942339	10-1287	2	LANL	USE	S
EXS01250138.wiff	244923005	LER	1/26/2010 22:24	942339	10-1287	2	LANL	USE	S
EXS01250139.wiff	244923006	LER	1/26/2010 22:40	942339	10-1287	2	LANL	USE	S
EXS01250140.wiff	244923007	LER	1/26/2010 22:56	942339	10-1287	2	LANL	USE	S
EXS01250141.wiff	244923008	LER	1/26/2010 23:12	942339	10-1287	2	LANL	USE	S

EXS01250142.wiff	244923009	LER	1/26/2010 23:27	942339	10-1287	2	LANL	USE	S
EXS01250143.wiff	244923010	LER	1/26/2010 23:43	942339	10-1287	2	LANL	USE	S
EXS01250144.wiff	WXXCCV	LER	1/26/2010 23:59			1		USE	C
EXS01250145.wiff	XIBLK16	LER	1/27/2010 0:14			1		USE	B
EXS01250146.wiff	WXXCRI	LER	1/27/2010 0:30			1		USE	C
EXS01250147.wiff	UXX100108-01.2	LER	1/27/2010 0:46	SCREEN	SOLID	2	O2SI	USE	S
EXS01250148.wiff	244599005	LER	1/27/2010 1:02	941658	10-1210	2	LANL	USE	S
EXS01250149.wiff	244599010	LER	1/27/2010 1:17	941658	10-1210	2	LANL	USE	S
EXS01250150.wiff	WXXCCV	LER	1/27/2010 1:33			1		USE	C
EXS01250151.wiff	XIBLK17	LER	1/27/2010 1:49			1		USE	B
EXS01250152.wiff	WXXCRI	LER	1/27/2010 2:04			1		USE	C

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 785204

Revision No.:

DATA EXCEPTION REPORT

Mo. Day Yr. 31-JAN-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 8321A Modified	Matrix Type: Solid	Client Code: LANL
Batch ID: 941664	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 244626(10-1225) Application Issues: Failed RPD for MS/MSD, or PS/PSD			
Specification and Requirements		DER Disposition:	
Exception Description:			
1. The MS/MSD pair (1202015512/3) did not meet RPD acceptance limits for Tetra at 53.1%. The acceptance limits are 0-30%.		1. Since all other RPD recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancy is noted in the case narrative.	

Originator's Name:

Michael Penny 31-JAN-10

Data Validator/Group Leader:

Herbert Maier 01-FEB-10

**GC
SEMIVOLATILE
PCB
ANALYSIS**

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1225**

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 942247
Prep Batch Number: 942245

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
244626015	RE12-10-7283
244626016	RE12-10-7282
1202017042	Method Blank (MB)
1202017043	Laboratory Control Sample (LCS)
1202017044	244627001(RE46-10-10052) Matrix Spike (MS)
1202017045	244627001(RE46-10-10052) 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# 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 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 inverted in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

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(s) 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 (#10-1229) 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 for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this SDG 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.

Technical Information**Holding Time Specifications**

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information**Electronic Package Comment**

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

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign

and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation

Data exception reports (DERs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integrations

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII's will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

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

Review Validation

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

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

Reviewer: Andy Whitbeck

Date: 2-8-2010

Roadmap for LANL 10-1225 PCB

This roadmap was analyzed by yip00818 on 01-19-2010, 14:17.

This roadmap was reviewed by jcb on 01-21-2010, 11:45.

This roadmap was packaged by yml on 02-08-2010, 14:04.

This roadmap was validated by rob01090 on 02-08-2010, 19:58.

Front Sample Column

exclude	manual	datafile	sampleid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/031b3101.d	244626015	sample	19-JAN-2010	11:58	10-1225.sub	RE12-10-7283	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/032b3201.d	244626016	sample	19-JAN-2010	12:11	10-1225.sub	RE12-10-7282	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	sampleid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/031b3101.d	244626015	sample	19-JAN-2010	11:58	10-1225.sub	RE12-10-7283	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/032b3201.d	244626016	sample	19-JAN-2010	12:11	10-1225.sub	RE12-10-7282	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	sampleid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/029b2901.d	1202017042	mb	19-JAN-2010	11:37	10-1225.sub	PBLK01	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/030b3001.d	1202017043	les	19-JAN-2010	11:48	10-1225.sub	PBLK01LCS	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	sampleid	sampletype	injdte	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/029b2901.d	1202017042	mb	19-JAN-2010	11:37	10-1225.sub	PBLK01	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/eod1a.i/011910.b/030b3001.d	1202017043	les	19-JAN-2010	11:48	10-1225.sub	PBLK01LCS	1.00000	942247	UPLOAD BOTH COLUMNS, USE HIGHER

SAMPLE DATA SUMMARY

PCB

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Certificate of Analysis
Sample Summary

SDG Number: 10-1225

Lab Sample ID: 244626016

Client ID: RE12-10-7282

Batch ID: 942247

Run Date: 01/19/2010 12:11

Prep Date: 01/18/2010 10:10

Data File: 032f3201.d

032h3201.d

Date Collected: 01/08/2010 12:00

Date Received: 01/13/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.01 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 6.2

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	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260	U	3.55	ug/kg	1.18	3.55	1

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1225
Lab Sample ID: 244626015Client ID: RE12-10-7283
Batch ID: 942247
Run Date: 01/19/2010 11:58
Prep Date: 01/18/2010 10:10
Data File: 031f3101.d
031b3101.dDate Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 18.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.07	ug/kg	1.36	4.07	1
11104-28-2	Aroclor-1221	U	4.07	ug/kg	1.36	4.07	1
11141-16-5	Aroclor-1232	U	4.07	ug/kg	1.36	4.07	1
53469-21-9	Aroclor-1242	U	4.07	ug/kg	1.36	4.07	1
12672-29-6	Aroclor-1248	U	4.07	ug/kg	1.36	4.07	1
11097-69-1	Aroclor-1254	U	4.07	ug/kg	1.36	4.07	1
11096-82-5	Aroclor-1260	U	4.07	ug/kg	1.36	4.07	1

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1225

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202017042	MB for batch 942245	79	72	86	83
1202017043	LCS for batch 942245	77	70	86	81
244626015	RE12-10-7283	61	51	61	57
244626016	RE12-10-7282	68	63	73	67

Surrogate

4CMX = 4cmx

DCB = Decachlorobiphenyl

Acceptance Limits

(34%-105%)

(33%-115%)

* 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: 10-1225

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 942245

Matrix: SOIL

Lab Sample ID:1202017043

Instrument: ECD1A.I

Analysis Date: 01/19/2010 11:48

Dilution: 1

Analyst: YS1

Prep Batch II 942245

Inj. Vol: 1 uL

Batch ID: 942247

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	25.5	77	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	30.1	90	48-110

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1229

Sample Type: Matrix Spike

Client ID: RE46-10-10052MS

Matrix: S

Lab Sample ID:1202017044

%Moisture: 3.4

Instrument: ECD1A.I

Analysis Date: 01/19/2010 12:36

Dilution: 1

Analyst: YS1

Prep Batch ID: 942245

Inj. Vol: 1 uL

Batch ID: 942247

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	34.5	0.00	U 21.2	61	23-117
11096-82-5	MS Aroclor-1260	34.5	0.00	U 26.2	76	27-116

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1229

Sample Type: Matrix Spike Duplicate

Client ID: RE46-10-10052MSD

Matrix: S

Lab Sample ID:1202017045

%Moisture: 3.4

Instrument: ECD1A.I

Analysis Date: 01/19/2010 12:49

Dilution: 1

Analyst: YS1

Prep Batch ID: 942245

Inj. Vol: 1 uL

Batch ID: 942247

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	34.5	0.00 U	21.2	61	23-117	0	0-30
11096-82-5	MSD Aroclor-1260	34.5	0.00 U	26.3	76	27-116	0	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1225	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 942245	Instrument ID:	ECD1A.I_2	Data File:	029b2901-1.d
Lab Sample ID:	1202017042		ECD1A.I_1		029f2901-1.d
Column:	CLP2	Prep Date:	01/18/2010 10:10	Analyzed:	01/19/10 11:37
	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 942245	1202017043	030f3001-1.d 030b3001-1.d	01/19/10	1148
02 RE12-10-7283	244626015	031f3101.d 031b3101.d	01/19/10	1158
03 RE12-10-7282	244626016	032f3201.d 032b3201.d	01/19/10	1211

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1225
Lab Sample ID: 244626016

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 6.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE12-10-7282
Batch ID: 942247
Run Date: 01/19/2010 12:11
Prep Date: 01/18/2010 10:10
Data File: 032f3201.d
032b3201.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254	U	3.55	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260	U	3.55	ug/kg	1.18	3.55	1

Data File: /chem/ecdla.i/011910.b/032f3201.d
Report Date: 25-Jan-2010 08:37

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011910.b/032f3201.d
Lab Smp Id: 244626016 Client Smp ID: RE12-10-7282
Inj Date : 19-JAN-2010 12:11
Operator : YS1 Inst ID: ecdla.i
Smp Info : |244626016|1|
Misc Info : |ECD82P_1S|942247|SVA|LANL|SOIL|RE12-10-7282|||
Comment :
Method : /chem/ecdla.i/011910.b/ECD1-F-8082-121409.m
Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1225.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	30.01000	Weight of sample extracted (g)
M	6.19840	% 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			
1.968	1.968	0.000	48898937	136.787	4.8 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.279	5.280	-0.001	43854586	145.209	5.2 80.00- 120.00	100.00

Data File: /chem/ecdl.a.i/011910.b/032F3201.d

Date: 19-JUN-2010 12:11

Client ID: RE12-10-7282

Sample Info: 124462601611

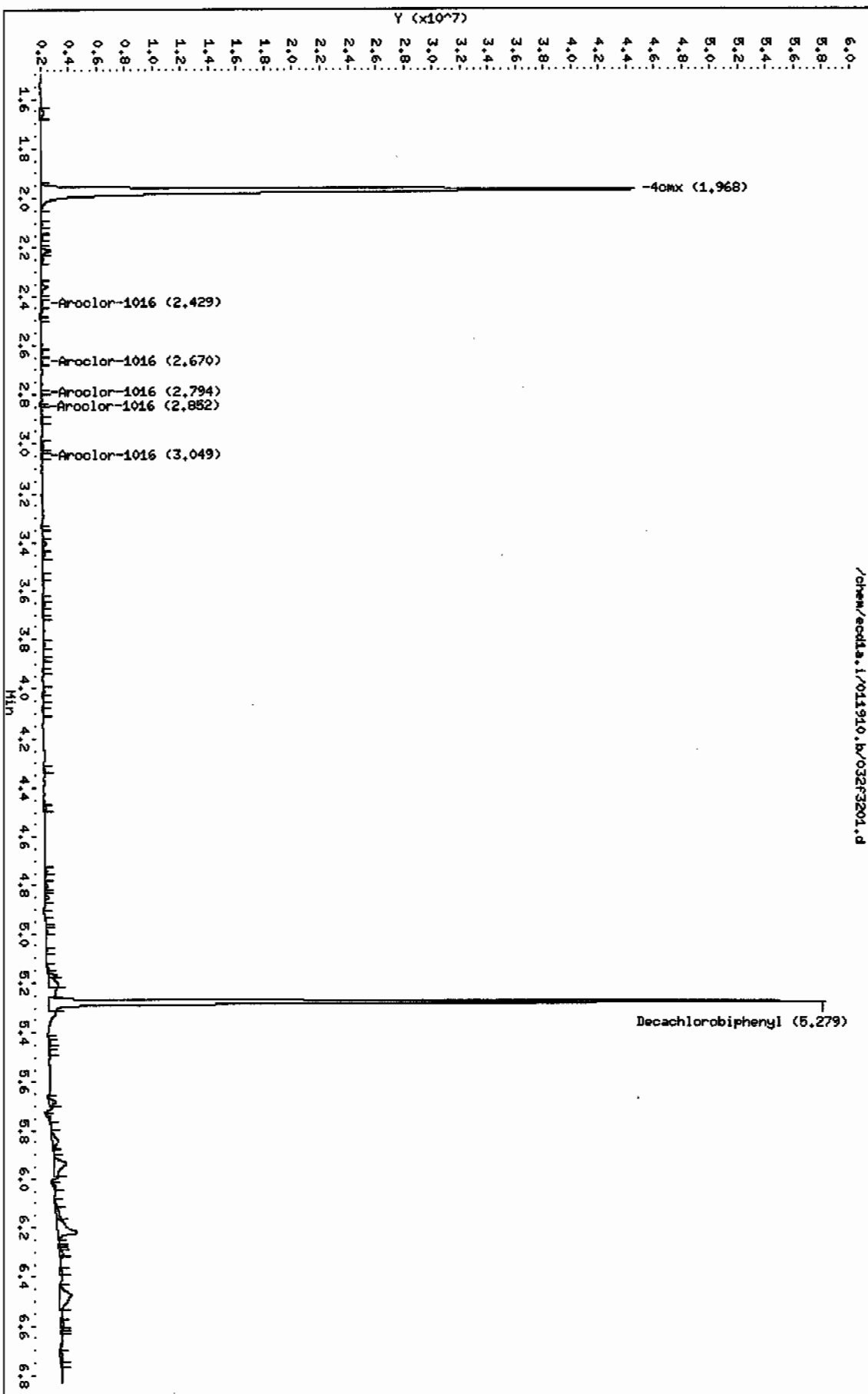
Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/011910.b/032b3201.d
Lab Smp Id: 244626016 Client Smp ID: RE12-10-7282
Inj Date : 19-JAN-2010 12:11
Operator : YS1 Inst ID: ecdla.i
Smp Info : |244626016|1|
Misc Info : |ECD82P_1S|942247|SVA|LANL|SOIL|RE12-10-7282|||
Comment :
Method : /chem/ecdla.i/011910.b/ECD1-B-8082-121409.m
Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
Als bottle: 32
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1225.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	6.19840	% Moisture

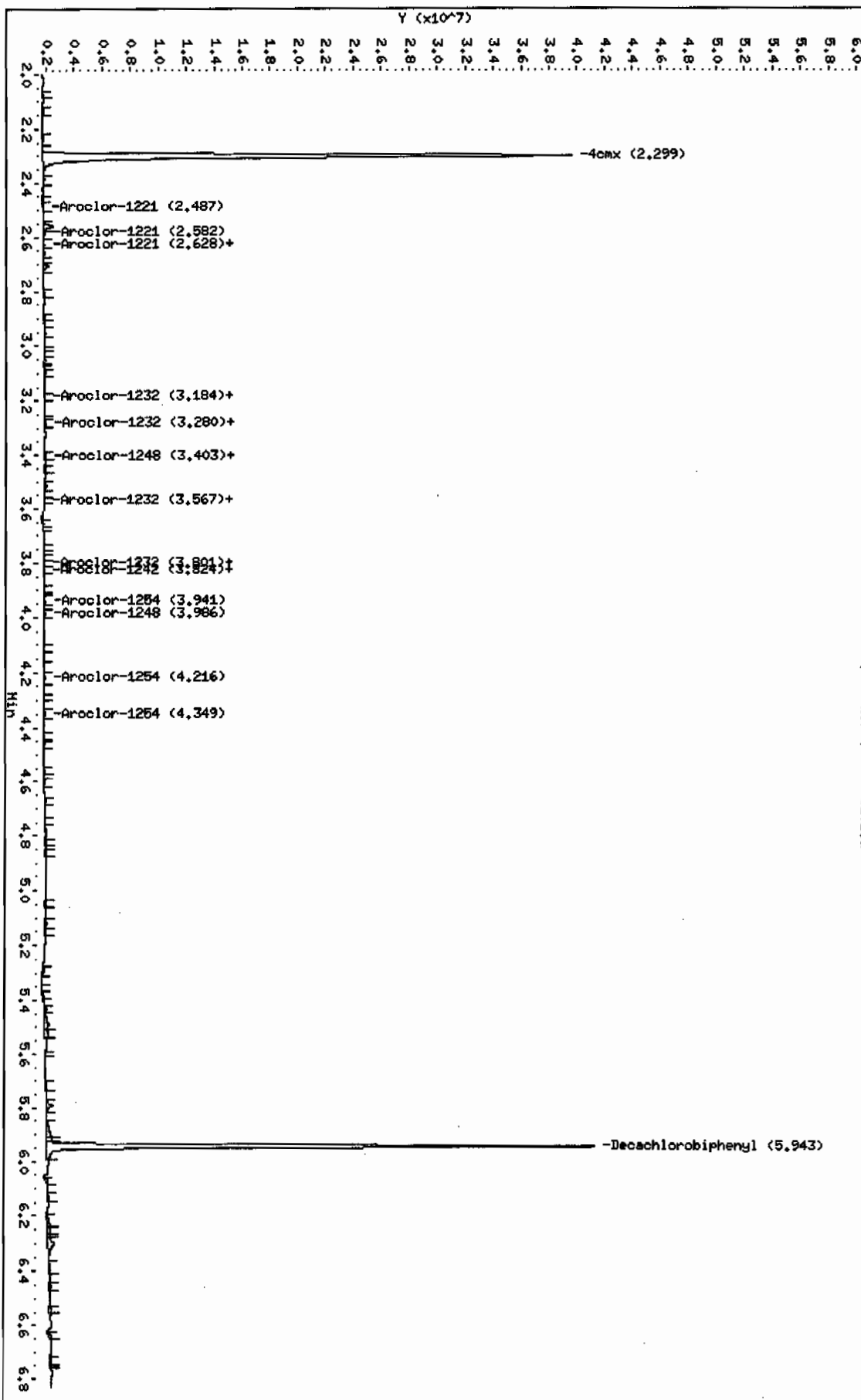
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
<hr/>							
\$ 11 4cmx			CAS #: 877-09-8				
2.299	2.299	0.000	35777635	125.386	4.4 80.00- 120.00	100.00	
<hr/>							
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3				
5.943	5.944	-0.001	29775148	134.251	4.8 80.00- 120.00	100.00	
<hr/>							

Data File: /chem/eod1a.i/011910.b/03263201.d
 Date: 19-JUN-2010 12:11
 Client ID: RE12-10-7282
 Sample Info: 124462601611
 Volume Injected (uL): 1.0
 Column phase: CLP2

Instrument: eod1a.i
 Operator: YSL
 Column diameter: 0.25

/chem/eod1a.i/011910.b/03263201.d



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1225
Lab Sample ID: 244626015

Client ID: RE12-10-7283
Batch ID: 942247
Run Date: 01/19/2010 11:58
Prep Date: 01/18/2010 10:10
Data File: 031f3101.d
031b3101.d

Date Collected: 01/08/2010 12:00
Date Received: 01/13/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 18.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.07	ug/kg	1.36	4.07	1
11104-28-2	Aroclor-1221	U	4.07	ug/kg	1.36	4.07	1
11141-16-5	Aroclor-1232	U	4.07	ug/kg	1.36	4.07	1
53469-21-9	Aroclor-1242	U	4.07	ug/kg	1.36	4.07	1
12672-29-6	Aroclor-1248	U	4.07	ug/kg	1.36	4.07	1
11097-69-1	Aroclor-1254	U	4.07	ug/kg	1.36	4.07	1
11096-82-5	Aroclor-1260	U	4.07	ug/kg	1.36	4.07	1

Data File: /chem/ecdla.i/011910.b/031f3101.d
 Report Date: 25-Jan-2010 08:36

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011910.b/031f3101.d
 Lab Smp Id: 244626015 Client Smp ID: RE12-10-7283
 Inj Date : 19-JAN-2010 11:58
 Operator : YSl Inst ID: ecdla.i
 Smp Info : |244626015|1|
 Misc Info : |ECD82P_1S|942247|SVA|LANL|SOIL|RE12-10-7283|||
 Comment :
 Method : /chem/ecdla.i/011910.b/ECD1-F-8082-121409.m
 Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
 Als bottle: 31
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1225.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	30.01000	Weight of sample extracted (g)
M	18.19770	% Moisture

Cpnd Variable Local Compound Variable

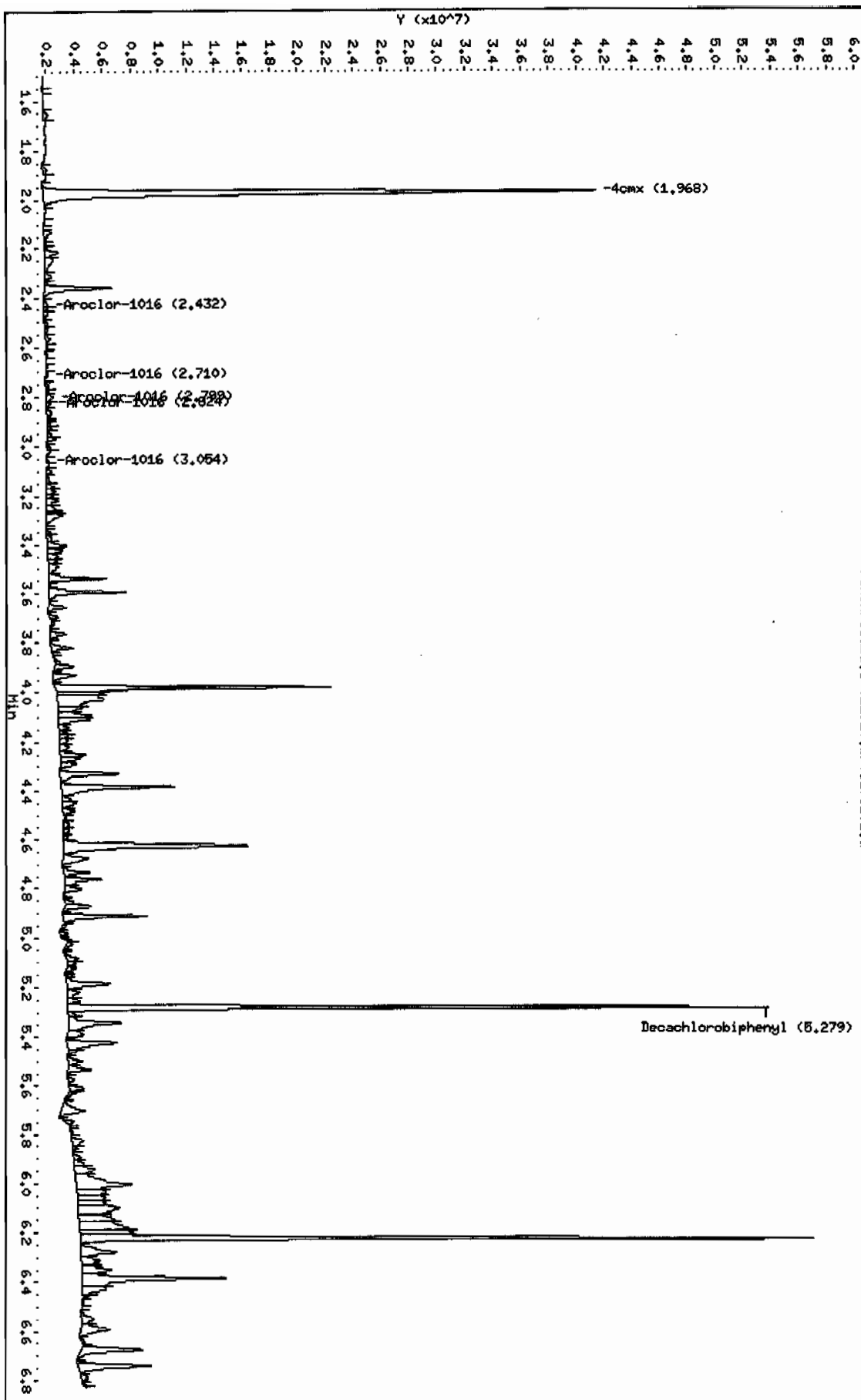
CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL RESPONSE (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
1.968	1.968	0.000	43864129	122.703	5.0 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.279	5.280	-0.001	37000229	122.513	5.0 80.00- 120.00	100.00

Data File: /chem/ecdtla.i/011910.b/031F3101.d
Date: 19-JAN-2010 11:58
Client ID: RE12-10-7283
Sample Info: 124462601511
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdtla.i
Operator: YSI
Column diameter: 0.25

/chem/ecdtla.i/011910.b/031F3101.d



Data File: /chem/ecdl1a.i/011910.b/031b3101.d
Report Date: 25-Jan-2010 08:36

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/011910.b/031b3101.d
Lab Smp Id: 244626015 Client Smp ID: RE12-10-7283
Inj Date : 19-JAN-2010 11:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244626015|1|
Misc Info : |ECD82P_1S|942247|SVA|LANL|SOIL|RE12-10-7283|||
Comment :
Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1225.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	18.19770	% Moisture

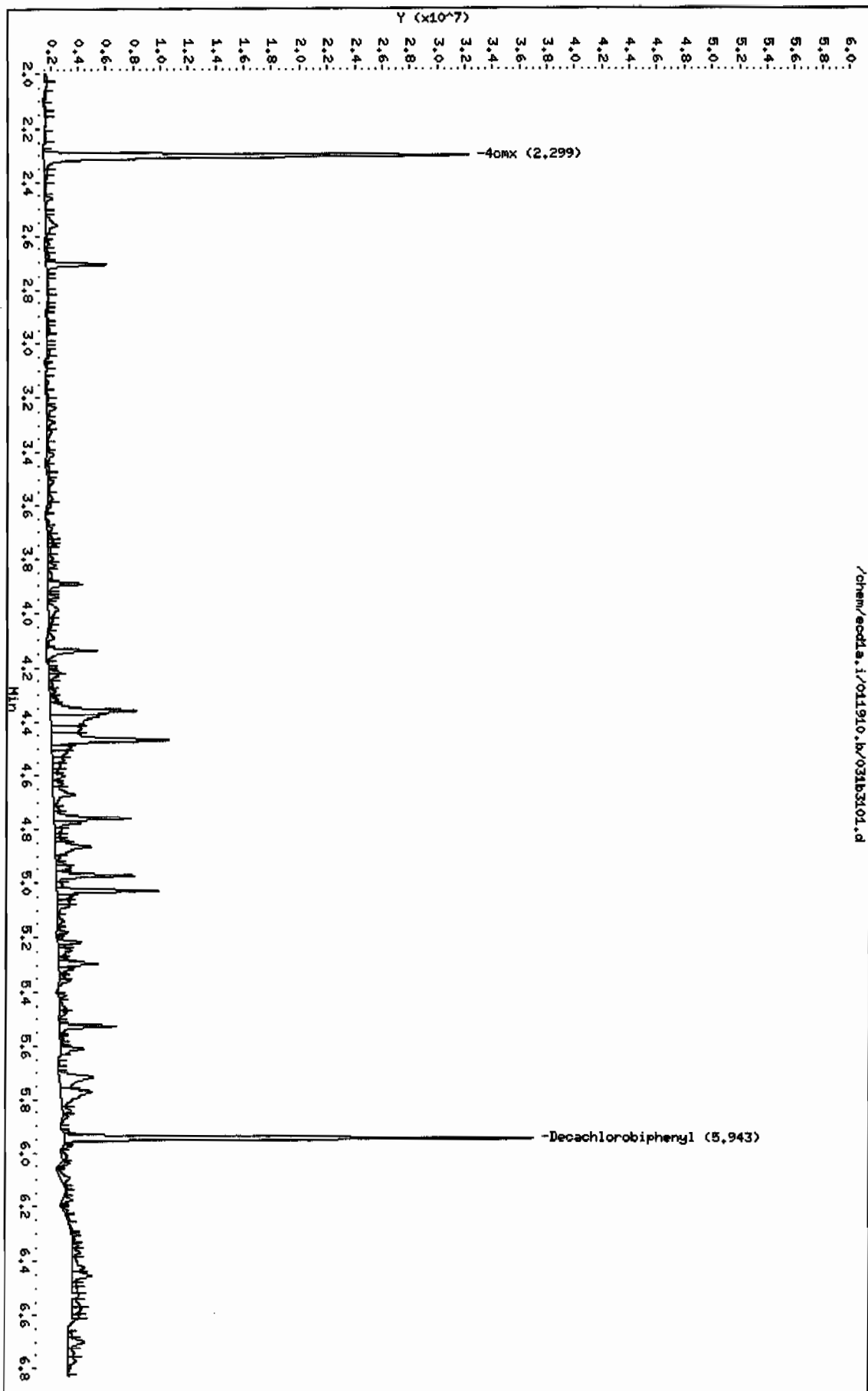
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
<hr/>						
\$ 11 4cmx				CAS #: 877-09-8		
2.299	2.299	0.000	29159109 102.191	4.2	80.00- 120.00	100.00
<hr/>						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.943	5.944	-0.001	25203202 113.637	4.6	80.00- 120.00	100.00
<hr/>						

Data File: /chem/ecdl.a.i/011910.b/031b3101.d
Date: 19-JUN-2010 11:58
Client ID: REL2-10-7283
Sample Info: 124462601511
Volume Injected (uL): 1.0
Column Phase: CLP2

Instrument: ecdl.a.i
Operator: YSL
Column diameter: 0.25

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STANDARDS DATA

Report Date: 20-Jan-2010 08:39

Calibration History

Method : /chem/ecdl1a.i/011910.b/ECD1-F-8082-121409.m
Start Cal Date: 14-DEC-2009 05:36
End Cal Date : 14-DEC-2009 12:37

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
14-DEC-2009 11:34	AR1268	/chem/ecdl1a.i/121409.b/040f4001.d
14-DEC-2009 09:28	AR1248	/chem/ecdl1a.i/121409.b/028f2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdl1a.i/121409.b/022f2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdl1a.i/121409.b/016f1601.d
14-DEC-2009 10:31	AR1660	/chem/ecdl1a.i/121409.b/034f3401.d
Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecdl1a.i/121409.b/041f4101.d
14-DEC-2009 09:38	AR1248	/chem/ecdl1a.i/121409.b/029f2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdl1a.i/121409.b/023f2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdl1a.i/121409.b/017f1701.d
14-DEC-2009 10:41	AR1660	/chem/ecdl1a.i/121409.b/035f3501.d
Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecdl1a.i/121409.b/042f4201.d
14-DEC-2009 09:49	AR1248	/chem/ecdl1a.i/121409.b/030f3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdl1a.i/121409.b/024f2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdl1a.i/121409.b/018f1801.d
14-DEC-2009 10:52	AR1660	/chem/ecdl1a.i/121409.b/036f3601.d
Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdl1a.i/121409.b/046f4601.d
14-DEC-2009 09:59	AR1248	/chem/ecdl1a.i/121409.b/031f3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdl1a.i/121409.b/025f2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdl1a.i/121409.b/019f1901.d
14-DEC-2009 11:02	AR1660	/chem/ecdl1a.i/121409.b/037f3701.d
14-DEC-2009 12:06	AR1268	/chem/ecdl1a.i/121409.b/043f4301.d
14-DEC-2009 05:58	AR1262	/chem/ecdl1a.i/121409.b/008f0801.d
14-DEC-2009 05:47	AR1221	/chem/ecdl1a.i/121409.b/007f0701.d
14-DEC-2009 05:36	AR1232	/chem/ecdl1a.i/121409.b/006f0601.d
Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecdl1a.i/121409.b/044f4401.d
14-DEC-2009 10:10	AR1248	/chem/ecdl1a.i/121409.b/032f3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdl1a.i/121409.b/026f2601.d
14-DEC-2009 08:04	AR1254	/chem/ecdl1a.i/121409.b/020f2001.d
14-DEC-2009 11:13	AR1660	/chem/ecdl1a.i/121409.b/038f3801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 20:28	| AR1660	| /chem/ecd1a.i/011910.b/072f7201.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 18:34	| AR1660	| /chem/ecd1a.i/011910.b/063f6301.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 17:18	| AR1660	| /chem/ecd1a.i/011910.b/057f5701.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 14:51	| AR1660	| /chem/ecd1a.i/011910.b/045f4501.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 13:39	| AR1660	| /chem/ecd1a.i/011910.b/039f3901.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 11:16	| AR1660	| /chem/ecd1a.i/011910.b/027f2701.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 09:56	| AR1660	| /chem/ecd1a.i/011910.b/020f2001.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 07:16	| AR1232	| /chem/ecd1a.i/011910.b/006f0601.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 07:06	| AR1248	| /chem/ecd1a.i/011910.b/005f0501.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 06:55	| AR1242	| /chem/ecd1a.i/011910.b/004f0401.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 06:45	| AR1254	| /chem/ecd1a.i/011910.b/003f0301.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 06:34	| AR1660	| /chem/ecd1a.i/011910.b/002f0201.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 07:48	| AR1268	| /chem/ecd1a.i/011910.b/009f0901.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 07:37	| AR1262	| /chem/ecd1a.i/011910.b/008f0801.d
| Ccal Level: 4 , Ccal Amount: 1000		
| 19-JAN-2010 07:27	| AR1221	| /chem/ecd1a.i/011910.b/007f0701.d

Report Date: 20-Jan-2010 08:39

Calibration History

Method : /chem/ecd1a.i/011910.b/ECD1-B-8082-121409.m
Start Cal Date: 11-DEC-2009 10:17
End Cal Date : 14-DEC-2009 12:37

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
14-DEC-2009 11:34	AR1268	/chem/ecd1a.i/121409.b/040b4001.d
14-DEC-2009 09:28	AR1248	/chem/ecd1a.i/121409.b/028b2801.d
14-DEC-2009 08:25	AR1242	/chem/ecd1a.i/121409.b/022b2201.d
14-DEC-2009 07:22	AR1254	/chem/ecd1a.i/121409.b/016b1601.d
14-DEC-2009 10:31	AR1660	/chem/ecd1a.i/121409.b/034b3401.d

Cal Level: 2 , Cal Amount: 200.00000		
14-DEC-2009 11:44	AR1268	/chem/ecd1a.i/121409.b/041b4101.d
14-DEC-2009 09:38	AR1248	/chem/ecd1a.i/121409.b/029b2901.d
14-DEC-2009 08:35	AR1242	/chem/ecd1a.i/121409.b/023b2301.d
14-DEC-2009 07:32	AR1254	/chem/ecd1a.i/121409.b/017b1701.d
14-DEC-2009 10:41	AR1660	/chem/ecd1a.i/121409.b/035b3501.d

Cal Level: 3 , Cal Amount: 500.00000		
14-DEC-2009 11:55	AR1268	/chem/ecd1a.i/121409.b/042b4201.d
14-DEC-2009 09:49	AR1248	/chem/ecd1a.i/121409.b/030b3001.d
14-DEC-2009 08:46	AR1242	/chem/ecd1a.i/121409.b/024b2401.d
14-DEC-2009 07:43	AR1254	/chem/ecd1a.i/121409.b/018b1801.d
14-DEC-2009 10:52	AR1660	/chem/ecd1a.i/121409.b/036b3601.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecd1a.i/121409.b/046b4601.d
14-DEC-2009 12:06	AR1268	/chem/ecd1a.i/121409.b/043b4301.d
14-DEC-2009 05:58	AR1262	/chem/ecd1a.i/121409.b/008b0801.d
14-DEC-2009 05:47	AR1221	/chem/ecd1a.i/121409.b/007b0701.d
14-DEC-2009 05:36	AR1232	/chem/ecd1a.i/121409.b/006b0601.d
14-DEC-2009 09:59	AR1248	/chem/ecd1a.i/121409.b/031b3101.d
14-DEC-2009 08:56	AR1242	/chem/ecd1a.i/121409.b/025b2501.d
14-DEC-2009 07:53	AR1254	/chem/ecd1a.i/121409.b/019b1901.d
14-DEC-2009 11:02	AR1660	/chem/ecd1a.i/121409.b/037b3701.d

Cal Level: 5 , Cal Amount: 4000.00000		
14-DEC-2009 12:16	AR1268	/chem/ecd1a.i/121409.b/044b4401.d
14-DEC-2009 10:10	AR1248	/chem/ecd1a.i/121409.b/032b3201.d
14-DEC-2009 09:07	AR1242	/chem/ecd1a.i/121409.b/026b2601.d
14-DEC-2009 08:04	AR1254	/chem/ecd1a.i/121409.b/020b2001.d
14-DEC-2009 11:13	AR1660	/chem/ecd1a.i/121409.b/038b3801.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 20:28	AR1660	/chem/ecdla.i/011910.b/072b7201.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 18:34	AR1660	/chem/ecdla.i/011910.b/063b6301.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 17:18	AR1660	/chem/ecdla.i/011910.b/057b5701.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 14:51	AR1660	/chem/ecdla.i/011910.b/045b4501.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 13:39	AR1660	/chem/ecdla.i/011910.b/039b3901.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 11:16	AR1660	/chem/ecdla.i/011910.b/027b2701.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 09:56	AR1660	/chem/ecdla.i/011910.b/020b2001.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 07:48	AR1268	/chem/ecdla.i/011910.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 07:37	AR1262	/chem/ecdla.i/011910.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 07:27	AR1221	/chem/ecdla.i/011910.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 07:16	AR1232	/chem/ecdla.i/011910.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 07:06	AR1248	/chem/ecdla.i/011910.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 06:55	AR1242	/chem/ecdla.i/011910.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 06:45	AR1254	/chem/ecdla.i/011910.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
19-JAN-2010 06:34	AR1660	/chem/ecdla.i/011910.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/011910.b/ECD1-F-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 20-Jan-2010 06:59 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	2.423	2.393-2.453	1.387e+04
	2.700	2.670-2.730	1.010e+04
	2.792	2.762-2.822	1.176e+04
	2.830	2.800-2.860	6.599e+03
	3.040	3.010-3.070	8.673e+03
63 4,4-DDD	3.953	3.933-3.973	3.938e+05
	3.603	3.583-3.623	4.795e+05
	4.118	4.098-4.138	3.238e+05
	2.081	2.051-2.111	4.301e+03
	2.174	2.144-2.204	2.440e+03
64 4,4-DDE	2.200	2.170-2.230	1.027e+04
	2.423	2.393-2.453	6.717e+03
	2.712	2.682-2.742	8.157e+03
	2.793	2.763-2.823	5.751e+03
	3.041	3.011-3.071	3.954e+03
62 4,4-DDT	3.295	3.265-3.325	3.533e+03
	2.424	2.394-2.454	1.166e+04
	2.712	2.682-2.742	1.345e+04
	2.830	2.800-2.860	5.506e+03
	3.041	3.011-3.071	7.245e+03
2 Aroclor-1221	3.295	3.265-3.325	6.811e+03
	2.174	2.144-2.204	2.440e+03
	2.200	2.170-2.230	1.027e+04
	2.423	2.393-2.453	6.717e+03
	2.712	2.682-2.742	8.157e+03
3 Aroclor-1232	2.793	2.763-2.823	5.751e+03
	3.041	3.011-3.071	3.954e+03
	3.295	3.265-3.325	3.533e+03
	2.424	2.394-2.454	1.166e+04
	2.712	2.682-2.742	1.345e+04
4 Aroclor-1242	2.830	2.800-2.860	5.506e+03
	3.041	3.011-3.071	7.245e+03
	3.295	3.265-3.325	6.811e+03
	2.424	2.394-2.454	1.166e+04
	2.712	2.682-2.742	1.345e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/011910.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.093	3.063-3.123	7.848e+03
	3.244	3.214-3.274	6.870e+03
	3.295	3.265-3.325	1.331e+04
	3.427	3.397-3.457	1.101e+04
6 Aroclor-1254	3.659	3.629-3.689	7.455e+03
	3.270	3.240-3.300	1.249e+04
	3.425	3.395-3.455	1.672e+04
	3.659	3.629-3.689	2.071e+04
7 Aroclor-1260	3.821	3.792-3.852	1.569e+04
	3.931	3.901-3.961	1.517e+04
	3.766	3.736-3.796	1.675e+04
	3.930	3.900-3.960	2.474e+04
8 Aroclor-1262	4.160	4.130-4.190	1.469e+04
	4.303	4.273-4.333	1.518e+04
	4.482	4.452-4.512	3.435e+04
	3.768	3.738-3.798	1.402e+04
9 Aroclor-1268	3.930	3.900-3.960	1.841e+04
	4.161	4.131-4.191	2.251e+04
	4.304	4.274-4.334	2.033e+04
	4.483	4.453-4.513	4.317e+04
M 10 Aroclor-Total	4.667	4.637-4.697	5.438e+04
	4.691	4.661-4.721	5.419e+04
	4.803	4.773-4.833	4.052e+04
	5.006	4.976-5.036	1.833e+04
\$ 11 4cmx	5.172	5.142-5.202	1.233e+05
\$ 12 Decachlorobiphenyl	1.000	0.980-1.020	
	1.968	1.938-1.998	3.757e+05
	5.280	5.250-5.310	3.175e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/011910.b/ECD1-B-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 20-Jan-2010 07:06 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	3.195	3.165-3.225	1.261e+04
	3.278	3.248-3.308	9.328e+03
	3.342	3.312-3.372	5.411e+03
	3.569	3.539-3.599	7.052e+03
	3.644	3.614-3.674	6.551e+03
62 4,4-DDT	4.670	4.650-4.690	2.436e+05
63 4,4-DDE	4.139	4.119-4.159	3.580e+05
64 4,4-DDD	4.483	4.463-4.503	2.893e+05
2 Aroclor-1221	2.495	2.465-2.525	3.640e+03
	2.590	2.560-2.620	2.329e+03
	2.631	2.601-2.661	8.119e+03
3 Aroclor-1232	2.631	2.601-2.661	6.156e+03
	3.196	3.166-3.226	6.302e+03
	3.278	3.248-3.308	4.701e+03
	3.569	3.539-3.599	3.243e+03
4 Aroclor-1242	3.803	3.773-3.833	3.151e+03
	3.195	3.165-3.225	1.059e+04
	3.279	3.249-3.309	8.054e+03
	3.569	3.539-3.599	5.962e+03
	3.802	3.772-3.832	6.057e+03
	3.830	3.800-3.860	6.701e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.403	3.373-3.433	8.054e+03
	3.569	3.539-3.599	9.874e+03
	3.803	3.773-3.833	1.122e+04
	3.830	3.800-3.860	1.248e+04
	3.967	3.937-3.997	1.210e+04
6 Aroclor-1254	3.403	3.373-3.433	6.435e+03
	3.826	3.796-3.856	1.156e+04
	3.942	3.912-3.971	1.243e+04
	4.218	4.188-4.248	1.688e+04
	4.354	4.324-4.384	1.244e+04
7 Aroclor-1260	4.335	4.305-4.365	1.368e+04
	4.459	4.429-4.489	1.603e+04
	4.725	4.695-4.755	1.256e+04
	4.899	4.869-4.929	1.281e+04
	5.045	5.015-5.075	2.790e+04
8 Aroclor-1262	4.460	4.430-4.490	1.292e+04
	4.725	4.695-4.755	1.831e+04
	4.899	4.869-4.929	1.658e+04
	5.046	5.016-5.076	3.329e+04
	5.259	5.229-5.289	2.297e+04
9 Aroclor-1268	5.258	5.228-5.288	4.358e+04
	5.286	5.256-5.316	4.039e+04
	5.435	5.405-5.465	3.144e+04
	5.600	5.570-5.630	1.427e+04
	5.793	5.763-5.823	8.886e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.299	2.269-2.329	3.000e+05
\$ 12 Decachlorobiphenyl	5.944	5.914-5.974	2.332e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36
 End Cal Date : 14-DEC-2009 12:37
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/011910.b/ECD1-F-8082-121409.m
 Cal Date : 25-Jan-2010 08:43 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdla.i/121409.b/040f4001.d
 Level 2: /chem/ecdla.i/121409.b/041f4101.d
 Level 3: /chem/ecdla.i/121409.b/042f4201.d
 Level 4: /chem/ecdla.i/121409.b/046f4601.d
 Level 5: /chem/ecdla.i/121409.b/044f4401.d

Compound	100.000	200.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	15975	14641	13829	13236	11653	13867	11.596
(2)	10801	10349	9832	9922	9584	10098	4.757
(3)	13242	12280	11732	11291	10240	11757	9.507
(4)	7178	6867	6609	6421	5920	6599	7.183
(5)	9710	9021	8649	8224	7763	8673	8.604
63 4,4-DDD	++++	++++	++++	393799	++++	393799	0.000
64 4,4-DDE	++++	++++	++++	479509	++++	479509	0.000
62 4,4-DDT	++++	++++	++++	323817	++++	323817	0.000
2 Aroclor-1221(1)	++++	++++	++++	4301	++++	4301	0.000
(2)	++++	++++	++++	2440	++++	2440	0.000
(3)	++++	++++	++++	10272	++++	10272	0.000
3 Aroclor-1232(1)	++++	++++	++++	6717	++++	6717	0.000
(2)	++++	++++	++++	8157	++++	8157	0.000
(3)	++++	++++	++++	5751	++++	5751	0.000
(4)	++++	++++	++++	3954	++++	3954	0.000
(5)	++++	++++	++++	3533	++++	3533	0.000
4 Aroclor-1242(1)	13692	12467	11522	10819	9798	11660	12.846
(2)	14782	14429	13236	12555	12263	13453	8.301
(3)	6076	5890	5423	5191	4949	5506	8.563
(4)	8395	7578	7079	6747	6426	7245	10.645
(5)	7587	7189	6604	6378	6296	6811	8.178
5 Aroclor-1248(1)	9070	8103	7743	7247	7078	7848	10.119
(2)	7785	7181	6827	6444	6114	6870	9.456
(3)	15108	13267	13037	12915	12225	13310	8.094
(4)	12682	11331	10815	10392	9852	11015	9.799
(5)	8605	7806	7405	7124	6336	7455	11.244

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36
 End Cal Date : 14-DEC-2009 12:37
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/011910.b/ECD1-F-8082-121409.m
 Cal Date : 25-Jan-2010 08:43 yip00818
 Curve Type : Average

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	14281	12975	12313	11911	10947	12485	9.963
(2)	18803	17181	16666	15949	15010	16722	8.494
(3)	22492	20906	20786	20326	19059	20714	5.957
(4)	16753	15627	15809	15513	14770	15694	4.535
(5)	16595	15169	15433	15075	13591	15172	7.071
7 Aroclor-1260(1)	18145	17177	16842	16407	15189	16752	6.464
(2)	26410	24871	24973	24571	22887	24743	5.081
(3)	16099	14386	14855	14472	13625	14687	6.171
(4)	16517	14719	15311	15032	14343	15185	5.451
(5)	35425	33953	34899	34487	32987	34350	2.719
8 Aroclor-1262(1)	+++++	+++++	+++++	14019	+++++	14019	0.000
(2)	+++++	+++++	+++++	18406	+++++	18406	0.000
(3)	+++++	+++++	+++++	22511	+++++	22511	0.000
(4)	+++++	+++++	+++++	20327	+++++	20327	0.000
(5)	+++++	+++++	+++++	43170	+++++	43170	0.000
9 Aroclor-1268(1)	56914	55996	53872	52565	52528	54375	3.680
(2)	57500	55307	54092	52376	51697	54194	4.300
(3)	43006	41368	40020	38976	39247	40524	4.120
(4)	19620	18932	18085	17425	17569	18326	5.094
(5)	128350	126812	122798	118830	119599	123278	3.436
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 11 4cmx	367897	363741	359986	359846	335942	357482	3.492
\$ 12 Decachlorobiphenyl	316645	310611	307193	296602	278999	302010	4.894

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17
 End Cal Date : 14-DEC-2009 12:37
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
 Cal Date : 25-Jan-2010 08:43 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/121409.b/040b4001.d
 Level 2: /chem/ecdl1a.i/121409.b/041b4101.d
 Level 3: /chem/ecdl1a.i/121409.b/042b4201.d
 Level 4: /chem/ecdl1a.i/121409.b/046b4601.d
 Level 5: /chem/ecdl1a.i/121409.b/044b4401.d

Compound	100.000 Level 1	200.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016(1)	14281	12734	12848	12156	11039	12612	9.333
(2)	10954	9913	9256	8806	7710	9328	13.003
(3)	6310	5679	5380	5089	4598	5411	11.852
(4)	8214	7430	6981	6696	5938	7052	12.003
(5)	7754	6843	6481	6115	5561	6551	12.561
62 4,4-DDT	++++	++++	++++	243613	++++	243613	0.000
63 4,4-DDE	++++	++++	++++	357996	++++	357996	0.000
64 4,4-DDD	++++	++++	++++	289343	++++	289343	0.000
2 Aroclor-1221(1)	++++	++++	++++	3640	++++	3640	0.000
(2)	++++	++++	++++	2329	++++	2329	0.000
(3)	++++	++++	++++	8119	++++	8119	0.000
3 Aroclor-1232(1)	++++	++++	++++	6156	++++	6156	0.000
(2)	++++	++++	++++	6302	++++	6302	0.000
(3)	++++	++++	++++	4701	++++	4701	0.000
(4)	++++	++++	++++	3243	++++	3243	0.000
(5)	++++	++++	++++	3151	++++	3151	0.000
4 Aroclor-1242(1)	12348	11309	9989	9755	9542	10589	11.338
(2)	9730	8628	7875	7358	6677	8054	14.627
(3)	7163	6326	5763	5452	5107	5962	13.534
(4)	7183	6468	5900	5548	5185	6057	12.997
(5)	7820	7123	6589	6229	5746	6701	11.977
5 Aroclor-1248(1)	9914	8542	7972	7289	6553	8054	15.880
(2)	11996	10356	9798	9046	8173	9874	14.605
(3)	13306	11756	11119	10365	9555	11220	12.723
(4)	14720	13121	12480	11577	10516	12483	12.732
(5)	14361	12633	11977	11210	10342	12104	12.596

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17
 End Cal Date : 14-DEC-2009 12:37
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
 Cal Date : 25-Jan-2010 08:43 yip00818
 Curve Type : Average

Compound	100.000	200.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
6 Aroclor-1254(1)	7857	6938	6317	5878	5185	6435	15.850
(2)	13759	12316	11389	10708	9625	11559	13.615
(3)	14674	13172	12243	11576	10492	12431	12.786
(4)	19102	17554	16808	16165	14771	16880	9.533
(5)	14276	12708	12612	11843	10739	12435	10.425
7 Aroclor-1260(1)	15678	14232	13583	13177	11731	13680	10.567
(2)	18142	16574	16035	15527	13867	16029	9.709
(3)	14298	13064	12524	12030	10903	12564	9.989
(4)	14593	13310	12766	12230	11150	12810	9.970
(5)	30553	28626	28257	27276	24777	27898	7.569
8 Aroclor-1262(1)	++++	++++	++++	12922	++++	12922	0.000
(2)	++++	++++	++++	18311	++++	18311	0.000
(3)	++++	++++	++++	16579	++++	16579	0.000
(4)	++++	++++	++++	33287	++++	33287	0.000
(5)	++++	++++	++++	22972	++++	22972	0.000
9 Aroclor-1268(1)	48327	45655	43354	41349	39206	43578	8.193
(2)	44968	41865	39872	38249	36983	40388	7.790
(3)	35350	32573	30975	29630	28674	31440	8.372
(4)	16410	14977	13894	13214	12876	14274	10.077
(5)	96769	92419	87897	84047	83161	88859	6.460
10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
\$ 11 4cmx	307069	293716	286931	282899	256086	285340	6.572
\$ 12 Decachlorobiphenyl	248884	228809	224119	212175	194946	221787	9.023

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.: 10-1225
 Instrument ID: ECD1A Calibration Date: 01/19/10 Time: 0634
 Lab File ID: 002F0201 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13866.870	12658.972	0.01	-8.7	15.0
(2)	10097.726	10145.813	0.01	0.5	15.0
(3)	11757.020	10852.998	0.01	-7.7	15.0
(4)	6599.010	6535.402	0.01	-1.0	15.0
(5)	8673.402	8372.372	0.01	-3.5	15.0
Aroclor-1260	16752.150	16879.592	0.01	0.8	15.0
(2)	24742.603	25733.689	0.01	4.0	15.0
(3)	14687.346	15296.444	0.01	4.1	15.0
(4)	15184.529	15991.991	0.01	5.3	15.0
(5)	34350.443	36727.586	0.01	6.9	15.0
4cmx	357482.34	379211.97	0.01	6.1	15.0
Decachlorobiphenyl	302009.99	316870.67	0.01	4.9	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.: 10-1225
 Instrument ID: ECD1A Calibration Date: 01/19/10 Time: 0634
 Lab File ID: 002B0201 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12611.539	11827.325	0.01	-6.2	15.0
(2)	9327.875	8007.184	0.01	-14.2	15.0
(3)	5411.316	4979.509	0.01	-8.0	15.0
(4)	7051.879	6546.190	0.01	-7.2	15.0
(5)	6550.733	6145.647	0.01	-6.2	15.0
Aroclor-1260	13680.027	12477.943	0.01	-8.8	15.0
(2)	16029.019	15281.159	0.01	-4.7	15.0
(3)	12563.933	11624.870	0.01	-7.5	15.0
(4)	12810.076	12102.128	0.01	-5.5	15.0
(5)	27897.674	27286.403	0.01	-2.2	15.0
4cmx	285339.98	282471.80	0.01	-1.0	15.0
Decachlorobiphenyl	221786.62	226762.24	0.01	2.2	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.: 10-1225
 Instrument ID: ECD1A Calibration Date: 01/19/10 Time: 1116
 Lab File ID: 027F2701 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13866.870	13320.162	0.01	-3.9	15.0
(2)	10097.726	10458.388	0.01	3.6	15.0
(3)	11757.020	11462.112	0.01	-2.5	15.0
(4)	6599.010	6909.551	0.01	4.7	15.0
(5)	8673.402	8775.256	0.01	1.2	15.0
Aroclor-1260	16752.150	17785.722	0.01	6.2	15.0
(2)	24742.603	27132.329	0.01	9.6	15.0
(3)	14687.346	16221.524	0.01	10.4	15.0
(4)	15184.529	16984.826	0.01	11.8	15.0
(5)	34350.443	38800.997	0.01	13.0	15.0
4cmx	357482.34	399907.70	0.01	11.9	15.0
Decachlorobiphenyl	302009.99	330907.62	0.01	9.6	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.: 10-1225
 Instrument ID: ECD1A Calibration Date: 01/19/10 Time: 1116
 Lab File ID: 027B2701 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12611.539	12011.878	0.01	-4.8	15.0
(2)	9327.875	8180.602	0.01	-12.3	15.0
(3)	5411.316	5084.498	0.01	-6.0	15.0
(4)	7051.879	6442.413	0.01	-8.6	15.0
(5)	6550.733	6095.808	0.01	-6.9	15.0
Aroclor-1260	13680.027	12796.788	0.01	-6.4	15.0
(2)	16029.019	15649.492	0.01	-2.4	15.0
(3)	12563.933	11995.519	0.01	-4.5	15.0
(4)	12810.076	12413.258	0.01	-3.1	15.0
(5)	27897.674	27906.103	0.01	0.0	15.0
4cmx	285339.98	289042.02	0.01	1.3	15.0
Decachlorobiphenyl	221786.62	228456.68	0.01	3.0	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1225
 Instrument ID: ECD1A Calibration Date: 01/19/10 Time: 1339
 Lab File ID: 039F3901 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13866.870	13634.481	0.01	-1.7	15.0
(2)	10097.726	11215.417	0.01	11.1	15.0
(3)	11757.020	11690.326	0.01	-0.6	15.0
(4)	6599.010	7053.235	0.01	6.9	15.0
(5)	8673.402	9097.253	0.01	4.9	15.0
Aroclor-1260	16752.150	18041.882	0.01	7.7	15.0
(2)	24742.603	27411.722	0.01	10.8	15.0
(3)	14687.346	16323.350	0.01	11.1	15.0
(4)	15184.529	17080.456	0.01	12.5	15.0
(5)	34350.443	38984.512	0.01	13.5	15.0
4cmx	357482.34	407669.72	0.01	14.0	15.0
Decachlorobiphenyl	302009.99	330020.31	0.01	9.3	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.: 10-1225
 Instrument ID: ECD1A Calibration Date: 01/19/10 Time: 1339
 Lab File ID: 039B3901 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 1031 1113
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12611.539	12802.742	0.01	1.5	15.0
(2)	9327.875	8453.743	0.01	-9.4	15.0
(3)	5411.316	5241.509	0.01	-3.1	15.0
(4)	7051.879	6818.606	0.01	-3.3	15.0
(5)	6550.733	6255.265	0.01	-4.5	15.0
Aroclor-1260	13680.027	13041.325	0.01	-4.7	15.0
(2)	16029.019	15905.076	0.01	-0.8	15.0
(3)	12563.933	12160.573	0.01	-3.2	15.0
(4)	12810.076	12555.537	0.01	-2.0	15.0
(5)	27897.674	27950.015	0.01	0.2	15.0
4cmx	285339.98	297185.44	0.01	4.2	15.0
Decachlorobiphenyl	221786.62	228255.28	0.01	2.9	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 min 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/002f0201.d

Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001

Inj Date : 19-JAN-2010 06:34

Operator : YSl Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-F-8082-121409.m

Meth Date : 25-Jan-2010 08:31 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d

Als bottle: 2 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclpl

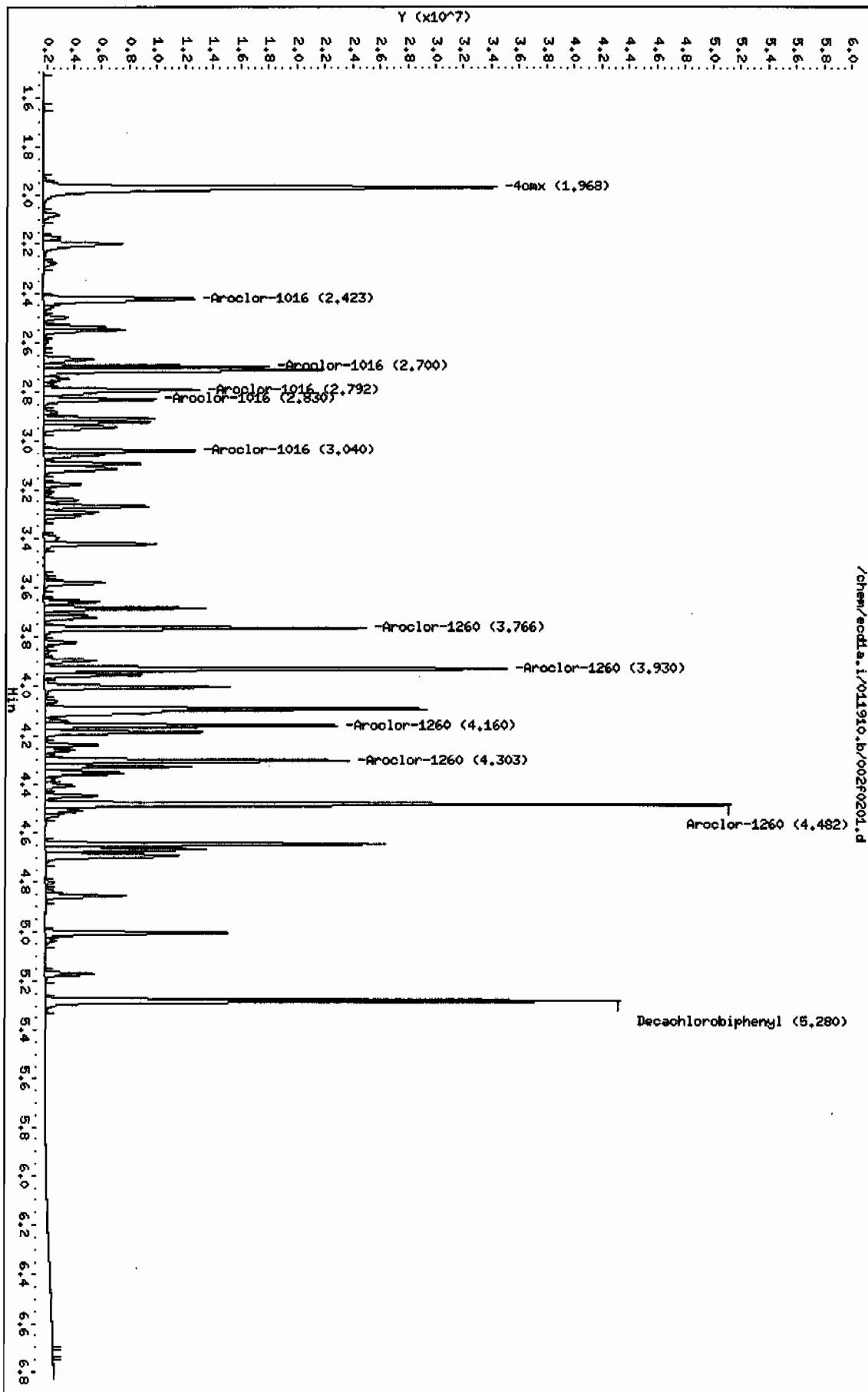
AMOUNTS

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx			CAS #: 877-09-8				
1.968	1.968	0.000	37921197	100.000	106	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3				
5.280	5.280	0.000	31687067	100.000	105	80.00- 120.00	100.00
1 Aroclor-1016			CAS #: 12674-11-2				
2.423	2.423	0.000	12658972	1000.00	913	80.00- 120.00	100.00
2.700	2.700	0.000	10145813	1000.00	1000	60.15- 100.15	80.15
2.792	2.792	0.000	10852998	1000.00	923	65.73- 105.73	85.73
2.830	2.830	0.000	6535402	1000.00	990	31.63- 71.63	51.63
3.040	3.040	0.000	8372372	1000.00	965	46.14- 86.14	66.14
Average of Peak Amounts =			959				
7 Aroclor-1260			CAS #: 11096-82-5				
3.766	3.766	0.000	16879592	1000.00	1010	80.00- 120.00	100.00
3.930	3.930	0.000	25733689	1000.00	1040	132.45- 172.45	152.45
4.160	4.160	0.000	15296444	1000.00	1040	70.62- 110.62	90.62
4.303	4.303	0.000	15991991	1000.00	1050	74.74- 114.74	94.74
4.482	4.482	0.000	36727586	1000.00	1070	197.59- 237.59	217.59
Average of Peak Amounts =			1.04e+03				

Data File: /chem/ecd1a.i/011910.b/002f0201.d
Date: 19-JAN-2010 06:34
Client ID: AR166001
Sample Info: 1HAR100104-60 01

Column phase: CLP1

Instrument: ecd1a.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/011910.b/002b0201.d
 Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001
 Inj Date : 19-JAN-2010 06:34
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100104-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
 Meth Date : 25-Jan-2010 08:31 yip00818 Quant Type: ESTD
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
2.299	2.299	0.000	28247180	100.000	99.0	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.944	5.944	0.000	22676224	100.000	102	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
3.195	3.195	0.000	11827325	1000.00	938	80.00- 120.00	100.00 (M)	
3.278	3.278	0.000	8007184	1000.00	858	47.70- 87.70	67.70	
3.342	3.342	0.000	4979509	1000.00	920	22.10- 62.10	42.10	
3.569	3.569	0.000	6546190	1000.00	928	35.35- 75.35	55.35	
3.644	3.644	0.000	6145647	1000.00	938	31.96- 71.96	51.96	
Average of Peak Amounts =					917			

7 Aroclor-1260					CAS #: 11096-82-5			
4.335	4.335	0.000	12477943	1000.00	912	80.00- 120.00	100.00	
4.459	4.459	0.000	15281159	1000.00	953	102.47- 142.47	122.47	
4.725	4.725	0.000	11624870	1000.00	925	73.16- 113.16	93.16	
4.899	4.899	0.000	12102128	1000.00	945	76.99- 116.99	96.99	
5.045	5.045	0.000	27286403	1000.00	978	198.68- 238.68	218.68	
Average of Peak Amounts =					943			

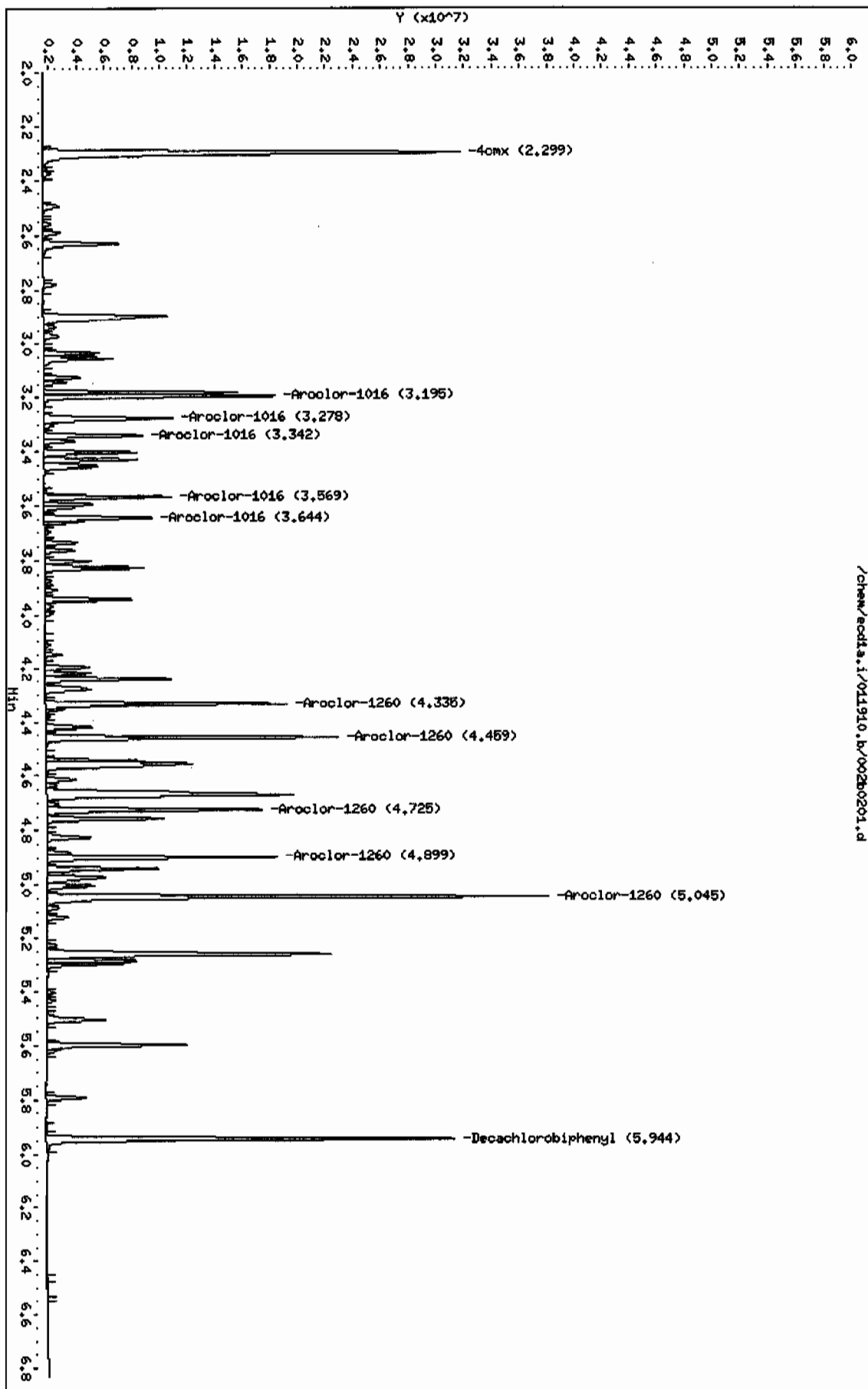
QC Flag Legend

M - Compound response manually integrated.

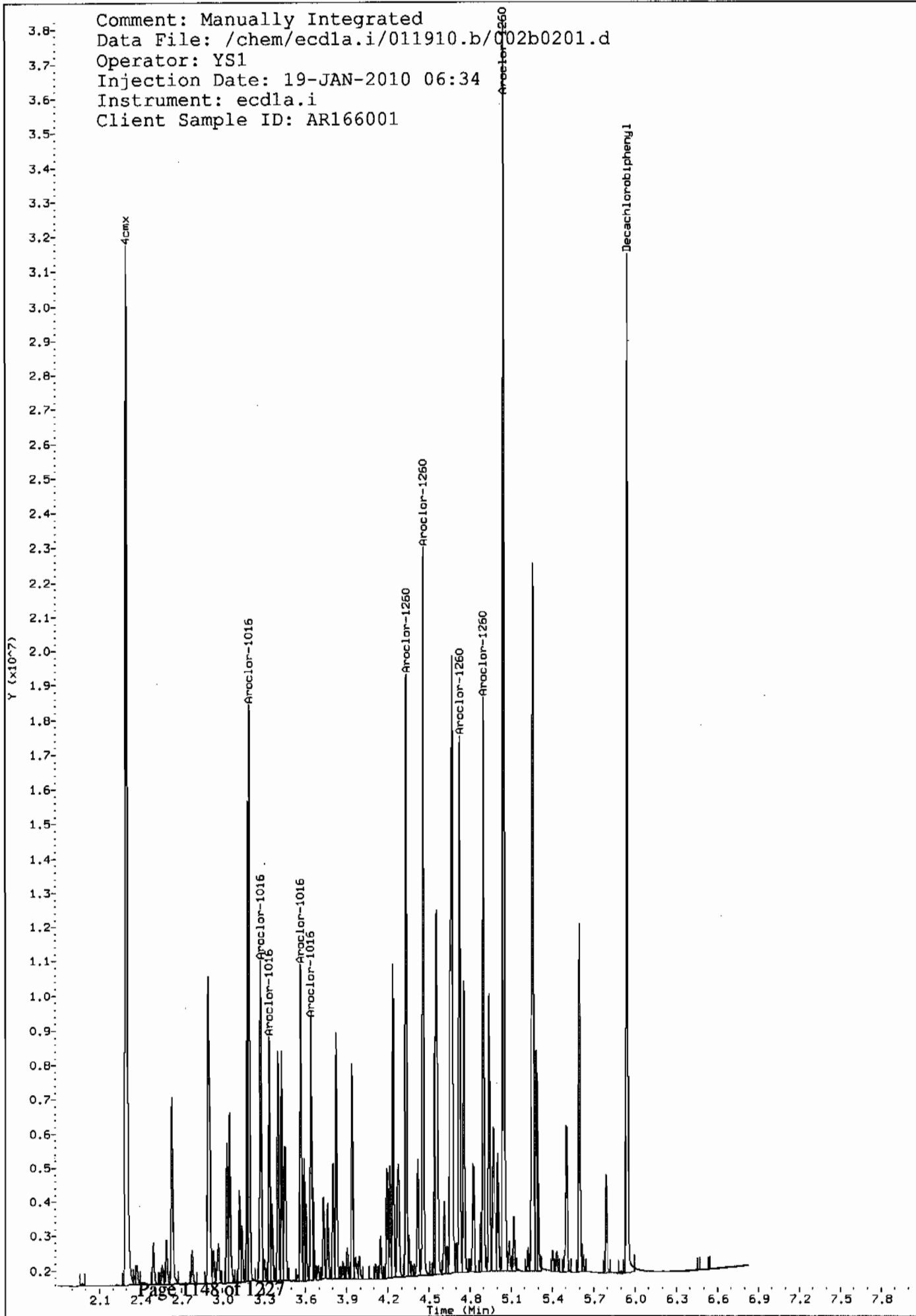
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Date: 19-JAN-2010 06:34
Client ID: AR166001
Sample Info: 1MR100104-60 01

Column phase: CLP2

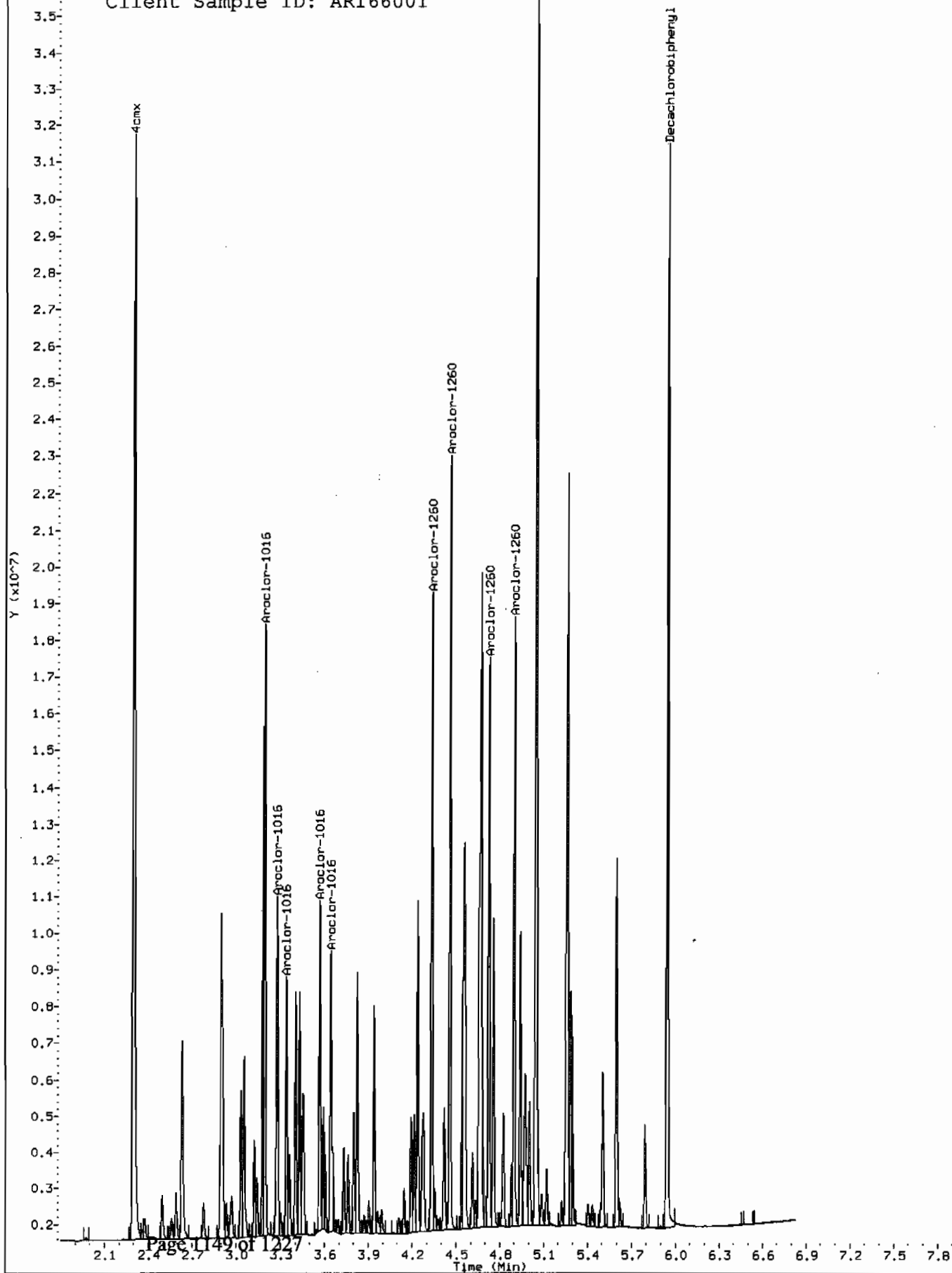
Instrument: ecdta.i
Operator: YSL
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1.i/011910.b/002b0201.d
Operator: YS1
Injection Date: 19-JAN-2010 06:34
Instrument: ecd1a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdl1.i/011910.b/orig-002b0201.d
Operator: YS1
Injection Date: 19-JAN-2010 06:34
Instrument: ecd1a.i
Client Sample ID: AR166001



Data File: /chem/ecd1a.i/011910.b/003f0301.d
Report Date: 25-Jan-2010 08:31

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/011910.b/003f0301.d

Lab Smp Id: WAR091216-54 Client Smp ID: AR125401

Inj Date : 19-JAN-2010 06:45

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecd1a.i/011910.b/ECD1-F-8082-121409.m

Meth Date : 25-Jan-2010 08:31 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d

Als bottle: 3 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254 CAS #: 11097-69-1						
3.270	3.270	0.000	12641022 1000.00	1010 80.00- 120.00	100.00	
3.425	3.425	0.000	17478674 1000.00	1040 118.27- 158.27	138.27	
3.659	3.659	0.000	22815319 1000.00	1100 160.49- 200.49	180.49	
3.821	3.821	0.000	17456151 1000.00	1110 118.09- 158.09	138.09	
3.931	3.931	0.000	16625903 1000.00	1100 111.52- 151.52	131.52	
Average of Peak Amounts =			1.07e+03			

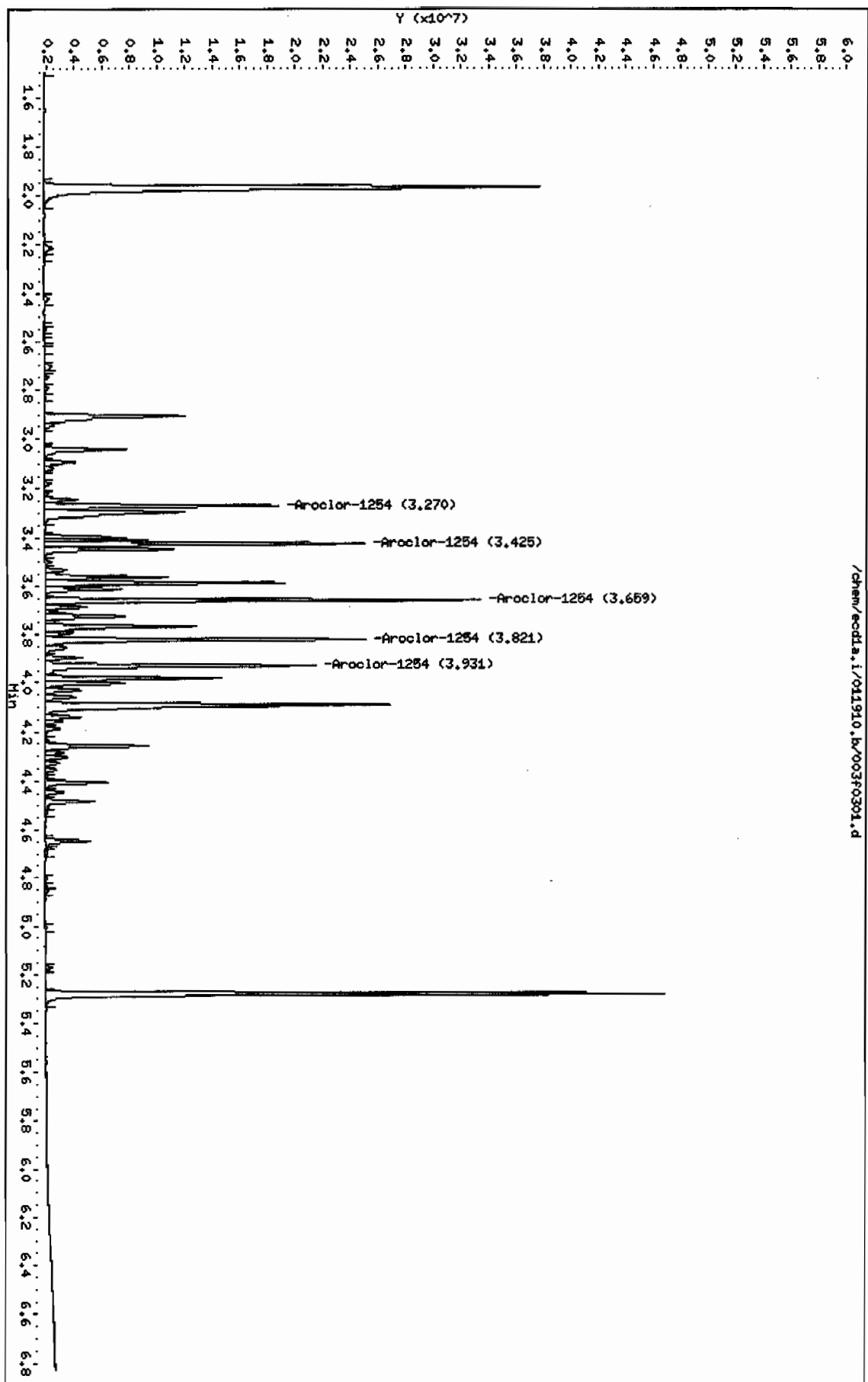
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Date: 19-JAN-2010 06:45
Client ID: AR128401
Sample Info: 1148091216-54

Instrument: eodla.i

Page 1

Column phase: CLP1

Operator: YS1
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011910.b/003b0301.d
Report Date: 25-Jan-2010 08:31

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/003b0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 19-JAN-2010 06:45

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m

Meth Date : 25-Jan-2010 08:31 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

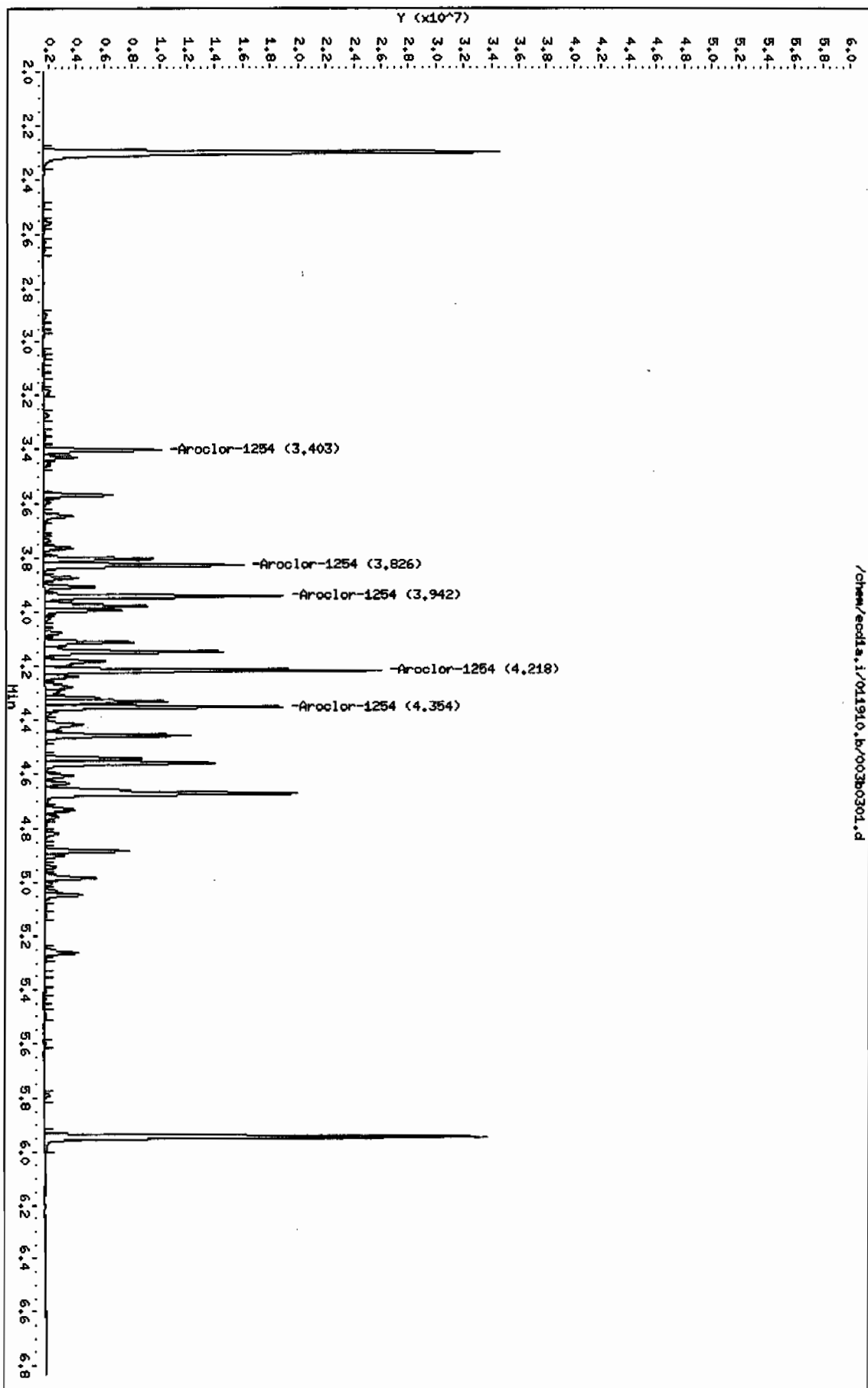
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.403	3.403	0.000	6002289 1000.00	933 80.00-	120.00	100.00
3.826	3.826	0.000	10904948 1000.00	943 161.68-	201.68	181.68
3.942	3.942	0.000	12054206 1000.00	970 180.83-	220.83	200.83
4.218	4.218	0.000	16911788 1000.00	1000 261.76-	301.76	281.76
4.354	4.354	0.000	12410175 1000.00	998 186.76-	226.76	206.76
Average of Peak Amounts =				969		

Data File: /chem/ecdda.i/011910.b/003b0301.d
Date: 19-MAY-2010 06:45
Client ID: AR125401
Sample Info: 1MAR091216-54

Column phase: CLP2

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/011910.b/004f0401.d
Report Date: 25-Jan-2010 08:31

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/004f0401.d
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201
Inj Date : 19-JAN-2010 06:55
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091217-42
Misc Info :
Comment :
Method : /chem/ecdl1a.i/011910.b/ECD1-F-8082-121409.m
Meth Date : 25-Jan-2010 08:31 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9	
2.424	2.424	0.000	11172534 1000.00	958	80.00- 120.00	100.00
2.712	2.712	0.000	14603479 1000.00	1080	110.71- 150.71	130.71
2.830	2.830	0.000	5617971 1000.00	1020	30.28- 70.28	50.28
3.041	3.041	0.000	7316561 1000.00	1010	45.49- 85.49	65.49
3.295	3.295	0.000	7410110 1000.00	1090	46.32- 86.32	66.32

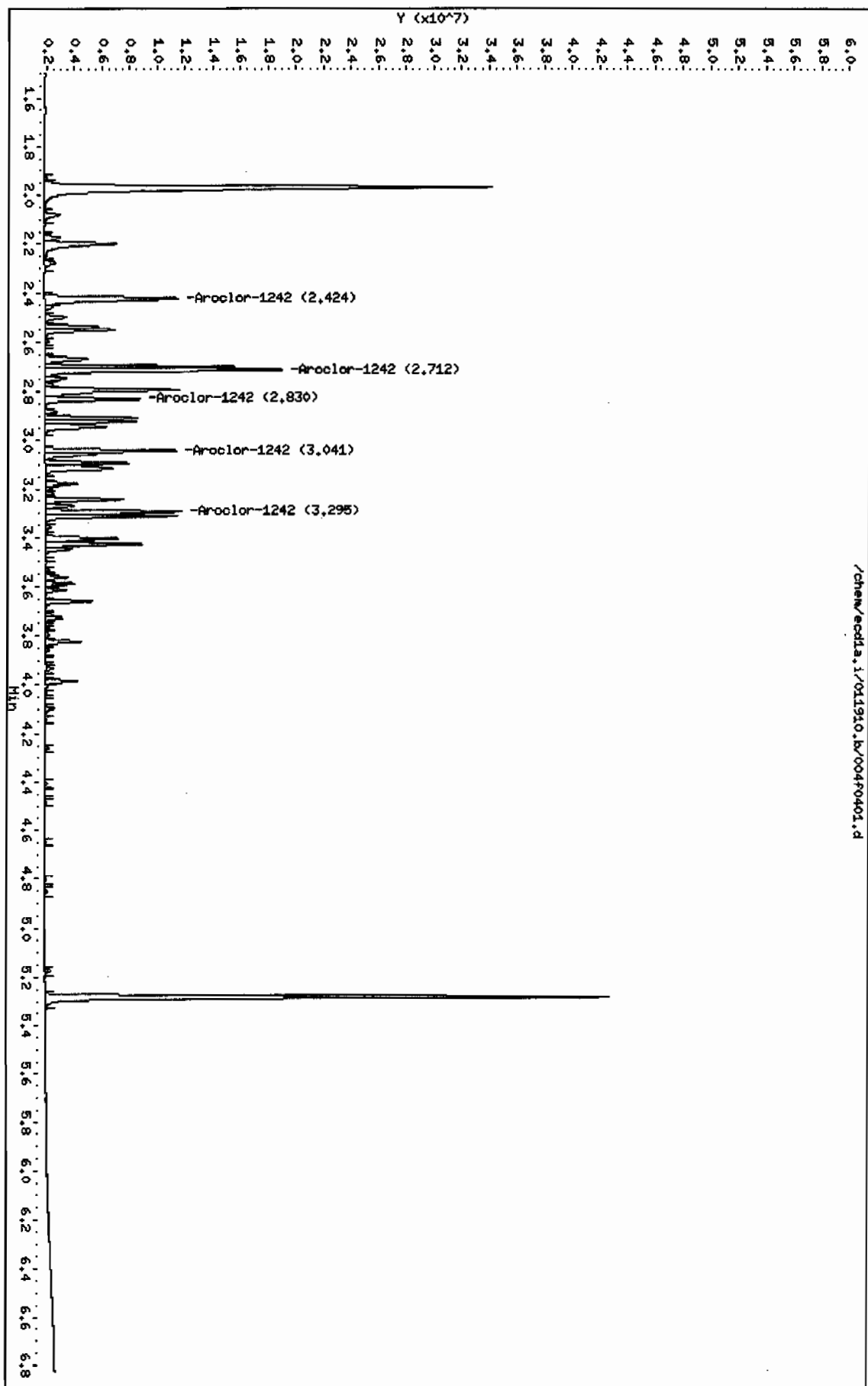
Average of Peak Amounts = 1.03e+03

Data File: /chem/ecdl.a.i/011910.b/004f0401.d
Date: 19-Jun-2010 06:55
Client ID: AR124201
Sample Info: 1MAR091217-42

Column phase: CLP1

Instrument: ecdl.a.i
Operator: YS1
Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/011910.b/004b0401.d
Report Date: 25-Jan-2010 08:31

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/004b0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 19-JAN-2010 06:55

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m

Meth Date : 25-Jan-2010 08:31 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

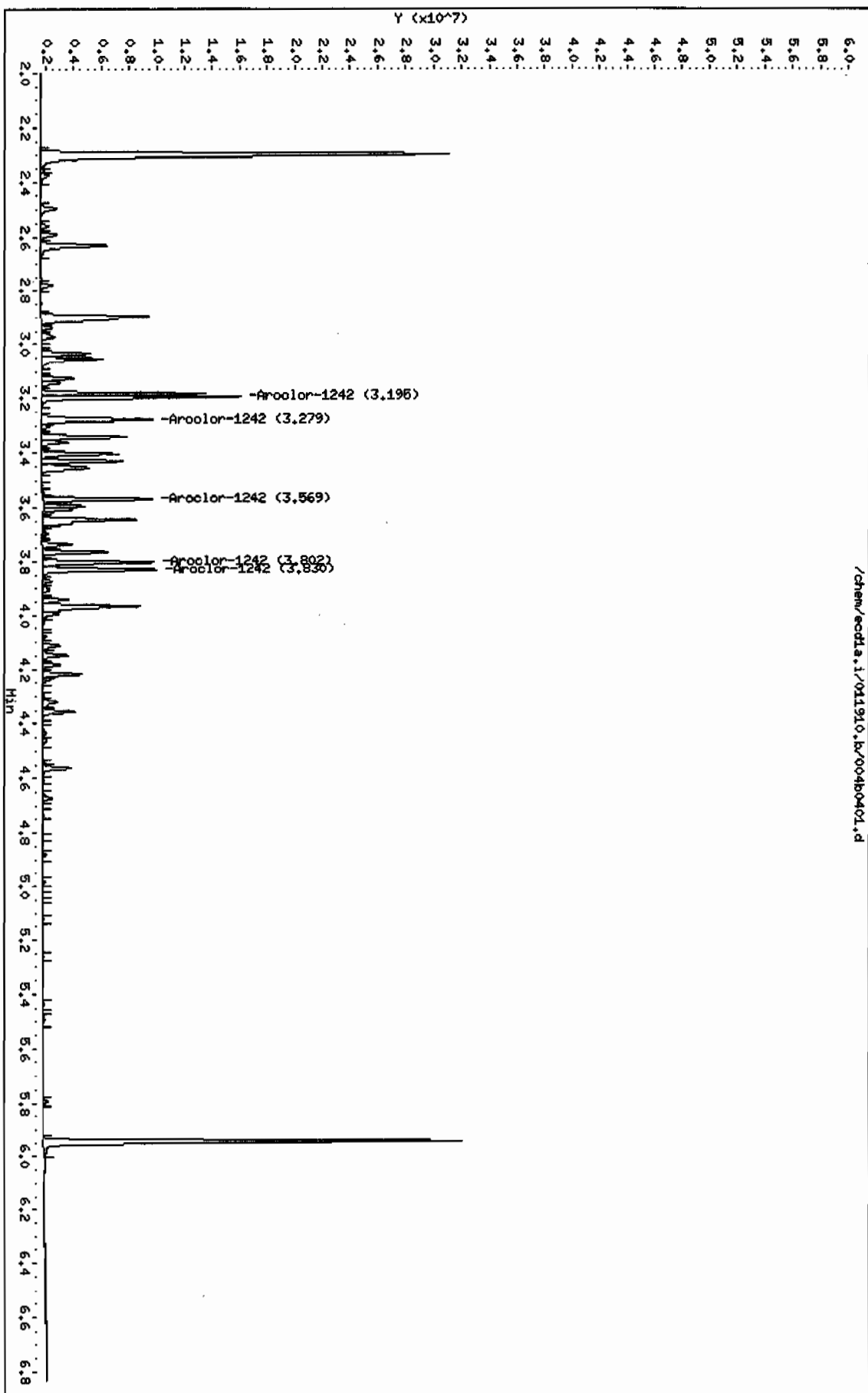
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.195	3.195	0.000	10408806 1000.00	983	80.00- 120.00	100.00
3.279	3.279	0.000	6962758 1000.00	864	46.89- 86.89	66.89
3.569	3.569	0.000	5495748 1000.00	922	32.80- 72.80	52.80
3.802	3.802	0.000	5755823 1000.00	950	35.30- 75.30	55.30
3.830	3.830	0.000	6388191 1000.00	953	41.37- 81.37	61.37
Average of Peak Amounts =				935		

Data File: /chem/ecdtla.i/011910.b/004b0401.d
Date: 19-JAN-2010 06:55
Client ID: AR124201
Sample Info: 1MR091217-42

Column phase: CLP2

Instrument: ecdtla.i
Operator: Y31
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011910.b/005f0501.d
Report Date: 25-Jan-2010 08:31

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 19-JAN-2010 07:06

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-F-8082-121409.m

Meth Date : 25-Jan-2010 08:31 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d

Als bottle: 5 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6	
3.093	3.093	0.000	8135403 1000.00	1040	80.00- 120.00	100.00
3.244	3.244	0.000	7130909 1000.00	1040	67.65- 107.65	87.65
3.295	3.295	0.000	14002766 1000.00	1050	152.12- 192.12	172.12
3.427	3.427	0.000	11154248 1000.00	1010	117.11- 157.11	137.11
3.659	3.659	0.000	7111483 1000.00	954	67.41- 107.41	87.41

Average of Peak Amounts = 1.02e+03

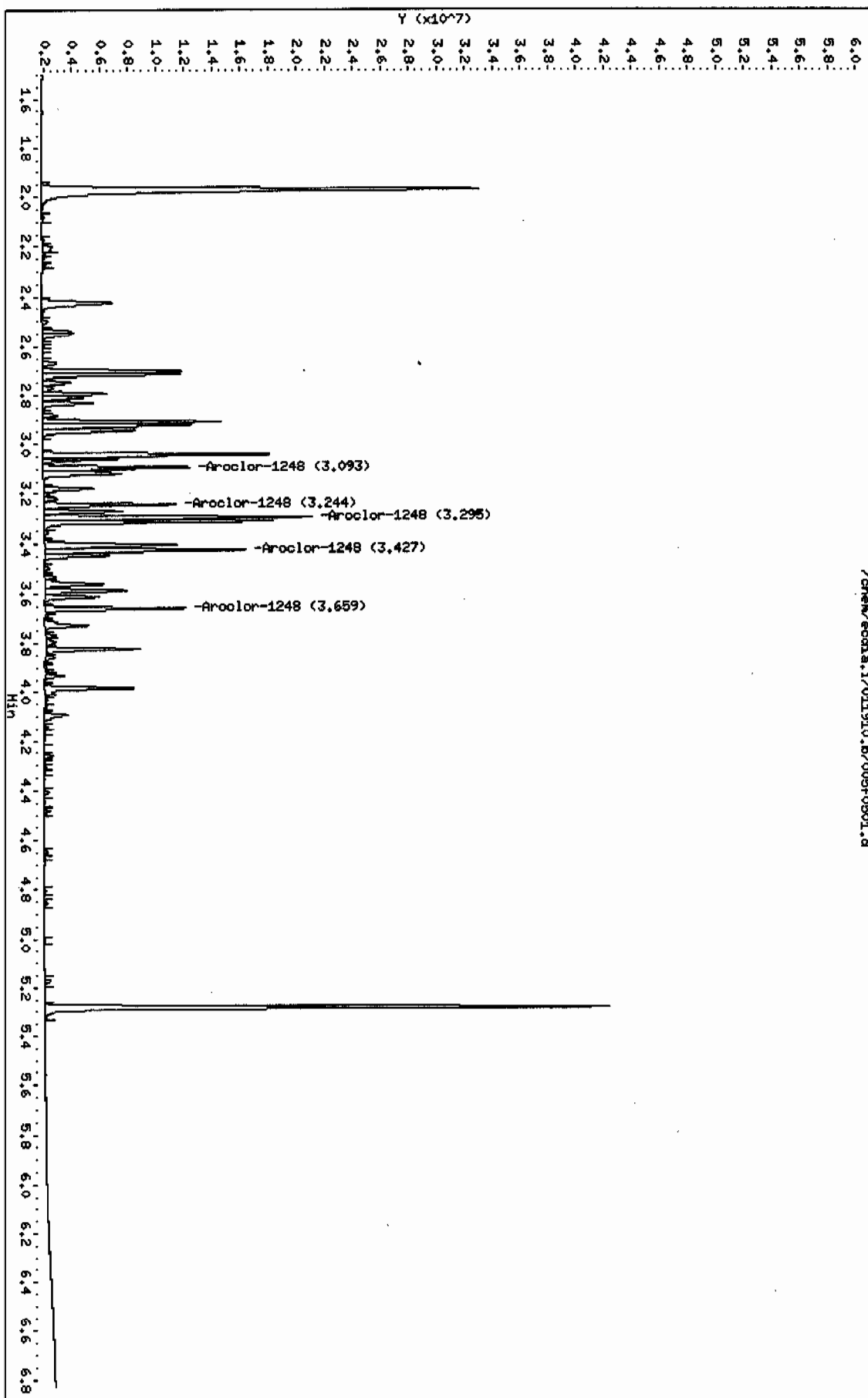
Data File: /chem/eodla.i/011910.b/005f0501.d
Date : 19-JAN-2010 07:06
Client ID: AR124801
Sample Info: 14AR091217-48

Page 1

Column phase: CLP1

Operator: YSL
Column diameter: 0.25

/chem/eodla.i/011910.b/005f0501.d



Data File: /chem/ecdl1a.i/011910.b/005b0501.d
Report Date: 25-Jan-2010 08:32

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/005b0501.d
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801
Inj Date : 19-JAN-2010 07:06
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091217-48
Misc Info :
Comment :
Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
Meth Date : 25-Jan-2010 08:31 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6	
3.403	3.403	0.000	7437653 1000.00	923	80.00- 120.00	100.00
3.569	3.569	0.000	9319277 1000.00	944	105.30- 145.30	125.30
3.803	3.803	0.000	10741820 1000.00	957	124.42- 164.42	144.42
3.830	3.830	0.000	11922245 1000.00	955	140.30- 180.30	160.30
3.967	3.967	0.000	11475411 1000.00	948	134.29- 174.29	154.29
Average of Peak Amounts =				946		

Data File: /chem/eodla.i/011910.b/005b0501.d

Date : 19-JAN-2010 07:06

Client ID: AR124801

Sample Info: 114R091217-48

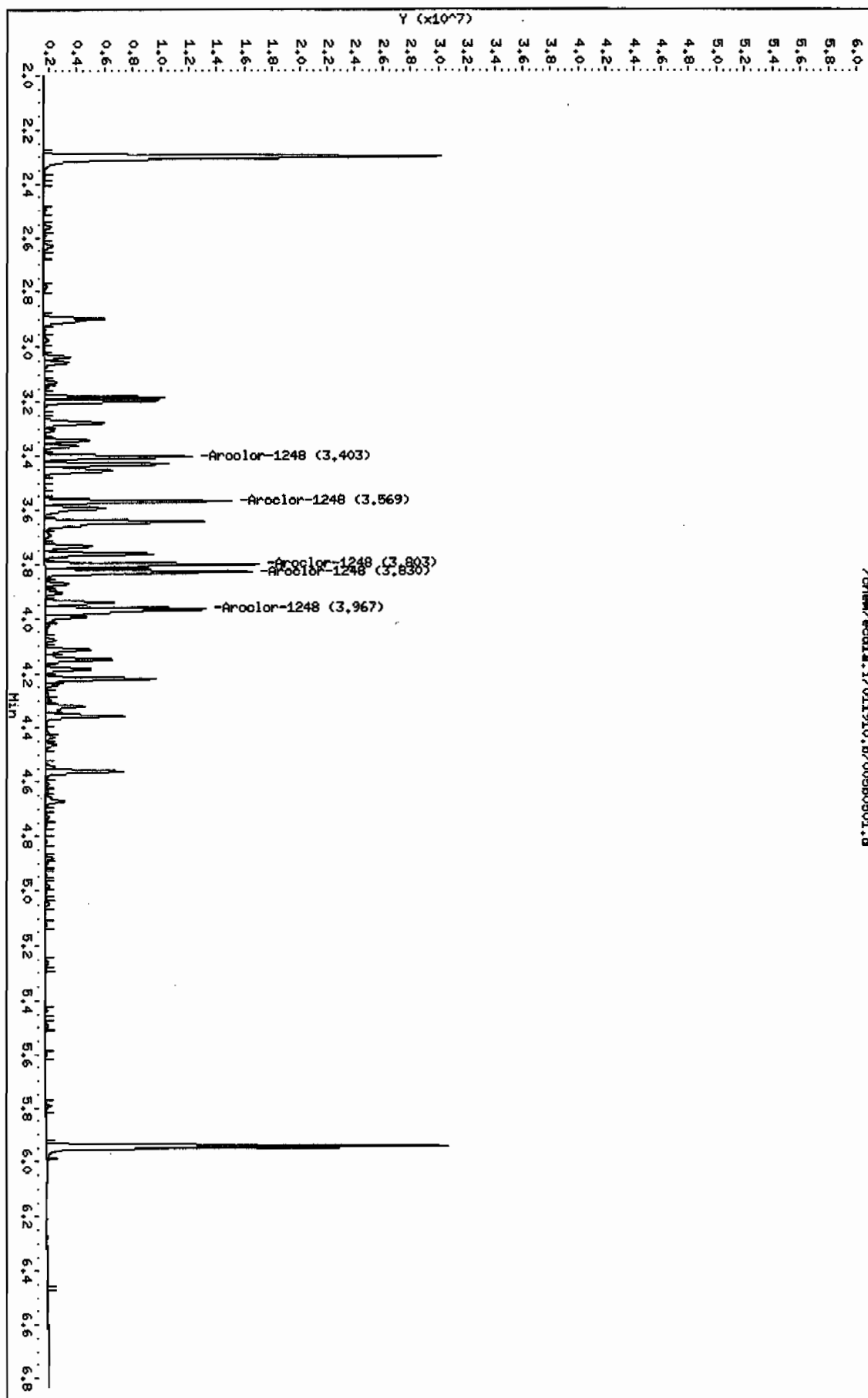
Column phase: CLP2

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/011910.b/005b0501.d



Data File: /chem/ecdl1a.i/011910.b/006f0601.d
Report Date: 25-Jan-2010 08:32

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 19-JAN-2010 07:16

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-F-8082-121409.m

Meth Date : 25-Jan-2010 08:32 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.423	2.423	0.000	6564330 1000.00	977 80.00- 120.00	100.00	
2.712	2.712	0.000	8345220 1000.00	1020 107.13- 147.13	127.13	
2.793	2.793	0.000	5640370 1000.00	981 65.92- 105.92	85.92	
3.041	3.041	0.000	4137456 1000.00	1050 43.03- 83.03	63.03	
3.295	3.295	0.000	4111471 1000.00	1160 42.63- 82.63	62.63	

Average of Peak Amounts = 1.04e+03

Data File: /chem/eodla.i/011910.b/006f0601.d

Date: 19-JAN-2010 07:16

Client ID: AR123201

Sample Info: IWR100104-32

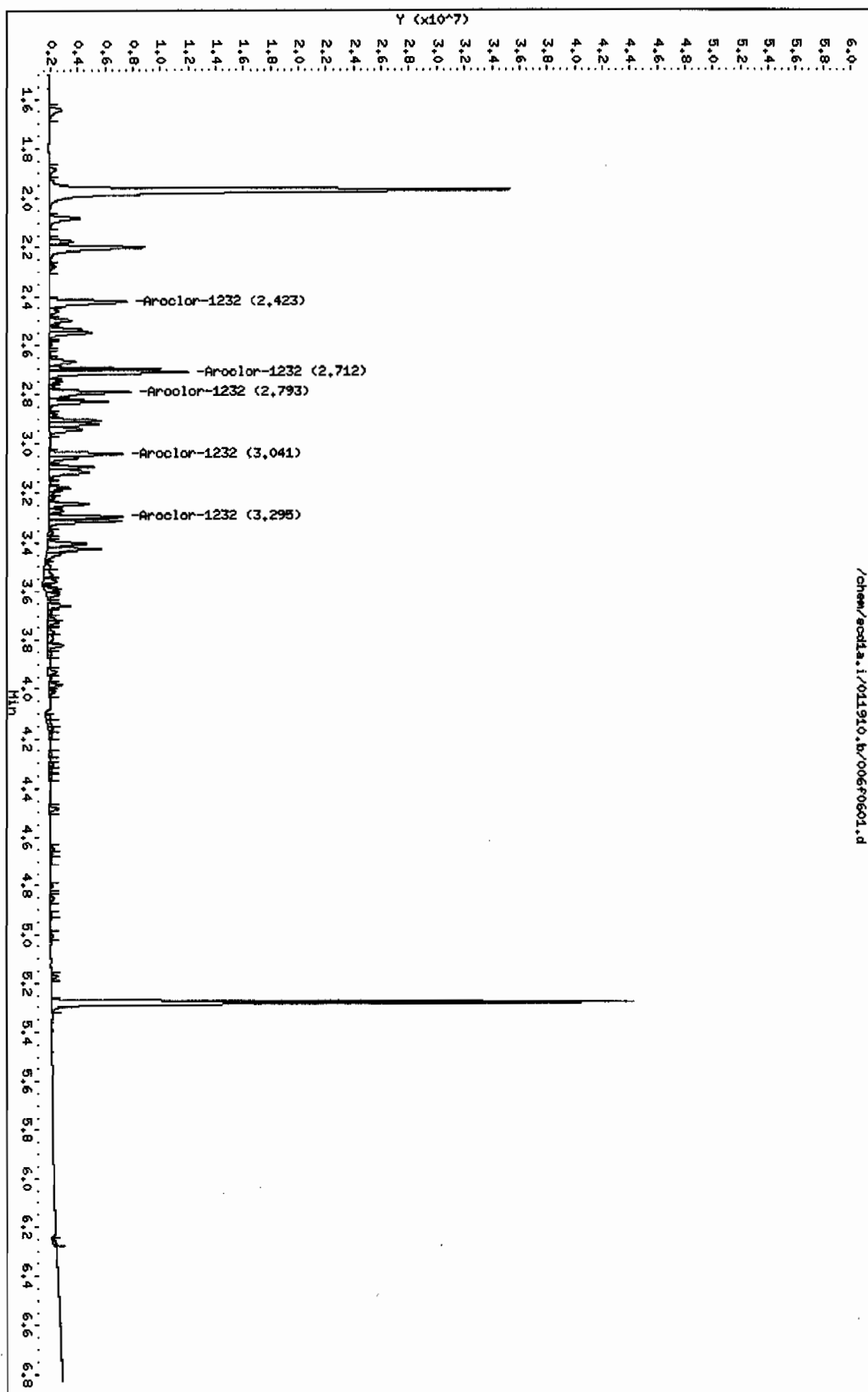
Column phase: CLP1

Instrument: eodla.i

Operator: YSI

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011910.b/006b0601.d
Report Date: 25-Jan-2010 08:32

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 19-JAN-2010 07:16

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m

Meth Date : 25-Jan-2010 08:32 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.631	2.631	0.000	5629564 1000.00	914 80.00- 120.00	100.00	
3.196	3.196	0.000	6349172 1000.00	1010 92.78- 132.78	112.78	
3.278	3.278	0.000	4306817 1000.00	916 56.50- 96.50	76.50	
3.569	3.569	0.000	3297870 1000.00	1020 38.58- 78.58	58.58	
3.803	3.803	0.000	3683224 1000.00	1170 45.43- 85.43	65.43	

Average of Peak Amounts = 1e+03

Data File: /chem/eod1a.i/011910.b/006b0601.d

Date: 19-JAN-2010 07:16

Client ID: PR123201

Sample Info: 11MR100104-32

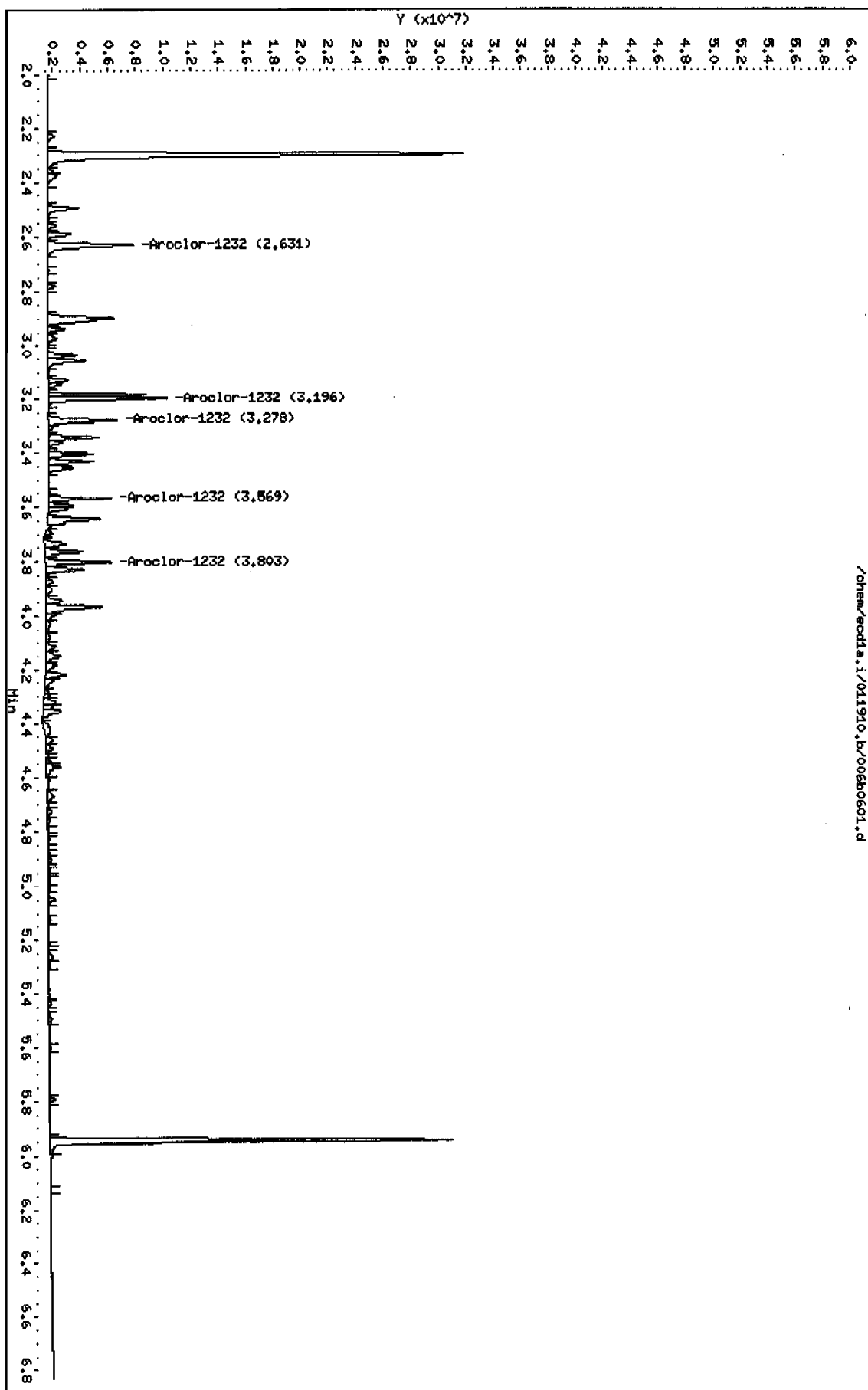
Column phase: CLP2

Instrument: eod1a.i

Operator: YSA

Column diameter: 0.25

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Data File: /chem/ecdla.i/011910.b/007f0701.d
Report Date: 25-Jan-2010 08:32

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/011910.b/007f0701.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 19-JAN-2010 07:27
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdla.i/011910.b/ECD1-F-8082-121409.m
Meth Date : 25-Jan-2010 08:32 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

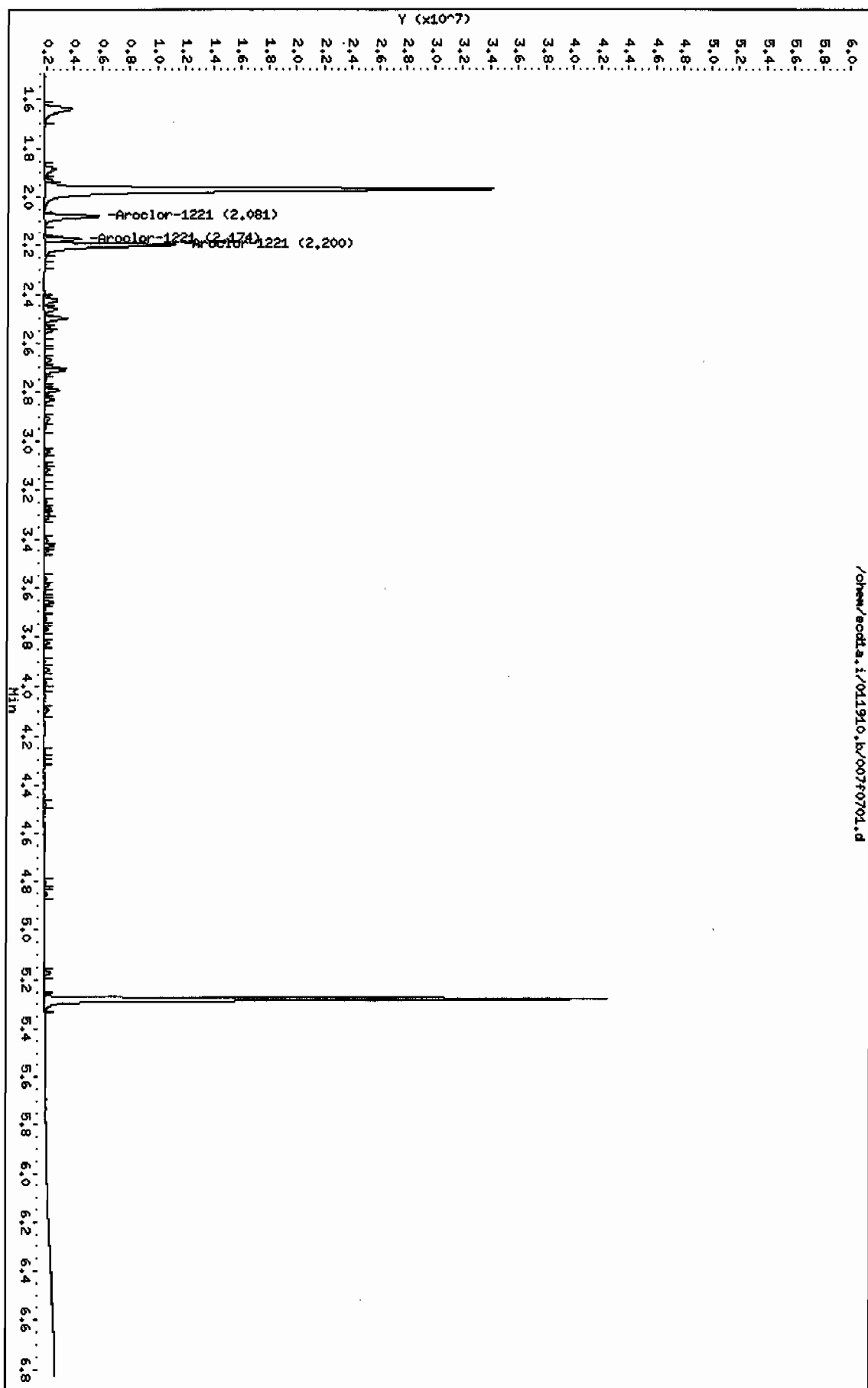
AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.081	2.081	0.000	4267022 1000.00	992 80.00- 120.00	100.00	
2.174	2.174	0.000	2399268 1000.00	983 36.23- 76.23	56.23	
2.200	2.200	0.000	10240278 1000.00	997 219.99- 259.99	239.99	
Average of Peak Amounts =				991		

Data File: /chem/eodda.i/011910.b/0070701.d
Date: 19-JUN-2010 07:27
Client ID: AR122101
Sample Info: 1MAR100104-21

Page 1

Column phase: CLP1
Operator: YSL
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011910.b/007b0701.d
Report Date: 25-Jan-2010 08:32

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/007b0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 19-JAN-2010 07:27

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m

Meth Date : 25-Jan-2010 08:32 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.495	2.495	0.000	3401499 1000.00	934	80.00- 120.00	100.00
2.590	2.590	0.000	2201093 1000.00	945	44.71- 84.71	64.71
2.631	2.631	0.000	7590321 1000.00	935	203.15- 243.15	223.15
Average of Peak Amounts =				938		

Data File: /chem/ecdl1a.i/011910.b/007b0701.d

Date: 19-JAN-2010 07:27

Client ID: PR122101

Sample Info: 1MR100104-21

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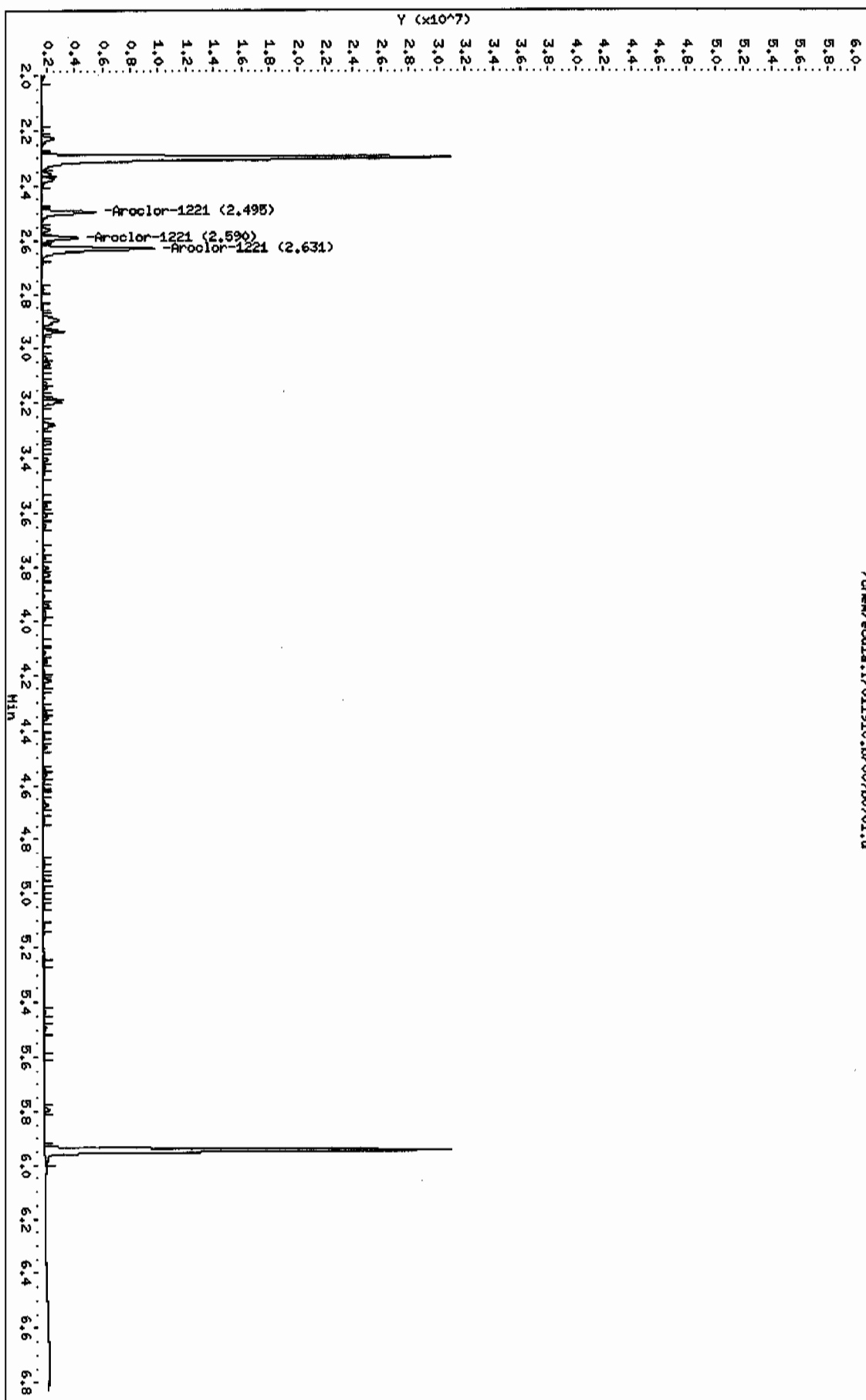
Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

Column phase: CLP2

/chem/ecdl1a.i/011910.b/007b0701.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/011910.b/027f2701.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 19-JAN-2010 11:16

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdl1.i/011910.b/ECD1-F-8082-121409.m

Meth Date : 25-Jan-2010 08:35 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 11:34

Cal File: 040f4001.d

Als bottle: 27

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			
1.967	1.968	-0.001	39990770	100.000	112	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.278	5.280	-0.002	33090762	100.000	110	80.00-	120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2			
2.422	2.423	-0.001	13320162	1000.00	960	80.00-	120.00	100.00
2.699	2.700	-0.001	10458388	1000.00	1040	58.52-	98.52	78.52
2.791	2.792	-0.001	11462112	1000.00	975	66.05-	106.05	86.05
2.829	2.830	-0.001	6909551	1000.00	1050	31.87-	71.87	51.87
3.039	3.040	-0.001	8775256	1000.00	1010	45.88-	85.88	65.88
Average of Peak Amounts =					1.01e+03			

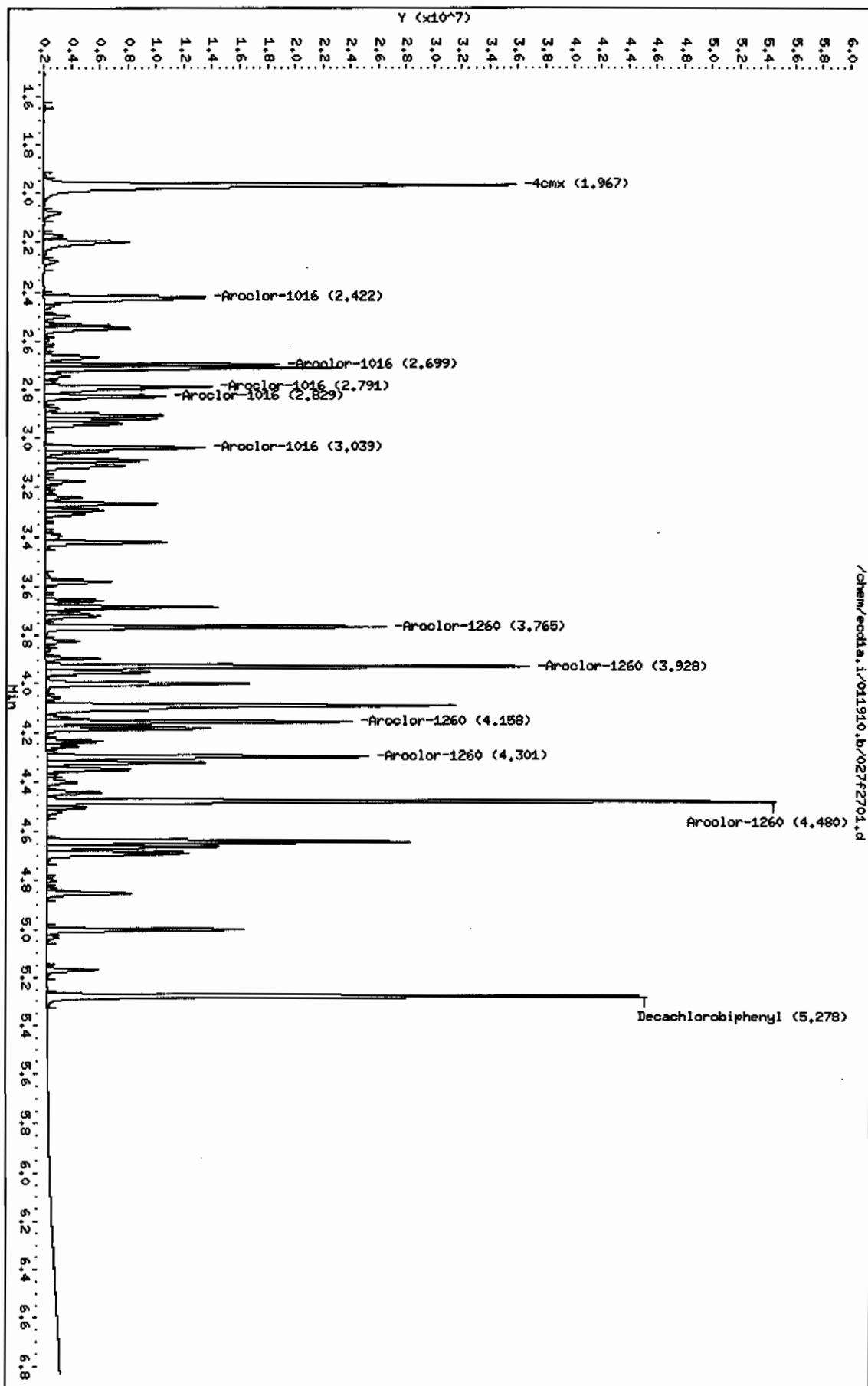
7 Aroclor-1260					CAS #: 11096-82-5			
3.765	3.766	-0.001	17785722	1000.00	1060	80.00-	120.00	100.00
3.928	3.930	-0.002	27132329	1000.00	1100	132.55-	172.55	152.55
4.158	4.160	-0.002	16221524	1000.00	1100	71.21-	111.21	91.21
4.301	4.303	-0.002	16984826	1000.00	1120	75.50-	115.50	95.50
4.480	4.482	-0.002	38800997	1000.00	1130	198.16-	238.16	218.16
Average of Peak Amounts =					1.1e+03			

Data File: /chem/eodla.i/011910.b/027f2701.d
Date: 19-JUN-2010 11:16
Client ID: AR16003
Sample Info: IMR100104-60 03

Column phase: CLP1

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/011910.b/027b2701.d
Report Date: 25-Jan-2010 08:35

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/027b2701.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 19-JAN-2010 11:16

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m

Meth Date : 25-Jan-2010 08:35 yip00818

Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16

Cal File: 044b4401.d

Als bottle: 27

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
\$ 11 4cmx				CAS #: 877-09-8		
2.298	2.299	-0.001	28904202 100.000	101	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.942	5.944	-0.002	22845668 100.000	103	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.195	3.195	0.000	12011878 1000.00	952	80.00- 120.00	100.00(M)
3.277	3.278	-0.001	8180602 1000.00	877	48.10- 88.10	68.10
3.341	3.342	-0.001	5084498 1000.00	940	22.33- 62.33	42.33
3.567	3.569	-0.002	6442413 1000.00	914	33.63- 73.63	53.63
3.643	3.644	-0.001	6095808 1000.00	930	30.75- 70.75	50.75
Average of Peak Amounts =				923		

7 Aroclor-1260				CAS #: 11096-82-5		
4.333	4.335	-0.002	12796788 1000.00	935	80.00- 120.00	100.00
4.457	4.459	-0.002	15649492 1000.00	976	102.29- 142.29	122.29
4.723	4.725	-0.002	11995519 1000.00	955	73.74- 113.74	93.74
4.897	4.899	-0.002	12413258 1000.00	969	77.00- 117.00	97.00
5.044	5.045	-0.001	27906103 1000.00	1000	198.07- 238.07	218.07
Average of Peak Amounts =				967		

Data File: /chem/ecdl1a.i/011910.b/027b2701.d
Report Date: 25-Jan-2010 08:35

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QC Flag Legend

M ~ Compound response manually integrated.

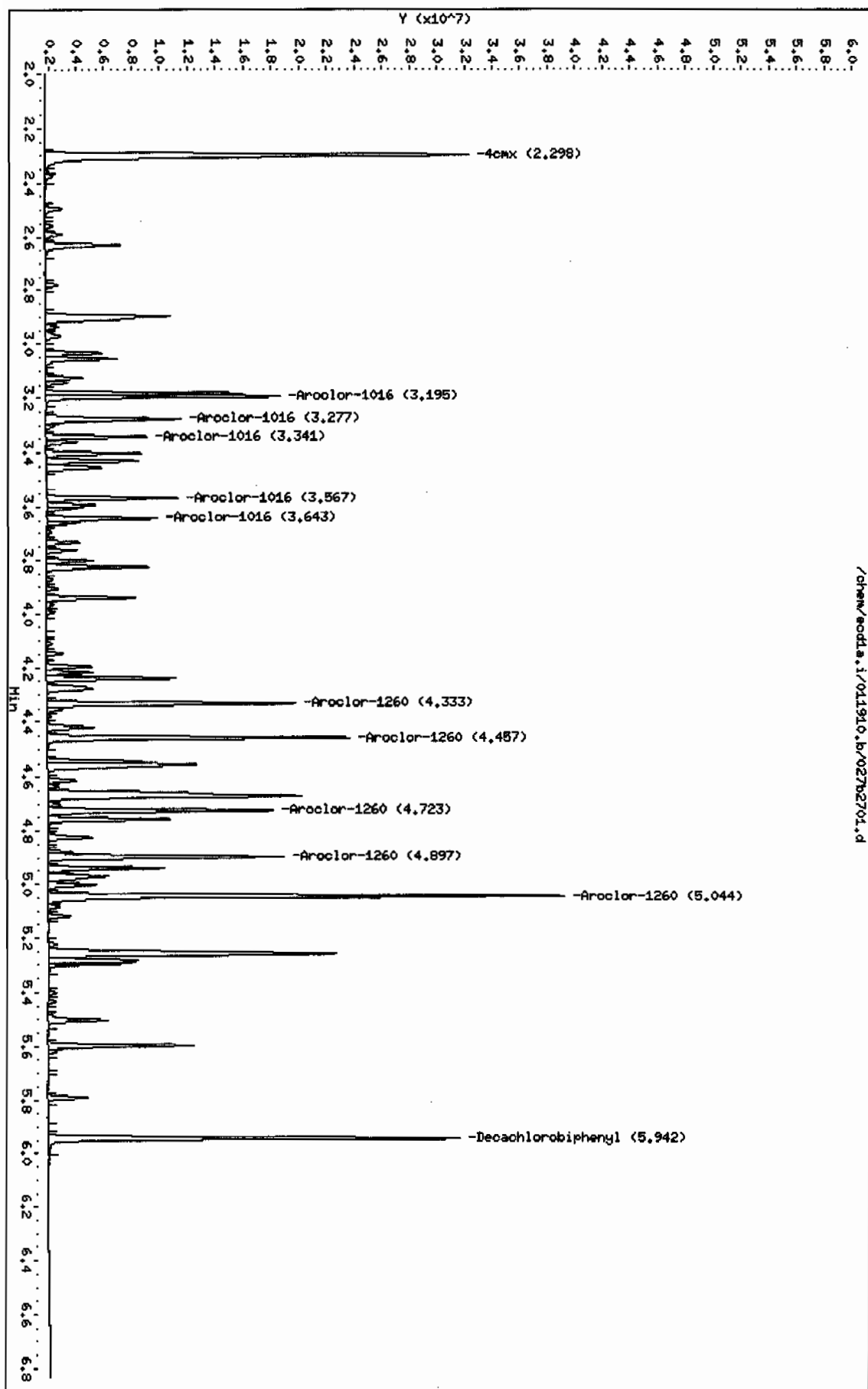
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Date: 19-JAN-2010 11:16
Client ID: AR166003
Sample Info: IHR100104-60 03

Instrument: eodla.i

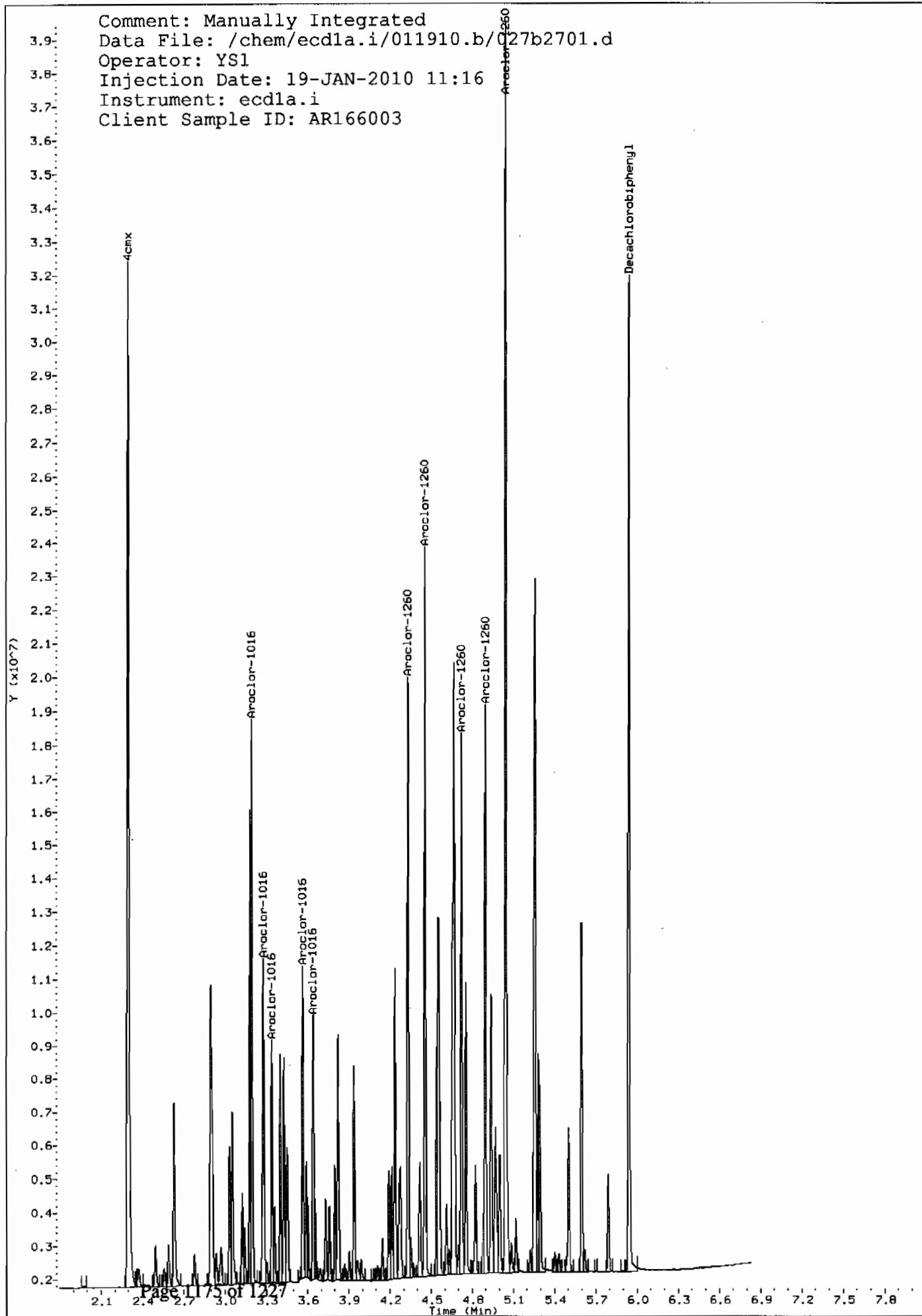
Page 1

Column phase: CLP2

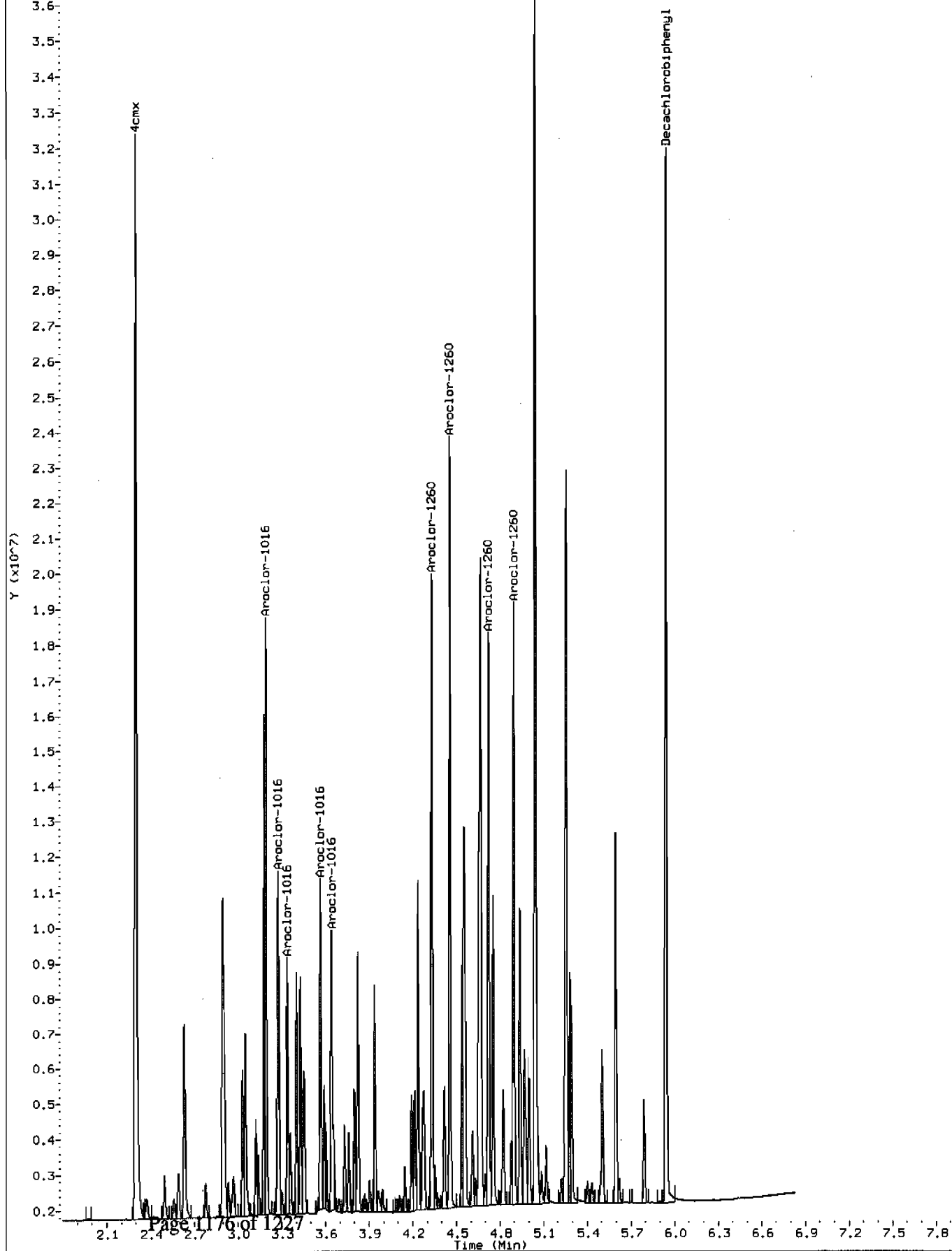
Operator: YS1
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1.i/011910.b/027b2701.d
Operator: YS1
Injection Date: 19-JAN-2010 11:16
Instrument: ecd1a.i
Client Sample ID: AR166003



Comment: Before manual integration
Data File: /chem/ecdl1.i/011910.b/Orig-027b2701.d
Operator: YS1
Injection Date: 19-JAN-2010 11:16
Instrument: ecd1a.i
Client Sample ID: AR166003



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/011910.b/039f3901.d
Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004
Inj Date : 19-JAN-2010 13:39
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-60 04
Misc Info :
Comment :
Method : /chem/ecdl1.i/011910.b/ECD1-F-8082-121409.m
Meth Date : 25-Jan-2010 08:38 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
Als bottle: 39 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpc1p1

AMOUNTS

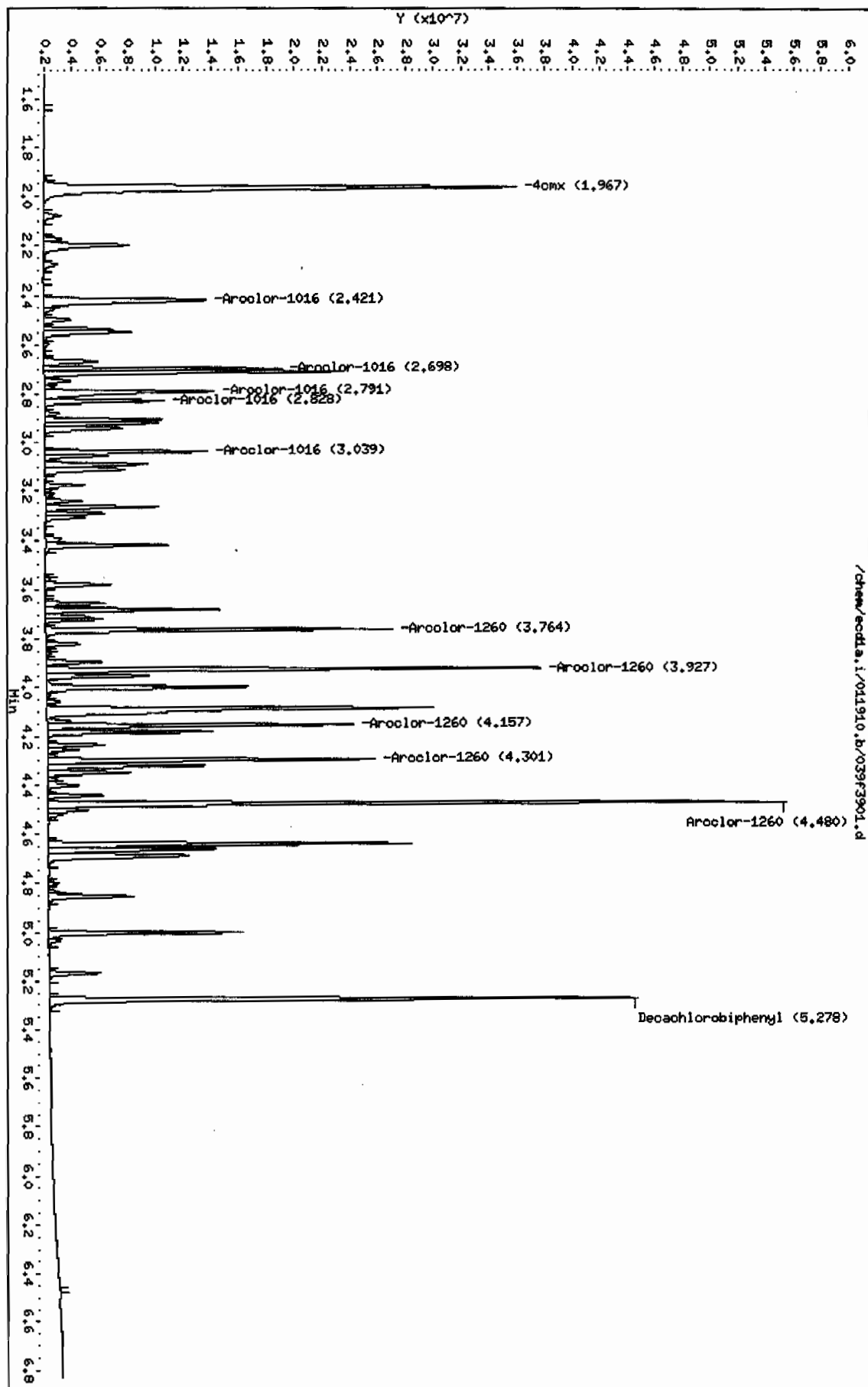
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE		RATIO
<hr/>								
\$ 11 4cmx					CAS #: 877-09-8			
1.967	1.968	-0.001	40766972	100.000	114	80.00-	120.00	100.00
<hr/>								
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.278	5.280	-0.002	33002031	100.000	109	80.00-	120.00	100.00
<hr/>								
1 Aroclor-1016					CAS #: 12674-11-2			
2.421	2.423	-0.002	13634481	1000.00	983	80.00-	120.00	100.00
2.698	2.700	-0.002	11215417	1000.00	1110	62.26-	102.26	82.26
2.791	2.792	-0.001	11690326	1000.00	994	65.74-	105.74	85.74
2.828	2.830	-0.002	7053235	1000.00	1070	31.73-	71.73	51.73
3.039	3.040	-0.001	9097253	1000.00	1050	46.72-	86.72	66.72
Average of Peak Amounts =					1.04e+03			
<hr/>								
7 Aroclor-1260					CAS #: 11096-82-5			
3.764	3.766	-0.002	18041882	1000.00	1080	80.00-	120.00	100.00
3.927	3.930	-0.003	27411722	1000.00	1110	131.93-	171.93	151.93
4.157	4.160	-0.003	16323350	1000.00	1110	70.47-	110.47	90.47
4.301	4.303	-0.002	17080456	1000.00	1120	74.67-	114.67	94.67
4.480	4.482	-0.002	38984512	1000.00	1130	196.08-	236.08	216.08
Average of Peak Amounts =					1.11e+03			

Data File: /chem/ecdda.i/011910.b/039f3901.d
Date: 19-JAN-2010 13:39
Client ID: AR166004
Sample Info: IMR100104-60 04

Column Phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

/chem/ecdda.i/011910.b/039f3901.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/039b3901.d

Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004

Inj Date : 19-JAN-2010 13:39

Operator : YS1 Inst ID: ecd1a.i

Smp Info : |WAR100104-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m

Meth Date : 25-Jan-2010 08:38 yip00818 Quant Type: ESTD

Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d

Als bottle: 39 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1p1

AMOUNTS

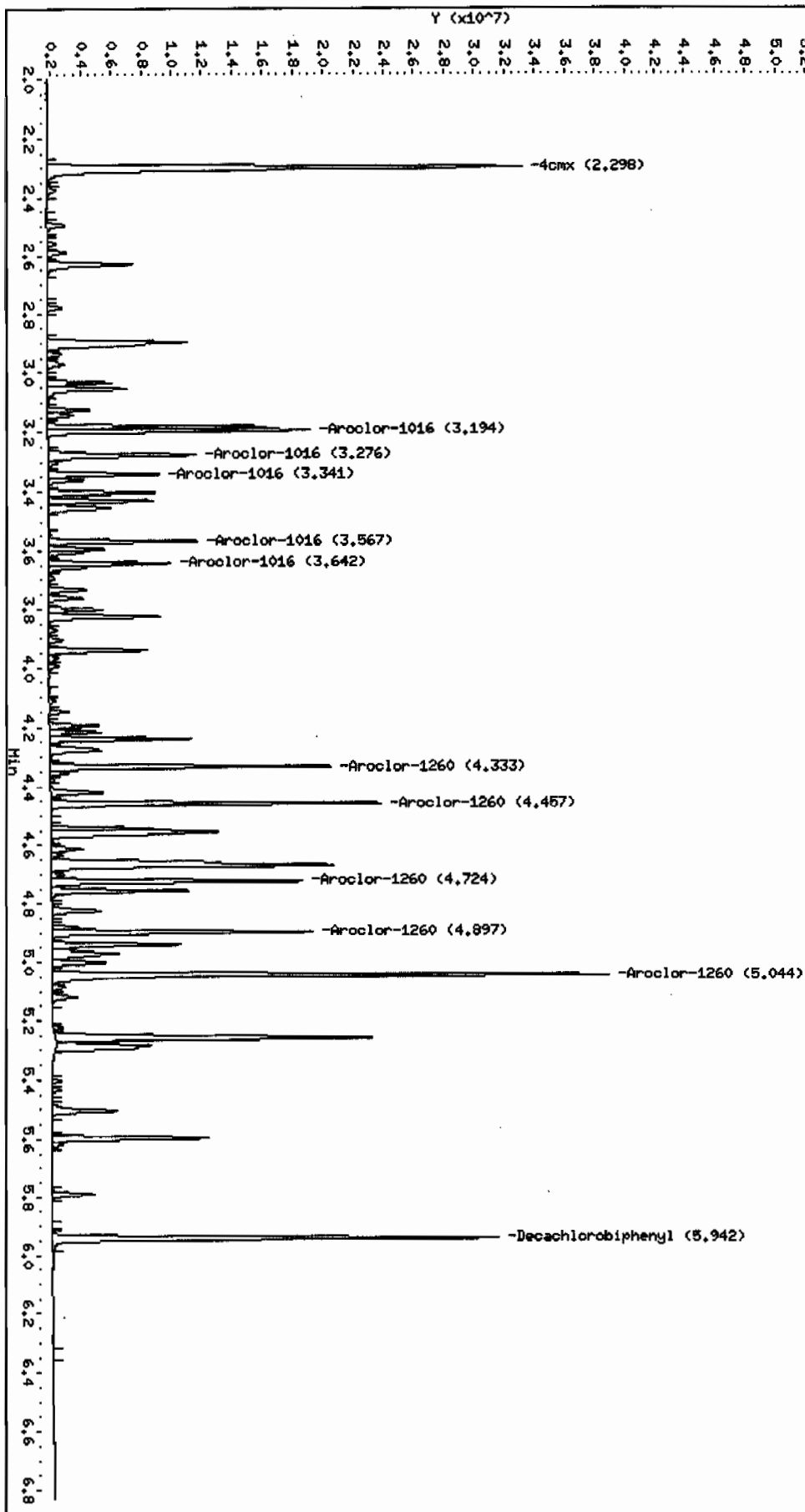
			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO
<hr/>							
\$ 11 4cmx					CAS #: 877-09-8		
2.298	2.299	-0.001	29718544	100.000	104	80.00- 120.00	100.00
<hr/>							
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.942	5.944	-0.002	22825528	100.000	103	80.00- 120.00	100.00
<hr/>							
1 Aroclor-1016					CAS #: 12674-11-2		
3.194	3.195	-0.001	12802742	1000.00	1020	80.00- 120.00	100.00
3.276	3.278	-0.002	8453743	1000.00	906	46.03- 86.03	66.03
3.341	3.342	-0.001	5241509	1000.00	969	20.94- 60.94	40.94
3.567	3.569	-0.002	6818606	1000.00	967	33.26- 73.26	53.26
3.642	3.644	-0.002	6255265	1000.00	955	28.86- 68.86	48.86
Average of Peak Amounts =					962		
<hr/>							
7 Aroclor-1260					CAS #: 11096-82-5		
4.333	4.335	-0.002	13041325	1000.00	953	80.00- 120.00	100.00
4.457	4.459	-0.002	15905076	1000.00	992	101.96- 141.96	121.96
4.724	4.725	-0.001	12160573	1000.00	968	73.25- 113.25	93.25
4.897	4.899	-0.002	12555537	1000.00	980	76.28- 116.28	96.28
5.044	5.045	-0.001	27950015	1000.00	1000	194.32- 234.32	214.32
Average of Peak Amounts =					979		

Data File: /chem/eodla.i/011910.b/039b3901.d
Date: 19-JUN-2010 13:39
Client ID: AR166004
Sample Info: IWER100104-60 04

Column phase: CLP2

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25

/chem/eodla.i/011910.b/039b3901.d



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.: 10-1225

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
						#
01	PIBLK01	WAR091130-99	12/14/09	0444	1.97	5.29
02	ZZZZZ	ZZZZZ	12/14/09	0454	1.97	5.29
03	ZZZZZ	ZZZZZ	12/14/09	0505	1.97	5.29
04	ZZZZZ	ZZZZZ	12/14/09	0515	1.97	5.29
05	ZZZZZ	ZZZZZ	12/14/09	0526	1.97	5.29
06	AR123201	WAR090930-32	12/14/09	0536	1.97	5.29
07	AR122101	WAR090803-21	12/14/09	0547	1.97	5.29
08	AR126201	WAR090803-62	12/14/09	0558	1.97	5.29
09	ZZZZZ	ZZZZZ	12/14/09	0608	1.97	5.29
10	ZZZZZ	ZZZZZ	12/14/09	0619	1.97	5.29
11	ZZZZZ	ZZZZZ	12/14/09	0629	1.97	5.29
12	ZZZZZ	ZZZZZ	12/14/09	0640	1.97	5.29
13	ZZZZZ	ZZZZZ	12/14/09	0650	1.97	5.29
14	ZZZZZ	ZZZZZ	12/14/09	0701	1.97	5.29
15	ZZZZZ	ZZZZZ	12/14/09	0711	1.97	5.29
16	AR125401	WAR091214-05	12/14/09	0722	1.97	5.29
17	AR125402	WAR091214-06	12/14/09	0732	1.97	5.29
18	AR125403	WAR091214-07	12/14/09	0743	1.97	5.29
19	AR125404	WAR091214-08	12/14/09	0753	1.97	5.29
20	AR125405	IAR091027-01	12/14/09	0804	1.97	5.29
21	AR125401	WAR091102-54	12/14/09	0814	1.97	5.29
22	AR124201	WAR091214-09	12/14/09	0825	1.97	5.29
23	AR124202	WAR091214-10	12/14/09	0835	1.97	5.29
24	AR124203	WAR091214-11	12/14/09	0846	1.97	5.29
25	AR124204	WAR091214-12	12/14/09	0856	1.97	5.29
26	AR124205	IAR0911111-0	12/14/09	0907	1.97	5.29
27	AR124201	WAR091102-42	12/14/09	0917	1.97	5.29
28	AR124801	WAR091214-13	12/14/09	0928	1.97	5.29
29	AR124802	WAR091214-14	12/14/09	0938	1.97	5.29
30	AR124803	WAR091214-15	12/14/09	0949	1.97	5.29
31	AR124804	WAR091214-16	12/14/09	0959	1.97	5.29
32	AR124805	IAR091027-02	12/14/09	1010	1.97	5.29

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.: 10-1225

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.97		DCB: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124801	WAR091027-48	12/14/09 1020	1.97	5.29
02	AR166001	WAR091214-01	12/14/09 1031	1.97	5.29
03	AR166002	WAR091214-02	12/14/09 1041	1.97	5.29
04	AR166003	WAR091214-03	12/14/09 1052	1.97	5.29
05	AR166004	WAR091214-04	12/14/09 1102	1.97	5.29
06	AR166005	IAR091102-01	12/14/09 1113	1.97	5.29
07	AR166001	WAR091211-60	12/14/09 1123	1.97	5.29
08	AR126801	WAR091214-17	12/14/09 1134	1.97	5.29
09	AR126802	WAR091214-18	12/14/09 1144	1.97	5.29
10	AR126803	WAR091214-19	12/14/09 1155	1.97	5.29
11	AR126804	WAR091214-20	12/14/09 1206	1.97	5.29
12	AR126805	IAR090817-02	12/14/09 1216	1.97	5.29
13	AR126801	WAR091106-68	12/14/09 1227	1.97	5.29
14	DDTANALOGSTD	WAR091020-DD	12/14/09 1237		
15	PIBLK02	WAR091130-99	12/14/09 1248	1.97	5.29
16	ZZZZZ	ZZZZZ	12/14/09 1258	1.97	5.29
17	ZZZZZ	ZZZZZ	12/14/09 1309	1.97	5.29
18	ZZZZZ	ZZZZZ	12/14/09 1319	1.97	5.29
19	ZZZZZ	ZZZZZ	12/14/09 1330	1.97	5.29
20	ZZZZZ	ZZZZZ	12/14/09 1340	1.97	5.29
21	ZZZZZ	ZZZZZ	12/14/09 1351	1.97	5.29
22	ZZZZZ	ZZZZZ	12/14/09 1403	1.97	5.29
23	ZZZZZ	ZZZZZ	12/14/09 1416	1.97	5.29
24	ZZZZZ	ZZZZZ	12/14/09 1429	1.97	5.29
25	ZZZZZ	ZZZZZ	12/14/09 1441	1.97	5.29
26	AR166002	WAR091211-60	12/14/09 1452	1.97	5.29
27	PIBLK03	WAR091130-99	12/14/09 1502	1.97	5.29
28	ZZZZZ	ZZZZZ	12/14/09 1513	1.97	5.29
29	ZZZZZ	ZZZZZ	12/14/09 1525	1.97	5.29
30	ZZZZZ	ZZZZZ	12/14/09 1538	1.97	5.29
31	ZZZZZ	ZZZZZ	12/14/09 1551	1.97	5.29
32	ZZZZZ	ZZZZZ	12/14/09 1603	1.97	5.27

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.: 10-1225

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
						#
01	PIBLK01	WAR091130-99	12/14/09	0444	2.30	5.95
02	ZZZZZ	ZZZZZ	12/14/09	0454	2.30	5.94
03	ZZZZZ	ZZZZZ	12/14/09	0505	2.30	5.95
04	ZZZZZ	ZZZZZ	12/14/09	0515	2.30	5.95
05	ZZZZZ	ZZZZZ	12/14/09	0526	2.30	5.95
06	AR123201	WAR090930-32	12/14/09	0536	2.30	5.95
07	AR122101	WAR090803-21	12/14/09	0547	2.30	5.95
08	AR126201	WAR090803-62	12/14/09	0558	2.30	5.94
09	ZZZZZ	ZZZZZ	12/14/09	0608	2.30	5.94
10	ZZZZZ	ZZZZZ	12/14/09	0619	2.30	5.95
11	ZZZZZ	ZZZZZ	12/14/09	0629	2.30	5.94
12	ZZZZZ	ZZZZZ	12/14/09	0640	2.30	5.94
13	ZZZZZ	ZZZZZ	12/14/09	0650	2.30	5.95
14	ZZZZZ	ZZZZZ	12/14/09	0701	2.30	5.94
15	ZZZZZ	ZZZZZ	12/14/09	0711	2.30	5.95
16	AR125401	WAR091214-05	12/14/09	0722	2.30	5.94
17	AR125402	WAR091214-06	12/14/09	0732	2.30	5.94
18	AR125403	WAR091214-07	12/14/09	0743	2.30	5.94
19	AR125404	WAR091214-08	12/14/09	0753	2.30	5.94
20	AR125405	IAR091027-01	12/14/09	0804	2.30	5.95
21	AR125401	WAR091102-54	12/14/09	0814	2.30	5.94
22	AR124201	WAR091214-09	12/14/09	0825	2.30	5.94
23	AR124202	WAR091214-10	12/14/09	0835	2.30	5.94
24	AR124203	WAR091214-11	12/14/09	0846	2.30	5.94
25	AR124204	WAR091214-12	12/14/09	0856	2.30	5.94
26	AR124205	IAR091111-0	12/14/09	0907	2.30	5.94
27	AR124201	WAR091102-42	12/14/09	0917	2.30	5.94
28	AR124801	WAR091214-13	12/14/09	0928	2.30	5.94
29	AR124802	WAR091214-14	12/14/09	0938	2.30	5.94
30	AR124803	WAR091214-15	12/14/09	0949	2.30	5.94
31	AR124804	WAR091214-16	12/14/09	0959	2.30	5.94
32	AR124805	IAR091027-02	12/14/09	1010	2.30	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.

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.: 10-1225
 GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09
 Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
 SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.30			DCB: 5.94		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR124801	WAR091027-48	12/14/09 1020	2.30	5.95
02	AR166001	WAR091214-01	12/14/09 1031	2.30	5.94
03	AR166002	WAR091214-02	12/14/09 1041	2.30	5.94
04	AR166003	WAR091214-03	12/14/09 1052	2.30	5.94
05	AR166004	WAR091214-04	12/14/09 1102	2.30	5.94
06	AR166005	IAR091102-01	12/14/09 1113	2.30	5.94
07	AR166001	WAR091211-60	12/14/09 1123	2.30	5.94
08	AR126801	WAR091214-17	12/14/09 1134	2.30	5.95
09	AR126802	WAR091214-18	12/14/09 1144	2.30	5.94
10	AR126803	WAR091214-19	12/14/09 1155	2.30	5.94
11	AR126804	WAR091214-20	12/14/09 1206	2.30	5.94
12	AR126805	IAR090817-02	12/14/09 1216	2.30	5.94
13	AR126801	WAR091106-68	12/14/09 1227	2.30	5.94
14	DDTANALOGSTD	WAR091020-DD	12/14/09 1237		
15	PIBLK02	WAR091130-99	12/14/09 1248	2.30	5.94
16	ZZZZZ	ZZZZZ	12/14/09 1258	2.30	5.94
17	ZZZZZ	ZZZZZ	12/14/09 1309	2.30	5.94
18	ZZZZZ	ZZZZZ	12/14/09 1319	2.30	5.94
19	ZZZZZ	ZZZZZ	12/14/09 1330	2.30	5.94
20	ZZZZZ	ZZZZZ	12/14/09 1340	2.30	5.94
21	ZZZZZ	ZZZZZ	12/14/09 1351	2.30	5.94
22	ZZZZZ	ZZZZZ	12/14/09 1403	2.30	5.94
23	ZZZZZ	ZZZZZ	12/14/09 1416	2.30	5.94
24	ZZZZZ	ZZZZZ	12/14/09 1429	2.30	5.94
25	ZZZZZ	ZZZZZ	12/14/09 1441	2.30	5.94
26	AR166002	WAR091211-60	12/14/09 1452	2.30	5.94
27	PIBLK03	WAR091130-99	12/14/09 1502	2.30	5.94
28	ZZZZZ	ZZZZZ	12/14/09 1513	2.30	5.94
29	ZZZZZ	ZZZZZ	12/14/09 1525	2.30	5.94
30	ZZZZZ	ZZZZZ	12/14/09 1538	2.30	5.94
31	ZZZZZ	ZZZZZ	12/14/09 1551	2.30	5.94
32	ZZZZZ	ZZZZZ	12/14/09 1603	2.30	5.94

S1 = 4cmx
 DCB = Decachlorobiphenyl

QC LIMITS
 (+/- 0.03 MINUTES)
 (+/- 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.: 10-1225

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/19/10	0624	1.97	5.28
02	AR166001	WAR100104-60	01/19/10	0634	1.97	5.28
03	AR125401	WAR091216-54	01/19/10	0645		
04	AR124201	WAR091217-42	01/19/10	0655		
05	AR124801	WAR091217-48	01/19/10	0706		
06	AR123201	WAR100104-32	01/19/10	0716		
07	AR122101	WAR100104-21	01/19/10	0727		
08	AR126201	WAR100104-62	01/19/10	0737		
09	AR126801	WAR100111-68	01/19/10	0748		
10	DDTANALOGSTD	WAR091219-DD	01/19/10	0758		
11	PIBLK02	WAR100105-99	01/19/10	0809	1.97	5.28
12	ZZZZZ	ZZZZZ	01/19/10	0819	1.97	5.28
13	ZZZZZ	ZZZZZ	01/19/10	0830	1.97	5.28
14	ZZZZZ	ZZZZZ	01/19/10	0840	1.97	5.28
15	ZZZZZ	ZZZZZ	01/19/10	0853	1.97	5.28
16	ZZZZZ	ZZZZZ	01/19/10	0906	1.97	5.28
17	ZZZZZ	ZZZZZ	01/19/10	0918	1.97	5.28
18	ZZZZZ	ZZZZZ	01/19/10	0931	1.97	5.28
19	ZZZZZ	ZZZZZ	01/19/10	0943	1.97	5.28
20	AR166002	WAR100104-60	01/19/10	0956	1.97	5.28
21	PIBLK03	WAR100105-99	01/19/10	1007	1.97	5.28
22	ZZZZZ	ZZZZZ	01/19/10	1017	1.97	5.28
23	ZZZZZ	ZZZZZ	01/19/10	1028	1.98	5.28
24	ZZZZZ	ZZZZZ	01/19/10	1038	1.97	5.28
25	ZZZZZ	ZZZZZ	01/19/10	1051	1.97	5.28
26	ZZZZZ	ZZZZZ	01/19/10	1104	1.97	5.28
27	AR166003	WAR100104-60	01/19/10	1116	1.97	5.28
28	PIBLK04	WAR100105-99	01/19/10	1127	1.97	5.28
29	PBLK01	1202017042	01/19/10	1137	1.97	5.28
30	PBLK01LCS	1202017043	01/19/10	1148	1.97	5.28
31	RE12-10-7283	244626015	01/19/10	1158	1.97	5.28
32	RE12-10-7282	244626016	01/19/10	1211	1.97	5.28

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.: 10-1225

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.97			DCB: 5.28		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	ZZZZZ	01/19/10	1224	1.97	5.28
02	ZZZZZ	01/19/10	1236	1.97	5.28
03	ZZZZZ	01/19/10	1249	1.97	5.28
04	ZZZZZ	01/19/10	1301	1.97	5.28
05	ZZZZZ	01/19/10	1314	1.97	5.28
06	ZZZZZ	01/19/10	1327	1.97	5.28
07	AR166004	WAR100104-60	1339	1.97	5.28
08	PIBLK05	WAR100105-99	1350	1.97	5.28
09	ZZZZZ	01/19/10	1400	1.97	5.28
10	ZZZZZ	01/19/10	1413	1.97	5.28
11	ZZZZZ	01/19/10	1426	1.97	5.28
12	ZZZZZ	01/19/10	1438	1.97	5.28
13	AR166005	WAR100104-60	1451	1.97	5.28
14	PIBLK06	WAR100105-99	1501	1.97	5.28
15	ZZZZZ	01/19/10	1512	1.97	5.28
16	ZZZZZ	01/19/10	1525	1.97	5.28
17	ZZZZZ	01/19/10	1537	1.97	5.28
18	ZZZZZ	01/19/10	1550	1.97	5.28
19	ZZZZZ	01/19/10	1602	1.97	5.28
20	ZZZZZ	01/19/10	1615	1.97	5.28
21	ZZZZZ	01/19/10	1628	1.97	5.28
22	ZZZZZ	01/19/10	1640	1.97	5.28
23	ZZZZZ	01/19/10	1653	1.97	5.28
24	ZZZZZ	01/19/10	1706	1.97	5.28
25	AR166006	WAR100104-60	1718	1.97	5.28
26	PIBLK07	WAR100105-99	1731	1.97	5.28
27	ZZZZZ	01/19/10	1743	1.97	5.28
28	ZZZZZ	01/19/10	1756	1.97	5.28
29	ZZZZZ	01/19/10	1809	1.97	5.28
30	ZZZZZ	01/19/10	1821	1.97	5.28
31	AR166007	WAR100104-60	1834	1.97	5.28
32	PIBLK08	WAR100105-99	1847	1.97	5.28

S1 = 4cmx
DCB = Decachlorobiphenyl

QC LIMITS
(+/- 0.03 MINUTES)
(+/- 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.: 10-1225

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/19/10	0624	2.30	5.94
02	AR166001	WAR100104-60	01/19/10	0634	2.30	5.94
03	AR125401	WAR091216-54	01/19/10	0645		
04	AR124201	WAR091217-42	01/19/10	0655		
05	AR124801	WAR091217-48	01/19/10	0706		
06	AR123201	WAR100104-32	01/19/10	0716		
07	AR122101	WAR100104-21	01/19/10	0727		
08	AR126201	WAR100104-62	01/19/10	0737		
09	AR126801	WAR100111-68	01/19/10	0748		
10	DDTANALOGSTD	WAR091219-DD	01/19/10	0758		
11	PIBLK02	WAR100105-99	01/19/10	0809	2.30	5.94
12	ZZZZZ	ZZZZZ	01/19/10	0819	2.30	5.94
13	ZZZZZ	ZZZZZ	01/19/10	0830	2.30	5.94
14	ZZZZZ	ZZZZZ	01/19/10	0840	2.30	5.94
15	ZZZZZ	ZZZZZ	01/19/10	0853	2.30	5.94
16	ZZZZZ	ZZZZZ	01/19/10	0906	2.30	5.94
17	ZZZZZ	ZZZZZ	01/19/10	0918	2.30	5.94
18	ZZZZZ	ZZZZZ	01/19/10	0931	2.30	5.94
19	ZZZZZ	ZZZZZ	01/19/10	0943	2.30	5.94
20	AR166002	WAR100104-60	01/19/10	0956	2.30	5.94
21	PIBLK03	WAR100105-99	01/19/10	1007	2.30	5.94
22	ZZZZZ	ZZZZZ	01/19/10	1017	2.30	5.94
23	ZZZZZ	ZZZZZ	01/19/10	1028	2.31	5.94
24	ZZZZZ	ZZZZZ	01/19/10	1038	2.30	5.94
25	ZZZZZ	ZZZZZ	01/19/10	1051	2.30	5.94
26	ZZZZZ	ZZZZZ	01/19/10	1104	2.30	5.94
27	AR166003	WAR100104-60	01/19/10	1116	2.30	5.94
28	PIBLK04	WAR100105-99	01/19/10	1127	2.30	5.94
29	PBLK01	1202017042	01/19/10	1137	2.30	5.94
30	PBLK01LCS	1202017043	01/19/10	1148	2.30	5.94
31	RE12-10-7283	244626015	01/19/10	1158	2.30	5.94
32	RE12-10-7282	244626016	01/19/10	1211	2.30	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.

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.: 10-1225

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.30				DCB: 5.94			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT
							#
01	ZZZZZ	ZZZZZ	01/19/10	1224	2.30		5.94
02	ZZZZZ	ZZZZZ	01/19/10	1236	2.30		5.94
03	ZZZZZ	ZZZZZ	01/19/10	1249	2.30		5.94
04	ZZZZZ	ZZZZZ	01/19/10	1301	2.30		5.94
05	ZZZZZ	ZZZZZ	01/19/10	1314	2.30		5.94
06	ZZZZZ	ZZZZZ	01/19/10	1327	2.30		5.94
07	AR166004	WAR100104-60	01/19/10	1339	2.30		5.94
08	PIBLK05	WAR100105-99	01/19/10	1350	2.30		5.94
09	ZZZZZ	ZZZZZ	01/19/10	1400	2.30		5.94
10	ZZZZZ	ZZZZZ	01/19/10	1413	2.30		5.94
11	ZZZZZ	ZZZZZ	01/19/10	1426	2.30		5.94
12	ZZZZZ	ZZZZZ	01/19/10	1438	2.30		5.94
13	AR16605	WAR100104-60	01/19/10	1451	2.30		5.94
14	PIBLK06	WAR100105-99	01/19/10	1501	2.30		5.94
15	ZZZZZ	ZZZZZ	01/19/10	1512	2.30		5.94
16	ZZZZZ	ZZZZZ	01/19/10	1525	2.30		5.94
17	ZZZZZ	ZZZZZ	01/19/10	1537	2.30		5.94
18	ZZZZZ	ZZZZZ	01/19/10	1550	2.30		5.94
19	ZZZZZ	ZZZZZ	01/19/10	1602	2.30		5.94
20	ZZZZZ	ZZZZZ	01/19/10	1615	2.30		5.94
21	ZZZZZ	ZZZZZ	01/19/10	1628	2.30		5.94
22	ZZZZZ	ZZZZZ	01/19/10	1640	2.30		5.94
23	ZZZZZ	ZZZZZ	01/19/10	1653	2.30		5.94
24	ZZZZZ	ZZZZZ	01/19/10	1706	2.30		5.94
25	AR166006	WAR100104-60	01/19/10	1718	2.30		5.94
26	PIBLK07	WAR100105-99	01/19/10	1731	2.30		5.94
27	ZZZZZ	ZZZZZ	01/19/10	1743	2.30		5.94
28	ZZZZZ	ZZZZZ	01/19/10	1756	2.30		5.94
29	ZZZZZ	ZZZZZ	01/19/10	1809	2.30		5.94
30	ZZZZZ	ZZZZZ	01/19/10	1821	2.30		5.94
31	AR199007	WAR100104-60	01/19/10	1834	2.30		5.94
32	PIBLK08	WAR100105-99	01/19/10	1847	2.30		5.94

S1 = 4cmx
DCB = Decachlorobiphenyl

QC LIMITS
(+/- 0.03 MINUTES)
(+/- 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: 10-1225

Client ID: LCS for batch 942245

Lab Sample ID: 1202017043

Data File: 030f3001.d

Data File: 030b3001.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 19-JAN-10 11:48

Analyzed: 19-JAN-10 11:48

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							10
Column 1	1	2.42	2.39 - 2.45	24.5		ug/kg	
	2	2.7	2.67 - 2.73	27.2		ug/kg	
	3	2.79	2.76 - 2.82	24.3		ug/kg	
	4	2.83	2.8 - 2.86	25.9		ug/kg	
	5	3.04	3.01 - 3.07	25.5		ug/kg	
					25.5		
Column 2	1	3.19	3.17 - 3.23	24.1		ug/kg	
	2	3.28	3.25 - 3.31	22.2		ug/kg	
	3	3.34	3.31 - 3.37	23		ug/kg	
	4	3.57	3.54 - 3.6	22.8		ug/kg	
	5	3.64	3.61 - 3.67	23.1		ug/kg	
					23		
Aroclor-1260							12
Column 1	1	3.77	3.74 - 3.8	28.6		ug/kg	
	2	3.93	3.9 - 3.96	29.8		ug/kg	
	3	4.16	4.13 - 4.19	30.3		ug/kg	
	4	4.3	4.27 - 4.33	30.3		ug/kg	
	5	4.48	4.45 - 4.51	31.9		ug/kg	
					30.2		
Column 2	1	4.33	4.3 - 4.36	25.4		ug/kg	
	2	4.46	4.43 - 4.49	26.8		ug/kg	
	3	4.72	4.7 - 4.76	26.4		ug/kg	
	4	4.9	4.87 - 4.93	27		ug/kg	
	5	5.04	5.02 - 5.08	28.3		ug/kg	
					26.8		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1225

Matrix: SOIL

Lab Sample ID: 1202017042

Client Sample: QC for batch 942245

Client: LANL010

Project: QC

Client ID: MB for batch 942245

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 942247

Inst: ECD1A.I

Dilution: 1

Run Date: 01/19/2010 11:37

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/18/2010 10:10

Aliquot: 30 g

Final Volume: 1 mL

Data File: 029f2901-1.d

Column: 1 CLP1

Level: LOW

029b2901-1.d

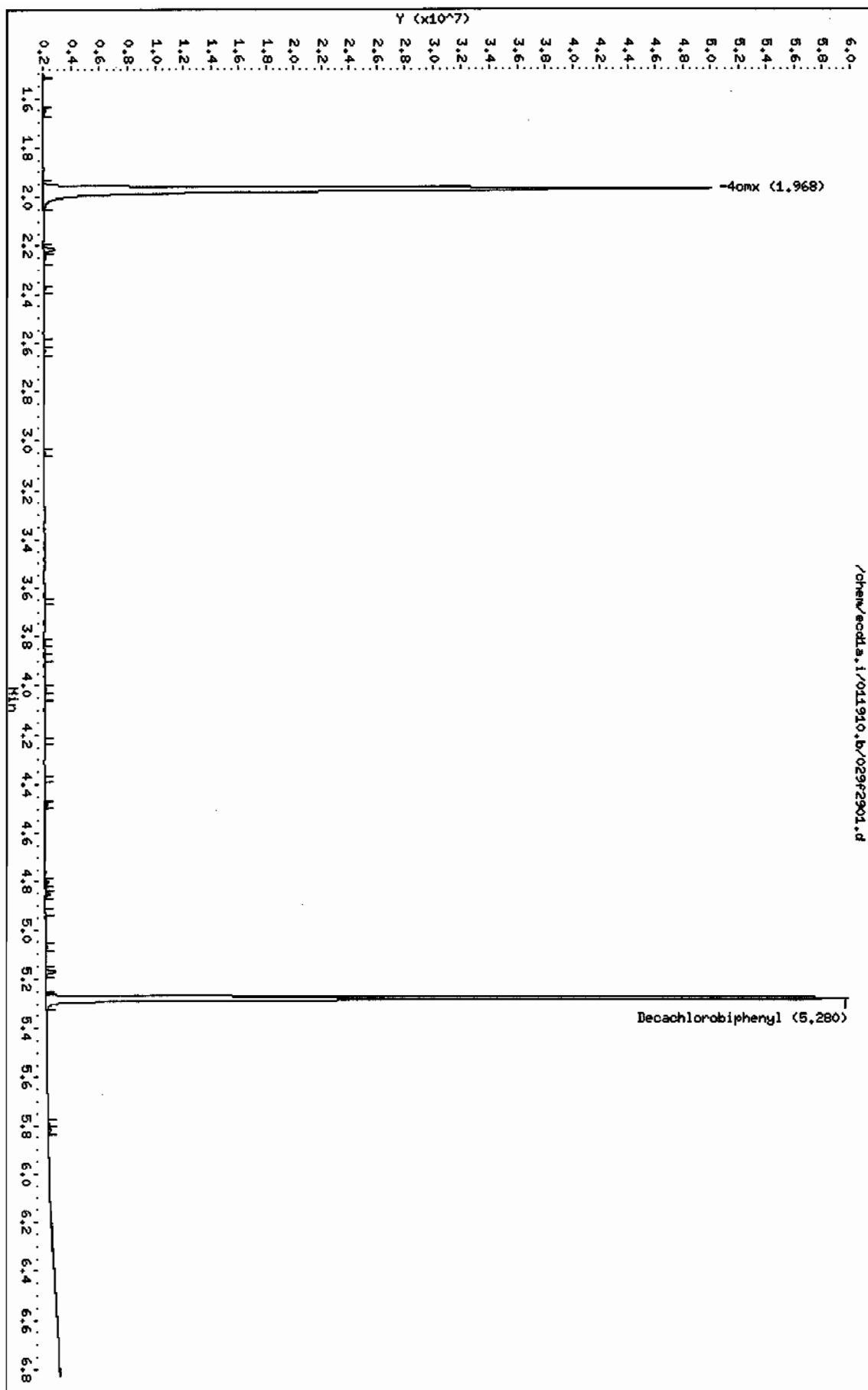
2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecdl.a.i/011910.b/029f2901.d
Date: 19-JUN-2010 11:37
Client ID: PBLK01
Sample Info: 11202017042141
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdl.a.i
Operator: YSL
Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/011910.b/029b2901.d
Report Date: 25-Jan-2010 08:36

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/029b2901.d
Lab Smp Id: 1202017042 Client Smp ID: PBLK01
Inj Date : 19-JAN-2010 11:37
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202017042|1|
Misc Info : |ECD82P_1S|942247|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
Als bottle: 29 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1225.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

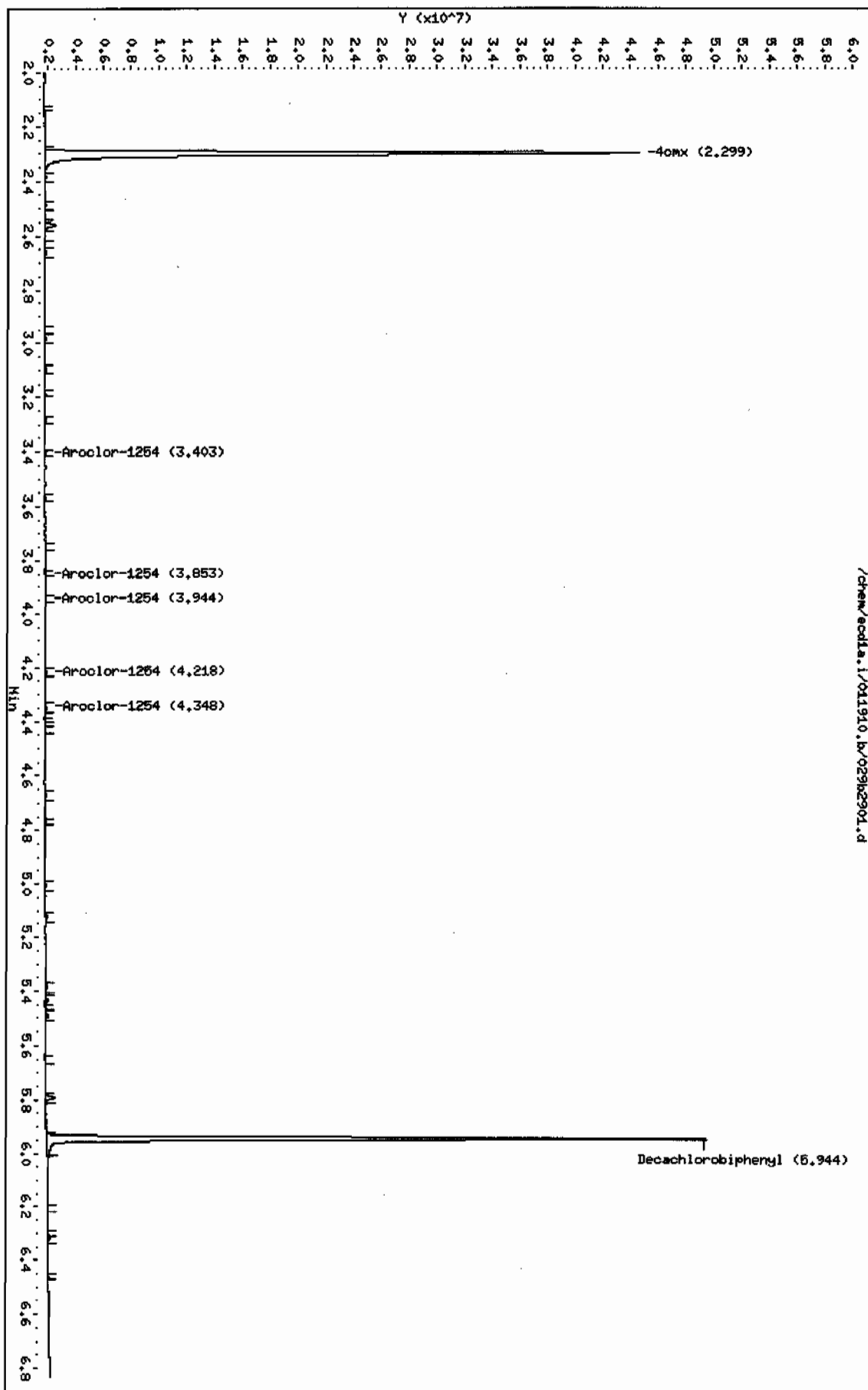
CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8		
2.299	2.299	0.000	40948923 143.509	4.8	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.944	5.944	0.000	36626207 165.142	5.5	80.00- 120.00	100.00	

Data File: /chem/eodla.i/011910.b/029b2901.d
Date: 19-JUN-2010 11:37
Client ID: PBLK01
Sample Info: 11202017042111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: eodla.i
Operator: YS1
Column diameter: 0.25

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PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1225

Lab Sample ID: 1202017043

Client Sample: QC for batch 942245

Client ID: LCS for batch 942245

Batch ID: 942247

Run Date: 01/19/2010 11:48

Prep Date: 01/18/2010 10:10

Data File: 030f3001-1.d

030b3001-1.d

Client: LANL010

Method: SW846 8082

Inst: ECD1AJ

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		25.5	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		30.1	ug/kg	1.11	3.33	1

Data File: /chem/ecdl1a.i/011910.b/030f3001.d
 Report Date: 25-Jan-2010 08:36

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/030f3001.d
 Lab Smp Id: 1202017043 Client Smp ID: PBLK01LCS
 Inj Date : 19-JAN-2010 11:48
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202017043|1|
 Misc Info : |ECD82P_1S|942247|SVA|QC A|SOIL|LCS|||
 Comment :
 Method : /chem/ecdl1a.i/011910.b/ECD1-F-8082-121409.m
 Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
 Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
 Als bottle: 30 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1225.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

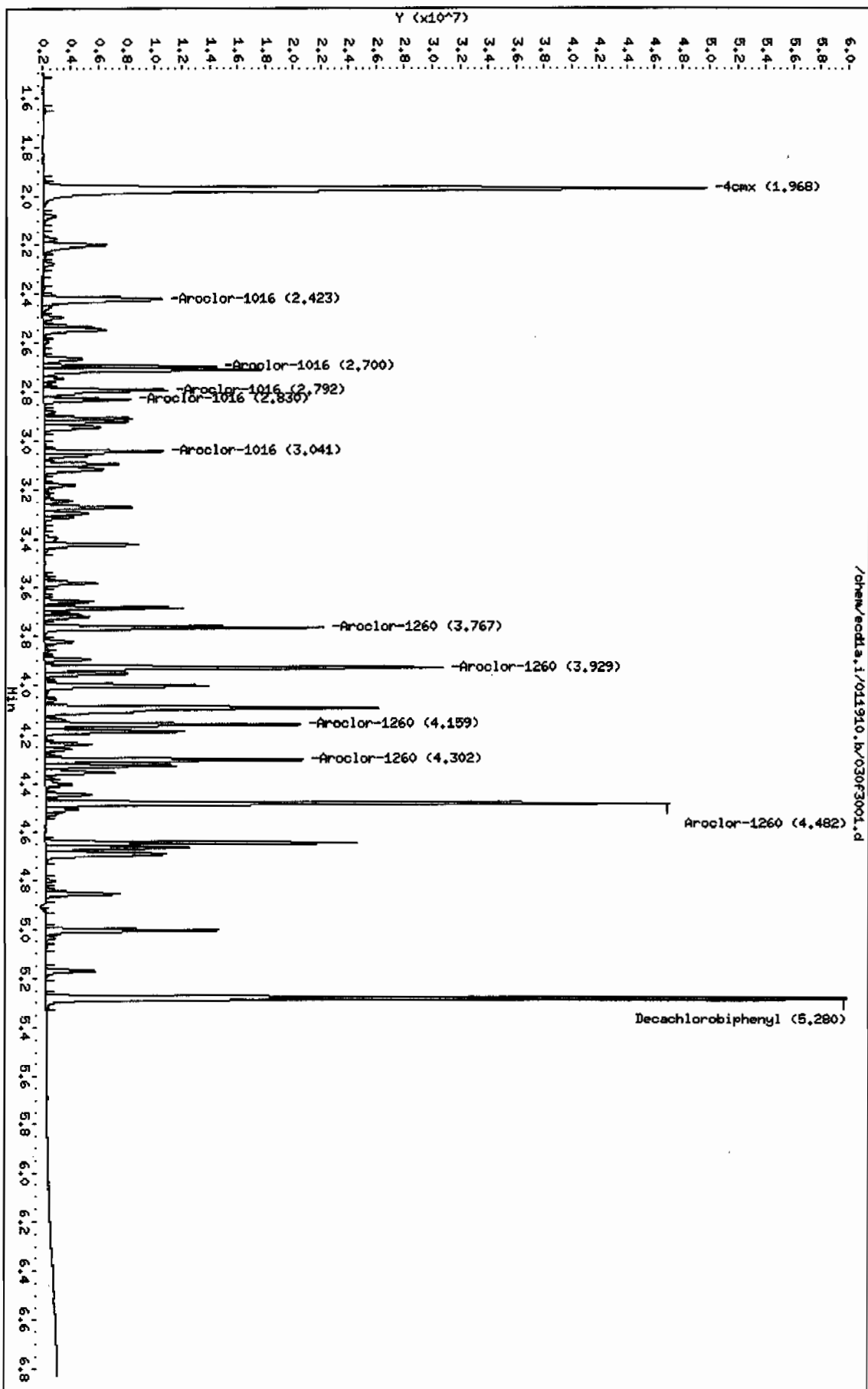
RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8		
1.968	1.968	0.000	55124774 154.203	5.1	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.280	5.280	0.000	51798263 171.512	5.7	80.00- 120.00	100.00	
1 Aroclor-1016					CAS #: 12674-11-2		
2.423	2.423	0.000	10200944 735.634	24.5	80.00- 120.00	100.00	
2.700	2.700	0.000	8226292 814.668	27.2	58.52- 98.52	80.64	
2.792	2.792	0.000	8565086 728.508	24.3	66.05- 106.05	83.96	
2.830	2.830	0.000	5134472 778.067	25.9	31.87- 71.87	50.33	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.041	3.040	0.001	6631286	764.554	25.5	45.88-	85.88	65.01	
Average of Peak Concentrations =					25.5				

7 Aroclor-1260					CAS #: 11096-82-5				
3.767	3.766	0.001	14394827	859.282	28.6	80.00-	120.00	100.00	
3.929	3.930	-0.001	22134428	894.588	29.8	132.55-	172.55	153.77	
4.159	4.160	-0.001	13364691	909.946	30.3	71.21-	111.21	92.84	
4.302	4.303	-0.001	13783185	907.712	30.2	75.50-	115.50	95.75	
4.482	4.482	0.000	32831934	955.794	31.8	198.16-	238.16	228.08	
Average of Peak Concentrations =					30.1				

Data File: /chem/eodla.i/011910.b/030f3001.d
Date: 19-JUN-2010 11:48
Client ID: PBLK01LCS
Sample Info: 1120204704311
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011910.b/030b3001.d
Report Date: 25-Jan-2010 08:36

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/030b3001.d
Lab Smp Id: 1202017043 Client Smp ID: PBLK01LCS
Inj Date : 19-JAN-2010 11:48
Operator : YSl Inst ID: ecd1a.i
Smp Info : |1202017043|1|
Misc Info : |ECD82P_1S|942247|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
Als bottle: 30 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1225.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
CAS #: 877-09-8							
2.299	2.299	0.000	39977000 140.103	4.7	80.00- 120.00	100.00	
CAS #: 2051-24-3							
5.944	5.944	0.000	35735483 161.126	5.4	80.00- 120.00	100.00	
CAS #: 12674-11-2							
3.195	3.195	0.000	9130827 724.006	24.1	80.00- 120.00	100.00 (M)	
3.277	3.278	-0.001	6201949 664.883	22.2	48.10- 88.10	67.92	
3.342	3.342	0.000	3732022 689.670	23.0	22.33- 62.33	40.87	
3.568	3.569	-0.001	4832171 685.232	22.8	33.63- 73.63	52.92	

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)									
3.643	3.644	-0.001	4539996	693.052	23.1	30.75-	70.75	49.72	
Average of Peak Concentrations =					23.0				

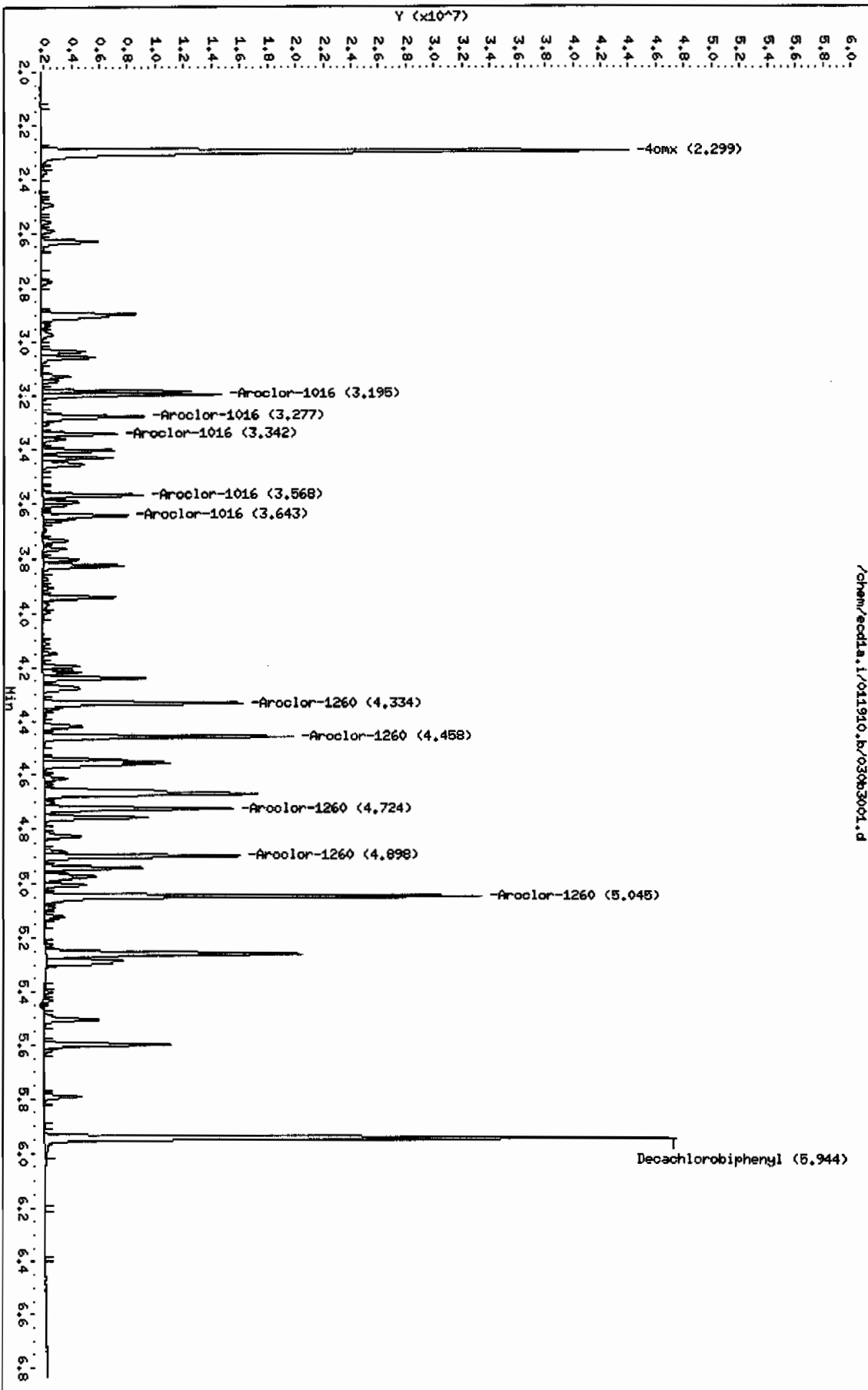
7 Aroclor-1260					CAS #: 11096-82-5				
4.334	4.335	-0.001	10432036	762.574	25.4	80.00-	120.00	100.00	
4.458	4.459	-0.001	12866789	802.718	26.8	102.29-	142.29	123.34	
4.724	4.725	-0.001	9954406	792.300	26.4	73.74-	113.74	95.42	
4.898	4.899	-0.001	10367980	809.361	27.0	77.00-	117.00	99.39	
5.045	5.045	0.000	23677508	848.727	28.3	198.07-	238.07	226.97	
Average of Peak Concentrations =					26.8				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/011910.b/03063001.d
Date: 19-JUN-2010 11:48
Client ID: PBLK01LCS
Sample Info: 11202017043111
Volume Injected (uL): 1.0
Column phase: CLP2

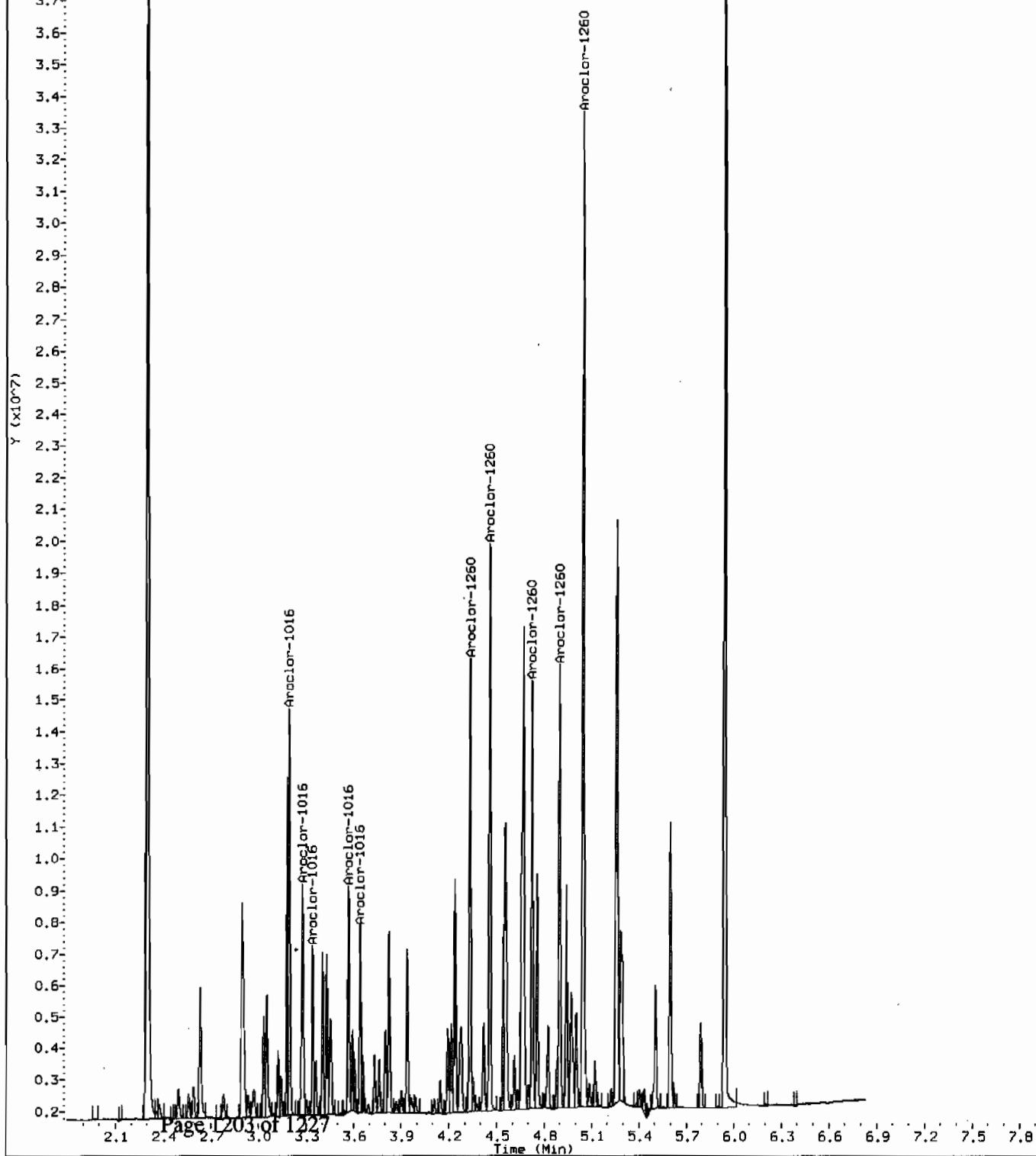
Instrument: ecdda.i
Operator: YSA
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1.i/011910.b/030b3001.d
Operator: YS1
Injection Date: 19-JAN-2010 11:48
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS

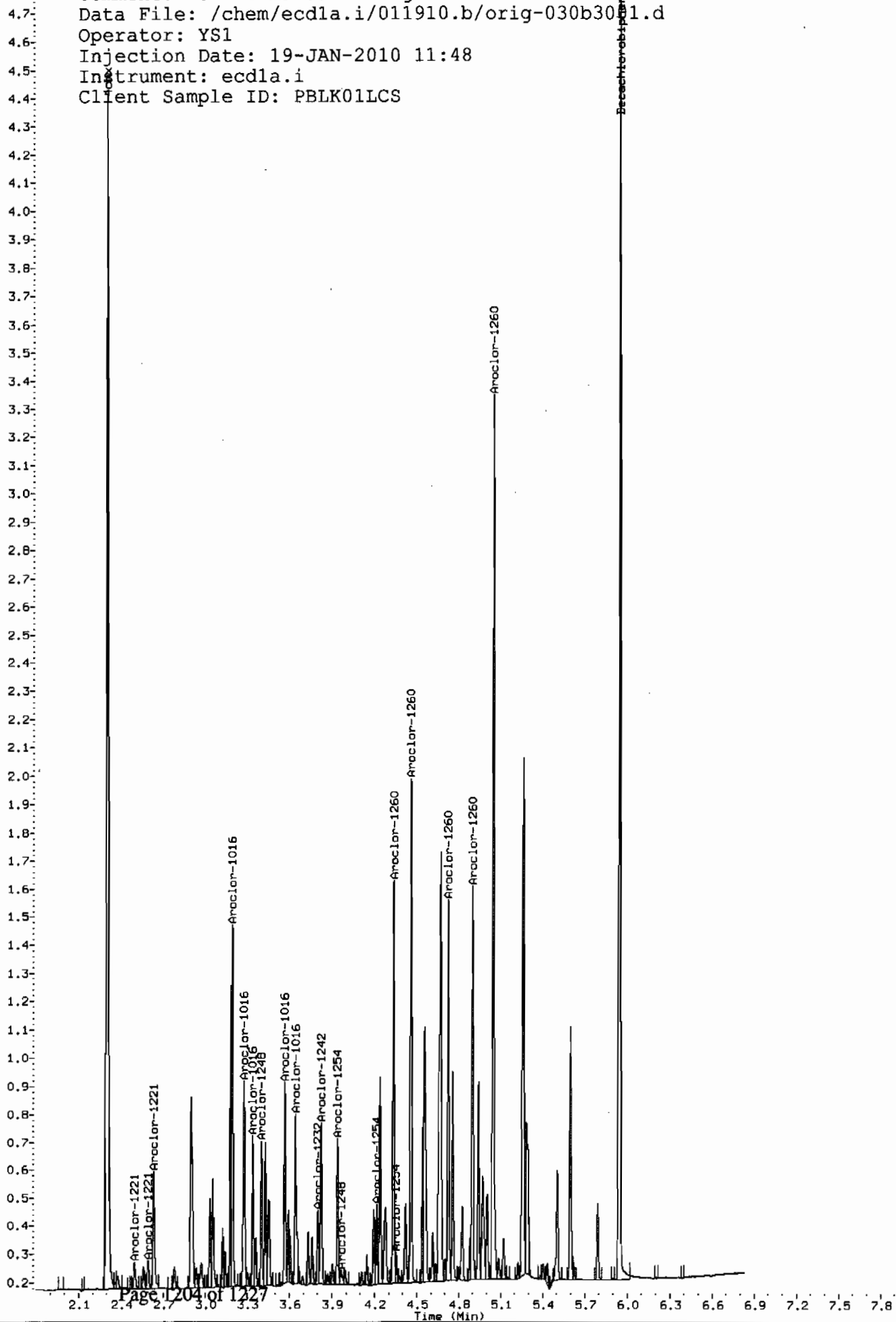
Y (x10⁻⁷)

Bis(4-chlorophenyl)



Comment: Before manual integration
Data File: /chem/ecdl1a.i/011910.b/orig-030b301.d
Operator: YS1
Injection Date: 19-JAN-2010 11:48
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS

Y (x10⁻⁷)



MISCELLANEOUS DATA

INSTRUMENT ID: ECCT

DATE: 12/15/2009

METHOD: ECD1-F-8082-121409.m

OPERATOR:YS1

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY:

SOLVENT LOT DA385

ALUMINA LOT 1230997-A

COPPER LOT 236547-A

Calibration & OC 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/121409.b

Injection Volume: 0.5 ul

Data File	GSL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR091130-99 01	YS1	14-DEC-2009 04:44		121409	1.0	CLEAN	
002f0201.d	WAR091211-60 01	YS1	14-DEC-2009 04:54		121409	1.0	DOSE RE-ICAL	
003f0301.d	WAR091102-54	YS1	14-DEC-2009 05:05		121409	1.0	DOSE RE-ICAL	
004f0401.d	WAR091102-42	YS1	14-DEC-2009 05:15		121409	1.0	DOSE RE-ICAL	
005f0501.d	WAR091027-48	YS1	14-DEC-2009 05:26		121409	1.0	DOSE RE-ICAL	
006f0601.d	WAR090930-32	YS1	14-DEC-2009 05:36		121409	1.0	PATTERN ONLY	
007f0701.d	WAR090803-21	YS1	14-DEC-2009 05:47		121409	1.0	PATTERN ONLY	
008f0801.d	WAR090803-62	YS1	14-DEC-2009 05:58		121409	1.0	PATTERN ONLY	
009f0901.d	WAR091106-68	YS1	14-DEC-2009 06:08		121409	1.0	DOSE RE-ICAL	
010f1001.d	1660-1	YS1	14-DEC-2009 06:19		121409	1.0	DOSE	
011f1101.d	1660-2	YS1	14-DEC-2009 06:29		121409	1.0	DOSE	
012f1201.d	1660-3	YS1	14-DEC-2009 06:40		121409	1.0	DOSE	
013f1301.d	1660-4	YS1	14-DEC-2009 06:50		121409	1.0	DOSE	
014f1401.d	IAR091102-01	YS1	14-DEC-2009 07:01		121409	1.0	DOSE	
015f1501.d	WAR091211-60 01	YS1	14-DEC-2009 07:11		121409	1.0	DOSE	

Instrument Batch: /chem/ecdl.a.i/121409.b

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[illegible]

016f1601.d	WAR091214-05 54	YS1	14-DEC-2009 07:22	121409	1.0	ARI254 I-CAL LEVEL 1
017f1701.d	WAR091214-06 54	YS1	14-DEC-2009 07:32	121409	1.0	ARI254 I-CAL LEVEL 2
018f1801.d	WAR091214-07 54	YS1	14-DEC-2009 07:43	121409	1.0	ARI254 I-CAL LEVEL 3
019f1901.d	WAR091214-08 54	YS1	14-DEC-2009 07:53	121409	1.0	ARI254 I-CAL LEVEL 4
020f2001.d	WAR091027-01	YS1	14-DEC-2009 08:04	121409	1.0	ARI254 I-CAL LEVEL 5
021f2101.d	WAR091102-54	YS1	14-DEC-2009 08:14	121409	1.0	PASSED ON BOTH COLUMNS
022f2201.d	WAR091214-09 42	YS1	14-DEC-2009 08:25	121409	1.0	ARI242 I-CAL LEVEL 1
023f2301.d	WAR091214-10 42	YS1	14-DEC-2009 08:35	121409	1.0	ARI242 I-CAL LEVEL 2
024f2401.d	WAR091214-11 42	YS1	14-DEC-2009 08:46	121409	1.0	ARI242 I-CAL LEVEL 3
025f2501.d	WAR091214-12 42	YS1	14-DEC-2009 08:56	121409	1.0	ARI242 I-CAL LEVEL 4
026f2601.d	WAR091111-01	YS1	14-DEC-2009 09:07	121409	1.0	ARI242 I-CAL LEVEL 5
027f2701.d	WAR091102-42	YS1	14-DEC-2009 09:17	121409	1.0	PASSED ON BOTH COLUMNS
028f2801.d	WAR091214-13 48	YS1	14-DEC-2009 09:28	121409	1.0	ARI248 I-CAL LEVEL 1
029f2901.d	WAR091214-14 48	YS1	14-DEC-2009 09:38	121409	1.0	ARI248 I-CAL LEVEL 2
030f3001.d	WAR091214-15 48	YS1	14-DEC-2009 09:49	121409	1.0	ARI248 I-CAL LEVEL 3
031f3101.d	WAR091214-16 48	YS1	14-DEC-2009 09:59	121409	1.0	ARI248 I-CAL LEVEL 4
032f3201.d	WAR091027-02	YS1	14-DEC-2009 10:10	121409	1.0	ARI248 I-CAL LEVEL 5
033f3301.d	WAR091027-48	YS1	14-DEC-2009 10:20	121409	1.0	PASSED ON BOTH COLUMNS
034f3401.d	WAR091214-01 60	YS1	14-DEC-2009 10:31	121409	1.0	ARI660 I-CAL LEVEL 1
035f3501.d	WAR091214-02 60	YS1	14-DEC-2009 10:41	121409	1.0	ARI660 I-CAL LEVEL 2

Instrument Batch: /chem/ecdl.a.i/121409.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	WAR091214-03 60	YS1	14-DEC-2009 10:52		121409	1.0	ARI660 I-CAL LEVEL 3	
037f3701.d	WAR091214-04 60	YS1	14-DEC-2009 11:02		121409	1.0	ARI660 I-CAL LEVEL 4	
038f3801.d	IAR091102-01	YS1	14-DEC-2009 11:13		121409	1.0	ARI660 I-CAL LEVEL 5	
039f3901.d	WAR091211-60 01	YS1	14-DEC-2009 11:23		121409	1.0	PASSED ON BOTH COLUMNS	
040f4001.d	WAR091214-17 68	YS1	14-DEC-2009 11:34		121409	1.0	ARI268 I-CAL LEVEL 1	

041f4101.d	WAR091214-18 68	YS1	14-DEC-2009 11:44	1	121409	1	1.0	1	ARI268 I-CAL LEVEL 2
042f4201.d	WAR091214-19 68	YS1	14-DEC-2009 11:55	1	121409	1	1.0	1	ARI268 I-CAL LEVEL 3
043f4301.d	WAR091214-20 68	YS1	14-DEC-2009 12:06	1	121409	1	1.0	1	ARI268 I-CAL LEVEL 4
044f4401.d	IAR090817-02	YS1	14-DEC-2009 12:16	1	121409	1	1.0	1	ARI268 I-CAL LEVEL 5
045f4501.d	WAR091106-68	YS1	14-DEC-2009 12:27	1	121409	1	1.0	1	PASSED ON BOTH COLUMNS
046f4601.d	WAR091020-DDT	YS1	14-DEC-2009 12:37	1	121409	1	1.0	1	DDT ANALOG STANDARD
047f4701.d	WAR091130-99 02	YS1	14-DEC-2009 12:48	1	121409	1	1.0	1	CLEAN
048f4801.d	1201991693	YS1	14-DEC-2009 12:58	931140	10-782	1	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201991694	YS1	14-DEC-2009 13:09	931140	10-782	1	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1242297001	YS1	14-DEC-2009 13:19	931140	10-782	1	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	1242297002	YS1	14-DEC-2009 13:30	931140	10-782	1	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	1242297003	YS1	14-DEC-2009 13:40	931140	10-782	1	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	1242297004	YS1	14-DEC-2009 13:51	931140	10-782	1	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	1242297005	YS1	14-DEC-2009 14:03	931140	10-782	1	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	1242297006	YS1	14-DEC-2009 14:16	931140	10-782	1	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl.a.i/121409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	242297007	YS1	14-DEC-2009 14:29	931140	10-782	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	242297008	YS1	14-DEC-2009 14:41	931140	10-782	25.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	WAR091211-60 02	YS1	14-DEC-2009 14:52		121409	1.0		PASSED ON BOTH COLUMNS
059f5901.d	WAR091130-99 03	YS1	14-DEC-2009 15:02		121409	1.0		CLEAN
060f6001.d	242297009	YS1	14-DEC-2009 15:13	931140	10-782	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	242297010	YS1	14-DEC-2009 15:25	931140	10-782	1.0	LANL	DCB LOW RE
062f6201.d	242297011	YS1	14-DEC-2009 15:38	931140	10-782	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	242297012	YS1	14-DEC-2009 15:51	931140	10-782	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	242297013	YS1	14-DEC-2009 16:03	931140	10-782	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

| 065f6501.d | 242305004 | YSI | 14-DEC-2009 16:16 | 931140 | 10-786 | 5.0|LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 066f6601.d | 1201991695 | YSI | 14-DEC-2009 16:28 | 931140 | 10-786 | 5.0|QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 067f6701.d | 1201991696 | YSI | 14-DEC-2009 16:41 | 931140 | 10-786 | 5.0|QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 068f6801.d | 242305005 | YSI | 14-DEC-2009 16:53 | 931140 | 10-786 | 5.0|LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 069f6901.d | 242305006 | YSI | 14-DEC-2009 17:06 | 931140 | 10-786 | 5.0|LANL | UPLOAD BOTH COLUMNS, USE HIGHER |
| 070f7001.d | 14091211-60 03 | YSI | 14-DEC-2009 17:19 | 121409 | 1.0| | PASSED ON BOTH COLUMNS |
| 071f7101.d | 14091130-99 04 | YSI | 14-DEC-2009 17:31 | 121409 | 1.0| | CLEAN |
| 072f7201.d | 1201992645 | YSI | 14-DEC-2009 17:44 | 931153 | 242521 | 1.0|QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 073f7301.d | 1201992646 | YSI | 14-DEC-2009 17:57 | 931153 | 242521 | 1.0|QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 074f7401.d | 242264001 | YSI | 14-DEC-2009 18:09 | 931153 | 242264 | 5.0|ENRG | UPLOAD BOTH COLUMNS, USE HIGHER |
075f7501.d 242521001 YSI 14-DEC-2009 18:22 931153 242521 5.0 EMSC UPLOAD BOTH COLUMNS, USE HIGHER

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Instrument Batch: /chem/ecd1a.i/121409.b

Data File GEL Lab Sample ID Analyst Injection Date/Time Batch SDG Dilution Client Comments
| 076f7601.d | 1201992647 | YSI | 14-DEC-2009 18:35 | 931153 | 242521 | 5.0|QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 077f7701.d | 1201992648 | YSI | 14-DEC-2009 18:47 | 931153 | 242521 | 5.0|QC A | UPLOAD BOTH COLUMNS, USE HIGHER |
| 078f7801.d | 242521002 | YSI | 14-DEC-2009 19:00 | 931153 | 242521 | 5.0|EMSC | UPLOAD BOTH COLUMNS, USE HIGHER |
| 079f7901.d | 242521003 | YSI | 14-DEC-2009 19:12 | 931153 | 242521 | 5.0|EMSC | UPLOAD BOTH COLUMNS, USE HIGHER |
| 080f8001.d | 242521004 | YSI | 14-DEC-2009 19:25 | 931153 | 242521 | 5.0|EMSC | UPLOAD BOTH COLUMNS, USE HIGHER |
| 081f8101.d | 242521005 | YSI | 14-DEC-2009 19:38 | 931153 | 242521 | 5.0|EMSC | UPLOAD BOTH COLUMNS, USE HIGHER |
| 082f8201.d | 14091211-60 04 | YSI | 14-DEC-2009 19:50 | 121409 | 1.0| | PASSED ON BOTH COLUMNS |
| 083f8301.d | 14091130-99 05 | YSI | 14-DEC-2009 20:03 | 121409 | 1.0| | CLEAN |
| 084f8401.d | 242521006 | YSI | 14-DEC-2009 20:15 | 931153 | 242521 | 5.0|EMSC | UPLOAD BOTH COLUMNS, USE HIGHER |
| 085f8501.d | 242521007 | YSI | 14-DEC-2009 20:28 | 931153 | 242521 | 5.0|EMSC | UPLOAD BOTH COLUMNS, USE HIGHER |
| 086f8601.d | 242521008 | YSI | 14-DEC-2009 20:41 | 931153 | 242521 | 5.0|EMSC | UPLOAD BOTH COLUMNS, USE HIGHER |
| 087f8701.d | 14091211-60 05 | YSI | 14-DEC-2009 20:53 | 121409 | 1.0| | PASSED ON BOTH COLUMNS |
| 088f8801.d | 14091130-99 06 | YSI | 14-DEC-2009 21:06 | 121409 | 1.0| | CLEAN |
| 089f8901.d | 242297010 | YSI | 14-DEC-2009 21:19 | 931140 | 10-782 | 1.0|LANL |

1090f9001.d	WAR091211-60 06	YS1	14-DEC-2009 21:31	1	121409	1	1.01	PASSED ON BOTH COLUMNS
1091f9101.d	WAR091130-99 07	YS1	14-DEC-2009 21:44	1	121409	1	1.01	CLEAN
1092f9201.d	1660	YS1	14-DEC-2009 21:56	1	121409	1	1.01	screen
1093f9301.d	1660	YS1	14-DEC-2009 22:09	1	121409	1	1.01	screen
1094f9401.d	1660	YS1	14-DEC-2009 22:22	1	121409	1	1.01	screen

Instrument Batch: /chem/ecd1a.i/121409.b

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016f1601.d	1202016944	YS1	19-JAN-2010 09:06	942213	10-1236	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	244714001	YS1	19-JAN-2010 09:18	942213	10-1236	1.0|LANL	UPLOAD BOTH COLUMNS, USE HIGHER
018f1801.d	1202016943	YS1	19-JAN-2010 09:31	942213	10-1238	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d	1202016942	YS1	19-JAN-2010 09:43	942213	10-1238	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	WAR100104-60 02	YS1	19-JAN-2010 09:56	1	011910	1.0|	PASSED ON BOTH COLUMNS
021f2101.d	WAR100105-99 03	YS1	19-JAN-2010 10:07	1	011910	1.0|	CLEAN
022f2201.d	1202017181	YS1	19-JAN-2010 10:17	942288	244693	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	1202017182	YS1	19-JAN-2010 10:28	942288	244693	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	244693003	YS1	19-JAN-2010 10:38	942288	244693	1.0|ORNL	UPLOAD BOTH COLUMNS, USE HIGHER
025f2501.d	1202017183	YS1	19-JAN-2010 10:51	942288	244693	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
026f2601.d	1202017184	YS1	19-JAN-2010 11:04	942288	244693	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	WAR100104-60 03	YS1	19-JAN-2010 11:16	1	011910	1.0|	PASSED ON BOTH COLUMNS
028f2801.d	WAR100105-99 04	YS1	19-JAN-2010 11:27	1	011910	1.0|	CLEAN
029f2901.d	1202017042	YS1	19-JAN-2010 11:37	942247	10-1225	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	1202017043	YS1	19-JAN-2010 11:48	942247	10-1225	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	244626015	YS1	19-JAN-2010 11:58	942247	10-1225	1.0|LANL	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	244626016	YS1	19-JAN-2010 12:11	942247	10-1225	1.0|LANL	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	244627001	YS1	19-JAN-2010 12:24	942247	10-1229	1.0|LANL	UPLOAD BOTH COLUMNS, USE HIGHER
034f3401.d	1202017044	YS1	19-JAN-2010 12:36	942247	10-1229	1.0|QC A	UPLOAD BOTH COLUMNS, USE HIGHER
035f3501.d	1202017045	YS1	19-JAN-2010 12:49	942247	10-1229	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl1.i/011910.b

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Data File	CEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	244627002	YS1	19-JAN-2010 13:01	942247	10-1229	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	244627003	YS1	19-JAN-2010 13:14	942247	10-1229	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	244627004	YS1	19-JAN-2010 13:27	942247	10-1229	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	WAR100104-60 04	YS1	19-JAN-2010 13:39		011910	1.0		PASSED ON BOTH COLUMNS
040f4001.d	WAR100105-99 05	YS1	19-JAN-2010 13:50		011910	1.0		CLEAN

|041f4101.d	|244627005	|YS1	|19-JAN-2010 14:00	|942247	|10-1229	|	|1.0|LANL	|UPLOAD BOTH COLUMNS, USE HIGHER
|042f4201.d	|244627006	|YS1	|19-JAN-2010 14:13	|942247	|10-1229	|	|1.0|LANL	|UPLOAD BOTH COLUMNS, USE HIGHER
|043f4301.d	|244627007	|YS1	|19-JAN-2010 14:26	|942247	|10-1229	|	|1.0|LANL	|UPLOAD BOTH COLUMNS, USE HIGHER
|044f4401.d	|244627008	|YS1	|19-JAN-2010 14:38	|942247	|10-1229	|	|1.0|LANL	|UPLOAD BOTH COLUMNS, USE HIGHER
|045f4501.d	|WAR100104-60 05	|YS1	|19-JAN-2010 14:51	|	|011910	|	|1.0|	| PASSED ON BOTH COLUMNS
|046f4601.d	|WAR100105-99 06	|YS1	|19-JAN-2010 15:01	|	|011910	|	|1.0|	|CLEAN
|047f4701.d	|1202018598	|YS1	|19-JAN-2010 15:12	|942835	|244768	|	|1.0|QC A	|UPLOAD BOTH COLUMNS, USE HIGHER
|048f4801.d	|1202018599	|YS1	|19-JAN-2010 15:25	|942835	|244768	|	|1.0|QC A	|UPLOAD BOTH COLUMNS, USE HIGHER
|049f4901.d	|244768001	|YS1	|19-JAN-2010 15:37	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|050f5001.d	|244768002	|YS1	|19-JAN-2010 15:50	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|051f5101.d	|1202018600	|YS1	|19-JAN-2010 16:02	|942835	|244768	|	|1.0|QC A	|UPLOAD BOTH COLUMNS, USE HIGHER
|052f5201.d	|1202018601	|YS1	|19-JAN-2010 16:15	|942835	|244768	|	|1.0|QC A	|UPLOAD BOTH COLUMNS, USE HIGHER
|053f5301.d	|244768003	|YS1	|19-JAN-2010 16:28	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|054f5401.d	|244768004	|YS1	|19-JAN-2010 16:40	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|055f5501.d	|244768005	|YS1	|19-JAN-2010 16:53	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdl.a.i/011910.b

| Data File	| GEL Lab Sample ID	| Analyst	| Injection Date/Time	| Batch	| SDG	| Dilution	| Client	| Comments
|056f5601.d	|244768006	|YS1	|19-JAN-2010 17:06	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|057f5701.d	|WAR100104-60 06	|YS1	|19-JAN-2010 17:18	|	|011910	|	|1.0|	| PASSED ON BOTH COLUMNS
|058f5801.d	|WAR100105-99 07	|YS1	|19-JAN-2010 17:31	|	|011910	|	|1.0|	|UPLOAD BOTH COLUMNS, USE HIGHER
|059f5901.d	|244768007	|YS1	|19-JAN-2010 17:43	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|060f6001.d	|244768008	|YS1	|19-JAN-2010 17:56	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|061f6101.d	|244768009	|YS1	|19-JAN-2010 18:09	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|062f6201.d	|244768010	|YS1	|19-JAN-2010 18:21	|942835	|244768	|	|1.0|WSRB	|UPLOAD BOTH COLUMNS, USE HIGHER
|063f6301.d	|WAR100104-60 07	|YS1	|19-JAN-2010 18:34	|	|011910	|	|1.0|	| PASSED ON BOTH COLUMNS
|064f6401.d	|WAR100105-99 08	|YS1	|19-JAN-2010 18:47	|	|011910	|	|1.0|	|CLEAN

|065f6501.d |MB	|YS1	|19-JAN-2010 18:59	|	|011910	|	1.0|	|LCS STARTUP FOR SJ	|
|066f6601.d |LCS1	|YS1	|19-JAN-2010 19:12	|	|011910	|	1.0|	|LCS STARTUP FOR SJ	|
|067f6701.d |LCS2	|YS1	|19-JAN-2010 19:25	|	|011910	|	1.0|	|LCS STARTUP FOR SJ	|
|068f6801.d |LCS3	|YS1	|19-JAN-2010 19:37	|	|011910	|	1.0|	|LCS STARTUP FOR SJ	|
|069f6901.d |LCS4	|YS1	|19-JAN-2010 19:50	|	|011910	|	1.0|	|LCS STARTUP FOR SJ	|
|070f7001.d |LCS5	|YS1	|19-JAN-2010 20:03	|	|011910	|	1.0|	|LCS STARTUP FOR SJ	|
|071f7101.d |SAMPLE	|YS1	|19-JAN-2010 20:15	|	|011910	|	1.0|	|LCS STARTUP FOR SJ	|
|072f7201.d |WAR100104-60 08	|YS1	|19-JAN-2010 20:28	|	|011910	|	1.0|	|PASSED ON BOTH COLUMNS	|
|073f7301.d |WAR100105-99 09	|YS1	|19-JAN-2010 20:40	|	|011910	|	1.0|	|CLEAN	|

* An error was found in the initial calibration level 2 for surrogate 4cmx and DCB. The concentration for I.cal. level 2 was changed from 20ppb to 25ppb on both columns for surrogate 4cmx and DCB in the method to correct the mistake after the data were originally processed. All files in this sequence were re-processed using the corrected method on 01/22/10, and the surrogate concentration was changed slightly. Therefore, the data in Target are slightly different from the ones documented in the original folder.

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/034b3401.d
 Lab Smp Id: 1202017044 Client Smp ID: RE46-10-10052MS
 Inj Date : 19-JAN-2010 12:36
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202017044|1|
 Misc Info : |ECD82P_1S|942247|SVA|QC A|SOIL|MS|||
 Comment :
 Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
 Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
 Als bottle: 34 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1229.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	3.39970	% 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			
2.298	2.299	-0.001	32681615	114.536	3.9 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.943	5.944	-0.001	28920941	130.400	4.5 80.00- 120.00	100.00

1 Aroclor-1016			CAS #: 12674-11-2			
3.194	3.195	-0.001	7322759	580.640	20.0 80.00- 120.00	100.00 (M)
3.277	3.278	-0.001	5123525	549.270	18.9 48.10- 88.10	69.97
3.340	3.342	-0.002	3073148	567.911	19.6 22.33- 62.33	41.97
3.568	3.569	-0.001	4054094	574.896	19.8 33.63- 73.63	55.36

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)							
3.643	3.644	-0.001	3724323	568.535	19.6	30.75- 70.75	50.86
Average of Peak Concentrations =					19.6		

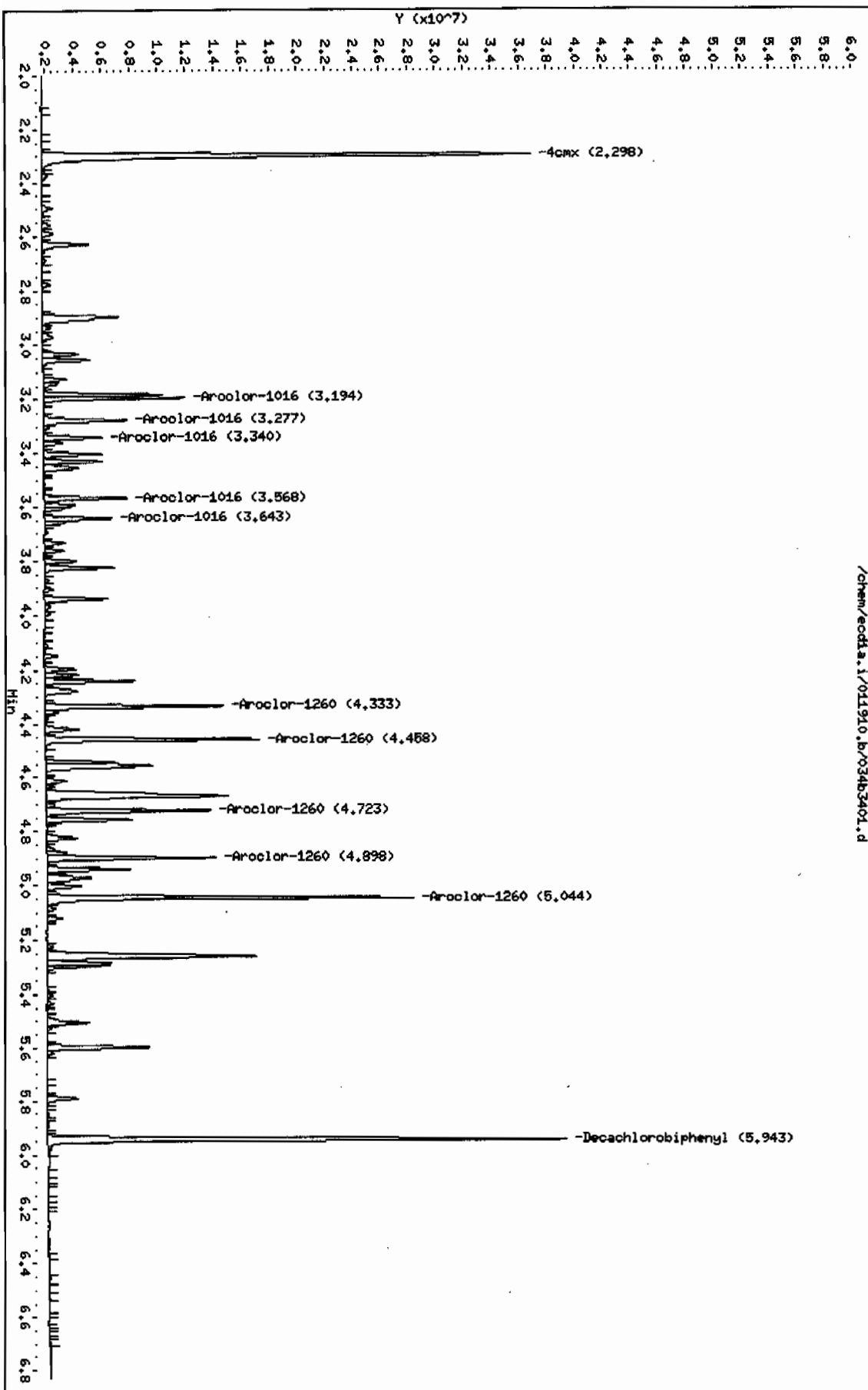
7 Aroclor-1260					CAS #: 11096-82-5		
4.333	4.335	-0.002	9007373	658.432	22.7	80.00- 120.00	100.00
4.458	4.459	-0.001	10911154	680.713	23.5	102.29- 142.29	121.14
4.723	4.725	-0.002	8412566	669.581	23.1	73.74- 113.74	93.40
4.898	4.899	-0.001	8815603	688.177	23.7	77.00- 117.00	97.87
5.044	5.045	-0.001	19619489	703.266	24.2	198.07- 238.07	217.82
Average of Peak Concentrations =					23.4		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eodla.i/011910.b/034b3401.d
Date: 19-JAN-2010 12:36
Client ID: RE46-10-10052MS
Sample Info: 11202017044111
Volume Injected (uL): 1.0
Column Phase: CLP2

Instrument: eodla.i
Operator: YS1
Column diameter: 0.25



Data File: /chem/ecdl1a.i/011910.b/034f3401.d
Report Date: 25-Jan-2010 08:37

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/034f3401.d
Lab Smp Id: 1202017044 Client Smp ID: RE46-10-10052MS
Inj Date : 19-JAN-2010 12:36
Operator : YSl Inst ID: ecd1a.i
Smp Info : |1202017044|1|
Misc Info : |ECD82P_1S|942247|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecdl1a.i/011910.b/ECD1-F-8082-121409.m
Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
Als bottle: 34 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1229.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.02000	Weight of sample extracted (g)
M	3.39970	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
CAS #: 877-09-8						
1.967	1.968	-0.001	44577180	124.698	4.3 80.00- 120.00	100.00
CAS #: 2051-24-3						
5.278	5.280	-0.002	41890784	138.707	4.8 80.00- 120.00	100.00
CAS #: 12674-11-2						
2.422	2.423	-0.001	8226600	593.256	20.4 80.00- 120.00	100.00
2.698	2.700	-0.002	6561393	649.789	22.4 58.52- 98.52	79.76
2.791	2.792	-0.001	6937398	590.064	20.3 66.05- 106.05	84.33
2.828	2.830	-0.002	4099520	621.233	21.4 31.87- 71.87	49.83

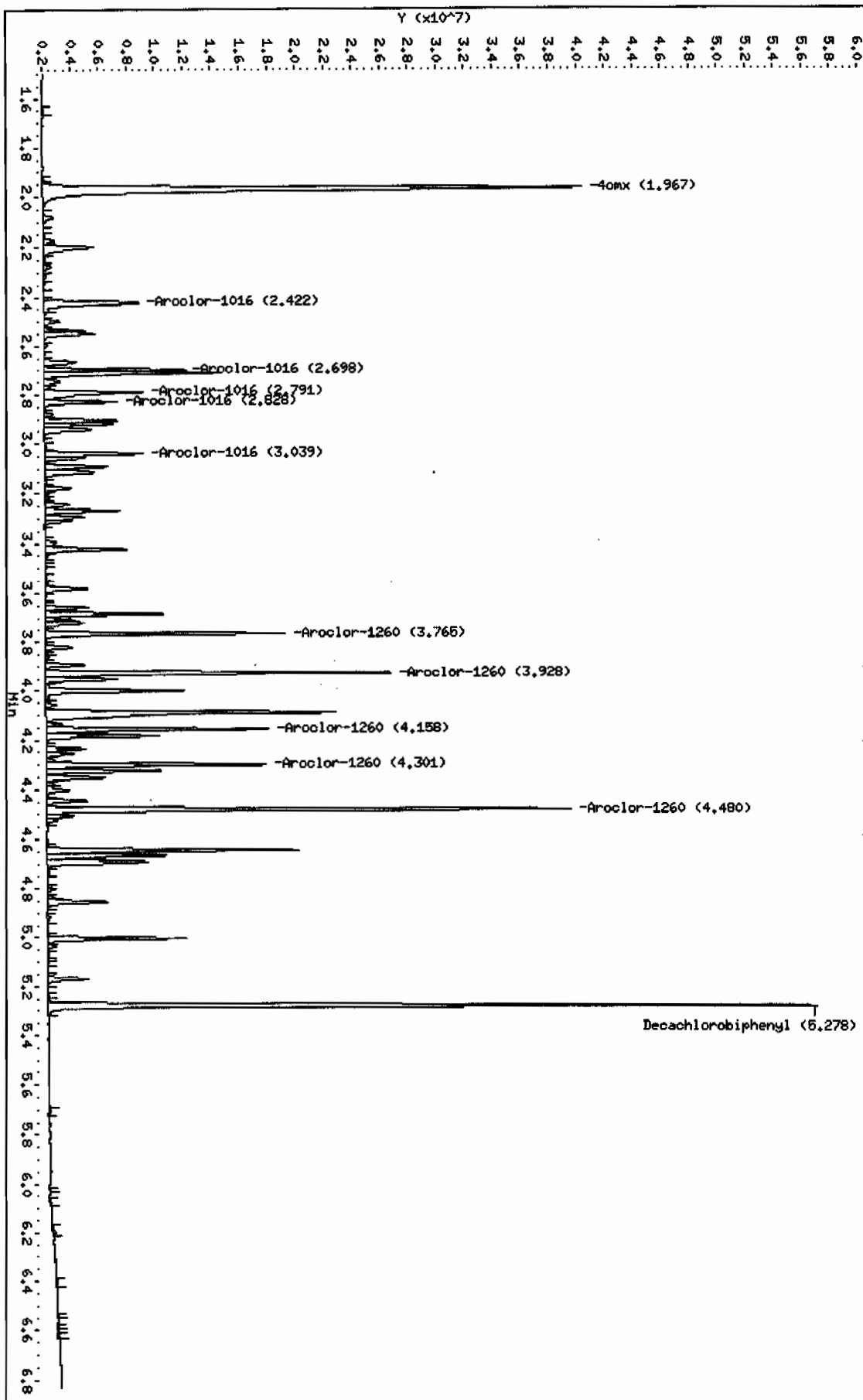
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.039	3.040	-0.001	5437085	626.869	21.6	45.88-	85.88	66.09	
Average of Peak Concentrations =					21.2				

7 Aroclor-1260					CAS #: 11096-82-5				
3.765	3.766	-0.001	12344824	736.910	25.4	80.00-	120.00	100.00	
3.928	3.930	-0.002	18836283	761.289	26.2	132.55-	172.55	152.58	
4.158	4.160	-0.002	11254165	766.249	26.4	71.21-	111.21	91.17	
4.301	4.303	-0.002	11455436	754.415	26.0	75.50-	115.50	92.80	
4.480	4.482	-0.002	27081498	788.389	27.2	198.16-	238.16	219.38	
Average of Peak Concentrations =					26.2				

Data File: /chem/ecdda.i/011910.b/034f3401.d
Date: 19-JAN-2010 12:36
Client ID: RE46-10-10082HS
Sample Info: 1120201704411
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

/chem/ecdda.i/011910.b/034f3401.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/011910.b/035b3501.d
 Lab Smp Id: 1202017045 Client Smp ID: RE46-10-10052MSD
 Inj Date : 19-JAN-2010 12:49
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202017045|1|
 Misc Info : |ECD82P_1S|942247|SVA|QC A|SOIL|MSD|
 Comment :
 Method : /chem/ecdl1a.i/011910.b/ECD1-B-8082-121409.m
 Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
 Cal Date : 14-DEC-2009 12:16 Cal File: 044b4401.d
 Als bottle: 35 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1229.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	3.39970	% 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		
2.299	2.299	0.000	33861195	118.670	4.1 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.942	5.944	-0.002	30347811	136.833	4.7 80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.195	3.195	0.000	7279819	577.235	19.9 80.00- 120.00	100.00 (M)
3.277	3.278	-0.001	5189561	556.350	19.2 48.10- 88.10	71.29
3.341	3.342	-0.001	3126322	577.738	19.9 22.33- 62.33	42.95
3.567	3.569	-0.002	4235709	600.650	20.7 33.63- 73.63	58.18

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
---	-----	-----	-----	-----	-----	-----		-----
1 Aroclor-1016 (continued)								
3.643	3.644	-0.001	3796335	579.528	20.0	30.75-	70.75	52.15
Average of Peak Concentrations =					20.0			

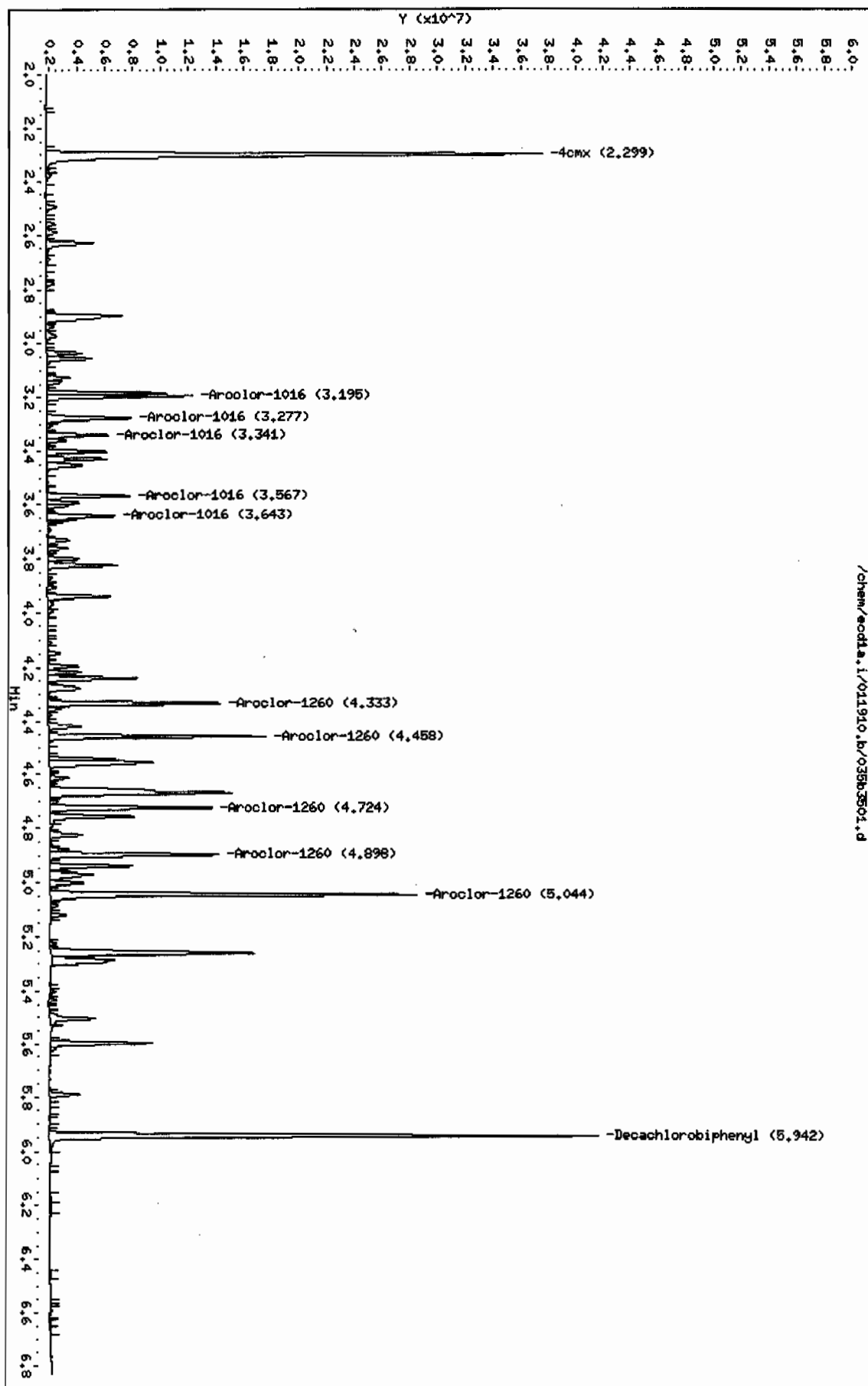
7 Aroclor-1260					CAS #: 11096-82-5			
4.333	4.335	-0.002	9060710	662.331	22.8	80.00-	120.00	100.00
4.458	4.459	-0.001	11027543	687.974	23.7	102.29-	142.29	121.71
4.724	4.725	-0.001	8354164	664.932	22.9	73.74-	113.74	92.20
4.898	4.899	-0.001	8760556	683.880	23.6	77.00-	117.00	96.69
5.044	5.045	-0.001	19743448	707.709	24.4	198.07-	238.07	217.90
Average of Peak Concentrations =					23.5			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.1/011910.b/036b3501.d
Date: 19-MN-2010 12:49
Client ID: RE46-10-10052MSD
Sample Info: 11202017045111
Volume Injected (uL): 1.0
Column Phase: CLP2

Instrument: eod1a.1
Operator: YS1
Column diameter: 0.25



Data File: /chem/ecdl1.i/011910.b/035f3501.d
Report Date: 25-Jan-2010 08:37

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/011910.b/035f3501.d
Lab Smp Id: 1202017045 Client Smp ID: RE46-10-10052MSD
Inj Date : 19-JAN-2010 12:49
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202017045|1|
Misc Info : |ECD82P_1S|942247|SVA|QC A|SOIL|MSD|1|1|
Comment :
Method : /chem/ecdl1.i/011910.b/ECD1-F-8082-121409.m
Meth Date : 25-Jan-2010 08:35 yip00818 Quant Type: ESTD
Cal Date : 14-DEC-2009 11:34 Cal File: 040f4001.d
Als bottle: 35 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1229.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	3.39970	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

ON-COL FINAL

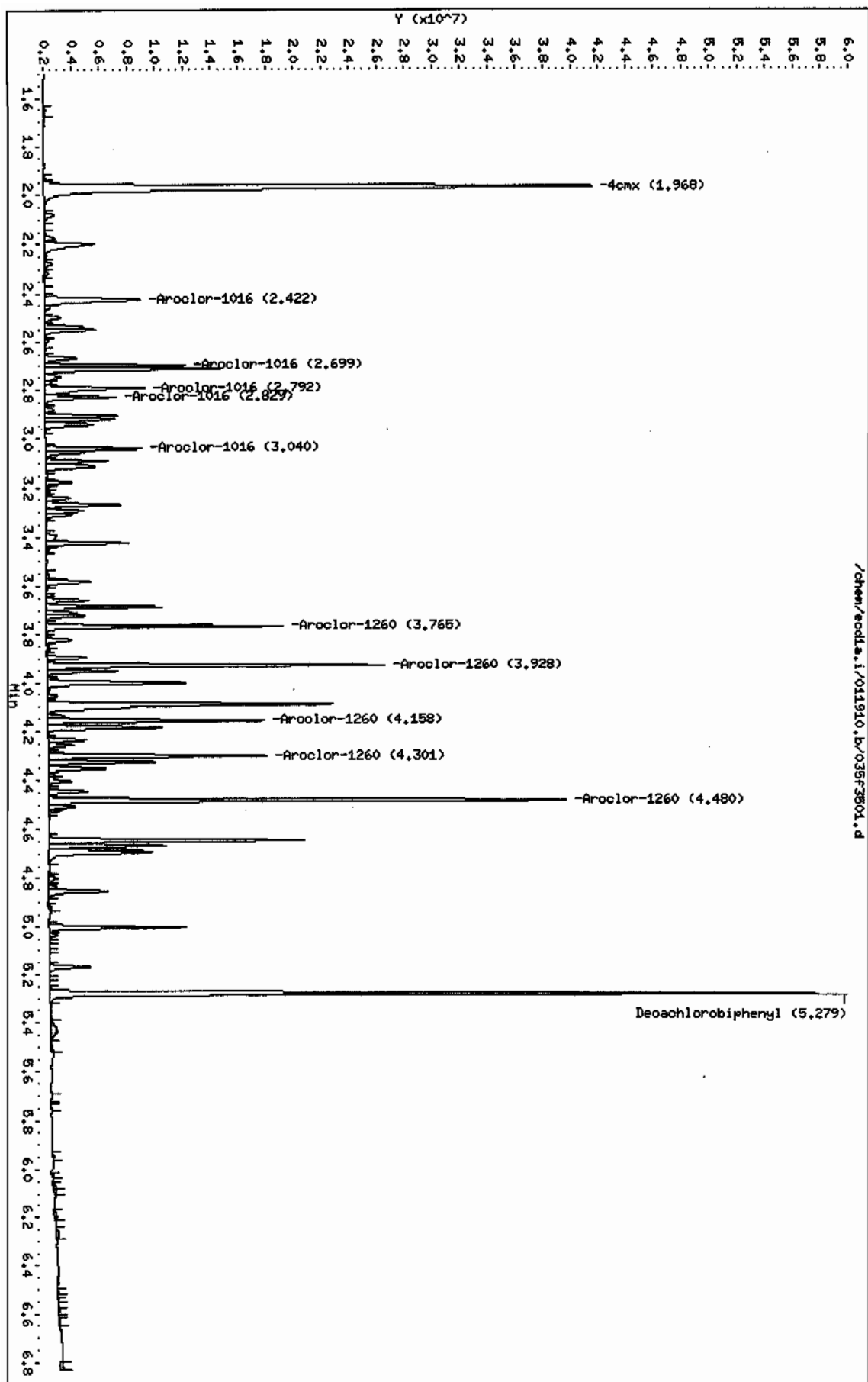
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
CAS #: 877-09-8						
1.968	1.968	0.000	46139578	129.068	4.4 80.00- 120.00	100.00
CAS #: 2051-24-3						
5.279	5.280	-0.001	44023366	145.768	5.0 80.00- 120.00	100.00
CAS #: 12674-11-2						
2.422	2.423	-0.001	8008229	577.508	19.9 80.00- 120.00	100.00
2.699	2.700	-0.001	6640907	657.664	22.7 58.52- 98.52	82.93
2.792	2.792	0.000	6980219	593.706	20.5 66.05- 106.05	87.16
2.829	2.830	-0.001	4144409	628.035	21.7 31.87- 71.87	51.75

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====		=====
1 Aroclor-1016 (continued)								
3.040	3.040	0.000	5394659	621.977	21.5	45.88-	85.88	67.36
Average of Peak Concentrations =					21.2			

7 Aroclor-1260					CAS #: 11096-82-5			
3.765	3.766	-0.001	12303318	734.432	25.3	80.00-	120.00	100.00
3.928	3.930	-0.002	18804179	759.992	26.2	132.55-	172.55	152.84
4.158	4.160	-0.002	11283365	768.237	26.5	71.21-	111.21	91.71
4.301	4.303	-0.002	11473584	755.610	26.1	75.50-	115.50	93.26
4.480	4.482	-0.002	27084986	788.490	27.2	198.16-	238.16	220.14
Average of Peak Concentrations =					26.3			

Data File: /chem/eodla.i/011910.b/035f3501.d
Date: 19-JAN-2010 12:49
Client ID: RE46-10-100824SD
Sample Info: 11202017045111
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25



Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 942245
Analyst: Robin Hunt
Method: SW846 3550B

Verified by: _____

Lab SOP: GL-OA-E-010 REV# 18
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202017042 MB	18-JAN-2010 10:10:29	30	H2SO4/KMn	1	8	1	0.03333	
1202017043 LCS	18-JAN-2010 10:10:29	30	H2SO4/KMn	1	8	1	0.03333	
244626015	18-JAN-2010 10:10:29	30.01	H2SO4/KMn	1	8	1	0.03332	
244626016	18-JAN-2010 10:10:29	30.01	H2SO4/KMn	1	8	1	0.03332	
244627001	18-JAN-2010 10:10:29	30.01	H2SO4/KMn	1	8	1	0.03332	
1202017044 MS (244627001)	18-JAN-2010 10:10:29	30.02	H2SO4/KMn	1	8	1	0.03331	
1202017045 MSD (244627001)	18-JAN-2010 10:10:29	30	H2SO4/KMn	1	8	1	0.03333	
244627002	18-JAN-2010 10:10:29	30	H2SO4/KMn	1	8	1	0.03333	
244627003	18-JAN-2010 10:10:29	30	H2SO4/KMn	1	8	1	0.03333	
244627004	18-JAN-2010 10:10:29	30	H2SO4/KMn	1	8	1	0.03333	
244627005	18-JAN-2010 10:10:29	30.02	H2SO4/KMn	1	8	1	0.03331	
244627006	18-JAN-2010 10:10:29	30.01	H2SO4/KMn	1	8	1	0.03332	
244627007	18-JAN-2010 10:10:29	30	H2SO4/KMn	1	8	1	0.03333	
244627008	18-JAN-2010 10:10:29	30.02	H2SO4/KMn	1	8	1	0.03331	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202017043	PCB Laboratory Control	WE100105-07	1	mL	Clean up Date: 01/18/2010		
MS	1202017044	PCB Laboratory Control	WE100105-07	1	mL	Clean up Initials: RWH		
MSD	1202017045	PCB Laboratory Control	WE100105-07	1	mL	Verified By: JAM		
SURR	ALL	PEST LOW LEVEL SURROGATE 200 UG/L	UEB091229-15	1	mL	Final Solvent: Hexane		
REGNT	ALL	1:1 sulfuric acid	1133264a	5	mL	Clean Up SOP: GL-OA-E-037		
REGNT	ALL	Acetone	1233927	150	mL			
REGNT	ALL	Hexane	1241300-B2	150	mL			
REGNT	ALL	5% Potassium Permanganate	B1202457-F	5	mL			
SOURC	ALL	SODIUM SULFATE	1242582	30	g			