

Sunday, January 17, 2010

Page 1 of 3
REQUEST NUMBER: 10-1301

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: 10-1301
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/18/2010

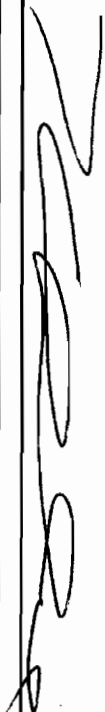
TURNAROUND/REPORT DUE: 2/17/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7219	R	1/13/2010	
	SW-846:8260B	1	RE15-10-7184	R	1/13/2010	
		1	RE15-10-7185	R	1/13/2010	
		1	RE15-10-7186	R	1/13/2010	
		1	RE15-10-7187	R	1/13/2010	
		1	RE15-10-7188	R	1/13/2010	
		1	RE15-10-7189	R	1/13/2010	
		1	RE15-10-7190	R	1/13/2010	
		1	RE15-10-7191	R	1/13/2010	

Sunday, January 17, 2010

REQUEST NUMBER: 10-1301

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8260B						
1		1	RE15-10-7192	R	1/13/2010	
1		1	RE15-10-7193	R	1/13/2010	
1		1	RE15-10-7194	R	1/13/2010	
1		1	RE15-10-7195	R	1/13/2010	
1		1	RE15-10-7196	R	1/13/2010	
1		1	RE15-10-7197	R	1/13/2010	
1		1	RE15-10-7219	R	1/13/2010	
1		1	RE15-10-7234	S	1/13/2010	
2		2	RE15-10-7234	S	1/13/2010	
SW-846:8270C						
1		1	RE15-10-7184	R	1/13/2010	
1		1	RE15-10-7185	R	1/13/2010	
1		1	RE15-10-7186	R	1/13/2010	
1		1	RE15-10-7187	R	1/13/2010	
1		1	RE15-10-7188	R	1/13/2010	
1		1	RE15-10-7189	R	1/13/2010	
1		1	RE15-10-7190	R	1/13/2010	
1		1	RE15-10-7191	R	1/13/2010	
1		1	RE15-10-7192	R	1/13/2010	
1		1	RE15-10-7193	R	1/13/2010	
1		1	RE15-10-7194	R	1/13/2010	
1		1	RE15-10-7195	R	1/13/2010	
1		1	RE15-10-7196	R	1/13/2010	
1		1	RE15-10-7197	R	1/13/2010	
1		1	RE15-10-7219	R	1/13/2010	
SW-846:8321A_MOD						
1		1	RE15-10-7184	R	1/13/2010	
1		1	RE15-10-7185	R	1/13/2010	
1		1	RE15-10-7186	R	1/13/2010	
1		1	RE15-10-7187	R	1/13/2010	

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REQUEST NUMBER: 10-1301

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8321A_MOD						
1		1	RE15-10-7188	R	1/13/2010	
1		1	RE15-10-7189	R	1/13/2010	
1		1	RE15-10-7190	R	1/13/2010	
1		1	RE15-10-7191	R	1/13/2010	
1		1	RE15-10-7192	R	1/13/2010	
1		1	RE15-10-7193	R	1/13/2010	
1		1	RE15-10-7194	R	1/13/2010	
1		1	RE15-10-7195	R	1/13/2010	
1		1	RE15-10-7196	R	1/13/2010	
1		1	RE15-10-7197	R	1/13/2010	
1		1	RE15-10-7219	R	1/13/2010	

Final Page of REQUEST NUMBER 10-1301

Sunday, January 17, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1301C

LOS ALAMOS

REQUEST NUMBER: 10-1301

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/17/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7194	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7194	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7186	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7186	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7191	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7191	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7195	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7195	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7196	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7196	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7197	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7197	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7193	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7193	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7184	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7184	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7185	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7185	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7189	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7189	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7187	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7187	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7188	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7188	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7190	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7190	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7192	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7192	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7219	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7219	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7234	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7234	2	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

W. Lee

4/14/10

3:00

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

10 - 1301

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7184

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:		QBT3	
TIME COLLECTED(HH:MM)		1133		SUB-MEDIA:		TUFF 1	
PRS ID:	15-014(h)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610513	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	0	0.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	0.7		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	SED		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Yes	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		H3	500 ML POLY	Ice	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 2 liter RC 12/17/09	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC:

Brown slightly moist silt/clay

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h-21, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpmBeta/Gamma \leq 2460 dpm

HE neg

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

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/17/10 7:51	RECEIVED BY (Printed Name) J. R. Marin (Signature) J. R. Marin	Date/Time 1/14/10 7:51
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7185

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:	OBT3		A11h
TIME COLLECTED (HH:MM)		1144		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-014(h)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610513			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Regular	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY Liter Re 12/17/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sandy silt, dry, few tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h-21, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

alpha \leq 33 dpm
 beta/gamma \leq 2440 dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/14/10 7:51	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 1/14/10 7:57
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7186

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA: QBT3		SED	
TIME COLLECTED (HH:MM)		7:45 1345		SUB-MEDIA: TUFF 1		NA	
PRS ID: 15-014(h)		ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID: 15-610514		↓		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	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY 2-liter RC 12/17/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Wet sand, few roots and rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h-15 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha ≤ 33 dpm
Beta/Gamma ≤ 2070 dpmPID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) Jen R. Marin	Date/Time 1/14/10 7:52	RECEIVED BY (Printed Name) Sherri Greenwood (Signature) Sherri Greenwood	Date/Time 1/14/10 7:52
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7187

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:	QBT3		Alh
TIME COLLECTED (HH:MM)	734 11/13/10	1455 1355		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-014(h)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610514			FIELD QC TYPE:	NA		
LOCATION TYPE:	GENERIC			FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY Liter 20 12/17/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown silty sand,
some roots and rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h-15 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 55 dpm
Beta/Gamma \leq 2390 dpmPID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MAARIN	1/14/10	(Printed Name) Sherri Sherwood	1/14/10
(Signature) Jan R. Marin	7:52	(Signature) Sherri Sherwood	7:52
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7188

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/13/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		1344	SUB-MEDIA:		TUFF 1
PRS ID:	15-014(h)	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610515	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	0.0 ft	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	0.8 ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	SED	EXCAVATED: YES (NO) NA		
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES (NO) NA		
BOREHOLE: YES (NO) NA		BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		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:

Brown sandy silt

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h - 22 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 33 dpm
 B/g ≤ 2280 dpm

HE Negative
 PID Ambient 0.0
 Reading 0.0 ppm

COLLECTED BY (PRINT)

TL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) <i>TL McFarland</i>	Date/Time 1/14/10 7:52	RECEIVED BY (Printed Name) <i>Joseph S.</i> (Signature) <i>Joseph S.</i>	Date/Time 1/14/10 7:52
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7189

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA: QBT3		Allh	
TIME COLLECTED (HH:MM)		1403		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-014(h)	ok		SAMPLE TECH CODE: HA		ok	
LOCATION ID:	15-610515	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	1.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	2.2		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY Liter RC 12/17/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Pinkish gray sandy silt, some roots

SAMPLE COMMENTS: NA

LOCATION DESC: 14h-22 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 38 dpm
Beta/Gamma ≤ 2070 dpmPID $\frac{\text{Ambient}}{\text{Reading}} = \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

JL McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/14/10 7:53	RECEIVED BY (Printed Name) Julie Math (Signature) [Signature]	Date/Time 1/14/10 753
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7190

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/13/2010	MEDIA:		QBT3
TIME COLLECTED (HH:MM)		1424	SUB-MEDIA:		TUFF 1
PRS ID:	15-014(h)	ok	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610516	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	0.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	0.7	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	SED	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:		NA	COMPOSITE TIME INTERVAL:		NA
			WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:		NA
			BOREHOLE DIRECTION:		NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY Liter RC 12/8/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: moist silty clay with rocks and roots

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-23, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 22 dpm
Beta/Gamma \leq 1962 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) MARIN (Signature) J. B. Marin	Date/Time 1/14/10 7:54	RECEIVED BY (Printed Name) M. B. Marin (Signature) M. B. Marin	Date/Time 1/14/10 7:54
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7191

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/13/2010	MEDIA:		OBT3
TIME COLLECTED (HH:MM)		1450	SUB-MEDIA:		TUFF 1
PRS ID:	15-014(h)	OK	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610516	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	1.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	SED	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAT POLY 4 liter LC 12/17/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Brown sand, slightly moist

FR: RE15-10-7228

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h-23, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 22 dpm
Beta/Gamma = 2270 dpmPID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

COLLECTED BY (PRINT)

T. L. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MARIN	1/14/10	(Printed Name) Sherril Shewood	1/14/10
(Signature) R. Marin	7:55	(Signature) Sherril Shewood	7:55
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7192

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:	QBT3		SED
TIME COLLECTED (HH:MM)		1424		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-014(h)	ok		SAMPLE TECH CODE:	HA		ok
LOCATION ID:	15-610517			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		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Yes	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		H3	500 ML POLY	Ice	Yes	
1		Met+U+CLO4+C N	1 GAL POLY Liter 20 12/17/09	Ice-	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: dark brown moist soil, with rocks

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-26 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE negative

Alpha < 11 dpm
Beta/Gamma < 1990 dpm

PID Ambient Reading 0.0 ppm

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R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/14/10 7:55	RECEIVED BY (Printed Name) Sheri Sherwood (Signature) Sheri Sherwood	Date/Time 1/14/10 7:55
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7193

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/13/2010	MEDIA:		OBT3
TIME COLLECTED (HH:MM)		1450	SUB-MEDIA:		TUFF 1
PRS ID:	15-014(h)	ok	SAMPLE TECH CODE:		HA
LOCATION ID:	15-610517	↓	FIELD QC TYPE:		NA
LOCATION TYPE:	GENERIC	↓	FIELD PREP:		NA
TOP DEPTH:	0	1.0	SAMPLE USAGE:		INV
BOTTOM DEPTH:	0	2.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	SED	EXCAVATED: YES/NO/NA		NO/NA
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA		NO/NA
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA		NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Yes	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		H3	500 ML POLY	Ice	Yes	
1		Met+U+CLO4+C N	1 LITER POLY 4 liter Le 12/17/09	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown sand, some wood and rocks and ^{73m 1/13/10} ~~slaty~~ moist slightly

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-26 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leftarrow 44 dpm
Beta/Gamma \leftarrow 210 dpm

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

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R. Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) MARIA	1/14/10	(Printed Name) Sherril Sherwood	1/14/10
(Signature) [Signature]	7:55	(Signature) [Signature]	7:55
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7194

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:	QBT3		SED
TIME COLLECTED (HH:MM)		1540		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610518	↓		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	SED		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Yes	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		H3	500 ML POLY	Ice	Yes	
1		Met+U+CLO4+C N	1 GAE POLY Liter XC 12/11/09	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Light brown Silty clay with rocks, some moisture

SAMPLE COMMENTS: NA

LOCATION DESC: 14h-24 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 33 dpm
Beta/Gamma \leq 280 dpm

PID Ambient 0.0
Reading 0.0 ppm

HE NEG

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R. Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) MARIN (Signature) Gen R. Marin	Date/Time 4/14/10 7:55	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 4/14/10 7:55
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7195

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:	OBT3		ALLH
TIME COLLECTED (HH:MM)		110100		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610518	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	✓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Yes	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		H3	500 ML POLY	Ice	Yes	
1		Met+U+CLO4+C N	1 GAL POLY Liter LC 12/17/09	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Light brown silty soil, with few rocks

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-24 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 38 dpm
Beta/Gamma \leq 2360 dpm

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

COLLECTED BY (PRINT)

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY

(Printed Name)

MARIN

(Signature)

John R. Marin

Date/Time

1/14/10

7:56

RECEIVED BY

(Printed Name)

Missy Martin

(Signature)

Missy Martin

Date/Time

1/14/10

756

RELINQUISHED BY

(Printed Name)

Date/Time

RECEIVED BY

(Printed Name)

Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7196

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:		OBT3	
TIME COLLECTED (HH:MM)		1553		SUB-MEDIA:		TUFF 1	
PRS ID:	15-014(h)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610519	↓		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		NO/NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NO/NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Yes	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		H3	500 ML POLY	Ice	Yes	
1		Met+U+CLO4+C N	1 GAL POLY 4 liter 20 12/11/09	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: moist sandy clay with some roots + rocks

SAMPLE COMMENTS: NA

FR RE15-10-7227

LOCATION DESC: 14h-25 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 dpm
Beta/Gamma ≤ 2150 dpm

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

COLLECTED BY (PRINT)

JL McFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/14/10 7:56	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/14/10 7:56
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7197

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1617		SUB-MEDIA:		TUFF 1	
PRS ID:	15-014(h)	ok		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610519	↓		FIELD QC TYPE:		NA	
LOCATION TYPE:	GENERIC	↓		FIELD PREP:		NA	
TOP DEPTH:	0	1.0		SAMPLE USAGE:		INV	
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	SED		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		8270C+NMED Exp	500 ML AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+C N	1 GAL POLY Liter LC 12/17/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Grayish brown silty sand with rocks

SAMPLE COMMENTS: NA

LOCATION DESC: 14h-25 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 33 dpm
Beta/Gamma \leq 2710 dpm

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

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT)

J Marin

RELINQUISHED BY (Printed Name) MARIN (Signature) J. R. Marin	Date/Time 1/14/10 7:56	RECEIVED BY (Printed Name) J. R. Marin (Signature) J. R. Marin	Date/Time 1/14/10 7:56
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7219

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/13/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1314		SUB-MEDIA:		TUFF 1	
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	UNK	15-610506		FIELD QC TYPE:		ED	
LOCATION TYPE:	GENERIC	OK		FIELD PREP:		NA	
TOP DEPTH:	0	0.0		SAMPLE USAGE:		QC	
BOTTOM DEPTH:	0	0.7		SCREEN/PORT DESC:		NA	
FIELD MATRIX:	R	SED		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Y	
1		8260B	125 ML SEPTUM AMBER GLASS	Ice	Y	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+ClO4+C N	1 GAE POLY Liter RC 12/17/09	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7170

Brown clayey silt, roots and rocks

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h-14 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 38 dpm
Beta/Gamma \leq 2,300 dpm

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

COLLECTED BY (PRINT)

T. McFarland

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY (Printed Name) MARIN (Signature) Jan R. Marin	Date/Time 1/14/10 7:56	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 1/14/10 7:56
RELINQUISHED BY (Printed Name)	Date/Time	RECEIVED BY (Printed Name)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

EVENT NAME: 4th Qtr. FY09 - AOC 15-014(h) - Threemile Canyon

SAMPLE ID: RE15-10-7234

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/13/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	0820	SUB-MEDIA:	OTHER
PRS ID: 15-014(h)	ok	SAMPLE TECH CODE:	DC
LOCATION ID: UNK	15-610503	FIELD QC TYPE:	FTB
LOCATION TYPE: GENERIC	ok	FIELD PREP:	NA
TOP DEPTH: 0		SAMPLE USAGE:	QC
BOTTOM DEPTH: 0		SCREEN/PORT DESC:	NA
FIELD MATRIX: S		EXCAVATED: YES/NO/NA	
COMPOSITE TYPE: NA	COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA	BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1 2 01/13/10	Normal	8260B Trip Blank	40 ML SEPTUM AMBER GLASS	Ice	Y	

SAMPLE DESC: QC Sample of RE15-10-7164

SAMPLE COMMENTS:

LOCATION DESC: FTB

FIELD SCREENING/MEASUREMENT RESULTS:

NA

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TL McFarlane

REVIEWED BY (PRINT)

R. Saunders

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	1/14/10	(Printed Name) Jennifer Herwood	1/14/10
(Signature) Jon R. Marin	7:49	(Signature) Jennifer Herwood	7:49
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	



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

ARS Sample Delivery Group:

ARS1-10-00080

Request or PO Number: N/A

Analysis Description:

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

Date Received: 1/18/2010

Analysis Test Method:

GPC-A-003

Report Date:

01/19/10 16:26

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	D/C	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracker/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00080-001	RE15-10-7194	GROSS ALPHA	10.282	5.352	12.726	3.515	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-001	RE15-10-7194	GROSS BETA	31.901	5.663	7.940	3.429	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-002	RE15-10-7191	GROSS ALPHA	3.239	3.681	13.415	3.921	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-002	RE15-10-7191	GROSS BETA	43.305	7.250	10.425	4.659	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-003	RE15-10-7193	GROSS ALPHA	4.142	4.278	15.360	4.852	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-003	RE15-10-7193	GROSS BETA	21.282	4.392	7.727	3.319	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-004	RE15-10-7185	GROSS ALPHA	3.205	3.434	12.513	3.638	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-004	RE15-10-7185	GROSS BETA	24.946	4.831	7.892	3.401	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-005	RE15-10-7164	GROSS ALPHA	9.323	6.240	19.655	7.082	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-005	RE15-10-7164	GROSS BETA	24.173	4.807	8.109	3.509	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-006	RE15-10-7176	GROSS ALPHA	18.082	6.907	14.806	4.849	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-006	RE15-10-7176	GROSS BETA	33.943	5.884	7.667	3.305	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-007	RE15-10-7189	GROSS ALPHA	6.106	4.928	16.484	5.574	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-007	RE15-10-7189	GROSS BETA	30.054	5.415	7.803	3.362	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-008	RE15-10-7178	GROSS ALPHA	8.750	5.174	14.931	4.890	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-008	RE15-10-7178	GROSS BETA	22.573	4.572	7.856	3.392	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-009	RE15-10-7180	GROSS ALPHA	7.730	4.908	13.984	4.374	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-009	RE15-10-7180	GROSS BETA	26.362	4.938	7.500	3.220	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-010	RE15-10-7190	GROSS ALPHA	2.514	3.678	14.472	4.446	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-010	RE15-10-7190	GROSS BETA	27.490	5.115	7.856	3.383	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-011	RE15-10-7171	GROSS ALPHA	8.231	5.178	14.782	4.624	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-011	RE15-10-7171	GROSS BETA	27.433	5.095	7.681	3.306	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-012	RE15-10-7179	GROSS ALPHA	6.394	4.565	13.922	4.277	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-012	RE15-10-7179	GROSS BETA	21.137	4.359	7.630	3.279	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-013	RE15-10-7187	GROSS ALPHA	13.607	6.627	17.105	5.837	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-013	RE15-10-7187	GROSS BETA	23.718	4.751	7.966	3.438	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-014	RE15-10-7177	GROSS ALPHA	9.251	6.129	18.700	6.678	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-014	RE15-10-7177	GROSS BETA	35.043	6.025	7.973	3.446	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-015	RE15-10-7169	GROSS ALPHA	3.499	4.270	15.927	5.150	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-015	RE15-10-7169	GROSS BETA	33.690	5.860	7.905	3.400	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-016	RE15-10-7183	GROSS ALPHA	9.705	5.669	15.672	5.040	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-016	RE15-10-7183	GROSS BETA	30.595	5.500	7.816	3.365	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-017	RE15-10-7184	GROSS ALPHA	11.407	5.490	13.068	3.820	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-017	RE15-10-7184	GROSS BETA	26.505	5.816	12.972	5.971	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-018	RE15-10-7195	GROSS ALPHA	1.718	2.971	13.110	3.745	U	pc/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-018	RE15-10-7195	GROSS BETA	22.838	6.182	16.453	7.706	U	pc/g	1/19/2010	WS	N/A	SO	



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

ARS Sample Delivery Group: ARS1-10-00080

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

Analysis Test Method: GPC-A-003

Request or PO Number: N/A

Date Received: 1/18/2010


Report Date: 01/19/10 16:26

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Trace/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00080-019	RE15-10-7192	GROSS ALPHA	10.146	5.061	11.752	3.169	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-019	RE15-10-7192	GROSS BETA	32.055	5.901	9.970	4.463	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-020	RE15-10-7197	GROSS ALPHA	0.675	2.960	14.485	4.450	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-020	RE15-10-7197	GROSS BETA	25.397	5.017	9.164	4.054	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-021	RE15-10-7186	GROSS ALPHA	0.695	3.049	14.920	4.583	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-021	RE15-10-7186	GROSS BETA	20.433	4.331	8.300	3.624	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-022	RE15-10-7181	GROSS ALPHA	1.745	3.290	13.411	4.223	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-022	RE15-10-7181	GROSS BETA	25.352	5.056	9.574	4.274	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-023	RE15-10-7188	GROSS ALPHA	1.298	2.545	11.013	3.146	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-023	RE15-10-7188	GROSS BETA	15.296	4.266	10.889	4.928	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-024	RE15-10-7219	GROSS ALPHA	18.854	6.806	12.193	3.483	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-024	RE15-10-7219	GROSS BETA	28.605	5.324	8.267	3.613	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-025	RE15-10-7168	GROSS ALPHA	7.504	4.349	11.450	3.162	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-025	RE15-10-7168	GROSS BETA	27.525	5.209	8.864	3.924	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-026	RE15-10-7182	GROSS ALPHA	8.957	5.340	14.470	4.392	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-026	RE15-10-7182	GROSS BETA	32.054	5.730	8.511	3.719	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-027	RE15-10-7165	GROSS ALPHA	5.247	4.406	14.924	4.529	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-027	RE15-10-7165	GROSS BETA	19.960	4.508	9.335	4.118	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-028	RE15-10-7170	GROSS ALPHA	5.164	3.827	11.657	3.310	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-028	RE15-10-7170	GROSS BETA	30.795	5.571	8.798	3.883	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-029	RE15-10-7167	GROSS ALPHA	2.741	3.333	12.971	3.920	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-029	RE15-10-7167	GROSS BETA	21.014	4.646	9.805	4.383	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-030	RE15-10-7166	GROSS ALPHA	2.877	3.807	15.229	4.678	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-030	RE15-10-7166	GROSS BETA	20.686	4.376	8.311	3.629	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-031	RE15-10-7196	GROSS ALPHA	-0.060	2.573	12.704	4.000	U	PC/g	1/19/2010	WS	N/A	SO	
ARS1-10-00080-031	RE15-10-7196	GROSS BETA	23.161	4.808	9.562	4.269	U	PC/g	1/19/2010	WS	N/A	SO	

NOTES:

Project Manager 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.

DATA VALIDATION COVER SHEET	
5114-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.

REQUEST NUMBER: 10-1301 VALIDATION DATE: 02/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

☒ OTHER (DESCRIBE): VOCs

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

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

- The ICV %Ds were >20% for dichlorodifluoromethane, acetone, 2-butanone, 2-hexanone and trichlorotrifluoroethane. For the CCV associated with all samples except RE15-10-7196, -7185 and -7189 the %Ds were >20% for n-propylbenzene; 2-chlorotoluene; 4-chlorotoluene; 1,3,5-trimethylbenzene; tert-butylbenzene; 1,2,4-trimethylbenzene; sec-butylbenzene; 4-isopropyltoluene; 1,4-dichlorobenzene and n-butylbenzene. Also, for the CCV associated with samples -7196, -7185 and -7189, the %D was > 20% for dichlorodifluoromethane. The acetone and 4-isopropyltoluene results for sample -7190 and the acetone result for sample -7324 were detects and, thus, were qualified J, V7c. The remaining associated sample results were NDs and, thus, were qualified UJ, V7c.
- The surrogate %Rs were > the laboratory UAL for 4-bromofluorobenzene in samples -7184, -7187, -7188, -7190 and -7219. The associated results that were detects were qualified J+, V3b and those that were NDs were not qualified.
- The MS/MSD %Rs and/or RPDs for several compounds did not meet laboratory acceptance criteria. Since the analysis of an MS or MSD was not required for VOCs, no sample data were qualified as a result.

Reviewed by: Mary DonovanLevel: IDate: 02/25/10

VALIDATOR'S SIGNATURE: _____

Mr. Peter Steves

DATE: 02/25/10

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST


5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist


Records Use only




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

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

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

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

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

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 12:02	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v142.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.411	1.21 UJ,V7c
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21
67-64-1	Acetone	U	6.04	ug/kg	2.00	6.04 UJ,V7c
75-35-4	1,1-Dichloroethylen	U	1.21	ug/kg	0.362	1.21
74-88-4	Iodomethane	U	6.04	ug/kg	1.93	6.04
75-09-2	Methylene chloride	U	6.04	ug/kg	2.42	6.04
75-15-0	Carbon disulfide	U	6.04	ug/kg	1.51	6.04
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21
78-93-3	2-Butanone	U	6.04	ug/kg	1.81	6.04 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.399	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.399	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21
108-10-1	4-Methyl-2-pentanone	U	6.04	ug/kg	1.51	6.04
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21
591-78-6	2-Hexanone	U	6.04	ug/kg	1.81	6.04 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21
127-18-4	Tetrachloroethylene	J	0.905	ug/kg	0.362	1.21 J+,V3b
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099008

Client ID: RE15-10-7184
 Batch ID: 945254
 Run Date: 01/26/2010 12:02
 Prep Date: 01/25/2010 22:59
 Data File: 4v142.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 17.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	J	0.460	ug/kg	0.362	2.42 J+,V3b
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21 UJ,V7c
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21 UJ,V7c
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.04	ug/kg	1.93	6.04 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	4.5	8.12	ug/kg		J
	Unknown Siloxane	16.79	19	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099009	Date Received: 01/20/2010 08:45	%Moisture: 9.4
Client ID: RE15-10-7185	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/27/2010 03:15	Inst: VOA4.I	Dilution: 1
Prep Date: 01/26/2010 21:22	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v222.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10 UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.453	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099009

Client ID: RE15-10-7185
 Batch ID: 945254
 Run Date: 01/27/2010 03:15
 Prep Date: 01/26/2010 21:22
 Data File: 4v222.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.635	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52 UJ,V7c
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	4.49	6.06	ug/kg		J
	Unknown Siloxane	14.83	46.3	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099002	Date Received: 01/20/2010 08:45	%Moisture: 18.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7186	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 09:17	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:53	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v136.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.418	1.23 UJ,V7c
74-87-3	Chloromethane	U	1.23	ug/kg	0.368	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.368	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.368	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.368	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.368	1.23
67-64-1	Acetone	U	6.14	ug/kg	2.04	6.14 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
74-88-4	Iodomethane	U	6.14	ug/kg	1.97	6.14
75-09-2	Methylene chloride	U	6.14	ug/kg	2.46	6.14
75-15-0	Carbon disulfide	U	6.14	ug/kg	1.54	6.14
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.368	1.23
78-93-3	2-Butanone	U	6.14	ug/kg	1.84	6.14 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.368	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.368	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.405	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.368	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.368	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.368	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.368	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.368	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.405	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.368	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.368	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.368	1.23
108-10-1	4-Methyl-2-pentanone	U	6.14	ug/kg	1.54	6.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.368	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.368	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.368	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.368	1.23
591-78-6	2-Hexanone	U	6.14	ug/kg	1.84	6.14 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.368	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.368	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.368	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.368	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.368	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 18.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7186
 Batch ID: 945254
 Run Date: 01/26/2010 09:17
 Prep Date: 01/25/2010 22:53
 Data File: 4v136.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.368	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.368	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.368	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.368	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.368	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.368	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.368	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.368	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.368	1.23 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.368	1.23 UJ,V7c
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.368	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.368	1.23 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.368	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.368	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.368	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.368	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.368	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23 UJ,V7c
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.368	1.23 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.368	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.14	ug/kg	1.97	6.14 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.368	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.8	11	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	%Moisture: 9.3
Client ID: RE15-10-7187	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 13:24	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 23:02	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v145.d	Allquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10 UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.76	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.65	5.52 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.65	5.52 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.505	ug/kg	0.331	1.10 J+,V3b
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099011

Client ID: RE15-10-7187
 Batch ID: 945254
 Run Date: 01/26/2010 13:24
 Prep Date: 01/25/2010 23:02
 Data File: 4v145.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10 UJ,V7c
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10 UJ,V7c
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.76	5.52 UJ,V7c
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	6.29	ug/kg		J
	Unknown Siloxane	14.83	80.9	ug/kg		J
13466-78-9	3-Carene	15.8	9.02	ug/kg	96	NJ
	Unknown Siloxane	16.79	23.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 12.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7188
 Batch ID: 945254
 Run Date: 01/26/2010 13:51
 Prep Date: 01/25/2010 23:03
 Data File: 4v146.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14 UJ,V7c
74-87-3	Chloromethane	U	1.14	ug/kg	0.343	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.343	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.343	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.343	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.343	1.14
67-64-1	Acetone	U	5.71	ug/kg	1.90	5.71 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
74-88-4	Iodomethane	U	5.71	ug/kg	1.83	5.71
75-09-2	Methylene chloride	U	5.71	ug/kg	2.28	5.71
75-15-0	Carbon disulfide	U	5.71	ug/kg	1.43	5.71
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.343	1.14
78-93-3	2-Butanone	U	5.71	ug/kg	1.71	5.71 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.343	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.377	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.343	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.343	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.343	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.343	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.343	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.377	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.343	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.343	1.14
108-10-1	4-Methyl-2-pentanone	U	5.71	ug/kg	1.43	5.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.343	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.343	1.14
591-78-6	2-Hexanone	U	5.71	ug/kg	1.71	5.71 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.343	1.14
127-18-4	Tetrachloroethylene	J	0.733	ug/kg	0.343	1.14 J+,V3b
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.343	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.343	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.343	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099012	Date Received: 01/20/2010 08:45	%Moisture: 12.4
Client ID: RE15-10-7188	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 13:51	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 23:03	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v146.d	Allquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	J	0.760	ug/kg	0.343	1.14 J+,V3b
179601-23-1	m,p-Xylenes	J	0.962	ug/kg	0.343	2.28 J+,V3b
95-47-6	o-Xylene	U	1.14	ug/kg	0.343	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.343	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.343	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.343	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.343	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.343	1.14 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.343	1.14 UJ,V7c
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.343	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.343	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.343	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.343	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14 UJ,V7c
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.343	1.14 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.343	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.71	ug/kg	1.83	5.71 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	4.5	7.53	ug/kg		J
	Unknown Siloxane	14.83	72.7	ug/kg		J
	Unknown Siloxane	16.79	19.1	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10 UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.51	ug/kg	1.83	5.51 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.51	ug/kg	1.76	5.51
75-09-2	Methylene chloride	U	5.51	ug/kg	2.20	5.51
75-15-0	Carbon disulfide	U	5.51	ug/kg	1.38	5.51
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.51	ug/kg	1.65	5.51 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	J	0.687	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.51	ug/kg	1.38	5.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene		1.53	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.51	ug/kg	1.65	5.51 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.578	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Allquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7189
 Batch ID: 945254
 Run Date: 01/27/2010 03:42
 Prep Date: 01/26/2010 21:23
 Data File: 4v223.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.761	ug/kg	0.331	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.51	ug/kg	1.76	5.51 UJ,V7c
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	5.61	ug/kg		J
	Unknown Siloxane	14.83	107	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099013

Date Collected: 01/13/2010 12:00

Matrix: R

Date Received: 01/20/2010 08:45

%Moisture: 28.3

Client: LANL010

Project: LANL01004

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Inst: VOA4.I

Dilution: 1

Client ID: RE15-10-7190

Batch ID: 945254

Run Date: 01/26/2010 14:18

Analyst: ACJ

Purge Vol: 5 mL

Prep Date: 01/25/2010 23:04

Allquot: 5 g

Final Volume: 5 mL

Data File: 4v147.d

Column: RTX-VOLATILES

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.40	ug/kg	0.474	1.40 UJ,V7c
74-87-3	Chloromethane	U	1.40	ug/kg	0.419	1.40
75-01-4	Vinyl chloride	U	1.40	ug/kg	0.419	1.40
74-83-9	Bromomethane	U	1.40	ug/kg	0.419	1.40
75-00-3	Chloroethane	U	1.40	ug/kg	0.419	1.40
75-69-4	Trichlorofluoromethane	U	1.40	ug/kg	0.419	1.40
67-64-1	Acetone	J	3.70	ug/kg	2.32	6.98 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
74-88-4	Iodomethane	U	6.98	ug/kg	2.23	6.98
75-09-2	Methylene chloride		9.41	ug/kg	2.79	6.98 J+,V3b
75-15-0	Carbon disulfide	U	6.98	ug/kg	1.74	6.98
156-60-5	trans-1,2-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
75-34-3	1,1-Dichloroethane	U	1.40	ug/kg	0.419	1.40
78-93-3	2-Butanone	U	6.98	ug/kg	2.09	6.98 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
594-20-7	2,2-Dichloropropane	U	1.40	ug/kg	0.419	1.40
67-66-3	Chloroform	U	1.40	ug/kg	0.419	1.40
74-97-5	Bromochloromethane	U	1.40	ug/kg	0.460	1.40
71-55-6	1,1,1-Trichloroethane	U	1.40	ug/kg	0.419	1.40
563-58-6	1,1-Dichloropropene	U	1.40	ug/kg	0.419	1.40
56-23-5	Carbon tetrachloride	U	1.40	ug/kg	0.419	1.40
107-06-2	1,2-Dichloroethane	U	1.40	ug/kg	0.419	1.40
71-43-2	Benzene	U	1.40	ug/kg	0.419	1.40
79-01-6	Trichloroethylene	U	1.40	ug/kg	0.460	1.40
78-87-5	1,2-Dichloropropane	U	1.40	ug/kg	0.419	1.40
75-27-4	Bromodichloromethane	U	1.40	ug/kg	0.419	1.40
74-95-3	Dibromomethane	U	1.40	ug/kg	0.419	1.40
108-10-1	4-Methyl-2-pentanone	U	6.98	ug/kg	1.74	6.98
10061-01-5	cis-1,3-Dichloropropylene	U	1.40	ug/kg	0.419	1.40
108-88-3	Toluene	J	1.17	ug/kg	0.419	1.40 J+,V3b
10061-02-6	trans-1,3-Dichloropropylene	U	1.40	ug/kg	0.419	1.40
79-00-5	1,1,2-Trichloroethane	U	1.40	ug/kg	0.419	1.40
591-78-6	2-Hexanone	U	6.98	ug/kg	2.09	6.98 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.40	ug/kg	0.419	1.40
127-18-4	Tetrachloroethylene		1.55	ug/kg	0.419	1.40 J+,V3b
124-48-1	Dibromochloromethane	U	1.40	ug/kg	0.419	1.40
106-93-4	1,2-Dibromoethane	U	1.40	ug/kg	0.419	1.40
108-90-7	Chlorobenzene	U	1.40	ug/kg	0.419	1.40

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301
Lab Sample ID: 245099013

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Aliquot: 5 g
Column: RTX-VOLATILES

Matrix: R
%Moisture: 28.3
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.40	ug/kg	0.419	1.40
179601-23-1	m,p-Xylenes	J	1.14	ug/kg	0.419	2.79 J+,V3b
95-47-6	o-Xylene	U	1.40	ug/kg	0.419	1.40
100-42-5	Styrene	U	1.40	ug/kg	0.419	1.40
75-25-2	Bromoform	U	1.40	ug/kg	0.419	1.40
79-34-5	1,1,2,2-Tetrachloroethane	U	1.40	ug/kg	0.419	1.40
96-18-4	1,2,3-Trichloropropane	U	1.40	ug/kg	0.419	1.40
108-86-1	Bromobenzene	U	1.40	ug/kg	0.419	1.40
103-65-1	n-Propylbenzene	U	1.40	ug/kg	0.419	1.40 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.40	ug/kg	0.419	1.40 UJ,V7c
98-82-8	Isopropylbenzene	U	1.40	ug/kg	0.419	1.40
108-67-8	1,3,5-Trimethylbenzene	U	1.40	ug/kg	0.419	1.40 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.40	ug/kg	0.419	1.40
98-06-6	tert-Butylbenzene	U	1.40	ug/kg	0.419	1.40
95-63-6	1,2,4-Trimethylbenzene	U	1.40	ug/kg	0.419	1.40
135-98-8	sec-Butylbenzene	U	1.40	ug/kg	0.419	1.40
99-87-6	4-Isopropyltoluene	J	0.790	ug/kg	0.419	1.40 J,V7c
541-73-1	1,3-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40
106-46-7	1,4-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40 UJ,V7c
104-51-8	n-Butylbenzene	U	1.40	ug/kg	0.419	1.40 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.40	ug/kg	0.419	1.40
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	6.98	ug/kg	2.23	6.98 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.40	ug/kg	0.419	1.40
95-50-1	1,2-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	9.78	ug/kg		J
	Unknown Siloxane	14.83	52.3	ug/kg		J
	Unknown Siloxane	16.79	32.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1301
Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00

Matrix: R

Date Received: 01/20/2010 08:45

%Moisture: 14.6

Client: LANL010

Project: LANL01004

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Inst: VOA4.I

Dilution: 1

Client ID: RE15-10-7191

Batch ID: 945254

Run Date: 01/26/2010 09:45

Analyst: ACJ

Purge Vol: 5 mL

Prep Date: 01/25/2010 22:54

Allquot: 5 g

Final Volume: 5 mL

Data File: 4v137.d

Column: RTX-VOLATILES

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17 UJ,V7c
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.85	ug/kg	1.94	5.85 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.85	ug/kg	1.87	5.85
75-09-2	Methylene chloride	U	5.85	ug/kg	2.34	5.85
75-15-0	Carbon disulfide	U	5.85	ug/kg	1.46	5.85
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.85	ug/kg	1.76	5.85 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.85	ug/kg	1.46	5.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.85	ug/kg	1.76	5.85 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	J	0.458	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7191
 Batch ID: 945254
 Run Date: 01/26/2010 09:45
 Prep Date: 01/25/2010 22:54
 Data File: 4v137.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	J	0.430	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.85	ug/kg	1.87	5.85 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Siloxane	14.83	108	ug/kg		J
	Unknown Siloxane	16.79	25.9	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099014	Date Received: 01/20/2010 08:45	%Moisture: 34.4
Client ID: RE15-10-7192	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 14:46	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 23:05	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v148.d	Allquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.52	ug/kg	0.518	1.52 UJ,V7c
74-87-3	Chloromethane	U	1.52	ug/kg	0.457	1.52
75-01-4	Vinyl chloride	U	1.52	ug/kg	0.457	1.52
74-83-9	Bromomethane	U	1.52	ug/kg	0.457	1.52
75-00-3	Chloroethane	U	1.52	ug/kg	0.457	1.52
75-69-4	Trichlorofluoromethane	U	1.52	ug/kg	0.457	1.52
67-64-1	Acetone	U	7.62	ug/kg	2.53	7.62 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
74-88-4	Iodomethane	U	7.62	ug/kg	2.44	7.62
75-09-2	Methylene chloride	U	7.62	ug/kg	3.05	7.62
75-15-0	Carbon disulfide	U	7.62	ug/kg	1.90	7.62
156-60-5	trans-1,2-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
75-34-3	1,1-Dichloroethane	U	1.52	ug/kg	0.457	1.52
78-93-3	2-Butanone	U	7.62	ug/kg	2.29	7.62 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
594-20-7	2,2-Dichloropropane	U	1.52	ug/kg	0.457	1.52
67-66-3	Chloroform	U	1.52	ug/kg	0.457	1.52
74-97-5	Bromochloromethane	U	1.52	ug/kg	0.503	1.52
71-55-6	1,1,1-Trichloroethane	U	1.52	ug/kg	0.457	1.52
563-58-6	1,1-Dichloropropene	U	1.52	ug/kg	0.457	1.52
56-23-5	Carbon tetrachloride	U	1.52	ug/kg	0.457	1.52
107-06-2	1,2-Dichloroethane	U	1.52	ug/kg	0.457	1.52
71-43-2	Benzene	U	1.52	ug/kg	0.457	1.52
79-01-6	Trichloroethylene	U	1.52	ug/kg	0.503	1.52
78-87-5	1,2-Dichloropropane	U	1.52	ug/kg	0.457	1.52
75-27-4	Bromodichloromethane	U	1.52	ug/kg	0.457	1.52
74-95-3	Dibromomethane	U	1.52	ug/kg	0.457	1.52
108-10-1	4-Methyl-2-pentanone	U	7.62	ug/kg	1.90	7.62
10061-01-5	cis-1,3-Dichloropropylene	U	1.52	ug/kg	0.457	1.52
108-88-3	Toluene	U	1.52	ug/kg	0.457	1.52
10061-02-6	trans-1,3-Dichloropropylene	U	1.52	ug/kg	0.457	1.52
79-00-5	1,1,2-Trichloroethane	U	1.52	ug/kg	0.457	1.52
591-78-6	2-Hexanone	U	7.62	ug/kg	2.29	7.62 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.52	ug/kg	0.457	1.52
127-18-4	Tetrachloroethylene	U	1.52	ug/kg	0.457	1.52
124-48-1	Dibromochloromethane	U	1.52	ug/kg	0.457	1.52
106-93-4	1,2-Dibromoethane	U	1.52	ug/kg	0.457	1.52
108-90-7	Chlorobenzene	U	1.52	ug/kg	0.457	1.52

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099014

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.1
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 34.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7192
 Batch ID: 945254
 Run Date: 01/26/2010 14:46
 Prep Date: 01/25/2010 23:05
 Data File: 4v148.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.52	ug/kg	0.457	1.52
179601-23-1	m,p-Xylenes	U	3.05	ug/kg	0.457	3.05
95-47-6	o-Xylene	U	1.52	ug/kg	0.457	1.52
100-42-5	Styrene	U	1.52	ug/kg	0.457	1.52
75-25-2	Bromoform	U	1.52	ug/kg	0.457	1.52
79-34-5	1,1,2,2-Tetrachloroethane	U	1.52	ug/kg	0.457	1.52
96-18-4	1,2,3-Trichloropropane	U	1.52	ug/kg	0.457	1.52
108-86-1	Bromobenzene	U	1.52	ug/kg	0.457	1.52
103-65-1	n-Propylbenzene	U	1.52	ug/kg	0.457	1.52 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.52	ug/kg	0.457	1.52 UJ,V7c
98-82-8	Isopropylbenzene	U	1.52	ug/kg	0.457	1.52
108-67-8	1,3,5-Trimethylbenzene	U	1.52	ug/kg	0.457	1.52 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.52	ug/kg	0.457	1.52
98-06-6	tert-Butylbenzene	U	1.52	ug/kg	0.457	1.52
95-63-6	1,2,4-Trimethylbenzene	U	1.52	ug/kg	0.457	1.52
135-98-8	sec-Butylbenzene	U	1.52	ug/kg	0.457	1.52
99-87-6	4-Isopropyltoluene	U	1.52	ug/kg	0.457	1.52
541-73-1	1,3-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52
106-46-7	1,4-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52 UJ,V7c
104-51-8	n-Butylbenzene	U	1.52	ug/kg	0.457	1.52 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.52	ug/kg	0.457	1.52
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	7.62	ug/kg	2.44	7.62 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.52	ug/kg	0.457	1.52
95-50-1	1,2-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	8.59	ug/kg		J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301
Lab Sample ID: 245099007

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8260B
Inst: VOA4.1
Analyst: ACJ
Allquot: 5 g
Column: RTX-VOLATILES

Matrix: R
%Moisture: 19
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

Client ID: RE15-10-7193
Batch ID: 945254
Run Date: 01/26/2010 11:34
Prep Date: 01/25/2010 22:58
Data File: 4v141.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.420	1.23 UJ,V7c
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	U	6.17	ug/kg	2.05	6.17 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.17	ug/kg	1.98	6.17
75-09-2	Methylene chloride	U	6.17	ug/kg	2.47	6.17
75-15-0	Carbon disulfide	U	6.17	ug/kg	1.54	6.17
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.17	ug/kg	1.85	6.17 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.407	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.407	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.17	ug/kg	1.54	6.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	J	0.796	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.17	ug/kg	1.85	6.17 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	J	0.415	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099007

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 19
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7193
 Batch ID: 945254
 Run Date: 01/26/2010 11:34
 Prep Date: 01/25/2010 22:58
 Data File: 4v141.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	J	0.489	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	J	0.406	ug/kg	0.370	2.47
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23 UJ,V7c
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23 UJ,V7c
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.17	ug/kg	1.98	6.17 UJ,V7c
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	14.79	13.1	ug/kg	96	NJ
	Unknown Siloxane	16.79	16.7	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099001	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client ID: RE15-10-7194	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 08:49	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 22:50	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v135.d	Allquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.26	ug/kg	0.429	1.26 UJ,V7c
74-87-3	Chloromethane	U	1.26	ug/kg	0.378	1.26
75-01-4	Vinyl chloride	U	1.26	ug/kg	0.378	1.26
74-83-9	Bromomethane	U	1.26	ug/kg	0.378	1.26
75-00-3	Chloroethane	U	1.26	ug/kg	0.378	1.26
75-69-4	Trichlorofluoromethane	U	1.26	ug/kg	0.378	1.26
67-64-1	Acetone	U	6.30	ug/kg	2.09	6.30 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
74-88-4	Iodomethane	U	6.30	ug/kg	2.02	6.30
75-09-2	Methylene chloride	U	6.30	ug/kg	2.52	6.30
75-15-0	Carbon disulfide	U	6.30	ug/kg	1.58	6.30
156-60-5	trans-1,2-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
75-34-3	1,1-Dichloroethane	U	1.26	ug/kg	0.378	1.26
78-93-3	2-Butanone	U	6.30	ug/kg	1.89	6.30 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
594-20-7	2,2-Dichloropropane	U	1.26	ug/kg	0.378	1.26
67-66-3	Chloroform	U	1.26	ug/kg	0.378	1.26
74-97-5	Bromochloromethane	U	1.26	ug/kg	0.416	1.26
71-55-6	1,1,1-Trichloroethane	U	1.26	ug/kg	0.378	1.26
563-58-6	1,1-Dichloropropene	U	1.26	ug/kg	0.378	1.26
56-23-5	Carbon tetrachloride	U	1.26	ug/kg	0.378	1.26
107-06-2	1,2-Dichloroethane	U	1.26	ug/kg	0.378	1.26
71-43-2	Benzene	U	1.26	ug/kg	0.378	1.26
79-01-6	Trichloroethylene	U	1.26	ug/kg	0.416	1.26
78-87-5	1,2-Dichloropropane	U	1.26	ug/kg	0.378	1.26
75-27-4	Bromodichloromethane	U	1.26	ug/kg	0.378	1.26
74-95-3	Dibromomethane	U	1.26	ug/kg	0.378	1.26
108-10-1	4-Methyl-2-pentanone	U	6.30	ug/kg	1.58	6.30
10061-01-5	cis-1,3-Dichloropropylene	U	1.26	ug/kg	0.378	1.26
108-88-3	Toluene	U	1.26	ug/kg	0.378	1.26
10061-02-6	trans-1,3-Dichloropropylene	U	1.26	ug/kg	0.378	1.26
79-00-5	1,1,2-Trichloroethane	U	1.26	ug/kg	0.378	1.26
591-78-6	2-Hexanone	U	6.30	ug/kg	1.89	6.30 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.26	ug/kg	0.378	1.26
127-18-4	Tetrachloroethylene	J	0.799	ug/kg	0.378	1.26
124-48-1	Dibromochloromethane	U	1.26	ug/kg	0.378	1.26
106-93-4	1,2-Dibromoethane	U	1.26	ug/kg	0.378	1.26
108-90-7	Chlorobenzene	U	1.26	ug/kg	0.378	1.26

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099001

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.1
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 20.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7194
 Batch ID: 945254
 Run Date: 01/26/2010 08:49
 Prep Date: 01/25/2010 22:50
 Data File: 4v135.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.26	ug/kg	0.378	1.26
179601-23-1	m,p-Xylenes	U	2.52	ug/kg	0.378	2.52
95-47-6	o-Xylene	U	1.26	ug/kg	0.378	1.26
100-42-5	Styrene	U	1.26	ug/kg	0.378	1.26
75-25-2	Bromoform	U	1.26	ug/kg	0.378	1.26
79-34-5	1,1,2,2-Tetrachloroethane	U	1.26	ug/kg	0.378	1.26
96-18-4	1,2,3-Trichloropropane	U	1.26	ug/kg	0.378	1.26
108-86-1	Bromobenzene	U	1.26	ug/kg	0.378	1.26
103-65-1	n-Propylbenzene	U	1.26	ug/kg	0.378	1.26 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.26	ug/kg	0.378	1.26 UJ,V7c
98-82-8	Isopropylbenzene	U	1.26	ug/kg	0.378	1.26
108-67-8	1,3,5-Trimethylbenzene	U	1.26	ug/kg	0.378	1.26 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.26	ug/kg	0.378	1.26
98-06-6	tert-Butylbenzene	U	1.26	ug/kg	0.378	1.26
95-63-6	1,2,4-Trimethylbenzene	U	1.26	ug/kg	0.378	1.26
135-98-8	sec-Butylbenzene	U	1.26	ug/kg	0.378	1.26
99-87-6	4-Isopropyltoluene	U	1.26	ug/kg	0.378	1.26
541-73-1	1,3-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26
106-46-7	1,4-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26 UJ,V7c
104-51-8	n-Butylbenzene	U	1.26	ug/kg	0.378	1.26 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.26	ug/kg	0.378	1.26
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.30	ug/kg	2.02	6.30 UJ,V7c
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.26	ug/kg	0.378	1.26
95-50-1	1,2-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Siloxane	14.83	59.4	ug/kg		J
	Unknown Siloxane	16.79	26.3	ug/kg		J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
Client ID: RE15-10-7195	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 10:13	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 22:55	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v138.d	Allquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11 UJ,V7c
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	J	0.404	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1301
Lab Sample ID: 245099004

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Allquot: 5 g
Column: RTX-VOLATILES

Matrix: R
%Moisture: 10.1
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

Client ID: RE15-10-7195
Batch ID: 945254
Run Date: 01/26/2010 10:13
Prep Date: 01/25/2010 22:55
Data File: 4v138.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	J	0.783	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11 UJ,V7c
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11 UJ,V7c
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.56	ug/kg	1.78	5.56 UJ,V7c
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Siloxane	14.83	93.3	ug/kg		J
	Unknown Siloxane	16.79	19	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
Client ID: RE15-10-7196	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/27/2010 01:52	Inst: VOA4.I	Dilution: 1
Prep Date: 01/26/2010 21:19	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v219.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.445	1.31 UJ,V7c
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone	U	6.55	ug/kg	2.17	6.55 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.10	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.97	6.55 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.432	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.432	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	J	0.685	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.97	6.55 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7196	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/27/2010 01:52	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 21:19	Allquot: 5 g	Final Volume: 5 mL
Data File: 4v219.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	J	0.574	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene	J	0.447	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.10	6.55 UJ,V7c
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	7.17	ug/kg		J
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	14.8	13.2	ug/kg	94	NJ
	Unknown Siloxane	16.79	8.91	ug/kg		J

**Volatile
Certificate of Analysis
Sample Summary**

Page 1 of 2

SDG Number: 10-1301
Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45

Matrix: R
%Moisture: 14.4
Project: LANL01004
SOP Ref: GL-OA-E-038

Client ID: RE15-10-7197
Batch ID: 945254
Run Date: 01/26/2010 11:07
Prep Date: 01/25/2010 22:57
Data File: 4v140.d

Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Aliquot: 5 g
Column: RTX-VOLATILES

Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17 UJ,V7c
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.84	ug/kg	1.94	5.84 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.84	ug/kg	1.87	5.84
75-09-2	Methylene chloride	U	5.84	ug/kg	2.34	5.84
75-15-0	Carbon disulfide	U	5.84	ug/kg	1.46	5.84
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.84	ug/kg	1.75	5.84 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.84	ug/kg	1.46	5.84
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	J	0.405	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.84	ug/kg	1.75	5.84 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	J	0.420	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7197
 Batch ID: 945254
 Run Date: 01/26/2010 11:07
 Prep Date: 01/25/2010 22:57
 Data File: 4v140.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	J	0.789	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	5.84	ug/kg	1.87	5.84 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	44.6	ug/kg		J
	Unknown Siloxane	16.79	25	ug/kg		J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
Client ID: RE15-10-7219	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 15:13	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 23:06	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v149.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.443	1.30 UJ,V7c
74-87-3	Chloromethane	U	1.30	ug/kg	0.391	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.391	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.391	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.391	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.391	1.30
67-64-1	Acetone	U	6.51	ug/kg	2.16	6.51 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
74-88-4	Iodomethane	U	6.51	ug/kg	2.08	6.51
75-09-2	Methylene chloride	U	6.51	ug/kg	2.60	6.51
75-15-0	Carbon disulfide	U	6.51	ug/kg	1.63	6.51
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.391	1.30
78-93-3	2-Butanone	U	6.51	ug/kg	1.95	6.51 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.391	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.391	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.430	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.391	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.391	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.391	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.391	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.391	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.430	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.391	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.391	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.391	1.30
108-10-1	4-Methyl-2-pentanone	U	6.51	ug/kg	1.63	6.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.391	1.30
108-88-3	Toluene	U	1.30	ug/kg	0.391	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.391	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.391	1.30
591-78-6	2-Hexanone	U	6.51	ug/kg	1.95	6.51 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.391	1.30
127-18-4	Tetrachloroethylene	J	0.962	ug/kg	0.391	1.30 J+,V3b
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.391	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.391	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.391	1.30

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301
Lab Sample ID: 245099015

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Aliquot: 5 g
Column: RTX-VOLATILES

Matrix: R
%Moisture: 23.2
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

Client ID: RE15-10-7219
Batch ID: 945254
Run Date: 01/26/2010 15:13
Prep Date: 01/25/2010 23:06
Data File: 4v149.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.391	1.30
179601-23-1	m,p-Xylenes	J	0.620	ug/kg	0.391	2.60 J+,V3b
95-47-6	o-Xylene	U	1.30	ug/kg	0.391	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.391	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.391	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.391	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.391	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.391	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.391	1.30 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.391	1.30 UJ,V7c
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.391	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.391	1.30 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.391	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.391	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.391	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.391	1.30
99-87-6	4-Isopropyltoluene	U	1.30	ug/kg	0.391	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30 UJ,V7c
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.391	1.30 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.391	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane Trichlorotrifluoroethane	U	6.51	ug/kg	2.08	6.51 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.391	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	4.5	8.28	ug/kg		J
	Unknown Siloxane	14.83	68.2	ug/kg		J
	Unknown Siloxane	16.79	38.9	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: S
Lab Sample ID: 245099016	Date Received: 01/20/2010 08:45	
Client ID: RE15-10-7234	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 08:22	Inst: VOA4.1	Dilution: 1
Prep Date: 01/25/2010 23:07	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v134.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00 UJ,V7c
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.67	ug/kg	1.66	5.00 J,V7c
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00 UJ,V7c
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00 UJ,V7c
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
Lab Sample ID: 245099016

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45

Matrix: S

Client ID: RE15-10-7234
Batch ID: 945254
Run Date: 01/26/2010 08:22
Prep Date: 01/25/2010 23:07
Data File: 4v134.d


Client: LANL010
Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Aliquot: 5 g
Column: RTX-VOLATILES

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00 UJ,V7c
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00 UJ,V7c
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00 UJ,V7c
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00 UJ,V7c
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00 UJ,V7c
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

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

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

Section I.		
REQUEST NUMBER: <u>10-1301</u>	VALIDATION DATE: <u>02/25/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Peter Steves</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
		<input type="checkbox"/> LCMSMS PERCHLORATES
		<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
<input checked="" type="checkbox"/> OTHER (DESCRIBE): <u>SVOCs</u>		

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

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


- The ICV %Ds were > 20% for 2-methyl-4,6-dinitrophenol; indeno(1,2,3-cd)pyrene and dibenz(a,h)anthracene. For the CCV associated with samples RE15-10-7194, -7186, -7191, -7195, -7196, -7184, -7187 and -7188 the %Ds were >20% for n-methyl-n-nitrosomethylamine; pyridine; bis(2-chloroethyl)ether; bis(2-chloroisopropyl)ether; 2-nitroaniline and 2-methyl-4,6-dinitrophenol. For the CCV associated with samples -7197, -7193, -7185 and -7189 the %D was >20% for 2-methyl-4,6-dinitrophenol. Also for the CCV associated with samples -7190, 7192 and -7219 the %Ds were >20% for n-methyl-n-nitrosomethylamine; pyridine; bis(2-chloroethyl)ether; bis(2-chloroisopropyl)ether and 2-methyl-4,6-dinitrophenol. The associated sample results were NDs and, thus, were qualified UJ,SV7c.

Reviewed by: Mary Donovan Level: I Date: 02/25/10


VALIDATOR'S SIGNATURE: _____

M. Peter Steves
M. Peter Steves


DATE: 02/25/10

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 $\geq 10\%R$. Follow the external laboratory limits located within the associated data package.	UJ, SV3a	J-, SV3a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, SV3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. At least one surrogate is > the Upper Acceptance Limit (UAL) and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, SV3c	J, SV3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, SV3d	R, SV3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, SV12	J-, SV12

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

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

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

SDG Number: 10-1301
Lab Sample ID: 245099008

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 17.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7184
Batch ID: 944455
Run Date: 01/25/2010 16:51
Prep Date: 01/22/2010 23:39
Data File: s3a2517.d

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

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 16:51	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s3a2517.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	401	ug/kg	80.3	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	803	ug/kg	153	803
132-64-9	Dibenzofuran	U	401	ug/kg	80.3	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.3	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.3	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.3	401 UJ,SV7c
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.3	401
122-66-7	Azobenzene	U	401	ug/kg	80.3	401
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.3	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.3	401
85-01-8	Phenanthrene	U	40.1	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.03	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.3	401
206-44-0	Fluoranthene	U	40.1	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.3	401
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.3	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.3	401
205-99-2	Benzo(b)fluoranthene	U	40.1	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.3	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.12	298	ug/kg		J
	Unknown	2.31	207	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
Client ID: RE15-10-7184	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/25/2010 16:51	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2517.d	Aliquot: 30.09 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.42	432	ug/kg		JA
	Unknown	12.13	535	ug/kg		J
	Unknown	15.23	282	ug/kg		J
	Unknown	15.24	379	ug/kg		J
	Unknown	15.55	164	ug/kg		J
	Unknown	16.1	987	ug/kg		J
83-46-5	.beta.-Sitosterol	17.73	508	ug/kg	93	NJ

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099009	Date Received: 01/20/2010 08:45	%Moisture: 9.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7185	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.1	Dilution: 1
Run Date: 01/26/2010 23:11	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2632.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	368	ug/kg	73.5	368
108-95-2	Phenol	U	368	ug/kg	73.5	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.5	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.5	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.5	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.5	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	91.9	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.5	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.5	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.5	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.5	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.5	368
95-48-7	o-Cresol	U	368	ug/kg	73.5	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.5	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.5	368
78-59-1	Isophorone	U	368	ug/kg	73.5	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.5	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.5	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.5	368
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.5	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.5	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.35	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.5	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.5	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.5	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.5	368
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	368	ug/kg	73.5	368

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099009	Date Received: 01/20/2010 08:45	%Moisture: 9.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7185	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 23:11	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2632.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	368	ug/kg	73.5	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	368	ug/kg	73.5	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.5	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.5	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.5	368 UJ,SV7c
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.5	368
122-66-7	Azobenzene	U	368	ug/kg	73.5	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.5	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.5	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.35	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.5	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.5	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.5	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.5	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.5	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	387	ug/kg		J
	Unknown	2.15	660	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099009	Date Received: 01/20/2010 08:45	%Moisture: 9.4
Client ID: RE15-10-7185	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/26/2010 23:11	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2632.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.33	182	ug/kg		J
	Unknown Aldol Condensate	3.42	530	ug/kg		JA
	Unknown	16.02	170	ug/kg		J
	Unknown	17.19	239	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Allquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7186
Batch ID: 944455
Run Date: 01/25/2010 14:11
Prep Date: 01/22/2010 23:39
Data File: s3a2511.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	408	ug/kg	81.6	408 UJ,SV7c
108-95-2	Phenol	U	408	ug/kg	81.6	408
95-57-8	2-Chlorophenol	U	408	ug/kg	81.6	408
106-46-7	1,4-Dichlorobenzene	U	408	ug/kg	81.6	408
621-64-7	N-Nitrosodipropylamine	U	408	ug/kg	81.6	408
59-50-7	4-Chloro-3-methylphenol	U	408	ug/kg	81.6	408
83-32-9	Acenaphthene	U	40.8	ug/kg	13.5	40.8
121-14-2	2,4-Dinitrotoluene	U	408	ug/kg	40.8	408
100-02-7	4-Nitrophenol	U	408	ug/kg	135	408
87-86-5	Pentachlorophenol	U	408	ug/kg	102	408
129-00-0	Pyrene	U	40.8	ug/kg	12.2	40.8
110-86-1	Pyridine	U	408	ug/kg	81.6	408 UJ,SV7c
62-53-3	Aniline	U	408	ug/kg	122	408
111-44-4	bis(2-Chloroethyl) ether	U	408	ug/kg	81.6	408 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	408	ug/kg	81.6	408
100-51-6	Benzyl alcohol	U	408	ug/kg	122	408
95-50-1	1,2-Dichlorobenzene	U	408	ug/kg	81.6	408
108-60-1	bis(2-Chloroisopropyl)ether	U	408	ug/kg	81.6	408 UJ,SV7c
95-48-7	o-Cresol	U	408	ug/kg	81.6	408
65794-96-9	m,p-Cresols	U	408	ug/kg	122	408
67-72-1	Hexachloroethane	U	408	ug/kg	81.6	408
98-95-3	Nitrobenzene	U	408	ug/kg	81.6	408
78-59-1	Isophorone	U	408	ug/kg	81.6	408
88-75-5	2-Nitrophenol	U	408	ug/kg	81.6	408
105-67-9	2,4-Dimethylphenol	U	408	ug/kg	143	408
111-91-1	bis(2-Chloroethoxy)methane	U	408	ug/kg	81.6	408
120-83-2	2,4-Dichlorophenol	U	408	ug/kg	81.6	408
65-85-0	Benzoic acid	U	816	ug/kg	204	816
91-20-3	Naphthalene	U	40.8	ug/kg	12.2	40.8
106-47-8	4-Chloroaniline	U	408	ug/kg	81.6	408
87-68-3	Hexachlorobutadiene	U	408	ug/kg	81.6	408
91-57-6	2-Methylnaphthalene	U	40.8	ug/kg	8.16	40.8
77-47-4	Hexachlorocyclopentadiene	U	408	ug/kg	81.6	408
88-06-2	2,4,6-Trichlorophenol	U	408	ug/kg	81.6	408
95-95-4	2,4,5-Trichlorophenol	U	408	ug/kg	81.6	408
91-58-7	2-Chloronaphthalene	U	40.8	ug/kg	13.5	40.8
88-74-4	2-Nitroaniline	U	408	ug/kg	81.6	408 UJ,SV7c
	<i>o-Nitroaniline</i>					
99-09-2	3-Nitroaniline	U	408	ug/kg	81.6	408

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

SDG Number: 10-1301
Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.6
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	408	ug/kg	81.6	408
606-20-2	2,6-Dinitrotoluene	U	408	ug/kg	40.8	408
208-96-8	Acenaphthylene	U	40.8	ug/kg	12.2	40.8
51-28-5	2,4-Dinitrophenol	U	816	ug/kg	155	816
132-64-9	Dibenzofuran	U	408	ug/kg	81.6	408
84-66-2	Diethylphthalate	U	408	ug/kg	81.6	408
86-73-7	Fluorene	U	40.8	ug/kg	12.2	40.8
7005-72-3	4-Chlorophenylphenylether	U	408	ug/kg	81.6	408
534-52-1	2-Methyl-4,6-dinitrophenol	U	408	ug/kg	81.6	408 UJ,SV7c
100-01-6	4-Nitroaniline	U	408	ug/kg	122	408
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	408	ug/kg	81.6	408
122-66-7	Azobenzene	U	408	ug/kg	81.6	408
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	408	ug/kg	81.6	408
118-74-1	Hexachlorobenzene	U	408	ug/kg	81.6	408
85-01-8	Phenanthrene	U	40.8	ug/kg	12.2	40.8
120-12-7	Anthracene	U	40.8	ug/kg	8.16	40.8
84-74-2	Di-n-butylphthalate	U	408	ug/kg	81.6	408
206-44-0	Fluoranthene	U	40.8	ug/kg	12.2	40.8
85-68-7	Butylbenzylphthalate	U	408	ug/kg	81.6	408
56-55-3	Benzo(a)anthracene	U	40.8	ug/kg	12.2	40.8
91-94-1	3,3'-Dichlorobenzidine	U	408	ug/kg	122	408
218-01-9	Chrysene	U	40.8	ug/kg	12.2	40.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	408	ug/kg	81.6	408
117-84-0	Di-n-octylphthalate	U	408	ug/kg	81.6	408
205-99-2	Benzo(b)fluoranthene	U	40.8	ug/kg	12.2	40.8
207-08-9	Benzo(k)fluoranthene	U	40.8	ug/kg	12.2	40.8
50-32-8	Benzo(a)pyrene	U	40.8	ug/kg	12.2	40.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.8	ug/kg	12.2	40.8 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	40.8	ug/kg	12.2	40.8 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	40.8	ug/kg	12.2	40.8
120-82-1	1,2,4-Trichlorobenzene	U	408	ug/kg	81.6	408

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.43	440	ug/kg		JA
	Unknown	15.22	729	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.6
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		16.09	730	ug/kg	J

Semi-Volatile
Certificate of Analysis
Sample Summary

Page 1 of 3

SDG Number: 10-1301
Lab Sample ID: 245099011

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 9.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7187
Batch ID: 944455
Run Date: 01/25/2010 18:10
Prep Date: 01/22/2010 23:39
Data File: s3a2520.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.3	367 UJ,SV7c
108-95-2	Phenol	U	367	ug/kg	73.3	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.3	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.3	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.3	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.3	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.3	367 UJ,SV7c
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.3	367 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.3	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.3	367
108-60-1	bis(2-Chloroisopropyl) ether	U	367	ug/kg	73.3	367 UJ,SV7c
95-48-7	o-Cresol	U	367	ug/kg	73.3	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.3	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.3	367
78-59-1	Isophorone	U	367	ug/kg	73.3	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.3	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.3	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.3	367
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.3	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.3	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.33	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.3	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.3	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.3	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.3	367 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.3	367

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	%Moisture: 9.3
Client ID: RE15-10-7187	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/25/2010 18:10	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2520.d	Aliquot: 30.08 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	367	ug/kg	73.3	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	367	ug/kg	73.3	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.3	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.3	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.3	367 UJ,SV7c
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.3	367
122-66-7	Azobenzene	U	367	ug/kg	73.3	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.3	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.3	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.33	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.3	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.3	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.3	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.3	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.3	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.11	598	ug/kg		J
	Unknown Aldol Condensate	3.42	317	ug/kg		JA

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

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SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	%Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7187	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 18:10	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2520.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
13466-78-9	3-Carene	4.78	169	ug/kg	96	NJ
	Unknown	11.96	207	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.4	263	ug/kg	91	NJ
	Unknown	15.23	537	ug/kg		J
112-95-8	Eicosane	15.79	148	ug/kg	93	NJ
	Unknown	16.1	577	ug/kg		J
	Unknown	16.9	186	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.74	1010	ug/kg	97	NJ
	Unknown	18.87	316	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7188
Batch ID: 944455
Run Date: 01/25/2010 18:36
Prep Date: 01/22/2010 23:39
Data File: s3a2521.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	75.9	380 UJ,SV7c
108-95-2	Phenol	U	380	ug/kg	75.9	380
95-57-8	2-Chlorophenol	U	380	ug/kg	75.9	380
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	75.9	380
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	75.9	380
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	75.9	380
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380
87-86-5	Pentachlorophenol	U	380	ug/kg	94.9	380
129-00-0	Pyrene	U	38.0	ug/kg	11.4	38.0
110-86-1	Pyridine	U	380	ug/kg	75.9	380 UJ,SV7c
62-53-3	Aniline	U	380	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	75.9	380 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	75.9	380
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	75.9	380
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	75.9	380 UJ,SV7c
95-48-7	o-Cresol	U	380	ug/kg	75.9	380
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380
67-72-1	Hexachloroethane	U	380	ug/kg	75.9	380
98-95-3	Nitrobenzene	U	380	ug/kg	75.9	380
78-59-1	Isophorone	U	380	ug/kg	75.9	380
88-75-5	2-Nitrophenol	U	380	ug/kg	75.9	380
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	75.9	380
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	75.9	380
65-85-0	Benzoic acid	U	759	ug/kg	190	759
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline	U	380	ug/kg	75.9	380
87-68-3	Hexachlorobutadiene	U	380	ug/kg	75.9	380
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.59	38.0
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	75.9	380
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	75.9	380
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	75.9	380
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline	U	380	ug/kg	75.9	380 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	380	ug/kg	75.9	380

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099012	Date Received: 01/20/2010 08:45	%Moisture: 12.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7188	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.1	Dilution: 1
Run Date: 01/25/2010 18:36	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s3a2521.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	380	ug/kg	75.9	380
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	U	759	ug/kg	144	759
132-64-9	Dibenzofuran	U	380	ug/kg	75.9	380
84-66-2	Diethylphthalate	U	380	ug/kg	75.9	380
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	75.9	380
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	75.9	380 UJ,SV7c
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	380	ug/kg	75.9	380
122-66-7	Azobenzene	U	380	ug/kg	75.9	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	75.9	380
118-74-1	Hexachlorobenzene	U	380	ug/kg	75.9	380
85-01-8	Phenanthrene	U	38.0	ug/kg	11.4	38.0
120-12-7	Anthracene	U	38.0	ug/kg	7.59	38.0
84-74-2	Di-n-butylphthalate	U	380	ug/kg	75.9	380
206-44-0	Fluoranthene	U	38.0	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate	U	380	ug/kg	75.9	380
56-55-3	Benzo(a)anthracene	U	38.0	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380
218-01-9	Chrysene	U	38.0	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate	J	95.9	ug/kg	75.9	380
117-84-0	Di-n-octylphthalate		1430	ug/kg	75.9	380
205-99-2	Benzo(b)fluoranthene	U	38.0	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene	U	38.0	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	38.0	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	75.9	380

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.13	1050	ug/kg		J
	Unknown	2.32	190	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099012	Date Received: 01/20/2010 08:45	%Moisture: 12.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7188	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 18:36	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.07 g	Final Volume: 1 mL
Data File: s3a2521.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	3.42	407	ug/kg		JA
7785-70-8	1R- α -Pinene	4.21	704	ug/kg	98	NJ
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	4.5	212	ug/kg	93	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	4.78	227	ug/kg	97	NJ
	Unknown	10.2	324	ug/kg		J
	Unknown	10.23	160	ug/kg		J
	Unknown	10.38	214	ug/kg		J
	Unknown	10.43	159	ug/kg		J
	Unknown	11.61	278	ug/kg		J
	Unknown	11.69	1210	ug/kg		J
	Unknown	11.79	431	ug/kg		J
17974-57-1	(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	11.94	1140	ug/kg	81	NJ
	Unknown	12.13	552	ug/kg		J
	Unknown	12.24	182	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.36	523	ug/kg	98	NJ
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.39	265	ug/kg	91	NJ
119-07-3	1,2-Benzenedicarboxylic acid, decyl octy	14.73	1680	ug/kg	91	NJ
	Unknown	15.24	1350	ug/kg		J
	Unknown	16.03	624	ug/kg		J
	Unknown	16.11	1760	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.73	976	ug/kg	95	NJ

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

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SDG Number: 10-1301
Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7189
Batch ID: 944455
Run Date: 01/26/2010 23:36
Prep Date: 01/22/2010 23:39
Data File: s3a2633.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl) ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy) methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	183	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.4	367
99-09-2	<i>o</i> -Nitroaniline	U	367	ug/kg	73.4	367
	3-Nitroaniline					

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099010	Date Received: 01/20/2010 08:45	%Moisture: 9.2
Client ID: RE15-10-7189	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/26/2010 23:36	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2633.d	Aliquot: 30.03 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	367	ug/kg	73.4	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	139	734
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367 UJ,SV7c
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.12	1220	ug/kg		J
	Unknown	2.3	201	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099010	Date Received: 01/20/2010 08:45	%Moisture: 9.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7189	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 23:36	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s3a2633.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		3.41	494	ug/kg		JA
	Unknown		16.01	408	ug/kg		J
	Unknown		17.19	798	ug/kg		J
	Unknown		17.39	384	ug/kg		J
	Unknown		17.88	154	ug/kg		J
83-46-5	.beta.-Sitosterol		17.91	376	ug/kg	93	NJ

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099013	Date Received: 01/20/2010 08:45	%Moisture: 28.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7190	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 13:17	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2711.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	465	ug/kg	93.0	465 UJ,SV7c
108-95-2	Phenol	U	465	ug/kg	93.0	465
95-57-8	2-Chlorophenol	U	465	ug/kg	93.0	465
106-46-7	1,4-Dichlorobenzene	U	465	ug/kg	93.0	465
621-64-7	N-Nitrosodipropylamine	U	465	ug/kg	93.0	465
59-50-7	4-Chloro-3-methylphenol	U	465	ug/kg	93.0	465
83-32-9	Acenaphthene	U	46.5	ug/kg	15.3	46.5
121-14-2	2,4-Dinitrotoluene	U	465	ug/kg	46.5	465
100-02-7	4-Nitrophenol	U	465	ug/kg	153	465
87-86-5	Pentachlorophenol	U	465	ug/kg	116	465
129-00-0	Pyrene	U	46.5	ug/kg	13.9	46.5
110-86-1	Pyridine	U	465	ug/kg	93.0	465 UJ,SV7c
62-53-3	Aniline	U	465	ug/kg	139	465
111-44-4	bis(2-Chloroethyl) ether	U	465	ug/kg	93.0	465 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	465	ug/kg	93.0	465
100-51-6	Benzyl alcohol	U	465	ug/kg	139	465
95-50-1	1,2-Dichlorobenzene	U	465	ug/kg	93.0	465
108-60-1	bis(2-Chloroisopropyl)ether	U	465	ug/kg	93.0	465 UJ,SV7c
95-48-7	o-Cresol	U	465	ug/kg	93.0	465
65794-96-9	m,p-Cresols	U	465	ug/kg	139	465
67-72-1	Hexachloroethane	U	465	ug/kg	93.0	465
98-95-3	Nitrobenzene	U	465	ug/kg	93.0	465
78-59-1	Isophorone	U	465	ug/kg	93.0	465
88-75-5	2-Nitrophenol	U	465	ug/kg	93.0	465
105-67-9	2,4-Dimethylphenol	U	465	ug/kg	163	465
111-91-1	bis(2-Chloroethoxy)methane	U	465	ug/kg	93.0	465
120-83-2	2,4-Dichlorophenol	U	465	ug/kg	93.0	465
65-85-0	Benzoic acid	U	930	ug/kg	232	930
91-20-3	Naphthalene	U	46.5	ug/kg	13.9	46.5
106-47-8	4-Chloroaniline	U	465	ug/kg	93.0	465
87-68-3	Hexachlorobutadiene	U	465	ug/kg	93.0	465
91-57-6	2-Methylnaphthalene	U	46.5	ug/kg	9.30	46.5
77-47-4	Hexachlorocyclopentadiene	U	465	ug/kg	93.0	465
88-06-2	2,4,6-Trichlorophenol	U	465	ug/kg	93.0	465
95-95-4	2,4,5-Trichlorophenol	U	465	ug/kg	93.0	465
91-58-7	2-Chloronaphthalene	U	46.5	ug/kg	15.3	46.5
88-74-4	2-Nitroaniline	U	465	ug/kg	93.0	465
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	465	ug/kg	93.0	465

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099013	Date Received: 01/20/2010 08:45	%Moisture: 28.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7190	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 13:17	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2711.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	465	ug/kg	93.0	465
606-20-2	2,6-Dinitrotoluene	U	465	ug/kg	46.5	465
208-96-8	Acenaphthylene	U	46.5	ug/kg	13.9	46.5
51-28-5	2,4-Dinitrophenol	U	930	ug/kg	177	930
132-64-9	Dibenzofuran	U	465	ug/kg	93.0	465
84-66-2	Diethylphthalate	U	465	ug/kg	93.0	465
86-73-7	Fluorene	U	46.5	ug/kg	13.9	46.5
7005-72-3	4-Chlorophenylphenylether	U	465	ug/kg	93.0	465
534-52-1	2-Methyl-4,6-dinitrophenol	U	465	ug/kg	93.0	465 UJ,SV7c
100-01-6	4-Nitroaniline	U	465	ug/kg	139	465
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	465	ug/kg	93.0	465
122-66-7	Azobenzene	U	465	ug/kg	93.0	465
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	465	ug/kg	93.0	465
118-74-1	Hexachlorobenzene	U	465	ug/kg	93.0	465
85-01-8	Phenanthrene	U	46.5	ug/kg	13.9	46.5
120-12-7	Anthracene	U	46.5	ug/kg	9.30	46.5
84-74-2	Di-n-butylphthalate	U	465	ug/kg	93.0	465
206-44-0	Fluoranthene	U	46.5	ug/kg	13.9	46.5
85-68-7	Butylbenzylphthalate	U	465	ug/kg	93.0	465
56-55-3	Benzo(a)anthracene	U	46.5	ug/kg	13.9	46.5
91-94-1	3,3'-Dichlorobenzidine	U	465	ug/kg	139	465
218-01-9	Chrysene	U	46.5	ug/kg	13.9	46.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	465	ug/kg	93.0	465
117-84-0	Di-n-octylphthalate	U	465	ug/kg	93.0	465
205-99-2	Benzo(b)fluoranthene	U	46.5	ug/kg	13.9	46.5
207-08-9	Benzo(k)fluoranthene	U	46.5	ug/kg	13.9	46.5
50-32-8	Benzo(a)pyrene	U	46.5	ug/kg	13.9	46.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.5	ug/kg	13.9	46.5 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	46.5	ug/kg	13.9	46.5 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	46.5	ug/kg	13.9	46.5
120-82-1	1,2,4-Trichlorobenzene	U	465	ug/kg	93.0	465

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.3	247	ug/kg		J
	Unknown Aldol Condensate	3.4	562	ug/kg		JA

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099013	Date Received: 01/20/2010 08:45	%Moisture: 28.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7190	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 13:17	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2711.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.57	189	ug/kg	99	NJ
2416-20-8	Hexadecenoic acid, Z-11-	10.09	199	ug/kg	97	NJ
57-10-3	n-Hexadecanoic acid	10.13	231	ug/kg	98	NJ
	Unknown	11.64	211	ug/kg		J
	Unknown	11.89	285	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	13.98	215	ug/kg	87	NJ
	Unknown	15.06	522	ug/kg		J
	Unknown	15.8	241	ug/kg		J
	Unknown	15.88	288	ug/kg		J
	Unknown	15.94	462	ug/kg		J
	Unknown	16.82	239	ug/kg		J
474-62-4	Campesterol	16.99	415	ug/kg	95	NJ
	Unknown	17.17	363	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	17.64	2050	ug/kg	95	NJ
	Unknown	18.2	213	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	18.78	572	ug/kg	91	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099003	Date Received: 01/20/2010 08:45	%Moisture: 14.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7191	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 14:37	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2512.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	390	ug/kg	78.0	390 UJ,SV7c
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.5	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390 UJ,SV7c
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390 UJ,SV7c
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	136	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390

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

SDG Number: 10-1301
Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.6
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	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390 UJ,SV7c
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	1.72	224	ug/kg		J
	Unknown	2.16	609	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099003	Date Received: 01/20/2010 08:45	%Moisture: 14.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7191	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 14:37	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2512.d	Column: J&W DB-SMS	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		3.43	309	ug/kg		JA
83-46-5	.beta.-Sitosterol		17.73	398	ug/kg	92	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099014	Date Received: 01/20/2010 08:45	%Moisture: 34.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7192	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 13:43	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.18 g	Final Volume: 1 mL
Data File: s3a2712.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	505	ug/kg	101	505 UJ,SV7c
108-95-2	Phenol	U	505	ug/kg	101	505
95-57-8	2-Chlorophenol	U	505	ug/kg	101	505
106-46-7	1,4-Dichlorobenzene	U	505	ug/kg	101	505
621-64-7	N-Nitrosodipropylamine	U	505	ug/kg	101	505
59-50-7	4-Chloro-3-methylphenol	U	505	ug/kg	101	505
83-32-9	Acenaphthene	U	50.5	ug/kg	16.7	50.5
121-14-2	2,4-Dinitrotoluene	U	505	ug/kg	50.5	505
100-02-7	4-Nitrophenol	U	505	ug/kg	167	505
87-86-5	Pentachlorophenol	U	505	ug/kg	126	505
129-00-0	Pyrene	U	50.5	ug/kg	15.1	50.5
110-86-1	Pyridine	U	505	ug/kg	101	505 UJ,SV7c
62-53-3	Aniline	U	505	ug/kg	151	505
111-44-4	bis(2-Chloroethyl) ether	U	505	ug/kg	101	505 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	505	ug/kg	101	505
100-51-6	Benzyl alcohol	U	505	ug/kg	151	505
95-50-1	1,2-Dichlorobenzene	U	505	ug/kg	101	505
108-60-1	bis(2-Chloroisopropyl) ether	U	505	ug/kg	101	505 UJ,SV7c
95-48-7	o-Cresol	U	505	ug/kg	101	505
65794-96-9	m,p-Cresols	U	505	ug/kg	151	505
67-72-1	Hexachloroethane	U	505	ug/kg	101	505
98-95-3	Nitrobenzene	U	505	ug/kg	101	505
78-59-1	Isophorone	U	505	ug/kg	101	505
88-75-5	2-Nitrophenol	U	505	ug/kg	101	505
105-67-9	2,4-Dimethylphenol	U	505	ug/kg	177	505
111-91-1	bis(2-Chloroethoxy)methane	U	505	ug/kg	101	505
120-83-2	2,4-Dichlorophenol	U	505	ug/kg	101	505
65-85-0	Benzoic acid	U	1010	ug/kg	252	1010
91-20-3	Naphthalene	U	50.5	ug/kg	15.1	50.5
106-47-8	4-Chloroaniline	U	505	ug/kg	101	505
87-68-3	Hexachlorobutadiene	U	505	ug/kg	101	505
91-57-6	2-Methylnaphthalene	U	50.5	ug/kg	10.1	50.5
77-47-4	Hexachlorocyclopentadiene	U	505	ug/kg	101	505
88-06-2	2,4,6-Trichlorophenol	U	505	ug/kg	101	505
95-95-4	2,4,5-Trichlorophenol	U	505	ug/kg	101	505
91-58-7	2-Chloronaphthalene	U	50.5	ug/kg	16.7	50.5
88-74-4	2-Nitroaniline	U	505	ug/kg	101	505
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	505	ug/kg	101	505

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099014	Date Received: 01/20/2010 08:45	%Moisture: 34.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7192	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.1	Dilution: 1
Run Date: 01/27/2010 13:43	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Allquot: 30.18 g	Final Volume: 1 mL
Data File: s3a2712.d	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	505	ug/kg	101	505
606-20-2	2,6-Dinitrotoluene	U	505	ug/kg	50.5	505
208-96-8	Acenaphthylene	U	50.5	ug/kg	15.1	50.5
51-28-5	2,4-Dinitrophenol	U	1010	ug/kg	192	1010
132-64-9	Dibenzofuran	U	505	ug/kg	101	505
84-66-2	Diethylphthalate	U	505	ug/kg	101	505
86-73-7	Fluorene	U	50.5	ug/kg	15.1	50.5
7005-72-3	4-Chlorophenylphenylether	U	505	ug/kg	101	505
534-52-1	2-Methyl-4,6-dinitrophenol	U	505	ug/kg	101	505 UJ,SV7c
100-01-6	4-Nitroaniline	U	505	ug/kg	151	505
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	505	ug/kg	101	505
122-66-7	Azobenzene	U	505	ug/kg	101	505
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	505	ug/kg	101	505
118-74-1	Hexachlorobenzene	U	505	ug/kg	101	505
85-01-8	Phenanthrene	U	50.5	ug/kg	15.1	50.5
120-12-7	Anthracene	U	50.5	ug/kg	10.1	50.5
84-74-2	Di-n-butylphthalate	U	505	ug/kg	101	505
206-44-0	Fluoranthene	U	50.5	ug/kg	15.1	50.5
85-68-7	Butylbenzylphthalate	U	505	ug/kg	101	505
56-55-3	Benzo(a)anthracene	U	50.5	ug/kg	15.1	50.5
91-94-1	3,3'-Dichlorobenzidine	U	505	ug/kg	151	505
218-01-9	Chrysene	U	50.5	ug/kg	15.1	50.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	505	ug/kg	101	505
117-84-0	Di-n-octylphthalate	U	505	ug/kg	101	505
205-99-2	Benzo(b)fluoranthene	U	50.5	ug/kg	15.1	50.5
207-08-9	Benzo(k)fluoranthene	U	50.5	ug/kg	15.1	50.5
50-32-8	Benzo(a)pyrene	U	50.5	ug/kg	15.1	50.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	50.5	ug/kg	15.1	50.5 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	50.5	ug/kg	15.1	50.5 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	50.5	ug/kg	15.1	50.5
120-82-1	1,2,4-Trichlorobenzene	U	505	ug/kg	101	505

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.29	281	ug/kg		J
	Unknown Aldol Condensate	3.4	641	ug/kg		JA

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099014	Date Received: 01/20/2010 08:45	%Moisture: 34.4
Client ID: RE15-10-7192	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/27/2010 13:43	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2712.d	Aliquot: 30.18 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.92	220	ug/kg		J
	Unknown	15.06	1810	ug/kg		J
	Unknown	15.94	1560	ug/kg		J
83-46-5	.beta.-Sitosterol	17.64	439	ug/kg	90	NJ
	Unknown	18.14	267	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099007	Date Received: 01/20/2010 08:45	%Moisture: 19
Client ID: RE15-10-7193	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/26/2010 22:19	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2630.d	Allquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410
87-86-5	Pentachlorophenol	U	410	ug/kg	102	410
129-00-0	Pyrene	U	41.0	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	143	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	U	820	ug/kg	205	820
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	410	ug/kg	82.0	410

Semi-Volatile
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Sample Summary

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SDG Number: 10-1301
Lab Sample ID: 245099007

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19
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	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	U	41.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410 UJ,SV7c
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene	U	41.0	ug/kg	12.3	41.0
120-12-7	Anthracene	U	41.0	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene	U	41.0	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene	U	41.0	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene	U	41.0	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene	U	41.0	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene	U	41.0	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.0	ug/kg	12.3	41.0 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	41.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.34	181	ug/kg		J
	Unknown Aldol Condensate	3.42	683	ug/kg		JA

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099007	Date Received: 01/20/2010 08:45	%Moisture: 19
Client ID: RE15-10-7193	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/26/2010 22:19	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2630.d	Aliquot: 30.12 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R-.alpha.-Pinene	4.2	220	ug/kg	98	NJ
13466-78-9	3-Carene	4.77	216	ug/kg	96	NJ
	Unknown	17.93	213	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099001	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client ID: RE15-10-7194	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/25/2010 12:52	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2508.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
62-75-9	N-Methyl-N-nitrosomethylamine	U	419	ug/kg	83.8	419 UJ,SV7c
108-95-2	Phenol	U	419	ug/kg	83.8	419
95-57-8	2-Chlorophenol	U	419	ug/kg	83.8	419
106-46-7	1,4-Dichlorobenzene	U	419	ug/kg	83.8	419
621-64-7	N-Nitrosodipropylamine	U	419	ug/kg	83.8	419
59-50-7	4-Chloro-3-methylphenol	U	419	ug/kg	83.8	419
83-32-9	Acenaphthene	U	41.9	ug/kg	13.8	41.9
121-14-2	2,4-Dinitrotoluene	U	419	ug/kg	41.9	419
100-02-7	4-Nitrophenol	U	419	ug/kg	138	419
87-86-5	Pentachlorophenol	U	419	ug/kg	105	419
129-00-0	Pyrene	U	41.9	ug/kg	12.6	41.9
110-86-1	Pyridine	U	419	ug/kg	83.8	419 UJ,SV7c
62-53-3	Aniline	U	419	ug/kg	126	419
111-44-4	bis(2-Chloroethyl) ether	U	419	ug/kg	83.8	419 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	419	ug/kg	83.8	419
100-51-6	Benzyl alcohol	U	419	ug/kg	126	419
95-50-1	1,2-Dichlorobenzene	U	419	ug/kg	83.8	419
108-60-1	bis(2-Chloroisopropyl)ether	U	419	ug/kg	83.8	419 UJ,SV7c
95-48-7	o-Cresol	U	419	ug/kg	83.8	419
65794-96-9	m,p-Cresols	U	419	ug/kg	126	419
67-72-1	Hexachloroethane	U	419	ug/kg	83.8	419
98-95-3	Nitrobenzene	U	419	ug/kg	83.8	419
78-59-1	Isophorone	U	419	ug/kg	83.8	419
88-75-5	2-Nitrophenol	U	419	ug/kg	83.8	419
105-67-9	2,4-Dimethylphenol	U	419	ug/kg	147	419
111-91-1	bis(2-Chloroethoxy)methane	U	419	ug/kg	83.8	419
120-83-2	2,4-Dichlorophenol	U	419	ug/kg	83.8	419
65-85-0	Benzoic acid	U	838	ug/kg	210	838
91-20-3	Naphthalene	U	41.9	ug/kg	12.6	41.9
106-47-8	4-Chloroaniline	U	419	ug/kg	83.8	419
87-68-3	Hexachlorobutadiene	U	419	ug/kg	83.8	419
91-57-6	2-Methylnaphthalene	U	41.9	ug/kg	8.38	41.9
77-47-4	Hexachlorocyclopentadiene	U	419	ug/kg	83.8	419
88-06-2	2,4,6-Trichlorophenol	U	419	ug/kg	83.8	419
95-95-4	2,4,5-Trichlorophenol	U	419	ug/kg	83.8	419
91-58-7	2-Chloronaphthalene	U	41.9	ug/kg	13.8	41.9
88-74-4	2-Nitroaniline	U	419	ug/kg	83.8	419 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	419	ug/kg	83.8	419

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099001	Date Received: 01/20/2010 08:45	%Moisture: 20.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7194	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.1	Dilution: 1
Run Date: 01/25/2010 12:52	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s3a2508.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	419	ug/kg	83.8	419
606-20-2	2,6-Dinitrotoluene	U	419	ug/kg	41.9	419
208-96-8	Acenaphthylene	U	41.9	ug/kg	12.6	41.9
51-28-5	2,4-Dinitrophenol	U	838	ug/kg	159	838
132-64-9	Dibenzofuran	U	419	ug/kg	83.8	419
84-66-2	Diethylphthalate	U	419	ug/kg	83.8	419
86-73-7	Fluorene	U	41.9	ug/kg	12.6	41.9
7005-72-3	4-Chlorophenylphenylether	U	419	ug/kg	83.8	419
534-52-1	2-Methyl-4,6-dinitrophenol	U	419	ug/kg	83.8	419 UJ,SV7c
100-01-6	4-Nitroaniline	U	419	ug/kg	126	419
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	419	ug/kg	83.8	419
122-66-7	Azobenzene	U	419	ug/kg	83.8	419
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	419	ug/kg	83.8	419
118-74-1	Hexachlorobenzene	U	419	ug/kg	83.8	419
85-01-8	Phenanthrene	U	41.9	ug/kg	12.6	41.9
120-12-7	Anthracene	U	41.9	ug/kg	8.38	41.9
84-74-2	Di-n-butylphthalate	U	419	ug/kg	83.8	419
206-44-0	Fluoranthene	U	41.9	ug/kg	12.6	41.9
85-68-7	Butylbenzylphthalate	U	419	ug/kg	83.8	419
56-55-3	Benzo(a)anthracene	U	41.9	ug/kg	12.6	41.9
91-94-1	3,3'-Dichlorobenzidine	U	419	ug/kg	126	419
218-01-9	Chrysene	U	41.9	ug/kg	12.6	41.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	419	ug/kg	83.8	419
117-84-0	Di-n-octylphthalate	U	419	ug/kg	83.8	419
205-99-2	Benzo(b)fluoranthene	U	41.9	ug/kg	12.6	41.9
207-08-9	Benzo(k)fluoranthene	U	41.9	ug/kg	12.6	41.9
50-32-8	Benzo(a)pyrene	U	41.9	ug/kg	12.6	41.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.9	ug/kg	12.6	41.9 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	41.9	ug/kg	12.6	41.9 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	41.9	ug/kg	12.6	41.9
120-82-1	1,2,4-Trichlorobenzene	U	419	ug/kg	83.8	419

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.33	301	ug/kg		J
	Unknown Aldol Condensate	3.43	573	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099001	Date Received: 01/20/2010 08:45	%Moisture: 20.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7194	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 12:52	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s3a2508.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
83-46-5	.beta.-Sitosterol		17.73	374	ug/kg	94	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099004

Client ID: RE15-10-7195
Batch ID: 944455
Run Date: 01/25/2010 15:04
Prep Date: 01/22/2010 23:39
Data File: s3a2513.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.1
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	370	ug/kg	73.9	370 UJ,SV7c
108-95-2	Phenol	U	370	ug/kg	73.9	370
95-57-8	2-Chlorophenol	U	370	ug/kg	73.9	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	73.9	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	73.9	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	73.9	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.4	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	73.9	370 UJ,SV7c
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	73.9	370 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	73.9	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	73.9	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	73.9	370 UJ,SV7c
95-48-7	o-Cresol	U	370	ug/kg	73.9	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	73.9	370
98-95-3	Nitrobenzene	U	370	ug/kg	73.9	370
78-59-1	Isophorone	U	370	ug/kg	73.9	370
88-75-5	2-Nitrophenol	U	370	ug/kg	73.9	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	73.9	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	73.9	370
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	73.9	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	73.9	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.39	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	73.9	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	73.9	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	73.9	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	73.9	370 UJ,SV7c
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	370	ug/kg	73.9	370

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
Client ID: RE15-10-7195	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/25/2010 15:04	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2513.d	Allquot: 30.08 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	370	ug/kg	73.9	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	370	ug/kg	73.9	370
84-66-2	Diethylphthalate	U	370	ug/kg	73.9	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	73.9	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	73.9	370 UJ,SV7c
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	73.9	370
122-66-7	Azobenzene	U	370	ug/kg	73.9	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	73.9	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	73.9	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.39	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	73.9	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	73.9	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	73.9	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	73.9	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	73.9	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.15	1490	ug/kg		J
	Unknown	2.32	170	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
Client ID: RE15-10-7195	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/25/2010 15:04	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2513.d	Aliquot: 30.08 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Flt	Qual
	Unknown Aldol Condensate	3.43	321	ug/kg		JA
17993-84-9	N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	15.22	316	ug/kg	30	NJ
	Unknown	16.09	230	ug/kg		J
	Unknown	17.22	174	ug/kg		J
	Unknown	17.73	500	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
Lab Sample ID: 245099005

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.7
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	436	ug/kg	87.1	436 UJ,SV7c
108-95-2	Phenol	U	436	ug/kg	87.1	436
95-57-8	2-Chlorophenol	U	436	ug/kg	87.1	436
106-46-7	1,4-Dichlorobenzene	U	436	ug/kg	87.1	436
621-64-7	N-Nitrosodipropylamine	U	436	ug/kg	87.1	436
59-50-7	4-Chloro-3-methylphenol	U	436	ug/kg	87.1	436
83-32-9	Acenaphthene	U	43.6	ug/kg	14.4	43.6
121-14-2	2,4-Dinitrotoluene	U	436	ug/kg	43.6	436
100-02-7	4-Nitrophenol	U	436	ug/kg	144	436
87-86-5	Pentachlorophenol	U	436	ug/kg	109	436
129-00-0	Pyrene	U	43.6	ug/kg	13.1	43.6
110-86-1	Pyridine	U	436	ug/kg	87.1	436 UJ,SV7c
62-53-3	Aniline	U	436	ug/kg	131	436
111-44-4	bis(2-Chloroethyl) ether	U	436	ug/kg	87.1	436 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	436	ug/kg	87.1	436
100-51-6	Benzyl alcohol	U	436	ug/kg	131	436
95-50-1	1,2-Dichlorobenzene	U	436	ug/kg	87.1	436
108-60-1	bis(2-Chloroisopropyl)ether	U	436	ug/kg	87.1	436 UJ,SV7c
95-48-7	o-Cresol	U	436	ug/kg	87.1	436
65794-96-9	m,p-Cresols	U	436	ug/kg	131	436
67-72-1	Hexachloroethane	U	436	ug/kg	87.1	436
98-95-3	Nitrobenzene	U	436	ug/kg	87.1	436
78-59-1	Isophorone	U	436	ug/kg	87.1	436
88-75-5	2-Nitrophenol	U	436	ug/kg	87.1	436
105-67-9	2,4-Dimethylphenol	U	436	ug/kg	152	436
111-91-1	bis(2-Chloroethoxy)methane	U	436	ug/kg	87.1	436
120-83-2	2,4-Dichlorophenol	U	436	ug/kg	87.1	436
65-85-0	Benzoic acid	U	871	ug/kg	218	871
91-20-3	Naphthalene	U	43.6	ug/kg	13.1	43.6
106-47-8	4-Chloroaniline	U	436	ug/kg	87.1	436
87-68-3	Hexachlorobutadiene	U	436	ug/kg	87.1	436
91-57-6	2-Methylnaphthalene	U	43.6	ug/kg	8.71	43.6
77-47-4	Hexachlorocyclopentadiene	U	436	ug/kg	87.1	436
88-06-2	2,4,6-Trichlorophenol	U	436	ug/kg	87.1	436
95-95-4	2,4,5-Trichlorophenol	U	436	ug/kg	87.1	436
91-58-7	2-Chloronaphthalene	U	43.6	ug/kg	14.4	43.6
88-74-4	2-Nitroaniline	U	436	ug/kg	87.1	436 UJ,SV7c
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	436	ug/kg	87.1	436

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7196	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 15:31	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2514.d	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	436	ug/kg	87.1	436
606-20-2	2,6-Dinitrotoluene	U	436	ug/kg	43.6	436
208-96-8	Acenaphthylene	U	43.6	ug/kg	13.1	43.6
51-28-5	2,4-Dinitrophenol	U	871	ug/kg	166	871
132-64-9	Dibenzofuran	U	436	ug/kg	87.1	436
84-66-2	Diethylphthalate	U	436	ug/kg	87.1	436
86-73-7	Fluorene	U	43.6	ug/kg	13.1	43.6
7005-72-3	4-Chlorophenylphenylether	U	436	ug/kg	87.1	436
534-52-1	2-Methyl-4,6-dinitrophenol	U	436	ug/kg	87.1	436 UJ,SV7c
100-01-6	4-Nitroaniline	U	436	ug/kg	131	436
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	436	ug/kg	87.1	436
122-66-7	Azobenzene	U	436	ug/kg	87.1	436
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	436	ug/kg	87.1	436
118-74-1	Hexachlorobenzene	U	436	ug/kg	87.1	436
85-01-8	Phenanthrene	U	43.6	ug/kg	13.1	43.6
120-12-7	Anthracene	U	43.6	ug/kg	8.71	43.6
84-74-2	Di-n-butylphthalate	U	436	ug/kg	87.1	436
206-44-0	Fluoranthene	U	43.6	ug/kg	13.1	43.6
85-68-7	Butylbenzylphthalate	U	436	ug/kg	87.1	436
56-55-3	Benzo(a)anthracene	U	43.6	ug/kg	13.1	43.6
91-94-1	3,3'-Dichlorobenzidine	U	436	ug/kg	131	436
218-01-9	Chrysene	U	43.6	ug/kg	13.1	43.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	436	ug/kg	87.1	436
117-84-0	Di-n-octylphthalate	U	436	ug/kg	87.1	436
205-99-2	Benzo(b)fluoranthene	U	43.6	ug/kg	13.1	43.6
207-08-9	Benzo(k)fluoranthene	U	43.6	ug/kg	13.1	43.6
50-32-8	Benzo(a)pyrene	U	43.6	ug/kg	13.1	43.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.6	ug/kg	13.1	43.6 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	43.6	ug/kg	13.1	43.6 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	43.6	ug/kg	13.1	43.6
120-82-1	1,2,4-Trichlorobenzene	U	436	ug/kg	87.1	436

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
7785-70-8	1R-.alpha.-Pinene	4.22	13900	ug/kg	96	NJ
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	4.89	963	ug/kg	96	NJ

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7196	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 15:31	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2514.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	6	1130	ug/kg		J
1197-01-9	Benzenemethanol, .alpha.,.alpha.,4-trime	6.06	747	ug/kg	95	NJ
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	6.71	955	ug/kg	99	NJ
29050-33-7	(+)-4-Carene	7.07	942	ug/kg	93	NJ
	Unknown	10.2	1070	ug/kg		J
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	10.63	1640	ug/kg	98	NJ
	Unknown	10.95	1290	ug/kg		J
	Unknown	11.55	282	ug/kg		J
	Unknown	11.6	577	ug/kg		J
	Unknown	11.63	455	ug/kg		J
	Unknown	11.68	673	ug/kg		J
	Unknown	11.8	474	ug/kg		J
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	12	1390	ug/kg	38	NJ
2223-54-3	1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	12.06	392	ug/kg	35	NJ
5508-58-7	Andrographolide	12.13	257	ug/kg	15	NJ
49599-09-9	Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	12.29	3080	ug/kg	50	NJ
68284-24-2	Cycloheptane, 1,3,5-tris(methylene)-	12.32	1440	ug/kg	25	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	3590	ug/kg	99	NJ
	Unknown	12.54	180	ug/kg		J
56554-57-5	5,8,11-Heptadecatriynoic acid, methyl es	12.77	177	ug/kg	53	NJ
1000125-88-0	.alpha.-Tetraoxime, 8-fluoro-5,6-dimeth	12.82	194	ug/kg	25	NJ
137987-78-1	Benzothiophene-3-carboxylic acid, 2-amin	12.89	364	ug/kg	64	NJ
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.95	1020	ug/kg	91	NJ
3056-71-1	Benzenebutanamide, N-phenyl-	13.11	237	ug/kg	25	NJ
1000128-34-5	Pregn-4-en-17,21-diol-3,20-dione, 9,11-e	13.34	225	ug/kg	10	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Allquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7197
Batch ID: 944455
Run Date: 01/26/2010 15:03
Prep Date: 01/22/2010 23:39
Data File: s3a2614.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388
108-95-2	Phenol	U	388	ug/kg	77.6	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	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	96.9	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.6	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388
95-48-7	o-Cresol	U	388	ug/kg	77.6	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388
78-59-1	Isophorone	U	388	ug/kg	77.6	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388
65-85-0	Benzoic acid	U	776	ug/kg	194	776
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.6	388
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	388	ug/kg	77.6	388

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099006	Date Received: 01/20/2010 08:45	%Moisture: 14.4
Client ID: RE15-10-7197	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/26/2010 15:03	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2614.d	Allquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	388	ug/kg	77.6	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	776	ug/kg	147	776
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388 UJ,SV7c
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
122-39-4	<i>p</i> -Nitroaniline					
	Diphenylamine	U	388	ug/kg	77.6	388
122-66-7	Azobenzene	U	388	ug/kg	77.6	388
101-55-3	<i>1,2</i> -Diphenylhydrazine					
	4-Bromophenylphenylether	U	388	ug/kg	77.6	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	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	77.6	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	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 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	38.8	ug/kg	11.6	38.8 UJ,SV7c
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	77.6	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.15	437	ug/kg		J
	Unknown	2.19	170	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099006	Date Received: 01/20/2010 08:45	%Moisture: 14.4
Client ID: RE15-10-7197	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/26/2010 15:03	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2614.d	Aliquot: 30.14 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualfier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.33	244	ug/kg		J
	Unknown Aldol Condensate	3.42	430	ug/kg		JA
	Unknown	17.19	311	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.71	667	ug/kg	96	NJ

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7219	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 14:09	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s3a2713.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	433	ug/kg	86.5	433 UJ,SV7c
108-95-2	Phenol	U	433	ug/kg	86.5	433
95-57-8	2-Chlorophenol	U	433	ug/kg	86.5	433
106-46-7	1,4-Dichlorobenzene	U	433	ug/kg	86.5	433
621-64-7	N-Nitrosodipropylamine	U	433	ug/kg	86.5	433
59-50-7	4-Chloro-3-methylphenol	U	433	ug/kg	86.5	433
83-32-9	Acenaphthene	U	43.3	ug/kg	14.3	43.3
121-14-2	2,4-Dinitrotoluene	U	433	ug/kg	43.3	433
100-02-7	4-Nitrophenol	U	433	ug/kg	143	433
87-86-5	Pentachlorophenol	U	433	ug/kg	108	433
129-00-0	Pyrene	U	43.3	ug/kg	13.0	43.3
110-86-1	Pyridine	U	433	ug/kg	86.5	433 UJ,SV7c
62-53-3	Aniline	U	433	ug/kg	130	433
111-44-4	bis(2-Chloroethyl) ether	U	433	ug/kg	86.5	433 UJ,SV7c
541-73-1	1,3-Dichlorobenzene	U	433	ug/kg	86.5	433
100-51-6	Benzyl alcohol	U	433	ug/kg	130	433
95-50-1	1,2-Dichlorobenzene	U	433	ug/kg	86.5	433
108-60-1	bis(2-Chloroisopropyl)ether	U	433	ug/kg	86.5	433 UJ,SV7c
95-48-7	o-Cresol	U	433	ug/kg	86.5	433
65794-96-9	m,p-Cresols	U	433	ug/kg	130	433
67-72-1	Hexachloroethane	U	433	ug/kg	86.5	433
98-95-3	Nitrobenzene	U	433	ug/kg	86.5	433
78-59-1	Isophorone	U	433	ug/kg	86.5	433
88-75-5	2-Nitrophenol	U	433	ug/kg	86.5	433
105-67-9	2,4-Dimethylphenol	U	433	ug/kg	151	433
111-91-1	bis(2-Chloroethoxy)methane	U	433	ug/kg	86.5	433
120-83-2	2,4-Dichlorophenol	U	433	ug/kg	86.5	433
65-85-0	Benzoic acid	U	865	ug/kg	216	865
91-20-3	Naphthalene	U	43.3	ug/kg	13.0	43.3
106-47-8	4-Chloroaniline	U	433	ug/kg	86.5	433
87-68-3	Hexachlorobutadiene	U	433	ug/kg	86.5	433
91-57-6	2-Methylnaphthalene	U	43.3	ug/kg	8.65	43.3
77-47-4	Hexachlorocyclopentadiene	U	433	ug/kg	86.5	433
88-06-2	2,4,6-Trichlorophenol	U	433	ug/kg	86.5	433
95-95-4	2,4,5-Trichlorophenol	U	433	ug/kg	86.5	433
91-58-7	2-Chloronaphthalene	U	43.3	ug/kg	14.3	43.3
88-74-4	2-Nitroaniline	U	433	ug/kg	86.5	433
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	433	ug/kg	86.5	433

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
Client ID: RE15-10-7219	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/27/2010 14:09	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2713.d	Aliquot: 30.11 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	433	ug/kg	86.5	433
606-20-2	2,6-Dinitrotoluene	U	433	ug/kg	43.3	433
208-96-8	Acenaphthylene	U	43.3	ug/kg	13.0	43.3
51-28-5	2,4-Dinitrophenol	U	865	ug/kg	164	865
132-64-9	Dibenzofuran	U	433	ug/kg	86.5	433
84-66-2	Diethylphthalate	U	433	ug/kg	86.5	433
86-73-7	Fluorene	U	43.3	ug/kg	13.0	43.3
7005-72-3	4-Chlorophenylphenylether	U	433	ug/kg	86.5	433
534-52-1	2-Methyl-4,6-dinitrophenol	U	433	ug/kg	86.5	433 UJ,SV7c
100-01-6	4-Nitroaniline	U	433	ug/kg	130	433
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	433	ug/kg	86.5	433
122-66-7	Azobenzene	U	433	ug/kg	86.5	433
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	433	ug/kg	86.5	433
118-74-1	Hexachlorobenzene	U	433	ug/kg	86.5	433
85-01-8	Phenanthrene	U	43.3	ug/kg	13.0	43.3
120-12-7	Anthracene	U	43.3	ug/kg	8.65	43.3
84-74-2	Di-n-butylphthalate	U	433	ug/kg	86.5	433
206-44-0	Fluoranthene	U	43.3	ug/kg	13.0	43.3
85-68-7	Butylbenzylphthalate	U	433	ug/kg	86.5	433
56-55-3	Benzo(a)anthracene	U	43.3	ug/kg	13.0	43.3
91-94-1	3,3'-Dichlorobenzidine	U	433	ug/kg	130	433
218-01-9	Chrysene	U	43.3	ug/kg	13.0	43.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	433	ug/kg	86.5	433
117-84-0	Di-n-octylphthalate	U	433	ug/kg	86.5	433
205-99-2	Benzo(b)fluoranthene	U	43.3	ug/kg	13.0	43.3
207-08-9	Benzo(k)fluoranthene	U	43.3	ug/kg	13.0	43.3
50-32-8	Benzo(a)pyrene	U	43.3	ug/kg	13.0	43.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.3	ug/kg	13.0	43.3 UJ,SV7c
53-70-3	Dibenzo(a,h)anthracene	U	43.3	ug/kg	13.0	43.3 UJ,SV7c
191-24-2	Benzo(ghi)perylene	U	43.3	ug/kg	13.0	43.3
120-82-1	1,2,4-Trichlorobenzene	U	433	ug/kg	86.5	433

Tentatively Identified Compound Summary


CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.09	284	ug/kg		J
	Unknown	2.28	327	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
Client ID: RE15-10-7219	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/27/2010 14:09	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2713.d	Aliquot: 30.11 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.4	609	ug/kg		JA
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.87	463	ug/kg	93	NJ
	Unknown	11.89	317	ug/kg		J
	Unknown	11.92	801	ug/kg		J
112-95-8	Eicosane	13.32	265	ug/kg	96	NJ
	Unknown	13.98	200	ug/kg		J
	Unknown	14.44	410	ug/kg		J
	Unknown	15.38	319	ug/kg		J
	Unknown	15.73	353	ug/kg		J
	Unknown	15.8	458	ug/kg		J
	Unknown	15.88	310	ug/kg		J
	Unknown	15.93	395	ug/kg		J
4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	16.99	360	ug/kg	90	NJ
	Unknown	17.17	398	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	17.64	1460	ug/kg	95	NJ
	Unknown	18.78	375	ug/kg		J

DATA VALIDATION COVER SHEET	
5122-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.		
REQUEST NUMBER: <u>10-1301</u>	VALIDATION DATE: <u>02/25/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Peter Steves</u> ORGANIZATION: <u>Analytical Quality Associates, Inc</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input checked="" type="checkbox"/> LCMSMS HIGH EXPLOSIVES
		<input type="checkbox"/> LCMSMS PERCHLORATES
		<input type="checkbox"/> ORGANOCHLORINE 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. The CCV %Ds were >20% with a positive bias for 2,4,6-trinitrotoluene; RDX; tetryl; 2-nitrotoluene; 4-nitrotoluene and HMX. The associated sample results were NDs and, thus, were not qualified.
2. The MS/MSD %Rs were > the laboratory UAL for TATB. The associated sample results were NDs and, thus, were not qualified. The MS/MSD RPD was > the laboratory control limit for TATB. The associated sample results were NDs and, thus, was qualified UJ,HE12g.
3. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate RT criteria could not be evaluated. In addition, the raw ICAL data from the instrument used for the primary HE analysis were also not reported. No sample data were qualified as a result.

Reviewed by: Mary DonovanLevel: IDate: 02/25/10


VALIDATOR'S SIGNATURE: _____

M. Peter Steves


DATE: 02/25/10

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	34. The affected analytes are considered suspect because the sample was diluted without any target analytes identified due to matrix interference. (Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.)	UJ, R, HE15	R, HE15
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35. The sample was diluted because target analytes were > the initial verification calibration.	UJ, HE15a	J, HE15a

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

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099001

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203112a

Date Analyzed: 05-FEB-10 21:13

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: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099001

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290047.wiff

Date Analyzed: 29-JAN-10 22:07

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument X Concentrated Extract Volume X Dilution
Value Sample Amount Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7186

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099002

Sample Amount 2

Moisture: 18.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203115a

Date Analyzed: 05-FEB-10 22:41

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7186

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099002

Sample Amount 2

Moisture: 18.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: BXS01290050.wiff

Date Analyzed: 29-JAN-10 22:54

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7191

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099003

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203116a

Date Analyzed: 05-FEB-10 23:11

Units: ug/kg

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

*Concentration =

Instrument Value X Concentrated Extract Volume Sample Amount X Dilution Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7191

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099003

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: BXS01290051.wiff

Date Analyzed: 29-JAN-10 23:10

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7195

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203117a

Date Analyzed: 05-FEB-10 23:40

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7195

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290052.wiff

Date Analyzed: 29-JAN-10 23:25

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7196

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099005

Sample Amount 2

Moisture: 23.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203118a

Date Analyzed: 06-FEB-10 00:10

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7196

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099005

Sample Amount 2

Moisture: 23.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290053.wiff

Date Analyzed: 29-JAN-10 23:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7197

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099006

Sample Amount 2

Moisture: 14.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203119a

Date Analyzed: 06-FEB-10 00:39

Units: ug/kg

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

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7197

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099006

Sample Amount 2

Moisture: 14.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290054.wiff

Date Analyzed: 29-JAN-10 23:57

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7193

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099007

Sample Amount 2

Moisture: 19.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203123a

Date Analyzed: 06-FEB-10 02:37

Units: ug/kg

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

*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7193

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099007

Sample Amount 2

Moisture: 19.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290058.wiff

Date Analyzed: 30-JAN-10 01:00

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7184

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099008

Sample Amount 2

Moisture: 17.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203124a

Date Analyzed: 06-FEB-10 03:07

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7184

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099008

Sample Amount 2

Moisture: 17.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290059.wiff

Date Analyzed: 30-JAN-10 01:15

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7185

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099009

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203125a

Date Analyzed: 06-FEB-10 03:36

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7185

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099009

Sample Amount 2

Moisture: 2.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290060.wiff

Date Analyzed: 30-JAN-10 01:31

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7189

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099010

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203126a

Date Analyzed: 06-FEB-10 04:06

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7189

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099010

Sample Amount 2

Moisture: 2.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290061.wiff

Date Analyzed: 30-JAN-10 01:47

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

Instrument Value	X	$\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$	X	Dilution Factor
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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7187

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099011

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203127a

Date Analyzed: 06-FEB-10 04:35

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: RE15-10-7187

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099011

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290062.wiff

Date Analyzed: 30-JAN-10 02:03

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7188

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099012

Sample Amount 2

Moisture: 12.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203128a

Date Analyzed: 06-FEB-10 05:05

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7188

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099012

Sample Amount 2

Moisture: 12.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290063.wiff

Date Analyzed: 30-JAN-10 02:18

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7190

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099013

Sample Amount 2

Moisture: 28.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203129a

Date Analyzed: 06-FEB-10 05:34

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7190

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099013

Sample Amount 2

Moisture: 28.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290064.wiff

Date Analyzed: 30-JAN-10 02:34

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7192

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099014

Sample Amount 2

Moisture: 34.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203130a

Date Analyzed: 06-FEB-10 06:04

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7192

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099014

Sample Amount 2

Moisture: 34.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290065.wiff

Date Analyzed: 30-JAN-10 02:50

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7219

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099015

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203131a

Date Analyzed: 06-FEB-10 06:33

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7219

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099015

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290066.wiff

Date Analyzed: 30-JAN-10 03:05

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB UJ,HE12g	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>

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1301 VALIDATION DATE: 02/25/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Peter Steves ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

1. It should be noted that the MS/MSD analyses were performed on a LANL parent sample from another RN. No sample data were qualified as a result.

Reviewed by: Mary Donovan Level: I Date: 02/25/10

VALIDATOR'S SIGNATURE:

A handwritten signature of Mr. Peter Steves.

Mr. Peter Steves

DATE: 02/25/10

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1301
Lab Sample ID: 245099015Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 23.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOWClient ID: RE15-10-7219
Batch ID: 944883
Run Date: 01/28/2010 17:20
Prep Date: 01/25/2010 20:44
Data File: 045f4501.d
045b4501.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.34	ug/kg	1.45	4.34	1
11104-28-2	Aroclor-1221	U	4.34	ug/kg	1.45	4.34	1
11141-16-5	Aroclor-1232	U	4.34	ug/kg	1.45	4.34	1
53469-21-9	Aroclor-1242	U	4.34	ug/kg	1.45	4.34	1
12672-29-6	Aroclor-1248	U	4.34	ug/kg	1.45	4.34	1
11097-69-1	Aroclor-1254	U	4.34	ug/kg	1.45	4.34	1
11096-82-5	Aroclor-1260		5.00	ug/kg	1.45	4.34	2

Sunday, January 17, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1301C

LOS ALAMOS

REQUEST NUMBER: 10-1301

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/17/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245099%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7194	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7194	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7186	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7186	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7191	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7191	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7195	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7195	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7196	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7196	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7197	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7197	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7193	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7193	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7184	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7184	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7185	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7185	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7189	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7189	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7187	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7187	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7188	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7188	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7190	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7190	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7192	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7192	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7219	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7219	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7234	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7234	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

10 - 1301

Sunday, January 17, 2010

LOS ALAMOS
NATIONAL LABORATORY

These Samples are on:
LANL Request Number: 10-1301
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

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: 1/18/2010
TURNAROUND/REPORT DUE: 2/17/2010
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background
LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846-8082	1	RE15-10-7219	R	1/13/2010	
	SW-846-8260B	1	RE15-10-7184	R	1/13/2010	
		1	RE15-10-7185	R	1/13/2010	
		1	RE15-10-7186	R	1/13/2010	
		1	RE15-10-7187	R	1/13/2010	
		1	RE15-10-7188	R	1/13/2010	
		1	RE15-10-7189	R	1/13/2010	
		1	RE15-10-7190	R	1/13/2010	
		1	RE15-10-7191	R	1/13/2010	

Sunday, January 17, 2010

REQUEST NUMBER: 10-1301

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8280B	1	RE15-10-7192	R	1/13/2010	
		1	RE15-10-7193	R	1/13/2010	
		1	RE15-10-7194	R	1/13/2010	
		1	RE15-10-7195	R	1/13/2010	
		1	RE15-10-7196	R	1/13/2010	
		1	RE15-10-7197	R	1/13/2010	
		1	RE15-10-7219	R	1/13/2010	
		1	RE15-10-7234	S	1/13/2010	
		2	RE15-10-7234	S	1/13/2010	
	SW-846:8270C	1	RE15-10-7184	R	1/13/2010	
		1	RE15-10-7185	R	1/13/2010	
		1	RE15-10-7186	R	1/13/2010	
		1	RE15-10-7187	R	1/13/2010	
		1	RE15-10-7188	R	1/13/2010	
		1	RE15-10-7189	R	1/13/2010	
		1	RE15-10-7190	R	1/13/2010	
		1	RE15-10-7191	R	1/13/2010	
		1	RE15-10-7192	R	1/13/2010	
		1	RE15-10-7193	R	1/13/2010	
		1	RE15-10-7194	R	1/13/2010	
		1	RE15-10-7195	R	1/13/2010	
		1	RE15-10-7196	R	1/13/2010	
		1	RE15-10-7197	R	1/13/2010	
		1	RE15-10-7219	R	1/13/2010	
	SW-846:8321A_MOD	1	RE15-10-7184	R	1/13/2010	
		1	RE15-10-7185	R	1/13/2010	
		1	RE15-10-7186	R	1/13/2010	
		1	RE15-10-7187	R	1/13/2010	

Sunday, January 17, 2010

REQUEST NUMBER: 10-1301

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE15-10-7188	R	1/13/2010	
		1	RE15-10-7189	R	1/13/2010	
		1	RE15-10-7190	R	1/13/2010	
		1	RE15-10-7191	R	1/13/2010	
		1	RE15-10-7192	R	1/13/2010	
		1	RE15-10-7193	R	1/13/2010	
		1	RE15-10-7194	R	1/13/2010	
		1	RE15-10-7195	R	1/13/2010	
		1	RE15-10-7196	R	1/13/2010	
		1	RE15-10-7197	R	1/13/2010	
		1	RE15-10-7219	R	1/13/2010	

Final Page of REQUEST NUMBER 10-1301



January 22, 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: 245099
SDG: 10-1301

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 20, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, GC/MS Semivolatile and GC/MS Volatile. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

Sincerely,

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1301
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 245099
SDG: 10-1301

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Quality Control Data.....	1569
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Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 245099
SDG # : 10-1301**

January 22, 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 20, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The lab received (1) 40ml vial 8260B container for sample RE15-10-7234 instead of (2) as indicated on the COC. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

<u>Laboratory ID</u>	<u>Client ID</u>
245099001	RE15-10-7194
245099002	RE15-10-7186
245099003	RE15-10-7191
245099004	RE15-10-7195
245099005	RE15-10-7196
245099006	RE15-10-7197
245099007	RE15-10-7193
245099008	RE15-10-7184
245099009	RE15-10-7185
245099010	RE15-10-7189
245099011	RE15-10-7187
245099012	RE15-10-7188
245099013	RE15-10-7190
245099014	RE15-10-7192
245099015	RE15-10-7219
245099016	RE15-10-7234

Case Narrative

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

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

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

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

Valerie Davis

Project Manager

List of current GEL Certifications as of 22 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

Sunday, January 17, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1301C

LOS ALAMOS

REQUEST NUMBER: 10-1301

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/17/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

245099%.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7194	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7194	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7186	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7186	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7191	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7191	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7195	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7195	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7196	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7196	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7197	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7197	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7193	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7193	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7184	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7184	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7185	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7185	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7189	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7189	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7187	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7187	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7188	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7188	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7190	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7190	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7192	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7192	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7219	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7219	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7234	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S
RE15-10-7234	1	SEPTUM AMBER GLASS	8260B Trip Blank	Ice	S

Relinquished By:

Date

Time

Received By:

Date

Time

Printed Name Signature

4/19/10
Date Time

Greg Tyler
Printed Name Signature

4-20-10 0845
Date Time

Printed Name Signature

Printed Name Signature

Printed Name Signature

Printed Name Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name Signature

10 - 1301

Sunday, January 17, 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: 1/18/2010

TURNAROUND/REPORT DUE: 2/17/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature: 

REQUEST NUMBER: 10-1301

These Samples are on:

LANL Request Number: 10-1301
Per Agreement Number: 126310011
Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7219	R	1/13/2010	
	SW-846:82608	1	RE15-10-7184	R	1/13/2010	
		1	RE15-10-7185	R	1/13/2010	
		1	RE15-10-7186	R	1/13/2010	
		1	RE15-10-7187	R	1/13/2010	
		1	RE15-10-7188	R	1/13/2010	
		1	RE15-10-7189	R	1/13/2010	
		1	RE15-10-7190	R	1/13/2010	
		1	RE15-10-7191	R	1/13/2010	

Sunday, January 17, 2010

Page 2 of 3

REQUEST NUMBER: 10-1301

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-7192	R	1/13/2010	
		1	RE15-10-7193	R	1/13/2010	
		1	RE15-10-7194	R	1/13/2010	
		1	RE15-10-7195	R	1/13/2010	
		1	RE15-10-7196	R	1/13/2010	
		1	RE15-10-7197	R	1/13/2010	
		1	RE15-10-7219	R	1/13/2010	
		1	RE15-10-7234	S	1/13/2010	
		2	RE15-10-7234	S	1/13/2010	
	SW-846:8270C	1	RE15-10-7184	R	1/13/2010	
		1	RE15-10-7185	R	1/13/2010	
		1	RE15-10-7186	R	1/13/2010	
		1	RE15-10-7187	R	1/13/2010	
		1	RE15-10-7188	R	1/13/2010	
		1	RE15-10-7189	R	1/13/2010	
		1	RE15-10-7190	R	1/13/2010	
		1	RE15-10-7191	R	1/13/2010	
		1	RE15-10-7192	R	1/13/2010	
		1	RE15-10-7193	R	1/13/2010	
		1	RE15-10-7194	R	1/13/2010	
		1	RE15-10-7195	R	1/13/2010	
		1	RE15-10-7196	R	1/13/2010	
		1	RE15-10-7197	R	1/13/2010	
		1	RE15-10-7219	R	1/13/2010	
	SW-846:8321A_MOD	1	RE15-10-7184	R	1/13/2010	
		1	RE15-10-7185	R	1/13/2010	
		1	RE15-10-7186	R	1/13/2010	
		1	RE15-10-7187	R	1/13/2010	

Sunday, January 17, 2010

Page 3 of 3

REQUEST NUMBER: 10-1301

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8321A_MOD	1	RE15-10-7188	R	1/13/2010	
		1	RE15-10-7189	R	1/13/2010	
		1	RE15-10-7190	R	1/13/2010	
		1	RE15-10-7191	R	1/13/2010	
		1	RE15-10-7192	R	1/13/2010	
		1	RE15-10-7193	R	1/13/2010	
		1	RE15-10-7194	R	1/13/2010	
		1	RE15-10-7195	R	1/13/2010	
		1	RE15-10-7196	R	1/13/2010	
		1	RE15-10-7197	R	1/13/2010	
		1	RE15-10-7219	R	1/13/2010	

Final Page of REQUEST NUMBER 10-1301



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCO/Work Order: 10-1301	
Received By: Greg Tyler		Date Received: 1/20/10	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further investigation.
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 80cpm
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
2 Samples requiring cold preservation within 0 ≤ 6 deg. C?	X			Preservation Method: ice bags blue ice dry ice none other 2-5 12-15, 17
3 Chain of custody documents included with shipment?	X			
4 Sample containers intact and sealed?	X			Circle Applicable: seals broken damaged container leaking container other (describe)
5 Samples requiring chemical preservation at proper pH?		X		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 VOA vials free of headspace (defined as < 6mm bubble)?		X		Sample ID's and containers affected:
7 Are Encore containers present?			X	(If yes, immediately deliver to Volatiles laboratory)
8 Samples received within holding time?	X			Id's and tests affected:
9 Sample ID's on COC match ID's on bottles?	X			Sample ID's and containers affected:
10 Date & time on COC match date & time on bottles?		X		Sample ID's affected: No time on Chain of Custody.
11 Number of containers received match number indicated on COC?			X	Sample ID's affected: RE15-10-7234 The lab only rec'd (1) 40 ML vial 8260B Trip Blank instead of (2) as indicated on COC.
12 COC form is properly signed in relinquished/received sections?	X			

Comments:

Fed Ex Tracking Numbers:

7209 7849 5644 2C 7209 7849 5714 4C 7209 7849 5699 13C
 7209 7849 5725 2C 7209 7849 5828 4C 7209 7849 5817 14C
 7209 7849 5736 2C 7209 7849 5839 4C 7209 7849 5872 14C
 7209 7849 5840 2C 7209 7849 5861 4C 7209 7849 5703 15C
 7209 7849 5688 3C 7209 7849 5883 4C 7209 7849 5633 17C
 7209 7849 5850 3C 7209 7849 5747 5C
 7209 7849 5655 4C 7209 7849 6055 5C
 7209 7849 5666 4C 7209 7849 5677 12C

Subject: Sample Receipt for 1/20/10

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

Date: Thu, 21 Jan 2010 11:41:20 -0500

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

Keith,

RN 10-1337: the lab did not receive the amber glass NMED Explosives container for sample WSTWA-10-11330.

RN 10-1299: the lab rec'd (1) 40ml vial 8260B container for sample RE46-10-11171 instead of (2) as indicated on the COC.

RN 10-1292: the lab rec'd (1) 40ml vial 8260B container each for samples RE46-10-11311 and 11324 instead of (2) as indicated on the COC.

RN 10-1294: the lab rec'd (1) 40ml vial 8260B container for sample RE16-10-1019 instead of (2) as indicated on the COC.

RN 10-1301: the lab rec'd (1) 40ml vial 8260B container for sample RE15-10-7234 instead of (2) as indicated on the COC.

RN 10-1293: the TCN container for sample RE46-10-11309 was preserved prior to analysis.

RN 10-1334: the lab did not receive any vial containers for sample RE16-10-1084.

RN 10-1335: the lab did not receive a poly NO3NO2 container for sample RE16-10-1084.

RN 10-1300: the Metals and TCN were preserved prior to analysis.

RN 10-1327: containers not rec'd
none for samples RE15-10-7208, 7201, 7220
amber glass 8260B containers for samples RE15-10-7207, 7199, 7206, 7202
amber glass 8270C+NMED Exp containers for samples RE15-10-7210, 7204, 7221

RN 10-1325: containers not rec'd
poly Perchlorate+CN+NO3+pH for samples RE15-10-8425, 8412, 8410, 8417
poly METALS+U for sample RE15-10-8417

RN 10-1330: containers not rec'd
amber glass 8270+NMED Exp for samples RE16-10-965, 981, 1008, 8416
amber glass 8260B for sample RE16-10-959

RN 10-1324: containers nor rec'd
amber glass 8270+NMED Exp for samples RE15-10-8422, 8425
amber glass 8260B for samples RE15-10-8410, 8411, 8420, 8418, 8424, 8413, 8422, 8425

RN 10-1339: the lab did not receive amber glass 8081A, 8082, TPH-GRO containers for sample WSTCB-10-11545. However, we rec'd amber glass containers with the same test for sample WSTCB-10-11543 without a COC. Please advise.

Thanks,
Dionne

--
Dionne Francis
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Road
Charleston, SC (USA) 29407

Direct: 843.769.7376 Ext. 4432
Main: 843.556.8171
Fax: 843.766.1178
E-mail: daf@gel.com
Web: www.gel.com

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



SHIP DATE: 19JAN10
 ACTWGT: 61.0 LB MAN
 CAD: 0014176/CAFE2449
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PRIORITY OVERNIGHT
 TUE - 19JAN A1



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WED - 20JAN A1
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3 of 3
 PS# 7209 7849 5644
 Mat# 7209 7849 5622 0201

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

SHIP DATE: 19JAN10
 ACTWGT: 62.0 LB MAN
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2 of 2
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ORIGIN ID: SAFA (505) 665-9968
 JOYLENE VALDEZ
 LOS ALAMOS NATL LAB
 TA00 BLDG 1237 DPU 03
 LOS ALAMOS, NM 87546
 UNITED STATES US

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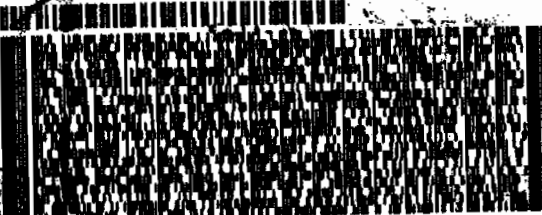
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 JOYLENE VALDEZ
 LOS ALAMOS NATL LAB
 TA00 BLDG 1237 DPU 03
 LOS ALAMOS, NM 87545
 UNITED STATES US

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 ACTWGT: 63.0 LB MAN
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2 of 2
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 Mat# 7209 7849 5839 0201

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LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
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SHIP DATE: 19JAN10
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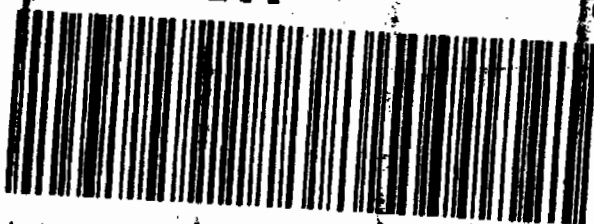


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PRIORITY OVERNIGHT

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

SHIP DATE: 19JAN10
ACTGCT: 54.0 LB MAN
CRD: 0014176/CAFE2449
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NPSH 7209 7849 5655
MatrN MASTER NH

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PRIORITY OVERNIGHT

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

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ACTGCT: 62.0 LB MAN
CRD: 0014176/CAFE2449
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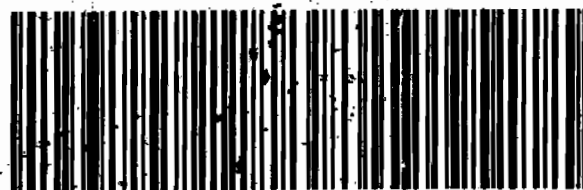


TRKH 7209 7849 5850
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WED - 20JAN A1
PRIORITY OVERNIGHT

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

SHIP DATE: 19JAN10
ACTGCT: 54.0 LB MAN
CRD: 0014176/CAFE2449
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2 of 2
NPSH 7209 7849 5666
MatrN 7209 7849 5655 0201

WED - 20JAN A1
PRIORITY OVERNIGHT

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

SHIP DATE: 19JAN10
ACTNGT: 54.0 LB MAN
CAD: 0014176/CAFE2449
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19JAN10
ACTNGT: 51.0 LB MAN
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GENERAL ENGINEERING LAB
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REF: 6B010AMR3A05529E00

4C

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3 of 3 WED - 20JAN A1
NPSH 0263 7209 7849 5714
Matr# 7209 7849 5699 0201
PRIORITY OVERNIGHT

3 of 3 WED - 20JAN A1
NPSH 0263 7209 7849 5828
Matr# 7209 7849 5806 0201
PRIORITY OVERNIGHT

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

SHIP DATE: 19JAN10
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19JAN10
ACTNGT: 51.0 LB MAN
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1 of 2 WED - 20JAN A1
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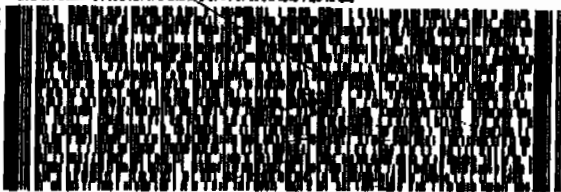
JOYLENE VALDEZ
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LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19JAN10
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03

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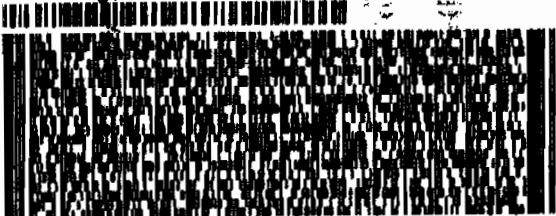
LOS ALAMOS, NM 87545
UNITED STATES US

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REF: 68010AMEGL11550000

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WED - 20JAN A1
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SHIP DATE: 19JAN10
ACTWT: 55.8 LB MAN
CAD: 0014176/CAFE2449

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WED - 20JAN A1
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03

SHIP DATE: 19JAN10
ACTWT: 61.8 LB MAN
CAD: 0014176/CAFE2449

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REF: 68010AMR3A05529E00

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1 of 2
TRKH 7209 7849 5677
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PRIORITY OVERNIGHT

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19JAN10
ACTWGT: 41.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR2A0515BYDO



1 of 3
TRK# 7209 7849 5699
0201
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PRIORITY OVERNIGHT

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Part # 156148-434 NRT V3 04-08

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19JAN10
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR3A05529E00



2 of 3
NPSH 7209 7849 5817
0263
Nstr# 7209 7849 5806 0201

WED - 20 JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



Part # 156148-434 NRT V3 04-08

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

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19JAN10
ACTWGT: 127.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 556-8171

REF: 68010AMR3A0352VA00



TRK# 7209 7849 5872
0201

WED - 20 JAN A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

YY CHSA

IN ID: SAFA (505) 665-9968
JENE VALDEZ
ALAMOS NATL LAB
BLDG 1237 DPU 03

ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 19JAN10
ACTWGT: 46.8 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

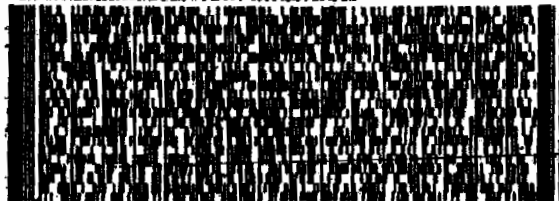
CHARLESTON SC 29407

(843) 556-8171

REF: 68010ANR2A0515BYDO

15

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2 of 3

MPS#
0263

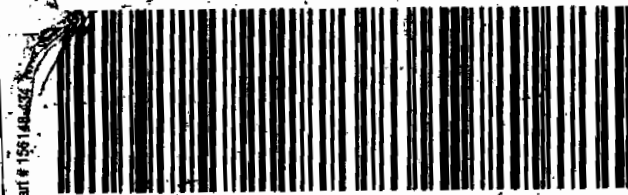
7209 7849 5703

Matr# 7209 7849 5699 (0201)

WED - 20JAN A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS



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

SHIP DATE: 19JAN10
ACTWGT: 67.8 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

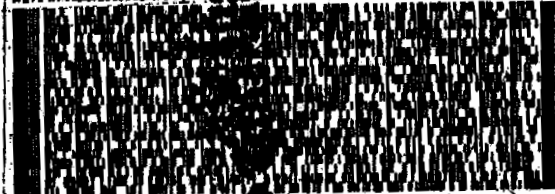
CHARLESTON SC 29407

(843) 556-8171

REF: 68010ANR2A05529E00

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J09209911382223

2 of 3

MPS#
0263

7209 7849 5633

Matr# 7209 7849 5622 (0201)

WED - 20JAN A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier Explanation

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

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

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

A The TIC is a suspected aldol-condensation product

B Target analyte was detected in the associated blank

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

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

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

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

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

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

H Analytical holding time was exceeded

h Preparation or preservation holding time was exceeded

J Value is estimated

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

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

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

ND Analyte concentration is not detected above the reporting limit

UI Gamma Spectroscopy-Uncertain identification

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

Y QC Samples were not spiked with this compound

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

GC/MS Volatile Analysis

**GC/MS Volatile Organics
Los Alamos National Laboratory (LANL)
SDG 10-1301**

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 945254
Prep Batch Number: 945253

Sample Analysis

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

Sample ID	Client ID
245099001	RE15-10-7194
245099002	RE15-10-7186
245099003	RE15-10-7191
245099004	RE15-10-7195
245099005	RE15-10-7196
245099006	RE15-10-7197
245099007	RE15-10-7193
245099008	RE15-10-7184
245099009	RE15-10-7185
245099010	RE15-10-7189
245099011	RE15-10-7187
245099012	RE15-10-7188
245099013	RE15-10-7190
245099014	RE15-10-7192
245099015	RE15-10-7219
245099016	RE15-10-7234
1202024442	Method Blank (MB)
1202024445	Laboratory Control Sample (LCS)
1202024446	Laboratory Control Sample (LCS)
1202037373	Method Blank (MB)
1202037374	Laboratory Control Sample (LCS)
1202037375	Laboratory Control Sample (LCS)
1202024443	245099001(RE15-10-7194) Post Spike (PS)
1202024444	245099001(RE15-10-7194) Post Spike Duplicate (PSD)

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

Samples 245099 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014 and 015 in this SDG were analyzed on an "dry weight" basis. Samples 245099 016 in this SDG was analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 13.

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

Calibration Information

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

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

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

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

Initial Calibration

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

Continuing Calibration Verification Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

Samples 245099008 (RE15-10-7184), 245099011 (RE15-10-7187), 245099012 (RE15-10-7188), 245099013 (RE15-10-7190) and 245099015 (RE15-10-7219) did not pass surrogate recoveries for Bromofluorobenzene. The samples were re-analyzed and confirmed the results. It is believed matrix interference has been demonstrated. See DER 790103.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 245099001 (RE15-10-7194) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

The spike recoveries were not all within the acceptance limits. The spike duplicate recovered in a similar manner. The results are reported. See DER 790103.

Matrix Spike Duplicate (PSD) Recovery Statement

The spike duplicate recoveries were not all within the acceptance limits. The spike duplicate recovered in a similar manner. The results are reported. See DER 790103.

Relative Percent Difference (RPD) Statement

The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance

In samples 245099001 (RE15-10-7194), 245099005 (RE15-10-7196), 245099007 (RE15-10-7193), 245099008 (RE15-10-7184), 245099009 (RE15-10-7185), 245099010 (RE15-10-7189), 245099011 (RE15-10-7187), 245099012 (RE15-10-7188), 245099013 (RE15-10-7190), 245099014 (RE15-10-7192) and 245099015 (RE15-10-7219), internal standard responses were outside the required acceptance criteria. The samples were re-analyzed and confirmed the results. It is believed matrix interference has been demonstrated. See DER 790103.

Technical Information**Holding Time Specifications**

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

Sample Preservation and Integrity

All samples met the sample preservation and integrity requirements.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information**Electronic Package Comment**

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

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

Data Exception (DER) Documentation

DER # 790103 was generated for this SDG.

Manual Integrations

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

TIC Comment

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

Additional Comments

Additional comments were not required for this SDG.

Residual Chlorine

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

System Configuration

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

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

Certification Statement

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

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

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

Client SDG: 10-1301 GEL Work Order: 245099

The Qualifiers in this report are defined as follows:


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

Review/Validation

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

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

Signature:



Name: Erin Haubert

Date: 16 FEB 2010

Title: Data Validator

Roadmap for LANL 10-1301 VOA

This roadmap was analyzed by acj on 02-11-2010, 18:15.

This roadmap was reviewed by kel00587 on 02-15-2010, 15:03.

Sample

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<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2516.d	245099007	RE15-10-7193	25-JAN-2010	16:24	10-1301.sub	1	944455	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v134.d	245099016	RE15-10-7234	26-JAN-2010	08:22	10-1301.sub	1	945254	<input type="checkbox"/>
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<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v138.d	245099004	RE15-10-7195	26-JAN-2010	10:13	10-1301.sub	1	945254	<input type="checkbox"/>
<input checked="" type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v139.d	245099005	RE15-10-7196	26-JAN-2010	10:40	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v140.d	245099006	RE15-10-7197	26-JAN-2010	11:07	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v141.d	245099007	RE15-10-7193	26-JAN-2010	11:34	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v142.d	245099008	RE15-10-7184	26-JAN-2010	12:02	10-1301.sub	1	945254	<input type="checkbox"/>
<input checked="" type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v143.d	245099009	RE15-10-7185	26-JAN-2010	12:29	10-1301.sub	1	945254	<input type="checkbox"/>
<input checked="" type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v144.d	245099010	RE15-10-7189	26-JAN-2010	12:56	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v145.d	245099011	RE15-10-7187	26-JAN-2010	13:24	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v146.d	245099012	RE15-10-7188	26-JAN-2010	13:51	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v147.d	245099013	RE15-10-7190	26-JAN-2010	14:18	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v148.d	245099014	RE15-10-7192	26-JAN-2010	14:46	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v149.d	245099015	RE15-10-7219	26-JAN-2010	15:13	10-1301.sub	1	945254	<input type="checkbox"/>

■	N	/chem/MSD3.i/s012610a.b/s3a2630.d	245099007	RE15-10-7193	26-JAN-2010	22:19	10-1301.sub	1	944455	<input type="checkbox"/>
■	N	/chem/VOA4.i/012610v4/4v218.d	245099001	RE15-10-7194	27-JAN-2010	01:25	10-1301.sub	1	945254	<input type="checkbox"/>
□	N	/chem/VOA4.i/012610v4/4v219.d	245099005	RE15-10-7196	27-JAN-2010	01:52	10-1301.sub	1	945254	<input type="checkbox"/>
■	N	/chem/VOA4.i/012610v4/4v220.d	245099007	RE15-10-7193	27-JAN-2010	02:20	10-1301.sub	1	945254	<input type="checkbox"/>
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□	N	/chem/VOA4.i/012610v4/4v223.d	245099010	RE15-10-7189	27-JAN-2010	03:42	10-1301.sub	1	945254	<input type="checkbox"/>
■	N	/chem/VOA4.i/012610v4/4v224.d	245099011	RE15-10-7187	27-JAN-2010	04:09	10-1301.sub	1	945254	<input type="checkbox"/>
■	N	/chem/VOA4.i/012610v4/4v225.d	245099012	RE15-10-7188	27-JAN-2010	04:36	10-1301.sub	1	945254	<input type="checkbox"/>
■	N	/chem/VOA4.i/012610v4/4v226.d	245099013	RE15-10-7190	27-JAN-2010	05:04	10-1301.sub	1	945254	<input type="checkbox"/>
■	N	/chem/VOA4.i/012610v4/4v227.d	245099014	RE15-10-7192	27-JAN-2010	05:31	10-1301.sub	1	945254	<input type="checkbox"/>
■	N	/chem/VOA4.i/012610v4/4v228.d	245099015	RE15-10-7219	27-JAN-2010	05:58	10-1301.sub	1	945254	<input type="checkbox"/>

QC Sample

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□	N	/chem/VOA4.i/012510v4/4v129LL.d	1202024445	LCS	lcs	26-JAN-2010	06:02	all.sub	1	945254	<input type="checkbox"/>
□	N	/chem/VOA4.i/012510v4/4v131SL.d	1202024446	LCS	lcs	26-JAN-2010	06:58	all.sub	1	945254	<input type="checkbox"/>
□	N	/chem/VOA4.i/012510v4/4v132BL.d	1202024442	BLANK	mb	26-JAN-2010	07:26	all.sub	1	945254	<input type="checkbox"/>
□	N	/chem/VOA4.i/012510v4/4v150.d	1202024443	RE15-10-7194MS	ms	26-JAN-2010	15:40	10-1301.sub	1	945254	<input type="checkbox"/>

<input type="checkbox"/>	N	/chem/VOA4.i/012510v4/4v151.d	1202024444	RE15-10-7194MSD	msd	26-JAN-2010	16:08	10-1301.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012610v4/4v203LL.d	1202037374	LCS	lcs	26-JAN-2010	18:30	all.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012610v4/4v205sl.d	1202037375	LCS	lcs	26-JAN-2010	19:25	all.sub	1	945254	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/VOA4.i/012610v4/4v207bl.d	1202037373	BLANK	mb	26-JAN-2010	20:22	all.sub	1	945254	<input type="checkbox"/>

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099008

Client ID: RE15-10-7184
 Batch ID: 945254
 Run Date: 01/26/2010 12:02
 Prep Date: 01/25/2010 22:59
 Data File: 4v142.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 17.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.411	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21
67-64-1	Acetone	U	6.04	ug/kg	2.00	6.04
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
74-88-4	Iodomethane	U	6.04	ug/kg	1.93	6.04
75-09-2	Methylene chloride	U	6.04	ug/kg	2.42	6.04
75-15-0	Carbon disulfide	U	6.04	ug/kg	1.51	6.04
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21
78-93-3	2-Butanone	U	6.04	ug/kg	1.81	6.04
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.399	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.399	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21
108-10-1	4-Methyl-2-pentanone	U	6.04	ug/kg	1.51	6.04
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21
591-78-6	2-Hexanone	U	6.04	ug/kg	1.81	6.04
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21
127-18-4	Tetrachloroethylene	J	0.905	ug/kg	0.362	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1301
 Lab Sample ID: 245099008

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4J
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 17.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7184
 Batch ID: 945254
 Run Date: 01/26/2010 12:02
 Prep Date: 01/25/2010 22:59
 Data File: 4v142.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	J	0.460	ug/kg	0.362	2.42
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.04	ug/kg	1.93	6.04
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	8.12	ug/kg		J
	Unknown Siloxane	16.79	19	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099009

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 % Moisture: 9.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7185
 Batch ID: 945254
 Run Date: 01/27/2010 03:15
 Prep Date: 01/26/2010 21:22
 Data File: 4v222.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.453	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099009

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.635	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.49	6.06	ug/kg		J
	Unknown Siloxane	14.83	46.3	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099002	Date Received: 01/20/2010 08:45	% Moisture: 18.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7186	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 09:17	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:53	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v136.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.368	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.368	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.368	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.368	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.368	1.23
67-64-1	Acetone	U	6.14	ug/kg	2.04	6.14
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
74-88-4	Iodomethane	U	6.14	ug/kg	1.97	6.14
75-09-2	Methylene chloride	U	6.14	ug/kg	2.46	6.14
75-15-0	Carbon disulfide	U	6.14	ug/kg	1.54	6.14
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.368	1.23
78-93-3	2-Butanone	U	6.14	ug/kg	1.84	6.14
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.368	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.368	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.405	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.368	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.368	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.368	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.368	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.368	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.405	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.368	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.368	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.368	1.23
108-10-1	4-Methyl-2-pentanone	U	6.14	ug/kg	1.54	6.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.368	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.368	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.368	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.368	1.23
591-78-6	2-Hexanone	U	6.14	ug/kg	1.84	6.14
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.368	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.368	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.368	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.368	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.368	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099002	Date Received: 01/20/2010 08:45	%Moisture: 18.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7186	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 09:17	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:53	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v136.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.368	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.368	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.368	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.368	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.368	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.368	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.368	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.368	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.368	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.368	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.368	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.368	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.368	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.368	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.368	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.368	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.368	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.368	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.368	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.14	ug/kg	1.97	6.14
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.368	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.8	11	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099011

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7187
 Batch ID: 945254
 Run Date: 01/26/2010 13:24
 Prep Date: 01/25/2010 23:02
 Data File: 4v145.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.76	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.65	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.65	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.505	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

**Volatile
Certificate of Analysis
Sample Summary**

Page 2 of 2

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	%Moisture: 9.3
Client ID: RE15-10-7187	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 13:24	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 23:02	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v145.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.76	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	6.29	ug/kg		J
	Unknown Siloxane	14.83	80.9	ug/kg		J
13466-78-9	3-Carene	15.8	9.02	ug/kg	96	NJ
	Unknown Siloxane	16.79	23.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 12.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.343	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.343	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.343	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.343	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.343	1.14
67-64-1	Acetone	U	5.71	ug/kg	1.90	5.71
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
74-88-4	Iodomethane	U	5.71	ug/kg	1.83	5.71
75-09-2	Methylene chloride	U	5.71	ug/kg	2.28	5.71
75-15-0	Carbon disulfide	U	5.71	ug/kg	1.43	5.71
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.343	1.14
78-93-3	2-Butanone	U	5.71	ug/kg	1.71	5.71
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.343	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.377	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.343	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.343	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.343	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.343	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.343	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.377	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.343	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.343	1.14
108-10-1	4-Methyl-2-pentanone	U	5.71	ug/kg	1.43	5.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.343	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.343	1.14
591-78-6	2-Hexanone	U	5.71	ug/kg	1.71	5.71
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.343	1.14
127-18-4	Tetrachloroethylene	J	0.733	ug/kg	0.343	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.343	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.343	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.343	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099012

Client ID: RE15-10-7188
 Batch ID: 945254
 Run Date: 01/26/2010 13:51
 Prep Date: 01/25/2010 23:03
 Data File: 4v146.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 12.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	J	0.760	ug/kg	0.343	1.14
179601-23-1	m,p-Xylenes	J	0.962	ug/kg	0.343	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.343	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.343	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.343	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.343	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.343	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.343	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.343	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.343	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.343	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.343	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.343	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.343	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.71	ug/kg	1.83	5.71
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	7.53	ug/kg		J
	Unknown Siloxane	14.83	72.7	ug/kg		J
	Unknown Siloxane	16.79	19.1	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099010	Date Received: 01/20/2010 08:45	%Moisture: 9.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7189	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/27/2010 03:42	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 21:23	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v223.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.51	ug/kg	1.83	5.51
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.51	ug/kg	1.76	5.51
75-09-2	Methylene chloride	U	5.51	ug/kg	2.20	5.51
75-15-0	Carbon disulfide	U	5.51	ug/kg	1.38	5.51
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.51	ug/kg	1.65	5.51
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	J	0.687	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.51	ug/kg	1.38	5.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene		1.53	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.51	ug/kg	1.65	5.51
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.578	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099010	Date Received: 01/20/2010 08:45	%Moisture: 9.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7189	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/27/2010 03:42	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 21:23	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v223.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.761	ug/kg	0.331	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.51	ug/kg	1.76	5.51
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	5.61	ug/kg		J
	Unknown Siloxane	14.83	107	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099013

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 28.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7190
 Batch ID: 945254
 Run Date: 01/26/2010 14:18
 Prep Date: 01/25/2010 23:04
 Data File: 4v147.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.40	ug/kg	0.474	1.40
74-87-3	Chloromethane	U	1.40	ug/kg	0.419	1.40
75-01-4	Vinyl chloride	U	1.40	ug/kg	0.419	1.40
74-83-9	Bromomethane	U	1.40	ug/kg	0.419	1.40
75-00-3	Chloroethane	U	1.40	ug/kg	0.419	1.40
75-69-4	Trichlorofluoromethane	U	1.40	ug/kg	0.419	1.40
67-64-1	Acetone	J	3.70	ug/kg	2.32	6.98
75-35-4	1,1-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
74-88-4	Iodomethane	U	6.98	ug/kg	2.23	6.98
75-09-2	Methylene chloride		9.41	ug/kg	2.79	6.98
75-15-0	Carbon disulfide	U	6.98	ug/kg	1.74	6.98
156-60-5	trans-1,2-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
75-34-3	1,1-Dichloroethane	U	1.40	ug/kg	0.419	1.40
78-93-3	2-Butanone	U	6.98	ug/kg	2.09	6.98
156-59-2	cis-1,2-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
594-20-7	2,2-Dichloropropane	U	1.40	ug/kg	0.419	1.40
67-66-3	Chloroform	U	1.40	ug/kg	0.419	1.40
74-97-5	Bromochloromethane	U	1.40	ug/kg	0.460	1.40
71-55-6	1,1,1-Trichloroethane	U	1.40	ug/kg	0.419	1.40
563-58-6	1,1-Dichloropropene	U	1.40	ug/kg	0.419	1.40
56-23-5	Carbon tetrachloride	U	1.40	ug/kg	0.419	1.40
107-06-2	1,2-Dichloroethane	U	1.40	ug/kg	0.419	1.40
71-43-2	Benzene	U	1.40	ug/kg	0.419	1.40
79-01-6	Trichloroethylene	U	1.40	ug/kg	0.460	1.40
78-87-5	1,2-Dichloropropane	U	1.40	ug/kg	0.419	1.40
75-27-4	Bromodichloromethane	U	1.40	ug/kg	0.419	1.40
74-95-3	Dibromomethane	U	1.40	ug/kg	0.419	1.40
108-10-1	4-Methyl-2-pentanone	U	6.98	ug/kg	1.74	6.98
10061-01-5	cis-1,3-Dichloropropylene	U	1.40	ug/kg	0.419	1.40
108-88-3	Toluene	J	1.17	ug/kg	0.419	1.40
10061-02-6	trans-1,3-Dichloropropylene	U	1.40	ug/kg	0.419	1.40
79-00-5	1,1,2-Trichloroethane	U	1.40	ug/kg	0.419	1.40
591-78-6	2-Hexanone	U	6.98	ug/kg	2.09	6.98
142-28-9	1,3-Dichloropropane	U	1.40	ug/kg	0.419	1.40
127-18-4	Tetrachloroethylene		1.55	ug/kg	0.419	1.40
124-48-1	Dibromochloromethane	U	1.40	ug/kg	0.419	1.40
106-93-4	1,2-Dibromoethane	U	1.40	ug/kg	0.419	1.40
108-90-7	Chlorobenzene	U	1.40	ug/kg	0.419	1.40

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099013	Date Received: 01/20/2010 08:45	%Moisture: 28.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7190	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 14:18	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:04	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v147.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.40	ug/kg	0.419	1.40
179601-23-1	m,p-Xylenes	J	1.14	ug/kg	0.419	2.79
95-47-6	o-Xylene	U	1.40	ug/kg	0.419	1.40
100-42-5	Styrene	U	1.40	ug/kg	0.419	1.40
75-25-2	Bromoform	U	1.40	ug/kg	0.419	1.40
79-34-5	1,1,2,2-Tetrachloroethane	U	1.40	ug/kg	0.419	1.40
96-18-4	1,2,3-Trichloropropane	U	1.40	ug/kg	0.419	1.40
108-86-1	Bromobenzene	U	1.40	ug/kg	0.419	1.40
103-65-1	n-Propylbenzene	U	1.40	ug/kg	0.419	1.40
95-49-8	2-Chlorotoluene	U	1.40	ug/kg	0.419	1.40
98-82-8	Isopropylbenzene	U	1.40	ug/kg	0.419	1.40
108-67-8	1,3,5-Trimethylbenzene	U	1.40	ug/kg	0.419	1.40
106-43-4	4-Chlorotoluene	U	1.40	ug/kg	0.419	1.40
98-06-6	tert-Butylbenzene	U	1.40	ug/kg	0.419	1.40
95-63-6	1,2,4-Trimethylbenzene	U	1.40	ug/kg	0.419	1.40
135-98-8	sec-Butylbenzene	U	1.40	ug/kg	0.419	1.40
99-87-6	4-Isopropyltoluene	J	0.790	ug/kg	0.419	1.40
541-73-1	1,3-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40
106-46-7	1,4-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40
104-51-8	n-Butylbenzene	U	1.40	ug/kg	0.419	1.40
96-12-8	1,2-Dibromo-3-chloropropane	U	1.40	ug/kg	0.419	1.40
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.98	ug/kg	2.23	6.98
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.40	ug/kg	0.419	1.40
95-50-1	1,2-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	9.78	ug/kg		J
	Unknown Siloxane	14.83	52.3	ug/kg		J
	Unknown Siloxane	16.79	32.8	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7191
 Batch ID: 945254
 Run Date: 01/26/2010 09:45
 Prep Date: 01/25/2010 22:54
 Data File: 4v137.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.85	ug/kg	1.94	5.85
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.85	ug/kg	1.87	5.85
75-09-2	Methylene chloride	U	5.85	ug/kg	2.34	5.85
75-15-0	Carbon disulfide	U	5.85	ug/kg	1.46	5.85
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.85	ug/kg	1.76	5.85
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.85	ug/kg	1.46	5.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.85	ug/kg	1.76	5.85
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	J	0.458	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1301
Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Aliquot: 5 g
Column: RTX-VOLATILES

Matrix: R
%Moisture: 14.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

Client ID: RE15-10-7191
Batch ID: 945254
Run Date: 01/26/2010 09:45
Prep Date: 01/25/2010 22:54
Data File: 4v137.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	J	0.430	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.85	ug/kg	1.87	5.85
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	108	ug/kg		J
	Unknown Siloxane	16.79	25.9	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099014	Date Received: 01/20/2010 08:45	% Moisture: 34.4
Client ID: RE15-10-7192	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 14:46	Inst: VOA4I	Dilution: 1
Prep Date: 01/25/2010 23:05	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v148.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.52	ug/kg	0.518	1.52
74-87-3	Chloromethane	U	1.52	ug/kg	0.457	1.52
75-01-4	Vinyl chloride	U	1.52	ug/kg	0.457	1.52
74-83-9	Bromomethane	U	1.52	ug/kg	0.457	1.52
75-00-3	Chloroethane	U	1.52	ug/kg	0.457	1.52
75-69-4	Trichlorofluoromethane	U	1.52	ug/kg	0.457	1.52
67-64-1	Acetone	U	7.62	ug/kg	2.53	7.62
75-35-4	1,1-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
74-88-4	Iodomethane	U	7.62	ug/kg	2.44	7.62
75-09-2	Methylene chloride	U	7.62	ug/kg	3.05	7.62
75-15-0	Carbon disulfide	U	7.62	ug/kg	1.90	7.62
156-60-5	trans-1,2-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
75-34-3	1,1-Dichloroethane	U	1.52	ug/kg	0.457	1.52
78-93-3	2-Butanone	U	7.62	ug/kg	2.29	7.62
156-59-2	cis-1,2-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
594-20-7	2,2-Dichloropropane	U	1.52	ug/kg	0.457	1.52
67-66-3	Chloroform	U	1.52	ug/kg	0.457	1.52
74-97-5	Bromochloromethane	U	1.52	ug/kg	0.503	1.52
71-55-6	1,1,1-Trichloroethane	U	1.52	ug/kg	0.457	1.52
563-58-6	1,1-Dichloropropene	U	1.52	ug/kg	0.457	1.52
56-23-5	Carbon tetrachloride	U	1.52	ug/kg	0.457	1.52
107-06-2	1,2-Dichloroethane	U	1.52	ug/kg	0.457	1.52
71-43-2	Benzene	U	1.52	ug/kg	0.457	1.52
79-01-6	Trichloroethylene	U	1.52	ug/kg	0.503	1.52
78-87-5	1,2-Dichloropropane	U	1.52	ug/kg	0.457	1.52
75-27-4	Bromodichloromethane	U	1.52	ug/kg	0.457	1.52
74-95-3	Dibromomethane	U	1.52	ug/kg	0.457	1.52
108-10-1	4-Methyl-2-pentanone	U	7.62	ug/kg	1.90	7.62
10061-01-5	cis-1,3-Dichloropropylene	U	1.52	ug/kg	0.457	1.52
108-88-3	Toluene	U	1.52	ug/kg	0.457	1.52
10061-02-6	trans-1,3-Dichloropropylene	U	1.52	ug/kg	0.457	1.52
79-00-5	1,1,2-Trichloroethane	U	1.52	ug/kg	0.457	1.52
591-78-6	2-Hexanone	U	7.62	ug/kg	2.29	7.62
142-28-9	1,3-Dichloropropane	U	1.52	ug/kg	0.457	1.52
127-18-4	Tetrachloroethylene	U	1.52	ug/kg	0.457	1.52
124-48-1	Dibromochloromethane	U	1.52	ug/kg	0.457	1.52
106-93-4	1,2-Dibromoethane	U	1.52	ug/kg	0.457	1.52
108-90-7	Chlorobenzene	U	1.52	ug/kg	0.457	1.52

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301

Lab Sample ID: 245099014

Date Collected: 01/13/2010 12:00

Date Received: 01/20/2010 08:45

Matrix: R

%Moisture: 34.4

Client ID: RE15-10-7192

Client: LANL010

Project: LANL01004

Batch ID: 945254

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Run Date: 01/26/2010 14:46

Inst: VOA4.I

Dilution: 1

Prep Date: 01/25/2010 23:05

Analyst: ACJ

Purge Vol: 5 mL

Data File: 4v148.d

Aliquot: 5 g

Final Volume: 5 mL

Column: RTX-VOLATILES

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.52	ug/kg	0.457	1.52
179601-23-1	m,p-Xylenes	U	3.05	ug/kg	0.457	3.05
95-47-6	o-Xylene	U	1.52	ug/kg	0.457	1.52
100-42-5	Styrene	U	1.52	ug/kg	0.457	1.52
75-25-2	Bromoform	U	1.52	ug/kg	0.457	1.52
79-34-5	1,1,2,2-Tetrachloroethane	U	1.52	ug/kg	0.457	1.52
96-18-4	1,2,3-Trichloropropane	U	1.52	ug/kg	0.457	1.52
108-86-1	Bromobenzene	U	1.52	ug/kg	0.457	1.52
103-65-1	n-Propylbenzene	U	1.52	ug/kg	0.457	1.52
95-49-8	2-Chlorotoluene	U	1.52	ug/kg	0.457	1.52
98-82-8	Isopropylbenzene	U	1.52	ug/kg	0.457	1.52
108-67-8	1,3,5-Trimethylbenzene	U	1.52	ug/kg	0.457	1.52
106-43-4	4-Chlorotoluene	U	1.52	ug/kg	0.457	1.52
98-06-6	tert-Butylbenzene	U	1.52	ug/kg	0.457	1.52
95-63-6	1,2,4-Trimethylbenzene	U	1.52	ug/kg	0.457	1.52
135-98-8	sec-Butylbenzene	U	1.52	ug/kg	0.457	1.52
99-87-6	4-Isopropyltoluene	U	1.52	ug/kg	0.457	1.52
541-73-1	1,3-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52
106-46-7	1,4-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52
104-51-8	n-Butylbenzene	U	1.52	ug/kg	0.457	1.52
96-12-8	1,2-Dibromo-3-chloropropane	U	1.52	ug/kg	0.457	1.52
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.62	ug/kg	2.44	7.62
630-20-6	1,1,1,2-Tetrachloroethane	U	1.52	ug/kg	0.457	1.52
95-50-1	1,2-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	8.59	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099007	Date Received: 01/20/2010 08:45	%Moisture: 19
Client ID: RE15-10-7193	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 11:34	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 22:58	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v141.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.420	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	U	6.17	ug/kg	2.05	6.17
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.17	ug/kg	1.98	6.17
75-09-2	Methylene chloride	U	6.17	ug/kg	2.47	6.17
75-15-0	Carbon disulfide	U	6.17	ug/kg	1.54	6.17
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.17	ug/kg	1.85	6.17
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.407	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.407	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.17	ug/kg	1.54	6.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	J	0.796	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.17	ug/kg	1.85	6.17
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	J	0.415	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099007	Date Received: 01/20/2010 08:45	%Moisture: 19
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7193	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 11:34	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:58	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v141.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	J	0.489	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	J	0.406	ug/kg	0.370	2.47
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.17	ug/kg	1.98	6.17
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	14.79	13.1	ug/kg	96	NJ
	Unknown Siloxane	16.79	16.7	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099001	Date Received: 01/20/2010 08:45	% Moisture: 20.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7194	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 08:49	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:50	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v135.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.26	ug/kg	0.429	1.26
74-87-3	Chloromethane	U	1.26	ug/kg	0.378	1.26
75-01-4	Vinyl chloride	U	1.26	ug/kg	0.378	1.26
74-83-9	Bromomethane	U	1.26	ug/kg	0.378	1.26
75-00-3	Chloroethane	U	1.26	ug/kg	0.378	1.26
75-69-4	Trichlorofluoromethane	U	1.26	ug/kg	0.378	1.26
67-64-1	Acetone	U	6.30	ug/kg	2.09	6.30
75-35-4	1,1-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
74-88-4	Iodomethane	U	6.30	ug/kg	2.02	6.30
75-09-2	Methylene chloride	U	6.30	ug/kg	2.52	6.30
75-15-0	Carbon disulfide	U	6.30	ug/kg	1.58	6.30
156-60-5	trans-1,2-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
75-34-3	1,1-Dichloroethane	U	1.26	ug/kg	0.378	1.26
78-93-3	2-Butanone	U	6.30	ug/kg	1.89	6.30
156-59-2	cis-1,2-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
594-20-7	2,2-Dichloropropane	U	1.26	ug/kg	0.378	1.26
67-66-3	Chloroform	U	1.26	ug/kg	0.378	1.26
74-97-5	Bromochloromethane	U	1.26	ug/kg	0.416	1.26
71-55-6	1,1,1-Trichloroethane	U	1.26	ug/kg	0.378	1.26
563-58-6	1,1-Dichloropropene	U	1.26	ug/kg	0.378	1.26
56-23-5	Carbon tetrachloride	U	1.26	ug/kg	0.378	1.26
107-06-2	1,2-Dichloroethane	U	1.26	ug/kg	0.378	1.26
71-43-2	Benzene	U	1.26	ug/kg	0.378	1.26
79-01-6	Trichloroethylene	U	1.26	ug/kg	0.416	1.26
78-87-5	1,2-Dichloropropane	U	1.26	ug/kg	0.378	1.26
75-27-4	Bromodichloromethane	U	1.26	ug/kg	0.378	1.26
74-95-3	Dibromomethane	U	1.26	ug/kg	0.378	1.26
108-10-1	4-Methyl-2-pentanone	U	6.30	ug/kg	1.58	6.30
10061-01-5	cis-1,3-Dichloropropylene	U	1.26	ug/kg	0.378	1.26
108-88-3	Toluene	U	1.26	ug/kg	0.378	1.26
10061-02-6	trans-1,3-Dichloropropylene	U	1.26	ug/kg	0.378	1.26
79-00-5	1,1,2-Trichloroethane	U	1.26	ug/kg	0.378	1.26
591-78-6	2-Hexanone	U	6.30	ug/kg	1.89	6.30
142-28-9	1,3-Dichloropropane	U	1.26	ug/kg	0.378	1.26
127-18-4	Tetrachloroethylene	J	0.799	ug/kg	0.378	1.26
124-48-1	Dibromochloromethane	U	1.26	ug/kg	0.378	1.26
106-93-4	1,2-Dibromoethane	U	1.26	ug/kg	0.378	1.26
108-90-7	Chlorobenzene	U	1.26	ug/kg	0.378	1.26

Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1301
 Lab Sample ID: 245099001

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 20.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7194
 Batch ID: 945254
 Run Date: 01/26/2010 08:49
 Prep Date: 01/25/2010 22:50
 Data File: 4v135.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.26	ug/kg	0.378	1.26
179601-23-1	m,p-Xylenes	U	2.52	ug/kg	0.378	2.52
95-47-6	o-Xylene	U	1.26	ug/kg	0.378	1.26
100-42-5	Styrene	U	1.26	ug/kg	0.378	1.26
75-25-2	Bromoform	U	1.26	ug/kg	0.378	1.26
79-34-5	1,1,2,2-Tetrachloroethane	U	1.26	ug/kg	0.378	1.26
96-18-4	1,2,3-Trichloropropane	U	1.26	ug/kg	0.378	1.26
108-86-1	Bromobenzene	U	1.26	ug/kg	0.378	1.26
103-65-1	n-Propylbenzene	U	1.26	ug/kg	0.378	1.26
95-49-8	2-Chlorotoluene	U	1.26	ug/kg	0.378	1.26
98-82-8	Isopropylbenzene	U	1.26	ug/kg	0.378	1.26
108-67-8	1,3,5-Trimethylbenzene	U	1.26	ug/kg	0.378	1.26
106-43-4	4-Chlorotoluene	U	1.26	ug/kg	0.378	1.26
98-06-6	tert-Butylbenzene	U	1.26	ug/kg	0.378	1.26
95-63-6	1,2,4-Trimethylbenzene	U	1.26	ug/kg	0.378	1.26
135-98-8	sec-Butylbenzene	U	1.26	ug/kg	0.378	1.26
99-87-6	4-Isopropyltoluene	U	1.26	ug/kg	0.378	1.26
541-73-1	1,3-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26
106-46-7	1,4-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26
104-51-8	n-Butylbenzene	U	1.26	ug/kg	0.378	1.26
96-12-8	1,2-Dibromo-3-chloropropane	U	1.26	ug/kg	0.378	1.26
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.30	ug/kg	2.02	6.30
630-20-6	Trichlorotrifluoroethane	U	1.26	ug/kg	0.378	1.26
95-50-1	1,1,1,2-Tetrachloroethane	U	1.26	ug/kg	0.378	1.26
95-50-1	1,2-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	59.4	ug/kg		J
	Unknown Siloxane	16.79	26.3	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099004

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 10.1
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	J	0.404	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7195	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 10:13	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:55	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v138.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	J	0.783	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.56	ug/kg	1.78	5.56
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	93.3	ug/kg		J
	Unknown Siloxane	16.79	19	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
Client ID: RE15-10-7196	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/27/2010 01:52	Inst: VOA4.1	Dilution: 1
Prep Date: 01/26/2010 21:19	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v219.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.445	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone	U	6.55	ug/kg	2.17	6.55
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.10	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.97	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.432	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.432	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	J	0.685	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.97	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099005

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4J
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 23.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7196
 Batch ID: 945254
 Run Date: 01/27/2010 01:52
 Prep Date: 01/26/2010 21:19
 Data File: 4v219.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	J	0.574	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene	J	0.447	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.10	6.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	7.17	ug/kg		J
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	14.8	13.2	ug/kg	94	NJ
	Unknown Siloxane	16.79	8.91	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099006

Client ID: RE15-10-7197
 Batch ID: 945254
 Run Date: 01/26/2010 11:07
 Prep Date: 01/25/2010 22:57
 Data File: 4v140.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.84	ug/kg	1.94	5.84
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.84	ug/kg	1.87	5.84
75-09-2	Methylene chloride	U	5.84	ug/kg	2.34	5.84
75-15-0	Carbon disulfide	U	5.84	ug/kg	1.46	5.84
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.84	ug/kg	1.75	5.84
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.84	ug/kg	1.46	5.84
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	J	0.405	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.84	ug/kg	1.75	5.84
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	J	0.420	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099006	Date Received: 01/20/2010 08:45	%Moisture: 14.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7197	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/26/2010 11:07	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:57	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v140.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	J	0.789	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.84	ug/kg	1.87	5.84
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	44.6	ug/kg		J
	Unknown Siloxane	16.79	25	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7219	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 15:13	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:06	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v149.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.443	1.30
74-87-3	Chloromethane	U	1.30	ug/kg	0.391	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.391	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.391	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.391	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.391	1.30
67-64-1	Acetone	U	6.51	ug/kg	2.16	6.51
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
74-88-4	Iodomethane	U	6.51	ug/kg	2.08	6.51
75-09-2	Methylene chloride	U	6.51	ug/kg	2.60	6.51
75-15-0	Carbon disulfide	U	6.51	ug/kg	1.63	6.51
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.391	1.30
78-93-3	2-Butanone	U	6.51	ug/kg	1.95	6.51
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.391	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.391	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.430	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.391	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.391	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.391	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.391	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.391	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.430	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.391	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.391	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.391	1.30
108-10-1	4-Methyl-2-pentanone	U	6.51	ug/kg	1.63	6.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.391	1.30
108-88-3	Toluene	U	1.30	ug/kg	0.391	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.391	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.391	1.30
591-78-6	2-Hexanone	U	6.51	ug/kg	1.95	6.51
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.391	1.30
127-18-4	Tetrachloroethylene	J	0.962	ug/kg	0.391	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.391	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.391	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.391	1.30

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
Client ID: RE15-10-7219	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 15:13	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 23:06	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v149.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.391	1.30
179601-23-1	m,p-Xylenes	J	0.620	ug/kg	0.391	2.60
95-47-6	o-Xylene	U	1.30	ug/kg	0.391	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.391	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.391	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.391	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.391	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.391	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.391	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.391	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.391	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.391	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.391	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.391	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.391	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.391	1.30
99-87-6	4-Isopropyltoluene	U	1.30	ug/kg	0.391	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.391	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.391	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.51	ug/kg	2.08	6.51
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.391	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	8.28	ug/kg		J
	Unknown Siloxane	14.83	68.2	ug/kg		J
	Unknown Siloxane	16.79	38.9	ug/kg		J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: S
Lab Sample ID: 245099016	Date Received: 01/20/2010 08:45	
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7234	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/26/2010 08:22	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:07	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v134.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.67	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099016

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

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

Client ID: RE15-10-7234
 Batch ID: 945254
 Run Date: 01/26/2010 08:22
 Prep Date: 01/25/2010 23:07
 Data File: 4v134.d

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

Tentatively Identified Compound Summary

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

QC Summary

Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1301

Matrix Type: SOLID

CAP Column (1) : RTX-VOLATILES

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202024445	LCS for batch 945253	92	91	99
1202024446	LCS for batch 945253	87	89	102
1202024442	MB for batch 945253	87	94	108
245099016	RE15-10-7234	83	92	104
245099001	RE15-10-7194	83	101	128
245099002	RE15-10-7186	83	96	116
245099003	RE15-10-7191	82	92	115
245099004	RE15-10-7195	81	97	116
245099006	RE15-10-7197	80	98	116
245099007	RE15-10-7193	81	101	129
245099008	RE15-10-7184	83	110	150 *
245099011	RE15-10-7187	81	104	139 *
245099012	RE15-10-7188	83	108	155 *
245099013	RE15-10-7190	82	116	146 *
245099014	RE15-10-7192	78	100	130
245099015	RE15-10-7219	82	115	158 *
1202024443	RE15-10-7194PS	82	96	112
1202024444	RE15-10-7194PSD	85	97	114
1202037374	LCS for batch 945253	88	88	96
1202037375	LCS for batch 945253	87	91	101
1202037373	MB for batch 945253	84	90	103
245099005	RE15-10-7196	81	99	126
245099009	RE15-10-7185	84	96	125
245099010	RE15-10-7189	82	97	125

Surrogate**Acceptance Limits**

DCED4 = 1,2-Dichloroethane-d4

(68%-131%)

TOL = Toluene-d8

(75%-129%)

BFB = Bromofluorobenzene

(68%-133%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile

Page 1 of 6

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1301

Sample Type: Post Spike

Client ID: RE15-10-7194PS

Matrix: R

Lab Sample ID: 1202024443

%Moisture: 20.7

Instrument: VOA4.I

Analysis Date: 01/26/2010 15:40

Dilution: 1

Analyst: ACJ

Pre Batch ID: 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	PS Dichlorodifluoromethane	50.0	0.00	U 50.1	100	25-149
74-87-3	PS Chloromethane	50.0	0.00	U 39.1	78	39-140
75-01-4	PS Vinyl chloride	50.0	0.00	U 40.2	80	47-129
74-83-9	PS Bromomethane	50.0	0.00	U 32.5	65	31-135
75-00-3	PS Chloroethane	50.0	0.00	U 49.9	100	53-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 47.8	96	51-151
67-64-1	PS Acetone	250	0.00	U 50.4	20 *	21-153
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 41.6	83	61-125
74-88-4	PS Iodomethane	250	0.00	U 119	48 *	53-142
75-09-2	PS Methylene chloride	50.0	0.00	U 49.6	99	59-136
75-15-0	PS Carbon disulfide	250	0.00	U 201	80	46-129
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 41.3	83	56-126
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 43.7	87	62-125
78-93-3	PS 2-Butanone	250	0.00	U 26.4	11 *	26-152
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 40.8	82	60-130
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 38.4	77	55-135
67-66-3	PS Chloroform	50.0	0.00	U 44.0	88	60-127
74-97-5	PS Bromochloromethane	50.0	0.00	U 45.9	92	61-131
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 44.5	89	59-131
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 41.6	83	57-128
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 42.8	86	58-136
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 40.8	82	58-126

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 6

SDG Number: 10-1301

Sample Type: Post Spike

Client ID: RE15-10-7194PS

Matrix: R

Lab Sample ID: 1202024443

%Moisture: 20.7

Instrument: VOA4.I

Analysis Date: 01/26/2010 15:40

Dilution: 1

Analyst: ACJ

Pren Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	PS Benzene	50.0	0.00 U	42.5	85	56-123
79-01-6	PS Trichloroethylene	50.0	0.00 U	39.6	79	51-137
78-87-5	PS 1,2-Dichloropropane	50.0	0.00 U	44.3	89	60-126
75-27-4	PS Bromodichloromethane	50.0	0.00 U	38.5	77	55-138
74-95-3	PS Dibromomethane	50.0	0.00 U	43.4	87	60-132
108-10-1	PS 4-Methyl-2-pentanone	250	0.00 U	113	45 *	58-136
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00 U	17.4	35 *	54-133
108-88-3	PS Toluene	50.0	0.00 U	43.5	87	52-128
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00 U	22.3	45 *	53-137
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00 U	45.4	91	59-130
591-78-6	PS 2-Hexanone	250	0.00 U	6.22	2 *	31-148
142-28-9	PS 1,3-Dichloropropane	50.0	0.00 U	43.0	86	57-127
127-18-4	PS Tetrachloroethylene	50.0	0.634 J	41.1	81	51-128
124-48-1	PS Dibromochloromethane	50.0	0.00 U	37.7	75	59-139
106-93-4	PS 1,2-Dibromoethane	50.0	0.00 U	35.4	71	57-133
108-90-7	PS Chlorobenzene	50.0	0.00 U	38.3	77	53-122
100-41-4	PS Ethylbenzene	50.0	0.00 U	35.6	71	51-125
179601-23-1	PS m,p-Xylenes	100	0.00 U	79.6	80	50-126
95-47-6	PS o-Xylene	50.0	0.00 U	43.0	86	52-127
100-42-5	PS Styrene	50.0	0.00 U	32.1	64	49-135
75-25-2	PS Bromoform	50.0	0.00 U	43.2	86	57-149
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00 U	52.7	105	63-127

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 6

SDG Number: 10-1301

Sample Type: Post Spike

Client ID: RE15-10-7194PS

Matrix: R

Lab Sample ID: 1202024443

%Moisture: 20.7

Instrument: VOA4.I

Analysis Date: 01/26/2010 15:40

Dilution: 1

Analyst: ACJ

Prep Batch ID: 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	PS 1,2,3-Trichloropropane	50.0	0.00 U	48.0	96	57-149
108-86-1	PS Bromobenzene	50.0	0.00 U	41.2	82	49-131
103-65-1	PS n-Propylbenzene	50.0	0.00 U	29.9	60	40-136
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	46.8	94	44-135
98-82-8	PS Isopropylbenzene	50.0	0.00 U	35.0	70	44-140
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	48.3	97	42-140
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	37.7	75	44-132
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	48.6	97	42-142
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00 U	42.0	84	43-137
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	29.2	58	39-139
99-87-6	PS 4-Isopropyltoluene	50.0	0.00 U	12.7	25 *	38-145
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	34.1	68	43-129
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	32.7	65	44-125
104-51-8	PS n-Butylbenzene	50.0	0.00 U	26.8	54	36-141
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	44.3	89	47-151
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	46.0	92	59-131
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	33.9	68	43-129

Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 6

SDG Number: 10-1301

Sample Type: Post Spike Duplicate

Client ID: RE15-10-7194PSD

Matrix: R

Lab Sample ID: 1202024444

%Moisture: 20.7

Instrument: VOA4.I

Analysis Date: 01/26/2010 16:08

Dilution: 1

Analyst: ACJ

Prep Batch ID: 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-71-8	PSD Dichlorodifluoromethane	50.0	0.00	U 53.1	106	25-149	6	0-25
74-87-3	PSD Chloromethane	50.0	0.00	U 43.1	86	39-140	10	0-25
75-01-4	PSD Vinyl chloride	50.0	0.00	U 43.7	87	47-129	8	0-25
74-83-9	PSD Bromomethane	50.0	0.00	U 34.8	70	31-135	7	0-25
75-00-3	PSD Chloroethane	50.0	0.00	U 51.8	104	53-128	4	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 46.3	93	51-151	3	0-25
67-64-1	PSD Acetone	250	0.00	U 54.0	22	21-153	7	0-25
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 43.6	87	61-125	5	0-25
74-88-4	PSD Iodomethane	250	0.00	U 124	50 *	53-142	4	0-25
75-09-2	PSD Methylene chloride	50.0	0.00	U 51.4	103	59-136	4	0-25
75-15-0	PSD Carbon disulfide	250	0.00	U 198	79	46-129	1	0-25
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 43.0	86	56-126	4	0-25
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 45.7	91	62-125	4	0-25
78-93-3	PSD 2-Butanone	250	0.00	U 24.9	10 *	26-152	6	0-25
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 42.8	86	60-130	5	0-25
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 40.7	81	55-135	6	0-25
67-66-3	PSD Chloroform	50.0	0.00	U 45.9	92	60-127	4	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 48.5	97	61-131	5	0-25
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 47.0	94	59-131	6	0-25
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 43.0	86	57-128	3	0-25
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 43.9	88	58-136	3	0-25
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 42.8	86	58-126	5	0-25

Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 6

SDG Number: 10-1301

Sample Type: Post Spike Duplicate

Client ID: RE15-10-7194PSD

Matrix: R

Lab Sample ID: 1202024444

% Moisture: 20.7

Instrument: VOA4.I

Analysis Date: 01/26/2010 16:08

Dilution: 1

Analyst: ACJ

Pren Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	Acceptance RPD %	Acceptance Limits
71-43-2	PSD Benzene	50.0	0.00 U	44.3	89	56-123	4	0-25
79-01-6	PSD Trichloroethylene	50.0	0.00 U	41.0	82	51-137	4	0-25
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00 U	46.8	94	60-126	6	0-25
75-27-4	PSD Bromodichloromethane	50.0	0.00 U	39.5	79	55-138	2	0-25
74-95-3	PSD Dibromomethane	50.0	0.00 U	45.4	91	60-132	5	0-25
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00 U	120	48 *	58-136	6	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00 U	17.0	34 *	54-133	3	0-25
108-88-3	PSD Toluene	50.0	0.00 U	43.8	88	52-128	1	0-25
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00 U	22.1	44 *	53-137	1	0-25
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00 U	46.8	94	59-130	3	0-25
591-78-6	PSD 2-Hexanone	250	0.00 U	5.30	2 *	31-148	16	0-25
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00 U	45.3	91	57-127	5	0-25
127-18-4	PSD Tetrachloroethylene	50.0	0.634 J	42.5	84	51-128	3	0-25
124-48-1	PSD Dibromochloromethane	50.0	0.00 U	37.5	75	59-139	1	0-25
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00 U	36.6	73	57-133	3	0-25
108-90-7	PSD Chlorobenzene	50.0	0.00 U	39.3	79	53-122	2	0-25
100-41-4	PSD Ethylbenzene	50.0	0.00 U	34.7	69	51-125	2	0-25
179601-23-1	PSD m,p-Xylenes	100	0.00 U	79.6	80	50-126	0	0-25
95-47-6	PSD o-Xylene	50.0	0.00 U	42.7	85	52-127	1	0-25
100-42-5	PSD Styrene	50.0	0.00 U	32.2	64	49-135	0	0-25
75-25-2	PSD Bromoform	50.0	0.00 U	42.9	86	57-149	1	0-25
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00 U	55.4	111	63-127	5	0-25

Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 6

SDG Number: 10-1301

Sample Type: Post Spike Duplicate

Client ID: RE15-10-7194PSD

Matrix: R

Lab Sample ID:1202024444

% Moisture: 20.7

Instrument: VOA4.I

Analysis Date: 01/26/2010 16:08

Dilution: 1

Analyst: ACJ

Prep Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD 1,2,3-Trichloropropane	50.0	0.00	U	51.9	104	57-149	8	0-25
108-86-1	PSD Bromobenzene	50.0	0.00	U	42.6	85	49-131	3	0-25
103-65-1	PSD n-Propylbenzene	50.0	0.00	U	27.1	54	40-136	10	0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U	47.2	94	44-135	1	0-25
98-82-8	PSD Isopropylbenzene	50.0	0.00	U	32.1	64	44-140	9	0-25
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U	48.5	97	42-140	0	0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U	37.8	76	44-132	0	0-25
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U	49.7	99	42-142	2	0-25
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U	41.9	84	43-137	0	0-25
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U	27.1	54	39-139	7	0-25
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U	9.89	20 *	38-145	25	0-25
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U	35.0	70	43-129	3	0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U	33.6	67	44-125	3	0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U	25.8	52	36-141	4	0-25
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U	45.7	91	47-151	3	0-25
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U	47.3	95	59-131	3	0-25
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U	35.8	72	43-129	6	0-25

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID: 1202024445

Instrument: VOA4.I

Analysis Date: 01/26/2010 06:02

Dilution: 1

Analyst: ACJ

Prep Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS Dichlorodifluoromethane	50.0	0.0	59.5	119	33-155
74-87-3	LCS Chloromethane	50.0	0.0	45.7	91	53-132
75-01-4	LCS Vinyl chloride	50.0	0.0	45.5	91	61-128
74-83-9	LCS Bromomethane	50.0	0.0	53.4	107	63-126
75-00-3	LCS Chloroethane	50.0	0.0	53.8	108	67-124
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	57.1	114	67-151
67-64-1	LCS Acetone	250	0.0	249	99	29-160
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	48.6	97	70-125
74-88-4	LCS Iodomethane	250	0.0	264	106	74-131
75-09-2	LCS Methylene chloride	50.0	0.0	51.3	103	72-127
75-15-0	LCS Carbon disulfide	250	0.0	261	104	64-127
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	48.8	98	71-122
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	49.0	98	75-120
78-93-3	LCS 2-Butanone	250	0.0	267	107	35-162
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	49.1	98	76-122
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	49.3	99	74-135
67-66-3	LCS Chloroform	50.0	0.0	50.5	101	77-120
74-97-5	LCS Bromochloromethane	50.0	0.0	53.2	106	76-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	52.7	105	75-128
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	52.9	106	77-125
56-23-5	LCS Carbon tetrachloride	50.0	0.0	54.3	109	77-134
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	50.1	100	72-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 3

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID: 1202024445

Instrument: VOA4.I

Analysis Date: 01/26/2010 06:02

Dilution: 1

Analyst: ACJ

Prep Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	48.9	98	72-120
79-01-6	LCS Trichloroethylene	50.0	0.0	53.6	107	78-121
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	49.6	99	74-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	53.6	107	79-125
74-95-3	LCS Dibromomethane	50.0	0.0	53.4	107	78-122
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	259	104	71-134
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	53.6	107	80-125
108-88-3	LCS Toluene	50.0	0.0	48.9	98	65-124
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	53.8	108	71-134
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	50.9	102	76-120
591-78-6	LCS 2-Hexanone	250	0.0	251	100	42-159
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	48.4	97	72-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	49.4	99	74-123
124-48-1	LCS Dibromochloromethane	50.0	0.0	54.7	109	83-128
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	53.3	107	79-121
108-90-7	LCS Chlorobenzene	50.0	0.0	51.0	102	75-120
100-41-4	LCS Ethylbenzene	50.0	0.0	49.6	99	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	102	102	74-120
95-47-6	LCS o-Xylene	50.0	0.0	51.9	104	74-120
100-42-5	LCS Styrene	50.0	0.0	55.5	111	76-125
75-25-2	LCS Bromoform	50.0	0.0	57.3	115	77-138
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	47.4	95	72-122

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID: 1202024445

Instrument: VOA4.I

Analysis Date: 01/26/2010 06:02

Dilution: 1

Analyst: ACJ

Pren Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	49.2	98	75-135
108-86-1	LCS Bromobenzene	50.0	0.0	50.4	101	73-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	48.5	97	68-121
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	47.5	95	69-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	49.6	99	66-127
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	49.2	98	67-126
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	49.7	99	72-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	50.4	101	72-124
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	49.8	100	72-122
135-98-8	LCS sec-Butylbenzene	50.0	0.0	50.6	101	71-124
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	51.4	103	72-130
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	50.3	101	73-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	49.4	99	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	51.6	103	72-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	61.3	123	68-145
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	53.6	107	78-121
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	51.3	103	74-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID:1202024446

Instrument: VOA4.I

Analysis Date: 01/26/2010 06:58

Dilution: 1

Analyst: ACJ

Prep Batch ID: 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS 1,1,2-Trichloro-1,2,2-Trifluor Trichlorotrifluoroethane	250	0.0	280	112	52-139

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID: 1202037374

Instrument: VOA4.I

Analysis Date: 01/26/2010 18:30

Dilution: 1

Analyst: ACJ

Prep Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
75-71-8	LCS Dichlorodifluoromethane	50.0	0.0	61.6	123	33-155
74-87-3	LCS Chloromethane	50.0	0.0	46.2	92	53-132
75-01-4	LCS Vinyl chloride	50.0	0.0	46.6	93	61-128
74-83-9	LCS Bromomethane	50.0	0.0	55.3	111	63-126
75-00-3	LCS Chloroethane	50.0	0.0	56.1	112	67-124
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	58.0	116	67-151
67-64-1	LCS Acetone	250	0.0	264	106	29-160
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	49.5	99	70-125
74-88-4	LCS Iodomethane	250	0.0	262	105	74-131
75-09-2	LCS Methylene chloride	50.0	0.0	50.9	102	72-127
75-15-0	LCS Carbon disulfide	250	0.0	272	109	64-127
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	50.7	101	71-122
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	50.5	101	75-120
78-93-3	LCS 2-Butanone	250	0.0	276	110	35-162
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	50.2	100	76-122
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	57.8	116	74-135
67-66-3	LCS Chloroform	50.0	0.0	50.6	101	77-120
74-97-5	LCS Bromochloromethane	50.0	0.0	52.2	104	76-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	55.0	110	75-128
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	55.6	111	77-125
56-23-5	LCS Carbon tetrachloride	50.0	0.0	56.6	113	77-134
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	47.9	96	72-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 3

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID: 1202037374

Instrument: VOA4.I

Analysis Date: 01/26/2010 18:30

Dilution: 1

Analyst: ACJ

Prev Batch ID: 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	50.2	100	72-120
79-01-6	LCS Trichloroethylene	50.0	0.0	53.0	106	78-121
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	50.6	101	74-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	53.2	106	79-125
74-95-3	LCS Dibromomethane	50.0	0.0	51.7	103	78-122
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	260	104	71-134
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	54.5	109	80-125
108-88-3	LCS Toluene	50.0	0.0	50.4	101	65-124
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	53.0	106	71-134
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	49.6	99	76-120
591-78-6	LCS 2-Hexanone	250	0.0	253	101	42-159
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	48.4	97	72-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	51.9	104	74-123
124-48-1	LCS Dibromochloromethane	50.0	0.0	52.5	105	83-128
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	51.6	103	79-121
108-90-7	LCS Chlorobenzene	50.0	0.0	51.2	102	75-120
100-41-4	LCS Ethylbenzene	50.0	0.0	51.1	102	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	105	105	74-120
95-47-6	LCS o-Xylene	50.0	0.0	51.8	104	74-120
100-42-5	LCS Styrene	50.0	0.0	55.3	111	76-125
75-25-2	LCS Bromoform	50.0	0.0	55.0	110	77-138
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	49.6	99	72-122

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID: 1202037374

Instrument: VOA4.I

Analysis Date: 01/26/2010 18:30

Dilution: 1

Analyst: ACJ

Prep Batch ID: 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	47.1	94	75-135
108-86-1	LCS Bromobenzene	50.0	0.0	50.1	100	73-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	51.5	103	68-121
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	48.9	98	69-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	51.7	103	66-127
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	50.8	102	67-126
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	51.0	102	72-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	51.9	104	72-124
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	52.1	104	72-122
135-98-8	LCS sec-Butylbenzene	50.0	0.0	53.3	107	71-124
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	54.5	109	72-130
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	51.8	104	73-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	51.1	102	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	55.5	111	72-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	56.6	113	68-145
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	52.6	105	78-121
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	51.6	103	74-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 1

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 945253

Matrix: SOIL

Lab Sample ID: 1202037375

Instrument: VOA4.I

Analysis Date: 01/26/2010 19:25

Dilution: 1

Analyst: ACJ

Pre Batch II 945253

Purge Vol: 5 mL

Batch ID: 945254

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
76-13-1	LCS 1,1,2-Trichloro-1,2,2-Trifluor Trichlorotrifluoroethane	250	0.0	304	122	52-139

Method Blank Summary

Page 1 of 1

SDG Number:	10-1301	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 945253	Instrument ID:	VOA4.I	Data File:	4v132BL.d
Lab Sample ID:	1202024442	Prep Date:	01/25/2010 23:00	Analyzed:	01/26/10 07:26
Column:	RTX-VOLATILES	Heated Purge:	Yes		

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 945253	1202024445	4v129LL.d	01/26/10	0602
02 LCS for batch 945253	1202024446	4v131SL.d	01/26/10	0658
03 RE15-10-7234	245099016	4v134.d	01/26/10	0822
04 RE15-10-7194	245099001	4v135.d	01/26/10	0849
05 RE15-10-7186	245099002	4v136.d	01/26/10	0917
06 RE15-10-7191	245099003	4v137.d	01/26/10	0945
07 RE15-10-7195	245099004	4v138.d	01/26/10	1013
08 RE15-10-7197	245099006	4v140.d	01/26/10	1107
09 RE15-10-7193	245099007	4v141.d	01/26/10	1134
10 RE15-10-7184	245099008	4v142.d	01/26/10	1202
11 RE15-10-7187	245099011	4v145.d	01/26/10	1324
12 RE15-10-7188	245099012	4v146.d	01/26/10	1351
13 RE15-10-7190	245099013	4v147.d	01/26/10	1418
14 RE15-10-7192	245099014	4v148.d	01/26/10	1446
15 RE15-10-7219	245099015	4v149.d	01/26/10	1513
16 RE15-10-7194PS	1202024443	4v150.d	01/26/10	1540
17 RE15-10-7194PSD	1202024444	4v151.d	01/26/10	1608

Method Blank Summary

Page 1 of 1

SDG Number:	10-1301	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 945253	Instrument ID:	VOA4.I	Data File:	4v207bld
Lab Sample ID:	1202037373	Prep Date:	01/26/2010 17:00	Analyzed:	01/26/10 20:22
Column:	RTX-VOLATILES	Heated Purge:	Yes		

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 945253	1202037374	4v203LLd	01/26/10	1830
02 LCS for batch 945253	1202037375	4v205sl.d	01/26/10	1925
03 RE15-10-7196	245099005	4v219.d	01/27/10	0152
04 RE15-10-7185	245099009	4v222.d	01/27/10	0315
05 RE15-10-7189	245099010	4v223.d	01/27/10	0342

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: VOA4.I

Injection Date/Time: 11-JAN-10 22:23

Column Description: DB-624

Lab File ID /011110v4/4t101.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	25.4
75	30.0 - 60.0% of mass 95	46.8
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	75.3
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	97.3
177	5.0 - 9.0% of mass 176	6.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD0005	W4VM100111-01	/011110v4/4t103.d	11-JAN-10 23:17
VSTD001	W4VM100111-02	/011110v4/4t104.d	11-JAN-10 23:45
VSTD002	W4VM100111-04	/011110v4/4t106.d	12-JAN-10 00:39
VSTD005	W4VM100111-05	/011110v4/4t107.d	12-JAN-10 01:06
VSTD010	W4VM100111-06	/011110v4/4t108.d	12-JAN-10 01:34
VSTD020	W4VM100111-07	/011110v4/4t109.d	12-JAN-10 02:01
VSTD050	W4VM100111-08	/011110v4/4t110.d	12-JAN-10 02:29
VSTD100	W4VM100111-09	/011110v4/4t111.d	12-JAN-10 02:56
VSTD005S	W4VM100111-10	/011110v4/4t113.d	12-JAN-10 03:51
VSTD010S	W4VM100111-11	/011110v4/4t114.d	12-JAN-10 04:19
VSTD025S	W4VM100111-12	/011110v4/4t115.d	12-JAN-10 04:46
VSTD100S	W4VM100111-14	/011110v4/4t117.d	12-JAN-10 05:41
VSTD250S	W4VM100111-15	/011110v4/4t118.d	12-JAN-10 06:08
VSTD500S	W4VM100111-16	/011110v4/4t119.d	12-JAN-10 06:35
SECOND SOURCE	W4VM100111-17	/011110v4/4t121.d	12-JAN-10 07:30

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: VOA4.I

Injection Date/Time: 12-JAN-10 17:58

Column Description: DB-624

Lab File ID /011210v4/4t201.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	22.2
75	30.0 - 60.0% of mass 95	47.1
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	91.4
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	100.6
177	5.0 - 9.0% of mass 176	6.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD250S / SICV	W4VM100112-03	/011210v4/4t204.d	12-JAN-10 19:20

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: VOA4.I

Injection Date/Time: 26-JAN-10 05:07

Column Description: DB-624

Lab File ID /012510v4/4v127.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	44.3
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	97.2
175	5.0 - 9.0% of mass 174	6.4
176	95.0 - 101.0% of mass 174	99.2
177	5.0 - 9.0% of mass 176	6.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM100125-07	/012510v4/4v128.d	26-JAN-10 05:35
LCS	1202024445	/012510v4/4v129LL.d	26-JAN-10 06:02
VSTD250S	W4VM100125-09	/012510v4/4v130.d	26-JAN-10 06:30
LCS	1202024446	/012510v4/4v131SL.d	26-JAN-10 06:58
BLANK	1202024442	/012510v4/4v132BL.d	26-JAN-10 07:26
RE15-10-7234	245099016	/012510v4/4v134.d	26-JAN-10 08:22
RE15-10-7194	245099001	/012510v4/4v135.d	26-JAN-10 08:49
RE15-10-7186	245099002	/012510v4/4v136.d	26-JAN-10 09:17
RE15-10-7191	245099003	/012510v4/4v137.d	26-JAN-10 09:45
RE15-10-7195	245099004	/012510v4/4v138.d	26-JAN-10 10:13
RE15-10-7197	245099006	/012510v4/4v140.d	26-JAN-10 11:07
RE15-10-7193	245099007	/012510v4/4v141.d	26-JAN-10 11:34
RE15-10-7184	245099008	/012510v4/4v142.d	26-JAN-10 12:02
RE15-10-7187	245099011	/012510v4/4v145.d	26-JAN-10 13:24
RE15-10-7188	245099012	/012510v4/4v146.d	26-JAN-10 13:51
RE15-10-7190	245099013	/012510v4/4v147.d	26-JAN-10 14:18
RE15-10-7192	245099014	/012510v4/4v148.d	26-JAN-10 14:46
RE15-10-7219	245099015	/012510v4/4v149.d	26-JAN-10 15:13
RE15-10-7194MS	1202024443	/012510v4/4v150.d	26-JAN-10 15:40

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: VOA4.I

Injection Date/Time: 26-JAN-10 05:07

Column Description: DB-624

Lab File ID /012510v4/4v127.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	44.3
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6
174	50.0 - 100.0% of mass 95	97.2
175	5.0 - 9.0% of mass 174	6.4
176	95.0 - 101.0% of mass 174	99.2
177	5.0 - 9.0% of mass 176	6.7

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
RE15-10-7194MSD	1202024444	/012510v4/4v151.d	26-JAN-10 16:08

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: VOA4.I

Injection Date/Time: 26-JAN-10 18:30

Column Description: DB-624

Lab File ID /012610v4/4v203BFB.d

m/e	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100
50	15.0 - 40.0% of mass 95	20.9
75	30.0 - 60.0% of mass 95	45.2
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5
174	50.0 - 100.0% of mass 95	91.1
175	5.0 - 9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	100.6
177	5.0 - 9.0% of mass 176	6.5

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
VSTD050	W4VM100126-02	/012610v4/4v203.d	26-JAN-10 18:30
LCS	1202037374	/012610v4/4v203LL.d	26-JAN-10 18:30
VSTD250S	W4VM100126-03	/012610v4/4v204.d	26-JAN-10 18:58
LCS	1202037375	/012610v4/4v205sl.d	26-JAN-10 19:25
BLANK	1202037373	/012610v4/4v207bl.d	26-JAN-10 20:22
RE15-10-7196	245099005	/012610v4/4v219.d	27-JAN-10 01:52
RE15-10-7185	245099009	/012610v4/4v222.d	27-JAN-10 03:15
RE15-10-7189	245099010	/012610v4/4v223.d	27-JAN-10 03:42

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1301

Instrument: VOA4.I

STD Analysis Time: 26-JAN-10 05:35

GC Column: RTX-VOLATILES

Data File: 4v128.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT	Area	#	RT	Area	#	RT
12 Hour STD	1002446		10.6	757804		13.8	484177		16.2
Upper Limit	2004892		11.1	1515608		14.3	968354		16.7
Lower Limit	501223		10.1	378902		13.3	242089		15.7
Sample ID									
BLK01LCS	1031643		10.6	776858		13.8	512936		16.2
BLK01SLCS	1037711		10.6	795153		13.8	489181		16.2
BLK01	991130		10.6	732743		13.8	416548		16.2
RE15-10-7234	962282		10.6	700725		13.8	387080		16.2
RE15-10-7194	872227		10.6	567942		13.8	233704	*	16.2
RE15-10-7186	912802		10.6	627336		13.8	298230		16.2
RE15-10-7191	892389		10.6	629251		13.8	299761		16.2
RE15-10-7195	888840		10.6	602106		13.8	285099		16.2
RE15-10-7197	887340		10.6	590982		13.8	274703		16.2
RE15-10-7193	835995		10.6	536705		13.8	206290	*	16.2
RE15-10-7184	793748		10.6	450060		13.8	135283	*	16.2
RE15-10-7187	827267		10.6	507439		13.8	178438	*	16.2
RE15-10-7188	754428		10.6	439066		13.8	127873	*	16.2
RE15-10-7190	722942		10.6	371583	*	13.8	99717	*	16.2
RE15-10-7192	781111		10.6	505907		13.8	187263	*	16.2
RE15-10-7219	733629		10.6	394399		13.8	102009	*	16.2
RE15-10-7194MS	835750		10.6	573190		13.8	285869		16.2
RE15-10-7194MSD	866182		10.6	597162		13.8	295514		16.2

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1301

Instrument: VOA4.I

STD Analysis Time: 26-JAN-10 18:30

GC Column: RTX-VOLATILES

Data File: 4v203.d

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	952445		10.6	724530		13.8	469704		16.2
Upper Limit	1904890		11.1	1449060		14.3	939408		16.7
Lower Limit	476223		10.1	362265		13.3	234852		15.7
Sample ID									
BLK02LCS	952445		10.6	724530		13.8	469704		16.2
BLK02SLCS	964035		10.6	731806		13.8	453662		16.2
BLK02	923452		10.6	675830		13.8	375304		16.2
RE15-10-7196	868969		10.6	557937		13.8	224787	*	16.2
RE15-10-7185	651559		10.6	437731		13.8	181206	*	16.2
RE15-10-7189	804371		10.6	546910		13.8	230521	*	16.2

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 12:02	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v142.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.21	ug/kg	0.411	1.21
74-87-3	Chloromethane	U	1.21	ug/kg	0.362	1.21
75-01-4	Vinyl chloride	U	1.21	ug/kg	0.362	1.21
74-83-9	Bromomethane	U	1.21	ug/kg	0.362	1.21
75-00-3	Chloroethane	U	1.21	ug/kg	0.362	1.21
75-69-4	Trichlorofluoromethane	U	1.21	ug/kg	0.362	1.21
67-64-1	Acetone	U	6.04	ug/kg	2.00	6.04
75-35-4	1,1-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
74-88-4	Iodomethane	U	6.04	ug/kg	1.93	6.04
75-09-2	Methylene chloride	U	6.04	ug/kg	2.42	6.04
75-15-0	Carbon disulfide	U	6.04	ug/kg	1.51	6.04
156-60-5	trans-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
75-34-3	1,1-Dichloroethane	U	1.21	ug/kg	0.362	1.21
78-93-3	2-Butanone	U	6.04	ug/kg	1.81	6.04
156-59-2	cis-1,2-Dichloroethylene	U	1.21	ug/kg	0.362	1.21
594-20-7	2,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
67-66-3	Chloroform	U	1.21	ug/kg	0.362	1.21
74-97-5	Bromochloromethane	U	1.21	ug/kg	0.399	1.21
71-55-6	1,1,1-Trichloroethane	U	1.21	ug/kg	0.362	1.21
563-58-6	1,1-Dichloropropene	U	1.21	ug/kg	0.362	1.21
56-23-5	Carbon tetrachloride	U	1.21	ug/kg	0.362	1.21
107-06-2	1,2-Dichloroethane	U	1.21	ug/kg	0.362	1.21
71-43-2	Benzene	U	1.21	ug/kg	0.362	1.21
79-01-6	Trichloroethylene	U	1.21	ug/kg	0.399	1.21
78-87-5	1,2-Dichloropropane	U	1.21	ug/kg	0.362	1.21
75-27-4	Bromodichloromethane	U	1.21	ug/kg	0.362	1.21
74-95-3	Dibromomethane	U	1.21	ug/kg	0.362	1.21
108-10-1	4-Methyl-2-pentanone	U	6.04	ug/kg	1.51	6.04
10061-01-5	cis-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
108-88-3	Toluene	U	1.21	ug/kg	0.362	1.21
10061-02-6	trans-1,3-Dichloropropylene	U	1.21	ug/kg	0.362	1.21
79-00-5	1,1,2-Trichloroethane	U	1.21	ug/kg	0.362	1.21
591-78-6	2-Hexanone	U	6.04	ug/kg	1.81	6.04
142-28-9	1,3-Dichloropropane	U	1.21	ug/kg	0.362	1.21
127-18-4	Tetrachloroethylene	J	0.905	ug/kg	0.362	1.21
124-48-1	Dibromochloromethane	U	1.21	ug/kg	0.362	1.21
106-93-4	1,2-Dibromoethane	U	1.21	ug/kg	0.362	1.21
108-90-7	Chlorobenzene	U	1.21	ug/kg	0.362	1.21

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 12:02	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:59	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v142.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.21	ug/kg	0.362	1.21
179601-23-1	m,p-Xylenes	J	0.460	ug/kg	0.362	2.42
95-47-6	o-Xylene	U	1.21	ug/kg	0.362	1.21
100-42-5	Styrene	U	1.21	ug/kg	0.362	1.21
75-25-2	Bromoform	U	1.21	ug/kg	0.362	1.21
79-34-5	1,1,2,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
96-18-4	1,2,3-Trichloropropane	U	1.21	ug/kg	0.362	1.21
108-86-1	Bromobenzene	U	1.21	ug/kg	0.362	1.21
103-65-1	n-Propylbenzene	U	1.21	ug/kg	0.362	1.21
95-49-8	2-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-82-8	Isopropylbenzene	U	1.21	ug/kg	0.362	1.21
108-67-8	1,3,5-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
106-43-4	4-Chlorotoluene	U	1.21	ug/kg	0.362	1.21
98-06-6	tert-Butylbenzene	U	1.21	ug/kg	0.362	1.21
95-63-6	1,2,4-Trimethylbenzene	U	1.21	ug/kg	0.362	1.21
135-98-8	sec-Butylbenzene	U	1.21	ug/kg	0.362	1.21
99-87-6	4-Isopropyltoluene	U	1.21	ug/kg	0.362	1.21
541-73-1	1,3-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
106-46-7	1,4-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21
104-51-8	n-Butylbenzene	U	1.21	ug/kg	0.362	1.21
96-12-8	1,2-Dibromo-3-chloropropane	U	1.21	ug/kg	0.362	1.21
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.04	ug/kg	1.93	6.04
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.21	ug/kg	0.362	1.21
95-50-1	1,2-Dichlorobenzene	U	1.21	ug/kg	0.362	1.21

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	8.12	ug/kg		J
	Unknown Siloxane	16.79	19	ug/kg		J

Data File: /chem/VOA4.i/012510v4/4v142.d
Report Date: 08-Feb-2010 22:09

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v142.d

Lab Smp Id: 245099008

Client Smp ID: RE15-10-7184

Inj Date : 26-JAN-2010 12:02

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099008|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 42

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.19080	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	793748	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	450060	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	135283	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	180347	41.5799	50.2
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	627304	54.8309	66.2
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	185628	75.0305	90.6 (R)
56 Tetrachloroethylene	164	12.917	12.923	(0.938)	2433	0.74921	0.90 (a)
63 m,p-Xylenes	106	13.972	13.972	(1.015)	2506	0.38109	0.46 (a)

QC Flag Legend

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

Data File: /chem/VOA4.i/012510v4/4v142.d
Report Date: 08-Feb-2010 22:09

Page 2

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ION RATIO REPORT

VOA REPORT

Data file: 4v142.d

Report Date: 01/26/2010 16:12

Lab. ID: 245099008

SampleType: SAMPLE

Injection Date: 26-JAN-2010 12:02

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099008|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	10305	10.61	10.34	80-120	100	(T)
64	1692	10.61	10.34	2- 62	16	(T)

39	Trichloroethylene			CAS#: 79-01-6		
95	64365	10.62	11.01	80-120	100	(T)
97	52764	10.62	11.01	37- 97	82	(T)
130	132	11.02	11.01	72-132	0	(Q)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	5783	12.25	12.02	80-120	100	(T)
43	3832	12.25	12.02	243-303	66	(QT)
100	408643	12.25	12.02	0- 60	7066	(QT)

56	Tetrachloroethylene			CAS#: 127-18-4		
164	2433	12.92	12.92	80-120	100	()
129	2344	12.92	12.92	58-118	96	()
131	1779	12.92	12.92	55-115	73	()

58	Ethylbenzene			CAS#: 100-41-4		
91	5151	13.97	13.86	80-120	100	(T)
106	2506	13.97	13.86	2- 62	49	(T)

64	o-Xylene			CAS#: 95-47-6		
106	2506	13.97	14.40	80-120	100	(T)
91	5151	13.97	14.40	177-237	206	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
63 m,p-Xylenes			CAS#: 179601-23-1			
106	2506	13.97	13.97	80-120	100	()
91	5151	13.97	13.97	168-228	206	()

66 Bromoform			CAS#: 75-25-2			
173	948	14.95	14.66	80-120	100	(T)
175	11960	14.95	14.66	20- 80	1262	(QT)

74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	2739	14.82	15.11	80-120	100	(T)
75	5851	14.83	15.11	252-312	214	(QT)
77	314	14.81	15.11	61-121	11	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v142.d
 Lab Smp Id: 245099008 Client Smp ID: RE15-10-7184
 Inj Date : 26-JAN-2010 12:02
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099008|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 42
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	17.19080	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1715702	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	788801	50.000

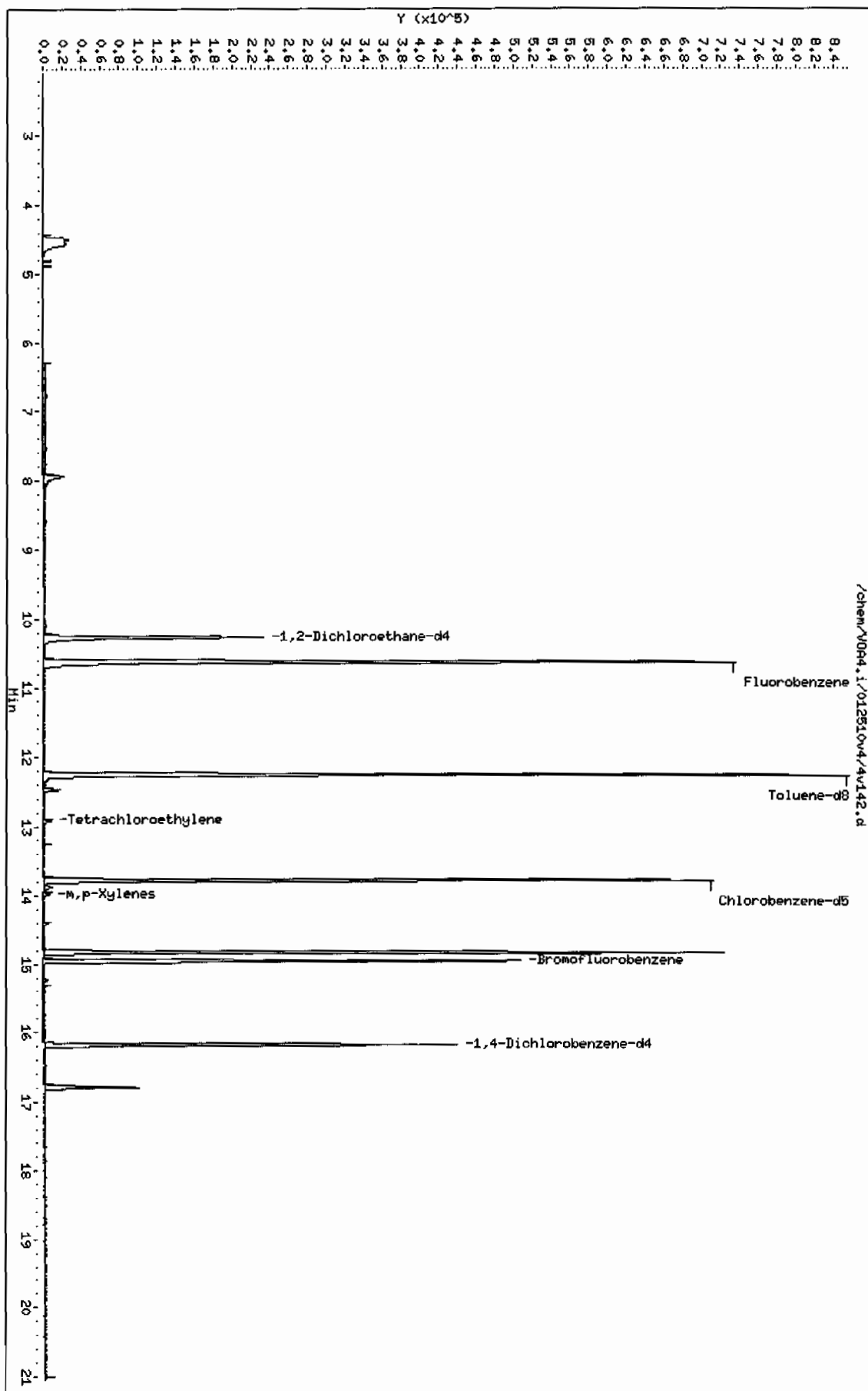
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
4.496	230661	6.72207076	8.1	0		0	40

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane				CAS #:			
16.794	247878	15.7123190	19.0	0		0	86

Data File: /chem/V004.1/012510v4/4v142.d
Date : 26-JAN-2010 12:02
Client ID: RE15-10-7184
Sample Info: 124509008194525411/V004.11

Column Phase: RTX-VOLATILES

Instrument: V004.1
Operator: ACJ
Column diameter: 0.25



Date : 26-JAN-2010 12:02

Client ID: RE15-10-7184

Instrument: VOA4.i

Sample Info: 12450990081945254111V0AF111

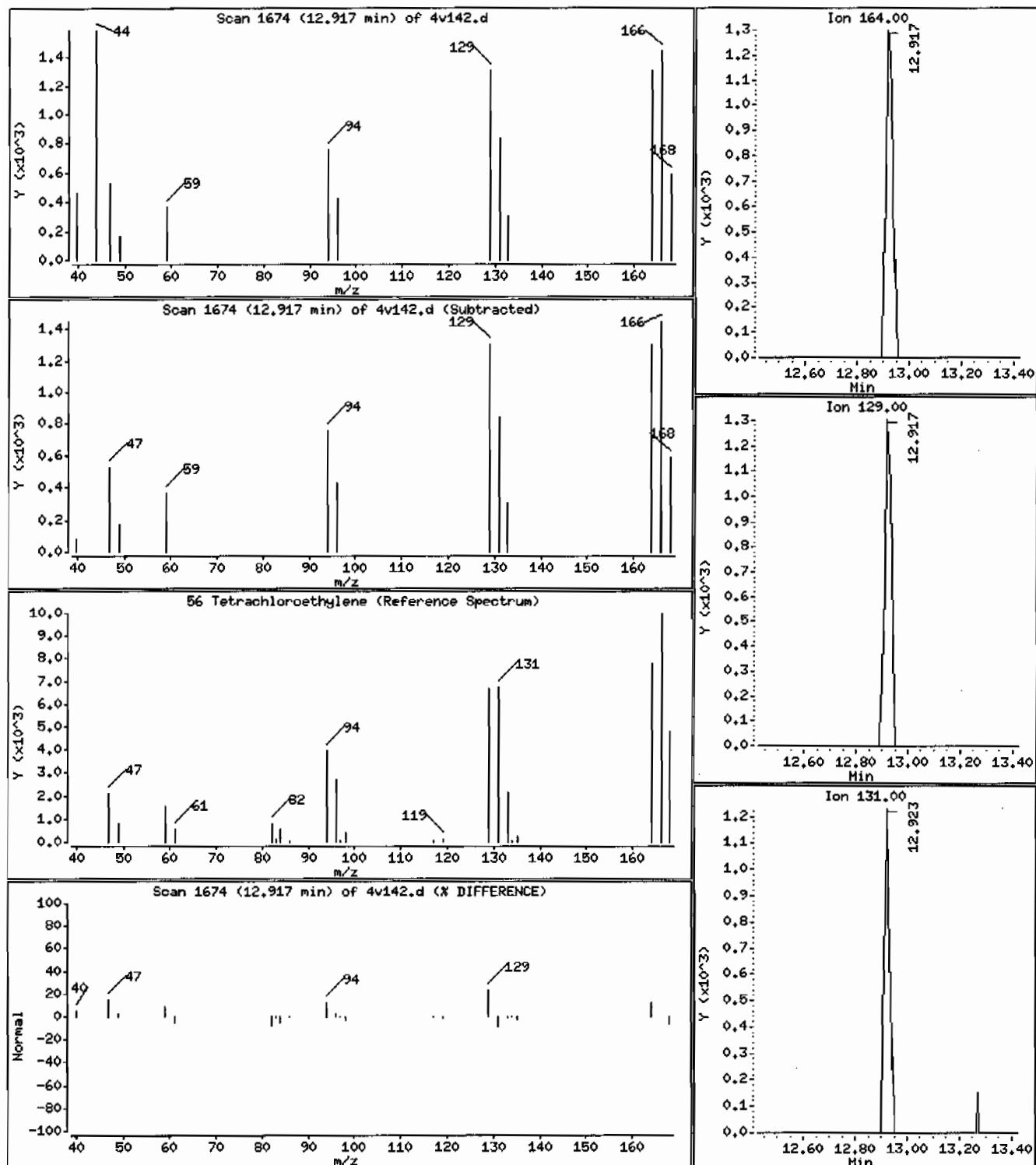
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.90 ug/Kg



Date : 26-JAN-2010 12:02

Client ID: RE15-10-7184

Instrument: VOA4.i

Sample Info: 1245099008|94525411|VOAF11

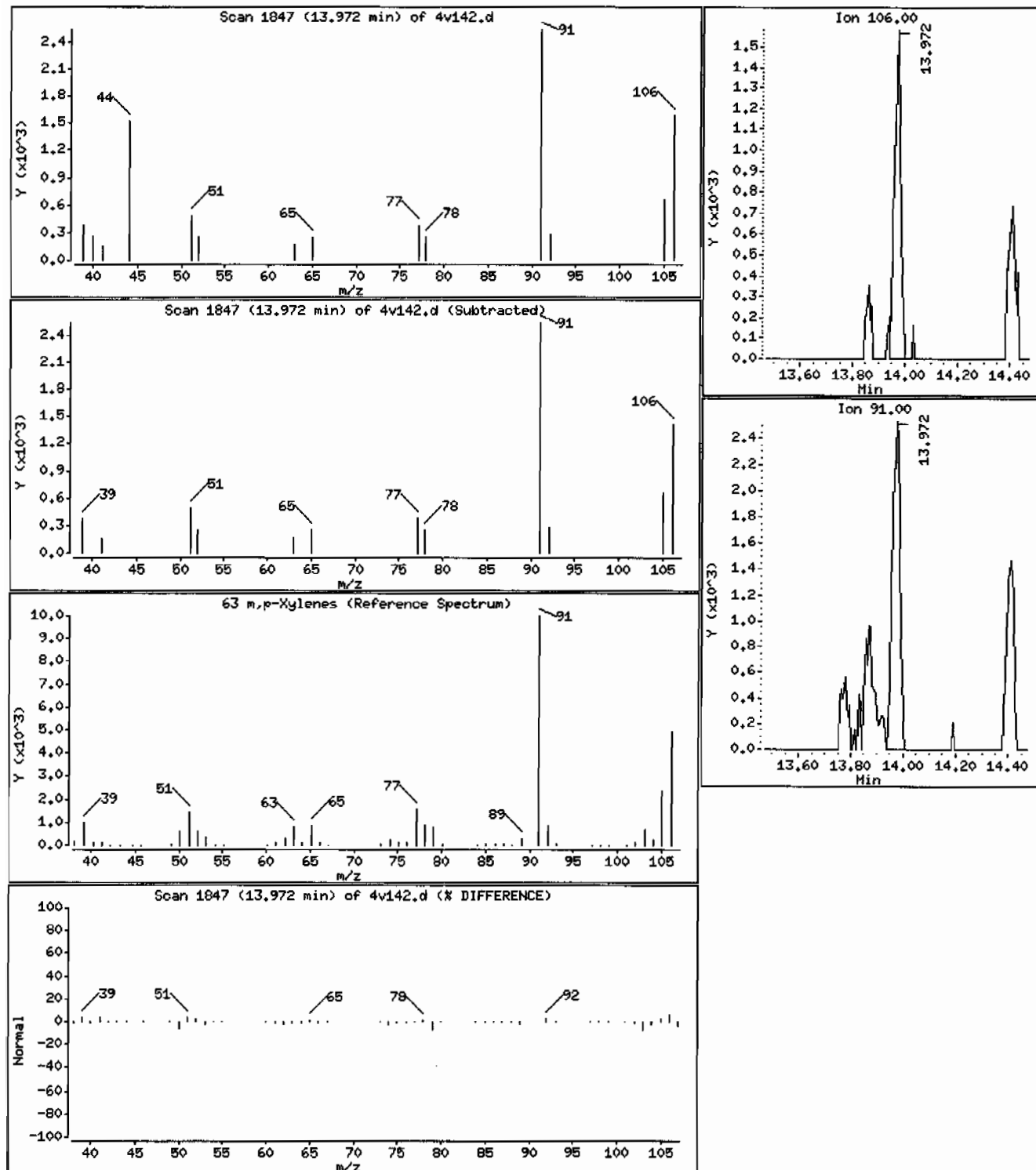
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.46 ug/Kg



Data File: /chem/VOA4.i/012510v4/4v142.d

Page 1

Date : 26-JAN-2010 12:02

Client ID: RE15-10-7184

Instrument: VOA4.i

Sample Info: 12450990081945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

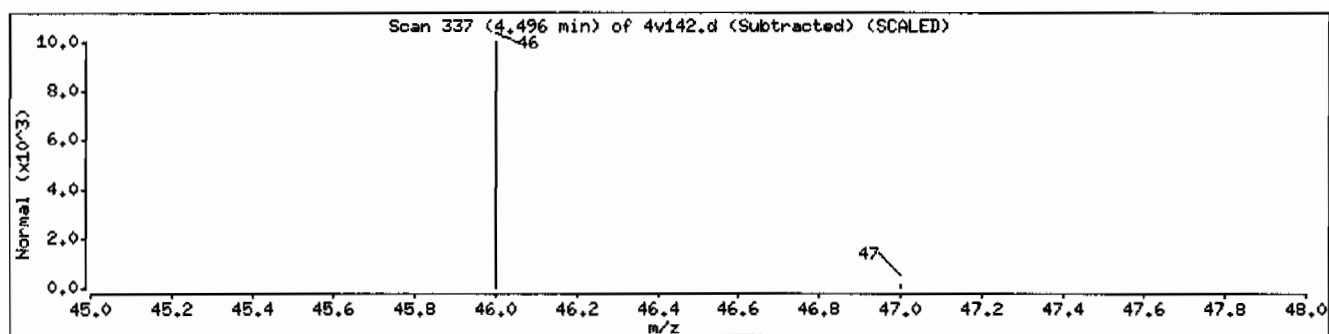
Weight

Unknown

0

0

0



Date: 26-JAN-2010 12:02

Client ID: RE15-10-7184

Instrument: VOA4.i

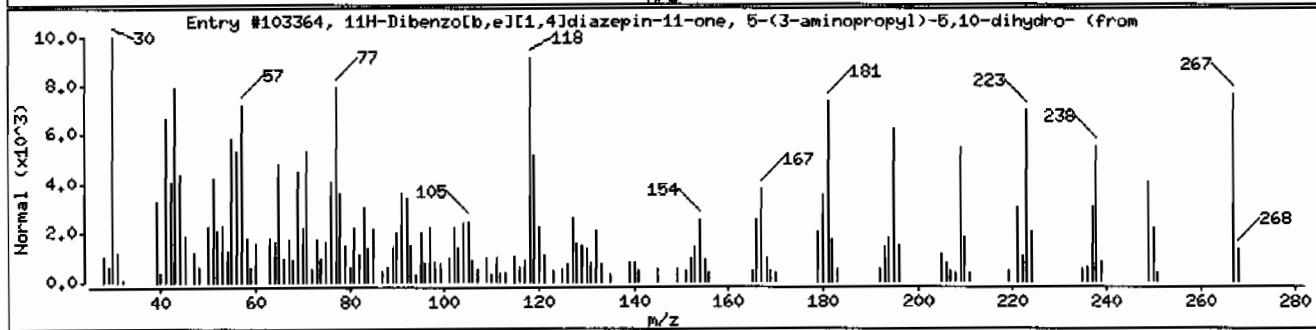
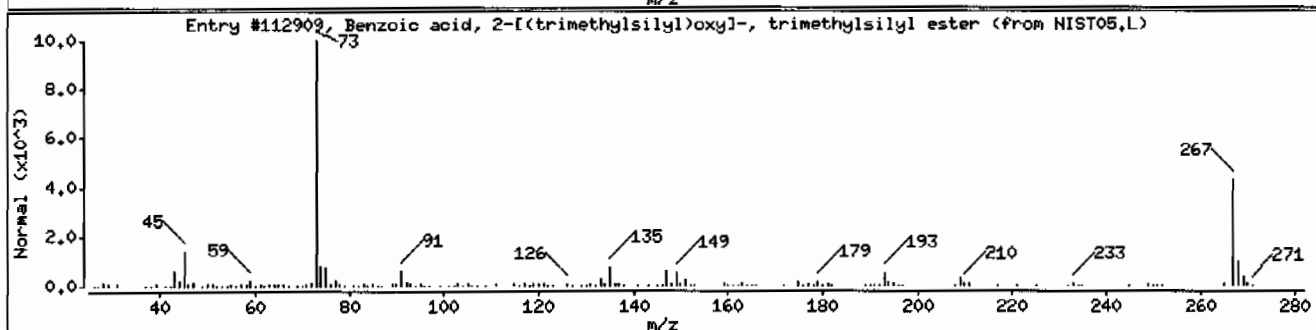
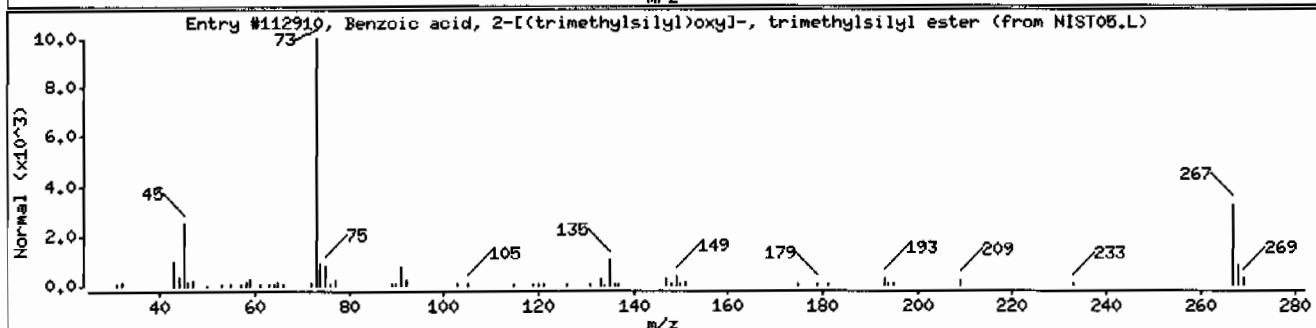
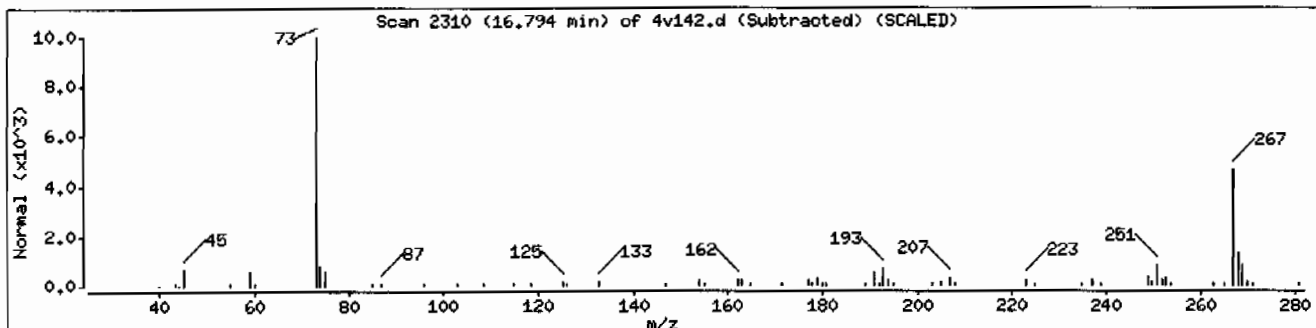
Sample Info: 12450990081945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-	3789-86-3	NIST05.L	112910	59	C ₁₃ H ₂₂ O ₃ Si ₂	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-	3789-85-3	NIST05.L	112909	59	C ₁₃ H ₂₂ O ₃ Si ₂	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	46	C ₁₆ H ₁₇ N ₃ O	267



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099009	Date Received: 01/20/2010 08:45	%Moisture: 9.4
Client ID: RE15-10-7185	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/27/2010 03:15	Inst: VOA4.1	Dilution: 1
Prep Date: 01/26/2010 21:22	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v222.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.77	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.66	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.66	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.453	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099009

Client ID: RE15-10-7185
 Batch ID: 945254
 Run Date: 01/27/2010 03:15
 Prep Date: 01/26/2010 21:22
 Data File: 4v222.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.635	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.77	5.52
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.49	6.06	ug/kg		J
	Unknown Siloxane	14.83	46.3	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v222.d

Lab Smp Id: 245099009

Client Smp ID: RE15-10-7185

Inj Date : 27-JAN-2010 03:15

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099009|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Meth Date : 27-Jan-2010 15:20 slg

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 22

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.41540	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	651559	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.770	(1.000)	437731	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	181206	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	149123	41.8840	46.2
\$ 47 Toluene-d8	98	12.252	12.252	(0.890)	535959	48.1661	53.2
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	207218	62.5306	69.0
56 Tetrachloroethylene	164	12.911	12.923	(0.938)	1297	0.41065	0.45 (a)
63 m,p-Xylenes	106	13.966	13.972	(1.014)	3680	0.57538	0.64 (a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v222.d

Report Date: 01/27/2010 16:07

Lab. ID: 245099009

SampleType: SAMPLE

Injection Date: 27-JAN-2010 03:15

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099009|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	8408	10.62	10.34	80-120	100	(T)
64	1433	10.61	10.34	3- 63	17	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	4735	12.25	12.02	80-120	100	(T)
43	3117	12.25	12.02	243-303	66	(QT)
100	349055	12.25	12.02	1- 61	7372	(QT)

56	Tetrachloroethylene			CAS#: 127-18-4		
164	1297	12.91	12.92	80-120	100	()
129	1165	12.92	12.92	56-116	90	()
131	1310	12.92	12.92	55-115	101	()

58	Ethylbenzene			CAS#: 100-41-4		
91	6929	13.97	13.86	80-120	100	(T)
106	3680	13.97	13.86	2- 62	53	(T)

64	o-Xylene			CAS#: 95-47-6		
106	3680	13.97	14.40	80-120	100	(T)
91	6929	13.97	14.40	176-236	188	(T)

63	m,p-Xylenes			CAS#: 179601-23-1		
106	3680	13.97	13.97	80-120	100	()
91	6929	13.97	13.97	165-225	188	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
66	Bromoform		CAS#: 75-25-2			
173	837	14.95	14.66	80-120	100	(T)
175	13816	14.95	14.66	18- 78	1650	(QT)

74	1,2,3-Trichloropropane		CAS#: 96-18-4			
110	1776	14.83	15.11	80-120	100	(T)
75	5149	14.83	15.11	257-317	290	(T)
77	1268	14.95	15.11	59-119	71	(T)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012610v4/4v222.d
 Lab Smp Id: 245099009 Client Smp ID: RE15-10-7185
 Inj Date : 27-JAN-2010 03:15
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099009|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Meth Date : 27-Jan-2010 15:20 slg Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.41540	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1415614	50.000
* 61 Chlorobenzene-d5	13.770	1351575	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
4.489	155302	5.48530687	6.0	0		0	40

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane				CAS #:			
14.825	1134600	41.9732193	46.3	0		0	61

Data File: /chem/V004.i/012610v4/4v222.d

Date : 27-JUN-2010 03:15

Client ID: RE15-10-7185

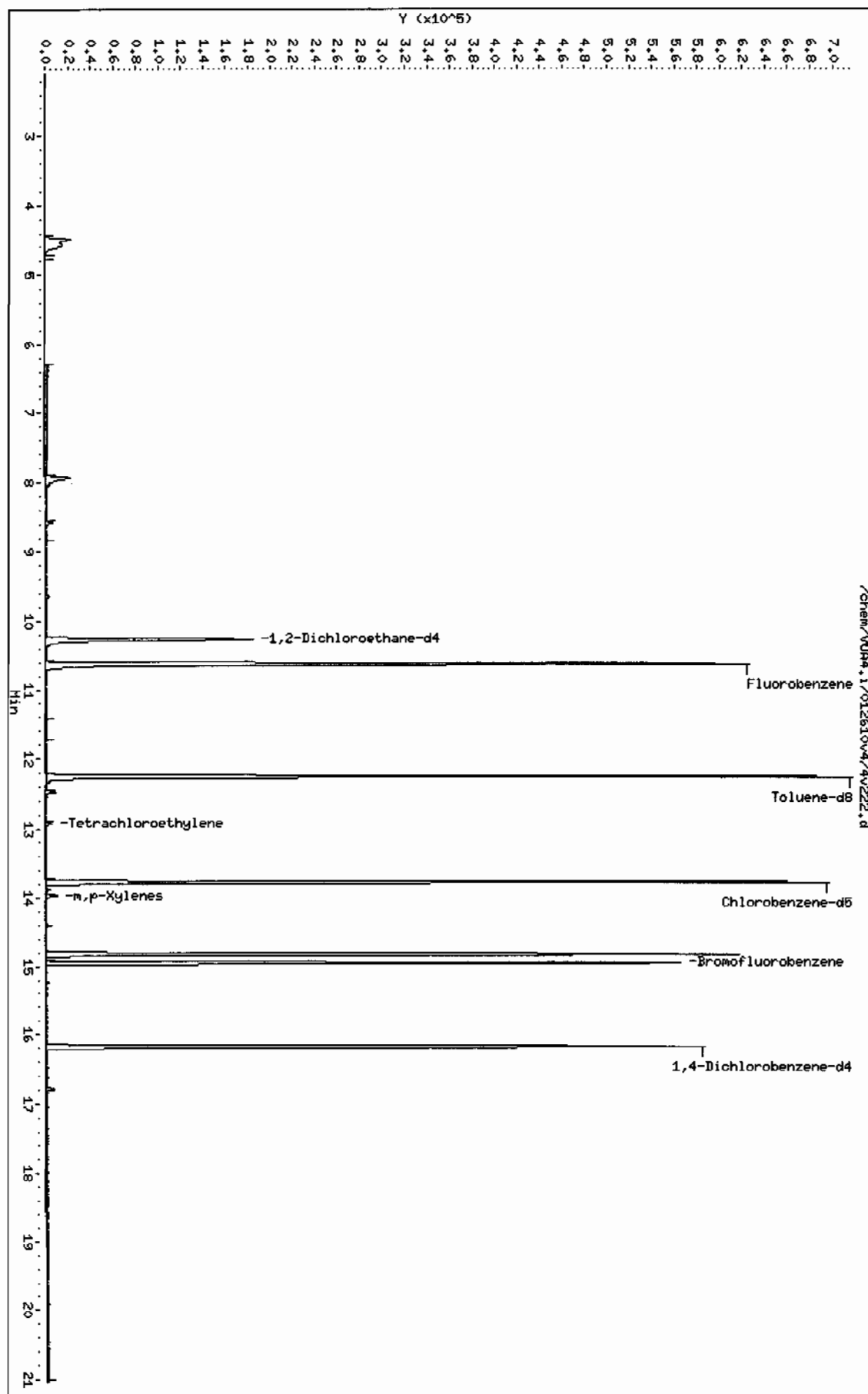
Sample Info: 124509009194525411V004F111

Column phase: RTX-VOLATILES

Instrument: V004.i

Operator: ACJ

Column diameter: 0.25



Date : 27-JAN-2010 03:15

Client ID: RE15-10-7185

Instrument: VOA4.i

Sample Info: 1245099009194525411\VOAF111

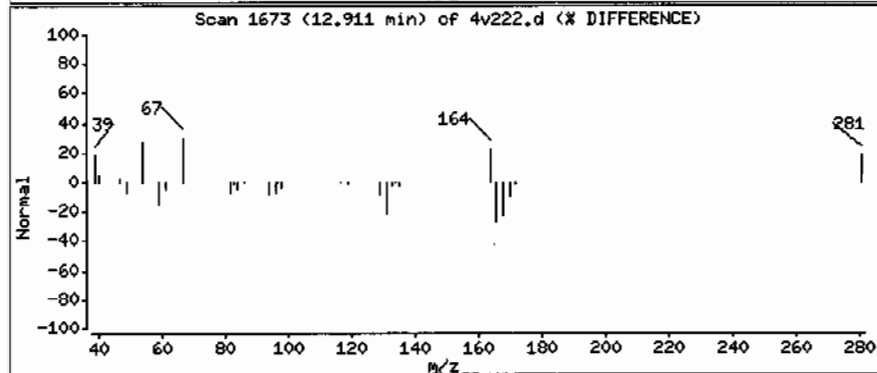
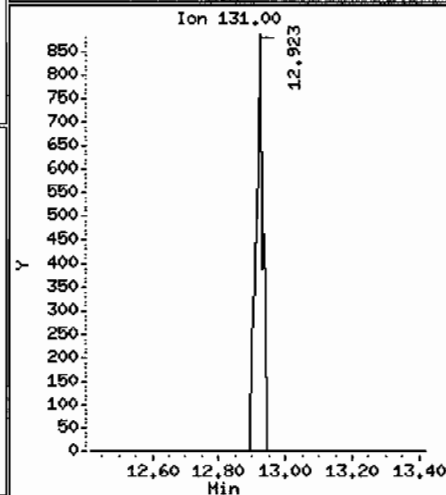
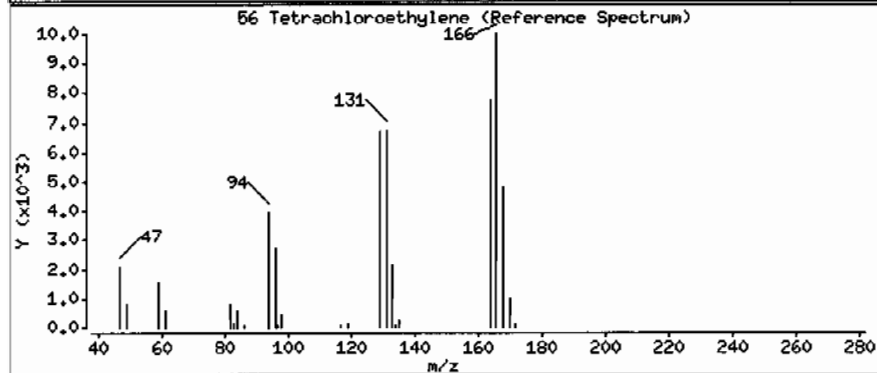
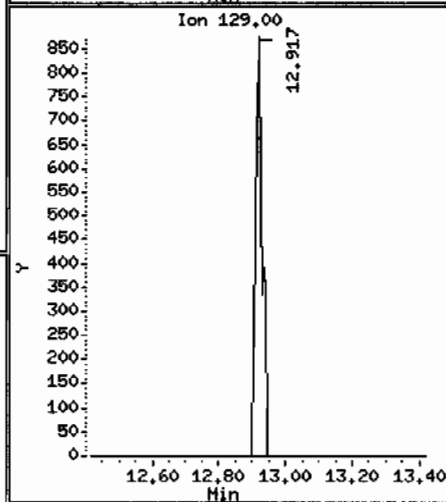
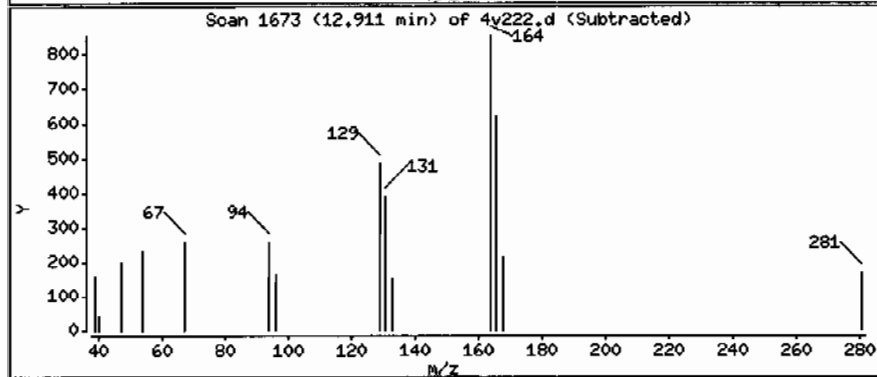
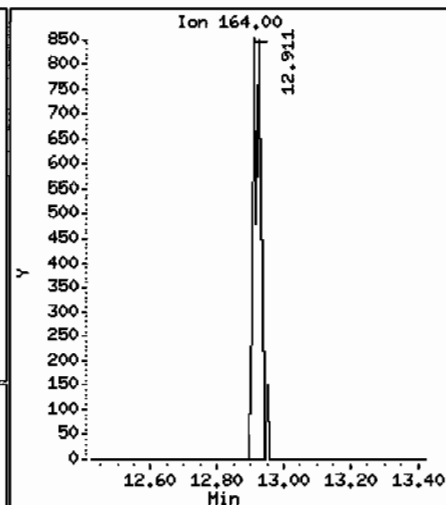
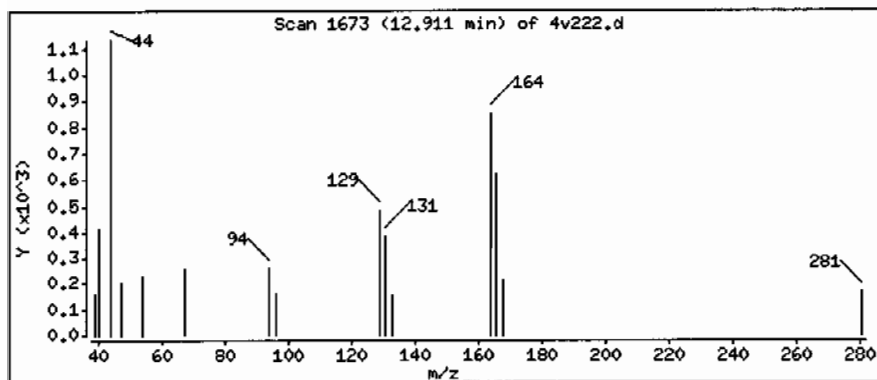
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.45 ug/Kg



Date : 27-JAN-2010 03:15

Client ID: RE15-10-7195

Instrument: VOA4.i

Sample Info: 12450990091945254111VOAF111

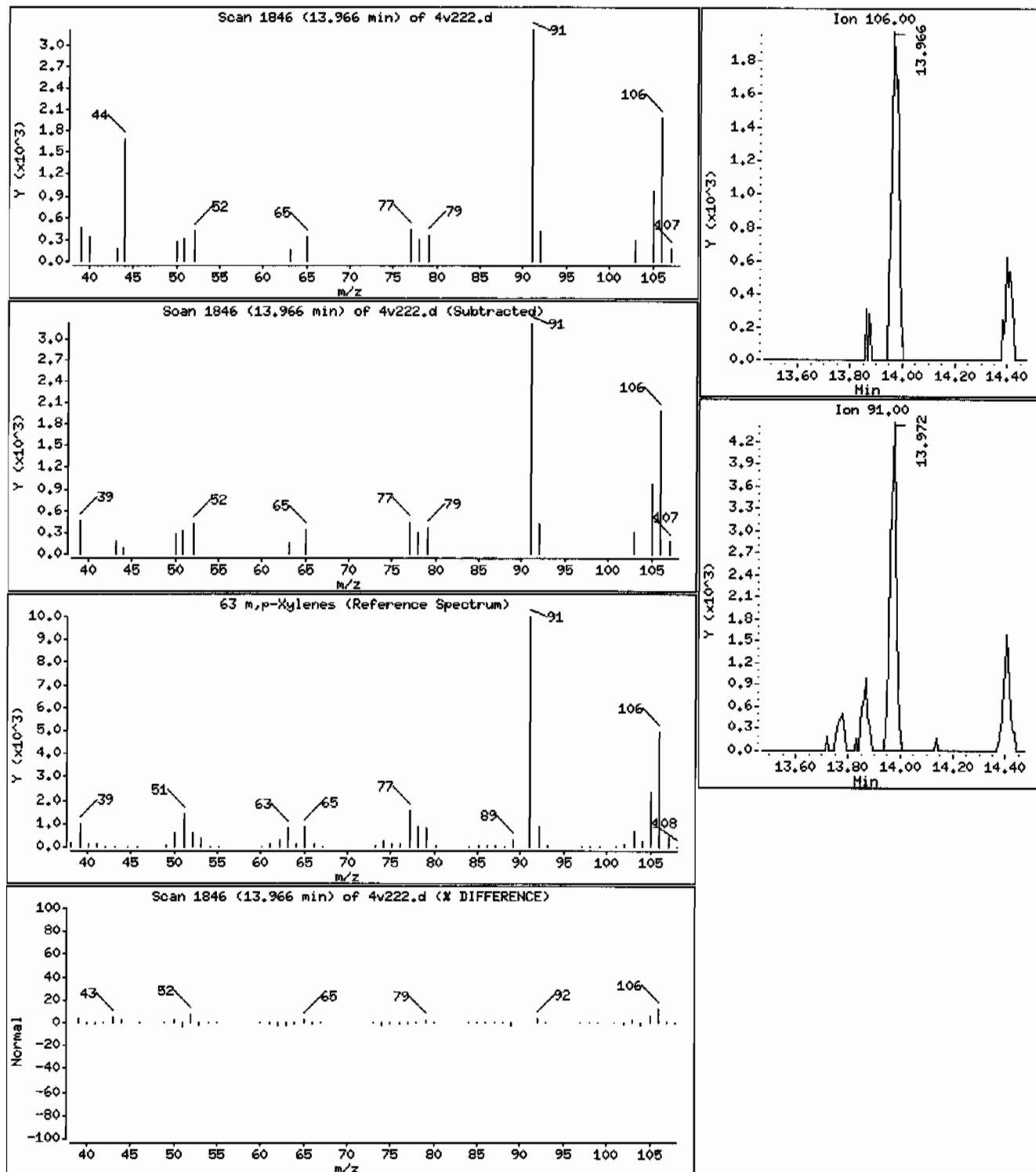
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.64 ug/Kg



Data File: /chem/V0A4.i/012610v4/4v222.d

Page 1

Date : 27-JAN-2010 03:15

Client ID: RE15-10-7185

Instrument: V0A4.i

Sample Info: I245099009I94525411IV0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

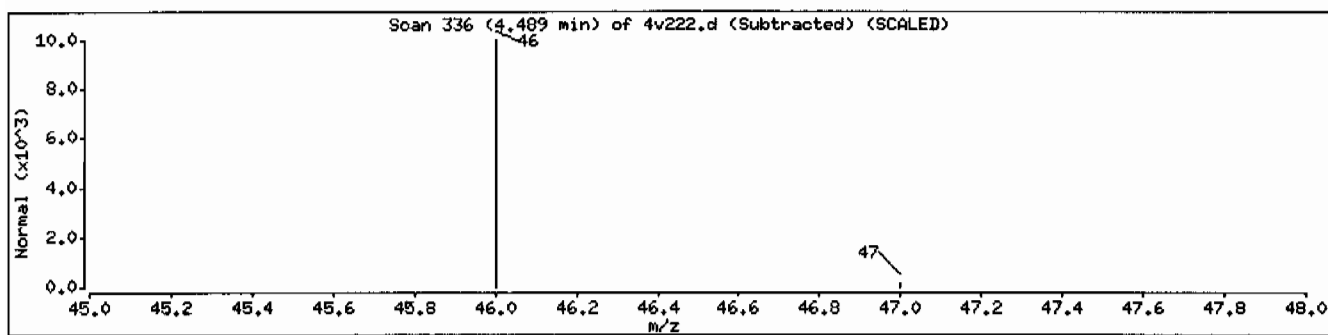
Weight

Unknown

0

0

0



Date : 27-JAN-2010 03:15

Client ID: RE15-10-7185

Instrument: V0A4.i

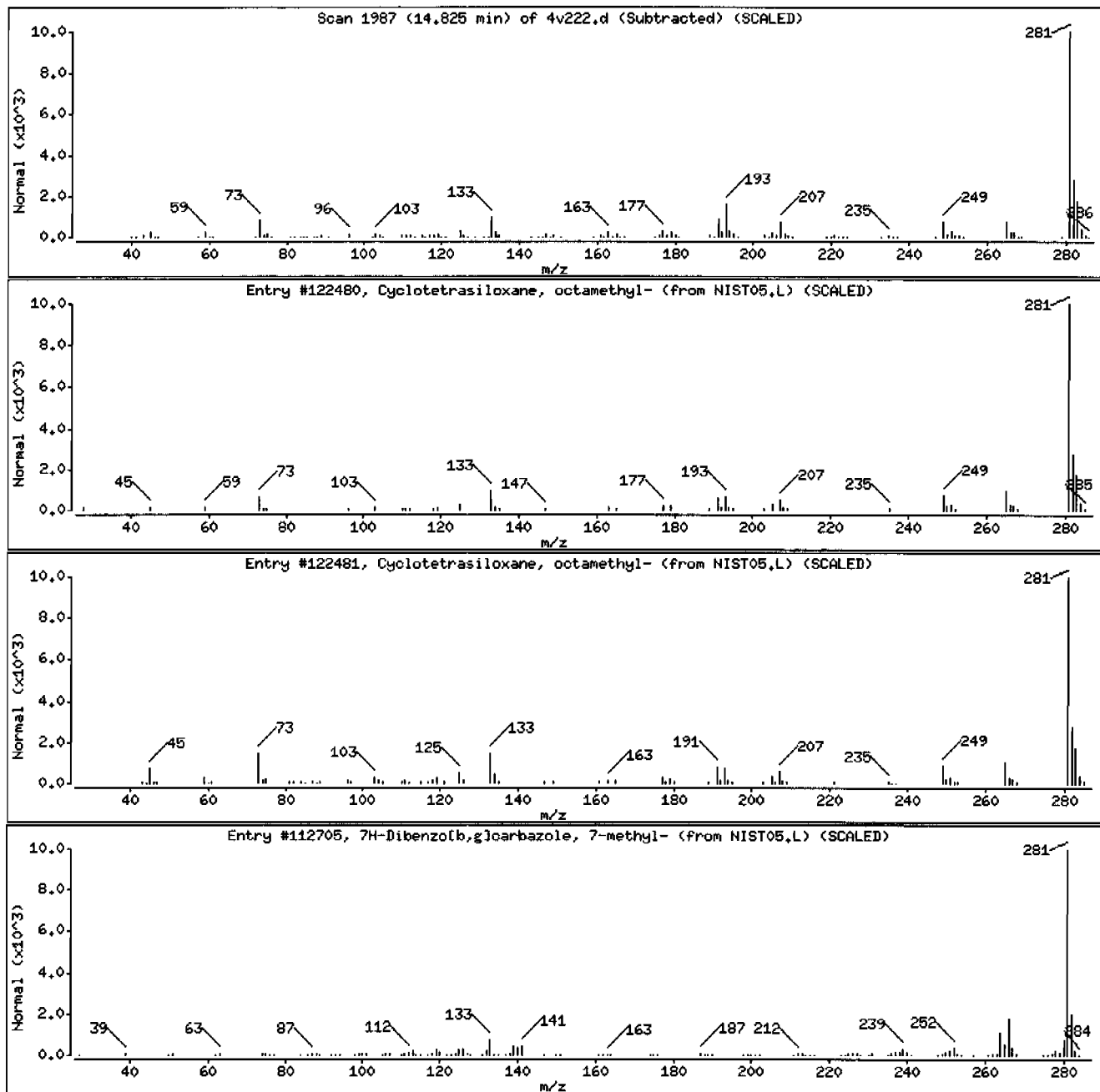
Sample Info: I245099009I945254I1I\VOAFI1I

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	72	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	64	C ₂₁ H ₁₅ N	281



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 18.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7186
 Batch ID: 945254
 Run Date: 01/26/2010 09:17
 Prep Date: 01/25/2010 22:53
 Data File: 4v136.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.418	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.368	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.368	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.368	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.368	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.368	1.23
67-64-1	Acetone	U	6.14	ug/kg	2.04	6.14
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
74-88-4	Iodomethane	U	6.14	ug/kg	1.97	6.14
75-09-2	Methylene chloride	U	6.14	ug/kg	2.46	6.14
75-15-0	Carbon disulfide	U	6.14	ug/kg	1.54	6.14
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.368	1.23
78-93-3	2-Butanone	U	6.14	ug/kg	1.84	6.14
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.368	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.368	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.368	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.405	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.368	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.368	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.368	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.368	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.368	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.405	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.368	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.368	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.368	1.23
108-10-1	4-Methyl-2-pentanone	U	6.14	ug/kg	1.54	6.14
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.368	1.23
108-88-3	Toluene	U	1.23	ug/kg	0.368	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.368	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.368	1.23
591-78-6	2-Hexanone	U	6.14	ug/kg	1.84	6.14
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.368	1.23
127-18-4	Tetrachloroethylene	U	1.23	ug/kg	0.368	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.368	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.368	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.368	1.23

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099002	Date Received: 01/20/2010 08:45	% Moisture: 18.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7186	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 09:17	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:53	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v136.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.23	ug/kg	0.368	1.23
179601-23-1	m,p-Xylenes	U	2.46	ug/kg	0.368	2.46
95-47-6	o-Xylene	U	1.23	ug/kg	0.368	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.368	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.368	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.368	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.368	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.368	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.368	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.368	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.368	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.368	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.368	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.368	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.368	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.368	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.368	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.368	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.368	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.14	ug/kg	1.97	6.14
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.368	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.368	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	16.8	11	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v136.d

Lab Smp Id: 245099002

Client Smp ID: RE15-10-7186

Inj Date : 26-JAN-2010 09:17

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099002|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 36

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	18.57750	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	912802		50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	627336		50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	298230		50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.266	10.265	(0.967)	207591		41.6188	51.1
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	768099		48.1653	59.2
\$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	315516		57.8506	71.0

ION RATIO REPORT

VOA REPORT

Data file: 4v136.d
Report Date: 01/26/2010 16:11
Lab. ID: 245099002
Injection Date: 26-JAN-2010 09:17
Operator: ACJ
Sample Info: |245099002|945254|1|VOAF|1|
Miscellaneous Info: LANL 5G N/A
Comment:
Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
Dilution Factor= 1.0
Integrator: HP RTE
Sample Matrix: SOIL

SampleType: SAMPLE

Instrument: VOA4.i

Compound Sublist: 10-1301

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	11471	10.62	10.34	80-120	100	(T)
64	2422	10.62	10.34	2- 62	21	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	7187	12.25	12.02	80-120	100	(T)
43	4694	12.25	12.02	243-303	65	(QT)
100	503597	12.25	12.02	0- 60	7007	(QT)

66	Bromoform			CAS#: 75-25-2		
173	1174	14.96	14.66	80-120	100	(T)
175	20618	14.95	14.66	20- 80	1756	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v136.d
 Lab Smp Id: 245099002 Client Smp ID: RE15-10-7186
 Inj Date : 26-JAN-2010 09:17
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099002|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 36
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	18.57750	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 86 1,4-Dichlorobenzene-d4	16.180	1785635	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane					CAS #:		
16.795	319959	8.95924016	11.0	0		0	86

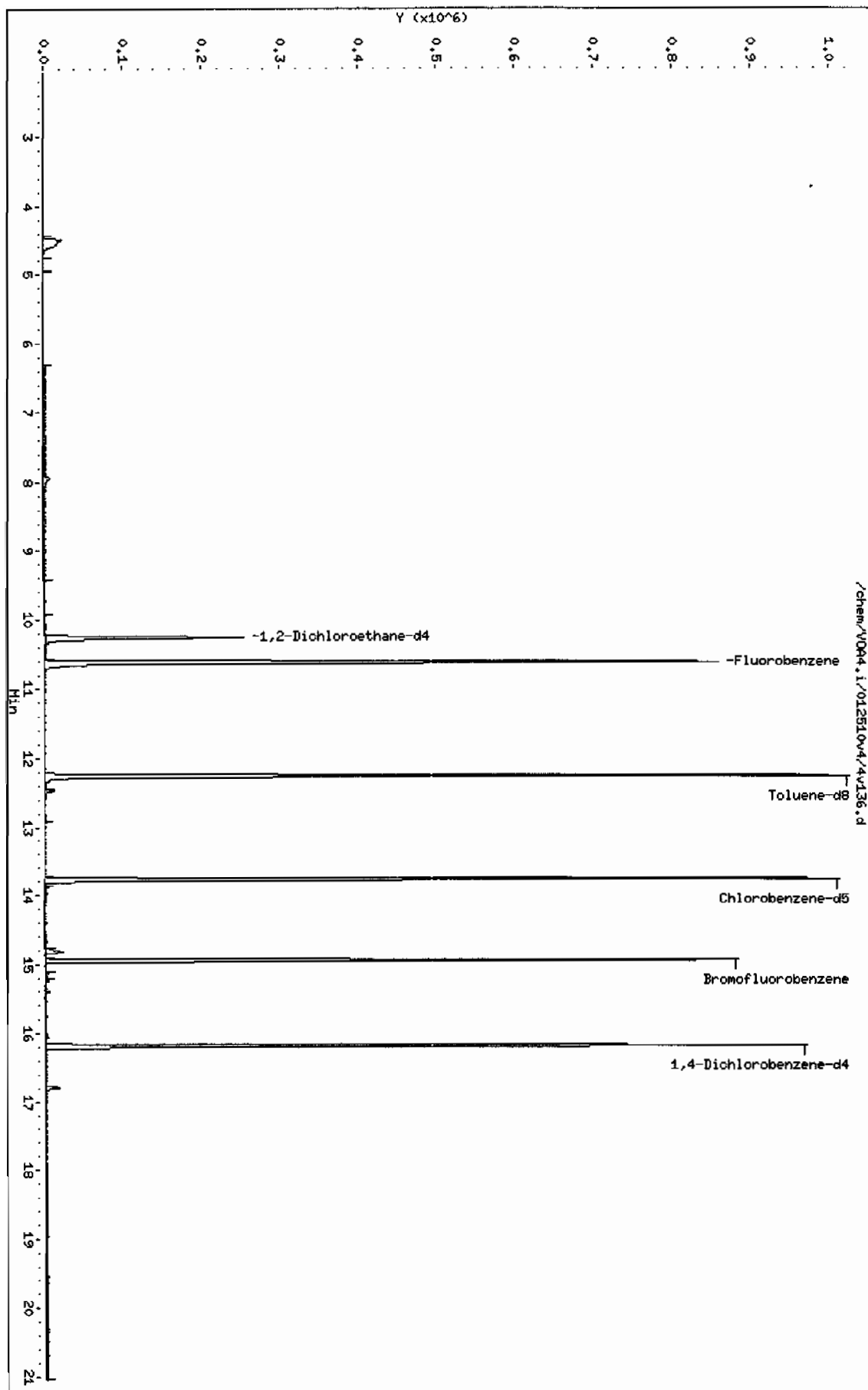
Data File: /chem/V004.i/012510v4/4v136.d
Date: 26-JAN-2010 09:17
Client ID: RE15-10-7186
Sample Info: 1245099002194525411V00F111

Instrument: V004.i

Page 1

Column phase: RTX-VOLATILES

Operator: ACJ
Column diameter: 0.25



Date : 26-JAN-2010 09:17

Client ID: RE15-10-7186

Instrument: VOA4.i

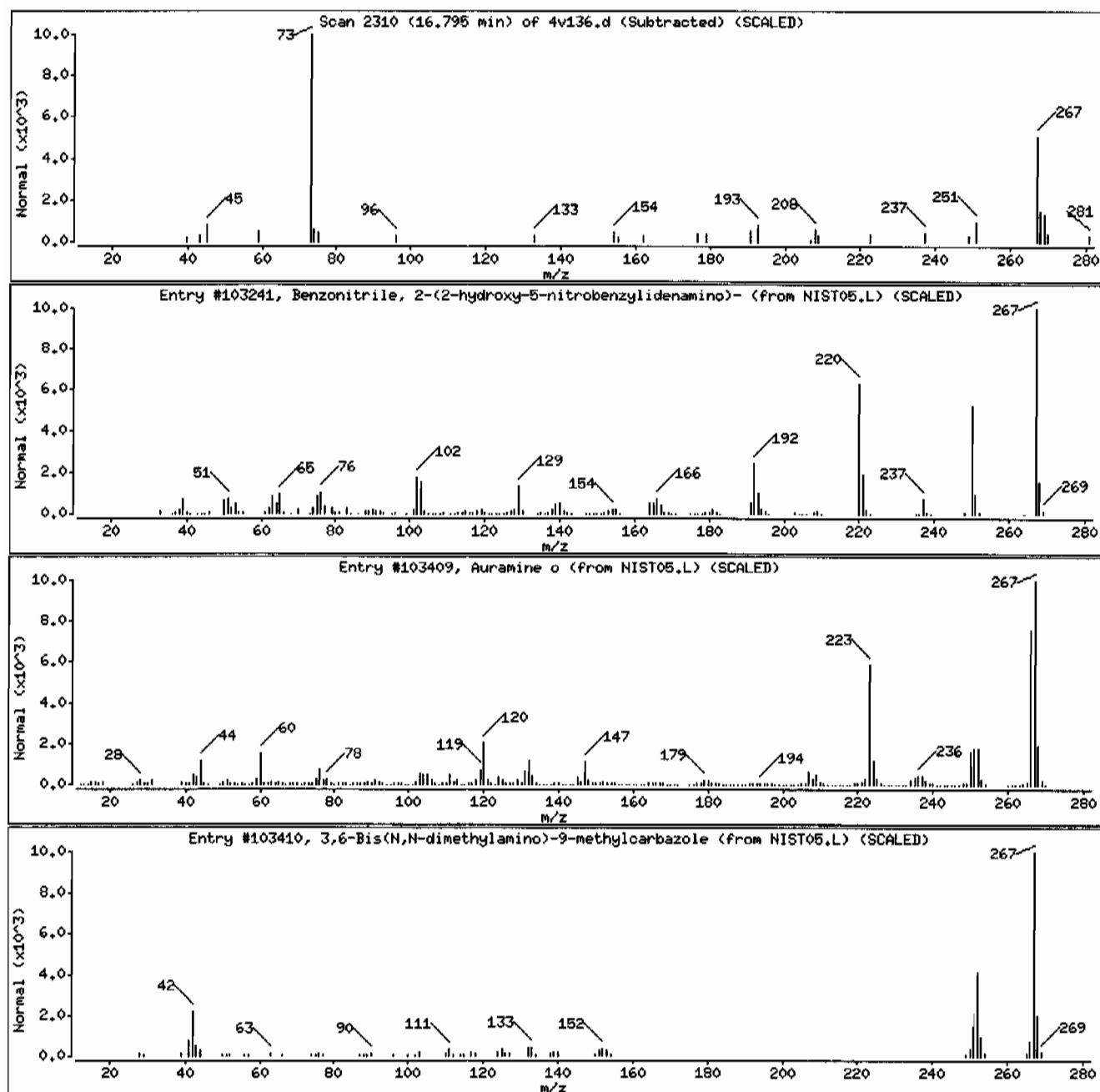
Sample Info: I245099002I945254I1IV0AF11I

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzonitrile, 2-(2-hydroxy-5-nitrobenzyl	303768-30-1	NIST05.L	103241	49	C ₁₄ H ₉ N ₃ O ₃	267
Auramine o	2465-27-2	NIST05.L	103409	47	C ₁₇ H ₂₁ N ₃	267
3,6-Bis(N,N-dimethylamino)-9-methylcarba	119046-55-8	NIST05.L	103410	43	C ₁₇ H ₂₁ N ₃	267



Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	%Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7187	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/26/2010 13:24	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:02	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v145.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.52	ug/kg	1.83	5.52
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.52	ug/kg	1.76	5.52
75-09-2	Methylene chloride	U	5.52	ug/kg	2.21	5.52
75-15-0	Carbon disulfide	U	5.52	ug/kg	1.38	5.52
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.52	ug/kg	1.65	5.52
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	U	1.10	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.52	ug/kg	1.38	5.52
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene	U	1.10	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.52	ug/kg	1.65	5.52
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.505	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	%Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7187	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/26/2010 13:24	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:02	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v145.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	U	2.21	ug/kg	0.331	2.21
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.52	ug/kg	1.76	5.52
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	6.29	ug/kg		J
	Unknown Siloxane	14.83	80.9	ug/kg		J
13466-78-9	3-Carene	15.8	9.02	ug/kg	96	NJ
	Unknown Siloxane	16.79	23.8	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v145.d

Lab Smp Id: 245099011

Client Smp ID: RE15-10-7187

Inj Date : 26-JAN-2010 13:24

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099011|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 45

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.34110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	827267	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	507439	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.179	(1.000)	178438	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	182820	40.4423	44.6
\$ 47 Toluene-d8	98	12.252	12.253	(0.890)	670075	51.9466	57.3
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	227176	69.6166	76.8(R)
56 Tetrachloroethylene	164	12.911	12.923	(0.938)	1675	0.45747	0.50(a)

QC Flag Legend

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

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ION RATIO REPORT

VOA REPORT

Data file: 4v145.d

Report Date: 01/26/2010 16:12

Lab. ID: 245099011

SampleType: SAMPLE

Injection Date: 26-JAN-2010 13:24

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099011|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	11420	10.62	10.34	80-120	100	(T)
64	1932	10.61	10.34	2- 62	17	(T)

39	Trichloroethylene			CAS#: 79-01-6		
95	66674	10.62	11.01	80-120	100	(T)
97	54374	10.62	11.01	37- 97	82	(T)
130	147	11.01	11.01	72-132	0	(Q)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	5892	12.25	12.02	80-120	100	(T)
43	3718	12.25	12.02	243-303	63	(QT)
100	442671	12.25	12.02	0- 60	7512	(QT)

56	Tetrachloroethylene			CAS#: 127-18-4		
164	1675	12.91	12.92	80-120	100	()
129	1598	12.92	12.92	58-118	95	()
131	1590	12.92	12.92	55-115	95	()

58	Ethylbenzene			CAS#: 100-41-4		
91	8405	13.87	13.86	80-120	100	()
106	1338	13.87	13.86	2- 62	16	()

65	Styrene			CAS#: 100-42-5		
104	4473	14.82	14.40	80-120	100	(T)
78	1183	14.79	14.40	22- 82	26	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
66 Bromoform		CAS#: 75-25-2				
173	875	14.96	14.66	80-120	100	(T)
175	14312	14.95	14.66	20- 80	1634	(QT)

67 Isopropylbenzene		CAS#: 98-82-8				
105	6580	14.83	14.76	80-120	100	(T)
120	1830	14.83	14.76	0- 56	28	(T)

74 1,2,3-Trichloropropane		CAS#: 96-18-4				
110	4240	14.83	15.11	80-120	100	(T)
75	10192	14.83	15.11	252-312	240	(QT)
77	5998	14.79	15.11	61-121	141	(QT)

76 n-Propylbenzene		CAS#: 103-65-1				
91	8699	14.79	15.18	80-120	100	(T)
120	1830	14.83	15.18	0- 53	21	(T)

78 1,3,5-Trimethylbenzene		CAS#: 108-67-8				
105	3777	15.80	15.33	80-120	100	(T)
120	358	15.79	15.33	18- 78	9	(QT)

79 1,2,4-Trimethylbenzene		CAS#: 95-63-6				
105	4712	15.80	15.75	80-120	100	()
120	358	15.79	15.75	17- 77	8	(Q)

81 tert-Butylbenzene		CAS#: 98-06-6				
119	4802	15.80	15.70	80-120	100	(T)
91	17453	15.79	15.70	42-102	363	(QT)
134	1044	15.79	15.71	0- 52	22	(T)

83 sec-Butylbenzene		CAS#: 135-98-8				
105	4712	15.80	15.93	80-120	100	(T)
134	1044	15.79	15.93	0- 50	22	(T)

84 4-Isopropyltoluene		CAS#: 99-87-6				
119	4802	15.80	16.05	80-120	100	(T)
134	1044	15.79	16.05	0- 58	22	(T)
91	17453	15.79	16.05	0- 54	363	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
Data file : /chem/VOA4.i/012510v4/4v145.d
Lab Smp Id: 245099011 Client Smp ID: RE15-10-7187
Inj Date : 26-JAN-2010 13:24
Operator : ACJ Inst ID: VOA4.i
Smp Info : |245099011|945254|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.34110	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1792686	50.000
* 61 Chlorobenzene-d5	13.770	1689801	50.000
* 86 1,4-Dichlorobenzene-d4	16.178	1072967	50.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
4.496	204428	5.70172484	6.3	0		0	40
Unknown Siloxane				CAS #:			
14.825	2477392	73.3042398	80.8	0		0	61
3-Carene				CAS #: 13466-78-9			
15.801	175414	8.17426554	9.0	96	NIST05.L	15156	86
Unknown Siloxane				CAS #:			
16.794	463124	21.5814582	23.8	0		0	86

Data File: /chem/V004.i/012510v4/4v145.d

Date : 26-JAN-2010 13:24

Client ID: RE15-10-7187

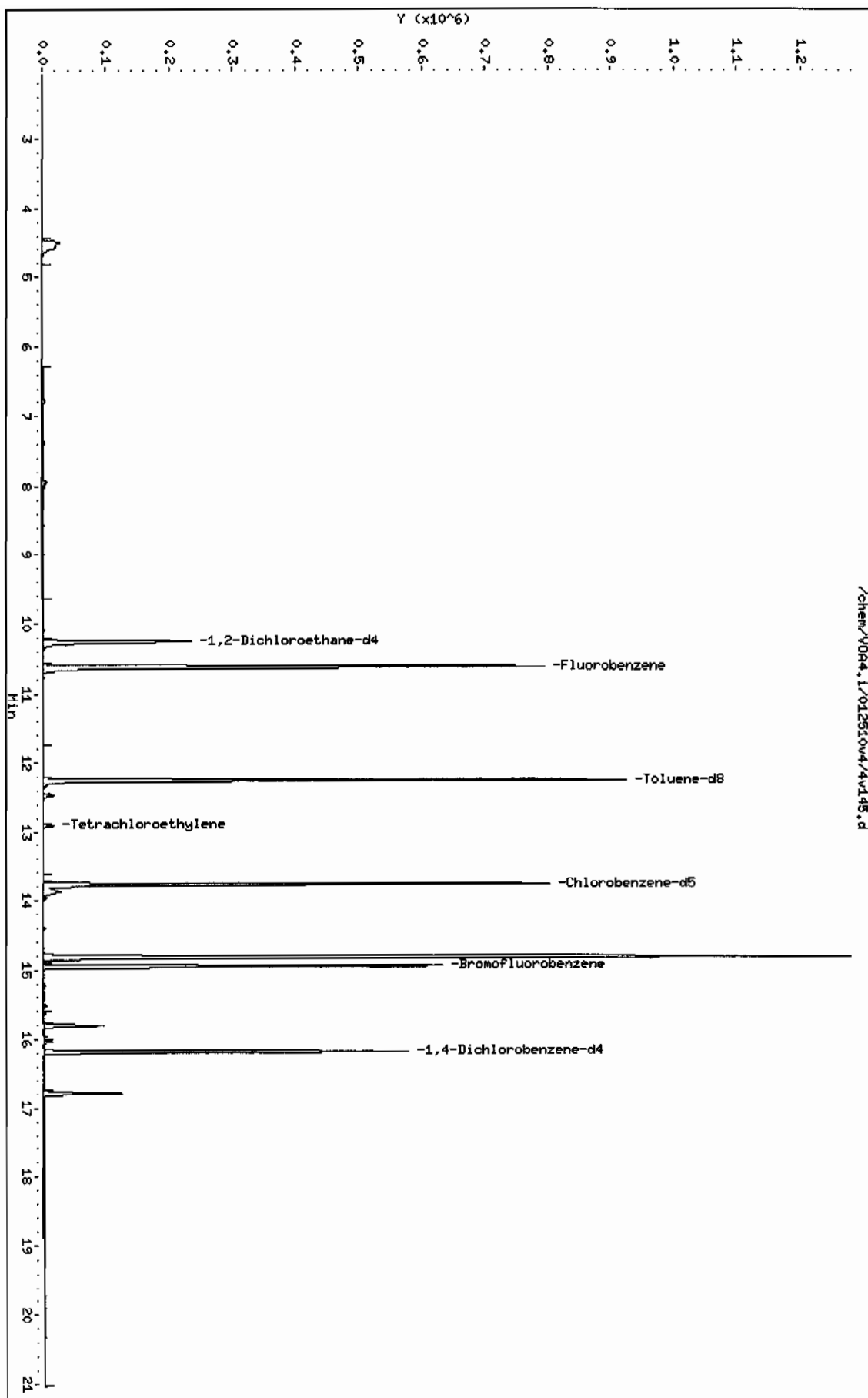
Sample Info: 124509901194525411V004F111

Column phase: RTX-VOLATILES

Instrument: V004.i

Operator: ACJ

Column diameter: 0.25



Date : 26-JAN-2010 13:24

Client ID: RE15-10-7187

Instrument: VOA4.i

Sample Info: 1245099011|94525411|VOAF11|

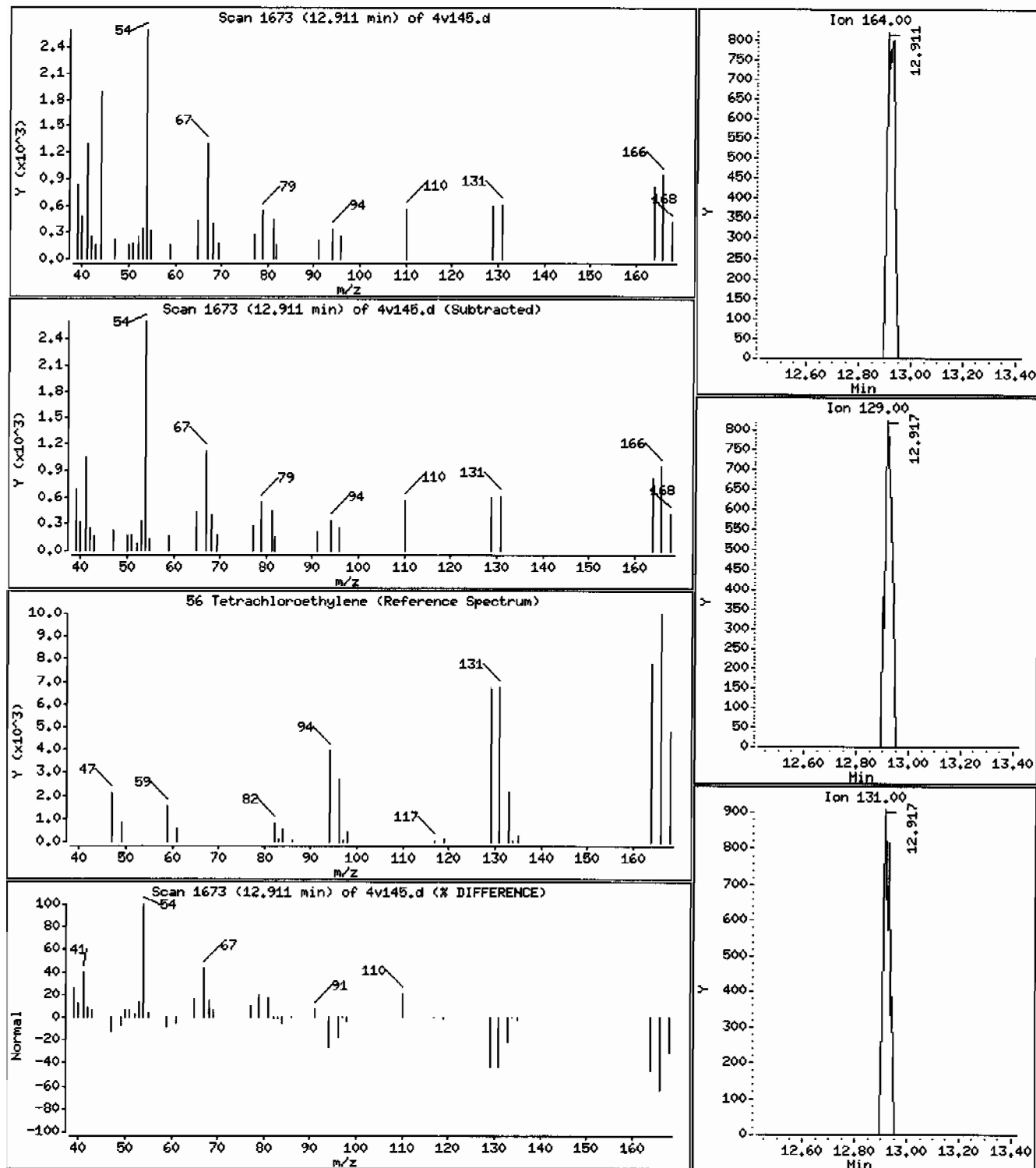
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.50 ug/Kg



Data File: /chem/VOA4.i/012510v4/4v145.d

Page 1

Date : 26-JAN-2010 13:24

Client ID: RE15-10-7187

Instrument: VOA4.i

Sample Info: 1245099011194525411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality Formula

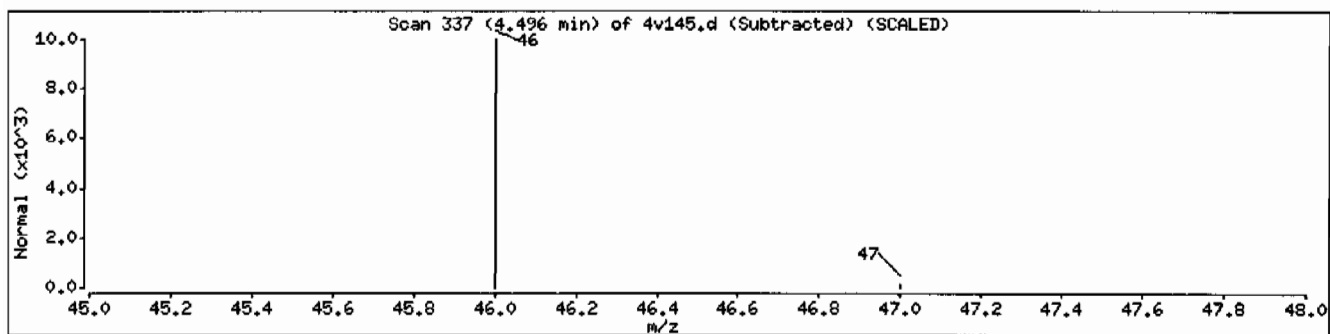
Weight

Unknown

0

0

0



Date : 26-JAN-2010 13:24

Client ID: RE15-10-7187

Instrument: VOA4.i

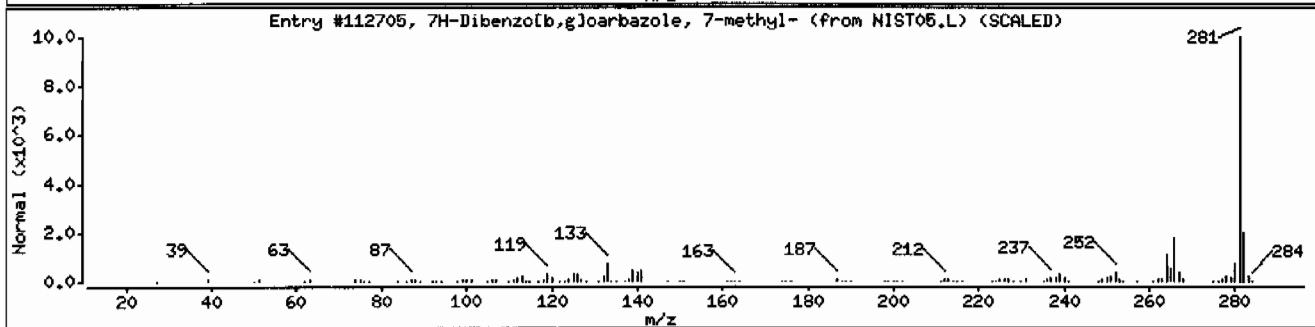
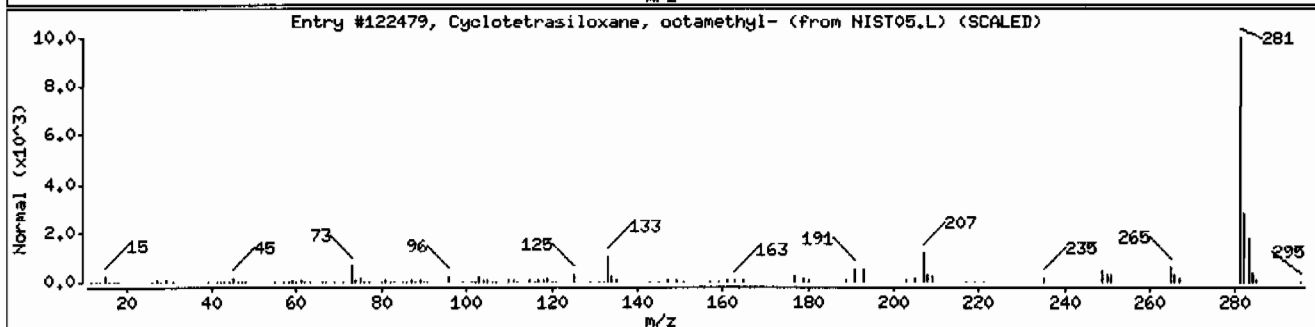
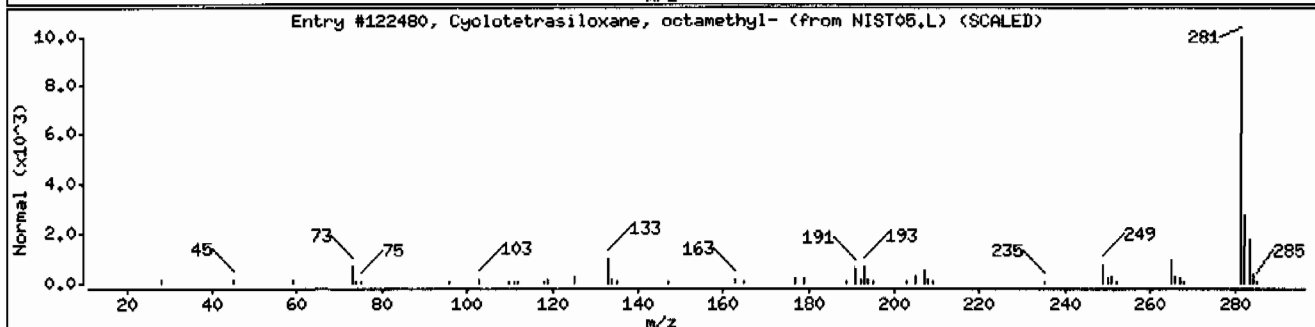
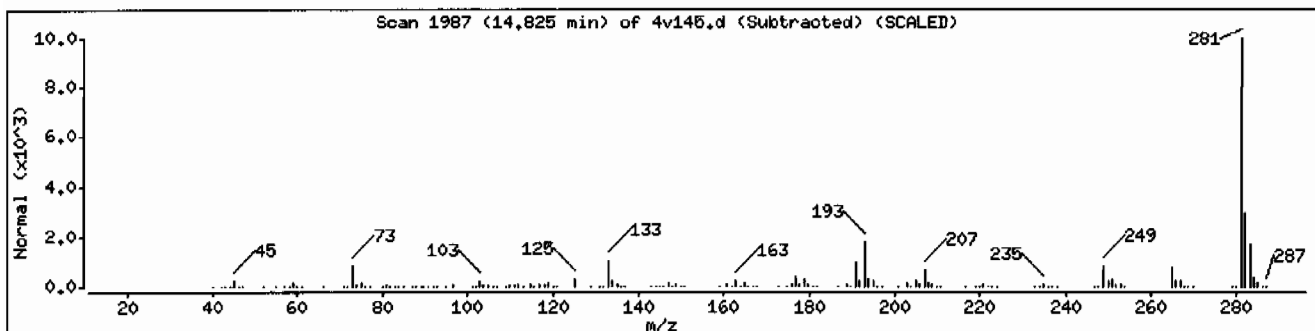
Sample Info: 1245099011|94525411|VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	78	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C ₂₁ H ₁₅ N	281



Date : 26-JAN-2010 13:24

Client ID: RE15-10-7187

Instrument: V0A4.i

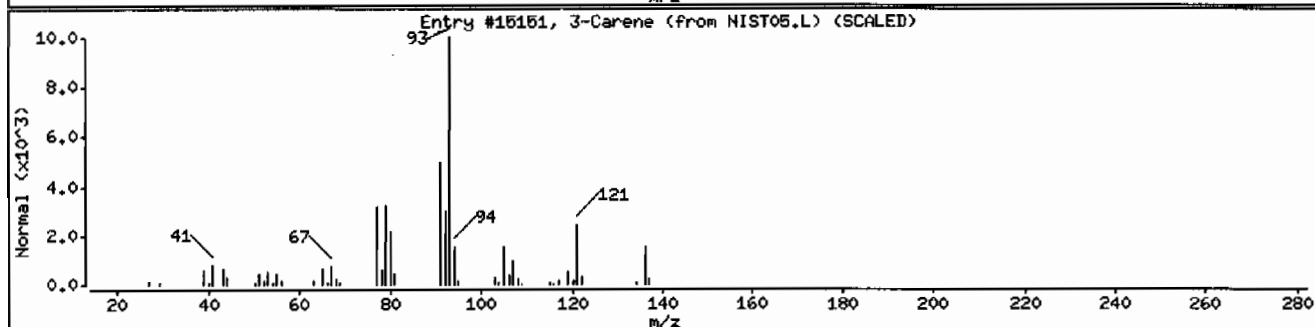
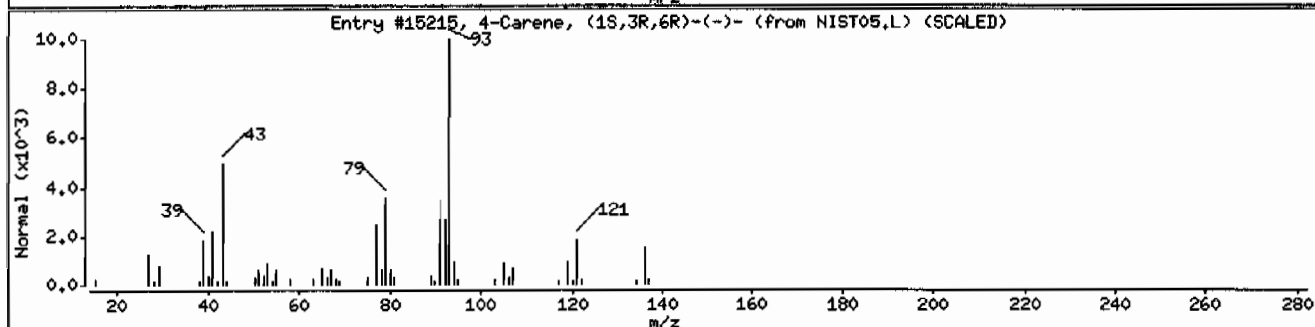
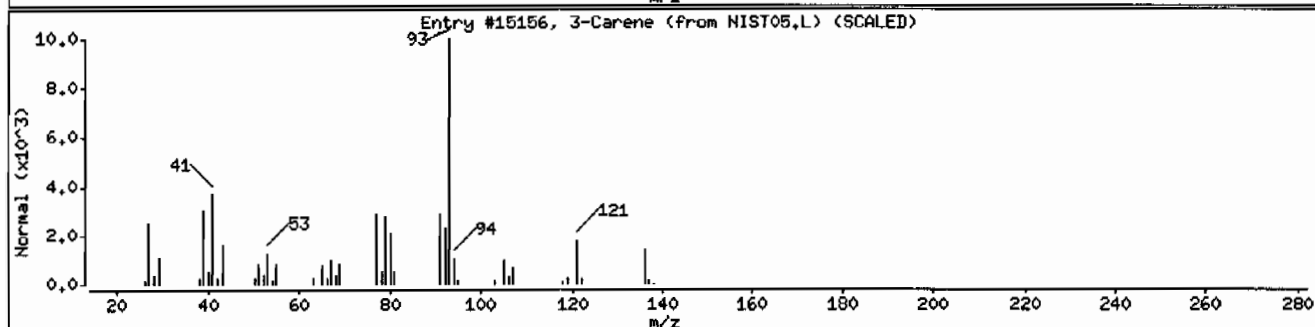
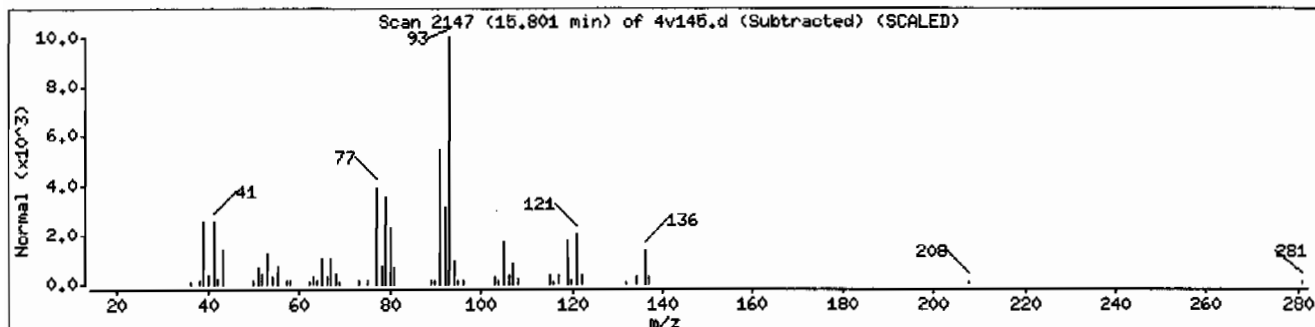
Sample Info: I245099011I945254I1I1V0AF11I

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
4-Carene, (1S,3R,6R)-(-)-	5208-49-1	NIST05.L	15215	93	C10H16	136
3-Carene	13466-78-9	NIST05.L	15151	93	C10H16	136



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099012	Date Received: 01/20/2010 08:45	%Moisture: 12.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7188	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 13:51	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:03	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v146.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.14	ug/kg	0.388	1.14
74-87-3	Chloromethane	U	1.14	ug/kg	0.343	1.14
75-01-4	Vinyl chloride	U	1.14	ug/kg	0.343	1.14
74-83-9	Bromomethane	U	1.14	ug/kg	0.343	1.14
75-00-3	Chloroethane	U	1.14	ug/kg	0.343	1.14
75-69-4	Trichlorofluoromethane	U	1.14	ug/kg	0.343	1.14
67-64-1	Acetone	U	5.71	ug/kg	1.90	5.71
75-35-4	1,1-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
74-88-4	Iodomethane	U	5.71	ug/kg	1.83	5.71
75-09-2	Methylene chloride	U	5.71	ug/kg	2.28	5.71
75-15-0	Carbon disulfide	U	5.71	ug/kg	1.43	5.71
156-60-5	trans-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
75-34-3	1,1-Dichloroethane	U	1.14	ug/kg	0.343	1.14
78-93-3	2-Butanone	U	5.71	ug/kg	1.71	5.71
156-59-2	cis-1,2-Dichloroethylene	U	1.14	ug/kg	0.343	1.14
594-20-7	2,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
67-66-3	Chloroform	U	1.14	ug/kg	0.343	1.14
74-97-5	Bromochloromethane	U	1.14	ug/kg	0.377	1.14
71-55-6	1,1,1-Trichloroethane	U	1.14	ug/kg	0.343	1.14
563-58-6	1,1-Dichloropropene	U	1.14	ug/kg	0.343	1.14
56-23-5	Carbon tetrachloride	U	1.14	ug/kg	0.343	1.14
107-06-2	1,2-Dichloroethane	U	1.14	ug/kg	0.343	1.14
71-43-2	Benzene	U	1.14	ug/kg	0.343	1.14
79-01-6	Trichloroethylene	U	1.14	ug/kg	0.377	1.14
78-87-5	1,2-Dichloropropane	U	1.14	ug/kg	0.343	1.14
75-27-4	Bromodichloromethane	U	1.14	ug/kg	0.343	1.14
74-95-3	Dibromomethane	U	1.14	ug/kg	0.343	1.14
108-10-1	4-Methyl-2-pentanone	U	5.71	ug/kg	1.43	5.71
10061-01-5	cis-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
108-88-3	Toluene	U	1.14	ug/kg	0.343	1.14
10061-02-6	trans-1,3-Dichloropropylene	U	1.14	ug/kg	0.343	1.14
79-00-5	1,1,2-Trichloroethane	U	1.14	ug/kg	0.343	1.14
591-78-6	2-Hexanone	U	5.71	ug/kg	1.71	5.71
142-28-9	1,3-Dichloropropane	U	1.14	ug/kg	0.343	1.14
127-18-4	Tetrachloroethylene	J	0.733	ug/kg	0.343	1.14
124-48-1	Dibromochloromethane	U	1.14	ug/kg	0.343	1.14
106-93-4	1,2-Dibromoethane	U	1.14	ug/kg	0.343	1.14
108-90-7	Chlorobenzene	U	1.14	ug/kg	0.343	1.14

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099012

Client ID: RE15-10-7188
 Batch ID: 945254
 Run Date: 01/26/2010 13:51
 Prep Date: 01/25/2010 23:03
 Data File: 4v146.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 12.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	J	0.760	ug/kg	0.343	1.14
179601-23-1	m,p-Xylenes	J	0.962	ug/kg	0.343	2.28
95-47-6	o-Xylene	U	1.14	ug/kg	0.343	1.14
100-42-5	Styrene	U	1.14	ug/kg	0.343	1.14
75-25-2	Bromoform	U	1.14	ug/kg	0.343	1.14
79-34-5	1,1,2,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
96-18-4	1,2,3-Trichloropropane	U	1.14	ug/kg	0.343	1.14
108-86-1	Bromobenzene	U	1.14	ug/kg	0.343	1.14
103-65-1	n-Propylbenzene	U	1.14	ug/kg	0.343	1.14
95-49-8	2-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-82-8	Isopropylbenzene	U	1.14	ug/kg	0.343	1.14
108-67-8	1,3,5-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
106-43-4	4-Chlorotoluene	U	1.14	ug/kg	0.343	1.14
98-06-6	tert-Butylbenzene	U	1.14	ug/kg	0.343	1.14
95-63-6	1,2,4-Trimethylbenzene	U	1.14	ug/kg	0.343	1.14
135-98-8	sec-Butylbenzene	U	1.14	ug/kg	0.343	1.14
99-87-6	4-Isopropyltoluene	U	1.14	ug/kg	0.343	1.14
541-73-1	1,3-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
106-46-7	1,4-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14
104-51-8	n-Butylbenzene	U	1.14	ug/kg	0.343	1.14
96-12-8	1,2-Dibromo-3-chloropropane	U	1.14	ug/kg	0.343	1.14
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.71	ug/kg	1.83	5.71
630-20-6	1,1,1,2-Tetrachloroethane	U	1.14	ug/kg	0.343	1.14
95-50-1	1,2-Dichlorobenzene	U	1.14	ug/kg	0.343	1.14

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	7.53	ug/kg		J
	Unknown Siloxane	14.83	72.7	ug/kg		J
	Unknown Siloxane	16.79	19.1	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v146.d

Lab Smp Id: 245099012

Client Smp ID: RE15-10-7188

Inj Date : 26-JAN-2010 13:51

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099012|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 46

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.42510	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619 (1.000)	754428	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771 (1.000)	439066	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.179 (1.000)	127873	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265 (0.967)	171441	41.5867	47.5
\$ 47 Toluene-d8	98	12.252	12.253 (0.890)	601788	53.9177	61.6
\$ 71 Bromofluorobenzene	95	14.953	14.953 (0.924)	180665	77.2561	88.2 (R)
56 Tetrachloroethylene	164	12.917	12.923 (0.938)	2034	0.64203	0.73 (a)
58 Ethylbenzene	91	13.868	13.862 (1.007)	11108	0.66557	0.76 (a)
63 m,p-Xylenes	106	13.966	13.972 (1.014)	5403	0.84221	0.96 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

ION RATIO REPORT

VOA REPORT

Data file: 4v146.d

Report Date: 01/26/2010 16:12

Lab. ID: 245099012

SampleType: SAMPLE

Injection Date: 26-JAN-2010 13:51

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099012|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	9876	10.62	10.34	80-120	100	(T)
64	1655	10.62	10.34	2- 62	17	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	5483	12.25	12.02	80-120	100	(T)
43	3342	12.25	12.02	243-303	61	(QT)
100	395409	12.25	12.02	0- 60	7211	(QT)

56	Tetrachloroethylene			CAS#: 127-18-4		
164	2034	12.92	12.92	80-120	100	()
129	1767	12.92	12.92	58-118	87	()
131	1902	12.92	12.92	55-115	94	()

58	Ethylbenzene			CAS#: 100-41-4		
91	11108	13.87	13.86	80-120	100	()
106	2433	13.86	13.86	2- 62	22	()

64	o-Xylene			CAS#: 95-47-6		
106	5403	13.97	14.40	80-120	100	(T)
91	10909	13.97	14.40	177-237	202	(T)

63	m,p-Xylenes			CAS#: 179601-23-1		
106	5403	13.97	13.97	80-120	100	()
91	10909	13.97	13.97	168-228	202	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
65 Styrene		CAS#: 100-42-5				
104	3493	14.82	14.40	80-120	100	(T)
78	363	14.40	14.40	22- 82	10	(Q)

66 Bromoform		CAS#: 75-25-2				
173	898	14.95	14.66	80-120	100	(T)
175	11488	14.95	14.66	20- 80	1279	(QT)

67 Isopropylbenzene		CAS#: 98-82-8				
105	3439	14.83	14.76	80-120	100	(T)
120	1182	14.82	14.76	0- 56	34	(T)

74 1,2,3-Trichloropropane		CAS#: 96-18-4				
110	3832	14.83	15.11	80-120	100	(T)
75	8814	14.83	15.11	252-312	230	(QT)
77	363	14.82	15.11	61-121	9	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v146.d
 Lab Smp Id: 245099012 Client Smp ID: RE15-10-7188
 Inj Date : 26-JAN-2010 13:51
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099012|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 46
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	12.42510	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1621845	50.000
* 61 Chlorobenzene-d5	13.770	1526395	50.000
* 86 1,4-Dichlorobenzene-d4	16.178	795140	50.000

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

RT	AREA	CONCENTRATIONS		QUAL	QUANT		
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	L1B ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
4.496	213761	6.59006077	7.5	0		0	40
Unknown Siloxane				CAS #:			
14.825	1943164	63.6520785	72.7	0		0	61
Unknown Siloxane				CAS #:			
16.794	265396	16.6886188	19.0	0		0	86

Data File: /chem/V004.i/012510v4/4v146.d

Date: 26-JAN-2010 13:51

Client ID: REIS-10-7188

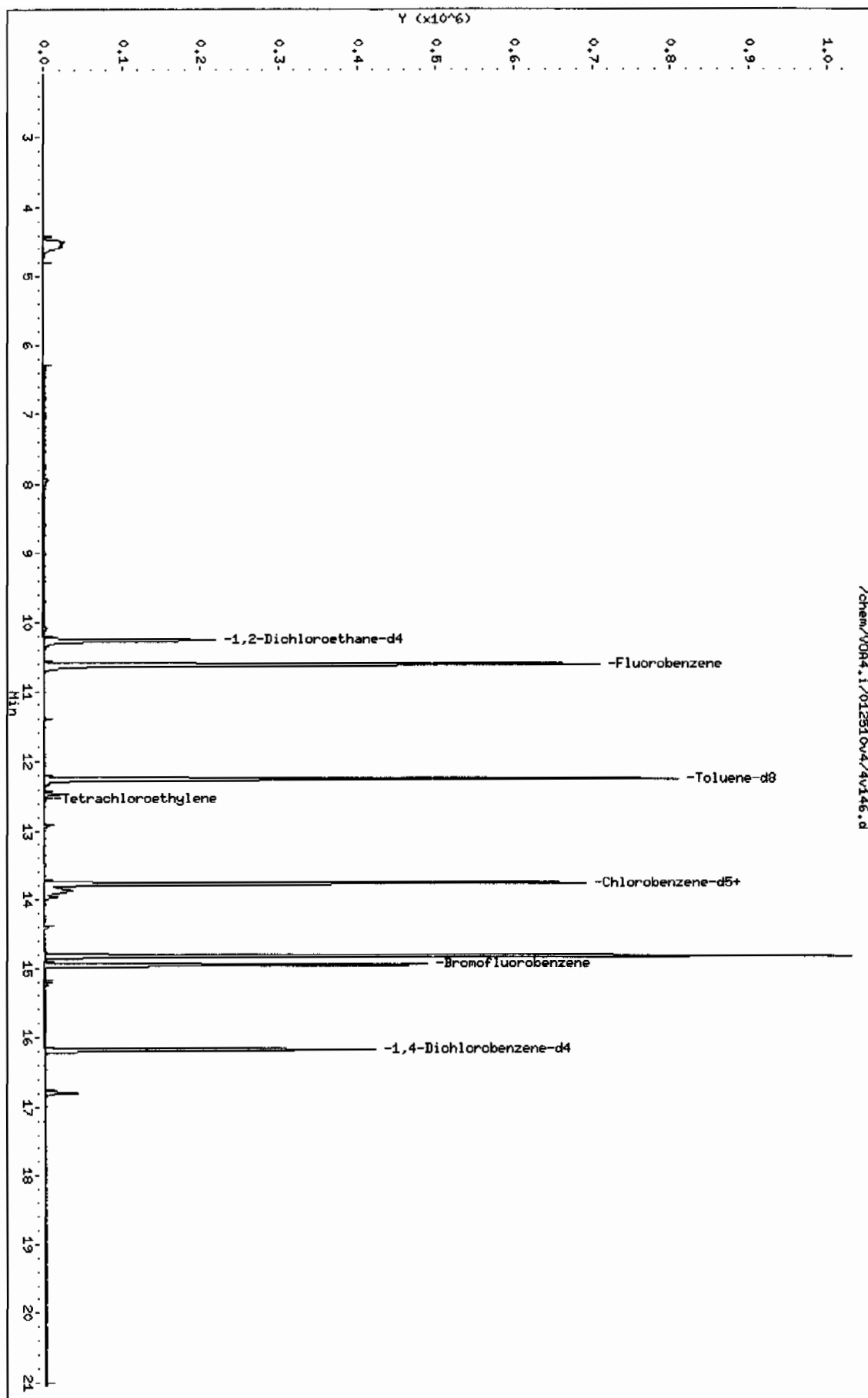
Sample Info: 1248099012194525411V004111

Column phase: RTX-VOLATILES

Instrument: V004.1

Operator: ACJ

Column diameter: 0.25



Date : 26-JAN-2010 13:51

Client ID: RE15-10-7188

Instrument: V0A4.i

Sample Info: 1245099012194525411/V0AF111

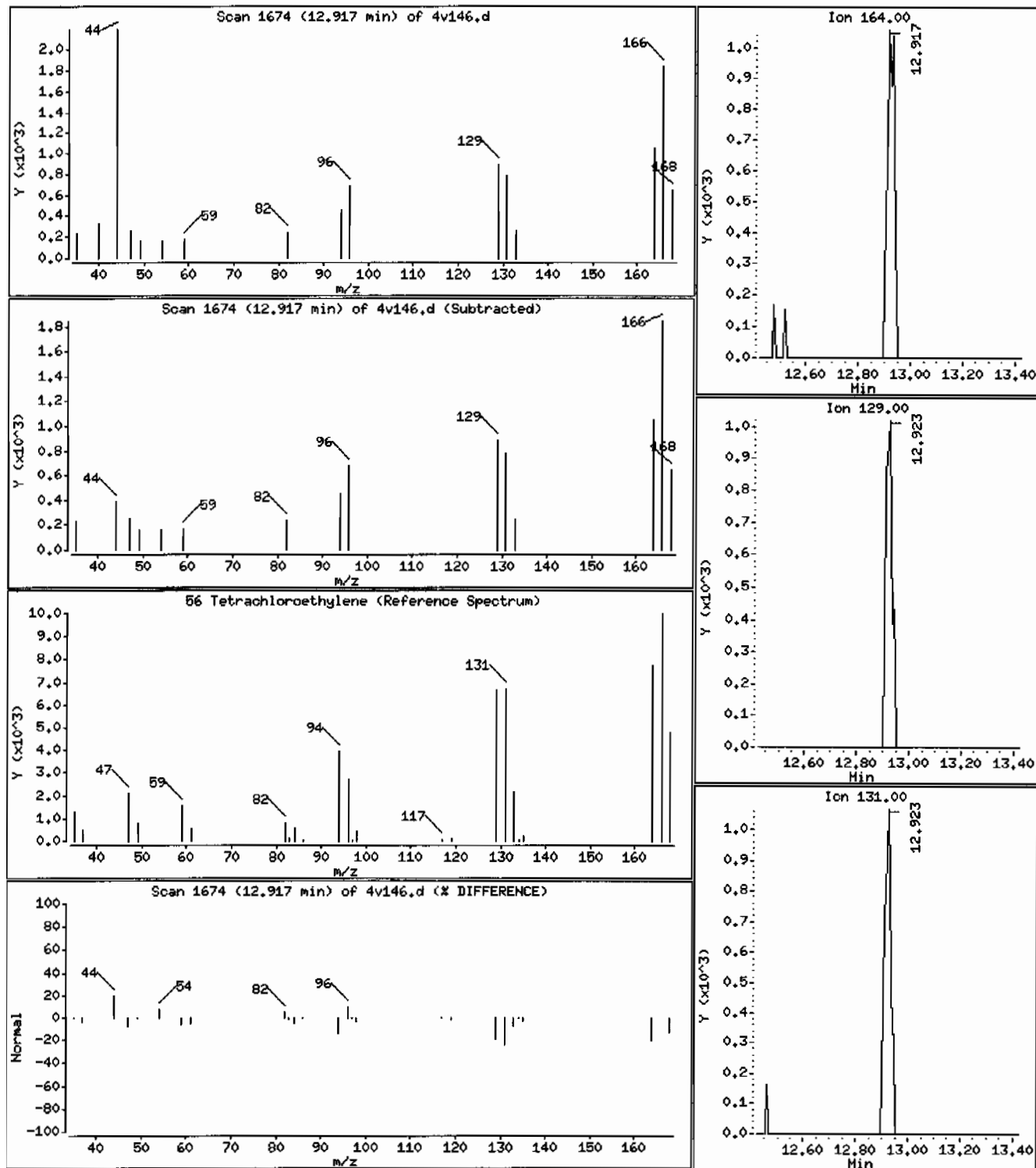
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.73 ug/Kg



Date : 26-JAN-2010 13:51

Client ID: RE15-10-7188

Instrument: VOA4.i

Sample Info: 12450990121945254111VOAF111

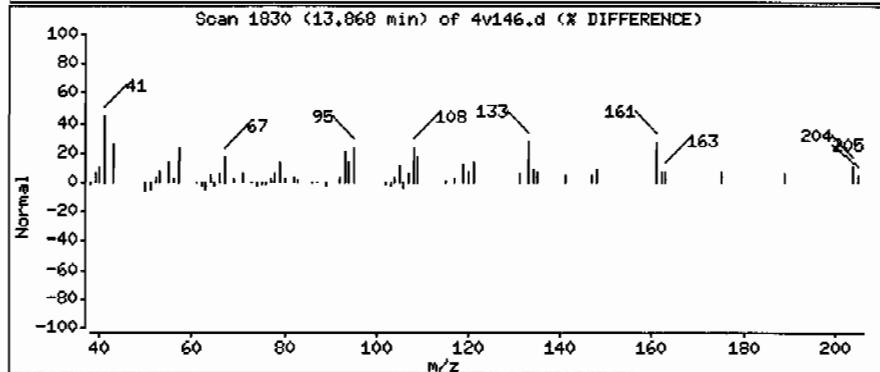
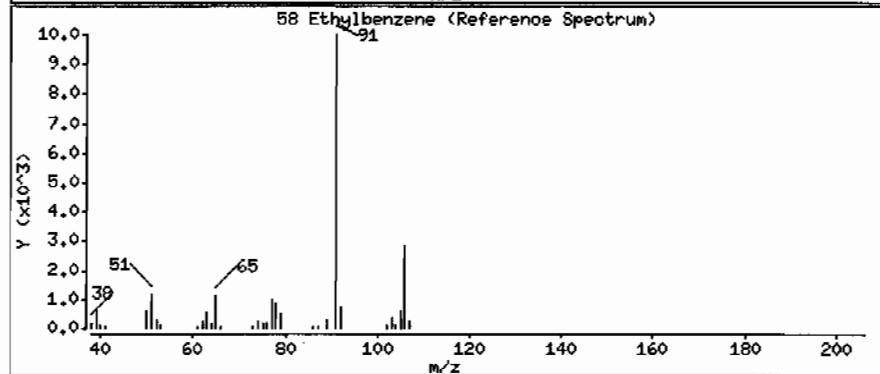
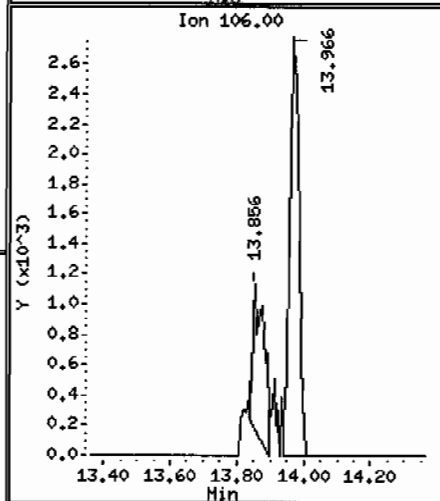
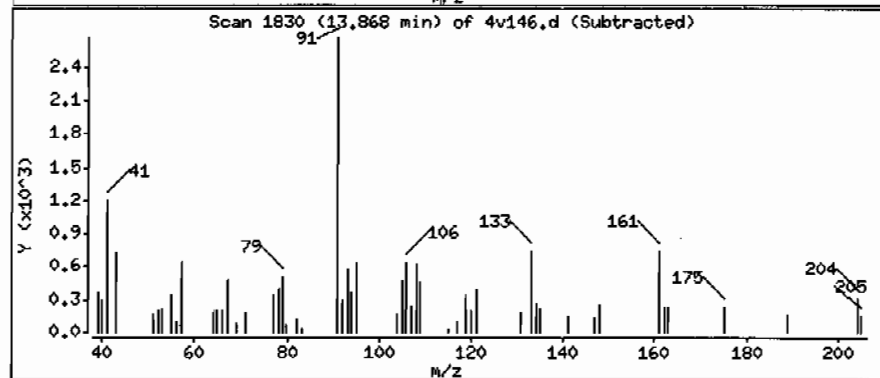
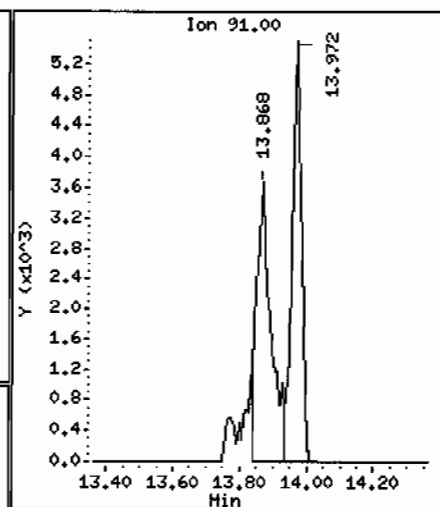
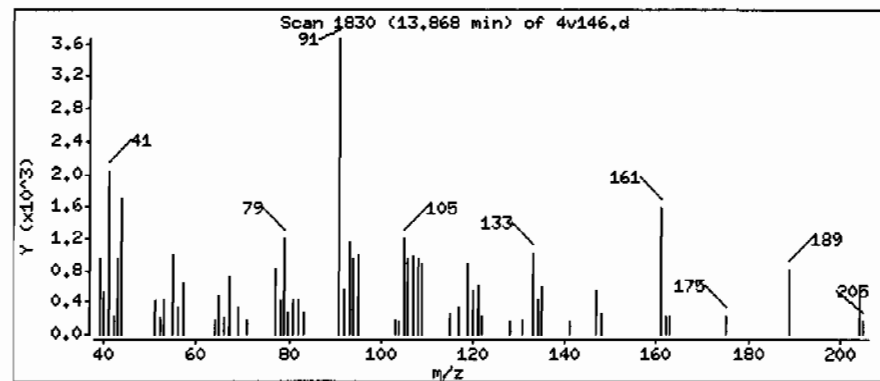
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

58 Ethylbenzene

Concentration: 0.76 ug/Kg



Date : 26-JAN-2010 13:51

Client ID: RE15-10-7188

Instrument: V0A4.i

Sample Info: 1245099012194525411V0AF111

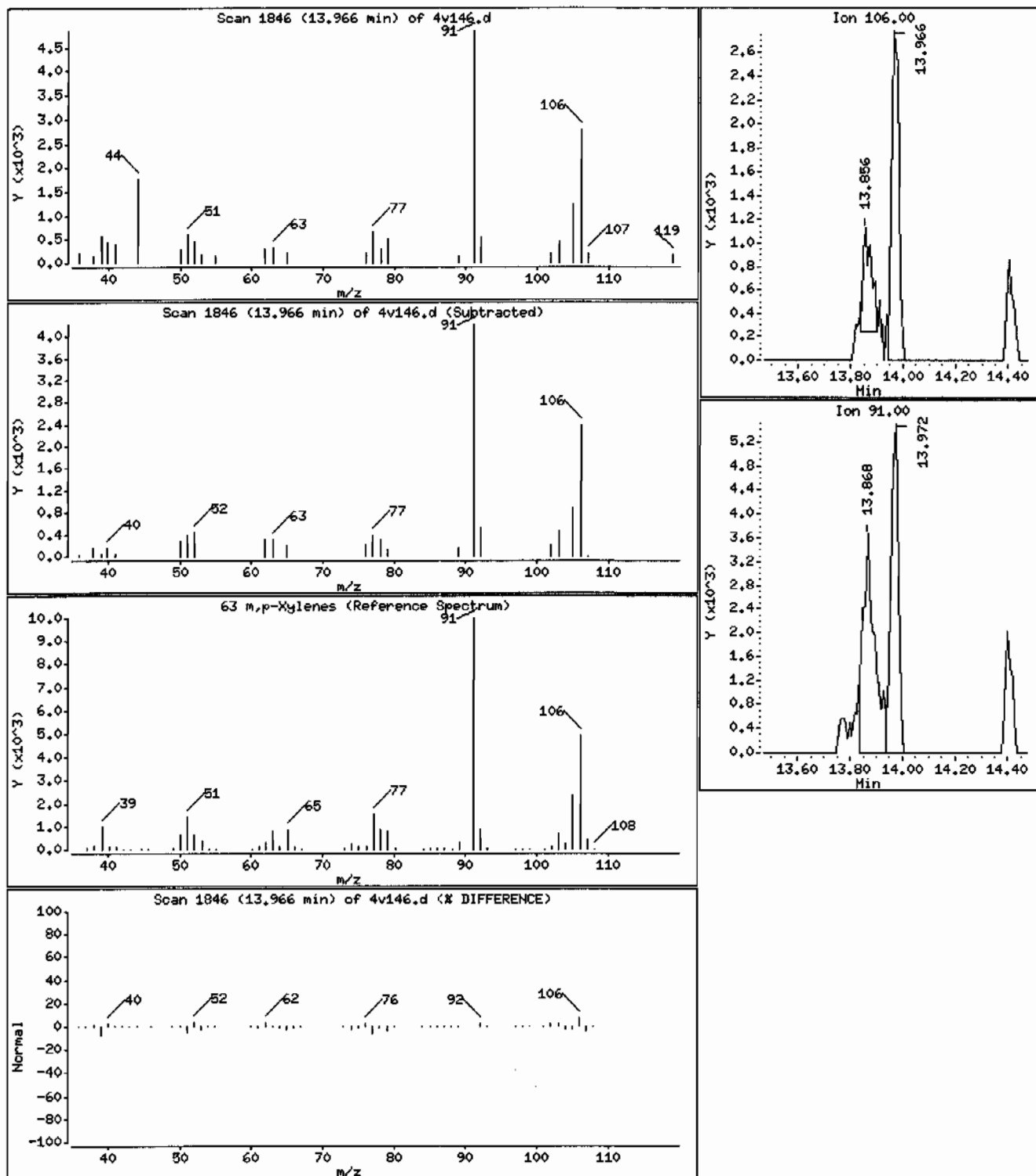
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.96 ug/Kg



Data File: /chem/V0A4.i/012510v4/4v146.d

Page 1

Date : 26-JAN-2010 13:51

Client ID: RE15-10-7188

Instrument: V0A4.i

Sample Info: I245099012194525411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match

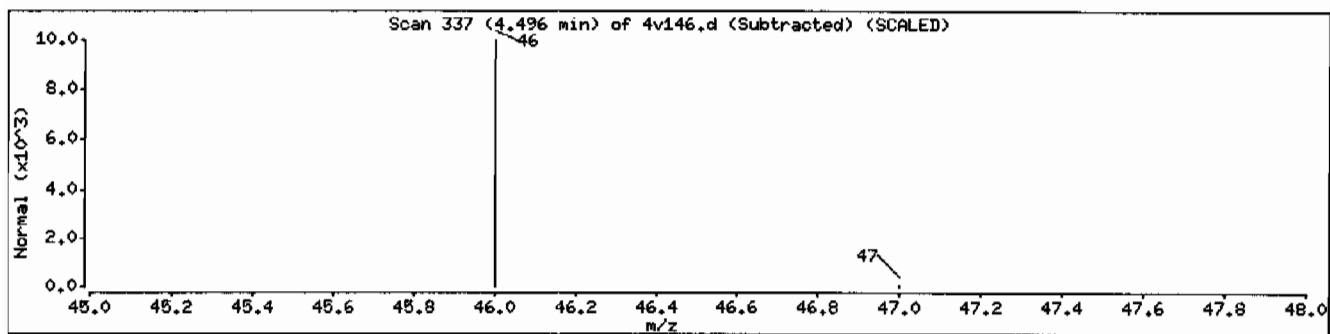
CAS Number	Library	Entry	Quality	Formula	Weight
------------	---------	-------	---------	---------	--------

Unknown

0

0

0



Date : 26-JAN-2010 13:51

Client ID: RE15-10-7188

Instrument: V0A4.i

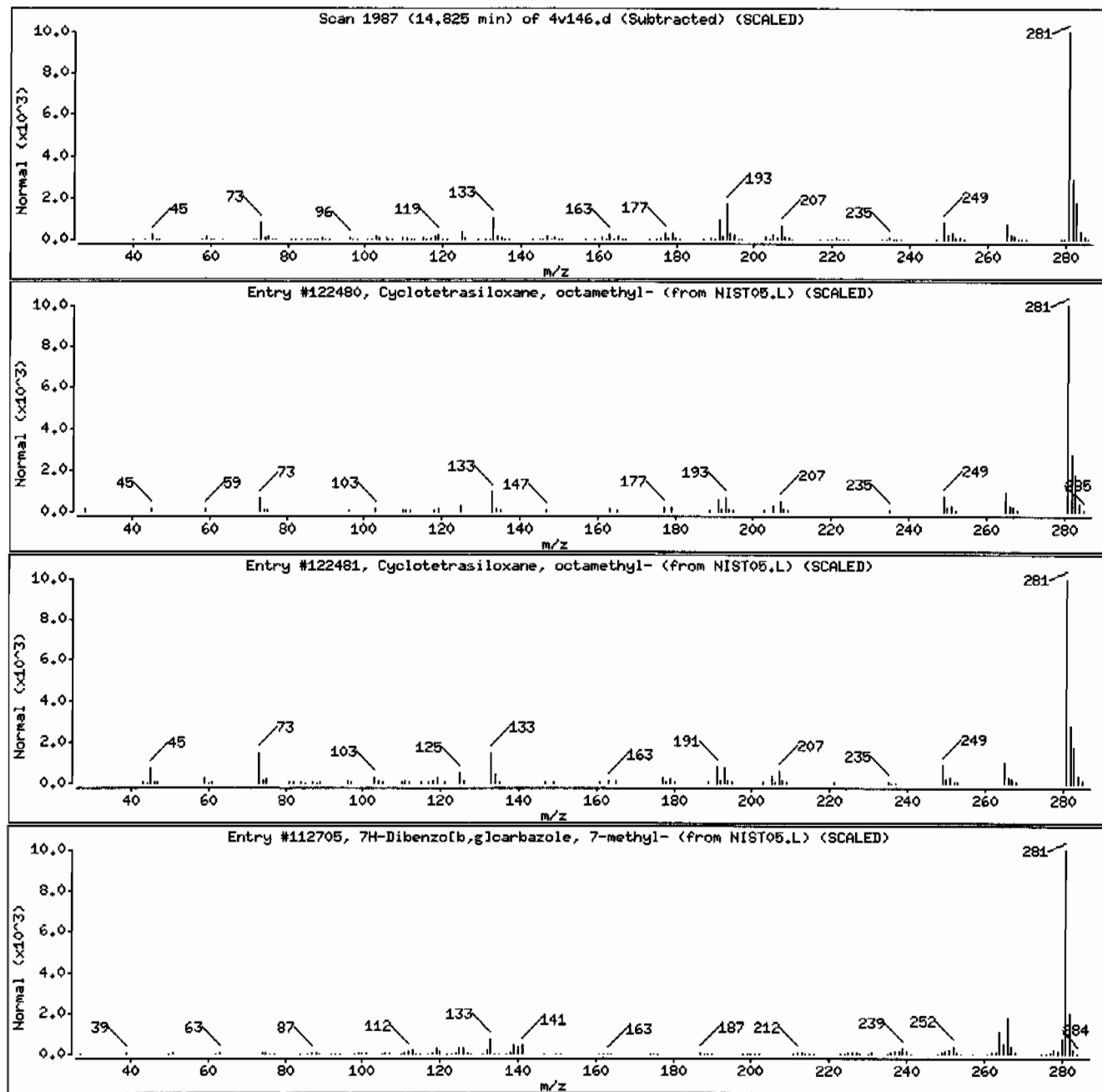
Sample Info: I245099012194825411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	87	C ₈ H ₂₄ O ₄ Si ₄	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	86	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C ₂₁ H ₁₅ N	281



Date : 26-JAN-2010 13:51

Client ID: RE15-10-7188

Instrument: V0A4.i

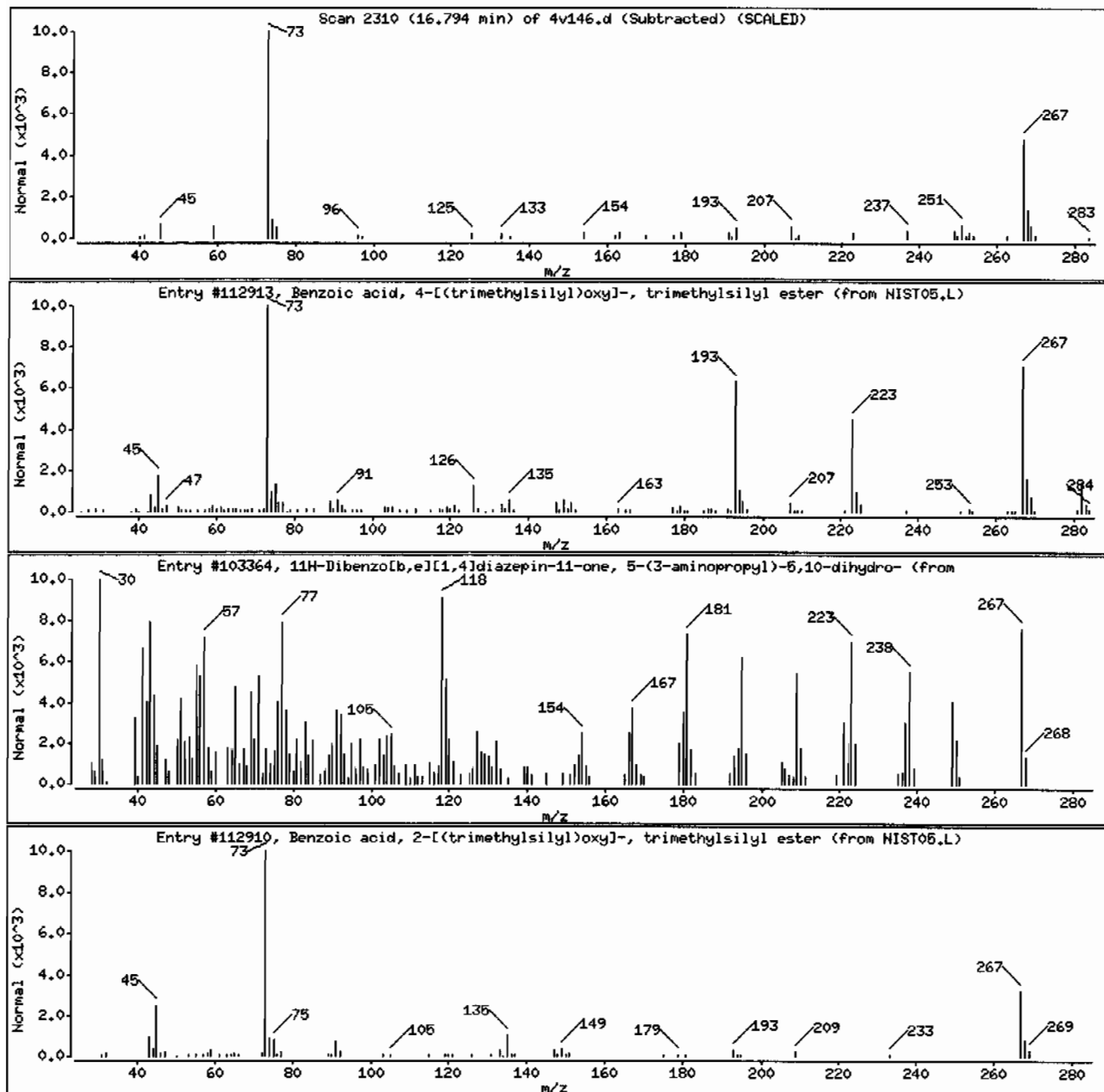
Sample Info: I245099012194525411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 4-[(trimethylsilyl)oxy]-,	2078-13-9	NIST05.L	112913	45	C ₁₃ H ₂₂ O ₃ Si ₂	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	43	C ₁₆ H ₁₇ N ₃ O	267
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	38	C ₁₃ H ₂₂ O ₃ Si ₂	282



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 9.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10
75-01-4	Vinyl chloride	U	1.10	ug/kg	0.331	1.10
74-83-9	Bromomethane	U	1.10	ug/kg	0.331	1.10
75-00-3	Chloroethane	U	1.10	ug/kg	0.331	1.10
75-69-4	Trichlorofluoromethane	U	1.10	ug/kg	0.331	1.10
67-64-1	Acetone	U	5.51	ug/kg	1.83	5.51
75-35-4	1,1-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
74-88-4	Iodomethane	U	5.51	ug/kg	1.76	5.51
75-09-2	Methylene chloride	U	5.51	ug/kg	2.20	5.51
75-15-0	Carbon disulfide	U	5.51	ug/kg	1.38	5.51
156-60-5	trans-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
75-34-3	1,1-Dichloroethane	U	1.10	ug/kg	0.331	1.10
78-93-3	2-Butanone	U	5.51	ug/kg	1.65	5.51
156-59-2	cis-1,2-Dichloroethylene	U	1.10	ug/kg	0.331	1.10
594-20-7	2,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
67-66-3	Chloroform	J	0.687	ug/kg	0.331	1.10
74-97-5	Bromochloromethane	U	1.10	ug/kg	0.364	1.10
71-55-6	1,1,1-Trichloroethane	U	1.10	ug/kg	0.331	1.10
563-58-6	1,1-Dichloropropene	U	1.10	ug/kg	0.331	1.10
56-23-5	Carbon tetrachloride	U	1.10	ug/kg	0.331	1.10
107-06-2	1,2-Dichloroethane	U	1.10	ug/kg	0.331	1.10
71-43-2	Benzene	U	1.10	ug/kg	0.331	1.10
79-01-6	Trichloroethylene	U	1.10	ug/kg	0.364	1.10
78-87-5	1,2-Dichloropropane	U	1.10	ug/kg	0.331	1.10
75-27-4	Bromodichloromethane	U	1.10	ug/kg	0.331	1.10
74-95-3	Dibromomethane	U	1.10	ug/kg	0.331	1.10
108-10-1	4-Methyl-2-pentanone	U	5.51	ug/kg	1.38	5.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
108-88-3	Toluene		1.53	ug/kg	0.331	1.10
10061-02-6	trans-1,3-Dichloropropylene	U	1.10	ug/kg	0.331	1.10
79-00-5	1,1,2-Trichloroethane	U	1.10	ug/kg	0.331	1.10
591-78-6	2-Hexanone	U	5.51	ug/kg	1.65	5.51
142-28-9	1,3-Dichloropropane	U	1.10	ug/kg	0.331	1.10
127-18-4	Tetrachloroethylene	J	0.578	ug/kg	0.331	1.10
124-48-1	Dibromochloromethane	U	1.10	ug/kg	0.331	1.10
106-93-4	1,2-Dibromoethane	U	1.10	ug/kg	0.331	1.10
108-90-7	Chlorobenzene	U	1.10	ug/kg	0.331	1.10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099010	Date Received: 01/20/2010 08:45	%Moisture: 9.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7189	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/27/2010 03:42	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 21:23	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v223.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	ug/kg	0.331	1.10
179601-23-1	m,p-Xylenes	J	0.761	ug/kg	0.331	2.20
95-47-6	o-Xylene	U	1.10	ug/kg	0.331	1.10
100-42-5	Styrene	U	1.10	ug/kg	0.331	1.10
75-25-2	Bromoform	U	1.10	ug/kg	0.331	1.10
79-34-5	1,1,2,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
96-18-4	1,2,3-Trichloropropane	U	1.10	ug/kg	0.331	1.10
108-86-1	Bromobenzene	U	1.10	ug/kg	0.331	1.10
103-65-1	n-Propylbenzene	U	1.10	ug/kg	0.331	1.10
95-49-8	2-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-82-8	Isopropylbenzene	U	1.10	ug/kg	0.331	1.10
108-67-8	1,3,5-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
106-43-4	4-Chlorotoluene	U	1.10	ug/kg	0.331	1.10
98-06-6	tert-Butylbenzene	U	1.10	ug/kg	0.331	1.10
95-63-6	1,2,4-Trimethylbenzene	U	1.10	ug/kg	0.331	1.10
135-98-8	sec-Butylbenzene	U	1.10	ug/kg	0.331	1.10
99-87-6	4-Isopropyltoluene	U	1.10	ug/kg	0.331	1.10
541-73-1	1,3-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
106-46-7	1,4-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10
104-51-8	n-Butylbenzene	U	1.10	ug/kg	0.331	1.10
96-12-8	1,2-Dibromo-3-chloropropane	U	1.10	ug/kg	0.331	1.10
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.51	ug/kg	1.76	5.51
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.10	ug/kg	0.331	1.10
95-50-1	1,2-Dichlorobenzene	U	1.10	ug/kg	0.331	1.10

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	5.61	ug/kg		J
	Unknown Siloxane	14.83	107	ug/kg		J

Data File: /chem/VOA4.i/012610v4/4v223.d
Report Date: 15-Feb-2010 14:20

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v223.d

Lab Smp Id: 245099010

Client Smp ID: RE15-10-7189

Inj Date : 27-JAN-2010 03:42

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099010|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Meth Date : 27-Jan-2010 15:20 slg

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 23

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.23220	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
	=====	==	=====	=====	=====		(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	804371		50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.770	(1.000)	546910		50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	230521		50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.259	(0.967)	180108		40.9764	45.1
\$ 47 Toluene-d8	98	12.252	12.252	(0.890)	675368		48.5783	53.5
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	263180		62.4281	68.8
32 Chloroform	83	9.686	9.692	(0.912)	5286		0.62401	0.69(a)
50 Toluene	92	12.320	12.326	(0.895)	14899		1.39286	1.5
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	2071		0.52481	0.58(a)
63 m,p-Xylenes	106	13.972	13.972	(1.015)	5520		0.69078	0.76(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v223.d

Report Date: 01/27/2010 16:07

Lab. ID: 245099010

SampleType: SAMPLE

Injection Date: 27-JAN-2010 03:42

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099010|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
32 Chloroform		CAS#: 67-66-3				
83	5286	9.69	9.69	80-120	100	()
85	2986	9.70	9.69	35- 95	56	()

37 1,2-Dichloroethane		CAS#: 107-06-2				
62	10830	10.62	10.34	80-120	100	(T)
64	1910	10.62	10.34	3- 63	18	(T)

49 4-Methyl-2-pentanone		CAS#: 108-10-1				
58	6074	12.25	12.02	80-120	100	(T)
43	3978	12.25	12.02	243-303	65	(QT)
100	441884	12.25	12.02	1- 61	7274	(QT)

50 Toluene		CAS#: 108-88-3				
92	14899	12.32	12.33	80-120	100	()
91	23127	12.33	12.33	139-199	155	()

56 Tetrachloroethylene		CAS#: 127-18-4				
164	2071	12.92	12.92	80-120	100	()
129	1376	12.92	12.92	56-116	66	()
131	1191	12.92	12.92	55-115	58	()

58 Ethylbenzene		CAS#: 100-41-4				
91	10234	13.97	13.86	80-120	100	(T)
106	5520	13.97	13.86	2- 62	54	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
64 o-Xylene			CAS#: 95-47-6			
106	5520	13.97	14.40	80-120	100	(T)
91	10234	13.97	14.40	176-236	185	(T)

63 m,p-Xylenes			CAS#: 179601-23-1			
106	5520	13.97	13.97	80-120	100	()
91	10234	13.97	13.97	165-225	185	()

65 Styrene			CAS#: 100-42-5			
104	6211	14.83	14.40	80-120	100	(T)
78	799	14.40	14.40	22- 82	13	(Q)

66 Bromoform			CAS#: 75-25-2			
173	1125	14.95	14.66	80-120	100	(T)
175	16563	14.95	14.66	18- 78	1472	(QT)

67 Isopropylbenzene			CAS#: 98-82-8			
105	5071	14.82	14.76	80-120	100	(T)
120	2054	14.83	14.76	0- 57	41	(T)

74 1,2,3-Trichloropropane			CAS#: 96-18-4			
110	5173	14.82	15.11	80-120	100	(T)
75	14111	14.82	15.11	257-317	273	(T)
77	989	14.83	15.11	59-119	19	(QT)

Q qualifier indicates ion failed ratio requirement						

Data File: /chem/VOA4.i/012610v4/4v223.d
Report Date: 15-Feb-2010 14:20

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GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
Data file : /chem/VOA4.i/012610v4/4v223.d
Lab Smp Id: 245099010 Client Smp ID: RE15-10-7189
Inj Date : 27-JAN-2010 03:42
Operator : ACJ Inst ID: VOA4.i
Smp Info : |245099010|945254|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
Meth Date : 27-Jan-2010 15:20 slg Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	9.23220	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1752349	50.000
* 61 Chlorobenzene-d5	13.771	1677159	50.000

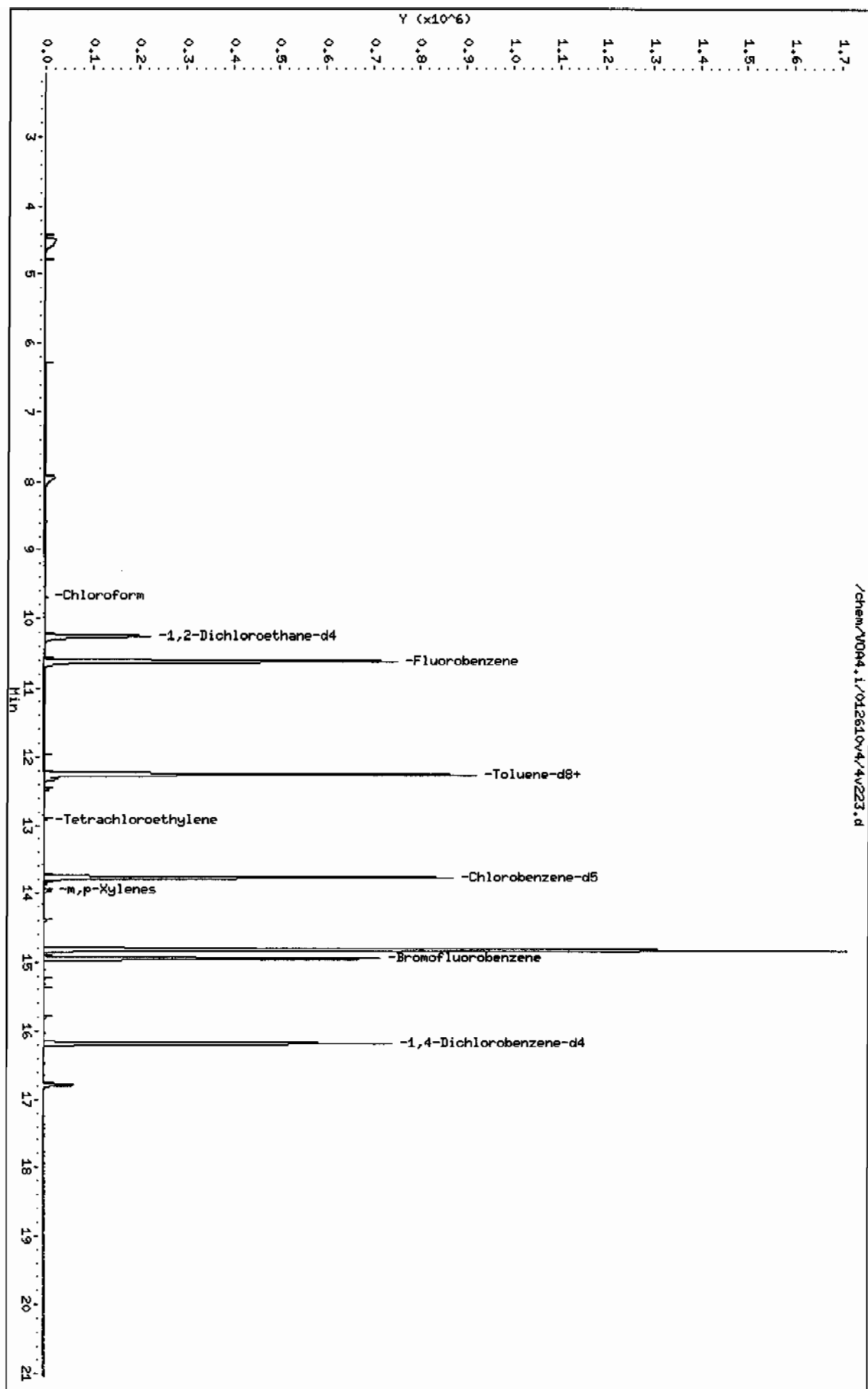
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----
Unknown				CAS #:			
4.496	178498	5.09310031	5.6	0		0	40

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane				CAS #:			
14.825	3243986	96.7107275	106	0		0	61

Data File: /chem/V004.i/012610v4/4v223.d
Date : 27-JAN-2010 03:42
Client ID: REIS-10-7189
Sample Info: 124509010194525411V004F11

Column phase: RTX-VOLATILES

Instrument: V004.i
Operator: RCJ
Column diameter: 0.25



Date : 27-JAN-2010 03:42

Client ID: RE15-10-7189

Instrument: VOA4.i

Sample Info: 1245099010194525411\VOAF111

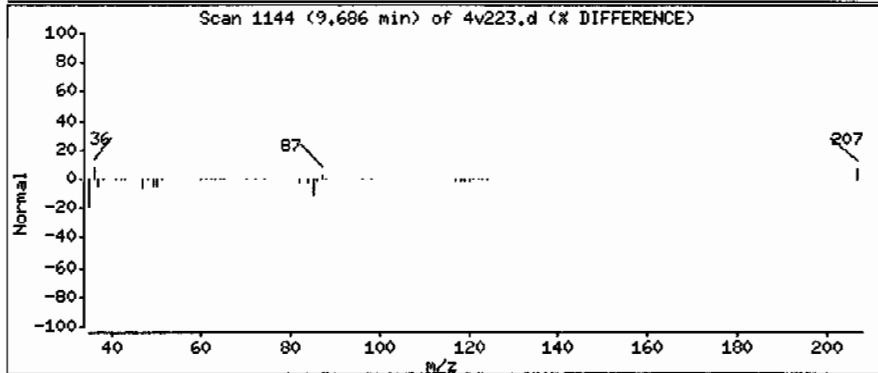
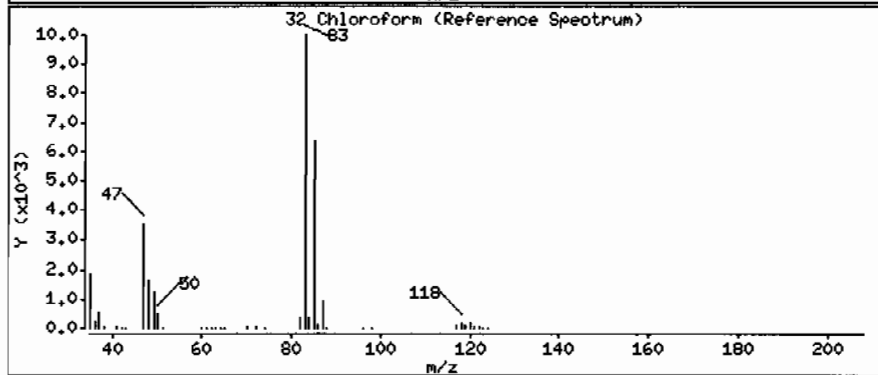
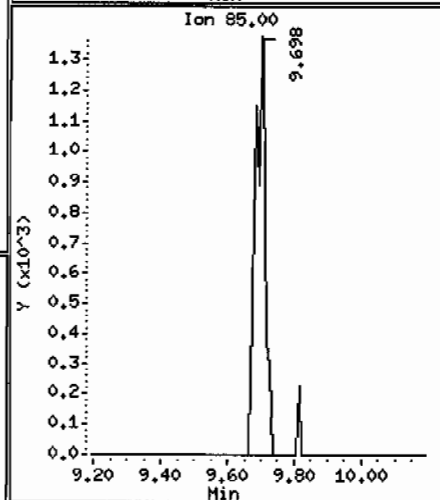
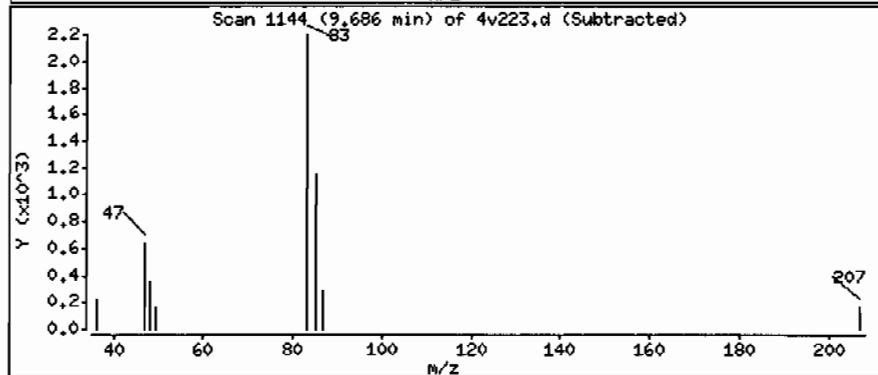
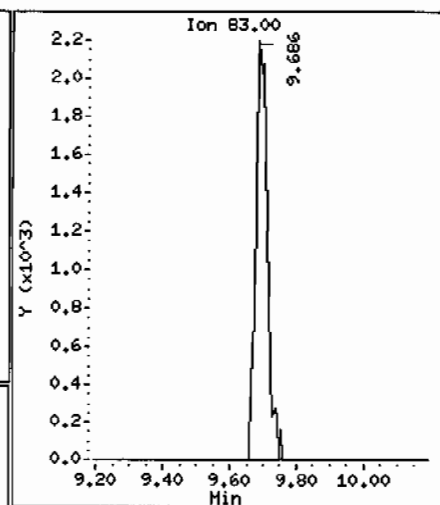
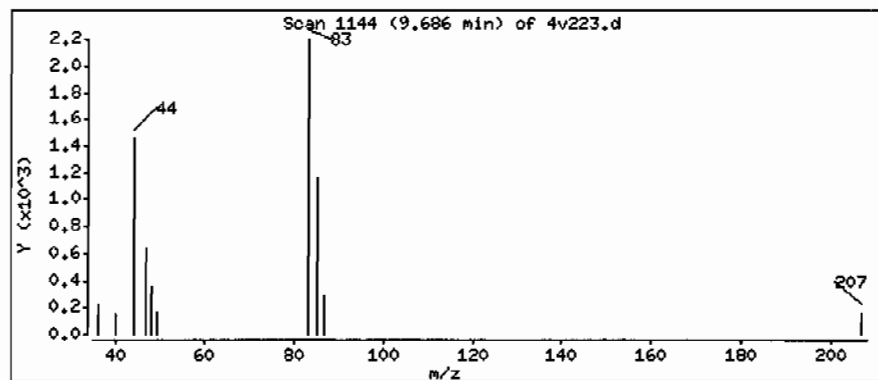
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

32 Chloroform

Concentration: 0.69 ug/Kg



Date : 27-JAN-2010 03:42

Client ID: RE15-10-7189

Instrument: VOA4.i

Sample Info: 12450990101945254111VOAF111

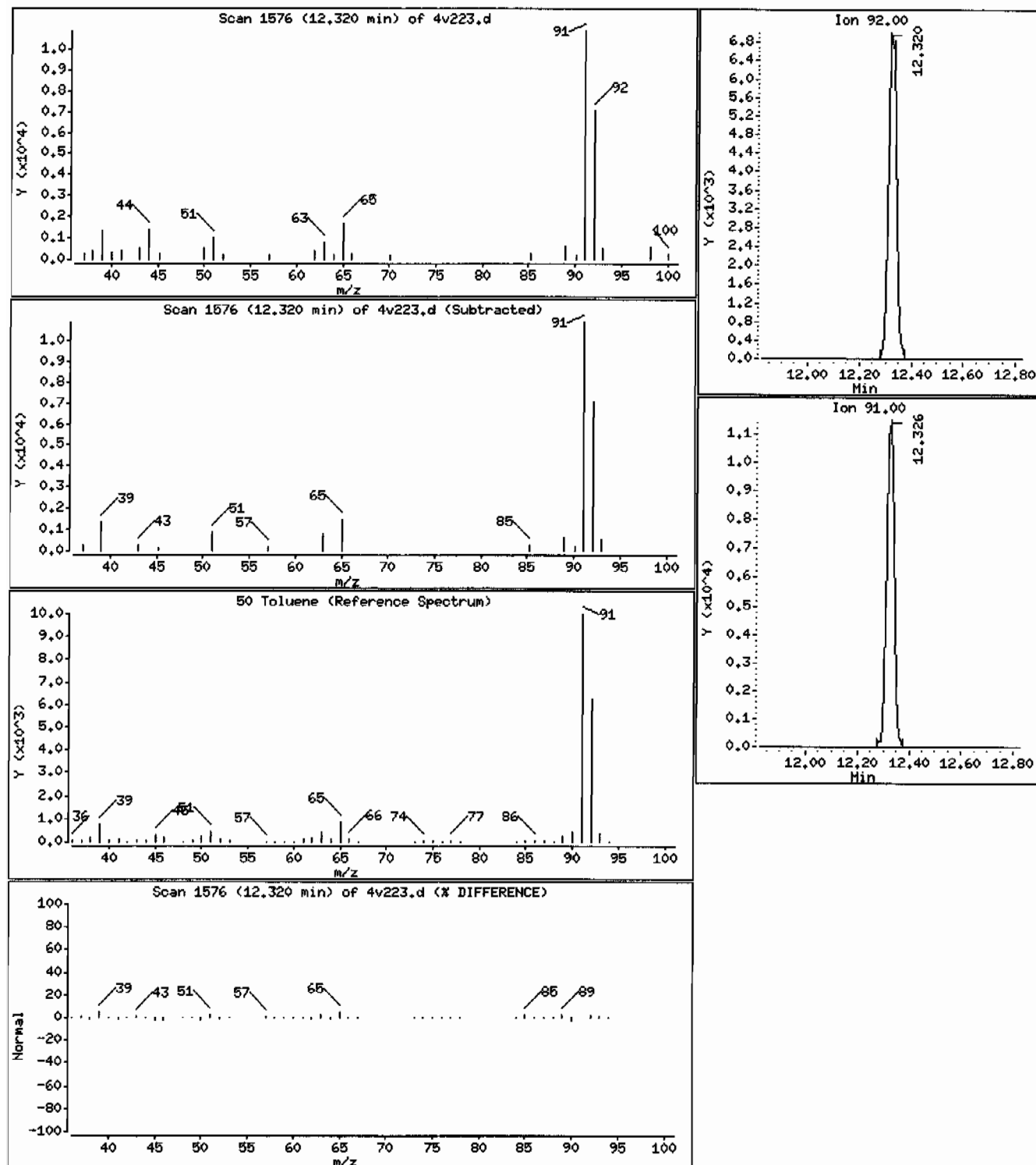
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

50 Toluene

Concentration: 1.5 ug/Kg



Date : 27-JAN-2010 03:42

Client ID: RE15-10-7189

Instrument: VOA4.i

Sample Info: 1245099010194525411\VOAF111

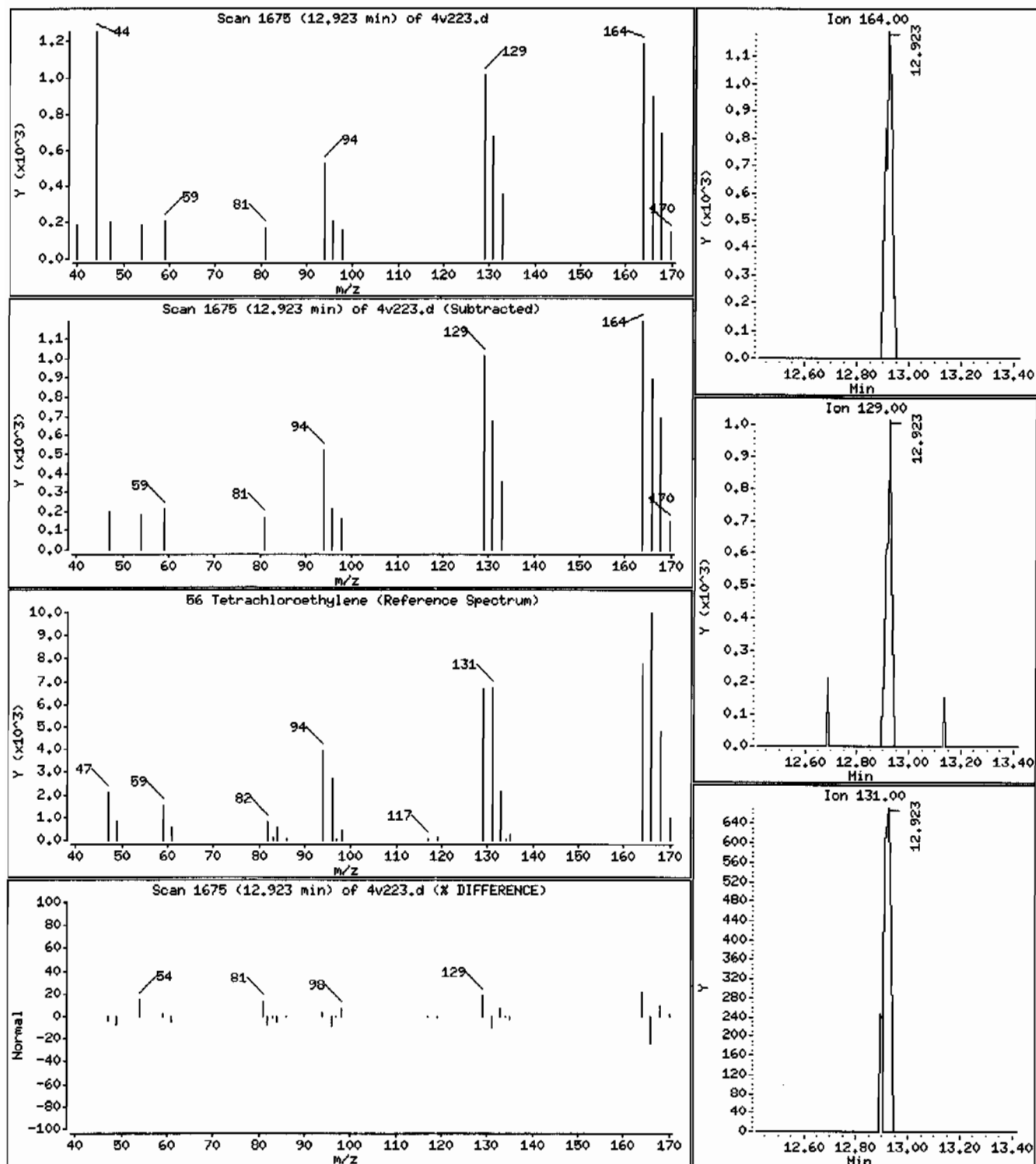
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.58 ug/Kg



Date : 27-JAN-2010 03:42

Client ID: RE15-10-7189

Instrument: VOA4.i

Sample Info: 1245099010194525411V0AF11

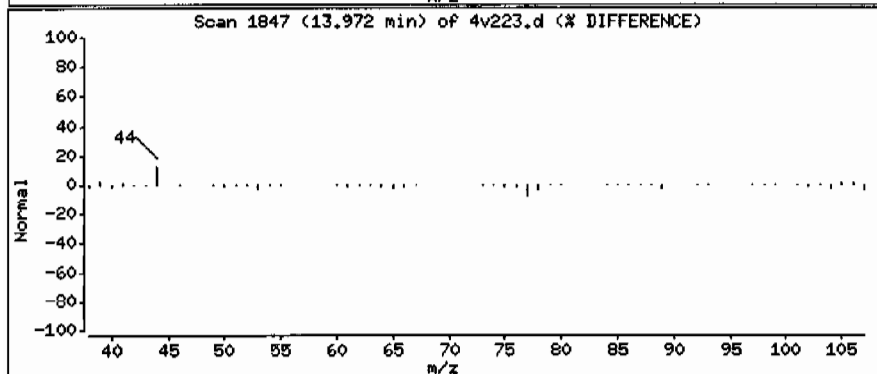
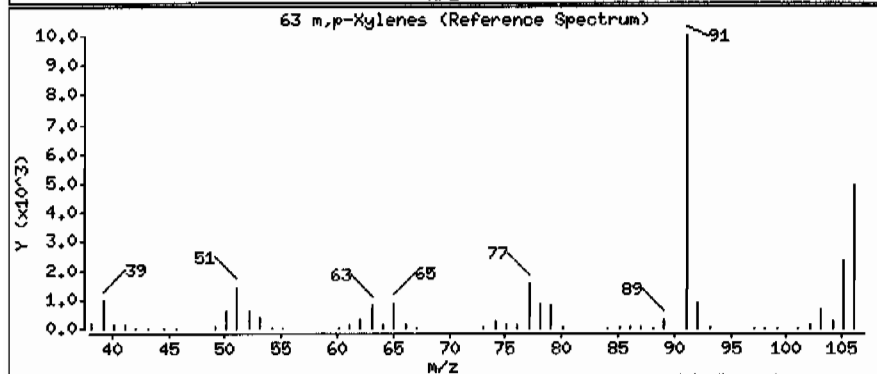
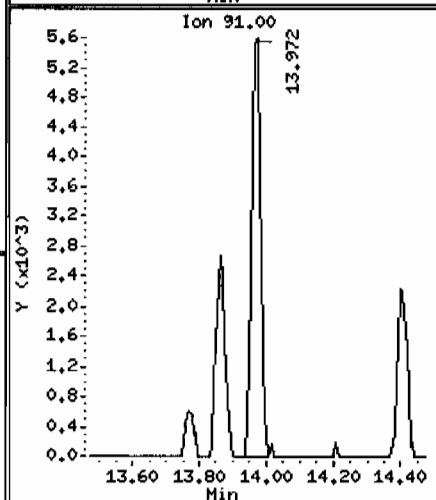
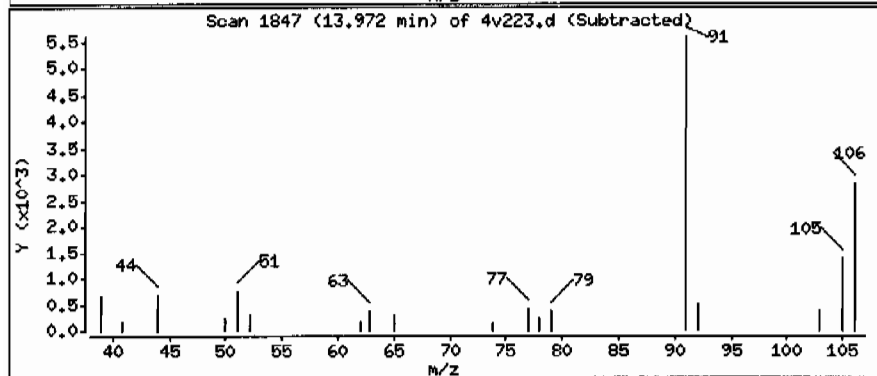
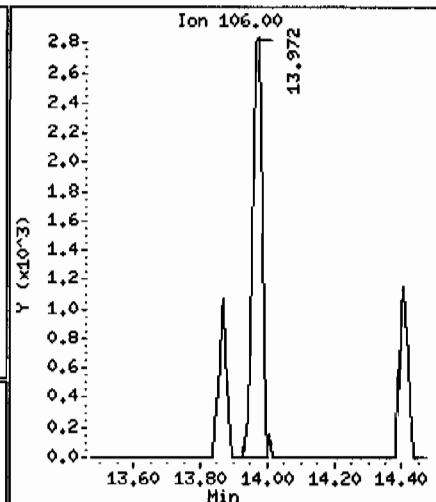
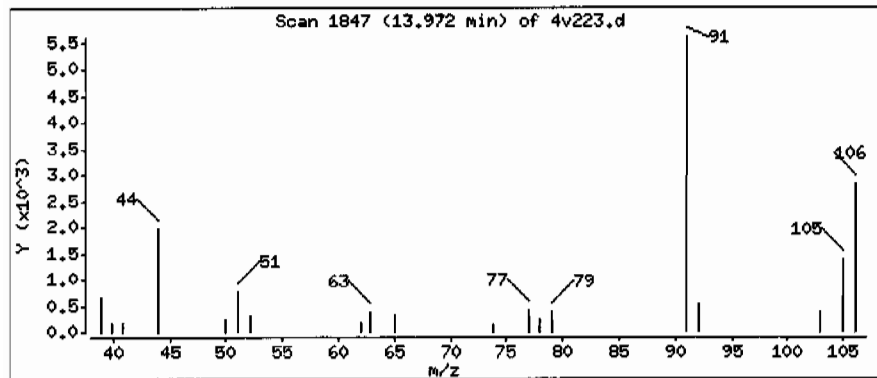
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.76 ug/Kg



Data File: /chem/VOA4.i/012610v4/4v223.d

Page 1

Date : 27-JAN-2010 03:42

Client ID: RE15-10-7189

Instrument: VOA4.i

Sample Info: 12450990101945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

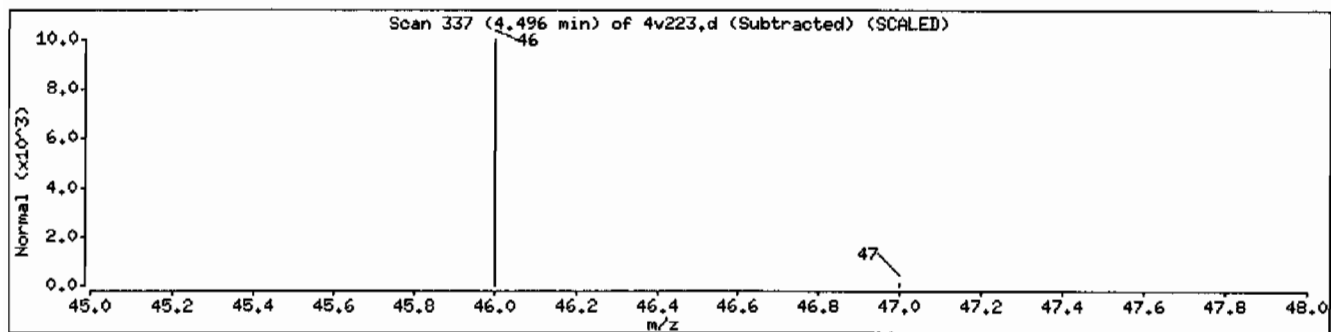
Column diameter: 0.25

Library Search Compound Match

CAS Number	Library	Entry	Quality	Formula	Weight
------------	---------	-------	---------	---------	--------

Unknown

0	0	0			
---	---	---	--	--	--



Date : 27-JAN-2010 03:42

Client ID: RE15-10-7189

Instrument: VOA4.i

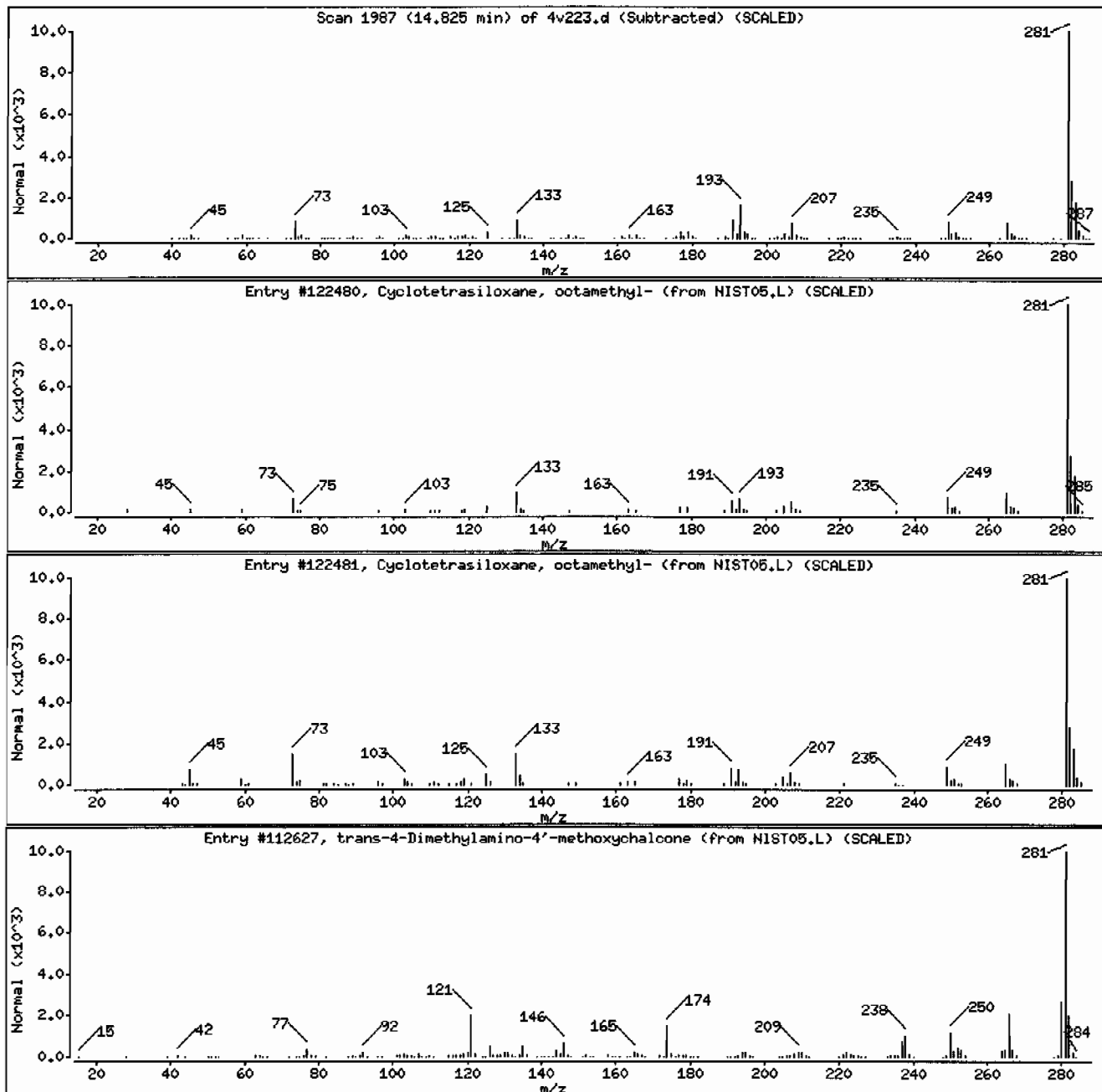
Sample Info: 12450990101945254111V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	78	C ₈ H ₂₄ O ₄ Si ₄	296
trans-4-Dimethylamino-4'-methoxychalcone	52119-37-6	NIST05.L	112627	53	C ₁₈ H ₁₉ O ₂	281



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099013	Date Received: 01/20/2010 08:45	%Moisture: 28.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7190	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 14:18	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:04	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v147.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.40	ug/kg	0.474	1.40
74-87-3	Chloromethane	U	1.40	ug/kg	0.419	1.40
75-01-4	Vinyl chloride	U	1.40	ug/kg	0.419	1.40
74-83-9	Bromomethane	U	1.40	ug/kg	0.419	1.40
75-00-3	Chloroethane	U	1.40	ug/kg	0.419	1.40
75-69-4	Trichlorofluoromethane	U	1.40	ug/kg	0.419	1.40
67-64-1	Acetone	J	3.70	ug/kg	2.32	6.98
75-35-4	1,1-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
74-88-4	Iodomethane	U	6.98	ug/kg	2.23	6.98
75-09-2	Methylene chloride		9.41	ug/kg	2.79	6.98
75-15-0	Carbon disulfide	U	6.98	ug/kg	1.74	6.98
156-60-5	trans-1,2-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
75-34-3	1,1-Dichloroethane	U	1.40	ug/kg	0.419	1.40
78-93-3	2-Butanone	U	6.98	ug/kg	2.09	6.98
156-59-2	cis-1,2-Dichloroethylene	U	1.40	ug/kg	0.419	1.40
594-20-7	2,2-Dichloropropane	U	1.40	ug/kg	0.419	1.40
67-66-3	Chloroform	U	1.40	ug/kg	0.419	1.40
74-97-5	Bromochloromethane	U	1.40	ug/kg	0.460	1.40
71-55-6	1,1,1-Trichloroethane	U	1.40	ug/kg	0.419	1.40
563-58-6	1,1-Dichloropropene	U	1.40	ug/kg	0.419	1.40
56-23-5	Carbon tetrachloride	U	1.40	ug/kg	0.419	1.40
107-06-2	1,2-Dichloroethane	U	1.40	ug/kg	0.419	1.40
71-43-2	Benzene	U	1.40	ug/kg	0.419	1.40
79-01-6	Trichloroethylene	U	1.40	ug/kg	0.460	1.40
78-87-5	1,2-Dichloropropane	U	1.40	ug/kg	0.419	1.40
75-27-4	Bromodichloromethane	U	1.40	ug/kg	0.419	1.40
74-95-3	Dibromomethane	U	1.40	ug/kg	0.419	1.40
108-10-1	4-Methyl-2-pentanone	U	6.98	ug/kg	1.74	6.98
10061-01-5	cis-1,3-Dichloropropylene	U	1.40	ug/kg	0.419	1.40
108-88-3	Toluene	J	1.17	ug/kg	0.419	1.40
10061-02-6	trans-1,3-Dichloropropylene	U	1.40	ug/kg	0.419	1.40
79-00-5	1,1,2-Trichloroethane	U	1.40	ug/kg	0.419	1.40
591-78-6	2-Hexanone	U	6.98	ug/kg	2.09	6.98
142-28-9	1,3-Dichloropropane	U	1.40	ug/kg	0.419	1.40
127-18-4	Tetrachloroethylene		1.55	ug/kg	0.419	1.40
124-48-1	Dibromochloromethane	U	1.40	ug/kg	0.419	1.40
106-93-4	1,2-Dibromoethane	U	1.40	ug/kg	0.419	1.40
108-90-7	Chlorobenzene	U	1.40	ug/kg	0.419	1.40

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099013

Client ID: RE15-10-7190
 Batch ID: 945254
 Run Date: 01/26/2010 14:18
 Prep Date: 01/25/2010 23:04
 Data File: 4v147.d

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 28.3
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.40	ug/kg	0.419	1.40
179601-23-1	m,p-Xylenes	J	1.14	ug/kg	0.419	2.79
95-47-6	o-Xylene	U	1.40	ug/kg	0.419	1.40
100-42-5	Styrene	U	1.40	ug/kg	0.419	1.40
75-25-2	Bromoform	U	1.40	ug/kg	0.419	1.40
79-34-5	1,1,2,2-Tetrachloroethane	U	1.40	ug/kg	0.419	1.40
96-18-4	1,2,3-Trichloropropane	U	1.40	ug/kg	0.419	1.40
108-86-1	Bromobenzene	U	1.40	ug/kg	0.419	1.40
103-65-1	n-Propylbenzene	U	1.40	ug/kg	0.419	1.40
95-49-8	2-Chlorotoluene	U	1.40	ug/kg	0.419	1.40
98-82-8	Isopropylbenzene	U	1.40	ug/kg	0.419	1.40
108-67-8	1,3,5-Trimethylbenzene	U	1.40	ug/kg	0.419	1.40
106-43-4	4-Chlorotoluene	U	1.40	ug/kg	0.419	1.40
98-06-6	tert-Butylbenzene	U	1.40	ug/kg	0.419	1.40
95-63-6	1,2,4-Trimethylbenzene	U	1.40	ug/kg	0.419	1.40
135-98-8	sec-Butylbenzene	U	1.40	ug/kg	0.419	1.40
99-87-6	4-Isopropyltoluene	J	0.790	ug/kg	0.419	1.40
541-73-1	1,3-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40
106-46-7	1,4-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40
104-51-8	n-Butylbenzene	U	1.40	ug/kg	0.419	1.40
96-12-8	1,2-Dibromo-3-chloropropane	U	1.40	ug/kg	0.419	1.40
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.98	ug/kg	2.23	6.98
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.40	ug/kg	0.419	1.40
95-50-1	1,2-Dichlorobenzene	U	1.40	ug/kg	0.419	1.40

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	9.78	ug/kg		J
	Unknown Siloxane	14.83	52.3	ug/kg		J
	Unknown Siloxane	16.79	32.8	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v147.d

Lab Smp Id: 245099013

Client Smp ID: RE15-10-7190

Inj Date : 26-JAN-2010 14:18

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099013|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 47

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	28.33330	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	722942	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	371583	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	99717	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	161820	40.9625	57.2
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	549603	58.1849	81.2
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	133283	73.0875	102 (R)
10 Acetone	43	7.375	7.363	(0.695)	11829	2.65340	3.7 (a)
17 Methylene chloride	84	7.949	7.942	(0.749)	44158	6.74265	9.4
50 Toluene	92	12.332	12.326	(0.896)	6118	0.84182	1.2 (a)
56 Tetrachloroethylene	164	12.917	12.923	(0.938)	2984	1.11295	1.6
63 m,p-Xylenes	106	13.972	13.972	(1.015)	4439	0.81761	1.1 (aH)
84 4-Isopropyltoluene	119	16.044	16.051	(0.992)	3365	0.56635	0.79 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.
- H - Operator selected an alternate compound hit.

ION RATIO REPORT

VOA REPORT

Data file: 4v147.d

Report Date: 01/26/2010 16:12

Lab. ID: 245099013

SampleType: SAMPLE

Injection Date: 26-JAN-2010 14:18

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099013|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
10	Acetone		CAS#: 67-64-1			
43	11829	7.38	7.36	80-120	100	()
58	3487	7.36	7.36	0- 60	29	()

17	Methylene chloride		CAS#: 75-09-2			
84	44158	7.95	7.94	80-120	100	()
86	27301	7.95	7.94	33- 93	62	()
49	71795	7.95	7.94	132-192	163	()

37	1,2-Dichloroethane		CAS#: 107-06-2			
62	9607	10.62	10.34	80-120	100	(T)
64	1788	10.61	10.34	2- 62	19	(T)

39	Trichloroethylene		CAS#: 79-01-6			
95	58300	10.62	11.01	80-120	100	(T)
97	47253	10.62	11.01	37- 97	81	(T)
130	170	11.01	11.01	72-132	0	(Q)

49	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	4832	12.26	12.02	80-120	100	(T)
43	2634	12.25	12.02	243-303	55	(QT)
100	360187	12.25	12.02	0- 60	7453	(QT)

50	Toluene		CAS#: 108-88-3			
92	6118	12.33	12.33	80-120	100	()
91	9689	12.33	12.33	138-198	158	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
56 Tetrachloroethylene				CAS#: 127-18-4		
164	2984	12.92	12.92	80-120	100	()
129	2945	12.92	12.92	58-118	99	()
131	2715	12.92	12.92	55-115	91	()

58 Ethylbenzene				CAS#: 100-41-4		
91	9764	13.97	13.86	80-120	100	(T)
106	4439	13.97	13.86	2- 62	45	(T)

64 o-Xylene				CAS#: 95-47-6		
106	4439	13.97	14.40	80-120	100	(T)
91	9764	13.97	14.40	177-237	220	(T)

63 m,p-Xylenes				CAS#: 179601-23-1		
106	4439	13.97	13.97	80-120	100	()
91	9764	13.97	13.97	168-228	220	()

66 Bromoform				CAS#: 75-25-2		
173	846	14.96	14.66	80-120	100	(T)
175	8548	14.95	14.66	20- 80	1009	(QT)

74 1,2,3-Trichloropropane				CAS#: 96-18-4		
110	1702	14.83	15.11	80-120	100	(T)
75	3585	14.83	15.11	252-312	211	(QT)
77	732	14.80	15.11	61-121	43	(QT)

81 tert-Butylbenzene				CAS#: 98-06-6		
119	3365	16.04	15.70	80-120	100	(T)
91	946	16.05	15.70	42-102	28	(QT)
134	875	16.05	15.71	0- 52	26	(T)

84 4-Isopropyltoluene				CAS#: 99-87-6		
119	3365	16.04	16.05	80-120	100	()
134	875	16.05	16.05	0- 58	26	()
91	946	16.05	16.05	0- 54	28	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v147.d
 Lab Smp Id: 245099013 Client Smp ID: RE15-10-7190
 Inj Date : 26-JAN-2010 14:18
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099013|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 47
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	28.33330	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1586935	50.000
* 61 Chlorobenzene-d5	13.771	1143294	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	603388	50.000

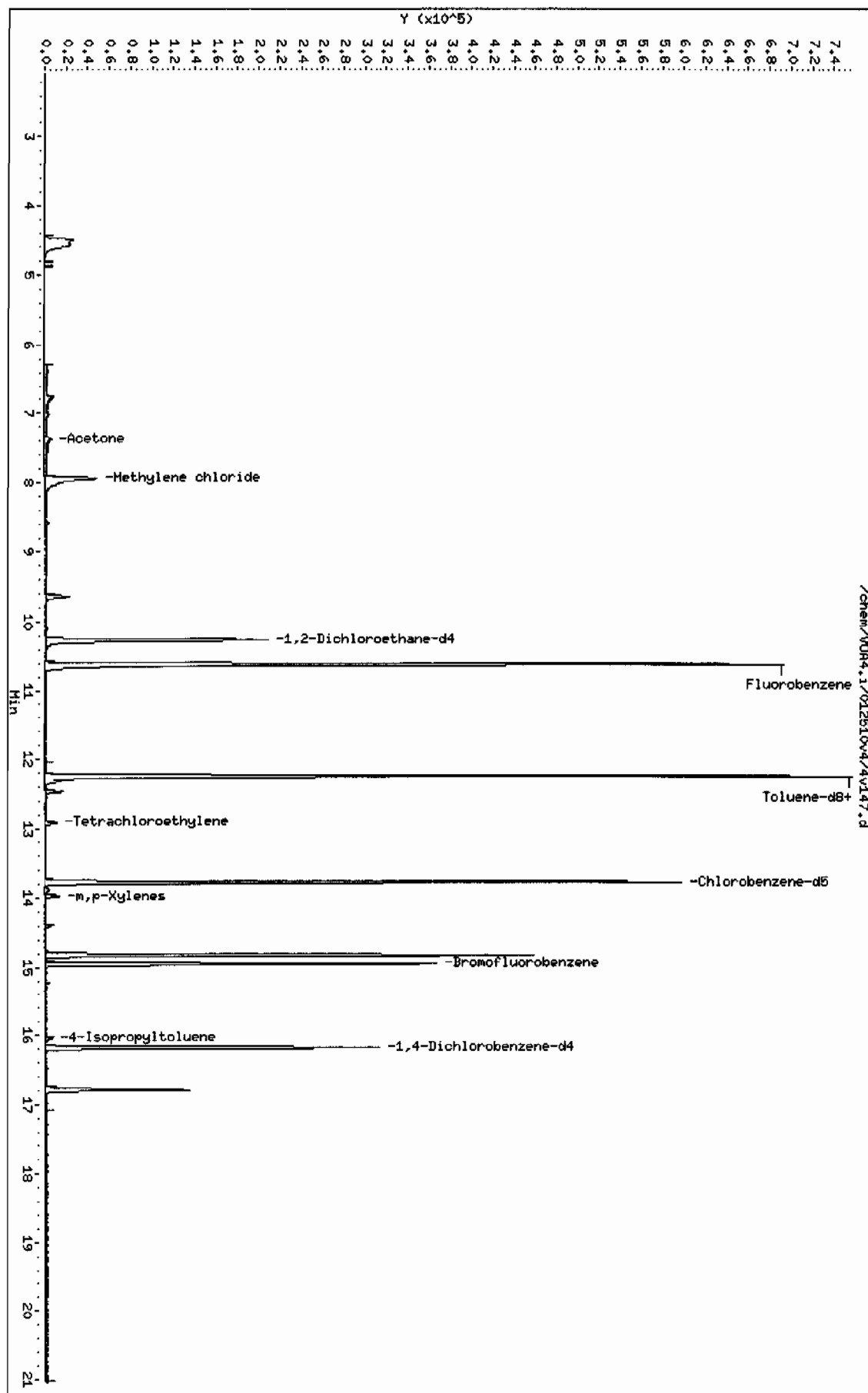
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
4.496	222402	7.00728688	9.8	0		0	40
Unknown Siloxane				CAS #:			
14.825	856509	37.4579395	52.3	0		0	61
Unknown Siloxane				CAS #:			
16.794	284037	23.5368058	32.8	0		0	86

Data File: /chem/V004.1/012510v4/4v147.d
Date: 26-JAN-2010 14:18
Client ID: RE15-10-7190
Sample Info: 1245099013194525411/V004.1

Column phase: RTX-VOLATILES

Instrument: V004.1
Operator: RCJ
Column diameter: 0.25



Data File: /chem/V0A4.i/012510v4/4v147.d

Page 2

Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: V0A4.i

Sample Info: 1245099013194525411/V0AF111

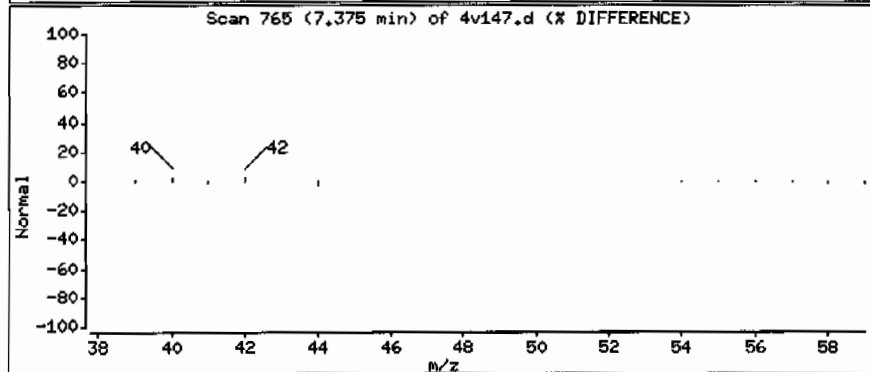
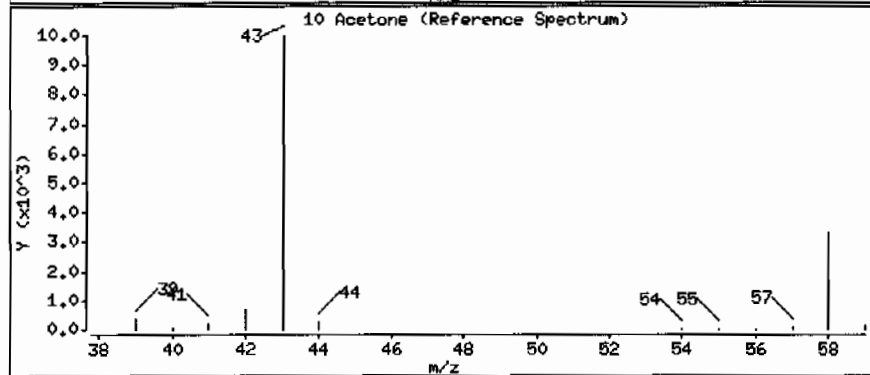
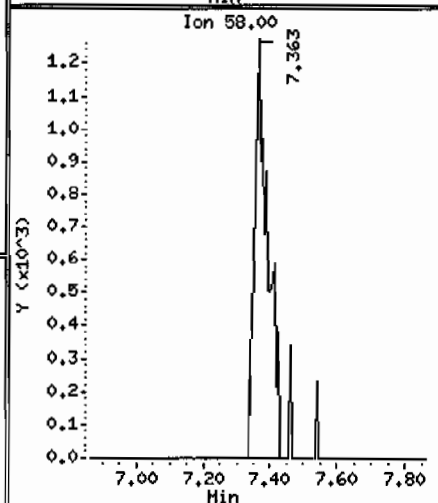
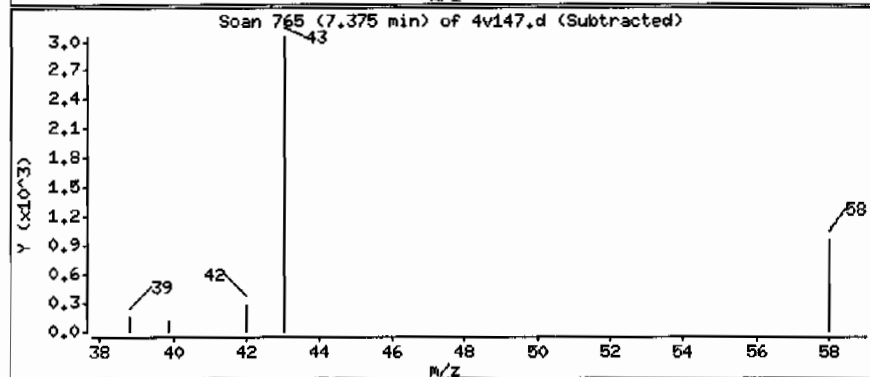
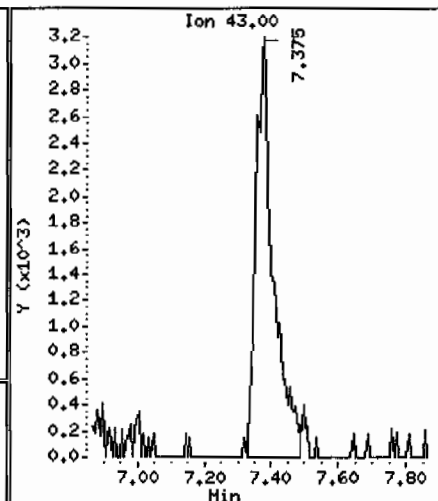
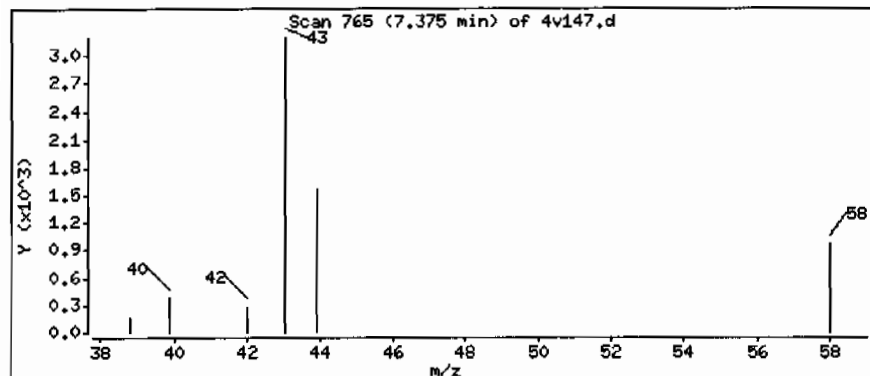
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 3.7 ug/Kg



Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: VOA4.i

Sample Info: I245099013I945254I1IV0AF11I

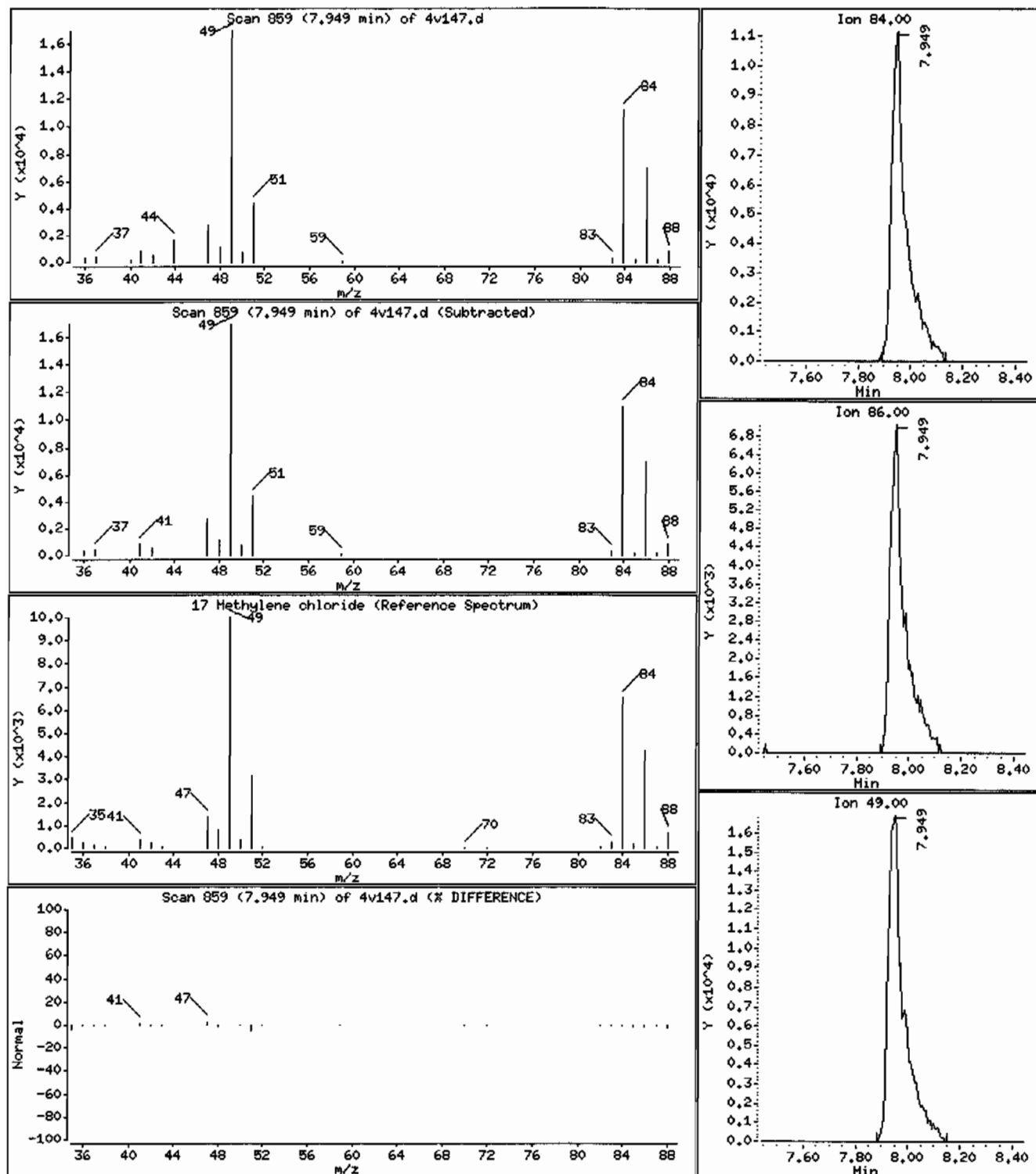
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

17 Methylene chloride

Concentration: 9.4 ug/Kg



Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: V0A4.i

Sample Info: I245099013194525411V0AF11

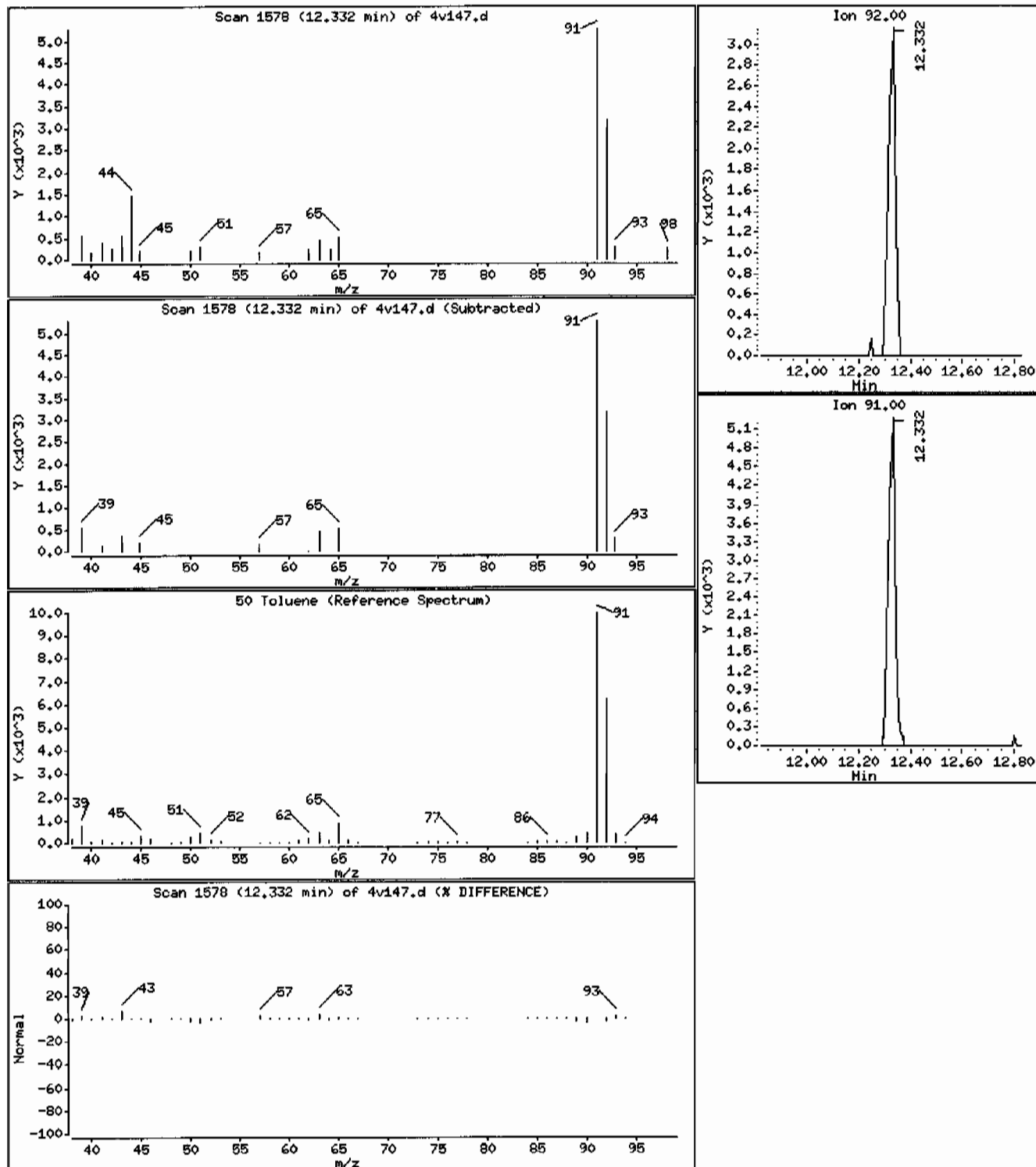
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

50 Toluene

Concentration: 1.2 ug/Kg



Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: V0A4.i

Sample Info: 12450990131945254111V0AF11

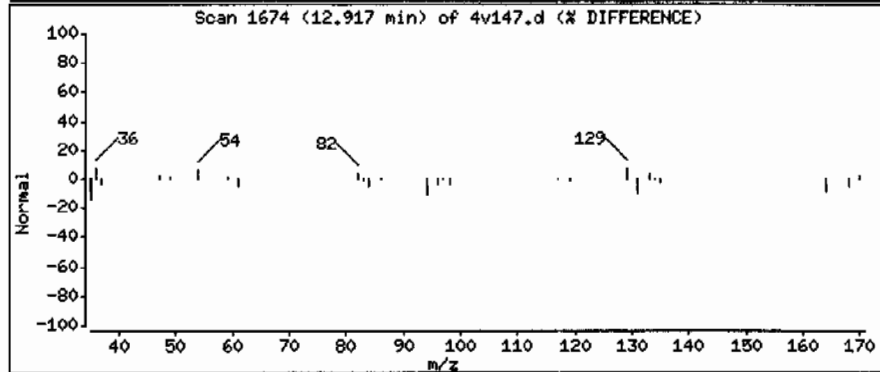
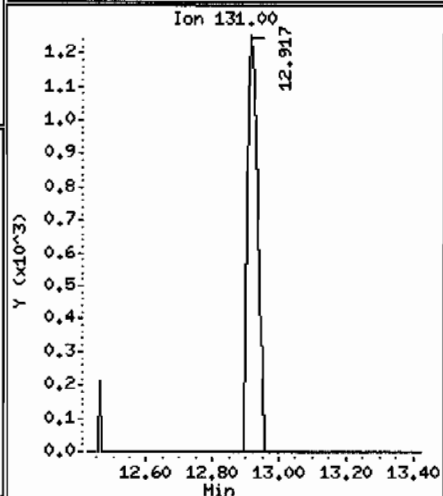
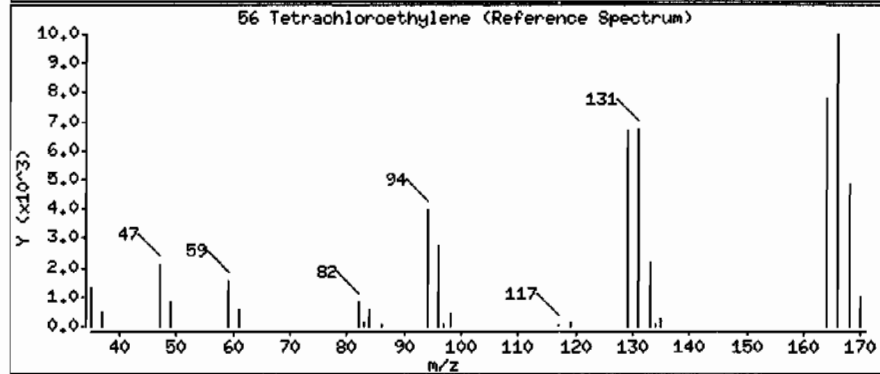
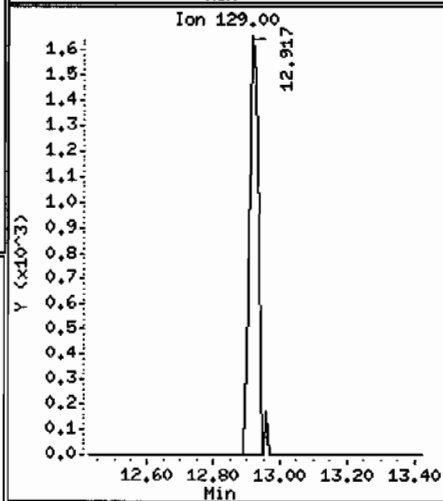
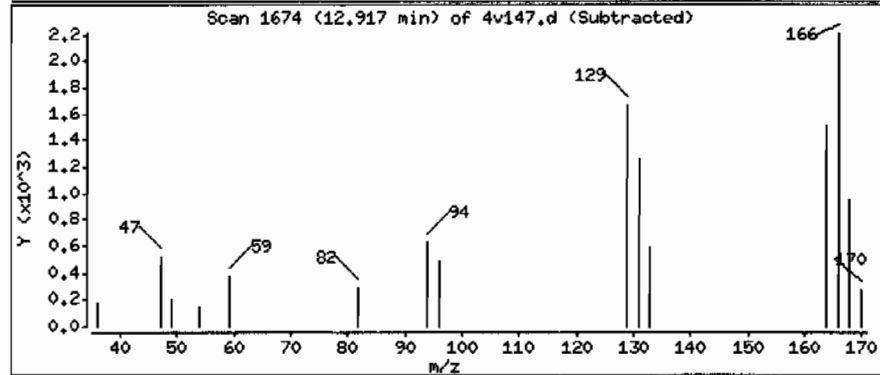
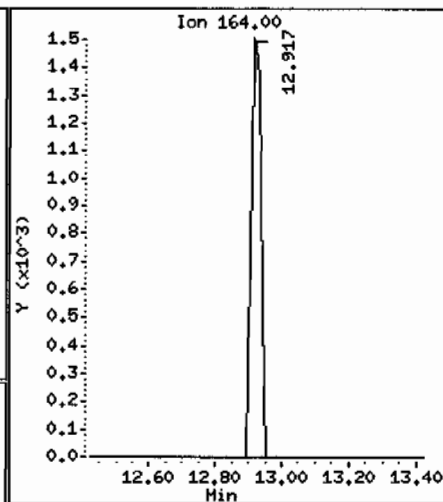
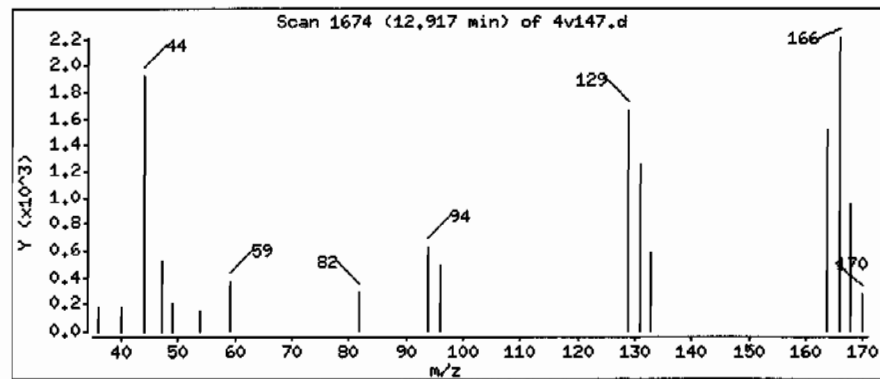
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 1.6 ug/Kg



Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: VOA4.i

Sample Info: I245099013194525411\VOAF111

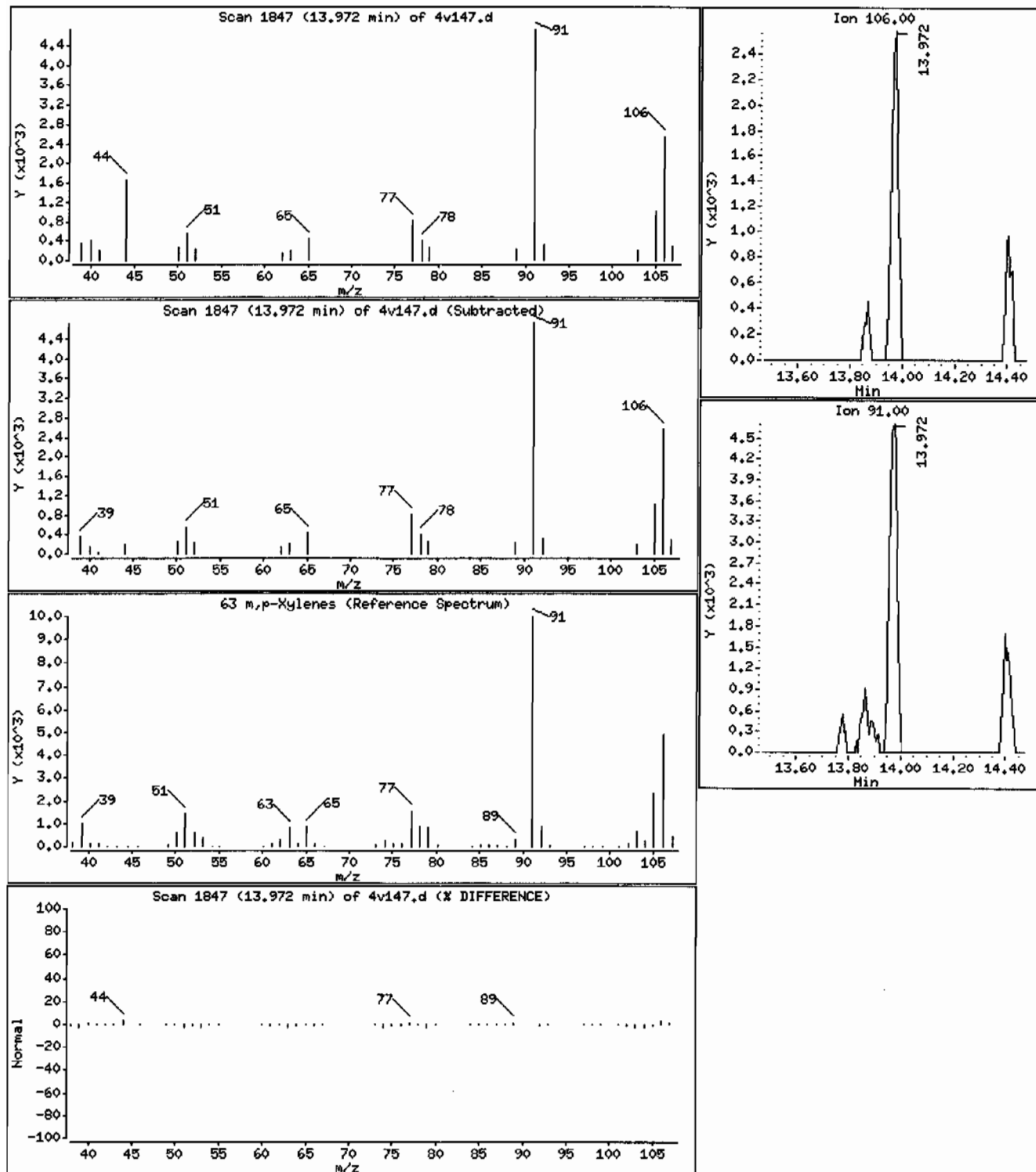
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 1.1 ug/Kg



Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: V0A4.i

Sample Info: 1245099013194525411/V0AF111

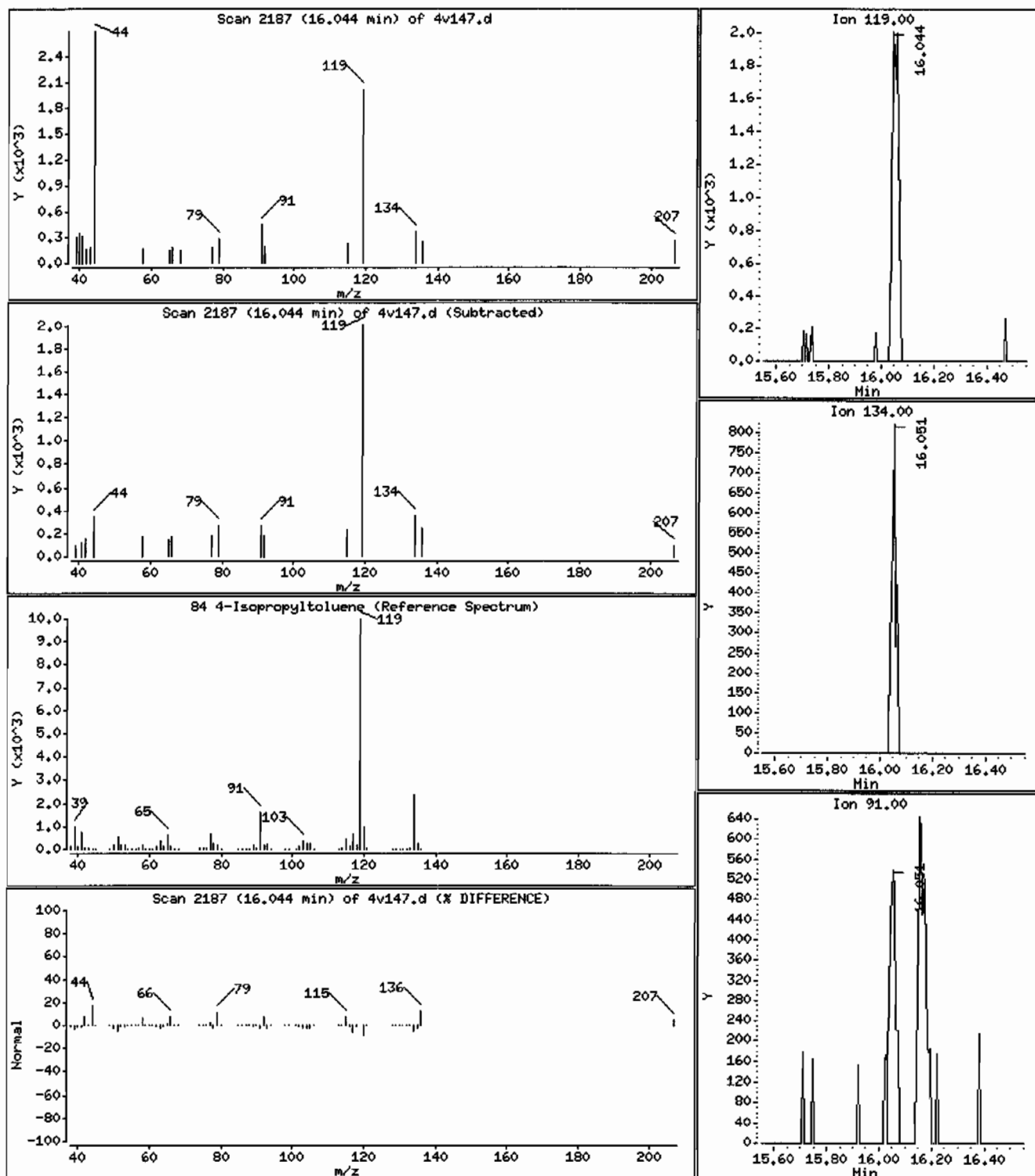
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

84 4-Isopropyltoluene

Concentration: 0.79 ug/Kg



Data File: /chem/VOA4.i/012510v4/4v147.d

Page 1

Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: VOA4.i

Sample Info: 12450990131945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

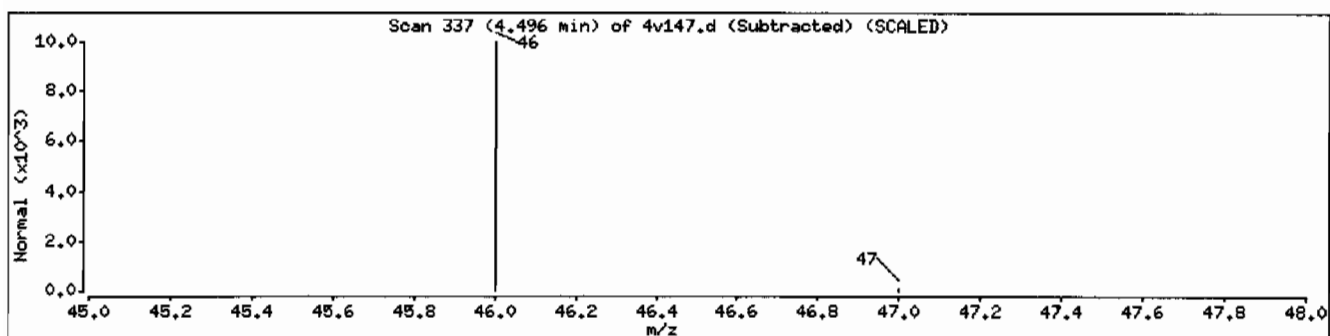
Weight

Unknown

0

0

0



Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: VOA4.i

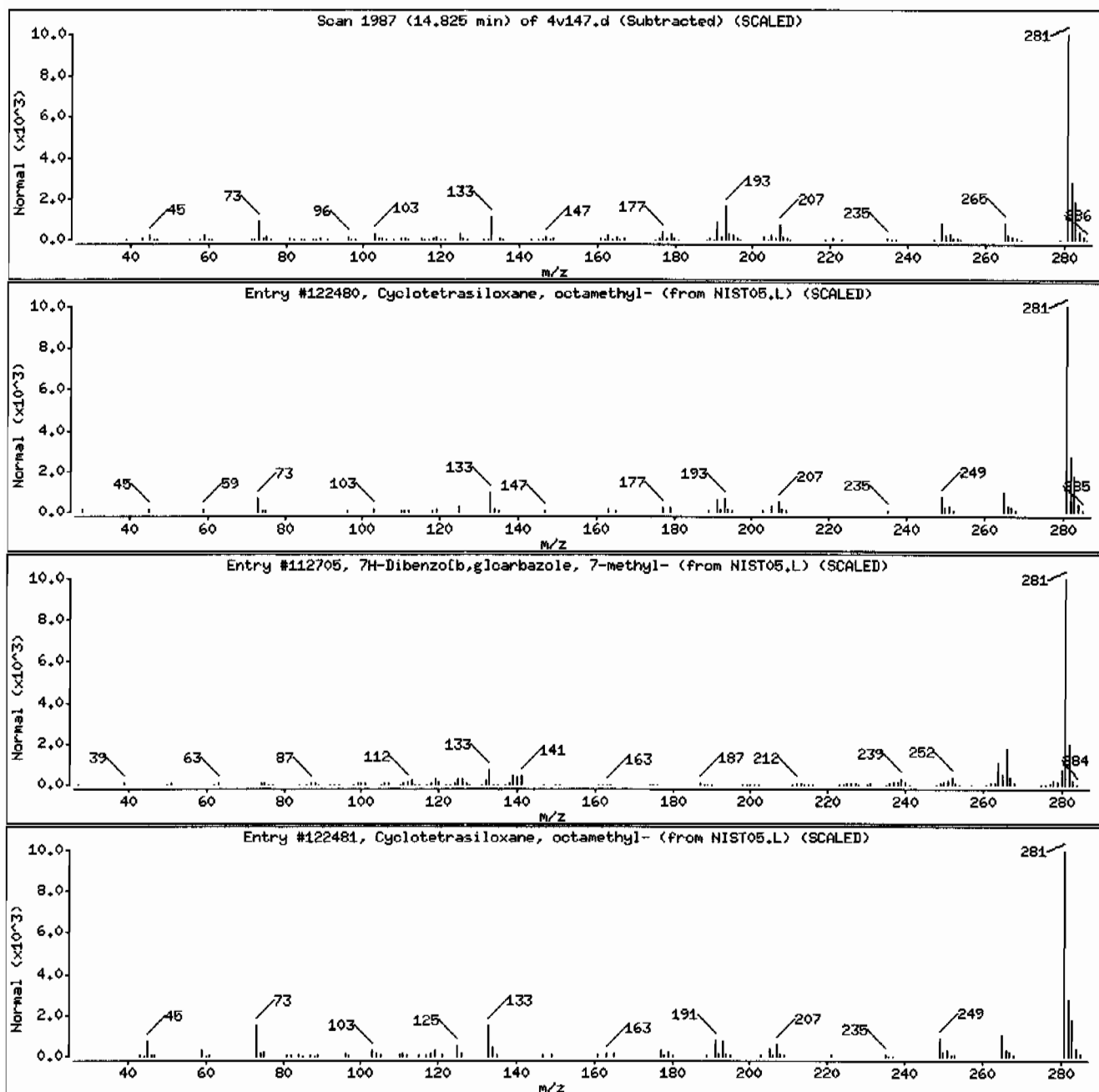
Sample Info: 12450990131945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	53	C ₂₁ H ₁₅ N	281
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	49	C ₈ H ₂₄ O ₄ Si ₄	296



Date : 26-JAN-2010 14:18

Client ID: RE15-10-7190

Instrument: VOA4.i

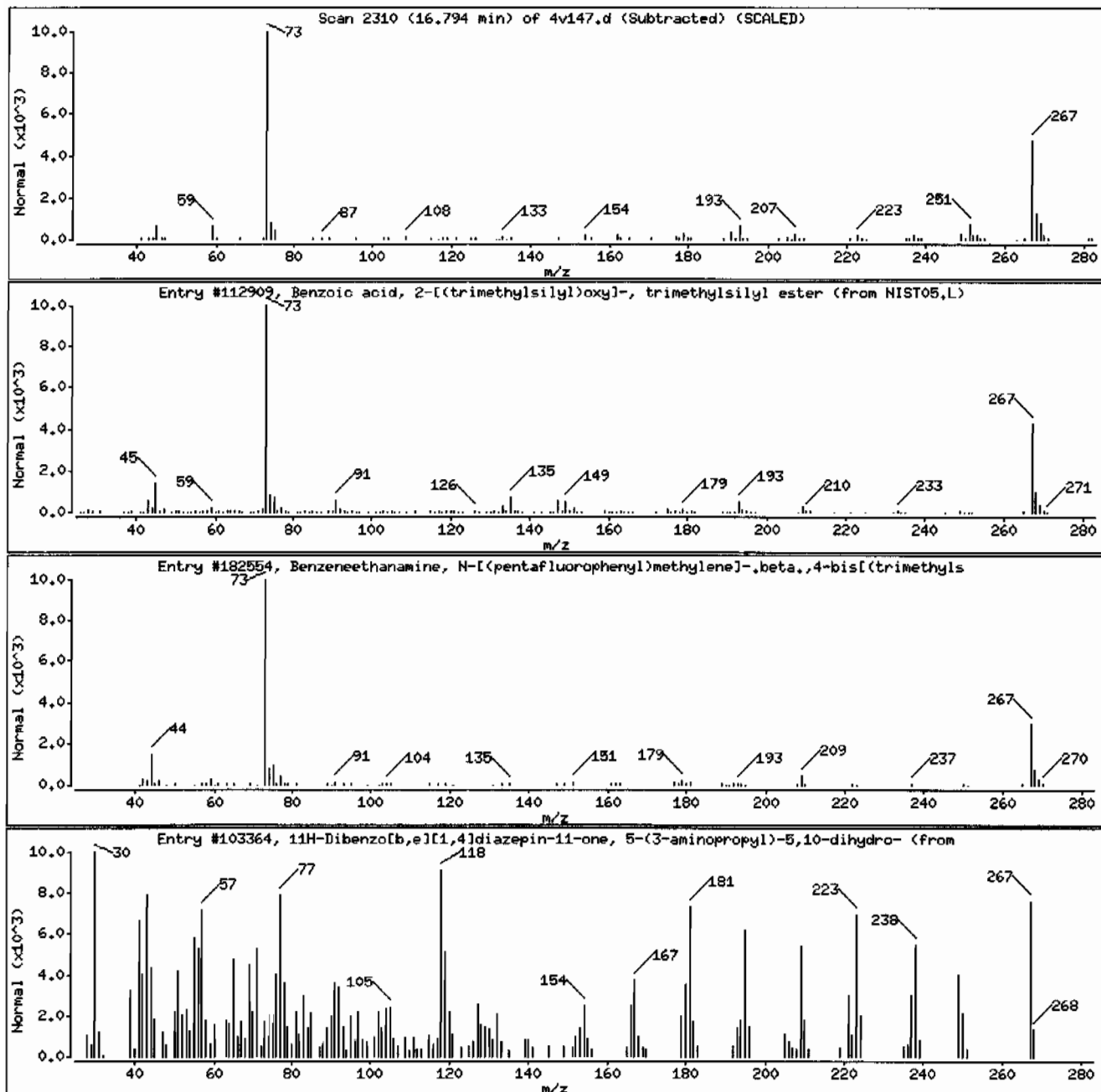
Sample Info: 12450990131945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112909	38	C ₁₃ H ₂₂ O ₃ Si ₂	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	38	C ₂₁ H ₂₆ F ₅ N ₂ Si ₂	425
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	37	C ₁₆ H ₁₇ N ₃ O	267



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.398	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.85	ug/kg	1.94	5.85
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.85	ug/kg	1.87	5.85
75-09-2	Methylene chloride	U	5.85	ug/kg	2.34	5.85
75-15-0	Carbon disulfide	U	5.85	ug/kg	1.46	5.85
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.85	ug/kg	1.76	5.85
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.85	ug/kg	1.46	5.85
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	U	1.17	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.85	ug/kg	1.76	5.85
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	J	0.458	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

Page 2 of 2

SDG Number: 10-1301
 Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.1
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7191
 Batch ID: 945254
 Run Date: 01/26/2010 09:45
 Prep Date: 01/25/2010 22:54
 Data File: 4v137.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	J	0.430	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.85	ug/kg	1.87	5.85
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	108	ug/kg		J
	Unknown Siloxane	16.79	25.9	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v137.d

Lab Smp Id: 245099003

Client Smp ID: RE15-10-7191

Inj Date : 26-JAN-2010 09:45

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099003|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 37

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.58450	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	892389	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	629251	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	299761	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	198923	40.7932	47.8
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	738902	46.1934	54.1
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	315678	57.5847	67.4
56 Tetrachloroethylene	164	12.929	12.923	(0.939)	1775	0.39094	0.46(a)
63 m,p-Xylenes	106	13.972	13.972	(1.015)	3375	0.36709	0.43(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v137.d

Report Date: 01/26/2010 16:11

Lab. ID: 245099003

SampleType: SAMPLE

Injection Date: 26-JAN-2010 09:45

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099003|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37 1,2-Dichloroethane				CAS#: 107-06-2		
62	11249	10.62	10.34	80-120	100	(T)
64	2056	10.62	10.34	2- 62	18	(T)

49 4-Methyl-2-pentanone				CAS#: 108-10-1		
58	6533	12.25	12.02	80-120	100	(T)
43	4502	12.25	12.02	243-303	69	(QT)
100	488247	12.25	12.02	0- 60	7474	(QT)

56 Tetrachloroethylene				CAS#: 127-18-4		
164	1775	12.93	12.92	80-120	100	()
129	1321	12.92	12.92	58-118	74	()
131	1411	12.92	12.92	55-115	80	()

64 o-Xylene				CAS#: 95-47-6		
106	3375	13.97	14.40	80-120	100	(T)
91	6609	13.97	14.40	177-237	196	(T)

63 m,p-Xylenes				CAS#: 179601-23-1		
106	3375	13.97	13.97	80-120	100	()
91	6609	13.97	13.97	168-228	196	()

65 Styrene				CAS#: 100-42-5		
104	6439	14.82	14.40	80-120	100	(T)
78	504	14.40	14.40	22- 82	8	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
66	Bromoform		CAS#: 75-25-2			
173	1680	14.95	14.66	80-120	100	(T)
175	20258	14.96	14.66	20- 80	1206	(QT)

74	1,2,3-Trichloropropane		CAS#: 96-18-4			
110	5676	14.82	15.11	80-120	100	(T)
75	14963	14.83	15.11	252-312	264	(T)
77	867	14.82	15.11	61-121	15	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v137.d
 Lab Smp Id: 245099003 Client Smp ID: RE15-10-7191
 Inj Date : 26-JAN-2010 09:45
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099003|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 37
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.58450	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 61 Chlorobenzene-d5	13.771	1936500	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	1795977	50.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane					CAS #:		
14.825	3576244	92.3377989	108	0		0	61

Data File: /chem/VOA4.i/012510v4/4v137.d
Report Date: 15-Feb-2010 14:09

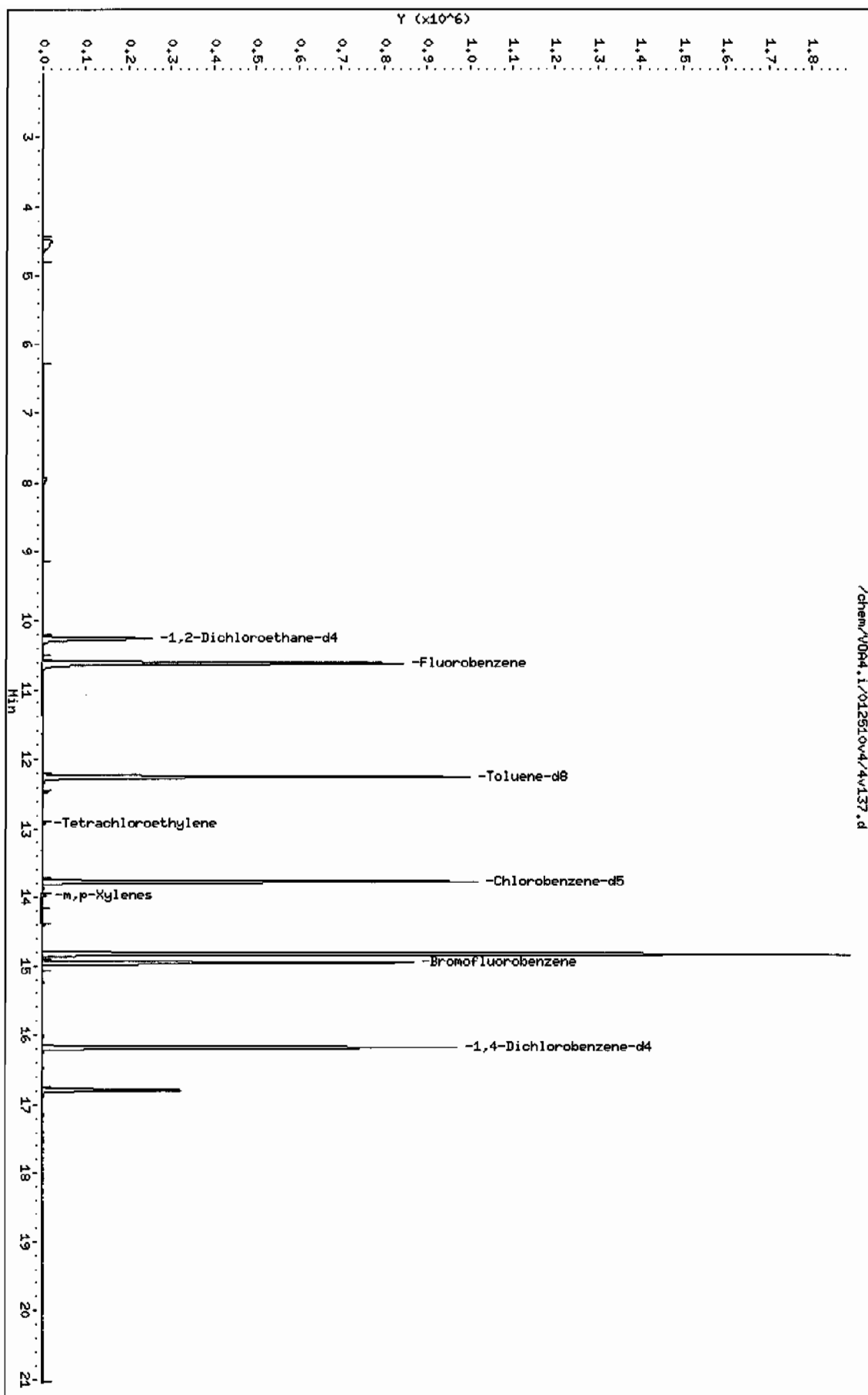
Page 2

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane				CAS #:			
16.794	795408	22.1441485	25.9	0		0	86

Data File: /chem/V004.1/012510v4/4v137.d
Date: 26-JAN-2010 09:45
Client ID: RE15-10-7191
Sample Info: 1245099003194525411/V004111

Column Phase: RTX-VOLATILES

Instrument: V004.1
Operator: RCJ
Column diameter: 0.25



Date : 26-JAN-2010 09:45

Client ID: RE15-10-7191

Instrument: VOA4.i

Sample Info: 12450990031945254111VOAF111

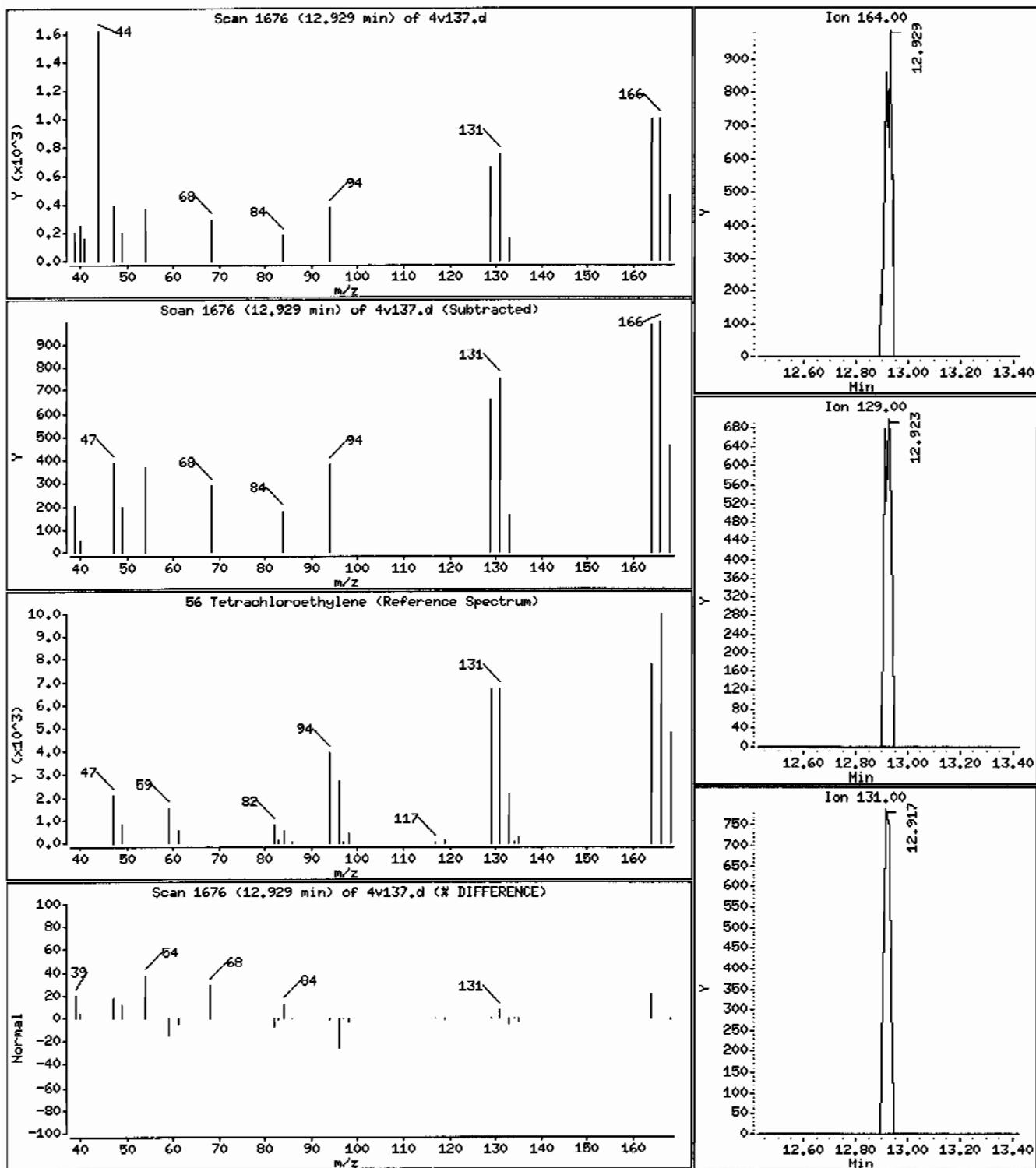
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.46 ug/Kg



Date : 26-JAN-2010 09:45

Client ID: RE15-10-7191

Instrument: VOA4.i

Sample Info: 12450990031945254111VOAF111

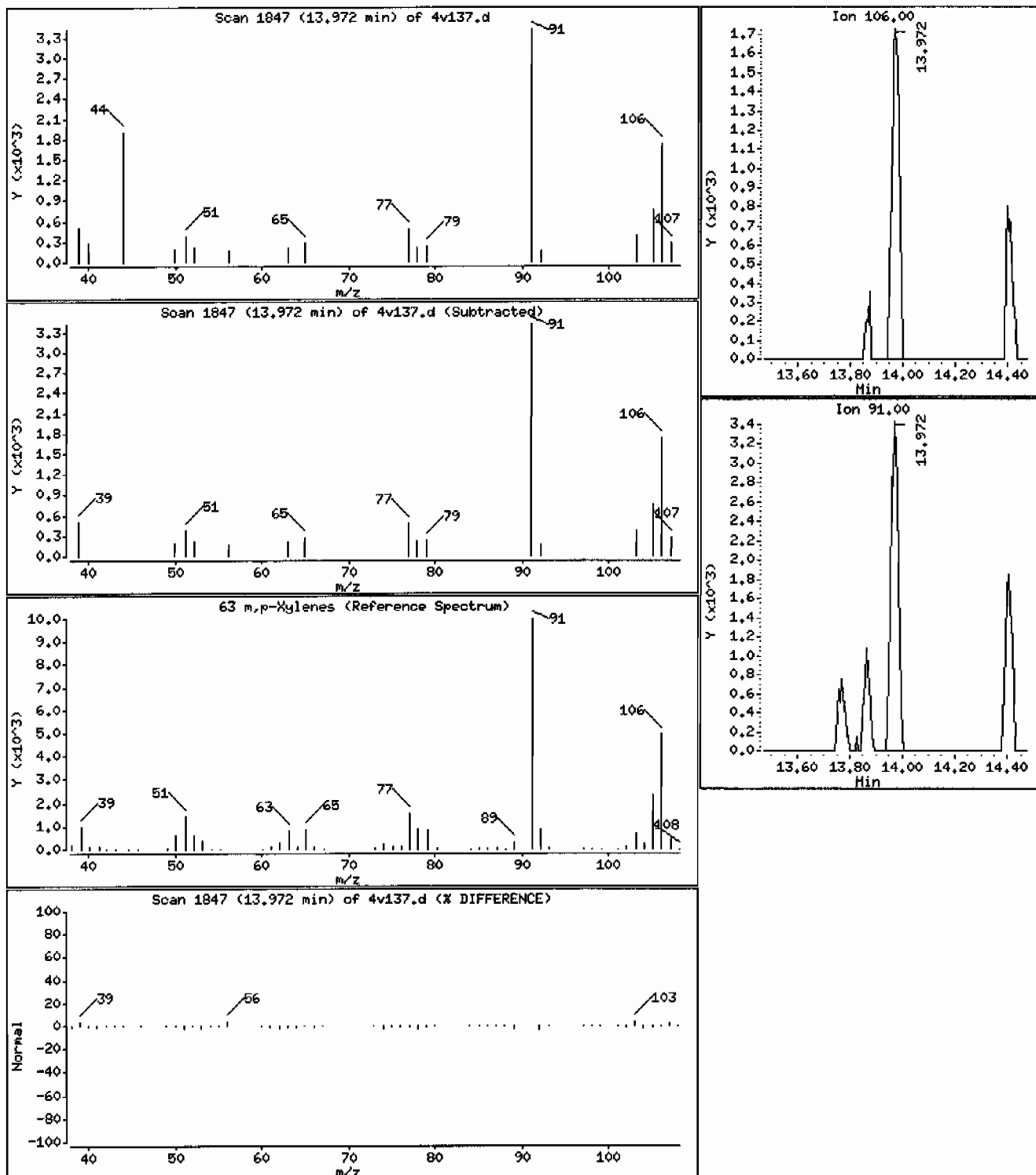
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.43 ug/Kg



Date : 26-JAN-2010 09:45

Client ID: RE15-10-7191

Instrument: V0A4.i

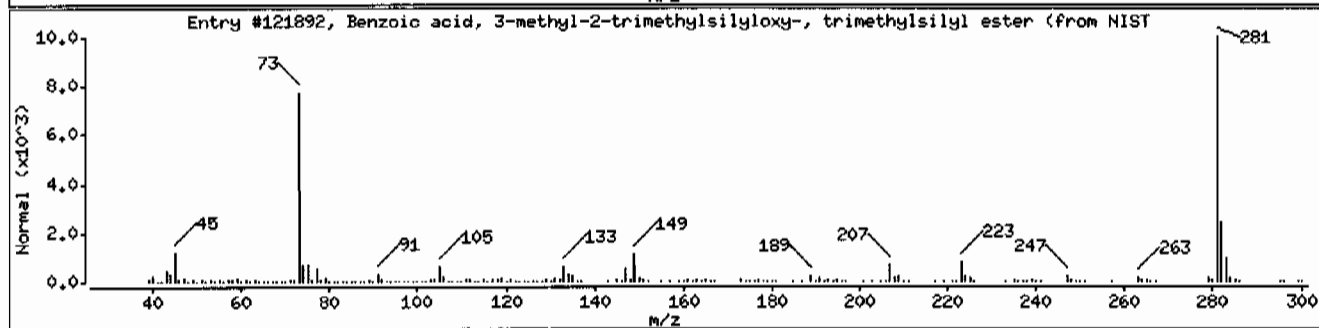
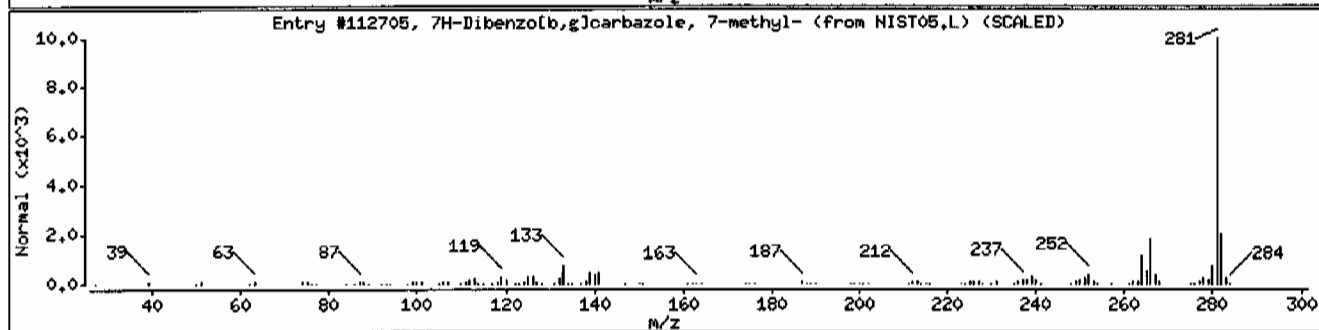
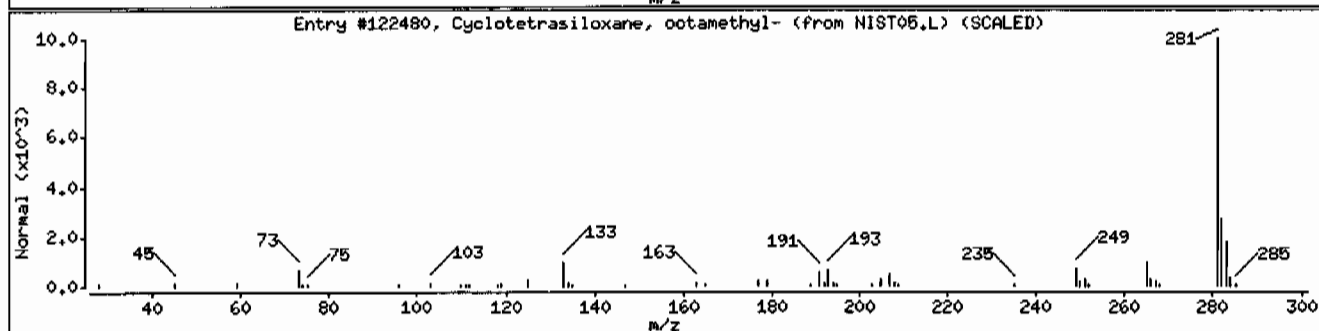
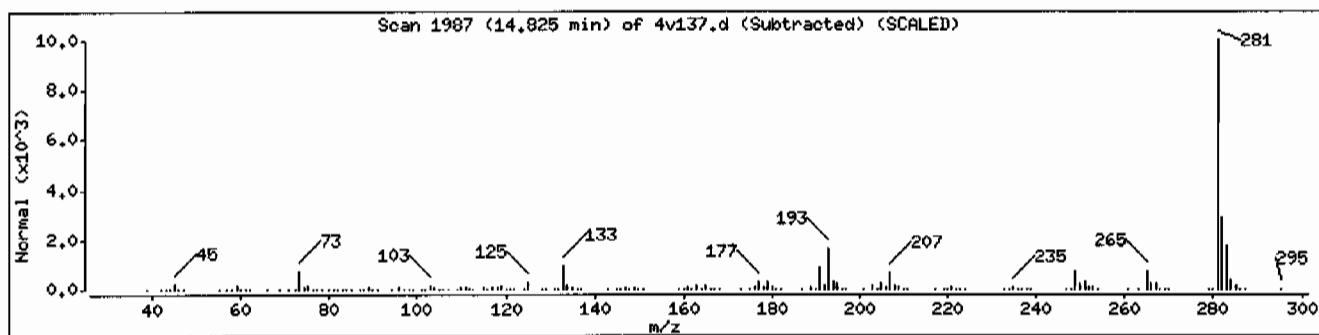
Sample Info: 1245099003|945254|11|V0AF|11|

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	586-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C ₂₁ H ₁₅ N	281
Benzoic acid, 3-methyl-2-trimethylsilyloxy-	1000153-57-1	NIST05.L	121892	59	C ₁₄ H ₂₄ O ₃ Si ₂	296



Date : 26-JAN-2010 09:45

Client ID: RE15-10-7191

Instrument: VOA4.i

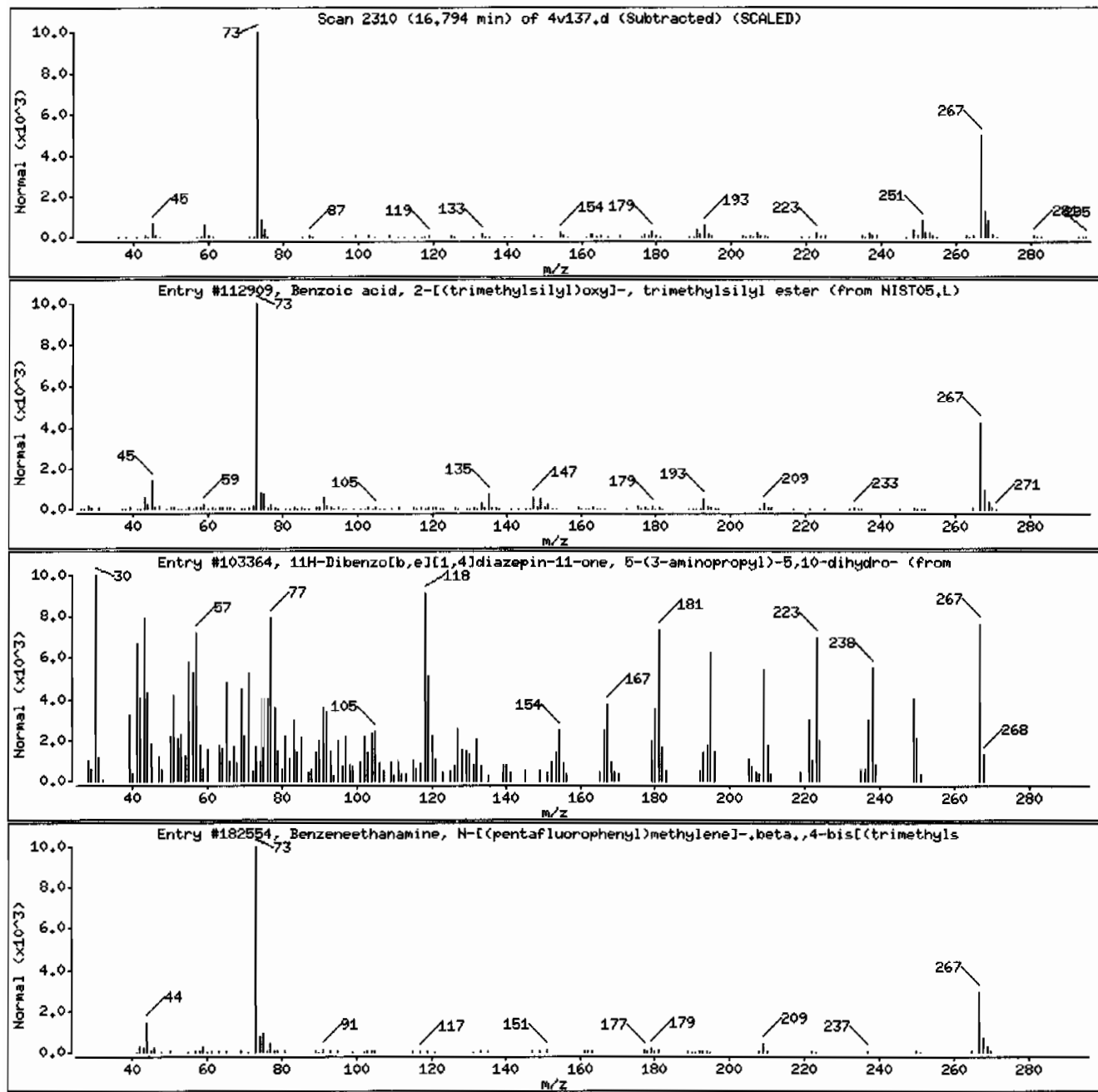
Sample Info: 12450990031945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-	3789-85-3	NIST05.L	112909	72	C ₁₃ H ₂₂ O ₃ Si ₂	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	43	C ₁₆ H ₁₇ N ₃ O	267
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	37	C ₂₁ H ₂₆ F ₅ N ₂ OSi ₂	475



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099014	Date Received: 01/20/2010 08:45	%Moisture: 34.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7192	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 14:46	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:05	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v148.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.52	ug/kg	0.518	1.52
74-87-3	Chloromethane	U	1.52	ug/kg	0.457	1.52
75-01-4	Vinyl chloride	U	1.52	ug/kg	0.457	1.52
74-83-9	Bromomethane	U	1.52	ug/kg	0.457	1.52
75-00-3	Chloroethane	U	1.52	ug/kg	0.457	1.52
75-69-4	Trichlorofluoromethane	U	1.52	ug/kg	0.457	1.52
67-64-1	Acetone	U	7.62	ug/kg	2.53	7.62
75-35-4	1,1-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
74-88-4	Iodomethane	U	7.62	ug/kg	2.44	7.62
75-09-2	Methylene chloride	U	7.62	ug/kg	3.05	7.62
75-15-0	Carbon disulfide	U	7.62	ug/kg	1.90	7.62
156-60-5	trans-1,2-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
75-34-3	1,1-Dichloroethane	U	1.52	ug/kg	0.457	1.52
78-93-3	2-Butanone	U	7.62	ug/kg	2.29	7.62
156-59-2	cis-1,2-Dichloroethylene	U	1.52	ug/kg	0.457	1.52
594-20-7	2,2-Dichloropropane	U	1.52	ug/kg	0.457	1.52
67-66-3	Chloroform	U	1.52	ug/kg	0.457	1.52
74-97-5	Bromochloromethane	U	1.52	ug/kg	0.503	1.52
71-55-6	1,1,1-Trichloroethane	U	1.52	ug/kg	0.457	1.52
563-58-6	1,1-Dichloropropene	U	1.52	ug/kg	0.457	1.52
56-23-5	Carbon tetrachloride	U	1.52	ug/kg	0.457	1.52
107-06-2	1,2-Dichloroethane	U	1.52	ug/kg	0.457	1.52
71-43-2	Benzene	U	1.52	ug/kg	0.457	1.52
79-01-6	Trichloroethylene	U	1.52	ug/kg	0.503	1.52
78-87-5	1,2-Dichloropropane	U	1.52	ug/kg	0.457	1.52
75-27-4	Bromodichloromethane	U	1.52	ug/kg	0.457	1.52
74-95-3	Dibromomethane	U	1.52	ug/kg	0.457	1.52
108-10-1	4-Methyl-2-pentanone	U	7.62	ug/kg	1.90	7.62
10061-01-5	cis-1,3-Dichloropropylene	U	1.52	ug/kg	0.457	1.52
108-88-3	Toluene	U	1.52	ug/kg	0.457	1.52
10061-02-6	trans-1,3-Dichloropropylene	U	1.52	ug/kg	0.457	1.52
79-00-5	1,1,2-Trichloroethane	U	1.52	ug/kg	0.457	1.52
591-78-6	2-Hexanone	U	7.62	ug/kg	2.29	7.62
142-28-9	1,3-Dichloropropane	U	1.52	ug/kg	0.457	1.52
127-18-4	Tetrachloroethylene	U	1.52	ug/kg	0.457	1.52
124-48-1	Dibromochloromethane	U	1.52	ug/kg	0.457	1.52
106-93-4	1,2-Dibromoethane	U	1.52	ug/kg	0.457	1.52
108-90-7	Chlorobenzene	U	1.52	ug/kg	0.457	1.52

**Volatile
Certificate of Analysis
Sample Summary**

Page 2 of 2

SDG Number: 10-1301
Lab Sample ID: 245099014

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Aliquot: 5 g
Column: RTX-VOLATILES

Matrix: R
%Moisture: 34.4
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

Client ID: RE15-10-7192
Batch ID: 945254
Run Date: 01/26/2010 14:46
Prep Date: 01/25/2010 23:05
Data File: 4v148.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.52	ug/kg	0.457	1.52
179601-23-1	m,p-Xylenes	U	3.05	ug/kg	0.457	3.05
95-47-6	o-Xylene	U	1.52	ug/kg	0.457	1.52
100-42-5	Styrene	U	1.52	ug/kg	0.457	1.52
75-25-2	Bromoform	U	1.52	ug/kg	0.457	1.52
79-34-5	1,1,2,2-Tetrachloroethane	U	1.52	ug/kg	0.457	1.52
96-18-4	1,2,3-Trichloropropane	U	1.52	ug/kg	0.457	1.52
108-86-1	Bromobenzene	U	1.52	ug/kg	0.457	1.52
103-65-1	n-Propylbenzene	U	1.52	ug/kg	0.457	1.52
95-49-8	2-Chlorotoluene	U	1.52	ug/kg	0.457	1.52
98-82-8	Isopropylbenzene	U	1.52	ug/kg	0.457	1.52
108-67-8	1,3,5-Trimethylbenzene	U	1.52	ug/kg	0.457	1.52
106-43-4	4-Chlorotoluene	U	1.52	ug/kg	0.457	1.52
98-06-6	tert-Butylbenzene	U	1.52	ug/kg	0.457	1.52
95-63-6	1,2,4-Trimethylbenzene	U	1.52	ug/kg	0.457	1.52
135-98-8	sec-Butylbenzene	U	1.52	ug/kg	0.457	1.52
99-87-6	4-Isopropyltoluene	U	1.52	ug/kg	0.457	1.52
541-73-1	1,3-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52
106-46-7	1,4-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52
104-51-8	n-Butylbenzene	U	1.52	ug/kg	0.457	1.52
96-12-8	1,2-Dibromo-3-chloropropane	U	1.52	ug/kg	0.457	1.52
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	7.62	ug/kg	2.44	7.62
630-20-6	1,1,1,2-Tetrachloroethane	U	1.52	ug/kg	0.457	1.52
95-50-1	1,2-Dichlorobenzene	U	1.52	ug/kg	0.457	1.52

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	8.59	ug/kg		J

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
Data file : /chem/VOA4.i/012510v4/4v148.d
Lab Smp Id: 245099014 Client Smp ID: RE15-10-7192
Inj Date : 26-JAN-2010 14:46
Operator : ACJ Inst ID: VOA4.i
Smp Info : |245099014|945254|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	34.38160	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	781111		50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	505907		50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	187263		50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	165539		38.7833	59.1
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	643328		50.0241	76.2
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	221867		64.7856	98.7

ION RATIO REPORT

VOA REPORT

Data file: 4v148.d

Report Date: 01/26/2010 16:13

Lab. ID: 245099014

SampleType: SAMPLE

Injection Date: 26-JAN-2010 14:46

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099014|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	10959	10.62	10.34	80-120	100	(T)
64	2115	10.62	10.34	2- 62	19	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	5904	12.26	12.02	80-120	100	(T)
43	3425	12.25	12.02	243-303	58	(QT)
100	420772	12.25	12.02	0- 60	7126	(QT)

66	Bromoform			CAS#: 75-25-2		
173	1156	14.96	14.66	80-120	100	(T)
175	13446	14.95	14.66	20- 80	1163	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v148.d
 Lab Smp Id: 245099014 Client Smp ID: RE15-10-7192
 Inj Date : 26-JAN-2010 14:46
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099014|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 48
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	34.38160	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1682286	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
4.496	189641	5.63639491	8.6	0		0	40

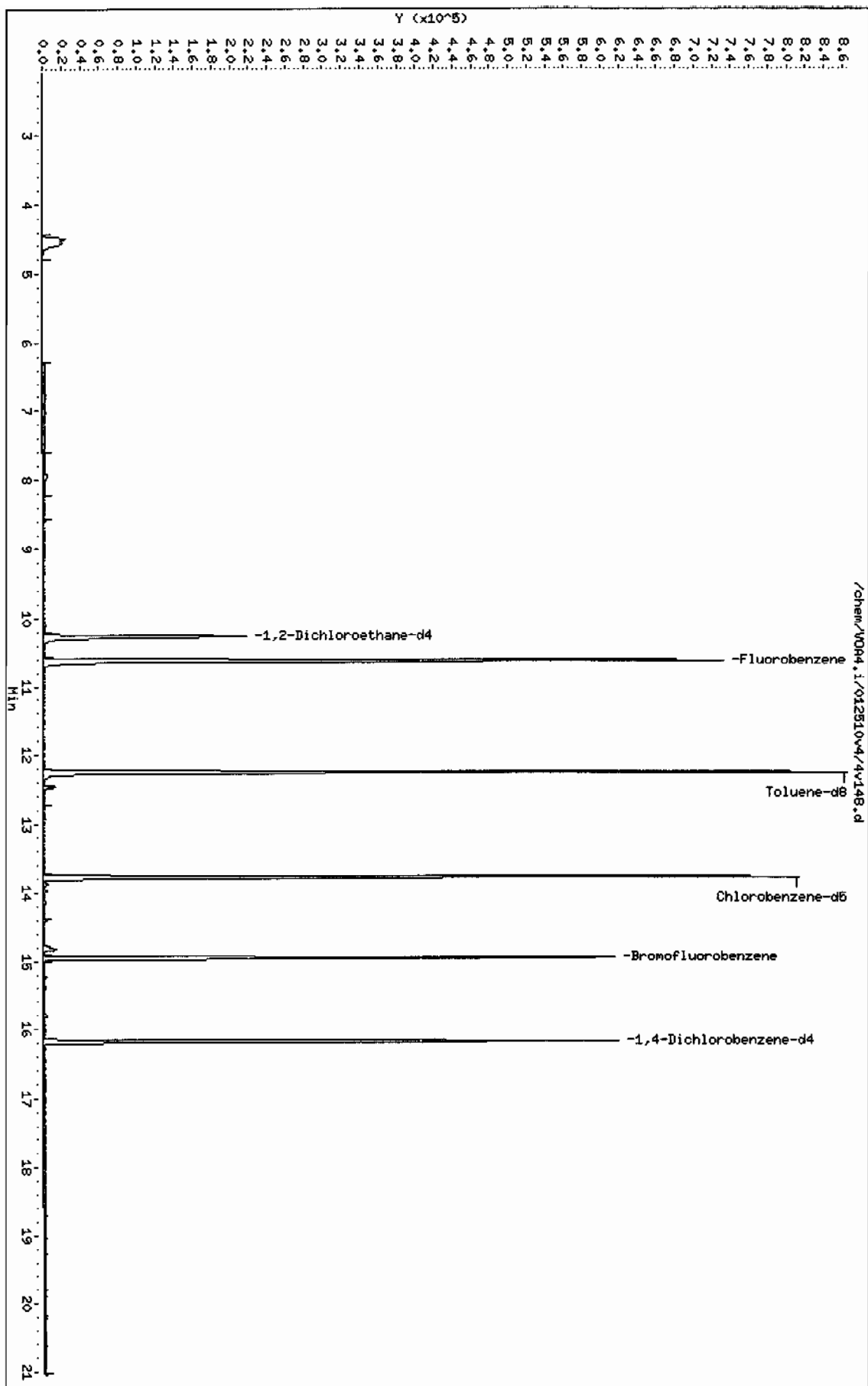
Data File: /chem/V004.i/012510v4/4v148.d
Date : 26-JAN-2010 14:46
Client ID: RELS-10-7192
Sample Info: 124509014194525411.V004.11

Instrument: V004.i

Page 1

Column phase: RTX-VOLATILES

Operator: ACJ
Column diameter: 0.25



Data File: /chem/VOA4.i/012510v4/4v148.d

Page 1

Date : 26-JAN-2010 14:46

Client ID: RE15-10-7192

Instrument: VOA4.i

Sample Info: 12450990141945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

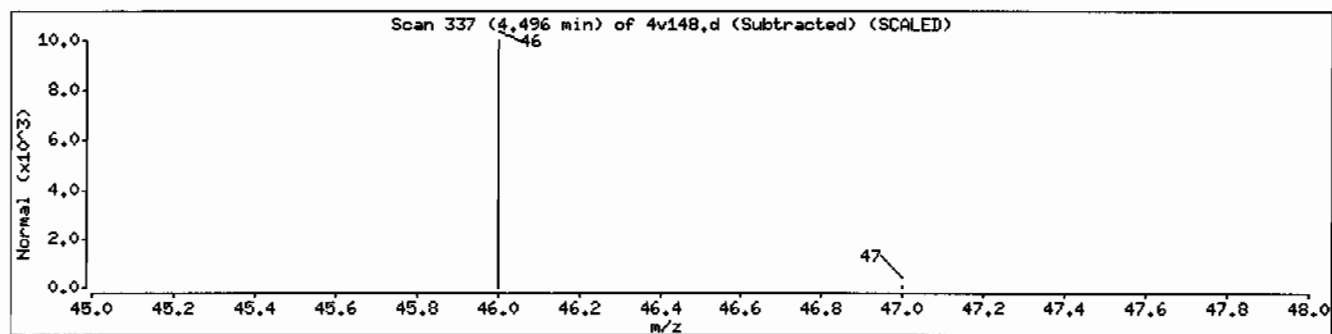
Weight

Unknown

0

0

0



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099007	Date Received: 01/20/2010 08:45	%Moisture: 19
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7193	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.J	Dilution: 1
Run Date: 01/26/2010 11:34	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:58	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v141.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.23	ug/kg	0.420	1.23
74-87-3	Chloromethane	U	1.23	ug/kg	0.370	1.23
75-01-4	Vinyl chloride	U	1.23	ug/kg	0.370	1.23
74-83-9	Bromomethane	U	1.23	ug/kg	0.370	1.23
75-00-3	Chloroethane	U	1.23	ug/kg	0.370	1.23
75-69-4	Trichlorofluoromethane	U	1.23	ug/kg	0.370	1.23
67-64-1	Acetone	U	6.17	ug/kg	2.05	6.17
75-35-4	1,1-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
74-88-4	Iodomethane	U	6.17	ug/kg	1.98	6.17
75-09-2	Methylene chloride	U	6.17	ug/kg	2.47	6.17
75-15-0	Carbon disulfide	U	6.17	ug/kg	1.54	6.17
156-60-5	trans-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
75-34-3	1,1-Dichloroethane	U	1.23	ug/kg	0.370	1.23
78-93-3	2-Butanone	U	6.17	ug/kg	1.85	6.17
156-59-2	cis-1,2-Dichloroethylene	U	1.23	ug/kg	0.370	1.23
594-20-7	2,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
67-66-3	Chloroform	U	1.23	ug/kg	0.370	1.23
74-97-5	Bromochloromethane	U	1.23	ug/kg	0.407	1.23
71-55-6	1,1,1-Trichloroethane	U	1.23	ug/kg	0.370	1.23
563-58-6	1,1-Dichloropropene	U	1.23	ug/kg	0.370	1.23
56-23-5	Carbon tetrachloride	U	1.23	ug/kg	0.370	1.23
107-06-2	1,2-Dichloroethane	U	1.23	ug/kg	0.370	1.23
71-43-2	Benzene	U	1.23	ug/kg	0.370	1.23
79-01-6	Trichloroethylene	U	1.23	ug/kg	0.407	1.23
78-87-5	1,2-Dichloropropane	U	1.23	ug/kg	0.370	1.23
75-27-4	Bromodichloromethane	U	1.23	ug/kg	0.370	1.23
74-95-3	Dibromomethane	U	1.23	ug/kg	0.370	1.23
108-10-1	4-Methyl-2-pentanone	U	6.17	ug/kg	1.54	6.17
10061-01-5	cis-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
108-88-3	Toluene	J	0.796	ug/kg	0.370	1.23
10061-02-6	trans-1,3-Dichloropropylene	U	1.23	ug/kg	0.370	1.23
79-00-5	1,1,2-Trichloroethane	U	1.23	ug/kg	0.370	1.23
591-78-6	2-Hexanone	U	6.17	ug/kg	1.85	6.17
142-28-9	1,3-Dichloropropane	U	1.23	ug/kg	0.370	1.23
127-18-4	Tetrachloroethylene	J	0.415	ug/kg	0.370	1.23
124-48-1	Dibromochloromethane	U	1.23	ug/kg	0.370	1.23
106-93-4	1,2-Dibromoethane	U	1.23	ug/kg	0.370	1.23
108-90-7	Chlorobenzene	U	1.23	ug/kg	0.370	1.23

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301
Lab Sample ID: 245099007

Client ID: RE15-10-7193
Batch ID: 945254
Run Date: 01/26/2010 11:34
Prep Date: 01/25/2010 22:58
Data File: 4v141.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8260B
Inst: VOA4.I
Analyst: ACJ
Aliquot: 5 g
Column: RTX-VOLATILES

Matrix: R
%Moisture: 19
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	J	0.489	ug/kg	0.370	1.23
179601-23-1	m,p-Xylenes	J	0.406	ug/kg	0.370	2.47
95-47-6	o-Xylene	U	1.23	ug/kg	0.370	1.23
100-42-5	Styrene	U	1.23	ug/kg	0.370	1.23
75-25-2	Bromoform	U	1.23	ug/kg	0.370	1.23
79-34-5	1,1,2,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
96-18-4	1,2,3-Trichloropropane	U	1.23	ug/kg	0.370	1.23
108-86-1	Bromobenzene	U	1.23	ug/kg	0.370	1.23
103-65-1	n-Propylbenzene	U	1.23	ug/kg	0.370	1.23
95-49-8	2-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-82-8	Isopropylbenzene	U	1.23	ug/kg	0.370	1.23
108-67-8	1,3,5-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
106-43-4	4-Chlorotoluene	U	1.23	ug/kg	0.370	1.23
98-06-6	tert-Butylbenzene	U	1.23	ug/kg	0.370	1.23
95-63-6	1,2,4-Trimethylbenzene	U	1.23	ug/kg	0.370	1.23
135-98-8	sec-Butylbenzene	U	1.23	ug/kg	0.370	1.23
99-87-6	4-Isopropyltoluene	U	1.23	ug/kg	0.370	1.23
541-73-1	1,3-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
106-46-7	1,4-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23
104-51-8	n-Butylbenzene	U	1.23	ug/kg	0.370	1.23
96-12-8	1,2-Dibromo-3-chloropropane	U	1.23	ug/kg	0.370	1.23
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.17	ug/kg	1.98	6.17
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.23	ug/kg	0.370	1.23
95-50-1	1,2-Dichlorobenzene	U	1.23	ug/kg	0.370	1.23

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R- α -Pinene	14.79	13.1	ug/kg	96	NJ
	Unknown Siloxane	16.79	16.7	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v141.d

Lab Smp Id: 245099007

Client Smp ID: RE15-10-7193

Inj Date : 26-JAN-2010 11:34

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099007|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 41

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	19.00050	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	835995		50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	536705		50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.178	16.179	(1.000)	206290		50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	184721		40.4362	49.9
\$ 47 Toluene-d8	98	12.252	12.253	(0.890)	688954		50.4977	62.3
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	242968		64.4034	79.5
50 Toluene	92	12.326	12.326	(0.895)	6772		0.64513	0.80(a)
56 Tetrachloroethylene	164	12.929	12.923	(0.939)	1303		0.33647	0.42(a)
58 Ethylbenzene	91	13.862	13.862	(1.007)	8074		0.39577	0.49(a)
63 m,p-Xylenes	106	13.966	13.972	(1.014)	2577		0.32862	0.40(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v141.d

Report Date: 01/26/2010 16:12

Lab. ID: 245099007

SampleType: SAMPLE

Injection Date: 26-JAN-2010 11:34

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099007|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	10537	10.62	10.34	80-120	100	(T)
64	1952	10.62	10.34	2- 62	19	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	6204	12.25	12.02	80-120	100	(T)
43	4167	12.25	12.02	243-303	67	(QT)
100	459047	12.25	12.02	0- 60	7398	(QT)

50	Toluene			CAS#: 108-88-3		
92	6772	12.33	12.33	80-120	100	()
91	11030	12.33	12.33	138-198	163	()

56	Tetrachloroethylene			CAS#: 127-18-4		
164	1303	12.93	12.92	80-120	100	()
129	1219	12.91	12.92	58-118	94	()
131	1112	12.92	12.92	55-115	85	()

58	Ethylbenzene			CAS#: 100-41-4		
91	8074	13.86	13.86	80-120	100	()
106	1918	13.87	13.86	2- 62	24	()

64	o-Xylene			CAS#: 95-47-6		
106	2577	13.97	14.40	80-120	100	(T)
91	5295	13.97	14.40	177-237	205	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
63 m,p-Xylenes			CAS#: 179601-23-1			
106	2577	13.97	13.97	80-120	100	()
91	5295	13.97	13.97	168-228	205	()

66 Bromoform			CAS#: 75-25-2			
173	1059	14.96	14.66	80-120	100	(T)
175	15544	14.95	14.66	20- 80	1466	(QT)

67 Isopropylbenzene			CAS#: 98-82-8			
105	6860	14.79	14.76	80-120	100	()
120	270	14.79	14.76	0- 56	4	()

76 n-Propylbenzene			CAS#: 103-65-1			
91	27397	14.79	15.18	80-120	100	(T)
120	270	14.79	15.18	0- 53	1	(T)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v141.d
 Lab Smp Id: 245099007 Client Smp ID: RE15-10-7193
 Inj Date : 26-JAN-2010 11:34
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099007|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 41
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	19.00050	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 61 Chlorobenzene-d5	13.770	1718790	50.000
* 86 1,4-Dichlorobenzene-d4	16.178	1234959	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
1R-.alpha.-Pinene					CAS #: 7785-70-8		
14.789	365612	10.6357389	13.1	96	NIST05.L	15188	61

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
16.794	334440	13.5405180	16.7	0		0	86

Unknown Siloxane CAS #:

Data File: /chem/VO04.1/012510v4/4v141.d

Date: 26-JAN-2010 11:34

Client ID: RE15-10-7193

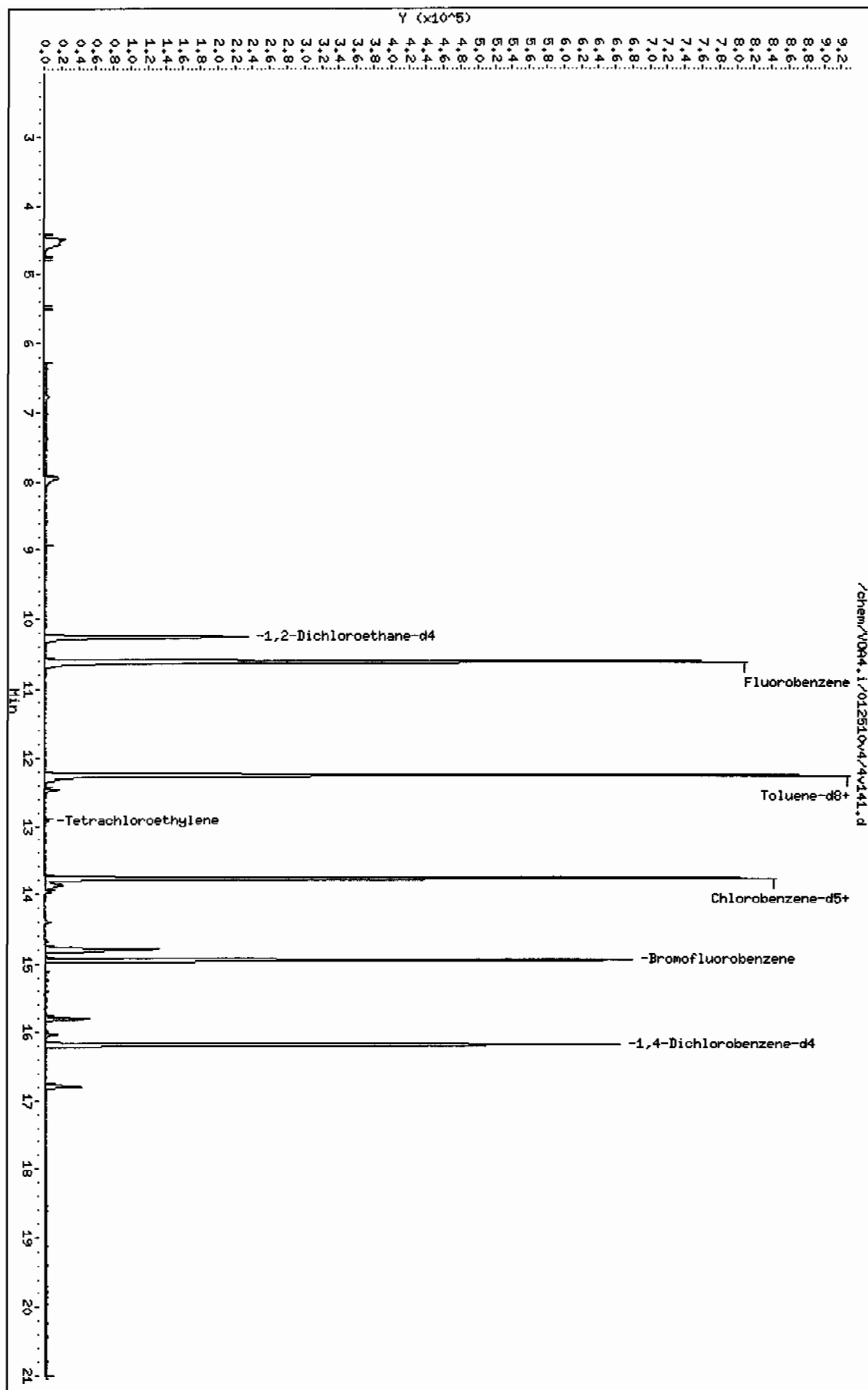
Sample Info: 1245099007194525411.V04F11.1

Instrument: VO04.1

Page 1

Column phase: RTX-VOLATILES

Operator: ACJ
Column diameter: 0.25



Date : 26-JAN-2010 11:34

Client ID: RE15-10-7193

Instrument: V0A4.i

Sample Info: 1245099007194525411V0AF111

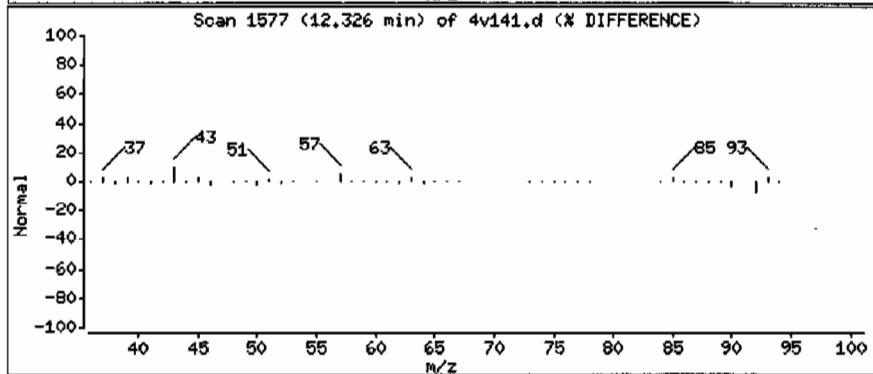
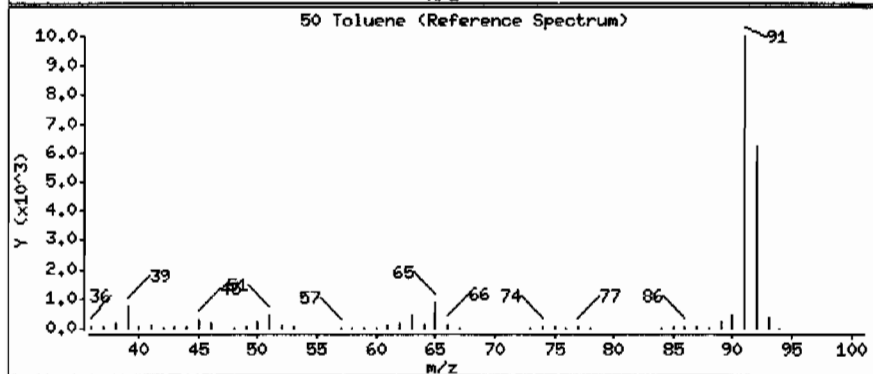
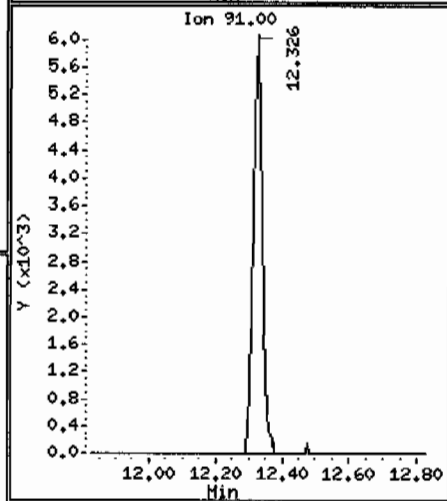
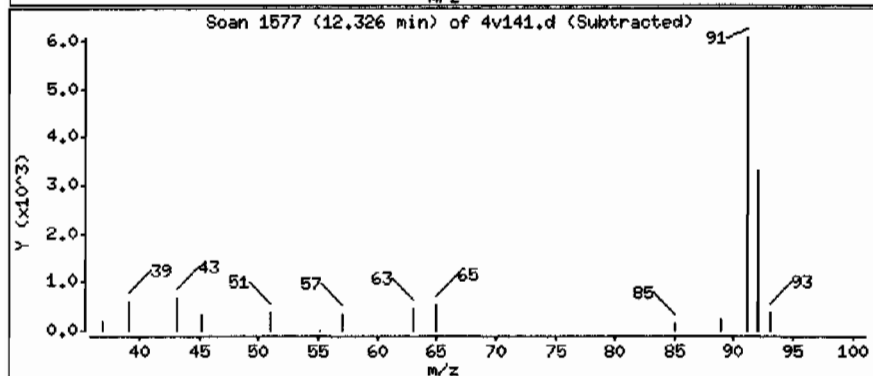
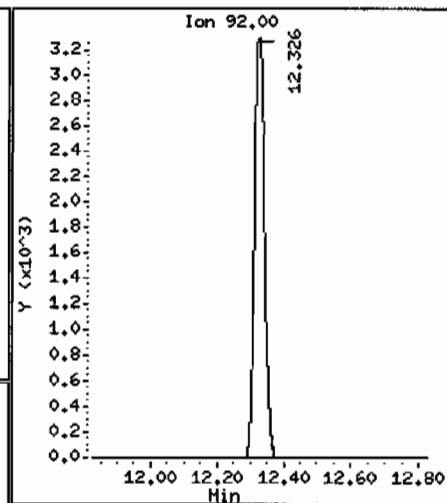
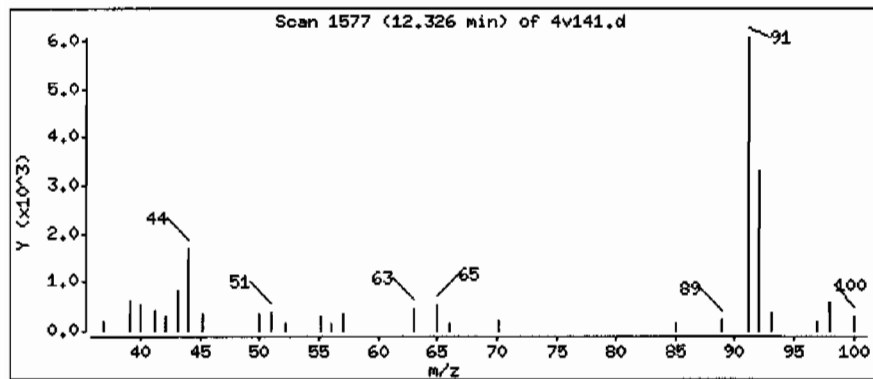
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

50 Toluene

Concentration: 0.80 ug/Kg



Date : 26-JAN-2010 11:34

Client ID: RE15-10-7193

Instrument: V0A4.1

Sample Info: 12450990071945254111V0AF111

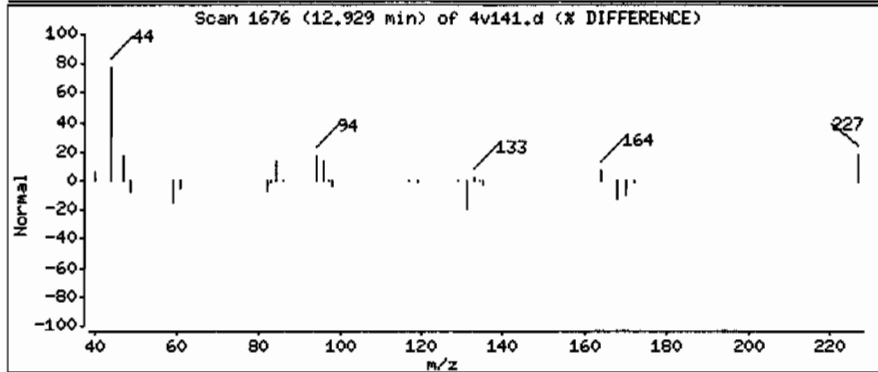
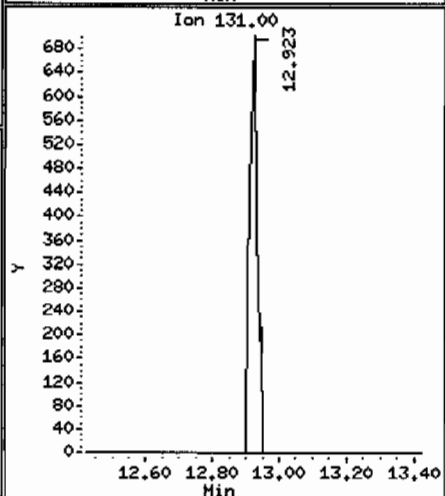
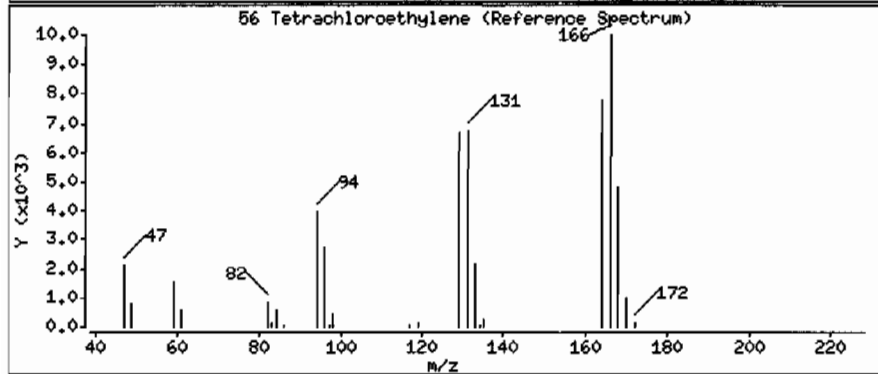
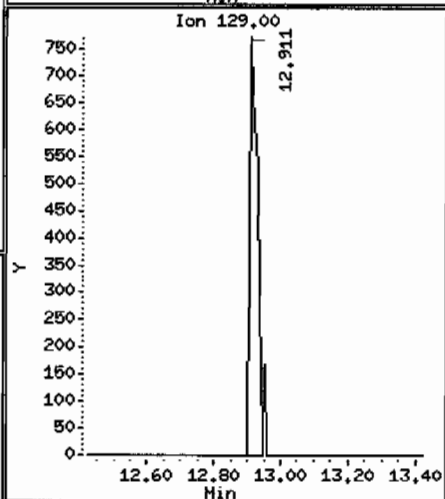
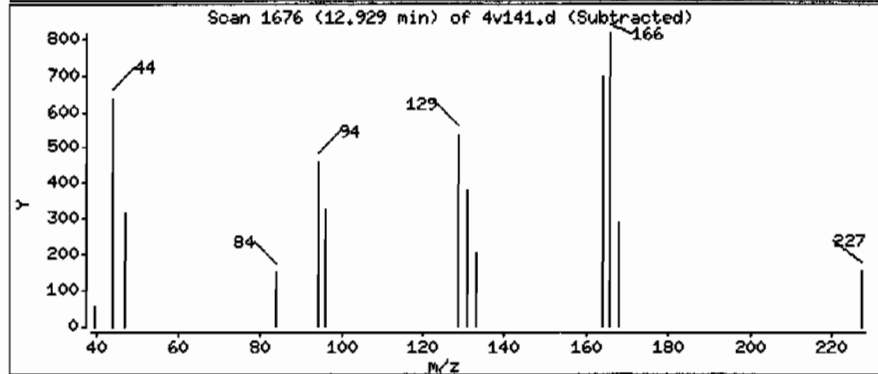
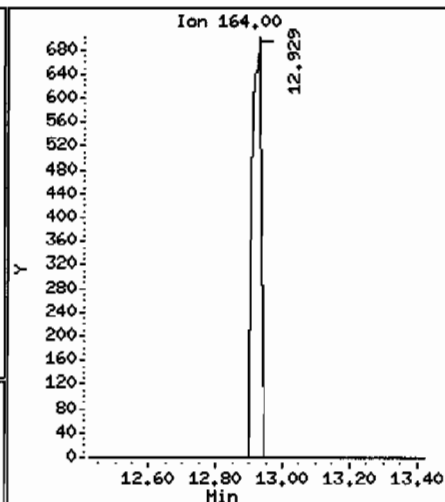
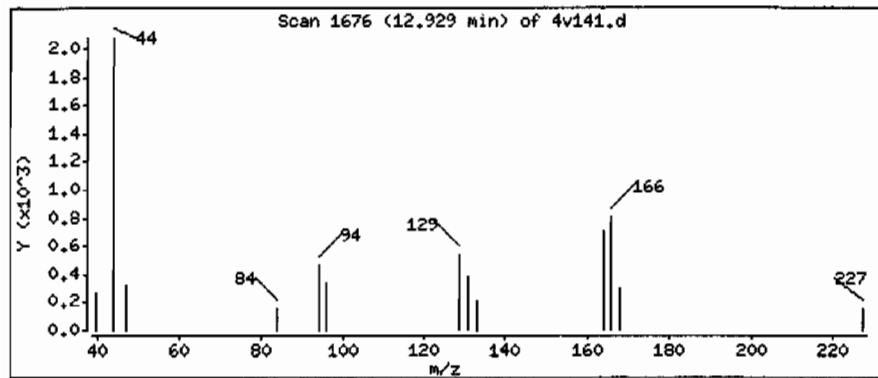
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.42 ug/Kg



Date : 26-JAN-2010 11:34

Client ID: RE15-10-7193

Instrument: V0A4.i

Sample Info: 1245099007194525411V0AF111

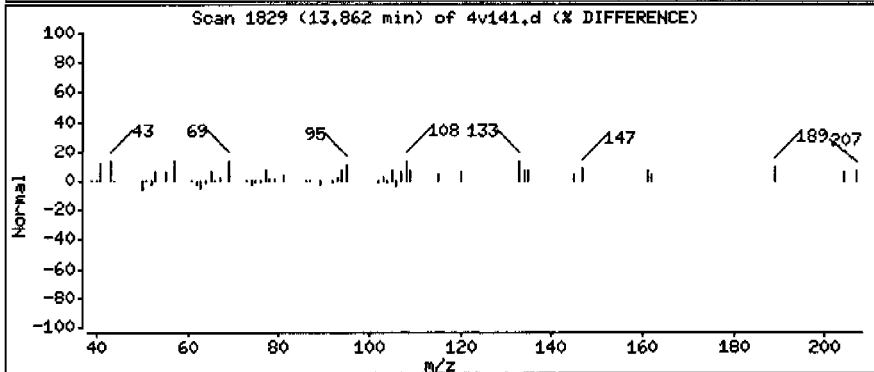
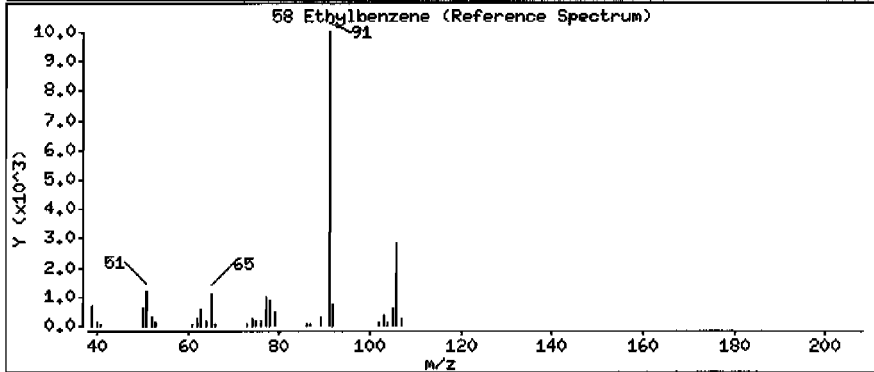
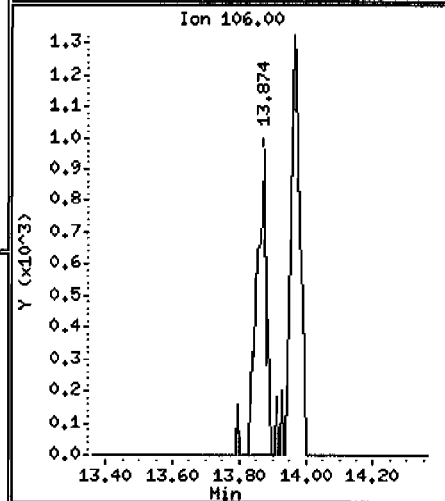
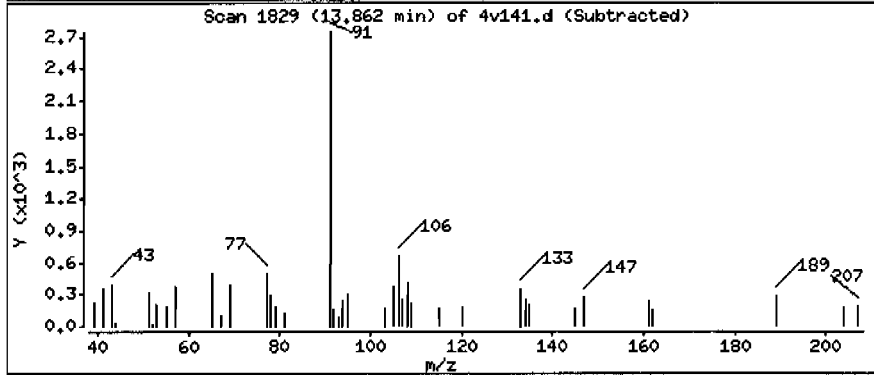
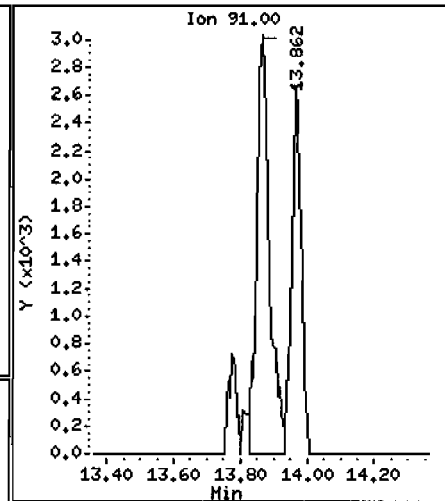
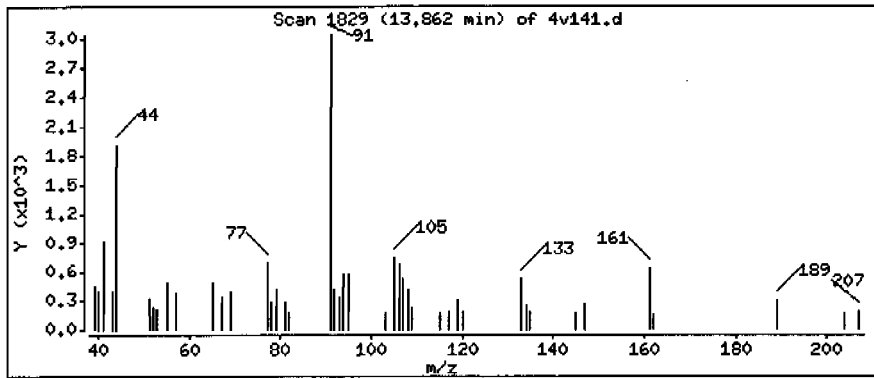
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

58 Ethylbenzene

Concentration: 0.49 ug/Kg



Date : 26-JAN-2010 11:34

Client ID: RE15-10-7193

Instrument: V0A4.i

Sample Info: 1245099007194525411V0AF11

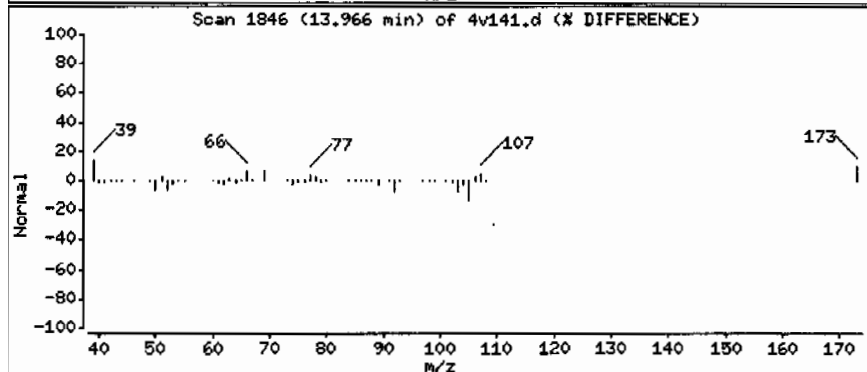
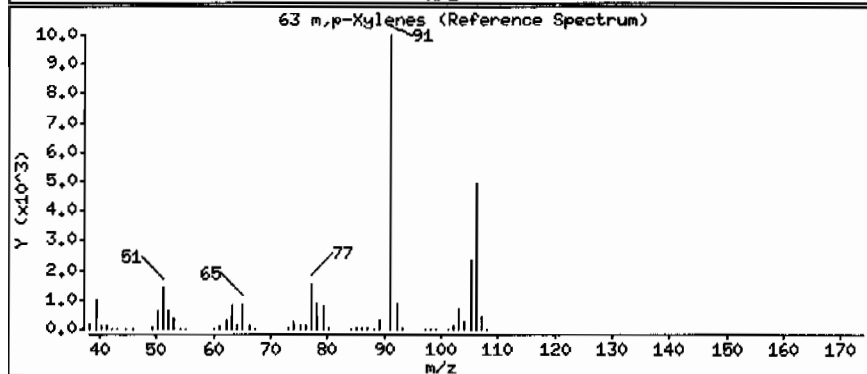
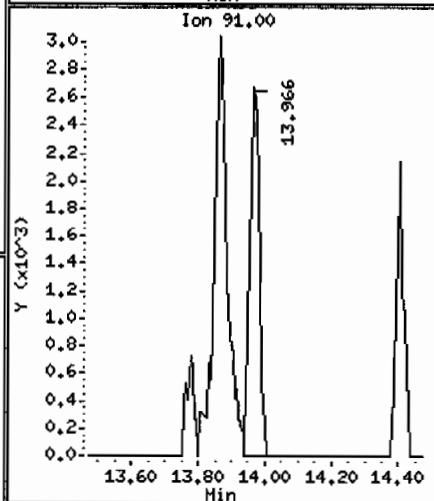
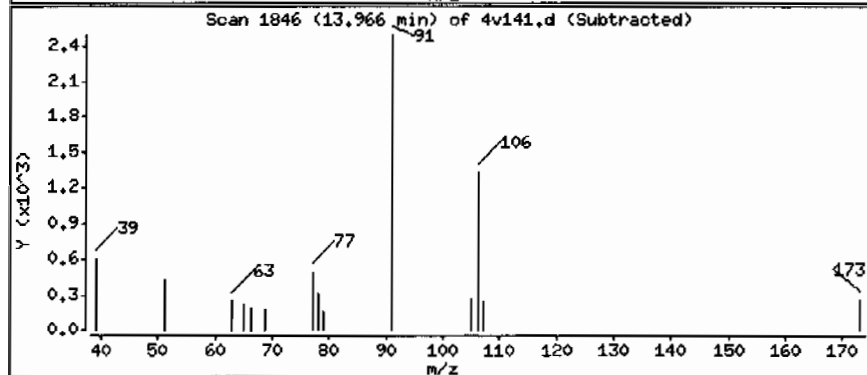
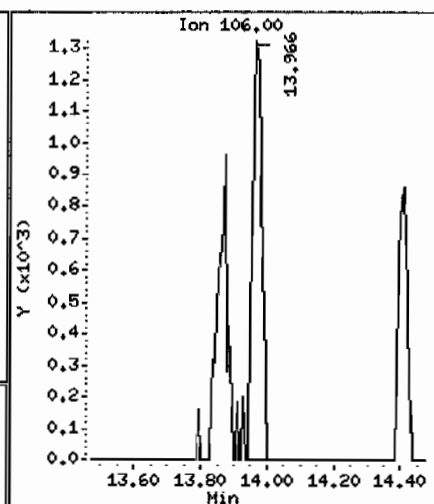
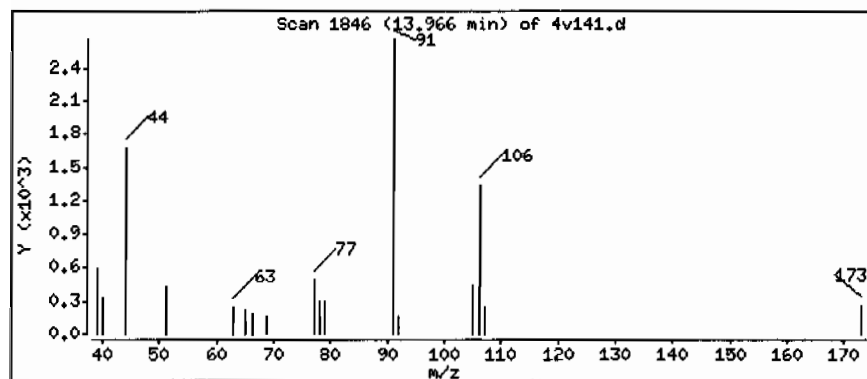
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.40 ug/Kg



Date : 26-JAN-2010 11:34

Client ID: RE15-10-7193

Instrument: VOA4.i

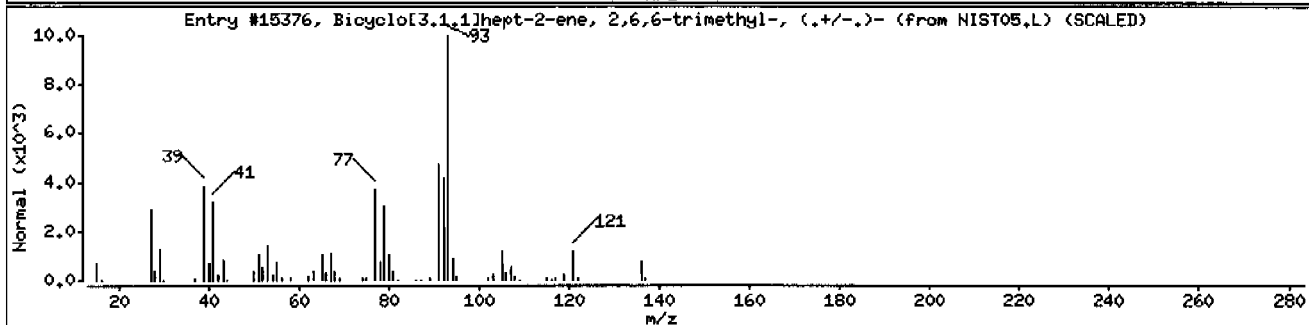
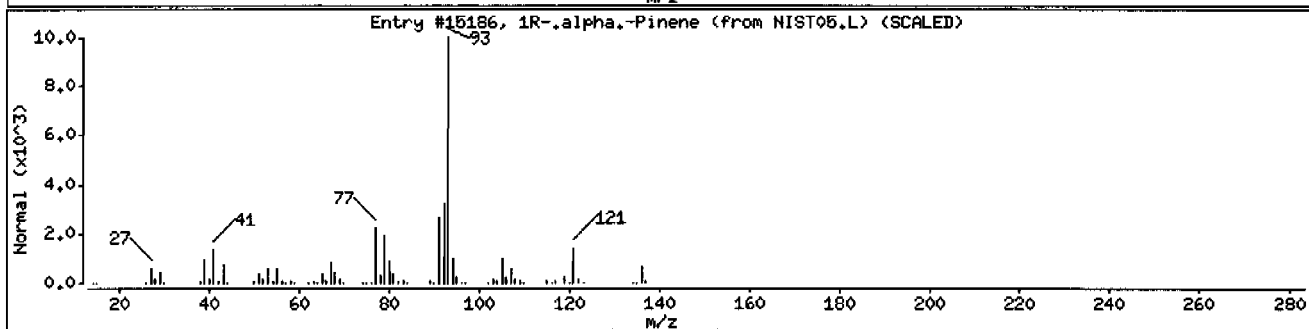
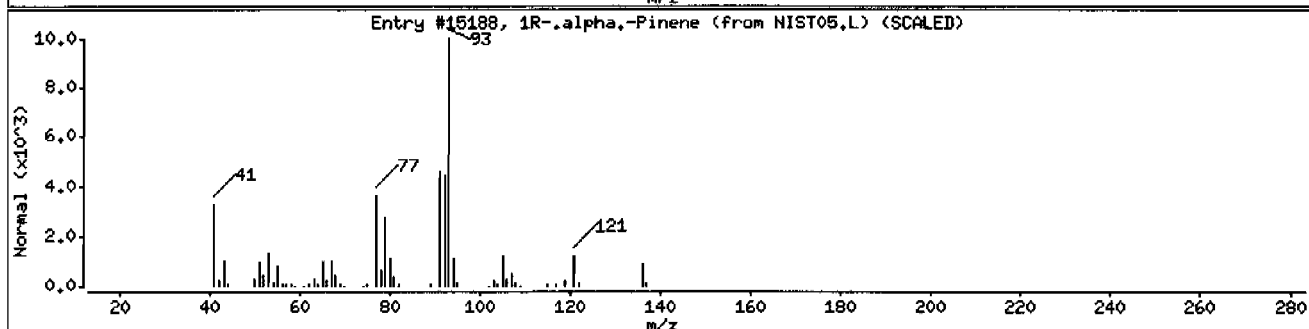
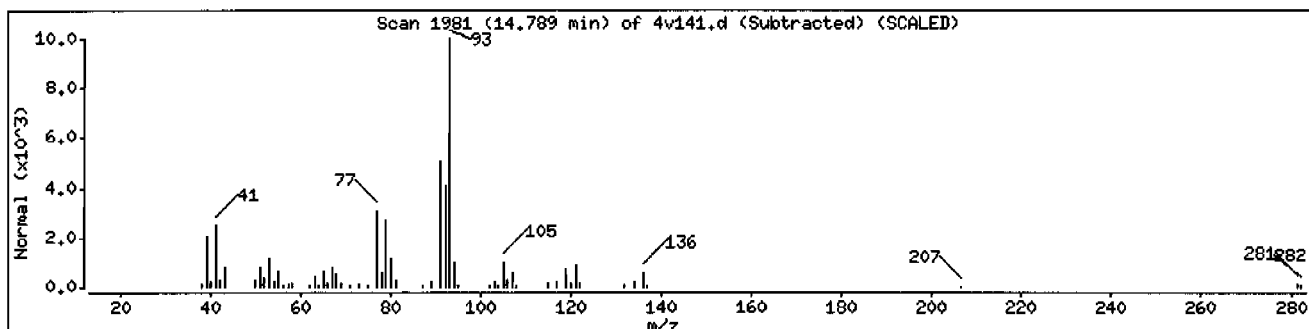
Sample Info: 1245099007194525411\VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15188	96	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	95	C10H16	136
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	2437-95-8	NIST05.L	15376	94	C10H16	136



Date : 26-JAN-2010 11:34

Client ID: RE15-10-7193

Instrument: V0A4.i

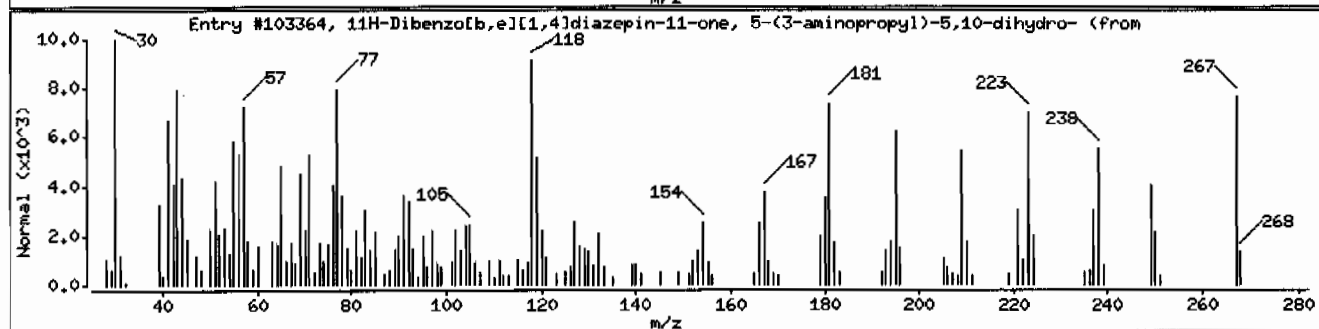
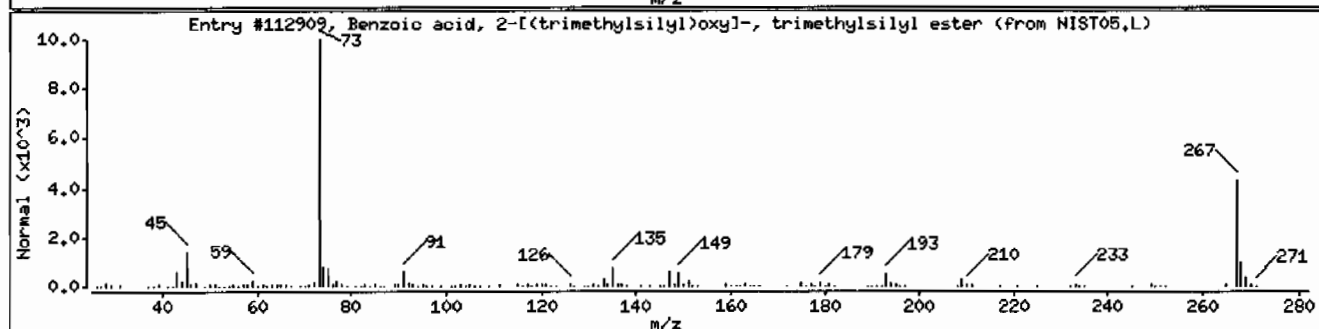
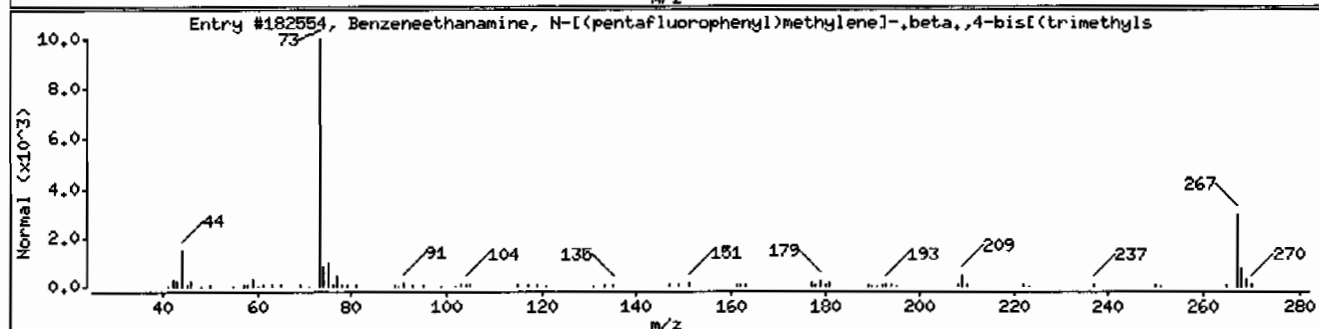
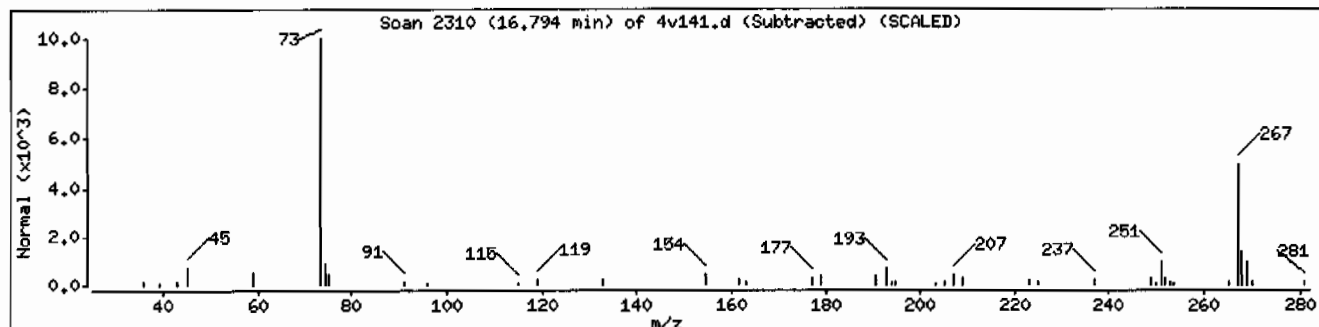
Sample Info: 1245099007194525411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzeneethanamine, N-[(pentafluorophenyl)methylene]-,beta.,4-bis[(trimethylsilyl)methyl]-	55429-85-1	NIST05.L	182554	47	C ₂₁ H ₂₆ F ₅ N ₂ Si ₄ O ₂	476
Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester (from NIST05.L)	3789-85-3	NIST05.L	112909	42	C ₁₃ H ₂₂ O ₃ Si ₂	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-(3-aminopropyl)-5,10-dihydro- (from NIST05.L)	13450-73-2	NIST05.L	103364	38	C ₁₆ H ₁₇ N ₃ O	267



Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1301
 Lab Sample ID: 245099001

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 20.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.26	ug/kg	0.429	1.26
74-87-3	Chloromethane	U	1.26	ug/kg	0.378	1.26
75-01-4	Vinyl chloride	U	1.26	ug/kg	0.378	1.26
74-83-9	Bromomethane	U	1.26	ug/kg	0.378	1.26
75-00-3	Chloroethane	U	1.26	ug/kg	0.378	1.26
75-69-4	Trichlorofluoromethane	U	1.26	ug/kg	0.378	1.26
67-64-1	Acetone	U	6.30	ug/kg	2.09	6.30
75-35-4	1,1-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
74-88-4	Iodomethane	U	6.30	ug/kg	2.02	6.30
75-09-2	Methylene chloride	U	6.30	ug/kg	2.52	6.30
75-15-0	Carbon disulfide	U	6.30	ug/kg	1.58	6.30
156-60-5	trans-1,2-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
75-34-3	1,1-Dichloroethane	U	1.26	ug/kg	0.378	1.26
78-93-3	2-Butanone	U	6.30	ug/kg	1.89	6.30
156-59-2	cis-1,2-Dichloroethylene	U	1.26	ug/kg	0.378	1.26
594-20-7	2,2-Dichloropropane	U	1.26	ug/kg	0.378	1.26
67-66-3	Chloroform	U	1.26	ug/kg	0.378	1.26
74-97-5	Bromochloromethane	U	1.26	ug/kg	0.416	1.26
71-55-6	1,1,1-Trichloroethane	U	1.26	ug/kg	0.378	1.26
563-58-6	1,1-Dichloropropene	U	1.26	ug/kg	0.378	1.26
56-23-5	Carbon tetrachloride	U	1.26	ug/kg	0.378	1.26
107-06-2	1,2-Dichloroethane	U	1.26	ug/kg	0.378	1.26
71-43-2	Benzene	U	1.26	ug/kg	0.378	1.26
79-01-6	Trichloroethylene	U	1.26	ug/kg	0.416	1.26
78-87-5	1,2-Dichloropropane	U	1.26	ug/kg	0.378	1.26
75-27-4	Bromodichloromethane	U	1.26	ug/kg	0.378	1.26
74-95-3	Dibromomethane	U	1.26	ug/kg	0.378	1.26
108-10-1	4-Methyl-2-pentanone	U	6.30	ug/kg	1.58	6.30
10061-01-5	cis-1,3-Dichloropropylene	U	1.26	ug/kg	0.378	1.26
108-88-3	Toluene	U	1.26	ug/kg	0.378	1.26
10061-02-6	trans-1,3-Dichloropropylene	U	1.26	ug/kg	0.378	1.26
79-00-5	1,1,2-Trichloroethane	U	1.26	ug/kg	0.378	1.26
591-78-6	2-Hexanone	U	6.30	ug/kg	1.89	6.30
142-28-9	1,3-Dichloropropane	U	1.26	ug/kg	0.378	1.26
127-18-4	Tetrachloroethylene	J	0.799	ug/kg	0.378	1.26
124-48-1	Dibromochloromethane	U	1.26	ug/kg	0.378	1.26
106-93-4	1,2-Dibromoethane	U	1.26	ug/kg	0.378	1.26
108-90-7	Chlorobenzene	U	1.26	ug/kg	0.378	1.26

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099001	Date Received: 01/20/2010 08:45	%Moisture: 20.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7194	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/26/2010 08:49	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:50	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v135.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.26	ug/kg	0.378	1.26
179601-23-1	m,p-Xylenes	U	2.52	ug/kg	0.378	2.52
95-47-6	o-Xylene	U	1.26	ug/kg	0.378	1.26
100-42-5	Styrene	U	1.26	ug/kg	0.378	1.26
75-25-2	Bromoform	U	1.26	ug/kg	0.378	1.26
79-34-5	1,1,2,2-Tetrachloroethane	U	1.26	ug/kg	0.378	1.26
96-18-4	1,2,3-Trichloropropane	U	1.26	ug/kg	0.378	1.26
108-86-1	Bromobenzene	U	1.26	ug/kg	0.378	1.26
103-65-1	n-Propylbenzene	U	1.26	ug/kg	0.378	1.26
95-49-8	2-Chlorotoluene	U	1.26	ug/kg	0.378	1.26
98-82-8	Isopropylbenzene	U	1.26	ug/kg	0.378	1.26
108-67-8	1,3,5-Trimethylbenzene	U	1.26	ug/kg	0.378	1.26
106-43-4	4-Chlorotoluene	U	1.26	ug/kg	0.378	1.26
98-06-6	tert-Butylbenzene	U	1.26	ug/kg	0.378	1.26
95-63-6	1,2,4-Trimethylbenzene	U	1.26	ug/kg	0.378	1.26
135-98-8	sec-Butylbenzene	U	1.26	ug/kg	0.378	1.26
99-87-6	4-Isopropyltoluene	U	1.26	ug/kg	0.378	1.26
541-73-1	1,3-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26
106-46-7	1,4-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26
104-51-8	n-Butylbenzene	U	1.26	ug/kg	0.378	1.26
96-12-8	1,2-Dibromo-3-chloropropane	U	1.26	ug/kg	0.378	1.26
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.30	ug/kg	2.02	6.30
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.26	ug/kg	0.378	1.26
95-50-1	1,2-Dichlorobenzene	U	1.26	ug/kg	0.378	1.26

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	59.4	ug/kg		J
	Unknown Siloxane	16.79	26.3	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v135.d

Lab Smp Id: 245099001

Client Smp ID: RE15-10-7194

Inj Date : 26-JAN-2010 08:49

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099001|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 35

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	20.65990	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	872227	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	567942	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	233704	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.259	10.265	(0.966)	198597	41.6678	52.5
\$ 47 Toluene-d8	98	12.252	12.253	(0.890)	727632	50.3994	63.5
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	273954	64.0987	80.8
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	2599	0.63421	0.80 (a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v135.d

Report Date: 01/26/2010 16:11

Lab. ID: 245099001

SampleType: SAMPLE

Injection Date: 26-JAN-2010 08:49

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099001|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	11379	10.62	10.34	80-120	100	(T)
64	1805	10.62	10.34	2- 62	16	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	6713	12.25	12.02	80-120	100	(T)
43	3994	12.25	12.02	243-303	60	(QT)
100	477175	12.25	12.02	0- 60	7107	(QT)

56	Tetrachloroethylene			CAS#: 127-18-4		
164	2599	12.92	12.92	80-120	100	()
129	2305	12.92	12.92	58-118	89	()
131	2241	12.92	12.92	55-115	86	()

66	Bromoform			CAS#: 75-25-2		
173	945	14.95	14.66	80-120	100	(T)
175	17878	14.95	14.66	20- 80	1892	(QT)

74	1,2,3-Trichloropropane			CAS#: 96-18-4		
110	2937	14.83	15.11	80-120	100	(T)
75	6843	14.82	15.11	252-312	233	(QT)
77	313	14.83	15.11	61-121	11	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v135.d
 Lab Smp Id: 245099001 Client Smp ID: RE15-10-7194
 Inj Date : 26-JAN-2010 08:49
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099001|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 35
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	20.65990	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	13.770	1747915	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	1422105	50.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
14.825	1647074	47.1153673	59.4	0		0	61

Unknown Siloxane CAS #:

Data File: /chem/VOA4.i/012510v4/4v135.d
Report Date: 15-Feb-2010 14:02

Page 2

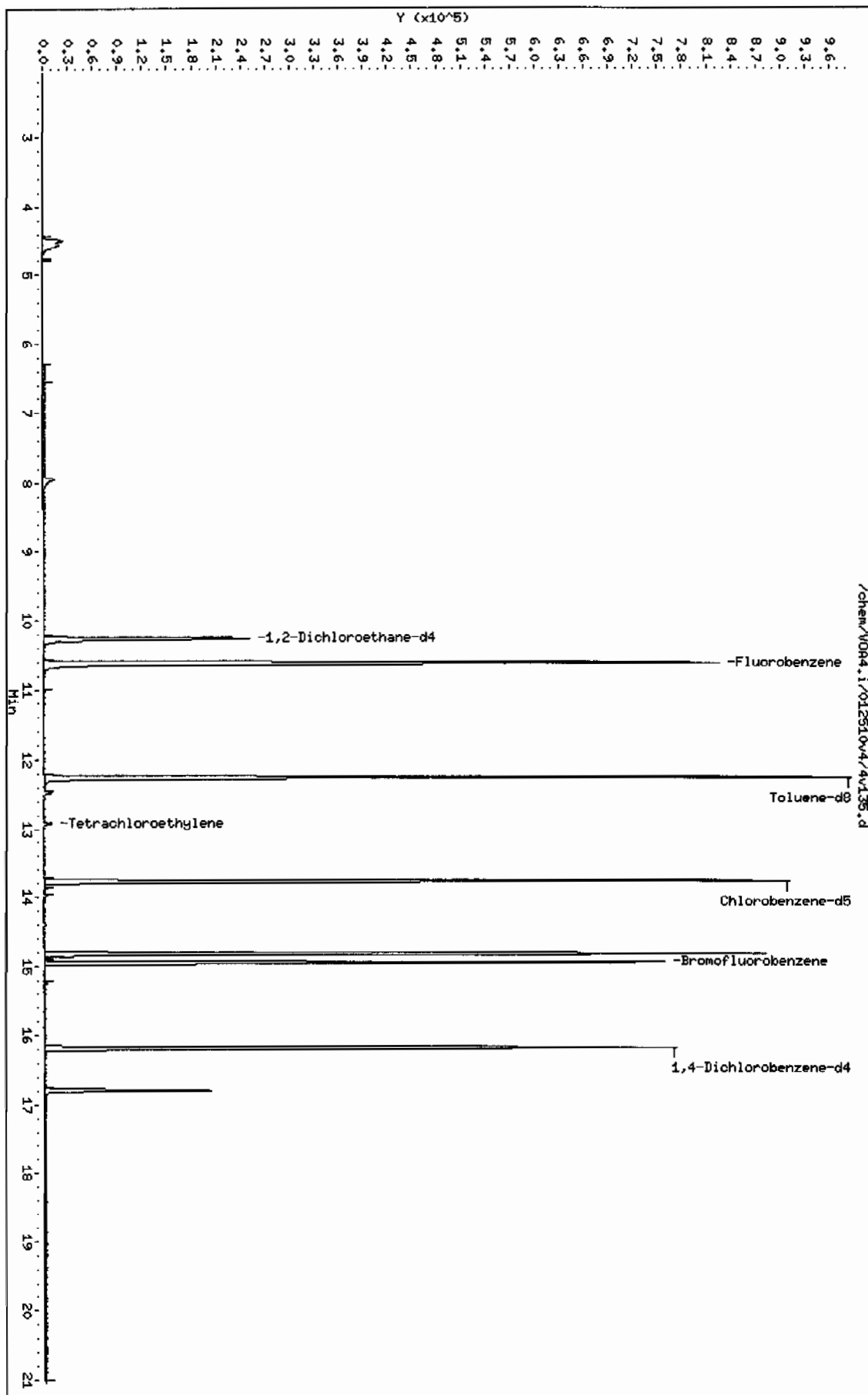
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		ON-COL(ug/l)	FINAL(ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane					CAS #:		
16.794	593926	20.8819176	26.3	0		0	86

Data File: /chem/V004.i/012510v4/4v135.d
Date : 26-JAN-2010 08:49
Client ID: RE15-10-7194
Sample Info: 124509900194525411V004111

Column phase: RTX-VOLATILES

Instrument: V004.i
Operator: PCJ
Column diameter: 0.25

Page 1



Date : 26-JAN-2010 08:49

Client ID: RE15-10-7194

Instrument: V0A4.i

Sample Info: 12450990011945254111V0AF111

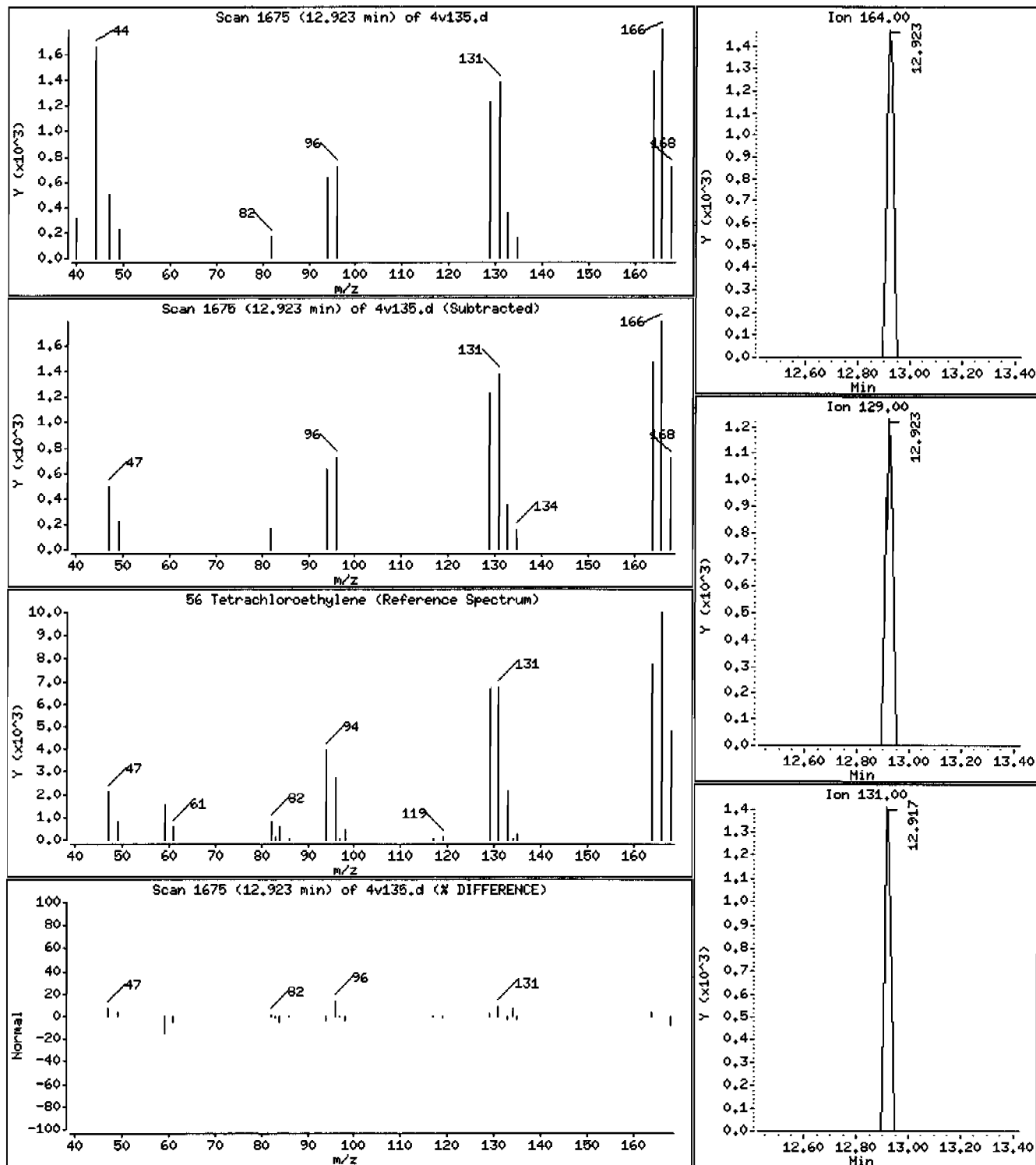
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

56 Tetrachloroethylene

Concentration: 0.80 ug/Kg



Date : 26-JAN-2010 08:49

Client ID: RE15-10-7194

Instrument: VOA4.i

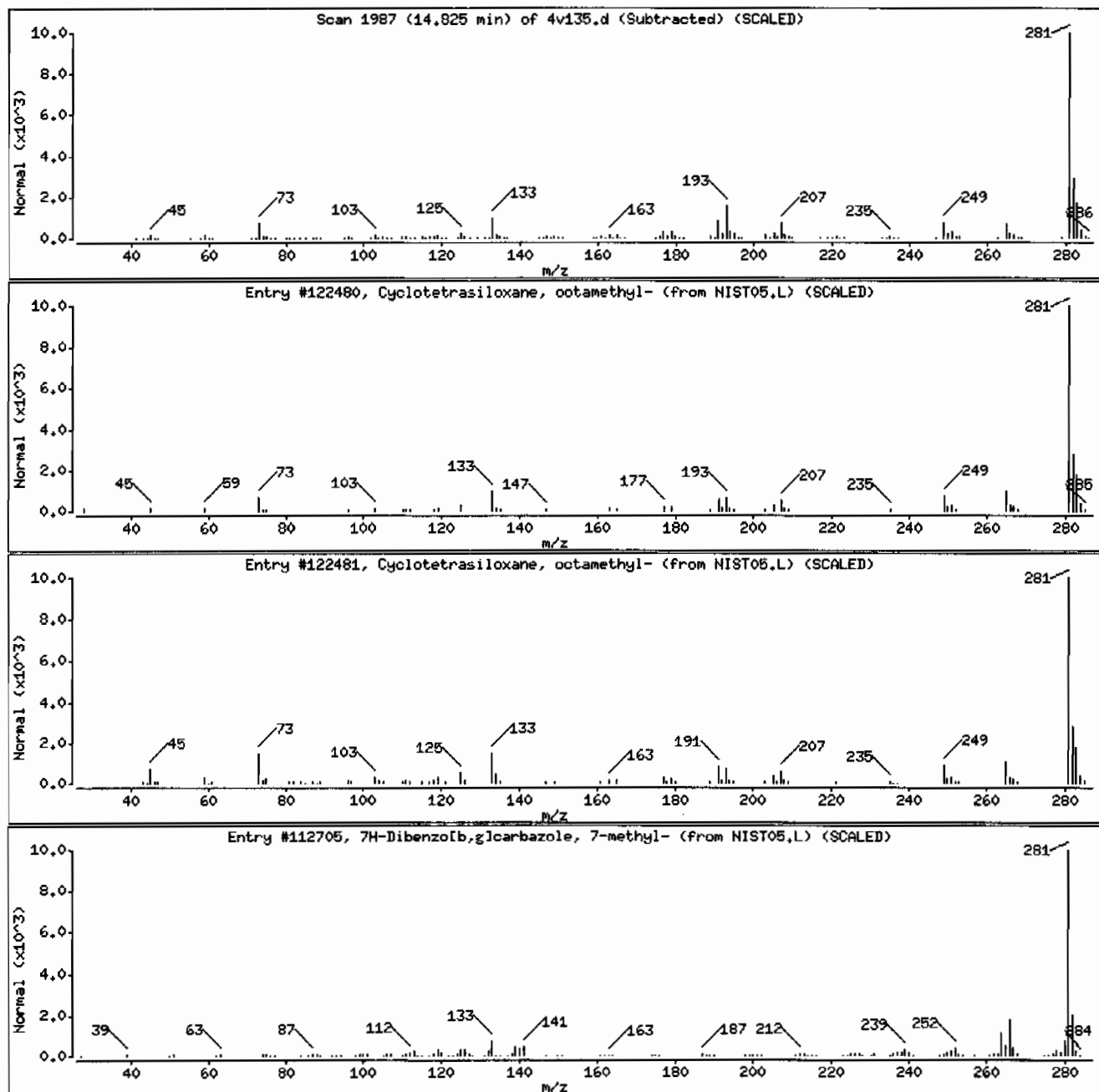
Sample Info: I245099001I94525411I\VOAF11I

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122481	72	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	64	C ₂₁ H ₁₅ N	281



Date : 26-JAN-2010 08:49

Client ID: RE15-10-7194

Instrument: VOA4.i

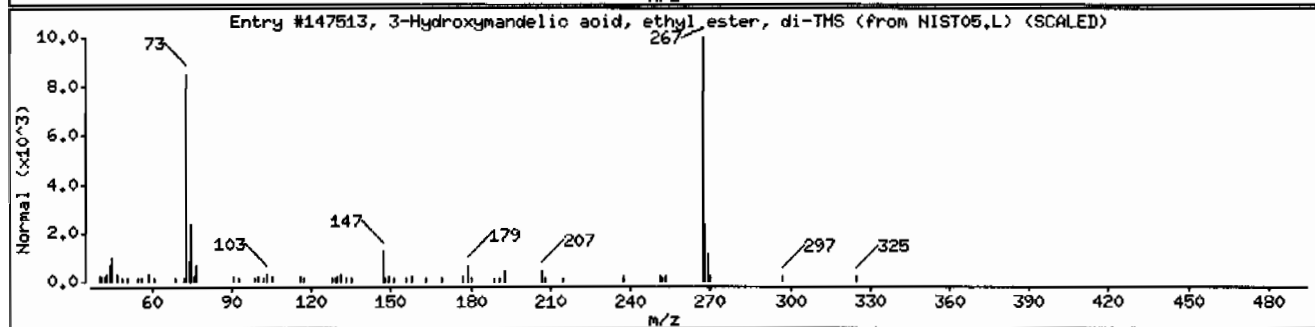
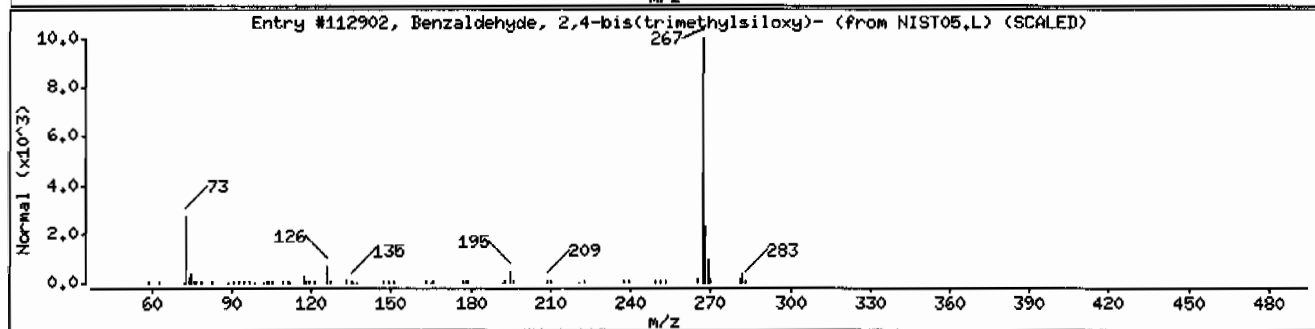
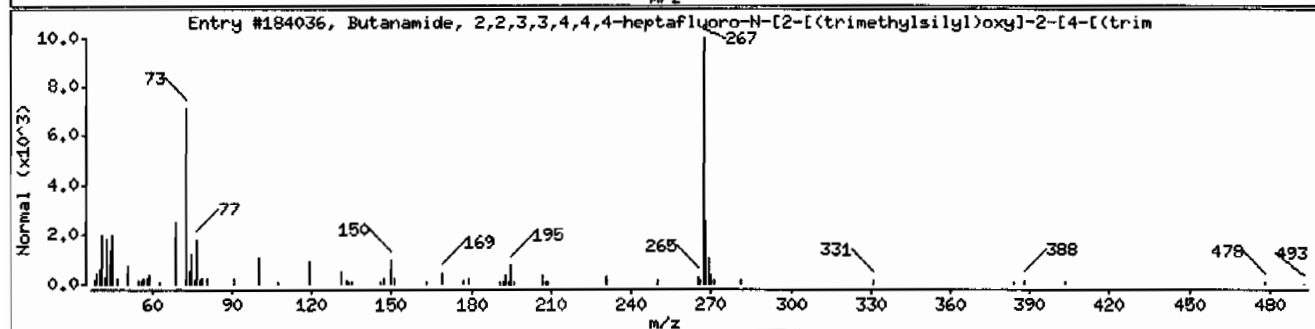
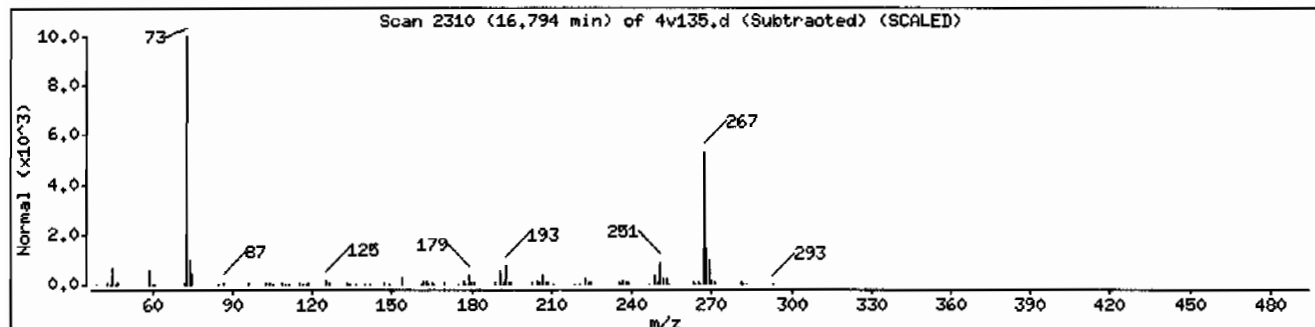
Sample Info: 12450990011945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-	55471-01-7	NIST05.L	184036	72	C ₁₈ H ₂₆ F ₇ N ₃ O ₃ Si ₂	429.3
Benzaldehyde, 2,4-bis(trimethylsiloxy)-	33617-38-8	NIST05.L	112902	59	C ₁₃ H ₂₂ O ₃ Si ₂	282
3-Hydroxymandelic acid, ethyl ester, di-	1000071-88-9	NIST05.L	147513	56	C ₁₆ H ₂₈ O ₄ Si ₂	340



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
Client ID: RE15-10-7195	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 10:13	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 22:55	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v138.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.334	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.334	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.334	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.334	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.334	1.11
67-64-1	Acetone	U	5.56	ug/kg	1.85	5.56
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
74-88-4	Iodomethane	U	5.56	ug/kg	1.78	5.56
75-09-2	Methylene chloride	U	5.56	ug/kg	2.22	5.56
75-15-0	Carbon disulfide	U	5.56	ug/kg	1.39	5.56
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.334	1.11
78-93-3	2-Butanone	U	5.56	ug/kg	1.67	5.56
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.334	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.334	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.367	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.334	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.334	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.334	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.334	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.334	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.367	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.334	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.334	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.334	1.11
108-10-1	4-Methyl-2-pentanone	U	5.56	ug/kg	1.39	5.56
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.334	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.334	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.334	1.11
591-78-6	2-Hexanone	U	5.56	ug/kg	1.67	5.56
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.334	1.11
127-18-4	Tetrachloroethylene	J	0.404	ug/kg	0.334	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.334	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.334	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.334	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7195	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 10:13	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:55	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v138.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.334	1.11
179601-23-1	m,p-Xylenes	J	0.783	ug/kg	0.334	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.334	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.334	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.334	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.334	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.334	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.334	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.334	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.334	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.334	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.334	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.334	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.334	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.334	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.334	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.56	ug/kg	1.78	5.56
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.334	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.334	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	93.3	ug/kg		J
	Unknown Siloxane	16.79	19	ug/kg		J

Data File: /chem/VOA4.i/012510v4/4v138.d
Report Date: 15-Feb-2010 14:13

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v138.d

Lab Smp Id: 245099004

Client Smp ID: RE15-10-7195

Inj Date : 26-JAN-2010 10:13

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099004|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 38

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.05680	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619 (1.000)	888840	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771 (1.000)	602106	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179 (1.000)	285099	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265 (0.967)	197436	40.6500	45.2
\$ 47 Toluene-d8	98	12.253	12.253 (0.890)	743017	48.5448	54.0
\$ 71 Bromofluorobenzene	95	14.953	14.953 (0.924)	301503	57.8274	64.3
56 Tetrachloroethylene	164	12.923	12.923 (0.938)	1577	0.36299	0.40 (a)
63 m,p-Xylenes	106	13.972	13.972 (1.015)	6198	0.70452	0.78 (a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v138.d

Report Date: 01/26/2010 16:11

Lab. ID: 245099004

SampleType: SAMPLE

Injection Date: 26-JAN-2010 10:13

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099004|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	11697	10.62	10.34	80-120	100	(T)
64	2145	10.62	10.34	2- 62	18	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	6811	12.25	12.02	80-120	100	(T)
43	4423	12.25	12.02	243-303	65	(QT)
100	490003	12.25	12.02	0- 60	7194	(QT)

56	Tetrachloroethylene			CAS#: 127-18-4		
164	1577	12.92	12.92	80-120	100	()
129	1414	12.92	12.92	58-118	90	()
131	1123	12.91	12.92	55-115	71	()

58	Ethylbenzene			CAS#: 100-41-4		
91	11803	13.97	13.86	80-120	100	(T)
106	6198	13.97	13.86	2- 62	53	(T)

64	o-Xylene			CAS#: 95-47-6		
106	6198	13.97	14.40	80-120	100	(T)
91	11803	13.97	14.40	177-237	190	(T)

63	m,p-Xylenes			CAS#: 179601-23-1		
106	6198	13.97	13.97	80-120	100	()
91	11803	13.97	13.97	168-228	190	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
65	Styrene		CAS#: 100-42-5			
104	5027	14.83	14.40	80-120	100	(T)
78	141	14.83	14.40	22- 82	3	(QT)

66	Bromoform		CAS#: 75-25-2			
173	1318	14.95	14.66	80-120	100	(T)
175	19528	14.95	14.66	20- 80	1481	(QT)

74	1,2,3-Trichloropropane		CAS#: 96-18-4			
110	5386	14.83	15.11	80-120	100	(T)
75	12884	14.83	15.11	252-312	239	(QT)
77	3081	14.80	15.11	61-121	57	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v138.d
 Lab Smp Id: 245099004 Client Smp ID: RE15-10-7195
 Inj Date : 26-JAN-2010 10:13
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099004|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 38
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	10.05680	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 61 Chlorobenzene-d5	13.771	1859835	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	1720738	50.000

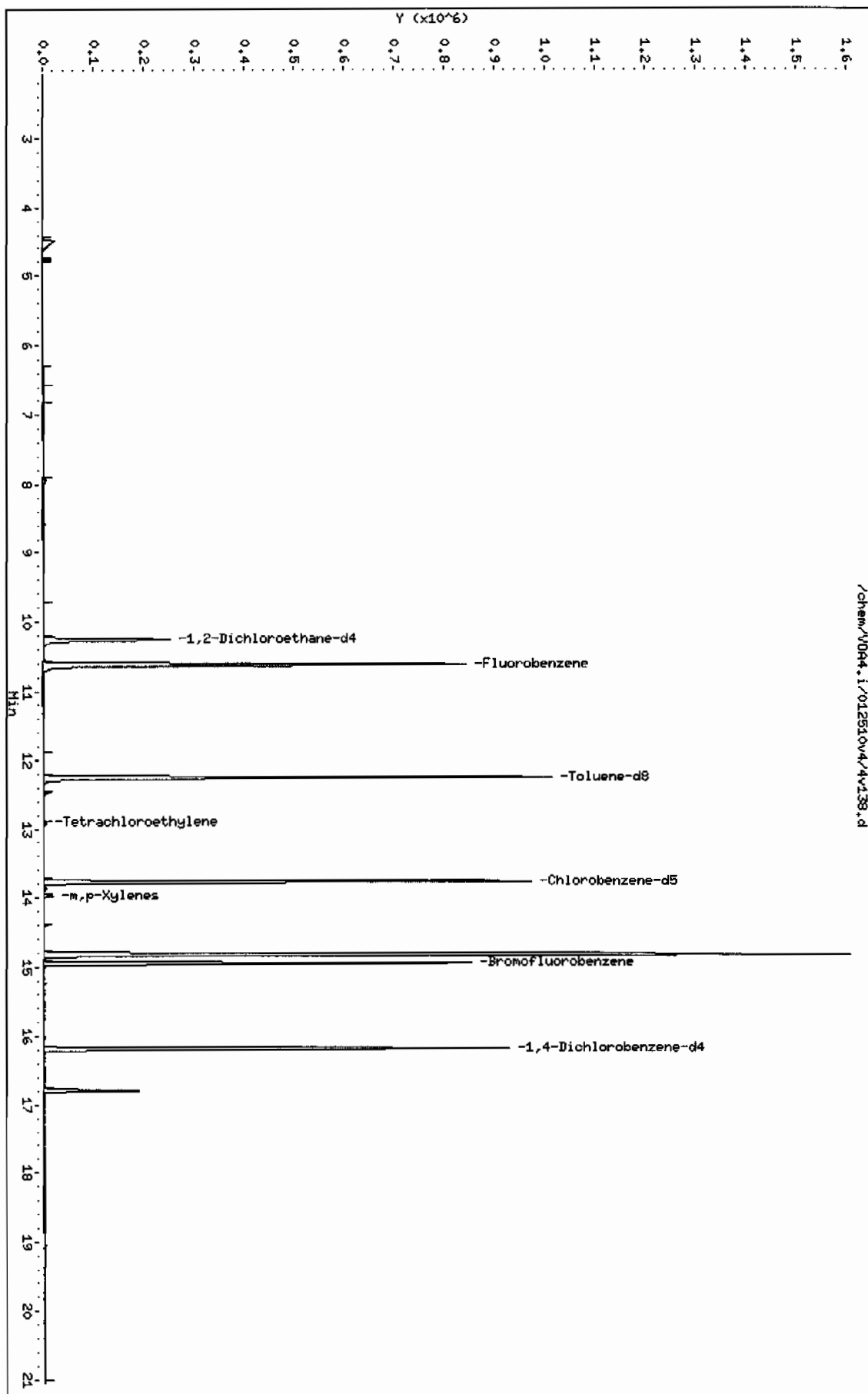
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane							
14.825	3123009	83.9592861	93.3	0		0	61

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Siloxane				CAS #:			
16.788	588979	17.1141447	19.0	0		0	86

Data File: /chem/VO04.i/012510v4/4v138.d
Date: 26-JAN-2010 10:13
Client ID: RE15-10-7195
Sample Info: 1245099004194525411\VO04.F11

Column phase: RTX-VOLATILES

Instrument: VO04.i
Operator: ACJ
Column diameter: 0.25



Date : 26-JAN-2010 10:13

Client ID: RE15-10-7195

Instrument: V0A4.i

Sample Info: 1245099004194525411V0AF11

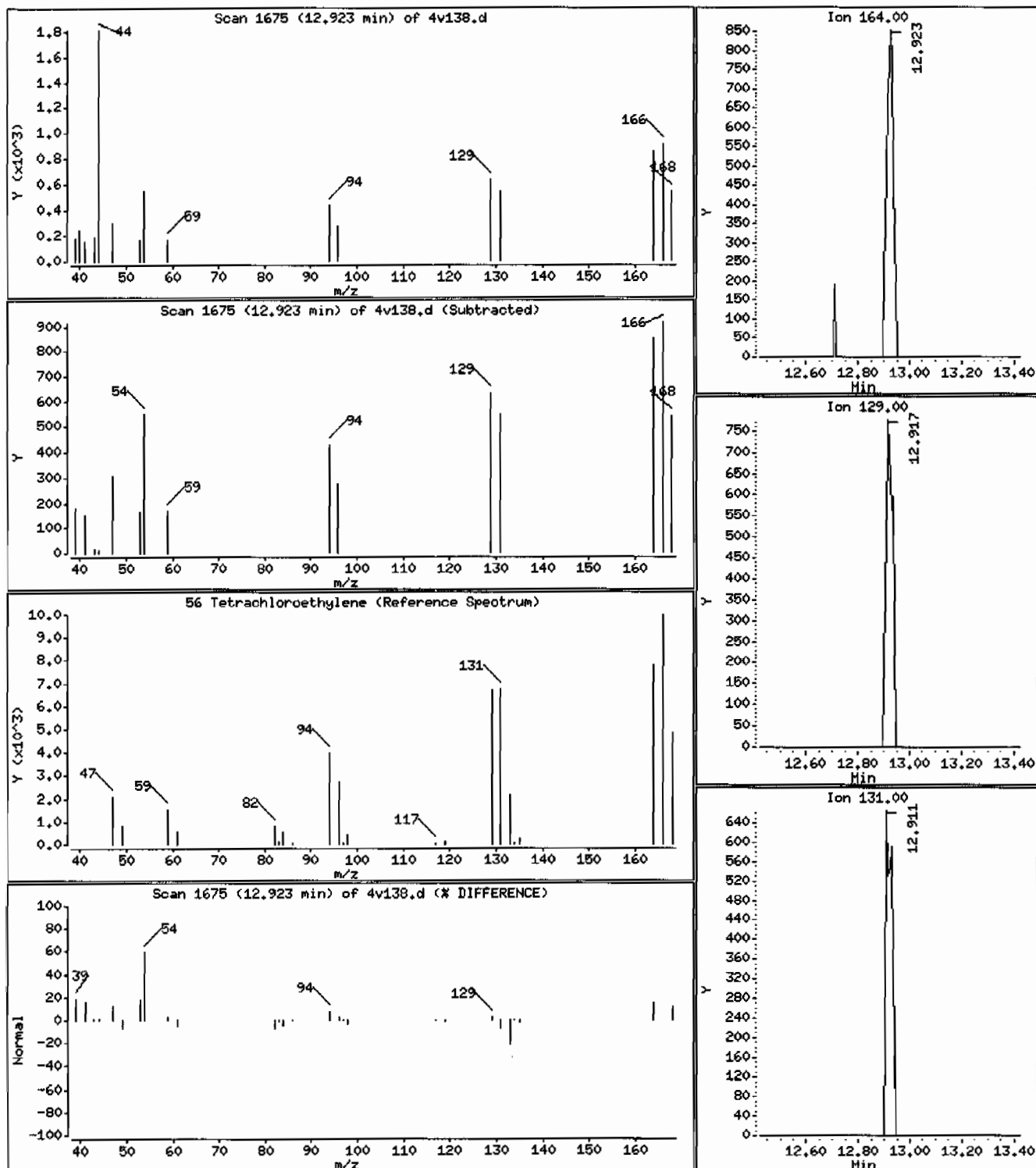
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

56 Tetrachloroethylene

Concentration: 0,40 ug/Kg



Date : 26-JAN-2010 10:13

Client ID: RE15-10-7195

Instrument: VOA4.i

Sample Info: 1245099004194525411|VOAF11|

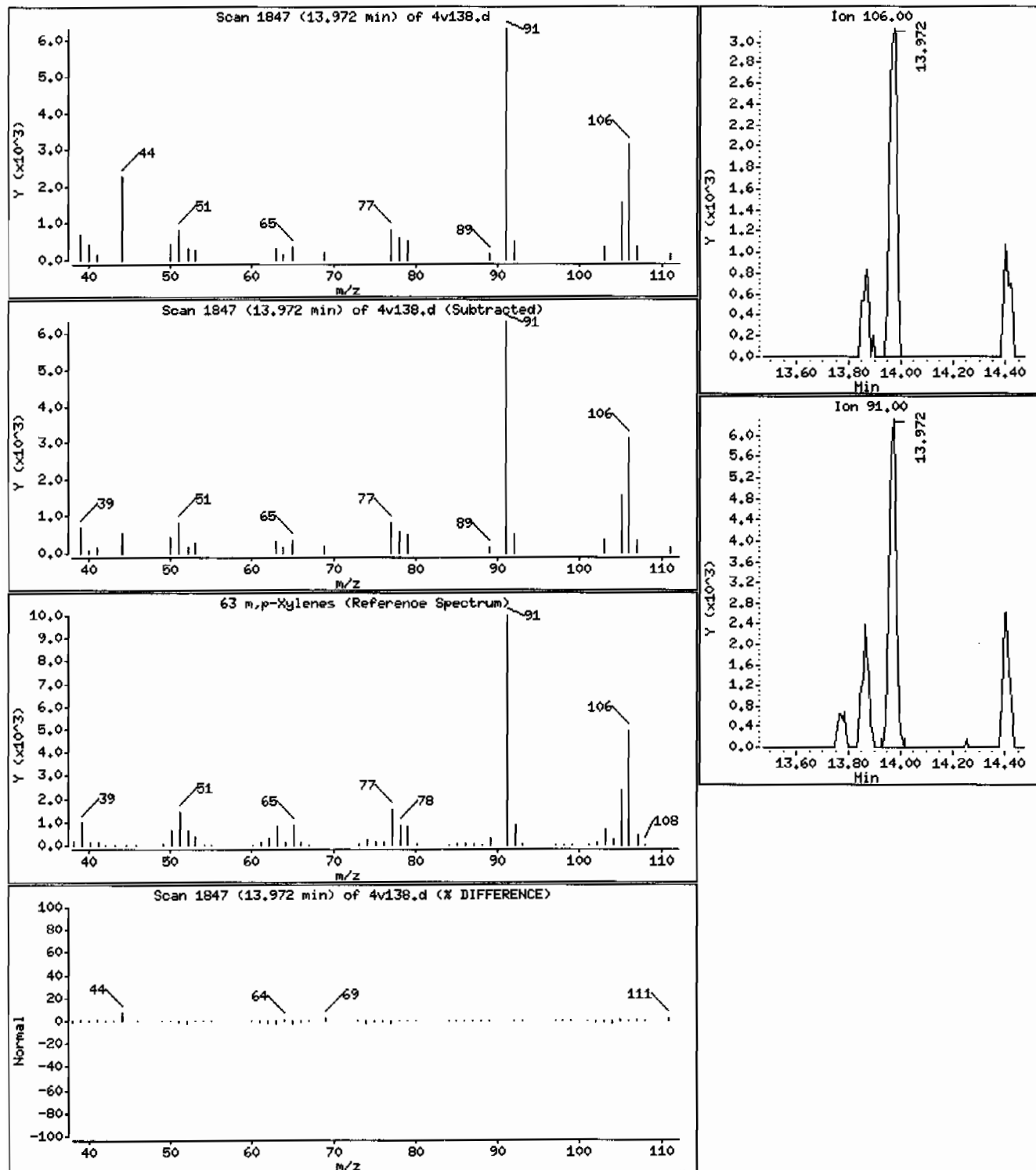
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.78 ug/Kg



Date : 26-JAN-2010 10:13

Client ID: RE15-10-7195

Instrument: VOA4.i

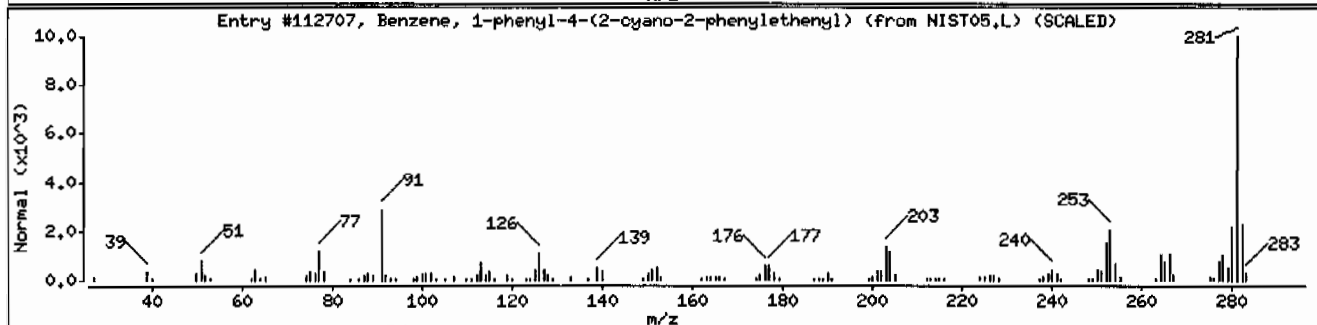
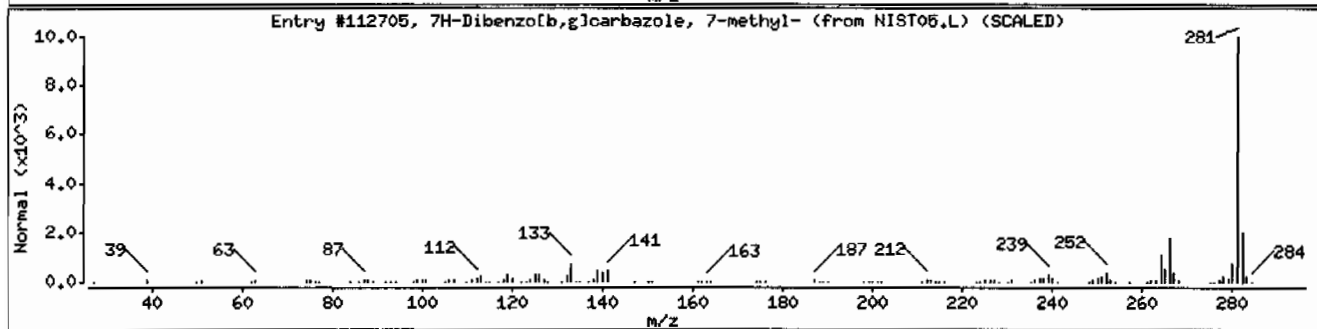
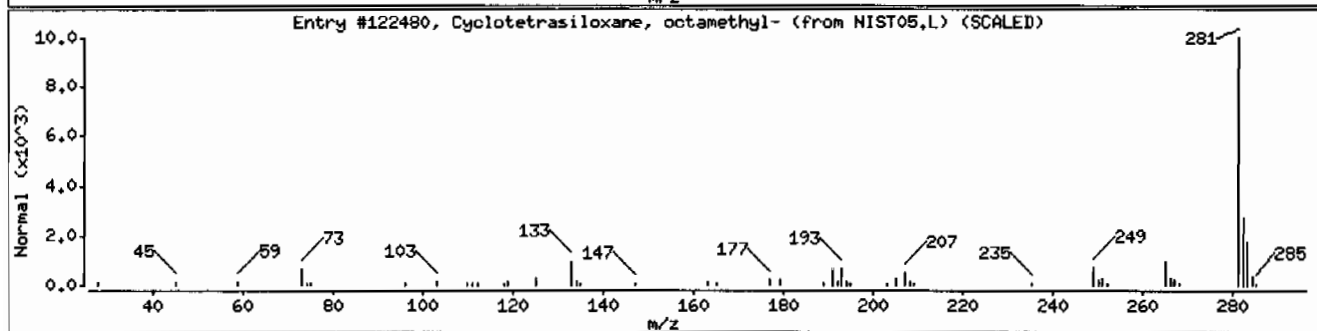
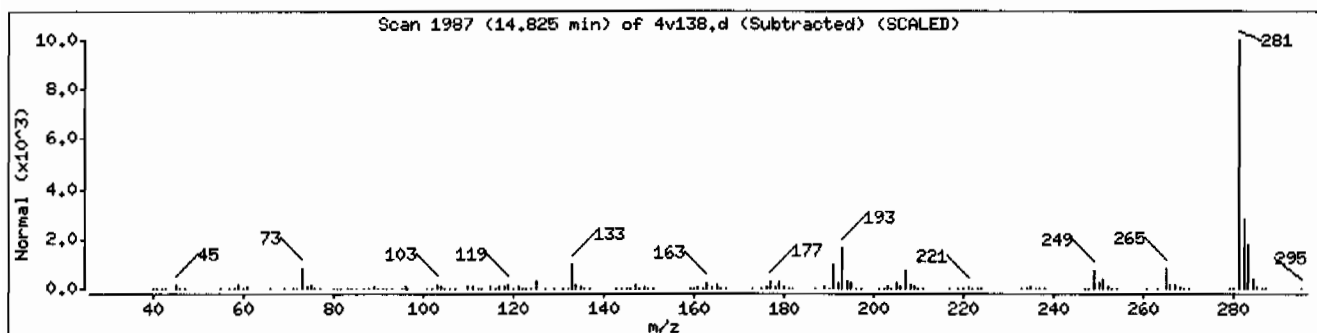
Sample Info: 12450990041945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C ₂₁ H ₁₅ N	281
Benzene, 1-phenyl-4-(2-cyano-2-phenylethyl)	27869-56-3	NIST05.L	112707	50	C ₂₁ H ₁₅ N	281



Date : 26-JAN-2010 10:13

Client ID: RE15-10-7195

Instrument: VOA4.i

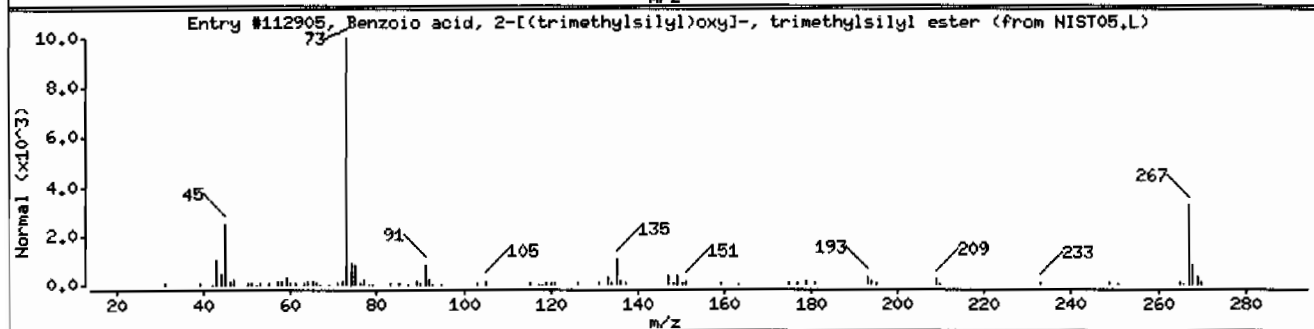
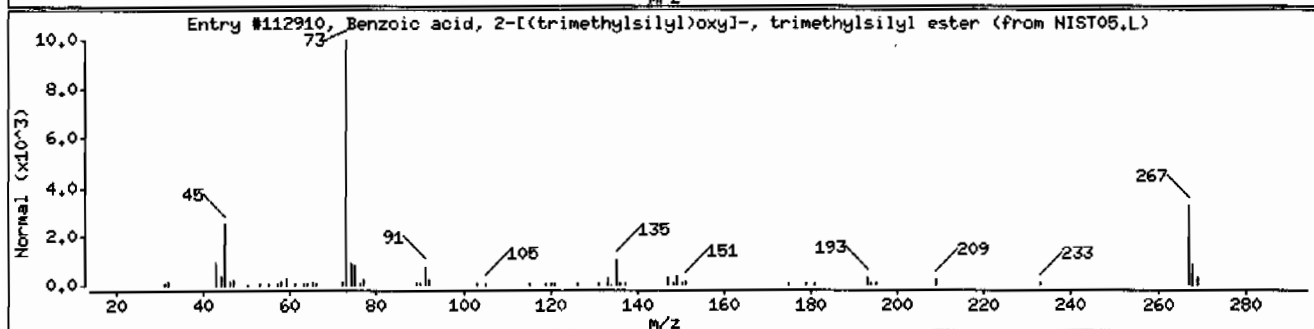
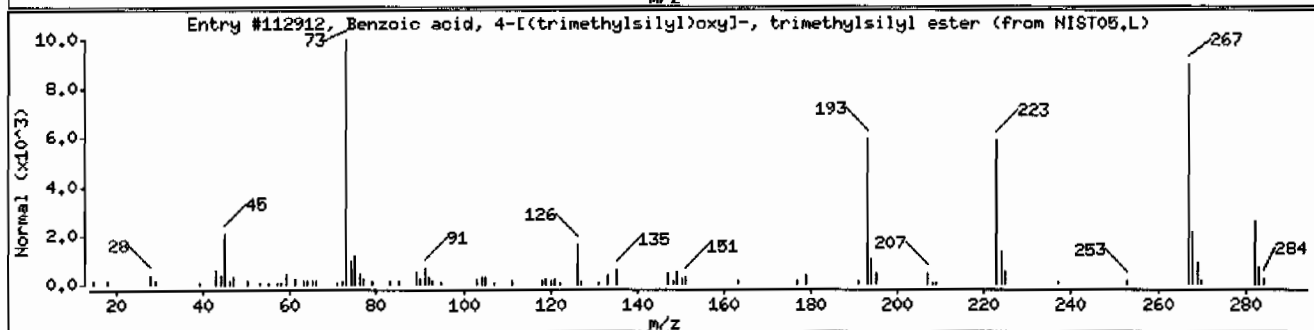
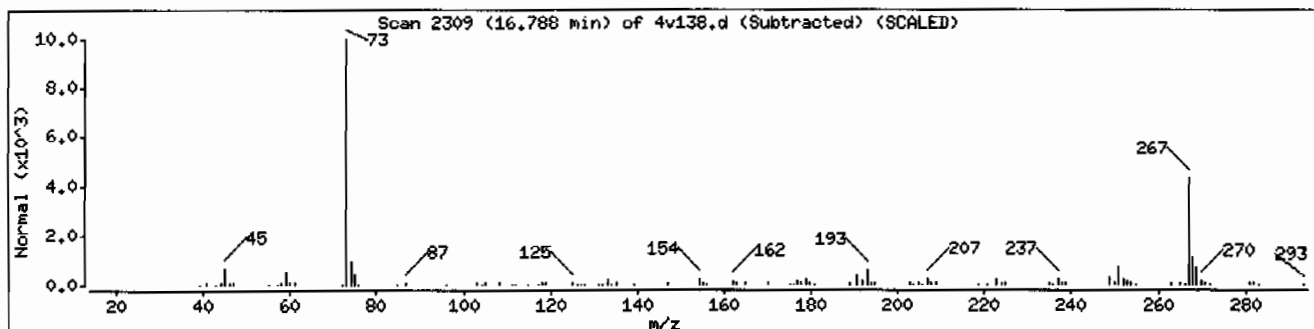
Sample Info: 1245099004194525411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 4-[(trimethylsilyl)oxy]-,	2078-13-9	NIST05.L	112912	40	C ₁₃ H ₂₂ O ₃ Si ₂	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112910	40	C ₁₃ H ₂₂ O ₃ Si ₂	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-,	3789-85-3	NIST05.L	112905	40	C ₁₃ H ₂₂ O ₃ Si ₂	282



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7196	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/27/2010 01:52	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 21:19	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v219.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.31	ug/kg	0.445	1.31
74-87-3	Chloromethane	U	1.31	ug/kg	0.393	1.31
75-01-4	Vinyl chloride	U	1.31	ug/kg	0.393	1.31
74-83-9	Bromomethane	U	1.31	ug/kg	0.393	1.31
75-00-3	Chloroethane	U	1.31	ug/kg	0.393	1.31
75-69-4	Trichlorofluoromethane	U	1.31	ug/kg	0.393	1.31
67-64-1	Acetone	U	6.55	ug/kg	2.17	6.55
75-35-4	1,1-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
74-88-4	Iodomethane	U	6.55	ug/kg	2.10	6.55
75-09-2	Methylene chloride	U	6.55	ug/kg	2.62	6.55
75-15-0	Carbon disulfide	U	6.55	ug/kg	1.64	6.55
156-60-5	trans-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
75-34-3	1,1-Dichloroethane	U	1.31	ug/kg	0.393	1.31
78-93-3	2-Butanone	U	6.55	ug/kg	1.97	6.55
156-59-2	cis-1,2-Dichloroethylene	U	1.31	ug/kg	0.393	1.31
594-20-7	2,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
67-66-3	Chloroform	U	1.31	ug/kg	0.393	1.31
74-97-5	Bromochloromethane	U	1.31	ug/kg	0.432	1.31
71-55-6	1,1,1-Trichloroethane	U	1.31	ug/kg	0.393	1.31
563-58-6	1,1-Dichloropropene	U	1.31	ug/kg	0.393	1.31
56-23-5	Carbon tetrachloride	U	1.31	ug/kg	0.393	1.31
107-06-2	1,2-Dichloroethane	U	1.31	ug/kg	0.393	1.31
71-43-2	Benzene	U	1.31	ug/kg	0.393	1.31
79-01-6	Trichloroethylene	U	1.31	ug/kg	0.432	1.31
78-87-5	1,2-Dichloropropane	U	1.31	ug/kg	0.393	1.31
75-27-4	Bromodichloromethane	U	1.31	ug/kg	0.393	1.31
74-95-3	Dibromomethane	U	1.31	ug/kg	0.393	1.31
108-10-1	4-Methyl-2-pentanone	U	6.55	ug/kg	1.64	6.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
108-88-3	Toluene	J	0.685	ug/kg	0.393	1.31
10061-02-6	trans-1,3-Dichloropropylene	U	1.31	ug/kg	0.393	1.31
79-00-5	1,1,2-Trichloroethane	U	1.31	ug/kg	0.393	1.31
591-78-6	2-Hexanone	U	6.55	ug/kg	1.97	6.55
142-28-9	1,3-Dichloropropane	U	1.31	ug/kg	0.393	1.31
127-18-4	Tetrachloroethylene	U	1.31	ug/kg	0.393	1.31
124-48-1	Dibromochloromethane	U	1.31	ug/kg	0.393	1.31
106-93-4	1,2-Dibromoethane	U	1.31	ug/kg	0.393	1.31
108-90-7	Chlorobenzene	U	1.31	ug/kg	0.393	1.31

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7196	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/27/2010 01:52	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 21:19	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v219.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.31	ug/kg	0.393	1.31
179601-23-1	m,p-Xylenes	J	0.574	ug/kg	0.393	2.62
95-47-6	o-Xylene	U	1.31	ug/kg	0.393	1.31
100-42-5	Styrene	U	1.31	ug/kg	0.393	1.31
75-25-2	Bromoform	U	1.31	ug/kg	0.393	1.31
79-34-5	1,1,2,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
96-18-4	1,2,3-Trichloropropane	U	1.31	ug/kg	0.393	1.31
108-86-1	Bromobenzene	U	1.31	ug/kg	0.393	1.31
103-65-1	n-Propylbenzene	U	1.31	ug/kg	0.393	1.31
95-49-8	2-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-82-8	Isopropylbenzene	U	1.31	ug/kg	0.393	1.31
108-67-8	1,3,5-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
106-43-4	4-Chlorotoluene	U	1.31	ug/kg	0.393	1.31
98-06-6	tert-Butylbenzene	U	1.31	ug/kg	0.393	1.31
95-63-6	1,2,4-Trimethylbenzene	U	1.31	ug/kg	0.393	1.31
135-98-8	sec-Butylbenzene	U	1.31	ug/kg	0.393	1.31
99-87-6	4-Isopropyltoluene	J	0.447	ug/kg	0.393	1.31
541-73-1	1,3-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
106-46-7	1,4-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31
104-51-8	n-Butylbenzene	U	1.31	ug/kg	0.393	1.31
96-12-8	1,2-Dibromo-3-chloropropane	U	1.31	ug/kg	0.393	1.31
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.55	ug/kg	2.10	6.55
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.31	ug/kg	0.393	1.31
95-50-1	1,2-Dichlorobenzene	U	1.31	ug/kg	0.393	1.31

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	7.17	ug/kg		J
2437-95-8	Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy	14.8	13.2	ug/kg	94	NJ
	Unknown Siloxane	16.79	8.91	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v219.d

Lab Smp Id: 245099005

Client Smp ID: RE15-10-7196

Inj Date : 27-JAN-2010 01:52

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099005|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Meth Date : 27-Jan-2010 15:20 slg

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 19

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	23.66860	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
	=====	==	=====	=====	=====		(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	868969		50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.770	(1.000)	557937		50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	224787		50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.266	10.259	(0.967)	192835		40.6106	53.2
\$ 47 Toluene-d8	98	12.254	12.252	(0.890)	700118		49.3632	64.7
\$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	258969		62.9962	82.5
50 Toluene	92	12.327	12.326	(0.895)	5703		0.52262	0.68 (a)
63 m,p-Xylenes	106	13.973	13.972	(1.015)	3570		0.43793	0.57 (a)
84 4-Isopropyltoluene	119	16.052	16.051	(0.992)	4572		0.34135	0.45 (a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v219.d

Report Date: 01/27/2010 16:07

Lab. ID: 245099005

SampleType: SAMPLE

Injection Date: 27-JAN-2010 01:52

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099005|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	10853	10.62	10.34	80-120	100	(T)
64	2090	10.62	10.34	3- 63	19	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	6535	12.25	12.02	80-120	100	(T)
43	4357	12.25	12.02	243-303	67	(QT)
100	464447	12.25	12.02	1- 61	7107	(QT)

50	Toluene			CAS#: 108-88-3		
92	5703	12.33	12.33	80-120	100	()
91	10443	12.33	12.33	139-199	183	()

58	Ethylbenzene			CAS#: 100-41-4		
91	6981	13.97	13.86	80-120	100	(T)
106	3570	13.97	13.86	2- 62	51	(T)

64	o-Xylene			CAS#: 95-47-6		
106	3570	13.97	14.40	80-120	100	(T)
91	6981	13.97	14.40	176-236	196	(T)

63	m,p-Xylenes			CAS#: 179601-23-1		
106	3570	13.97	13.97	80-120	100	()
91	6981	13.97	13.97	165-225	196	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
66 Bromoform		CAS#: 75-25-2				
173	903	14.96	14.66	80-120	100	(T)
175	16304	14.95	14.66	18- 78	1805	(QT)

67 Isopropylbenzene		CAS#: 98-82-8				
105	8715	14.80	14.76	80-120	100	()
120	588	14.79	14.76	0- 57	7	()

76 n-Propylbenzene		CAS#: 103-65-1				
91	31617	14.79	15.18	80-120	100	(T)
120	588	14.79	15.18	0- 53	2	(T)

81 tert-Butylbenzene		CAS#: 98-06-6				
119	4572	16.05	15.70	80-120	100	(T)
91	2451	16.02	15.70	41-101	54	(T)
134	1234	16.05	15.70	0- 53	27	(T)

84 4-Isopropyltoluene		CAS#: 99-87-6				
119	4572	16.05	16.05	80-120	100	()
134	1234	16.05	16.06	0- 58	27	()
91	2451	16.02	16.05	0- 54	54	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
Data file : /chem/VOA4.i/012610v4/4v219.d
Lab Smp Id: 245099005 Client Smp ID: RE15-10-7196
Inj Date : 27-JAN-2010 01:52
Operator : ACJ Inst ID: VOA4.i
Smp Info : |245099005|945254|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
Meth Date : 27-Jan-2010 15:20 slg Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	23.66860	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.620	1866131	50.000
* 61 Chlorobenzene-d5	13.772	1727403	50.000
* 86 1,4-Dichlorobenzene-d4	16.180	1349621	50.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ug/l)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
4.496	204342	5.47502448	7.2	0		0	40

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ug/l)	FINAL(ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethy					CAS #: 2437-95-8		
14.796	348337	10.0826914	13.2	94	NIST05.L	15376	61
Unknown Siloxane					CAS #:		
16.789	183656	6.80399038	8.9	0		0	86

Data File: /chem/V004.i/012610v4/4v219.d

Date : 27-JAN-2010 01:52

Client ID: REIS-10-7196

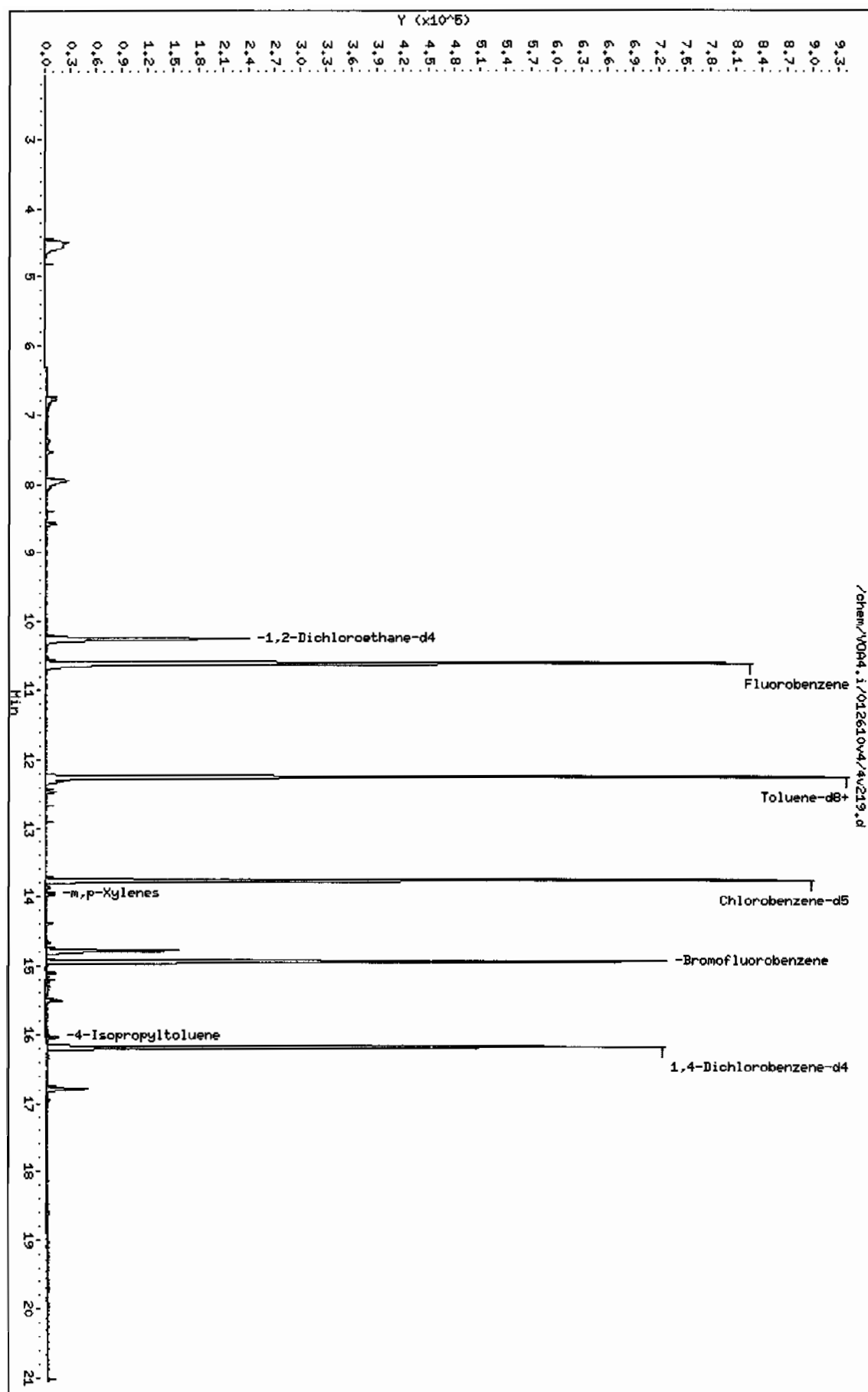
Sample Info: 1245099005194525411V004F11.1

Column phase: RTX-VOLATILES

Instrument: V004.i

Operator: RCJ

Column diameter: 0.25



Date : 27-JAN-2010 01:52

Client ID: RE15-10-7196

Instrument: VOA4.i

Sample Info: 1245099005194525411\VOAF111

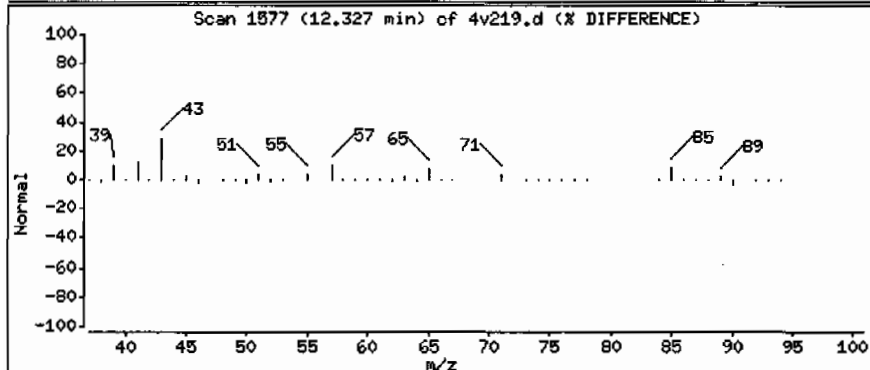
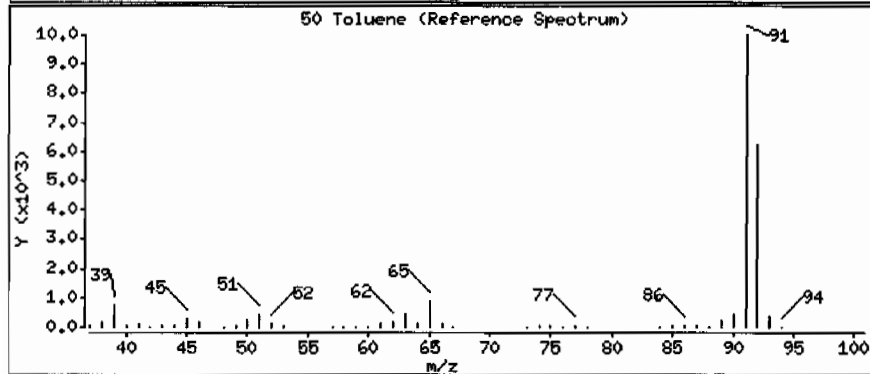
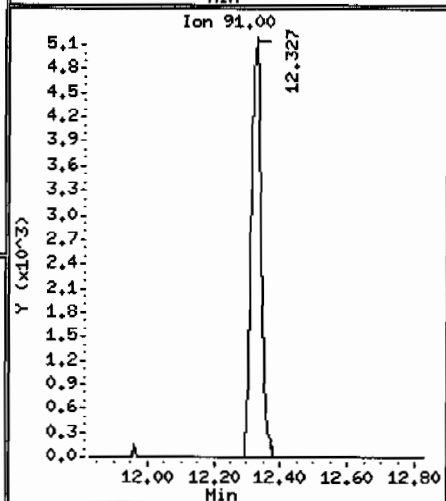
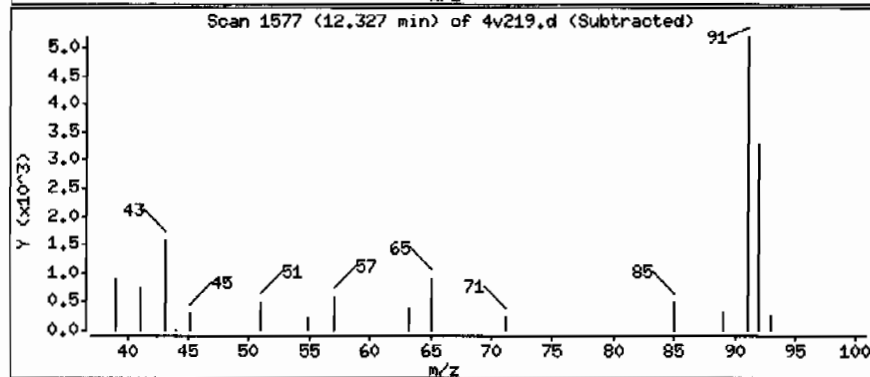
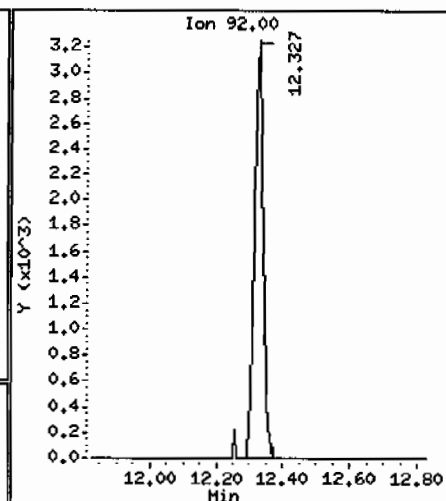
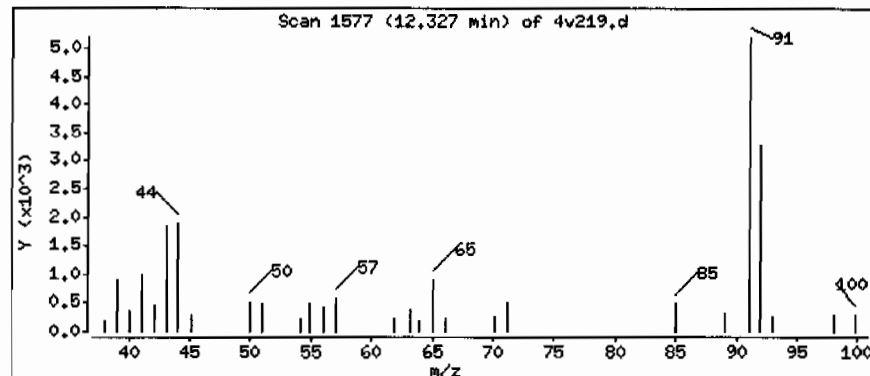
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

50 Toluene

Concentration: 0.68 ug/Kg



Date : 27-JAN-2010 01:52

Client ID: RE15-10-7196

Instrument: VOA4.i

Sample Info: 12450990051945254111VOAF111

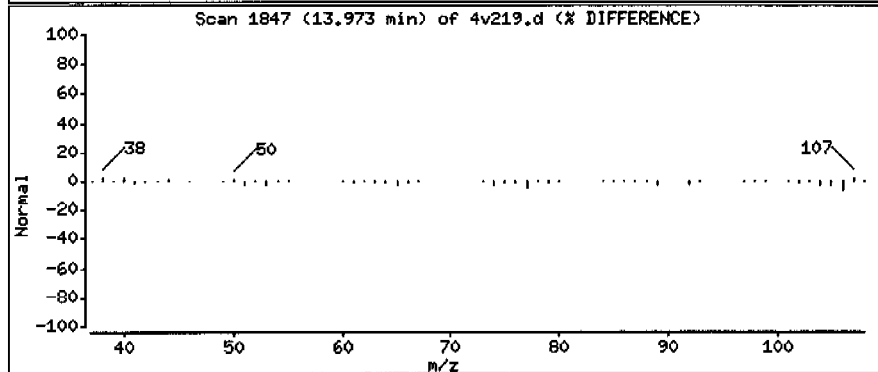
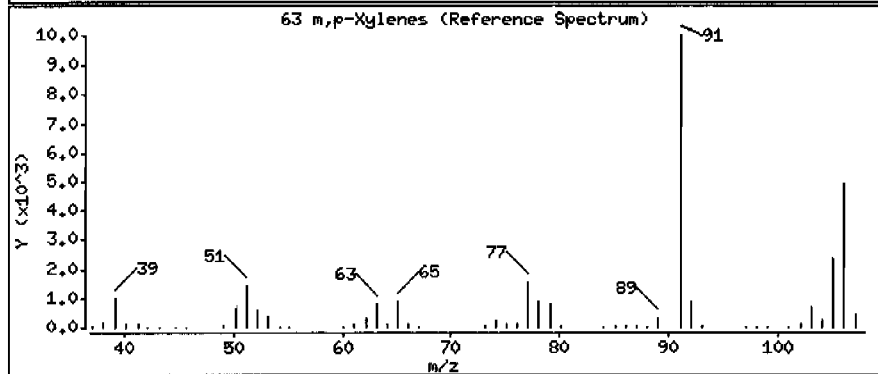
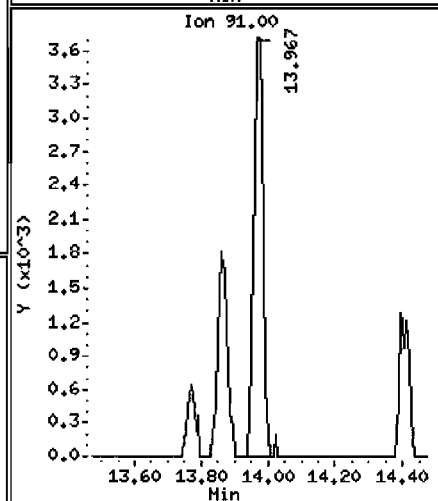
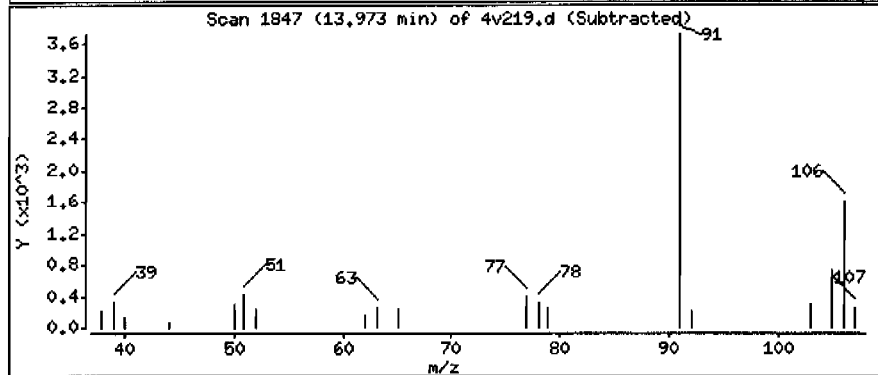
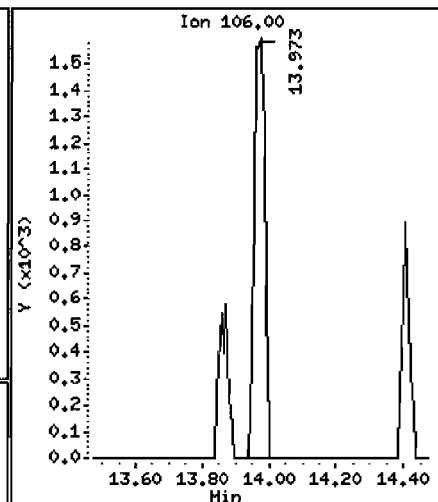
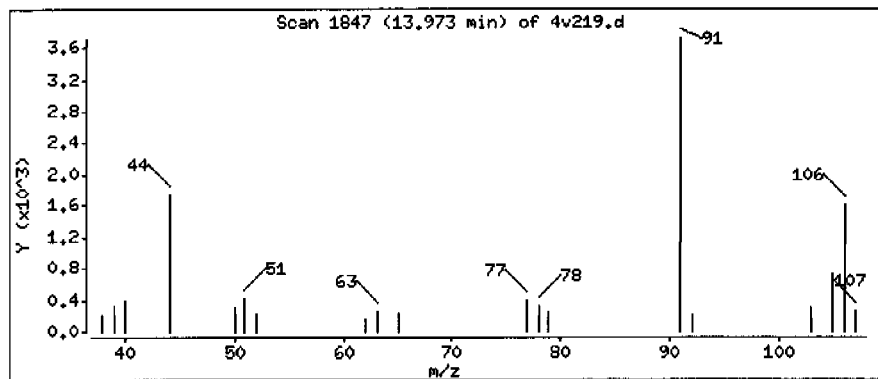
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.57 ug/Kg



Date : 27-JAN-2010 01:52

Client ID: RE15-10-7196

Instrument: VOA4.i

Sample Info: I245099005I945254I1I1VOAF11I

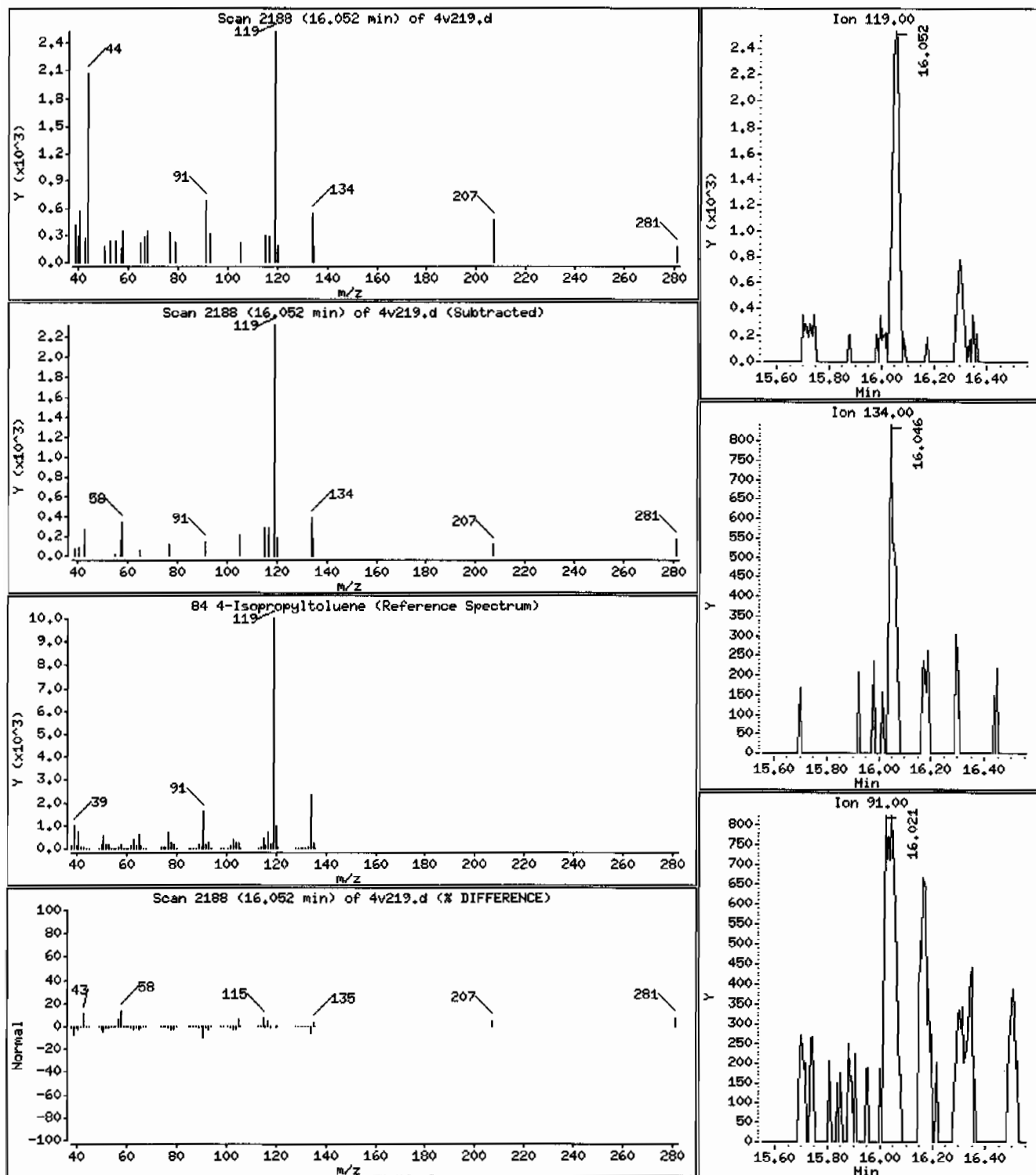
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

84 4-Isopropyltoluene

Concentration: 0.45 ug/Kg



Data File: /chem/VOA4.i/012610v4/4v219.d

Page 1

Date : 27-JAN-2010 01:52

Client ID: RE15-10-7196

Instrument: VOA4.i

Sample Info: I245099005I945254I1I\VOAFI1I

Operator: ACJ

Column phase: RTX-VOLATILES

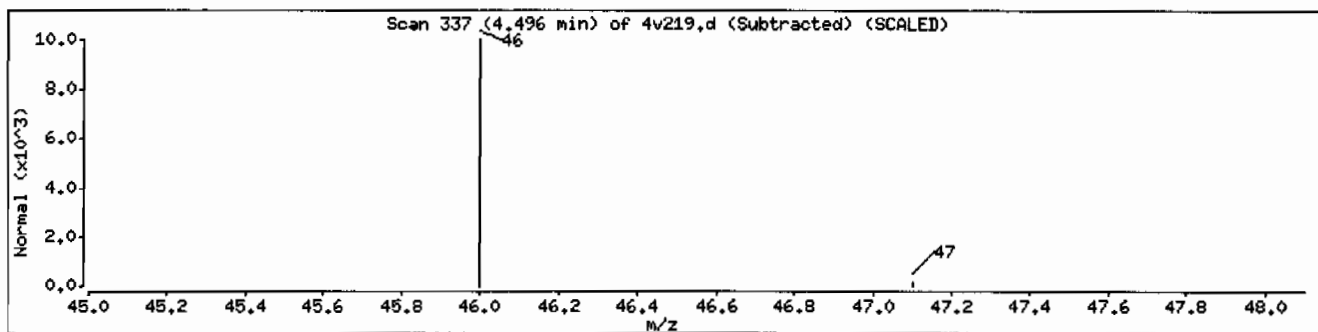
Column diameter: 0.25

Library Search Compound Match

CAS Number	Library	Entry	Quality	Formula	Weight
------------	---------	-------	---------	---------	--------

Unknown

0	0	0			
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Date : 27-JAN-2010 01:52

Client ID: RE15-10-7196

Instrument: VDA4.i

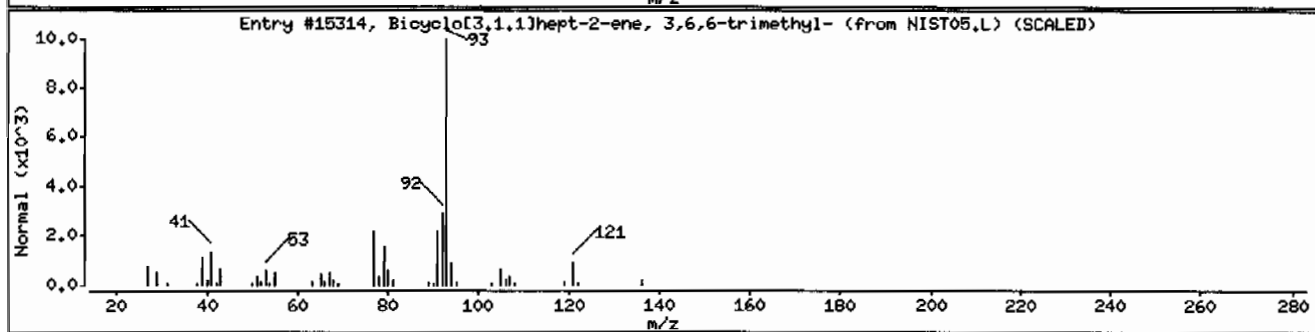
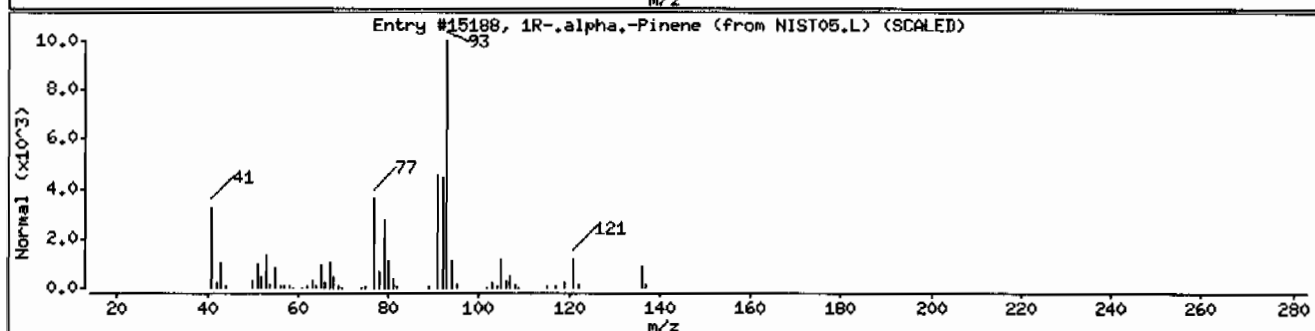
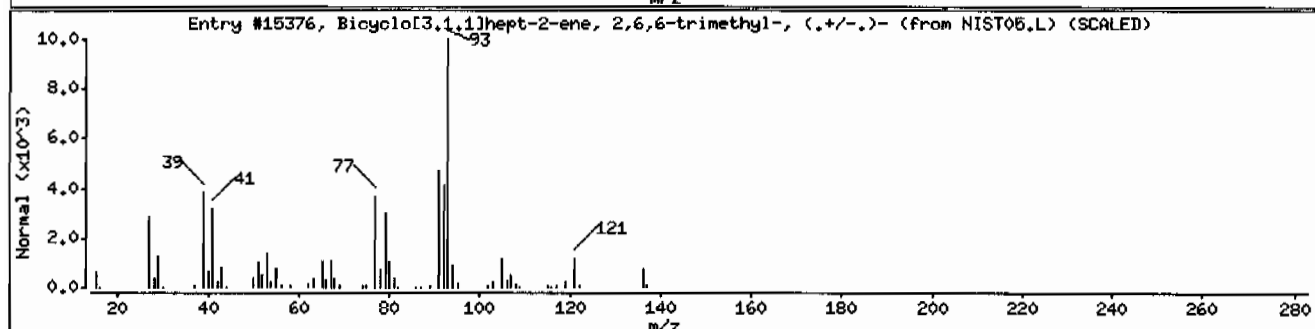
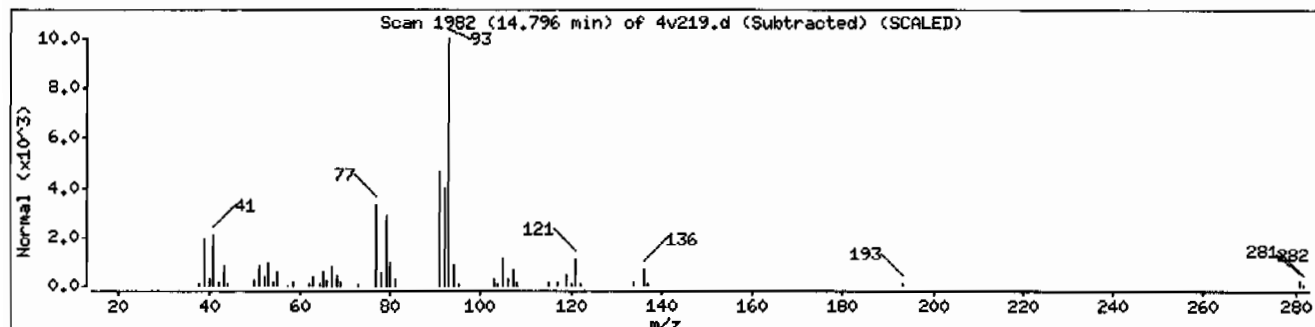
Sample Info: 12450990051945254111VDAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl	2437-95-8	NIST05.L	15376	94	C ₁₀ H ₁₆	136
1R-,alpha.-Pinene	7785-70-8	NIST05.L	15188	93	C ₁₀ H ₁₆	136
Bicyclo[3.1.1]hept-2-ene, 3,6,6-trimethyl	4889-83-2	NIST05.L	15314	91	C ₁₀ H ₁₆	136



Date : 27-JAN-2010 01:52

Client ID: RE15-10-7196

Instrument: V0A4.i

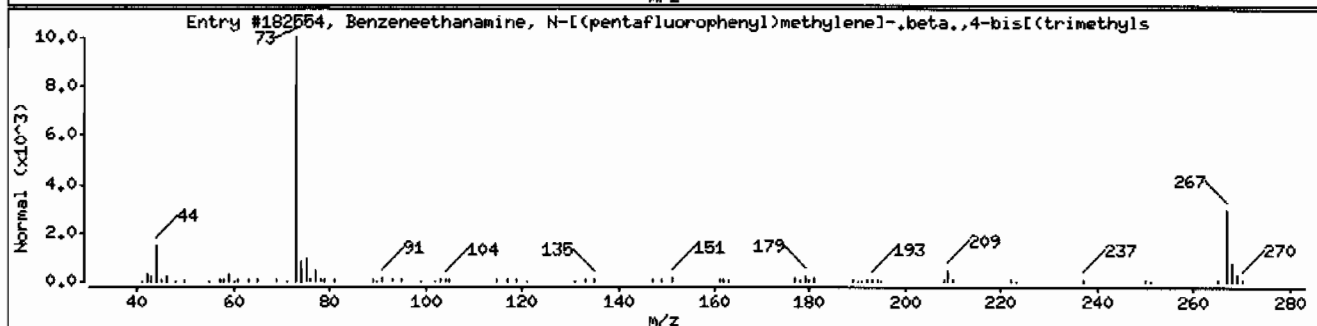
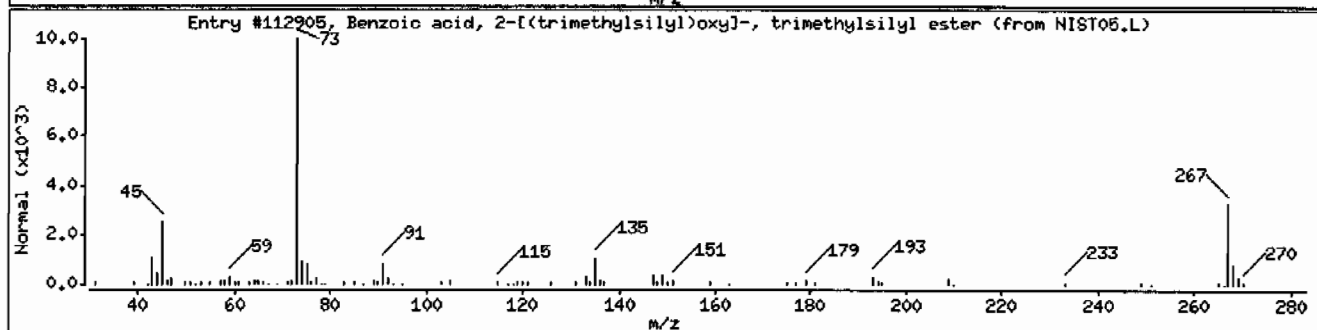
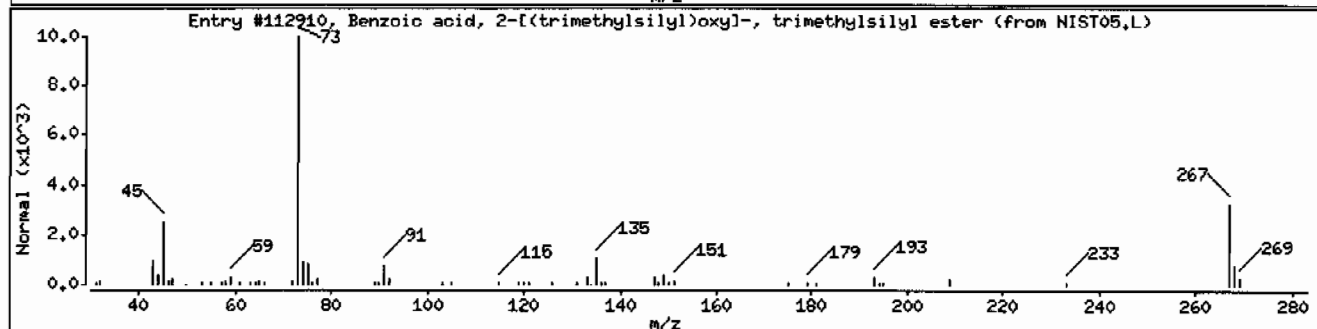
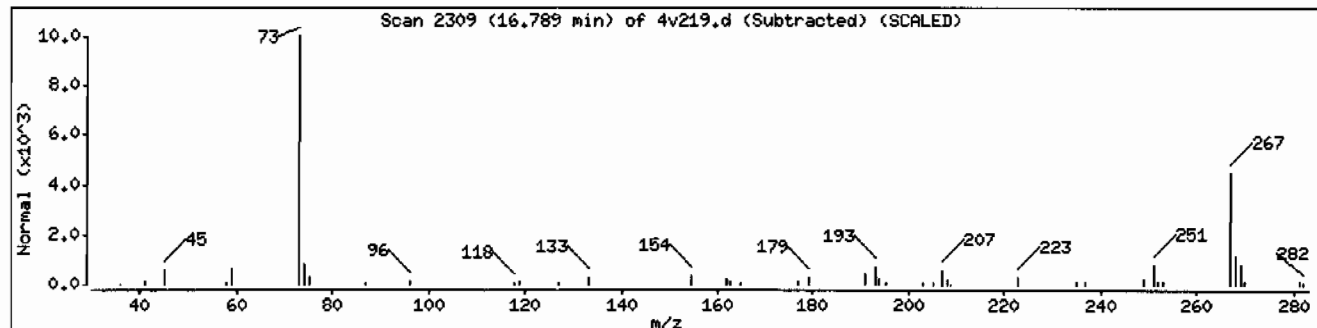
Sample Info: 1245099005194525411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 2-[(trimethylsilyl)oxy]-	3789-85-3	NIST05.L	112910	64	C ₁₃ H ₂₂ O ₃ Si ₂	282
Benzoic acid, 2-[(trimethylsilyl)oxy]-	3789-85-3	NIST05.L	112905	50	C ₁₃ H ₂₂ O ₃ Si ₂	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	50	C ₂₁ H ₂₆ F ₅ N ₂ Si ₂	405



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7197
 Batch ID: 945254
 Run Date: 01/26/2010 11:07
 Prep Date: 01/25/2010 22:57
 Data File: 4v140.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.17	ug/kg	0.397	1.17
74-87-3	Chloromethane	U	1.17	ug/kg	0.351	1.17
75-01-4	Vinyl chloride	U	1.17	ug/kg	0.351	1.17
74-83-9	Bromomethane	U	1.17	ug/kg	0.351	1.17
75-00-3	Chloroethane	U	1.17	ug/kg	0.351	1.17
75-69-4	Trichlorofluoromethane	U	1.17	ug/kg	0.351	1.17
67-64-1	Acetone	U	5.84	ug/kg	1.94	5.84
75-35-4	1,1-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
74-88-4	Iodomethane	U	5.84	ug/kg	1.87	5.84
75-09-2	Methylene chloride	U	5.84	ug/kg	2.34	5.84
75-15-0	Carbon disulfide	U	5.84	ug/kg	1.46	5.84
156-60-5	trans-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
75-34-3	1,1-Dichloroethane	U	1.17	ug/kg	0.351	1.17
78-93-3	2-Butanone	U	5.84	ug/kg	1.75	5.84
156-59-2	cis-1,2-Dichloroethylene	U	1.17	ug/kg	0.351	1.17
594-20-7	2,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
67-66-3	Chloroform	U	1.17	ug/kg	0.351	1.17
74-97-5	Bromochloromethane	U	1.17	ug/kg	0.386	1.17
71-55-6	1,1,1-Trichloroethane	U	1.17	ug/kg	0.351	1.17
563-58-6	1,1-Dichloropropene	U	1.17	ug/kg	0.351	1.17
56-23-5	Carbon tetrachloride	U	1.17	ug/kg	0.351	1.17
107-06-2	1,2-Dichloroethane	U	1.17	ug/kg	0.351	1.17
71-43-2	Benzene	U	1.17	ug/kg	0.351	1.17
79-01-6	Trichloroethylene	U	1.17	ug/kg	0.386	1.17
78-87-5	1,2-Dichloropropane	U	1.17	ug/kg	0.351	1.17
75-27-4	Bromodichloromethane	U	1.17	ug/kg	0.351	1.17
74-95-3	Dibromomethane	U	1.17	ug/kg	0.351	1.17
108-10-1	4-Methyl-2-pentanone	U	5.84	ug/kg	1.46	5.84
10061-01-5	cis-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
108-88-3	Toluene	J	0.405	ug/kg	0.351	1.17
10061-02-6	trans-1,3-Dichloropropylene	U	1.17	ug/kg	0.351	1.17
79-00-5	1,1,2-Trichloroethane	U	1.17	ug/kg	0.351	1.17
591-78-6	2-Hexanone	U	5.84	ug/kg	1.75	5.84
142-28-9	1,3-Dichloropropane	U	1.17	ug/kg	0.351	1.17
127-18-4	Tetrachloroethylene	J	0.420	ug/kg	0.351	1.17
124-48-1	Dibromochloromethane	U	1.17	ug/kg	0.351	1.17
106-93-4	1,2-Dibromoethane	U	1.17	ug/kg	0.351	1.17
108-90-7	Chlorobenzene	U	1.17	ug/kg	0.351	1.17

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

Matrix: R
 %Moisture: 14.4
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL
 Level: LOW

Client ID: RE15-10-7197
 Batch ID: 945254
 Run Date: 01/26/2010 11:07
 Prep Date: 01/25/2010 22:57
 Data File: 4v140.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.17	ug/kg	0.351	1.17
179601-23-1	m,p-Xylenes	J	0.789	ug/kg	0.351	2.34
95-47-6	o-Xylene	U	1.17	ug/kg	0.351	1.17
100-42-5	Styrene	U	1.17	ug/kg	0.351	1.17
75-25-2	Bromoform	U	1.17	ug/kg	0.351	1.17
79-34-5	1,1,2,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
96-18-4	1,2,3-Trichloropropane	U	1.17	ug/kg	0.351	1.17
108-86-1	Bromobenzene	U	1.17	ug/kg	0.351	1.17
103-65-1	n-Propylbenzene	U	1.17	ug/kg	0.351	1.17
95-49-8	2-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-82-8	Isopropylbenzene	U	1.17	ug/kg	0.351	1.17
108-67-8	1,3,5-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
106-43-4	4-Chlorotoluene	U	1.17	ug/kg	0.351	1.17
98-06-6	tert-Butylbenzene	U	1.17	ug/kg	0.351	1.17
95-63-6	1,2,4-Trimethylbenzene	U	1.17	ug/kg	0.351	1.17
135-98-8	sec-Butylbenzene	U	1.17	ug/kg	0.351	1.17
99-87-6	4-Isopropyltoluene	U	1.17	ug/kg	0.351	1.17
541-73-1	1,3-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
106-46-7	1,4-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17
104-51-8	n-Butylbenzene	U	1.17	ug/kg	0.351	1.17
96-12-8	1,2-Dibromo-3-chloropropane	U	1.17	ug/kg	0.351	1.17
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.84	ug/kg	1.87	5.84
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.17	ug/kg	0.351	1.17
95-50-1	1,2-Dichlorobenzene	U	1.17	ug/kg	0.351	1.17

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Siloxane	14.83	44.6	ug/kg		J
	Unknown Siloxane	16.79	25	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v140.d

Lab Smp Id: 245099006

Client Smp ID: RE15-10-7197

Inj Date : 26-JAN-2010 11:07

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099006|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 40

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.44340	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	887340	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	590982	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	274703	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	194547	40.1229	46.9
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	734226	48.8734	57.1
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	290924	57.9100	67.7
50 Toluene	92	12.332	12.326	(0.896)	4004	0.34641	0.40(a)
56 Tetrachloroethylene	164	12.917	12.923	(0.938)	1531	0.35903	0.42(a)
63 m,p-Xylenes	106	13.966	13.972	(1.014)	5830	0.67517	0.79(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v140.d

Report Date: 01/26/2010 16:12

Lab. ID: 245099006

SampleType: SAMPLE

Injection Date: 26-JAN-2010 11:07

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099006|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	11678	10.61	10.34	80-120	100	(T)
64	2332	10.62	10.34	2- 62	20	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	6656	12.25	12.02	80-120	100	(T)
43	4486	12.25	12.02	243-303	67	(QT)
100	481492	12.25	12.02	0- 60	7233	(QT)

50	Toluene			CAS#: 108-88-3		
92	4004	12.33	12.33	80-120	100	()
91	6987	12.33	12.33	138-198	174	()

56	Tetrachloroethylene			CAS#: 127-18-4		
164	1531	12.92	12.92	80-120	100	()
129	1524	12.92	12.92	58-118	100	()
131	1241	12.92	12.92	55-115	81	()

58	Ethylbenzene			CAS#: 100-41-4		
91	11420	13.97	13.86	80-120	100	(T)
106	5830	13.97	13.86	2- 62	51	(T)

64	o-Xylene			CAS#: 95-47-6		
106	5830	13.97	14.40	80-120	100	(T)
91	11420	13.97	14.40	177-237	196	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
63 m,p-Xylenes			CAS#:	179601-23-1		
106	5830	13.97	13.97	80-120	100	()
91	11420	13.97	13.97	168-228	196	()

66 Bromoform			CAS#:	75-25-2		
173	1399	14.95	14.66	80-120	100	(T)
175	18966	14.95	14.66	20- 80	1355	(QT)

74 1,2,3-Trichloropropane			CAS#:	96-18-4		
110	2656	14.82	15.11	80-120	100	(T)
75	6038	14.82	15.11	252-312	227	(QT)
77	514	14.82	15.11	61-121	19	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
Data file : /chem/VOA4.i/012510v4/4v140.d
Lab Smp Id: 245099006 Client Smp ID: RE15-10-7197
Inj Date : 26-JAN-2010 11:07
Operator : ACJ Inst ID: VOA4.i
Smp Info : |245099006|945254|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	14.44340	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 61 Chlorobenzene-d5	13.771	1813982	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	1666242	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ug/l)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	====	=====	=====	=====
Unknown Siloxane							
14.825	1384521	38.1624800	44.6	0		0	61

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL(ug/l)	FINAL(ug/Kg)		LIBRARY	LIB ENTRY	
16.794	713096	21.3983434	25.0	0		0	86

Unknown Siloxane CAS #:

Data File: /chem/V004.i/012510v4/4v140.d
Date: 26-JAN-2010 11:07
Client ID: RE15-10-7197
Sample Info: 1245099006194525411.V004.11

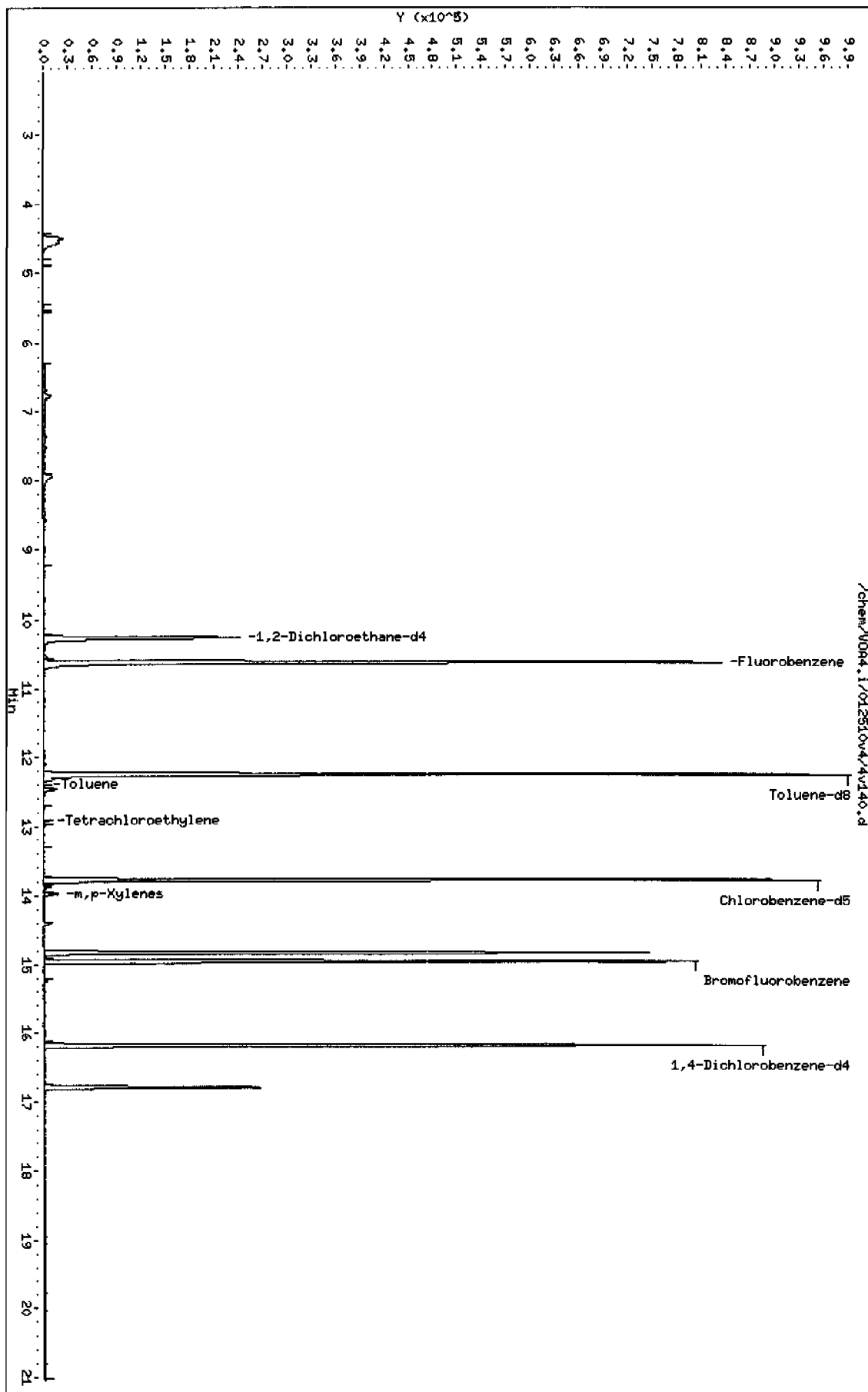
Column phase: RTX-VOLATILES

Instrument: V004.1

Operator: NCJ

Column diameter: 0.25

Page 1



Date : 26-JAN-2010 11:07

Client ID: RE15-10-7197

Instrument: VOA4.i

Sample Info: 12450990061945254111VOAF111

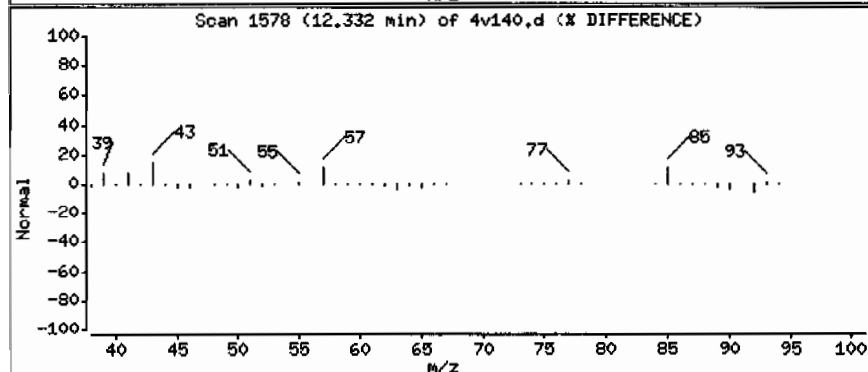
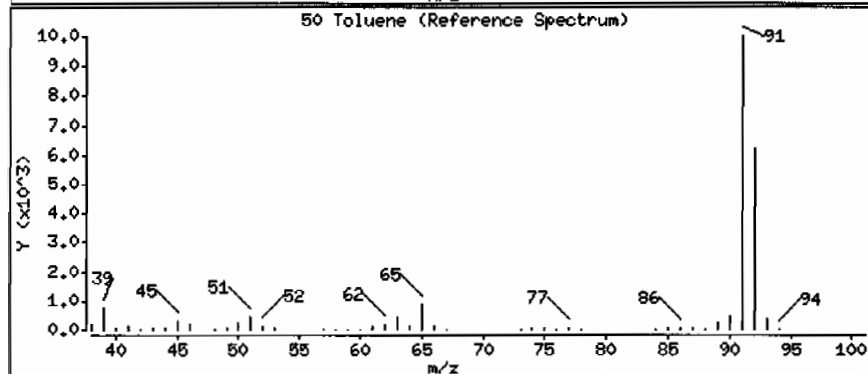
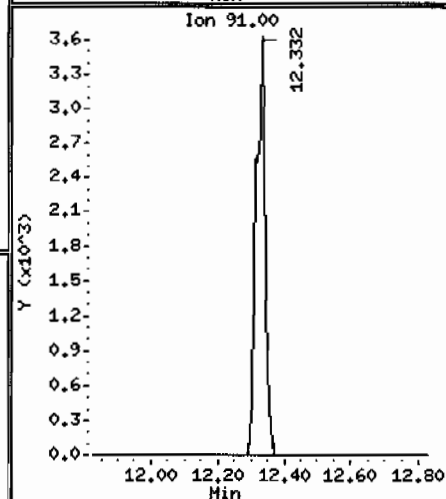
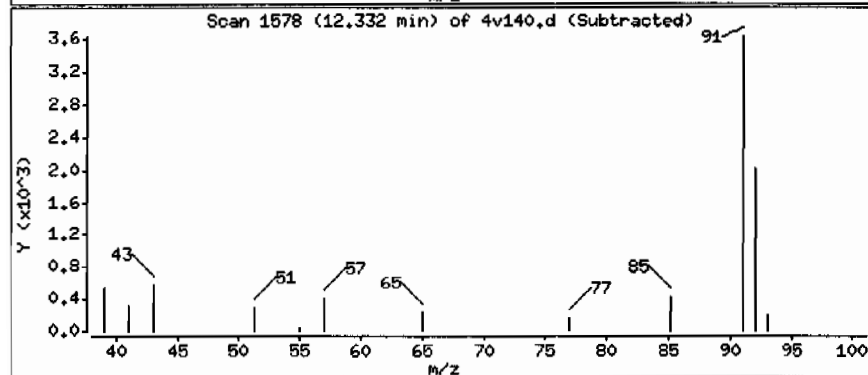
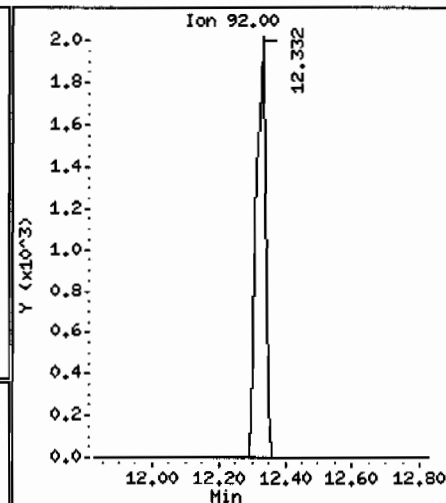
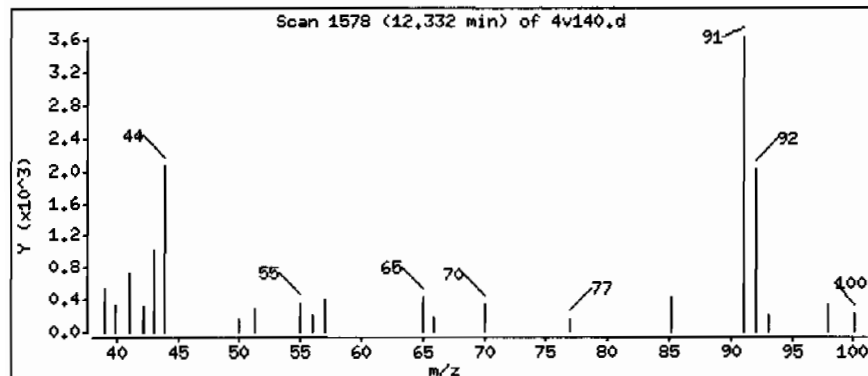
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

50 Toluene

Concentration: 0.40 ug/Kg



Date : 26-JAN-2010 11:07

Client ID: RE15-10-7197

Instrument: VOA4.i

Sample Info: 1245099006194525411\VOAF111

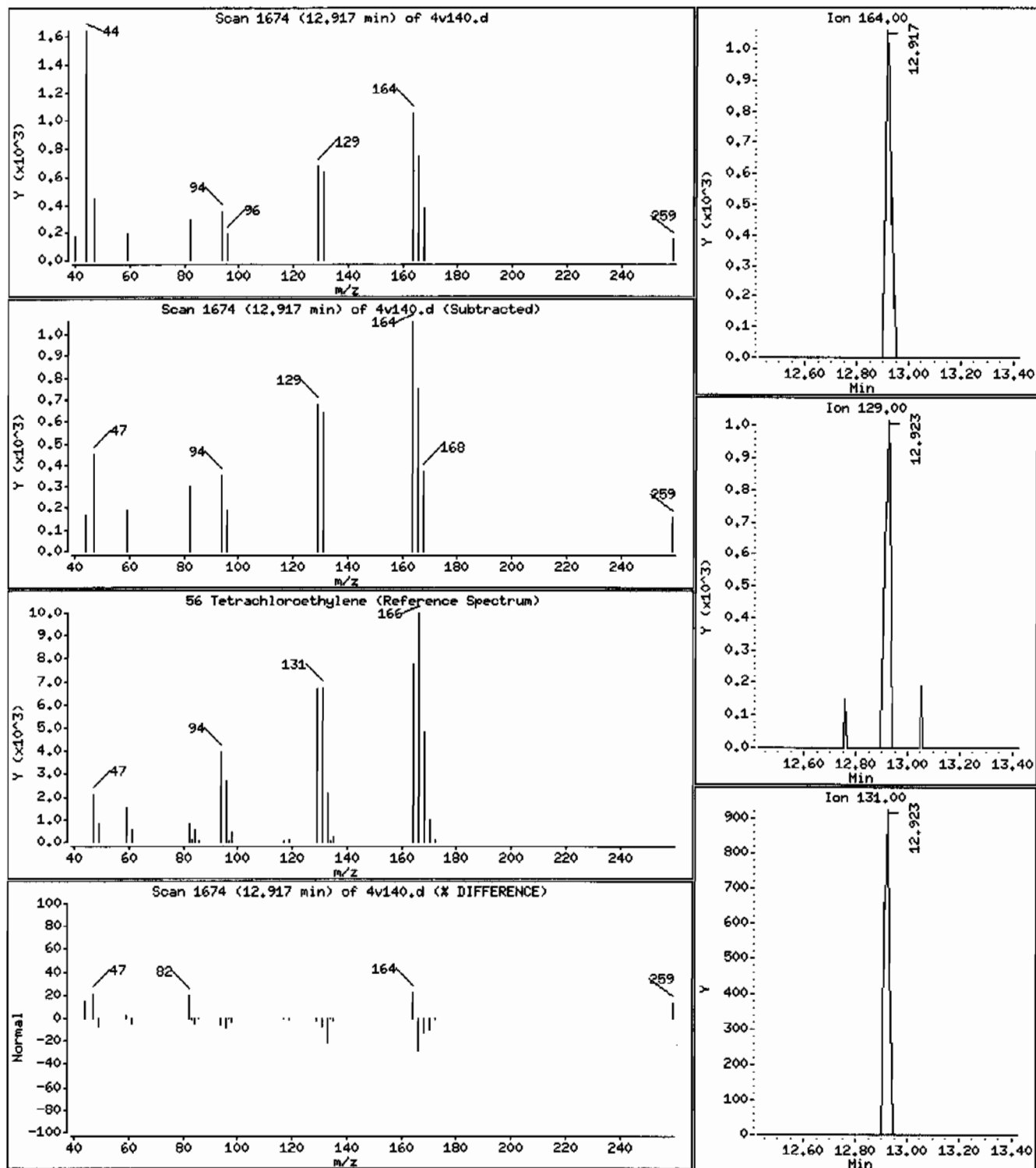
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

56 Tetrachloroethylene

Concentration: 0.42 ug/Kg



Date : 26-JAN-2010 11:07

Client ID: RE15-10-7197

Instrument: V0A4.i

Sample Info: 1245099006194525411V0AF111

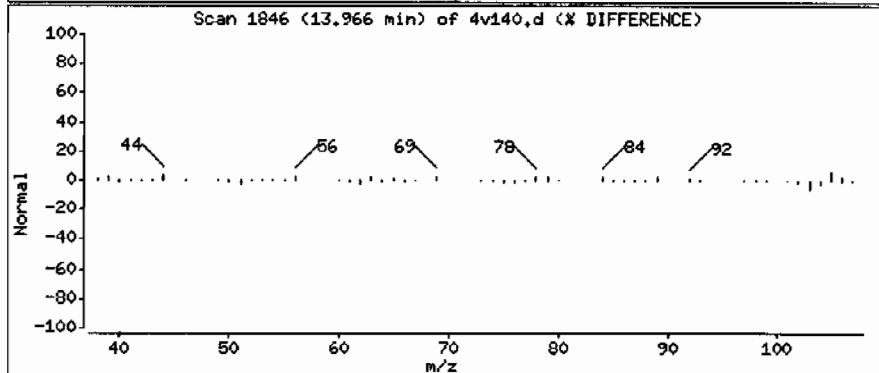
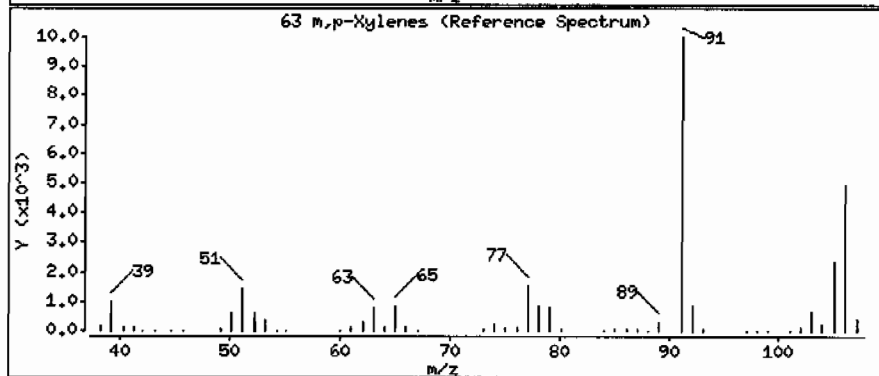
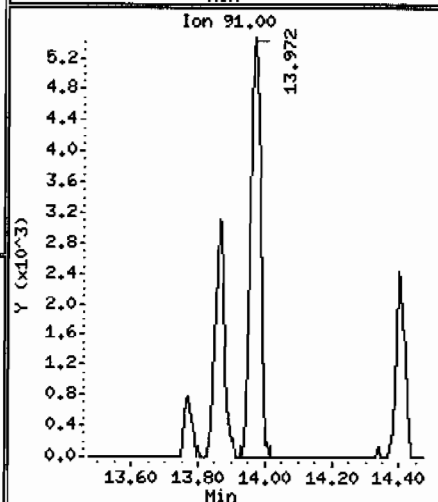
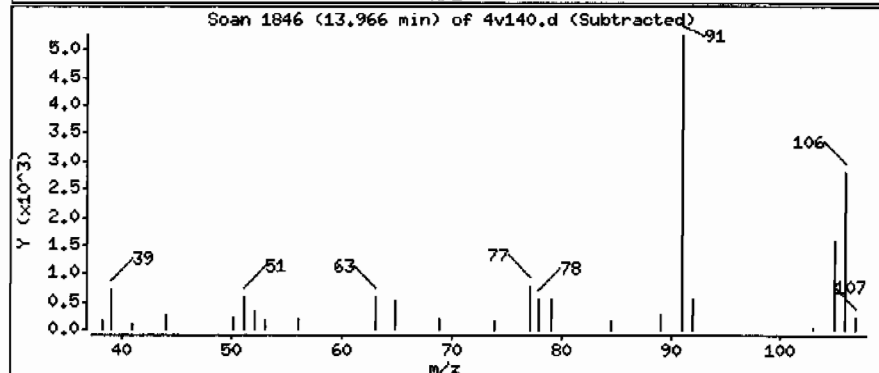
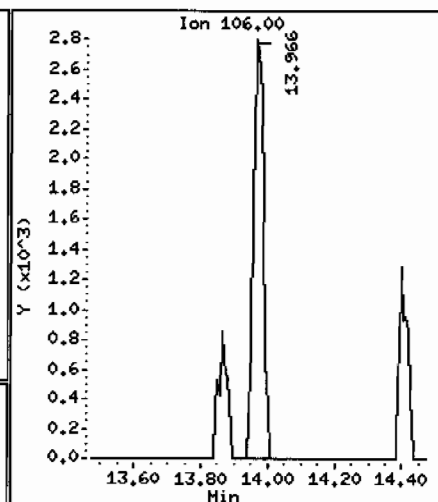
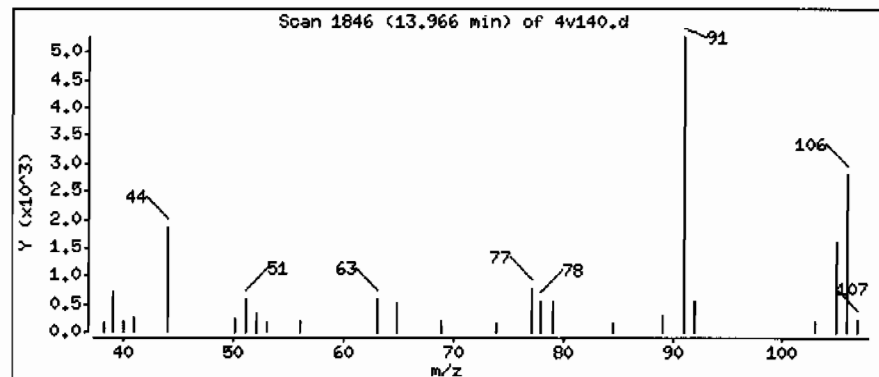
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.79 ug/Kg



Date : 26-JAN-2010 11:07

Client ID: RE15-10-7197

Instrument: V0A4.1

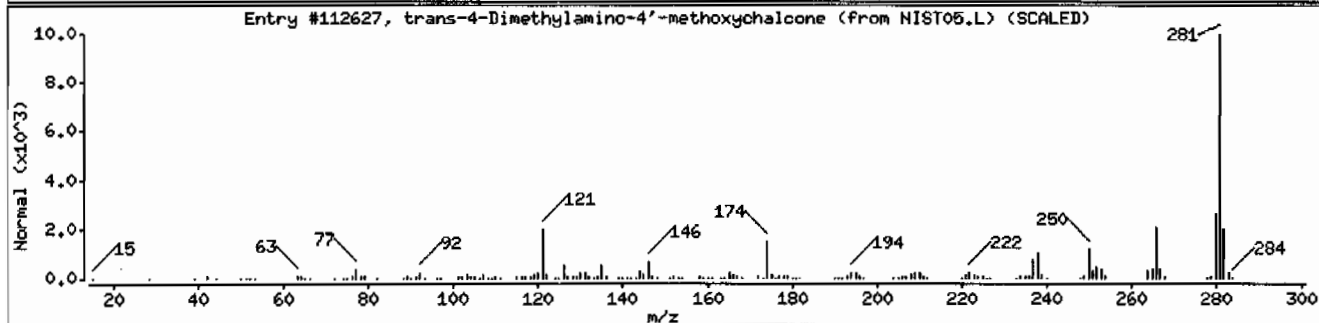
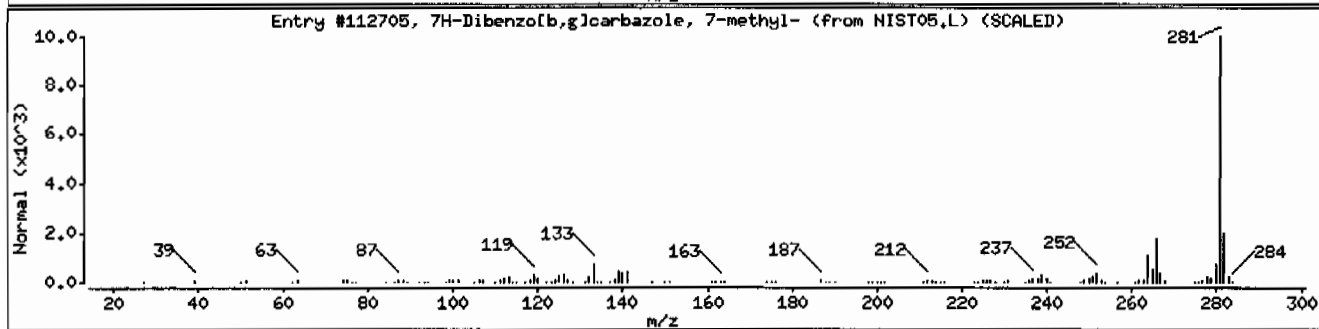
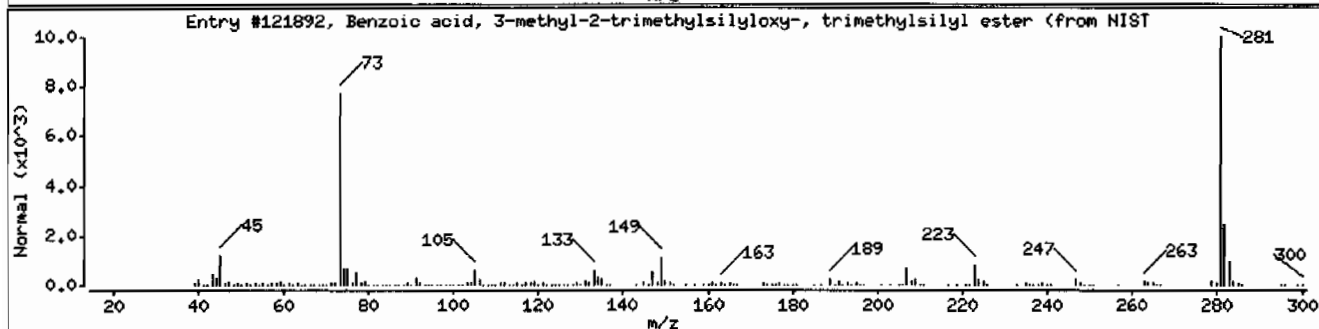
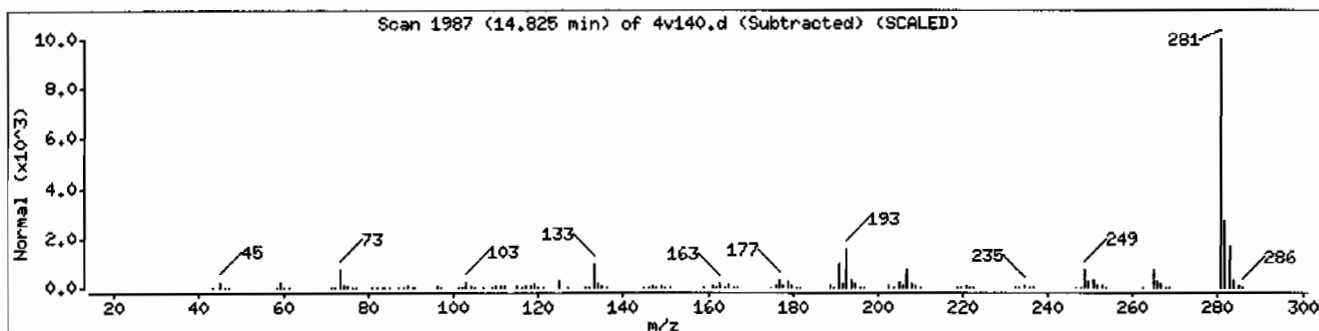
Sample Info: I245099006I9452541IIV0AFI11

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzoic acid, 3-methyl-2-trimethylsilyloxy-	1000153-57-1	NIST05.L	121892	59	C ₁₄ H ₂₄ O ₃ Si ₂	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3557-49-1	NIST05.L	112705	59	C ₂₁ H ₁₅ N	281
trans-4-Dimethylamino-4'-methoxychalcone	52119-37-6	NIST05.L	112627	50	C ₁₈ H ₁₉ O ₂	281



Date : 26-JAN-2010 11:07

Client ID: RE15-10-7197

Instrument: V0A4.1

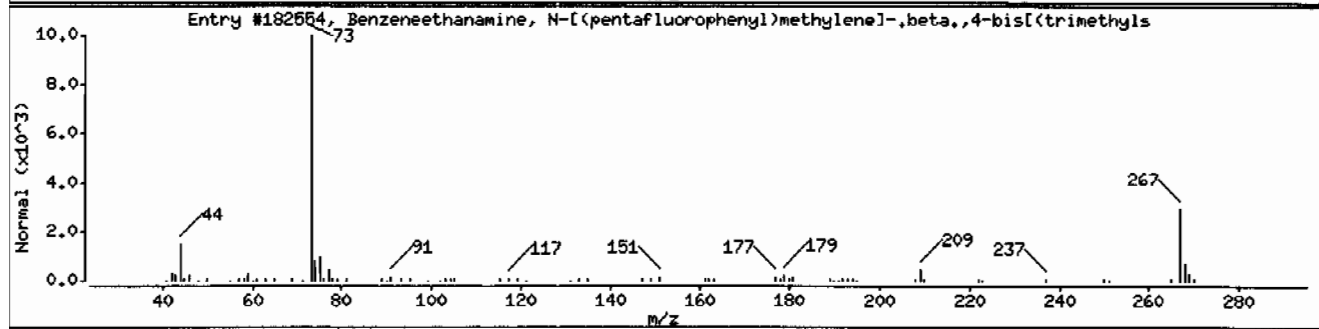
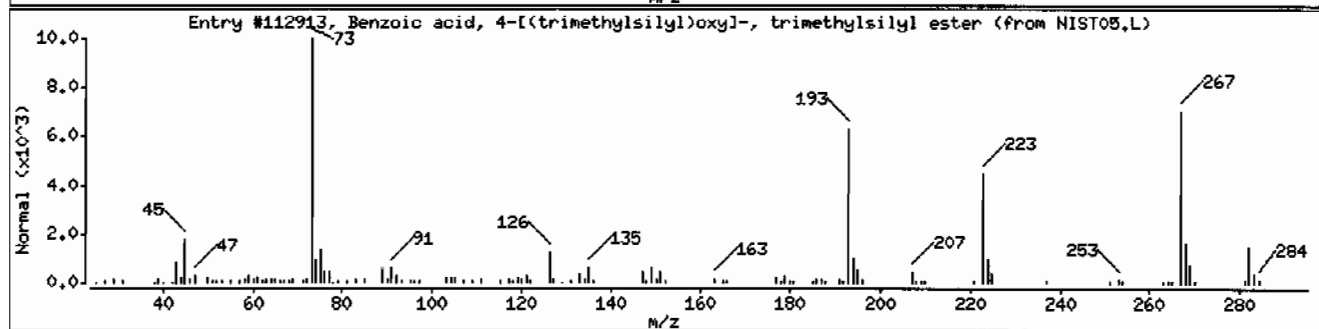
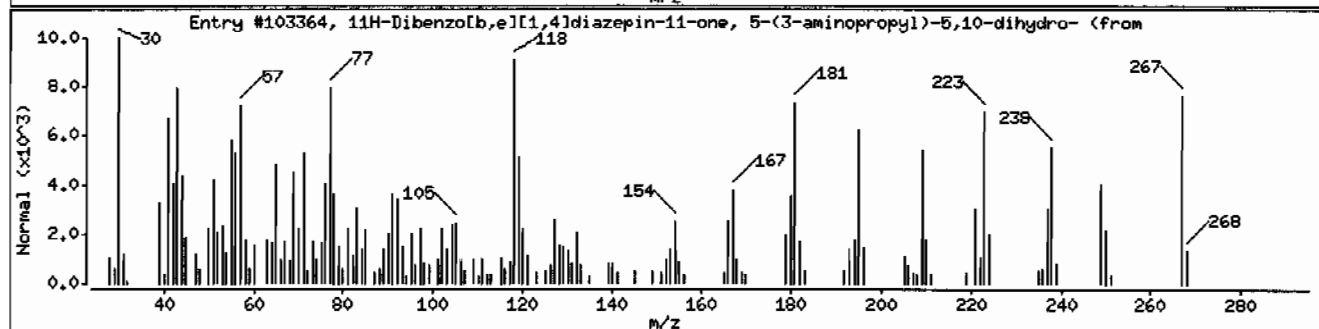
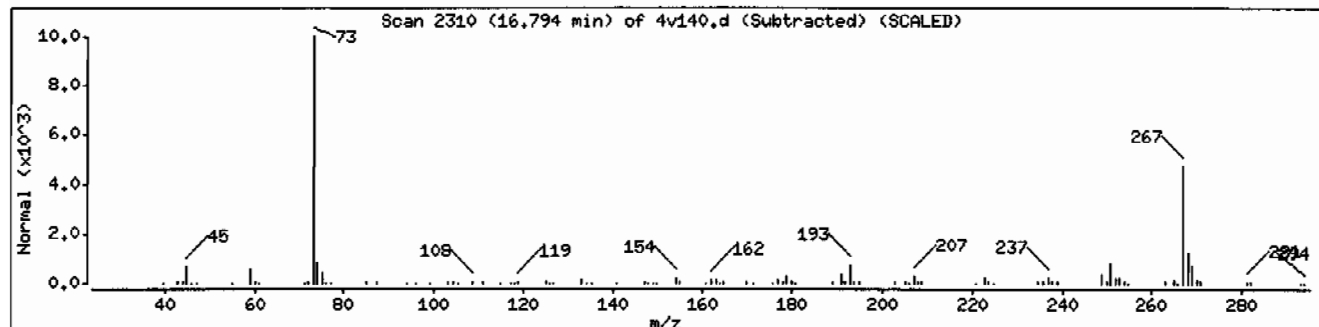
Sample Info: 1245099006194525411V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0,25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-	13450-73-2	NIST05.L	103364	43	C ₁₆ H ₁₇ N ₃ O	267
Benzoic acid, 4-[(trimethylsilyl)oxy]-,	2078-13-9	NIST05.L	112913	38	C ₁₃ H ₂₂ O ₃ Si ₂	282
Benzeneethanamine, N-[(pentafluorophenyl	55429-85-1	NIST05.L	182554	38	C ₂₁ H ₂₆ F ₅ N ₂ O ₂ Si ₂	475



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	% Moisture: 23.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7219	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/26/2010 15:13	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:06	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v149.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.30	ug/kg	0.443	1.30
74-87-3	Chloromethane	U	1.30	ug/kg	0.391	1.30
75-01-4	Vinyl chloride	U	1.30	ug/kg	0.391	1.30
74-83-9	Bromomethane	U	1.30	ug/kg	0.391	1.30
75-00-3	Chloroethane	U	1.30	ug/kg	0.391	1.30
75-69-4	Trichlorofluoromethane	U	1.30	ug/kg	0.391	1.30
67-64-1	Acetone	U	6.51	ug/kg	2.16	6.51
75-35-4	1,1-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
74-88-4	Iodomethane	U	6.51	ug/kg	2.08	6.51
75-09-2	Methylene chloride	U	6.51	ug/kg	2.60	6.51
75-15-0	Carbon disulfide	U	6.51	ug/kg	1.63	6.51
156-60-5	trans-1,2-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
75-34-3	1,1-Dichloroethane	U	1.30	ug/kg	0.391	1.30
78-93-3	2-Butanone	U	6.51	ug/kg	1.95	6.51
156-59-2	cis-1,2-Dichloroethylene	U	1.30	ug/kg	0.391	1.30
594-20-7	2,2-Dichloropropane	U	1.30	ug/kg	0.391	1.30
67-66-3	Chloroform	U	1.30	ug/kg	0.391	1.30
74-97-5	Bromochloromethane	U	1.30	ug/kg	0.430	1.30
71-55-6	1,1,1-Trichloroethane	U	1.30	ug/kg	0.391	1.30
563-58-6	1,1-Dichloropropene	U	1.30	ug/kg	0.391	1.30
56-23-5	Carbon tetrachloride	U	1.30	ug/kg	0.391	1.30
107-06-2	1,2-Dichloroethane	U	1.30	ug/kg	0.391	1.30
71-43-2	Benzene	U	1.30	ug/kg	0.391	1.30
79-01-6	Trichloroethylene	U	1.30	ug/kg	0.430	1.30
78-87-5	1,2-Dichloropropane	U	1.30	ug/kg	0.391	1.30
75-27-4	Bromodichloromethane	U	1.30	ug/kg	0.391	1.30
74-95-3	Dibromomethane	U	1.30	ug/kg	0.391	1.30
108-10-1	4-Methyl-2-pentanone	U	6.51	ug/kg	1.63	6.51
10061-01-5	cis-1,3-Dichloropropylene	U	1.30	ug/kg	0.391	1.30
108-88-3	Toluene	U	1.30	ug/kg	0.391	1.30
10061-02-6	trans-1,3-Dichloropropylene	U	1.30	ug/kg	0.391	1.30
79-00-5	1,1,2-Trichloroethane	U	1.30	ug/kg	0.391	1.30
591-78-6	2-Hexanone	U	6.51	ug/kg	1.95	6.51
142-28-9	1,3-Dichloropropane	U	1.30	ug/kg	0.391	1.30
127-18-4	Tetrachloroethylene	J	0.962	ug/kg	0.391	1.30
124-48-1	Dibromochloromethane	U	1.30	ug/kg	0.391	1.30
106-93-4	1,2-Dibromoethane	U	1.30	ug/kg	0.391	1.30
108-90-7	Chlorobenzene	U	1.30	ug/kg	0.391	1.30

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7219	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 15:13	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:06	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v149.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.30	ug/kg	0.391	1.30
179601-23-1	m,p-Xylenes	J	0.620	ug/kg	0.391	2.60
95-47-6	o-Xylene	U	1.30	ug/kg	0.391	1.30
100-42-5	Styrene	U	1.30	ug/kg	0.391	1.30
75-25-2	Bromoform	U	1.30	ug/kg	0.391	1.30
79-34-5	1,1,2,2-Tetrachloroethane	U	1.30	ug/kg	0.391	1.30
96-18-4	1,2,3-Trichloropropane	U	1.30	ug/kg	0.391	1.30
108-86-1	Bromobenzene	U	1.30	ug/kg	0.391	1.30
103-65-1	n-Propylbenzene	U	1.30	ug/kg	0.391	1.30
95-49-8	2-Chlorotoluene	U	1.30	ug/kg	0.391	1.30
98-82-8	Isopropylbenzene	U	1.30	ug/kg	0.391	1.30
108-67-8	1,3,5-Trimethylbenzene	U	1.30	ug/kg	0.391	1.30
106-43-4	4-Chlorotoluene	U	1.30	ug/kg	0.391	1.30
98-06-6	tert-Butylbenzene	U	1.30	ug/kg	0.391	1.30
95-63-6	1,2,4-Trimethylbenzene	U	1.30	ug/kg	0.391	1.30
135-98-8	sec-Butylbenzene	U	1.30	ug/kg	0.391	1.30
99-87-6	4-Isopropyltoluene	U	1.30	ug/kg	0.391	1.30
541-73-1	1,3-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30
106-46-7	1,4-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30
104-51-8	n-Butylbenzene	U	1.30	ug/kg	0.391	1.30
96-12-8	1,2-Dibromo-3-chloropropane	U	1.30	ug/kg	0.391	1.30
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.51	ug/kg	2.08	6.51
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.30	ug/kg	0.391	1.30
95-50-1	1,2-Dichlorobenzene	U	1.30	ug/kg	0.391	1.30

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	4.5	8.28	ug/kg		J
	Unknown Siloxane	14.83	68.2	ug/kg		J
	Unknown Siloxane	16.79	38.9	ug/kg		J

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v149.d

Lab Smp Id: 245099015

Client Smp ID: RE15-10-7219

Inj Date : 26-JAN-2010 15:13

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099015|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 49

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	23.21380	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
	=====	==	=====	=====	=====	(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	733629	50.0000	
* 61 Chlorobenzene-d5	117	13.770	13.771	(1.000)	394399	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	102009	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	163424	40.7659	53.1
\$ 47 Toluene-d8	98	12.252	12.253	(0.890)	576870	57.5386	74.9
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	147507	79.0700	103(R)
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	2102	0.73864	0.96(a)
63 m,p-Xylenes	106	13.972	13.972	(1.015)	2742	0.47583	0.62(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

ION RATIO REPORT

VOA REPORT

Data file: 4v149.d

Report Date: 01/26/2010 16:13

Lab. ID: 245099015

SampleType: SAMPLE

Injection Date: 26-JAN-2010 15:13

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099015|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
37	1,2-Dichloroethane			CAS#: 107-06-2		
62	9480	10.62	10.34	80-120	100	(T)
64	1658	10.62	10.34	2- 62	17	(T)

49	4-Methyl-2-pentanone			CAS#: 108-10-1		
58	5214	12.25	12.02	80-120	100	(T)
43	3509	12.25	12.02	243-303	67	(QT)
100	381852	12.25	12.02	0- 60	7323	(QT)

56	Tetrachloroethylene			CAS#: 127-18-4		
164	2102	12.92	12.92	80-120	100	()
129	1513	12.92	12.92	58-118	72	()
131	1735	12.92	12.92	55-115	83	()

58	Ethylbenzene			CAS#: 100-41-4		
91	5335	13.97	13.86	80-120	100	(T)
106	2742	13.97	13.86	2- 62	51	(T)

64	o-Xylene			CAS#: 95-47-6		
106	2742	13.97	14.40	80-120	100	(T)
91	5335	13.97	14.40	177-237	195	(T)

63	m,p-Xylenes			CAS#: 179601-23-1		
106	2742	13.97	13.97	80-120	100	()
91	5335	13.97	13.97	168-228	195	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
66	Bromoform		CAS#: 75-25-2			
173	519	14.95	14.66	80-120	100	(T)
175	8898	14.95	14.66	20- 80	1714	(QT)

67	Isopropylbenzene		CAS#: 98-82-8			
105	1975	14.83	14.76	80-120	100	(T)
120	661	14.83	14.76	0- 56	33	(T)

74	1,2,3-Trichloropropane		CAS#: 96-18-4			
110	2640	14.82	15.11	80-120	100	(T)
75	5542	14.82	15.11	252-312	210	(QT)
77	312	14.82	15.11	61-121	12	(QT)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026
 Data file : /chem/VOA4.i/012510v4/4v149.d
 Lab Smp Id: 245099015 Client Smp ID: RE15-10-7219
 Inj Date : 26-JAN-2010 15:13
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |245099015|945254|1|VOAF|1|
 Misc Info : LANL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
 Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 49
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	23.21380	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 40 Fluorobenzene	10.619	1558142	50.000
* 61 Chlorobenzene-d5	13.770	1216600	50.000
* 86 1,4-Dichlorobenzene-d4	16.179	623837	50.000

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

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ug/l)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
4.496	198149	6.35851200	8.3	0		0	40
Unknown Siloxane					CAS #:		
14.825	1274364	52.3739616	68.2	0		0	61
Unknown Siloxane					CAS #:		
16.794	372686	29.8704249	38.9	0		0	86

Data File: /chem/V004.i/012510v4/4v149.d

Date : 26-JAN-2010 15:13

Client ID: REIS-10-7219

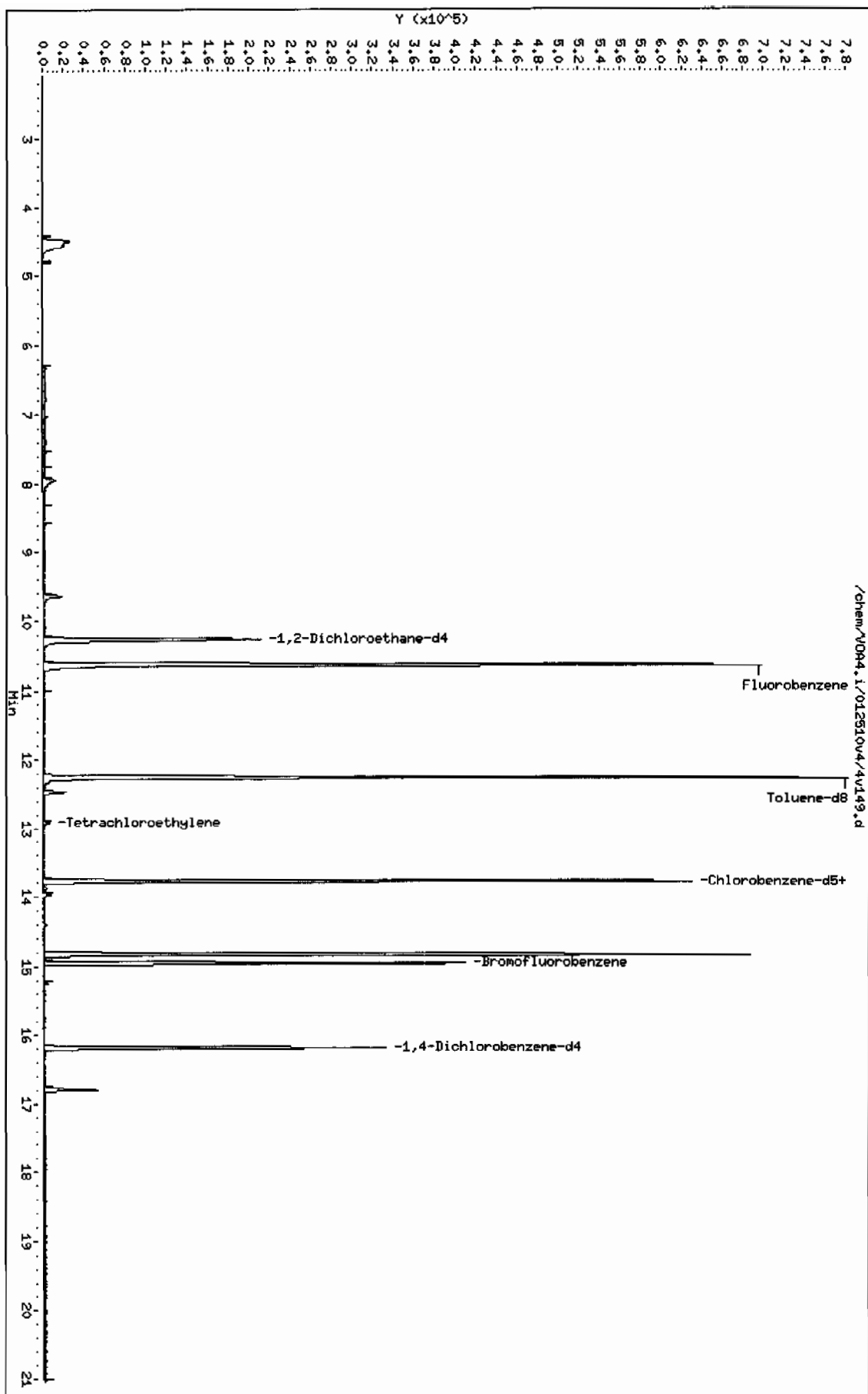
Sample Info: 1245099015194525411V004F111

Instrument: V004.i

Page 1

Column phase: RTX-VOLATILES

Operator: RCJ
Column diameter: 0.25



Date : 26-JAN-2010 15:13

Client ID: RE15-10-7219

Instrument: VOA4.i

Sample Info: 12450990151945254111\VOAF111

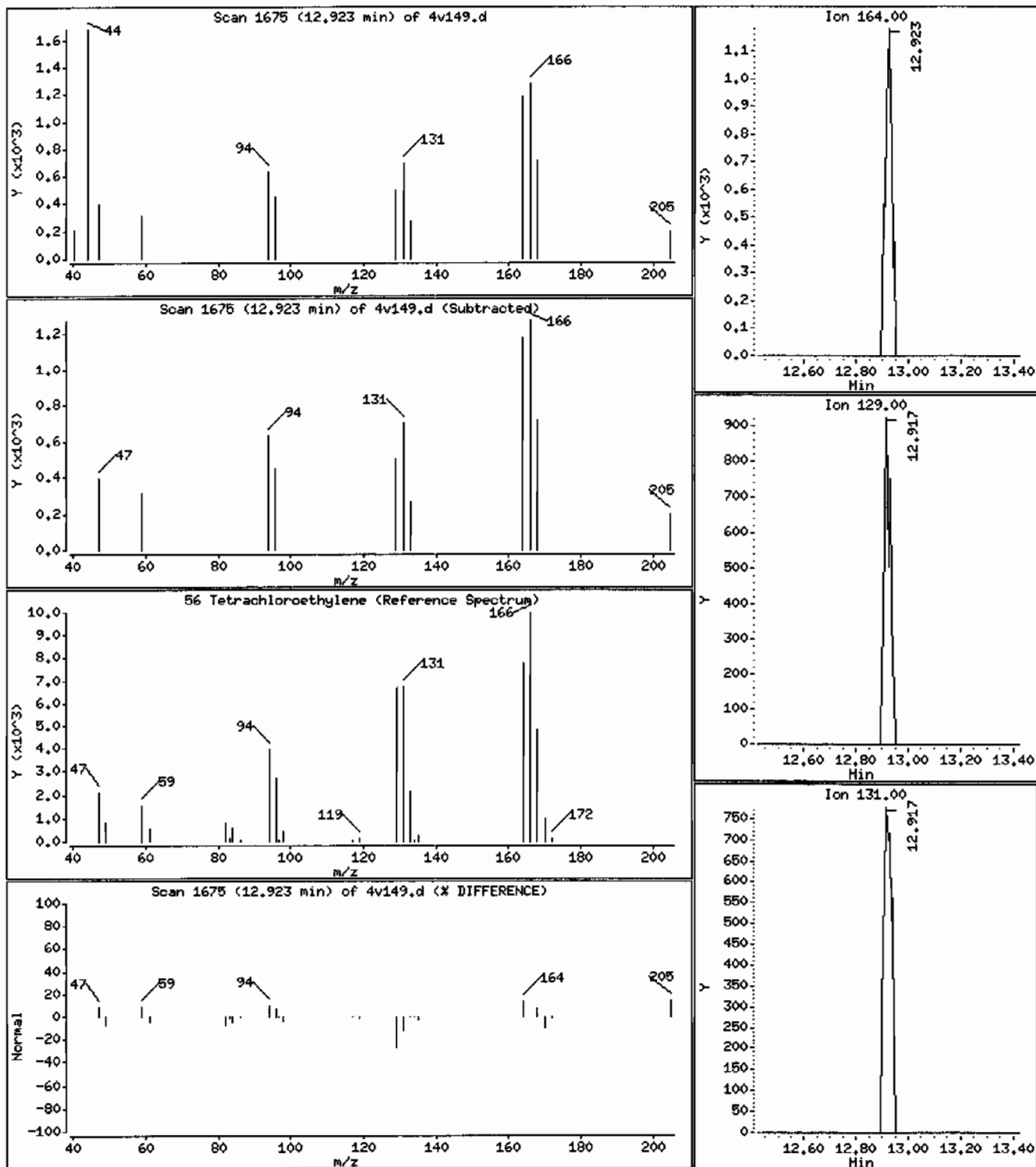
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

56 Tetrachloroethylene

Concentration: 0.96 ug/Kg



Date : 26-JAN-2010 15:13

Client ID: RE15-10-7219

Instrument: VOA4.i

Sample Info: 1245099015194525411\VOAF11

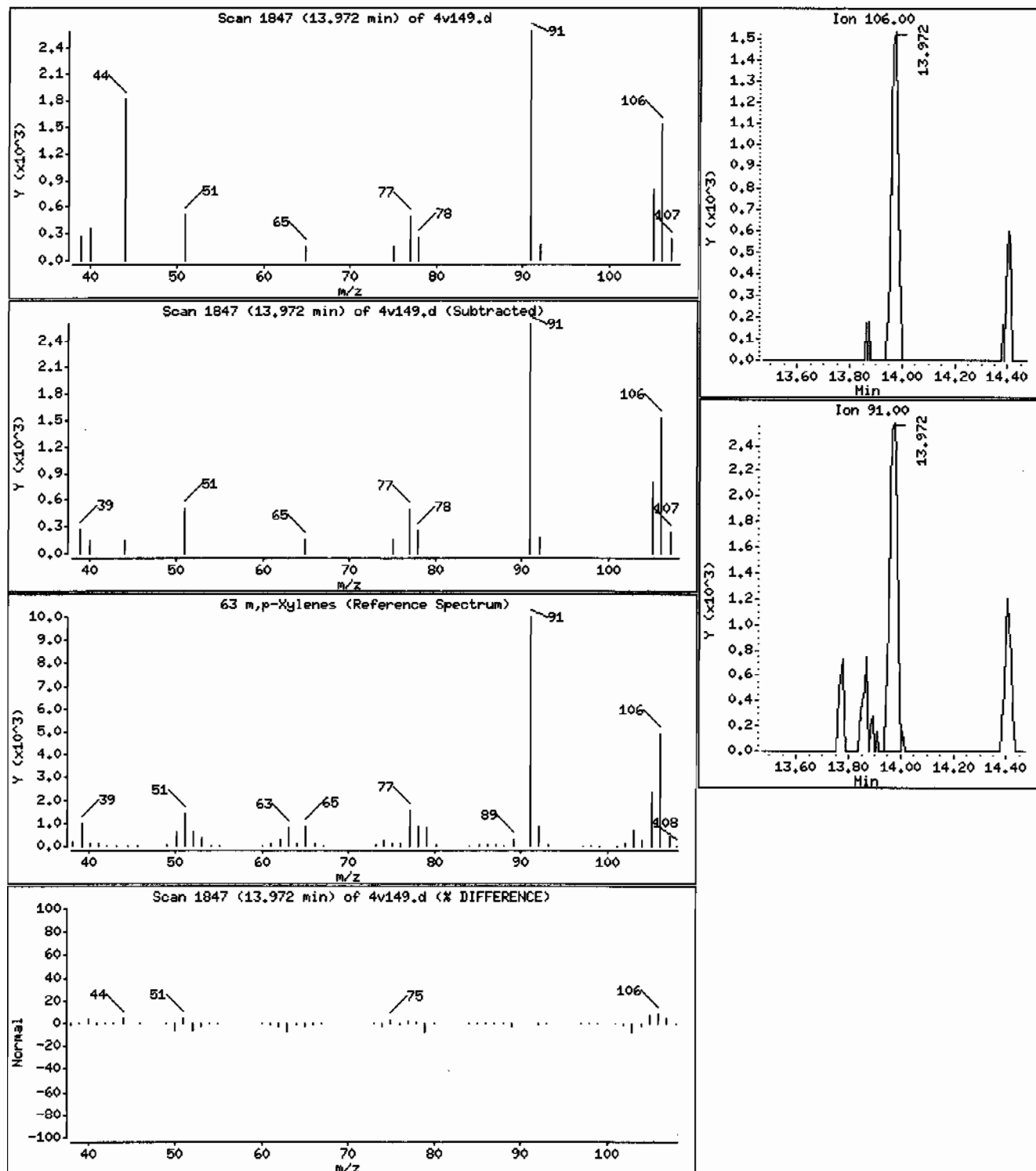
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

63 m,p-Xylenes

Concentration: 0.62 ug/Kg



Data File: /chem/VOA4.i/012510v4/4v149.d

Page 1

Date : 26-JAN-2010 15:13

Client ID: RE15-10-7219

Instrument: VOA4.i

Sample Info: 1245099015194525411\VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match

CAS Number

Library

Entry

Quality

Formula

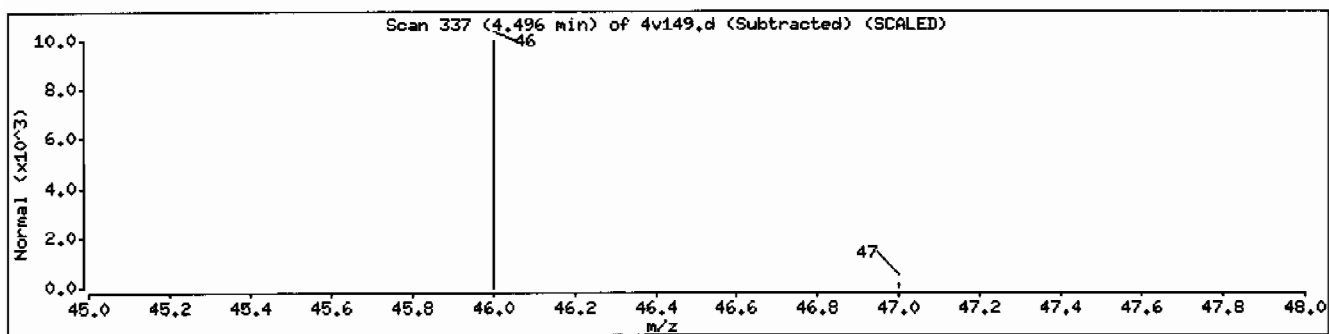
Weight

Unknown

0

0

0



Date : 26-JAN-2010 15:13

Client ID: RE15-10-7219

Instrument: V0A4.i

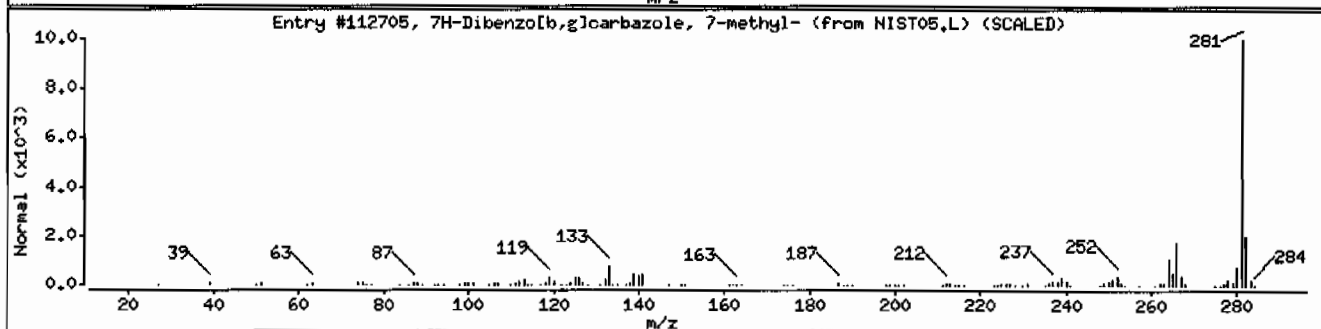
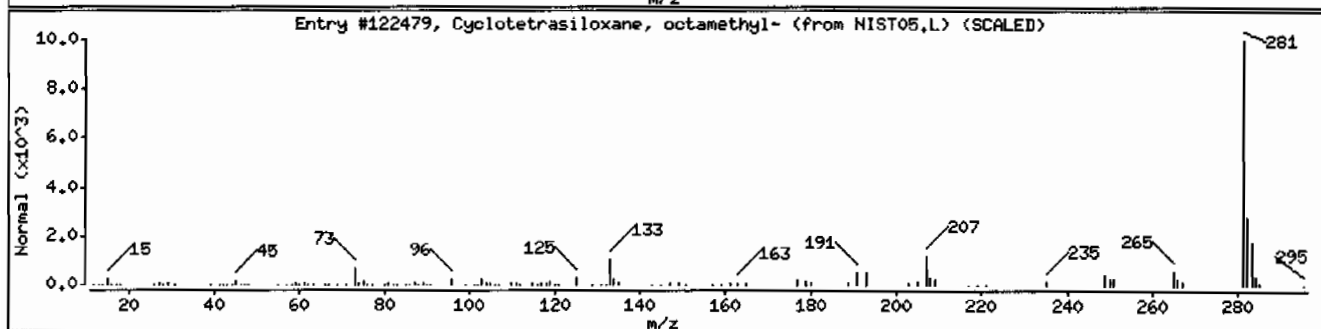
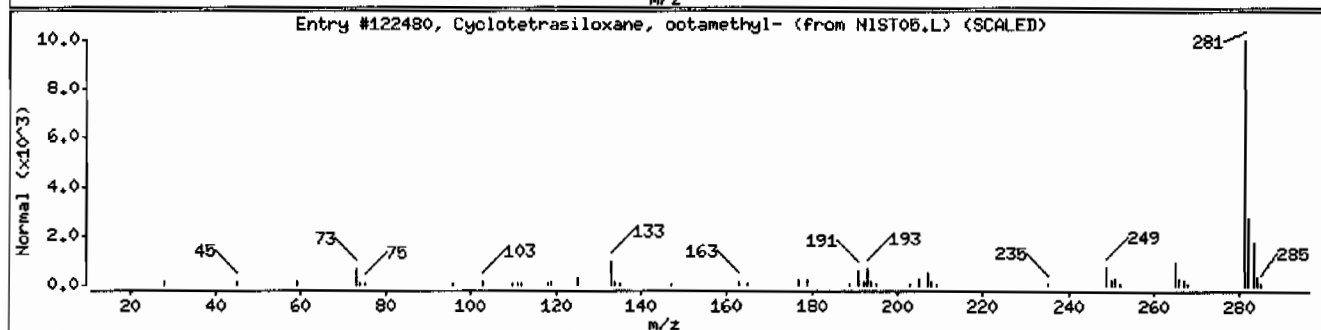
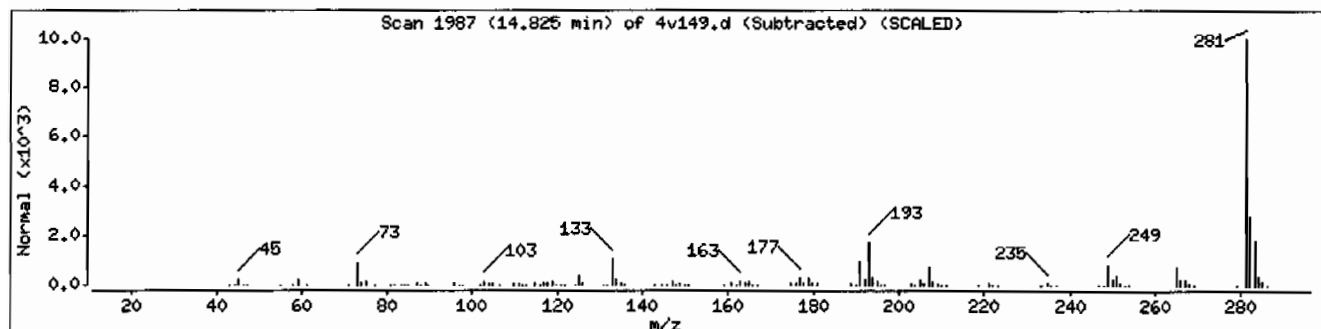
Sample Info: 12450990151945254111V0AF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122480	90	C ₈ H ₂₄ O ₄ Si ₄	296
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST05.L	122479	72	C ₈ H ₂₄ O ₄ Si ₄	296
7H-Dibenzo[b,g]carbazole, 7-methyl-	3567-49-1	NIST05.L	112705	59	C ₂₁ H ₁₅ N	281



Date : 26-JAN-2010 15:13

Client ID: RE15-10-7219

Instrument: VOA4.i

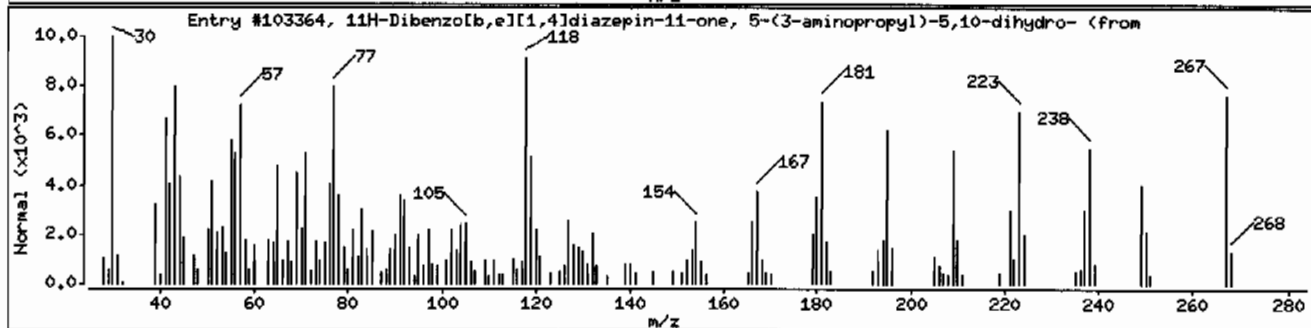
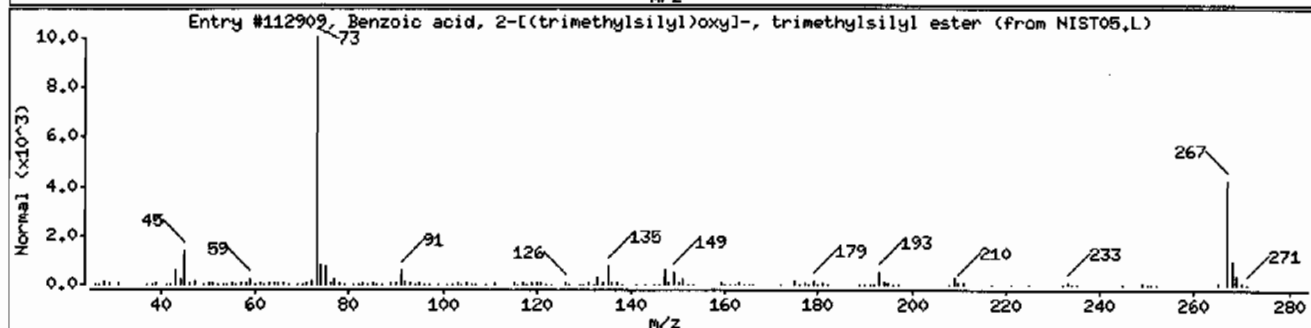
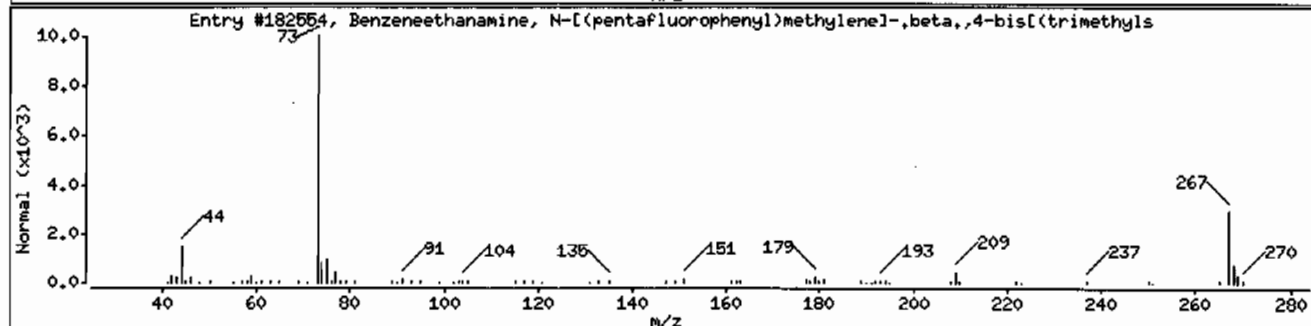
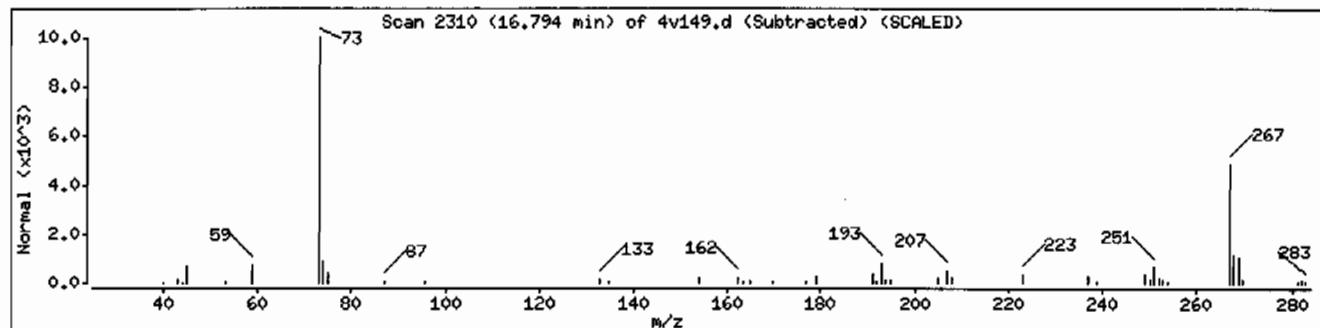
Sample Info: 12450990151945254111VOAF111

Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Benzeneethanamine, N-[(pentafluorophenyl)methylene]-,beta,4-bis[(trimethylsilyl)methyl]-	55429-85-1	NIST05.L	182554	64	C ₂₁ H ₂₆ F ₅ N ₂ Si ₂	475
Benzoic acid, 2-[(trimethylsilyl)oxyl]-, trimethylsilyl ester (from NIST05.L)	3789-85-3	NIST05.L	112909	38	C ₁₃ H ₂₂ O ₃ Si ₂	282
11H-Dibenzo[b,e][1,4]diazepin-11-one, 5-(3-aminopropyl)-5,10-dihydro- (from NIST05.L)	13450-73-2	NIST05.L	103364	38	C ₁₆ H ₁₇ N ₃ O	267



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: S
Lab Sample ID: 245099016	Date Received: 01/20/2010 08:45	
Client ID: RE15-10-7234	Client: LANL010	Project: LANL01004
Batch ID: 945254	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/26/2010 08:22	Inst: VOA4.I	Dilution: 1
Prep Date: 01/25/2010 23:07	Analyst: ACJ	Purge Vol: 5 mL
Data File: 4v134.d	Aliquot: 5 g	Final Volume: 5 mL
	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	1.67	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/kg	1.60	5.00
75-09-2	Methylene chloride	U	5.00	ug/kg	2.00	5.00
75-15-0	Carbon disulfide	U	5.00	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/kg	0.300	1.00
78-93-3	2-Butanone	U	5.00	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
67-66-3	Chloroform	U	1.00	ug/kg	0.300	1.00
74-97-5	Bromochloromethane	U	1.00	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride	U	1.00	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/kg	0.300	1.00
71-43-2	Benzene	U	1.00	ug/kg	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/kg	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
108-88-3	Toluene	U	1.00	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/kg	0.300	1.00
591-78-6	2-Hexanone	U	5.00	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane	U	1.00	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/kg	0.300	1.00
108-90-7	Chlorobenzene	U	1.00	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 245099016

Date Collected: 01/13/2010 12:00
 Date Received: 01/20/2010 08:45
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

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

Client ID: RE15-10-7234
 Batch ID: 945254
 Run Date: 01/26/2010 08:22
 Prep Date: 01/25/2010 23:07
 Data File: 4v134.d

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

Tentatively Identified Compound Summary

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

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v134.d
Lab Smp Id: 245099016 Client Smp ID: RE15-10-7234
Inj Date : 26-JAN-2010 08:22
Operator : ACJ Inst ID: VOA4.i
Smp Info : |245099016|945254|1|VOAF|1|
Misc Info : LANL 5G N/A
Comment :
Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: prdsrv07

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
* 40 Fluorobenzene	96	10.619	10.619 (1.000)	962282	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771 (1.000)	700725	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179 (1.000)	387080	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.259	10.265 (0.966)	218732	41.5975	41.6
\$ 47 Toluene-d8	98	12.253	12.253 (0.890)	819323	45.9965	46.0
\$ 71 Bromofluorobenzene	95	14.953	14.953 (0.924)	367660	51.9378	51.9
10 Acetone	43	7.363	7.363 (0.693)	9929	1.67325	1.7(a)

QC Flag Legend

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

ION RATIO REPORT

VOA REPORT

Data file: 4v134.d

Report Date: 01/26/2010 16:11

Lab. ID: 245099016

SampleType: SAMPLE

Injection Date: 26-JAN-2010 08:22

Operator: ACJ

Instrument: VOA4.i

Sample Info: |245099016|945254|1|VOAF|1|

Miscellaneous Info: LANL 5G N/A

Comment:

Method used: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
10	Acetone		CAS#: 67-64-1			
43	9929	7.36	7.36	80-120	100	()
58	2240	7.37	7.36	0- 60	23	()

37	1,2-Dichloroethane		CAS#: 107-06-2			
62	12434	10.62	10.34	80-120	100	(T)
64	2408	10.61	10.34	2- 62	19	(T)

49	4-Methyl-2-pentanone		CAS#: 108-10-1			
58	7726	12.25	12.02	80-120	100	(T)
43	4990	12.25	12.02	243-303	65	(QT)
100	535549	12.25	12.02	0- 60	6932	(QT)

66	Bromoform		CAS#: 75-25-2			
173	1777	14.95	14.66	80-120	100	(T)
175	24069	14.95	14.66	20- 80	1354	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/VOA4.i/012510v4/4v134.d
Report Date: 08-Feb-2010 21:54

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v134.d

Lab Smp Id: 245099016

Client Smp ID: RE15-10-7234

Inj Date : 26-JAN-2010 08:22

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |245099016|945254|1|VOAF|1|

Misc Info : LANL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 34

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/V004.i/012510v4/4v134.d

Date : 26-JAN-2010 08:22

Client ID: RELS-10-7234

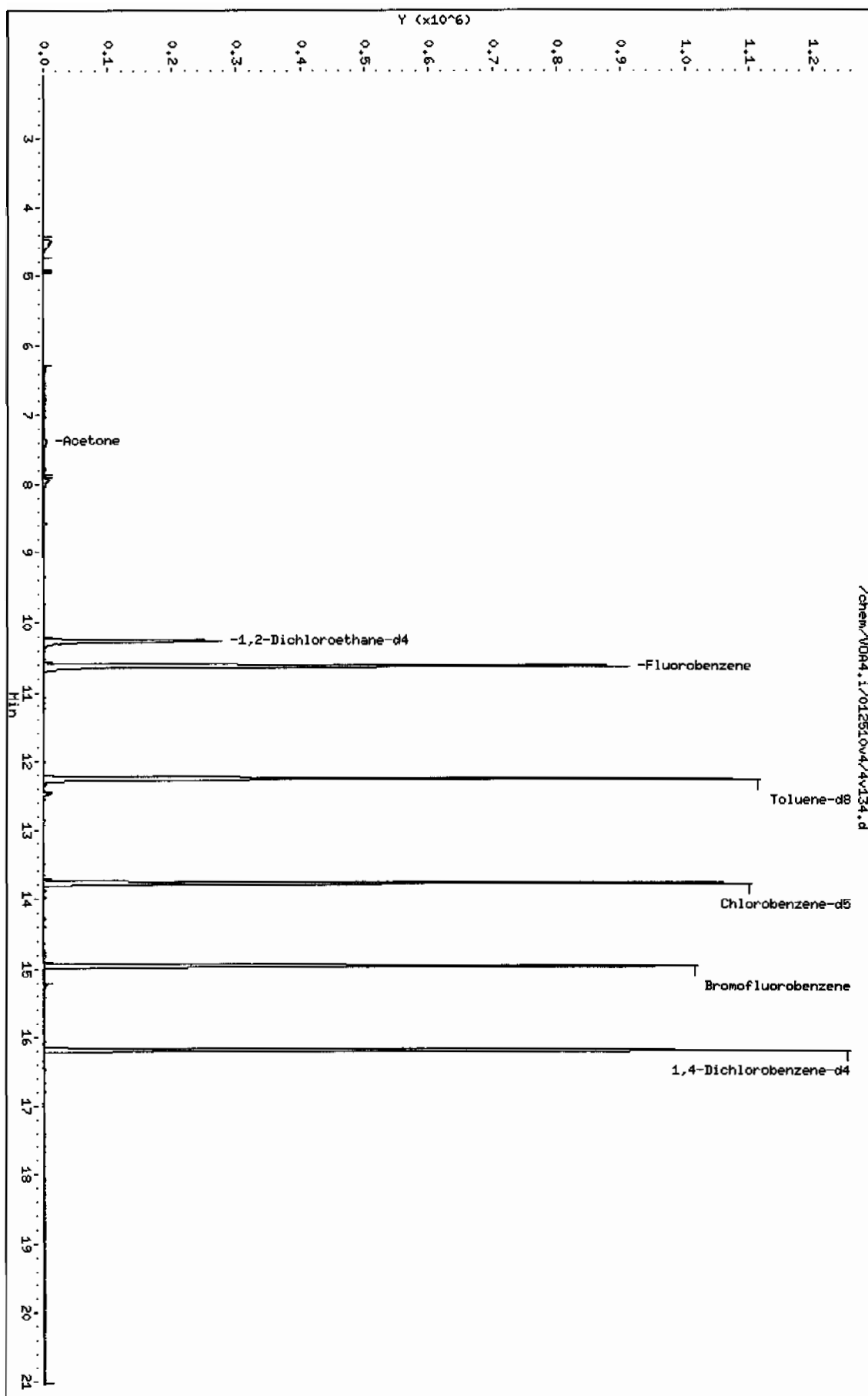
Sample Info: 1245099016194525411V004F111

Column phase: RTX-VOLATILES

Instrument: V004.i

Operator: PCJ

Column diameter: 0.25



Date : 26-JAN-2010 08:22

Client ID: RE15-10-7234

Instrument: V004.i

Sample Info: I245099016I945254I1I\VOAFI1I

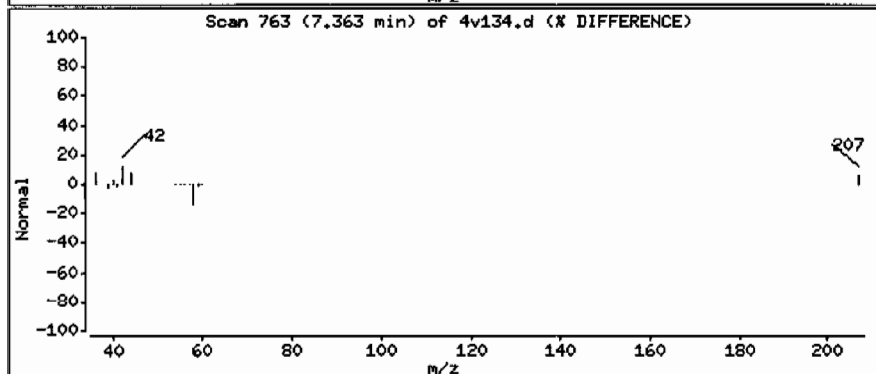
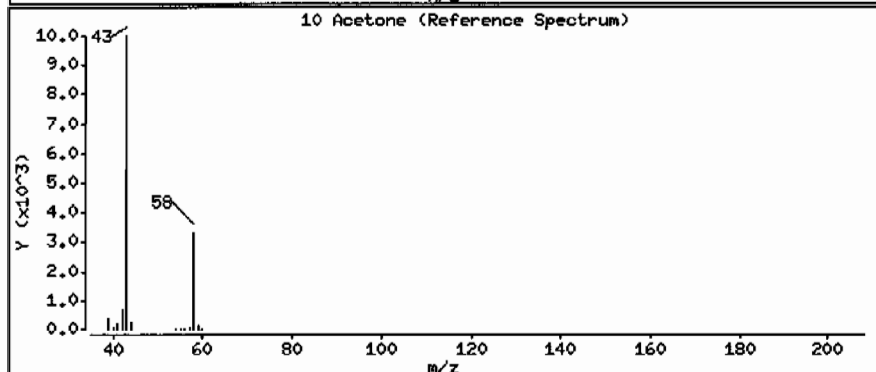
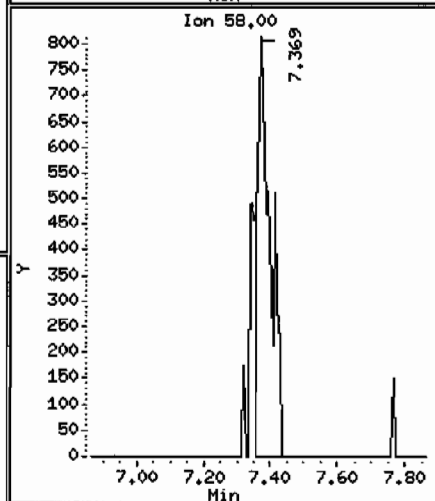
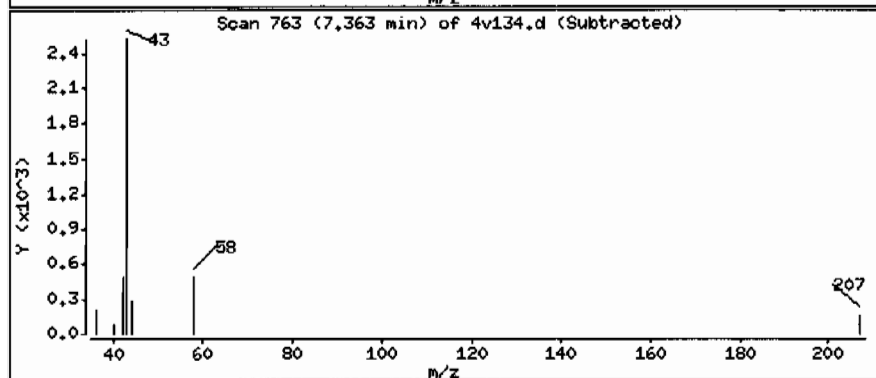
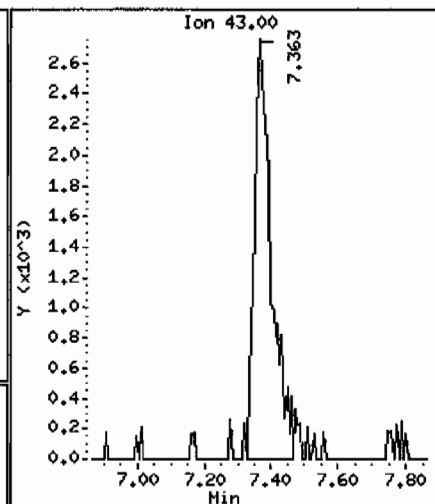
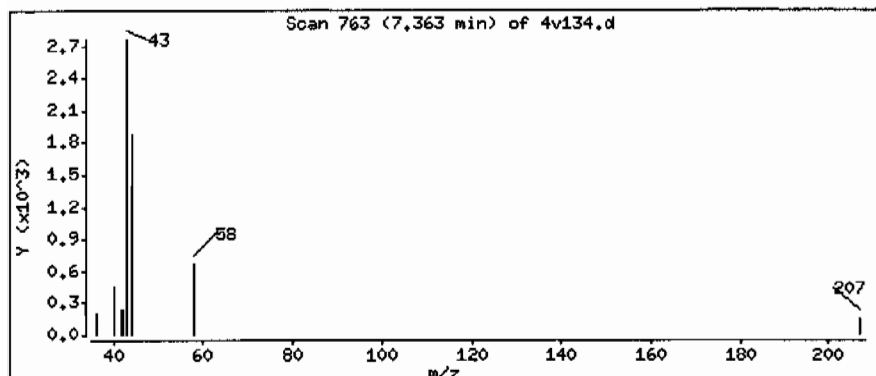
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

10 Acetone

Concentration: 1.7 ug/Kg



Standard Data

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

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

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

Report Date: 27-Jan-2010 16:20

Calibration History

Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
Start Cal Date: 11-JAN-2010 23:17
End Cal Date : 12-JAN-2010 06:35

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
12-JAN-2010 03:51	ICALsubS	/chem/VOA4.i/011110v4/4t113.d
11-JAN-2010 23:45	CALsubL+	/chem/VOA4.i/011110v4/4t104.d
Cal Level: 2 , Cal Amount: 2.00000		
12-JAN-2010 04:19	ICALsubS	/chem/VOA4.i/011110v4/4t114.d
12-JAN-2010 00:39	CALsubL+	/chem/VOA4.i/011110v4/4t106.d
Cal Level: 3 , Cal Amount: 5.00000		
12-JAN-2010 04:46	ICALsubS	/chem/VOA4.i/011110v4/4t115.d
12-JAN-2010 01:06	CALsubL+	/chem/VOA4.i/011110v4/4t107.d
Cal Level: 4 , Cal Amount: 10.00000		
12-JAN-2010 05:13	ICALsubS	/chem/VOA4.i/011110v4/4t116.d
12-JAN-2010 01:34	CALsubL+	/chem/VOA4.i/011110v4/4t108.d
Cal Level: 5 , Cal Amount: 20.00000		
12-JAN-2010 05:41	ICALsubS	/chem/VOA4.i/011110v4/4t117.d
12-JAN-2010 02:01	CALsubL+	/chem/VOA4.i/011110v4/4t109.d
Cal Level: 6 , Cal Amount: 50.00000		
12-JAN-2010 06:08	ICALsubS	/chem/VOA4.i/011110v4/4t118.d
12-JAN-2010 02:29	CALsubL+	/chem/VOA4.i/011110v4/4t110.d
Cal Level: 7 , Cal Amount: 100.00000		
12-JAN-2010 06:35	ICALsubS	/chem/VOA4.i/011110v4/4t119.d
12-JAN-2010 02:56	CALsubL+	/chem/VOA4.i/011110v4/4t111.d
Cal Level: 8 , Cal Amount: 200.00000		
11-JAN-2010 23:17	BENZENE+	/chem/VOA4.i/011110v4/4t103.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0	
26-JAN-2010 18:30 CALsubL+	/chem/VOA4.i/012610v4/4v203.d
Ccal Level: 6 , Ccal Amount: 50.0	
26-JAN-2010 18:58 CALsubS+SS	/chem/VOA4.i/012610v4/4v204.d
Ccal Level: 6 , Ccal Amount: 50.0	
26-JAN-2010 18:03 CALsubL+	/chem/VOA4.i/012610v4/4v202.d

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Calibration File Names:

Level 1: /chem/VOA4.i/011110v4/4t113.d
 Level 2: /chem/VOA4.i/011110v4/4t114.d
 Level 3: /chem/VOA4.i/011110v4/4t115.d
 Level 4: /chem/VOA4.i/011110v4/4t116.d
 Level 5: /chem/VOA4.i/011110v4/4t117.d
 Level 6: /chem/VOA4.i/011110v4/4t118.d
 Level 7: /chem/VOA4.i/011110v4/4t119.d
 Level 8: /chem/VOA4.i/011110v4/4t103.d

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	ml	Coefficients	m2	%RSD or R^2
M 1 Xylenes (total)	0.74252	0.72716	0.76345	0.75158	0.76986	0.72867	AVRG	0.73961				3.48506
	0.69404	++++										
M 2 1,2-Dichloroethylene (total)	0.50482	0.50417	0.51280	0.51145	0.49222	0.49192	AVRG					
	0.48256	++++					AVRG		0.49999			2.25900
M 135 1,3-Dichloropropylene	0.38613	0.39502	0.41965	0.45073	0.44835	0.46439	AVRG					
	0.46079	++++					AVRG		0.43215			7.39078
153 Chlorotrifluoroethylene	17301	44315	85513	++++	507830	676853	AVRG					
	943471	++++					LINE	0.05080	0.20408			0.99109
154 2-Chloro-1,1,1-trifluoroethane	0.26417	0.28489	0.27243	++++	0.30176	0.28858	AVRG					
	0.29438	++++					AVRG		0.28437			4.90103

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	RSD or R ²
3 Dichlorodifluoromethane	0.17249 0.20732	0.18128 ++++	0.24636	0.19869	0.20232	0.21253	AVRG		0.20300		11.74612
4 Chloromethane	0.40461 0.42811	0.43470 ++++	0.45921	0.44894	0.43003	0.45281	AVRG		0.43691		4.24870
5 Vinyl chloride	0.31739 0.32914	0.32074 ++++	0.34941	0.34346	0.33836	0.35031	AVRG		0.33555		3.98161
6 Bromomethane	0.28568 0.25909	0.28815 ++++	0.29582	0.28978	0.27180	0.27542	AVRG		0.28082		4.51756
7 Chloroethane	0.26414 0.27306	0.27676 ++++	0.30027	0.29617	0.28878	0.28793	AVRG		0.28387		4.58773
8 Trichlorofluoromethane	0.40726 0.38135	0.37942 ++++	0.40363	0.38702	0.38813	0.39537	AVRG		0.39174		2.73869
134 Ethyl Ether	0.25058 0.27915	0.26748 ++++	0.26400	0.28422	0.27514	0.27791	AVRG		0.27121		4.21420
9 Acrolein	0.05420 0.06893	0.05265 ++++	0.05744	++++	0.06378	0.06114	AVRG		0.05969		10.29754
12 Trichlorotrifluoroethane	0.10243 0.08804	0.09526 ++++	0.09030	++++	0.09459	0.08410	AVRG		0.09245		6.94013

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
	100	200									
	Level 7	Level 8									
10 Acetone	0.36820 0.25229	0.32054 ++++	0.31143	0.31832	0.30703	0.28047	AVRG		0.30833		11.66438
11 1,1-Dichloroethylene	0.55672 0.52360	0.53068 ++++	0.52583	0.54404	0.49081	0.52521	AVRG		0.52813		3.86606
147 Isopropyl Alcohol	0.03234 0.03166	0.02821 ++++	0.02949	++++	0.03575	0.03069	AVRG		0.03136		8.33870
13 Iodomethane	0.52114 0.54446	0.52947 ++++	0.53697	0.56168	0.48861	0.53826	AVRG		0.53151		4.28060
15 Acetonitrile	0.06570 0.05193	0.06473 ++++	0.06745	0.06929	0.06425	0.06092	AVRG		0.06347		9.01967
128 Methyl acetate	0.34539 0.26767	0.32455 ++++	0.33797	0.32989	0.30867	0.31324	AVRG		0.31820		8.08995
14 Carbon disulfide	1.08666 0.91043	1.04212 ++++	1.05143	1.09065	0.84593	0.98060	AVRG		1.00112		9.32347
16 Allyl chloride	0.58476 0.50762	0.56543 ++++	0.57685	++++	0.57688	0.53234	AVRG		0.55731		5.48771
148 tert-Butyl Alcohol	0.04572 0.04321	0.03801 ++++	0.04061	++++	0.05074	0.04274	AVRG		0.04350		10.10338

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
17 Methylene chloride	++++ 891985	29332 ++++	52947	98350	172143	421273	LINE	-0.03967	0.34999		0.99981
18 Acrylonitrile	0.13056 0.13390	0.12703 ++++	0.13069	++++	0.14306	0.12978	AVRG		0.13250		4.23999
20 tert-Butyl methyl ether	0.77347 0.79352	0.78167 ++++	0.78601	0.82098	0.79172	0.79829	AVRG		0.79224		1.90559
21 trans-1,2-Dichloroethylene	0.48783 0.46230	0.47606 ++++	0.50197	0.49030	0.46375	0.47487	AVRG		0.47958		3.03160
23 Vinyl acetate	0.62402 0.61255	0.65202 ++++	0.68550	0.80500	0.74989	0.69240	AVRG		0.68877		10.02746
149 Isopropyl ether	1.17856 1.27978	1.20714 ++++	1.22723	++++	1.35500	1.28847	AVRG		1.25603		5.11461
22 1,1-Dichloroethane	0.63851 0.58256	0.61229 ++++	0.61498	0.63059	0.59502	0.58850	AVRG		0.60892		3.48284
24 2-Chloro-1,3-butadiene	0.43909 0.47005	0.41392 ++++	0.43620	++++	0.46698	0.45510	AVRG		0.44689		4.76780
150 Ethyl tert-butyl ether	0.96060 1.06416	0.99018 ++++	0.99350	++++	1.12285	1.05470	AVRG		1.03100		5.83984

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
30 2-Butanone	0.36048 0.30322	0.34230 ++++	0.36628 0.37925	0.36197 ++++	0.36632 0.40622	0.33505 0.35782	AVRG AVRG		0.34795 0.38382		6.66394 8.76813
26 Ethyl acetate	0.43850 0.34656	0.37454 ++++	0.37925 0.52363	0.36197 0.53259	0.40622 0.52069	0.35782 0.50897	AVRG AVRG		0.38382 0.52039		8.76813 2.13549
31 cis-1,2-Dichloroethylene	0.52176 0.50283	0.53226 ++++	0.52363 0.25678	0.53259 0.27057	0.52069 0.25348	0.50897 0.26070	AVRG AVRG		0.52039 0.25991		2.13549 3.05111
25 2,2-Dichloropropane	0.26757 0.26248	0.24780 ++++	0.25678 0.05462	0.27057 0.05791	0.25348 0.05791	0.26070 0.05194	AVRG AVRG		0.25991 0.05318		3.05111 6.23423
28 Propionitrile	0.04829 0.05476	0.05156 ++++	0.05462 0.23628	0.05791 0.24427	0.05791 0.24427	0.05194 0.22317	AVRG AVRG		0.05318 0.22806		6.23423 5.34336
27 Methacrylonitrile	0.23468 0.21617	0.21381 ++++	0.23628 0.15405	0.24427 0.16514	0.24427 0.15939	0.22317 0.15743	AVRG AVRG		0.22806 0.15742		5.34336 3.70302
29 Bromochloromethane	0.15915 0.16023	0.14655 ++++	0.15405 0.53560	0.16514 0.54147	0.15939 0.52852	0.15743 0.51441	AVRG AVRG		0.15742 0.52656		3.70302 2.27316
32 Chloroform	0.53622 0.51056	0.51918 ++++	0.53560 0.29504	0.54147 0.29504	0.52852 0.30548	0.51441 0.27103	AVRG AVRG		0.52656 0.28437		2.27316 6.75696
72 Tetrahydrofuran	0.29926 0.25483	0.28059 ++++	0.29504 0.29504	0.29504 0.29504	0.30548 0.30548	0.27103 0.27103	AVRG AVRG		0.28437 0.28437		6.75696 6.75696

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	1.00	200									
	Level 7	Level 8									
36 1,1,1-Trichloroethane	0.38624	0.37753	0.37819	0.38458	0.38328	0.38276	AVRG	0.38307			1.07298
	0.38893	++++									
19 Isobutyl alcohol	0.01677	0.01565	0.01713	++++	0.01880	0.01645	AVRG	0.01684			6.42503
	0.01624	++++									
129 Cyclohexane	0.54474	0.52567	0.54070	0.54333	0.52843	0.52462	AVRG	0.53130			2.28706
	0.51161	++++									
34 1,1-Dichloropropene	0.37412	0.36830	0.38078	0.38203	0.38487	0.37994	AVRG	0.37759			1.55594
	0.37309	++++									
33 Carbon tetrachloride	0.32660	0.34617	0.34820	0.35906	0.35788	0.35970	AVRG	0.35204			3.76236
	0.36667	++++									
37 1,2-Dichloroethane	0.43436	0.41952	0.42395	0.43308	0.41925	0.41805	AVRG	0.42317			1.83751
	0.41402	++++									
38 Benzene	1.36308	1.25853	1.25525	1.26116	1.19948	1.19142	AVRG	1.25168			6.46924
	1.12649	1.35804		++++	0.89853	0.85721	AVRG	0.82929			6.34733
151 Methyl tert-amyl ether	0.80237	0.76582	0.78404		0.56978	0.58259	AVRG	0.57639			1.99939
	0.86775	++++									
139 Cyclohexene	0.58730	0.57195	0.56394	0.59375			AVRG				
	0.56545	++++									

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
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 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients ml	m2	%RSD or R ²
	100	200									
	Level 7	Level 8									
131 n-Butyl alcohol	0.01052	0.01111	0.01281	0.01387	0.01109	0.01361	AVRG		0.01205		10.28973
	0.01184	0.01154									
39 Trichloroethylene	0.31717	0.29524	0.30441	0.30607	0.29739	0.29366	AVRG		0.30020		3.26646
	0.28749	++++									
42 Methyl methacrylate	0.18639	0.17410	0.19749	++++	0.21306	0.19618	AVRG		0.19245		6.82348
	0.18750	++++									
130 Methylcyclohexane	0.45513	0.46111	0.47841	0.49037	0.47212	0.47004	AVRG		0.46695		3.43064
	0.44146	++++									
41 1,2-Dichloropropane	0.36730	0.36116	0.36636	0.36049	0.35870	0.34744	AVRG		0.35665		3.23151
	0.33508	++++									
97 1,4-Dioxane	0.00348	0.00316	0.00317	++++	0.00359	0.00331	AVRG		0.00337		5.49164
	0.00352	++++									
43 Dibromomethane	0.18209	0.17184	0.18467	0.19847	0.19089	0.18693	AVRG		0.18569		4.38746
	0.18497	++++									
45 Bromodichloromethane	0.36248	0.35014	0.37821	0.38489	0.39190	0.38735	AVRG		0.37857		4.35950
	0.39506	++++									
48 2-Nitropropane	0.08331	0.07869	0.08535	++++	0.10409	0.10192	AVRG		0.09410		14.13862
	0.11124	++++									

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INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 sig

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	100	200									
	Level 7	Level 8									
44 2-Chloroethylvinyl ether	0.13422	0.14702	0.15063	0.17755	0.16089	0.17097	AVRG		0.15646		9.40439
	0.15393	++++									
46 cis-1,3-Dichloropropylene	0.41260	0.42572	0.44371	0.48224	0.47151	0.48520	AVRG		0.45734		6.50734
	0.48037	++++									
49 4-Methyl-2-pentanone	0.19749	0.20227	0.21406	0.21734	0.21774	0.19989	AVRG		0.20310		7.76600
	0.17288	++++									
50 Toluene	1.08277	1.00173	1.02821	0.97219	0.98451	0.88968	AVRG		0.97792		7.27089
	0.88637	++++									
51 Ethyl methacrylate	0.46007	0.45308	0.51123	++++	0.54624	0.48975					
	0.42451	++++					AVRG		0.48081		9.13930
53 trans-1,3-Dichloropropylene	0.51143	0.52388	0.55623	0.56426	0.58326	0.57416					
	0.58318	++++					AVRG		0.55663		5.13142
54 1,1,2-Trichloroethane	0.32743	0.31626	0.34288	0.32199	0.32322	0.30523					
	0.29661	++++					AVRG		0.31909		4.72902
55 2-Hexanone	0.59457	0.60407	0.66959	0.66352	0.66322	0.59709					
	0.49089	++++					AVRG		0.61185		10.30485
52 1,3-Dichloropropane	0.64225	0.63956	0.65651	0.66105	0.63536	0.58470					
	0.53966	++++					AVRG		0.62273		7.11536

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
56 Tetrachloroethylene	0.40822 0.32852	0.39356 ++++	0.36702	0.34903	0.35290	0.32617	AVRG		0.36077		8.61950
57 Dibromochloromethane	0.38901 0.43940	0.35915 ++++	0.38691	0.40837	0.41811	0.42189	AVRG		0.40326		6.65057
59 1,2-Dibromoethane	0.39864 0.38044	0.35473 ++++	0.38510	0.39160	0.38500	0.38014	AVRG		0.38224		3.60114
152 1-Chlorohexane	0.30271 0.30486	0.29174 ++++	0.29663	++++	0.33204	0.29798	AVRG		0.30433		4.71306
62 Chlorobenzene	1.22372 1.04106	1.10571 ++++	1.15478	1.10491	1.11322	1.06815	AVRG		1.11594		5.33290
60 1,1,1,2-Tetrachloroethane	0.36547 0.41410	0.37891 ++++	0.41152	0.42286	0.42301	0.41231	AVRG		0.40403		5.58794
58 Ethylbenzene	2.08197 1.65347	1.93333 ++++	1.95264	1.90900	1.95071	1.82276	AVRG		1.90055		7.00638
63 m,p-Xylenes	0.74287 0.68212	0.71727 ++++	0.75179	0.74253	0.75973	0.71758	AVRG		0.73056		3.65895
64 o-Xylene	0.74176 0.71787	0.74691 ++++	0.78675	0.76968	0.79013	0.75083	AVRG		0.75771		3.42583

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	RSD or R ²
	100	200									
	Level 7	Level 8									
65 Styrene	1.03459	1.03807	1.12863	1.18439	1.23944	1.21091	AVRG	1.13966			7.03039
	1.14161	++++									
66 Bromoform	0.44482	0.43213	0.45370	0.52181	0.54591	0.56821	AVRG	0.50976			13.08935
	0.60173	++++									
67 Isopropylbenzene	3.25034	3.08694	3.24519	3.23303	3.35084	3.14596	AVRG	3.18322			3.95174
	2.97024	++++									
68 cis-1,4-Dichloro-2-butene	0.25490	0.26094	0.28026	++++	0.31138	0.29314	AVRG	0.28030			7.40097
	0.28119	++++									
70 Cyclohexanone	14516	29596	91653	++++	468805	1182268	LINR	0.26095	0.05455		0.99898
	++++	++++									
73 1,1,2,2-Tetrachloroethane	0.96829	1.00692	0.99314	1.03350	1.00640	0.93593	AVRG	0.97445			5.45333
	0.87693	++++									
69 trans-1,4-Dichloro-2-butene	0.24936	0.25754	0.28210	++++	0.30045	0.27890	AVRG	0.27228			6.82175
	0.26532	++++									
74 1,2,3-Trichloropropane	0.27523	0.25361	0.24319	0.25021	0.24056	0.23269	AVRG	0.24587			6.55757
	0.22563	++++									
75 Bromobenzene	0.96362	0.90176	0.96119	0.94762	0.95601	0.92718	AVRG	0.93958			2.51884
	0.91967	++++									

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	200									
	Level 7	Level 8									
76 n-Propylbenzene	3.95873	3.96166	4.11798	4.04805	4.13939	3.83328	AVRG		3.92144		6.53759
	3.39096	++++									
78 1,3,5-Trimethylbenzene	2.80146	2.87178	2.92995	2.94806	2.97667	2.75858	AVRG		2.83102		5.44766
	2.53064	++++									
77 2-Chlorotoluene	2.75102	2.88910	2.93332	2.85068	2.85004	2.59805	AVRG		2.73791		8.21954
	2.29316	++++									
80 4-Chlorotoluene	2.56063	2.43010	2.58017	2.53396	2.59950	2.46938	AVRG		2.49650		4.20746
	2.30175	++++									
81 tert-Butylbenzene	2.80177	2.76592	2.81141	2.79724	2.88616	2.75816	AVRG		2.77558		3.05023
	2.60842	++++									
79 1,2,4-Trimethylbenzene	2.97003	2.91817	3.11903	3.06113	3.14621	2.94944	AVRG		2.97917		5.17051
	2.69021	++++									
82 Pentachloroethane	0.36954	0.36634	0.31245	++++	0.33501	0.32855	AVRG		0.34092		6.58075
	0.33362	++++									
83 sec-Butylbenzene	3.85267	3.79520	4.06980	3.93500	4.07707	3.80243	AVRG		3.86211		5.09194
	3.50258	++++									
84 4-Isopropyltoluene	2.94243	2.86781	3.13174	3.02950	3.16269	2.96456	AVRG		2.97920		4.81411
	2.75564	++++									

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	200									
	Level 7	Level 8									
85 1,3-Dichlorobenzene	1.94582 1.70682	1.82931 ++++	1.89298	1.83356	1.85409	1.77464 AVRG			1.83389		4.23014
87 1,4-Dichlorobenzene	2.01504 1.68475	1.91468 ++++	1.93449	1.80861	1.87538	1.76315 AVRG			1.85658		6.04060
88 Benzyl chloride	1.02973 1.09075	1.03882 ++++	1.19638	++++	2.34795	1.24416 AVRG			1.15797		10.93437
89 n-Butylbenzene	2.93279 2.60160	2.79096 ++++	3.12021	2.95877	3.14382	2.89857 AVRG			2.92096		6.40980
90 1,2-Dichlorobenzene	1.77065 1.63894	1.71894 ++++	1.83453	1.78294	1.78978	1.68902 AVRG			1.74640		3.85289
91 bis(2-Chloroisopropyl)ether	0.47630 0.48428	0.42827 ++++	0.50345	++++	0.57227	0.51429 AVRG			0.49648		9.58302
92 1,2-Dibromo-3-chloropropane	0.13346 0.16707	0.14169 ++++	0.14390	0.15797	0.17244	0.16948 AVRG			0.15514		9.95921
93 1,2,4-Trichlorobenzene	0.85605 0.89309	0.87414 ++++	0.95913	0.97253	1.02936	0.96745 AVRG			0.93597		6.70581
94 Hexachlorobutadiene	0.71275 0.64080	0.65904 ++++	0.71637	0.68162	0.71291	0.65042 AVRG			0.68199		4.75294

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
 End Cal Date : 12-JAN-2010 06:35
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Cal Date : 27-Jan-2010 15:20 slg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
95 Naphthalene	1.33720 1.64513	1.42468 ++++	1.61611	1.77347	1.86701	1.76700	AVRG	1.63294	11.82647		
96 1,2,3-Trichlorobenzene	0.69154 0.72545	0.70242 ++++	0.77689	0.78845	0.84534	0.78192	AVRG	0.75884	7.22597		
138 1,2-Dichloroethane-d4	0.25752 0.29966	0.26323 ++++	0.26725	0.26960	0.27107	0.28420	AVRG	0.27322	5.21768		
47 Toluene-d8	1.30341 1.22560	1.30762 ++++	1.31335	1.26223	1.27194	1.21301	AVRG	1.27102	3.16129		
71 Bromofluorobenzene	0.91655 0.91628	0.90771 ++++	0.91493	0.91461	0.90859	0.92207	AVRG	0.91439	0.53908		

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2010 23:17
End Cal Date : 12-JAN-2010 06:35
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
Cal Date : 27-Jan-2010 15:20 slg

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

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 12-JAN-2010 07:30
Lab File ID: 4t121.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100111-17 Quant Type: ISTD
Method: /chem/VOA4.i/011110v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.73961	0.71029	0.71029	0.050	-3.96444	30.00000	Averaged
M 2 1,2-Dichloroethylene (total)	0.49999	0.46073	0.46073	0.050	-7.85239	30.00000	Averaged
M 135 1,3-Dichloropropylene	0.43215	0.43460	0.43460	0.050	0.56651	30.00000	Averaged
3 Dichlorodifluoromethane	0.20300	0.15342	0.15342	0.050	-24.42207	30.00000	Averaged
4 Chloromethane	0.43691	0.36261	0.36261	0.100	-17.00563	30.00000	Averaged spcc
5 Vinyl chloride	0.33555	0.30232	0.30232	0.050	-9.90077	20.00000	Averaged ccc
6 Bromomethane	0.28082	0.24489	0.24489	0.050	-12.79556	30.00000	Averaged
7 Chloroethane	0.28387	0.25896	0.25896	0.050	-8.77703	30.00000	Averaged
8 Trichlorofluoromethane	0.39174	0.37508	0.37508	0.050	-4.25292	30.00000	Averaged
134 Ethyl Ether	0.27121	0.26319	0.26319	0.001	-2.95840	30.00000	Averaged
10 Acetone	0.30833	0.22748	0.22748	0.050	-26.22226	40.00000	Averaged
15 Acetonitrile	0.06347	0.05463	0.05463	0.010	-13.92230	30.00000	Averaged
11 1,1-Dichloroethylene	0.52813	0.45924	0.45924	0.050	-13.04389	20.00000	Averaged ccc
128 Methyl acetate	0.31820	0.26661	0.26661	0.010	-16.21306	40.00000	Averaged
13 Iodomethane	0.53151	0.48902	0.48902	0.050	-7.99384	30.00000	Averaged
17 Methylene chloride	47.18119	50.00000	0.34414	0.050	-5.63761	30.00000	Linear
14 Carbon disulfide	1.00112	0.90114	0.90114	0.050	-9.98615	30.00000	Averaged
20 tert-Butyl methyl ether	0.79224	0.75340	0.75340	0.050	-4.90180	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.47958	0.44058	0.44058	0.050	-8.13237	30.00000	Averaged
23 Vinyl acetate	0.68877	0.62071	0.62071	0.010	-9.88096	40.00000	Averaged
22 1,1-Dichloroethane	0.60892	0.55605	0.55605	0.100	-8.68345	30.00000	Averaged spcc
30 2-Butanone	0.34795	0.26877	0.26877	0.030	-22.75629	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.52039	0.48088	0.48088	0.050	-7.59252	30.00000	Averaged
25 2,2-Dichloropropane	0.25991	0.24414	0.24414	0.050	-6.06768	30.00000	Averaged
32 Chloroform	0.52656	0.49680	0.49680	0.010	-5.65228	20.00000	Averaged ccc
29 Bromochloromethane	0.15742	0.15062	0.15062	0.010	-4.31747	30.00000	Averaged
36 1,1,1-Trichloroethane	0.38307	0.37583	0.37583	0.010	-1.88994	30.00000	Averaged
129 Cyclohexane	0.53130	0.48649	0.48649	0.010	-8.43462	30.00000	Averaged
34 1,1-Dichloropropene	0.37759	0.36354	0.36354	0.010	-3.72206	30.00000	Averaged
131 n-Butyl alcohol	0.01205	0.01242	0.01242	0.001	3.07482	40.00000	Averaged
33 Carbon tetrachloride	0.35204	0.34773	0.34773	0.010	-1.22419	30.00000	Averaged
138 1,2-Dichloroethane-d4	0.27322	0.28965	0.28965	0.001	6.01311	30.00000	Averaged
37 1,2-Dichloroethane	0.42317	0.40014	0.40014	0.010	-5.44350	30.00000	Averaged
38 Benzene	1.25168	1.10823	1.10823	0.010	-11.46066	30.00000	Averaged
139 Cyclohexene	0.57639	0.52604	0.52604	0.001	-8.73635	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 12-JAN-2010 07:30
Lab File ID: 4t121.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100111-17 Quant Type: ISTD
Method: /chem/VOA4.i/011110v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
			RRF50	RRF	%D / %DRIFT	%D / %DRIFT
39 Trichloroethylene	0.30020	0.28419	0.28419	0.010	-5.33589	30.00000
41 1,2-Dichloropropane	0.35665	0.33041	0.33041	0.010	-7.35665	20.00000
130 Methylcyclohexane	0.46695	0.43651	0.43651	0.010	-6.51847	30.00000
45 Bromodichloromethane	0.37857	0.37637	0.37637	0.010	-0.58311	30.00000
43 Dibromomethane	0.18569	0.17863	0.17863	0.010	-3.80502	30.00000
44 2-Chloroethylvinyl ether	0.15646	0.12903	0.12903	0.005	-17.52875	30.00000
49 4-Methyl-2-pentanone	0.20310	0.17912	0.17912	0.010	-11.80668	40.00000
46 cis-1,3-Dichloropropylene	0.45734	0.45218	0.45218	0.010	-1.12719	30.00000
47 Toluene-d8	1.27102	1.25219	1.25219	0.010	-1.48139	30.00000
50 Toluene	0.97792	0.88360	0.88360	0.010	-9.64501	20.00000
53 trans-1,3-Dichloropropylene	0.55663	0.55670	0.55670	0.010	0.01246	30.00000
54 1,1,2-Trichloroethane	0.31909	0.29499	0.29499	0.010	-7.55014	30.00000
55 2-Hexanone	0.61185	0.45793	0.45793	0.010	-25.15596	40.00000
52 1,3-Dichloropropane	0.62273	0.56725	0.56725	0.010	-8.90869	30.00000
56 Tetrachloroethylene	0.36077	0.32794	0.32794	0.010	-9.10237	30.00000
57 Dibromochloromethane	0.40326	0.40733	0.40733	0.010	1.00786	30.00000
59 1,2-Dibromoethane	0.38224	0.36417	0.36417	0.010	-4.72728	30.00000
62 Chlorobenzene	1.11594	1.05133	1.05133	0.300	-5.78978	30.00000
60 1,1,1,2-Tetrachloroethane	0.40403	0.40856	0.40856	0.010	1.12108	30.00000
58 Ethylbenzene	1.90055	1.75389	1.75389	0.010	-7.71696	20.00000
63 m,p-Xylenes	0.73056	0.69660	0.69660	0.010	-4.64734	30.00000
64 o-Xylene	0.75771	0.73766	0.73766	0.010	-2.64549	30.00000
65 Styrene	1.13966	1.16069	1.16069	0.010	1.84512	30.00000
66 Bromoform	0.50976	0.53665	0.53665	0.100	5.27531	30.00000
67 Isopropylbenzene	3.18322	3.02272	3.02272	0.010	-5.04199	30.00000
73 1,1,2,2-Tetrachloroethane	0.97445	0.85041	0.85041	0.300	-12.72850	30.00000
71 Bromofluorobenzene	0.91439	0.92018	0.92018	0.010	0.63298	30.00000
74 1,2,3-Trichloropropane	0.24587	0.21915	0.21915	0.010	-10.86923	30.00000
75 Bromobenzene	0.93958	0.90572	0.90572	0.010	-3.60398	30.00000
76 n-Propylbenzene	3.92144	3.57912	3.57912	0.010	-8.72948	30.00000
77 2-Chlorotoluene	2.73791	2.51004	2.51004	0.010	-8.32266	30.00000
78 1,3,5-Trimethylbenzene	2.83102	2.66761	2.66761	0.010	-5.77221	30.00000
80 4-Chlorotoluene	2.49650	2.37022	2.37022	0.010	-5.05817	30.00000
81 tert-Butylbenzene	2.77558	2.63396	2.63396	0.010	-5.10243	30.00000
79 1,2,4-Trimethylbenzene	2.97917	2.78654	2.78654	0.010	-6.46614	30.00000
83 sec-Butylbenzene	3.86211	3.58990	3.58990	0.010	-7.04822	30.00000

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 12-JAN-2010 07:30
Lab File ID: 4t121.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100111-17 Quant Type: ISTD
Method: /chem/VOA4.i/011110v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
RRF	%D / %DRIFT	%D / %DRIFT	%D / %DRIFT	%D / %DRIFT	%D / %DRIFT	
84 4-Isopropyltoluene	2.97920	2.81125	2.81125	0.010	-5.63734	30.00000 Averaged
85 1,3-Dichlorobenzene	1.83389	1.70136	1.70136	0.010	-7.22685	30.00000 Averaged
87 1,4-Dichlorobenzene	1.85658	1.68757	1.68757	0.010	-9.10353	30.00000 Averaged
89 n-Butylbenzene	2.92096	2.66115	2.66115	0.010	-8.89469	30.00000 Averaged
90 1,2-Dichlorobenzene	1.74640	1.63857	1.63857	0.010	-6.17443	30.00000 Averaged
92 1,2-Dibromo-3-chloropropane	0.15514	0.15336	0.15336	0.010	-1.14696	30.00000 Averaged
93 1,2,4-Trichlorobenzene	0.93597	0.88979	0.88979	0.010	-4.93335	30.00000 Averaged
94 Hexachlorobutadiene	0.68199	0.60245	0.60245	0.010	-11.66191	30.00000 Averaged
95 Naphthalene	1.63294	1.59569	1.59569	0.010	-2.28131	30.00000 Averaged
96 1,2,3-Trichlorobenzene	0.75884	0.74403	0.74403	0.010	-1.95190	30.00000 Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 17.79565

Maximum Average %D/Drift = 20.00000

* Passed Average %D/Drift Test.

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/011110v4/4t121.d

Lab Smp Id: W4VM100111-17

Client Smp ID: SECOND SOURCE

Inj Date : 12-JAN-2010 07:30

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |W4VM100111-17|CCV|LCS|1|VOAF|1|

Misc Info : GEL 5ML N/A UVM091214-01F/IVM100105-01

Comment :

Method : /chem/VOA4.i/011110v4/VOA4-8260-011110.m

Meth Date : 12-Jan-2010 16:55 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 21

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubL+.sub

Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

Local Compound Variable

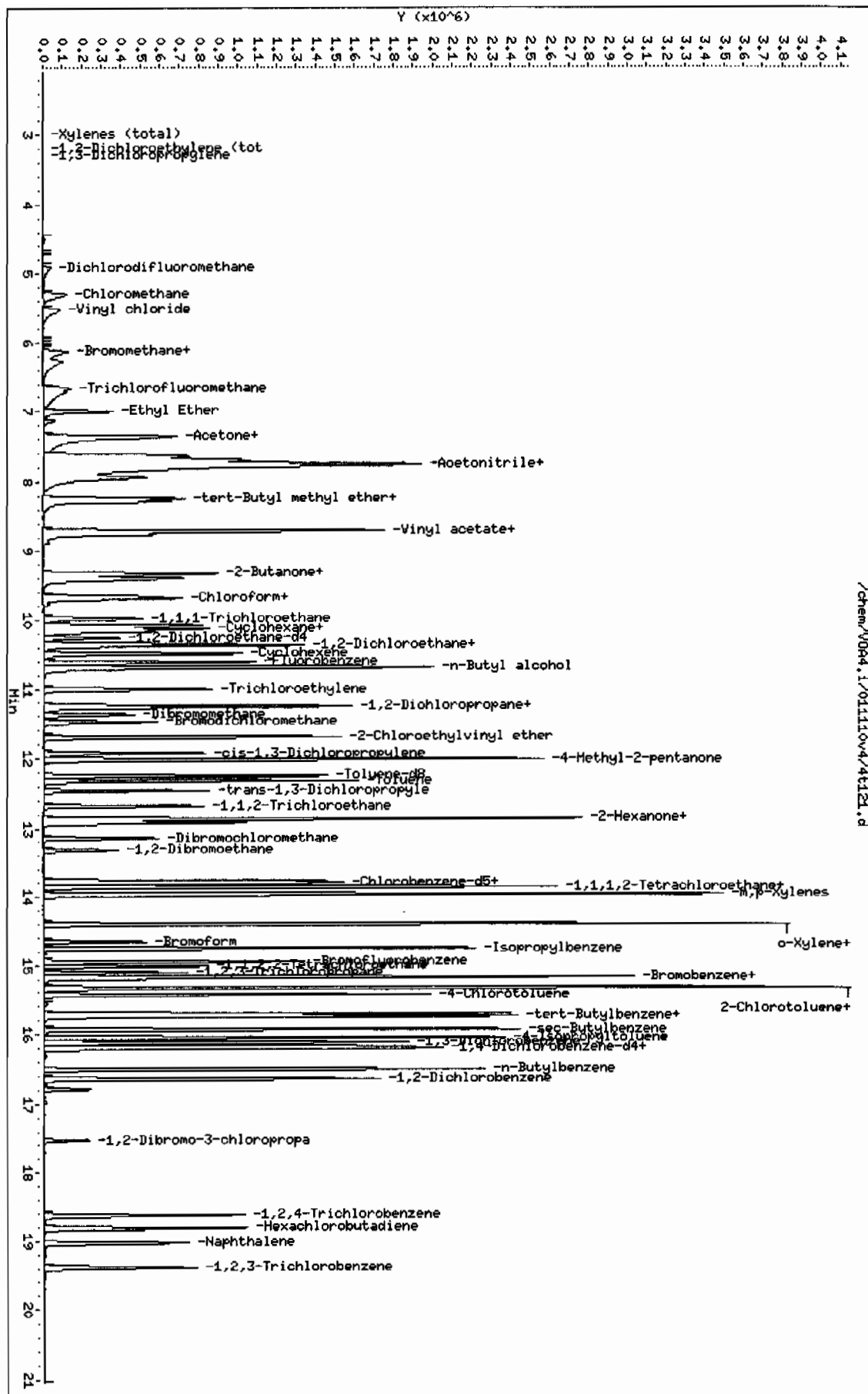
		QUANT SIG			AMOUNTS	
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)
						ON-COL (ug/l)
M 1 Xylenes (total)	106				1832926	150.000
M 2 1,2-Dichloroethylene (total)	96				1058107	100.000
M 135 1,3-Dichloropropylene	75				998095	100.000
3 Dichlorodifluoromethane	85	4.904	4.904	(0.462)	176171	50.0000
4 Chloromethane	50	5.299	5.299	(0.499)	416388	50.0000
5 Vinyl chloride	62	5.514	5.514	(0.520)	347156	50.0000
6 Bromomethane	94	6.130	6.130	(0.578)	281203	50.0000
7 Chloroethane	64	6.281	6.281	(0.592)	297357	50.0000
8 Trichlorofluoromethane	101	6.668	6.668	(0.628)	430702	50.0000
134 Ethyl Ether	59	6.998	6.998	(0.659)	302217	50.0000
10 Acetone	43	7.357	7.357	(0.693)	1306051	250.000
15 Acetonitrile	41	7.699	7.699	(0.725)	1568284	1250.00
11 1,1-Dichloroethylene	61	7.388	7.388	(0.696)	527342	50.0000
128 Methyl acetate	43	7.747	7.747	(0.730)	1530721	250.000
13 Iodomethane	142	7.632	7.632	(0.719)	2807714	250.000
17 Methylene chloride	84	7.936	7.936	(0.748)	395178	50.0000

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	5173888	250.000	225
20 tert-Butyl methyl ether	73	8.241	8.241	(0.777)	865129	50.0000	47.5
21 trans-1,2-Dichloroethylene	61	8.278	8.278	(0.780)	505917	50.0000	45.9
23 Vinyl acetate	43	8.705	8.705	(0.820)	3563794	250.000	225
22 1,1-Dichloroethane	63	8.753	8.753	(0.825)	638505	50.0000	45.6
30 2-Butanone	43	9.320	9.320	(0.878)	1543111	250.000	193
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.885)	552190	50.0000	46.2
25 2,2-Dichloropropane	77	9.418	9.418	(0.887)	280343	50.0000	47.0
32 Chloroform	83	9.686	9.686	(0.913)	570473	50.0000	47.2
29 Bromochloromethane	128	9.656	9.656	(0.910)	172958	50.0000	47.8
36 1,1,1-Trichloroethane	97	9.973	9.973	(0.940)	431566	50.0000	49.0
129 Cyclohexane	56	10.076	10.076	(0.949)	558630	50.0000	45.8
34 1,1-Dichloropropene	75	10.131	10.131	(0.955)	417446	50.0000	48.1
131 n-Butyl alcohol	56	10.686	10.686	(1.007)	1426091	5000.00	5150
33 Carbon tetrachloride	117	10.174	10.174	(0.959)	399296	50.0000	49.4
\$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.967)	332602	50.0000	53.0
37 1,2-Dichloroethane	62	10.338	10.338	(0.974)	459477	50.0000	47.3
38 Benzene	78	10.369	10.369	(0.977)	1272573	50.0000	44.3
139 Cyclohexene	67	10.491	10.491	(0.988)	604047	50.0000	45.6
* 40 Fluorobenzene	96	10.613	10.613	(1.000)	1148293	50.0000	
39 Trichloroethylene	95	11.003	11.003	(1.037)	326329	50.0000	47.3
41 1,2-Dichloropropane	63	11.241	11.241	(1.059)	379407	50.0000	46.3
130 Methylcyclohexane	83	11.259	11.259	(1.061)	501241	50.0000	46.7
45 Bromodichloromethane	83	11.478	11.478	(1.082)	432179	50.0000	49.7
43 Dibromomethane	93	11.369	11.369	(1.071)	205117	50.0000	48.1
44 2-Chloroethylvinyl ether	63	11.692	11.692	(1.102)	740839	250.000	206
49 4-Methyl-2-pentanone	58	12.015	12.015	(0.873)	770364	250.000	220
46 cis-1,3-Dichloropropylene	75	11.930	11.930	(1.124)	519236	50.0000	49.4
\$ 47 Toluene-d8	98	12.247	12.246	(0.890)	1077108	50.0000	49.2
50 Toluene	92	12.320	12.320	(0.895)	760054	50.0000	45.2
53 trans-1,3-Dichloropropylene	75	12.460	12.460	(0.905)	478859	50.0000	50.0
54 1,1,2-Trichloroethane	83	12.679	12.679	(0.921)	253748	50.0000	46.2
55 2-Hexanone	43	12.856	12.856	(0.934)	1969517	250.000	187
52 1,3-Dichloropropane	76	12.874	12.874	(0.935)	487937	50.0000	45.5
56 Tetrachloroethylene	164	12.917	12.917	(0.938)	282083	50.0000	45.4
57 Dibromochloromethane	129	13.143	13.143	(0.955)	350373	50.0000	50.5
59 1,2-Dibromoethane	107	13.313	13.313	(0.967)	313248	50.0000	47.6
* 61 Chlorobenzene-d5	117	13.764	13.764	(1.000)	860178	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.003)	904327	50.0000	47.1
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	351431	50.0000	50.6
58 Ethylbenzene	91	13.862	13.862	(1.007)	1508657	50.0000	46.1
63 m,p-Xylenes	106	13.966	13.966	(1.015)	1198407	100.000	95.4
64 o-Xylene	106	14.399	14.399	(1.046)	634519	50.0000	48.7
65 Styrene	104	14.399	14.399	(1.046)	998401	50.0000	50.9
66 Bromoform	173	14.655	14.655	(0.906)	295024	50.0000	52.6
67 Isopropylbenzene	105	14.758	14.758	(0.913)	1661739	50.0000	47.5
73 1,1,2,2-Tetrachloroethane	83	15.014	15.014	(0.928)	467514	50.0000	43.6

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
=====	=====	==	=====	=====	=====	=====	=====
\$ 71 Bromofluorobenzene	95	14.947	14.947	(0.924)	505868	50.0000	50.3
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	120477	50.0000	44.6
75 Bromobenzene	156	15.167	15.167	(0.938)	497917	50.0000	48.2
76 n-Propylbenzene	91	15.179	15.179	(0.939)	1967615	50.0000	45.6
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1379894	50.0000	45.8
78 1,3,5-Trimethylbenzene	105	15.325	15.325	(0.948)	1466514	50.0000	47.1
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1303028	50.0000	47.5
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	1448017	50.0000	47.4
79 1,2,4-Trimethylbenzene	105	15.740	15.740	(0.973)	1531896	50.0000	46.8
83 sec-Butylbenzene	105	15.929	15.929	(0.985)	1973543	50.0000	46.5
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	1545481	50.0000	47.2
85 1,3-Dichlorobenzene	146	16.118	16.118	(0.997)	935319	50.0000	46.4
* 86 1,4-Dichlorobenzene-d4	152	16.173	16.173	(1.000)	549749	50.0000	
87 1,4-Dichlorobenzene	146	16.203	16.203	(1.002)	927740	50.0000	45.4
89 n-Butylbenzene	91	16.502	16.502	(1.020)	1462965	50.0000	45.6
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	900803	50.0000	46.9
92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.084)	84311	50.0000	49.4
93 1,2,4-Trichlorobenzene	180	18.629	18.629	(1.152)	489162	50.0000	47.5
94 Hexachlorobutadiene	225	18.818	18.818	(1.164)	331198	50.0000	44.2
95 Naphthalene	128	19.026	19.026	(1.176)	877229	50.0000	48.8
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.199)	409031	50.0000	49.0

Data File: /chem/V004.1/011110v4/4t121.d
 Date: 12-JAN-2010 07:30
 Client ID: SECOND SOURCE
 Sample Info: 146VH10011-17/DCV/LCS11/V004.1
 Purge Volume: 5.0
 Column phase: RTX-VOLATILES

Instrument: V004.1
 Operator: ACJ
 Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 12-JAN-2010 19:20
Lab File ID: 4t204ICV.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100112-03 Quant Type: ISTD
Method: /chem/VOA4.i/011210v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	130	150	0.17374	0.010	-13.17347	30.00000	Linear
154 2-Chloro-1,1,1-trifluoroeth	0.28437	0.30684	0.30684	0.010	7.90273	30.00000	Averaged
9 Acrolein	0.05969	0.04777	0.04777	0.001	-19.96779	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09245	0.06898	0.06898	0.050	-25.39198	30.00000	Averaged
147 Isopropyl Alcohol	0.03136	0.03278	0.03278	0.010	4.52767	40.00000	Averaged
16 Allyl chloride	0.55731	0.40898	0.40898	0.010	-26.61560	30.00000	Averaged
148 tert-Butyl Alcohol	0.04350	0.04533	0.04533	0.010	4.19185	40.00000	Averaged
18 Acrylonitrile	0.13250	0.10099	0.10099	0.010	-23.78161	30.00000	Averaged
149 Isopropyl ether	1.25603	1.20263	1.20263	0.010	-4.25157	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.44689	0.35433	0.35433	0.010	-20.71268	30.00000	Averaged
150 Ethyl tert-butyl ether	1.03100	0.98534	0.98534	0.010	-4.42827	30.00000	Averaged
28 Propionitrile	0.05318	0.04050	0.04050	0.010	-23.84624	30.00000	Averaged
26 Ethyl acetate	0.38382	0.26473	0.26473	0.010	-31.02737	40.00000	Averaged
27 Methacrylonitrile	0.22806	0.16964	0.16964	0.010	-25.61719	30.00000	Averaged
72 Tetrahydrofuran	0.28437	0.20407	0.20407	0.010	-28.23822	30.00000	Averaged
19 Isobutyl alcohol	0.01684	0.01270	0.01270	0.005	-24.56807	40.00000	Averaged
151 Methyl tert-amyl ether	0.82929	0.79888	0.79888	0.010	-3.66714	30.00000	Averaged
42 Methyl methacrylate	0.19245	0.14900	0.14900	0.010	-22.57821	30.00000	Averaged
51 Ethyl methacrylate	0.48081	0.38220	0.38220	0.010	-20.51059	30.00000	Averaged
152 1-Chlorohexane	0.30433	0.33789	0.33789	0.010	11.02965	30.00000	Averaged
97 1,4-Dioxane	0.00337	0.00265	0.00265	0.001	-21.48684	40.00000	Averaged
48 2-Nitropropane	0.09410	0.08332	0.08332	0.010	-11.45690	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.28030	0.24608	0.24608	0.010	-12.20790	30.00000	Averaged
70 Cyclohexanone	400	1250	0.01690	0.005	-67.97368	40.00000	Linear
69 trans-1,4-Dichloro-2-butene	0.27228	0.23558	0.23558	0.010	-13.47744	30.00000	Averaged
82 Pentachloroethane	0.34092	0.36955	0.36955	0.010	8.39918	30.00000	Averaged
88 Benzyl chloride	1.15797	1.16017	1.16017	0.010	0.19058	30.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.49648	0.39896	0.39896	0.010	-19.64256	30.00000	Averaged
138 1,2-Dichloroethane-d4	0.27322	0.26658	0.26658	0.001	-2.42896	30.00000	Averaged
47 Toluene-d8	1.27102	1.24875	1.24875	0.010	-1.75191	30.00000	Averaged
71 Bromofluorobenzene	0.91439	0.88029	0.88029	0.010	-3.72914	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 12-JAN-2010 19:20
Lab File ID: 4t204ICV.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100112-03 Quant Type: ISTD
Method: /chem/VOA4.i/011210v4/VOA4-8260-011110.m

Average %D / Drift Results.	
=====	
Calculated Average %D/Drift =	16.41203
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/011210v4/4t204ICV.d

Lab Smp Id: W4VM100112-03

Client Smp ID: SHORT SECOND SOURCE

Inj Date : 12-JAN-2010 19:20

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |W4VM100112-03|SHORT|1|VOAF|1|

Misc Info : GEL 5ML N/A UVM091216-08A/UVM091209-08C

Comment :

Method : /chem/VOA4.i/011210v4/VOA4-8260-011110.m

Meth Date : 12-Jan-2010 20:49 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubS+SS.sub

Target Version: 3.50

Processing Host: prdsrv07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	638726	150.000	130
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	1128070	150.000	162
9 Acrolein	56	7.181	7.181	(0.676)	292713	250.000	200
12 Trichlorotrifluoroethane	85	7.358	7.358	(0.693)	422652	250.000	186
147 Isopropyl Alcohol	45	7.437	7.437	(0.700)	2008420	2500.00	2610
16 Allyl chloride	41	7.803	7.803	(0.735)	2505970	250.000	183
148 tert-Butyl Alcohol	59	7.925	7.925	(0.746)	2777364	2500.00	2600
18 Acrylonitrile	53	8.175	8.175	(0.770)	618813	250.000	190
149 Isopropyl ether	45	8.742	8.742	(0.823)	1473783	50.0000	47.9
24 2-Chloro-1,3-butadiene	53	8.864	8.864	(0.835)	434217	50.0000	39.6
150 Ethyl tert-butyl ether	59	9.144	9.144	(0.861)	1207508	50.0000	47.8
28 Propionitrile	54	9.388	9.388	(0.884)	248142	250.000	190
26 Ethyl acetate	43	9.339	9.339	(0.879)	1622083	250.000	172
27 Methacrylonitrile	41	9.577	9.577	(0.902)	1039444	250.000	186
72 Tetrahydrofuran	42	9.711	9.711	(0.600)	572003	250.000	179

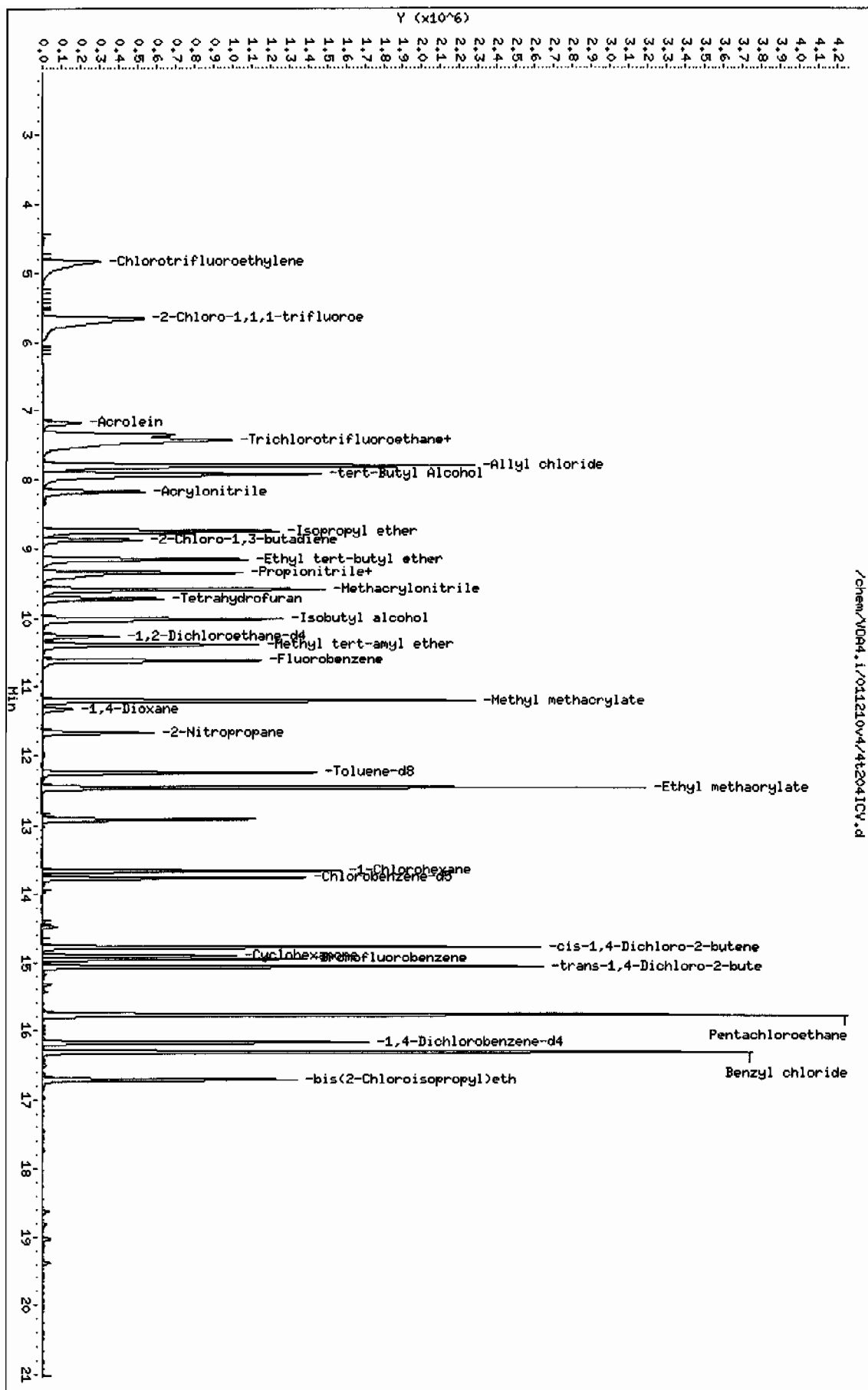
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
=====	=====	==	=====	=====	=====	=====	=====
19 Isobutyl alcohol	41	10.004	10.004	(0.942)	778269	2500.00	1880
151 Methyl tert-amyl ether	73	10.388	10.388	(0.978)	978998	50.0000	48.2
42 Methyl methacrylate	69	11.205	11.205	(1.055)	912987	250.000	194
51 Ethyl methacrylate	69	12.461	12.461	(0.905)	1686205	250.000	199
152 1-Chlorohexane	55	13.662	13.662	(1.286)	414078	50.0000	55.5
97 1,4-Dioxane	88	11.321	11.321	(1.066)	162214	2500.00	1960
48 2-Nitropropane	43	11.674	11.674	(1.099)	510525	250.000	221
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	689763	250.000	219
70 Cyclohexanone	42	14.905	14.905	(1.082)	372821	1250.00	400
69 trans-1,4-Dichloro-2-butene	53	15.064	15.064	(0.931)	660328	250.000	216
82 Pentachloroethane	167	15.771	15.771	(0.975)	1035842	250.000	271 (A)
88 Benzyl chloride	91	16.320	16.320	(1.009)	3251935	250.000	250
91 bis(2-Chloroisopropyl)ether	45	16.716	16.716	(1.033)	1118261	250.000	201
* 40 Fluorobenzene	96	10.620	10.620	(1.000)	1225469	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	882375	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.180	(1.000)	560594	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.260	10.260	(0.966)	326690	50.0000	48.8
\$ 47 Toluene-d8	98	12.247	12.247	(0.889)	1101869	50.0000	49.1
\$ 71 Bromofluorobenzene	95	14.954	14.954	(0.924)	493487	50.0000	48.1

QC Flag Legend

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

Data File: /chem/VD04.1/011210v4/4t2041CV.d
 Date: 12-JAN-2010 19:20
 Client ID: SHORT SECOND SOURCE
 Sample Info: 1M4WHL00112-03|SHORT11|VD04.1
 Purge Volume: 5.0
 Column phase: RTX-VOLATILES

Instrument: VD04.1
 Operator: ACJ
 Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 05:35
Lab File ID: 4v128.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100125-07 Quant Type: ISTD
Method: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
			RRF50	RRF	%D / %DRIFT	
M 1 Xylenes (total)	0.73961	0.62368	0.62368	0.050	-15.67402	Averaged
M 2 1,2-Dichloroethylene (total)	0.49999	0.46877	0.46877	0.050	-6.24536	Averaged
M 135 1,3-Dichloropropylene	0.43215	0.44049	0.44049	0.050	1.92868	Averaged
3 Dichlorodifluoromethane	0.20300	0.22775	0.22775	0.050	12.19399	Averaged
4 Chloromethane	0.43691	0.37750	0.37750	0.100	-13.59790	Averaged spcc
5 Vinyl chloride	0.33555	0.28862	0.28862	0.050	-13.98621	Averaged ccc
6 Bromomethane	0.28082	0.29861	0.29861	0.050	6.33545	Averaged
7 Chloroethane	0.28387	0.30154	0.30154	0.050	6.22511	Averaged
8 Trichlorofluoromethane	0.39174	0.41846	0.41846	0.050	6.82180	Averaged
134 Ethyl Ether	0.27121	0.28483	0.28483	0.001	5.02291	Averaged
10 Acetone	0.30833	0.27515	0.27515	0.050	-10.75895	Averaged
15 Acetonitrile	0.06347	0.05740	0.05740	0.010	-9.55383	Averaged
11 1,1-Dichloroethylene	0.52813	0.47761	0.47761	0.050	-9.56617	Averaged ccc
128 Methyl acetate	0.31820	0.28052	0.28052	0.010	-11.83969	Averaged
13 Iodomethane	0.53151	0.54211	0.54211	0.050	1.99296	Averaged
17 Methylene chloride	50.48068	50.00000	0.36724	0.050	0.96136	Linear
14 Carbon disulfide	1.00112	0.99156	0.99156	0.050	-0.95436	Averaged
20 tert-Butyl methyl ether	0.79224	0.78382	0.78382	0.050	-1.06300	Averaged
21 trans-1,2-Dichloroethylene	0.47958	0.44273	0.44273	0.050	-7.68422	Averaged
23 Vinyl acetate	0.68877	0.68013	0.68013	0.010	-1.25374	Averaged
22 1,1-Dichloroethane	0.60892	0.58900	0.58900	0.100	-3.27222	Averaged spcc
30 2-Butanone	0.34795	0.33098	0.33098	0.030	-4.87609	Averaged
31 cis-1,2-Dichloroethylene	0.52039	0.49480	0.49480	0.050	-4.91746	Averaged
25 2,2-Dichloropropane	0.25991	0.26060	0.26060	0.050	0.26401	Averaged
32 Chloroform	0.52656	0.51295	0.51295	0.010	-2.58533	Averaged ccc
29 Bromochloromethane	0.15742	0.16096	0.16096	0.010	2.24877	Averaged
36 1,1,1-Trichloroethane	0.38307	0.38835	0.38835	0.010	1.37693	Averaged
129 Cyclohexane	0.53130	0.50539	0.50539	0.010	-4.87591	Averaged
34 1,1-Dichloropropene	0.37759	0.36297	0.36297	0.010	-3.87115	Averaged
131 n-Butyl alcohol	0.01205	0.01297	0.01297	0.001	7.63135	Averaged
33 Carbon tetrachloride	0.35204	0.35483	0.35483	0.010	0.79179	Averaged
\$ 138 1,2-Dichloroethane-d4	0.27322	0.24326	0.24326	0.001	-10.96408	Averaged
37 1,2-Dichloroethane	0.42317	0.40310	0.40310	0.010	-4.74288	Averaged
38 Benzene	1.25168	1.16520	1.16520	0.010	-6.90905	Averaged
139 Cyclohexene	0.57639	0.53678	0.53678	0.001	-6.87219	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 05:35
 Lab File ID: 4v128.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
 Analysis Type: WATER Init. Cal. Times: 23:17 06:35
 Lab Sample ID: W4VM100125-07 Quant Type: ISTD
 Method: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
39 Trichloroethylene	0.30020	0.28565	0.28565	0.010	-4.84918	30.00000	Averaged
41 1,2-Dichloropropane	0.35665	0.34541	0.34541	0.010	-3.15066	20.00000	Averaged ccc
130 Methylcyclohexane	0.46695	0.45139	0.45139	0.010	-3.33070	30.00000	Averaged
45 Bromodichloromethane	0.37857	0.38446	0.38446	0.010	1.55521	30.00000	Averaged
43 Dibromomethane	0.18569	0.18825	0.18825	0.010	1.37652	30.00000	Averaged
44 2-Chloroethylvinyl ether	0.15646	0.14738	0.14738	0.005	-5.80114	30.00000	Averaged
49 4-Methyl-2-pentanone	0.20310	0.19531	0.19531	0.010	-3.83280	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.45734	0.46003	0.46003	0.010	0.58927	30.00000	Averaged
47 Toluene-d8	1.27102	1.16163	1.16163	0.010	-8.60672	30.00000	Averaged
50 Toluene	0.97792	0.87946	0.87946	0.010	-10.06794	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.55663	0.55683	0.55683	0.010	0.03696	30.00000	Averaged
54 1,1,2-Trichloroethane	0.31909	0.30955	0.30955	0.010	-2.98829	30.00000	Averaged
55 2-Hexanone	0.61185	0.55049	0.55049	0.010	-10.02778	40.00000	Averaged
52 1,3-Dichloropropane	0.62273	0.58761	0.58761	0.010	-5.64008	30.00000	Averaged
56 Tetrachloroethylene	0.36077	0.29933	0.29933	0.010	-17.03112	30.00000	Averaged
57 Dibromochloromethane	0.40326	0.41199	0.41199	0.010	2.16450	30.00000	Averaged
59 1,2-Dibromoethane	0.38224	0.38155	0.38155	0.010	-0.17947	30.00000	Averaged
62 Chlorobenzene	1.11594	0.98999	0.98999	0.300	-11.28591	30.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.40403	0.39562	0.39562	0.010	-2.07955	30.00000	Averaged
58 Ethylbenzene	1.90055	1.59113	1.59113	0.010	-16.28079	20.00000	Averaged ccc
63 m,p-Xylenes	0.73056	0.61164	0.61164	0.010	-16.27736	30.00000	Averaged
64 o-Xylene	0.75771	0.64777	0.64777	0.010	-14.50873	30.00000	Averaged
65 Styrene	1.13966	1.05125	1.05125	0.010	-7.75799	30.00000	Averaged
66 Bromoform	0.50976	0.53296	0.53296	0.100	4.55183	30.00000	Averaged spcc
67 Isopropylbenzene	3.18322	2.54938	2.54938	0.010	-19.91181	30.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.97445	0.89454	0.89454	0.300	-8.20029	30.00000	Averaged spcc
71 Bromofluorobenzene	0.91439	0.90254	0.90254	0.010	-1.29619	30.00000	Averaged
74 1,2,3-Trichloropropane	0.24587	0.22136	0.22136	0.010	-9.97038	30.00000	Averaged
75 Bromobenzene	0.93958	0.82201	0.82201	0.010	-12.51282	30.00000	Averaged
76 n-Propylbenzene	3.92144	2.96107	2.96107	0.010	-24.49006	30.00000	Averaged
77 2-Chlorotoluene	2.73791	2.17615	2.17615	0.010	-20.51769	30.00000	Averaged
78 1,3,5-Trimethylbenzene	2.83102	2.21732	2.21732	0.010	-21.67784	30.00000	Averaged
80 4-Chlorotoluene	2.49650	1.95438	1.95438	0.010	-21.71521	30.00000	Averaged
81 tert-Butylbenzene	2.77558	2.16005	2.16005	0.010	-22.17666	30.00000	Averaged
79 1,2,4-Trimethylbenzene	2.97917	2.32420	2.32420	0.010	-21.98498	30.00000	Averaged
83 sec-Butylbenzene	3.86211	2.93574	2.93574	0.010	-23.98612	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 05:35
Lab File ID: 4v128.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100125-07 Quant Type: ISTD
Method: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

COMPOUND	RRF / AMOUNT	RF50	CCAL	MIN	MAX	CURVE TYPE
			RRF50	RRF	%D / %DRIFT	
84 4-Isopropyltoluene	2.97920	2.21227	2.21227	0.010	-25.74287	Averaged
85 1,3-Dichlorobenzene	1.83389	1.47014	1.47014	0.010	-19.83506	Averaged
87 1,4-Dichlorobenzene	1.85658	1.45836	1.45836	0.010	-21.44914	Averaged
89 n-Butylbenzene	2.92096	2.03542	2.03542	0.010	-30.31689	Averaged
90 1,2-Dichlorobenzene	1.74640	1.47535	1.47535	0.010	-15.52077	Averaged
92 1,2-Dibromo-3-chloropropane	0.15514	0.16942	0.16942	0.010	9.20006	Averaged
93 1,2,4-Trichlorobenzene	0.93597	0.77664	0.77664	0.010	-17.02290	Averaged
94 Hexachlorobutadiene	0.68199	0.43097	0.43097	0.010	-36.80591	Averaged
95 Naphthalene	1.63294	1.71147	1.71147	0.010	4.80890	Averaged
96 1,2,3-Trichlorobenzene	0.75884	0.67468	0.67468	0.010	-11.09070	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.43287

Maximum Average %D/Drift = 20.00000

* Passed Average %D/Drift Test.

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v128.d

Lab Smp Id: W4VM100125-07

Client Smp ID: VSTD050

Inj Date : 26-JAN-2010 05:35

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |W4VM100125-07|CCV|LCS|1|VOAF|1|

Misc Info : GEL 5ML N/A UVM091214-01I/IVM100120-01

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 28

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubL+.sub

Target Version: 3.50

Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

Local Compound Variable

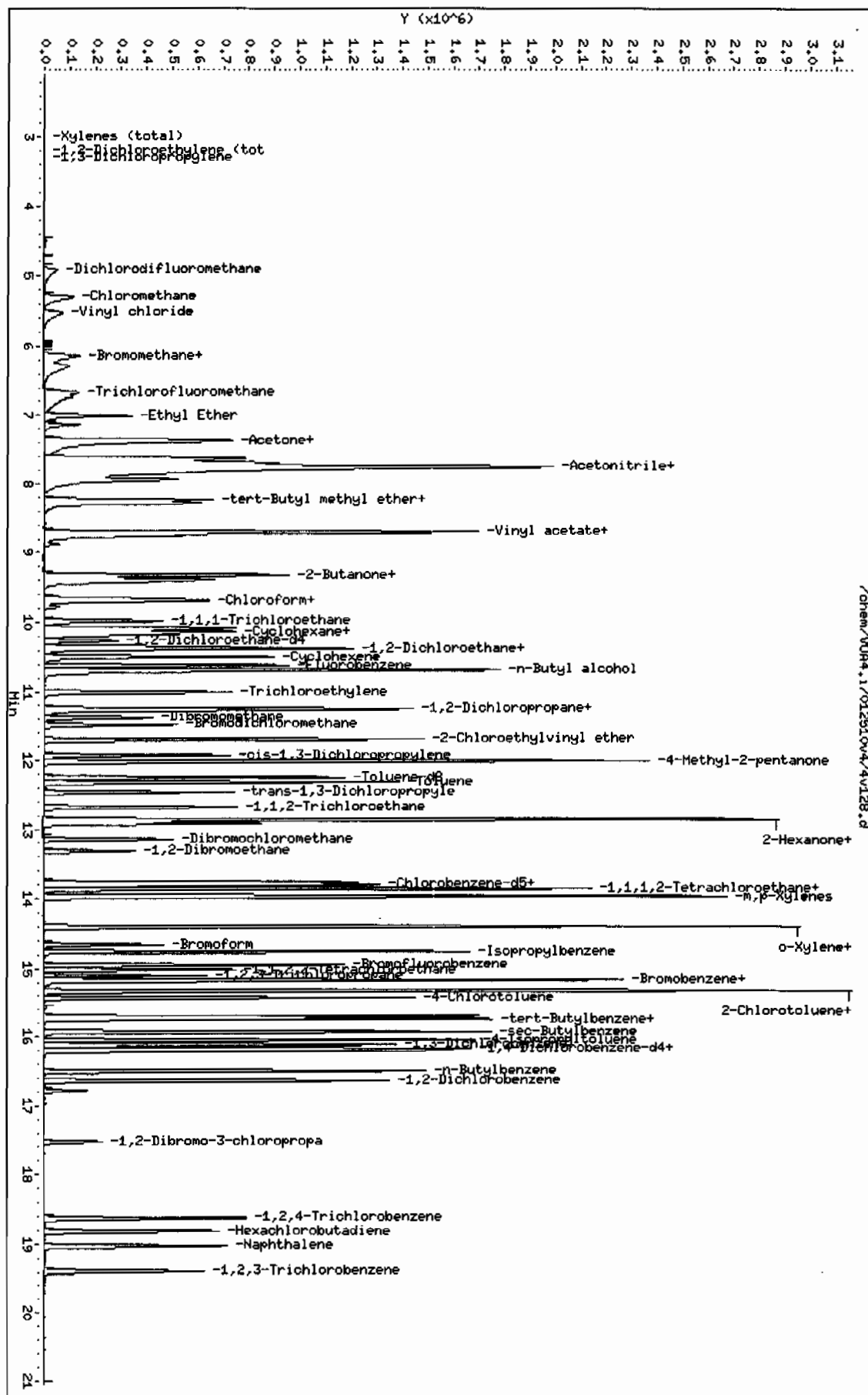
		QUANT SIG			AMOUNTS		
Compounds		MASS	RT	EXP RT REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)		106			1417891	150.000	126
M 2 1,2-Dichloroethylene (total)		96			939824	100.000	93.7
M 135 1,3-Dichloropropylene		75			883127	100.000	102
3 Dichlorodifluoromethane		85	4.912	4.912 (0.463)	228306	50.0000	56.1
4 Chloromethane		50	5.306	5.306 (0.500)	378427	50.0000	43.2
5 Vinyl chloride		62	5.528	5.528 (0.521)	289321	50.0000	43.0
6 Bromomethane		94	6.138	6.138 (0.578)	299342	50.0000	53.2
7 Chloroethane		64	6.288	6.288 (0.592)	302280	50.0000	53.1
8 Trichlorofluoromethane		101	6.668	6.668 (0.628)	419488	50.0000	53.4
134 Ethyl Ether		59	7.004	7.004 (0.660)	285531	50.0000	52.5
10 Acetone		43	7.363	7.363 (0.693)	1379138	250.000	223
15 Acetonitrile		41	7.705	7.705 (0.726)	1438575	1250.00	1130
11 1,1-Dichloroethylene		61	7.388	7.388 (0.696)	478775	50.0000	45.2
128 Methyl acetate		43	7.753	7.753 (0.730)	1406051	250.000	220
13 Iodomethane		142	7.632	7.632 (0.719)	2717155	250.000	255

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
=====	=====	==	=====	=====	=====	=====	=====
17 Methylene chloride	84	7.942	7.942	(0.748)	368138	50.0000	50.5
14 Carbon disulfide	76	7.772	7.772	(0.732)	4969942	250.000	248
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	785734	50.0000	49.5
21 trans-1,2-Dichloroethylene	61	8.290	8.290	(0.781)	443814	50.0000	46.2
23 Vinyl acetate	43	8.711	8.711	(0.820)	3408984	250.000	247
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	590438	50.0000	48.4
30 2-Butanone	43	9.326	9.326	(0.878)	1658945	250.000	238
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	496010	50.0000	47.5
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	261233	50.0000	50.1
32 Chloroform	83	9.692	9.692	(0.913)	514205	50.0000	48.7
29 Bromochloromethane	128	9.662	9.662	(0.910)	161352	50.0000	51.1
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	389297	50.0000	50.7
129 Cyclohexane	56	10.088	10.088	(0.950)	506631	50.0000	47.6
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	363861	50.0000	48.1
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1299995	5000.00	5380
33 Carbon tetrachloride	117	10.180	10.180	(0.959)	355695	50.0000	50.4
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	243859	50.0000	44.5
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	404090	50.0000	47.6
38 Benzene	78	10.375	10.375	(0.977)	1168052	50.0000	46.5
139 Cyclohexene	67	10.497	10.497	(0.989)	538097	50.0000	46.6
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1002446	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	286346	50.0000	47.6
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	346255	50.0000	48.4
130 Methylcyclohexane	83	11.265	11.265	(1.061)	452499	50.0000	48.3
45 Bromodichloromethane	83	11.484	11.484	(1.082)	385402	50.0000	50.8
43 Dibromomethane	93	11.375	11.375	(1.071)	188710	50.0000	50.7
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	738712	250.000	235
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	740041	250.000	240
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	461156	50.0000	50.3
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	880286	50.0000	45.7
50 Toluene	92	12.326	12.326	(0.895)	666462	50.0000	45.0
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	421971	50.0000	50.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	234579	50.0000	48.5
55 2-Hexanone	43	12.862	12.862	(0.934)	2085833	250.000	225
52 1,3-Dichloropropane	76	12.881	12.881	(0.935)	445290	50.0000	47.2
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	226834	50.0000	41.5
57 Dibromochloromethane	129	13.149	13.149	(0.955)	312208	50.0000	51.1
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	289140	50.0000	49.9
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	757804	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	750220	50.0000	44.4
60 1,1,1,2-Tetrachloroethane	131	13.856	13.856	(1.006)	299806	50.0000	49.0
58 Ethylbenzene	91	13.862	13.862	(1.007)	1205764	50.0000	41.8
63 m,p-Xylenes	106	13.972	13.972	(1.015)	927007	100.000	83.7
64 o-Xylene	106	14.405	14.405	(1.046)	490884	50.0000	42.7
65 Styrene	104	14.405	14.405	(1.046)	796640	50.0000	46.1
66 Bromoform	173	14.661	14.661	(0.906)	258049	50.0000	52.3
67 Isopropylbenzene	105	14.758	14.758	(0.912)	1234353	50.0000	40.0

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
=====	=====	==	=====	=====	=====	=====	=====
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	433115	50.0000	45.9
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	436989	50.0000	49.4
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	107177	50.0000	45.0
75 Bromobenzene	156	15.167	15.167	(0.937)	397999	50.0000	43.7
76 n-Propylbenzene	91	15.185	15.185	(0.939)	1433684	50.0000	37.8
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1053644	50.0000	39.7
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1073573	50.0000	39.2
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	946266	50.0000	39.1
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	1045847	50.0000	38.9
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	1125326	50.0000	39.0
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	1421417	50.0000	38.0
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	1071128	50.0000	37.1
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	711806	50.0000	40.1
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	484177	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	706106	50.0000	39.3
89 n-Butylbenzene	91	16.508	16.508	(1.020)	985502	50.0000	34.8
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	714329	50.0000	42.2
92 1,2-Dibromo-3-chloropropane	157	17.526	17.526	(1.083)	82027	50.0000	54.6
93 1,2,4-Trichlorobenzene	180	18.636	18.636	(1.152)	376030	50.0000	41.5
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	208668	50.0000	31.6
95 Naphthalene	128	19.032	19.032	(1.176)	828654	50.0000	52.4
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	326666	50.0000	44.4

Data File: /chem/V004.i/012510v4/4v128.d
 Date: 26-Jan-2010 05:35
 Client ID: VSTD050
 Sample Info: 144VH100125-071CCV/LCS111.V0AF11
 Purge Volume: 5.0
 Column phase: RTX-VOLATILES

Instrument: V004.i
 Operator: ACJ
 Column diameter: 0.25



GEL Laboratories LLC
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 06:30
Lab File ID: 4v130.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100125-09 Quant Type: ISTD
Method: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	137	150	0.18303	0.010	-8.61981	30.00000 Linear
154 2-Chloro-1,1,1-trifluoroeth	0.28437	0.29008	0.29008	0.010	2.00753	30.00000 Averaged
9 Acrolein	0.05969	0.06004	0.06004	0.001	0.58647	30.00000 Averaged
12 Trichlorotrifluoroethane	0.09245	0.09343	0.09343	0.050	1.05246	30.00000 Averaged
147 Isopropyl Alcohol	0.03136	0.03413	0.03413	0.010	8.85154	40.00000 Averaged
16 Allyl chloride	0.55731	0.51349	0.51349	0.010	-7.86303	30.00000 Averaged
148 tert-Butyl Alcohol	0.04350	0.04702	0.04702	0.010	8.07519	40.00000 Averaged
18 Acrylonitrile	0.13250	0.13364	0.13364	0.010	0.85741	30.00000 Averaged
149 Isopropyl ether	1.25603	1.27036	1.27036	0.010	1.14084	30.00000 Averaged
24 2-Chloro-1,3-butadiene	0.44689	0.43095	0.43095	0.010	-3.56632	30.00000 Averaged
150 Ethyl tert-butyl ether	1.03100	1.04451	1.04451	0.010	1.31061	30.00000 Averaged
28 Propionitrile	0.05318	0.05285	0.05285	0.010	-0.62498	30.00000 Averaged
26 Ethyl acetate	0.38382	0.33885	0.33885	0.010	-11.71533	40.00000 Averaged
27 Methacrylonitrile	0.22806	0.21504	0.21504	0.010	-5.71162	30.00000 Averaged
72 Tetrahydrofuran	0.28437	0.26559	0.26559	0.010	-6.60645	30.00000 Averaged
19 Isobutyl alcohol	0.01684	0.01564	0.01564	0.005	-7.13927	40.00000 Averaged
151 Methyl tert-amyl ether	0.82929	0.86941	0.86941	0.010	4.83792	30.00000 Averaged
42 Methyl methacrylate	0.19245	0.19058	0.19058	0.010	-0.97494	30.00000 Averaged
51 Ethyl methacrylate	0.48081	0.45796	0.45796	0.010	-4.75395	30.00000 Averaged
152 1-Chlorohexane	0.30433	0.26042	0.26042	0.010	-14.42896	30.00000 Averaged
97 1,4-Dioxane	0.00337	0.00360	0.00360	0.001	6.65877	40.00000 Averaged
48 2-Nitropropane	0.09410	0.09842	0.09842	0.010	4.59354	30.00000 Averaged
68 cis-1,4-Dichloro-2-butene	0.28030	0.27396	0.27396	0.010	-2.26303	30.00000 Averaged
70 Cyclohexanone	496	1250	0.02106	0.005	-60.35303	40.00000 Linear
69 trans-1,4-Dichloro-2-butene	0.27228	0.26122	0.26122	0.010	-4.06264	30.00000 Averaged
82 Pentachloroethane	0.34092	0.25430	0.25430	0.010	-25.40837	30.00000 Averaged
88 Benzyl chloride	1.15797	1.05269	1.05269	0.010	-9.09121	30.00000 Averaged
91 bis(2-Chloroisopropyl)ether	0.49648	0.50295	0.50295	0.010	1.30333	30.00000 Averaged
138 1,2-Dichloroethane-d4	0.27322	0.23212	0.23212	0.001	-15.04370	30.00000 Averaged
47 Toluene-d8	1.27102	1.14555	1.14555	0.010	-9.87195	30.00000 Averaged
71 Bromofluorobenzene	0.91439	0.94852	0.94852	0.010	3.73185	30.00000 Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 06:30
Lab File ID: 4v130.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100125-09 Quant Type: ISTD
Method: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Average %D / Drift Results.
=====
Calculated Average %D/Drift = 7.84213
Maximum Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

Data File: /chem/VOA4.i/012510v4/4v130.d
Report Date: 26-Jan-2010 06:52

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v130.d

Lab Smp Id: W4VM100125-09

Client Smp ID: VSTD250S

Inj Date : 26-JAN-2010 06:30

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |W4VM100125-09|SHORT|1|VOAF|1|

Misc Info : GEL 5ML N/A UVM100118-08A/UVM091209-08E

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 30

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubS+SS.sub

Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

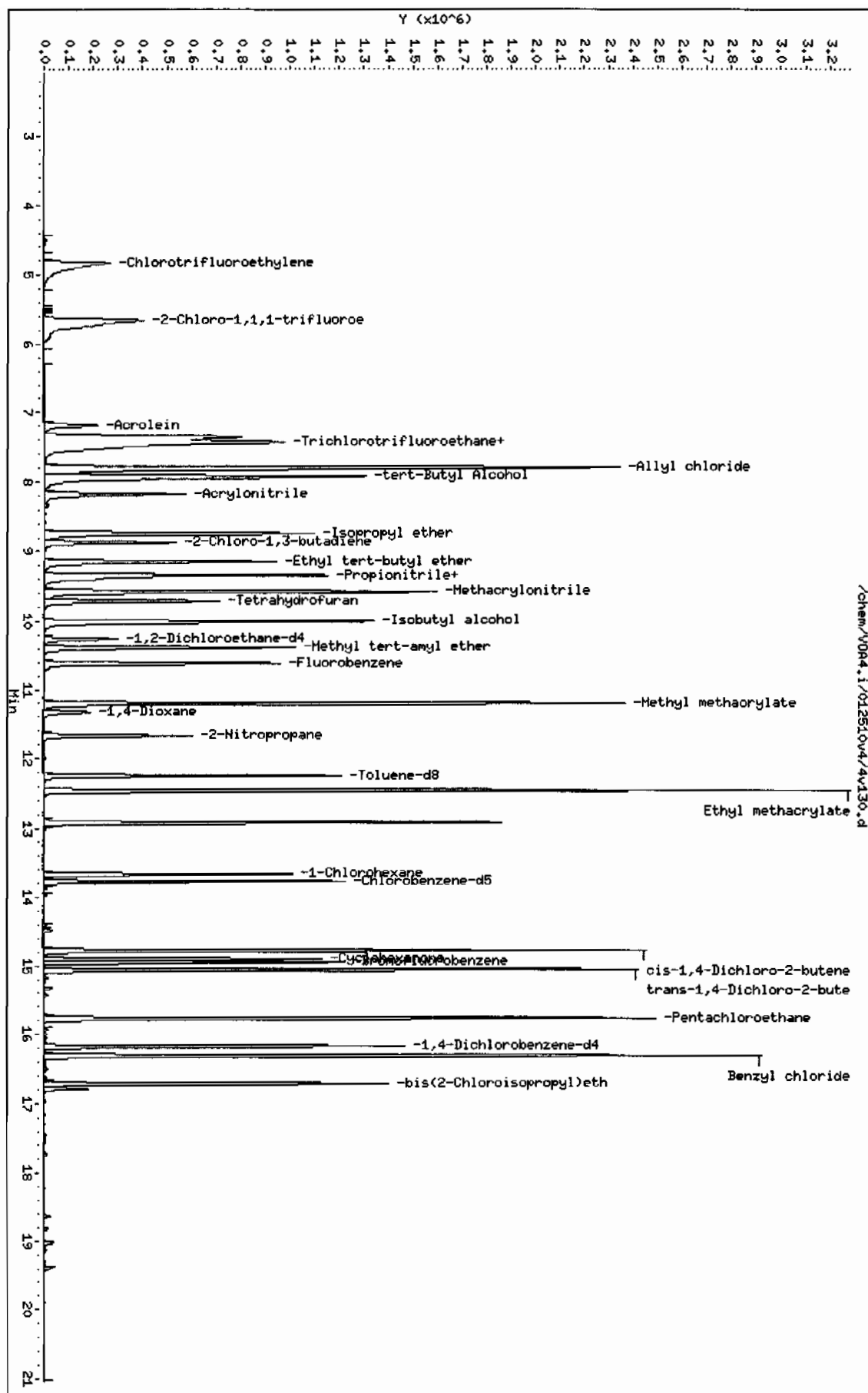
Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	563378	150.000	137
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	892876	150.000	153
9 Acrolein	56	7.187	7.187	(0.677)	308015	250.000	251
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	479291	250.000	253
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	1751110	2500.00	2720
16 Allyl chloride	41	7.802	7.802	(0.735)	2634278	250.000	230
148 tert-Butyl Alcohol	59	7.936	7.936	(0.747)	2412018	2500.00	2700
18 Acrylonitrile	53	8.180	8.180	(0.770)	685587	250.000	252
149 Isopropyl ether	45	8.747	8.747	(0.824)	1303419	50.0000	50.6
24 2-Chloro-1,3-butadiene	53	8.875	8.875	(0.836)	442168	50.0000	48.2
150 Ethyl tert-butyl ether	59	9.150	9.150	(0.862)	1071694	50.0000	50.6
28 Propionitrile	54	9.393	9.393	(0.885)	271107	250.000	248
26 Ethyl acetate	43	9.345	9.345	(0.880)	1738350	250.000	221
27 Methacrylonitrile	41	9.582	9.582	(0.902)	1103169	250.000	236
72 Tetrahydrofuran	42	9.716	9.716	(0.601)	618836	250.000	233
19 Isobutyl alcohol	41	10.009	10.009	(0.943)	802162	2500.00	2320

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
=====	=====	==	=====	=====	=====	=====	=====
151 Methyl tert-amyl ether	73	10.387	10.387	(0.978)	892033	50.0000	52.4
42 Methyl methacrylate	69	11.210	11.210	(1.056)	977692	250.000	248
51 Ethyl methacrylate	69	12.466	12.466	(0.905)	1780187	250.000	238
152 1-Chlorohexane	55	13.661	13.661	(1.286)	267193	50.0000	42.8
97 1,4-Dioxane	88	11.332	11.332	(1.067)	184500	2500.00	2670
48 2-Nitropropane	43	11.673	11.673	(1.099)	504920	250.000	261
68 cis-1,4-Dichloro-2-butene	53	14.783	14.783	(0.914)	638348	250.000	244
70 Cyclohexanone	42	14.905	14.905	(1.082)	409283	1250.00	496
69 trans-1,4-Dichloro-2-butene	53	15.063	15.063	(0.931)	608656	250.000	240
82 Pentachloroethane	167	15.776	15.776	(0.975)	592532	250.000	186
88 Benzyl chloride	91	16.319	16.319	(1.009)	2452872	250.000	227
91 bis(2-Chloroisopropyl)ether	45	16.721	16.721	(1.034)	1171912	250.000	253
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	1026025	50.0000	
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	777447	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	466017	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.265	10.265	(0.967)	238158	50.0000	42.5
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	890601	50.0000	45.1
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	442025	50.0000	51.9

Data File: /chem/V004.i/012510v4/4v130.d
 Date : 26-JAN-2010 06:30
 Client ID: VSTD2505
 Sample Info: 1M4M100125-091SHORT11.V004.F11
 Purge Volume: 5.0
 Column phase: RTX-VOLATILES

Instrument: V004.i
 Operator: RCJ
 Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 18:30
Lab File ID: 4v203.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100126-02 Quant Type: ISTD
Method: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Xylenes (total)	0.73961	0.77370	0.77370	0.050	4.60940	30.00000	Averaged
2 1,2-Dichloroethylene (total)	0.49999	0.50459	0.50459	0.050	0.91963	30.00000	Averaged
135 1,3-Dichloropropylene	0.43215	0.47405	0.47405	0.050	9.69598	30.00000	Averaged
3 Dichlorodifluoromethane	0.20300	0.25008	0.25008	0.050	23.19246	30.00000	Averaged
4 Chloromethane	0.43691	0.40338	0.40338	0.100	-7.67424	30.00000	Averaged spcc
5 Vinyl chloride	0.33555	0.31274	0.31274	0.050	-6.79601	20.00000	Averaged ccc
6 Bromomethane	0.28082	0.31072	0.31072	0.050	10.64735	30.00000	Averaged
7 Chloroethane	0.28387	0.31792	0.31792	0.050	11.99400	30.00000	Averaged
8 Trichlorofluoromethane	0.39174	0.45453	0.45453	0.050	16.02861	30.00000	Averaged
134 Ethyl Ether	0.27121	0.28144	0.28144	0.001	3.77133	30.00000	Averaged
10 Acetone	0.30833	0.32611	0.32611	0.050	5.76860	40.00000	Averaged
15 Acetonitrile	0.06347	0.05902	0.05902	0.010	-7.00270	30.00000	Averaged
11 1,1-Dichloroethylene	0.52813	0.52310	0.52310	0.050	-0.95232	20.00000	Averaged ccc
128 Methyl acetate	0.31820	0.28198	0.28198	0.010	-11.38181	40.00000	Averaged
13 Iodomethane	0.53151	0.55689	0.55689	0.050	4.77458	30.00000	Averaged
17 Methylene chloride	50.86487	50.00000	0.36993	0.050	1.72973	30.00000	Linear
14 Carbon disulfide	1.00112	1.08821	1.08821	0.050	8.69959	30.00000	Averaged
20 tert-Butyl methyl ether	0.79224	0.79449	0.79449	0.050	0.28435	30.00000	Averaged
21 trans-1,2-Dichloroethylene	0.47958	0.48620	0.48620	0.050	1.37864	30.00000	Averaged
23 Vinyl acetate	0.68877	0.81379	0.81379	0.010	18.15215	40.00000	Averaged
22 1,1-Dichloroethane	0.60892	0.61497	0.61497	0.100	0.99363	30.00000	Averaged spcc
30 2-Butanone	0.34795	0.38398	0.38398	0.030	10.35754	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.52039	0.52298	0.52298	0.050	0.49863	30.00000	Averaged
25 2,2-Dichloropropane	0.25991	0.30051	0.30051	0.050	15.62056	30.00000	Averaged
32 Chloroform	0.52656	0.53284	0.53284	0.010	1.19117	20.00000	Averaged ccc
29 Bromochloromethane	0.15742	0.16432	0.16432	0.010	4.38712	30.00000	Averaged
36 1,1,1-Trichloroethane	0.38307	0.42100	0.42100	0.010	9.90051	30.00000	Averaged
129 Cyclohexane	0.53130	0.59611	0.59611	0.010	12.19906	30.00000	Averaged
34 1,1-Dichloropropene	0.37759	0.41975	0.41975	0.010	11.16609	30.00000	Averaged
131 n-Butyl alcohol	0.01205	0.01392	0.01392	0.001	15.48924	40.00000	Averaged
33 Carbon tetrachloride	0.35204	0.39880	0.39880	0.010	13.28356	30.00000	Averaged
138 1,2-Dichloroethane-d4	0.27322	0.24124	0.24124	0.001	-11.70519	30.00000	Averaged
37 1,2-Dichloroethane	0.42317	0.40539	0.40539	0.010	-4.20260	30.00000	Averaged
38 Benzene	1.25168	1.25695	1.25695	0.010	0.42105	30.00000	Averaged
139 Cyclohexene	0.57639	0.62646	0.62646	0.001	8.68667	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 18:30
 Lab File ID: 4v203.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
 Analysis Type: WATER Init. Cal. Times: 23:17 06:35
 Lab Sample ID: W4VM100126-02 Quant Type: ISTD
 Method: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
39 Trichloroethylene	0.30020	0.31798	0.31798	0.010	5.91948	30.00000	Averaged
41 1,2-Dichloropropane	0.35665	0.36099	0.36099	0.010	1.21833	20.00000	Averaged ccc
130 Methylcyclohexane	0.46695	0.54243	0.54243	0.010	16.16605	30.00000	Averaged
45 Bromodichloromethane	0.37857	0.40298	0.40298	0.010	6.44564	30.00000	Averaged
43 Dibromomethane	0.18569	0.19207	0.19207	0.010	3.43556	30.00000	Averaged
44 2-Chloroethylvinyl ether	0.15646	0.15788	0.15788	0.005	0.91056	30.00000	Averaged
49 4-Methyl-2-pentanone	0.20310	0.21100	0.21100	0.010	3.89146	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.45734	0.49889	0.49889	0.010	9.08562	30.00000	Averaged
\$ 47 Toluene-d8	1.27102	1.12102	1.12102	0.010	-11.80167	30.00000	Averaged
50 Toluene	0.97792	0.98629	0.98629	0.010	0.85607	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.55663	0.59053	0.59053	0.010	6.09014	30.00000	Averaged
54 1,1,2-Trichloroethane	0.31909	0.31629	0.31629	0.010	-0.87528	30.00000	Averaged
55 2-Hexanone	0.61185	0.61854	0.61854	0.010	1.09327	40.00000	Averaged
52 1,3-Dichloropropane	0.62273	0.60230	0.60230	0.010	-3.27963	30.00000	Averaged
56 Tetrachloroethylene	0.36077	0.37477	0.37477	0.010	3.87959	30.00000	Averaged
57 Dibromochloromethane	0.40326	0.42305	0.42305	0.010	4.90757	30.00000	Averaged
59 1,2-Dibromoethane	0.38224	0.39461	0.39461	0.010	3.23631	30.00000	Averaged
62 Chlorobenzene	1.11594	1.14192	1.14192	0.300	2.32869	30.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.40403	0.42516	0.42516	0.010	5.23028	30.00000	Averaged
58 Ethylbenzene	1.90055	1.94361	1.94361	0.010	2.26537	20.00000	Averaged ccc
63 m,p-Xylenes	0.73056	0.76770	0.76770	0.010	5.08448	30.00000	Averaged
64 o-Xylene	0.75771	0.78571	0.78571	0.010	3.69557	30.00000	Averaged
65 Styrene	1.13966	1.26044	1.26044	0.010	10.59741	30.00000	Averaged
66 Bromoform	0.50976	0.56076	0.56076	0.100	10.00405	30.00000	Averaged spcc
67 Isopropylbenzene	3.18322	3.28844	3.28844	0.010	3.30554	30.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.97445	0.96736	0.96736	0.300	-0.72736	30.00000	Averaged spcc
\$ 71 Bromofluorobenzene	0.91439	0.87599	0.87599	0.010	-4.19927	30.00000	Averaged
74 1,2,3-Trichloropropane	0.24587	0.23144	0.23144	0.010	-5.87148	30.00000	Averaged
75 Bromobenzene	0.93958	0.94128	0.94128	0.010	0.18102	30.00000	Averaged
76 n-Propylbenzene	3.92144	4.04083	4.04083	0.010	3.04453	30.00000	Averaged
77 2-Chlorotoluene	2.73791	2.67625	2.67625	0.010	-2.25221	30.00000	Averaged
78 1,3,5-Trimethylbenzene	2.83102	2.87399	2.87399	0.010	1.51775	30.00000	Averaged
80 4-Chlorotoluene	2.49650	2.54539	2.54539	0.010	1.95832	30.00000	Averaged
81 tert-Butylbenzene	2.77558	2.88133	2.88133	0.010	3.81006	30.00000	Averaged
79 1,2,4-Trimethylbenzene	2.97917	3.10177	3.10177	0.010	4.11495	30.00000	Averaged
83 sec-Butylbenzene	3.86211	4.11903	4.11903	0.010	6.65249	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 18:30
Lab File ID: 4v203.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100126-02 Quant Type: ISTD
Method: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	2.97920	3.24436	3.24436	0.010	8.90040	30.00000	Averaged
85 1,3-Dichlorobenzene	1.83389	1.89973	1.89973	0.010	3.59039	30.00000	Averaged
87 1,4-Dichlorobenzene	1.85658	1.89716	1.89716	0.010	2.18563	30.00000	Averaged
89 n-Butylbenzene	2.92096	3.24224	3.24224	0.010	10.99899	30.00000	Averaged
90 1,2-Dichlorobenzene	1.74640	1.80157	1.80157	0.010	3.15901	30.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.15514	0.17531	0.17531	0.010	12.99712	30.00000	Averaged
93 1,2,4-Trichlorobenzene	0.93597	1.05143	1.05143	0.010	12.33638	30.00000	Averaged
94 Hexachlorobutadiene	0.68199	0.71544	0.71544	0.010	4.90480	30.00000	Averaged
95 Naphthalene	1.63294	1.89859	1.89859	0.010	16.26811	30.00000	Averaged
96 1,2,3-Trichlorobenzene	0.75884	0.83999	0.83999	0.010	10.69316	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.43856

Maximun Average %D/Drift = 20.00000

* Passed Average %D/Drift Test.

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v203.d

Lab Smp Id: W4VM100126-02

Client Smp ID: VSTD050

Inj Date : 26-JAN-2010 18:30

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |W4VM100126-02|CCV|LCS|1|VOAF|1|

Misc Info : GEL 5G N/A UVM091214-01I/IVM100126-01

Comment :

Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Meth Date : 27-Jan-2010 15:20 slg

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubL+.sub

Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

Local Compound Variable

AMOUNTS

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	CAL-AMT	
	MASS						(ug/l)	ON-COL
	-----		--	-----	-----	-----	-----	-----
M 1 Xylenes (total)	106					1681712	150.000	157
M 2 1,2-Dichloroethylene (total)	96					961188	100.000	101
M 135 1,3-Dichloropropylene	75					903018	100.000	110
3 Dichlorodifluoromethane	85		4.912	4.912	(0.463)	238183	50.0000	61.6
4 Chloromethane	50		5.299	5.299	(0.499)	384202	50.0000	46.2
5 Vinyl chloride	62		5.528	5.528	(0.521)	297869	50.0000	46.6
6 Bromomethane	94		6.138	6.138	(0.578)	295944	50.0000	55.3
7 Chloroethane	64		6.281	6.281	(0.591)	302800	50.0000	56.0
8 Trichlorofluoromethane	101		6.662	6.662	(0.627)	432916	50.0000	58.0
134 Ethyl Ether	59		7.003	7.003	(0.660)	268056	50.0000	51.9(H)
10 Acetone	43		7.363	7.363	(0.693)	1553026	250.000	264
15 Acetonitrile	41		7.705	7.705	(0.726)	1405373	1250.00	1160
11 1,1-Dichloroethylene	61		7.388	7.388	(0.696)	498223	50.0000	49.5
128 Methyl acetate	43		7.753	7.753	(0.730)	1342857	250.000	222
13 Iodomethane	142		7.631	7.631	(0.719)	2652034	250.000	262
17 Methylene chloride	84		7.942	7.942	(0.748)	352337	50.0000	50.9

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
14 Carbon disulfide	76	7.772	7.772	(0.732)	5182303	250.000	272
20 tert-Butyl methyl ether	73	8.241	8.241	(0.776)	756709	50.0000	50.1
21 trans-1,2-Dichloroethylene	61	8.290	8.290	(0.781)	463074	50.0000	50.7
23 Vinyl acetate	43	8.710	8.710	(0.820)	3875474	250.000	295
22 1,1-Dichloroethane	63	8.759	8.759	(0.825)	585728	50.0000	50.5
30 2-Butanone	43	9.326	9.326	(0.878)	1828619	250.000	276
31 cis-1,2-Dichloroethylene	61	9.387	9.387	(0.884)	498114	50.0000	50.2
25 2,2-Dichloropropane	77	9.424	9.424	(0.887)	286218	50.0000	57.8
32 Chloroform	83	9.692	9.692	(0.913)	507497	50.0000	50.6
29 Bromochloromethane	128	9.662	9.662	(0.910)	156510	50.0000	52.2
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	400978	50.0000	55.0
129 Cyclohexane	56	10.082	10.082	(0.949)	567766	50.0000	56.1
34 1,1-Dichloropropene	75	10.137	10.137	(0.955)	399791	50.0000	55.6
131 n-Butyl alcohol	56	10.692	10.692	(1.007)	1325328	5000.00	5770
33 Carbon tetrachloride	117	10.174	10.174	(0.958)	379838	50.0000	56.6
\$ 138 1,2-Dichloroethane-d4	65	10.259	10.259	(0.966)	229767	50.0000	44.1
37 1,2-Dichloroethane	62	10.344	10.344	(0.974)	386112	50.0000	47.9
38 Benzene	78	10.375	10.375	(0.977)	1197177	50.0000	50.2
139 Cyclohexene	67	10.497	10.497	(0.989)	596673	50.0000	54.3
* 40 Fluorobenzene	96	10.619	10.619	(1.000)	952445	50.0000	
39 Trichloroethylene	95	11.009	11.009	(1.037)	302854	50.0000	53.0
41 1,2-Dichloropropane	63	11.247	11.247	(1.059)	343825	50.0000	50.6
130 Methylcyclohexane	83	11.265	11.265	(1.061)	516639	50.0000	58.1
45 Bromodichloromethane	83	11.484	11.484	(1.082)	383812	50.0000	53.2
43 Dibromomethane	93	11.375	11.375	(1.071)	182939	50.0000	51.7
44 2-Chloroethylvinyl ether	63	11.698	11.698	(1.102)	751874	250.000	252
49 4-Methyl-2-pentanone	58	12.021	12.021	(0.873)	764378	250.000	260
46 cis-1,3-Dichloropropylene	75	11.929	11.929	(1.123)	475163	50.0000	54.5
\$ 47 Toluene-d8	98	12.252	12.252	(0.890)	812212	50.0000	44.1
50 Toluene	92	12.326	12.326	(0.895)	714599	50.0000	50.4
53 trans-1,3-Dichloropropylene	75	12.466	12.466	(0.905)	427855	50.0000	53.0
54 1,1,2-Trichloroethane	83	12.685	12.685	(0.921)	229164	50.0000	49.6
55 2-Hexanone	43	12.856	12.856	(0.934)	2240747	250.000	253
52 1,3-Dichloropropane	76	12.874	12.874	(0.935)	436388	50.0000	48.4
56 Tetrachloroethylene	164	12.923	12.923	(0.938)	271533	50.0000	51.9
57 Dibromochloromethane	129	13.149	13.149	(0.955)	306514	50.0000	52.4
59 1,2-Dibromoethane	107	13.319	13.319	(0.967)	285904	50.0000	51.6
* 61 Chlorobenzene-d5	117	13.770	13.770	(1.000)	724530	50.0000	
62 Chlorobenzene	112	13.801	13.801	(1.002)	827357	50.0000	51.2
60 1,1,1,2-Tetrachloroethane	131	13.850	13.850	(1.006)	308040	50.0000	52.6
58 Ethylbenzene	91	13.862	13.862	(1.007)	1408203	50.0000	51.1
63 m,p-Xylenes	106	13.972	13.972	(1.015)	1112444	100.000	105
64 o-Xylene	106	14.405	14.405	(1.046)	569268	50.0000	51.8
65 Styrene	104	14.405	14.405	(1.046)	913225	50.0000	55.3
66 Bromoform	173	14.661	14.661	(0.906)	263390	50.0000	55.0
67 Isopropylbenzene	105	14.758	14.758	(0.912)	1544595	50.0000	51.6
73 1,1,2,2-Tetrachloroethane	83	15.020	15.020	(0.928)	454372	50.0000	49.6

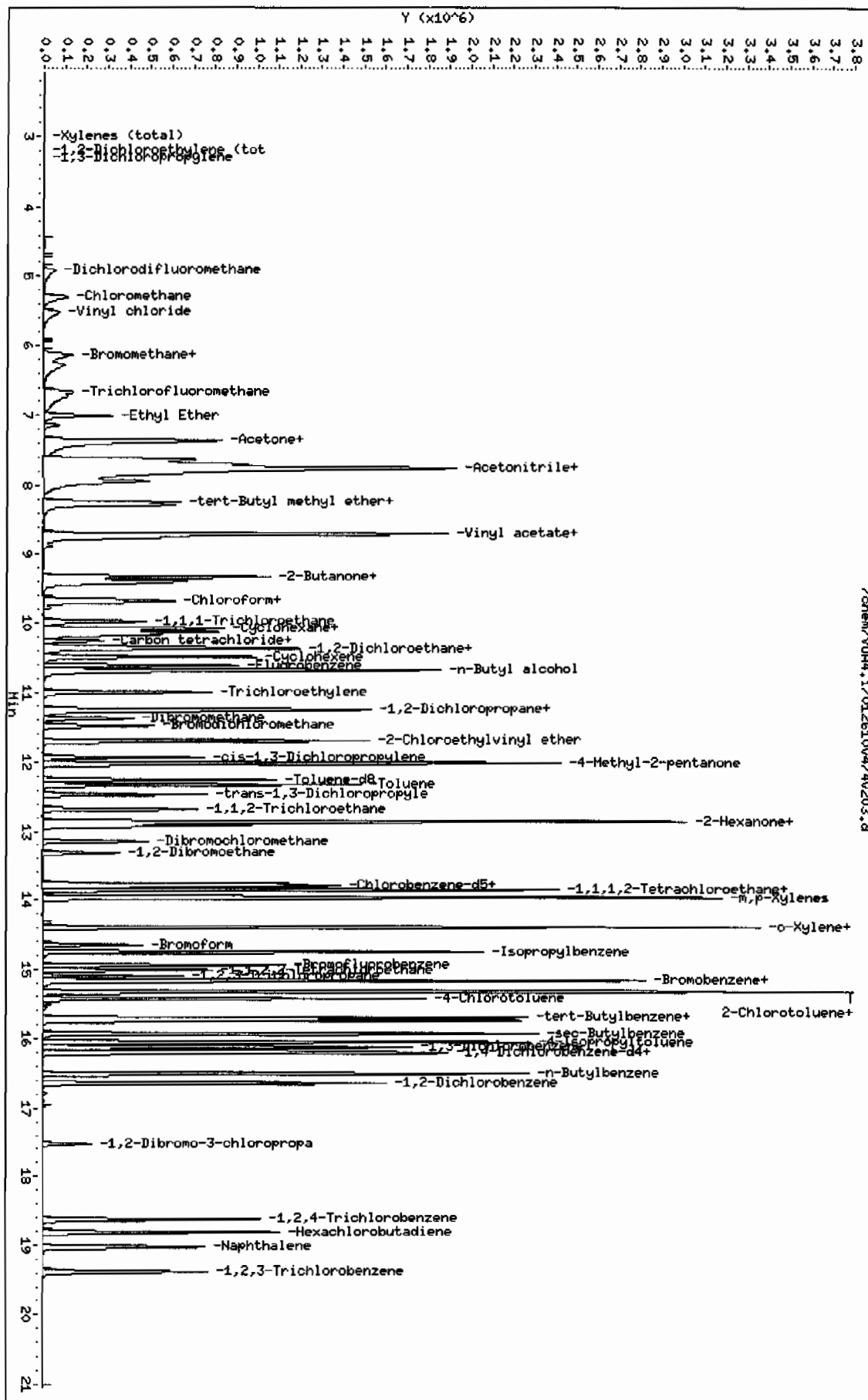
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
\$ 71 Bromofluorobenzene	95	14.953	14.953	(0.924)	411458	50.0000	47.9
74 1,2,3-Trichloropropane	110	15.106	15.106	(0.934)	108707	50.0000	47.1
75 Bromobenzene	156	15.167	15.167	(0.937)	442123	50.0000	50.1
76 n-Propylbenzene	91	15.185	15.185	(0.939)	1897992	50.0000	51.5
77 2-Chlorotoluene	91	15.331	15.331	(0.948)	1257044	50.0000	48.9
78 1,3,5-Trimethylbenzene	105	15.331	15.331	(0.948)	1349923	50.0000	50.8
80 4-Chlorotoluene	91	15.429	15.429	(0.954)	1195580	50.0000	51.0
81 tert-Butylbenzene	119	15.703	15.703	(0.971)	1353374	50.0000	51.9
79 1,2,4-Trimethylbenzene	105	15.746	15.746	(0.973)	1456912	50.0000	52.0
83 sec-Butylbenzene	105	15.935	15.935	(0.985)	1934727	50.0000	53.3
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	1523887	50.0000	54.4
85 1,3-Dichlorobenzene	146	16.124	16.124	(0.997)	892312	50.0000	51.8
* 86 1,4-Dichlorobenzene-d4	152	16.179	16.179	(1.000)	469704	50.0000	
87 1,4-Dichlorobenzene	146	16.209	16.209	(1.002)	891105	50.0000	51.1
89 n-Butylbenzene	91	16.508	16.508	(1.020)	1522892	50.0000	55.5
90 1,2-Dichlorobenzene	146	16.642	16.642	(1.029)	846205	50.0000	51.6
92 1,2-Dibromo-3-chloropropane	157	17.532	17.532	(1.084)	82342	50.0000	56.5
93 1,2,4-Trichlorobenzene	180	18.635	18.635	(1.152)	493861	50.0000	56.2
94 Hexachlorobutadiene	225	18.818	18.818	(1.163)	336043	50.0000	52.4
95 Naphthalene	128	19.032	19.032	(1.176)	891776	50.0000	58.1
96 1,2,3-Trichlorobenzene	180	19.385	19.385	(1.198)	394546	50.0000	55.3

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/V004.i/012610v4/4v203.d
 Date: 26-JAN-2010 18:30
 Client ID: VSTD050
 Sample Info: 1M4M100126-02|CCV/LCS11V00F111
 Purge Volume: 5.0
 Column phase: RTX-VOLATILES

Instrument: V004.i
 Operator: RCJ
 Column diameter: 0.25



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 18:58
Lab File ID: 4v204.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100126-03 Quant Type: ISTD
Method: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
153 Chlorotrifluoroethylene	136	150	0.18103	0.010	-9.59939	30.00000	Linear
154 2-Chloro-1,1,1-trifluoroeth	0.28437	0.27438	0.27438	0.010	-3.51215	30.00000	Averaged
9 Acrolein	0.05969	0.07130	0.07130	0.001	19.45252	30.00000	Averaged
12 Trichlorotrifluoroethane	0.09245	0.10595	0.10595	0.050	14.59807	30.00000	Averaged
147 Isopropyl Alcohol	0.03136	0.03436	0.03436	0.010	9.58441	40.00000	Averaged
16 Allyl chloride	0.55731	0.55612	0.55612	0.010	-0.21373	30.00000	Averaged
148 tert-Butyl Alcohol	0.04350	0.04816	0.04816	0.010	10.71030	40.00000	Averaged
18 Acrylonitrile	0.13250	0.14487	0.14487	0.010	9.32987	30.00000	Averaged
149 Isopropyl ether	1.25603	1.22102	1.22102	0.010	-2.78734	30.00000	Averaged
24 2-Chloro-1,3-butadiene	0.44689	0.47433	0.47433	0.010	6.13906	30.00000	Averaged
150 Ethyl tert-butyl ether	1.03100	1.01251	1.01251	0.010	-1.79360	30.00000	Averaged
28 Propionitrile	0.05318	0.05773	0.05773	0.010	8.56449	30.00000	Averaged
26 Ethyl acetate	0.38382	0.37176	0.37176	0.010	-3.14137	40.00000	Averaged
27 Methacrylonitrile	0.22806	0.23233	0.23233	0.010	1.87019	30.00000	Averaged
72 Tetrahydrofuran	0.28437	0.28791	0.28791	0.010	1.24264	30.00000	Averaged
19 Isobutyl alcohol	0.01684	0.01744	0.01744	0.005	3.56652	40.00000	Averaged
151 Methyl tert-amyl ether	0.82929	0.84317	0.84317	0.010	1.67443	30.00000	Averaged
42 Methyl methacrylate	0.19245	0.21054	0.21054	0.010	9.39778	30.00000	Averaged
51 Ethyl methacrylate	0.48081	0.49940	0.49940	0.010	3.86494	30.00000	Averaged
152 1-Chlorohexane	0.30433	0.30933	0.30933	0.010	1.64521	30.00000	Averaged
97 1,4-Dioxane	0.00337	0.00376	0.00376	0.001	11.53267	40.00000	Averaged
48 2-Nitropropane	0.09410	0.10742	0.10742	0.010	14.15044	30.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.28030	0.32291	0.32291	0.010	15.20079	30.00000	Averaged
70 Cyclohexanone	574	1250	0.02446	0.005	-54.11508	40.00000	Linear<-
69 trans-1,4-Dichloro-2-butene	0.27228	0.31111	0.31111	0.010	14.26364	30.00000	Averaged
82 Pentachloroethane	0.34092	0.47191	0.47191	0.010	38.42400	30.00000	Averaged<-
88 Benzyl chloride	1.15797	1.54553	1.54553	0.010	33.46908	30.00000	Averaged<-
91 bis(2-Chloroisopropyl)ether	0.49648	0.56214	0.56214	0.010	13.22522	30.00000	Averaged
138 1,2-Dichloroethane-d4	0.27322	0.22955	0.22955	0.001	-15.98473	30.00000	Averaged
47 Toluene-d8	1.27102	1.14521	1.14521	0.010	-9.89867	30.00000	Averaged
71 Bromofluorobenzene	0.91439	0.92730	0.92730	0.010	1.41175	30.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA4.i Injection Date: 26-JAN-2010 18:58
Lab File ID: 4v204.d Init. Cal. Date(s): 11-JAN-2010 12-JAN-2010
Analysis Type: WATER Init. Cal. Times: 23:17 06:35
Lab Sample ID: W4VM100126-03 Quant Type: ISTD
Method: /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Average %D / Drift Results.	
=====	
Calculated Average %D/Drift "	6.43856
Maximun Average %D/Drift =	20.00000
* Passed Average %D/Drift Test.	

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v204.d

Lab Smp Id: W4VM100126-03

Client Smp ID: VSTD250S

Inj Date : 26-JAN-2010 18:58

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |W4VM100126-03|SHORT|1|VOAF|1|

Misc Info : GEL 5ML N/A UVM100118-08A/UVM091209-08E

Comment :

Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Meth Date : 27-Jan-2010 15:20 slg

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: CALsubS+SS.sub

Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	512219	150.000	136
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	776349	150.000	145
9 Acrolein	56	7.188	7.188	(0.677)	336243	250.000	299
12 Trichlorotrifluoroethane	85	7.358	7.358	(0.693)	499638	250.000	286
147 Isopropyl Alcohol	45	7.431	7.431	(0.700)	1620514	2500.00	2740
16 Allyl chloride	41	7.803	7.803	(0.735)	2622549	250.000	249
148 tert-Butyl Alcohol	59	7.931	7.931	(0.747)	2271265	2500.00	2770
18 Acrylonitrile	53	8.181	8.181	(0.770)	683155	250.000	273
149 Isopropyl ether	45	8.742	8.742	(0.823)	1151610	50.0000	48.6
24 2-Chloro-1,3-butadiene	53	8.870	8.870	(0.835)	447362	50.0000	53.1
150 Ethyl tert-butyl ether	59	9.144	9.144	(0.861)	954951	50.0000	49.1
28 Propionitrile	54	9.394	9.394	(0.885)	272256	250.000	271
26 Ethyl acetate	43	9.340	9.340	(0.879)	1753135	250.000	242
27 Methacrylonitrile	41	9.577	9.577	(0.902)	1095611	250.000	255
72 Tetrahydrofuran	42	9.717	9.717	(0.601)	631282	250.000	253
19 Isobutyl alcohol	41	10.010	10.010	(0.943)	822384	2500.00	2590

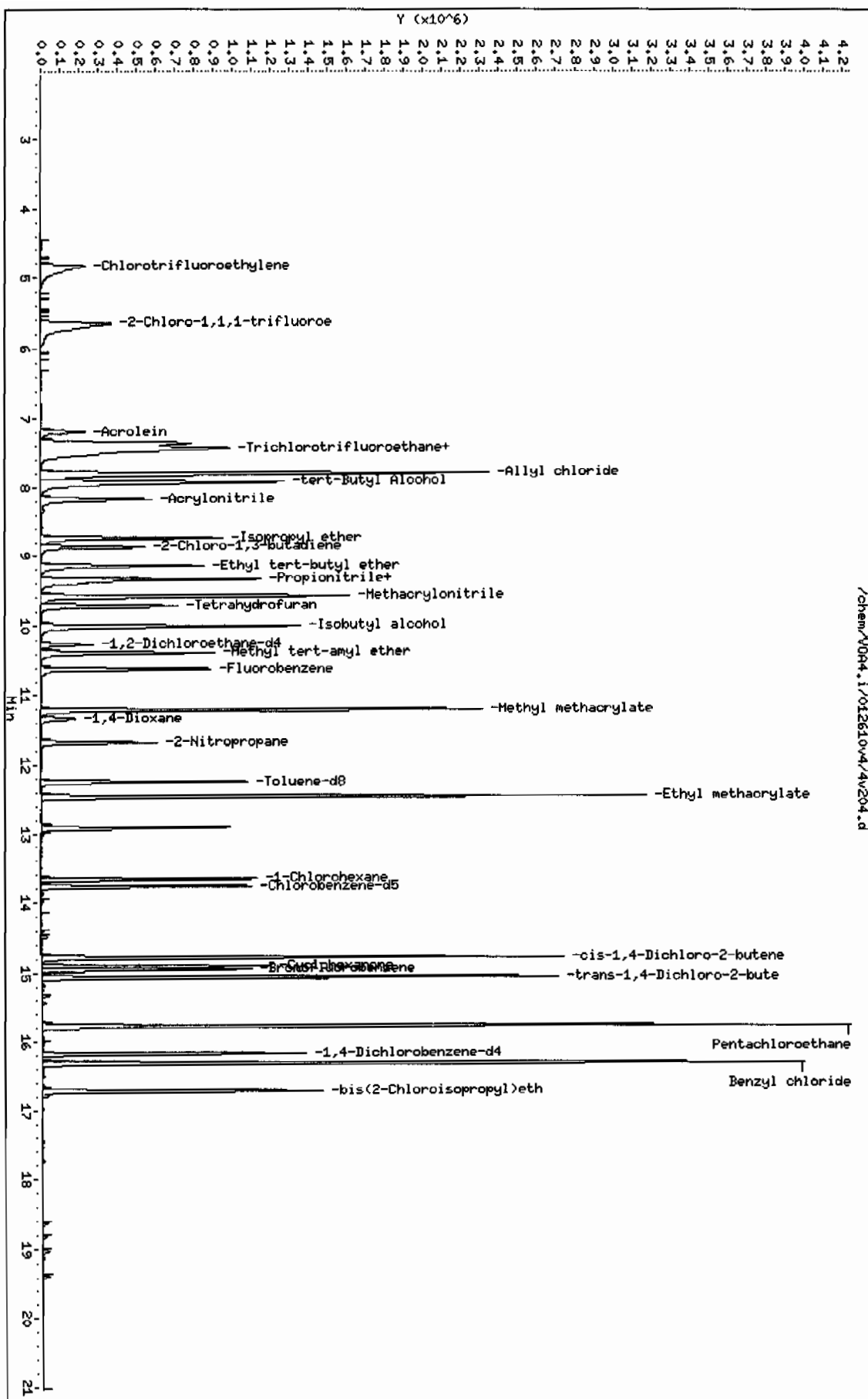
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
=====	=====	==	=====	=====	=====	=====	=====
151 Methyl tert-amyl ether	73	10.388	10.388	(0.978)	795243	50.0000	50.8
42 Methyl methacrylate	69	11.211	11.211	(1.056)	992866	250.000	273
51 Ethyl methacrylate	69	12.467	12.467	(0.905)	1761914	250.000	260
152 1-Chlorohexane	55	13.662	13.662	(1.286)	291750	50.0000	50.8
97 1,4-Dioxane	88	11.327	11.327	(1.067)	177349	2500.00	2790
48 2-Nitropropane	43	11.674	11.674	(1.099)	506548	250.000	285
68 cis-1,4-Dichloro-2-butene	53	14.784	14.784	(0.914)	708035	250.000	288
70 Cyclohexanone	42	14.906	14.906	(1.082)	431494	1250.00	574
69 trans-1,4-Dichloro-2-butene	53	15.064	15.064	(0.931)	682171	250.000	286
82 Pentachloroethane	167	15.771	15.771	(0.975)	1034746	250.000	346(A)
88 Benzyl chloride	91	16.320	16.320	(1.009)	3388835	250.000	334
91 bis(2-Chloroisopropyl)ether	45	16.722	16.722	(1.034)	1232580	250.000	283
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	943155	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.770	(1.000)	705615	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	438534	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.260	10.259	(0.966)	216498	50.0000	42.0
\$ 47 Toluene-d8	98	12.254	12.252	(0.890)	808075	50.0000	45.0
\$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	406653	50.0000	50.7

QC Flag Legend

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

Data File: /chem/V004.i/012610v4/4v204.d
 Date : 26-JAN-2010 18:58
 Client ID: VST12805
 Sample Info: 1M4VH000126-03|SHORT11|V004F11
 Purge Volume: 5.0
 Column phase: RTX-VOLATILES

Instrument: V004.i
 Operator: ACJ
 Column diameter: 0.25



QC Data

Data File: /chem/VOA4.i/011110v4/4t101.d

Page 1

Date : 11-JAN-2010 22:23

Client ID: BFB01

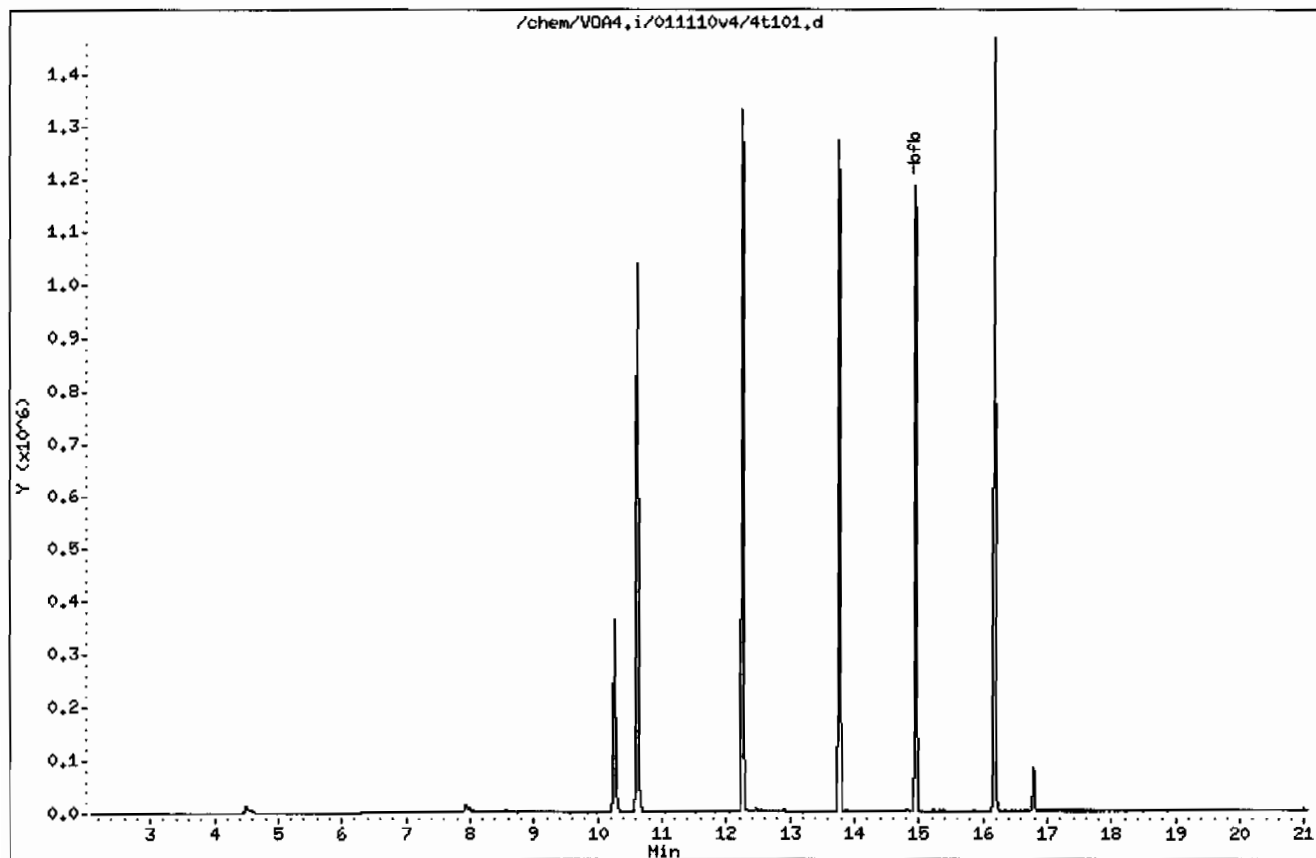
Instrument: VOA4.i

Sample Info: IUVH090910-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Date : 11-JAN-2010 22:23

Client ID: BFB01

Instrument: VOA4.i

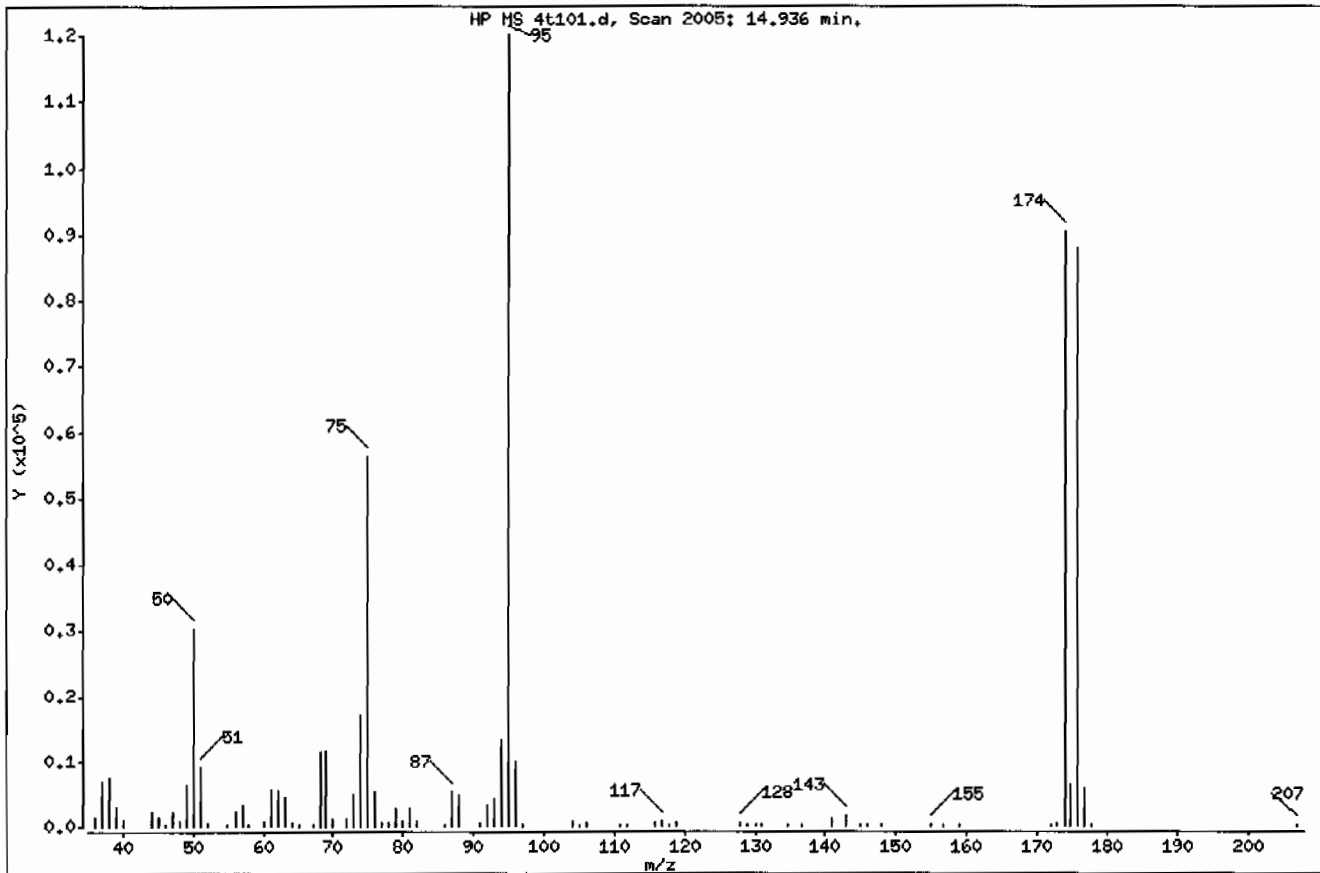
Sample Info: IUVH090910-02|BFB11|VOAF11|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.36
75	30.00 - 60.00% of mass 95	46.81
96	5.00 - 9.00% of mass 95	8.20
173	Less than 2.00% of mass 174	0.43 (0.57)
174	50.00 - 100.00% of mass 95	75.32
175	5.00 - 9.00% of mass 174	5.39 (7.16)
176	95.00 - 101.00% of mass 174	73.32 (97.34)
177	5.00 - 9.00% of mass 176	4.92 (6.71)

Date : 11-JAN-2010 22:23

Client ID: BFB01

Instrument: VOA4.i

Sample Info: IUVH090910-021BFB11V0AF11

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Data File: 4t101.d

Spectrum: HP MS 4t101.d, Scan 2005: 14.936 min.

Location of Maximum: 95.00

Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1491	63.10	4393	90.90	616	136.70	299
37.00	6989	64.00	445	91.90	3350	140.80	1019
38.00	7332	65.10	236	93.00	4244	142.90	1559
39.10	3139	67.10	326	94.00	13188	144.90	260
40.00	988	68.00	11323	95.00	120008	145.80	245
44.00	2272	69.00	11722	96.00	9839	147.80	327
45.00	1473	70.00	1200	96.90	260	155.00	221
46.10	192	72.00	1112	103.90	699	156.80	182
47.00	2222	73.00	4900	104.90	309	158.90	207
48.10	866	74.00	17040	105.90	446	171.90	203
49.00	6268	75.00	56176	110.80	244	172.80	513
50.00	30432	76.00	5376	111.80	224	173.90	90392
51.00	9138	76.90	560	115.80	433	174.90	6471
52.00	586	78.00	503	116.90	746	175.90	87984
54.90	165	79.00	2851	117.90	354	176.90	5906
56.00	2207	80.00	738	118.80	626	177.90	233
57.00	3188	80.90	2804	127.90	514	206.90	250
57.90	291	81.90	768	128.80	355		
60.00	743	86.00	217	130.00	205		
61.00	5590	86.90	5132	130.80	233		
62.00	5440	87.90	4617	134.70	249		

Data File: /chem/VOA4.i/011210v4/4t201.d

Page 1

Date : 12-JAN-2010 17:58

Client ID: BFB01

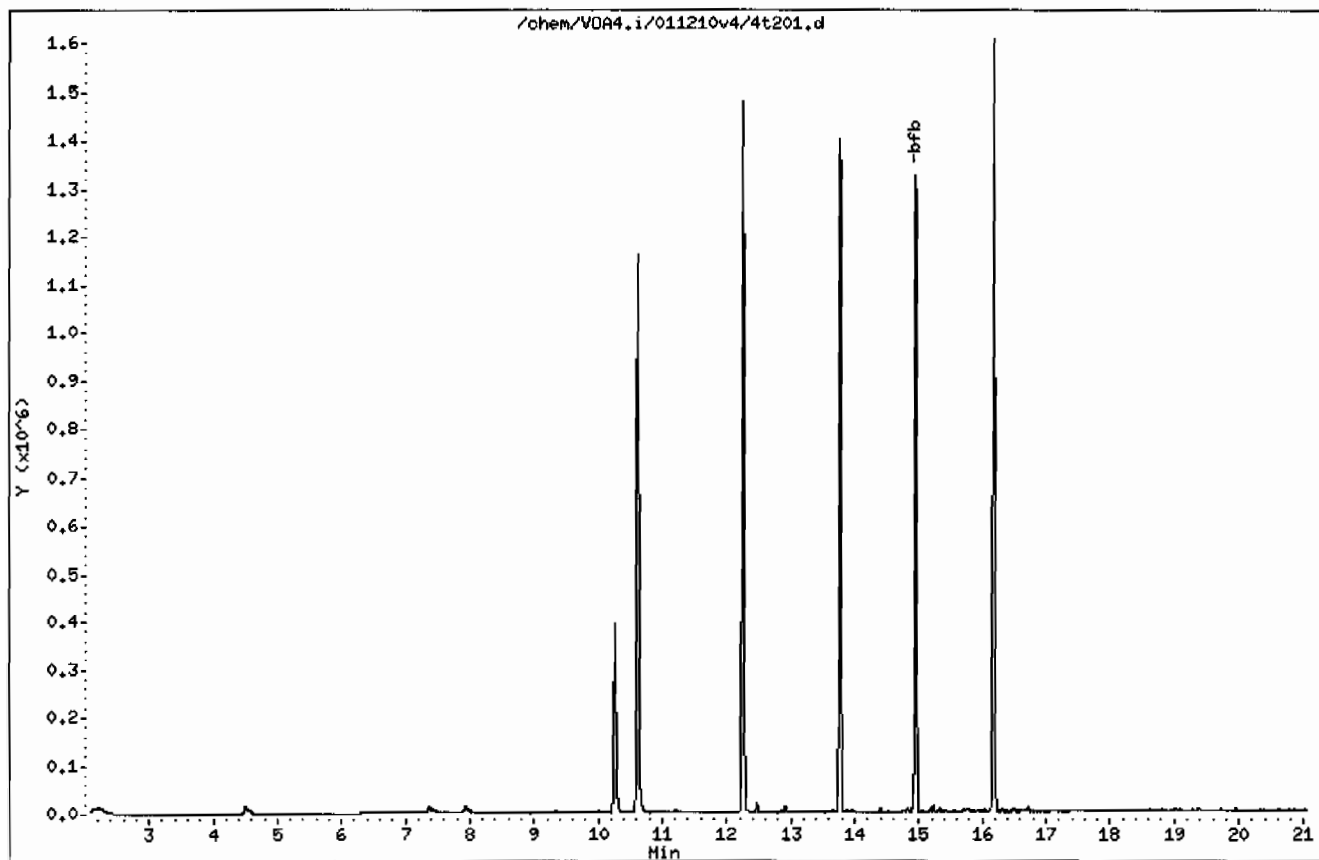
Instrument: VOA4.i

Sample Info: IUVH091117-021BFB111VOAF111

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Date : 12-JAN-2010 17:58

Client ID: BFB01

Instrument: VOA4.i

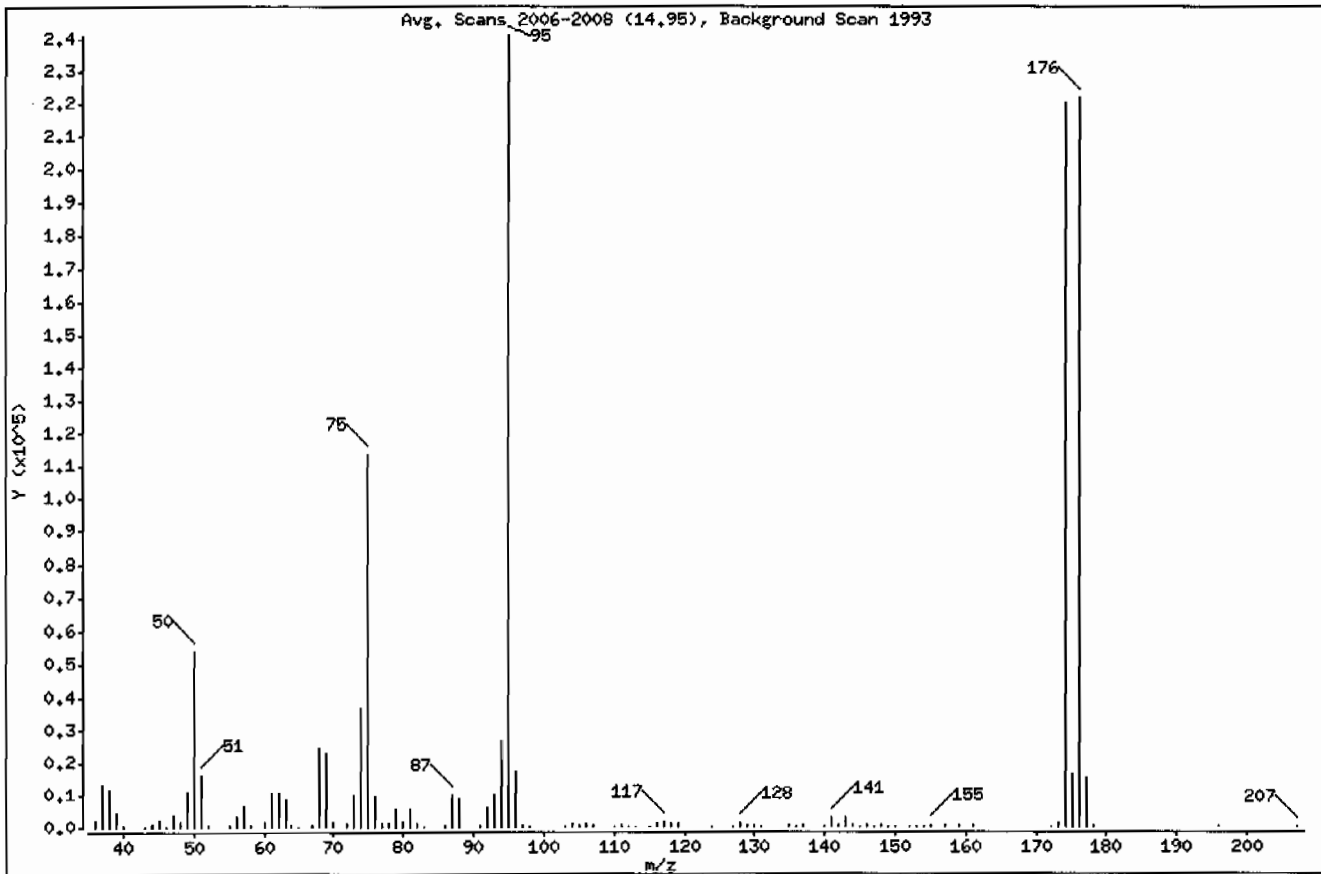
Sample Info: IUVH091117-02IBFB111VOAF111

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.20
75	30.00 - 60.00% of mass 95	47.07
96	5.00 - 9.00% of mass 95	7.21
173	Less than 2.00% of mass 174	0.52 (0.57)
174	50.00 - 100.00% of mass 95	91.37
175	5.00 - 9.00% of mass 174	6.58 (7.21)
176	95.00 - 101.00% of mass 174	91.87 (100.55)
177	5.00 - 9.00% of mass 176	6.12 (6.67)

Date : 12-JAN-2010 17:58

Client ID: BFB01

Instrument: VOA4.i

Sample Info: IUVH091117-02IBFB11VOAF11

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Data File: 4t201.d

Spectrum: Avg. Scans 2006-2008 (14.95), Background Scan 1993

Location of Maximum: 95.00

Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	2143	68.00	24640	103.00	139	143.00	2575
37.00	13180	69.00	22960	104.00	1122	144.00	281
38.00	11860	70.00	1735	105.00	341	145.00	203
39.00	4457	72.00	1090	106.00	882	146.00	346
40.00	295	73.00	9787	107.00	346	147.00	173

43.00	59	74.00	36472	110.00	163	148.00	678
44.00	1046	75.00	113384	111.00	303	149.00	177
45.00	2313	76.00	9208	112.00	82	150.00	150
46.00	106	77.00	1171	113.00	208	152.00	136
47.00	3837	78.00	1055	115.00	254	153.00	227

48.00	1460	79.00	5520	116.00	952	154.00	181
49.00	10825	80.00	1568	117.00	1401	155.00	626
50.00	53488	81.00	5625	118.00	939	157.00	536
51.00	16238	82.00	1207	119.00	1298	159.00	389
52.00	790	83.00	194	124.00	117	161.00	305

55.00	725	86.00	282	127.00	59	172.00	199
56.00	3310	87.00	10143	128.00	902	173.00	1253
57.00	6778	88.00	8885	129.00	472	174.00	220096
58.00	501	91.00	816	130.00	790	175.00	15862
60.00	1819	92.00	6210	131.00	183	176.00	221312

61.00	10529	93.00	9858	135.00	420	177.00	14753
62.00	10559	94.00	26432	136.00	69	178.00	439
63.00	8377	95.00	240896	137.00	579	196.00	53
64.00	753	96.00	17368	140.00	56	207.00	148
65.00	53	97.00	517	141.00	2597		

67.00	590	98.00	60	142.00	300		

Data File: /chem/V0A4.i/012510v4/4v127.d

Page 1

Date : 26-JAN-2010 05:07

Client ID: BFB01

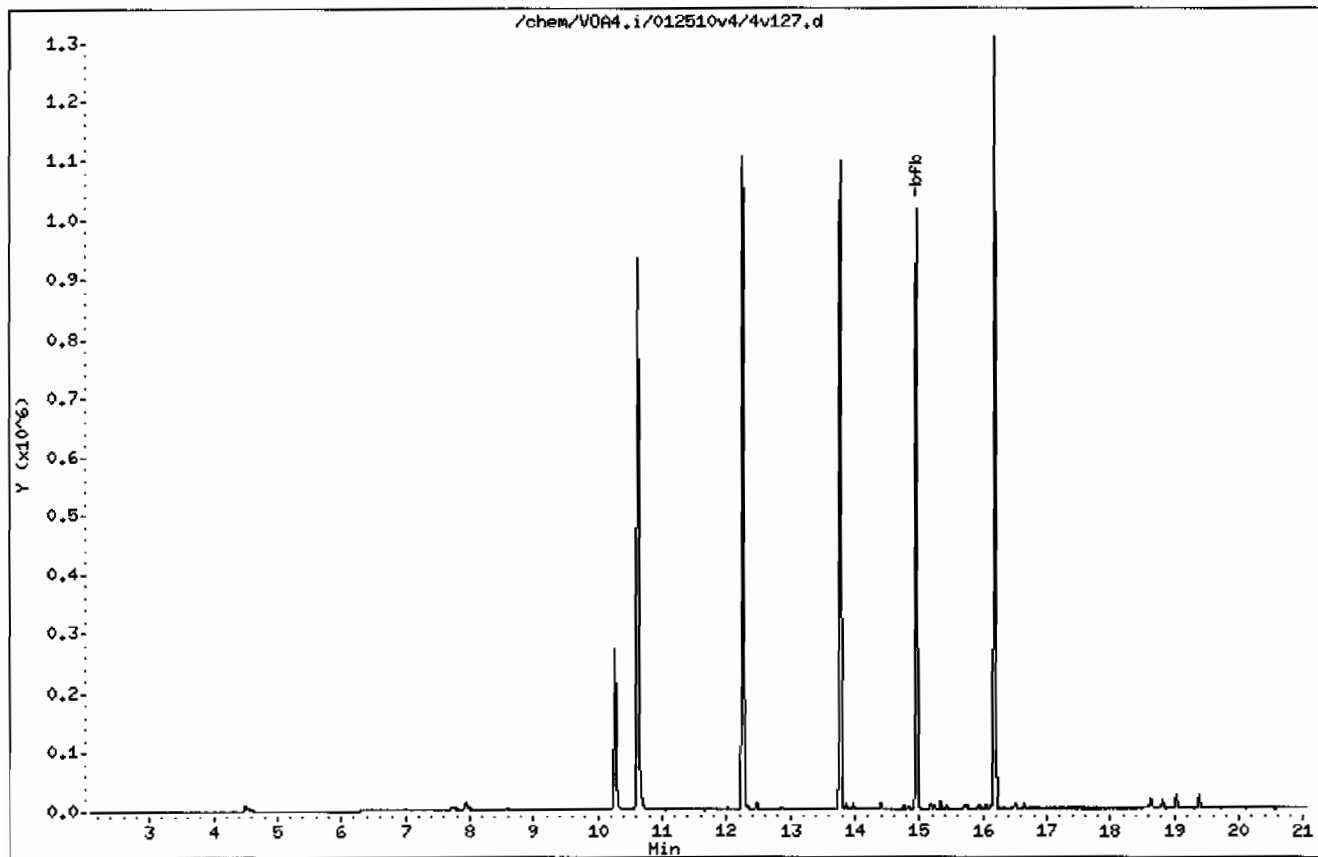
Instrument: V0A4.i

Sample Info: IUVH091117-02|BFB2|1|V0AF|1|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Date : 26-JAN-2010 05:07

Client ID: BFB01

Instrument: VOA4.i

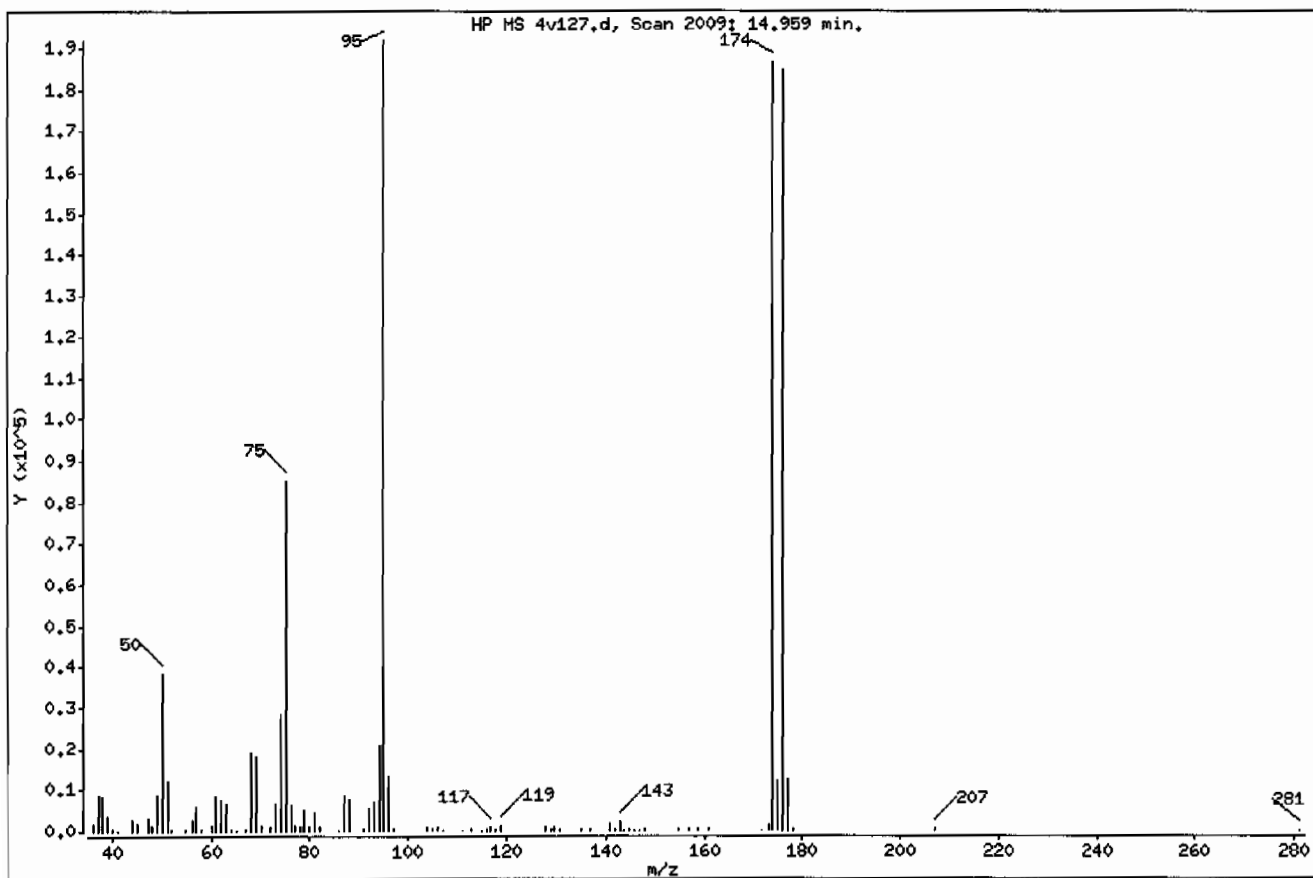
Sample Info: IUVH091117-021BFB211\VOAF111

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.03
75	30.00 - 60.00% of mass 95	44.29
96	5.00 - 9.00% of mass 95	6.81
173	Less than 2.00% of mass 174	0.59 (0.60)
174	50.00 - 100.00% of mass 95	97.20
175	5.00 - 9.00% of mass 174	6.25 (6.43)
176	95.00 - 101.00% of mass 174	96.40 (99.18)
177	5.00 - 9.00% of mass 176	6.50 (6.74)

Date : 26-JAN-2010 05:07

Client ID: BFB01

Instrument: VOA4.i

Sample Info: IUVH091117-021BFB2111VOAF111

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Data File: 4v127.d

Spectrum: HP MS 4v127.d, Scan 2009: 14.959 min.

Location of Maximum: 95.00

Number of points: 87

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1746	64.00	604	93.00	7140	140.90	1939
37.10	8979	65.10	181	94.00	20736	141.80	251
38.00	8304	66.90	385	95.00	191808	142.90	2027
39.00	3733	68.00	19040	96.00	13058	143.80	162
40.00	398	69.00	17968	97.00	342	144.80	243
41.10	220	70.10	1330	103.90	802	145.90	196
44.00	2566	72.00	851	104.90	389	147.00	161
45.00	1674	73.00	6398	105.90	808	147.80	588
47.10	3221	74.00	28280	107.00	158	154.90	636
47.90	1149	75.00	94952	111.00	183	156.90	566
49.00	8636	76.10	6083	112.80	239	158.90	279
50.00	38424	77.10	1134	114.80	161	160.90	291
51.00	11919	77.90	880	116.00	545	171.80	216
52.00	551	78.90	4832	116.90	1100	172.90	1127
54.90	633	79.90	1081	117.90	651	173.90	186432
56.00	2781	80.90	4225	118.80	1459	174.90	11982
57.00	5549	81.90	1068	127.80	716	175.90	184896
57.90	246	85.90	174	129.00	412	176.90	12459
60.00	1530	86.90	8499	129.80	803	178.00	342
61.00	8352	88.00	7314	130.70	356	207.00	242
62.00	7303	91.00	607	134.90	404	281.10	172
63.00	6638	92.00	5079	136.90	294		

Data File: /chem/VOA4.i/012610v4/4v203BFB,d

Page 1

Date : 26-JAN-2010 18:30

Client ID: BFB01

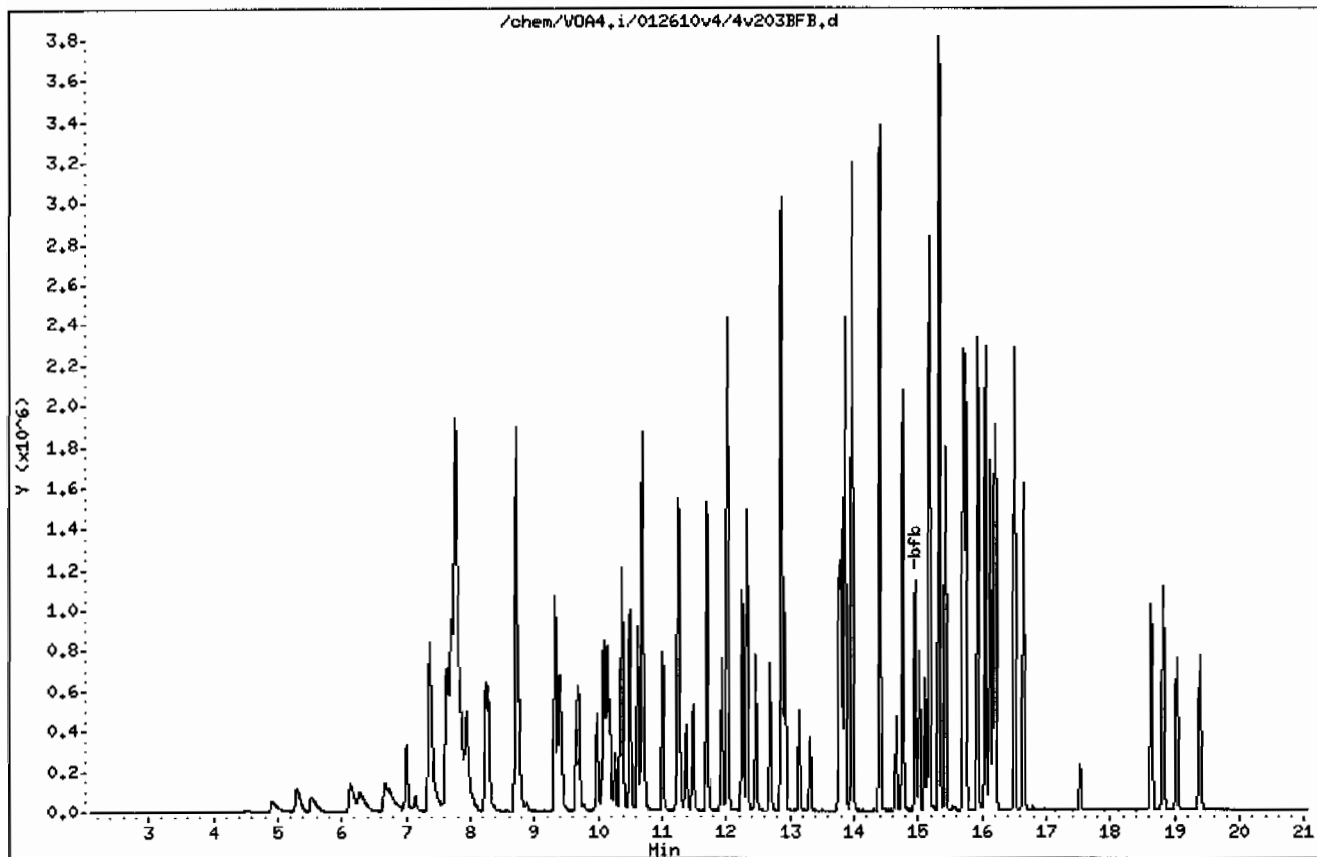
Instrument: VOA4.i

Sample Info: IW4VM100126-02|CCV/LCS11|VOAF11|

Operator: ACJ

Column phase: DB-624

Column diameter: 0,25



Date : 26-JAN-2010 18:30

Client ID: BFB01

Instrument: VOA4.i

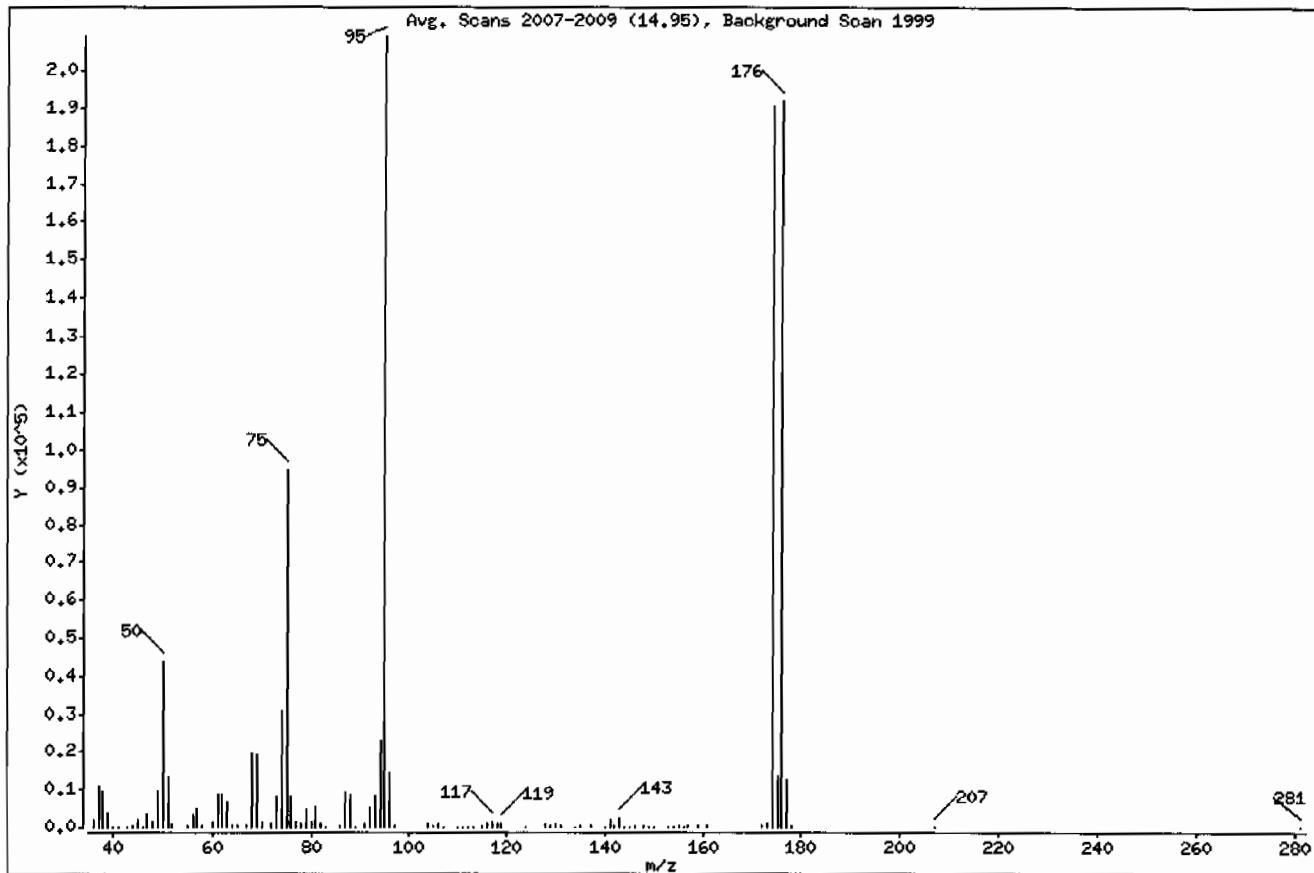
Sample Info: IW4VM100126-02ICCV/LCSI11VOAF111

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.95
75	30.00 - 60.00% of mass 95	45.20
96	5.00 - 9.00% of mass 95	6.83
173	Less than 2.00% of mass 174	0.43 (0.47)
174	50.00 - 100.00% of mass 95	91.13
175	5.00 - 9.00% of mass 174	6.51 (7.14)
176	95.00 - 101.00% of mass 174	91.69 (100.62)
177	5.00 - 9.00% of mass 176	6.00 (6.55)

Date : 26-JAN-2010 18:30

Client ID: BFB01

Instrument: VOA4.i

Sample Info: IW4VM100126-02|CCV/LCS|1|VOAF11|

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Data File: 4v203BFB.d

Spectrum: Avg. Scans 2007-2009 (14.95), Background Scan 1999

Location of Maximum: 95.00

Number of points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	1877	67.00	544	97.00	420	144.00	182
37.00	11059	68.00	19816	104.00	730	145.00	142
38.00	9696	69.00	19240	105.00	326	146.00	301
39.00	3787	70.00	1428	106.00	999	148.00	516
40.00	134	72.00	927	107.00	168	149.00	76

41.00	10	73.00	8270	110.00	138	150.00	144
43.00	214	74.00	30552	111.00	192	153.00	75
44.00	494	75.00	94576	112.00	50	154.00	146
45.00	2044	76.00	8209	113.00	175	155.00	670
46.00	202	77.00	1236	115.00	245	156.00	50

47.00	3197	78.00	915	116.00	792	157.00	368
48.00	1207	79.00	4852	117.00	1320	159.00	321
49.00	9516	80.00	1591	118.00	776	161.00	256
50.00	43832	81.00	5333	119.00	1126	172.00	261
51.00	13289	82.00	1105	124.00	67	173.00	902

52.00	734	83.00	157	128.00	732	174.00	190656
55.00	486	86.00	348	129.00	388	175.00	13624
56.00	3168	87.00	9321	130.00	816	176.00	191872
57.00	4685	88.00	8808	131.00	262	177.00	12562
58.00	244	89.00	112	134.00	50	178.00	330

60.00	1425	91.00	724	135.00	437	207.00	52
61.00	8565	92.00	5292	137.00	416	281.00	123
62.00	8638	93.00	8095	140.00	77		
63.00	6772	94.00	23208	141.00	2074		
64.00	708	95.00	209216	142.00	304		

65.00	241	96.00	14299	143.00	2544		

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202024442

Client Sample: QC for batch 945253

Client: LANL010

Project: QC

Client ID: MB for batch 945253

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 945254

Inst: VOA4.I

Dilution: 1

Run Date: 01/26/2010 07:26

Analyst: ACJ

Purge Vol: 5 mL

Prep Date: 01/25/2010 23:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 4v132BL.d

Column: RTX-VOLATILES

Level: LOW

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301		Matrix: SOIL
Lab Sample ID: 1202024442		
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: MB for batch 945253	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 07:26	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 23:00	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v132BL.d	Column: RTX-VOLATILES	Level: LOW

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

Tentatively Identified Compound Summary

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

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v132BL.d
Lab Smp Id: 1202024442 Client Smp ID: BLANK
Inj Date : 26-JAN-2010 07:26
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202024442|945254|1|VOAF|1|
Misc Info : GEL 5G N/A
Comment :
Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m
Meth Date : 26-Jan-2010 06:52 amj Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 32 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ug/l) (ug/Kg)
\$ 138 1,2-Dichloroethane-d4	65		10.266	10.265	(0.967)	236751	43.7138 43.7
* 40 Fluorobenzene	96		10.620	10.619	(1.000)	991130	50.0000
\$ 47 Toluene-d8	98		12.253	12.253	(0.890)	872965	46.8665 46.9
* 61 Chlorobenzene-d5	117		13.771	13.771	(1.000)	732743	50.0000
70 Cyclohexanone	42		14.911	14.905	(1.083)	3112	16.9404 16.9(aQ)
\$ 71 Bromofluorobenzene	95		14.954	14.953	(0.924)	411863	54.0661 54.1
* 86 1,4-Dichlorobenzene-d4	152		16.180	16.179	(1.000)	416548	50.0000
91 bis(2-Chloroisopropyl) ether	45		16.722	16.721	(1.034)	8782	2.12324 2.1(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v132BL.d

Lab Smp Id: 1202024442

Client Smp ID: BLANK

Inj Date : 26-JAN-2010 07:26

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |1202024442|945254|1|VOAF|1|

Misc Info : GEL 5G N/A

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 32

QC Sample: BLANK

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

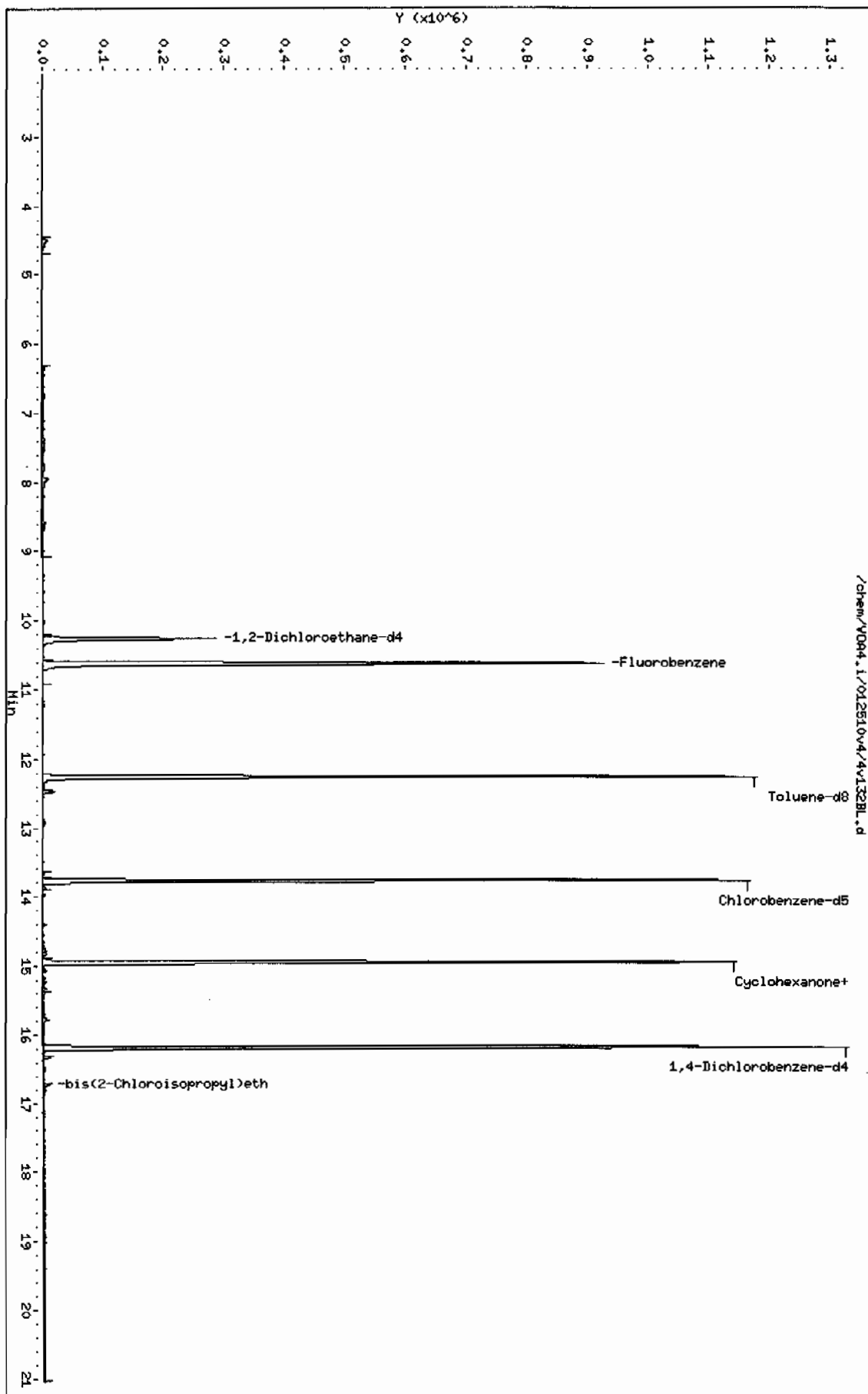
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/V004.i/012510v4/4v132BL.d
Date : 26-JAN-2010 07:26
Client ID: BLANK
Sample Info: 11202024442194525411V00AF11

Column phase: RTX-VOLATILES

Instrument: V004.i
Operator: RCJ
Column diameter: 0.25



Date : 26-JAN-2010 07:26

Client ID: BLANK

Instrument: VOA4.i

Sample Info: I12020244421945254111VOAF111

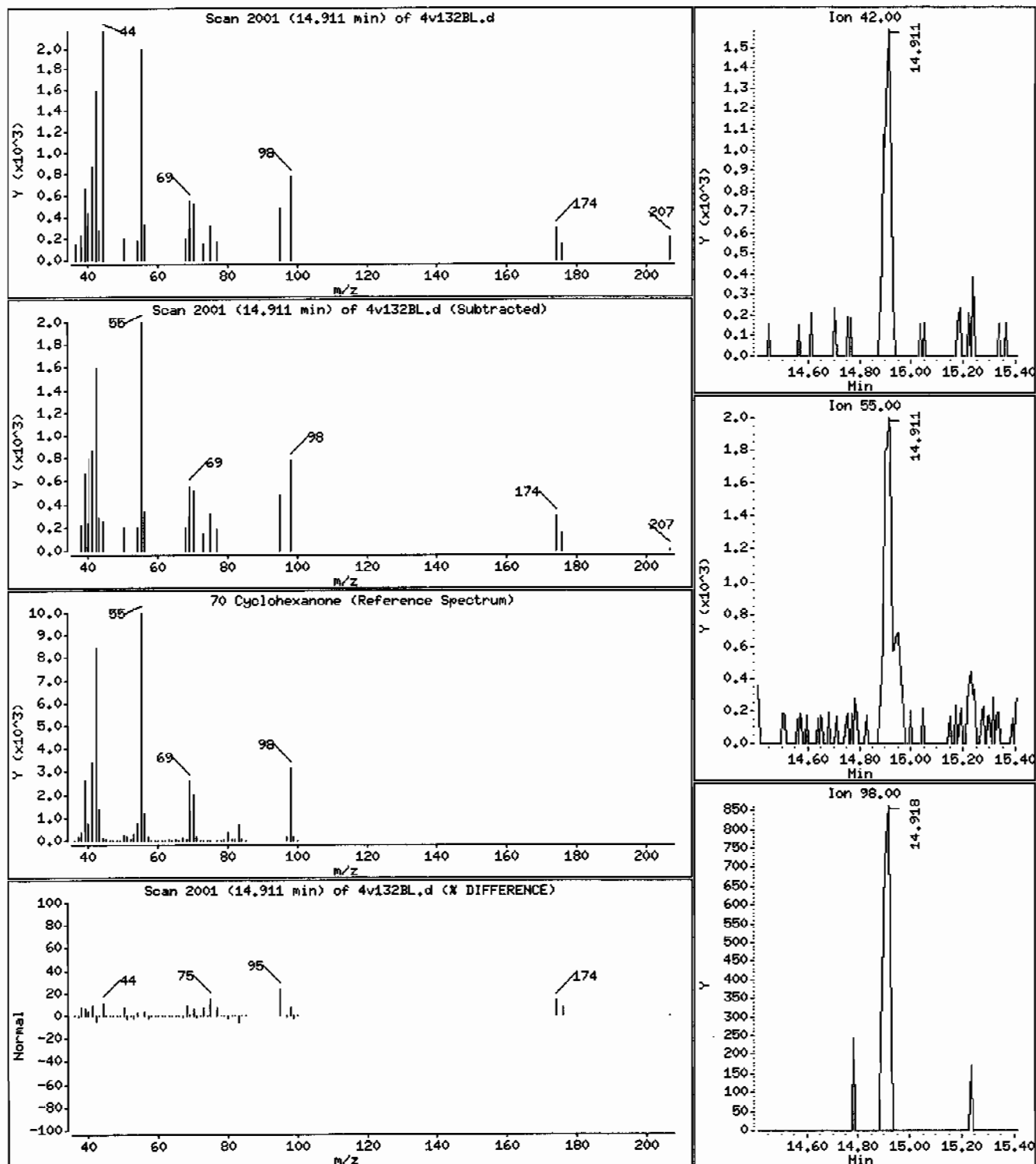
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

70 Cyclohexanone

Concentration: 16.9 ug/Kg



Date : 26-JAN-2010 07:26

Client ID: BLANK

Instrument: V0A4.i

Sample Info: I1202024442I945254I1I\VOAFI1I

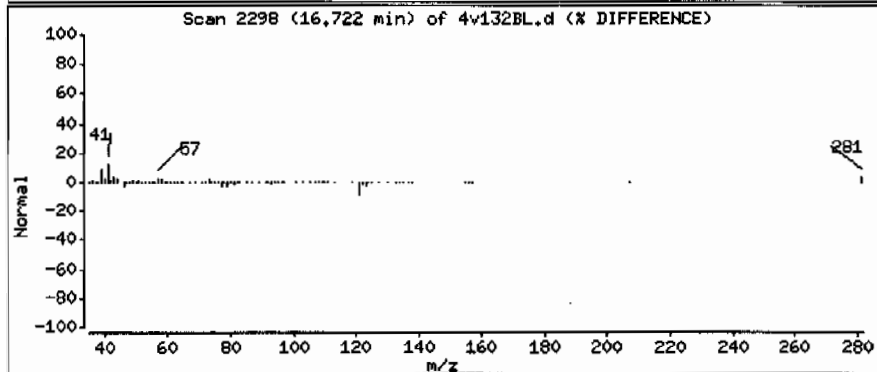
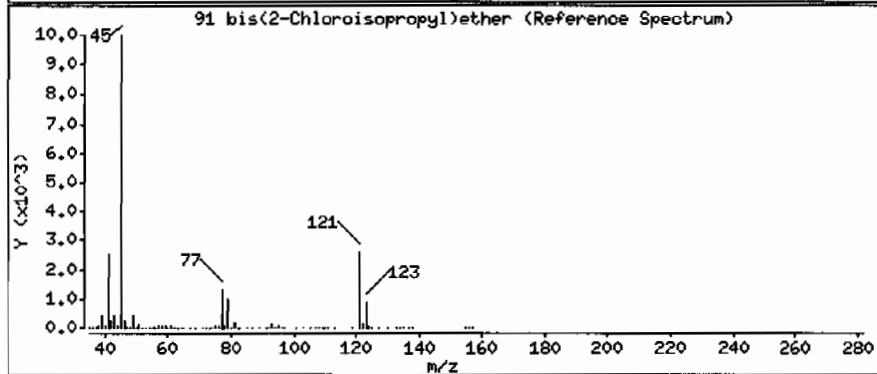
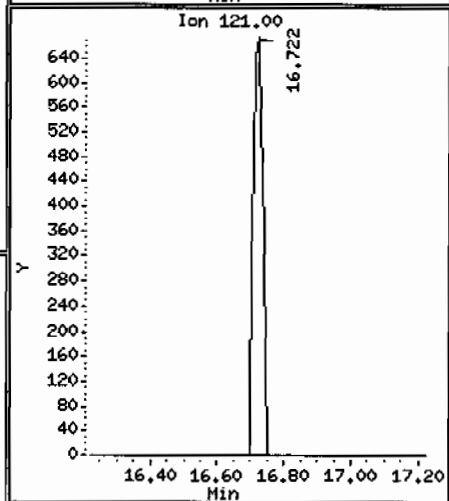
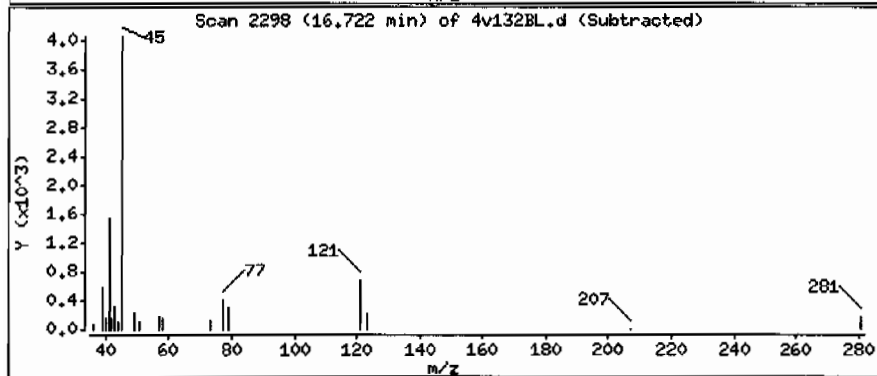
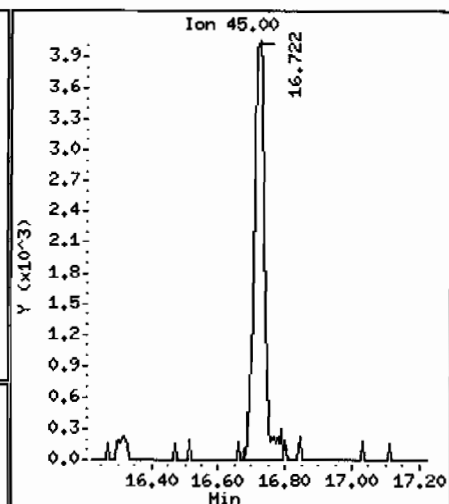
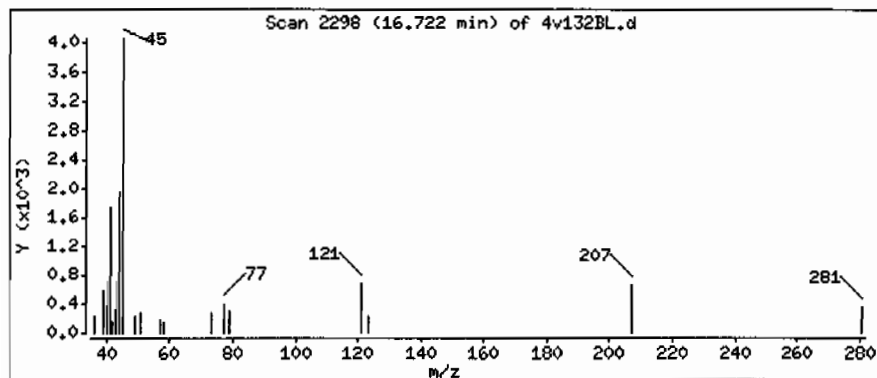
Operator: ACJ

Column phase: RTX-VOLATILES

Column diameter: 0.25

91 bis(2-Chloroisopropyl)ether

Concentration: 2.1 ug/Kg



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301		Matrix: SOIL	
Lab Sample ID: 1202037373			
Client Sample: QC for batch 945253	Client: LANL010	Project: QC	
Client ID: MB for batch 945253	Method: SW846 8260B	SOP Ref: GL-OA-E-038	
Batch ID: 945254	Inst: VOA4.I	Dilution: 1	
Run Date: 01/26/2010 20:22	Analyst: ACJ	Purge Vol: 5 mL	
Prep Date: 01/26/2010 17:00	Aliquot: 5 g	Final Volume: 5 mL	
Data File: 4v207bl.d	Column: RTX-VOLATILES	Level: LOW	

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

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202037373

Client Sample: QC for batch 945253

Client: LANL010

Project: QC

Client ID: MB for batch 945253

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 945254

Inst: VOA4.I

Dilution: 1

Run Date: 01/26/2010 20:22

Analyst: ACJ

Purge Vol: 5 mL

Prep Date: 01/26/2010 17:00

Aliquot: 5 g

Final Volume: 5 mL

Data File: 4v207bl.d

Column: RTX-VOLATILES

Level: LOW

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

Tentatively Identified Compound Summary

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

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v207b1.d
 Lab Smp Id: 1202037373 Client Smp ID: BLANK
 Inj Date : 26-JAN-2010 20:22
 Operator : ACJ Inst ID: VOA4.i
 Smp Info : |1202037373|945254|1|VOAF|1|
 Misc Info : GEL 5G N/A
 Comment :
 Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
 Meth Date : 27-Jan-2010 15:20 slg Quant Type: ISTD
 Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
 Als bottle: 7 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50
 Processing Host: prdsrv07

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN (ug/l)	FINAL (ug/Kg)
\$ 138 1,2-Dichloroethane-d4	65	10.260	10.259 (0.966)	213132	42.2369	42.2
* 40 Fluorobenzene	96	10.620	10.619 (1.000)	923452	50.0000	
\$ 47 Toluene-d8	98	12.253	12.252 (0.890)	775849	45.1603	45.2
* 61 Chlorobenzene-d5	117	13.771	13.770 (1.000)	675830	50.0000	
\$ 71 Bromofluorobenzene	95	14.954	14.953 (0.924)	353358	51.4836	51.5
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179 (1.000)	375304	50.0000	

Data File: /chem/VOA4.i/012610v4/4v207b1.d
Report Date: 11-Feb-2010 17:10

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v207b1.d

Lab Smp Id: 1202037373

Client Smp ID: BLANK

Inj Date : 26-JAN-2010 20:22

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |1202037373|945254|1|VOAF|1|

Misc Info : GEL 5G N/A

Comment :

Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m

Meth Date : 27-Jan-2010 15:20 slg

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 7

QC Sample: BLANK

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

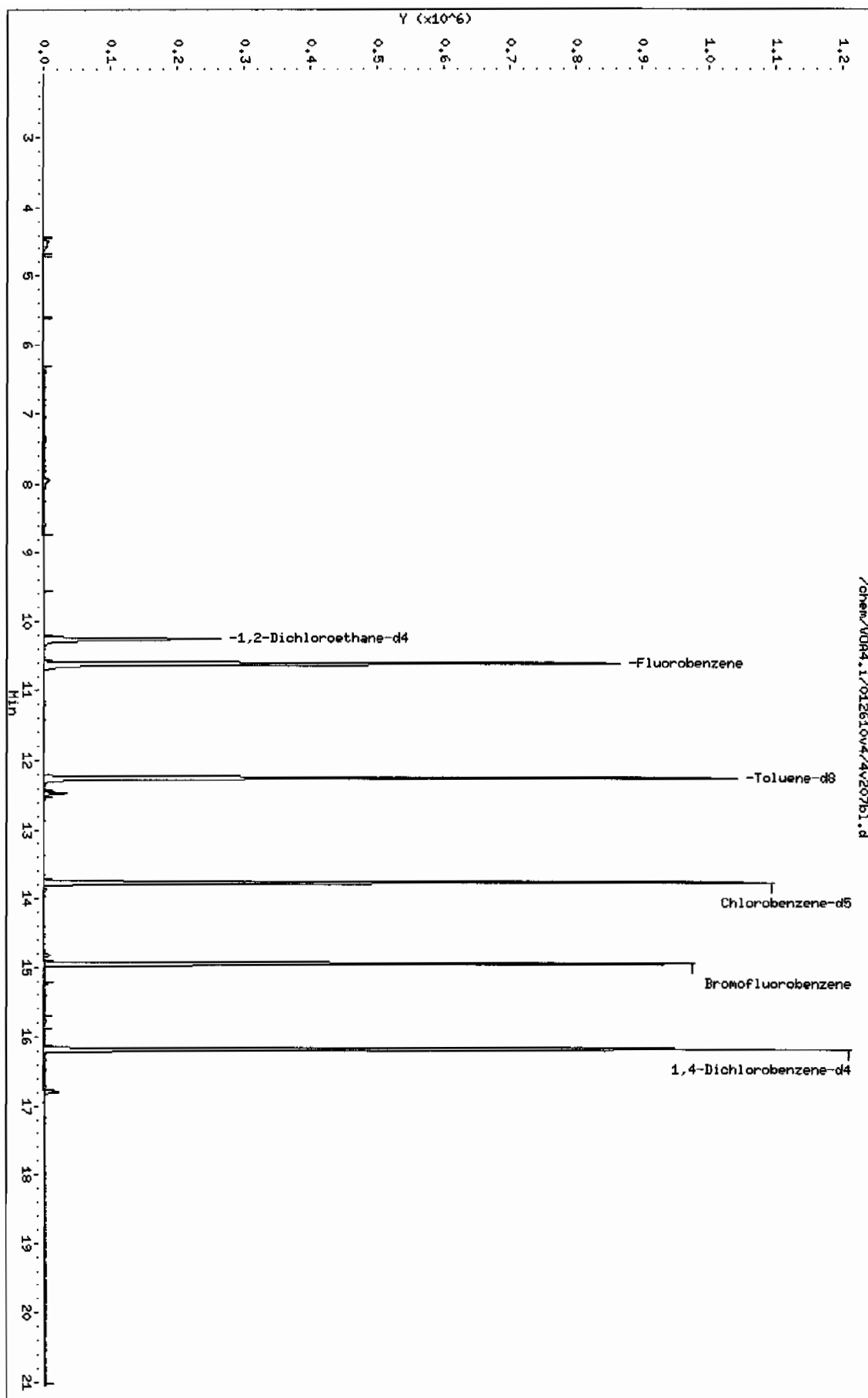
Target Version: 3.50

Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/V004.i/012610v4/4v207b1.d
Date : 26-JAN-2010 20:22
Client ID: BLANK
Sample Info: 11202037373194525411.V004.i11
Column phase: RTX-VOLATILES

Instrument: V004.i
Operator: PCJ
Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202024445

Client Sample: QC for batch 945253

Client: LANL010

Project: QC

Client ID: LCS for batch 945253

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 945254

Inst: VOA4.I

Dilution: 1

Run Date: 01/26/2010 06:02

Analyst: ACJ

Purge Vol: 5 mL

Prep Date: 01/25/2010 22:30

Aliquot: 5 g

Final Volume: 5 mL

Data File: 4v129LL.d

Column: RTX-VOLATILES

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		59.5	ug/kg	0.340	1.00
74-87-3	Chloromethane		45.7	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		45.5	ug/kg	0.300	1.00
74-83-9	Bromomethane		53.4	ug/kg	0.300	1.00
75-00-3	Chloroethane		53.8	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		57.1	ug/kg	0.300	1.00
67-64-1	Acetone		249	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		48.6	ug/kg	0.300	1.00
74-88-4	Iodomethane		264	ug/kg	1.60	5.00
75-09-2	Methylene chloride		51.3	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		261	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		48.8	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		49.0	ug/kg	0.300	1.00
78-93-3	2-Butanone		267	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		49.1	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		49.3	ug/kg	0.300	1.00
67-66-3	Chloroform		50.5	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		53.2	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		52.7	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		52.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		54.3	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		50.1	ug/kg	0.300	1.00
71-43-2	Benzene		48.9	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		53.6	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		49.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		53.6	ug/kg	0.300	1.00
74-95-3	Dibromomethane		53.4	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		259	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		53.6	ug/kg	0.300	1.00
108-88-3	Toluene		48.9	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.8	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		50.9	ug/kg	0.300	1.00
591-78-6	2-Hexanone		251	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		48.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		49.4	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		54.7	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		53.3	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		51.0	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202024445

Client Sample: QC for batch 945253

Client: LANL010

Project: QC

Client ID: LCS for batch 945253

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 945254

Inst: VOA4.1

Dilution: 1

Run Date: 01/26/2010 06:02

Analyst: ACJ

Purge Vol: 5 mL

Prep Date: 01/25/2010 22:30

Aliquot: 5 g

Final Volume: 5 mL

Data File: 4v129LL.d

Column: RTX-VOLATILES

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		49.6	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		102	ug/kg	0.300	2.00
95-47-6	o-Xylene		51.9	ug/kg	0.300	1.00
100-42-5	Styrene		55.5	ug/kg	0.300	1.00
75-25-2	Bromoform		57.3	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.4	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		49.2	ug/kg	0.300	1.00
108-86-1	Bromobenzene		50.4	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		48.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		47.5	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		49.6	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		49.2	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		49.7	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		50.4	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		49.8	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		50.6	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		51.4	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		50.3	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		49.4	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		51.6	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		61.3	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		53.6	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		51.3	ug/kg	0.300	1.00

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v129LL.d

Lab Smp Id: 1202024445

Client Smp ID: LCS

Inj Date : 26-JAN-2010 06:02

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |1202024445|945254|1|VOAF|1|

Misc Info : GEL 5G N/A UVM091214-01I/IVM100120-01

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 29

QC Sample: LCS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

Processing Host: prdsvr07

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

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

Cpnd Variable

Local Compound Variable

		QUANT SIG			CONCENTRATIONS		
Compounds		MASS	RT	EXP RT REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)		106			1774101	154.369	154
M 2 1,2-Dichloroethylene (total)		96			1010572	97.9499	97.9
M 135 1,3-Dichloropropylene		75			971457	108.950	109
3 Dichlorodifluoromethane		85	4.911	4.912 (0.462)	249237	59.5068	59.5
4 Chloromethane		50	5.306	5.306 (0.500)	411747	45.6745	45.7
5 Vinyl chloride		62	5.521	5.528 (0.520)	315192	45.5266	45.5
6 Bromomethane		94	6.145	6.138 (0.579)	309549	53.4246	53.4
7 Chloroethane		64	6.288	6.288 (0.592)	315110	53.7999	53.8
8 Trichlorofluoromethane		101	6.663	6.668 (0.627)	461833	57.1382	57.1
134 Ethyl Ether		59	7.004	7.004 (0.660)	295618	52.8279	52.8
10 Acetone		43	7.364	7.363 (0.693)	1582461	248.749	249
11 1,1-Dichloroethylene		61	7.389	7.388 (0.696)	529737	48.6140	48.6

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
13 Iodomethane	142	7.626	7.632	(0.718)	2899627	264.405	264
15 Acetonitrile	41	7.706	7.705	(0.726)	1555040	1187.52	1190
128 Methyl acetate	43	7.754	7.753	(0.730)	1529245	232.927	233
14 Carbon disulfide	76	7.773	7.772	(0.732)	5391179	260.999	261
17 Methylene chloride	84	7.937	7.942	(0.747)	384608	51.2766	51.3
20 tert-Butyl methyl ether	73	8.242	8.241	(0.776)	837965	51.2638	51.3
21 trans-1,2-Dichloroethylene	61	8.291	8.290	(0.781)	483373	48.8494	48.8
23 Vinyl acetate	43	8.711	8.711	(0.820)	3046857	214.397	214
22 1,1-Dichloroethane	63	8.760	8.759	(0.825)	615588	48.9969	49.0
30 2-Butanone	43	9.327	9.326	(0.878)	1917862	267.145	267
31 cis-1,2-Dichloroethylene	61	9.388	9.387	(0.884)	527199	49.1006	49.1
25 2,2-Dichloropropane	77	9.425	9.424	(0.887)	264541	49.3301	49.3
29 Bromochloromethane	128	9.662	9.662	(0.910)	172830	53.2114	53.2
32 Chloroform	83	9.693	9.692	(0.913)	548723	50.5060	50.5
36 1,1,1-Trichloroethane	97	9.979	9.979	(0.940)	416384	52.6810	52.7
129 Cyclohexane	56	10.083	10.088	(0.949)	579440	52.8578	52.8
34 1,1-Dichloropropene	75	10.138	10.137	(0.955)	412420	52.9370	52.9
33 Carbon tetrachloride	117	10.175	10.180	(0.958)	394267	54.2799	54.3
\$ 138 1,2-Dichloroethane-d4	65	10.260	10.265	(0.966)	259989	46.1193	46.1
37 1,2-Dichloroethane	62	10.345	10.344	(0.974)	437543	50.1120	50.1
38 Benzene	78	10.376	10.375	(0.977)	1262455	48.8836	48.9
139 Cyclohexene	67	10.498	10.497	(0.989)	604959	50.8682	50.9
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	1031643	50.0000	
131 n-Butyl alcohol	56	10.693	10.692	(1.007)	1490014	5993.62	5990
39 Trichloroethylene	95	11.010	11.009	(1.037)	331751	53.5593	53.6
130 Methylcyclohexane	83	11.266	11.265	(1.061)	511072	53.0462	53.0
41 1,2-Dichloropropane	63	11.248	11.247	(1.059)	364829	49.5783	49.6
43 Dibromomethane	93	11.376	11.375	(1.071)	204749	53.4399	53.4
45 Bromodichloromethane	83	11.485	11.484	(1.082)	418313	53.5539	53.6
44 2-Chloroethylvinyl ether	63	11.699	11.698	(1.102)	806105	249.709	250
46 cis-1,3-Dichloropropylene	75	11.930	11.929	(1.123)	506143	53.6387	53.6
49 4-Methyl-2-pentanone	58	12.022	12.021	(0.873)	817597	259.099	259
\$ 47 Toluene-d8	98	12.253	12.253	(0.890)	898934	45.5201	45.5
50 Toluene	92	12.327	12.326	(0.895)	743591	48.9394	48.9
53 trans-1,3-Dichloropropylene	75	12.467	12.466	(0.905)	465314	53.8033	53.8
54 1,1,2-Trichloroethane	83	12.686	12.685	(0.921)	252434	50.9176	50.9
55 2-Hexanone	43	12.857	12.862	(0.934)	2386152	251.005	251
52 1,3-Dichloropropane	76	12.881	12.881	(0.935)	467821	48.3515	48.4
56 Tetrachloroethylene	164	12.924	12.923	(0.938)	277144	49.4422	49.4
57 Dibromochloromethane	129	13.150	13.149	(0.955)	342688	54.6941	54.7
59 1,2-Dibromoethane	107	13.320	13.319	(0.967)	316754	53.3358	53.3
* 61 Chlorobenzene-d5	117	13.771	13.771	(1.000)	776858	50.0000	
62 Chlorobenzene	112	13.802	13.801	(1.002)	884074	50.9892	51.0
60 1,1,1,2-Tetrachloroethane	131	13.851	13.856	(1.006)	336303	53.5734	53.6
58 Ethylbenzene	91	13.863	13.862	(1.007)	1465526	49.6297	49.6
63 m,p-Xylenes	106	13.973	13.972	(1.015)	1163100	102.469	102
64 o-Xylene	106	14.405	14.405	(1.046)	611001	51.9003	51.9

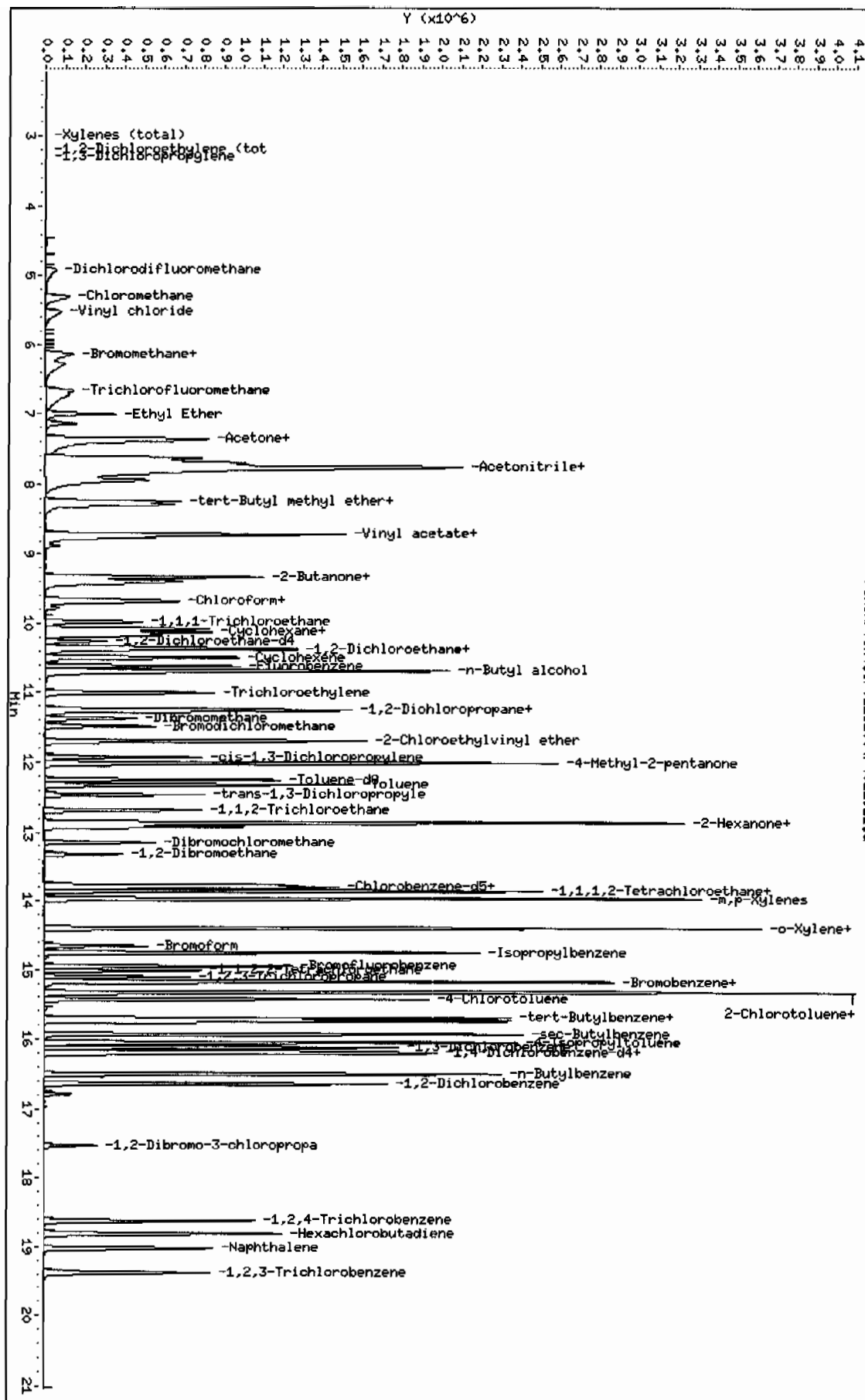
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/Kg)
65 Styrene	104	14.405	14.405	(1.046)	982159	55.4669	55.5
66 Bromoform	173	14.662	14.661	(0.906)	299858	57.3398	57.3
67 Isopropylbenzene	105	14.759	14.758	(0.912)	1620652	49.6283	49.6
\$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	464254	49.4914	49.5
73 1,1,2,2-Tetrachloroethane	83	15.015	15.020	(0.928)	473505	47.3668	47.4
74 1,2,3-Trichloropropane	110	15.107	15.106	(0.934)	124049	49.1799	49.2
75 Bromobenzene	156	15.168	15.167	(0.937)	485917	50.4122	50.4
76 n-Propylbenzene	91	15.186	15.185	(0.939)	1952098	48.5247	48.5
78 1,3,5-Trimethylbenzene	105	15.332	15.331	(0.948)	1430174	49.2440	49.2
77 2-Chlorotoluene	91	15.332	15.331	(0.948)	1333443	47.4747	47.5
80 4-Chlorotoluene	91	15.430	15.429	(0.954)	1272446	49.6838	49.7
81 tert-Butylbenzene	119	15.704	15.703	(0.971)	1434693	50.3862	50.4
79 1,2,4-Trimethylbenzene	105	15.747	15.746	(0.973)	1520629	49.7547	49.8
83 sec-Butylbenzene	105	15.936	15.935	(0.985)	2004131	50.5835	50.6
84 4-Isopropyltoluene	119	16.051	16.051	(0.992)	1570139	51.3743	51.4
85 1,3-Dichlorobenzene	146	16.119	16.124	(0.996)	945525	50.2582	50.2
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	512936	50.0000	
87 1,4-Dichlorobenzene	146	16.210	16.209	(1.002)	941477	49.4313	49.4
89 n-Butylbenzene	91	16.503	16.508	(1.020)	1545252	51.5680	51.6
90 1,2-Dichlorobenzene	146	16.643	16.642	(1.029)	919837	51.3421	51.3
92 1,2-Dibromo-3-chloropropane	157	17.533	17.526	(1.084)	97624	61.3386	61.3
93 1,2,4-Trichlorobenzene	180	18.630	18.636	(1.151)	519912	54.1473	54.1
94 Hexachlorobutadiene	225	18.819	18.818	(1.163)	373184	53.3402	53.3
95 Naphthalene	128	19.033	19.032	(1.176)	1014609	60.5668	60.6
96 1,2,3-Trichlorobenzene	180	19.386	19.385	(1.198)	439991	56.5195	56.5

Data File: /chem/V004.i/012510v4/4v129L.L.d
 Date : 26-JAN-2010 06:02
 Client ID: LCS
 Sample Info: 11202024445194525411V004111

Column phase: RTX-VOLATILES

/chem/V004.i/012510v4/4v129L.L.d

Instrument: V004.i
 Operator: ACJ
 Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301		Matrix: SOIL
Lab Sample ID: 1202024446		
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: LCS for batch 945253	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 06:58	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:45	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v131SL.d	Column: RTX-VOLATILES	Level: LOW

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
 Lab Sample ID: 1202024446
 Client Sample: QC for batch 945253
 Client ID: LCS for batch 945253
 Batch ID: 945254
 Run Date: 01/26/2010 06:58
 Prep Date: 01/25/2010 22:45
 Data File: 4v131SL.d

Client: LANL010
 Method: SW846 8260B
 Inst: VOA4.I
 Analyst: ACJ
 Aliquot: 5 g
 Column: RTX-VOLATILES

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		280	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Data File: /chem/VOA4.i/012510v4/4v131SL.d
Report Date: 11-Feb-2010 16:56

Page 1

GEL Laboratories LLC

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

Data file: /chem/VOA4.i/012510v4/4v131SL.d

Lab Smp Id: 1202024446

Client Smp ID: LCS

Inj Date: 26-JAN-2010 06:58

Operator: ACJ

Inst ID: VOA4.i

Smp Info: |1202024446|945254|1|VOAF|1|

Misc Info: GEL 5G N/A UVM0100118-08A/UVM091209-08E

Comment:

Method: /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date: 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date: 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 31

QC Sample: LCS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 3.50

Processing Host: prdsrv07

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

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

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
	=====	==	=====	=====	=====	(ug/l)	(ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	550322	132.473	132
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	867375	146.967	147
9 Acrolein	56	7.186	7.187	(0.677)	330746	266.983	267
12 Trichlorotrifluoroethane	85	7.363	7.363	(0.693)	537718	280.235	280
147 Isopropyl Alcohol	45	7.436	7.436	(0.700)	1738951	2671.96	2670
16 Allyl chloride	41	7.808	7.802	(0.735)	2804098	242.430	242
148 tert-Butyl Alcohol	59	7.930	7.936	(0.747)	2439884	2702.32	2700
18 Acrylonitrile	53	8.180	8.180	(0.770)	747163	271.695	272
149 Isopropyl ether	45	8.747	8.747	(0.824)	1268581	48.6645	48.7
24 2-Chloro-1,3-butadiene	53	8.875	8.875	(0.836)	493683	53.2281	53.2
150 Ethyl tert-butyl ether	59	9.149	9.150	(0.862)	1052329	49.1798	49.2
26 Ethyl acetate	43	9.344	9.345	(0.880)	1868685	234.588	234

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====
28 Propionitrile		54	9.399	9.393	(0.885)	299411	271.284	271
27 Methacrylonitrile		41	9.582	9.582	(0.902)	1192283	251.893	252
72 Tetrahydrofuran		42	9.716	9.716	(0.601)	686906	246.894	247
19 Isobutyl alcohol		41	10.009	10.009	(0.943)	895383	2562.12	2560
\$ 138 1,2-Dichloroethane-d4		65	10.265	10.265	(0.967)	248047	43.7436	43.7
151 Methyl tert-amyl ether		73	10.387	10.387	(0.978)	879094	51.0768	51.1
* 40 Fluorobenzene		96	10.619	10.619	(1.000)	1037711	50.0000	
42 Methyl methacrylate		69	11.210	11.210	(1.056)	1080631	270.547	270
97 1,4-Dioxane		88	11.326	11.332	(1.067)	190260	2718.74	2720
48 2-Nitropropane		43	11.673	11.673	(1.099)	560090	286.788	287
\$ 47 Toluene-d8		98	12.252	12.253	(0.890)	895702	44.3129	44.3
51 Ethyl methacrylate		69	12.466	12.466	(0.905)	1941478	253.907	254
152 1-Chlorohexane		55	13.667	13.661	(1.287)	326559	51.7028	51.7
* 61 Chlorobenzene-d5		117	13.770	13.771	(1.000)	795153	50.0000	
68 cis-1,4-Dichloro-2-butene		53	14.782	14.783	(0.914)	734081	267.682	268
70 Cyclohexanone		42	14.904	14.905	(1.082)	444656	525.617	526
\$ 71 Bromofluorobenzene		95	14.953	14.953	(0.924)	454702	50.8270	50.8
69 trans-1,4-Dichloro-2-butene		53	15.063	15.063	(0.931)	691580	259.616	260
82 Pentachloroethane		167	15.776	15.776	(0.975)	601927	180.466	180
* 86 1,4-Dichlorobenzene-d4		152	16.178	16.179	(1.000)	489181	50.0000	
88 Benzyl chloride		91	16.319	16.319	(1.009)	2836640	250.385	250
91 bis(2-Chloroisopropyl) ether		45	16.721	16.721	(1.034)	1311575	270.019	270

Data File: /chem/V004.i/012510v4/4v131SL.d

Date: 26-JAN-2010 06:58

Client ID: LCS

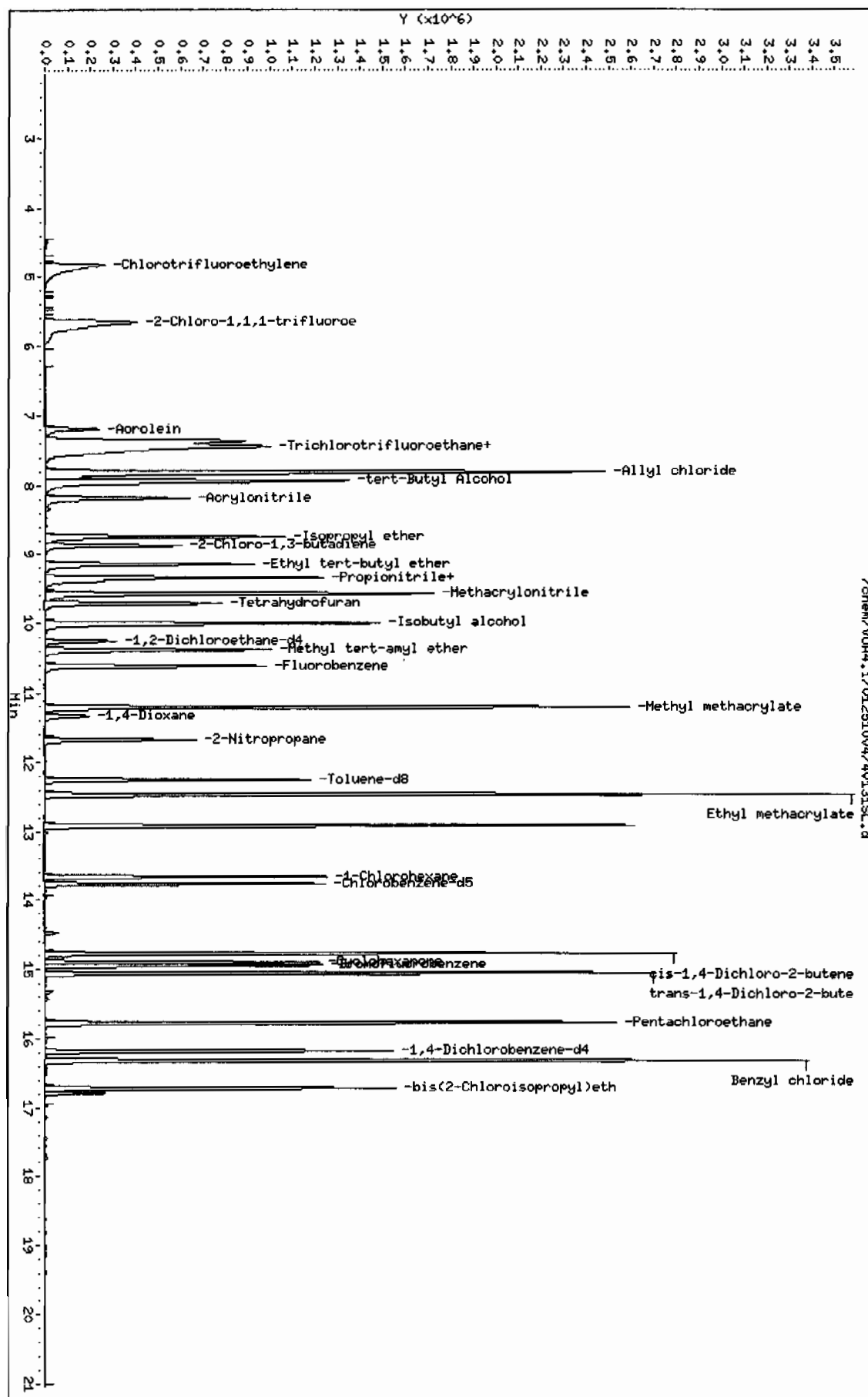
Sample Info: 11202024446194525411V004I11

Column phase: RTX-VOLATILES

Instrument: V004.i

Operator: ACJ

Column diameter: 0.25



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1301		Matrix: SOIL
Lab Sample ID: 1202037374		
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: LCS for batch 945253	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 18:30	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 16:30	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v203LLd	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		61.6	ug/kg	0.340	1.00
74-87-3	Chloromethane		46.2	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		46.6	ug/kg	0.300	1.00
74-83-9	Bromomethane		55.3	ug/kg	0.300	1.00
75-00-3	Chloroethane		56.1	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		58.0	ug/kg	0.300	1.00
67-64-1	Acetone		264	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		49.5	ug/kg	0.300	1.00
74-88-4	Iodomethane		262	ug/kg	1.60	5.00
75-09-2	Methylene chloride		50.9	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		272	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		50.7	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		50.5	ug/kg	0.300	1.00
78-93-3	2-Butanone		276	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		50.2	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		57.8	ug/kg	0.300	1.00
67-66-3	Chloroform		50.6	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		52.2	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		55.0	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		55.6	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		56.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		47.9	ug/kg	0.300	1.00
71-43-2	Benzene		50.2	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		53.0	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		50.6	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		53.2	ug/kg	0.300	1.00
74-95-3	Dibromomethane		51.7	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		260	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		54.5	ug/kg	0.300	1.00
108-88-3	Toluene		50.4	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		53.0	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		49.6	ug/kg	0.300	1.00
591-78-6	2-Hexanone		253	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		48.4	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		51.9	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		52.5	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		51.6	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		51.2	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202037374

Client Sample: QC for batch 945253

Client: LANL010

Project: QC

Client ID: LCS for batch 945253

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Batch ID: 945254

Inst: VOA4.1

Dilution: 1

Run Date: 01/26/2010 18:30

Analyst: ACJ

Purge Vol: 5 mL

Prep Date: 01/26/2010 16:30

Aliquot: 5 g

Final Volume: 5 mL

Data File: 4v203LL.d

Column: RTX-VOLATILES

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		51.1	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		105	ug/kg	0.300	2.00
95-47-6	o-Xylene		51.8	ug/kg	0.300	1.00
100-42-5	Styrene		55.3	ug/kg	0.300	1.00
75-25-2	Bromoform		55.0	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		49.6	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		47.1	ug/kg	0.300	1.00
108-86-1	Bromobenzene		50.1	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		51.5	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		48.9	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		51.7	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		50.8	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		51.0	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		51.9	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		52.1	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		53.3	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		54.5	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		51.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		51.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		55.5	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		56.6	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		52.6	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		51.6	ug/kg	0.300	1.00

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

Data file : /chem/VOA4.i/012610v4/4v203L1.d
Lab Smp Id: 1202037374 Client Smp ID: LCS
Inj Date : 26-JAN-2010 18:30
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202037374|945254|1|VOAF|1|
Misc Info : GEL 5G N/A UVM091214-01I/IVM100126-01
Comment :
Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
Meth Date : 27-Jan-2010 15:20 slg Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

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

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

Cpnd Variable Local Compound Variable

		QUANT SIG			CONCENTRATIONS		
Compounds		MASS	RT	EXP RT REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/Kg)
M 1 Xylenes (total)		106			1681712	156.932	157
M 2 1,2-Dichloroethylene (total)		96			961188	100.939	101
M 135 1,3-Dichloropropylene		75			903018	109.696	110
3 Dichlorodifluoromethane		85	4.912	4.912 (0.463)	238183	61.5962	61.6
4 Chloromethane		50	5.299	5.299 (0.499)	384698	46.2225	46.2
5 Vinyl chloride		62	5.528	5.528 (0.521)	297869	46.6020	46.6
6 Bromomethane		94	6.138	6.138 (0.578)	295944	55.3237	55.3
7 Chloroethane		64	6.281	6.281 (0.591)	303251	56.0804	56.1
8 Trichlorofluoromethane		101	6.662	6.662 (0.627)	432696	57.9848	58.0
134 Ethyl Ether		59	7.003	7.003 (0.660)	268056	51.8857	51.9
10 Acetone		43	7.363	7.363 (0.693)	1553026	264.422	264
11 1,1-Dichloroethylene		61	7.388	7.388 (0.696)	498223	49.5238	49.5

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
=====		=====	==	=====	=====	=====	=====	=====
13 Iodomethane		142	7.631	7.631	(0.719)	2652034	261.936	262
15 Acetonitrile		41	7.705	7.705	(0.726)	1405373	1162.47	1160
128 Methyl acetate		43	7.753	7.753	(0.730)	1342857	221.545	222
14 Carbon disulfide		76	7.772	7.772	(0.732)	5182303	271.749	272
17 Methylene chloride		84	7.942	7.942	(0.748)	352337	50.8649	50.9
20 tert-Butyl methyl ether		73	8.241	8.241	(0.776)	756709	50.1422	50.1
21 trans-1,2-Dichloroethylene		61	8.290	8.290	(0.781)	463074	50.6893	50.7
23 Vinyl acetate		43	8.710	8.710	(0.820)	3875474	295.380	295
22 1,1-Dichloroethane		63	8.759	8.759	(0.825)	585728	50.4968	50.5
30 2-Butanone		43	9.326	9.326	(0.878)	1828619	275.894	276
31 cis-1,2-Dichloroethylene		61	9.387	9.387	(0.884)	498114	50.2493	50.2
25 2,2-Dichloropropane		77	9.424	9.424	(0.887)	286218	57.8103	57.8
29 Bromochloromethane		128	9.662	9.662	(0.910)	156510	52.1936	52.2
32 Chloroform		83	9.692	9.692	(0.913)	507497	50.5956	50.6
36 1,1,1-Trichloroethane		97	9.979	9.979	(0.940)	400978	54.9503	55.0
129 Cyclohexane		56	10.082	10.082	(0.949)	567766	56.0995	56.1
34 1,1-Dichloropropene		75	10.137	10.137	(0.955)	399791	55.5830	55.6
33 Carbon tetrachloride		117	10.174	10.174	(0.958)	379838	56.6418	56.6
\$ 138 1,2-Dichloroethane-d4		65	10.259	10.259	(0.966)	229767	44.1474	44.1
37 1,2-Dichloroethane		62	10.344	10.344	(0.974)	386112	47.8987	47.9
38 Benzene		78	10.375	10.375	(0.977)	1197177	50.2105	50.2
139 Cyclohexene		67	10.497	10.497	(0.989)	596673	54.3433	54.3
* 40 Fluorobenzene		96	10.619	10.619	(1.000)	952445	50.0000	
131 n-Butyl alcohol		56	10.692	10.692	(1.007)	1325328	5774.46	5770
39 Trichloroethylene		95	11.009	11.009	(1.037)	302854	52.9597	53.0
130 Methylcyclohexane		83	11.265	11.265	(1.061)	516639	58.0830	58.1
41 1,2-Dichloropropane		63	11.247	11.247	(1.059)	343825	50.6092	50.6
43 Dibromomethane		93	11.375	11.375	(1.071)	182939	51.7178	51.7
45 Bromodichloromethane		83	11.484	11.484	(1.082)	383812	53.2228	53.2
44 2-Chloroethylvinyl ether		63	11.698	11.698	(1.102)	751874	252.276	252
46 cis-1,3-Dichloropropylene		75	11.929	11.929	(1.123)	475163	54.5428	54.5
49 4-Methyl-2-pentanone		58	12.021	12.021	(0.873)	764378	259.729	260
\$ 47 Toluene-d8		98	12.252	12.252	(0.890)	812212	44.0992	44.1
50 Toluene		92	12.326	12.326	(0.895)	714599	50.4280	50.4
53 trans-1,3-Dichloropropylene		75	12.466	12.466	(0.905)	427855	53.0451	53.0
54 1,1,2-Trichloroethane		83	12.685	12.685	(0.921)	229164	49.5624	49.6
55 2-Hexanone		43	12.856	12.856	(0.934)	2240747	252.733	253
52 1,3-Dichloropropane		76	12.874	12.874	(0.935)	436388	48.3602	48.4
56 Tetrachloroethylene		164	12.923	12.923	(0.938)	271533	51.9398	51.9
57 Dibromochloromethane		129	13.149	13.149	(0.955)	306514	52.4538	52.4
59 1,2-Dibromoethane		107	13.319	13.319	(0.967)	285904	51.6182	51.6
* 61 Chlorobenzene-d5		117	13.770	13.770	(1.000)	724530	50.0000	
62 Chlorobenzene		112	13.801	13.801	(1.002)	827357	51.1643	51.2
60 1,1,1,2-Tetrachloroethane		131	13.850	13.850	(1.006)	308040	52.6151	52.6
58 Ethylbenzene		91	13.862	13.862	(1.007)	1408203	51.1327	51.1
63 m,p-Xylenes		106	13.972	13.972	(1.015)	1112444	105.084	105
64 o-Xylene		106	14.405	14.405	(1.046)	569268	51.8478	51.8

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
=====						=====	=====	=====
65 Styrene		104	14.405	14.405	(1.046)	913225	55.2987	55.3
66 Bromoform		173	14.661	14.661	(0.906)	263390	55.0020	55.0
67 Isopropylbenzene		105	14.758	14.758	(0.912)	1544595	51.6528	51.6
\$ 71 Bromofluorobenzene		95	14.953	14.953	(0.924)	411458	47.9004	47.9
73 1,1,2,2-Tetrachloroethane		83	15.020	15.020	(0.928)	454372	49.6363	49.6
74 1,2,3-Trichloropropane		110	15.106	15.106	(0.934)	108707	47.0643	47.1
75 Bromobenzene		156	15.167	15.167	(0.937)	442123	50.0905	50.1
76 n-Propylbenzene		91	15.185	15.185	(0.939)	1897992	51.5223	51.5
78 1,3,5-Trimethylbenzene		105	15.331	15.331	(0.948)	1349923	50.7589	50.8
77 2-Chlorotoluene		91	15.331	15.331	(0.948)	1257044	48.8739	48.9
80 4-Chlorotoluene		91	15.429	15.429	(0.954)	1195580	50.9792	51.0
81 tert-Butylbenzene		119	15.703	15.703	(0.971)	1353374	51.9050	51.9
79 1,2,4-Trimethylbenzene		105	15.746	15.746	(0.973)	1456912	52.0575	52.0
83 sec-Butylbenzene		105	15.935	15.935	(0.985)	1934727	53.3262	53.3
84 4-Isopropyltoluene		119	16.051	16.051	(0.992)	1523887	54.4502	54.4
85 1,3-Dichlorobenzene		146	16.124	16.124	(0.997)	892312	51.7952	51.8
* 86 1,4-Dichlorobenzene-d4		152	16.179	16.179	(1.000)	469704	50.0000	
87 1,4-Dichlorobenzene		146	16.209	16.209	(1.002)	891105	51.0928	51.1
89 n-Butylbenzene		91	16.508	16.508	(1.020)	1522892	55.4995	55.5
90 1,2-Dichlorobenzene		146	16.642	16.642	(1.029)	846205	51.5795	51.6
92 1,2-Dibromo-3-chloropropane		157	17.532	17.532	(1.084)	82427	56.5569	56.6
93 1,2,4-Trichlorobenzene		180	18.635	18.635	(1.152)	493861	56.1682	56.2
94 Hexachlorobutadiene		225	18.818	18.818	(1.163)	336043	52.4524	52.4
95 Naphthalene		128	19.032	19.032	(1.176)	891776	58.1341	58.1
96 1,2,3-Trichlorobenzene		180	19.385	19.385	(1.198)	394546	55.3466	55.3

Data File: /chem/V004.i/012610v4/4v203L1.d

Date: 26-JAN-2010 18:30

Client ID: LCS

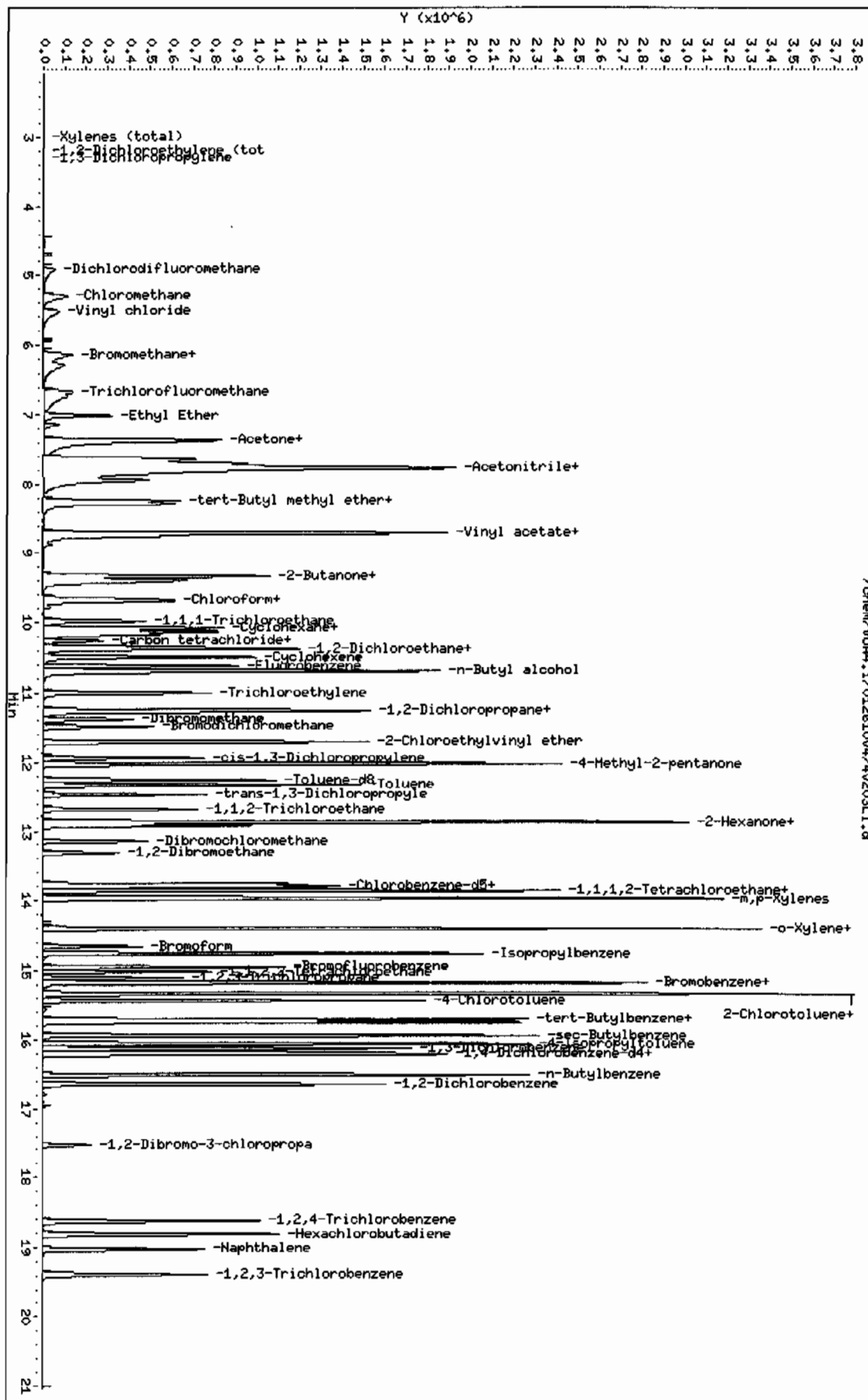
Sample Info: 11202037374/94525411V004.1

Column phase: RTX-VOLATILES

Instrument: V004.1

Operator: ACJ

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301		Matrix: SOIL
Lab Sample ID: 1202037375		
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: LCS for batch 945253	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 19:25	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 16:45	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v205sl.d	Column: RTX-VOLATILES	Level: LOW

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301		Matrix: SOIL
Lab Sample ID: 1202037375		
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: LCS for batch 945253	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 19:25	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/26/2010 16:45	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v205sLd	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		304	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012610v4/4v205sl.d
Lab Smp Id: 1202037375 Client Smp ID: LCS
Inj Date : 26-JAN-2010 19:25
Operator : ACJ Inst ID: VOA4.i
Smp Info : |1202037375|945254|1|VOAF|1|
Misc Info : GEL 5G N/A UVM0100118-08A/UVM091209-08E
Comment :
Method : /chem/VOA4.i/012610v4/VOA4-8260-011110.m
Meth Date : 27-Jan-2010 15:20 slg Quant Type: ISTD
Cal Date : 12-JAN-2010 06:08 Cal File: 4t118.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: prdsvr07

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

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

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/l)	FINAL (ug/Kg)
153 Chlorotrifluoroethylene	116	4.833	4.833	(0.455)	517537	134.071	134
154 2-Chloro-1,1,1-trifluoroethane	118	5.657	5.657	(0.533)	782124	142.650	143
9 Acrolein	56	7.187	7.188	(0.677)	341671	296.880	297
12 Trichlorotrifluoroethane	85	7.370	7.358	(0.694)	542747	304.474	304
147 Isopropyl Alcohol	45	7.437	7.431	(0.700)	1507822	2493.88	2490
16 Allyl chloride	41	7.803	7.803	(0.735)	2883966	268.391	268
148 tert-Butyl Alcohol	59	7.931	7.931	(0.747)	2098152	2501.42	2500
18 Acrylonitrile	53	8.175	8.181	(0.770)	687079	268.941	269
149 Isopropyl ether	45	8.748	8.742	(0.824)	1174448	48.4966	48.5
24 2-Chloro-1,3-butadiene	53	8.870	8.870	(0.835)	498070	57.8052	57.8
150 Ethyl tert-butyl ether	59	9.150	9.144	(0.862)	968932	48.7430	48.7
26 Ethyl acetate	43	9.339	9.340	(0.879)	1763454	238.296	238

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
=====		=====		=====	=====	=====	=====	=====
28 Propionitrile		54	9.394	9.394	(0.885)	270841	264.153	264
27 Methacrylonitrile		41	9.577	9.577	(0.902)	1131632	257.351	257
72 Tetrahydrofuran		42	9.717	9.717	(0.601)	634210	245.801	246
19 Isobutyl alcohol		41	10.010	10.010	(0.943)	802358	2471.40	2470
\$ 138 1,2-Dichloroethane-d4		65	10.260	10.259	(0.966)	227870	43.2565	43.2
151 Methyl tert-amyl ether		73	10.388	10.388	(0.978)	803941	50.2801	50.3
* 40 Fluorobenzene		96	10.620	10.619	(1.000)	964035	50.0000	
42 Methyl methacrylate		69	11.205	11.211	(1.055)	1010968	272.449	272
97 1,4-Dioxane		88	11.327	11.327	(1.067)	173372	2666.75	2670
48 2-Nitropropane		43	11.674	11.674	(1.099)	508221	280.117	280
\$ 47 Toluene-d8		98	12.254	12.252	(0.890)	843627	45.3494	45.3
51 Ethyl methacrylate		69	12.467	12.467	(0.905)	1847046	262.466	262
152 1-Chlorohexane		55	13.662	13.662	(1.286)	304551	51.9035	51.9
* 61 Chlorobenzene-d5		117	13.772	13.770	(1.000)	731806	50.0000	
68 cis-1,4-Dichloro-2-butene		53	14.784	14.784	(0.914)	721421	283.661	284
70 Cyclohexanone		42	14.905	14.906	(1.082)	423231	543.151	543
\$ 71 Bromofluorobenzene		95	14.954	14.953	(0.924)	419028	50.5066	50.5
69 trans-1,4-Dichloro-2-butene		53	15.064	15.064	(0.931)	687843	278.429	278
82 Pentachloroethane		167	15.771	15.771	(0.975)	1065494	344.461	344
* 86 1,4-Dichlorobenzene-d4		152	16.180	16.179	(1.000)	453662	50.0000	
88 Benzyl chloride		91	16.320	16.320	(1.009)	3432954	326.745	327
91 bis(2-Chloroisopropyl) ether		45	16.722	16.722	(1.034)	1227525	272.502	272

Data File: /chem/V004.i/012610v4/4v205s1.d

Date: 26-JAN-2010 19:25

Client ID: LCS

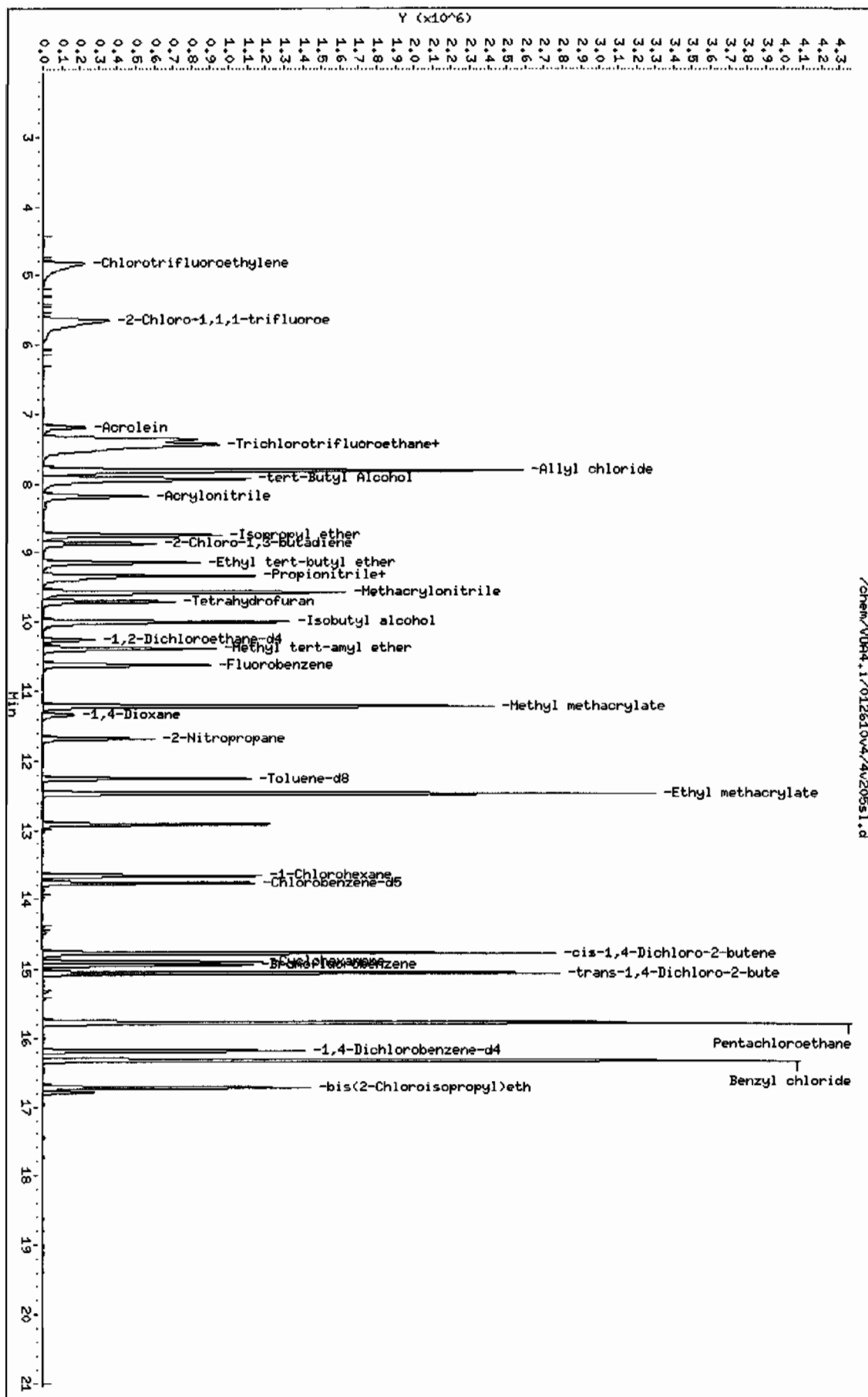
Sample Info: 11202037375194525411.V004.11

Column phase: RTX-VOLATILES

Instrument: V004.1

Operator: PCJ

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 1202024443	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: RE15-10-7194PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 15:40	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:51	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v150.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		63.2	ug/kg	0.429	1.26
74-87-3	Chloromethane		49.2	ug/kg	0.378	1.26
75-01-4	Vinyl chloride		50.7	ug/kg	0.378	1.26
74-83-9	Bromomethane		41.0	ug/kg	0.378	1.26
75-00-3	Chloroethane		62.9	ug/kg	0.378	1.26
75-69-4	Trichlorofluoromethane		60.3	ug/kg	0.378	1.26
67-64-1	Acetone		63.5	ug/kg	2.09	6.30
75-35-4	1,1-Dichloroethylene		52.5	ug/kg	0.378	1.26
74-88-4	Iodomethane		150	ug/kg	2.02	6.30
75-09-2	Methylene chloride		62.5	ug/kg	2.52	6.30
75-15-0	Carbon disulfide		253	ug/kg	1.58	6.30
156-60-5	trans-1,2-Dichloroethylene		52.0	ug/kg	0.378	1.26
75-34-3	1,1-Dichloroethane		55.1	ug/kg	0.378	1.26
78-93-3	2-Butanone		33.3	ug/kg	1.89	6.30
156-59-2	cis-1,2-Dichloroethylene		51.4	ug/kg	0.378	1.26
594-20-7	2,2-Dichloropropane		48.4	ug/kg	0.378	1.26
67-66-3	Chloroform		55.5	ug/kg	0.378	1.26
74-97-5	Bromochloromethane		57.8	ug/kg	0.416	1.26
71-55-6	1,1,1-Trichloroethane		56.0	ug/kg	0.378	1.26
563-58-6	1,1-Dichloropropene		52.5	ug/kg	0.378	1.26
56-23-5	Carbon tetrachloride		53.9	ug/kg	0.378	1.26
107-06-2	1,2-Dichloroethane		51.4	ug/kg	0.378	1.26
71-43-2	Benzene		53.5	ug/kg	0.378	1.26
79-01-6	Trichloroethylene		49.9	ug/kg	0.416	1.26
78-87-5	1,2-Dichloropropane		55.8	ug/kg	0.378	1.26
75-27-4	Bromodichloromethane		48.5	ug/kg	0.378	1.26
74-95-3	Dibromomethane		54.7	ug/kg	0.378	1.26
108-10-1	4-Methyl-2-pentanone		143	ug/kg	1.58	6.30
10061-01-5	cis-1,3-Dichloropropylene		22.0	ug/kg	0.378	1.26
108-88-3	Toluene		54.8	ug/kg	0.378	1.26
10061-02-6	trans-1,3-Dichloropropylene		28.1	ug/kg	0.378	1.26
79-00-5	1,1,2-Trichloroethane		57.3	ug/kg	0.378	1.26
591-78-6	2-Hexanone		7.84	ug/kg	1.89	6.30
142-28-9	1,3-Dichloropropane		54.2	ug/kg	0.378	1.26
127-18-4	Tetrachloroethylene		51.8	ug/kg	0.378	1.26
124-48-1	Dibromochloromethane		47.6	ug/kg	0.378	1.26
106-93-4	1,2-Dibromoethane		44.7	ug/kg	0.378	1.26
108-90-7	Chlorobenzene		48.3	ug/kg	0.378	1.26

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 1202024443	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: RE15-10-7194PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 15:40	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:51	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v150.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		44.9	ug/kg	0.378	1.26
179601-23-1	m,p-Xylenes		100	ug/kg	0.378	2.52
95-47-6	o-Xylene		54.2	ug/kg	0.378	1.26
100-42-5	Styrene		40.4	ug/kg	0.378	1.26
75-25-2	Bromoform		54.4	ug/kg	0.378	1.26
79-34-5	1,1,2,2-Tetrachloroethane		66.5	ug/kg	0.378	1.26
96-18-4	1,2,3-Trichloropropane		60.5	ug/kg	0.378	1.26
108-86-1	Bromobenzene		51.9	ug/kg	0.378	1.26
103-65-1	n-Propylbenzene		37.7	ug/kg	0.378	1.26
95-49-8	2-Chlorotoluene		59.0	ug/kg	0.378	1.26
98-82-8	Isopropylbenzene		44.1	ug/kg	0.378	1.26
108-67-8	1,3,5-Trimethylbenzene		60.9	ug/kg	0.378	1.26
106-43-4	4-Chlorotoluene		47.5	ug/kg	0.378	1.26
98-06-6	tert-Butylbenzene		61.3	ug/kg	0.378	1.26
95-63-6	1,2,4-Trimethylbenzene		53.0	ug/kg	0.378	1.26
135-98-8	sec-Butylbenzene		36.8	ug/kg	0.378	1.26
99-87-6	4-Isopropyltoluene		16.0	ug/kg	0.378	1.26
541-73-1	1,3-Dichlorobenzene		42.9	ug/kg	0.378	1.26
106-46-7	1,4-Dichlorobenzene		41.2	ug/kg	0.378	1.26
104-51-8	n-Butylbenzene		33.8	ug/kg	0.378	1.26
96-12-8	1,2-Dibromo-3-chloropropane		55.9	ug/kg	0.378	1.26
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.30	ug/kg	2.02	6.30
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		58.0	ug/kg	0.378	1.26
95-50-1	1,2-Dichlorobenzene		42.7	ug/kg	0.378	1.26

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v150.d

Lab Smp Id: 1202024443

Client Smp ID: RE15-10-7194MS

Inj Date : 26-JAN-2010 15:40

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |1202024443|945254|1|VOAF|1|

Misc Info : LANL 5G N/A MS 245099001

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 50

QC Sample: MS

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsvr07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	20.65990	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619	(1.000)	835750	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.771	(1.000)	573190	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179	(1.000)	285869	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.266	10.265	(0.967)	188246	41.2199	52.0
\$ 47 Toluene-d8	98	12.254	12.253	(0.890)	701887	48.1710	60.7
\$ 71 Bromofluorobenzene	95	14.954	14.953	(0.924)	292227	55.8973	70.4
3 Dichlorodifluoromethane	85	4.912	4.912	(0.462)	170033	50.1118	63.2
4 Chloromethane	50	5.306	5.306	(0.500)	285210	39.0536	49.2
5 Vinyl chloride	62	5.528	5.528	(0.521)	225578	40.2198	50.7
6 Bromomethane	94	6.138	6.138	(0.578)	152748	32.5417	41.0
7 Chloroethane	64	6.295	6.288	(0.593)	236800	49.9062	62.9
8 Trichlorofluoromethane	101	6.669	6.668	(0.628)	313274	47.8431	60.3

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ug/l)	(ug/Kg)
=====		=====	==	=====	=====	=====	=====	=====
10 Acetone		43	7.364	7.363	(0.693)	259625	50.3765	63.5(R)
11 1,1-Dichloroethylene		61	7.389	7.388	(0.696)	367377	41.6165	52.4
87 1,4-Dichlorobenzene		146	16.210	16.209	(1.002)	346883	32.6792	41.2
13 Iodomethane		142	7.639	7.632	(0.719)	1059183	119.221	150(R)
17 Methylene chloride		84	7.944	7.942	(0.748)	301827	49.6100	62.5
14 Carbon disulfide		76	7.779	7.772	(0.732)	3361247	200.867	253
21 trans-1,2-Dichloroethylene		61	8.291	8.290	(0.781)	330931	41.2826	52.0
22 1,1-Dichloroethane		63	8.760	8.759	(0.825)	444678	43.6895	55.1
30 2-Butanone		43	9.333	9.326	(0.879)	153506	26.3941	33.3(R)
31 cis-1,2-Dichloroethylene		61	9.388	9.387	(0.884)	354805	40.7901	51.4
85 1,3-Dichlorobenzene		146	16.119	16.124	(0.996)	357251	34.0725	42.9
25 2,2-Dichloropropane		77	9.425	9.424	(0.887)	166994	38.4390	48.4
32 Chloroform		83	9.693	9.692	(0.913)	387635	44.0419	55.5
90 1,2-Dichlorobenzene		146	16.643	16.642	(1.029)	338338	33.8852	42.7
29 Bromochloromethane		128	9.663	9.662	(0.910)	120760	45.8946	57.8
36 1,1,1-Trichloroethane		97	9.980	9.979	(0.940)	284696	44.4625	56.0
34 1,1-Dichloropropene		75	10.138	10.137	(0.955)	262704	41.6236	52.5
33 Carbon tetrachloride		117	10.175	10.180	(0.958)	251592	42.7562	53.9
37 1,2-Dichloroethane		62	10.345	10.344	(0.974)	288326	40.7622	51.4
38 Benzene		78	10.376	10.375	(0.977)	888550	42.4700	53.5
39 Trichloroethylene		95	11.010	11.009	(1.037)	198513	39.5608	49.9
41 1,2-Dichloropropane		63	11.248	11.247	(1.059)	264138	44.3084	55.8
45 Bromodichloromethane		83	11.486	11.484	(1.081)	243615	38.4988	48.5
43 Dibromomethane		93	11.376	11.375	(1.071)	134692	43.3949	54.7
49 4-Methyl-2-pentanone		58	12.022	12.021	(0.873)	263496	113.173	143(R)
46 cis-1,3-Dichloropropylene		75	11.931	11.929	(1.123)	133384	17.4487	22.0(R)
50 Toluene		92	12.327	12.326	(0.895)	487640	43.4977	54.8
53 trans-1,3-Dichloropropylene		75	12.467	12.466	(0.905)	142230	22.2893	28.1(R)
54 1,1,2-Trichloroethane		83	12.686	12.685	(0.921)	166154	45.4228	57.2
55 2-Hexanone		43	12.863	12.862	(0.934)	43632	6.22060	7.8(R)
52 1,3-Dichloropropane		76	12.875	12.881	(0.935)	307256	43.0401	54.2(Q)
56 Tetrachloroethylene		164	12.924	12.923	(0.938)	170074	41.1219	51.8
57 Dibromochloromethane		129	13.150	13.149	(0.955)	174496	37.7459	47.6
59 1,2-Dibromoethane		107	13.320	13.319	(0.967)	155279	35.4367	44.7
62 Chlorobenzene		112	13.802	13.801	(1.002)	490214	38.3193	48.3
60 1,1,1,2-Tetrachloroethane		131	13.851	13.856	(1.006)	213205	46.0319	58.0
58 Ethylbenzene		91	13.863	13.862	(1.007)	775574	35.5971	44.9
63 m,p-Xylenes		106	13.973	13.972	(1.015)	666559	79.5897	100
64 o-Xylene		106	14.406	14.405	(1.046)	373558	43.0060	54.2
65 Styrene		104	14.406	14.405	(1.046)	418729	32.0500	40.4
66 Bromoform		173	14.662	14.661	(0.906)	125775	43.1550	54.4
73 1,1,2,2-Tetrachloroethane		83	15.015	15.020	(0.928)	293819	52.7382	66.5
74 1,2,3-Trichloropropane		110	15.107	15.106	(0.934)	67449	47.9807	60.5
75 Bromobenzene		156	15.168	15.167	(0.937)	221101	41.1586	51.9
76 n-Propylbenzene		91	15.186	15.185	(0.939)	670141	29.8899	37.7
77 2-Chlorotoluene		91	15.332	15.331	(0.948)	732266	46.7792	59.0
67 Isopropylbenzene		105	14.759	14.758	(0.912)	637140	35.0083	44.1

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
78 1,3,5-Trimethylbenzene	105	15.332	15.331	(0.948)	781706	48.2952	60.9
80 4-Chlorotoluene	91	15.430	15.429	(0.954)	537816	37.6795	47.5
81 tert-Butylbenzene	119	15.704	15.703	(0.971)	771904	48.6421	61.3
79 1,2,4-Trimethylbenzene	105	15.741	15.746	(0.973)	716120	42.0429	53.0
83 sec-Butylbenzene	105	15.930	15.935	(0.985)	645170	29.2181	36.8
84 4-Isopropyltoluene	119	16.052	16.051	(0.992)	215851	12.6724	16.0 (R)
89 n-Butylbenzene	91	16.503	16.508	(1.020)	448199	26.8379	33.8
92 1,2-Dibromo-3-chloropropane	157	17.527	17.526	(1.083)	39325	44.3345	55.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.
 R - Spike/Surrogate failed recovery limits.

Data File: /chem/V004.1/012510v4/4v150.d
 Date : 26-JAN-2010 15:40
 Client ID: RE15-10-7194MS
 Sample Info: 1120202443194525411V004F11

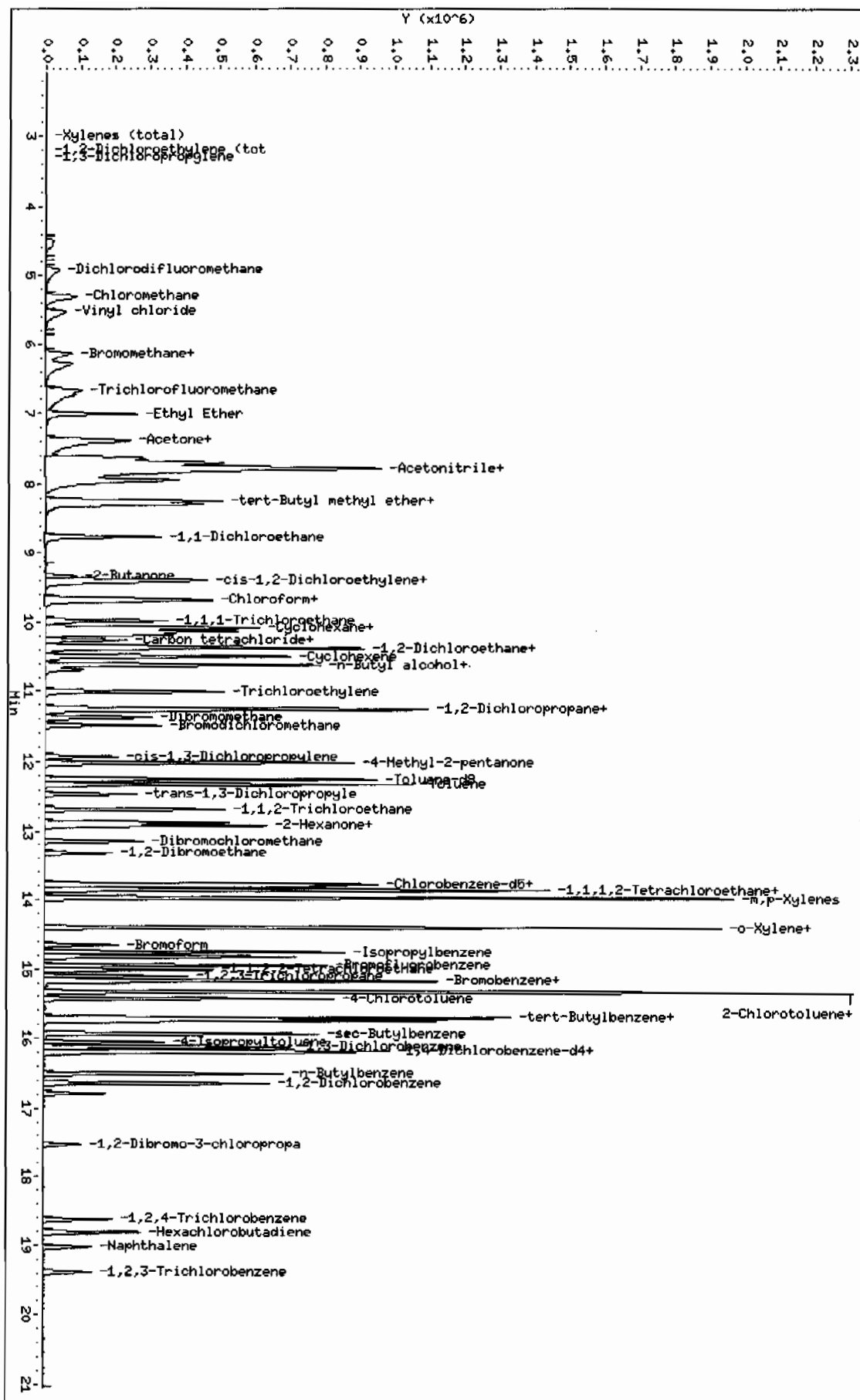
Column phase: RTX-VOLATILES

Instrument: V004.1

Operator: RCJ

Column diameter: 0.25

/chem/V004.1/012510v4/4v150.d



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 120202444	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: RE15-10-7194PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.I	Dilution: 1
Run Date: 01/26/2010 16:08	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:52	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v151.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		66.9	ug/kg	0.429	1.26
74-87-3	Chloromethane		54.3	ug/kg	0.378	1.26
75-01-4	Vinyl chloride		55.1	ug/kg	0.378	1.26
74-83-9	Bromomethane		43.9	ug/kg	0.378	1.26
75-00-3	Chloroethane		65.3	ug/kg	0.378	1.26
75-69-4	Trichlorofluoromethane		58.4	ug/kg	0.378	1.26
67-64-1	Acetone		68.0	ug/kg	2.09	6.30
75-35-4	1,1-Dichloroethylene		55.0	ug/kg	0.378	1.26
74-88-4	Iodomethane		156	ug/kg	2.02	6.30
75-09-2	Methylene chloride		64.8	ug/kg	2.52	6.30
75-15-0	Carbon disulfide		250	ug/kg	1.58	6.30
156-60-5	trans-1,2-Dichloroethylene		54.2	ug/kg	0.378	1.26
75-34-3	1,1-Dichloroethane		57.6	ug/kg	0.378	1.26
78-93-3	2-Butanone		31.4	ug/kg	1.89	6.30
156-59-2	cis-1,2-Dichloroethylene		53.9	ug/kg	0.378	1.26
594-20-7	2,2-Dichloropropane		51.3	ug/kg	0.378	1.26
67-66-3	Chloroform		57.8	ug/kg	0.378	1.26
74-97-5	Bromochloromethane		61.1	ug/kg	0.416	1.26
71-55-6	1,1,1-Trichloroethane		59.3	ug/kg	0.378	1.26
563-58-6	1,1-Dichloropropene		54.2	ug/kg	0.378	1.26
56-23-5	Carbon tetrachloride		55.3	ug/kg	0.378	1.26
107-06-2	1,2-Dichloroethane		54.0	ug/kg	0.378	1.26
71-43-2	Benzene		55.8	ug/kg	0.378	1.26
79-01-6	Trichloroethylene		51.6	ug/kg	0.416	1.26
78-87-5	1,2-Dichloropropane		59.0	ug/kg	0.378	1.26
75-27-4	Bromodichloromethane		49.7	ug/kg	0.378	1.26
74-95-3	Dibromomethane		57.3	ug/kg	0.378	1.26
108-10-1	4-Methyl-2-pentanone		151	ug/kg	1.58	6.30
10061-01-5	cis-1,3-Dichloropropylene		21.4	ug/kg	0.378	1.26
108-88-3	Toluene		55.2	ug/kg	0.378	1.26
10061-02-6	trans-1,3-Dichloropropylene		27.9	ug/kg	0.378	1.26
79-00-5	1,1,2-Trichloroethane		59.0	ug/kg	0.378	1.26
591-78-6	2-Hexanone		6.69	ug/kg	1.89	6.30
142-28-9	1,3-Dichloropropane		57.1	ug/kg	0.378	1.26
127-18-4	Tetrachloroethylene		53.5	ug/kg	0.378	1.26
124-48-1	Dibromochloromethane		47.2	ug/kg	0.378	1.26
106-93-4	1,2-Dibromoethane		46.1	ug/kg	0.378	1.26
108-90-7	Chlorobenzene		49.5	ug/kg	0.378	1.26

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 1202024444	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 945253	Client: LANL010	Project: QC
Client ID: RE15-10-7194PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 945254	Inst: VOA4.1	Dilution: 1
Run Date: 01/26/2010 16:08	Analyst: ACJ	Purge Vol: 5 mL
Prep Date: 01/25/2010 22:52	Aliquot: 5 g	Final Volume: 5 mL
Data File: 4v151.d	Column: RTX-VOLATILES	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		43.8	ug/kg	0.378	1.26
179601-23-1	m,p-Xylenes		100	ug/kg	0.378	2.52
95-47-6	o-Xylene		53.8	ug/kg	0.378	1.26
100-42-5	Styrene		40.5	ug/kg	0.378	1.26
75-25-2	Bromoform		54.0	ug/kg	0.378	1.26
79-34-5	1,1,2,2-Tetrachloroethane		69.8	ug/kg	0.378	1.26
96-18-4	1,2,3-Trichloropropane		65.4	ug/kg	0.378	1.26
108-86-1	Bromobenzene		53.6	ug/kg	0.378	1.26
103-65-1	n-Propylbenzene		34.1	ug/kg	0.378	1.26
95-49-8	2-Chlorotoluene		59.5	ug/kg	0.378	1.26
98-82-8	Isopropylbenzene		40.5	ug/kg	0.378	1.26
108-67-8	1,3,5-Trimethylbenzene		61.2	ug/kg	0.378	1.26
106-43-4	4-Chlorotoluene		47.7	ug/kg	0.378	1.26
98-06-6	tert-Butylbenzene		62.7	ug/kg	0.378	1.26
95-63-6	1,2,4-Trimethylbenzene		52.8	ug/kg	0.378	1.26
135-98-8	sec-Butylbenzene		34.2	ug/kg	0.378	1.26
99-87-6	4-Isopropyltoluene		12.5	ug/kg	0.378	1.26
541-73-1	1,3-Dichlorobenzene		44.1	ug/kg	0.378	1.26
106-46-7	1,4-Dichlorobenzene		42.4	ug/kg	0.378	1.26
104-51-8	n-Butylbenzene		32.6	ug/kg	0.378	1.26
96-12-8	1,2-Dibromo-3-chloropropane		57.6	ug/kg	0.378	1.26
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.30	ug/kg	2.02	6.30
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		59.6	ug/kg	0.378	1.26
95-50-1	1,2-Dichlorobenzene		45.1	ug/kg	0.378	1.26

Data File: /chem/VOA4.i/012510v4/4v151.d
Report Date: 11-Feb-2010 17:21

Page 1

GEL Laboratories LLC

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

Data file : /chem/VOA4.i/012510v4/4v151.d

Lab Smp Id: 1202024444

Client Smp ID: RE15-10-7194MSD

Inj Date : 26-JAN-2010 16:08

Operator : ACJ

Inst ID: VOA4.i

Smp Info : |1202024444|945254|1|VOAF|1|

Misc Info : LANL 5G N/A MSD 245099001

Comment :

Method : /chem/VOA4.i/012510v4/VOA4-8260-011110pm.m

Meth Date : 26-Jan-2010 06:52 amj

Quant Type: ISTD

Cal Date : 12-JAN-2010 06:08

Cal File: 4t118.d

Als bottle: 51

QC Sample: MSD

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 10-1301.sub

Target Version: 3.50

Processing Host: prdsrv07

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

Name	Value	Description
DF	1.00000	Dilution Factor
M	20.65990	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN	FINAL
					(ug/l)	(ug/Kg)
* 40 Fluorobenzene	96	10.620	10.619 (1.000)	866182	50.0000	
* 61 Chlorobenzene-d5	117	13.772	13.771 (1.000)	597162	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.180	16.179 (1.000)	295514	50.0000	
\$ 138 1,2-Dichloroethane-d4	65	10.260	10.265 (0.966)	201048	42.4764	53.5
\$ 47 Toluene-d8	98	12.254	12.253 (0.890)	739138	48.6912	61.4
\$ 71 Bromofluorobenzene	95	14.954	14.953 (0.924)	307072	56.8198	71.6
3 Dichlorodifluoromethane	85	4.912	4.912 (0.462)	186558	53.0503	66.9
4 Chloromethane	50	5.306	5.306 (0.500)	326061	43.0787	54.3
5 Vinyl chloride	62	5.521	5.528 (0.520)	253975	43.6919	55.1
6 Bromomethane	94	6.138	6.138 (0.578)	169327	34.8063	43.9
7 Chloroethane	64	6.288	6.288 (0.592)	254665	51.7856	65.3
8 Trichlorofluoromethane	101	6.669	6.668 (0.628)	314476	46.3393	58.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/l)	FINAL (ug/Kg)
10 Acetone	43	7.364	7.363	(0.693)	288242	53.9642	68.0
11 1,1-Dichloroethylene	61	7.389	7.388	(0.696)	399283	43.6417	55.0
87 1,4-Dichlorobenzene	146	16.204	16.209	(1.002)	368816	33.6114	42.4
13 Iodomethane	142	7.632	7.632	(0.719)	1140840	123.900	156(R)
17 Methylene chloride	84	7.943	7.942	(0.748)	323585	51.3859	64.8
14 Carbon disulfide	76	7.773	7.772	(0.732)	3437978	198.234	250
21 trans-1,2-Dichloroethylene	61	8.285	8.290	(0.780)	357467	43.0262	54.2
22 1,1-Dichloroethane	63	8.760	8.759	(0.825)	481746	45.6685	57.6
30 2-Butanone	43	9.333	9.326	(0.879)	150068	24.8965	31.4(R)
31 cis-1,2-Dichloroethylene	61	9.388	9.387	(0.884)	385845	42.8001	53.9
85 1,3-Dichlorobenzene	146	16.119	16.124	(0.996)	379490	35.0122	44.1
25 2,2-Dichloropropane	77	9.425	9.424	(0.887)	183192	40.6860	51.3
32 Chloroform	83	9.693	9.692	(0.913)	418259	45.8517	57.8
90 1,2-Dichlorobenzene	146	16.643	16.642	(1.029)	369723	35.8199	45.1
29 Bromochloromethane	128	9.663	9.662	(0.910)	132143	48.4562	61.1
36 1,1,1-Trichloroethane	97	9.980	9.979	(0.940)	312021	47.0180	59.3
34 1,1-Dichloropropene	75	10.132	10.137	(0.954)	281411	43.0211	54.2
33 Carbon tetrachloride	117	10.181	10.180	(0.959)	267583	43.8761	55.3
37 1,2-Dichloroethane	62	10.345	10.344	(0.974)	313933	42.8231	54.0
38 Benzene	78	10.376	10.375	(0.977)	960058	44.2756	55.8
39 Trichloroethylene	95	11.010	11.009	(1.037)	213085	40.9728	51.6
41 1,2-Dichloropropane	63	11.248	11.247	(1.059)	289262	46.8181	59.0
45 Bromodichloromethane	83	11.485	11.484	(1.081)	258800	39.4616	49.7
43 Dibromomethane	93	11.376	11.375	(1.071)	146129	45.4256	57.2
49 4-Methyl-2-pentanone	58	12.022	12.021	(0.873)	290706	119.848	151(R)
46 cis-1,3-Dichloropropylene	75	11.930	11.929	(1.123)	134480	16.9740	21.4(R)
50 Toluene	92	12.327	12.326	(0.895)	511744	43.8154	55.2
53 trans-1,3-Dichloropropylene	75	12.461	12.466	(0.905)	147154	22.1353	27.9(R)
54 1,1,2-Trichloroethane	83	12.686	12.685	(0.921)	178523	46.8451	59.0
55 2-Hexanone	43	12.863	12.862	(0.934)	38760	5.30417	6.7(R)
52 1,3-Dichloropropane	76	12.875	12.881	(0.935)	336662	45.2661	57.0(Q)
56 Tetrachloroethylene	164	12.924	12.923	(0.938)	183058	42.4845	53.5
57 Dibromochloromethane	129	13.150	13.149	(0.955)	180550	37.4877	47.2
59 1,2-Dibromoethane	107	13.320	13.319	(0.967)	167136	36.6114	46.1
62 Chlorobenzene	112	13.802	13.801	(1.002)	523244	39.2593	49.5
60 1,1,1,2-Tetrachloroethane	131	13.851	13.856	(1.006)	228137	47.2785	59.6
58 Ethylbenzene	91	13.863	13.862	(1.007)	788262	34.7271	43.8
63 m,p-Xylenes	106	13.973	13.972	(1.015)	694610	79.6096	100
64 o-Xylene	106	14.406	14.405	(1.046)	386191	42.6756	53.8
65 Styrene	104	14.406	14.405	(1.046)	437865	32.1693	40.5
66 Bromoform	173	14.656	14.661	(0.906)	129108	42.8528	54.0
73 1,1,2,2-Tetrachloroethane	83	15.021	15.020	(0.928)	318897	55.3713	69.8
74 1,2,3-Trichloropropane	110	15.107	15.106	(0.934)	75440	51.9137	65.4
75 Bromobenzene	156	15.168	15.167	(0.937)	236307	42.5535	53.6
76 n-Propylbenzene	91	15.180	15.185	(0.938)	627579	27.0779	34.1
77 2-Chlorotoluene	91	15.332	15.331	(0.948)	764326	47.2336	59.5
67 Isopropylbenzene	105	14.759	14.758	(0.912)	604461	32.1287	40.5

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
78 1,3,5-Trimethylbenzene	105	15.332	15.331	(0.948)	812044	48.5321	61.2
80 4-Chlorotoluene	91	15.430	15.429	(0.954)	558283	37.8368	47.7
81 tert-Butylbenzene	119	15.704	15.703	(0.971)	816067	49.7466	62.7
79 1,2,4-Trimethylbenzene	105	15.747	15.746	(0.973)	737168	41.8661	52.8
83 sec-Butylbenzene	105	15.930	15.935	(0.985)	619232	27.1282	34.2
84 4-Isopropyltoluene	119	16.052	16.051	(0.992)	174148	9.89034	12.5 (R)
89 n-Butylbenzene	91	16.503	16.508	(1.020)	445922	25.8300	32.6
92 1,2-Dibromo-3-chloropropane	157	17.527	17.526	(1.083)	41903	45.6991	57.6

QC Flag Legend

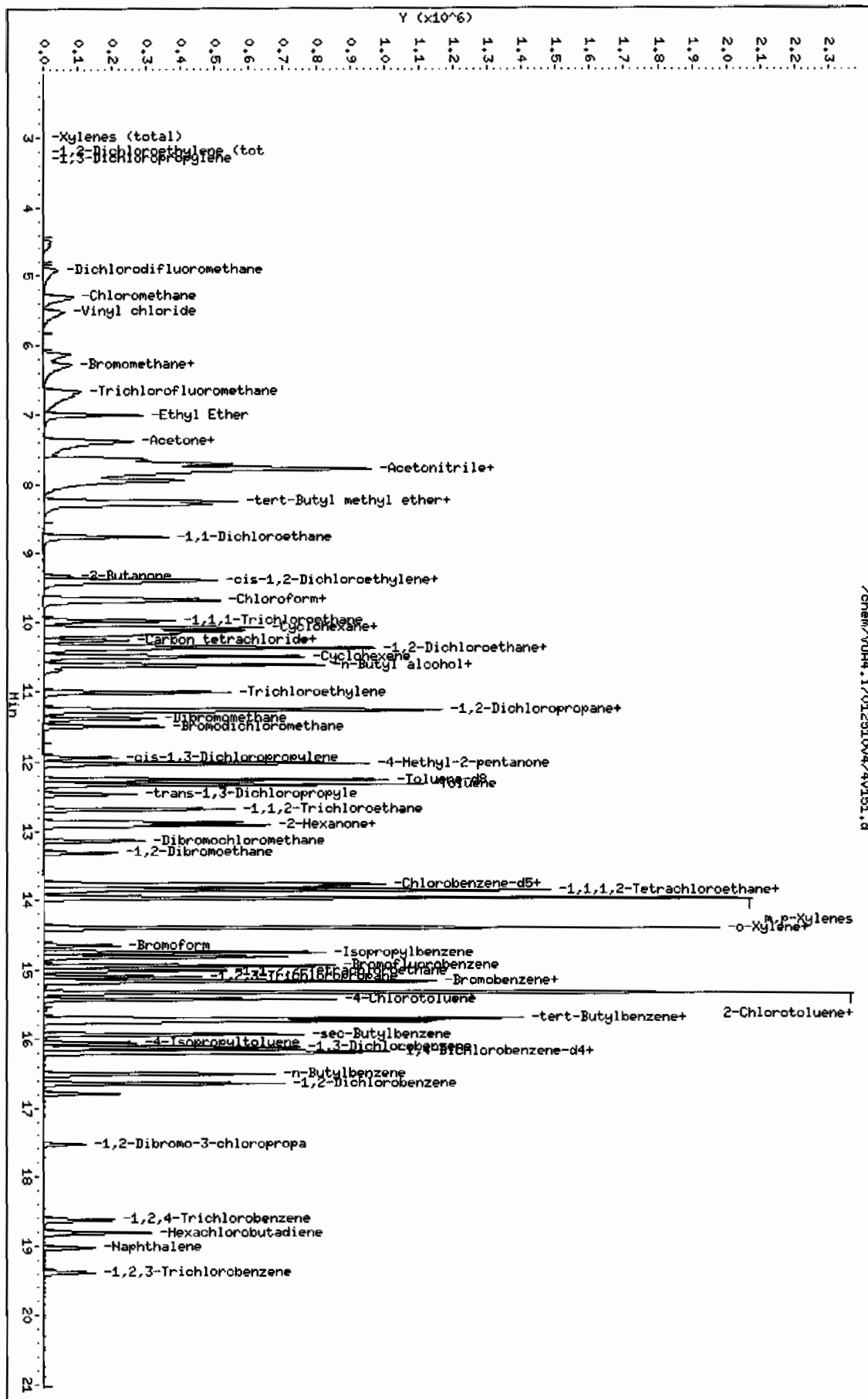
Q - Qualifier signal failed the ratio test.
 R - Spike/Surrogate failed recovery limits.

Data File: /chem/V004.i/012810v4/4v151.d
 Date : 26-JUN-2010 16:08
 Client ID: RELS-10-7194MSD
 Sample Info: 11202024444194525411V004F111

Instrument: V004.i
 Operator: ACJ
 Column diameter: 0.25

Column phase: RTX-VOLATILES

/chem/V004.i/012810v4/4v151.d



Miscellaneous Data

Prep Logbook

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

Batch ID:	945253	Verified by:		Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst:	Amy Jamison								
Method:	SW846 5030								
Lab SOP:	GL-OA-E-038 REV# 13								
Instrument:	Sartorius Balance B-001								

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202024445 LCS	25-JAN-2010 22:30:00	Soil	5	5	1	
1202024446 LCS	25-JAN-2010 22:45:00	Soil	5	5	1	
245099001	25-JAN-2010 22:50:00	Soil	5	5	1	
1202024443 PS (2450990001)	25-JAN-2010 22:51:00	Soil	5	5	1	
1202024444 PSD (2450990001)	25-JAN-2010 22:52:00	Soil	5	5	1	
245099002	25-JAN-2010 22:53:00	Soil	5	5	1	
245099003	25-JAN-2010 22:54:00	Soil	5	5	1	
245099004	25-JAN-2010 22:55:00	Soil	5	5	1	
245099006	25-JAN-2010 22:57:00	Soil	5	5	1	
245099007	25-JAN-2010 22:58:00	Soil	5	5	1	
245099008	25-JAN-2010 22:59:00	Soil	5	5	1	
1202024442 MB	25-JAN-2010 23:00:00	Soil	5	5	1	
245099011	25-JAN-2010 23:02:00	Soil	5	5	1	
245099012	25-JAN-2010 23:03:00	Soil	5	5	1	
245099013	25-JAN-2010 23:04:00	Soil	5	5	1	
245099014	25-JAN-2010 23:05:00	Soil	5	5	1	
245099015	25-JAN-2010 23:06:00	Soil	5	5	1	
245099016	25-JAN-2010 23:07:00	Soil	5	5	1	
1202037374 LCS	26-JAN-2010 16:30:00	Soil	5	5	1	
1202037375 LCS	26-JAN-2010 16:45:00	Soil	5	5	1	
1202037373 MB	26-JAN-2010 17:00:00	Soil	5	5	1	
245099005	26-JAN-2010 21:19:00	Soil	5	5	1	
245099009	26-JAN-2010 21:22:00	Soil	5	5	1	
245099010	26-JAN-2010 21:23:00	Soil	5	5	1	

Comments:

Reagent/Solvent Lot ID	Description	Amount
------------------------	-------------	--------

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 1/11/2010 Method 8260B/624 Operator: ACJ
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1624

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/2010
(See pg. 3 for ICAL Std. Sol. Ids)
NaHSO4 lot # N/A
Cl test lot # 81710
Sequence Number: Q11110V4

Daily Standard Volume Added for Purge (ul) MS/
Blk/

Solution ID#	CCV	MS/	LCS	BFB
IS	1	1	1	
SS	1	1	1	
LCS/MS				
BFB				1
SHORT				
DEEC				

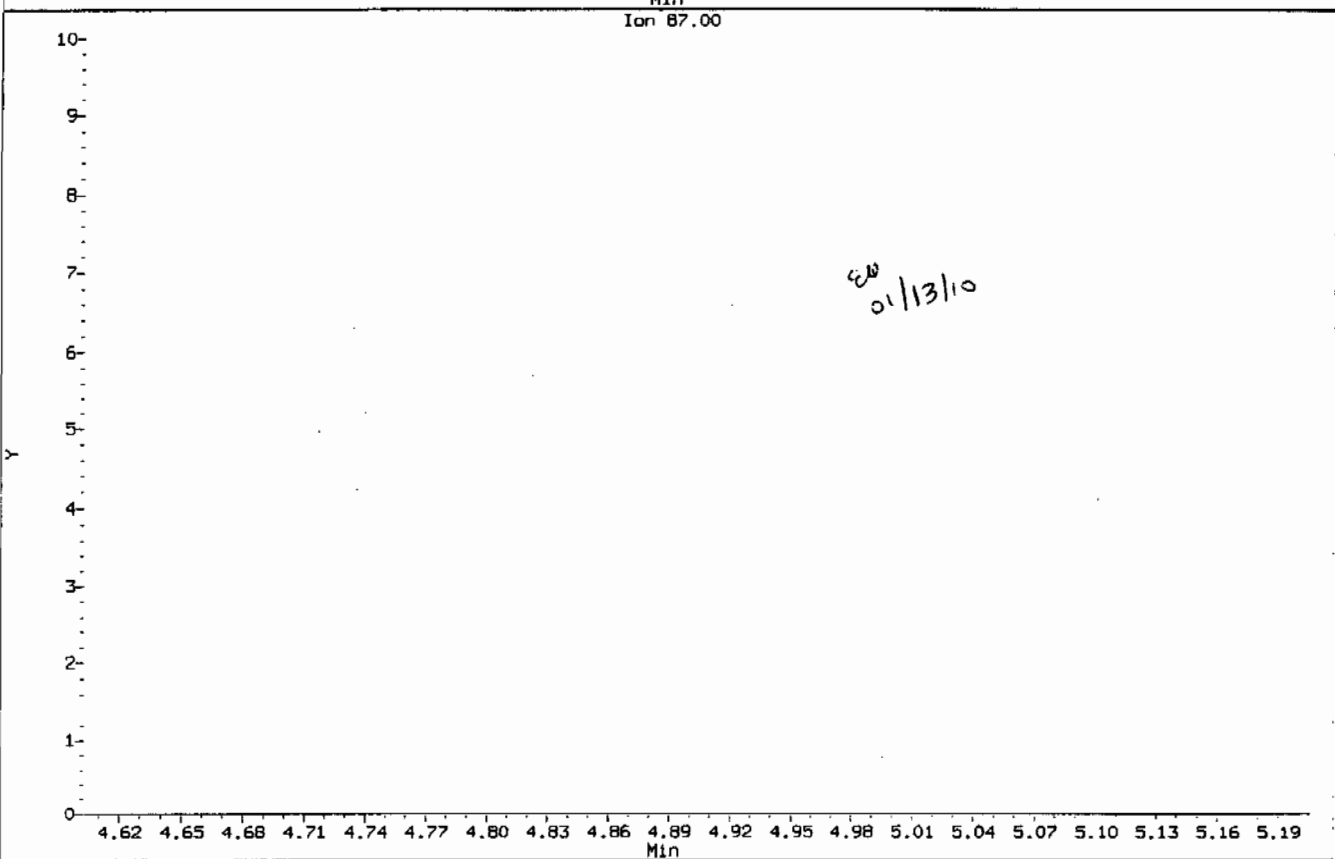
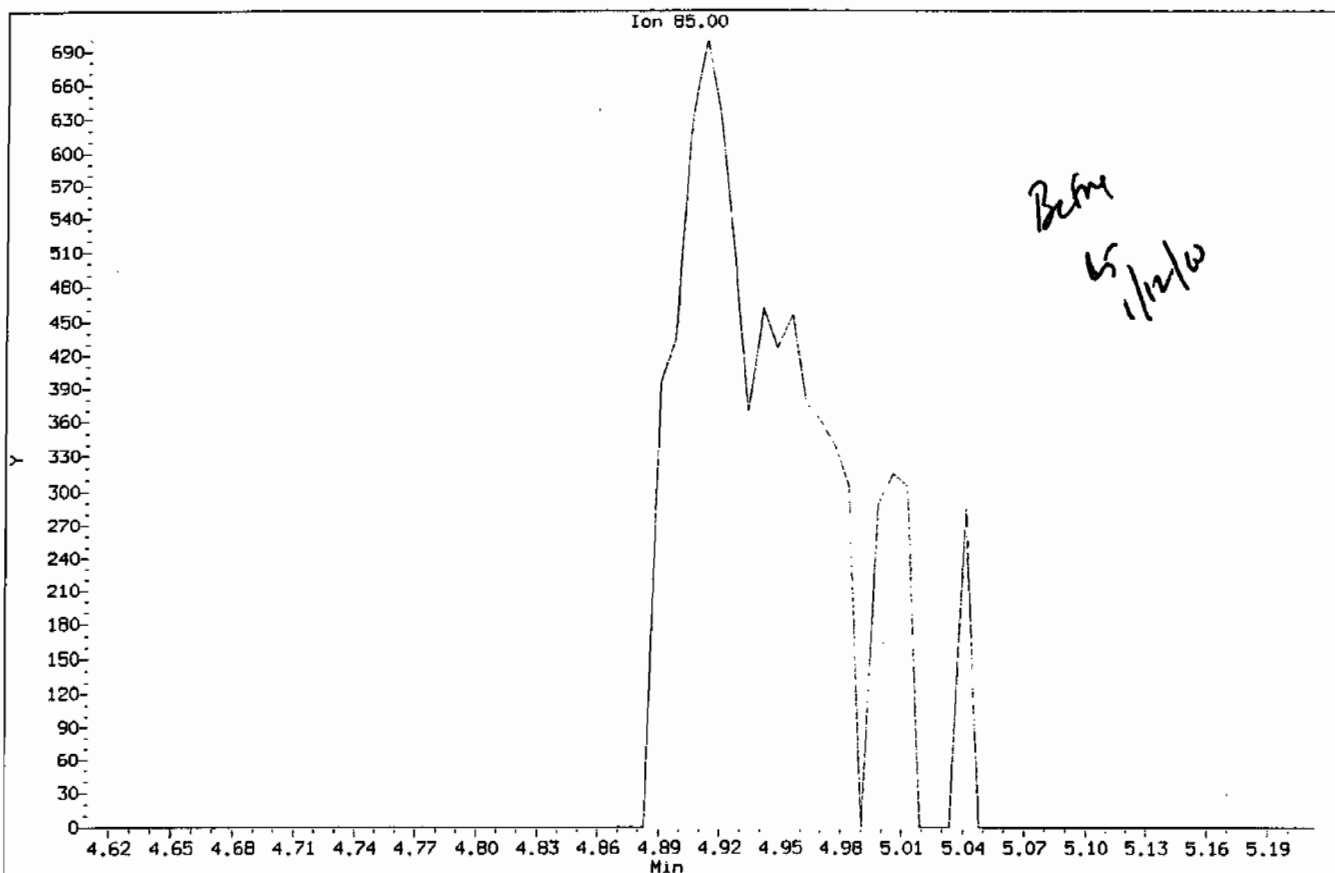
Purge Amount

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

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
1/11/2010	22:23	4T101.D	UVM091117-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	
1/11/2010	22:50	4T102.D	12020----	GEL	BLANK	5ML	1	N/A	2	W	ACJ	N/A	X	
1/11/2010	23:17	4T103.D	W4VM100111-01	GEL	VSTD0005	5ML	1	N/A	3	W	ACJ	N/A	O	UVM100106-01A/UVM091217-01A
1/11/2010	23:45	4T104.D	W4VM100111-02	GEL	VSTD0001	5ML	1	N/A	4	W	ACJ	N/A	O	UVM100106-02A/UVM091217-02A
1/12/2010	0:12	4T105.D	W4VM100111-03	GEL	VSTD0001	5ML	1	N/A	5	W	ACJ	N/A	X	UVM100106-02A/UVM091217-02A; NOT NEEDED
1/12/2010	0:39	4T106.D	W4VM100111-04	GEL	VSTD0002	5ML	1	N/A	6	W	ACJ	N/A	O	UVM100106-03A/UVM091217-03A
1/12/2010	1:06	4T107.D	W4VM100111-05	GEL	VSTD0005	5ML	1	N/A	7	W	ACJ	N/A	O	UVM100106-04A/UVM091217-04A
1/12/2010	1:34	4T108.D	W4VM100111-06	GEL	VSTD0010	5ML	1	N/A	8	W	ACJ	N/A	O	UVM100106-05A/UVM091217-05A
1/12/2010	2:01	4T109.D	W4VM100111-07	GEL	VSTD0020	5ML	1	N/A	9	W	ACJ	N/A	O	UVM100106-06A/UVM091217-06A
1/12/2010	2:29	4T110.D	W4VM100111-08	GEL	VSTD0050	5ML	1	N/A	10	W	ACJ	N/A	O	UVM100106-07A/UVM091217-07A
1/12/2010	2:56	4T111.D	W4VM100111-09	GEL	VSTD100	5ML	1	N/A	11	W	ACJ	N/A	O	UVM100106-08A/UVM091217-08A
1/12/2010	3:24	4T112.D	12020----	GEL	BLANK	5ML	1	N/A	12	W	ACJ	N/A	X	
1/12/2010	3:51	4T113.D	W4VM100111-10	GEL	VSTD0005S	5ML	1	N/A	13	W	ACJ	N/A	O	UVM091209-01C/UVM091216-01
1/12/2010	4:19	4T114.D	W4VM100111-11	GEL	VSTD0010S	5ML	1	N/A	14	W	ACJ	N/A	O	UVM091209-02C/UVM091216-02
1/12/2010	4:46	4T115.D	W4VM100111-12	GEL	VSTD0025S	5ML	1	N/A	15	W	ACJ	N/A	O	UVM091209-03C/UVM091216-03
1/12/2010	5:13	4T116.D	W4VM100111-13	GEL	VSTD0050S	5ML	1	N/A	16	W	ACJ	N/A	X	UVM091209-04C/UVM091216-04
1/12/2010	5:41	4T117.D	W4VM100111-14	GEL	VSTD100S	5ML	1	N/A	17	W	ACJ	N/A	O	UVM091209-05C/UVM091216-05
1/12/2010	6:08	4T118.D	W4VM100111-15	GEL	VSTD250S	5ML	1	N/A	18	W	ACJ	N/A	O	UVM091209-06C/UVM091216-06
1/12/2010	6:35	4T119.D	W4VM100111-16	GEL	VSTD500S	5ML	1	N/A	19	W	ACJ	N/A	O	UVM091209-07C/UVM091216-07
1/12/2010	7:02	4T120.D	12020----	GEL	BLANK	5ML	1	N/A	20	W	ACJ	N/A	X	
1/12/2010	7:30	4T121.D	W4VM100111-17	GEL	CCV/LCS	5ML	1	N/A	21	W	ACJ	N/A	O	UVM091214-01F/UVM100105-01
1/12/2010	7:58	4T122.D	W4VM100111-18	GEL	SHORTICV	5ML	1	N/A	22	W	ACJ	N/A	X	UVM091216-08A/UVM091209-08C

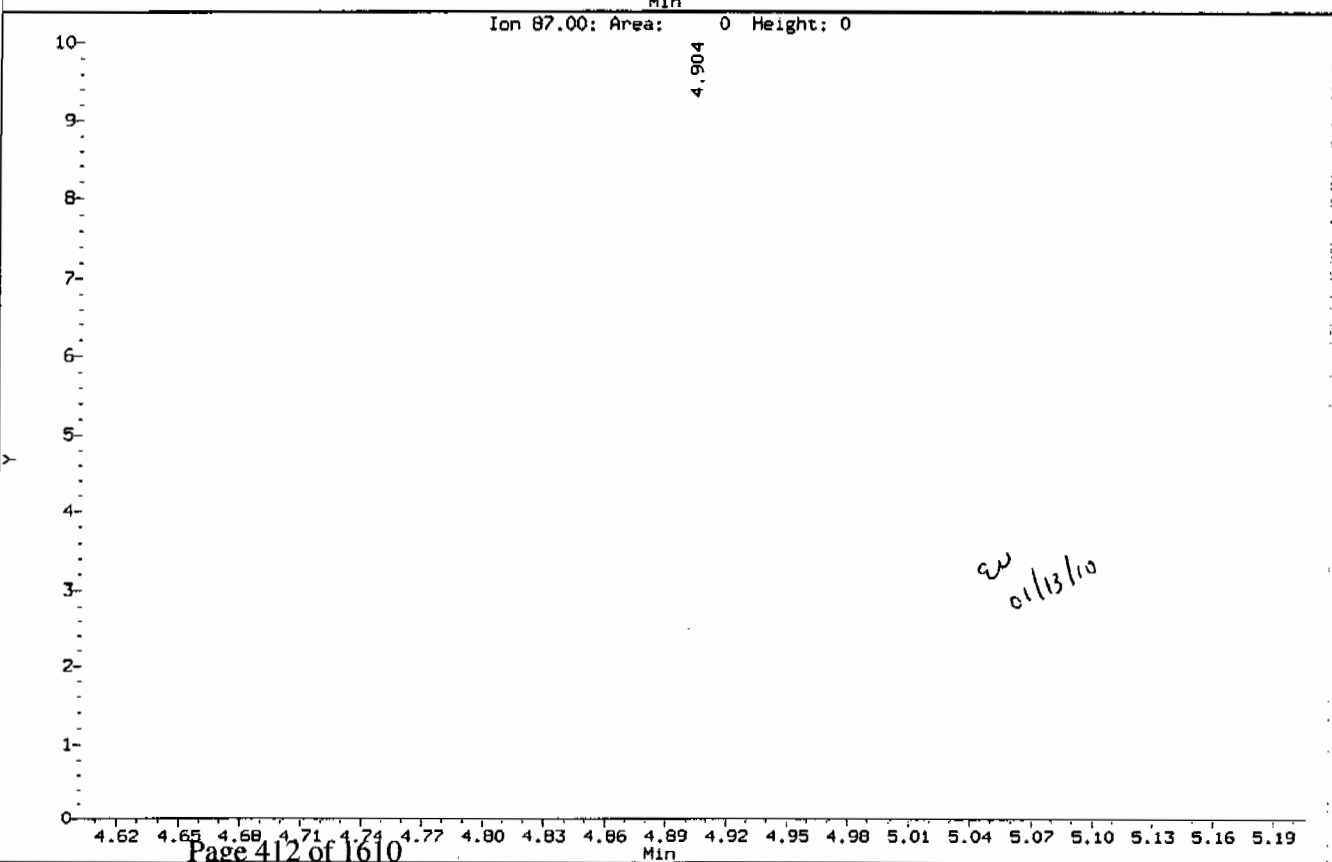
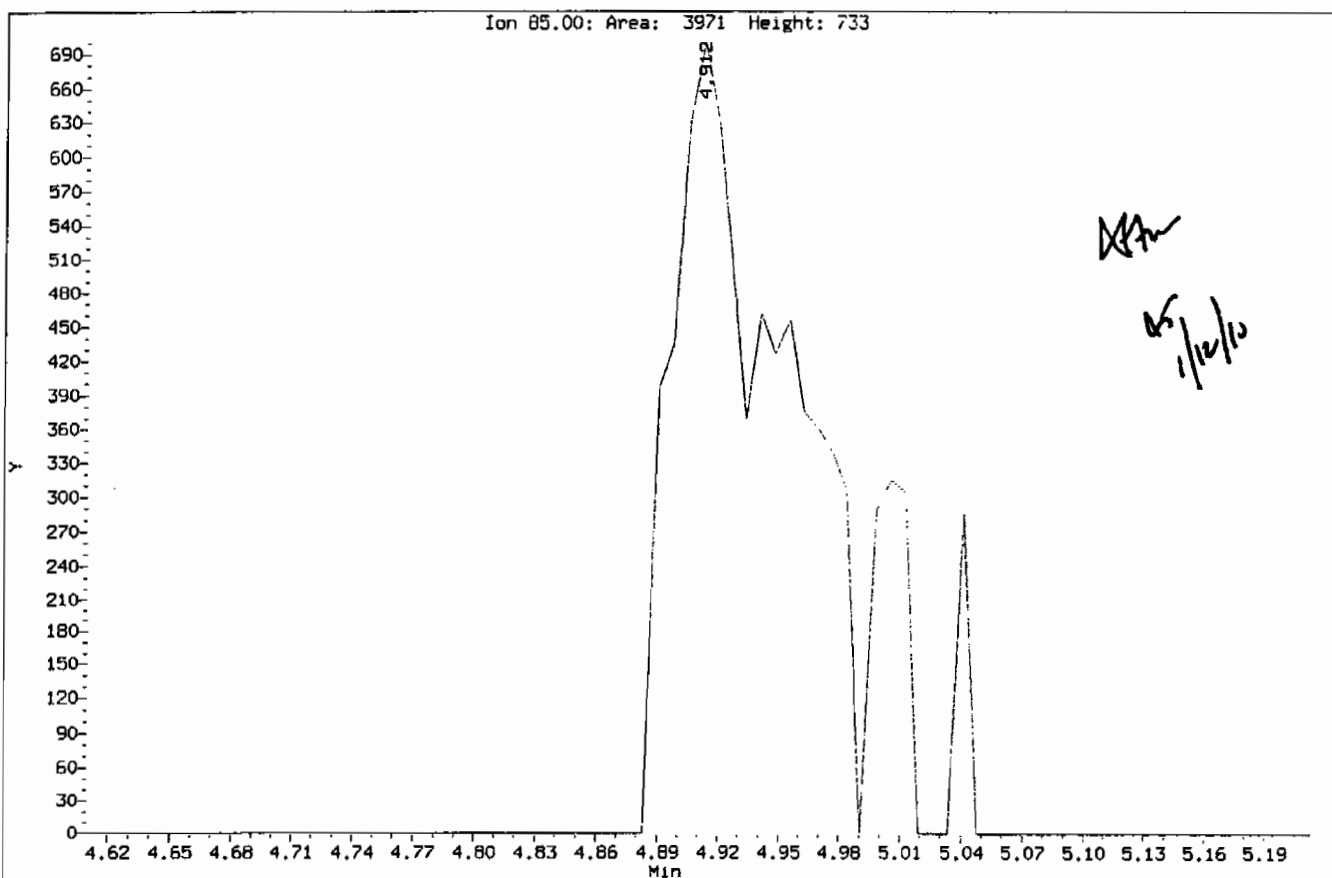
Data File: /chem/VOA4.1/011110v4/4t104.d
Injection Date: 11-JAN-2010 23:45
Instrument: VOA4.1
Client Sample ID: VSTD001

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8



Data File: /chem/VDA4.1/011110v4/4t104.d
Injection Date: 11-JAN-2010 23:45
Instrument: VDA4.1
Client Sample ID: VSTD001

Compound: Dichlorodifluoromethane
CAS Number: 75-71-8



ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 1/12/2010 Method 8260B/624 Operator: ACJ
REVIEWED BY: _____
DATE: _____
Multiplier Voltage: 1624

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

CALIBRATION & QC INFORMATION:

Initial Calibration Date: 1/11/2010
(See pg. 3 for ICal Std. Sci. Ids)
NaHSO4 lot # N/A
CI test lot # 81710
Sequence Number: 011210V4

Daily Standard	Solution ID#	Volume Added for Purge (ul)	MS/ Blk/ Smpl	CCV	LCS	BFB	Purge Amount
IS	W4VM100112-01	1	1	1	1	1	5
SS	UVM091216-09	1	1	1	1	1	N/A
LCS/MS	W4VM100112-01	1	1	1	1	1	N/A
BFB	UVM091117-02	1	1	1	1	1	N/A
SHORT	W4VM100112-03	1	1	1	1	1	N/A
DHEC	N/A	1	1	1	1	1	N/A

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

Analysis		Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable (O/X)	Comments
1/12/2010	17:58	4T201.D		UVM091117-02	UVM091117-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	O	UVM091214-01F/IVM100105-01
1/12/2010	18:25	4T202.D		W4VM100112-01	W4VM100112-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	O	UVM091214-01F/IVM100105-01; NOT NEEDED
1/12/2010	18:53	4T203.D		W4VM100112-02	W4VM100112-02	GEL	LCS	5G	1	N/A	3	S	ACJ	N/A	X	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	19:20	4T204.D		W4VM100112-03	W4VM100112-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	19:48	4T205.D		W4VM100112-04	W4VM100112-04	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	X	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	20:16	4T206.D		12020----	12020----	GEL	BLANK	5G	1	N/A	6	S	ACJ	N/A	X	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	20:43	4T207.D		12020----	12020----	GEL	BLANK	5ML	1	N/A	7	W	ACJ	N/A	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	22:13	4T208.D		243828001	243828001	SNLS	941036	5ML	1	PH2	8	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	22:40	4T209.D		243828010	243828010	SNLS	941036	5ML	1	PH2	9	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	23:07	4T210.D		243828014	243828014	SNLS	941036	5ML	1	PH2	10	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/12/2010	23:35	4T211.D		243828015	243828015	SNLS	941036	5ML	1	PH2	11	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	0:02	4T212.D		243828024	243828024	SNLS	941036	5ML	1	PH2	12	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	0:29	4T213.D		243828025	243828025	SNLS	941036	5ML	1	PH2	13	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	0:56	4T214.D		243828034	243828034	SNLS	941036	5ML	1	PH2	14	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	1:23	4T215.D		243828043	243828043	SNLS	941036	5ML	1	PH2	15	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	1:50	4T216.D		243828044	243828044	SNLS	941036	5ML	1	PH2	16	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	2:17	4T217.D		243828048	243828048	SNLS	941036	5ML	1	PH2	17	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	2:44	4T218.D		243828049	243828049	SNLS	941036	5ML	1	PH2	18	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	3:11	4T219.D		243828058	243828058	SNLS	941036	5ML	1	PH2	19	W	ACJ	N	O	UVM091216-08A/IVM091209-08C; NOT NEEDED
1/13/2010	3:39	4T220.D		1202014052	1202014052	SNLS	941036	5ML	1	PH2	20	W	ACJ	N	X	MS 243828001; SEE 4T323
1/13/2010	4:06	4T221.D		1202014053	1202014053	SNLS	941036	5ML	1	PH2	21	W	ACJ	N	X	MSD 243828001; SEE 4T324

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 1/25/2010 Method 8260B/624 Operator: ACJ
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1624

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/2010 Volume Added for Purge (ul) MS/Blk/ Smp/ CCV LCS BFB
Purge Amount
(See pg. 3 for ICAL Std. Sds) 5 5G Water Purge Vol:
NaHSO4 lot # N/A 1 1 1 1 5G Soil Purge Wt.
LCS/MS W4VM100125-08 1 1 1 1 1 N/A Mid level ext. MeOH Vol:
BFB UVM091117-02 5+5 1 1 N/A ul
SHORT W4VM100125-08/10 1 1 N/A Meihanol Lot #
DHEC N/A 5+5 5+5 x Heated Purge
Sequence Number: 012510V4PM 5

Analysis Date	Time	Date File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	CI test (Y/N)	Acceptable (O/X)	Comments
1/26/2010	5:07	4V127.D	UVM091117-02	GEL	BFB2	5ML	1	N/A	27	W	ACJ	N/A	O	
1/26/2010	5:35	4V128.D	W4VM100125-07	GEL	CCV/LCS	5ML	1	N/A	28	W	ACJ	N/A	O	UVM091214-01/UVM100120-01
1/26/2010	6:02	4V129.D	W4VM100125-08	GEL	LCS	5G	1	N/A	29	S	ACJ	N/A	O	UVM091214-01/UVM100120-01
1/26/2010	6:30	4V130.D	W4VM100125-09	GEL	SHORT	5ML	1	N/A	30	W	ACJ	N/A	O	UVM100118-08A/UVM091209-08E
1/26/2010	6:58	4V131.D	W4VM100125-10	GEL	SHORT	5G	1	N/A	31	S	ACJ	N/A	O	UVM01001118-08A/UVM091209-08E
1/26/2010	7:26	4V132.D	12020----	GEL	BLANK	5G	1	N/A	32	S	ACJ	N/A	O	
1/26/2010	7:54	4V133.D	12020----	GEL	BLANK	5ML	1	N/A	33	W	ACJ	N/A	X	NOT NEEDED
1/26/2010	8:22	4V134.D	245099016	LANL	945254	5G	1	N/A	34	S	ACJ	N/A	O	
1/26/2010	8:49	4V135.D	245099001	LANL	945254	5G	1	N/A	35	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V218
1/26/2010	9:17	4V136.D	245099002	LANL	945254	5G	1	N/A	36	S	ACJ	N/A	O	
1/26/2010	9:45	4V137.D	245099003	LANL	945254	5G	1	N/A	37	S	ACJ	N/A	O	
1/26/2010	10:13	4V138.D	245099004	LANL	945254	5G	1	N/A	38	S	ACJ	N/A	O	
1/26/2010	10:40	4V139.D	245099005	LANL	945254	5G	1	N/A	39	S	ACJ	N/A	X	IS LOW; CONFIRMED 4V219
1/26/2010	11:07	4V140.D	245099006	LANL	945254	5G	1	N/A	40	S	ACJ	N/A	O	
1/26/2010	11:34	4V141.D	245099007	LANL	945254	5G	1	N/A	41	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V220
1/26/2010	12:02	4V142.D	245099008	LANL	945254	5G	1	N/A	42	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V221
1/26/2010	12:29	4V143.D	245099009	LANL	945254	5G	1	N/A	43	S	ACJ	N/A	X	IS LOW; CONFIRMS 4V222
1/26/2010	12:56	4V144.D	245099010	LANL	945254	5G	1	N/A	44	S	ACJ	N/A	X	IS LOW; CONFIRMS 4V223
1/26/2010	13:24	4V145.D	245099011	LANL	945254	5G	1	N/A	45	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V224
1/26/2010	13:51	4V146.D	245099012	LANL	945254	5G	1	N/A	46	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V225
1/26/2010	14:18	4V147.D	245099013	LANL	945254	5G	1	N/A	47	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V226
1/26/2010	14:46	4V148.D	245099014	LANL	945254	5G	1	N/A	48	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V227
1/26/2010	15:13	4V149.D	245099015	LANL	945254	5G	1	N/A	49	S	ACJ	N/A	O	IS LOW; CONFIRMED BY 4V228
1/26/2010	15:40	4V150.D	1202024443	LANL	945254	5G	1	N/A	50	S	ACJ	N/A	O	MS 245099001
1/26/2010	16:08	4V151.D	1202024444	LANL	945254	5G	1	N/A	51	S	ACJ	N/A	O	MSD 245099001

ORGANIC RUN LOG - INSTRUMENT ID#VOA4

Date: 1/26/2010 Method 8260B/624 Operator: ACJ
REVIEWED BY: _____
DATE: _____
CALIBRATION & CC INFORMATION: HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1
Daily Instrument Readings: Multiplier Voltage: 1624

Initial Calibration Date: 1/11/2010
(See pg. 3 for ICAI Std. Sci. Ids)
NaHSO4 lot # N/A
Cl test lot # 81710
Sequence Number: 012610V4
Daily Standard Volume Added for Purge (ul) MS/Blk/Smpl CCV LCS BFB
Solution ID# CCV W4VM100126-02 5+5 1 1
IS UVM091216-09 1 1
SS UVM091117-02 1 1
LCS/MS W4VM100126-02 5+5 1
BFB UVM091117-02 1
SHORT W4VM100126-04 5+5 5
DHEC N/A 5
Purge Amount
5 Water Purge Vol:
VARIED Soil Purge Wt.
X Mid level ext. MeOH Vol:
100 ul
C2937 Methanol Lot #
x Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable (O/X)	Comments
1/26/2010	17:35	4V201.D	UVM091117-02	GEL	BFB	5ML	1	N/A	1	W	ACJ	N/A	X	PASSES; BFB FROM 4V203
1/26/2010	18:03	4V202.D	W4VM100126-01	GEL	CCV/LCS	5ML	1	N/A	2	W	ACJ	N/A	X	UVM091214-01/UVM100126-01
1/26/2010	18:30	4V203.D	W4VM100126-02	GEL	CCV/LCS	5G	1	N/A	3	S	ACJ	N/A	O	UVM091214-01/UVM100126-01
1/26/2010	18:58	4V204.D	W4VM100126-03	GEL	SHORT	5ML	1	N/A	4	W	ACJ	N/A	O	UVM100118-08A/UVM091209-08E
1/26/2010	19:25	4V205.D	W4VM100126-04	GEL	SHORT	5G	1	N/A	5	S	ACJ	N/A	O	UVM0100118-08A/UVM091209-08E
1/26/2010	19:54	4V206.D	12020----	GEL	BLANK	5ML	1	N/A	6	W	ACJ	N/A	X	NOT NEEDED
1/26/2010	20:22	4V207.D	12020----	GEL	BLANK	5G	1	N/A	7	S	ACJ	N/A	O	
1/26/2010	20:49	4V208.D	1202025582	GEL	945760	100UL	50	N/A	8	S	ACJ	N/A	O	HB
1/26/2010	21:17	4V209.D	245051001	CARE	945760	100UL	50	N/A	9	S	ACJ	N/A	O	5.2G
1/26/2010	21:44	4V210.D	245051002	CARE	945760	100UL	50	N/A	10	S	ACJ	N/A	O	5.1G
1/26/2010	22:12	4V211.D	245051003	CARE	945760	100UL	50	N/A	11	S	ACJ	N/A	O	5.0G
1/26/2010	22:39	4V212.D	245055001	CARE	945760	100UL	50	N/A	12	S	ACJ	N/A	O	5.3G
1/26/2010	23:07	4V213.D	245055002	CARE	945760	100UL	50	N/A	13	S	ACJ	N/A	O	5.1G
1/26/2010	23:34	4V214.D	1202025580	CARE	945760	100UL	50	N/A	14	S	ACJ	N/A	O	MS 245051001
1/27/2010	0:02	4V215.D	1202025581	CARE	945760	100UL	50	N/A	15	S	ACJ	N/A	O	MSD 245051001
1/27/2010	0:29	4V216.D	12020----	GEL	BLANK	5ML	1	N/A	16	W	ACJ	N/A	X	
1/27/2010	0:57	4V217.D	12020----	GEL	BLANK	5ML	1	N/A	17	W	ACJ	N/A	X	
1/27/2010	1:26	4V218.D	245099001	LANL	945254	5G	1	N/A	18	S	ACJ	N/A	X	CONFIRMS 4V135
1/27/2010	1:52	4V219.D	245099005	LANL	945254	5G	1	N/A	19	S	ACJ	N/A	O	CONFIRMED BY 4V139
1/27/2010	2:20	4V220.D	245099007	LANL	945254	5G	1	N/A	20	S	ACJ	N/A	X	CONFIRMS 4V141
1/27/2010	2:47	4V221.D	245099008	LANL	945254	5G	1	N/A	21	S	ACJ	N/A	X	CONFIRMS 4V142
1/27/2010	3:15	4V222.D	245099009	LANL	945254	5G	1	N/A	22	S	ACJ	N/A	O	CONFIRMED BY 4V143
1/27/2010	3:42	4V223.D	245099010	LANL	945254	5G	1	N/A	23	S	ACJ	N/A	O	CONFIRMED BY 4V144
1/27/2010	4:09	4V224.D	245099011	LANL	945254	5G	1	N/A	24	S	ACJ	N/A	X	CONFIRMS 4V145
1/27/2010	4:36	4V225.D	245099012	LANL	945254	5G	1	N/A	25	S	ACJ	N/A	X	CONFIRMS 4V146
1/27/2010	5:04	4V226.D	245099013	LANL	945254	5G	1	N/A	26	S	ACJ	N/A	X	CONFIRMS 4V147
1/27/2010	5:31	4V227.D	245099014	LANL	945254	5G	1	N/A	27	S	ACJ	N/A	X	CONFIRMS 4V148
1/27/2010	5:58	4V228.D	245099015	LANL	945254	5G	1	N/A	28	S	ACJ	N/A	X	CONFIRMS 4V149

DATA EXCEPTION REPORT

Mo.Day Yr. 11-FEB-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: VOA GC/MS	Test / Method: SW846 8260B	Matrix Type: Solid	Client Code: LANL
Batch ID: 945254	Sample Numbers: See Below		

Potentially affected work order(s)(SDG): 245099(10-1301)

Application Issues:

Failed Recovery for MS/PS

Failed Yield for Surrogates

Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

DER Disposition:

1. QC samples 1202024443MS and 1202024444MSD were outside the spike recovery acceptance limits for multiple compounds.

2. The following samples were outside the surrogate recovery acceptance limits for Bromofluorobenzene:

245099008,011,012,013,015

3. The following samples were outside the internal standard response recovery acceptance criteria:

245099001,005,007,008,009,010,011,012,013,014,015

1. Narrate and report data. The MS/MSD pass RPD and recover in a similar manner. Possible matrix interference.

2. Narrate and report data. The samples were analyzed twice with similar results. It is believed matrix interference has been demonstrated.

3. Narrate and report data. The samples were analyzed twice with similar results. It is believed matrix interference has been demonstrated.

Originator's Name:

Amy Jamison

11-FEB-10

Data Validator/Group Leader:

Kelle Bellamy

15-FEB-10

GC/MS Semivolatile Analysis

**Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1301**

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:	944455
Prep Batch Number:	944454

Sample Analysis

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

Sample ID	Client ID
245099001	RE15-10-7194
245099002	RE15-10-7186
245099003	RE15-10-7191
245099004	RE15-10-7195
245099005	RE15-10-7196
245099006	RE15-10-7197
245099007	RE15-10-7193
245099008	RE15-10-7184
245099009	RE15-10-7185
245099010	RE15-10-7189
245099011	RE15-10-7187
245099012	RE15-10-7188
245099013	RE15-10-7190
245099014	RE15-10-7192
245099015	RE15-10-7219
1202022468	Method Blank (MB)
1202022469	Laboratory Control Sample (LCS)
1202022470	245099001(RE15-10-7194) Matrix Spike (MS)
1202022471	245099001(RE15-10-7194) 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. Toluene diisocyanate rapidly hydrolyzes in water (half-life less than 30 minutes). Therefore, recoveries of this compound from aqueous matrices should not be expected. In addition, in solid matrices, toluene diisocyanate often reacts with alcohols and amines to produce urethane and ureas and consequently cannot usually coexist in a solution containing these materials.

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

Initial Calibration

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

CCV Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 245099001 (RE15-10-7194) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

The internal standard responses were outside of the acceptance criteria for the following samples: 245099001 (RE15-10-7194), 245099002 (RE15-10-7186), 245099003 (RE15-10-7191), 245099005 (RE15-10-7196), 245099008 (RE15-10-7184), 245099011 (RE15-10-7187) and 245099012 (RE15-10-7188). The samples were re-analyzed and the failures were confirmed. The first analysis data were reported. The re-analysis raw data have been placed in the Miscellaneous Section.

The internal standard responses were outside of the acceptance criteria for the following samples. The samples were re-analyzed and the failures were not confirmed. The re-analysis data were reported. 1202022469 (LCS), 245099006 (RE15-10-7197), 245099007 (RE15-10-7193), 245099009 (RE15-10-7185), 245099010 (RE15-10-7189), 245099013 (RE15-10-7190) and 245099014 (RE15-10-7192).

The internal standard responses were outside of the acceptance criteria for the following sample 245099015 (RE15-10-7219). The samples were re-analyzed and the failure confirmed. The re-analysis data were reported. The original analysis raw data have been placed in the Miscellaneous Section of the data report.

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
MSD3.I	HP Mass Spectrometer	HP7890A/HP5975C	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

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

Review Validation:

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

Reviewer: Alan R. Riechers Date: 2-15-10

Roadmap for LANL 10-1301 SVOA

This roadmap was analyzed by jcn00986 on 01-28-2010, 14:16.

This roadmap was reviewed by bar00895 on 01-28-2010, 15:33.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2508.d	245099001	25-JAN-2010	12:52	10-1301.sub	RE15-10-7194	1	944455	USE; 2526 CONFIRMS LOW ISTD
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2511.d	245099002	25-JAN-2010	14:11	10-1301.sub	RE15-10-7186	1	944455	USE; 2527 CONFIRMS LOW ISTD
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2512.d	245099003	25-JAN-2010	14:37	10-1301.sub	RE15-10-7191	1	944455	USE; 2528 CONFIRMS LOW ISTD
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2513.d	245099004	25-JAN-2010	15:04	10-1301.sub	RE15-10-7195	1	944455	USE
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2514.d	245099005	25-JAN-2010	15:31	10-1301.sub	RE15-10-7196	1	944455	USE; LOW ISTD SEE RR S3A2613
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2515.d	245099006	25-JAN-2010	15:57	10-1301.sub	RE15-10-7197	1	944455	DUSE; LOW ISTD SEE RR S3A2614
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2516.d	245099007	25-JAN-2010	16:24	10-1301.sub	RE15-10-7193	1	944455	DUSE; LOW ISTD SEE RR S3A2630
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2517.d	245099008	25-JAN-2010	16:51	10-1301.sub	RE15-10-7184	1	944455	USE; LOW ISTD SEE RR S3A2631
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2518.d	245099009	25-JAN-2010	17:17	10-1301.sub	RE15-10-7185	1	944455	DUSE; LOW ISTD SEE RR S3A2632
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2519.d	245099010	25-JAN-2010	17:43	10-1301.sub	RE15-10-7189	1	944455	DUSE; LOW ISTD SEE RR S3A2633
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2520.d	245099011	25-JAN-2010	18:10	10-1301.sub	RE15-10-7187	1	944455	USE; LOW ISTD SEE RR S3A2709
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2521.d	245099012	25-JAN-2010	18:36	10-1301.sub	RE15-10-7188	1	944455	USE; LOW ISTD SEE RR S3A2710
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2522.d	245099013	25-JAN-2010	19:02	10-1301.sub	RE15-10-7190	1	944455	DUSE; LOW ISTD SEE RR S3A2711
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2523.d	245099014	25-JAN-2010	19:28	10-1301.sub	RE15-10-7192	1	944455	DUSE; LOW ISTD SEE RR S3A2712
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2524.d	245099015	25-JAN-2010	19:54	10-1301.sub	RE15-10-7219	1	944455	DUSE; LOW ISTD SEE RR S3A2713
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2526.d	245099001	25-JAN-2010	20:47	10-1301.sub	RE15-10-7194	1	944455	DUSE; ISTD LOW
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2527.d	245099002	25-JAN-2010	21:13	10-1301.sub	RE15-10-7186	1	944455	DUSE; ISTD LOW
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2528.d	245099003	25-JAN-2010	21:38	10-1301.sub	RE15-10-7191	1	944455	DUSE; ISTD LOW
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2613.d	245099005	26-JAN-2010	14:37	10-1301.sub	RE15-10-7196	1	944455	DUSE; RR OF S3A2514; ISTD LOW
<input type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2614.d	245099006	26-JAN-2010	15:03	10-1301.sub	RE15-10-7197	1	944455	USE; RR OF S3A2515; ISTD PASS
<input type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2630.d	245099007	26-JAN-2010	22:19	10-1301.sub	RE15-10-7193	1	944455	USE; RR OF S3A2516; ISTD PASS

<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2631.d	245099008	26-JAN-2010	22:45	10-1301.sub	RE15-10-7184	1	944455	DUSE; RR OF S3A2517; ISTD LOW
<input type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2632.d	245099009	26-JAN-2010	23:11	10-1301.sub	RE15-10-7185	1	944455	USE; RR OF S3A2518; ISTD PASS
<input type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2633.d	245099010	26-JAN-2010	23:36	10-1301.sub	RE15-10-7189	1	944455	USE; RR OF S3A2519; ISTD PASS
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2634.d	245099011	27-JAN-2010	00:02	10-1301.sub	RE15-10-7187	1	944455	DUSE; OUT OF TUNE
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2635.d	245099012	27-JAN-2010	00:28	10-1301.sub	RE15-10-7188	1	944455	DUSE; OUT OF TUNE
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2636.d	245099013	27-JAN-2010	00:54	10-1301.sub	RE15-10-7190	1	944455	DUSE; OUT OF TUNE
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2637.d	245099014	27-JAN-2010	01:20	10-1301.sub	RE15-10-7192	1	944455	DUSE; OUT OF TUNE
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012610a.b/s3a2638.d	245099015	27-JAN-2010	01:45	10-1301.sub	RE15-10-7219	1	944455	DUSE; OUT OF TUNE
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012710.b/s3a2709.d	245099011	27-JAN-2010	12:25	10-1301.sub	RE15-10-7187	1	944455	DUSE; RR OF S3A2520; ISTD LOW
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012710.b/s3a2710.d	245099012	27-JAN-2010	12:51	10-1301.sub	RE15-10-7188	1	944455	DUSE; RR OF S3A2521; ISTD LOW
<input type="checkbox"/>	N	/chem/MSD3.i/s012710.b/s3a2711.d	245099013	27-JAN-2010	13:17	10-1301.sub	RE15-10-7190	1	944455	USE; RR OF S3A2522; ISTD PASS
<input type="checkbox"/>	N	/chem/MSD3.i/s012710.b/s3a2712.d	245099014	27-JAN-2010	13:43	10-1301.sub	RE15-10-7192	1	944455	USE; RR OF S3A2523; ISTD PASS
<input type="checkbox"/>	Y	/chem/MSD3.i/s012710.b/s3a2713.d	245099015	27-JAN-2010	14:09	10-1301.sub	RE15-10-7219	1.00000	944455	

QC Sample

exclude	manual	datafile	sampleid	sampletype	injdate	injtime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2506.d	1202022468	mb	25-JAN-2010	11:59	10-1301.sub	SBLK01	1	944455	USE
<input checked="" type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2507.d	1202022469	lcs	25-JAN-2010	12:25	10-1301.sub	SBLK01LCS	1	944455	DUSE; ISTD LOW
<input type="checkbox"/>	N	/chem/MSD3.i/s012510.b/s3a2509.d	1202022470	ms	25-JAN-2010	13:18	10-1301.sub	RE15-10-7194MS	1	944455	USE

■	N	/chem/MSD3.i/s012510.b/s3a2525.d	1202022469	lcs	25-JAN-2010	20:20	10-1301.sub	SBLK01LCS	I	944455	DUSE; 1STD LOW
□	N	/chem/MSD3.i/s012610a.b/s3a2612.d	1202022469	lcs	26-JAN-2010	14:10	10-1301.sub	SBLK01LCS	I	944455	USE; RR OF S3A2507; TSTD PASS
□	Y	/chem/MSD3.i/s012510.b/s3a2510.d	1202022471	msd	25-JAN-2010	13:44	10-1301.sub	RE15-10-7194MSD	1.00000	944455	

Sample Data Summary

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 16:51	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s3a2517.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	401	ug/kg	80.3	401
108-95-2	Phenol	U	401	ug/kg	80.3	401
95-57-8	2-Chlorophenol	U	401	ug/kg	80.3	401
106-46-7	1,4-Dichlorobenzene	U	401	ug/kg	80.3	401
621-64-7	N-Nitrosodipropylamine	U	401	ug/kg	80.3	401
59-50-7	4-Chloro-3-methylphenol	U	401	ug/kg	80.3	401
83-32-9	Acenaphthene	U	40.1	ug/kg	13.2	40.1
121-14-2	2,4-Dinitrotoluene	U	401	ug/kg	40.1	401
100-02-7	4-Nitrophenol	U	401	ug/kg	132	401
87-86-5	Pentachlorophenol	U	401	ug/kg	100	401
129-00-0	Pyrene	U	40.1	ug/kg	12.0	40.1
110-86-1	Pyridine	U	401	ug/kg	80.3	401
62-53-3	Aniline	U	401	ug/kg	120	401
111-44-4	bis(2-Chloroethyl) ether	U	401	ug/kg	80.3	401
541-73-1	1,3-Dichlorobenzene	U	401	ug/kg	80.3	401
100-51-6	Benzyl alcohol	U	401	ug/kg	120	401
95-50-1	1,2-Dichlorobenzene	U	401	ug/kg	80.3	401
108-60-1	bis(2-Chloroisopropyl)ether	U	401	ug/kg	80.3	401
95-48-7	o-Cresol	U	401	ug/kg	80.3	401
65794-96-9	m,p-Cresols	U	401	ug/kg	120	401
67-72-1	Hexachloroethane	U	401	ug/kg	80.3	401
98-95-3	Nitrobenzene	U	401	ug/kg	80.3	401
78-59-1	Isophorone	U	401	ug/kg	80.3	401
88-75-5	2-Nitrophenol	U	401	ug/kg	80.3	401
105-67-9	2,4-Dimethylphenol	U	401	ug/kg	140	401
111-91-1	bis(2-Chloroethoxy)methane	U	401	ug/kg	80.3	401
120-83-2	2,4-Dichlorophenol	U	401	ug/kg	80.3	401
65-85-0	Benzoic acid	U	803	ug/kg	201	803
91-20-3	Naphthalene	U	40.1	ug/kg	12.0	40.1
106-47-8	4-Chloroaniline	U	401	ug/kg	80.3	401
87-68-3	Hexachlorobutadiene	U	401	ug/kg	80.3	401
91-57-6	2-Methylnaphthalene	U	40.1	ug/kg	8.03	40.1
77-47-4	Hexachlorocyclopentadiene	U	401	ug/kg	80.3	401
88-06-2	2,4,6-Trichlorophenol	U	401	ug/kg	80.3	401
95-95-4	2,4,5-Trichlorophenol	U	401	ug/kg	80.3	401
91-58-7	2-Chloronaphthalene	U	40.1	ug/kg	13.2	40.1
88-74-4	2-Nitroaniline	U	401	ug/kg	80.3	401
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	401	ug/kg	80.3	401

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 16:51	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s3a2517.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	401	ug/kg	80.3	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	803	ug/kg	153	803
132-64-9	Dibenzofuran	U	401	ug/kg	80.3	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.3	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.3	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.3	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.3	401
122-66-7	Azobenzene	U	401	ug/kg	80.3	401
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.3	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.3	401
85-01-8	Phenanthrene	U	40.1	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.03	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.3	401
206-44-0	Fluoranthene	U	40.1	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.3	401
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.3	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.3	401
205-99-2	Benzo(b)fluoranthene	U	40.1	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.3	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.12	298	ug/kg		J
	Unknown	2.31	207	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 16:51	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s3a2517.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	3.42	432	ug/kg		JA
	Unknown	12.13	535	ug/kg		J
	Unknown	15.23	282	ug/kg		J
	Unknown	15.24	379	ug/kg		J
	Unknown	15.55	164	ug/kg		J
	Unknown	16.1	987	ug/kg		J
83-46-5	.beta.-Sitosterol	17.73	508	ug/kg	93	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099009

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.5	368
108-95-2	Phenol	U	368	ug/kg	73.5	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.5	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.5	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.5	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.5	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	91.9	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.5	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.5	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.5	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.5	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.5	368
95-48-7	o-Cresol	U	368	ug/kg	73.5	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.5	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.5	368
78-59-1	Isophorone	U	368	ug/kg	73.5	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.5	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.5	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.5	368
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.5	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.5	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.35	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.5	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.5	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.5	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.5	368
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	368	ug/kg	73.5	368

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099009	Date Received: 01/20/2010 08:45	%Moisture: 9.4
Client ID: RE15-10-7185	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/26/2010 23:11	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2632.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	368	ug/kg	73.5	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	368	ug/kg	73.5	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.5	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.5	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.5	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	368	ug/kg	73.5	368
122-66-7	Azobenzene	U	368	ug/kg	73.5	368
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.5	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.5	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.35	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.5	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.5	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.5	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.5	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.5	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	387	ug/kg		J
	Unknown	2.15	660	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1301
Lab Sample ID: 245099009

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 9.4
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		2.33	182	ug/kg		J
	Unknown Aldol Condensate		3.42	530	ug/kg		JA
	Unknown		16.02	170	ug/kg		J
	Unknown		17.19	239	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.6
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	408	ug/kg	81.6	408
108-95-2	Phenol	U	408	ug/kg	81.6	408
95-57-8	2-Chlorophenol	U	408	ug/kg	81.6	408
106-46-7	1,4-Dichlorobenzene	U	408	ug/kg	81.6	408
621-64-7	N-Nitrosodipropylamine	U	408	ug/kg	81.6	408
59-50-7	4-Chloro-3-methylphenol	U	408	ug/kg	81.6	408
83-32-9	Acenaphthene	U	40.8	ug/kg	13.5	40.8
121-14-2	2,4-Dinitrotoluene	U	408	ug/kg	40.8	408
100-02-7	4-Nitrophenol	U	408	ug/kg	135	408
87-86-5	Pentachlorophenol	U	408	ug/kg	102	408
129-00-0	Pyrene	U	40.8	ug/kg	12.2	40.8
110-86-1	Pyridine	U	408	ug/kg	81.6	408
62-53-3	Aniline	U	408	ug/kg	122	408
111-44-4	bis(2-Chloroethyl) ether	U	408	ug/kg	81.6	408
541-73-1	1,3-Dichlorobenzene	U	408	ug/kg	81.6	408
100-51-6	Benzyl alcohol	U	408	ug/kg	122	408
95-50-1	1,2-Dichlorobenzene	U	408	ug/kg	81.6	408
108-60-1	bis(2-Chloroisopropyl)ether	U	408	ug/kg	81.6	408
95-48-7	o-Cresol	U	408	ug/kg	81.6	408
65794-96-9	m,p-Cresols	U	408	ug/kg	122	408
67-72-1	Hexachloroethane	U	408	ug/kg	81.6	408
98-95-3	Nitrobenzene	U	408	ug/kg	81.6	408
78-59-1	Isophorone	U	408	ug/kg	81.6	408
88-75-5	2-Nitrophenol	U	408	ug/kg	81.6	408
105-67-9	2,4-Dimethylphenol	U	408	ug/kg	143	408
111-91-1	bis(2-Chloroethoxy)methane	U	408	ug/kg	81.6	408
120-83-2	2,4-Dichlorophenol	U	408	ug/kg	81.6	408
65-85-0	Benzoic acid	U	816	ug/kg	204	816
91-20-3	Naphthalene	U	40.8	ug/kg	12.2	40.8
106-47-8	4-Chloroaniline	U	408	ug/kg	81.6	408
87-68-3	Hexachlorobutadiene	U	408	ug/kg	81.6	408
91-57-6	2-Methylnaphthalene	U	40.8	ug/kg	8.16	40.8
77-47-4	Hexachlorocyclopentadiene	U	408	ug/kg	81.6	408
88-06-2	2,4,6-Trichlorophenol	U	408	ug/kg	81.6	408
95-95-4	2,4,5-Trichlorophenol	U	408	ug/kg	81.6	408
91-58-7	2-Chloronaphthalene	U	40.8	ug/kg	13.5	40.8
88-74-4	2-Nitroaniline	U	408	ug/kg	81.6	408
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	408	ug/kg	81.6	408

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

SDG Number: 10-1301
Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.6
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	408	ug/kg	81.6	408
606-20-2	2,6-Dinitrotoluene	U	408	ug/kg	40.8	408
208-96-8	Acenaphthylene	U	40.8	ug/kg	12.2	40.8
51-28-5	2,4-Dinitrophenol	U	816	ug/kg	155	816
132-64-9	Dibenzofuran	U	408	ug/kg	81.6	408
84-66-2	Diethylphthalate	U	408	ug/kg	81.6	408
86-73-7	Fluorene	U	40.8	ug/kg	12.2	40.8
7005-72-3	4-Chlorophenylphenylether	U	408	ug/kg	81.6	408
534-52-1	2-Methyl-4,6-dinitrophenol	U	408	ug/kg	81.6	408
100-01-6	4-Nitroaniline	U	408	ug/kg	122	408
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	408	ug/kg	81.6	408
122-66-7	Azobenzene	U	408	ug/kg	81.6	408
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	408	ug/kg	81.6	408
118-74-1	Hexachlorobenzene	U	408	ug/kg	81.6	408
85-01-8	Phenanthrene	U	40.8	ug/kg	12.2	40.8
120-12-7	Anthracene	U	40.8	ug/kg	8.16	40.8
84-74-2	Di-n-butylphthalate	U	408	ug/kg	81.6	408
206-44-0	Fluoranthene	U	40.8	ug/kg	12.2	40.8
85-68-7	Butylbenzylphthalate	U	408	ug/kg	81.6	408
56-55-3	Benzo(a)anthracene	U	40.8	ug/kg	12.2	40.8
91-94-1	3,3'-Dichlorobenzidine	U	408	ug/kg	122	408
218-01-9	Chrysene	U	40.8	ug/kg	12.2	40.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	408	ug/kg	81.6	408
117-84-0	Di-n-octylphthalate	U	408	ug/kg	81.6	408
205-99-2	Benzo(b)fluoranthene	U	40.8	ug/kg	12.2	40.8
207-08-9	Benzo(k)fluoranthene	U	40.8	ug/kg	12.2	40.8
50-32-8	Benzo(a)pyrene	U	40.8	ug/kg	12.2	40.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.8	ug/kg	12.2	40.8
53-70-3	Dibenzo(a,h)anthracene	U	40.8	ug/kg	12.2	40.8
191-24-2	Benzo(ghi)perylene	U	40.8	ug/kg	12.2	40.8
120-82-1	1,2,4-Trichlorobenzene	U	408	ug/kg	81.6	408

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.43	440	ug/kg		JA
	Unknown	15.22	729	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.6
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		16.09	730	ug/kg	J

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

SDG Number: 10-1301
Lab Sample ID: 245099011

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 9.3
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	367	ug/kg	73.3	367
108-95-2	Phenol	U	367	ug/kg	73.3	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.3	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.3	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.3	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.3	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.3	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.3	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.3	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.3	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.3	367
95-48-7	o-Cresol	U	367	ug/kg	73.3	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.3	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.3	367
78-59-1	Isophorone	U	367	ug/kg	73.3	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.3	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.3	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.3	367
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.3	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.3	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.33	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.3	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.3	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.3	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.3	367
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.3	367

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	% Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7187	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 18:10	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2520.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	367	ug/kg	73.3	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	367	ug/kg	73.3	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.3	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.3	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.3	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.3	367
122-66-7	Azobenzene	U	367	ug/kg	73.3	367
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.3	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.3	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.33	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.3	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.3	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.3	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.3	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.3	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.11	598	ug/kg		J
	Unknown Aldol Condensate	3.42	317	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1301
Lab Sample ID: 245099011

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
13466-78-9	3-Carene	4.78	169	ug/kg	96	NJ
	Unknown	11.96	207	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.4	263	ug/kg	91	NJ
	Unknown	15.23	537	ug/kg		J
112-95-8	Eicosane	15.79	148	ug/kg	93	NJ
	Unknown	16.1	577	ug/kg		J
	Unknown	16.9	186	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.74	1010	ug/kg	97	NJ
	Unknown	18.87	316	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	75.9	380
108-95-2	Phenol	U	380	ug/kg	75.9	380
95-57-8	2-Chlorophenol	U	380	ug/kg	75.9	380
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	75.9	380
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	75.9	380
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	75.9	380
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380
87-86-5	Pentachlorophenol	U	380	ug/kg	94.9	380
129-00-0	Pyrene	U	38.0	ug/kg	11.4	38.0
110-86-1	Pyridine	U	380	ug/kg	75.9	380
62-53-3	Aniline	U	380	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	75.9	380
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	75.9	380
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	75.9	380
108-60-1	bis(2-Chloroisopropyl)ether	U	380	ug/kg	75.9	380
95-48-7	o-Cresol	U	380	ug/kg	75.9	380
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380
67-72-1	Hexachloroethane	U	380	ug/kg	75.9	380
98-95-3	Nitrobenzene	U	380	ug/kg	75.9	380
78-59-1	Isophorone	U	380	ug/kg	75.9	380
88-75-5	2-Nitrophenol	U	380	ug/kg	75.9	380
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	75.9	380
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	75.9	380
65-85-0	Benzoic acid	U	759	ug/kg	190	759
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline	U	380	ug/kg	75.9	380
87-68-3	Hexachlorobutadiene	U	380	ug/kg	75.9	380
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.59	38.0
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	75.9	380
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	75.9	380
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	75.9	380
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline	U	380	ug/kg	75.9	380
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	380	ug/kg	75.9	380

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

SDG Number: 10-1301
Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7188
Batch ID: 944455
Run Date: 01/25/2010 18:36
Prep Date: 01/22/2010 23:39
Data File: s3a2521.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	380	ug/kg	75.9	380
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	U	759	ug/kg	144	759
132-64-9	Dibenzofuran	U	380	ug/kg	75.9	380
84-66-2	Diethylphthalate	U	380	ug/kg	75.9	380
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	75.9	380
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	75.9	380
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	380	ug/kg	75.9	380
122-66-7	Azobenzene	U	380	ug/kg	75.9	380
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	75.9	380
118-74-1	Hexachlorobenzene	U	380	ug/kg	75.9	380
85-01-8	Phenanthrene	U	38.0	ug/kg	11.4	38.0
120-12-7	Anthracene	U	38.0	ug/kg	7.59	38.0
84-74-2	Di-n-butylphthalate	U	380	ug/kg	75.9	380
206-44-0	Fluoranthene	U	38.0	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate	U	380	ug/kg	75.9	380
56-55-3	Benzo(a)anthracene	U	38.0	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380
218-01-9	Chrysene	U	38.0	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate	J	95.9	ug/kg	75.9	380
117-84-0	Di-n-octylphthalate		1430	ug/kg	75.9	380
205-99-2	Benzo(b)fluoranthene	U	38.0	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene	U	38.0	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene	U	38.0	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	75.9	380

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.13	1050	ug/kg		J
	Unknown	2.32	190	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.42	407	ug/kg		JA
7785-70-8	1R- α -Pinene	4.21	704	ug/kg	98	NJ
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	4.5	212	ug/kg	93	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	4.78	227	ug/kg	97	NJ
	Unknown	10.2	324	ug/kg		J
	Unknown	10.23	160	ug/kg		J
	Unknown	10.38	214	ug/kg		J
	Unknown	10.43	159	ug/kg		J
	Unknown	11.61	278	ug/kg		J
	Unknown	11.69	1210	ug/kg		J
	Unknown	11.79	431	ug/kg		J
17974-57-1	(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	11.94	1140	ug/kg	81	NJ
	Unknown	12.13	552	ug/kg		J
	Unknown	12.24	182	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.36	523	ug/kg	98	NJ
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.39	265	ug/kg	91	NJ
119-07-3	1,2-Benzenedicarboxylic acid, decyl octy	14.73	1680	ug/kg	91	NJ
	Unknown	15.24	1350	ug/kg		J
	Unknown	16.03	624	ug/kg		J
	Unknown	16.11	1760	ug/kg		J
83-47-6	γ -Sitosterol	17.73	976	ug/kg	95	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.2
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	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	183	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.4	367
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.4	367

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

SDG Number: 10-1301
Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.2
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	367	ug/kg	73.4	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	139	734
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.12	1220	ug/kg		J
	Unknown	2.3	201	ug/kg		J

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099010	Date Received: 01/20/2010 08:45	%Moisture: 9.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7189	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 23:36	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s3a2633.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
	Unknown Aldol Condensate	3.41	494	ug/kg		JA
	Unknown	16.01	408	ug/kg		J
	Unknown	17.19	798	ug/kg		J
	Unknown	17.39	384	ug/kg		J
	Unknown	17.88	154	ug/kg		J
83-46-5	.beta.-Sitosterol	17.91	376	ug/kg	93	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099013

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 28.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7190
Batch ID: 944455
Run Date: 01/27/2010 13:17
Prep Date: 01/22/2010 23:39
Data File: s3a2711.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	465	ug/kg	93.0	465
108-95-2	Phenol	U	465	ug/kg	93.0	465
95-57-8	2-Chlorophenol	U	465	ug/kg	93.0	465
106-46-7	1,4-Dichlorobenzene	U	465	ug/kg	93.0	465
621-64-7	N-Nitrosodipropylamine	U	465	ug/kg	93.0	465
59-50-7	4-Chloro-3-methylphenol	U	465	ug/kg	93.0	465
83-32-9	Acenaphthene	U	46.5	ug/kg	15.3	46.5
121-14-2	2,4-Dinitrotoluene	U	465	ug/kg	46.5	465
100-02-7	4-Nitrophenol	U	465	ug/kg	153	465
87-86-5	Pentachlorophenol	U	465	ug/kg	116	465
129-00-0	Pyrene	U	46.5	ug/kg	13.9	46.5
110-86-1	Pyridine	U	465	ug/kg	93.0	465
62-53-3	Aniline	U	465	ug/kg	139	465
111-44-4	bis(2-Chloroethyl) ether	U	465	ug/kg	93.0	465
541-73-1	1,3-Dichlorobenzene	U	465	ug/kg	93.0	465
100-51-6	Benzyl alcohol	U	465	ug/kg	139	465
95-50-1	1,2-Dichlorobenzene	U	465	ug/kg	93.0	465
108-60-1	bis(2-Chloroisopropyl)ether	U	465	ug/kg	93.0	465
95-48-7	o-Cresol	U	465	ug/kg	93.0	465
65794-96-9	m,p-Cresols	U	465	ug/kg	139	465
67-72-1	Hexachloroethane	U	465	ug/kg	93.0	465
98-95-3	Nitrobenzene	U	465	ug/kg	93.0	465
78-59-1	Isophorone	U	465	ug/kg	93.0	465
88-75-5	2-Nitrophenol	U	465	ug/kg	93.0	465
105-67-9	2,4-Dimethylphenol	U	465	ug/kg	163	465
111-91-1	bis(2-Chloroethoxy)methane	U	465	ug/kg	93.0	465
120-83-2	2,4-Dichlorophenol	U	465	ug/kg	93.0	465
65-85-0	Benzoic acid	U	930	ug/kg	232	930
91-20-3	Naphthalene	U	46.5	ug/kg	13.9	46.5
106-47-8	4-Chloroaniline	U	465	ug/kg	93.0	465
87-68-3	Hexachlorobutadiene	U	465	ug/kg	93.0	465
91-57-6	2-Methylnaphthalene	U	46.5	ug/kg	9.30	46.5
77-47-4	Hexachlorocyclopentadiene	U	465	ug/kg	93.0	465
88-06-2	2,4,6-Trichlorophenol	U	465	ug/kg	93.0	465
95-95-4	2,4,5-Trichlorophenol	U	465	ug/kg	93.0	465
91-58-7	2-Chloronaphthalene	U	46.5	ug/kg	15.3	46.5
88-74-4	2-Nitroaniline	U	465	ug/kg	93.0	465
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	465	ug/kg	93.0	465

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099013	Date Received: 01/20/2010 08:45	%Moisture: 28.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7190	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 13:17	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2711.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	465	ug/kg	93.0	465
606-20-2	2,6-Dinitrotoluene	U	465	ug/kg	46.5	465
208-96-8	Acenaphthylene	U	46.5	ug/kg	13.9	46.5
51-28-5	2,4-Dinitrophenol	U	930	ug/kg	177	930
132-64-9	Dibenzofuran	U	465	ug/kg	93.0	465
84-66-2	Diethylphthalate	U	465	ug/kg	93.0	465
86-73-7	Fluorene	U	46.5	ug/kg	13.9	46.5
7005-72-3	4-Chlorophenylphenylether	U	465	ug/kg	93.0	465
534-52-1	2-Methyl-4,6-dinitrophenol	U	465	ug/kg	93.0	465
100-01-6	4-Nitroaniline	U	465	ug/kg	139	465
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	465	ug/kg	93.0	465
122-66-7	Azobenzene	U	465	ug/kg	93.0	465
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	465	ug/kg	93.0	465
118-74-1	Hexachlorobenzene	U	465	ug/kg	93.0	465
85-01-8	Phenanthrene	U	46.5	ug/kg	13.9	46.5
120-12-7	Anthracene	U	46.5	ug/kg	9.30	46.5
84-74-2	Di-n-butylphthalate	U	465	ug/kg	93.0	465
206-44-0	Fluoranthene	U	46.5	ug/kg	13.9	46.5
85-68-7	Butylbenzylphthalate	U	465	ug/kg	93.0	465
56-55-3	Benzo(a)anthracene	U	46.5	ug/kg	13.9	46.5
91-94-1	3,3'-Dichlorobenzidine	U	465	ug/kg	139	465
218-01-9	Chrysene	U	46.5	ug/kg	13.9	46.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	465	ug/kg	93.0	465
117-84-0	Di-n-octylphthalate	U	465	ug/kg	93.0	465
205-99-2	Benzo(b)fluoranthene	U	46.5	ug/kg	13.9	46.5
207-08-9	Benzo(k)fluoranthene	U	46.5	ug/kg	13.9	46.5
50-32-8	Benzo(a)pyrene	U	46.5	ug/kg	13.9	46.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.5	ug/kg	13.9	46.5
53-70-3	Dibenzo(a,h)anthracene	U	46.5	ug/kg	13.9	46.5
191-24-2	Benzo(ghi)perylene	U	46.5	ug/kg	13.9	46.5
120-82-1	1,2,4-Trichlorobenzene	U	465	ug/kg	93.0	465

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.3	247	ug/kg		J
	Unknown Aldol Condensate	3.4	562	ug/kg		JA

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

SDG Number: 10-1301
Lab Sample ID: 245099013

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 28.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7190
Batch ID: 944455
Run Date: 01/27/2010 13:17
Prep Date: 01/22/2010 23:39
Data File: s3a2711.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.57	189	ug/kg	99	NJ
2416-20-8	Hexadecenoic acid, Z-11-	10.09	199	ug/kg	97	NJ
57-10-3	n-Hexadecanoic acid	10.13	231	ug/kg	98	NJ
	Unknown	11.64	211	ug/kg		J
	Unknown	11.89	285	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	13.98	215	ug/kg	87	NJ
	Unknown	15.06	522	ug/kg		J
	Unknown	15.8	241	ug/kg		J
	Unknown	15.88	288	ug/kg		J
	Unknown	15.94	462	ug/kg		J
	Unknown	16.82	239	ug/kg		J
474-62-4	Campesterol	16.99	415	ug/kg	95	NJ
	Unknown	17.17	363	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	17.64	2050	ug/kg	95	NJ
	Unknown	18.2	213	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	18.78	572	ug/kg	91	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099003

Client ID: RE15-10-7191
Batch ID: 944455
Run Date: 01/25/2010 14:37
Prep Date: 01/22/2010 23:39
Data File: s3a2512.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.6
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	390	ug/kg	78.0	390
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.5	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	136	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099003	Date Received: 01/20/2010 08:45	%Moisture: 14.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7191	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 14:37	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2512.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	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	224	ug/kg		J
	Unknown	2.16	609	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099003	Date Received: 01/20/2010 08:45	%Moisture: 14.6
Client ID: RE15-10-7191	Client: LANL010	Project: LANL01004
Batch ID: 944455	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/25/2010 14:37	Inst: MSD3.I	Dilution: 1
Prep Date: 01/22/2010 23:39	Analyst: JLD1	Inj. Vol: .5 uL
Data File: s3a2512.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.43	309	ug/kg		JA
83-46-5	.beta.-Sitosterol	17.73	398	ug/kg	92	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099014

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 34.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7192
Batch ID: 944455
Run Date: 01/27/2010 13:43
Prep Date: 01/22/2010 23:39
Data File: s3a2712.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	505	ug/kg	101	505
108-95-2	Phenol	U	505	ug/kg	101	505
95-57-8	2-Chlorophenol	U	505	ug/kg	101	505
106-46-7	1,4-Dichlorobenzene	U	505	ug/kg	101	505
621-64-7	N-Nitrosodipropylamine	U	505	ug/kg	101	505
59-50-7	4-Chloro-3-methylphenol	U	505	ug/kg	101	505
83-32-9	Acenaphthene	U	50.5	ug/kg	16.7	50.5
121-14-2	2,4-Dinitrotoluene	U	505	ug/kg	50.5	505
100-02-7	4-Nitrophenol	U	505	ug/kg	167	505
87-86-5	Pentachlorophenol	U	505	ug/kg	126	505
129-00-0	Pyrene	U	50.5	ug/kg	15.1	50.5
110-86-1	Pyridine	U	505	ug/kg	101	505
62-53-3	Aniline	U	505	ug/kg	151	505
111-44-4	bis(2-Chloroethyl) ether	U	505	ug/kg	101	505
541-73-1	1,3-Dichlorobenzene	U	505	ug/kg	101	505
100-51-6	Benzyl alcohol	U	505	ug/kg	151	505
95-50-1	1,2-Dichlorobenzene	U	505	ug/kg	101	505
108-60-1	bis(2-Chloroisopropyl)ether	U	505	ug/kg	101	505
95-48-7	o-Cresol	U	505	ug/kg	101	505
65794-96-9	m,p-Cresols	U	505	ug/kg	151	505
67-72-1	Hexachloroethane	U	505	ug/kg	101	505
98-95-3	Nitrobenzene	U	505	ug/kg	101	505
78-59-1	Isophorone	U	505	ug/kg	101	505
88-75-5	2-Nitrophenol	U	505	ug/kg	101	505
105-67-9	2,4-Dimethylphenol	U	505	ug/kg	177	505
111-91-1	bis(2-Chloroethoxy)methane	U	505	ug/kg	101	505
120-83-2	2,4-Dichlorophenol	U	505	ug/kg	101	505
65-85-0	Benzoic acid	U	1010	ug/kg	252	1010
91-20-3	Naphthalene	U	50.5	ug/kg	15.1	50.5
106-47-8	4-Chloroaniline	U	505	ug/kg	101	505
87-68-3	Hexachlorobutadiene	U	505	ug/kg	101	505
91-57-6	2-Methylnaphthalene	U	50.5	ug/kg	10.1	50.5
77-47-4	Hexachlorocyclopentadiene	U	505	ug/kg	101	505
88-06-2	2,4,6-Trichlorophenol	U	505	ug/kg	101	505
95-95-4	2,4,5-Trichlorophenol	U	505	ug/kg	101	505
91-58-7	2-Chloronaphthalene	U	50.5	ug/kg	16.7	50.5
88-74-4	2-Nitroaniline	U	505	ug/kg	101	505
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	505	ug/kg	101	505

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

SDG Number: 10-1301
Lab Sample ID: 245099014

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.1
Analyst: JLD1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 34.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	505	ug/kg	101	505
606-20-2	2,6-Dinitrotoluene	U	505	ug/kg	50.5	505
208-96-8	Acenaphthylene	U	50.5	ug/kg	15.1	50.5
51-28-5	2,4-Dinitrophenol	U	1010	ug/kg	192	1010
132-64-9	Dibenzofuran	U	505	ug/kg	101	505
84-66-2	Diethylphthalate	U	505	ug/kg	101	505
86-73-7	Fluorene	U	50.5	ug/kg	15.1	50.5
7005-72-3	4-Chlorophenylphenylether	U	505	ug/kg	101	505
534-52-1	2-Methyl-4,6-dinitrophenol	U	505	ug/kg	101	505
100-01-6	4-Nitroaniline	U	505	ug/kg	151	505
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	505	ug/kg	101	505
122-66-7	Azobenzene	U	505	ug/kg	101	505
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	505	ug/kg	101	505
118-74-1	Hexachlorobenzene	U	505	ug/kg	101	505
85-01-8	Phenanthrene	U	50.5	ug/kg	15.1	50.5
120-12-7	Anthracene	U	50.5	ug/kg	10.1	50.5
84-74-2	Di-n-butylphthalate	U	505	ug/kg	101	505
206-44-0	Fluoranthene	U	50.5	ug/kg	15.1	50.5
85-68-7	Butylbenzylphthalate	U	505	ug/kg	101	505
56-55-3	Benzo(a)anthracene	U	50.5	ug/kg	15.1	50.5
91-94-1	3,3'-Dichlorobenzidine	U	505	ug/kg	151	505
218-01-9	Chrysene	U	50.5	ug/kg	15.1	50.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	505	ug/kg	101	505
117-84-0	Di-n-octylphthalate	U	505	ug/kg	101	505
205-99-2	Benzo(b)fluoranthene	U	50.5	ug/kg	15.1	50.5
207-08-9	Benzo(k)fluoranthene	U	50.5	ug/kg	15.1	50.5
50-32-8	Benzo(a)pyrene	U	50.5	ug/kg	15.1	50.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	50.5	ug/kg	15.1	50.5
53-70-3	Dibenzo(a,h)anthracene	U	50.5	ug/kg	15.1	50.5
191-24-2	Benzo(ghi)perylene	U	50.5	ug/kg	15.1	50.5
120-82-1	1,2,4-Trichlorobenzene	U	505	ug/kg	101	505

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.29	281	ug/kg		J
	Unknown Aldol Condensate	3.4	641	ug/kg		JA

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

SDG Number: 10-1301
Lab Sample ID: 245099014

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 34.4
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	11.92	220	ug/kg		J
	Unknown	15.06	1810	ug/kg		J
	Unknown	15.94	1560	ug/kg		J
83-46-5	.beta.-Sitosterol	17.64	439	ug/kg	90	NJ
	Unknown	18.14	267	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099007

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19
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	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410
87-86-5	Pentachlorophenol	U	410	ug/kg	102	410
129-00-0	Pyrene	U	41.0	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	143	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	U	820	ug/kg	205	820
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	410	ug/kg	82.0	410

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

SDG Number: 10-1301
Lab Sample ID: 245099007

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19
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	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	U	41.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene	U	41.0	ug/kg	12.3	41.0
120-12-7	Anthracene	U	41.0	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene	U	41.0	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene	U	41.0	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene	U	41.0	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene	U	41.0	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene	U	41.0	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.0	ug/kg	12.3	41.0
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0
191-24-2	Benzo(ghi)perylene	U	41.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	181	ug/kg		J
	Unknown Aldol Condensate	3.42	683	ug/kg		JA

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

SDG Number: 10-1301
Lab Sample ID: 245099007

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19
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
7785-70-8	1R-.alpha.-Pinene	4.2	220	ug/kg	98	NJ
13466-78-9	3-Carene	4.77	216	ug/kg	96	NJ
	Unknown	17.93	213	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099001

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7194
Batch ID: 944455
Run Date: 01/25/2010 12:52
Prep Date: 01/22/2010 23:39
Data File: s3a2508.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	419	ug/kg	83.8	419
108-95-2	Phenol	U	419	ug/kg	83.8	419
95-57-8	2-Chlorophenol	U	419	ug/kg	83.8	419
106-46-7	1,4-Dichlorobenzene	U	419	ug/kg	83.8	419
621-64-7	N-Nitrosodipropylamine	U	419	ug/kg	83.8	419
59-50-7	4-Chloro-3-methylphenol	U	419	ug/kg	83.8	419
83-32-9	Acenaphthene	U	41.9	ug/kg	13.8	41.9
121-14-2	2,4-Dinitrotoluene	U	419	ug/kg	41.9	419
100-02-7	4-Nitrophenol	U	419	ug/kg	138	419
87-86-5	Pentachlorophenol	U	419	ug/kg	105	419
129-00-0	Pyrene	U	41.9	ug/kg	12.6	41.9
110-86-1	Pyridine	U	419	ug/kg	83.8	419
62-53-3	Aniline	U	419	ug/kg	126	419
111-44-4	bis(2-Chloroethyl) ether	U	419	ug/kg	83.8	419
541-73-1	1,3-Dichlorobenzene	U	419	ug/kg	83.8	419
100-51-6	Benzyl alcohol	U	419	ug/kg	126	419
95-50-1	1,2-Dichlorobenzene	U	419	ug/kg	83.8	419
108-60-1	bis(2-Chloroisopropyl)ether	U	419	ug/kg	83.8	419
95-48-7	o-Cresol	U	419	ug/kg	83.8	419
65794-96-9	m,p-Cresols	U	419	ug/kg	126	419
67-72-1	Hexachloroethane	U	419	ug/kg	83.8	419
98-95-3	Nitrobenzene	U	419	ug/kg	83.8	419
78-59-1	Isophorone	U	419	ug/kg	83.8	419
88-75-5	2-Nitrophenol	U	419	ug/kg	83.8	419
105-67-9	2,4-Dimethylphenol	U	419	ug/kg	147	419
111-91-1	bis(2-Chloroethoxy)methane	U	419	ug/kg	83.8	419
120-83-2	2,4-Dichlorophenol	U	419	ug/kg	83.8	419
65-85-0	Benzoic acid	U	838	ug/kg	210	838
91-20-3	Naphthalene	U	41.9	ug/kg	12.6	41.9
106-47-8	4-Chloroaniline	U	419	ug/kg	83.8	419
87-68-3	Hexachlorobutadiene	U	419	ug/kg	83.8	419
91-57-6	2-Methylnaphthalene	U	41.9	ug/kg	8.38	41.9
77-47-4	Hexachlorocyclopentadiene	U	419	ug/kg	83.8	419
88-06-2	2,4,6-Trichlorophenol	U	419	ug/kg	83.8	419
95-95-4	2,4,5-Trichlorophenol	U	419	ug/kg	83.8	419
91-58-7	2-Chloronaphthalene	U	41.9	ug/kg	13.8	41.9
88-74-4	2-Nitroaniline	U	419	ug/kg	83.8	419
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	419	ug/kg	83.8	419

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

SDG Number: 10-1301
Lab Sample ID: 245099001

Client ID: RE15-10-7194
Batch ID: 944455
Run Date: 01/25/2010 12:52
Prep Date: 01/22/2010 23:39
Data File: s3a2508.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline Dimethylphthalate	U	419	ug/kg	83.8	419
606-20-2	2,6-Dinitrotoluene	U	419	ug/kg	41.9	419
208-96-8	Acenaphthylene	U	41.9	ug/kg	12.6	41.9
51-28-5	2,4-Dinitrophenol	U	838	ug/kg	159	838
132-64-9	Dibenzofuran	U	419	ug/kg	83.8	419
84-66-2	Diethylphthalate	U	419	ug/kg	83.8	419
86-73-7	Fluorene	U	41.9	ug/kg	12.6	41.9
7005-72-3	4-Chlorophenylphenylether	U	419	ug/kg	83.8	419
534-52-1	2-Methyl-4,6-dinitrophenol	U	419	ug/kg	83.8	419
100-01-6	4-Nitroaniline	U	419	ug/kg	126	419
122-39-4	<i>p</i> -Nitroaniline Diphenylamine	U	419	ug/kg	83.8	419
122-66-7	Azobenzene	U	419	ug/kg	83.8	419
101-55-3	<i>1,2</i> -Diphenylhydrazine 4-Bromophenylphenylether	U	419	ug/kg	83.8	419
118-74-1	Hexachlorobenzene	U	419	ug/kg	83.8	419
85-01-8	Phenanthrene	U	41.9	ug/kg	12.6	41.9
120-12-7	Anthracene	U	41.9	ug/kg	8.38	41.9
84-74-2	Di-n-butylphthalate	U	419	ug/kg	83.8	419
206-44-0	Fluoranthene	U	41.9	ug/kg	12.6	41.9
85-68-7	Butylbenzylphthalate	U	419	ug/kg	83.8	419
56-55-3	Benzo(a)anthracene	U	41.9	ug/kg	12.6	41.9
91-94-1	3,3'-Dichlorobenzidine	U	419	ug/kg	126	419
218-01-9	Chrysene	U	41.9	ug/kg	12.6	41.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	419	ug/kg	83.8	419
117-84-0	Di-n-octylphthalate	U	419	ug/kg	83.8	419
205-99-2	Benzo(b)fluoranthene	U	41.9	ug/kg	12.6	41.9
207-08-9	Benzo(k)fluoranthene	U	41.9	ug/kg	12.6	41.9
50-32-8	Benzo(a)pyrene	U	41.9	ug/kg	12.6	41.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.9	ug/kg	12.6	41.9
53-70-3	Dibenzo(a,h)anthracene	U	41.9	ug/kg	12.6	41.9
191-24-2	Benzo(ghi)perylene	U	41.9	ug/kg	12.6	41.9
120-82-1	1,2,4-Trichlorobenzene	U	419	ug/kg	83.8	419

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.33	301	ug/kg		J
	Unknown Aldol Condensate	3.43	573	ug/kg		JA

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

Page 3 of 3

SDG Number:	10-1301	Date Collected:	01/13/2010 12:00	Matrix:	R
Lab Sample ID:	245099001	Date Received:	01/20/2010 08:45	%Moisture:	20.7
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-7194	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	944455	Inst:	MSD3.I	Dilution:	1
Run Date:	01/25/2010 12:52	Analyst:	JLD1	Inj. Vol:	.5 uL
Prep Date:	01/22/2010 23:39	Aliquot:	30.07 g	Final Volume:	1 mL
Data File:	s3a2508.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
83-46-5	.beta.-Sitosterol	17.73	374	ug/kg	94	NJ

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7195	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 15:04	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2513.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	73.9	370
108-95-2	Phenol	U	370	ug/kg	73.9	370
95-57-8	2-Chlorophenol	U	370	ug/kg	73.9	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	73.9	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	73.9	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	73.9	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.4	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	73.9	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	73.9	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	73.9	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	73.9	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	73.9	370
95-48-7	o-Cresol	U	370	ug/kg	73.9	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	73.9	370
98-95-3	Nitrobenzene	U	370	ug/kg	73.9	370
78-59-1	Isophorone	U	370	ug/kg	73.9	370
88-75-5	2-Nitrophenol	U	370	ug/kg	73.9	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	73.9	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	73.9	370
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	73.9	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	73.9	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.39	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	73.9	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	73.9	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	73.9	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	73.9	370
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	370	ug/kg	73.9	370

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

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SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099004	Date Received: 01/20/2010 08:45	%Moisture: 10.1
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7195	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 15:04	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2513.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	370	ug/kg	73.9	370
606-20-2	2,6-Dinitrotoluene	U	370	ug/kg	37.0	370
208-96-8	Acenaphthylene	U	37.0	ug/kg	11.1	37.0
51-28-5	2,4-Dinitrophenol	U	739	ug/kg	140	739
132-64-9	Dibenzofuran	U	370	ug/kg	73.9	370
84-66-2	Diethylphthalate	U	370	ug/kg	73.9	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	73.9	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	73.9	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	73.9	370
122-66-7	Azobenzene	U	370	ug/kg	73.9	370
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	73.9	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	73.9	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.39	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	73.9	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	73.9	370
56-55-3	Benzo(a)anthracene	U	37.0	ug/kg	11.1	37.0
91-94-1	3,3'-Dichlorobenzidine	U	370	ug/kg	111	370
218-01-9	Chrysene	U	37.0	ug/kg	11.1	37.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	370	ug/kg	73.9	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	73.9	370
205-99-2	Benzo(b)fluoranthene	U	37.0	ug/kg	11.1	37.0
207-08-9	Benzo(k)fluoranthene	U	37.0	ug/kg	11.1	37.0
50-32-8	Benzo(a)pyrene	U	37.0	ug/kg	11.1	37.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.0	ug/kg	11.1	37.0
53-70-3	Dibenzo(a,h)anthracene	U	37.0	ug/kg	11.1	37.0
191-24-2	Benzo(ghi)perylene	U	37.0	ug/kg	11.1	37.0
120-82-1	1,2,4-Trichlorobenzene	U	370	ug/kg	73.9	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.15	1490	ug/kg		J
	Unknown	2.32	170	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099004

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.1
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	3.43	321	ug/kg		JA
17993-84-9	N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	15.22	316	ug/kg	30	NJ
	Unknown	16.09	230	ug/kg		J
	Unknown	17.22	174	ug/kg		J
	Unknown	17.73	500	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099005

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.7
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	436	ug/kg	87.1	436
108-95-2	Phenol	U	436	ug/kg	87.1	436
95-57-8	2-Chlorophenol	U	436	ug/kg	87.1	436
106-46-7	1,4-Dichlorobenzene	U	436	ug/kg	87.1	436
621-64-7	N-Nitrosodipropylamine	U	436	ug/kg	87.1	436
59-50-7	4-Chloro-3-methylphenol	U	436	ug/kg	87.1	436
83-32-9	Acenaphthene	U	43.6	ug/kg	14.4	43.6
121-14-2	2,4-Dinitrotoluene	U	436	ug/kg	43.6	436
100-02-7	4-Nitrophenol	U	436	ug/kg	144	436
87-86-5	Pentachlorophenol	U	436	ug/kg	109	436
129-00-0	Pyrene	U	43.6	ug/kg	13.1	43.6
110-86-1	Pyridine	U	436	ug/kg	87.1	436
62-53-3	Aniline	U	436	ug/kg	131	436
111-44-4	bis(2-Chloroethyl) ether	U	436	ug/kg	87.1	436
541-73-1	1,3-Dichlorobenzene	U	436	ug/kg	87.1	436
100-51-6	Benzyl alcohol	U	436	ug/kg	131	436
95-50-1	1,2-Dichlorobenzene	U	436	ug/kg	87.1	436
108-60-1	bis(2-Chloroisopropyl)ether	U	436	ug/kg	87.1	436
95-48-7	o-Cresol	U	436	ug/kg	87.1	436
65794-96-9	m,p-Cresols	U	436	ug/kg	131	436
67-72-1	Hexachloroethane	U	436	ug/kg	87.1	436
98-95-3	Nitrobenzene	U	436	ug/kg	87.1	436
78-59-1	Isophorone	U	436	ug/kg	87.1	436
88-75-5	2-Nitrophenol	U	436	ug/kg	87.1	436
105-67-9	2,4-Dimethylphenol	U	436	ug/kg	152	436
111-91-1	bis(2-Chloroethoxy)methane	U	436	ug/kg	87.1	436
120-83-2	2,4-Dichlorophenol	U	436	ug/kg	87.1	436
65-85-0	Benzoic acid	U	871	ug/kg	218	871
91-20-3	Naphthalene	U	43.6	ug/kg	13.1	43.6
106-47-8	4-Chloroaniline	U	436	ug/kg	87.1	436
87-68-3	Hexachlorobutadiene	U	436	ug/kg	87.1	436
91-57-6	2-Methylnaphthalene	U	43.6	ug/kg	8.71	43.6
77-47-4	Hexachlorocyclopentadiene	U	436	ug/kg	87.1	436
88-06-2	2,4,6-Trichlorophenol	U	436	ug/kg	87.1	436
95-95-4	2,4,5-Trichlorophenol	U	436	ug/kg	87.1	436
91-58-7	2-Chloronaphthalene	U	43.6	ug/kg	14.4	43.6
88-74-4	2-Nitroaniline	U	436	ug/kg	87.1	436
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	436	ug/kg	87.1	436

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

SDG Number: 10-1301
Lab Sample ID: 245099005

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 23.7
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	436	ug/kg	87.1	436
606-20-2	2,6-Dinitrotoluene	U	436	ug/kg	43.6	436
208-96-8	Acenaphthylene	U	43.6	ug/kg	13.1	43.6
51-28-5	2,4-Dinitrophenol	U	871	ug/kg	166	871
132-64-9	Dibenzofuran	U	436	ug/kg	87.1	436
84-66-2	Diethylphthalate	U	436	ug/kg	87.1	436
86-73-7	Fluorene	U	43.6	ug/kg	13.1	43.6
7005-72-3	4-Chlorophenylphenylether	U	436	ug/kg	87.1	436
534-52-1	2-Methyl-4,6-dinitrophenol	U	436	ug/kg	87.1	436
100-01-6	4-Nitroaniline	U	436	ug/kg	131	436
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	436	ug/kg	87.1	436
122-66-7	Azobenzene	U	436	ug/kg	87.1	436
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	436	ug/kg	87.1	436
118-74-1	Hexachlorobenzene	U	436	ug/kg	87.1	436
85-01-8	Phenanthrene	U	43.6	ug/kg	13.1	43.6
120-12-7	Anthracene	U	43.6	ug/kg	8.71	43.6
84-74-2	Di-n-butylphthalate	U	436	ug/kg	87.1	436
206-44-0	Fluoranthene	U	43.6	ug/kg	13.1	43.6
85-68-7	Butylbenzylphthalate	U	436	ug/kg	87.1	436
56-55-3	Benzo(a)anthracene	U	43.6	ug/kg	13.1	43.6
91-94-1	3,3'-Dichlorobenzidine	U	436	ug/kg	131	436
218-01-9	Chrysene	U	43.6	ug/kg	13.1	43.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	436	ug/kg	87.1	436
117-84-0	Di-n-octylphthalate	U	436	ug/kg	87.1	436
205-99-2	Benzo(b)fluoranthene	U	43.6	ug/kg	13.1	43.6
207-08-9	Benzo(k)fluoranthene	U	43.6	ug/kg	13.1	43.6
50-32-8	Benzo(a)pyrene	U	43.6	ug/kg	13.1	43.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.6	ug/kg	13.1	43.6
53-70-3	Dibenzo(a,h)anthracene	U	43.6	ug/kg	13.1	43.6
191-24-2	Benzo(ghi)perylene	U	43.6	ug/kg	13.1	43.6
120-82-1	1,2,4-Trichlorobenzene	U	436	ug/kg	87.1	436

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	4.22	13900	ug/kg	96	NJ
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	4.89	963	ug/kg	96	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099005

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.7
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	6	1130	ug/kg		J
1197-01-9	Benzenemethanol, .alpha.,.alpha.,4-trime	6.06	747	ug/kg	95	NJ
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	6.71	955	ug/kg	99	NJ
29050-33-7	(+)-4-Carene	7.07	942	ug/kg	93	NJ
	Unknown	10.2	1070	ug/kg		J
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	10.63	1640	ug/kg	98	NJ
	Unknown	10.95	1290	ug/kg		J
	Unknown	11.55	282	ug/kg		J
	Unknown	11.6	577	ug/kg		J
	Unknown	11.63	455	ug/kg		J
	Unknown	11.68	673	ug/kg		J
	Unknown	11.8	474	ug/kg		J
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	12	1390	ug/kg	38	NJ
2223-54-3	1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	12.06	392	ug/kg	35	NJ
5508-58-7	Andrographolide	12.13	257	ug/kg	15	NJ
49599-09-9	Xanthen-9-one, 1-hydroxy-3,5,8-trimethoxy	12.29	3080	ug/kg	50	NJ
68284-24-2	Cycloheptane, 1,3,5-tris(methylene)-	12.32	1440	ug/kg	25	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	3590	ug/kg	99	NJ
	Unknown	12.54	180	ug/kg		J
56554-57-5	5,8,11-Heptadecatriynoic acid, methyl es	12.77	177	ug/kg	53	NJ
1000125-88-0	.alpha.-Tetraloxime, 8-fluoro-5,6-dimeth	12.82	194	ug/kg	25	NJ
137987-78-1	Benzothiophene-3-carboxylic acid, 2-amin	12.89	364	ug/kg	64	NJ
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.95	1020	ug/kg	91	NJ
3056-71-1	Benzenebutanamide, N-phenyl-	13.11	237	ug/kg	25	NJ
1000128-34-5	Pregn-4-en-17,21-diol-3,20-dione, 9,11-e	13.34	225	ug/kg	10	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099006

Client ID: RE15-10-7197
Batch ID: 944455
Run Date: 01/26/2010 15:03
Prep Date: 01/22/2010 23:39
Data File: s3a2614.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 14.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388
108-95-2	Phenol	U	388	ug/kg	77.6	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	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	96.9	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.6	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388
95-48-7	o-Cresol	U	388	ug/kg	77.6	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388
78-59-1	Isophorone	U	388	ug/kg	77.6	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388
65-85-0	Benzoic acid	U	776	ug/kg	194	776
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.6	388
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	388	ug/kg	77.6	388

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099006	Date Received: 01/20/2010 08:45	%Moisture: 14.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7197	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 15:03	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.14 g	Final Volume: 1 mL
Data File: s3a2614.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	388	ug/kg	77.6	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	776	ug/kg	147	776
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388
122-66-7	Azobenzene	U	388	ug/kg	77.6	388
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	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	77.6	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	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	77.6	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.15	437	ug/kg		J
	Unknown	2.19	170	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.14 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 14.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parinname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.33	244	ug/kg		J
	Unknown Aldol Condensate	3.42	430	ug/kg		JA
	Unknown	17.19	311	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.71	667	ug/kg	96	NJ

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	%Moisture: 23.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7219	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 14:09	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s3a2713.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	433	ug/kg	86.5	433
108-95-2	Phenol	U	433	ug/kg	86.5	433
95-57-8	2-Chlorophenol	U	433	ug/kg	86.5	433
106-46-7	1,4-Dichlorobenzene	U	433	ug/kg	86.5	433
621-64-7	N-Nitrosodipropylamine	U	433	ug/kg	86.5	433
59-50-7	4-Chloro-3-methylphenol	U	433	ug/kg	86.5	433
83-32-9	Acenaphthene	U	43.3	ug/kg	14.3	43.3
121-14-2	2,4-Dinitrotoluene	U	433	ug/kg	43.3	433
100-02-7	4-Nitrophenol	U	433	ug/kg	143	433
87-86-5	Pentachlorophenol	U	433	ug/kg	108	433
129-00-0	Pyrene	U	43.3	ug/kg	13.0	43.3
110-86-1	Pyridine	U	433	ug/kg	86.5	433
62-53-3	Aniline	U	433	ug/kg	130	433
111-44-4	bis(2-Chloroethyl) ether	U	433	ug/kg	86.5	433
541-73-1	1,3-Dichlorobenzene	U	433	ug/kg	86.5	433
100-51-6	Benzyl alcohol	U	433	ug/kg	130	433
95-50-1	1,2-Dichlorobenzene	U	433	ug/kg	86.5	433
108-60-1	bis(2-Chloroisopropyl)ether	U	433	ug/kg	86.5	433
95-48-7	o-Cresol	U	433	ug/kg	86.5	433
65794-96-9	m,p-Cresols	U	433	ug/kg	130	433
67-72-1	Hexachloroethane	U	433	ug/kg	86.5	433
98-95-3	Nitrobenzene	U	433	ug/kg	86.5	433
78-59-1	Isophorone	U	433	ug/kg	86.5	433
88-75-5	2-Nitrophenol	U	433	ug/kg	86.5	433
105-67-9	2,4-Dimethylphenol	U	433	ug/kg	151	433
111-91-1	bis(2-Chloroethoxy)methane	U	433	ug/kg	86.5	433
120-83-2	2,4-Dichlorophenol	U	433	ug/kg	86.5	433
65-85-0	Benzoic acid	U	865	ug/kg	216	865
91-20-3	Naphthalene	U	43.3	ug/kg	13.0	43.3
106-47-8	4-Chloroaniline	U	433	ug/kg	86.5	433
87-68-3	Hexachlorobutadiene	U	433	ug/kg	86.5	433
91-57-6	2-Methylnaphthalene	U	43.3	ug/kg	8.65	43.3
77-47-4	Hexachlorocyclopentadiene	U	433	ug/kg	86.5	433
88-06-2	2,4,6-Trichlorophenol	U	433	ug/kg	86.5	433
95-95-4	2,4,5-Trichlorophenol	U	433	ug/kg	86.5	433
91-58-7	2-Chloronaphthalene	U	43.3	ug/kg	14.3	43.3
88-74-4	2-Nitroaniline	U	433	ug/kg	86.5	433
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	433	ug/kg	86.5	433

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099015	Date Received: 01/20/2010 08:45	% Moisture: 23.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7219	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/27/2010 14:09	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s3a2713.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	433	ug/kg	86.5	433
606-20-2	2,6-Dinitrotoluene	U	433	ug/kg	43.3	433
208-96-8	Acenaphthylene	U	43.3	ug/kg	13.0	43.3
51-28-5	2,4-Dinitrophenol	U	865	ug/kg	164	865
132-64-9	Dibenzofuran	U	433	ug/kg	86.5	433
84-66-2	Diethylphthalate	U	433	ug/kg	86.5	433
86-73-7	Fluorene	U	43.3	ug/kg	13.0	43.3
7005-72-3	4-Chlorophenylphenylether	U	433	ug/kg	86.5	433
534-52-1	2-Methyl-4,6-dinitrophenol	U	433	ug/kg	86.5	433
100-01-6	4-Nitroaniline	U	433	ug/kg	130	433
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	433	ug/kg	86.5	433
122-66-7	Azobenzene	U	433	ug/kg	86.5	433
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	433	ug/kg	86.5	433
118-74-1	Hexachlorobenzene	U	433	ug/kg	86.5	433
85-01-8	Phenanthrene	U	43.3	ug/kg	13.0	43.3
120-12-7	Anthracene	U	43.3	ug/kg	8.65	43.3
84-74-2	Di-n-butylphthalate	U	433	ug/kg	86.5	433
206-44-0	Fluoranthene	U	43.3	ug/kg	13.0	43.3
85-68-7	Butylbenzylphthalate	U	433	ug/kg	86.5	433
56-55-3	Benzo(a)anthracene	U	43.3	ug/kg	13.0	43.3
91-94-1	3,3'-Dichlorobenzidine	U	433	ug/kg	130	433
218-01-9	Chrysene	U	43.3	ug/kg	13.0	43.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	433	ug/kg	86.5	433
117-84-0	Di-n-octylphthalate	U	433	ug/kg	86.5	433
205-99-2	Benzo(b)fluoranthene	U	43.3	ug/kg	13.0	43.3
207-08-9	Benzo(k)fluoranthene	U	43.3	ug/kg	13.0	43.3
50-32-8	Benzo(a)pyrene	U	43.3	ug/kg	13.0	43.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.3	ug/kg	13.0	43.3
53-70-3	Dibenzo(a,h)anthracene	U	43.3	ug/kg	13.0	43.3
191-24-2	Benzo(ghi)perylene	U	43.3	ug/kg	13.0	43.3
120-82-1	1,2,4-Trichlorobenzene	U	433	ug/kg	86.5	433

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.09	284	ug/kg		J
	Unknown	2.28	327	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099015

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.4	609	ug/kg		JA
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.87	463	ug/kg	93	NJ
	Unknown	11.89	317	ug/kg		J
	Unknown	11.92	801	ug/kg		J
112-95-8	Eicosane	13.32	265	ug/kg	96	NJ
	Unknown	13.98	200	ug/kg		J
	Unknown	14.44	410	ug/kg		J
	Unknown	15.38	319	ug/kg		J
	Unknown	15.73	353	ug/kg		J
	Unknown	15.8	458	ug/kg		J
	Unknown	15.88	310	ug/kg		J
	Unknown	15.93	395	ug/kg		J
4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	16.99	360	ug/kg	90	NJ
	Unknown	17.17	398	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	17.64	1460	ug/kg	95	NJ
	Unknown	18.78	375	ug/kg		J

QC Summary

Semi-Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1301

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
1202022468	MB for batch 944454	78	73	82	83	69	109
245099001	RE15-10-7194	64	59	67	69	58	89
1202022470	RE15-10-7194MS	60	56	58	64	64	77
1202022471	RE15-10-7194MSD	66	61	64	71	65	79
245099002	RE15-10-7186	57	54	67	81	50	76
245099003	RE15-10-7191	46	42	55	62	37	53
245099004	RE15-10-7195	63	60	71	76	59	77
245099005	RE15-10-7196	59	55	61	66	56	83
245099008	RE15-10-7184	44	42	46	47	42	64
245099011	RE15-10-7187	46	47	47	54	54	79
245099012	RE15-10-7188	51	51	54	62	59	94
1202022469	LCS for batch 944454	74	70	71	77	81	96
245099006	RE15-10-7197	66	62	67	68	80	91
245099007	RE15-10-7193	63	60	65	72	78	114
245099009	RE15-10-7185	59	56	61	64	73	95
245099010	RE15-10-7189	65	61	65	68	81	100
245099013	RE15-10-7190	56	53	57	62	72	80
245099014	RE15-10-7192	52	52	52	58	72	90
245099015	RE15-10-7219	58	56	59	65	71	96

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: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944454

Matrix: SOIL

Lab Sample ID: 1202022469

Instrument: MSD3.I

Analysis Date: 01/26/2010 14:10

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

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	949	57	31-95
108-95-2	LCS Phenol	1670	0.0	1260	76	37-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1390	83	40-105
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1330	80	34-103
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1170	70	36-110
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1290	78	46-114
83-32-9	LCS Acenaphthene	1670	0.0	1280	77	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1370	82	49-107
100-02-7	LCS 4-Nitrophenol	1670	0.0	1090	66	33-110
87-86-5	LCS Pentachlorophenol	1670	0.0	1330	80	38-116
129-00-0	LCS Pyrene	1670	0.0	1430	86	43-108
110-86-1	LCS Pyridine	1670	0.0	1140	69	13-129
62-53-3	LCS Aniline	1670	0.0	671	40	30-121
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1020	61	37-106
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1320	79	33-103
100-51-6	LCS Benzyl alcohol	1670	0.0	1240	74	31-100
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1340	81	34-108
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1010	61	34-120
95-48-7	LCS o-Cresol	1670	0.0	1330	80	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1430	86	43-118
67-72-1	LCS Hexachloroethane	1670	0.0	1230	74	34-105
98-95-3	LCS Nitrobenzene	1670	0.0	1200	72	37-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 4

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944454

Matrix: SOIL

Lab Sample ID: 1202022469

Instrument: MSD3.I

Analysis Date: 01/26/2010 14:10

Dilution: 1

Analyst: JLD1

Pre Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

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	1200	72	41-108
88-75-5	LCS 2-Nitrophenol	1670	0.0	1340	81	35-112
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1290	77	35-114
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1180	71	40-109
120-83-2	LCS 2,4-Dichlorophenol	1670	0.0	1380	83	45-109
65-85-0	LCS Benzoic acid	3330	0.0	3030	91	27-137
91-20-3	LCS Naphthalene	1670	0.0	1180	71	35-105
106-47-8	LCS 4-Chloroaniline	1670	0.0	996	60	30-122
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1450	87	37-111
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1330	80	40-106
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1550	93	24-135
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1370	82	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	1350	81	44-104
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1100	66	44-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1230	74	48-113
131-11-3	LCS Dimethylphthalate	1670	0.0	1340	81	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	80	43-104
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1300	78	32-114
132-64-9	LCS Dibenzofuran	1670	0.0	1690	101	47-112
84-66-2	LCS Diethylphthalate	1670	0.0	1360	82	50-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944454

Matrix: SOIL

Lab Sample ID: 1202022469

Instrument: MSD3.I

Analysis Date: 01/26/2010 14:10

Dilution: 1

Analyst: JLD1

Pred Batch II 944454

Inj. Vol: .5 uL

Batch ID: 944455

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	LCS Fluorene	1670	0.0	1360	81	49-102
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1440	86	50-109
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1340	81	35-114
100-01-6	LCS 4-Nitroaniline <i>p-Nitroaniline</i>	1670	0.0	1370	82	44-139
122-39-4	LCS Diphenylamine	1670	0.0	1340	80	46-111
122-66-7	LCS Azobenzene <i>1,2-Diphenylhydrazine</i>	1670	0.0	1110	67	40-119
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1230	74	45-112
118-74-1	LCS Hexachlorobenzene	1670	0.0	1270	76	44-115
85-01-8	LCS Phenanthrene	1670	0.0	1320	79	45-107
120-12-7	LCS Anthracene	1670	0.0	1320	79	46-106
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1410	84	52-115
206-44-0	LCS Fluoranthene	1670	0.0	1530	92	50-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1380	83	49-115
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1330	80	48-105
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1100	66	45-98
218-01-9	LCS Chrysene	1670	0.0	1370	82	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	1560	93	39-123
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1470	88	46-111
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1470	88	46-114
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1480	89	49-112
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1430	86	45-128

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 4

SDG Number: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944454

Matrix: SOIL

Lab Sample ID:1202022469

Instrument: MSD3.I

Analysis Date: 01/26/2010 14:10

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

CAS No	Paramname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS Dibenzo(a,h)anthracene	1670	0.0	1460	88	44-131
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1390	83	42-128
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1410	85	36-109

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1301

Sample Type: Matrix Spike

Client ID: RE15-10-7194MS

Matrix: R

Lab Sample ID: 1202022470

%Moisture: 20.7

Instrument: MSD3.I

Analysis Date: 01/25/2010 13:18

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

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	2090	0.00 U	962	46	32-90
108-95-2	MS Phenol	2090	0.00 U	1300	62	32-105
95-57-8	MS 2-Chlorophenol	2090	0.00 U	1380	66	33-106
106-46-7	MS 1,4-Dichlorobenzene	2090	0.00 U	1310	63	33-95
621-64-7	MS N-Nitrosodipropylamine	2090	0.00 U	1200	58	31-109
59-50-7	MS 4-Chloro-3-methylphenol	2090	0.00 U	1390	67	38-119
83-32-9	MS Acenaphthene	2090	0.00 U	1360	65	39-100
121-14-2	MS 2,4-Dinitrotoluene	2090	0.00 U	1420	68	42-107
100-02-7	MS 4-Nitrophenol	2090	0.00 U	1330	63	24-120
87-86-5	MS Pentachlorophenol	2090	0.00 U	1470	70	26-121
129-00-0	MS Pyrene	2090	0.00 U	1500	71	34-120
110-86-1	MS Pyridine	2090	0.00 U	1050	50	30-95
62-53-3	MS Aniline	2090	0.00 U	1140	54	34-111
111-44-4	MS bis(2-Chloroethyl) ether	2090	0.00 U	1040	50	34-101
541-73-1	MS 1,3-Dichlorobenzene	2090	0.00 U	1310	63	31-97
100-51-6	MS Benzyl alcohol	2090	0.00 U	1540	74	17-120
95-50-1	MS 1,2-Dichlorobenzene	2090	0.00 U	1340	64	32-102
108-60-1	MS bis(2-Chloroisopropyl)ether	2090	0.00 U	1040	50	32-113
95-48-7	MS o-Cresol	2090	0.00 U	1310	62	31-119
65794-96-9	MS m,p-Cresols	2090	0.00 U	1460	70	35-125
67-72-1	MS Hexachloroethane	2090	0.00 U	1220	58	30-100
98-95-3	MS Nitrobenzene	2090	0.00 U	1240	59	33-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 8

SDG Number: 10-1301

Client ID: RE15-10-7194MS

Lab Sample ID: 1202022470

Instrument: MSD3.I

Analyst: JLD1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 20.7

Analysis Date: 01/25/2010 13:18

Dilution: 1

Prep Batch II 944454

Batch ID: 944455

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	2090	0.00 U	1270	61	34-110
88-75-5	MS 2-Nitrophenol	2090	0.00 U	1350	65	32-108
105-67-9	MS 2,4-Dimethylphenol	2090	0.00 U	1380	66	32-115
111-91-1	MS bis(2-Chloroethoxy)methane	2090	0.00 U	1230	59	35-108
120-83-2	MS 2,4-Dichlorophenol	2090	0.00 U	1450	69	38-110
65-85-0	MS Benzoic acid	4190	0.00 U	3130	75	18-134
91-20-3	MS Naphthalene	2090	0.00 U	1220	58	31-105
106-47-8	MS 4-Chloroaniline	2090	0.00 U	1120	53	29-123
87-68-3	MS Hexachlorobutadiene	2090	0.00 U	1440	69	31-109
91-57-6	MS 2-Methylnaphthalene	2090	0.00 U	1390	66	32-110
77-47-4	MS Hexachlorocyclopentadiene	2090	0.00 U	1600	77	21-122
88-06-2	MS 2,4,6-Trichlorophenol	2090	0.00 U	1480	71	37-108
95-95-4	MS 2,4,5-Trichlorophenol	2090	0.00 U	1520	73	37-116
91-58-7	MS 2-Chloronaphthalene	2090	0.00 U	1410	68	37-103
88-74-4	MS 2-Nitroaniline <i>o</i> -Nitroaniline	2090	0.00 U	1180	56	36-115
99-09-2	MS 3-Nitroaniline <i>m</i> -Nitroaniline	2090	0.00 U	1290	61	39-117
131-11-3	MS Dimethylphthalate	2090	0.00 U	1430	68	41-105
606-20-2	MS 2,6-Dinitrotoluene	2090	0.00 U	1380	66	41-103
208-96-8	MS Acenaphthylene	2090	0.00 U	1430	68	41-103
51-28-5	MS 2,4-Dinitrophenol	2090	0.00 U	1290	62	25-104
132-64-9	MS Dibenzofuran	2090	0.00 U	1790	85	40-114
84-66-2	MS Diethylphthalate	2090	0.00 U	1430	68	43-110

Semi-Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1301

Client ID: RE15-10-7194MS

Lab Sample ID: 1202022470

Instrument: MSD3.I

Analyst: JLD1

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

% Moisture: 20.7

Analysis Date: 01/25/2010 13:18

Dilution: 1

Pren Batch II 944454

Batch ID: 944455

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	2090	0.00 U	1420	68	48-99
7005-72-3	MS 4-Chlorophenylphenylether	2090	0.00 U	1480	71	42-111
534-52-1	MS 2-Methyl-4,6-dinitrophenol	2090	0.00 U	1460	70	19-118
100-01-6	MS 4-Nitroaniline <i>p</i> -Nitroaniline	2090	0.00 U	1340	64	35-139
122-39-4	MS Diphenylamine	2090	0.00 U	1510	72	41-112
122-66-7	MS Azobenzene <i>1,2</i> -Diphenylhydrazine	2090	0.00 U	1300	62	37-118
101-55-3	MS 4-Bromophenylphenylether	2090	0.00 U	1370	65	39-112
118-74-1	MS Hexachlorobenzene	2090	0.00 U	1380	66	38-113
85-01-8	MS Phenanthrene	2090	0.00 U	1430	69	38-110
120-12-7	MS Anthracene	2090	0.00 U	1470	70	38-112
84-74-2	MS Di-n-butylphthalate	2090	0.00 U	1440	69	42-119
206-44-0	MS Fluoranthene	2090	0.00 U	1440	69	38-119
85-68-7	MS Butylbenzylphthalate	2090	0.00 U	1430	68	39-126
56-55-3	MS Benzo(a)anthracene	2090	0.00 U	1430	68	39-110
91-94-1	MS 3,3'-Dichlorobenzidine	2090	0.00 U	875	42	35-106
218-01-9	MS Chrysene	2090	0.00 U	1480	71	39-109
117-81-7	MS bis(2-Ethylhexyl)phthalate	2090	0.00 U	1420	68	40-125
117-84-0	MS Di-n-octylphthalate	2090	0.00 U	1380	66	30-147
205-99-2	MS Benzo(b)fluoranthene	2090	0.00 U	1530	73	38-117
207-08-9	MS Benzo(k)fluoranthene	2090	0.00 U	1520	72	39-120
50-32-8	MS Benzo(a)pyrene	2090	0.00 U	1590	76	40-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	2090	0.00 U	1570	75	32-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1301

Sample Type: Matrix Spike

Client ID: RE15-10-7194MS

Matrix: R

Lab Sample ID: 1202022470

% Moisture: 20.7

Instrument: MSD3.I

Analysis Date: 01/25/2010 13:18

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

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	2090	0.00 U	1580	76	32-124
191-24-2	MS Benzo(ghi)perylene	2090	0.00 U	1500	72	28-119
120-82-1	MS 1,2,4-Trichlorobenzene	2090	0.00 U	1440	69	31-105

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1301

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7194MSD

Matrix: R

Lab Sample ID: 1202022471

%Moisture: 20.7

Instrument: MSD3.I

Analysis Date: 01/25/2010 13:44

Dilution: 1

Analyst: JLD1

Pren Batch II 944454

Inj. Vol: .5 uL

Batch ID: 944455

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	2090	0.00	U	1080	52	32-90	12	0-30
108-95-2	MSD Phenol	2090	0.00	U	1420	68	32-105	9	0-30
95-57-8	MSD 2-Chlorophenol	2090	0.00	U	1520	73	33-106	10	0-30
106-46-7	MSD 1,4-Dichlorobenzene	2090	0.00	U	1490	71	33-95	13	0-30
621-64-7	MSD N-Nitrosodipropylamine	2090	0.00	U	1320	63	31-109	9	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	2090	0.00	U	1430	68	38-119	3	0-30
83-32-9	MSD Acenaphthene	2090	0.00	U	1470	70	39-100	8	0-30
121-14-2	MSD 2,4-Dinitrotoluene	2090	0.00	U	1490	71	42-107	5	0-30
100-02-7	MSD 4-Nitrophenol	2090	0.00	U	1300	62	24-120	2	0-30
87-86-5	MSD Pentachlorophenol	2090	0.00	U	1510	72	26-121	2	0-30
129-00-0	MSD Pyrene	2090	0.00	U	1550	74	34-120	4	0-30
110-86-1	MSD Pyridine	2090	0.00	U	1190	57	30-95	12	0-30
62-53-3	MSD Aniline	2090	0.00	U	1230	59	34-111	8	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	2090	0.00	U	1160	56	34-101	11	0-30
541-73-1	MSD 1,3-Dichlorobenzene	2090	0.00	U	1470	70	31-97	11	0-30
100-51-6	MSD Benzyl alcohol	2090	0.00	U	1680	80	17-120	8	0-30
95-50-1	MSD 1,2-Dichlorobenzene	2090	0.00	U	1510	72	32-102	12	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	2090	0.00	U	1150	55	32-113	10	0-30
95-48-7	MSD o-Cresol	2090	0.00	U	1420	68	31-119	9	0-30
65794-96-9	MSD m,p-Cresols	2090	0.00	U	1550	74	35-125	6	0-30
67-72-1	MSD Hexachloroethane	2090	0.00	U	1380	66	30-100	12	0-30
98-95-3	MSD Nitrobenzene	2090	0.00	U	1380	66	33-108	11	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1301

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7194MSD

Matrix: R

Lab Sample ID: 1202022471

%Moisture: 20.7

Instrument: MSD3.I

Analysis Date: 01/25/2010 13:44

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
78-59-1	MSD Isophorone	2090	0.00	U	1380	66	34-110	8	0-30
88-75-5	MSD 2-Nitrophenol	2090	0.00	U	1500	72	32-108	10	0-30
105-67-9	MSD 2,4-Dimethylphenol	2090	0.00	U	1470	70	32-115	7	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	2090	0.00	U	1350	65	35-108	9	0-30
120-83-2	MSD 2,4-Dichlorophenol	2090	0.00	U	1540	74	38-110	6	0-30
65-85-0	MSD Benzoic acid	4180	0.00	U	3330	80	18-134	6	0-30
91-20-3	MSD Naphthalene	2090	0.00	U	1340	64	31-105	10	0-30
106-47-8	MSD 4-Chloroaniline	2090	0.00	U	1210	58	29-123	8	0-30
87-68-3	MSD Hexachlorobutadiene	2090	0.00	U	1600	76	31-109	11	0-30
91-57-6	MSD 2-Methylnaphthalene	2090	0.00	U	1490	71	32-110	7	0-30
77-47-4	MSD Hexachlorocyclopentadiene	2090	0.00	U	1800	86	21-122	12	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	2090	0.00	U	1590	76	37-108	7	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	2090	0.00	U	1620	77	37-116	6	0-30
91-58-7	MSD 2-Chloronaphthalene	2090	0.00	U	1570	75	37-103	10	0-30
88-74-4	MSD 2-Nitroaniline <i>o</i> -Nitroaniline	2090	0.00	U	1280	61	36-115	8	0-30
99-09-2	MSD 3-Nitroaniline <i>m</i> -Nitroaniline	2090	0.00	U	1380	66	39-117	7	0-30
131-11-3	MSD Dimethylphthalate	2090	0.00	U	1540	73	41-105	7	0-30
606-20-2	MSD 2,6-Dinitrotoluene	2090	0.00	U	1480	71	41-103	7	0-30
208-96-8	MSD Acenaphthylene	2090	0.00	U	1550	74	41-103	8	0-30
51-28-5	MSD 2,4-Dinitrophenol	2090	0.00	U	1310	63	25-104	1	0-30
132-64-9	MSD Dibenzofuran	2090	0.00	U	1950	93	40-114	9	0-30
84-66-2	MSD Diethylphthalate	2090	0.00	U	1520	72	43-110	6	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1301

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7194MSD

Matrix: R

Lab Sample ID: 1202022471

%Moisture: 20.7

Instrument: MSD3.I

Analysis Date: 01/25/2010 13:44

Dilution: 1

Analyst: JLD1

Prep Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

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	2090	0.00 U	1520	73	48-99	7	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	2090	0.00 U	1610	77	42-111	8	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	2090	0.00 U	1550	74	19-118	6	0-30
100-01-6	MSD 4-Nitroaniline <i>p-Nitroaniline</i>	2090	0.00 U	1380	66	35-139	3	0-30
122-39-4	MSD Diphenylamine	2090	0.00 U	1720	82	41-112	13	0-30
122-66-7	MSD Azobenzene <i>1,2-Diphenylhydrazine</i>	2090	0.00 U	1490	71	37-118	14	0-30
101-55-3	MSD 4-Bromophenylphenylether	2090	0.00 U	1560	74	39-112	13	0-30
118-74-1	MSD Hexachlorobenzene	2090	0.00 U	1520	73	38-113	10	0-30
85-01-8	MSD Phenanthrene	2090	0.00 U	1560	74	38-110	8	0-30
120-12-7	MSD Anthracene	2090	0.00 U	1580	76	38-112	8	0-30
84-74-2	MSD Di-n-butylphthalate	2090	0.00 U	1490	71	42-119	4	0-30
206-44-0	MSD Fluoranthene	2090	0.00 U	1410	67	38-119	2	0-30
85-68-7	MSD Butylbenzylphthalate	2090	0.00 U	1460	70	39-126	2	0-30
56-55-3	MSD Benzo(a)anthracene	2090	0.00 U	1520	73	39-110	6	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	2090	0.00 U	1000	48	35-106	14	0-30
218-01-9	MSD Chrysene	2090	0.00 U	1580	75	39-109	6	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	2090	0.00 U	1450	69	40-125	2	0-30
117-84-0	MSD Di-n-octylphthalate	2090	0.00 U	1430	68	30-147	4	0-30
205-99-2	MSD Benzo(b)fluoranthene	2090	0.00 U	1650	79	38-117	8	0-30
207-08-9	MSD Benzo(k)fluoranthene	2090	0.00 U	1640	78	39-120	8	0-30
50-32-8	MSD Benzo(a)pyrene	2090	0.00 U	1700	81	40-115	7	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	2090	0.00 U	1600	76	32-120	2	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

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SDG Number: 10-1301

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7194MSD

Matrix: R

Lab Sample ID: 1202022471

%Moisture: 20.7

Instrument: MSD3.I

Analysis Date: 01/25/2010 13:44

Dilution: 1

Analyst: JLD1

Pre Batch ID: 944454

Inj. Vol: .5 uL

Batch ID: 944455

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	2090	0.00 U	1610	77	32-124	2	0-30
191-24-2	MSD Benzo(ghi)perylene	2090	0.00 U	1500	72	28-119	0	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	2090	0.00 U	1590	76	31-105	10	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1301	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 944454	Instrument ID:	MSD3.I	Data File:	s3a2506.d
Lab Sample ID:	1202022468	Prep Date:	01/22/2010 23:39	Analyzed:	01/25/10 11:59
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 RE15-10-7194	245099001	s3a2508.d	01/25/10	1252
02 RE15-10-7194MS	1202022470	s3a2509.d	01/25/10	1318
03 RE15-10-7194MSD	1202022471	s3a2510.d	01/25/10	1344
04 RE15-10-7186	245099002	s3a2511.d	01/25/10	1411
05 RE15-10-7191	245099003	s3a2512.d	01/25/10	1437
06 RE15-10-7195	245099004	s3a2513.d	01/25/10	1504
07 RE15-10-7196	245099005	s3a2514.d	01/25/10	1531
08 RE15-10-7184	245099008	s3a2517.d	01/25/10	1651
09 RE15-10-7187	245099011	s3a2520.d	01/25/10	1810
10 RE15-10-7188	245099012	s3a2521.d	01/25/10	1836
11 LCS for batch 944454	1202022469	s3a2612.d	01/26/10	1410
12 RE15-10-7197	245099006	s3a2614.d	01/26/10	1503
13 RE15-10-7193	245099007	s3a2630.d	01/26/10	2219
14 RE15-10-7185	245099009	s3a2632.d	01/26/10	2311
15 RE15-10-7189	245099010	s3a2633.d	01/26/10	2336
16 RE15-10-7190	245099013	s3a2711.d	01/27/10	1317
17 RE15-10-7192	245099014	s3a2712.d	01/27/10	1343
18 RE15-10-7219	245099015	s3a2713.d	01/27/10	1409

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: MSD3.I

Injection Date/Time: 20-JAN-10 17:17

Column Description: J&W DB-5MS

Lab File ID /chem/MSD3.i/s012010a.b/s3a2013.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	51.6
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	48.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	53
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	26.4
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	74
442	Greater than 40% of mass 198	98
443	17 - 23% of mass 442	20.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL01	WBN100112-08	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 17:59
MEGAICAL010	WBN100112-07	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 18:29
MEGAICAL020	WBN100112-06	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 18:58
MEGAICAL040	WBN100112-05	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 19:28
MEGAICAL050	WBN100112-04	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 19:58
MEGAICAL080	WBN100112-03	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 20:27
MEGAICAL100	WBN100112-02	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 20:57
MEGAICAL120	WBN100112-01	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 21:26
APICAL010	WBN100103-01	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 21:56
APICAL020	WBN100103-02	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 22:22
APICAL040	WBN100103-03.1	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 22:48
APICAL050	WBN100103-04	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 23:15
APICAL080	WBN100103-05	/chem/MSD3.i/s012010a.b/s3a20	20-JAN-10 23:41
APICAL100	WBN100103-06	/chem/MSD3.i/s012010a.b/s3a20	21-JAN-10 00:07
APICAL120	WBN100103-07	/chem/MSD3.i/s012010a.b/s3a20	21-JAN-10 00:33
MEGAICV	WBN100106-09.3	/chem/MSD3.i/s012010a.b/s3a20	21-JAN-10 00:59

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: MSD3.I

Injection Date/Time: 20-JAN-10 17:17

Column Description: J&W DB-5MS

Lab File ID /chem/MSD3.i/s012010a.b/s3a2013.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	51.6
68	Less than 2% of mass 69	1.9
69	Mass 69 Relative Abundance	48.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	53
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	26.4
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	74
442	Greater than 40% of mass 198	98
443	17 - 23% of mass 442	20.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
APICV	WBN100103-08.1	/chem/MSD3.i/s012010a.b/s3a2013.d	21-JAN-10 01:29

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: MSD3.I

Injection Date/Time: 25-JAN-10 09:52

Column Description: J&W DB-5MS

Lab File ID /chem/MSD3.i/s012510.b/s3a2502.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	44.1
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	42.3
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	50.3
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	23.2
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	76.2
442	Greater than 40% of mass 198	76.1
443	17 - 23% of mass 442	19.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100121-17.2	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 10:04
APCVS	WBN100120-08.3	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 11:00
SBLK01	1202022468	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 11:59
RE15-10-7194	245099001	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 12:52
RE15-10-7194MS	1202022470	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 13:18
RE15-10-7194MSD	1202022471	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 13:44
RE15-10-7186	245099002	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 14:11
RE15-10-7191	245099003	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 14:37
RE15-10-7195	245099004	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 15:04
RE15-10-7196	245099005	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 15:31
RE15-10-7184	245099008	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 16:51
RE15-10-7187	245099011	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 18:10
RE15-10-7188	245099012	/chem/MSD3.i/s012510.b/s3a2502.d	25-JAN-10 18:36

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: MSD3.1

Injection Date/Time: 26-JAN-10 11:36

Column Description: J&W DB-5MS

Lab File ID /chem/MSD3.i/s012610a.b/s3a2606.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	39.5
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	40.1
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	48.3
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	24.2
365	Greater than 1% of mass 198	2.6
441	Present, but less than mass 443	75.9
442	Greater than 40% of mass 198	95.8
443	17 - 23% of mass 442	19.4

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100121-17.2	/chem/MSD3.i/s012610a.b/s3a2606.d	26-JAN-10 11:48
APCVS	WBN100120-08.3	/chem/MSD3.i/s012610a.b/s3a2606.d	26-JAN-10 12:19
SBLK01LCS	1202022469	/chem/MSD3.i/s012610a.b/s3a2606.d	26-JAN-10 14:10
RE15-10-7197	245099006	/chem/MSD3.i/s012610a.b/s3a2606.d	26-JAN-10 15:03
RE15-10-7193	245099007	/chem/MSD3.i/s012610a.b/s3a2606.d	26-JAN-10 22:19
RE15-10-7185	245099009	/chem/MSD3.i/s012610a.b/s3a2606.d	26-JAN-10 23:11
RE15-10-7189	245099010	/chem/MSD3.i/s012610a.b/s3a2606.d	26-JAN-10 23:36

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1301

Instrument ID: MSD3.1

Injection Date/Time: 27-JAN-10 08:57

Column Description: J&W DB-5MS

Lab File ID /chem/MSD3.i/s012710.b/s3a2701.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	38.6
68	Less than 2% of mass 69	1.8
69	Mass 69 Relative Abundance	39.9
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	48.7
197	0 - 1% of mass 198	0
199	5 - 9% of mass 198	6.9
275	10 - 30% of mass 198	24.9
365	Greater than 1% of mass 198	2.7
441	Present, but less than mass 443	77.7
442	Greater than 40% of mass 198	98.2
443	17 - 23% of mass 442	19.3

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGACVS	WBN100121-17.2	/chem/MSD3.i/s012710.b/s3a2701	27-JAN-10 09:09
APCVS	WBN100120-08.4	/chem/MSD3.i/s012710.b/s3a2701	27-JAN-10 10:11
RE15-10-7190	245099013	/chem/MSD3.i/s012710.b/s3a2711	27-JAN-10 13:17
RE15-10-7192	245099014	/chem/MSD3.i/s012710.b/s3a2711	27-JAN-10 13:43
RE15-10-7219	245099015	/chem/MSD3.i/s012710.b/s3a2711	27-JAN-10 14:09

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1301

Instrument: MSD3.I

STD Analysis Time: 25-JAN-10 10:04

GC Column: J&W DB-5MS

Data File: s3a2503.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	385188		4.84	1537267		6.13	795210		8	1246225		9.62	1022987		12.7	819421		15
Upper Limit	770376		5.34	3074534		6.63	1590420		8.5	2492450		10.1	2045974		13.2	1638842		15.5
Lower Limit	192594		4.34	768634		5.63	397605		7.5	623113		9.12	511494		12.2	409711		14.5
Sample ID																		
BLK01	371687		4.84	1428160		6.12	753109		8	1163357		9.61	746234		12.6	452174		15.0
RE15-10-7194	424430		4.84	1584835		6.12	812141		8	1127729		9.62	544455		12.6	402932	*	15.0
RE15-10-7194MS	421278		4.84	1696090		6.13	857027		8	1298172		9.62	869552		12.7	639446		15.0
RE15-10-7194MSD	392460		4.84	1576322		6.13	769406		8	1088861		9.62	681347		12.6	506149		15.0
RE15-10-7186	388525		4.84	1276577		6.12	523831		8	628326		9.61	517646		12.6	279917	*	15.0
RE15-10-7191	411391		4.84	1384482		6.12	595421		8	666195		9.61	544769		12.6	383091	*	15.0
RE15-10-7195	401137		4.84	1468125		6.12	713015		8	956223		9.62	719475		12.6	450646		15.0
RE15-10-7196	383178		4.84	1426026		6.12	688372		8	1012540		9.62	567555		12.7	241239	*	15.0
RE15-10-7184	363116		4.84	1396321		6.12	741611		8	1134946		9.62	658793		12.6	308381	*	15.0
RE15-10-7187	367983		4.84	1445849		6.12	783803		8	1246673		9.62	714866		12.7	357738	*	15
RE15-10-7188	362395		4.84	1356428		6.13	697569		8	1064530		9.62	554683		12.7	247459	*	15

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1301

Instrument: MSD3.I

STD Analysis Time: 26-JAN-10 11:48

GC Column: J&W DB-5MS

Data File: s3a2607.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	319045		4.83	1275014		6.11	676019		7.99	1138387		9.61	825135		12.6	556699		15.0
Upper Limit	638090		5.33	2550028		6.61	1352038		8.49	2276774		10.1	1650270		13.1	1113398		15.5
Lower Limit	159523		4.33	637507		5.61	338010		7.49	569194		9.11	412568		12.1	278350		14.5
Sample ID																		
BLK01LCS	330784		4.83	1355866		6.11	697484		7.99	1144028		9.61	860496		12.6	523399		15.0
RE15-10-7197	304636		4.83	1171799		6.11	657556		7.99	1186890		9.6	895824		12.6	548615		15.0
RE15-10-7193	345454		4.83	1303773		6.11	760759		7.99	1216496		9.6	638144		12.6	331039		15.0
RE15-10-7185	315739		4.83	1207745		6.11	686208		7.98	1170635		9.6	721863		12.6	428621		15.0
RE15-10-7189	276519		4.83	1093154		6.11	640976		7.99	1117729		9.6	803316		12.6	438569		15.0

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1301

Instrument: MSD3.1

STD Analysis Time: 27-JAN-10 09:09

GC Column: J&W DB-5MS

Data File: s3a2702.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	267689		4.82	1068883		6.1	570163		7.97	947337		9.59	775080		12.6	562347		14.9
Upper Limit	535378		5.32	2137766		6.6	1140326		8.47	1894674		10.1	1550160		13.1	1124694		15.4
Lower Limit	133845		4.32	534442		5.6	285082		7.47	473669		9.09	387540		12.1	281174		14.4
Sample ID																		
RE15-10-7190	283357		4.81	1097949		6.1	618703		7.97	1008788		9.59	778817		12.6	456745		15.0
RE15-10-7192	247055		4.81	981631		6.1	570992		7.97	979611		9.59	667913		12.6	312206		14.9
RE15-10-7219	196426		4.81	762587		6.1	433069		7.97	717208		9.58	483700		12.6	218661	*	14.9

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

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

SDG Number: 10-1301
Lab Sample ID: 245099008

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 17.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7184
Batch ID: 944455
Run Date: 01/25/2010 16:51
Prep Date: 01/22/2010 23:39
Data File: s3a2517.d

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

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099008	Date Received: 01/20/2010 08:45	%Moisture: 17.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7184	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 16:51	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.09 g	Final Volume: 1 mL
Data File: s3a2517.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	401	ug/kg	80.3	401
606-20-2	2,6-Dinitrotoluene	U	401	ug/kg	40.1	401
208-96-8	Acenaphthylene	U	40.1	ug/kg	12.0	40.1
51-28-5	2,4-Dinitrophenol	U	803	ug/kg	153	803
132-64-9	Dibenzofuran	U	401	ug/kg	80.3	401
84-66-2	Diethylphthalate	U	401	ug/kg	80.3	401
86-73-7	Fluorene	U	40.1	ug/kg	12.0	40.1
7005-72-3	4-Chlorophenylphenylether	U	401	ug/kg	80.3	401
534-52-1	2-Methyl-4,6-dinitrophenol	U	401	ug/kg	80.3	401
100-01-6	4-Nitroaniline	U	401	ug/kg	120	401
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	401	ug/kg	80.3	401
122-66-7	Azobenzene	U	401	ug/kg	80.3	401
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	401	ug/kg	80.3	401
118-74-1	Hexachlorobenzene	U	401	ug/kg	80.3	401
85-01-8	Phenanthrene	U	40.1	ug/kg	12.0	40.1
120-12-7	Anthracene	U	40.1	ug/kg	8.03	40.1
84-74-2	Di-n-butylphthalate	U	401	ug/kg	80.3	401
206-44-0	Fluoranthene	U	40.1	ug/kg	12.0	40.1
85-68-7	Butylbenzylphthalate	U	401	ug/kg	80.3	401
56-55-3	Benzo(a)anthracene	U	40.1	ug/kg	12.0	40.1
91-94-1	3,3'-Dichlorobenzidine	U	401	ug/kg	120	401
218-01-9	Chrysene	U	40.1	ug/kg	12.0	40.1
117-81-7	bis(2-Ethylhexyl)phthalate	U	401	ug/kg	80.3	401
117-84-0	Di-n-octylphthalate	U	401	ug/kg	80.3	401
205-99-2	Benzo(b)fluoranthene	U	40.1	ug/kg	12.0	40.1
207-08-9	Benzo(k)fluoranthene	U	40.1	ug/kg	12.0	40.1
50-32-8	Benzo(a)pyrene	U	40.1	ug/kg	12.0	40.1
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.1	ug/kg	12.0	40.1
53-70-3	Dibenzo(a,h)anthracene	U	40.1	ug/kg	12.0	40.1
191-24-2	Benzo(ghi)perylene	U	40.1	ug/kg	12.0	40.1
120-82-1	1,2,4-Trichlorobenzene	U	401	ug/kg	80.3	401

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.12	298	ug/kg		J
	Unknown	2.31	207	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099008

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.09 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 17.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.42	432	ug/kg		JA
	Unknown	12.13	535	ug/kg		J
	Unknown	15.23	282	ug/kg		J
	Unknown	15.24	379	ug/kg		J
	Unknown	15.55	164	ug/kg		J
	Unknown	16.1	987	ug/kg		J
83-46-5	.beta.-Sitosterol	17.73	508	ug/kg	93	NJ

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2517.d
Lab Smp Id: 245099008 Client Smp ID: RE15-10-7184
Inj Date : 25-JAN-2010 16:51
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099008|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	17.19080	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.839	4.841	(1.000)	363116	40.0000	
* 29 Naphthalene-d8	136	6.124	6.126	(1.000)	1396321	40.0000	
* 46 Acenaphthene-d10	164	8.002	8.003	(1.000)	741611	40.0000	
* 67 Phenanthrene-d10	188	9.617	9.618	(1.000)	1134946	40.0000	
* 91 Chrysene-d12	240	12.643	12.650	(1.000)	658793	40.0000	
* 98 Perylene-d12	264	14.991	14.999	(1.000)	308381	40.0000	
\$ 3 2-Fluorophenol	112	3.660	3.653	(0.756)	414942	43.9151	1760
\$ 5 Phenol-d5	99	4.437	4.436	(0.917)	495662	41.7398	1680
\$ 20 Nitrobenzene-d5	82	5.379	5.384	(0.878)	235023	22.7858	914
\$ 39 2-Fluorobiphenyl	172	7.253	7.254	(0.906)	455097	23.7412	953
\$ 60 2,4,6-Tribromophenol	329	8.850	8.852	(1.106)	88715	41.7287	1670
\$ 81 p-Terphenyl-d14	244	11.327	11.326	(0.896)	361246	31.9026	1280

ION RATIO REPORT

SV REPORT

Data file: s3a2517.d

Report Date: 01/26/2010 08:41

Lab. ID: 245099008

SampleType: SAMPLE

Injection Date: 25-JAN-2010 16:51

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099008|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	27990	4.44	4.53	80-120	100	(T)
93	2730	4.50	4.53	206-266	10	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	33188	5.38	5.21	80-120	100	(T)
42	21103	5.38	5.21	45-105	64	(T)

41 m-Nitroaniline		CAS#: 99-09-2				
138	203	8.00	7.94	80-120	100	()
92	4170	8.00	7.94	79-139	2052	(Q)
108	15945	8.00	7.94	0- 40	7846	(Q)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	97784	8.00	7.76	80-120	100	(T)
63	4067	8.00	7.76	37- 97	4	(QT)

45 Acenaphthylene		CAS#: 208-96-8				
152	15997	8.00	7.85	80-120	100	(T)
151	4375	8.00	7.85	0- 50	27	(T)
153	16918	8.00	7.85	0- 43	106	(QT)

47 Acenaphthene		CAS#: 83-32-9				
154	16890	8.00	8.04	80-120	100	()
153	16918	8.00	8.04	70-130	100	()
152	15997	8.00	8.04	18- 78	95	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	97784	8.00	8.19	80-120	100	(T)
89	2216	8.00	8.19	42-102	2	(QT)
63	4067	8.00	8.19	21- 81	4	(QT)

 Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2517.d
 Lab Smp Id: 245099008 Client Smp ID: RE15-10-7184
 Inj Date : 25-JAN-2010 16:51
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099008|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	17.19080	% moisture

Cpnd Variable

Local Compound Variable

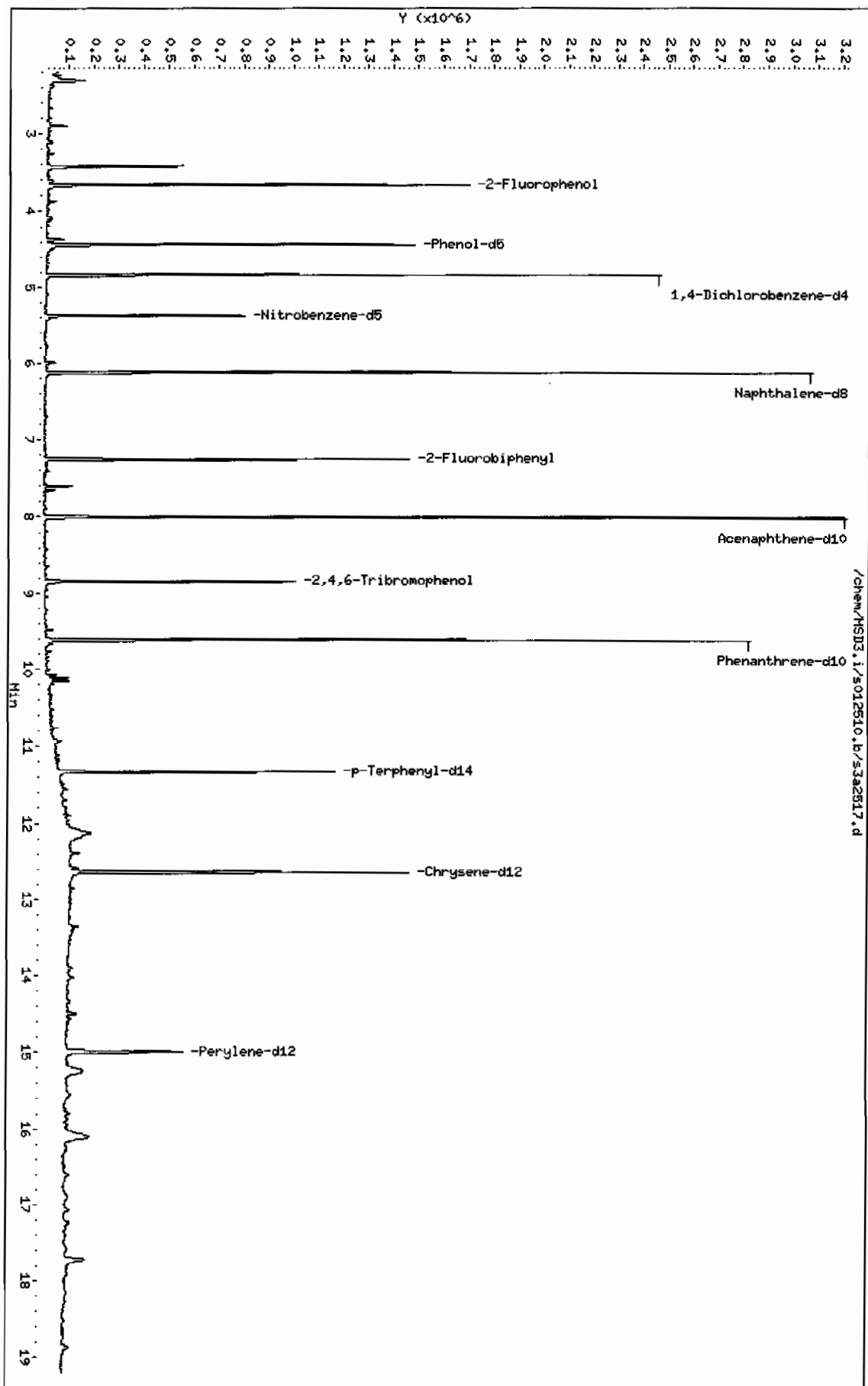
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.839	2305028	40.000
* 91 Chrysene-d12	12.643	1796023	40.000
* 98 Perylene-d12	14.991	879324	40.000

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 #:		
2.121	428501	7.43593409	298	0		0	10
Unknown					CAS #:		
2.308	297669	5.16555740	207	0		0	10
Unknown Aldol Condensate					CAS #:		
3.419	620162	10.7618975	432	0		0	10
Unknown					CAS #:		
12.127	598626	13.3322603	535	0		0	91
Unknown					CAS #:		
15.227	154568	7.03121596	282	0		0	98
Unknown					CAS #:		
15.239	207649	9.44582117	379	0		0	98
Unknown					CAS #:		
15.552	89858	4.08758672	164	0		0	98
Unknown					CAS #:		
16.102	540856	24.6032584	987	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
17.726	278501	12.6688657	508	93	NIST05.L	174400	98

Data File: /chem/HSD3.i/5012510.b/s3a2517.d
 Date: 25-JAN-2010 16:51
 Client ID: RE15-10-7184
 Sample Info: 1245099008194445511SVNF11LNHL
 Volume Injected (uL): 0.5
 Column phase: 3uM DB-SHS

Instrument: HSD3.i
 Operator: JLD1
 Column diameter: 0.20



Date : 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: 12450990081944465111SVHF111LANL

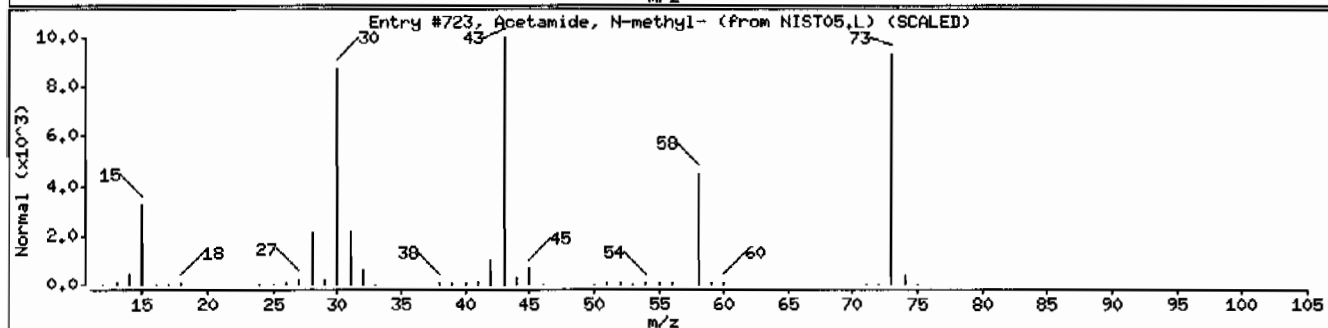
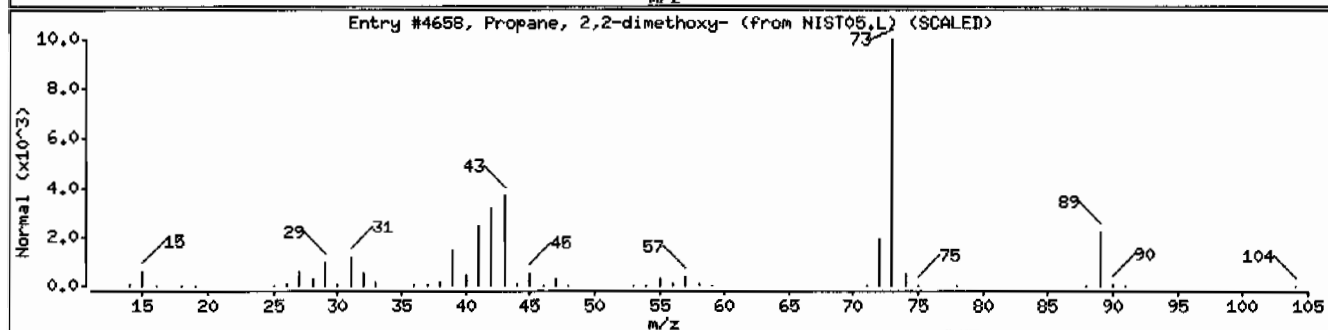
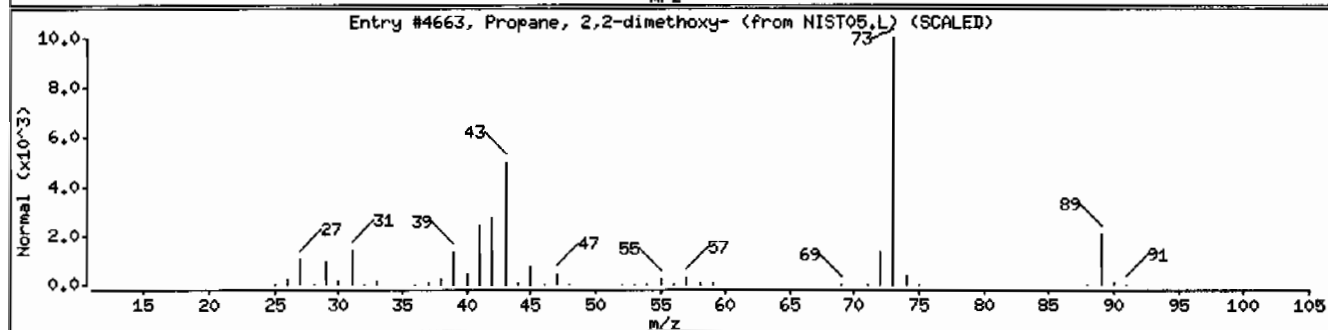
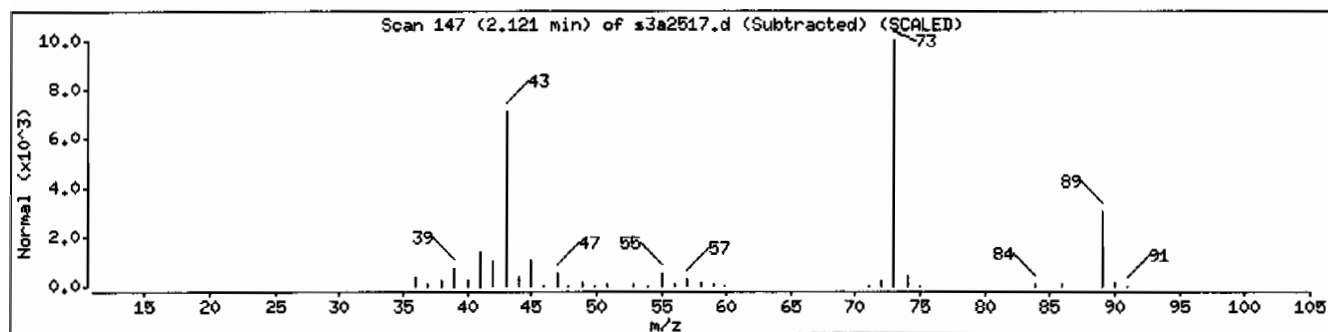
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	45	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	36	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	25	C3H7NO	73



Date : 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: 1245099008194445511SVMF111LANL

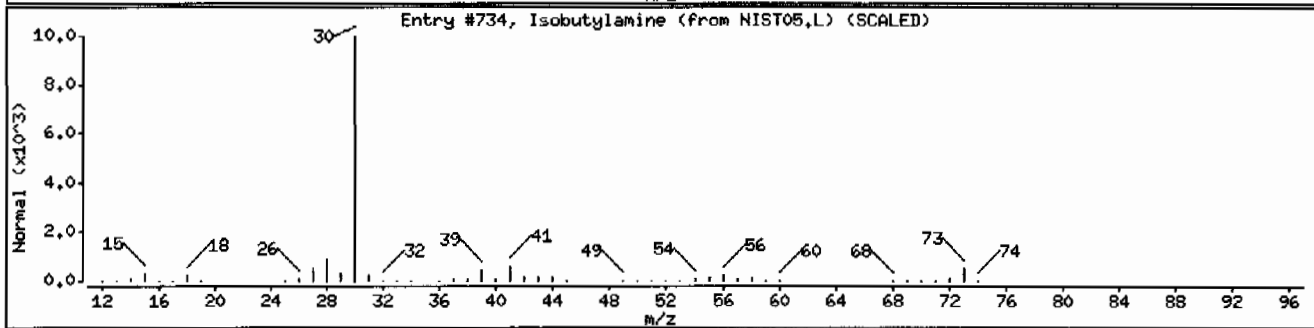
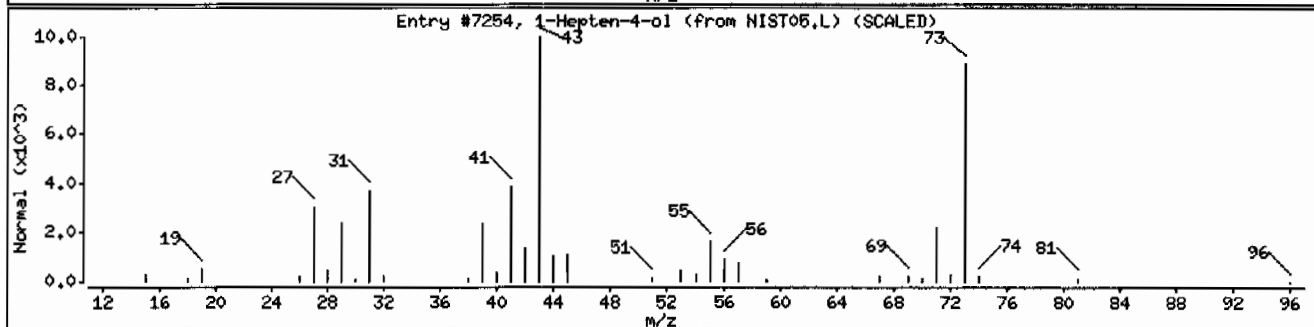
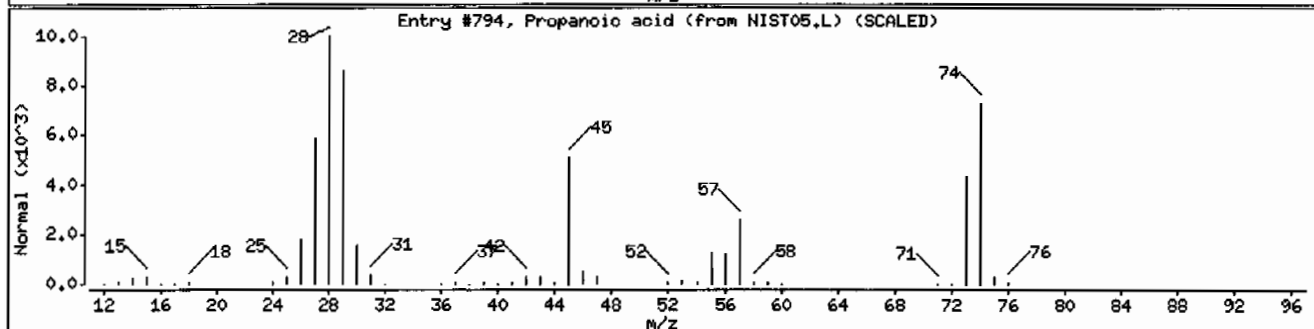
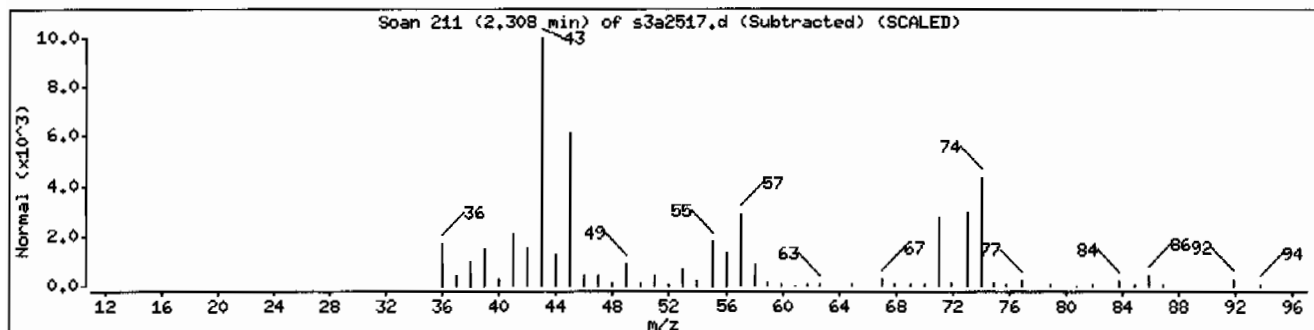
Volume Injected (uL): 0.5

Operator: JLB1

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	794	59	C3H6O2	74
1-Hepten-4-ol	3521-91-3	NIST05.L	7254	10	C7H14O	114
Isobutylamine	78-81-9	NIST05.L	734	9	C4H11N	73



Date : 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: 1245099008194445511SVMF11ILANL

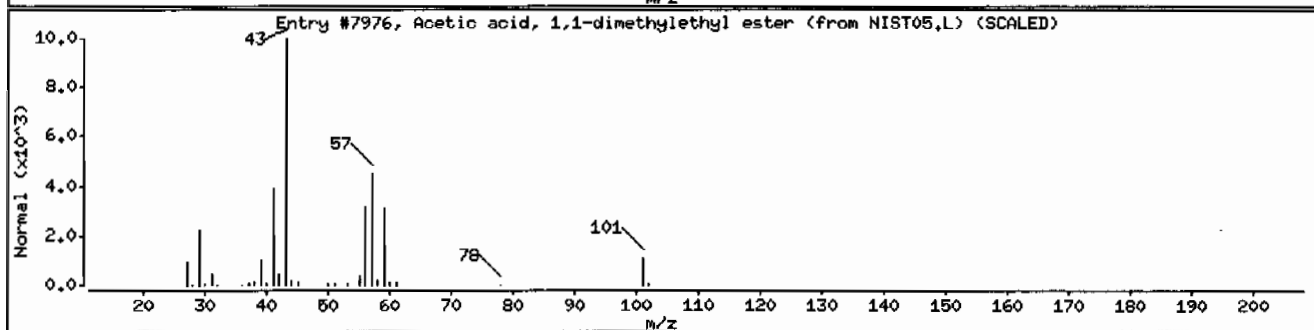
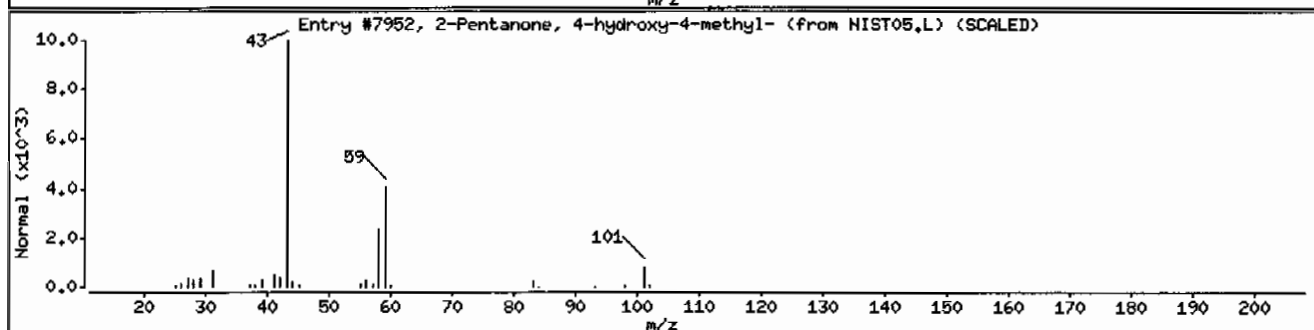
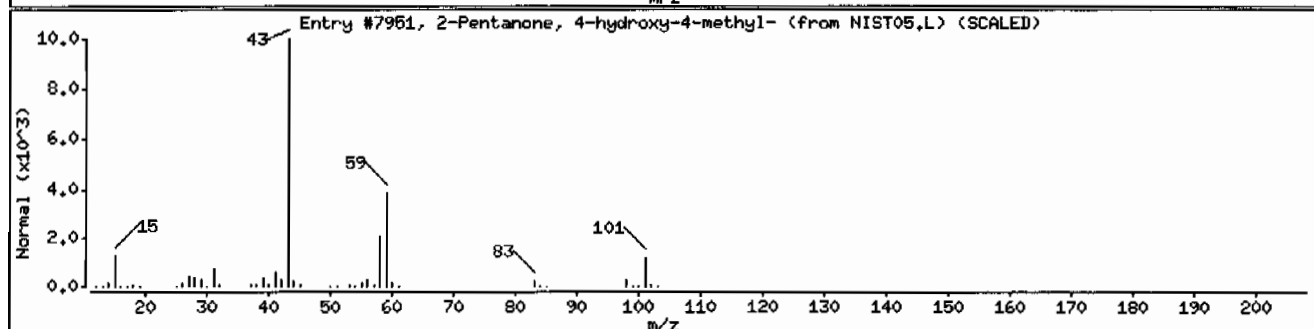
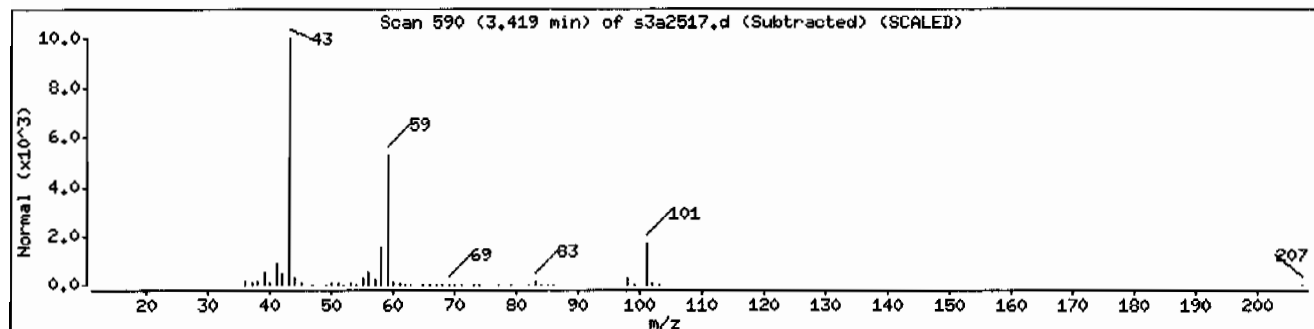
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	38	C6H12O2	116



Date : 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: I245099008I944455I1ISVHF11ILANL

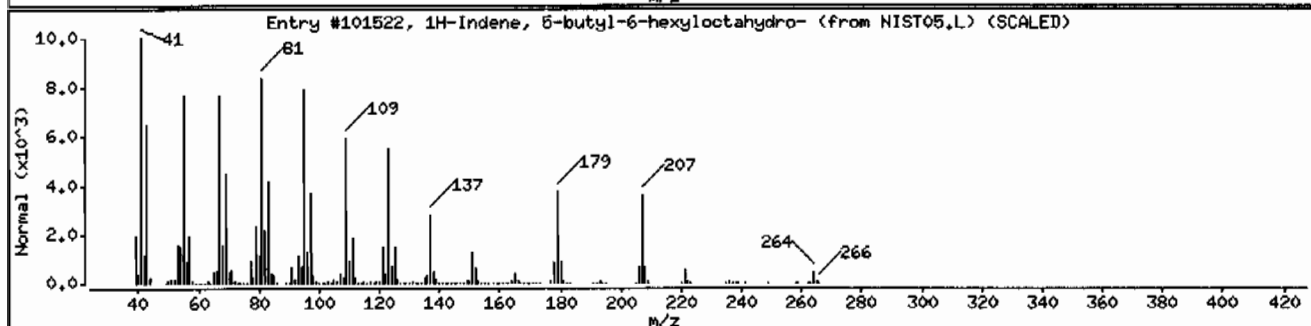
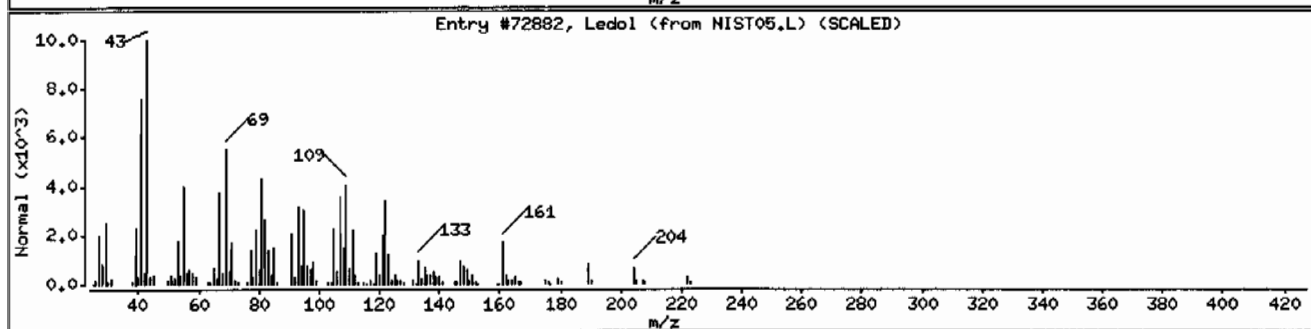
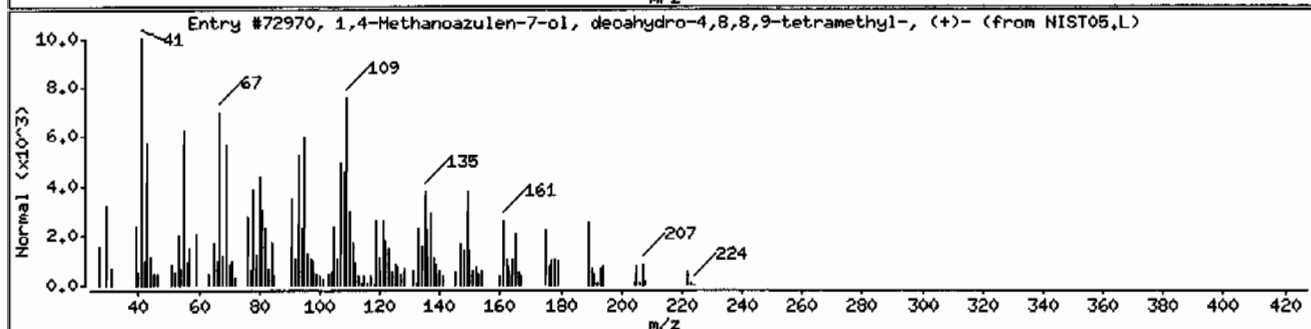
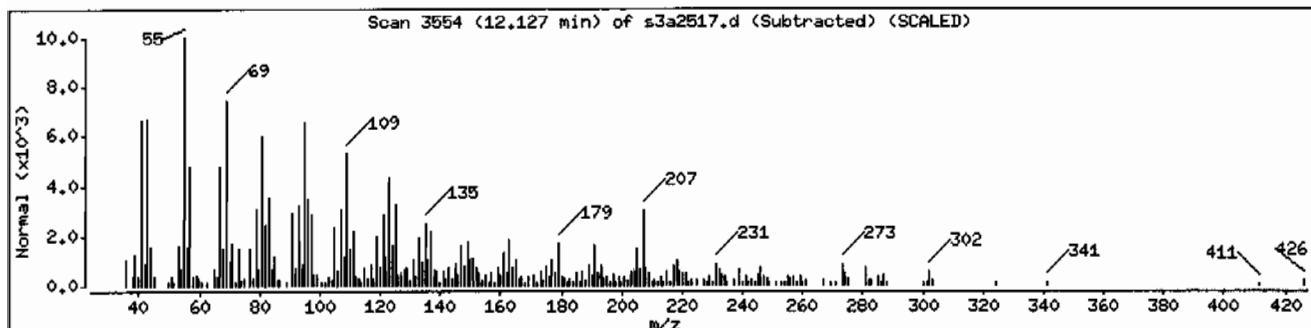
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Methanoazulen-7-ol, decahydro-4,8,8,	18319-27-2	NIST05.L	72970	48	C15H26O	222
Ledol	577-27-5	NIST05.L	72882	44	C15H26O	222
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	43	C19H36	264



Date: 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: 1245099008194445511|SVHF11|LANL

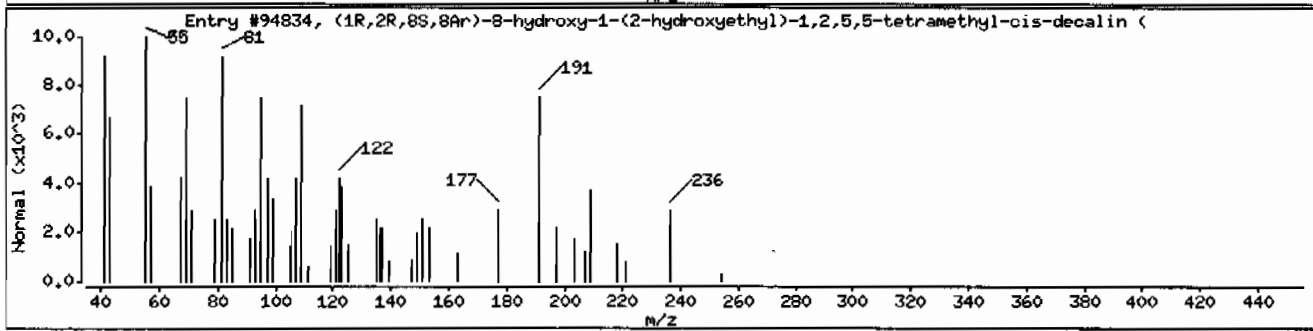
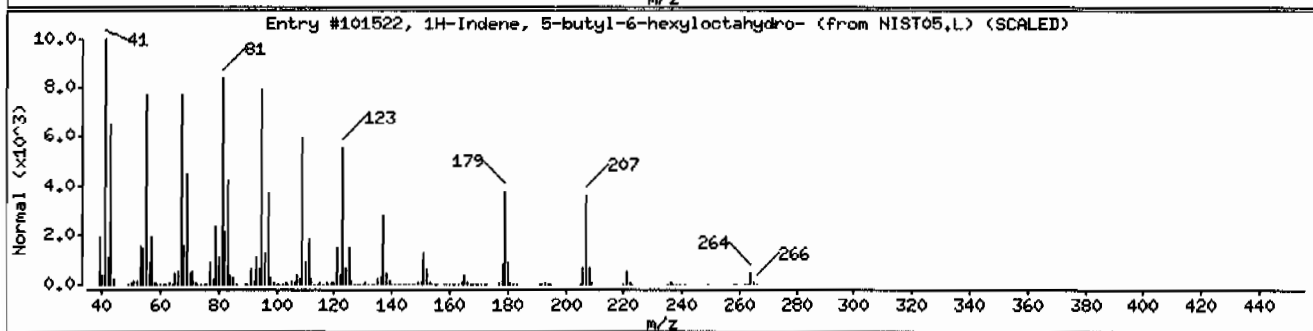
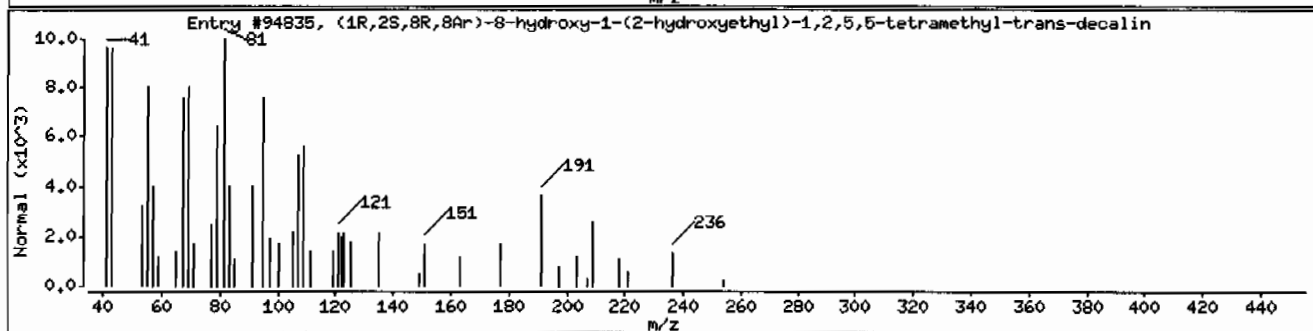
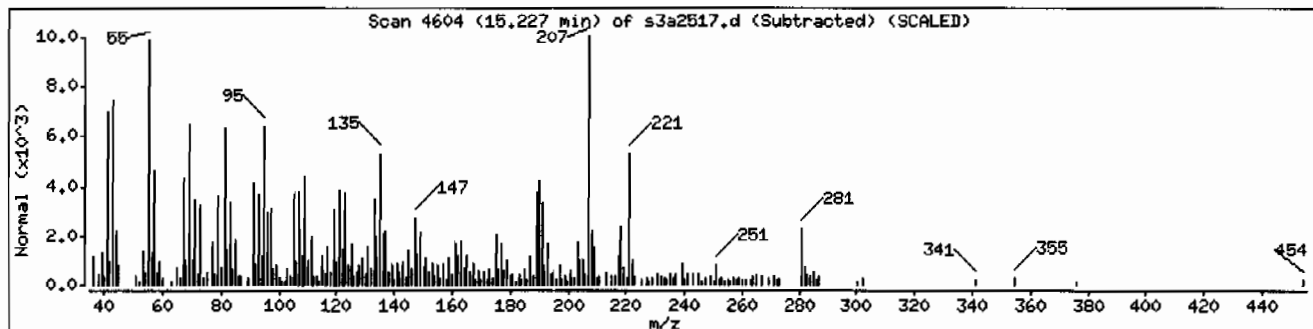
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(1R,2S,8R,8Ar)-8-hydroxy-1-(2-hydroxyeth	1000298-98-3	NIST05.L	94835	55	C16H30O2	254
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	48	C19H36	264
(1R,2R,8S,8Ar)-8-hydroxy-1-(2-hydroxyeth	1000298-98-6	NIST05.L	94834	41	C16H30O2	254



Date: 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.1

Sample Info: 1245099008194445511SVHF111LANL

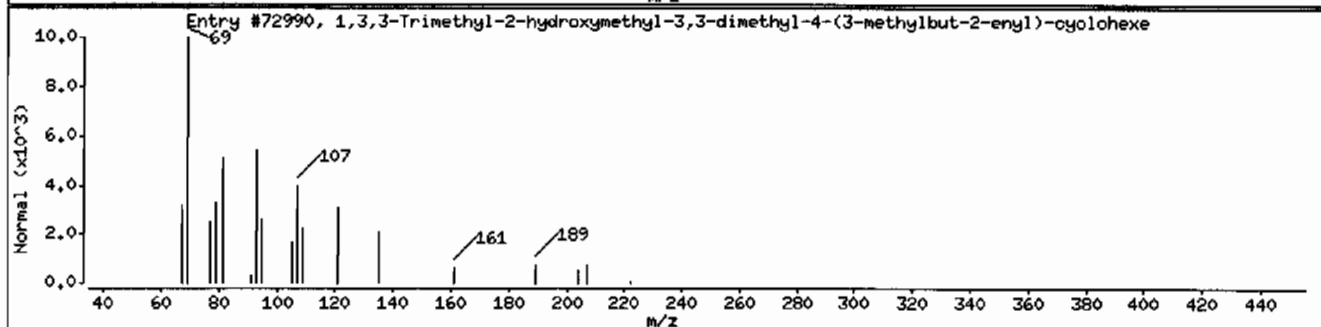
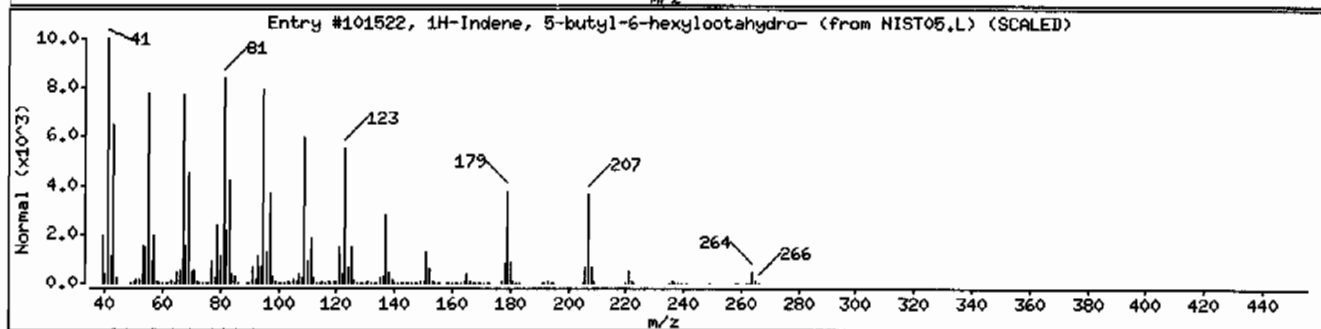
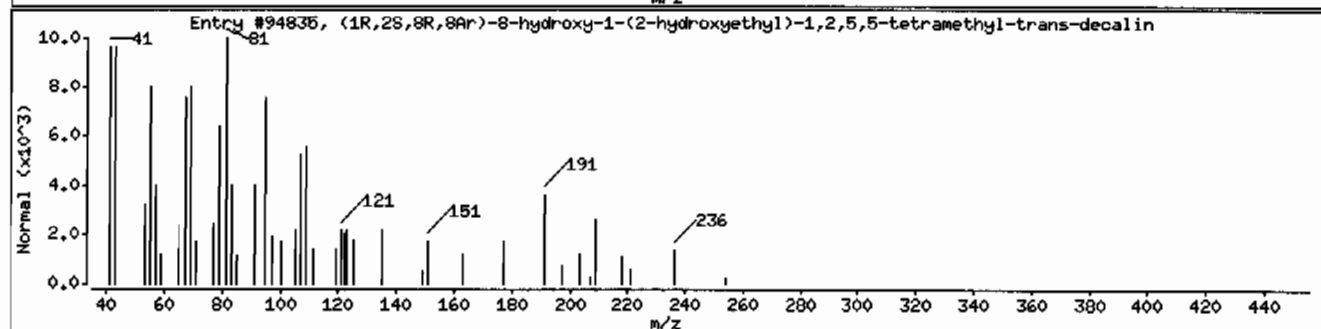
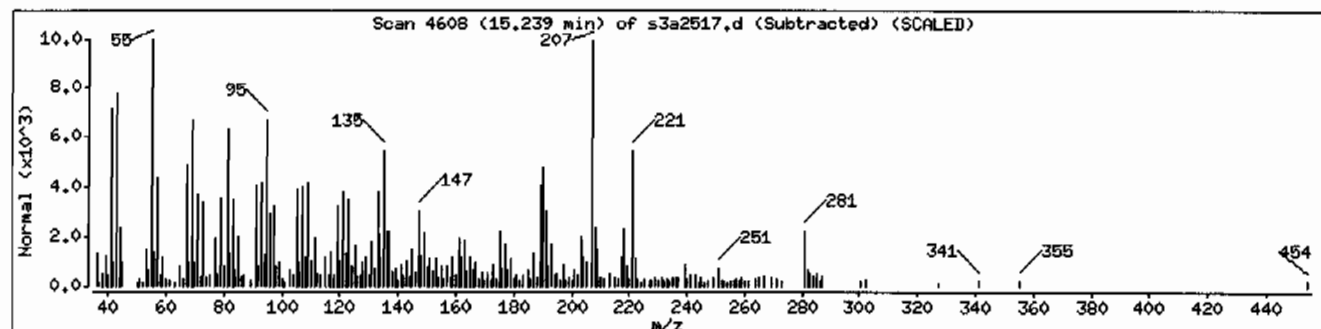
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(1R,2S,8R,8Ar)-8-hydroxy-1-(2-hydroxyethyl-1H-Indene, 5-butyl-6-hexyloctahydro-	1000298-98-3	NIST05.L	94835	50	C16H30O2	254
1,3,3-Trimethyl-2-hydroxymethyl-3,3-dime	55044-36-5	NIST05.L	101522	43	C19H36	264
	1000144-10-7	NIST05.L	72990	38	C15H26O	222



Date : 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: 1245099008194445511SVHF11ILANL

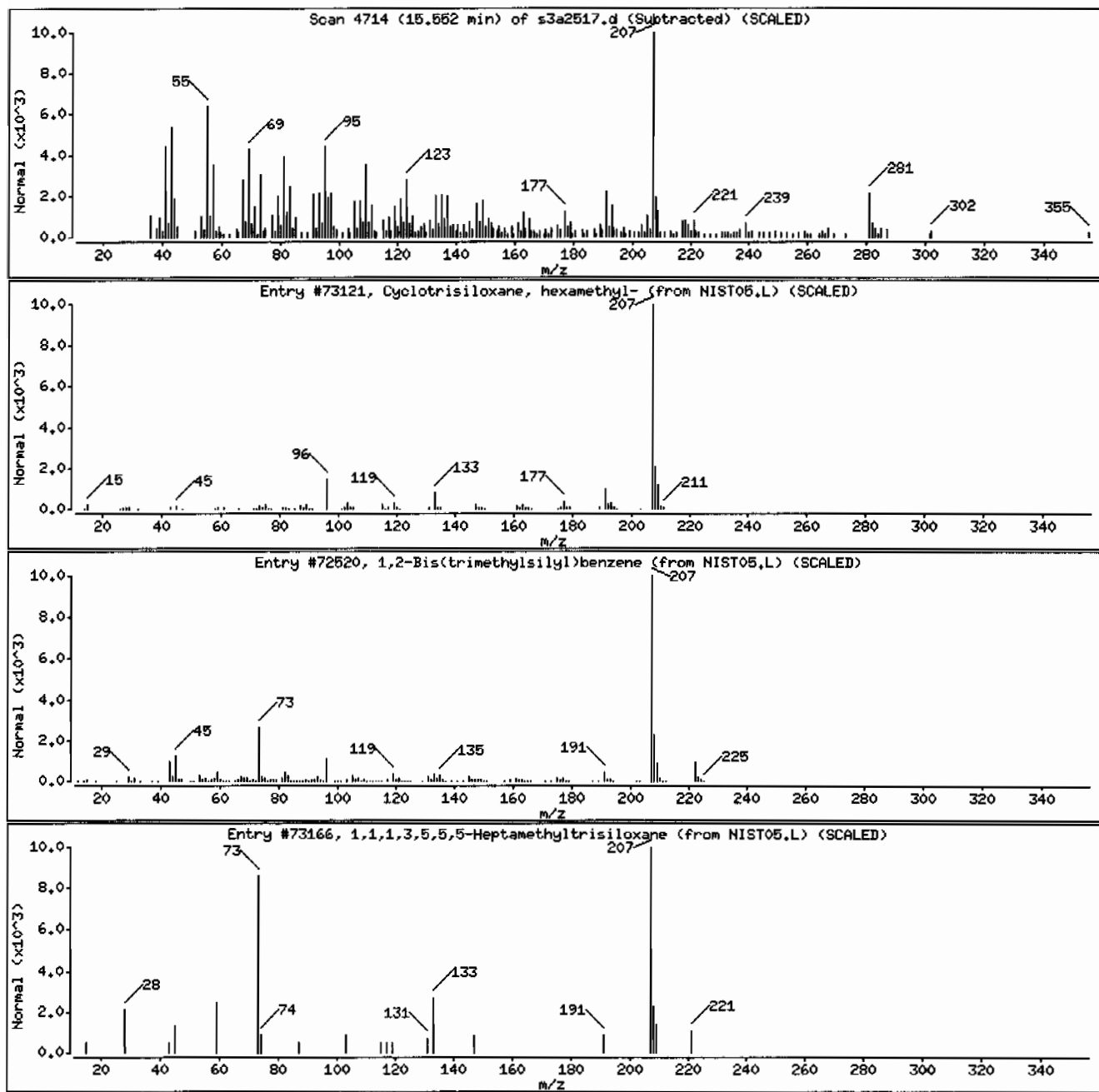
Volume Injected (uL): 0.5

Operator: JLD1

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
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	38	C ₁₂ H ₂₂ Si ₂	222
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	35	C ₇ H ₂₂ O ₂ Si ₃	222



Date : 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: 1245099008194445511ISVHF111LANL

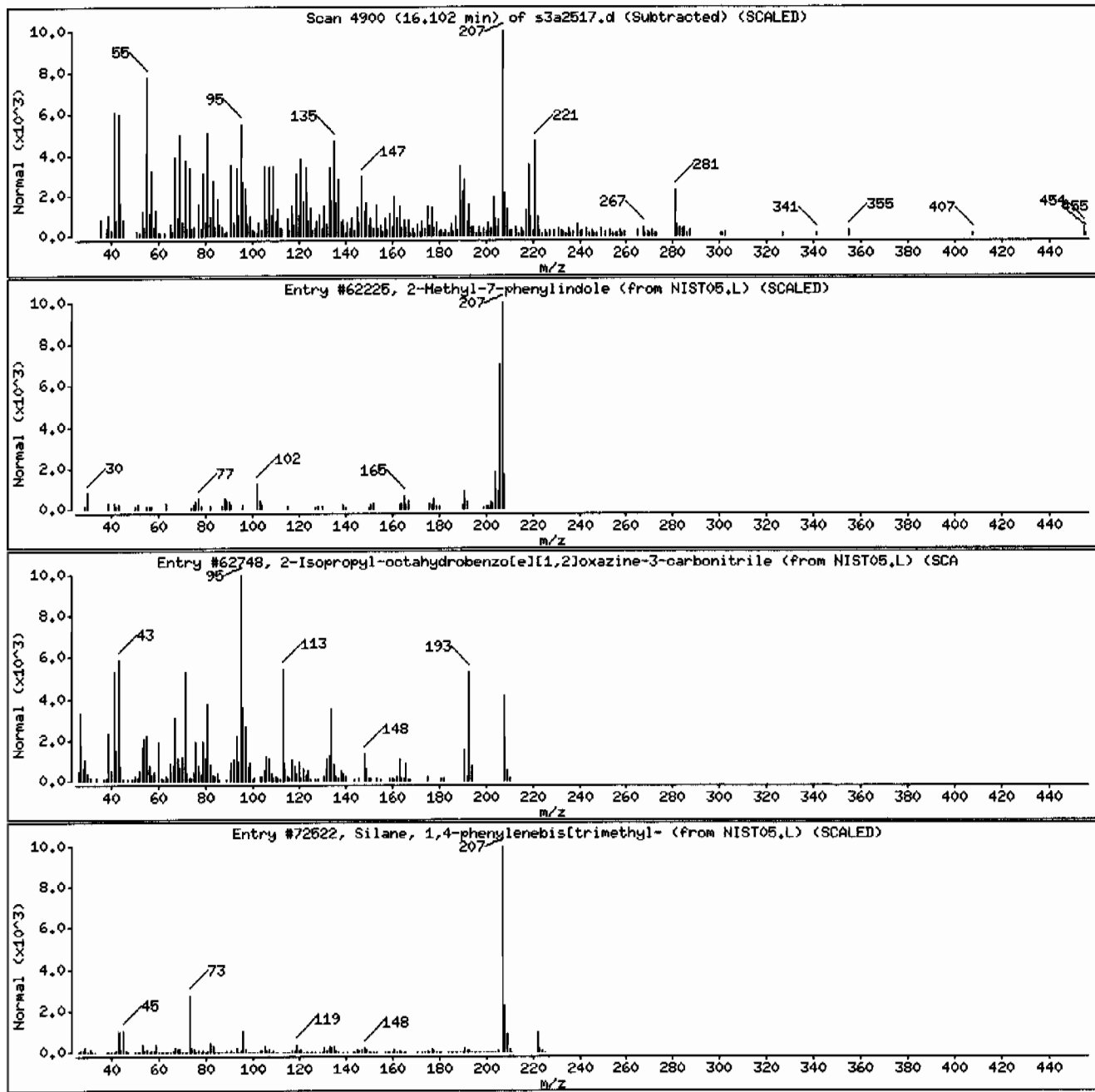
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	25	C ₁₅ H ₁₃ N	207
2-Isopropyl-octahydrobenzo[e][1,2]oxazin	1000193-38-1	NIST05.L	62748	25	C ₁₂ H ₂₀ N ₂ O	208
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72622	25	C ₁₂ H ₂₂ Si ₂	222



Date : 25-JAN-2010 16:51

Client ID: RE15-10-7184

Instrument: MSD3.i

Sample Info: 1245099008194445511SVHF11/LANL

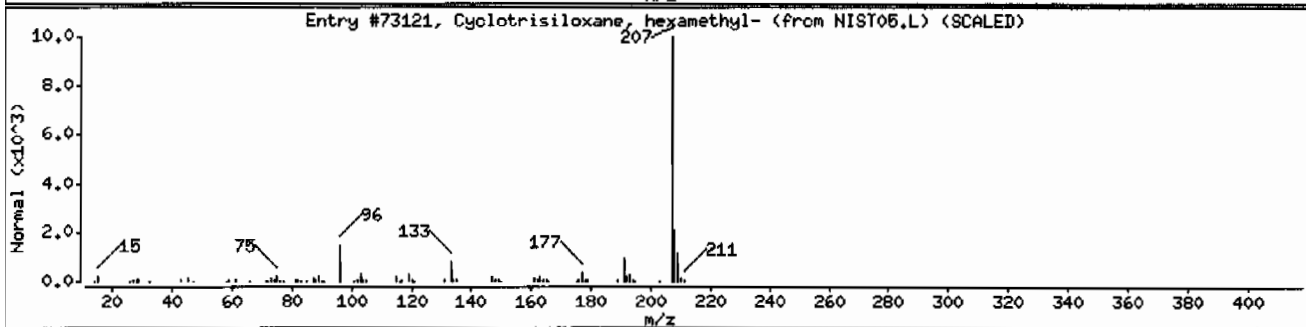
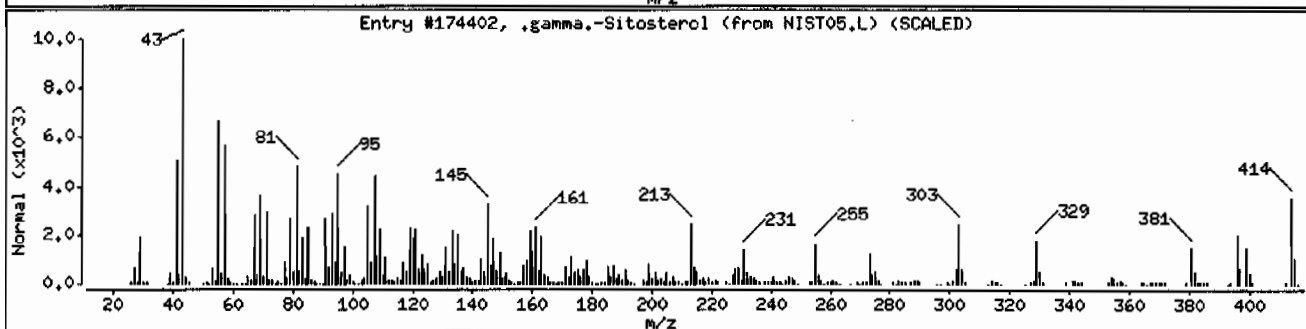
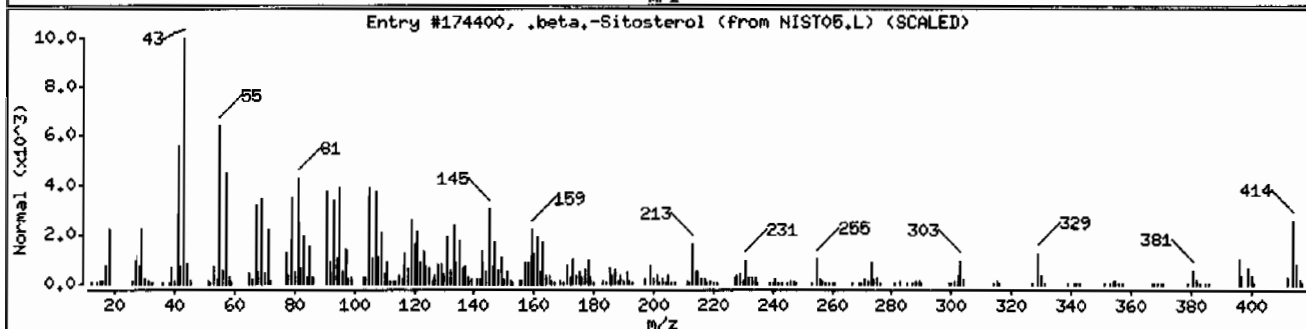
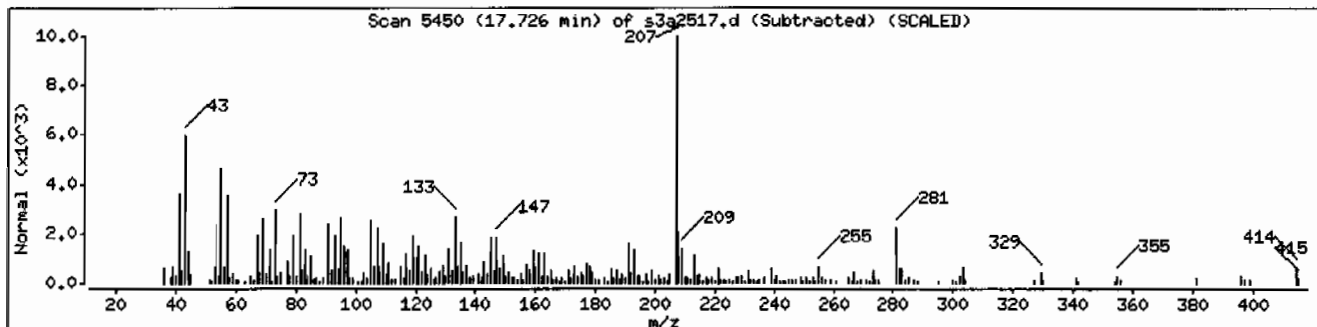
Volume Injected (uL): 0.5

Operator: JLD1

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	174400	93	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	56	C ₂₉ H ₅₀ O	414
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C ₆ H ₁₈ O ₃ Si ₃	222



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

SDG Number: 10-1301
Lab Sample ID: 245099009

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	368	ug/kg	73.5	368
108-95-2	Phenol	U	368	ug/kg	73.5	368
95-57-8	2-Chlorophenol	U	368	ug/kg	73.5	368
106-46-7	1,4-Dichlorobenzene	U	368	ug/kg	73.5	368
621-64-7	N-Nitrosodipropylamine	U	368	ug/kg	73.5	368
59-50-7	4-Chloro-3-methylphenol	U	368	ug/kg	73.5	368
83-32-9	Acenaphthene	U	36.8	ug/kg	12.1	36.8
121-14-2	2,4-Dinitrotoluene	U	368	ug/kg	36.8	368
100-02-7	4-Nitrophenol	U	368	ug/kg	121	368
87-86-5	Pentachlorophenol	U	368	ug/kg	91.9	368
129-00-0	Pyrene	U	36.8	ug/kg	11.0	36.8
110-86-1	Pyridine	U	368	ug/kg	73.5	368
62-53-3	Aniline	U	368	ug/kg	110	368
111-44-4	bis(2-Chloroethyl) ether	U	368	ug/kg	73.5	368
541-73-1	1,3-Dichlorobenzene	U	368	ug/kg	73.5	368
100-51-6	Benzyl alcohol	U	368	ug/kg	110	368
95-50-1	1,2-Dichlorobenzene	U	368	ug/kg	73.5	368
108-60-1	bis(2-Chloroisopropyl)ether	U	368	ug/kg	73.5	368
95-48-7	o-Cresol	U	368	ug/kg	73.5	368
65794-96-9	m,p-Cresols	U	368	ug/kg	110	368
67-72-1	Hexachloroethane	U	368	ug/kg	73.5	368
98-95-3	Nitrobenzene	U	368	ug/kg	73.5	368
78-59-1	Isophorone	U	368	ug/kg	73.5	368
88-75-5	2-Nitrophenol	U	368	ug/kg	73.5	368
105-67-9	2,4-Dimethylphenol	U	368	ug/kg	129	368
111-91-1	bis(2-Chloroethoxy)methane	U	368	ug/kg	73.5	368
120-83-2	2,4-Dichlorophenol	U	368	ug/kg	73.5	368
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.8	ug/kg	11.0	36.8
106-47-8	4-Chloroaniline	U	368	ug/kg	73.5	368
87-68-3	Hexachlorobutadiene	U	368	ug/kg	73.5	368
91-57-6	2-Methylnaphthalene	U	36.8	ug/kg	7.35	36.8
77-47-4	Hexachlorocyclopentadiene	U	368	ug/kg	73.5	368
88-06-2	2,4,6-Trichlorophenol	U	368	ug/kg	73.5	368
95-95-4	2,4,5-Trichlorophenol	U	368	ug/kg	73.5	368
91-58-7	2-Chloronaphthalene	U	36.8	ug/kg	12.1	36.8
88-74-4	2-Nitroaniline	U	368	ug/kg	73.5	368
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	368	ug/kg	73.5	368

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

SDG Number: 10-1301
Lab Sample ID: 245099009

Client ID: RE15-10-7185
Batch ID: 944455
Run Date: 01/26/2010 23:11
Prep Date: 01/22/2010 23:39
Data File: s3a2632.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.1
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	368	ug/kg	73.5	368
606-20-2	2,6-Dinitrotoluene	U	368	ug/kg	36.8	368
208-96-8	Acenaphthylene	U	36.8	ug/kg	11.0	36.8
51-28-5	2,4-Dinitrophenol	U	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	368	ug/kg	73.5	368
84-66-2	Diethylphthalate	U	368	ug/kg	73.5	368
86-73-7	Fluorene	U	36.8	ug/kg	11.0	36.8
7005-72-3	4-Chlorophenylphenylether	U	368	ug/kg	73.5	368
534-52-1	2-Methyl-4,6-dinitrophenol	U	368	ug/kg	73.5	368
100-01-6	4-Nitroaniline	U	368	ug/kg	110	368
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	368	ug/kg	73.5	368
122-66-7	Azobenzene	U	368	ug/kg	73.5	368
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	368	ug/kg	73.5	368
118-74-1	Hexachlorobenzene	U	368	ug/kg	73.5	368
85-01-8	Phenanthrene	U	36.8	ug/kg	11.0	36.8
120-12-7	Anthracene	U	36.8	ug/kg	7.35	36.8
84-74-2	Di-n-butylphthalate	U	368	ug/kg	73.5	368
206-44-0	Fluoranthene	U	36.8	ug/kg	11.0	36.8
85-68-7	Butylbenzylphthalate	U	368	ug/kg	73.5	368
56-55-3	Benzo(a)anthracene	U	36.8	ug/kg	11.0	36.8
91-94-1	3,3'-Dichlorobenzidine	U	368	ug/kg	110	368
218-01-9	Chrysene	U	36.8	ug/kg	11.0	36.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	368	ug/kg	73.5	368
117-84-0	Di-n-octylphthalate	U	368	ug/kg	73.5	368
205-99-2	Benzo(b)fluoranthene	U	36.8	ug/kg	11.0	36.8
207-08-9	Benzo(k)fluoranthene	U	36.8	ug/kg	11.0	36.8
50-32-8	Benzo(a)pyrene	U	36.8	ug/kg	11.0	36.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.8	ug/kg	11.0	36.8
53-70-3	Dibenzo(a,h)anthracene	U	36.8	ug/kg	11.0	36.8
191-24-2	Benzo(ghi)perylene	U	36.8	ug/kg	11.0	36.8
120-82-1	1,2,4-Trichlorobenzene	U	368	ug/kg	73.5	368

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	387	ug/kg		J
	Unknown	2.15	660	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099009	Date Received: 01/20/2010 08:45	%Moisture: 9.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7185	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 23:11	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2632.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	2.33	182	ug/kg		J
	Unknown Aldol Condensate	3.42	530	ug/kg		JA
	Unknown	16.02	170	ug/kg		J
	Unknown	17.19	239	ug/kg		J

Data File: /chem/MSD3.i/s012610a.b/s3a2632.d
Report Date: 27-Jan-2010 10:00

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2632.d
Lab Smp Id: 245099009 Client Smp ID: RE15-10-7185
Inj Date : 26-JAN-2010 23:11
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099009|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 08:40 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.41540	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.826	4.832	(1.000)	315739	40.0000		
* 29 Naphthalene-d8	136	6.111	6.114	(1.000)	1207745	40.0000		
* 46 Acenaphthene-d10	164	7.984	7.990	(1.000)	686208	40.0000		
* 67 Phenanthrene-d10	188	9.603	9.605	(1.000)	1170635	40.0000		
* 91 Chrysene-d12	240	12.626	12.634	(1.000)	721863	40.0000		
* 98 Perylene-d12	264	14.968	14.975	(1.000)	428621	40.0000		
\$ 3 2-Fluorophenol	112	3.654	3.644	(0.757)	485313	59.0698	2170	
\$ 5 Phenol-d5	99	4.428	4.430	(0.917)	582359	56.3992	2070	
\$ 20 Nitrobenzene-d5	82	5.366	5.372	(0.878)	270856	30.3600	1120	
\$ 39 2-Fluorobiphenyl	172	7.239	7.244	(0.907)	569975	32.1347	1180	
\$ 60 2,4,6-Tribromophenol	329	8.837	8.842	(1.107)	143023	72.7050	2670	
\$ 81 p-Terphenyl-d14	244	11.313	11.316	(0.896)	592000	47.7132	1750	

ION RATIO REPORT

SV REPORT

Data file: s3a2632.d

Report Date: 01/27/2010 09:42

Lab. ID: 245099009

SampleType: SAMPLE

Injection Date: 26-JAN-2010 23:11

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099009|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	33115	4.43	4.52	80-120	100	(T)
93	2916	4.49	4.52	205-265	9	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	37765	5.37	5.20	80-120	100	(T)
42	25079	5.36	5.20	45-105	66	(T)

41 m-Nitroaniline		CAS#: 99-09-2				
138	181	7.98	7.93	80-120	100	()
92	3653	7.98	7.93	78-138	2016	(Q)
108	14120	7.98	7.93	0- 40	7793	(Q)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	89273	7.98	7.75	80-120	100	(T)
63	3526	7.98	7.75	36- 96	4	(QT)

45 Acenaphthylene		CAS#: 208-96-8				
152	16227	7.99	7.84	80-120	100	(T)
151	4419	7.99	7.84	0- 50	27	(T)
153	16389	7.99	7.84	0- 43	101	(QT)

47 Acenaphthene		CAS#: 83-32-9				
154	16343	7.99	8.03	80-120	100	()
153	16389	7.99	8.03	69-129	100	()
152	16227	7.99	8.03	17- 77	99	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	89273	7.98	8.18	80-120	100	(T)
89	1915	7.99	8.18	42-102	2	(QT)
63	3526	7.98	8.18	21- 81	4	(QT)

Q qualifier indicates ion failed ratio requirement

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Data file : /chem/MSD3.i/s012610a.b/s3a2632.d
 Lab Smp Id: 245099009 Client Smp ID: RE15-10-7185
 Inj Date : 26-JAN-2010 23:11
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099009|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
 Meth Date : 27-Jan-2010 08:40 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.41540	% moisture

Cpnd Variable Local Compound Variable

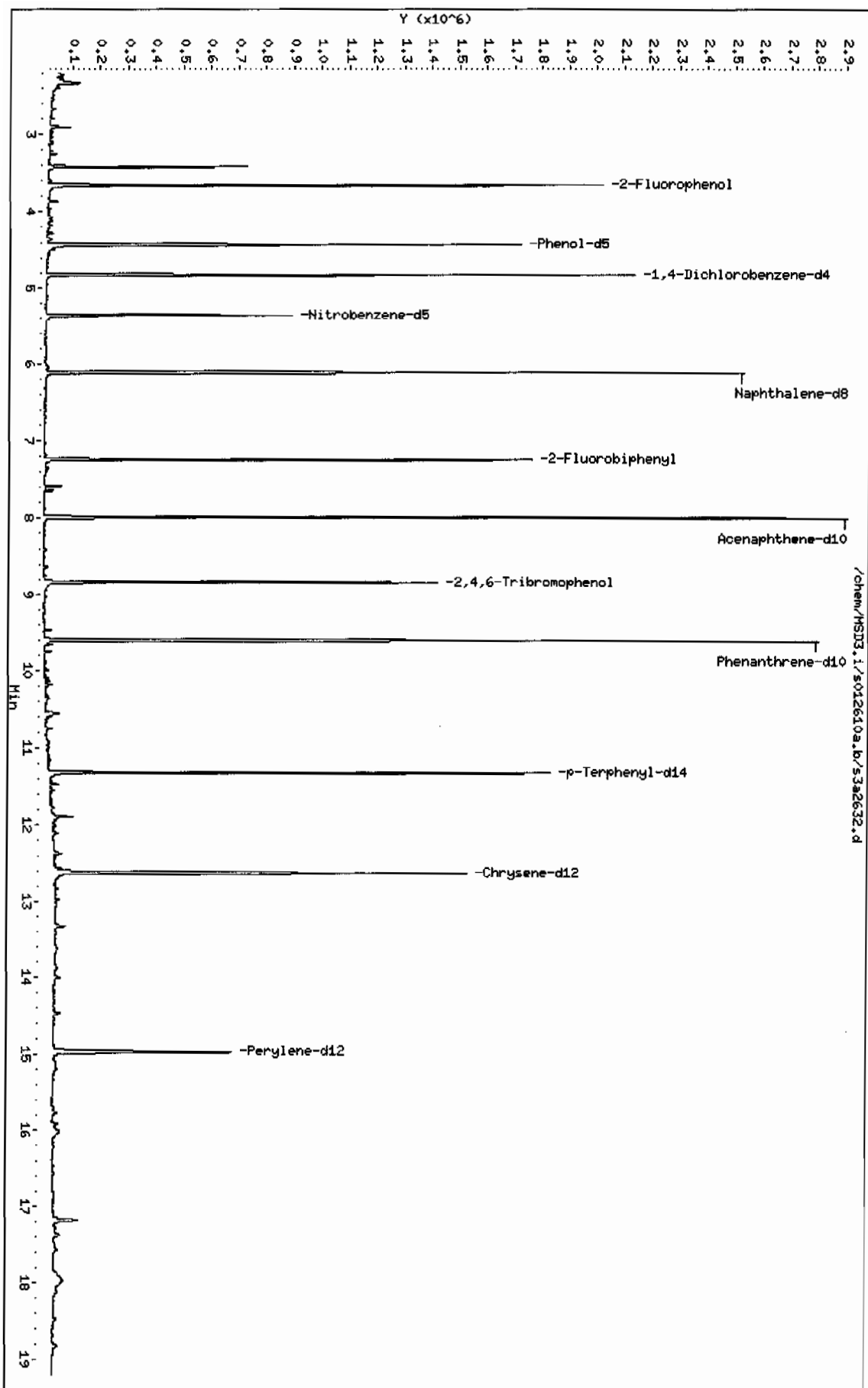
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.826	1971649	40.000
* 98 Perylene-d12	14.968	1215214	40.000

RT	AREA	CONCENTRATIONS		QUAL	QUANT		
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.716	518117	10.5113460	386	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.147	884225	17.9387833	660	0		0	10
Unknown					CAS #:		
2.331	244425	4.95879133	182	0		0	10
Unknown Aldol Condensate					CAS #:		
3.416	709865	14.4014473	530	0		0	10
Unknown					CAS #:		
16.017	140325	4.61894234	170	0		0	98
Unknown					CAS #:		
17.189	197625	6.50501949	239	0		0	98

Data File: /chem/HSD3.i/s012610a.b/s3a2632.d
 Date : 26-JAN-2010 23:11
 Client ID: RE15-10-7185
 Sample Info: 124509009194445511(SNH111LNL)
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: HSD3.i
 Operator: JLD1
 Column diameter: 0.20



Date : 26-JAN-2010 23:11

Client ID: RE15-10-7185

Instrument: MSD3.i

Sample Info: 1245099009194445511SVHF111LANL

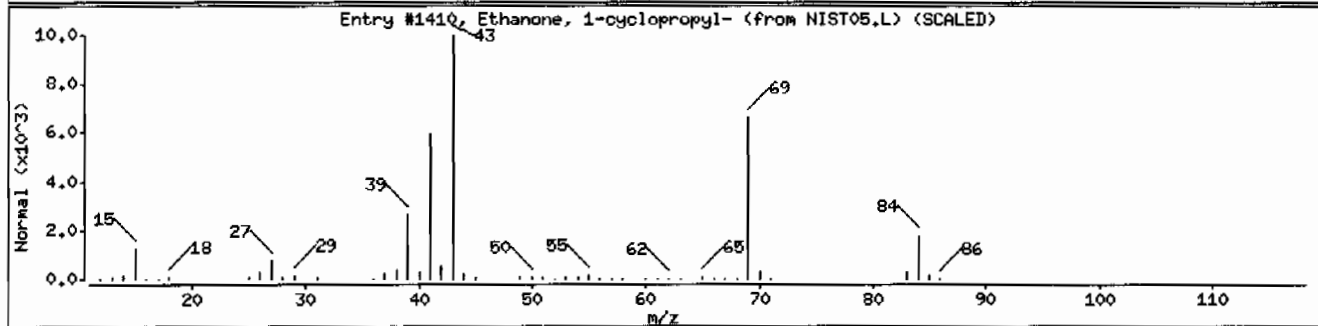
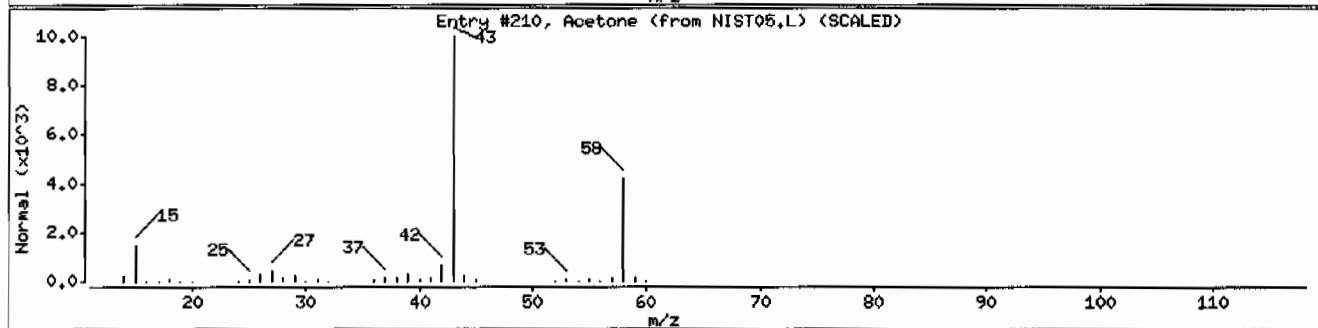
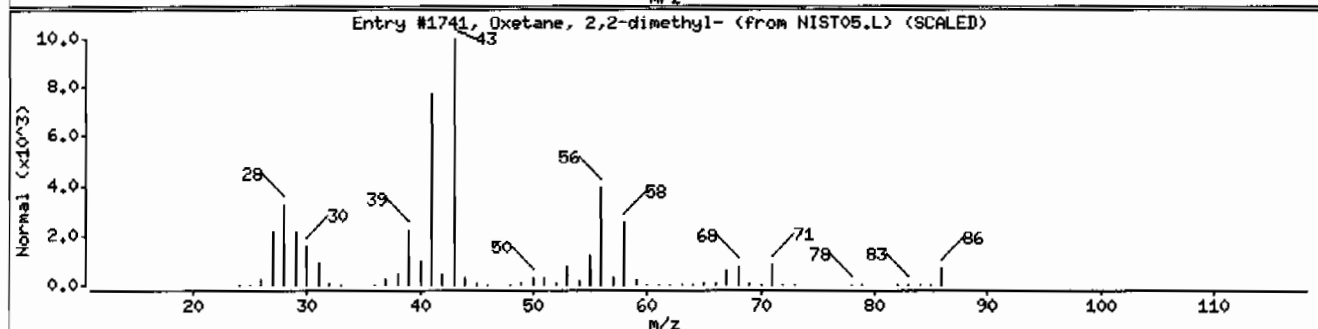
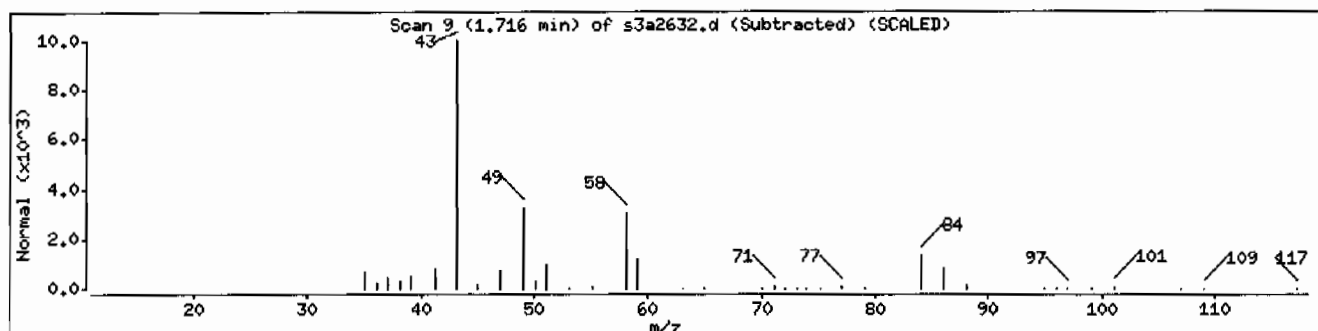
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Oxetane, 2,2-dimethyl-	6245-99-4	NIST05.L	1741	9	C5H10O	86
Acetone	67-64-1	NIST05.L	210	7	C3H6O	58
Ethanone, 1-cyclopropyl-	765-43-5	NIST05.L	1410	5	C5H8O	84



Date : 26-JAN-2010 23:11

Client ID: RE15-10-7185

Instrument: MSD3.i

Sample Info: I245099009I944485I1ISVMF11ILANL

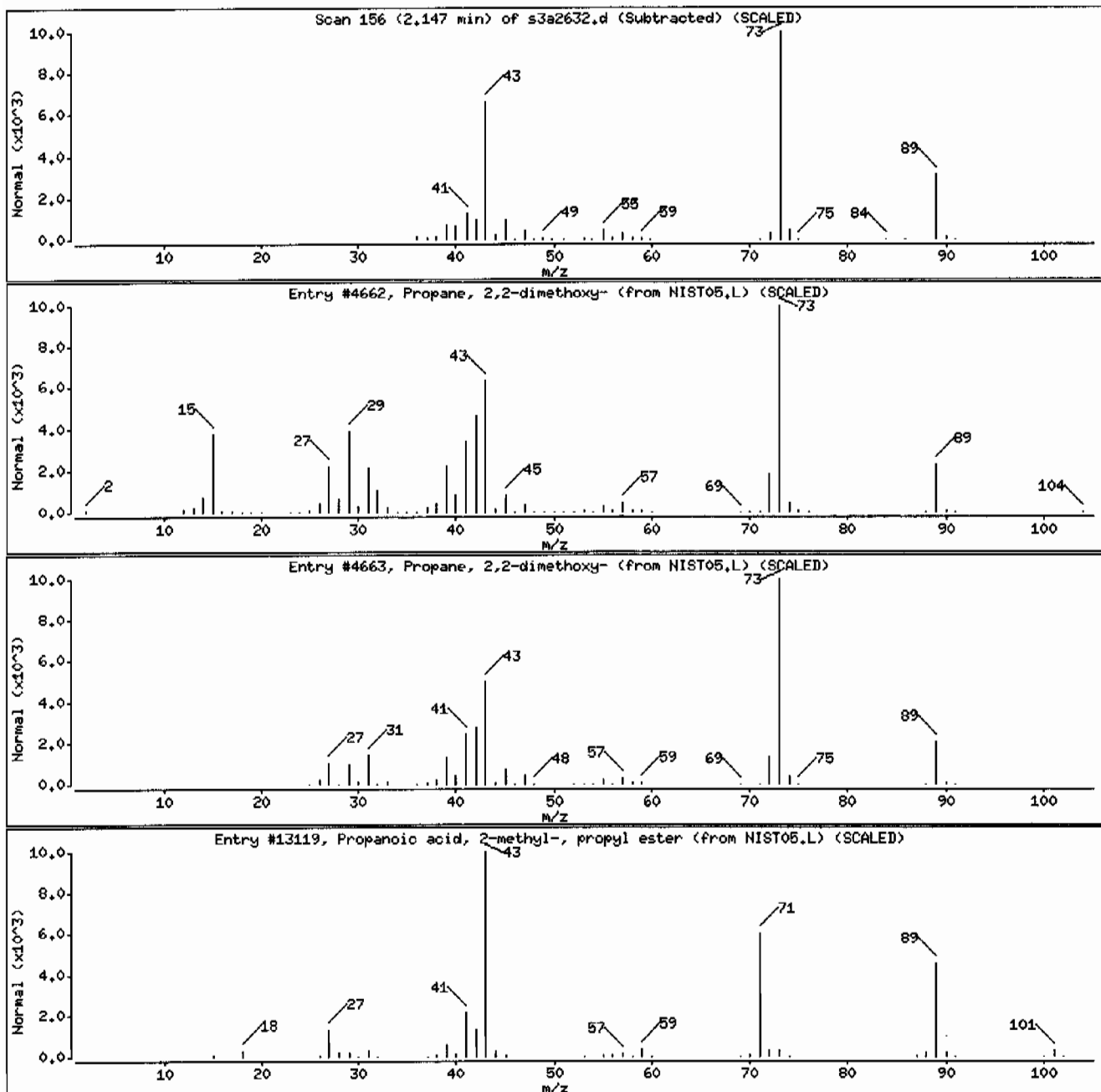
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	17	C7H14O2	130



Date : 26-JAN-2010 23:11

Client ID: RE15-10-7185

Instrument: MSD3.i

Sample Info: 1245099009194445511ISVMFI11LANL

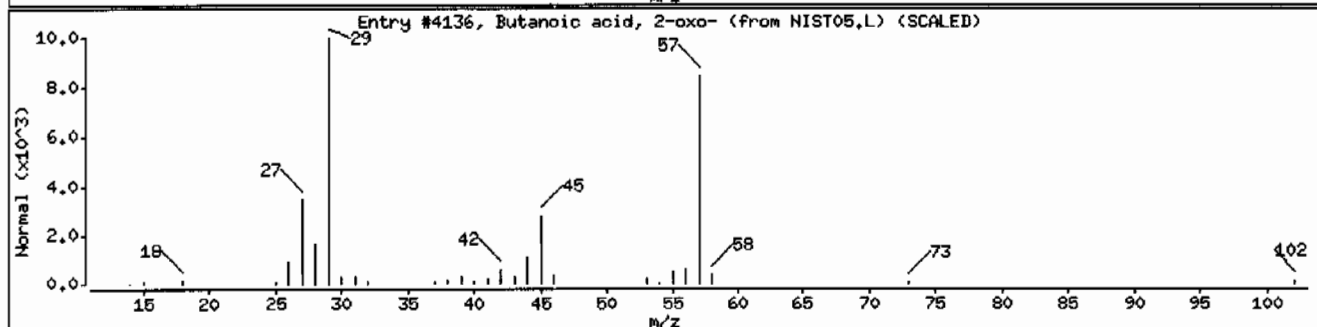
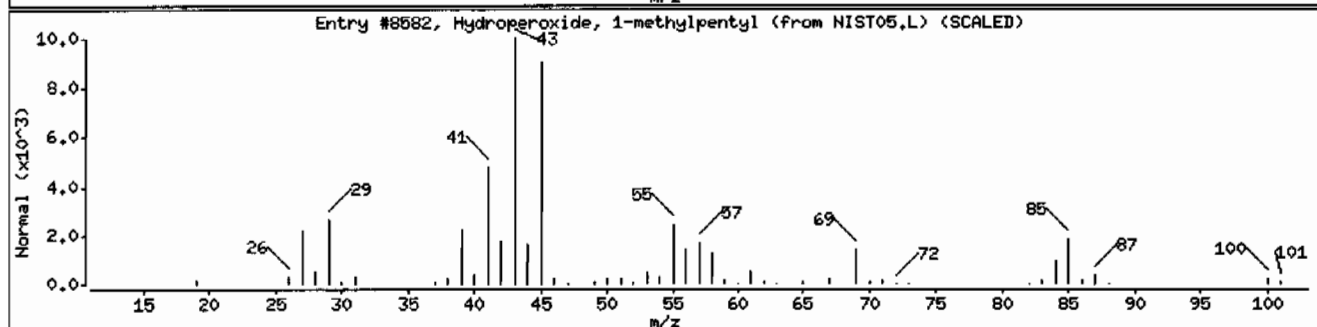
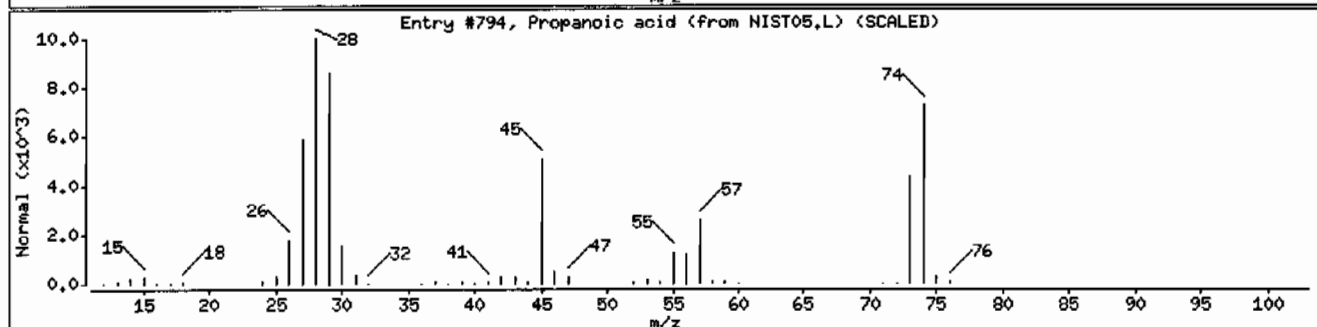
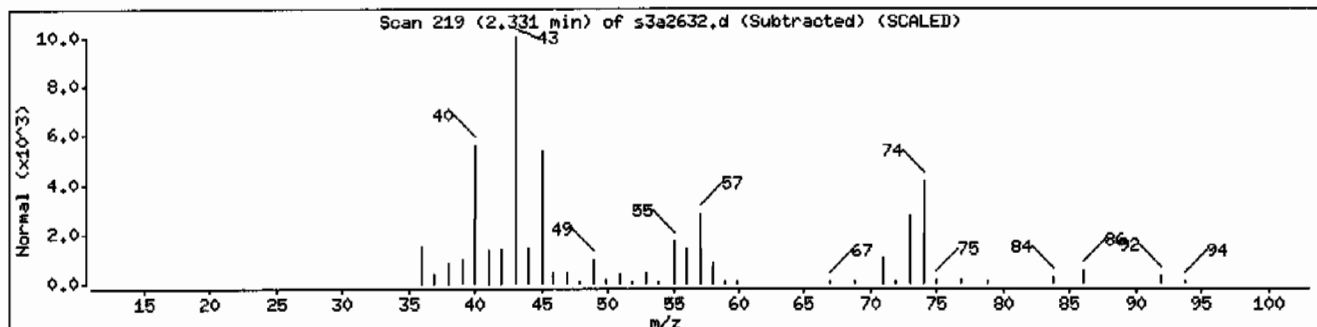
Volume Injected (uL): 0.5

Operator: JLD1

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	794	64	C3H6O2	74
Hydroperoxide, 1-methylpentyl	24254-55-5	NIST05,L	8582	10	C6H14O2	118
Butanoic acid, 2-oxo-	600-18-0	NIST05,L	4136	10	C4H6O3	102



Date : 26-JAN-2010 23:11

Client ID: RE15-10-7185

Instrument: HSD3.i

Sample Info: 1245099009194445511SVHF11ILANL

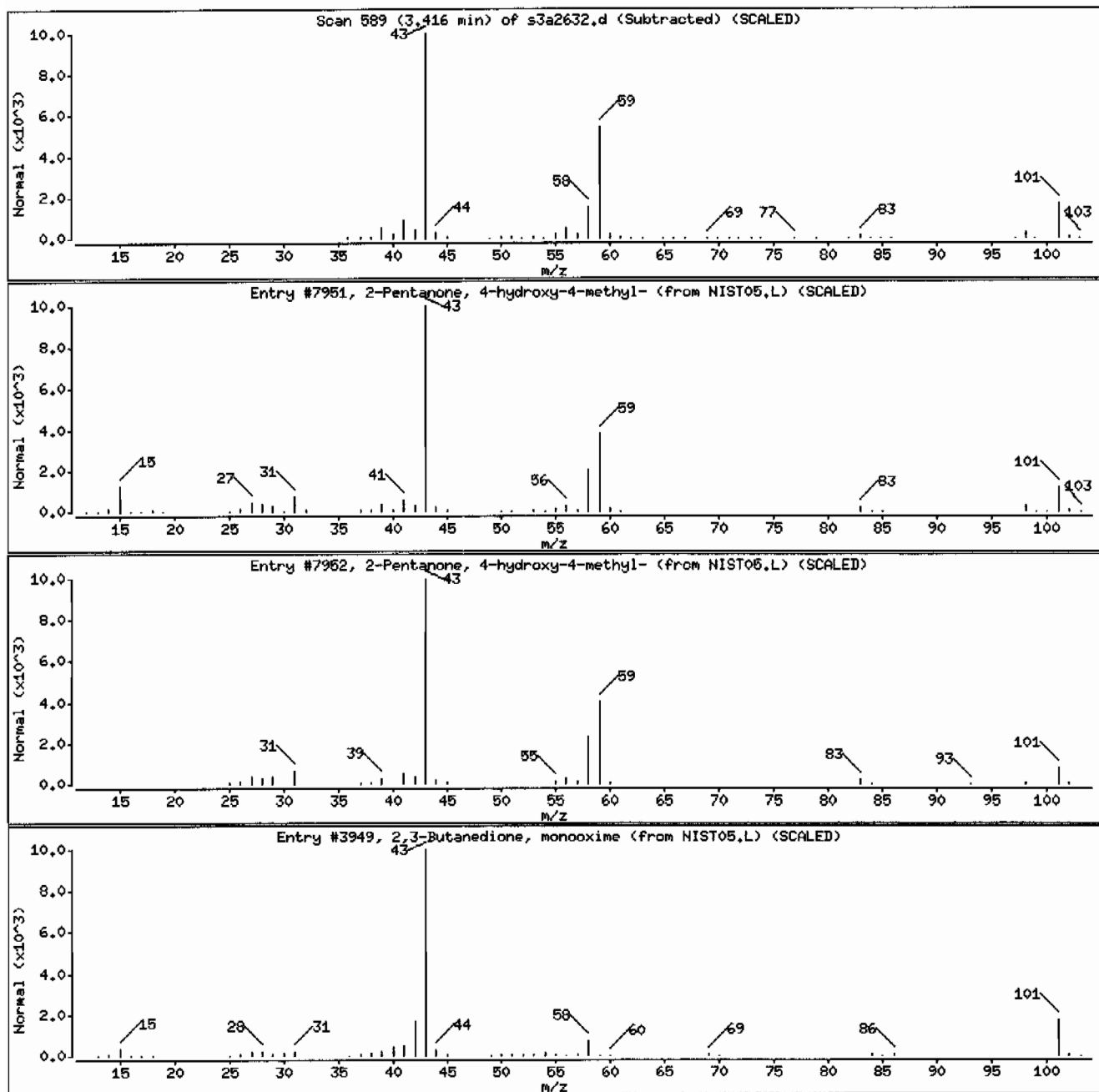
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101



Date : 26-JAN-2010 23:11

Client ID: RE15-10-7185

Instrument: HSD3.i

Sample Info: 1245099009194445511SVHF111LANL

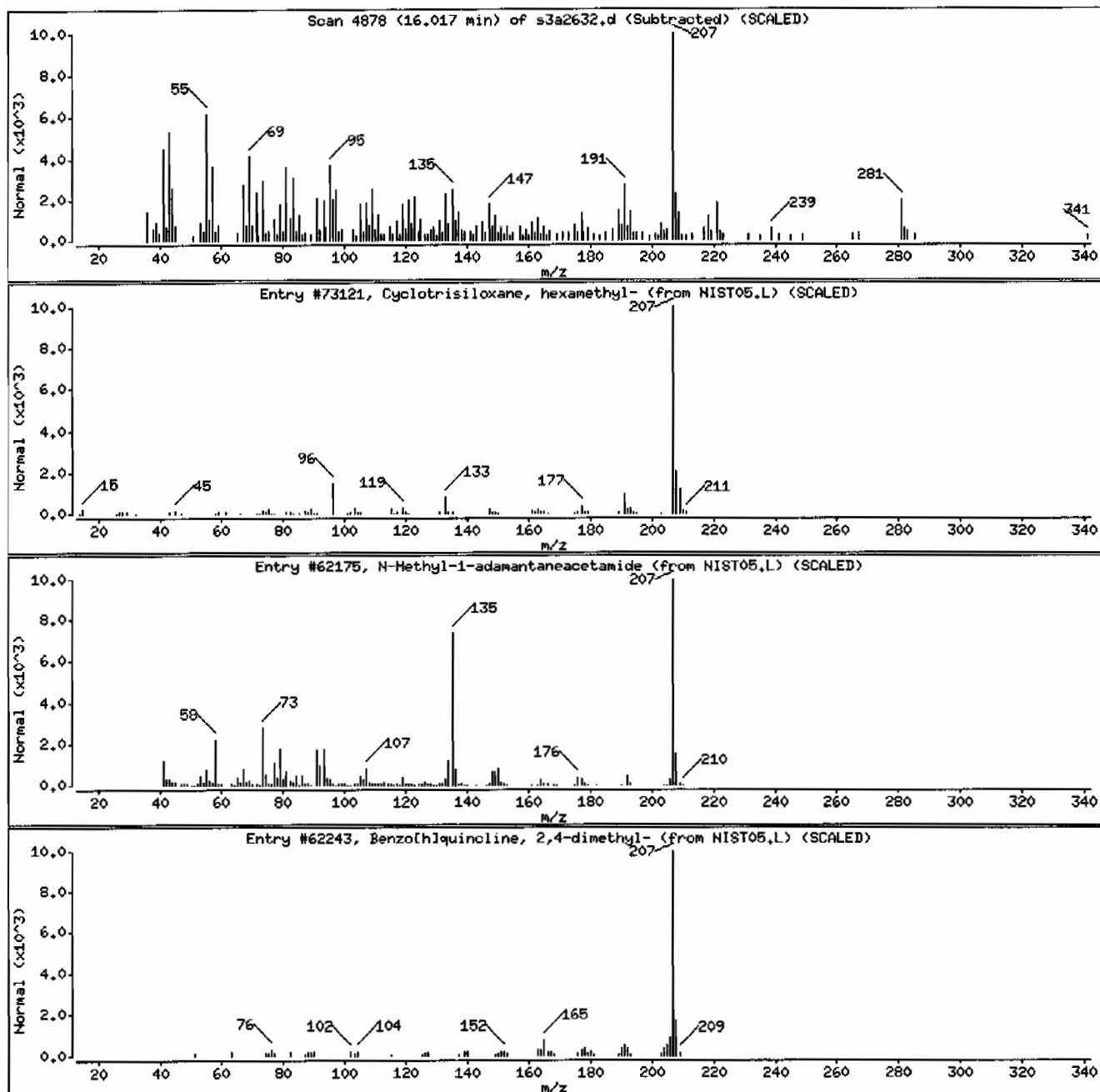
Volume Injected (uL): 0.5

Operator: JLD1

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
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C ₁₃ H ₂₁ NO	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C ₁₅ H ₁₃ N	207



Date : 26-JAN-2010 23:11

Client ID: RE15-10-7185

Instrument: MSD3.i

Sample Info: 1245099009194445511SVHF11ILANL

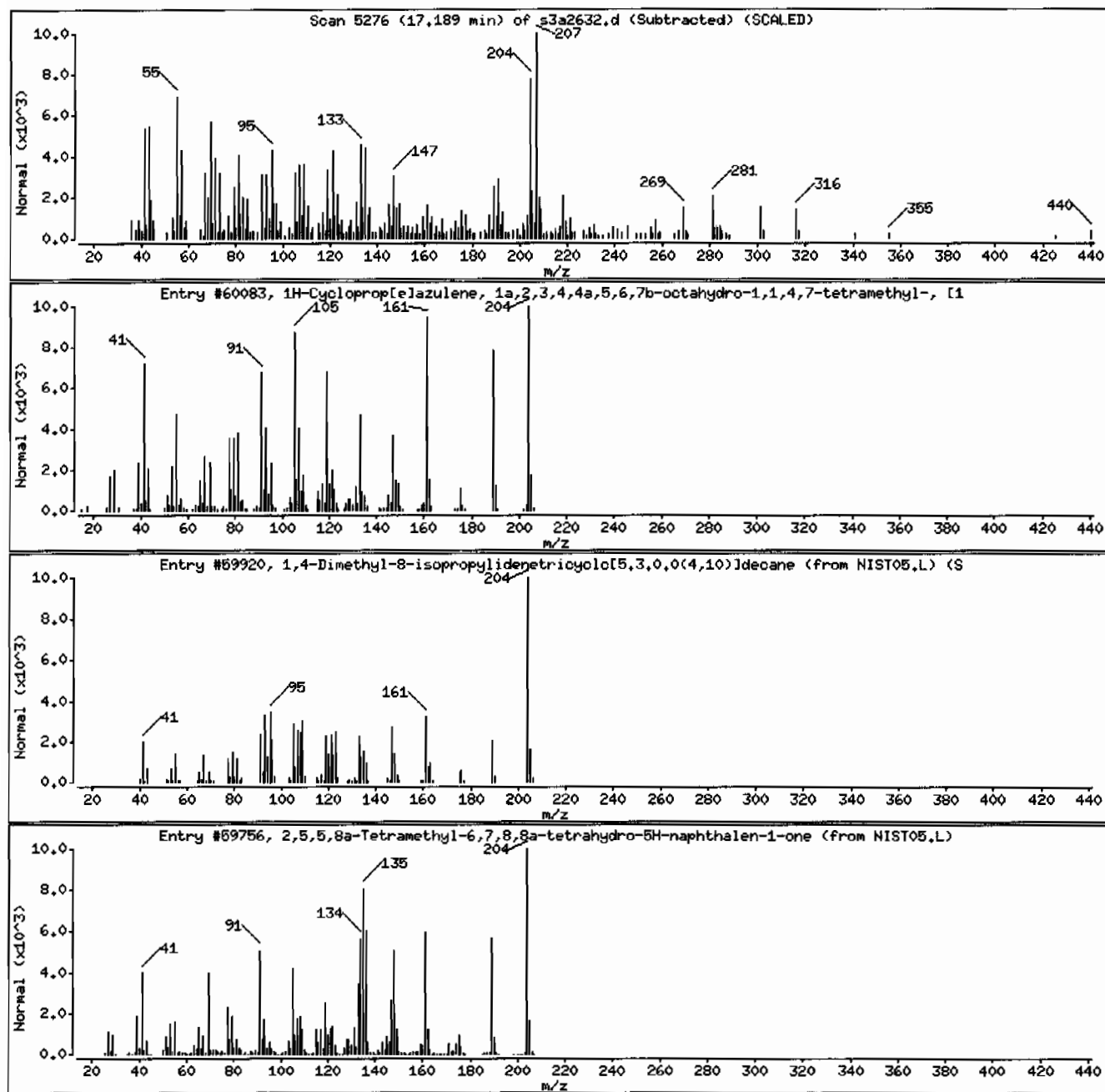
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Cycloprop[elazulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60083	52	C15H24	204
1,4-Dimethyl-8-isopropylidenetricyclo[5.	1000140-07-7	NIST05.L	59920	38	C15H24	204
2,5,5,8a-Tetramethyl-6,7,8,8a-tetrahydro	124957-09-1	NIST05.L	59756	25	C14H20O	204



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

SDG Number: 10-1301
Lab Sample ID: 245099002

Client ID: RE15-10-7186
Batch ID: 944455
Run Date: 01/25/2010 14:11
Prep Date: 01/22/2010 23:39
Data File: s3a2511.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 18.6
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	408	ug/kg	81.6	408
108-95-2	Phenol	U	408	ug/kg	81.6	408
95-57-8	2-Chlorophenol	U	408	ug/kg	81.6	408
106-46-7	1,4-Dichlorobenzene	U	408	ug/kg	81.6	408
621-64-7	N-Nitrosodipropylamine	U	408	ug/kg	81.6	408
59-50-7	4-Chloro-3-methylphenol	U	408	ug/kg	81.6	408
83-32-9	Acenaphthene	U	40.8	ug/kg	13.5	40.8
121-14-2	2,4-Dinitrotoluene	U	408	ug/kg	40.8	408
100-02-7	4-Nitrophenol	U	408	ug/kg	135	408
87-86-5	Pentachlorophenol	U	408	ug/kg	102	408
129-00-0	Pyrene	U	40.8	ug/kg	12.2	40.8
110-86-1	Pyridine	U	408	ug/kg	81.6	408
62-53-3	Aniline	U	408	ug/kg	122	408
111-44-4	bis(2-Chloroethyl) ether	U	408	ug/kg	81.6	408
541-73-1	1,3-Dichlorobenzene	U	408	ug/kg	81.6	408
100-51-6	Benzyl alcohol	U	408	ug/kg	122	408
95-50-1	1,2-Dichlorobenzene	U	408	ug/kg	81.6	408
108-60-1	bis(2-Chloroisopropyl)ether	U	408	ug/kg	81.6	408
95-48-7	o-Cresol	U	408	ug/kg	81.6	408
65794-96-9	m,p-Cresols	U	408	ug/kg	122	408
67-72-1	Hexachloroethane	U	408	ug/kg	81.6	408
98-95-3	Nitrobenzene	U	408	ug/kg	81.6	408
78-59-1	Isophorone	U	408	ug/kg	81.6	408
88-75-5	2-Nitrophenol	U	408	ug/kg	81.6	408
105-67-9	2,4-Dimethylphenol	U	408	ug/kg	143	408
111-91-1	bis(2-Chloroethoxy)methane	U	408	ug/kg	81.6	408
120-83-2	2,4-Dichlorophenol	U	408	ug/kg	81.6	408
65-85-0	Benzoic acid	U	816	ug/kg	204	816
91-20-3	Naphthalene	U	40.8	ug/kg	12.2	40.8
106-47-8	4-Chloroaniline	U	408	ug/kg	81.6	408
87-68-3	Hexachlorobutadiene	U	408	ug/kg	81.6	408
91-57-6	2-Methylnaphthalene	U	40.8	ug/kg	8.16	40.8
77-47-4	Hexachlorocyclopentadiene	U	408	ug/kg	81.6	408
88-06-2	2,4,6-Trichlorophenol	U	408	ug/kg	81.6	408
95-95-4	2,4,5-Trichlorophenol	U	408	ug/kg	81.6	408
91-58-7	2-Chloronaphthalene	U	40.8	ug/kg	13.5	40.8
88-74-4	2-Nitroaniline	U	408	ug/kg	81.6	408
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	408	ug/kg	81.6	408

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099002	Date Received: 01/20/2010 08:45	%Moisture: 18.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7186	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 14:11	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s3a2511.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	408	ug/kg	81.6	408
606-20-2	2,6-Dinitrotoluene	U	408	ug/kg	40.8	408
208-96-8	Acenaphthylene	U	40.8	ug/kg	12.2	40.8
51-28-5	2,4-Dinitrophenol	U	816	ug/kg	155	816
132-64-9	Dibenzofuran	U	408	ug/kg	81.6	408
84-66-2	Diethylphthalate	U	408	ug/kg	81.6	408
86-73-7	Fluorene	U	40.8	ug/kg	12.2	40.8
7005-72-3	4-Chlorophenylphenylether	U	408	ug/kg	81.6	408
534-52-1	2-Methyl-4,6-dinitrophenol	U	408	ug/kg	81.6	408
100-01-6	4-Nitroaniline	U	408	ug/kg	122	408
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	408	ug/kg	81.6	408
122-66-7	Azobenzene	U	408	ug/kg	81.6	408
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	408	ug/kg	81.6	408
118-74-1	Hexachlorobenzene	U	408	ug/kg	81.6	408
85-01-8	Phenanthrene	U	40.8	ug/kg	12.2	40.8
120-12-7	Anthracene	U	40.8	ug/kg	8.16	40.8
84-74-2	Di-n-butylphthalate	U	408	ug/kg	81.6	408
206-44-0	Fluoranthene	U	40.8	ug/kg	12.2	40.8
85-68-7	Butylbenzylphthalate	U	408	ug/kg	81.6	408
56-55-3	Benzo(a)anthracene	U	40.8	ug/kg	12.2	40.8
91-94-1	3,3'-Dichlorobenzidine	U	408	ug/kg	122	408
218-01-9	Chrysene	U	40.8	ug/kg	12.2	40.8
117-81-7	bis(2-Ethylhexyl)phthalate	U	408	ug/kg	81.6	408
117-84-0	Di-n-octylphthalate	U	408	ug/kg	81.6	408
205-99-2	Benzo(b)fluoranthene	U	40.8	ug/kg	12.2	40.8
207-08-9	Benzo(k)fluoranthene	U	40.8	ug/kg	12.2	40.8
50-32-8	Benzo(a)pyrene	U	40.8	ug/kg	12.2	40.8
193-39-5	Indeno(1,2,3-cd)pyrene	U	40.8	ug/kg	12.2	40.8
53-70-3	Dibenzo(a,h)anthracene	U	40.8	ug/kg	12.2	40.8
191-24-2	Benzo(ghi)perylene	U	40.8	ug/kg	12.2	40.8
120-82-1	1,2,4-Trichlorobenzene	U	408	ug/kg	81.6	408

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.43	440	ug/kg		JA
	Unknown	15.22	729	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099002

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 18.6
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
	Unknown		16.09	730	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2511.d
Lab Smp Id: 245099002 Client Smp ID: RE15-10-7186
Inj Date : 25-JAN-2010 14:11
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099002|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	18.57750	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.839	4.841	(1.000)	388525	40.0000		
* 29 Naphthalene-d8	136	6.121	6.126	(1.000)	1276577	40.0000		
* 46 Acenaphthene-d10	164	7.996	8.003	(1.000)	523831	40.0000		
* 67 Phenanthrene-d10	188	9.612	9.618	(1.000)	628326	40.0000		
* 91 Chrysene-d12	240	12.639	12.650	(1.000)	517646	40.0000		
* 98 Perylene-d12	264	14.985	14.999	(1.000)	279917	40.0000		
\$ 3 2-Fluorophenol	112	3.663	3.653	(0.757)	577966	57.1682	2330	
\$ 5 Phenol-d5	99	4.434	4.436	(0.916)	682344	53.7025	2190	
\$ 20 Nitrobenzene-d5	82	5.376	5.384	(0.878)	316879	33.6035	1370	
\$ 39 2-Fluorobiphenyl	172	7.251	7.254	(0.907)	548098	40.4801	1650	
\$ 60 2,4,6-Tribromophenol	329	8.847	8.852	(1.106)	75334	50.1665	2040	
\$ 81 p-Terphenyl-d14	244	11.324	11.326	(0.896)	336562	37.8272	1540	

ION RATIO REPORT

SV REPORT

Data file: s3a2511.d

Report Date: 01/25/2010 14:29

Lab. ID: 245099002

SampleType: SAMPLE

Injection Date: 25-JAN-2010 14:11

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099002|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	39086	4.43	4.53	80-120	100	(T)
93	1550	4.50	4.53	206-266	4	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	46132	5.38	5.21	80-120	100	(T)
42	28933	5.38	5.21	45-105	63	(T)

41 m-Nitroaniline		CAS#: 99-09-2				
138	662	8.00	7.94	80-120	100	()
92	3533	8.00	7.94	79-139	534	(Q)
108	11416	8.00	7.94	0- 40	1725	(Q)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	68350	8.00	7.76	80-120	100	(T)
63	13456	8.00	7.76	37- 97	20	(QT)

45 Acenaphthylene		CAS#: 208-96-8				
152	78047	8.00	7.85	80-120	100	(T)
151	21026	8.00	7.85	0- 50	27	(T)
153	81013	8.00	7.85	0- 43	104	(QT)

47 Acenaphthene		CAS#: 83-32-9				
154	70963	8.00	8.04	80-120	100	()
153	81013	8.00	8.04	70-130	114	()
152	78047	8.00	8.04	18- 78	110	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	68350	8.00	8.19	80-120	100	(T)
89	5155	8.00	8.19	42-102	8	(QT)
63	13456	8.00	8.19	21- 81	20	(QT)

52	4-Nitrophenol			CAS#: 100-02-7		
139	13431	8.00	8.09	80-120	100	(T)
109	1468	8.00	8.09	40-100	11	(QT)
65	5130	8.00	8.09	77-137	38	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2511.d
 Lab Smp Id: 245099002 Client Smp ID: RE15-10-7186
 Inj Date : 25-JAN-2010 14:11
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099002|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclpl1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	18.57750	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.839	2456164	40.000
* 98 Perylene-d12	14.985	815798	40.000

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

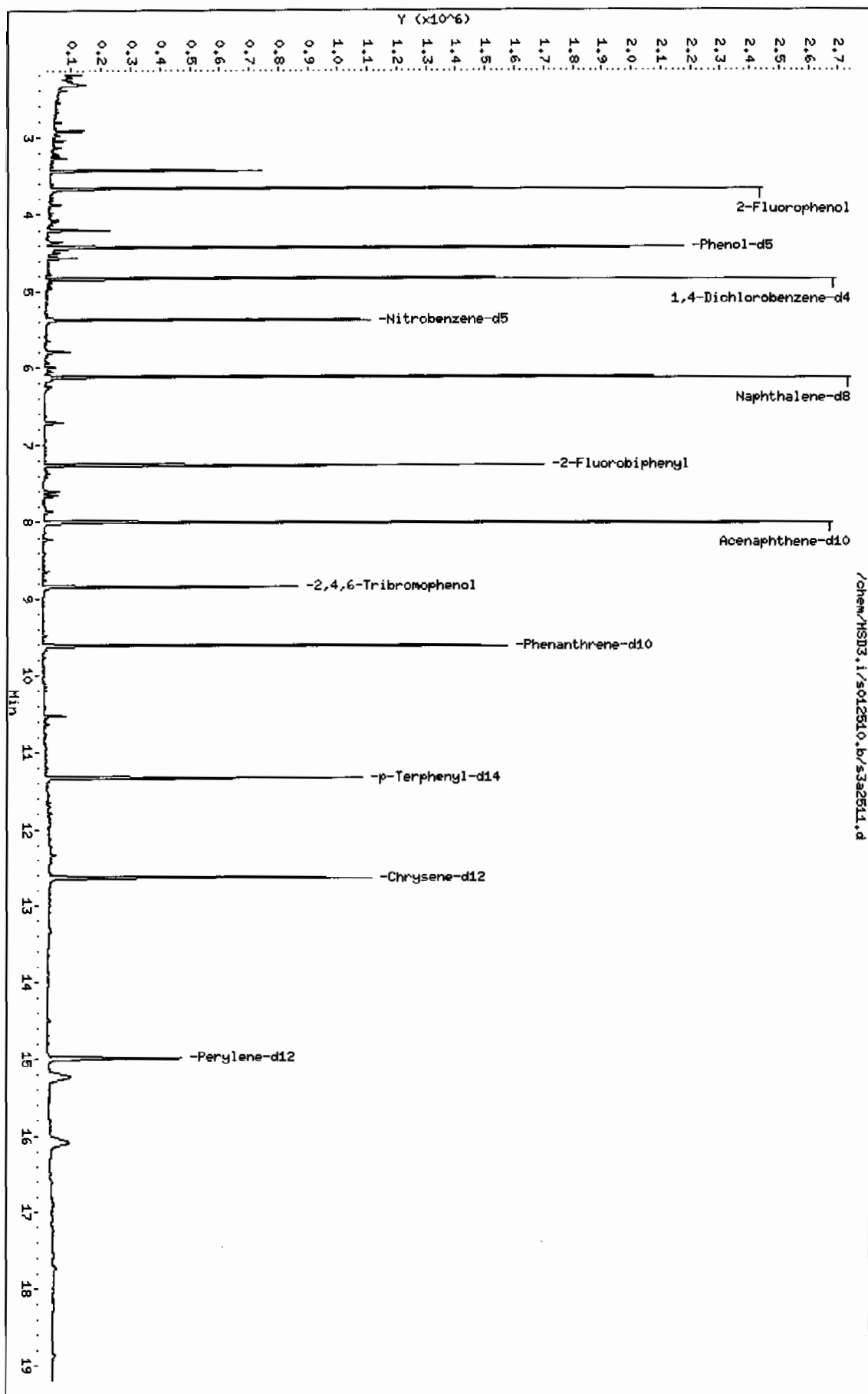
Unknown Aldol Condensate CAS #:

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RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
15.221	364835	17.8884699	729	0		0	98
Unknown					CAS #:		
16.089	365234	17.9080677	730	0		0	98

Data File: /chem/MSD3.i/s012510.b/s3a2511.d
 Date: 25-JAN-2010 14:11
 Client ID: REL5-10-7186
 Sample Info: 12450900219445511SVHF11L6NL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD3.i
 Operator: JLM
 Column diameter: 0.20



Date : 25-JAN-2010 14:11

Client ID: RE15-10-7186

Instrument: MSD3.1

Sample Info: 1245099002194445511ISVMF111LANL

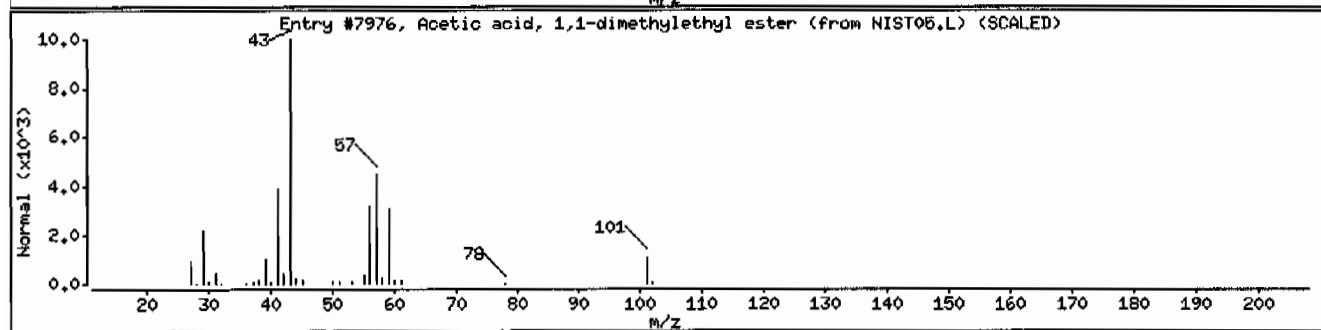
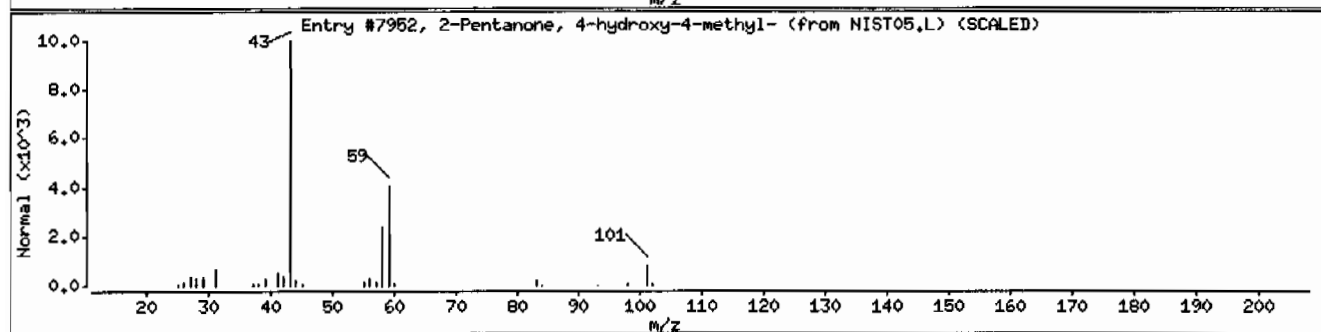
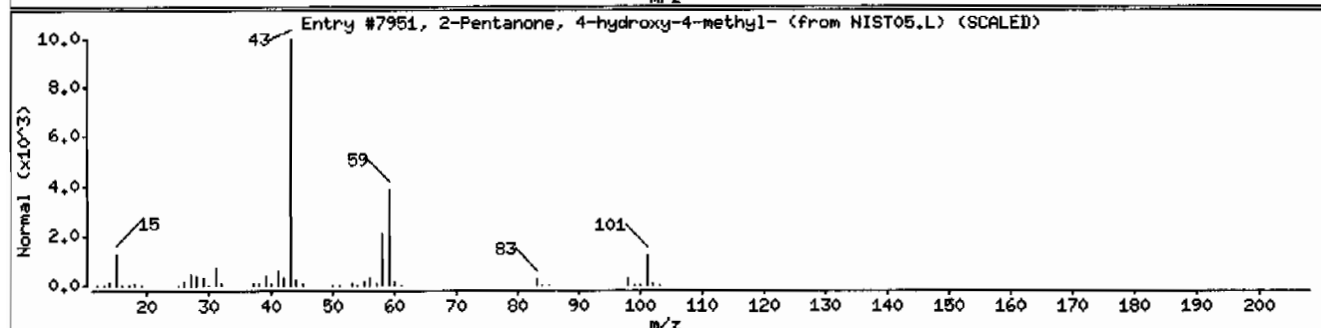
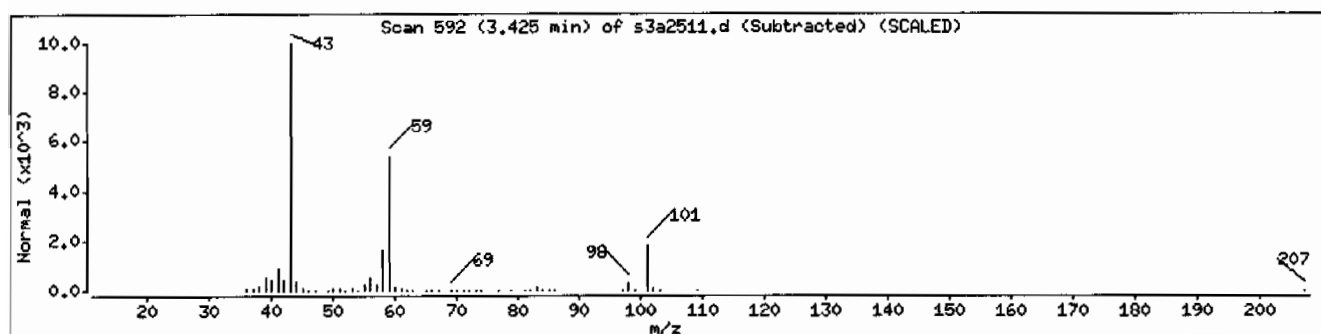
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	38	C6H12O2	116



Date : 25-JAN-2010 14:11

Client ID: RE15-10-7186

Instrument: MSD3.i

Sample Info: 1245099002194445511SVHF111LANL

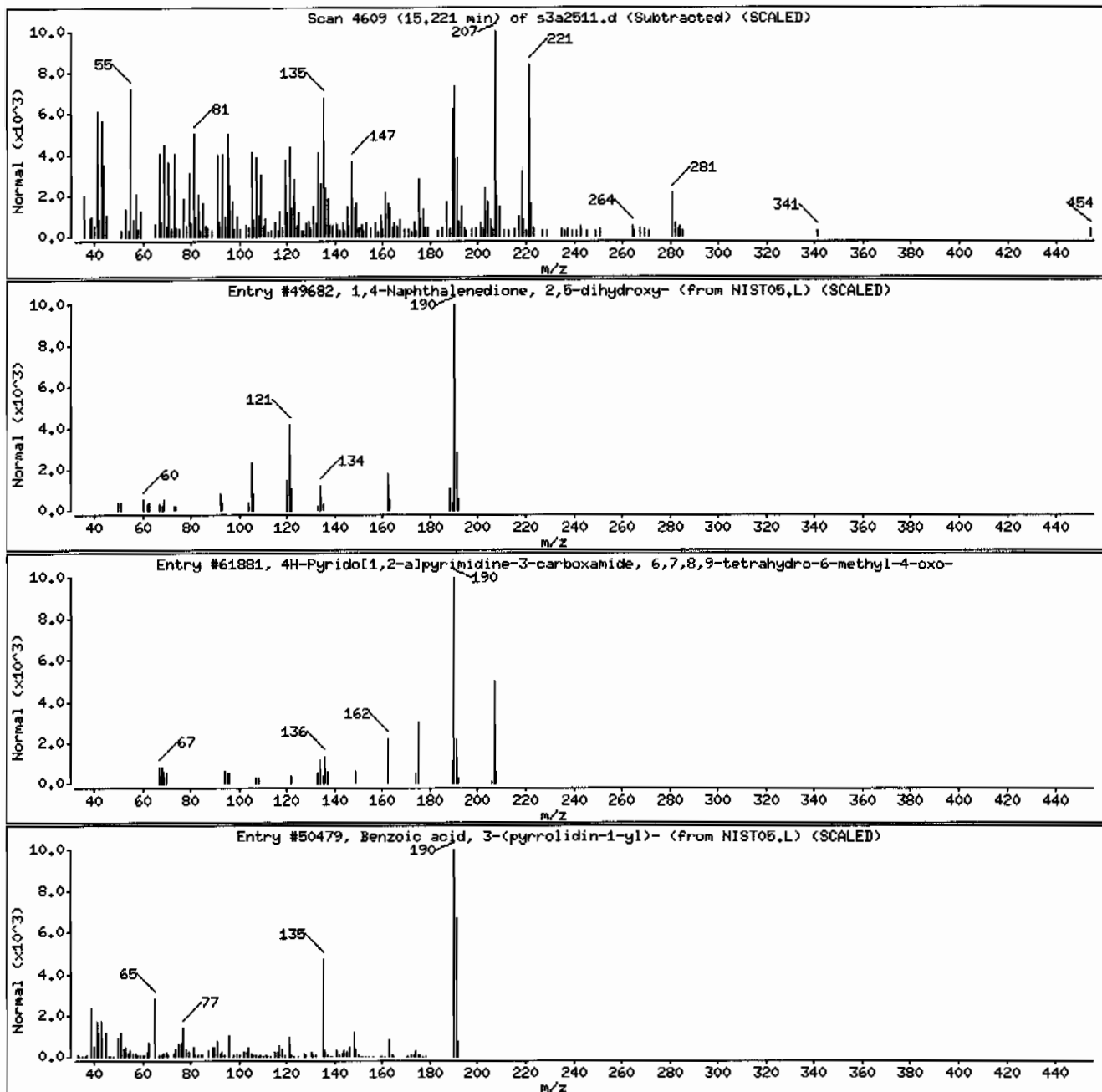
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,4-Naphthalenedione, 2,5-dihydroxy-	4923-55-1	NIST05.L	49682	25	C10H6O4	190
4H-Pyrido[1,2-a]pyrimidine-3-carboxamide	33484-45-6	NIST05.L	61881	25	C10H13N3O2	207
Benzoic acid, 3-(pyrrolidin-1-yl)-	1000304-91-1	NIST05.L	50479	18	C11H13NO2	191



Date : 25-JAN-2010 14:11

Client ID: RE15-10-7186

Instrument: HSD3.i

Sample Info: I245099002194445511SVHF11ILANL

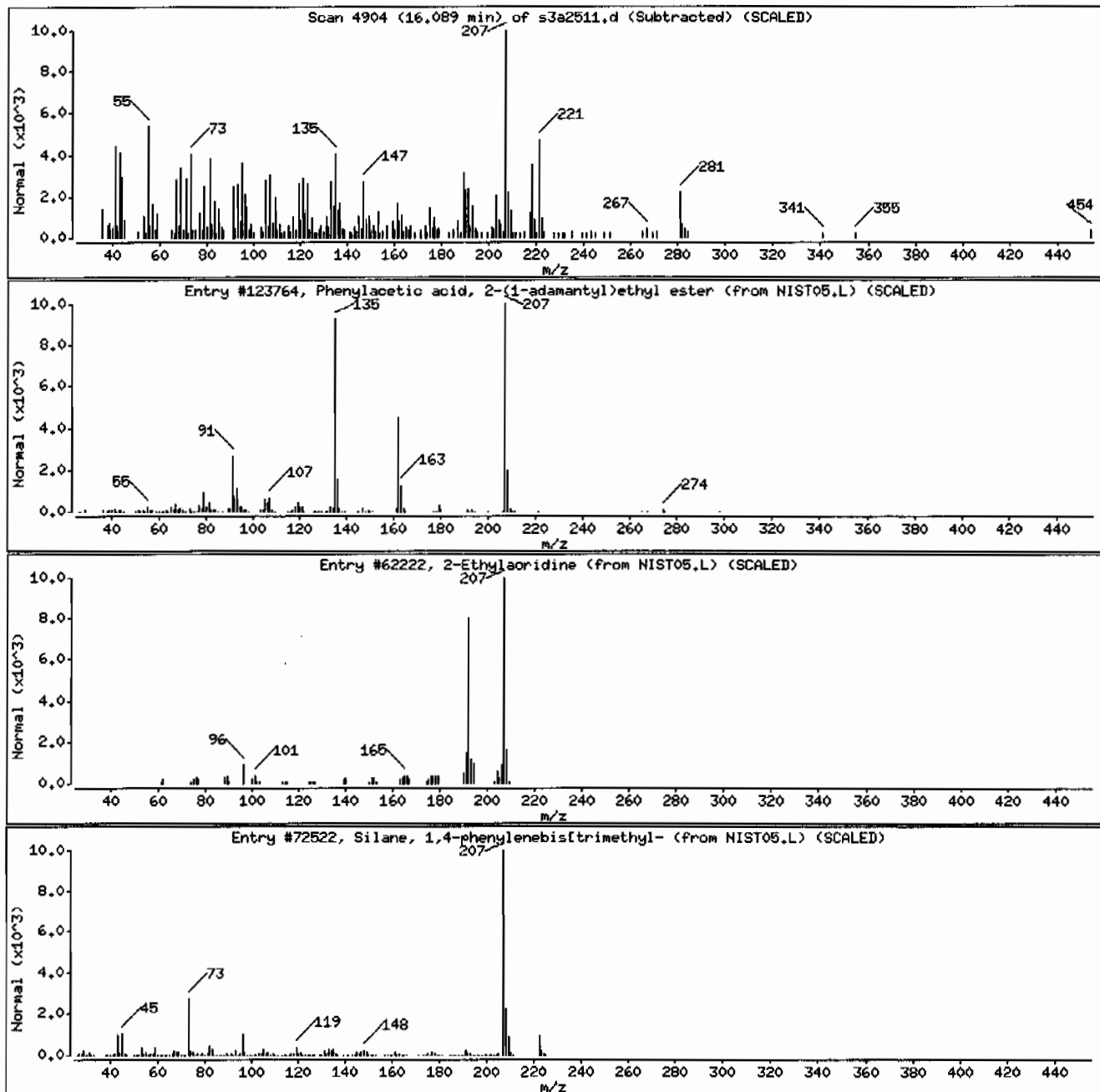
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenylacetic acid, 2-(1-adamantyl)ethyl	1000282-91-2	NIST05.L	123764	32	C ₂₀ H ₂₆ O ₂	298
2-Ethylacridine	55751-83-2	NIST05.L	62222	30	C ₁₅ H ₁₃ N	207
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	30	C ₁₂ H ₂₂ Si ₂	222



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

Page 1 of 3

SDG Number: 10-1301
Lab Sample ID: 245099011

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7187
Batch ID: 944455
Run Date: 01/25/2010 18:10
Prep Date: 01/22/2010 23:39
Data File: s3a2520.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.3	367
108-95-2	Phenol	U	367	ug/kg	73.3	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.3	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.3	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.3	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.3	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.3	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.3	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.3	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.3	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.3	367
95-48-7	o-Cresol	U	367	ug/kg	73.3	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.3	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.3	367
78-59-1	Isophorone	U	367	ug/kg	73.3	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.3	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.3	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.3	367
65-85-0	Benzoic acid	U	733	ug/kg	183	733
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.3	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.3	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.33	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.3	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.3	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.3	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.3	367
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.3	367

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

SDG Number: 10-1301
Lab Sample ID: 245099011

Client ID: RE15-10-7187
Batch ID: 944455
Run Date: 01/25/2010 18:10
Prep Date: 01/22/2010 23:39
Data File: s3a2520.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.3
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	367	ug/kg	73.3	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	733	ug/kg	139	733
132-64-9	Dibenzofuran	U	367	ug/kg	73.3	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.3	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.3	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.3	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.3	367
122-66-7	Azobenzene	U	367	ug/kg	73.3	367
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.3	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.3	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.33	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.3	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.3	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.3	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.3	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.3	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.11	598	ug/kg		J
	Unknown Aldol Condensate	3.42	317	ug/kg		JA

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099011	Date Received: 01/20/2010 08:45	%Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7187	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 18:10	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2520.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
13466-78-9	3-Carene	4.78	169	ug/kg	96	NJ
	Unknown	11.96	207	ug/kg		J
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.4	263	ug/kg	91	NJ
	Unknown	15.23	537	ug/kg		J
112-95-8	Eicosane	15.79	148	ug/kg	93	NJ
	Unknown	16.1	577	ug/kg		J
	Unknown	16.9	186	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.74	1010	ug/kg	97	NJ
	Unknown	18.87	316	ug/kg		J

Data File: /chem/MSD3.i/s012510.b/s3a2520.d
Report Date: 28-Jan-2010 11:45

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2520.d
Lab Smp Id: 245099011 Client Smp ID: RE15-10-7187
Inj Date : 25-JAN-2010 18:10
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099011|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	9.34110	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.842	4.841	(1.000)	367983	40.0000	
* 29 Naphthalene-d8		136	6.124	6.126	(1.000)	1445849	40.0000	
* 46 Acenaphthene-d10		164	8.002	8.003	(1.000)	783803	40.0000	
* 67 Phenanthrene-d10		188	9.617	9.618	(1.000)	1246673	40.0000	
* 91 Chrysene-d12		240	12.646	12.650	(1.000)	714866	40.0000	
* 98 Perylene-d12		264	14.997	14.999	(1.000)	357738	40.0000	
\$ 3 2-Fluorophenol		112	3.660	3.653	(0.756)	439628	45.9123	1680
\$ 5 Phenol-d5		99	4.440	4.436	(0.917)	565348	46.9784	1720
\$ 20 Nitrobenzene-d5		82	5.379	5.384	(0.878)	250937	23.4953	862
\$ 39 2-Fluorobiphenyl		172	7.253	7.254	(0.906)	544933	26.8974	986
\$ 60 2,4,6-Tribromophenol		329	8.853	8.852	(1.106)	120985	53.8442	1970
\$ 81 p-Terphenyl-d14		244	11.327	11.326	(0.896)	483971	39.3882	1440

ION RATIO REPORT

SV REPORT

Data file: s3a2520.d

Report Date: 01/26/2010 08:43

Lab. ID: 245099011

SampleType: SAMPLE

Injection Date: 25-JAN-2010 18:10

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099011|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	31386	4.44	4.53	80-120	100	(T)
93	7731	4.50	4.53	206-266	25	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	35083	5.38	5.21	80-120	100	(T)
42	23129	5.38	5.21	45-105	66	(T)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	16593	7.60	7.40	80-120	100	(T)
164	938	7.60	7.40	2- 62	6	(T)
127	1263	7.60	7.40	9- 69	8	(QT)

42 o-Nitroaniline		CAS#: 88-74-4				
65	21731	7.60	7.50	80-120	100	(T)
92	23919	7.60	7.50	32- 92	110	(QT)
138	1828	7.60	7.50	72-132	8	(QT)

41 m-Nitroaniline		CAS#: 99-09-2				
138	132	8.00	7.94	80-120	100	()
92	4511	8.00	7.94	79-139	3401	(Q)
108	17280	8.00	7.94	0- 40	13027	(Q)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	102971	8.00	7.76	80-120	100	(T)
63	2305	8.00	7.76	37- 97	2	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
47 Acenaphthene			CAS#: 83-32-9			
154	6485	8.00	8.04	80-120	100	()
153	5084	8.00	8.04	70-130	78	()
152	4608	8.00	8.04	18- 78	71	()

50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	102971	8.00	8.19	80-120	100	(T)
89	1645	8.00	8.19	42-102	2	(QT)
63	2305	8.00	8.19	21- 81	2	(QT)

56 p-Nitroaniline			CAS#: 100-01-6			
138	124	8.70	8.60	80-120	100	(T)
108	594	8.70	8.60	40-100	476	(QT)
92	343	8.70	8.60	6- 66	275	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2520.d
 Lab Smp Id: 245099011 Client Smp ID: RE15-10-7187
 Inj Date : 25-JAN-2010 18:10
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099011|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	9.34110	% moisture

Cpnd Variable

Local Compound Variable

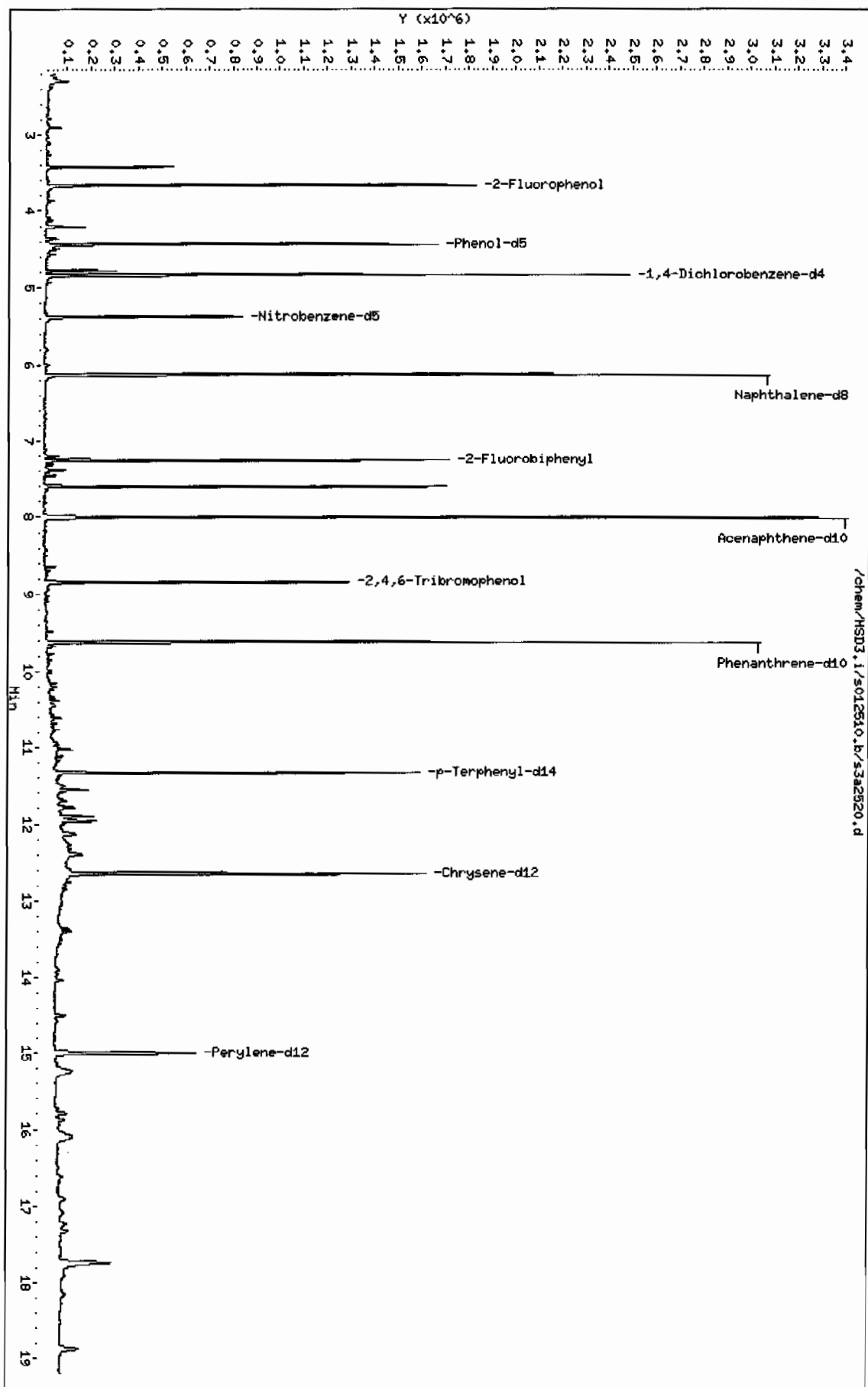
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.842	2320631	40.000
* 91 Chrysene-d12	12.646	2225046	40.000
* 98 Perylene-d12	14.997	1018080	40.000

CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY
=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.115	946840	16.3203950	598	0		0	10
Unknown Aldol Condensate					CAS #:		
3.419	502035	8.65342817	317	0		0	10
3-Carene					CAS #: 13466-78-9		
4.783	268056	4.62039361	169	96	NIST05.L	15156	10
Unknown					CAS #:		
11.958	313519	5.63618087	207	0		0	91
1,2-Benzisothiazole, 3-(hexahydro-1H-aze					CAS #: 309735-29-3		
12.401	399550	7.18277153	263	91	NIST05.L	101019	91
Unknown					CAS #:		
15.230	372376	14.6305282	536	0		0	98
Eicosane					CAS #: 112-95-8		
15.793	102615	4.03172207	148	93	NIST05.L	113489	98
Unknown					CAS #:		
16.100	400297	15.7275214	577	0		0	98
Unknown					CAS #:		
16.900	128934	5.06576818	186	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
17.735	699632	27.4882809	1010	97	NIST05.L	174402	98
Unknown					CAS #:		
18.869	219134	8.60968730	316	0		0	98

Data File: /chem/HSD3.i/s012510.b/s3a2520.d
 Date : 25-JAN-2010 18:10
 Client ID: RE15-10-7187
 Sample Info: 12450901194445111SNF111LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-SMS

Instrument: HSD3.i
 Operator: JLD1
 Column diameter: 0.20



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: HSD3,i

Sample Info: 1245099011|94445511|SVHF11|LANL

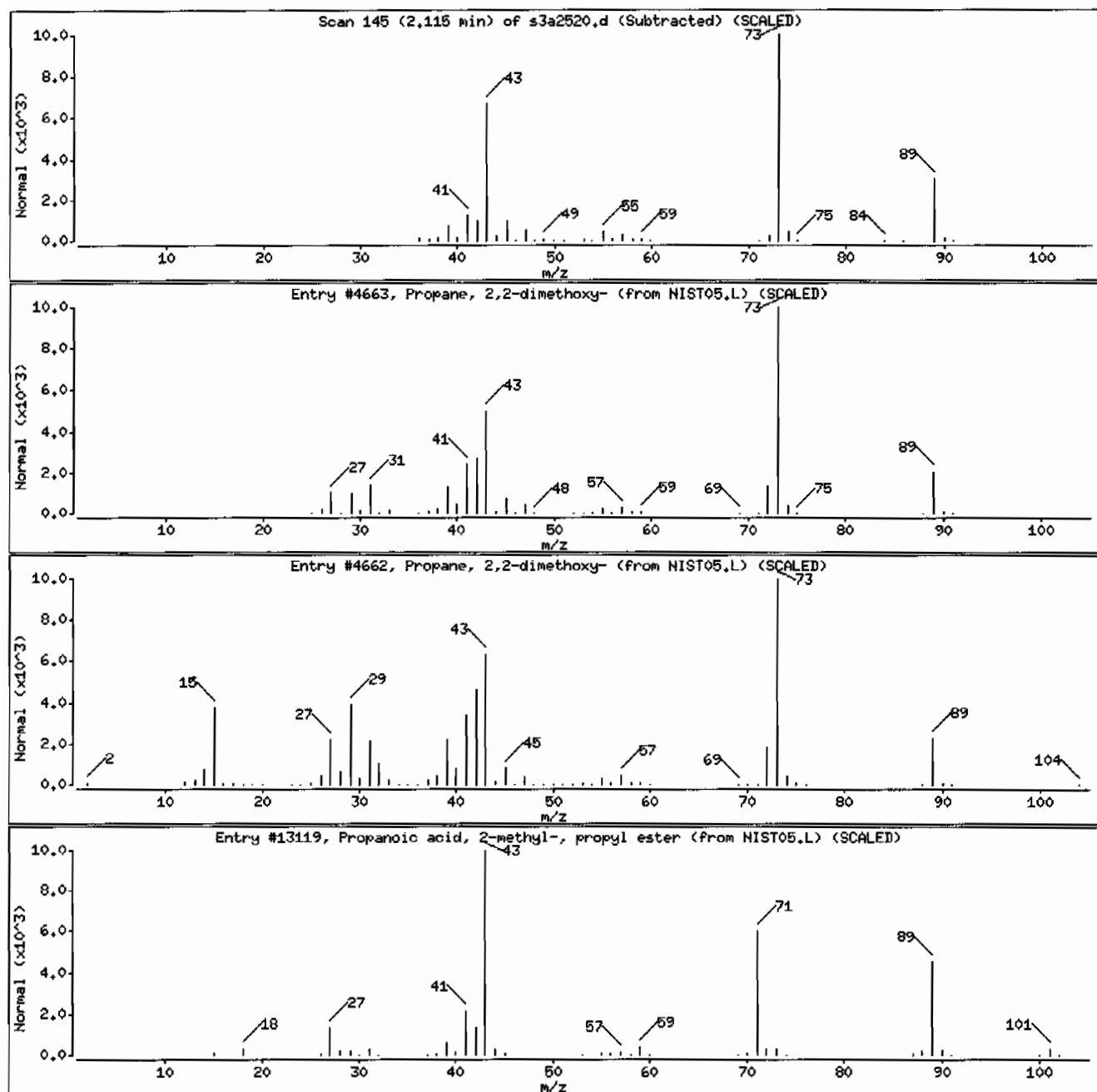
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	28	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	17	C7H14O2	130



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.i

Sample Info: 1245099011194445511SVMF11ILANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown Aldol Condensate

2-Pentanone, 4-hydroxy-4-methyl-

2-Pentanone, 4-hydroxy-4-methyl-

2,3-Butanedione, monooxime

CAS Number

Library

Entry

Quality

Formula

Weight

123-42-2

NIST05.L

7951

59

C6H12O2

116

123-42-2

NIST05.L

7952

50

C6H12O2

116

57-71-6

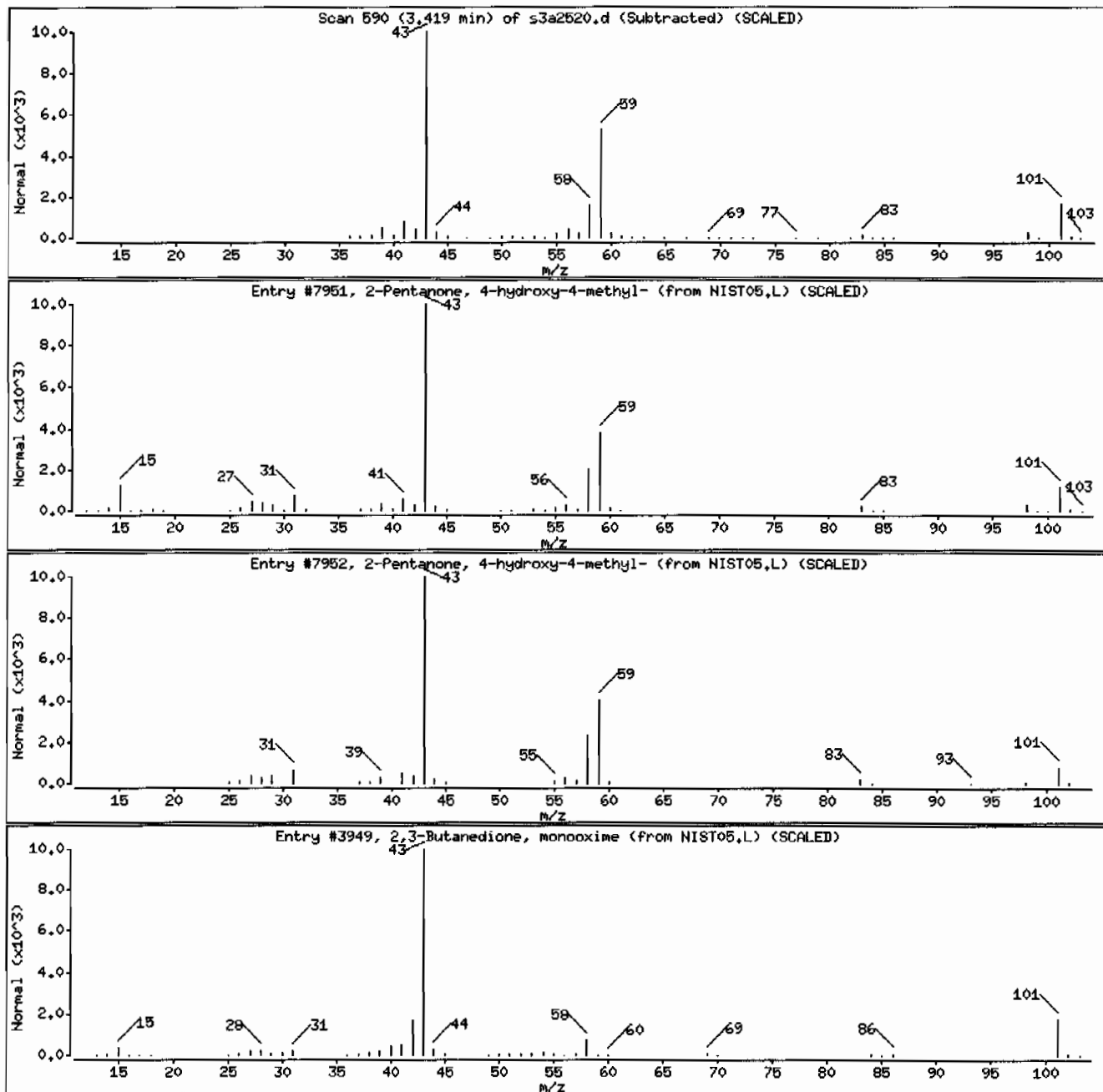
NIST05.L

3949

27

C4H7NO2

101



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.i

Sample Info: 12450990111944455111SVMF111LANL

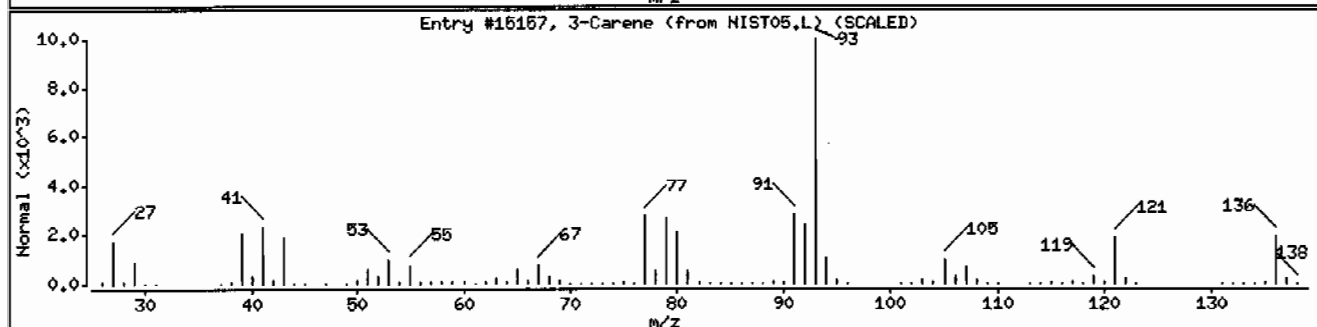
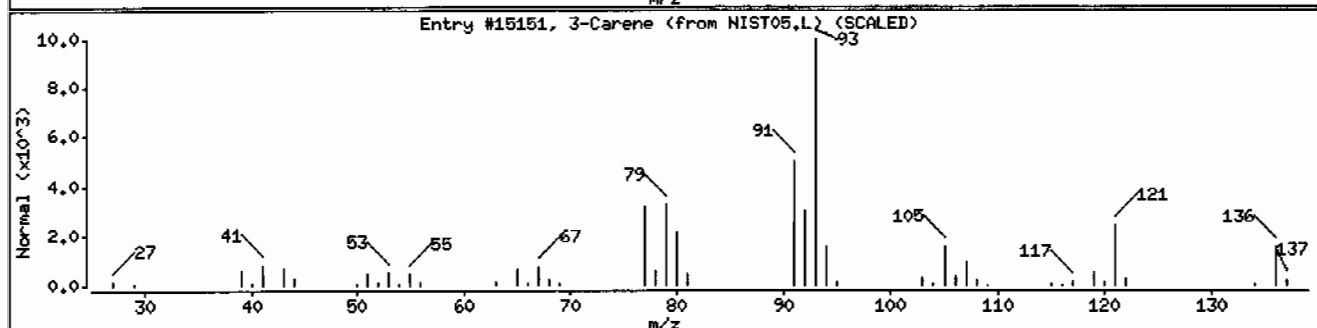
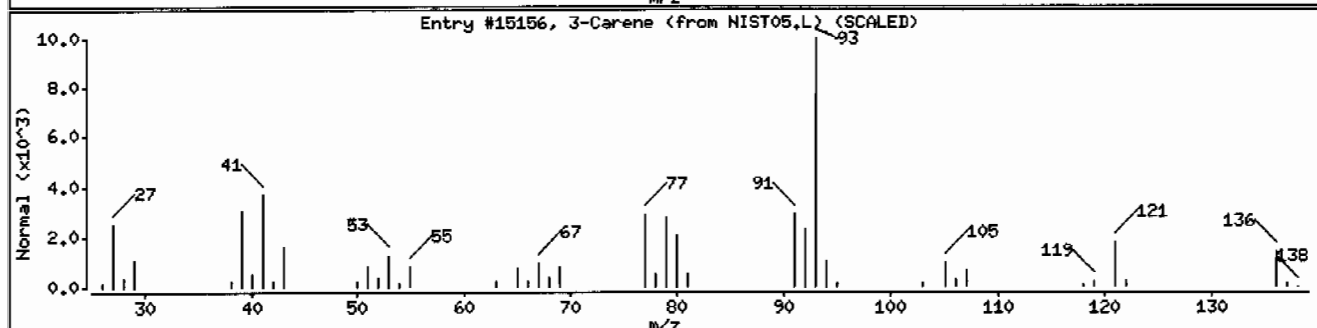
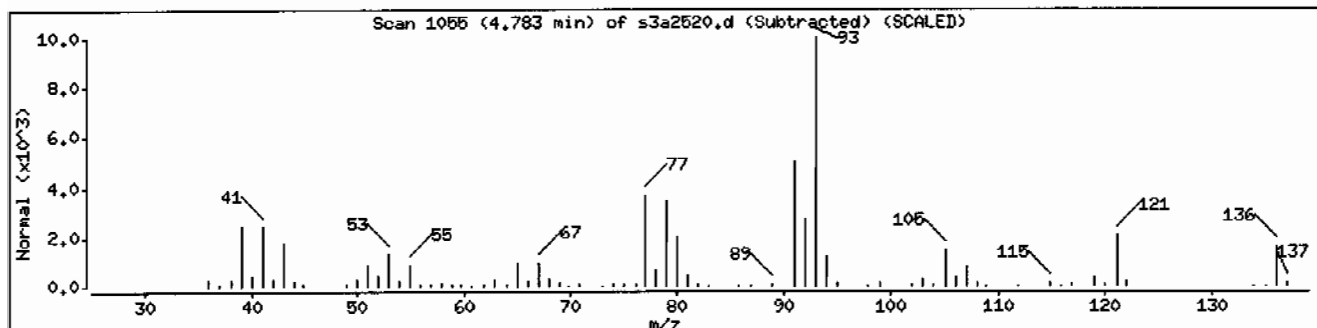
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15151	95	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	94	C10H16	136



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.i

Sample Info: 12450990111944455111SVMF111LANL

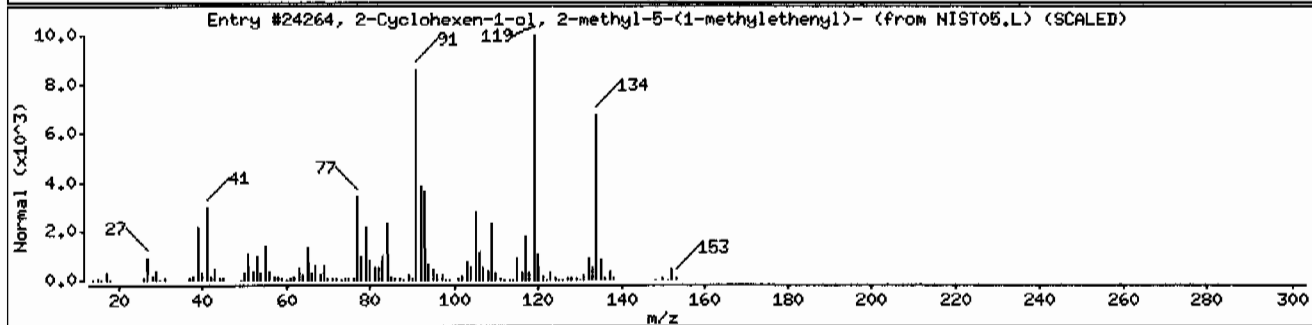
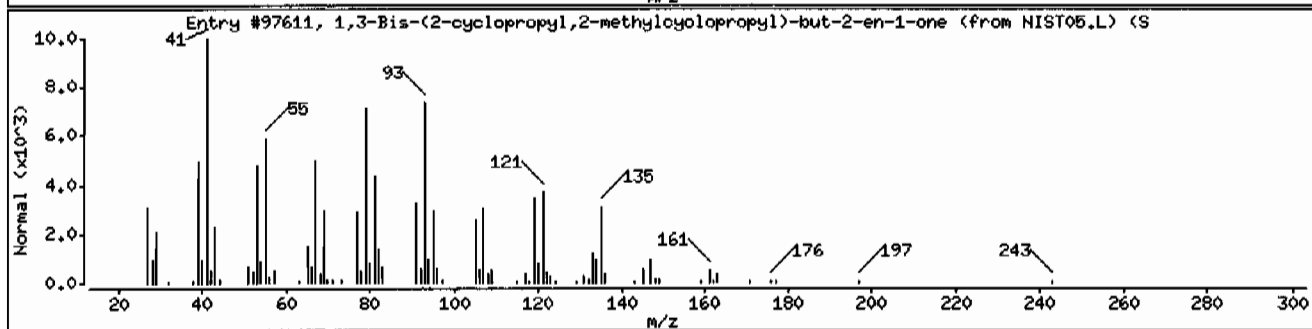
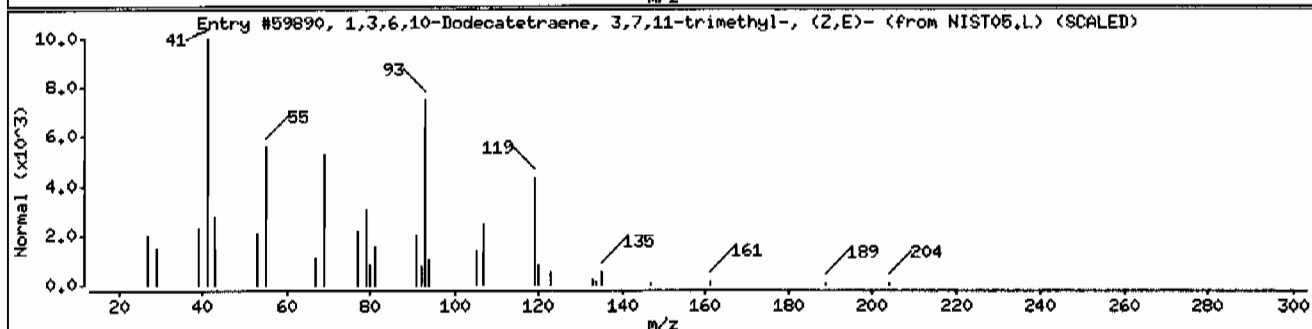
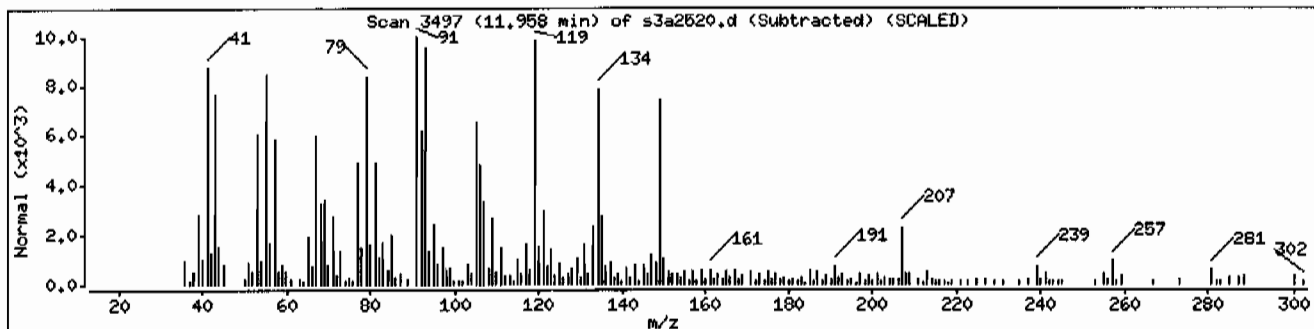
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3,6,10-Dodecatetraene, 3,7,11-trimethyl	26560-14-5	NIST05.L	59890	43	C15H24	204
1,3-Bis-(2-cyclopropyl,2-methylcycloprop	1000222-08-6	NIST05.L	97611	43	C18H26O	258
2-Cyclohexen-1-ol, 2-methyl-5-(1-methyle	99-48-9	NIST05.L	24264	42	C10H16O	152



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.i

Sample Info: 1245099011194448511SVHF11ILANL

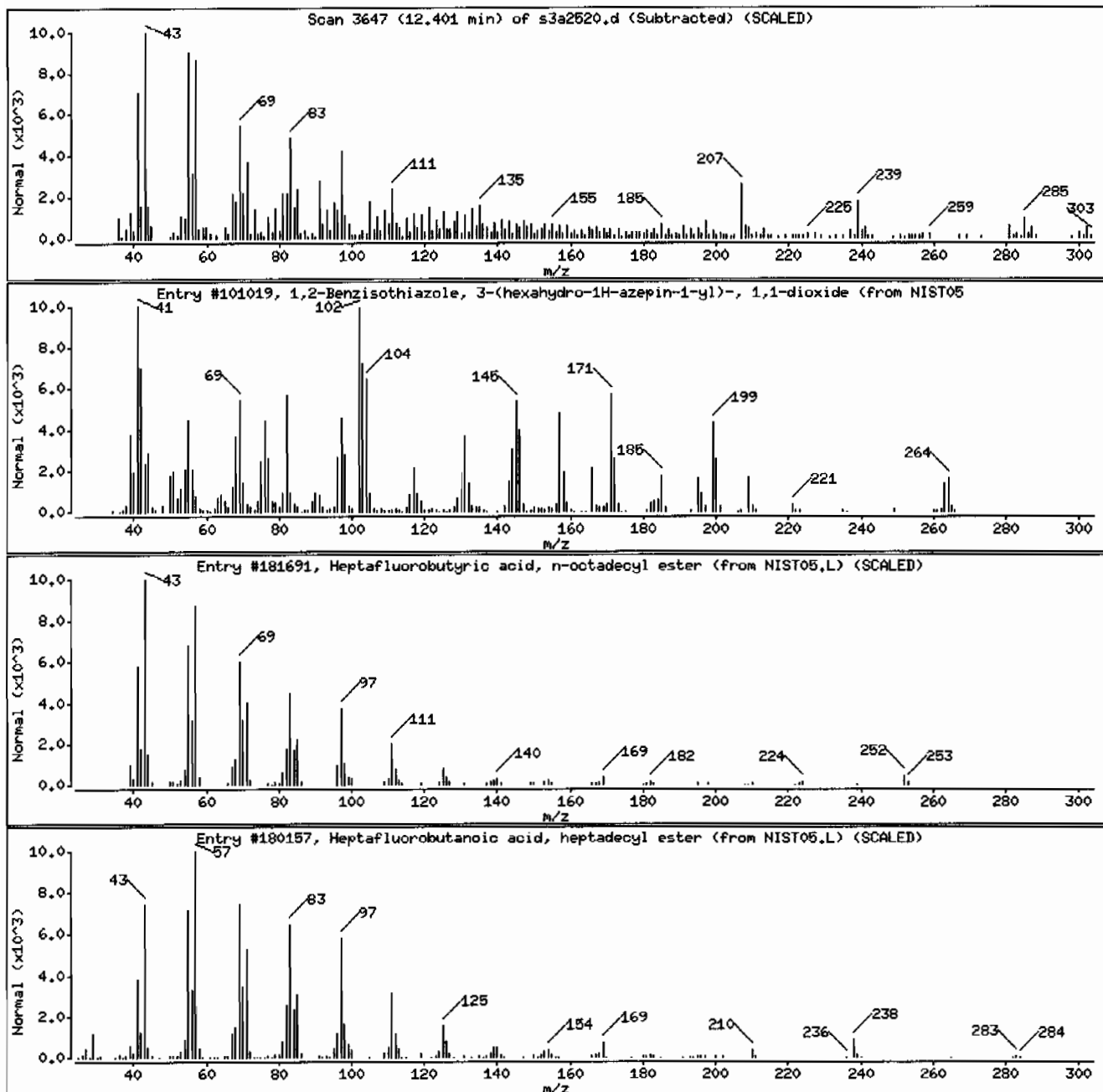
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzisothiazole, 3-(hexahydro-1H-azep	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264
Heptafluorobutyric acid, n-octadecyl est	400-57-7	NIST05.L	181691	86	C22H37F7O2	466
Heptafluorobutanoic acid, heptadecyl est	1000282-97-3	NIST05.L	180157	70	C21H35F7O2	452



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.i

Sample Info: I245099011/94445511/SVMF11/LANL

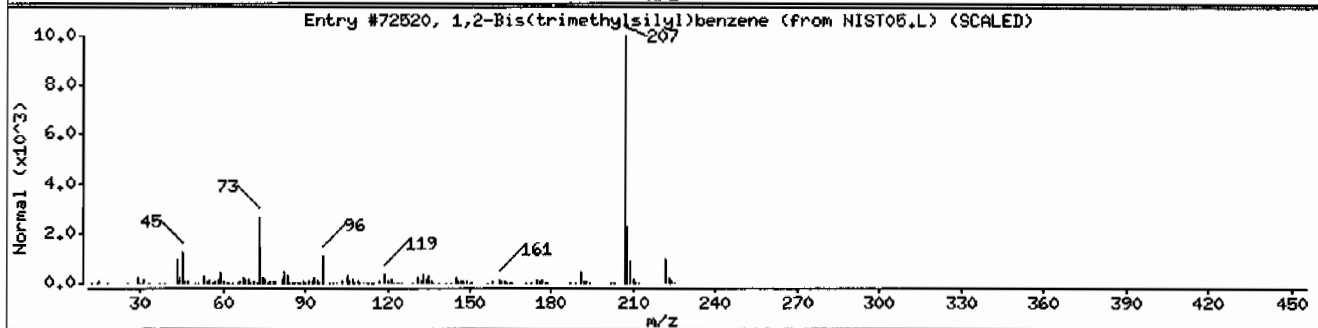
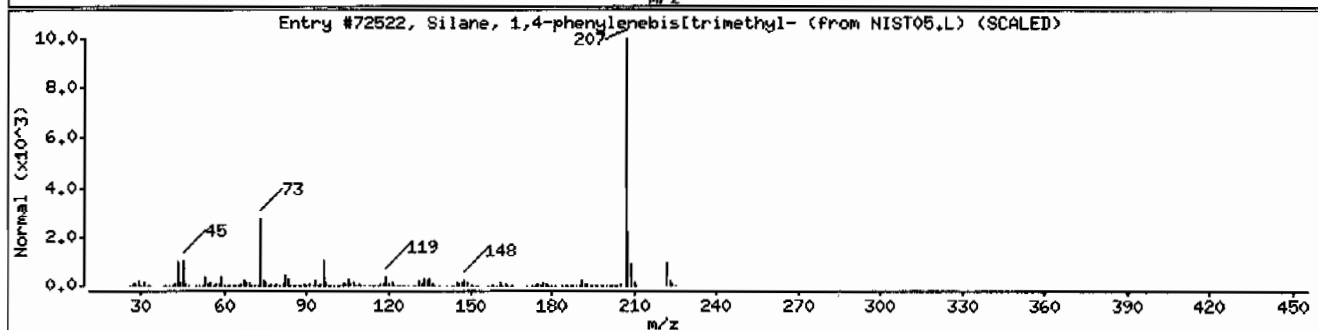
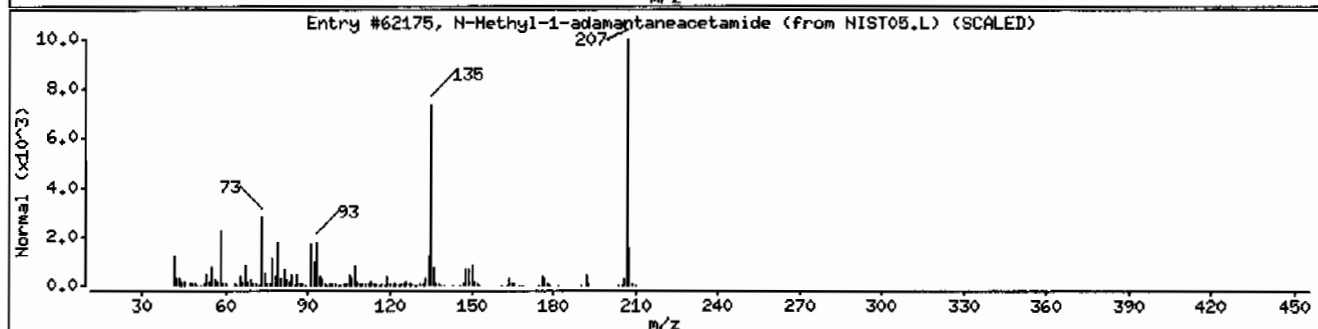
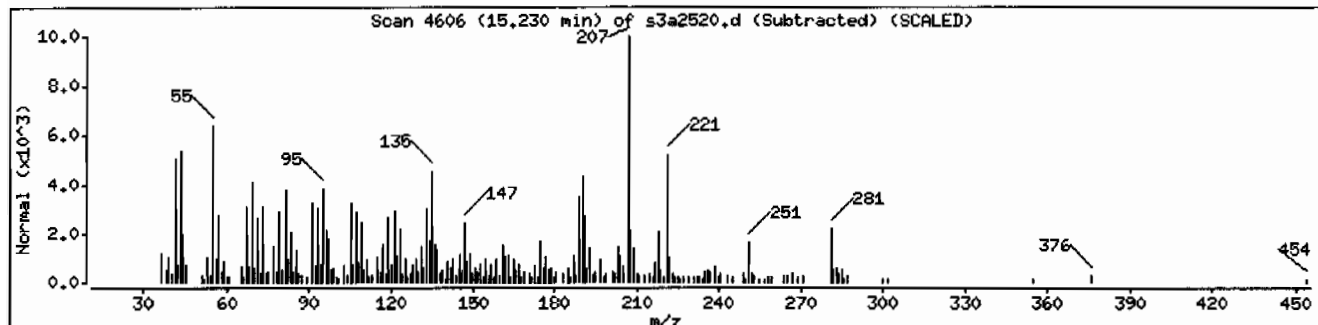
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	35	C ₁₃ H ₂₁ N	207
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	25	C ₁₂ H ₂₂ Si ₂	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	22	C ₁₂ H ₂₂ Si ₂	222



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.1

Sample Info: 1245099011194445511SVMF11ILANL

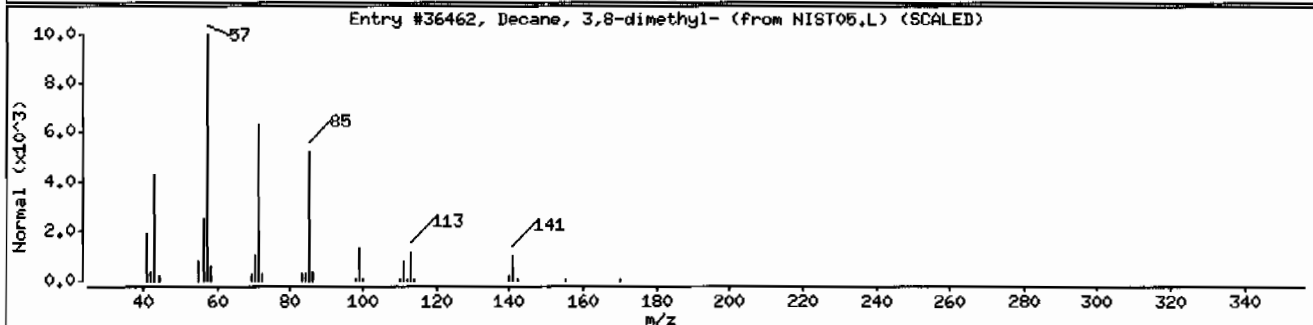
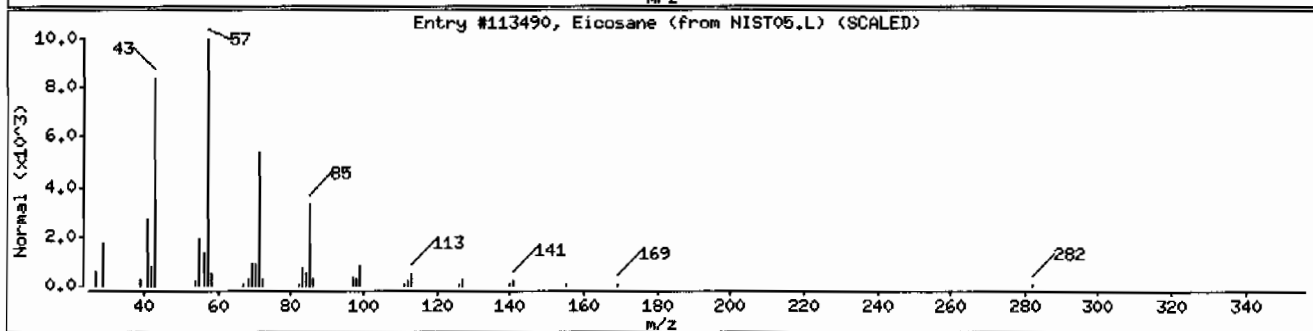
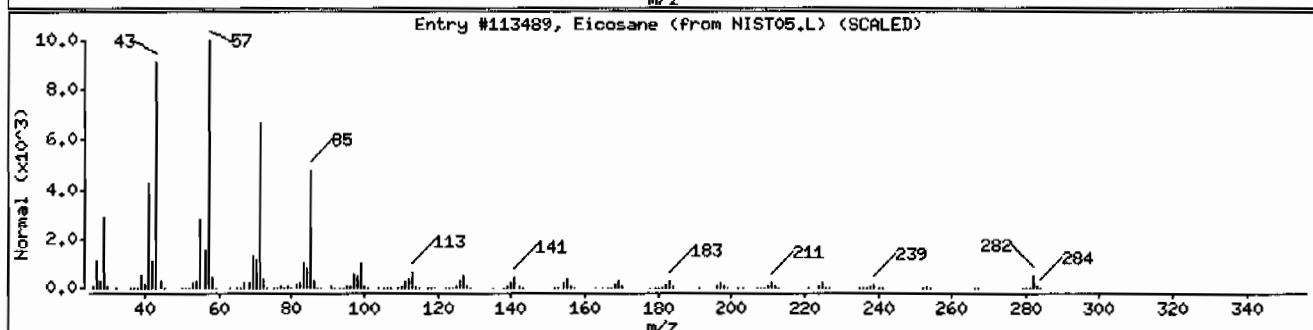
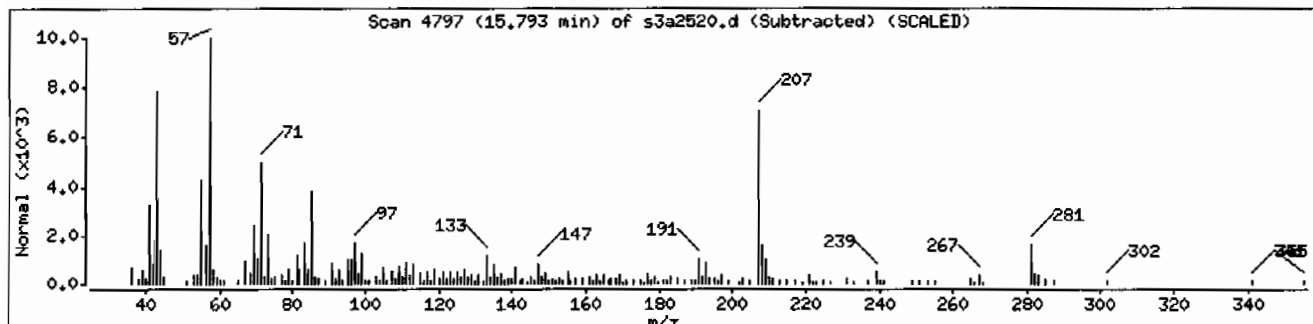
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113489	93	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113490	92	C ₂₀ H ₄₂	282
Decane, 3,8-dimethyl-	17312-55-9	NIST05.L	36462	74	C ₁₂ H ₂₆	170



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.1

Sample Info: I245099011|94445511|SVMF11|LANL

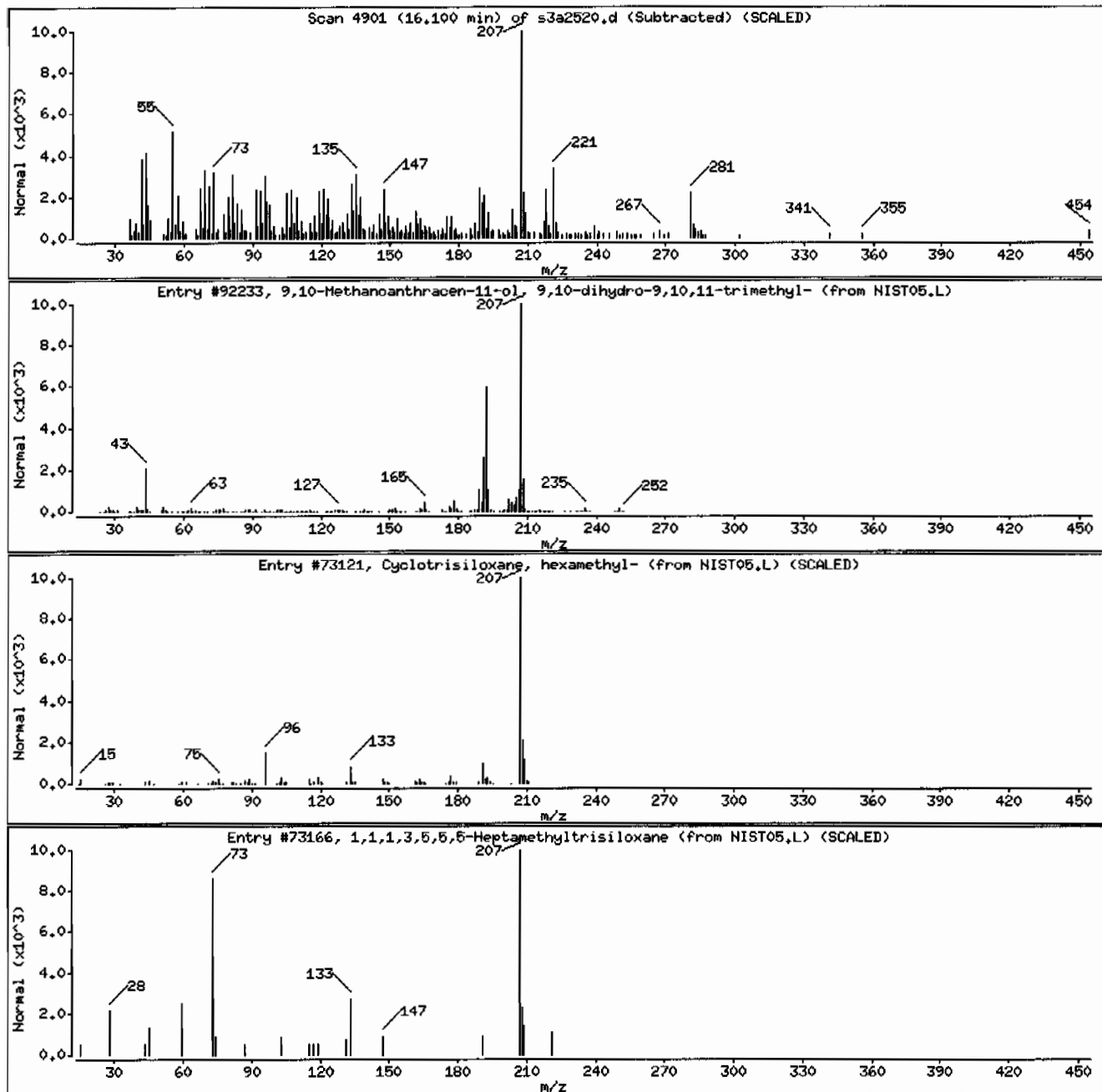
Volume Injected (uL): 0.5

Operator: JLD1

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-dihydro	126615-74-5	NIST05.L	92233	38	C18H18O	250
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	35	C6H18O3Si3	222
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	35	C7H22O2Si3	222



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: HSD3.i

Sample Info: 12450990111944455111SVHF111LANL

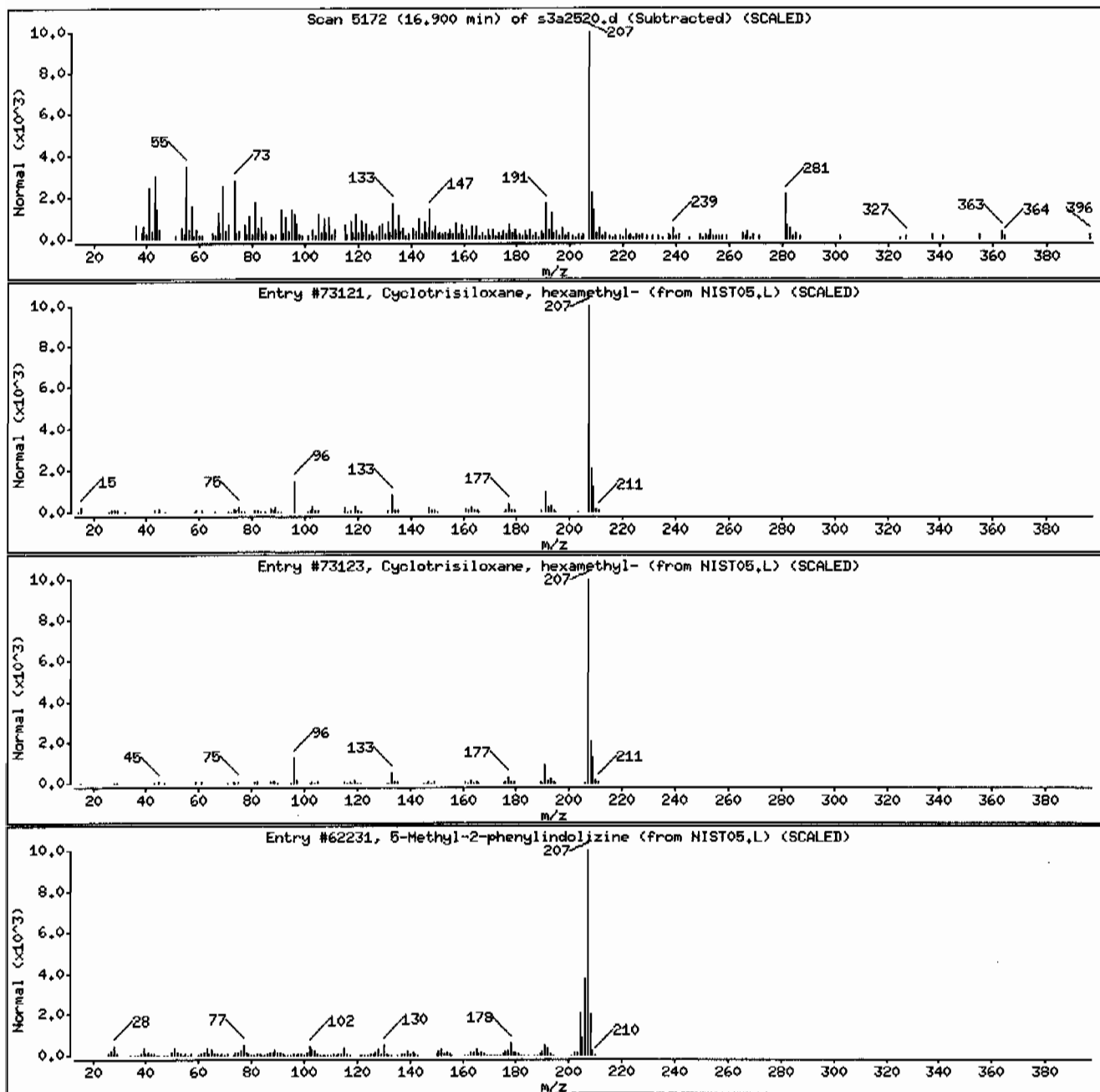
Volume Injected (uL): 0.5

Operator: JLD1

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	58	C ₆ H ₁₈ O ₃ Si ₃	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	53	C ₆ H ₁₈ O ₃ Si ₃	222
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	49	C ₁₅ H ₁₃ N	207



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.i

Sample Info: 1245099011194445511SVHF111LANL

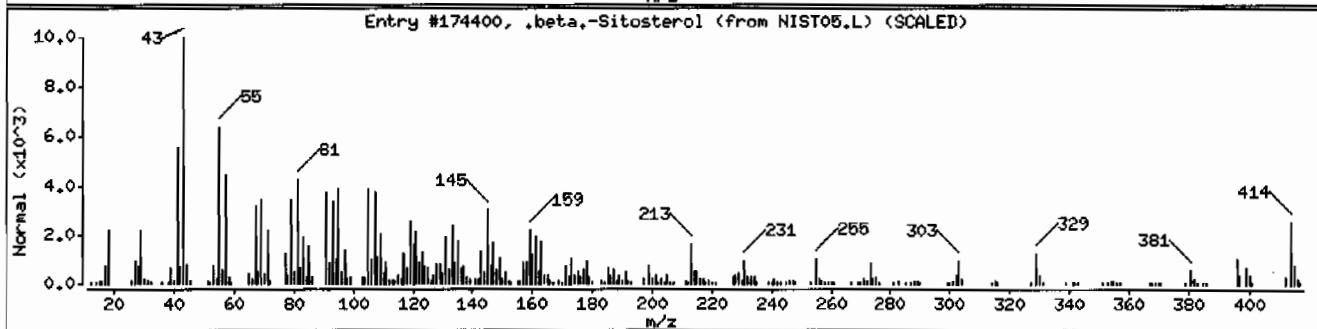
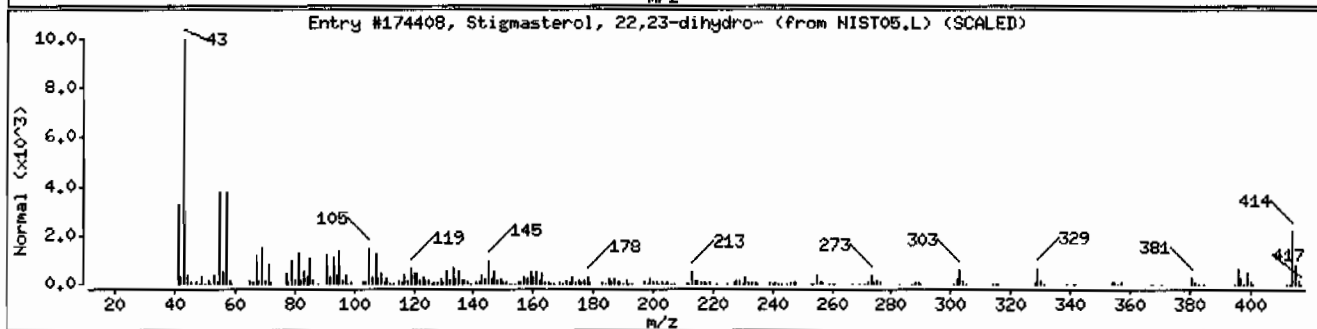
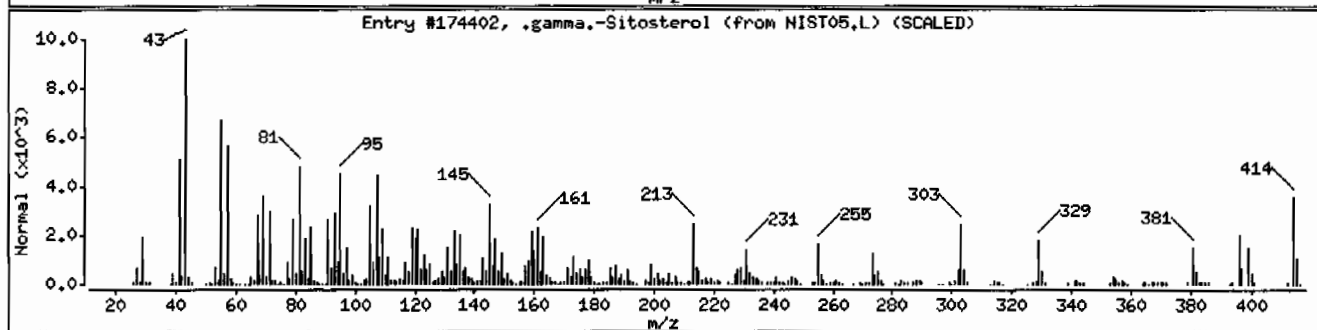
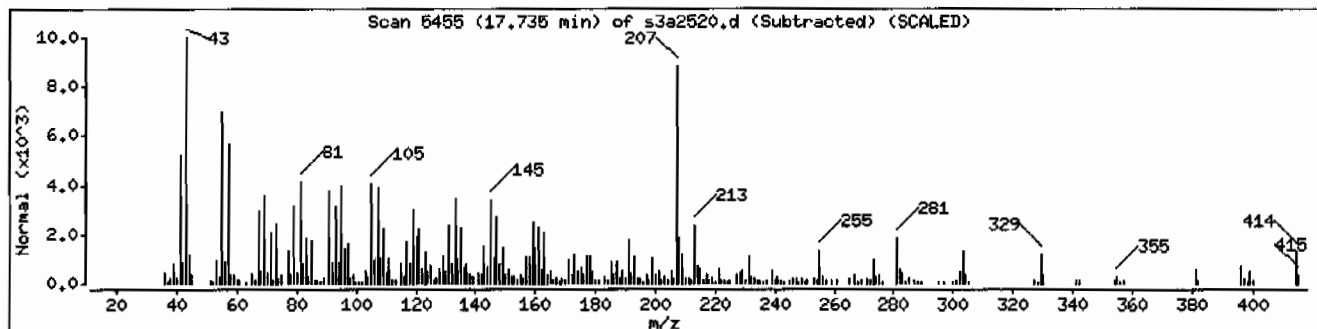
Volume Injected (uL): 0.5

Operator: JLD1

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	97	C ₂₉ H ₅₀ O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	94	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	46	C ₂₉ H ₅₀ O	414



Date : 25-JAN-2010 18:10

Client ID: RE15-10-7187

Instrument: MSD3.i

Sample Info: 124509901194445511SVHF11ILANL

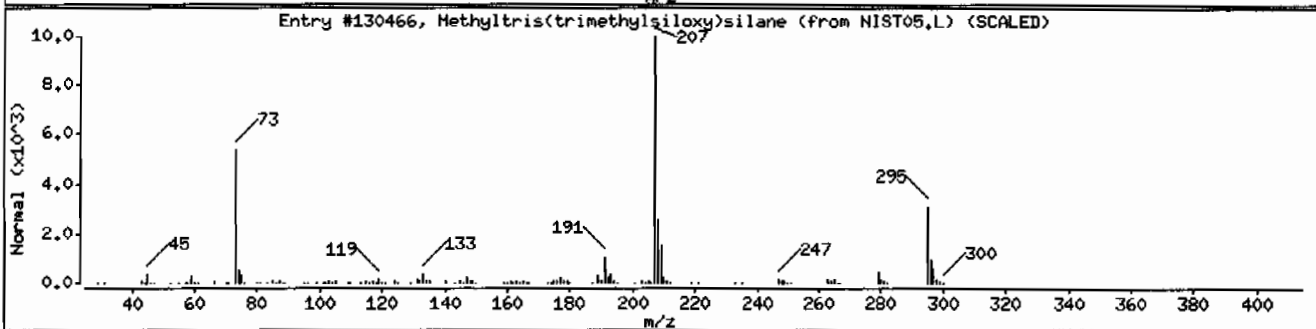
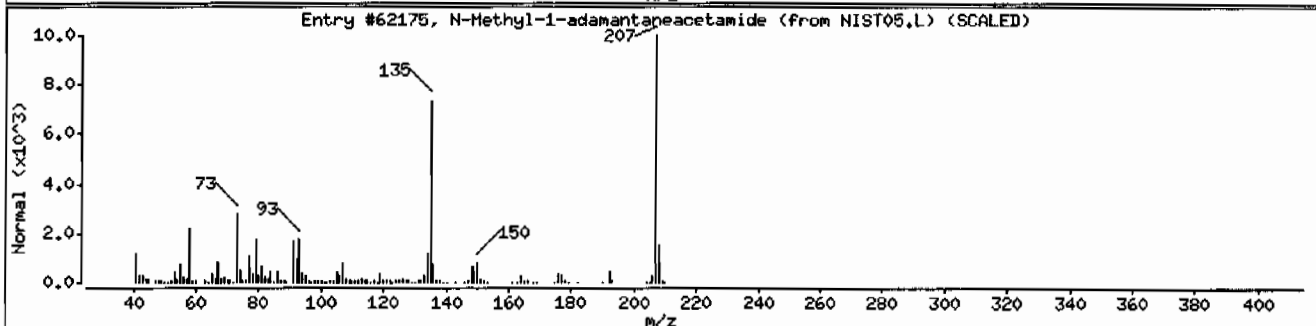
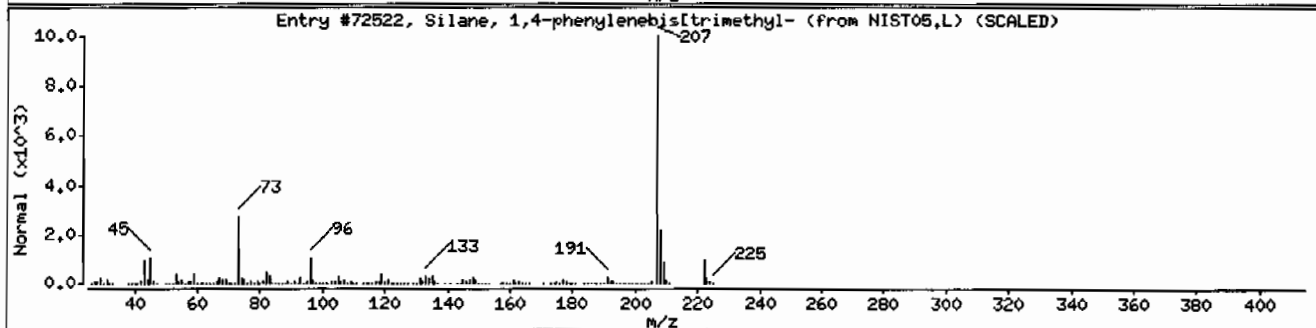
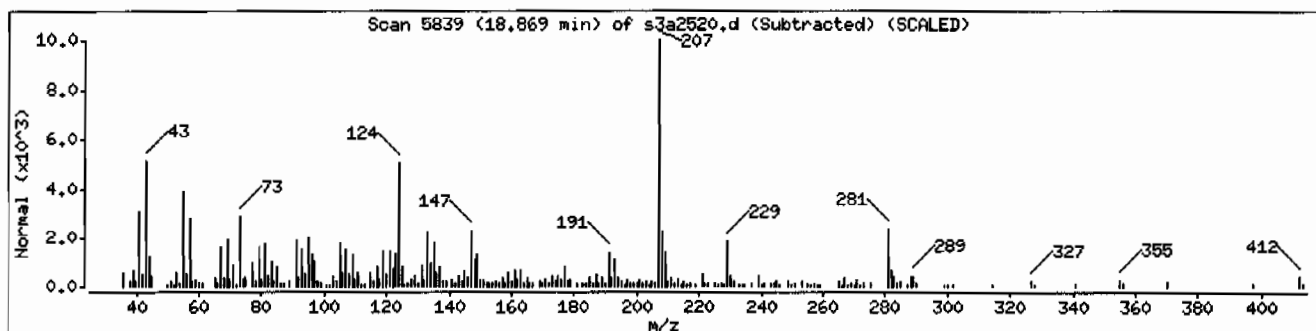
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C ₁₂ H ₂₂ Si ₂	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C ₁₃ H ₂₁ N	207
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	38	C ₁₀ H ₃₀ O ₃ Si ₄	310



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

SDG Number: 10-1301
Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 12.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7188
Batch ID: 944455
Run Date: 01/25/2010 18:36
Prep Date: 01/22/2010 23:39
Data File: s3a2521.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	380	ug/kg	75.9	380
108-95-2	Phenol	U	380	ug/kg	75.9	380
95-57-8	2-Chlorophenol	U	380	ug/kg	75.9	380
106-46-7	1,4-Dichlorobenzene	U	380	ug/kg	75.9	380
621-64-7	N-Nitrosodipropylamine	U	380	ug/kg	75.9	380
59-50-7	4-Chloro-3-methylphenol	U	380	ug/kg	75.9	380
83-32-9	Acenaphthene	U	38.0	ug/kg	12.5	38.0
121-14-2	2,4-Dinitrotoluene	U	380	ug/kg	38.0	380
100-02-7	4-Nitrophenol	U	380	ug/kg	125	380
87-86-5	Pentachlorophenol	U	380	ug/kg	94.9	380
129-00-0	Pyrene	U	38.0	ug/kg	11.4	38.0
110-86-1	Pyridine	U	380	ug/kg	75.9	380
62-53-3	Aniline	U	380	ug/kg	114	380
111-44-4	bis(2-Chloroethyl) ether	U	380	ug/kg	75.9	380
541-73-1	1,3-Dichlorobenzene	U	380	ug/kg	75.9	380
100-51-6	Benzyl alcohol	U	380	ug/kg	114	380
95-50-1	1,2-Dichlorobenzene	U	380	ug/kg	75.9	380
108-60-1	bis(2-Chloroisopropyl) ether	U	380	ug/kg	75.9	380
95-48-7	o-Cresol	U	380	ug/kg	75.9	380
65794-96-9	m,p-Cresols	U	380	ug/kg	114	380
67-72-1	Hexachloroethane	U	380	ug/kg	75.9	380
98-95-3	Nitrobenzene	U	380	ug/kg	75.9	380
78-59-1	Isophorone	U	380	ug/kg	75.9	380
88-75-5	2-Nitrophenol	U	380	ug/kg	75.9	380
105-67-9	2,4-Dimethylphenol	U	380	ug/kg	133	380
111-91-1	bis(2-Chloroethoxy)methane	U	380	ug/kg	75.9	380
120-83-2	2,4-Dichlorophenol	U	380	ug/kg	75.9	380
65-85-0	Benzoic acid	U	759	ug/kg	190	759
91-20-3	Naphthalene	U	38.0	ug/kg	11.4	38.0
106-47-8	4-Chloroaniline	U	380	ug/kg	75.9	380
87-68-3	Hexachlorobutadiene	U	380	ug/kg	75.9	380
91-57-6	2-Methylnaphthalene	U	38.0	ug/kg	7.59	38.0
77-47-4	Hexachlorocyclopentadiene	U	380	ug/kg	75.9	380
88-06-2	2,4,6-Trichlorophenol	U	380	ug/kg	75.9	380
95-95-4	2,4,5-Trichlorophenol	U	380	ug/kg	75.9	380
91-58-7	2-Chloronaphthalene	U	38.0	ug/kg	12.5	38.0
88-74-4	2-Nitroaniline	U	380	ug/kg	75.9	380
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	380	ug/kg	75.9	380

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099012	Date Received: 01/20/2010 08:45	%Moisture: 12.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7188	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 18:36	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s3a2521.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	380	ug/kg	75.9	380
606-20-2	2,6-Dinitrotoluene	U	380	ug/kg	38.0	380
208-96-8	Acenaphthylene	U	38.0	ug/kg	11.4	38.0
51-28-5	2,4-Dinitrophenol	U	759	ug/kg	144	759
132-64-9	Dibenzofuran	U	380	ug/kg	75.9	380
84-66-2	Diethylphthalate	U	380	ug/kg	75.9	380
86-73-7	Fluorene	U	38.0	ug/kg	11.4	38.0
7005-72-3	4-Chlorophenylphenylether	U	380	ug/kg	75.9	380
534-52-1	2-Methyl-4,6-dinitrophenol	U	380	ug/kg	75.9	380
100-01-6	4-Nitroaniline	U	380	ug/kg	114	380
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	380	ug/kg	75.9	380
122-66-7	Azobenzene	U	380	ug/kg	75.9	380
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	380	ug/kg	75.9	380
118-74-1	Hexachlorobenzene	U	380	ug/kg	75.9	380
85-01-8	Phenanthrene	U	38.0	ug/kg	11.4	38.0
120-12-7	Anthracene	U	38.0	ug/kg	7.59	38.0
84-74-2	Di-n-butylphthalate	U	380	ug/kg	75.9	380
206-44-0	Fluoranthene	U	38.0	ug/kg	11.4	38.0
85-68-7	Butylbenzylphthalate	U	380	ug/kg	75.9	380
56-55-3	Benzo(a)anthracene	U	38.0	ug/kg	11.4	38.0
91-94-1	3,3'-Dichlorobenzidine	U	380	ug/kg	114	380
218-01-9	Chrysene	U	38.0	ug/kg	11.4	38.0
117-81-7	bis(2-Ethylhexyl)phthalate	J	95.9	ug/kg	75.9	380
117-84-0	Di-n-octylphthalate		1430	ug/kg	75.9	380
205-99-2	Benzo(b)fluoranthene	U	38.0	ug/kg	11.4	38.0
207-08-9	Benzo(k)fluoranthene	U	38.0	ug/kg	11.4	38.0
50-32-8	Benzo(a)pyrene	U	38.0	ug/kg	11.4	38.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	38.0	ug/kg	11.4	38.0
53-70-3	Dibenzo(a,h)anthracene	U	38.0	ug/kg	11.4	38.0
191-24-2	Benzo(ghi)perylene	U	38.0	ug/kg	11.4	38.0
120-82-1	1,2,4-Trichlorobenzene	U	380	ug/kg	75.9	380

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.13	1050	ug/kg		J
	Unknown	2.32	190	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099012

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 12.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.42	407	ug/kg		JA
7785-70-8	1R- α -Pinene	4.21	704	ug/kg	98	NJ
3479-89-8	1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	4.5	212	ug/kg	93	NJ
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	4.78	227	ug/kg	97	NJ
	Unknown	10.2	324	ug/kg		J
	Unknown	10.23	160	ug/kg		J
	Unknown	10.38	214	ug/kg		J
	Unknown	10.43	159	ug/kg		J
	Unknown	11.61	278	ug/kg		J
	Unknown	11.69	1210	ug/kg		J
	Unknown	11.79	431	ug/kg		J
17974-57-1	(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	11.94	1140	ug/kg	81	NJ
	Unknown	12.13	552	ug/kg		J
	Unknown	12.24	182	ug/kg		J
5155-70-4	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.36	523	ug/kg	98	NJ
309735-29-3	1,2-Benzisothiazole, 3-(hexahydro-1H-aze	12.39	265	ug/kg	91	NJ
119-07-3	1,2-Benzenedicarboxylic acid, decyl octy	14.73	1680	ug/kg	91	NJ
	Unknown	15.24	1350	ug/kg		J
	Unknown	16.03	624	ug/kg		J
	Unknown	16.11	1760	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.73	976	ug/kg	95	NJ

Data File: /chem/MSD3.i/s012510.b/s3a2521.d
Report Date: 26-Jan-2010 09:15

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2521.d
Lab Smp Id: 245099012 Client Smp ID: RE15-10-7188
Inj Date : 25-JAN-2010 18:36
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099012|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	12.42510	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.842	4.841	(1.000)	362395	40.0000	
* 29 Naphthalene-d8		136	6.125	6.126	(1.000)	1356428	40.0000	
* 46 Acenaphthene-d10		164	8.001	8.003	(1.000)	697569	40.0000	
* 67 Phenanthrene-d10		188	9.617	9.618	(1.000)	1064530	40.0000	
* 91 Chrysene-d12		240	12.646	12.650	(1.000)	554683	40.0000	
* 98 Perylene-d12		264	14.996	14.999	(1.000)	247459	40.0000	
\$ 3 2-Fluorophenol		112	3.663	3.653	(0.756)	478880	50.7827	1930
\$ 5 Phenol-d5		99	4.440	4.436	(0.917)	601105	50.7199	1930
\$ 20 Nitrobenzene-d5		82	5.379	5.384	(0.878)	268052	26.7523	1020
\$ 39 2-Fluorobiphenyl		172	7.253	7.254	(0.906)	556612	30.8702	1170
\$ 60 2,4,6-Tribromophenol		329	8.853	8.852	(1.106)	117316	58.6657	2230
\$ 81 p-Terphenyl-d14		244	11.327	11.326	(0.896)	449534	47.1508	1790

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====		=====	=====
93 bis(2-Ethylhexyl)phthalate	149	12.589	12.588	(0.996)	27644		2.52593	95.9(a)
94 Di-n-octylphthalate	149	13.583	13.584	(0.906)	377828		37.7038	1430

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s3a2521.d

Report Date: 01/26/2010 08:44

Lab. ID: 245099012

SampleType: SAMPLE

Injection Date: 25-JAN-2010 18:36

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099012|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	33533	4.44	4.53	80-120	100	(T)
93	15008	4.50	4.53	206-266	45	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	38299	5.38	5.21	80-120	100	(T)
42	24912	5.38	5.21	45-105	65	(T)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	6171	7.60	7.40	80-120	100	(T)
164	320	7.60	7.40	2- 62	5	(T)
127	509	7.60	7.40	9- 69	8	(QT)

41 m-Nitroaniline		CAS#: 99-09-2				
138	242	8.00	7.94	80-120	100	()
92	4900	8.00	7.94	79-139	2021	(Q)
108	15177	8.00	7.94	0- 40	6261	(Q)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	91093	8.00	7.76	80-120	100	(T)
63	3344	8.00	7.76	37- 97	4	(QT)

45 Acenaphthylene		CAS#: 208-96-8				
152	11227	8.00	7.85	80-120	100	(T)
151	2851	8.00	7.85	0- 50	25	(T)
153	11521	8.00	7.85	0- 43	103	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
47 Acenaphthene			CAS#: 83-32-9			
154	11773	8.00	8.04	80-120	100	()
153	11521	8.00	8.04	70-130	98	()
152	11227	8.00	8.04	18- 78	95	(Q)

50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	91093	8.00	8.19	80-120	100	(T)
89	1971	8.00	8.19	42-102	2	(QT)
63	3344	8.00	8.19	21- 81	4	(QT)

90 3,3'-Dichlorobenzidine			CAS#: 91-94-1			
252	233	12.61	12.57	80-120	100	()
254	411	12.59	12.57	33- 93	176	(Q)
126	1232	12.64	12.57	0- 46	528	(QT)

93 bis(2-Ethylhexyl)phthalate			CAS#: 117-81-7			
149	27644	12.59	12.59	80-120	100	()
167	8553	12.59	12.59	3- 63	31	()

94 Di-n-octylphthalate			CAS#: 117-84-0			
149	377828	13.58	13.58	80-120	100	()
43	55159	13.58	13.58	0- 42	15	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2521.d
 Lab Smp Id: 245099012 Client Smp ID: RE15-10-7188
 Inj Date : 25-JAN-2010 18:36
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099012|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	12.42510	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.842	2300172	40.000
* 67 Phenanthrene-d10	9.617	2770197	40.000
* 91 Chrysene-d12	12.646	1553042	40.000
* 98 Perylene-d12	14.996	745451	40.000

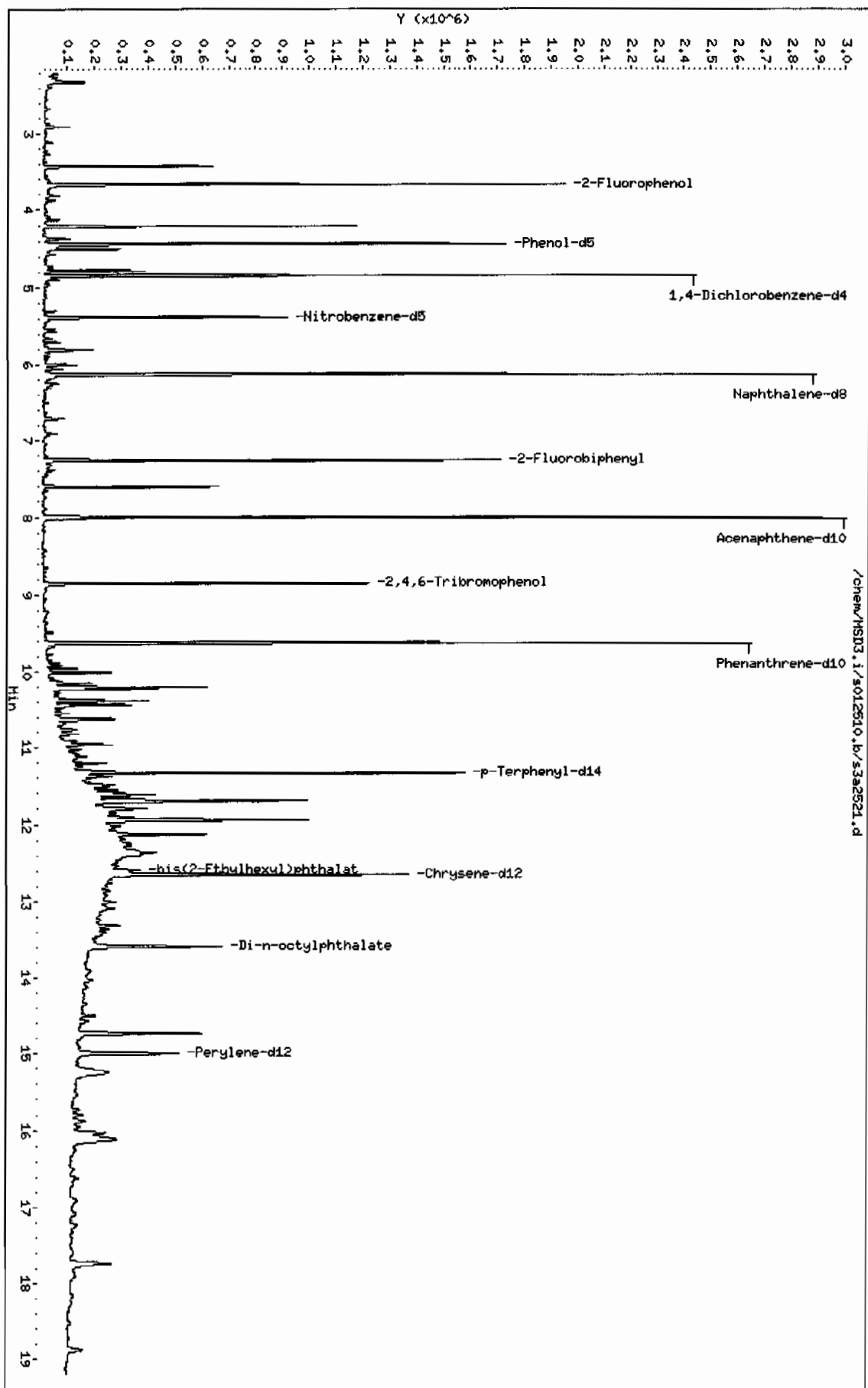
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
2.132	1592343	27.6908445	1050	0		0	10
Unknown					CAS #:		
2.320	287315	4.99640912	190	0		0	10
Unknown Aldol Condensate					CAS #:		
3.422	616625	10.7231118	407	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
4.208	1066121	18.5398445	704	98	NIST05.L	15188	10
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-					CAS #: 3479-89-8		
4.505	321257	5.58666106	212	93	NIST05.L	14442	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-					CAS #: 498-15-7		
4.784	344164	5.98501417	227	97	NIST05.L	15369	10
Unknown					CAS #:		
10.203	590049	8.51995187	324	0		0	67
Unknown					CAS #:		
10.227	291253	4.20551263	160	0		0	67
Unknown					CAS #:		
10.377	389877	5.62958858	214	0		0	67
Unknown					CAS #:		
10.430	290699	4.19752242	159	0		0	67
Unknown					CAS #:		
11.611	284521	7.32810301	278	0		0	91
Unknown					CAS #:		
11.687	1235182	31.8132341	1210	0		0	91
Unknown					CAS #:		
11.794	440169	11.3369564	430	0		0	91
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1					CAS #: 17974-57-1		
11.936	1165190	30.0105221	1140	81	NIST05.L	97615	91
Unknown					CAS #:		
12.125	564887	14.5491780	552	0		0	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
12.237	185589	4.78000933	182	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 5155-70-4		
12.356	534596	13.7690141	523	98	NIST05.L	125035	91
1,2-Benzisothiazole, 3-(hexahydro-1H-aze					CAS #: 309735-29-3		
12.394	270436	6.96531211	264	91	NIST05.L	101019	91
1,2-Benzenedicarboxylic acid, decyl octy					CAS #: 119-07-3		
14.733	824570	44.2453951	1680	91	NIST05.L	175193	98
Unknown					CAS #:		
15.239	662398	35.5434854	1350	0		0	98
Unknown					CAS #:		
16.031	306309	16.4361657	624	0		0	98
Unknown					CAS #:		
16.107	862038	46.2559222	1760	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
17.733	479212	25.7139325	976	95	NIST05.L	174402	98

Data File: /chem/HSD3.i/s012610.b/s3a2621.d
 Date: 25-JAN-2010 18:36
 Client ID: RE18-10-7188
 Sample Info: 124509012194445611SVWF11.LANL
 Volume Injected (uL): 0.5
 Column phase: 3uM DB-SHS

Instrument: HSD3.1
 Operator: JLD1
 Column diameter: 0.20



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511ISVHF11ILANL

Volume Injected (uL): 0.5

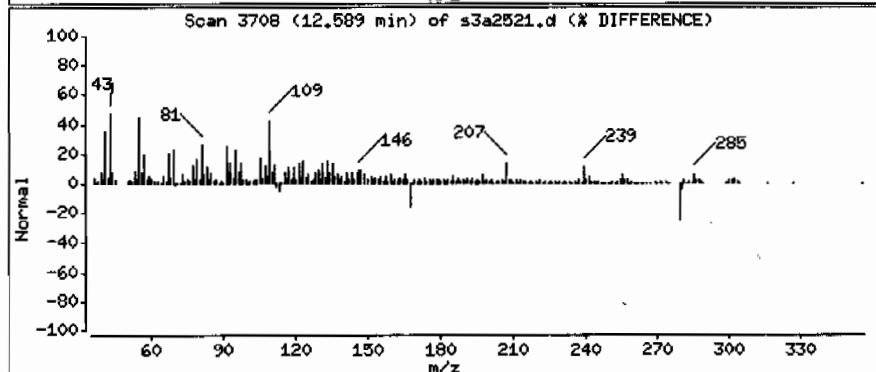
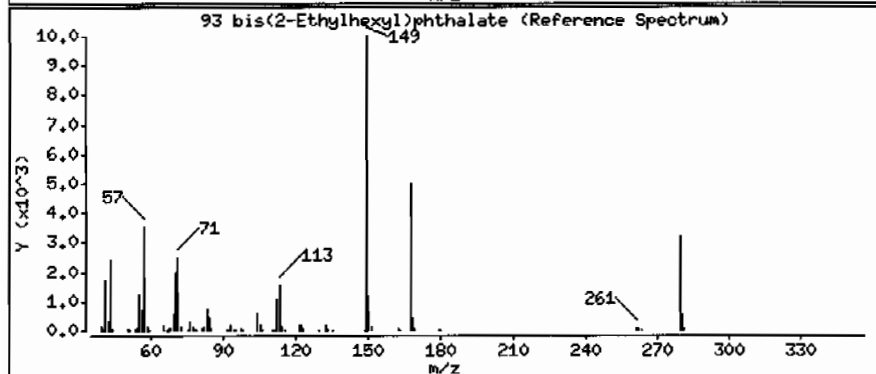
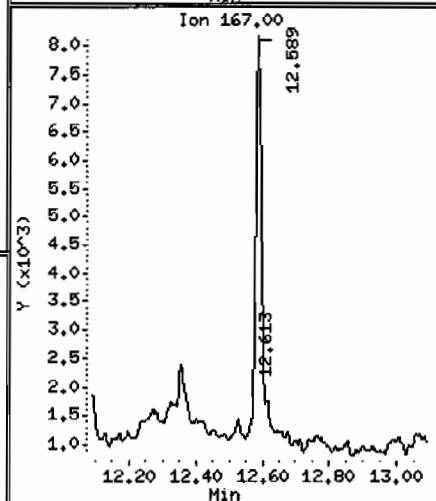
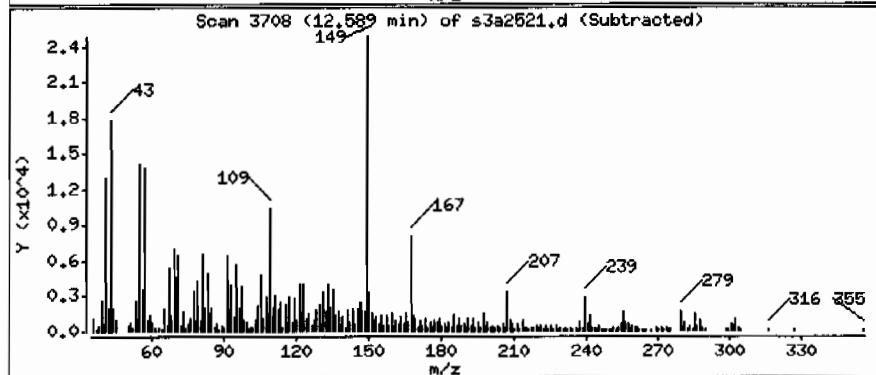
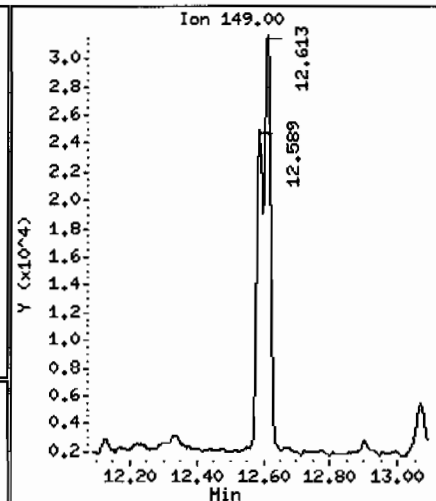
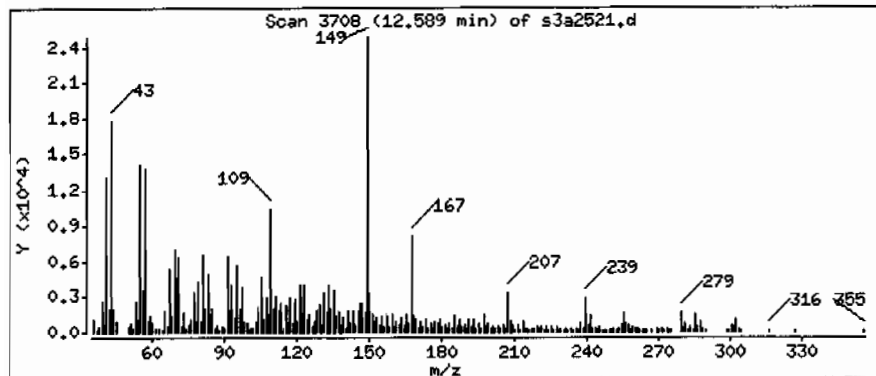
Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 95.9 ug/Kg



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511ISVHF11ILANL

Volume Injected (uL): 0.5

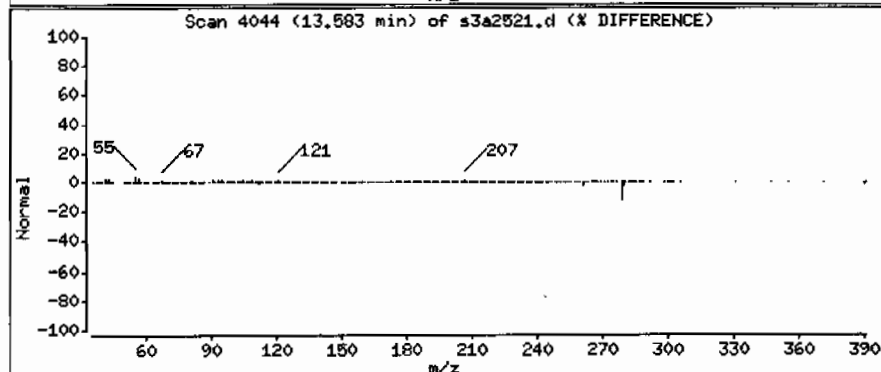
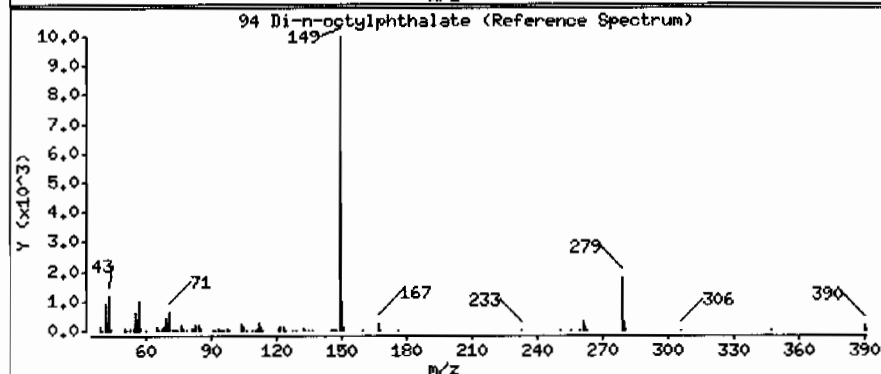
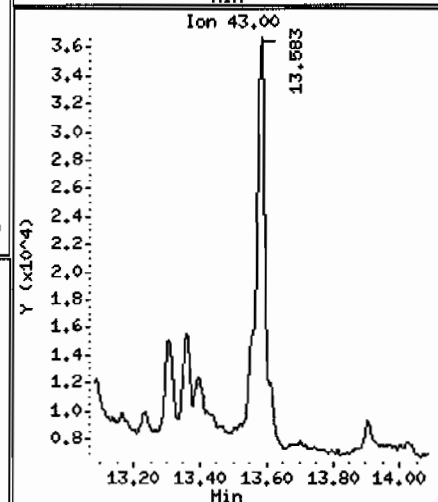
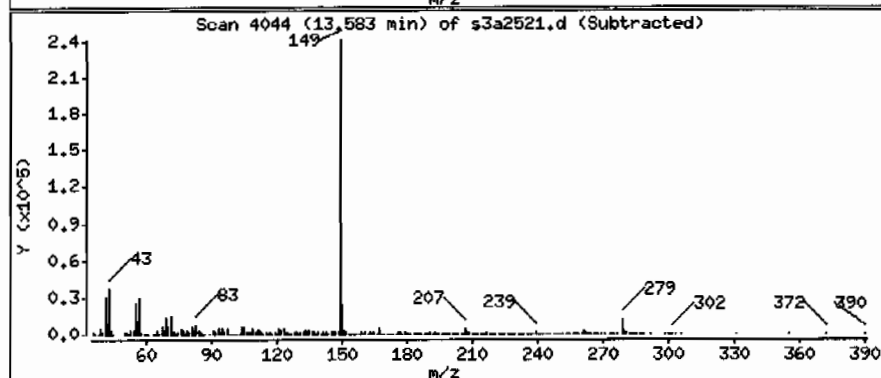
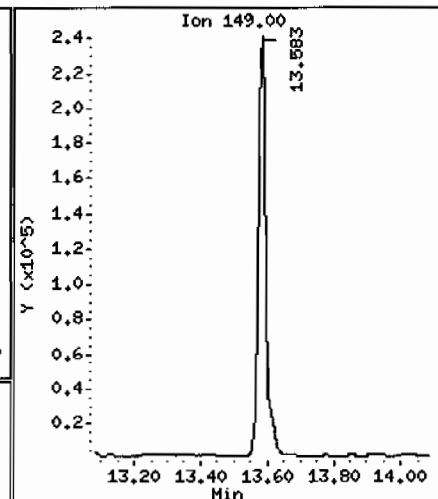
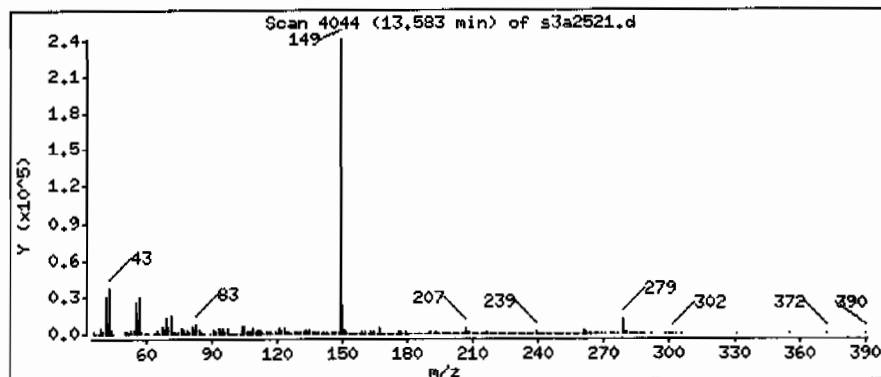
Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

94 Di-n-octylphthalate

Concentration: 1430 ug/Kg



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: HSD3.i

Sample Info: 1245099012194445511SVHF11ILANL

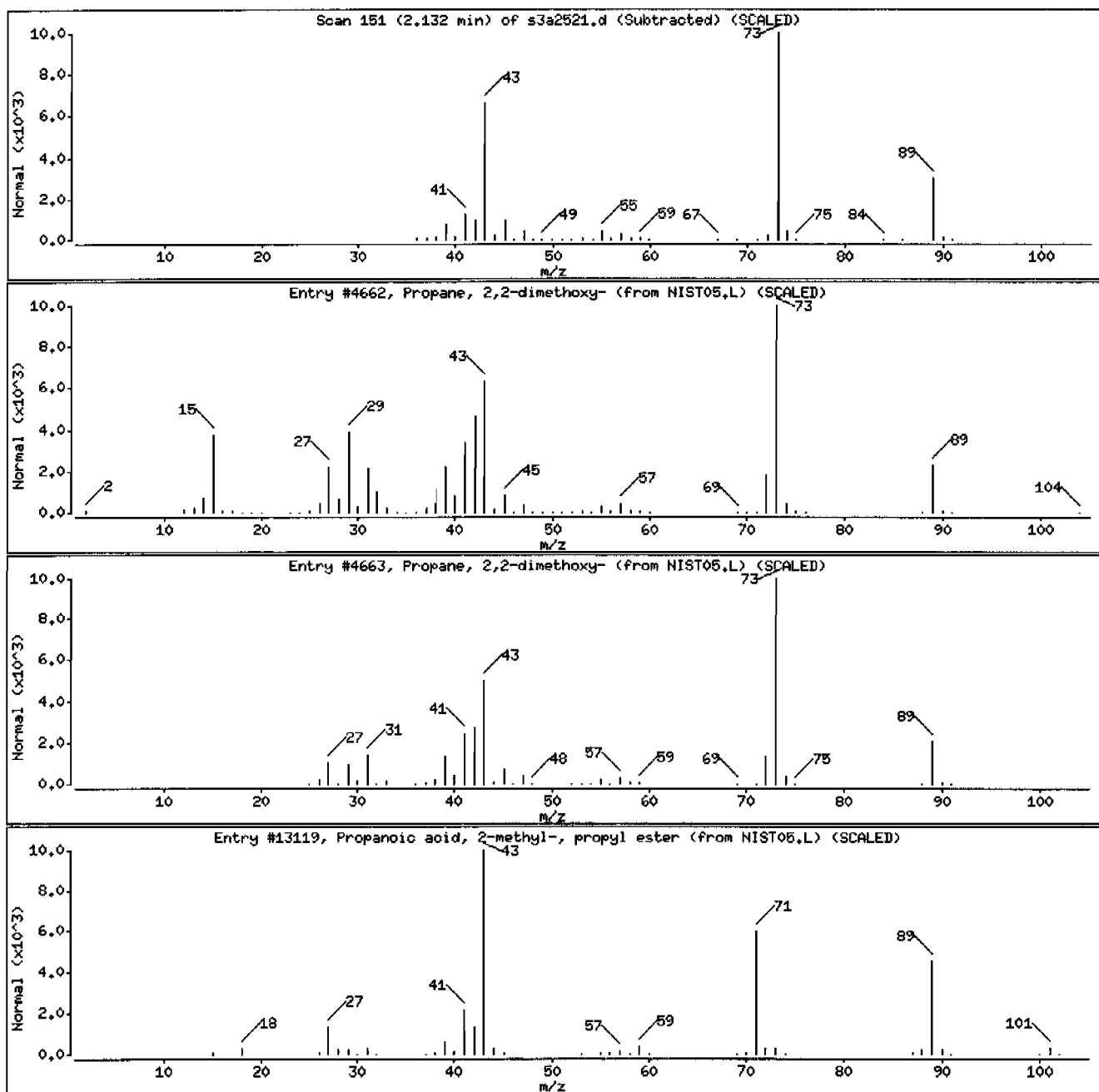
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	17	C7H14O2	130



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: HSD3.i

Sample Info: 1245099012194445511SVHF111LANL

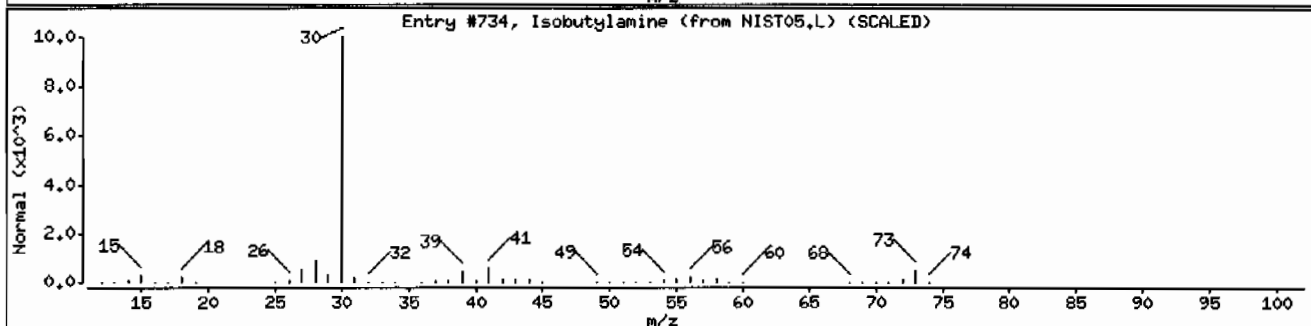
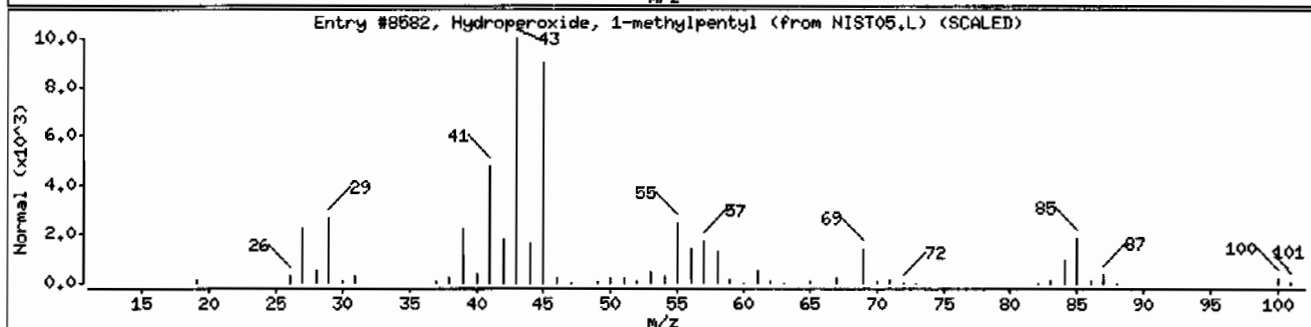
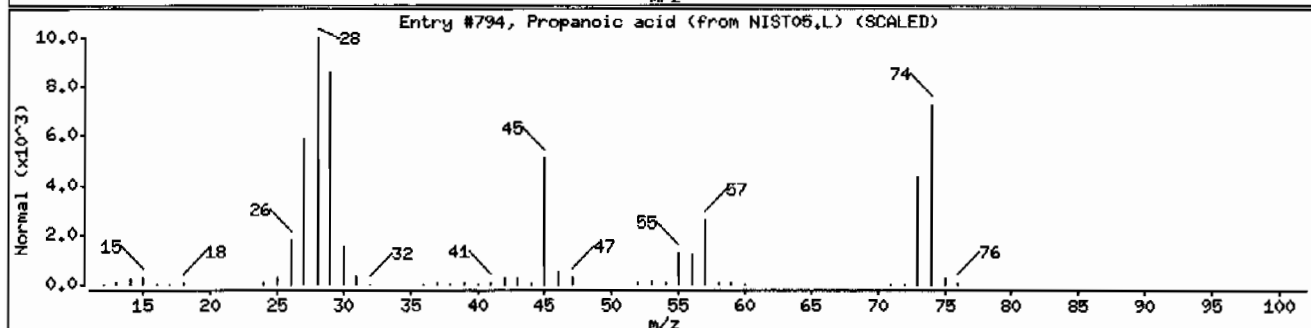
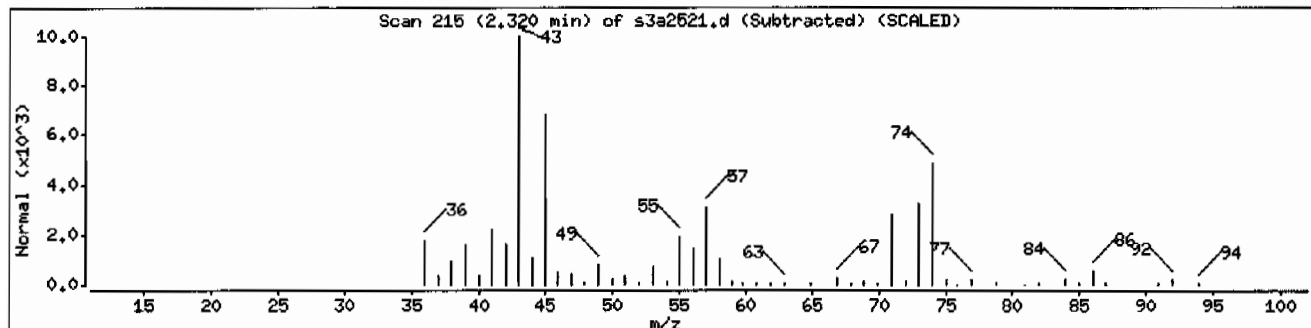
Volume Injected (uL): 0.5

Operator: JLD1

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	794	59	C3H6O2	74
Hydroperoxide, 1-methylpentyl	24254-55-5	NIST05.L	8582	12	C6H14O2	118
Isobutylamine	78-81-9	NIST05.L	734	10	C4H11N	73



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVHF11ILANL

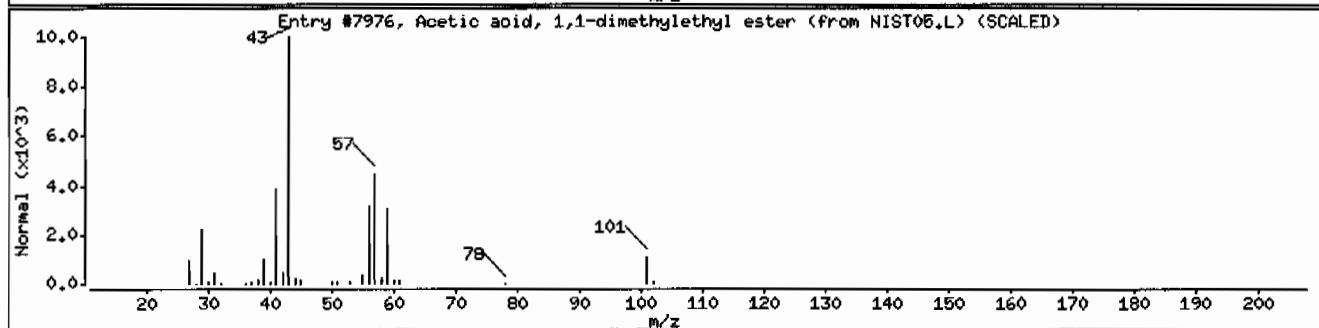
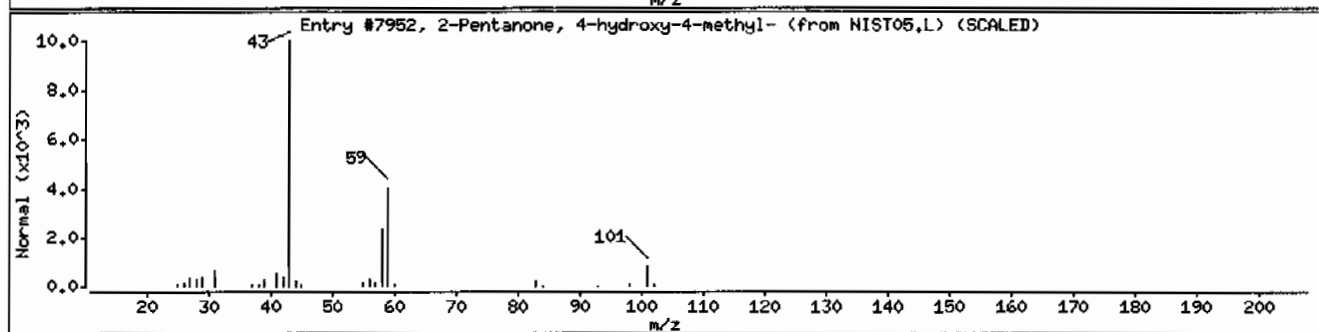
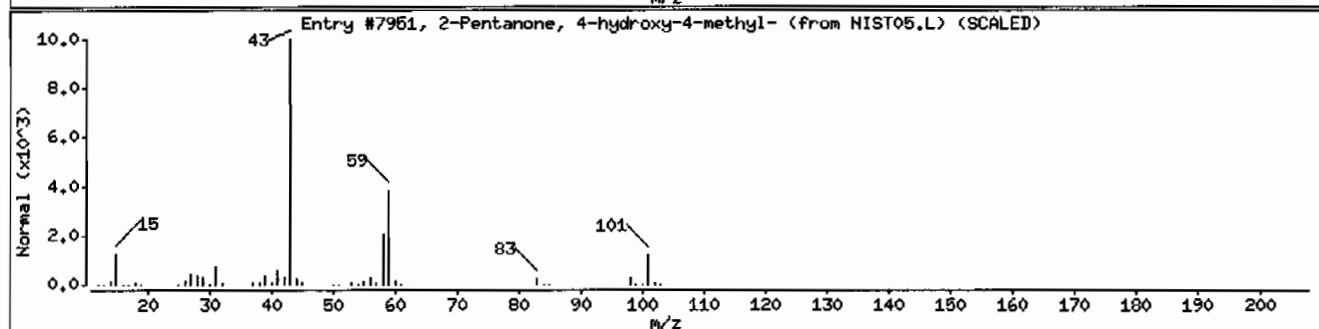
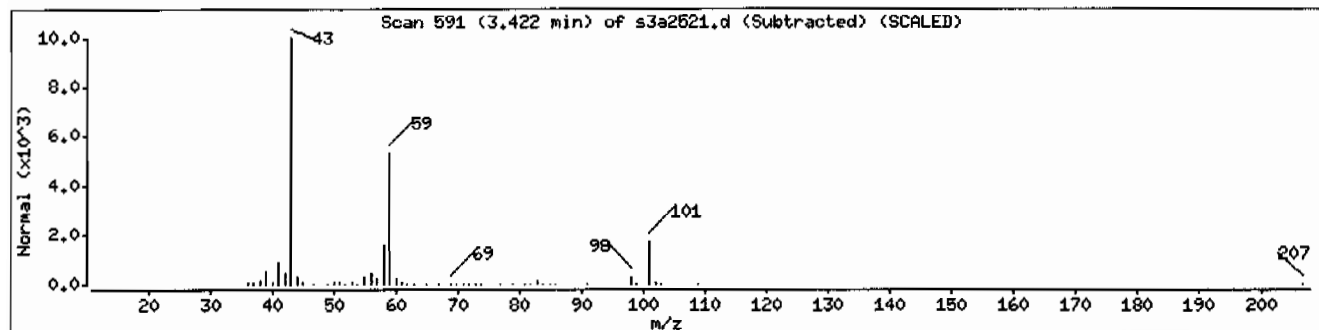
Volume Injected (uL): 0.5

Operator: JLD1

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	50	C ₆ H ₁₂ O ₂	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C ₆ H ₁₂ O ₂	116



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511ISVMFI1ILANL

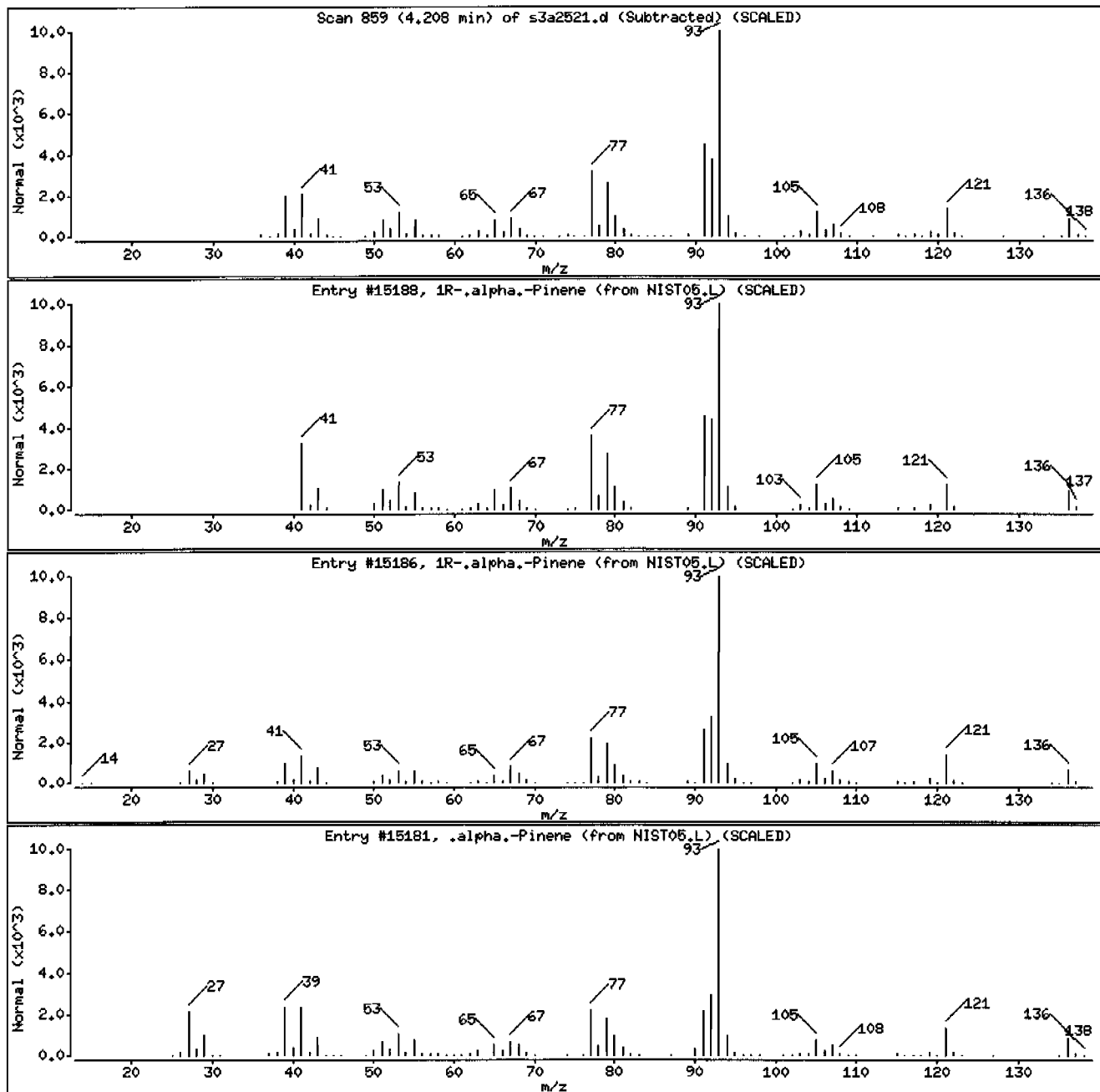
Volume Injected (uL): 0.5

Operator: JLD1

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	98	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15181	96	C10H16	136



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.1

Sample Info: 1245099012194445511ISVMF111LANL

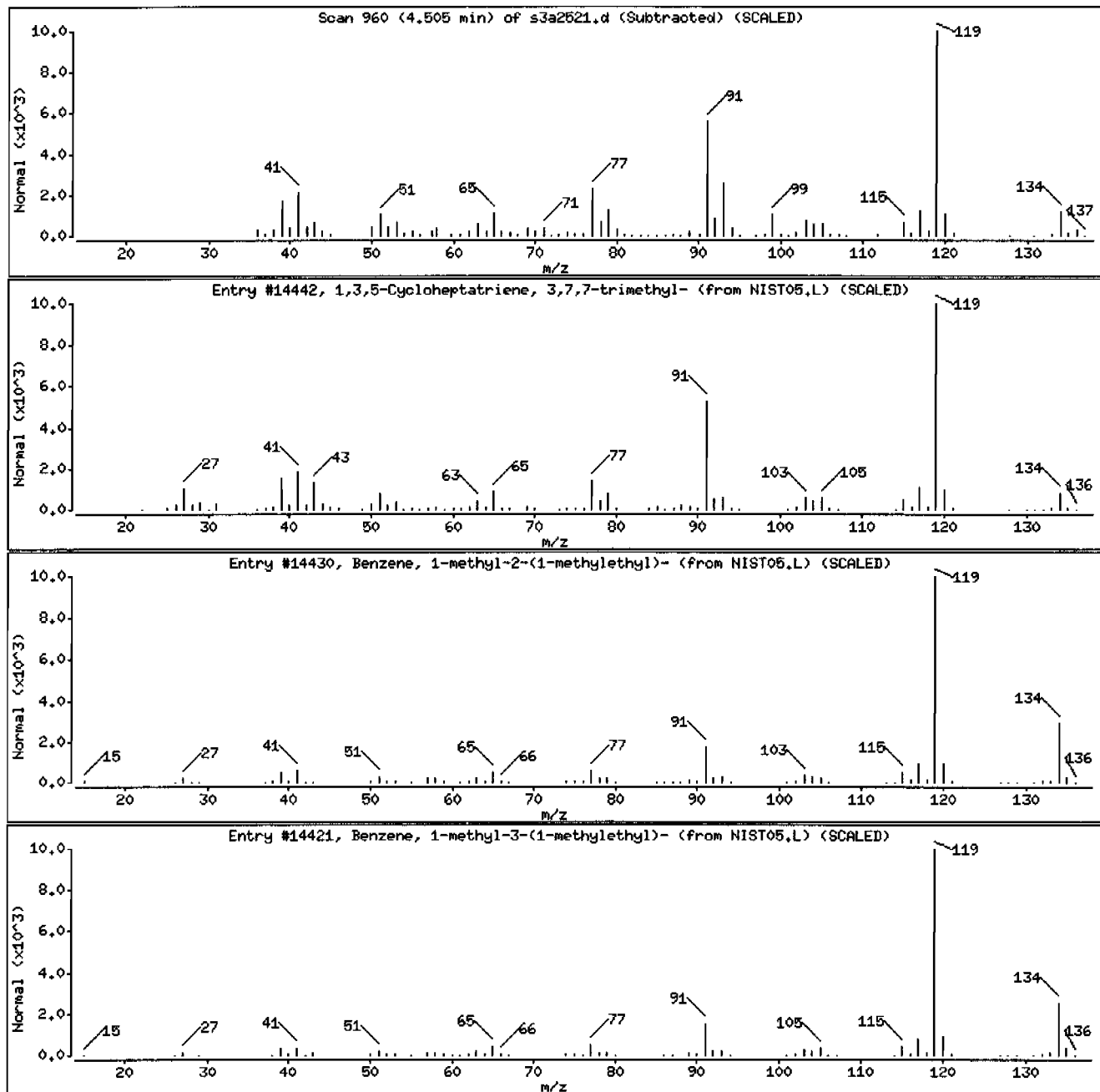
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,3,5-Cycloheptatriene, 3,7,7-trimethyl-	3479-89-8	NIST05.L	14442	93	C ₁₀ H ₁₄	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14430	93	C ₁₀ H ₁₄	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NIST05.L	14421	90	C ₁₀ H ₁₄	134



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511ISVMF11ILANL

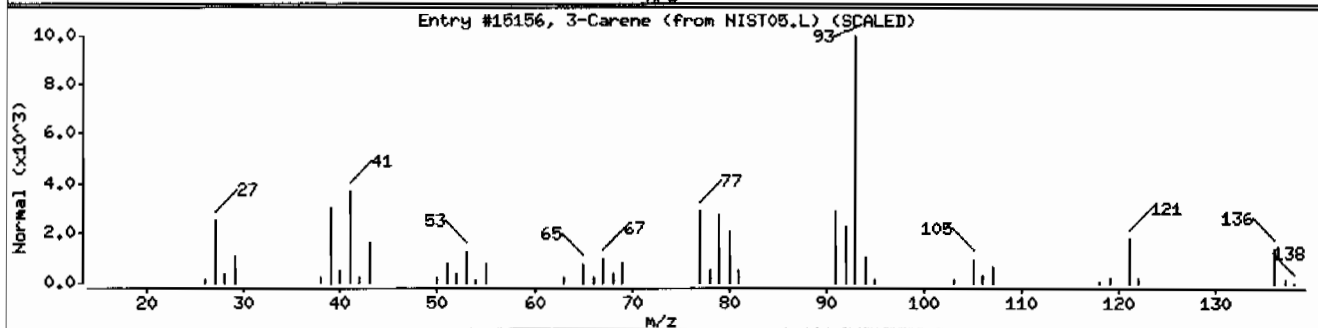
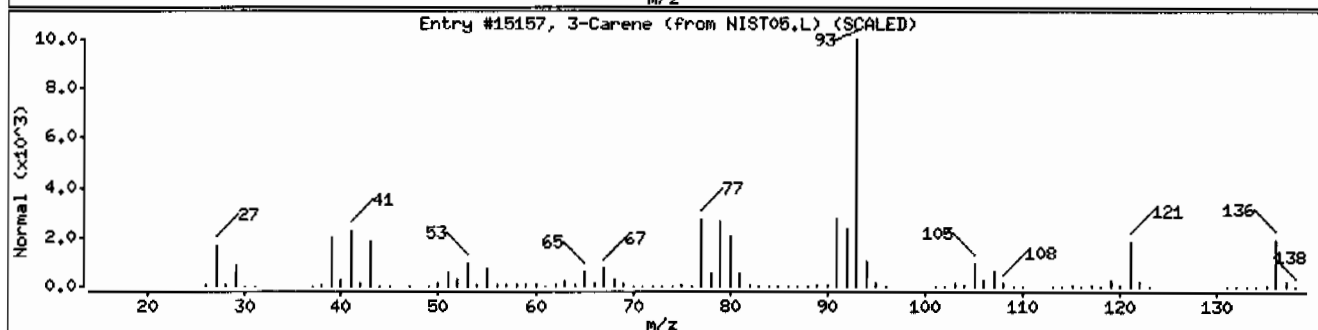
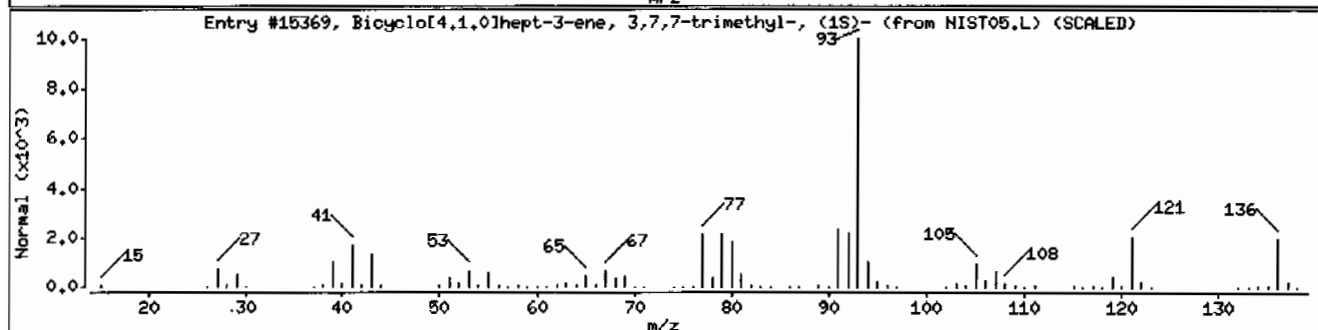
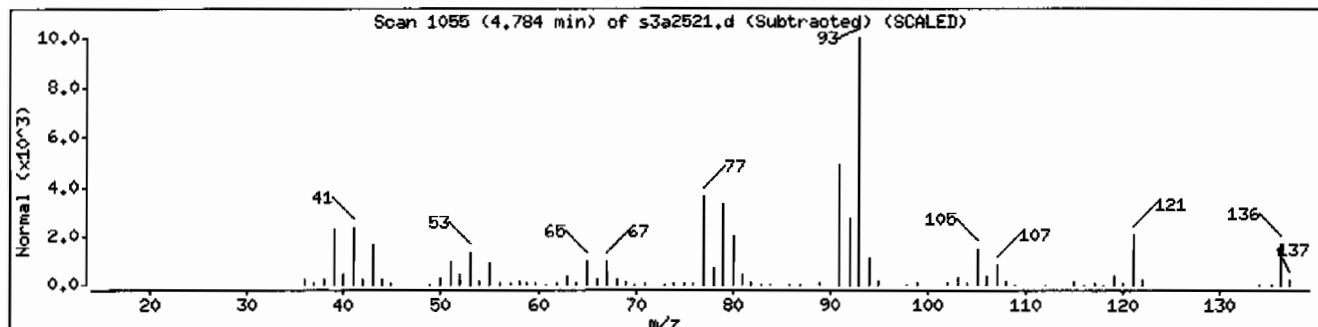
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	498-15-7	NIST05.L	15369	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15157	97	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

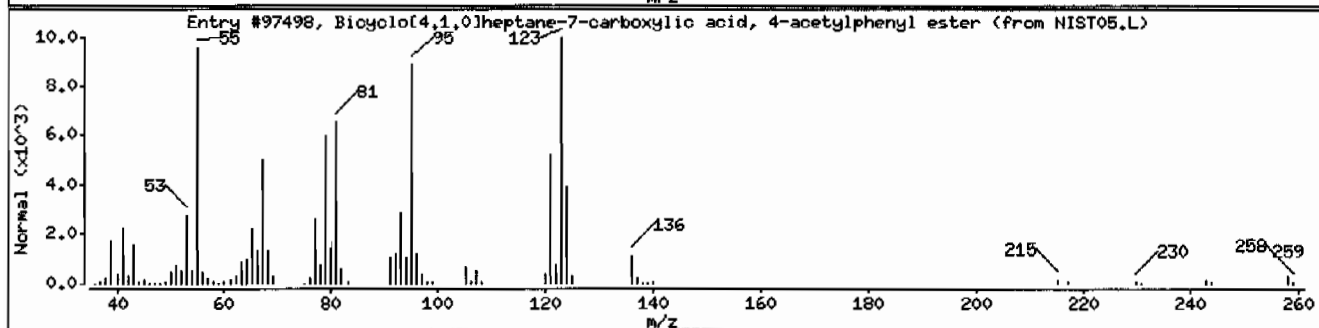
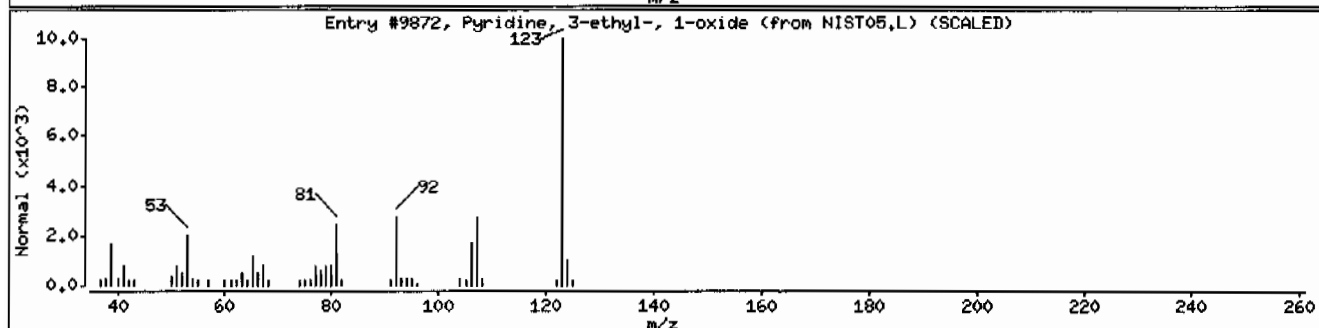
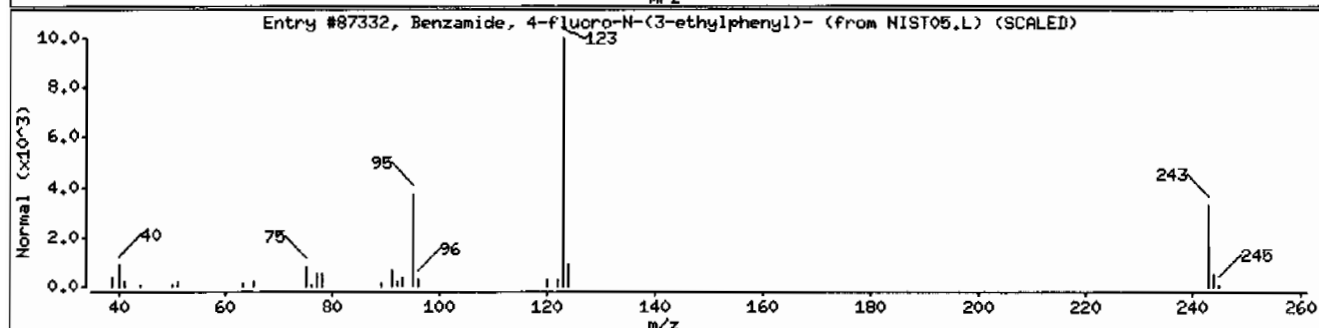
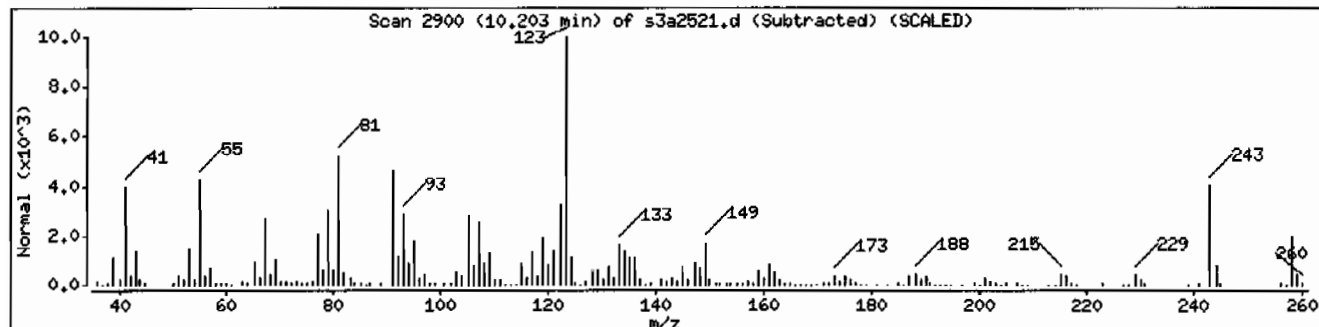
Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzamide, 4-fluoro-N-(3-ethylphenyl)-	101398-05-4	NIST05.L	87332	46	C15H14FN	243
Pyridine, 3-ethyl-, 1-oxide	14906-62-8	NIST05.L	9872	35	C7H9NO	123
Bicyclo[4.1.0]heptane-7-carboxylic acid,	1000311-46-7	NIST05.L	97498	35	C16H18O3	258



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.1

Sample Info: 1245099012194445511SVHF111LANL

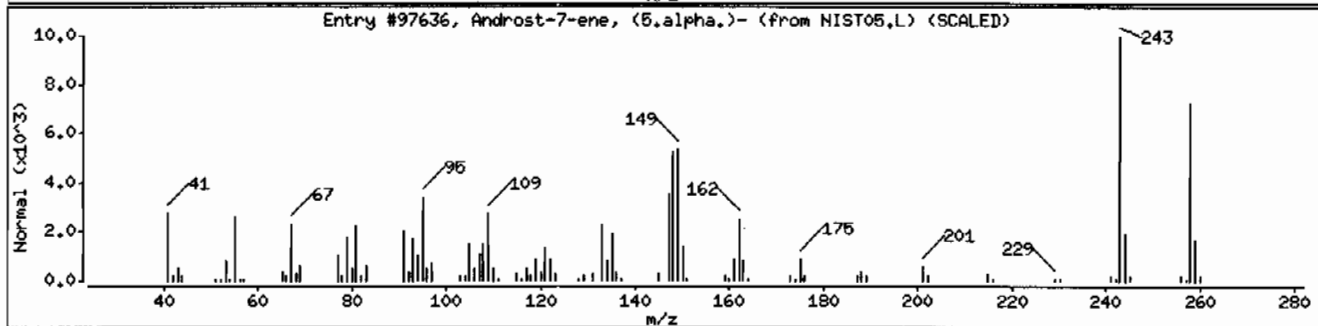
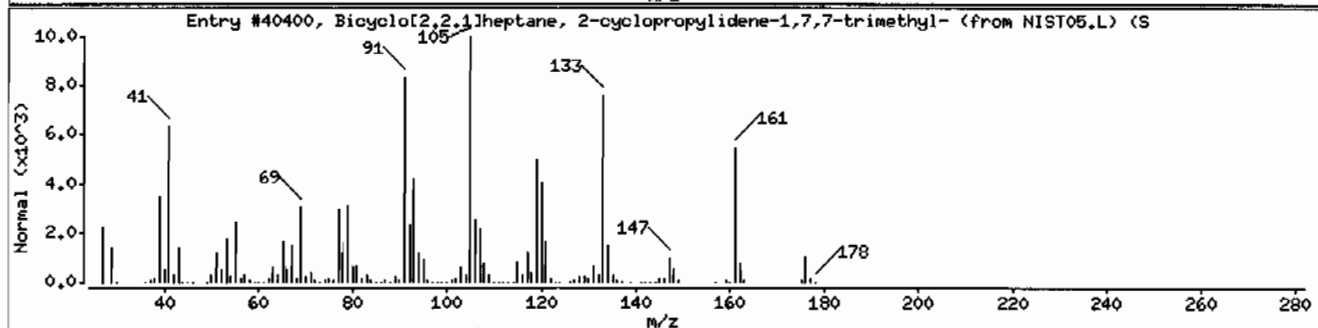
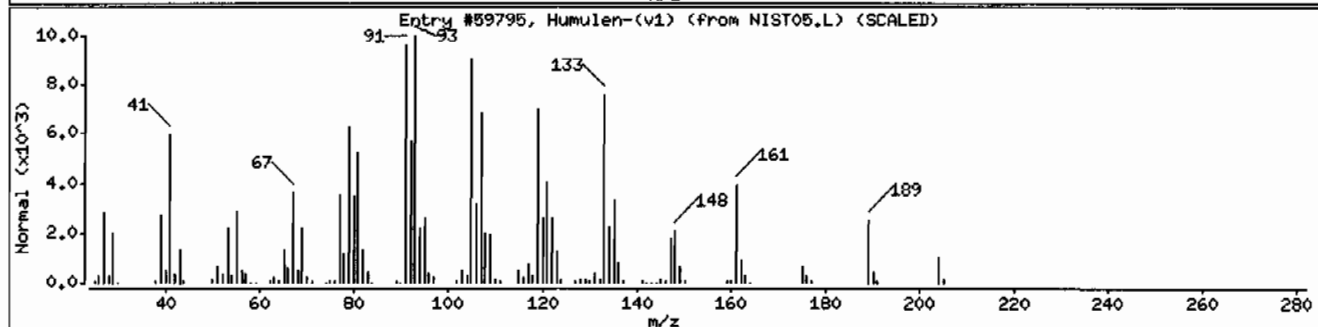
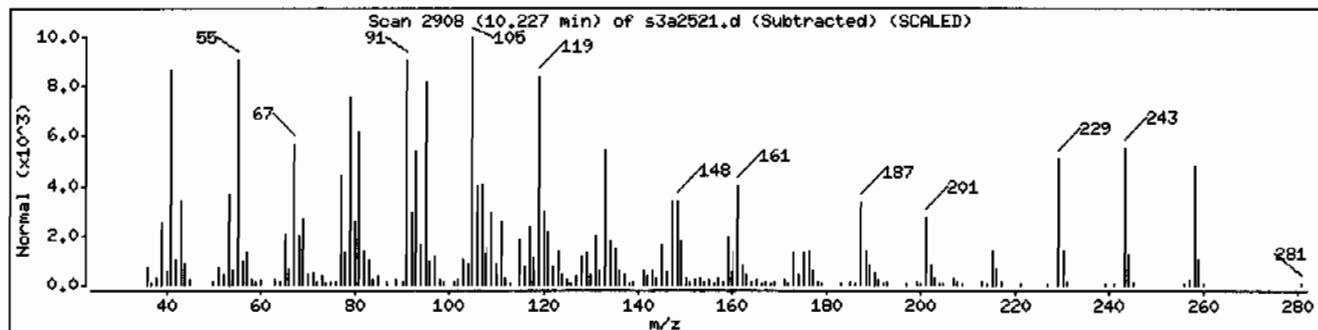
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Humulen-(v1)	1000159-39-4	NIST05.L	59795	35	C15H24	204
Bicyclo[2.2.1]heptane, 2-cyclopropyliden	1000159-45-7	NIST05.L	40400	25	C13H20	176
Androst-7-ene, (5.alpha.)-	54411-76-6	NIST05.L	97636	15	C19H30	258



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.1

Sample Info: 1245099012194445511SVMF111LANL

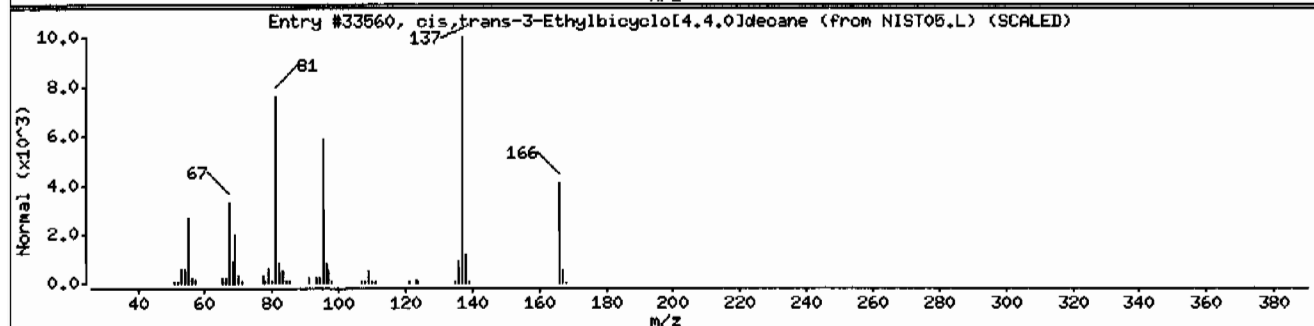
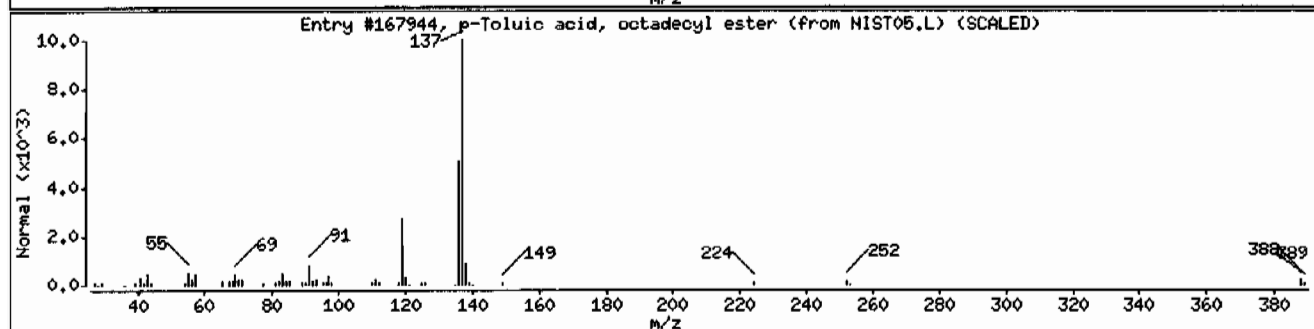
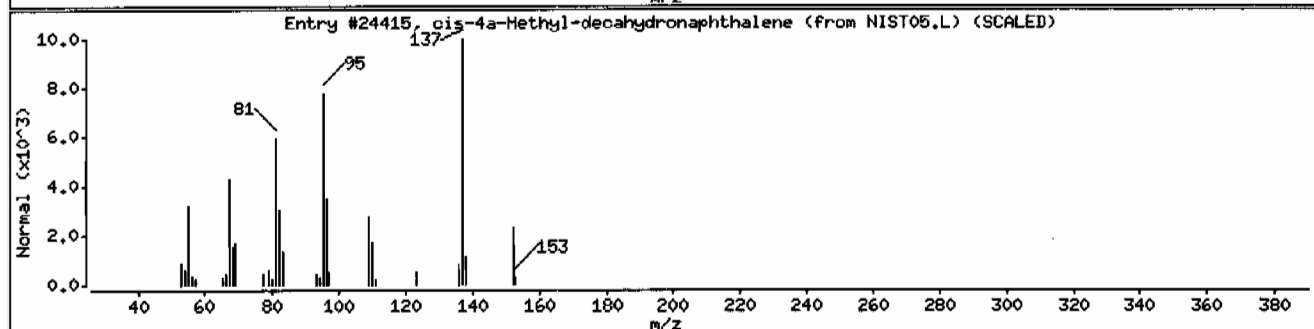
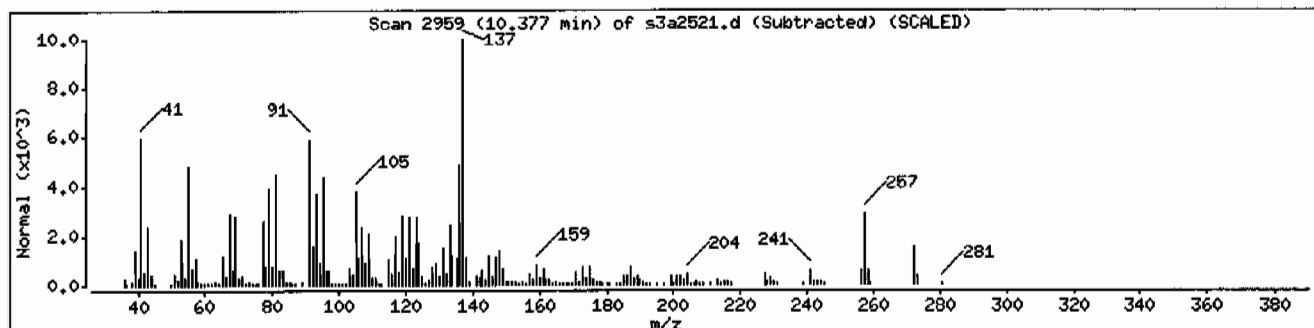
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
cis-4a-Methyl-decahydronaphthalene	2547-26-4	NIST05.L	24415	38	C ₁₁ H ₂₀	152
p-Toluic acid, octadecyl ester	75260-42-3	NIST05.L	167944	35	C ₂₆ H ₄₄ O ₂	388
cis,trans-3-Ethylbicyclo[4.4.0]decane	66660-41-1	NIST05.L	33560	35	C ₁₂ H ₂₂	166



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVMF11ILANL

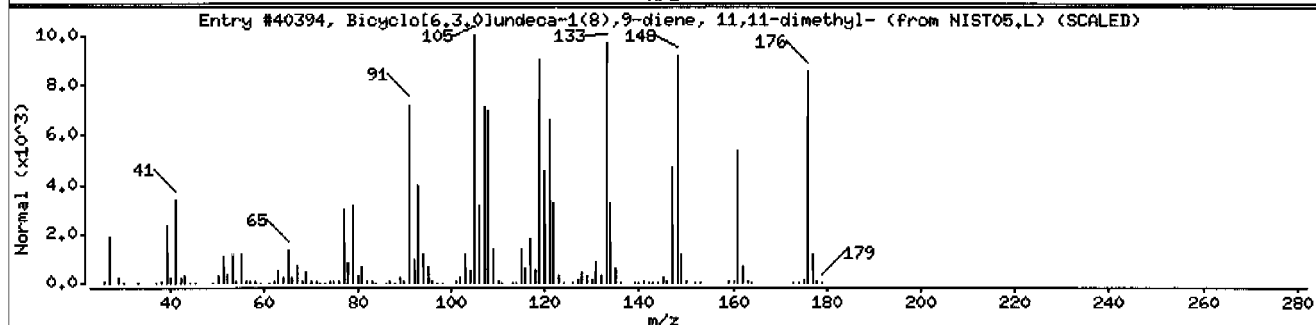
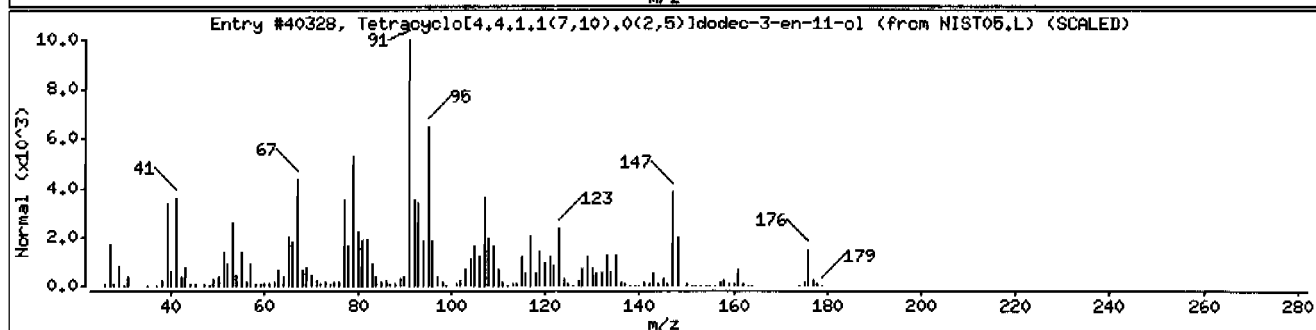
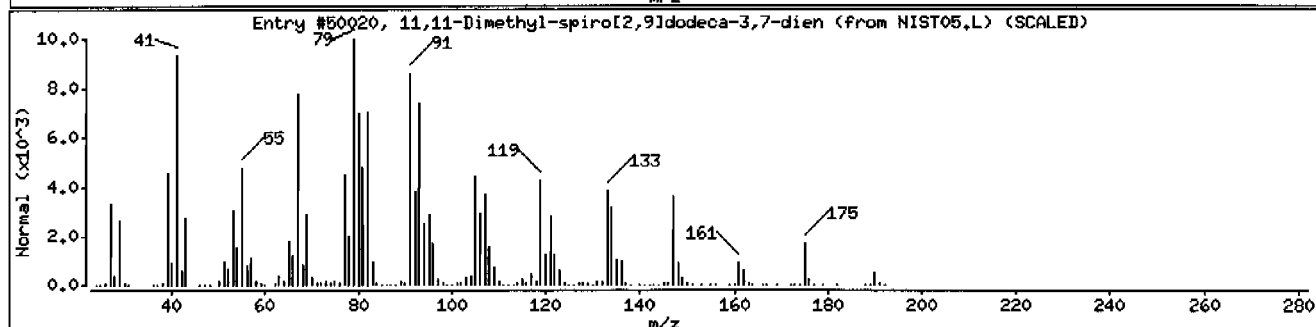
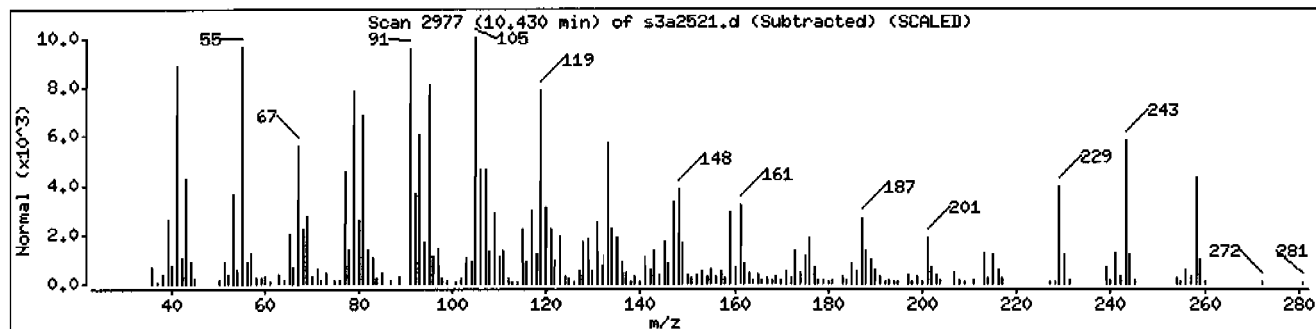
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
11,11-Dimethyl-spiro[2,9]dodeca-3,7-dien	1000062-28-4	NIST05.L	50020	47	C14H22	190
Tetracyclo[4,4,1,1(7,10),0(2,5)]dodec-3-	1000184-98-8	NIST05.L	40328	46	C12H16O	176
Bicyclo[6,3,0]undeca-1(8),9-diene, 11,11	1000163-44-3	NIST05.L	40394	42	C13H20	176



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVHF11LANL

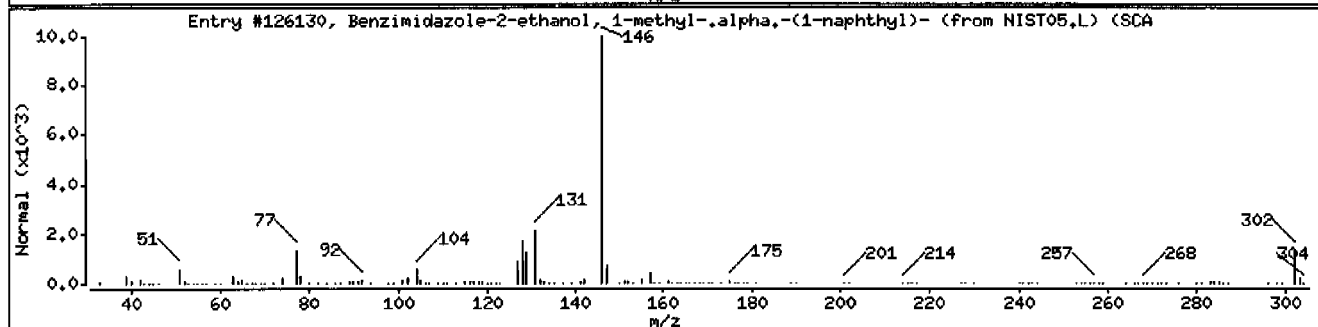
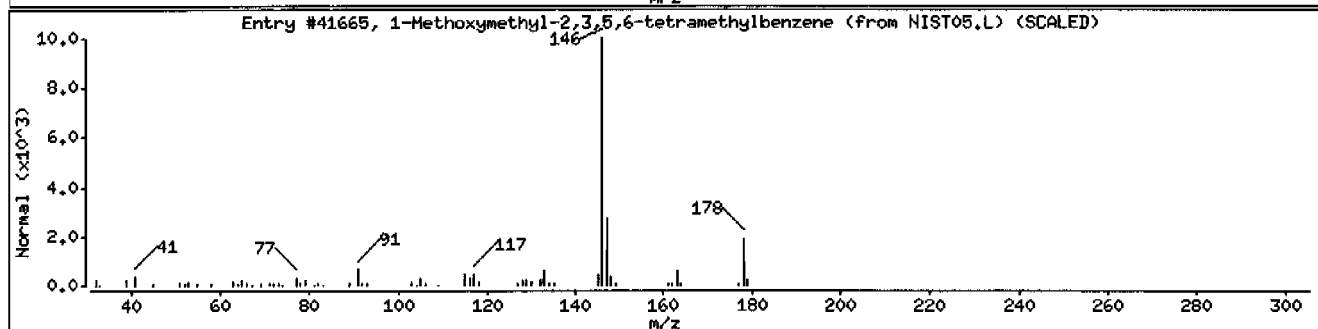
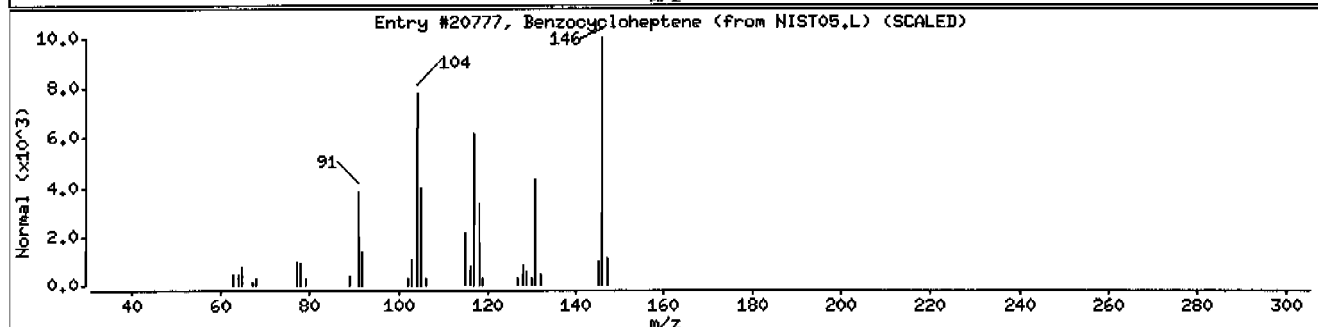
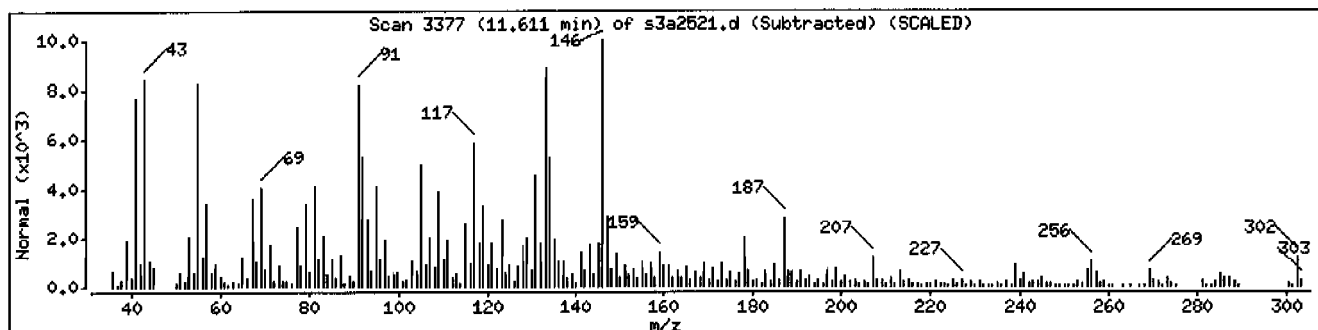
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzocycloheptene	1075-16-7	NIST05.L	20777	42	C11H14	146
1-Methoxymethyl-2,3,5,6-tetramethylbenzene	18922-11-7	NIST05.L	41665	35	C12H18O	178
Benzimidazole-2-ethanol, 1-methyl-,alpha	309724-72-9	NIST05.L	126130	25	C20H18N2O	302



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: HSD3.i

Sample Info: 1245099012194445511SVHF11LANL

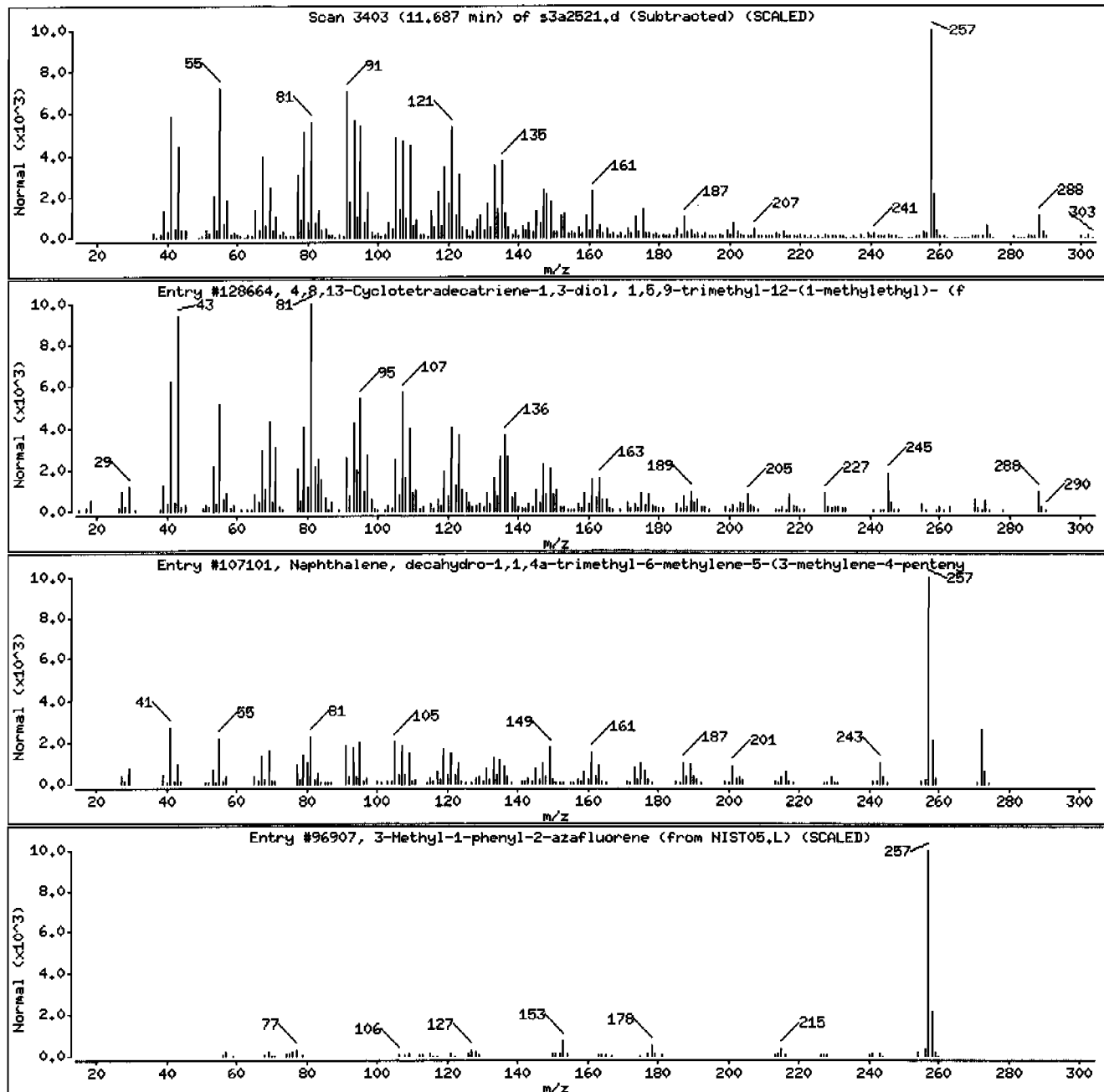
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4,8,13-Cyclotetradecatriene-1,3-diol, 1,	7220-78-2	NIST05.L	128664	43	C20H34O2	306
Naphthalene, decahydro-1,1,4a-trimethyl-	511-02-4	NIST05.L	107101	37	C20H32	272
3-Methyl-1-phenyl-2-azafluorene	62578-39-6	NIST05.L	96907	35	C19H15N	257



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: HSD3.i

Sample Info: 1245099012194445511SVHF11ILANL

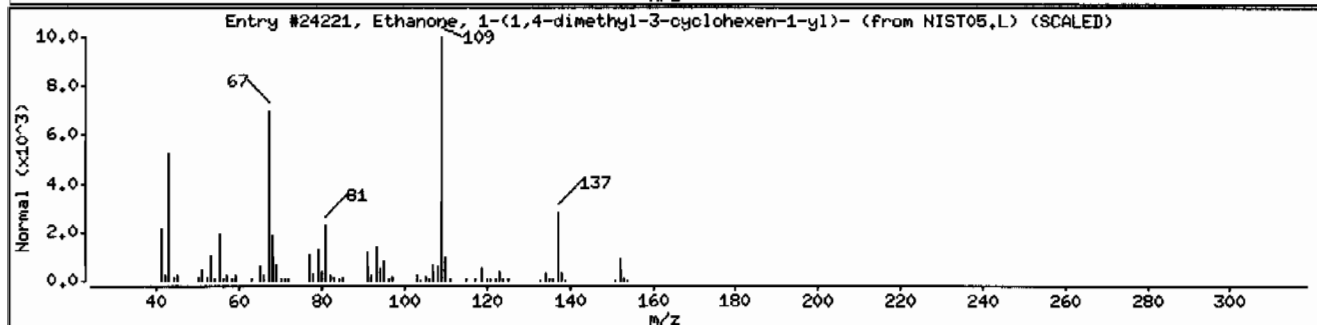
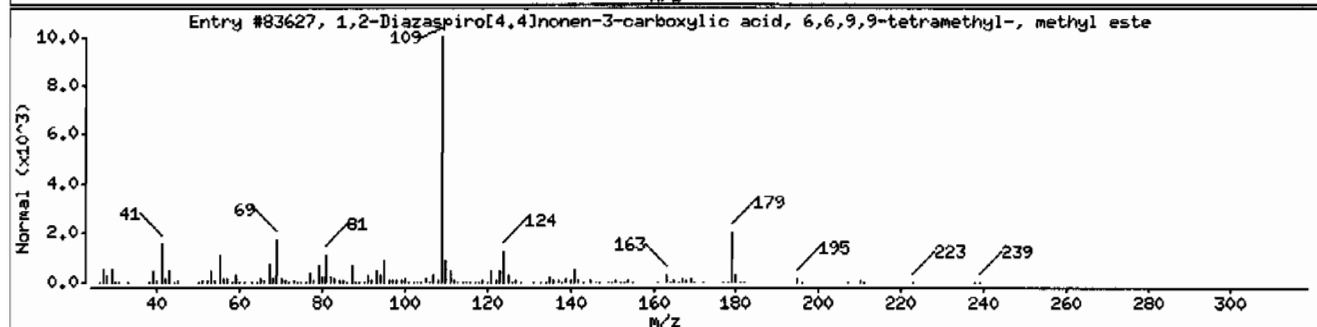
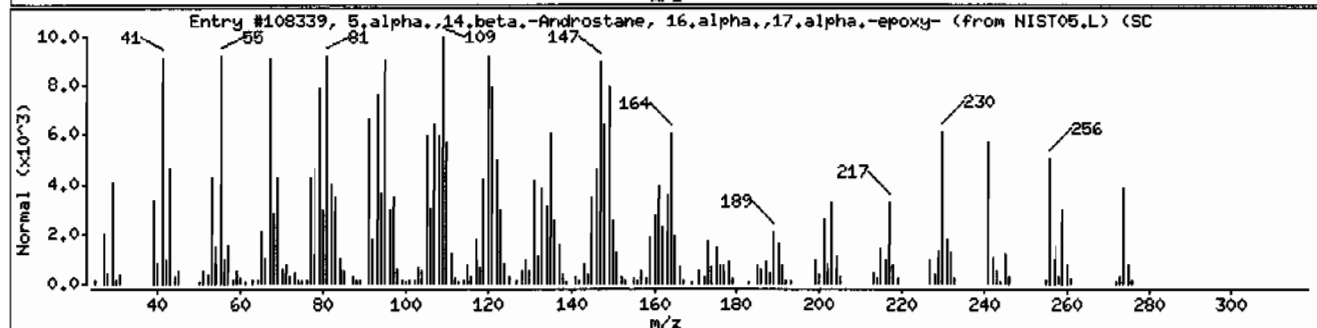
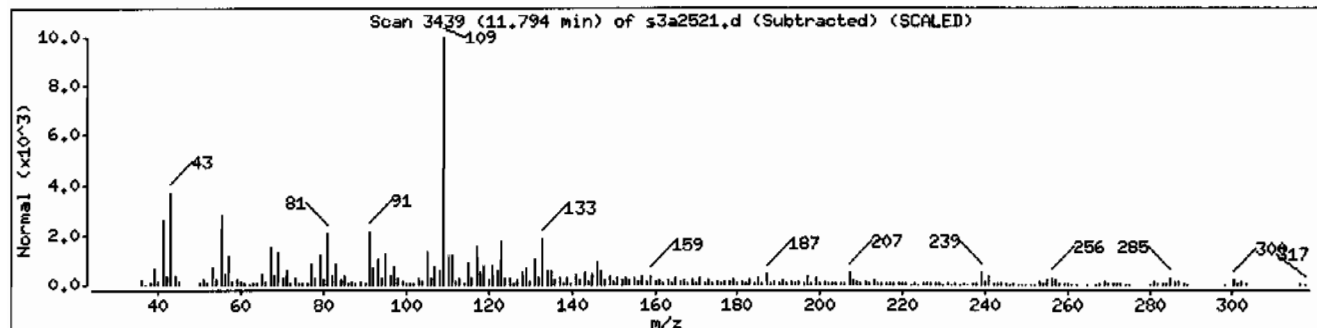
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5.alpha.,14.beta.-Androstane, 16.alpha.,	24174-25-2	NIST05.L	108339	60	C19H30O	274
1,2-Diazaspiro[4.4]nonen-3-carboxylic ac	1000164-25-8	NIST05.L	83627	50	C13H22N2O2	238
Ethanone, 1-(1,4-dimethyl-3-cyclohexen-1	43219-68-7	NIST05.L	24221	47	C10H16O	152



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVHF111LANL

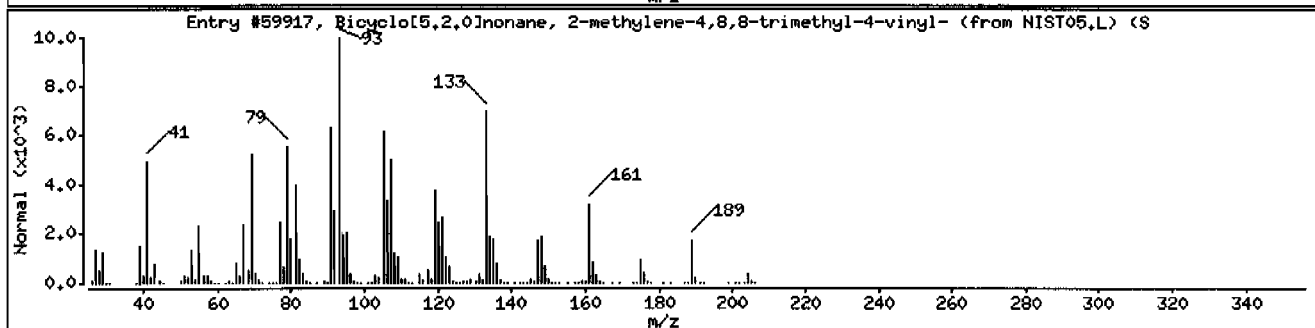
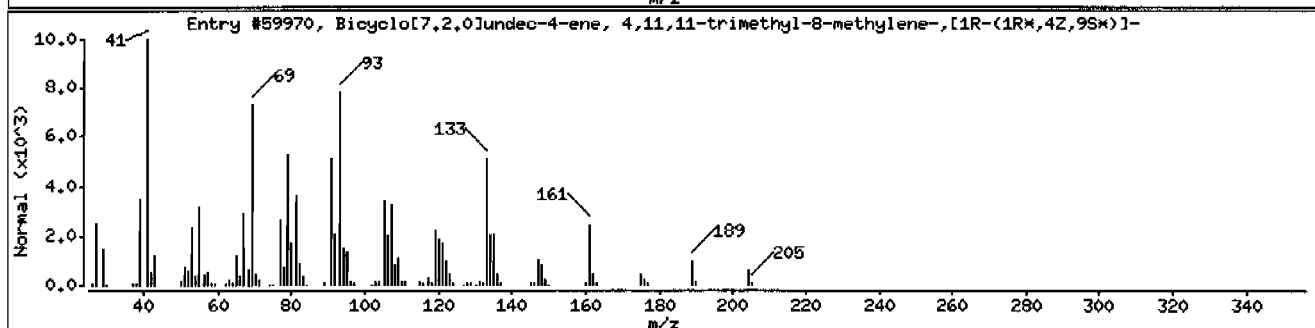
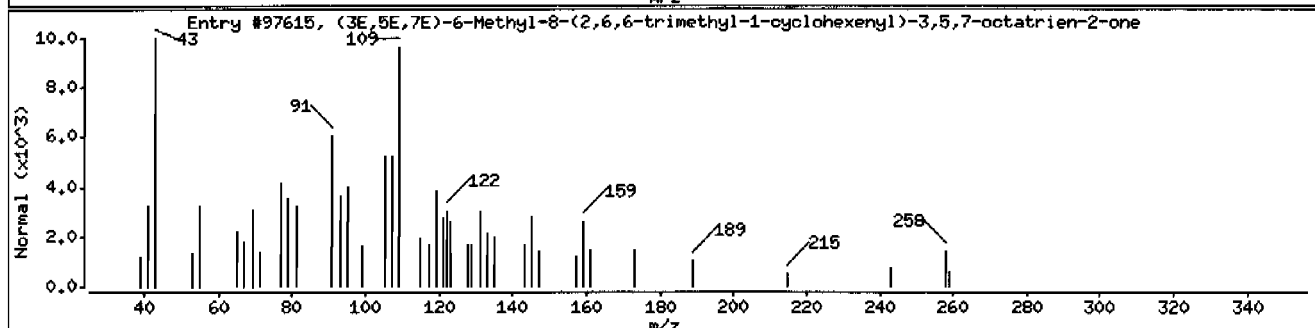
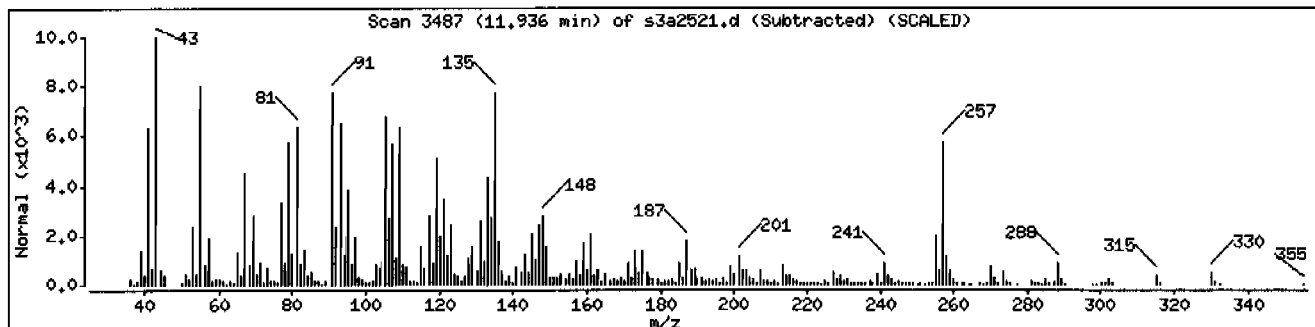
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1-	17974-57-1	NIST05.L	97615	81	C18H26O	258
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	118-65-0	NIST05.L	59970	35	C15H24	204
Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-	242794-76-9	NIST05.L	59917	35	C15H24	204



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3,i

Sample Info: 1245099012/94445511/SVMF11/LANL

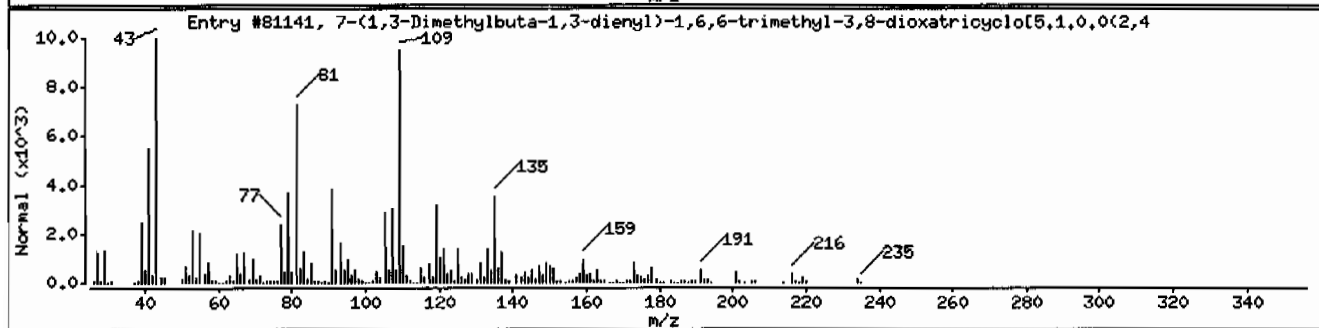
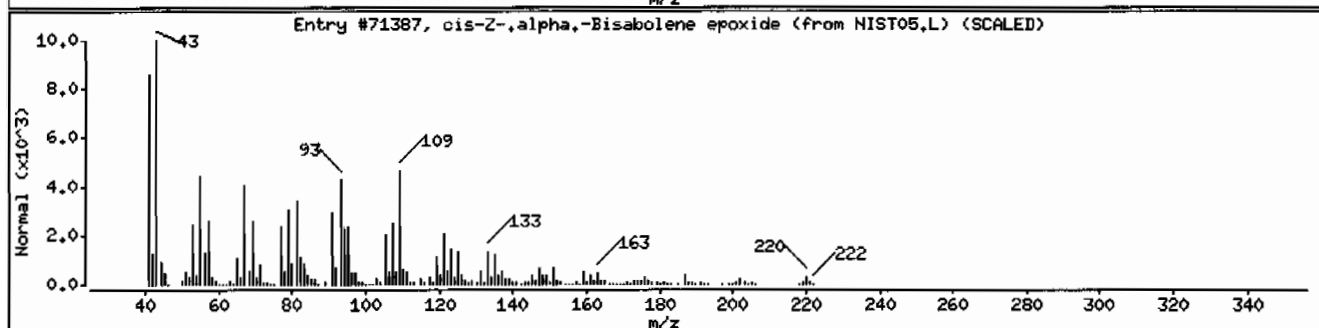
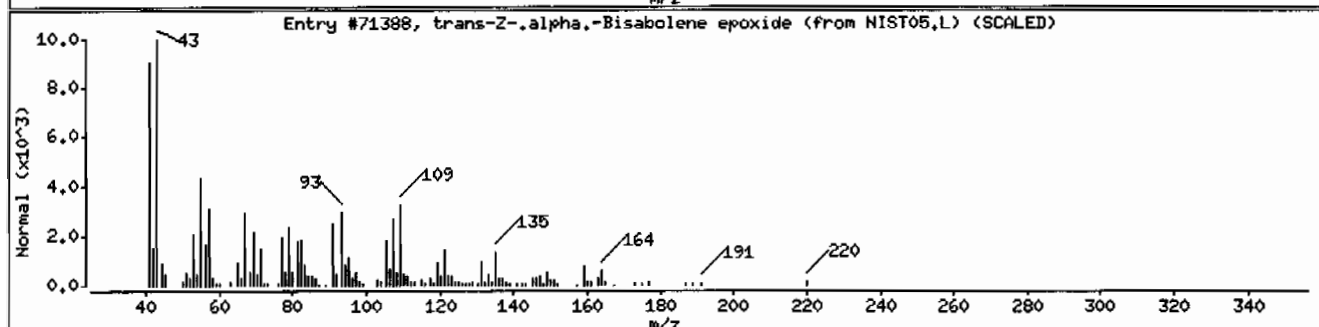
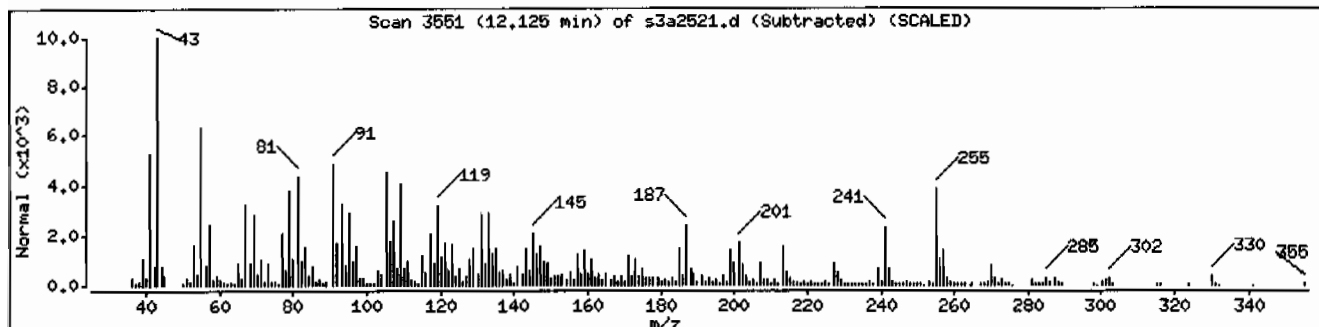
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-Z-.alpha.-Bisabolene epoxide	1000131-71-1	NIST05.L	71388	18	C15H24O	220
cis-Z-.alpha.-Bisabolene epoxide	1000131-71-2	NIST05.L	71387	12	C15H24O	220
7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr	1000190-22-7	NIST05.L	81141	11	C15H22O2	234



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVHF111LANL

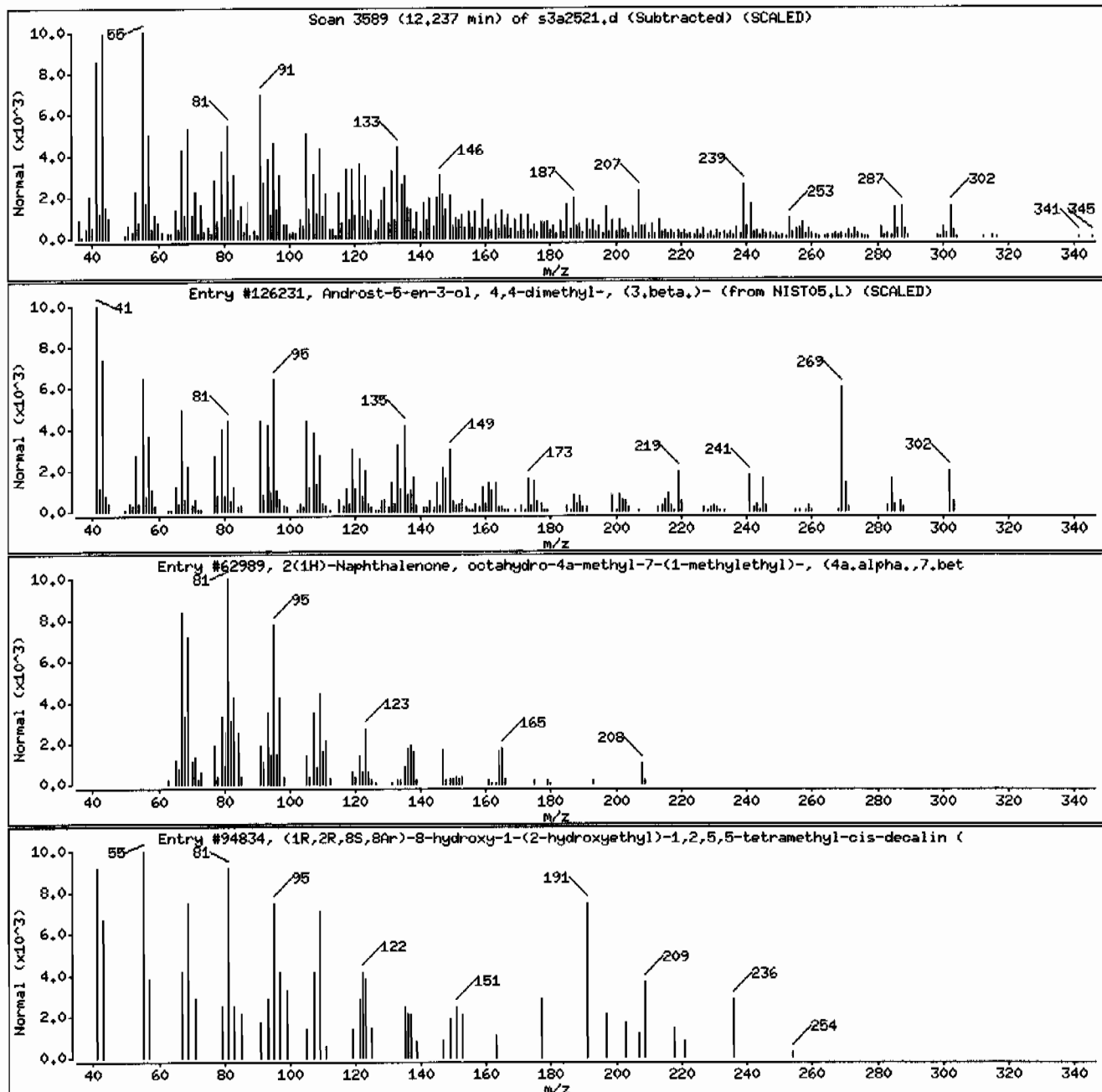
Volume Injected (uL): 0.5

Operator: JLD1

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	62	C21H34O	302
2(1H)-Naphthalenone, octahydro-4a-methyl	54594-42-2	NIST05.L	62989	52	C14H24O	208
(1R,2R,8S,8Ar)-8-hydroxy-1-(2-hydroxyethyl	1000298-98-6	NIST05.L	94834	35	C16H30O2	254



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVHF111LANL

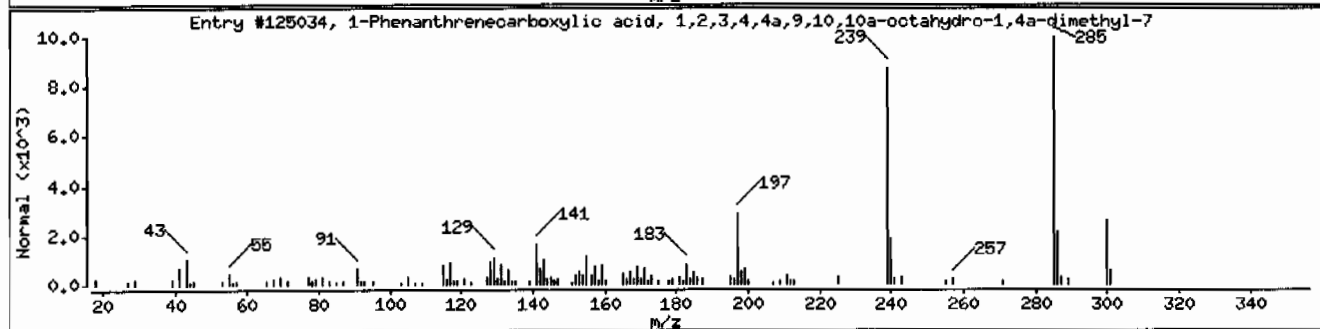
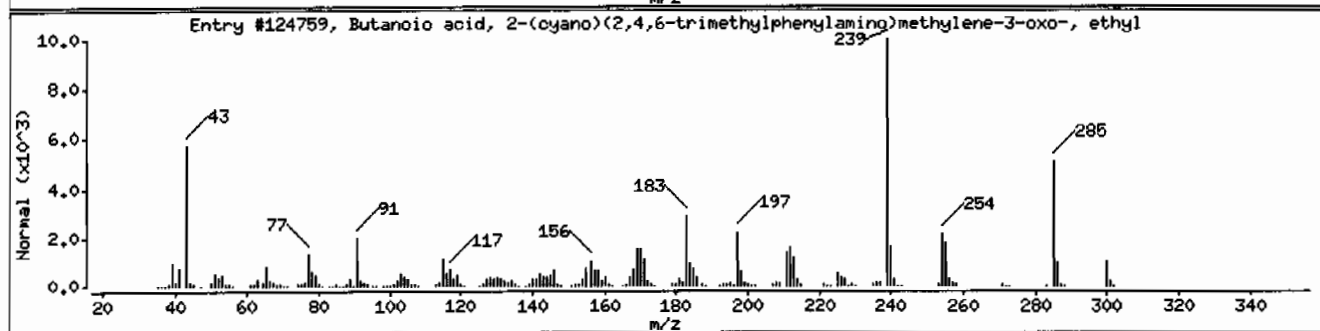
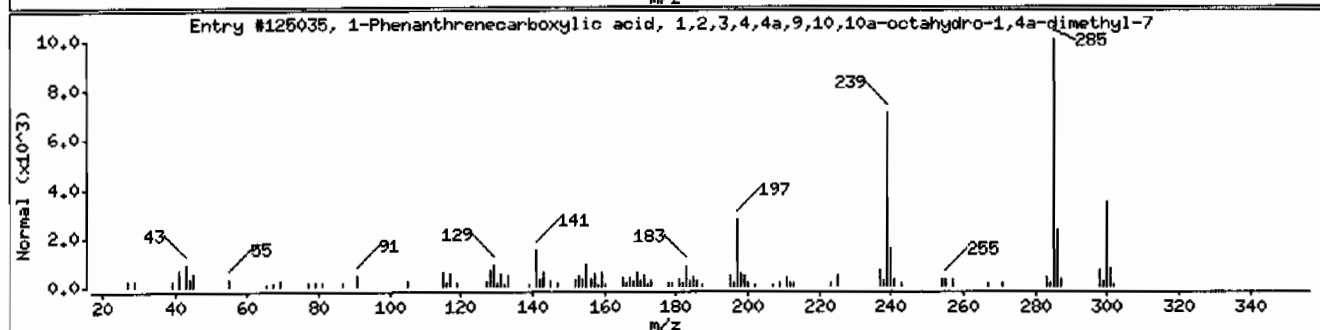
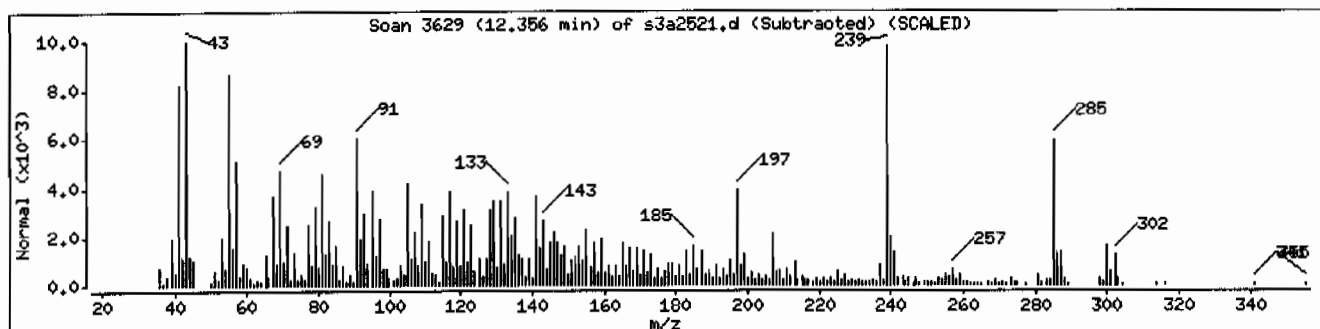
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	98	C20H28O2	300
Butanoic acid, 2-(cyano)(2,4,6-trimethyl	1000267-71-7	NIST05.L	124759	70	C17H20N2O3	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	64	C20H28O2	300



Date : 28-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVHF11ILANL

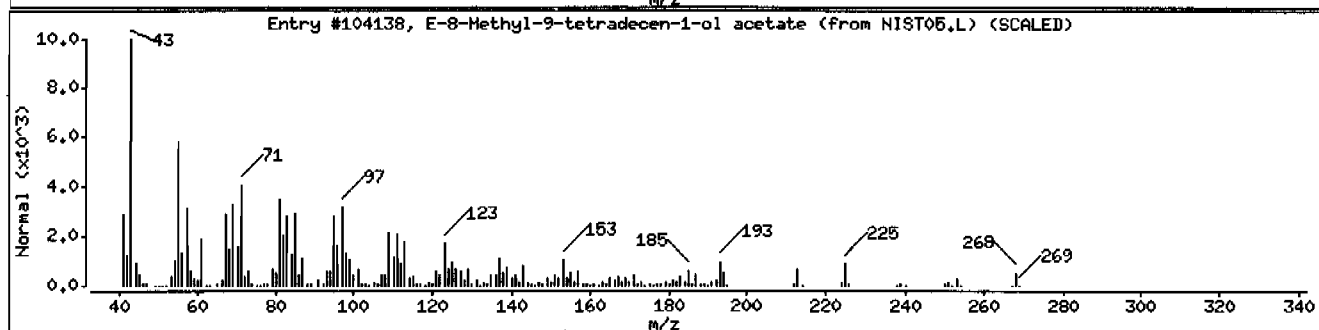
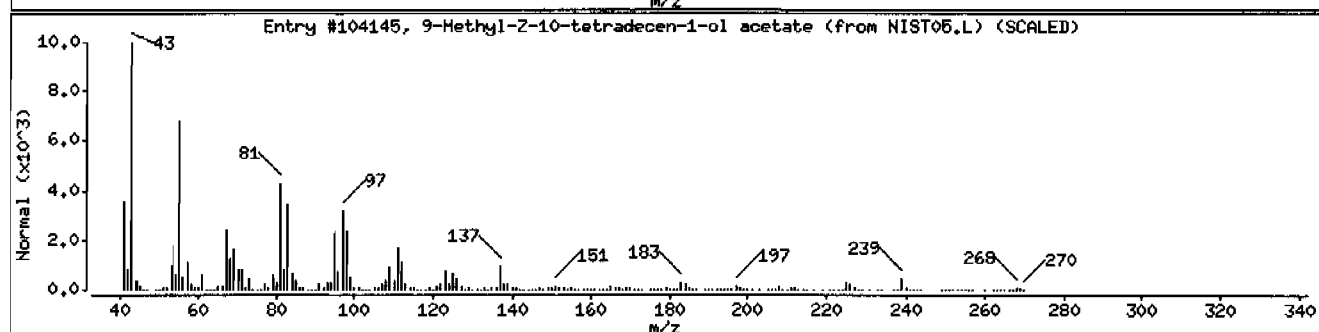
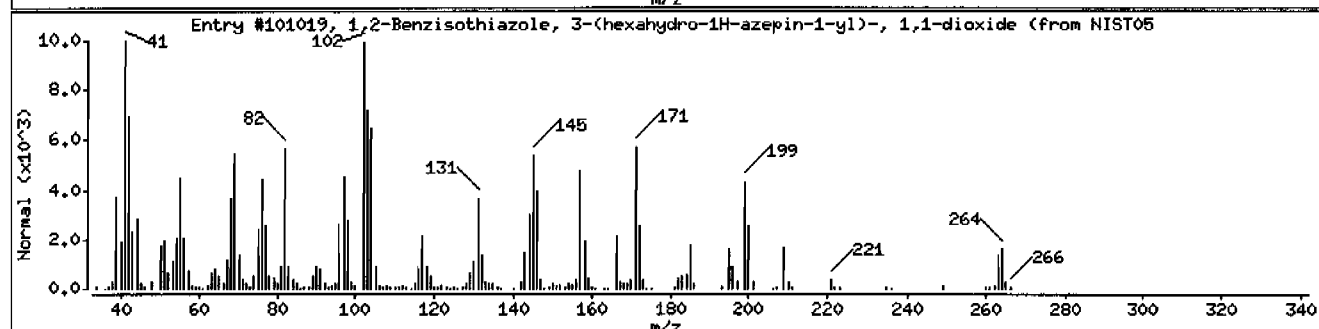
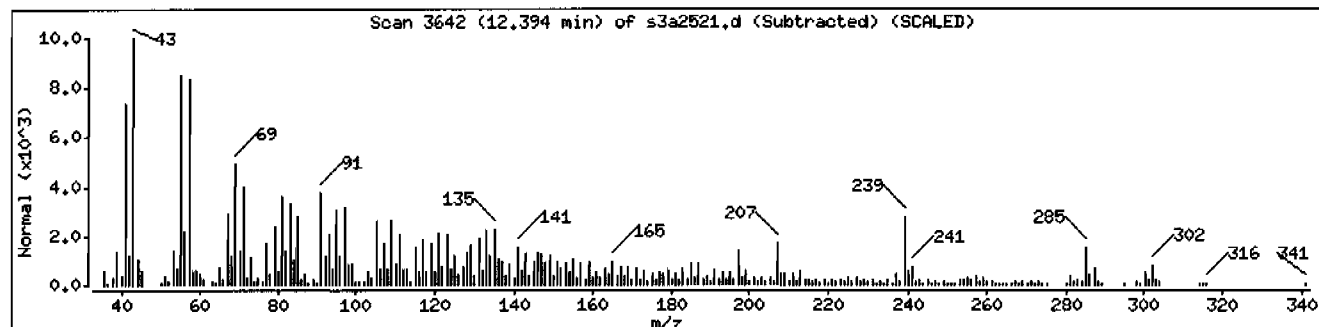
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzisothiazole, 3-(hexahydro-1H-azepin-1-yl)-, 1,1-dioxide	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264
9-Methyl-2-10-tetradecen-1-ol acetate	1000130-99-4	NIST05.L	104145	55	C17H32O2	268
E-8-Methyl-9-tetradecen-1-ol acetate	1000130-81-4	NIST05.L	104138	55	C17H32O2	268



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511ISVMF11ILANL

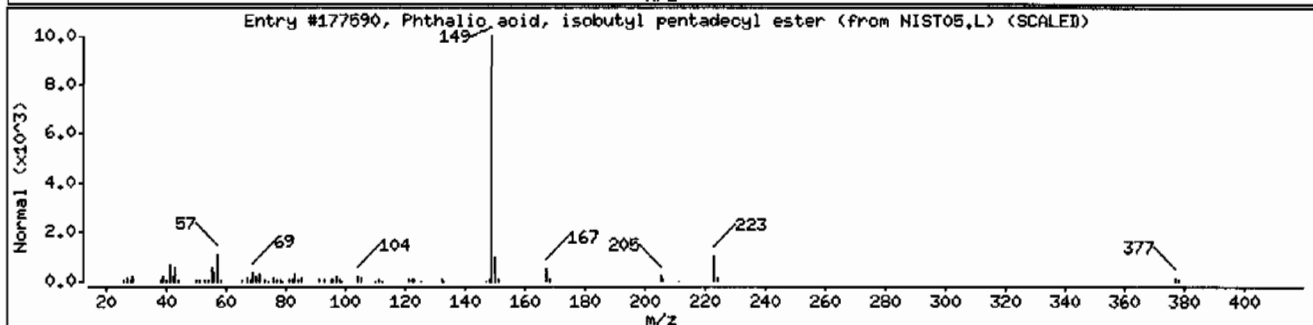
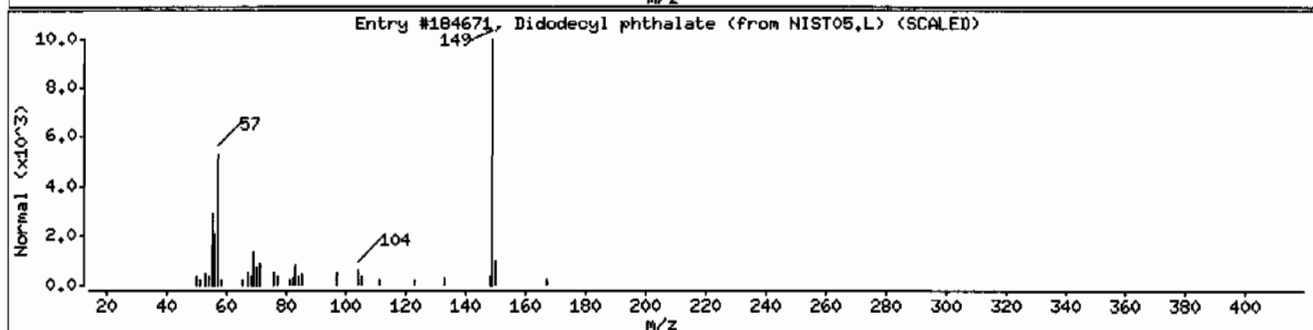
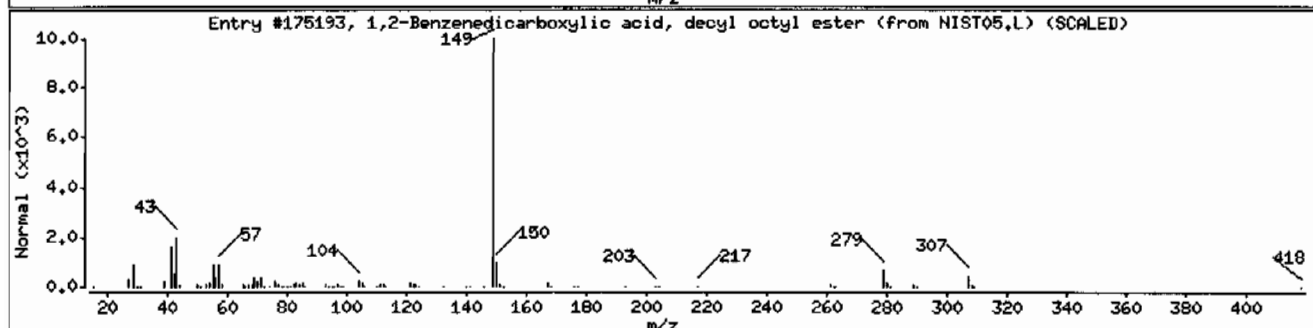
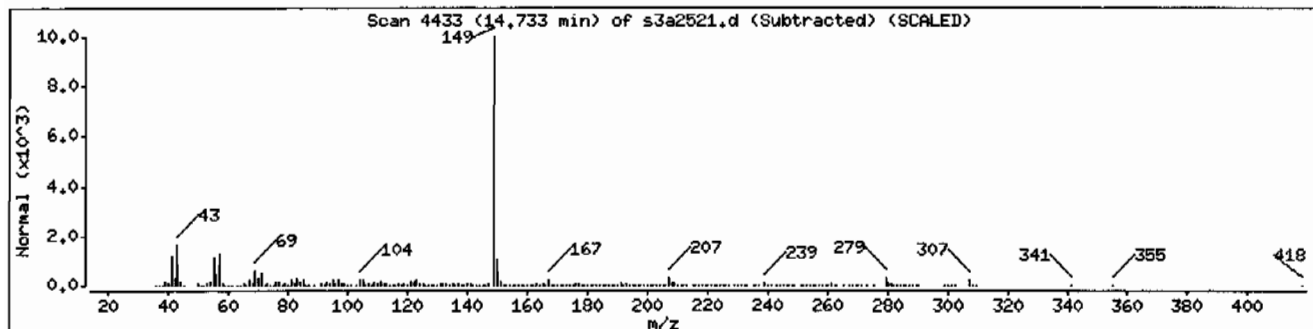
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Benzenedicarboxylic acid, decyl octyl	119-07-3	NIST05.L	175193	91	C ₂₆ H ₄₂ O ₄	418
Didodecyl phthalate	2432-90-8	NIST05.L	184671	80	C ₃₂ H ₅₄ O ₄	502
Phthalic acid, isobutyl pentadecyl ester	1000309-07-3	NIST05.L	177590	72	C ₂₇ H ₄₄ O ₄	432



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7108

Instrument: MSD3.i

Sample Info: 1245099012194445511|SVHF|1|LANL

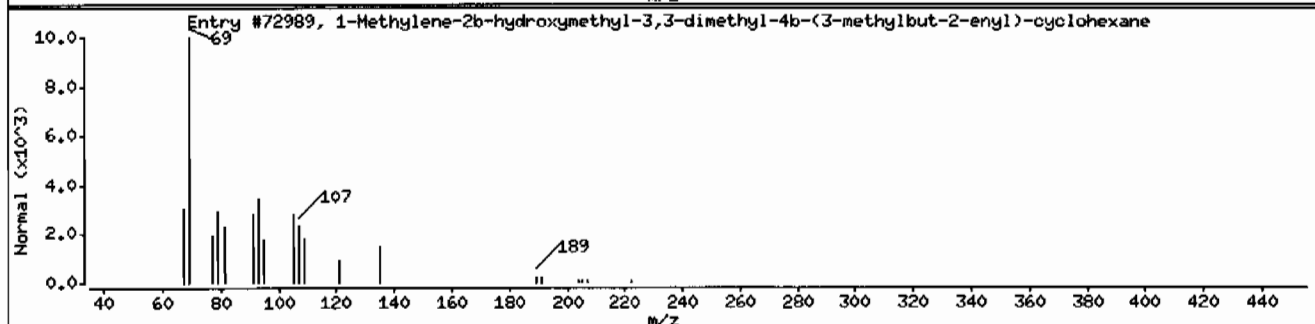
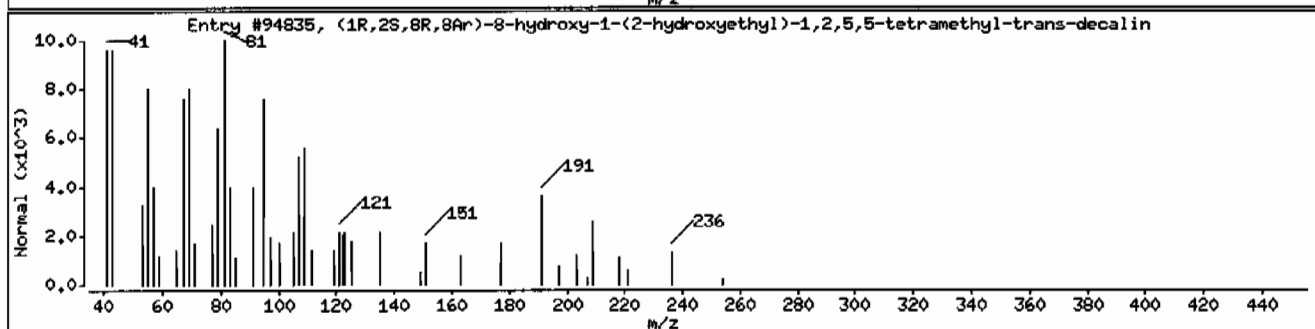
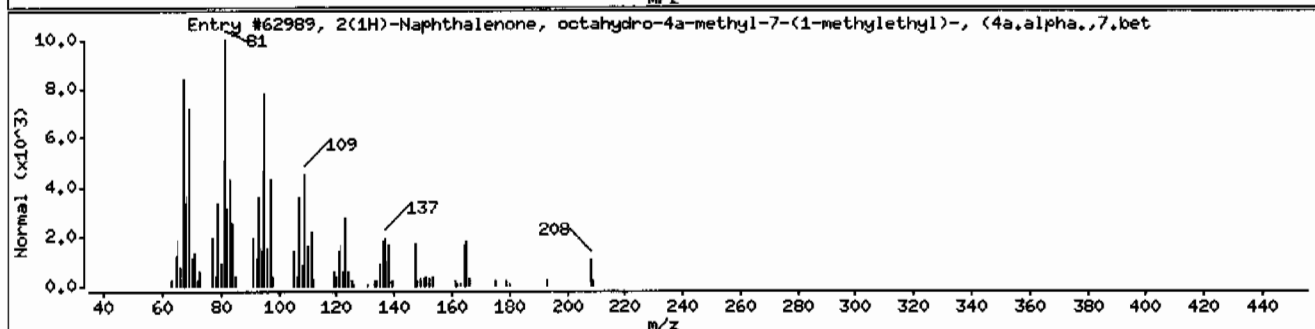
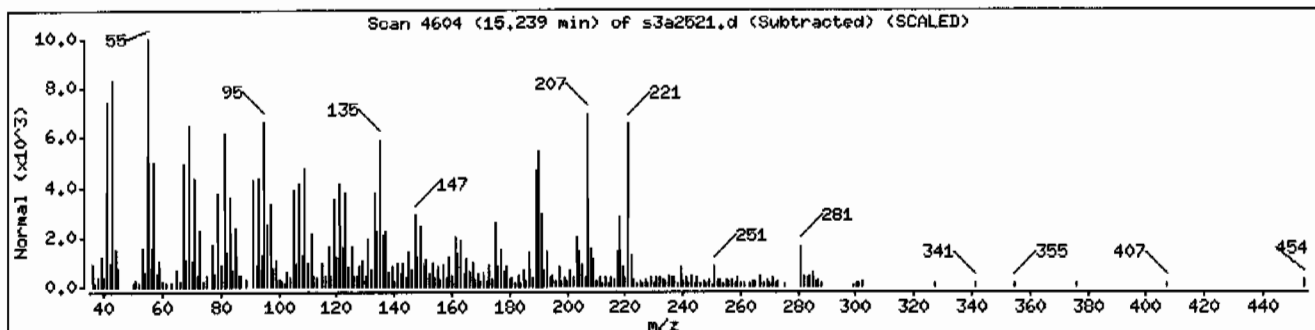
Volume Injected (uL): 0.5

Operator: JLD1

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, octahydro-4a-methyl	54594-42-2	NIST05.L	62989	53	C14H24O	208
(1R,2S,8R,8A)-8-hydroxy-1-(2-hydroxyethyl	1000298-98-3	NIST05.L	94835	50	C16H30O2	254
1-Methylene-2b-hydroxymethyl-3,3-dimethyl	1000144-10-6	NIST05.L	72989	42	C15H26O	222



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511ISVMF11ILANL

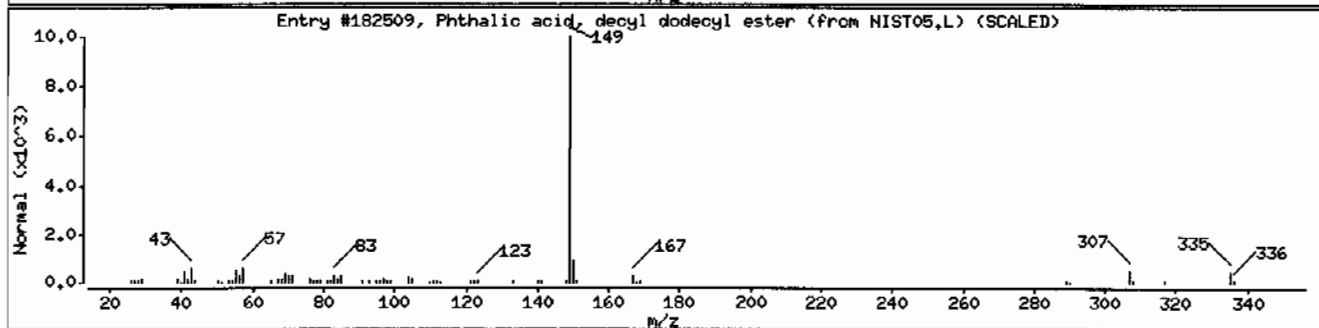
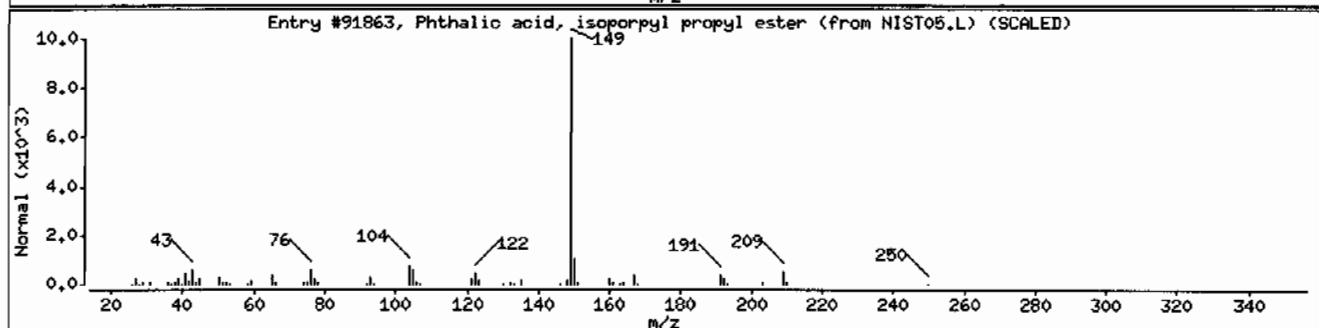
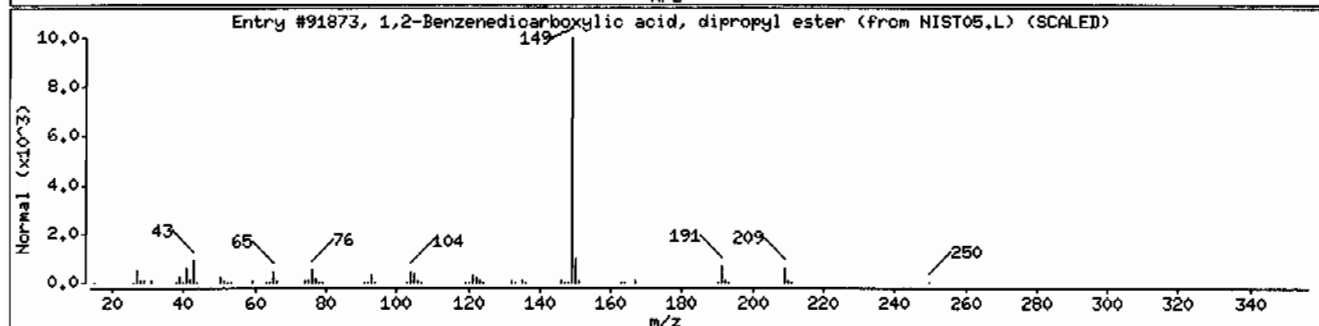
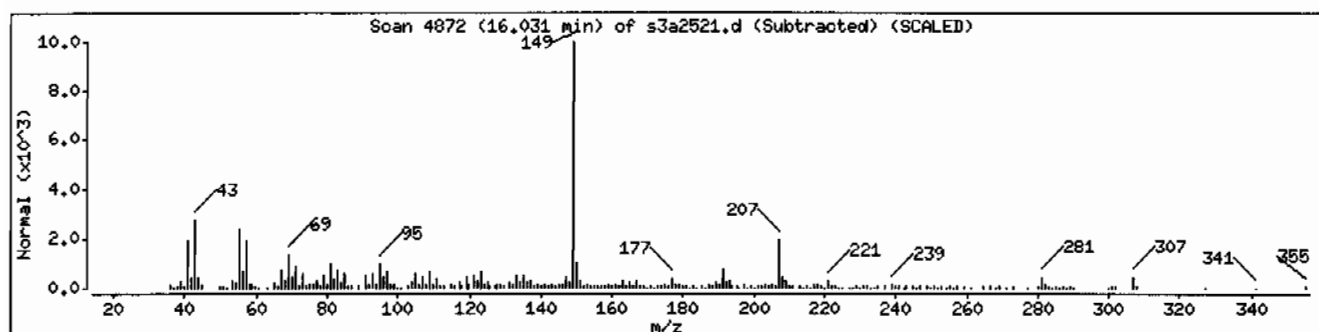
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Benzenedicarboxylic acid, dipropyl e	131-16-8	NIST05.L	91873	52	C14H18O4	250
Phthalic acid, isopropyl propyl ester	1000314-99-7	NIST05.L	91863	52	C14H18O4	250
Phthalic acid, decyl dodecyl ester	1000309-04-9	NIST05.L	182509	50	C30H50O4	474



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVHF11ILANL

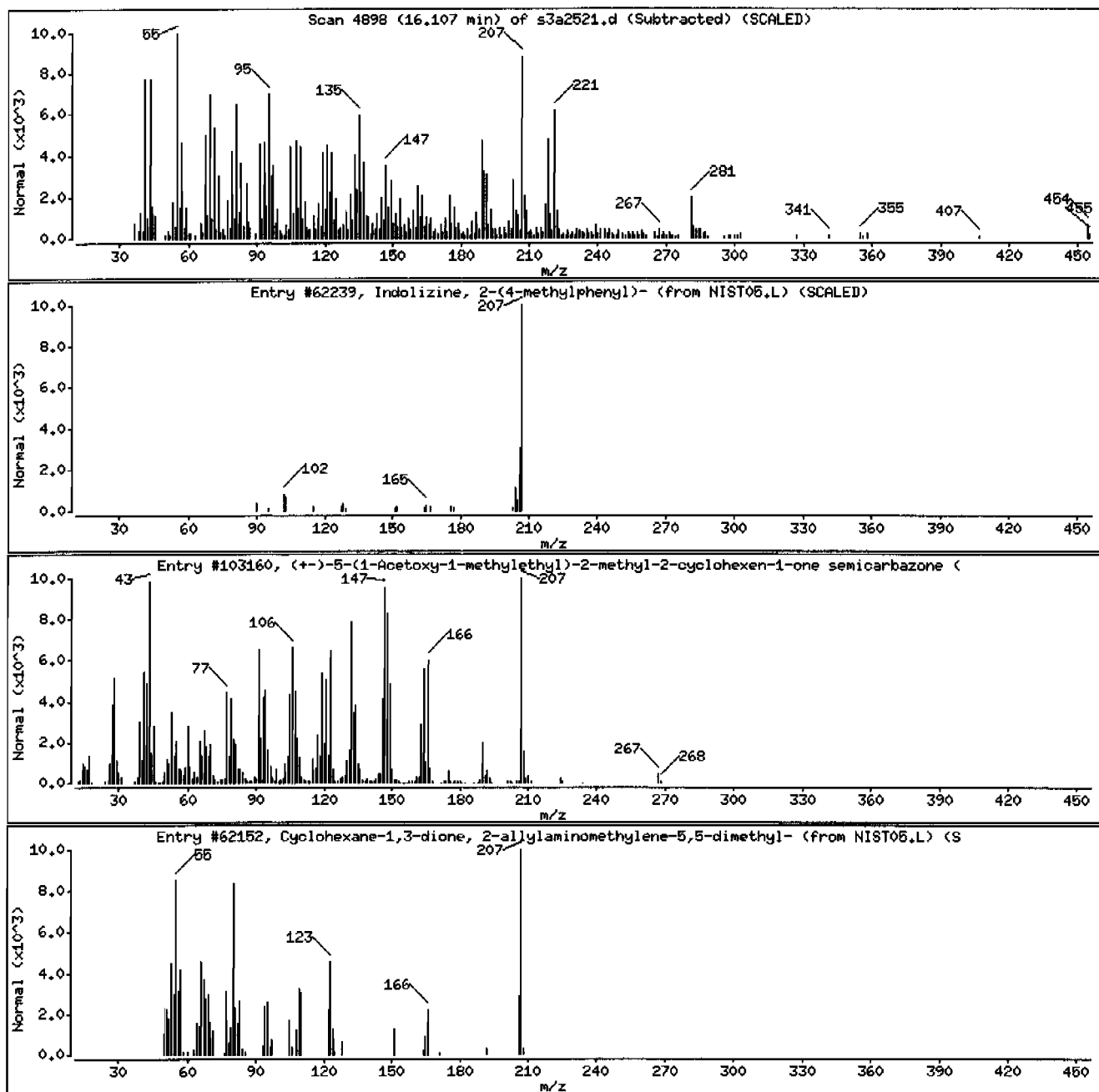
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Indolizine, 2-(4-methylphenyl)-	7496-81-3	NIST05.L	62239	25	C15H13N	207
(+)-5-(1-Acetoxy-1-methylethyl)-2-methy	108904-53-6	NIST05.L	103160	22	C13H21N3O3	267
Cyclohexane-1,3-dione, 2-allylaminomethy	104926-37-6	NIST05.L	62152	20	C12H17NO2	207



Date : 25-JAN-2010 18:36

Client ID: RE15-10-7188

Instrument: MSD3.i

Sample Info: 1245099012194445511SVMF11ILANL

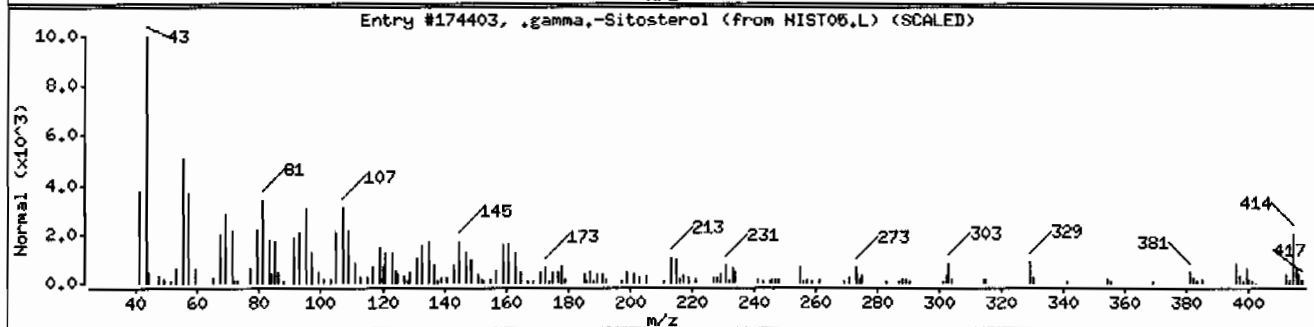
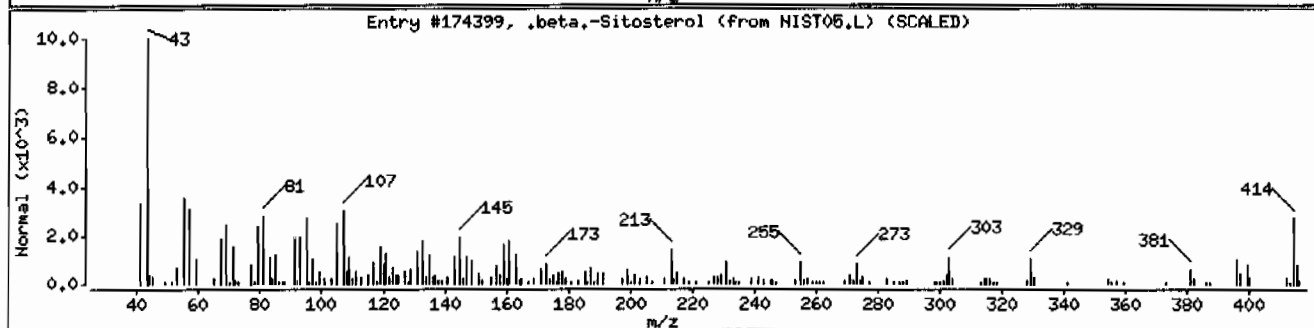
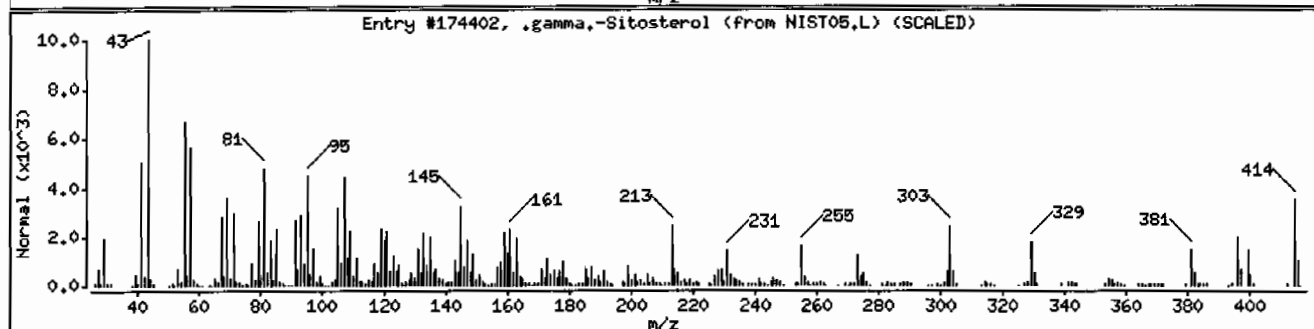
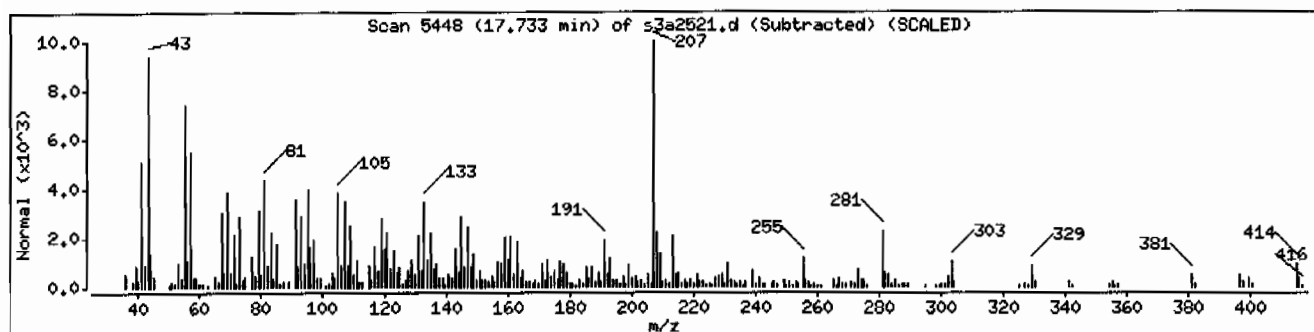
Volume Injected (uL): 0.5

Operator: JLD1

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	95	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	90	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	72	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1301
Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7189
Batch ID: 944455
Run Date: 01/26/2010 23:36
Prep Date: 01/22/2010 23:39
Data File: s3a2633.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.4	367
108-95-2	Phenol	U	367	ug/kg	73.4	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.4	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.4	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.4	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.4	367
83-32-9	Acenaphthene	U	36.7	ug/kg	12.1	36.7
121-14-2	2,4-Dinitrotoluene	U	367	ug/kg	36.7	367
100-02-7	4-Nitrophenol	U	367	ug/kg	121	367
87-86-5	Pentachlorophenol	U	367	ug/kg	91.7	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.4	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.4	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.4	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.4	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.4	367
95-48-7	o-Cresol	U	367	ug/kg	73.4	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.4	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.4	367
78-59-1	Isophorone	U	367	ug/kg	73.4	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.4	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	128	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.4	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.4	367
65-85-0	Benzoic acid	U	734	ug/kg	183	734
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.4	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.4	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.34	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.4	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.4	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.4	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.4	367
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.4	367

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099010	Date Received: 01/20/2010 08:45	%Moisture: 9.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7189	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 23:36	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s3a2633.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	367	ug/kg	73.4	367
606-20-2	2,6-Dinitrotoluene	U	367	ug/kg	36.7	367
208-96-8	Acenaphthylene	U	36.7	ug/kg	11.0	36.7
51-28-5	2,4-Dinitrophenol	U	734	ug/kg	139	734
132-64-9	Dibenzofuran	U	367	ug/kg	73.4	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.4	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.4	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.4	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.4	367
122-66-7	Azobenzene	U	367	ug/kg	73.4	367
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.4	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.4	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.34	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.4	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.4	367
56-55-3	Benzo(a)anthracene	U	36.7	ug/kg	11.0	36.7
91-94-1	3,3'-Dichlorobenzidine	U	367	ug/kg	110	367
218-01-9	Chrysene	U	36.7	ug/kg	11.0	36.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	367	ug/kg	73.4	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.4	367
205-99-2	Benzo(b)fluoranthene	U	36.7	ug/kg	11.0	36.7
207-08-9	Benzo(k)fluoranthene	U	36.7	ug/kg	11.0	36.7
50-32-8	Benzo(a)pyrene	U	36.7	ug/kg	11.0	36.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.7	ug/kg	11.0	36.7
53-70-3	Dibenzo(a,h)anthracene	U	36.7	ug/kg	11.0	36.7
191-24-2	Benzo(ghi)perylene	U	36.7	ug/kg	11.0	36.7
120-82-1	1,2,4-Trichlorobenzene	U	367	ug/kg	73.4	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.12	1220	ug/kg		J
	Unknown	2.3	201	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099010

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	3.41	494	ug/kg		JA
	Unknown	16.01	408	ug/kg		J
	Unknown	17.19	798	ug/kg		J
	Unknown	17.39	384	ug/kg		J
	Unknown	17.88	154	ug/kg		J
83-46-5	.beta.-Sitosterol	17.91	376	ug/kg	93	NJ

Data File: /chem/MSD3.i/s012610a.b/s3a2633.d
Report Date: 27-Jan-2010 10:01

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2633.d
Lab Smp Id: 245099010 Client Smp ID: RE15-10-7189
Inj Date : 26-JAN-2010 23:36
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099010|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 08:40 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.23220	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.829	4.832	(1.000)	276519	40.0000		
* 29 Naphthalene-d8	136	6.110	6.114	(1.000)	1093154	40.0000		
* 46 Acenaphthene-d10	164	7.987	7.990	(1.000)	640976	40.0000		
* 67 Phenanthrene-d10	188	9.604	9.605	(1.000)	1117729	40.0000		
* 91 Chrysene-d12	240	12.628	12.634	(1.000)	803316	40.0000		
* 98 Perylene-d12	264	14.970	14.975	(1.000)	438569	40.0000		
\$ 3 2-Fluorophenol	112	3.650	3.644	(0.756)	464853	64.6044	2370	
\$ 5 Phenol-d5	99	4.430	4.430	(0.917)	551867	61.0267	2240	
\$ 20 Nitrobenzene-d5	82	5.366	5.372	(0.878)	260520	32.2625	1180	
\$ 39 2-Fluorobiphenyl	172	7.239	7.244	(0.906)	567096	34.2286	1260	
\$ 60 2,4,6-Tribromophenol	329	8.838	8.842	(1.107)	149196	81.1950	2980	
\$ 81 p-Terphenyl-d14	244	11.312	11.316	(0.896)	689613	49.9448	1830	

ION RATIO REPORT

SV REPORT

Data file: s3a2633.d

Report Date: 01/27/2010 09:43

Lab. ID: 245099010

SampleType: SAMPLE

Injection Date: 26-JAN-2010 23:36

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099010|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	31785	4.43	4.52	80-120	100	(T)
93	6908	4.49	4.52	205-265	22	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	36786	5.37	5.20	80-120	100	(T)
42	24208	5.37	5.20	45-105	66	(T)

40	2-Chloronaphthalene		CAS#: 91-58-7			
162	8428	7.58	7.39	80-120	100	(T)
164	499	7.59	7.39	2- 62	6	(T)
127	620	7.58	7.39	9- 69	7	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	84350	7.99	7.75	80-120	100	(T)
63	1491	7.99	7.75	36- 96	2	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	84350	7.99	8.18	80-120	100	(T)
89	1237	7.99	8.18	42-102	1	(QT)
63	1491	7.99	8.18	21- 81	2	(QT)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD3.i/s012610a.b/s3a2633.d
 Report Date: 27-Jan-2010 10:01

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2633.d
 Lab Smp Id: 245099010 Client Smp ID: RE15-10-7189
 Inj Date : 26-JAN-2010 23:36
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099010|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270_S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
 Meth Date : 27-Jan-2010 08:40 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.23220	% moisture

Cpnd Variable Local Compound Variable

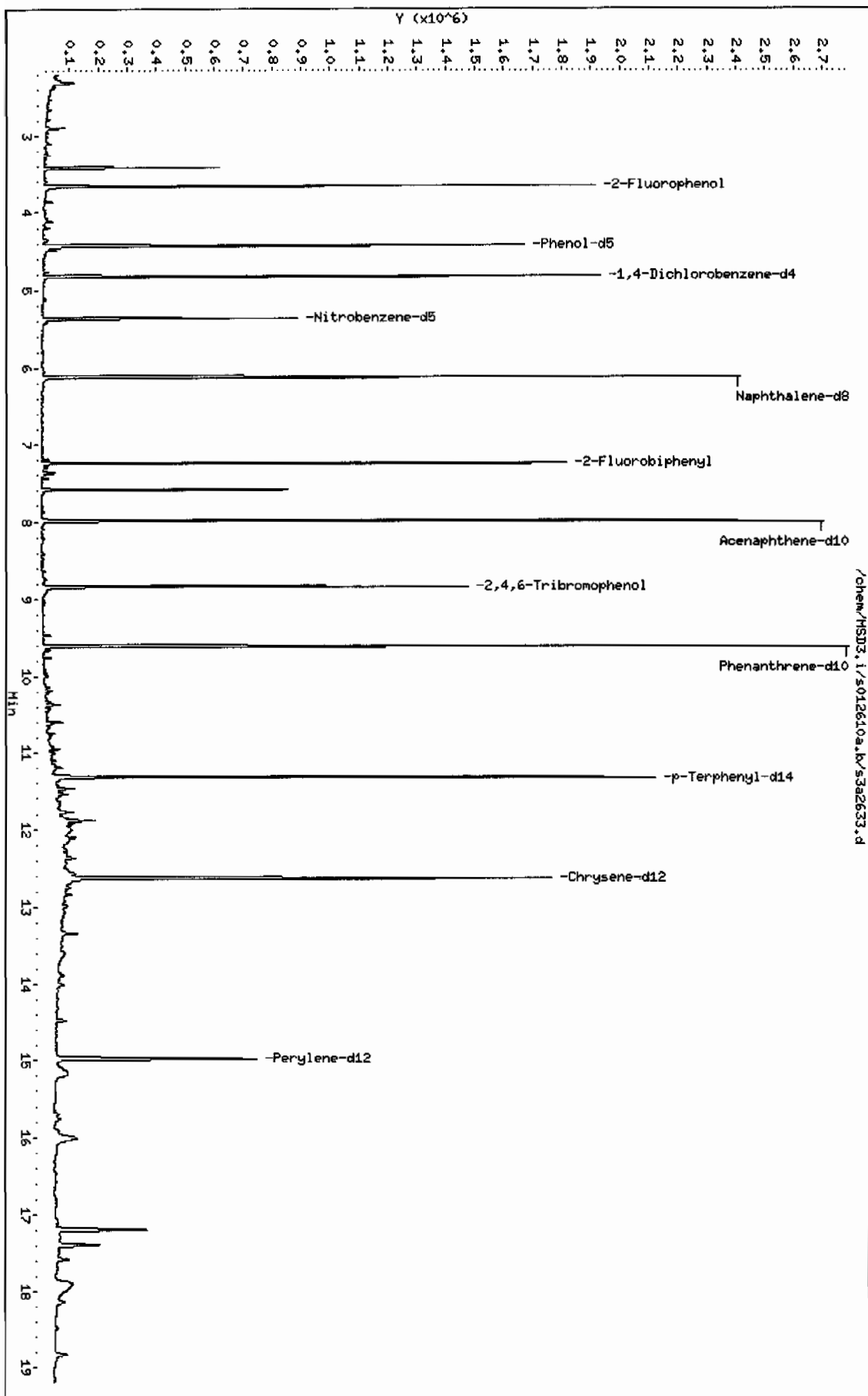
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.829	1738791	40.000
* 98 Perylene-d12	14.970	1243320	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.120	1446787	33.2826027	1220	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.305	238449	5.48539451	201	0		0	10
Unknown Aldol Condensate					CAS #:		
3.410	585793	13.4758598	494	0		0	10
Unknown					CAS #:		
16.011	345893	11.1280320	408	0		0	98
Unknown					CAS #:		
17.193	675736	21.7397340	798	0		0	98
Unknown					CAS #:		
17.387	325122	10.4597872	384	0		0	98
Unknown					CAS #:		
17.877	130199	4.18874951	154	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
17.909	318649	10.2515431	376	93	NIST05.L	174400	98

Data File: /chem/MSD3.i/s012610a.b/s3a2633.d
Date: 26-JAN-2010 23:36
Client ID: RE15-10-7189
Sample Info: 124509010194445111SVHF11LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD3.1
Operator: JLD1
Column diameter: 0.20



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: MSD3.i

Sample Info: I245099010194445511SVHF11ILANL

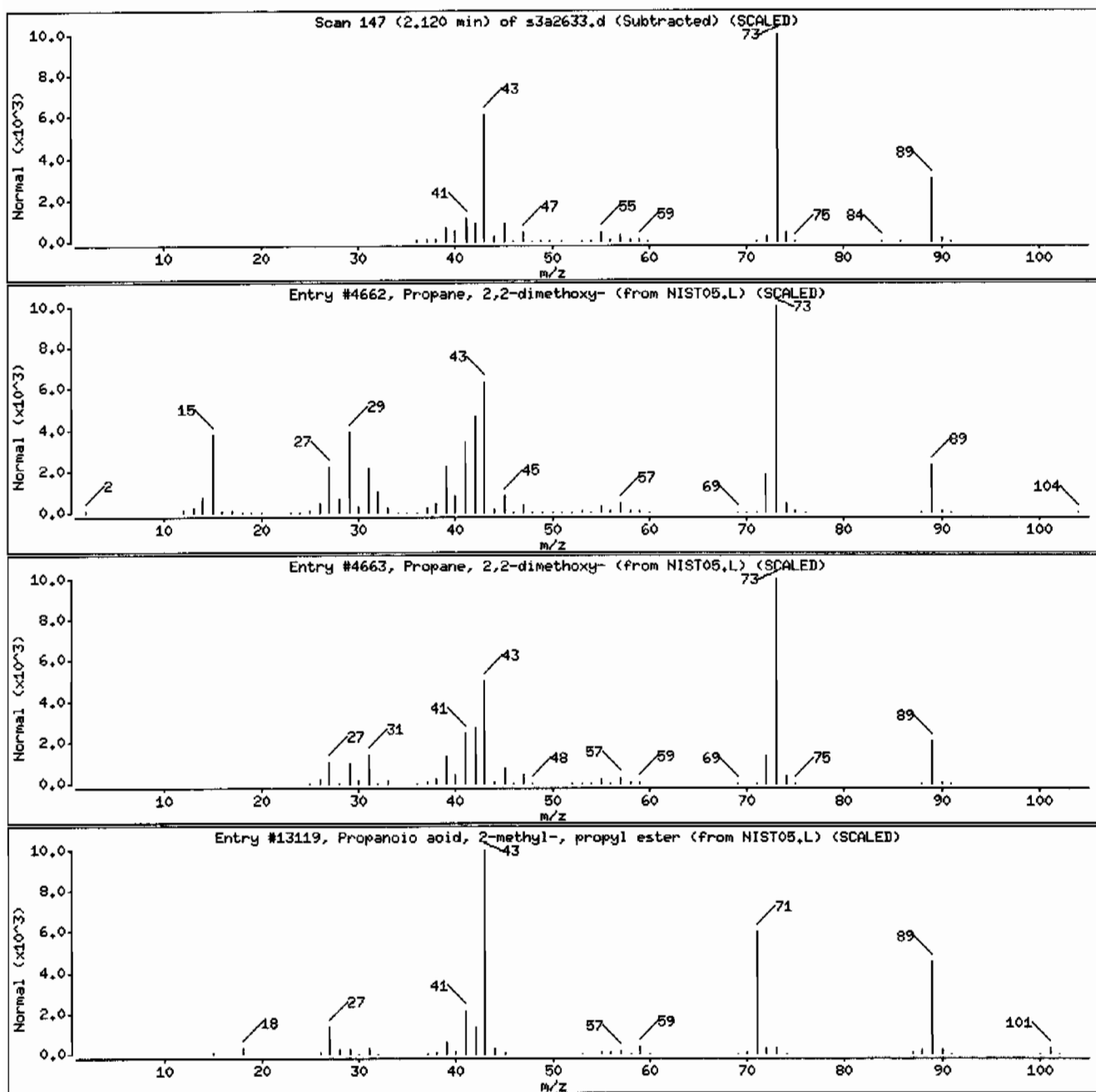
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	56	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	17	C7H14O2	130



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: MSD3.i

Sample Info: 1245099010194445511SVHF111LANL

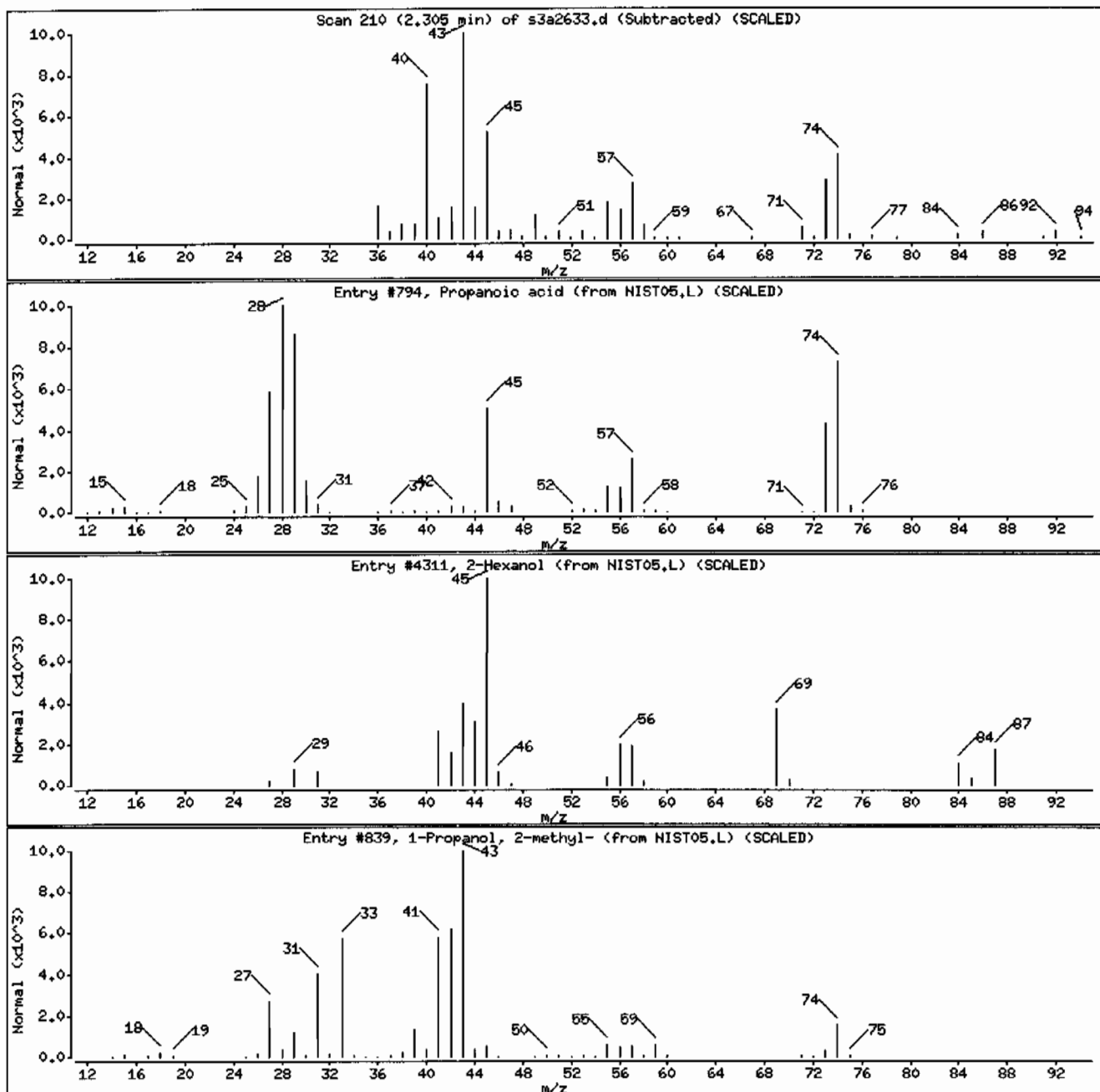
Volume Injected (uL): 0.5

Operator: JLD1

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	794	72	C3H6O2	74
2-Hexanol	626-93-7	NIST05.L	4311	10	C6H14O	102
1-Propanol, 2-methyl-	78-83-1	NIST05.L	839	9	C4H10O	74



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: MSD3.i

Sample Info: 1245099010194445511SVHF111LANL

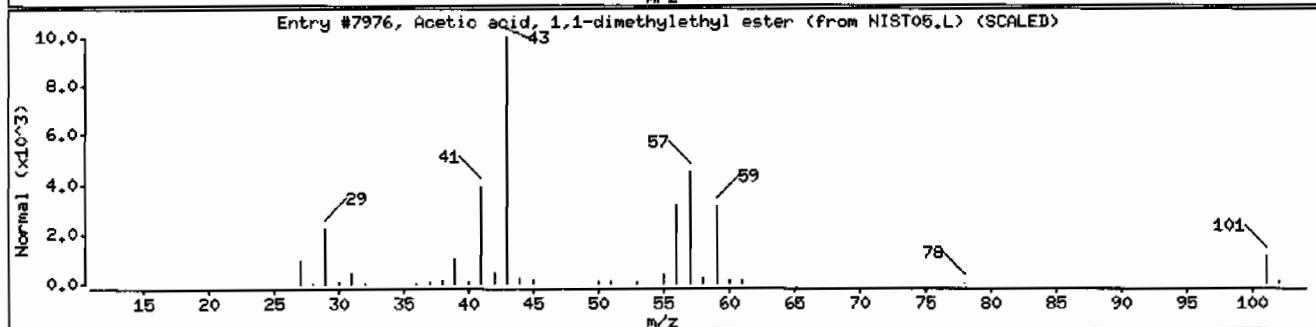
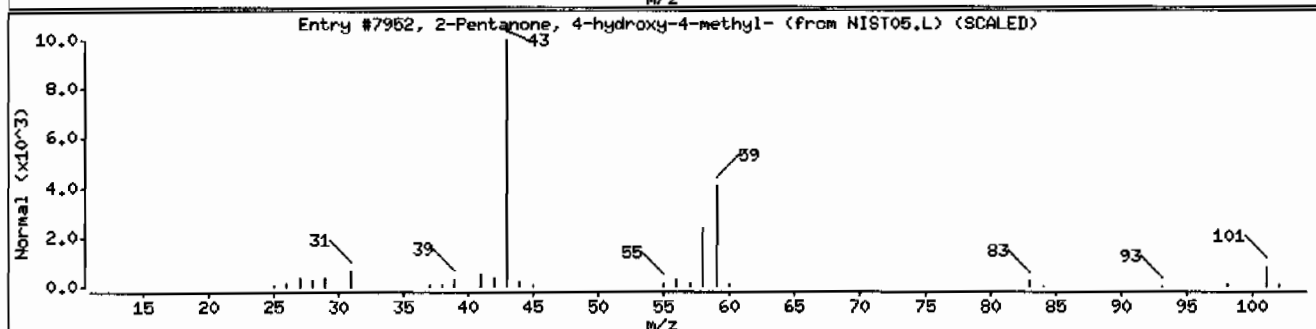
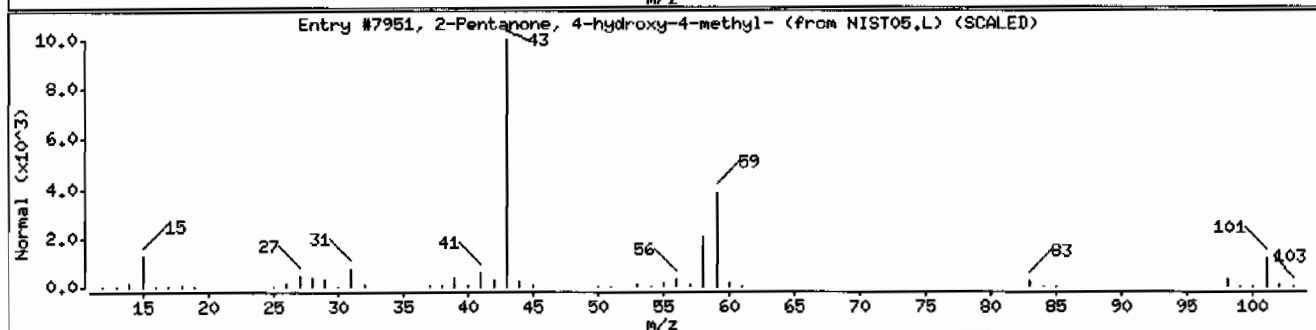
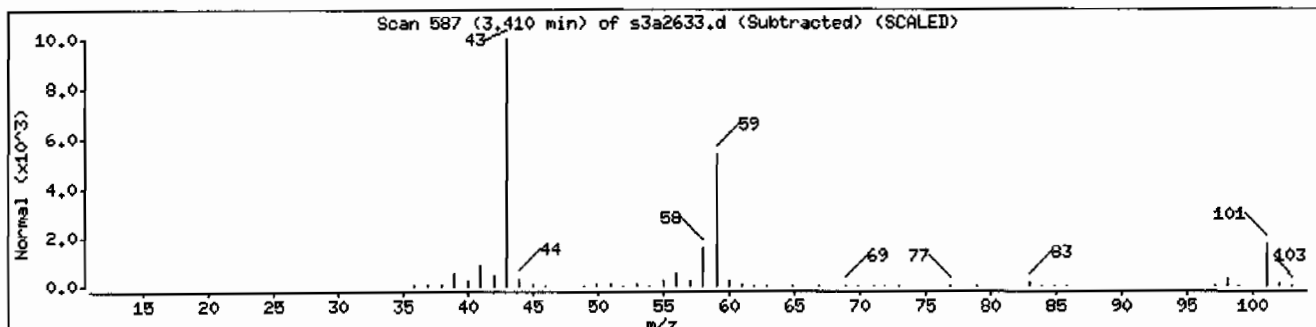
Volume Injected (uL): 0.5

Operator: JLD1

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, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: HSD3.i

Sample Info: 1245099010194445511SVHF11ILANL

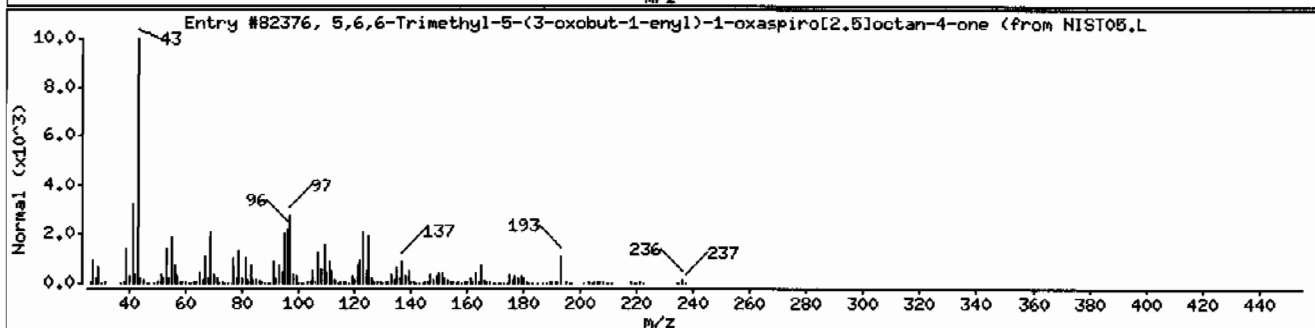
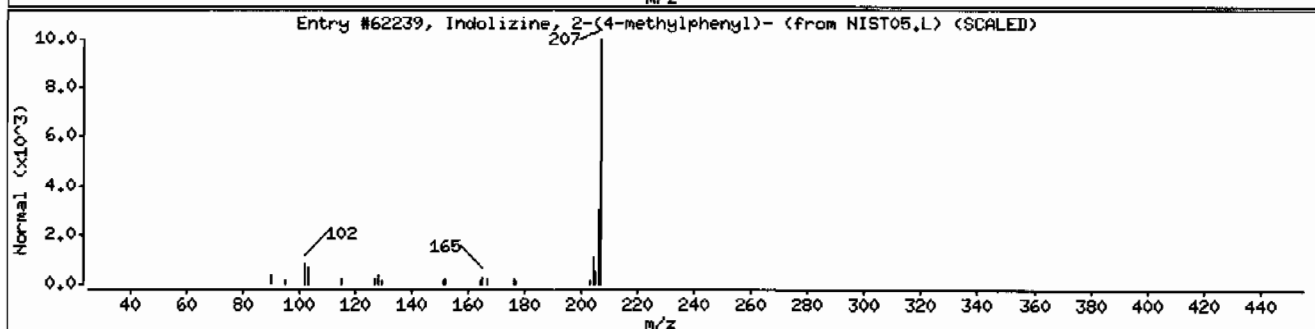
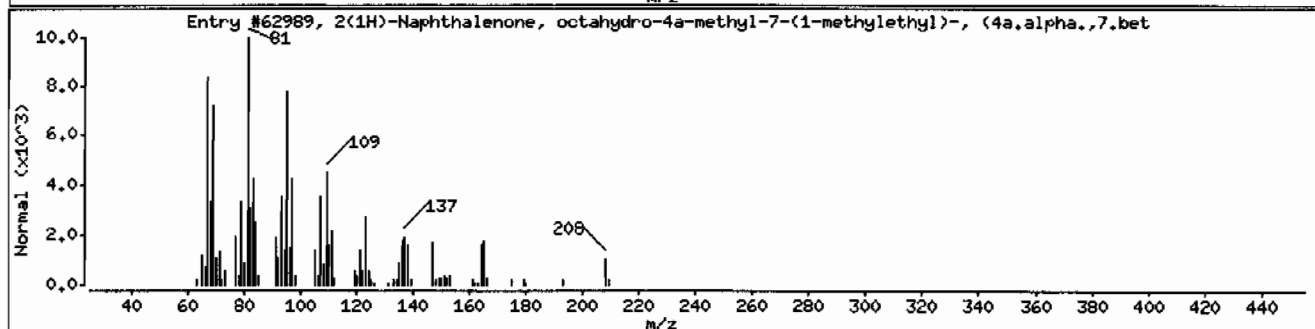
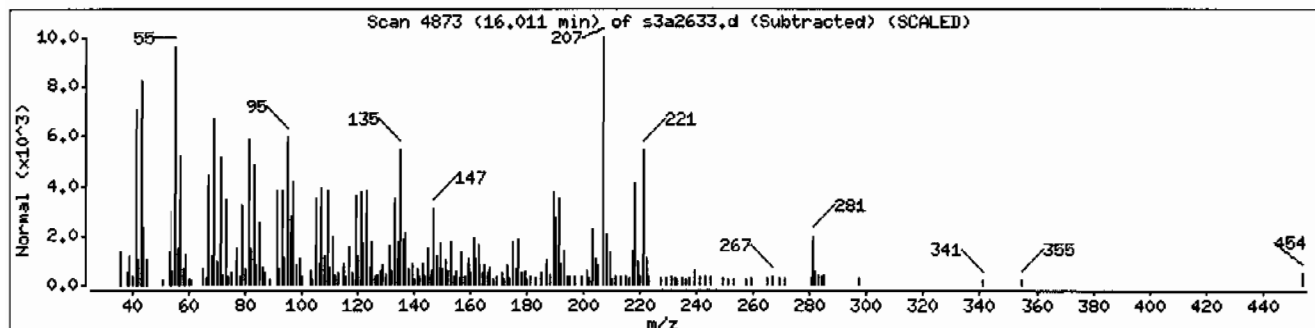
Volume Injected (uL): 0.5

Operator: JLD1

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, octahydro-4a-methyl	54594-42-2	NIST05.L	62989	49	C14H24O	208
Indolizine, 2-(4-methylphenyl)-	7496-81-3	NIST05.L	62239	25	C15H13N	207
5,6,6-Trimethyl-5-(3-oxobut-1-enyl)-1-ox	1000192-73-9	NIST05.L	82376	25	C14H20O3	236



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: MSD3.i

Sample Info: 1245099010194445511ISVMF11ILANL

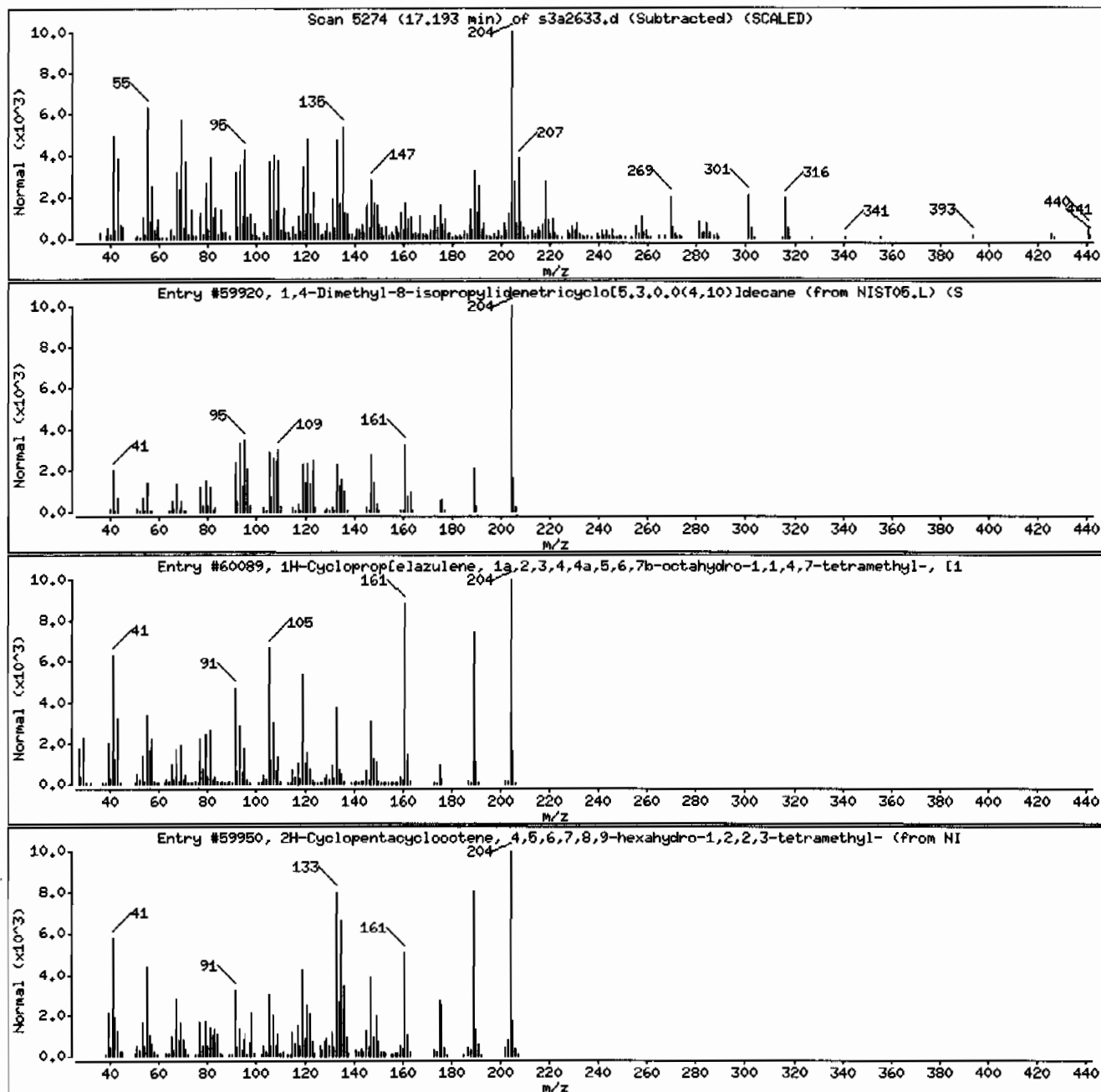
Volume Injected (uL): 0.5

Operator: JLD1

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-isopropylidenetetracyclo[5,1,0,0,0]decane	1000140-07-7	NIST05.L	59920	70	C15H24	204
1H-Cycloprop[elazulene, 1a,2,3,4,4a,5,6,7b-octahydro-1,1,4,7-tetramethyl-, [1	489-40-7	NIST05.L	60089	60	C15H24	204
2H-Cyclopentacyclooctene, 4,5,6,7,8,9-hexahydro-1,2,2,3-tetramethyl-	1000221-85-8	NIST05.L	59950	50	C15H24	204



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: MSD3.i

Sample Info: 1245099010194445511SVMF111LANL

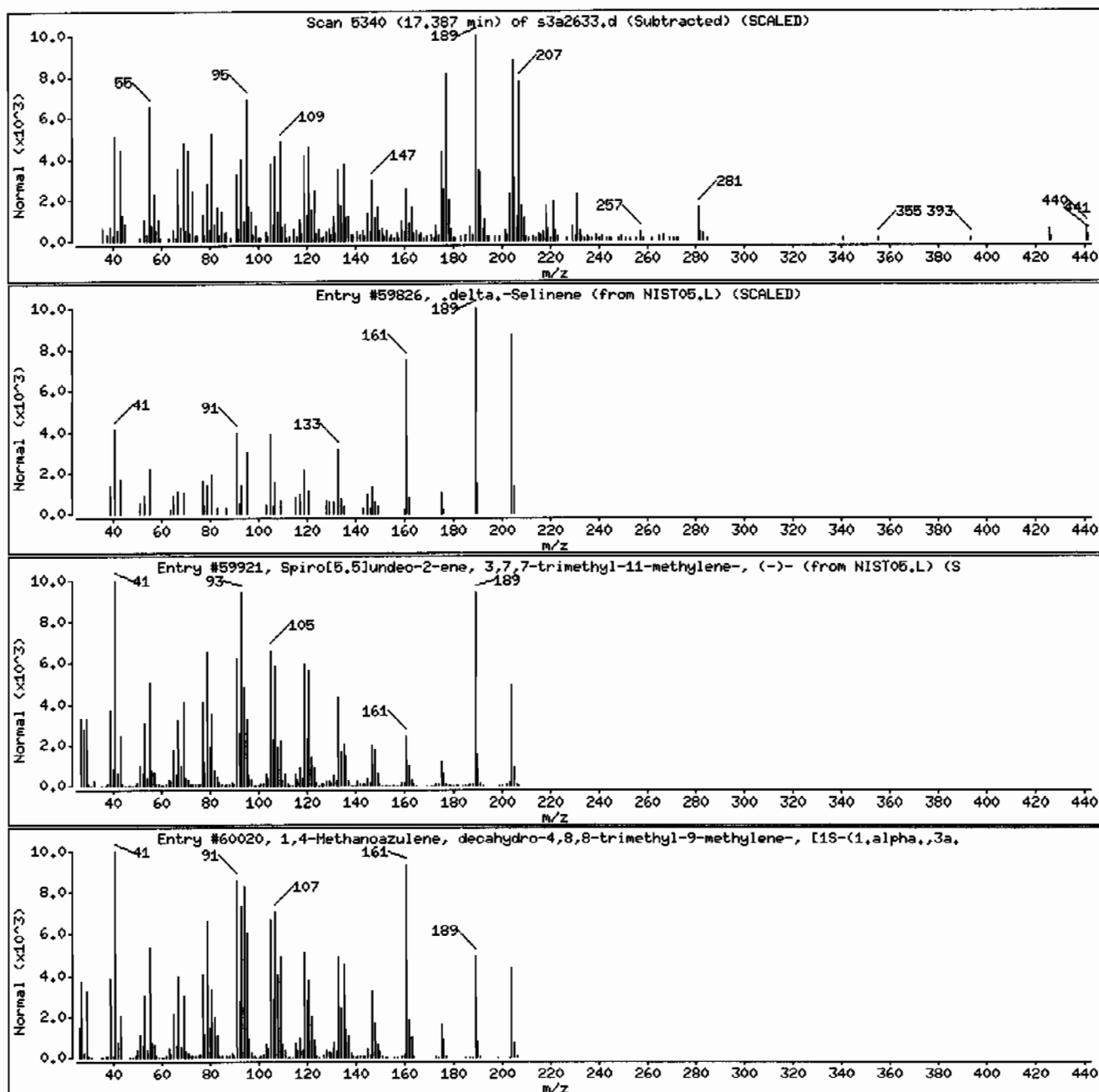
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.delta.-Selinene	28624-23-9	NIST05.L	59826	55	C15H24	204
Spiro[5.5]undec-2-ene, 3,7,7-trimethyl-1	18431-82-8	NIST05.L	59921	52	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	50	C15H24	204



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: MSD3.i

Sample Info: 1245099010194445511SVMF11ILANL

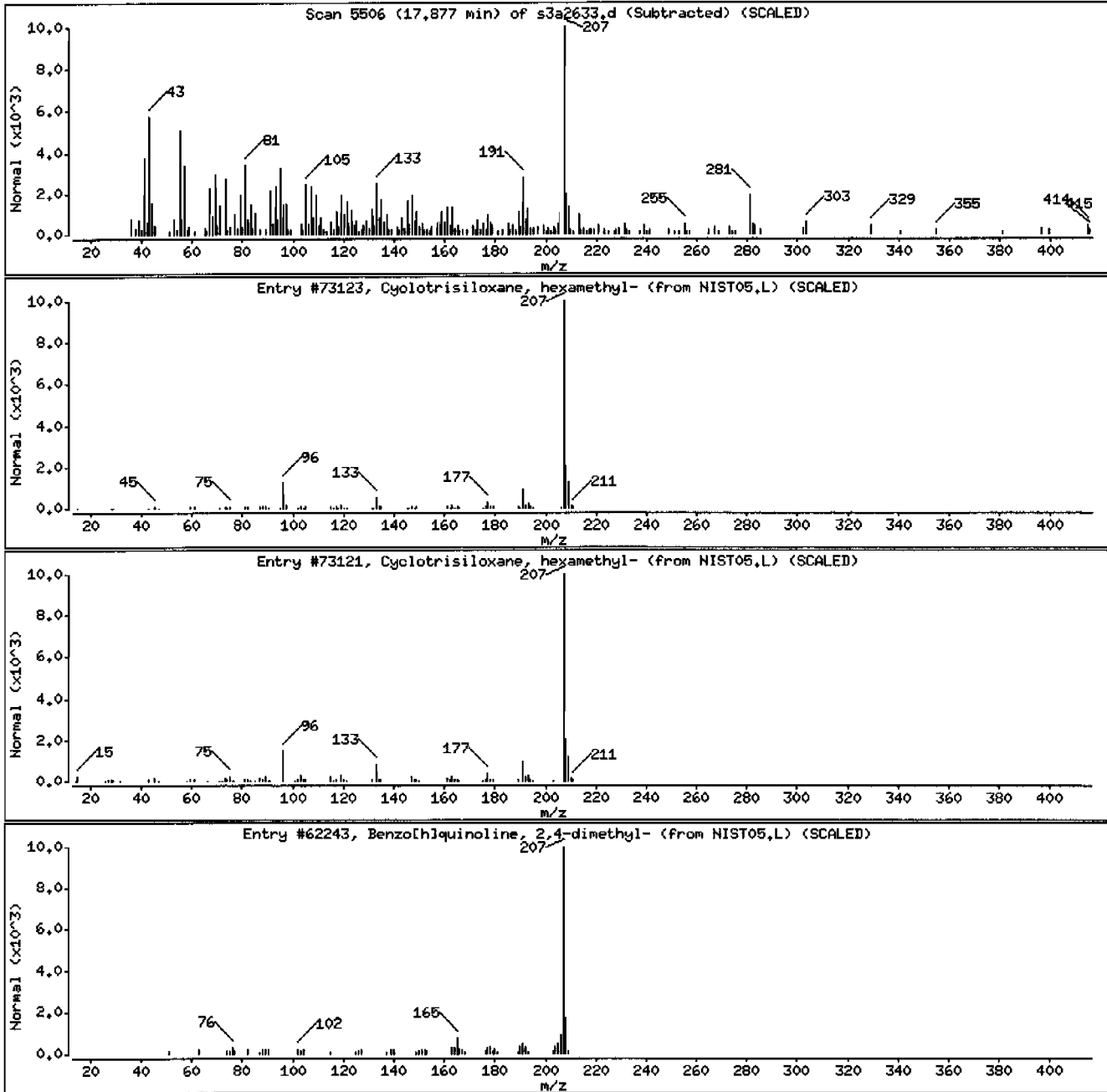
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	47	C ₆ H ₁₈ O ₃ Si ₃	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C ₆ H ₁₈ O ₃ Si ₃	222
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C ₁₅ H ₁₃ N	207



Date : 26-JAN-2010 23:36

Client ID: RE15-10-7189

Instrument: MSD3.i

Sample Info: 1245099010194445511SVHF111LANL

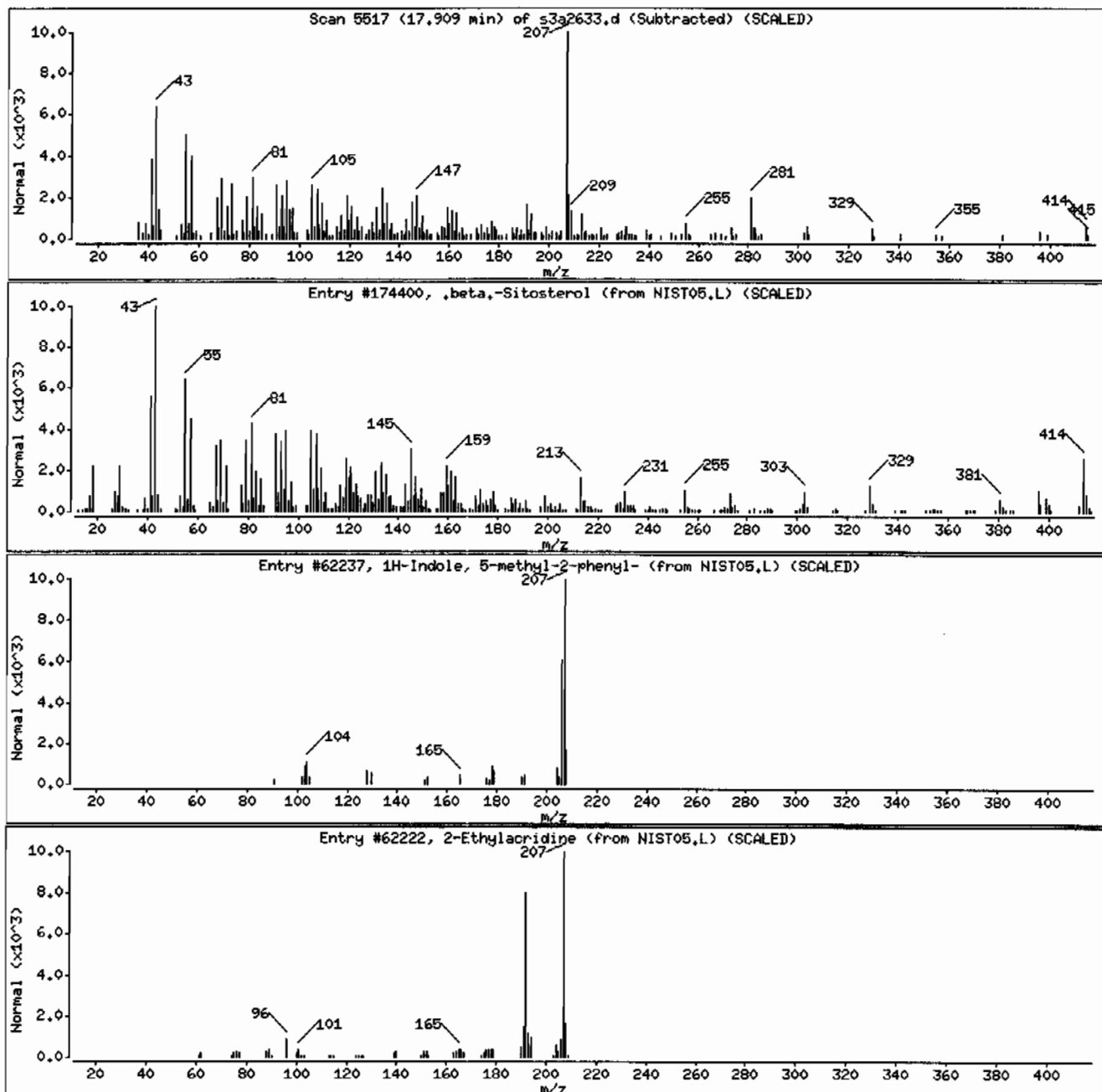
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
,beta.-Sitosterol	83-46-5	NIST05.L	174400	93	C29H50O	414
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	42	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
Lab Sample ID: 245099013

Client ID: RE15-10-7190
Batch ID: 944455
Run Date: 01/27/2010 13:17
Prep Date: 01/22/2010 23:39
Data File: s3a2711.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 28.3
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	465	ug/kg	93.0	465
108-95-2	Phenol	U	465	ug/kg	93.0	465
95-57-8	2-Chlorophenol	U	465	ug/kg	93.0	465
106-46-7	1,4-Dichlorobenzene	U	465	ug/kg	93.0	465
621-64-7	N-Nitrosodipropylamine	U	465	ug/kg	93.0	465
59-50-7	4-Chloro-3-methylphenol	U	465	ug/kg	93.0	465
83-32-9	Acenaphthene	U	46.5	ug/kg	15.3	46.5
121-14-2	2,4-Dinitrotoluene	U	465	ug/kg	46.5	465
100-02-7	4-Nitrophenol	U	465	ug/kg	153	465
87-86-5	Pentachlorophenol	U	465	ug/kg	116	465
129-00-0	Pyrene	U	46.5	ug/kg	13.9	46.5
110-86-1	Pyridine	U	465	ug/kg	93.0	465
62-53-3	Aniline	U	465	ug/kg	139	465
111-44-4	bis(2-Chloroethyl) ether	U	465	ug/kg	93.0	465
541-73-1	1,3-Dichlorobenzene	U	465	ug/kg	93.0	465
100-51-6	Benzyl alcohol	U	465	ug/kg	139	465
95-50-1	1,2-Dichlorobenzene	U	465	ug/kg	93.0	465
108-60-1	bis(2-Chloroisopropyl)ether	U	465	ug/kg	93.0	465
95-48-7	o-Cresol	U	465	ug/kg	93.0	465
65794-96-9	m,p-Cresols	U	465	ug/kg	139	465
67-72-1	Hexachloroethane	U	465	ug/kg	93.0	465
98-95-3	Nitrobenzene	U	465	ug/kg	93.0	465
78-59-1	Isophorone	U	465	ug/kg	93.0	465
88-75-5	2-Nitrophenol	U	465	ug/kg	93.0	465
105-67-9	2,4-Dimethylphenol	U	465	ug/kg	163	465
111-91-1	bis(2-Chloroethoxy)methane	U	465	ug/kg	93.0	465
120-83-2	2,4-Dichlorophenol	U	465	ug/kg	93.0	465
65-85-0	Benzoic acid	U	930	ug/kg	232	930
91-20-3	Naphthalene	U	46.5	ug/kg	13.9	46.5
106-47-8	4-Chloroaniline	U	465	ug/kg	93.0	465
87-68-3	Hexachlorobutadiene	U	465	ug/kg	93.0	465
91-57-6	2-Methylnaphthalene	U	46.5	ug/kg	9.30	46.5
77-47-4	Hexachlorocyclopentadiene	U	465	ug/kg	93.0	465
88-06-2	2,4,6-Trichlorophenol	U	465	ug/kg	93.0	465
95-95-4	2,4,5-Trichlorophenol	U	465	ug/kg	93.0	465
91-58-7	2-Chloronaphthalene	U	46.5	ug/kg	15.3	46.5
88-74-4	2-Nitroaniline	U	465	ug/kg	93.0	465
99-09-2	<i>o</i> -Nitroaniline	U	465	ug/kg	93.0	465
	3-Nitroaniline					

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

SDG Number: 10-1301
Lab Sample ID: 245099013

Client ID: RE15-10-7190
Batch ID: 944455
Run Date: 01/27/2010 13:17
Prep Date: 01/22/2010 23:39
Data File: s3a2711.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 28.3
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
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	465	ug/kg	93.0	465
606-20-2	2,6-Dinitrotoluene	U	465	ug/kg	46.5	465
208-96-8	Acenaphthylene	U	46.5	ug/kg	13.9	46.5
51-28-5	2,4-Dinitrophenol	U	930	ug/kg	177	930
132-64-9	Dibenzofuran	U	465	ug/kg	93.0	465
84-66-2	Diethylphthalate	U	465	ug/kg	93.0	465
86-73-7	Fluorene	U	46.5	ug/kg	13.9	46.5
7005-72-3	4-Chlorophenylphenylether	U	465	ug/kg	93.0	465
534-52-1	2-Methyl-4,6-dinitrophenol	U	465	ug/kg	93.0	465
100-01-6	4-Nitroaniline	U	465	ug/kg	139	465
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	465	ug/kg	93.0	465
122-66-7	Azobenzene	U	465	ug/kg	93.0	465
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	465	ug/kg	93.0	465
118-74-1	Hexachlorobenzene	U	465	ug/kg	93.0	465
85-01-8	Phenanthrene	U	46.5	ug/kg	13.9	46.5
120-12-7	Anthracene	U	46.5	ug/kg	9.30	46.5
84-74-2	Di-n-butylphthalate	U	465	ug/kg	93.0	465
206-44-0	Fluoranthene	U	46.5	ug/kg	13.9	46.5
85-68-7	Butylbenzylphthalate	U	465	ug/kg	93.0	465
56-55-3	Benzo(a)anthracene	U	46.5	ug/kg	13.9	46.5
91-94-1	3,3'-Dichlorobenzidine	U	465	ug/kg	139	465
218-01-9	Chrysene	U	46.5	ug/kg	13.9	46.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	465	ug/kg	93.0	465
117-84-0	Di-n-octylphthalate	U	465	ug/kg	93.0	465
205-99-2	Benzo(b)fluoranthene	U	46.5	ug/kg	13.9	46.5
207-08-9	Benzo(k)fluoranthene	U	46.5	ug/kg	13.9	46.5
50-32-8	Benzo(a)pyrene	U	46.5	ug/kg	13.9	46.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	46.5	ug/kg	13.9	46.5
53-70-3	Dibenzo(a,h)anthracene	U	46.5	ug/kg	13.9	46.5
191-24-2	Benzo(ghi)perylene	U	46.5	ug/kg	13.9	46.5
120-82-1	1,2,4-Trichlorobenzene	U	465	ug/kg	93.0	465

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown	2.3	247	ug/kg		J
	Unknown Aldol Condensate	3.4	562	ug/kg		JA

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

SDG Number: 10-1301
Lab Sample ID: 245099013

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 28.3
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7190
Batch ID: 944455
Run Date: 01/27/2010 13:17
Prep Date: 01/22/2010 23:39
Data File: s3a2711.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	7.57	189	ug/kg	99	NJ
2416-20-8	Hexadecenoic acid, Z-11-	10.09	199	ug/kg	97	NJ
57-10-3	n-Hexadecanoic acid	10.13	231	ug/kg	98	NJ
	Unknown	11.64	211	ug/kg		J
	Unknown	11.89	285	ug/kg		J
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10	13.98	215	ug/kg	87	NJ
	Unknown	15.06	522	ug/kg		J
	Unknown	15.8	241	ug/kg		J
	Unknown	15.88	288	ug/kg		J
	Unknown	15.94	462	ug/kg		J
	Unknown	16.82	239	ug/kg		J
474-62-4	Campesterol	16.99	415	ug/kg	95	NJ
	Unknown	17.17	363	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	17.64	2050	ug/kg	95	NJ
	Unknown	18.2	213	ug/kg		J
1058-61-3	Stigmast-4-en-3-one	18.78	572	ug/kg	91	NJ

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2711.d
 Lab Smp Id: 245099013 Client Smp ID: RE15-10-7190
 Inj Date : 27-JAN-2010 13:17
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099013|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270_S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
 Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	28.33330	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.815	4.817	(1.000)	283357	40.0000	
* 29 Naphthalene-d8	136	6.096	6.100	(1.000)	1097949	40.0000	
* 46 Acenaphthene-d10	164	7.971	7.973	(1.000)	618703	40.0000	
* 67 Phenanthrene-d10	188	9.587	9.588	(1.000)	1008788	40.0000	
* 91 Chrysene-d12	240	12.608	12.610	(1.000)	778817	40.0000	
* 98 Perylene-d12	264	14.946	14.945	(1.000)	456745	40.0000	
\$ 3 2-Fluorophenol	112	3.642	3.633	(0.756)	409640	55.5571	2580
\$ 5 Phenol-d5	99	4.416	4.418	(0.917)	493313	53.2352	2470
\$ 20 Nitrobenzene-d5	82	5.351	5.357	(0.878)	229401	28.2847	1310
\$ 39 2-Fluorobiphenyl	172	7.223	7.227	(0.906)	496104	31.0217	1440
\$ 60 2,4,6-Tribromophenol	329	8.820	8.825	(1.106)	127483	71.8760	3340
\$ 81 p-Terphenyl-d14	244	11.296	11.297	(0.896)	536281	40.0616	1860

ION RATIO REPORT

SV REPORT

Data file: s3a2711.d

Report Date: 01/27/2010 14:15

Lab. ID: 245099013

SampleType: SAMPLE

Injection Date: 27-JAN-2010 13:17

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099013|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	28770	4.42	4.50	80-120	100	(T)
93	3575	4.48	4.50	205-265	12	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	33725	5.35	5.19	80-120	100	(T)
42	22528	5.35	5.19	43-103	67	(T)

41 m-Nitroaniline		CAS#: 99-09-2				
138	670	7.97	7.92	80-120	100	()
92	3709	7.97	7.92	79-139	553	(Q)
108	13536	7.97	7.92	0- 40	2018	(Q)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	81574	7.97	7.73	80-120	100	(T)
63	11703	7.97	7.73	35- 95	14	(QT)

45 Acenaphthylene		CAS#: 208-96-8				
152	69828	7.97	7.82	80-120	100	(T)
151	18248	7.97	7.82	0- 50	26	(T)
153	73079	7.97	7.82	0- 43	105	(QT)

47 Acenaphthene		CAS#: 83-32-9				
154	64507	7.97	8.01	80-120	100	()
153	73079	7.97	8.01	69-129	113	()
152	69828	7.97	8.01	17- 77	108	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	81574	7.97	8.16	80-120	100	(T)
89	4985	7.97	8.16	42-102	6	(QT)
63	11703	7.97	8.16	20- 80	14	(QT)

52	4-Nitrophenol			CAS#: 100-02-7		
139	11990	7.97	8.07	80-120	100	(T)
109	2480	7.97	8.07	42-102	21	(QT)
65	4563	7.97	8.07	75-135	38	(QT)

56	p-Nitroaniline			CAS#: 100-01-6		
138	103	8.66	8.58	80-120	100	(T)
108	584	8.66	8.58	41-101	563	(QT)
92	171	8.66	8.58	17- 77	165	(QT)

90	3,3'-Dichlorobenzidine			CAS#: 91-94-1		
252	126	12.42	12.53	80-120	100	(T)
254	299	12.35	12.53	35- 95	237	(QT)
126	122	12.45	12.53	0- 45	97	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2711.d
 Lab Smp Id: 245099013 Client Smp ID: RE15-10-7190
 Inj Date : 27-JAN-2010 13:17
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099013|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
 Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	28.33330	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.815	1797138	40.000
* 46 Acenaphthene-d10	7.971	3143700	40.000
* 67 Phenanthrene-d10	9.587	2579048	40.000
* 91 Chrysene-d12	12.608	2213973	40.000
* 98 Perylene-d12	14.946	1299156	40.000

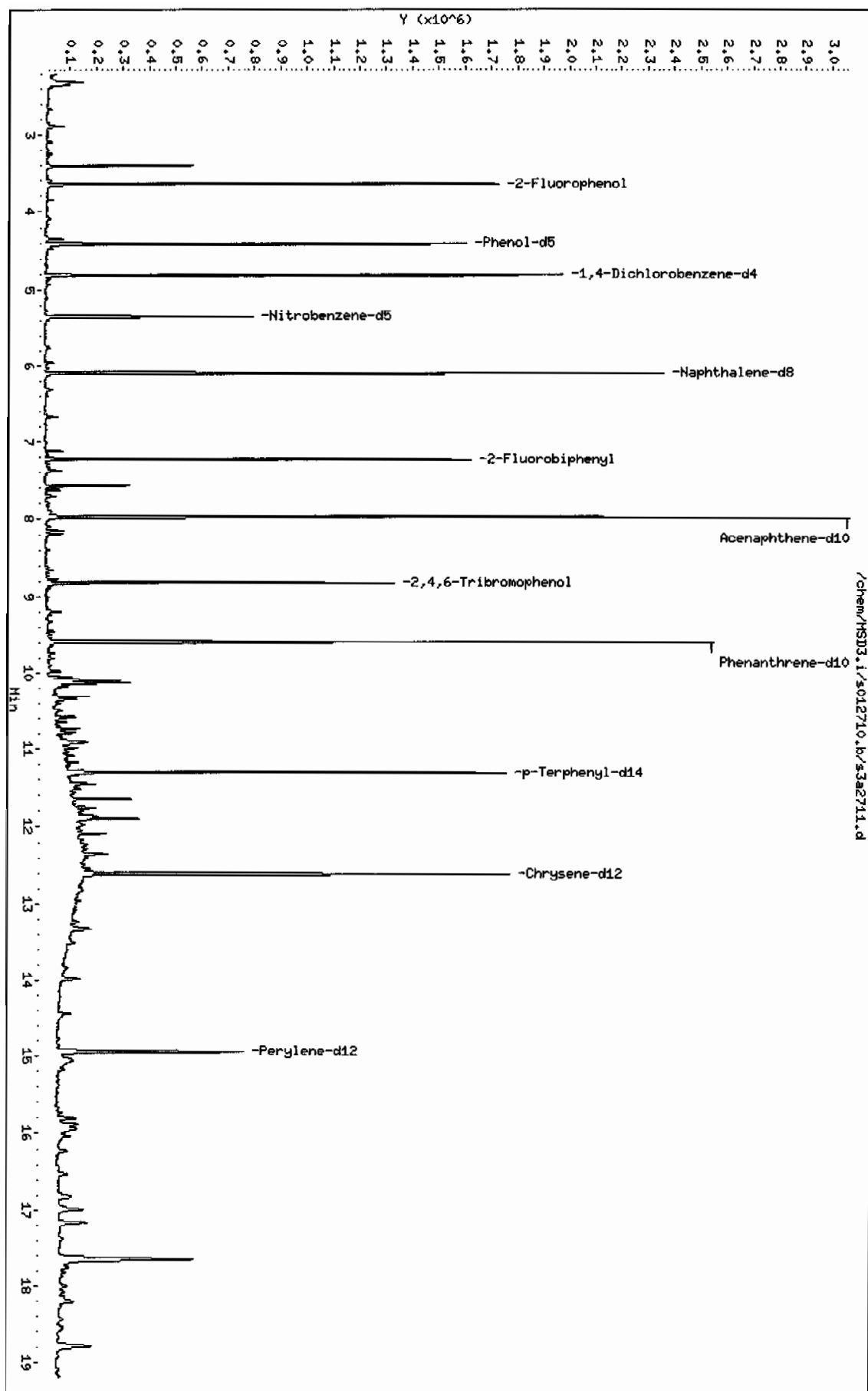
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.305	238931	5.31802757	247	0		0	10
Unknown Aldol Condensate					CAS #:		
3.401	543503	12.0970743	562	0		0	10
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
7.566	319282	4.06250006	189	99	NIST05.L	60024	46
Hexadecenoic acid, Z-11-					CAS #: 2416-20-8		
10.093	276649	4.29071641	199	97	NIST05.L	94748	67
n-Hexadecanoic acid					CAS #: 57-10-3		
10.128	320799	4.97545872	231	98	NIST05.L	96235	67
Unknown					CAS #:		
11.639	250846	4.53205087	211	0		0	91
Unknown					CAS #:		
11.893	339692	6.13723666	285	0		0	91
2,6,10,14,18,22-Tetracosahexaene, 2,6,10					CAS #: 111-02-4		
13.981	150389	4.63036014	215	87	NIST05.L	173573	98
Unknown					CAS #:		
15.058	365103	11.2412363	522	0		0	98
Unknown					CAS #:		
15.801	168537	5.18911215	241	0		0	98
Unknown					CAS #:		
15.881	201069	6.19075156	288	0		0	98
Unknown					CAS #:		
15.937	322828	9.93960389	462	0		0	98
Unknown					CAS #:		
16.816	167282	5.15047640	239	0		0	98
Campesterol					CAS #: 474-62-4		
16.987	290222	8.93570117	415	95	NIST05.L	171431	98
Unknown					CAS #:		
17.167	253460	7.80381967	363	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Stigmasterol, 22,23-dihydro-					CAS #: 1000214-20-7		
17.642	1435526	44.1986997	2050	95	NIST05.L	174408	98
Unknown					CAS #:		
18.200	148561	4.57407257	213	0		0	98
Stigmast-4-en-3-one					CAS #: 1058-61-3		
18.782	399518	12.3008499	572	91	NIST05.L	173936	98

Data File: /chem/HS03.i/s012710.b/s3a2711.d
 Date: 27-JAN-2010 13:17
 Client ID: RE15-10-7190
 Sample Info: 1245099013194445511SVHF11LNL
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-EHS

Instrument: HS03.i
 Operator: JLD1
 Column diameter: 0.20



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 12450990131944455111SVMF111LANL

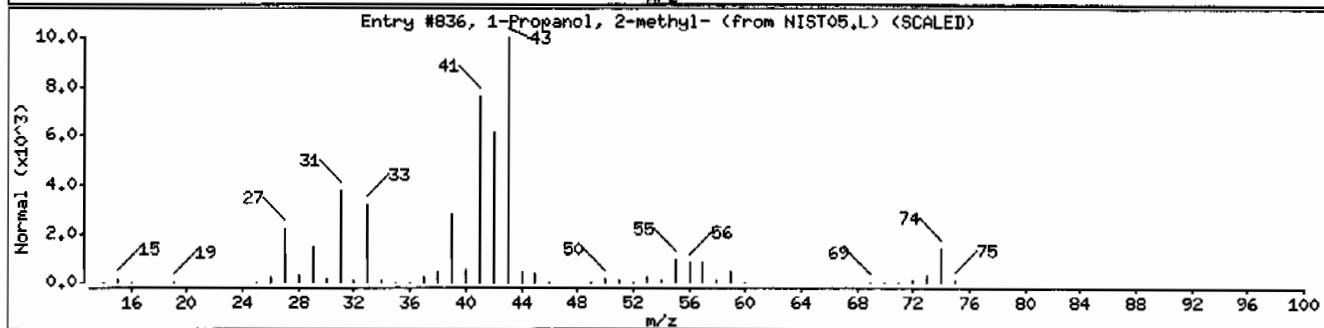
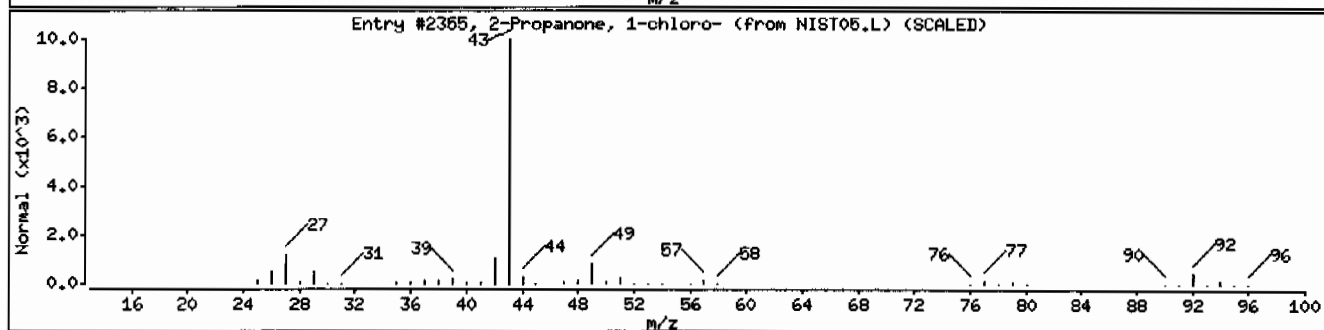
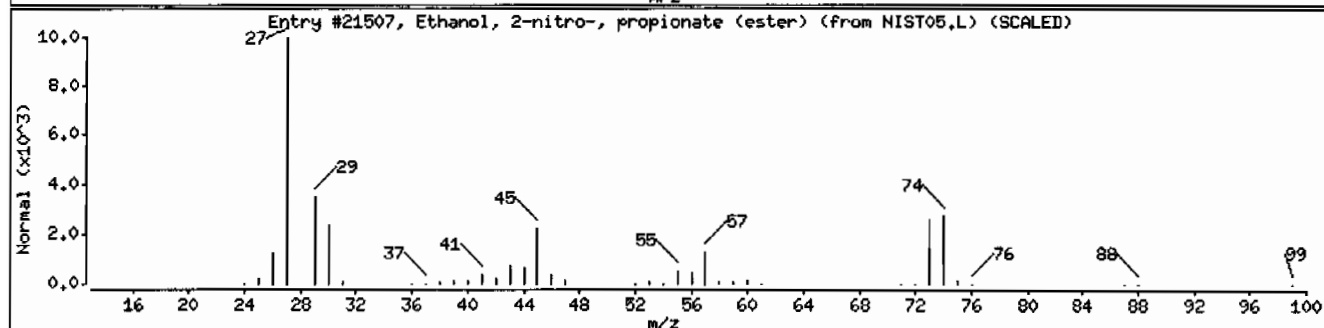
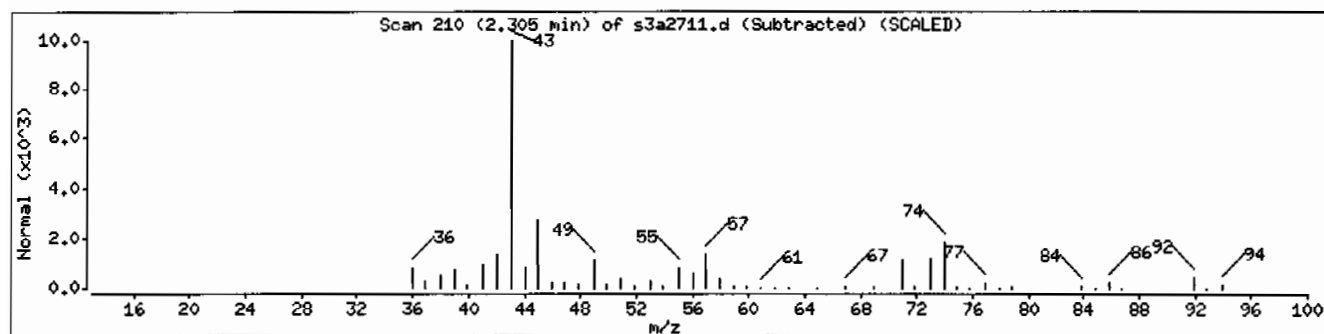
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanol, 2-nitro-, propionate (ester)	5390-28-3	NIST05.L	21507	25	C5H9NO4	147
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2355	11	C3H5ClO	92
1-Propanol, 2-methyl-	78-83-1	NIST05.L	836	9	C4H10O	74



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVMF111LANL

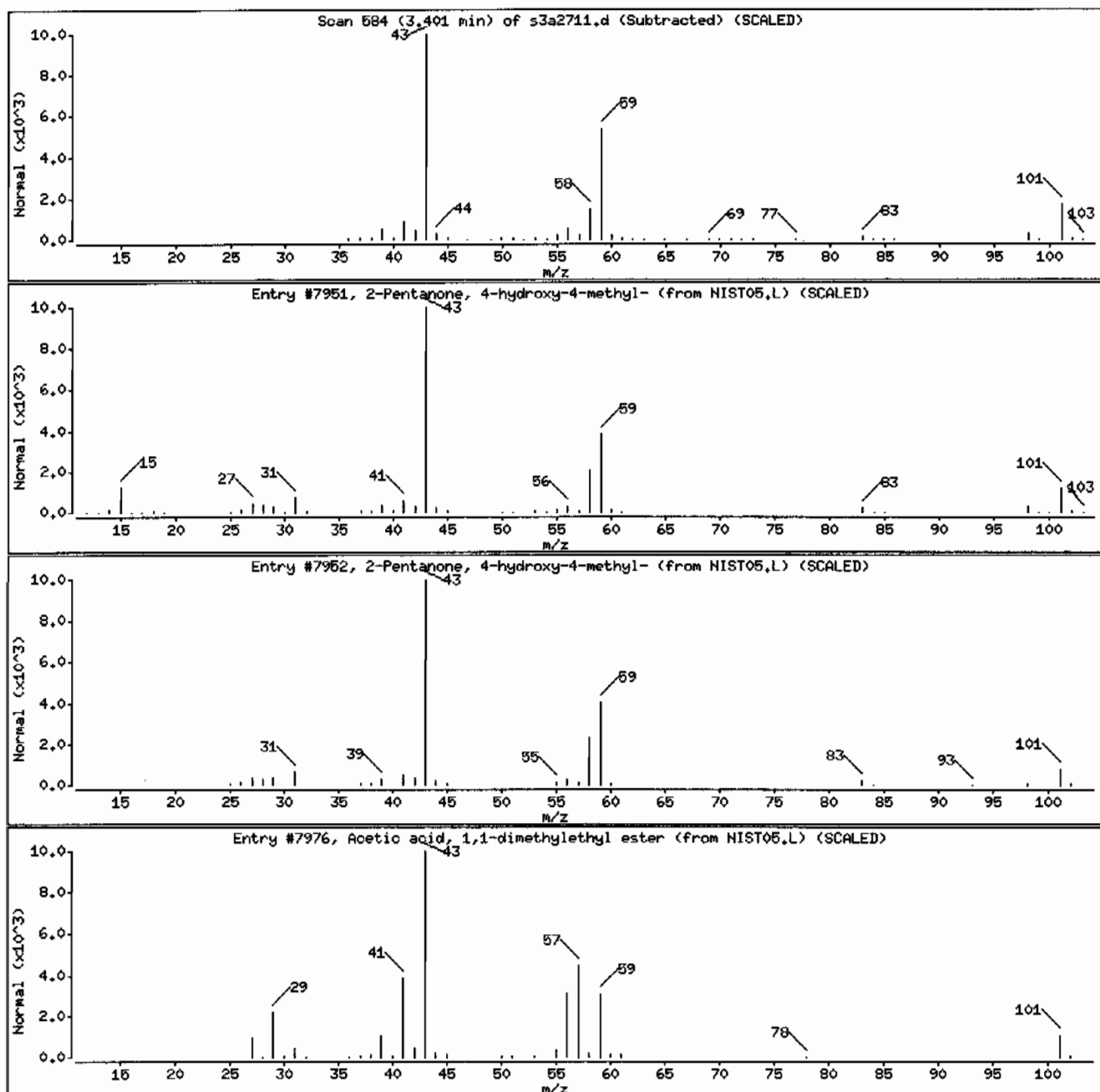
Volume Injected (uL): 0.5

Operator: JLD1

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, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.1

Sample Info: 1245099013194445511SVMF11ILANL

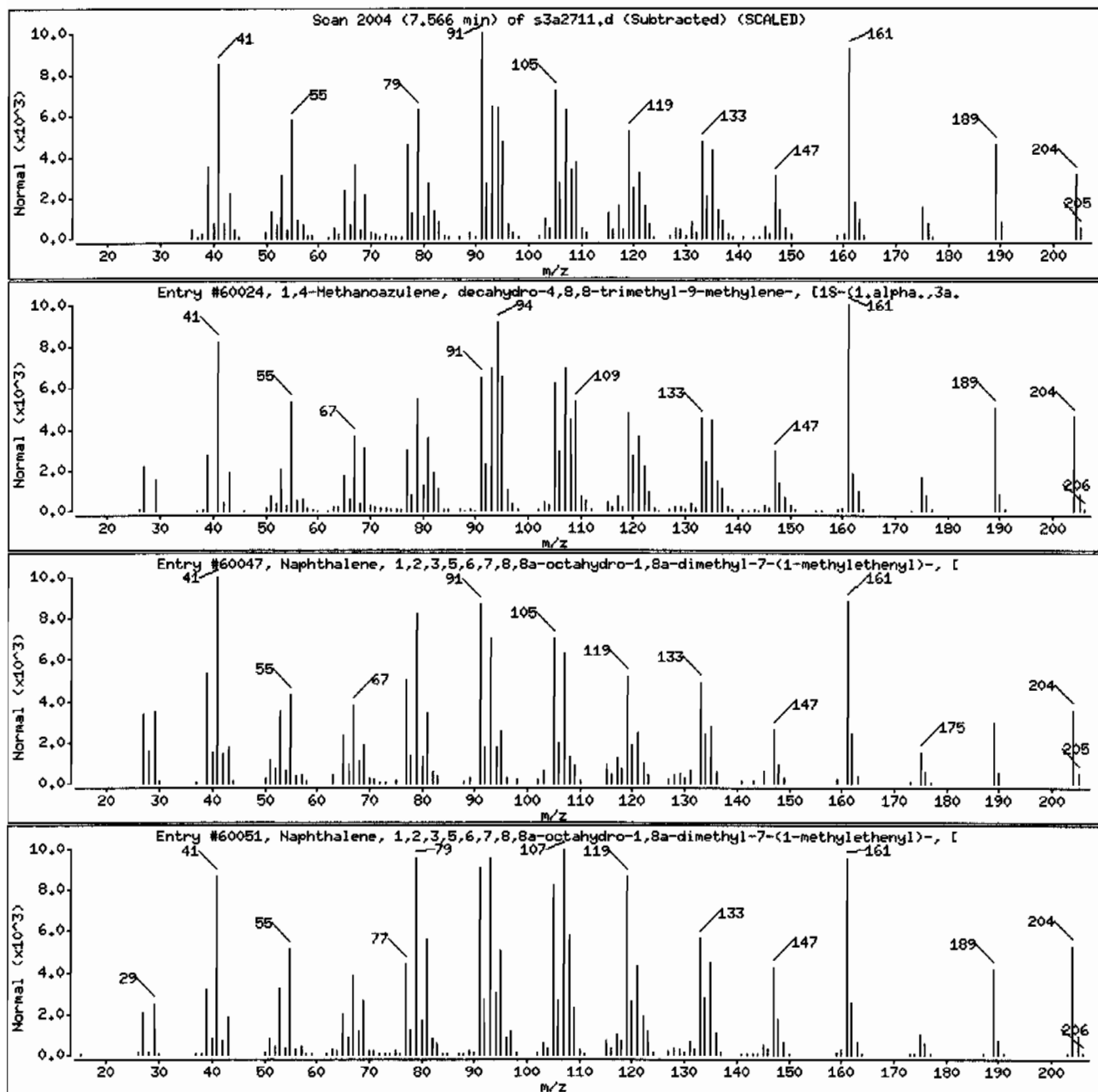
Volume Injected (uL): 0.5

Operator: JLD1

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	60047	98	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	10219-75-7	NIST05.L	60051	97	C15H24	204



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVMF111LANL

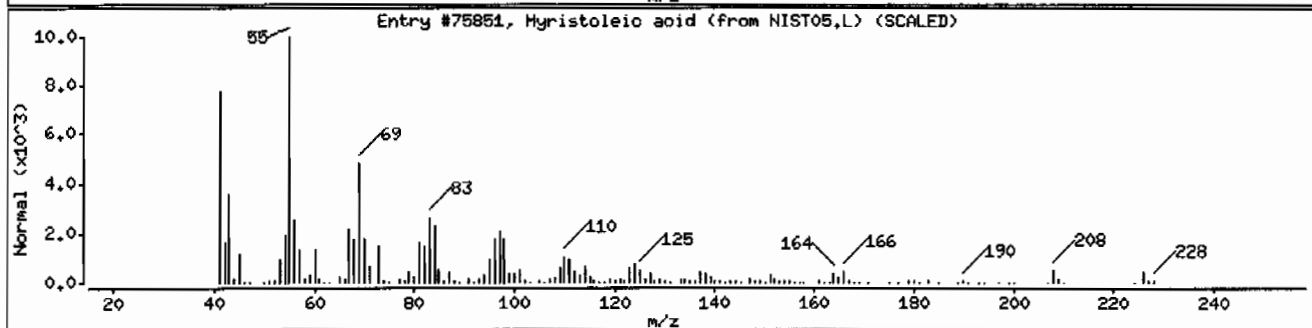
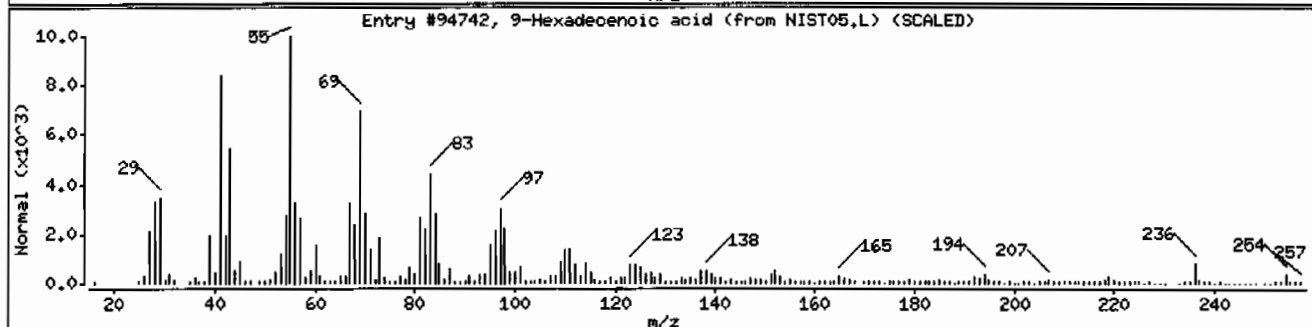
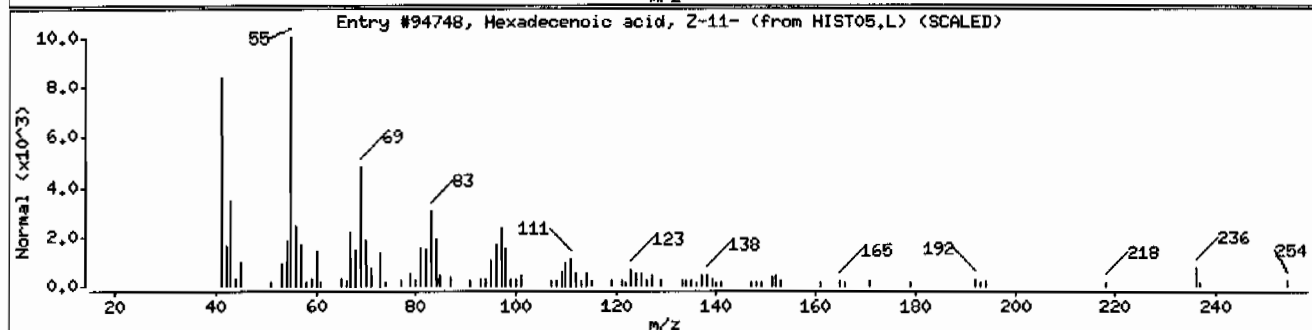
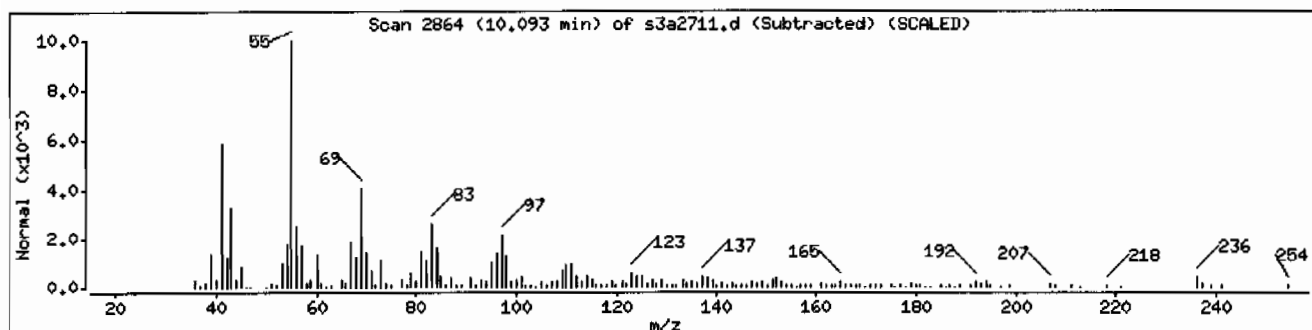
Volume Injected (uL): 0.5

Operator: JLD1

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	97	C16H30O2	254
9-Hexadecenoic acid	2091-29-4	NIST05.L	94742	91	C16H30O2	254
Myristoleic acid	544-64-9	NIST05.L	75851	91	C14H26O2	226



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 12450990131944455111SVMF111LANL

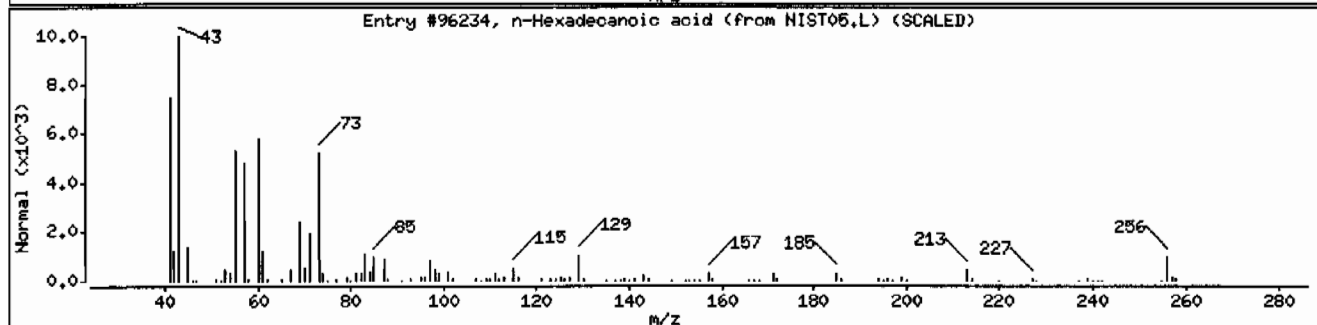
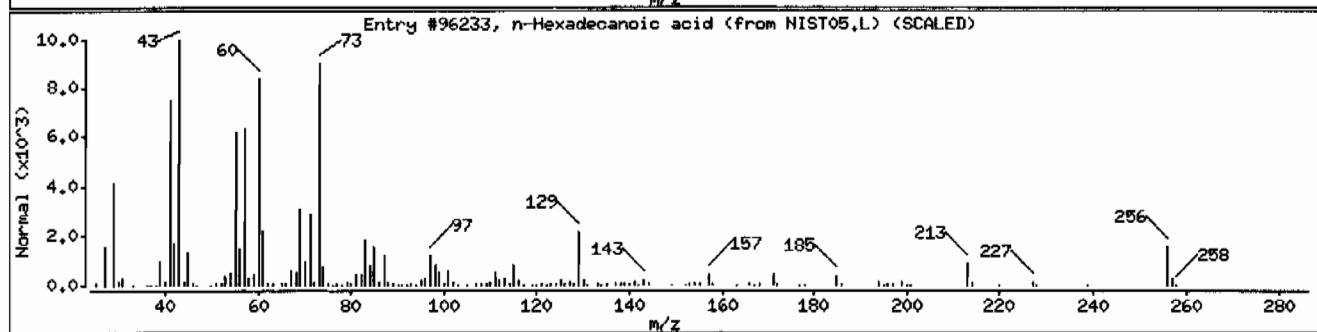
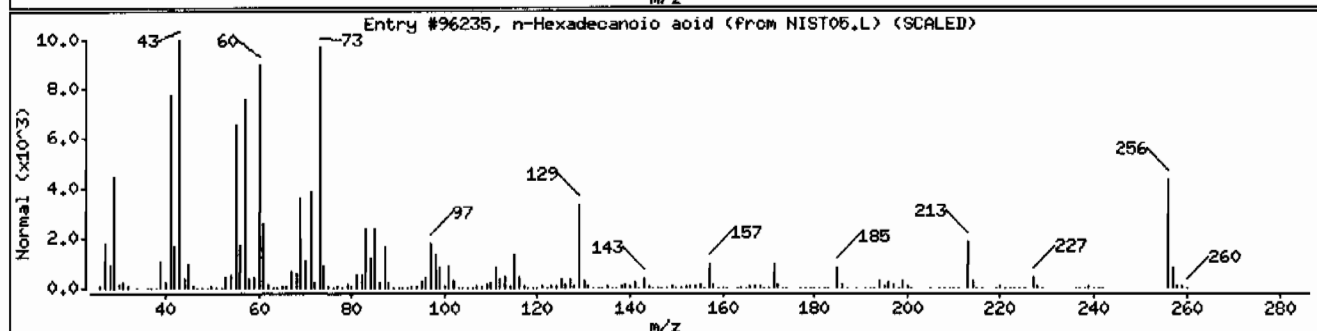
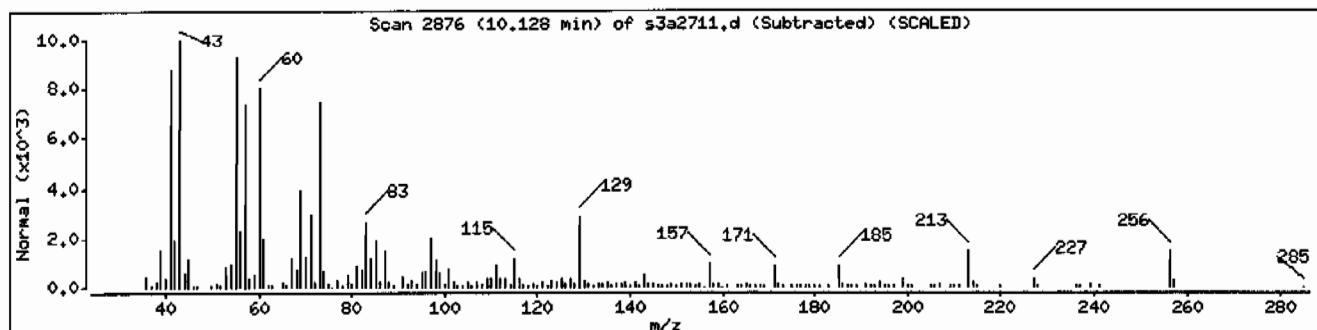
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIST05.L	96235	98	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96233	96	C16H32O2	256
n-Hexadecanoic acid	57-10-3	NIST05.L	96234	96	C16H32O2	256



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194448511ISVMFI11LANL

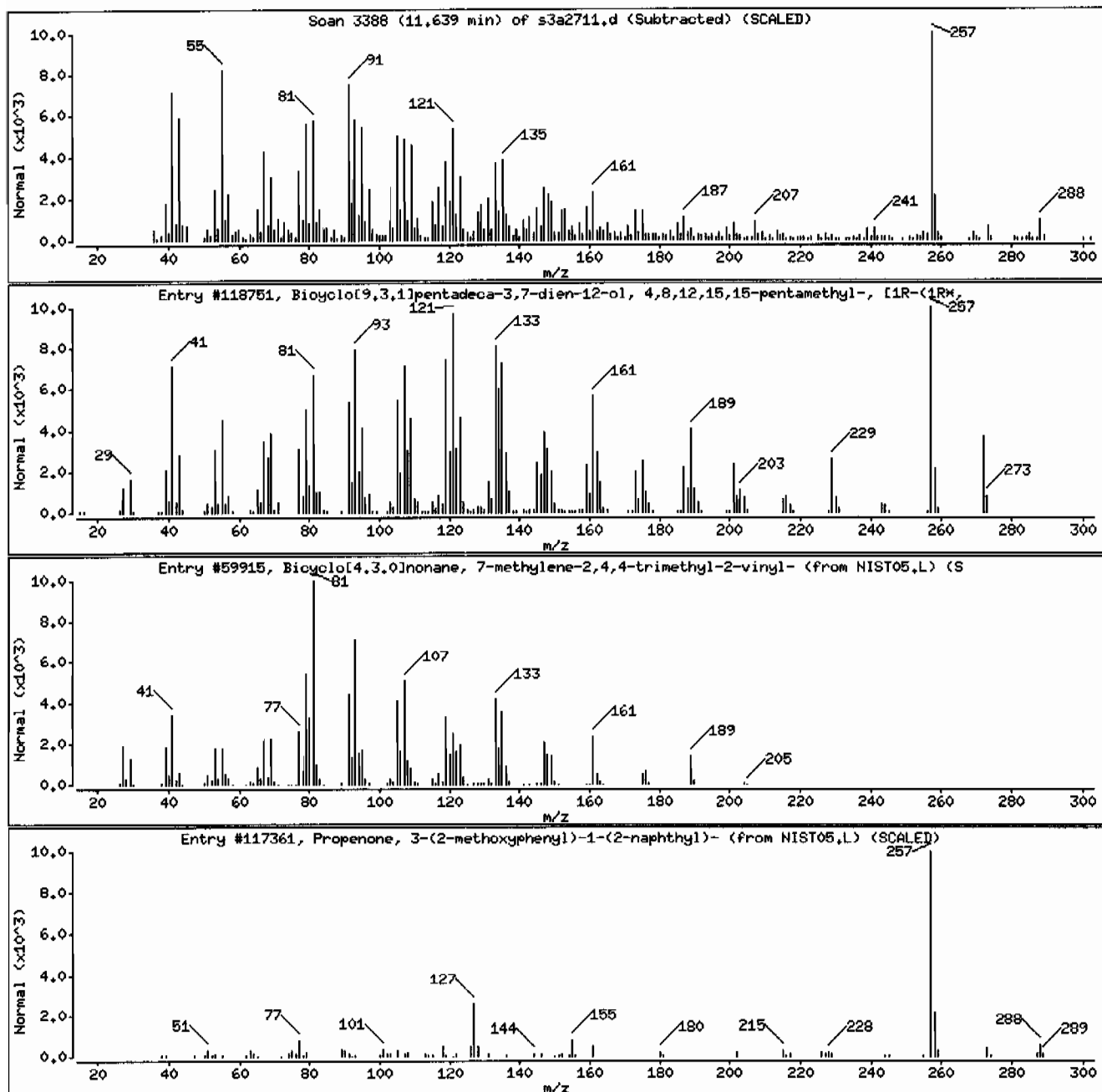
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[9.3.1]pentadeca-3,7-dien-12-ol,	70000-19-0	NIST05.L	118751	59	C ₂₀ H ₃₄ O	290
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	38	C ₁₅ H ₂₄	204
Propenone, 3-(2-methoxyphenyl)-1-(2-naph	52601-56-6	NIST05.L	117361	30	C ₂₀ H ₁₆ O ₂	288



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVHF111LANL

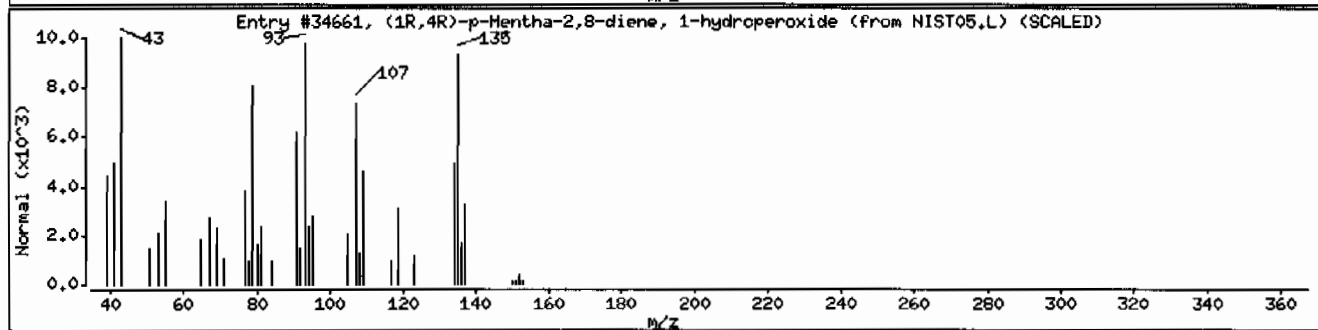
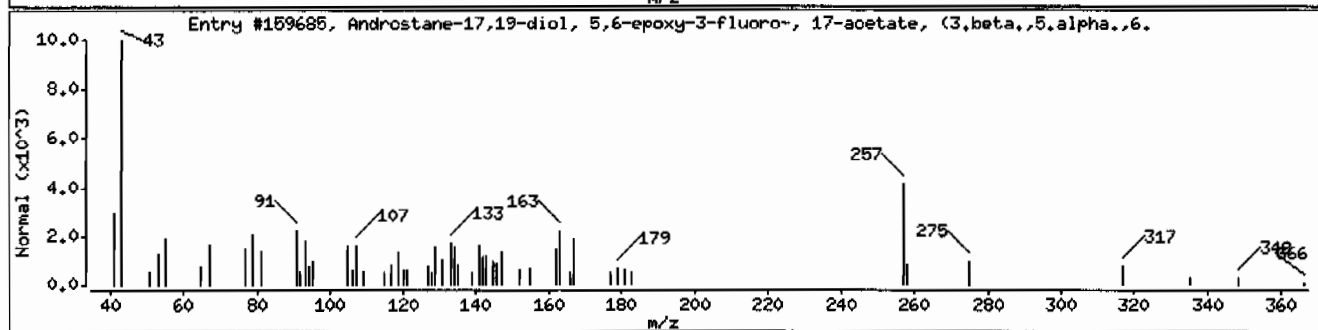
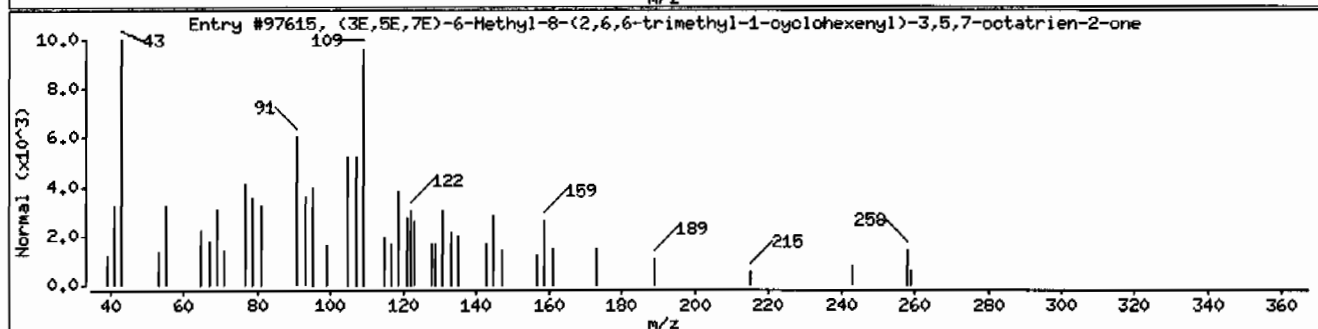
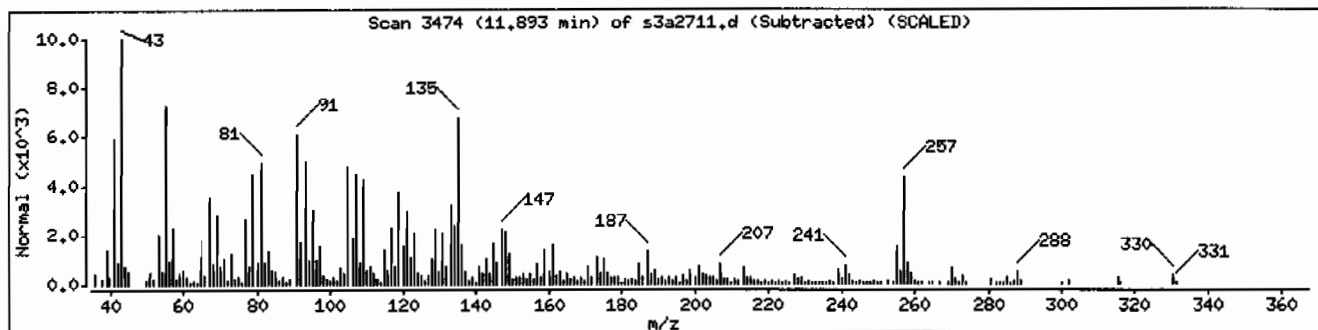
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	40	C18H26O	268
Androstane-17,19-diol, 5,6-epoxy-3-fluor	40242-94-2	NIST05.L	159685	37	C21H31FO4	366
(1R,4R)-p-Mentha-2,8-diene, 1-hydroperox	1000292-74-0	NIST05.L	34661	27	C10H16O2	168



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 12450990131944485111SVMF111LANL

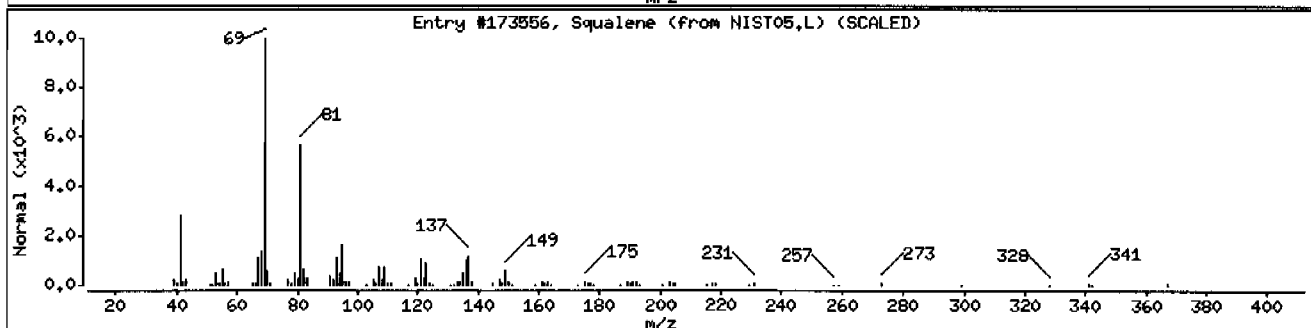
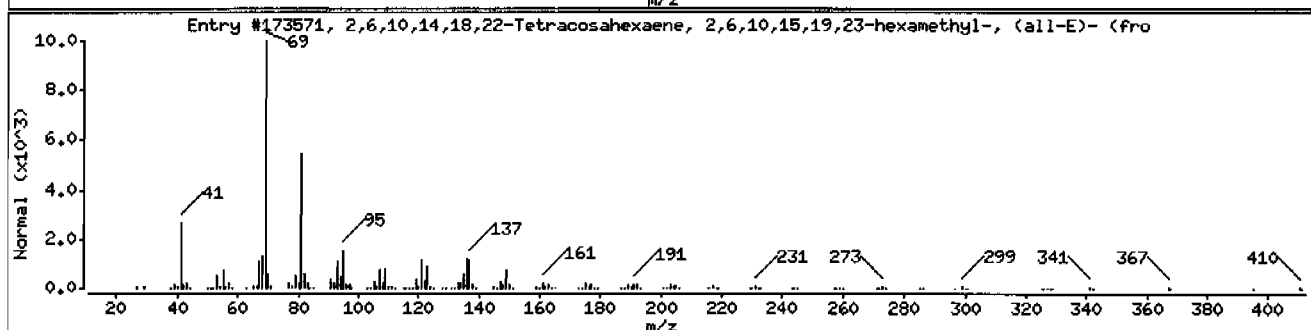
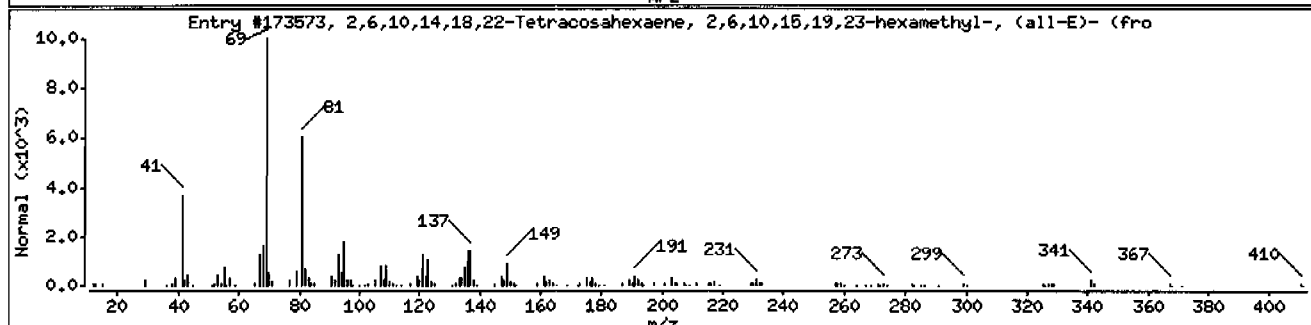
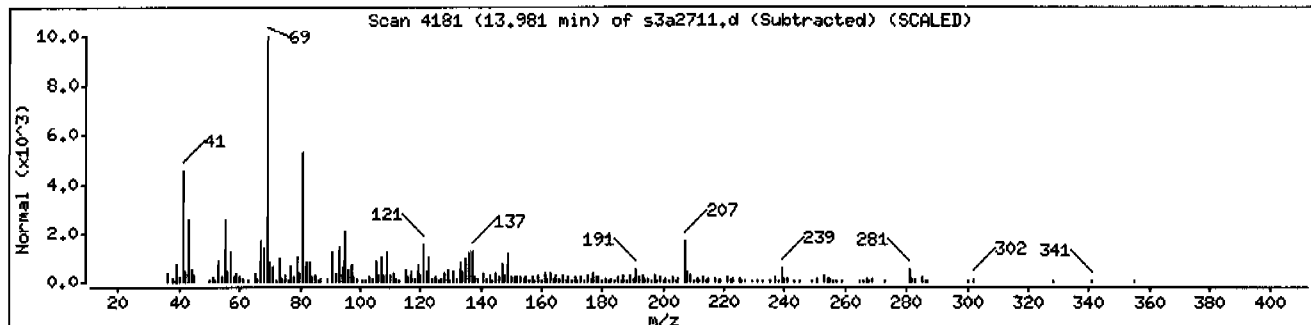
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173573	87	C ₃₀ H ₅₀	410
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	87	C ₃₀ H ₅₀	410
Squalene	7683-64-9	NIST05.L	173556	83	C ₃₀ H ₅₀	410



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVMF111LANL

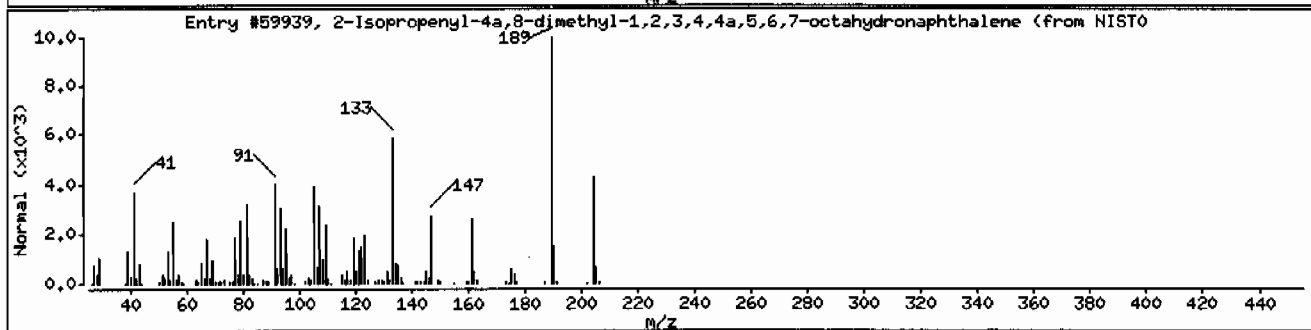
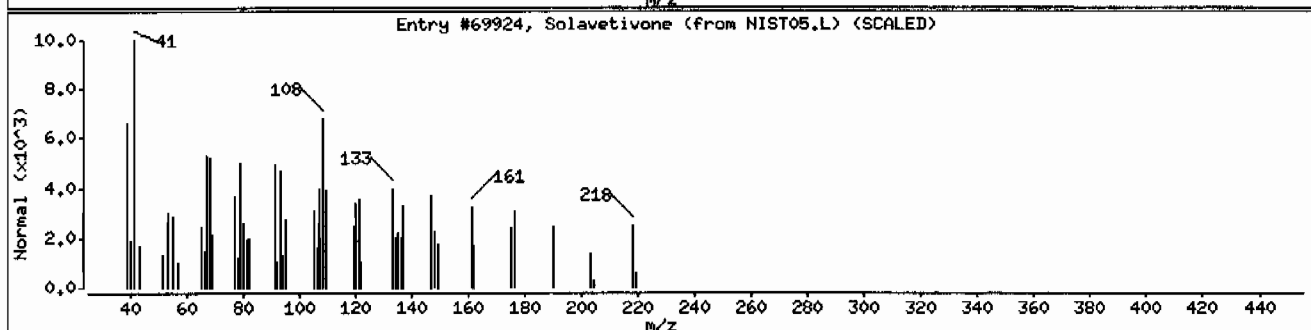
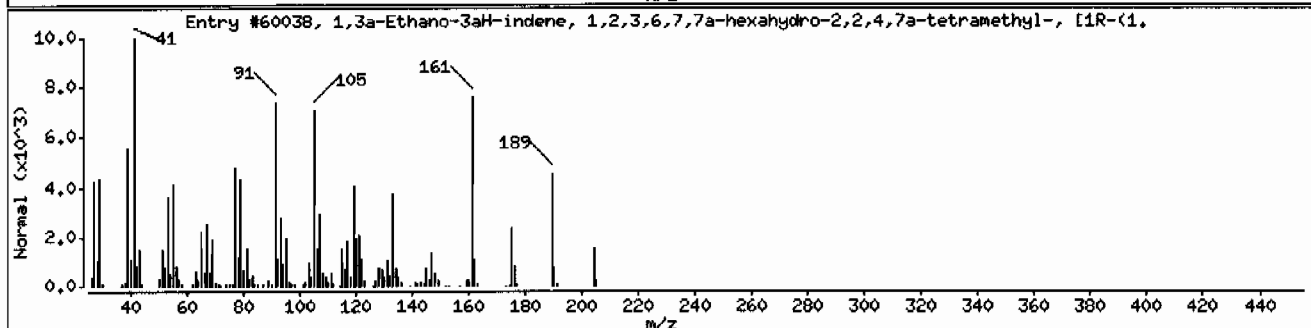
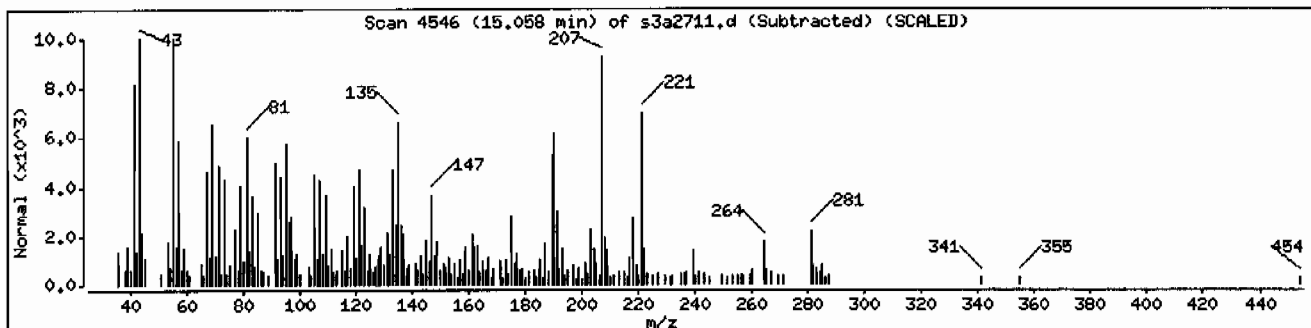
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4646-68-0	NIST05.L	60038	42	C15H24	204
Solavetivone	54878-25-0	NIST05.L	69924	38	C15H22O	218
2-Isopropenyl-4a,8-dimethyl-1,2,3,4,4a,5	1000192-43-5	NIST05.L	59939	38	C15H24	204



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.1

Sample Info: 1245099013194445511SVHF111LANL

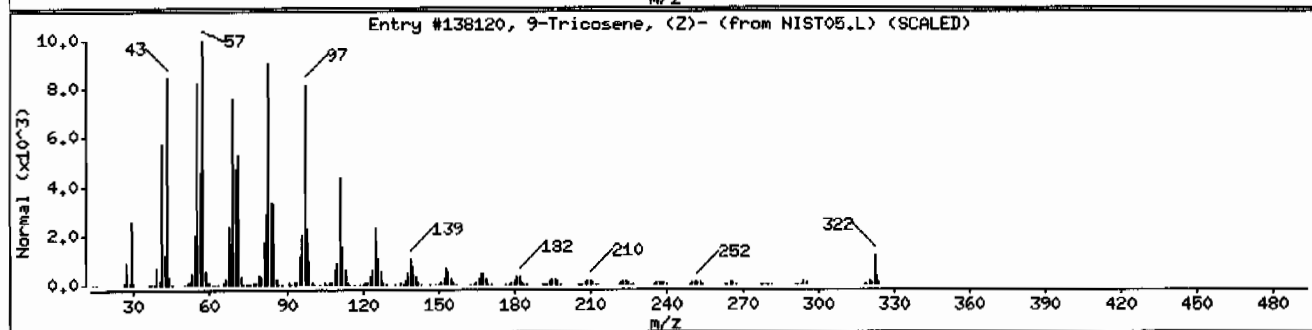
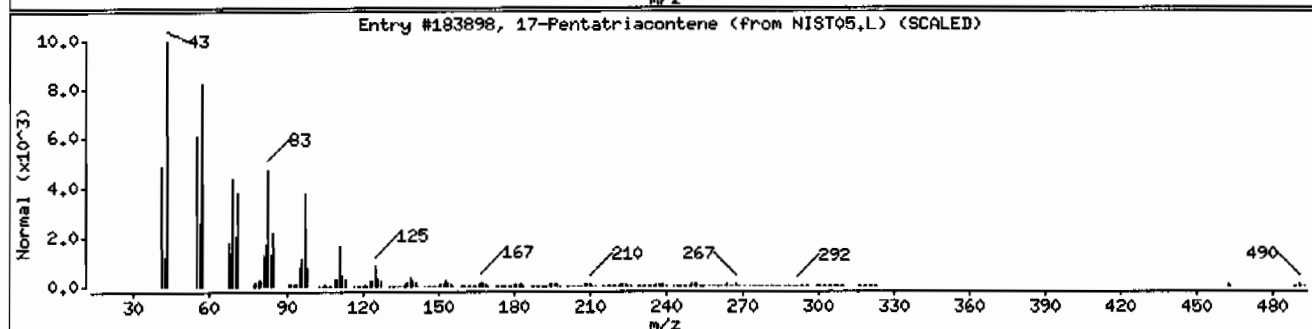
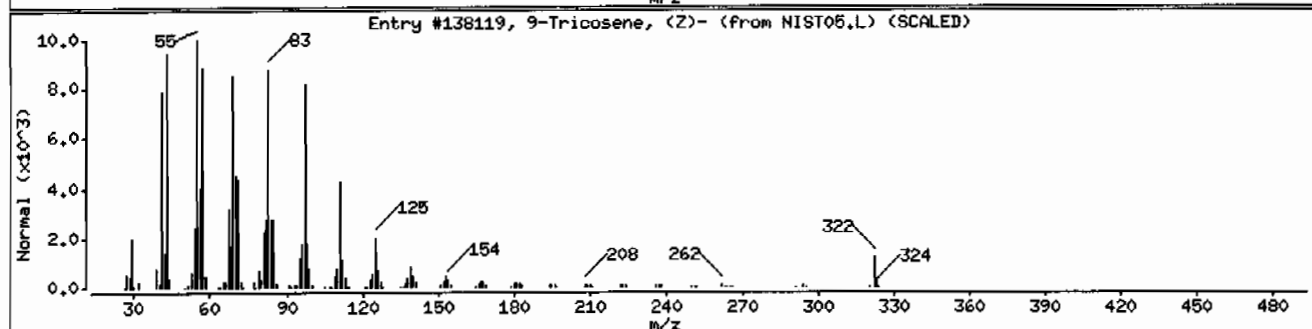
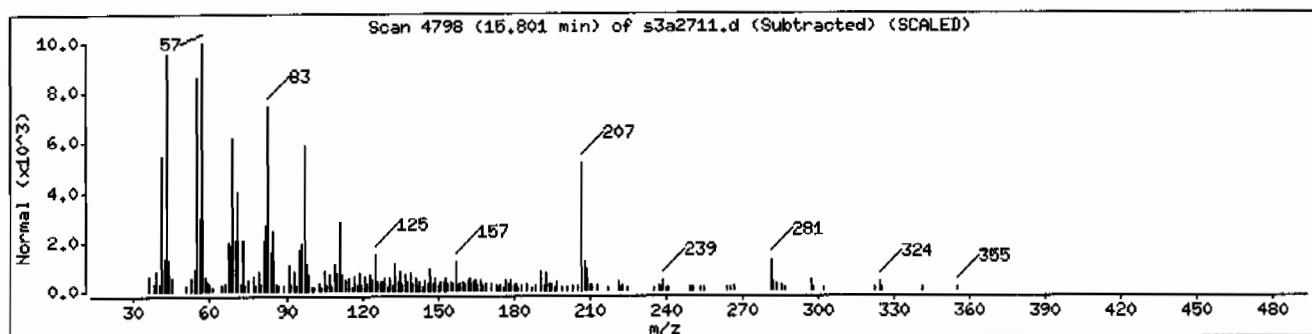
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Tricosene, (Z)-	27519-02-4	NIST05.L	138119	78	C23H46	322
17-Pentatriacontene	6971-40-0	NIST05.L	183898	70	C35H70	491
9-Tricosene, (Z)-	27519-02-4	NIST05.L	138120	62	C23H46	322



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVMF111LANL

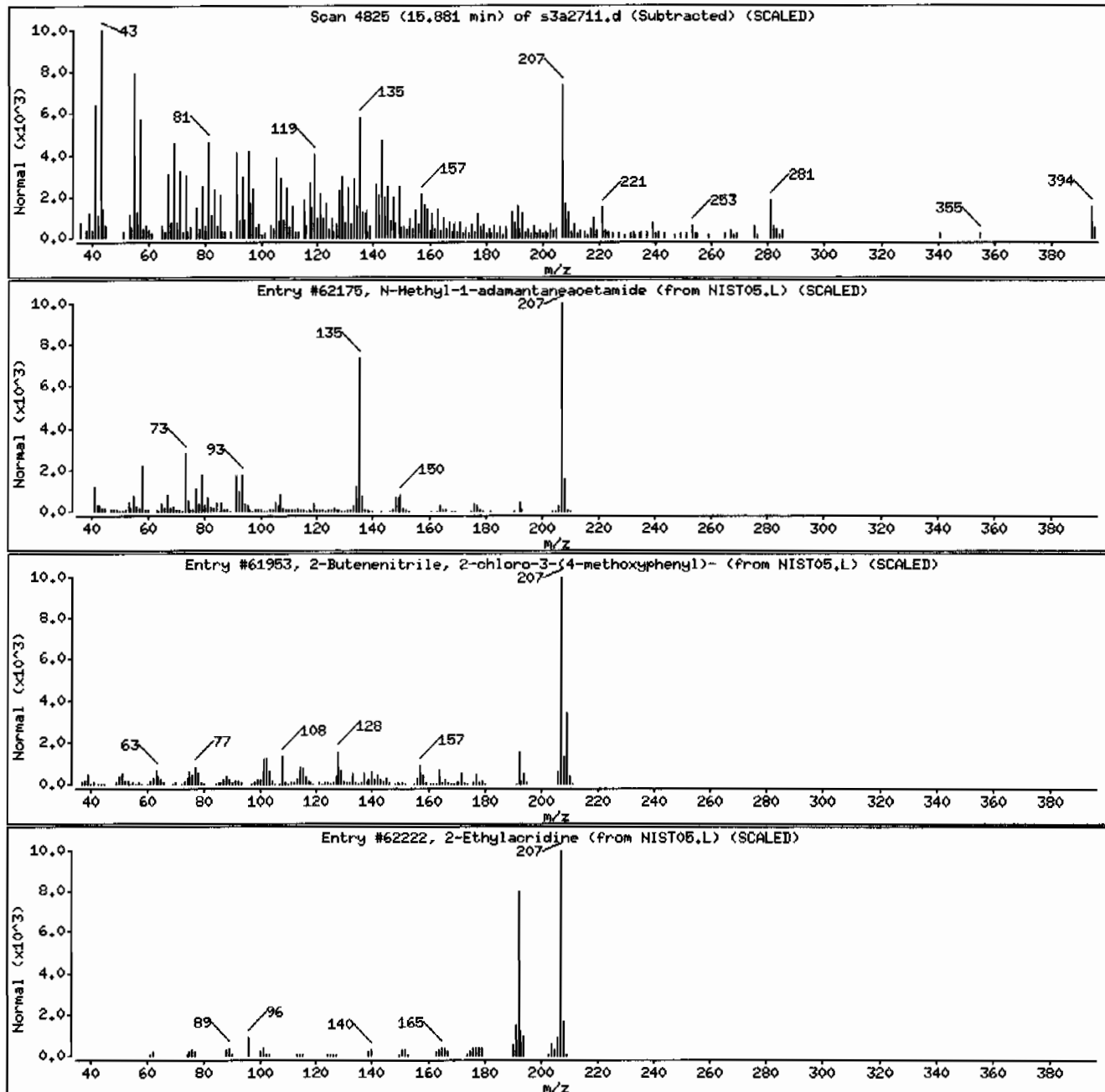
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C ₁₃ H ₂₁ N	207
2-Butenenitrile, 2-chloro-3-(4-methoxyph	1000305-66-7	NIST05.L	61953	25	C ₁₁ H ₁₀ ClNO	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	20	C ₁₅ H ₁₃ N	207



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVMF111LANL

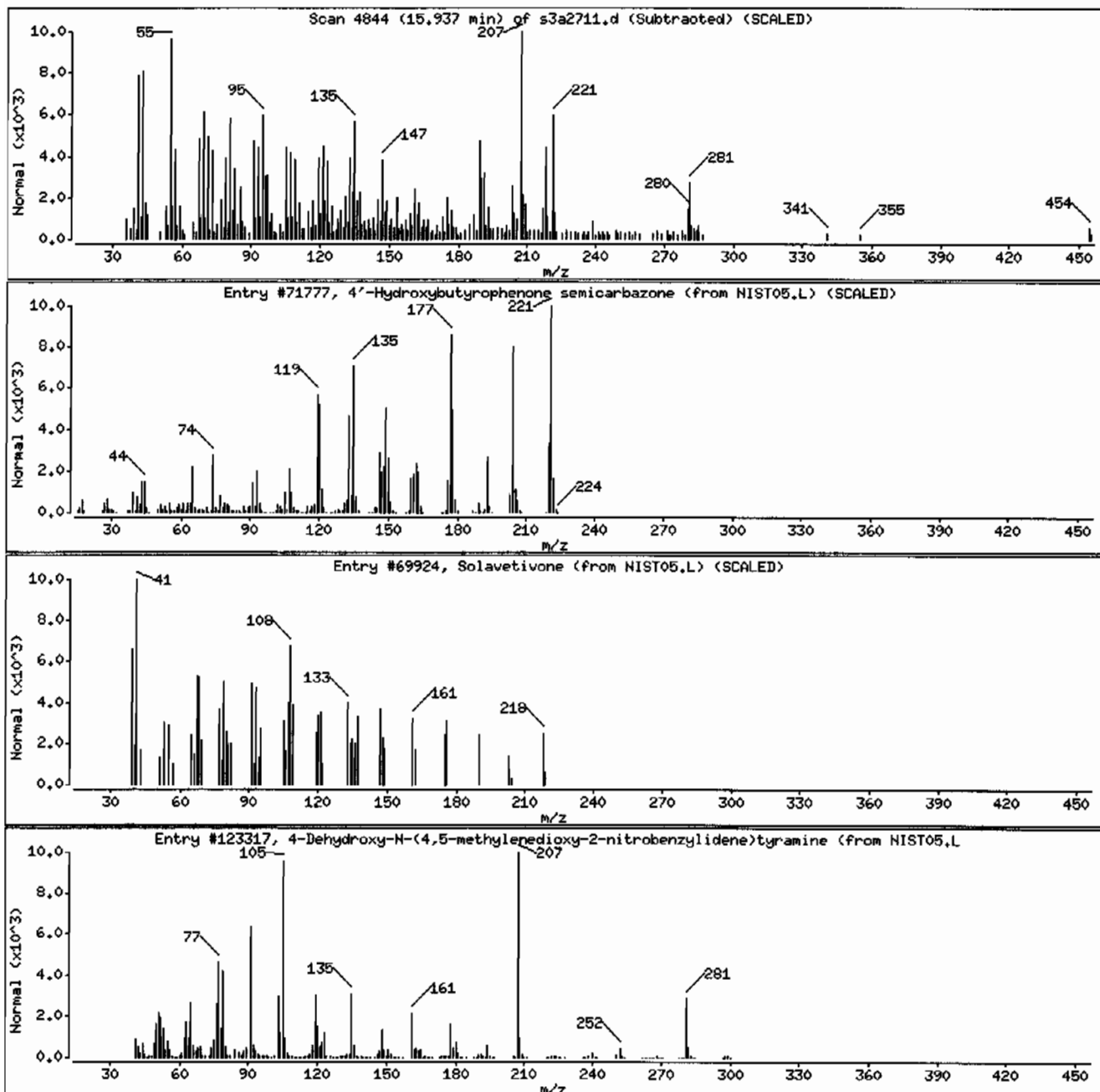
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4'-Hydroxybutyrophenone semicarbazone	1000240-11-4	NIST05.L	71777	30	C11H15N3O2	221
Solavetivone	54878-25-0	NIST05.L	69924	27	C15H22O	218
4-Dehydroxy-N-(4,5-methylenedioxy-2-nitro	1000111-66-9	NIST05.L	123317	22	C16H14N2O4	298



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: HSD3.i

Sample Info: 1245099013194445511SVMF11ILANL

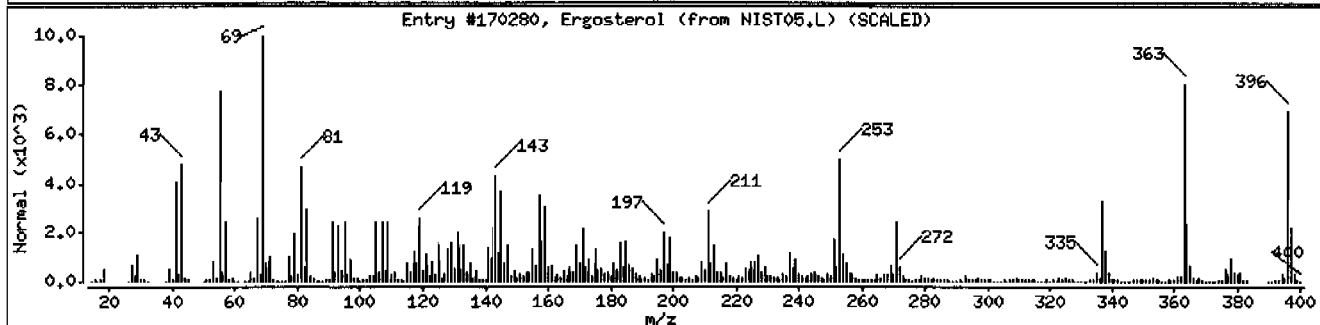
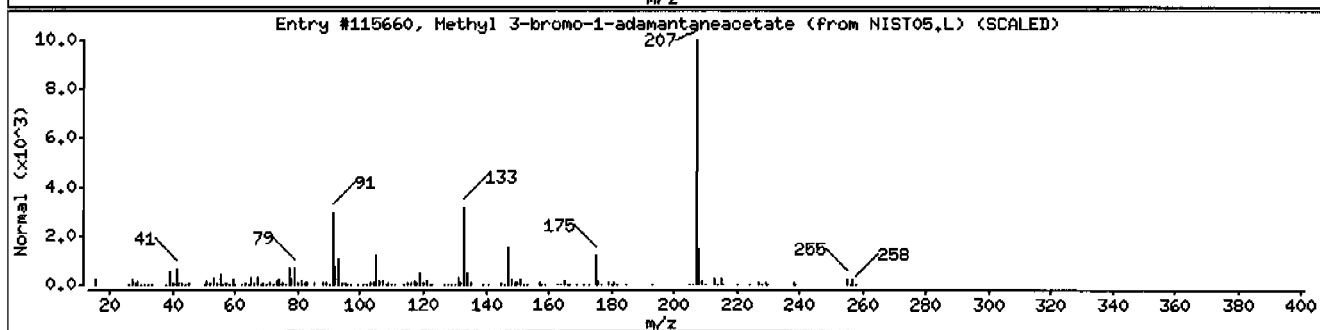
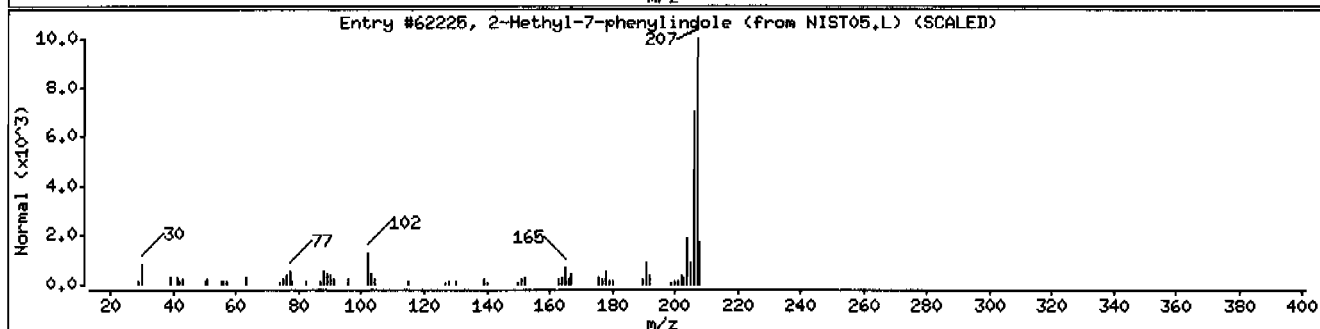
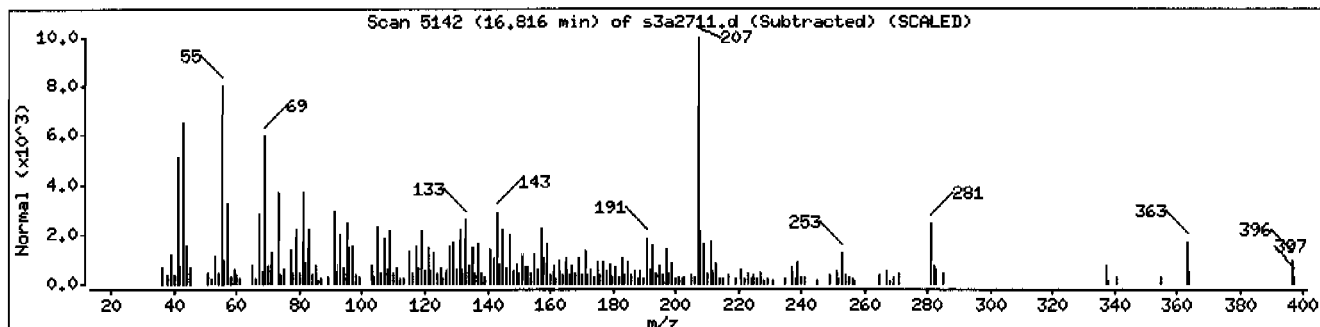
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-7-phenylindole	1140-08-5	NIST05.L	62225	38	C ₁₆ H ₁₃ N	207
Methyl 3-bromo-1-adamantaneacetate	14575-01-0	NIST05.L	115660	38	C ₁₃ H ₁₉ BrO ₂	286
Ergosterol	57-87-4	NIST05.L	170280	35	C ₂₈ H ₄₄ O	396



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.1

Sample Info: 1245099013194445511ISVMFI11LANL

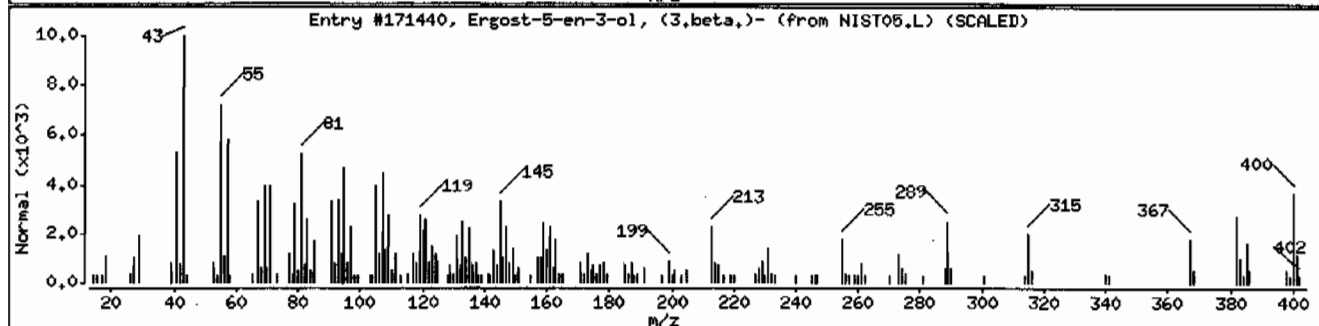
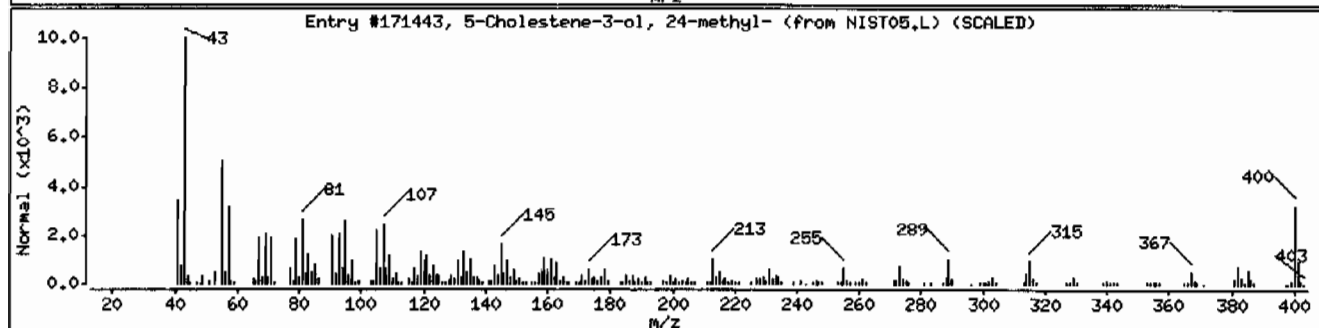
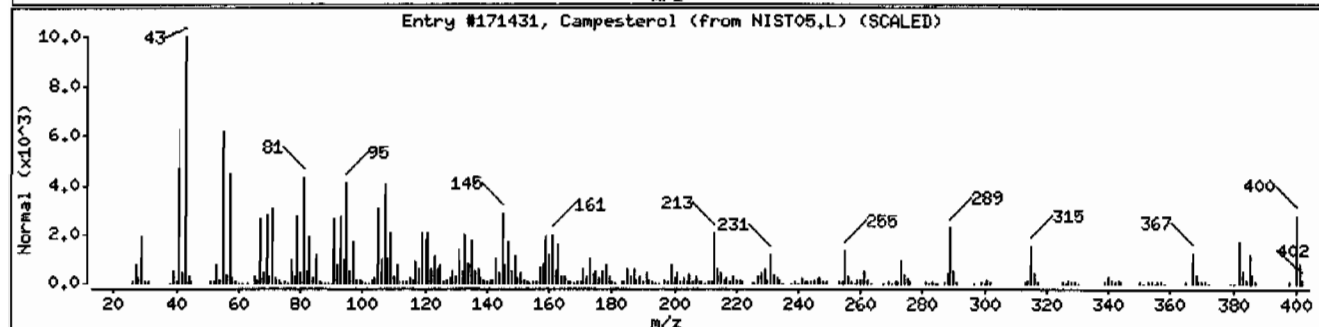
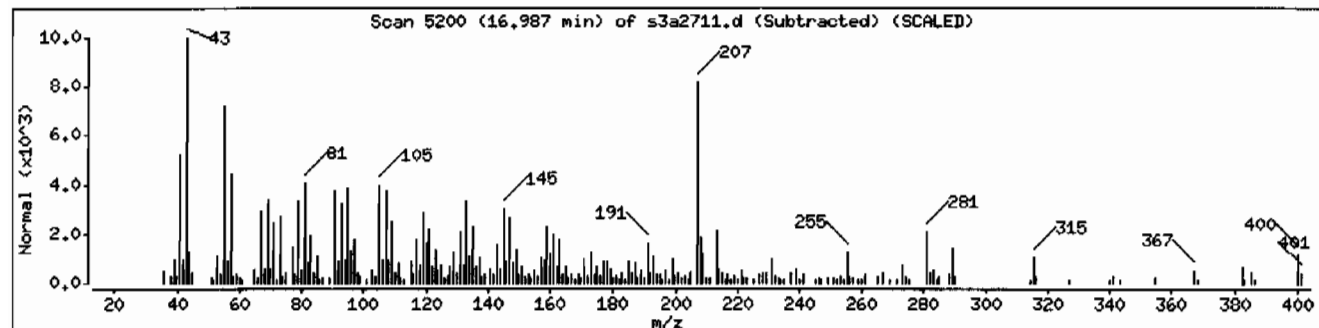
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Campesterol	474-62-4	NIST05.L	171431	96	C ₂₈ H ₄₈ O	400
5-Cholestene-3-ol, 24-methyl-	1000214-17-4	NIST05.L	171443	50	C ₂₈ H ₄₈ O	400
Ergost-5-en-3-ol, (3,β)-	4651-51-8	NIST05.L	171440	50	C ₂₈ H ₄₈ O	400



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVMF111LANL

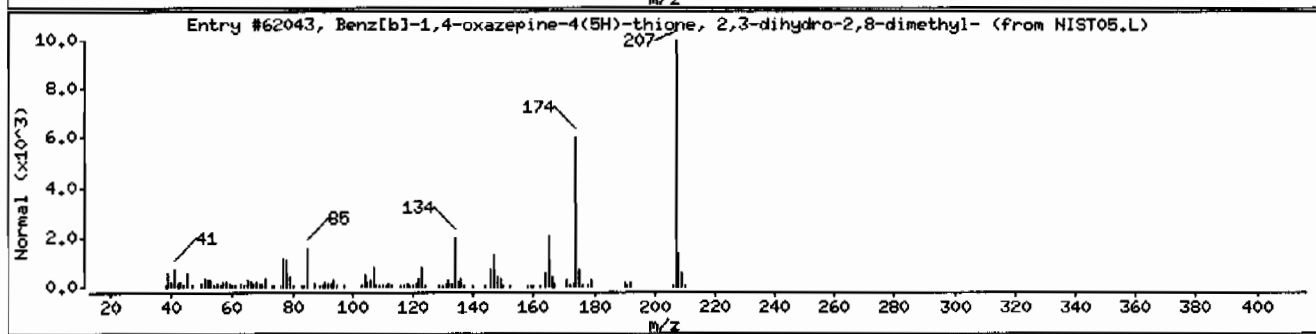
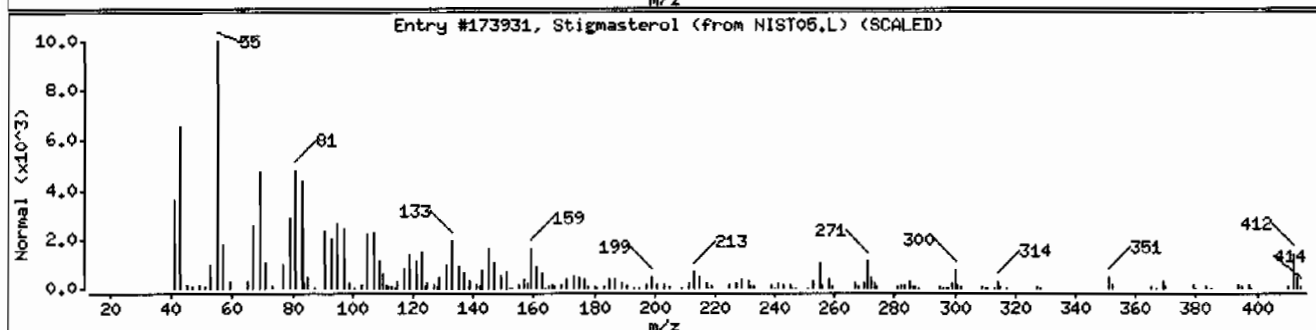
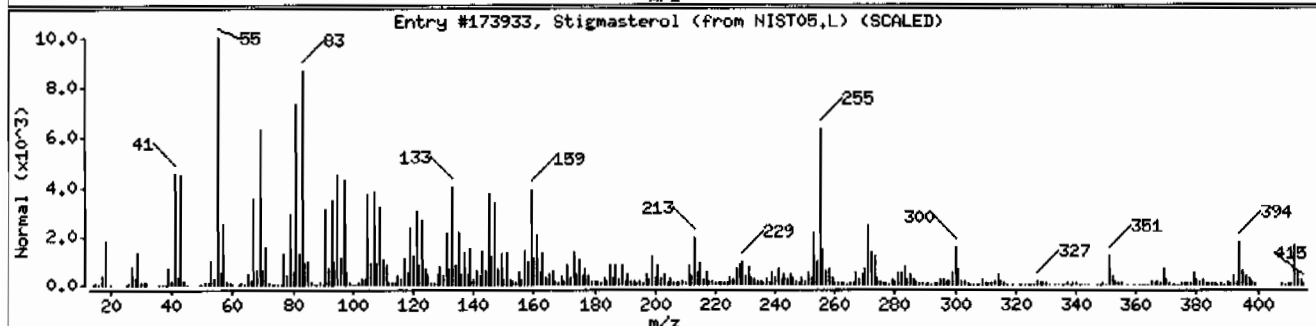
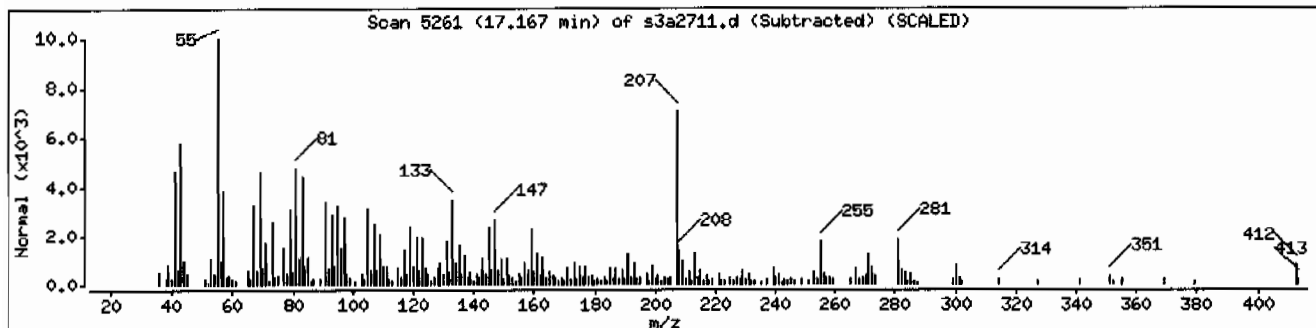
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stigmasterol	83-48-7	NIST05.L	173933	40	C ₂₉ H ₄₈ O	412
Stigmasterol	83-48-7	NIST05.L	173931	35	C ₂₉ H ₄₈ O	412
Benz[b]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	30	C ₁₁ H ₁₃ NOS	207



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVHF111LANL

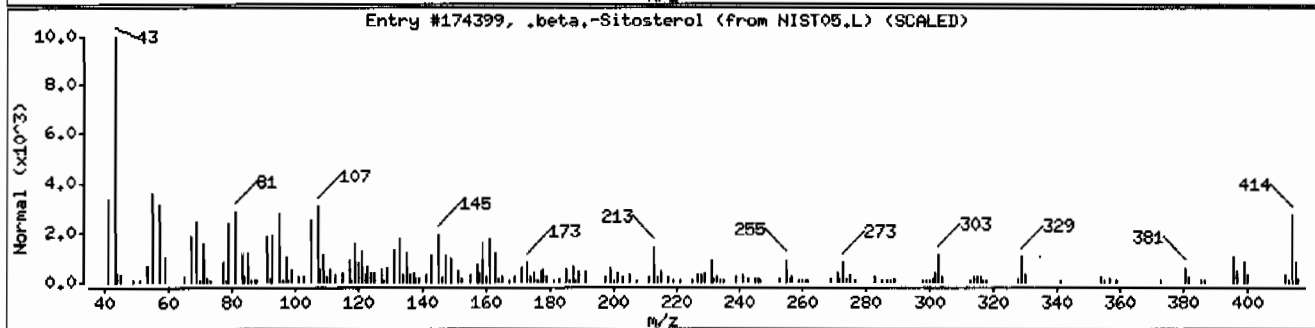
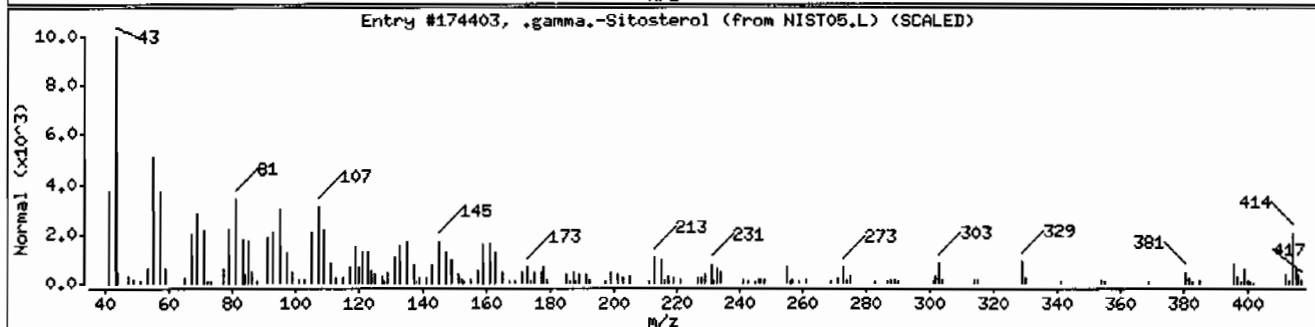
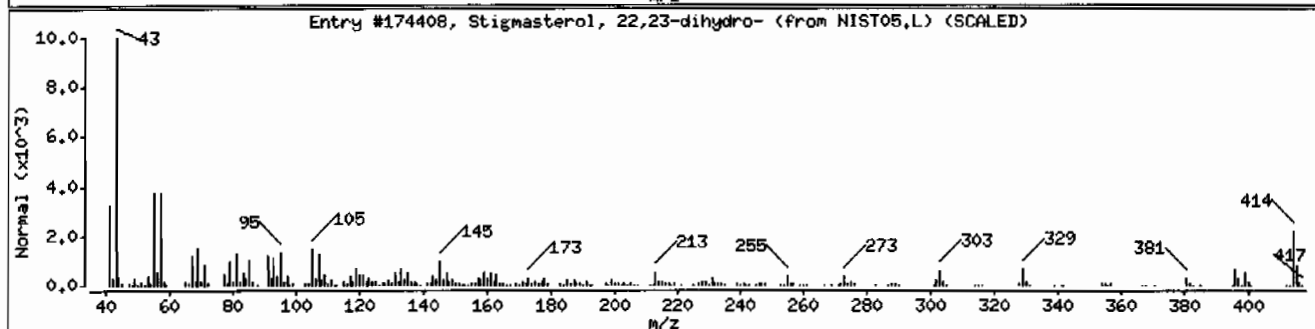
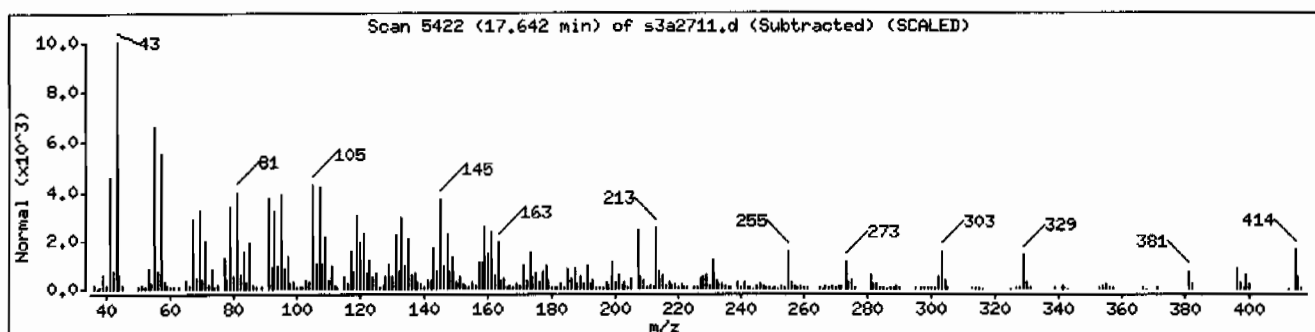
Volume Injected (uL): 0.5

Operator: JLD1

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	95	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	94	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	74	C ₂₉ H ₅₀ O	414



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: I245099013194445511SVMF11ILANL

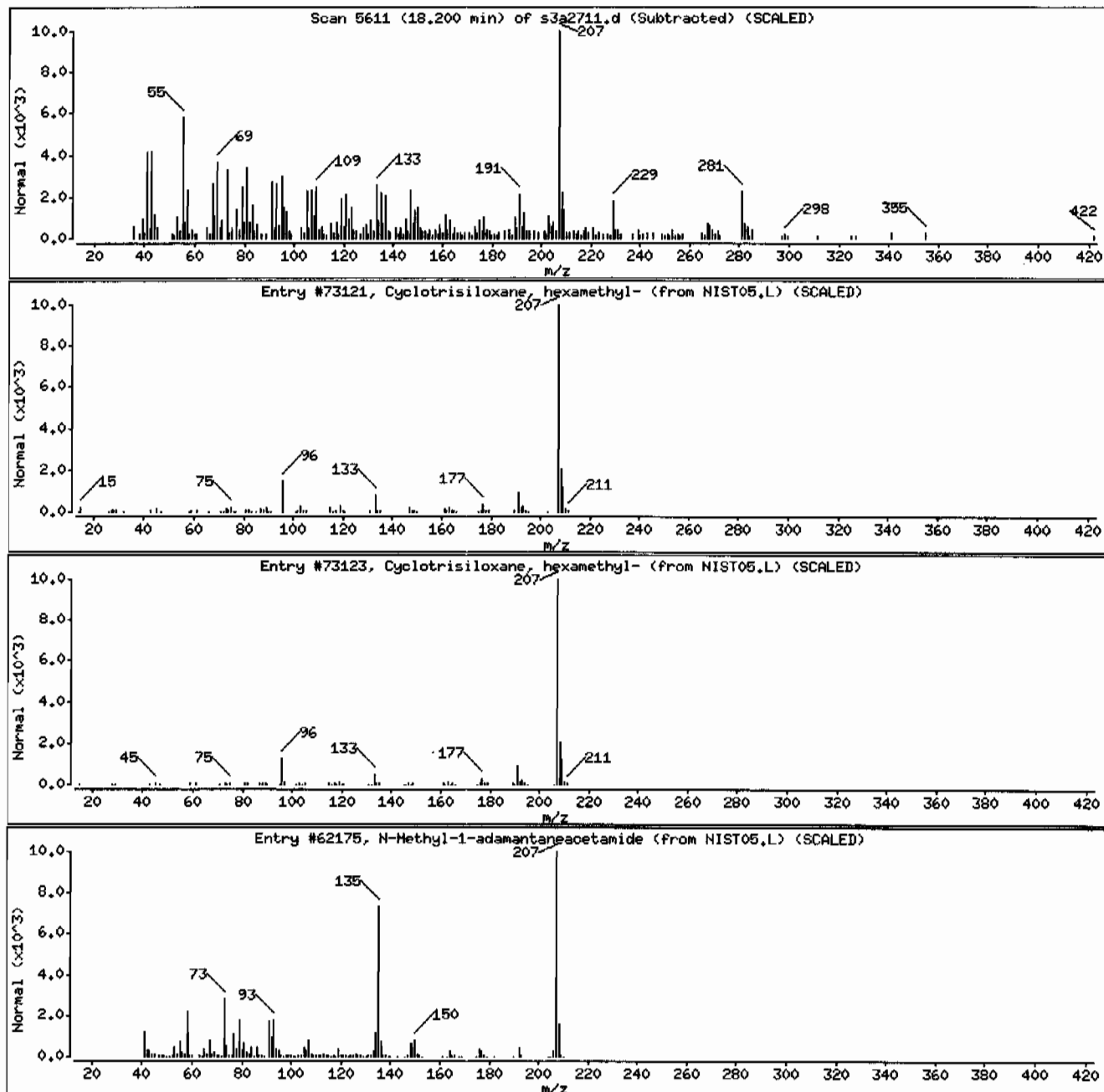
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C ₆ H ₁₈ O ₃ Si ₃	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	43	C ₆ H ₁₈ O ₃ Si ₃	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	42	C ₁₃ H ₂₁ NO	207



Date : 27-JAN-2010 13:17

Client ID: RE15-10-7190

Instrument: MSD3.i

Sample Info: 1245099013194445511SVMF111LANL

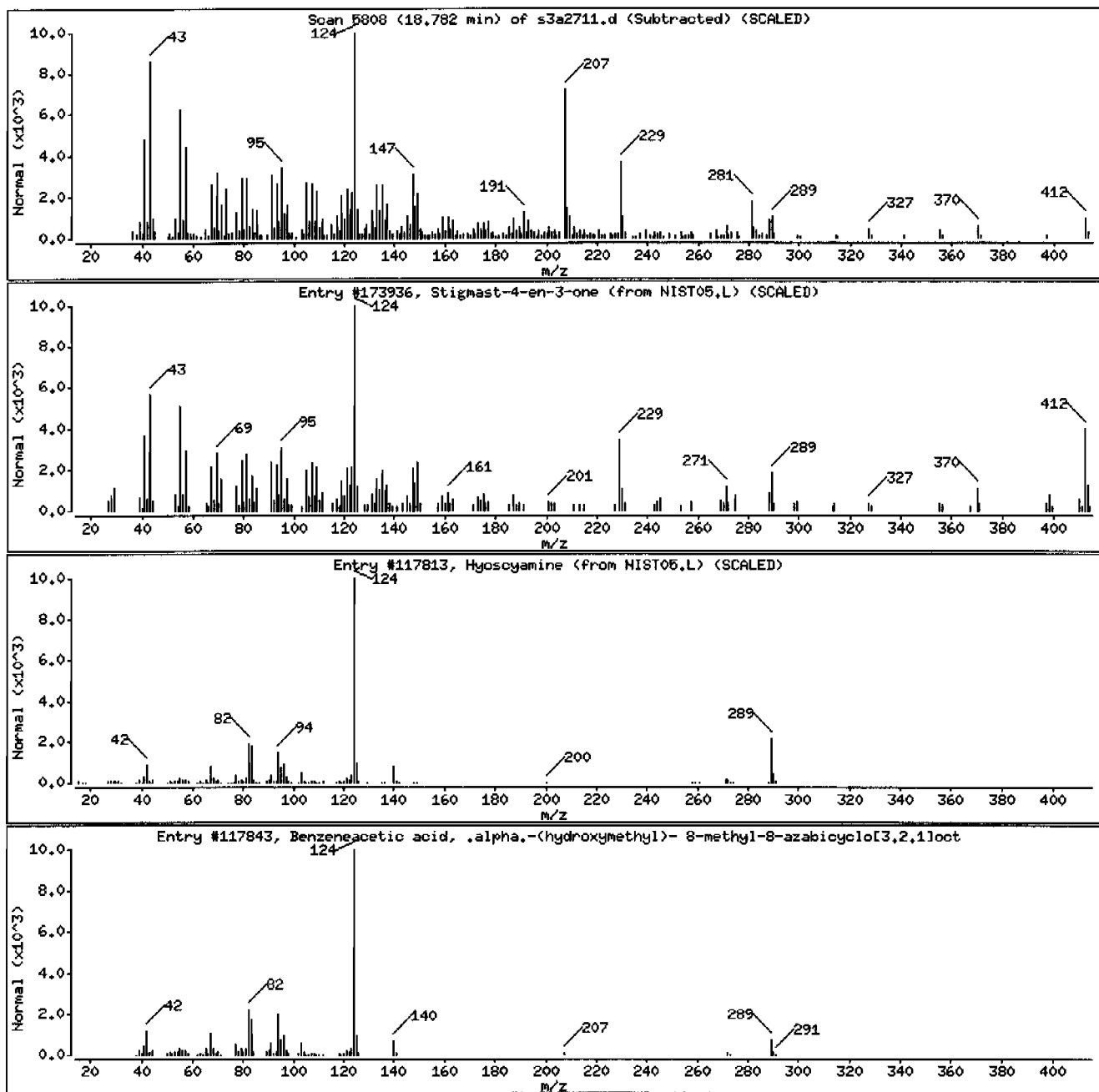
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIST05.L	173936	91	C29H48O	412
Hyoscyamine	101-31-5	NIST05.L	117813	30	C17H23NO3	289
Benzeneacetic acid, .alpha.-(hydroxymeth	51-55-8	NIST05.L	117843	30	C17H23NO3	289



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

SDG Number: 10-1301
Lab Sample ID: 245099003

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.02 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7191
Batch ID: 944455
Run Date: 01/25/2010 14:37
Prep Date: 01/22/2010 23:39
Data File: s3a2512.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	390	ug/kg	78.0	390
108-95-2	Phenol	U	390	ug/kg	78.0	390
95-57-8	2-Chlorophenol	U	390	ug/kg	78.0	390
106-46-7	1,4-Dichlorobenzene	U	390	ug/kg	78.0	390
621-64-7	N-Nitrosodipropylamine	U	390	ug/kg	78.0	390
59-50-7	4-Chloro-3-methylphenol	U	390	ug/kg	78.0	390
83-32-9	Acenaphthene	U	39.0	ug/kg	12.9	39.0
121-14-2	2,4-Dinitrotoluene	U	390	ug/kg	39.0	390
100-02-7	4-Nitrophenol	U	390	ug/kg	129	390
87-86-5	Pentachlorophenol	U	390	ug/kg	97.5	390
129-00-0	Pyrene	U	39.0	ug/kg	11.7	39.0
110-86-1	Pyridine	U	390	ug/kg	78.0	390
62-53-3	Aniline	U	390	ug/kg	117	390
111-44-4	bis(2-Chloroethyl) ether	U	390	ug/kg	78.0	390
541-73-1	1,3-Dichlorobenzene	U	390	ug/kg	78.0	390
100-51-6	Benzyl alcohol	U	390	ug/kg	117	390
95-50-1	1,2-Dichlorobenzene	U	390	ug/kg	78.0	390
108-60-1	bis(2-Chloroisopropyl)ether	U	390	ug/kg	78.0	390
95-48-7	o-Cresol	U	390	ug/kg	78.0	390
65794-96-9	m,p-Cresols	U	390	ug/kg	117	390
67-72-1	Hexachloroethane	U	390	ug/kg	78.0	390
98-95-3	Nitrobenzene	U	390	ug/kg	78.0	390
78-59-1	Isophorone	U	390	ug/kg	78.0	390
88-75-5	2-Nitrophenol	U	390	ug/kg	78.0	390
105-67-9	2,4-Dimethylphenol	U	390	ug/kg	136	390
111-91-1	bis(2-Chloroethoxy)methane	U	390	ug/kg	78.0	390
120-83-2	2,4-Dichlorophenol	U	390	ug/kg	78.0	390
65-85-0	Benzoic acid	U	780	ug/kg	195	780
91-20-3	Naphthalene	U	39.0	ug/kg	11.7	39.0
106-47-8	4-Chloroaniline	U	390	ug/kg	78.0	390
87-68-3	Hexachlorobutadiene	U	390	ug/kg	78.0	390
91-57-6	2-Methylnaphthalene	U	39.0	ug/kg	7.80	39.0
77-47-4	Hexachlorocyclopentadiene	U	390	ug/kg	78.0	390
88-06-2	2,4,6-Trichlorophenol	U	390	ug/kg	78.0	390
95-95-4	2,4,5-Trichlorophenol	U	390	ug/kg	78.0	390
91-58-7	2-Chloronaphthalene	U	39.0	ug/kg	12.9	39.0
88-74-4	2-Nitroaniline	U	390	ug/kg	78.0	390
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	390	ug/kg	78.0	390

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099003	Date Received: 01/20/2010 08:45	% Moisture: 14.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7191	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 14:37	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s3a2512.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	390	ug/kg	78.0	390
606-20-2	2,6-Dinitrotoluene	U	390	ug/kg	39.0	390
208-96-8	Acenaphthylene	U	39.0	ug/kg	11.7	39.0
51-28-5	2,4-Dinitrophenol	U	780	ug/kg	148	780
132-64-9	Dibenzofuran	U	390	ug/kg	78.0	390
84-66-2	Diethylphthalate	U	390	ug/kg	78.0	390
86-73-7	Fluorene	U	39.0	ug/kg	11.7	39.0
7005-72-3	4-Chlorophenylphenylether	U	390	ug/kg	78.0	390
534-52-1	2-Methyl-4,6-dinitrophenol	U	390	ug/kg	78.0	390
100-01-6	4-Nitroaniline	U	390	ug/kg	117	390
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	390	ug/kg	78.0	390
122-66-7	Azobenzene	U	390	ug/kg	78.0	390
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	390	ug/kg	78.0	390
118-74-1	Hexachlorobenzene	U	390	ug/kg	78.0	390
85-01-8	Phenanthrene	U	39.0	ug/kg	11.7	39.0
120-12-7	Anthracene	U	39.0	ug/kg	7.80	39.0
84-74-2	Di-n-butylphthalate	U	390	ug/kg	78.0	390
206-44-0	Fluoranthene	U	39.0	ug/kg	11.7	39.0
85-68-7	Butylbenzylphthalate	U	390	ug/kg	78.0	390
56-55-3	Benzo(a)anthracene	U	39.0	ug/kg	11.7	39.0
91-94-1	3,3'-Dichlorobenzidine	U	390	ug/kg	117	390
218-01-9	Chrysene	U	39.0	ug/kg	11.7	39.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	390	ug/kg	78.0	390
117-84-0	Di-n-octylphthalate	U	390	ug/kg	78.0	390
205-99-2	Benzo(b)fluoranthene	U	39.0	ug/kg	11.7	39.0
207-08-9	Benzo(k)fluoranthene	U	39.0	ug/kg	11.7	39.0
50-32-8	Benzo(a)pyrene	U	39.0	ug/kg	11.7	39.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	39.0	ug/kg	11.7	39.0
53-70-3	Dibenzo(a,h)anthracene	U	39.0	ug/kg	11.7	39.0
191-24-2	Benzo(ghi)perylene	U	39.0	ug/kg	11.7	39.0
120-82-1	1,2,4-Trichlorobenzene	U	390	ug/kg	78.0	390

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.72	224	ug/kg		J
	Unknown	2.16	609	ug/kg		J

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

SDG Number:	10-1301	Date Collected:	01/13/2010 12:00	Matrix:	R
Lab Sample ID:	245099003	Date Received:	01/20/2010 08:45	%Moisture:	14.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-7191	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	944455	Inst:	MSD3.I	Dilution:	1
Run Date:	01/25/2010 14:37	Analyst:	JLD1	Inj. Vol:	.5 uL
Prep Date:	01/22/2010 23:39	Aliquot:	30.02 g	Final Volume:	1 mL
Data File:	s3a2512.d	Column:	J&W DB-5MS	Level:	LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	3.43	309	ug/kg		JA
83-46-5	.beta.-Sitosterol	17.73	398	ug/kg	92	NJ

Data File: /chem/MSD3.i/s012510.b/s3a2512.d
Report Date: 25-Jan-2010 15:13

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2512.d
Lab Smp Id: 245099003 Client Smp ID: RE15-10-7191
Inj Date : 25-JAN-2010 14:37
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099003|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	14.58450	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.839	4.841	(1.000)	411391	40.0000
* 29 Naphthalene-d8	136	6.123	6.126	(1.000)	1384482	40.0000
* 46 Acenaphthene-d10	164	7.996	8.003	(1.000)	595421	40.0000
* 67 Phenanthrene-d10	188	9.612	9.618	(1.000)	666195	40.0000
* 91 Chrysene-d12	240	12.639	12.650	(1.000)	544769	40.0000
* 98 Perylene-d12	264	14.988	14.999	(1.000)	383091	40.0000
\$ 3 2-Fluorophenol	112	3.663	3.653	(0.757)	496336	1810
\$ 5 Phenol-d5	99	4.434	4.436	(0.916)	571715	1660
\$ 20 Nitrobenzene-d5	82	5.375	5.384	(0.878)	279808	1070
\$ 39 2-Fluorobiphenyl	172	7.252	7.254	(0.907)	476661	1210
\$ 60 2,4,6-Tribromophenol	329	8.846	8.852	(1.106)	63970	1460
\$ 81 p-Terphenyl-d14	244	11.324	11.326	(0.896)	250091	1040

ION RATIO REPORT

SV REPORT

Data file: s3a2512.d

Report Date: 01/25/2010 15:10

Lab. ID: 245099003

SampleType: SAMPLE

Injection Date: 25-JAN-2010 14:37

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099003|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	32028	4.43	4.53	80-120	100	(T)
93	2009	4.50	4.53	206-266	6	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	40672	5.38	5.21	80-120	100	(T)
42	25637	5.38	5.21	45-105	63	(T)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	77580	8.00	7.76	80-120	100	(T)
63	1341	8.00	7.76	37- 97	2	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	77580	8.00	8.19	80-120	100	(T)
89	1067	8.00	8.19	42-102	1	(QT)
63	1341	8.00	8.19	21- 81	2	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2512.d
 Lab Smp Id: 245099003 Client Smp ID: RE15-10-7191
 Inj Date : 25-JAN-2010 14:37
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099003|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270_S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	14.58450	% moisture

Cpnd Variable Local Compound Variable

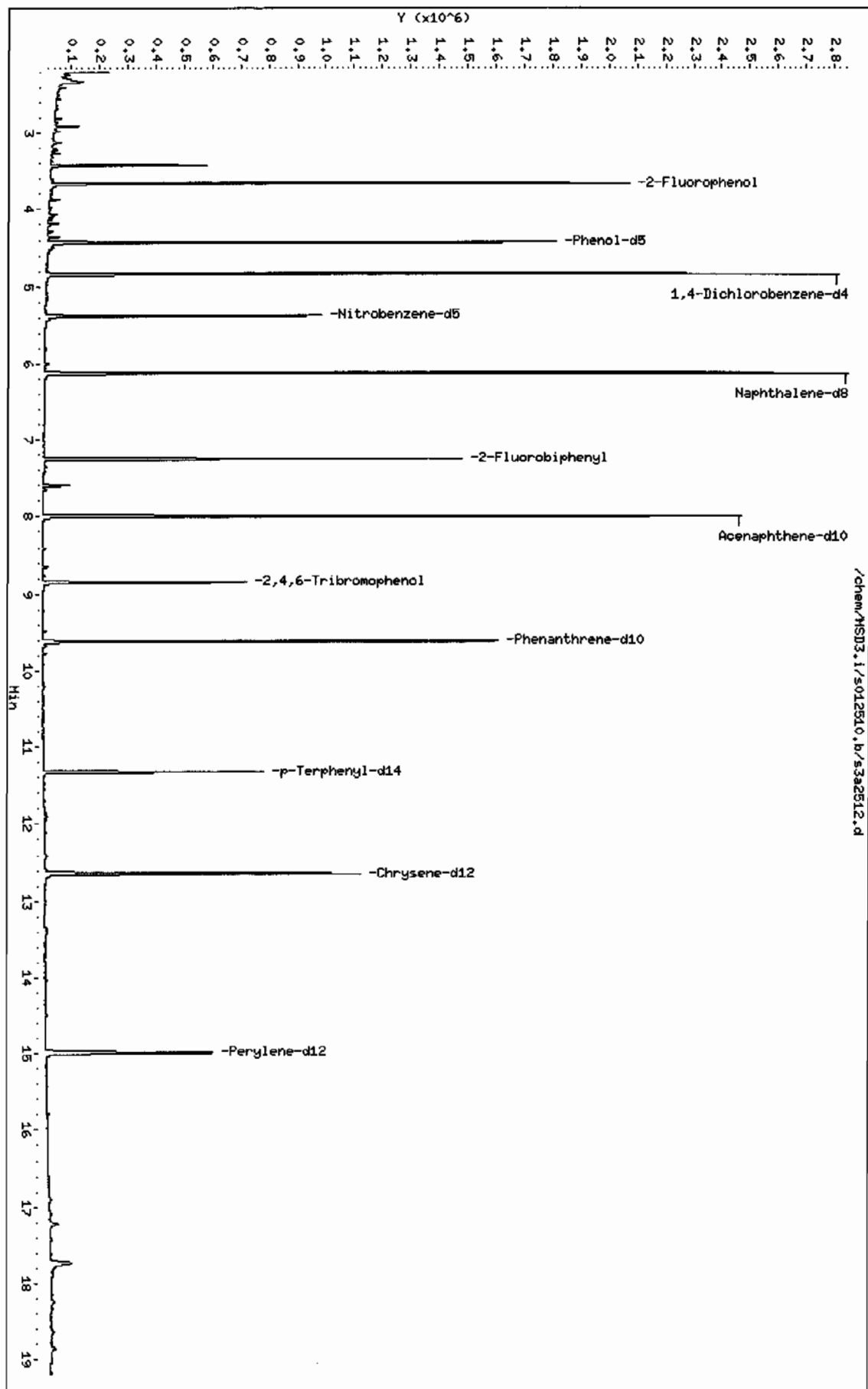
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.839	2602759	40.000
* 98 Perylene-d12	14.988	1107371	40.000

RT	AREA	CONCENTRATIONS		QUAL	QUANT		
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
1.721	373776	5.74430120	224	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown				CAS #:			
2.156	1016736	15.6255044	609	0		0	10
Unknown Aldol Condensate				CAS #:			
3.425	515671	7.92499293	309	0		0	10
.beta.-Sitosterol				CAS #: 83-46-5			
17.727	282791	10.2148761	398	92	NIST05.L	174400	98

Data File: /chem/HSD3.1/s012510.b/s3a2512.d
Date: 25-JAN-2010 14:37
Client ID: RE15-10-7191
Sample Info: 12450900319445511/SWHF11.LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: HSD3.1
Operator: JLD1
Column diameter: 0.20



Date : 25-JAN-2010 14:37

Client ID: RE15-10-7191

Instrument: MSD3.i

Sample Info: 12450990031944455111SVMF111LANL

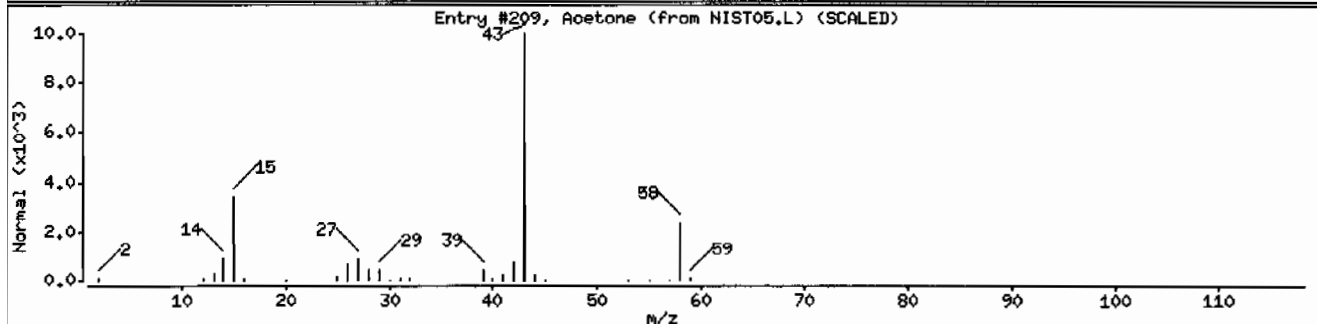
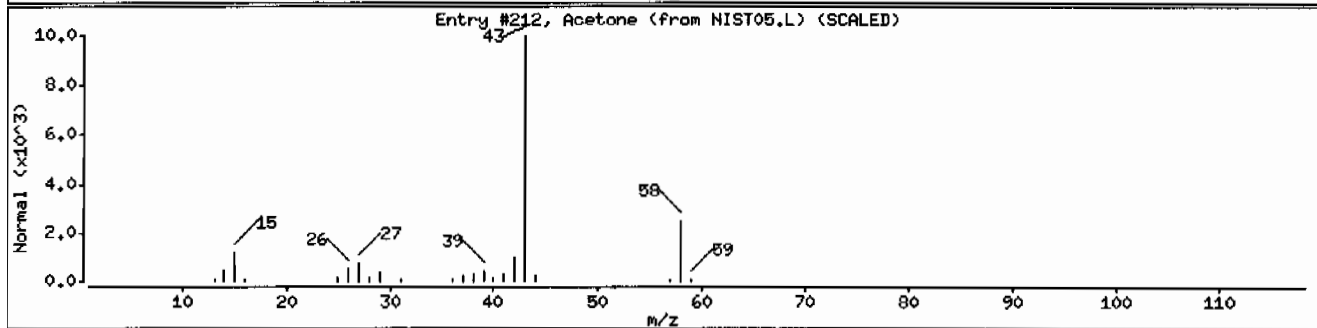
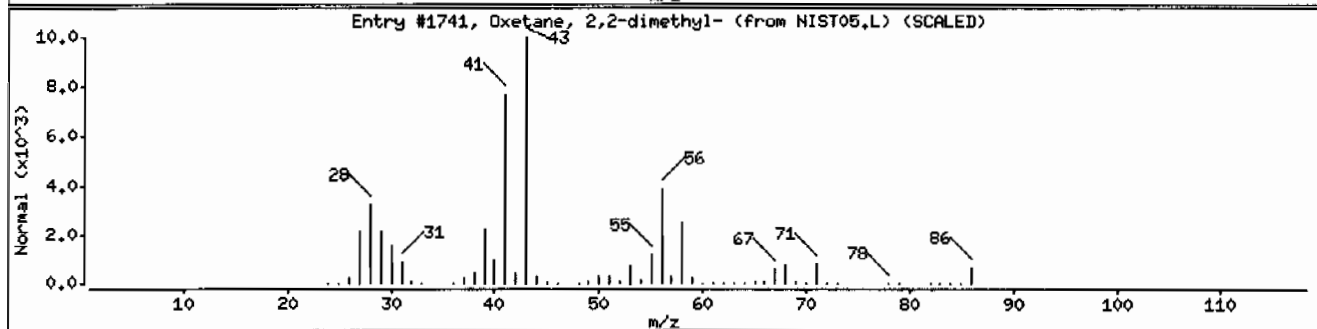
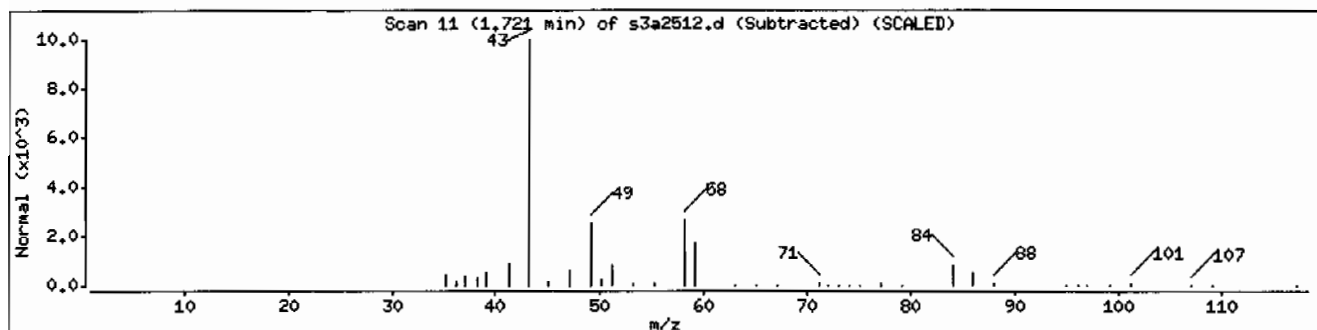
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Oxetane, 2,2-dimethyl-	6245-99-4	NIST05.L	1741	8	C5H10O	86
Acetone	67-64-1	NIST05.L	212	5	C3H6O	58
Acetone	67-64-1	NIST05.L	209	5	C3H6O	58



Date : 25-JAN-2010 14:37

Client ID: RE15-10-7191

Instrument: MSD3.i

Sample Info: 1245099003194445511SVHF11ILANL

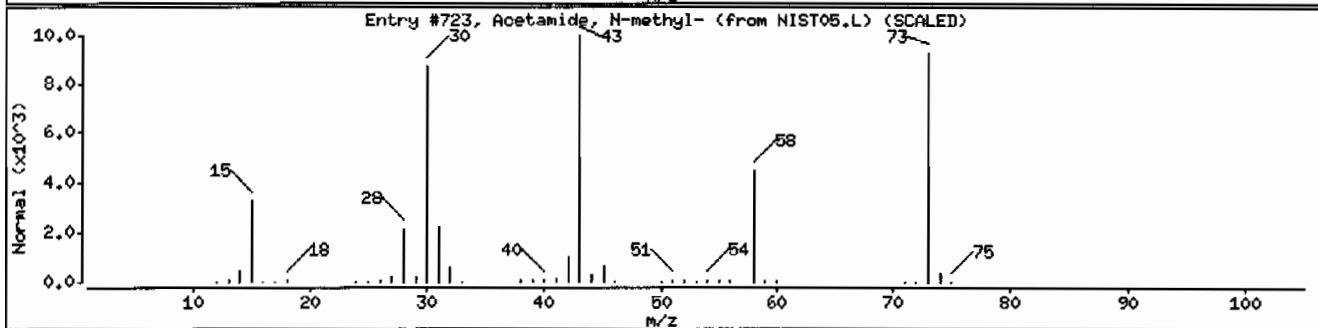
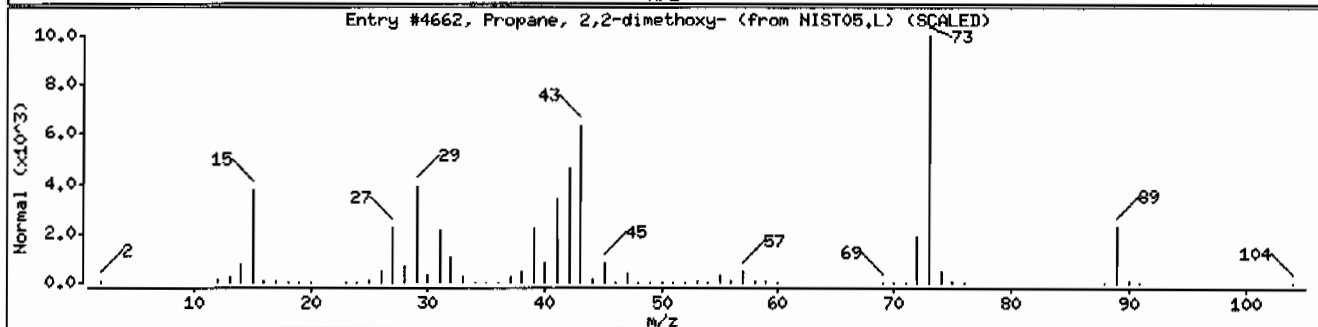
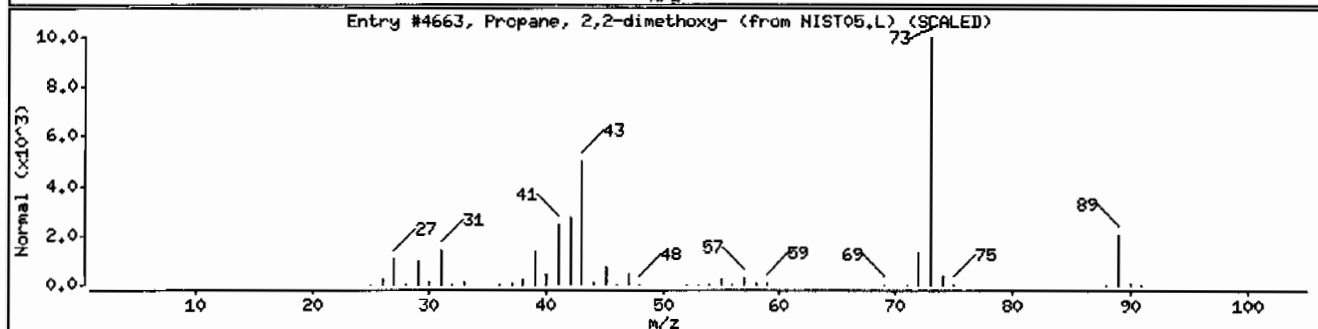
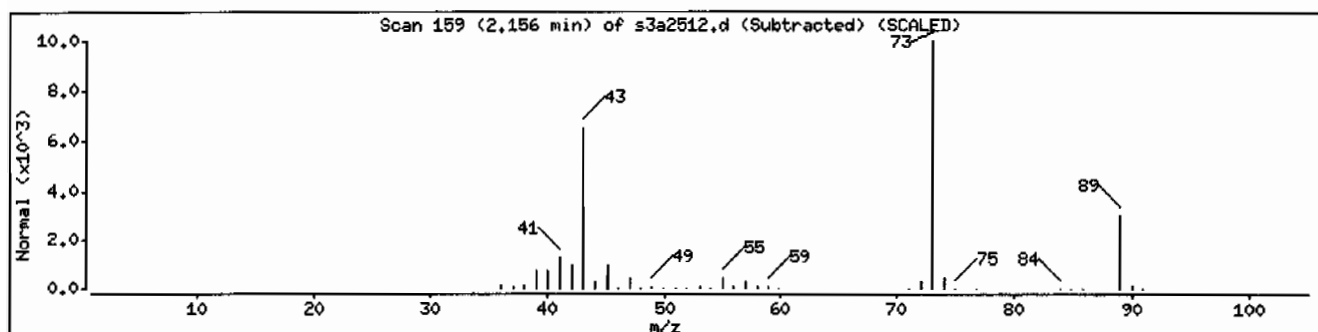
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	28	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	25	C3H7NO	73



Date : 25-JAN-2010 14:37

Client ID: RE15-10-7191

Instrument: MSD3.i

Sample Info: 1245099003194445511SVHF111LANL

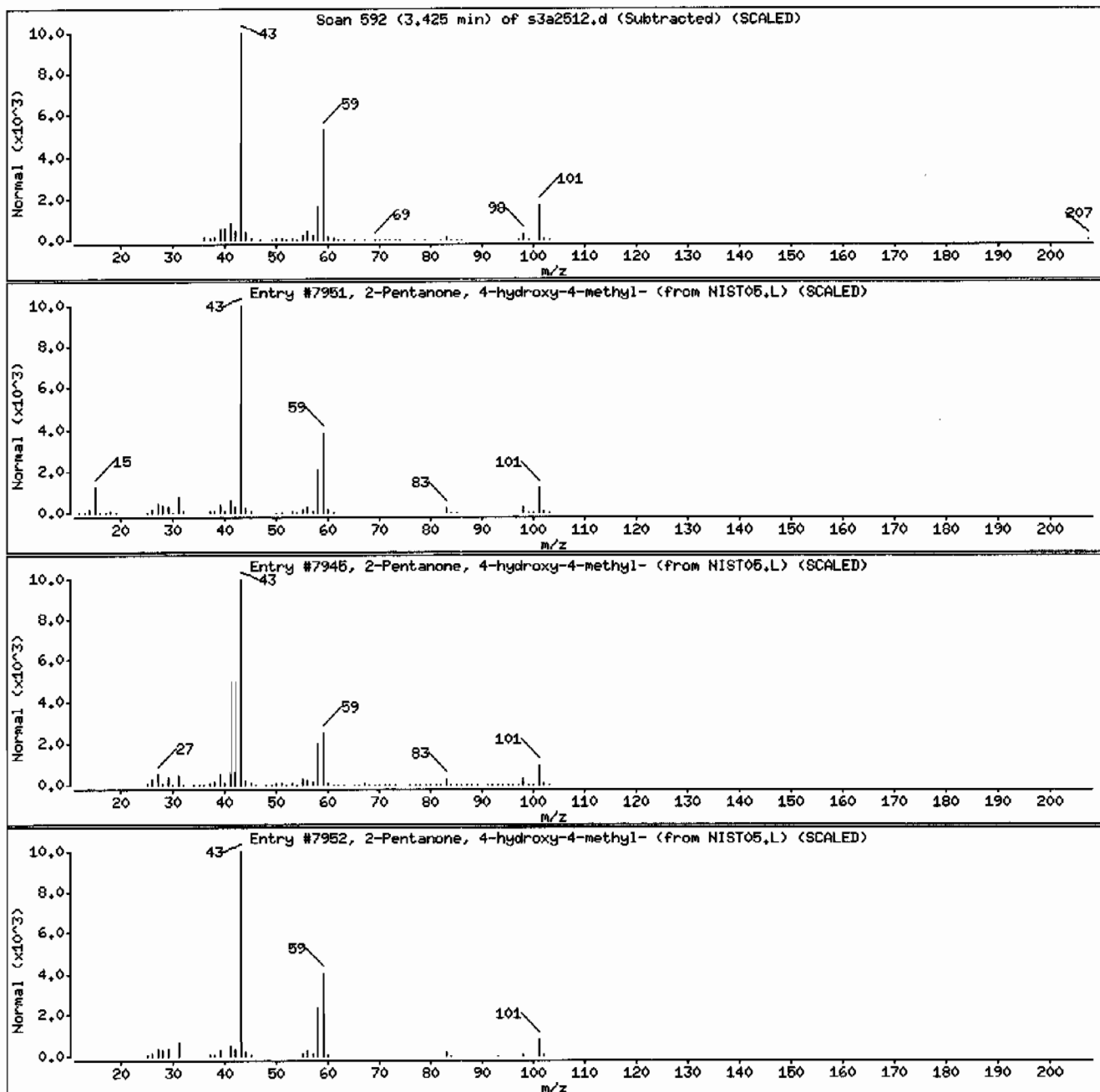
Volume Injected (uL): 0.5

Operator: JLD1

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	7945	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116



Date : 25-JAN-2010 14:37

Client ID: RE15-10-7191

Instrument: MSD3.i

Sample Info: 1245099003194445511SVMF111LANL

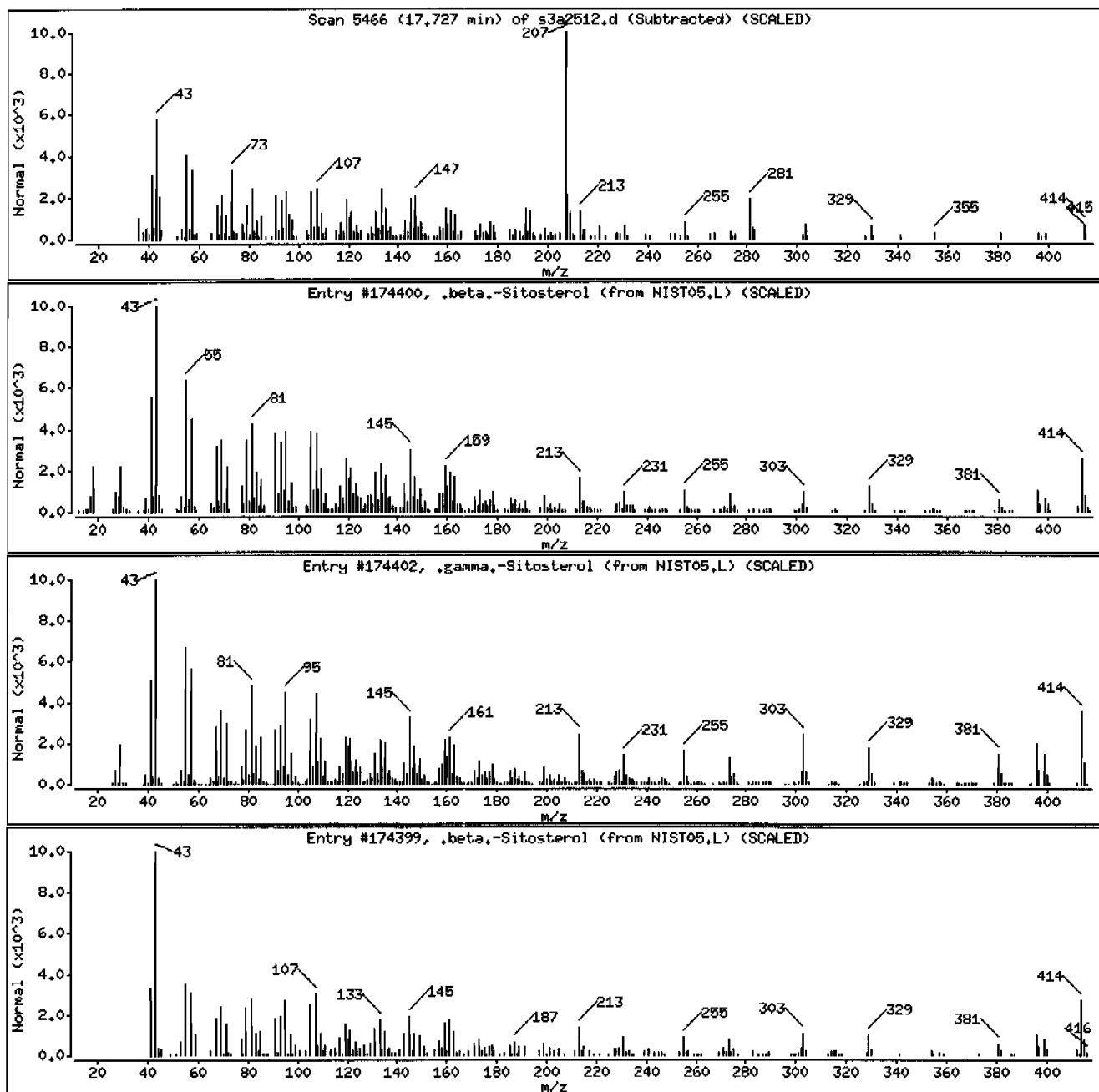
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	92	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	90	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	45	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1301
Lab Sample ID: 245099014

Client ID: RE15-10-7192
Batch ID: 944455
Run Date: 01/27/2010 13:43
Prep Date: 01/22/2010 23:39
Data File: s3a2712.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.1
Analyst: JLD1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 34.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	505	ug/kg	101	505
108-95-2	Phenol	U	505	ug/kg	101	505
95-57-8	2-Chlorophenol	U	505	ug/kg	101	505
106-46-7	1,4-Dichlorobenzene	U	505	ug/kg	101	505
621-64-7	N-Nitrosodipropylamine	U	505	ug/kg	101	505
59-50-7	4-Chloro-3-methylphenol	U	505	ug/kg	101	505
83-32-9	Acenaphthene	U	50.5	ug/kg	16.7	50.5
121-14-2	2,4-Dinitrotoluene	U	505	ug/kg	50.5	505
100-02-7	4-Nitrophenol	U	505	ug/kg	167	505
87-86-5	Pentachlorophenol	U	505	ug/kg	126	505
129-00-0	Pyrene	U	50.5	ug/kg	15.1	50.5
110-86-1	Pyridine	U	505	ug/kg	101	505
62-53-3	Aniline	U	505	ug/kg	151	505
111-44-4	bis(2-Chloroethyl) ether	U	505	ug/kg	101	505
541-73-1	1,3-Dichlorobenzene	U	505	ug/kg	101	505
100-51-6	Benzyl alcohol	U	505	ug/kg	151	505
95-50-1	1,2-Dichlorobenzene	U	505	ug/kg	101	505
108-60-1	bis(2-Chloroisopropyl)ether	U	505	ug/kg	101	505
95-48-7	o-Cresol	U	505	ug/kg	101	505
65794-96-9	m,p-Cresols	U	505	ug/kg	151	505
67-72-1	Hexachloroethane	U	505	ug/kg	101	505
98-95-3	Nitrobenzene	U	505	ug/kg	101	505
78-59-1	Isophorone	U	505	ug/kg	101	505
88-75-5	2-Nitrophenol	U	505	ug/kg	101	505
105-67-9	2,4-Dimethylphenol	U	505	ug/kg	177	505
111-91-1	bis(2-Chloroethoxy)methane	U	505	ug/kg	101	505
120-83-2	2,4-Dichlorophenol	U	505	ug/kg	101	505
65-85-0	Benzoic acid	U	1010	ug/kg	252	1010
91-20-3	Naphthalene	U	50.5	ug/kg	15.1	50.5
106-47-8	4-Chloroaniline	U	505	ug/kg	101	505
87-68-3	Hexachlorobutadiene	U	505	ug/kg	101	505
91-57-6	2-Methylnaphthalene	U	50.5	ug/kg	10.1	50.5
77-47-4	Hexachlorocyclopentadiene	U	505	ug/kg	101	505
88-06-2	2,4,6-Trichlorophenol	U	505	ug/kg	101	505
95-95-4	2,4,5-Trichlorophenol	U	505	ug/kg	101	505
91-58-7	2-Chloronaphthalene	U	50.5	ug/kg	16.7	50.5
88-74-4	2-Nitroaniline	U	505	ug/kg	101	505
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	505	ug/kg	101	505

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

SDG Number: 10-1301
Lab Sample ID: 245099014

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.18 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 34.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	505	ug/kg	101	505
606-20-2	2,6-Dinitrotoluene	U	505	ug/kg	50.5	505
208-96-8	Acenaphthylene	U	50.5	ug/kg	15.1	50.5
51-28-5	2,4-Dinitrophenol	U	1010	ug/kg	192	1010
132-64-9	Dibenzofuran	U	505	ug/kg	101	505
84-66-2	Diethylphthalate	U	505	ug/kg	101	505
86-73-7	Fluorene	U	50.5	ug/kg	15.1	50.5
7005-72-3	4-Chlorophenylphenylether	U	505	ug/kg	101	505
534-52-1	2-Methyl-4,6-dinitrophenol	U	505	ug/kg	101	505
100-01-6	4-Nitroaniline	U	505	ug/kg	151	505
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	505	ug/kg	101	505
122-66-7	Azobenzene	U	505	ug/kg	101	505
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	505	ug/kg	101	505
118-74-1	Hexachlorobenzene	U	505	ug/kg	101	505
85-01-8	Phenanthrene	U	50.5	ug/kg	15.1	50.5
120-12-7	Anthracene	U	50.5	ug/kg	10.1	50.5
84-74-2	Di-n-butylphthalate	U	505	ug/kg	101	505
206-44-0	Fluoranthene	U	50.5	ug/kg	15.1	50.5
85-68-7	Butylbenzylphthalate	U	505	ug/kg	101	505
56-55-3	Benzo(a)anthracene	U	50.5	ug/kg	15.1	50.5
91-94-1	3,3'-Dichlorobenzidine	U	505	ug/kg	151	505
218-01-9	Chrysene	U	50.5	ug/kg	15.1	50.5
117-81-7	bis(2-Ethylhexyl)phthalate	U	505	ug/kg	101	505
117-84-0	Di-n-octylphthalate	U	505	ug/kg	101	505
205-99-2	Benzo(b)fluoranthene	U	50.5	ug/kg	15.1	50.5
207-08-9	Benzo(k)fluoranthene	U	50.5	ug/kg	15.1	50.5
50-32-8	Benzo(a)pyrene	U	50.5	ug/kg	15.1	50.5
193-39-5	Indeno(1,2,3-cd)pyrene	U	50.5	ug/kg	15.1	50.5
53-70-3	Dibenzo(a,h)anthracene	U	50.5	ug/kg	15.1	50.5
191-24-2	Benzo(ghi)perylene	U	50.5	ug/kg	15.1	50.5
120-82-1	1,2,4-Trichlorobenzene	U	505	ug/kg	101	505

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.29	281	ug/kg		J
	Unknown Aldol Condensate	3.4	641	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099014	Date Received: 01/20/2010 08:45	%Moisture: 34.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7192	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.1	Dilution: 1
Run Date: 01/27/2010 13:43	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.18 g	Final Volume: 1 mL
Data File: s3a2712.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
	Unknown	11.92	220	ug/kg		J
	Unknown	15.06	1810	ug/kg		J
	Unknown	15.94	1560	ug/kg		J
83-46-5	.beta.-Sitosterol	17.64	439	ug/kg	90	NJ
	Unknown	18.14	267	ug/kg		J

Data File: /chem/MSD3.i/s012710.b/s3a2712.d
Report Date: 27-Jan-2010 15:41

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2712.d
Lab Smp Id: 245099014 Client Smp ID: RE15-10-7192
Inj Date : 27-JAN-2010 13:43
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099014|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	34.38160	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.814	4.817	(1.000)	247055	40.0000	
* 29 Naphthalene-d8	136	6.096	6.100	(1.000)	981631	40.0000	
* 46 Acenaphthene-d10	164	7.969	7.973	(1.000)	570992	40.0000	
* 67 Phenanthrene-d10	188	9.588	9.588	(1.000)	979611	40.0000	
* 91 Chrysene-d12	240	12.605	12.610	(1.000)	667913	40.0000	
* 98 Perylene-d12	264	14.940	14.945	(1.000)	312206	40.0000	
\$ 3 2-Fluorophenol	112	3.639	3.633	(0.756)	336391	52.3266	2640
\$ 5 Phenol-d5	99	4.416	4.418	(0.917)	418310	51.7744	2610
\$ 20 Nitrobenzene-d5	82	5.351	5.357	(0.878)	188343	25.9741	1310
\$ 39 2-Fluorobiphenyl	172	7.224	7.227	(0.907)	429283	29.0863	1470
\$ 60 2,4,6-Tribromophenol	329	8.823	8.825	(1.107)	118253	72.2431	3650
\$ 81 p-Terphenyl-d14	244	11.298	11.297	(0.896)	516912	45.0265	2270

ION RATIO REPORT

SV REPORT

Data file: s3a2712.d

Report Date: 01/27/2010 14:16

Lab. ID: 245099014

SampleType: SAMPLE

Injection Date: 27-JAN-2010 13:43

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099014|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	24455	4.42	4.50	80-120	100	(T)
93	617	4.48	4.50	205-265	3	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	27273	5.35	5.19	80-120	100	(T)
42	17986	5.35	5.19	43-103	66	(T)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	74565	7.97	7.73	80-120	100	(T)
63	1039	7.97	7.73	35- 95	1	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	74565	7.97	8.16	80-120	100	(T)
89	1501	7.97	8.16	42-102	2	(QT)
63	1039	7.97	8.16	20- 80	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2712.d
Lab Smp Id: 245099014 Client Smp ID: RE15-10-7192
Inj Date : 27-JAN-2010 13:43
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099014|944455|1|SVMF|1|LANL
Misc Info : |MSD8270 S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.18000	weight of sample
M	34.38160	% moisture

Cpnd Variable Local Compound Variable

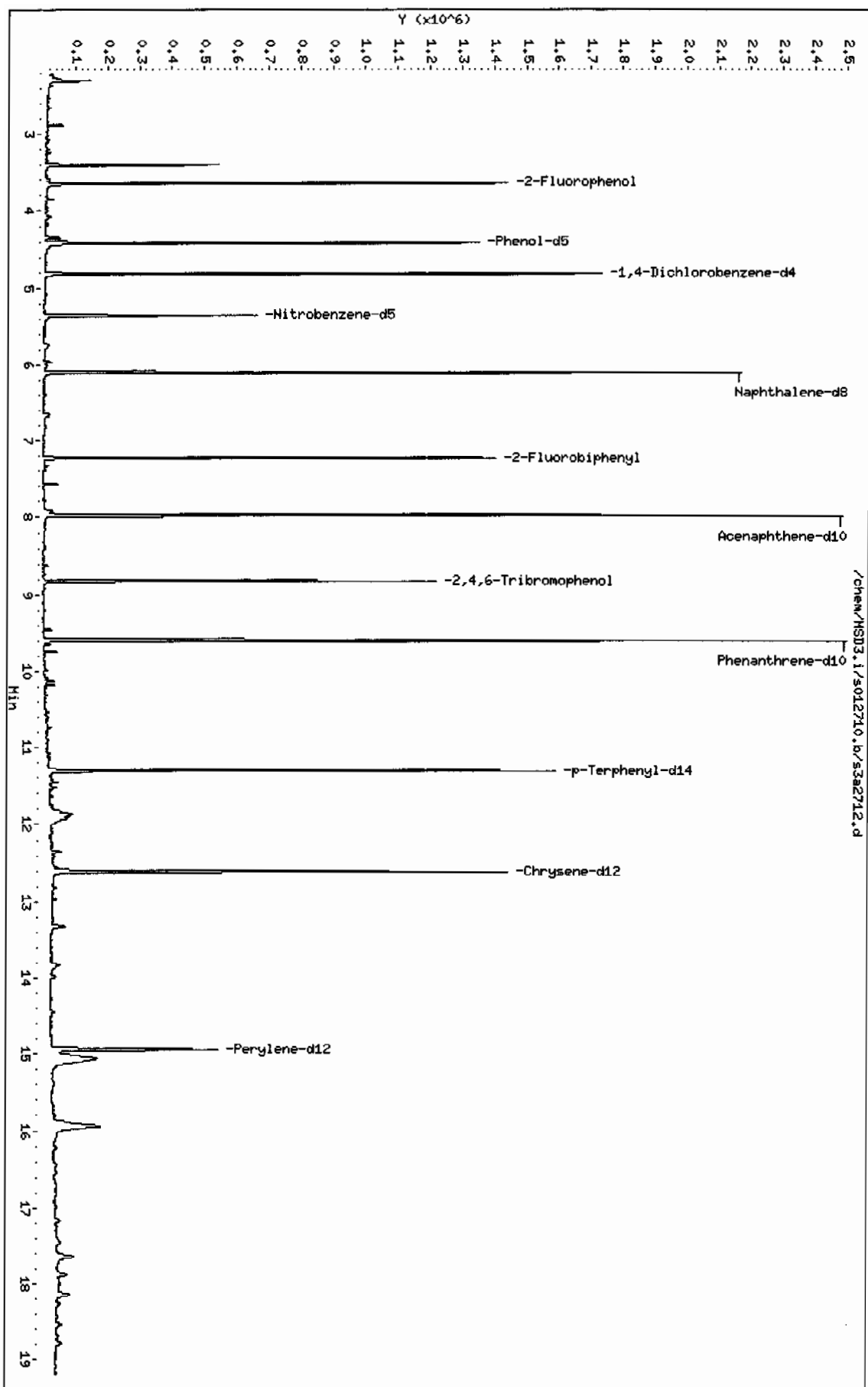
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.814	1569148	40.000
* 91 Chrysene-d12	12.605	1804642	40.000
* 98 Perylene-d12	14.940	896880	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.293	218440	5.56836888	281	0		0	10
Unknown Aldol Condensate				CAS #:			
3.398	497675	12.6864951	641	0		0	10
Unknown				CAS #:			
11.922	196549	4.35651635	220	0		0	91
Unknown				CAS #:			
15.058	805165	35.9096101	1810	0		0	98
Unknown				CAS #:			
15.944	693090	30.9111351	1560	0		0	98
.beta.-Sitosterol				CAS #: 83-46-5			
17.638	195099	8.70124839	439	90	NIST05.L	174400	98
Unknown				CAS #:			
18.142	118755	5.29634134	267	0		0	98

Data File: /chem/MSD3.1/s012710.b/s3a2712.d
 Date : 27-JAN-2010 13:43
 Client ID: RE15-10-7192
 Sample Info: 124509014194445511SWH111LANL
 Volume Injected (uL): 0.5
 Column phase: 3uM DB-SHS

Instrument: MSD3.1
 Operator: JLD1
 Column diameter: 0.20



Data File: /chem/MSD3.i/s012710.b/s3a2712.d

Page 1

Date : 27-JAN-2010 13:43

Client ID: RE15-10-7192

Instrument: MSD3.i

Sample Info: I245099014194445511SVHF11ILANL

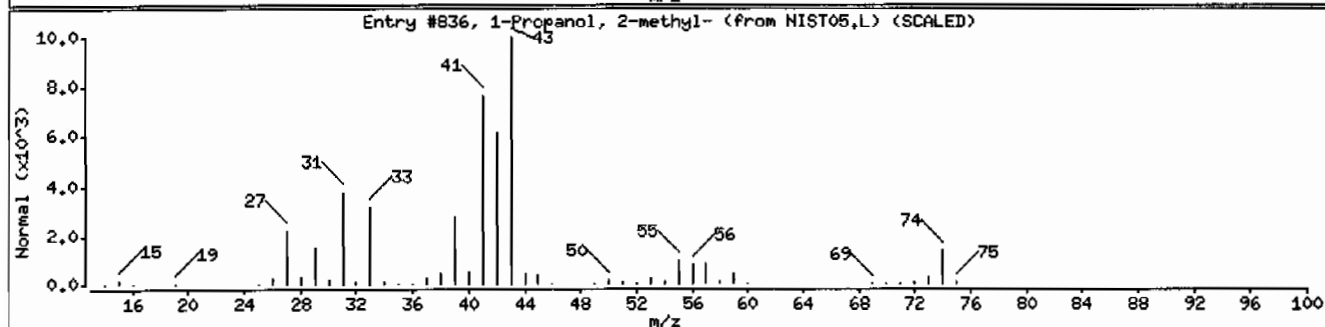
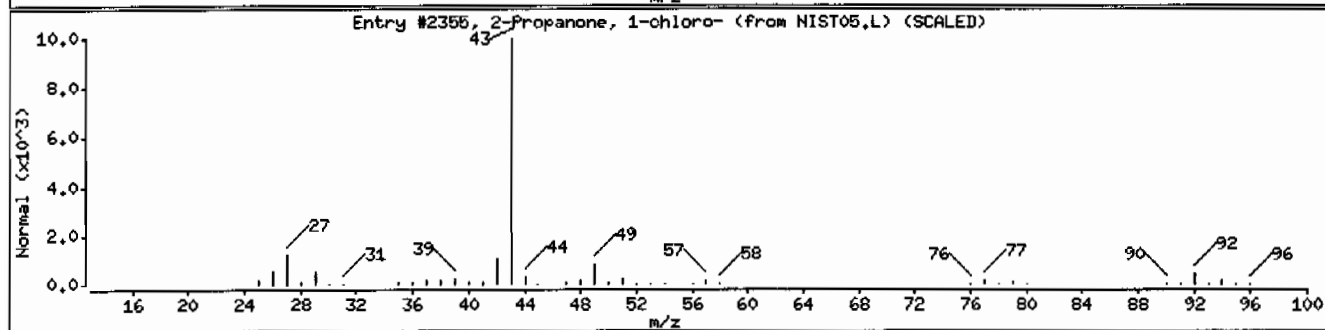
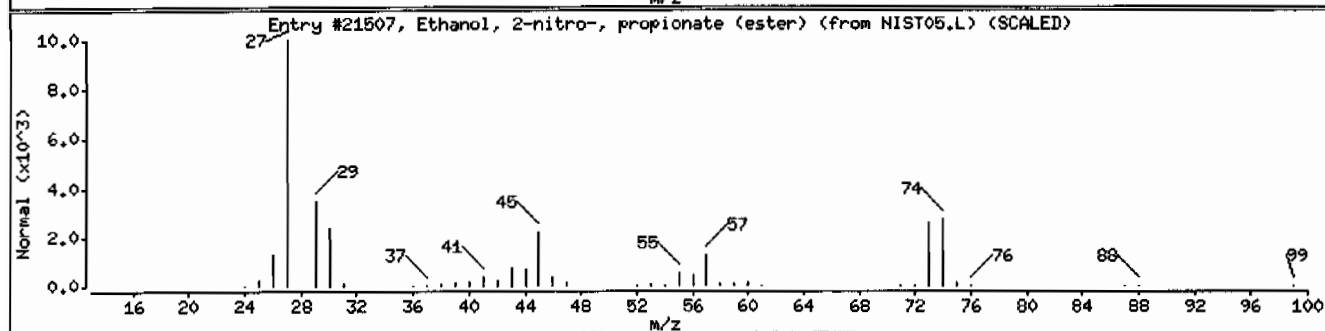
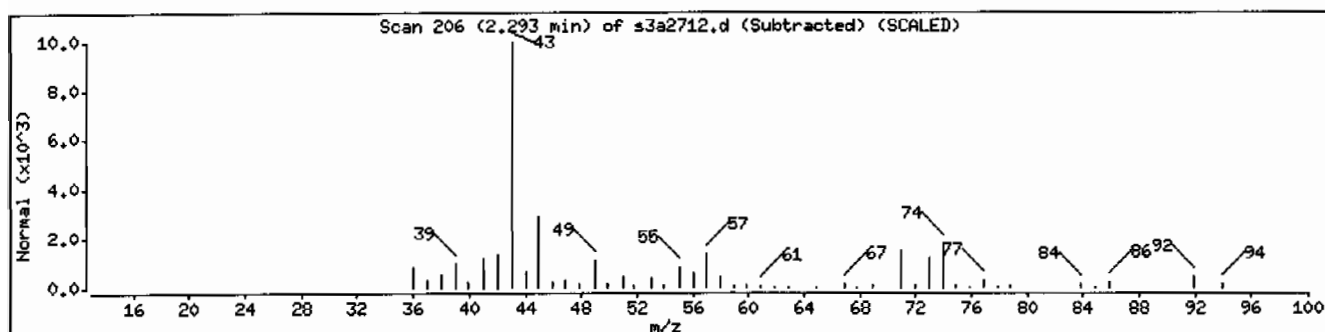
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanol, 2-nitro-, propionate (ester)	5390-28-3	NIST05.L	21507	25	C5H9NO4	147
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2355	11	C3H5ClO	92
1-Propanol, 2-methyl-	78-83-1	NIST05.L	836	9	C4H10O	74



Date : 27-JAN-2010 13:43

Client ID: RE15-10-7192

Instrument: MSD3.1

Sample Info: 1245099014194445511SVMF111LANL

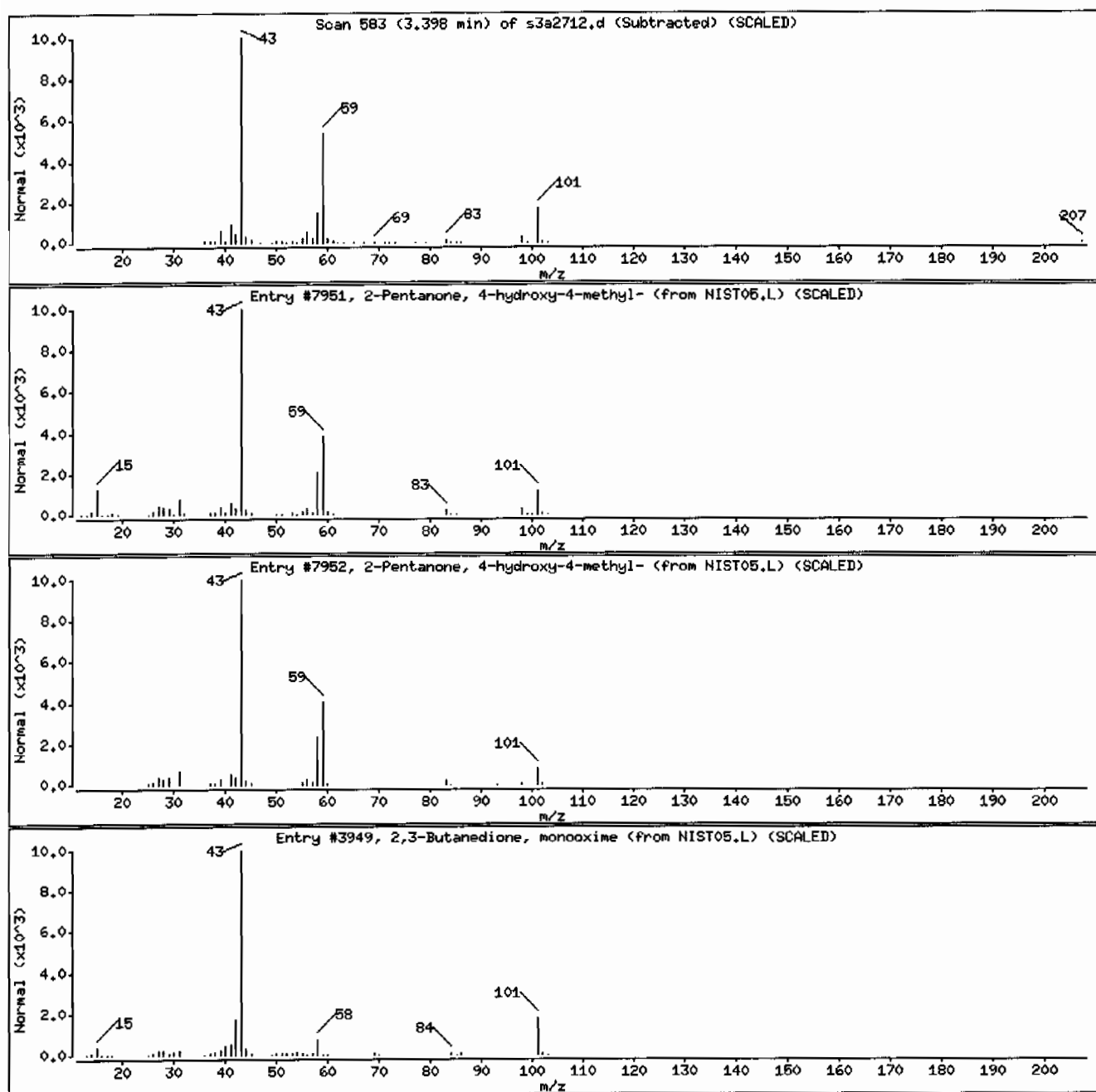
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101



Date : 27-JAN-2010 13:43

Client ID: RE15-10-7192

Instrument: MSD3.i

Sample Info: I245099014194445511SVHF111LANL

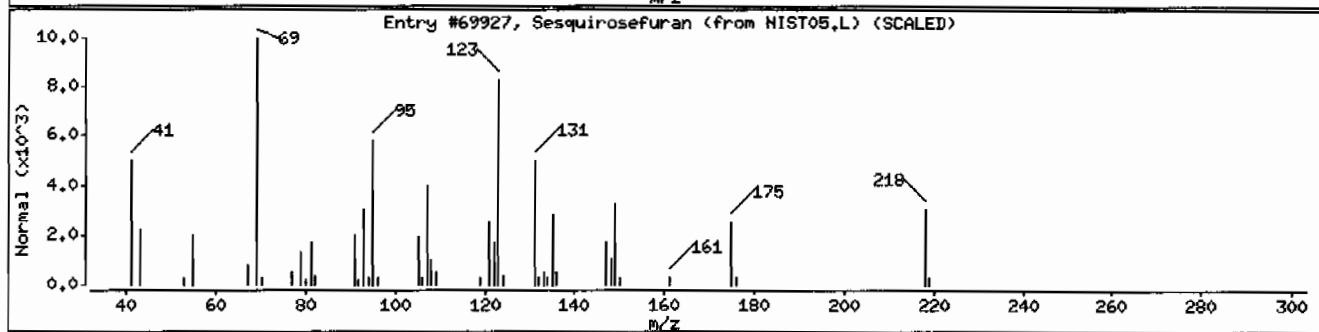
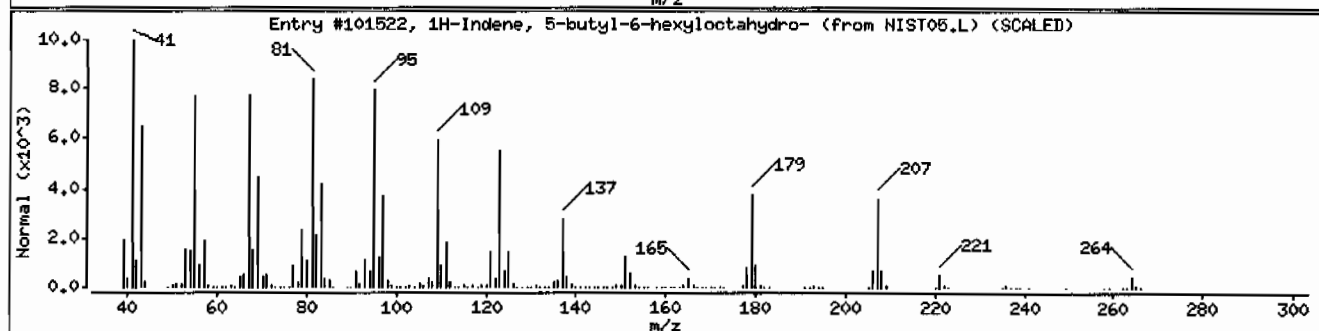
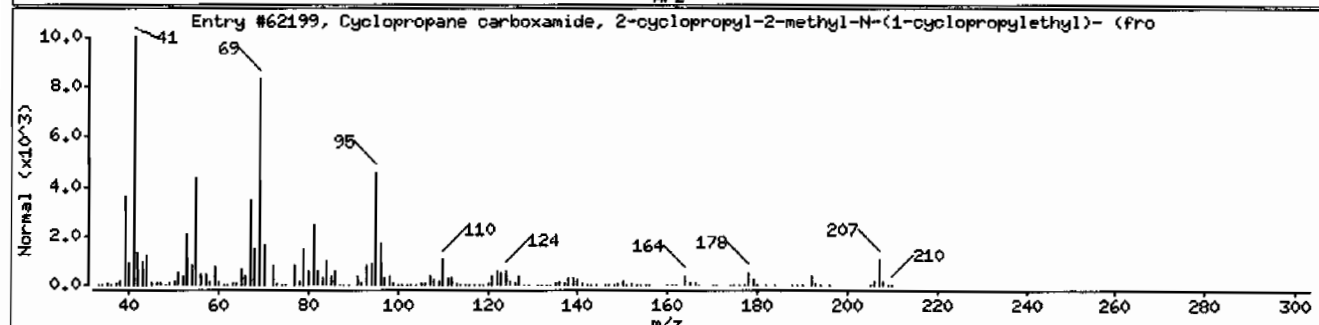
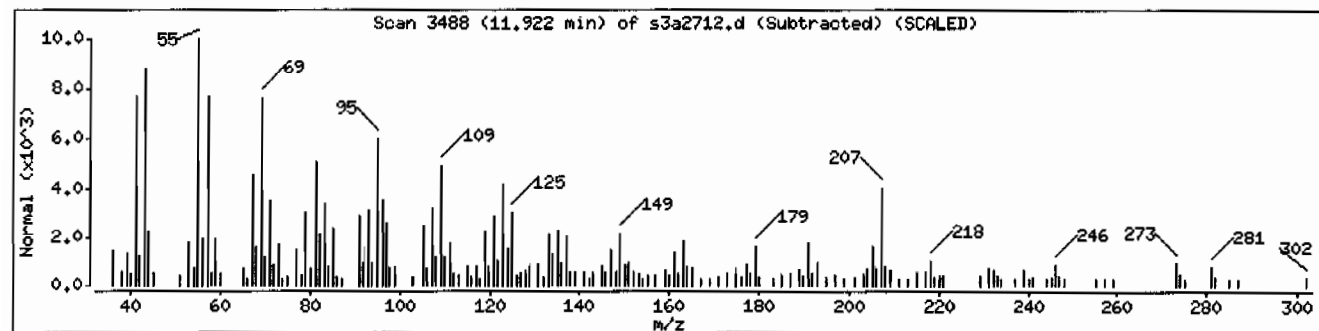
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-6MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopropane carboxamide, 2-cyclopropyl-	331416-19-4	NIST05.L	62199	64	C13H21NO	207
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	46	C19H36	264
Sesquirosefuran	39007-93-7	NIST05.L	69927	43	C15H22O	218



Date : 27-JAN-2010 13:43

Client ID: RE15-10-7192

Instrument: MSD3.i

Sample Info: I245099014/94445511/SVMFI11LANL

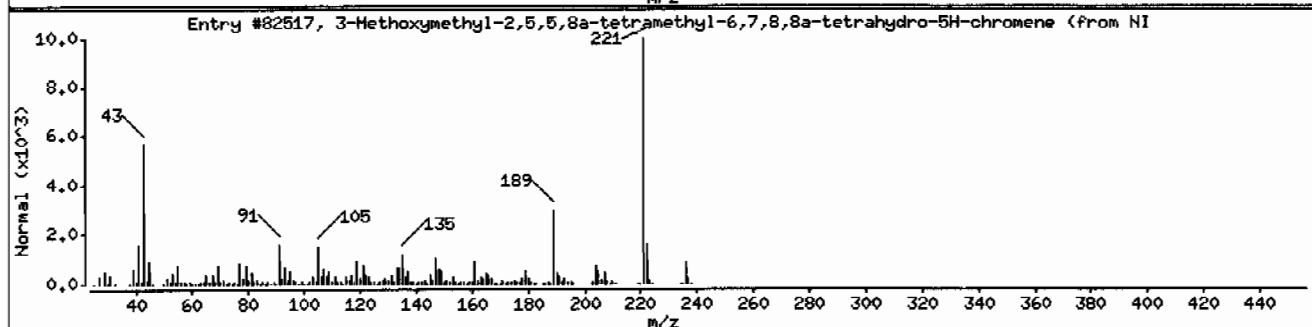
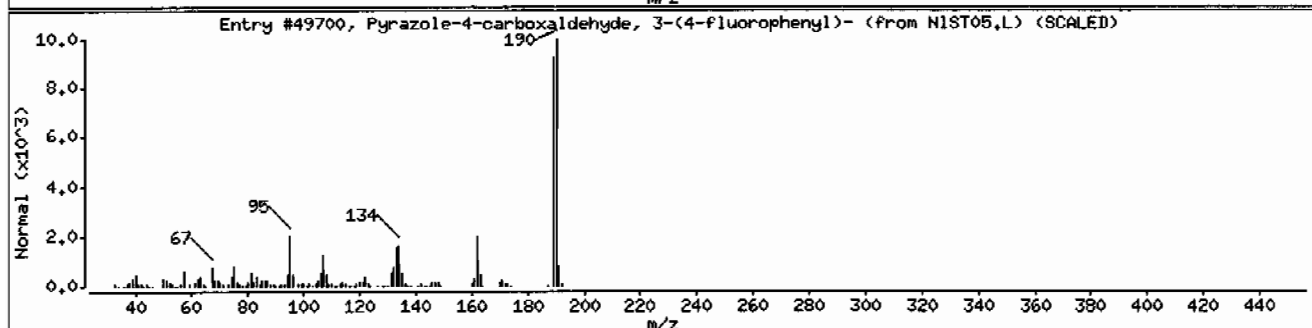
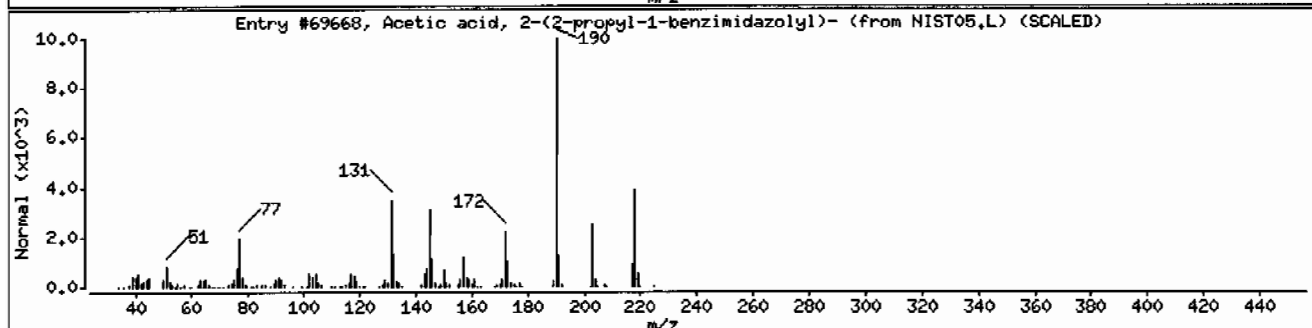
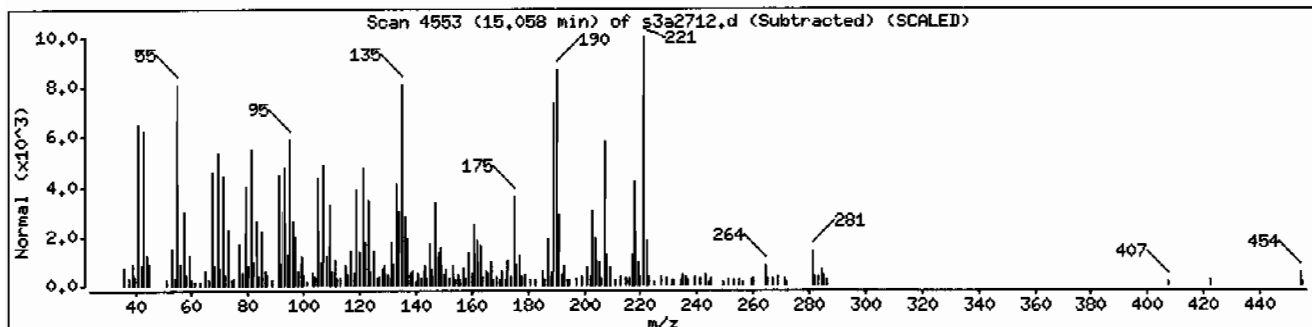
Volume Injected (uL): 0.5

Operator: JLD1

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-(2-propyl-1-benzimidazolyl	331736-92-6	NIST05.L	69668	46	C12H14N2O2	218
Pyrazole-4-carboxaldehyde, 3-(4-fluoroph	306936-57-2	NIST05.L	49700	43	C10H7FN2O	190
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	25	C15H24O2	236



Date : 27-JAN-2010 13:43

Client ID: RE15-10-7192

Instrument: HSD3.i

Sample Info: 1245099014194445511SVHF111LANL

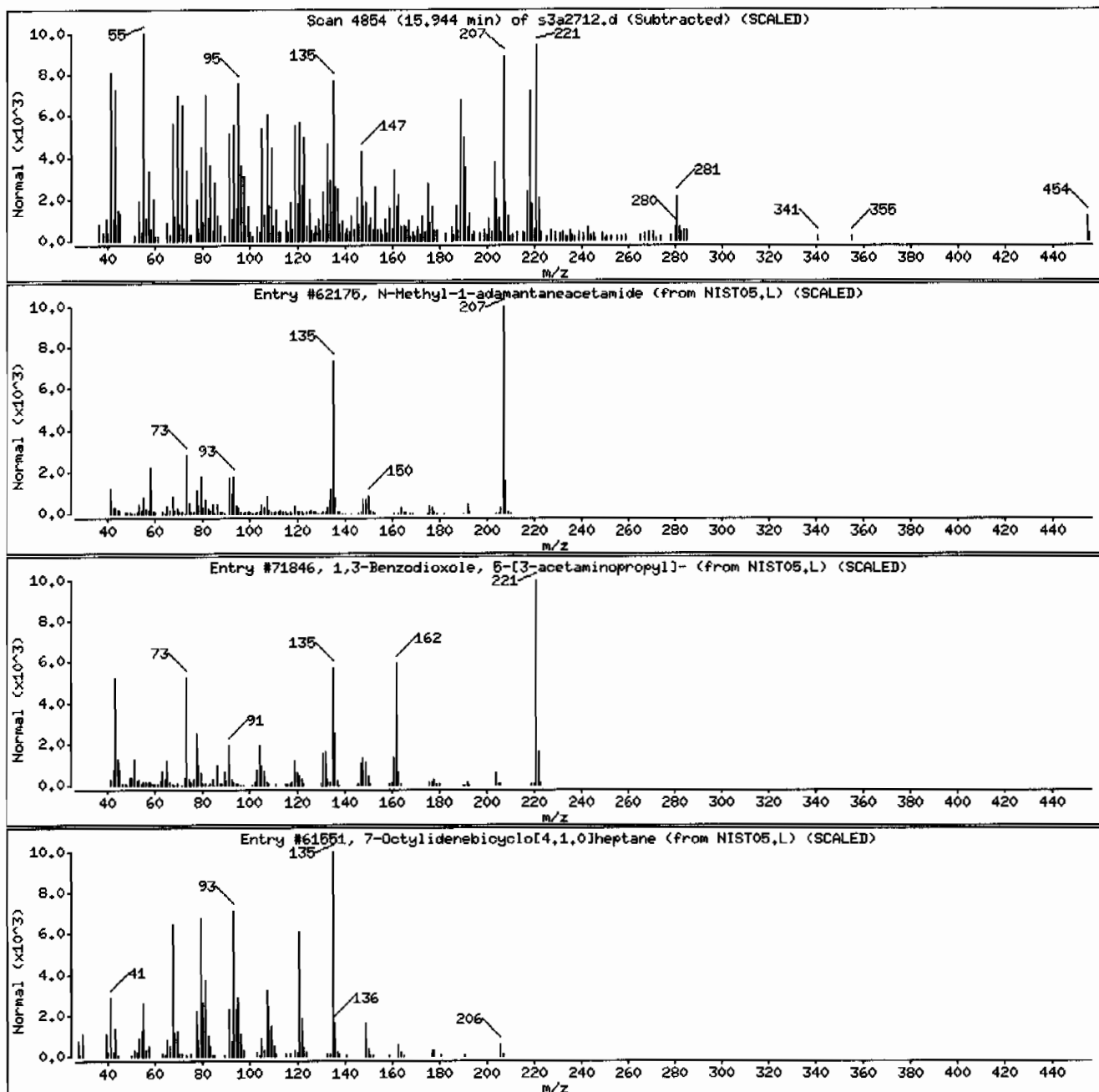
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	35	C13H21NO	207
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C12H15NO3	221
7-Octylidenebicyclo[4,1,0]heptane	82253-11-0	NIST05.L	61551	25	C15H26	206



Date : 27-JAN-2010 13:43

Client ID: RE15-10-7192

Instrument: MSD3.i

Sample Info: 12450990141944455111SVMF111LANL

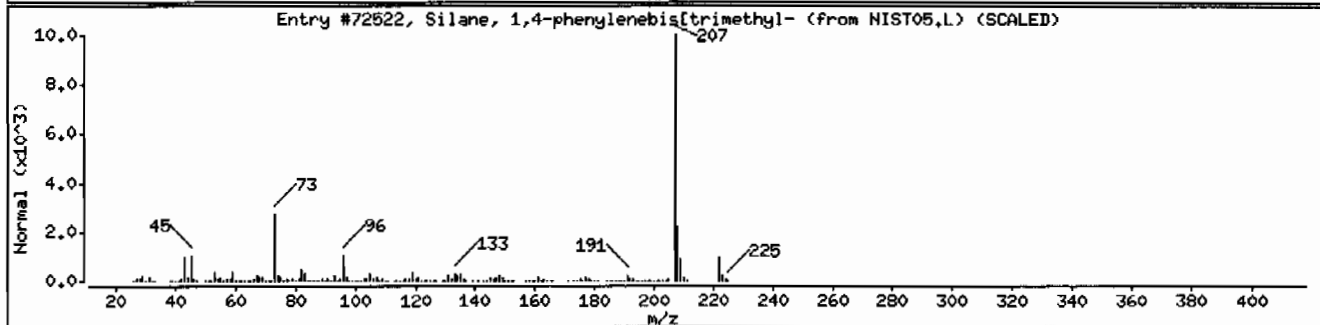
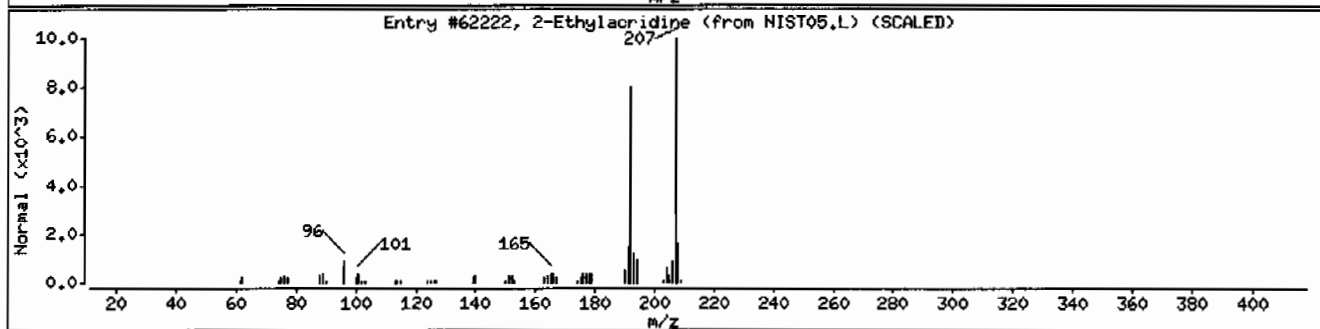
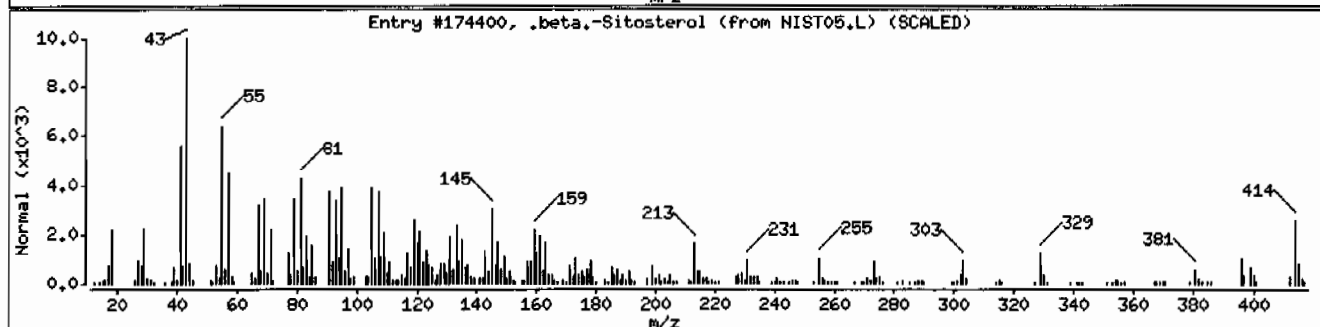
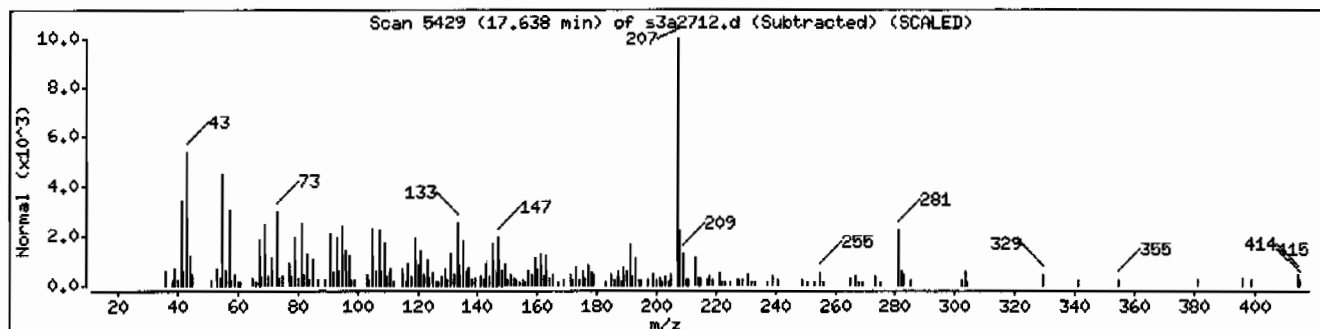
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	90	C ₂₉ H ₅₀ O	414
2-Ethylacridine	55751-83-2	NIST05.L	62222	42	C ₁₅ H ₁₃ N	207
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	38	C ₁₂ H ₂₂ Si ₂	222



Date : 27-JAN-2010 13:43

Client ID: RE15-10-7192

Instrument: MSD3.i

Sample Info: 1245099014194445511SVHF11ILANL

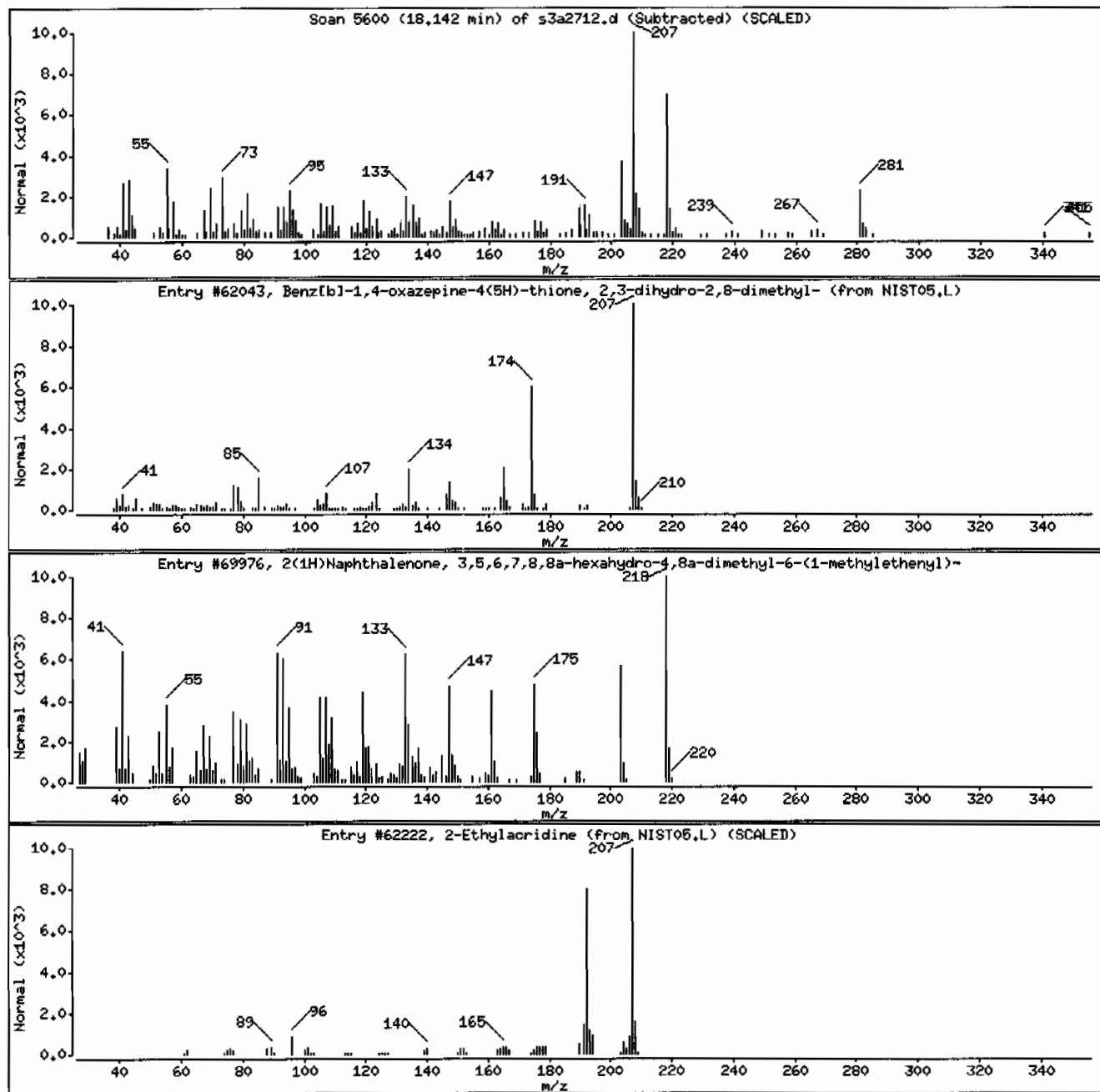
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benz[bl]-1,4-oxazepine-4(5H)-thione, 2,3-	1000258-63-4	NIST05.L	62043	42	C11H13NOS	207
2(1H)Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	38	C15H22O	218
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C15H13N	207



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

SDG Number: 10-1301
Lab Sample ID: 245099007

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 19
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	410	ug/kg	82.0	410
108-95-2	Phenol	U	410	ug/kg	82.0	410
95-57-8	2-Chlorophenol	U	410	ug/kg	82.0	410
106-46-7	1,4-Dichlorobenzene	U	410	ug/kg	82.0	410
621-64-7	N-Nitrosodipropylamine	U	410	ug/kg	82.0	410
59-50-7	4-Chloro-3-methylphenol	U	410	ug/kg	82.0	410
83-32-9	Acenaphthene	U	41.0	ug/kg	13.5	41.0
121-14-2	2,4-Dinitrotoluene	U	410	ug/kg	41.0	410
100-02-7	4-Nitrophenol	U	410	ug/kg	135	410
87-86-5	Pentachlorophenol	U	410	ug/kg	102	410
129-00-0	Pyrene	U	41.0	ug/kg	12.3	41.0
110-86-1	Pyridine	U	410	ug/kg	82.0	410
62-53-3	Aniline	U	410	ug/kg	123	410
111-44-4	bis(2-Chloroethyl) ether	U	410	ug/kg	82.0	410
541-73-1	1,3-Dichlorobenzene	U	410	ug/kg	82.0	410
100-51-6	Benzyl alcohol	U	410	ug/kg	123	410
95-50-1	1,2-Dichlorobenzene	U	410	ug/kg	82.0	410
108-60-1	bis(2-Chloroisopropyl)ether	U	410	ug/kg	82.0	410
95-48-7	o-Cresol	U	410	ug/kg	82.0	410
65794-96-9	m,p-Cresols	U	410	ug/kg	123	410
67-72-1	Hexachloroethane	U	410	ug/kg	82.0	410
98-95-3	Nitrobenzene	U	410	ug/kg	82.0	410
78-59-1	Isophorone	U	410	ug/kg	82.0	410
88-75-5	2-Nitrophenol	U	410	ug/kg	82.0	410
105-67-9	2,4-Dimethylphenol	U	410	ug/kg	143	410
111-91-1	bis(2-Chloroethoxy)methane	U	410	ug/kg	82.0	410
120-83-2	2,4-Dichlorophenol	U	410	ug/kg	82.0	410
65-85-0	Benzoic acid	U	820	ug/kg	205	820
91-20-3	Naphthalene	U	41.0	ug/kg	12.3	41.0
106-47-8	4-Chloroaniline	U	410	ug/kg	82.0	410
87-68-3	Hexachlorobutadiene	U	410	ug/kg	82.0	410
91-57-6	2-Methylnaphthalene	U	41.0	ug/kg	8.20	41.0
77-47-4	Hexachlorocyclopentadiene	U	410	ug/kg	82.0	410
88-06-2	2,4,6-Trichlorophenol	U	410	ug/kg	82.0	410
95-95-4	2,4,5-Trichlorophenol	U	410	ug/kg	82.0	410
91-58-7	2-Chloronaphthalene	U	41.0	ug/kg	13.5	41.0
88-74-4	2-Nitroaniline	U	410	ug/kg	82.0	410
99-09-2	o-Nitroaniline	U	410	ug/kg	82.0	410
	3-Nitroaniline					

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

SDG Number: 10-1301
Lab Sample ID: 245099007

Client ID: RE15-10-7193
Batch ID: 944455
Run Date: 01/26/2010 22:19
Prep Date: 01/22/2010 23:39
Data File: s3a2630.d

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.12 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19
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	410	ug/kg	82.0	410
606-20-2	2,6-Dinitrotoluene	U	410	ug/kg	41.0	410
208-96-8	Acenaphthylene	U	41.0	ug/kg	12.3	41.0
51-28-5	2,4-Dinitrophenol	U	820	ug/kg	156	820
132-64-9	Dibenzofuran	U	410	ug/kg	82.0	410
84-66-2	Diethylphthalate	U	410	ug/kg	82.0	410
86-73-7	Fluorene	U	41.0	ug/kg	12.3	41.0
7005-72-3	4-Chlorophenylphenylether	U	410	ug/kg	82.0	410
534-52-1	2-Methyl-4,6-dinitrophenol	U	410	ug/kg	82.0	410
100-01-6	4-Nitroaniline	U	410	ug/kg	123	410
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	410	ug/kg	82.0	410
122-66-7	Azobenzene	U	410	ug/kg	82.0	410
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	410	ug/kg	82.0	410
118-74-1	Hexachlorobenzene	U	410	ug/kg	82.0	410
85-01-8	Phenanthrene	U	41.0	ug/kg	12.3	41.0
120-12-7	Anthracene	U	41.0	ug/kg	8.20	41.0
84-74-2	Di-n-butylphthalate	U	410	ug/kg	82.0	410
206-44-0	Fluoranthene	U	41.0	ug/kg	12.3	41.0
85-68-7	Butylbenzylphthalate	U	410	ug/kg	82.0	410
56-55-3	Benzo(a)anthracene	U	41.0	ug/kg	12.3	41.0
91-94-1	3,3'-Dichlorobenzidine	U	410	ug/kg	123	410
218-01-9	Chrysene	U	41.0	ug/kg	12.3	41.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	410	ug/kg	82.0	410
117-84-0	Di-n-octylphthalate	U	410	ug/kg	82.0	410
205-99-2	Benzo(b)fluoranthene	U	41.0	ug/kg	12.3	41.0
207-08-9	Benzo(k)fluoranthene	U	41.0	ug/kg	12.3	41.0
50-32-8	Benzo(a)pyrene	U	41.0	ug/kg	12.3	41.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.0	ug/kg	12.3	41.0
53-70-3	Dibenzo(a,h)anthracene	U	41.0	ug/kg	12.3	41.0
191-24-2	Benzo(ghi)perylene	U	41.0	ug/kg	12.3	41.0
120-82-1	1,2,4-Trichlorobenzene	U	410	ug/kg	82.0	410

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.34	181	ug/kg		J
	Unknown Aldol Condensate	3.42	683	ug/kg		JA

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099007	Date Received: 01/20/2010 08:45	%Moisture: 19
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7193	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 22:19	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.12 g	Final Volume: 1 mL
Data File: s3a2630.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parinname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R-.alpha.-Pinene	4.2	220	ug/kg	98	NJ
13466-78-9	3-Carene	4.77	216	ug/kg	96	NJ
	Unknown	17.93	213	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2630.d
Lab Smp Id: 245099007 Client Smp ID: RE15-10-7193
Inj Date : 26-JAN-2010 22:19
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099007|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 08:40 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	19.00050	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4		152	4.827	4.832	(1.000)	345454	40.0000	
* 29 Naphthalene-d8		136	6.108	6.114	(1.000)	1303773	40.0000	
* 46 Acenaphthene-d10		164	7.986	7.990	(1.000)	760759	40.0000	
* 67 Phenanthrene-d10		188	9.603	9.605	(1.000)	1216496	40.0000	
* 91 Chrysene-d12		240	12.624	12.634	(1.000)	638144	40.0000	
* 98 Perylene-d12		264	14.966	14.975	(1.000)	331039	40.0000	
\$ 3 2-Fluorophenol		112	3.654	3.644	(0.757)	564867	62.8387	2580
\$ 5 Phenol-d5		99	4.425	4.430	(0.917)	675149	59.7612	2450
\$ 20 Nitrobenzene-d5		82	5.363	5.372	(0.878)	312386	32.4361	1330
\$ 39 2-Fluorobiphenyl		172	7.237	7.244	(0.906)	703927	35.7977	1470
\$ 60 2,4,6-Tribromophenol		329	8.837	8.842	(1.107)	170351	78.1109	3200
\$ 81 p-Terphenyl-d14		244	11.312	11.316	(0.896)	623743	56.8668	2330

ION RATIO REPORT

SV REPORT

Data file: s3a2630.d

Report Date: 01/27/2010 09:38

Lab. ID: 245099007

SampleType: SAMPLE

Injection Date: 26-JAN-2010 22:19

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099007|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	38891	4.42	4.52	80-120	100	(T)
93	4046	4.49	4.52	205-265	10	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	43737	5.36	5.20	80-120	100	(T)
42	28833	5.36	5.20	45-105	66	(T)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	7518	7.58	7.39	80-120	100	(T)
164	404	7.58	7.39	2- 62	5	(T)
127	625	7.58	7.39	9- 69	8	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	99384	7.99	7.75	80-120	100	(T)
63	1394	7.99	7.75	36- 96	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	99384	7.99	8.18	80-120	100	(T)
89	1251	7.99	8.18	42-102	1	(QT)
63	1394	7.99	8.18	21- 81	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2630.d
 Lab Smp Id: 245099007 Client Smp ID: RE15-10-7193
 Inj Date : 26-JAN-2010 22:19
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099007|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
 Meth Date : 27-Jan-2010 08:40 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	19.00050	% moisture

Cpnd Variable

Local Compound Variable

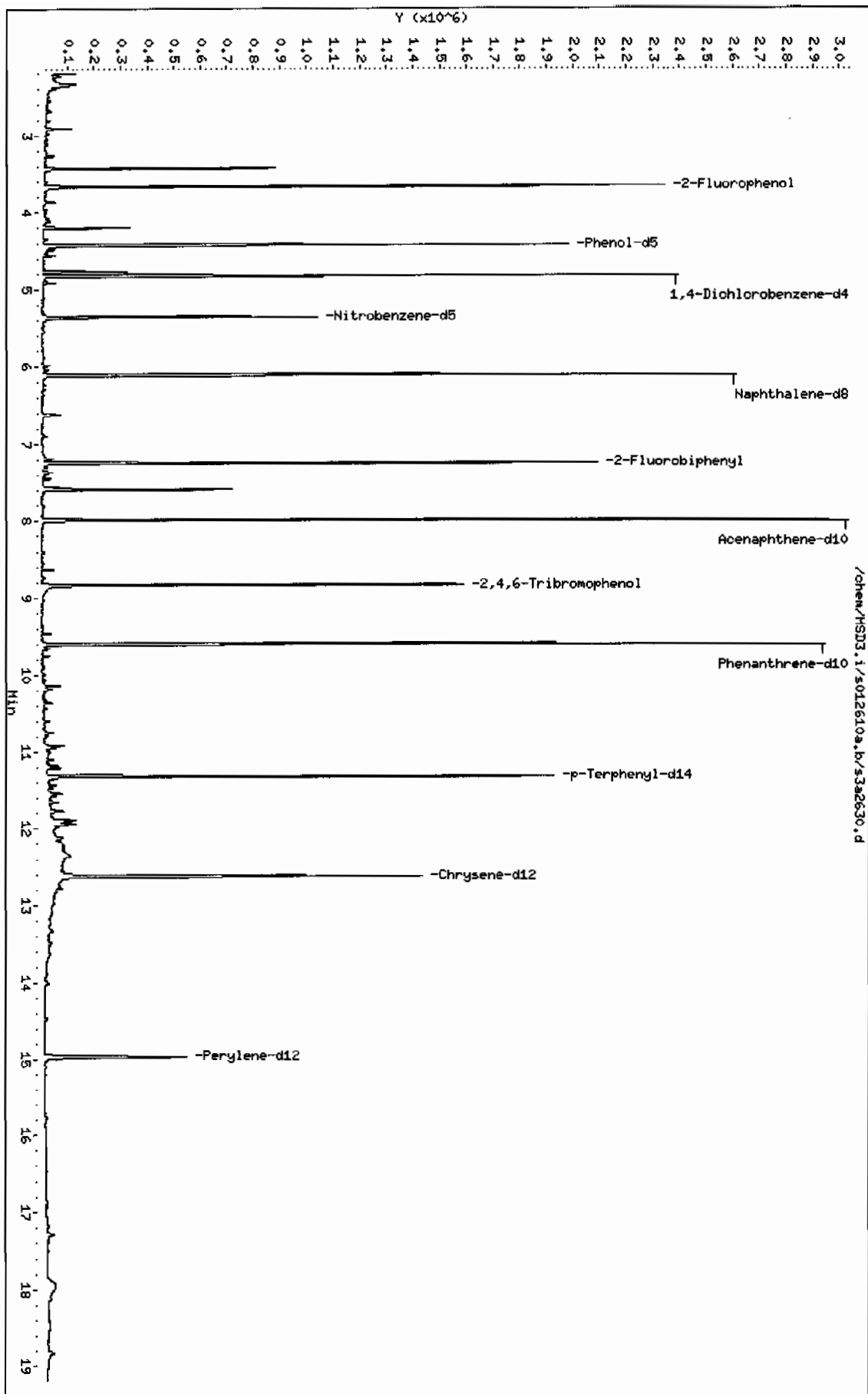
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.827	2153119	40.000
* 98 Perylene-d12	14.966	946576	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.337	237360	4.40959827	181	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.419	896880	16.6619648	683	0		0	10
1R-.alpha.-Pinene					CAS #: 7785-70-8		
4.196	289206	5.37278714	220	98	NIST05.L	15188	10
3-Carene					CAS #: 13466-78-9		
4.768	283588	5.26840440	216	96	NIST05.L	15157	10
Unknown					CAS #:		
17.929	122878	5.19250736	213	0		0	98

Data File: /chem/HSD3.1/s012610a.b/s3a2630.d
 Date: 26-JAN-2010 22:19
 Client ID: REIS-10-7193
 Sample Info: 1245099007194445511SVHF11.LANL
 Volume Injected (uL): 0.5
 Column phase: J&M DB-5MS

Instrument: HSD3.1
 Operator: JLD1
 Column diameter: 0.20



Date : 26-JAN-2010 22:19

Client ID: RE15-10-7193

Instrument: MSD3.i

Sample Info: 1245099007194445511SVHF11ILANL

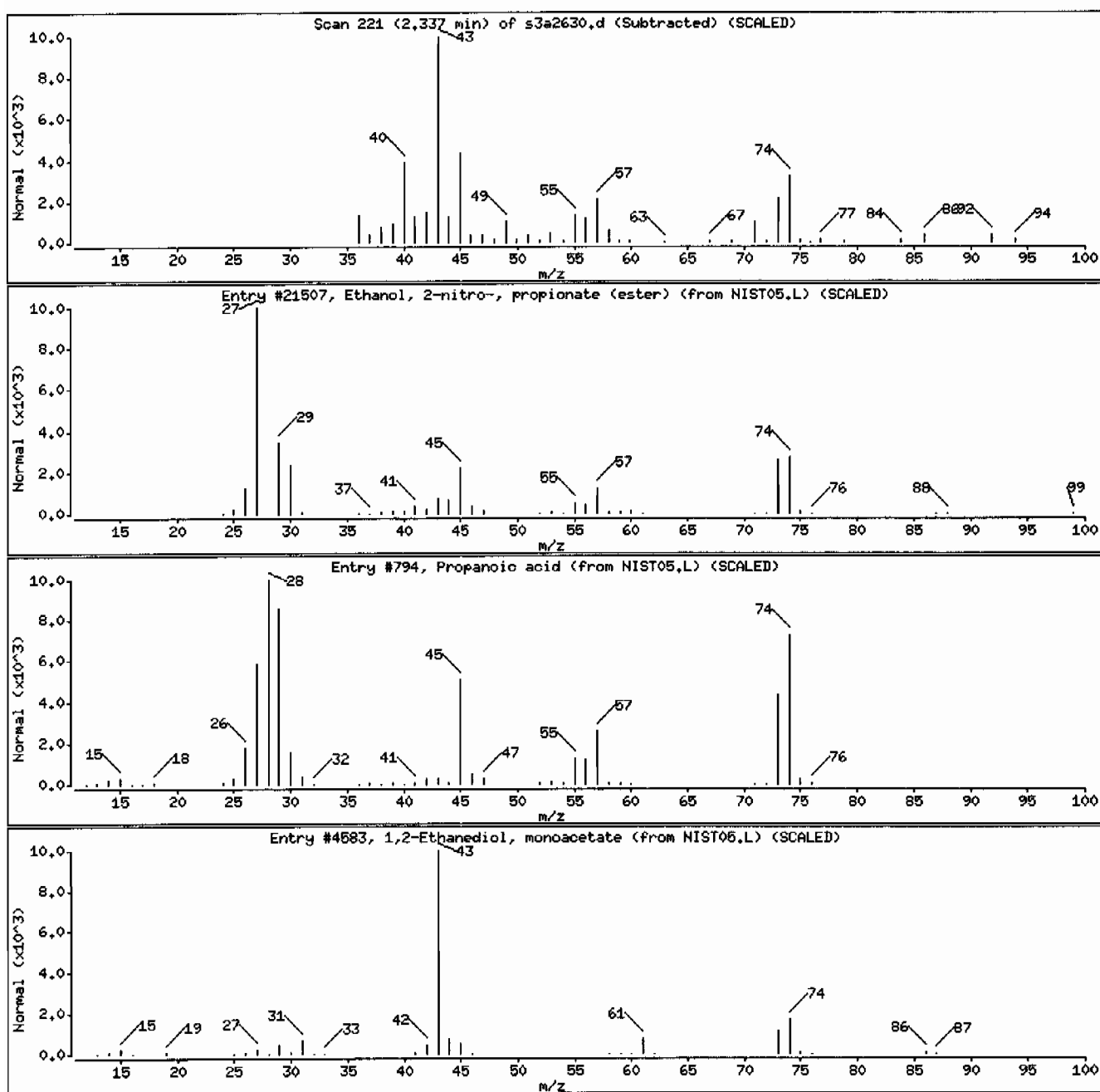
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanol, 2-nitro-, propionate (ester)	5390-28-3	NIST05.L	21507	47	C5H9NO4	147
Propanoic acid	79-09-4	NIST05.L	794	9	C3H6O2	74
1,2-Ethanediol, monoacetate	542-59-6	NIST05.L	4583	9	C4H8O3	104



Date : 26-JAN-2010 22:19

Client ID: RE15-10-7193

Instrument: MSD3.1

Sample Info: 1245099007194445511SVHF111LANL

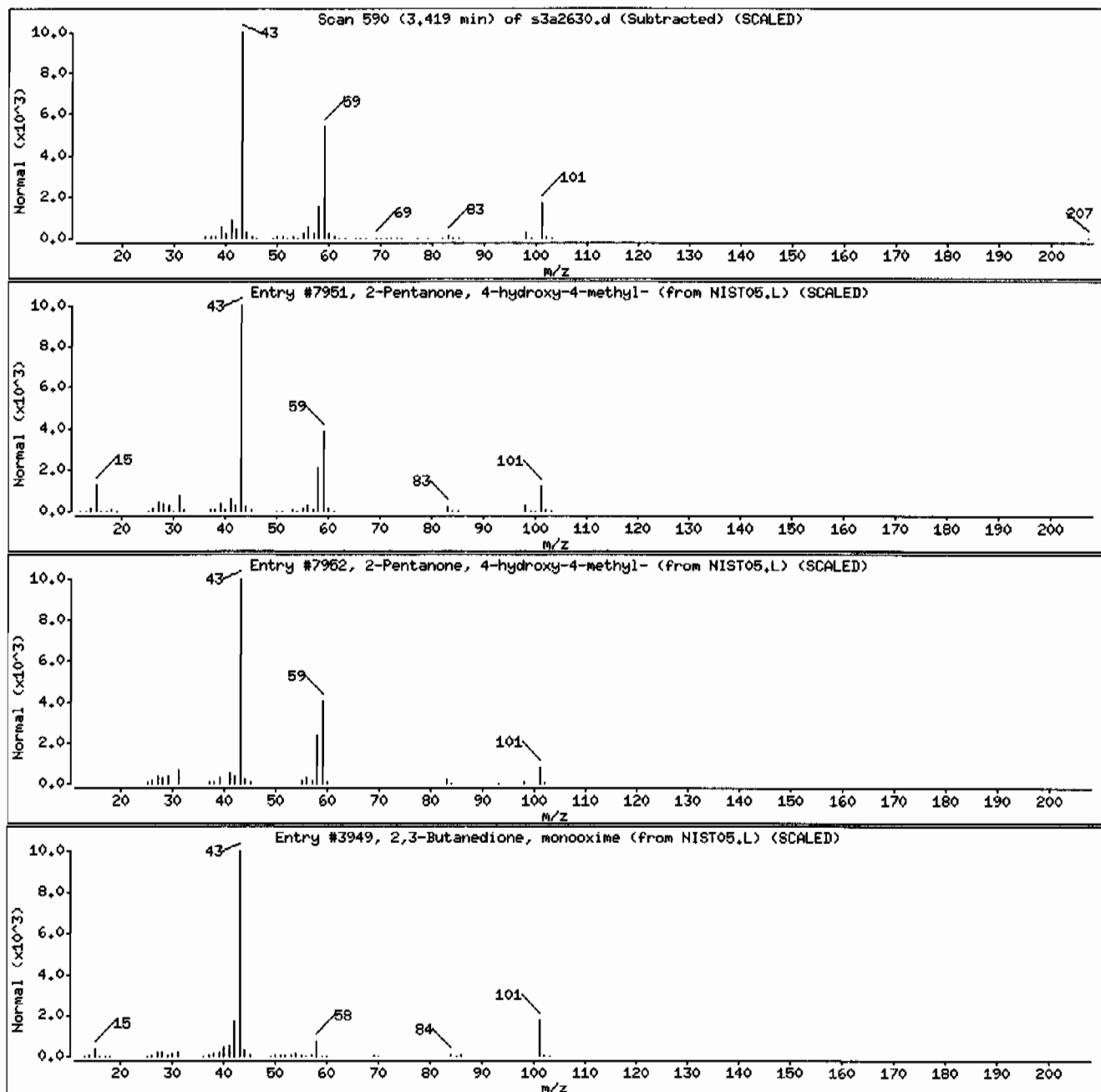
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	16	C4H7NO2	101



Date : 26-JAN-2010 22:19

Client ID: RE15-10-7193

Instrument: MSD3.i

Sample Info: 1245099007194445511SVHF111LANL

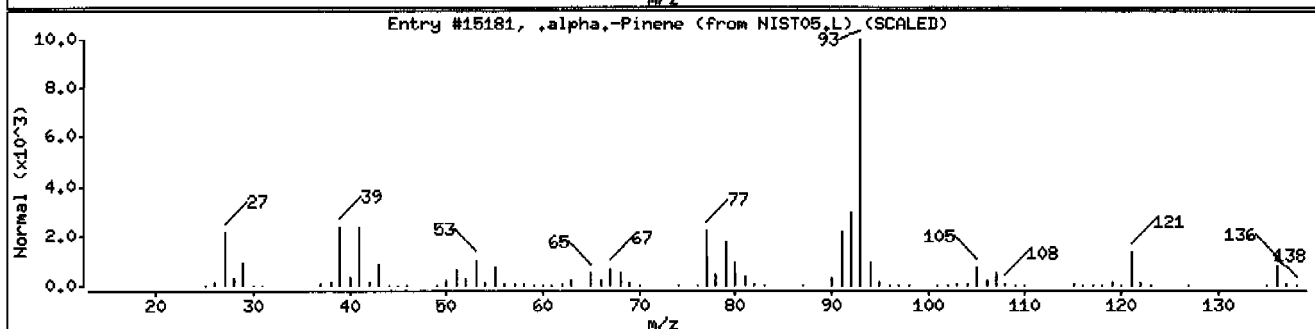
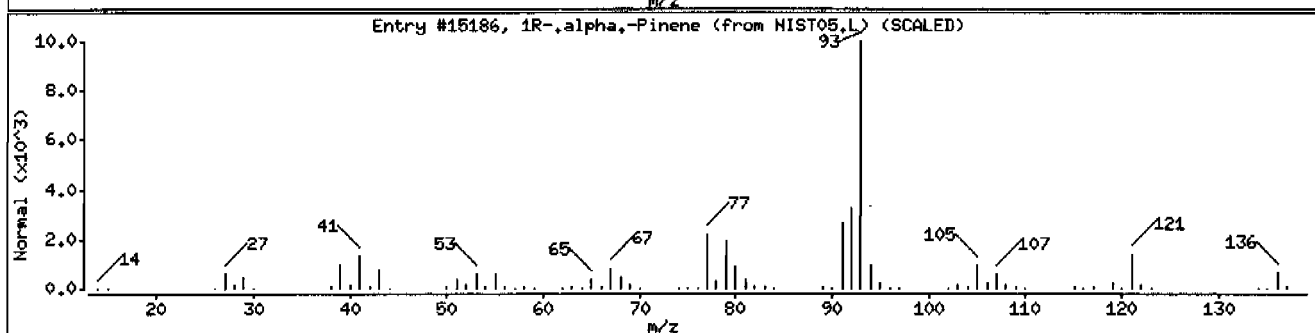
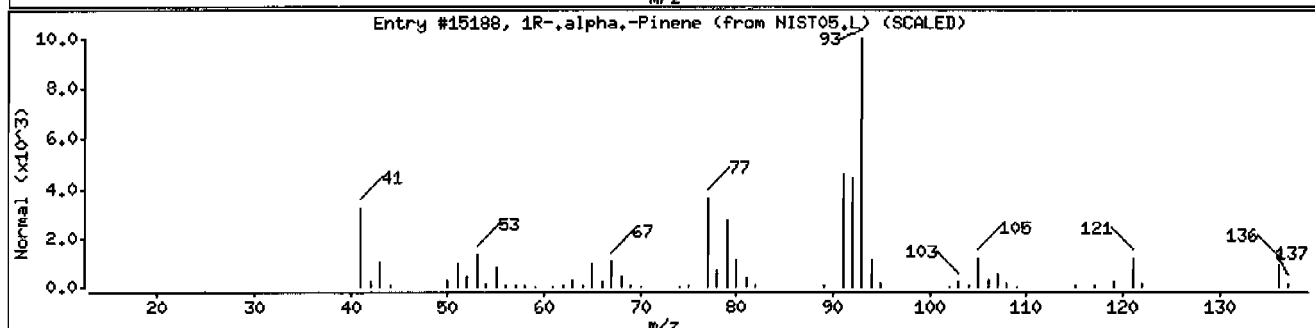
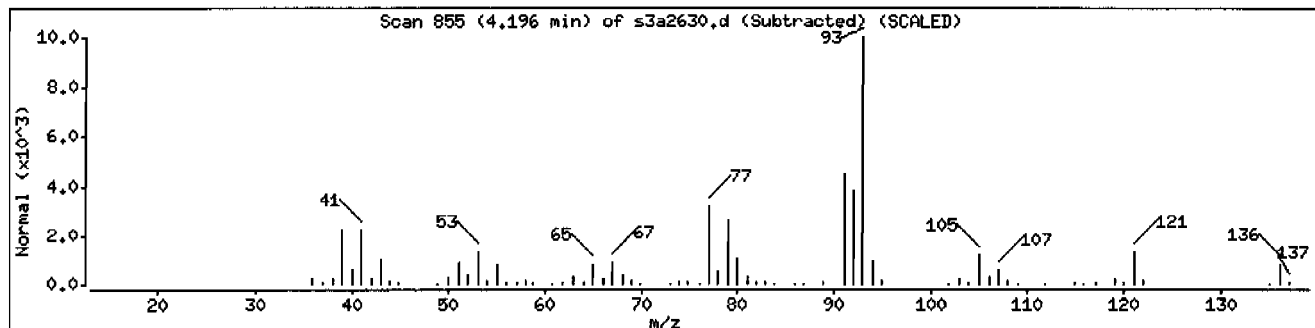
Volume Injected (uL): 0.5

Operator: JLD1

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	98	C10H16	136
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15181	96	C10H16	136



Date : 26-JAN-2010 22:19

Client ID: RE15-10-7193

Instrument: MSD3.i

Sample Info: I245099007194445511ISVMF111LANL

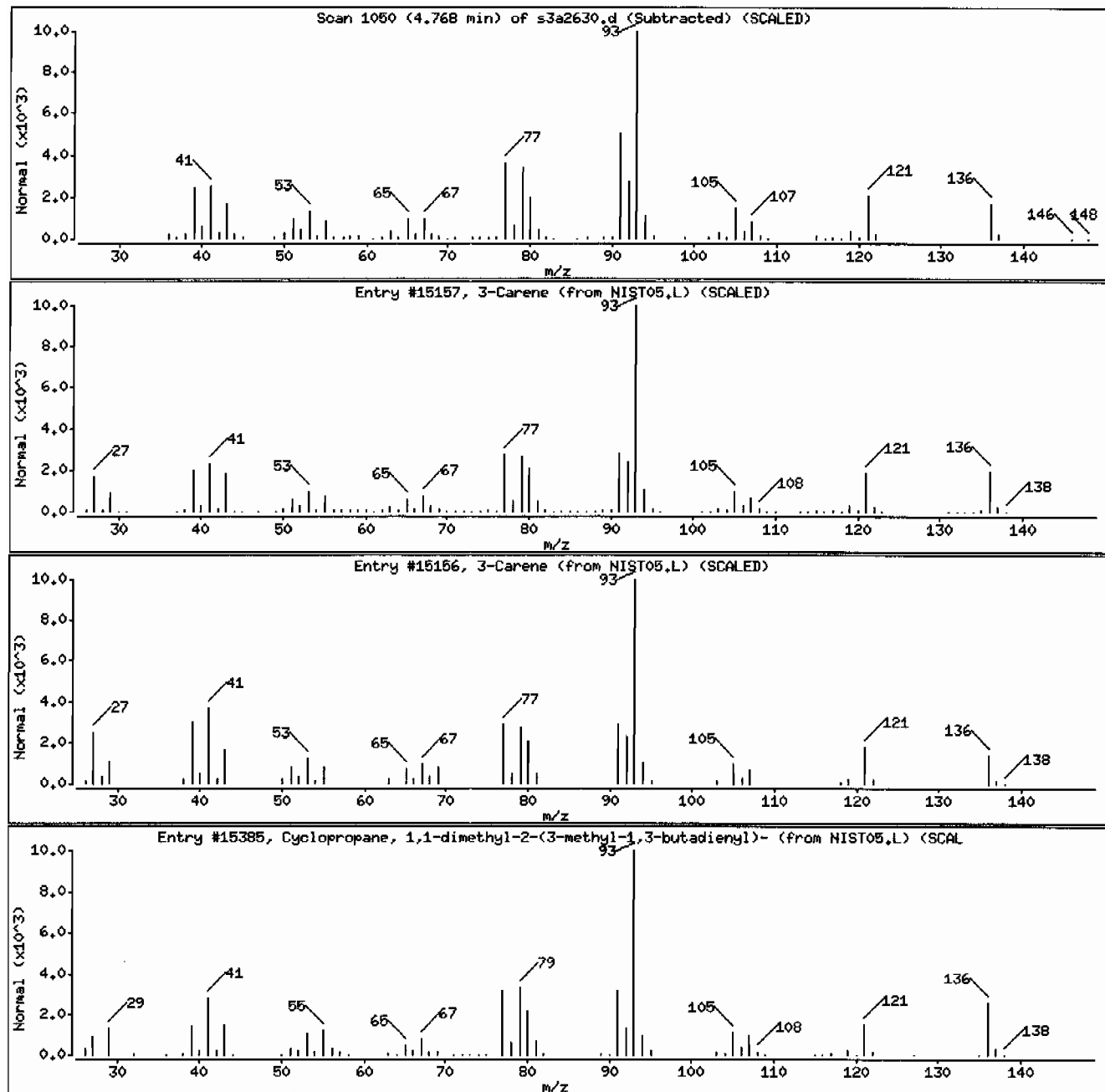
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
3-Carene	13466-78-9	NIST05.L	15157	96	C10H16	136
3-Carene	13466-78-9	NIST05.L	15156	96	C10H16	136
Cyclopropane, 1,1-dimethyl-2-(3-methyl-1	68998-21-0	NIST05.L	15385	94	C10H16	136



Date : 26-JAN-2010 22:19

Client ID: RE15-10-7193

Instrument: MSD3.i

Sample Info: 1245099007194448511ISVMFI1ILANL

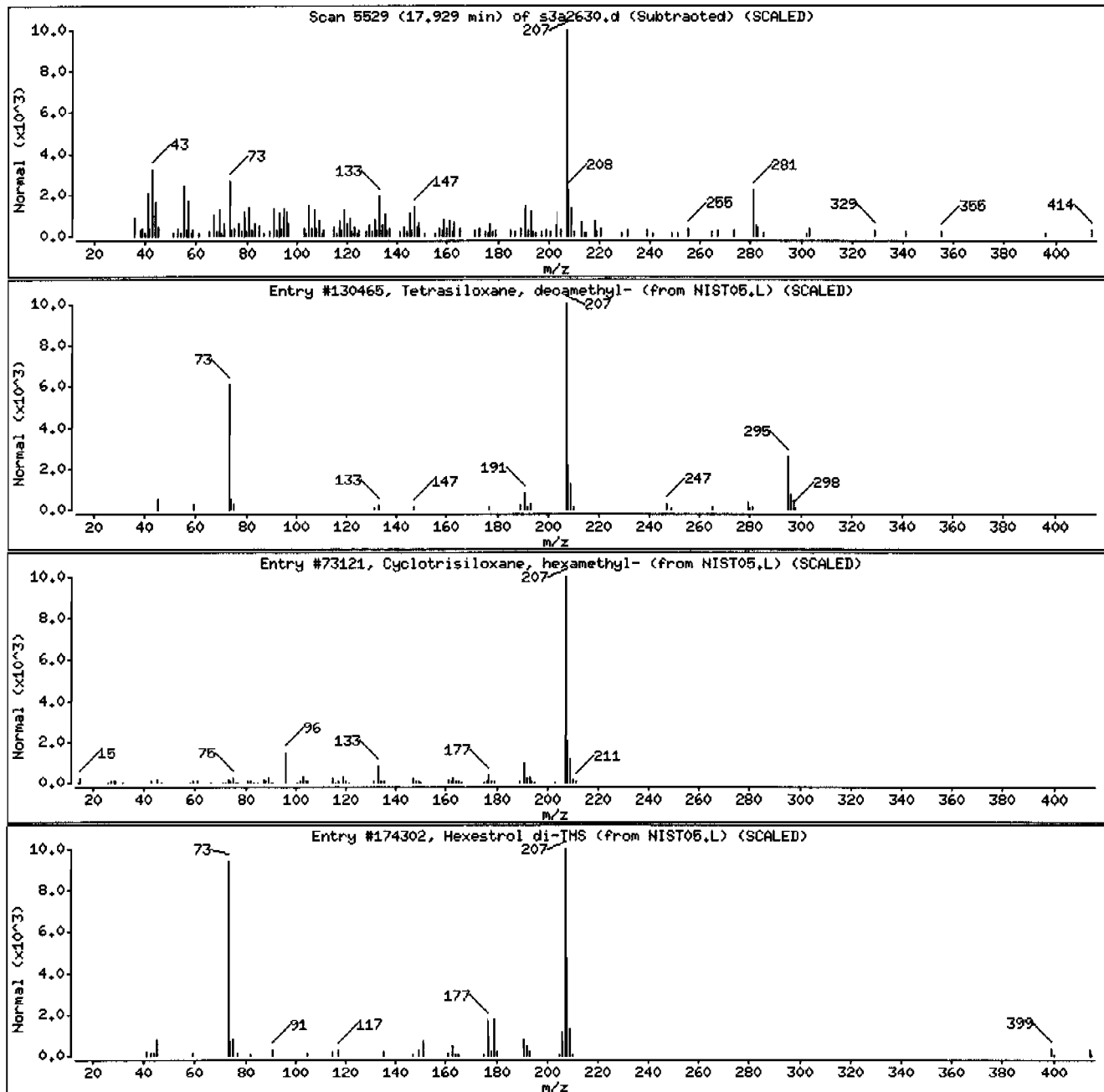
Volume Injected (uL): 0.5

Operator: JLD1

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	130465	59	C10H30O3Si4	310
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	50	C6H18O3Si3	222
Hexestrol di-TMS	70244-15-4	NIST05.L	174302	50	C24H38O2Si2	414



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

SDG Number: 10-1301
Lab Sample ID: 245099001

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7194
Batch ID: 944455
Run Date: 01/25/2010 12:52
Prep Date: 01/22/2010 23:39
Data File: s3a2508.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	419	ug/kg	83.8	419
108-95-2	Phenol	U	419	ug/kg	83.8	419
95-57-8	2-Chlorophenol	U	419	ug/kg	83.8	419
106-46-7	1,4-Dichlorobenzene	U	419	ug/kg	83.8	419
621-64-7	N-Nitrosodipropylamine	U	419	ug/kg	83.8	419
59-50-7	4-Chloro-3-methylphenol	U	419	ug/kg	83.8	419
83-32-9	Acenaphthene	U	41.9	ug/kg	13.8	41.9
121-14-2	2,4-Dinitrotoluene	U	419	ug/kg	41.9	419
100-02-7	4-Nitrophenol	U	419	ug/kg	138	419
87-86-5	Pentachlorophenol	U	419	ug/kg	105	419
129-00-0	Pyrene	U	41.9	ug/kg	12.6	41.9
110-86-1	Pyridine	U	419	ug/kg	83.8	419
62-53-3	Aniline	U	419	ug/kg	126	419
111-44-4	bis(2-Chloroethyl) ether	U	419	ug/kg	83.8	419
541-73-1	1,3-Dichlorobenzene	U	419	ug/kg	83.8	419
100-51-6	Benzyl alcohol	U	419	ug/kg	126	419
95-50-1	1,2-Dichlorobenzene	U	419	ug/kg	83.8	419
108-60-1	bis(2-Chloroisopropyl)ether	U	419	ug/kg	83.8	419
95-48-7	o-Cresol	U	419	ug/kg	83.8	419
65794-96-9	m,p-Cresols	U	419	ug/kg	126	419
67-72-1	Hexachloroethane	U	419	ug/kg	83.8	419
98-95-3	Nitrobenzene	U	419	ug/kg	83.8	419
78-59-1	Isophorone	U	419	ug/kg	83.8	419
88-75-5	2-Nitrophenol	U	419	ug/kg	83.8	419
105-67-9	2,4-Dimethylphenol	U	419	ug/kg	147	419
111-91-1	bis(2-Chloroethoxy)methane	U	419	ug/kg	83.8	419
120-83-2	2,4-Dichlorophenol	U	419	ug/kg	83.8	419
65-85-0	Benzoic acid	U	838	ug/kg	210	838
91-20-3	Naphthalene	U	41.9	ug/kg	12.6	41.9
106-47-8	4-Chloroaniline	U	419	ug/kg	83.8	419
87-68-3	Hexachlorobutadiene	U	419	ug/kg	83.8	419
91-57-6	2-Methylnaphthalene	U	41.9	ug/kg	8.38	41.9
77-47-4	Hexachlorocyclopentadiene	U	419	ug/kg	83.8	419
88-06-2	2,4,6-Trichlorophenol	U	419	ug/kg	83.8	419
95-95-4	2,4,5-Trichlorophenol	U	419	ug/kg	83.8	419
91-58-7	2-Chloronaphthalene	U	41.9	ug/kg	13.8	41.9
88-74-4	2-Nitroaniline	U	419	ug/kg	83.8	419
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	419	ug/kg	83.8	419

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099001	Date Received: 01/20/2010 08:45	% Moisture: 20.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7194	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 12:52	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.07 g	Final Volume: 1 mL
Data File: s3a2508.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	419	ug/kg	83.8	419
606-20-2	2,6-Dinitrotoluene	U	419	ug/kg	41.9	419
208-96-8	Acenaphthylene	U	41.9	ug/kg	12.6	41.9
51-28-5	2,4-Dinitrophenol	U	838	ug/kg	159	838
132-64-9	Dibenzofuran	U	419	ug/kg	83.8	419
84-66-2	Diethylphthalate	U	419	ug/kg	83.8	419
86-73-7	Fluorene	U	41.9	ug/kg	12.6	41.9
7005-72-3	4-Chlorophenylphenylether	U	419	ug/kg	83.8	419
534-52-1	2-Methyl-4,6-dinitrophenol	U	419	ug/kg	83.8	419
100-01-6	4-Nitroaniline	U	419	ug/kg	126	419
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	419	ug/kg	83.8	419
122-66-7	Azobenzene	U	419	ug/kg	83.8	419
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	419	ug/kg	83.8	419
118-74-1	Hexachlorobenzene	U	419	ug/kg	83.8	419
85-01-8	Phenanthrene	U	41.9	ug/kg	12.6	41.9
120-12-7	Anthracene	U	41.9	ug/kg	8.38	41.9
84-74-2	Di-n-butylphthalate	U	419	ug/kg	83.8	419
206-44-0	Fluoranthene	U	41.9	ug/kg	12.6	41.9
85-68-7	Butylbenzylphthalate	U	419	ug/kg	83.8	419
56-55-3	Benzo(a)anthracene	U	41.9	ug/kg	12.6	41.9
91-94-1	3,3'-Dichlorobenzidine	U	419	ug/kg	126	419
218-01-9	Chrysene	U	41.9	ug/kg	12.6	41.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	419	ug/kg	83.8	419
117-84-0	Di-n-octylphthalate	U	419	ug/kg	83.8	419
205-99-2	Benzo(b)fluoranthene	U	41.9	ug/kg	12.6	41.9
207-08-9	Benzo(k)fluoranthene	U	41.9	ug/kg	12.6	41.9
50-32-8	Benzo(a)pyrene	U	41.9	ug/kg	12.6	41.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.9	ug/kg	12.6	41.9
53-70-3	Dibenzo(a,h)anthracene	U	41.9	ug/kg	12.6	41.9
191-24-2	Benzo(ghi)perylene	U	41.9	ug/kg	12.6	41.9
120-82-1	1,2,4-Trichlorobenzene	U	419	ug/kg	83.8	419

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.33	301	ug/kg		J
	Unknown Aldol Condensate	3.43	573	ug/kg		JA

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

SDG Number: 10-1301
Lab Sample ID: 245099001

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.07 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Fit	Qual
83-46-5	.beta.-Sitosterol		17.73	374	ug/kg	94	NJ

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2508.d
Lab Smp Id: 245099001 Client Smp ID: RE15-10-7194
Inj Date : 25-JAN-2010 12:52
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099001|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	20.65990	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ng/ul) (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.839	4.841	(1.000)	424430	40.0000	
* 29 Naphthalene-d8	136	6.123	6.126	(1.000)	1584835	40.0000	
* 46 Acenaphthene-d10	164	8.000	8.003	(1.000)	812141	40.0000	
* 67 Phenanthrene-d10	188	9.616	9.618	(1.000)	1127729	40.0000	
* 91 Chrysene-d12	240	12.637	12.650	(1.000)	544455	40.0000	
* 98 Perylene-d12	264	14.986	14.999	(1.000)	402932	40.0000	
\$ 3 2-Fluorophenol	112	3.663	3.653	(0.757)	705097	63.8431	2680
\$ 5 Phenol-d5	99	4.434	4.436	(0.916)	823795	59.3504	2490
\$ 20 Nitrobenzene-d5	82	5.376	5.384	(0.878)	393066	33.5753	1410
\$ 39 2-Fluorobiphenyl	172	7.252	7.254	(0.906)	729272	34.7402	1460
\$ 60 2,4,6-Tribromophenol	329	8.848	8.852	(1.106)	136184	58.4936	2450
\$ 81 p-Terphenyl-d14	244	11.324	11.326	(0.896)	417694	44.6342	1870

ION RATIO REPORT

SV REPORT

Data file: s3a2508.d

Report Date: 01/25/2010 14:00

Lab. ID: 245099001

SampleType: SAMPLE

Injection Date: 25-JAN-2010 12:52

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099001|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	47457	4.43	4.53	80-120	100	(T)
93	915	4.50	4.53	206-266	2	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	56758	5.38	5.21	80-120	100	(T)
42	36173	5.38	5.21	45-105	64	(T)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	106545	8.00	7.76	80-120	100	(T)
63	1454	8.00	7.76	37- 97	1	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	106545	8.00	8.19	80-120	100	(T)
89	1382	8.00	8.19	42-102	1	(QT)
63	1454	8.00	8.19	21- 81	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2508.d
 Lab Smp Id: 245099001 Client Smp ID: RE15-10-7194
 Inj Date : 25-JAN-2010 12:52
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099001|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	20.65990	% moisture

Cpnd Variable Local Compound Variable

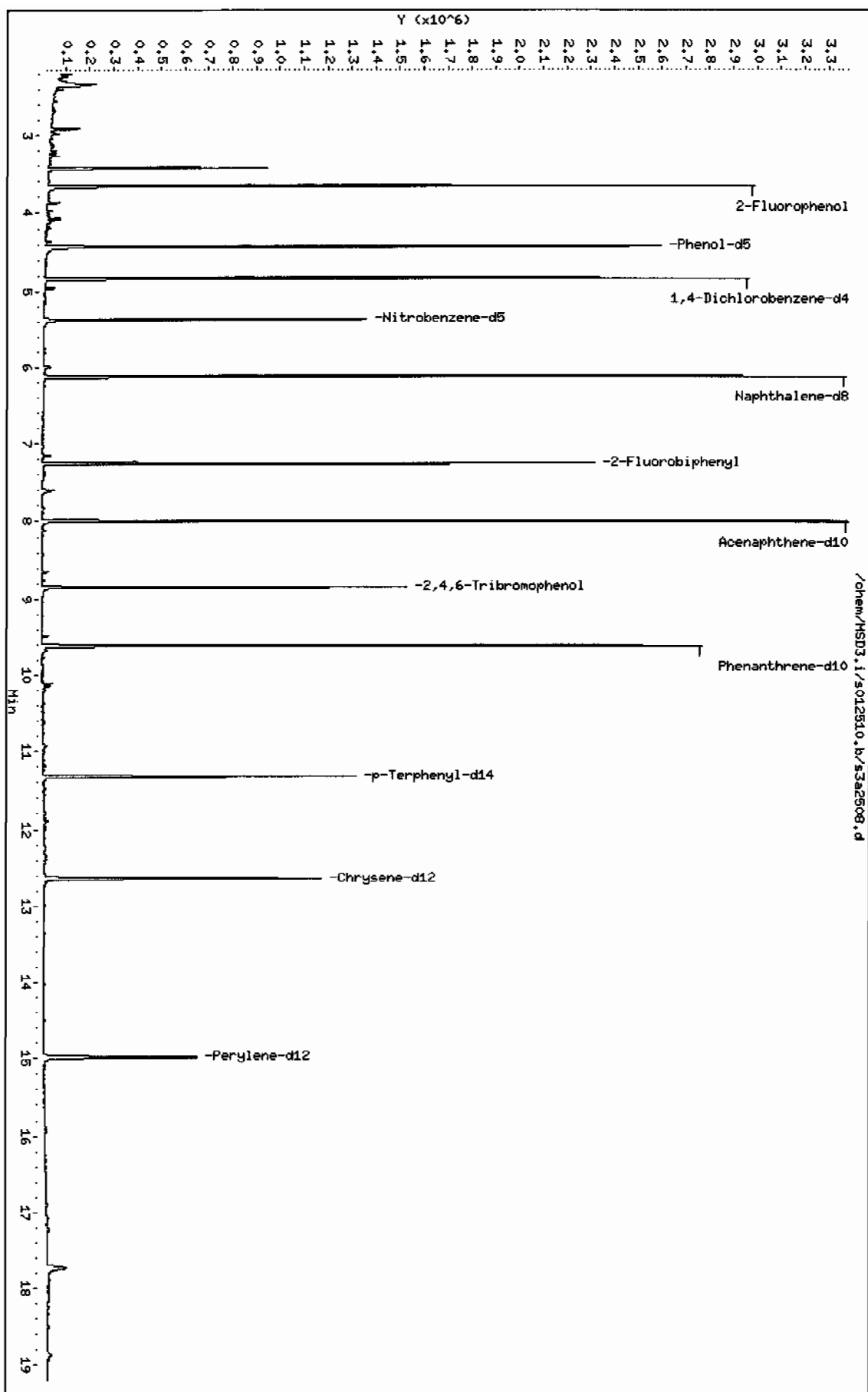
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.839	2710065	40.000
* 98 Perylene-d12	14.986	1174427	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.331	486060	7.17414373	301	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
3.425	925404	13.6587696	572	0		0	10
.beta.-Sitosterol					CAS #: 83-46-5		
17.729	261801	8.91672420	374	94	NIST05.L	174400	98

Data File: /chem/HSD3.i/s012510.b/s3a2508.d
Date: 25-JAN-2010 12:52
Client ID: REL5-10-7194
Sample Info: 124509900194445511SVWF11.LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: HSD3.i
Operator: JLD1
Column diameter: 0.20



Date : 25-JAN-2010 12:52

Client ID: RE15-10-7194

Instrument: MSD3.i

Sample Info: 1245099001|94445511|SVMF11|LANL

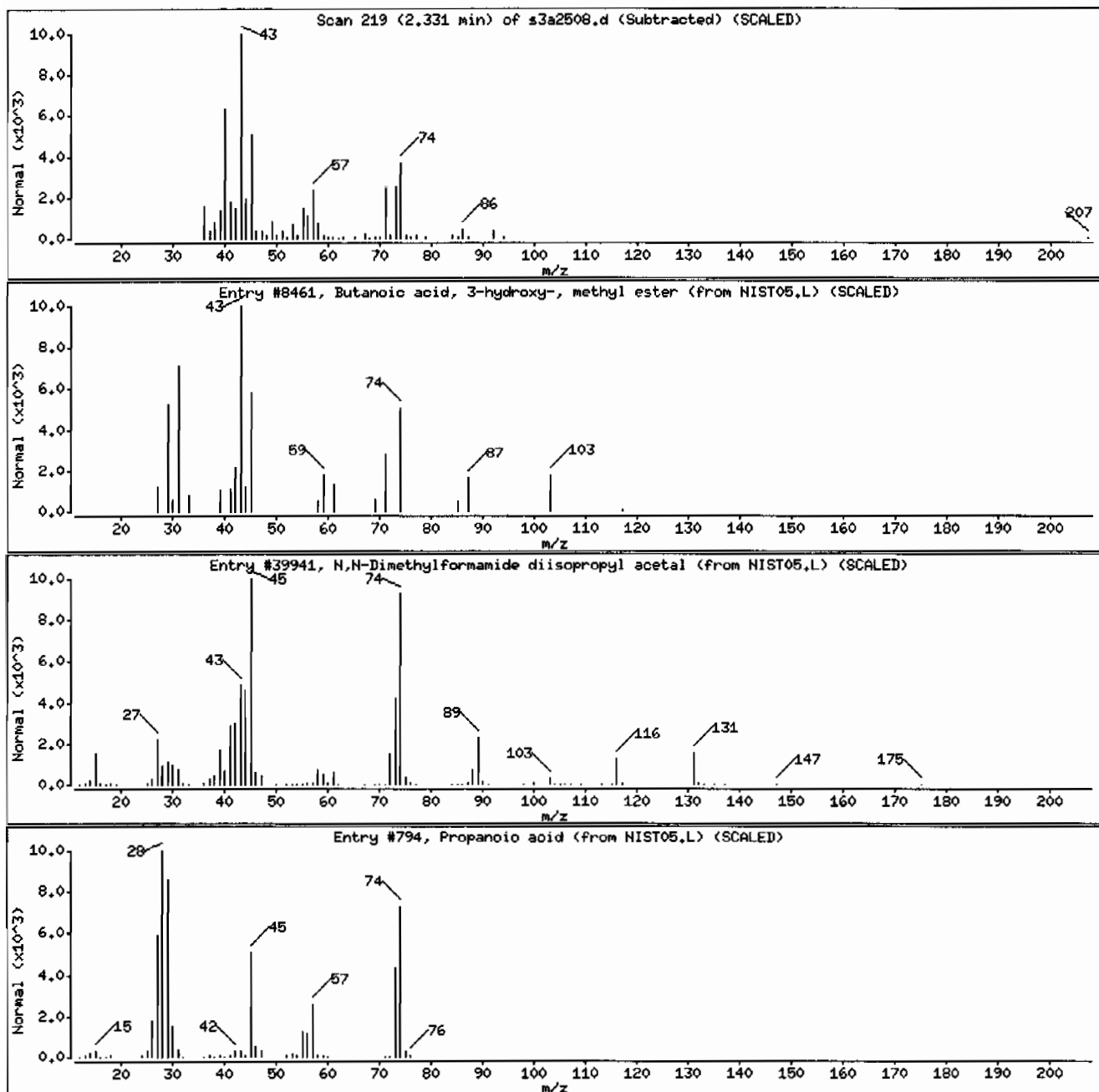
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanoic acid, 3-hydroxy-, methyl ester	1487-49-6	NIST05.L	8461	43	C5H10O3	118
N,N-Dimethylformamide diisopropyl acetal	18503-89-4	NIST05.L	39941	42	C9H21NO2	175
Propanoic acid	79-09-4	NIST05.L	794	38	C3H6O2	74



Date : 25-JAN-2010 12:52

Client ID: RE15-10-7194

Instrument: MSD3.i

Sample Info: 124509900194445511SVHF11ILANL

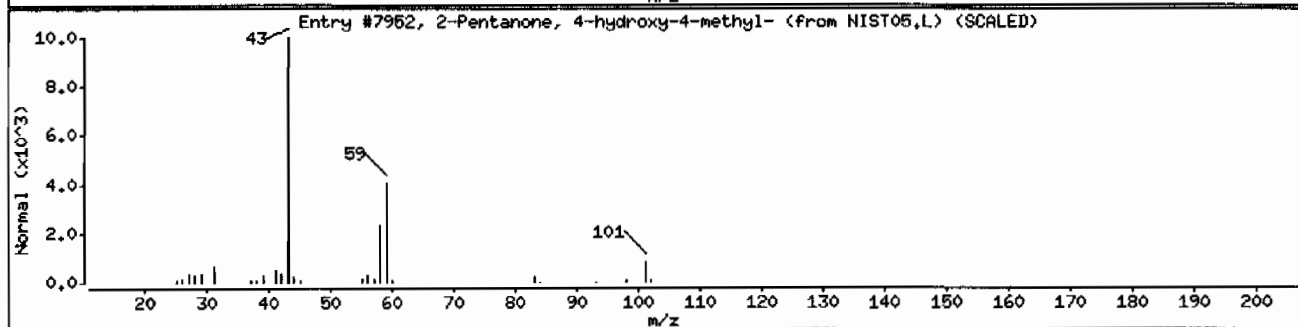
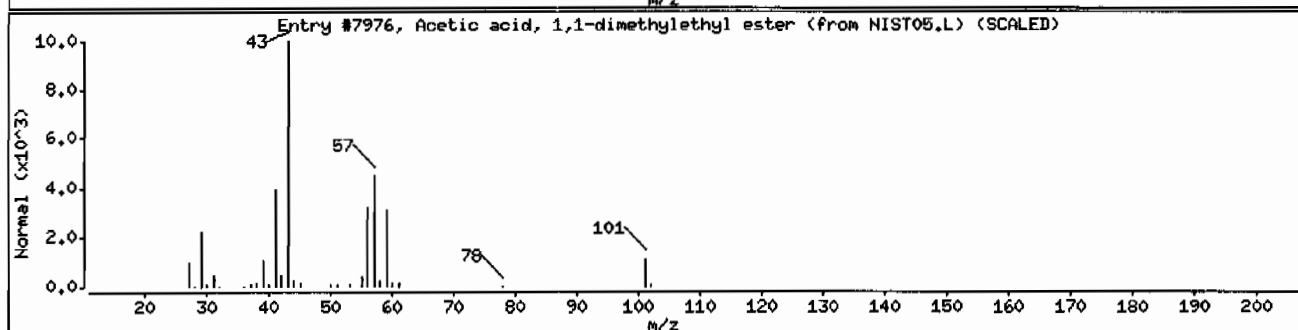
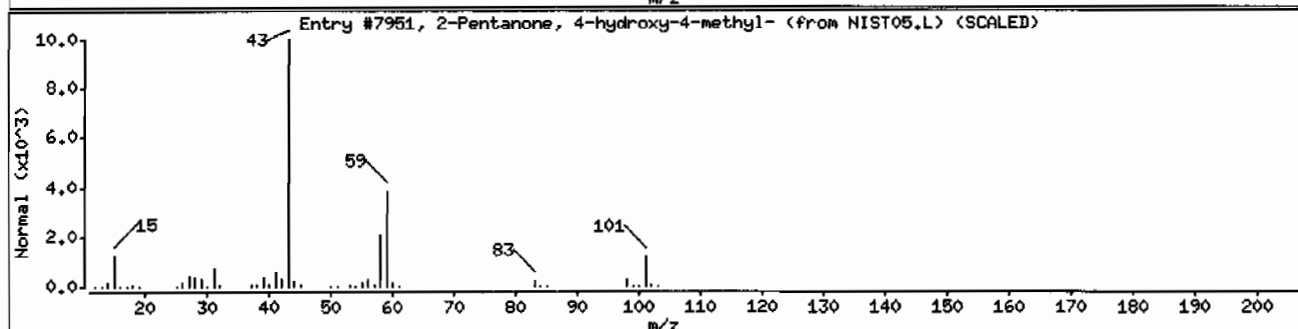
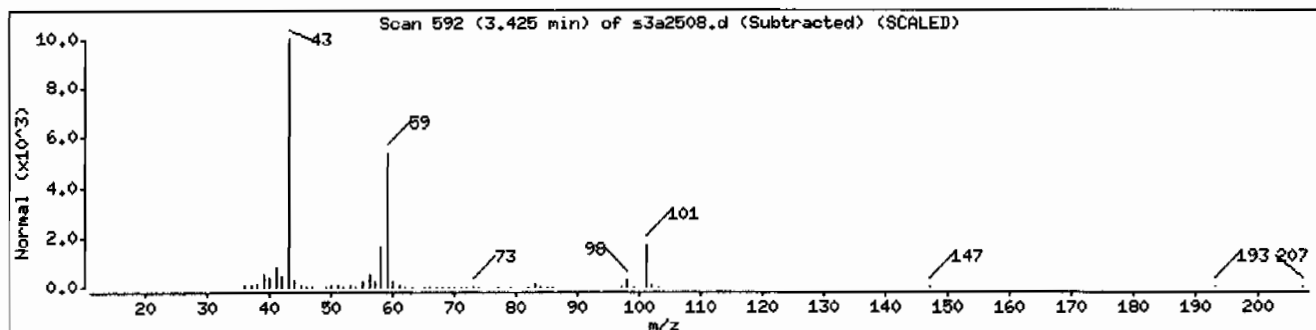
Volume Injected (uL): 0.5

Operator: JLD1

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
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116



Date : 25-JAN-2010 12:52

Client ID: RE15-10-7194

Instrument: MSD3.i

Sample Info: 124509900194445511SVHF11ILANL

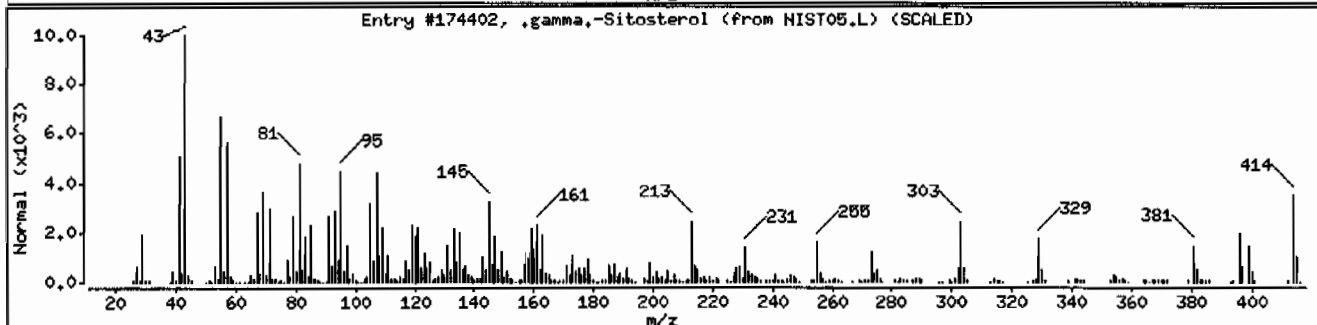
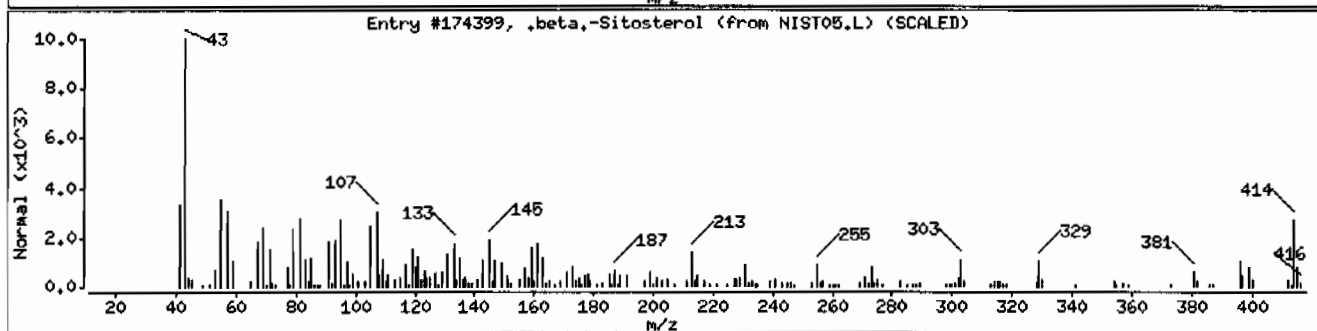
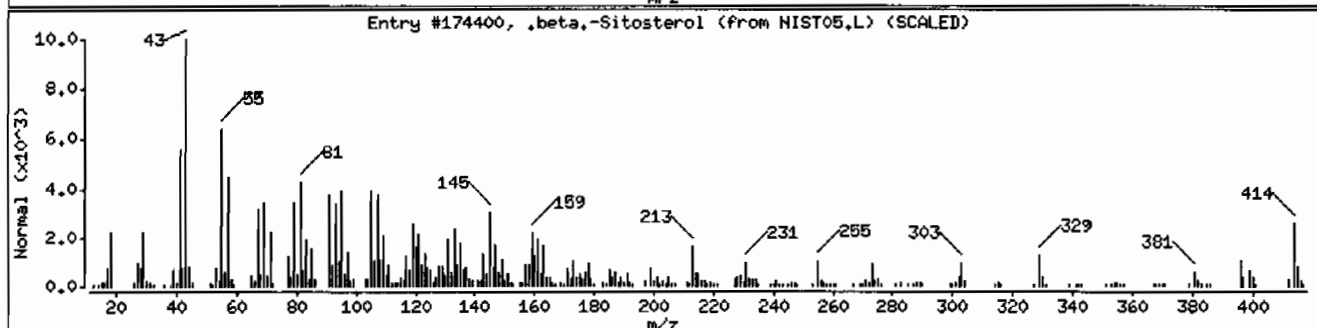
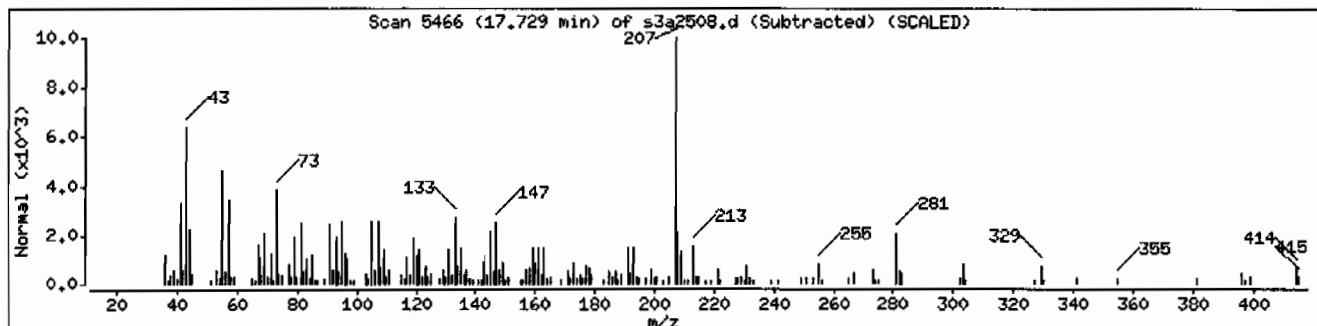
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174400	94	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	59	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	56	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1301
Lab Sample ID: 245099004

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7195
Batch ID: 944455
Run Date: 01/25/2010 15:04
Prep Date: 01/22/2010 23:39
Data File: s3a2513.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	73.9	370
108-95-2	Phenol	U	370	ug/kg	73.9	370
95-57-8	2-Chlorophenol	U	370	ug/kg	73.9	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	73.9	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	73.9	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	73.9	370
83-32-9	Acenaphthene	U	37.0	ug/kg	12.2	37.0
121-14-2	2,4-Dinitrotoluene	U	370	ug/kg	37.0	370
100-02-7	4-Nitrophenol	U	370	ug/kg	122	370
87-86-5	Pentachlorophenol	U	370	ug/kg	92.4	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	73.9	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	73.9	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	73.9	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	73.9	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	73.9	370
95-48-7	o-Cresol	U	370	ug/kg	73.9	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	73.9	370
98-95-3	Nitrobenzene	U	370	ug/kg	73.9	370
78-59-1	Isophorone	U	370	ug/kg	73.9	370
88-75-5	2-Nitrophenol	U	370	ug/kg	73.9	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	129	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	73.9	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	73.9	370
65-85-0	Benzoic acid	U	739	ug/kg	185	739
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	73.9	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	73.9	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.39	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	73.9	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	73.9	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	73.9	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	73.9	370
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	370	ug/kg	73.9	370

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

SDG Number: 10-1301
Lab Sample ID: 245099004

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.1
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.15	1490	ug/kg		J
	Unknown	2.32	170	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
Lab Sample ID: 245099004

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.1
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
17993-84-9	Unknown Aldol Condensate	3.43	321	ug/kg		JA
	N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	15.22	316	ug/kg	30	NJ
	Unknown	16.09	230	ug/kg		J
	Unknown	17.22	174	ug/kg		J
	Unknown	17.73	500	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2513.d
Lab Smp Id: 245099004 Client Smp ID: RE15-10-7195
Inj Date : 25-JAN-2010 15:04
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099004|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclpl

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	10.05680	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.839	4.841	(1.000)	401137	40.0000	
* 29 Naphthalene-d8	136	6.123	6.126	(1.000)	1468125	40.0000	
* 46 Acenaphthene-d10	164	8.000	8.003	(1.000)	713015	40.0000	
* 67 Phenanthrene-d10	188	9.615	9.618	(1.000)	956223	40.0000	
* 91 Chrysene-d12	240	12.639	12.650	(1.000)	719475	40.0000	
* 98 Perylene-d12	264	14.989	14.999	(1.000)	450646	40.0000	
\$ 3 2-Fluorophenol	112	3.663	3.653	(0.757)	657418	62.9826	2330
\$ 5 Phenol-d5	99	4.434	4.436	(0.916)	786371	59.9439	2220
\$ 20 Nitrobenzene-d5	82	5.376	5.384	(0.878)	387061	35.6907	1320
\$ 39 2-Fluorobiphenyl	172	7.252	7.254	(0.907)	704047	38.2012	1410
\$ 60 2,4,6-Tribromophenol	329	8.850	8.852	(1.106)	121365	59.3757	2190
\$ 81 p-Terphenyl-d14	244	11.325	11.326	(0.896)	474915	38.4036	1420

ION RATIO REPORT

SV REPORT

Data file: s3a2513.d

Report Date: 01/25/2010 15:39

Lab. ID: 245099004

SampleType: SAMPLE

Injection Date: 25-JAN-2010 15:04

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099004|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	44959	4.43	4.53	80-120	100	(T)
93	3123	4.50	4.53	206-266	7	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	55084	5.38	5.21	80-120	100	(T)
42	34649	5.38	5.21	45-105	63	(T)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	93045	8.00	7.76	80-120	100	(T)
63	1522	8.00	7.76	37- 97	2	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	93045	8.00	8.19	80-120	100	(T)
89	1254	8.00	8.19	42-102	1	(QT)
63	1522	8.00	8.19	21- 81	2	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2513.d
 Lab Smp Id: 245099004 Client Smp ID: RE15-10-7195
 Inj Date : 25-JAN-2010 15:04
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099004|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	10.05680	% moisture

Cpnd Variable Local Compound Variable

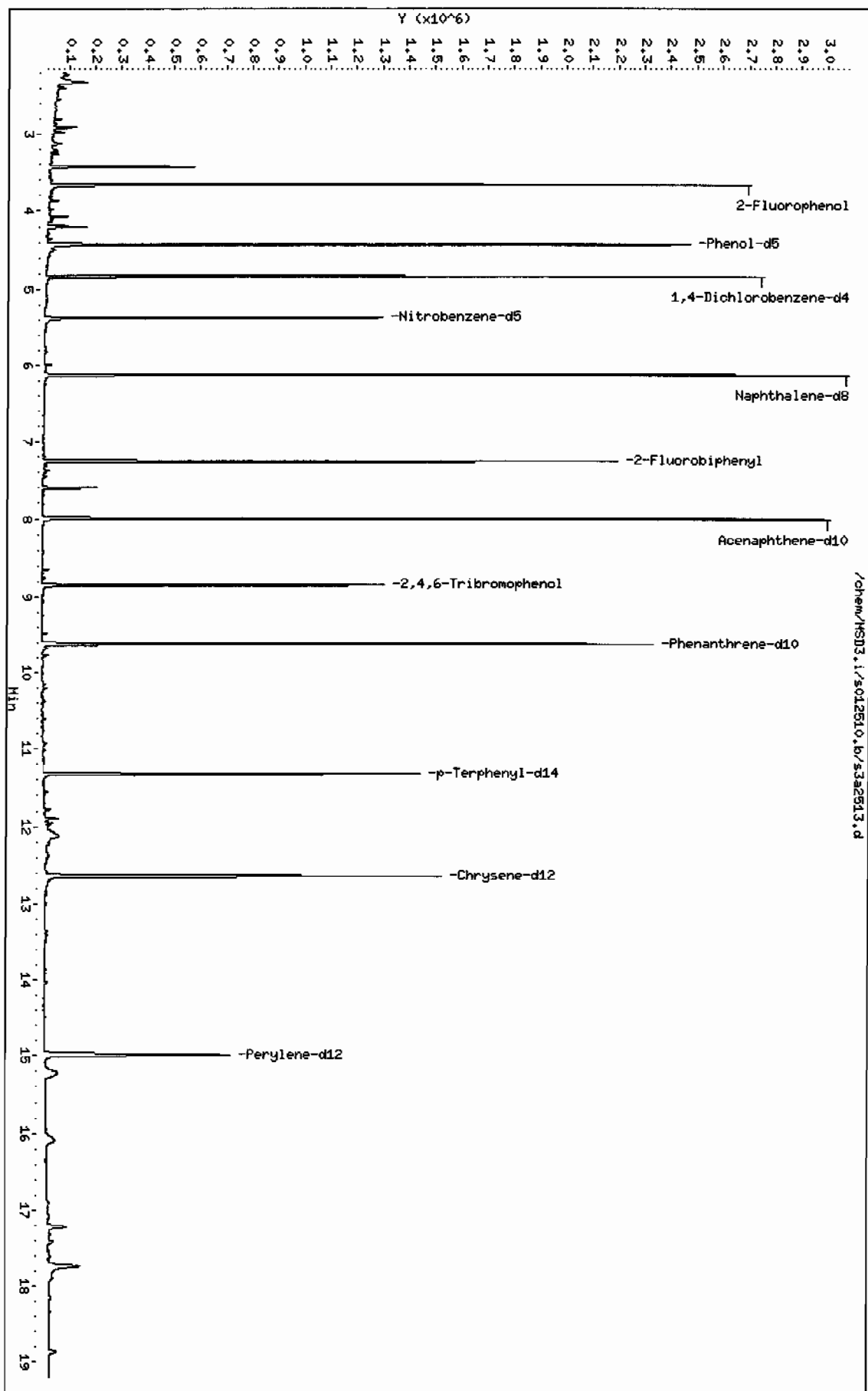
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.839	2534040	40.000
* 98 Perylene-d12	14.989	1313398	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown							
2.147	2562269	40.4455881	1490	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ng/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	====	=====	=====	=====
Unknown					CAS #:		
2.323	291227	4.59704253	170	0		0	10
Unknown Aldol Condensate					CAS #:		
3.425	550130	8.68383975	321	0		0	10
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)					CAS #: 17993-84-9		
15.216	280369	8.53874375	316	30	NIST05.L	72386	98
Unknown					CAS #:		
16.086	204479	6.22748466	230	0		0	98
Unknown					CAS #:		
17.221	154802	4.71456256	174	0		0	98
Unknown					CAS #:		
17.730	444023	13.5228803	500	0		0	98

Data File: /chem/MSD3.i/s012510.b/s3a2513.d
 Date: 25-JAN-2010 15:04
 Client ID: RE15-10-7195
 Sample Info: (245099004)94445511SYMF111L.ML
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-5MS

Instrument: MSD3.1
 Operator: JLD1
 Column diameter: 0.20



Date : 25-JAN-2010 15:04

Client ID: RE15-10-7195

Instrument: MSD3.i

Sample Info: 12450990041944455111SVMF111LANL

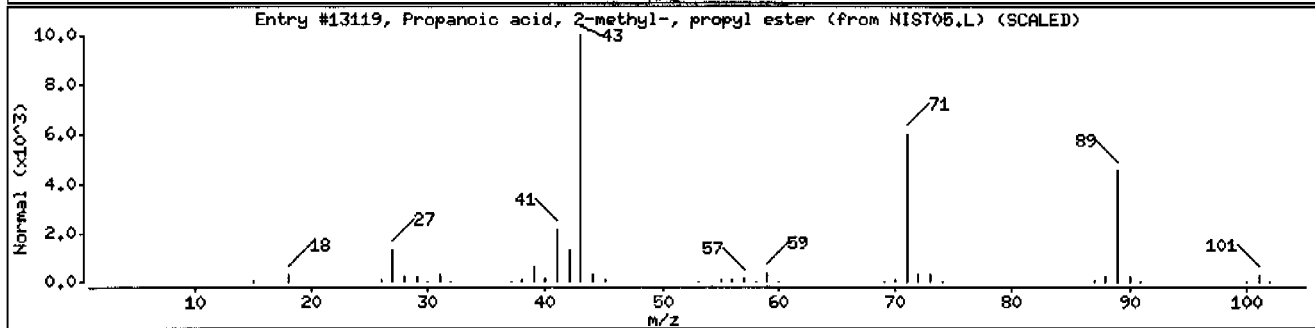
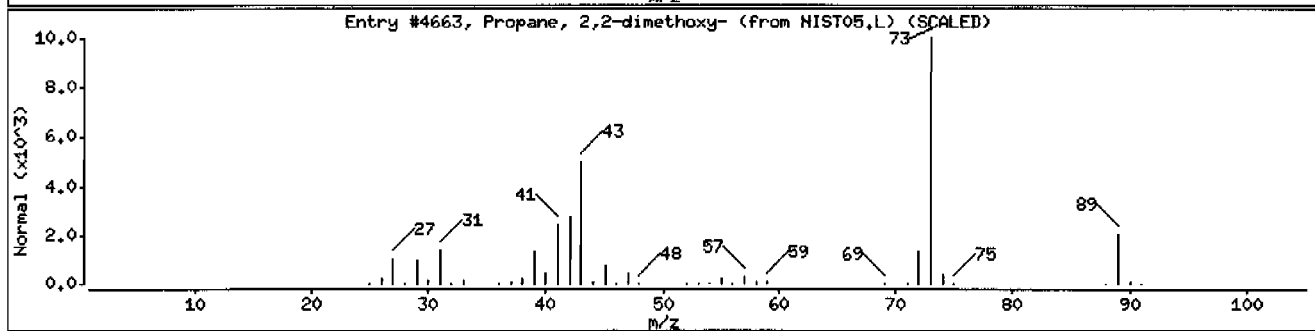
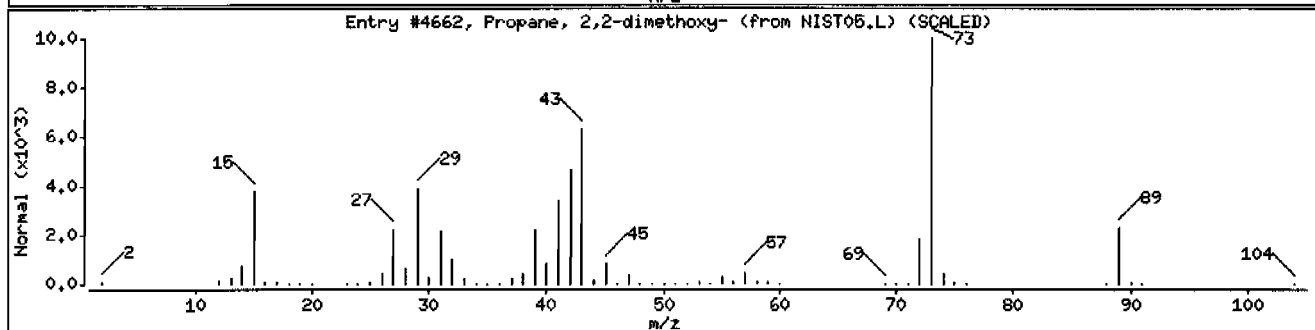
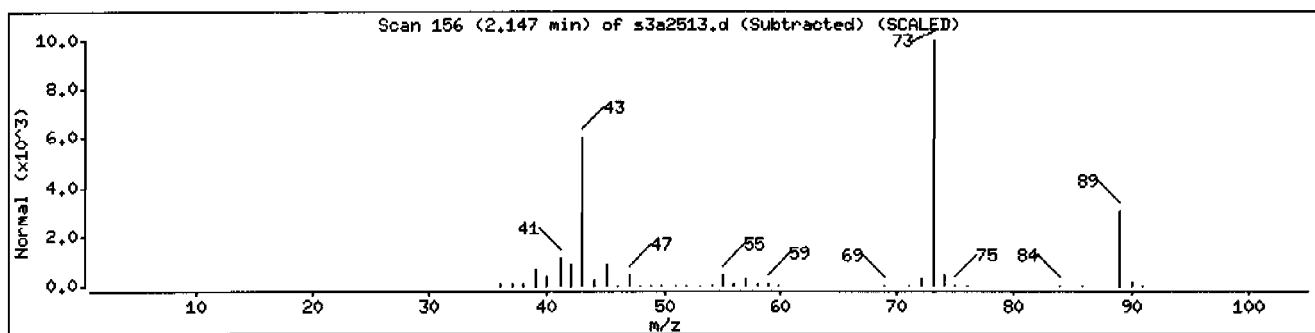
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-5	NIST05.L	13119	23	C7H14O2	130



Date : 25-JAN-2010 15:04

Client ID: RE15-10-7195

Instrument: MSD3.i

Sample Info: 1245099004194445511SVMF111LANL

Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Propanoic acid

1,4-Butanediamine

Pentane, 2-methyl-

CAS Number

Library

Entry

Quality

Formula

Weight

79-09-4

NIST05.L

794

27

C3H6O2

74

110-60-1

NIST05.L

1935

23

C4H12N2

88

107-83-5

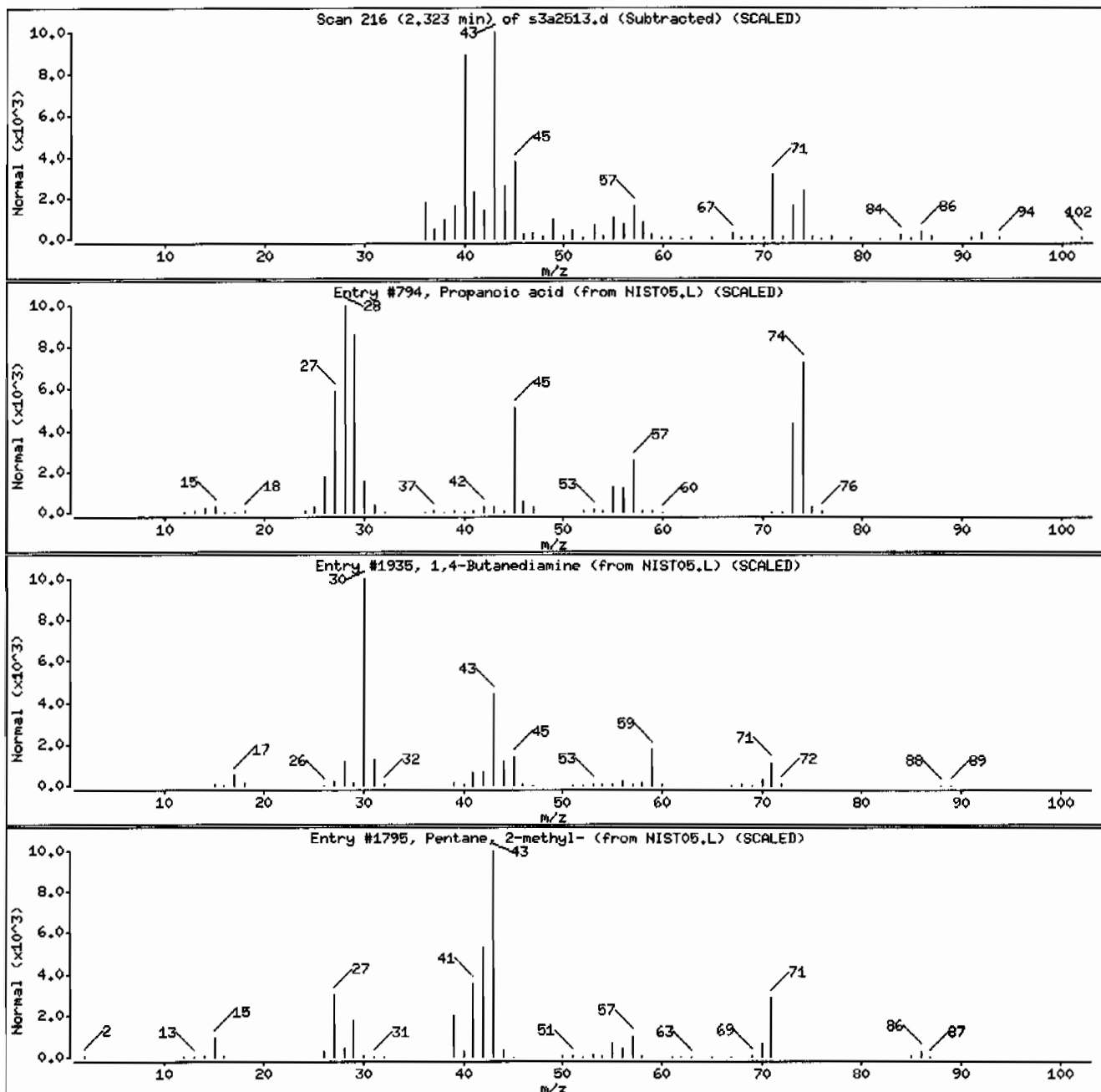
NIST05.L

1795

14

C6H14

86



Date : 25-JAN-2010 15:04

Client ID: RE15-10-7195

Instrument: MSD3.i

Sample Info: 1245099004|94445511|SVHF11|LANL

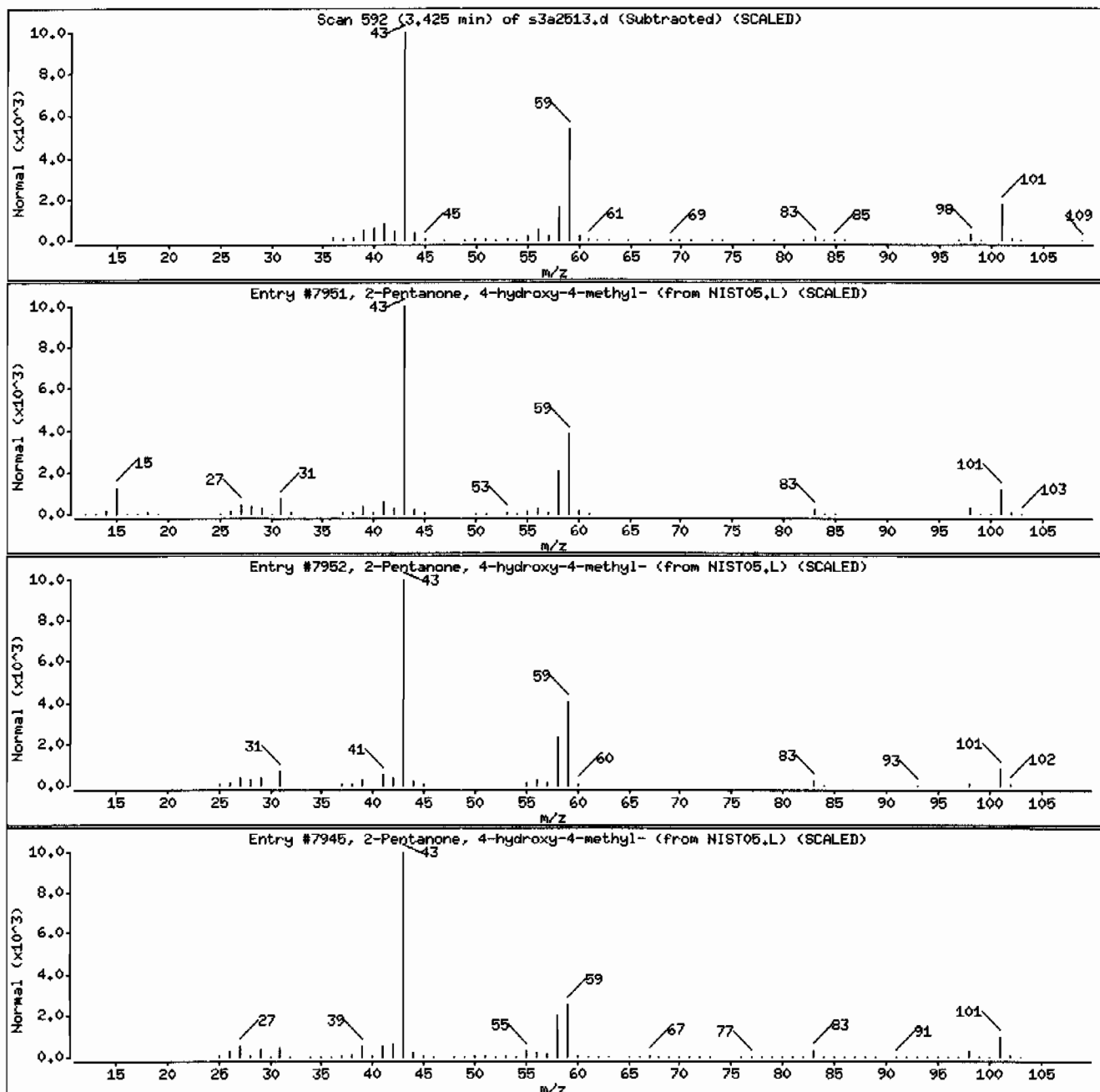
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	33	C6H12O2	116



Date : 25-JAN-2010 15:04

Client ID: RE15-10-7195

Instrument: MSD3.i

Sample Info: 1245099004194445511SVHF11ILANL

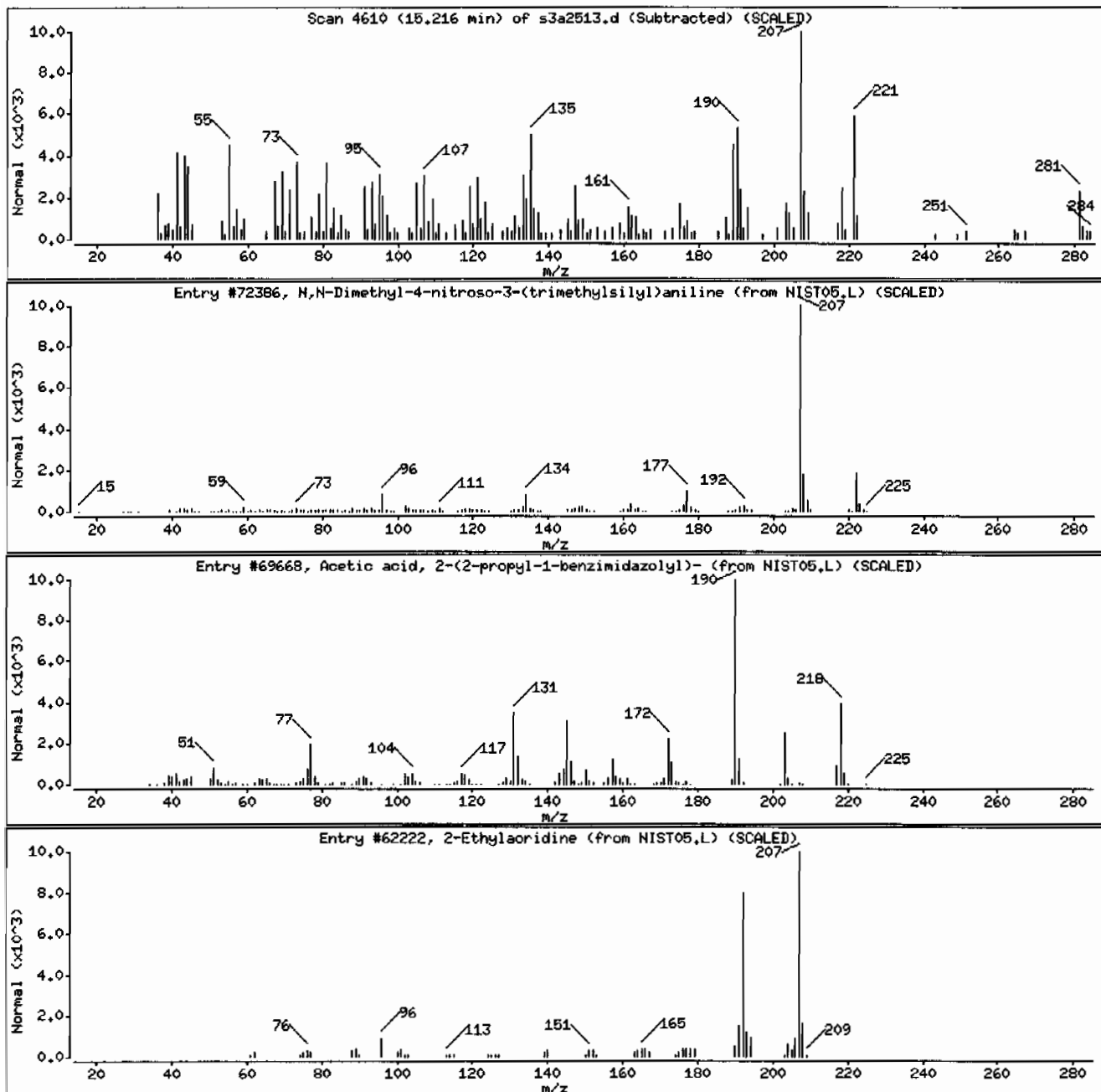
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	30	C ₁₁ H ₁₈ N ₂ OSi	222
Acetic acid, 2-(2-propyl-1-benzimidazolyl)	331736-92-6	NIST05.L	69668	25	C ₁₂ H ₁₄ N ₂ O ₂	218
2-Ethylacridine	55751-83-2	NIST05.L	62222	25	C ₁₅ H ₁₃ N	207



Date : 25-JAN-2010 15:04

Client ID: RE15-10-7195

Instrument: MSD3.i

Sample Info: 1245099004194445511SVMF11/LANL

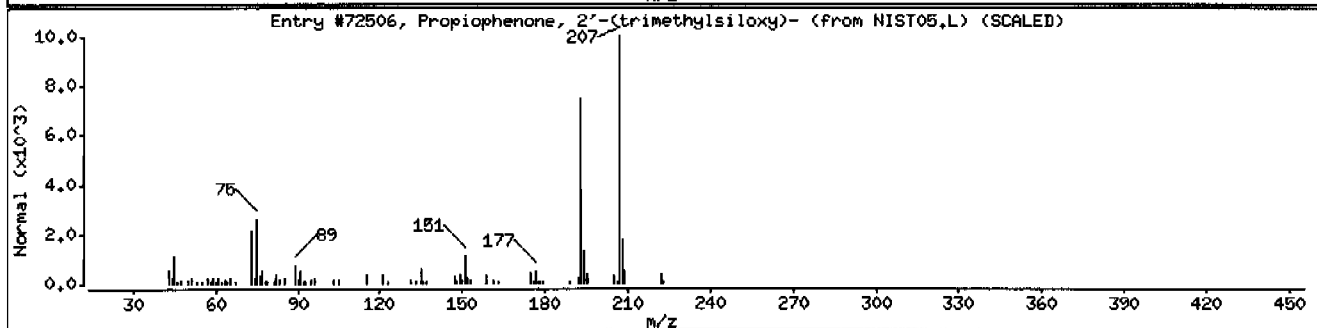
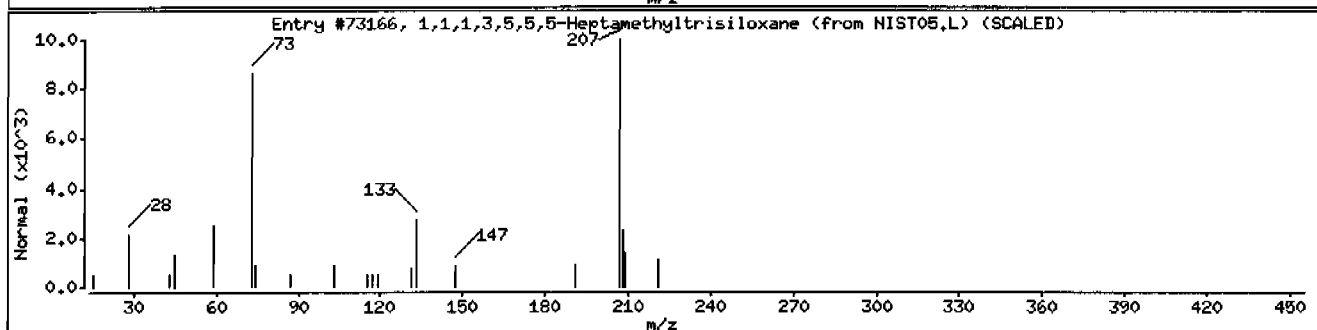
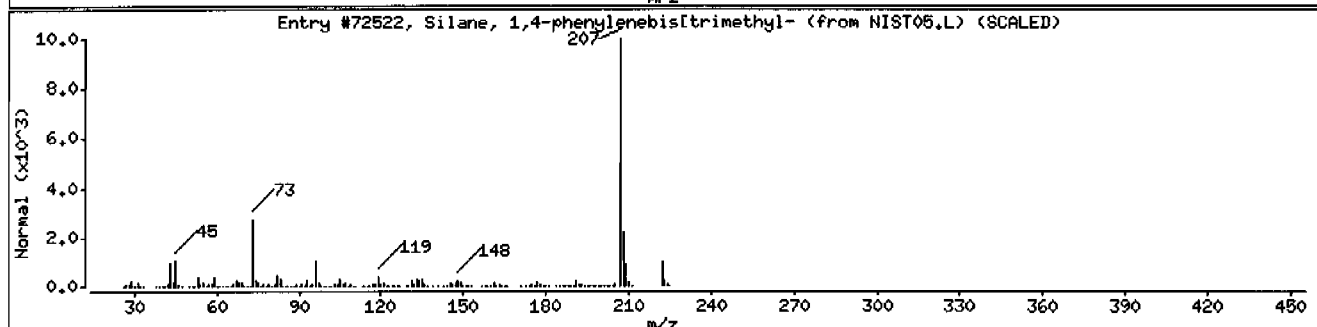
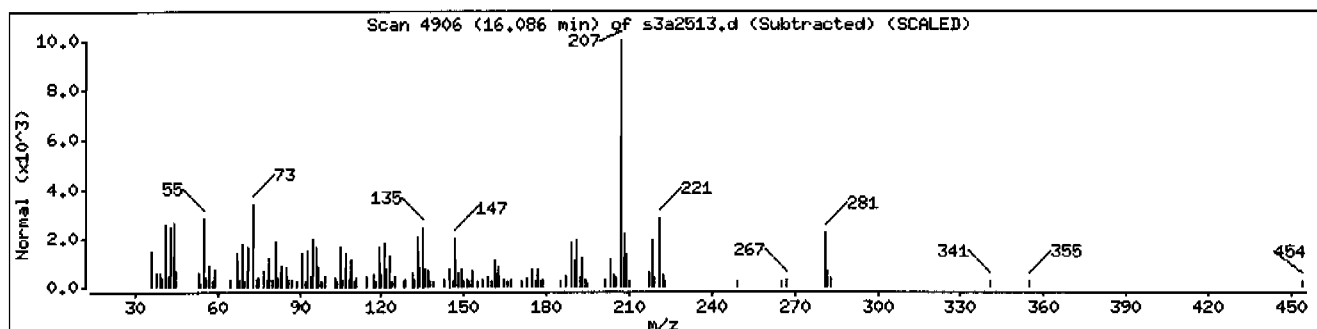
Volume Injected (uL): 0.5

Operator: JLD1

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	45	C ₁₂ H ₂₂ Si ₂	222
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C ₇ H ₂₂ O ₂ Si ₃	222
Propiophenone, 2'-(trimethylsiloxy)-	33342-87-9	NIST05.L	72506	38	C ₁₂ H ₁₈ O ₂ Si	222



Date : 25-JAN-2010 15:04

Client ID: RE15-10-7195

Instrument: MSD3.i

Sample Info: 1245099004194445511SVHF11ILANL

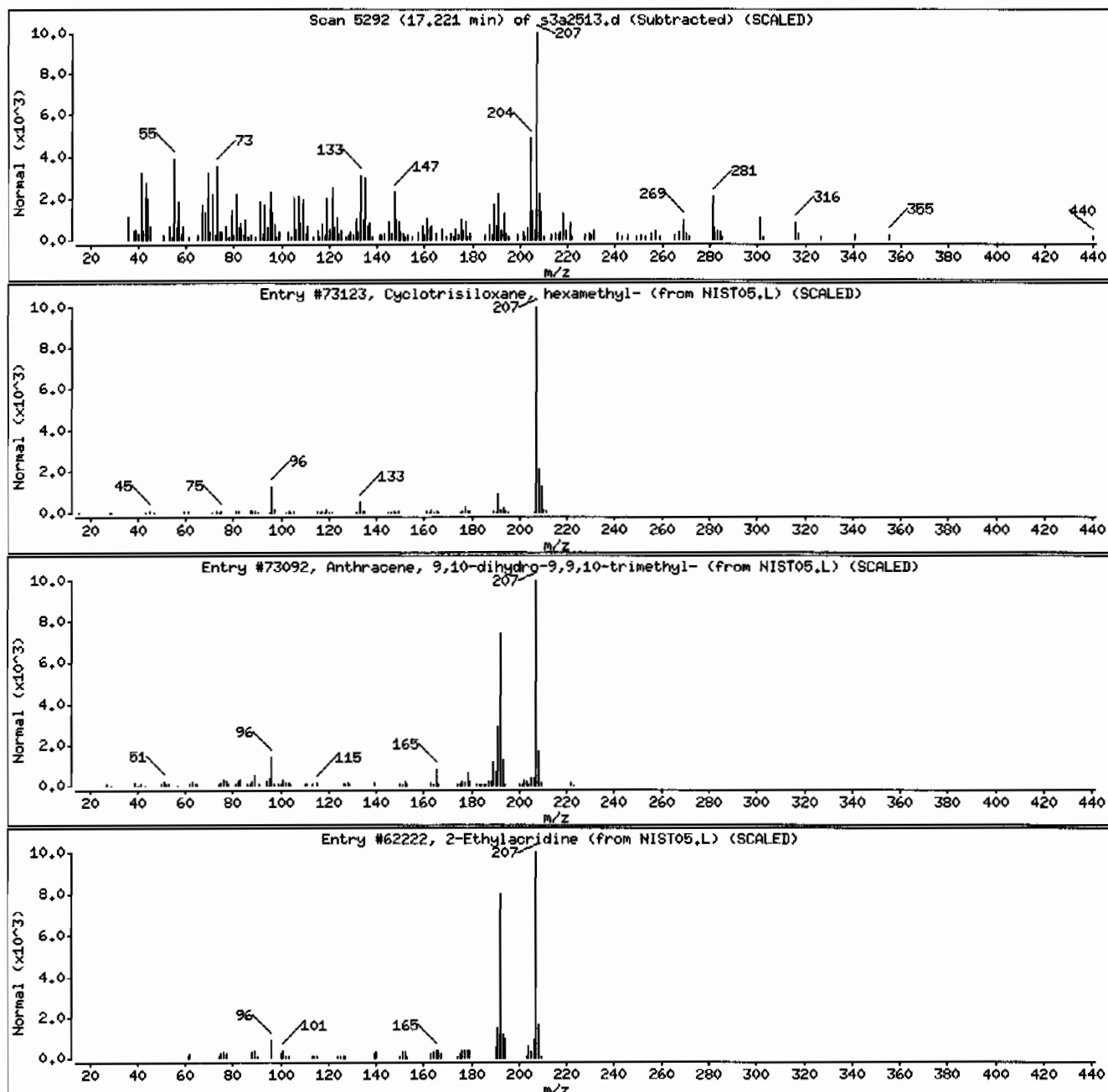
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	38	C ₆ H ₁₈ Si ₃	222
Anthracene, 9,10-dihydro-9,9,10-trimethyl-	14923-29-6	NIST05.L	73092	38	C ₁₇ H ₁₈	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C ₁₅ H ₁₃ N	207



Date : 25-JAN-2010 15:04

Client ID: RE15-10-7195

Instrument: MSD3.i

Sample Info: 1245099004194445511SVMF11LANL

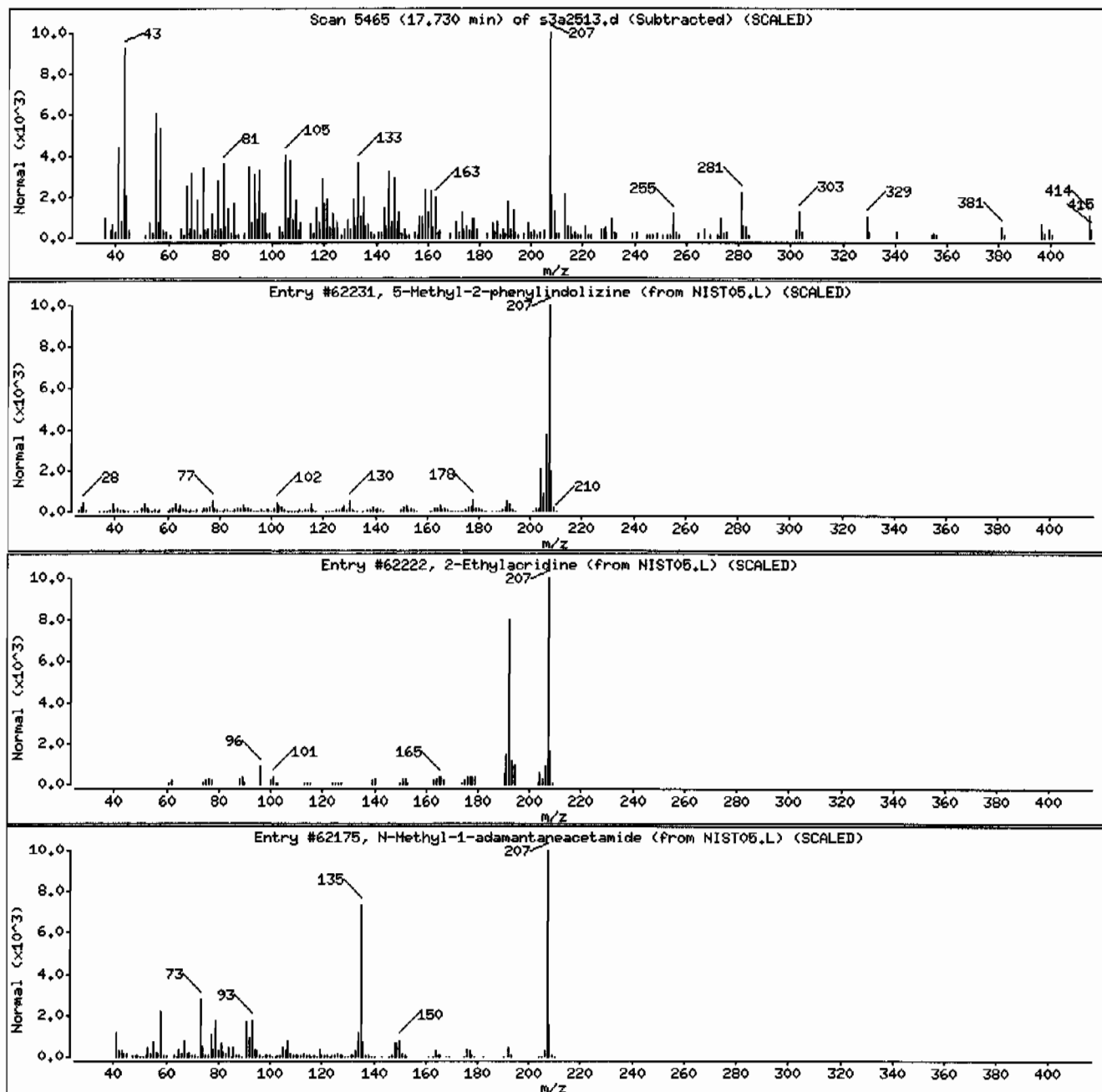
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	41	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	41	C15H13N	207
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	38	C13H21NO	207



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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099005	Date Received: 01/20/2010 08:45	%Moisture: 23.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7196	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 15:31	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.08 g	Final Volume: 1 mL
Data File: s3a2514.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	436	ug/kg	87.1	436
108-95-2	Phenol	U	436	ug/kg	87.1	436
95-57-8	2-Chlorophenol	U	436	ug/kg	87.1	436
106-46-7	1,4-Dichlorobenzene	U	436	ug/kg	87.1	436
621-64-7	N-Nitrosodipropylamine	U	436	ug/kg	87.1	436
59-50-7	4-Chloro-3-methylphenol	U	436	ug/kg	87.1	436
83-32-9	Acenaphthene	U	43.6	ug/kg	14.4	43.6
121-14-2	2,4-Dinitrotoluene	U	436	ug/kg	43.6	436
100-02-7	4-Nitrophenol	U	436	ug/kg	144	436
87-86-5	Pentachlorophenol	U	436	ug/kg	109	436
129-00-0	Pyrene	U	43.6	ug/kg	13.1	43.6
110-86-1	Pyridine	U	436	ug/kg	87.1	436
62-53-3	Aniline	U	436	ug/kg	131	436
111-44-4	bis(2-Chloroethyl) ether	U	436	ug/kg	87.1	436
541-73-1	1,3-Dichlorobenzene	U	436	ug/kg	87.1	436
100-51-6	Benzyl alcohol	U	436	ug/kg	131	436
95-50-1	1,2-Dichlorobenzene	U	436	ug/kg	87.1	436
108-60-1	bis(2-Chloroisopropyl) ether	U	436	ug/kg	87.1	436
95-48-7	o-Cresol	U	436	ug/kg	87.1	436
65794-96-9	m,p-Cresols	U	436	ug/kg	131	436
67-72-1	Hexachloroethane	U	436	ug/kg	87.1	436
98-95-3	Nitrobenzene	U	436	ug/kg	87.1	436
78-59-1	Isophorone	U	436	ug/kg	87.1	436
88-75-5	2-Nitrophenol	U	436	ug/kg	87.1	436
105-67-9	2,4-Dimethylphenol	U	436	ug/kg	152	436
111-91-1	bis(2-Chloroethoxy)methane	U	436	ug/kg	87.1	436
120-83-2	2,4-Dichlorophenol	U	436	ug/kg	87.1	436
65-85-0	Benzoic acid	U	871	ug/kg	218	871
91-20-3	Naphthalene	U	43.6	ug/kg	13.1	43.6
106-47-8	4-Chloroaniline	U	436	ug/kg	87.1	436
87-68-3	Hexachlorobutadiene	U	436	ug/kg	87.1	436
91-57-6	2-Methylnaphthalene	U	43.6	ug/kg	8.71	43.6
77-47-4	Hexachlorocyclopentadiene	U	436	ug/kg	87.1	436
88-06-2	2,4,6-Trichlorophenol	U	436	ug/kg	87.1	436
95-95-4	2,4,5-Trichlorophenol	U	436	ug/kg	87.1	436
91-58-7	2-Chloronaphthalene	U	43.6	ug/kg	14.4	43.6
88-74-4	2-Nitroaniline	U	436	ug/kg	87.1	436
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	436	ug/kg	87.1	436

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

SDG Number: 10-1301
Lab Sample ID: 245099005

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7196
Batch ID: 944455
Run Date: 01/25/2010 15:31
Prep Date: 01/22/2010 23:39
Data File: s3a2514.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	436	ug/kg	87.1	436
606-20-2	2,6-Dinitrotoluene	U	436	ug/kg	43.6	436
208-96-8	Acenaphthylene	U	43.6	ug/kg	13.1	43.6
51-28-5	2,4-Dinitrophenol	U	871	ug/kg	166	871
132-64-9	Dibenzofuran	U	436	ug/kg	87.1	436
84-66-2	Diethylphthalate	U	436	ug/kg	87.1	436
86-73-7	Fluorene	U	43.6	ug/kg	13.1	43.6
7005-72-3	4-Chlorophenylphenylether	U	436	ug/kg	87.1	436
534-52-1	2-Methyl-4,6-dinitrophenol	U	436	ug/kg	87.1	436
100-01-6	4-Nitroaniline	U	436	ug/kg	131	436
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	436	ug/kg	87.1	436
122-66-7	Azobenzene	U	436	ug/kg	87.1	436
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	436	ug/kg	87.1	436
118-74-1	Hexachlorobenzene	U	436	ug/kg	87.1	436
85-01-8	Phenanthrene	U	43.6	ug/kg	13.1	43.6
120-12-7	Anthracene	U	43.6	ug/kg	8.71	43.6
84-74-2	Di-n-butylphthalate	U	436	ug/kg	87.1	436
206-44-0	Fluoranthene	U	43.6	ug/kg	13.1	43.6
85-68-7	Butylbenzylphthalate	U	436	ug/kg	87.1	436
56-55-3	Benzo(a)anthracene	U	43.6	ug/kg	13.1	43.6
91-94-1	3,3'-Dichlorobenzidine	U	436	ug/kg	131	436
218-01-9	Chrysene	U	43.6	ug/kg	13.1	43.6
117-81-7	bis(2-Ethylhexyl)phthalate	U	436	ug/kg	87.1	436
117-84-0	Di-n-octylphthalate	U	436	ug/kg	87.1	436
205-99-2	Benzo(b)fluoranthene	U	43.6	ug/kg	13.1	43.6
207-08-9	Benzo(k)fluoranthene	U	43.6	ug/kg	13.1	43.6
50-32-8	Benzo(a)pyrene	U	43.6	ug/kg	13.1	43.6
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.6	ug/kg	13.1	43.6
53-70-3	Dibenzo(a,h)anthracene	U	43.6	ug/kg	13.1	43.6
191-24-2	Benzo(ghi)perylene	U	43.6	ug/kg	13.1	43.6
120-82-1	1,2,4-Trichlorobenzene	U	436	ug/kg	87.1	436

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
7785-70-8	1R- α -Pinene	4.22	13900	ug/kg	96	NJ
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	4.89	963	ug/kg	96	NJ

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

SDG Number: 10-1301
Lab Sample ID: 245099005

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.08 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	6	1130	ug/kg		J
1197-01-9	Benzenemethanol, .alpha.,.alpha.,4-trime	6.06	747	ug/kg	95	NJ
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth	6.71	955	ug/kg	99	NJ
29050-33-7	(+)-4-Carene	7.07	942	ug/kg	93	NJ
	Unknown	10.2	1070	ug/kg		J
1000197-14-1	4b,8-Dimethyl-2-isopropylphenanthrene, 4	10.63	1640	ug/kg	98	NJ
	Unknown	10.95	1290	ug/kg		J
	Unknown	11.55	282	ug/kg		J
	Unknown	11.6	577	ug/kg		J
	Unknown	11.63	455	ug/kg		J
	Unknown	11.68	673	ug/kg		J
	Unknown	11.8	474	ug/kg		J
673-84-7	2,4,6-Octatriene, 2,6-dimethyl-	12	1390	ug/kg	38	NJ
2223-54-3	1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	12.06	392	ug/kg	35	NJ
5508-58-7	Andrographolide	12.13	257	ug/kg	15	NJ
49599-09-9	Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	12.29	3080	ug/kg	50	NJ
68284-24-2	Cycloheptane, 1,3,5-tris(methylene)-	12.32	1440	ug/kg	25	NJ
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.46	3590	ug/kg	99	NJ
	Unknown	12.54	180	ug/kg		J
56554-57-5	5,8,11-Heptadecatriynoic acid, methyl es	12.77	177	ug/kg	53	NJ
1000125-88-0	.alpha.-Tetraloxime, 8-fluoro-5,6-dimeth	12.82	194	ug/kg	25	NJ
137987-78-1	Benzo[thiophene-3-carboxylic acid, 2-amin	12.89	364	ug/kg	64	NJ
471-77-2	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.95	1020	ug/kg	91	NJ
3056-71-1	Benzenebutanamide, N-phenyl-	13.11	237	ug/kg	25	NJ
1000128-34-5	Preg-4-en-17,21-diol-3,20-dione, 9,11-e	13.34	225	ug/kg	10	NJ

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2514.d
Lab Smp Id: 245099005 Client Smp ID: RE15-10-7196
Inj Date : 25-JAN-2010 15:31
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099005|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	23.66860	% moisture

Cpnd Variable Local Compound Variable

						CONCENTRATIONS	
QUANT SIG						ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.843	4.841	(1.000)	383178	40.0000	
* 29 Naphthalene-d8	136	6.124	6.126	(1.000)	1426026	40.0000	
* 46 Acenaphthene-d10	164	7.997	8.003	(1.000)	688372	40.0000	
* 67 Phenanthrene-d10	188	9.615	9.618	(1.000)	1012540	40.0000	
* 91 Chrysene-d12	240	12.655	12.650	(1.000)	567555	40.0000	
* 98 Perylene-d12	264	15.007	14.999	(1.000)	241239	40.0000	
\$ 3 2-Fluorophenol	112	3.660	3.653	(0.756)	591293	59.3026	2580
\$ 5 Phenol-d5	99	4.435	4.436	(0.916)	686829	54.8098	2390
\$ 20 Nitrobenzene-d5	82	5.378	5.384	(0.878)	323021	30.6649	1340
\$ 39 2-Fluorobiphenyl	172	7.253	7.254	(0.907)	587917	33.0421	1440
\$ 60 2,4,6-Tribromophenol	329	8.848	8.852	(1.106)	109804	55.6428	2420
\$ 81 p-Terphenyl-d14	244	11.326	11.326	(0.895)	406071	41.6261	1810

ION RATIO REPORT

SV REPORT

Data file: s3a2514.d

Report Date: 01/25/2010 15:57

Lab. ID: 245099005

SampleType: SAMPLE

Injection Date: 25-JAN-2010 15:31

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099005|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	38374	4.43	4.53	80-120	100	(T)
93	80901	4.51	4.53	206-266	211	()

6 Phenol		CAS#: 108-95-2				
94	27400	4.36	4.45	80-120	100	(T)
66	14993	4.36	4.45	18- 78	55	(T)
65	20050	4.36	4.45	5- 65	73	(QT)

7 bis(2-Chloroethyl) ether		CAS#: 111-44-4				
63	59929	4.51	4.56	80-120	100	()
93	82914	4.51	4.56	92-152	138	()
95	3899	4.57	4.56	8- 68	7	(Q)

12 Benzyl alcohol		CAS#: 100-51-6				
108	36373	4.79	4.95	80-120	100	(T)
79	725564	4.79	4.95	101-161	1995	(QT)
77	765871	4.79	4.95	55-115	2106	(QT)

15 o-Cresol		CAS#: 95-48-7				
107	25329	4.93	5.03	80-120	100	(T)
108	8407	4.93	5.03	86-146	33	(QT)
77	28625	4.93	5.03	19- 79	113	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	47704	5.38	5.21	80-120	100	(T)
42	30570	5.38	5.21	45-105	64	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
<hr/>						
18 m,p-Cresols			CAS#: 65794-96-9			
107	39407	5.33	5.19	80-120	100	(T)
108	11705	5.33	5.19	61-121	30	(QT)
77	11900	5.33	5.19	5- 65	30	(T)
<hr/>						
22 Isophorone			CAS#: 78-59-1			
82	49765	5.80	5.64	80-120	100	(T)
138	3186	5.80	5.64	0- 50	6	(T)
<hr/>						
25 bis(2-Chloroethoxy)methane			CAS#: 111-91-1			
93	73648	5.80	5.84	80-120	100	()
123	20757	5.80	5.84	0- 49	28	()
95	97563	5.80	5.84	2- 62	132	(Q)
<hr/>						
27 Benzoic acid			CAS#: 65-85-0			
105	39152	5.80	5.82	80-120	100	()
122	6669	5.80	5.82	47-107	17	(Q)
77	98975	5.80	5.82	43-103	253	(Q)
<hr/>						
40 2-Chloronaphthalene			CAS#: 91-58-7			
162	46696	7.60	7.40	80-120	100	(T)
164	2832	7.60	7.40	2- 62	6	(T)
127	3648	7.60	7.40	9- 69	8	(QT)
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42 o-Nitroaniline			CAS#: 88-74-4			
65	61354	7.60	7.50	80-120	100	(T)
92	68578	7.60	7.50	32- 92	112	(QT)
138	5289	7.60	7.50	72-132	9	(QT)
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41 m-Nitroaniline			CAS#: 99-09-2			
138	180	8.02	7.94	80-120	100	(T)
92	6256	8.00	7.94	79-139	3473	(Q)
108	16434	8.00	7.94	0- 40	9124	(Q)
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44 2,6-Dinitrotoluene			CAS#: 606-20-2			
165	90172	8.00	7.76	80-120	100	(T)
63	1428	8.00	7.76	37- 97	2	(QT)
<hr/>						
50 2,4-Dinitrotoluene			CAS#: 121-14-2			
165	90172	8.00	8.19	80-120	100	(T)
89	1481	8.00	8.19	42-102	2	(QT)
63	1428	8.00	8.19	21- 81	2	(QT)
<hr/>						
56 p-Nitroaniline			CAS#: 100-01-6			
138	152	8.62	8.60	80-120	100	()
108	1171	8.56	8.60	40-100	767	(Q)
92	711	8.55	8.60	6- 66	465	(Q)
<hr/>						

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
79 Pyrene		CAS#: 129-00-0				
202	7071	11.32	11.19	80-120	100	(T)
200	8103	11.33	11.19	0- 51	115	(QT)
101	1395	11.32	11.19	0- 46	20	(T)

85 Butylbenzylphthalate		CAS#: 85-68-7				
149	31416	11.93	11.86	80-120	100	(T)
91	147276	11.93	11.86	41-101	469	(QT)
206	2115	11.94	11.86	0- 51	7	(T)

90 3,3'-Dichlorobenzidine		CAS#: 91-94-1				
252	523	12.58	12.57	80-120	100	()
254	4340	12.61	12.57	33- 93	829	(Q)
126	910	12.61	12.57	0- 46	174	(Q)

93 bis(2-Ethylhexyl)phthalate		CAS#: 117-81-7				
149	33494	12.62	12.59	80-120	100	()
167	4938	12.61	12.59	3- 63	15	()

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2514.d
 Lab Smp Id: 245099005 Client Smp ID: RE15-10-7196
 Inj Date : 25-JAN-2010 15:31
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099005|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	23.66860	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.843	3070735	40.000
* 29 Naphthalene-d8	6.124	4187015	40.000
* 46 Acenaphthene-d10	7.997	3319448	40.000
* 67 Phenanthrene-d10	9.615	2637911	40.000
* 91 Chrysene-d12	12.655	17981722	40.000

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

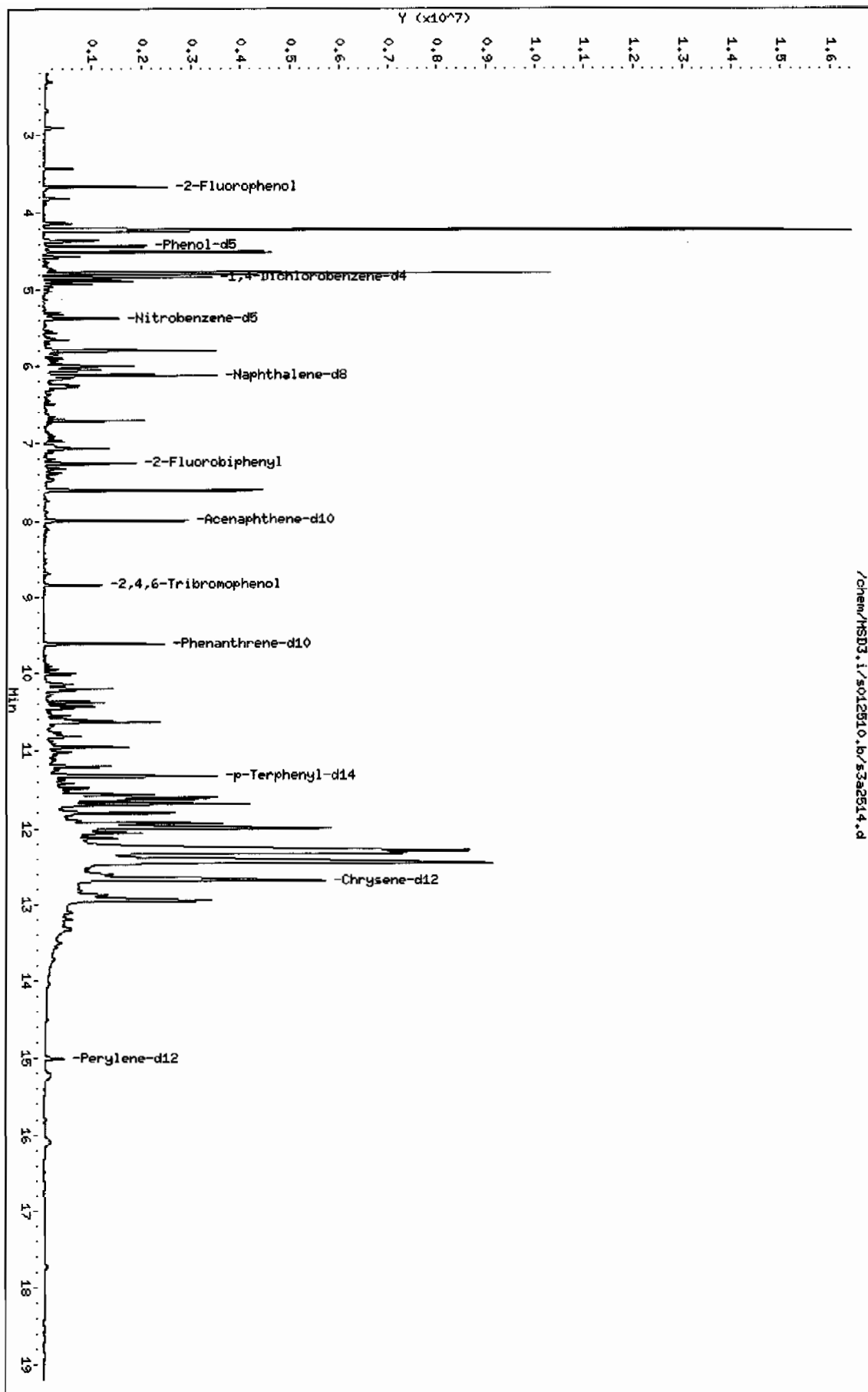
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	====	=====	=====	=====	=====	=====	=====
1R-.alpha.-Pinene					CAS #: 7785-70-8		
4.224	24430682	318.238840	13900	96	NIST05.L	15186	10
Benzene, 1-methyl-2-(1-methylethyl)-					CAS #: 527-84-4		
4.893	1697401	22.1106816	963	96	NIST05.L	14419	10
Unknown					CAS #:		
6.001	2720418	25.9890933	1130	0		0	29
Benzenemethanol, .alpha.,.alpha.,4-trime					CAS #: 1197-01-9		
6.057	1795668	17.1546336	747	95	NIST05.L	22882	29
Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimeth					CAS #: 5655-61-8		
6.709	2295711	21.9317145	955	99	NIST05.L	54340	29
(+)-4-Carene					CAS #: 29050-33-7		
7.068	1794197	21.6204231	942	93	NIST05.L	15169	46
Unknown					CAS #:		
10.202	1625756	24.6521645	1070	0		0	67
4b,8-Dimethyl-2-isopropylphenanthrene, 4					CAS #: 1000197-14-1		
10.632	2486756	37.7079532	1640	98	NIST05.L	96373	67
Unknown					CAS #:		
10.954	1955474	29.6518461	1290	0		0	67
Unknown					CAS #:		
11.554	2914831	6.48398614	282	0		0	91
Unknown					CAS #:		
11.598	5957992	13.2534401	577	0		0	91
Unknown					CAS #:		
11.628	4699207	10.4532958	455	0		0	91
Unknown					CAS #:		
11.681	6941821	15.4419481	672	0		0	91
Unknown					CAS #:		
11.799	4895107	10.8890733	474	0		0	91
2,4,6-Octatriene, 2,6-dimethyl-					CAS #: 673-84-7		
11.998	14334181	31.8861127	1390	38	NIST05.L	15244	91

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-					CAS #: 2223-54-3		
12.060	4049989	9.00912305	392	35	NIST05.L	15305	91
Andrographolide					CAS #: 5508-58-7		
12.131	2656213	5.90869643	257	15	NIST05.L	152634	91
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox					CAS #: 49599-09-9		
12.288	31838589	70.8243370	3080	50	NIST05.L	125840	91
Cycloheptane, 1,3,5-tris(methylene)-					CAS #: 68284-24-2		
12.323	14850022	33.0335922	1440	25	NIST05.L	14422	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1740-19-8		
12.456	37004566	82.3159540	3580	99	NIST05.L	125034	91
Unknown					CAS #:		
12.539	1856184	4.12904595	180	0		0	91
5,8,11-Heptadecatriynoic acid, methyl es					CAS #: 56554-57-5		
12.773	1826861	4.06381805	177	53	NIST05.L	106987	91
.alpha.-Tetraoxime, 8-fluoro-5,6-dimeth					CAS #: 1000125-88-0		
12.823	2003161	4.45599335	194	25	NIST05.L	84370	91
Benzothiophene-3-carboxylic acid, 2-amin					CAS #: 137987-78-1		
12.885	3752046	8.34635532	364	64	NIST05.L	113658	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 471-77-2		
12.954	10485806	23.3254763	1020	91	NIST05.L	126183	91
Benzenebutanamide, N-phenyl-					CAS #: 3056-71-1		
13.107	2445108	5.43909566	237	25	NIST05.L	84608	91
Pregn-4-en-17,21-diol-3,20-dione, 9,11-e					CAS #: 1000128-34-5		
13.338	2325859	5.17382939	225	10	NIST05.L	157143	91

Data File: /chem/MSD3.1/s012510.b/s3a2514.d
Date : 25-JAN-2010 15:31
Client ID: RE15-10-7196
Sample Info: 1245099005194445511SVHF11.LANL
Volume Injected (uL): 0.5
Column phase: 3uM DB-SHS

Instrument: MSD3.1
Operator: JLD1
Column diameter: 0.20

/chem/MSD3.1/s012510.b/s3a2514.d



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVMF11|LANL

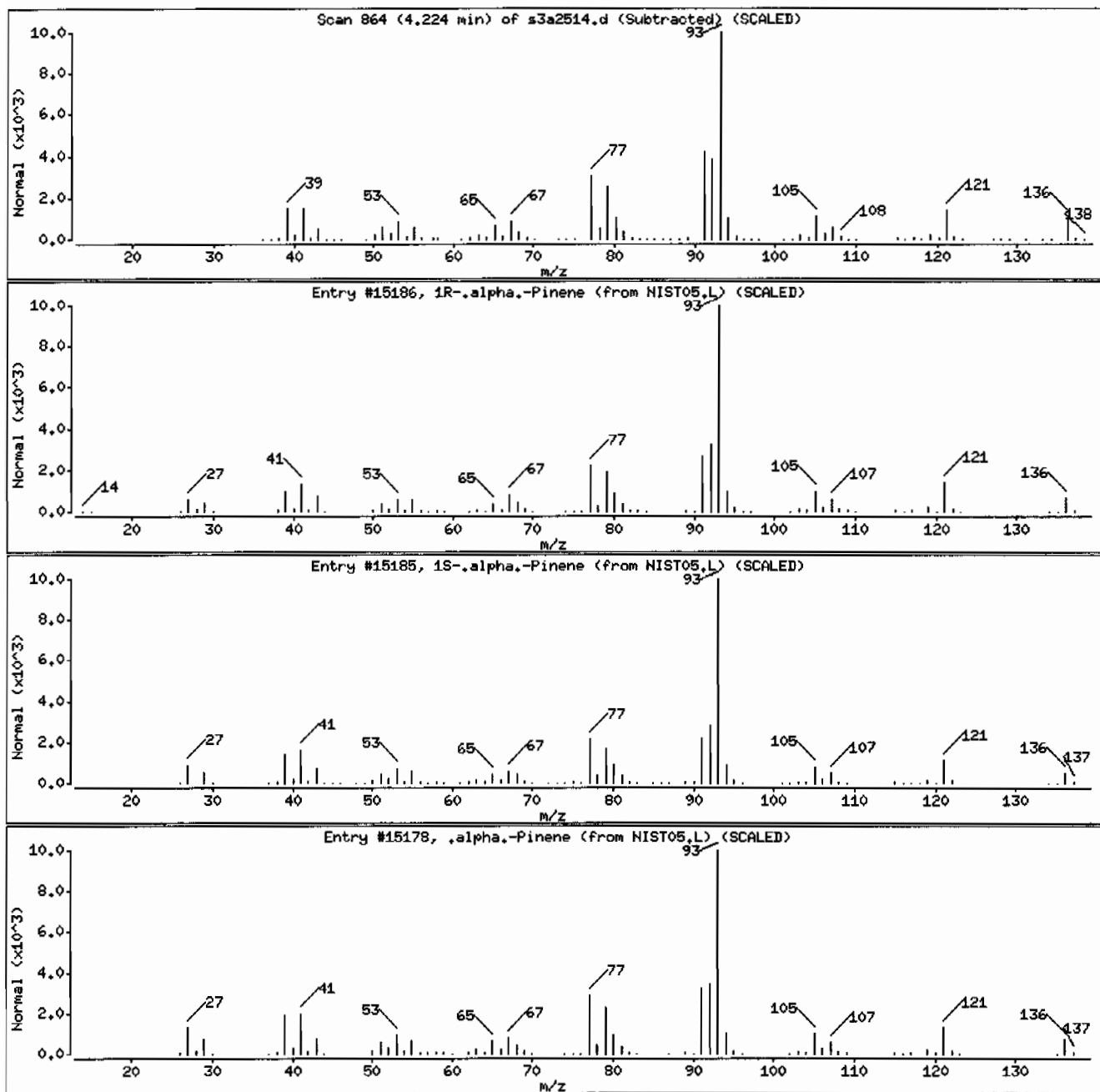
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1R-.alpha.-Pinene	7785-70-8	NIST05.L	15186	96	C10H16	136
1S-.alpha.-Pinene	7785-26-4	NIST05.L	15185	96	C10H16	136
.alpha.-Pinene	80-56-8	NIST05.L	15178	96	C10H16	136



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVMF11ILANL

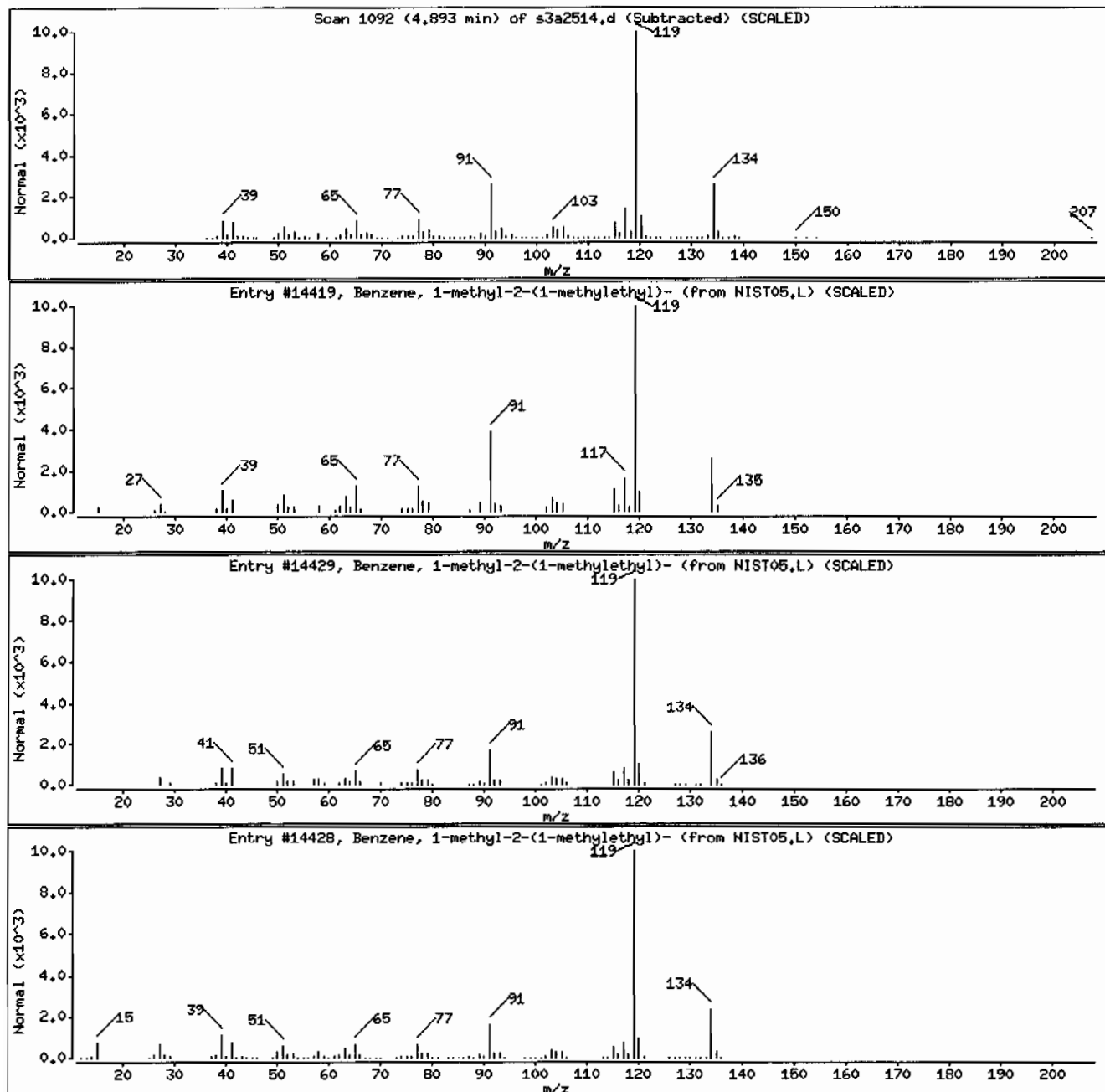
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14419	96	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14429	95	C10H14	134
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NIST05.L	14428	95	C10H14	134



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

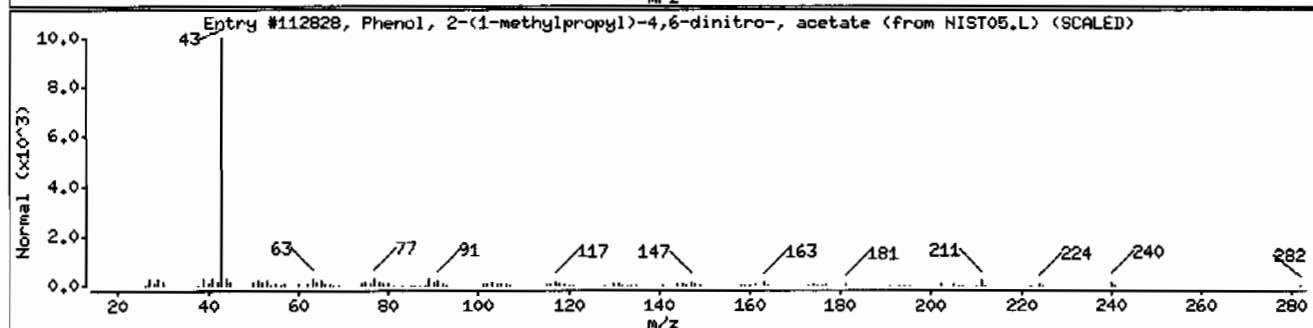
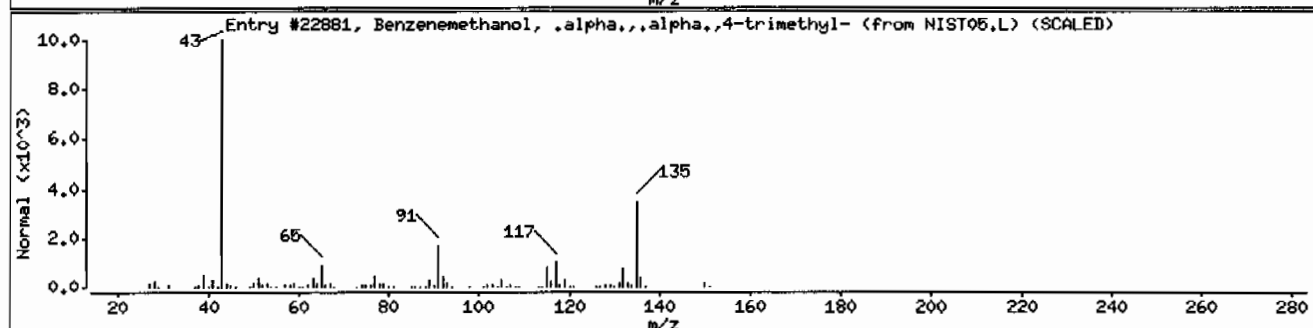
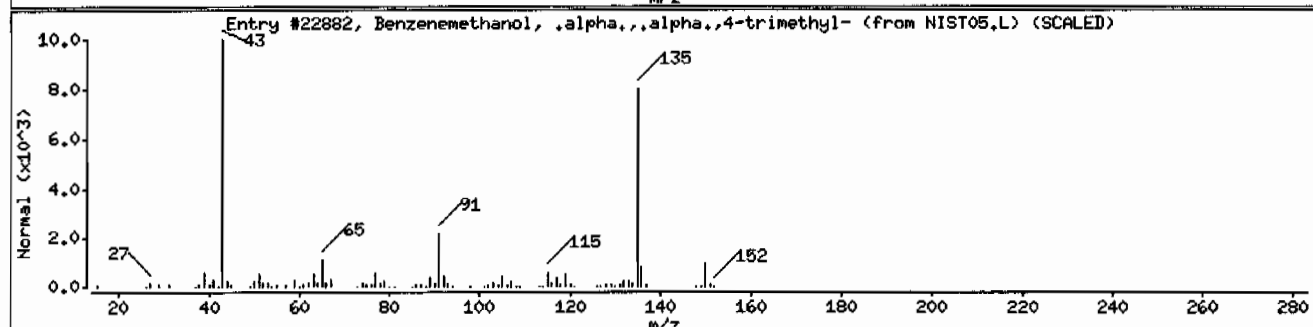
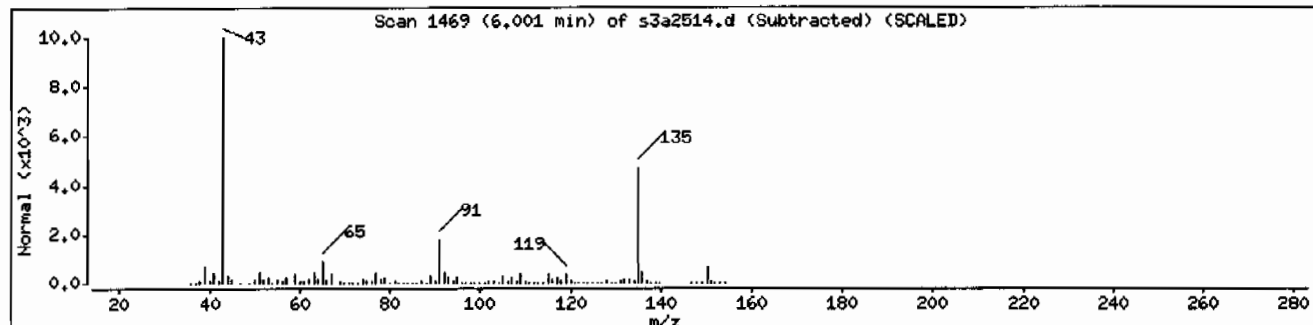
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenemethanol, .alpha.,.alpha.,4-trime	1197-01-9	NIST05.L	22882	93	C10H14O	150
Benzenemethanol, .alpha.,.alpha.,4-trime	1197-01-9	NIST05.L	22881	56	C10H14O	150
Phenol, 2-(1-methylpropyl)-4,6-dinitro-,	2813-95-8	NIST05.L	112828	10	C12H14N2O6	282



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: I245099005I944455I1SVHF11ILANL

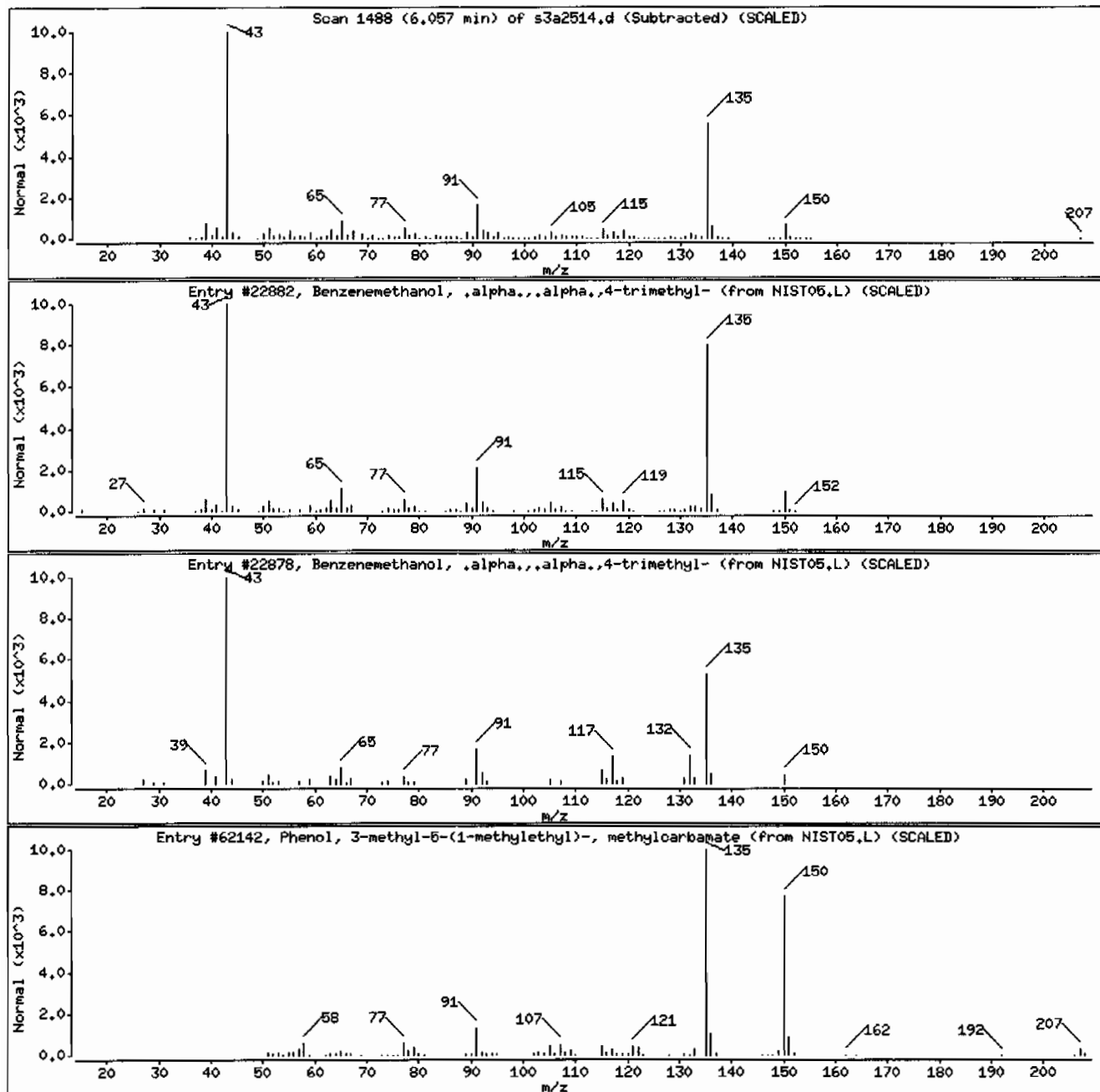
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzenemethanol, .alpha.,.alpha.,4-trime	1197-01-9	NIST05.L	22882	95	C10H14O	150
Benzenemethanol, .alpha.,.alpha.,4-trime	1197-01-9	NIST05.L	22878	80	C10H14O	150
Phenol, 3-methyl-5-(1-methylethyl)-, met	2631-37-0	NIST05.L	62142	64	C12H17NO2	207



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF11ILANL

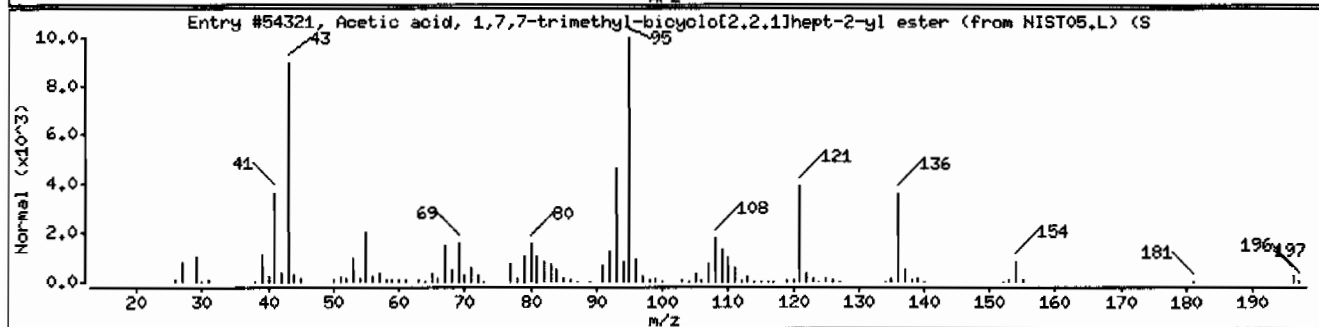
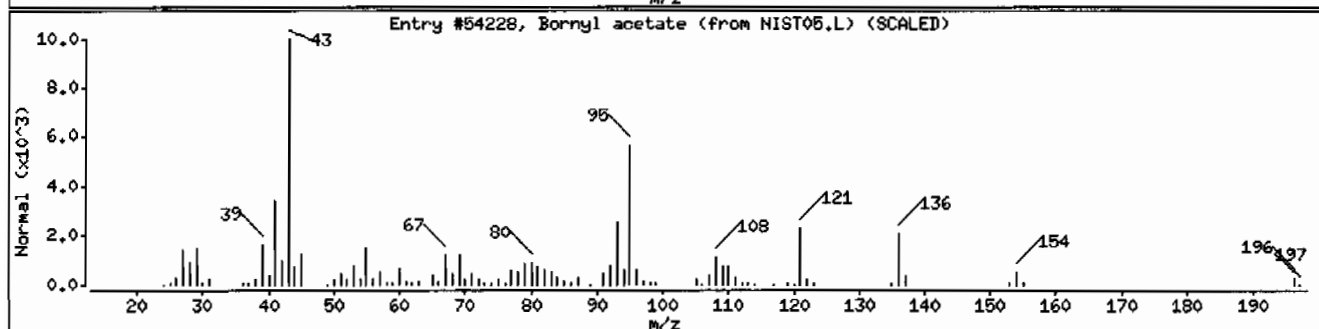
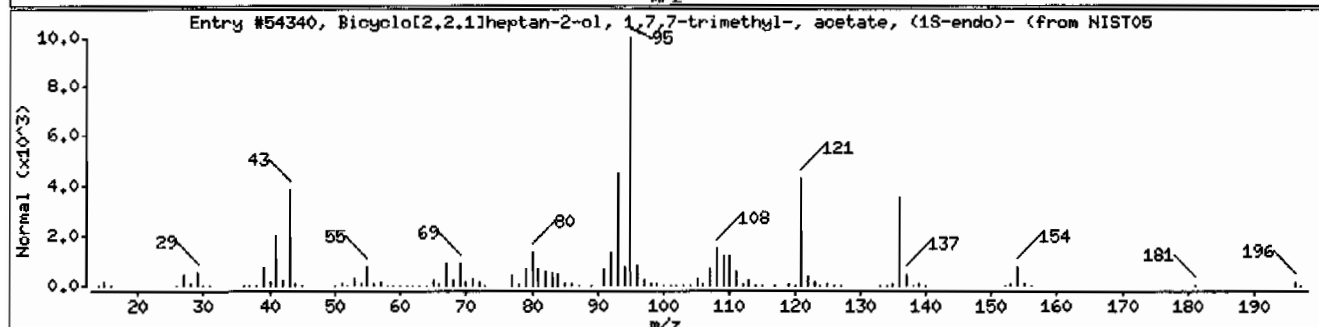
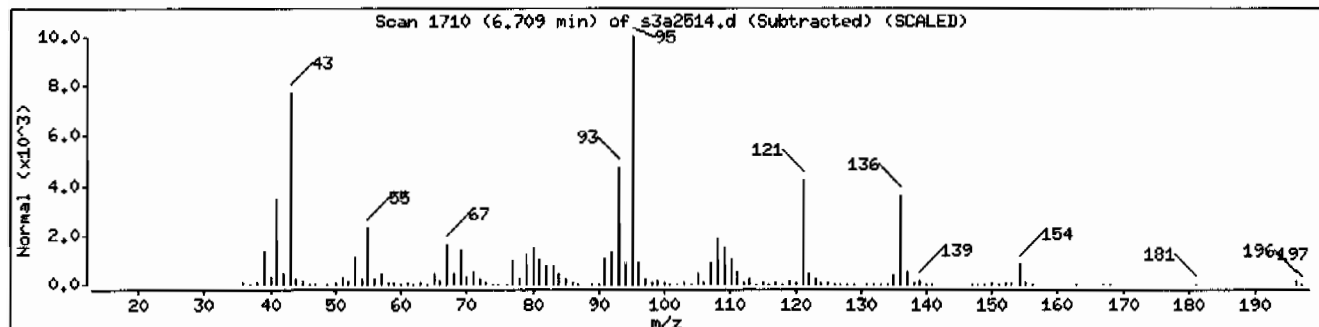
Volume Injected (uL): 0.5

Operator: JLD1

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]heptan-2-ol, 1,7,7-trimeth	5655-61-8	NIST05.L	54340	99	C ₁₂ H ₂₀ O ₂	196
Bornyl acetate	76-49-3	NIST05.L	54228	98	C ₁₂ H ₂₀ O ₂	196
Acetic acid, 1,7,7-trimethyl-bicyclo[2,2	92618-89-8	NIST05.L	54321	98	C ₁₂ H ₂₀ O ₂	196



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

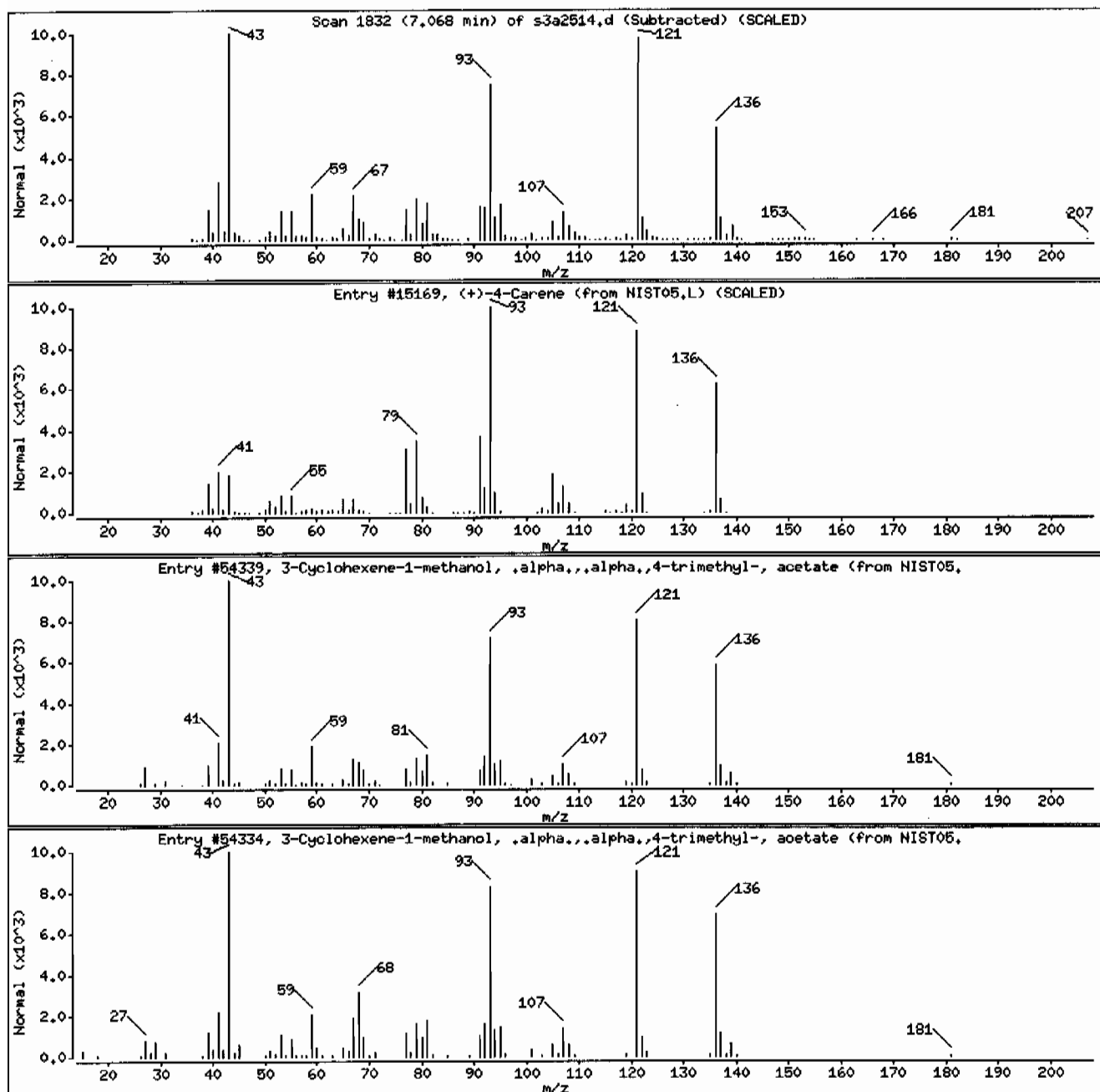
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
(+)-4-Carene	29050-33-7	NIST05.L	15169	93	C10H16	136
3-Cyclohexene-1-methanol, .alpha.,.alpha	80-26-2	NIST05.L	54339	91	C12H20O2	196
3-Cyclohexene-1-methanol, .alpha.,.alpha	80-26-2	NIST05.L	54334	91	C12H20O2	196



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF11ILANL

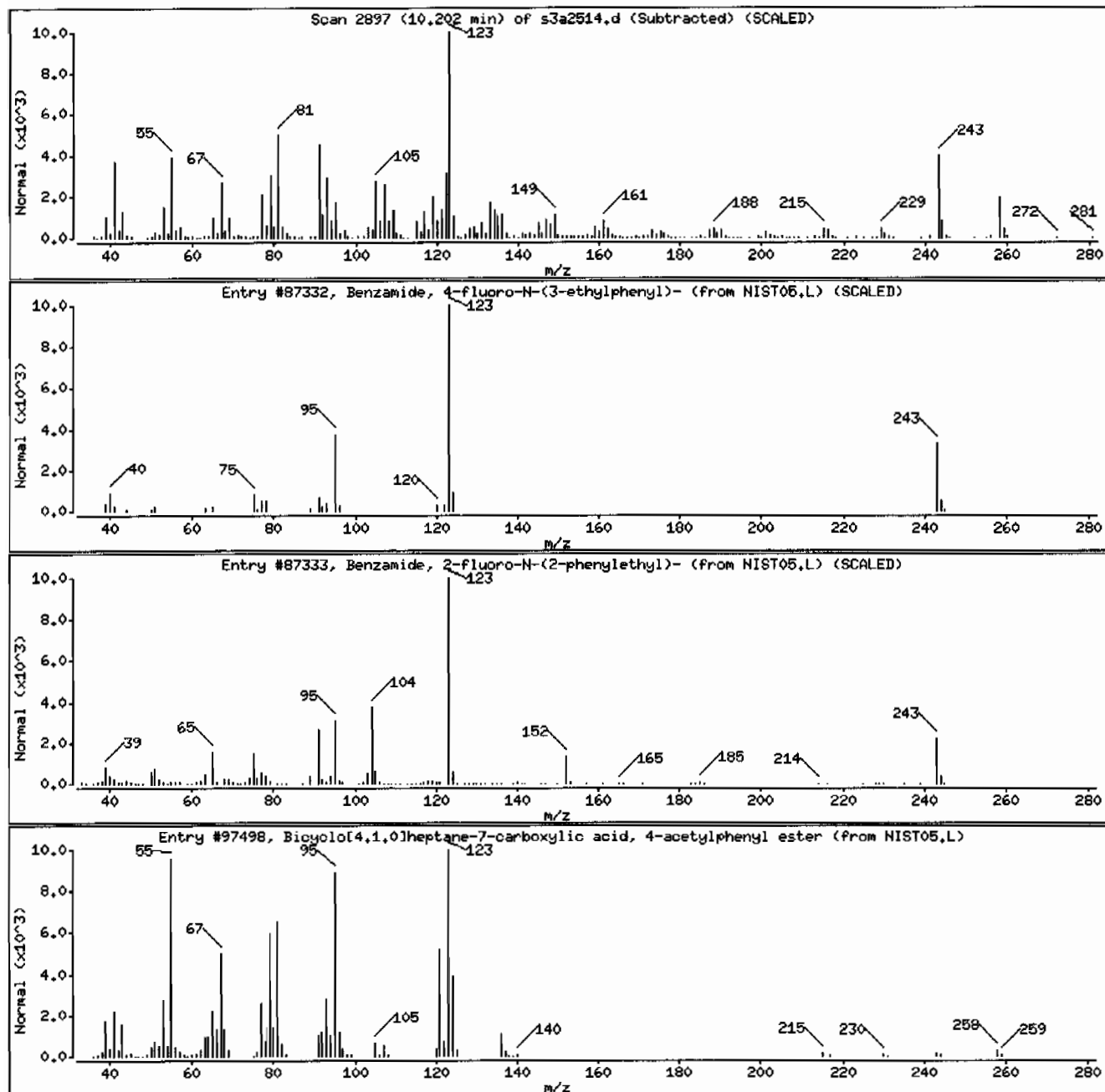
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzamide, 4-fluoro-N-(3-ethylphenyl)-	101398-05-4	NIST05,L	87332	46	C15H14FN0	243
Benzamide, 2-fluoro-N-(2-phenylethyl)-	304884-81-9	NIST05,L	87333	43	C15H14FN0	243
Bicyclo[4.1.0]heptane-7-carboxylic acid,	1000311-46-7	NIST05,L	97498	35	C16H18O3	258



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVMF111LANL

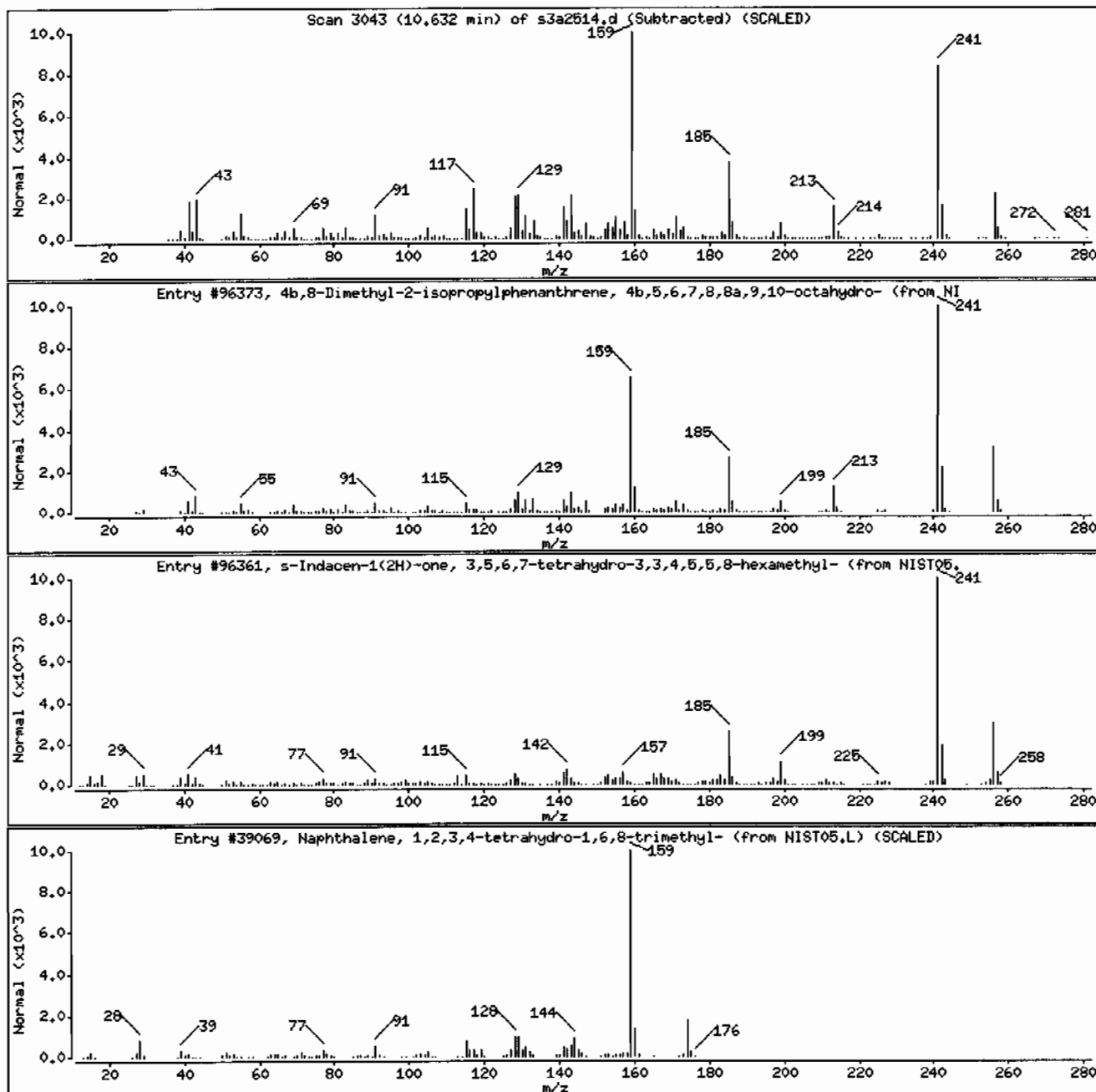
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4b,8-Dimethyl-2-isopropylphenanthrene, 4	1000197-14-1	NIST05.L	96373	98	C19H28	256
s-Indacen-1(2H)-one, 3,5,6,7-tetrahydro-	38754-94-8	NIST05.L	96361	80	C18H24O	256
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-tr	30316-36-0	NIST05.L	39069	38	C13H18	174



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511/SVHF111LANL

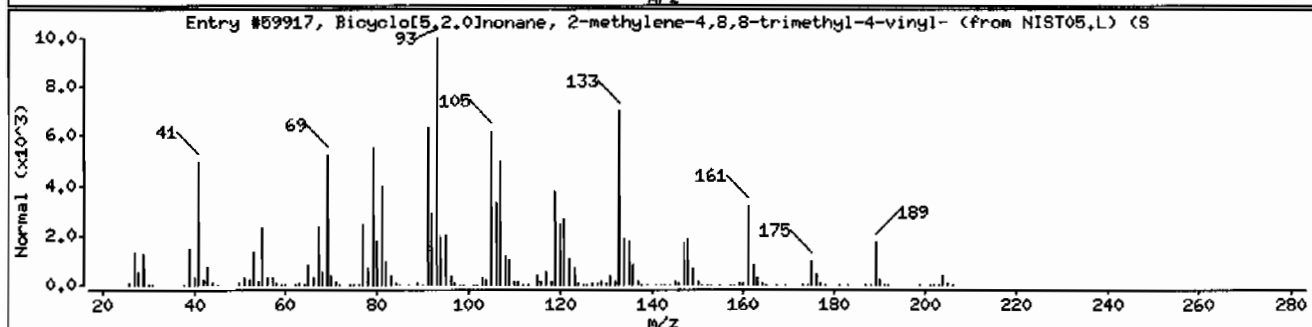
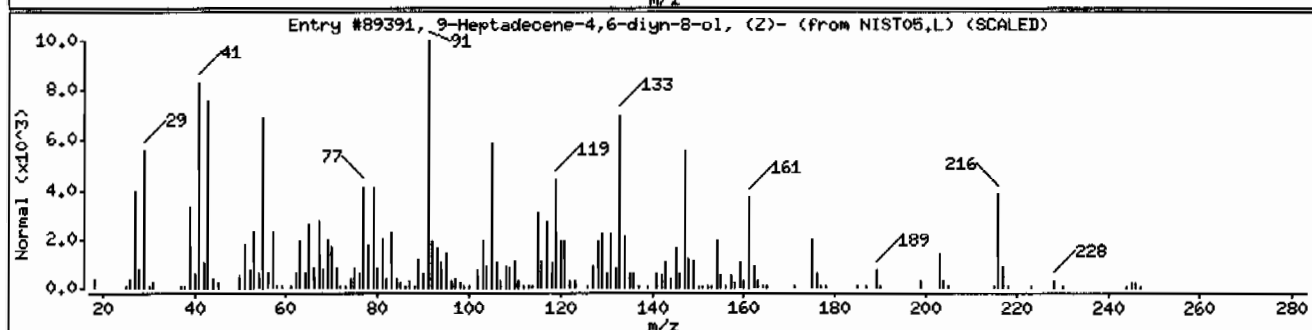
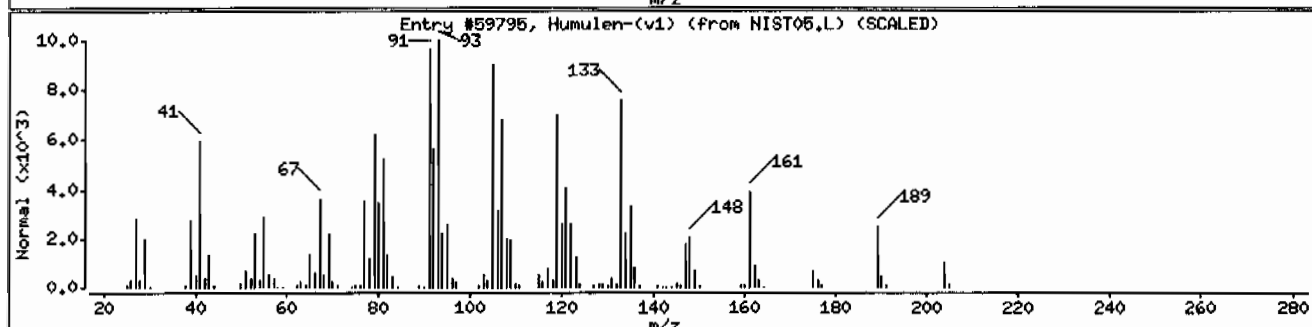
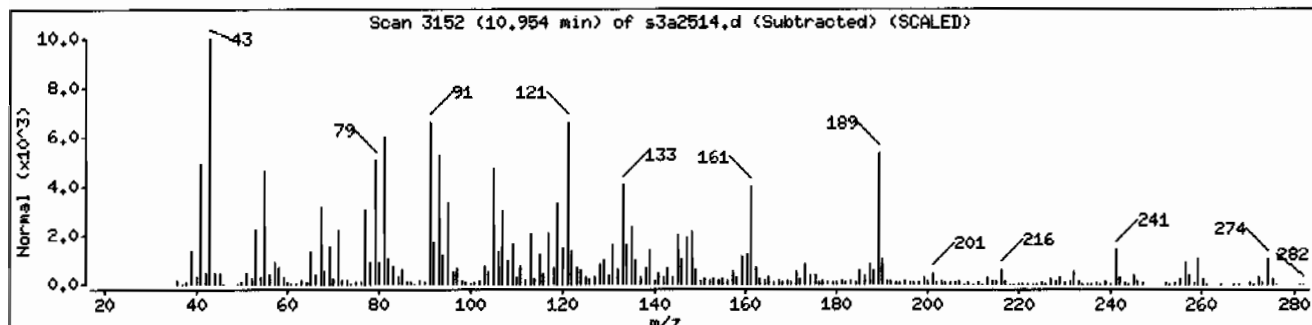
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Humulen-(v1)	1000159-39-4	NIST05.L	59795	62	C15H24	204
9-Heptadecene-4,6-diyn-8-ol, (Z)-	32768-90-4	NIST05.L	89391	50	C17H26O	246
Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-	242794-76-9	NIST05.L	59917	38	C15H24	204



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF11|LANL

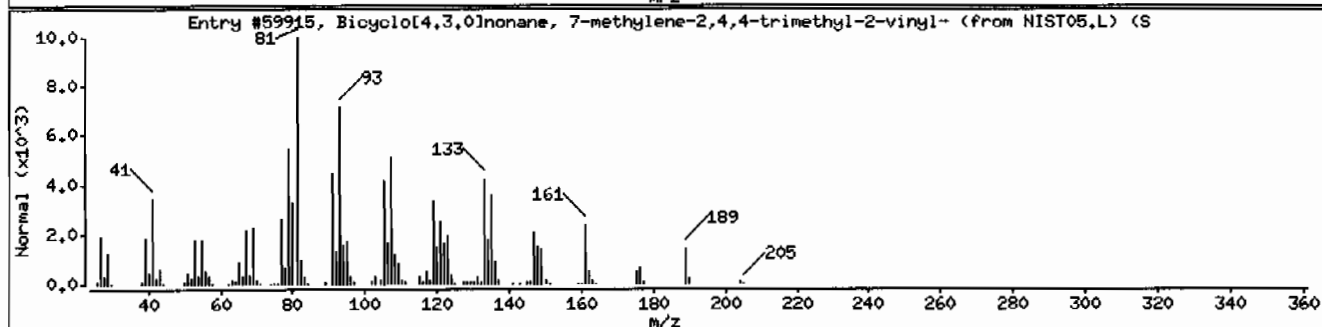
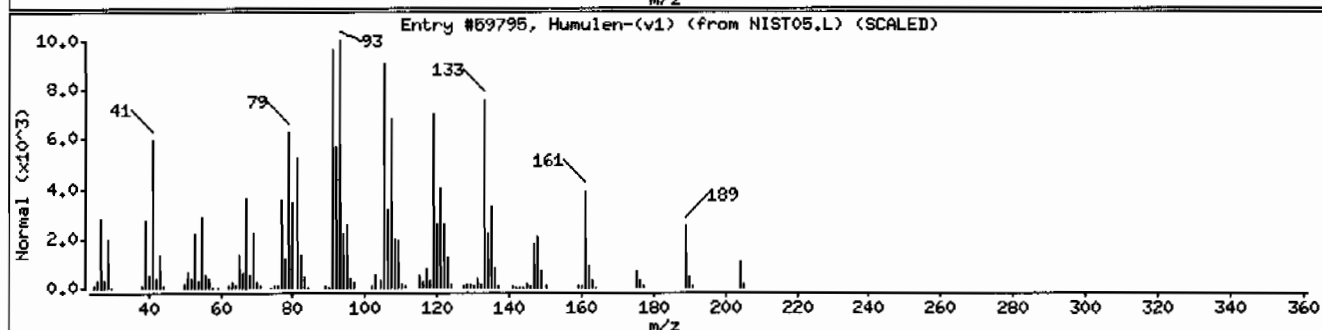
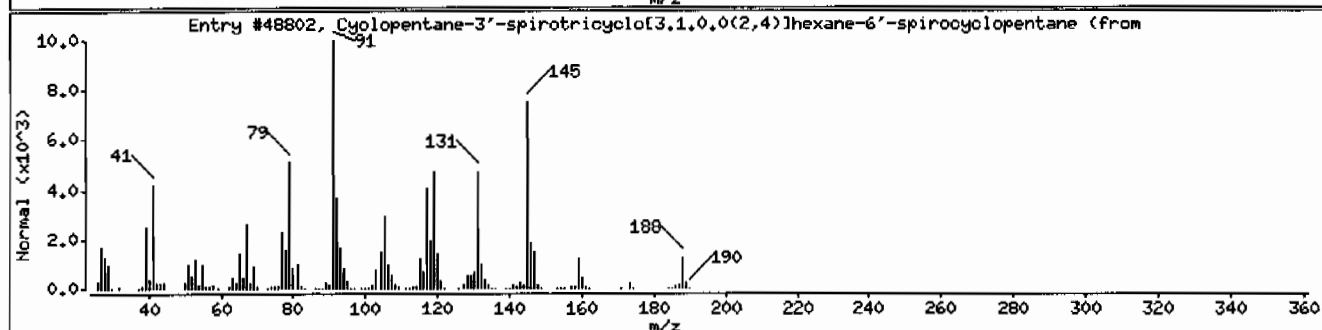
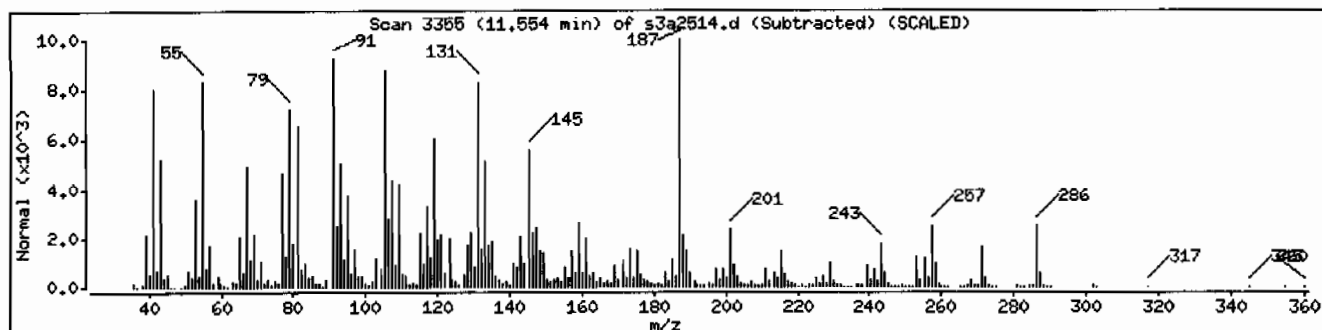
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopentane-3'-spirotricyclo[3,1,0,0(2,	78578-93-5	NIST05.L	48802	30	C14H20	188
Humulen-(v1)	1000159-39-4	NIST05.L	59795	25	C15H24	204
Bicyclo[4,3,0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	25	C15H24	204



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

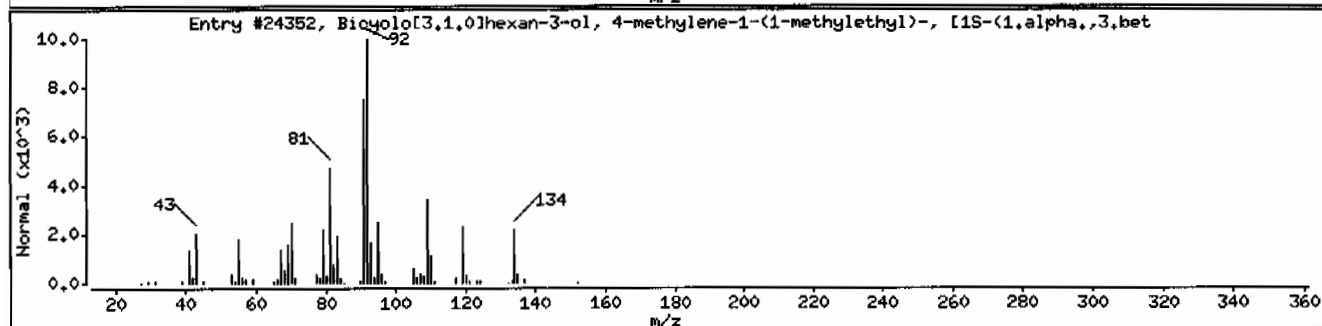
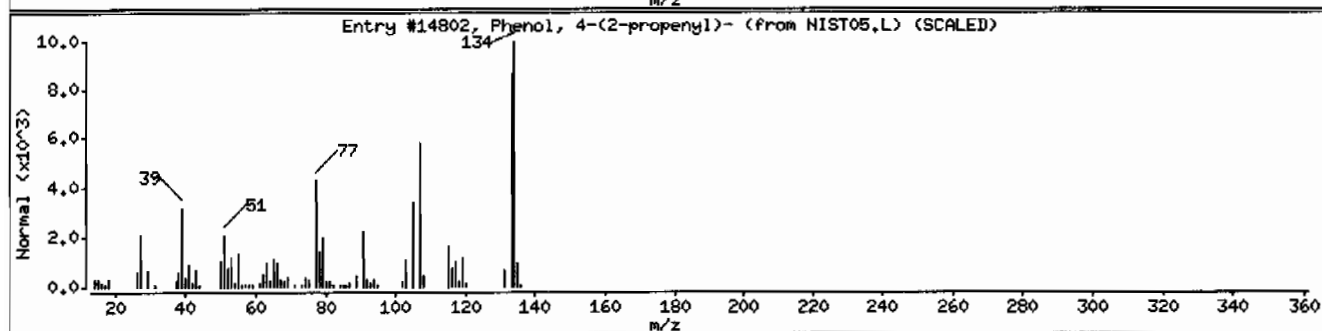
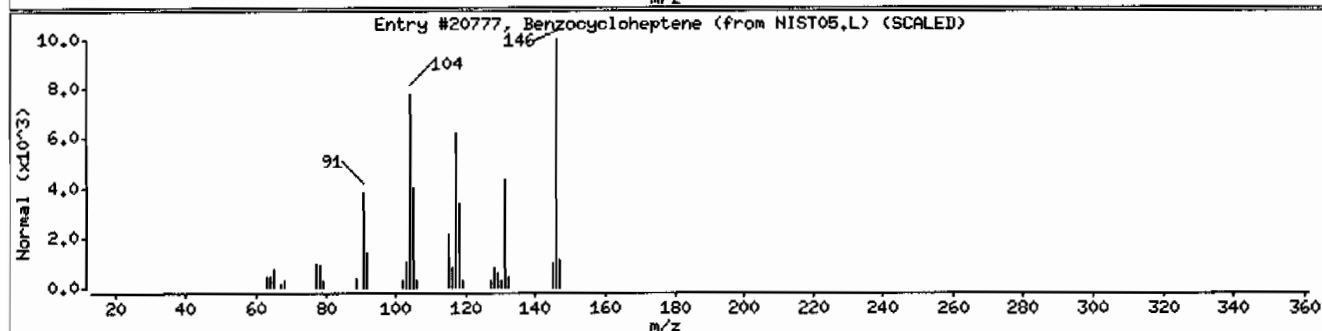
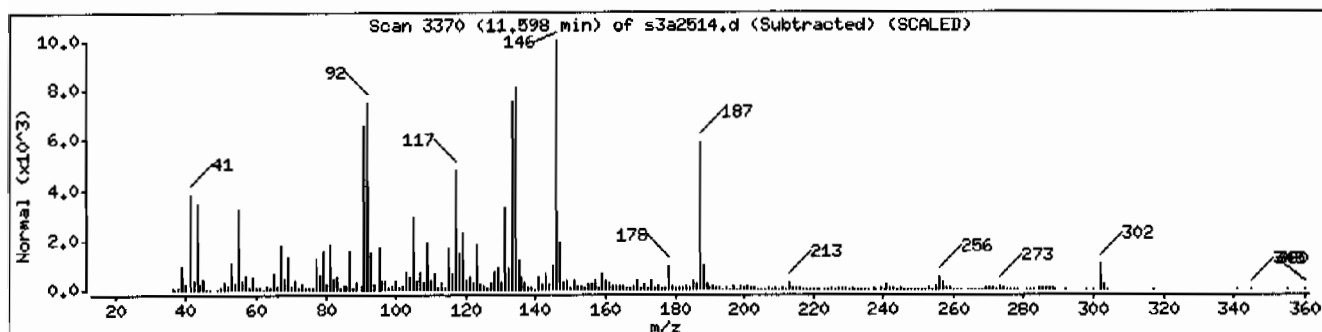
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzocycloheptene	1075-16-7	NIST05.L	20777	35	C11H14	146
Phenol, 4-(2-propenyl)-	501-92-8	NIST05.L	14802	25	C9H10O	134
Bicyclo[3.1.0]hexan-3-ol, 4-methylene-1-	471-16-9	NIST05.L	24352	25	C10H16O	152



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 12450990081944455111SVHF111LANL

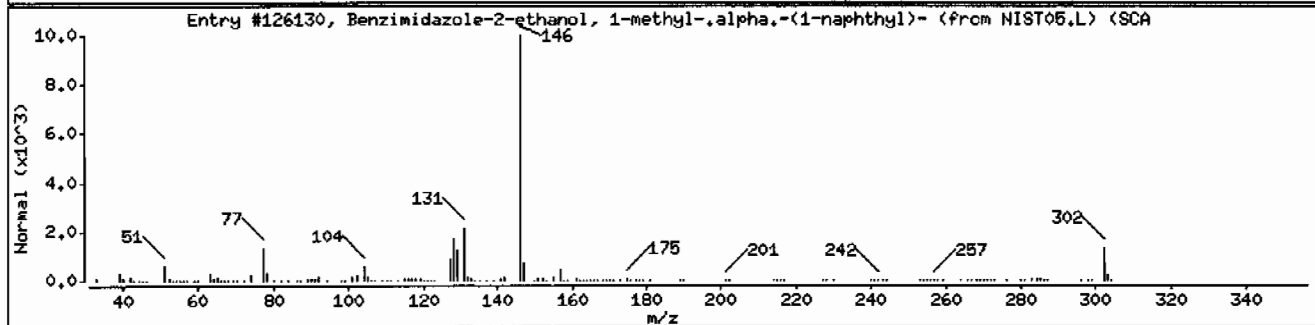
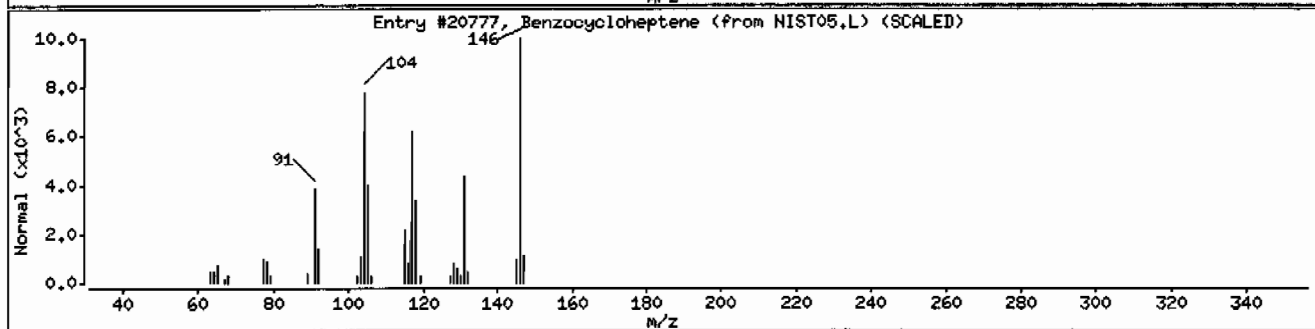
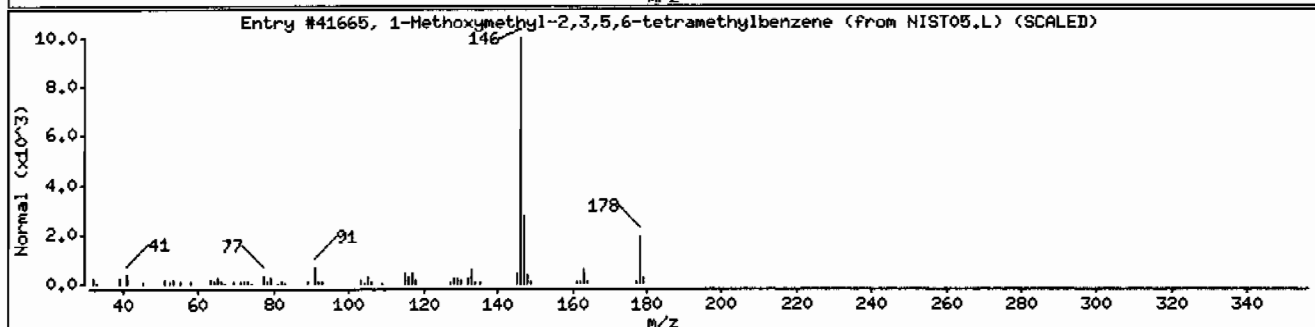
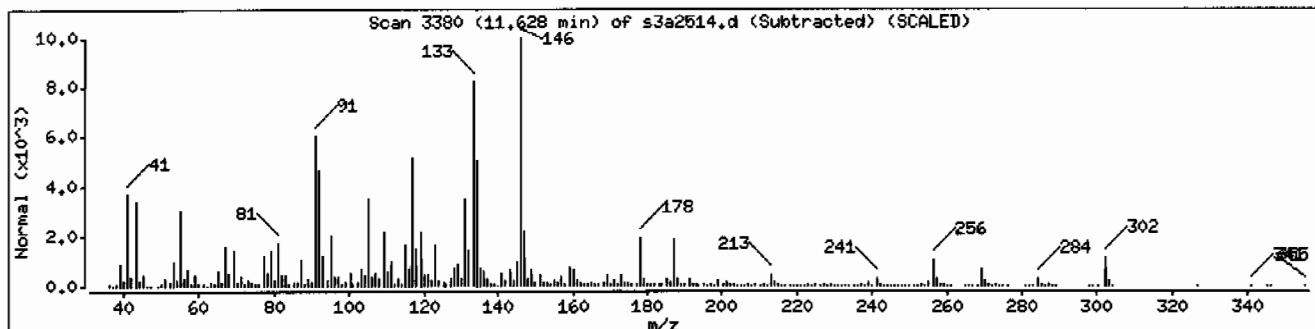
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Methoxymethyl-2,3,5,6-tetramethylbenzene	18922-11-7	NIST05.L	41665	41	C ₁₂ H ₁₈ O	178
Benzocycloheptene	1075-16-7	NIST05.L	20777	38	C ₁₁ H ₁₄	146
Benzimidazole-2-ethanol, 1-methyl-,alpha	309724-72-9	NIST05.L	126130	35	C ₂₀ H ₁₈ N ₂ O	302



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Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVMF11ILANL

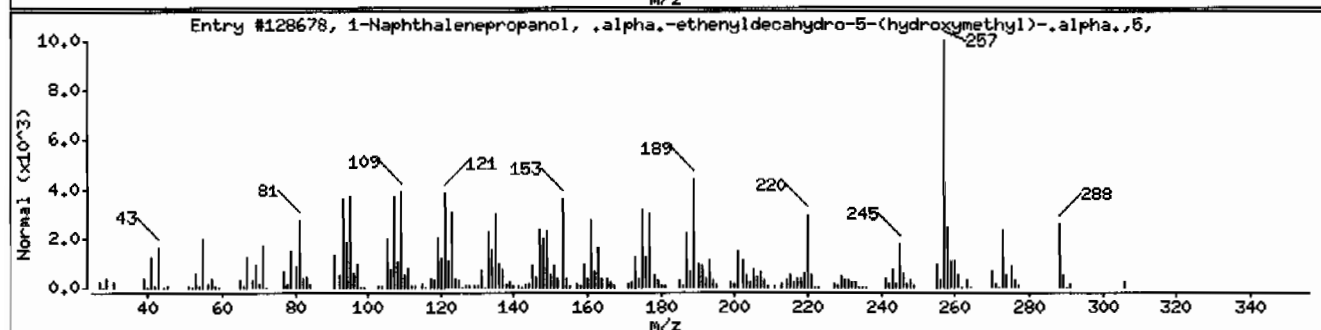
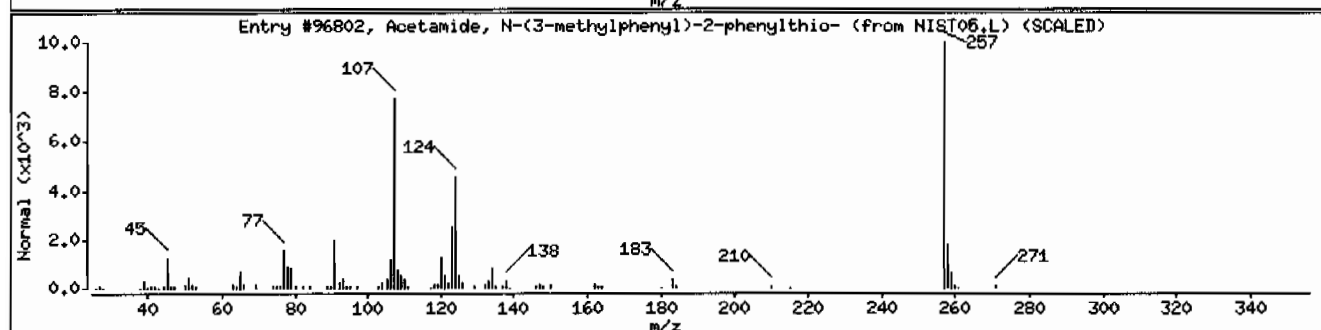
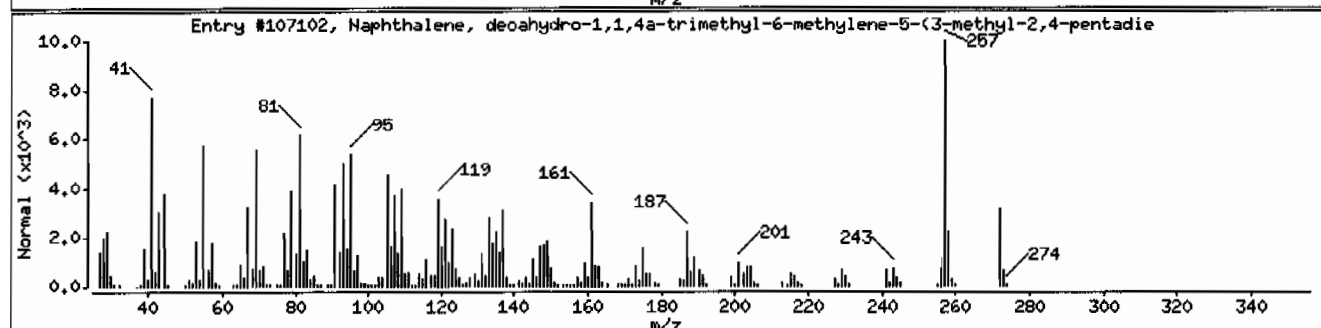
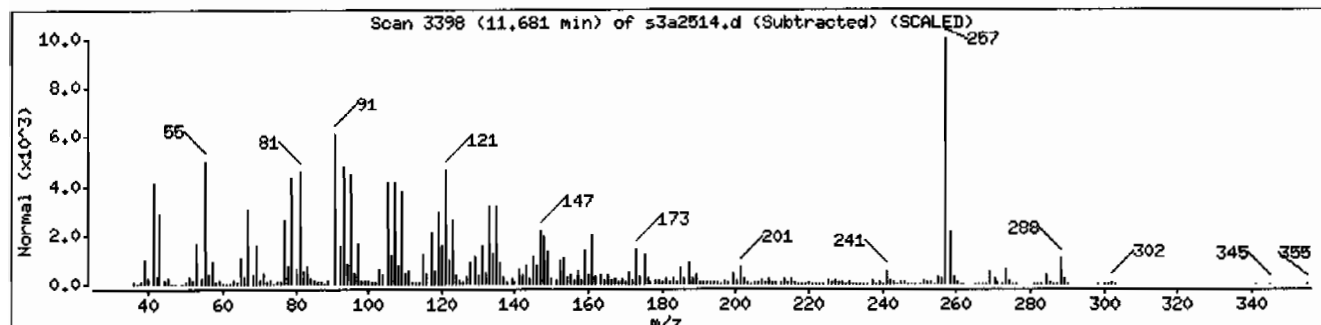
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Naphthalene, decahydro-1,1,4a-trimethyl-	5957-33-5	NIST05,L	107102	42	C20H32	272
Acetamide, N-(3-methylphenyl)-2-phenylthio	1000307-20-6	NIST05,L	96802	38	C15H15NOS	257
1-Naphthalenepropanol, .alpha.-ethenylde	1908-44-7	NIST05,L	128678	37	C20H34O2	306



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3,i

Sample Info: 1245099005194445511SVMF11ILANL

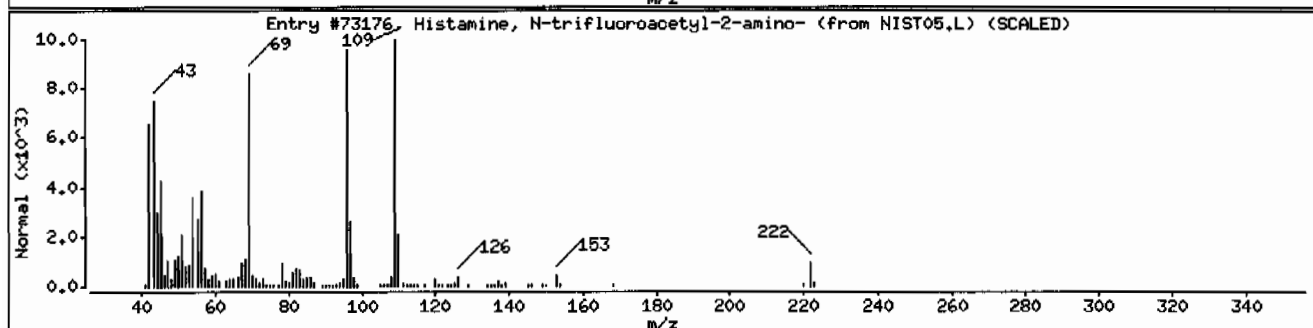
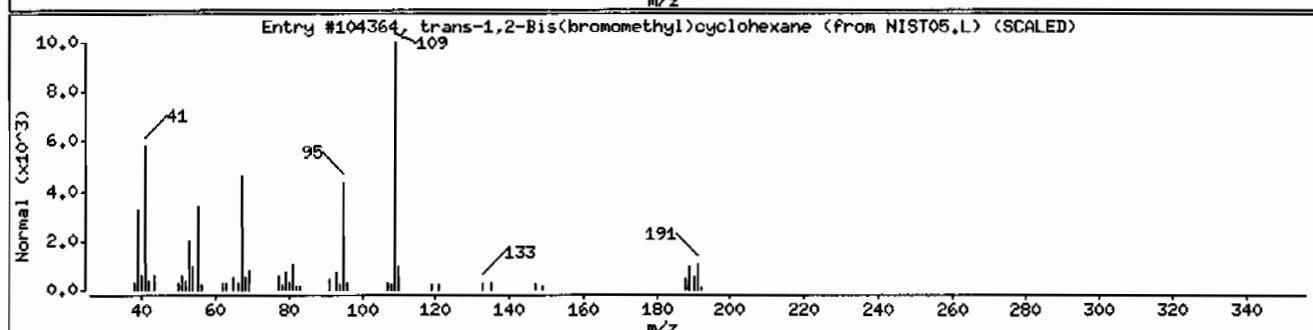
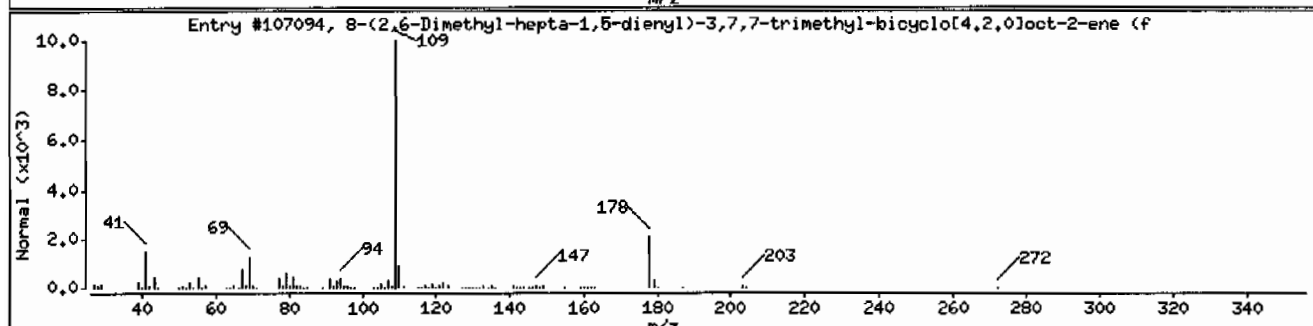
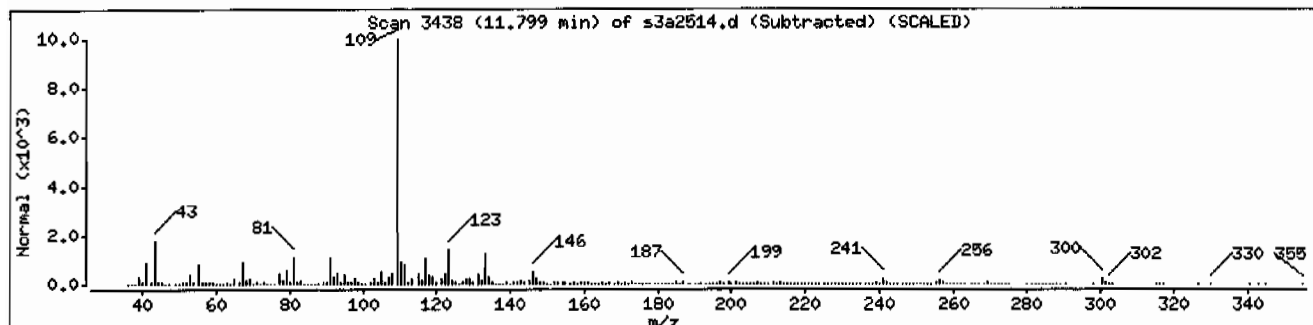
Volume Injected (UL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
8-(2,6-Dimethyl-hepta-1,5-dienyl)-3,7,7-	113725-56-7	NIST05.L	107094	52	C20H32	272
trans-1,2-Bis(bromomethyl)cyclohexane	1000216-87-8	NIST05.L	104364	50	C8H14Br2	268
Histamine, N-trifluoroacetyl-2-amino-	50580-60-4	NIST05.L	73176	49	C7H9F3N4O	222



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Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

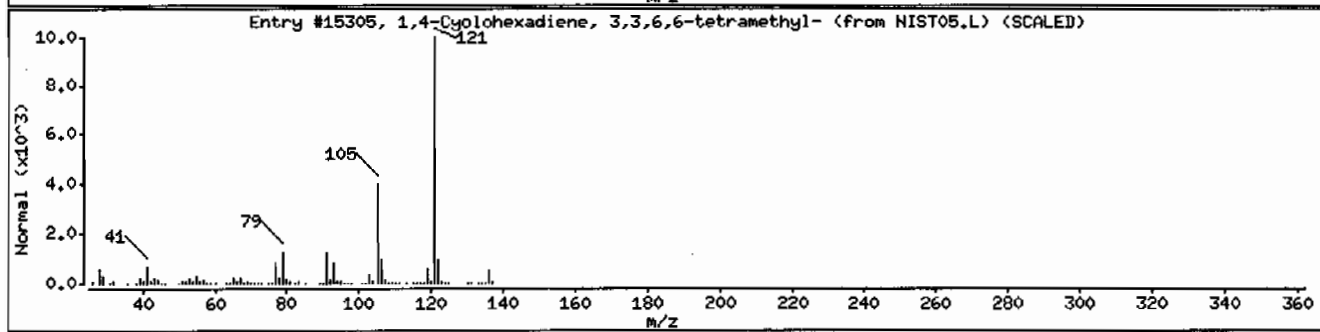
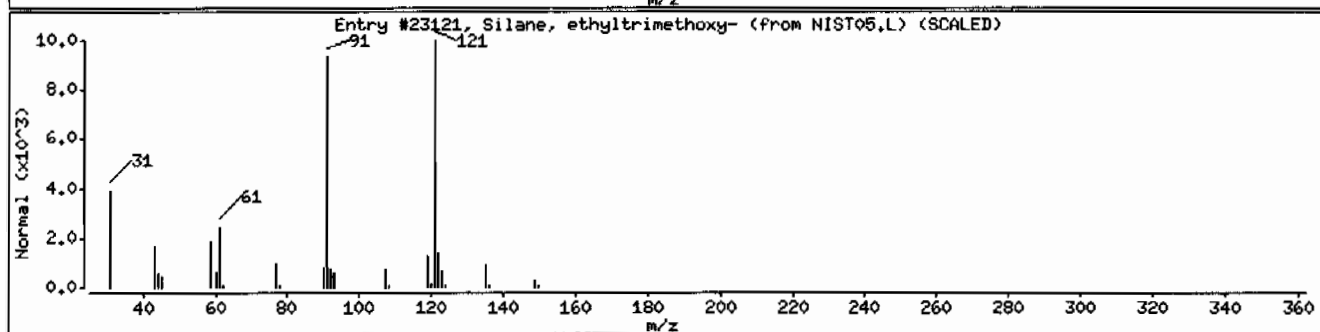
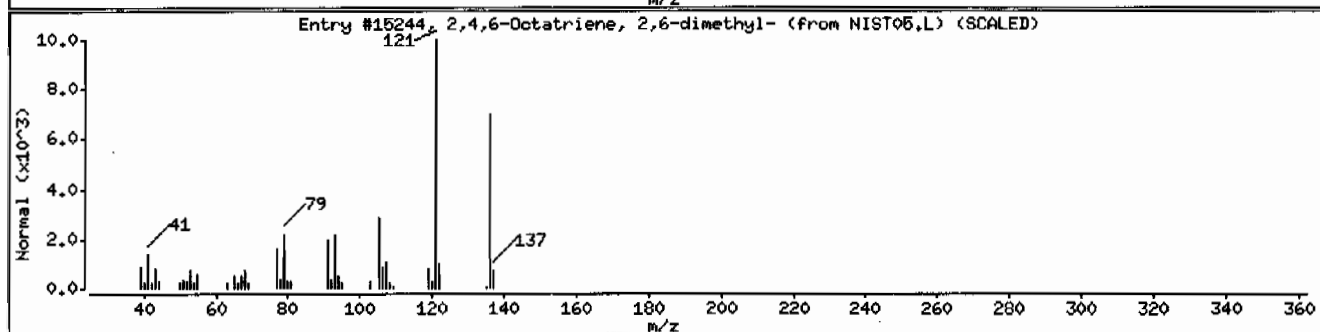
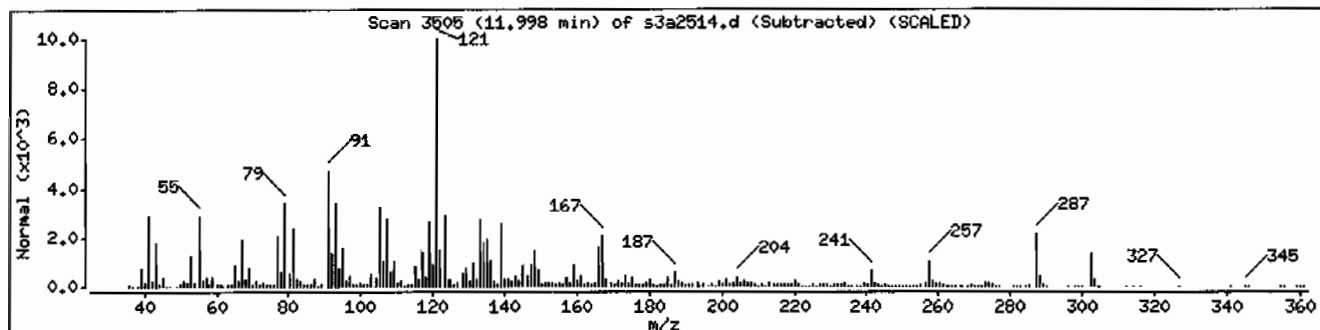
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C10H16	136
Silane, ethyltrimethoxy-	5314-55-6	NIST05.L	23121	35	C5H14O3Si	150
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	35	C10H16	136



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

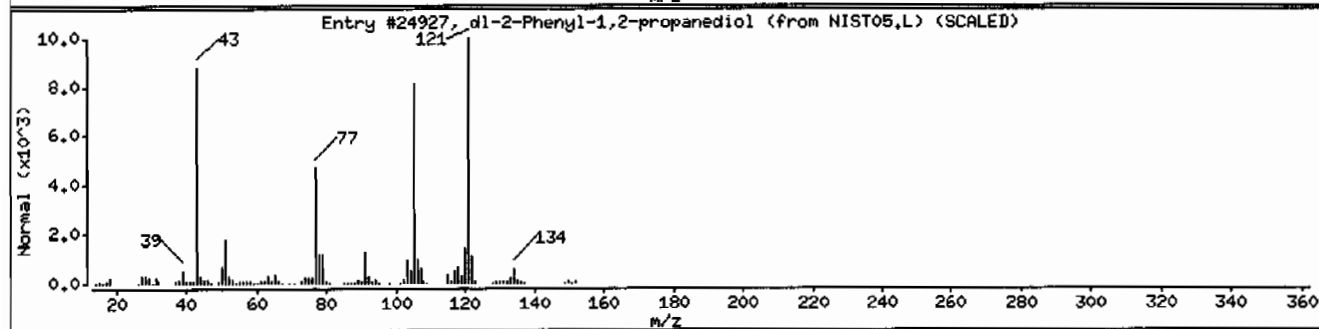
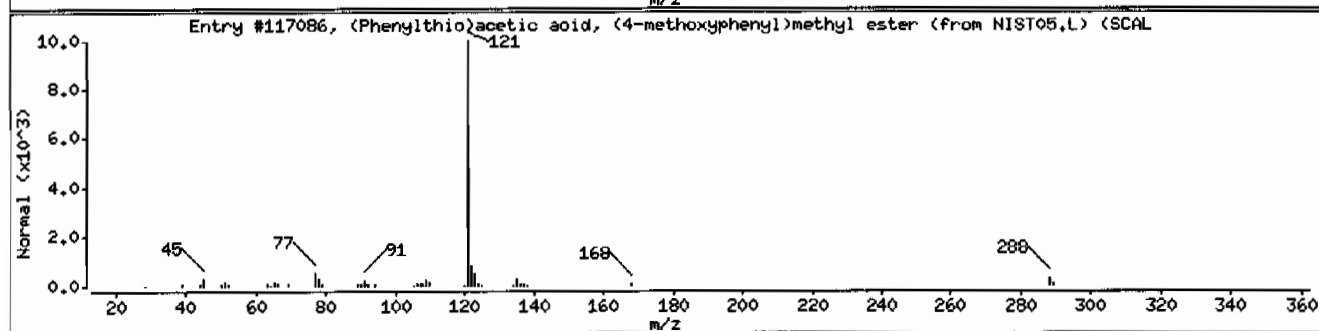
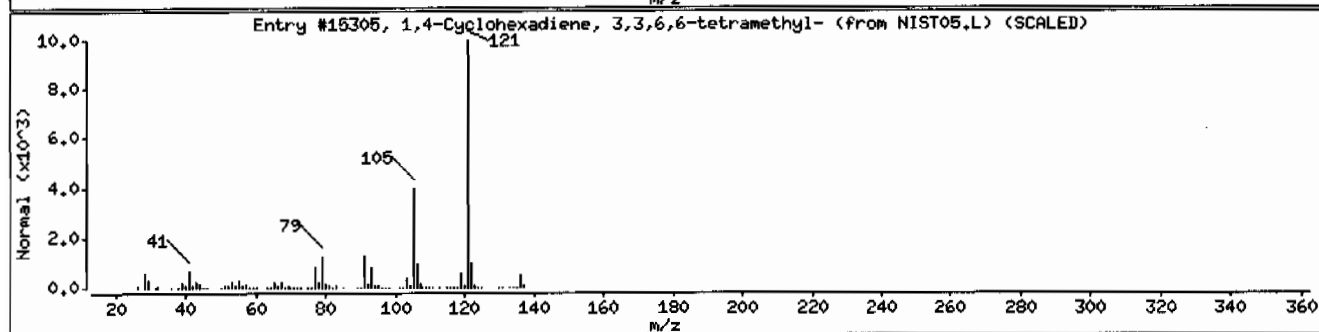
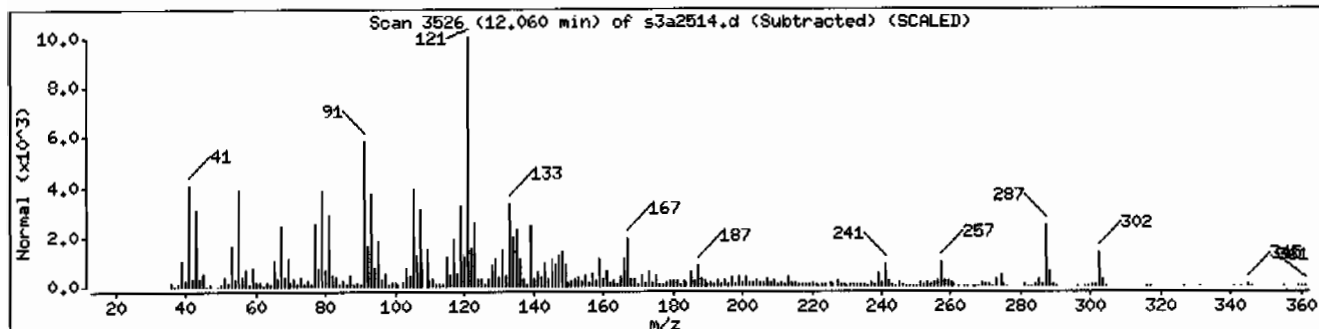
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Cyclohexadiene, 3,3,6,6-tetramethyl-	2223-54-3	NIST05.L	15305	35	C10H16	136
(Phenylthio)acetic acid, (4-methoxyphenyl	1000308-33-9	NIST05.L	117086	22	C16H16O3S	288
dl-2-Phenyl-1,2-propanediol	4217-66-7	NIST05.L	24927	22	C9H12O2	152



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVMF11|LANL

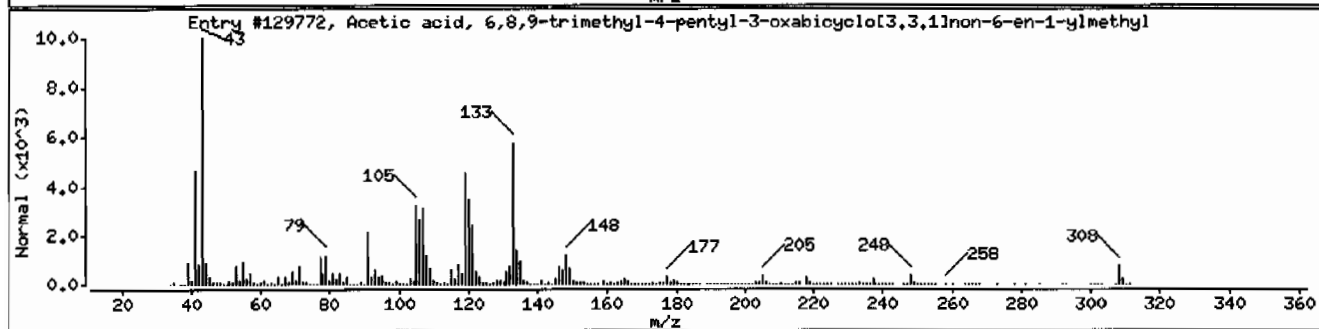
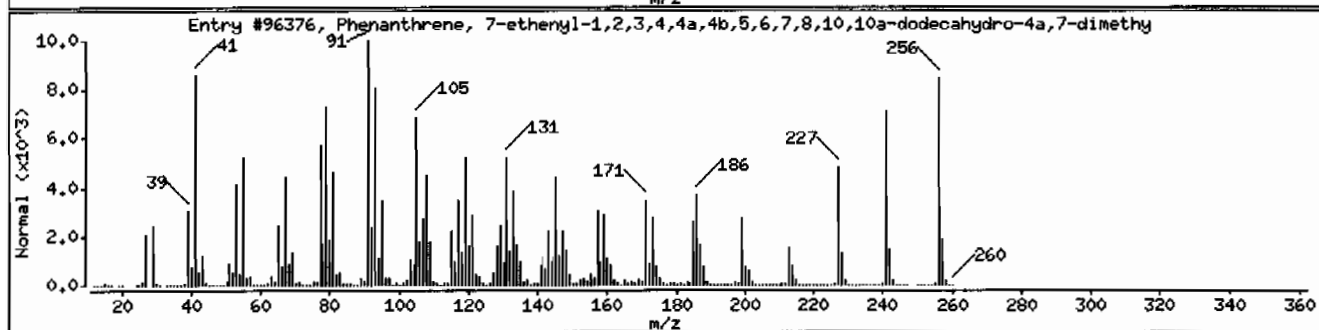
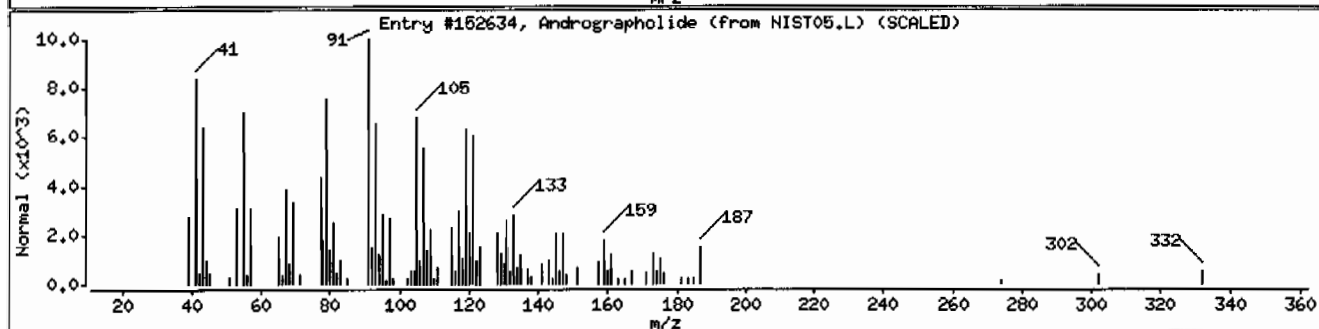
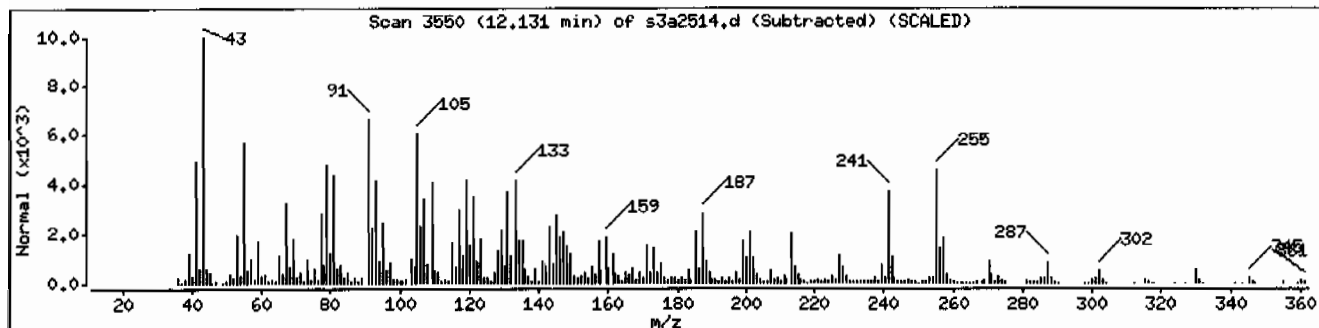
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Andrographolide	5508-58-7	NIST05.L	152634	15	C20H30O5	350
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	26549-04-2	NIST05.L	96376	11	C19H28	256
Acetic acid, 6,8,9-trimethyl-4-pentyl-3-	1000276-96-4	NIST05.L	129772	10	C19H32O3	308



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Client ID: RE15-10-7196

Instrument: MSD3.1

Sample Info: 1245099005194445511SVMF111LANL

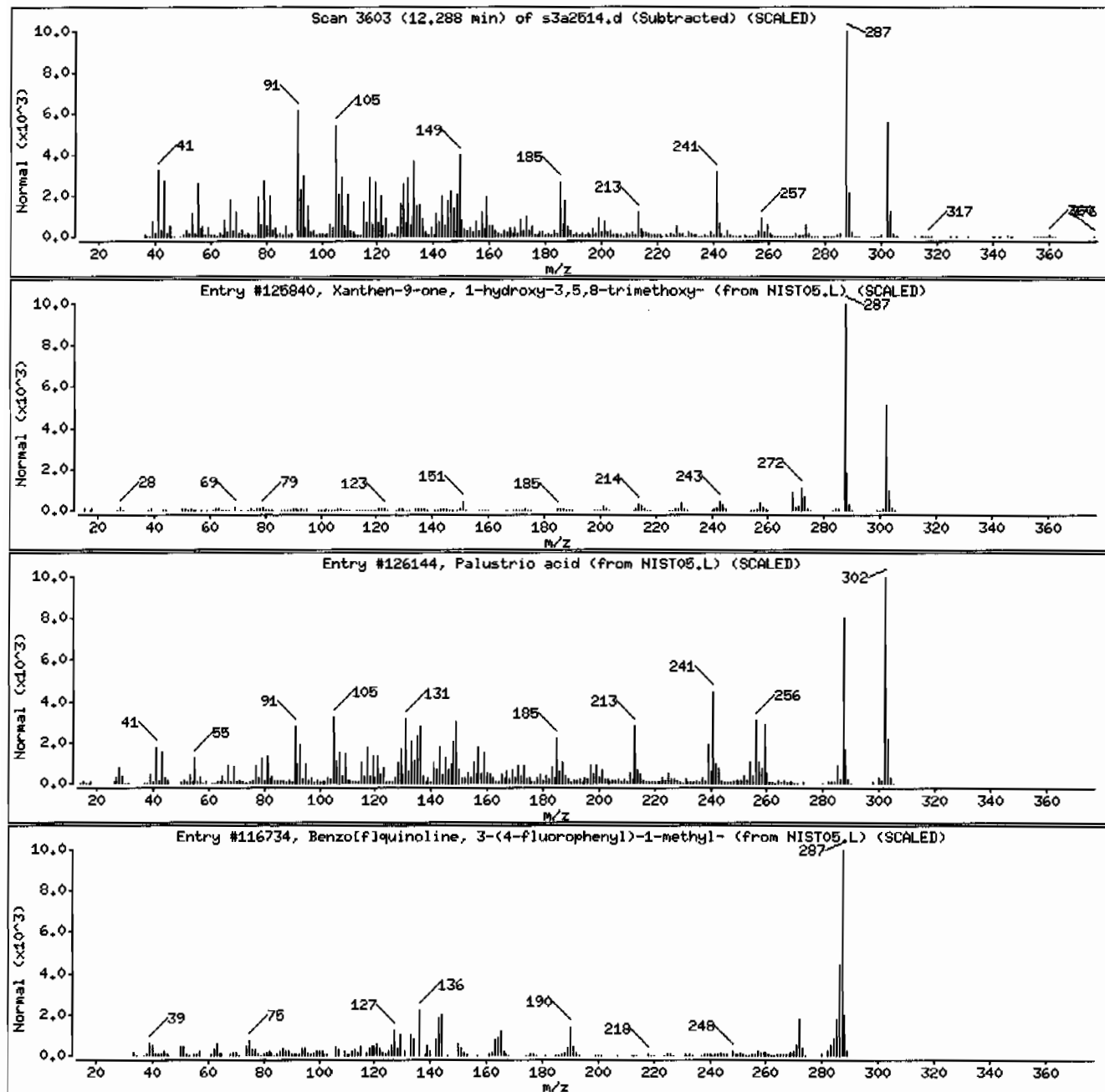
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Xanthen-9-one, 1-hydroxy-3,5,8-trimethox	49599-09-9	NIST05.L	125840	50	C ₁₆ H ₁₄ O ₆	302
Palustic acid	1945-53-5	NIST05.L	126144	38	C ₂₀ H ₃₀ O ₂	302
Benzo[f]quinoline, 3-(4-fluorophenyl)-1-	22186-27-8	NIST05.L	116734	30	C ₂₀ H ₁₄ FN	287



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Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

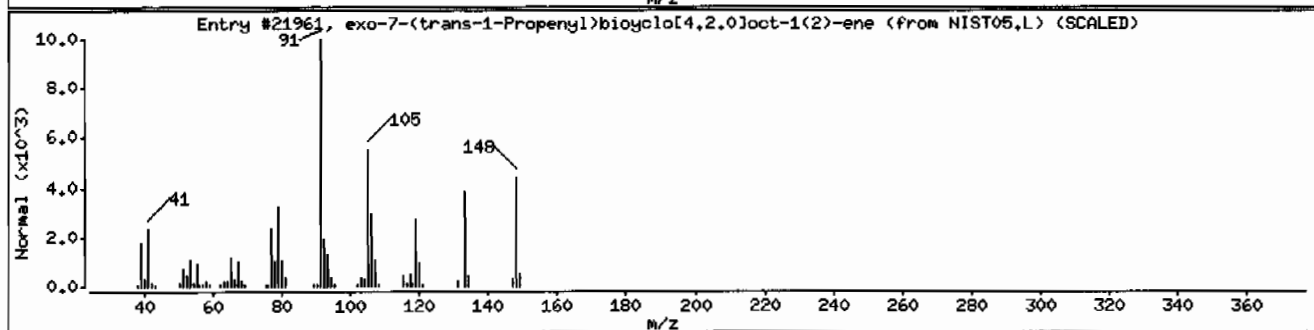
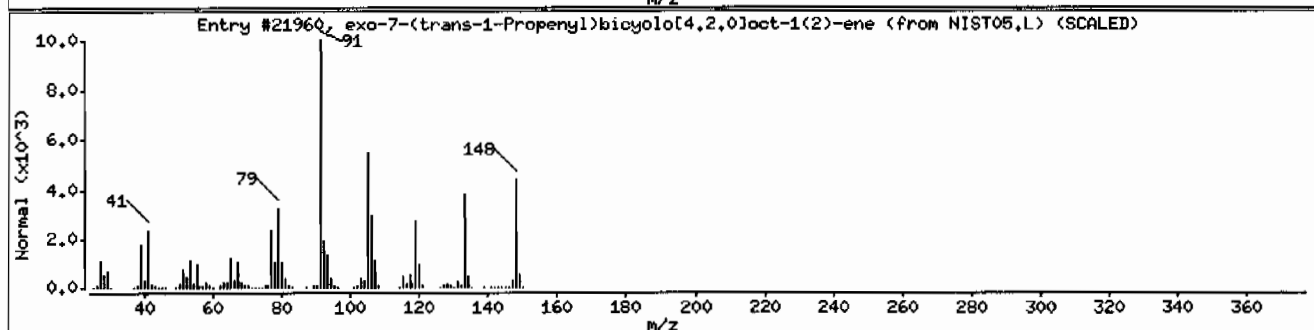
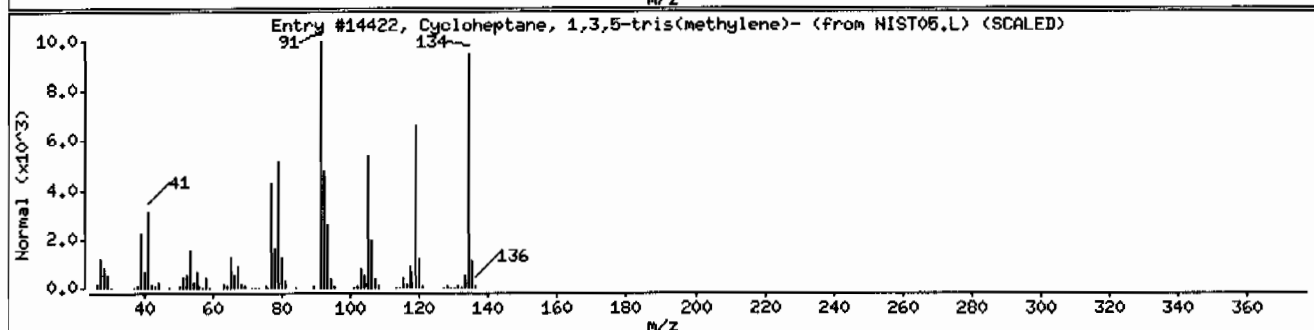
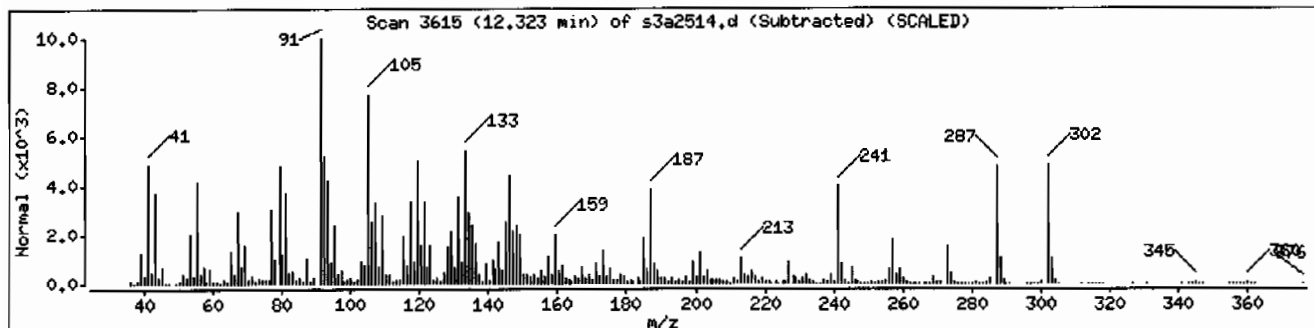
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cycloheptane, 1,3,5-tris(methylene)-	68284-24-2	NIST05.L	14422	25	C10H14	134
exo-7-(trans-1-Propenyl)bicyclo[4.2.0]oc	107983-42-6	NIST05.L	21960	14	C11H16	148
exo-7-(trans-1-Propenyl)bicyclo[4.2.0]oc	107983-42-6	NIST05.L	21961	14	C11H16	148



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: HSD3.i

Sample Info: 1245099005194448511ISVMFI1ILANL

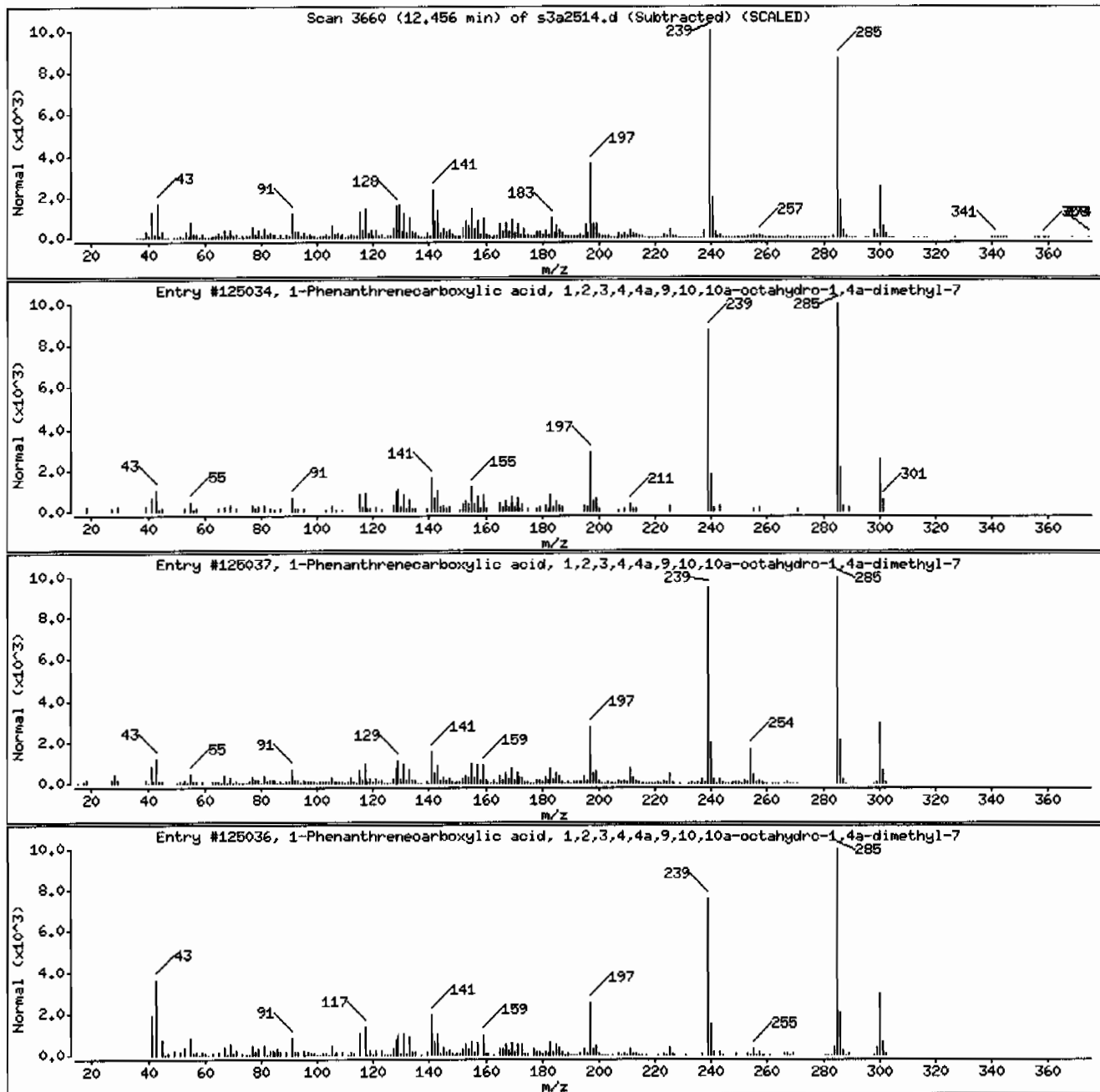
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	99	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	93	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	93	C20H28O2	300



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

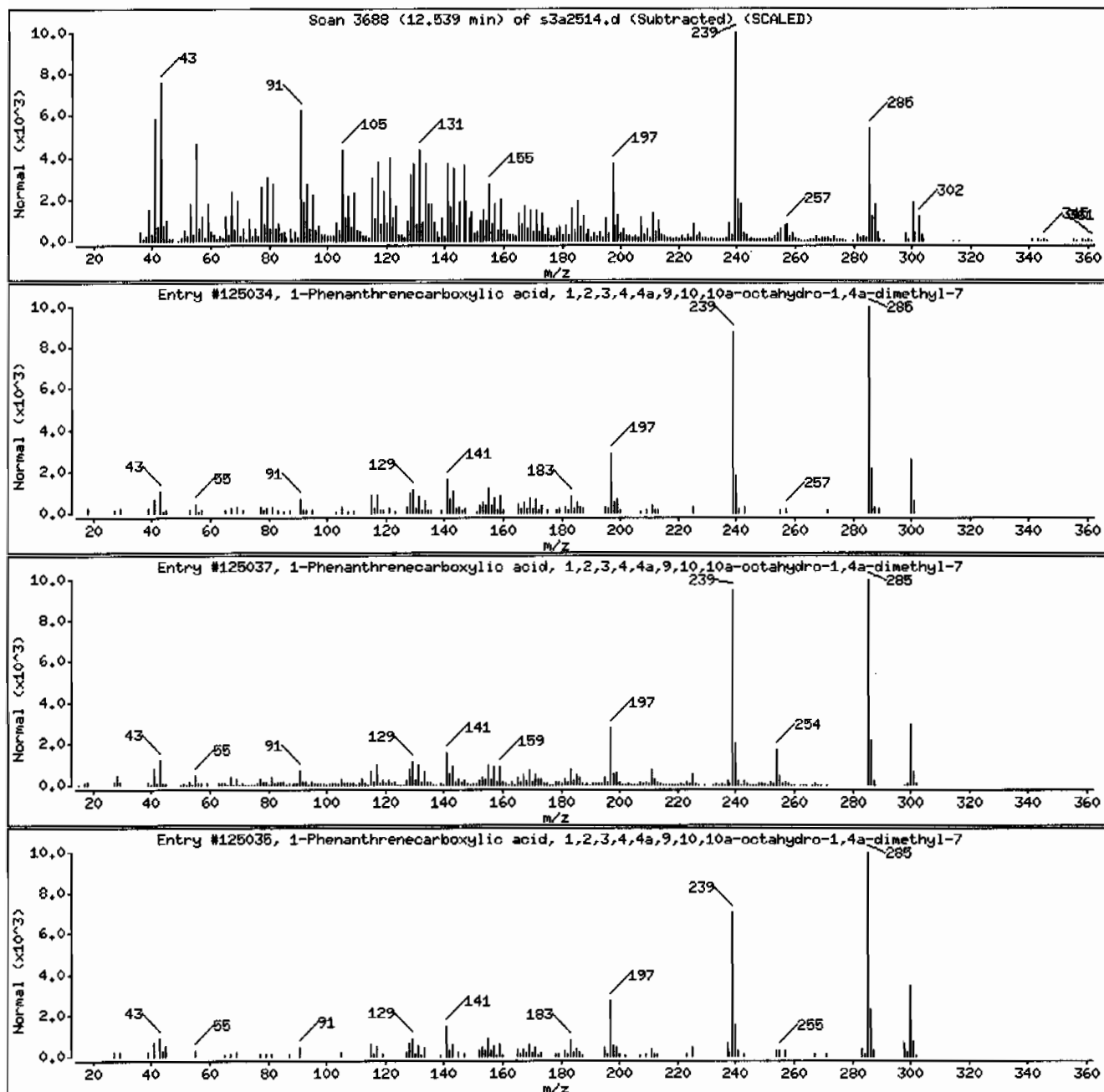
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	98	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125037	86	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	58	C20H28O2	300



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF111LANL

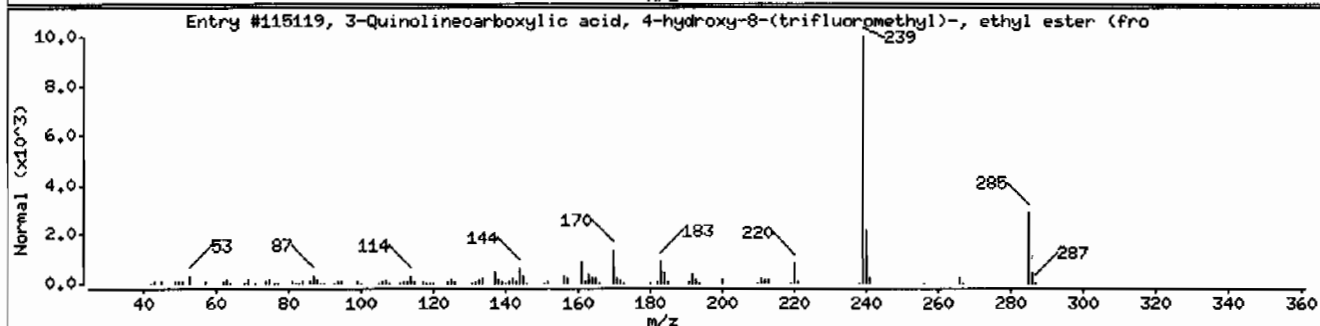
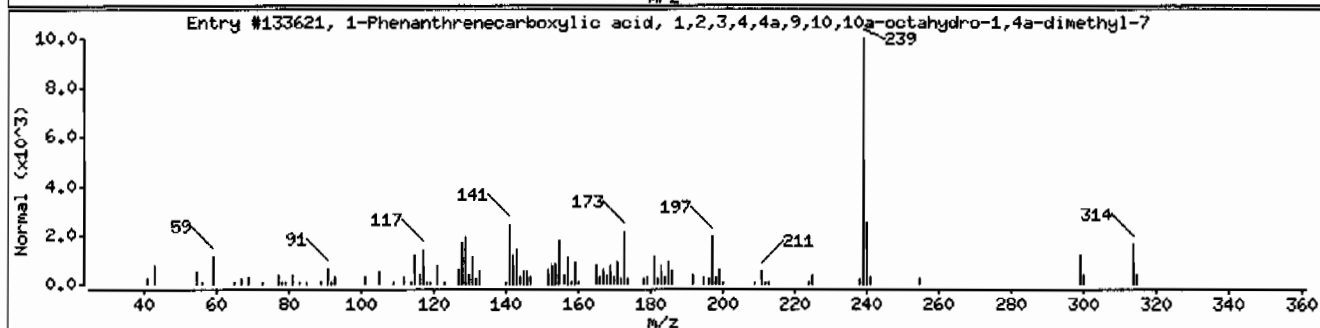
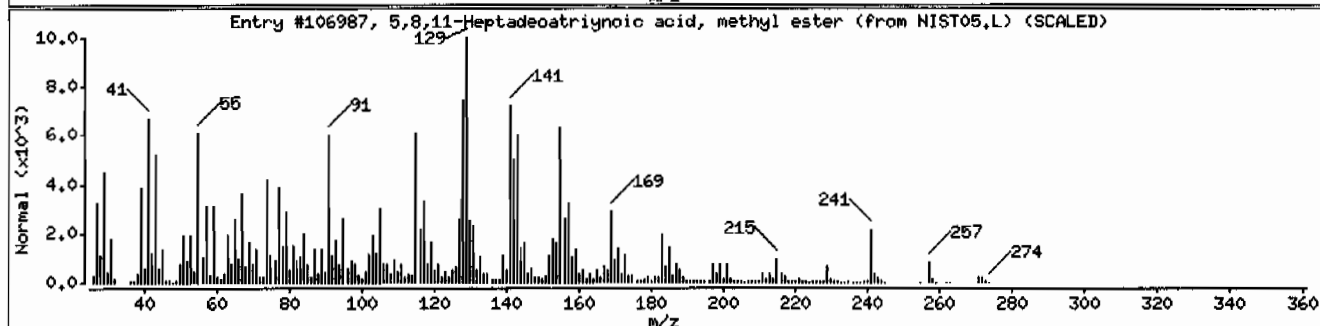
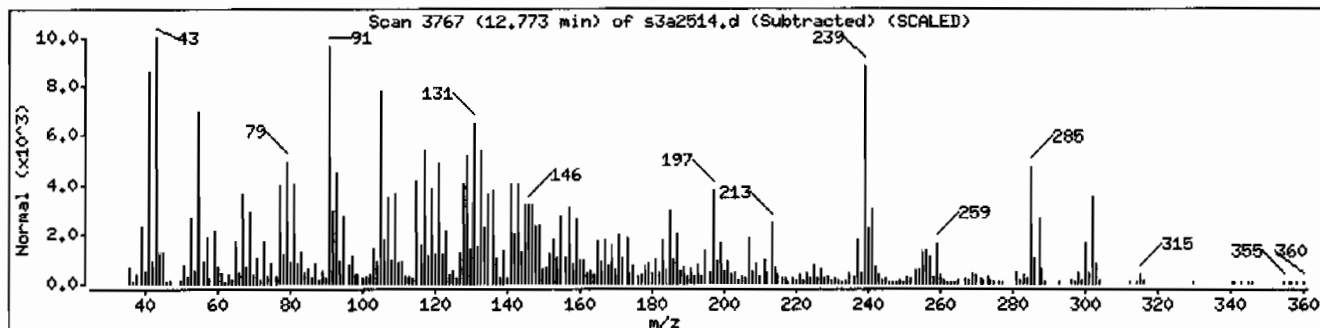
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
5,8,11-Heptadecatrienoic acid, methyl es	56554-57-5	NIST05.L	106987	53	C18H24O2	272
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	43	C21H30O2	314
3-Quinolinedicarboxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	38	C13H10F3NO3	285



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: I245099005I944455I1ISVMFI1ILANL

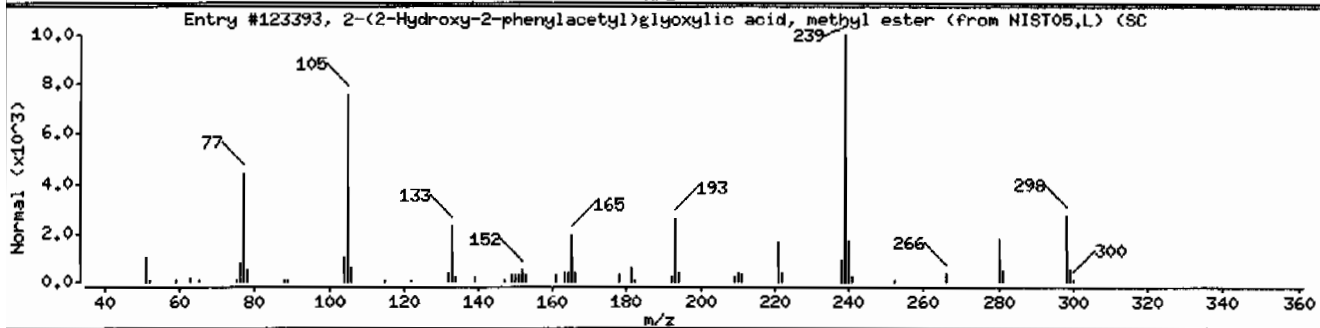
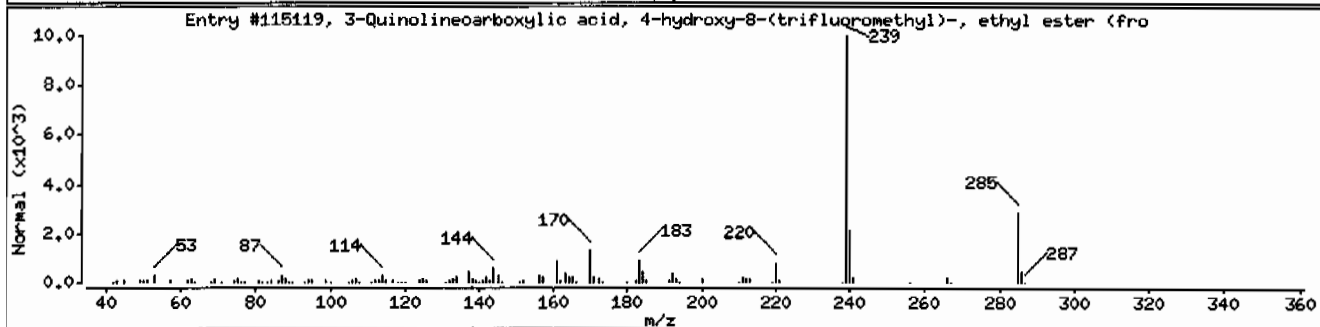
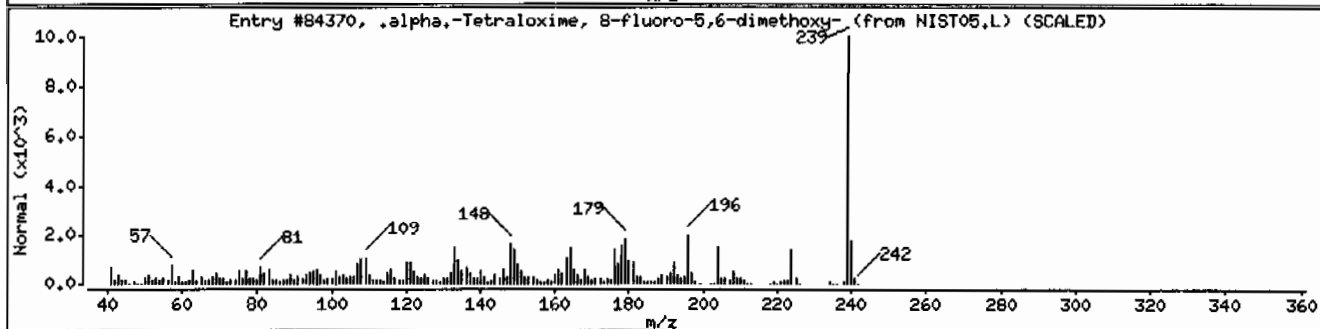
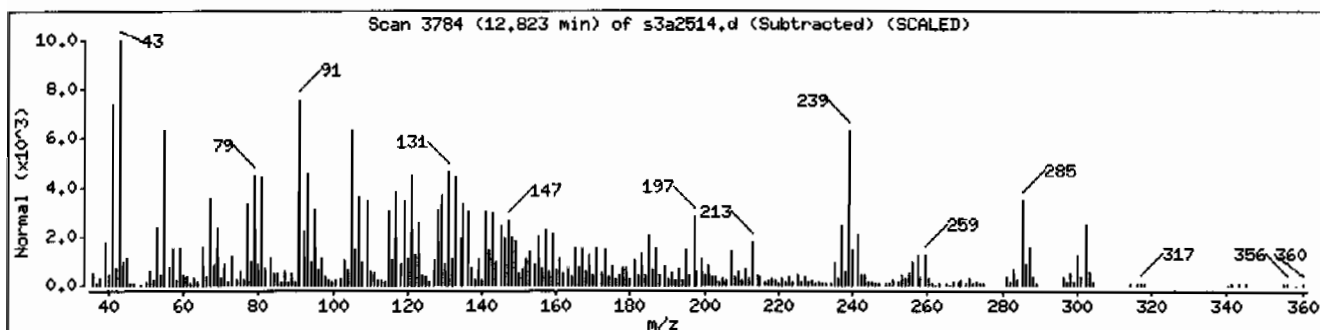
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
,alpha,-Tetraloxime, 8-fluoro-5,6-dimeth	1000125-88-0	NIST05.L	84370	25	C12H14FN03	239
3-Quinolincaroxylic acid, 4-hydroxy-8-	23851-84-5	NIST05.L	115119	25	C13H10F3N03	285
2-(2-Hydroxy-2-phenylacetyl)glyoxylic ac	101451-97-2	NIST05.L	123393	25	C17H14O5	298



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: HSD3.i

Sample Info: 1245099005194445511SVHF111LANL

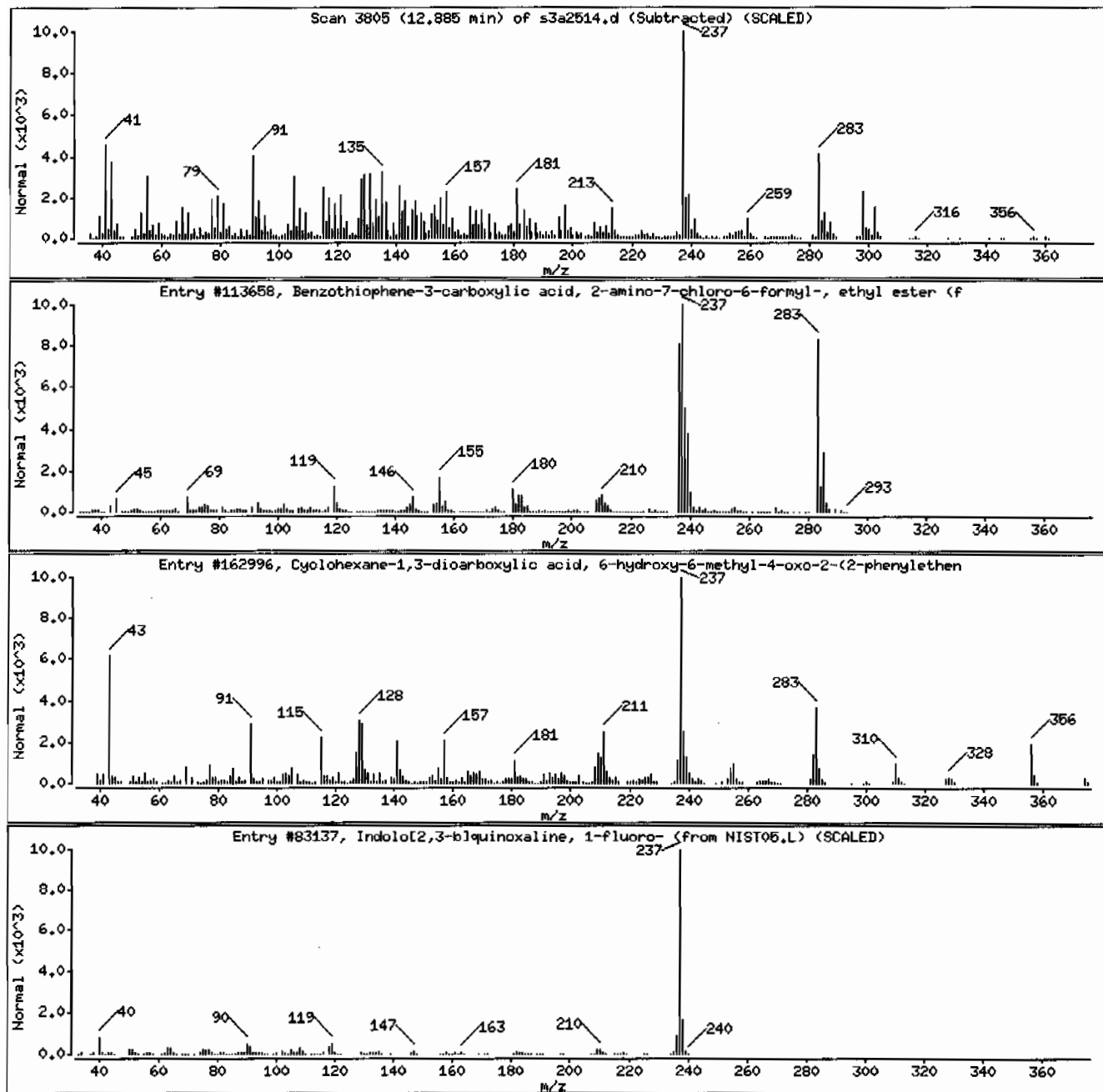
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzothiophene-3-carboxylic acid, 2-amin	137987-78-1	NIST05.L	113658	64	C12H10ClNO3S	283
Cyclohexane-1,3-dicarboxylic acid, 6-hyd	1000295-43-2	NIST05.L	162996	42	C21H26O6	374
Indolo[2,3-b]quinoxaline, 1-fluoro-	296244-71-8	NIST05.L	83137	30	C14H8FN3	237



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF11ILANL

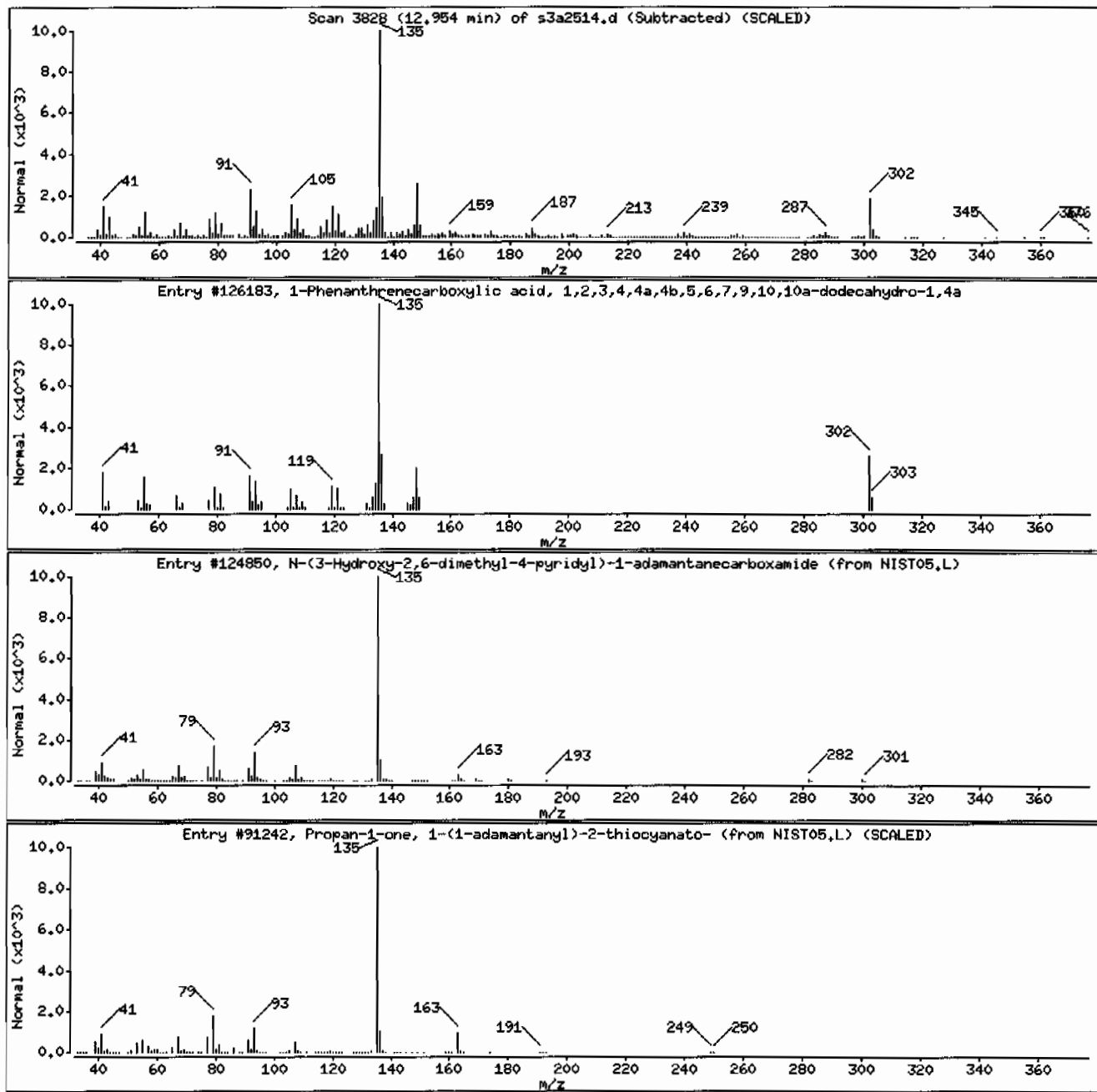
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	471-77-2	NIST05.L	126183	91	C20H30O2	302
N-(3-Hydroxy-2,6-dimethyl-4-pyridyl)-1-a	1000260-99-3	NIST05.L	124850	50	C18H24N2O2	300
Propan-1-one, 1-(1-adamantanyl)-2-thio	313231-18-4	NIST05.L	91242	49	C14H19NOS	249



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 1245099005194445511SVHF11ILANL

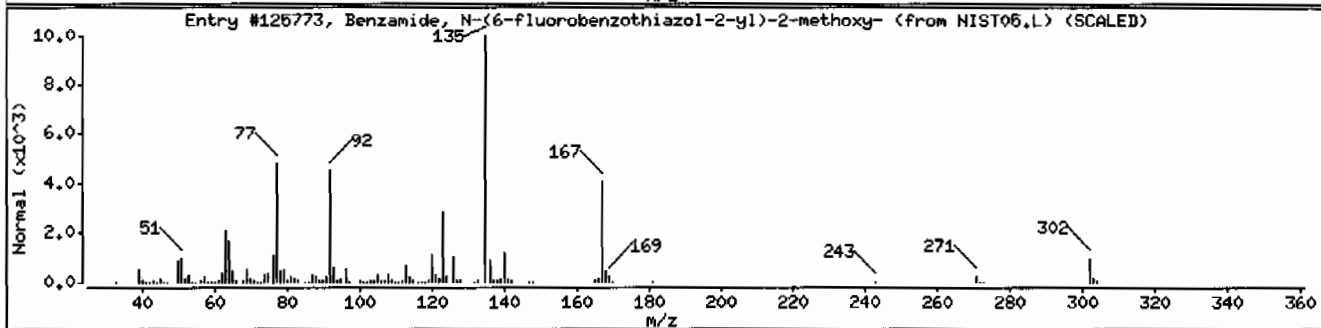
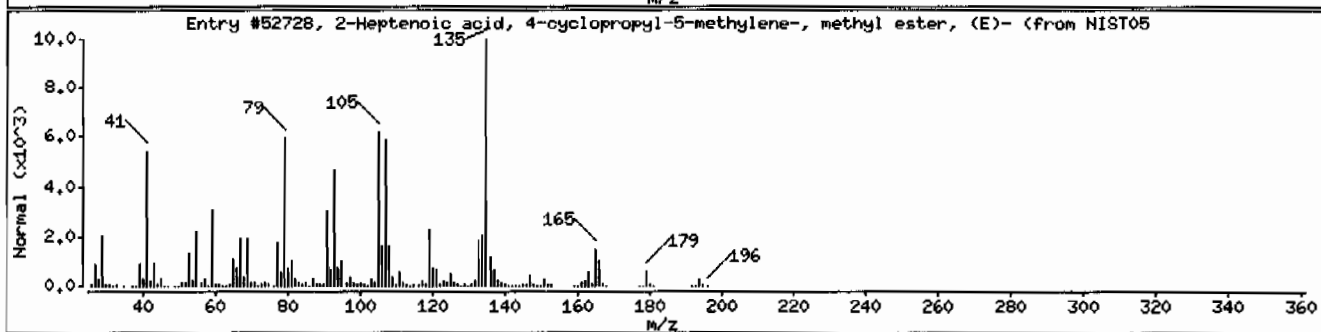
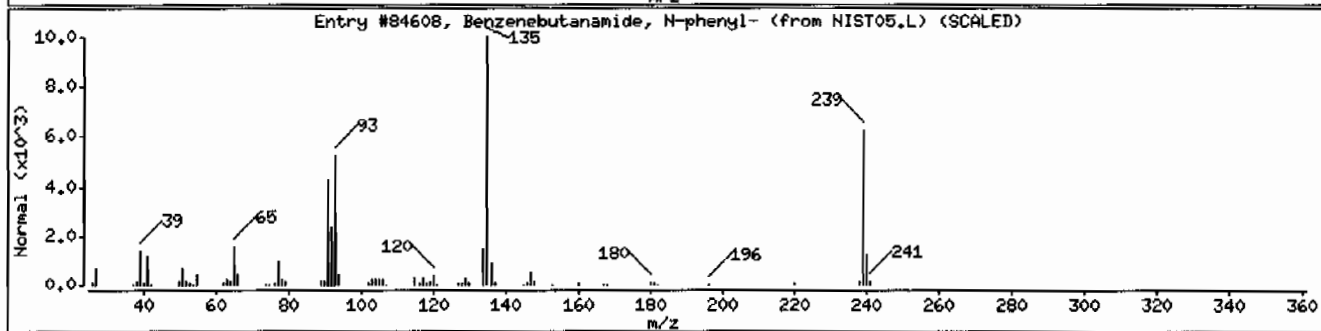
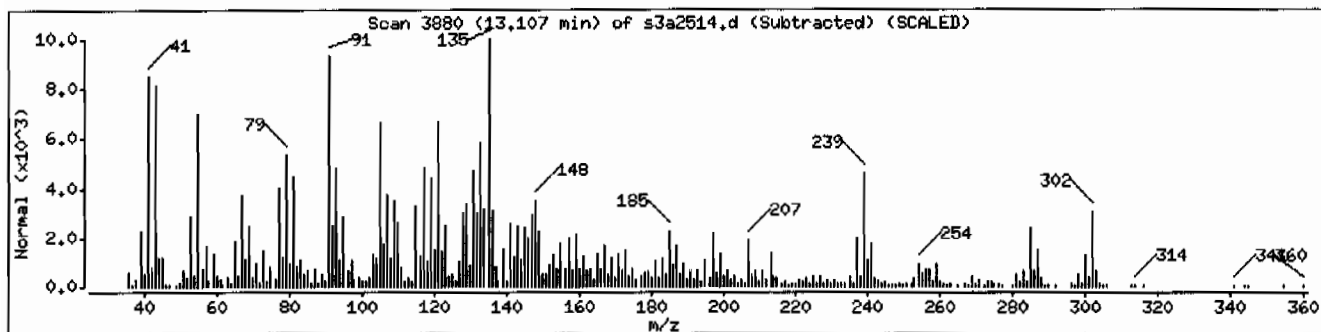
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzenebutanamide, N-phenyl-	3056-71-1	NIST05.L	84608	25	C ₁₆ H ₁₇ N ₁ O	239
2-Heptenoic acid, 4-cyclopropyl-5-methyl	74793-23-0	NIST05.L	52728	20	C ₁₂ H ₁₈ O ₂	194
Benzamide, N-(6-fluorobenzothiazol-2-yl)	1000315-97-7	NIST05.L	125773	20	C ₁₅ H ₁₁ FN ₂ O ₂ S	302



Date : 25-JAN-2010 15:31

Client ID: RE15-10-7196

Instrument: MSD3.i

Sample Info: 12450990051944455111SVHF111LANL

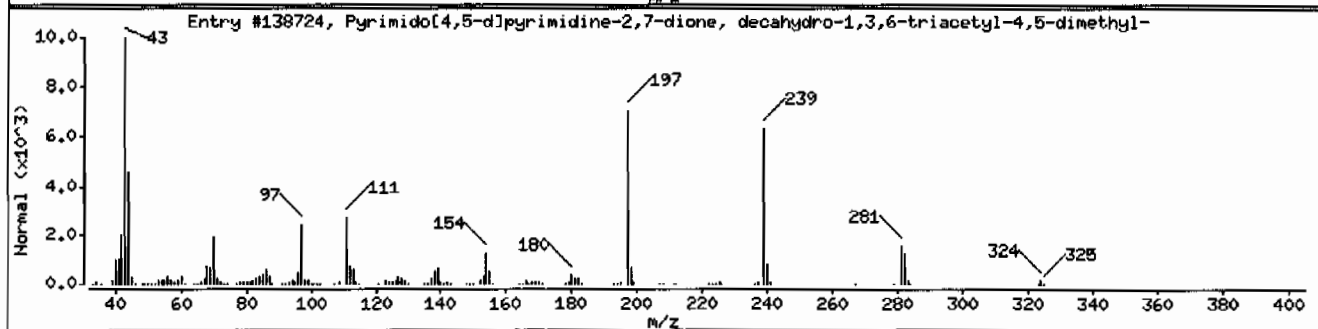
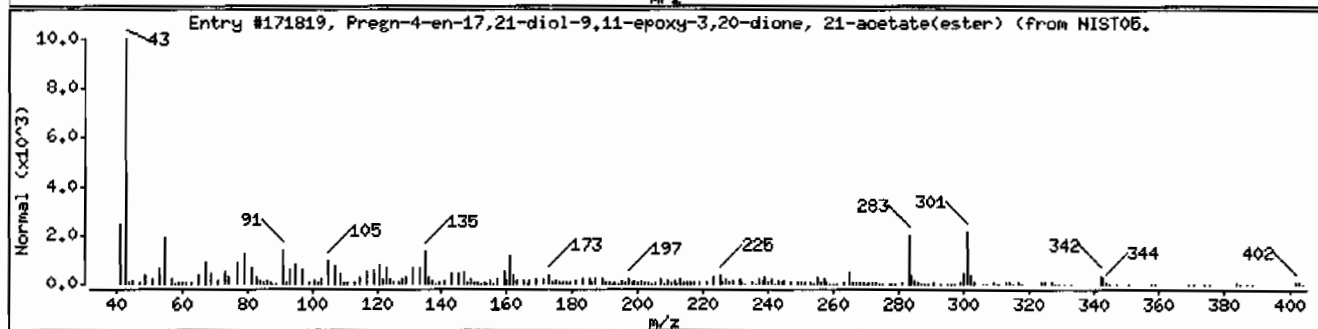
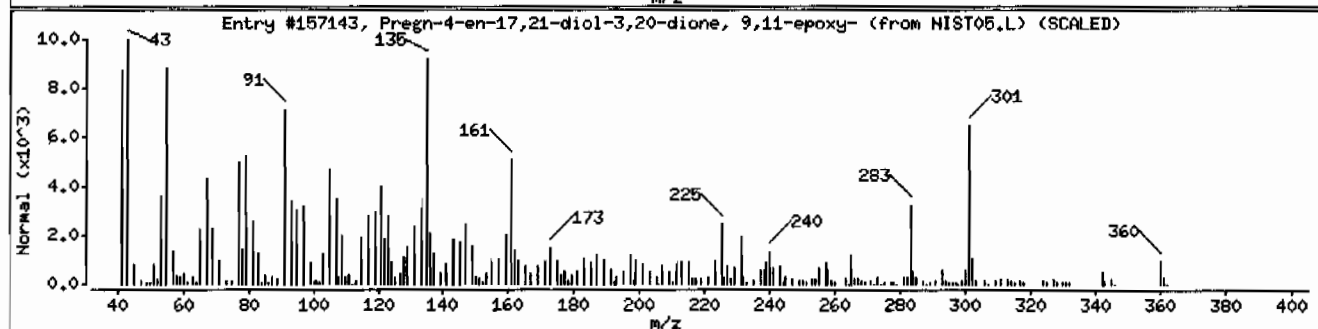
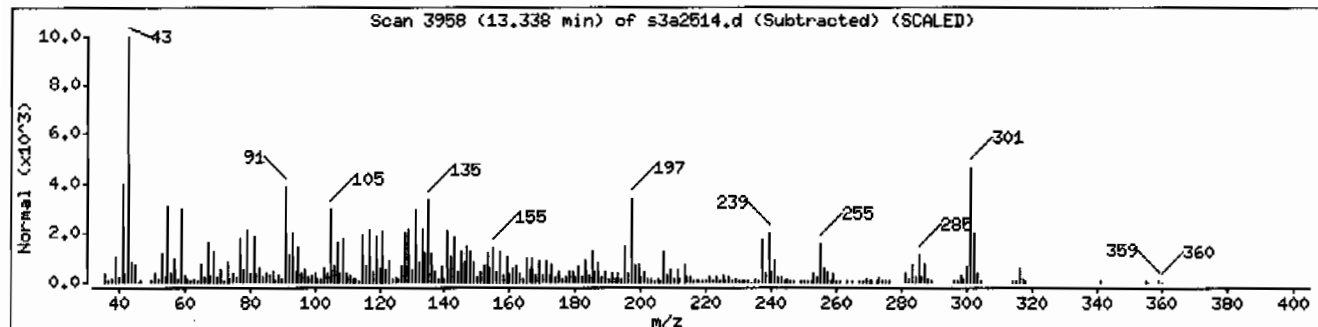
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pregn-4-en-17,21-diol-3,20-dione, 9,11-e	1000128-34-5	NIST05.L	157143	10	C21H28O5	360
Pregn-4-en-17,21-diol-9,11-epoxy-3,20-di	1000128-35-4	NIST05.L	171819	9	C23H30O6	402
Pyrimido[4,5-d]pyrimidine-2,7-dione, dec	1000272-71-0	NIST05.L	138724	9	C14H20N4O5	324



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

Page 1 of 3

SDG Number: 10-1301
Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	388	ug/kg	77.6	388
108-95-2	Phenol	U	388	ug/kg	77.6	388
95-57-8	2-Chlorophenol	U	388	ug/kg	77.6	388
106-46-7	1,4-Dichlorobenzene	U	388	ug/kg	77.6	388
621-64-7	N-Nitrosodipropylamine	U	388	ug/kg	77.6	388
59-50-7	4-Chloro-3-methylphenol	U	388	ug/kg	77.6	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	96.9	388
129-00-0	Pyrene	U	38.8	ug/kg	11.6	38.8
110-86-1	Pyridine	U	388	ug/kg	77.6	388
62-53-3	Aniline	U	388	ug/kg	116	388
111-44-4	bis(2-Chloroethyl) ether	U	388	ug/kg	77.6	388
541-73-1	1,3-Dichlorobenzene	U	388	ug/kg	77.6	388
100-51-6	Benzyl alcohol	U	388	ug/kg	116	388
95-50-1	1,2-Dichlorobenzene	U	388	ug/kg	77.6	388
108-60-1	bis(2-Chloroisopropyl)ether	U	388	ug/kg	77.6	388
95-48-7	o-Cresol	U	388	ug/kg	77.6	388
65794-96-9	m,p-Cresols	U	388	ug/kg	116	388
67-72-1	Hexachloroethane	U	388	ug/kg	77.6	388
98-95-3	Nitrobenzene	U	388	ug/kg	77.6	388
78-59-1	Isophorone	U	388	ug/kg	77.6	388
88-75-5	2-Nitrophenol	U	388	ug/kg	77.6	388
105-67-9	2,4-Dimethylphenol	U	388	ug/kg	136	388
111-91-1	bis(2-Chloroethoxy)methane	U	388	ug/kg	77.6	388
120-83-2	2,4-Dichlorophenol	U	388	ug/kg	77.6	388
65-85-0	Benzoic acid	U	776	ug/kg	194	776
91-20-3	Naphthalene	U	38.8	ug/kg	11.6	38.8
106-47-8	4-Chloroaniline	U	388	ug/kg	77.6	388
87-68-3	Hexachlorobutadiene	U	388	ug/kg	77.6	388
91-57-6	2-Methylnaphthalene	U	38.8	ug/kg	7.76	38.8
77-47-4	Hexachlorocyclopentadiene	U	388	ug/kg	77.6	388
88-06-2	2,4,6-Trichlorophenol	U	388	ug/kg	77.6	388
95-95-4	2,4,5-Trichlorophenol	U	388	ug/kg	77.6	388
91-58-7	2-Chloronaphthalene	U	38.8	ug/kg	12.8	38.8
88-74-4	2-Nitroaniline	U	388	ug/kg	77.6	388
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	388	ug/kg	77.6	388

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 245099006	Date Received: 01/20/2010 08:45	%Moisture: 14.4
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7197	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/26/2010 15:03	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.14 g	Final Volume: 1 mL
Data File: s3a2614.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	388	ug/kg	77.6	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	776	ug/kg	147	776
132-64-9	Dibenzofuran	U	388	ug/kg	77.6	388
84-66-2	Diethylphthalate	U	388	ug/kg	77.6	388
86-73-7	Fluorene	U	38.8	ug/kg	11.6	38.8
7005-72-3	4-Chlorophenylphenylether	U	388	ug/kg	77.6	388
534-52-1	2-Methyl-4,6-dinitrophenol	U	388	ug/kg	77.6	388
100-01-6	4-Nitroaniline	U	388	ug/kg	116	388
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	388	ug/kg	77.6	388
122-66-7	Azobenzene	U	388	ug/kg	77.6	388
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	388	ug/kg	77.6	388
118-74-1	Hexachlorobenzene	U	388	ug/kg	77.6	388
85-01-8	Phenanthrene	U	38.8	ug/kg	11.6	38.8
120-12-7	Anthracene	U	38.8	ug/kg	7.76	38.8
84-74-2	Di-n-butylphthalate	U	388	ug/kg	77.6	388
206-44-0	Fluoranthene	U	38.8	ug/kg	11.6	38.8
85-68-7	Butylbenzylphthalate	U	388	ug/kg	77.6	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	77.6	388
117-84-0	Di-n-octylphthalate	U	388	ug/kg	77.6	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	77.6	388

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.15	437	ug/kg		J
	Unknown	2.19	170	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301
Lab Sample ID: 245099006

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.14 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 14.4
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.33	244	ug/kg		J
	Unknown Aldol Condensate	3.42	430	ug/kg		JA
	Unknown	17.19	311	ug/kg		J
83-47-6	.gamma.-Sitosterol	17.71	667	ug/kg	96	NJ

Data File: /chem/MSD3.i/s012610a.b/s3a2614.d
Report Date: 26-Jan-2010 16:03

Page 1

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2614.d
Lab Smp Id: 245099006 Client Smp ID: RE15-10-7197
Inj Date : 26-JAN-2010 15:03
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099006|944455|1|SVMF|1|LANL
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
Meth Date : 26-Jan-2010 15:55 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	14.44340	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
								(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		4.829	4.828	(1.000)		304636	40.0000	
* 29 Naphthalene-d8	136		6.111	6.111	(1.000)		1171799	40.0000	
* 46 Acenaphthene-d10	164		7.987	7.986	(1.000)		657556	40.0000	
* 67 Phenanthrene-d10	188		9.604	9.603	(1.000)		1186890	40.0000	
* 91 Chrysene-d12	240		12.629	12.624	(1.000)		895824	40.0000	
* 98 Perylene-d12	264		14.977	14.969	(1.000)		548615	40.0000	
\$ 3 2-Fluorophenol	112		3.657	3.644	(0.757)		519618	65.5503	2540
\$ 5 Phenol-d5	99		4.428	4.430	(0.917)		612911	61.5214	2380
\$ 20 Nitrobenzene-d5	82		5.366	5.372	(0.878)		290039	33.5075	1300
\$ 39 2-Fluorobiphenyl	172		7.239	7.244	(0.906)		580335	34.1445	1320
\$ 60 2,4,6-Tribromophenol	329		8.838	8.842	(1.106)		151257	80.2411	3110
\$ 81 p-Terphenyl-d14	244		11.315	11.316	(0.896)		697101	45.2736	1760

ION RATIO REPORT

SV REPORT

Data file: s3a2614.d

Report Date: 01/26/2010 15:50

Lab. ID: 245099006

SampleType: SAMPLE

Injection Date: 26-JAN-2010 15:03

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099006|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	35094	4.43	4.52	80-120	100	(T)
93	2538	4.49	4.52	205-265	7	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	41751	5.37	5.20	80-120	100	(T)
42	27302	5.37	5.20	45-105	65	(T)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	5185	7.58	7.39	80-120	100	(T)
164	216	7.59	7.39	2- 62	4	(T)
127	367	7.59	7.39	9- 69	7	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	85535	7.99	7.75	80-120	100	(T)
63	1152	7.99	7.75	36- 96	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	85535	7.99	8.18	80-120	100	(T)
89	1671	7.99	8.18	42-102	2	(QT)
63	1152	7.99	8.18	21- 81	1	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2614.d
 Lab Smp Id: 245099006 Client Smp ID: RE15-10-7197
 Inj Date : 26-JAN-2010 15:03
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099006|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
 Meth Date : 26-Jan-2010 15:55 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.14000	weight of sample
M	14.44340	% moisture

Cpnd Variable Local Compound Variable

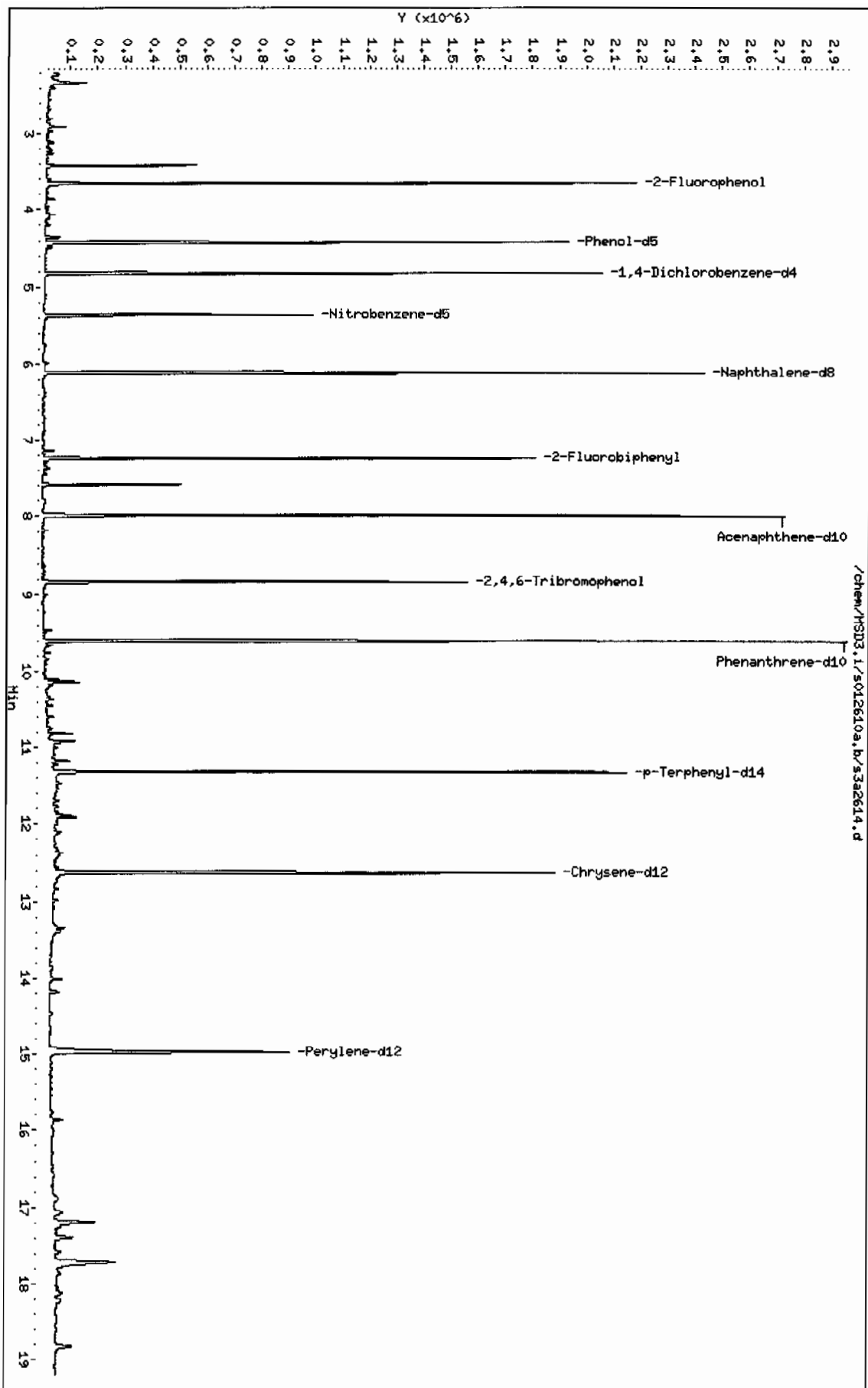
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.829	1926629	40.000
* 98 Perylene-d12	14.977	1714932	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.150	542551	11.2642446	437	0		0	10

RT	CONCENTRATIONS				QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.188	210629	4.37301397	170	0		0	10
Unknown				CAS #:			
2.329	302846	6.28757347	244	0		0	10
Unknown Aldol Condensate				CAS #:			
3.419	534542	11.0979721	430	0		0	10
Unknown				CAS #:			
17.192	343406	8.00977719	311	0		0	98
.gamma.-Sitosterol				CAS #: 83-47-6			
17.711	737298	17.1971345	667	96	NIST05.L	174402	98

Data File: /chem/HSD3.i/s012610a.b/s3a2614.d
 Date : 26-JAN-2010 15:03
 Client ID: RE15-10-7197
 Sample Info: 12450900619445511SVWF11LNL
 Volume injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: HSD3.i
 Operator: JLD1
 Column diameter: 0.20



Date : 26-JAN-2010 15:03

Client ID: RE15-10-7197

Instrument: MSD3.i

Sample Info: 1245099006194445511SVMF111LANL

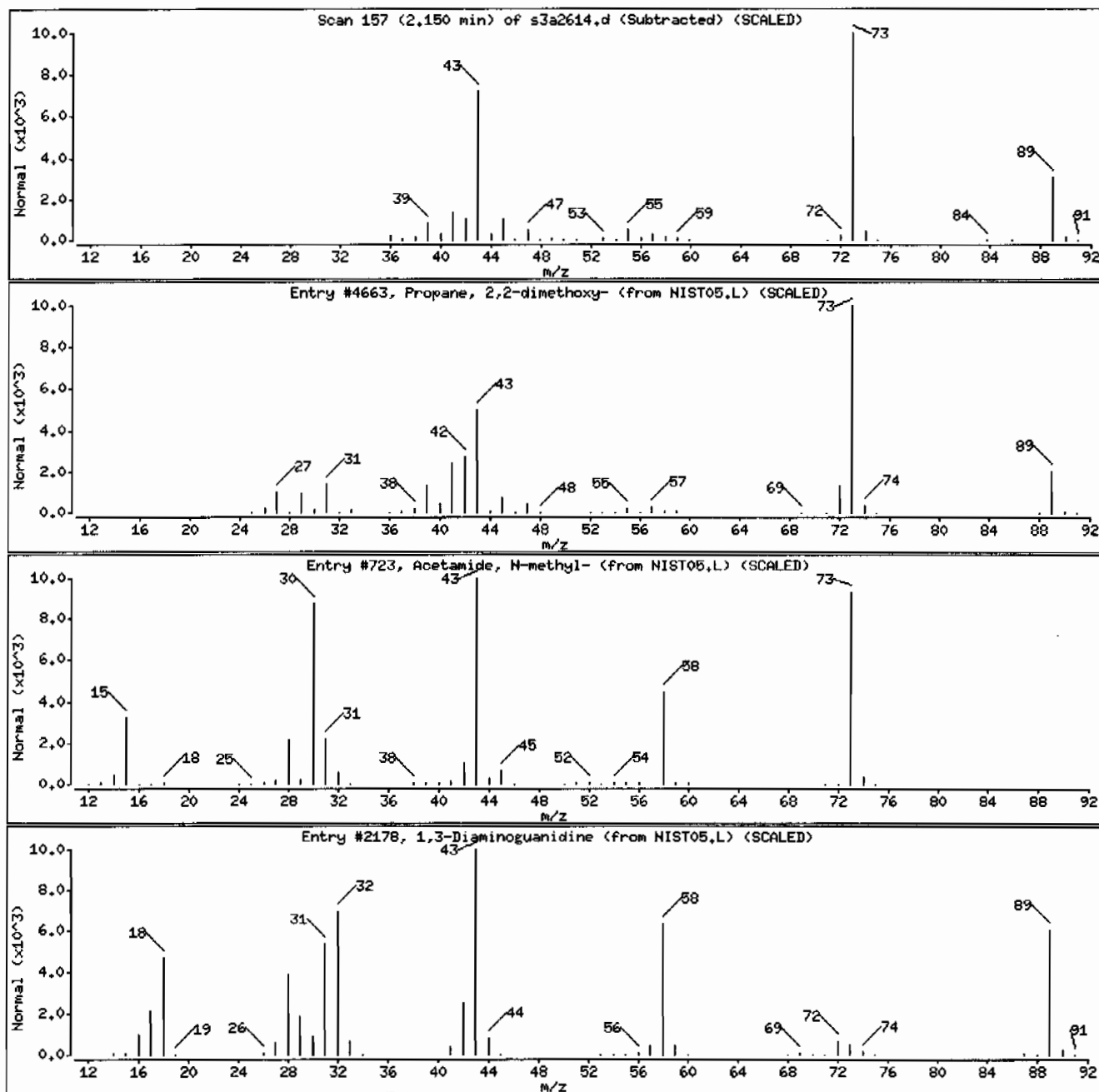
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	38	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	35	C3H7NO	73
1,3-Diaminoguanidine	4364-78-7	NIST05.L	2178	17	CH7N5	89



Date : 26-JAN-2010 15:03

Client ID: RE15-10-7197

Instrument: MSD3.i

Sample Info: 1245099006194445511SVHF111LANL

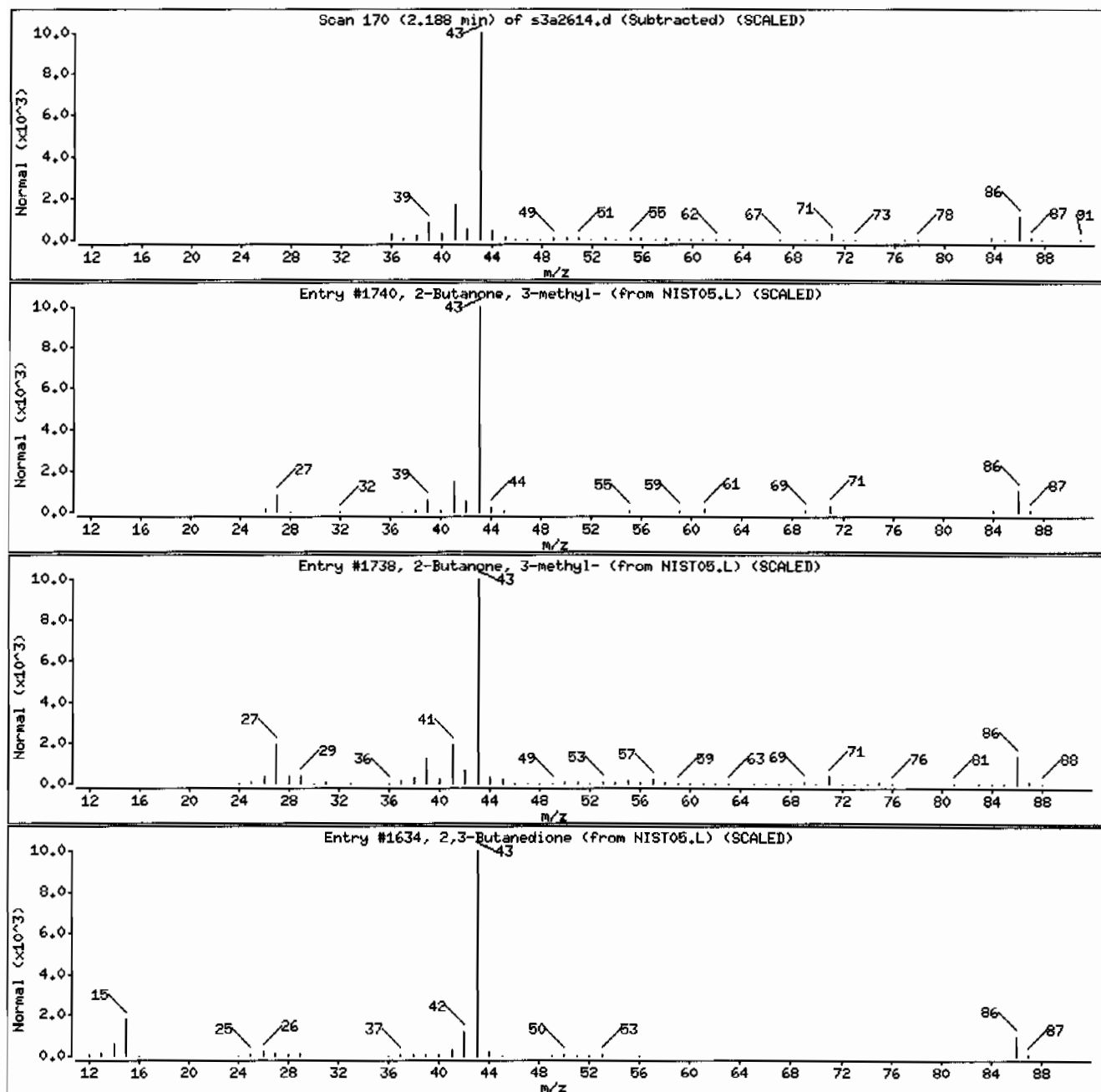
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	50	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	50	C5H10O	86
2,3-Butanedione	431-03-8	NIST05.L	1634	40	C4H6O2	86



Date : 26-JAN-2010 15:03

Client ID: RE15-10-7197

Instrument: HSD3,i

Sample Info: 12450990061944455111SVMF111LANL

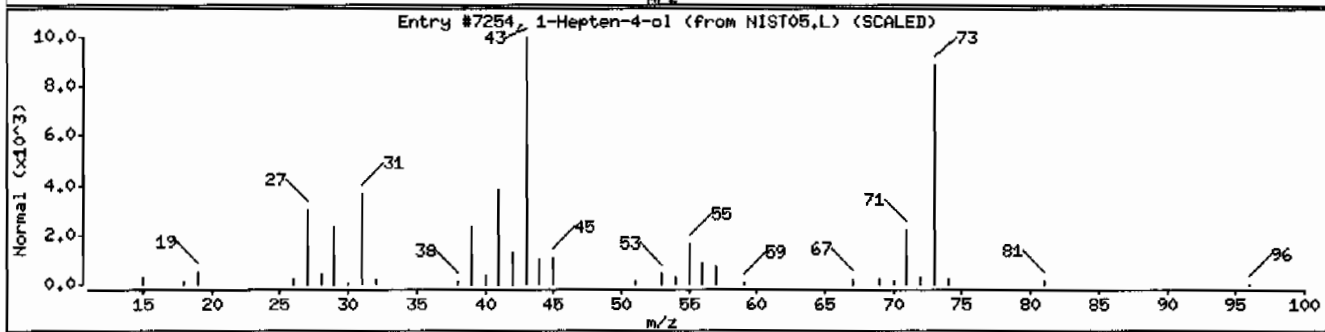
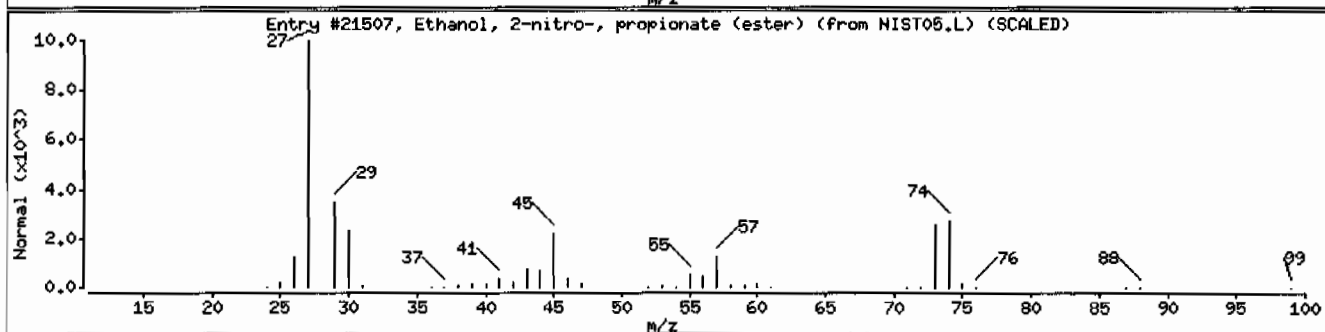
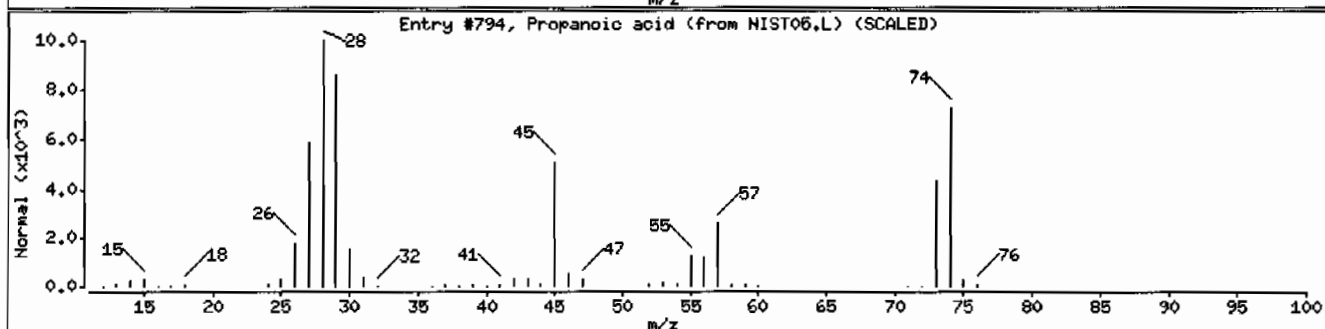
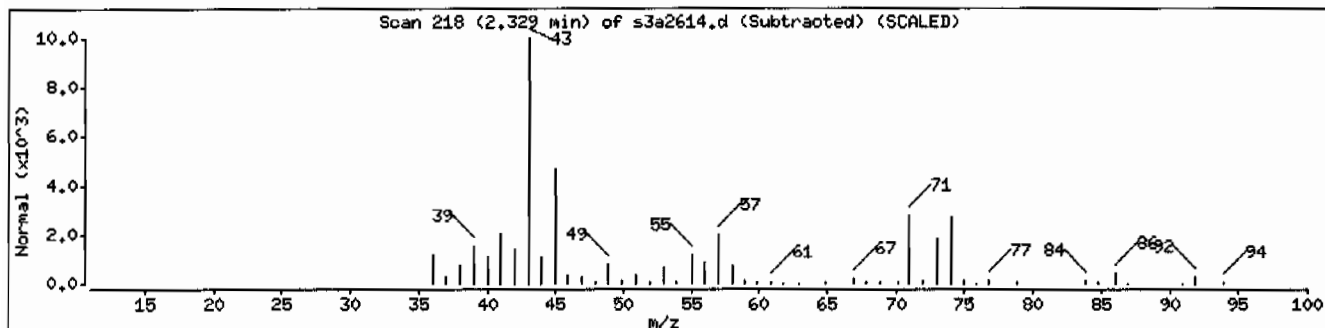
Volume Injected (uL): 0.5

Operator: JLD1

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	794	43	C3H6O2	74
Ethanol, 2-nitro-, propionate (ester)	5390-28-3	NIST05.L	21507	38	C5H9NO4	147
1-Hepten-4-ol	3521-91-3	NIST05.L	7254	14	C7H14O	114



Date : 26-JAN-2010 15:03

Client ID: RE15-10-7197

Instrument: MSD3.i

Sample Info: 1245099006194445511SVHF111LANL

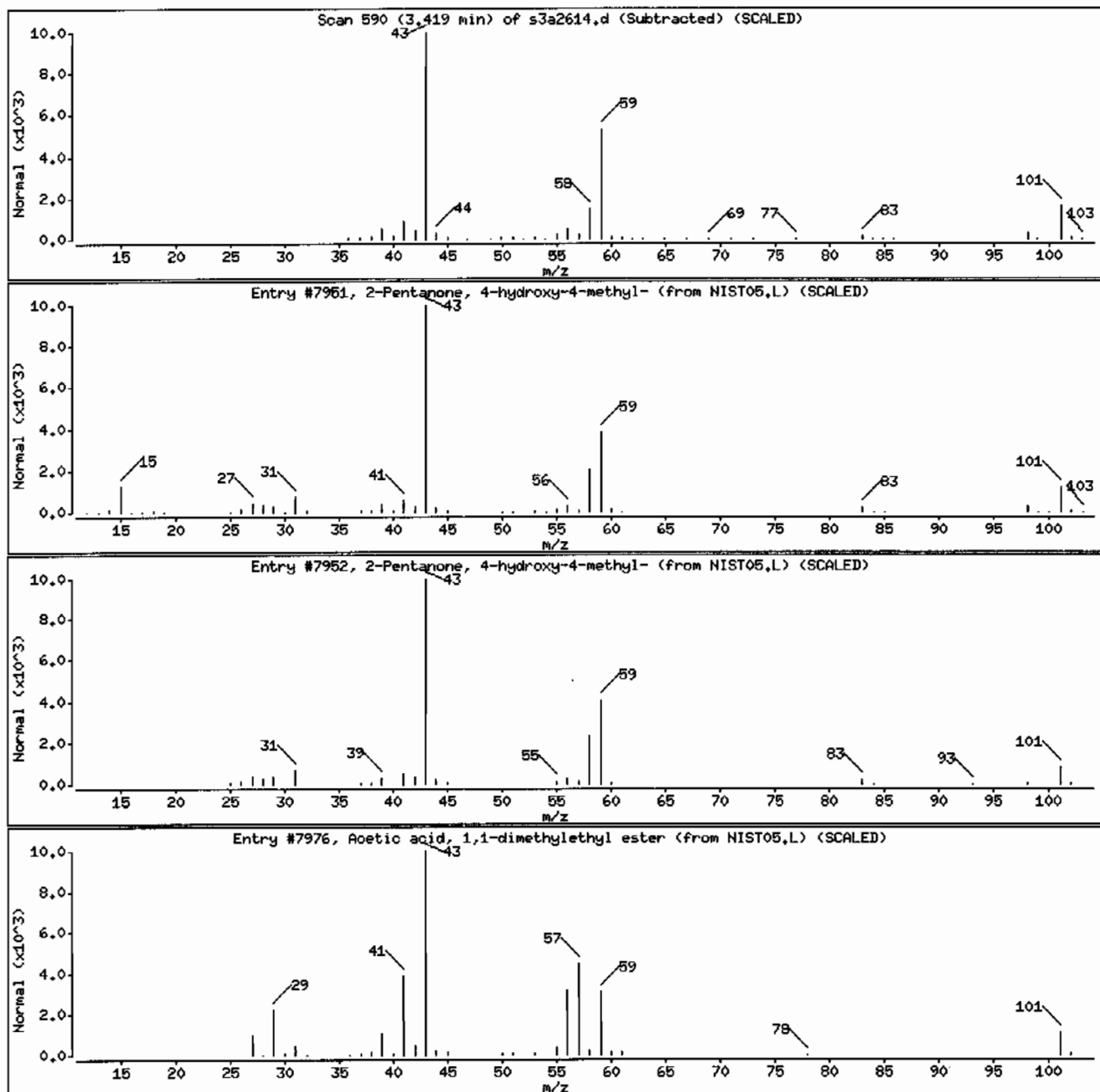
Volume Injected (uL): 0.5

Operator: JLD1

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, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



Date : 26-JAN-2010 15:03

Client ID: RE15-10-7197

Instrument: MSD3.i

Sample Info: 1245099006194445511SVHF11ILANL

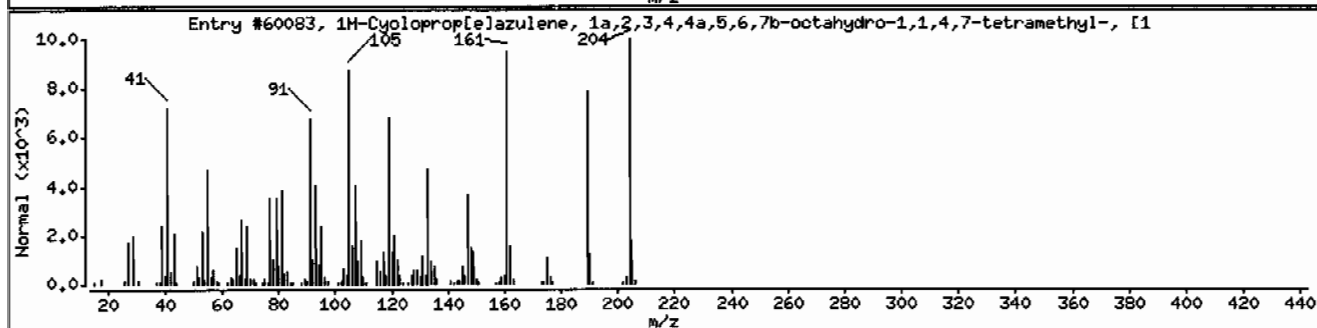
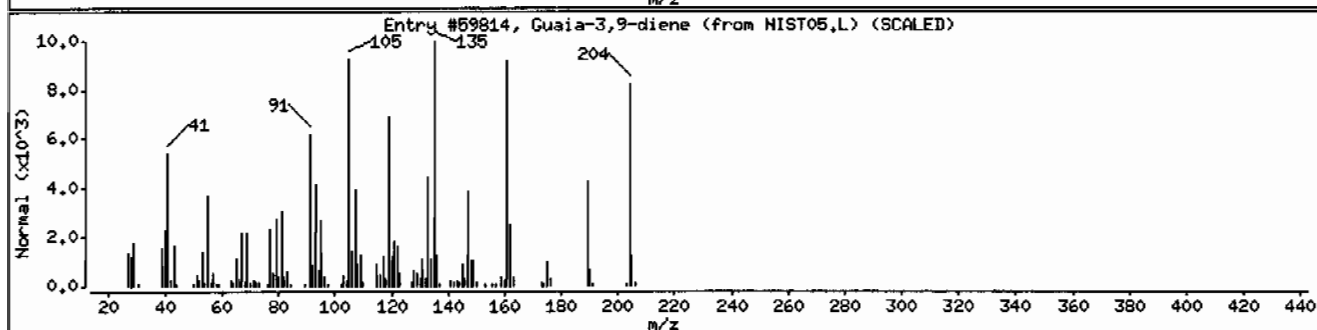
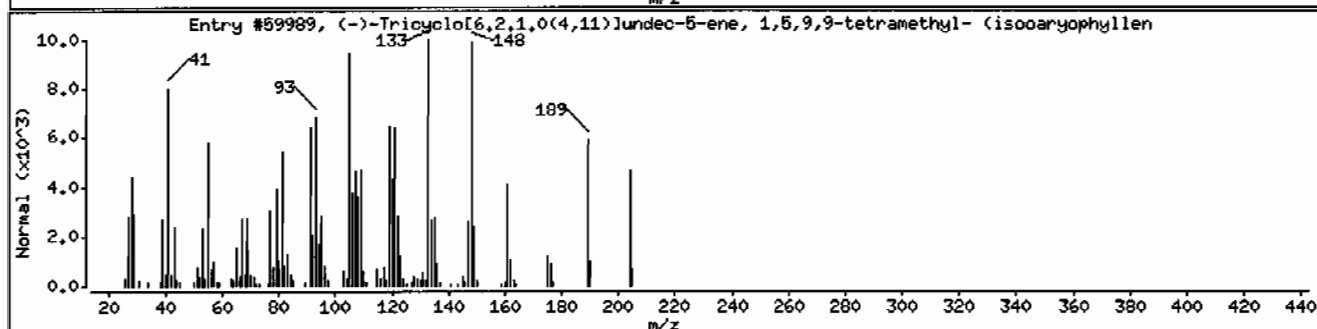
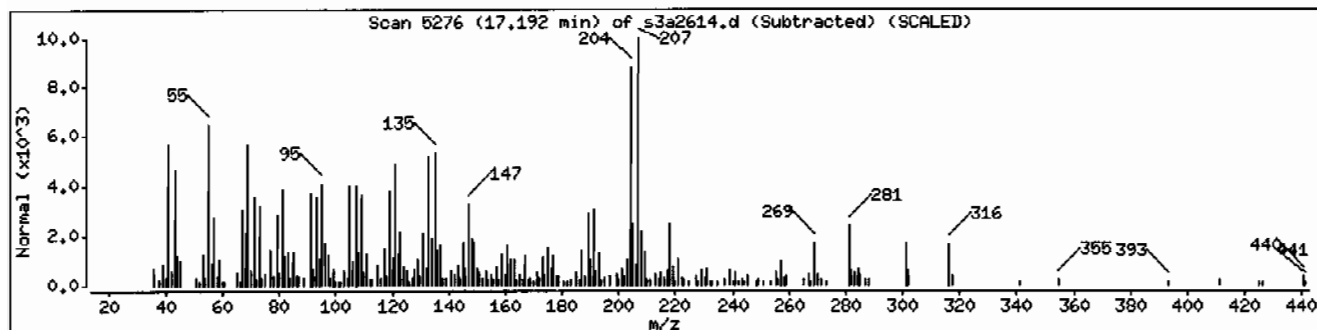
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(-)-Tricyclo[6,2,1,0(4,11)]undec-5-ene,	1000154-06-7	NIST05.L	59989	49	C15H24	204
Guaiac-3,9-diene	489-83-8	NIST05.L	59814	46	C15H24	204
1H-Cycloprop[elazulene, 1a,2,3,4,4a,5,6,	489-40-7	NIST05.L	60083	41	C15H24	204



Date : 26-JAN-2010 15:03

Client ID: RE15-10-7197

Instrument: MSD3.i

Sample Info: 1245099006194448511ISVMF11ILANL

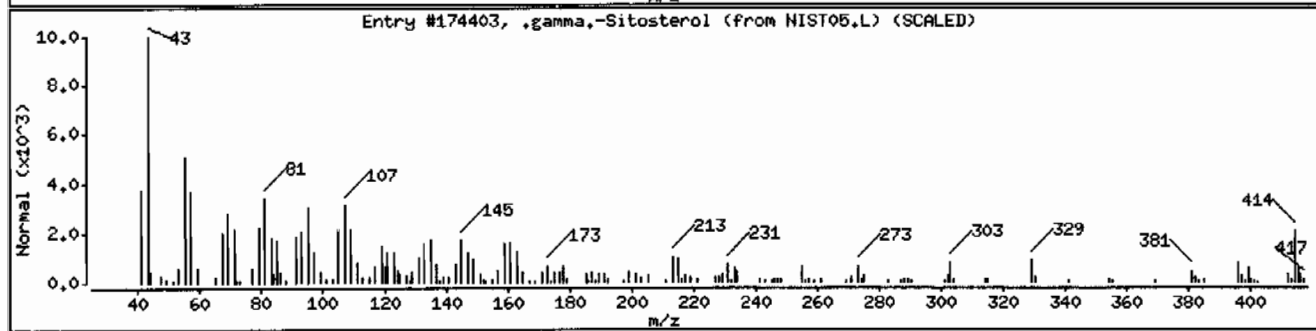
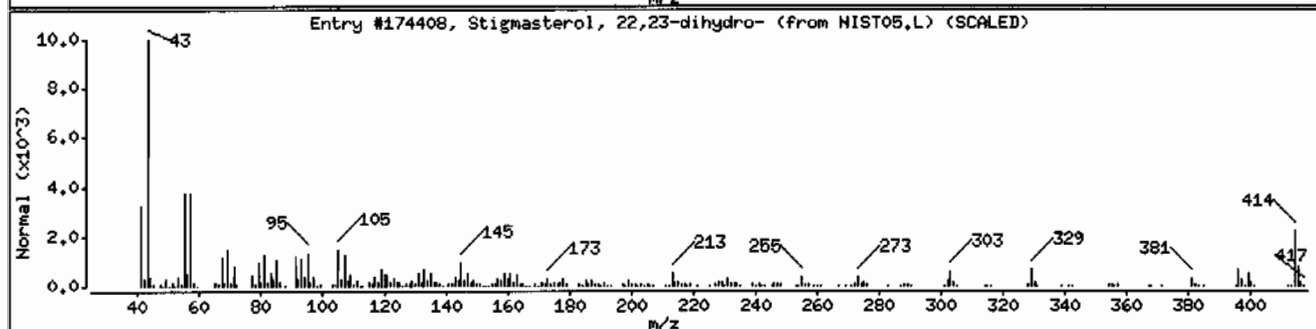
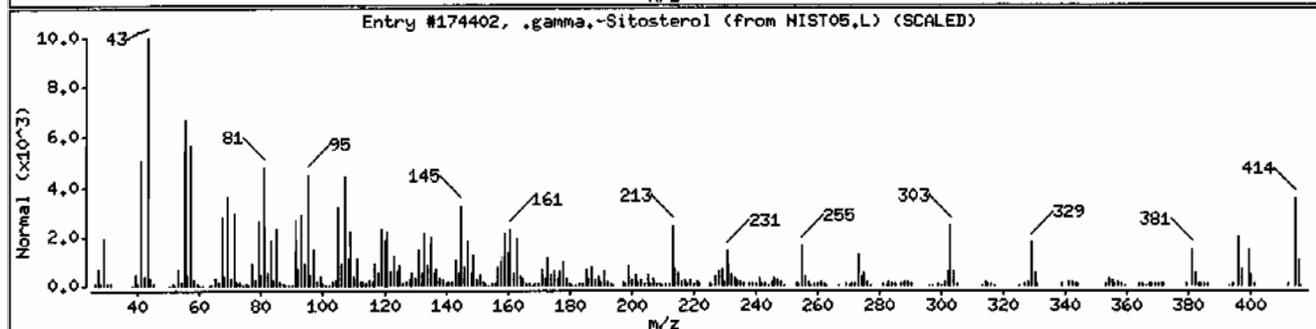
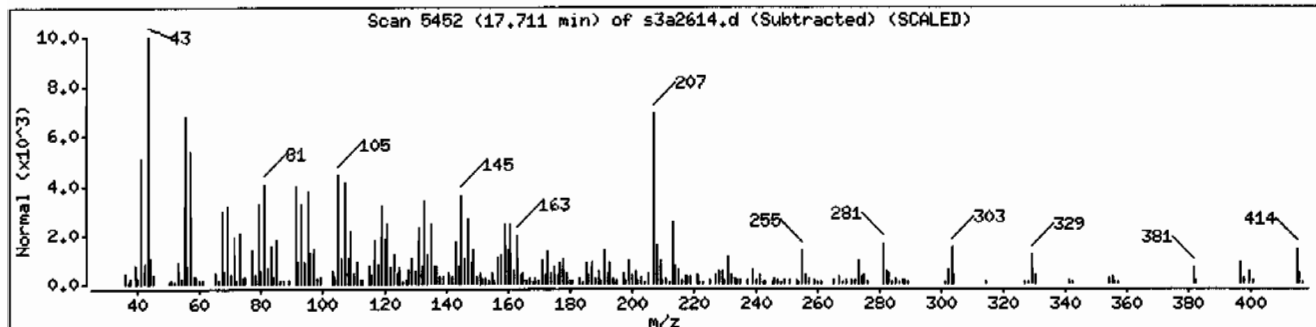
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-SMS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	96	C29H50O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	95	C29H50O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174403	90	C29H50O	414



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

SDG Number: 10-1301
Lab Sample ID: 245099015

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.2
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	433	ug/kg	86.5	433
108-95-2	Phenol	U	433	ug/kg	86.5	433
95-57-8	2-Chlorophenol	U	433	ug/kg	86.5	433
106-46-7	1,4-Dichlorobenzene	U	433	ug/kg	86.5	433
621-64-7	N-Nitrosodipropylamine	U	433	ug/kg	86.5	433
59-50-7	4-Chloro-3-methylphenol	U	433	ug/kg	86.5	433
83-32-9	Acenaphthene	U	43.3	ug/kg	14.3	43.3
121-14-2	2,4-Dinitrotoluene	U	433	ug/kg	43.3	433
100-02-7	4-Nitrophenol	U	433	ug/kg	143	433
87-86-5	Pentachlorophenol	U	433	ug/kg	108	433
129-00-0	Pyrene	U	43.3	ug/kg	13.0	43.3
110-86-1	Pyridine	U	433	ug/kg	86.5	433
62-53-3	Aniline	U	433	ug/kg	130	433
111-44-4	bis(2-Chloroethyl) ether	U	433	ug/kg	86.5	433
541-73-1	1,3-Dichlorobenzene	U	433	ug/kg	86.5	433
100-51-6	Benzyl alcohol	U	433	ug/kg	130	433
95-50-1	1,2-Dichlorobenzene	U	433	ug/kg	86.5	433
108-60-1	bis(2-Chloroisopropyl)ether	U	433	ug/kg	86.5	433
95-48-7	o-Cresol	U	433	ug/kg	86.5	433
65794-96-9	m,p-Cresols	U	433	ug/kg	130	433
67-72-1	Hexachloroethane	U	433	ug/kg	86.5	433
98-95-3	Nitrobenzene	U	433	ug/kg	86.5	433
78-59-1	Isophorone	U	433	ug/kg	86.5	433
88-75-5	2-Nitrophenol	U	433	ug/kg	86.5	433
105-67-9	2,4-Dimethylphenol	U	433	ug/kg	151	433
111-91-1	bis(2-Chloroethoxy)methane	U	433	ug/kg	86.5	433
120-83-2	2,4-Dichlorophenol	U	433	ug/kg	86.5	433
65-85-0	Benzoic acid	U	865	ug/kg	216	865
91-20-3	Naphthalene	U	43.3	ug/kg	13.0	43.3
106-47-8	4-Chloroaniline	U	433	ug/kg	86.5	433
87-68-3	Hexachlorobutadiene	U	433	ug/kg	86.5	433
91-57-6	2-Methylnaphthalene	U	43.3	ug/kg	8.65	43.3
77-47-4	Hexachlorocyclopentadiene	U	433	ug/kg	86.5	433
88-06-2	2,4,6-Trichlorophenol	U	433	ug/kg	86.5	433
95-95-4	2,4,5-Trichlorophenol	U	433	ug/kg	86.5	433
91-58-7	2-Chloronaphthalene	U	43.3	ug/kg	14.3	43.3
88-74-4	2-Nitroaniline	U	433	ug/kg	86.5	433
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	433	ug/kg	86.5	433

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

SDG Number: 10-1301
Lab Sample ID: 245099015

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7219
Batch ID: 944455
Run Date: 01/27/2010 14:09
Prep Date: 01/22/2010 23:39
Data File: s3a2713.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	433	ug/kg	86.5	433
606-20-2	2,6-Dinitrotoluene	U	433	ug/kg	43.3	433
208-96-8	Acenaphthylene	U	43.3	ug/kg	13.0	43.3
51-28-5	2,4-Dinitrophenol	U	865	ug/kg	164	865
132-64-9	Dibenzofuran	U	433	ug/kg	86.5	433
84-66-2	Diethylphthalate	U	433	ug/kg	86.5	433
86-73-7	Fluorene	U	43.3	ug/kg	13.0	43.3
7005-72-3	4-Chlorophenylphenylether	U	433	ug/kg	86.5	433
534-52-1	2-Methyl-4,6-dinitrophenol	U	433	ug/kg	86.5	433
100-01-6	4-Nitroaniline	U	433	ug/kg	130	433
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	433	ug/kg	86.5	433
122-66-7	Azobenzene	U	433	ug/kg	86.5	433
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	433	ug/kg	86.5	433
118-74-1	Hexachlorobenzene	U	433	ug/kg	86.5	433
85-01-8	Phenanthrene	U	43.3	ug/kg	13.0	43.3
120-12-7	Anthracene	U	43.3	ug/kg	8.65	43.3
84-74-2	Di-n-butylphthalate	U	433	ug/kg	86.5	433
206-44-0	Fluoranthene	U	43.3	ug/kg	13.0	43.3
85-68-7	Butylbenzylphthalate	U	433	ug/kg	86.5	433
56-55-3	Benzo(a)anthracene	U	43.3	ug/kg	13.0	43.3
91-94-1	3,3'-Dichlorobenzidine	U	433	ug/kg	130	433
218-01-9	Chrysene	U	43.3	ug/kg	13.0	43.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	433	ug/kg	86.5	433
117-84-0	Di-n-octylphthalate	U	433	ug/kg	86.5	433
205-99-2	Benzo(b)fluoranthene	U	43.3	ug/kg	13.0	43.3
207-08-9	Benzo(k)fluoranthene	U	43.3	ug/kg	13.0	43.3
50-32-8	Benzo(a)pyrene	U	43.3	ug/kg	13.0	43.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	43.3	ug/kg	13.0	43.3
53-70-3	Dibenzo(a,h)anthracene	U	43.3	ug/kg	13.0	43.3
191-24-2	Benzo(ghi)perylene	U	43.3	ug/kg	13.0	43.3
120-82-1	1,2,4-Trichlorobenzene	U	433	ug/kg	86.5	433

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2.09	284	ug/kg		J
	Unknown	2.28	327	ug/kg		J

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

SDG Number: 10-1301
Lab Sample ID: 245099015

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8270C
Inst: MSD3.I
Analyst: JLD1
Aliquot: 30.11 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 23.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7219
Batch ID: 944455
Run Date: 01/27/2010 14:09
Prep Date: 01/22/2010 23:39
Data File: s3a2713.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	3.4	609	ug/kg		JA
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	11.87	463	ug/kg	93	NJ
	Unknown	11.89	317	ug/kg		J
	Unknown	11.92	801	ug/kg		J
112-95-8	Eicosane	13.32	265	ug/kg	96	NJ
	Unknown	13.98	200	ug/kg		J
	Unknown	14.44	410	ug/kg		J
	Unknown	15.38	319	ug/kg		J
	Unknown	15.73	353	ug/kg		J
	Unknown	15.8	458	ug/kg		J
	Unknown	15.88	310	ug/kg		J
	Unknown	15.93	395	ug/kg		J
4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	16.99	360	ug/kg	90	NJ
	Unknown	17.17	398	ug/kg		J
1000214-20-7	Stigmasterol, 22,23-dihydro-	17.64	1460	ug/kg	95	NJ
	Unknown	18.78	375	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2713.d
 Lab Smp Id: 245099015 Client Smp ID: RE15-10-7219
 Inj Date : 27-JAN-2010 14:09
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099015|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270_S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
 Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	23.21380	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.815	4.817	(1.000)	196426	40.0000	
* 29 Naphthalene-d8	136	6.096	6.100	(1.000)	762587	40.0000	
* 46 Acenaphthene-d10	164	7.970	7.973	(1.000)	433069	40.0000	
* 67 Phenanthrene-d10	188	9.585	9.588	(1.000)	717208	40.0000	
* 91 Chrysene-d12	240	12.603	12.610	(1.000)	483700	40.0000	
* 98 Perylene-d12	264	14.940	14.945	(1.000)	218661	40.0000	
\$ 3 2-Fluorophenol	112	3.636	3.633	(0.755)	297437	58.1926	2520
\$ 5 Phenol-d5	99	4.416	4.418	(0.917)	356963	55.5692	2400
\$ 20 Nitrobenzene-d5	82	5.351	5.357	(0.878)	164802	29.2558	1260
\$ 39 2-Fluorobiphenyl	172	7.225	7.227	(0.906)	362196	32.3565	1400
\$ 60 2,4,6-Tribromophenol	329	8.821	8.825	(1.107)	88458	71.2515	3080
\$ 81 p-Terphenyl-d14	244	11.296	11.297	(0.896)	399231	48.0197	2080

ION RATIO REPORT

SV REPORT

Data file: s3a2713.d

Report Date: 01/27/2010 15:44

Lab. ID: 245099015

SampleType: SAMPLE

Injection Date: 27-JAN-2010 14:09

Operator: JLD1

Instrument: MSD3.i

Sample Info: |245099015|944455|1|SVMF|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02|

Comment:

Method used: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1301

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	21260	4.42	4.50	80-120	100	(T)
93	1961	4.48	4.50	205-265	9	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	24013	5.35	5.19	80-120	100	(T)
42	16246	5.35	5.19	43-103	68	(T)

41	m-Nitroaniline		CAS#: 99-09-2			
138	684	7.97	7.92	80-120	100	()
92	2654	7.97	7.92	79-139	388	(Q)
108	9478	7.97	7.92	0- 40	1384	(Q)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	56557	7.97	7.73	80-120	100	(T)
63	13839	7.97	7.73	35- 95	24	(QT)

45	Acenaphthylene		CAS#: 208-96-8			
152	82611	7.97	7.82	80-120	100	(T)
151	22150	7.97	7.82	0- 50	27	(T)
153	86107	7.97	7.82	0- 43	104	(QT)

47	Acenaphthene		CAS#: 83-32-9			
154	74875	7.97	8.01	80-120	100	()
153	86107	7.97	8.01	69-129	115	()
152	82611	7.97	8.01	17- 77	110	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	56557	7.97	8.16	80-120	100	(T)
89	5344	7.97	8.16	42-102	9	(QT)
63	13839	7.97	8.16	20- 80	24	(T)

52	4-Nitrophenol			CAS#: 100-02-7		
139	13801	7.97	8.07	80-120	100	(T)
109	1372	7.97	8.07	42-102	10	(QT)
65	4185	7.97	8.07	75-135	30	(QT)

Q qualifier indicates ion failed ratio requirement						

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2713.d
 Lab Smp Id: 245099015 Client Smp ID: RE15-10-7219
 Inj Date : 27-JAN-2010 14:09
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099015|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
 Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	23.21380	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.815	1254777	40.000
* 91 Chrysene-d12	12.603	1313570	40.000
* 98 Perylene-d12	14.940	636492	40.000

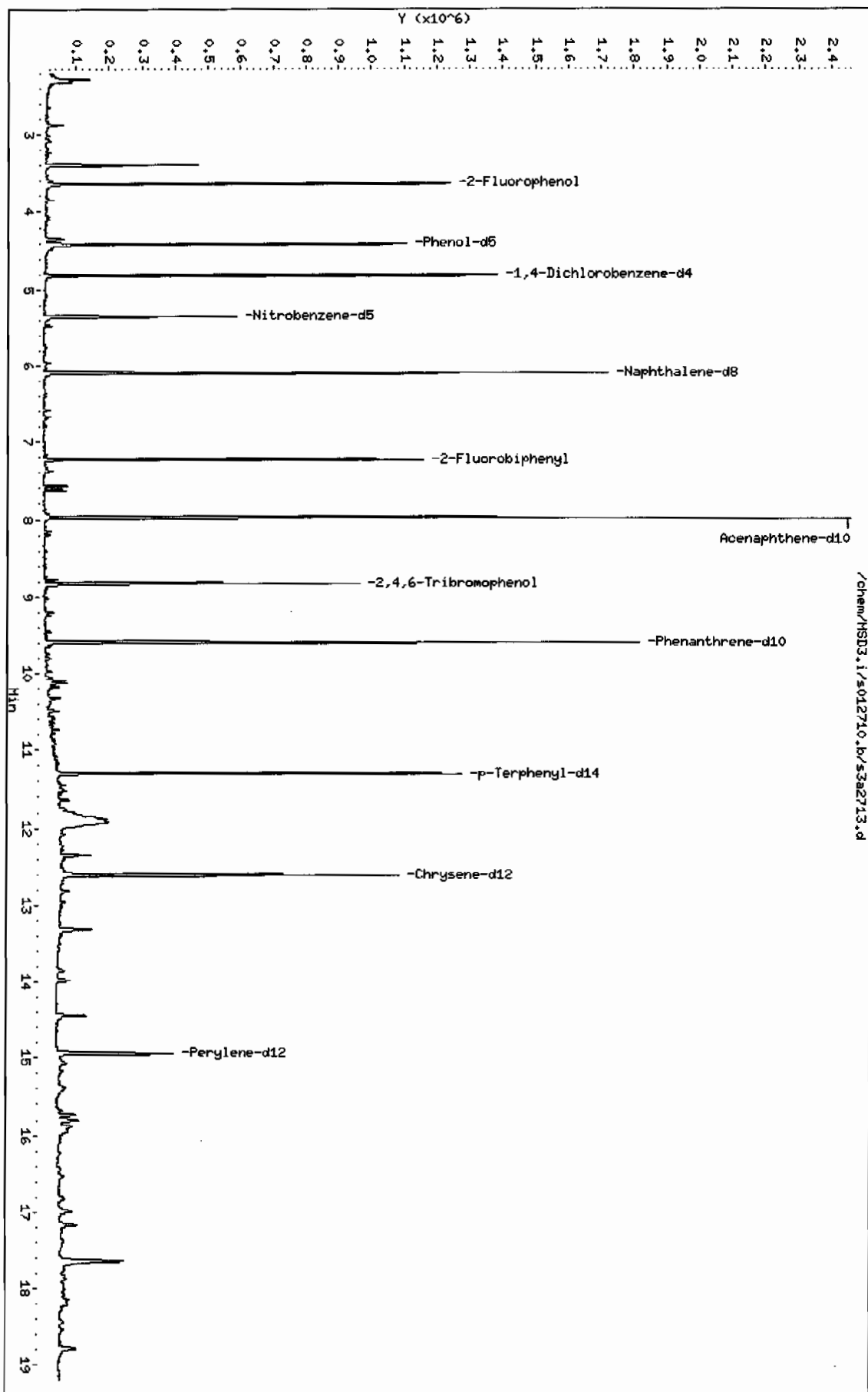
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
2.094	205677	6.55659506	284	0		0	10
Unknown					CAS #:		
2.279	236820	7.54940175	326	0		0	10
Unknown Aldol Condensate					CAS #:		
3.396	441522	14.0749058	609	0		0	10
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
11.865	351840	10.7139996	463	93	NIST05.L	133618	91
Unknown					CAS #:		
11.889	240967	7.33775845	317	0		0	91
Unknown					CAS #:		
11.924	607972	18.5135642	801	0		0	91
Eicosane					CAS #: 112-95-8		
13.319	201063	6.12265144	265	96	NIST05.L	113489	91
Unknown					CAS #:		
13.982	73625	4.62689651	200	0		0	98
Unknown					CAS #:		
14.442	150890	9.48261441	410	0		0	98
Unknown					CAS #:		
15.382	117304	7.37189071	319	0		0	98
Unknown					CAS #:		
15.733	129971	8.16796179	353	0		0	98
Unknown					CAS #:		
15.801	168605	10.5958575	458	0		0	98
Unknown					CAS #:		
15.883	114022	7.16564955	310	0		0	98
Unknown					CAS #:		
15.934	145283	9.13021147	395	0		0	98
Ergost-5-en-3-ol, (3.beta.)-					CAS #: 4651-51-8		
16.989	132364	8.31833335	360	90	NIST05.L	171440	98

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
17.166	146343	9.19683887	398	0		0	98
Stigmasterol, 22,23-dihydro-					CAS #: 1000214-20-7		
17.641	537027	33.7491548	1460	95	NIST05.L	174408	98
Unknown					CAS #:		
18.782	137786	8.65907989	374	0		0	98

Data File: /chem/HSD3.i/s012710.b/s3a2713.d
Date: 27-JAN-2010 14:09
Client ID: RE18-10-7219
Sample Info: 1245099015194445511SYMF11L1ANL
Volume Injected (uL): 0.5
Column phase: J&W DB-SHS

Instrument: HSD3.i
Operator: JLD1
Column diameter: 0.20



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511SVMF111LANL

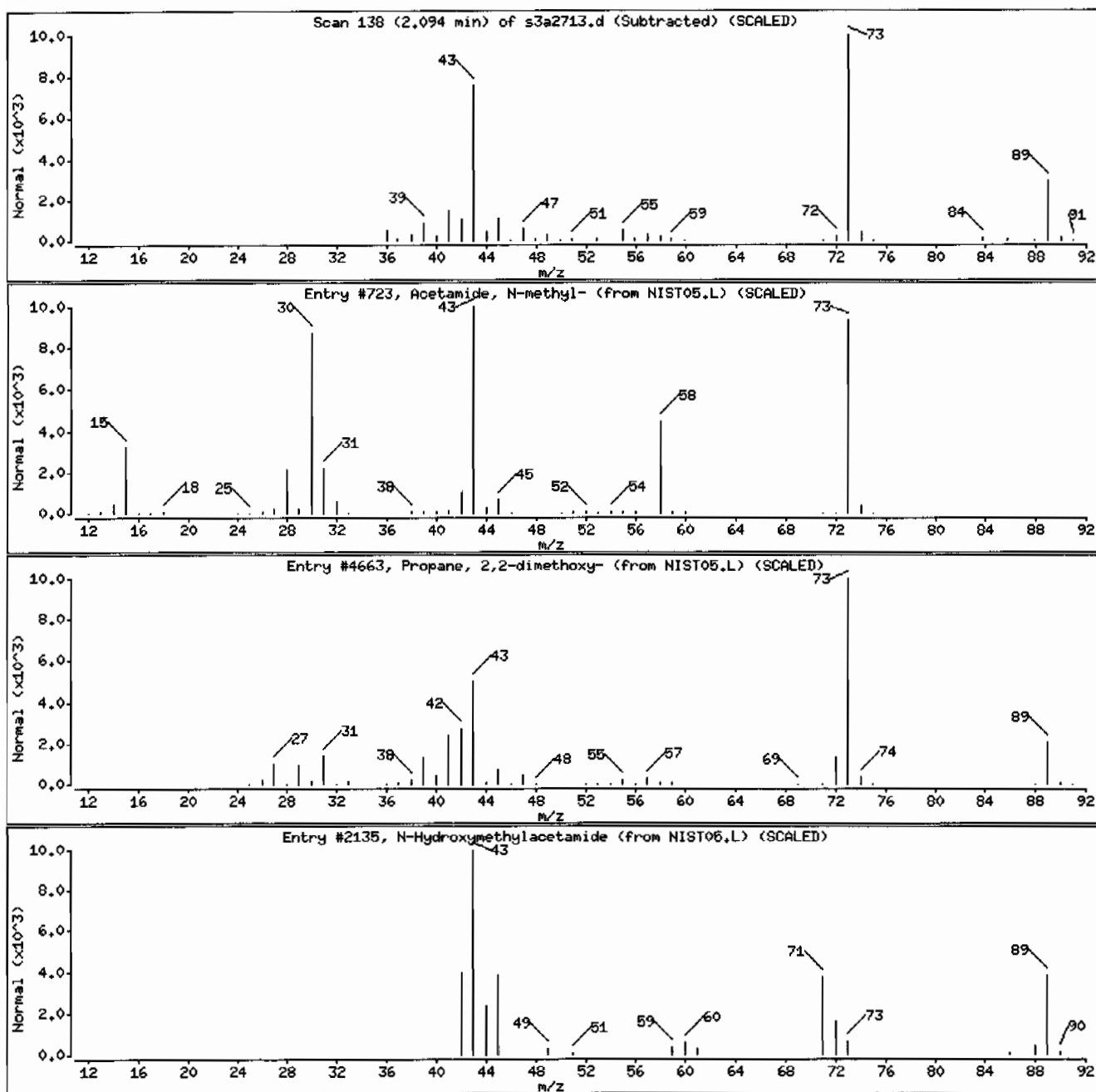
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, N-methyl-	79-16-3	NIST05.L	723	43	C3H7NO	73
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	33	C5H12O2	104
N-Hydroxymethylacetamide	625-51-4	NIST05.L	2135	32	C3H7NO2	89



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511SVHF111LANL

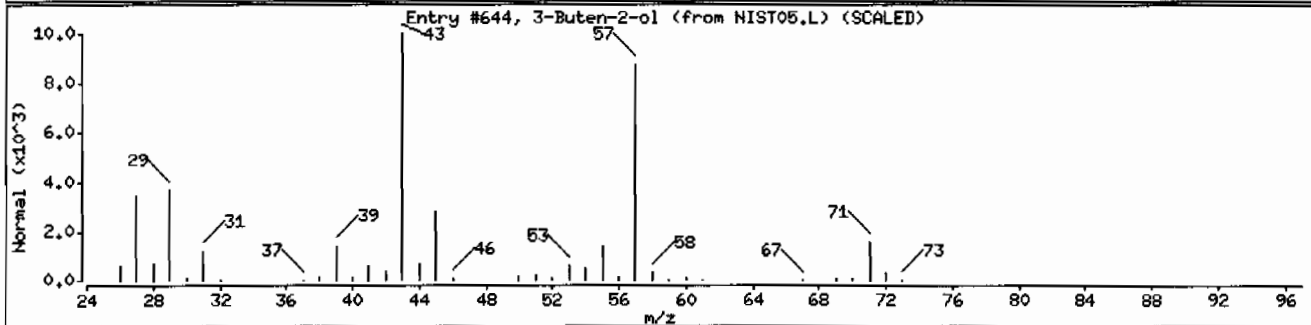
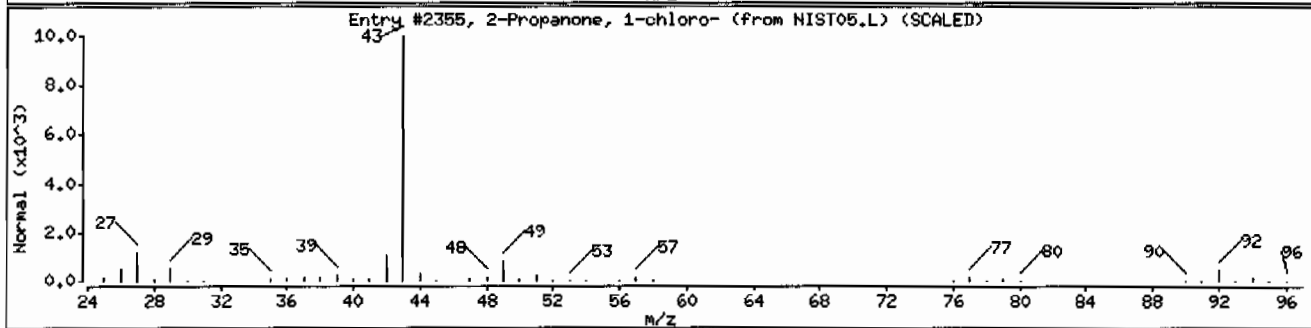
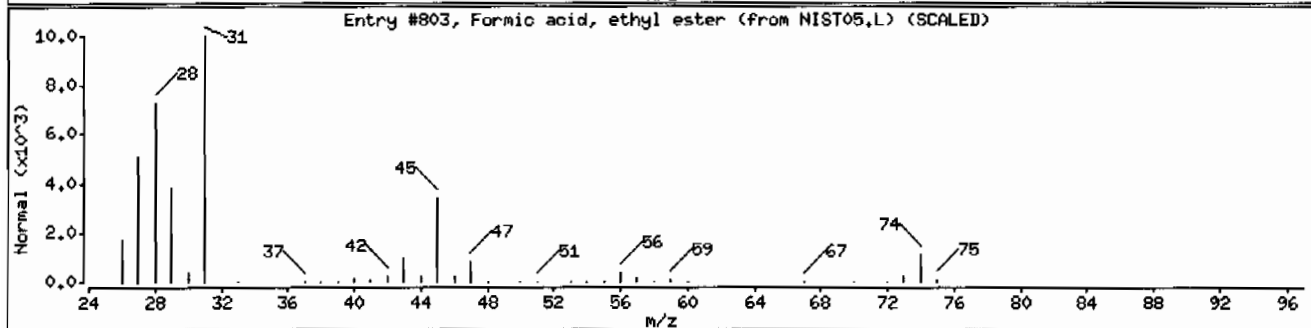
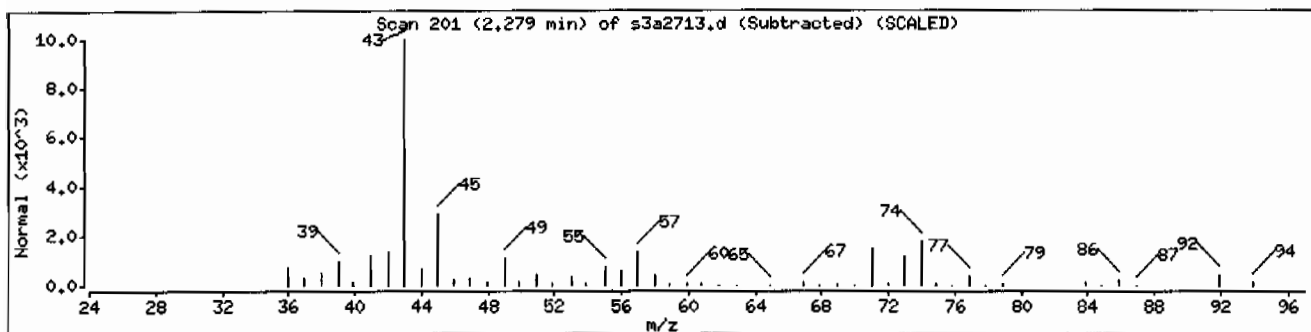
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Formic acid, ethyl ester	109-94-4	NIST05.L	803	17	C3H6O2	74
2-Propanone, 1-chloro-	78-95-5	NIST05.L	2355	11	C3H5ClO	92
3-Buten-2-ol	598-32-3	NIST05.L	644	10	C4H8O	72



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: I245099015194445511SVHF111LANL

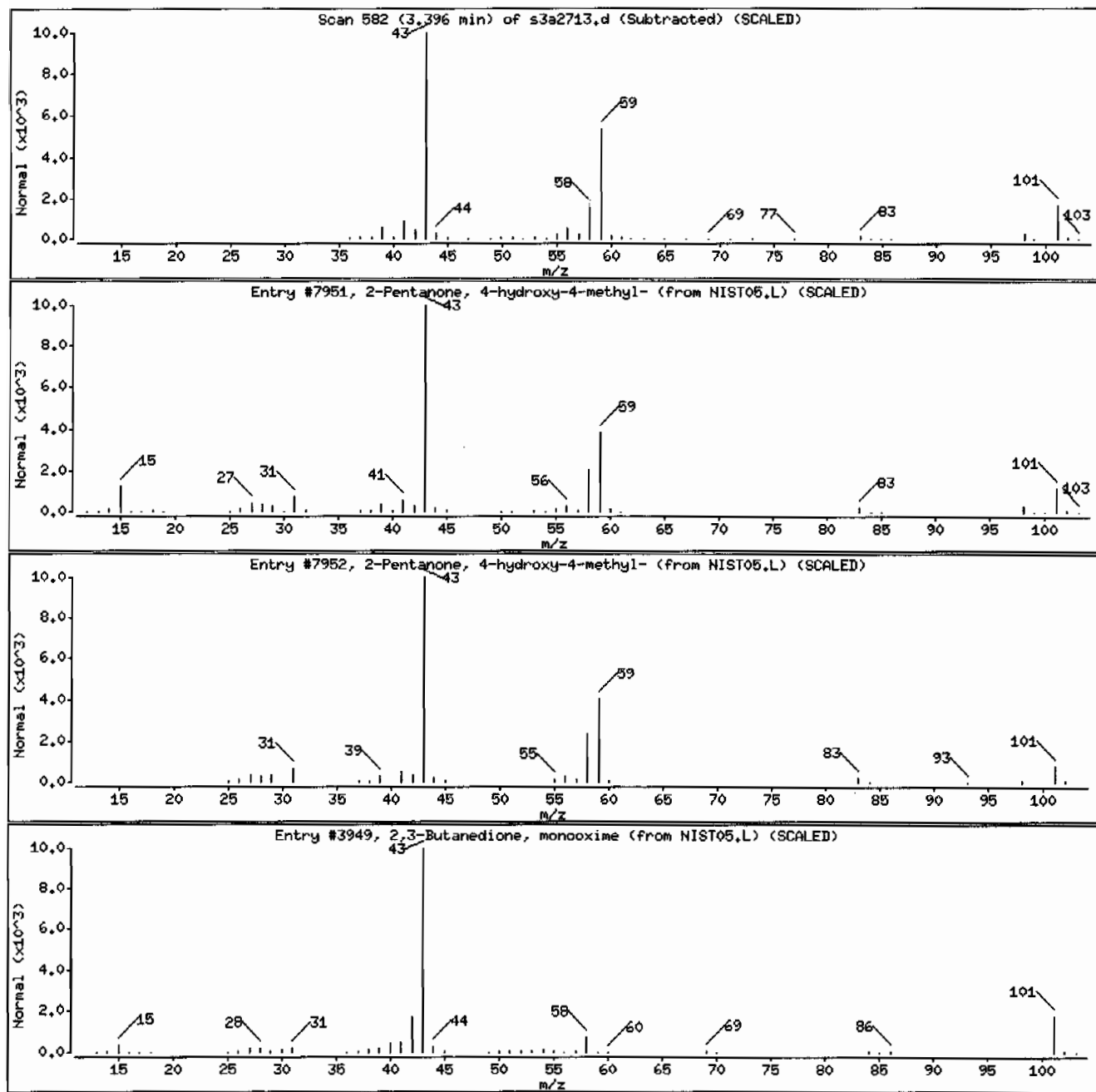
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIST05.L	3949	27	C4H7NO2	101



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 12480990151944485111SVHF111LANL

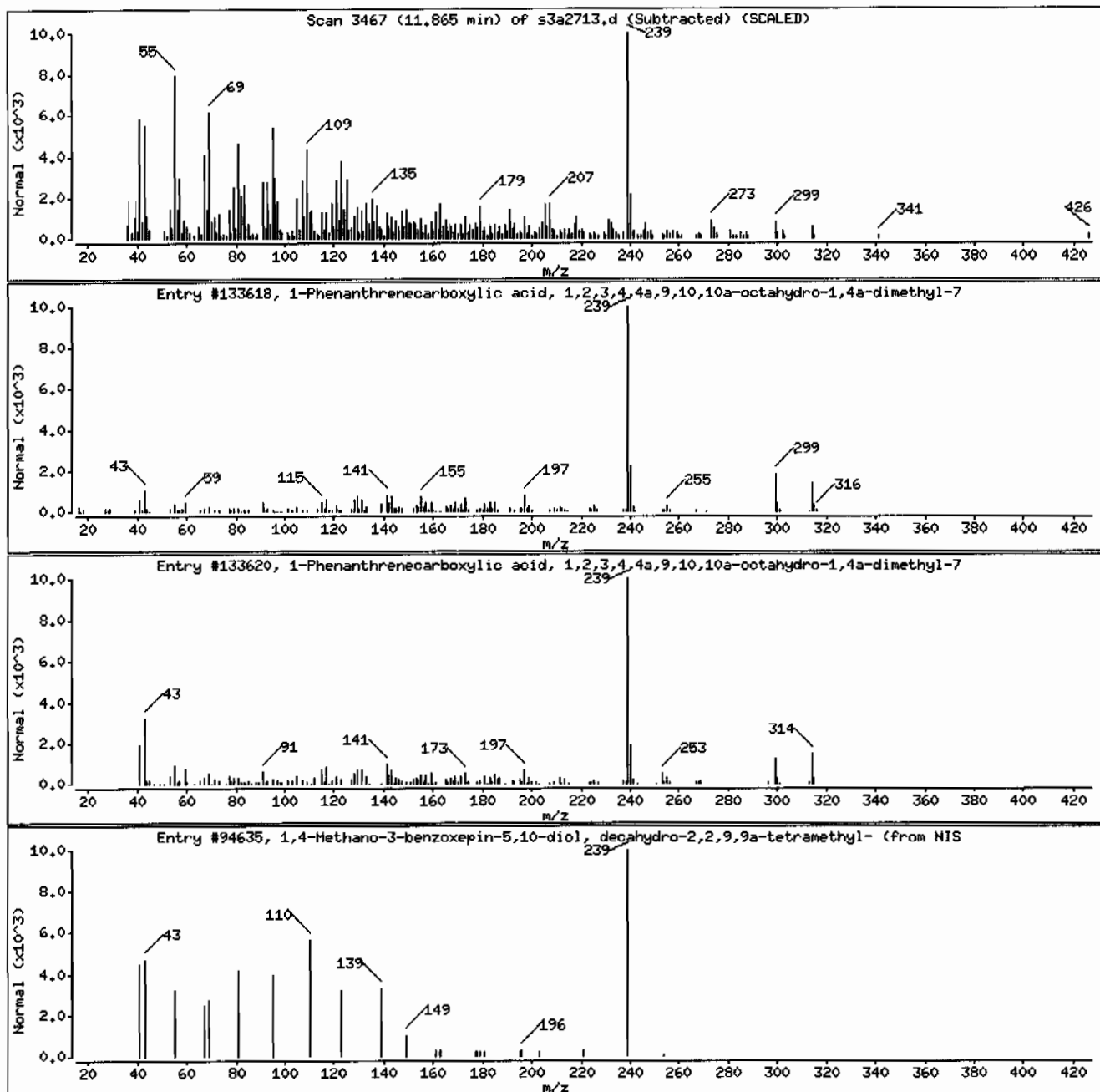
Volume Injected (uL): 0.5

Operator: JLD1

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	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	64	C21H30O2	314
1,4-Methano-3-benzoxepin-5,10-diol, deca	41988-44-7	NIST05.L	94635	35	C15H26O3	254



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 12450990151944455111SVHF111LANL

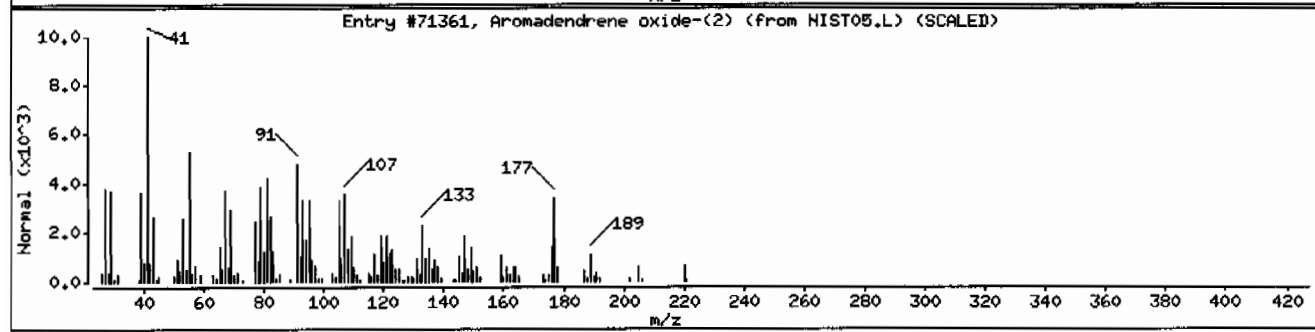
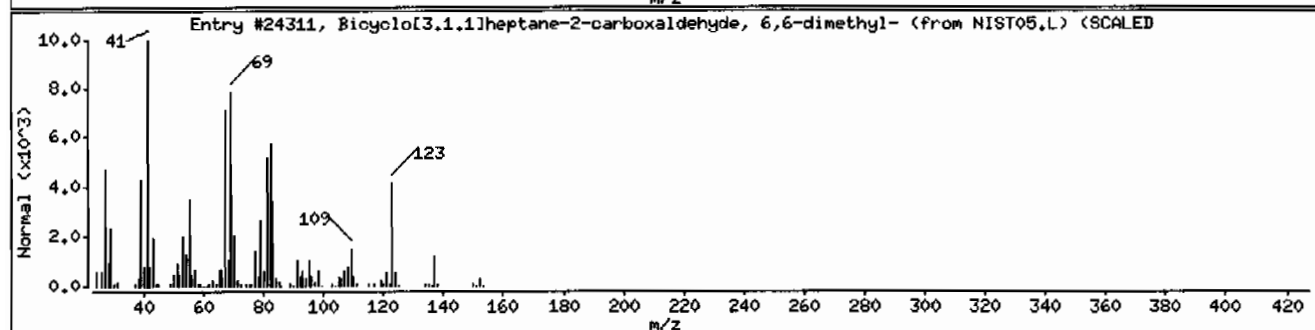
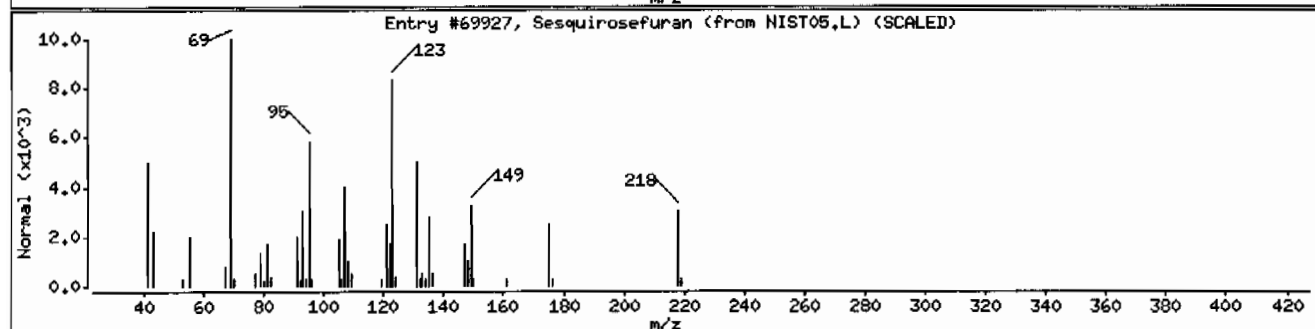
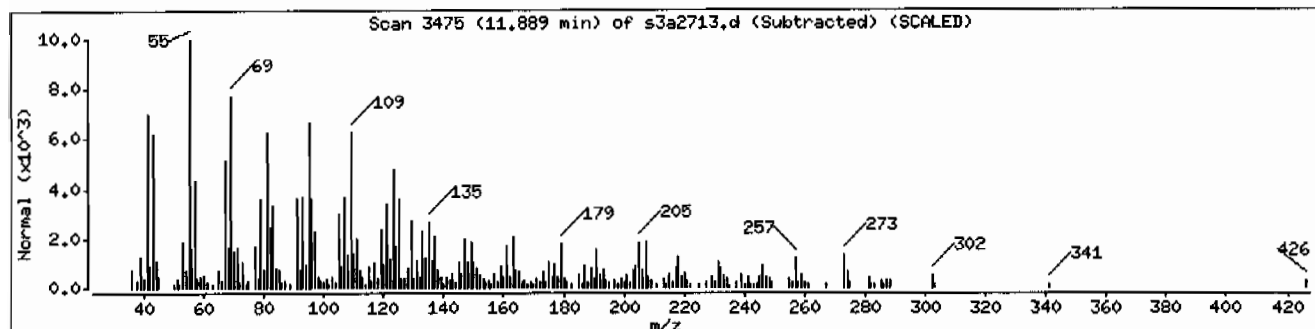
Volume Injected (uL): 0.5

Operator: JLD1

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	45	C15H22O	218
Bicyclo[3.1.1]heptane-2-carboxaldehyde,	4764-14-1	NIST05.L	24311	43	C10H16O	152
Aromadendrene oxide-(2)	1000151-98-6	NIST05.L	71361	41	C15H24O	220



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511ISVHF11ILANL

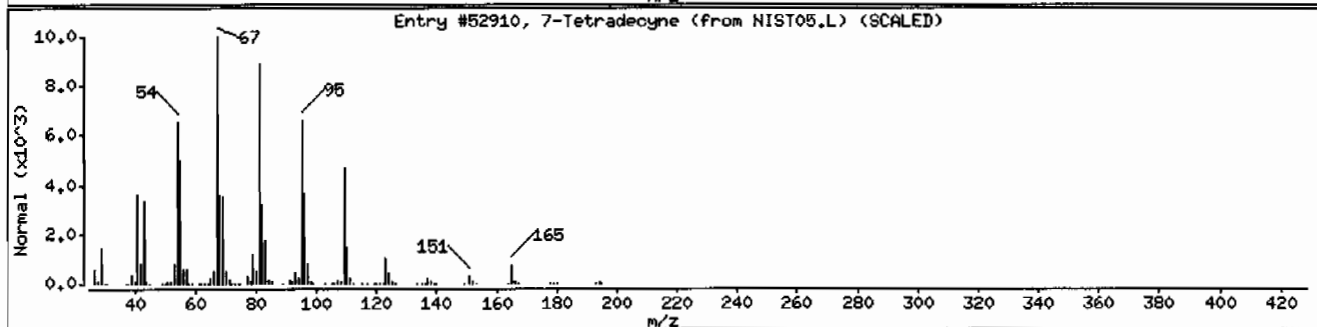
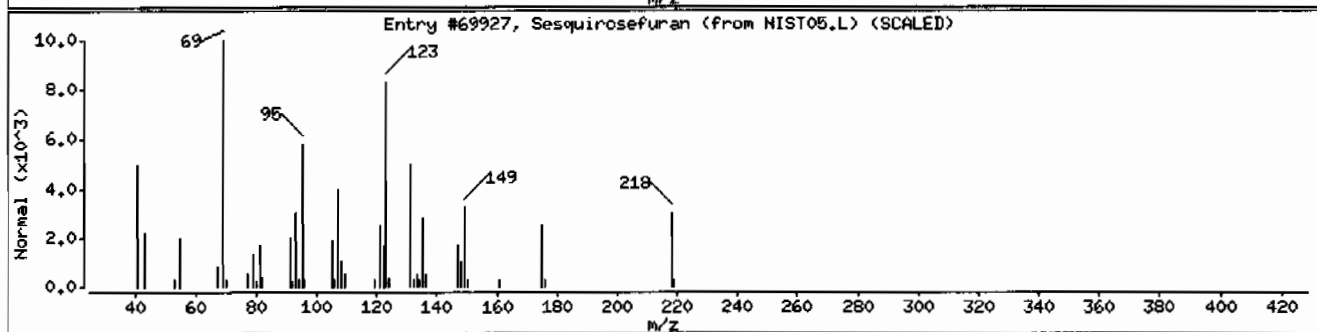
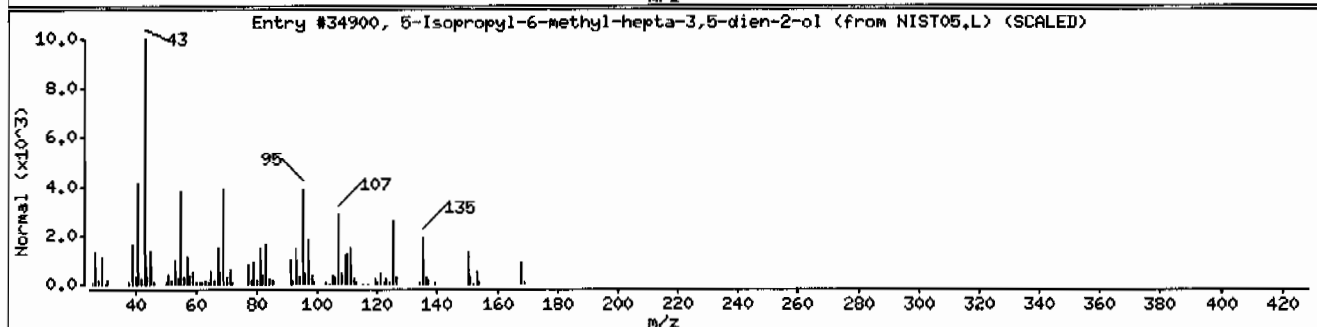
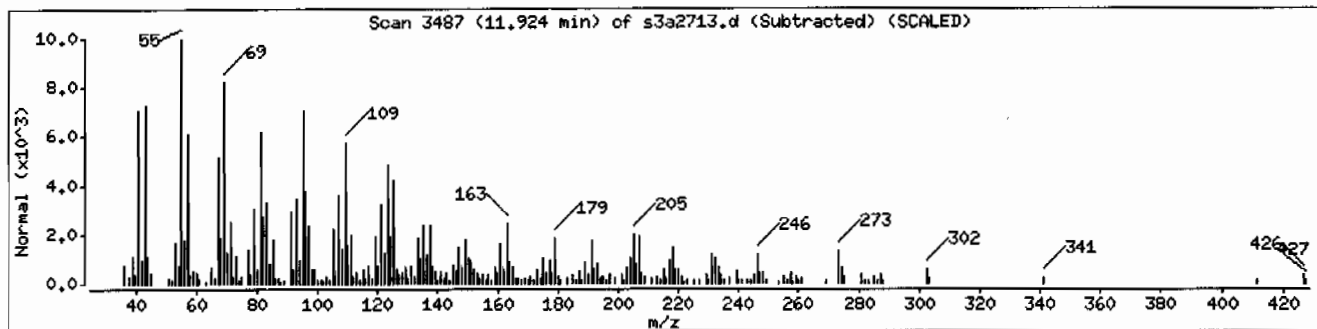
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Isopropyl-6-methyl-hepta-3,5-dien-2-ol	1000187-77-8	NIST05.L	34900	62	C ₁₁ H ₂₀ O	168
Sesquirosefuran	39007-93-7	NIST05.L	69927	49	C ₁₅ H ₂₂ O	218
7-Tetradecyne	35216-11-6	NIST05.L	52910	43	C ₁₄ H ₂₆	194



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511SVHF111LANL

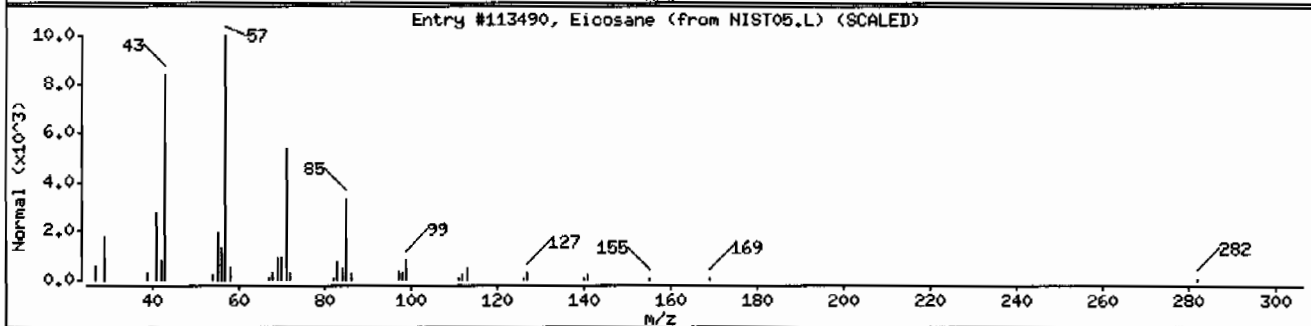
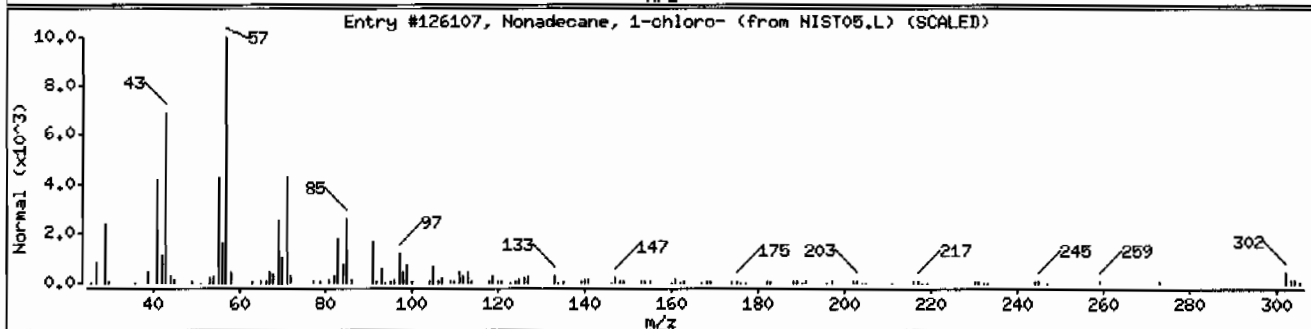
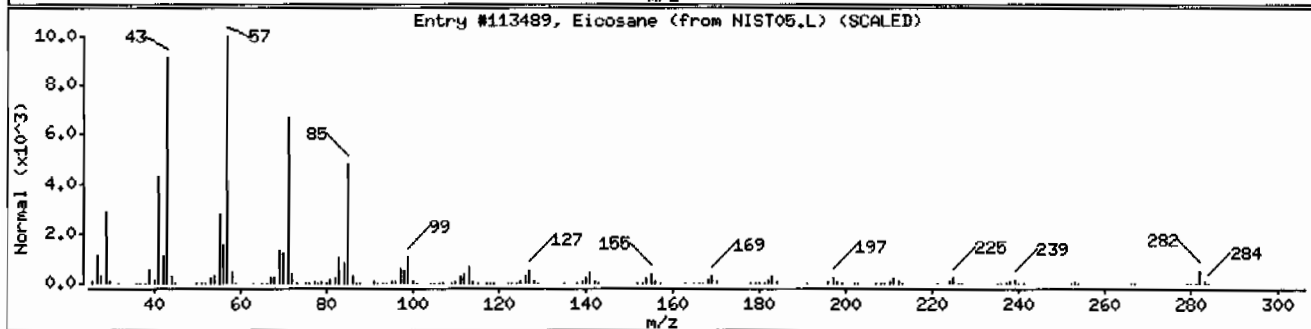
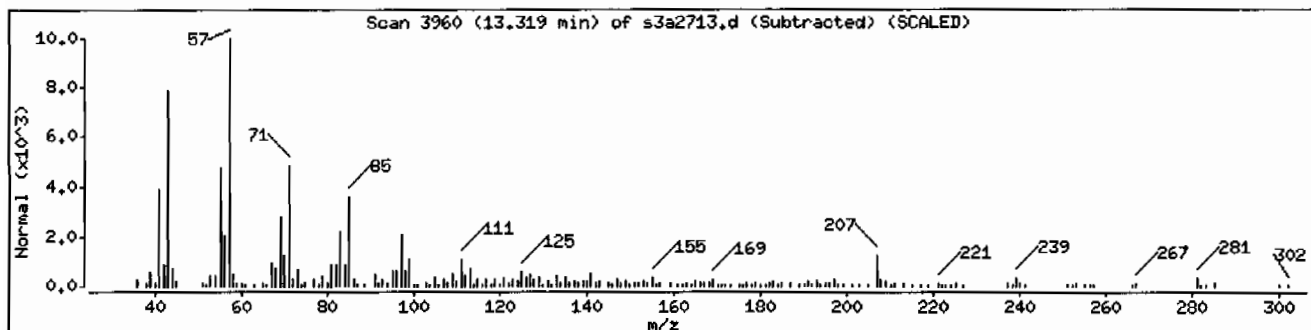
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282
Nonadecane, 1-chloro-	62016-76-6	NIST05.L	126107	93	C19H39Cl	302
Eicosane	112-95-8	NIST05.L	113490	92	C20H42	282



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511ISVMFI1ILANL

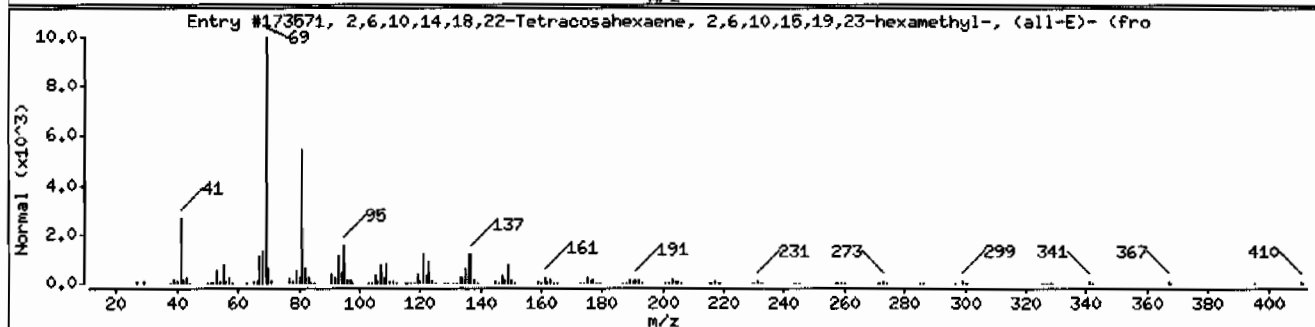
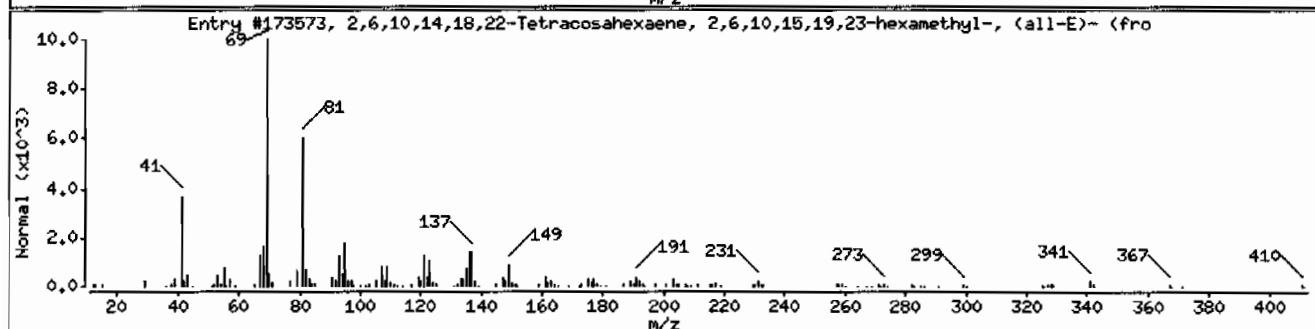
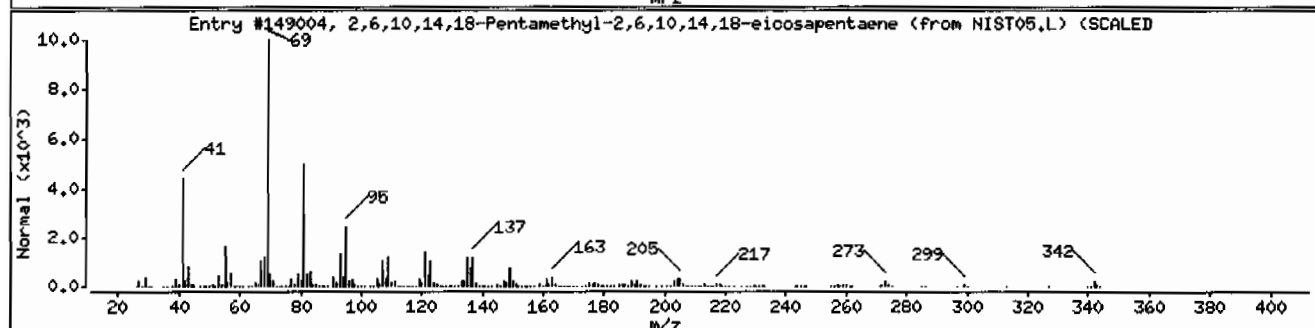
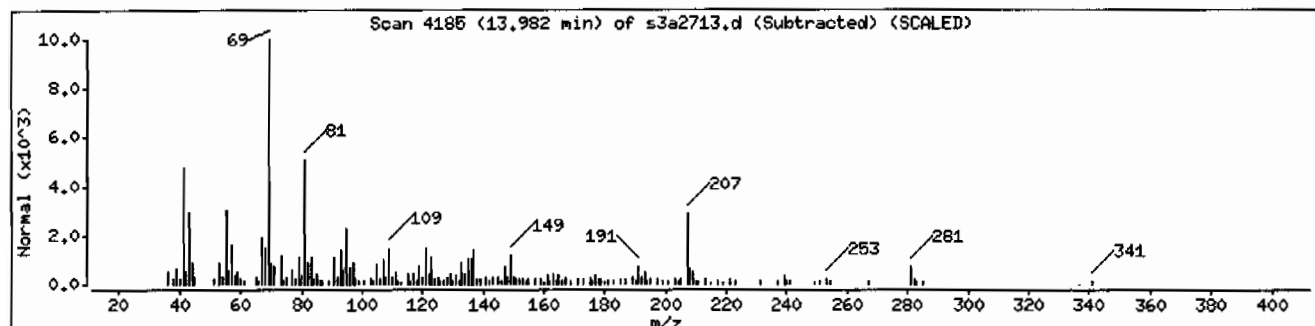
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,6,10,14,18-Pentamethyl-2,6,10,14,18-ei	75581-03-2	NIST05.L	149004	74	C25H42	342
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173573	68	C30H50	410
2,6,10,14,18,22-Tetracosahexaene, 2,6,10	111-02-4	NIST05.L	173571	68	C30H50	410



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511SVHF111LANL

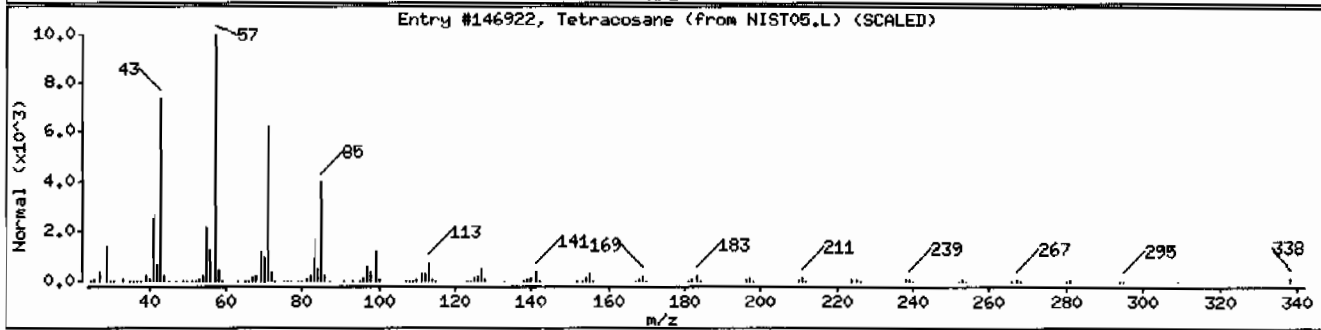
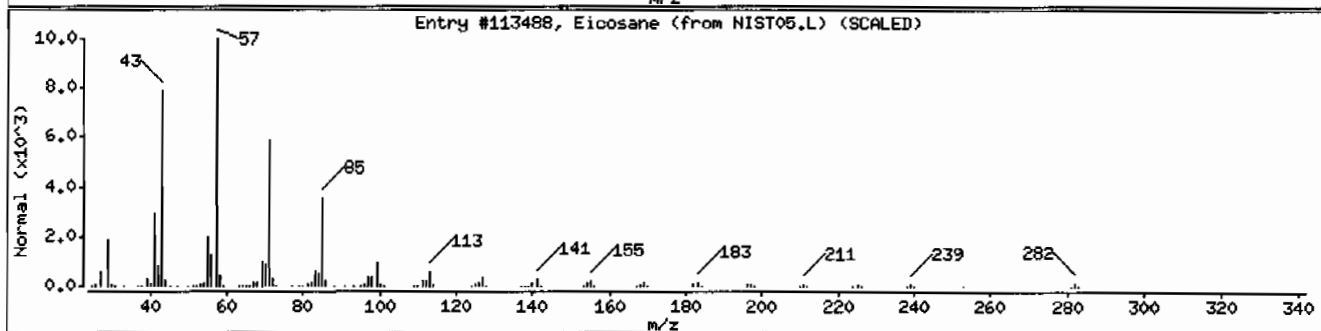
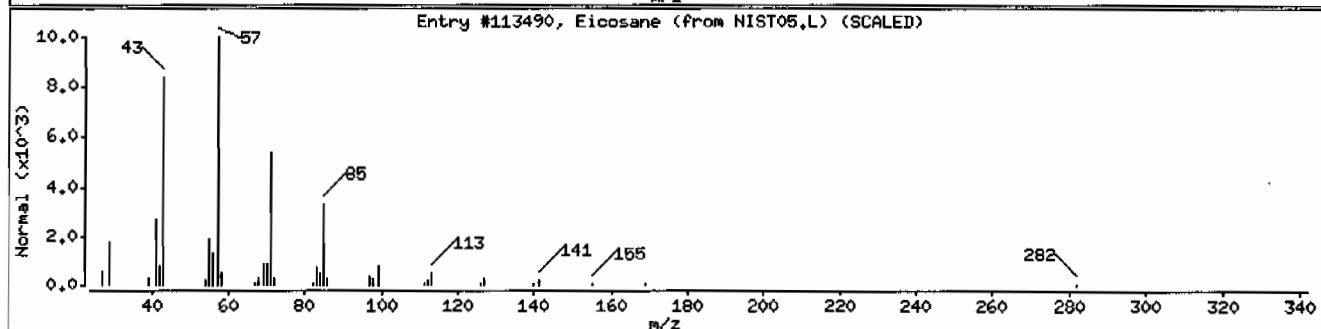
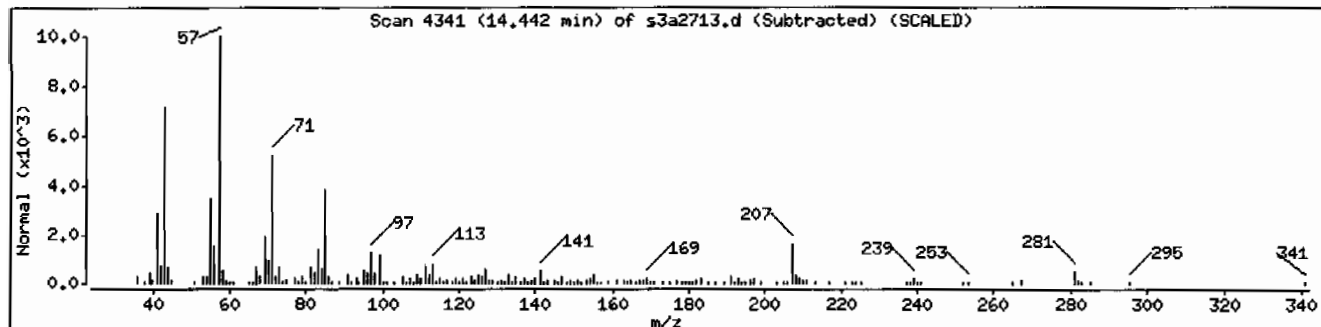
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	94	C20H42	282
Tetracosane	646-31-1	NIST05.L	146922	81	C24H50	338



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: HSD3.i

Sample Info: 1245099015194445511ISVHF111LANL

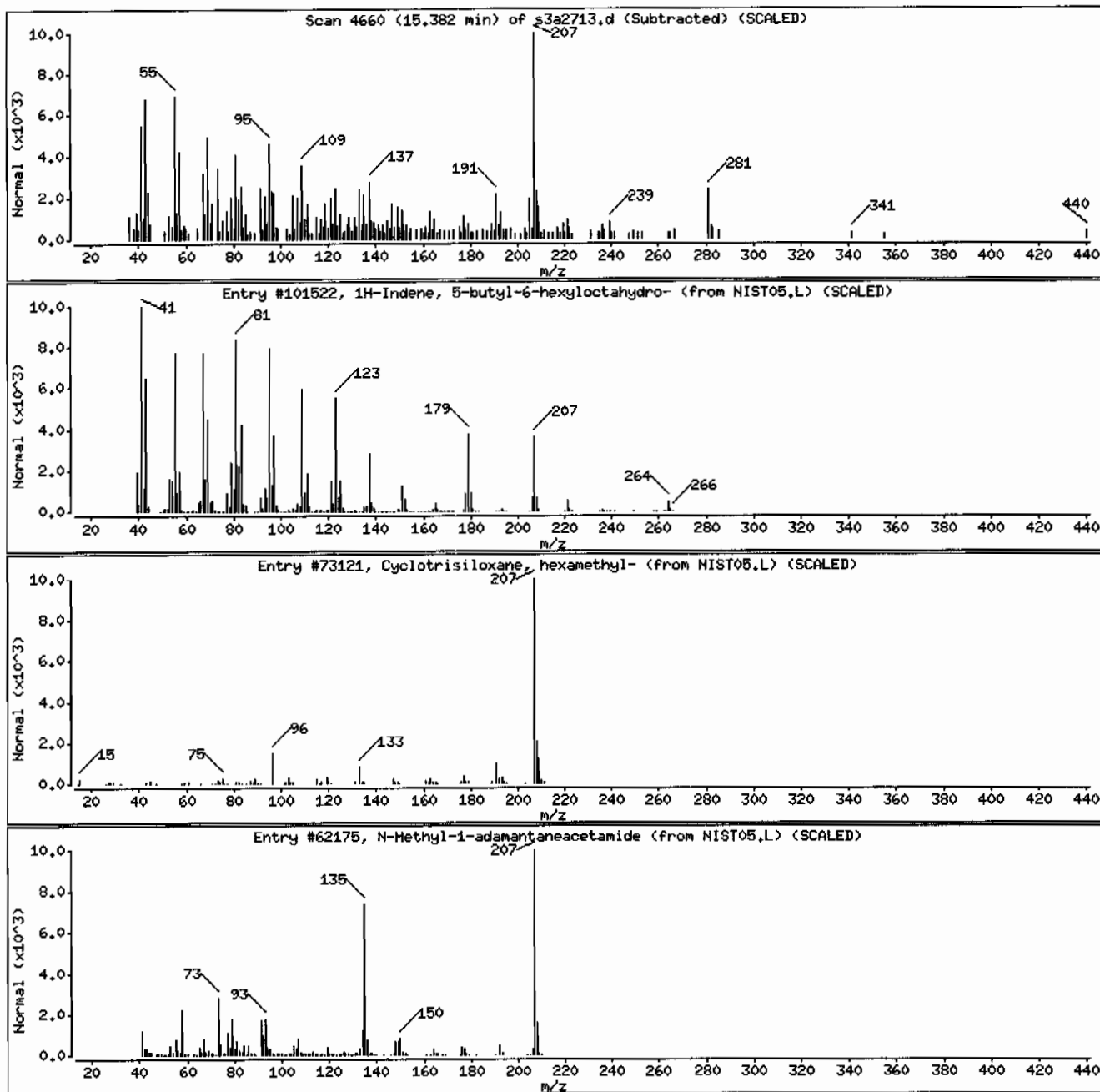
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	42	C19H36	264
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C6H18O3Si3	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	30	C13H21NO	207



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511SVHF111LANL

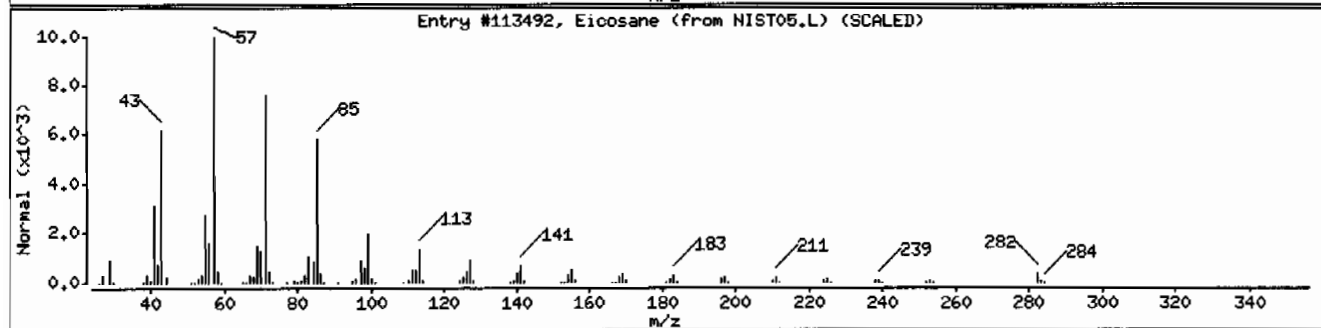
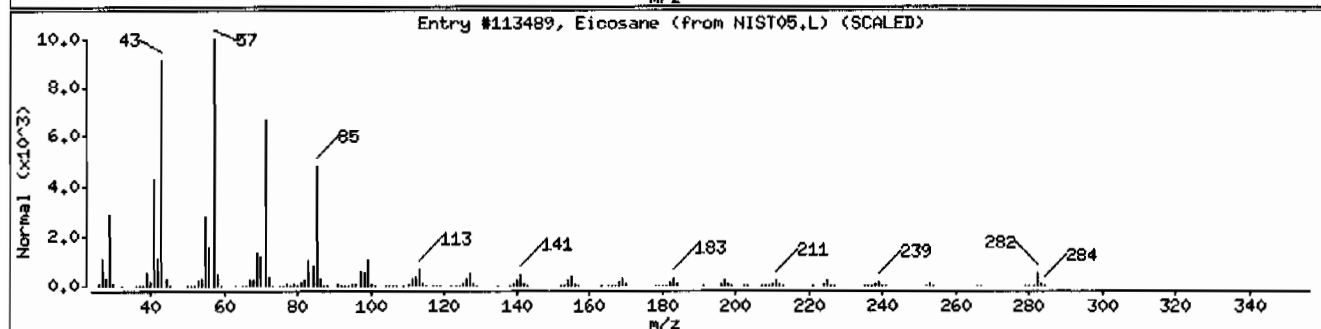
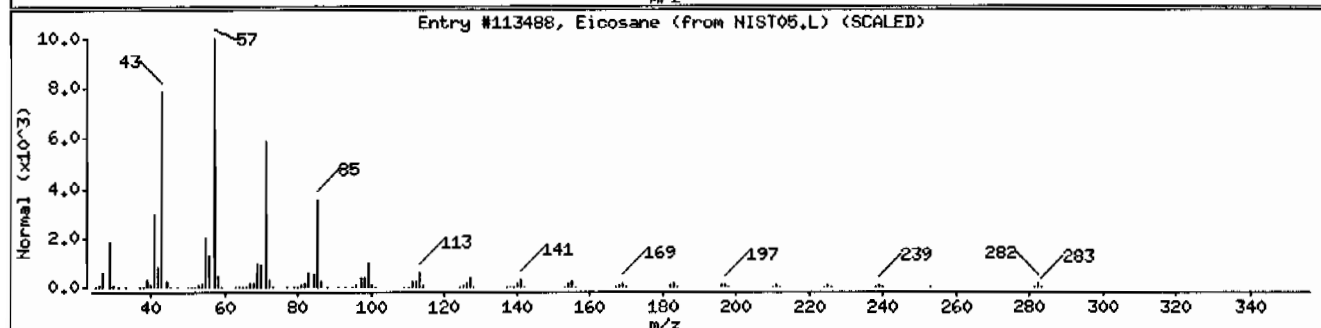
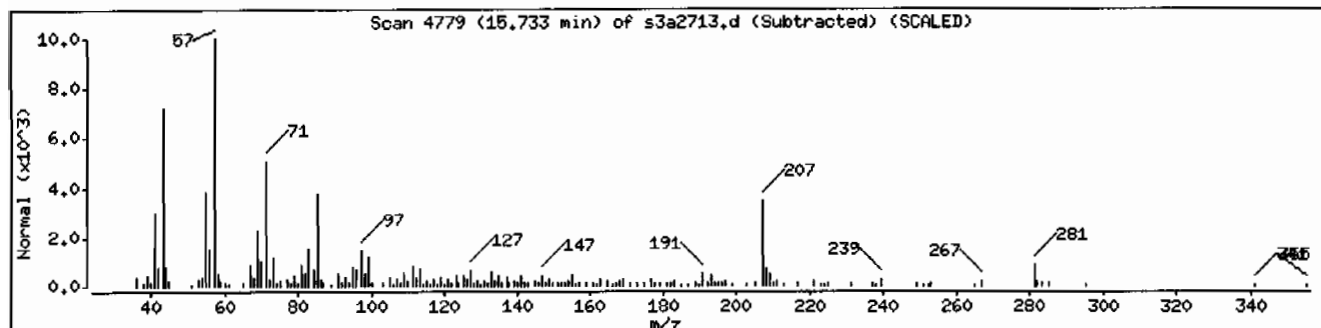
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113488	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113489	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511SVMF11/LANL

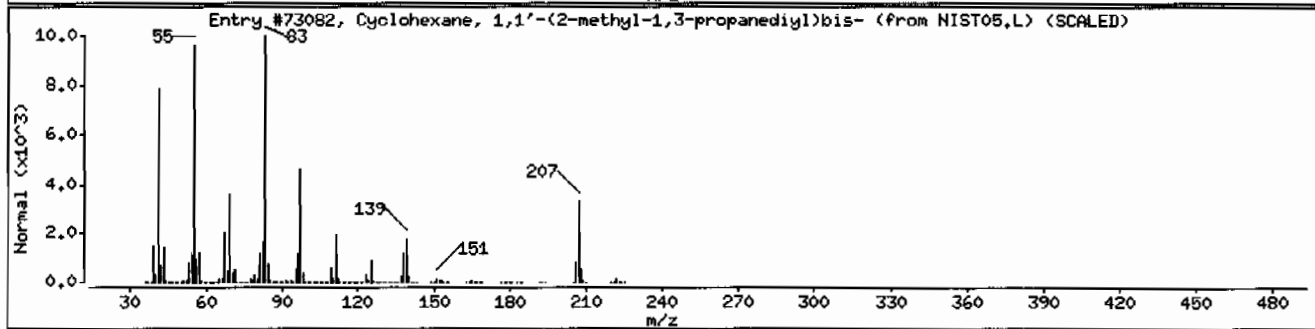
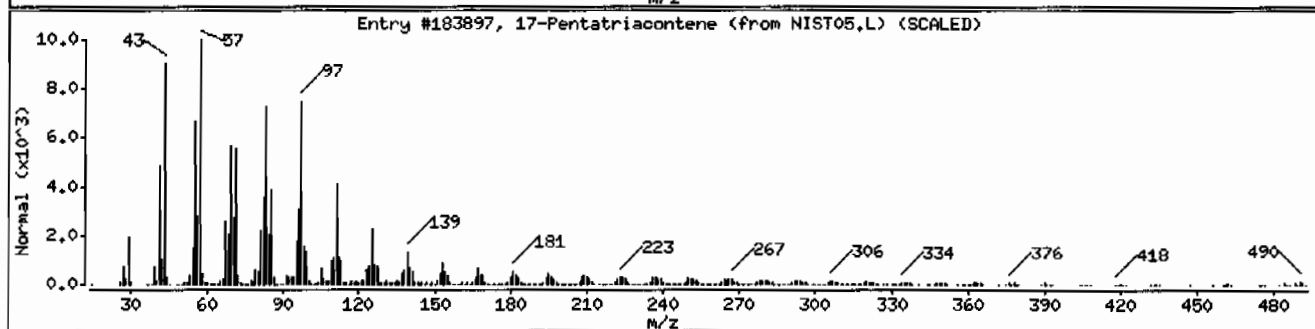
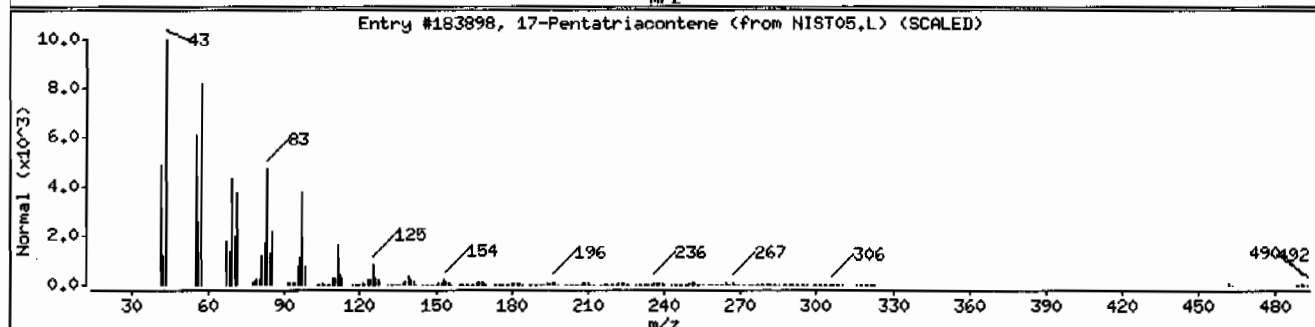
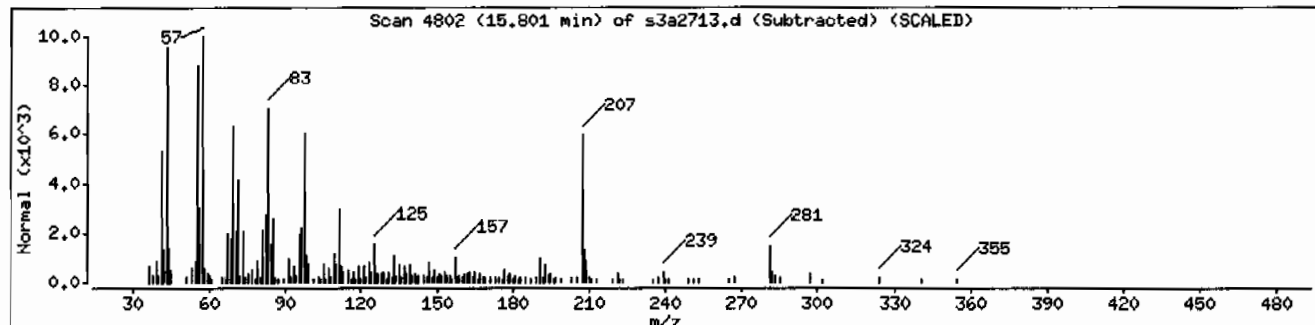
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
17-Pentatriacontene	6971-40-0	NIST05.L	183898	64	C35H70	491
17-Pentatriacontene	6971-40-0	NIST05.L	183897	50	C35H70	491
Cyclohexane, 1,1'-(2-methyl-1,3-propanediyl)bis-	2883-08-1	NIST05.L	73082	50	C16H30	222



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: I245099015194445511SVMF111LANL

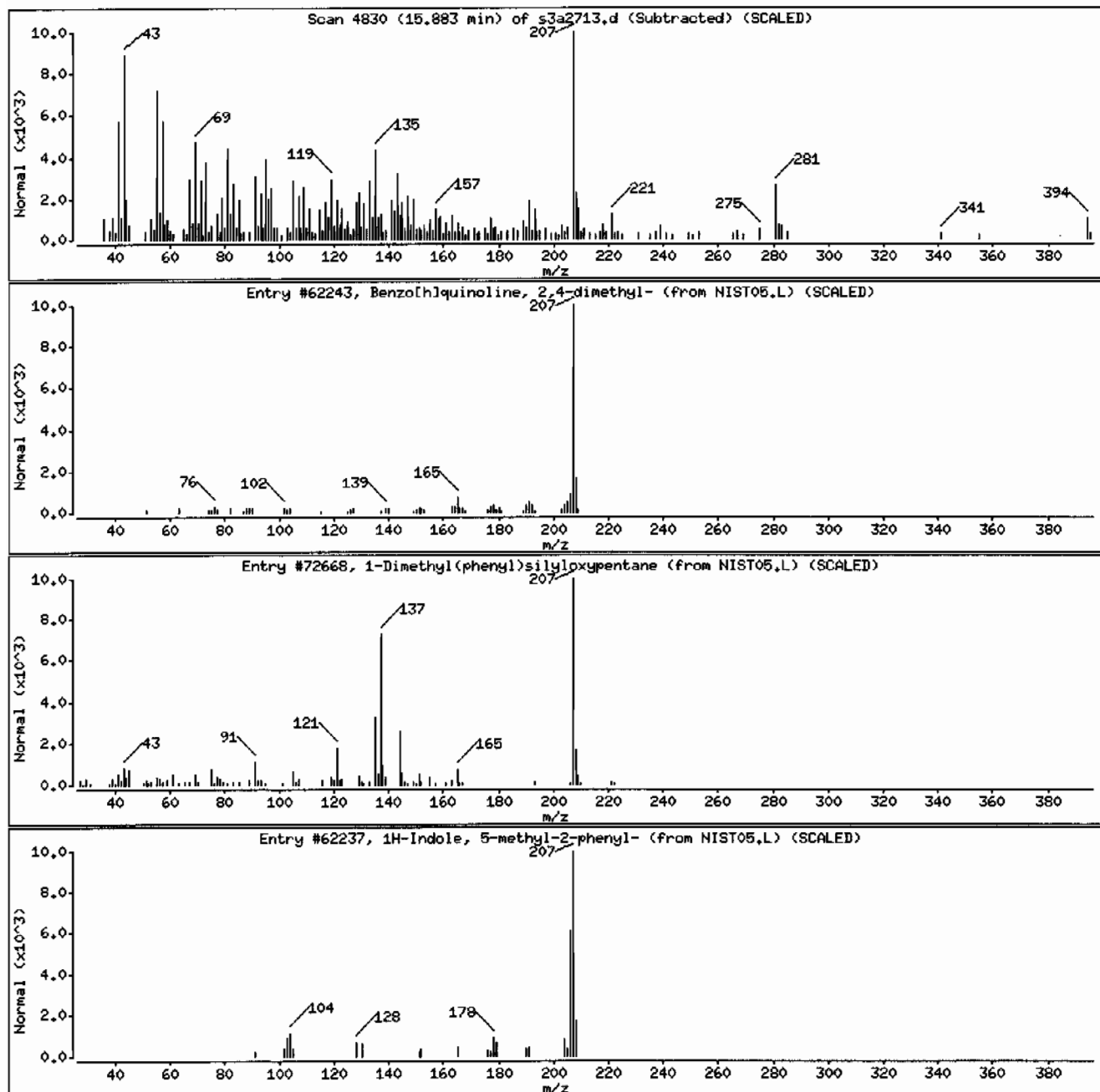
Volume Injected (uL): 0.5

Operator: JLD1

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	38	C15H13N	207
1-Dimethyl(phenyl)silyloxypentane	1000280-41-7	NIST05.L	72668	35	C13H22OSi	222
1H-Indole, 5-methyl-2-phenyl-	13228-36-9	NIST05.L	62237	30	C15H13N	207



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511/SVHF11/LANL

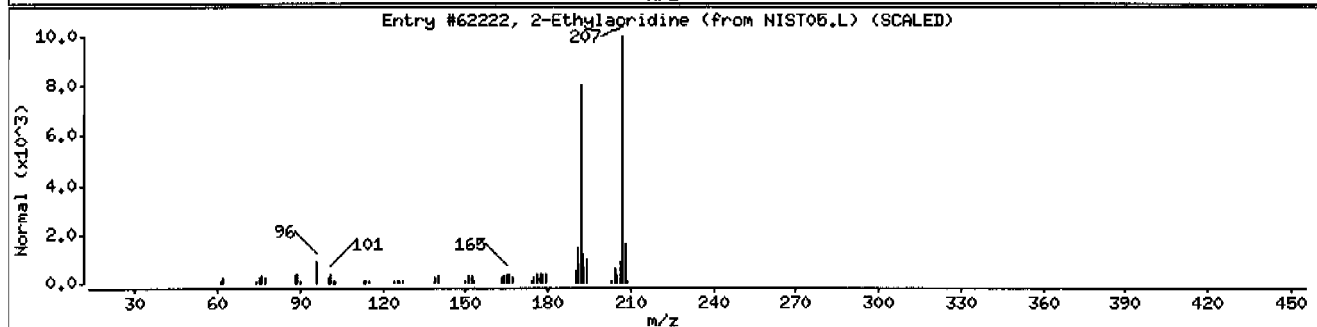
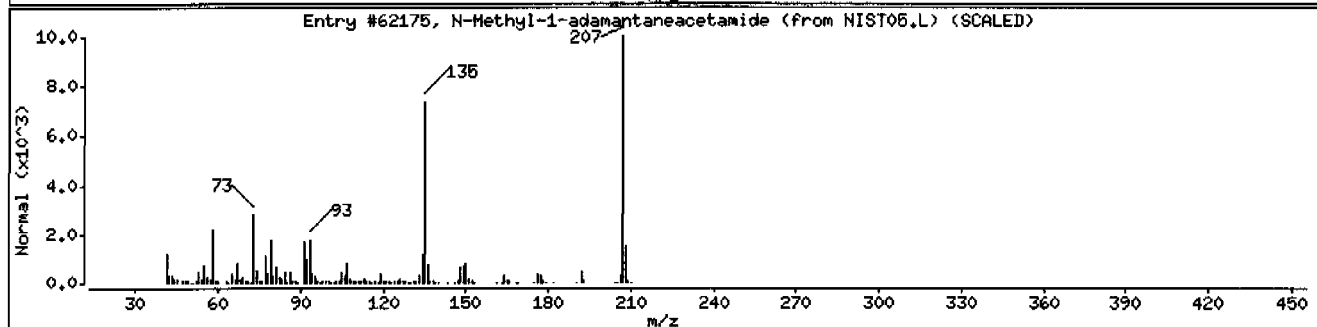
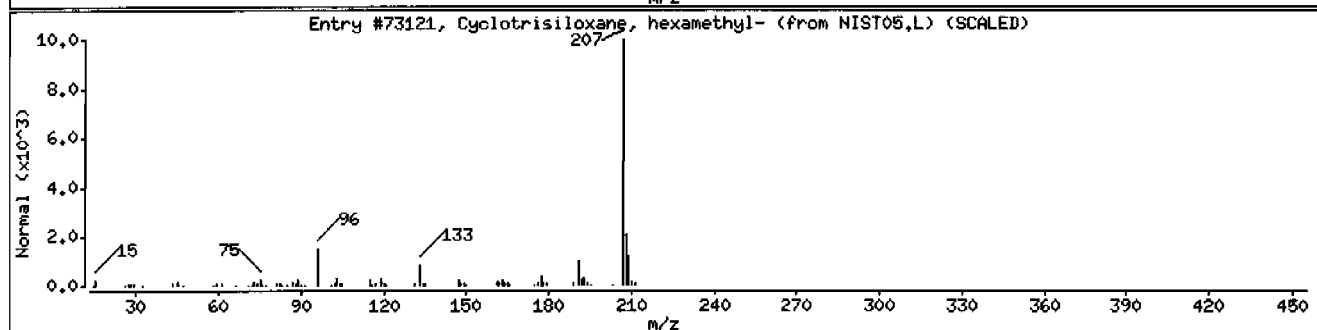
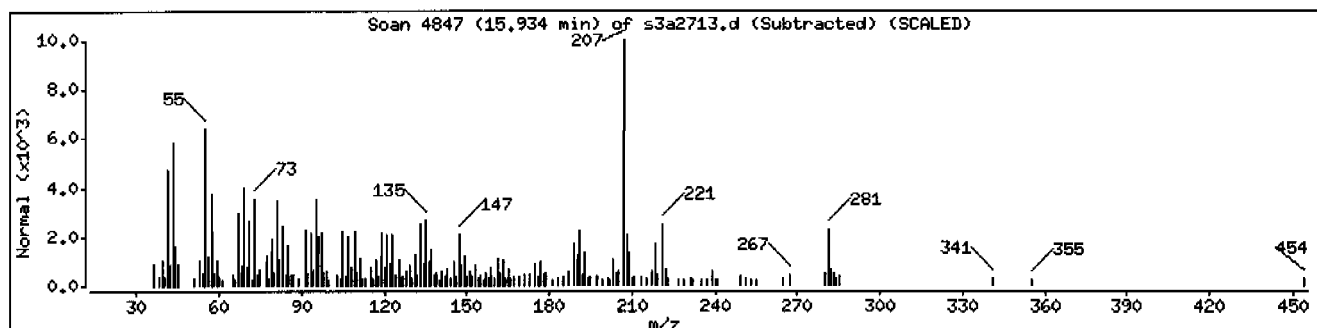
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C ₆ H ₁₈ O ₃ Si ₃	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	42	C ₁₃ H ₂₁ NO	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C ₁₅ H ₁₃ N	207



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511(SVMF11)LANL

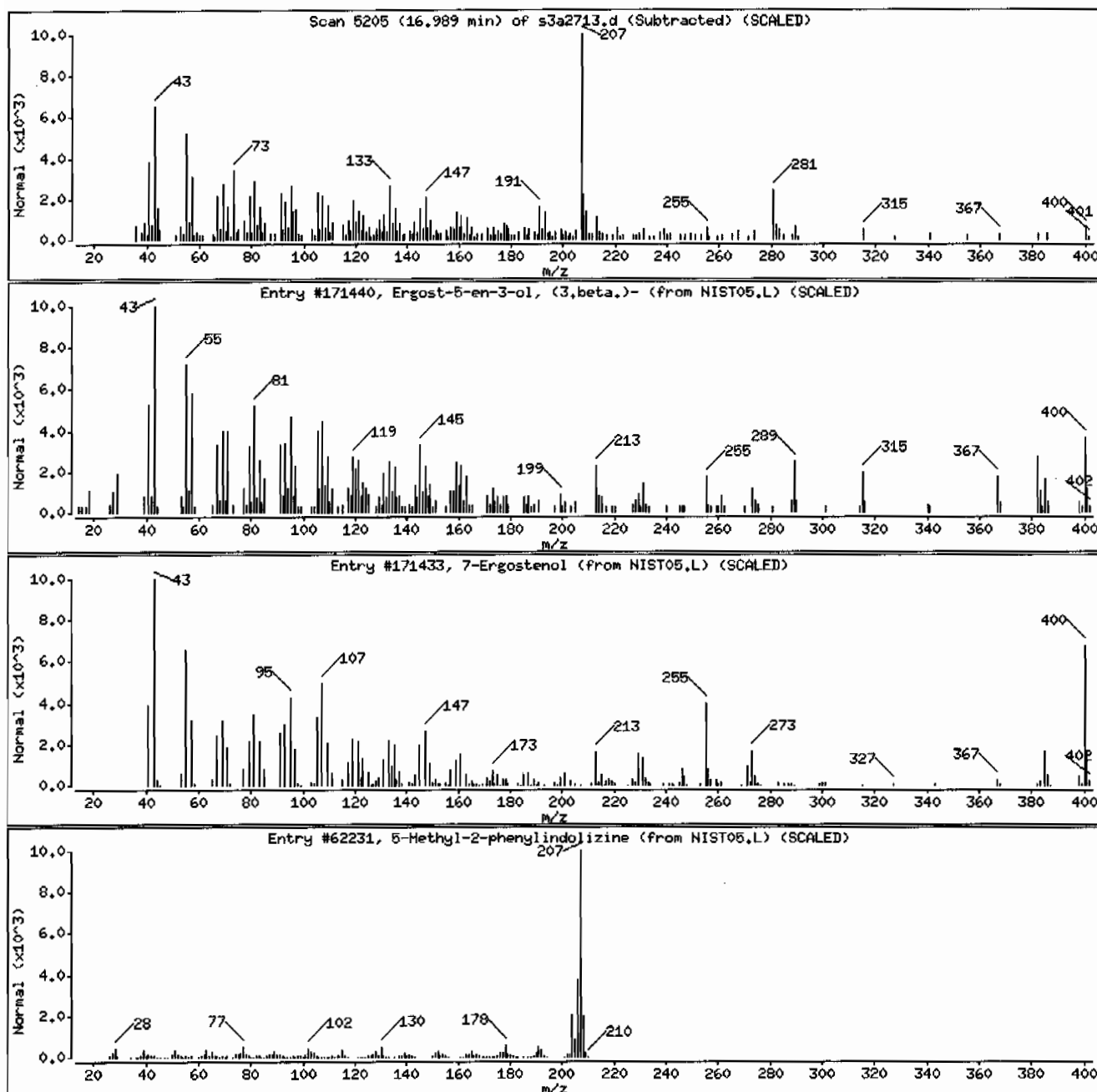
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ergost-5-en-3-ol, (3,β)-	4651-51-8	NIST05.L	171440	90	C ₂₈ H ₄₈ O	400
7-Ergosterol	116179-22-7	NIST05.L	171433	44	C ₂₈ H ₄₈ O	400
5-Methyl-2-phenylindolizine	36944-99-7	NIST05.L	62231	38	C ₁₅ H ₁₃ N	207



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 1245099015194445511SVMF11|LANL

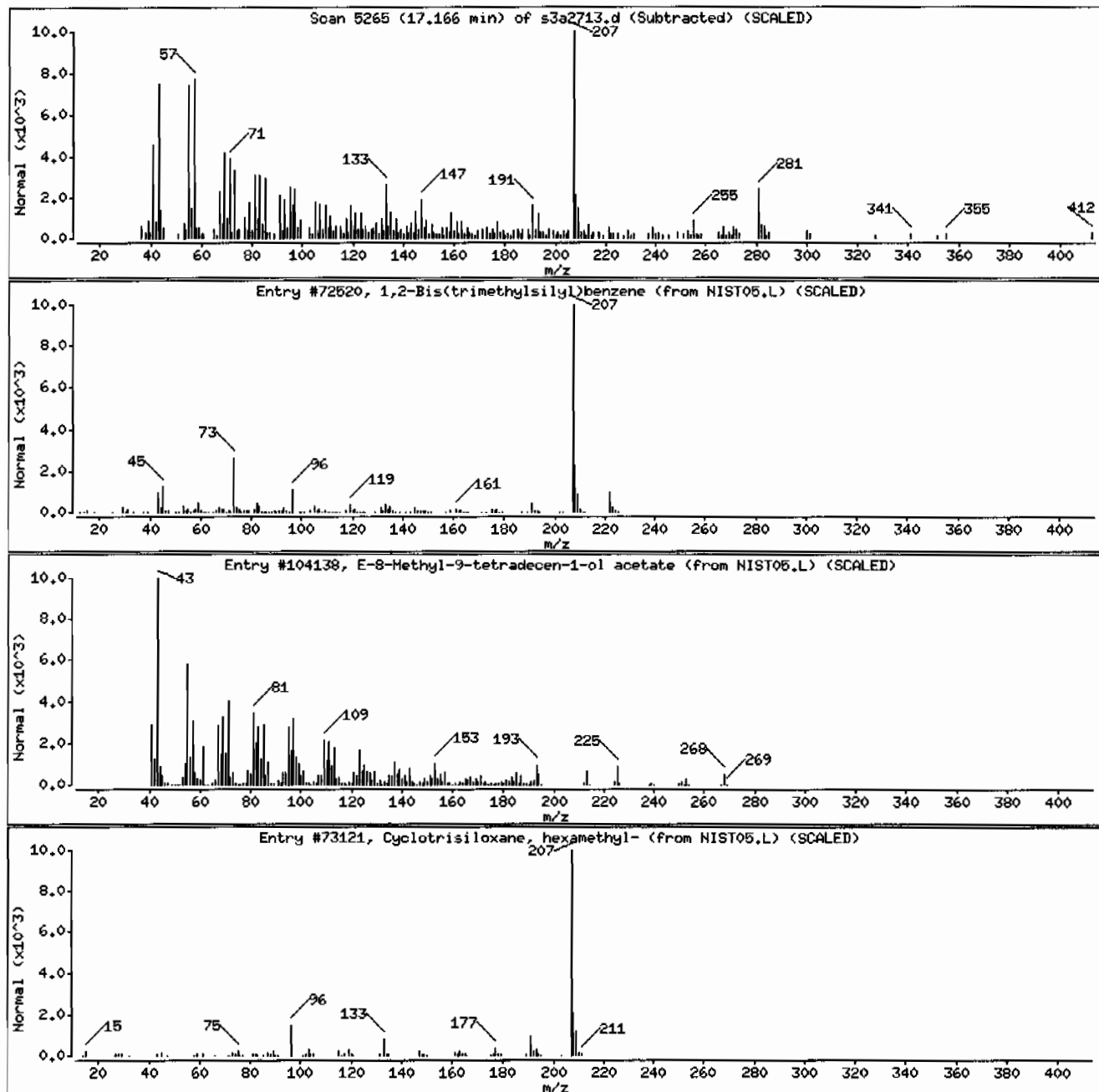
Volume Injected (uL): 0.5

Operator: JLD1

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	41	C ₁₂ H ₂₂ Si ₂	222
E-8-Methyl-9-tetradecen-1-ol acetate	1000130-81-4	NIST05.L	104138	38	C ₁₇ H ₃₂ O ₂	268
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	35	C ₆ H ₁₈ O ₃ Si ₃	222



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: MSD3.i

Sample Info: 12450990151944455111SVHF111LANL

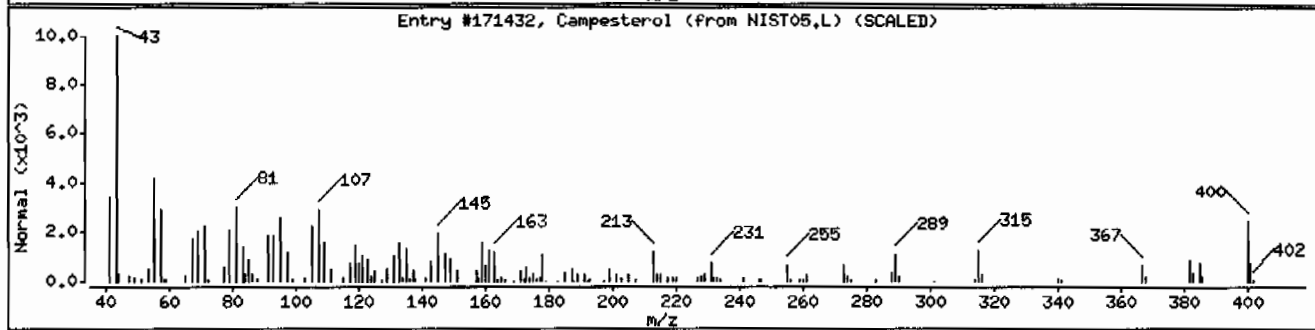
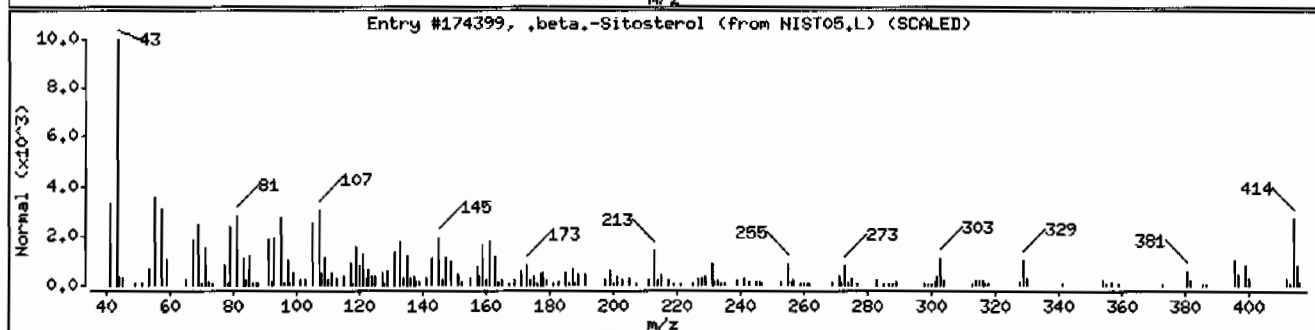
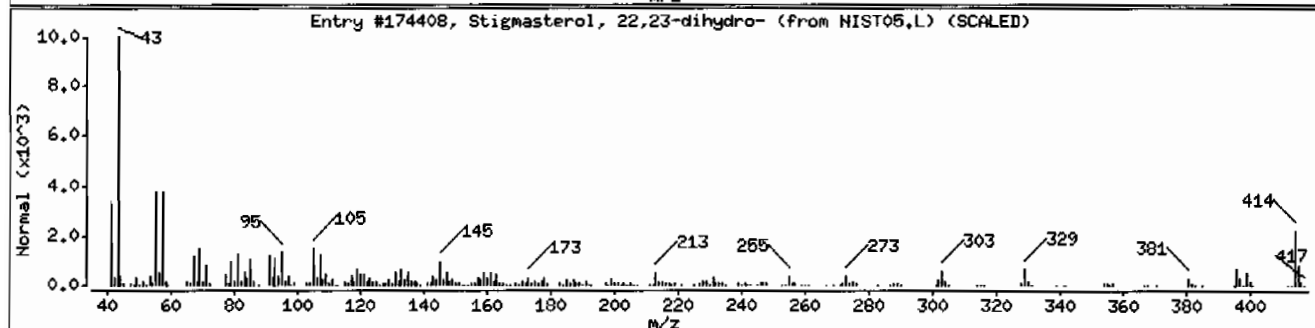
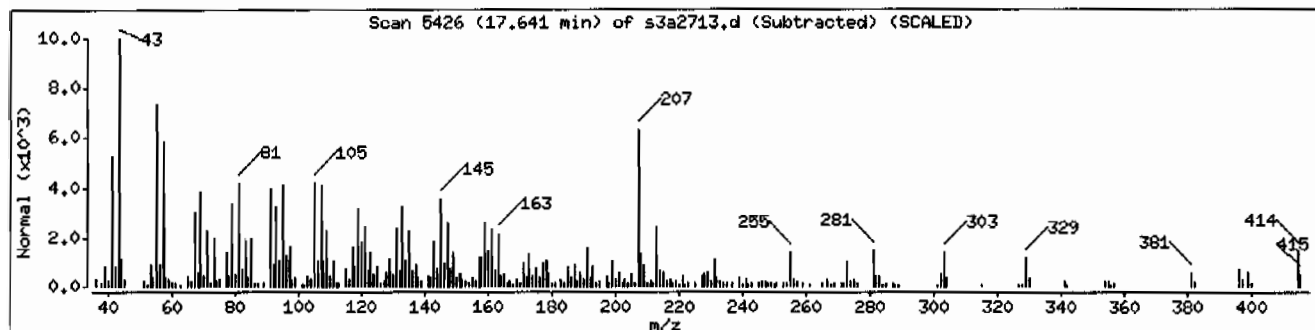
Volume Injected (uL): 0.5

Operator: JLD1

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	96	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	83	C ₂₉ H ₅₀ O	414
Campesterol	474-62-4	NIST05.L	171432	46	C ₂₈ H ₄₈ O	400



Date : 27-JAN-2010 14:09

Client ID: RE15-10-7219

Instrument: HSD3.i

Sample Info: 1245099015194445511SVHF111LANL

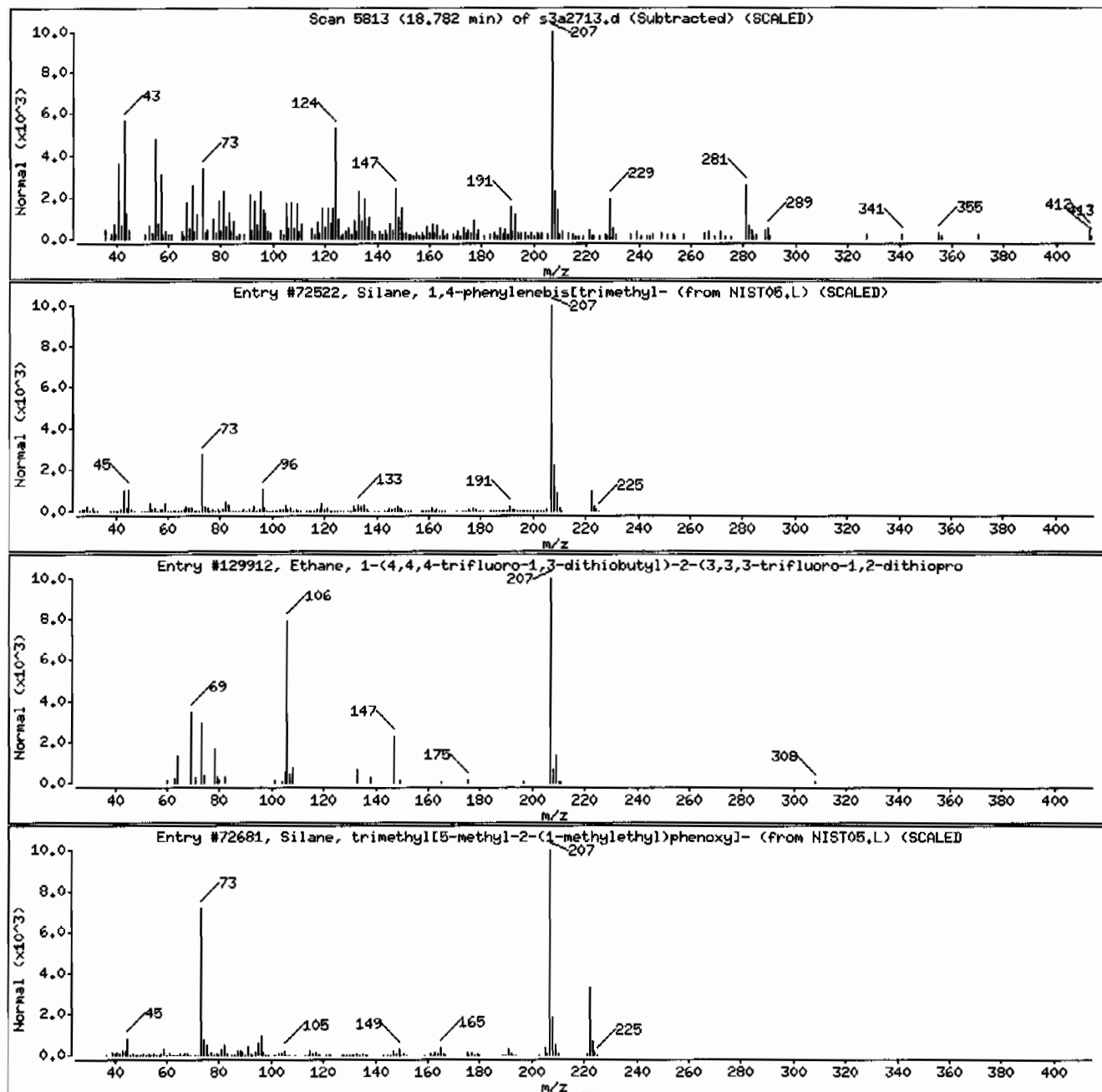
Volume Injected (uL): 0.5

Operator: JLD1

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	35	C ₁₂ H ₂₂ Si ₂	222
Ethane, 1-(4,4,4-trifluoro-1,3-dithiobut	1000226-87-3	NIST05,L	129912	32	C ₅ H ₆ F ₆ S ₄	308
Silane, trimethyl[5-methyl-2-(1-methylet	55012-80-1	NIST05,L	72681	32	C ₁₃ H ₂₂ OSi	222



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-Benzquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde	10	20	40	50	80	100	120	
Acetophenone	10	20	40	50	80	100	120	
Caprolactam	10	20	40	50	80	100	120	
1,1'-Biphenyl	10	20	40	50	80	100	120	
Atrazine	10	20	40	50	80	100	120	
Benzidine	10	20	40	50	80	100	120	
3,3'-Dichlorobenzidine	10	20	40	50	80	100	120	
1,4-Dioxane	10	20	40	50	80	100	120	
Methyl methacrylate	10	20	40	50	80	100	120	
Ethyl methacrylate	10	20	40	50	80	100	120	
2-Picoline	10	20	40	50	80	100	120	
N-Nitrosomethylethylamine	10	20	40	50	80	100	120	
Methyl methanesulfonate	10	20	40	50	80	100	120	
N-Nitrosodiethylamine	10	20	40	50	80	100	120	
Ethyl methanesulfonate	10	20	40	50	80	100	120	
Pentachloroethane	10	20	40	50	80	100	120	
N-Nitrosopyrrolidine	10	20	40	50	80	100	120	
N-Nitrosomorpholine	10	20	40	50	80	100	120	
o-Toluidine	10	20	40	50	80	100	120	
N-Nitrosopiperidine	10	20	40	50	80	100	120	
a,a-Dimethylphenethylamine	10	20	40	50	80	100	120	
2,6-Dichlorophenol	10	20	40	50	80	100	120	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene	10	20	40	50	80	100	120	
p-Phenylenediamine	10	20	40	50	80	100	120	
N-Nitrosodi-n-butylamine	10	20	40	50	80	100	120	
Safrole	10	20	40	50	80	100	120	
1,2,4,5-Tetrachlorobenzene	10	20	40	50	80	100	120	
Isosafrole	10	20	40	50	80	100	120	
1,4-Naphthoquinone	10	20	40	50	80	100	120	
Pentachlorobenzene	10	20	40	50	80	100	120	
1-Naphthylamine	10	20	40	50	80	100	120	
2-Naphthylamine	10	20	40	50	80	100	120	
5-Nitro-o-toluidine	10	20	40	50	80	100	120	
1,3,5-Trinitrobenzene	10	20	40	50	80	100	120	
Phenacetin	10	20	40	50	80	100	120	
Diallate	10	20	40	50	80	100	120	
cis-Diallate	1.5	3	6	7.5	12	15	18	
trans-Diallate	8.5	17	34	42	68	85	102	
4-Aminobiphenyl	10	20	40	50	80	100	120	

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothiobanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120
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SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol	10	20	40	50	80	100	120	
Quinoline	10	20	40	50	80	100	120	
2,4-Toluene diisocyanate	10	20	40	50	80	100	120	
1-Nitropyrene	10	20	40	50	80	100	120	
5-Methylchrysene	10	20	40	50	80	100	120	
Benzo(j)fluoranthene	10	20	40	50	80	100	120	
Dibenzo(a,h)pyrene	10	20	40	50	80	100	120	
Dibenzo(a,h)acridine	10	20	40	50	80	100	120	
Dibenzo(a,i)acridine	10	20	40	50	80	100	120	
Dibenzo(a,i)pyrene	10	20	40	50	80	100	120	
Dibenzo(a,l)pyrene	10	20	40	50	80	100	120	
7H-Dibenzo(c,g)carbazole	10	20	40	50	80	10	120	

All values are mg/L without the prep factor.

Indicates the calibration verification concentration level used

* Usual calibration levels using SCAN methodology

** This analyte included in this level at special client request.

(0210/Full list)

Report Date: 25-Jan-2010 11:45

Calibration History

Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

Start Cal Date: 20-JAN-2010 17:59

End Cal Date : 21-JAN-2010 23:34

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
20-JAN-2010 17:59	MEGAI	/chem/MSD3.i/s012010a.b/s3a2015.d
Cal Level: 2 , Cal Amount: 10.00000		
21-JAN-2010 20:38	BJCO	/chem/MSD3.i/s012110.b/s3a2128.d
21-JAN-2010 16:14	NEV	/chem/MSD3.i/s012110.b/s3a2118.d
21-JAN-2010 12:44	HEX	/chem/MSD3.i/s012110.b/s3a2110.d
21-JAN-2010 09:39	PEST	/chem/MSD3.i/s012110.b/s3a2103.d
20-JAN-2010 21:56	AP12	/chem/MSD3.i/s012010a.b/s3a2023.d
20-JAN-2010 18:29	MEGAI	/chem/MSD3.i/s012010a.b/s3a2016.d
Cal Level: 3 , Cal Amount: 20.00000		
21-JAN-2010 21:07	BJCO	/chem/MSD3.i/s012110.b/s3a2129.d
21-JAN-2010 16:41	NEV	/chem/MSD3.i/s012110.b/s3a2119.d
21-JAN-2010 13:10	HEX	/chem/MSD3.i/s012110.b/s3a2111.d
21-JAN-2010 10:05	PEST	/chem/MSD3.i/s012110.b/s3a2104.d
20-JAN-2010 22:22	AP12	/chem/MSD3.i/s012010a.b/s3a2024.d
20-JAN-2010 18:58	MEGAI	/chem/MSD3.i/s012010a.b/s3a2017.d
Cal Level: 4 , Cal Amount: 40.00000		
21-JAN-2010 21:36	BJCO	/chem/MSD3.i/s012110.b/s3a2130.d
21-JAN-2010 17:07	NEV	/chem/MSD3.i/s012110.b/s3a2120.d
21-JAN-2010 13:36	HEX	/chem/MSD3.i/s012110.b/s3a2112.d
21-JAN-2010 10:31	PEST	/chem/MSD3.i/s012110.b/s3a2105.d
20-JAN-2010 22:48	AP12	/chem/MSD3.i/s012010a.b/s3a2025.d
20-JAN-2010 19:28	MEGAI	/chem/MSD3.i/s012010a.b/s3a2018.d
Cal Level: 5 , Cal Amount: 50.00000		
21-JAN-2010 22:06	BJCO	/chem/MSD3.i/s012110.b/s3a2131.d
21-JAN-2010 17:33	NEV	/chem/MSD3.i/s012110.b/s3a2121.d
21-JAN-2010 14:03	HEX	/chem/MSD3.i/s012110.b/s3a2113.d
21-JAN-2010 10:58	PEST	/chem/MSD3.i/s012110.b/s3a2106.d
20-JAN-2010 23:15	AP12	/chem/MSD3.i/s012010a.b/s3a2026.d
20-JAN-2010 19:58	MEGAI	/chem/MSD3.i/s012010a.b/s3a2019.d
Cal Level: 6 , Cal Amount: 80.00000		
21-JAN-2010 22:35	BJCO	/chem/MSD3.i/s012110.b/s3a2132.d
21-JAN-2010 17:59	NEV	/chem/MSD3.i/s012110.b/s3a2122.d
21-JAN-2010 14:29	HEX	/chem/MSD3.i/s012110.b/s3a2114.d
21-JAN-2010 11:24	PEST	/chem/MSD3.i/s012110.b/s3a2107.d
20-JAN-2010 23:41	AP12	/chem/MSD3.i/s012010a.b/s3a2027.d
20-JAN-2010 20:27	MEGAI	/chem/MSD3.i/s012010a.b/s3a2020.d

Cal Level: 7 , Cal Amount: 100.00000

21-JAN-2010 23:05	BJCO	/chem/MSD3.i/s012110.b/s3a2133.d
21-JAN-2010 18:26	NEV	/chem/MSD3.i/s012110.b/s3a2123.d
21-JAN-2010 14:55	HEX	/chem/MSD3.i/s012110.b/s3a2115.d
21-JAN-2010 11:51	PEST	/chem/MSD3.i/s012110.b/s3a2108.d
21-JAN-2010 00:07	AP12	/chem/MSD3.i/s012010a.b/s3a2028.d
20-JAN-2010 20:57	MEGAI1	/chem/MSD3.i/s012010a.b/s3a2021.d

Cal Level: 8 , Cal Amount: 120.00000

21-JAN-2010 23:34	BJCO	/chem/MSD3.i/s012110.b/s3a2134.d
21-JAN-2010 18:52	NEV	/chem/MSD3.i/s012110.b/s3a2124.d
21-JAN-2010 12:17	PEST	/chem/MSD3.i/s012110.b/s3a2109.d
21-JAN-2010 00:33	AP12	/chem/MSD3.i/s012010a.b/s3a2029.d
20-JAN-2010 21:26	MEGAI1	/chem/MSD3.i/s012010a.b/s3a2022.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

25-JAN-2010 10:04	MEGAI1	/chem/MSD3.i/s012510.b/s3a2503.d
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Ccal Level: 4 , Ccal Amount: 40.0

20-JAN-2010 19:28	MEGAI1	/chem/MSD3.i/s012010a.b/s3a2018.d
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 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
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Calibration File Names:

Level 1: /chem/MSD3.i/s012010a.b/s3a2015.d
 Level 2: /chem/MSD3.i/s012110.b/s3a2128.d
 Level 3: /chem/MSD3.i/s012110.b/s3a2129.d
 Level 4: /chem/MSD3.i/s012110.b/s3a2130.d
 Level 5: /chem/MSD3.i/s012110.b/s3a2131.d
 Level 6: /chem/MSD3.i/s012110.b/s3a2132.d
 Level 7: /chem/MSD3.i/s012110.b/s3a2133.d
 Level 8: /chem/MSD3.i/s012110.b/s3a2134.d

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	SRSD or R^2
1 N-Methyl-N-nitrosomethylamine	++++ 0.71804	0.74577 0.71044	0.76146	0.72551	0.69783	0.73979	AVRG		0.72841		3.01664
2 Pyridine	++++ 0.81224	0.79588 0.81235	0.83002	0.81037	0.79171	0.84563	AVRG				
4 Aniline	++++ 0.61494	0.60427 0.61068	0.61520	0.60118	0.59219	0.63983	AVRG		0.81403		2.29912
209 Benzaldehyde	++++ 0.91392	1.05611 0.90096	1.10141	1.06522	1.00879	0.97526	AVRG		0.60975		2.86056
6 Phenol	++++ 1.32420	1.45109 1.31412	1.47647	1.39073	1.32949	1.39749	AVRG		1.00310		7.67114
							AVRG		1.38337		4.63856

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Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	ml	m2	%RSD or R^2
	100	120									
	Level 7	Level 8									
7 bis(2-Chloroethyl) ether	1.29780	1.13083	1.13339	1.07640	1.02407	1.07371	AVRG		1.09435		8.77407
	1.01762	1.00099									
8 2-Chlorophenol	++++	1.11214	1.13276	1.05500	1.00421	1.05178	AVRG		1.05048		5.22731
	0.99834	0.99913									
203 n-Decane	++++	2.16402	2.05496	1.72403	1.58287	1.33003	AVRG		1.59470		25.77078
	1.17770	1.12930									
9 1,3-Dichlorobenzene	++++	1.30193	1.31338	1.21877	1.16294	1.19332	AVRG		1.20957		6.03757
	1.13505	1.14162									
11 1,4-Dichlorobenzene	++++	1.32370	1.33377	1.23734	1.17929	1.20844	AVRG		1.22630		6.23668
	1.15021	1.15134									
12 Benzyl alcohol	++++	0.71914	0.75592	0.73787	0.70446	0.75970	AVRG		0.73117		2.86237
	0.72663	0.71449									
13 1,2-Dichlorobenzene	++++	1.24142	1.24897	1.16585	1.09982	1.13727	AVRG		1.15004		6.28599
	1.08272	1.07421									
14 bis(2-Chloroisopropyl) ether	++++	2.97224	2.93925	2.70633	2.55941	2.50797	AVRG		2.59104		11.78103
	2.27523	2.17682									
15 o-Cresol	++++	0.93464	0.94239	0.91543	0.86771	0.91509	AVRG		0.89964		3.96610
	0.86852	0.85370									

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	120									
	Level 7	Level 8									
16 Acetophenone	++++ 1.2284	1.3807 1.2195	1.4280 1.3977	1.3185 1.2883		AVRG		1.32216			6.31545
17 N-Nitrosodipropylamine	0.92182 0.87724	0.87489 0.85115	0.91703 0.89073	0.85524 0.92446		AVRG		0.88907			3.30197
18 m,p-Cresols	++++ 1.15036	1.17673 1.14193	1.22218	1.17299	1.11972	1.20881	AVRG	1.17039			3.11662
19 Hexachloroethane	++++ 0.50820	0.53827 0.50664	0.55727	0.52939	0.51037	0.53604	AVRG	0.52660			3.61498
21 Nitrobenzene	++++ 0.27913	0.34106 0.26801	0.34935	0.32421	0.30872	0.30431	AVRG	0.31068			9.71142
22 Isophorone	++++ 0.51082	0.59931 0.47987	0.60707	0.56759	0.54067	0.54924	AVRG	0.55065			8.30085
23 2-Nitrophenol	++++ 0.12796	0.18445 0.12201	0.14902	0.14104	0.13526	0.13811	AVRG	0.14255			14.33925
24 2,4-Dimethylphenol	++++ 0.22363	0.27318 0.21300	0.27704	0.25586	0.24108	0.24128	AVRG	0.24644			9.70792
25 bis (2-Chloroethoxy)methane	++++ 0.28620	0.36537 0.27088	0.36244	0.33070	0.31239	0.30990	AVRG	0.31970			11.19776

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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
26 2,4-Dichlorophenol	++++ 0.19076	0.22327 0.18158	0.23204	0.21422	0.20393	0.20591	AVRG		0.20739		8.49755
27 Benzoic acid	++++ 0.19403	++++ 0.18846	0.13182	0.16272	0.16509	0.19870	AVRG		0.17347		14.59461
28 1,2,4-Trichlorobenzene	++++ 0.20734	0.26132 0.19936	0.26161	0.23595	0.22435	0.22238	AVRG		0.23033		10.57200
30 Naphthalene	1.02686 ++++	0.86157 ++++	0.85332	0.75506	0.70931	++++	AVRG		0.84122		14.54030
204 alpha-Terpineol	++++ 0.23859	0.31672 0.21885	0.31918	0.29694	0.28376	0.26561	AVRG		0.27709		13.81104
31 4-Chloroaniline	++++ 1379044	72758 ++++	242968	529597	626017	1163354	LINR	0.01089	0.25718		0.99290
189 Caprolactam	++++ 0.08130	0.07902 0.08273	0.08980	0.09255	0.08930	0.08562	AVRG		0.08576		5.82184
32 Hexachlorobutadiene	++++ 0.12191	0.14410 0.11643	0.14601	0.13380	0.12786	0.13013	AVRG		0.13146		8.26801
33 4-Chloro-3-methylphenol	++++ 0.21751	0.25053 0.20470	0.26138	0.24440	0.23250	0.23425	AVRG		0.23504		8.25058

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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
34 2-Methylnaphthalene	0.63264 0.41605 ++++	0.54425 ++++	0.54385	0.48947	0.46292	0.45129	AVRG		0.50578		14.47183
35 1-Methylnaphthalene	0.62882 ++++	0.53834 ++++	0.53831	0.48101	0.45128	0.44067	AVRG		0.51307		13.71568
36 Hexachlorocyclopentadiene	++++ 0.21973	0.22113 0.21336	0.23923	0.23488	0.22522	0.24003	AVRG		0.22766		4.58941
208 1,1'-Biphenyl	++++ 1.12738	1.34163 1.09426	1.32307	1.25148	1.18543	1.14943	AVRG		1.21038		8.00473
205 2,3-Dichloroaniline	++++ 0.48856	0.54650 0.48828	0.55336	0.50388	0.48092	0.50829	AVRG		0.50997		5.67758
37 2,4,6-Trichlorophenol	++++ 0.28898	0.27875 0.29197	0.29479	0.28152	0.27265	0.29824	AVRG		0.28670		3.24410
38 2,4,5-Trichlorophenol	++++ 0.31122	0.29964 0.30377	0.32339	0.31035	0.29888	0.32105	AVRG		0.30976		3.15349
40 2-Chloronaphthalene	1.09282 0.87595	0.98378 0.87244	0.99396	0.93198	0.88980	0.91989	AVRG		0.94508		7.96150
42 o-Nitroaniline	++++ 0.37301	0.35292 0.36862	0.37905	0.37354	0.35917	0.39187	AVRG		0.37117		3.44867

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	++++ 595969	24160 653033	84099	223402	264703	508263	LINR	0.10772	0.24761		0.99638
43 Dimethylphthalate	++++ 1.04210	1.15017 1.00230	1.17429	1.09296	1.04860	1.08333	AVRG		1.08482		5.61871
44 2,6-Dinitrotoluene	++++ 0.24973	0.26127 0.24227	0.27649	0.26356	0.25029	0.26094	AVRG		0.25779		4.38601
45 Acenaphthylene	1.71149 1.34102	1.60018 1.31035	1.60779	1.48849	1.41330	1.42295	AVRG		1.48695		9.50591
47 Acenaphthene	1.11629 0.88661	0.96542 0.86196	0.99725	0.93059	0.89065	0.92656	AVRG		0.94692		8.58539
48 2,4-Dinitrophenol	++++ 0.12947	++++ 0.12286	0.08845	0.10958	0.10655	0.13215	AVRG		0.11484		14.42064
49 Dibenzofuran	++++ 1.13932	1.32487 1.10909	1.32975	1.22403	1.17119	1.20294	AVRG		1.21446		7.07746
50 2,4-Dinitrotoluene	++++ 0.31737	0.31324 0.30020	0.34041	0.32689	0.31515	0.32940	AVRG		0.32038		4.06899
51 Diethylphthalate	++++ 1.02940	1.15017 0.96851	1.18217	1.09898	1.05156	1.06689	AVRG		1.07824		6.73832

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	100 Level 7	120 Level 8									
52 4-Nitrophenol	++++ 0.19482	0.14809 0.18715	0.18079	0.18484	0.18183	0.20200	AVRG		0.18279		9.33220
53 Fluorene	1.23652 0.95214	1.08915 0.90970	1.09417	0.99304	0.94867	0.98295	AVRG		1.02579		20.47717
54 4-Chlorophenylphenylether	++++ 0.47769	0.50916 0.46080	0.50927	0.47449	0.45641	0.48845	AVRG		0.48232		4.39927
55 2-Methyl-4,6-dinitrophenol	++++ 0.11208	0.07609 0.10901	0.09887	0.10491	0.10417	0.11609	AVRG		0.10303		12.75423
56 p-Nitroaniline	++++ 601084	34121 638900	79188	198035	248695	506405	LINR	0.13043	0.24657		0.99437
133 Diphenylamine	++++ 0.52356	0.55707 0.52539	0.53334	0.51872	0.50649	0.54589	AVRG		0.53006		3.21154
58 1,2-Diphenylhydrazine	++++ 0.74423	0.82487 0.74173	0.83334	0.77782	0.75952	0.78845	AVRG		0.78142		4.69737
59 Tributylphosphate	++++ 1.09555	1.32216 1.12968	1.18297	1.12399	1.17926	1.10515	AVRG		1.16268		6.71052
61 4-Bromophenylphenylether	++++ 0.17775	0.16761 0.17588	0.17020	0.16317	0.16052	0.17788	AVRG		0.17043		4.13286

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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
	Level 7	Level 8									
63 Hexachlorobenzene	++++ 0.18616	0.17615 0.18291	0.17524 0.18291	0.16870 0.18291	0.16457 0.18291	0.18527 0.18291	AVRG		0.17700		4.69442
207 Atrazine	++++ 0.04175	0.04948 0.03993	0.05167 0.03993	0.04892 0.03993	0.04705 0.03993	0.04526 0.03993	AVRG		0.04628		9.21030
65 Pentachlorophenol	++++ 0.11029	0.07673 0.10862	0.09660 0.10862	0.10008 0.10862	0.09851 0.10862	0.11103 0.10862	AVRG		0.10027		11.91792
206 n-Octadecane	++++ 0.55457	0.77057 0.53533	0.76149 0.53533	0.67942 0.53533	0.64819 0.53533	0.61274 0.53533	AVRG		0.65176		14.20920
68 Phenanthrene	1.09161 0.80188	0.93858 0.77958	0.93460 0.77958	0.84726 0.85644	0.80961 0.83100	0.83068 0.84315	AVRG		0.87923		11.83793
69 Anthracene	0.98204 0.82966	0.92939 0.81107	0.93865 0.81107	0.85644 0.85644	0.83100 0.83100	0.84315 0.84315	AVRG		0.87768		7.18623
72 Di-n-butylphthalate	++++ 0.96977	1.16683 0.93322	1.20960 0.93322	1.09849 0.93322	1.03930 0.93322	1.01395 0.93322	AVRG		1.06159		9.57727
76 Fluoranthene	0.90108 0.72012	0.87949 0.72879	0.90049 0.72879	0.78704 0.72879	0.74569 0.72879	0.73752 0.72879	AVRG		0.80003		10.03388
77 Benzidine	++++ 1.242269	68247 1396665	157088 1396665	368997 1396665	517823 1396665	799002 1396665	LINR	0.18762	0.43103		0.99259

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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
79 Pyrene	1.20782 1.10515	1.17367 1.07728	1.19363	1.15436	1.14505	1.11019	AVRG		1.14589		3.98562
85 Butylbenzylphthalate	++++ 0.57757	0.53315 0.57218	0.59279	0.58620	0.57351	0.57865	AVRG		0.57344		3.34401
89 Benzo(a)anthracene	1.04947 0.89123	0.92578 0.87778	0.93249	0.87547	0.85953	0.91526	AVRG		0.91588		6.53649
90 3,3'-Dichlorobenzidine	++++ 870778	50313 992474	128838	311549	418224	630554	LINR	0.08574	0.29947		0.99849
92 Chrysene	0.97877 0.83239	0.87284 0.82524	0.88778	0.83077	0.81096	0.85332	AVRG		0.86151		6.25094
93 bis(2-Ethylhexyl)phthalate	0.64865 0.79914	0.80856 0.74447	0.85756	0.83189	0.81753	0.80790	AVRG		0.78921		8.26795
94 Di-n-octylphthalate	++++ 1.77023	1.35964 1.78288	1.60765	1.55720	1.51913	1.74200	AVRG		1.61982		9.63151
95 Benzo(b)fluoranthene	0.80148 1.01895	0.90924 1.01572	0.94818	0.90443	0.89079	1.02086	AVRG		0.93870		8.28907
96 Benzo(k)fluoranthene	0.88969 0.98776	0.97141 1.03666	1.01309	0.93213	0.93572	1.02950	AVRG		0.97450		5.35398

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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
97 Benzo(a)pyrene	0.63975	0.78545	0.85523	0.82144	0.81380	0.89384	AVRG		0.81798		9.78413
99 Indeno(1,2,3-cd)pyrene	0.53271	0.64912	0.78240	0.73167	0.69198	0.67705	AVRG		0.66728		11.19617
100 Dibenzo(a,h)anthracene	0.38835	0.51473	0.63534	0.59869	0.57749	0.56896	AVRG		0.54458		13.68691
101 Benzo(ghi)perylene	0.53024	0.55394	0.65192	0.60056	0.54802	0.52127	AVRG		0.54772		10.33074
102 1,4-Dioxane	++++	0.40284	0.40910	0.38885	0.36418	0.35721	AVRG		0.37050		8.19005
103 Methyl methacrylate	++++	0.33737	0.22937	0.23413	0.22455	0.20925	AVRG		0.21351		7.49623
104 Ethyl methacrylate	0.19656	0.19380	0.19380	0.96408	0.94490	0.87906	AVRG		0.87421		6.55903
105 2-Picoline	0.82833	0.81644	1.42601	1.37405	1.28232	1.25646	AVRG		0.89246		7.69147
106 N-Nitrosomethylethylamine	++++	1.19098	1.17745	0.60188	0.60267	0.57117	AVRG		1.30074		3.00772
	0.56140	0.56139					AVRG		0.57807		

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Start Cal Date : 20-JAN-2010 17:59
 End Cal Date : 21-JAN-2010 23:34
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Cal Date : 25-Jan-2010 10:56 jen00986

Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	RSD or R^2
107 Methyl methanesulfonate	++++ 0.57075	0.61804 0.56788	0.63933	0.63301	0.60159	0.59587	AVRG		0.60378		4.66950
108 N-Nitrosodiethylamine	++++ 0.55646	0.58134 0.55701	0.61446	0.60838	0.57663	0.57742	AVRG		0.58167		3.89262
109 Ethyl Methanesulfonate	++++ 0.71730	0.75021 0.71916	0.78366	0.77467	0.73862	0.74097	AVRG		0.74637		3.40767
110 Pentachloroethane	++++ 0.30943	0.34206 0.30715	0.35291	0.34546	0.32303	0.32328	AVRG		0.32905		5.46741
111 N-Nitrosopyrrolidine	++++ 0.53121	0.60763 0.54193	0.65600	0.64807	0.62006	0.59922	AVRG		0.60059		8.04589
113 N-Nitrosomorpholine	++++ 0.87036	1.06306 0.83070	1.10704	1.07185	1.00687	0.95244	AVRG		0.98604		10.71783
114 o-Toluidine	++++ 1.67531	1.92126 1.65506	1.98267	1.89353	1.78515	1.73854	AVRG		1.80736		7.03491
115 N-Nitrosopiperidine	++++ 0.14519	0.15118 0.14450	0.15925	0.15757	0.14997	0.14991	AVRG		0.15108		3.71838
116 a,a-Dimethylphenethylamine	++++ 1.14477	0.96436 1.14654	1.10317	1.16948	1.12786	1.17544	AVRG		1.11880		6.46576

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Compound	i	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	100	Level 7	Level 8									
117 Triethylphosphorothioate	++++	0.12504	0.14096	0.12675	0.12671	0.12709	0.12431	AVRG		0.12848		4.41389
118 2,6-Dichlorophenol	++++	0.21091	0.20730	0.22246	0.22551	0.21620	0.21642	AVRG		0.21531		3.22282
119 Hexachloropropene	++++	0.11936	0.10458	0.11742	0.12274	0.11836	0.11947	AVRG		0.11708		4.94585
120 p-Phenylenediamine	++++	0.21382	0.24630	0.29054	0.28023	0.26426	0.23686	AVRG		0.24808		13.05955
121 N-Nitrosodi-n-butylamine	++++	0.21235	0.26153	0.27739	0.24051	0.22685	0.22052	AVRG		0.23566		10.84221
122 Safrrole	++++	0.18084	0.20311	0.20717	0.20248	0.19097	0.18811	AVRG		0.19323		5.74835
123 1,2,4,5-Tetrachlorobenzene	++++	0.42012	0.44070	0.44504	0.42857	0.41216	0.41546	AVRG		0.42534		3.08394
124 Isosafrole	++++	0.34682	0.36248	0.37728	0.36959	0.35298	0.34957	AVRG		0.35652		3.92605
125 1,4-Naphthoquinone	++++	0.35549	0.38126	0.38126	0.33900	0.32053	0.28095	AVRG		0.33545		11.25882

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	RSD or R ²
126 m-Dinitrobenzene	++++ 0.18723	0.17442 0.18207	0.19169	0.18527	0.18037	0.19440	AVRG		0.185061		3.69258
127 Pentachlorobenzene	++++ 0.36872	0.37423 0.37073	0.37911	0.37490	0.35909	0.36746	AVRG		0.370601		1.74192
128 1-Naphthylamine	++++ 0.87269	0.89660 0.85274	0.97285	0.96776	0.92853	0.89575	AVRG		0.91242		5.03087
129 2-Naphthylamine	++++ 0.94805	1.05353 0.92273	1.06610	1.04929	1.01007	0.96861	AVRG		1.00263		5.66741
130 2,3,4,6-Tetrachlorophenol	++++ 0.24841	0.23053 0.24174	0.25006	0.24208	0.23646	0.25408	AVRG		0.24334		3.36290
131 5-Nitro-o-toluidine	++++ 0.29827	0.26341 0.29683	0.29456	0.30662	0.30452	0.30310	AVRG		0.29533		4.98830
132 Thionazin	++++ 0.16225	0.18286 0.16825	0.16965	0.16716	0.17350	0.16496	AVRG		0.16981		3.97911
134 Sulfotepp	++++ 0.09338	0.08201 0.10136	0.07661	0.07979	0.08274	0.08803	AVRG		0.08627		10.00671
135 Phorate	++++ 0.39466	0.45434 0.37860	0.42143	0.42115	0.40948	0.39752	AVRG		0.41103		5.95211

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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
	100	120									
	Level 7	Level 8									
136 1,3,5-Trinitrobenzene	++++ 0.14789	0.11115 0.15095	0.15254 0.16071	0.16238 0.15691			AVRG		0.14894		11.72228
137 Phenacetin	++++ 0.33711	0.29223 0.33088	0.32768	0.33875	0.34208	0.35004	AVRG		0.33125		5.64272
138 Diallate	++++ 0.29918	0.33060 0.29006	0.34769	0.33140	0.31546	0.31296	AVRG		0.31820		6.26753
139 Dimethoate	++++ 0.24875	0.26282 0.26233	0.24782	0.25053	0.26811	0.25122	AVRG		0.25594		3.21186
140 4-Aminobiphenyl	++++ 0.63808	0.60889 0.62249	0.60889	0.65926	0.65686	0.65614	AVRG		0.63580		3.53941
141 Pentachloronitrobenzene	++++ 0.07382	0.07920 0.07181	0.08536	0.08213	0.07899	0.07836	AVRG		0.07853		5.87331
142 Pronamide	++++ 0.27884	0.30210 0.27568	0.31704	0.30741	0.29794	0.29432	AVRG		0.29619		5.01473
143 Dinoseb	++++ 0.15547	0.10128 0.14836	0.13894	0.14777	0.14435	0.15742	AVRG		0.14194		13.38497
144 Disulfoton	++++ 0.32392	0.36381 0.32137	0.35580	0.34624	0.34548	0.32535	AVRG		0.34314		6.50461

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Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
100	Level 7	Level 8									
145 Methyl parathion	++++ 0.19984	0.18112 0.21607	0.18572	0.19503	0.21595	0.20096	AVRG		0.19924		6.77966
146 4-Nitroquinoline-1-oxide	++++ ++++	0.03400 ++++	0.03957	0.03524	0.03285	0.02772	AVRG		0.03387		12.63095
147 Methapyrilene	++++ 0.45174	0.56834 0.43613	0.60091	0.57196	0.54842	0.50433	AVRG		0.52598		12.04463
148 Isodrin	++++ 0.10509	0.11363 0.10547	0.11886	0.11337	0.11000	0.11015	AVRG		0.11094		4.37564
149 Aramite	++++ 0.04447	0.04104 0.04376	0.04681	0.04847	0.04868	0.04772					
150 Kepone	++++ 0.06744	0.06390 0.06910	0.07066	0.06797	0.06703	0.06757	AVRG		0.04585		6.21308
151 p-(Dimethylamino)azobenzene	++++ 0.38016	0.38603 0.37647	0.41569	0.41479	0.39936	0.40281	AVRG		0.06767		3.06053
152 Chlorobenzilate	++++ 0.32216	0.29852 0.33106	0.32418	0.32853	0.31604	0.33558	AVRG		0.39647		4.02605
153 3,3'-Dimethylbenzidine	++++ 0.54403	0.44454 0.52456	0.51712	0.52940	0.52712	0.53071	AVRG		0.32229		3.80049
							AVRG		0.51678		6.36003

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	100	120									
	Level 7	Level 8									
154 Camphur	++++ 0.37941	0.37855 0.37565	0.36235 0.37553	0.38371 0.37553	0.37553	0.38280	AVRG		0.37686		1.89344
155 2-Acetylanthracene	++++ 1039733	54358 1181312	146603	347782	471601	730946	LINR	0.12725	0.36004		0.99818
157 7,12Dimethylbenz(a)anthracene	++++ 0.52084	0.49065 0.52780	0.53222	0.55091	0.53464	0.55350	AVRG		0.53008		3.96662
158 3-Methylcholanthrene	++++ 0.40379	0.32173 0.39477	0.36538	0.39456	0.39877	0.41088	AVRG		0.38427		8.07973
166 Phthalic anhydride	++++ 0.10937	0.09112 ++++	0.08833	0.11036	0.11415	0.11552	AVRG		0.10481		11.38965
173 Carbazole	0.86479	0.71586	0.64023	0.67237	0.68439	0.73157	AVRG		0.71254		9.46599
174 Hexachlorophene	++++ 0.70180	0.68929 0.06527	0.07987	0.07491	0.07520	0.06851	AVRG		0.07309		7.20745
179 Dibenzo(a,e)pyrene	++++ 0.23424	0.20398 0.20708	0.30269	0.26880	0.22289	0.23884	AVRG		0.23979		14.71273
185 (2,3-Dibromopropyl)phosphate	++++ ++++	++++ ++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00

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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
184 p-Benzquinone	++++ 0.11632	0.05055 0.13440	0.06219	0.08664	0.08181	0.11534	AVRG		0.09247		33.25064 <=
191 Parathion	++++ 0.05929	0.05232 0.06990	0.05250	0.05390	0.06077	0.05809	AVRG		0.05811		10.65746
192 Methoxychlor	++++ 0.50867	0.47888 0.48210	0.55020	0.54492	0.52330	0.52850	AVRG		0.51665		5.47062
210 m-Toluidine	++++ 1.42086	1.20660 1.35651	1.13863	1.34833	1.30013	1.34859	AVRG		1.30281		7.49486
211 p-Toluidine	++++ 0.87001	0.82792 0.88427	0.92751	0.95009	0.93687	0.99354	AVRG		0.91289		6.09139
212 Cis Diallate	++++ 0.33303	0.32530 0.32933	0.35061	0.34315	0.33383	0.34948	AVRG		0.33782		2.94956
213 Trans Diallate	++++ 0.35198	0.38895 0.34125	0.40905	0.38989	0.37113	0.36819	AVRG		0.37435		6.26753
214 1,4-Dinitrobenzene	++++ 0.22066	0.19443 0.21678	0.21635	0.21508	0.21009	0.22936	AVRG		0.21468		4.99410
215 2-Ethoxyethanol	++++ 0.80779	0.87726 0.81374	0.90209	0.85383	0.83647	0.85701	AVRG		0.84974		3.96160

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 Cal Date : 25-Jan-2010 10:56 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	4RSD or R ²
	100 Level 7	120 Level 8									
216 Methylenebis(2-chloroaniline)	++++ 0.13842	0.06616 0.19549	0.07608 0.09079	0.10448 0.09079	0.14208 0.10448	AVRG			0.10764		29.17866 <-
229 2,2'-Dichlorobenzil	++++ 0.76403	0.77468 0.70142	0.81672 0.78001	0.77122 0.78001	++++	AVRG			0.76801		4.87929
230 4-Chloroethioanisole	++++ 0.24233	0.21750 0.23147	0.22713 0.23458	0.23458 0.23458	++++	AVRG			0.23125		3.61952
231 4-Chlorothiophenol	++++ 1322620	13915 1786788	145785 449073	465253	++++	LINR	0.27132	0.21350			0.99388
232 bis(p-Chlorophenyl)sulfone	++++ 0.40821	0.47388 0.37583	0.45390 0.19838	0.41761 0.17851	0.41127 0.21138	++++ AVRG			0.42345		8.28402
233 bis(p-Chlorophenyl)disulfide	++++ 0.17420	0.19441 0.16308	0.19838 0.27802	0.17851 0.26242	0.21138 0.26450	++++ AVRG			0.18666		9.54234
234 Diphenyl disulfide	++++ 0.24334	0.28343 0.23143	0.27802 0.73432	0.26242 0.69665	0.26450 0.69787	++++ AVRG			0.26052		7.66126
235 Diphenyl sulfide	++++ 0.68944	0.77450 0.64311	0.73432 0.45278	0.69665 0.45366	0.69787 0.44706	++++ AVRG			0.70598		6.29545
236 Phenyl sulfone	++++ 0.42641	0.49686 0.40051	0.45278 0.40051	0.45366 0.40051	0.44706 0.40051	++++ AVRG			0.44621		7.18905

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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	SRSD or R^2
237 Hydroxymethyl phthalimide	++++ 338664	43061 ++++	70788 ++++	158625 ++++	184195 ++++	++++	LINR	-0.20385	0.08483		0.99591
238 Phthalic acid	++++ 817425	17549 1057677	67240 1057677	222077 222077	286654 286654	++++	LINR	0.30649	0.13018		0.99095
239 Thiopheno-	++++ 1859333	40472 2488746	249069 2488746	669124 669124	791770 791770	++++	LINR	0.17391	1.07612		0.99866
240 bis (Chloromethyl) ether	++++ 0.69380	0.92896 0.63914	0.78750 0.63914	0.71357 0.71357	0.72008 0.72008	++++	AVRG		0.74718		13.52417
241 Octachlorostyrene	++++ 0.07623	0.07090 0.07200	0.06572 0.07200	0.06994 0.06994	0.07114 0.07114	++++	AVRG		0.07099		4.77390
243 Dibenzo (a,h) pyrene	++++ 251537	19398 ++++	48052 ++++	105592 105592	125067 125067	++++	LINR	0.12801	0.15800		0.99595
244 Benzo (j) fluoranthene	++++ 0.97135	0.84035 0.96350	0.90941 0.96350	0.90195 0.90195	0.92608 0.92608	++++	AVRG		0.91877		5.18322
245 Dibenzo (a,j) acridine	++++ 0.46183	0.37913 0.45797	0.43749 0.45797	0.45831 0.45831	0.44770 0.44770	++++	AVRG		0.44041		7.11174
246 Dibenzo (a,h) acridine	++++ 0.43627	0.36614 0.43845	0.42944 0.43845	0.44947 0.44947	0.42727 0.42727	++++	AVRG		0.42451		6.98435

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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
247 Quinoline	++++ 0.49755	0.53898 0.48463	0.55312 0.48463	0.52678 0.48463	0.51137 0.48463	++++ 0.48463	AVRG		0.51874		4.96956 <-
248 2,4-Toluene Diisocyanate	++++ 0.36246	0.35575 0.35475	0.37703 0.35475	0.36901 0.35475	0.37246 0.35475	++++ 0.35475	AVRG		0.36524		2.48889 <-
249 Dibenzo(a,i)pyrene	++++ 161637	5679 ++++	25971	55431	70235	++++	LINR	0.23477	0.10559		0.99436 <-
250 i-Nitropyrene	++++ 501845	14872 593928	57017	155998	206454	++++	LINR	0.22707	0.19061		0.99890 <-
251 5-Methylchrysene	++++ 0.52982	0.50185 0.51942	0.53453 0.51942	0.53426 0.51942	0.53672 0.51942	++++ 0.51942	AVRG		0.52610		2.54612 <-
252 Dibenzo(a,l)pyrene	++++ 0.17464	0.14160 0.18728	0.15863 0.25109	0.16539 0.27176	0.15589 0.25676	++++ 0.25676	AVRG		0.16390		9.65826 <-
253 7H-Dibenzo(c,g)carbazole	++++ 0.28764	0.21831 0.29107	0.25109 1.25596	0.27176 1.22589	0.25676 1.22960	++++ 1.22960	AVRG		0.26277		10.28110 <-
254 1-Hexanol	++++ 1.14723	1.09335 1.09030	1.25596 1.09030	1.22589 729477	1.22960 911671	++++ 911671	AVRG		1.17372		6.22929 <-
255 Propylene glycol	++++ 1873680	82158 2256352	335628	729477	911671	++++	LINR	0.11619	1.48305		0.99956 <-

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Compound	i	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients	m1	m2	4RSD	or R^2
		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients	m1	m2	4RSD	or R^2
	100	Level 7	Level 8											
M 225 Trichlorophenols	++++	0.28920	0.30909	0.29593	0.28576	0.30965		AVRG		0.29823			3.04328	<=
	0.30010	0.29787												
M 226 Tetrachlorophenols	++++	0.23053	0.25006	0.24208	0.23646	0.25408		AVRG		0.24334			3.36290	
	0.24841	0.24174												
M 227 Benzo(b,k)fluoranthrene	0.84558	0.94032	0.98063	0.91828	0.91325	1.02518		AVRG		0.95660			6.64057	
	1.00336	1.02619												
M 228 TTO Sum Semivolatiles	++++	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00			0.000e+00	<=
	++++	++++	++++	++++	++++	++++	++++							
\$ 3 2-Fluorophenol	++++	1.07851	1.11123	1.04855	1.00806	1.04546		AVRG		1.04085			4.18326	
	0.99425	0.99990												
\$ 5 Phenol-d5	++++	1.34878	1.37895	1.30637	1.25573	1.33301		AVRG		1.30813			3.61651	
	1.26953	1.26451												
\$ 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	++++	0.31580	0.32342	0.30479	0.29159	0.29502		AVRG		0.29548			7.27263	
	0.27418	0.26353												

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59
 End Cal Date : 21-JAN-2010 23:34
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Cal Date : 25-Jan-2010 10:56 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
	100 Level 7	120 Level 8									
\$ 39 2-Fluorobiphenyl	++++ 0.97352	1.12515 0.96556	1.12690	1.04189	0.99112	1.01327	AVRG		1.03392		6.56122
\$ 60 2,4,6-Tribromophenol	++++ 0.12894	0.09835 0.12196	0.11081	0.10988	0.10815	0.12459	AVRG		0.11467		9.43255
\$ 81 p-Terphenyl-d14	++++ 0.70914	0.66516 0.69369	0.69226	0.68049	0.68287	0.68906	AVRG		0.68752		1.97038

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2010 17:59
End Cal Date : 21-JAN-2010 23:34
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Cal Date : 25-Jan-2010 10:56 jen00986

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

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 00:59
Lab File ID: s3a2030.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 00:33
Lab Sample ID: WBN100106-09.3 Quant Type: ISTD
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	1.04085	1.06783	1.06783	0.000	2.59199	60.00000	Averaged
5 Phenol-d5	1.30813	1.30677	1.30677	0.000	-0.10402	60.00000	Averaged
20 Nitrobenzene-d5	0.29548	0.31664	0.31664	0.000	7.16229	60.00000	Averaged
39 2-Fluorobiphenyl	1.03392	1.08338	1.08338	0.000	4.78365	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11467	0.11591	0.11591	0.000	1.08552	60.00000	Averaged
81 p-Terphenyl-d14	0.68752	0.74803	0.74803	0.000	8.80081	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.72841	0.71079	0.71079	0.000	-2.41905	60.00000	Averaged
2 Pyridine	0.81403	0.88918	0.88918	0.000	9.23243	60.00000	Averaged
4 Aniline	0.60975	0.61910	0.61910	0.000	1.53283	60.00000	Averaged
6 Phenol	1.38337	1.37047	1.37047	0.001	-0.93241	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.09435	1.02455	1.02455	0.000	-6.37835	60.00000	Averaged
8 2-Chlorophenol	1.05048	1.03520	1.03520	0.000	-1.45436	60.00000	Averaged
203 n-Decane	1.59470	1.65263	1.65263	0.000	3.63239	60.00000	Averaged
9 1,3-Dichlorobenzene	1.20957	1.21368	1.21368	0.000	0.33934	60.00000	Averaged
11 1,4-Dichlorobenzene	1.22630	1.21738	1.21738	0.001	-0.72770	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.15004	1.15443	1.15443	0.000	0.38143	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.59104	2.64106	2.64106	0.000	1.93048	60.00000	Averaged
12 Benzyl alcohol	0.73117	0.73463	0.73463	0.000	0.47315	60.00000	Averaged
15 o-Cresol	0.89964	0.91779	0.91779	0.000	2.01760	60.00000	Averaged
18 m,p-Cresols	1.17039	1.20984	1.20984	0.000	3.37103	60.00000	Averaged
17 N-Nitrosodipropylamine	0.88907	0.89937	0.89937	0.050	1.15804	60.00000	Averaged spcc
19 Hexachloroethane	0.52660	0.50914	0.50914	0.000	-3.31499	60.00000	Averaged
21 Nitrobenzene	0.31068	0.33352	0.33352	0.000	7.35138	60.00000	Averaged
22 Isophorone	0.55065	0.57659	0.57659	0.000	4.71165	60.00000	Averaged
23 2-Nitrophenol	0.14255	0.14316	0.14316	0.001	0.42846	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.24644	0.25783	0.25783	0.000	4.62060	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31970	0.32968	0.32968	0.000	3.12270	60.00000	Averaged
26 2,4-Dichlorophenol	0.20739	0.21530	0.21530	0.001	3.81337	20.00000	Averaged ccc
27 Benzoic acid	0.17347	0.18935	0.18935	0.000	9.15625	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.23033	0.23735	0.23735	0.000	3.04924	60.00000	Averaged
30 Naphthalene	0.84122	0.82716	0.82716	0.000	-1.67175	60.00000	Averaged
204 alpha-Terpineol	0.27709	0.27641	0.27641	0.000	-0.24655	60.00000	Averaged
31 4-Chloroaniline	45.06758	40.00000	0.28696	0.000	12.66895	60.00000	Linear
32 Hexachlorobutadiene	0.13146	0.13632	0.13632	0.001	3.69370	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.23504	0.24535	0.24535	0.001	4.38906	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.50578	0.56566	0.56566	0.000	11.83960	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 00:59
Lab File ID: s3a2030.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 00:33
Lab Sample ID: WBN100106-09.3 Quant Type: ISTD
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.51307	0.53284	0.53284	0.000	3.85247	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.22766	0.19950	0.19950	0.050	-12.36610	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.50997	0.51708	0.51708	0.000	1.39502	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.28670	0.27613	0.27613	0.001	-3.68730	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.30976	0.33054	0.33054	0.000	6.70890	60.00000	Averaged
40 2-Chloronaphthalene	0.94508	0.94123	0.94123	0.000	-0.40707	60.00000	Averaged
42 o-Nitroaniline	0.37117	0.37692	0.37692	0.000	1.55024	60.00000	Averaged
41 m-Nitroaniline	44.14116	40.00000	0.24658	0.000	10.35290	60.00000	Linear
43 Dimethylphthalate	1.08482	1.16081	1.16081	0.000	7.00511	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25779	0.27155	0.27155	0.000	5.33431	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32038	0.35318	0.35318	0.000	10.23660	60.00000	Averaged
45 Acenaphthylene	1.48695	1.67702	1.67702	0.000	12.78290	60.00000	Averaged
47 Acenaphthene	0.94692	1.00401	1.00401	0.001	6.02959	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.11484	0.10141	0.10141	0.050	-11.69404	60.00000	Averaged spcc
49 Dibenzofuran	1.21446	1.27596	1.27596	0.000	5.06408	60.00000	Averaged
51 Diethylphthalate	1.07824	1.17796	1.17796	0.000	9.24894	60.00000	Averaged
52 4-Nitrophenol	0.18279	0.19161	0.19161	0.050	4.82259	60.00000	Averaged spcc
53 Fluorene	1.02579	1.11808	1.11808	0.000	8.99688	60.00000	Averaged
54 4-Chlorophenylphenylether	0.48232	0.49999	0.49999	0.000	3.66212	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10303	0.13047	0.13047	0.000	26.63294	60.00000	Averaged
56 p-Nitroaniline	40.51800	40.00000	0.21760	0.000	1.29499	60.00000	Linear
133 Diphenylamine	0.53006	0.53974	0.53974	0.001	1.82484	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.78142	0.80468	0.80468	0.000	2.97642	60.00000	Averaged
61 4-Bromophenylphenylether	0.17043	0.16965	0.16965	0.000	-0.46057	60.00000	Averaged
63 Hexachlorobenzene	0.17700	0.17250	0.17250	0.000	-2.54123	60.00000	Averaged
65 Pentachlorophenol	0.10027	0.10278	0.10278	0.001	2.51088	20.00000	Averaged ccc
206 n-Octadecane	0.65176	0.65600	0.65600	0.000	0.65012	60.00000	Averaged
68 Phenanthrene	0.87923	0.94546	0.94546	0.000	7.53310	60.00000	Averaged
69 Anthracene	0.87768	0.98015	0.98015	0.000	11.67622	60.00000	Averaged
72 Di-n-butylphthalate	1.06159	1.15927	1.15927	0.000	9.20088	60.00000	Averaged
76 Fluoranthene	0.80003	0.91399	0.91399	0.001	14.24505	20.00000	Averaged ccc
79 Pyrene	1.14589	1.22409	1.22409	0.000	6.82447	60.00000	Averaged
85 Butylbenzylphthalate	0.57344	0.61854	0.61854	0.000	7.86585	60.00000	Averaged
89 Benzo(a)anthracene	0.91588	1.00476	1.00476	0.000	9.70420	60.00000	Averaged
92 Chrysene	0.86151	0.94852	0.94852	0.000	10.09975	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.78921	0.85269	0.85269	0.000	8.04326	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 00:59
Lab File ID: s3a2030.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 00:33
Lab Sample ID: WBN100106-09.3 Quant Type: ISTD
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
RRF	%D / %DRIFT	%D / %DRIFT	%D / %DRIFT	%D / %DRIFT	%D / %DRIFT	
94 Di-n-octylphthalate	1.61982	1.70872	1.70872 0.001	5.48833	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.93870	1.09274	1.09274 0.000	16.40938	60.00000	Averaged
96 Benzo(k)fluoranthene	0.97450	1.10633	1.10633 0.000	13.52818	60.00000	Averaged
97 Benzo(a)pyrene	0.81798	0.96500	0.96500 0.001	17.97377	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66728	0.80721	0.80721 0.000	20.96896	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.54458	0.66537	0.66537 0.000	22.17901	60.00000	Averaged
101 Benzo(ghi)perylene	0.54772	0.65631	0.65631 0.000	19.82602	60.00000	Averaged
126 m-Dinitrobenzene	0.18506	0.19464	0.19464 0.000	5.17721	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24334	0.24186	0.24186 0.000	-0.60826	60.00000	Averaged
143 Dinoseb	0.14194	0.14693	0.14693 0.000	3.51444	60.00000	Averaged
173 Carbazole	0.71254	0.72438	0.72438 0.000	1.66242	60.00000	Averaged
184 p-Benzoquinone	0.09247	0.17801	0.17801 0.000	92.51512	60.00000	Averaged <-
192 Methoxychlor	0.51665	0.57043	0.57043 0.000	10.40900	60.00000	Averaged
211 p-Toluidine	0.91289	0.99695	0.99695 0.000	9.20880	60.00000	Averaged
210 m-Toluidine	1.30281	1.16582	1.16582 0.000	-10.51463	60.00000	Averaged
26 Phthalic anhydride	0.10481	0.13887	0.13887 0.000	32.49582	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.23979	0.19603	0.19603 0.000	-18.24896	60.00000	Averaged
214 1,4-Dinitrobenzene	0.21468	0.22373	0.22373 0.000	4.21365	60.00000	Averaged
215 2-Ethoxyethanol	0.84974	0.88902	0.88902 0.000	4.62255	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.10764	0.13594	0.13594 0.000	26.28659	60.00000	Averaged
M 225 Trichlorophenols	0.29823	0.30333	0.30333 0.000	1.71173	60.00000	Averaged
M 226 Tetrachlorophenols	0.24334	0.24186	0.24186 0.000	-0.60826	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.95660	1.09953	1.09953 0.000	14.94183	60.00000	Averaged

Data File: /chem/MSD3.i/s012010a.b/s3a2030.d
Report Date: 21-Jan-2010 09:24

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GEL Laboratories LLC

Data file : /chem/MSD3.i/s012010a.b/s3a2030.d
Lab Smp Id: WBN100106-09.3 Client Smp ID: MEGAICV
Inj Date : 21-JAN-2010 00:59
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |WBN100106-09.3|40PPM|1|SVMF|1|MEGAICV
Misc Info : |MSD8270|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m
Meth Date : 21-Jan-2010 09:23 jen00986 Quant Type: ISTD
Cal Date : 20-JAN-2010 21:56 Cal File: s3a2023.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAI.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.782	4.782	(1.000)	478316	40.0000	
* 29 Naphthalene-d8	136	6.065	6.065	(1.000)	1900671	40.0000	
* 46 Acenaphthene-d10	164	7.942	7.942	(1.000)	949249	40.0000	
* 67 Phenanthrene-d10	188	9.555	9.555	(1.000)	1476723	40.0000	
* 91 Chrysene-d12	240	12.577	12.577	(1.000)	1131079	40.0000	
* 98 Perylene-d12	264	14.896	14.896	(1.000)	833917	40.0000	
\$ 3 2-Fluorophenol	112	3.592	3.592	(0.751)	510760	40.0000	41.0
\$ 5 Phenol-d5	99	4.380	4.380	(0.916)	625047	40.0000	40.0
\$ 20 Nitrobenzene-d5	82	5.322	5.322	(0.878)	601825	40.0000	42.9
\$ 39 2-Fluorobiphenyl	172	7.193	7.193	(0.906)	1028393	40.0000	41.9
\$ 60 2,4,6-Tribromophenol	329	8.791	8.791	(1.107)	110031	40.0000	40.4
\$ 81 p-Terphenyl-d14	244	11.270	11.270	(0.896)	846084	40.0000	43.5
1 N-Methyl-N-nitrosomethylamine	74	2.601	2.601	(0.544)	339980	40.0000	39.0
2 Pyridine	79	2.642	2.642	(0.552)	425311	40.0000	43.7
4 Aniline	66	4.468	4.468	(0.934)	296126	40.0000	40.6
6 Phenol	94	4.395	4.395	(0.919)	655519	40.0000	39.6(Q)
7 bis(2-Chloroethyl) ether	63	4.506	4.506	(0.942)	490059	40.0000	37.4
8 2-Chlorophenol	128	4.577	4.577	(0.957)	495153	40.0000	39.4
203 n-Decane	43	4.583	4.583	(0.958)	790478	40.0000	41.4
9 1,3-Dichlorobenzene	146	4.729	4.729	(0.989)	580521	40.0000	40.1
11 1,4-Dichlorobenzene	146	4.800	4.800	(1.004)	582290	40.0000	39.7
13 1,2-Dichlorobenzene	146	4.947	4.947	(1.034)	552180	40.0000	40.2
14 bis(2-Chloroisopropyl)ether	45	5.014	5.014	(1.048)	1263259	40.0000	40.8
12 Benzyl alcohol	108	4.894	4.894	(1.023)	351387	40.0000	40.2
15 o-Cresol	107	4.976	4.976	(1.041)	438993	40.0000	40.8
18 m,p-Cresols	107	5.129	5.129	(1.072)	578688	40.0000	41.3

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
17 N-Nitrosodipropylamine	70	5.155	5.155	(1.078)	430182	40.0000	40.5
19 Hexachloroethane	117	5.281	5.281	(1.104)	243530	40.0000	38.7
21 Nitrobenzene	77	5.343	5.343	(0.881)	633918	40.0000	42.9
22 Isophorone	82	5.578	5.578	(0.920)	1095915	40.0000	41.9
23 2-Nitrophenol	139	5.660	5.660	(0.933)	272103	40.0000	40.2
24 2,4-Dimethylphenol	122	5.669	5.669	(0.935)	490044	40.0000	41.8
25 bis(2-Chloroethoxy)methane	93	5.777	5.777	(0.953)	626612	40.0000	41.2
26 2,4-Dichlorophenol	162	5.898	5.898	(0.972)	409207	40.0000	41.5
27 Benzoic acid	105	5.771	5.771	(0.952)	359896	40.0000	43.7 (H)
28 1,2,4-Trichlorobenzene	180	5.995	5.995	(0.988)	451131	40.0000	41.2
30 Naphthalene	128	6.089	6.089	(1.004)	1572162	40.0000	39.3
204 alpha-Terpineol	59	6.074	6.074	(1.001)	525364	40.0000	39.9
31 4-Chloroaniline	127	6.127	6.127	(1.010)	545416	40.0000	45.1
32 Hexachlorobutadiene	225	6.195	6.195	(1.021)	259095	40.0000	41.5
33 4-Chloro-3-methylphenol	107	6.608	6.608	(1.090)	466334	40.0000	41.8
34 2-Methylnaphthalene	142	6.814	6.814	(1.123)	1075137	40.0000	44.7
35 1-Methylnaphthalene	142	6.920	6.920	(1.141)	1012751	40.0000	41.5
36 Hexachlorocyclopentadiene	237	6.967	6.967	(0.877)	189378	40.0000	35.0
205 2,3-Dichloroaniline	161	7.111	7.111	(0.895)	490842	40.0000	40.6
37 2,4,6-Trichlorophenol	196	7.102	7.102	(0.894)	262115	40.0000	38.5
38 2,4,5-Trichlorophenol	196	7.137	7.137	(0.899)	313762	40.0000	42.7
40 2-Chloronaphthalene	162	7.337	7.337	(0.924)	893462	40.0000	39.8
42 o-Nitroaniline	65	7.437	7.437	(0.936)	357794	40.0000	40.6
41 m-Nitroaniline	138	7.883	7.883	(0.993)	234062	40.0000	44.1
43 Dimethylphthalate	163	7.628	7.628	(0.960)	1101902	40.0000	42.8
44 2,6-Dinitrotoluene	165	7.698	7.698	(0.969)	257764	40.0000	42.1
50 2,4-Dinitrotoluene	165	8.130	8.130	(1.024)	335252	40.0000	44.1
45 Acenaphthylene	152	7.792	7.792	(0.981)	1591910	40.0000	45.1
47 Acenaphthene	154	7.977	7.977	(1.004)	953057	40.0000	42.4
48 2,4-Dinitrophenol	184	7.992	7.992	(1.006)	96267	40.0000	35.3
49 Dibenzofuran	168	8.159	8.159	(1.027)	1211202	40.0000	42.0
51 Diethylphthalate	149	8.380	8.380	(1.055)	1118181	40.0000	43.7
52 4-Nitrophenol	139	8.033	8.033	(1.011)	181882	40.0000	41.9
53 Fluorene	166	8.533	8.533	(1.074)	1061338	40.0000	43.6
54 4-Chlorophenylphenylether	204	8.518	8.518	(1.073)	474613	40.0000	41.5
55 2-Methyl-4,6-dinitrophenol	198	8.574	8.574	(0.897)	192668	40.0000	50.6
56 p-Nitroaniline	138	8.547	8.547	(1.076)	206560	40.0000	40.5
133 Diphenylamine	169	8.647	8.647	(0.905)	797043	40.0000	40.7
58 1,2-Diphenylhydrazine	77	8.694	8.694	(0.910)	1188292	40.0000	41.2
61 4-Bromophenylphenylether	248	9.053	9.053	(0.947)	250520	40.0000	39.8
63 Hexachlorobenzene	284	9.123	9.123	(0.955)	254740	40.0000	39.0
65 Pentachlorophenol	266	9.329	9.329	(0.976)	151784	40.0000	41.0
206 n-Octadecane	57	9.382	9.382	(0.982)	968723	40.0000	40.3
68 Phenanthrene	178	9.585	9.585	(1.003)	1396181	40.0000	43.0
69 Anthracene	178	9.641	9.641	(1.009)	1447417	40.0000	44.7
72 Di-n-butylphthalate	149	10.146	10.146	(1.062)	1711919	40.0000	43.7
76 Fluoranthene	202	10.876	10.876	(1.138)	1349711	40.0000	45.7

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	11.126	11.126	(0.885)	1384548	40.0000	42.7
85 Butylbenzylphthalate	149	11.801	11.801	(0.938)	699620	40.0000	43.1
89 Benzo(a)anthracene	228	12.557	12.557	(0.998)	1136459	40.0000	43.9
92 Chrysene	228	12.613	12.613	(1.003)	1072849	40.0000	44.0
93 bis(2-Ethylhexyl)phthalate	149	12.521	12.521	(0.996)	964461	40.0000	43.2
94 Di-n-octylphthalate	149	13.508	13.508	(0.907)	1424930	40.0000	42.2
95 Benzo(b)fluoranthene	252	14.221	14.221	(0.955)	911254	40.0000	46.6
96 Benzo(k)fluoranthene	252	14.271	14.271	(0.958)	922585	40.0000	45.4
97 Benzo(a)pyrene	252	14.796	14.796	(0.993)	804729	40.0000	47.2
99 Indeno(1,2,3-cd)pyrene	276	16.877	16.877	(1.133)	673143	40.0000	48.4
100 Dibenzo(a,h)anthracene	278	16.909	16.909	(1.135)	554860	40.0000	48.9
101 Benzo(ghi)perylene	276	17.388	17.388	(1.167)	547305	40.0000	47.9(Q)
126 m-Dinitrobenzene	168	7.669	7.669	(0.966)	184765	40.0000	42.1
130 2,3,4,6-Tetrachlorophenol	232	8.280	8.280	(1.043)	229581	40.0000	39.8
143 Dinoseb	211	9.517	9.517	(0.996)	216974	40.0000	41.4
173 Carbazole	167	9.802	9.802	(1.026)	1069713	40.0000	40.7
184 p-Benzoquinone	54	4.034	4.034	(0.844)	85145	40.0000	77.0
192 Methoxychlor	227	12.427	12.427	(0.988)	645202	40.0000	44.2
211 p-Toluidine	106	5.202	5.202	(1.088)	476859	40.0000	43.7
210 m-Toluidine	106	5.234	5.234	(1.095)	557632	40.0000	35.8
26 Phthalic anhydride	104	6.870	6.870	(1.133)	263941	40.0000	53.0
179 Dibenzo(a,e)pyrene	302	21.055	21.055	(1.413)	163472	40.0000	32.7
214 1,4-Dinitrobenzene	75	7.590	7.590	(0.956)	212371	40.0000	41.7
215 2-Ethoxyethanol	59	2.387	2.387	(0.499)	425233	40.0000	41.8
216 Methylenebis(2-chloroaniline)	231	12.504	12.504	(0.994)	153759	40.0000	50.5(Q)
M 225 Trichlorophenols	196				575877	80.0000	81.4
M 226 Tetrachlorophenols	232				229581	40.0000	39.8
M 227 Benzo(b,k)fluoranthene	252				1833839	80.0000	92.0

QC Flag Legend

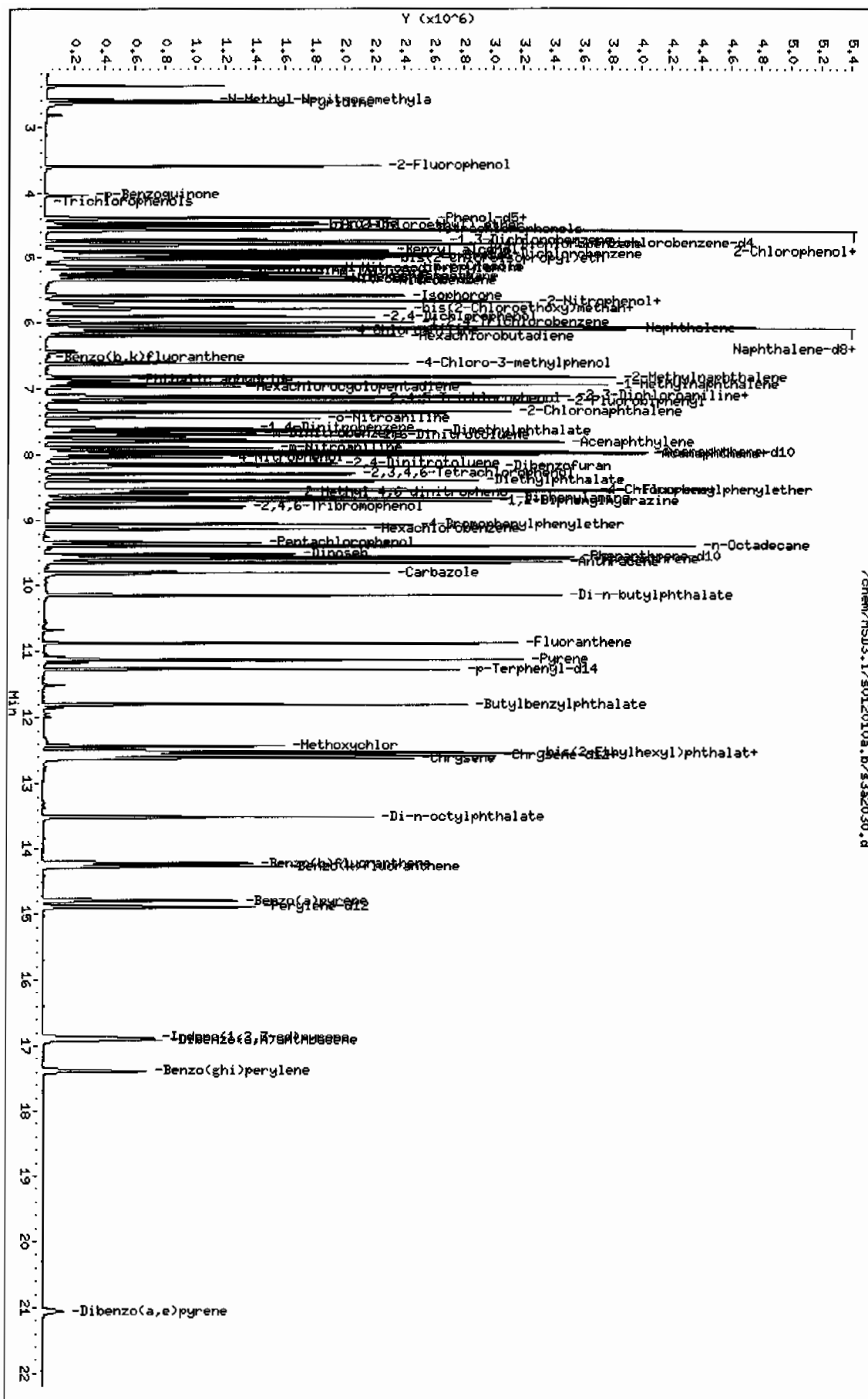
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Page 1

Client ID: MEGAICV

Instrument: MSIS-3, i

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 01:29
Lab File ID: s3a2031.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 00:33
Lab Sample ID: WBN100103-08.1 Quant Type: ISTD
Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	1.00310	0.87886	0.87886	0.000	-12.38528	60.00000	Averaged
16 Acetophenone	1.32216	1.42921	1.42921	0.000	8.09690	60.00000	Averaged
189 Caprolactam	0.08576	0.10573	0.10573	0.000	23.29058	60.00000	Averaged
208 1,1'-Biphenyl	1.21038	1.35841	1.35841	0.000	12.23019	60.00000	Averaged
207 Atrazine	0.04628	0.05463	0.05463	0.000	18.04776	60.00000	Averaged
77 Benzidine	42.00694	40.00000	0.37178	0.000	5.01735	60.00000	Linear
90 3,3'-Dichlorobenzidine	43.71602	40.00000	0.30161	0.000	9.29005	60.00000	Linear
102 1,4-Dioxane	0.37050	0.48478	0.48478	0.000	30.84714	60.00000	Averaged
103 Methyl methacrylate	0.21351	0.27929	0.27929	0.000	30.81270	60.00000	Averaged
104 Ethyl methacrylate	0.89246	1.16472	1.16472	0.000	30.50708	60.00000	Averaged
105 2-Picoline	1.30074	1.34281	1.34281	0.000	3.23452	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.57807	0.62738	0.62738	0.000	8.53033	60.00000	Averaged
107 Methyl methanesulfonate	0.60378	0.70581	0.70581	0.000	16.89775	60.00000	Averaged
108 N-Nitrosodiethylamine	0.58167	0.62350	0.62350	0.000	7.19031	60.00000	Averaged
109 Ethyl Methanesulfonate	0.74637	0.99843	0.99843	0.000	33.77148	60.00000	Averaged
110 Pentachloroethane	0.32905	0.48815	0.48815	0.000	48.35264	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.60059	0.65198	0.65198	0.000	8.55722	60.00000	Averaged
113 N-Nitrosomorpholine	0.98604	1.06719	1.06719	0.000	8.22947	60.00000	Averaged
114 o-Toluidine	1.80736	1.88793	1.88793	0.000	4.45782	60.00000	Averaged
115 N-Nitrosopiperidine	0.15108	0.16164	0.16164	0.000	6.98512	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.11880	1.16043	1.16043	0.000	3.72071	60.00000	Averaged
118 2,6-Dichlorophenol	0.21531	0.25050	0.25050	0.000	16.34370	60.00000	Averaged
119 Hexachloropropene	0.11708	0.19865	0.19865	0.000	69.66795	60.00000	Averaged
120 p-Phenylenediamine	0.24808	0.28612	0.28612	0.000	15.33691	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.23566	0.24977	0.24977	0.000	5.98473	60.00000	Averaged
122 Safrrole	0.19323	0.24544	0.24544	0.000	27.02225	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42534	0.50468	0.50468	0.000	18.65216	60.00000	Averaged
124 Isosafrole	0.35652	0.51744	0.51744	0.000	45.13574	60.00000	Averaged
125 1,4-Naphthoquinone	0.33545	0.36014	0.36014	0.000	7.36120	60.00000	Averaged
127 Pentachlorobenzene	0.37060	0.42276	0.42276	0.000	14.07224	60.00000	Averaged
128 1-Naphthylamine	0.91242	1.03143	1.03143	0.000	13.04392	60.00000	Averaged
129 2-Naphthylamine	1.00263	1.12891	1.12891	0.000	12.59532	60.00000	Averaged
131 5-Nitro-o-toluidine	0.29533	0.33028	0.33028	0.000	11.83547	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.14894	0.22680	0.22680	0.000	52.28395	60.00000	Averaged
137 Phenacetin	0.33125	0.38915	0.38915	0.000	17.47830	60.00000	Averaged
138 Diallate	0.31820	0.32997	0.32997	0.000	3.69872	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 21-JAN-2010 01:29
 Lab File ID: s3a2031.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
 Analysis Type: Init. Cal. Times: 17:59 00:33
 Lab Sample ID: WBN100103-08.1 Quant Type: ISTD
 Method: /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF %D / %DRIFT	%D / %DRIFT	
140 4-Aminobiphenyl	0.63580	0.70273	0.70273	0.000	10.52630	60.00000 Averaged
141 Pentachloronitrobenzene	0.07853	0.09143	0.09143	0.000	16.43821	60.00000 Averaged
142 Pronamide	0.29619	0.34625	0.34625	0.000	16.89924	60.00000 Averaged
146 4-Nitroquinoline-1-oxide	0.03387	0.03596	0.03596	0.000	6.17128	60.00000 Averaged
147 Methapyrilene	0.52598	0.61294	0.61294	0.000	16.53393	60.00000 Averaged
148 Isodrin	0.11094	0.11480	0.11480	0.000	3.48482	60.00000 Averaged
149 Aramite	0.04585	0.04869	0.04869	0.000	6.19320	60.00000 Averaged
150 Kepone	0.06767	0.07404	0.07404	0.000	9.41477	60.00000 Averaged
151 p-(Dimethylamino)azobenzene	0.39647	0.41235	0.41235	0.000	4.00381	60.00000 Averaged
152 Chlorobenzilate	0.32229	0.35506	0.35506	0.000	10.16696	60.00000 Averaged
153 3,3'-Dimethylbenzidine	0.51678	0.53770	0.53770	0.000	4.04793	60.00000 Averaged
155 2-Acetylaminofluorene	43.29018	40.00000	0.34384	0.000	8.22545	60.00000 Linear
157 7,12Dimethylbenz(a)anthracene	0.53008	0.55722	0.55722	0.000	5.11999	60.00000 Averaged
158 3-Methylcholanthrene	0.38427	0.46495	0.46495	0.000	20.99848	60.00000 Averaged
212 Cis Diallate	0.33782	0.46727	0.46727	0.000	38.32025	60.00000 Averaged
213 Trans Diallate	0.37435	0.38819	0.38819	0.000	3.69872	60.00000 Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012010a.b/s3a2031.d
 Lab Smp Id: WBN100103-08.1 Client Smp ID: APICV
 Inj Date : 21-JAN-2010 01:29
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |WBN100103-08.1|40PPM|1|SVMF|1|APICV
 Misc Info : |MSD8270|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012010a.b/MSD3-8270R-AQA-012010.m
 Meth Date : 21-Jan-2010 09:24 jen00986 Quant Type: ISTD
 Cal Date : 20-JAN-2010 21:56 Cal File: s3a2023.d
 Als bottle: 32 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: AP12.sub
 Target Version: 3.50
 Processing Host: hpclpl1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.782	4.782	(1.000)	601996	40.0000	
* 29 Naphthalene-d8	136	6.064	6.064	(1.000)	2246525	40.0000	
* 46 Acenaphthene-d10	164	7.939	7.939	(1.000)	1188314	40.0000	
* 67 Phenanthrene-d10	188	9.561	9.561	(1.000)	1851984	40.0000	
* 91 Chrysene-d12	240	12.572	12.572	(1.000)	1380458	40.0000	
* 98 Perylene-d12	264	14.895	14.895	(1.000)	919801	40.0000	
209 Benzaldehyde	77	4.377	4.377	(0.915)	529070	40.0000	35.0
16 Acetophenone	105	5.163	5.163	(1.080)	860378	40.0000	43.2
189 Caprolactam	113	6.504	6.504	(1.073)	237531	40.0000	49.3
208 1,1'-Biphenyl	154	7.311	7.311	(0.921)	1614222	40.0000	44.9
207 Atrazine	173	9.217	9.217	(0.964)	101175	40.0000	47.2
77 Benzidine	184	11.005	11.005	(0.875)	513228	40.0000	42.0
90 3,3'-Dichlorobenzidine	252	12.501	12.501	(0.994)	416362	40.0000	43.7
102 1,4-Dioxane	88	2.396	2.396	(0.501)	291838	40.0000	52.3
103 Methyl methacrylate	100	2.393	2.393	(0.500)	168133	40.0000	52.3
104 Ethyl methacrylate	69	2.912	2.912	(0.609)	701155	40.0000	52.2
105 2-Picoline	93	3.169	3.169	(0.663)	808367	40.0000	41.3
106 N-Nitrosomethylethylamine	88	3.243	3.243	(0.678)	377681	40.0000	43.4
107 Methyl methanesulfonate	80	3.474	3.474	(0.727)	424893	40.0000	46.8
108 N-Nitrosodiethylamine	102	3.809	3.809	(0.796)	375342	40.0000	42.9
109 Ethyl Methanesulfonate	79	4.052	4.052	(0.847)	601051	40.0000	53.5
110 Pentachloroethane	167	4.521	4.521	(0.945)	293863	40.0000	59.3
111 N-Nitrosopyrrolidine	100	5.154	5.154	(1.078)	392491	40.0000	43.4(Q)
113 N-Nitrosomorpholine	56	5.187	5.187	(1.085)	642444	40.0000	43.3
114 o-Toluidine	106	5.201	5.201	(1.088)	1136525	40.0000	41.8
115 N-Nitrosopiperidine	114	5.498	5.498	(0.907)	363120	40.0000	42.8

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	5.896	5.896	(0.972)	2606938	40.0000	41.5
118 2,6-Dichlorophenol	162	6.137	6.137	(1.012)	562759	40.0000	46.5
119 Hexachloropropene	213	6.169	6.169	(1.017)	446272	40.0000	67.9
120 p-Phenylenediamine	108	6.507	6.507	(1.073)	642785	40.0000	46.1
121 N-Nitrosodi-n-butylamine	84	6.469	6.469	(1.067)	561110	40.0000	42.4(Q)
122 Safrole	162	6.704	6.704	(1.106)	551387	40.0000	50.8
123 1,2,4,5-Tetrachlorobenzene	216	6.985	6.985	(0.880)	599717	40.0000	47.5
124 Isosafrole	162	7.261	7.261	(0.915)	614885	40.0000	58.0
125 1,4-Naphthoquinone	158	7.525	7.525	(0.948)	427957	40.0000	42.9
127 Pentachlorobenzene	250	8.109	8.109	(1.021)	502367	40.0000	45.6
128 1-Naphthylamine	143	8.244	8.244	(1.038)	1225664	40.0000	45.2
129 2-Naphthylamine	143	8.330	8.330	(1.049)	1341500	40.0000	45.0
131 5-Nitro-o-toluidine	152	8.538	8.538	(1.075)	392478	40.0000	44.7
136 1,3,5-Trinitrobenzene	75	8.917	8.917	(0.933)	420039	40.0000	60.9
137 Phenacetin	108	8.978	8.978	(0.939)	720701	40.0000	47.0(Q)
138 Diallate	86	8.946	8.946	(0.936)	611091	40.0000	41.5
140 4-Aminobiphenyl	169	9.340	9.340	(0.977)	1301442	40.0000	44.2
141 Pentachloronitrobenzene	237	9.346	9.346	(0.978)	169333	40.0000	46.6(Q)
142 Pronamide	173	9.381	9.381	(0.981)	641242	40.0000	46.8
146 4-Nitroquinoline-1-oxide	101	10.417	10.417	(1.090)	66605	40.0000	42.5
147 Methapyrilene	58	10.476	10.476	(1.096)	1135156	40.0000	46.6
148 Isodrin	193	10.711	10.711	(1.120)	212615	40.0000	41.4
149 Aramite	185	11.228	11.228	(1.174)	90172	40.0000	42.5
150 Kepone	272	11.890	11.890	(1.244)	137118	40.0000	43.8
151 p-(Dimethylamino)azobenzene	120	11.422	11.422	(0.909)	569227	40.0000	41.6
152 Chlorobenzilate	251	11.464	11.464	(0.912)	490148	40.0000	44.1
153 3,3'-Dimethylbenzidine	212	11.807	11.807	(0.939)	742275	40.0000	41.6
155 2-Acetylaminofluorene	181	12.119	12.119	(0.964)	474661	40.0000	43.3
157 7,12Dimethylbenz(a)anthracene	256	14.200	14.200	(0.953)	512532	40.0000	42.0
158 3-Methylcholanthrene	268	15.418	15.418	(1.035)	427666	40.0000	48.4(Q)
212 Cis Diallate	86	9.046	9.046	(0.946)	129807	6.00000	8.3
213 Trans Diallate	86	8.946	8.946	(0.936)	611091	34.0000	35.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.i/s012010a.k/s3a2031.d

Date: 21-Jan-2010 01:29

Client ID: APICV

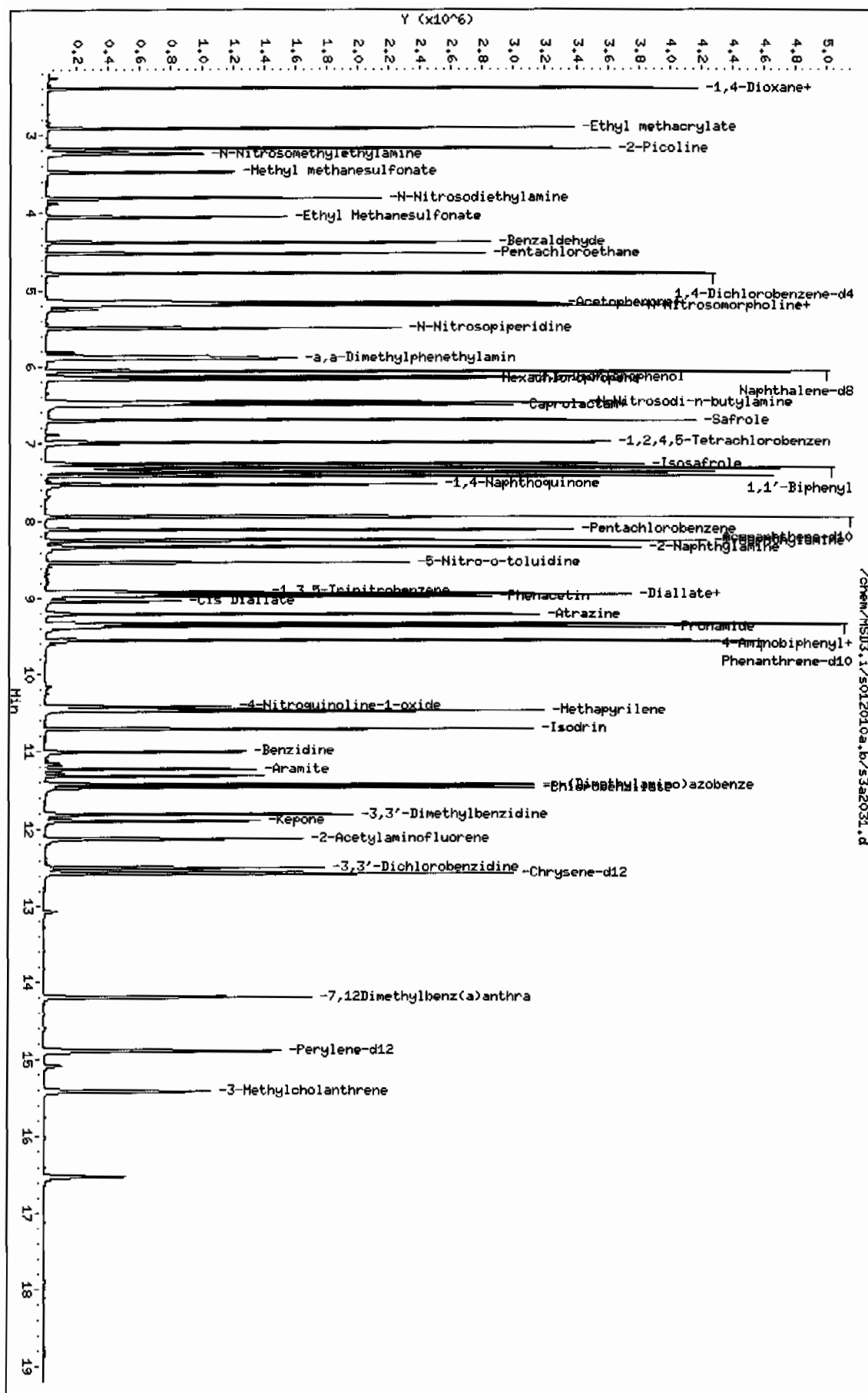
Sample Info: 14BN100103-08.1140PH11SWF11APICV

Column phase: 3M DB-5MS

Instrument: MSD3.i

Operator: JLD

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 25-JAN-2010 10:04
Lab File ID: s3a2503.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
Method: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
\$ 3 2-Fluorophenol	1.04085	0.83793	0.83793	0.000	-19.49607	60.00000	Averaged
\$ 5 Phenol-d5	1.30813	1.12975	1.12975	0.000	-13.63606	60.00000	Averaged
\$ 20 Nitrobenzene-d5	0.29548	0.26726	0.26726	0.000	-9.54760	60.00000	Averaged
\$ 39 2-Fluorobiphenyl	1.03392	1.02987	1.02987	0.000	-0.39136	60.00000	Averaged
\$ 60 2,4,6-Tribromophenol	0.11467	0.10135	0.10135	0.000	-11.61793	60.00000	Averaged
\$ 81 p-Terphenyl-d14	0.68752	0.68643	0.68643	0.000	-0.15853	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.72841	0.49141	0.49141	0.000	-32.53632	60.00000	Averaged
2 Pyridine	0.81403	0.53987	0.53987	0.000	-33.67881	60.00000	Averaged
4 Aniline	0.60975	0.50884	0.50884	0.000	-16.54964	60.00000	Averaged
6 Phenol	1.38337	1.24275	1.24275	0.001	-10.16482	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.09435	0.80905	0.80905	0.000	-26.07051	60.00000	Averaged
8 2-Chlorophenol	1.05048	1.01991	1.01991	0.000	-2.90947	60.00000	Averaged
203 n-Decane	1.59470	1.25847	1.25847	0.000	-21.08421	60.00000	Averaged
9 1,3-Dichlorobenzene	1.20957	1.21014	1.21014	0.000	0.04729	60.00000	Averaged
11 1,4-Dichlorobenzene	1.22630	1.20822	1.20822	0.001	-1.47466	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.15004	1.13440	1.13440	0.000	-1.35943	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.59104	1.91577	1.91577	0.000	-26.06178	60.00000	Averaged
12 Benzyl alcohol	0.73117	0.66362	0.66362	0.000	-9.23893	60.00000	Averaged
15 o-Cresol	0.89964	0.81007	0.81007	0.000	-9.95603	60.00000	Averaged
18 m,p-Cresols	1.17039	1.08941	1.08941	0.000	-6.91901	60.00000	Averaged
17 N-Nitrosodipropylamine	0.88907	0.76766	0.76766	0.050	-13.65587	60.00000	Averaged spcc
19 Hexachloroethane	0.52660	0.49102	0.49102	0.000	-6.75554	60.00000	Averaged
21 Nitrobenzene	0.31068	0.27861	0.27861	0.000	-10.32338	60.00000	Averaged
22 Isophorone	0.55065	0.49343	0.49343	0.000	-10.39081	60.00000	Averaged
23 2-Nitrophenol	0.14255	0.13950	0.13950	0.001	-2.13683	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.24644	0.23958	0.23958	0.000	-2.78343	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31970	0.27357	0.27357	0.000	-14.42898	60.00000	Averaged
26 2,4-Dichlorophenol	0.20739	0.21243	0.21243	0.001	2.43275	20.00000	Averaged ccc
27 Benzoic acid	0.17347	0.15631	0.15631	0.000	-9.89354	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.23033	0.23755	0.23755	0.000	3.13375	60.00000	Averaged
30 Naphthalene	0.84122	0.71802	0.71802	0.000	-14.64575	60.00000	Averaged
204 alpha-Terpineol	0.27709	0.21900	0.21900	0.000	-20.96619	60.00000	Averaged
31 4-Chloroaniline	40.29952	40.00000	0.25630	0.000	0.74879	60.00000	Linear
32 Hexachlorobutadiene	0.13146	0.13768	0.13768	0.001	4.73104	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.23504	0.22920	0.22920	0.001	-2.48225	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.50578	0.48647	0.48647	0.000	-3.81794	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 25-JAN-2010 10:04
Lab File ID: s3a2503.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
Method: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.51307	0.46781	0.46781	0.000	-8.82161	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.22766	0.22607	0.22607	0.050	-0.69686	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.50997	0.48632	0.48632	0.000	-4.63674	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.28670	0.29317	0.29317	0.001	2.25585	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.30976	0.31938	0.31938	0.000	3.10612	60.00000	Averaged
40 2-Chloronaphthalene	0.94508	0.90333	0.90333	0.000	-4.41724	60.00000	Averaged
42 o-Nitroaniline	0.37117	0.28844	0.28844	0.000	-22.28894	60.00000	Averaged
41 m-Nitroaniline	37.49026	40.00000	0.20540	0.000	-6.27434	60.00000	Linear
43 Dimethylphthalate	1.08482	1.03747	1.03747	0.000	-4.36533	60.00000	Averaged
44 2,6-Dinitrotoluene	0.25779	0.24851	0.24851	0.000	-3.60005	60.00000	Averaged
50 2,4-Dinitrotoluene	0.32038	0.30943	0.30943	0.000	-3.41736	60.00000	Averaged
45 Acenaphthylene	1.48695	1.41943	1.41943	0.000	-4.54056	60.00000	Averaged
47 Acenaphthene	0.94692	0.87204	0.87204	0.001	-7.90778	20.00000	Averaged ccc
48 2,4-Dinitrophenol	0.11484	0.11887	0.11887	0.050	3.50630	60.00000	Averaged spcc
49 Dibenzofuran	1.21446	1.20679	1.20679	0.000	-0.63147	60.00000	Averaged
51 Diethylphthalate	1.07824	1.04052	1.04052	0.000	-3.49836	60.00000	Averaged
52 4-Nitrophenol	0.18279	0.17279	0.17279	0.050	-5.47011	60.00000	Averaged spcc
53 Fluorene	1.02579	0.96529	0.96529	0.000	-5.89815	60.00000	Averaged
54 4-Chlorophenylphenylether	0.48232	0.48013	0.48013	0.000	-0.45531	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10303	0.14327	0.14327	0.000	39.05524	60.00000	Averaged
56 p-Nitroaniline	35.05083	40.00000	0.18390	0.000	-12.37292	60.00000	Linear
133 Diphenylamine	0.53006	0.50048	0.50048	0.001	-5.58086	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.78142	0.65025	0.65025	0.000	-16.78593	60.00000	Averaged
61 4-Bromophenylphenylether	0.17043	0.15143	0.15143	0.000	-11.14959	60.00000	Averaged
63 Hexachlorobenzene	0.17700	0.15984	0.15984	0.000	-9.69691	60.00000	Averaged
65 Pentachlorophenol	0.10027	0.10820	0.10820	0.001	7.91089	20.00000	Averaged ccc
206 n-Octadecane	0.65176	0.49938	0.49938	0.000	-23.37913	60.00000	Averaged
68 Phenanthrene	0.87923	0.82680	0.82680	0.000	-5.96328	60.00000	Averaged
69 Anthracene	0.87768	0.83172	0.83172	0.000	-5.23597	60.00000	Averaged
72 Di-n-butylphthalate	1.06159	1.03601	1.03601	0.000	-2.40998	60.00000	Averaged
76 Fluoranthene	0.80003	0.81794	0.81794	0.001	2.23889	20.00000	Averaged ccc
79 Pyrene	1.14589	1.02918	1.02918	0.000	-10.18571	60.00000	Averaged
85 Butylbenzylphthalate	0.57344	0.51739	0.51739	0.000	-9.77451	60.00000	Averaged
89 Benzo(a)anthracene	0.91588	0.84391	0.84391	0.000	-7.85780	60.00000	Averaged
92 Chrysene	0.86151	0.81572	0.81572	0.000	-5.31521	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.78921	0.72489	0.72489	0.000	-8.15012	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 25-JAN-2010 10:04
 Lab File ID: s3a2503.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
 Analysis Type: Init. Cal. Times: 17:59 23:34
 Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
 Method: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF %D / %DRIFT	%D / %DRIFT	
94 Di-n-octylphthalate	1.61982	1.35446	1.35446 0.001	-16.38205	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.93870	0.88275	0.88275 0.000	-5.96101	60.00000	Averaged
96 Benzo(k)fluoranthene	0.97450	0.92403	0.92403 0.000	-5.17884	60.00000	Averaged
97 Benzo(a)pyrene	0.81798	0.82139	0.82139 0.001	0.41685	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66728	0.76732	0.76732 0.000	14.99098	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.54458	0.62803	0.62803 0.000	15.32268	60.00000	Averaged
101 Benzo(ghi)perylene	0.54772	0.63696	0.63696 0.000	16.29398	60.00000	Averaged
126 m-Dinitrobenzene	0.18506	0.17250	0.17250 0.000	-6.79067	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24334	0.23999	0.23999 0.000	-1.37664	60.00000	Averaged
143 Dinoseb	0.14194	0.15636	0.15636 0.000	10.15976	60.00000	Averaged
173 Carbazole	0.71254	0.68572	0.68572 0.000	-3.76338	60.00000	Averaged
184 p-Benzoquinone	0.09247	0.06227	0.06227 0.000	-32.66056	60.00000	Averaged
192 Methoxychlor	0.51665	0.55760	0.55760 0.000	7.92644	60.00000	Averaged
211 p-Toluidine	0.91289	0.88831	0.88831 0.000	-2.69270	60.00000	Averaged
210 m-Toluidine	1.30281	1.33179	1.33179 0.000	2.22439	60.00000	Averaged
26 Phthalic anhydride	0.10481	0.15607	0.15607 0.000	48.91220	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.23979	0.22643	0.22643 0.000	-5.57198	60.00000	Averaged
214 1,4-Dinitrobenzene	0.21468	0.17362	0.17362 0.000	-19.12556	60.00000	Averaged
215 2-Ethoxyethanol	0.84974	0.59815	0.59815 0.000	-29.60775	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.10764	0.11585	0.11585 0.000	7.62674	60.00000	Averaged
M 225 Trichlorophenols	0.29823	0.30627	0.30627 0.000	2.69742	60.00000	Averaged
M 226 Tetrachlorophenols	0.24334	0.23999	0.23999 0.000	-1.37664	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.95660	0.90339	0.90339 0.000	-5.56261	60.00000	Averaged

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Data file : /chem/MSD3.i/s012510.b/s3a2503.d
Lab Smp Id: WBN100121-17.2 Client Smp ID: MEGACVS
Inj Date : 25-JAN-2010 10:04
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |WBN100121-17.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAILI.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.841	4.841	(1.000)	385188	40.0000	
* 29 Naphthalene-d8	136	6.126	6.126	(1.000)	1537267	40.0000	
* 46 Acenaphthene-d10	164	8.003	8.003	(1.000)	795210	40.0000	
* 67 Phenanthrene-d10	188	9.618	9.618	(1.000)	1246225	40.0000	
* 91 Chrysene-d12	240	12.650	12.650	(1.000)	1022987	40.0000	
* 98 Perylene-d12	264	14.999	14.999	(1.000)	819421	40.0000	
\$ 3 2-Fluorophenol	112	3.653	3.653	(0.755)	322759	40.0000	32.2
\$ 5 Phenol-d5	99	4.436	4.436	(0.916)	435166	40.0000	34.5
\$ 20 Nitrobenzene-d5	82	5.384	5.384	(0.879)	410857	40.0000	36.2
\$ 39 2-Fluorobiphenyl	172	7.254	7.254	(0.906)	818963	40.0000	39.8
\$ 60 2,4,6-Tribromophenol	329	8.852	8.852	(1.106)	80592	40.0000	35.4
\$ 81 p-Terphenyl-d14	244	11.326	11.326	(0.895)	702214	40.0000	39.9
1 N-Methyl-N-nitrosomethylamine	74	2.657	2.657	(0.549)	189285	40.0000	27.0
2 Pyridine	79	2.701	2.701	(0.558)	207953	40.0000	26.5
4 Aniline	66	4.527	4.527	(0.935)	196000	40.0000	33.4
6 Phenol	94	4.450	4.450	(0.919)	478694	40.0000	35.9
7 bis(2-Chloroethyl) ether	63	4.565	4.565	(0.943)	311636	40.0000	29.6
8 2-Chlorophenol	128	4.638	4.638	(0.958)	392859	40.0000	38.8
203 n-Decane	43	4.641	4.641	(0.959)	484748	40.0000	31.6
9 1,3-Dichlorobenzene	146	4.791	4.791	(0.990)	466133	40.0000	40.0
11 1,4-Dichlorobenzene	146	4.858	4.858	(1.004)	465390	40.0000	39.4
13 1,2-Dichlorobenzene	146	5.008	5.008	(1.035)	436959	40.0000	39.4
14 bis(2-Chloroisopropyl) ether	45	5.073	5.073	(1.048)	737930	40.0000	29.6
12 Benzyl alcohol	108	4.949	4.949	(1.022)	255619	40.0000	36.3
15 o-Cresol	107	5.034	5.034	(1.040)	312029	40.0000	36.0
18 m,p-Cresols	107	5.187	5.187	(1.072)	419628	40.0000	37.2

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70		5.213	5.213	(1.077)	295694	40.0000	34.5
19 Hexachloroethane	117		5.343	5.343	(1.104)	189136	40.0000	37.3
21 Nitrobenzene	77		5.401	5.401	(0.882)	428299	40.0000	35.9
22 Isophorone	82		5.636	5.636	(0.920)	758537	40.0000	35.8
23 2-Nitrophenol	139		5.721	5.721	(0.934)	214456	40.0000	39.1
24 2,4-Dimethylphenol	122		5.727	5.727	(0.935)	368299	40.0000	38.9
25 bis(2-Chloroethoxy)methane	93		5.836	5.836	(0.953)	420546	40.0000	34.2
26 2,4-Dichlorophenol	162		5.959	5.959	(0.973)	326566	40.0000	41.0
27 Benzoic acid	105		5.818	5.818	(0.950)	240285	40.0000	36.0
28 1,2,4-Trichlorobenzene	180		6.056	6.056	(0.988)	365175	40.0000	41.2
30 Naphthalene	128		6.150	6.150	(1.004)	1103790	40.0000	34.1
204 alpha-Terpineol	59		6.132	6.132	(1.001)	336657	40.0000	31.6
31 4-Chloroaniline	127		6.188	6.188	(1.010)	394007	40.0000	40.3
32 Hexachlorobutadiene	225		6.256	6.256	(1.021)	211653	40.0000	41.9
33 4-Chloro-3-methylphenol	107		6.667	6.667	(1.088)	352345	40.0000	39.0
34 2-Methylnaphthalene	142		6.875	6.875	(1.122)	747833	40.0000	38.5
35 1-Methylnaphthalene	142		6.981	6.981	(1.139)	719151	40.0000	36.5
36 Hexachlorocyclopentadiene	237		7.028	7.028	(0.878)	179772	40.0000	39.7
205 2,3-Dichloroaniline	161		7.172	7.172	(0.896)	386730	40.0000	38.1
37 2,4,6-Trichlorophenol	196		7.163	7.163	(0.895)	233130	40.0000	40.9
38 2,4,5-Trichlorophenol	196		7.198	7.198	(0.899)	253972	40.0000	41.2
40 2-Chloronaphthalene	162		7.401	7.401	(0.925)	718338	40.0000	38.2
42 o-Nitroaniline	65		7.501	7.501	(0.937)	229370	40.0000	31.1
41 m-Nitroaniline	138		7.944	7.944	(0.993)	163340	40.0000	37.5
43 Dimethylphthalate	163		7.686	7.686	(0.960)	825003	40.0000	38.2
44 2,6-Dinitrotoluene	165		7.756	7.756	(0.969)	197620	40.0000	38.6
50 2,4-Dinitrotoluene	165		8.191	8.191	(1.023)	246063	40.0000	38.6
45 Acenaphthylene	152		7.853	7.853	(0.981)	1128745	40.0000	38.2
47 Acenaphthene	154		8.038	8.038	(1.004)	693452	40.0000	36.8
48 2,4-Dinitrophenol	184		8.053	8.053	(1.006)	94527	40.0000	41.4
49 Dibenzofuran	168		8.223	8.223	(1.028)	959650	40.0000	39.7
51 Diethylphthalate	149		8.437	8.437	(1.054)	827430	40.0000	38.6
52 4-Nitrophenol	139		8.091	8.091	(1.011)	137406	40.0000	37.8
53 Fluorene	166		8.593	8.593	(1.074)	767608	40.0000	37.6
54 4-Chlorophenylphenylether	204		8.578	8.578	(1.072)	381803	40.0000	39.8
55 2-Methyl-4,6-dinitrophenol	198		8.631	8.631	(0.897)	178545	40.0000	55.6
56 p-Nitroaniline	138		8.605	8.605	(1.075)	146241	40.0000	35.0
133 Diphenylamine	169		8.705	8.705	(0.905)	623714	40.0000	37.8
58 1,2-Diphenylhydrazine	77		8.755	8.755	(0.910)	810363	40.0000	33.3
61 4-Bromophenylphenylether	248		9.113	9.113	(0.947)	188714	40.0000	35.5
63 Hexachlorobenzene	284		9.186	9.186	(0.955)	199194	40.0000	36.1
65 Pentachlorophenol	266		9.392	9.392	(0.976)	134840	40.0000	43.2
206 n-Octadecane	57		9.436	9.436	(0.981)	622343	40.0000	30.6
68 Phenanthrene	178		9.645	9.645	(1.003)	1030373	40.0000	37.6
69 Anthracene	178		9.700	9.700	(1.009)	1036511	40.0000	37.9
72 Di-n-butylphthalate	149		10.202	10.202	(1.061)	1291100	40.0000	39.0
76 Fluoranthene	202		10.935	10.935	(1.137)	1019335	40.0000	40.9

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	11.188	11.188	(0.884)	1052834	40.0000	35.9
85 Butylbenzylphthalate	149	11.863	11.863	(0.938)	529279	40.0000	36.1
89 Benzo(a)anthracene	228	12.633	12.633	(0.999)	863309	40.0000	36.8
92 Chrysene	228	12.686	12.686	(1.003)	834468	40.0000	37.9
93 bis(2-Ethylhexyl)phthalate	149	12.588	12.588	(0.995)	741554	40.0000	36.7
94 Di-n-octylphthalate	149	13.584	13.584	(0.906)	1109872	40.0000	33.4
95 Benzo(b)fluoranthene	252	14.317	14.317	(0.955)	723342	40.0000	37.6
96 Benzo(k)fluoranthene	252	14.364	14.364	(0.958)	757168	40.0000	37.9
97 Benzo(a)pyrene	252	14.899	14.899	(0.993)	673062	40.0000	40.2
99 Indeno(1,2,3-cd)pyrene	276	16.998	16.998	(1.133)	628755	40.0000	46.0
100 Dibenzo(a,h)anthracene	278	17.027	17.027	(1.135)	514619	40.0000	46.1
101 Benzo(ghi)perylene	276	17.515	17.515	(1.168)	521939	40.0000	46.5
126 m-Dinitrobenzene	168	7.730	7.730	(0.966)	137170	40.0000	37.3
130 2,3,4,6-Tetrachlorophenol	232	8.340	8.340	(1.042)	190839	40.0000	39.4
143 Dinoseb	211	9.574	9.574	(0.995)	194862	40.0000	44.1
173 Carbazole	167	9.865	9.865	(1.026)	854564	40.0000	38.5
184 p-Benzoquinone	54	4.096	4.096	(0.846)	23984	40.0000	26.9
192 Methoxychlor	227	12.494	12.494	(0.988)	570422	40.0000	43.2
211 p-Toluidine	106	5.261	5.261	(1.087)	342165	40.0000	38.9
210 m-Toluidine	106	5.296	5.296	(1.094)	512989	40.0000	40.9
26 Phthalic anhydride	104	6.934	6.934	(1.132)	239926	40.0000	59.6
179 Dibenzo(a,e)pyrene	302	21.272	21.272	(1.418)	185539	40.0000	37.8
214 1,4-Dinitrobenzene	75	7.647	7.647	(0.956)	138065	40.0000	32.3
215 2-Ethoxyethanol	59	2.440	2.440	(0.504)	230401	40.0000	28.2
216 Methylenebis(2-chloroaniline)	231	12.574	12.574	(0.994)	118517	40.0000	43.0(H)
M 225 Trichlorophenols	196				487102	80.0000	82.2
M 226 Tetrachlorophenols	232				190839	40.0000	39.4
M 227 Benzo(b,k)fluoranthene	252				1480510	80.0000	75.5

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD3.i/s012510.b/s3a2503.d

Date : 25-JAN-2010 10:04

Client ID: MEGACY5

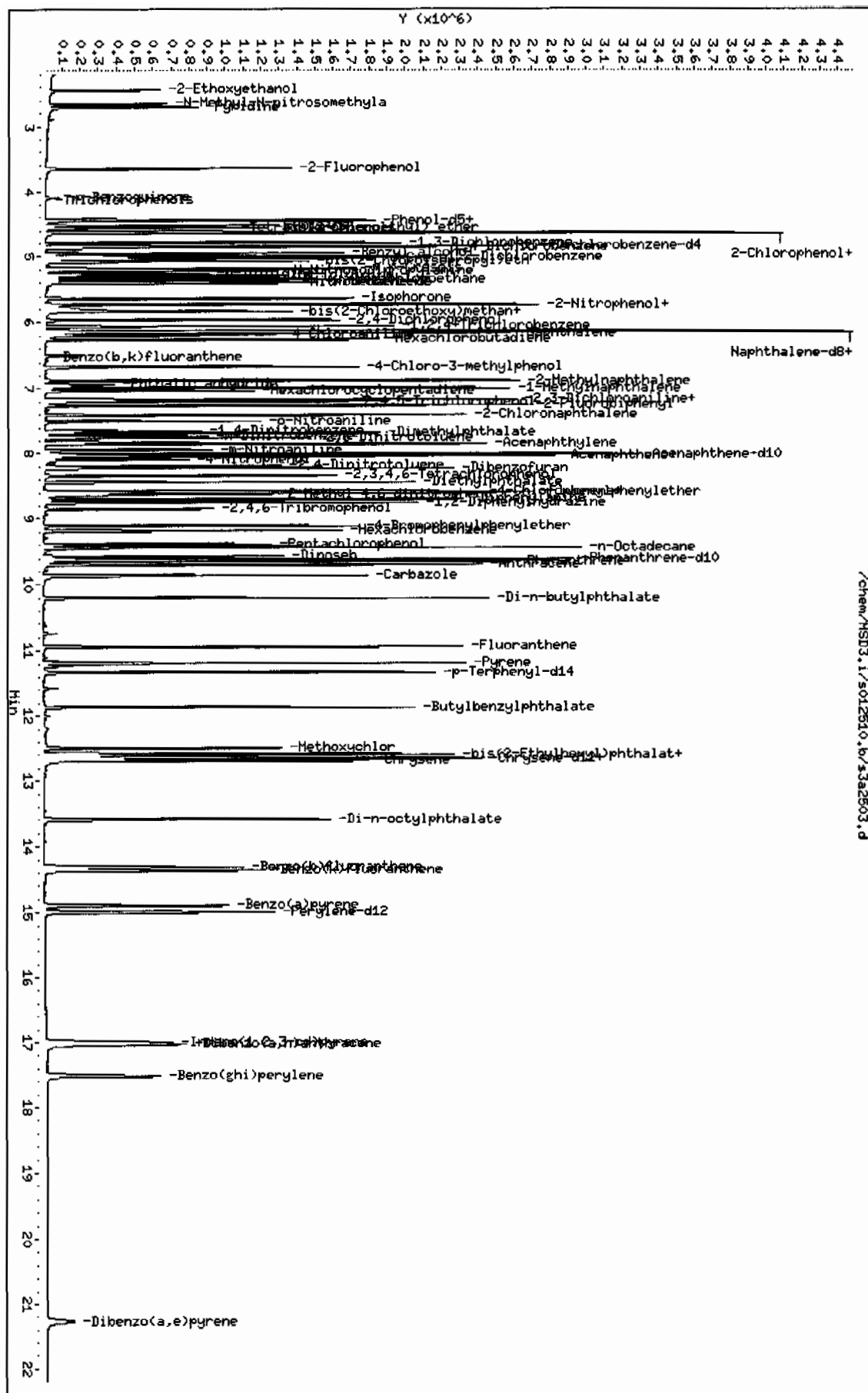
Sample Info: 1|WB100121-17.2|40 PPM|1SVHF|1|MEGACVS

Column phase: J&W DB-5MS

Instrument: MSD3.1

Operator: JLD1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 25-JAN-2010 11:00
Lab File ID: s3a2504.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100120-08.3 Quant Type: ISTD
Method: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
209 Benzaldehyde	1.00310	0.65674	0.65674	0.000	-34.52847	Averaged
16 Acetophenone	1.32216	1.05064	1.05064	0.000	-20.53549	Averaged
189 Caprolactam	0.08576	0.07242	0.07242	0.000	-15.55432	Averaged
208 1,1'-Biphenyl	1.21038	1.11596	1.11596	0.000	-7.80080	Averaged
207 Atrazine	0.04628	0.04189	0.04189	0.000	-9.48352	Averaged
77 Benzidine	39.86206	40.00000	0.34867	0.000	-0.34486	Linear
90 3,3'-Dichlorobenzidine	38.19120	40.00000	0.26025	0.000	-4.52200	Linear
102 1,4-Dioxane	0.37050	0.35637	0.35637	0.000	-3.81226	Averaged
103 Methyl methacrylate	0.21351	0.21315	0.21315	0.000	-0.16493	Averaged
104 Ethyl methacrylate	0.89246	0.82848	0.82848	0.000	-7.16855	Averaged
105 2-Picoline	1.30074	1.01441	1.01441	0.000	-22.01264	Averaged
106 N-Nitrosomethylethylamine	0.57807	0.44624	0.44624	0.000	-22.80471	Averaged
107 Methyl methanesulfonate	0.60378	0.51203	0.51203	0.000	-15.19690	Averaged
108 N-Nitrosodiethylamine	0.58167	0.47694	0.47694	0.000	-18.00508	Averaged
109 Ethyl Methanesulfonate	0.74637	0.68252	0.68252	0.000	-8.55514	Averaged
110 Pentachloroethane	0.32905	0.40432	0.40432	0.000	22.87737	Averaged
111 N-Nitrosopyrrolidine	0.60059	0.47380	0.47380	0.000	-21.11101	Averaged
113 N-Nitrosomorpholine	0.98604	0.73526	0.73526	0.000	-25.43311	Averaged
114 o-Toluidine	1.80736	1.46180	1.46180	0.000	-19.11981	Averaged
115 N-Nitrosopiperidine	0.15108	0.12246	0.12246	0.000	-18.94435	Averaged
116 a,a-Dimethylphenethylamine	1.11880	0.68729	0.68729	0.000	-38.56900	Averaged
118 2,6-Dichlorophenol	0.21531	0.19953	0.19953	0.000	-7.32872	Averaged
119 Hexachloropropene	0.11708	0.17392	0.17392	0.000	48.54521	Averaged
120 p-Phenylenediamine	0.24808	0.19493	0.19493	0.000	-21.42456	Averaged
121 N-Nitrosodi-n-butylamine	0.23566	0.18301	0.18301	0.000	-22.34210	Averaged
122 Safrrole	0.19323	0.19607	0.19607	0.000	1.47368	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42534	0.43297	0.43297	0.000	1.79276	Averaged
124 Isosafrole	0.35652	0.40693	0.40693	0.000	14.13720	Averaged
125 1,4-Naphthoquinone	0.33545	0.28856	0.28856	0.000	-13.97644	Averaged
127 Pentachlorobenzene	0.37060	0.32298	0.32298	0.000	-12.84999	Averaged
128 1-Naphthylamine	0.91242	0.78196	0.78196	0.000	-14.29763	Averaged
129 2-Naphthylamine	1.00263	0.82813	0.82813	0.000	-17.40343	Averaged
131 5-Nitro-o-toluidine	0.29533	0.22251	0.22251	0.000	-24.65553	Averaged
136 1,3,5-Trinitrobenzene	0.14894	0.14087	0.14087	0.000	-5.41807	Averaged
137 Phenacetin	0.33125	0.23845	0.23845	0.000	-28.01601	Averaged
138 Diallyate	0.31820	0.24351	0.24351	0.000	-23.47331	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 25-JAN-2010 11:00
 Lab File ID: s3a2504.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
 Analysis Type: Init. Cal. Times: 17:59 23:34
 Lab Sample ID: WBN100120-08.3 Quant Type: ISTD
 Method: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
140 4-Aminobiphenyl	0.63580	0.55092	0.55092	0.000	-13.35040	Averaged
141 Pentachloronitrobenzene	0.07853	0.07055	0.07055	0.000	-10.15844	Averaged
142 Pronamide	0.29619	0.25947	0.25947	0.000	-12.39924	Averaged
146 4-Nitroquinoline-1-oxide	0.03387	0.03136	0.03136	0.000	-7.43474	Averaged
147 Methapyrilene	0.52598	0.37182	0.37182	0.000	-29.30793	Averaged
148 Isodrin	0.11094	0.08812	0.08812	0.000	-20.56801	Averaged
149 Aramite	0.04585	0.03175	0.03175	0.000	-30.75257	Averaged
150 Kepone	0.06767	0.04972	0.04972	0.000	-26.51657	Averaged
151 p-(Dimethylamino)azobenzene	0.39647	0.29932	0.29932	0.000	-24.50456	Averaged
152 Chlorobenzilate	0.32229	0.25452	0.25452	0.000	-21.02737	Averaged
153 3,3'-Dimethylbenzidine	0.51678	0.49541	0.49541	0.000	-4.13530	Averaged
155 2-Acetylaminofluorene	37.18365	40.00000	0.28888	0.000	-7.04088	Linear
157 7,12Dimethylbenz(a)anthrace	0.53008	0.38366	0.38366	0.000	-27.62177	Averaged
158 3-Methylcholanthrene	0.38427	0.38753	0.38753	0.000	0.84918	Averaged
212 Cis Diallate	0.33782	0.31918	0.31918	0.000	-5.51759	Averaged
213 Trans Diallate	0.37435	0.28648	0.28648	0.000	-23.47331	Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2504.d
Lab Smp Id: WBN100120-08.3 Client Smp ID: APCVS
Inj Date : 25-JAN-2010 11:00
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |WBN100120-08.3|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:20 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpc1p1

Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
*****	----	--	-----	-----	-----	-----	-----
* 10 1,4-Dichlorobenzene-d4	152	4.841	4.841	(1.000)	403146	40.0000	
* 29 Naphthalene-d8	136	6.125	6.125	(1.000)	1484265	40.0000	
* 46 Acenaphthene-d10	164	8.000	8.000	(1.000)	767707	40.0000	
* 67 Phenanthrene-d10	188	9.620	9.620	(1.000)	1102494	40.0000	
* 91 Chrysene-d12	240	12.642	12.642	(1.000)	763043	40.0000	
* 98 Perylene-d12	264	14.997	14.997	(1.000)	645473	40.0000	
209 Benzaldehyde	77	4.436	4.436	(0.916)	264763	40.0000	26.2
16 Acetophenone	105	5.222	5.222	(1.079)	423563	40.0000	31.8
189 Caprolactam	113	6.550	6.550	(1.069)	107490	40.0000	33.8 (H)
208 1,1'-Biphenyl	154	7.369	7.369	(0.921)	856732	40.0000	36.9
207 Atrazine	173	9.270	9.270	(0.964)	46183	40.0000	36.2 (H)
77 Benzidine	184	11.066	11.066	(0.875)	266049	40.0000	39.9
90 3,3'-Dichlorobenzidine	252	12.572	12.572	(0.994)	198581	40.0000	38.2
102 1,4-Dioxane	88	2.446	2.446	(0.505)	143670	40.0000	38.5 (H)
103 Methyl methacrylate	100	2.440	2.440	(0.504)	85932	40.0000	39.9
104 Ethyl methacrylate	69	2.964	2.964	(0.612)	333998	40.0000	37.1
105 2-Picoline	93	3.231	3.231	(0.668)	408956	40.0000	31.2
106 N-Nitrosomethylethylamine	88	3.299	3.299	(0.681)	179901	40.0000	30.9 (H)
107 Methyl methanesulfonate	80	3.530	3.530	(0.729)	206421	40.0000	33.9
108 N-Nitrosodiethylamine	102	3.861	3.861	(0.798)	192277	40.0000	32.8
109 Ethyl Methanesulfonate	79	4.102	4.102	(0.847)	275154	40.0000	36.6
110 Pentachloroethane	167	4.580	4.580	(0.946)	163001	40.0000	49.2
111 N-Nitrosopyrrolidine	100	5.204	5.204	(1.075)	191010	40.0000	31.6 (Q)
113 N-Nitrosomorpholine	56	5.239	5.239	(1.082)	296418	40.0000	29.8 (H)
114 o-Toluidine	106	5.257	5.257	(1.086)	589317	40.0000	32.4 (H)
115 N-Nitrosopiperidine	114	5.553	5.553	(0.907)	181765	40.0000	32.4

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.926	5.926 (0.967)	1020124	40.0000	24.6 (H)
118 2,6-Dichlorophenol	162	6.196	6.196 (1.012)	296159	40.0000	37.1
119 Hexachloropropene	213	6.231	6.231 (1.017)	258142	40.0000	59.4
120 p-Phenylenediamine	108	6.559	6.559 (1.071)	289324	40.0000	31.4
121 N-Nitrosodi-n-butylamine	84	6.524	6.524 (1.065)	271638	40.0000	31.1 (Q)
122 Safrole	162	6.765	6.765 (1.104)	291025	40.0000	40.6
123 1,2,4,5-Tetrachlorobenzene	216	7.046	7.046 (0.881)	332393	40.0000	40.7
124 Isosafrole	162	7.319	7.319 (0.915)	312400	40.0000	45.6 (H)
125 1,4-Naphthoquinone	158	7.586	7.586 (0.948)	221531	40.0000	34.4
127 Pentachlorobenzene	250	8.170	8.170 (1.021)	247955	40.0000	34.9
128 1-Naphthylamine	143	8.305	8.305 (1.038)	600318	40.0000	34.3 (H)
129 2-Naphthylamine	143	8.390	8.390 (1.049)	635765	40.0000	33.0 (H)
131 5-Nitro-o-toluidine	152	8.595	8.595 (1.074)	170825	40.0000	30.1
136 1,3,5-Trinitrobenzene	75	8.973	8.973 (0.933)	155304	40.0000	37.8 (H)
137 Phenacetin	108	9.026	9.026 (0.938)	262889	40.0000	28.8 (Q)
138 Diallylate	86	9.006	9.006 (0.936)	268463	40.0000	30.6 (H)
140 4-Aminobiphenyl	169	9.396	9.396 (0.977)	607386	40.0000	34.6 (H)
141 Pentachloronitrobenzene	237	9.405	9.405 (0.978)	77779	40.0000	35.9 (Q)
142 Pronamide	173	9.435	9.435 (0.981)	286060	40.0000	35.0 (H)
146 4-Nitroquinoline-1-oxide	101	10.476	10.476 (1.089)	34569	40.0000	37.0 (H)
147 Methapyrilene	58	10.535	10.535 (1.095)	409933	40.0000	28.3 (H)
148 Isodrin	193	10.769	10.769 (1.119)	97152	40.0000	31.8 (H)
149 Aramite	185	11.283	11.283 (1.173)	35004	40.0000	27.7 (H)
150 Kepone	272	11.955	11.955 (1.243)	54821	40.0000	29.4
151 p-(Dimethylamino)azobenzene	120	11.477	11.477 (0.908)	228393	40.0000	30.2 (H)
152 Chlorobenzilate	251	11.518	11.518 (0.911)	194213	40.0000	31.6
153 3,3'-Dimethylbenzidine	212	11.867	11.867 (0.939)	378021	40.0000	38.3
155 2-Acetylaminofluorene	181	12.181	12.181 (0.964)	220426	40.0000	37.2 (H)
157 7,12Dimethylbenz(a)anthracene	256	14.293	14.293 (0.953)	247644	40.0000	29.0 (H)
158 3-Methylcholanthrene	268	15.520	15.520 (1.035)	250139	40.0000	40.3 (Q)
212 Cis Diallylate	86	9.106	9.106 (0.947)	52784	6.00000	5.7 (H)
213 Trans Diallylate	86	9.006	9.006 (0.936)	268463	34.0000	26.0 (H)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD3.1/s012510.b/s3a2504.d

Date: 25-JAN-2010 11:00

Client ID: APCVS

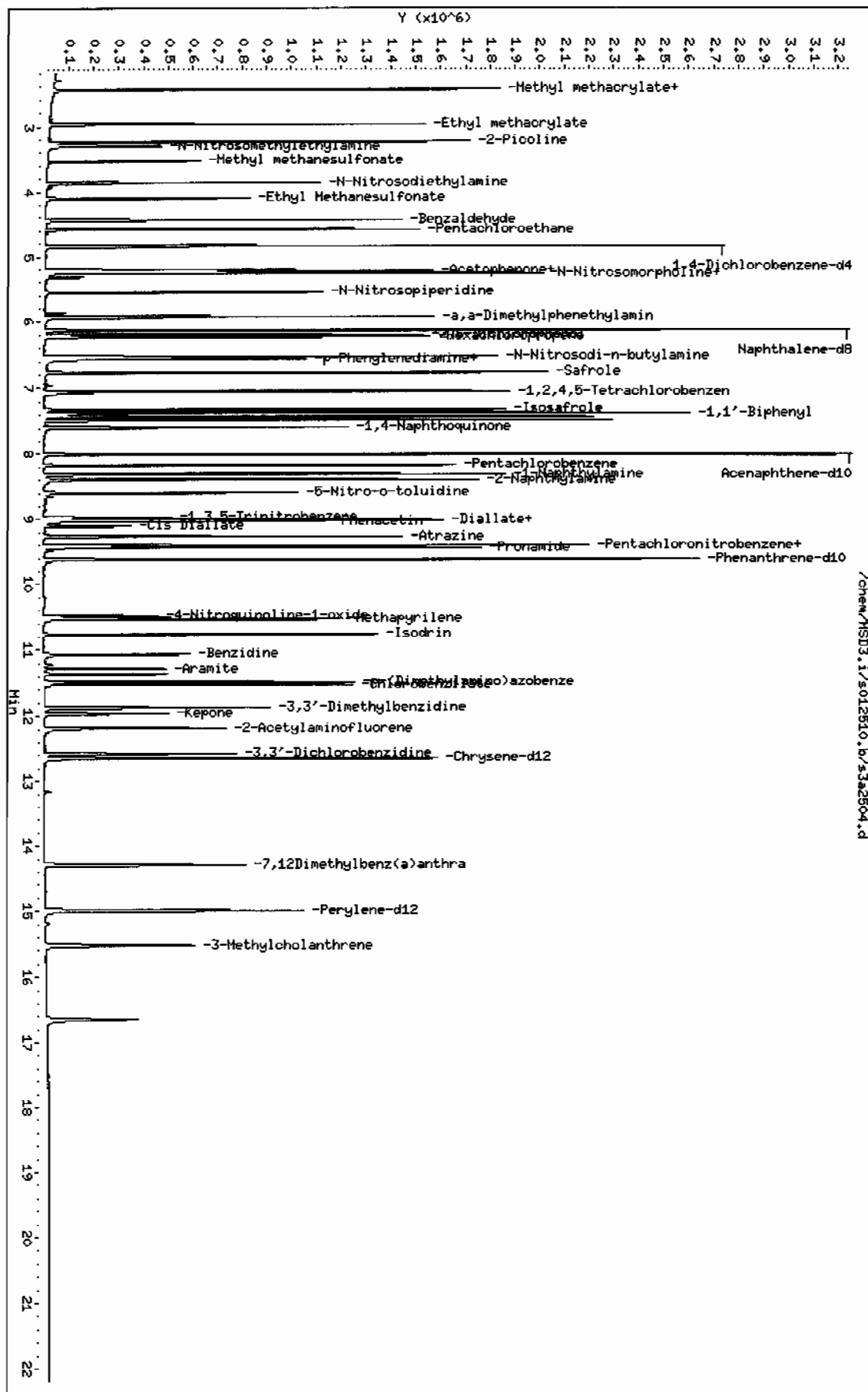
Sample Info: ILMN00120-08.3/40 PPH11SVHF11APCVS

Column phase: J&W DB-5MS

Instrument: MSD3.1

Operator: JLD1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 11:48
Lab File ID: s3a2607.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
RRF	%D	%DRIFT	%D	%DRIFT		
3 2-Fluorophenol	1.04085	1.02812	1.02812 0.000	-1.22268	60.00000	Averaged
5 Phenol-d5	1.30813	1.25058	1.25058 0.000	-4.39899	60.00000	Averaged
20 Nitrobenzene-d5	0.29548	0.30023	0.30023 0.000	1.60929	60.00000	Averaged
39 2-Fluorobiphenyl	1.03392	1.13455	1.13455 0.000	9.73318	60.00000	Averaged
60 2,4,6-Tribromophenol	0.11467	0.11969	0.11969 0.000	4.37779	60.00000	Averaged
81 p-Terphenyl-d14	0.68752	0.86716	0.86716 0.000	26.12814	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.72841	0.61631	0.61631 0.000	-15.38947	60.00000	Averaged
2 Pyridine	0.81403	0.68929	0.68929 0.000	-15.32314	60.00000	Averaged
4 Aniline	0.60975	0.57236	0.57236 0.000	-6.13305	60.00000	Averaged
6 Phenol	1.38337	1.35051	1.35051 0.001	-2.37579	20.00000	Averaged ccc
7 bis(2-Chloroethyl) ether	1.09435	0.89686	0.89686 0.000	-18.04642	60.00000	Averaged
8 2-Chlorophenol	1.05048	1.11171	1.11171 0.000	5.82908	60.00000	Averaged
203 n-Decane	1.59470	1.34615	1.34615 0.000	-15.58577	60.00000	Averaged
9 1,3-Dichlorobenzene	1.20957	1.31686	1.31686 0.000	8.87000	60.00000	Averaged
11 1,4-Dichlorobenzene	1.22630	1.31497	1.31497 0.001	7.23114	20.00000	Averaged ccc
13 1,2-Dichlorobenzene	1.15004	1.23013	1.23013 0.000	6.96402	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	2.59104	2.12413	2.12413 0.000	-18.01993	60.00000	Averaged
12 Benzyl alcohol	0.73117	0.72793	0.72793 0.000	-0.44429	60.00000	Averaged
15 o-Cresol	0.89964	0.91059	0.91059 0.000	1.21701	60.00000	Averaged
18 m,p-Cresols	1.17039	1.20499	1.20499 0.000	2.95651	60.00000	Averaged
17 N-Nitrosodipropylamine	0.88907	0.84535	0.84535 0.050	-4.91760	60.00000	Averaged spcc
19 Hexachloroethane	0.52660	0.53102	0.53102 0.000	0.83975	60.00000	Averaged
21 Nitrobenzene	0.31068	0.30659	0.30659 0.000	-1.31854	60.00000	Averaged
22 Isophorone	0.55065	0.53738	0.53738 0.000	-2.40958	60.00000	Averaged
23 2-Nitrophenol	0.14255	0.15329	0.15329 0.001	7.53201	20.00000	Averaged ccc
24 2,4-Dimethylphenol	0.24644	0.26260	0.26260 0.000	6.55627	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31970	0.30314	0.30314 0.000	-5.17965	60.00000	Averaged
26 2,4-Dichlorophenol	0.20739	0.23359	0.23359 0.001	12.63392	20.00000	Averaged ccc
27 Benzoic acid	0.17347	0.16685	0.16685 0.000	-3.81471	60.00000	Averaged
28 1,2,4-Trichlorobenzene	0.23033	0.25672	0.25672 0.000	11.45615	60.00000	Averaged
30 Naphthalene	0.84122	0.77665	0.77665 0.000	-7.67633	60.00000	Averaged
204 alpha-Terpineol	0.27709	0.24384	0.24384 0.000	-12.00104	60.00000	Averaged
31 4-Chloroaniline	45.69292	40.00000	0.29098 0.000	14.23231	60.00000	Linear
32 Hexachlorobutadiene	0.13146	0.15054	0.15054 0.001	14.51136	20.00000	Averaged ccc
33 4-Chloro-3-methylphenol	0.23504	0.25897	0.25897 0.001	10.18247	20.00000	Averaged ccc
34 2-Methylnaphthalene	0.50578	0.54519	0.54519 0.000	7.79112	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 11:48
Lab File ID: s3a2607.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.51307	0.51607	0.51607	0.000	0.58458	Averaged
36 Hexachlorocyclopentadiene	0.22766	0.24157	0.24157	0.050	6.11431	Averaged spcc
205 2,3-Dichloroaniline	0.50997	0.53189	0.53189	0.000	4.29800	Averaged
37 2,4,6-Trichlorophenol	0.28670	0.31909	0.31909	0.001	11.29693	Averaged ccc
38 2,4,5-Trichlorophenol	0.30976	0.35399	0.35399	0.000	14.27986	Averaged
40 2-Chloronaphthalene	0.94508	0.99814	0.99814	0.000	5.61499	Averaged
42 o-Nitroaniline	0.37117	0.32865	0.32865	0.000	-11.45454	Averaged
41 m-Nitroaniline	43.55258	40.00000	0.24293	0.000	8.88146	Linear
43 Dimethylphthalate	1.08482	1.16420	1.16420	0.000	7.31701	Averaged
44 2,6-Dinitrotoluene	0.25779	0.27693	0.27693	0.000	7.42429	Averaged
50 2,4-Dinitrotoluene	0.32038	0.35425	0.35425	0.000	10.57194	Averaged
45 Acenaphthylene	1.48695	1.56796	1.56796	0.000	5.44849	Averaged
47 Acenaphthene	0.94692	0.96126	0.96126	0.001	1.51492	Averaged ccc
48 2,4-Dinitrophenol	0.11484	0.13507	0.13507	0.050	17.61344	Averaged spcc
49 Dibenzofuran	1.21446	1.34468	1.34468	0.000	10.72270	Averaged
51 Diethylphthalate	1.07824	1.17692	1.17692	0.000	9.15236	Averaged
52 4-Nitrophenol	0.18279	0.20745	0.20745	0.050	13.48776	Averaged spcc
53 Fluorene	1.02579	1.08731	1.08731	0.000	5.99734	Averaged
54 4-Chlorophenylphenylether	0.48232	0.55027	0.55027	0.000	14.08677	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10303	0.15077	0.15077	0.000	46.33459	Averaged
56 p-Nitroaniline	43.91785	40.00000	0.23856	0.000	9.79463	Linear
133 Diphenylamine	0.53006	0.53928	0.53928	0.001	1.73894	Averaged ccc
58 1,2-Diphenylhydrazine	0.78142	0.69149	0.69149	0.000	-11.50860	Averaged
61 4-Bromophenylphenylether	0.17043	0.16538	0.16538	0.000	-2.96071	Averaged
63 Hexachlorobenzene	0.17700	0.17336	0.17336	0.000	-2.05925	Averaged
65 Pentachlorophenol	0.10027	0.11476	0.11476	0.001	14.45004	Averaged ccc
206 n-Octadecane	0.65176	0.54096	0.54096	0.000	-17.00010	Averaged
68 Phenanthrene	0.87923	0.88623	0.88623	0.000	0.79634	Averaged
69 Anthracene	0.87768	0.91140	0.91140	0.000	3.84260	Averaged
72 Di-n-butylphthalate	1.06159	1.13894	1.13894	0.000	7.28607	Averaged
76 Fluoranthene	0.80003	0.88744	0.88744	0.001	10.92631	Averaged ccc
79 Pyrene	1.14589	1.24742	1.24742	0.000	8.85959	Averaged
85 Butylbenzylphthalate	0.57344	0.61574	0.61574	0.000	7.37643	Averaged
89 Benzo(a)anthracene	0.91588	0.91279	0.91279	0.000	-0.33767	Averaged
92 Chrysene	0.86151	0.88413	0.88413	0.000	2.62549	Averaged
93 bis(2-Ethylhexyl)phthalate	0.78921	0.84510	0.84510	0.000	7.08147	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 11:48
Lab File ID: s3a2607.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
94 Di-n-octylphthalate	1.61982	1.74352	1.74352	0.001	7.63656	Averaged ccc
95 Benzo(b)fluoranthene	0.93870	0.98881	0.98881	0.000	5.33750	Averaged
96 Benzo(k)fluoranthene	0.97450	1.02248	1.02248	0.000	4.92391	Averaged
97 Benzo(a)pyrene	0.81798	0.89407	0.89407	0.001	9.30276	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66728	0.77088	0.77088	0.000	15.52556	Averaged
100 Dibenzo(a,h)anthracene	0.54458	0.63585	0.63585	0.000	16.75973	Averaged
101 Benzo(ghi)perylene	0.54772	0.62788	0.62788	0.000	14.63534	Averaged
126 m-Dinitrobenzene	0.18506	0.19853	0.19853	0.000	7.27815	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24334	0.27200	0.27200	0.000	11.77790	Averaged
143 Dinoseb	0.14194	0.17109	0.17109	0.000	20.53255	Averaged
173 Carbazole	0.71254	0.78570	0.78570	0.000	10.26827	Averaged
184 p-Benzoquinone	0.09247	0.08593	0.08593	0.000	-7.07318	Averaged
192 Methoxychlor	0.51665	0.61075	0.61075	0.000	18.21388	Averaged
211 p-Toluidine	0.91289	1.03895	1.03895	0.000	13.80889	Averaged
210 m-Toluidine	1.30281	1.47440	1.47440	0.000	13.17062	Averaged
26 Phthalic anhydride	0.10481	0.14873	0.14873	0.000	41.90391	Averaged
179 Dibenzo(a,e)pyrene	0.23979	0.20264	0.20264	0.000	-15.49159	Averaged
214 1,4-Dinitrobenzene	0.21468	0.19914	0.19914	0.000	-7.23667	Averaged
215 2-Ethoxyethanol	0.84974	0.70998	0.70998	0.000	-16.44699	Averaged
216 Methylenebis(2-chloroanilin	0.10764	0.14824	0.14824	0.000	37.71077	Averaged
M 225 Trichlorophenols	0.29823	0.33654	0.33654	0.000	12.84605	Averaged
M 226 Tetrachlorophenols	0.24334	0.27200	0.27200	0.000	11.77790	Averaged
M 227 Benzo(b,k)fluoranthene	0.95660	1.00564	1.00564	0.000	5.12684	Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2607.d
 Lab Smp Id: WBN100121-17.2 Client Smp ID: MEGACVS
 Inj Date : 26-JAN-2010 11:48
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |WBN100121-17.2|40 PPM|1|SVMF|1|MEGACVS
 Misc Info : |MSD8270|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
 Meth Date : 26-Jan-2010 16:29 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAI1.sub
 Target Version: 3.50
 Processing Host: hpc1pl1

Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	4.832	4.832	(1.000)	319045	40.0000	
* 29 Naphthalene-d8	136	6.114	6.114	(1.000)	1275014	40.0000	
* 46 Acenaphthene-d10	164	7.990	7.990	(1.000)	676019	40.0000	
* 67 Phenanthrene-d10	188	9.605	9.605	(1.000)	1138387	40.0000	
* 91 Chrysene-d12	240	12.634	12.634	(1.000)	825135	40.0000	
* 98 Perylene-d12	264	14.975	14.975	(1.000)	556699	40.0000	
\$ 3 2-Fluorophenol	112	3.644	3.644	(0.754)	328018	40.0000	39.5
\$ 5 Phenol-d5	99	4.430	4.430	(0.917)	398992	40.0000	38.2
\$ 20 Nitrobenzene-d5	82	5.372	5.372	(0.879)	382798	40.0000	40.6
\$ 39 2-Fluorobiphenyl	172	7.244	7.244	(0.907)	766977	40.0000	43.9
\$ 60 2,4,6-Tribromophenol	329	8.842	8.842	(1.107)	80912	40.0000	41.8
\$ 81 p-Terphenyl-d14	244	11.316	11.316	(0.896)	715526	40.0000	50.4
1 N-Methyl-N-nitrosomethylamine	74	2.651	2.651	(0.549)	196630	40.0000	33.8
2 Pyridine	79	2.695	2.695	(0.558)	219916	40.0000	33.9
4 Aniline	66	4.518	4.518	(0.935)	182608	40.0000	37.5
6 Phenol	94	4.444	4.444	(0.920)	430872	40.0000	39.0
7 bis(2-Chloroethyl) ether	63	4.556	4.556	(0.943)	286139	40.0000	32.8
8 2-Chlorophenol	128	4.629	4.629	(0.958)	354686	40.0000	42.3
203 n-Decane	43	4.629	4.629	(0.958)	429484	40.0000	33.8
9 1,3-Dichlorobenzene	146	4.779	4.779	(0.989)	420138	40.0000	43.5
11 1,4-Dichlorobenzene	146	4.846	4.846	(1.003)	419536	40.0000	42.9
13 1,2-Dichlorobenzene	146	4.996	4.996	(1.034)	392466	40.0000	42.8
14 bis(2-Chloroisopropyl) ether	45	5.063	5.063	(1.048)	677694	40.0000	32.8
12 Benzyl alcohol	108	4.943	4.943	(1.023)	232241	40.0000	39.8
15 o-Cresol	107	5.025	5.025	(1.040)	290518	40.0000	40.5
18 m,p-Cresols	107	5.181	5.181	(1.072)	384447	40.0000	41.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	5.204	5.204	(1.077)	269705	40.0000	38.0
19 Hexachloroethane	117	5.331	5.331	(1.103)	169419	40.0000	40.3
21 Nitrobenzene	77	5.392	5.392	(0.882)	390903	40.0000	39.5
22 Isophorone	82	5.627	5.627	(0.920)	685168	40.0000	39.0
23 2-Nitrophenol	139	5.709	5.709	(0.934)	195444	40.0000	43.0
24 2,4-Dimethylphenol	122	5.718	5.718	(0.935)	334815	40.0000	42.6
25 bis(2-Chloroethoxy)methane	93	5.826	5.826	(0.953)	386504	40.0000	37.9
26 2,4-Dichlorophenol	162	5.950	5.950	(0.973)	297829	40.0000	45.0
27 Benzoic acid	105	5.818	5.818	(0.952)	212738	40.0000	38.5
28 1,2,4-Trichlorobenzene	180	6.044	6.044	(0.988)	327318	40.0000	44.6
30 Naphthalene	128	6.138	6.138	(1.004)	990239	40.0000	36.9
204 alpha-Terpineol	59	6.120	6.120	(1.001)	310898	40.0000	35.2
31 4-Chloroaniline	127	6.176	6.176	(1.010)	371004	40.0000	45.7
32 Hexachlorobutadiene	225	6.243	6.243	(1.021)	191939	40.0000	45.8
33 4-Chloro-3-methylphenol	107	6.660	6.660	(1.089)	330189	40.0000	44.1
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	695119	40.0000	43.1
35 1-Methylnaphthalene	142	6.971	6.971	(1.140)	657999	40.0000	40.2
36 Hexachlorocyclopentadiene	237	7.015	7.015	(0.878)	163309	40.0000	42.4
205 2,3-Dichloroaniline	161	7.159	7.159	(0.896)	359567	40.0000	41.7
37 2,4,6-Trichlorophenol	196	7.150	7.150	(0.895)	215710	40.0000	44.5
38 2,4,5-Trichlorophenol	196	7.189	7.189	(0.900)	239303	40.0000	45.7
40 2-Chloronaphthalene	162	7.388	7.388	(0.925)	674764	40.0000	42.2
42 o-Nitroaniline	65	7.488	7.488	(0.937)	222176	40.0000	35.4
41 m-Nitroaniline	138	7.934	7.934	(0.993)	164227	40.0000	43.6
43 Dimethylphthalate	163	7.676	7.676	(0.961)	787020	40.0000	42.9
44 2,6-Dinitrotoluene	165	7.746	7.746	(0.970)	187212	40.0000	43.0
50 2,4-Dinitrotoluene	165	8.181	8.181	(1.024)	239480	40.0000	44.2
45 Acenaphthylene	152	7.840	7.840	(0.981)	1059972	40.0000	42.2
47 Acenaphthene	154	8.025	8.025	(1.004)	649831	40.0000	40.6
48 2,4-Dinitrophenol	184	8.043	8.043	(1.007)	91311	40.0000	47.0
49 Dibenzofuran	168	8.210	8.210	(1.028)	909029	40.0000	44.3
51 Diethylphthalate	149	8.428	8.428	(1.055)	795622	40.0000	43.7
52 4-Nitrophenol	139	8.087	8.087	(1.012)	140237	40.0000	45.4
53 Fluorene	166	8.583	8.583	(1.074)	735044	40.0000	42.4
54 4-Chlorophenylphenylether	204	8.566	8.566	(1.072)	371992	40.0000	45.6
55 2-Methyl-4,6-dinitrophenol	198	8.624	8.624	(0.898)	171633	40.0000	58.5
56 p-Nitroaniline	138	8.598	8.598	(1.076)	161272	40.0000	43.9
133 Diphenylamine	169	8.695	8.695	(0.905)	613912	40.0000	40.7
58 1,2-Diphenylhydrazine	77	8.742	8.742	(0.910)	787186	40.0000	35.4
61 4-Bromophenylphenylether	248	9.100	9.100	(0.947)	188272	40.0000	38.8
63 Hexachlorobenzene	284	9.174	9.174	(0.955)	197347	40.0000	39.2
65 Pentachlorophenol	266	9.382	9.382	(0.977)	130636	40.0000	45.8
206 n-Octadecane	57	9.423	9.423	(0.981)	615820	40.0000	33.2
68 Phenanthrene	178	9.632	9.632	(1.003)	1008870	40.0000	40.3
69 Anthracene	178	9.688	9.688	(1.009)	1037527	40.0000	41.5
72 Di-n-butylphthalate	149	10.189	10.189	(1.061)	1296556	40.0000	42.9
76 Fluoranthene	202	10.922	10.922	(1.137)	1010250	40.0000	44.4

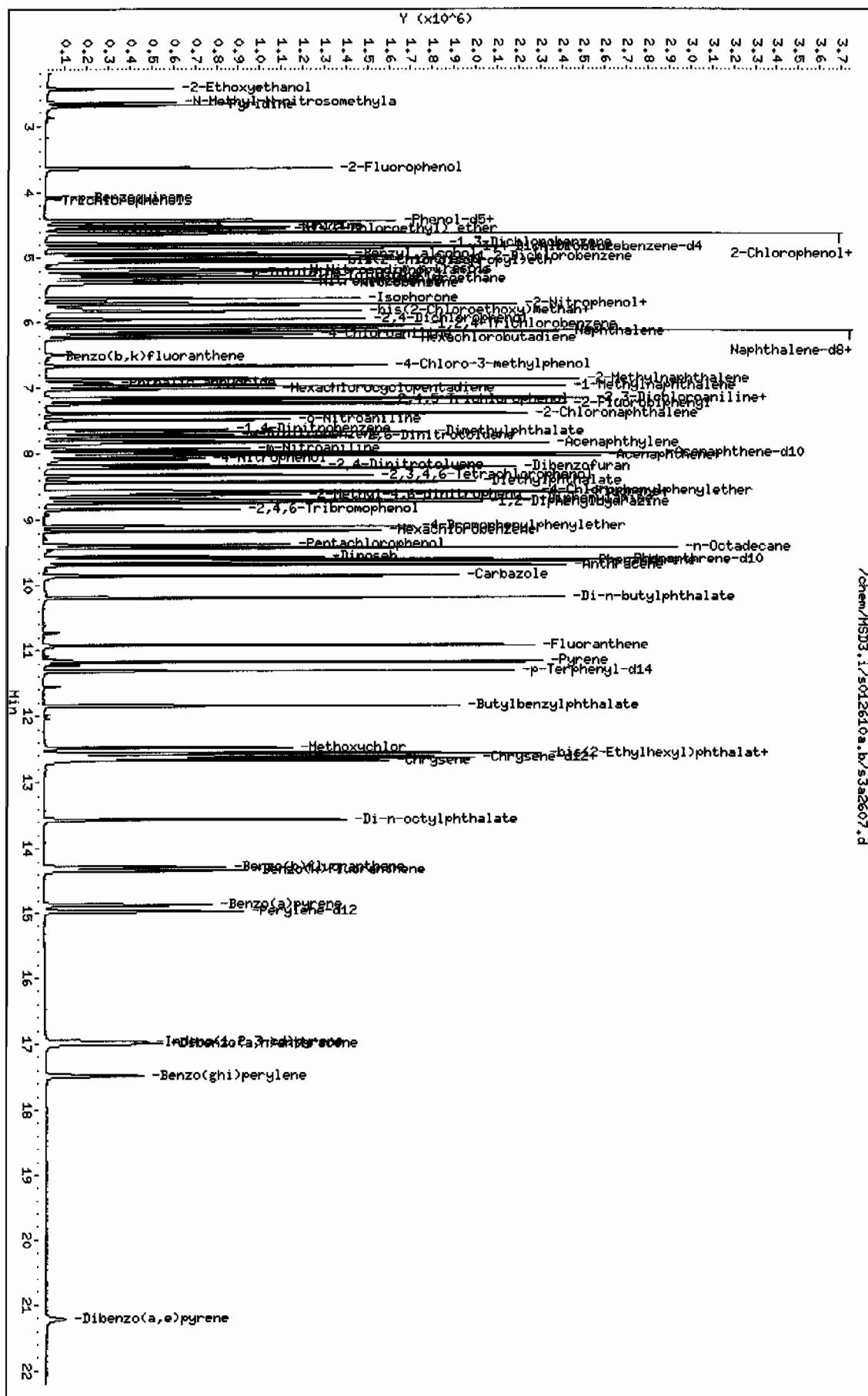
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	11.175	11.175	(0.884)	1029286	40.0000	43.5
85 Butylbenzylphthalate	149	11.847	11.847	(0.938)	508065	40.0000	43.0
89 Benzo(a)anthracene	228	12.613	12.613	(0.998)	753171	40.0000	39.9
92 Chrysene	228	12.669	12.669	(1.003)	729524	40.0000	41.0
93 bis(2-Ethylhexyl)phthalate	149	12.572	12.572	(0.995)	697322	40.0000	42.8
94 Di-n-octylphthalate	149	13.564	13.564	(0.906)	970614	40.0000	43.0
95 Benzo(b)fluoranthene	252	14.294	14.294	(0.955)	550468	40.0000	42.1
96 Benzo(k)fluoranthene	252	14.344	14.344	(0.958)	569213	40.0000	42.0
97 Benzo(a)pyrene	252	14.875	14.875	(0.993)	497729	40.0000	43.7
99 Indeno(1,2,3-cd)pyrene	276	16.968	16.968	(1.133)	429150	40.0000	46.2
100 Dibenzo(a,h)anthracene	278	17.000	17.000	(1.135)	353979	40.0000	46.7
101 Benzo(ghi)perylene	276	17.485	17.485	(1.168)	349538	40.0000	45.8
126 m-Dinitrobenzene	168	7.720	7.720	(0.966)	134211	40.0000	42.9
130 2,3,4,6-Tetrachlorophenol	232	8.328	8.328	(1.042)	183874	40.0000	44.7
143 Dinoseb	211	9.564	9.564	(0.996)	194761	40.0000	48.2
173 Carbazole	167	9.852	9.852	(1.026)	894434	40.0000	44.1
184 p-Benzoquinone	54	4.087	4.087	(0.846)	27414	40.0000	37.2
192 Methoxychlor	227	12.481	12.481	(0.988)	503955	40.0000	47.3
211 p-Toluidine	106	5.251	5.251	(1.087)	331471	40.0000	45.5
210 m-Toluidine	106	5.287	5.287	(1.094)	470399	40.0000	45.3
26 Phthalic anhydride	104	6.924	6.924	(1.132)	189630	40.0000	56.8
179 Dibenzo(a,e)pyrene	302	21.218	21.218	(1.417)	112810	40.0000	33.8
214 1,4-Dinitrobenzene	75	7.638	7.638	(0.956)	134625	40.0000	37.1
215 2-Ethoxyethanol	59	2.437	2.437	(0.504)	226517	40.0000	33.4
216 Methylenebis(2-chloroaniline)	231	12.557	12.557	(0.994)	122316	40.0000	55.1
M 225 Trichlorophenols	196				455013	80.0000	90.3
M 226 Tetrachlorophenols	232				183874	40.0000	44.7
M 227 Benzo(b,k)fluoranthene	252				1119681	80.0000	84.1

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Client ID: MEGACUS

Instrument: MSD3, i

Column diameter: Ø.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 12:19
Lab File ID: s3a2608.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100120-08.3 Quant Type: ISTD
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	1.00310	0.69434	0.69434	0.000	-30.78050	60.00000	Averaged
16 Acetophenone	1.32216	1.17080	1.17080	0.000	-11.44742	60.00000	Averaged
189 Caprolactam	0.08576	0.08580	0.08580	0.000	0.04414	60.00000	Averaged
208 1,1'-Biphenyl	1.21038	1.14215	1.14215	0.000	-5.63689	60.00000	Averaged
207 Atrazine	0.04628	0.04614	0.04614	0.000	-0.29576	60.00000	Averaged
77 Benzidine	41.31554	40.00000	0.36433	0.000	3.28886	60.00000	Linear
90 3,3'-Dichlorobenzidine	39.82390	40.00000	0.27247	0.000	-0.44025	60.00000	Linear
102 1,4-Dioxane	0.37050	0.36822	0.36822	0.000	-0.61505	60.00000	Averaged
103 Methyl methacrylate	0.21351	0.22119	0.22119	0.000	3.60074	60.00000	Averaged
104 Ethyl methacrylate	0.89246	0.84951	0.84951	0.000	-4.81180	60.00000	Averaged
105 2-Picoline	1.30074	1.04631	1.04631	0.000	-19.56051	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.57807	0.45793	0.45793	0.000	-20.78294	60.00000	Averaged
107 Methyl methanesulfonate	0.60378	0.53649	0.53649	0.000	-11.14431	60.00000	Averaged
108 N-Nitrosodiethylamine	0.58167	0.50358	0.50358	0.000	-13.42595	60.00000	Averaged
109 Ethyl Methanesulfonate	0.74637	0.74032	0.74032	0.000	-0.81010	60.00000	Averaged
110 Pentachloroethane	0.32905	0.42826	0.42826	0.000	30.15248	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.60059	0.52867	0.52867	0.000	-11.97538	60.00000	Averaged
113 N-Nitrosomorpholine	0.98604	0.84613	0.84613	0.000	-14.18973	60.00000	Averaged
114 o-Toluidine	1.80736	1.65570	1.65570	0.000	-8.39133	60.00000	Averaged
115 N-Nitrosopiperidine	0.15108	0.13237	0.13237	0.000	-12.38549	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.11880	0.83449	0.83449	0.000	-25.41241	60.00000	Averaged
118 2,6-Dichlorophenol	0.21531	0.21187	0.21187	0.000	-1.59730	60.00000	Averaged
119 Hexachloropropene	0.11708	0.17194	0.17194	0.000	46.85844	60.00000	Averaged
120 p-Phenylenediamine	0.24808	0.22584	0.22584	0.000	-8.96344	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.23566	0.20525	0.20525	0.000	-12.90725	60.00000	Averaged
122 Saffrole	0.19323	0.22126	0.22126	0.000	14.51003	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42534	0.43775	0.43775	0.000	2.91671	60.00000	Averaged
124 Isosaffrole	0.35652	0.42076	0.42076	0.000	18.01800	60.00000	Averaged
125 1,4-Naphthoquinone	0.33545	0.29664	0.29664	0.000	-11.56678	60.00000	Averaged
127 Pentachlorobenzene	0.37060	0.35813	0.35813	0.000	-3.36666	60.00000	Averaged
128 1-Naphthylamine	0.91242	0.89364	0.89364	0.000	-2.05764	60.00000	Averaged
129 2-Naphthylamine	1.00263	0.99186	0.99186	0.000	-1.07340	60.00000	Averaged
131 5-Nitro-o-toluidine	0.29533	0.29061	0.29061	0.000	-1.59655	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.14894	0.17935	0.17935	0.000	20.42196	60.00000	Averaged
137 Phenacetin	0.33125	0.29647	0.29647	0.000	-10.50051	60.00000	Averaged
138 Diallate	0.31820	0.24844	0.24844	0.000	-21.92389	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 26-JAN-2010 12:19
Lab File ID: s3a2608.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100120-08.3 Quant Type: ISTD
Method: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.63580	0.61485	0.61485	0.000	-3.29556	60.00000	Averaged
141 Pentachloronitrobenzene	0.07853	0.07411	0.07411	0.000	-5.62731	60.00000	Averaged
142 Pronamide	0.29619	0.29468	0.29468	0.000	-0.50973	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.03387	0.02455	0.02455	0.000	-27.51255	60.00000	Averaged
147 Methapyrilene	0.52598	0.46427	0.46427	0.000	-11.73090	60.00000	Averaged
148 Isodrin	0.11094	0.10119	0.10119	0.000	-8.78488	60.00000	Averaged
149 Aramite	0.04585	0.04690	0.04690	0.000	2.29004	60.00000	Averaged
150 Kepone	0.06767	0.07115	0.07115	0.000	5.14083	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.39647	0.32638	0.32638	0.000	-17.67858	60.00000	Averaged
152 Chlorobenzilate	0.32229	0.28636	0.28636	0.000	-11.14801	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.51678	0.53370	0.53370	0.000	3.27268	60.00000	Averaged
155 2-Acetylaminofluorene	39.39914	40.00000	0.30882	0.000	-1.50214	60.00000	Linear
157 7,12Dimethylbenz(a)anthracene	0.53008	0.48992	0.48992	0.000	-7.57697	60.00000	Averaged
158 3-Methylcholanthrene	0.38427	0.41862	0.41862	0.000	8.94069	60.00000	Averaged
212 Cis Diallate	0.33782	0.33849	0.33849	0.000	0.19971	60.00000	Averaged
213 Trans Diallate	0.37435	0.29228	0.29228	0.000	-21.92389	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2608.d
Lab Smp Id: WBN100120-08.3 Client Smp ID: APCVS
Inj Date : 26-JAN-2010 12:19
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |WBN100120-08.3|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
Meth Date : 26-Jan-2010 13:48 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclpl1

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.828	4.828	(1.000)	292156	40.0000	
* 29 Naphthalene-d8	136	6.112	6.112	(1.000)	1126383	40.0000	
* 46 Acenaphthene-d10	164	7.986	7.986	(1.000)	655494	40.0000	
* 67 Phenanthrene-d10	188	9.606	9.606	(1.000)	1160495	40.0000	
* 91 Chrysene-d12	240	12.629	12.629	(1.000)	1012624	40.0000	
* 98 Perylene-d12	264	14.976	14.976	(1.000)	651950	40.0000	
209 Benzaldehyde	77	4.426	4.426	(0.917)	202855	40.0000	27.7
16 Acetophenone	105	5.209	5.209	(1.079)	342057	40.0000	35.4
189 Caprolactam	113	6.543	6.543	(1.071)	96640	40.0000	40.0
208 1,1'-Biphenyl	154	7.355	7.355	(0.921)	748675	40.0000	37.7
207 Atrazine	173	9.259	9.259	(0.964)	53547	40.0000	39.9
77 Benzydine	184	11.052	11.052	(0.875)	368930	40.0000	41.3
90 3,3'-Dichlorobenzidine	252	12.556	12.556	(0.994)	275912	40.0000	39.8
102 1,4-Dioxane	88	2.439	2.439	(0.505)	107577	40.0000	39.8
103 Methyl methacrylate	100	2.434	2.434	(0.504)	64623	40.0000	41.4
104 Ethyl methacrylate	69	2.955	2.955	(0.612)	248190	40.0000	38.1
105 2-Picoline	93	3.219	3.219	(0.667)	305685	40.0000	32.2
106 N-Nitrosomethylethylamine	88	3.289	3.289	(0.681)	133787	40.0000	31.7
107 Methyl methanesulfonate	80	3.521	3.521	(0.729)	156740	40.0000	35.5
108 N-Nitrosodiethylamine	102	3.852	3.852	(0.798)	147123	40.0000	34.6
109 Ethyl Methanesulfonate	79	4.095	4.095	(0.848)	216290	40.0000	39.7
110 Pentachloroethane	167	4.567	4.567	(0.946)	125119	40.0000	52.1
111 N-Nitrosopyrrolidine	100	5.194	5.194	(1.076)	154453	40.0000	35.2 (Q)
113 N-Nitrosomorpholine	56	5.230	5.230	(1.083)	247201	40.0000	34.3
114 o-Toluidine	106	5.247	5.247	(1.087)	483722	40.0000	36.6
115 N-Nitrosopiperidine	114	5.543	5.543	(0.907)	149100	40.0000	35.0

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine		58	5.913	5.913	(0.967)	939954	40.0000	29.8
118 2,6-Dichlorophenol		162	6.185	6.185	(1.012)	238650	40.0000	39.4
119 Hexachloropropene		213	6.218	6.218	(1.017)	193675	40.0000	58.7
120 p-Phenylenediamine		108	6.549	6.549	(1.071)	254383	40.0000	36.4
121 N-Nitrosodi-n-butylamine		84	6.514	6.514	(1.066)	231186	40.0000	34.8 (Q)
122 Saffrole		162	6.751	6.751	(1.105)	249227	40.0000	45.8
123 1,2,4,5-Tetrachlorobenzene		216	7.036	7.036	(0.881)	286942	40.0000	41.2
124 Isosaffrole		162	7.308	7.308	(0.915)	275807	40.0000	47.2
125 1,4-Naphthoquinone		158	7.576	7.576	(0.949)	194449	40.0000	35.4
127 Pentachlorobenzene		250	8.156	8.156	(1.021)	234750	40.0000	38.6
128 1-Naphthylamine		143	8.294	8.294	(1.039)	585777	40.0000	39.2
129 2-Naphthylamine		143	8.379	8.379	(1.049)	650161	40.0000	39.6
131 5-Nitro-o-toluidine		152	8.584	8.584	(1.075)	190495	40.0000	39.4
136 1,3,5-Trinitrobenzene		75	8.966	8.966	(0.933)	208136	40.0000	48.2
137 Phenacetin		108	9.021	9.021	(0.939)	344052	40.0000	35.8 (Q)
138 Diallate		86	8.989	8.989	(0.936)	288308	40.0000	31.2
140 4-Aminobiphenyl		169	9.386	9.386	(0.977)	713529	40.0000	38.7
141 Pentachloronitrobenzene		237	9.394	9.394	(0.978)	86000	40.0000	37.7 (Q)
142 Pronamide		173	9.424	9.424	(0.981)	341977	40.0000	39.8
146 4-Nitroquinoline-1-oxide		101	10.465	10.465	(1.089)	28495	40.0000	29.0
147 Methapyrilene		58	10.518	10.518	(1.095)	538788	40.0000	35.3
148 Isodrin		193	10.756	10.756	(1.120)	117433	40.0000	36.5
149 Aramite		185	11.269	11.269	(1.173)	54427	40.0000	40.9
150 Kepone		272	11.939	11.939	(1.243)	82565	40.0000	42.0
151 p-(Dimethylamino)azobenzene		120	11.463	11.463	(0.908)	330502	40.0000	32.9
152 Chlorobenzilate		251	11.504	11.504	(0.911)	289980	40.0000	35.5
153 3,3'-Dimethylbenzidine		212	11.854	11.854	(0.939)	540433	40.0000	41.3
155 2-Acetylaminofluorene		181	12.171	12.171	(0.964)	312718	40.0000	39.4
157 7,12Dimethylbenz(a)anthracene		256	14.271	14.271	(0.953)	319401	40.0000	37.0
158 3-Methylcholanthrene		268	15.498	15.498	(1.035)	272920	40.0000	43.6 (Q)
212 Cis Diallate		86	9.092	9.092	(0.946)	58923	6.00000	6.0
213 Trans Diallate		86	8.989	8.989	(0.936)	288308	34.0000	26.5

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.i/s012610a.b/s3a2608.d

Date : 26-JAN-2010 12:19

Client ID: APCVS

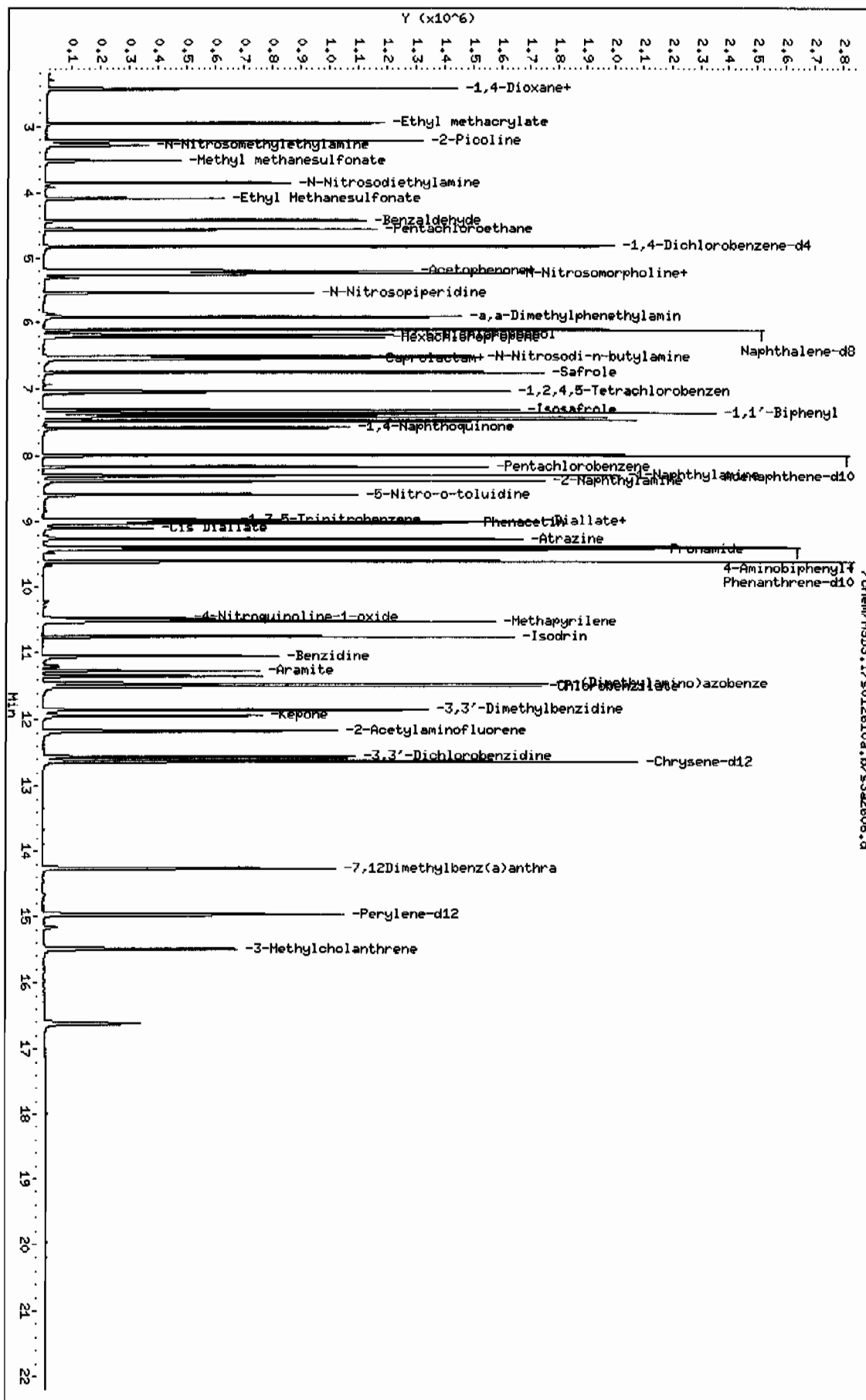
Sample Info: ILMN100120-08.3140 PPH111SHF111APCVS

Column phase: J&W DB-SMS

Instrument: MSD3.i

Operator: JLD1

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 09:09
 Lab File ID: s3a2702.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
 Analysis Type: Init. Cal. Times: 17:59 23:34
 Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
 Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
3 2-Fluorophenol	1.04085	0.90591	0.90591	0.000	-12.96417	Averaged
5 Phenol-d5	1.30813	1.19728	1.19728	0.000	-8.47331	Averaged
20 Nitrobenzene-d5	0.29548	0.29587	0.29587	0.000	0.13247	Averaged
39 2-Fluorobiphenyl	1.03392	1.11826	1.11826	0.000	8.15810	Averaged
60 2,4,6-Tribromophenol	0.11467	0.12408	0.12408	0.000	8.20586	Averaged
81 p-Terphenyl-d14	0.68752	0.77786	0.77786	0.000	13.13942	Averaged
1 N-Methyl-N-nitrosomethylami	0.72841	0.51560	0.51560	0.000	-29.21500	Averaged
2 Pyridine	0.81403	0.58289	0.58289	0.000	-28.39413	Averaged
4 Aniline	0.60975	0.53792	0.53792	0.000	-11.78108	Averaged
6 Phenol	1.38337	1.30033	1.30033	0.001	-6.00284	Averaged ccc
7 bis(2-Chloroethyl) ether	1.09435	0.85072	0.85072	0.000	-22.26249	Averaged
8 2-Chlorophenol	1.05048	1.09089	1.09089	0.000	3.84724	Averaged
203 n-Decane	1.59470	1.27038	1.27038	0.000	-20.33761	Averaged
9 1,3-Dichlorobenzene	1.20957	1.29878	1.29878	0.000	7.37481	Averaged
11 1,4-Dichlorobenzene	1.22630	1.29521	1.29521	0.001	5.61929	Averaged ccc
13 1,2-Dichlorobenzene	1.15004	1.21756	1.21756	0.000	5.87143	Averaged
14 bis(2-Chloroisopropyl)ether	2.59104	1.96635	1.96635	0.000	-24.10939	Averaged
12 Benzyl alcohol	0.73117	0.71097	0.71097	0.000	-2.76366	Averaged
15 o-Cresol	0.89964	0.86657	0.86657	0.000	-3.67535	Averaged
18 m,p-Cresols	1.17039	1.15231	1.15231	0.000	-1.54440	Averaged
17 N-Nitrosodipropylamine	0.88907	0.82943	0.82943	0.050	-6.70847	Averaged spcc
19 Hexachloroethane	0.52660	0.53239	0.53239	0.000	1.10012	Averaged
21 Nitrobenzene	0.31068	0.29993	0.29993	0.000	-3.46013	Averaged
22 Isophorone	0.55065	0.54434	0.54434	0.000	-1.14521	Averaged
23 2-Nitrophenol	0.14255	0.15223	0.15223	0.001	6.78932	Averaged ccc
24 2,4-Dimethylphenol	0.24644	0.26144	0.26144	0.000	6.08531	Averaged
25 bis(2-Chloroethoxy)methane	0.31970	0.29979	0.29979	0.000	-6.22527	Averaged
26 2,4-Dichlorophenol	0.20739	0.23272	0.23272	0.001	12.21569	Averaged ccc
27 Benzoic acid	0.17347	0.18034	0.18034	0.000	3.95923	Averaged
28 1,2,4-Trichlorobenzene	0.23033	0.26120	0.26120	0.000	13.40393	Averaged
30 Naphthalene	0.84122	0.77641	0.77641	0.000	-7.70441	Averaged
204 alpha-Terpineol	0.27709	0.23471	0.23471	0.000	-15.29473	Averaged
31 4-Chloroaniline	41.46192	40.00000	0.26378	0.000	3.65481	Linear
32 Hexachlorobutadiene	0.13146	0.15493	0.15493	0.001	17.85024	Averaged ccc
33 4-Chloro-3-methylphenol	0.23504	0.25474	0.25474	0.001	8.38390	Averaged ccc
34 2-Methylnaphthalene	0.50578	0.53512	0.53512	0.000	5.80018	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 09:09
Lab File ID: s3a2702.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
35 1-Methylnaphthalene	0.51307	0.51236	0.51236	0.000	-0.13943	Averaged
36 Hexachlorocyclopentadiene	0.22766	0.21464	0.21464	0.050	-5.71837	Averaged spcc
205 2,3-Dichloroaniline	0.50997	0.52002	0.52002	0.000	1.97092	Averaged
37 2,4,6-Trichlorophenol	0.28670	0.32082	0.32082	0.001	11.90223	Averaged ccc
38 2,4,5-Trichlorophenol	0.30976	0.34924	0.34924	0.000	12.74701	Averaged
40 2-Chloronaphthalene	0.94508	0.97164	0.97164	0.000	2.81095	Averaged
42 o-Nitroaniline	0.37117	0.31589	0.31589	0.000	-14.89411	Averaged
41 m-Nitroaniline	38.80115	40.00000	0.21352	0.000	-2.99713	Linear
43 Dimethylphthalate	1.08482	1.16032	1.16032	0.000	6.95976	Averaged
44 2,6-Dinitrotoluene	0.25779	0.27419	0.27419	0.000	6.36093	Averaged
50 2,4-Dinitrotoluene	0.32038	0.34731	0.34731	0.000	8.40492	Averaged
45 Acenaphthylene	1.48695	1.54934	1.54934	0.000	4.19598	Averaged
47 Acenaphthene	0.94692	0.95605	0.95605	0.001	0.96487	Averaged ccc
48 2,4-Dinitrophenol	0.11484	0.13221	0.13221	0.050	15.11975	Averaged spcc
49 Dibenzofuran	1.21446	1.32220	1.32220	0.000	8.87147	Averaged
51 Diethylphthalate	1.07824	1.18578	1.18578	0.000	9.97353	Averaged
52 4-Nitrophenol	0.18279	0.20202	0.20202	0.050	10.52130	Averaged spcc
53 Fluorene	1.02579	1.07659	1.07659	0.000	4.95207	Averaged
54 4-Chlorophenylphenylether	0.48232	0.54239	0.54239	0.000	12.45342	Averaged
55 2-Methyl-4,6-dinitrophenol	0.10303	0.15089	0.15089	0.000	46.45686	Averaged
56 p-Nitroaniline	33.66597	40.00000	0.17537	0.000	-15.83509	Linear
133 Diphenylamine	0.53006	0.50850	0.50850	0.001	-4.06831	Averaged ccc
58 1,2-Diphenylhydrazine	0.78142	0.67735	0.67735	0.000	-13.31866	Averaged
61 4-Bromophenylphenylether	0.17043	0.16912	0.16912	0.000	-0.77077	Averaged
63 Hexachlorobenzene	0.17700	0.17714	0.17714	0.000	0.07565	Averaged
65 Pentachlorophenol	0.10027	0.11506	0.11506	0.001	14.75009	Averaged ccc
206 n-Octadecane	0.65176	0.53001	0.53001	0.000	-18.67961	Averaged
68 Phenanthrene	0.87923	0.87965	0.87965	0.000	0.04834	Averaged
69 Anthracene	0.87768	0.89540	0.89540	0.000	2.01931	Averaged
72 Di-n-butylphthalate	1.06159	1.14276	1.14276	0.000	7.64590	Averaged
76 Fluoranthene	0.80003	0.88153	0.88153	0.001	10.18748	Averaged ccc
79 Pyrene	1.14589	1.10199	1.10199	0.000	-3.83144	Averaged
85 Butylbenzylphthalate	0.57344	0.58350	0.58350	0.000	1.75469	Averaged
89 Benzo(a)anthracene	0.91588	0.90755	0.90755	0.000	-0.90883	Averaged
92 Chrysene	0.86151	0.88377	0.88377	0.000	2.58355	Averaged
93 bis(2-Ethylhexyl)phthalate	0.78921	0.80453	0.80453	0.000	1.94049	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 09:09
Lab File ID: s3a2702.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100121-17.2 Quant Type: ISTD
Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.61982	1.72946	1.72946	0.001	6.76848	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.93870	0.99131	0.99131	0.000	5.60427	60.00000	Averaged
96 Benzo(k)fluoranthene	0.97450	1.01295	1.01295	0.000	3.94564	60.00000	Averaged
97 Benzo(a)pyrene	0.81798	0.89059	0.89059	0.001	8.87716	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66728	0.73658	0.73658	0.000	10.38520	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.54458	0.60797	0.60797	0.000	11.64019	60.00000	Averaged
101 Benzo(ghi)perylene	0.54772	0.58120	0.58120	0.000	6.11368	60.00000	Averaged
126 m-Dinitrobenzene	0.18506	0.19340	0.19340	0.000	4.50486	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24334	0.27541	0.27541	0.000	13.18147	60.00000	Averaged
143 Dinoseb	0.14194	0.16915	0.16915	0.000	19.17146	60.00000	Averaged
173 Carbazole	0.71254	0.61695	0.61695	0.000	-13.41533	60.00000	Averaged
184 p-Benzoquinone	0.09247	0.04411	0.04411	0.000	-52.29876	60.00000	Averaged
192 Methoxychlor	0.51665	0.63910	0.63910	0.000	23.69958	60.00000	Averaged
211 p-Toluidine	0.91289	0.91280	0.91280	0.000	-0.00983	60.00000	Averaged
210 m-Toluidine	1.30281	1.20361	1.20361	0.000	-7.61429	60.00000	Averaged
26 Phthalic anhydride	0.10481	0.16491	0.16491	0.000	57.34233	60.00000	Averaged
179 Dibenzo(a,e)pyrene	0.23979	0.18658	0.18658	0.000	-22.19083	60.00000	Averaged
214 1,4-Dinitrobenzene	0.21468	0.19150	0.19150	0.000	-10.79659	60.00000	Averaged
215 2-Ethoxyethanol	0.84974	0.51871	0.51871	0.000	-38.95626	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.10764	0.12443	0.12443	0.000	15.59241	60.00000	Averaged
M 225 Trichlorophenols	0.29823	0.33503	0.33503	0.000	12.34094	60.00000	Averaged
M 226 Tetrachlorophenols	0.24334	0.27541	0.27541	0.000	13.18147	60.00000	Averaged
M 227 Benzo(b,k)fluoranthene	0.95660	1.00213	1.00213	0.000	4.75944	60.00000	Averaged

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2702.d
Lab Smp Id: WBN100121-17.2 Client Smp ID: MEGACVS
Inj Date : 27-JAN-2010 09:09
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |WBN100121-17.2|40 PPM|1|SVMF|1|MEGACVS
Misc Info : |MSD8270|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAII.sub
Target Version: 3.50
Processing Host: hpclpl

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.817	4.817	(1.000)	267689	40.0000		
* 29 Naphthalene-d8	136	6.100	6.100	(1.000)	1068883	40.0000		
* 46 Acenaphthene-d10	164	7.973	7.973	(1.000)	570163	40.0000		
* 67 Phenanthrene-d10	188	9.588	9.588	(1.000)	947337	40.0000		
* 91 Chrysene-d12	240	12.610	12.610	(1.000)	775080	40.0000		
* 98 Perylene-d12	264	14.945	14.945	(1.000)	562347	40.0000		
\$ 3 2-Fluorophenol	112	3.633	3.633	(0.754)	242503	40.0000		34.8
\$ 5 Phenol-d5	99	4.418	4.418	(0.917)	320500	40.0000		36.6
\$ 20 Nitrobenzene-d5	82	5.357	5.357	(0.878)	316247	40.0000		40.0
\$ 39 2-Fluorobiphenyl	172	7.227	7.227	(0.906)	637593	40.0000		43.3
\$ 60 2,4,6-Tribromophenol	329	8.825	8.825	(1.107)	70745	40.0000		43.3
\$ 81 p-Terphenyl-d14	244	11.297	11.297	(0.896)	602905	40.0000		45.2
1 N-Methyl-N-nitrosomethylamine	74	2.639	2.639	(0.548)	138021	40.0000		28.3
2 Pyridine	79	2.680	2.680	(0.556)	156034	40.0000		28.6
4 Aniline	66	4.503	4.503	(0.935)	143995	40.0000		35.3
6 Phenol	94	4.430	4.430	(0.920)	348084	40.0000		37.6
7 bis(2-Chloroethyl) ether	63	4.541	4.541	(0.943)	227729	40.0000		31.1
8 2-Chlorophenol	128	4.615	4.615	(0.958)	292020	40.0000		41.5
203 n-Decane	43	4.615	4.615	(0.958)	340066	40.0000		31.9
9 1,3-Dichlorobenzene	146	4.764	4.764	(0.989)	347668	40.0000		42.9
11 1,4-Dichlorobenzene	146	4.832	4.832	(1.003)	346713	40.0000		42.2
13 1,2-Dichlorobenzene	146	4.982	4.982	(1.034)	325928	40.0000		42.3
14 bis(2-Chloroisopropyl) ether	45	5.049	5.049	(1.048)	526371	40.0000		30.4
12 Benzyl alcohol	108	4.926	4.926	(1.023)	190318	40.0000		38.9
15 o-Cresol	107	5.011	5.011	(1.040)	231972	40.0000		38.5
18 m,p-Cresols	107	5.164	5.164	(1.072)	308462	40.0000		39.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	5.187	5.187	(1.077)	222029	40.0000	37.3
19 Hexachloroethane	117	5.316	5.316	(1.104)	142515	40.0000	40.4
21 Nitrobenzene	77	5.378	5.378	(0.882)	320594	40.0000	38.6
22 Isophorone	82	5.610	5.610	(0.920)	581839	40.0000	39.5
23 2-Nitrophenol	139	5.695	5.695	(0.934)	162715	40.0000	42.7
24 2,4-Dimethylphenol	122	5.704	5.704	(0.935)	279445	40.0000	42.4
25 bis(2-Chloroethoxy)methane	93	5.809	5.809	(0.952)	320445	40.0000	37.5
26 2,4-Dichlorophenol	162	5.933	5.933	(0.973)	248752	40.0000	44.9
27 Benzoic acid	105	5.800	5.800	(0.951)	192759	40.0000	41.6
28 1,2,4-Trichlorobenzene	180	6.029	6.029	(0.988)	279196	40.0000	45.4
30 Naphthalene	128	6.120	6.120	(1.003)	829895	40.0000	36.9
204 alpha-Terpineol	59	6.106	6.106	(1.001)	250880	40.0000	33.9
31 4-Chloroaniline	127	6.162	6.162	(1.010)	281947	40.0000	41.5
32 Hexachlorobutadiene	225	6.226	6.226	(1.021)	165600	40.0000	47.1
33 4-Chloro-3-methylphenol	107	6.643	6.643	(1.089)	272289	40.0000	43.4
34 2-Methylnaphthalene	142	6.845	6.845	(1.122)	571976	40.0000	42.3
35 1-Methylnaphthalene	142	6.954	6.954	(1.140)	547650	40.0000	39.9
36 Hexachlorocyclopentadiene	237	6.998	6.998	(0.878)	122378	40.0000	37.7
205 2,3-Dichloroaniline	161	7.145	7.145	(0.896)	296497	40.0000	40.8 (H)
37 2,4,6-Trichlorophenol	196	7.136	7.136	(0.895)	182922	40.0000	44.8
38 2,4,5-Trichlorophenol	196	7.171	7.171	(0.899)	199124	40.0000	45.1
40 2-Chloronaphthalene	162	7.371	7.371	(0.925)	553995	40.0000	41.1
42 o-Nitroaniline	65	7.474	7.474	(0.937)	180107	40.0000	34.0
41 m-Nitroaniline	138	7.917	7.917	(0.993)	121741	40.0000	38.8
43 Dimethylphthalate	163	7.656	7.656	(0.960)	661573	40.0000	42.8
44 2,6-Dinitrotoluene	165	7.729	7.729	(0.969)	156334	40.0000	42.5
50 2,4-Dinitrotoluene	165	8.164	8.164	(1.024)	198022	40.0000	43.4
45 Acenaphthylene	152	7.823	7.823	(0.981)	883375	40.0000	41.7
47 Acenaphthene	154	8.008	8.008	(1.004)	545106	40.0000	40.4
48 2,4-Dinitrophenol	184	8.026	8.026	(1.007)	75380	40.0000	46.0
49 Dibenzofuran	168	8.193	8.193	(1.028)	753868	40.0000	43.5
51 Diethylphthalate	149	8.411	8.411	(1.055)	676086	40.0000	44.0
52 4-Nitrophenol	139	8.070	8.070	(1.012)	115186	40.0000	44.2
53 Fluorene	166	8.563	8.563	(1.074)	613832	40.0000	42.0
54 4-Chlorophenylphenylether	204	8.549	8.549	(1.072)	309251	40.0000	45.0
55 2-Methyl-4,6-dinitrophenol	198	8.605	8.605	(0.897)	142948	40.0000	58.6
56 p-Nitroaniline	138	8.578	8.578	(1.076)	99987	40.0000	33.7
133 Diphenylamine	169	8.678	8.678	(0.905)	481721	40.0000	38.4
58 1,2-Diphenylhydrazine	77	8.725	8.725	(0.910)	641677	40.0000	34.7
61 4-Bromophenylphenylether	248	9.083	9.083	(0.947)	160211	40.0000	39.7
63 Hexachlorobenzene	284	9.157	9.157	(0.955)	167807	40.0000	40.0
65 Pentachlorophenol	266	9.365	9.365	(0.977)	108997	40.0000	45.9
206 n-Octadecane	57	9.406	9.406	(0.981)	502100	40.0000	32.5
68 Phenanthrene	178	9.615	9.615	(1.003)	833326	40.0000	40.0
69 Anthracene	178	9.671	9.671	(1.009)	848244	40.0000	40.8
72 Di-n-butylphthalate	149	10.173	10.173	(1.061)	1082580	40.0000	43.0
76 Fluoranthene	202	10.906	10.906	(1.137)	835105	40.0000	44.1

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
79 Pyrene	202	11.156	11.156	(0.885)	854130	40.0000	38.5
85 Butylbenzylphthalate	149	11.828	11.828	(0.938)	452258	40.0000	40.7
89 Benzo(a)anthracene	228	12.592	12.592	(0.999)	703427	40.0000	39.6
92 Chrysene	228	12.646	12.646	(1.003)	684989	40.0000	41.0
93 bis(2-Ethylhexyl)phthalate	149	12.548	12.548	(0.995)	623573	40.0000	40.8(H)
94 Di-n-octylphthalate	149	13.538	13.538	(0.906)	972554	40.0000	42.7
95 Benzo(b)fluoranthene	252	14.266	14.266	(0.955)	557461	40.0000	42.2(H)
96 Benzo(k)fluoranthene	252	14.316	14.316	(0.958)	569627	40.0000	41.6
97 Benzo(a)pyrene	252	14.845	14.845	(0.993)	500821	40.0000	43.6
99 Indeno(1,2,3-cd)pyrene	276	16.934	16.934	(1.133)	414215	40.0000	44.2
100 Dibenzo(a,h)anthracene	278	16.966	16.966	(1.135)	341892	40.0000	44.6
101 Benzo(ghi)perylene	276	17.446	17.446	(1.167)	326837	40.0000	42.4
126 m-Dinitrobenzene	168	7.703	7.703	(0.966)	110269	40.0000	41.8
130 2,3,4,6-Tetrachlorophenol	232	8.314	8.314	(1.043)	157029	40.0000	45.3
143 Dinoseb	211	9.547	9.547	(0.996)	160245	40.0000	47.7
173 Carbazole	167	9.835	9.835	(1.026)	584458	40.0000	34.6
184 p-Benzoquinone	54	4.075	4.075	(0.846)	11807	40.0000	19.1
192 Methoxychlor	227	12.457	12.457	(0.988)	495351	40.0000	49.5
211 p-Toluidine	106	5.237	5.237	(1.087)	244346	40.0000	40.0
210 m-Toluidine	106	5.269	5.269	(1.094)	322193	40.0000	37.0
26 Phthalic anhydride	104	6.907	6.907	(1.132)	176268	40.0000	62.9
179 Dibenzo(a,e)pyrene	302	21.154	21.154	(1.415)	104921	40.0000	31.1
214 1,4-Dinitrobenzene	75	7.624	7.624	(0.956)	109187	40.0000	35.7
215 2-Ethoxyethanol	59	2.422	2.422	(0.503)	138854	40.0000	24.4
216 Methylenebis(2-chloroaniline)	231	12.536	12.536	(0.994)	96442	40.0000	46.2
M 225 Trichlorophenols	196				382046	80.0000	89.9
M 226 Tetrachlorophenols	232				157029	40.0000	45.3
M 227 Benzo(b,k)fluoranthene	252				1127088	80.0000	83.8

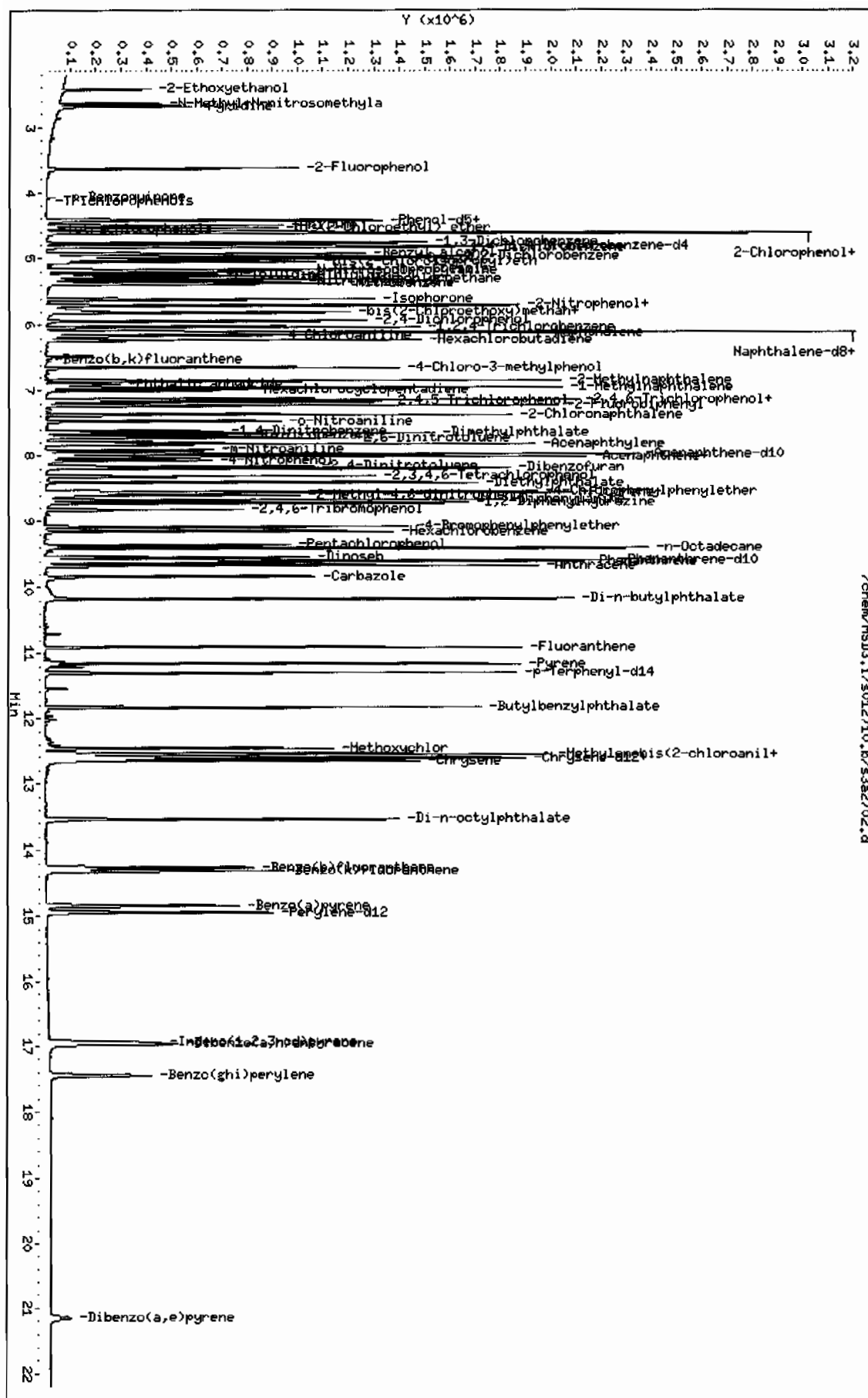
QC Flag Legend

H - Operator selected an alternate compound hit.

Column phase: J&W DB-5MS

Operator: JLD1
Column diameter: 0.20

/chem/HSD3.i/s012710.k/s3a2702.d



Data File: /chem/MSD3.i/s012710.b/s3a2704.d
Report Date: 27-Jan-2010 11:46

Page 1

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 10:11
Lab File ID: s3a2704.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
Analysis Type: Init. Cal. Times: 17:59 23:34
Lab Sample ID: WBN100120-08.4 Quant Type: ISTD
Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	1.00310	0.69755	0.69755	0.000	-30.46057	60.00000	Averaged
16 Acetophenone	1.32216	1.14533	1.14533	0.000	-13.37434	60.00000	Averaged
189 Caprolactam	0.08576	0.08451	0.08451	0.000	-1.45316	60.00000	Averaged
208 1,1'-Biphenyl	1.21038	1.17905	1.17905	0.000	-2.58856	60.00000	Averaged
207 Atrazine	0.04628	0.04843	0.04843	0.000	4.65576	60.00000	Averaged
77 Benzidine	24.89647	40.00000	0.18740	0.000	-37.75882	60.00000	Linear
90 3,3'-Dichlorobenzidine	35.07004	40.00000	0.23688	0.000	-12.32491	60.00000	Linear
102 1,4-Dioxane	0.37050	0.37143	0.37143	0.000	0.25291	60.00000	Averaged
103 Methyl methacrylate	0.21351	0.22531	0.22531	0.000	5.53095	60.00000	Averaged
104 Ethyl methacrylate	0.89246	0.85284	0.85284	0.000	-4.43918	60.00000	Averaged
105 2-Picoline	1.30074	1.04330	1.04330	0.000	-19.79167	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.57807	0.45950	0.45950	0.000	-20.51215	60.00000	Averaged
107 Methyl methanesulfonate	0.60378	0.55389	0.55389	0.000	-8.26297	60.00000	Averaged
108 N-Nitrosodiethylamine	0.58167	0.50389	0.50389	0.000	-13.37265	60.00000	Averaged
109 Ethyl Methanesulfonate	0.74637	0.74248	0.74248	0.000	-0.52086	60.00000	Averaged
110 Pentachloroethane	0.32905	0.43278	0.43278	0.000	31.52699	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.60059	0.51940	0.51940	0.000	-13.51777	60.00000	Averaged
113 N-Nitrosomorpholine	0.98604	0.82768	0.82768	0.000	-16.06094	60.00000	Averaged
114 o-Toluidine	1.80736	1.61096	1.61096	0.000	-10.86667	60.00000	Averaged
115 N-Nitrosopiperidine	0.15108	0.13342	0.13342	0.000	-11.68999	60.00000	Averaged
116 a,a-Dimethylphenethylamine	1.11880	0.79170	0.79170	0.000	-29.23733	60.00000	Averaged
118 2,6-Dichlorophenol	0.21531	0.21236	0.21236	0.000	-1.36955	60.00000	Averaged
119 Hexachloropropene	0.11708	0.15535	0.15535	0.000	32.68879	60.00000	Averaged
120 p-Phenylenediamine	0.24808	0.18786	0.18786	0.000	-24.27440	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.23566	0.20459	0.20459	0.000	-13.18411	60.00000	Averaged
122 Safrole	0.19323	0.21744	0.21744	0.000	12.53318	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.42534	0.46495	0.46495	0.000	9.31270	60.00000	Averaged
124 Isosafrole	0.35652	0.43179	0.43179	0.000	21.11174	60.00000	Averaged
125 1,4-Naphthoquinone	0.33545	0.30298	0.30298	0.000	-9.67783	60.00000	Averaged
127 Pentachlorobenzene	0.37060	0.35865	0.35865	0.000	-3.22615	60.00000	Averaged
128 1-Naphthylamine	0.91242	0.83838	0.83838	0.000	-8.11473	60.00000	Averaged
129 2-Naphthylamine	1.00263	0.86475	0.86475	0.000	-13.75164	60.00000	Averaged
131 5-Nitro-o-toluidine	0.29533	0.24171	0.24171	0.000	-18.15384	60.00000	Averaged
136 1,3,5-Trinitrobenzene	0.14894	0.15140	0.15140	0.000	1.65682	60.00000	Averaged
137 Phenacetin	0.33125	0.26694	0.26694	0.000	-19.41452	60.00000	Averaged
138 Diallate	0.31820	0.25215	0.25215	0.000	-20.75697	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD3.i Injection Date: 27-JAN-2010 10:11
 Lab File ID: s3a2704.d Init. Cal. Date(s): 20-JAN-2010 21-JAN-2010
 Analysis Type: Init. Cal. Times: 17:59 23:34
 Lab Sample ID: WBN100120-08.4 Quant Type: ISTD
 Method: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
140 4-Aminobiphenyl	0.63580	0.51143	0.51143	0.000	-19.56210	60.00000	Averaged
141 Pentachloronitrobenzene	0.07853	0.07686	0.07686	0.000	-2.12320	60.00000	Averaged
142 Pronamide	0.29619	0.29945	0.29945	0.000	1.09961	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.03387	0.01701	0.01701	0.000	-49.78709	60.00000	Averaged
147 Methapyrilene	0.52598	0.40240	0.40240	0.000	-23.49373	60.00000	Averaged
148 Isodrin	0.11094	0.09826	0.09826	0.000	-11.43181	60.00000	Averaged
149 Aramite	0.04585	0.04083	0.04083	0.000	-10.95651	60.00000	Averaged
150 Kepone	0.06767	0.05999	0.05999	0.000	-11.34340	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.39647	0.40498	0.40498	0.000	2.14596	60.00000	Averaged
152 Chlorobenzilate	0.32229	0.39650	0.39650	0.000	23.02305	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.51678	0.43855	0.43855	0.000	-15.13914	60.00000	Averaged
155 2-Acetylaminofluorene	35.54353	40.00000	0.27411	0.000	-11.14119	60.00000	Linear
157 7,12Dimethylbenz(a)anthracene	0.53008	0.55161	0.55161	0.000	4.06115	60.00000	Averaged
158 3-Methylcholanthrene	0.38427	0.42176	0.42176	0.000	9.75629	60.00000	Averaged
212 Cis Diallate	0.33782	0.33747	0.33747	0.000	-0.10307	60.00000	Averaged
213 Trans Diallate	0.37435	0.29665	0.29665	0.000	-20.75697	60.00000	Averaged

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Data file : /chem/MSD3.i/s012710.b/s3a2704.d
Lab Smp Id: WBN100120-08.4 Client Smp ID: APCVS
Inj Date : 27-JAN-2010 10:11
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |WBN100120-08.4|40 PPM|1|SVMF|1|APCVS
Misc Info : |MSD8270|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 11:46 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AP12.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.814	4.814	(1.000)	299772	40.0000		
* 29 Naphthalene-d8	136	6.098	6.098	(1.000)	1120405	40.0000		
* 46 Acenaphthene-d10	164	7.969	7.969	(1.000)	612234	40.0000		
* 67 Phenanthrene-d10	188	9.589	9.589	(1.000)	988246	40.0000		
* 91 Chrysene-d12	240	12.600	12.600	(1.000)	531784	40.0000		
* 98 Perylene-d12	264	14.935	14.935	(1.000)	275778	40.0000		
209 Benzaldehyde	77	4.412	4.412	(0.917)	209105	40.0000		27.8
16 Acetophenone	105	5.195	5.195	(1.079)	343336	40.0000		34.6
189 Caprolactam	113	6.529	6.529	(1.071)	94688	40.0000		39.4
208 1,1'-Biphenyl	154	7.342	7.342	(0.921)	721855	40.0000		39.0
207 Atrazine	173	9.242	9.242	(0.964)	47863	40.0000		41.9
77 Benzidine	184	11.035	11.035	(0.876)	99658	40.0000		24.9
90 3,3'-Dichlorobenzidine	252	12.530	12.530	(0.994)	125970	40.0000		35.1
102 1,4-Dioxane	88	2.431	2.431	(0.505)	111345	40.0000		40.1
103 Methyl methacrylate	100	2.425	2.425	(0.504)	67543	40.0000		42.2
104 Ethyl methacrylate	69	2.947	2.947	(0.612)	255656	40.0000		38.2
105 2-Picoline	93	3.211	3.211	(0.667)	312752	40.0000		32.1
106 N-Nitrosomethylethylamine	88	3.278	3.278	(0.681)	137743	40.0000		31.8
107 Methyl methanesulfonate	80	3.510	3.510	(0.729)	166041	40.0000		36.7
108 N-Nitrosodiethylamine	102	3.841	3.841	(0.798)	151051	40.0000		34.6
109 Ethyl Methanesulfonate	79	4.081	4.081	(0.848)	222575	40.0000		39.8
110 Pentachloroethane	167	4.553	4.553	(0.946)	129736	40.0000		52.6
111 N-Nitrosopyrrolidine	100	5.183	5.183	(1.077)	155702	40.0000		34.6(Q)
113 N-Nitrosomorpholine	56	5.215	5.215	(1.083)	248114	40.0000		33.6
114 o-Toluidine	106	5.233	5.233	(1.087)	482920	40.0000		35.6
115 N-Nitrosopiperidine	114	5.529	5.529	(0.907)	149486	40.0000		35.3

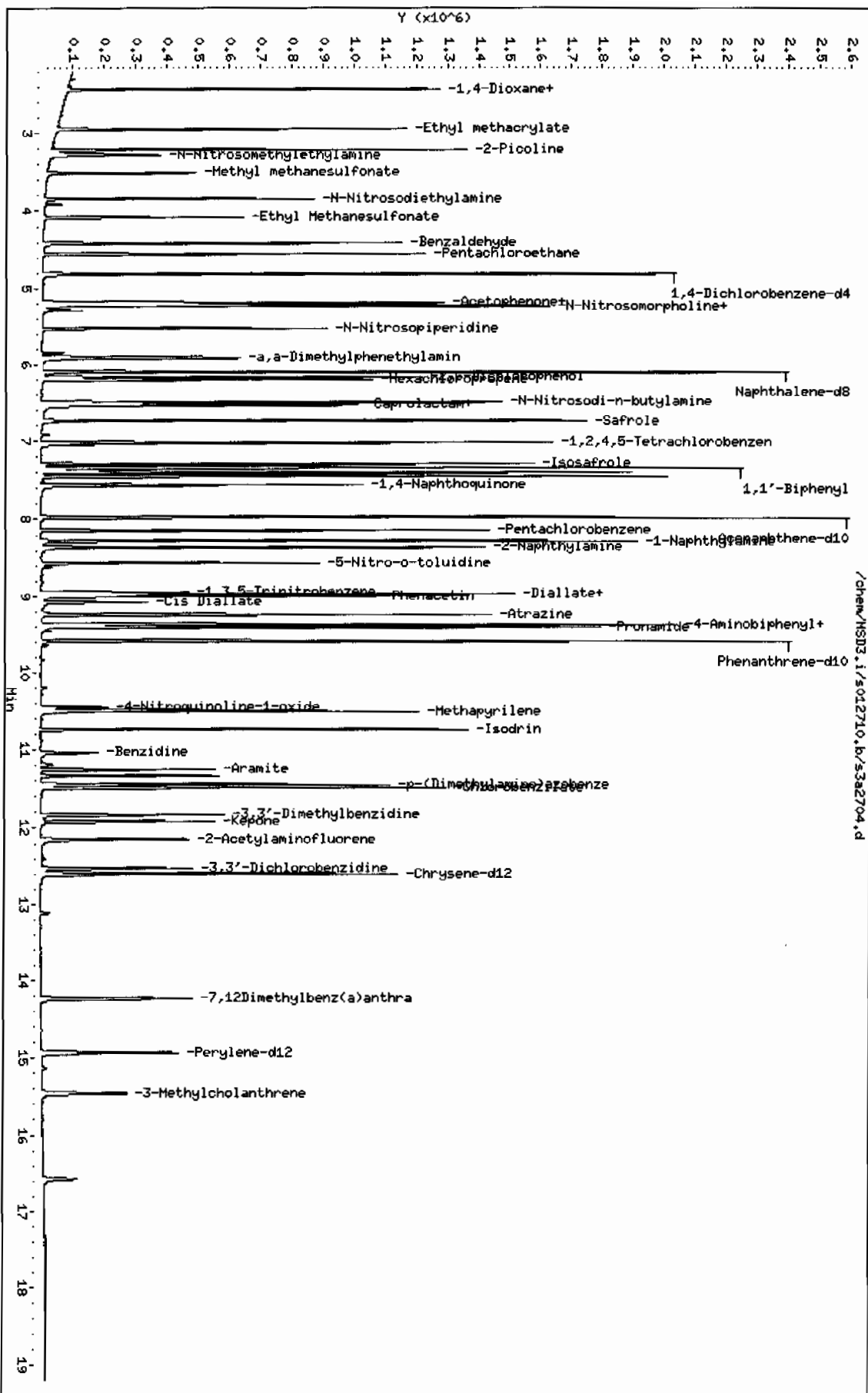
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
116 a,a-Dimethylphenethylamine	58	5.919	5.919	(0.971)	887020	40.0000	28.3
118 2,6-Dichlorophenol	162	6.168	6.168	(1.012)	237933	40.0000	39.4
119 Hexachloropropene	213	6.201	6.201	(1.017)	174059	40.0000	53.1
120 p-Phenylenediamine	108	6.535	6.535	(1.072)	210476	40.0000	30.3
121 N-Nitrosodi-n-butylamine	84	6.497	6.497	(1.065)	229228	40.0000	34.7 (Q)
122 Saffrole	162	6.734	6.734	(1.104)	243624	40.0000	45.0
123 1,2,4,5-Tetrachlorobenzene	216	7.019	7.019	(0.881)	284661	40.0000	43.7
124 Isosaffrole	162	7.292	7.292	(0.915)	264357	40.0000	48.4
125 1,4-Naphthoquinone	158	7.559	7.559	(0.948)	185495	40.0000	36.1
127 Pentachlorobenzene	250	8.142	8.142	(1.022)	219576	40.0000	38.7
128 1-Naphthylamine	143	8.277	8.277	(1.039)	513282	40.0000	36.8
129 2-Naphthylamine	143	8.359	8.359	(1.049)	529429	40.0000	34.5
131 5-Nitro-o-toluidine	152	8.567	8.567	(1.075)	147986	40.0000	32.7
136 1,3,5-Trinitrobenzene	75	8.949	8.949	(0.933)	149623	40.0000	40.7
137 Phenacetin	108	9.002	9.002	(0.939)	263804	40.0000	32.2 (Q)
138 Diallate	86	8.975	8.975	(0.936)	249184	40.0000	31.7
140 4-Aminobiphenyl	169	9.369	9.369	(0.977)	505414	40.0000	32.2
141 Pentachloronitrobenzene	237	9.375	9.375	(0.978)	75954	40.0000	39.2 (Q)
142 Pronamide	173	9.407	9.407	(0.981)	295929	40.0000	40.4
146 4-Nitroquinoline-1-oxide	101	10.445	10.445	(1.089)	16809	40.0000	20.1
147 Methapyrilene	58	10.501	10.501	(1.095)	397675	40.0000	30.6
148 Isodrin	193	10.736	10.736	(1.120)	97100	40.0000	35.4
149 Aramite	185	11.249	11.249	(1.173)	40346	40.0000	35.6
150 Kepone	272	11.916	11.916	(1.243)	59286	40.0000	35.5
151 p-(Dimethylamino)azobenzene	120	11.446	11.446	(0.908)	215362	40.0000	40.8
152 Chlorobenzilate	251	11.484	11.484	(0.911)	210850	40.0000	49.2
153 3,3'-Dimethylbenzidine	212	11.831	11.831	(0.939)	233212	40.0000	33.9
155 2-Acetylaminofluorene	181	12.145	12.145	(0.964)	145770	40.0000	35.5
157 7,12Dimethylbenz(a)anthracene	256	14.234	14.234	(0.953)	152121	40.0000	41.6
158 3-Methylcholanthrene	268	15.455	15.455	(1.035)	116311	40.0000	43.9 (Q)
212 Cis Diallate	86	9.075	9.075	(0.946)	50025	6.00000	6.0
213 Trans Diallate	86	8.975	8.975	(0.936)	249184	34.0000	26.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/HSD3.i/s012710.b/s3a2704.d
 Date: 27-JAN-2010 10:11
 Client ID: APCVS
 Sample Info: IWBH00120-08.4140 PPH11SUMF11.IAPCVS
 Column Phase: 3AN DB-SHS

Instrument: HSD3.i
 Operator: JLD1
 Column diameter: 0.20



QC Data

Data File: /chem/MSD3,i/s012010a,b/s3a2013,d

Page 1

Date : 20-JAN-2010 17:17

Client ID: DFTPP

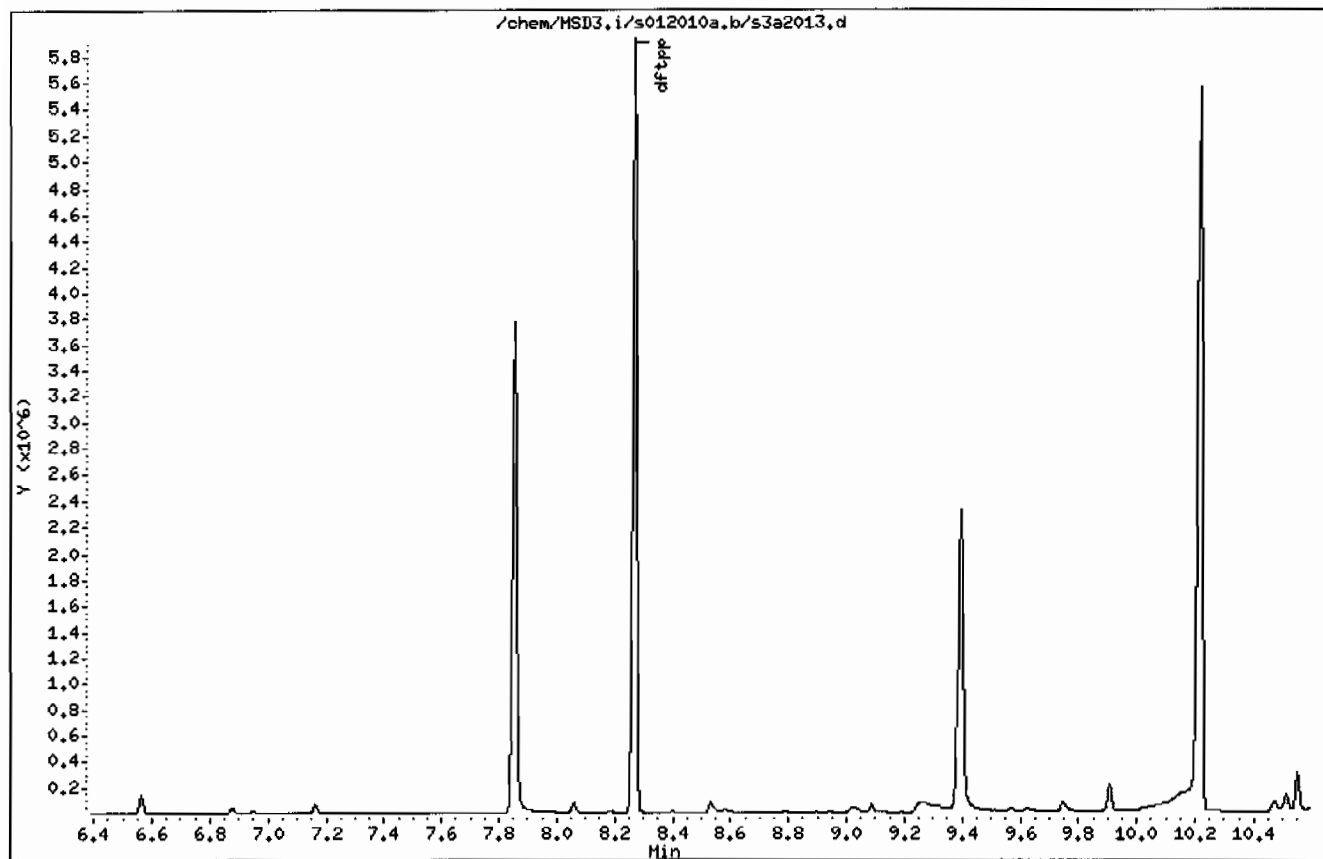
Instrument: MSD3.i

Sample Info: IMBN100107-01|DFTPP11|SVMI1|DFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: HSD3.i

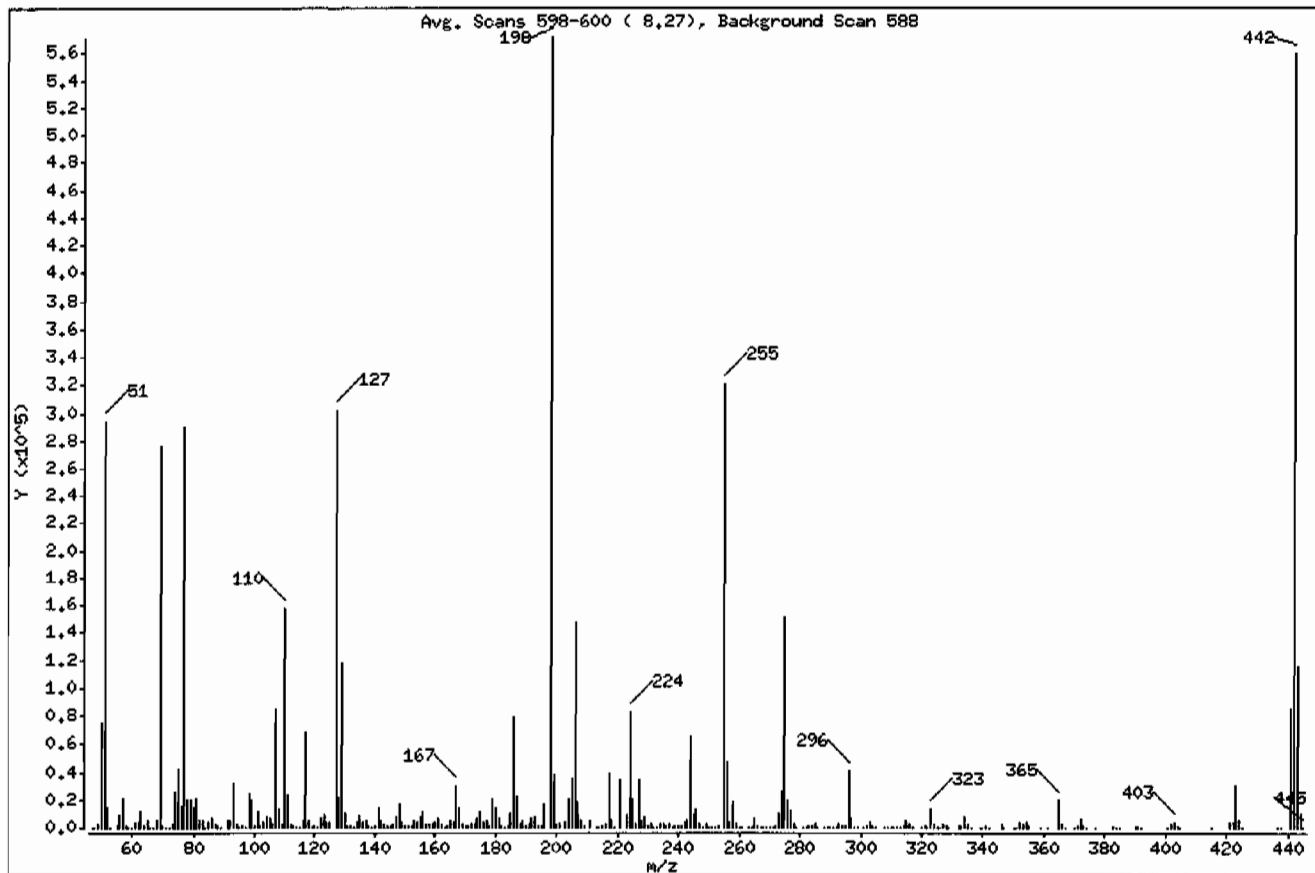
Sample Info: IWBNI00107-01IDFTPP11SVMI1IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	51.61
68	Less than 2.00% of mass 69	0.89 (1.85)
69	Mass 69 relative abundance	48.28
70	Less than 2.00% of mass 69	0.24 (0.49)
127	40.00 - 60.00% of mass 198	52.97
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.71
275	10.00 - 30.00% of mass 198	26.39
365	Greater than 1.00% of mass 198	3.48
441	Present, but less than mass 443	14.91
442	Greater than 40.00% of mass 198	97.96
443	17.00 - 23.00% of mass 442	20.16 (20.58)

Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: HSD3.i

Sample Info: IWBH100107-01IDFTPP11SVMI1IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2013.d

Spectrum: Avg. Scans 598-600 (8.27), Background Scan 598

Location of Maximum: 198.00

Number of points: 317

m/z	Y	m/z	Y	m/z	Y	m/z	Y
47.00	71	130.00	10080	214.00	173	301.00	490
48.00	215	131.00	1922	215.00	1657	302.00	731
49.00	1992	132.00	1040	216.00	3255	303.00	4594
50.00	74976	133.00	396	217.00	38984	304.00	1332
51.00	294720	134.00	3380	218.00	4866	305.00	157
52.00	14845	135.00	9473	219.00	515	308.00	596
53.00	653	136.00	3795	221.00	33936	309.00	359
55.00	1342	137.00	4700	223.00	8682	310.00	471
56.00	9017	138.00	1054	224.00	82472	311.00	77
57.00	20728	139.00	626	225.00	21400	312.00	75
58.00	925	140.00	1431	226.00	2177	313.00	319
59.00	258	141.00	14888	227.00	34304	314.00	1886
60.00	180	142.00	4915	228.00	4806	315.00	4776
61.00	3855	143.00	3193	229.00	7275	316.00	2628
62.00	4152	144.00	888	230.00	959	317.00	508
63.00	11447	145.00	759	231.00	3027	320.00	140
64.00	1645	146.00	2722	232.00	642	321.00	1328
65.00	5508	147.00	7667	233.00	641	322.00	621
66.00	373	148.00	17112	234.00	2259	323.00	13004
67.00	401	149.00	3399	235.00	2452	324.00	2330
68.00	5108	150.00	1015	236.00	1606	325.00	228
69.00	275712	151.00	1867	237.00	2669	326.00	281
70.00	1360	152.00	1209	238.00	408	327.00	2511
71.00	126	153.00	4709	239.00	1373	328.00	1262
72.00	92	154.00	3367	240.00	1044	329.00	201
73.00	2123	155.00	8100	241.00	1937	332.00	958
74.00	26656	156.00	12062	242.00	4382	333.00	1303
75.00	42640	157.00	2327	243.00	4685	334.00	8529
76.00	15152	158.00	2803	244.00	65856	335.00	2354
77.00	290112	159.00	2124	245.00	8735	336.00	285
78.00	20048	160.00	4463	246.00	12559	339.00	180
79.00	19176	161.00	6742	247.00	2716	340.00	192
80.00	14978	162.00	1977	248.00	586	341.00	1630
81.00	21032	163.00	552	249.00	2429	342.00	424
82.00	5241	164.00	785	250.00	440	346.00	3171

Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBEN100107-01|DFTPP|1|SVMI|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2013,d

Spectrum: Avg. Scans 598-600 (8.27), Background Scan 588

Location of Maximum: 198.00

Number of points: 317

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	4854	165.00	5288	251.00	493	347.00	557
84.00	419	166.00	4276	252.00	604	350.00	127
85.00	3785	167.00	29592	253.00	1354	351.00	248
86.00	6173	168.00	13942	255.00	319808	352.00	3954
87.00	2798	169.00	2462	256.00	47472	353.00	2730
88.00	1095	170.00	1019	257.00	3415	354.00	4049
89.00	472	171.00	1253	258.00	18800	355.00	813
91.00	4699	172.00	2641	259.00	2905	359.00	249
92.00	5188	173.00	3263	260.00	441	361.00	68
93.00	31992	174.00	6267	261.00	543	365.00	19880
94.00	2223	175.00	11398	263.00	185	366.00	3135
95.00	515	176.00	3378	264.00	460	367.00	191
96.00	1464	177.00	5542	265.00	7188	370.00	406
97.00	609	178.00	1755	266.00	1380	371.00	1007
98.00	24728	179.00	21648	267.00	143	372.00	7125
99.00	19224	180.00	14476	268.00	157	373.00	1815
100.00	1766	181.00	6936	269.00	33	374.00	114
101.00	11457	182.00	1104	270.00	428	377.00	170
102.00	667	183.00	598	271.00	542	383.00	1878
103.00	4115	184.00	1734	272.00	880	384.00	495
104.00	7470	185.00	10368	273.00	9910	385.00	155
105.00	6606	186.00	78664	274.00	25968	390.00	921
106.00	2421	187.00	22736	275.00	150720	391.00	700
107.00	85448	188.00	2180	276.00	19760	392.00	528
108.00	13681	189.00	4878	277.00	11944	401.00	477
109.00	2749	190.00	775	278.00	2043	402.00	2667
110.00	156928	191.00	2381	279.00	417	403.00	3854
111.00	23736	192.00	7053	281.00	157	404.00	1417
112.00	3017	193.00	7872	282.00	276	405.00	208
113.00	950	194.00	1545	283.00	1456	415.00	192
114.00	218	195.00	941	284.00	958	421.00	3844
115.00	308	196.00	17480	285.00	2218	422.00	3784
116.00	4903	198.00	571136	286.00	378	423.00	29736
117.00	68016	199.00	38344	288.00	138	424.00	6833
118.00	4862	200.00	3066	289.00	459	425.00	528

Date : 20-JAN-2010 17:17

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01|DFTPP|1|SVMI|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2013.d

Spectrum: Avg. Scans 598-600 (8.27), Background Scan 588

Location of Maximum: 198.00

Number of points: 317

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	619	201.00	2806	290.00	427	437.00	75
120.00	1124	203.00	3981	291.00	255	438.00	34
121.00	421	204.00	20728	292.00	552	441.00	85168
122.00	5938	205.00	35552	293.00	2690	442.00	559488
123.00	8803	206.00	147008	294.00	703	443.00	115120
124.00	4068	207.00	18872	295.00	963	444.00	10969
125.00	3625	208.00	4964	296.00	41336	445.00	603
127.00	302528	209.00	1534	297.00	5911		
128.00	22944	211.00	5840	298.00	340		
129.00	118808	213.00	416	299.00	70		

Data File: /chem/MSD3.i/s012510.b/s3a2502.d

Page 1

Date : 25-JAN-2010 09:52

Client ID: DFTPP

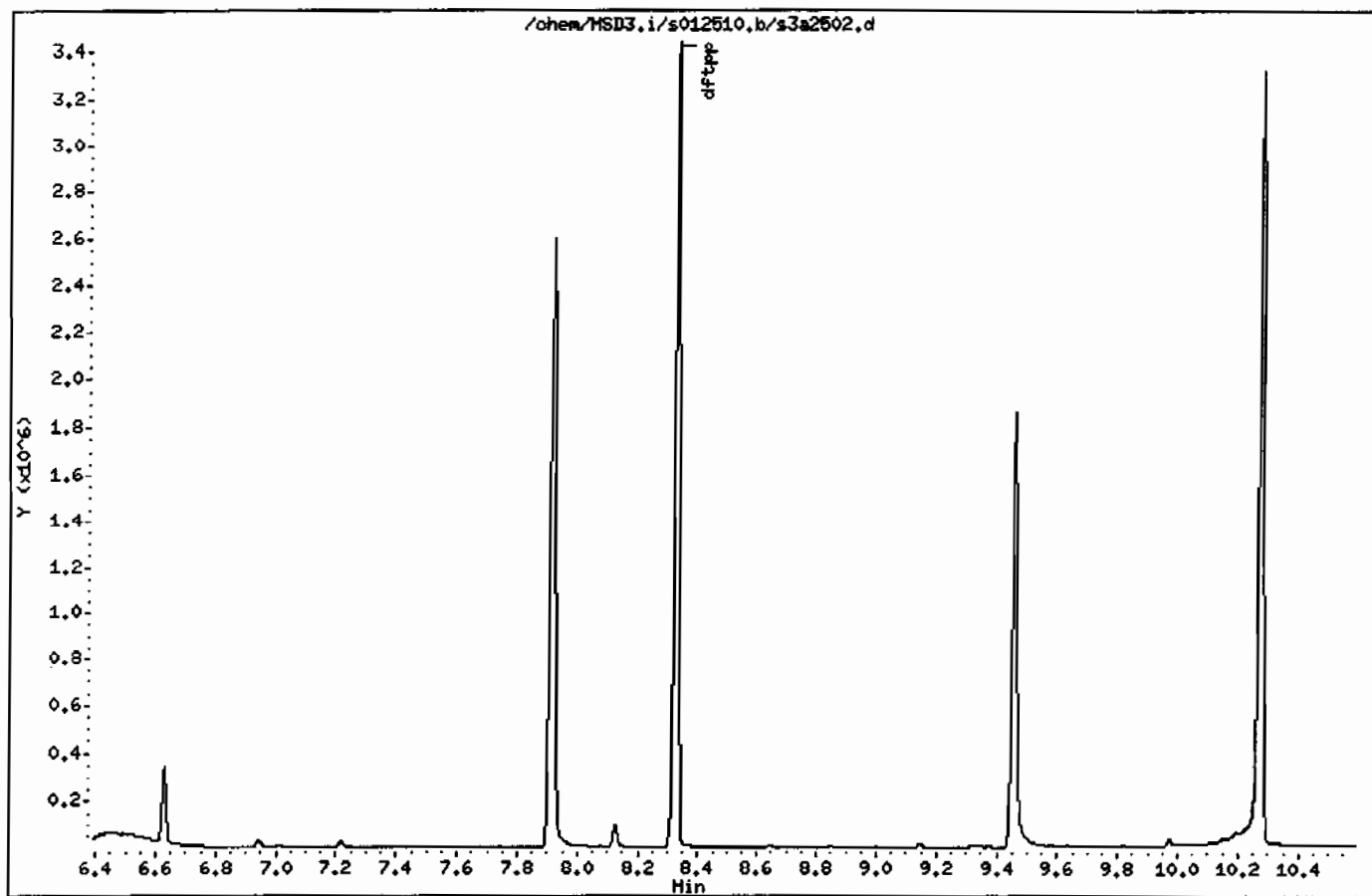
Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD3.i/s012810.b/s3a2802.d

Page 2

Date : 25-JAN-2010 09:52

Client ID: DFTPP

Instrument: MSD3.i

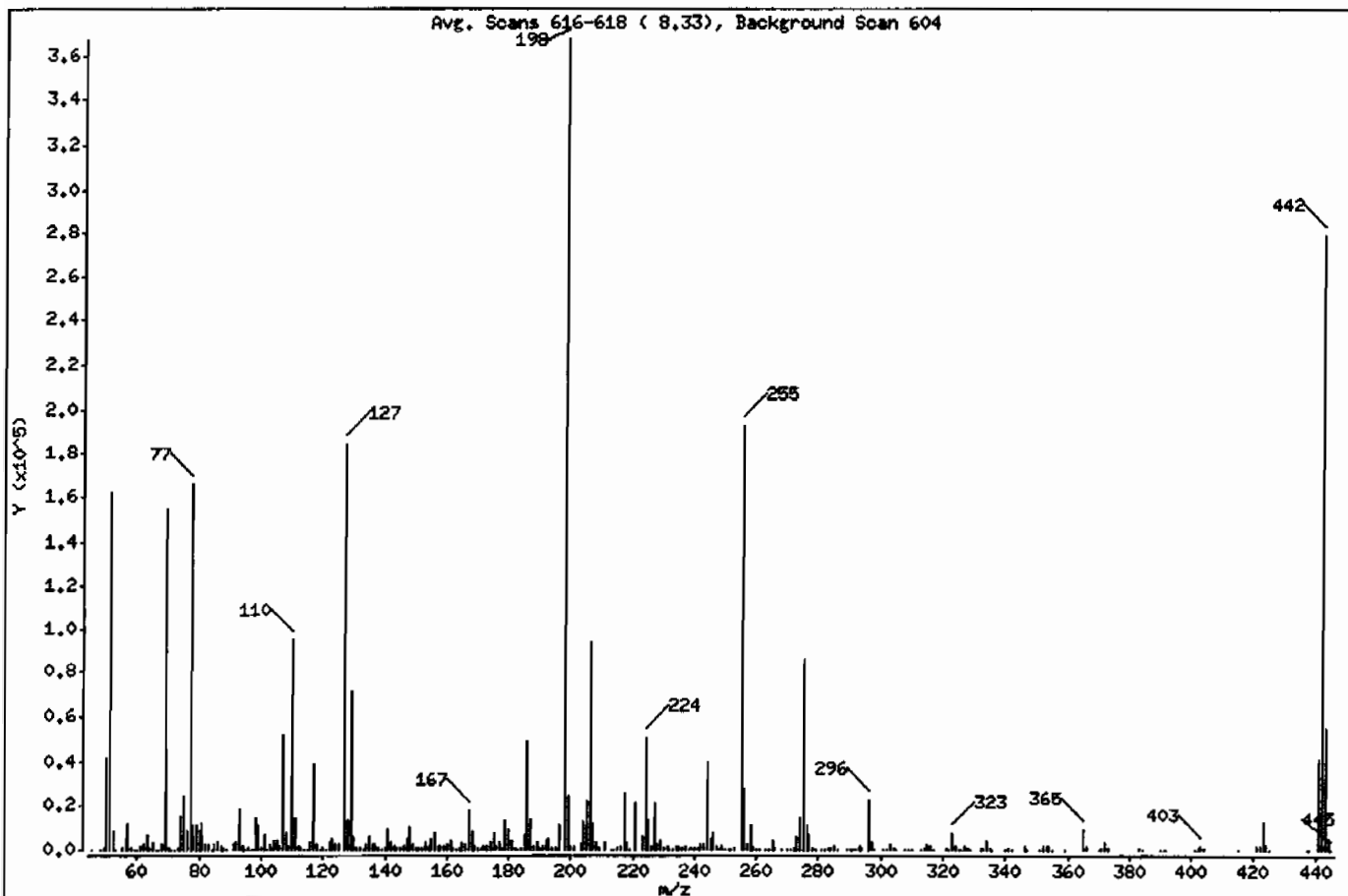
Sample Info: IWBNI00107-01IDFTPP1ISVM11IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.10
68	Less than 2.00% of mass 69	0.74 (1.76)
69	Mass 69 relative abundance	42.26
70	Less than 2.00% of mass 69	0.19 (0.45)
127	40.00 - 60.00% of mass 198	50.27
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 30.00% of mass 198	23.24
365	Greater than 1.00% of mass 198	2.62
441	Present, but less than mass 443	11.36
442	Greater than 40.00% of mass 198	76.11
443	17.00 - 23.00% of mass 442	14.91 (19.59)

Data File: /chem/MSD3.i/s012510.b/s3a2502.d

Page 3

Date : 25-JAN-2010 09:52

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2502.d

Spectrum: Avg. Scans 616-618 (8.33), Background Scan 604

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	108	125.00	2211	204.00	13095	291.00	164
48.00	76	127.00	184640	205.00	22352	292.00	340
49.00	1142	128.00	13948	206.00	93976	293.00	1616
50.00	41376	129.00	71040	207.00	11850	294.00	430
51.00	161984	130.00	5990	208.00	3096	296.00	22984
52.00	8341	131.00	1124	209.00	1059	297.00	3147
53.00	360	132.00	673	211.00	3667	298.00	232
55.00	769	133.00	316	213.00	249	301.00	272
56.00	4866	134.00	2172	214.00	70	302.00	403
57.00	11678	135.00	5811	215.00	1066	303.00	2669
58.00	520	136.00	2290	216.00	1923	304.00	673
59.00	154	137.00	2901	217.00	25008	305.00	35
60.00	163	138.00	651	218.00	3071	308.00	327
61.00	2061	139.00	382	219.00	289	309.00	238
62.00	2281	140.00	838	221.00	21384	310.00	308
63.00	6497	141.00	9143	223.00	5622	313.00	195
64.00	890	142.00	3005	224.00	50520	314.00	997
65.00	3209	143.00	2107	225.00	13203	315.00	2540
66.00	176	144.00	483	226.00	1310	316.00	1286
67.00	241	145.00	468	227.00	21168	317.00	218
68.00	2737	146.00	1560	228.00	2914	321.00	695
69.00	155264	147.00	4915	229.00	4217	322.00	372
70.00	704	148.00	10167	230.00	573	323.00	7244
71.00	126	149.00	2138	231.00	1894	324.00	1317
72.00	76	150.00	532	232.00	304	325.00	82
73.00	1097	151.00	1146	233.00	375	326.00	153
74.00	15187	152.00	671	234.00	1370	327.00	1357
75.00	24680	153.00	2978	235.00	1633	328.00	663
76.00	8254	154.00	2099	236.00	980	329.00	110
77.00	165824	155.00	5095	237.00	1653	332.00	577
78.00	11333	156.00	7559	238.00	204	333.00	708
79.00	11226	157.00	1410	239.00	872	334.00	4513
80.00	8568	158.00	1687	240.00	679	335.00	1140
81.00	12112	159.00	1313	241.00	1208	336.00	123
82.00	2861	160.00	2891	242.00	2796	340.00	72

Data File: /chem/MSD3.i/s012510.b/s3a2502.d

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Date : 25-JAN-2010 09:52

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: HBN100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2502.d

Spectrum: Avg. Scans 616-618 (8.33), Background Scan 604

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	2832	161.00	4122	243.00	2765	341.00	772
84.00	276	162.00	1186	244.00	39792	342.00	186
85.00	2253	163.00	363	245.00	6455	346.00	1712
86.00	3391	164.00	434	246.00	7806	347.00	272
87.00	1441	165.00	3506	247.00	1515	351.00	134
88.00	639	166.00	2724	248.00	359	352.00	2053
89.00	249	167.00	17416	249.00	1332	353.00	1513
91.00	2792	168.00	8661	250.00	269	354.00	2101
92.00	2986	169.00	1390	251.00	302	355.00	377
93.00	18392	170.00	595	252.00	346	359.00	147
94.00	1302	171.00	804	253.00	846	365.00	9636
95.00	326	172.00	1500	255.00	192960	366.00	1579
96.00	842	173.00	2094	256.00	27816	370.00	194
97.00	356	174.00	3707	257.00	2289	371.00	500
98.00	14066	175.00	7352	258.00	10770	372.00	3580
99.00	11026	176.00	2065	259.00	1813	373.00	818
100.00	1030	177.00	3368	260.00	318	383.00	929
101.00	6800	178.00	1219	261.00	316	384.00	194
102.00	384	179.00	13550	263.00	71	390.00	413
103.00	2371	180.00	9160	264.00	331	391.00	300
104.00	4313	181.00	4321	265.00	4445	392.00	218
105.00	4164	182.00	659	266.00	743	401.00	225
106.00	1341	183.00	362	268.00	124	402.00	1226
107.00	51264	184.00	1065	270.00	253	403.00	1686
108.00	7943	185.00	6390	271.00	401	404.00	643
109.00	1511	186.00	48736	272.00	492	415.00	34
110.00	94456	187.00	13747	273.00	6022	421.00	1723
111.00	14245	188.00	1367	274.00	14734	422.00	1833
112.00	1845	189.00	3184	275.00	85384	423.00	12476
113.00	614	190.00	506	276.00	11259	424.00	2654
114.00	105	191.00	1413	277.00	6925	425.00	251
115.00	199	192.00	4192	278.00	1155	437.00	127
116.00	2998	193.00	4814	279.00	243	438.00	50
117.00	38560	194.00	955	281.00	123	441.00	41752
118.00	2894	195.00	615	282.00	182	442.00	279616

Data File: /chem/MSD3.i/s012510.b/s3a2502.d

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Date : 25-JAN-2010 09:52

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01|DFTPP|1|SVH11|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0,20

Data File: s3a2502.d

Spectrum: Avg. Scans 616-618 (8.33), Background Scan 604

Location of Maximum: 198.00

Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	372	196.00	11389	283.00	798	443.00	54768
120.00	718	198.00	367360	284.00	484	444.00	4932
121.00	224	199.00	24608	285.00	1287	445.00	285
122.00	3892	200.00	1889	286.00	244		
123.00	5216	201.00	1689	289.00	311		
124.00	2326	203.00	2493	290.00	213		

Data File: /chem/MSD3.i/s012610a,b/s3a2606.d

Page 1

Date : 26-JAN-2010 11:36

Client ID: DFTPP

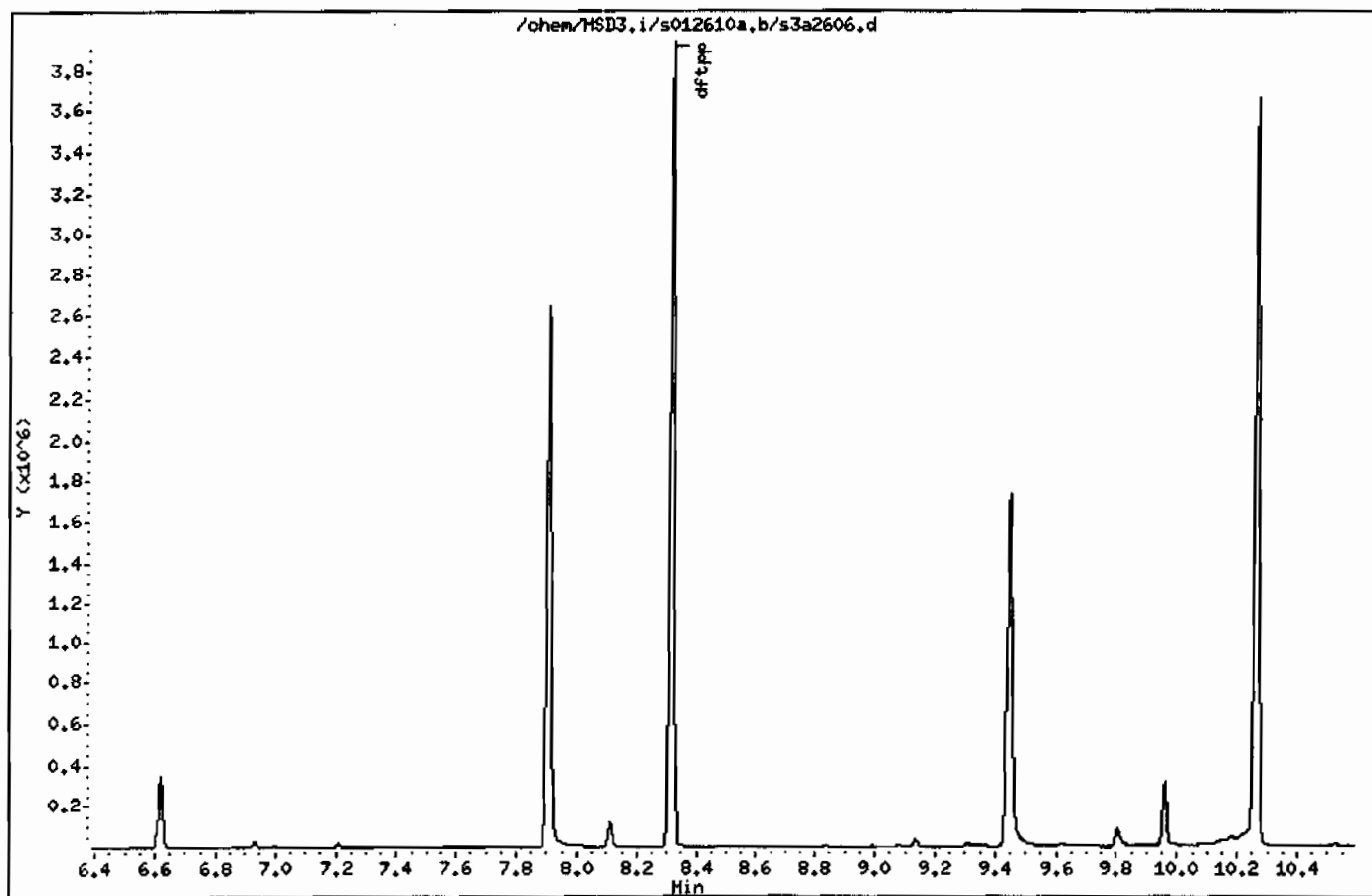
Instrument: MSD3.i

Sample Info: INBN100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/HSD3.i/s012610a.b/s3a2606.d

Page 2

Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: HSD3.i

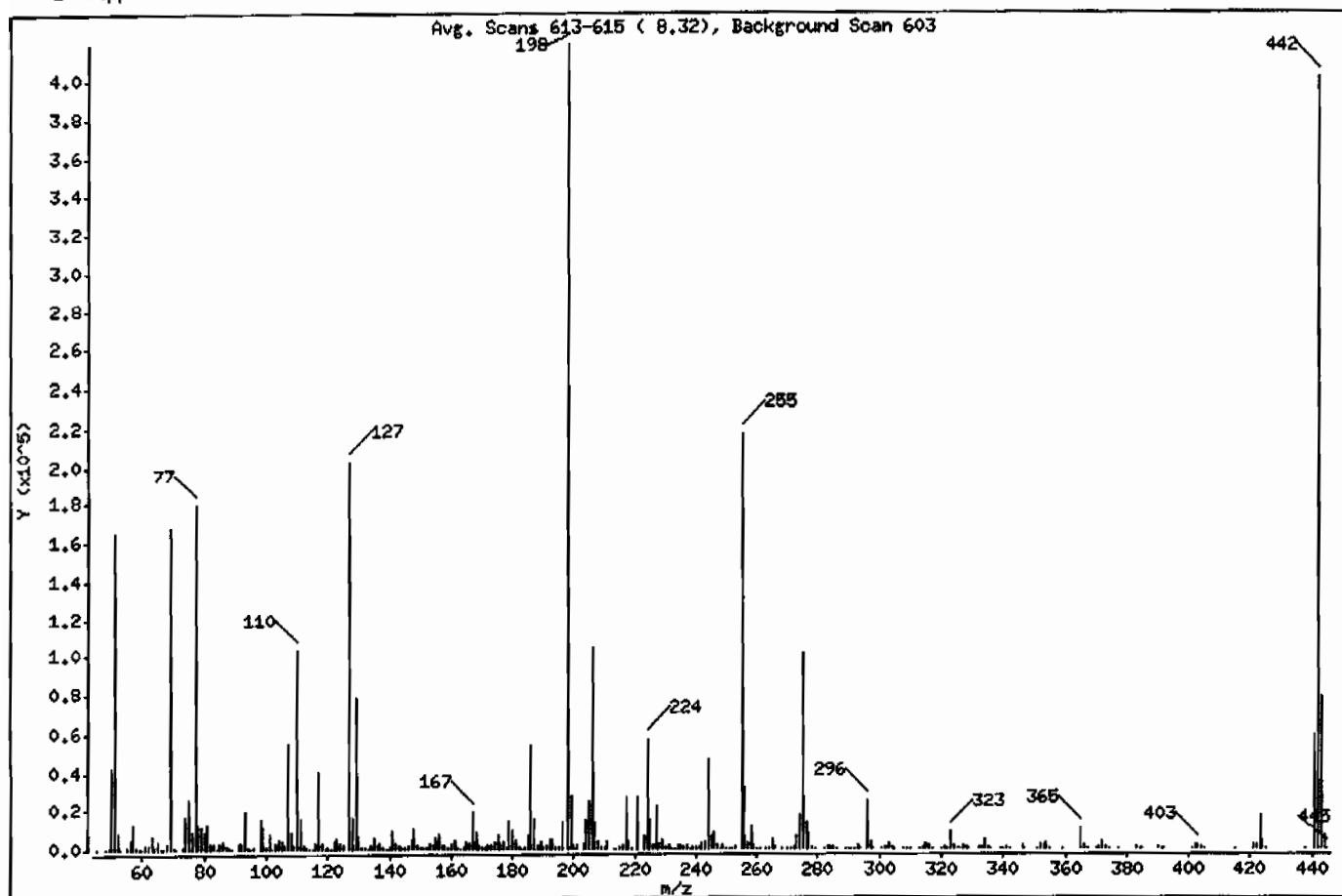
Sample Info: IWBH100107-01|DFTPP|1|SVH11|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	39.50
68	Less than 2.00% of mass 69	0.72 (1.80)
69	Mass 69 relative abundance	40.07
70	Less than 2.00% of mass 69	0.21 (0.52)
127	40.00 - 60.00% of mass 198	48.29
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 30.00% of mass 198	24.17
365	Greater than 1.00% of mass 198	2.61
441	Present, but less than mass 443	14.07
442	Greater than 40.00% of mass 198	95.78
443	17.00 - 23.00% of mass 442	18.55 (19.37)

Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: HSD3.i

Sample Info: |WBN100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-SMS

Column diameter: 0.20

Data File: s3a2606.d

Spectrum: Avg. Scans 613-615 (8.32), Background Scan 603

Location of Maximum: 198.00

Number of points: 305

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	187	129.00	78072	208.00	3553	297.00	3592
48.00	70	130.00	6665	209.00	1057	298.00	248
49.00	1177	131.00	1262	210.00	1314	301.00	339
50.00	42304	132.00	661	211.00	4263	302.00	498
51.00	165312	133.00	325	213.00	263	303.00	2782
52.00	8697	134.00	2232	214.00	35	304.00	700
53.00	345	135.00	6259	215.00	1142	305.00	35
55.00	732	136.00	2403	216.00	2184	308.00	374
56.00	5233	137.00	3145	217.00	27120	309.00	184
57.00	12250	138.00	726	218.00	3450	310.00	357
58.00	513	139.00	388	219.00	273	313.00	197
59.00	176	140.00	918	221.00	27416	314.00	1184
60.00	145	141.00	9806	223.00	6323	315.00	2697
61.00	2241	142.00	3146	224.00	57136	316.00	1558
62.00	2404	143.00	2265	225.00	14659	317.00	273
63.00	6899	144.00	574	226.00	1524	320.00	37
64.00	936	145.00	535	227.00	22416	321.00	808
65.00	3387	146.00	1770	228.00	3128	322.00	400
66.00	223	147.00	4948	229.00	4750	323.00	8415
67.00	249	148.00	10772	230.00	676	324.00	1535
68.00	3025	149.00	2221	231.00	2189	325.00	143
69.00	167744	150.00	626	232.00	369	326.00	173
70.00	870	151.00	1327	233.00	426	327.00	1533
71.00	78	152.00	868	234.00	1492	328.00	841
73.00	1185	153.00	3137	235.00	1670	329.00	74
74.00	15995	154.00	2280	236.00	1068	332.00	596
75.00	26000	155.00	5456	237.00	1980	333.00	795
76.00	8946	156.00	8045	238.00	258	334.00	4950
77.00	179392	157.00	1687	239.00	928	335.00	1172
78.00	12092	158.00	1846	240.00	700	336.00	84
79.00	11544	159.00	1347	241.00	1337	339.00	116
80.00	8989	160.00	2888	242.00	2963	340.00	124
81.00	12762	161.00	4541	243.00	3439	341.00	867
82.00	3199	162.00	1356	244.00	46768	342.00	234
83.00	3002	163.00	314	245.00	6276	346.00	1859

Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBNI00107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-SMS

Column diameter: 0.20

Data File: s3a2606.d

Spectrum: Avg. Scans 613-615 (8.32), Background Scan 603

Location of Maximum: 198.00

Number of points: 305

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	315	164.00	511	246.00	8379	347.00	321
85.00	2605	165.00	3570	247.00	1608	351.00	175
86.00	3696	166.00	2827	248.00	376	352.00	2385
87.00	1708	167.00	19312	249.00	1562	353.00	1771
88.00	731	168.00	8625	250.00	264	354.00	2600
89.00	285	169.00	1666	251.00	367	355.00	480
91.00	2991	170.00	652	252.00	390	359.00	171
92.00	3145	171.00	812	253.00	813	365.00	10936
93.00	19728	172.00	1643	255.00	217280	366.00	1708
94.00	1340	173.00	2245	256.00	32048	367.00	81
95.00	344	174.00	3997	257.00	2478	370.00	218
96.00	818	175.00	7607	258.00	11905	371.00	622
98.00	15030	176.00	2577	259.00	1862	372.00	4047
99.00	11773	177.00	3740	260.00	337	373.00	1070
100.00	1079	178.00	1266	261.00	367	374.00	72
101.00	7352	179.00	14893	263.00	23	377.00	114
102.00	373	180.00	9827	264.00	461	383.00	1135
103.00	2598	181.00	4566	265.00	4820	384.00	281
104.00	4675	182.00	704	266.00	768	385.00	35
105.00	4169	183.00	472	268.00	153	390.00	492
106.00	1468	184.00	1180	270.00	295	391.00	385
107.00	54696	185.00	7029	271.00	411	392.00	288
108.00	8921	186.00	54440	272.00	607	401.00	249
109.00	1717	187.00	15228	273.00	6929	402.00	1535
110.00	103248	188.00	1567	274.00	17784	403.00	2365
111.00	15383	189.00	3474	275.00	101152	404.00	761
112.00	1918	190.00	565	276.00	13735	405.00	71
113.00	590	191.00	1565	277.00	7645	415.00	76
114.00	82	192.00	4521	278.00	1156	421.00	2205
115.00	252	193.00	5200	279.00	265	422.00	2293
116.00	3296	194.00	1138	282.00	211	423.00	17768
117.00	40688	195.00	689	283.00	861	424.00	3553
118.00	2992	196.00	13521	284.00	581	425.00	391
119.00	408	198.00	418560	285.00	1302	438.00	41
120.00	730	199.00	28024	286.00	226	441.00	58912

Data File: /chem/MSD3,i/s012610a,b/s3a2606.d

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Date : 26-JAN-2010 11:36

Client ID: DFTPP

Instrument: MSD3,i

Sample Info: IWBH100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2606.d

Spectrum: Avg, Scans 613-618 (8.32), Background Scan 603

Location of Maximum: 198.00

Number of points: 305

m/z	Y	m/z	Y	m/z	Y	m/z	Y
121.00	272	200.00	2176	289.00	322	442.00	400896
122.00	3676	201.00	2189	290.00	275	443.00	77648
123.00	5769	203.00	2739	291.00	165	444.00	7038
124.00	2553	204.00	14253	292.00	358	445.00	421
125.00	2313	205.00	24720	293.00	1686		
127.00	202112	206.00	104504	294.00	419		
128.00	15498	207.00	13708	296.00	25328		

Data File: /chem/MSD3.i/s012710.b/s3a2701.d

Page 1

Date : 27-JAN-2010 08:57

Client ID: DFTPP

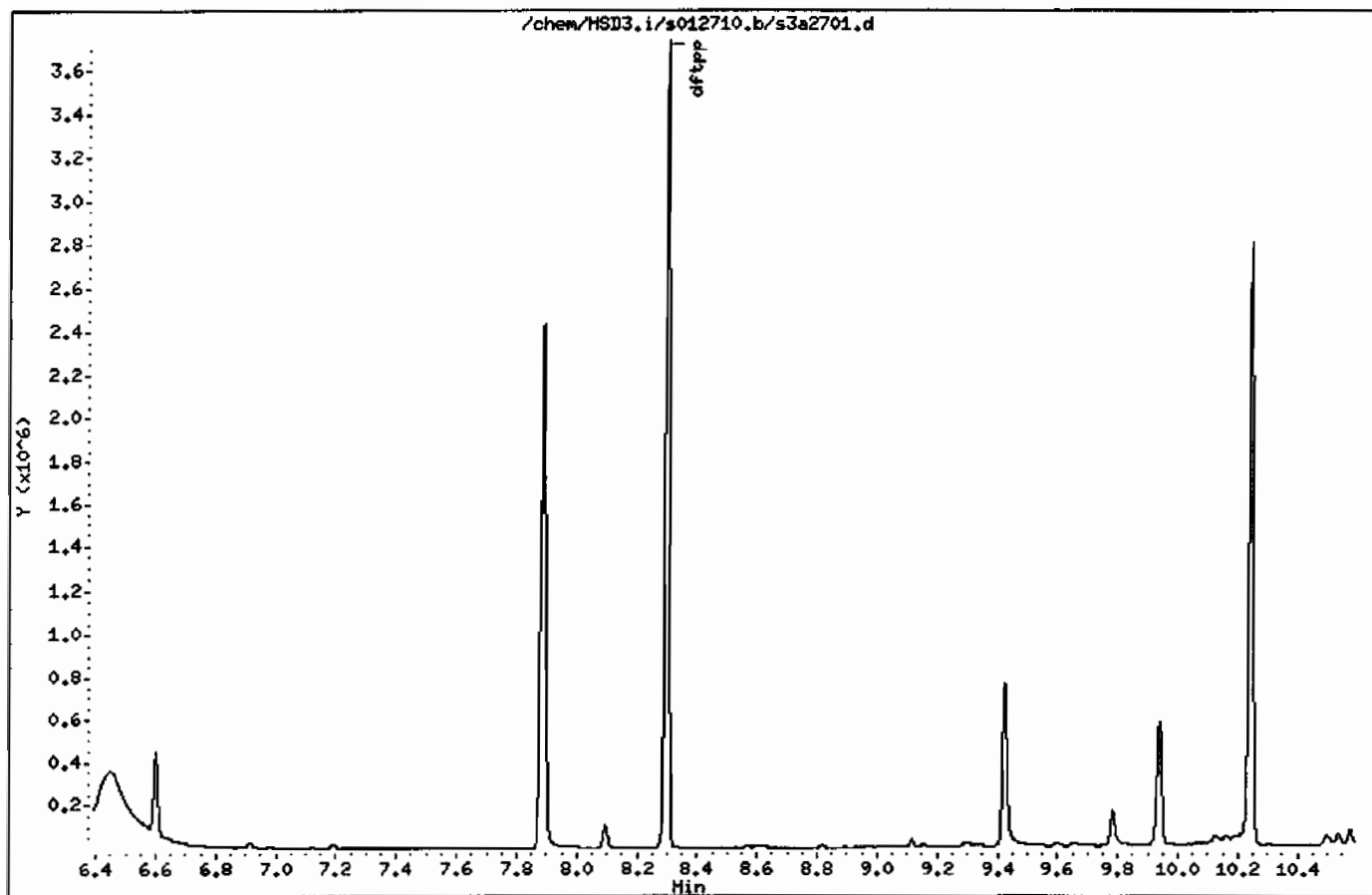
Instrument: MSD3.i

Sample Info: IWBH100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD3.i/s012710.b/s3a2701.d

Page 2

Date : 27-JAN-2010 08:57

Client ID: DFTPP

Instrument: MSD3.i

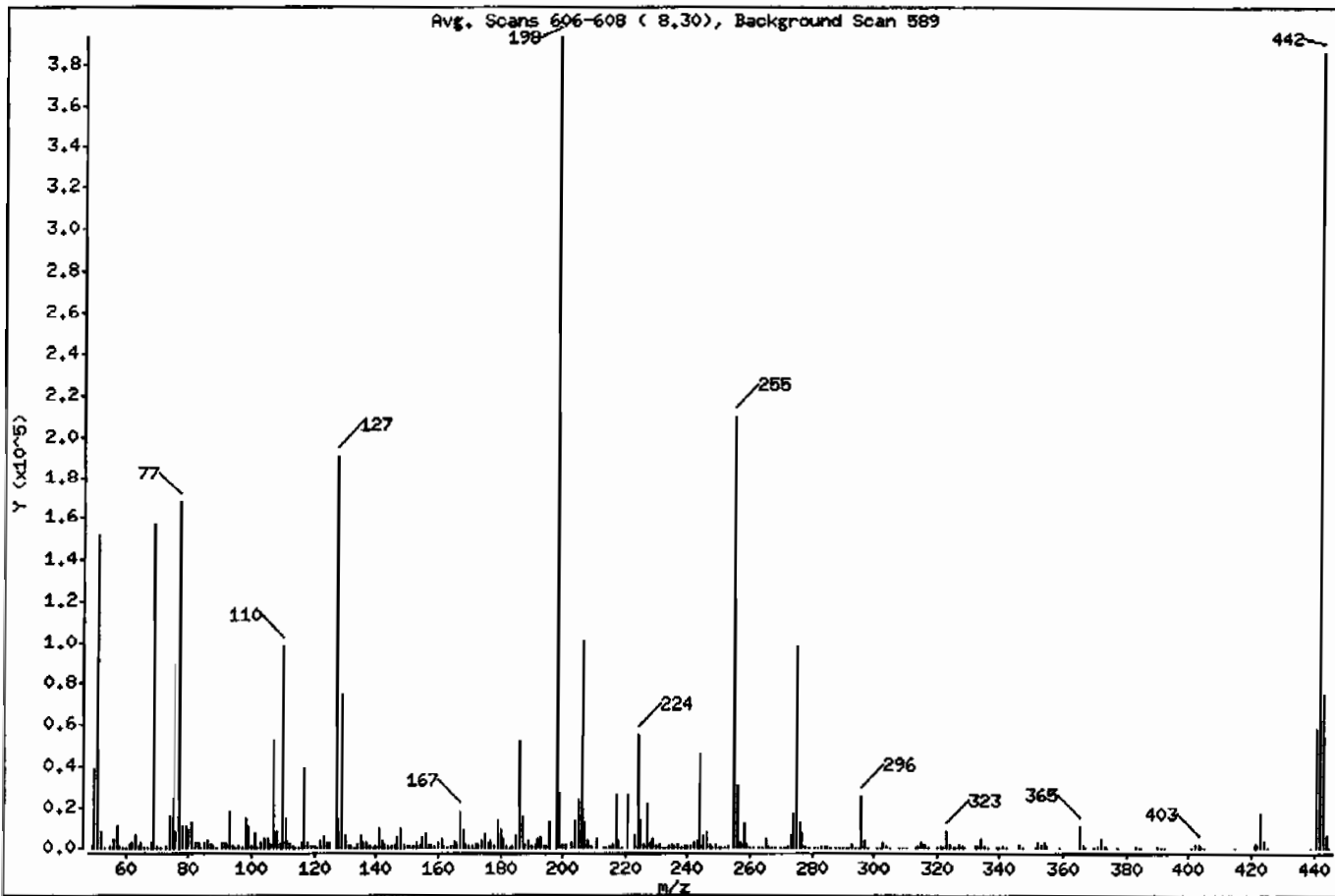
Sample Info: IWBH100107-01|DFTPP|1|SVH|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	38.59
68	Less than 2.00% of mass 69	0.73 (1.84)
69	Mass 69 relative abundance	39.92
70	Less than 2.00% of mass 69	0.21 (0.52)
127	40.00 - 60.00% of mass 198	48.68
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.87
275	10.00 - 30.00% of mass 198	24.94
365	Greater than 1.00% of mass 198	2.72
441	Present, but less than mass 443	14.73
442	Greater than 40.00% of mass 198	98.17
443	17.00 - 23.00% of mass 442	18.97 (19.32)

Data File: /chem/MSD3.i/s012710.b/s3a2701.d

Page 3

Date : 27-JAN-2010 08:57

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01|DFTPP|1|SVMI|1|DFTPP|

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2701.d

Spectrum: Avg. Scans 606-608 (8.30), Background Scan 589

Location of Maximum: 198.00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
49.00	1011	130.00	6291	209.00	1084	295.00	422
50.00	39392	131.00	1291	211.00	4098	296.00	28112
51.00	151808	132.00	725	213.00	249	297.00	3450
52.00	7967	133.00	248	214.00	138	298.00	262
53.00	351	134.00	2101	215.00	1066	301.00	325
55.00	819	135.00	6202	216.00	2139	302.00	442
56.00	4849	136.00	2452	217.00	26048	303.00	2783
57.00	11257	137.00	3072	218.00	3274	304.00	777
58.00	517	138.00	689	219.00	306	305.00	110
59.00	165	139.00	434	221.00	25856	308.00	302
60.00	68	140.00	931	223.00	5914	309.00	196
61.00	2066	141.00	9522	224.00	54096	310.00	324
62.00	2378	142.00	3189	225.00	13970	313.00	237
63.00	6289	143.00	2028	226.00	1533	314.00	1173
64.00	838	144.00	541	227.00	21536	315.00	2569
65.00	3157	145.00	538	228.00	2987	316.00	1508
66.00	200	146.00	1663	229.00	4585	317.00	263
67.00	190	147.00	5090	230.00	616	320.00	71
68.00	2891	148.00	10292	231.00	2070	321.00	761
69.00	156992	149.00	2132	232.00	342	322.00	441
70.00	818	150.00	611	233.00	436	323.00	7982
71.00	146	151.00	1150	234.00	1346	324.00	1456
73.00	1095	152.00	832	238.00	1618	325.00	126
74.00	15336	153.00	3028	236.00	1003	326.00	183
75.00	24368	154.00	2240	237.00	1818	327.00	1610
76.00	8294	155.00	5263	238.00	253	328.00	748
77.00	167552	156.00	7590	239.00	915	329.00	144
78.00	11281	157.00	1669	240.00	733	332.00	546
79.00	11142	158.00	1861	241.00	1282	333.00	752
80.00	8866	159.00	1299	242.00	2908	334.00	4760
81.00	12371	160.00	2920	243.00	3247	335.00	1235
82.00	3019	161.00	4259	244.00	44880	336.00	121
83.00	2848	162.00	1246	245.00	6115	339.00	121
84.00	259	163.00	351	246.00	8083	340.00	121
85.00	2326	164.00	515	247.00	1521	341.00	864

Date : 27-JAN-2010 08:57

Client ID: DFTPP

Instrument: MSD3.i

Sample Info: IWBH100107-01IDFTPP11SVH11IDFTPP1

Operator: JLD1

Column phase: J&W DB-MS

Column diameter: 0.20

Data File: s3a2701.d

Spectrum: Avg. Scans 606-608 (8.30), Background Scan 589

Location of Maximum: 198.00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	3490	165.00	3516	248.00	353	342.00	223
87.00	1579	166.00	2777	249.00	1546	346.00	1861
88.00	608	167.00	18176	250.00	308	347.00	305
89.00	283	168.00	8695	251.00	351	351.00	154
91.00	2661	169.00	1542	252.00	397	352.00	2330
92.00	3096	170.00	580	253.00	880	353.00	1698
93.00	18520	171.00	828	255.00	210048	354.00	2485
94.00	1314	172.00	1667	256.00	31272	355.00	455
95.00	296	173.00	2220	257.00	2318	359.00	137
96.00	936	174.00	3863	258.00	11425	365.00	10690
97.00	288	175.00	7331	259.00	1796	366.00	1596
98.00	14368	176.00	2311	260.00	344	367.00	132
99.00	11308	177.00	3408	261.00	314	370.00	186
100.00	1009	178.00	1156	263.00	37	371.00	594
101.00	6967	179.00	13654	264.00	387	372.00	4099
102.00	409	180.00	9323	265.00	4550	373.00	1027
103.00	2466	181.00	4446	266.00	654	374.00	79
104.00	4424	182.00	669	267.00	108	377.00	69
105.00	4164	183.00	384	268.00	173	383.00	1033
106.00	1402	184.00	1106	270.00	266	384.00	295
107.00	52024	185.00	6694	271.00	424	385.00	79
108.00	8296	186.00	51664	272.00	575	390.00	490
109.00	1735	187.00	14975	273.00	6543	391.00	422
110.00	98120	188.00	1418	274.00	17248	392.00	244
111.00	14871	189.00	3269	275.00	98104	401.00	214
112.00	1842	190.00	587	276.00	13109	402.00	1476
113.00	587	191.00	1617	277.00	7483	403.00	2181
114.00	147	192.00	4477	278.00	1336	404.00	752
115.00	270	193.00	5033	279.00	255	405.00	34
116.00	3034	194.00	1098	281.00	124	415.00	121
117.00	38592	195.00	684	282.00	224	421.00	2209
118.00	2886	196.00	12957	283.00	774	422.00	2228
119.00	454	198.00	393408	284.00	607	423.00	17216
120.00	645	199.00	27024	285.00	1305	424.00	3425
121.00	281	200.00	2050	286.00	200	425.00	332

Data File: /chem/HSD3.i/s012710.b/s3a2701.d

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Date : 27-JAN-2010 08:57

Client ID: DFTPP

Instrument: HSD3.i

Sample Info: INBN100107-011DFTPP11SVH11DFTPP1

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s3a2701.d

Spectrum: Avg. Scans 606-608 (8.30), Background Scan 589

Location of Maximum: 198.00

Number of points: 307

m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	3896	201.00	1916	288.00	37	439.00	86
123.00	5458	203.00	2486	289.00	319	441.00	57968
124.00	2386	204.00	13426	290.00	228	442.00	386240
125.00	2278	205.00	23624	291.00	157	443.00	74616
127.00	191488	206.00	100816	292.00	316	444.00	6665
128.00	14840	207.00	12807	293.00	1706	445.00	383
129.00	73920	208.00	3392	294.00	398		

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

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202022468

Client Sample: QC for batch 944454

Client: LANL010

Project: QC

Client ID: MB for batch 944454

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944455

Inst: MSD3.I

Dilution: 1

Run Date: 01/25/2010 11:59

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/22/2010 23:39

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2506.d

Column: J&W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	333	ug/kg	66.7	333
108-95-2	Phenol	U	333	ug/kg	66.7	333
95-57-8	2-Chlorophenol	U	333	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene	U	333	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine	U	333	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol	U	333	ug/kg	66.7	333
83-32-9	Acenaphthene	U	33.3	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene	U	333	ug/kg	33.3	333
100-02-7	4-Nitrophenol	U	333	ug/kg	110	333
87-86-5	Pentachlorophenol	U	333	ug/kg	83.3	333
129-00-0	Pyrene	U	33.3	ug/kg	10.0	33.3
110-86-1	Pyridine	U	333	ug/kg	66.7	333
62-53-3	Aniline	U	333	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether	U	333	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene	U	333	ug/kg	66.7	333
100-51-6	Benzyl alcohol	U	333	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene	U	333	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether	U	333	ug/kg	66.7	333
95-48-7	o-Cresol	U	333	ug/kg	66.7	333
65794-96-9	m,p-Cresols	U	333	ug/kg	100	333
67-72-1	Hexachloroethane	U	333	ug/kg	66.7	333
98-95-3	Nitrobenzene	U	333	ug/kg	66.7	333
78-59-1	Isophorone	U	333	ug/kg	66.7	333
88-75-5	2-Nitrophenol	U	333	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol	U	333	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane	U	333	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol	U	333	ug/kg	66.7	333
65-85-0	Benzoic acid	U	667	ug/kg	167	667
91-20-3	Naphthalene	U	33.3	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline	U	333	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene	U	333	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene	U	33.3	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene	U	333	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol	U	333	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol	U	333	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene	U	33.3	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline	U	333	ug/kg	66.7	333
99-09-2	<i>o</i> -Nitroaniline	U	333	ug/kg	66.7	333
	3-Nitroaniline					

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202022468

Client Sample: QC for batch 944454

Client: LANL010

Project: QC

Client ID: MB for batch 944454

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944455

Inst: MSD3.I

Dilution: 1

Run Date: 01/25/2010 11:59

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/22/2010 23:39

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2506.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	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	2.15	2020	ug/kg		J
	Unknown	2.19	167	ug/kg		J

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

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202022468

Client Sample: QC for batch 944454

Client: LANL010

Project: QC

Client ID: MB for batch 944454

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944455

Inst: MSD3.I

Dilution: 1

Run Date: 01/25/2010 11:59

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/22/2010 23:39

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2506.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		2.33	220	ug/kg	J
	Unknown Aldol Condensate		3.43	568	ug/kg	JA

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2506.d
Lab Smp Id: 1202022468 Client Smp ID: SBLK01
Inj Date : 25-JAN-2010 11:59
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |1202022468|944455|1|SVMF|1|SBLK01
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	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	4.839	4.841	(1.000)	371687	40.0000	
* 29 Naphthalene-d8	136	6.123	6.126	(1.000)	1428160	40.0000	
* 46 Acenaphthene-d10	164	7.999	8.003	(1.000)	753109	40.0000	
* 67 Phenanthrene-d10	188	9.614	9.618	(1.000)	1163357	40.0000	
* 91 Chrysene-d12	240	12.639	12.650	(1.000)	746234	40.0000	
* 98 Perylene-d12	264	14.990	14.999	(1.000)	452174	40.0000	
\$ 3 2-Fluorophenol	112	3.663	3.653	(0.757)	752097	77.7621	2590
\$ 5 Phenol-d5	99	4.434	4.436	(0.916)	887546	73.0170	2430
\$ 20 Nitrobenzene-d5	82	5.376	5.384	(0.878)	433328	41.0751	1370
\$ 39 2-Fluorobiphenyl	172	7.252	7.254	(0.907)	804413	41.3234	1380
\$ 60 2,4,6-Tribromophenol	329	8.849	8.852	(1.106)	149711	69.3442	2310
\$ 81 p-Terphenyl-d14	244	11.325	11.326	(0.896)	697084	54.3478	1810

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2506.d
 Lab Smp Id: 1202022468 Client Smp ID: SBLK01
 Inj Date : 25-JAN-2010 11:59
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |1202022468|944455|1|SVMF|1|SBLK01
 Misc Info : |MSD8270_S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 5 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

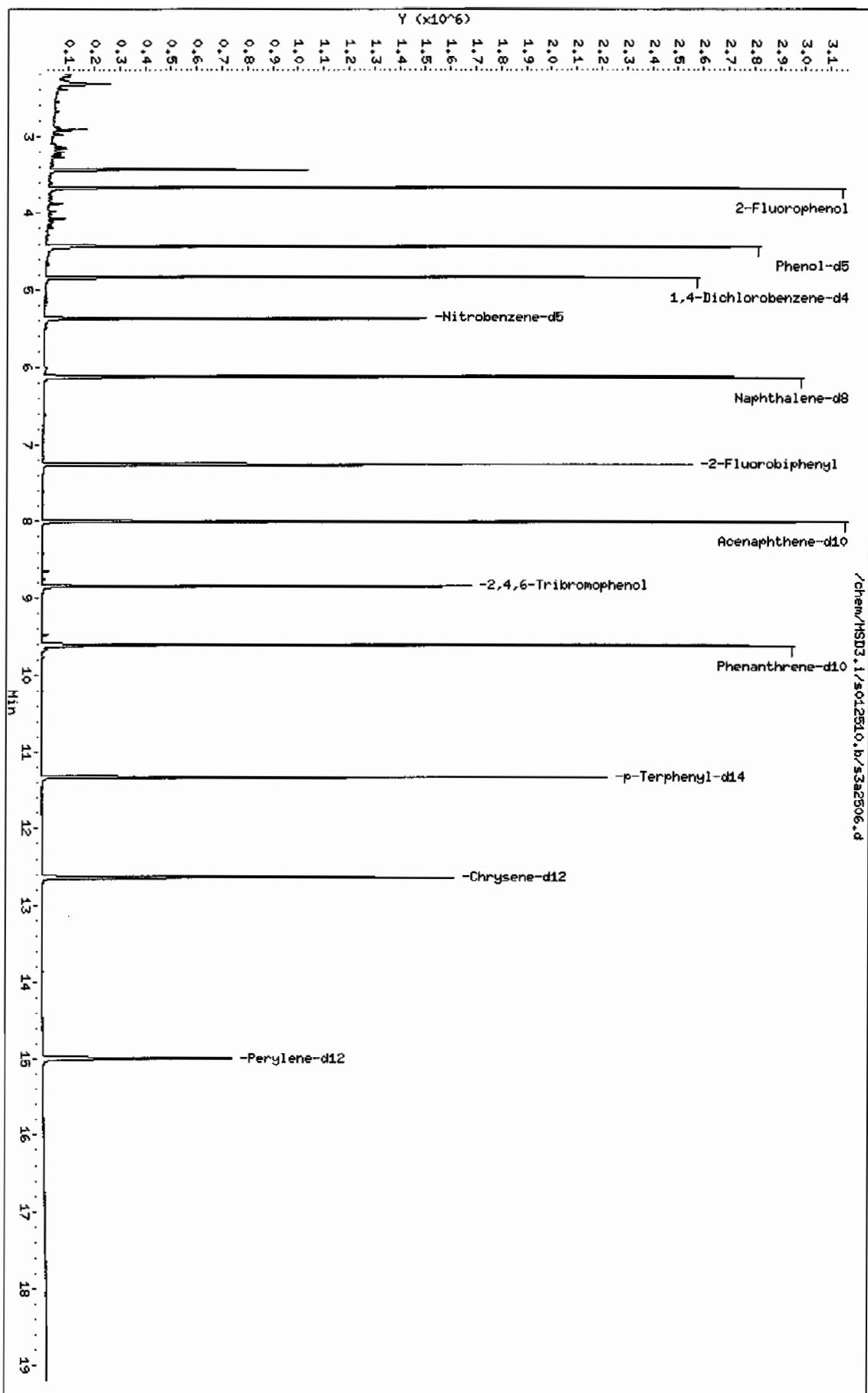
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	4.839	2382125	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.147	3611654	60.6459058	2020	0		0	10
Unknown				CAS #:			
2.188	298142	5.00632425	167	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.326	392984	6.59887337	220	0	0	10	
Unknown Aldol Condensate				CAS #:			
3.425	1014168	17.0296346	568	0	0	10	

Data File: /chem/MSD3.1/s012510.b/s3a2506.d
Date : 25-JAN-2010 11:59
Client ID: SRLK01
Sample Info: 11202022468194445511SVMF11SRLK01
Volume Injected (uL): 0.5
Column phase: J&M DB-5MS

Instrument: MSD3.1
Operator: JLD1
Column diameter: 0.20



Date : 25-JAN-2010 11:59

Client ID: SBLK01

Instrument: MSD3.i

Sample Info: I1202022468194445511SVHF11ISBLK01

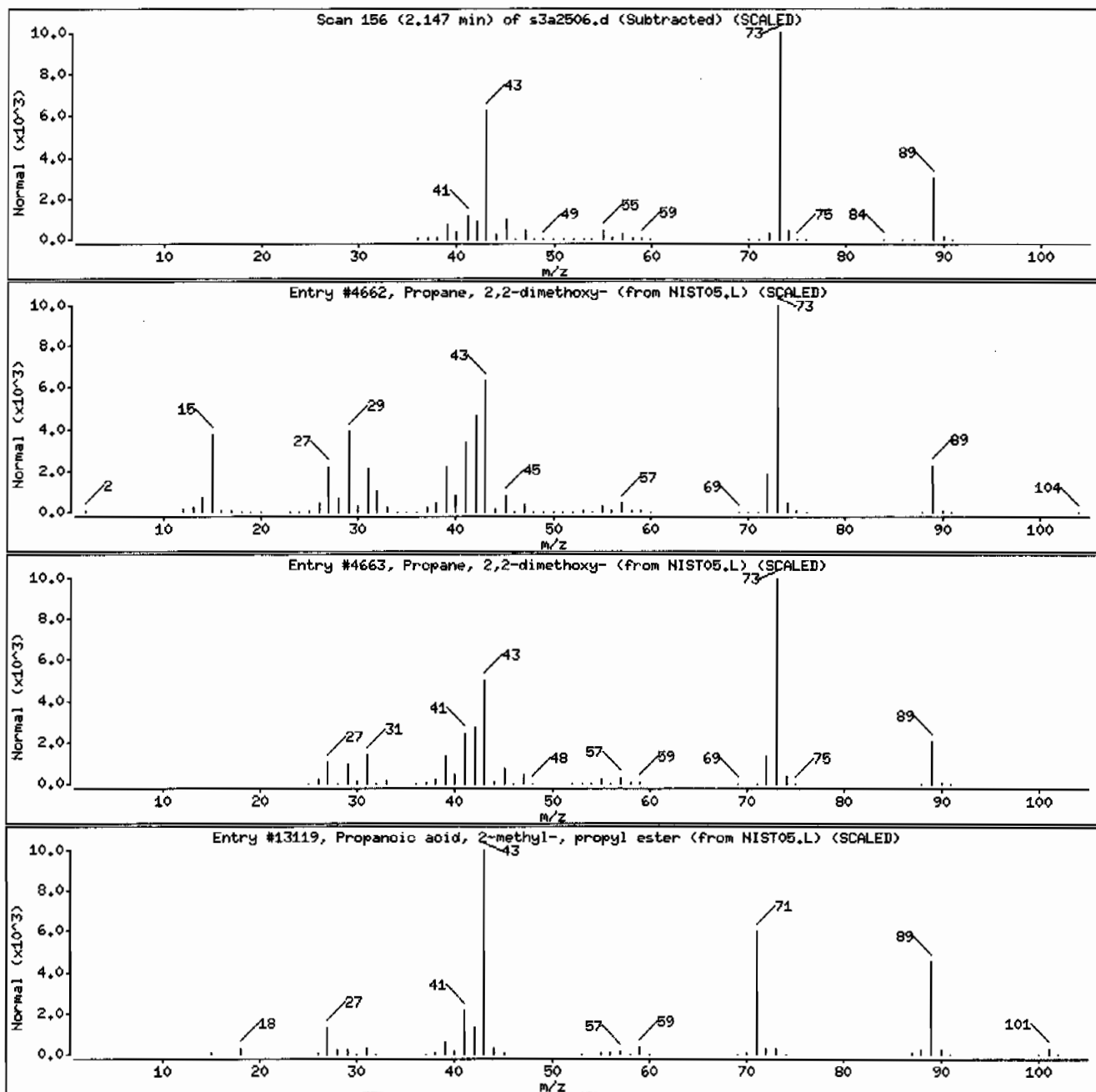
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	50	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	40	C5H12O2	104
Propanoic acid, 2-methyl-, propyl ester	644-49-6	NIST05.L	13119	23	C7H14O2	130



Date : 25-JAN-2010 11:59

Client ID: SBLK01

Instrument: MSD3.1

Sample Info: I1202022468194445511|SVHF11|SBLK01

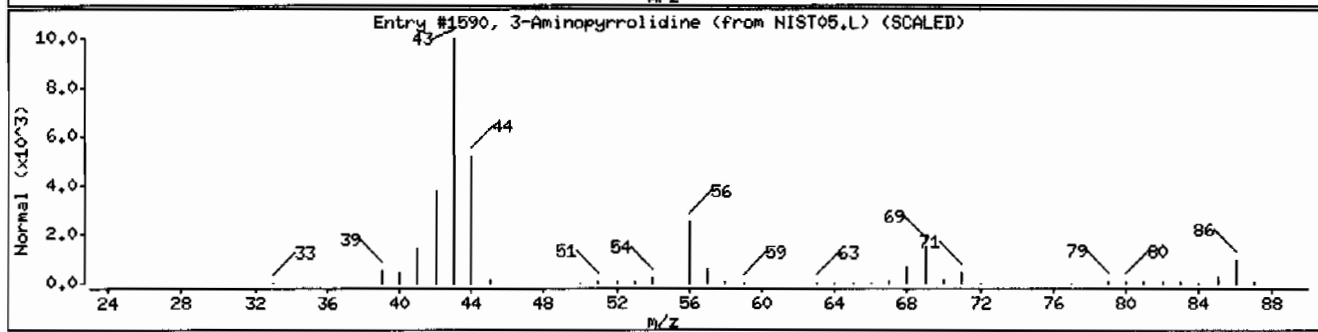
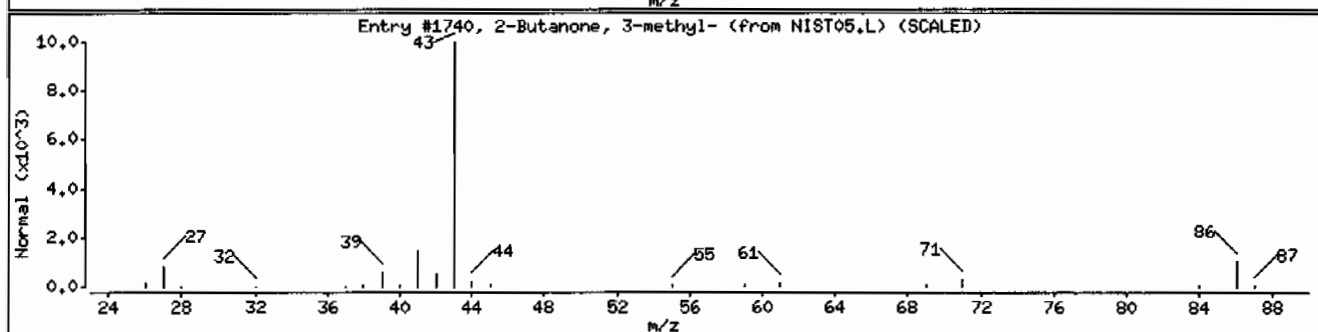
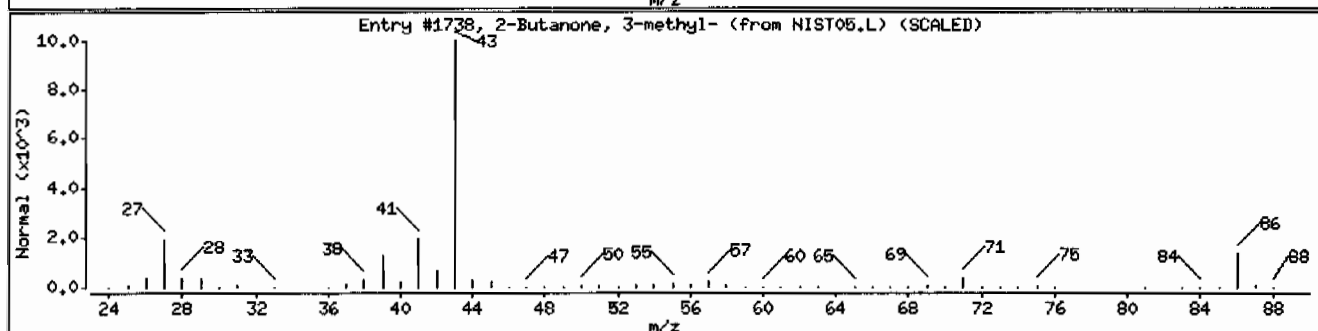
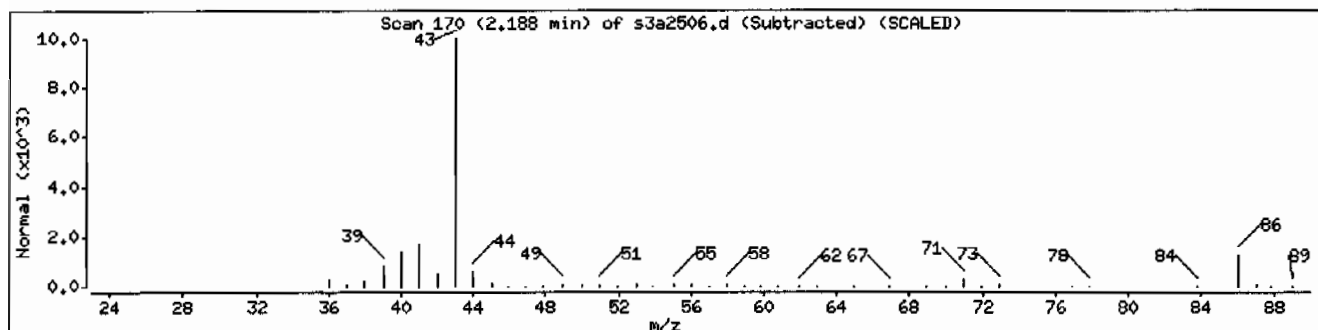
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1738	47	C5H10O	86
2-Butanone, 3-methyl-	563-80-4	NIST05.L	1740	47	C5H10O	86
3-Aminopyrrolidine	79286-79-6	NIST05.L	1590	9	C4H10N2	86



Date : 25-JAN-2010 11:59

Client ID: SBLK01

Instrument: MSD3.i

Sample Info: I1202022468194445511SVMF11SBLK01

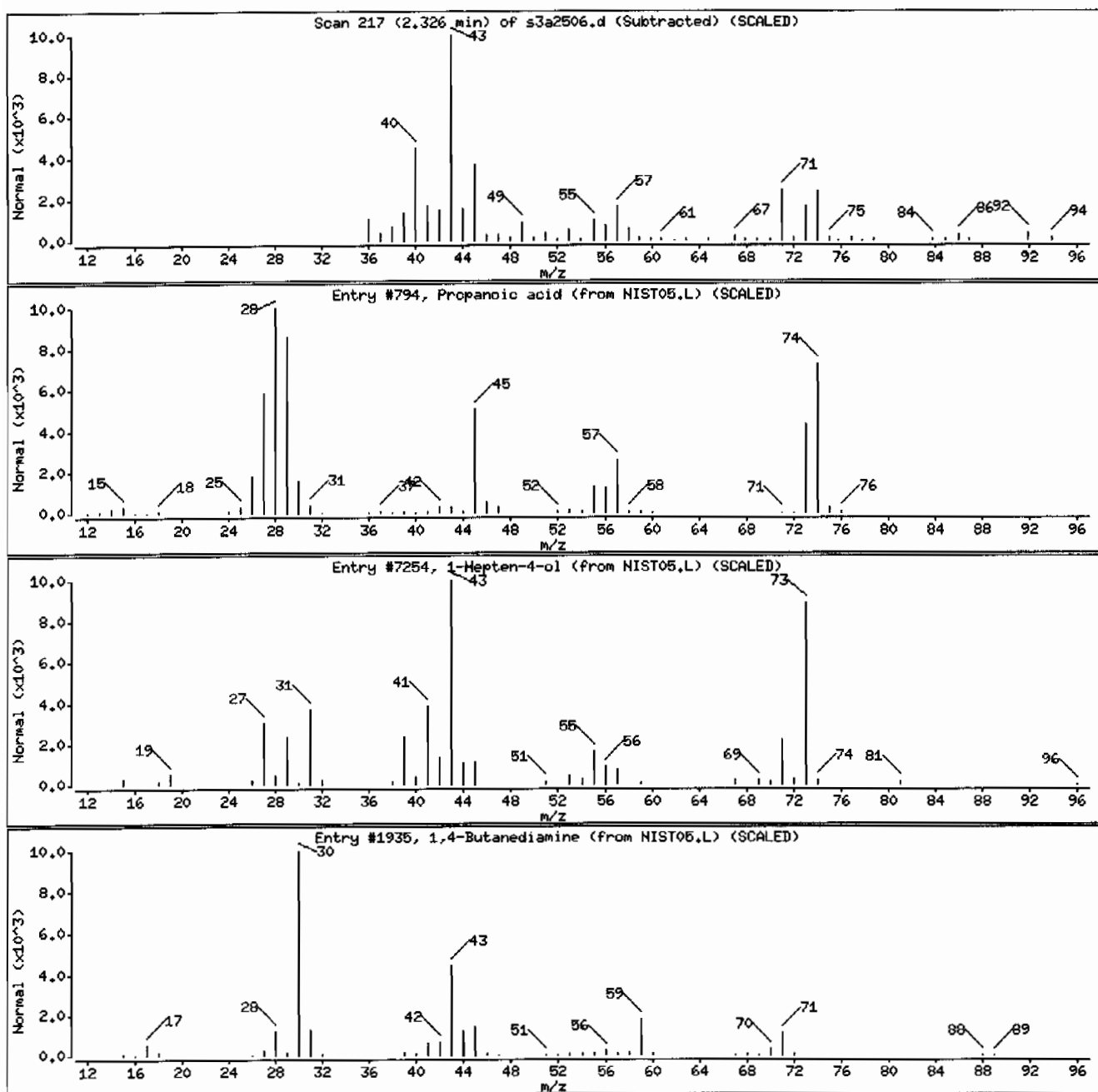
Volume Injected (uL): 0.5

Operator: JLD1

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	794	43	C3H6O2	74
1-Hepten-4-ol	3521-91-3	NIST05.L	7254	14	C7H14O	114
1,4-Butanediamine	110-60-1	NIST05.L	1935	12	C4H12N2	88



Date : 25-JAN-2010 11:59

Client ID: SBLK01

Instrument: MSD3.i

Sample Info: I1202022468194445511SVHF111SBLK01

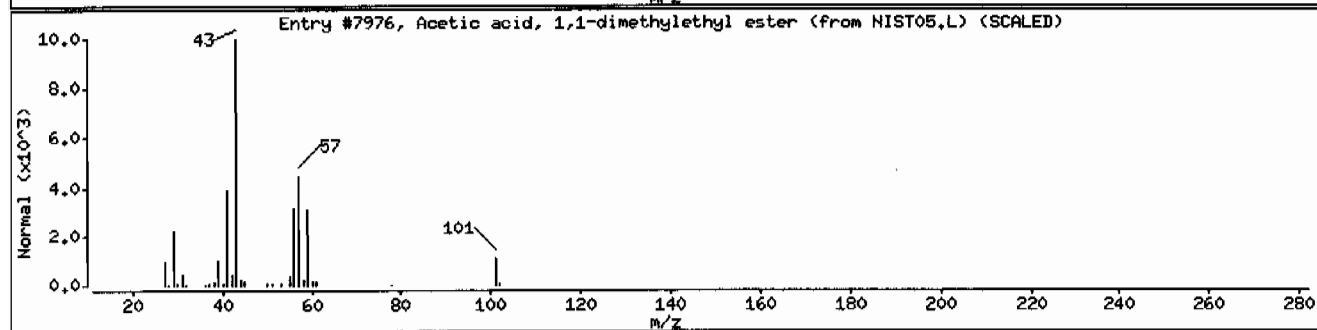
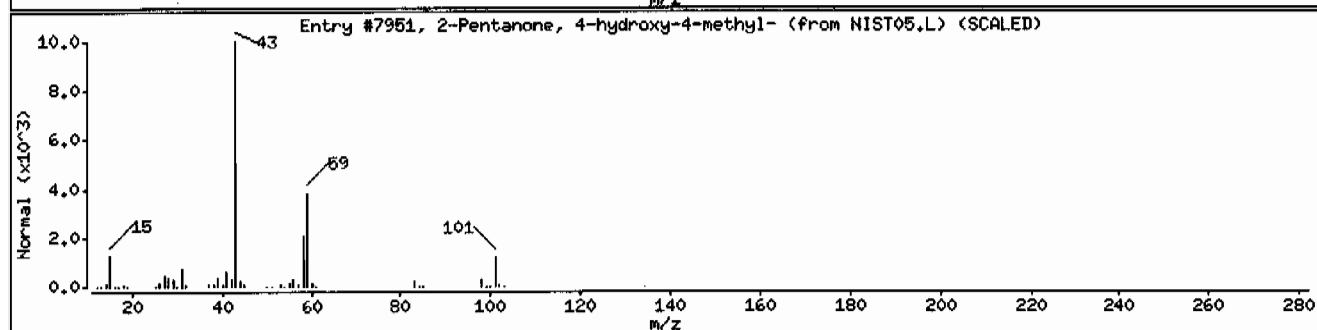
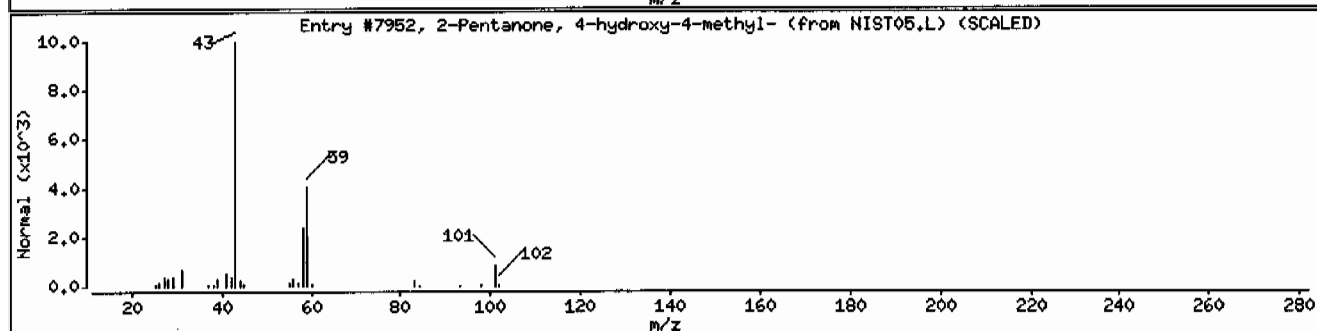
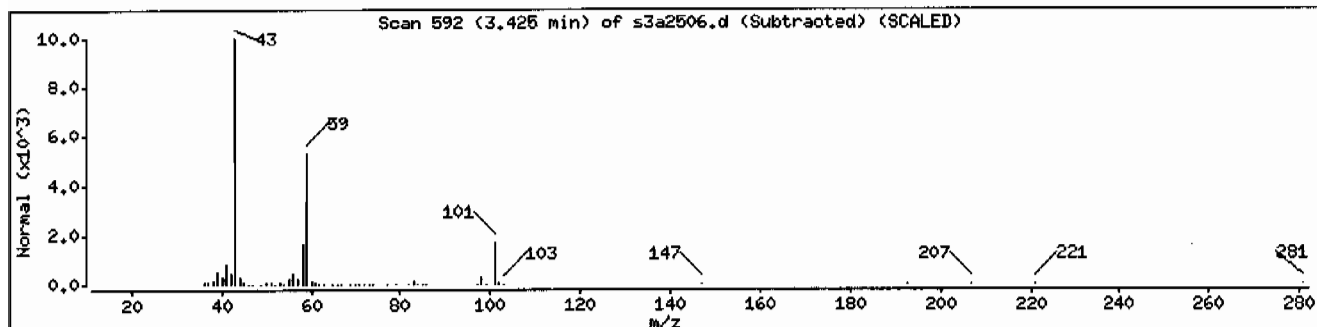
Volume Injected (uL): 0.5

Operator: JLD1

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-6	NIST05.L	7976	38	C6H12O2	116



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

Page 1 of 2

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202022469

Client Sample: QC for batch 944454

Client: LANL010

Project: QC

Client ID: LCS for batch 944454

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944455

Inst: MSD3.I

Dilution: 1

Run Date: 01/26/2010 14:10

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/22/2010 23:39

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2612.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		949	ug/kg	66.7	333
108-95-2	Phenol		1260	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1390	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1330	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1170	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1290	ug/kg	66.7	333
83-32-9	Acenaphthene		1280	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1370	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1090	ug/kg	110	333
87-86-5	Pentachlorophenol		1330	ug/kg	83.3	333
129-00-0	Pyrene		1430	ug/kg	10.0	33.3
110-86-1	Pyridine		1140	ug/kg	66.7	333
62-53-3	Aniline		671	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1020	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1320	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1240	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1340	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1010	ug/kg	66.7	333
95-48-7	o-Cresol		1330	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1430	ug/kg	100	333
67-72-1	Hexachloroethane		1230	ug/kg	66.7	333
98-95-3	Nitrobenzene		1200	ug/kg	66.7	333
78-59-1	Isophorone		1200	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1340	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1290	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1180	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1380	ug/kg	66.7	333
65-85-0	Benzoic acid		3030	ug/kg	167	667
91-20-3	Naphthalene		1180	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		996	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1450	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1330	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1550	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1370	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1450	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1350	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1100	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1230	ug/kg	66.7	333

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

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202022469

Client Sample: QC for batch 944454

Client: LANL010

Project: QC

Client ID: LCS for batch 944454

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 944455

Inst: MSD3.I

Dilution: 1

Run Date: 01/26/2010 14:10

Analyst: JLD1

Inj. Vol: .5 uL

Prep Date: 01/22/2010 23:39

Aliquot: 30 g

Final Volume: 1 mL

Data File: s3a2612.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		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		1300	ug/kg	127	667
132-64-9	Dibenzofuran		1690	ug/kg	66.7	333
84-66-2	Diethylphthalate		1360	ug/kg	66.7	333
86-73-7	Fluorene		1360	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1440	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1340	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1370	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1340	ug/kg	66.7	333
122-66-7	Azobenzene		1110	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1230	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1270	ug/kg	66.7	333
85-01-8	Phenanthrene		1320	ug/kg	10.0	33.3
120-12-7	Anthracene		1320	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1410	ug/kg	66.7	333
206-44-0	Fluoranthene		1530	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1380	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1330	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1100	ug/kg	100	333
218-01-9	Chrysene		1370	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		1560	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1470	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1470	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1480	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1430	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1460	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1390	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1410	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2612.d
 Lab Smp Id: 1202022469 Client Smp ID: SBLK01LCS
 Inj Date : 26-JAN-2010 14:10
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |1202022469|944455|1|SVMF|1|SBLK01LCS
 Misc Info : |MSD8270_S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
 Meth Date : 26-Jan-2010 13:48 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 7 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
	=====	==	=====	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.830	4.832	(1.000)	330784	40.0000	
* 29 Naphthalene-d8	136	6.113	6.114	(1.000)	1355866	40.0000	
* 46 Acenaphthene-d10	164	7.990	7.990	(1.000)	697484	40.0000	
* 67 Phenanthrene-d10	188	9.606	9.605	(1.000)	1144028	40.0000	
* 91 Chrysene-d12	240	12.632	12.634	(1.000)	860496	40.0000	
* 98 Perylene-d12	264	14.974	14.975	(1.000)	523399	40.0000	
\$ 3 2-Fluorophenol	112	3.657	3.644	(0.757)	640644	74.4291	2480
\$ 5 Phenol-d5	99	4.434	4.430	(0.918)	757627	70.0358	2330
\$ 20 Nitrobenzene-d5	82	5.370	5.372	(0.878)	355879	35.5324	1180
\$ 39 2-Fluorobiphenyl	172	7.241	7.244	(0.906)	692308	38.4008	1280
\$ 60 2,4,6-Tribromophenol	329	8.842	8.842	(1.107)	162921	81.4814	2720
\$ 81 p-Terphenyl-d14	244	11.314	11.316	(0.896)	707097	47.8081	1590

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
6 Phenol	94	4.446	4.444	(0.920)	432449	37.8017	1260
8 2-Chlorophenol	128	4.628	4.629	(0.958)	361160	41.5745	1380
11 1,4-Dichlorobenzene	146	4.845	4.846	(1.003)	404443	39.8819	1330
17 N-Nitrosodipropylamine	70	5.200	5.204	(1.077)	258079	35.1020	1170 (Q)
28 1,2,4-Trichlorobenzene	180	6.043	6.044	(0.988)	330157	42.2876	1410
33 4-Chloro-3-methylphenol	107	6.671	6.660	(1.091)	309165	38.8060	1290
47 Acenaphthene	154	8.025	8.025	(1.004)	636404	38.5432	1280
50 2,4-Dinitrotoluene	165	8.181	8.181	(1.024)	229539	41.0883	1370
52 4-Nitrophenol	139	8.096	8.087	(1.013)	104634	32.8281	1090
65 Pentachlorophenol	266	9.386	9.382	(0.977)	114307	39.8603	1330
79 Pyrene	202	11.176	11.175	(0.885)	1054106	42.7613	1420
2 Pyridine	79	2.736	2.695	(0.566)	230607	34.2569	1140
4 Aniline	66	4.513	4.518	(0.934)	101560	20.1411	671
7 bis(2-Chloroethyl) ether	63	4.554	4.556	(0.943)	275999	30.4976	1020
9 1,3-Dichlorobenzene	146	4.777	4.779	(0.989)	396905	39.6798	1320
12 Benzyl alcohol	108	4.945	4.943	(1.024)	224984	37.2088	1240
13 1,2-Dichlorobenzene	146	4.995	4.996	(1.034)	383303	40.3037	1340
14 bis(2-Chloroisopropyl) ether	45	5.059	5.063	(1.047)	649362	30.3060	1010
15 o-Cresol	107	5.030	5.025	(1.041)	296157	39.8080	1330
18 m,p-Cresols	107	5.176	5.181	(1.072)	415557	42.9353	1430
19 Hexachloroethane	117	5.329	5.331	(1.103)	161265	37.0320	1230
21 Nitrobenzene	77	5.391	5.392	(0.882)	380531	36.1340	1200
22 Isophorone	82	5.623	5.627	(0.920)	670875	35.9427	1200
23 2-Nitrophenol	139	5.708	5.709	(0.934)	194622	40.2778	1340
24 2,4-Dimethylphenol	122	5.720	5.718	(0.936)	322262	38.5782	1280
25 bis(2-Chloroethoxy)methane	93	5.822	5.826	(0.952)	383596	35.3982	1180
26 2,4-Dichlorophenol	162	5.949	5.950	(0.973)	290210	41.2832	1380
27 Benzoic acid	105	5.855	5.818	(0.958)	533929	90.8041	3030
30 Naphthalene	128	6.137	6.138	(1.004)	1012633	35.5127	1180
31 4-Chloroaniline	127	6.178	6.176	(1.011)	256638	29.8752	996
32 Hexachlorobutadiene	225	6.240	6.243	(1.021)	193738	43.4769	1450
34 2-Methylnaphthalene	142	6.862	6.862	(1.122)	686144	40.0219	1330
36 Hexachlorocyclopentadiene	237	7.015	7.015	(0.878)	184586	46.4994	1550
37 2,4,6-Trichlorophenol	196	7.153	7.150	(0.895)	204977	41.0019	1370
38 2,4,5-Trichlorophenol	196	7.197	7.189	(0.901)	235342	43.5719	1450
40 2-Chloronaphthalene	162	7.388	7.388	(0.925)	665992	40.4136	1350
42 o-Nitroaniline	65	7.491	7.488	(0.938)	212896	32.8944	1100
41 m-Nitroaniline	138	7.931	7.934	(0.993)	140120	36.7617	1220
43 Dimethylphthalate	163	7.667	7.676	(0.960)	761847	40.2750	1340
44 2,6-Dinitrotoluene	165	7.746	7.746	(0.969)	177513	39.4897	1320
45 Acenaphthylene	152	7.837	7.840	(0.981)	1042008	40.1885	1340
48 2,4-Dinitrophenol	184	8.043	8.043	(1.007)	78240	39.0708	1300 (Q)
49 Dibenzofuran	168	8.210	8.210	(1.028)	1074085	50.7203	1690
51 Diethylphthalate	149	8.425	8.428	(1.054)	768013	40.8489	1360
53 Fluorene	166	8.580	8.583	(1.074)	727555	40.6755	1360
54 4-Chlorophenylphenylether	204	8.566	8.566	(1.072)	362856	43.1441	1440
55 2-Methyl-4,6-dinitrophenol	198	8.622	8.624	(0.898)	118728	40.2915	1340

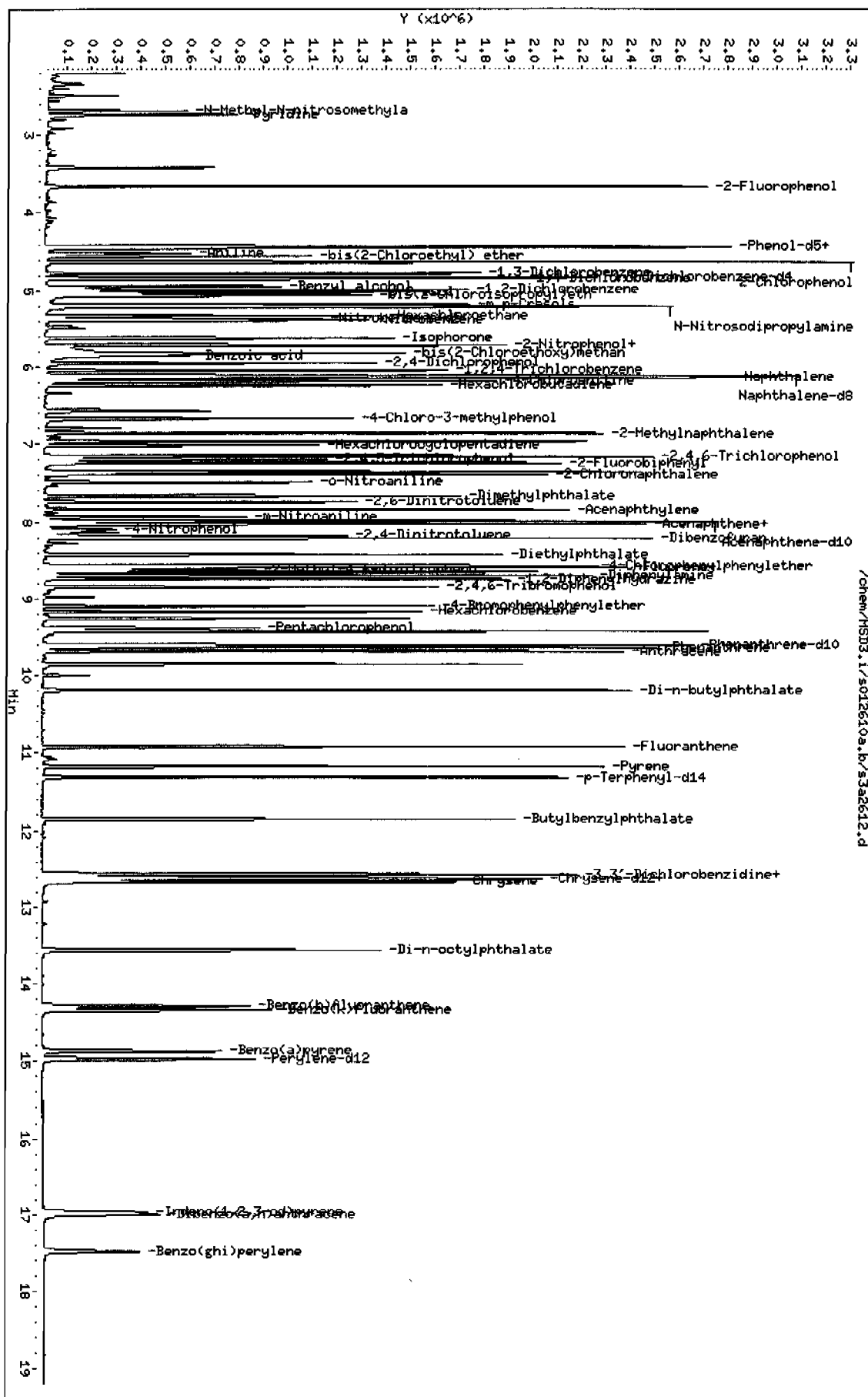
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	8.598	8.598	(1.076)	154013	41.0386	1370
133 Diphenylamine	169	8.695	8.695	(0.905)	607758	40.0890	1340
58 1,2-Diphenylhydrazine	77	8.742	8.742	(0.910)	746752	33.4128	1110
61 4-Bromophenylphenylether	248	9.100	9.100	(0.947)	179962	36.9195	1230
63 Hexachlorobenzene	284	9.171	9.174	(0.955)	192490	38.0237	1270
68 Phenanthrene	178	9.632	9.632	(1.003)	993089	39.4922	1320
69 Anthracene	178	9.688	9.688	(1.009)	993752	39.5884	1320
72 Di-n-butylphthalate	149	10.190	10.189	(1.061)	1280434	42.1718	1400
76 Fluoranthene	202	10.923	10.922	(1.137)	1048225	45.8114	1530
85 Butylbenzylphthalate	149	11.848	11.847	(0.938)	511834	41.4911	1380
89 Benzo(a)anthracene	228	12.614	12.613	(0.999)	788655	40.0277	1330
90 3,3'-Dichlorobenzidine	252	12.558	12.556	(0.994)	189634	32.8656	1100
92 Chrysene	228	12.670	12.669	(1.003)	760713	41.0462	1370
93 bis(2-Ethylhexyl)phthalate	149	12.570	12.572	(0.995)	685169	40.3567	1340
94 Di-n-octylphthalate	149	13.562	13.564	(0.906)	990268	46.7211	1560
95 Benzo(b)fluoranthene	252	14.293	14.294	(0.954)	540132	43.9743	1460
96 Benzo(k)fluoranthene	252	14.343	14.344	(0.958)	562577	44.1194	1470
97 Benzo(a)pyrene	252	14.874	14.875	(0.993)	474153	44.3001	1480
99 Indeno(1,2,3-cd)pyrene	276	16.966	16.968	(1.133)	375696	43.0283	1430
100 Dibenzo(a,h)anthracene	278	16.999	17.000	(1.135)	311972	43.7804	1460
101 Benzo(ghi)perylene	276	17.483	17.485	(1.168)	298704	41.6787	1390
1 N-Methyl-N-nitrosomethylamine	74	2.686	2.651	(0.556)	171581	28.4847	949

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.1/s012610a.b/s3a2612.d
 Date: 26-JAN-2010 14:10
 Client ID: SBLK01LCS
 Sample Info: 11202022469194445511SWH11SBLK01LCS
 Volume Injected (uL): 0.5
 Column phase: 3M DB-5MS

Instrument: MSD3.1
 Operator: JLD1
 Column diameter: 0.20



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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 1202022470	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 944454	Client: LANL010	Project: QC
Client ID: RE15-10-7194MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 13:18	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s3a2509.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		962	ug/kg	83.7	419
108-95-2	Phenol		1300	ug/kg	83.7	419
95-57-8	2-Chlorophenol		1380	ug/kg	83.7	419
106-46-7	1,4-Dichlorobenzene		1310	ug/kg	83.7	419
621-64-7	N-Nitrosodipropylamine		1200	ug/kg	83.7	419
59-50-7	4-Chloro-3-methylphenol		1390	ug/kg	83.7	419
83-32-9	Acenaphthene		1360	ug/kg	13.8	41.9
121-14-2	2,4-Dinitrotoluene		1420	ug/kg	41.9	419
100-02-7	4-Nitrophenol		1330	ug/kg	138	419
87-86-5	Pentachlorophenol		1470	ug/kg	105	419
129-00-0	Pyrene		1500	ug/kg	12.6	41.9
110-86-1	Pyridine		1050	ug/kg	83.7	419
62-53-3	Aniline		1140	ug/kg	126	419
111-44-4	bis(2-Chloroethyl) ether		1040	ug/kg	83.7	419
541-73-1	1,3-Dichlorobenzene		1310	ug/kg	83.7	419
100-51-6	Benzyl alcohol		1540	ug/kg	126	419
95-50-1	1,2-Dichlorobenzene		1340	ug/kg	83.7	419
108-60-1	bis(2-Chloroisopropyl)ether		1040	ug/kg	83.7	419
95-48-7	o-Cresol		1310	ug/kg	83.7	419
65794-96-9	m,p-Cresols		1460	ug/kg	126	419
67-72-1	Hexachloroethane		1220	ug/kg	83.7	419
98-95-3	Nitrobenzene		1240	ug/kg	83.7	419
78-59-1	Isophorone		1270	ug/kg	83.7	419
88-75-5	2-Nitrophenol		1350	ug/kg	83.7	419
105-67-9	2,4-Dimethylphenol		1380	ug/kg	147	419
111-91-1	bis(2-Chloroethoxy)methane		1230	ug/kg	83.7	419
120-83-2	2,4-Dichlorophenol		1450	ug/kg	83.7	419
65-85-0	Benzoic acid		3130	ug/kg	209	837
91-20-3	Naphthalene		1220	ug/kg	12.6	41.9
106-47-8	4-Chloroaniline		1120	ug/kg	83.7	419
87-68-3	Hexachlorobutadiene		1440	ug/kg	83.7	419
91-57-6	2-Methylnaphthalene		1390	ug/kg	8.37	41.9
77-47-4	Hexachlorocyclopentadiene		1600	ug/kg	83.7	419
88-06-2	2,4,6-Trichlorophenol		1480	ug/kg	83.7	419
95-95-4	2,4,5-Trichlorophenol		1520	ug/kg	83.7	419
91-58-7	2-Chloronaphthalene		1410	ug/kg	13.8	41.9
88-74-4	2-Nitroaniline		1180	ug/kg	83.7	419
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1290	ug/kg	83.7	419

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 1202022470	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 944454	Client: LANL010	Project: QC
Client ID: RE15-10-7194MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 13:18	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.11 g	Final Volume: 1 mL
Data File: s3a2509.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		1430	ug/kg	83.7	419
606-20-2	2,6-Dinitrotoluene		1380	ug/kg	41.9	419
208-96-8	Acenaphthylene		1430	ug/kg	12.6	41.9
51-28-5	2,4-Dinitrophenol		1290	ug/kg	159	837
132-64-9	Dibenzofuran		1790	ug/kg	83.7	419
84-66-2	Diethylphthalate		1430	ug/kg	83.7	419
86-73-7	Fluorene		1420	ug/kg	12.6	41.9
7005-72-3	4-Chlorophenylphenylether		1480	ug/kg	83.7	419
534-52-1	2-Methyl-4,6-dinitrophenol		1460	ug/kg	83.7	419
100-01-6	4-Nitroaniline		1340	ug/kg	126	419
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1510	ug/kg	83.7	419
122-66-7	Azobenzene		1300	ug/kg	83.7	419
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1370	ug/kg	83.7	419
118-74-1	Hexachlorobenzene		1380	ug/kg	83.7	419
85-01-8	Phenanthrene		1430	ug/kg	12.6	41.9
120-12-7	Anthracene		1470	ug/kg	8.37	41.9
84-74-2	Di-n-butylphthalate		1440	ug/kg	83.7	419
206-44-0	Fluoranthene		1440	ug/kg	12.6	41.9
85-68-7	Butylbenzylphthalate		1430	ug/kg	83.7	419
56-55-3	Benzo(a)anthracene		1430	ug/kg	12.6	41.9
91-94-1	3,3'-Dichlorobenzidine		875	ug/kg	126	419
218-01-9	Chrysene		1480	ug/kg	12.6	41.9
117-81-7	bis(2-Ethylhexyl)phthalate		1420	ug/kg	83.7	419
117-84-0	Di-n-octylphthalate		1380	ug/kg	83.7	419
205-99-2	Benzo(b)fluoranthene		1530	ug/kg	12.6	41.9
207-08-9	Benzo(k)fluoranthene		1520	ug/kg	12.6	41.9
50-32-8	Benzo(a)pyrene		1590	ug/kg	12.6	41.9
193-39-5	Indeno(1,2,3-cd)pyrene		1570	ug/kg	12.6	41.9
53-70-3	Dibenzo(a,h)anthracene		1580	ug/kg	12.6	41.9
191-24-2	Benzo(ghi)perylene		1500	ug/kg	12.6	41.9
120-82-1	1,2,4-Trichlorobenzene		1440	ug/kg	83.7	419

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2509.d
Lab Smp Id: 1202022470 Client Smp ID: RE15-10-7194MS
Inj Date : 25-JAN-2010 13:18
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |1202022470|944455|1|SVMF|1|MS
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 8 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	20.65990	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
						(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.839	4.841	(1.000)	421278	40.0000	
* 29 Naphthalene-d8	136	6.126	6.126	(1.000)	1696090	40.0000	
* 46 Acenaphthene-d10	164	8.000	8.003	(1.000)	857027	40.0000	
* 67 Phenanthrene-d10	188	9.616	9.618	(1.000)	1298172	40.0000	
* 91 Chrysene-d12	240	12.647	12.650	(1.000)	869552	40.0000	
* 98 Perylene-d12	264	14.994	14.999	(1.000)	639446	40.0000	
\$ 3 2-Fluorophenol	112	3.660	3.653	(0.756)	657312	59.9618	2510
\$ 5 Phenol-d5	99	4.440	4.436	(0.918)	776223	56.3414	2360
\$ 20 Nitrobenzene-d5	82	5.380	5.384	(0.878)	361721	28.8711	1210
\$ 39 2-Fluorobiphenyl	172	7.254	7.254	(0.907)	712445	32.1611	1350
\$ 60 2,4,6-Tribromophenol	329	8.852	8.852	(1.107)	156754	63.8029	2670
\$ 81 p-Terphenyl-d14	244	11.325	11.326	(0.895)	571957	38.2683	1600

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
6 Phenol		94	4.452	4.450	(0.920)	452812	31.0792	1300
8 2-Chlorophenol		128	4.637	4.638	(0.958)	363526	32.8579	1380
11 1,4-Dichlorobenzene		146	4.857	4.858	(1.004)	404609	31.3279	1310
17 N-Nitrosodipropylamine		70	5.209	5.213	(1.076)	269408	28.7717	1200 (Q)
28 1,2,4-Trichlorobenzene		180	6.055	6.056	(0.988)	335712	34.3738	1440
33 4-Chloro-3-methylphenol		107	6.675	6.667	(1.090)	331758	33.2887	1390
47 Acenaphthene		154	8.035	8.038	(1.004)	658679	32.4659	1360
50 2,4-Dinitrotoluene		165	8.188	8.191	(1.024)	233124	33.9616	1420
52 4-Nitrophenol		139	8.094	8.091	(1.012)	124285	31.7346	1330
65 Pentachlorophenol		266	9.393	9.392	(0.977)	114451	35.1717	1470
79 Pyrene		202	11.186	11.188	(0.885)	889997	35.7280	1500
2 Pyridine		79	2.736	2.701	(0.565)	214949	25.0719	1050
4 Aniline		66	4.525	4.527	(0.935)	174172	27.1217	1140
7 bis(2-Chloroethyl) ether		63	4.563	4.565	(0.943)	287439	24.9391	1040
9 1,3-Dichlorobenzene		146	4.786	4.791	(0.989)	400184	31.4137	1310
12 Benzyl alcohol		108	4.951	4.949	(1.023)	283502	36.8152	1540
13 1,2-Dichlorobenzene		146	5.004	5.008	(1.034)	388948	32.1122	1340
14 bis(2-Chloroisopropyl) ether		45	5.071	5.073	(1.048)	677319	24.8206	1040
15 o-Cresol		107	5.036	5.034	(1.041)	295655	31.2039	1310
18 m,p-Cresols		107	5.186	5.187	(1.072)	429717	34.8613	1460
19 Hexachloroethane		117	5.341	5.343	(1.104)	162122	29.2319	1220
21 Nitrobenzene		77	5.400	5.401	(0.882)	390655	29.6542	1240
22 Isophorone		82	5.632	5.636	(0.919)	707449	30.2992	1270
23 2-Nitrophenol		139	5.720	5.721	(0.934)	195658	32.3698	1350
24 2,4-Dimethylphenol		122	5.726	5.727	(0.935)	343531	32.8750	1380
25 bis(2-Chloroethoxy)methane		93	5.835	5.836	(0.953)	398292	29.3816	1230
26 2,4-Dichlorophenol		162	5.958	5.959	(0.973)	304418	34.6177	1450
27 Benzoic acid		105	5.849	5.818	(0.955)	549830	74.7512	3130
30 Naphthalene		128	6.146	6.150	(1.003)	1035762	29.0375	1220
31 4-Chloroaniline		127	6.187	6.188	(1.010)	286801	26.7358	1120
32 Hexachlorobutadiene		225	6.252	6.256	(1.021)	191320	34.3221	1440
34 2-Methylnaphthalene		142	6.871	6.875	(1.122)	711993	33.1990	1390
36 Hexachlorocyclopentadiene		237	7.027	7.028	(0.878)	186693	38.2752	1600
37 2,4,6-Trichlorophenol		196	7.162	7.163	(0.895)	217182	35.3559	1480
38 2,4,5-Trichlorophenol		196	7.204	7.198	(0.900)	241438	36.3791	1520
40 2-Chloronaphthalene		162	7.401	7.401	(0.925)	684408	33.7998	1410
42 o-Nitroaniline		65	7.498	7.501	(0.937)	224113	28.1814	1180
41 m-Nitroaniline		138	7.941	7.944	(0.993)	140162	30.7280	1290
43 Dimethylphthalate		163	7.677	7.686	(0.960)	794791	34.1948	1430
44 2,6-Dinitrotoluene		165	7.753	7.756	(0.969)	182140	32.9761	1380
45 Acenaphthylene		152	7.850	7.853	(0.981)	1087821	34.1451	1430
48 2,4-Dinitrophenol		184	8.050	8.053	(1.006)	76073	30.9166	1290 (Q)
49 Dibenzofuran		168	8.220	8.223	(1.028)	1112295	42.7468	1790
51 Diethylphthalate		149	8.438	8.437	(1.055)	791018	34.2403	1430
53 Fluorene		166	8.593	8.593	(1.074)	743205	33.8154	1420
54 4-Chlorophenylphenylether		204	8.579	8.578	(1.072)	365232	35.3423	1480
55 2-Methyl-4,6-dinitrophenol		198	8.629	8.631	(0.897)	116461	34.8294	1460

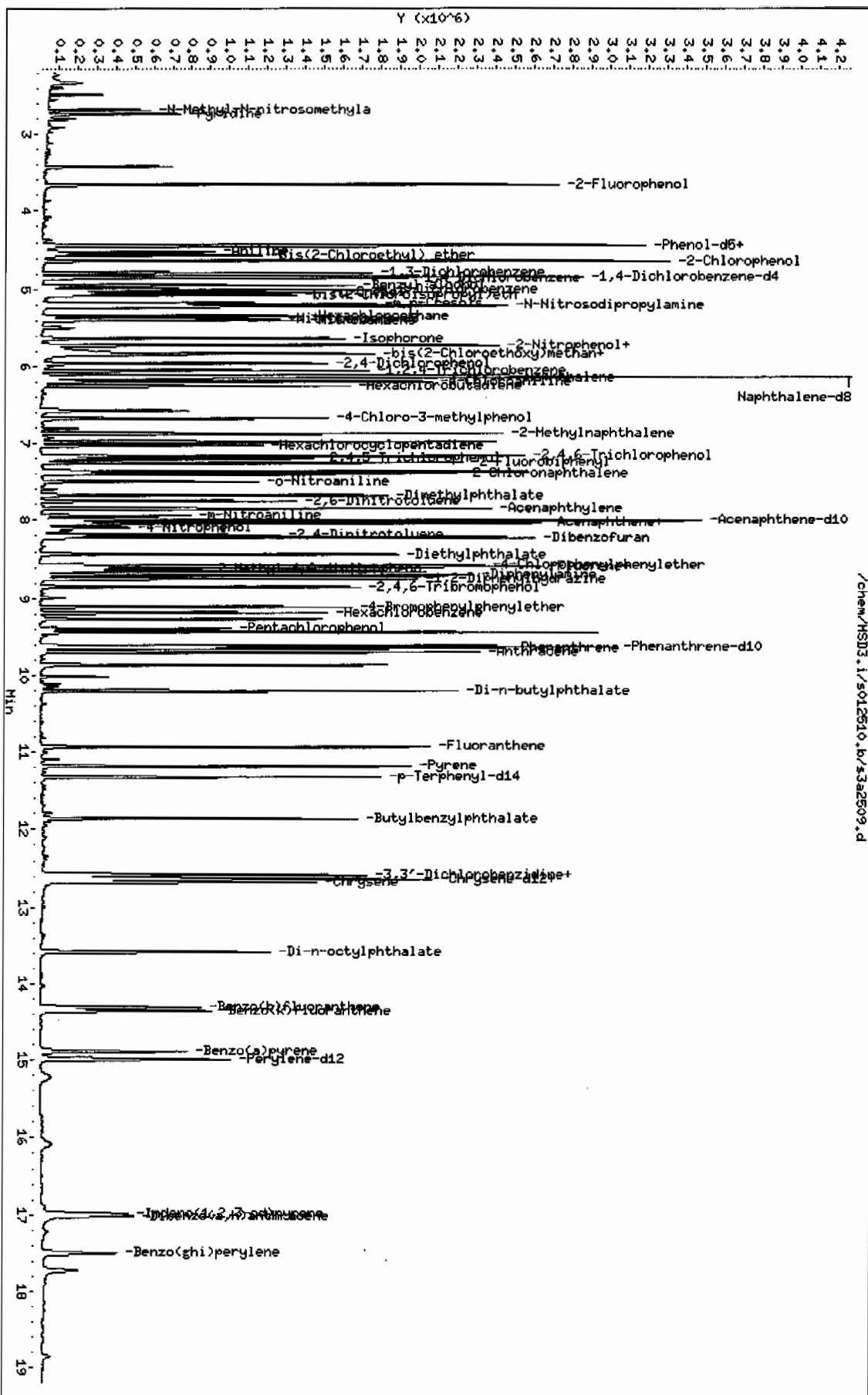
Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
	=====	==	=====	=====	=====		(ng/ul)	(ug/Kg)
56 p-Nitroaniline	138	8.605	8.605	(1.076)	141308		31.9653	1340
133 Diphenylamine	169	8.705	8.705	(0.905)	619854		36.0320	1510
58 1,2-Diphenylhydrazine	77	8.752	8.755	(0.910)	788361		31.0861	1300
61 4-Bromophenylphenylether	248	9.111	9.113	(0.947)	180717		32.6722	1370
63 Hexachlorobenzene	284	9.184	9.186	(0.955)	188926		32.8885	1380
68 Phenanthrene	178	9.643	9.645	(1.003)	977842		34.2685	1430
69 Anthracene	178	9.699	9.700	(1.009)	999575		35.0921	1470
72 Di-n-butylphthalate	149	10.202	10.202	(1.061)	1184060		34.3671	1440
76 Fluoranthene	202	10.933	10.935	(1.137)	894101		34.4358	1440
85 Butylbenzylphthalate	149	11.860	11.863	(0.938)	426113		34.1826	1430
89 Benzo(a)anthracene	228	12.629	12.633	(0.999)	680887		34.1981	1430
90 3,3'-Dichlorobenzidine	252	12.570	12.572	(0.994)	113695		20.8942	875
92 Chrysene	228	12.679	12.686	(1.003)	663718		35.4396	1480
93 bis(2-Ethylhexyl)phthalate	149	12.585	12.588	(0.995)	581041		33.8671	1420
94 Di-n-octylphthalate	149	13.580	13.584	(0.906)	854419		32.9959	1380
95 Benzo(b)fluoranthene	252	14.309	14.317	(0.954)	546882		36.4436	1520
96 Benzo(k)fluoranthene	252	14.359	14.364	(0.958)	563949		36.2006	1520
97 Benzo(a)pyrene	252	14.891	14.899	(0.993)	496194		37.9460	1590
99 Indeno(1,2,3-cd)pyrene	276	16.988	16.998	(1.133)	399458		37.4470	1570
100 Dibenzo(a,h)anthracene	278	17.021	17.027	(1.135)	329220		37.8162	1580
101 Benzo(ghi)perylene	276	17.504	17.515	(1.167)	313666		35.8235	1500
1 N-Methyl-N-nitrosomethylamine	74	2.680	2.657	(0.554)	176355		22.9883	962

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.1/s012510.b/s3a2509.d
 Date: 25-JAN-2010 13:18
 Client ID: RE15-10-7194MS
 Sample Info: 1120202247019445511SVH11MS
 Volume Injected (uL): 0.5
 Column Phase: J&W DB-SMS

Instrument: MSD3.1
 Operator: JLD1
 Column diameter: 0.20



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

Page 1 of 2

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 1202022471	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 944454	Client: LANL010	Project: QC
Client ID: RE15-10-7194MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 13:44	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s3a2510.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		1080	ug/kg	83.7	418
108-95-2	Phenol		1420	ug/kg	83.7	418
95-57-8	2-Chlorophenol		1520	ug/kg	83.7	418
106-46-7	1,4-Dichlorobenzene		1490	ug/kg	83.7	418
621-64-7	N-Nitrosodipropylamine		1320	ug/kg	83.7	418
59-50-7	4-Chloro-3-methylphenol		1430	ug/kg	83.7	418
83-32-9	Acenaphthene		1470	ug/kg	13.8	41.8
121-14-2	2,4-Dinitrotoluene		1490	ug/kg	41.8	418
100-02-7	4-Nitrophenol		1300	ug/kg	138	418
87-86-5	Pentachlorophenol		1510	ug/kg	105	418
129-00-0	Pyrene		1550	ug/kg	12.5	41.8
110-86-1	Pyridine		1190	ug/kg	83.7	418
62-53-3	Aniline		1230	ug/kg	125	418
111-44-4	bis(2-Chloroethyl) ether		1160	ug/kg	83.7	418
541-73-1	1,3-Dichlorobenzene		1470	ug/kg	83.7	418
100-51-6	Benzyl alcohol		1680	ug/kg	125	418
95-50-1	1,2-Dichlorobenzene		1510	ug/kg	83.7	418
108-60-1	bis(2-Chloroisopropyl)ether		1150	ug/kg	83.7	418
95-48-7	o-Cresol		1420	ug/kg	83.7	418
65794-96-9	m,p-Cresols		1550	ug/kg	125	418
67-72-1	Hexachloroethane		1380	ug/kg	83.7	418
98-95-3	Nitrobenzene		1380	ug/kg	83.7	418
78-59-1	Isophorone		1380	ug/kg	83.7	418
88-75-5	2-Nitrophenol		1500	ug/kg	83.7	418
105-67-9	2,4-Dimethylphenol		1470	ug/kg	146	418
111-91-1	bis(2-Chloroethoxy)methane		1350	ug/kg	83.7	418
120-83-2	2,4-Dichlorophenol		1540	ug/kg	83.7	418
65-85-0	Benzoic acid		3330	ug/kg	209	837
91-20-3	Naphthalene		1340	ug/kg	12.5	41.8
106-47-8	4-Chloroaniline		1210	ug/kg	83.7	418
87-68-3	Hexachlorobutadiene		1600	ug/kg	83.7	418
91-57-6	2-Methylnaphthalene		1490	ug/kg	8.37	41.8
77-47-4	Hexachlorocyclopentadiene		1800	ug/kg	83.7	418
88-06-2	2,4,6-Trichlorophenol		1590	ug/kg	83.7	418
95-95-4	2,4,5-Trichlorophenol		1620	ug/kg	83.7	418
91-58-7	2-Chloronaphthalene		1570	ug/kg	13.8	41.8
88-74-4	2-Nitroaniline		1280	ug/kg	83.7	418
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1380	ug/kg	83.7	418

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

SDG Number: 10-1301	Date Collected: 01/13/2010 12:00	Matrix: R
Lab Sample ID: 1202022471	Date Received: 01/20/2010 08:45	%Moisture: 20.7
Client Sample: QC for batch 944454	Client: LANL010	Project: QC
Client ID: RE15-10-7194MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 944455	Inst: MSD3.I	Dilution: 1
Run Date: 01/25/2010 13:44	Analyst: JLD1	Inj. Vol: .5 uL
Prep Date: 01/22/2010 23:39	Aliquot: 30.13 g	Final Volume: 1 mL
Data File: s3a2510.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		1540	ug/kg	83.7	418
606-20-2	2,6-Dinitrotoluene		1480	ug/kg	41.8	418
208-96-8	Acenaphthylene		1550	ug/kg	12.5	41.8
51-28-5	2,4-Dinitrophenol		1310	ug/kg	159	837
132-64-9	Dibenzofuran		1950	ug/kg	83.7	418
84-66-2	Diethylphthalate		1520	ug/kg	83.7	418
86-73-7	Fluorene		1520	ug/kg	12.5	41.8
7005-72-3	4-Chlorophenylphenylether		1610	ug/kg	83.7	418
534-52-1	2-Methyl-4,6-dinitrophenol		1550	ug/kg	83.7	418
100-01-6	4-Nitroaniline		1380	ug/kg	125	418
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1720	ug/kg	83.7	418
122-66-7	Azobenzene		1490	ug/kg	83.7	418
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1560	ug/kg	83.7	418
118-74-1	Hexachlorobenzene		1520	ug/kg	83.7	418
85-01-8	Phenanthrene		1560	ug/kg	12.5	41.8
120-12-7	Anthracene		1580	ug/kg	8.37	41.8
84-74-2	Di-n-butylphthalate		1490	ug/kg	83.7	418
206-44-0	Fluoranthene		1410	ug/kg	12.5	41.8
85-68-7	Butylbenzylphthalate		1460	ug/kg	83.7	418
56-55-3	Benzo(a)anthracene		1520	ug/kg	12.5	41.8
91-94-1	3,3'-Dichlorobenzidine		1000	ug/kg	125	418
218-01-9	Chrysene		1580	ug/kg	12.5	41.8
117-81-7	bis(2-Ethylhexyl)phthalate		1450	ug/kg	83.7	418
117-84-0	Di-n-octylphthalate		1430	ug/kg	83.7	418
205-99-2	Benzo(b)fluoranthene		1650	ug/kg	12.5	41.8
207-08-9	Benzo(k)fluoranthene		1640	ug/kg	12.5	41.8
50-32-8	Benzo(a)pyrene		1700	ug/kg	12.5	41.8
193-39-5	Indeno(1,2,3-cd)pyrene		1600	ug/kg	12.5	41.8
53-70-3	Dibenzo(a,h)anthracene		1610	ug/kg	12.5	41.8
191-24-2	Benzo(ghi)perylene		1500	ug/kg	12.5	41.8
120-82-1	1,2,4-Trichlorobenzene		1590	ug/kg	83.7	418

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2510.d
Lab Smp Id: 1202022471 Client Smp ID: RE15-10-7194MSD
Inj Date : 25-JAN-2010 13:44
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |1202022471|944455|1|SVMF|1|MSD
Misc Info : |MSD8270_S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.13000	weight of sample
M	20.65990	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.840	4.841	(1.000)	392460		40.0000	
* 29 Naphthalene-d8	136	6.126	6.126	(1.000)	1576322		40.0000	
* 46 Acenaphthene-d10	164	8.000	8.003	(1.000)	769406		40.0000	
* 67 Phenanthrene-d10	188	9.617	9.618	(1.000)	1088861		40.0000	
* 91 Chrysene-d12	240	12.643	12.650	(1.000)	681347		40.0000	
* 98 Perylene-d12	264	14.991	14.999	(1.000)	506149		40.0000	
\$ 3 2-Fluorophenol	112	3.660	3.653	(0.756)	672197		65.8222	2750
\$ 5 Phenol-d5	99	4.441	4.436	(0.918)	786465		61.2766	2560
\$ 20 Nitrobenzene-d5	82	5.380	5.384	(0.878)	375240		32.2258	1350
\$ 39 2-Fluorobiphenyl	172	7.254	7.254	(0.907)	707966		35.5985	1490
\$ 60 2,4,6-Tribromophenol	329	8.853	8.852	(1.107)	143093		64.8750	2710
\$ 81 p-Terphenyl-d14	244	11.325	11.326	(0.896)	461771		39.4303	1650

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====
6 Phenol		94	4.452	4.450	(0.920)	461179	33.9778	1420
8 2-Chlorophenol		128	4.637	4.638	(0.958)	374297	36.3157	1520
11 1,4-Dichlorobenzene		146	4.857	4.858	(1.004)	427644	35.5428	1490
17 N-Nitrosodipropylamine		70	5.210	5.213	(1.076)	275500	31.5828	1320 (Q)
28 1,2,4-Trichlorobenzene		180	6.056	6.056	(0.988)	345234	38.0346	1590
33 4-Chloro-3-methylphenol		107	6.675	6.667	(1.090)	317173	34.2434	1430
47 Acenaphthene		154	8.036	8.038	(1.004)	639806	35.1270	1470
50 2,4-Dinitrotoluene		165	8.189	8.191	(1.024)	220221	35.7355	1490
52 4-Nitrophenol		139	8.095	8.091	(1.012)	109008	31.0033	1300
65 Pentachlorophenol		266	9.394	9.392	(0.977)	98462	36.0747	1510
79 Pyrene		202	11.184	11.188	(0.885)	723953	37.0901	1550
2 Pyridine		79	2.736	2.701	(0.565)	226263	28.3295	1180
4 Aniline		66	4.523	4.527	(0.934)	176422	29.4892	1230
7 bis(2-Chloroethyl) ether		63	4.564	4.565	(0.943)	298545	27.8047	1160
9 1,3-Dichlorobenzene		146	4.790	4.791	(0.990)	418251	35.2427	1470
12 Benzyl alcohol		108	4.951	4.949	(1.023)	287385	40.0598	1680
13 1,2-Dichlorobenzene		146	5.004	5.008	(1.034)	407130	36.0816	1510
14 bis(2-Chloroisopropyl)ether		45	5.072	5.073	(1.048)	697173	27.4241	1150
15 o-Cresol		107	5.037	5.034	(1.041)	300457	34.0392	1420
18 m,p-Cresols		107	5.183	5.187	(1.071)	426486	37.1397	1550
19 Hexachloroethane		117	5.342	5.343	(1.104)	170039	32.9107	1380
21 Nitrobenzene		77	5.401	5.401	(0.882)	404837	33.0657	1380
22 Isophorone		82	5.633	5.636	(0.919)	713915	32.8993	1380
23 2-Nitrophenol		139	5.718	5.721	(0.933)	201146	35.8061	1500
24 2,4-Dimethylphenol		122	5.727	5.727	(0.935)	341939	35.2089	1470
25 bis(2-Chloroethoxy)methane		93	5.832	5.836	(0.952)	407122	32.3149	1350
26 2,4-Dichlorophenol		162	5.959	5.959	(0.973)	301636	36.9076	1540
27 Benzoic acid		105	5.847	5.818	(0.954)	543818	79.5514	3330 (Q)
30 Naphthalene		128	6.147	6.150	(1.003)	1060311	31.9843	1340
31 4-Chloroaniline		127	6.188	6.188	(1.010)	288332	28.8850	1210
32 Hexachlorobutadiene		225	6.253	6.256	(1.021)	197577	38.1376	1600
34 2-Methylnaphthalene		142	6.872	6.875	(1.122)	708891	35.5659	1490
36 Hexachlorocyclopentadiene		237	7.028	7.028	(0.878)	188769	43.1081	1800
37 2,4,6-Trichlorophenol		196	7.163	7.163	(0.895)	210080	38.0944	1590
38 2,4,5-Trichlorophenol		196	7.201	7.198	(0.900)	230165	38.6300	1620
40 2-Chloronaphthalene		162	7.401	7.401	(0.925)	682638	37.5515	1570
42 o-Nitroaniline		65	7.498	7.501	(0.937)	217805	30.5072	1280
41 m-Nitroaniline		138	7.942	7.944	(0.993)	136454	32.9584	1380
43 Dimethylphthalate		163	7.677	7.686	(0.960)	766592	36.7376	1540
44 2,6-Dinitrotoluene		165	7.754	7.756	(0.969)	175815	35.4559	1480
45 Acenaphthylene		152	7.851	7.853	(0.981)	1061019	37.0965	1550
48 2,4-Dinitrophenol		184	8.050	8.053	(1.006)	69296	31.3693	1310 (Q)
49 Dibenzofuran		168	8.221	8.223	(1.028)	1088782	46.6083	1950
51 Diethylphthalate		149	8.435	8.437	(1.054)	751438	36.2312	1520
53 Fluorene		166	8.594	8.593	(1.074)	716314	36.3035	1520
54 4-Chlorophenylphenylether		204	8.576	8.578	(1.072)	356329	38.4076	1610
55 2-Methyl-4,6-dinitrophenol		198	8.629	8.631	(0.897)	104106	37.1194	1550

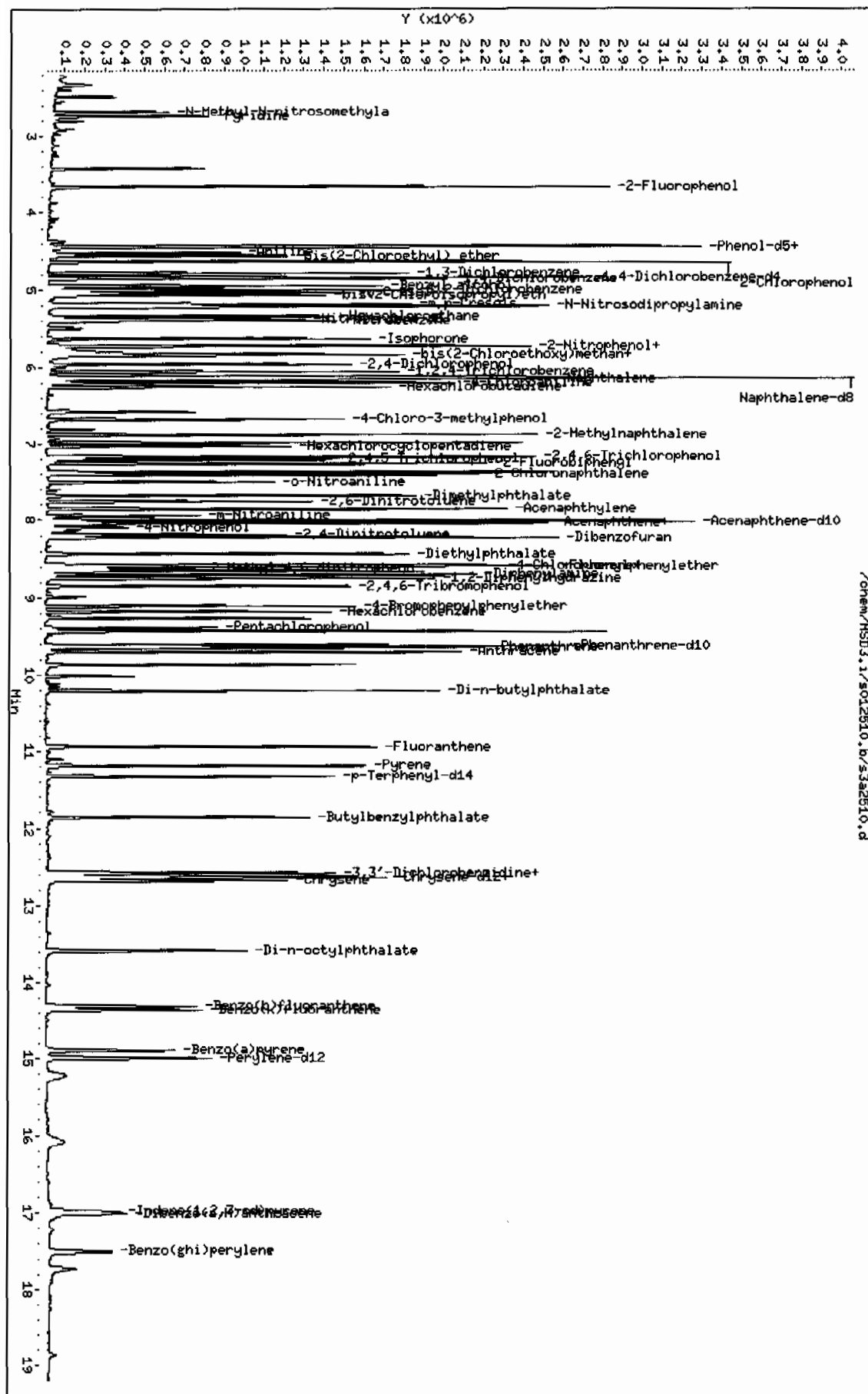
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	8.603	8.605	(1.075)	131283	32.8977	1380
133 Diphenylamine	169	8.706	8.705	(0.905)	594719	41.2164	1720
58 1,2-Diphenylhydrazine	77	8.753	8.755	(0.910)	758757	35.6701	1490
61 4-Bromophenylphenylether	248	9.111	9.113	(0.947)	172506	37.1830	1560
63 Hexachlorobenzene	284	9.185	9.186	(0.955)	175325	36.3879	1520
68 Phenanthrene	178	9.644	9.645	(1.003)	890698	37.2150	1560
69 Anthracene	178	9.700	9.700	(1.009)	904590	37.8622	1580
72 Di-n-butylphthalate	149	10.202	10.202	(1.061)	1030987	35.6766	1490
76 Fluoranthene	202	10.934	10.935	(1.137)	732439	33.6322	1410
85 Butylbenzylphthalate	149	11.860	11.863	(0.938)	341195	34.9308	1460
89 Benzo(a)anthracene	228	12.626	12.633	(0.999)	567774	36.3940	1520
90 3,3'-Dichlorobenzidine	252	12.569	12.572	(0.994)	104914	23.9969	1000
92 Chrysene	228	12.679	12.686	(1.003)	553234	37.7000	1580
93 bis(2-Ethylhexyl)phthalate	149	12.584	12.588	(0.995)	464583	34.5590	1440
94 Di-n-octylphthalate	149	13.579	13.584	(0.906)	701803	34.2397	1430
95 Benzo(b)fluoranthene	252	14.311	14.317	(0.955)	467738	39.3782	1650
96 Benzo(k)fluoranthene	252	14.358	14.364	(0.958)	483543	39.2136	1640
97 Benzo(a)pyrene	252	14.891	14.899	(0.993)	420648	40.6405	1700
99 Indeno(1,2,3-cd)pyrene	276	16.985	16.998	(1.133)	322279	38.1683	1600
100 Dibenzo(a,h)anthracene	278	17.021	17.027	(1.135)	266014	38.6032	1610
101 Benzo(ghi)perylene	276	17.501	17.515	(1.167)	248655	35.8776	1500
1 N-Methyl-N-nitrosomethylamine	74	2.684	2.657	(0.554)	185086	25.8980	1080

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD3.i/s012510.b/s3a2510.d
 Date: 25-JAN-2010 13:44
 Client ID: RE15-10-7194MSD
 Sample Info: 112020224711944456111SWH111MSD
 Volume Injected (uL): 0.5
 Column phase: 3M DB-SHS

Instrument: MSD3.i
 Operator: JLDI
 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: 944454 Verified by: _____
 Analyst: Alberto Velasco Lab SOP: GL-OA-E-010 REV# 18
 Method: SW846 3550B Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202022468 MB	22-JAN-2010 23:39:38	30	1	0.03333
1202022469 LCS	22-JAN-2010 23:39:38	30	1	0.03333
245099001	22-JAN-2010 23:39:38	30.07	1	0.03326
1202022470 MS (245099001)	22-JAN-2010 23:39:38	30.11	1	0.03321
1202022471 MSD (245099001)	22-JAN-2010 23:39:38	30.13	1	0.03319
245099002	22-JAN-2010 23:39:38	30.12	1	0.0332
245099003	22-JAN-2010 23:39:38	30.02	1	0.03331
245099004	22-JAN-2010 23:39:38	30.08	1	0.03324
245099005	22-JAN-2010 23:39:38	30.08	1	0.03324
245099006	22-JAN-2010 23:39:38	30.14	1	0.03318
245099007	22-JAN-2010 23:39:38	30.12	1	0.0332
245099008	22-JAN-2010 23:39:38	30.09	1	0.03323
245099009	22-JAN-2010 23:39:38	30.02	1	0.03331
245099010	22-JAN-2010 23:39:38	30.03	1	0.0333
245099011	22-JAN-2010 23:39:38	30.08	1	0.03324
245099012	22-JAN-2010 23:39:38	30.07	1	0.03326
245099013	22-JAN-2010 23:39:38	30.02	1	0.03331
245099014	22-JAN-2010 23:39:38	30.18	1	0.03313
245099015	22-JAN-2010 23:39:38	30.11	1	0.03321

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202022469	BNA LCS w/o Benzidine 50ppm	UE091229-12B	1	mL	Verified By: AJS
LCS	1202022469	BENZIDINE LCS	UE091229-21	1	mL	Final Solvent: CH2Cl2
MS	1202022470	BNA LCS w/o Benzidine 50ppm	UE091229-12B	1	mL	
MS	1202022470	BENZIDINE LCS	UE091229-21	1	mL	
MSD	1202022471	BNA LCS w/o Benzidine 50ppm	UE091229-12B	1	mL	
MSD	1202022471	BENZIDINE LCS	UE091229-21	1	mL	
SURR	All	BNA for all Surrogate	UE091229-10	1	mL	
REGNT	All	Methylene Chloride	1256305-D	150	mL	
REGNT	All	Acetone	1256900	150	mL	
SOURC	All	SODIUM SULFATE	1256907	30	g	

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/20/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: _____
 HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D
 Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul
 DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02
 CALIBRATION & QC INFORMATION:
 Initial Calibration Dates: See Calibration History and Standard Logbook.
 Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012010a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s3a2013-D.d	WBN100107-01	JLD1	20-JAN-2010 17:17	150NG	s012010a	1.0	DFTPP	USE; 8270D MEGA/APICAL/ICV
s3a2013.d	WBN100107-01	JLD1	20-JAN-2010 17:17	150NG	s012010a	1.0	DFTPP	USE; 8270C MEGA/APICAL/ICV
s3a2014.d	INSTRUMENTBLANK	JLD1	20-JAN-2010 17:33		s012010a	1.0	IB	
s3a2015.d	WBN100112-08	JLD1	20-JAN-2010 17:59	101PPM	s012010a	1.0	MEGAICAL	USE; LEV 1
s3a2016-MQC	WBN100112-07	JLD1	20-JAN-2010 18:29	110PPM	s012010a	1.0	MEGAICAL	8270D PASS MQC FOR C 41
s3a2016.d	WBN100112-07	JLD1	20-JAN-2010 18:29	110PPM	s012010a	1.0	MEGAICAL	USE; LEV 2
s3a2017.d	WBN100112-06	JLD1	20-JAN-2010 18:58	120PPM	s012010a	1.0	MEGAICAL	USE; LEV 3
s3a2018.d	WBN100112-05	JLD1	20-JAN-2010 19:28	140PPM	s012010a	1.0	MEGAICAL	USE; LEV 4
s3a2019.d	WBN100112-04	JLD1	20-JAN-2010 19:58	150PPM	s012010a	1.0	MEGAICAL	USE; LEV 5
s3a2020.d	WBN100112-03	JLD1	20-JAN-2010 20:27	180PPM	s012010a	1.0	MEGAICAL	USE; LEV 6
s3a2021.d	WBN100112-02	JLD1	20-JAN-2010 20:57	1100PPM	s012010a	1.0	MEGAICAL	USE; LEV 7
s3a2022.d	WBN100112-01	JLD1	20-JAN-2010 21:26	120PPM	s012010a	1.0	MEGAICAL	USE; LEV 8 (ICAL FAILS 203/179/216)
s3a2023.d	WBN100103-01	JLD1	20-JAN-2010 21:56	110PPM	s012010a	1.0	APICAL	USE; LEV 2
s3a2024.d	WBN100103-02	JLD1	20-JAN-2010 22:22	120PPM	s012010a	1.0	APICAL	USE; LEV 3
s3a2025.d	WBN100103-03.1	JLD1	20-JAN-2010 22:48	140PPM	s012010a	1.0	APICAL	USE; LEV 4
s3a2026.d	WBN100103-04	JLD1	20-JAN-2010 23:15	150PPM	s012010a	1.0	APICAL	USE; LEV 5
s3a2027.d	WBN100103-05	JLD1	20-JAN-2010 23:41	180PPM	s012010a	1.0	APICAL	USE; LEV 6
s3a2028.d	WBN100103-06	JLD1	21-JAN-2010 00:07	1100PPM	s012010a	1.0	APICAL	USE; LEV 7
s3a2029.d	WBN100103-07	JLD1	21-JAN-2010 00:33	120PPM	s012010a	1.0	APICAL	USE; LEV 8

ls3a2030-D.d	WEN100106-09.3	JLD1	21-JAN-2010 00:59	140PPM	ls012010a	1.0 MEGAICV	USE; 8270D FAILS C 184 >60%	
ls3a2030.d	WEN100106-09.3	JLD1	21-JAN-2010 00:59	140PPM	ls012010a	1.0 MEGAICV	USE; 8270C FAILS C 184	
ls3a2031-D.d	WEN100103-08.1	JLD1	21-JAN-2010 01:29	140PPM	ls012010a	1.0 APICV	USE; 8270D FAILS C 119 >60%	
ls3a2031.d	WEN100103-08.1	JLD1	21-JAN-2010 01:29	140PPM	ls012010a	1.0 APICV	USE; 8270C FAILS C 119 >60%	
ls3a2032.d	WEN100107-01	JLD1	21-JAN-2010 01:57	150NG	ls012010a	1.0 DFTTP	DOUSE; TUNE FAILS	

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/25/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: _____
DATE: _____
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D
Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012510.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s3a2501.d	WBN100107-01	JLD1	25-JAN-2010 08:44	150NG	s012510	1.0	DFTPP	DOSE; MAINTENANCE
s3a2502.d	WBN100107-01	JLD1	25-JAN-2010 09:52	150NG	s012510	1.0	DFTPP	DOSE
s3a2503.d	WBN100121-17.2	JLD1	25-JAN-2010 10:04	140 PPM	s012510	1.0	MEGACVS	DOSE (385188)
s3a2504.d	WBN100120-08.3	JLD1	25-JAN-2010 11:00	140 PPM	s012510	1.0	APCVS	DOSE
s3a2505.d	WBN100103-26.3	JLD1	25-JAN-2010 11:29	140 PPM	s012510	1.0	PESTCVS	DOSE
s3a2506.d	1202022468	JLD1	25-JAN-2010 11:59	1944455	10-1301	1.0	SBLK01	DOSE
s3a2507.d	1202022469	JLD1	25-JAN-2010 12:25	1944455	10-1301	1.0	SBLK01CS	DOSE; ISTD LOW
s3a2508.d	245099001	JLD1	25-JAN-2010 12:52	1944455	10-1301	1.0	LANL	DOSE; 2526 CONFIRMS LOW ISTD
s3a2509.d	1202022470	JLD1	25-JAN-2010 13:18	1944455	10-1301	1.0	IMS	DOSE
s3a2510.d	1202022471	JLD1	25-JAN-2010 13:44	1944455	10-130	1.0	MSD	DOSE
s3a2511.d	245099002	JLD1	25-JAN-2010 14:11	1944455	10-1301	1.0	LANL	DOSE; 2527 CONFIRMS LOW ISTD
s3a2512.d	245099003	JLD1	25-JAN-2010 14:37	1944455	10-1301	1.0	LANL	DOSE; 2528 CONFIRMS LOW ISTD
s3a2513.d	245099004	JLD1	25-JAN-2010 15:04	1944455	10-1301	1.0	LANL	DOSE
s3a2514.d	245099005	JLD1	25-JAN-2010 15:31	1944455	10-1301	1.0	LANL	DOSE; LOW ISTD SEE RR S3A2613
s3a2515.d	245099006	JLD1	25-JAN-2010 15:57	1944455	10-1301	1.0	LANL	DOSE; LOW ISTD SEE RR S3A2614
s3a2516.d	245099007	JLD1	25-JAN-2010 16:24	1944455	10-1301	1.0	LANL	DOSE; LOW ISTD SEE RR S3A2630
s3a2517.d	245099008	JLD1	25-JAN-2010 16:51	1944455	10-1301	1.0	LANL	DOSE; LOW ISTD SEE RR S3A2631
s3a2518.d	245099009	JLD1	25-JAN-2010 17:17	1944455	10-1301	1.0	LANL	DOSE; LOW ISTD SEE RR S3A2632
s3a2519.d	245099010	JLD1	25-JAN-2010 17:43	1944455	10-1301	1.0	LANL	DOSE; LOW ISTD SEE RR S3A2633

s3a2520.d	1245099011	JLD1	25-JAN-2010 18:10	944455	10-1301	1.0 LANL	USE; LOW ISTD SEE RR S3A2709
s3a2521.d	1245099012	JLD1	25-JAN-2010 18:36	944455	10-1301	1.0 LANL	USE; LOW ISTD SEE RR S3A2710
s3a2522.d	1245099013	JLD1	25-JAN-2010 19:02	944455	10-1301	1.0 LANL	DUSE; LOW ISTD SEE RR S3A2711
s3a2523.d	1245099014	JLD1	25-JAN-2010 19:28	944455	10-1301	1.0 LANL	DUSE; LOW ISTD SEE RR S3A2712
s3a2524.d	1245099015	JLD1	25-JAN-2010 19:54	944455	10-1301	1.0 LANL	DUSE; LOW ISTD SEE RR S3A2713
s3a2525.d	1202022469	JLD1	25-JAN-2010 20:20	944455	10-1301	1.0 SBLK01LCS	DUSE; ISTD LOW
s3a2526.d	1245099001	JLD1	25-JAN-2010 20:47	944455	10-1301	1.0 LANL	DUSE; ISTD LOW
s3a2527.d	1245099002	JLD1	25-JAN-2010 21:13	944455	10-1301	1.0 LANL	DUSE; ISTD LOW
s3a2528.d	1245099003	JLD1	25-JAN-2010 21:38	944455	10-1301	1.0 LANL	DUSE; ISTD LOW

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/26/2010 METHOD: See raw data OPERATOR: JLD1 REVIEWED BY: _____
DATE: _____
HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D
Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012610a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s3a2606.d	WBN100107-01	JLD1	26-JAN-2010 11:36	50NG	s012610	1.0	DFTPP	USE
s3a2607.d	WBN100121-17.2	JLD1	26-JAN-2010 11:48	40 PPM	s012610	1.0	MEGACVS	USE; (319045)
s3a2608.d	WBN100120-08.3	JLD1	26-JAN-2010 12:19	40 PPM	s012610	1.0	APCVS	USE
s3a2609.d	WBN100103-26.3	JLD1	26-JAN-2010 12:48	40 PPM	s012610	1.0	PESTCVS	USE
s3a2610.d	1202023496	JLD1	26-JAN-2010 13:18	944874	10-1324	1.0	SELK01	USE
s3a2611.d	1202023497	JLD1	26-JAN-2010 13:44	944874	10-1324	1.0	SELK01LCS	USE
s3a2612.d	1202022469	JLD1	26-JAN-2010 14:10	944455	10-1301	1.0	SELK01LCS	USE; RR OF S3A2507; ISTD PASS
s3a2613.d	1245099005	JLD1	26-JAN-2010 14:37	944455	10-1301	1.0	LANL	USE; RR OF S3A2514; ISTD LOW
s3a2614.d	1245099006	JLD1	26-JAN-2010 15:03	944455	10-1301	1.0	LANL	USE; RR OF S3A2515; ISTD PASS
s3a2615.d	WBN100121-05.2	JLD1	26-JAN-2010 15:30	40 PPM	s012610a	1.0	BJCOCVS	USE
s3a2616.d	1202024272	JLD1	26-JAN-2010 16:04	945165	IDOC-BJCOS	1.0	SELK01	USE
s3a2617.d	1202024265	JLD1	26-JAN-2010 16:33	945165	IDOC-BLCOS	1.0	SELK01LCS	USE
s3a2618.d	1202024266	JLD1	26-JAN-2010 17:03	945165	IDOC-BJCOS	1.0	SELK02LCS	USE
s3a2619.d	1202024267	JLD1	26-JAN-2010 17:32	945165	IDOC-BJCOS	1.0	SELK03LCS	USE
s3a2620.d	1202024268	JLD1	26-JAN-2010 17:58	945165	IDOC-BJCOS	1.0	SELK04LCS	USE
s3a2621.d	1202024269	JLD1	26-JAN-2010 18:24	945165	IDOC-BJCOS	1.0	SELK05LCS	USE
s3a2622.d	1245446001	JLD1	26-JAN-2010 18:50	945165	IDOC-BJCOS	1.0	QCQA	USE
s3a2623.d	1202024202	JLD1	26-JAN-2010 19:16	945122	IDOC-BJCOS	1.0	SELK01	USE
s3a2624.d	1202024203	JLD1	26-JAN-2010 19:42	945122	IDOC-BJCOS	1.0	SELK01LCS	USE

Is3a2625.d	1202024204	JLD1	26-JAN-2010 20:08	945122	IDOC-BJCOL	1.0 SBLK02LCS	DUSE	
Is3a2626.d	1202024205	JLD1	26-JAN-2010 20:34	945122	IDOC-BJCOL	1.0 SBLK03LCS	DUSE	
Is3a2627.d	1202024206	JLD1	26-JAN-2010 21:00	945122	IDOC-BJCOL	1.0 SBLK04LCS	DUSE	
Is3a2628.d	1202024207	JLD1	26-JAN-2010 21:27	945122	IDOC-BJCOL	1.0 SBLK05LCS	DUSE	
Is3a2629.d	1245445001	JLD1	26-JAN-2010 21:53	945122	IDOC-BJCOL	1.0 QCQA	DUSE	
Is3a2630.d	1245099007	JLD1	26-JAN-2010 22:19	944455	10-1301	1.0 LANL	USE; RR OF S3A2516; ISTD PASS	
Is3a2631.d	1245099008	JLD1	26-JAN-2010 22:45	944455	10-1301	1.0 LANL	DUSE; RR OF S3A2517; ISTD LOW	
Is3a2632.d	1245099009	JLD1	26-JAN-2010 23:11	944455	10-1301	1.0 LANL	USE; RR OF S3A2518; ISTD PASS	
Is3a2633.d	1245099010	JLD1	26-JAN-2010 23:36	944455	10-1301	1.0 LANL	USE; RR OF S3A2519; ISTD PASS	
Is3a2634.d	1245099011	JLD1	27-JAN-2010 00:02	944455	10-1301	1.0 LANL	DUSE; OUT OF TUNE	
Is3a2635.d	1245099012	JLD1	27-JAN-2010 00:28	944455	10-1301	1.0 LANL	DUSE; OUT OF TUNE	
Is3a2636.d	1245099013	JLD1	27-JAN-2010 00:54	944455	10-1301	1.0 LANL	DUSE; OUT OF TUNE	
Is3a2637.d	1245099014	JLD1	27-JAN-2010 01:20	944455	10-1301	1.0 LANL	DUSE; OUT OF TUNE	
Is3a2638.d	1245099015	JLD1	27-JAN-2010 01:45	944455	10-1301	1.0 LANL	DUSE; OUT OF TUNE	

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD3

DATE: 01/27/2010 METHOD: See raw data

OPERATOR: JLD1

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 246976-D
Multiplier Voltage: 1035 Emv Extr. Injection Volume: 0.5, 1.0 ul
DFTPP Solution ID: WBN100107-01 Internal Std ID: WBN100107-02
CALIBRATION & QC INFORMATION:
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD3.i/s012710.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s3a2701.d	WBN100107-01	JLD1	27-JAN-2010 08:57	150NG	s012710	1.0	DFTPP	USE
s3a2702.d	WBN100121-17.2	JLD1	27-JAN-2010 09:09	140 PPM	s012710	1.0	MEGACVS	USE (267689)
s3a2703.d	WBN100121-05.2	JLD1	27-JAN-2010 09:42	140 PPM	s012710	1.0	BJCOCVS	USE; NOT NEEDED
s3a2704.d	WBN100120-08.4	JLD1	27-JAN-2010 10:11	140 PPM	s012710	1.0	APCVS	USE
s3a2705.d	WBN100103-26.4	JLD1	27-JAN-2010 10:37	140 PPM	s012710	1.0	PESTCVS	USE
s3a2706.d	1202024181	JLD1	27-JAN-2010 11:07	1945113	245416	1.0	SBLK01	USE
s3a2707.d	1202024182	JLD1	27-JAN-2010 11:33	1945113	245416	1.0	SBLK01LCS	USE
s3a2708.d	1202024183	JLD1	27-JAN-2010 11:59	1945113	245416	1.0	SBLK01LCS	USE
s3a2709.d	1245099011	JLD1	27-JAN-2010 12:25	1944455	110-1301	1.0	LANL	USE; RR OF S3A2520; ISTD LOW
s3a2710.d	1245099012	JLD1	27-JAN-2010 12:51	1944455	110-1301	1.0	LANL	USE; RR OF S3A2521; ISTD LOW
s3a2711.d	1245099013	JLD1	27-JAN-2010 13:17	1944455	110-1301	1.0	LANL	USE; RR OF S3A2522; ISTD PASS
s3a2712.d	1245099014	JLD1	27-JAN-2010 13:43	1944455	110-1301	1.0	LANL	USE; RR OF S3A2523; ISTD PASS
s3a2713.d	1245099015	JLD1	27-JAN-2010 14:09	1944455	110-1301	1.0	LANL	USE; RR OF S3A2524; ISTD FAILURE CONFIRMS
s3a2714.d	1245114002	JLD1	27-JAN-2010 14:35	1944874	110-1324	1.0	LANL	USE
s3a2715.d	1202023498	JLD1	27-JAN-2010 15:01	1944874	110-1324	1.0	MS	USE
s3a2716.d	1202023499	JLD1	27-JAN-2010 15:26	1944874	110-1324	1.0	MSD	USE; ISTD LOW
s3a2717.d	1245114003	JLD1	27-JAN-2010 15:52	1944874	110-1324	1.0	LANL	USE
s3a2718.d	1245114004	JLD1	27-JAN-2010 16:18	1944874	110-1324	1.0	LANL	USE
s3a2719.d	1245114005	JLD1	27-JAN-2010 16:44	1944874	110-1324	1.0	LANL	USE

Is3a2720.d	1245416001	JLD1	27-JAN-2010 17:09	1945113	1245416	1	1.0 MCLI	DUSE; ISTD LOW S3A2832 PASS ISTD
Is3a2721.d	1245416002	JLD1	27-JAN-2010 17:35	1945113	1245416	1	1.0 MCLI	DUSE; ISTD LOW S3A2833 PASS ISTD
Is3a2722.d	1245416003	JLD1	27-JAN-2010 18:01	1945113	1245416	1	1.0 MCLI	DUSE; ISTD LOW S3A2834 PASS ISTD
Is3a2723.d	1245114006	JLD1	27-JAN-2010 18:27	1944874	110-1324	1	1.0 LANL	DUSE; ISTD LOW; SEE RR S3A2835
Is3a2724.d	1245114007	JLD1	27-JAN-2010 18:53	1944874	110-1324	1	1.0 LANL	USE
Is3a2725.d	1245114008	JLD1	27-JAN-2010 19:19	1944874	110-1324	1	1.0 LANL	DUSE; ISTD LOW; SEE RR S3A2836
Is3a2726.d	1245114009	JLD1	27-JAN-2010 19:44	1944874	110-1324	1	1.0 LANL	DUSE; ISTD LOW; SEE RR S3A2837
Is3a2727.d	1245114010	JLD1	27-JAN-2010 20:10	1944874	110-1324	1	1.0 LANL	USE; ISTD LOW; SEE RR S3A2814
Is3a2728.d	1245416001	JLD1	27-JAN-2010 20:36	1945113	1245416	1	1.0 MCLI	DUSE; ISTD LOW/SCRR HIGH
Is3a2729.d	1245416002	JLD1	27-JAN-2010 21:02	1945113	1245416	1	1.0 MCLI	DUSE; OUT OF TUNE
Is3a2730.d	1245416003	JLD1	27-JAN-2010 21:27	1945113	1245416	1	1.0 MCLI	DUSE; OUT OF TUNE

Data File: /chem/MSD3.i/s012510.b/s3a2526.d
 Report Date: 26-Jan-2010 09:26

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Data file : /chem/MSD3.i/s012510.b/s3a2526.d
 Lab Smp Id: 245099001 Client Smp ID: RE15-10-7194
 Inj Date : 25-JAN-2010 20:47
 Operator : JLD1 Inst ID: MSD3.i
 Smp Info : |245099001|944455|1|SVMF|1|LANL
 Misc Info : |MSD8270 S|WBN100107-02|
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
 Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
 Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
 Als bottle: 25
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1301.sub
 Target Version: 3.50
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	20.65990	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS					CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.840	4.841	(1.000)	412610	40.0000	
* 29 Naphthalene-d8	136	6.124	6.126	(1.000)	1476957	40.0000	
* 46 Acenaphthene-d10	164	8.002	8.003	(1.000)	686069	40.0000	
* 67 Phenanthrene-d10	188	9.618	9.618	(1.000)	949591	40.0000	
* 91 Chrysene-d12	240	12.643	12.650	(1.000)	566554	40.0000	
* 98 Perylene-d12	264	14.994	14.999	(1.000)	292152	40.0000	
\$ 3 2-Fluorophenol	112	3.663	3.653	(0.757)	620730	57.8142	2420
\$ 5 Phenol-d5	99	4.441	4.436	(0.918)	726099	53.8104	2260
\$ 20 Nitrobenzene-d5	82	5.379	5.384	(0.878)	362739	33.2480	1390
\$ 39 2-Fluorobiphenyl	172	7.254	7.254	(0.906)	647151	36.4932	1530
\$ 60 2,4,6-Tribromophenol	329	8.852	8.852	(1.106)	115852	58.9047	2470
\$ 81 p-Terphenyl-d14	244	11.327	11.326	(0.896)	464867	47.7374	2000

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSD3.i	Calibration Date: 25-JAN-2010
Lab File ID: s3a2526.d	Calibration Time: 10:04
Lab Smp Id: 245099001	Client Smp ID: RE15-10-7194
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JLD1	
Method File: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m	
Misc Info: MSD8270_S WBN100107-02	

Test Mode:

Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	385188	192594	770376	412610	7.12
29 Naphthalene-d8	1537267	768634	3074534	1476957	-3.92
46 Acenaphthene-d10	795210	397605	1590420	686069	-13.72
67 Phenanthrene-d10	1246225	623112	2492450	949591	-23.80
91 Chrysene-d12	1022987	511494	2045974	566554	-44.62
98 Perylene-d12	819421	409710	1638842	292152	-64.35

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COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.84	4.34	5.34	4.84	-0.02
29 Naphthalene-d8	6.13	5.63	6.63	6.12	-0.03
46 Acenaphthene-d10	8.00	7.50	8.50	8.00	-0.01
67 Phenanthrene-d10	9.62	9.12	10.12	9.62	0.00
91 Chrysene-d12	12.65	12.15	13.15	12.64	-0.06
98 Perylene-d12	15.00	14.50	15.50	14.99	-0.03

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.

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Data file : /chem/MSD3.i/s012510.b/s3a2527.d
Lab Smp Id: 245099002 Client Smp ID: RE15-10-7186
Inj Date : 25-JAN-2010 21:13
Operator : JLD1 Inst ID: MSD3.i
Smp Info : 245099002|944455|1|SVMF|1|LANL
Misc Info : MSD8270 S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.12000	weight of sample
M	18.57750	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152		4.842	4.841	(1.000)	380973	40.0000	
* 29 Naphthalene-d8	136		6.125	6.126	(1.000)	1455810	40.0000	
* 46 Acenaphthene-d10	164		8.001	8.003	(1.000)	790622	40.0000	
* 67 Phenanthrene-d10	188		9.619	9.618	(1.000)	1261643	40.0000	
* 91 Chrysene-d12	240		12.646	12.650	(1.000)	591023	40.0000	
* 98 Perylene-d12	264		14.997	14.999	(1.000)	261223	40.0000	
\$ 3 2-Fluorophenol	112		3.663	3.653	(0.756)	570387	57.5370	2350
\$ 5 Phenol-d5	99		4.440	4.436	(0.917)	733418	58.8664	2400
\$ 20 Nitrobenzene-d5	82		5.379	5.384	(0.878)	332552	30.9238	1260
\$ 39 2-Fluorobiphenyl	172		7.255	7.254	(0.907)	705766	34.5355	1410
\$ 60 2,4,6-Tribromophenol	329		8.855	8.852	(1.107)	174388	76.9417	3140
\$ 81 p-Terphenyl-d14	244		11.328	11.326	(0.896)	622317	61.2603	2500

Data File: /chem/MSD3.i/s012510.b/s3a2527.d
 Report Date: 26-Jan-2010 09:32

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GEL Laboratories LLC

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: MSD3.i	Calibration Date: 25-JAN-2010
Lab File ID: s3a2527.d	Calibration Time: 10:04
Lab Smp Id: 245099002	Client Smp ID: RE15-10-7186
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JLD1	
Method File: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m	
Misc Info: MSD8270_S WBN100107-02	

Test Mode:
 Use Last Continuing Calibrator.
 If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	385188	192594	770376	380973	-1.09
29 Naphthalene-d8	1537267	768634	3074534	1455810	-5.30
46 Acenaphthene-d10	795210	397605	1590420	790622	-0.58
67 Phenanthrene-d10	1246225	623112	2492450	1261643	1.24
91 Chrysene-d12	1022987	511494	2045974	591023	-42.23
98 Perylene-d12	819421	409710	1638842	261223	-68.12

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COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.84	4.34	5.34	4.84	0.04
29 Naphthalene-d8	6.13	5.63	6.63	6.12	-0.03
46 Acenaphthene-d10	8.00	7.50	8.50	8.00	-0.03
67 Phenanthrene-d10	9.62	9.12	10.12	9.62	0.01
91 Chrysene-d12	12.65	12.15	13.15	12.65	-0.04
98 Perylene-d12	15.00	14.50	15.50	15.00	-0.01

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.

Data File: /chem/MSD3.i/s012510.b/s3a2528.d
Report Date: 26-Jan-2010 09:34

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Data file : /chem/MSD3.i/s012510.b/s3a2528.d
Lab Smp Id: 245099003 Client Smp ID: RE15-10-7191
Inj Date : 25-JAN-2010 21:38
Operator : JLD1 Inst ID: MSD3.i
Smp Info : 245099003|944455|1|SVMF|1|LANL
Misc Info : MSD8270 S WBN100107-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	14.58450	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.842	4.841	(1.000)	396068	40.0000	
* 29 Naphthalene-d8	136	6.126	6.126	(1.000)	1557116	40.0000	
* 46 Acenaphthene-d10	164	8.003	8.003	(1.000)	851804	40.0000	
* 67 Phenanthrene-d10	188	9.620	9.618	(1.000)	1394795	40.0000	
* 91 Chrysene-d12	240	12.648	12.650	(1.000)	770777	40.0000	
* 98 Perylene-d12	264	14.999	14.999	(1.000)	406107	40.0000	
\$ 3 2-Fluorophenol	112	3.663	3.653	(0.756)	493610	47.8945	1870
\$ 5 Phenol-d5	99	4.440	4.436	(0.917)	620151	47.8782	1870
\$ 20 Nitrobenzene-d5	82	5.379	5.384	(0.878)	293518	25.5183	995
\$ 39 2-Fluorobiphenyl	172	7.255	7.254	(0.907)	592947	26.9309	1050
\$ 60 2,4,6-Tribromophenol	329	8.854	8.852	(1.106)	141803	58.0711	2260
\$ 81 p-Terphenyl-d14	244	11.329	11.326	(0.896)	590287	44.5560	1740

GEL Laboratories LLC

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: MSD3.i	Calibration Date: 25-JAN-2010
Lab File ID: s3a2528.d	Calibration Time: 10:04
Lab Smp Id: 245099003	Client Smp ID: RE15-10-7191
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JLD1	
Method File: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m	
Misc Info: MSD8270_S WBN100107-02	

Test Mode: Use Last Continuing Calibrator.
 If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	385188	192594	770376	396068	2.82
29 Naphthalene-d8	1537267	768634	3074534	1557116	1.29
46 Acenaphthene-d10	795210	397605	1590420	851804	7.12
67 Phenanthrene-d10	1246225	623112	2492450	1394795	11.92
91 Chrysene-d12	1022987	511494	2045974	770777	-24.65
98 Perylene-d12	819421	409710	1638842	406107	-50.44 <-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.84	4.34	5.34	4.84	0.02
29 Naphthalene-d8	6.13	5.63	6.63	6.13	0.00
46 Acenaphthene-d10	8.00	7.50	8.50	8.00	0.01
67 Phenanthrene-d10	9.62	9.12	10.12	9.62	0.02
91 Chrysene-d12	12.65	12.15	13.15	12.65	-0.02
98 Perylene-d12	15.00	14.50	15.50	15.00	0.01

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.

Data File: /chem/MSD3.i/s012610a.b/s3a2613.d
Report Date: 26-Jan-2010 16:05

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Data file : /chem/MSD3.i/s012610a.b/s3a2613.d
Lab Smp Id: 245099005 Client Smp ID: RE15-10-7196
Inj Date : 26-JAN-2010 14:37
Operator : JLD1 Inst ID: MSD3.i
Smp Info : 245099005|944455|1|SVMF|1|LANL
Misc Info : MSD8270 S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
Meth Date : 26-Jan-2010 15:55 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	23.66860	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.830	4.828	(1.000)	250445	40.0000	
* 29 Naphthalene-d8	136	6.111	6.111	(1.000)	937259	40.0000	
* 46 Acenaphthene-d10	164	7.984	7.986	(1.000)	469917	40.0000	
* 67 Phenanthrene-d10	188	9.601	9.603	(1.000)	657891	40.0000	
* 91 Chrysene-d12	240	12.636	12.624	(1.000)	385237	40.0000	
* 98 Perylene-d12	264	14.985	14.969	(1.000)	166541	40.0000	
\$ 3 2-Fluorophenol	112	3.654	3.644	(0.756)	445353	68.3380	2980
\$ 5 Phenol-d5	99	4.428	4.430	(0.917)	510601	62.3417	2720
\$ 20 Nitrobenzene-d5	82	5.365	5.372	(0.878)	241566	34.8911	1520
\$ 39 2-Fluorobiphenyl	172	7.240	7.244	(0.907)	463629	38.1701	1660
\$ 60 2,4,6-Tribromophenol	329	8.836	8.842	(1.107)	87213	64.7407	2820
\$ 81 p-Terphenyl-d14	244	11.311	11.316	(0.895)	326492	49.3079	2150

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	4.349	4.444	(0.900)	22153	2.55776	111(aQ)
17 N-Nitrosodipropylamine	70	5.365	5.204	(1.111)	34979	6.28378	274(a)
50 2,4-Dinitrotoluene	165	7.984	8.181	(1.000)	61566	16.3574	712(Q)
79 Pyrene	202	11.302	11.175	(0.894)	5431	0.49213	21.4(aQ)
4 Aniline	66	4.496	4.518	(0.931)	11949	3.13001	136(aQ)
7 bis(2-Chloroethyl) ether	63	4.496	4.556	(0.931)	46986	6.85740	299(aQ)
12 Benzyl alcohol	108	4.778	4.943	(0.989)	29402	6.42256	280(aQ)
15 o-Cresol	107	4.919	5.025	(1.018)	20125	3.57290	156(aQ)
18 m,p-Cresols	107	5.318	5.181	(1.101)	28781	3.92755	171(aQ)
22 Isophorone	82	5.794	5.627	(0.948)	32013	2.48122	108(a)
25 bis(2-Chloroethoxy)methane	93	5.791	5.826	(0.948)	58206	7.77027	338(aQ)
27 Benzoic acid	105	5.794	5.818	(0.948)	21843	5.37396	234(aQ)
40 2-Chloronaphthalene	162	7.587	7.388	(0.950)	37000	3.33260	145(Q)
42 o-Nitroaniline	65	7.587	7.488	(0.950)	47307	10.8490	472(Q)
41 m-Nitroaniline	138	7.922	7.934	(0.992)	131	4.35371	190(aQ)
44 2,6-Dinitrotoluene	165	7.984	7.746	(1.000)	61566	20.3286	885(Q)
56 p-Nitroaniline	138	8.607	8.598	(1.078)	328	5.33091	232(aQ)
85 Butylbenzylphthalate	149	11.982	11.847	(0.948)	44779	8.10828	353(aQ)
90 3,3'-Dichlorobenzidine	252	12.577	12.556	(0.995)	366	3.55697	155(aQ)
93 bis(2-Ethylhexyl)phthalate	149	12.613	12.572	(0.998)	45089	5.93222	258(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

GEL Laboratories LLC

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSD3.i	Calibration Date: 26-JAN-2010
Lab File ID: s3a2613.d	Calibration Time: 15:30
Lab Smp Id: 245099005	Client Smp ID: RE15-10-7196
Analysis Type: SV	Level: LOW
Quant Type: ISTD	Sample Type: Soil
Operator: JLD1	
Method File: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m	
Misc Info: MSD8270_S WBN100107-02	

Test Mode:

Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	257516	128758	515032	250445	-2.75
29 Naphthalene-d8	990013	495006	1980026	937259	-5.33
46 Acenaphthene-d10	561099	280550	1122198	469917	-16.25
67 Phenanthrene-d10	971436	485718	1942872	657891	-32.28
91 Chrysene-d12	684072	342036	1368144	385237	-43.68
98 Perylene-d12	409673	204836	819346	166541	-59.35

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COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.83	4.33	5.33	4.83	0.06
29 Naphthalene-d8	6.11	5.61	6.61	6.11	0.00
46 Acenaphthene-d10	7.99	7.49	8.49	7.98	-0.03
67 Phenanthrene-d10	9.60	9.10	10.10	9.60	-0.03
91 Chrysene-d12	12.62	12.12	13.12	12.64	0.10
98 Perylene-d12	14.97	14.47	15.47	14.99	0.11

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.

Data File: /chem/MSD3.i/s012610a.b/s3a2631.d
Report Date: 27-Jan-2010 09:51

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GEL Laboratories LLC

Data file : /chem/MSD3.i/s012610a.b/s3a2631.d
Lab Smp Id: 245099008 Client Smp ID: RE15-10-7184
Inj Date : 26-JAN-2010 22:45
Operator : JLD1 Inst ID: MSD3.i
Smp Info : 245099008|944455|1|SVMP|1|LANL
Misc Info : MSD8270 S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 08:40 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.09000	weight of sample
M	17.19080	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.827	4.832	(1.000)	316618	40.0000	
* 29 Naphthalene-d8	136	6.111	6.114	(1.000)	1192325	40.0000	
* 46 Acenaphthene-d10	164	7.985	7.990	(1.000)	660008	40.0000	
* 67 Phenanthrene-d10	188	9.602	9.605	(1.000)	1082747	40.0000	
* 91 Chrysene-d12	240	12.623	12.634	(1.000)	559854	40.0000	
* 98 Perylene-d12	264	14.965	14.975	(1.000)	221594	40.0000	
\$ 3 2-Fluorophenol	112	3.654	3.644	(0.757)	360593	43.7676	1760
\$ 5 Phenol-d5	99	4.425	4.430	(0.917)	418389	40.4068	1620
\$ 20 Nitrobenzene-d5	82	5.366	5.372	(0.878)	201698	22.9005	919
\$ 39 2-Fluorobiphenyl	172	7.237	7.244	(0.906)	404719	23.7235	952
\$ 60 2,4,6-Tribromophenol	329	8.836	8.842	(1.107)	85389	45.1301	1810
\$ 81 p-Terphenyl-d14	244	11.311	11.316	(0.896)	358791	37.2854	1500

Data File: /chem/MSD3.i/s012610a.b/s3a2631.d
 Report Date: 27-Jan-2010 09:51

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GEL Laboratories LLC

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: MSD3.i
 Lab File ID: s3a2631.d
 Lab Smp Id: 245099008
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JLD1
 Method File: /chem/MSD3.i/s012610a.b/MSD3-8270R-AQA-012110.m
 Misc Info: |MSD8270_S|WBN100107-02|

Calibration Date: 26-JAN-2010
 Calibration Time: 11:48
 Client Smp ID: RE15-10-7184
 Level: LOW
 Sample Type: Soil

Test Mode:

Use Last Continuing Calibrator.
 If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	319045	159522	638090	316618	-0.76
29 Naphthalene-d8	1275014	637507	2550028	1192325	-6.49
46 Acenaphthene-d10	676019	338010	1352038	660008	-2.37
67 Phenanthrene-d10	1138387	569194	2276774	1082747	-4.89
91 Chrysene-d12	825135	412568	1650270	559854	-32.15
98 Perylene-d12	556699	278350	1113398	221594	-60.20 <-

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.83	4.33	5.33	4.83	-0.10
29 Naphthalene-d8	6.11	5.61	6.61	6.11	-0.05
46 Acenaphthene-d10	7.99	7.49	8.49	7.99	-0.06
67 Phenanthrene-d10	9.61	9.11	10.11	9.60	-0.03
91 Chrysene-d12	12.63	12.13	13.13	12.62	-0.08
98 Perylene-d12	14.98	14.48	15.48	14.96	-0.07

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.

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2709.d
Lab Smp Id: 245099011 Client Smp ID: RE15-10-7187
Inj Date : 27-JAN-2010 12:25
Operator : JLD1 Inst ID: MSD3.i
Smp Info : 245099011|944455|1|SVMF|1|LANL
Misc Info : MSD8270 S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.08000	weight of sample
M	9.34110	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng/ul)	FINAL (ug/Kg)
-----		-----	-----	-----	-----	-----	-----	-----
* 10 1,4-Dichlorobenzene-d4		152	4.815	4.817	(1.000)	199159	40.0000	
* 29 Naphthalene-d8		136	6.096	6.100	(1.000)	770639	40.0000	
* 46 Acenaphthene-d10		164	7.969	7.973	(1.000)	438922	40.0000	
* 67 Phenanthrene-d10		188	9.586	9.588	(1.000)	731645	40.0000	
* 91 Chrysene-d12		240	12.604	12.610	(1.000)	529638	40.0000	
* 98 Perylene-d12		264	14.939	14.945	(1.000)	272119	40.0000	
\$ 3 2-Fluorophenol		112	3.636	3.633	(0.755)	292072	56.3588	2070
\$ 5 Phenol-d5		99	4.413	4.418	(0.917)	351594	53.9823	1980
\$ 20 Nitrobenzene-d5		82	5.351	5.357	(0.878)	164825	28.9541	1060
\$ 39 2-Fluorobiphenyl		172	7.224	7.227	(0.906)	350642	30.9066	1130
\$ 60 2,4,6-Tribromophenol		329	8.820	8.825	(1.107)	82297	65.4050	2400
\$ 81 p-Terphenyl-d14		244	11.296	11.297	(0.896)	396476	43.5521	1600

GEL Laboratories LLC
 INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: MSD3.i
 Lab File ID: s3a2709.d
 Lab Smp Id: 245099011
 Analysis Type: SV
 Quant Type: ISTD
 Operator: JLD1
 Method File: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
 Misc Info: |MSD8270_S|WBN100107-02|

Calibration Date: 27-JAN-2010
 Calibration Time: 09:09
 Client Smp ID: RE15-10-7187
 Level: LOW
 Sample Type: Soil

Test Mode:
 Use Last Continuing Calibrator.
 If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	267689	133844	535378	199159	-25.60
29 Naphthalene-d8	1068883	534442	2137766	770639	-27.90
46 Acenaphthene-d10	570163	285082	1140326	438922	-23.02
67 Phenanthrene-d10	947337	473668	1894674	731645	-22.77
91 Chrysene-d12	775080	387540	1550160	529638	-31.67
98 Perylene-d12	562347	281174	1124694	272119	-51.61

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COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.82	4.32	5.32	4.81	-0.06
29 Naphthalene-d8	6.10	5.60	6.60	6.10	-0.07
46 Acenaphthene-d10	7.97	7.47	8.47	7.97	-0.05
67 Phenanthrene-d10	9.59	9.09	10.09	9.59	-0.03
91 Chrysene-d12	12.61	12.11	13.11	12.60	-0.05
98 Perylene-d12	14.94	14.44	15.44	14.94	-0.04

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.

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012710.b/s3a2710.d
Lab Smp Id: 245099012 Client Smp ID: RE15-10-7188
Inj Date : 27-JAN-2010 12:51
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099012|944455|1|SVMF|1|LANL
Misc Info : |MSD8270 S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
Meth Date : 27-Jan-2010 13:18 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.07000	weight of sample
M	12.42510	% moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	4.815	4.817	(1.000)	259924	40.0000		
* 29 Naphthalene-d8	136	6.095	6.100	(1.000)	1003101	40.0000		
* 46 Acenaphthene-d10	164	7.970	7.973	(1.000)	559435	40.0000		
* 67 Phenanthrene-d10	188	9.584	9.588	(1.000)	901336	40.0000		
* 91 Chrysene-d12	240	12.605	12.610	(1.000)	437944	40.0000		
* 98 Perylene-d12	264	14.940	14.945	(1.000)	205315	40.0000		
\$ 3 2-Fluorophenol	112	3.639	3.633	(0.756)	386760	57.1830		2170
\$ 5 Phenol-d5	99	4.413	4.418	(0.917)	467692	55.0204		2090
\$ 20 Nitrobenzene-d5	82	5.352	5.357	(0.878)	218908	29.5431		1120
\$ 39 2-Fluorobiphenyl	172	7.224	7.227	(0.906)	464085	32.0939		1220
\$ 60 2,4,6-Tribromophenol	329	8.821	8.825	(1.107)	111148	69.3052		2630
\$ 81 p-Terphenyl-d14	244	11.296	11.297	(0.896)	423119	56.2103		2130

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
-----	----	--	-----	-----	-----	-----	-----
93 bis(2-Ethylhexyl)phthalate	149	12.549	12.548	(0.996)	25713	2.97578	113 (a)
94 Di-n-octylphthalate	149	13.537	13.538	(0.906)	328647	39.5278	1500

QC Flag Legend

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

Data File: /chem/MSD3.i/s012710.b/s3a2710.d
Report Date: 27-Jan-2010 13:56

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GEL Laboratories LLC

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSD3.i
Lab File ID: s3a2710.d
Lab Smp Id: 245099012
Analysis Type: SV
Quant Type: ISTD
Operator: JLD1
Method File: /chem/MSD3.i/s012710.b/MSD3-8270R-AQA-012110.m
Misc Info: |MSD8270_S|WBN100107-02|

Calibration Date: 27-JAN-2010
Calibration Time: 09:09
Client Smp ID: RE15-10-7188
Level: LOW
Sample Type: Soil

Test Mode:

Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	267689	133844	535378	259924	-2.90
29 Naphthalene-d8	1068883	534442	2137766	1003101	-6.15
46 Acenaphthene-d10	570163	285082	1140326	559435	-1.88
67 Phenanthrene-d10	947337	473668	1894674	901336	-4.86
91 Chrysene-d12	775080	387540	1550160	437944	-43.50
98 Perylene-d12	562347	281174	1124694	205315	-63.49

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COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.82	4.32	5.32	4.82	-0.04
29 Naphthalene-d8	6.10	5.60	6.60	6.09	-0.09
46 Acenaphthene-d10	7.97	7.47	8.47	7.97	-0.04
67 Phenanthrene-d10	9.59	9.09	10.09	9.58	-0.04
91 Chrysene-d12	12.61	12.11	13.11	12.61	-0.04
98 Perylene-d12	14.94	14.44	15.44	14.94	-0.04

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.

GEL Laboratories LLC

Data file : /chem/MSD3.i/s012510.b/s3a2524.d
Lab Smp Id: 245099015 Client Smp ID: RE15-10-7219
Inj Date : 25-JAN-2010 19:54
Operator : JLD1 Inst ID: MSD3.i
Smp Info : |245099015|944455|1|SVMP|1|LANL
Misc Info : |MSD8270 S|WBN100107-02|
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Meth Date : 25-Jan-2010 13:33 jen00986 Quant Type: ISTD
Cal Date : 21-JAN-2010 21:36 Cal File: s3a2130.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1301.sub
Target Version: 3.50
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.11000	weight of sample
M	23.21380	% moisture

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
-----	----	--	-----	-----	-----	-----	-----	-----
* 10 1,4-Dichlorobenzene-d4	152		4.842	4.841	(1.000)	330767	40.0000	
* 29 Naphthalene-d8	136		6.124	6.126	(1.000)	1272980	40.0000	
* 46 Acenaphthene-d10	164		8.000	8.003	(1.000)	681262	40.0000	
* 67 Phenanthrene-d10	188		9.619	9.618	(1.000)	1121226	40.0000	
* 91 Chrysene-d12	240		12.643	12.650	(1.000)	491240	40.0000	
* 98 Perylene-d12	264		14.997	14.999	(1.000)	207303	40.0000	
\$ 3 2-Fluorophenol	112		3.663	3.653	(0.756)	508998	59.1378	2560
\$ 5 Phenol-d5	99		4.440	4.436	(0.917)	619134	57.2365	2480
\$ 20 Nitrobenzene-d5	82		5.379	5.384	(0.878)	288439	30.6740	1330
\$ 39 2-Fluorobiphenyl	172		7.254	7.254	(0.907)	601033	34.1318	1480
\$ 60 2,4,6-Tribromophenol	329		8.852	8.852	(1.106)	140172	71.7730	3100
\$ 81 p-Terphenyl-d14	244		11.327	11.326	(0.896)	515609	61.0658	2640

Data File: /chem/MSD3.i/s012510.b/s3a2524.d
Report Date: 26-Jan-2010 09:23

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GEL Laboratories LLC

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: MSD3.i
Lab File ID: s3a2524.d
Lab Smp Id: 245099015
Analysis Type: SV
Quant Type: ISTD
Operator: JLD1
Method File: /chem/MSD3.i/s012510.b/MSD3-8270R-AQA-012110.m
Misc Info: |MSD8270_S|WBN100107-02|

Calibration Date: 25-JAN-2010
Calibration Time: 10:04
Client Smp ID: RE15-10-7219
Level: LOW
Sample Type: Soil

Test Mode:

Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 4

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	385188	192594	770376	330767	-14.13
29 Naphthalene-d8	1537267	768634	3074534	1272980	-17.19
46 Acenaphthene-d10	795210	397605	1590420	681262	-14.33
67 Phenanthrene-d10	1246225	623112	2492450	1121226	-10.03
91 Chrysene-d12	1022987	511494	2045974	491240	-51.98
98 Perylene-d12	819421	409710	1638842	207303	-74.70

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COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
10 1,4-Dichlorobenze	4.84	4.34	5.34	4.84	0.03
29 Naphthalene-d8	6.13	5.63	6.63	6.12	-0.03
46 Acenaphthene-d10	8.00	7.50	8.50	8.00	-0.03
67 Phenanthrene-d10	9.62	9.12	10.12	9.62	0.01
91 Chrysene-d12	12.65	12.15	13.15	12.64	-0.05
98 Perylene-d12	15.00	14.50	15.50	15.00	-0.01

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.

LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1301**

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: 944243

Prep Batch Number: 944241

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
245099001	RE15-10-7194
245099002	RE15-10-7186
245099003	RE15-10-7191
245099004	RE15-10-7195
245099005	RE15-10-7196
245099006	RE15-10-7197
245099007	RE15-10-7193
245099008	RE15-10-7184
245099009	RE15-10-7185
245099010	RE15-10-7189
245099011	RE15-10-7187
245099012	RE15-10-7188
245099013	RE15-10-7190
245099014	RE15-10-7192
245099015	RE15-10-7219
1202021896	Method Blank (MB)
1202021897	Laboratory Control Sample (LCS)
1202021898	245099001(RE15-10-7194) Matrix Spike (MS)
1202021899	245099001(RE15-10-7194) 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.

10-1301-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. New surrogate limits went into effect midnight on 01/31/10. Samples for Primary analyte analysis were analyzed after midnight on 01/31/10, and samples for Secondary analyte analysis were analyzed before midnight on 01/31/10. This fact is documented on the Form 2.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 245099001 (RE15-10-7194) 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 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. New surrogate limits went into effect midnight on 01/31/10. Samples for Primary analyte analysis were analyzed after midnight on 01/31/10, and samples for Secondary analyte analysis were analyzed before midnight on 01/31/10. This fact is documented on the Form 2.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 245099001 (RE15-10-7194) 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 recovered TATB at 337%. The recovery limits are 44-166%. Since both the LCS and MS spike recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported. Please see data exception report 788280.

10-1301-EXPLCMS

MS/MSD Relative Percent Difference (RPD) Statement

The MS/MSD RPD for TATB was 117%. 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 788280.

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 788280 was generated for this SDG.

The MSD recovered TATB at 337%. The recovery limits are 44-166%. Since both the LCS and MS spike recoveries met acceptance criteria, the noted exception is attributed to vagaries in the extraction process. The data are reported.

The MS/MSD RPD for TATB was 117%. 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: Heather M. Mauer Date: 02/09/10

SAMPLE DATA SUMMARY

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099001

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203112a

Date Analyzed: 05-FEB-10 21:13

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: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099001

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290047.wiff

Date Analyzed: 29-JAN-10 22:07

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7186

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099002

Sample Amount 2

Moisture: 18.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203115a

Date Analyzed: 05-FEB-10 22:41

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7186

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099002

Sample Amount 2

Moisture: 18.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290050.wiff

Date Analyzed: 29-JAN-10 22:54

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7191

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099003

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203116a

Date Analyzed: 05-FEB-10 23:11

Units: ug/kg

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

*Concentration =

Instrument Value	X	<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: RE15-10-7191

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099003

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290051.wiff

Date Analyzed: 29-JAN-10 23:10

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7195

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203117a

Date Analyzed: 05-FEB-10 23:40

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7195

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290052.wiff

Date Analyzed: 29-JAN-10 23:25

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7196

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099005

Sample Amount 2

Moisture: 23.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203118a

Date Analyzed: 06-FEB-10 00:10

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7196

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099005

Sample Amount 2

Moisture: 23.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290053.wiff

Date Analyzed: 29-JAN-10 23:41

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7197

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099006

Sample Amount 2

Moisture: 14.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203119a

Date Analyzed: 06-FEB-10 00:39

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7197

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099006

Sample Amount 2

Moisture: 14.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290054.wiff

Date Analyzed: 29-JAN-10 23:57

Units: ug/kg

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

*Concentration =

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

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7193

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099007

Sample Amount 2

Moisture: 19.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203123a

Date Analyzed: 06-FEB-10 02:37

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7193

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099007

Sample Amount 2

Moisture: 19.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290058.wiff

Date Analyzed: 30-JAN-10 01:00

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: RE15-10-7184

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099008

Sample Amount 2

Moisture: 17.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203124a

Date Analyzed: 06-FEB-10 03:07

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7184

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099008

Sample Amount 2

Moisture: 17.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290059.wiff

Date Analyzed: 30-JAN-10 01:15

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7185

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099009

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203125a

Date Analyzed: 06-FEB-10 03:36

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	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7185

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099009

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290060.wiff

Date Analyzed: 30-JAN-10 01:31

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7189

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099010

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203126a

Date Analyzed: 06-FEB-10 04:06

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7189

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099010

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290061.wiff

Date Analyzed: 30-JAN-10 01:47

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7187

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099011

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203127a

Date Analyzed: 06-FEB-10 04:35

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: RE15-10-7187

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099011

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290062.wiff

Date Analyzed: 30-JAN-10 02:03

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	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7188

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099012

Sample Amount 2

Moisture: 12.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203128a

Date Analyzed: 06-FEB-10 05:05

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7188

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099012

Sample Amount 2

Moisture: 12.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290063.wiff

Date Analyzed: 30-JAN-10 02:18

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7190

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099013

Sample Amount 2

Moisture: 28.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203129a

Date Analyzed: 06-FEB-10 05:34

Units: ug/kg

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

*Concentration =

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

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7190

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099013

Sample Amount 2

Moisture: 28.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290064.wiff

Date Analyzed: 30-JAN-10 02:34

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7192

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099014

Sample Amount 2

Moisture: 34.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203130a

Date Analyzed: 06-FEB-10 06:04

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: RE15-10-7192

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099014

Sample Amount 2

Moisture: 34.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290065.wiff

Date Analyzed: 30-JAN-10 02:50

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: RE15-10-7219

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099015

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203131a

Date Analyzed: 06-FEB-10 06:33

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: RE15-10-7219

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099015

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290066.wiff

Date Analyzed: 30-JAN-10 03:05

Units: ug/kg

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

*Concentration =

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

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb Su ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
245099001	RE15-10-7194	115	70 - 144	
245099001	RE15-10-7194	120	73.7 - 133.3	
245099002	RE15-10-7186	112	70 - 144	
245099002	RE15-10-7186	114	73.7 - 133.3	
245099003	RE15-10-7191	110	70 - 144	
245099003	RE15-10-7191	116	73.7 - 133.3	
245099004	RE15-10-7195	116	70 - 144	
245099004	RE15-10-7195	116	73.7 - 133.3	
245099005	RE15-10-7196	108	70 - 144	
245099005	RE15-10-7196	114	73.7 - 133.3	
245099006	RE15-10-7197	112	70 - 144	
245099006	RE15-10-7197	112	73.7 - 133.3	
245099007	RE15-10-7193	110	70 - 144	
245099007	RE15-10-7193	101	73.7 - 133.3	
245099008	RE15-10-7184	108	70 - 144	
245099008	RE15-10-7184	111	73.7 - 133.3	
245099009	RE15-10-7185	113	70 - 144	
245099009	RE15-10-7185	104	73.7 - 133.3	
245099010	RE15-10-7189	109	70 - 144	
245099010	RE15-10-7189	111	73.7 - 133.3	
245099011	RE15-10-7187	112	70 - 144	
245099011	RE15-10-7187	117	73.7 - 133.3	
245099012	RE15-10-7188	111	70 - 144	
245099012	RE15-10-7188	110	73.7 - 133.3	
245099013	RE15-10-7190	116	70 - 144	
245099013	RE15-10-7190	112	73.7 - 133.3	
245099014	RE15-10-7192	88.1	70 - 144	
245099014	RE15-10-7192	118	73.7 - 133.3	
245099015	RE15-10-7219	114	70 - 144	
245099015	RE15-10-7219	116	73.7 - 133.3	
1202021896	MB for batch 944241	100	70 - 144	
1202021896	MB for batch 944241	110	73.7 - 133.3	
1202021897	LCS for batch 944241	105	70 - 144	
1202021897	LCS for batch 944241	115	73.7 - 133.3	
1202021898	RE15-10-7194(245099001MS)	115	70 - 144	
1202021898	RE15-10-7194(245099001MS)	115	73.7 - 133.3	
1202021899	RE15-10-7194(245099001MSD)	113	70 - 144	

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
1202021899	RE15-10-7194(245099001MSD)	113	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) 10-1301

Extract Batch Code: 944241

Date Extracted: 26-JAN-10

GEL LCS ID: 1202021897

GEL LCSDUP ID:

Analysis Date/Time: 05--FEB--10 20:43

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	5000	4060	81.3					69 - 126
2,4,6-Trinitrotoluene	5000	5110	102					73 - 149
2,4-Dinitrotoluene	5000	5070	101					87 - 137
2,6-Dinitrotoluene	5000	5030	101					89 - 120
2-Amino-4,6-dinitrotoluene	5000	5310	106					90 - 130
4-Amino-2,6-dinitrotoluene	5000	4920	98.5					84 - 130
HMX	5000	4500	90.1					58 - 138
Nitrobenzene	5000	4350	87					71 - 122
PETN	5000	4070	81.4					64 - 137
RDX	5000	5170	103					81 - 137
Tetryl	5000	2630	52.6					51 - 112
m-Dinitrobenzene	5000	4750	95					83 - 122
m-Nitrotoluene	5000	4290	85.8					73 - 118
o-Nitrotoluene	5000	4860	97.1					72 - 119
p-Nitrotoluene	5000	4720	94.4					67 - 131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1301

Extract Batch Code: 944241

Date Extracted: 26-JAN-10

GEL LCS ID: 1202021897

GEL LCSDUP ID:

Analysis Date/Time: 29-JAN-10 21:51

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	4680	93.6					64.8 – 128
2,6-Diamino-4-nitrotoluene	5000	4710	94.2					69.6 – 133
3,5-Dinitroaniline	5000	5520	110					77.3 – 123
tris(o-cresyl) phosphate	5000	5400	108					84.3 – 120
TATB	7500	6800	90.7					46.8 – 166

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

3
High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Extract Batch Code: 944241

Date Extracted: 26-JAN-10

GEL Spike ID: 1202021898

GEL SpikeDup ID: 1202021899

Analysis Date/Time: 05-FEB-10 21:42

MSD Analysis Date/Time:

Reporting Units: ug/kg

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
1,3,5-Trinitrobenzene	5000	0	4300	86	4130	82.5	4.11	30	50 – 140
2,4,6-Trinitrotoluene	5000	0	5240	105	5200	104	.769	30	76 – 144
2,4-Dinitrotoluene	5000	0	5170	103	5360	107	3.6	30	86 – 135
2,6-Dinitrotoluene	5000	0	5100	102	5020	100	1.53	30	90 – 118
2-Amino-4,6-dinitrotoluene	5000	0	5390	108	5600	112	3.8	30	85 – 137
4-Amino-2,6-dinitrotoluene	5000	0	5080	102	5120	102	.853	30	72 – 143
HMX	5000	0	4370	87.4	4910	98.3	11.7	30	51 – 144
Nitrobenzene	5000	0	4350	87	4820	96.4	10.2	30	70 – 122
PETN	5000	0	5510	110	5710	114	3.72	30	60 – 140
RDX	5000	0	4860	97.1	5310	106	8.87	30	59 – 152
Tetryl	5000	0	3190	63.7	2890	57.8	9.7	30	36 – 124
m-Dinitrobenzene	5000	0	4860	97.2	4810	96.1	1.17	30	85 – 118
m-Nitrotoluene	5000	0	5180	104	4830	96.5	7.11	30	70 – 120
o-Nitrotoluene	5000	0	5100	102	5280	106	3.5	30	69 – 123
p-Nitrotoluene	5000	0	4880	97.6	5300	106	8.24	30	65 – 133

#Column to be used to flag recovery and RPD values with an asterisk

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Extract Batch Code: 944241

Date Extracted:26-JAN-10

GEL Spike ID: 1202021898

GEL SpikeDup ID:1202021899

Analysis Date/Time: 29-JAN-10 22:23

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	4170	83.4	4100	82	1.69	30	51.6 – 127
2,6-Diamino-4-nitrotoluene	5000	0	4300	86	4060	81.2	5.74	30	58.9 – 135
3,5-Dinitroaniline	5000	0	5210	104	5480	110	5.05	30	72.8 – 125
tris(o-cresyl) phosphate	5000	0	5380	108	5310	106	1.31	30	79.1 – 124
TATB	7500	0	6670	88.9	25300	337 *	117 *	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): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 03-FEB-10 10:10

GEL Data File: EXP0203001a

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	538.957
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	530.111
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantity Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

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Calibration: Unidentified, Time: Thu Feb 04 09:07:11 2010

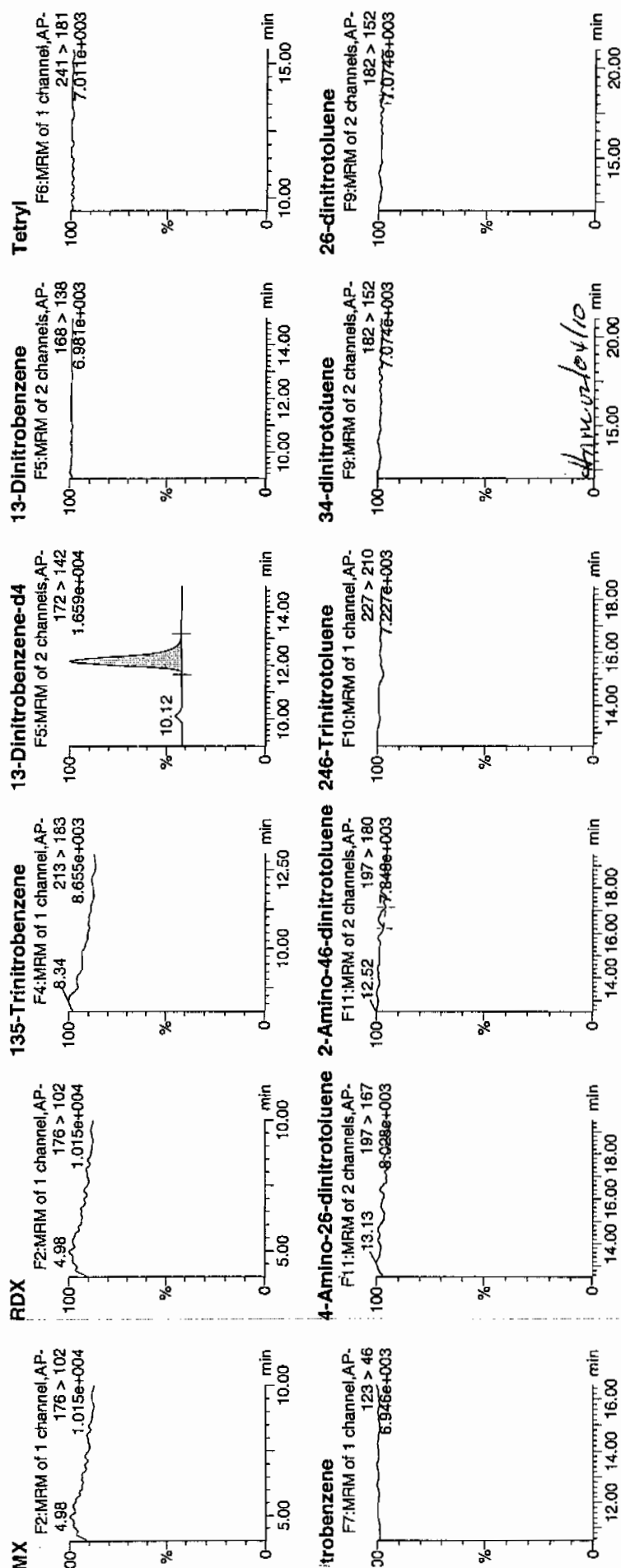
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Date: 03-Feb-2010

Time: 10:10:05

File: XIBLK01

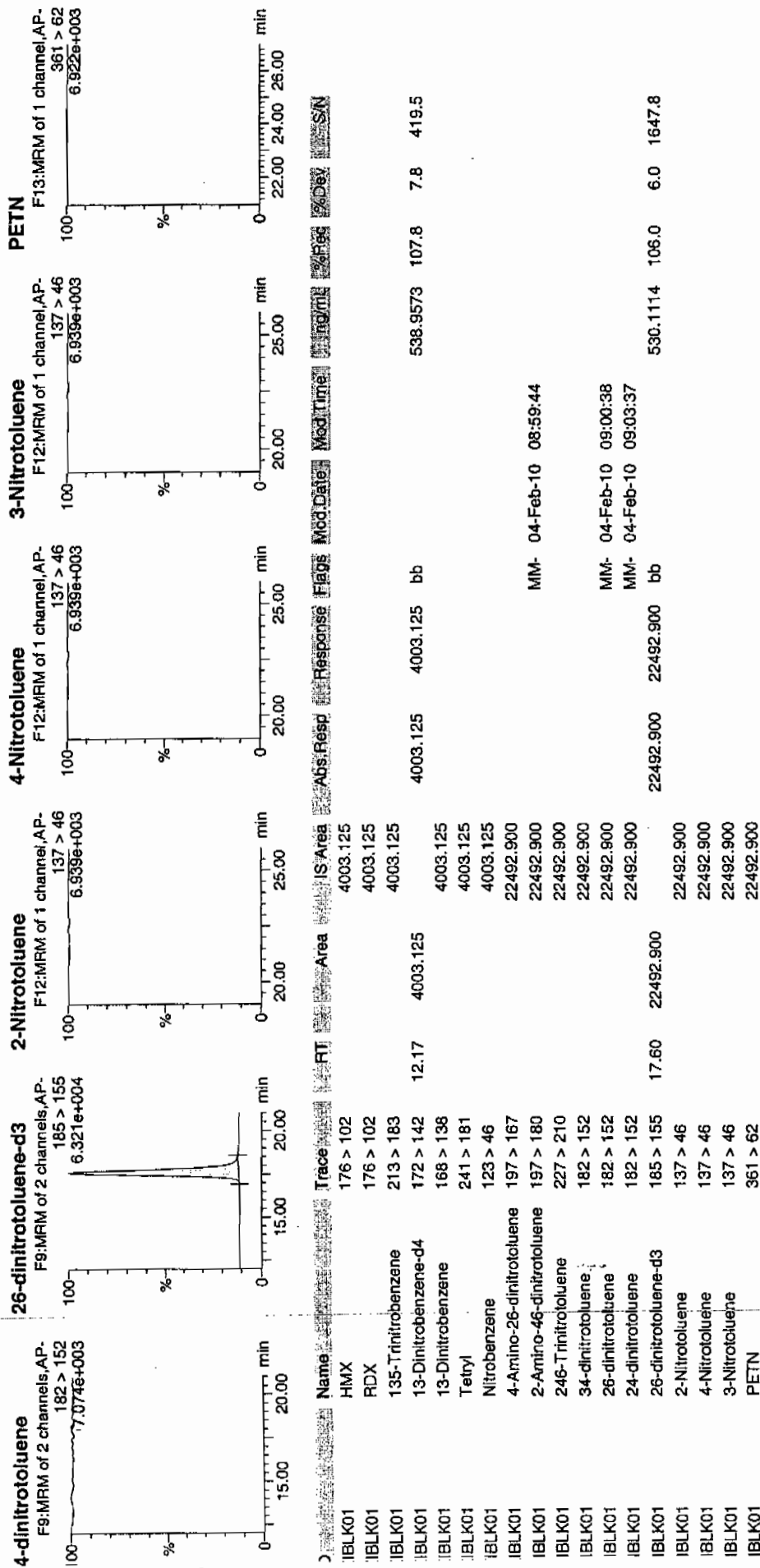
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Printed: Thu Feb 04 09:09:25 2010, Page 2 of 73

Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 03-FEB-10 10:39

GEL Data File: EXP0203002a

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	515.419
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	529.385
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

uantify Sample Report
EL Laboratories, LLC / Analyst: Michael A. Penny

ataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

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ate: 03-Feb-2010

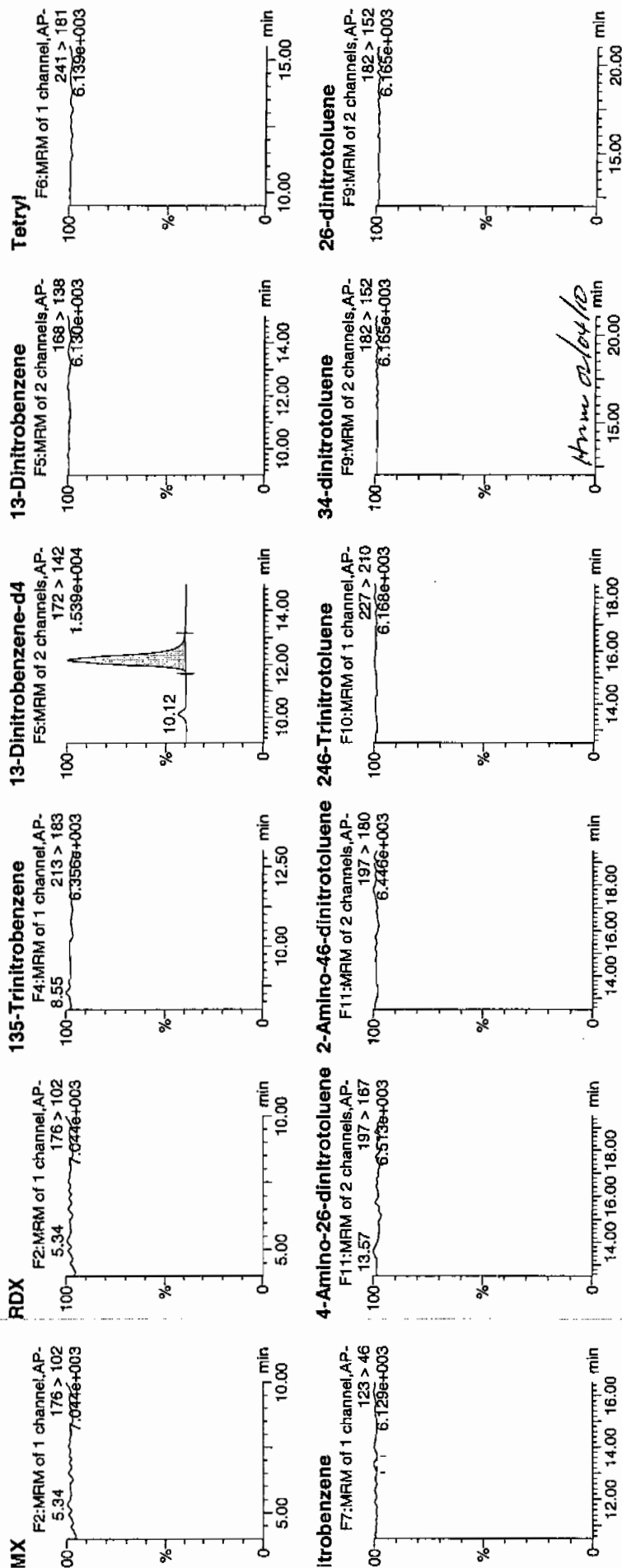
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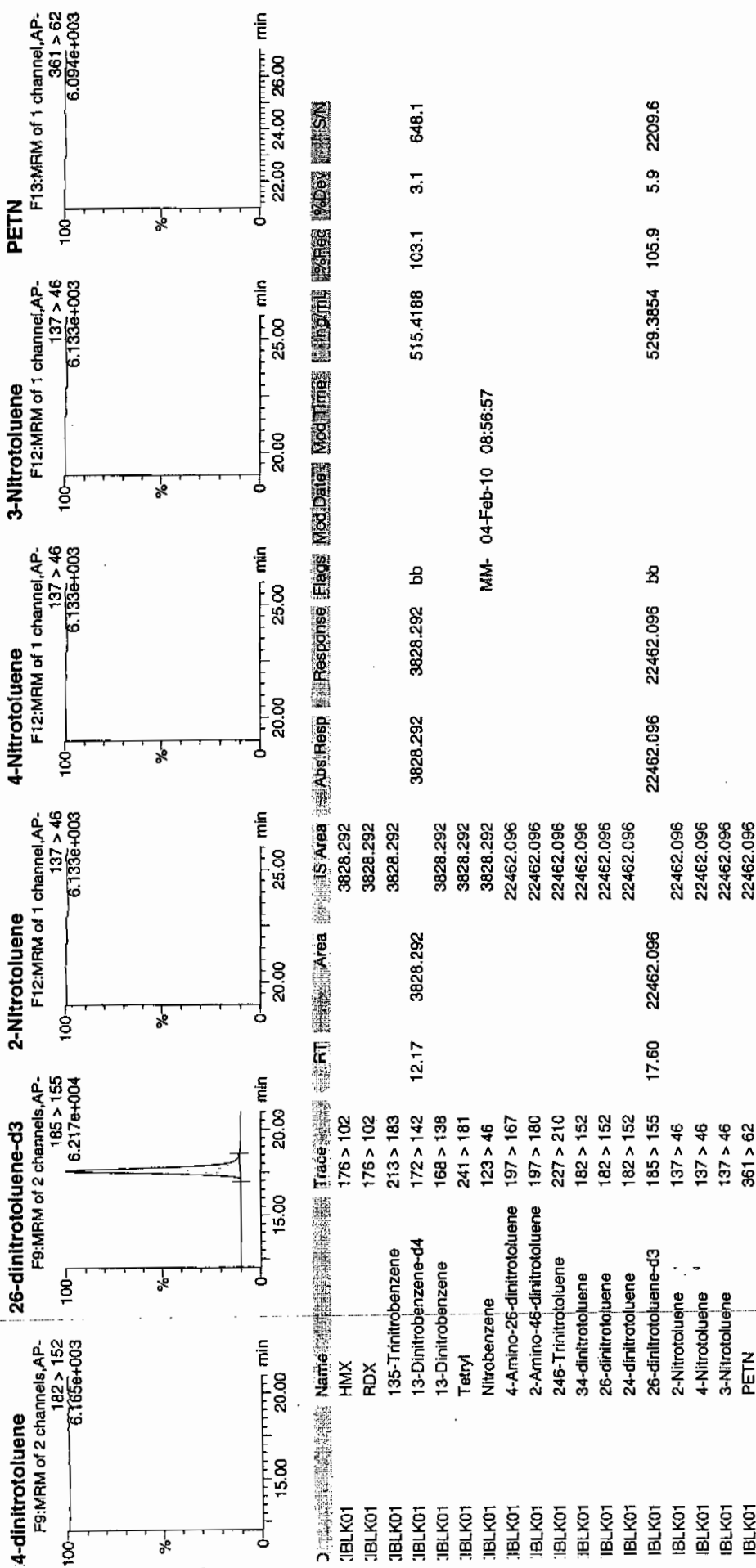
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ial: 1:1,A

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10/11

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Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 29-JAN-10 10:04

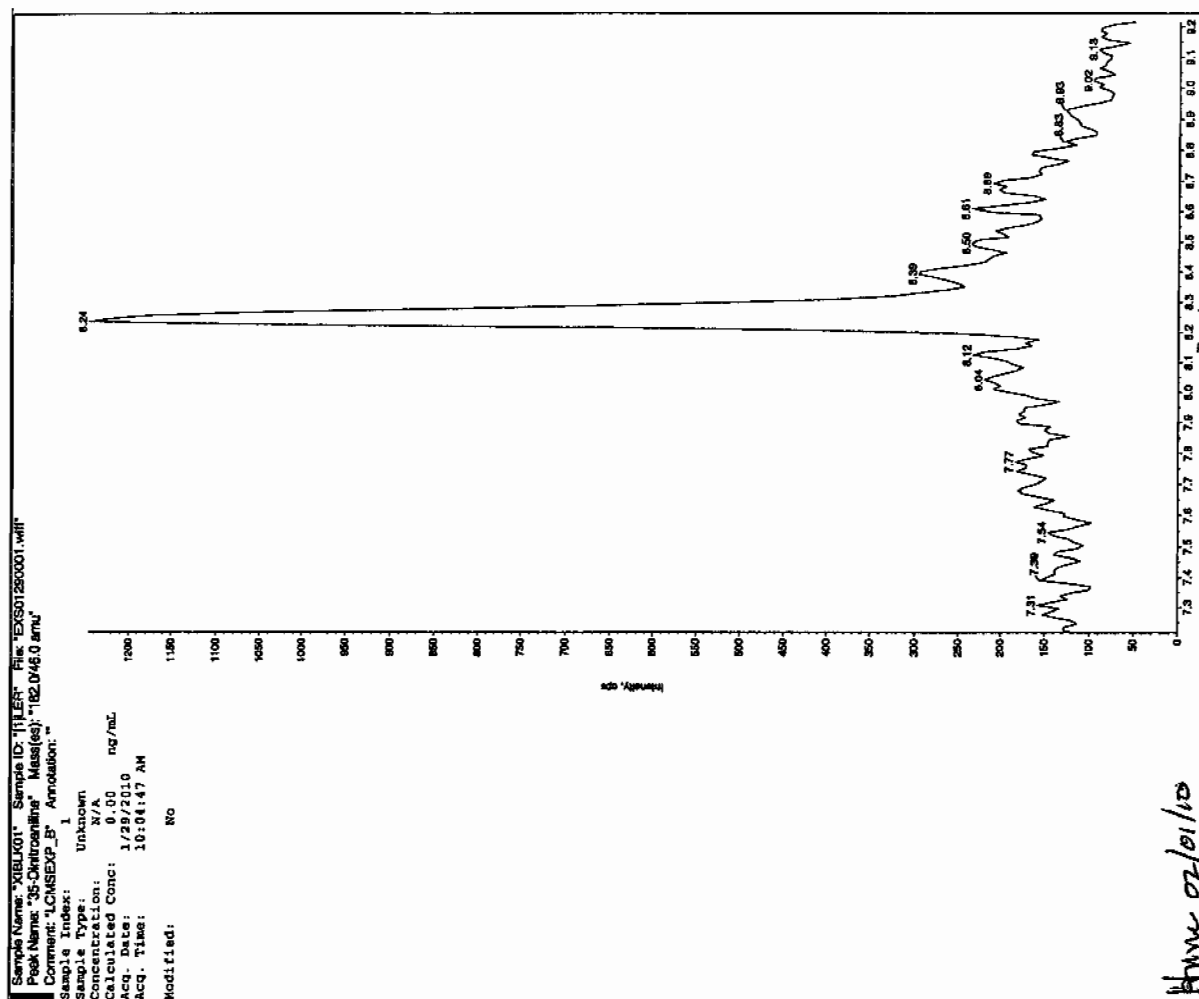
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Instrument ID: LCMSMS

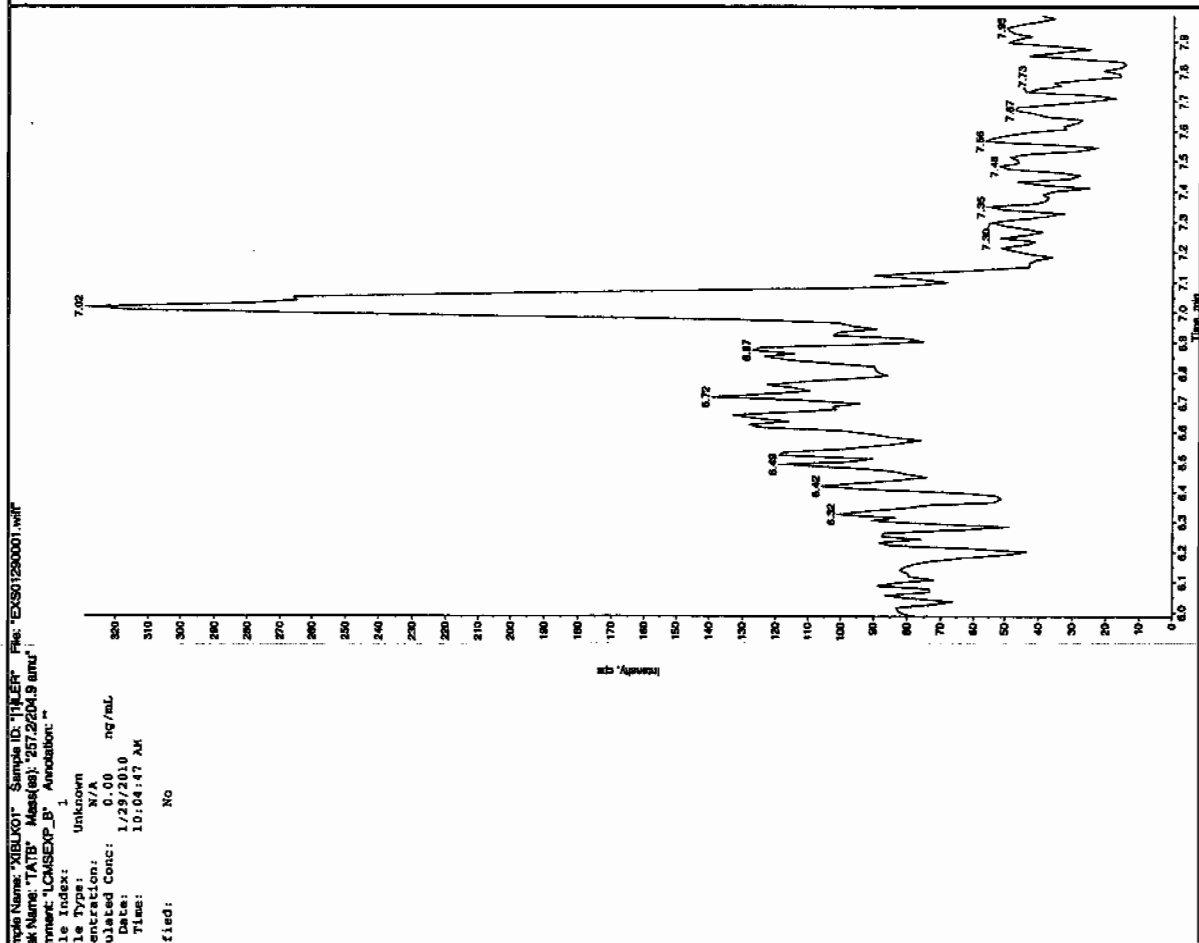
Column: Phenomenex Ultracarb 5u ODS(20)

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

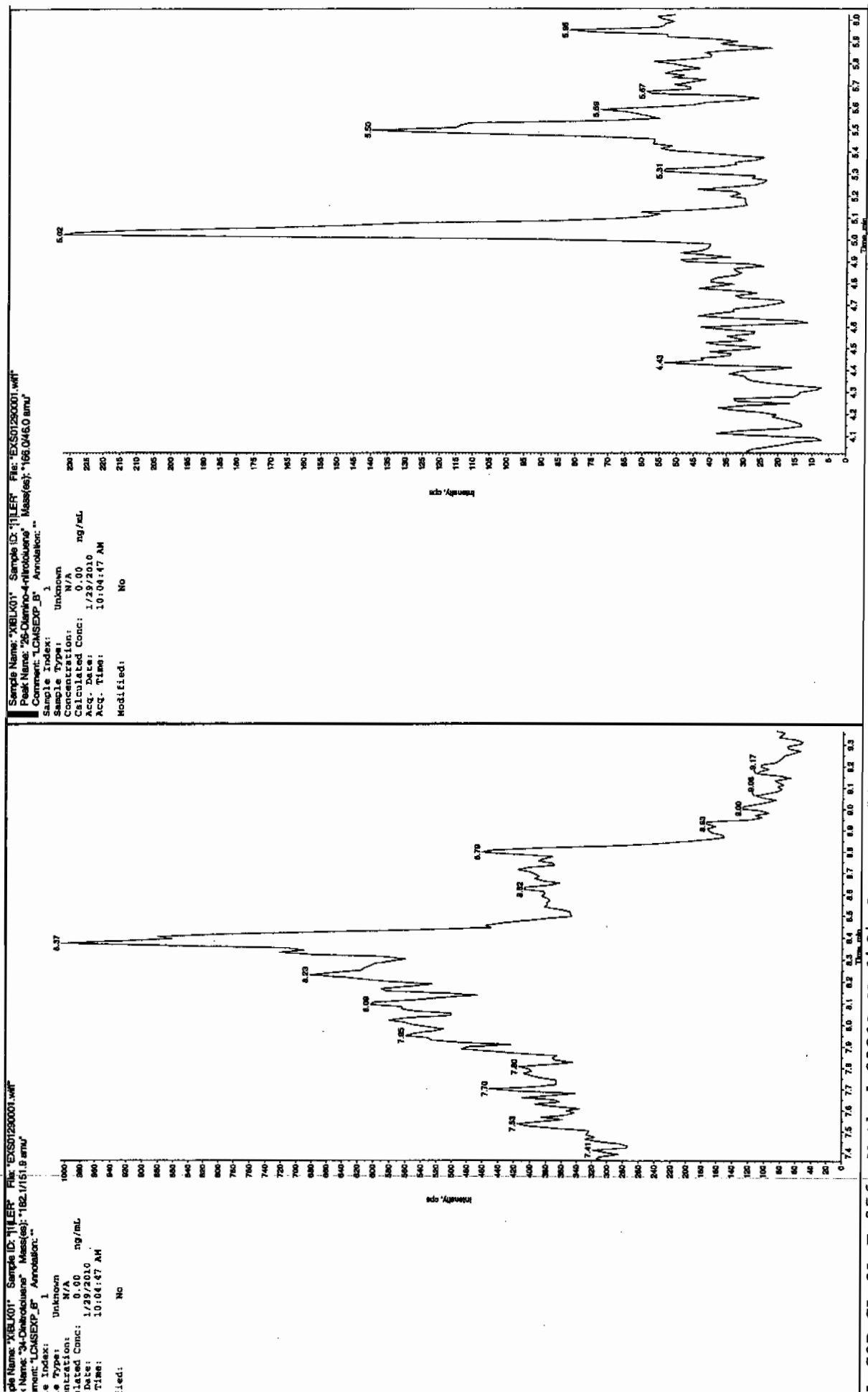
Jan 21/10



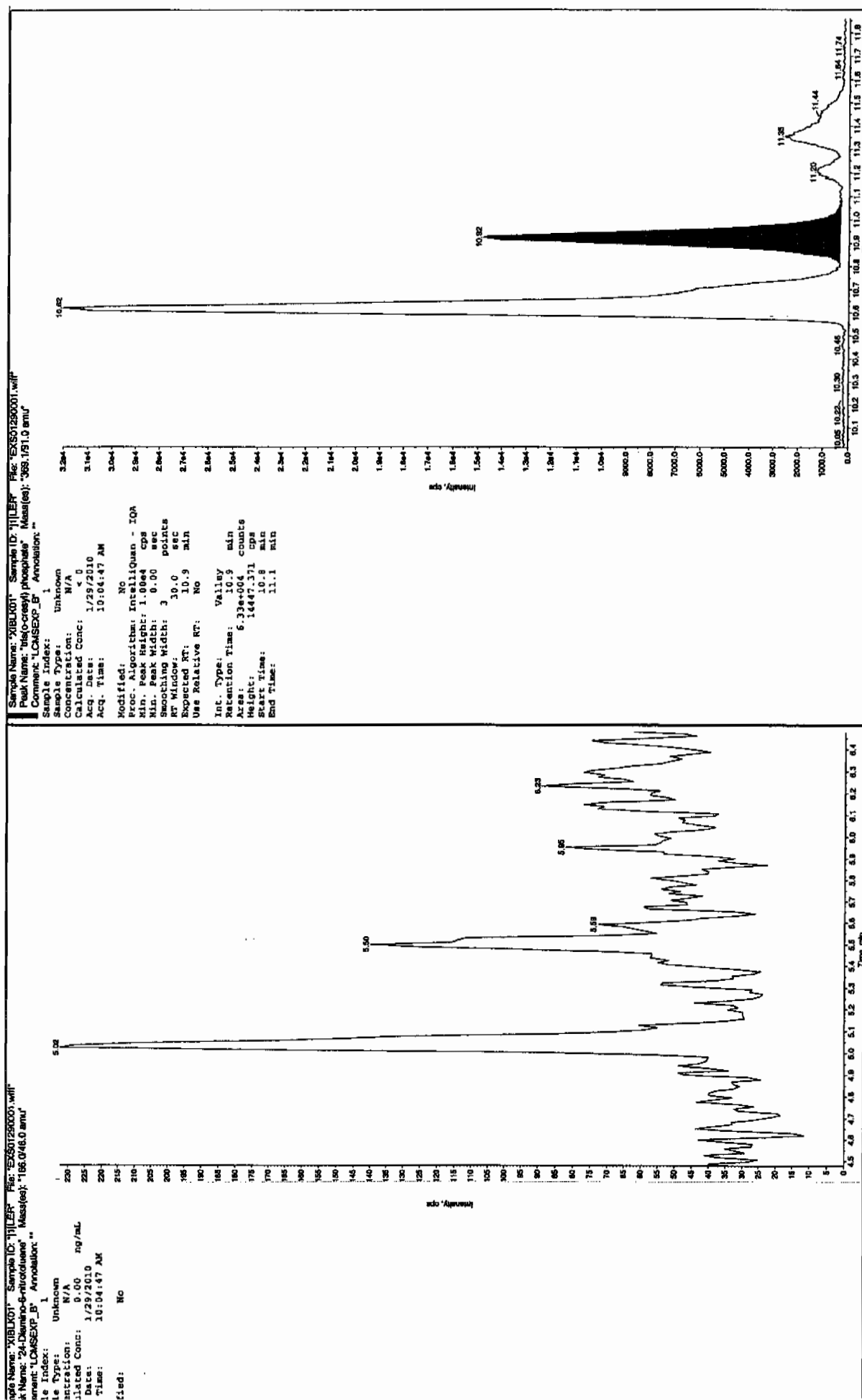
Jan 02/10/10



IL 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

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 29-JAN-10 10:20

GEL Data File: EXS01290002.wiff

Instrument ID: LCMSMS

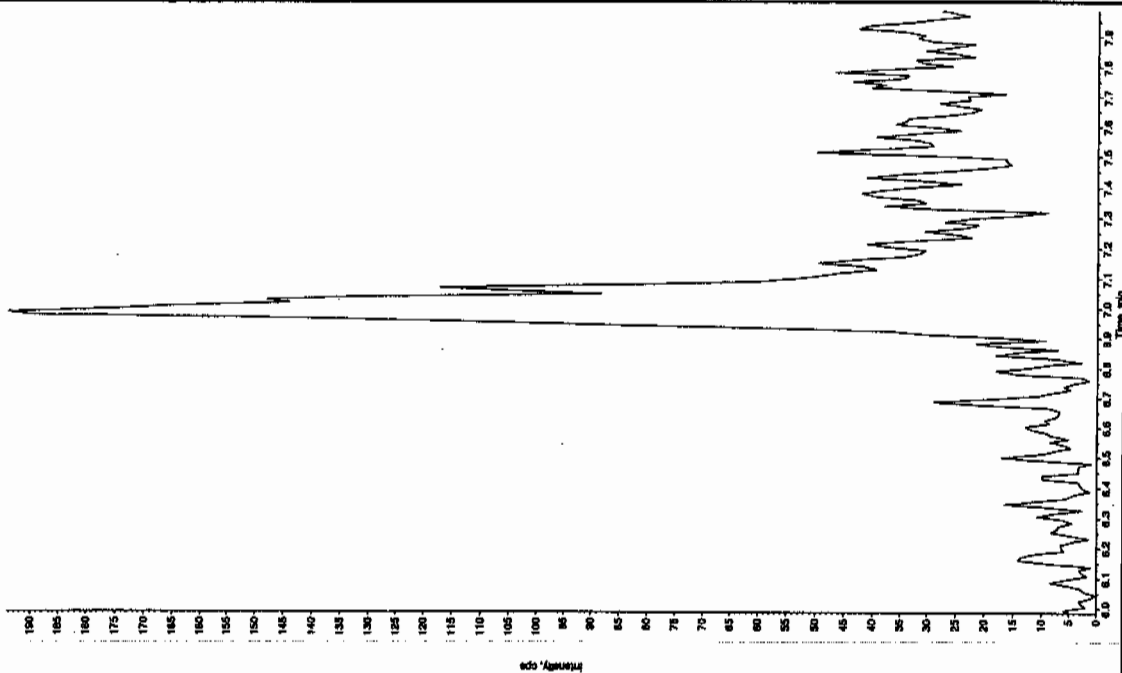
Column: Phenomenex Ultracarb 5u ODS(20)

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 2/1/10

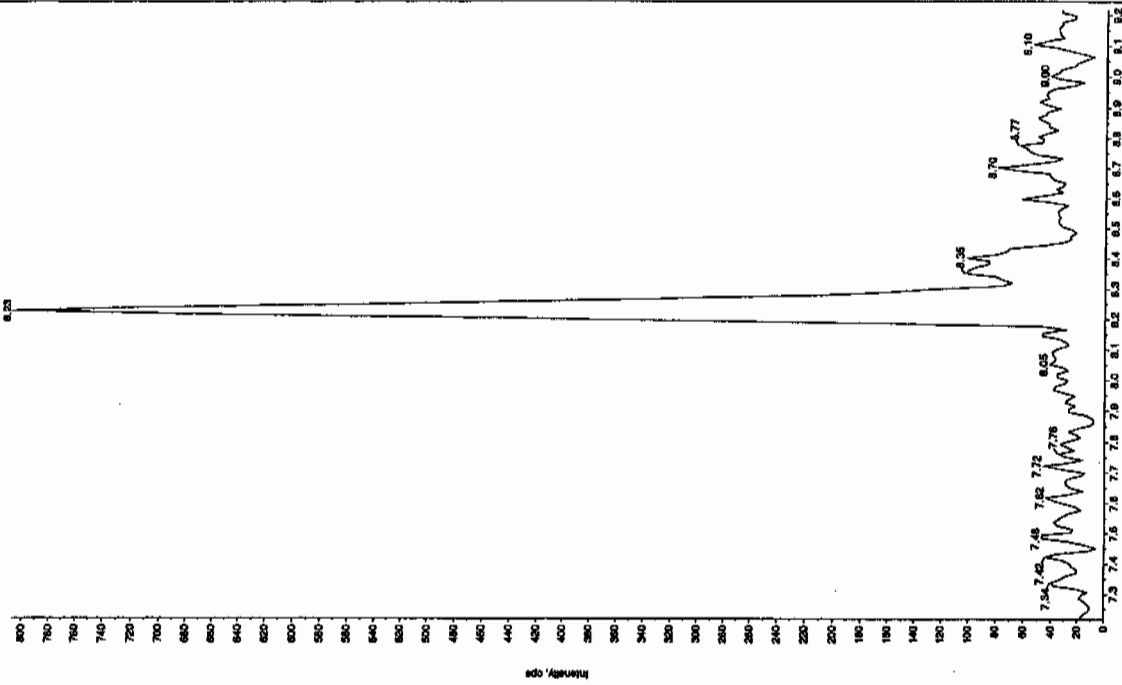
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 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSXP_B" Annotation: ""

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 Concentration: 0.00 ng/mL
 Date: 1/29/2010
 Time: 10:20:39 AM
 Modified: No

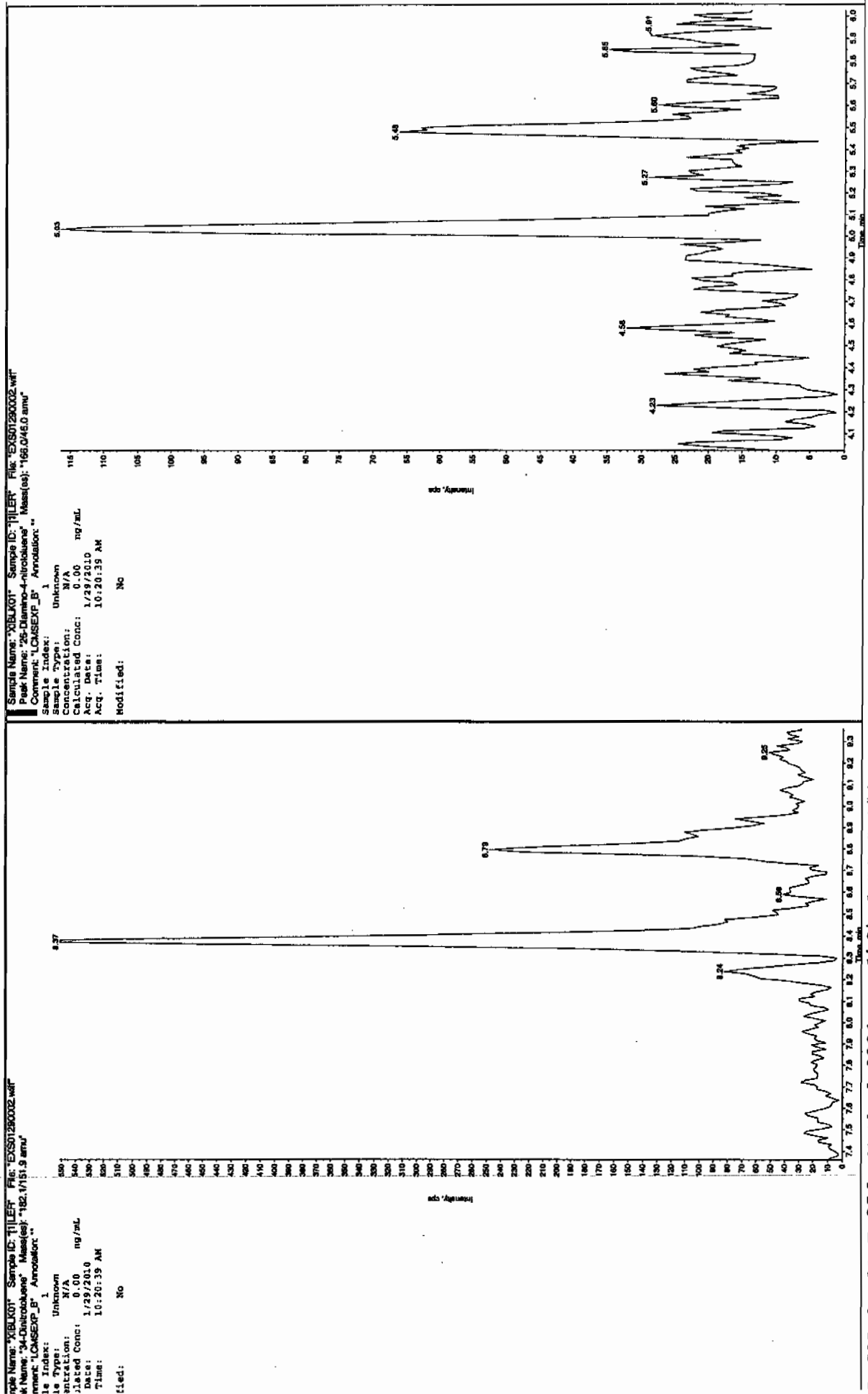


Sample Name: "XELU01" Sample ID: "T1LER" File: "EXS01250002.wif"
 Peak Name: "Ss-Delicate" Mass(es): "182.046.0 amu"
 Comment: "LCMSXP_B" Annotation: ""

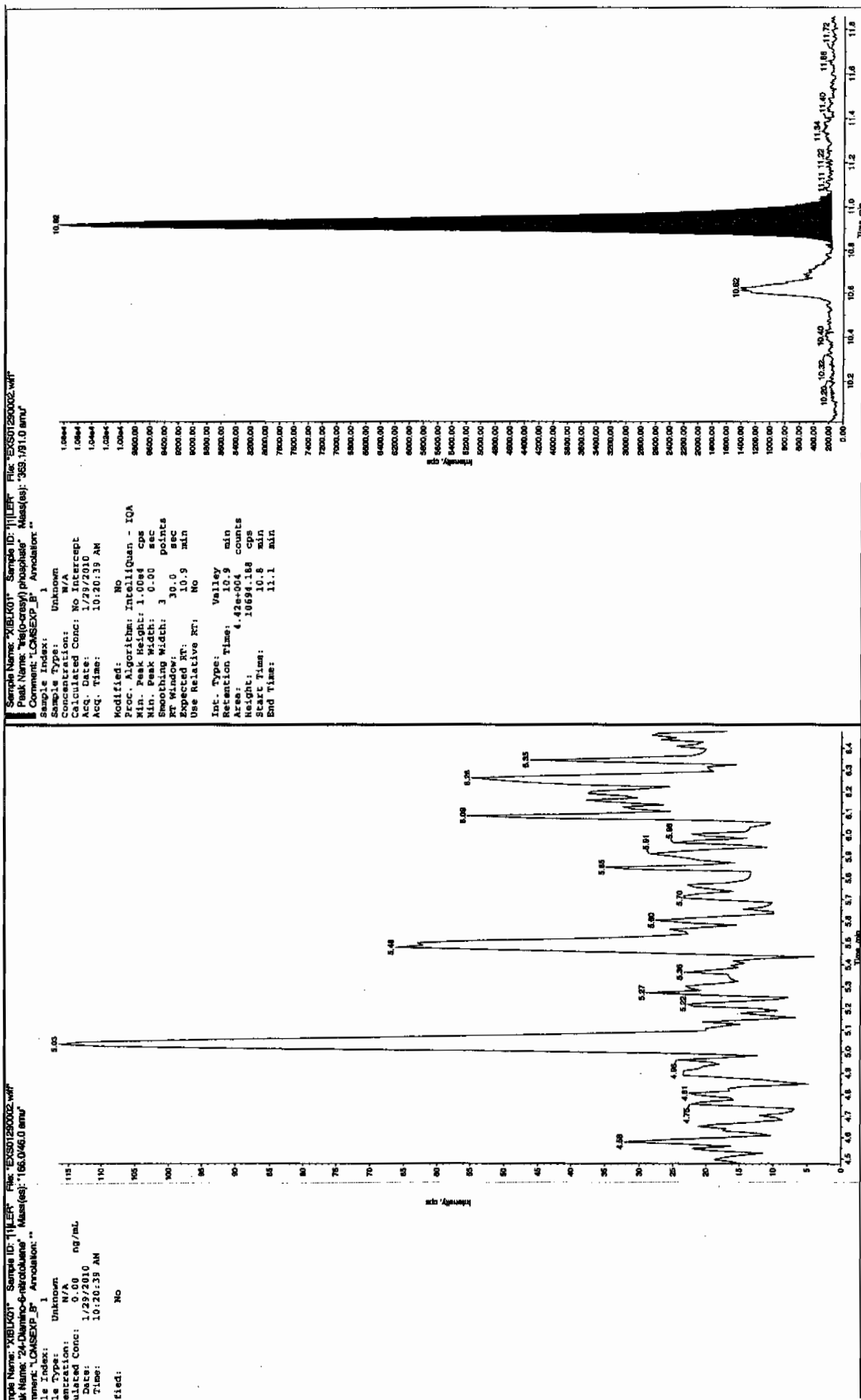
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 File Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 1/29/2010
 Time: 10:20:39 AM
 Modified: No



See 2/1/10



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): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 03-FEB-10 14:06

GEL Data File: EXP0203009a

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	499.552
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	498.981
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

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Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP02030009a

Date: 03-Feb-2010

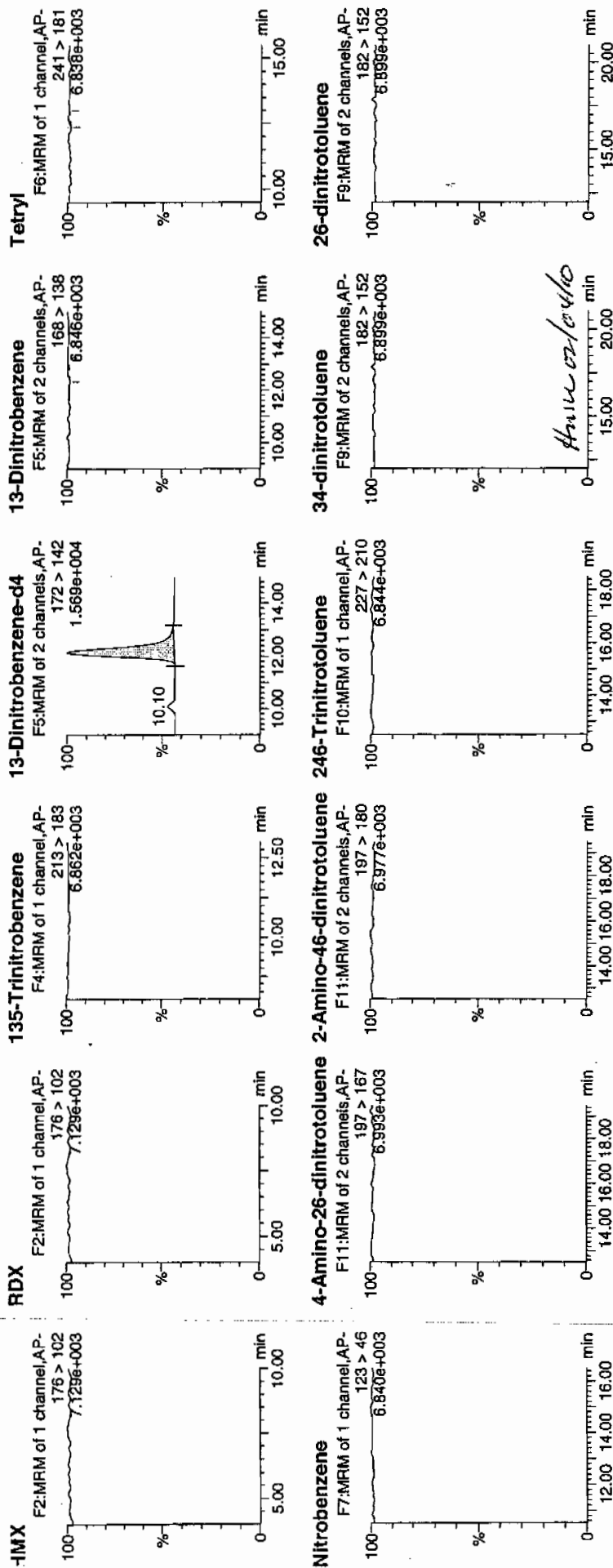
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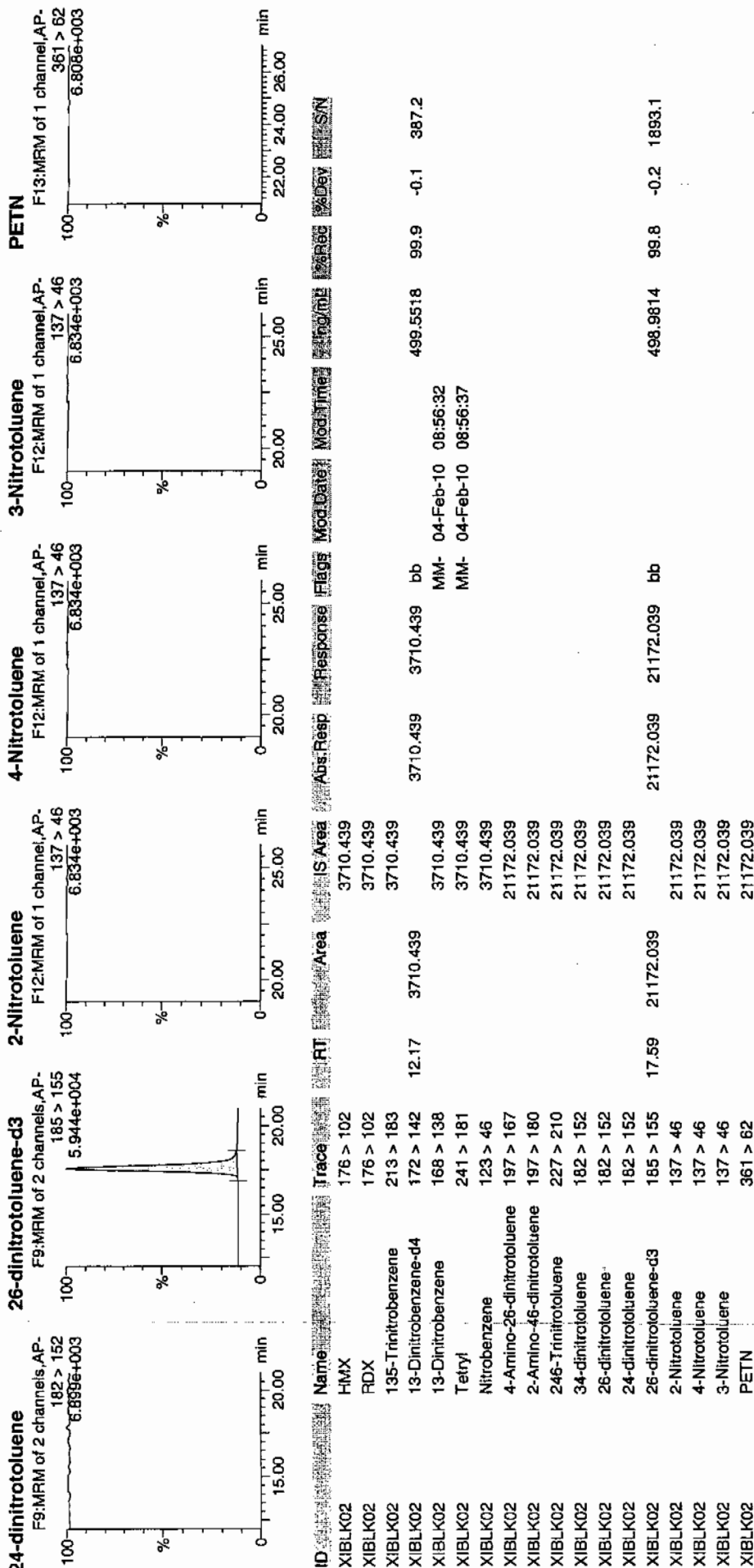
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Page 1003 of 1610

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Dataset: C:\WASSLYN\New_Exp\PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 03-FEB-10 15:05

GEL Data File: EXP0203011a

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	458.194
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	494.409
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\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203011a

Date: 03-Feb-2010

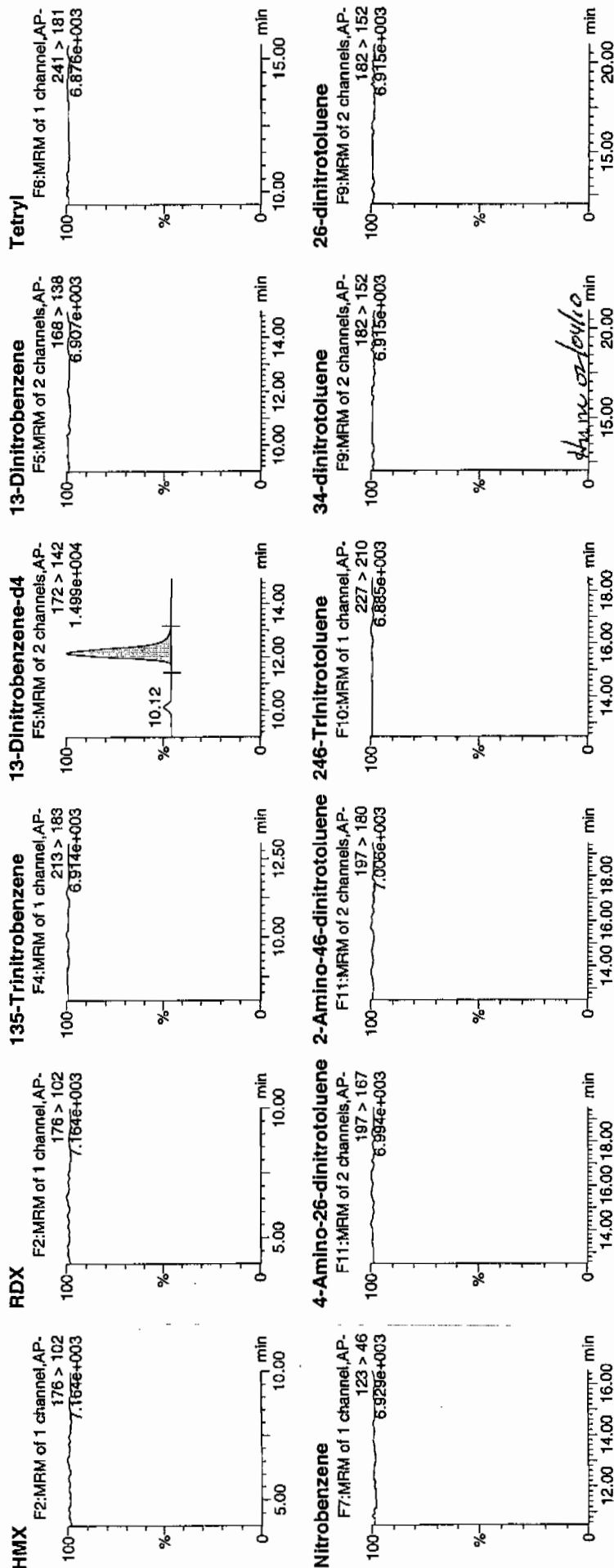
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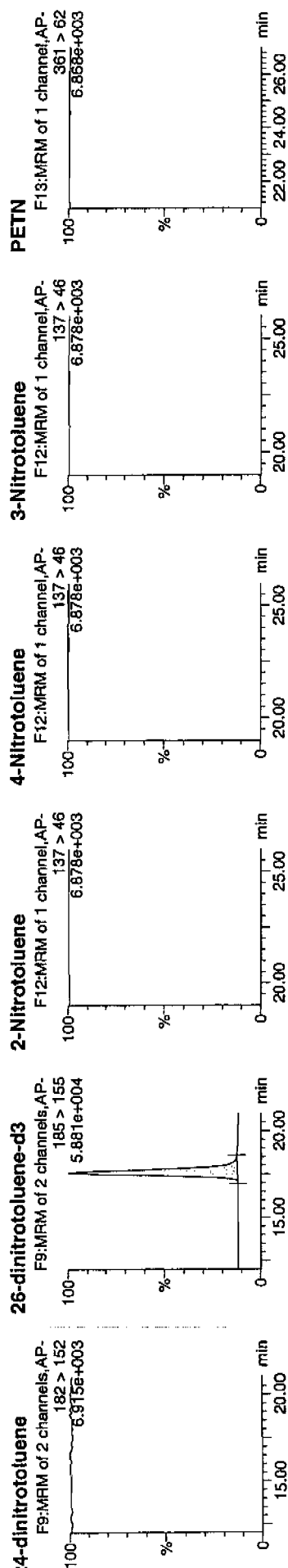
Page 1006 of 1610

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Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 03-FEB-10 21:28

GEL Data File: EXP0203024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	555.97
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	587.813
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\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203024a

Date: 03-Feb-2010

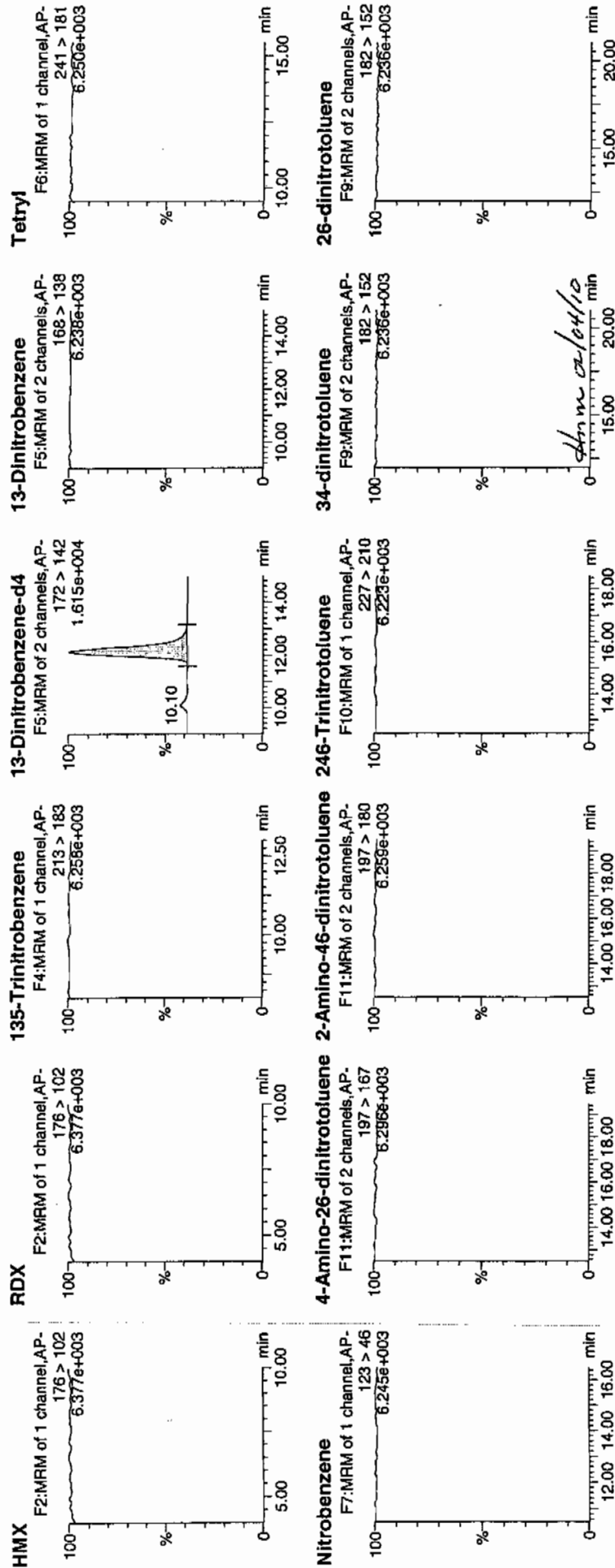
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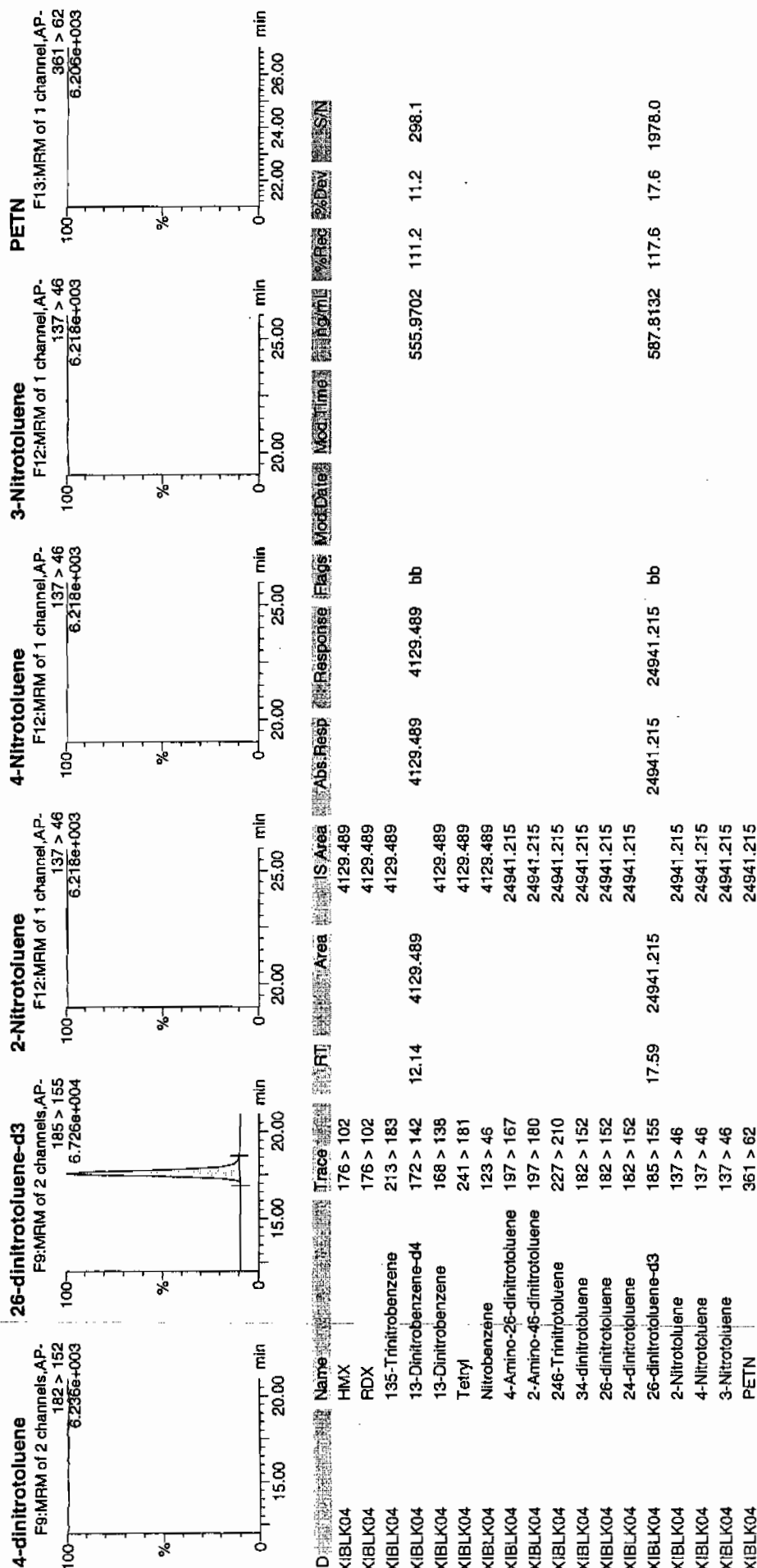
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2/4/10

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Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 03-FEB-10 23:26

GEL Data File: EXP0203028a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	525.043
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	512.357
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\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Sample Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0203028a

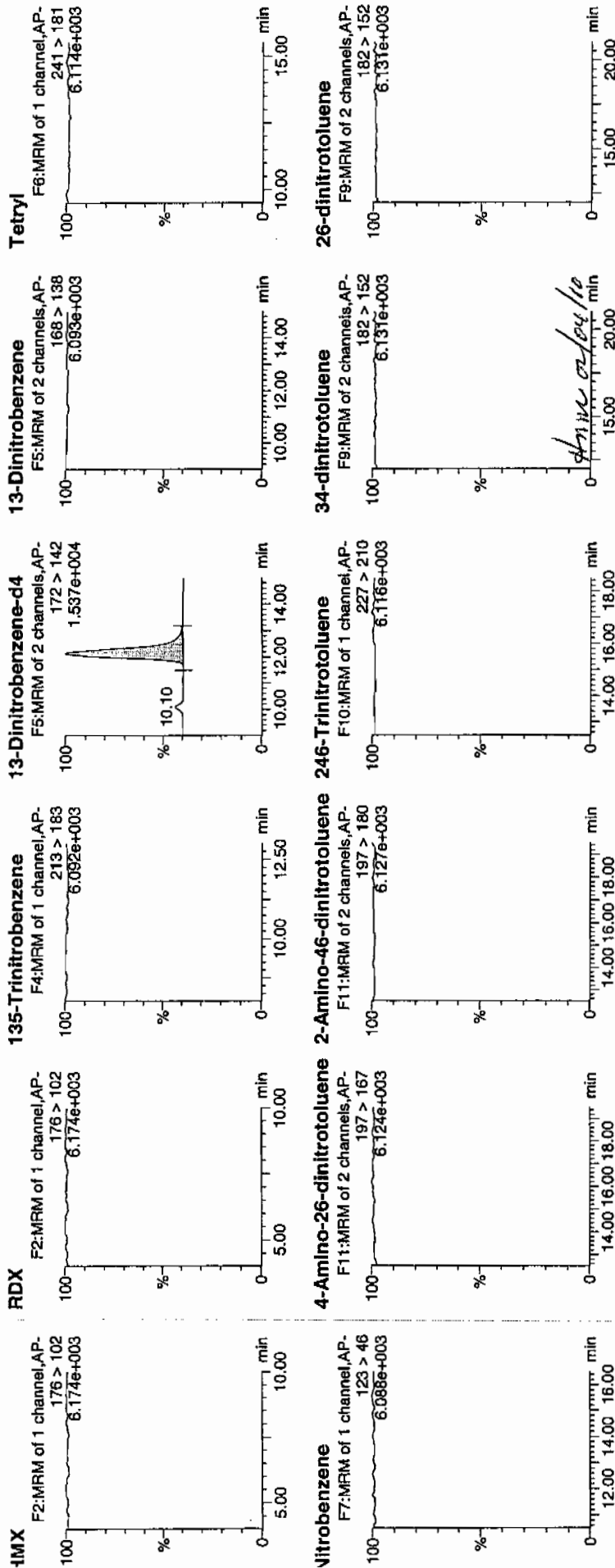
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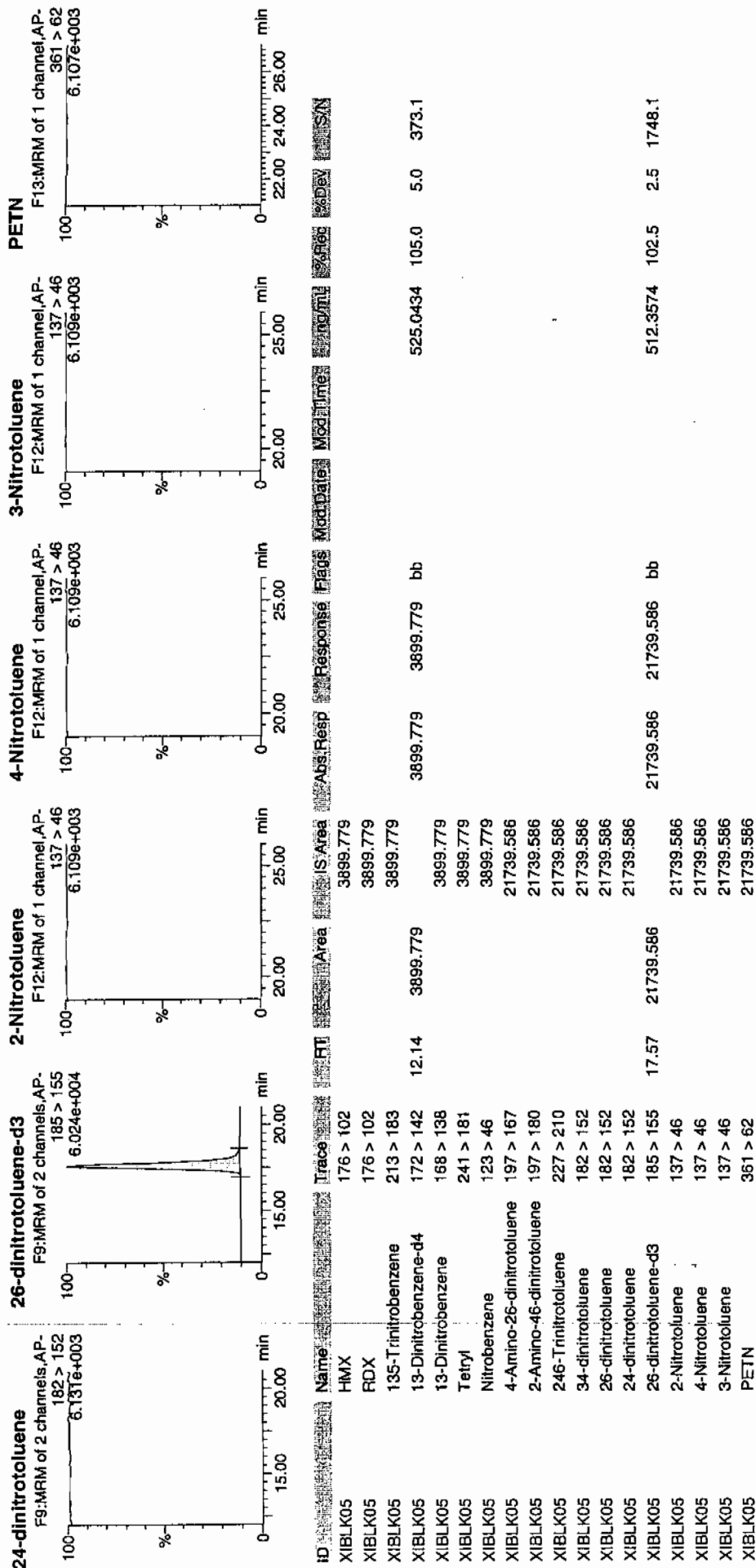
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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 04-FEB-10 02:53

GEL Data File: EXP0203035a

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	621.17
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	551.47
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\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203035a

Date: 04-Feb-2010

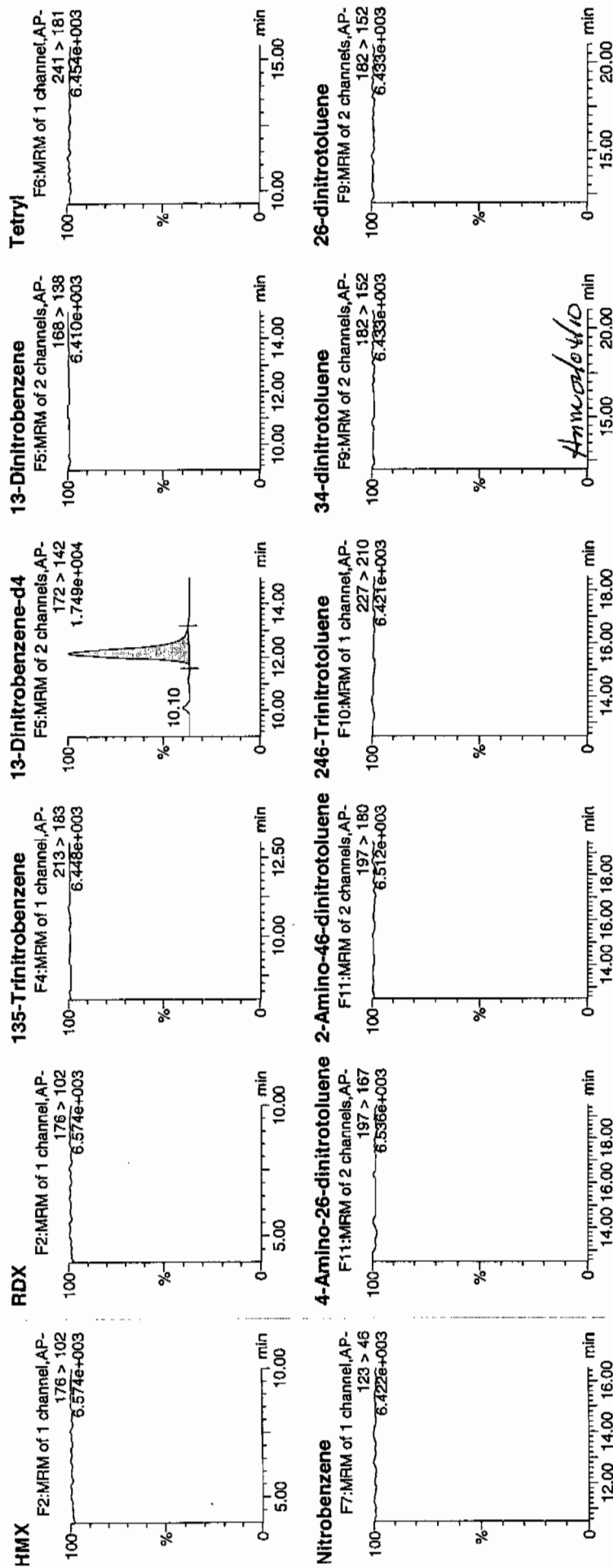
Time: 02:53:13

ID: XIBLK06

Vial: 1:1,A

Page 1015 of 1610

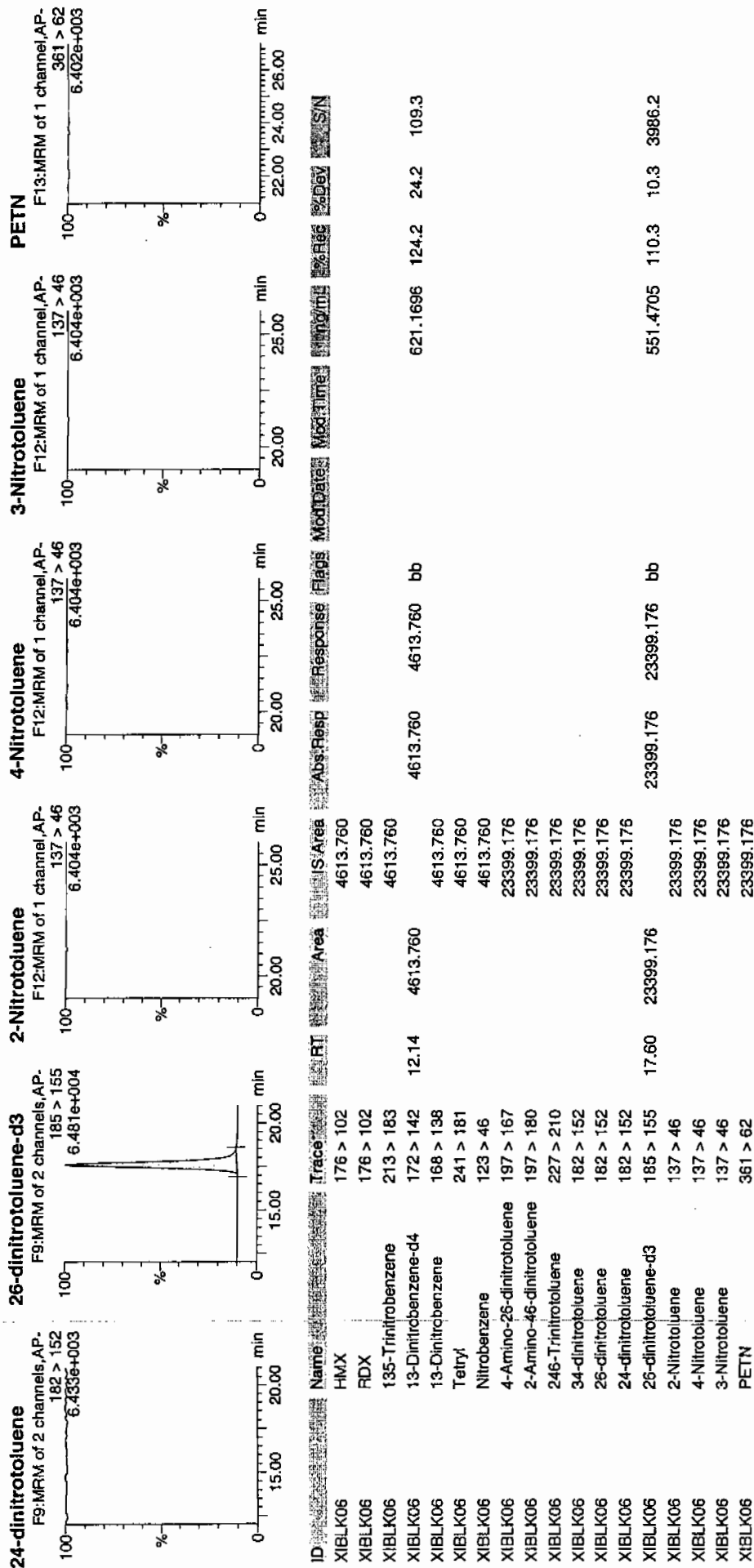
2/4/10



Printed: Thu Feb 04 09:09:25 2010, Page 70 of 73

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 04-FEB-10 06:19

GEL Data File: EXP0203042a

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	611.216
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	601.586
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203042a

Date: 04-Feb-2010

Time: 06:19:56

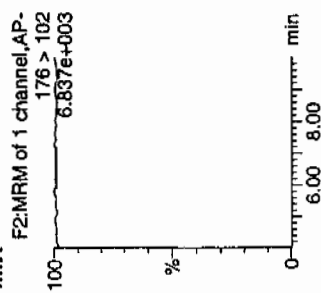
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Vial: 1:1,F

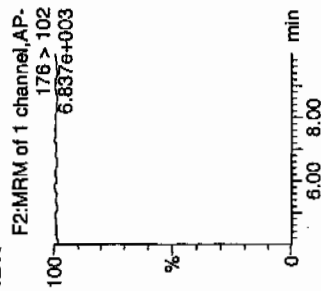
WAT
2/5/10

Page 1018 of 1610

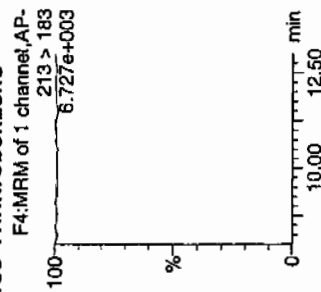
HMX



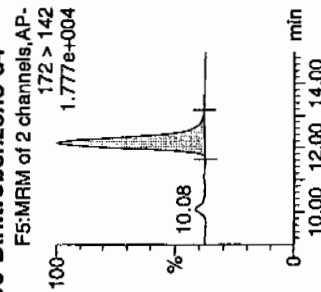
RDX



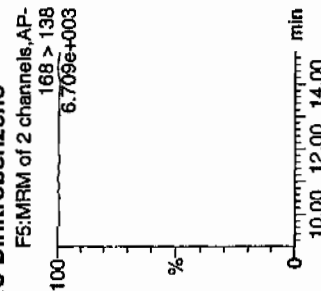
135-Trinitrobenzene



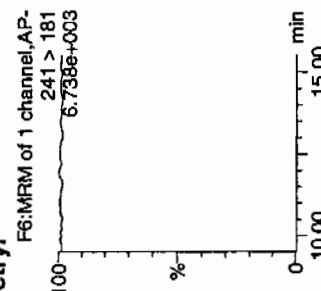
13-Dinitrobenzene-d4



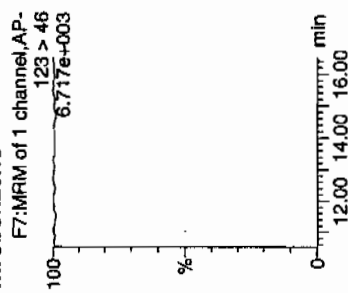
13-Dinitrobenzene



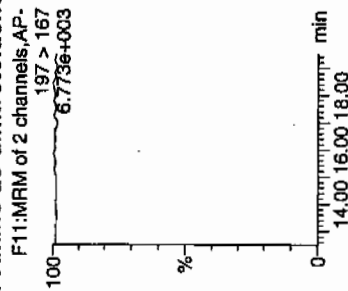
Tetryl



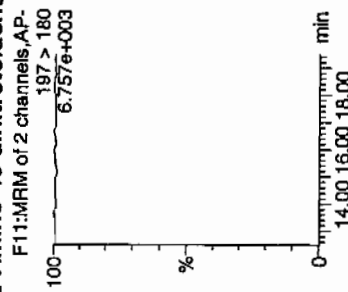
Nitrobenzene



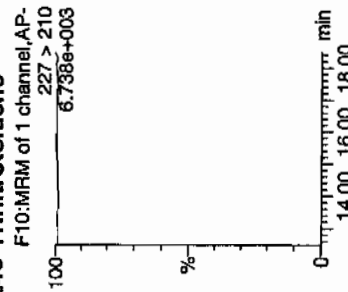
4-Amino-26-dinitrotoluene



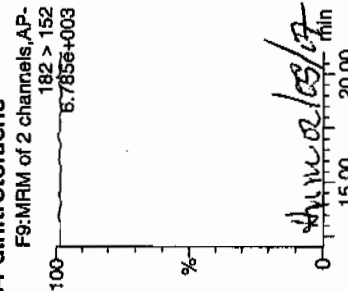
2-Amino-46-dinitrotoluene



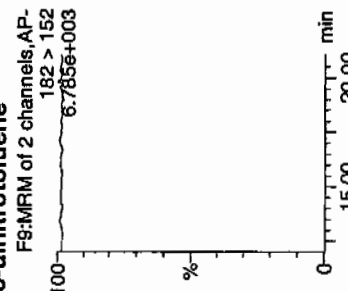
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

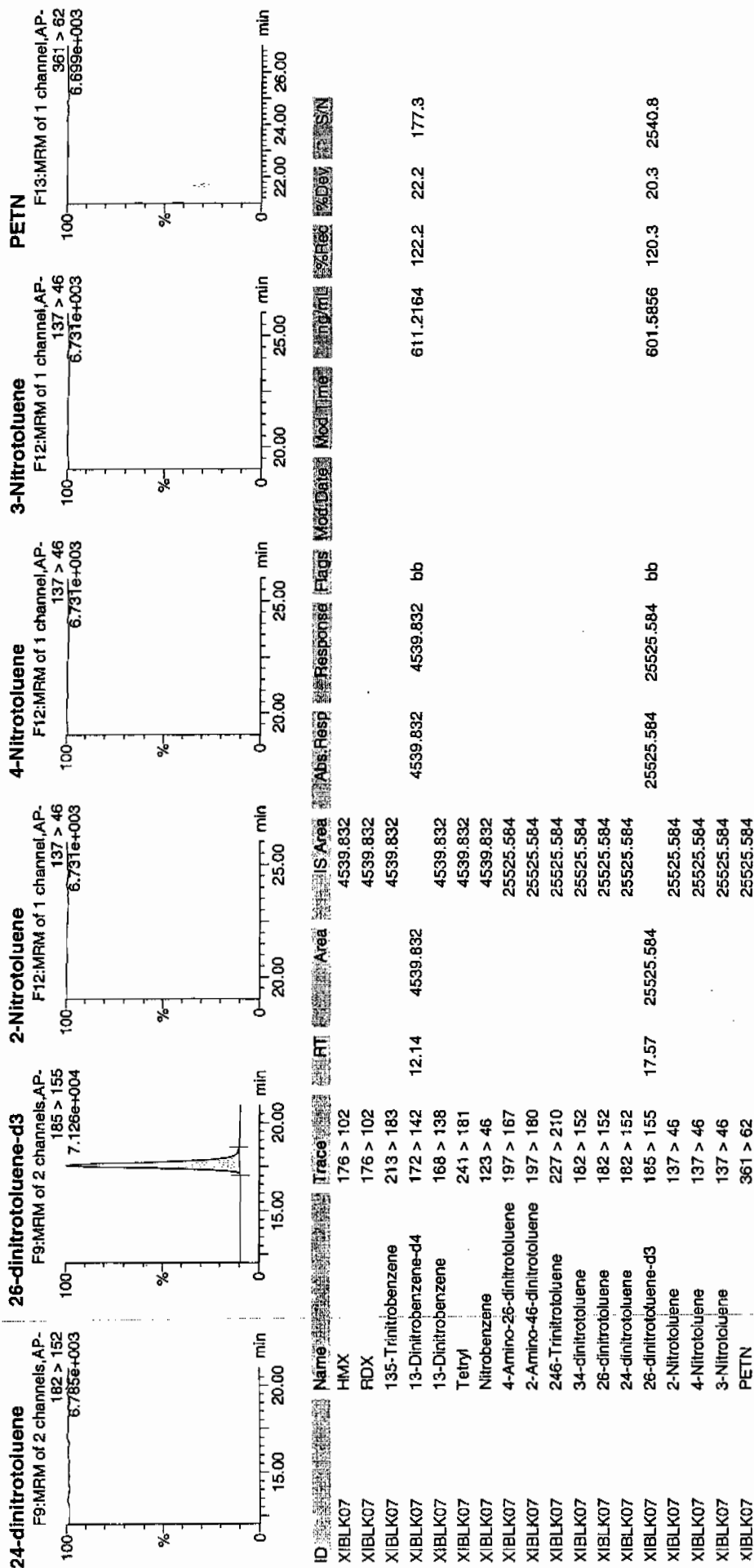


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 05 09:55:30 2010, Page 12 of 95

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 04-FEB-10 09:17

GEL Data File: EXP0203048a

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	607.525
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	583.205
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0203048a

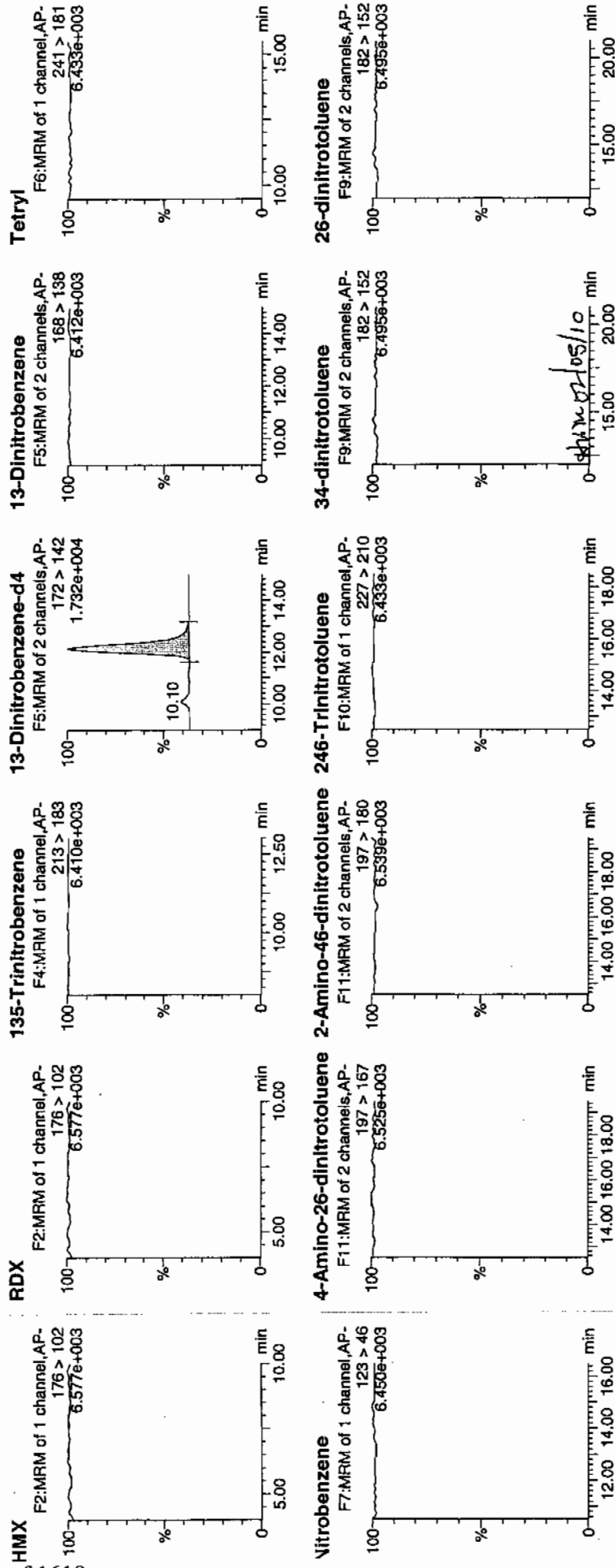
Date: 04-Feb-2010

Time: 09:17:11

ID: XIBLK08

Vial: 1:1,A

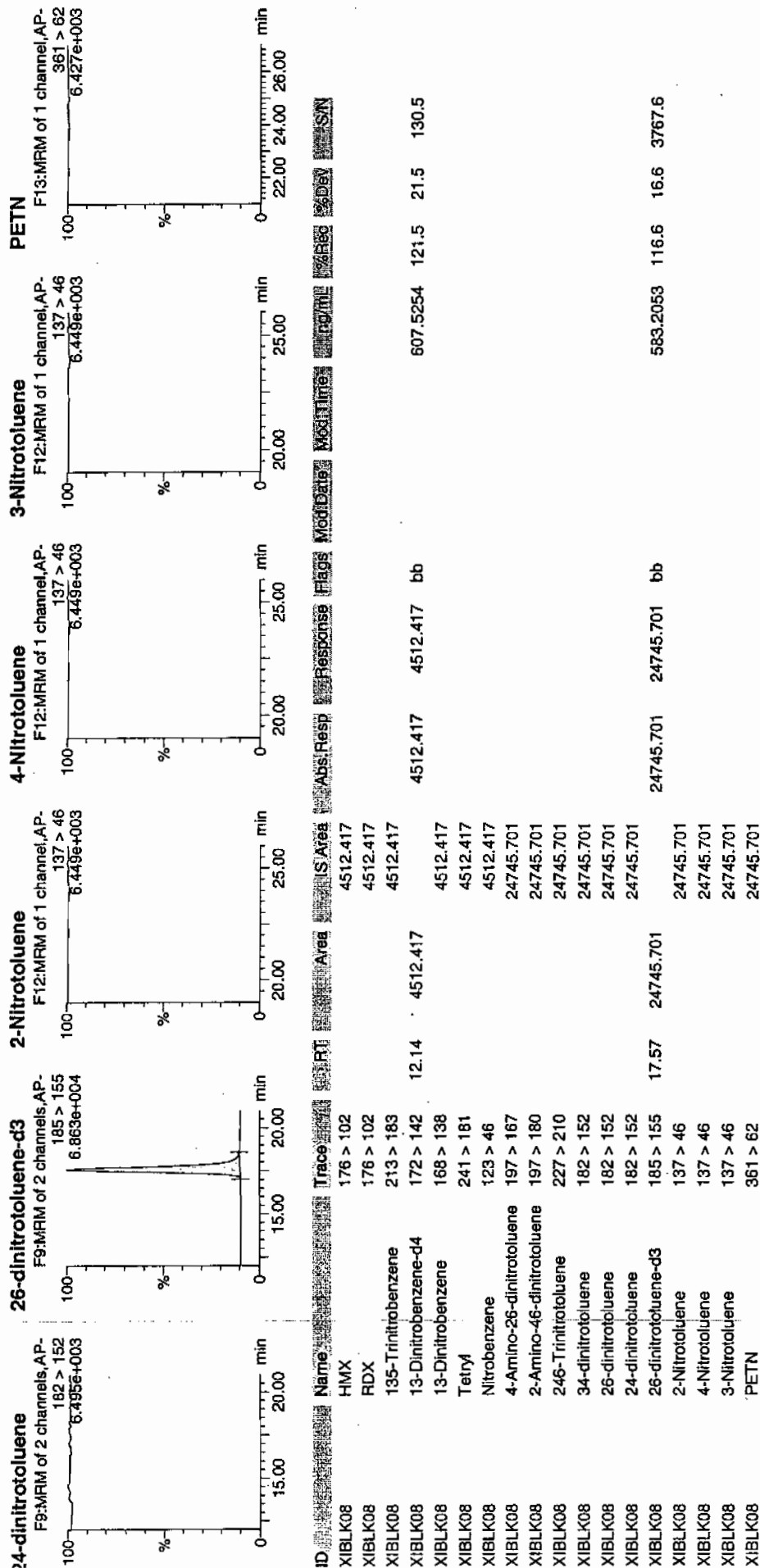
Page 1021 of 1610



Printed: Fri Feb 05 09:55:30 2010, Page 24 of 95

Quantify Sample Report
3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 04-FEB-10 15:41

GEL Data File: EXP0203061a

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	534.932
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	531.358
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\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203061a

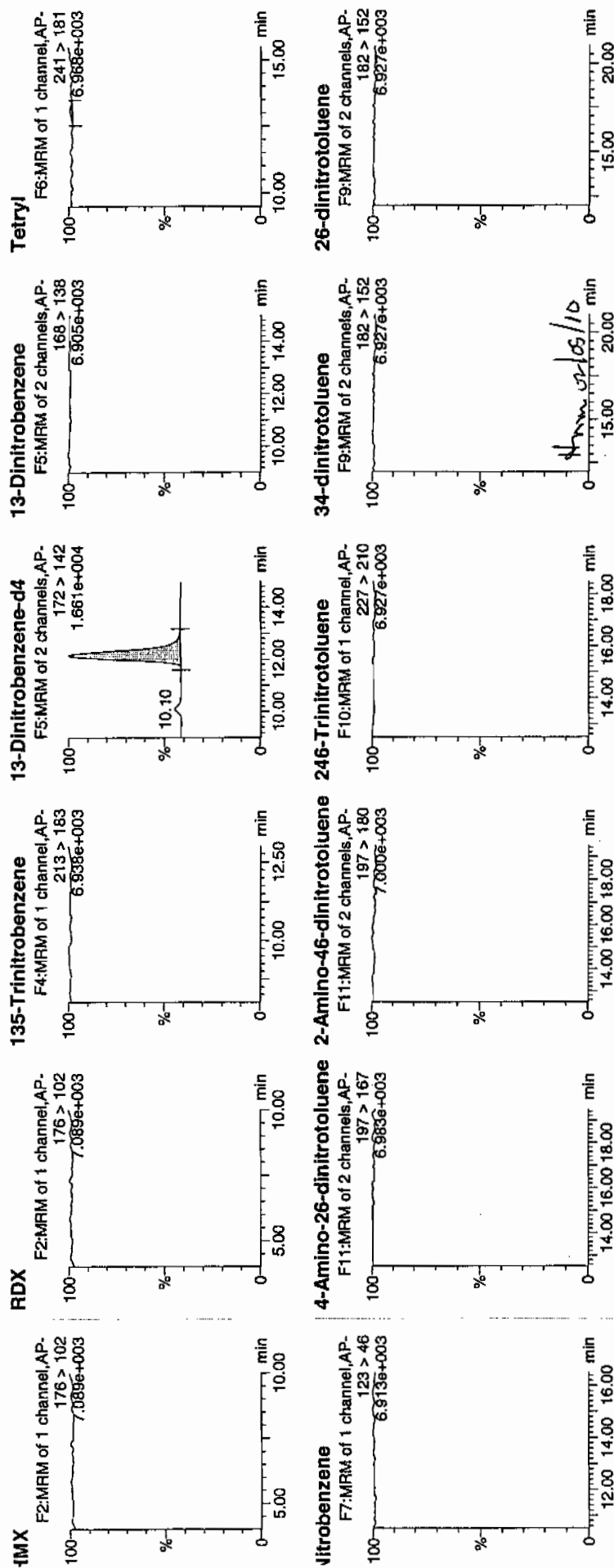
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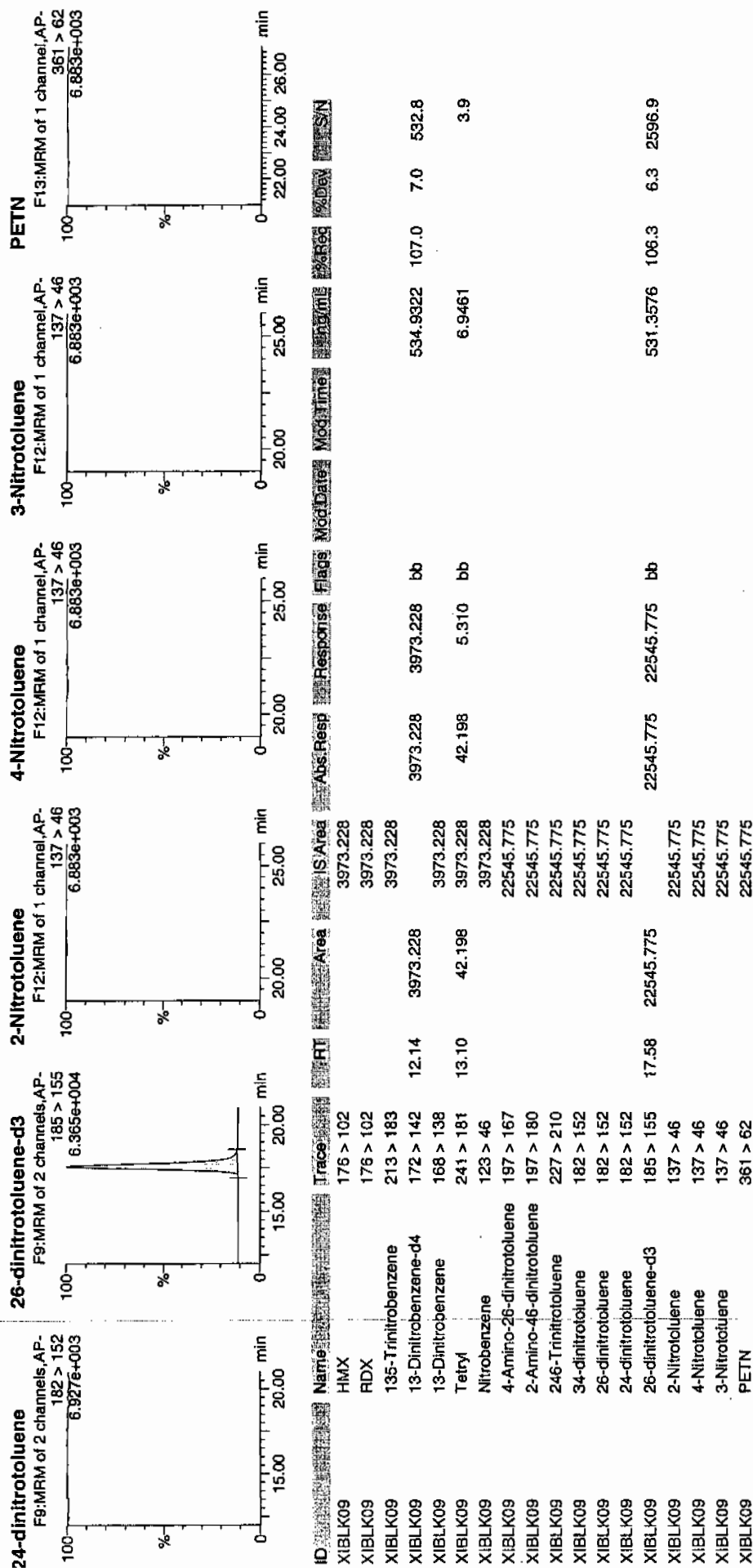
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D: XIBLK09

/lat: 1:1,A

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 04-FEB-10 23:04

GEL Data File: EXP0203067a

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	411.319
2,4,6--Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	427.111
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\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203067a

Date: 04-Feb-2010

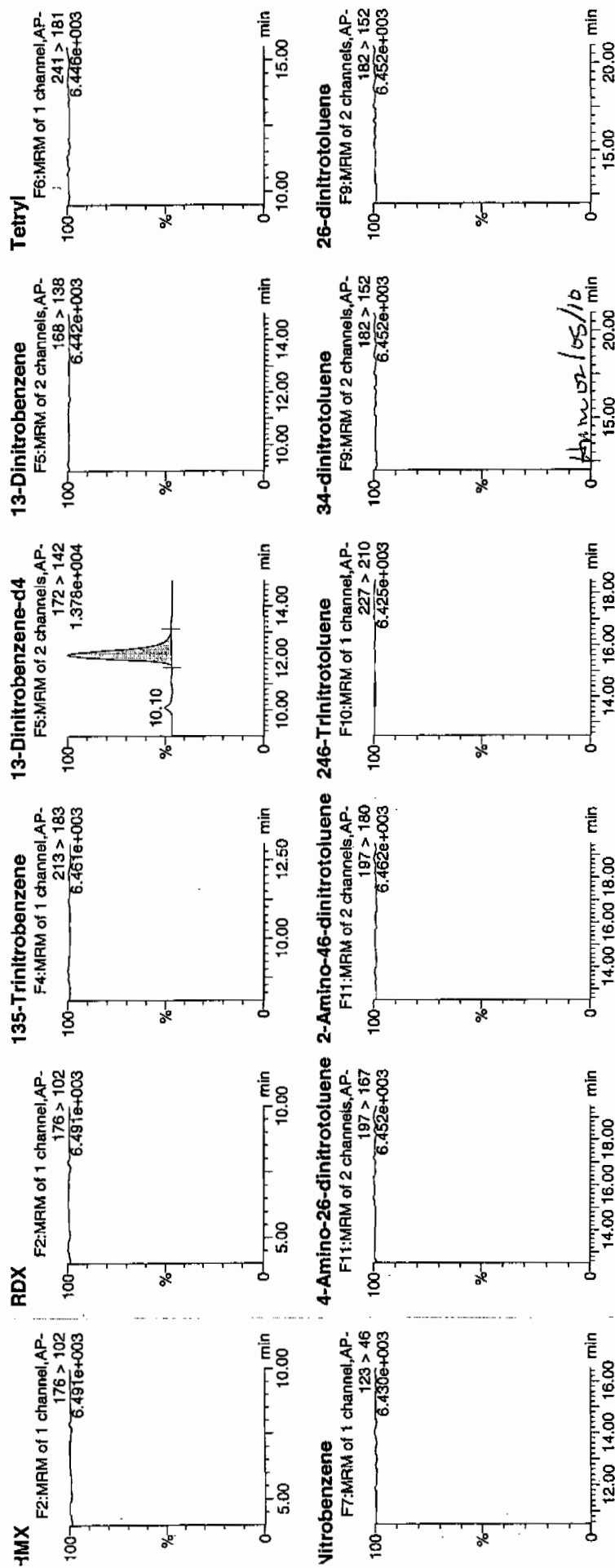
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File: 1:1,A

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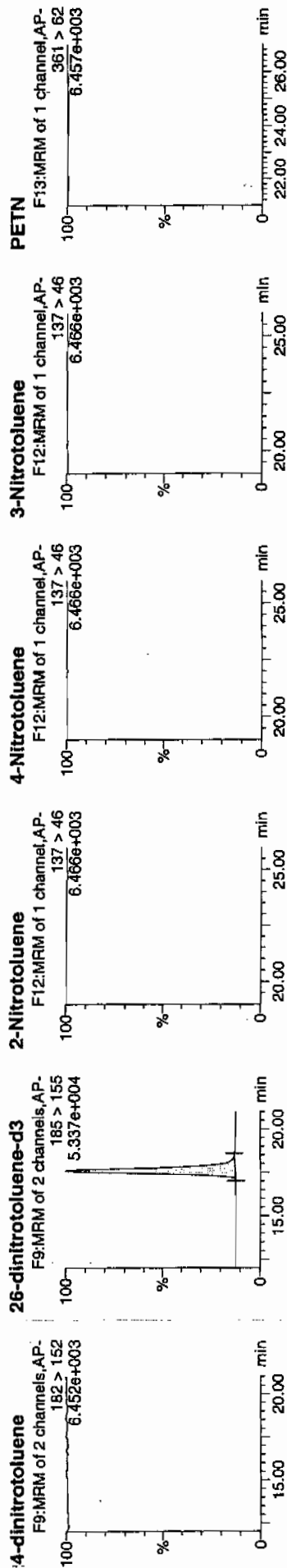
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Printed: Fri Feb 05 09:55:30 2010, Page 62 of 95

Quantify Sample Report
 iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010



D	Name	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Intng/mL	%Rec	%Dev	SN
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<BLK10	135-Trinitrobenzene	213 > 183		3055.084									
<BLK10	13-Dinitrobenzene-d4	172 > 142	12.14	3055.084									
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<BLK10	4-Amino-26-dinitrotoluene	197 > 167		18122.545									
<BLK10	2-Amino-46-dinitrotoluene	197 > 180		18122.545									
<BLK10	246-Trinitrotoluene	227 > 210		18122.545									
<BLK10	34-dinitrotoluene	182 > 152		18122.545									
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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 05-FEB-10 01:02

GEL Data File: EXP0203071a

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	487.056
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	460.109
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203071a

Date: 05-Feb-2010

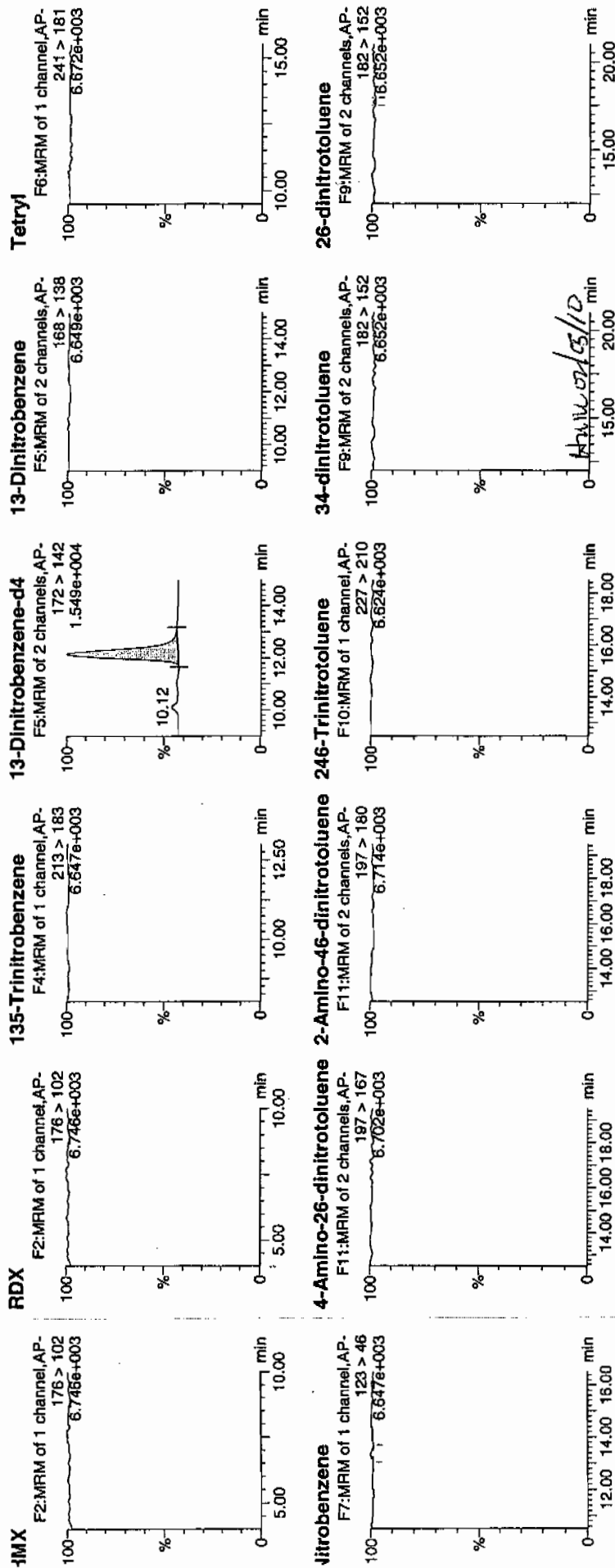
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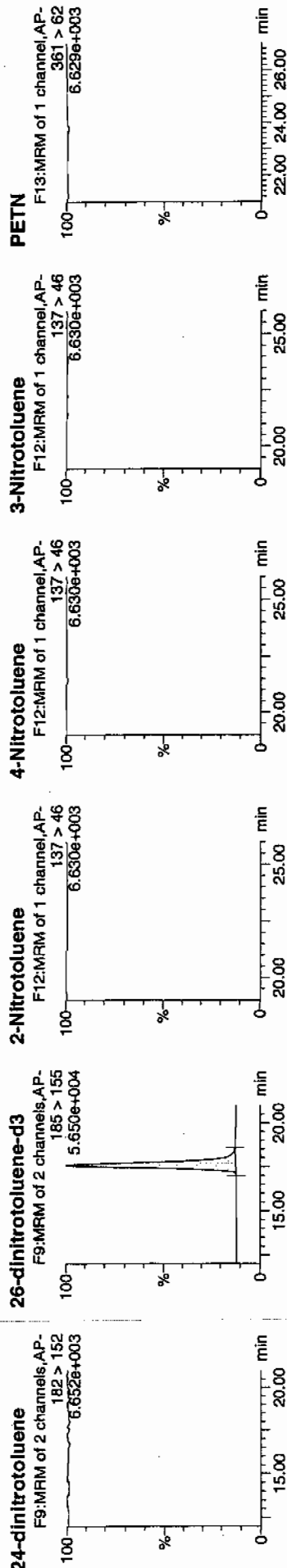
/Inl: 1:1,A

2/5/10
M.A.P.

Page 1030 of 1610



Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 05-FEB-10 06:27

GEL Data File: EXP0203082a

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	467.601
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	448.013
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
JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

Sample: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203082a

Date: 05-Feb-2010

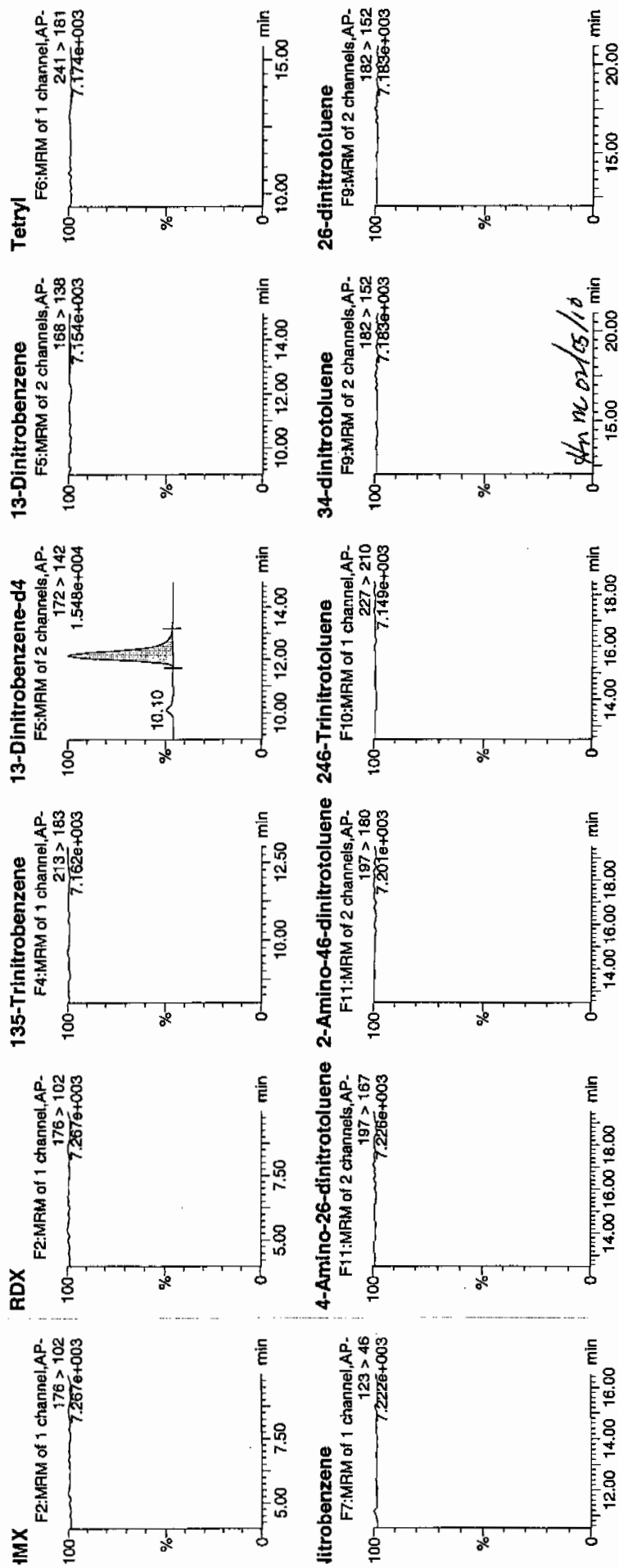
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File: 1:1,A

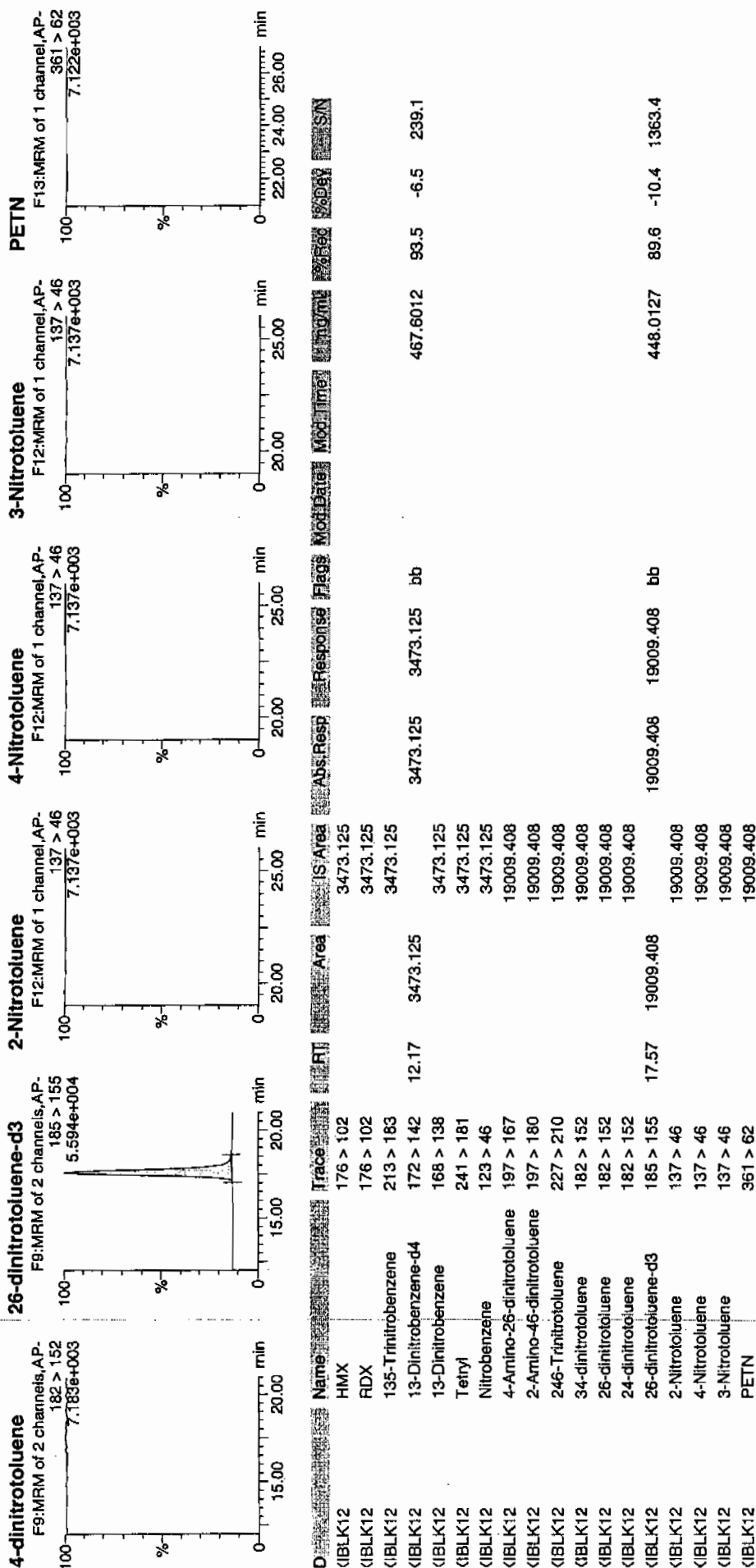
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Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 05-FEB-10 11:22

GEL Data File: EXP0203092a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	473.93
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	488.859
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\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203092a

Date: 05-Feb-2010

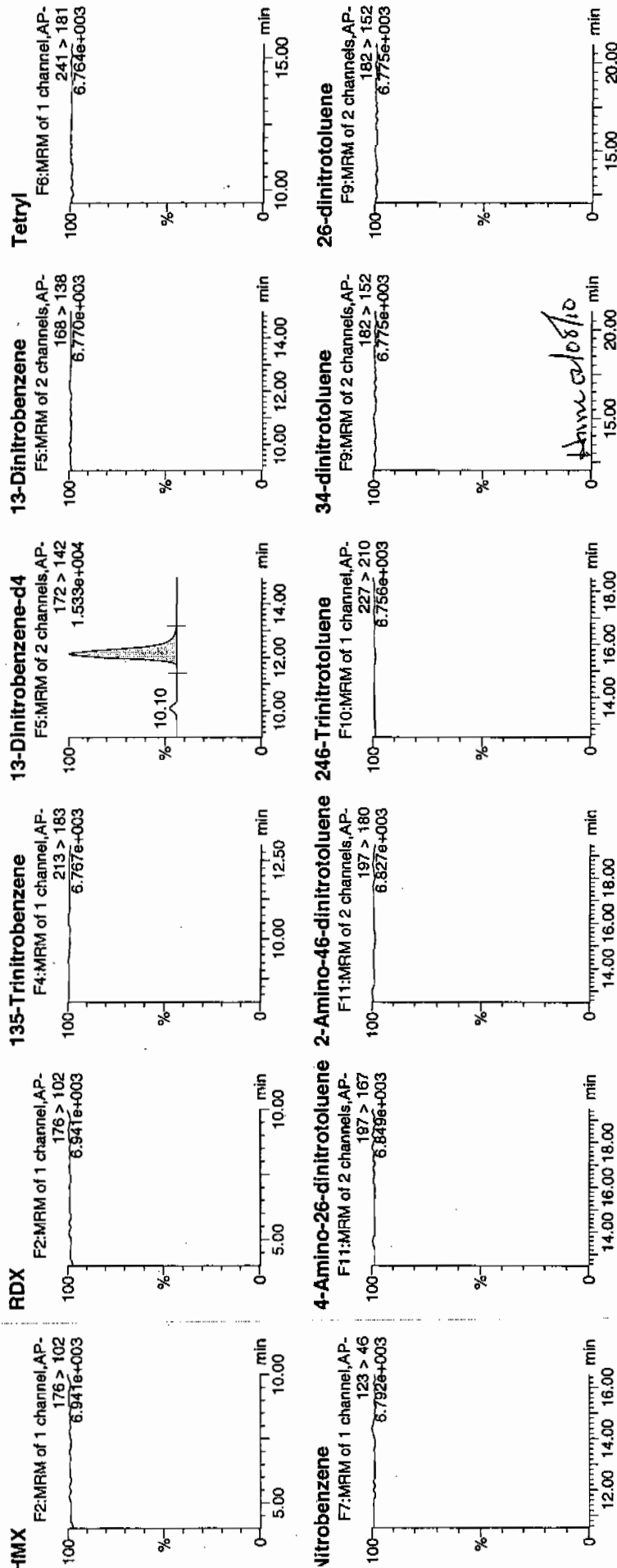
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ID: XIBLK13

Vial: 1:1,A

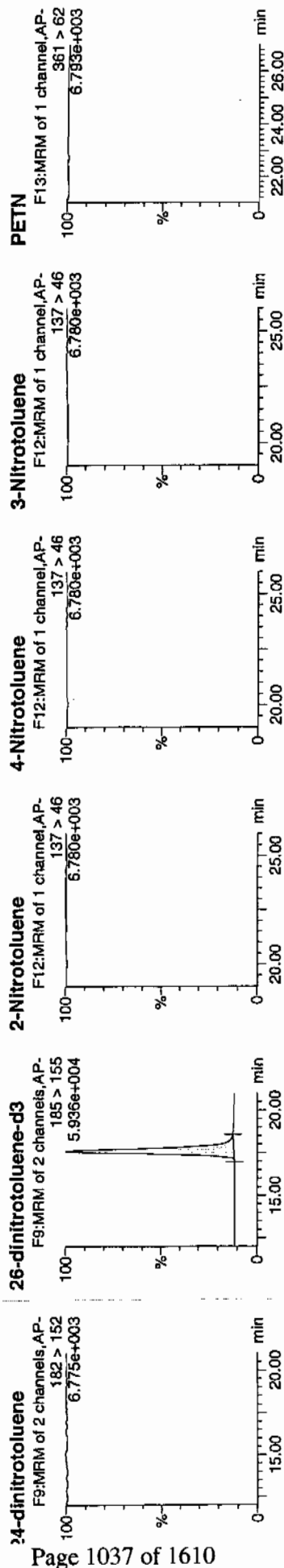
1/8/10

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Quantify Sample Report
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



ID	Name	Trace	RT	Area	IS:Area	Abs:Resp	Flags	Mod:Time	%Rec	%Dev	S/N
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XIBLK13	RDX	176 > 102		3520.133							
XIBLK13	135-Trinitrobenzene	213 > 183		3520.133							
XIBLK13	13-Dinitrobenzene-d4	172 > 142	12.14	3520.133							
XIBLK13	13-Dinitrobenzene	168 > 138		3520.133							
XIBLK13	Tetryl	241 > 181		3520.133							
XIBLK13	Nitrobenzene	123 > 46		3520.133							
XIBLK13	4-Amino-26-dinitrotoluene	197 > 167		20742.523							
XIBLK13	2-Amino-46-dinitrotoluene	197 > 180		20742.523							
XIBLK13	246-Trinitrotoluene	227 > 210		20742.523							
XIBLK13	34-dinitrotoluene	182 > 152		20742.523							
XIBLK13	26-dinitrotoluene	182 > 152		20742.523							
XIBLK13	24-dinitrotoluene	182 > 152		20742.523							
XIBLK13	26-dinitrotoluene-d3	185 > 155	17.58	20742.523							
XIBLK13	2-Nitrotoluene	137 > 46		20742.523							
XIBLK13	4-Nitrotoluene	137 > 46		20742.523							
XIBLK13	3-Nitrotoluene	137 > 46		20742.523							
XIBLK13	PETN	361 > 62		20742.523							
						20742.523	20742.523	bb	488.8586	97.8	-2.2
						3520.133	3520.133	bb	473.9301	94.8	-5.2
									414.1		

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 05-FEB-10 15:18

GEL Data File: EXP0203100a

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	466.35
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	459.844
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
 JEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203100a

Date: 05-Feb-2010

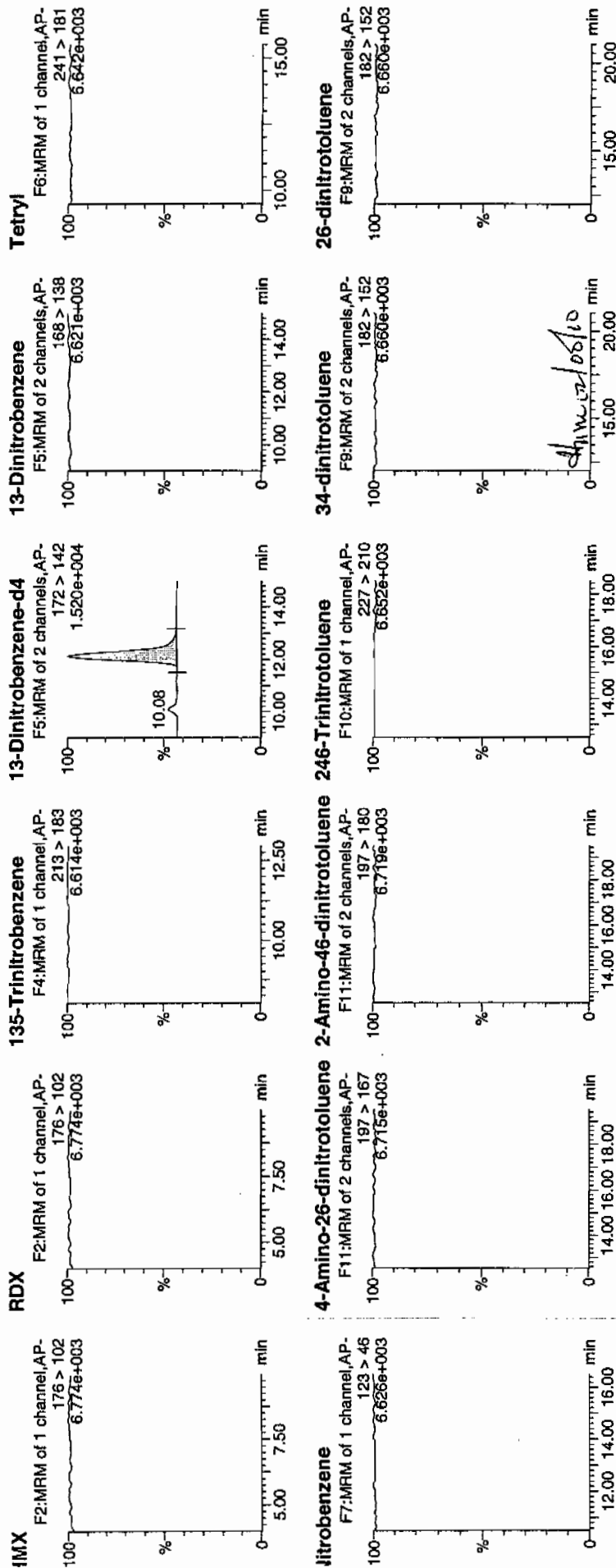
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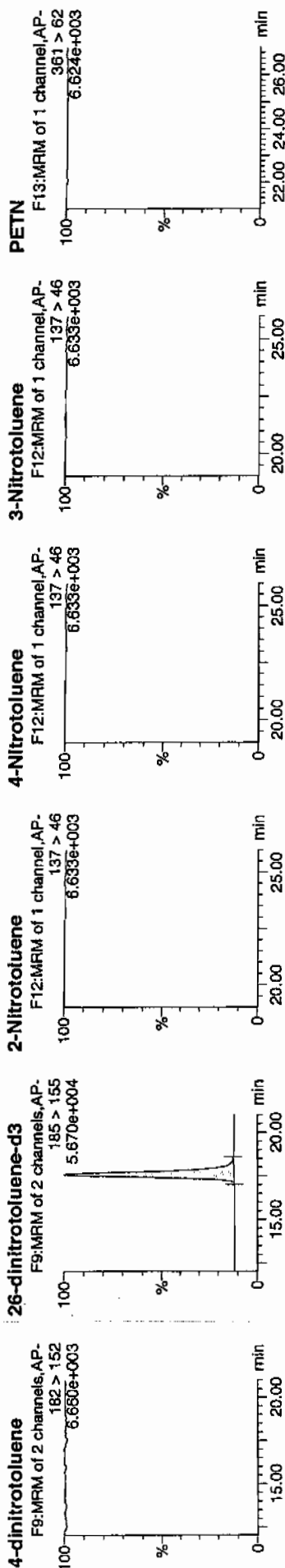
15/10
 2/5/10

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Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 05-FEB-10 19:15

GEL Data File: EXP0203108a

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	436.894
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	444.323
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\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203108a

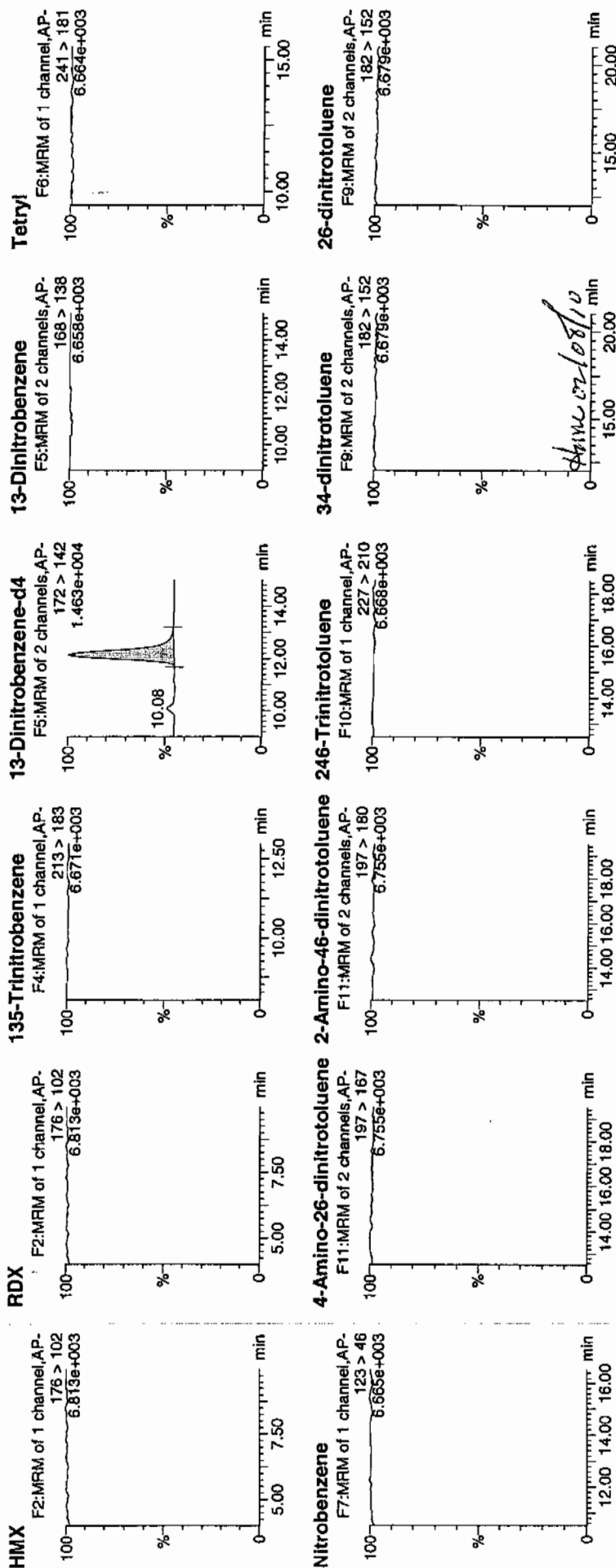
Date: 05-Feb-2010

Time: 19:15:21

ID: XIBLK15

Vial: 1:1,A

WAT
2/8/10

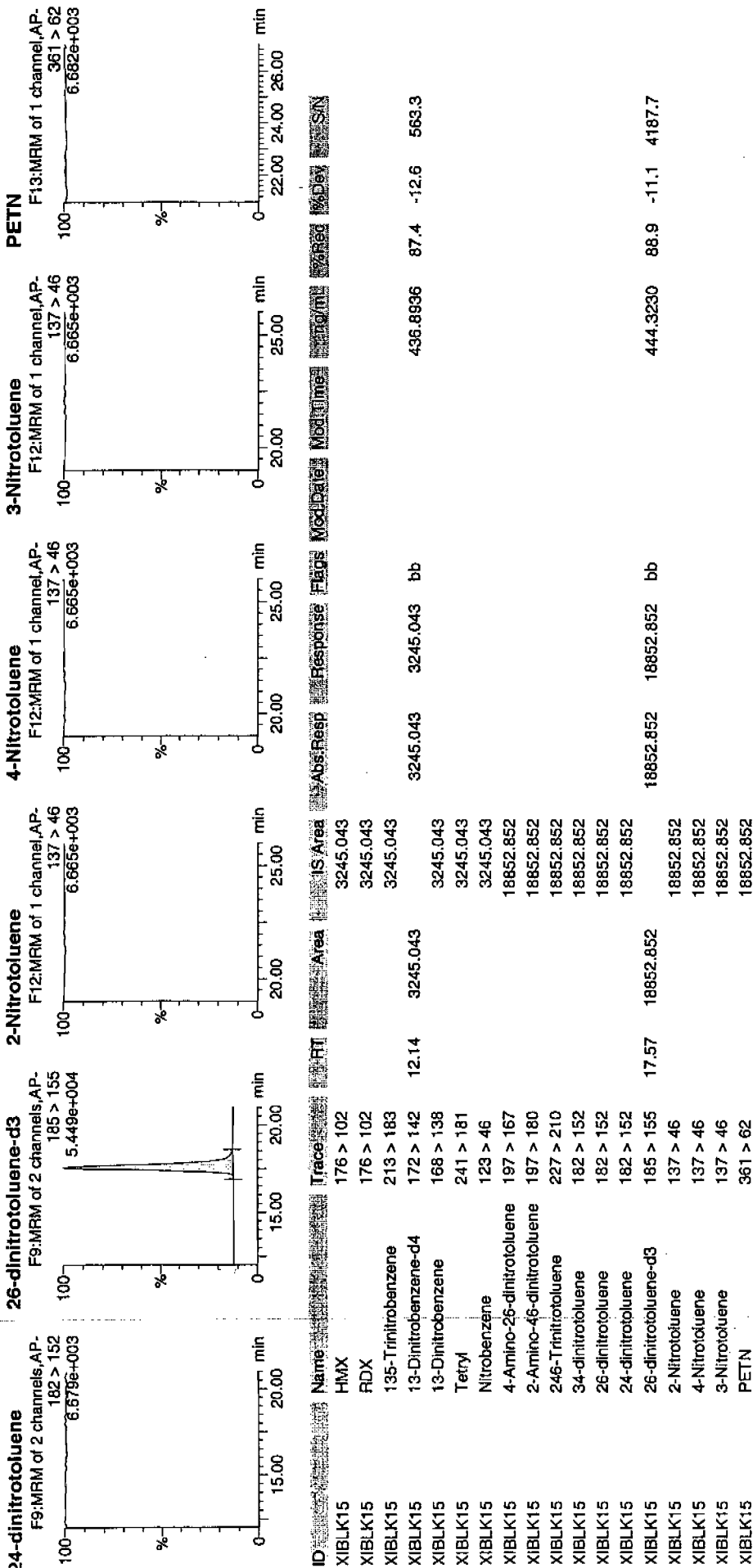


Quantify Sample Report

3EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Feb 08 11:31:28 2010, Page 50 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 06-FEB-10 01:38

GEL Data File: EXP0203121a

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	425.265
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	430.432
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: Mon Feb 08 11:31:28 2010, Page 75 of 103

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0203121a

Date: 06-Feb-2010

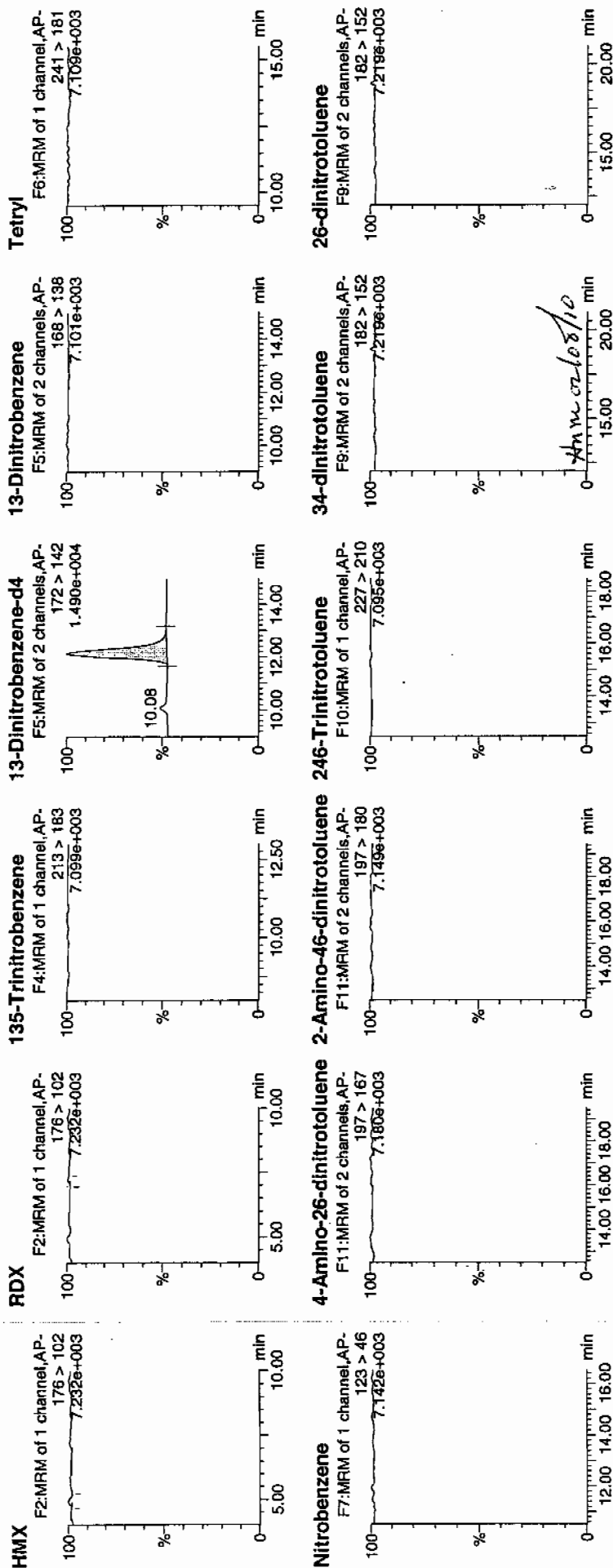
Time: 01:38:55

ID: XIBLK16

Vial: 1:1,A

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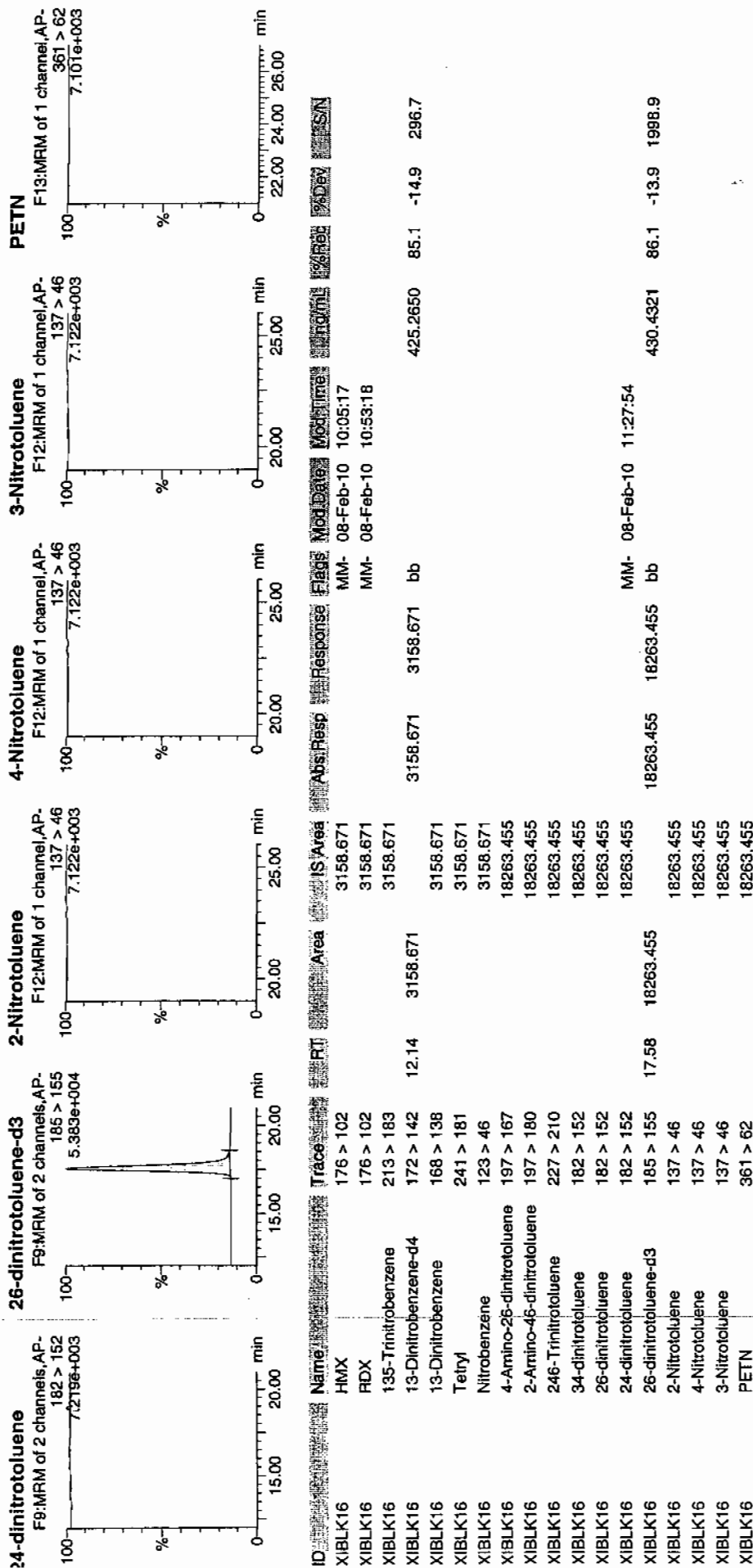


Quantify Sample Report

3EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Feb 08 11:31:28 2010, Page 76 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 06-FEB-10 07:32

GEL Data File: EXP0203133a

Instrument ID: LCMSMS

Column: Phenomenex Ultra[®]carb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	428.419
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	373.679
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203133a

Date: 06-Feb-2010

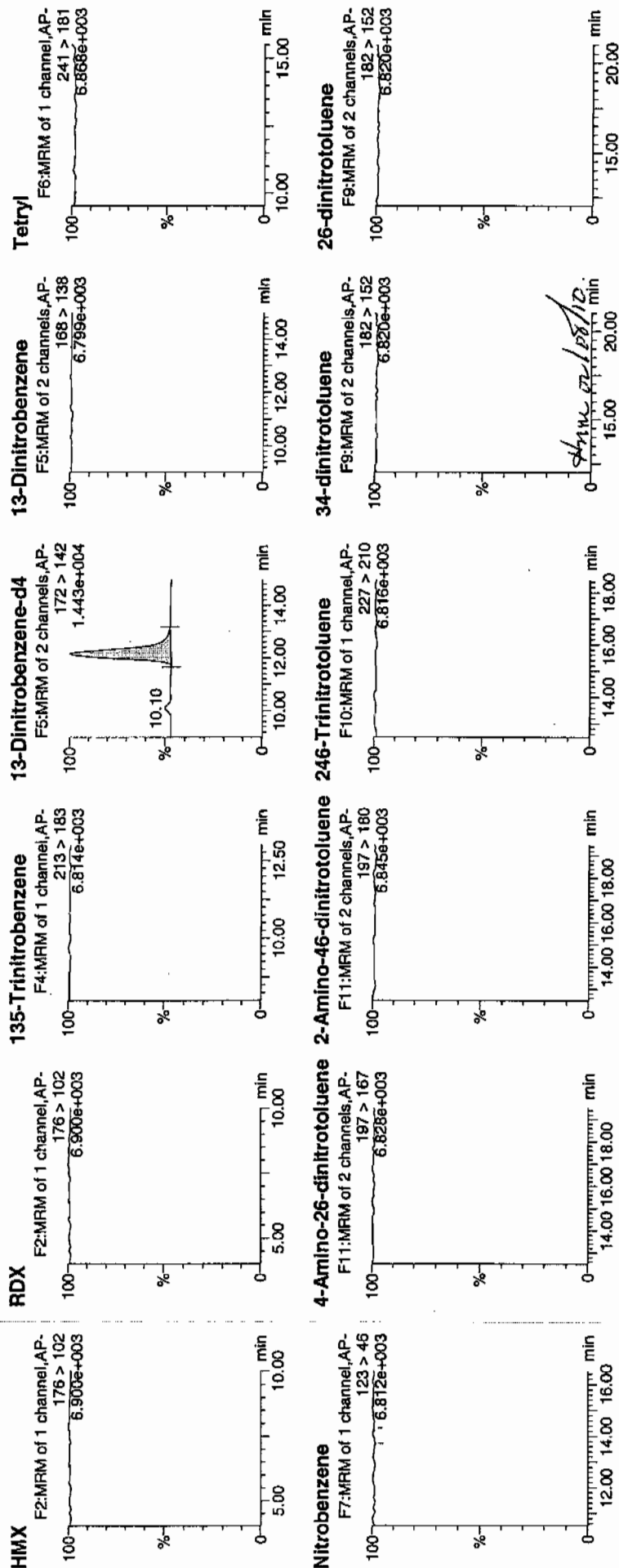
Time: 07:32:46

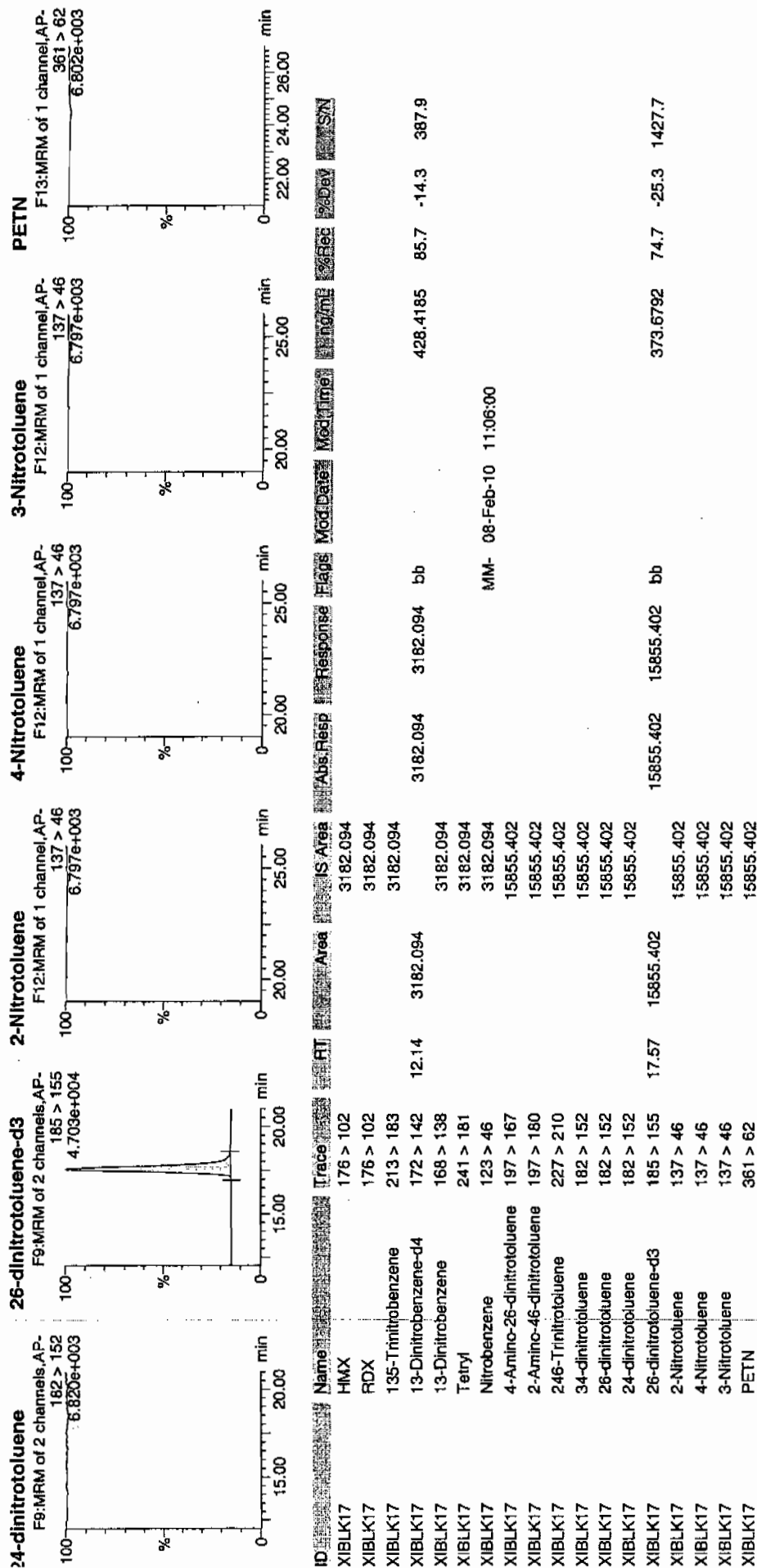
ID: XIBLK17

Vial: 1:1,A

2/8/10

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 29-JAN-10 12:26

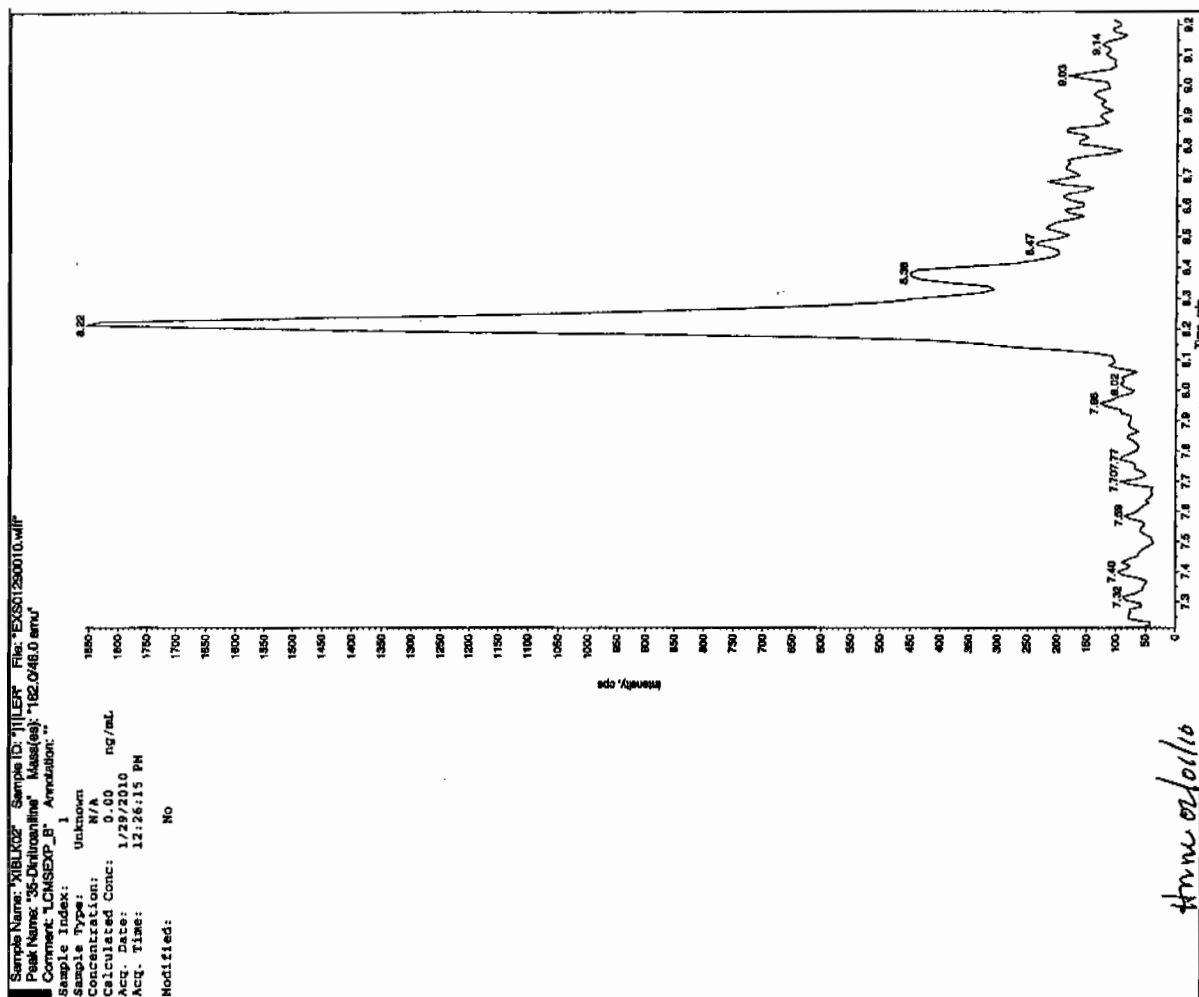
GEL Data File: EXS01290010.wiff

Instrument ID: LCMSMS

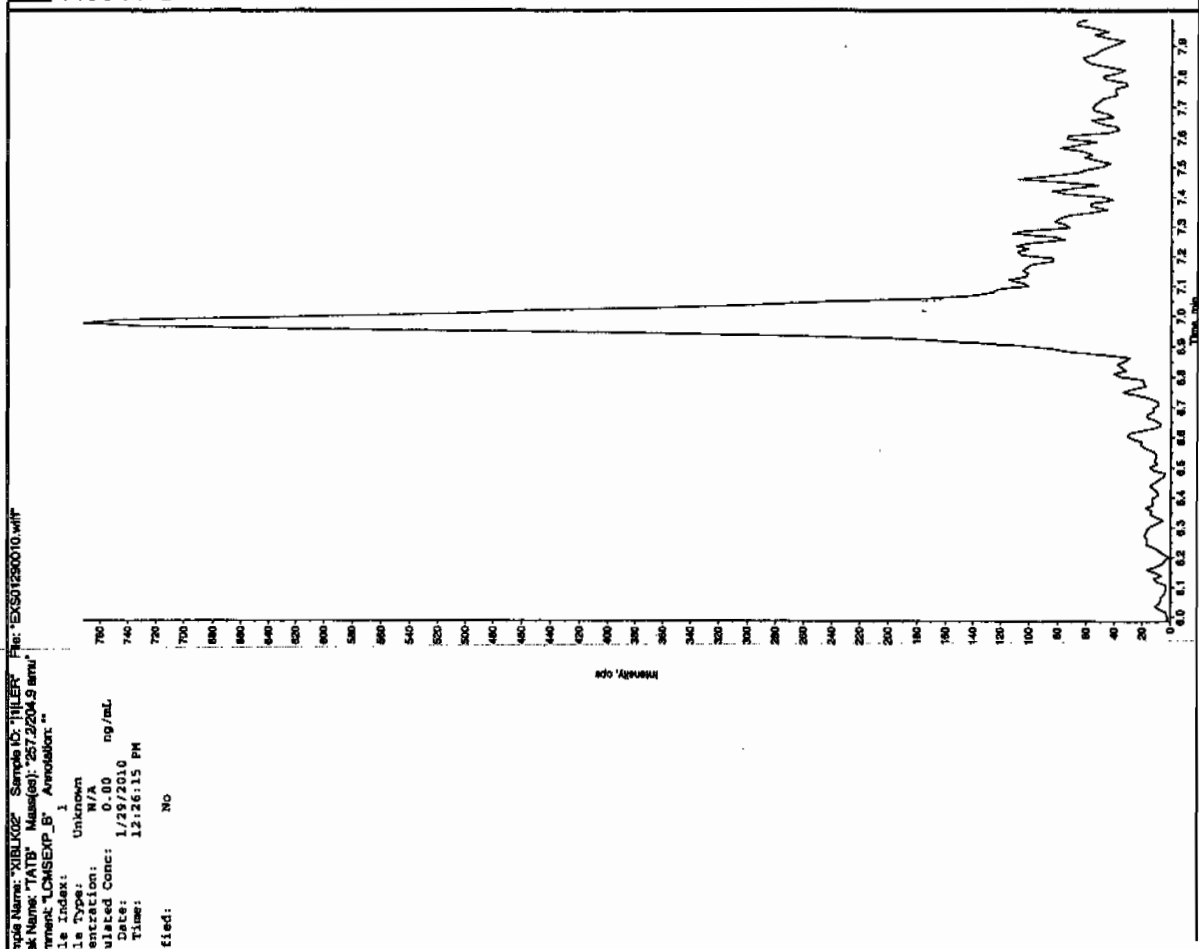
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	3.37
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

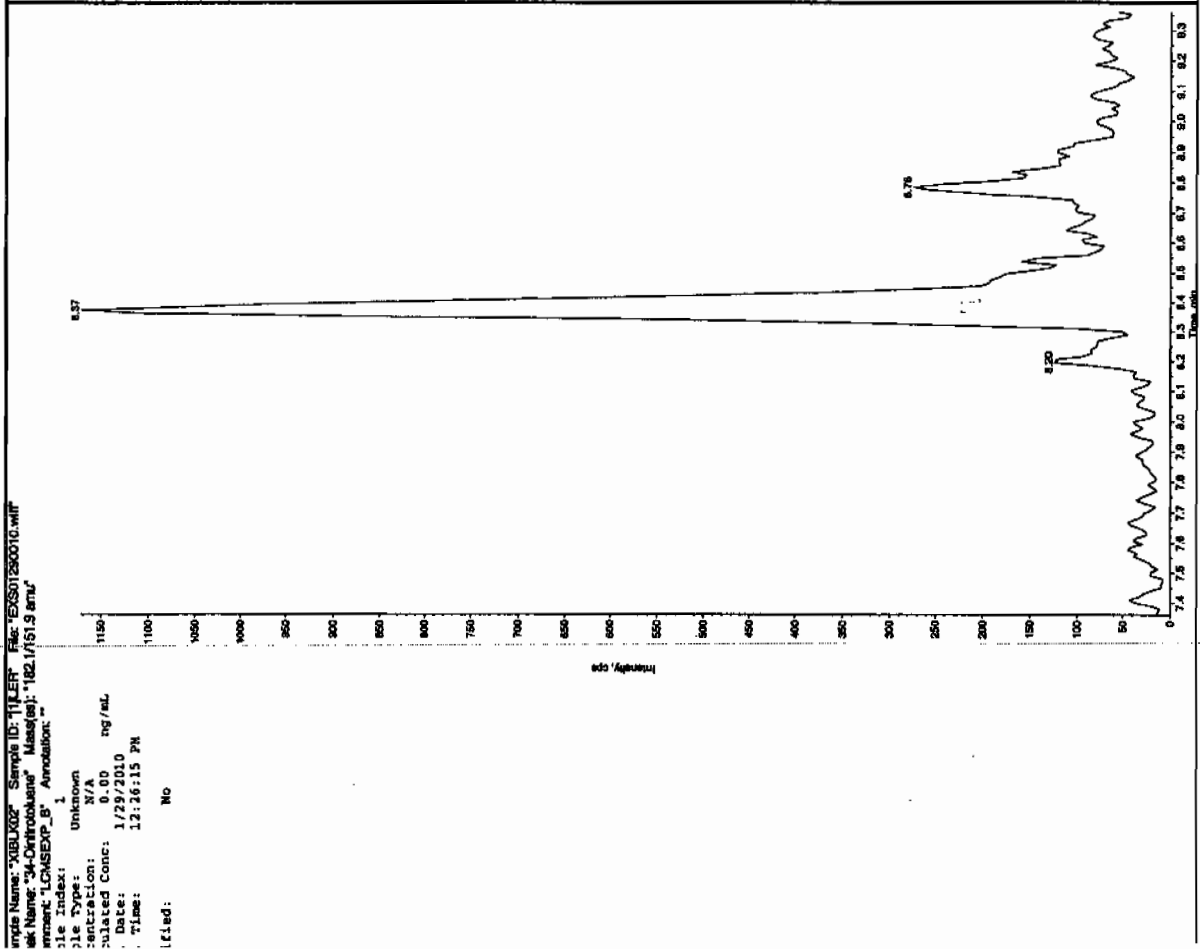
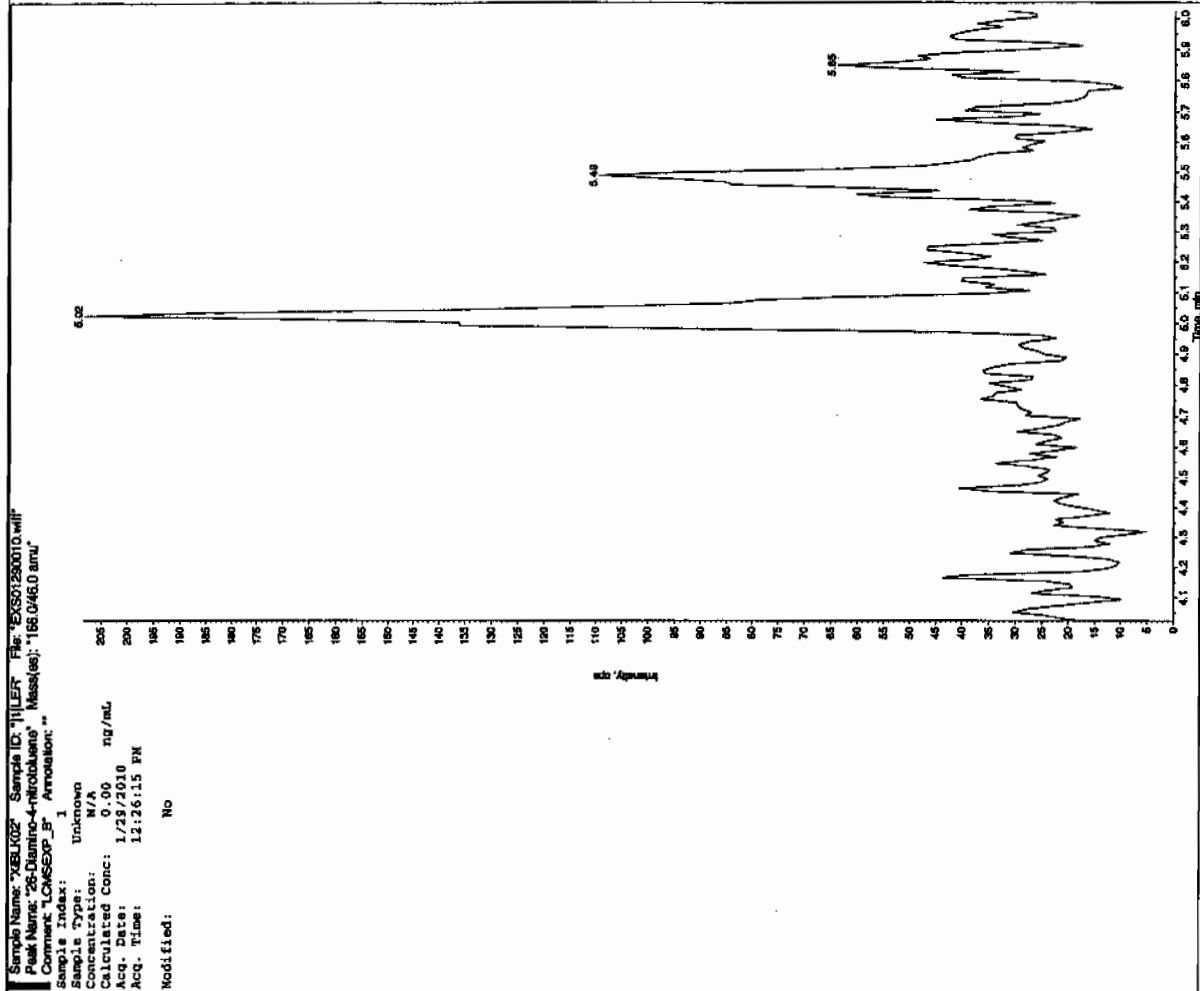
Rev 2/10



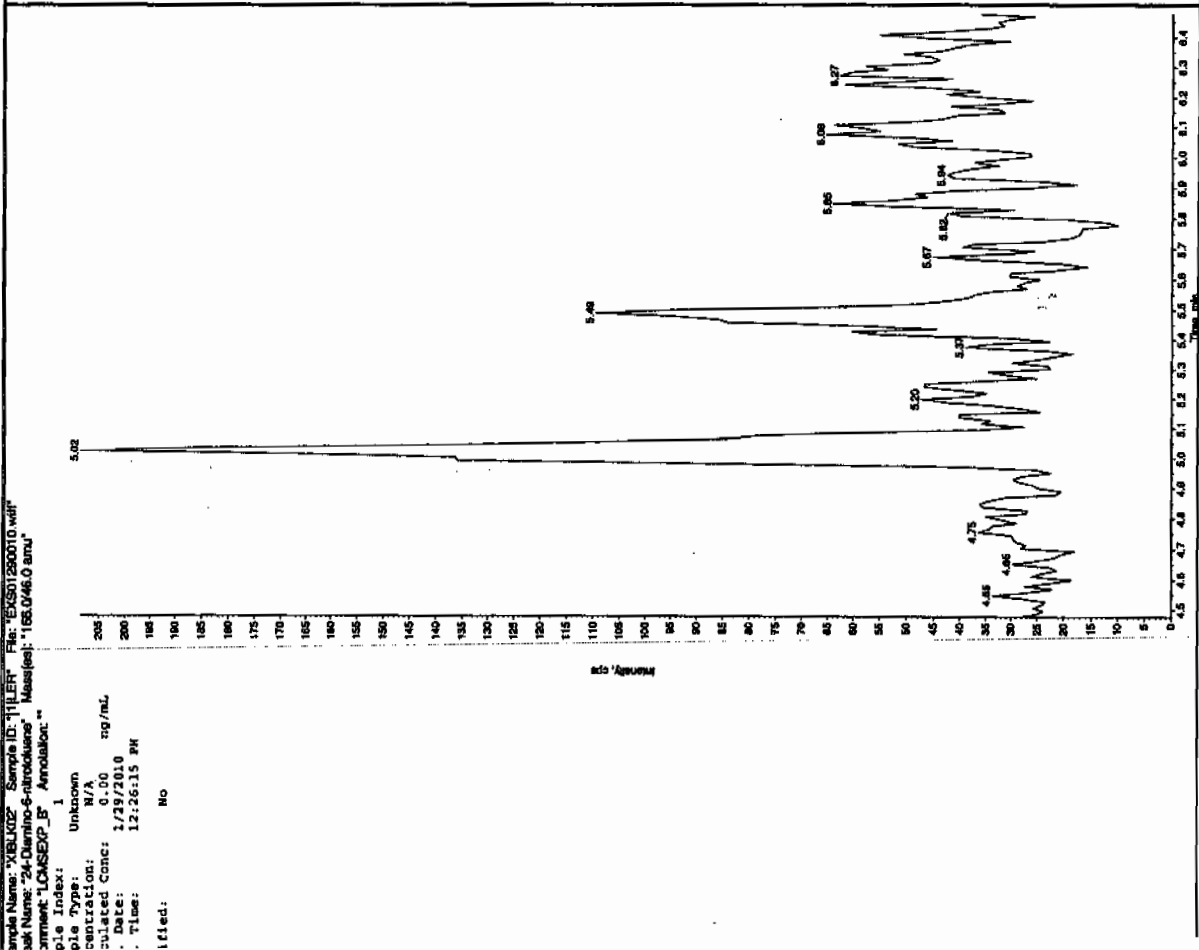
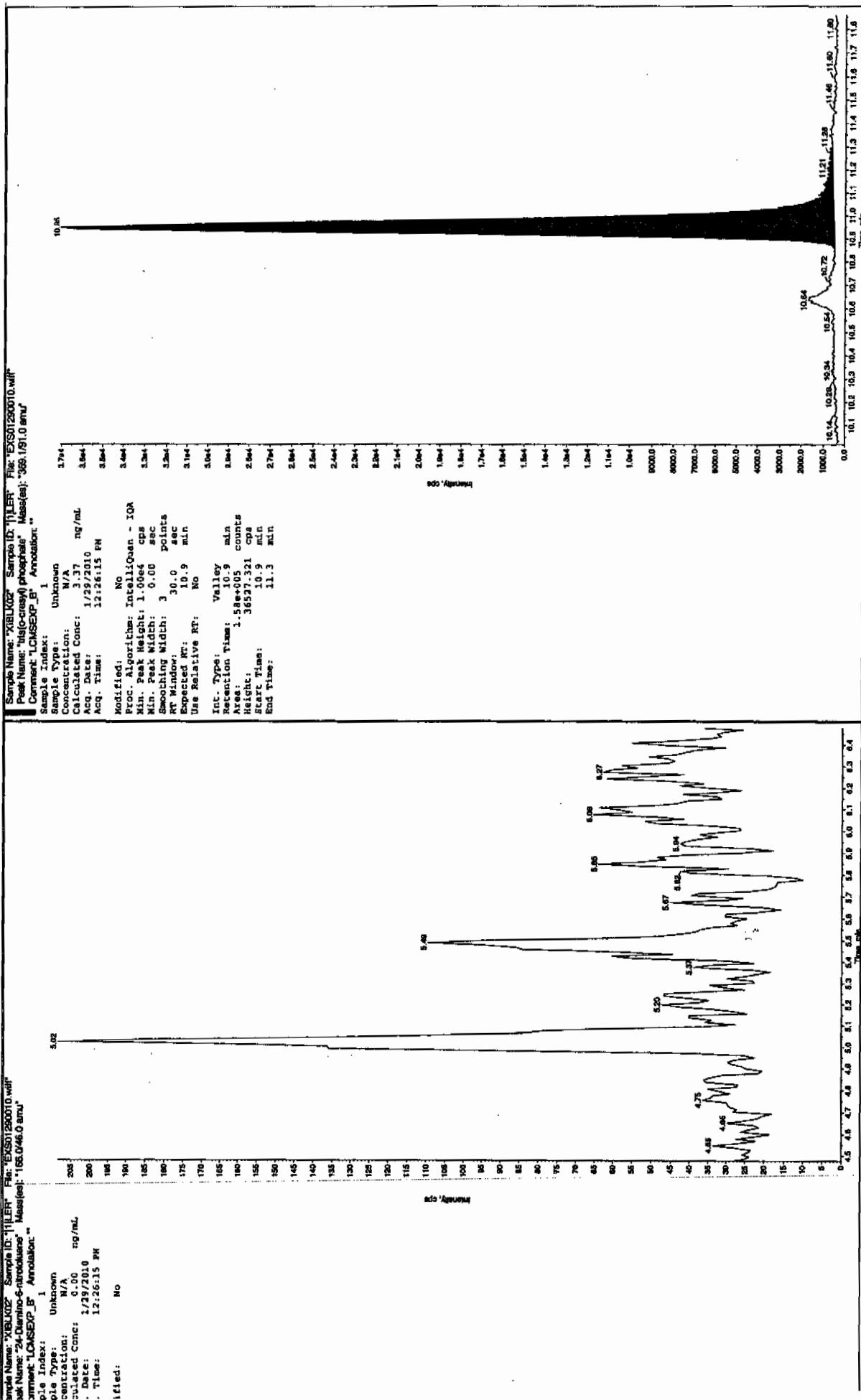
Rev 2/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



EL 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): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 29-JAN-10 12:57

GEL Data File: EXS01290012.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	.527
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Land 1110

Sample Name: "XIBLK03" Sample ID: "TILEP" File: "EX501250012.wif"

Peak Name: "TATP" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

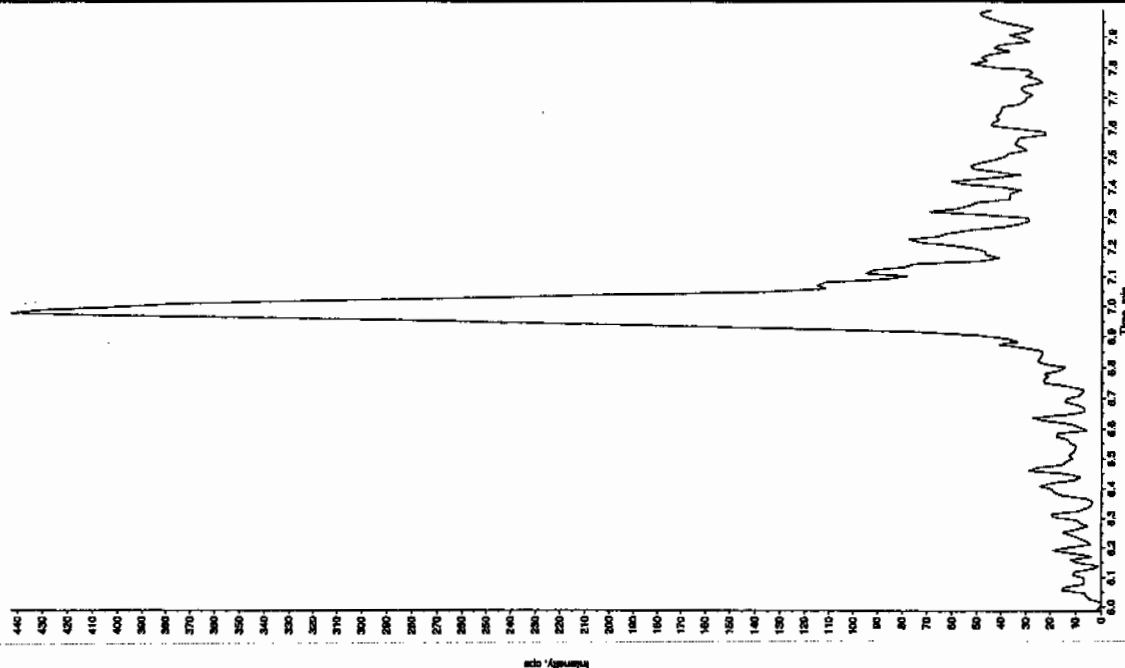
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/29/2010

Acq. Time: 12:57:39 PM

Modified: No



Sample Name: "XIBLK03" Sample ID: "TILEP" File: "EX501250012.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

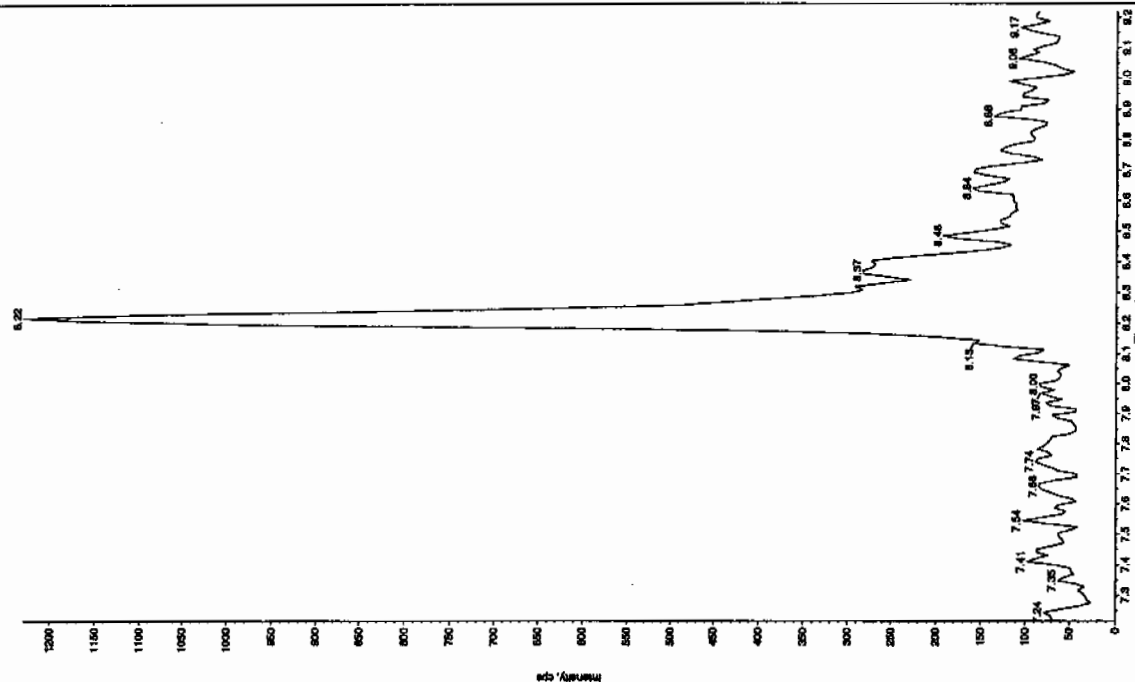
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/29/2010

Acq. Time: 12:57:39 PM

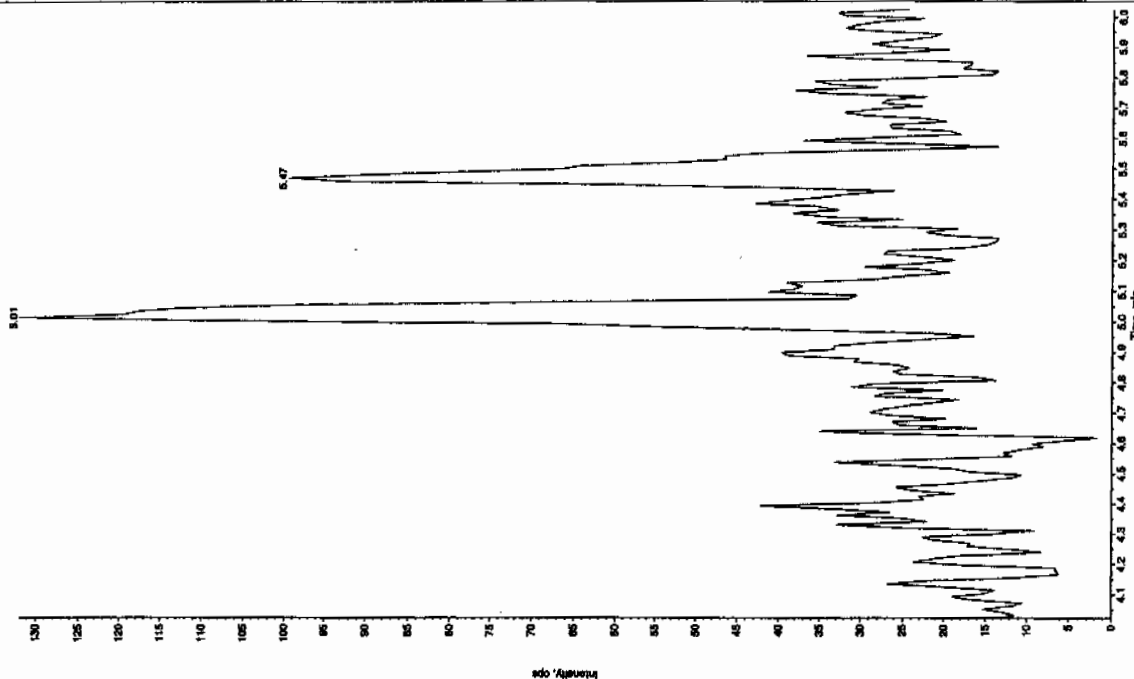
Modified: No



Land 1110

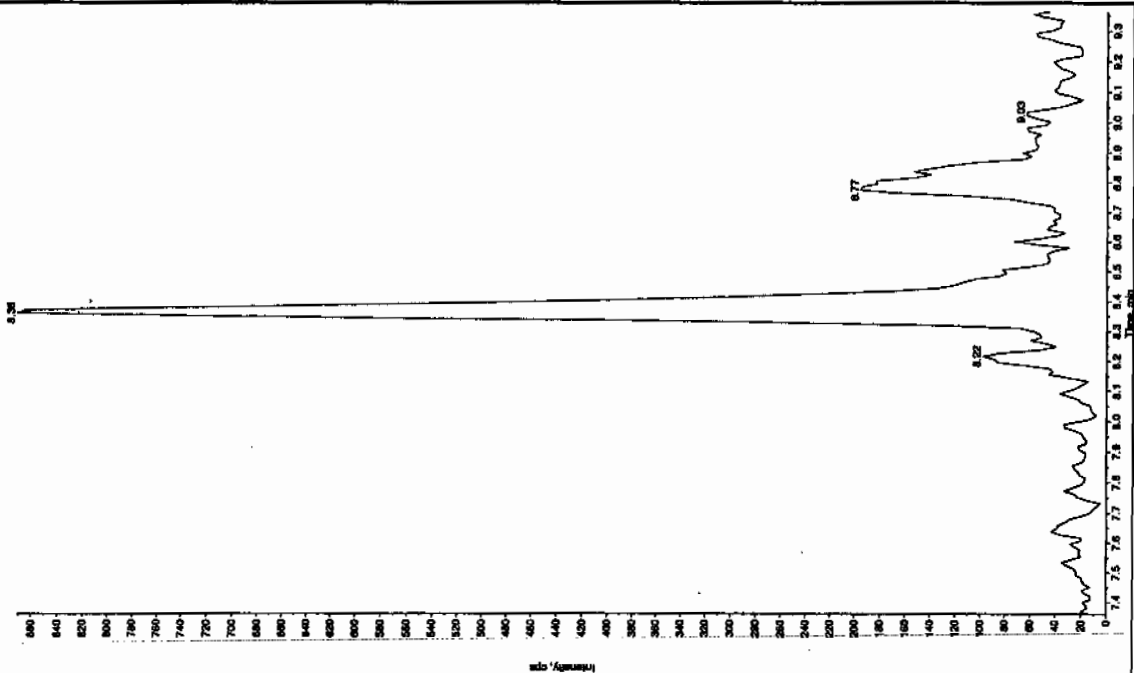
Sample Name: "VBLK03" Sample ID: "11LSP" File: "EX50120012.wif"
 Peak Name: "26-Diethyl-4-nitrophenol" Mass(es): "166.046.0 amu"
 Comment: "LMSERP_B" Annotation: "1"

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 12:57:39 PM
 Modified: No



Sample Name: "VBLK03" Sample ID: "11LSP" File: "EX50120012.wif"
 Peak Name: "26-Diethyl-4-nitrophenol" Mass(es): "162.151.9 amu"
 Comment: "LMSERP_B" Annotation: "1"

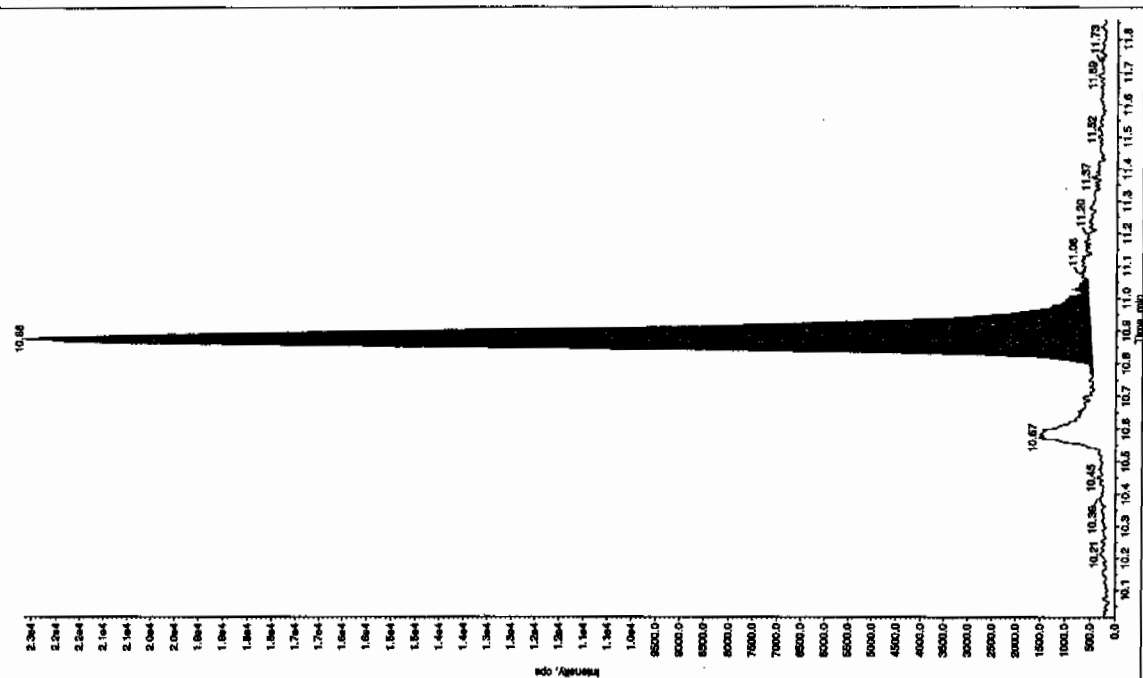
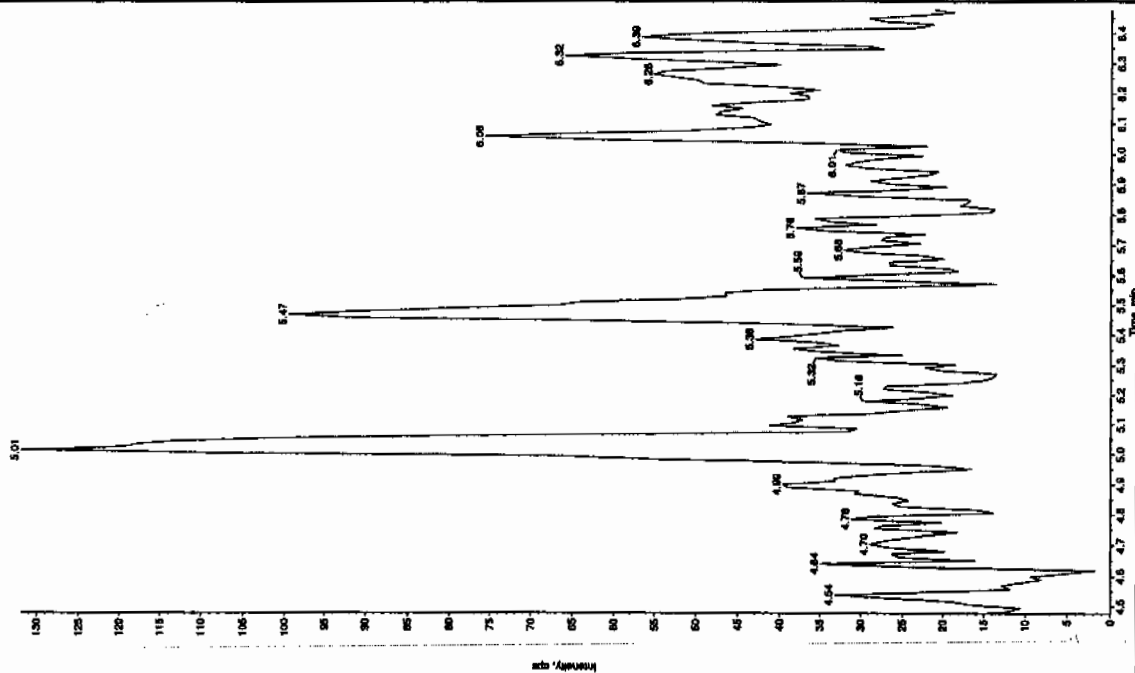
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 12:57:39 PM
 Modified: No



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK03" Sample ID: "11LEP" File: "EXS01290012.wif"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369, 1791.0 amu"
Comment: "LCMS/EXP B" Annotation: ""

Col Name:	CHECKIN_1	AmmoniaRT
Sample Type:	Unknown	234
Concentration:	N/A	236
Calculated Conc:	0.527 ng/mL	238
Acq Date:	1/23/2018	239
Acq Time:	13:57:39 PM	240
Modified:	No	241
Injection(s):	Int:Quan - TOA	242
Min Peak Height:	1.00e4 sec	243
Min. Peak Width:	3.00 points	244
Smoother Width:	30.0 sec	245
Rt Window:	10.9 min	246
Expected RT:	No	247
Use Relative RT:	No	248
Int. Type:	Valley	249
Retention Time:	9.15e+00.3 counts	250
Height:	22312.851 CPM	251
Start Time:	10.8 min	252
End Time:	11.1 min	253



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 29-JAN-10 13:44

GEL Data File: EXS01290015.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	.119
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 2/1/10

File: "EX501280015.wif"

Sample Name: "XBL004" Sample ID: "11111" File: "EX501280015.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: ""

File Index: 1

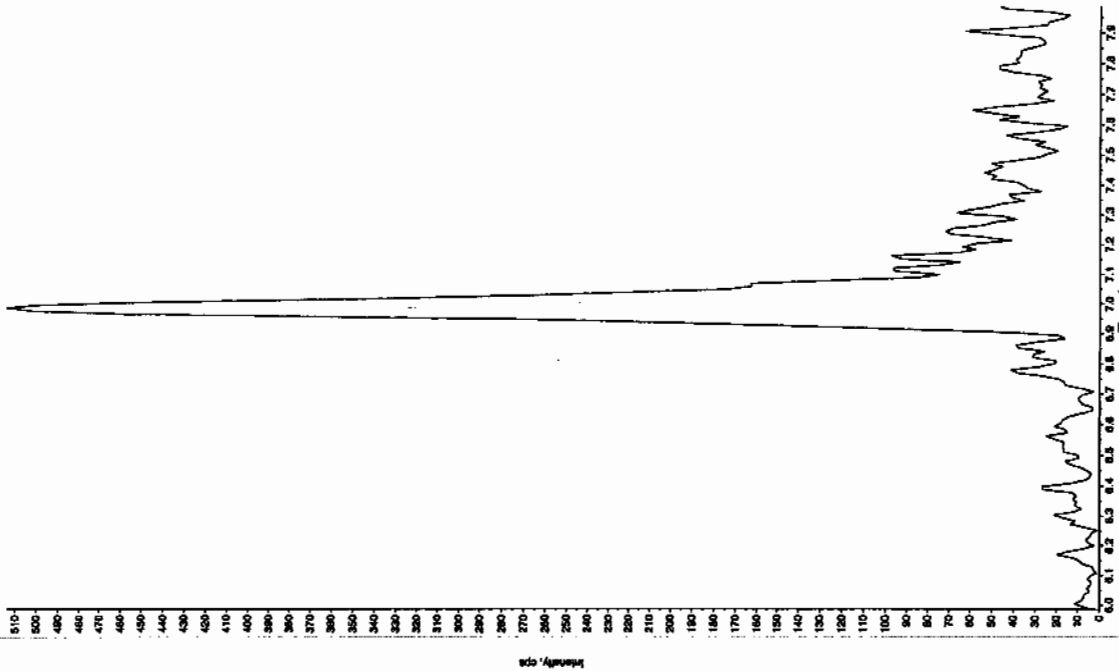
File Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/29/2010

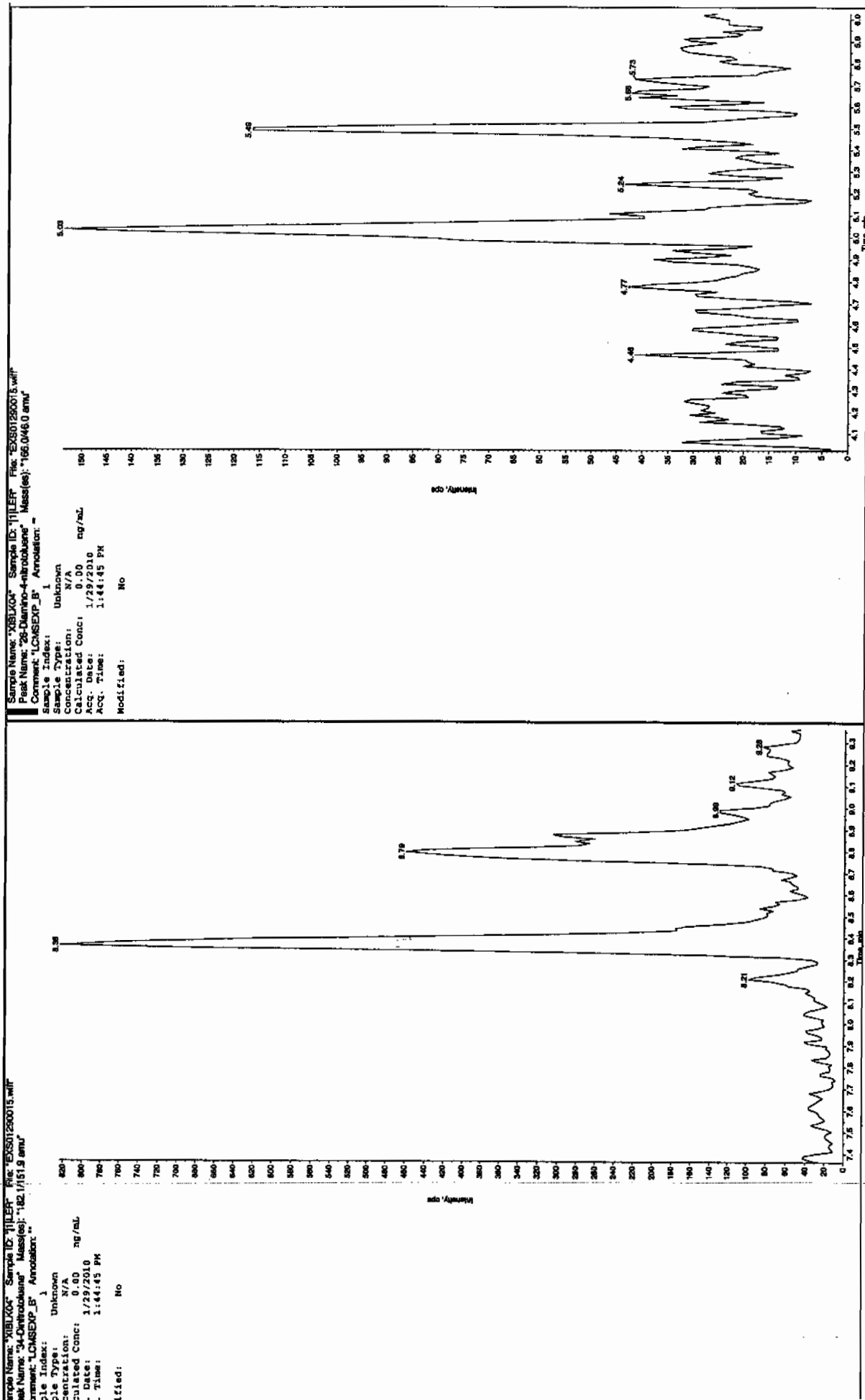
Acq. Time: 1:44:45 PM

Modified: No



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Handwritten signature/initials



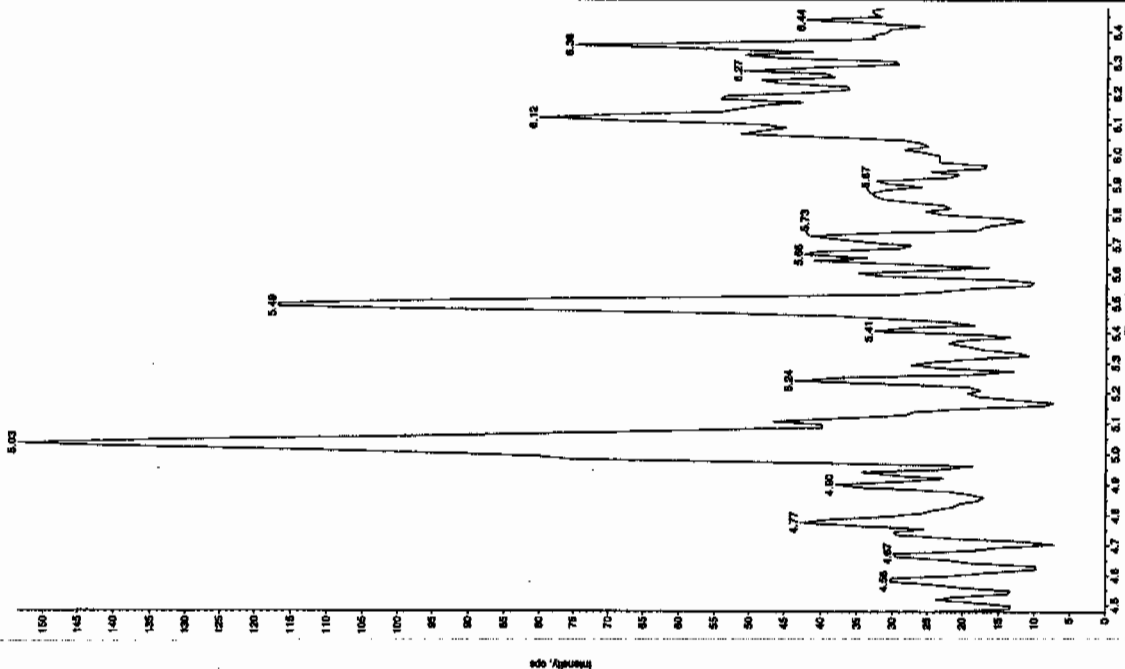
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK04" Sample ID: "J1LER" File: "EXS01290015.wiff"
Peak Name: "tri(o-cresyl) phosphine" Mass(es): "369.1/91.0 amu"

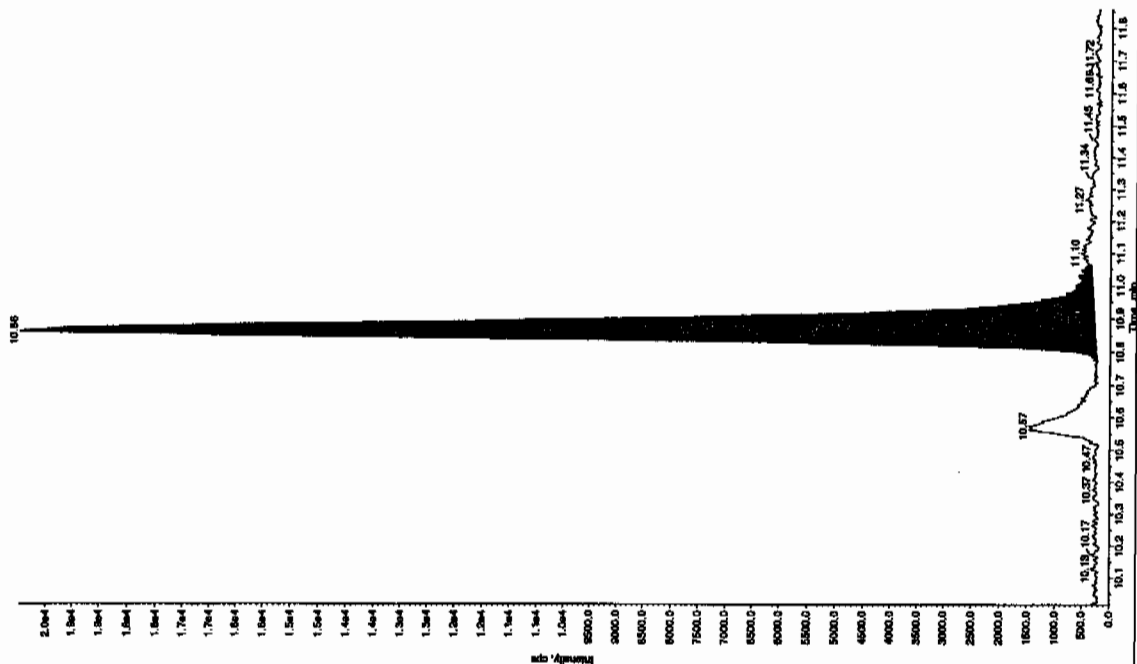
```

* Comment: 'LOMSEXP_F' Annotation: =
Sample Index:
Sample type: Unknown
Sample Name:
Calculated Conc: 0.119 ng/mL
Acq. Date: 1/29/2010
Acq. Qc: 1:44:45 PM
Modified: No
Proc. Algorithm: IntelliQuan - IQA
Peak Height: 1.00e4 cps
Peak Width: 3.00 sec
Smoothing Width: 30.0
RT Window: 10.0
Expected RT: 10.9 min
Use Relative RT: No
Int. Type: Valley
Integration Time: 8.21e-004 min
Area: 18725.443 counts
Height: 18725.443
Start Time: 10.8 min
End Time: 11.1 min

```



ENL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 29-JAN-10 16:21

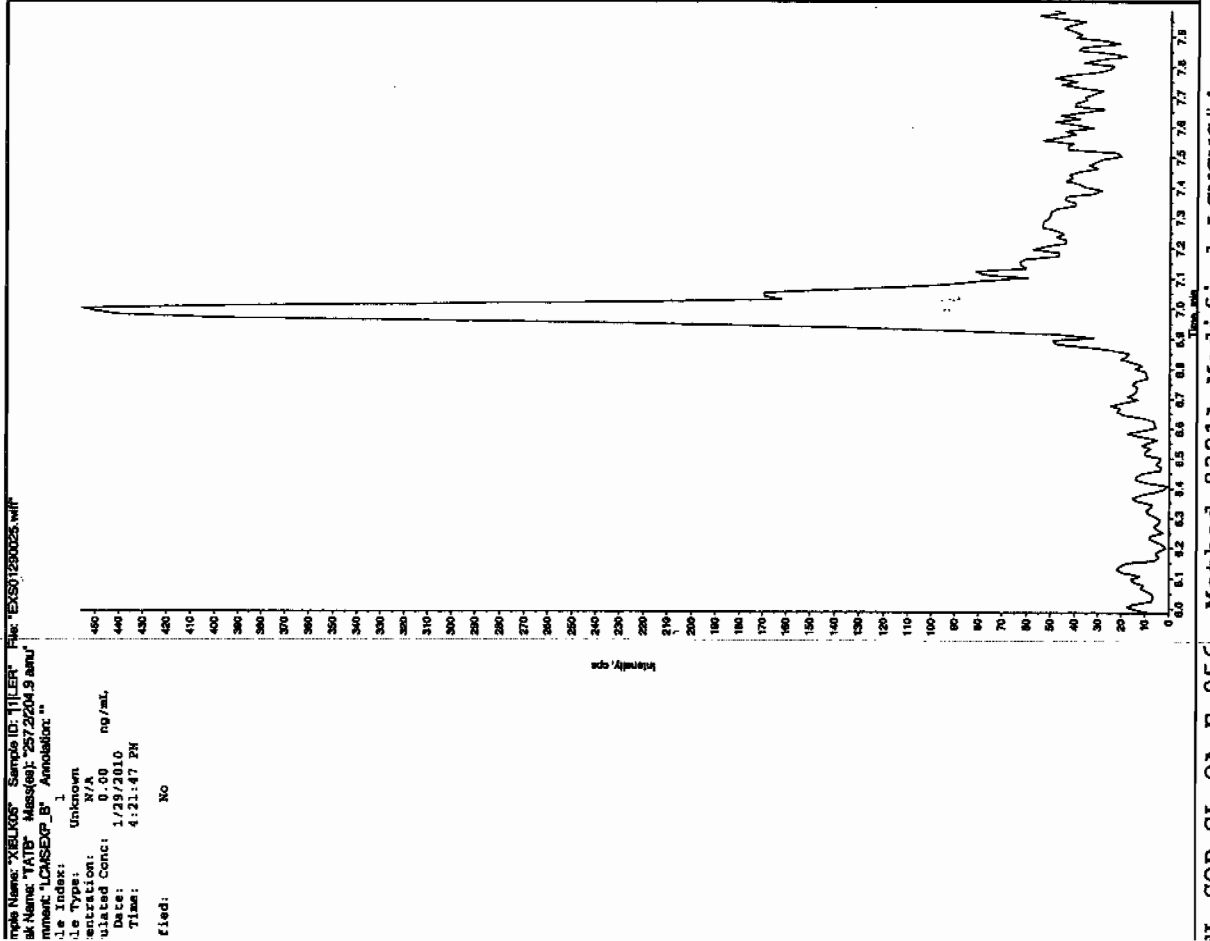
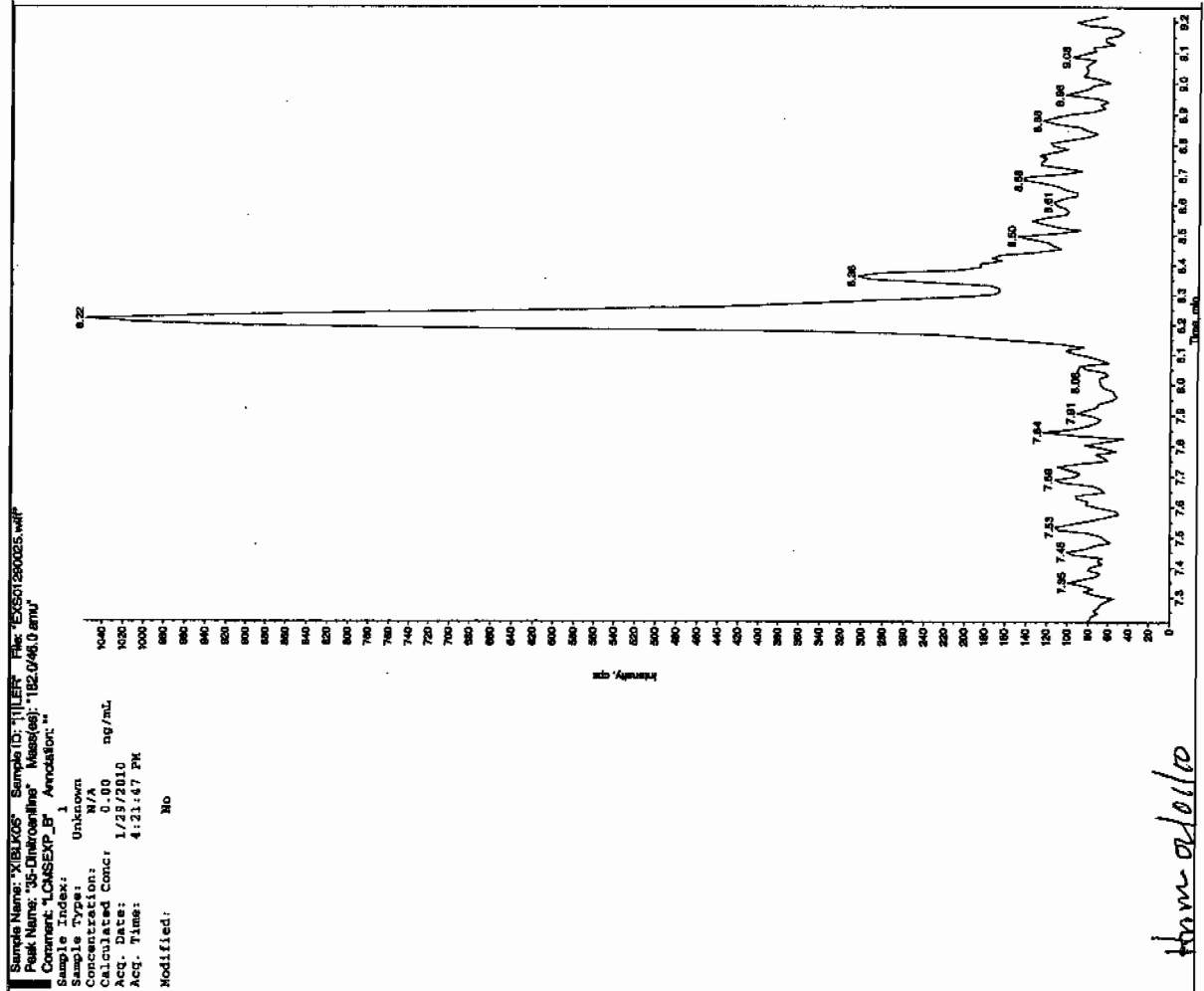
GEL Data File: EXS01290025.wiff

Instrument ID: LCMSMS

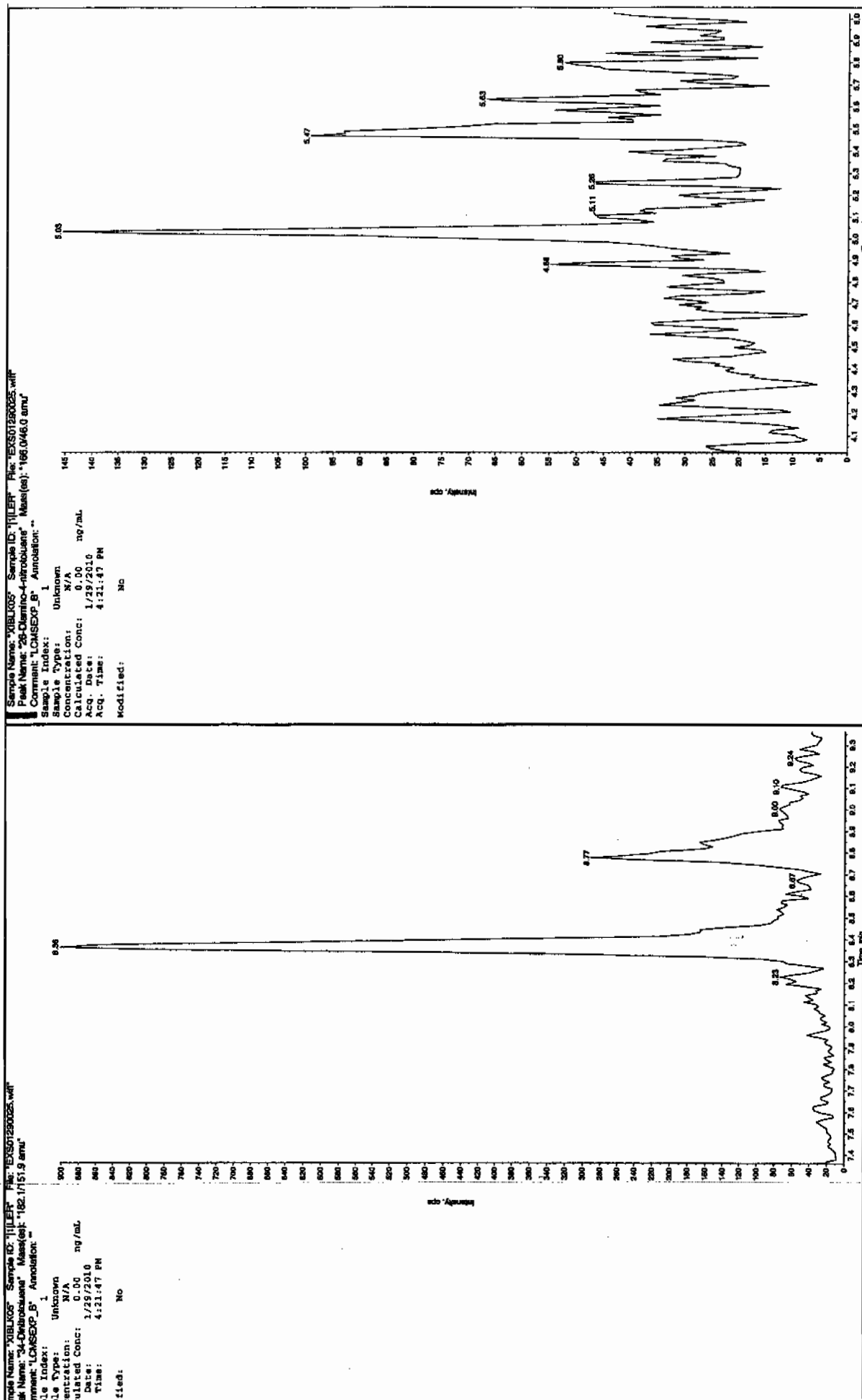
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.231
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 21110

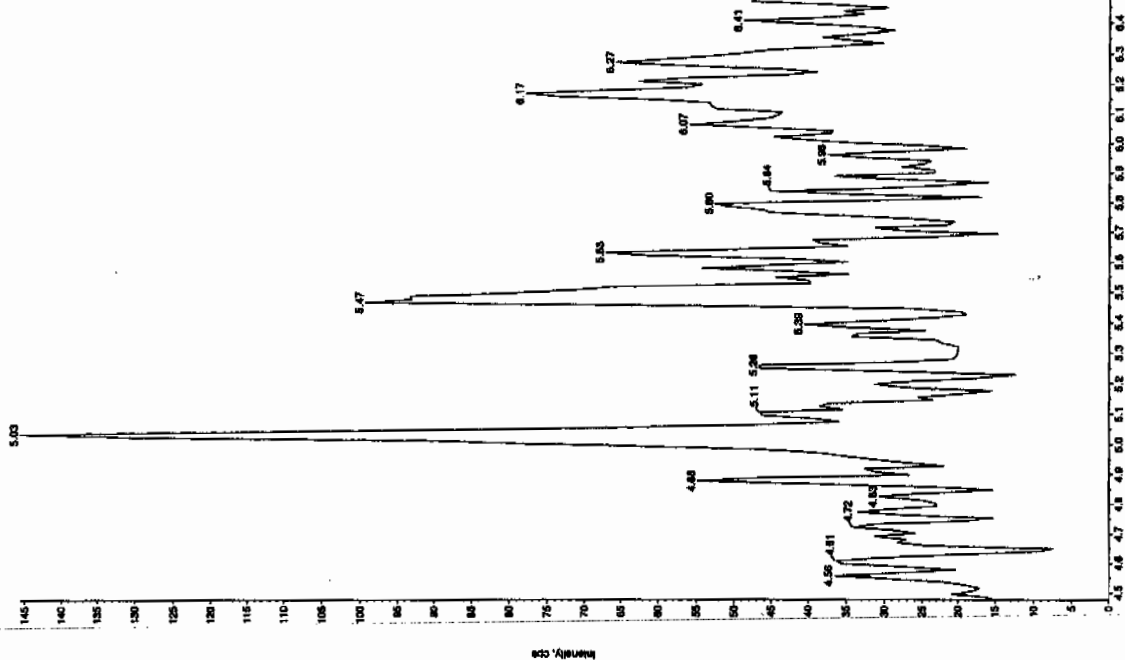


See 21110



Sample Name: 'XBLK05' Sample ID: '11LEP' File: 'EXS0128025.wif'
 Peak Name: '24-Chloro-6-nitrofluorene' Mass(es): '166.046.0 amu'
 Comment: 'LCMS-EXP_B' Annotation: '1'

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.231 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 4:21:47 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 1 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Height: 20955.821 cps
 Start Time: 10.8 min
 End Time: 11.1 min



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 29-JAN-10 18:58

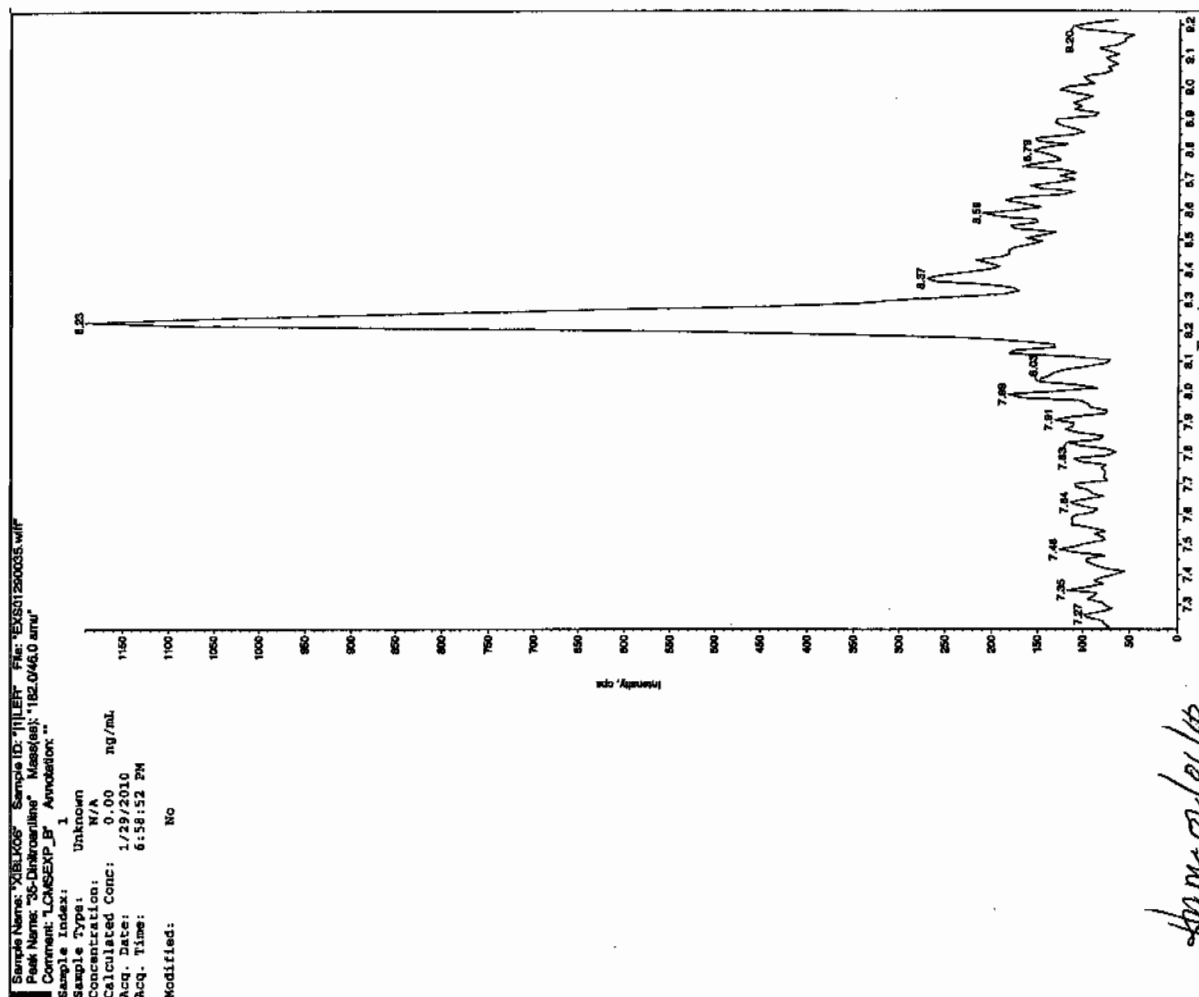
GEL Data File: EXS01290035.wiff

Instrument ID: LCMSMS

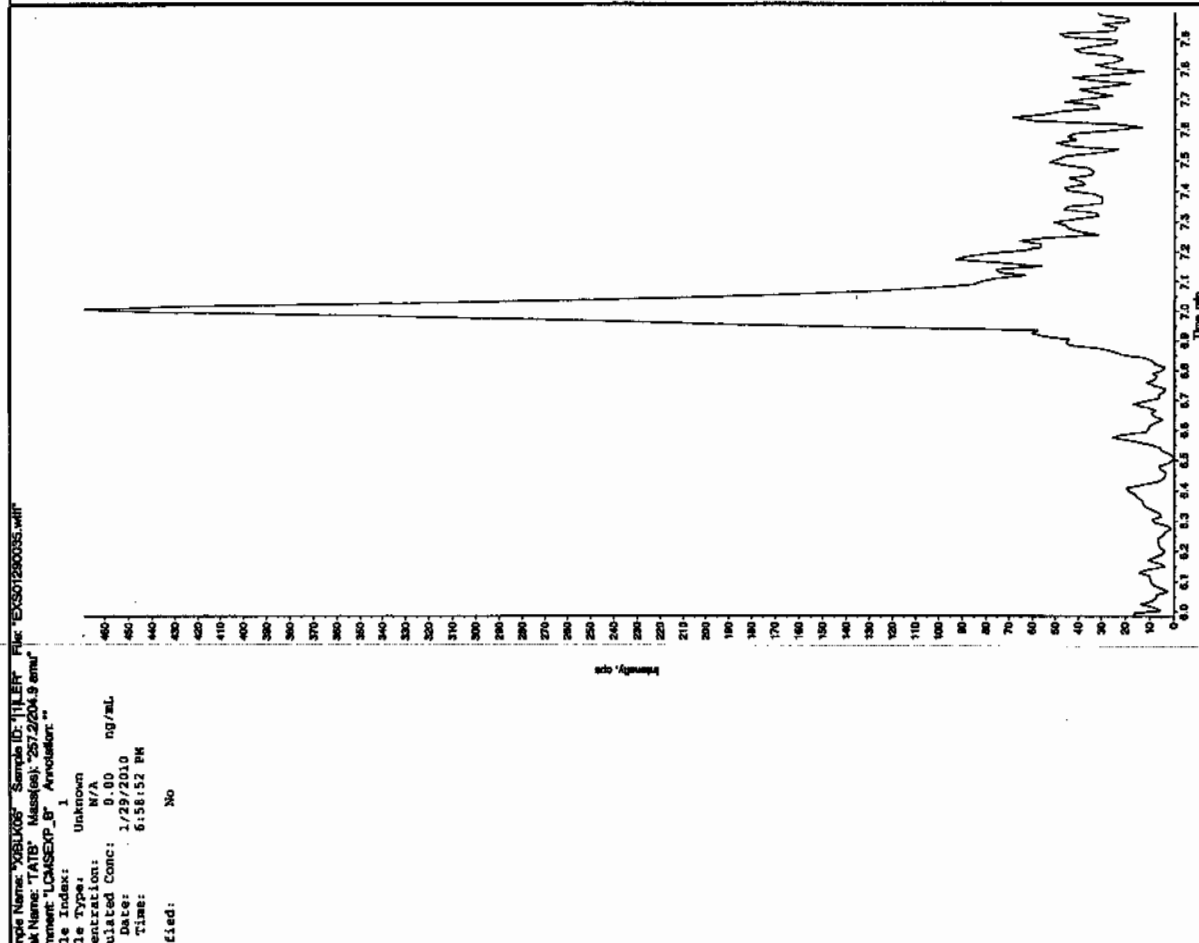
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.656
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

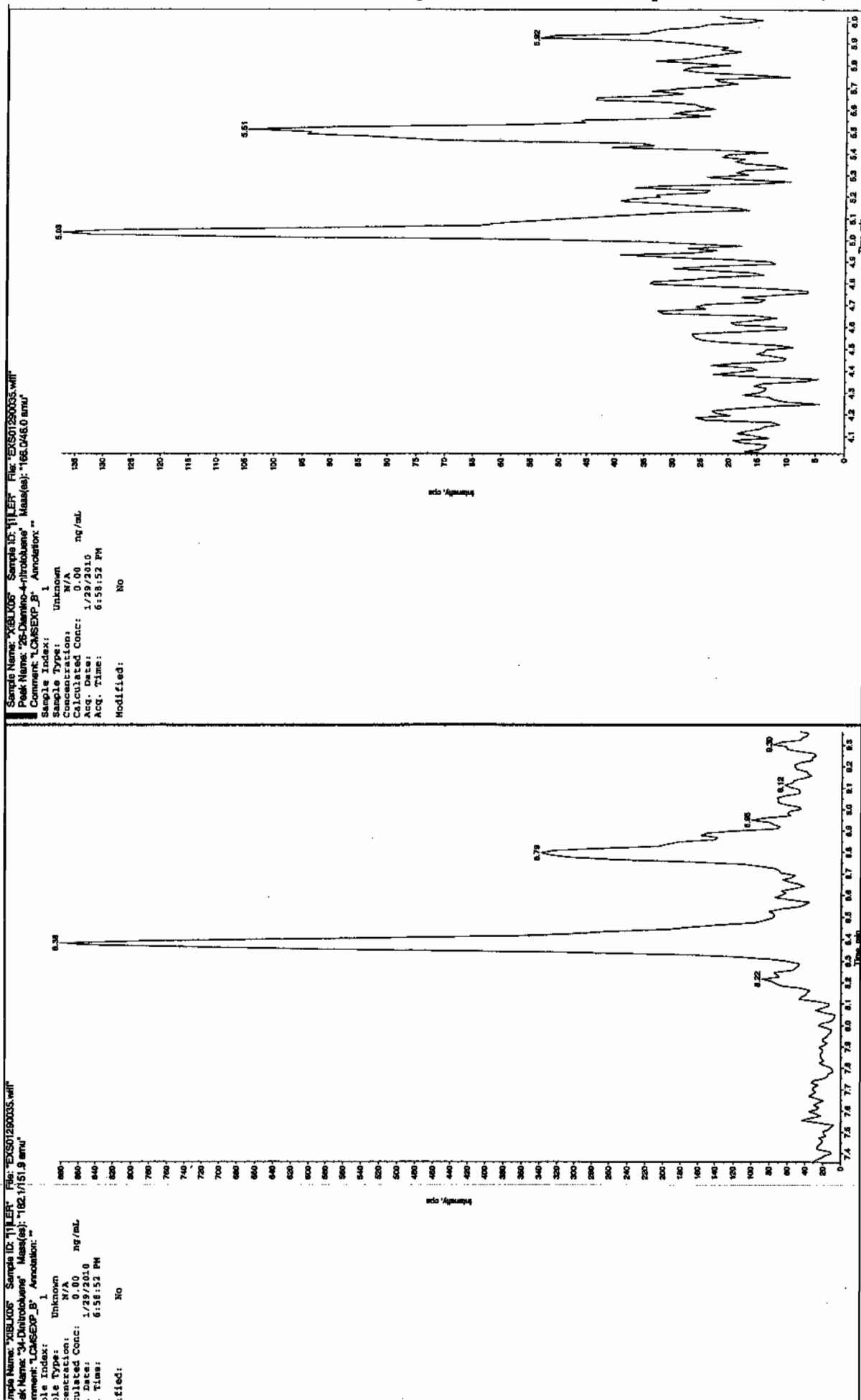
San 2/1/10



San 2/1/10

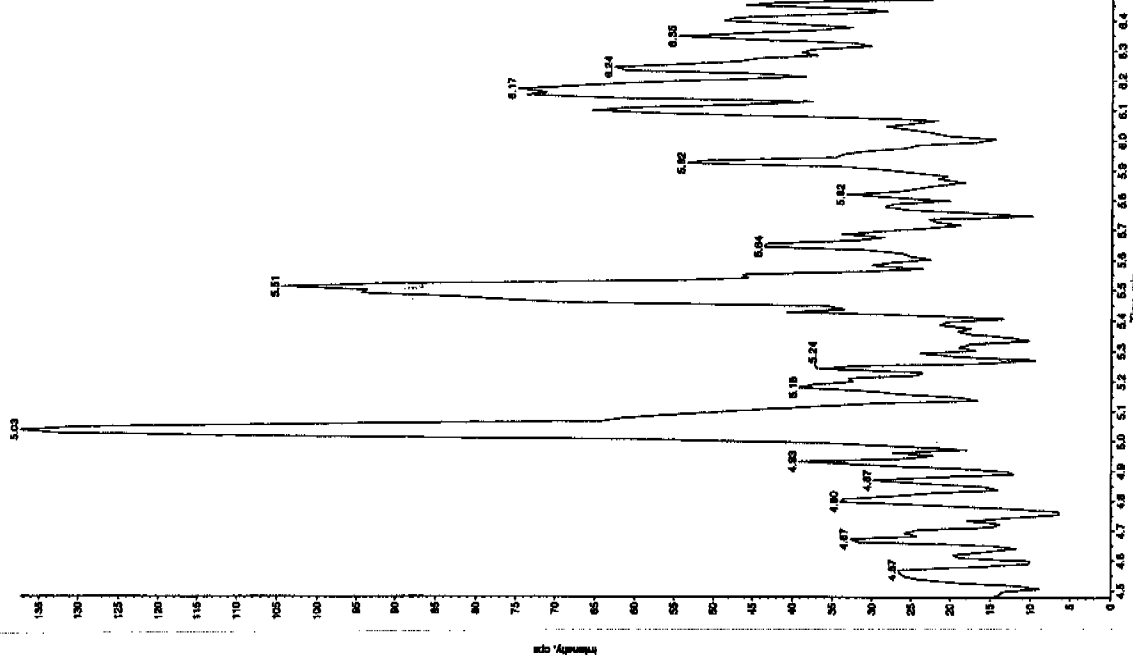


3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



Sample Name: "XBLU008" Sample ID: "11111" File: "EX501280035.wml"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

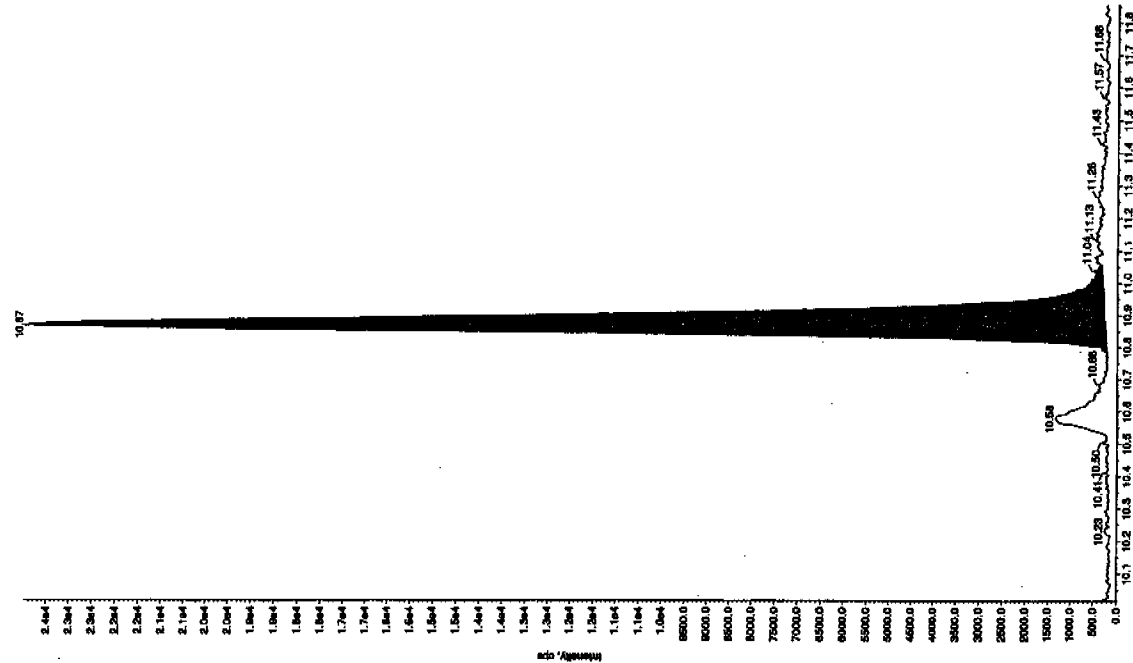
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 6:58:52 PM
 Method: No



Sample Name: "XBLU008" Sample ID: "11111" File: "EX501280035.wml"
 Peak Name: "bis(o-cresyl) phosphite" Mass(es): "368.181.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.056 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 6:58:52 PM

Method: 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: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 9.47e+004 counts
 Height: 23741.621 cps
 Start Time: 10.8 min
 End Time: 11.1 min



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): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 29-JAN-10 21:04

GEL Data File: EXS01290043.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	.453
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Star 21/10

Sample Name: "XBLX07" Sample ID: "T1LER" File: "EXS01290043.wif"

Peak Name: "ATB" Mass(es): "281.22045 amu"

Comment: "LCMSXP_B" Annotation: "1"

Sample Type: Unknown

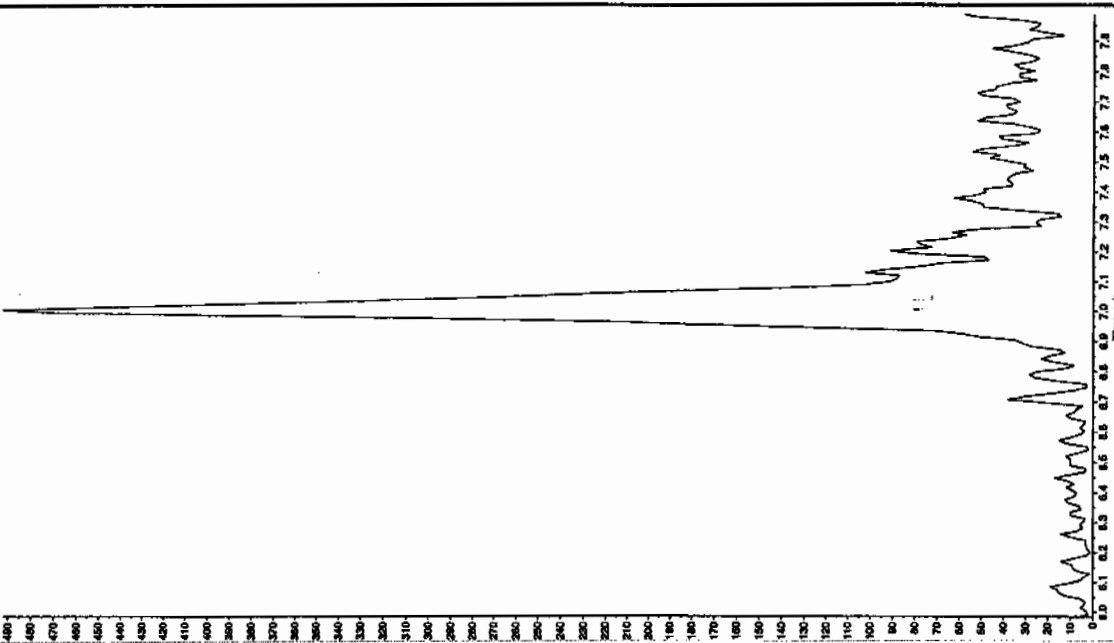
Concentration: 0.00 ng/mL

Acq. Date: 1/29/2010

Acq. Time: 9:04:27 PM

Modified: No

Intensity, cps



Sample Name: "XBLX07" Sample ID: "T1LER" File: "EXS01290043.wif"

Peak Name: "3S-Derivatized" Mass(es): "182.04630 amu"

Comment: "LCMSXP_B" Annotation: "1"

Sample Type: Unknown

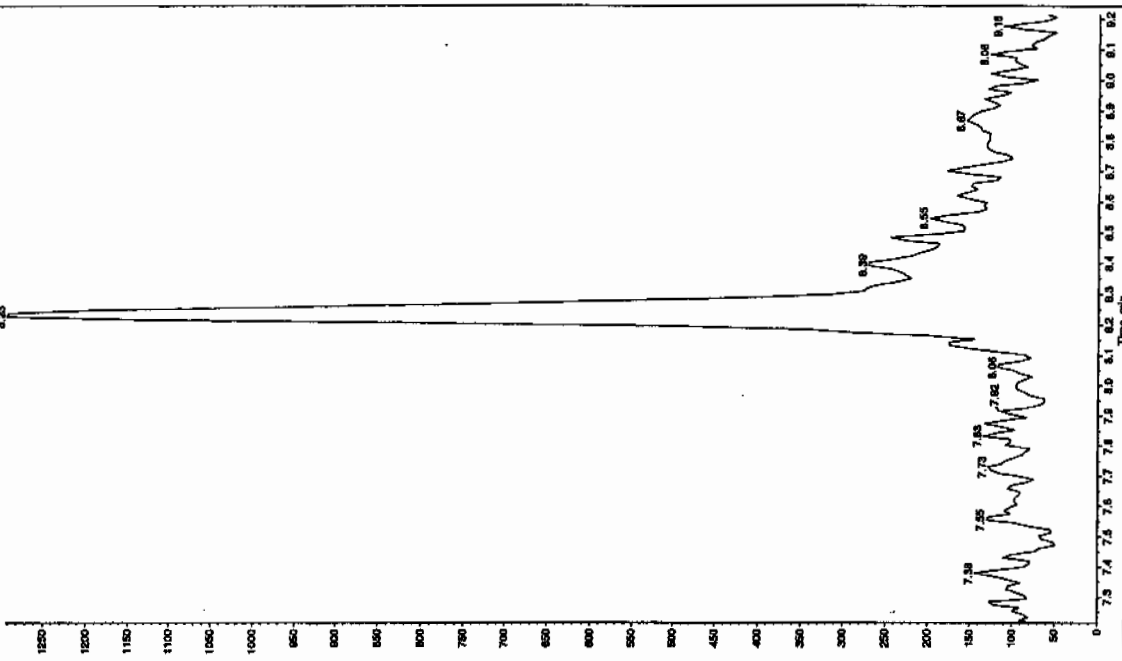
Concentration: 0.00 ng/mL

Acq. Date: 1/29/2010

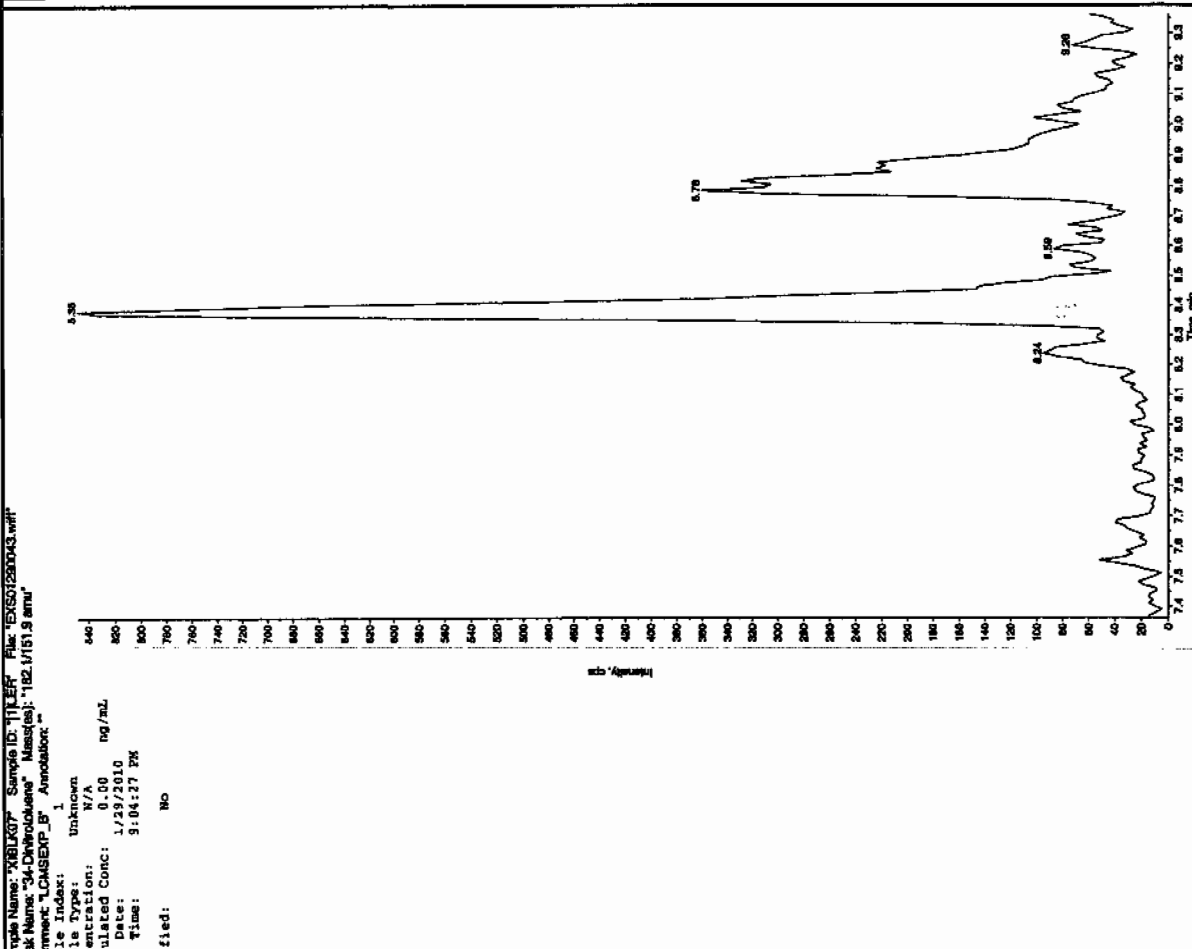
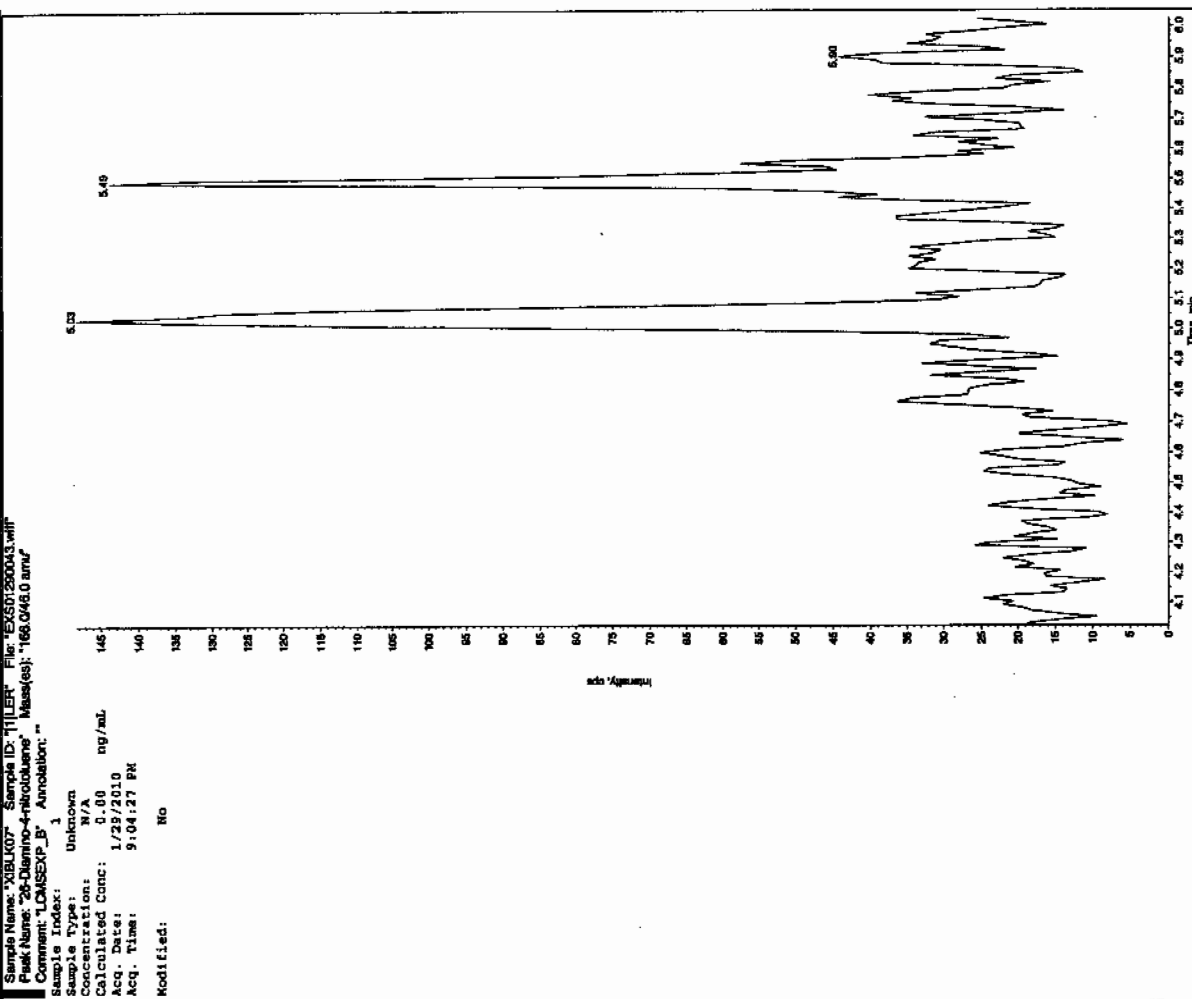
Acq. Time: 9:04:27 PM

Modified: No

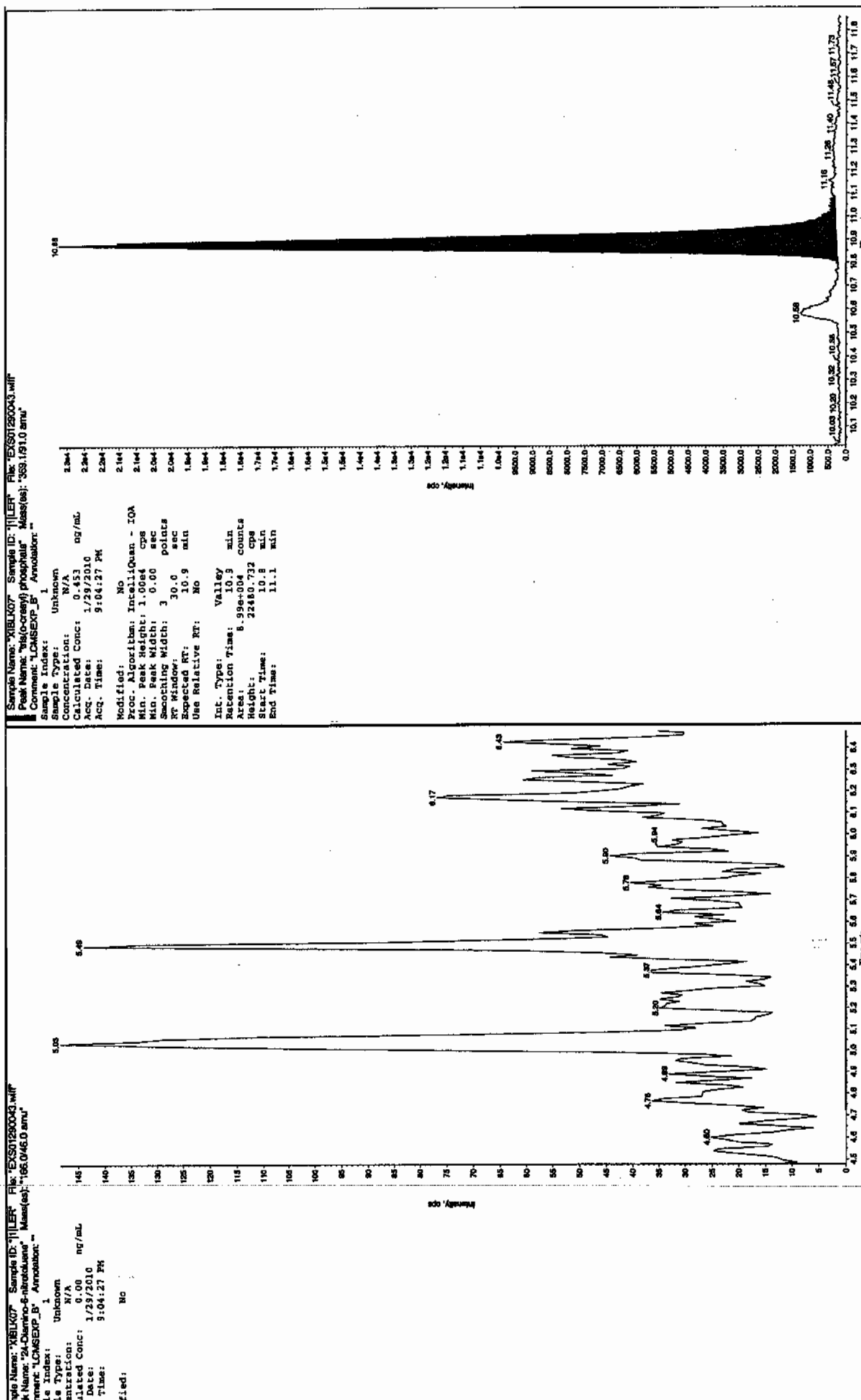
Intensity, cps



Star 21/10



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): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 30-JAN-10 00:28

GEL Data File: EXS01290056.wiff

Instrument ID: LCMSMS

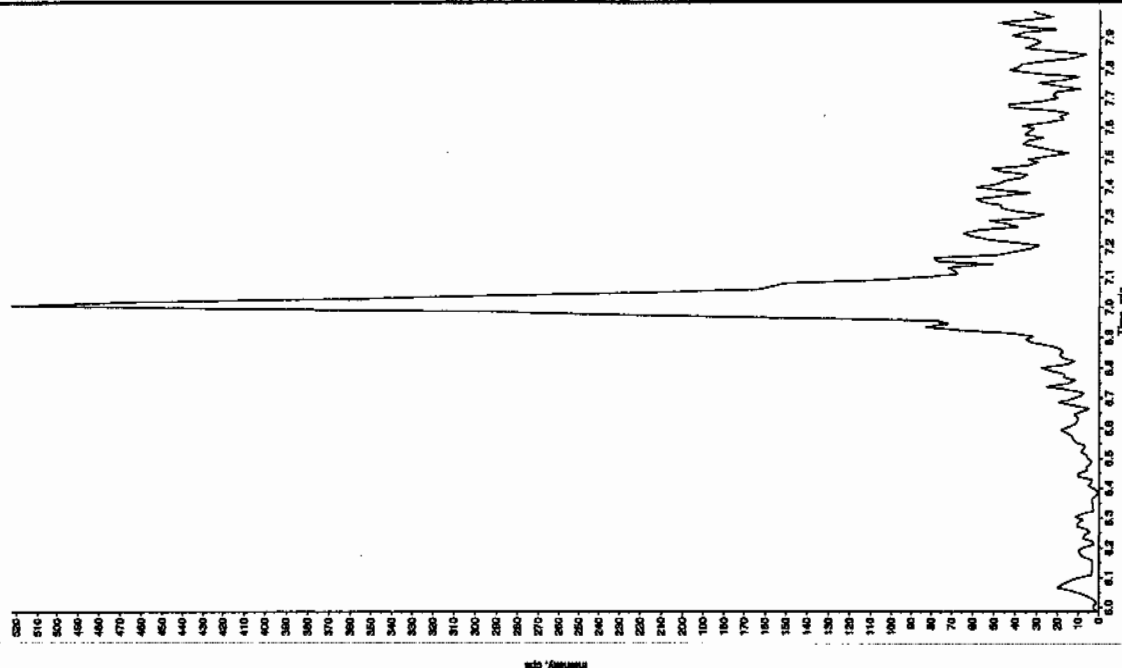
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.287
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Car 2110

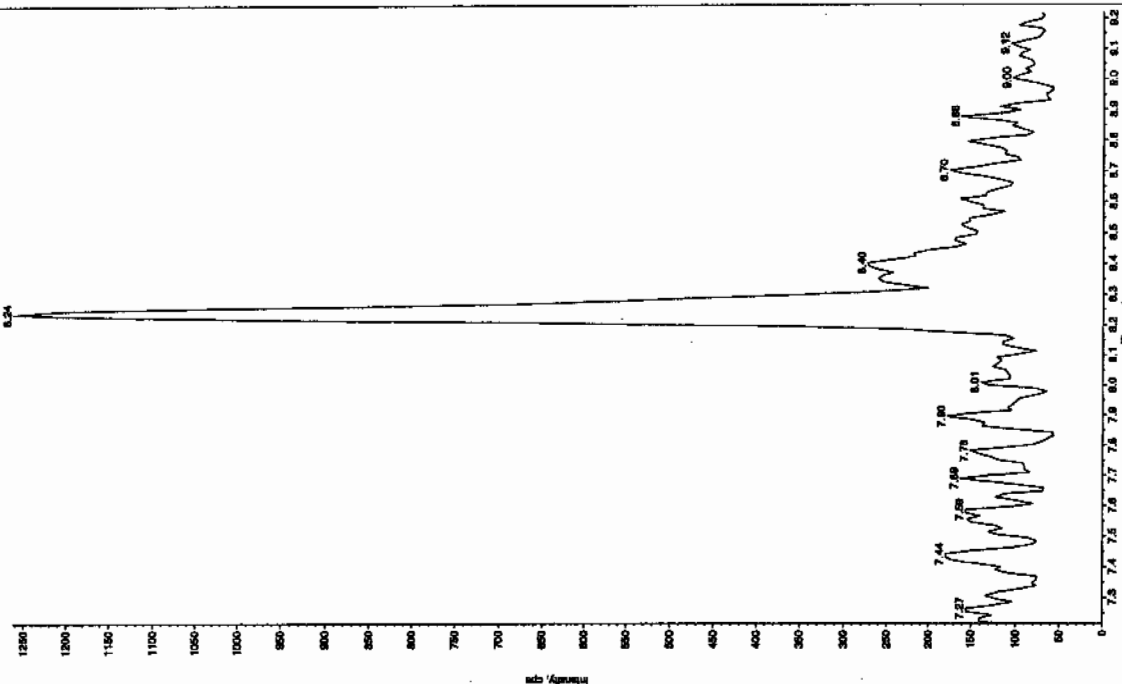
Sample Name: 'XBL008' Sample ID: '1111EF' File: 'EXSD1260056.wif'
 Peak Name: 'TATV' Mass(es): '257.2204.9 amu'
 Comment: 'LCMSEXP_B' Annotation: '-'

Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 1/30/2010
 Time: 12:28:43 AM
 Modified: No



Sample Name: 'XBL008' Sample ID: '1111EF' File: 'EXSD1260056.wif'
 Peak Name: 'TATV' Mass(es): '182.046.0 amu'
 Comment: 'LCMSEXP_B' Annotation: '-'

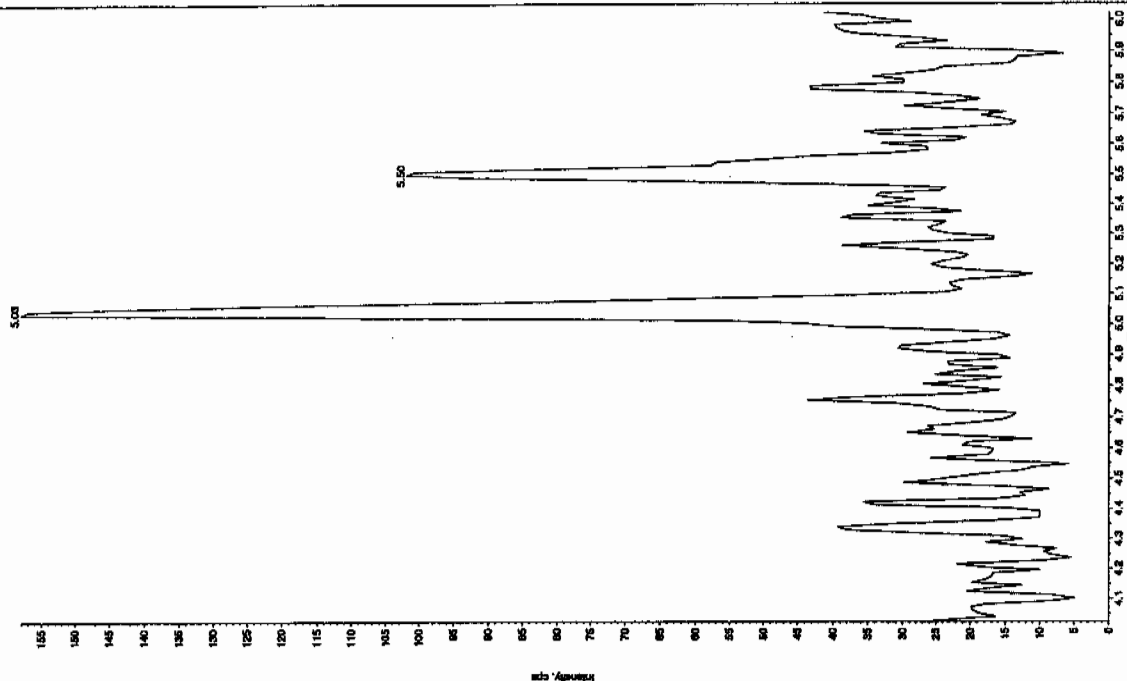
Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 1/30/2010
 Time: 12:28:43 AM
 Modified: No



Car 2110

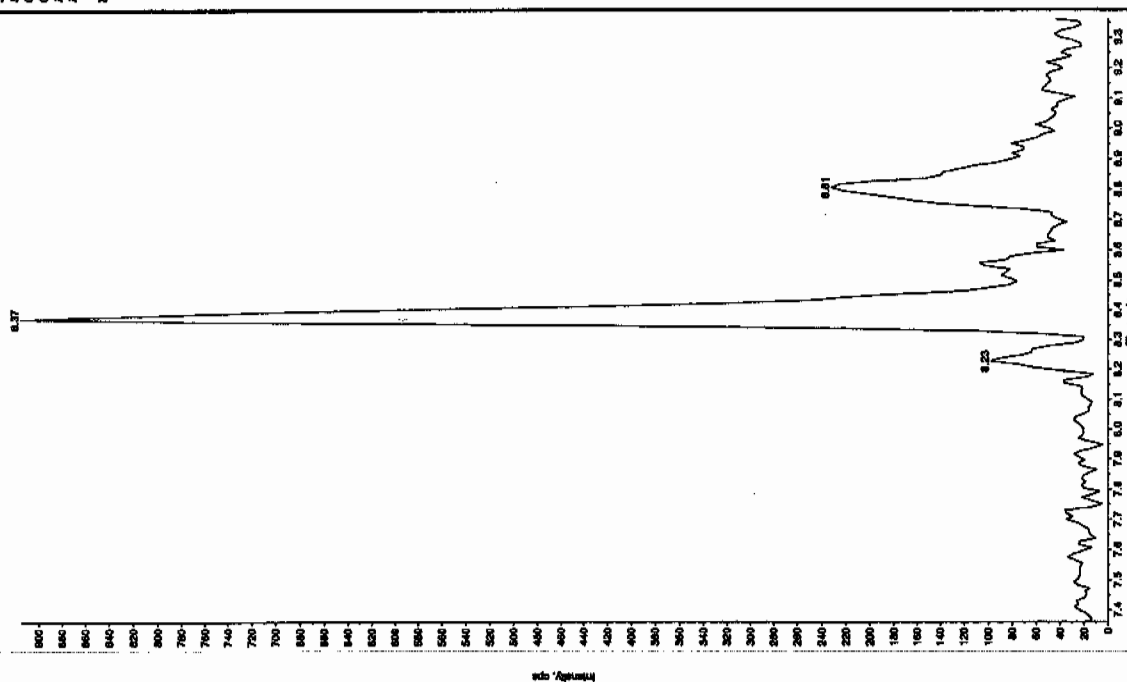
Sample Name: "XBLK08" Sample ID: "11111" File: "EX50120058.wif"
 Peak Name: "25-Dienol-4-nitrobenzyl" Mass(es): "168.046.0 amu"
 Comment: "LCMSXP_F" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 12:28:43 AM
 Modified: No

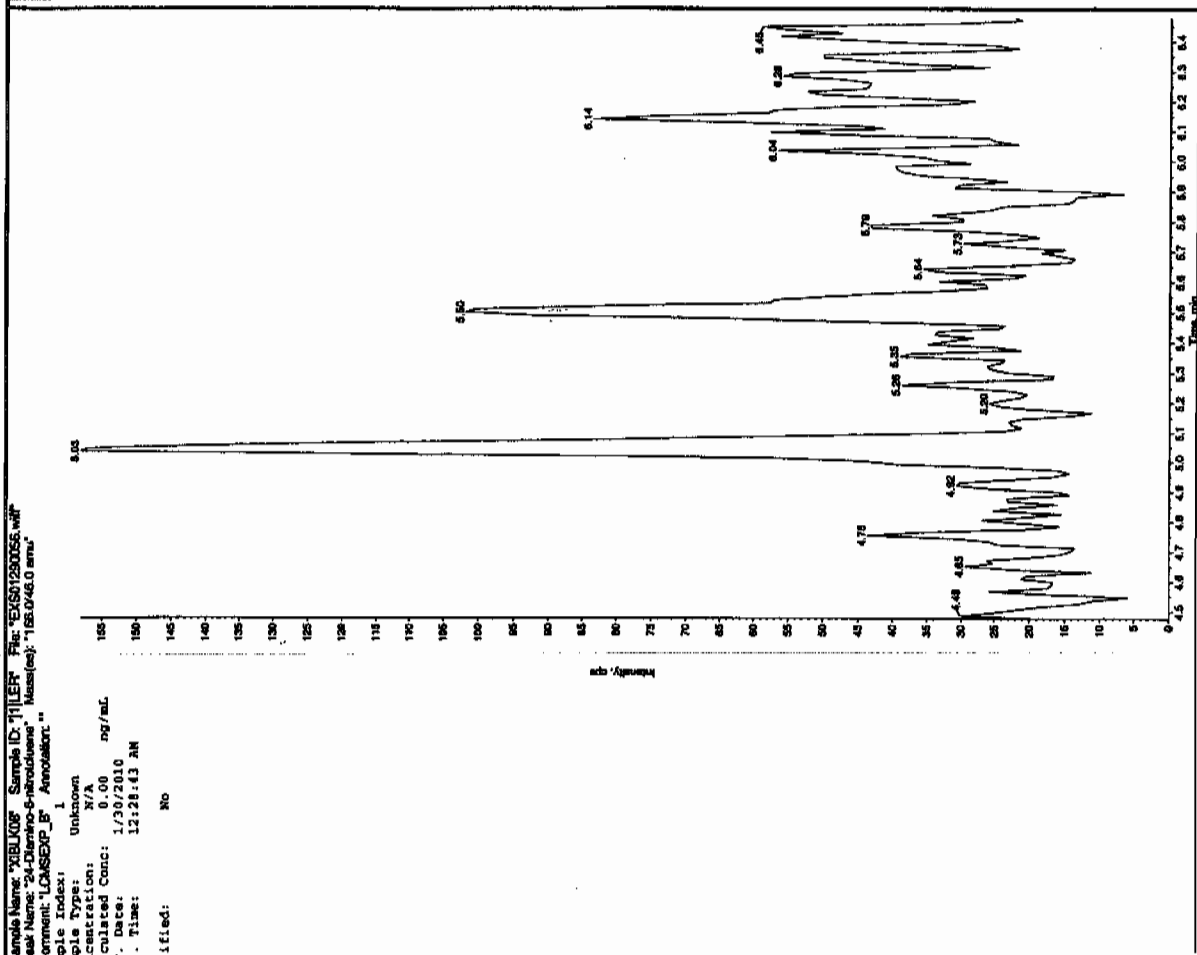
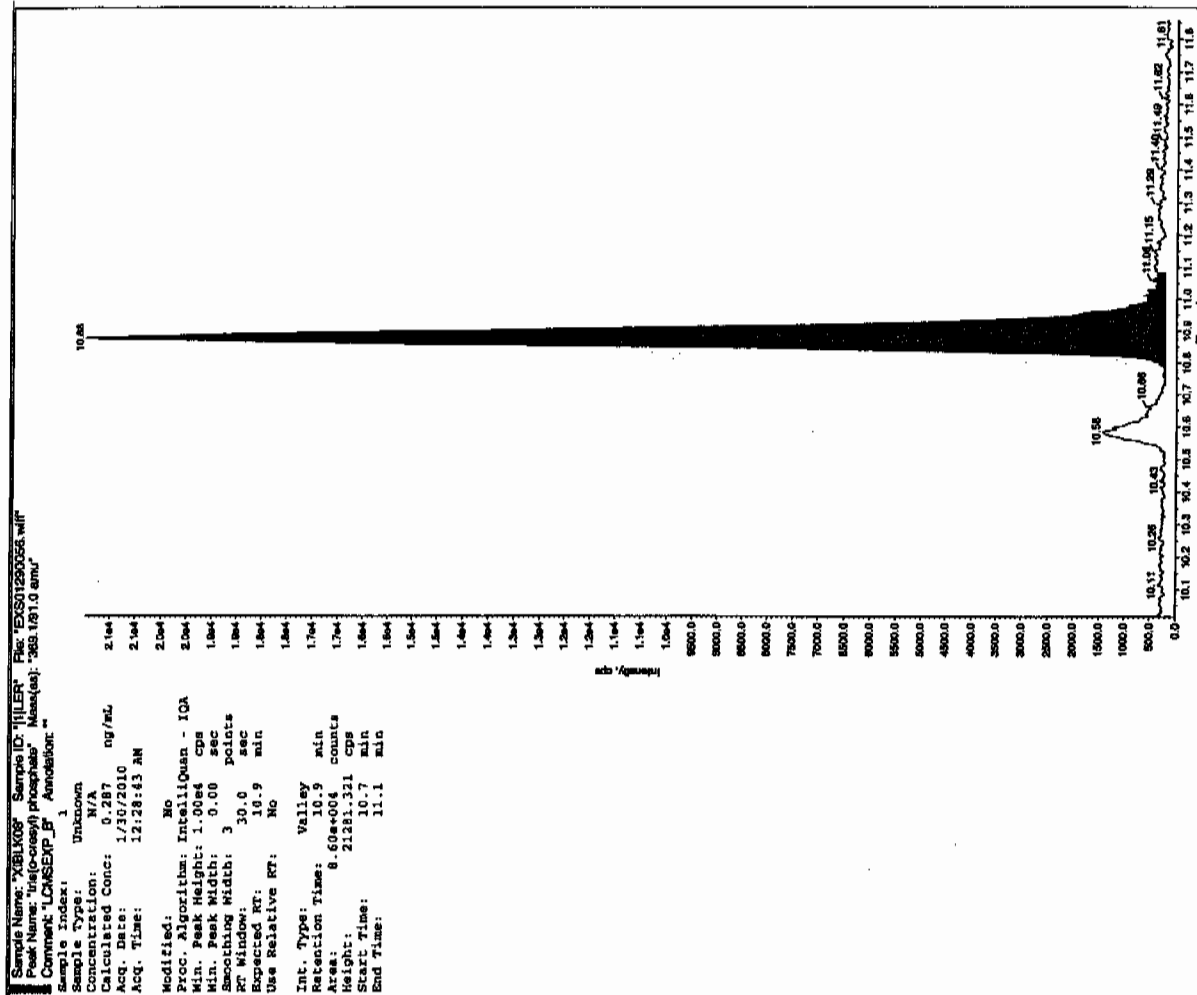


Sample Name: "XBLK08" Sample ID: "11111" File: "EX50120058.wif"
 Peak Name: "34-Dienol-4-nitrobenzyl" Mass(es): "162.1715.9 amu"
 Comment: "LCMSXP_F" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 12:28:43 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): 10-1301

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 30-JAN-10 03:37

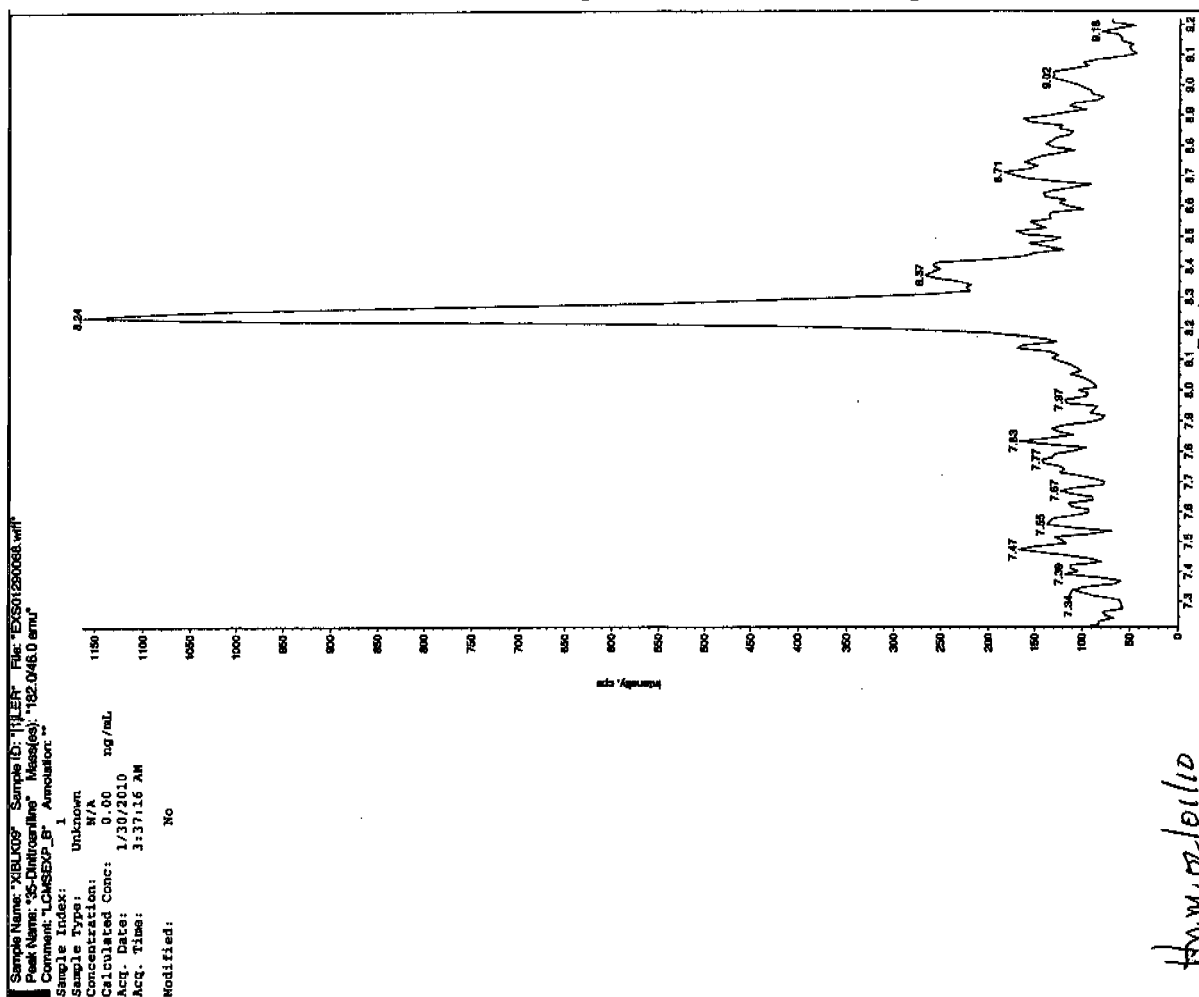
GEL Data File: EXS01290068.wiff

Instrument ID: LCMSMS

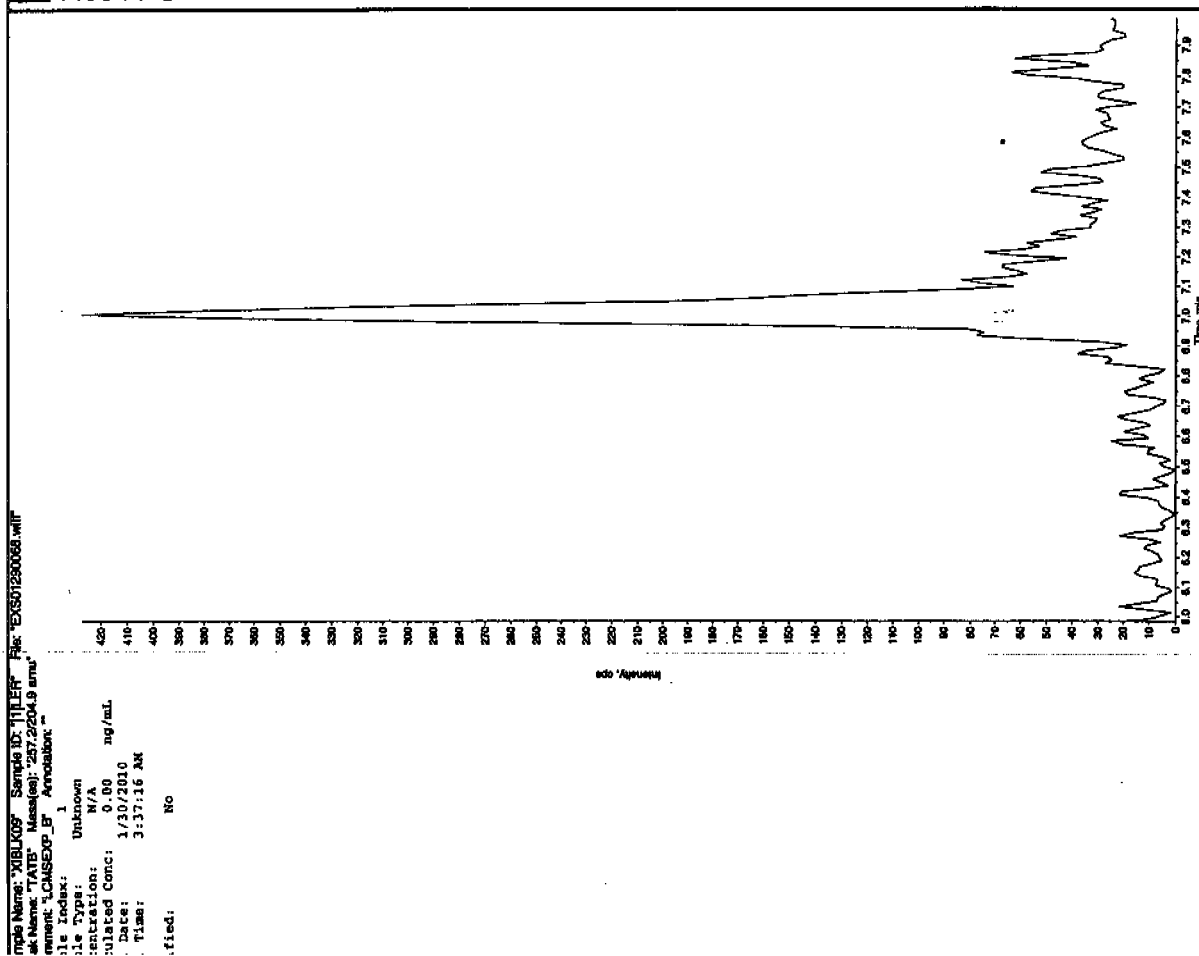
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	.433
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

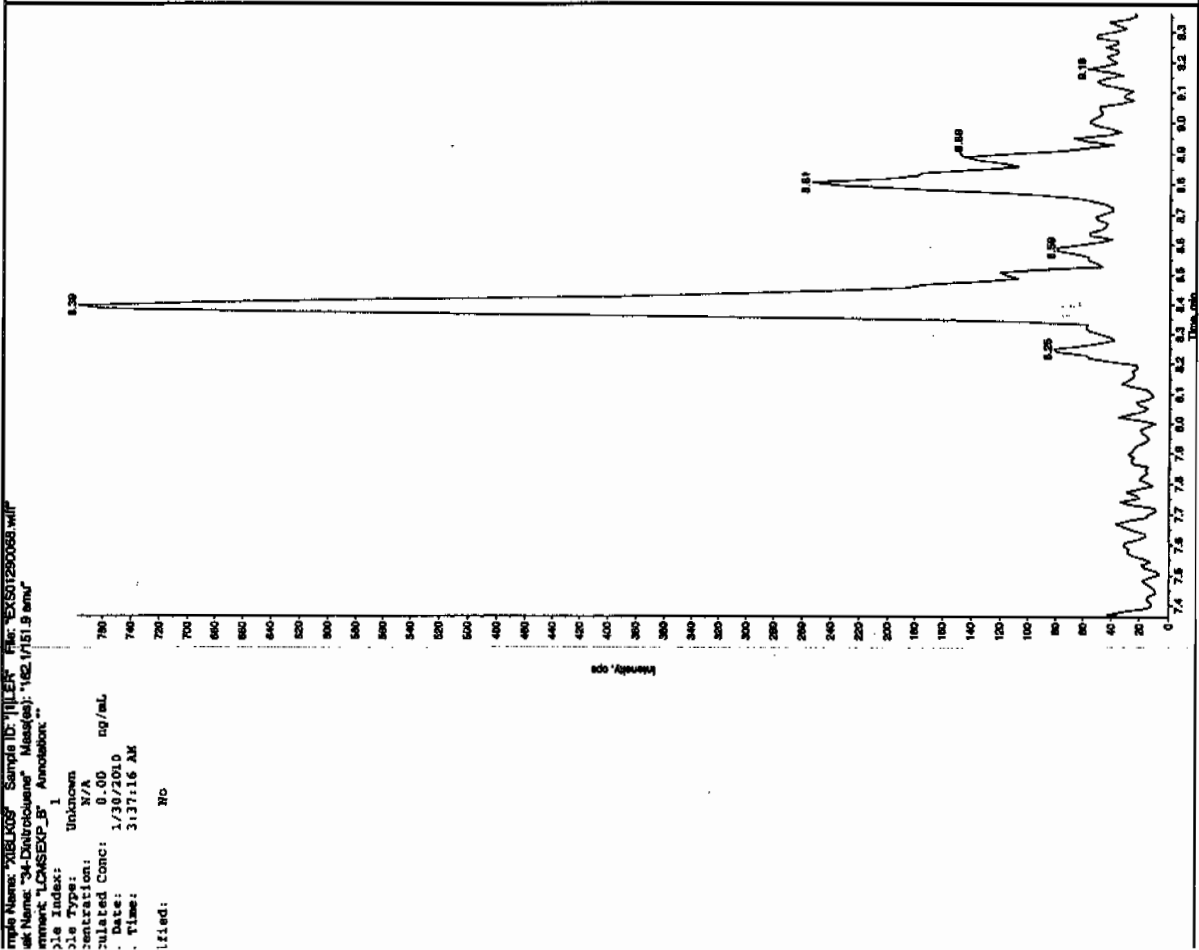
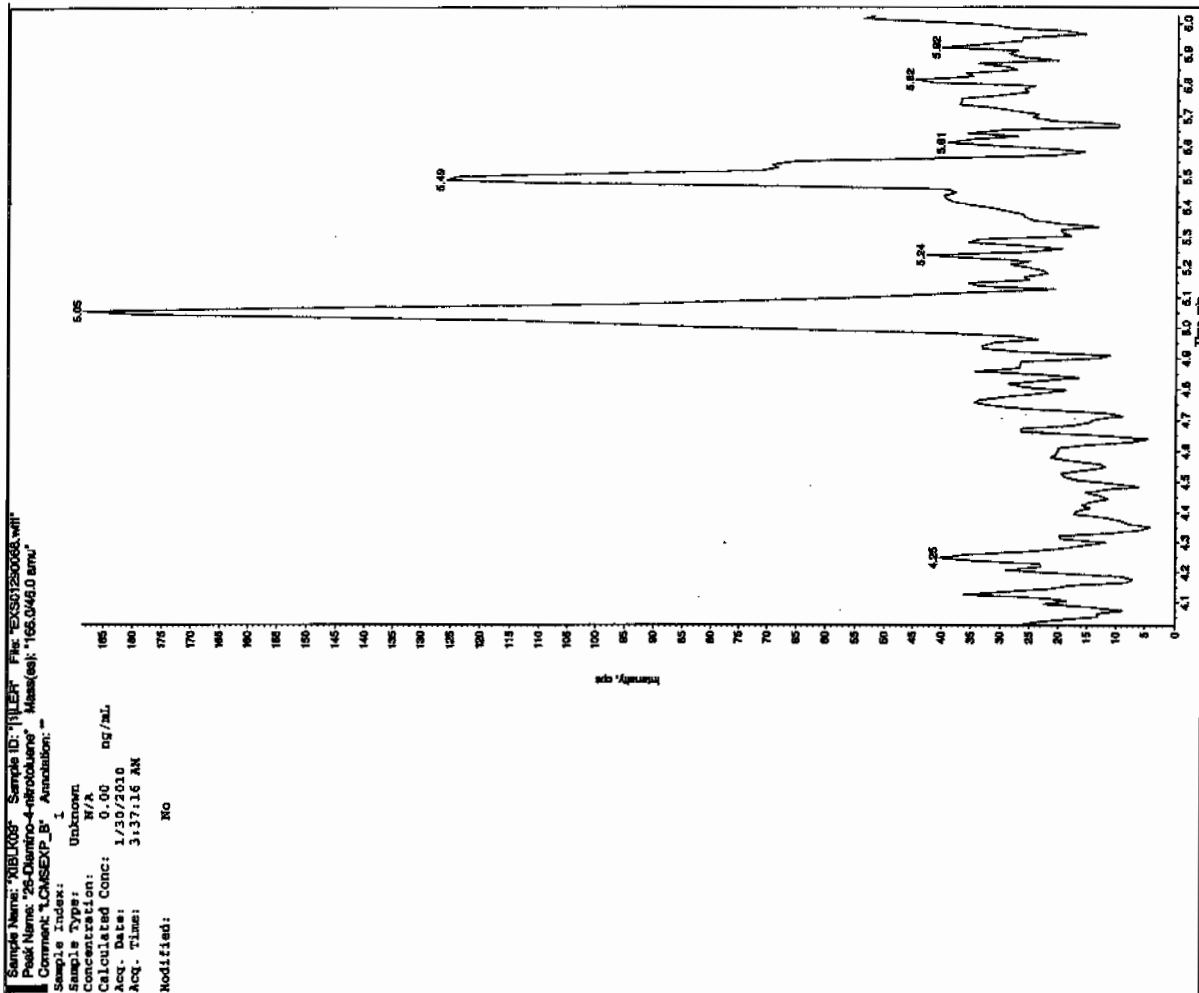
See 11110



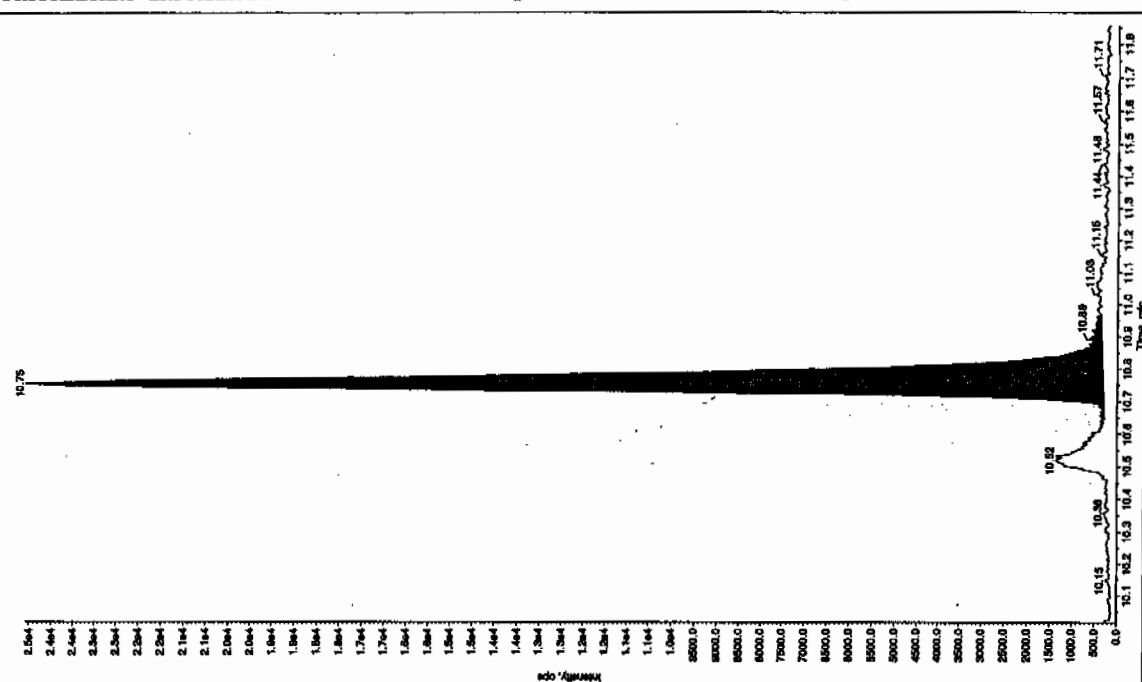
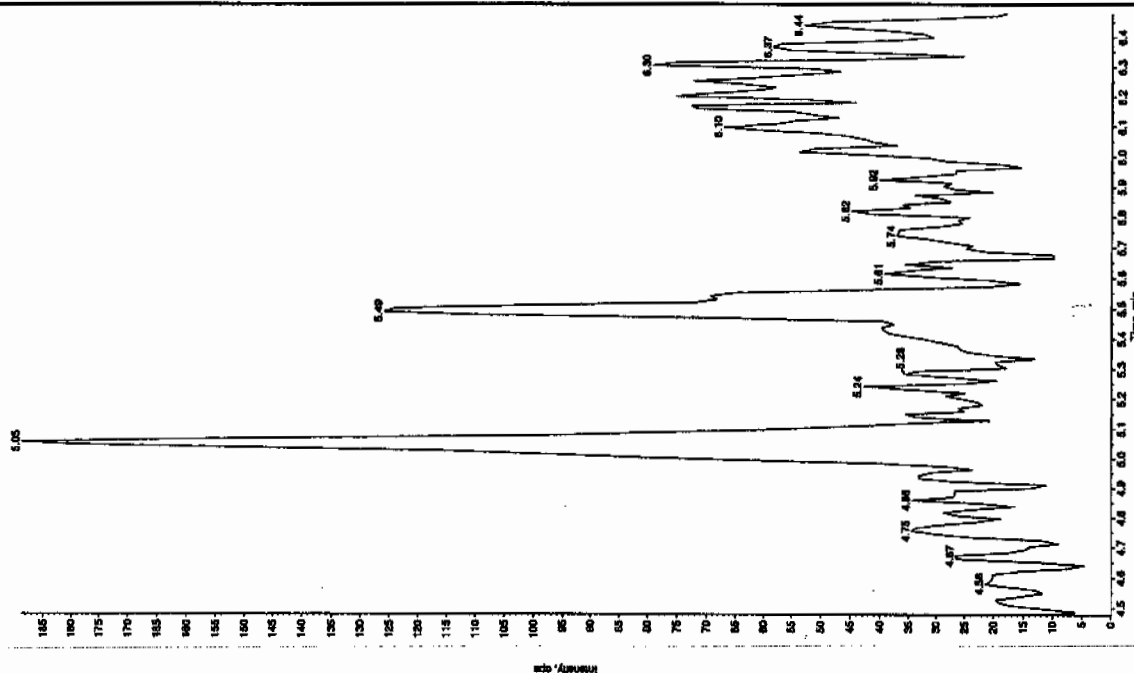
See 11110



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



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

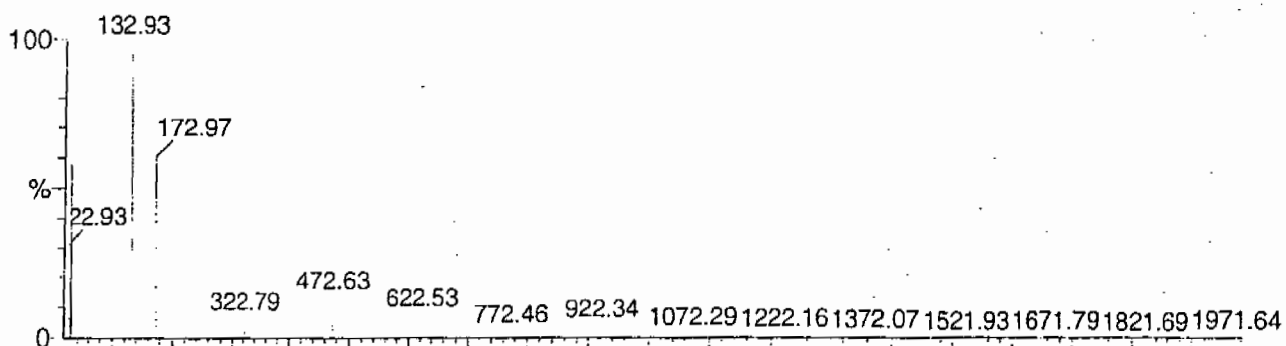
Calibration Report - MS1 Static

Page 1 of 1

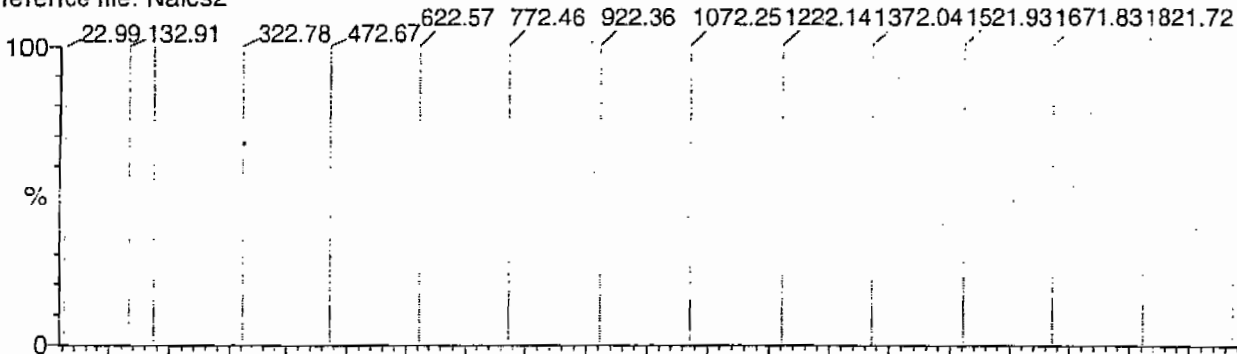
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

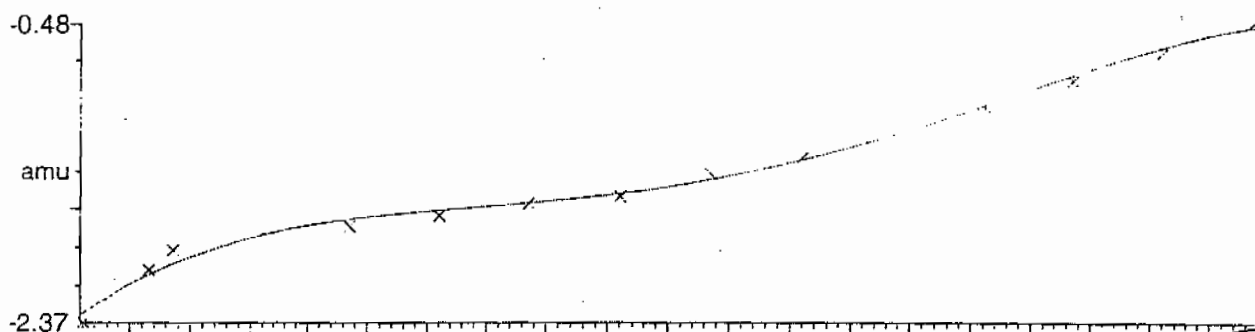
15 matches of 15 tested references



Reference file: Naics2

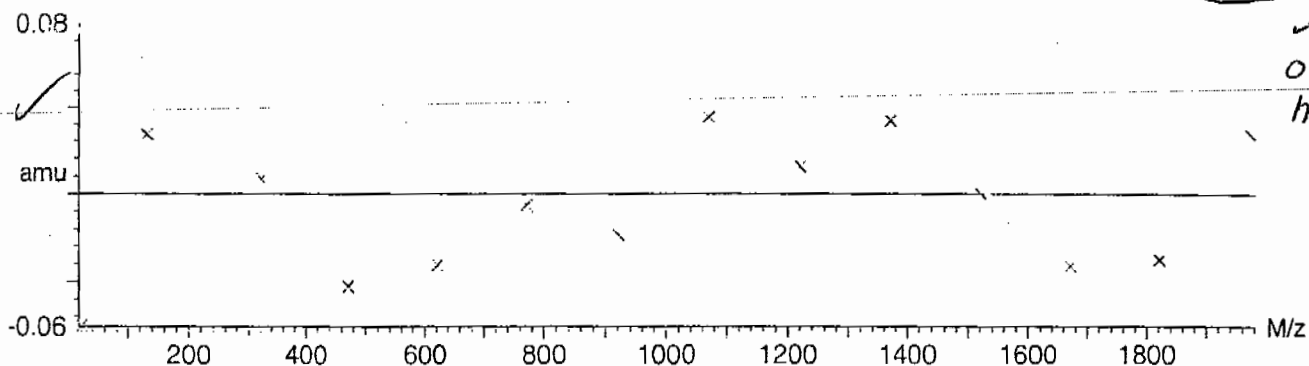


Mass difference (Raw - Ref mass)



Residuals

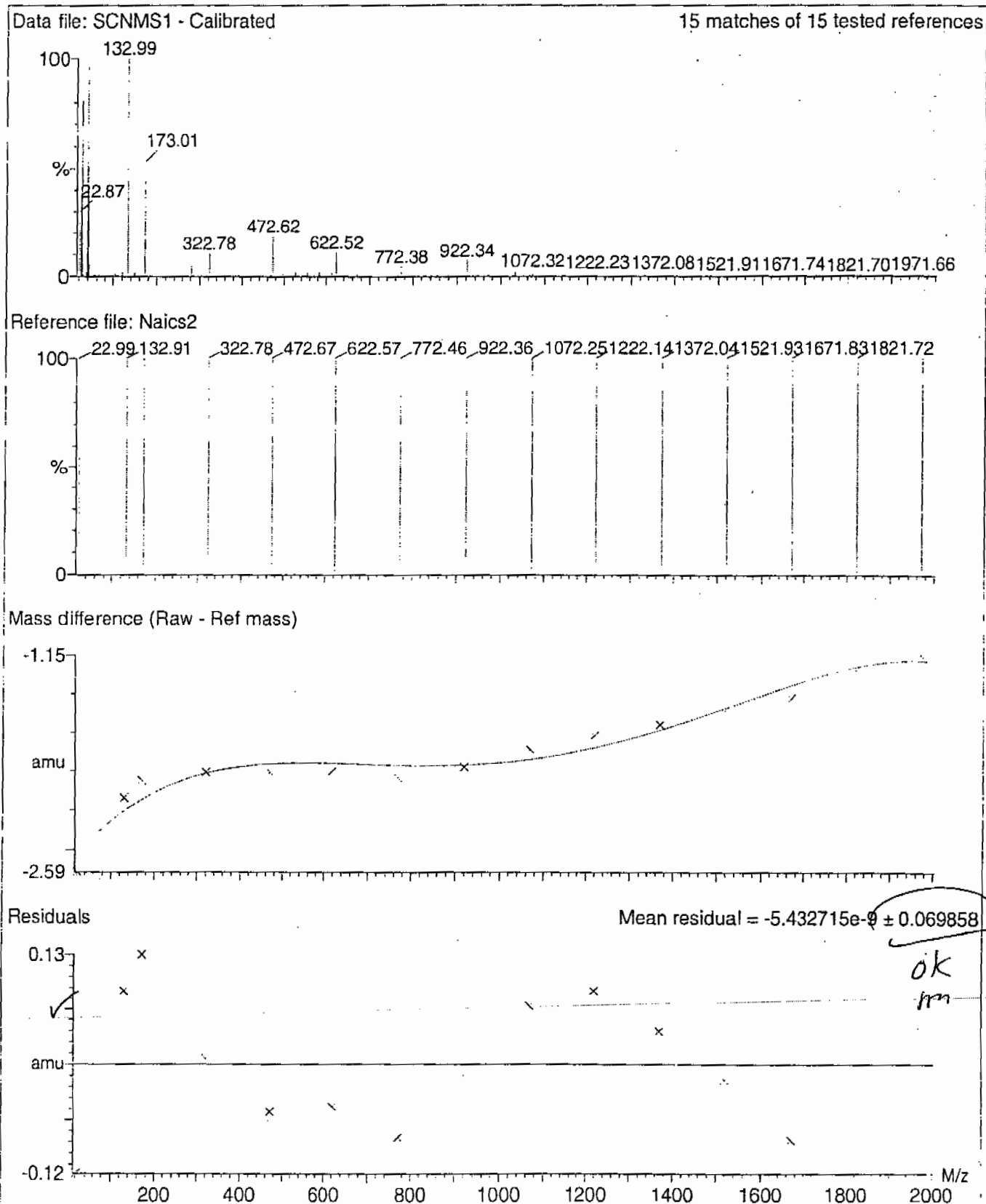
Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$



Calibration Report - MS1 Scanning

Page 1 of 1

Printed: Fri Aug 25 10:51:06 2006



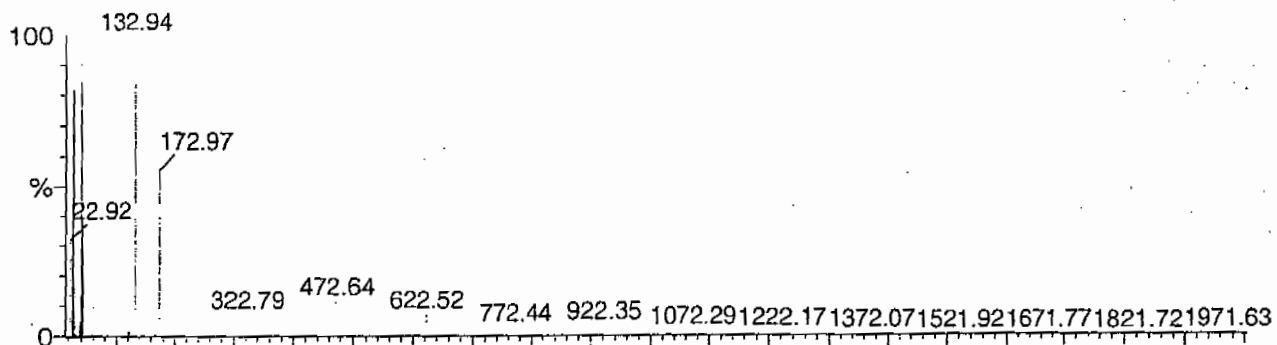
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

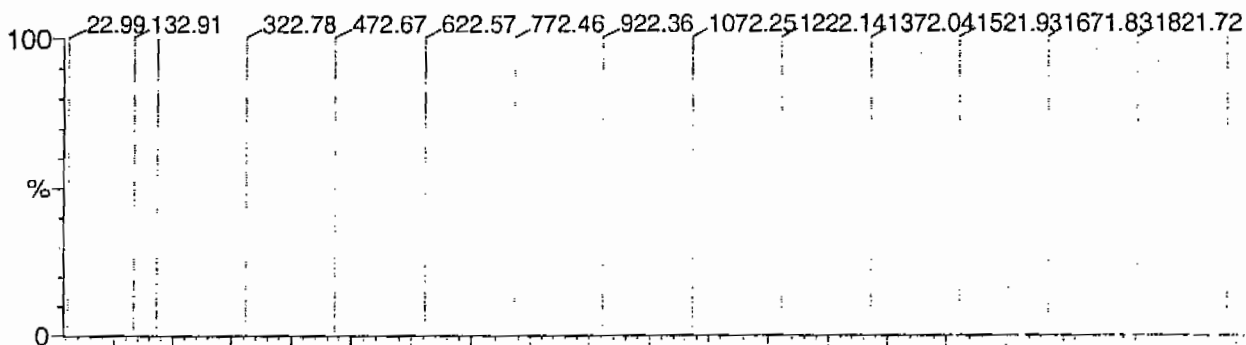
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

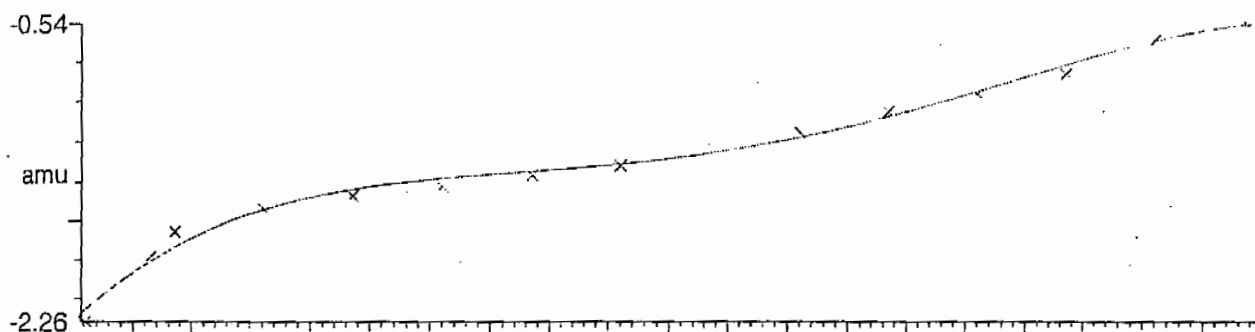
15 matches of 15 tested references



Reference file: Naics2

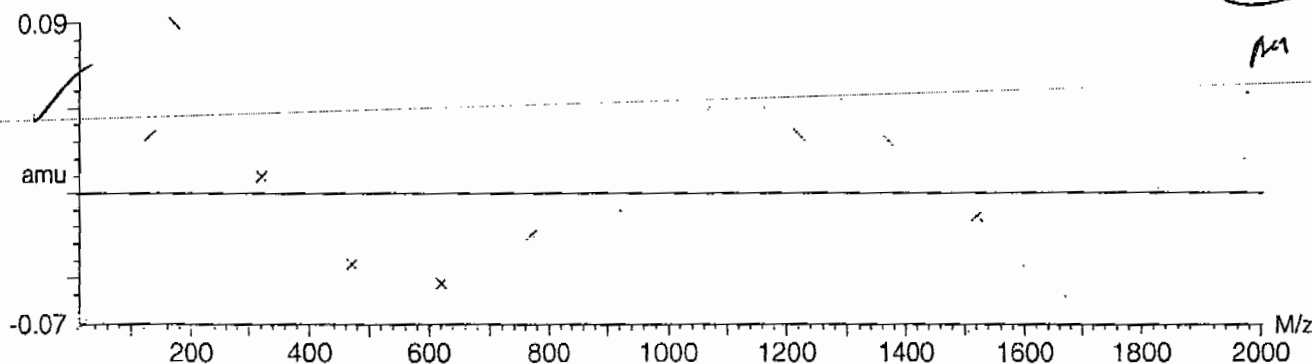


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639e-9 \pm 0.040487$



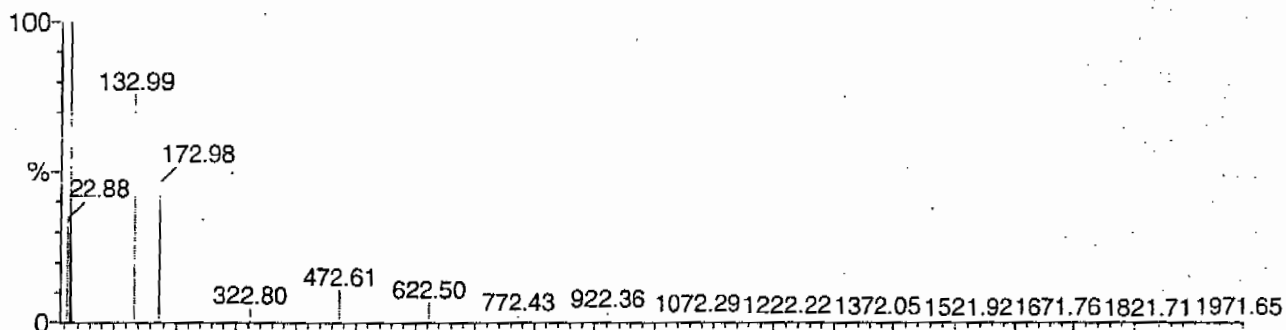
Calibration Report - MS2 Static

Page 1 of 1

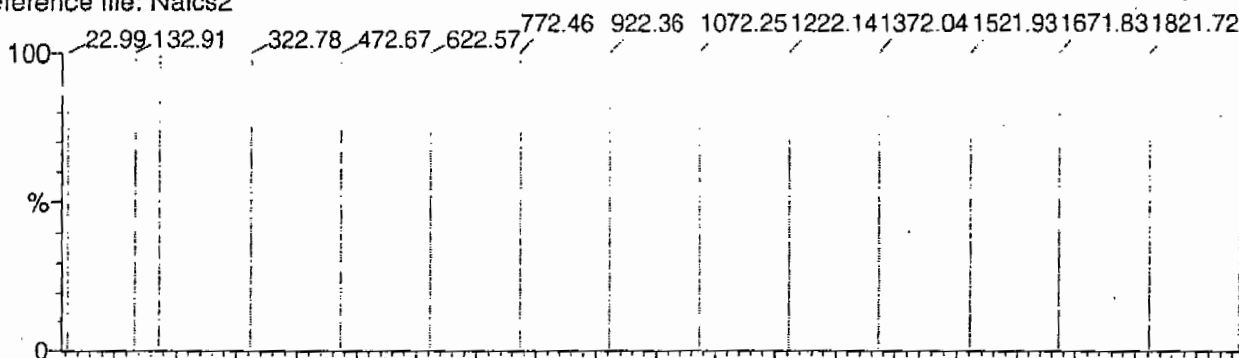
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

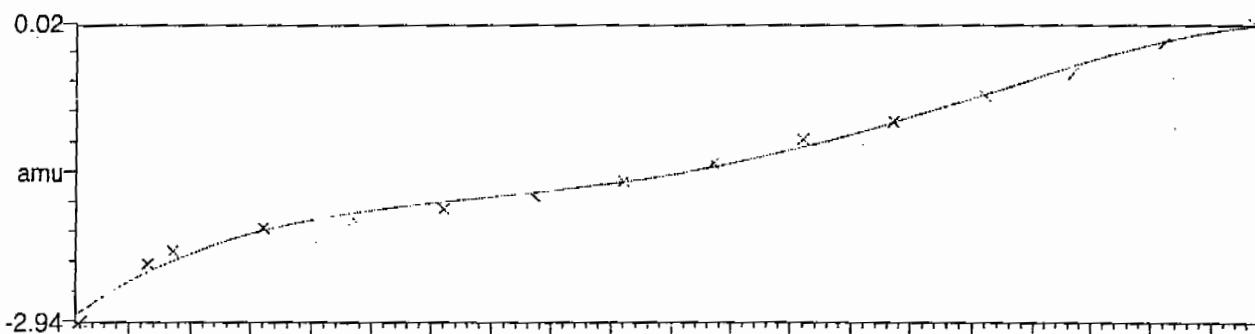
15 matches of 15 tested references



Reference file: Naics2

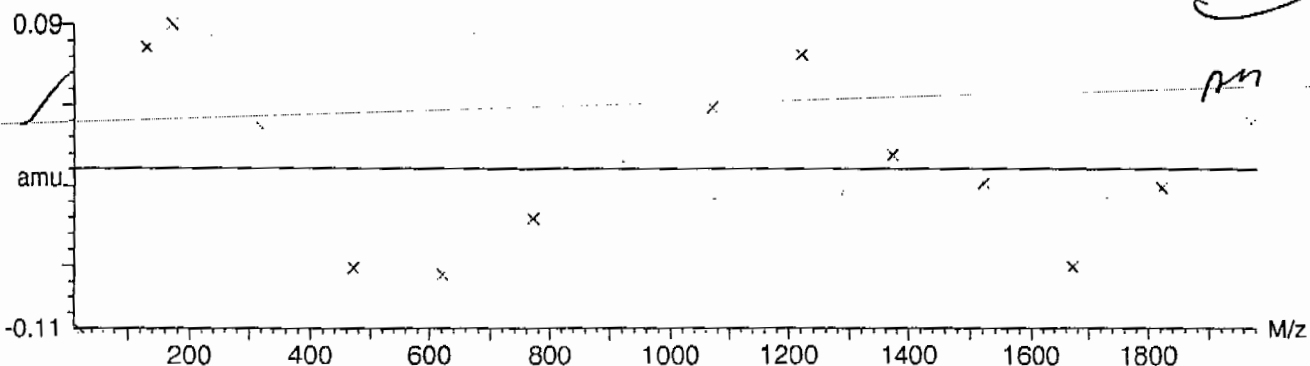


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910 \times 10^{-9} \pm 0.057803$



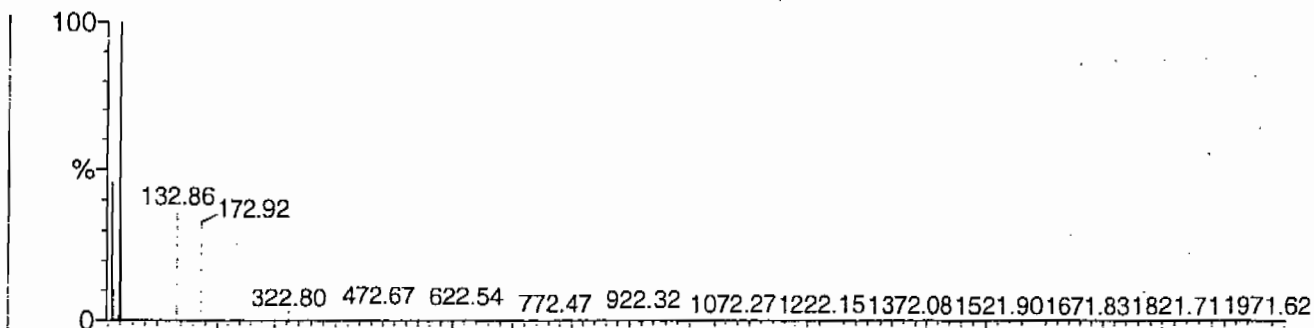
Calibration Report - MS2 Scanning

Page 1 of 1

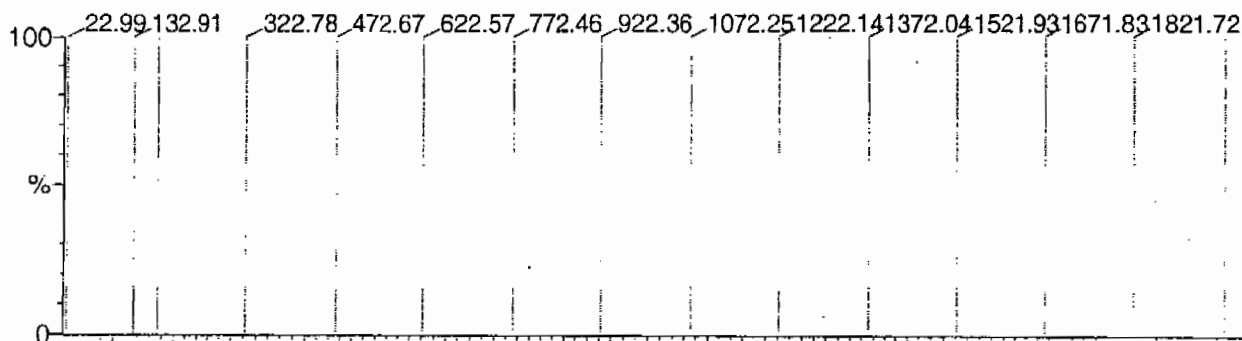
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

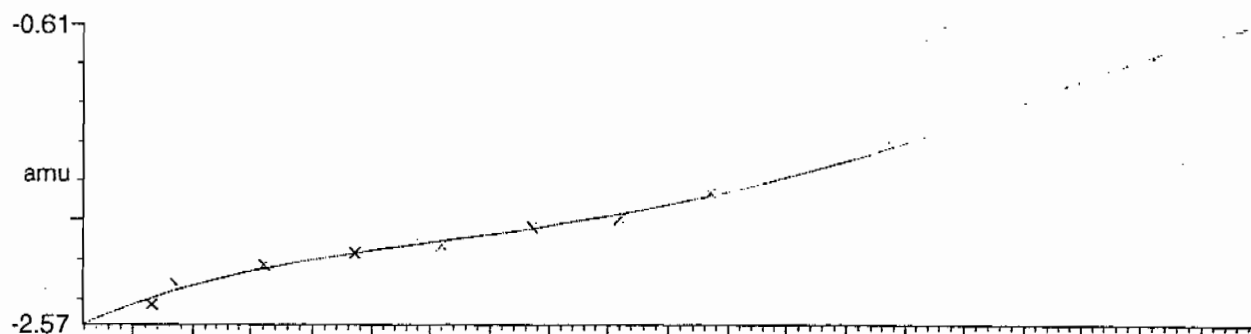
14 matches of 15 tested references



Reference file: Naics2

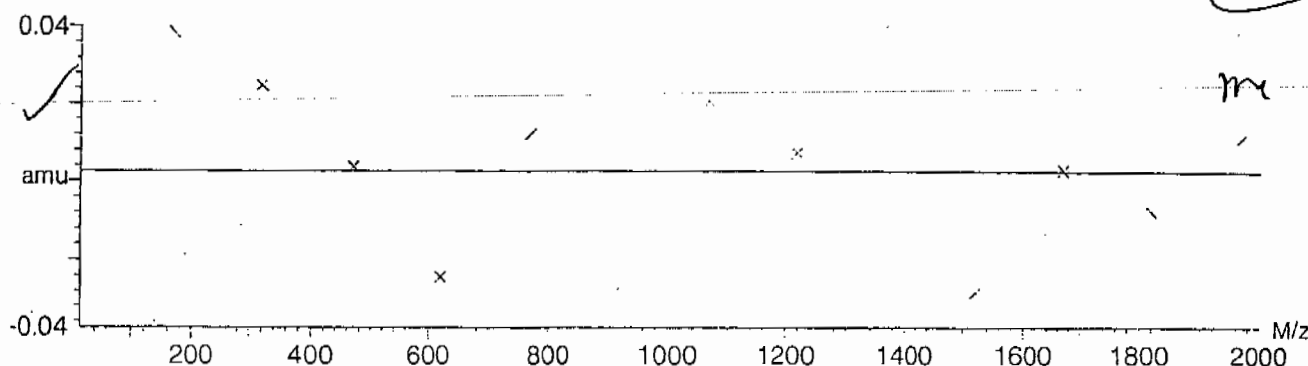


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502 \times 10^{-9} \pm 0.025622$



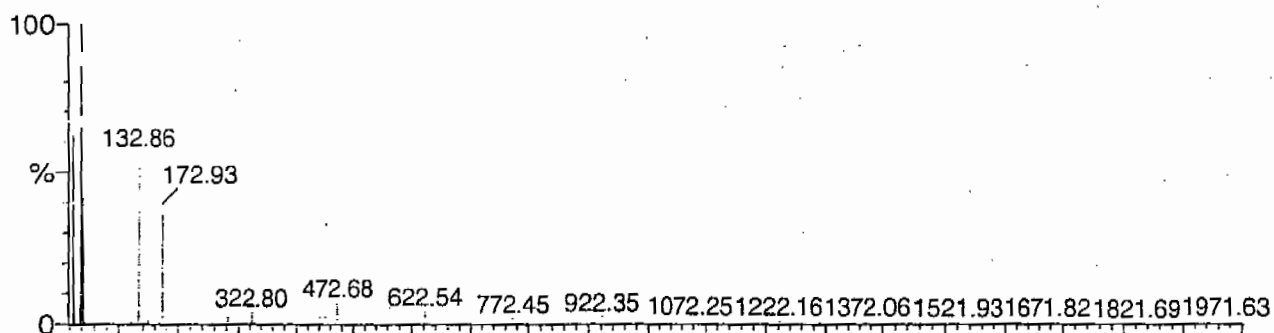
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

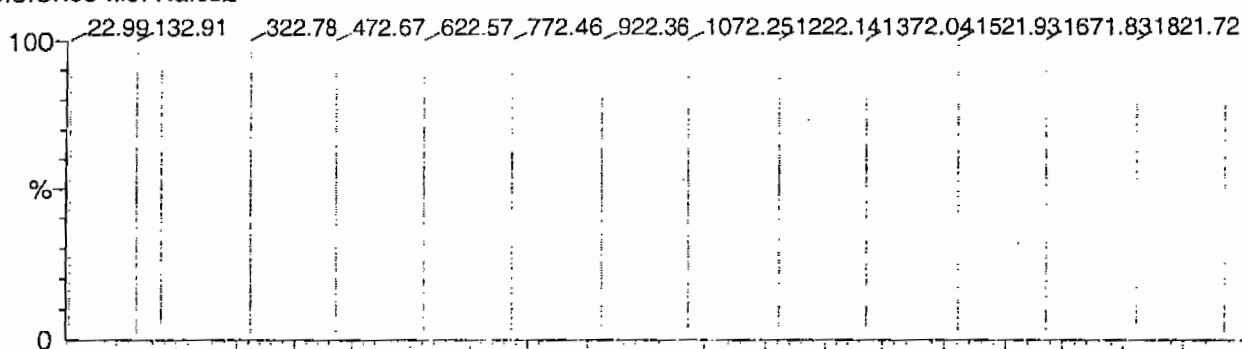
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

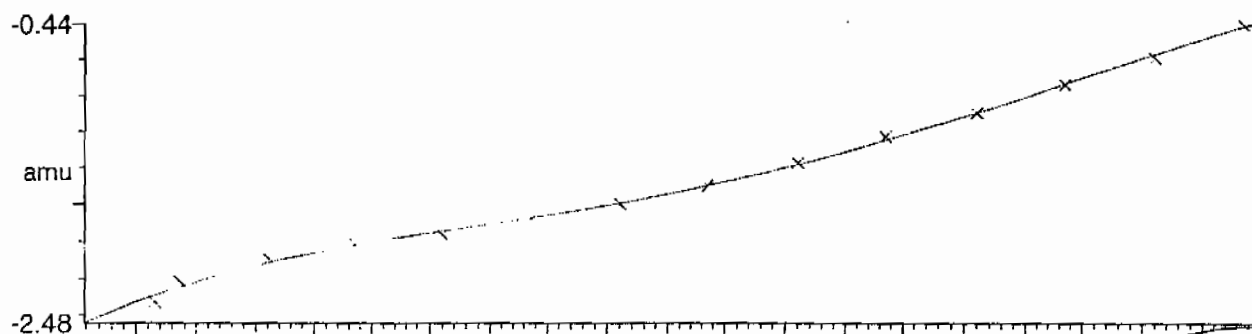
14 matches of 15 tested references



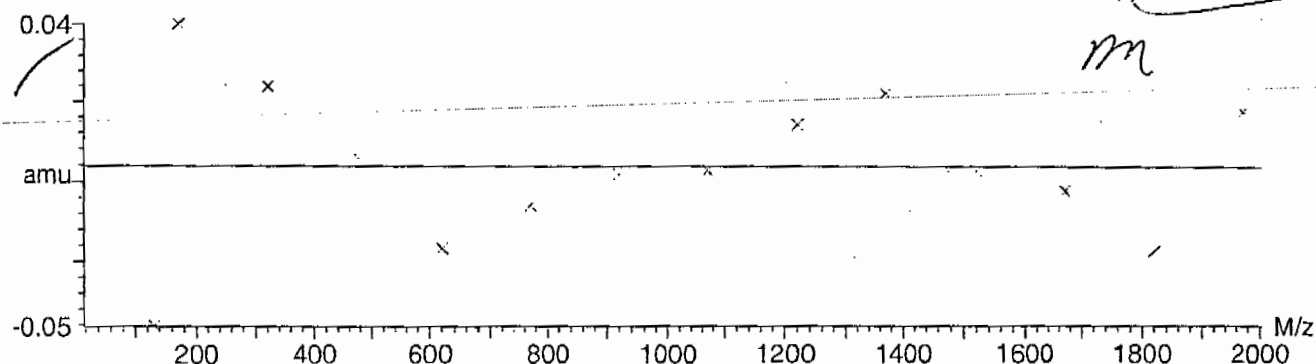
Reference file: Naics2



Mass difference (Raw - Ref mass)



Residuals

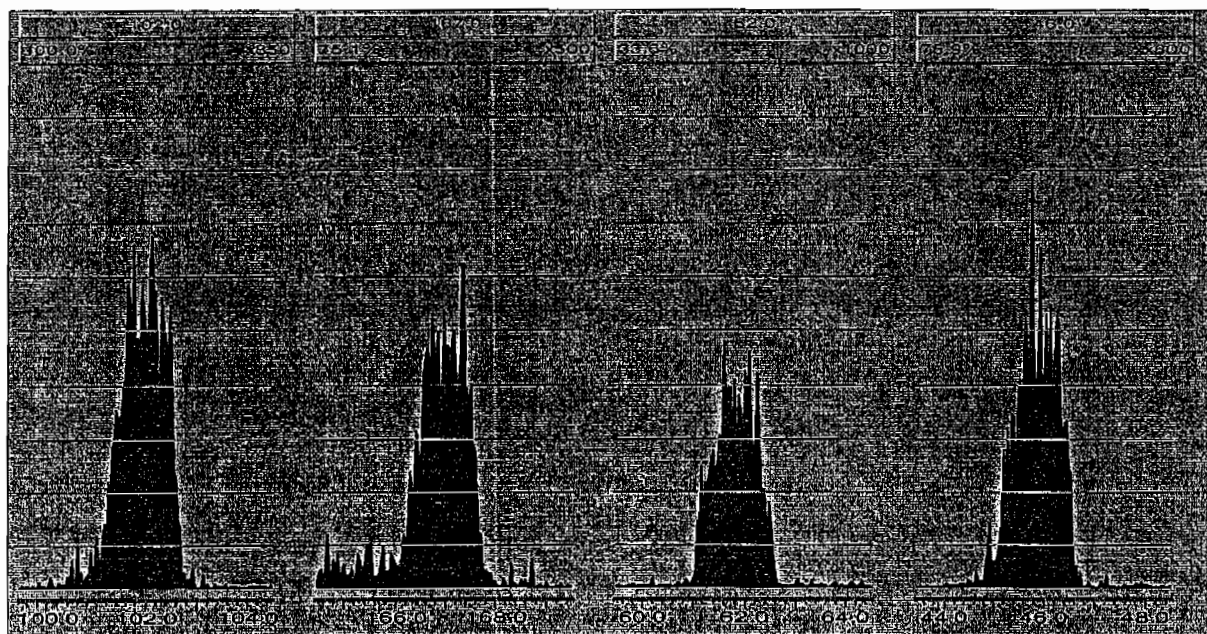


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PROVACQ\UDB\explosives04.IPR

Printed : Wed Feb 03 10:07:13 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

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) #
			3713.768	12.165	21215.283	17.596
Upper Limit			4827.8984	12.665	27579.8679	18.096
Lower Limit			2599.6376	11.665	14850.6981	17.096
MB for batch 944241	05-feb-10 20:14	EXP0203110a	3441.85	12.139	19662.5	17.574
LCS for batch 944241	05-feb-10 20:43	EXP0203111a	3646.55	12.137	20987.9	17.576
RE15-10-7194	05-feb-10 21:13	EXP0203112a	3260.23	12.136	17825.2	17.576
RE15-10-7194(245099001MS)	05-feb-10 21:42	EXP0203113a	3640.77	12.137	19082.4	17.577
RE15-10-7194(245099001MSD)	05-feb-10 22:12	EXP0203114a	3172.8	12.14	17426.8	17.575
RE15-10-7186	05-feb-10 22:41	EXP0203115a	2928.43	12.136	17621.2	17.576
RE15-10-7191	05-feb-10 23:11	EXP0203116a	3464.96	12.14	16260.8	17.576
RE15-10-7195	05-feb-10 23:40	EXP0203117a	3027.95	12.136	17899.9	17.576
RE15-10-7196	06-feb-10 00:10	EXP0203118a	3253.24	12.136	17634.3	17.576
RE15-10-7197	06-feb-10 00:39	EXP0203119a	2988.58	12.142	17250.9	17.574
RE15-10-7193	06-feb-10 02:37	EXP0203123a	3570.88	12.136	20564.8	17.576
RE15-10-7184	06-feb-10 03:07	EXP0203124a	3528.83	12.136	19421.8	17.576
RE15-10-7185	06-feb-10 03:36	EXP0203125a	3477.71	12.136	18693.6	17.576
RE15-10-7189	06-feb-10 04:06	EXP0203126a	3168.56	12.134	18201.9	17.566
RE15-10-7187	06-feb-10 04:35	EXP0203127a	3339.99	12.138	18497.9	17.574
RE15-10-7188	06-feb-10 05:05	EXP0203128a	3862.91	12.134	20038.8	17.575
RE15-10-7190	06-feb-10 05:34	EXP0203129a	3881.89	12.137	18732	17.577
RE15-10-7192	06-feb-10 06:04	EXP0203130a	3514.8	12.143	24086	17.574
RE15-10-7219	06-feb-10 06:33	EXP0203131a	3586.39	12.136	19149.3	17.576

IS1 (DNB) = 1,3-Dinitrobenzene-d4

IS2 (DNT) = 2,6-Dinitrotoluene-d3

Area Upper Limit = + 30% of average IS area from multipoint calibration

Area Lower Limit = - 30% of average IS area from multipoint calibration

RT Upper Limit = +0.5 of average multipoint RT

RT Lower Limit = -0.5 of average multipoint RT

Column used to flag values outside QC limits with an asterisk

* Values outside of QC limits

SAMPLE DATA

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099001

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203112a

Date Analyzed: 05-FEB-10 21:13

Units: ug/kg

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

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

Quantify Sample Report
 iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203112a

Date: 05-Feb-2010

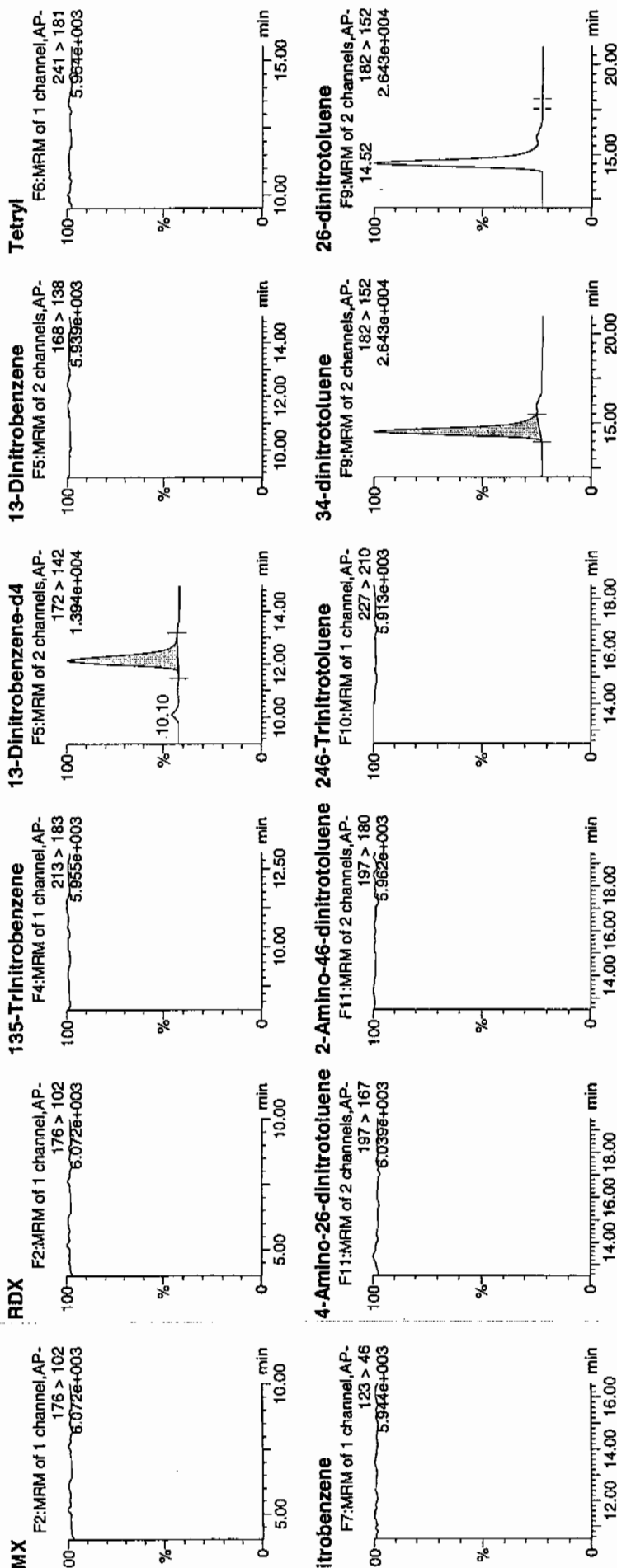
Time: 21:13:20

ID: 245099001

Label: 3:1,C

4077
 2/8/10

WAW/94443/8000/21

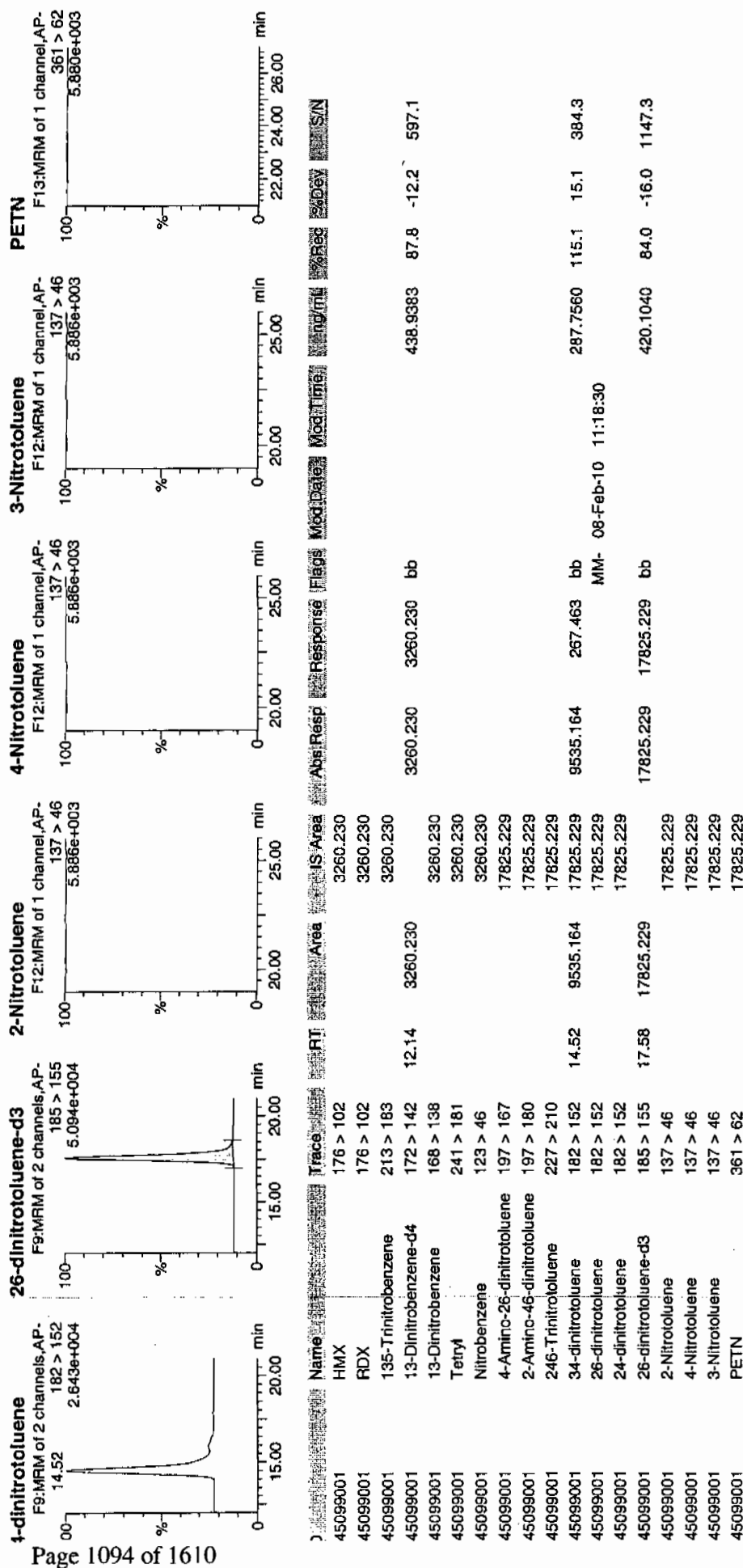


done
 2/8/10

Printed: Mon Feb 08 11:31:28 2010, Page 58 of 103

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New\Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099001

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290047.wiff

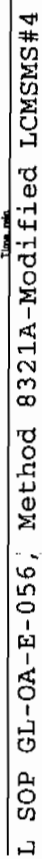
Date Analyzed: 29-JAN-10 22:07

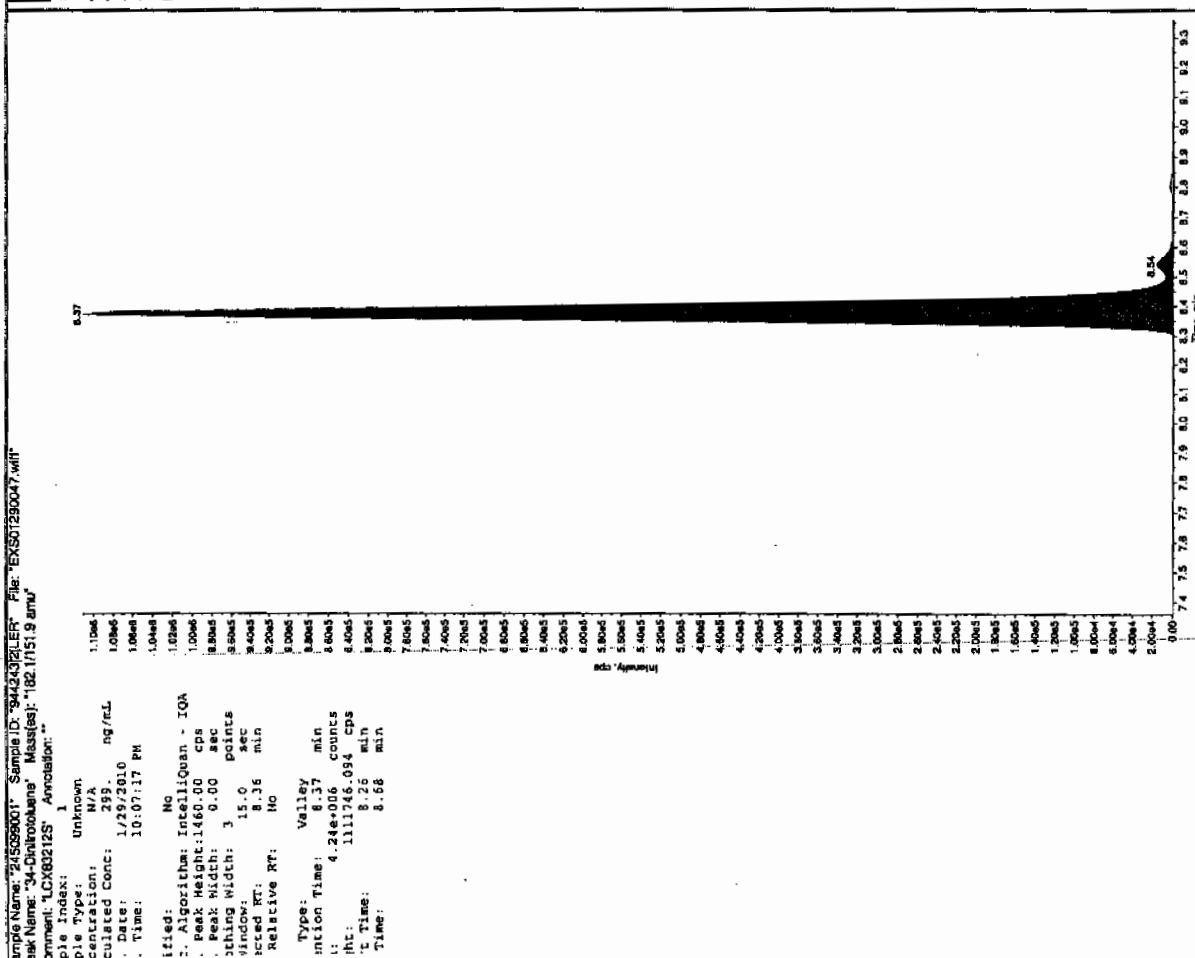
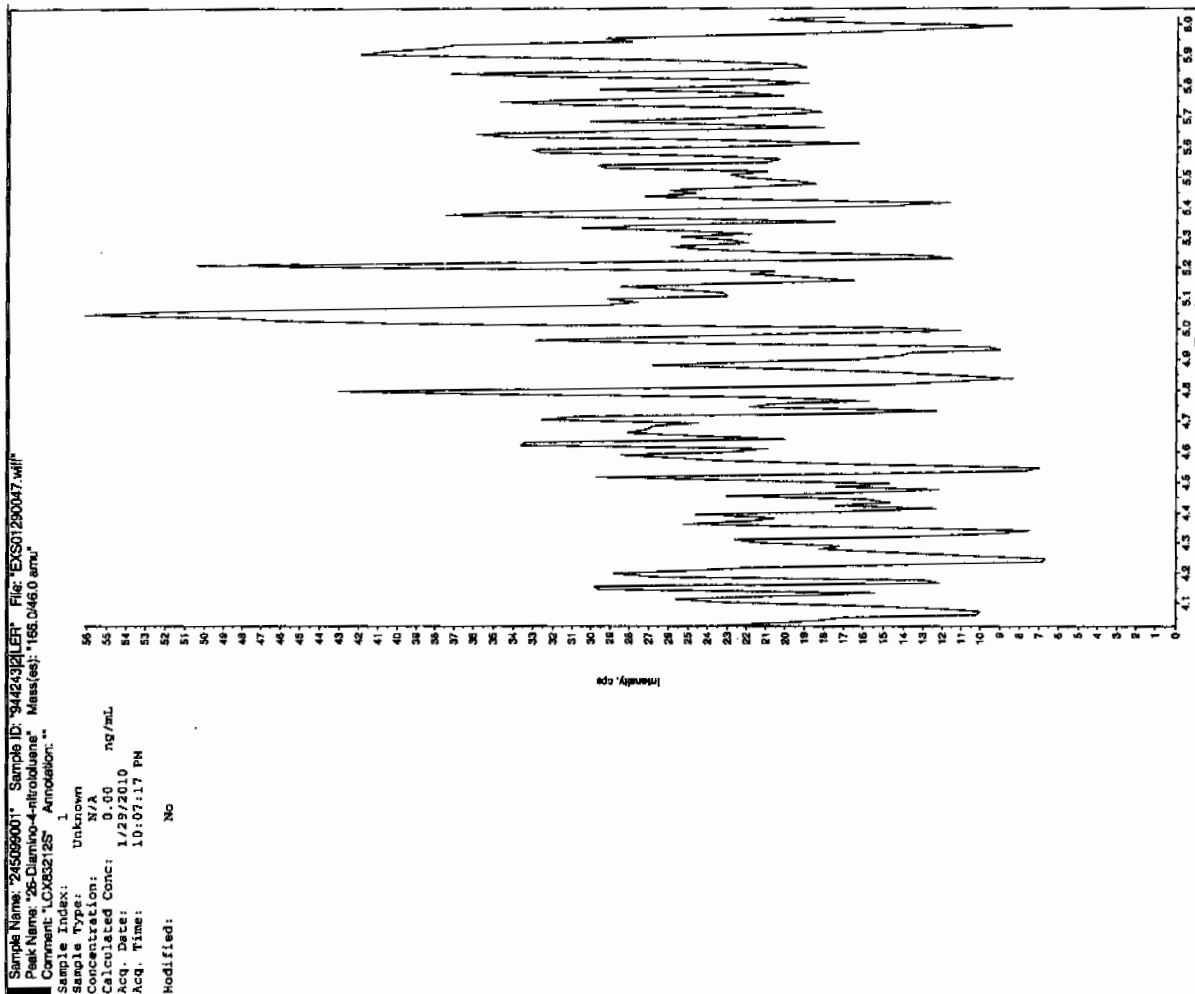
Units: ug/kg

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

*Concentration =

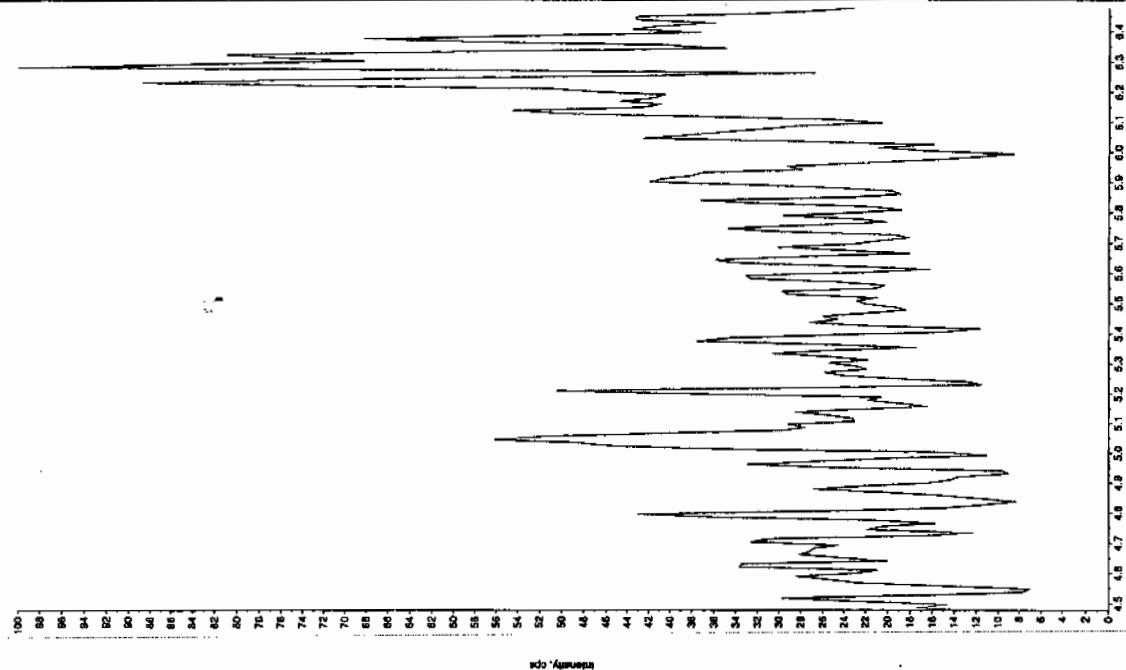
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor





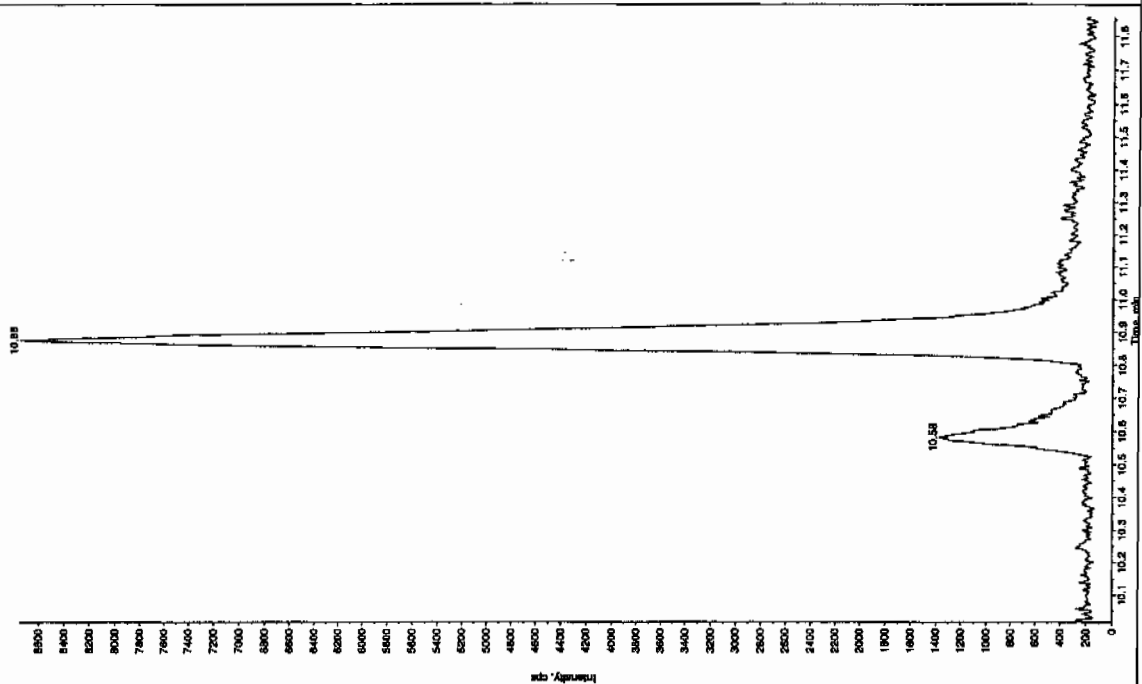
Sample Name: "24508001" Sample ID: "94424321ER" File: "EX301290047.wif"
 Peak Name: "24-Diamino-5-nitrothiouracil" Mass(es): "155.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 1/29/2010
 Time: 10:07:17 PM
 Filed: No



Sample Name: "24508001" Sample ID: "94424321ER" File: "EX301290047.wif"
 Peak Name: "trifluoromethyl phosphite" Mass(es): "359.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Date: 1/29/2010
 Time: 10:07:17 PM
 Filed: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7186

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099002

Sample Amount 2

Moisture: 18.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203115a

Date Analyzed: 05-FEB-10 22:41

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
 3EL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qtd, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\020310expA2.qtd

Date: 05-Feb-2010

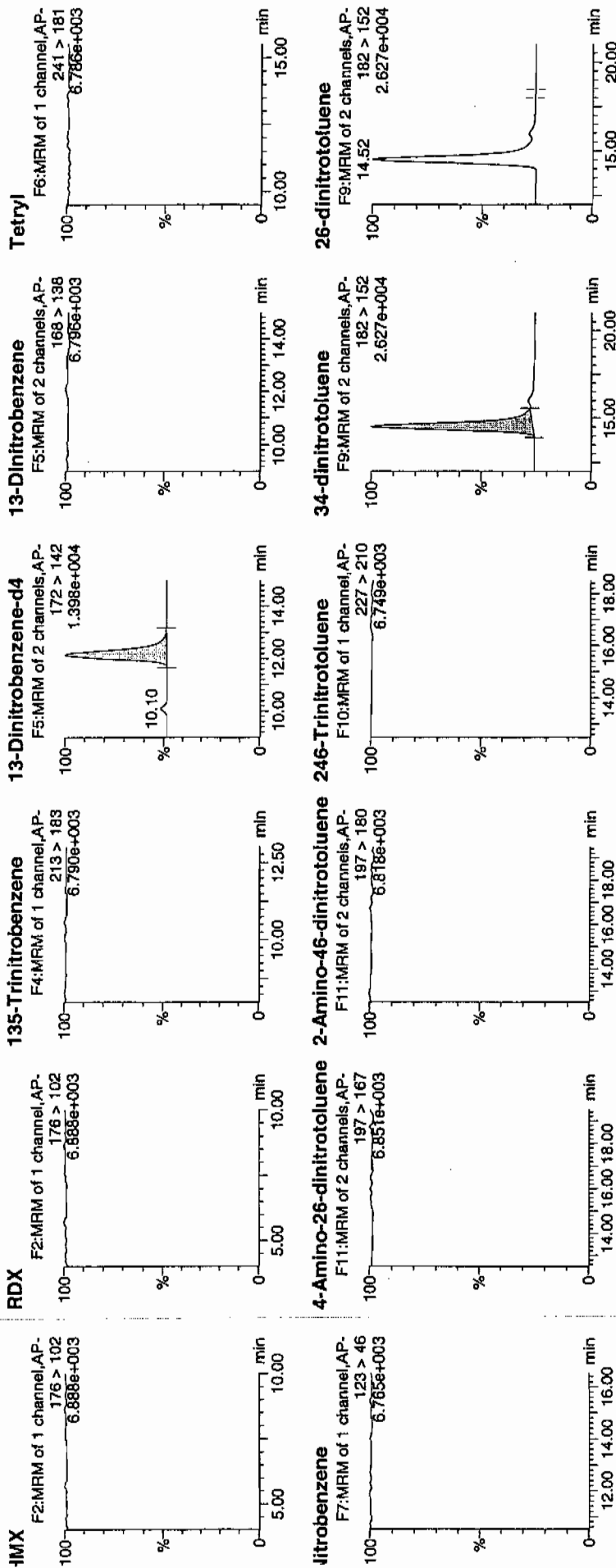
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D: 245099002

/lat: 3:1,F

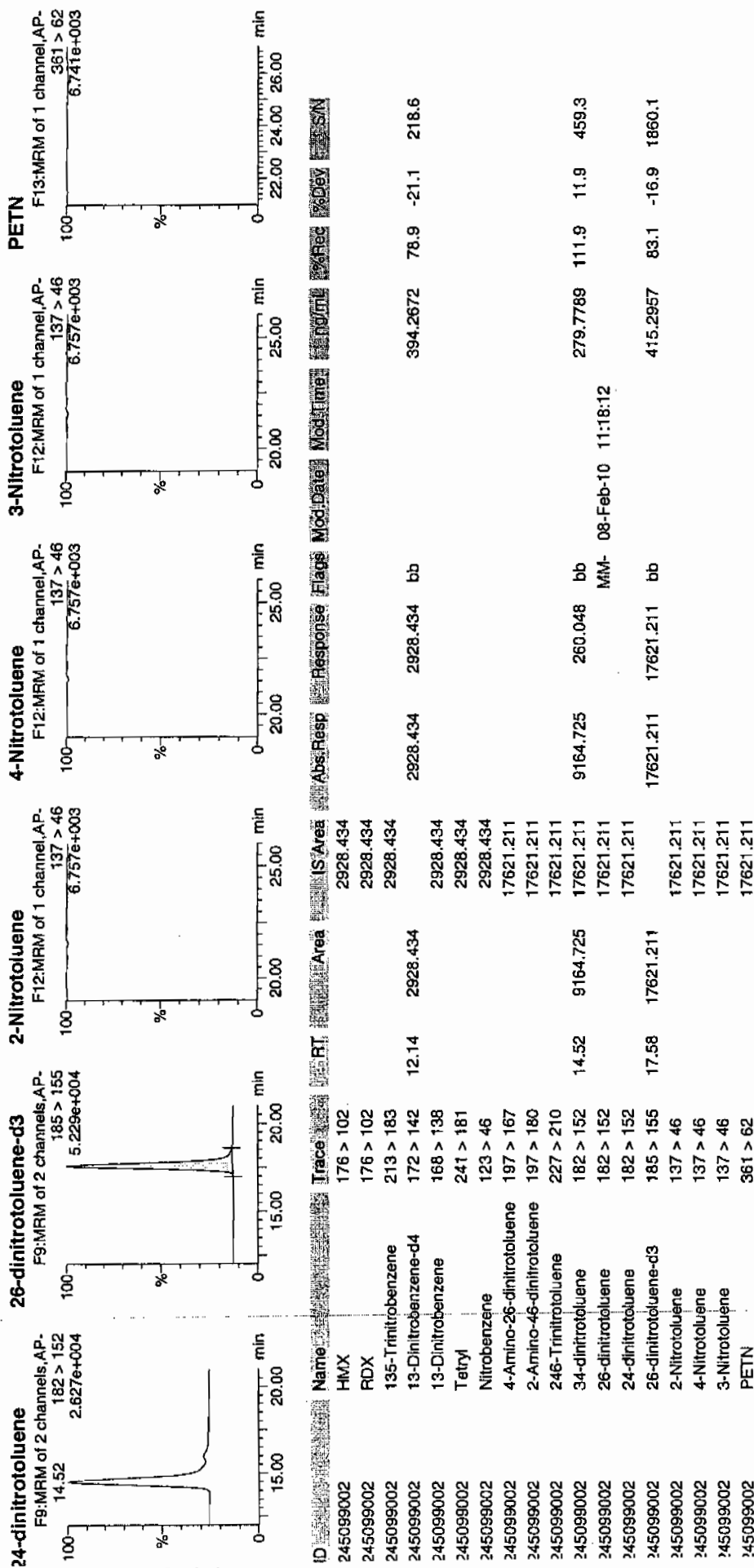
2/8/10

944243 / 21



2/11/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7186

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099002

Sample Amount 2

Molsture: 18.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290050.wiff

Date Analyzed: 29-JAN-10 22:54

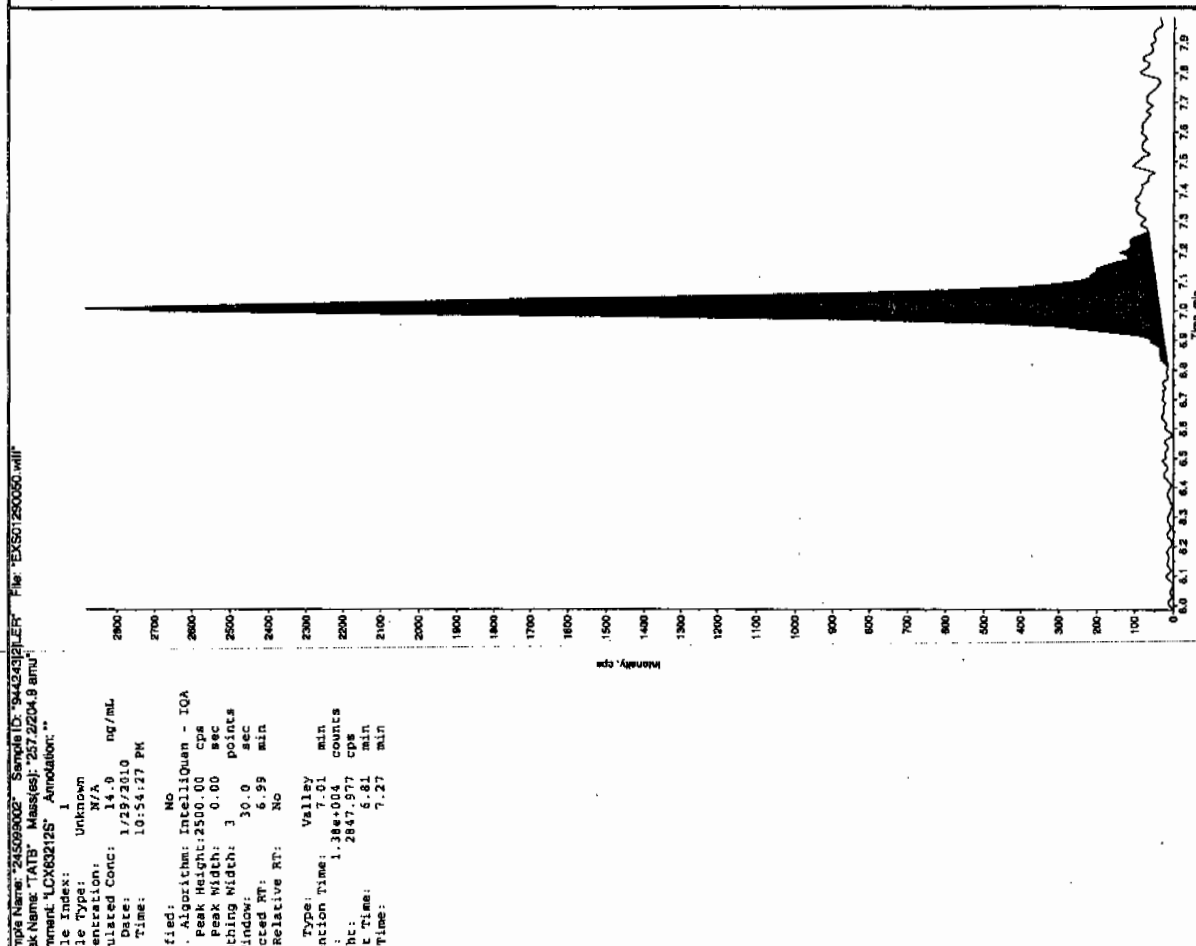
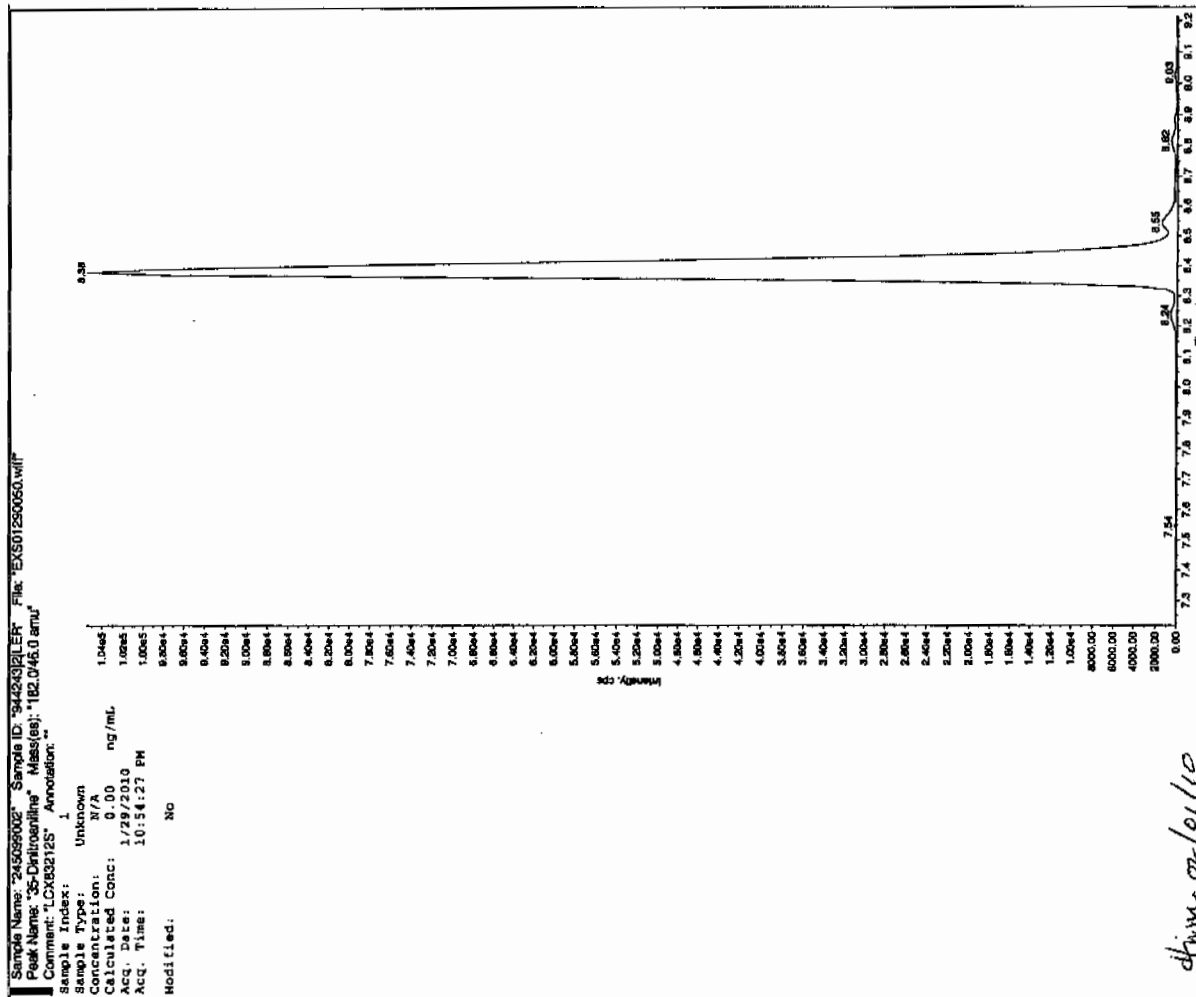
Units: ug/kg

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 2/1/10

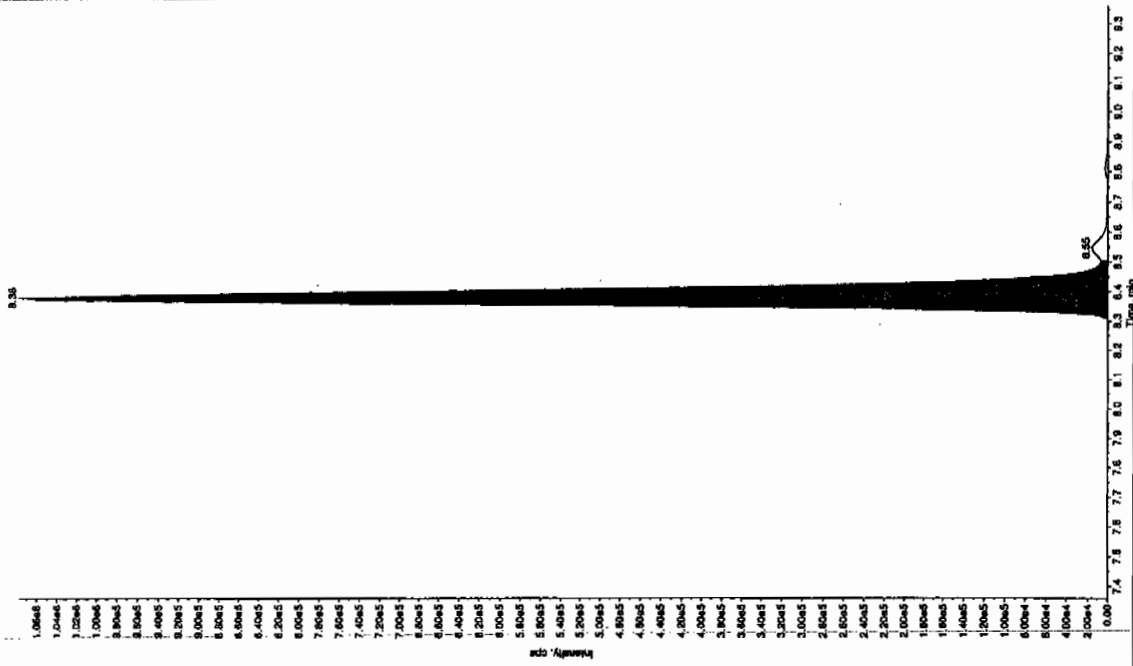


drive on 10/1/10

L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "24509002" Sample ID: "944243JLER" File: "EXS01290050.wif"
 Peak Name: "25-Diamino-4-nitrofluorene" Mass(es): "186.048.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/23/2010
 Acq. Time: 10:54:27 PM
 Modified: No

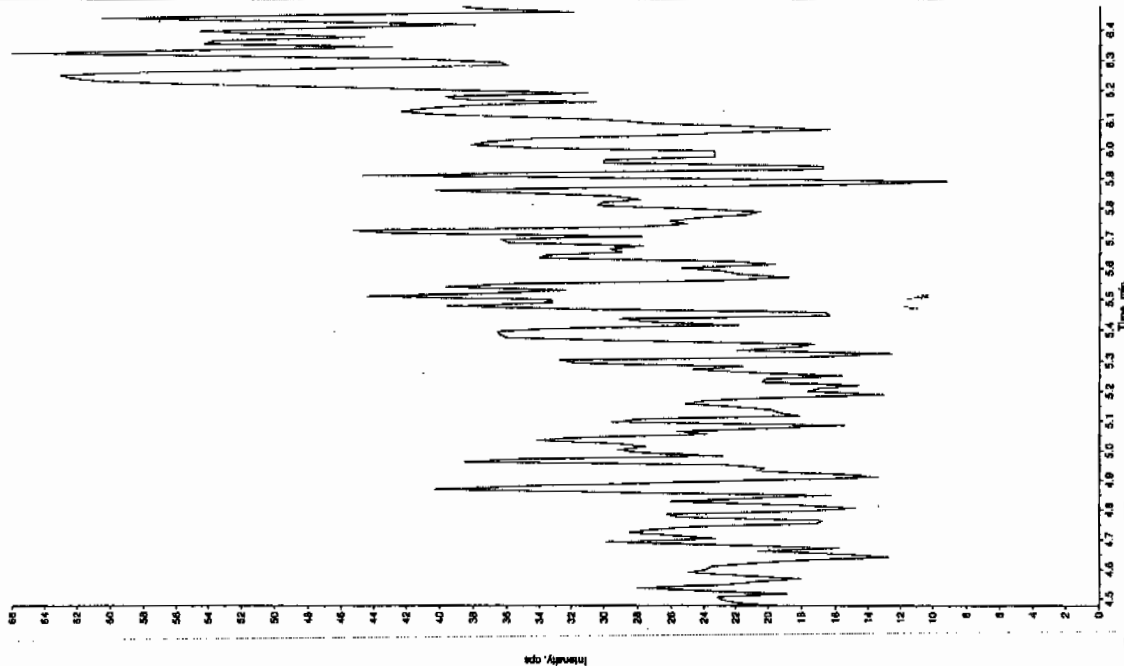


Sample Name: "24509002" Sample ID: "944243JLER" File: "EXS01290050.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/23/2010
 Acq. Date: 10:54:27 PM
 Acq. Time: 10:54:27 PM
 Modified: No
 Algorithm: IntelliQuan - IQA
 Peak Height: 1450.00 cps
 Peak Width: 0.00 sec
 Peak Width: 3 points
 Window: 15.0 sec
 Retention Time: 8.36 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.36 min
 Counts: 4.06e+008
 C. Time: 1077443.486 cps
 C. Time: 8.28 min
 C. Time: 8.31 min

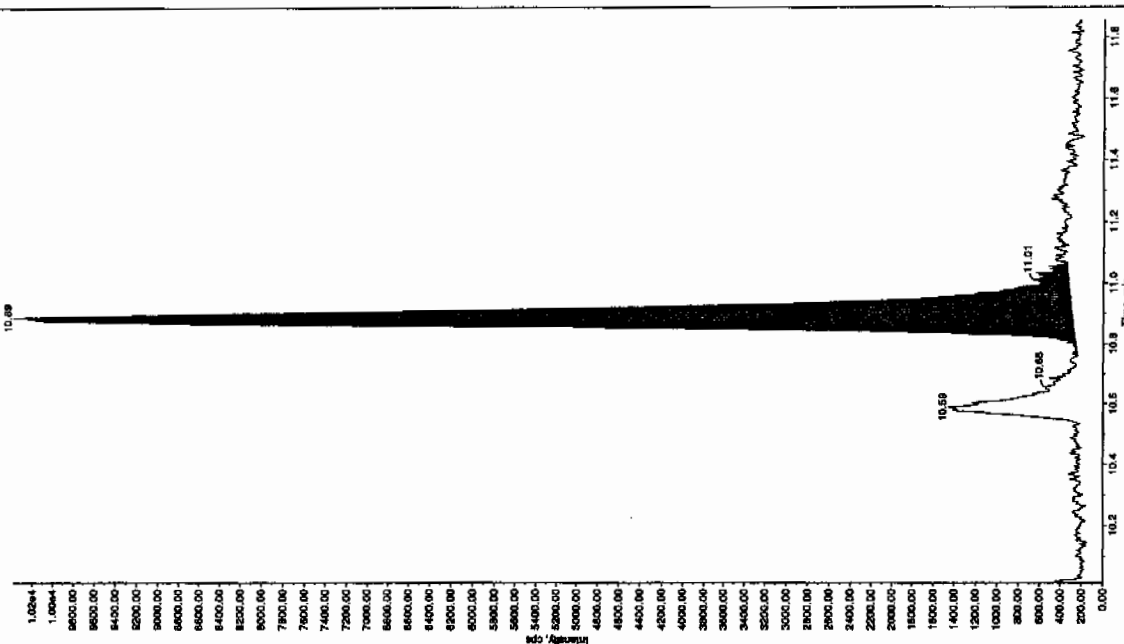
Sample Name: "24509002" Sample ID: "94424321ER" File: "EXS01290050.wif"
 Peak Name: "24-Diamino-6-nitroQuand" Mass(es): 168.046.0 amu
 Comment: "LOX632125" Annotation: "1"

File Index: 1
 Sample Index: Unknown
 Concentration: 0.00 ng/mL
 Date: 1/29/2010
 Time: 10:54:27 PM
 ified: No



Sample Name: "24509002" Sample ID: "94424321ER" File: "EXS01290050.wif"
 Peak Name: "bis(O-allyl) phosphide" Mass(es): 368.199.0 amu
 Comment: "LOX632125" Annotation: "1"

File Index: 1
 Sample Index: Unknown
 Concentration: N/A
 Calculated Conc: No Intercept
 Acq. Date: 1/29/2010
 Acq. Time: 10:54:27 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: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 4.37e+004 counts
 Height: 10094.323 cps
 Start Time: 10.8 min
 End Time: 11.1 min



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7191

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099003

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203116a

Date Analyzed: 05-FEB-10 23:11

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0203116a

Date: 05-Feb-2010

Time: 23:11:27

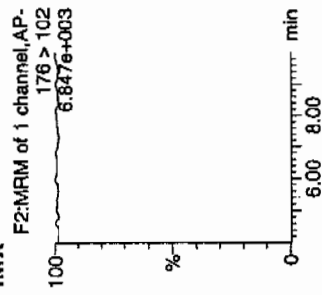
D: 245099003

/Inl: 3:2,A

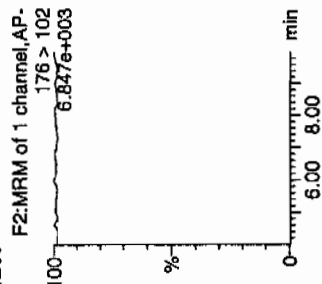
not
2/9/10

1944243 / 80121

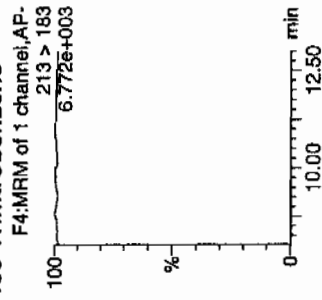
IMX



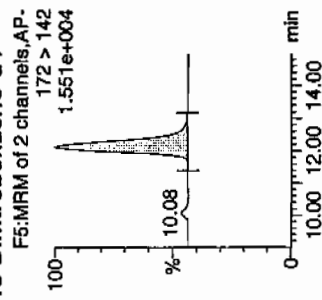
RDX



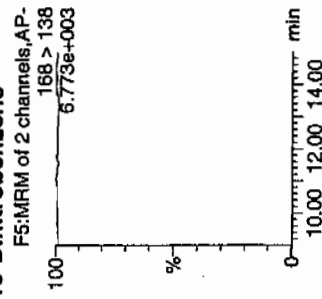
135-Trinitrobenzene



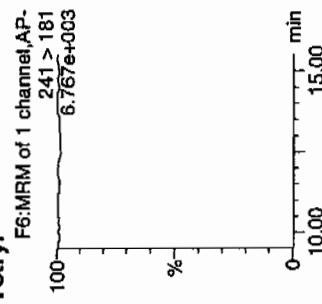
13-Dinitrobenzene-d4



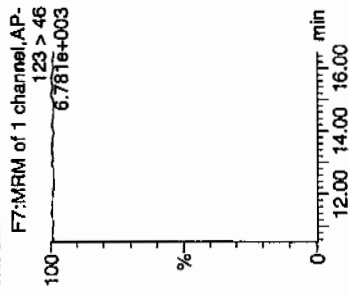
13-Dinitrobenzene



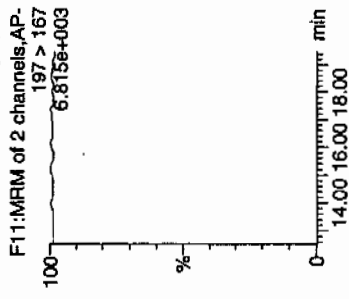
Tetryl



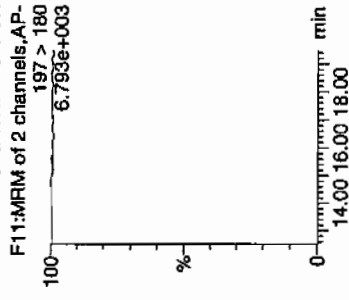
Nitrobenzene



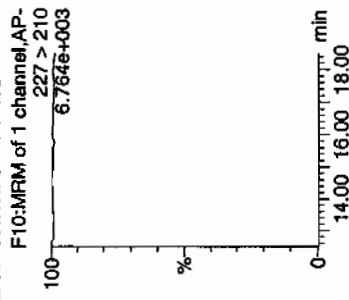
4-Amino-26-dinitrotoluene



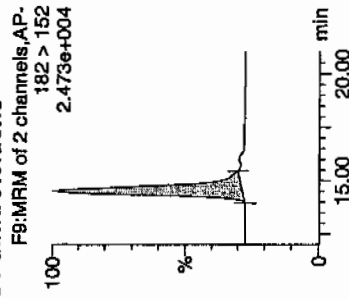
2-Amino-46-dinitrotoluene



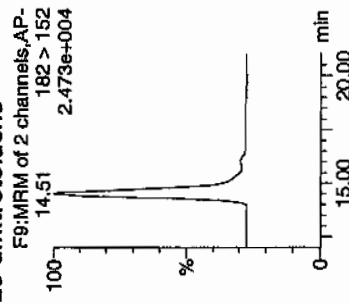
246-Trinitrotoluene



34-dinitrotoluene

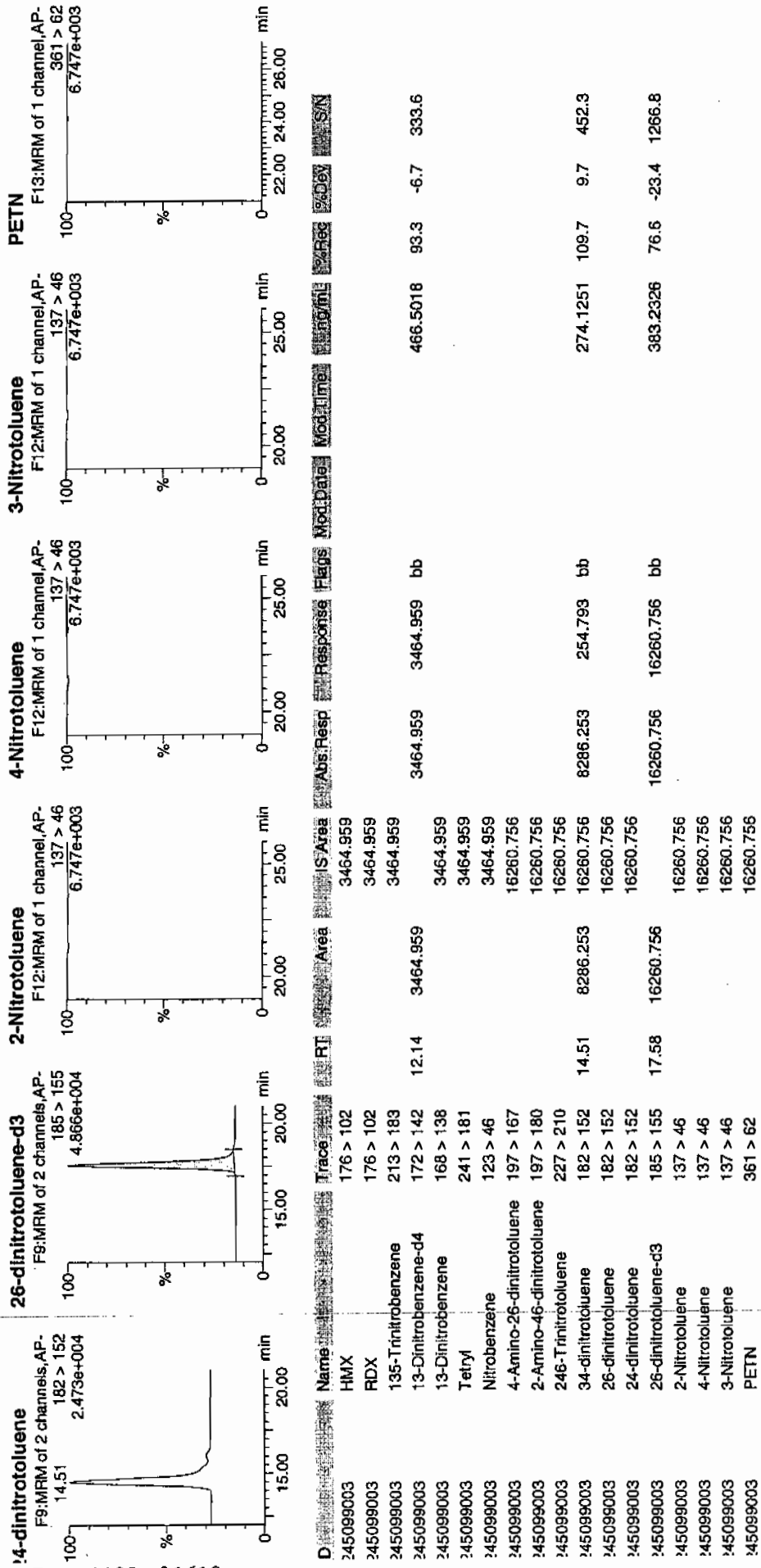


26-dinitrotoluene



HPLC

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7191

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099003

Sample Amount 2

Moisture: 14.6

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290051.wiff

Date Analyzed: 29-JAN-10 23:10

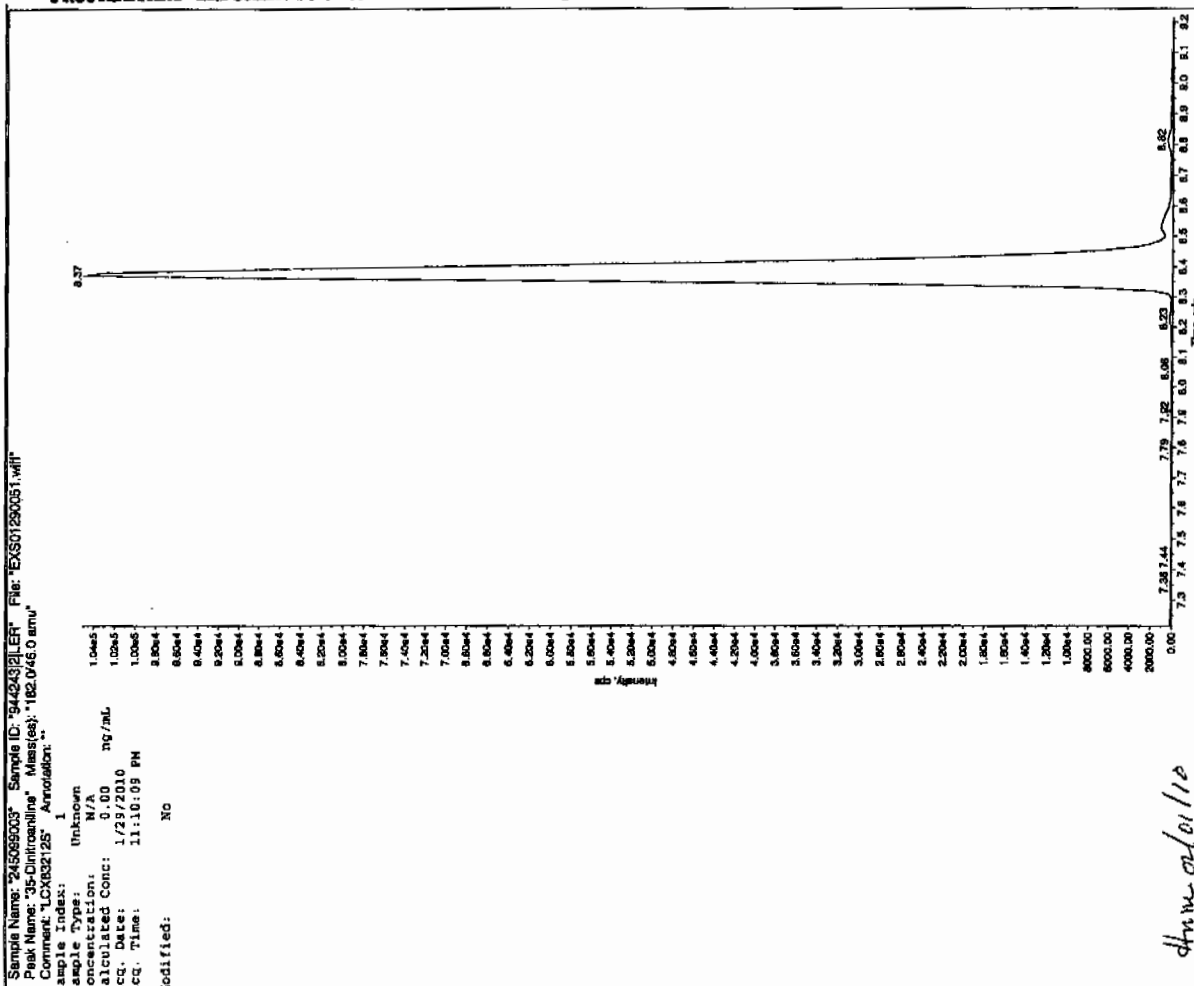
Units: ug/kg

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

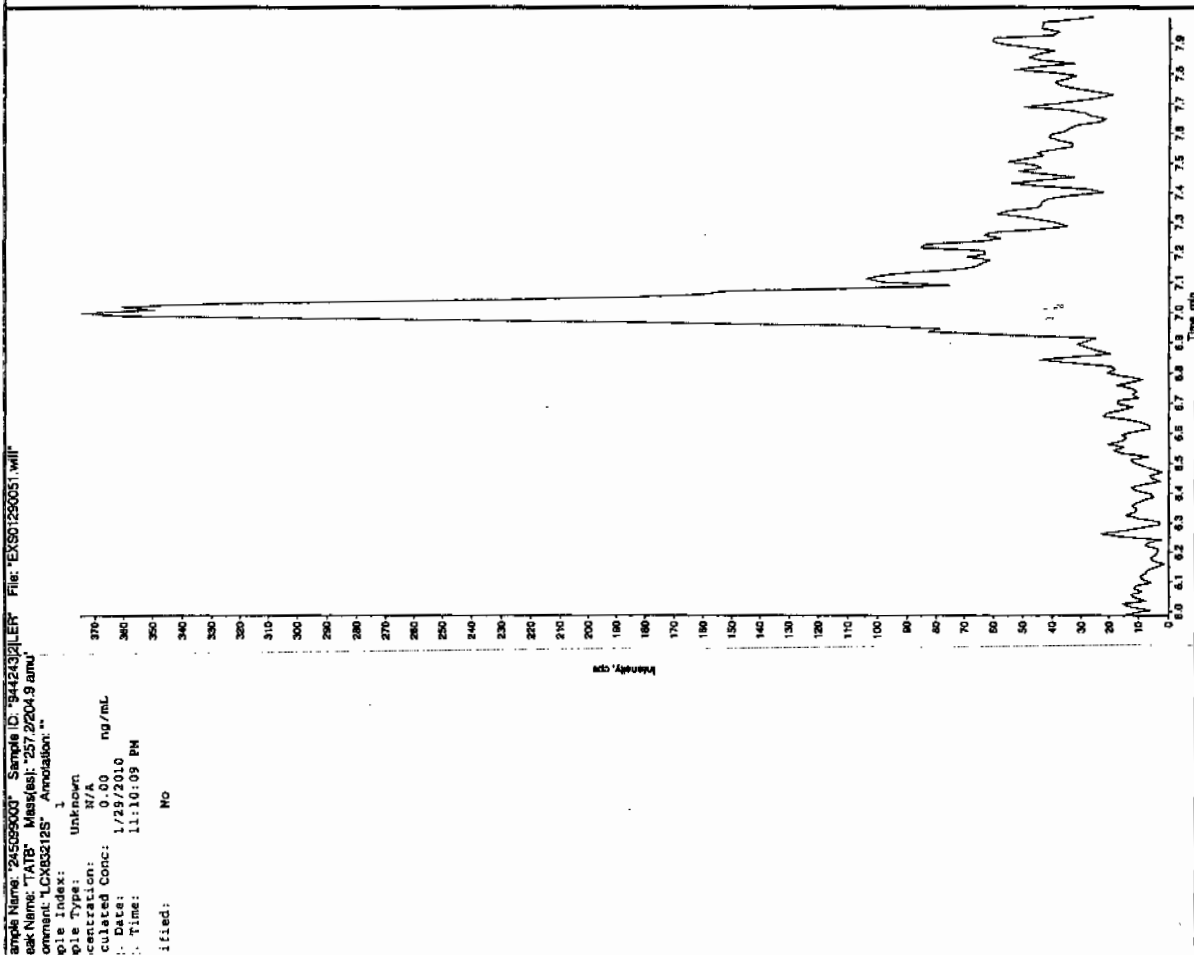
*Concentration =

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

See 2110

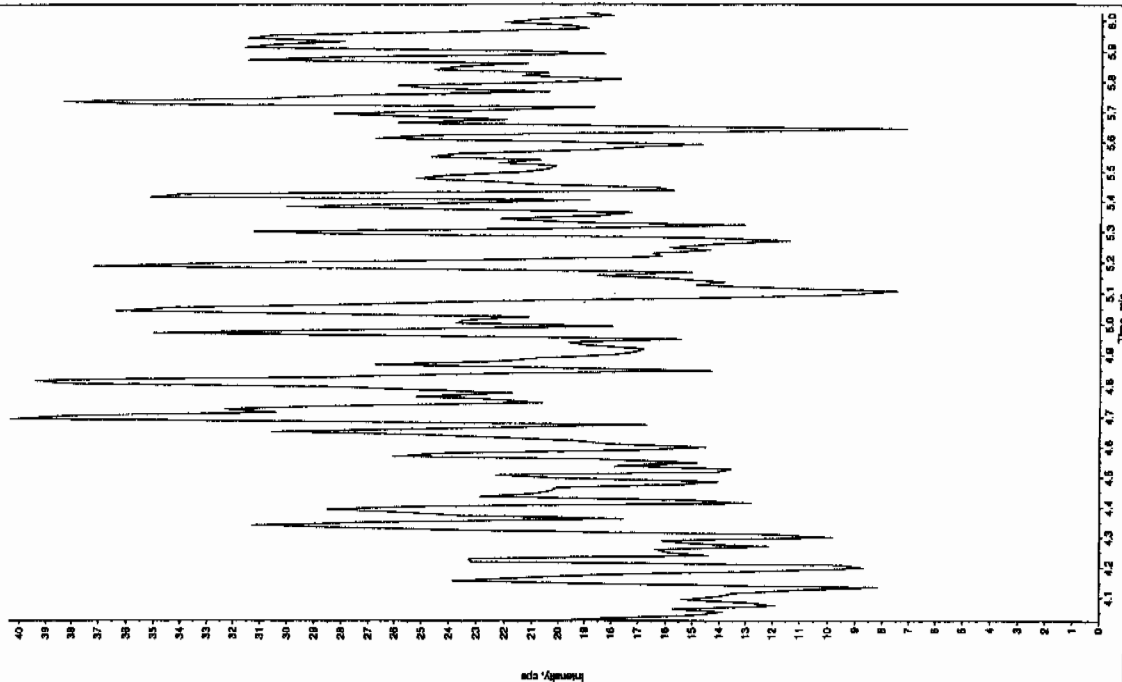
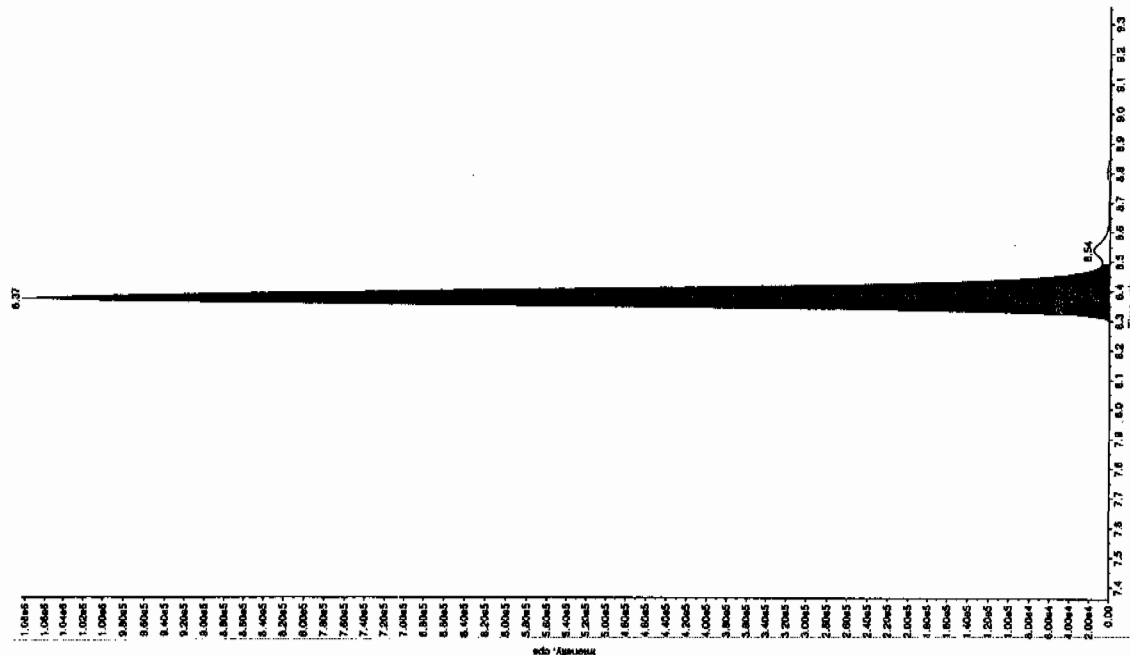


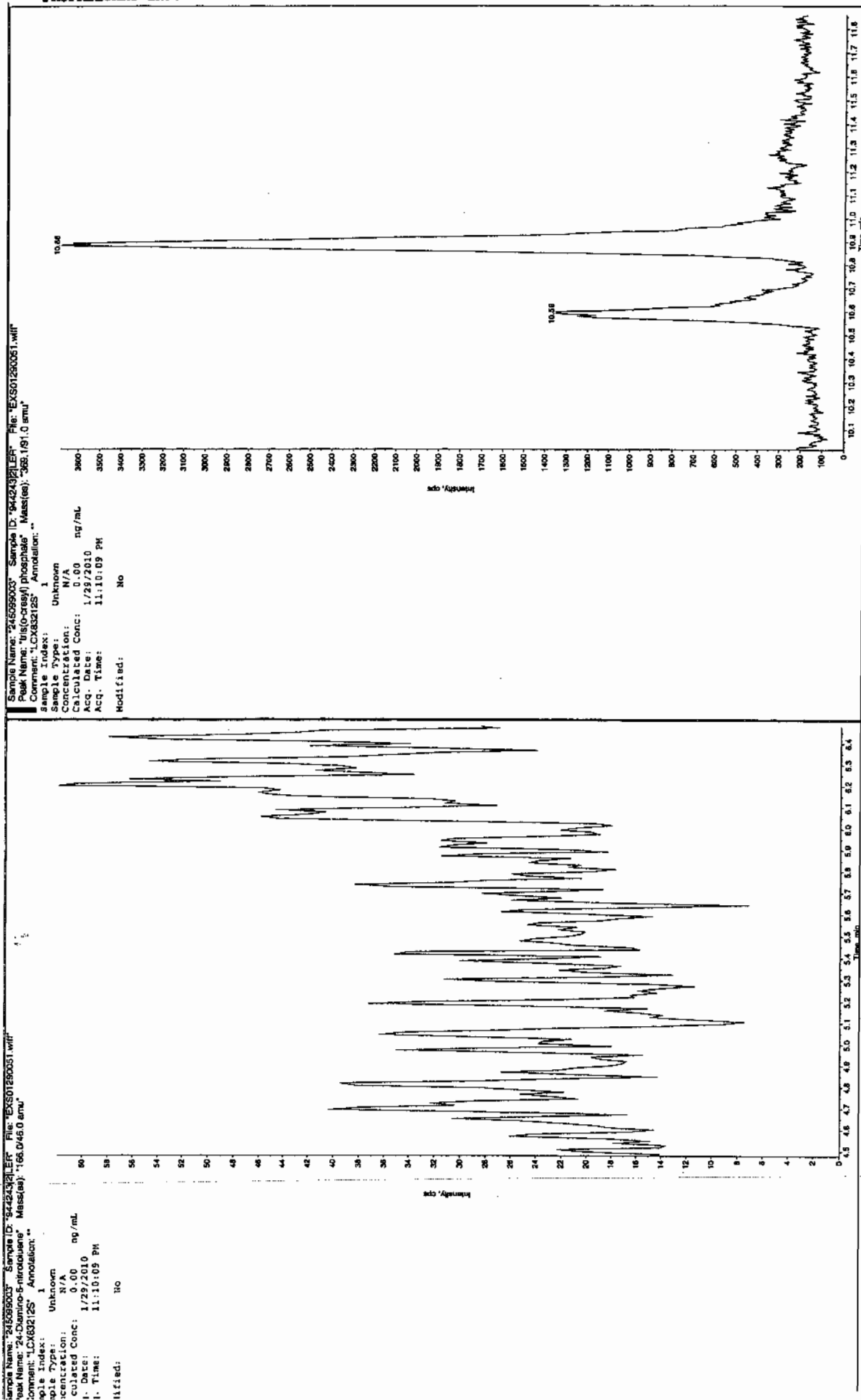
4/11/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "24509003" Sample ID: "94424321ER" File: "EXS01290051.wif"
Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "1CX932125" Annotation: "

[illegible]



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: RE15-10-7195

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203117a

Date Analyzed: 05-FEB-10 23:40

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203117a

Date: 05-Feb-2010

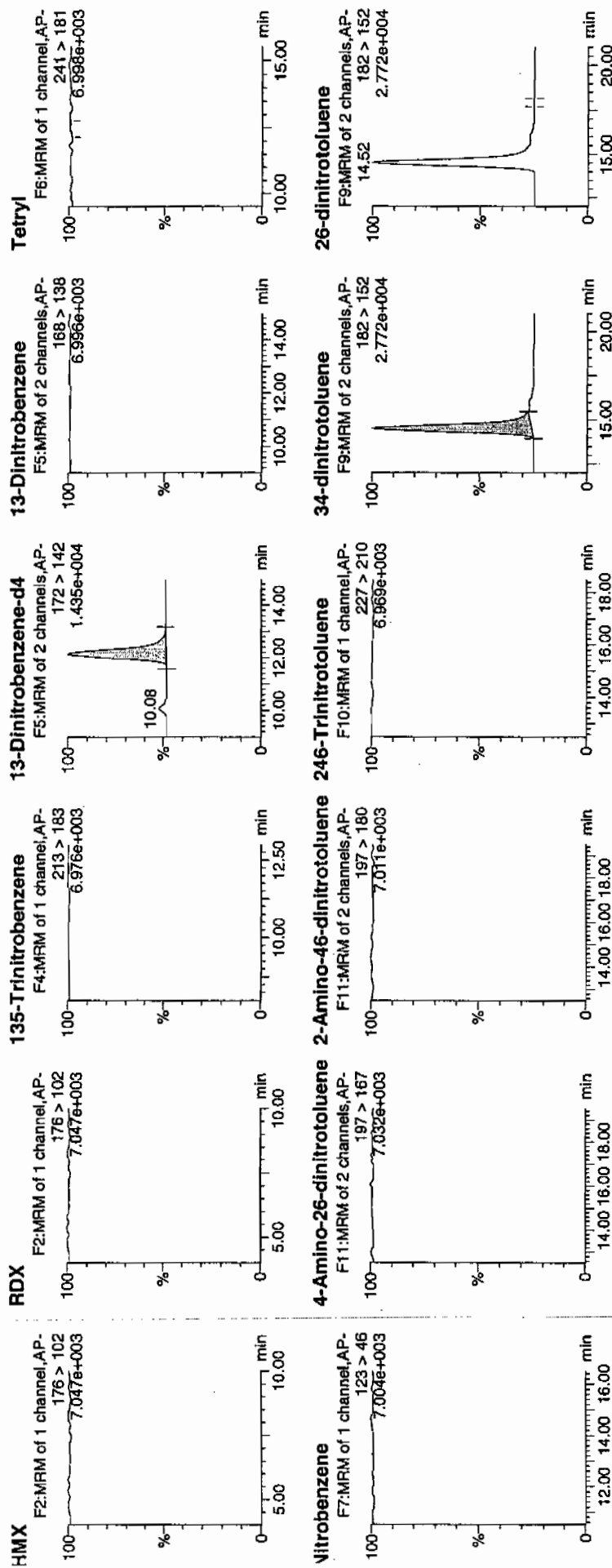
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ID: 245099004

Vial: 3:2,B

1447
2/8/10

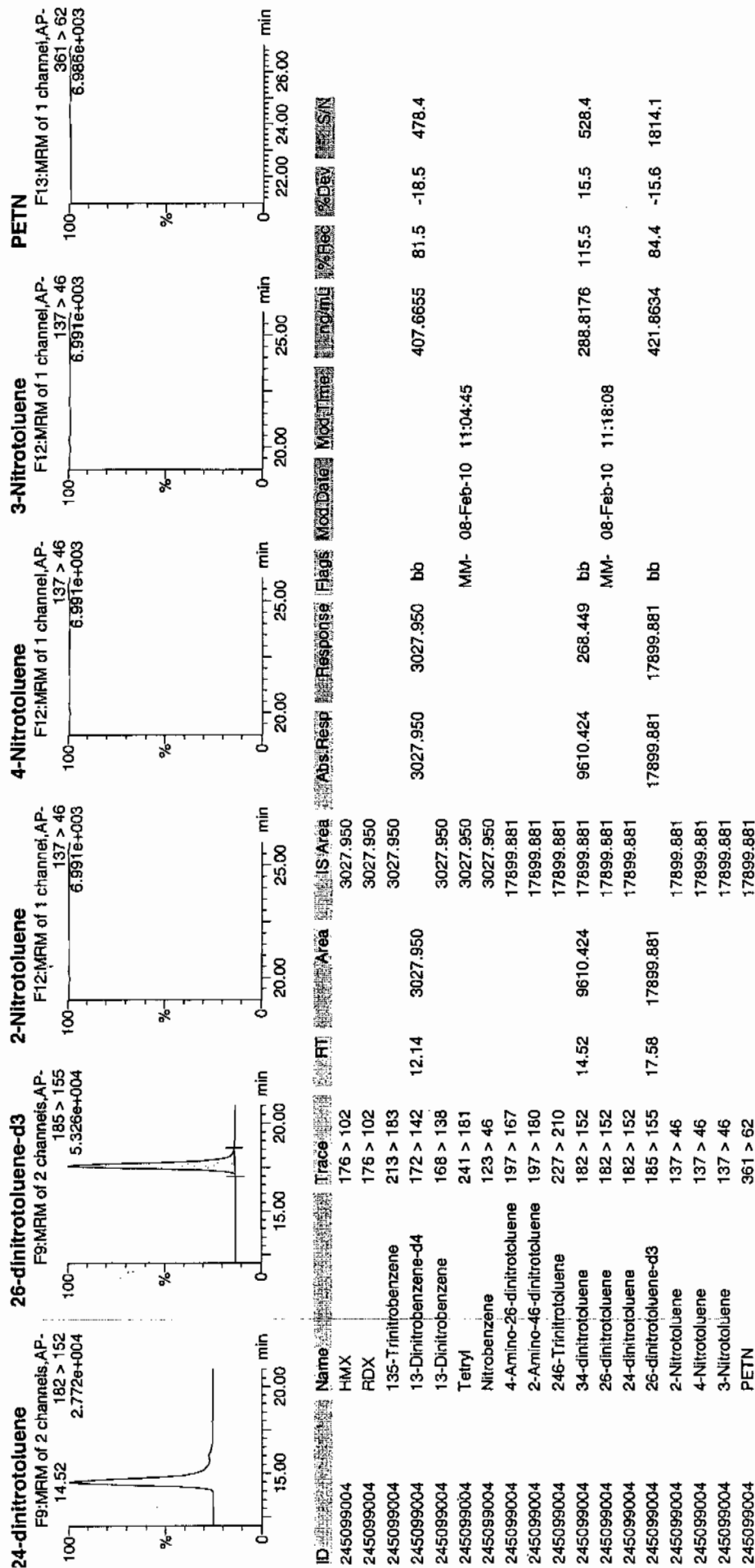
1944243 / 8022 / 21



Amu 2/8/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PROV020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7195

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099004

Sample Amount 2

Moisture: 10.1

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290052.wiff

Date Analyzed: 29-JAN-10 23:25

Units: ug/kg

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

*Concentration =

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

San 2/1/10

Sample Name: "245059004" Sample ID: "9442432125" File: "EXS01250032.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

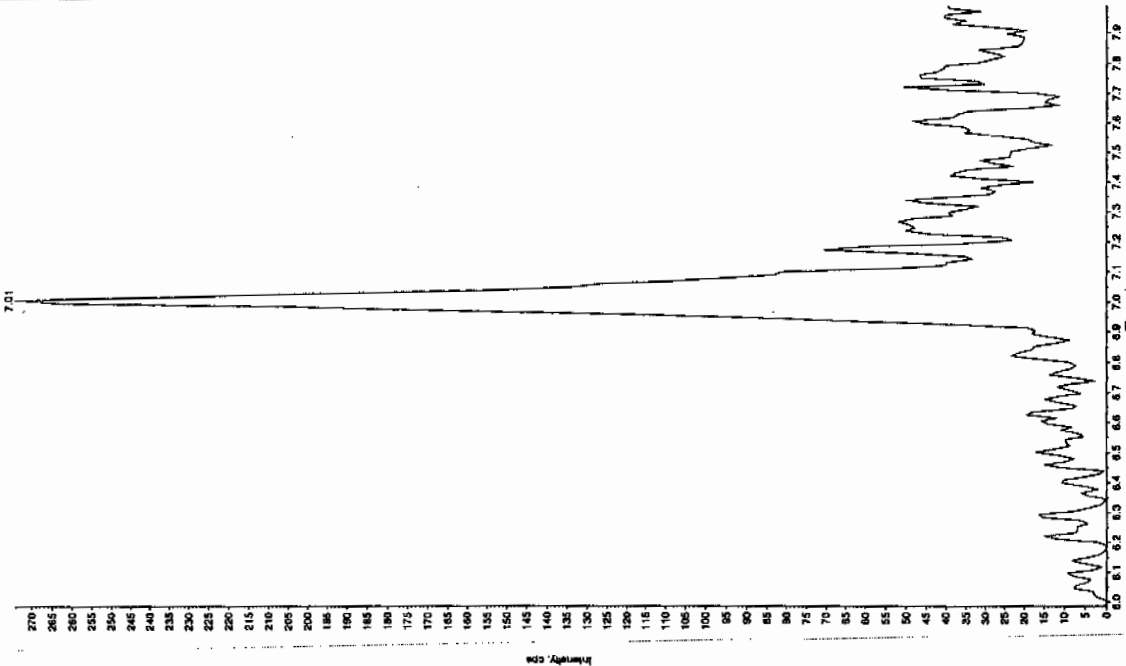
Concentration: 0.00 ng/mL

Calculated Conc: 1/29/2010

Acq. Date: 11:25:53 PM

Acq. Time: 11:25:53 PM

Modified: No



Sample Name: "245059004" Sample ID: "9442432125" File: "EXS01250032.wif"

Peak Name: "1A7B" Mass(es): "257.2204.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 0.00 ng/mL

Calculated Conc: 1/29/2010

Acq. Date: 11:25:53 PM

Acq. Time: 11:25:53 PM

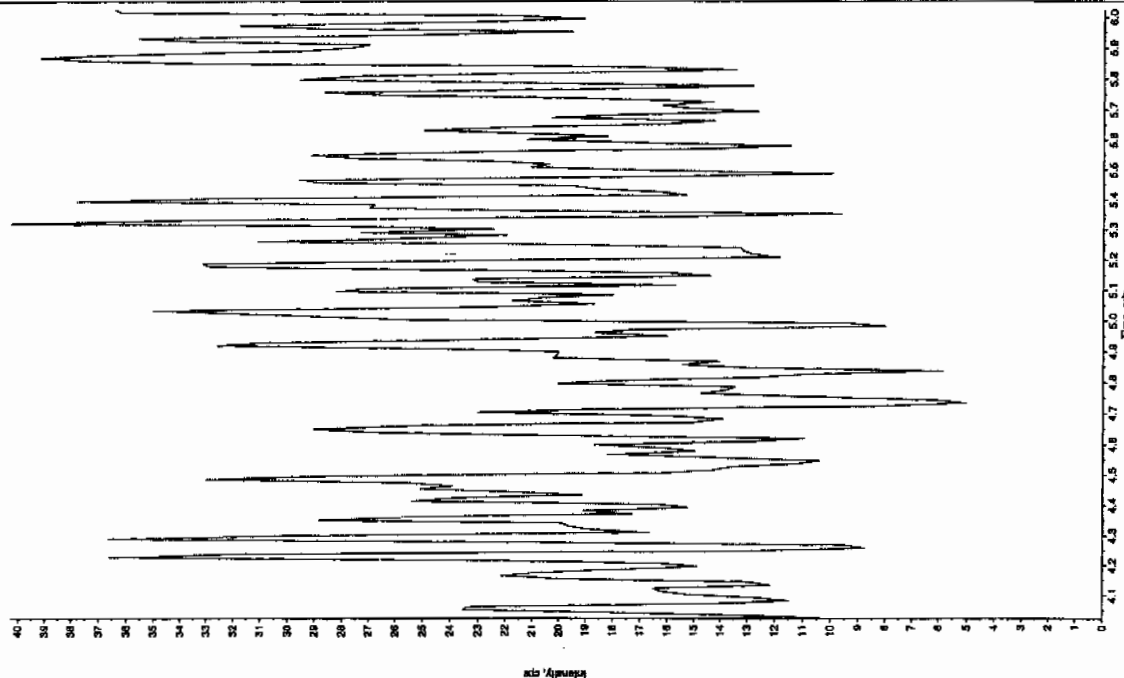
Modified: No



San 2/1/10

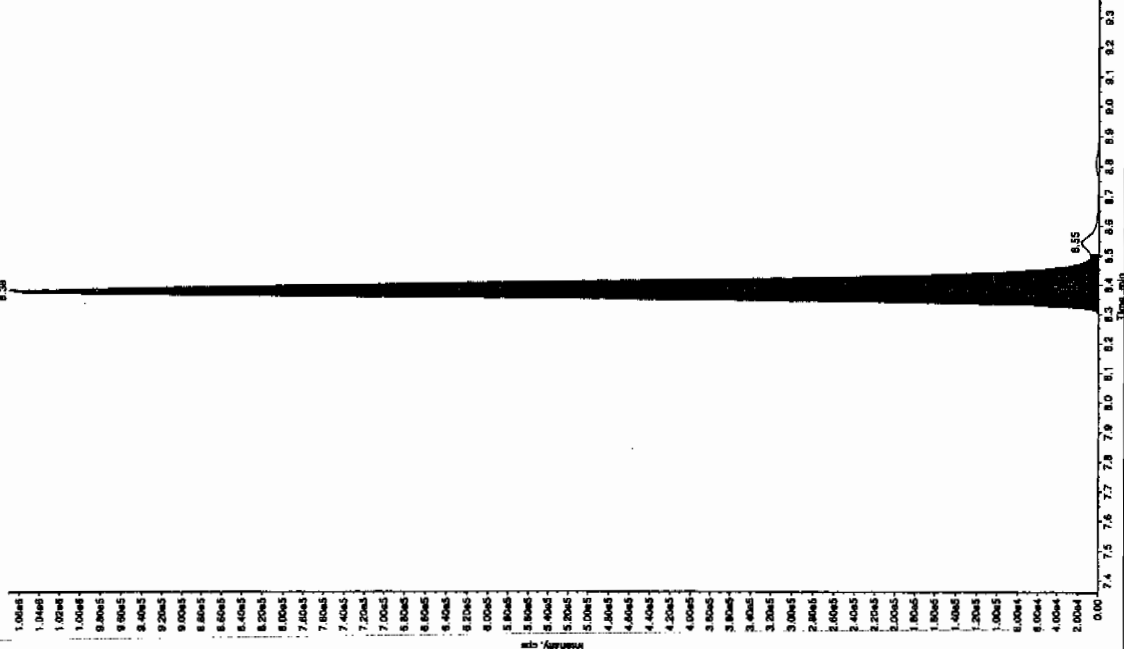
Sample Name: "245099004" Sample ID: "9442432121" File: "EX001280052.wif"
 Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "LCX632125" Annotation: ""

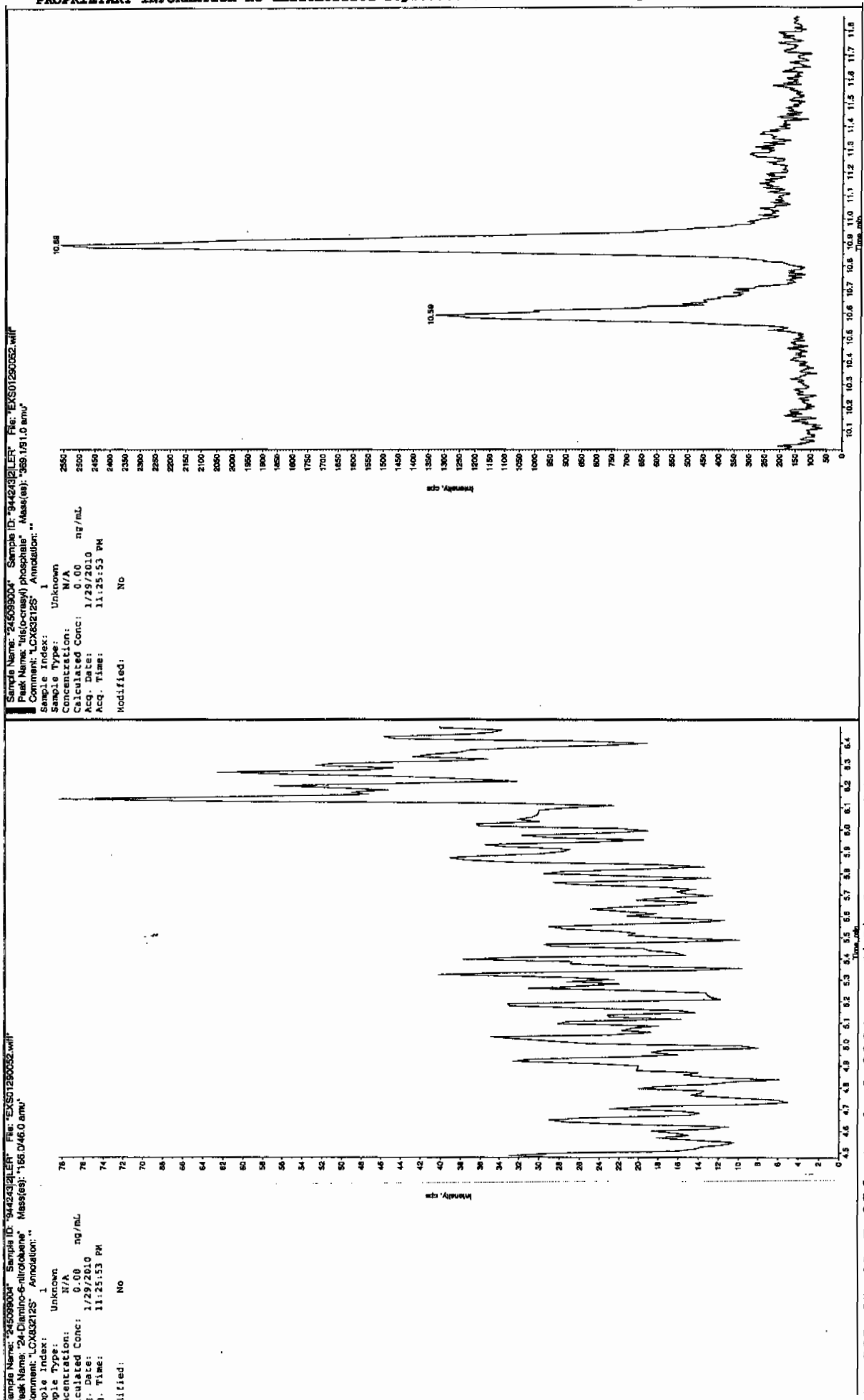
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/29/2010
 Acq. Date: 11:25:53 PM
 Modified: No



Sample Name: "245099004" Sample ID: "9442432121" File: "EX001280052.wif"
 Peak Name: "34-Oxatetrafluorene" Mass(es): "182.1151.9 amu"
 Comment: "LCX632125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 291 ng/mL
 Calculated Conc: 1/29/2010
 Acq. Date: 11:25:53 PM
 Modified: No
 C. Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Retention Window: 3 points
 Window: 15.0 sec
 Selected RT: 8.36 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.36 min
 Counts: 4.13e+004 counts
 RT: 1071503.784 cps
 RT Time: 8.28 min
 Time: 8.51 min





EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7196

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099005

Sample Amount 2

Moisture: 23.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203118a

Date Analyzed: 06-FEB-10 00:10

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qtd, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203118a

Date: 06-Feb-2010

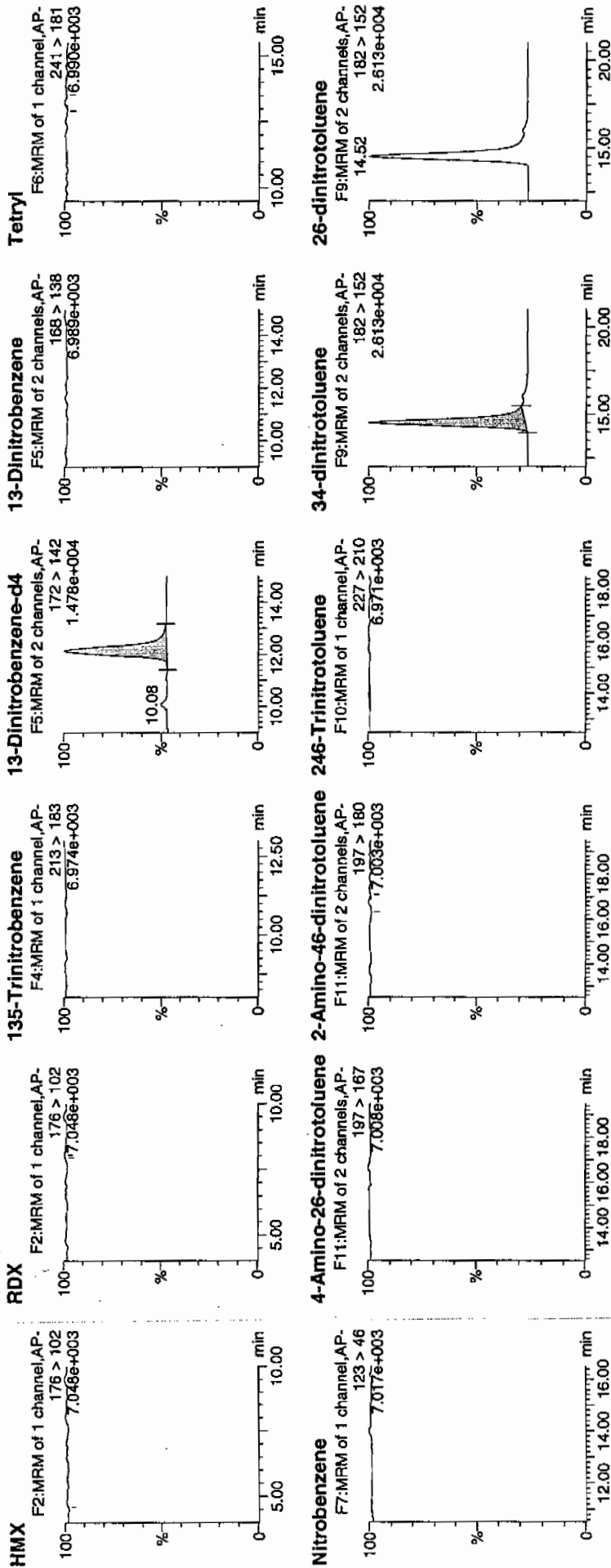
Time: 00:10:25

ID: 245099005

Vial: 3:2,C

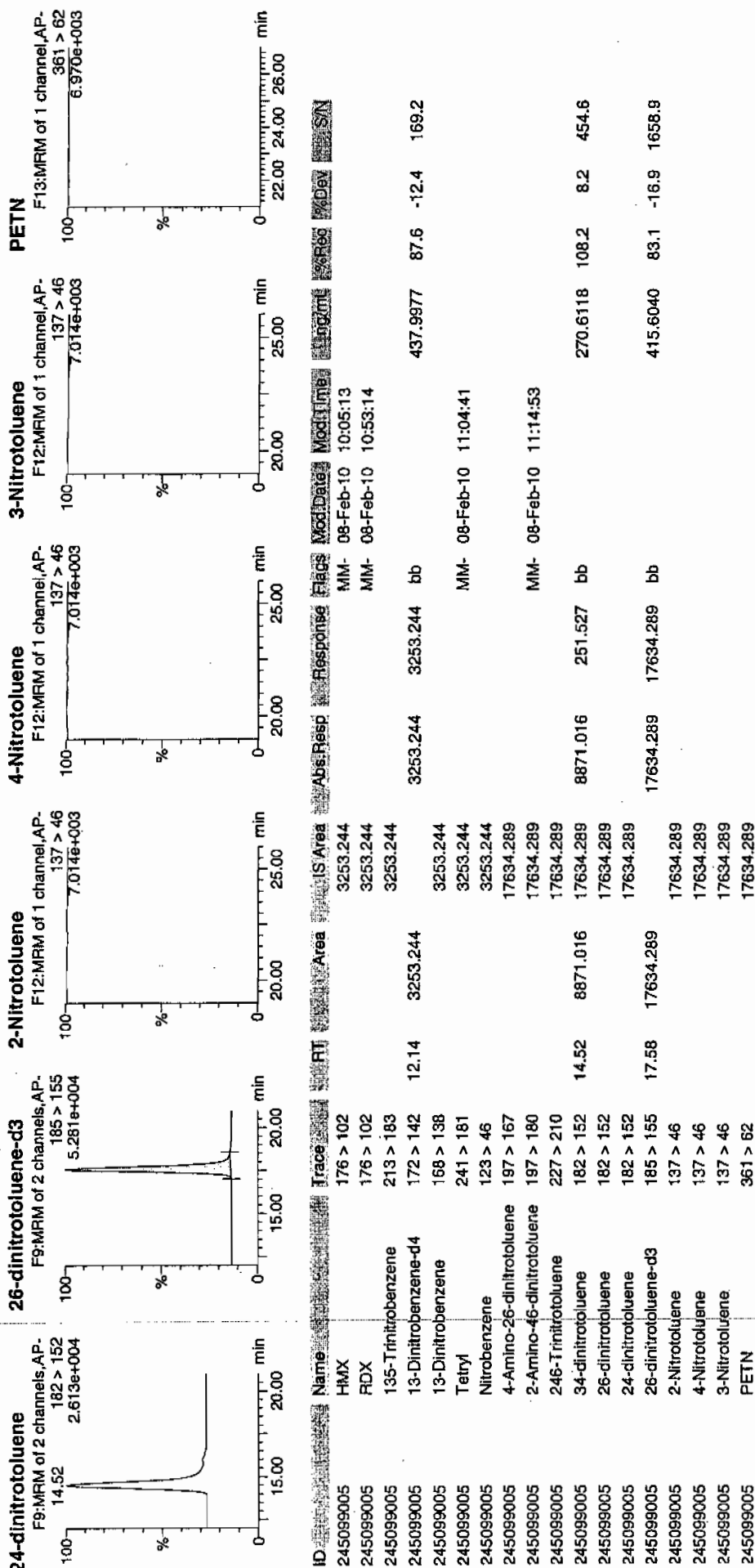
10/77
2/3/10

LAUW 1944243 / Sca 121



Handwritten signature: *Handwritten signature*

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7196

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099005

Sample Amount 2

Moisture: 23.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290053.wiff

Date Analyzed: 29-JAN-10 23:41

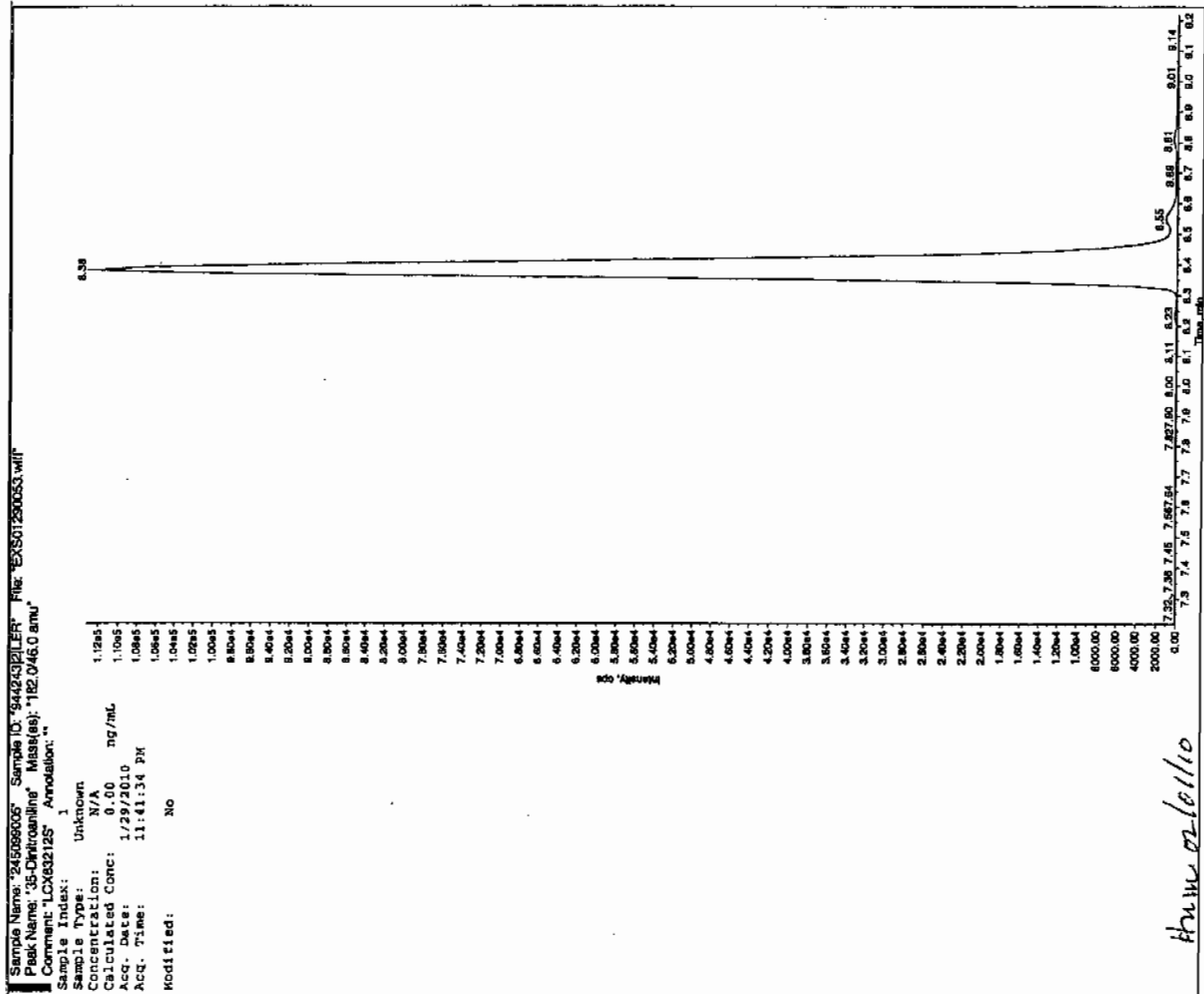
Units: ug/kg

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

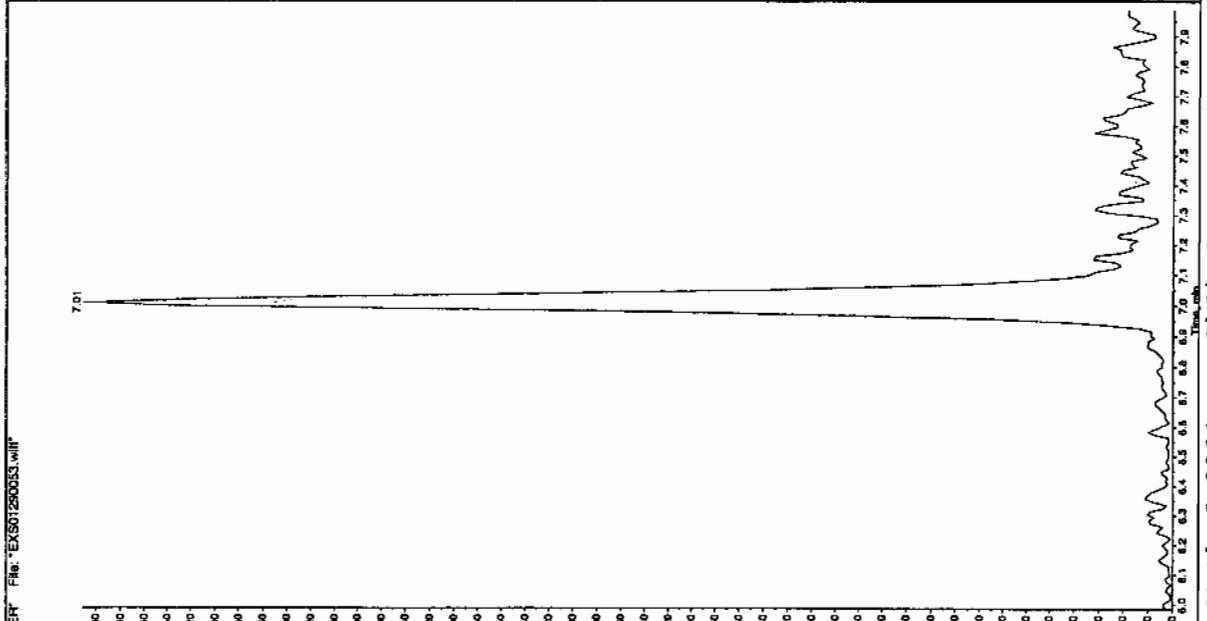
*Concentration =

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

San 21110



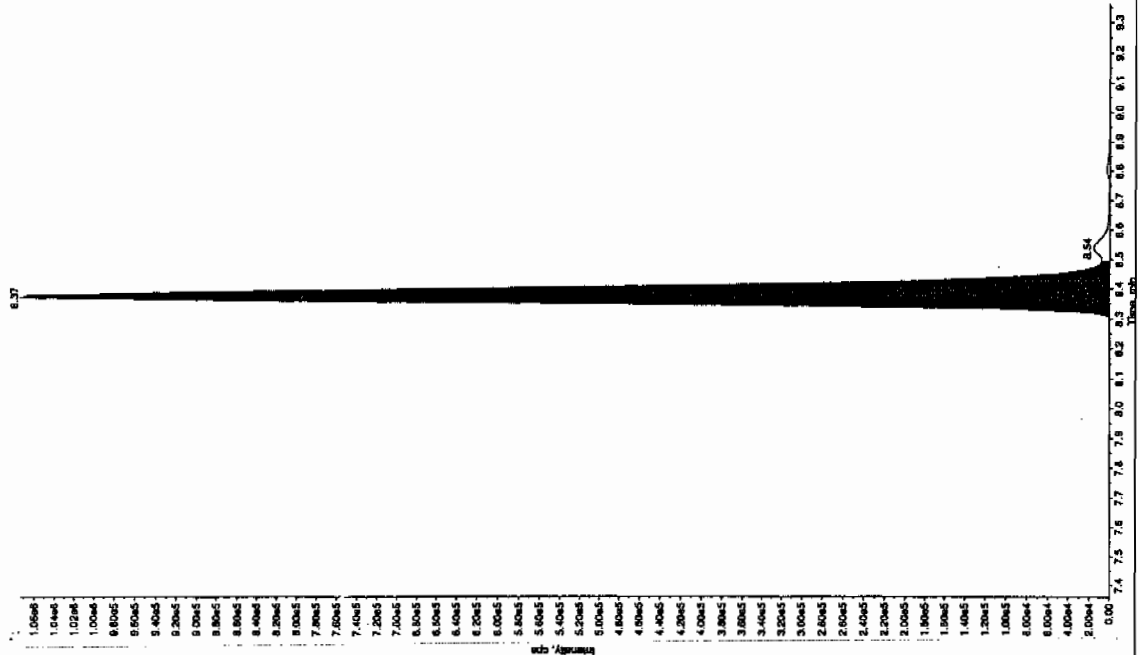
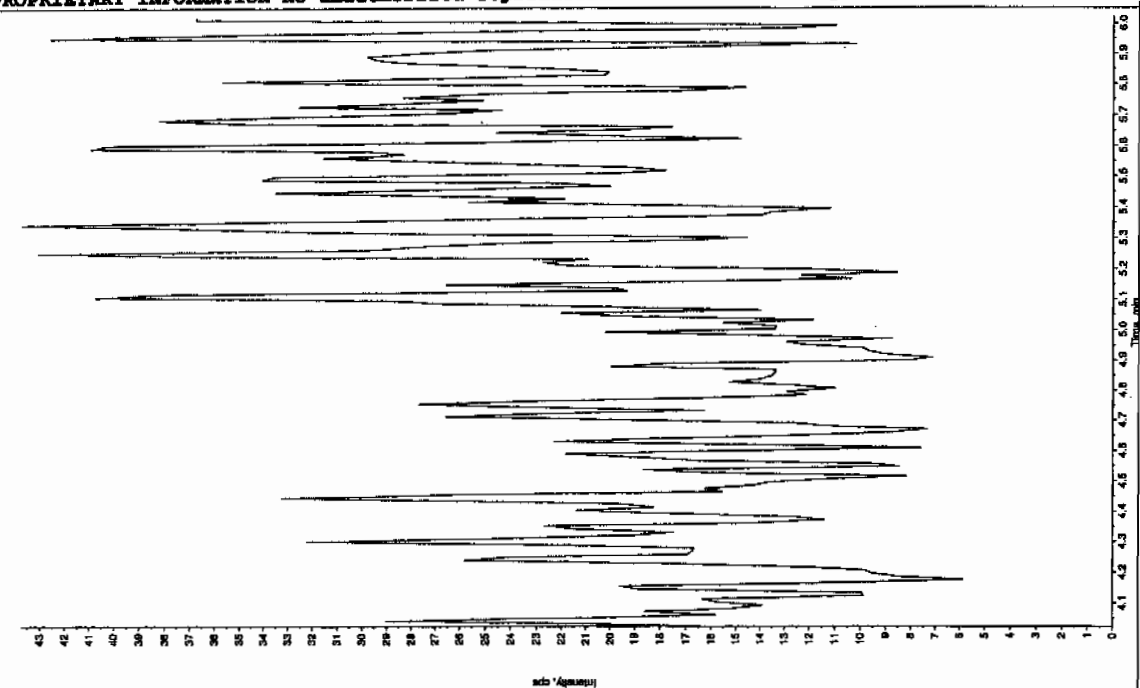
San 21110



EL SOP GL-OA-E-056; Method 8321A-Modified LCMSMS#4

Sample Name: "24509005" Sample ID: "94424321LER" File: "EX507290053.will"
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1751.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 11:41:34 PM
 Modified: No



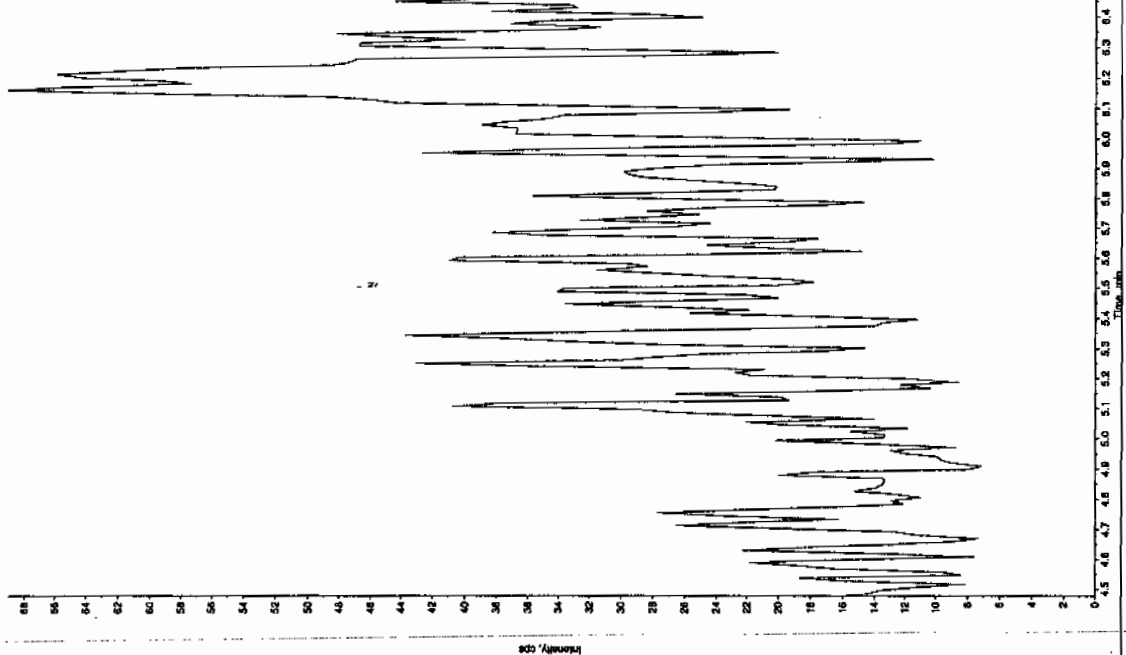
Sample Name: "24509005" Sample ID: "94424321LER" File: "EX507290053.will"
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.1751.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 11:41:34 PM
 Modified: No

Peak Name: "34-Dinitrofluorene" Mass(es): "162.1751.9 amu"
 Peak Width: 3.00 points
 Peak Height: 15.0 sec
 Peak Area: 8.36 min
 Peak Type: Valley
 Retention Time: 8.37 min
 Count: 4.05e+006 counts
 RT Time: 8.28 min
 I Time: 8.50 min

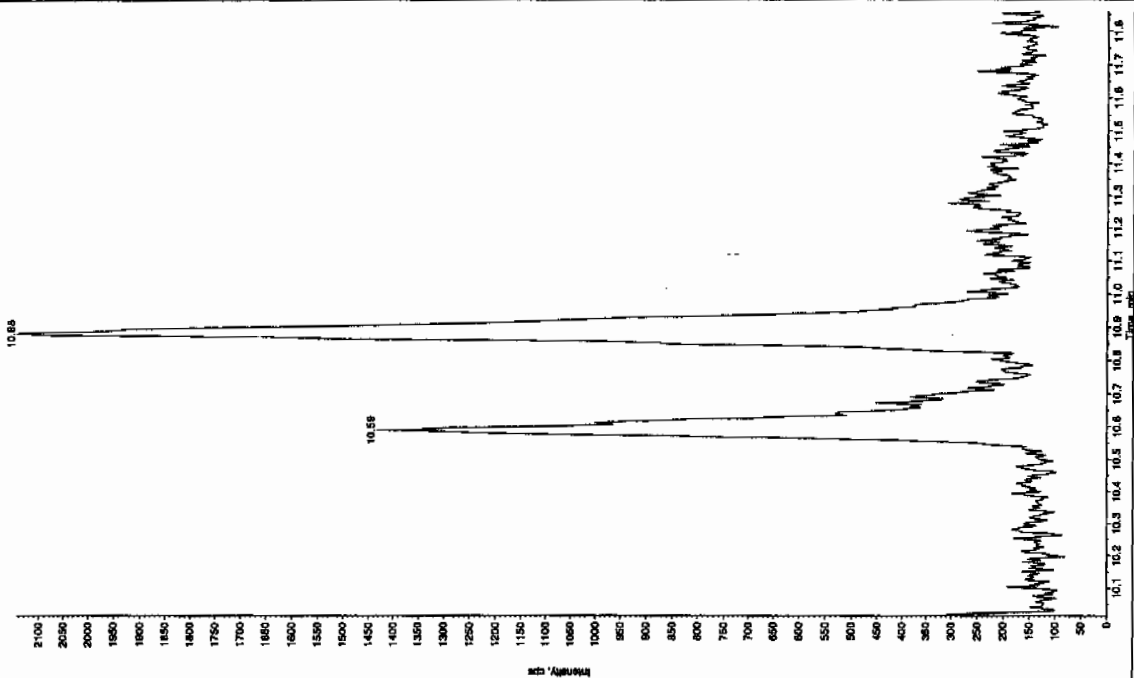
Sample Name: "24509005" Sample ID: "94424321LRF" File: "EXS01250053.wif"
 Peak Name: "24-Damino-6-nicotinamide" Mass(es): "166.046.0 amu"
 Comment: "LCX03212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 11:41:34 PM
 Modified: No



Sample Name: "24509005" Sample ID: "94424321LRF" File: "EXS01250053.wif"
 Peak Name: "166.0-cross(1) phosphatidic" Mass(es): "369.191.0 amu"
 Comment: "LCX03212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 11:41:34 PM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7197

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099006

Sample Amount 2

Moisture: 14.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203119a

Date Analyzed: 06-FEB-10 00:39

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Mon Feb 08 11:31:28 2010, Page 71 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0203119a

Date: 06-Feb-2010

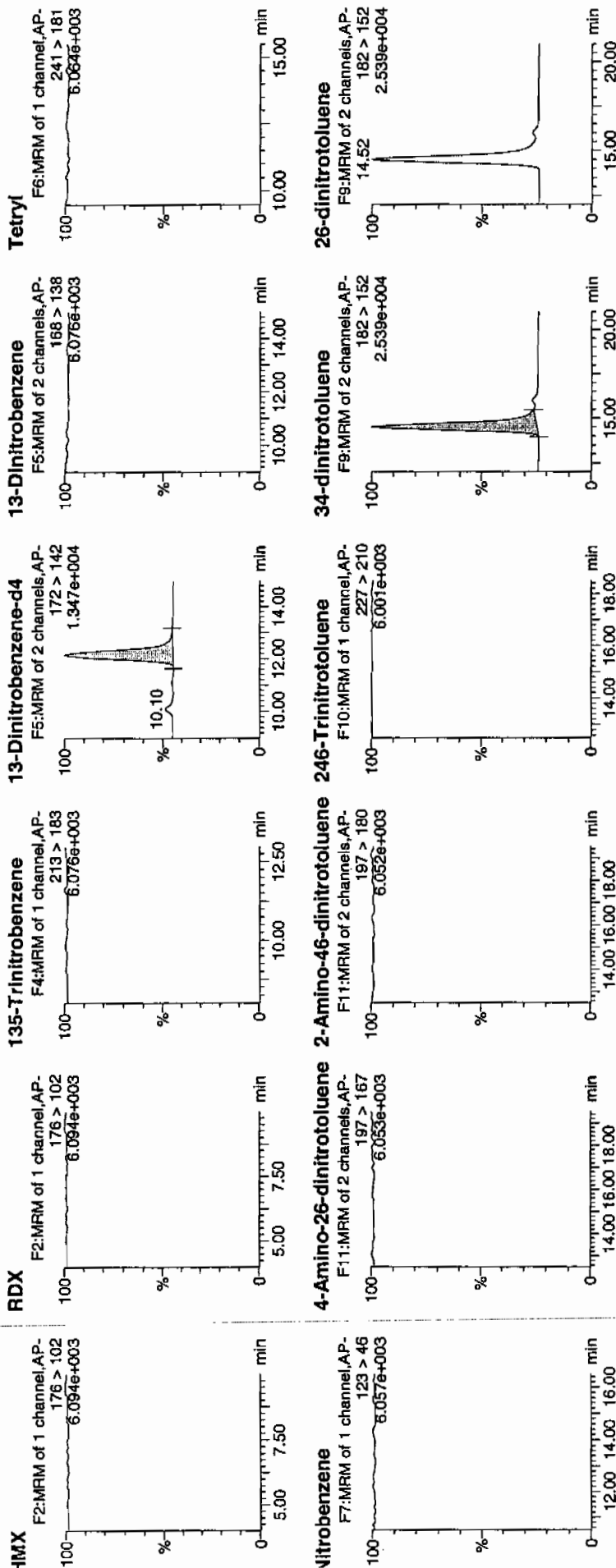
Time: 00:39:54

ID: 245099006

Vial: 3;2,D

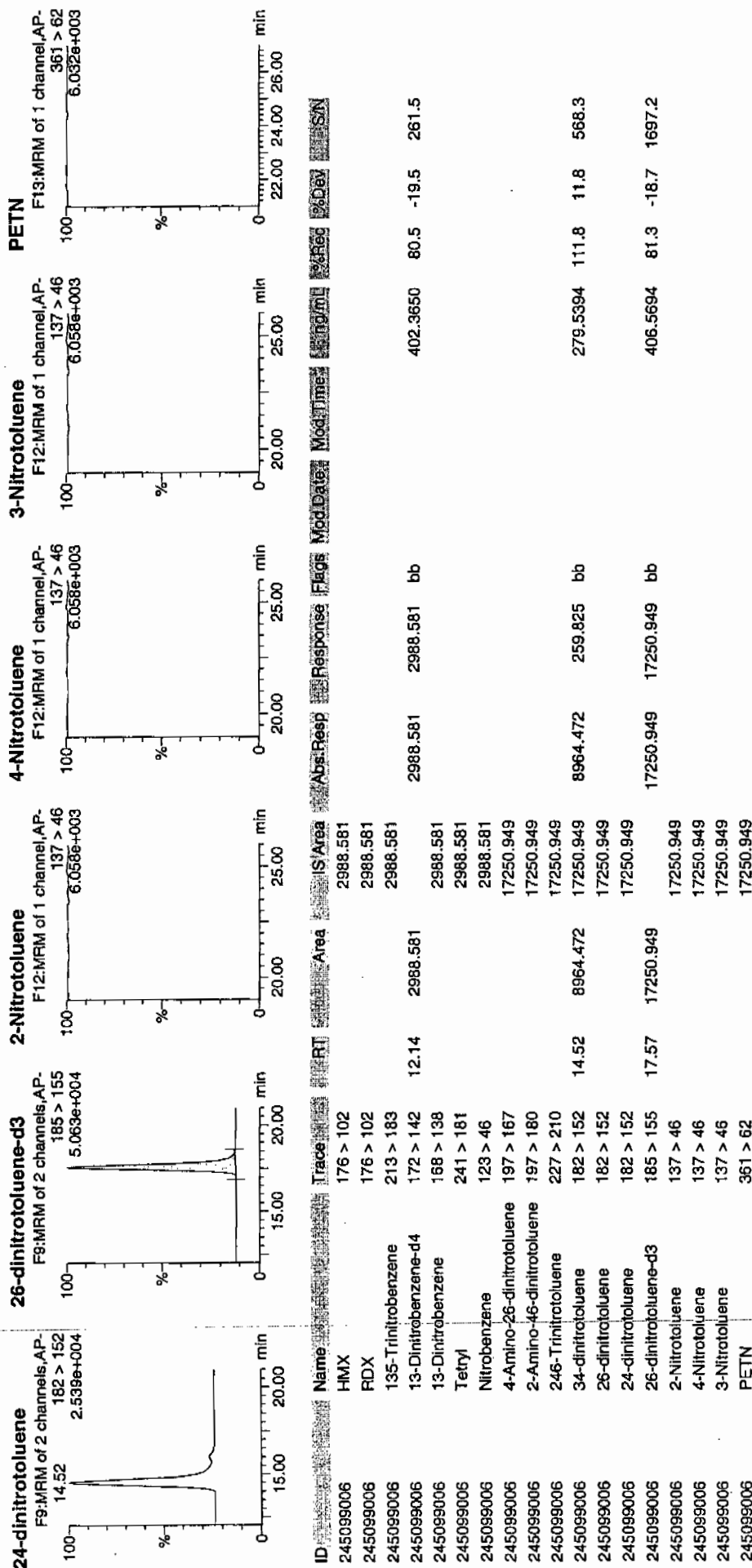
not
2/8/10

WAVU (944243 / *Saved*) / *2*



Handwritten signature

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7197

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099006

Sample Amount 2

Moisture: 14.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290054.wiff

Date Analyzed: 29-JAN-10 23:57

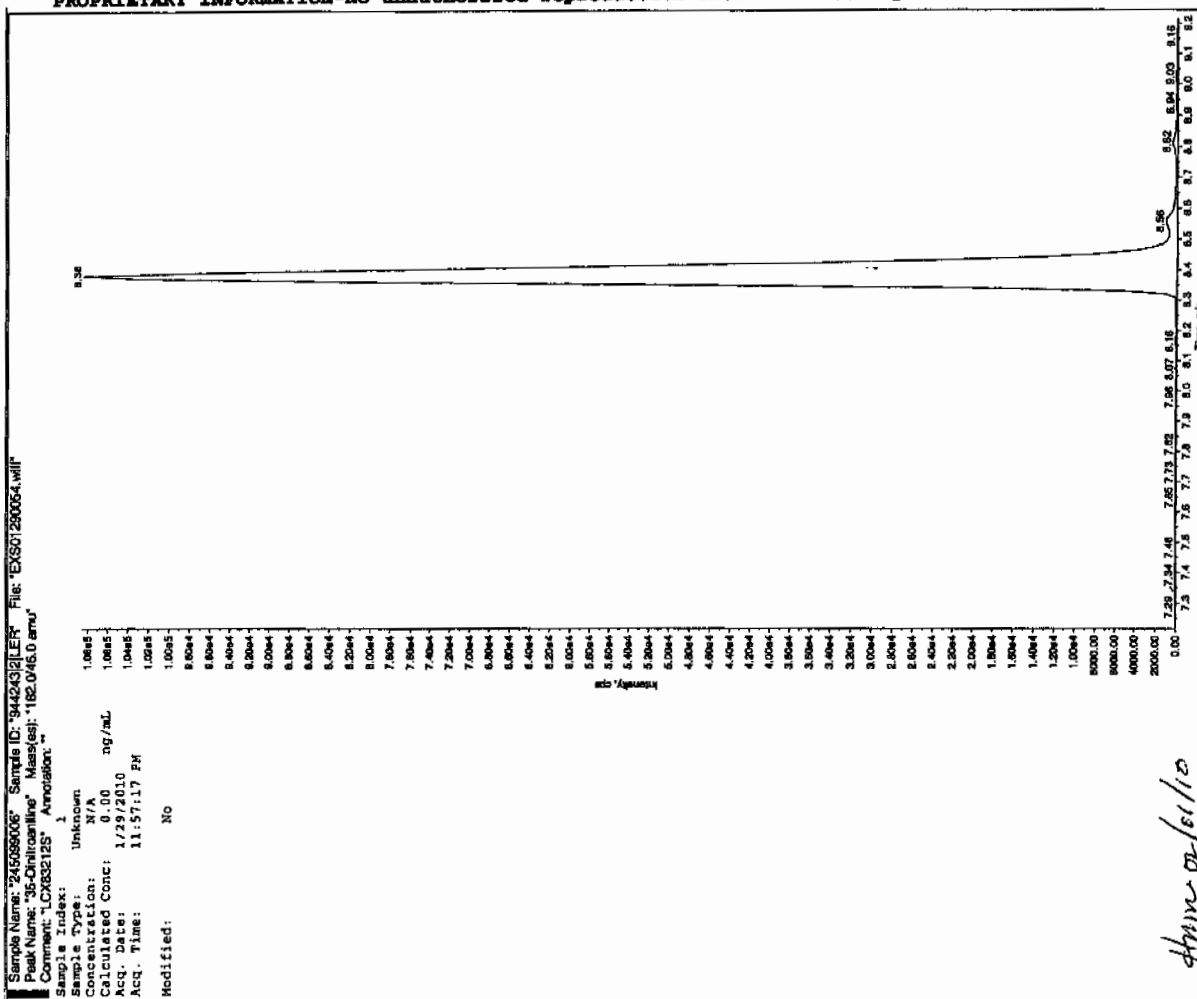
Units: ug/kg

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

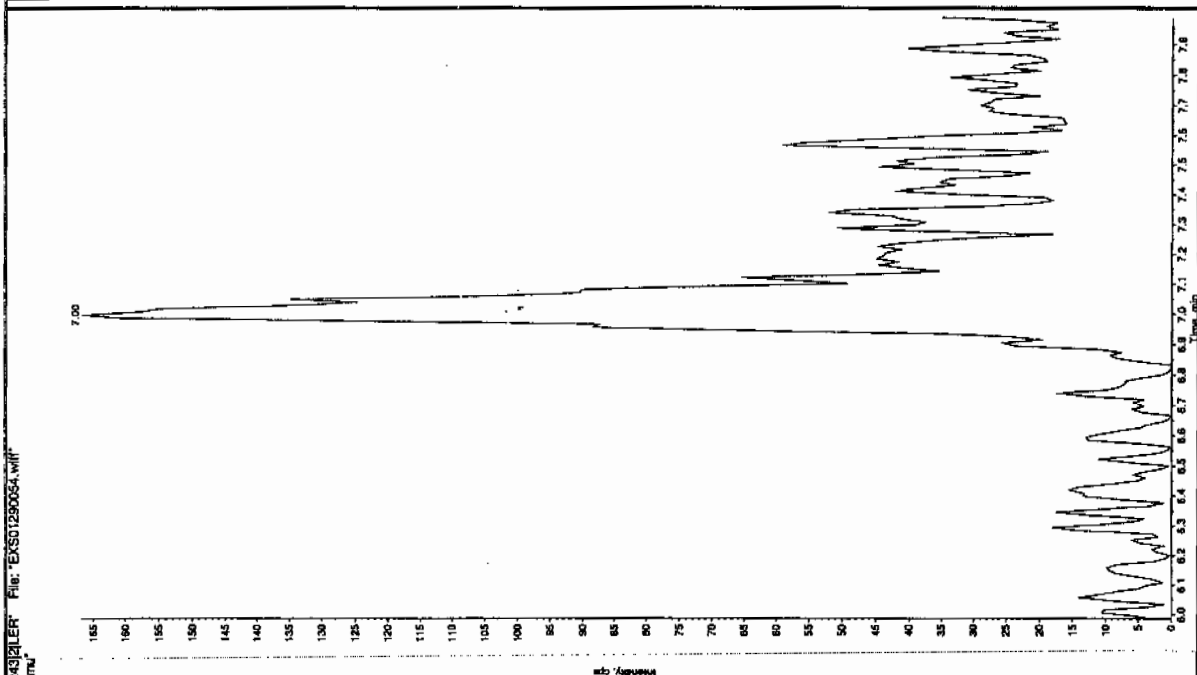
*Concentration =

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

See 2/1/10

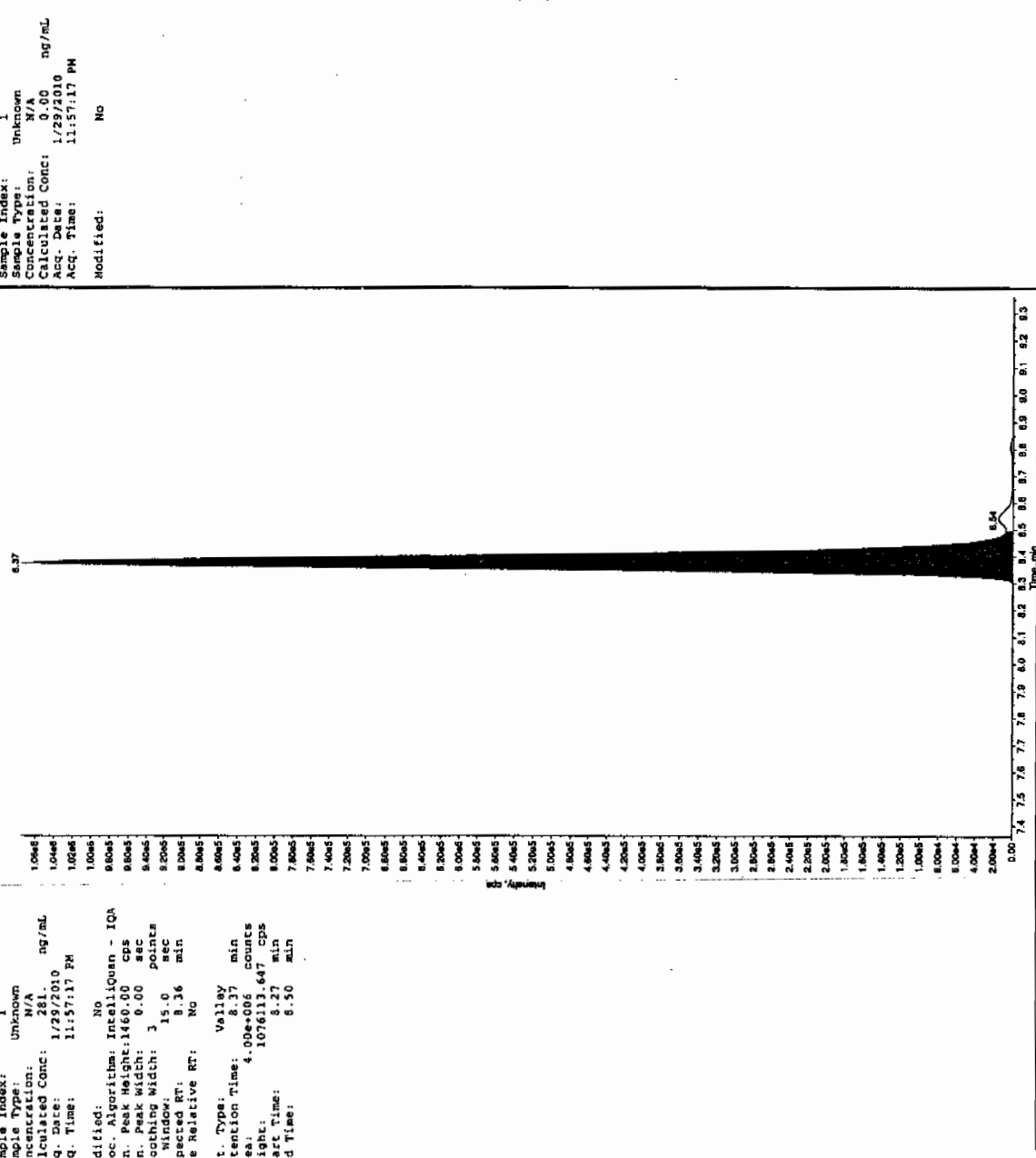
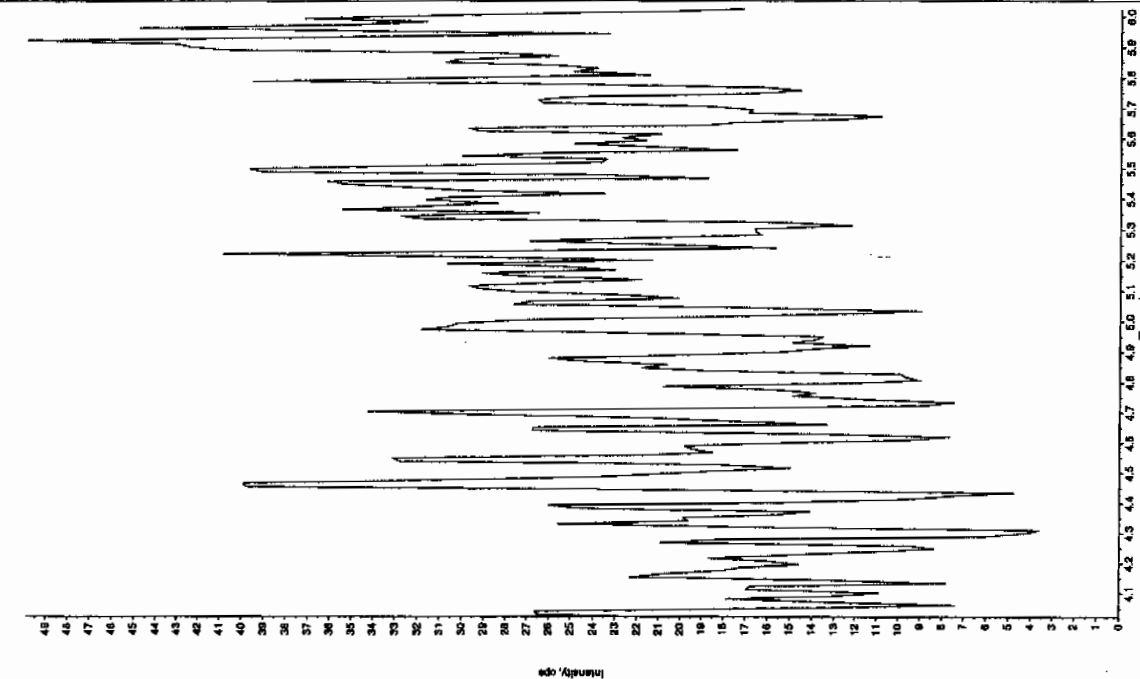


4/11/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

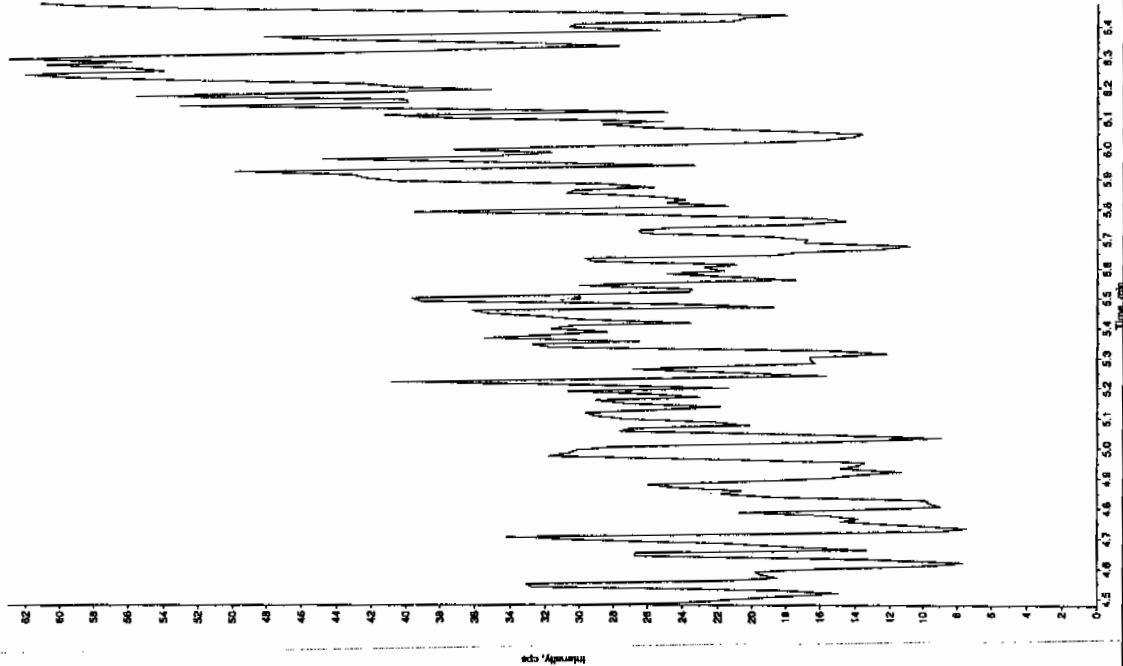
Sample Name: 245090006 Sample ID: 944243212LRF File: EXS01290004.wif
 Peak Name: 28-Chloro-4-nitrobenzene Mass(es): 166.0460 amu
 Concentration: 0.00 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 11:57:17 PM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

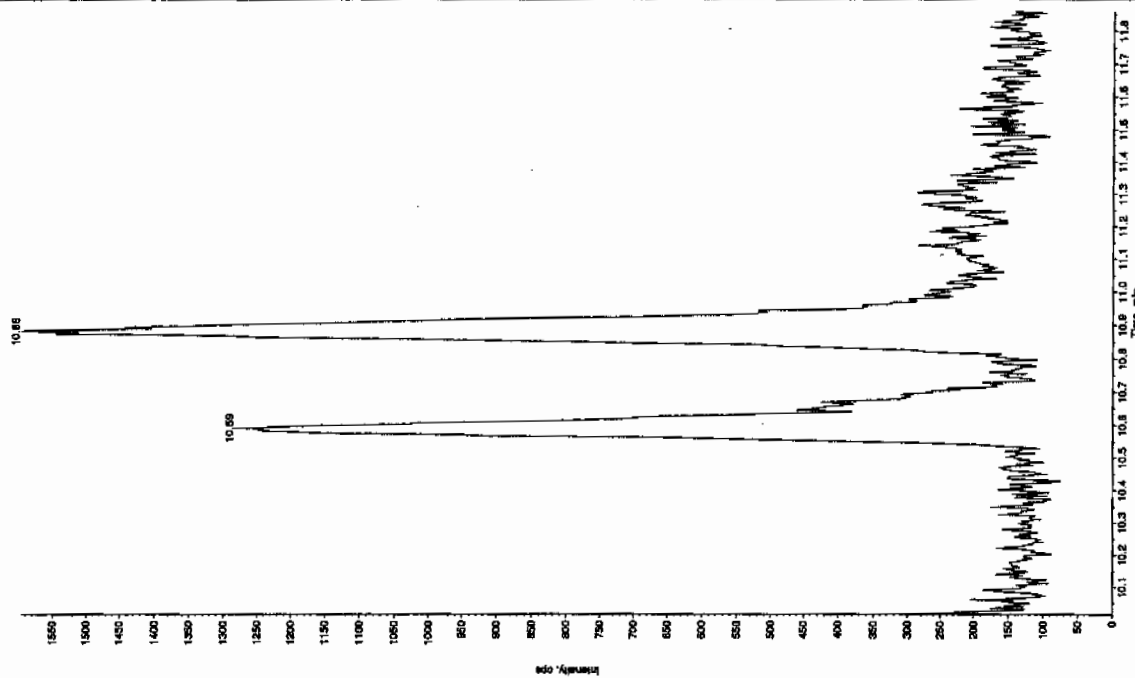
Sample Name: 24509008 Sample ID: 9424321ER File: EXS01290054.wif
 Peak Name: 24-Chlorine-6-nitrobenzene Mass(es): 156.046.0 amu
 Comment: LCR332125 Annotation: -

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/28/2010
 Acq. Date: 11:57:17 PM
 Acq. Time: 11:57:17 PM
 Modified: No



Sample Name: 24509008 Sample ID: 9424321ER File: EXS01290054.wif
 Peak Name: bis(cresyl) phosphate Mass(es): 358.1910 amu
 Comment: LCR332125 Annotation: -

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/28/2010
 Acq. Date: 11:57:17 PM
 Acq. Time: 11:57:17 PM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7193

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099007

Sample Amount 2

Moisture: 19.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203123a

Date Analyzed: 06-FEB-10 02:37

Units: ug/kg

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

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Feb 08 11:31:28 2010, Page 79 of 103

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203123a

Date: 06-Feb-2010

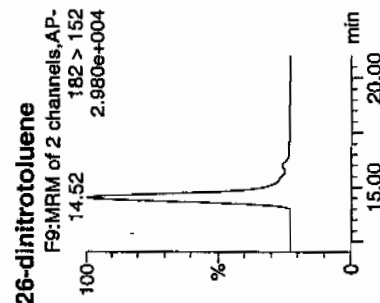
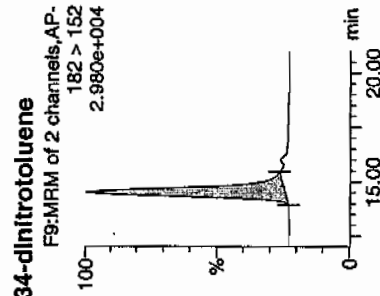
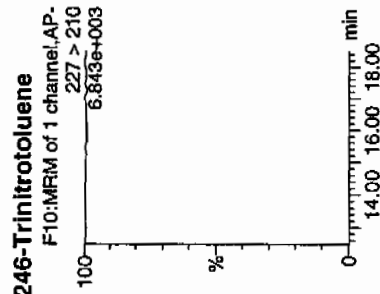
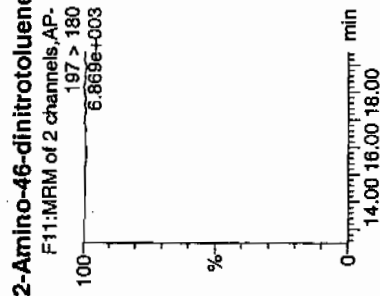
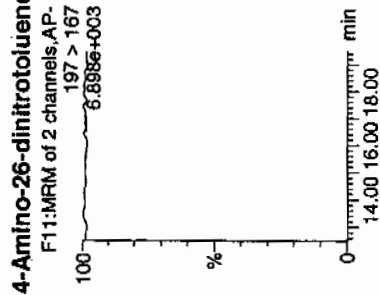
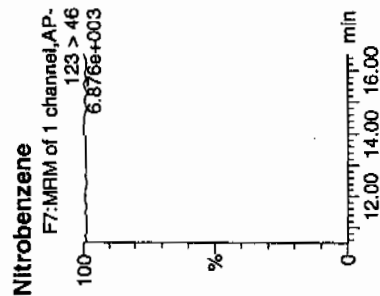
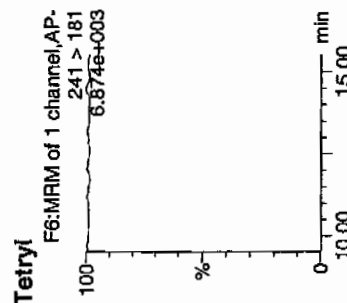
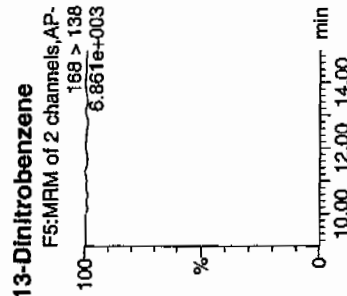
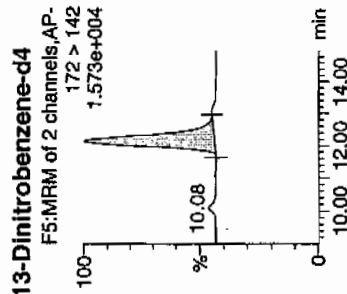
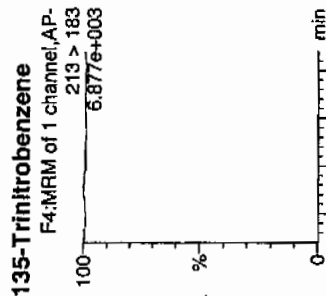
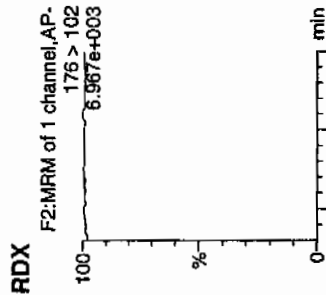
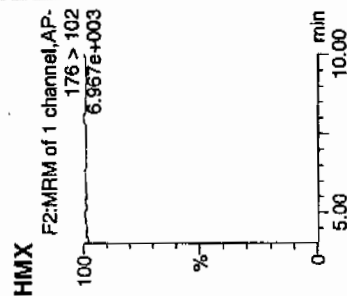
Time: 02:37:51

ID: 245099007

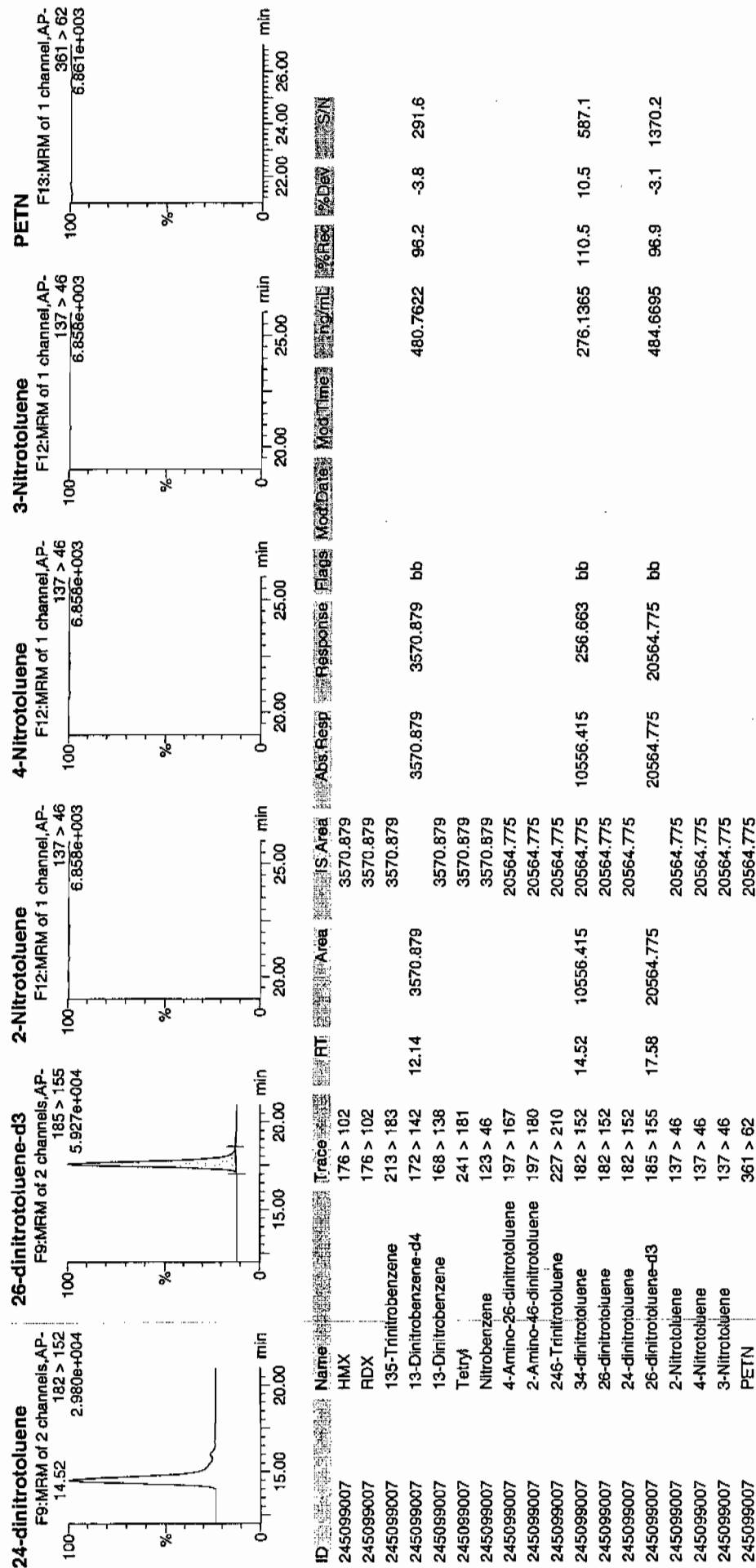
Vial: 3:2,E

10/17/10
4/2/10

194443 / 21



4/11/10 02:10:51/10



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7193

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099007

Sample Amount 2

Moisture: 19.0

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290058.wiff

Date Analyzed: 30-JAN-10 01:00

Units: ug/kg

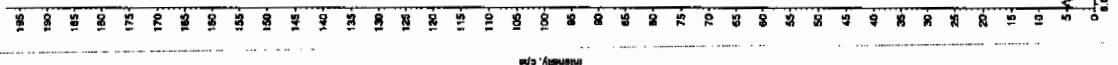
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

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

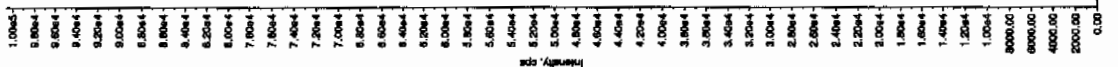
Sample Name: "24509907" Sample ID: "9424321ER" File: "EXS01290058.wif"
 Peak Name: "TAIB" Mass(es): 257.2704.9 amu
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 1/30.000
 Acq. Time: 1:00:08 AM
 Modified: No



Sample Name: "24509907" Sample ID: "9424321ER" File: "EXS01290058.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): 182.048.0 amu
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 1/30.000
 Acq. Time: 1:00:08 AM
 Modified: No



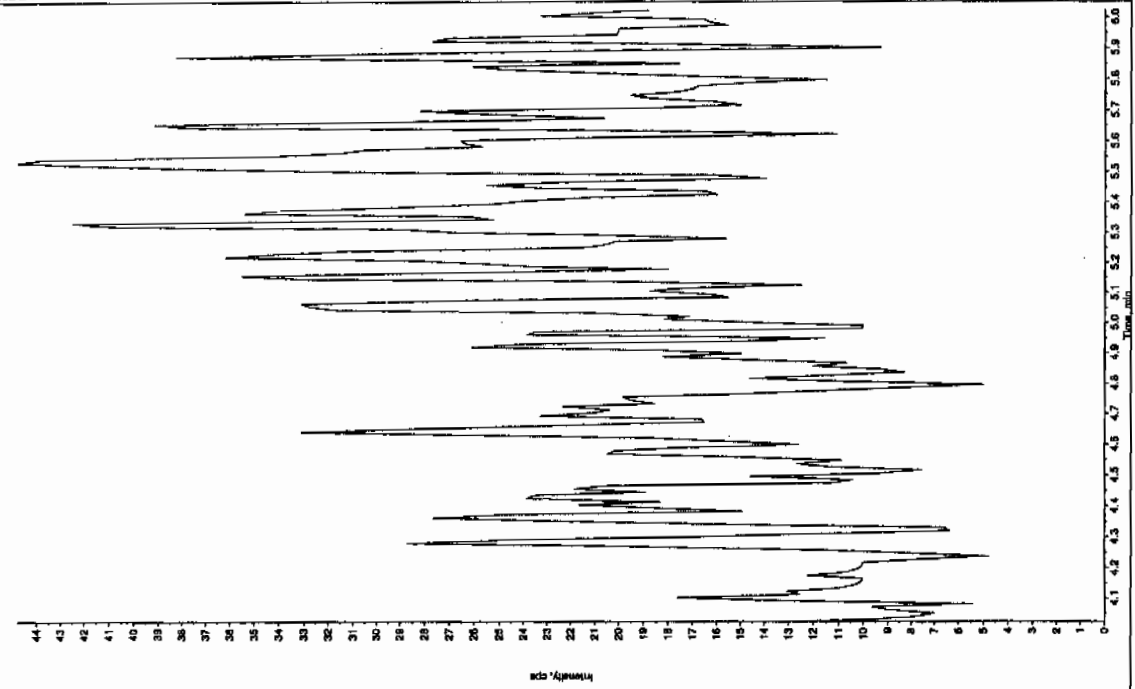
EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Time on file

See 24110

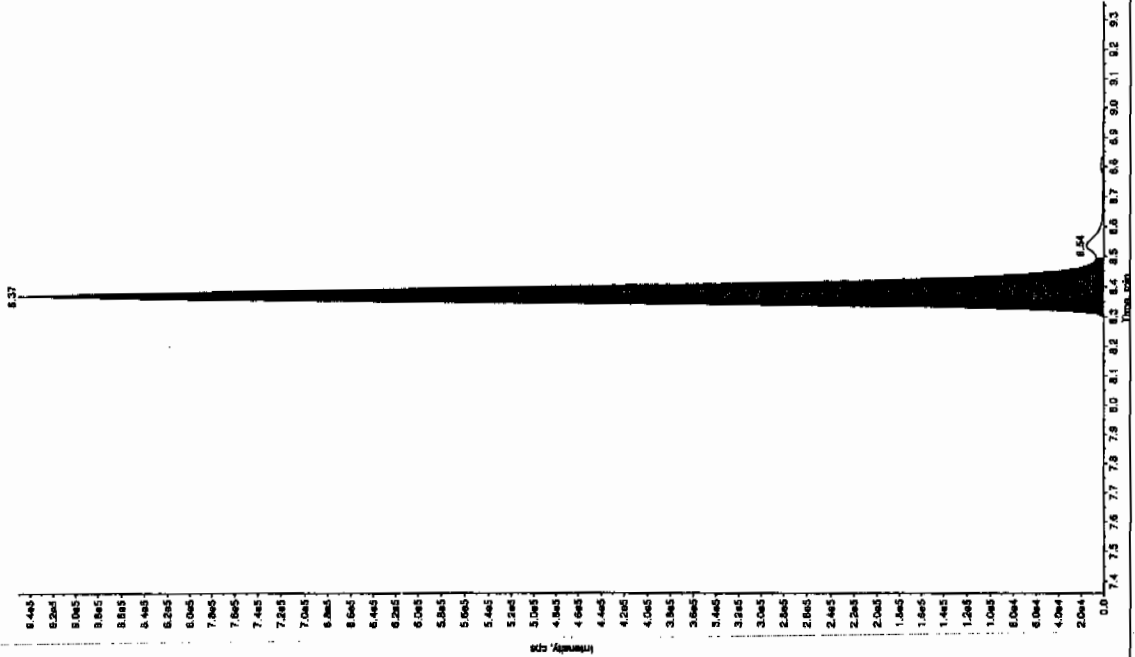
Sample Name: "245095007" Sample ID: "94424321LER" File: "EX501280058.wif"
 Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 1/30/2010
 Acq. Time: 1:00:08 AM
 Modified: No



Sample Name: "245095007" Sample ID: "94424321LER" File: "EX501280058.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.1151.9 amu"
 Comment: "LCX832125" Annotation: "

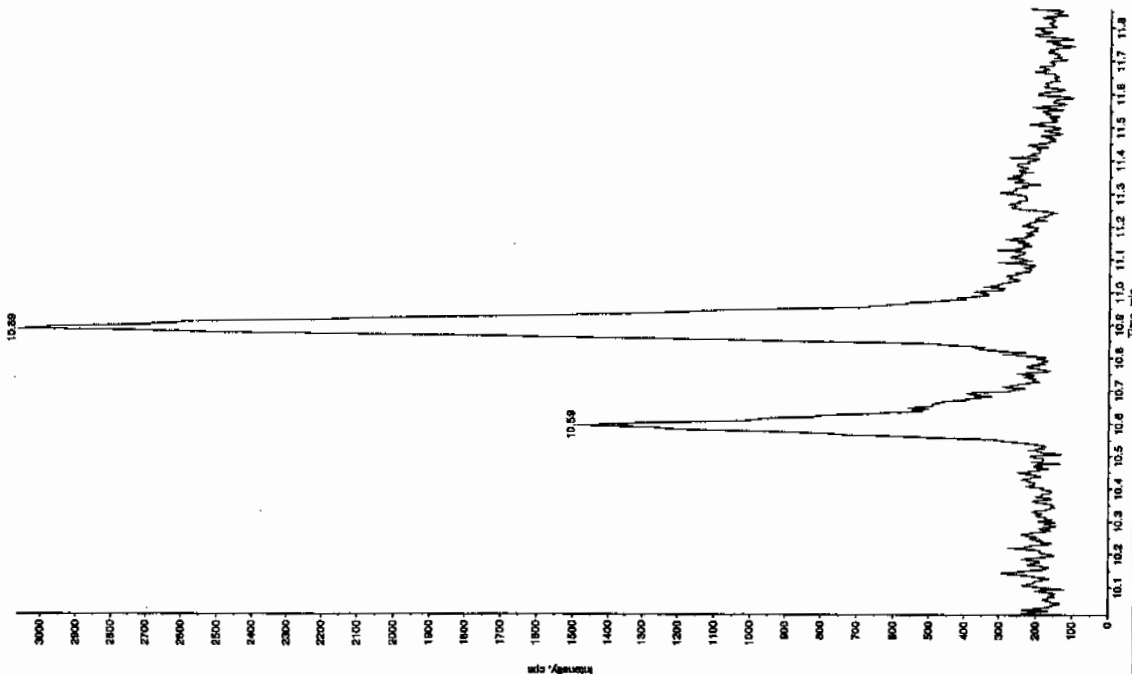
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 1/30/2010
 Acq. Time: 1:00:08 AM
 Modified: No
 X: Algorithm: IntelliQuan - IQA
 1. Peak Height: 1460.00 cps
 1. Peak Width: 0.00 sec
 1. Peak Width: 3 points
 Window: 15.0 sec
 Selected RT: 8.36 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.37 min
 Area: 3.60e+006 counts
 Height: 951111.586 cps
 Ret Time: 8.28 min
 Time: 8.50 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

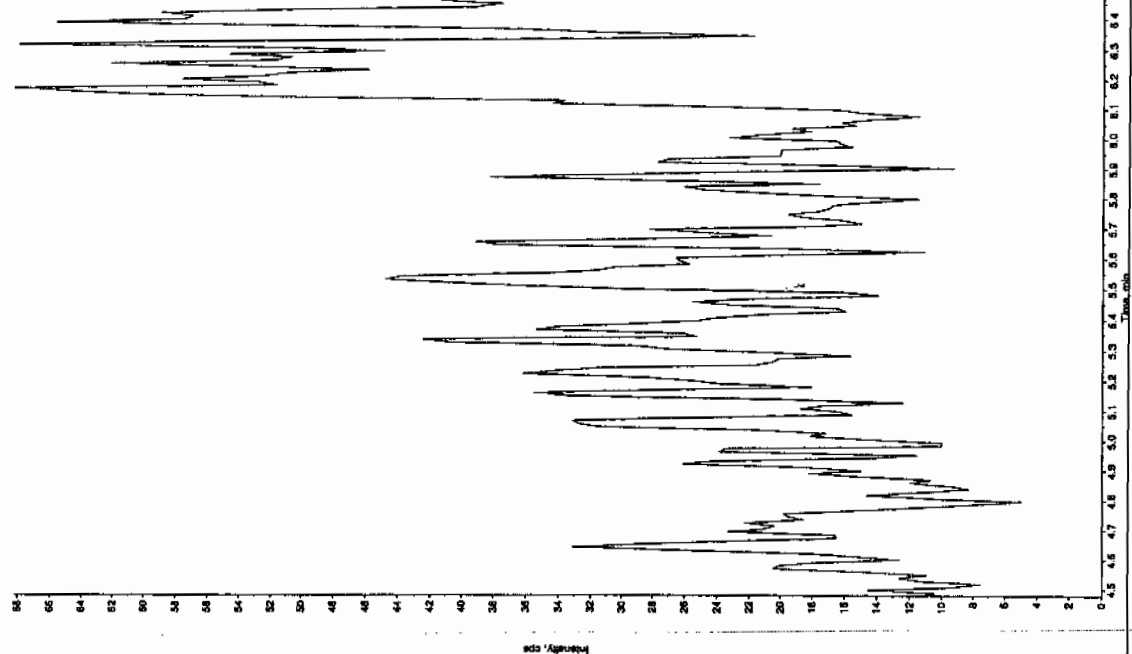
Sample Name: "245058007" Sample ID: "9442432125" File: "EX501250058.wif"
 Peak Name: "bis(crossyl) phosphate" Mass(es): "565.191.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 1:00:08 AM
 Acq. Time: 1:00:08 AM
 Modified: No



Sample Name: "245058007" Sample ID: "9442432125" File: "EX501250058.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 1:00:08 AM
 Acq. Time: 1:00:08 AM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7184

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099008

Sample Amount 2

Moisture: 17.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203124a

Date Analyzed: 06-FEB-10 03:07

Units: ug/kg

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

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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Date: 06-Feb-2010

Time: 03:07:25

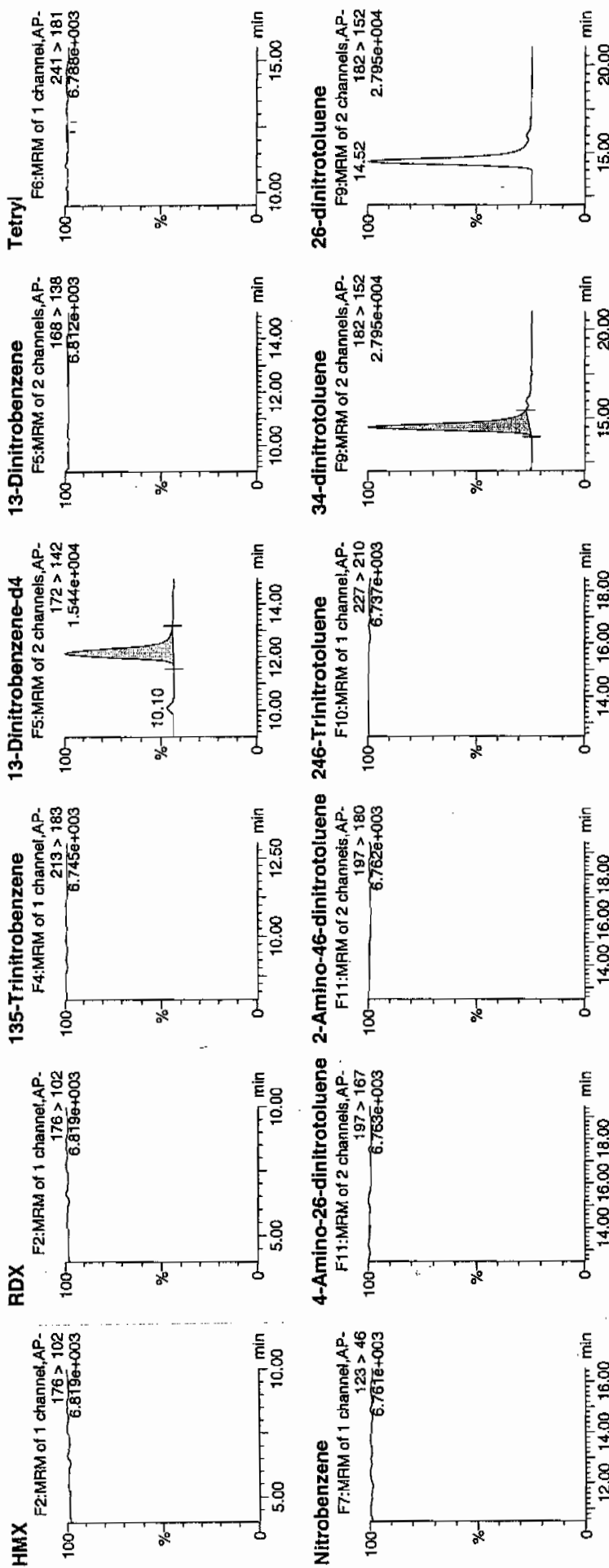
ID: 245099008

Vial: 3:2,F

1477
2/8/10

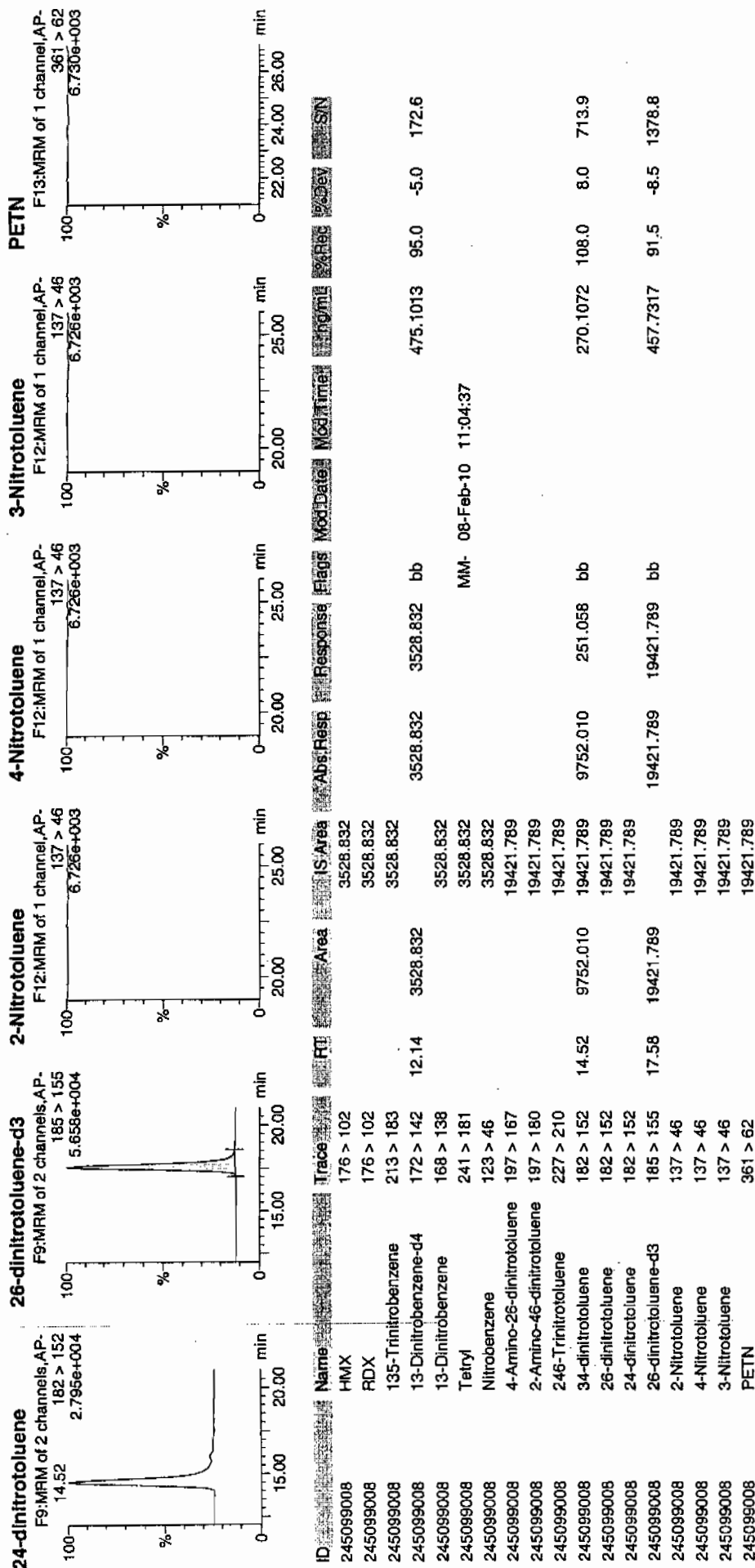
WAC/944243/8002/21

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Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7184

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099008

Sample Amount 2

Moisture: 17.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290059.wiff

Date Analyzed: 30-JAN-10 01:15

Units: ug/kg

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

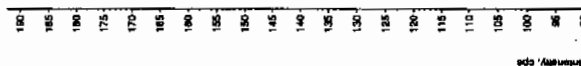
*Concentration =

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

Star 26/10

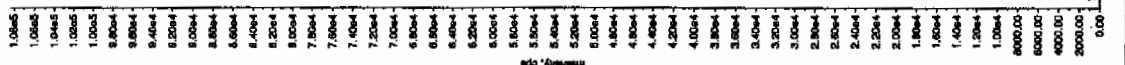
Sample Name: "24509008" Sample ID: "94424321" File: "EX50129008.wif"
 Peak Name: "TATB" Mass(es): "257.204.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 1/15/12 AM
 Acq. Time: 1:15:52 AM
 Modified: No



Sample Name: "24509008" Sample ID: "94424321" File: "EX50129008.wif"
 Peak Name: "35-Dinitrobenz" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "

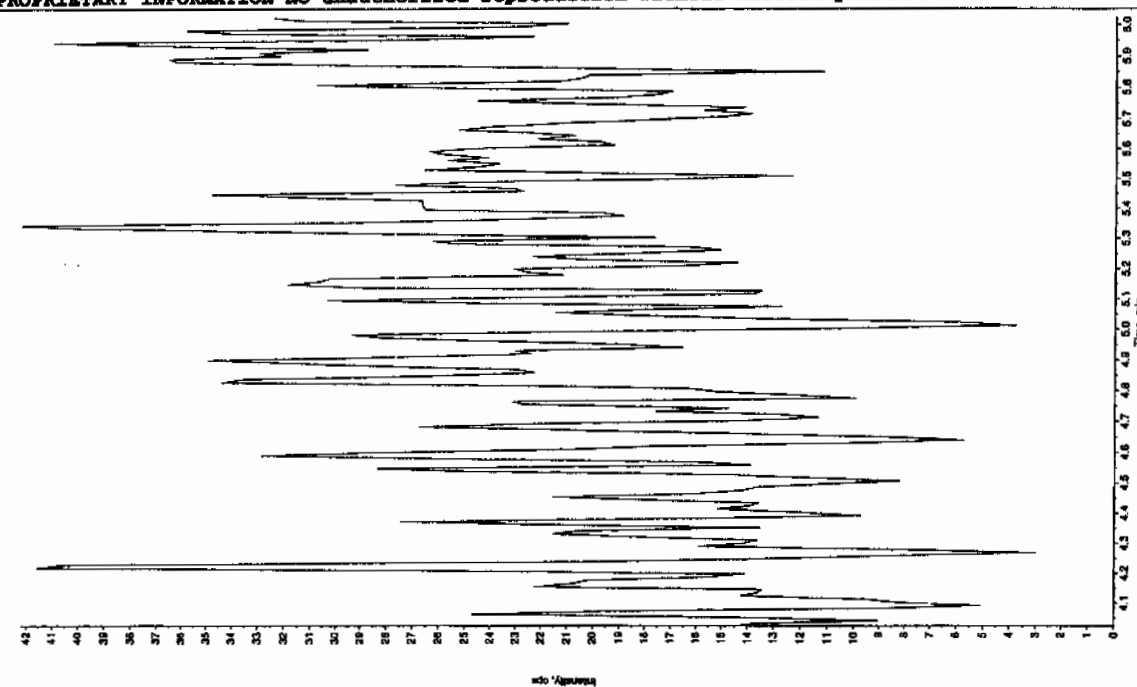
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 1/15/12 AM
 Acq. Time: 1:15:52 AM
 Modified: No



Star 26/10

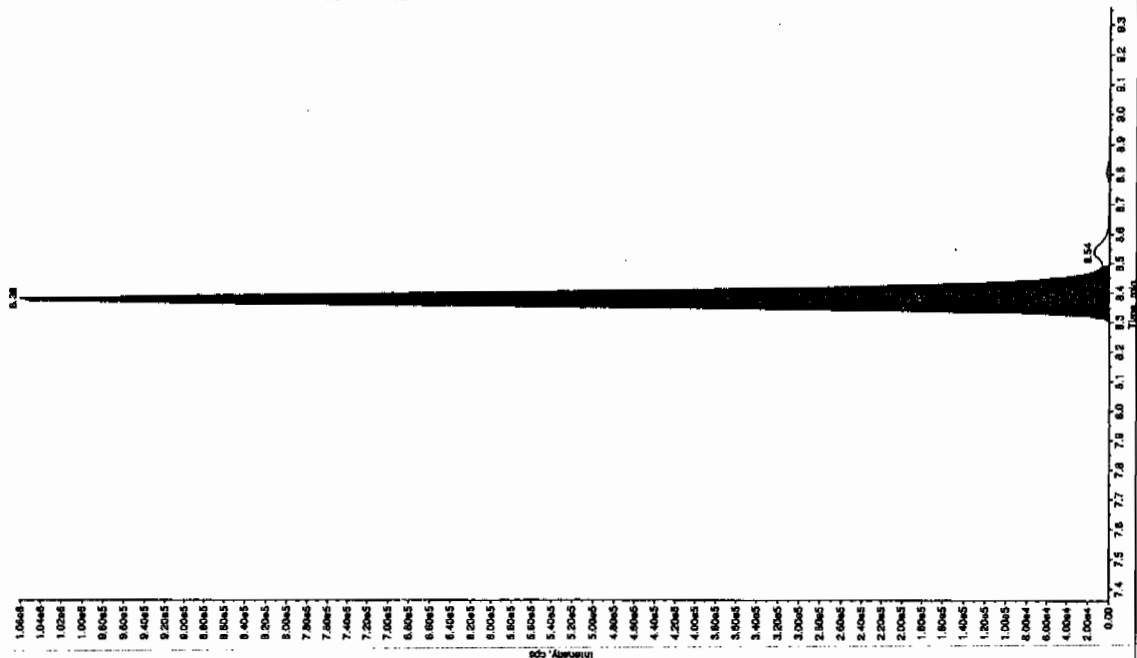
Sample Name: "245059009" Sample ID: "94424321.EP" File: "EXS01290059.wif"
 Peak Name: "26-Diamino-4-nitrophenol" Mass(es): "166.046.0 amu"
 Comment: "LCX632125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:15:52 AM
 Modified: No



Sample Name: "245059009" Sample ID: "94424321.EP" File: "EXS01290059.wif"
 Peak Name: "34-Dinitrophenol" Mass(es): "182.0751.9 amu"
 Comment: "LCX632125" Annotation: "

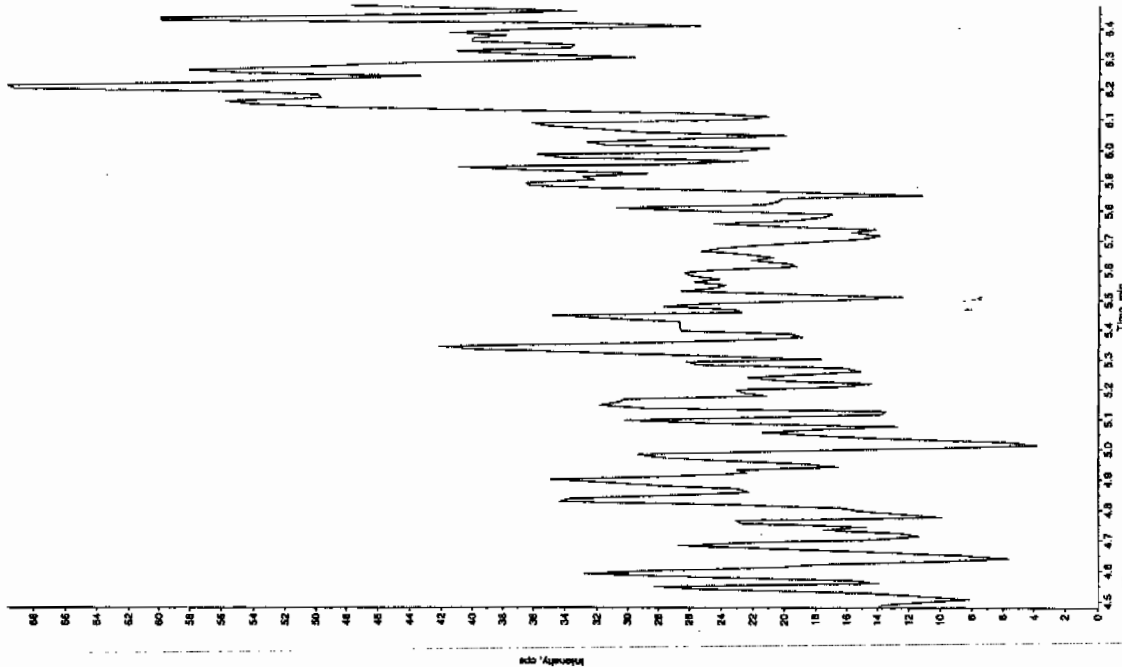
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 277. ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:15:52 AM
 Modified: No
 xc. Algorithm: IntelliQuan - IQA
 1. Peak Height: 1460.00 cps
 1. Peak Width: 0.00 sec
 1. Peak Width: 3 points
 window: 15.0 sec
 window: 8.36 min
 1. Relative RT: No
 1. Type: Valley
 1. Retention Time: 8.38 min
 1. Signal: 3.94e+006 counts
 1. Light: 1061721.680 cps
 1. Ret Time: 8.28 min
 1. Time: 8.50 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

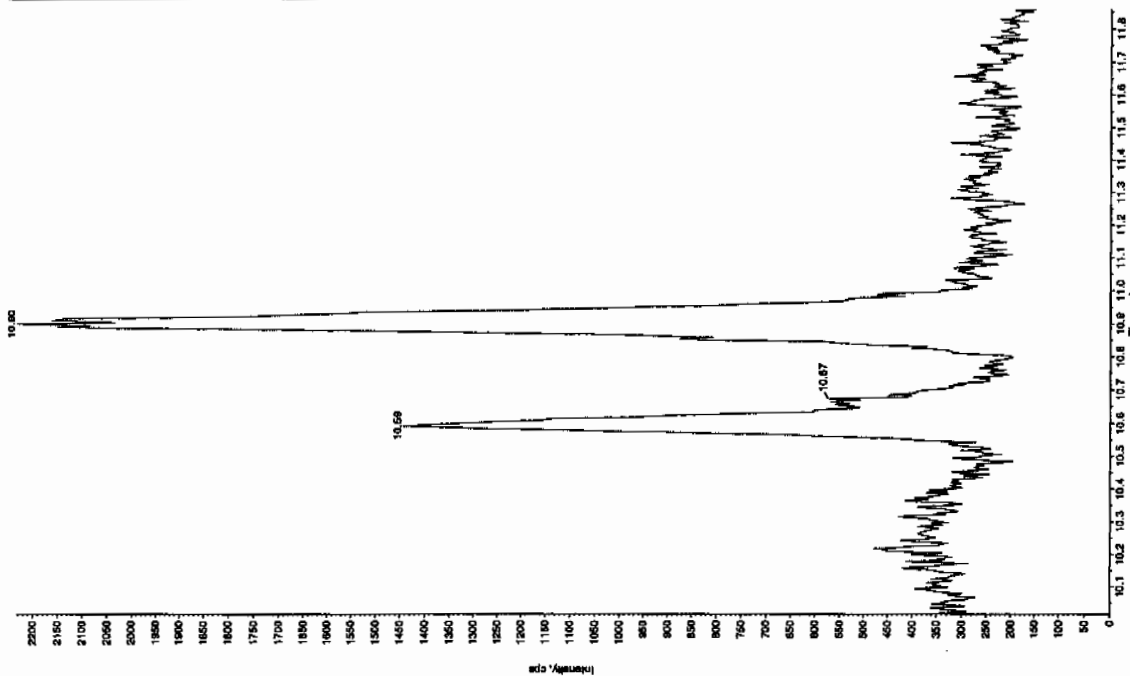
Sample Name: "245059008" Sample ID: "9442432125" File: "EX501290059.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ug/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:15:52 AM
 Modified: No



Sample Name: "245059008" Sample ID: "9442432125" File: "EX501290059.wif"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "359.191.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:15:52 AM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7185

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099009

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203125a

Date Analyzed: 06-FEB-10 03:36

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	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\20310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0203125a

Date: 06-Feb-2010

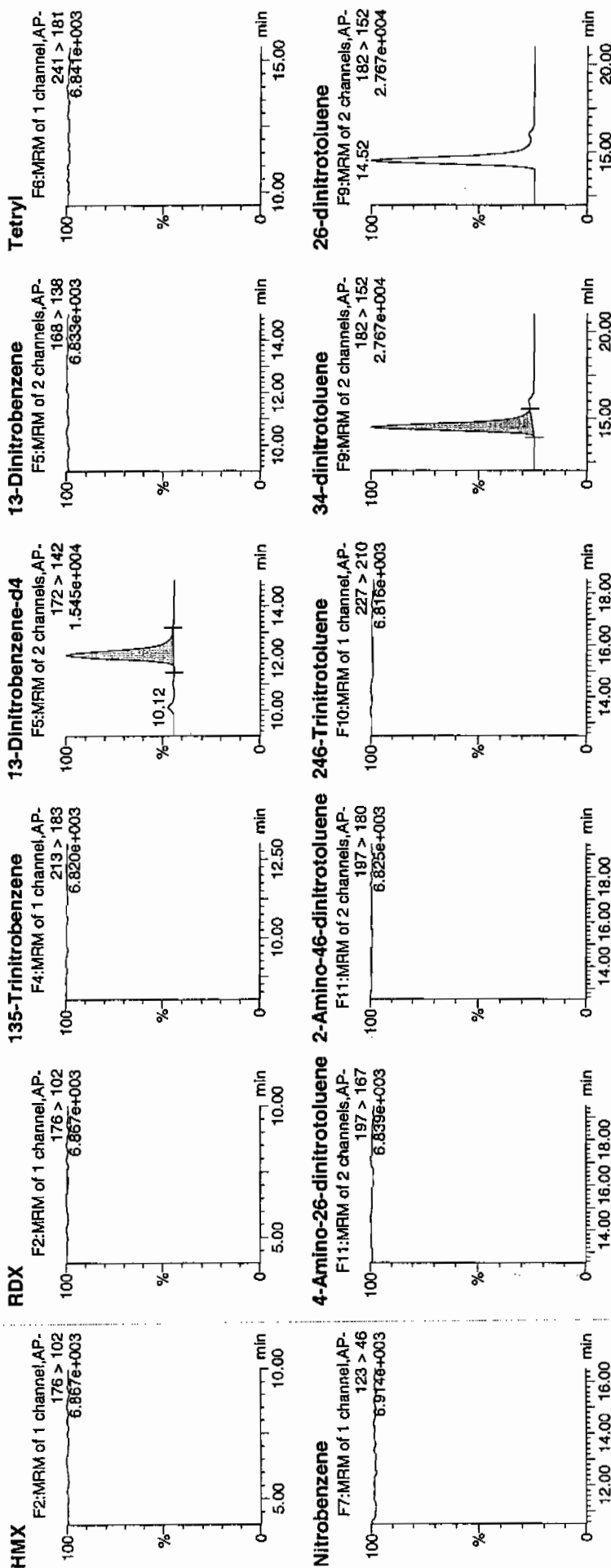
Time: 03:36:51

ID: 245099009

Vial: 3:3,A

auth
2/8/10

944243 / 121



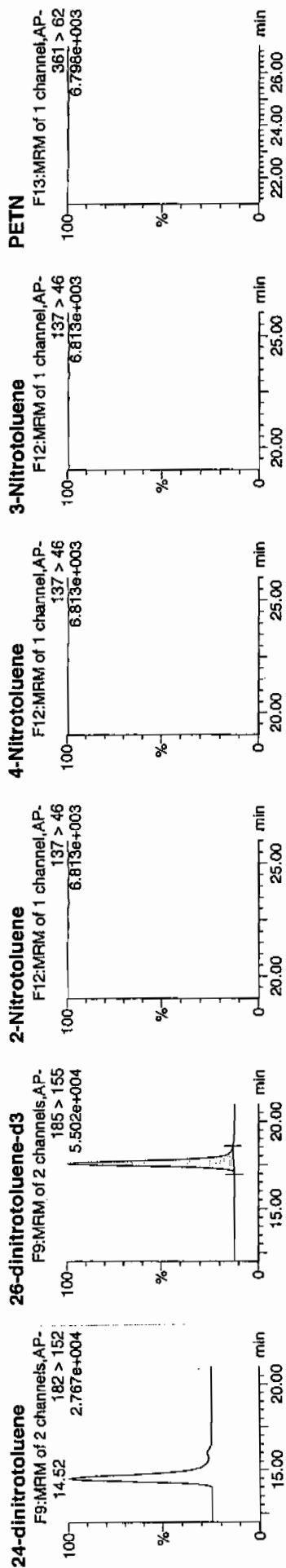
auth 02/08/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Area	%Dev	%SIN
245099009	HMX	176 > 102		3477.711									
245099009	RDX	176 > 102		3477.711									
245099009	135-Trinitrobenzene	213 > 183		3477.711									
245099009	13-Dinitrobenzene-d4	172 > 142	12.14	3477.711									
245099009	13-Dinitrobenzene	168 > 138		3477.711									
245099009	Tetryl	241 > 181		3477.711									
245099009	Nitrobenzene	123 > 46		3477.711									
245099009	4-Amino-26-dinitrotoluene	197 > 167		18693.584									
245099009	2-Amino-46-dinitrotoluene	197 > 180		18693.584									
245099009	246-Trinitrotoluene	227 > 210		18693.584									
245099009	34-dinitrotoluene	182 > 152	14.52	9852.771									
245099009	26-dinitrotoluene	182 > 152		18693.584									
245099009	24-dinitrotoluene	182 > 152		18693.584									
245099009	26-dinitrotoluene-d3	185 > 155	17.58	18693.584									
245099009	2-Nitrotoluene	137 > 46		18693.584									
245099009	4-Nitrotoluene	137 > 46		18693.584									
245099009	3-Nitrotoluene	137 > 46		18693.584									
245099009	PETN	361 > 62		18693.584									
						3477.711	3477.711	bb					
						9852.771	263.533	bb					
						18693.584	18693.584	bb					
									468.2186	93.6	-6.4	366.4	
									283.5288	113.4	13.4	441.2	
									440.5694	88.1	-11.9	1319.2	

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7185

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099009

Sample Amount 2

Moisture: 9.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290060.wiff

Date Analyzed: 30-JAN-10 01:31

Units: ug/kg

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

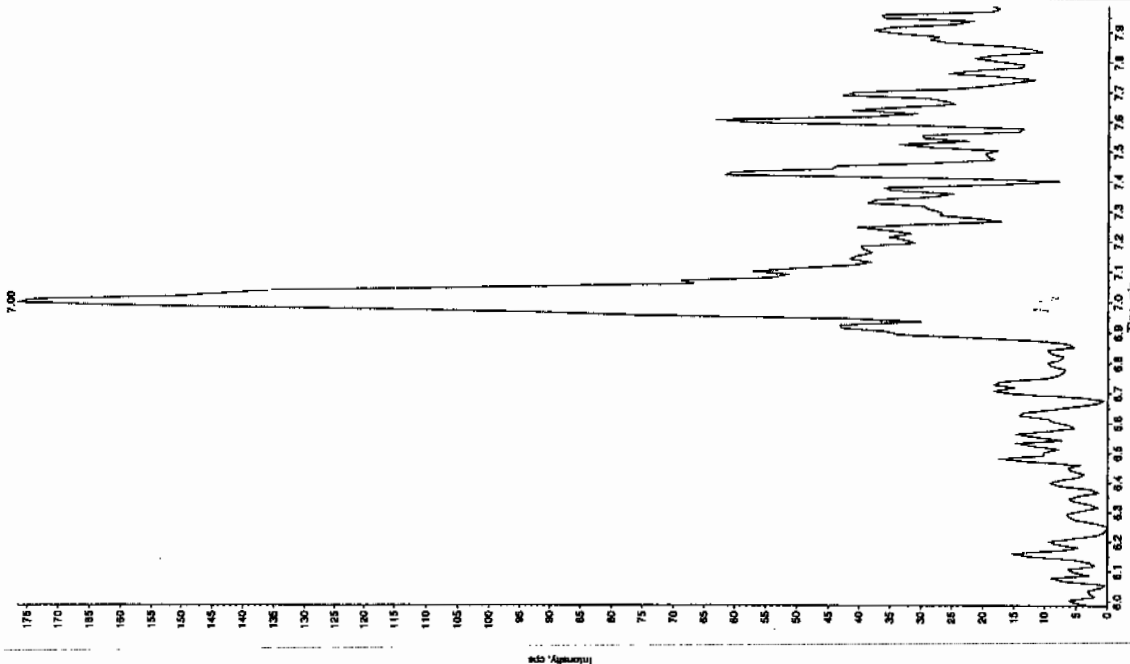
*Concentration =

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

See 2/1/10

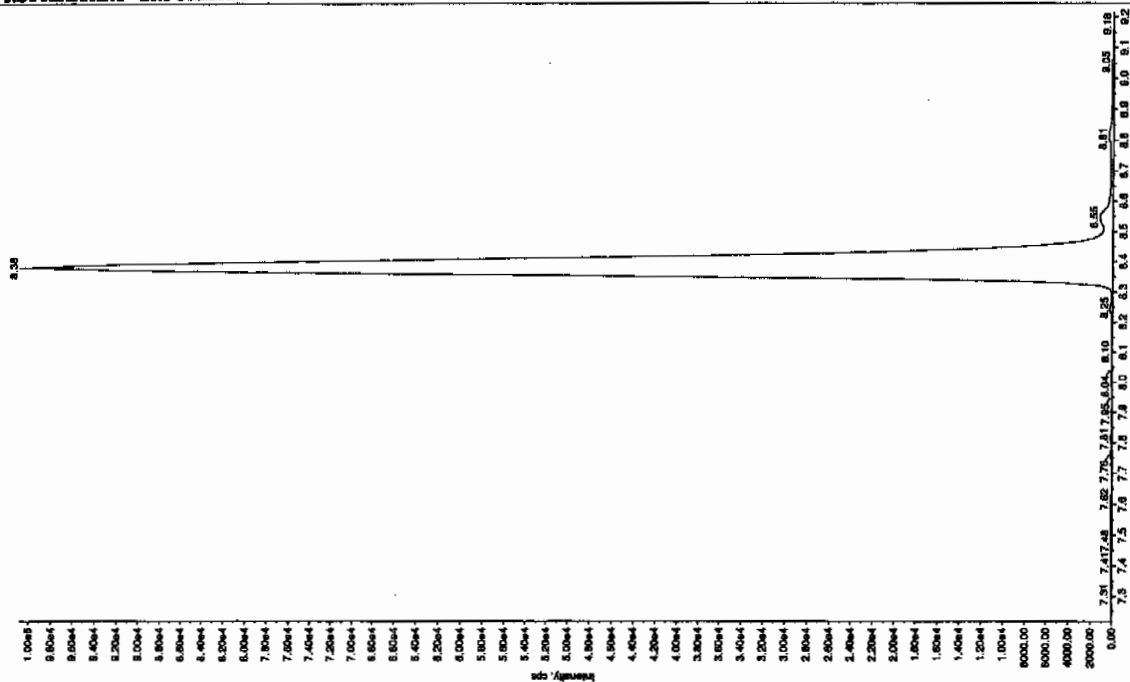
Sample Name: "24599009" Sample ID: "944243111" File: "EX501290060.wif"
 Peak Name: "TATB" Mass(es): "267.2204.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:31:35 AM
 Modified: NO



Sample Name: "24599009" Sample ID: "944243111" File: "EX501290060.wif"
 Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "

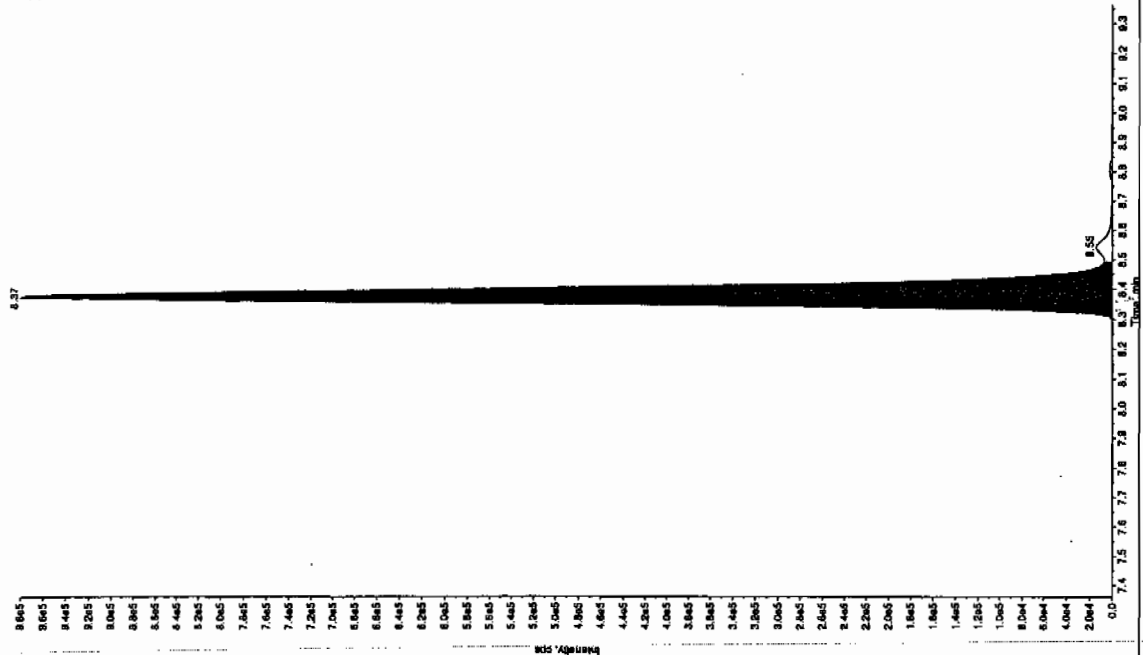
Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:31:35 AM
 Modified: NO



Hum or 2/1/10

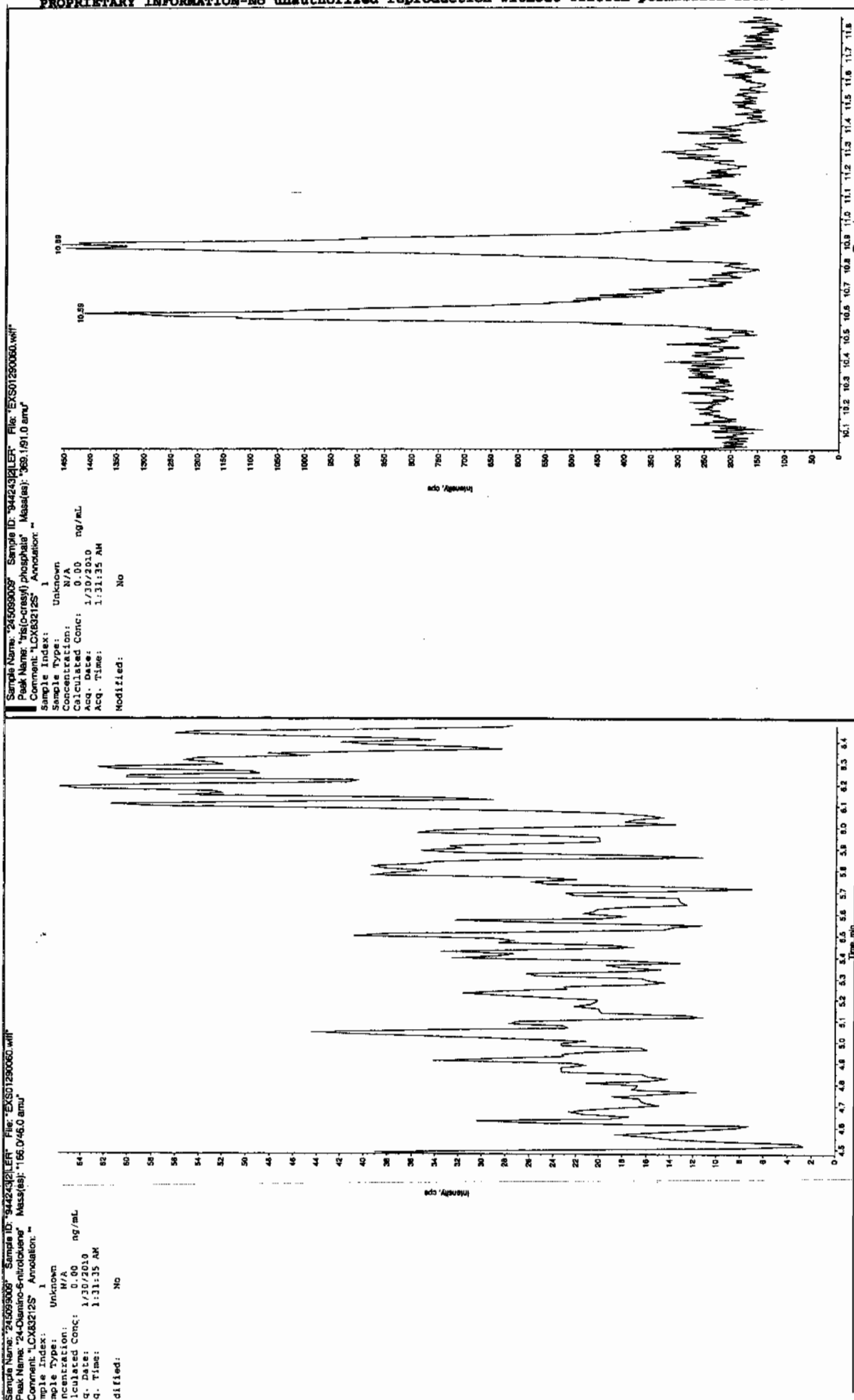
Sample Name: "24509009" Sample ID: "94424321LRF" File: "EXS01200650.wif"
 Peak Name: "26-Diamino-4-nitrotolene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:31:35 AM
 Modified: No



Sample Name: "24509009" Sample ID: "94424321LRF" File: "EXS01200650.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "182.07515 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 260. ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:31:35 AM
 Modified: No
 Occ. Algorithm: IntelliQuan - IQA
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 n. Peak Width: 3.00 points
 Window: 15.0 sec
 Picked RT: 8.36 min
 e Relative RT: No
 t. Type: Valley
 t. Retention Time: 8.37 min
 ea: 3.71e+006 counts
 ight: 979913.696 cps
 art Time: 8.28 min
 d Time: 8.50 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7189

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099010

Sample Amount 2

Molsture: 9.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203126a

Date Analyzed: 06-FEB-10 04:06

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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Date: 06-Feb-2010

Time: 04:06:21

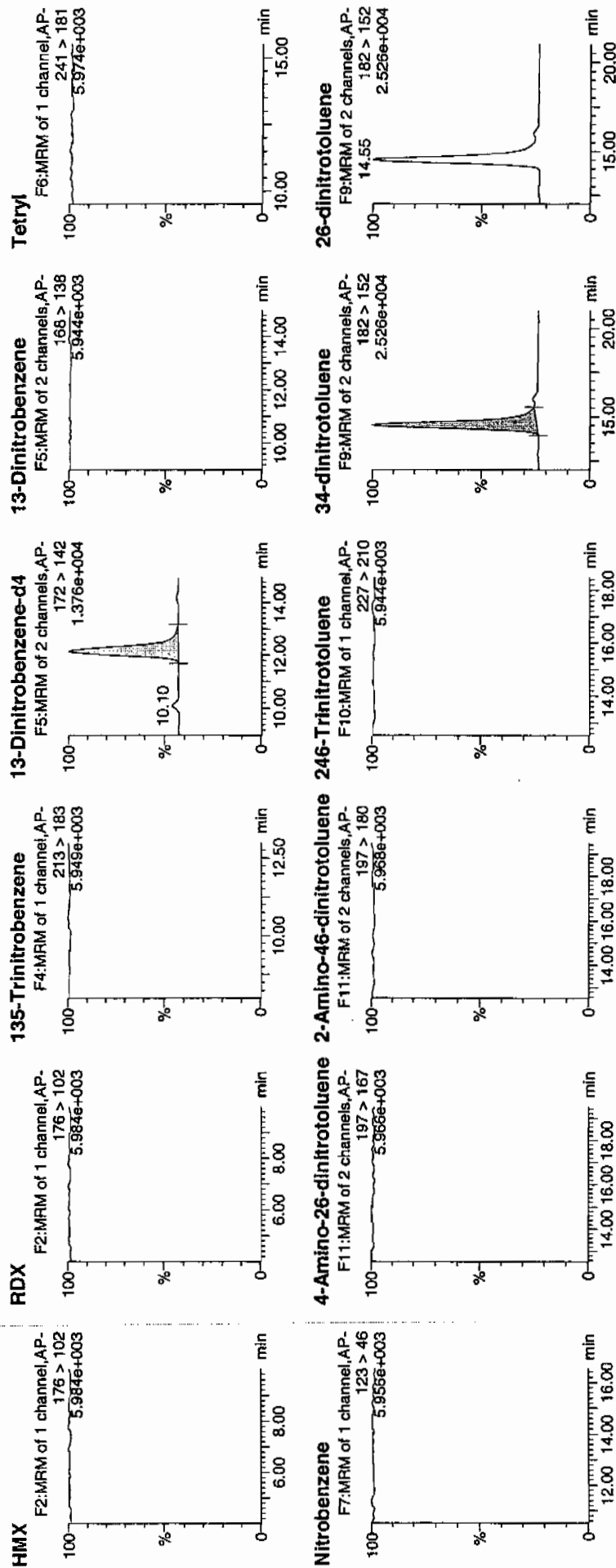
ID: 245099010

Vial: 3:3,B

Wave 944243 / Soda / 2.1

not
2/8/10

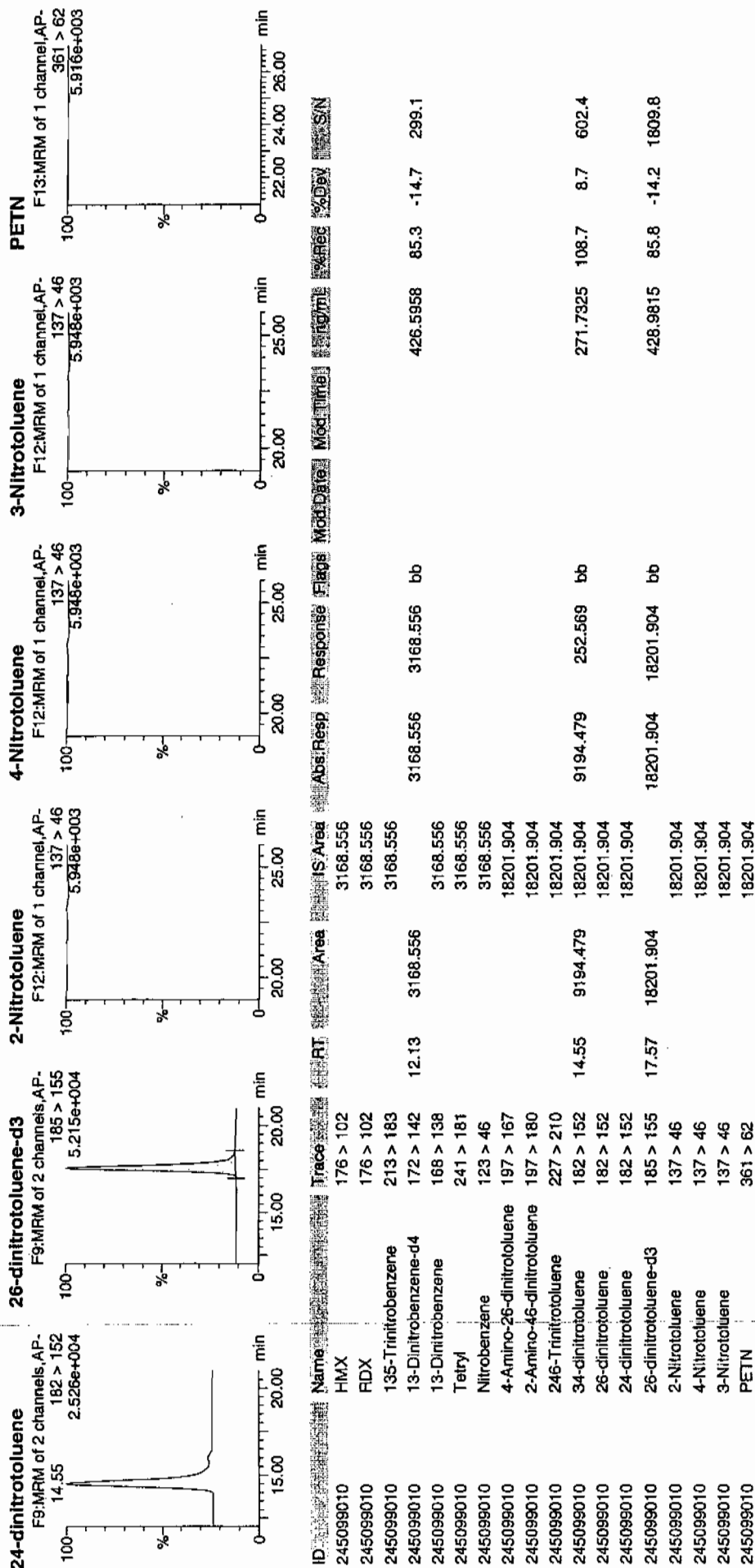
Page 1156 of 1610



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Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7189

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099010

Sample Amount 2

Moisture: 9.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290061.wiff

Date Analyzed: 30-JAN-10 01:47

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 1110

Sample Name: "245059010" Sample ID: "94424321ER" File: "EXS01280061.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

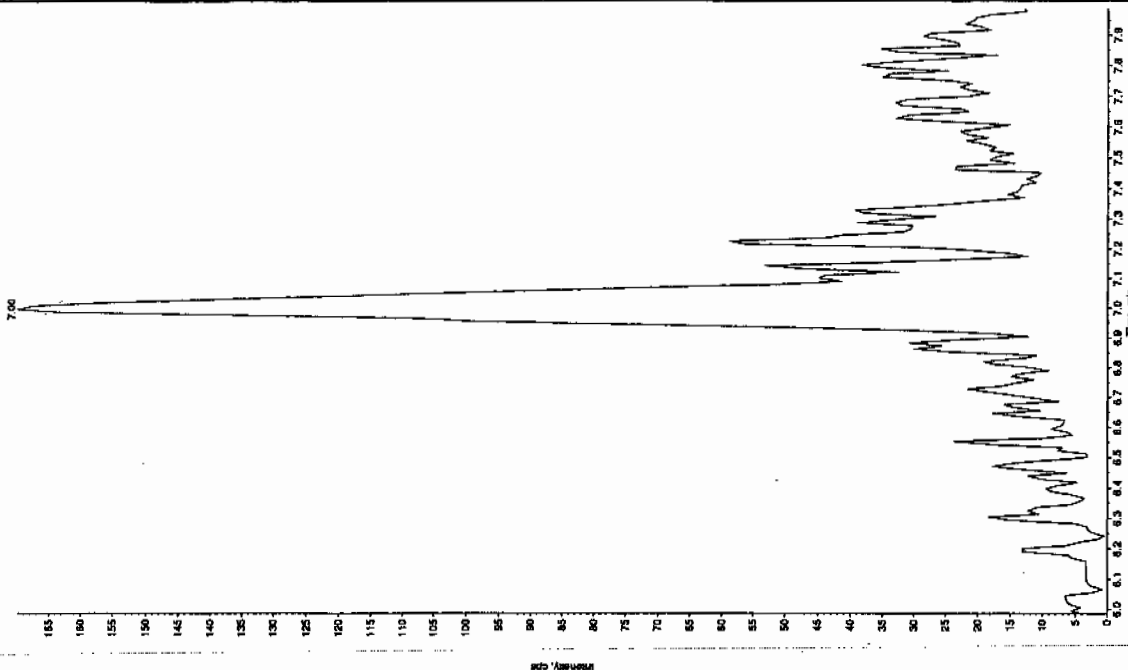
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/30/2010

Acq. Time: 1:47:18 AM

Modified: No



Sample Name: "245059010" Sample ID: "94424321ER" File: "EXS01280061.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCX83212S" Annotation: ""

Sample Index: 1

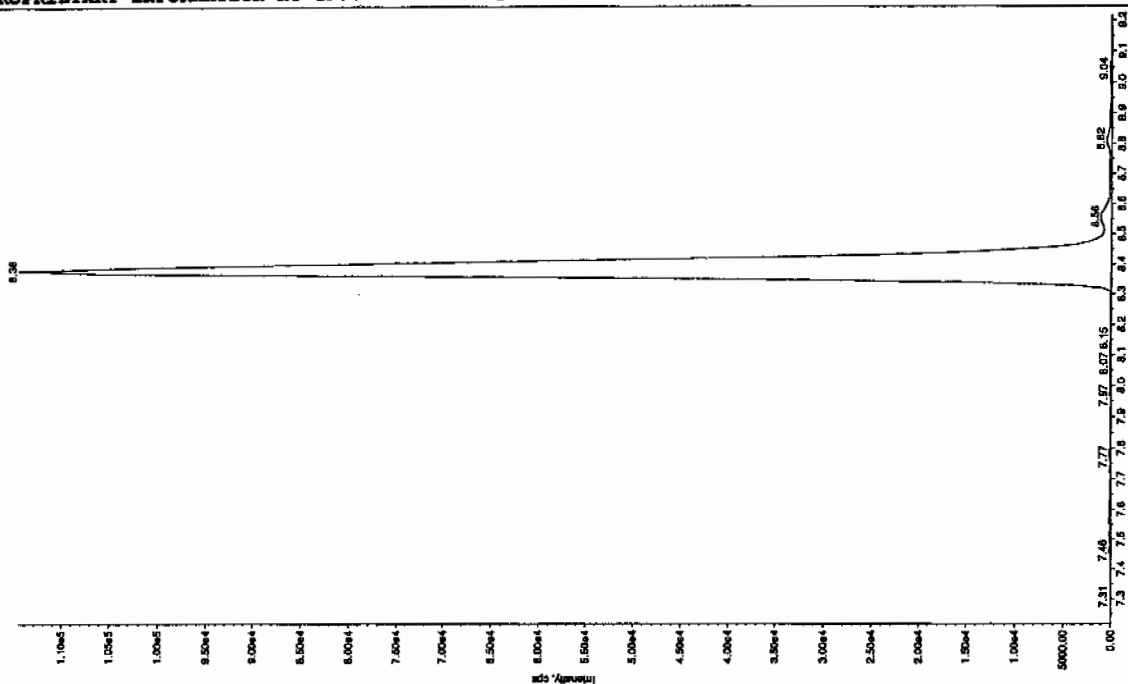
Sample Type: Unknown

Concentration: 0.00 ng/mL

Acq. Date: 1/30/2010

Acq. Time: 1:47:18 AM

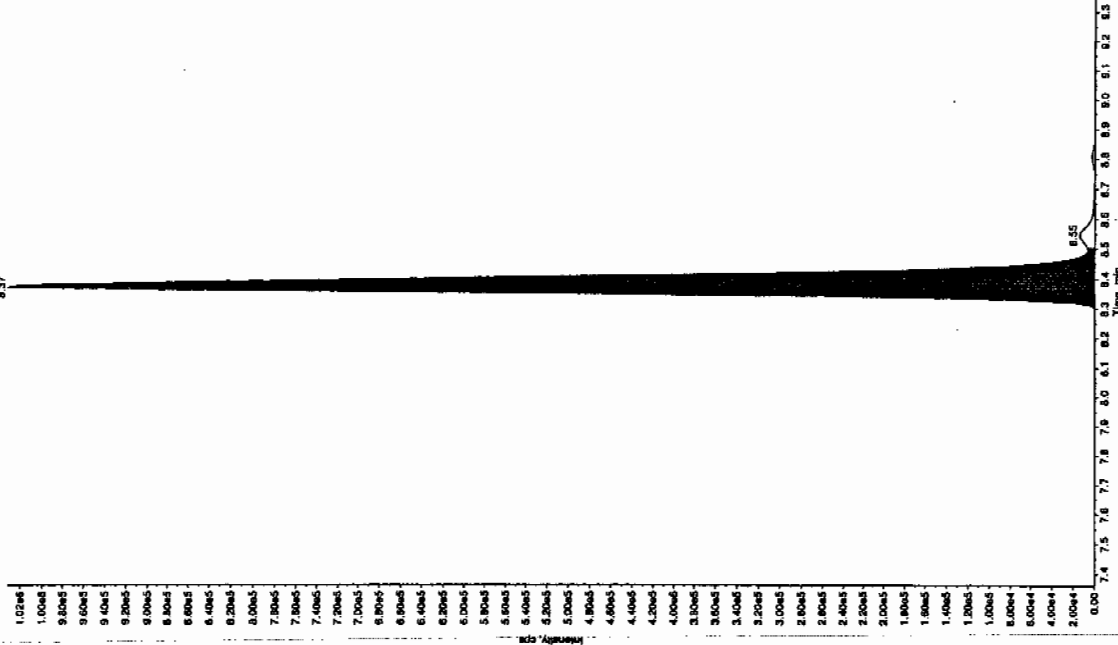
Modified: No



Home color 110

Sample Name: "245059010" Sample ID: "944243121" File: "EX501280061.wif"
 Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: M/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:47:18 AM
 Modified: No

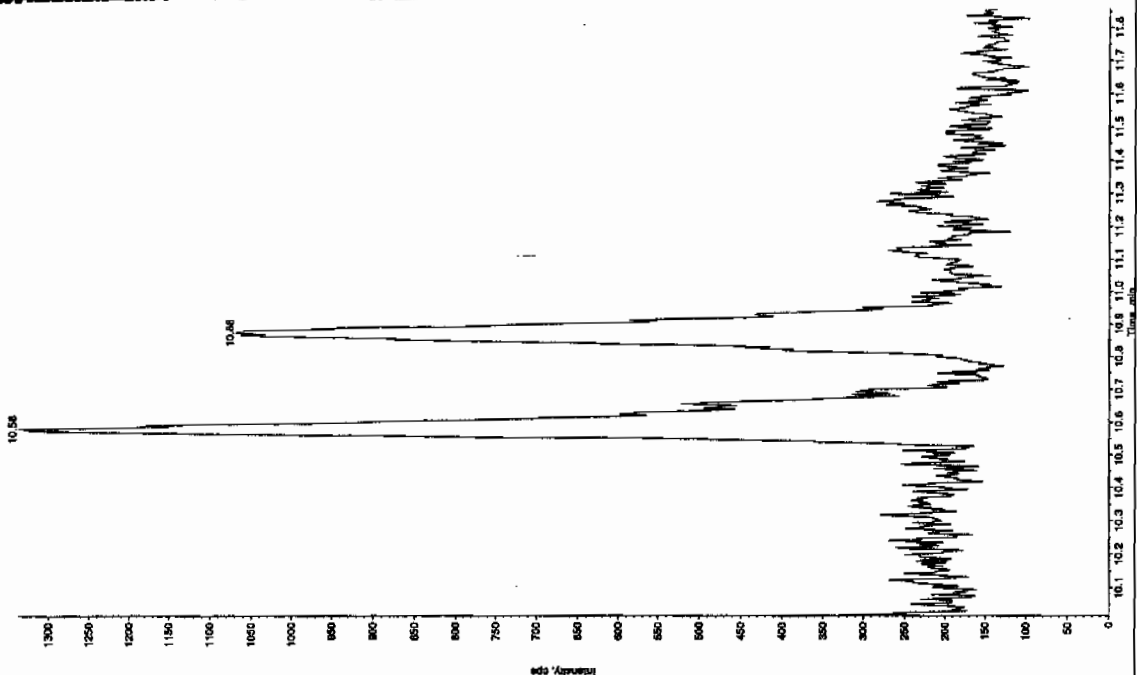


Sample Name: "245059010" Sample ID: "944243121" File: "EX501280061.wif"
 Peak Name: "34-Dinitrotoluene" Mass(es): "192.1715.9 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 278. ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:47:18 AM
 Modified: No
 Ac. Algorithm: IntelliQuan - IOL
 n. Peak Height: 1460.00 cps
 n. Peak Width: 0.00 sec
 Window Width: 3.00 points
 Window: 15.0 sec
 Specified RT: 8.36 min
 n. Relative RT: No
 T. Type: Valley
 Tentation Time: 8.37 min
 ea. 3.96e+006 counts
 IOPC: 1012866.211 cps
 Art Time: 8.28 min
 d Time: 8.51 min

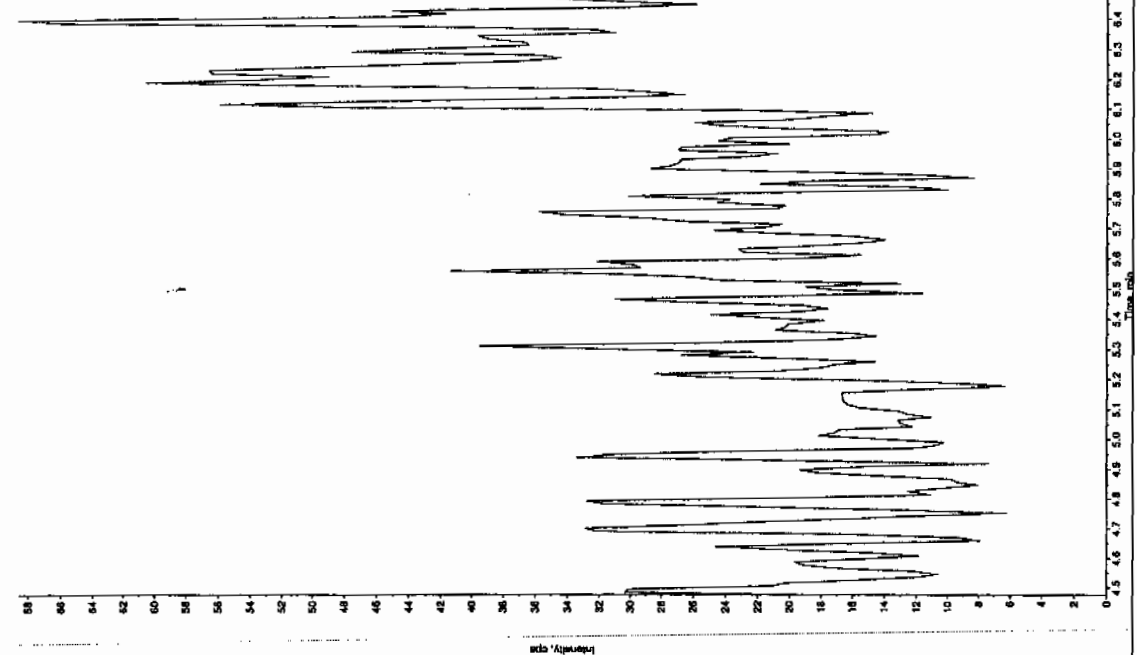
Sample Name: "245596010" Sample ID: "94424321ER" File: "EX501250061.wif"
 Peak Name: "bis(o-cresyl) phosphate" Mass(es): "366.181.0 amu"
 Comment: "LCX632125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:47:18 AM
 Modified: No



Sample Name: "245596010" Sample ID: "94424321ER" File: "EX501250061.wif"
 Peak Name: "24-Diamino-6-nitrothiophene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 1:47:18 AM
 Modified: No



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7187

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099011

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203127a

Date Analyzed: 06-FEB-10 04:35

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

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203127a

Date: 06-Feb-2010

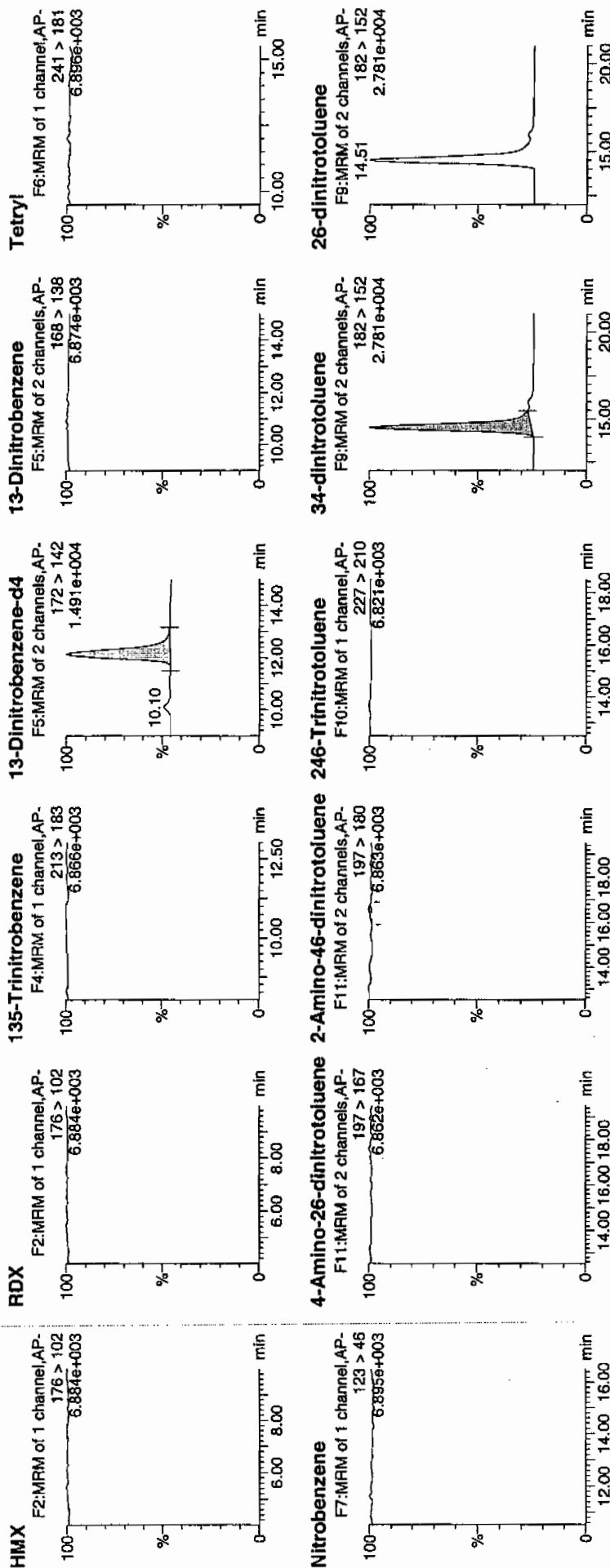
Time: 04:35:50

ID: 245099011

Vial: 3:3,C

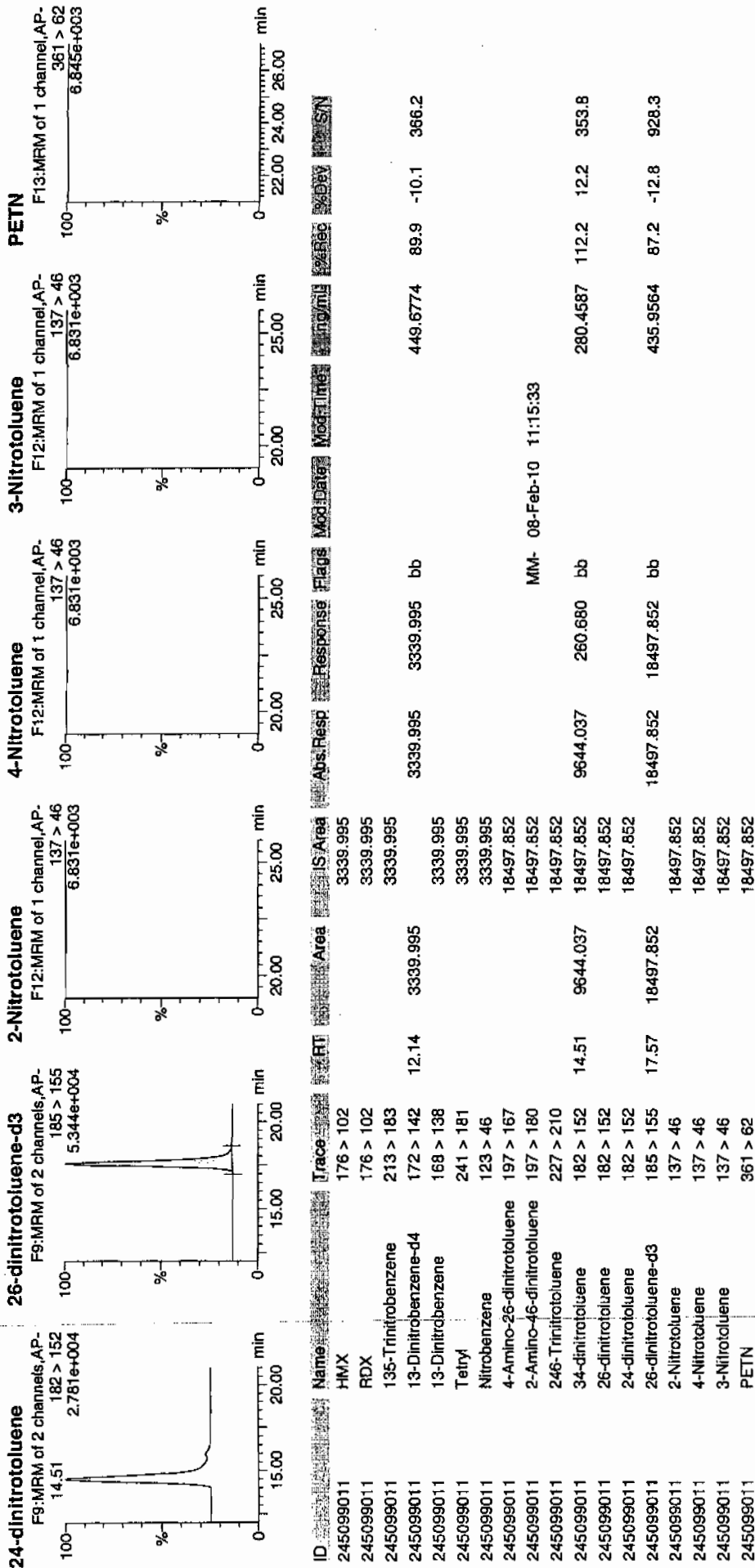
1477
2/8/10

LANC 944243 / 8012 / 121



4777
2/8/10

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7187

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099011

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290062.wiff

Date Analyzed: 30-JAN-10 02:03

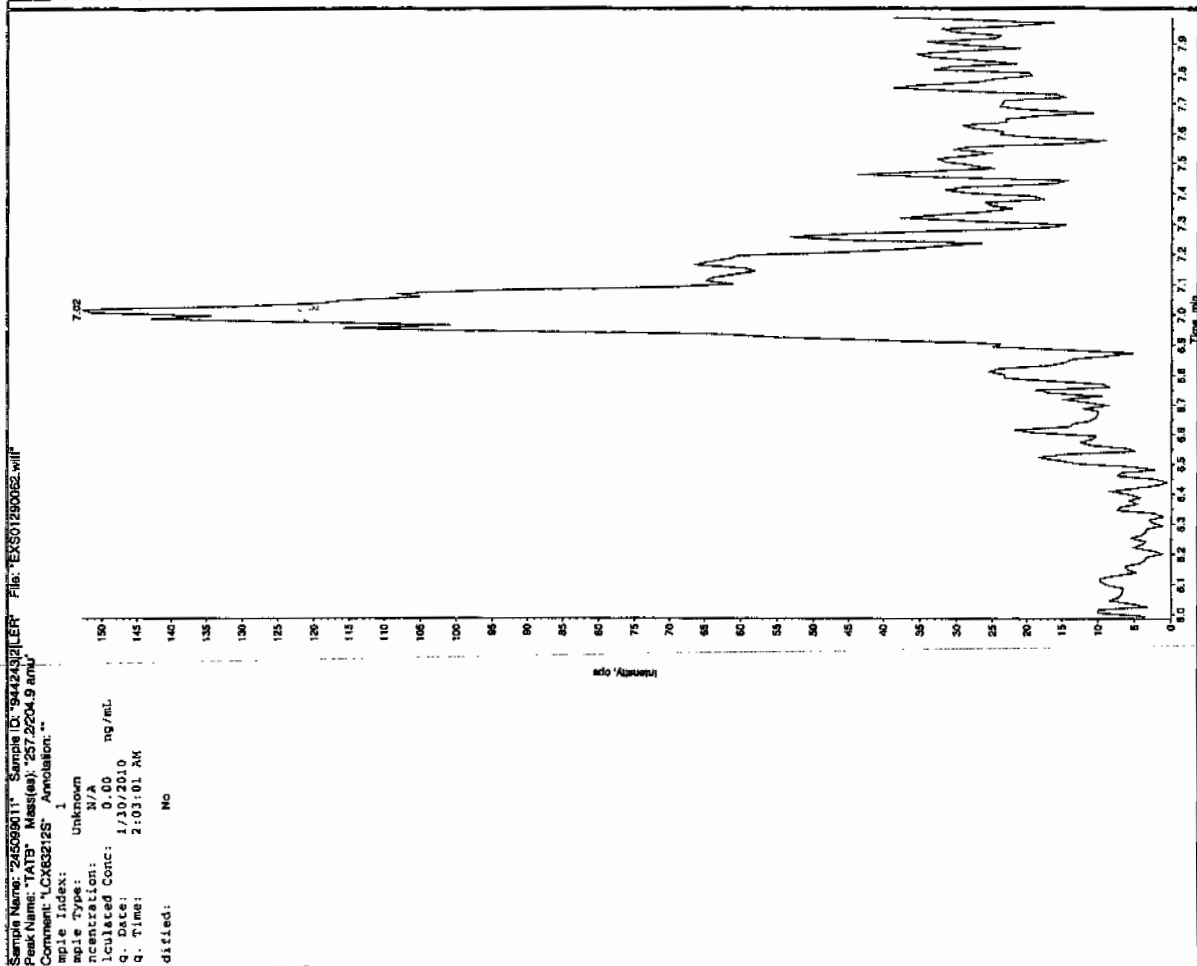
Units: ug/kg

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

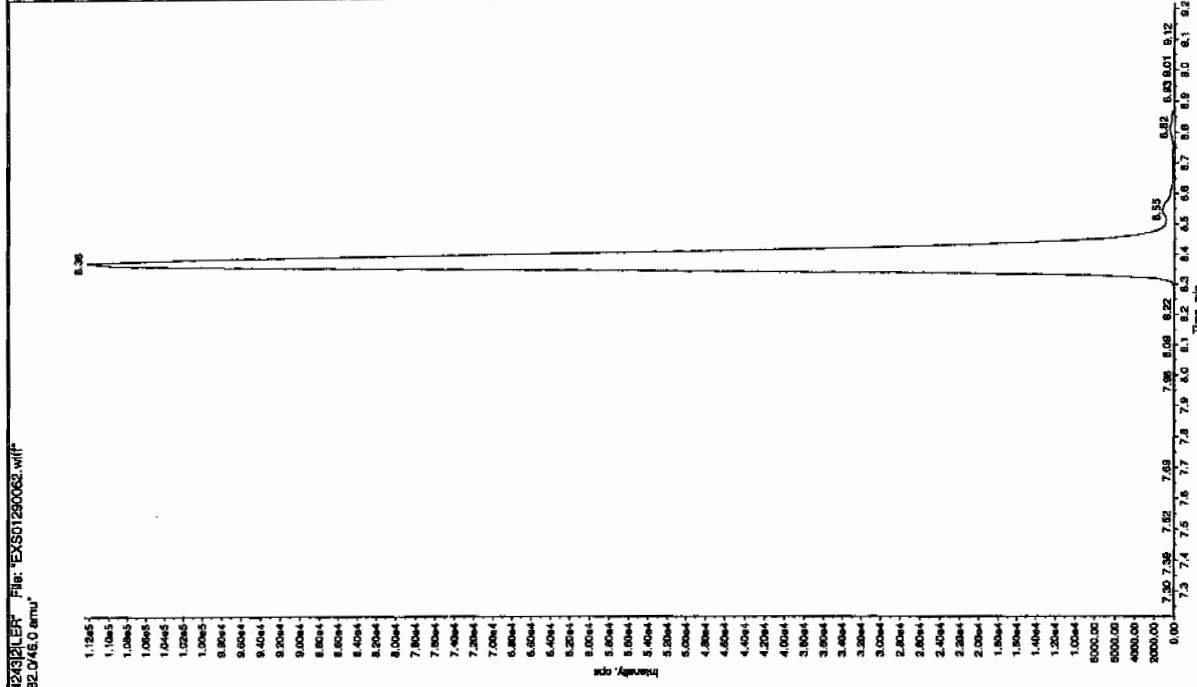
*Concentration =

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

24509011



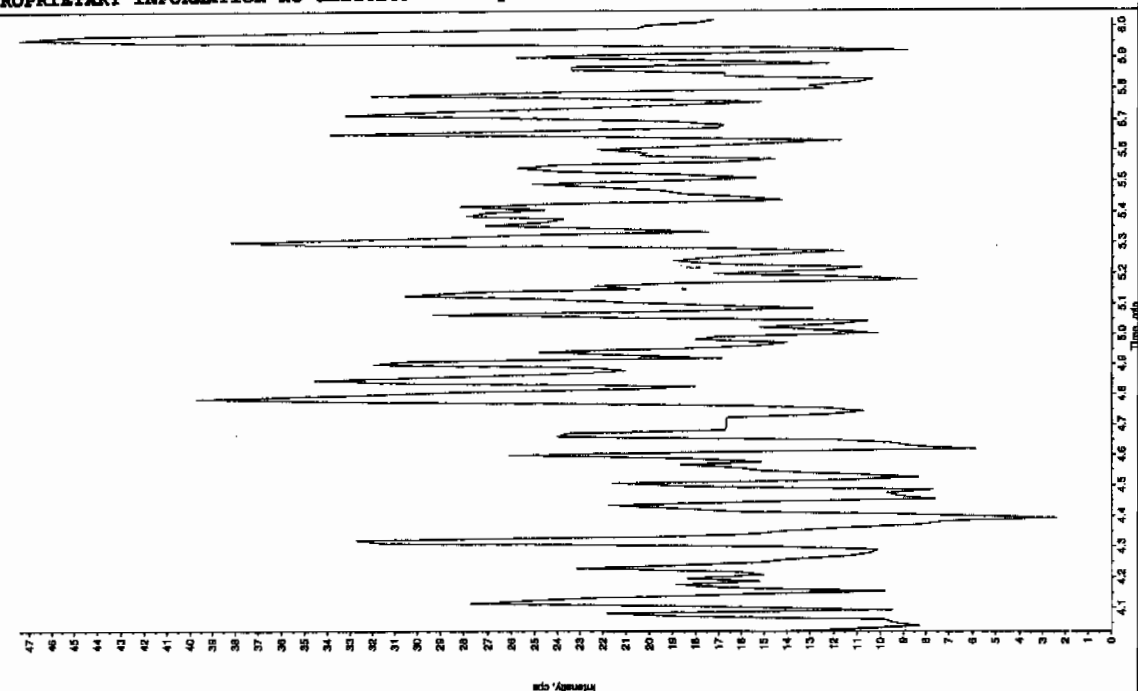
Sample Name: 24509011
 Peak Name: 35-Chloroquinoline
 Comment: LCMS0212S
 Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 Acq. Date: 2:03:01 AM
 Acq. Time: 2:03:01 AM
 Modified: No



24509011

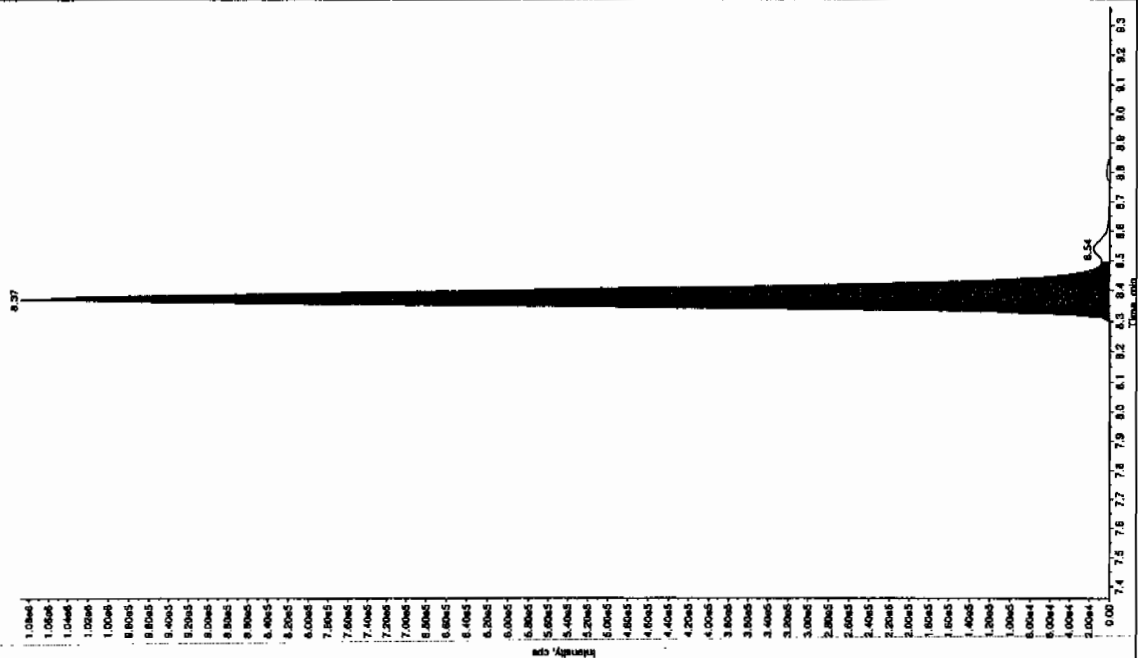
Sample Name: "24509011" Sample ID: "942432125" File: "EXS01290062.wif"
 Peak Name: "26-Dinitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 17.00 ng/mL
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 2:03:01 AM
 Modified: No

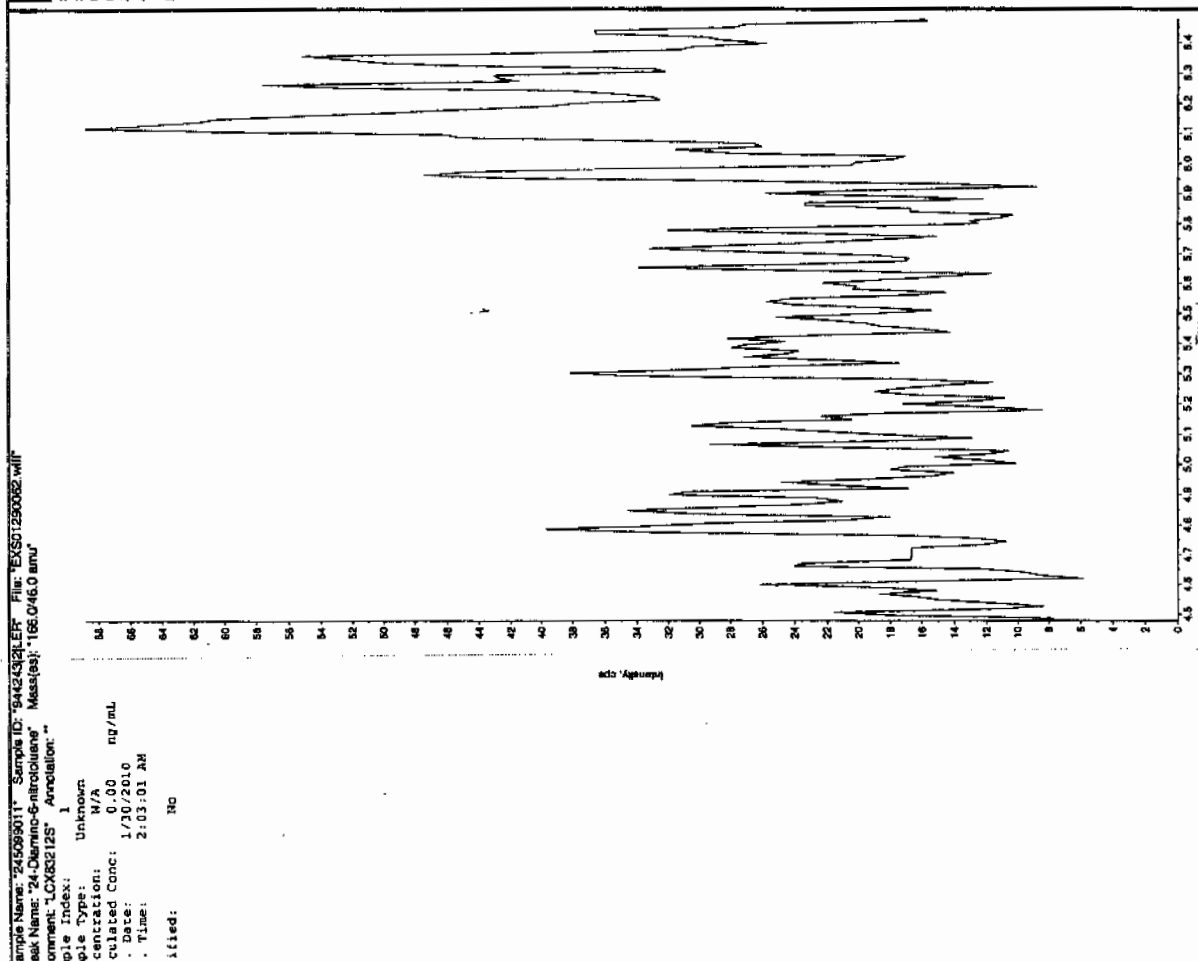
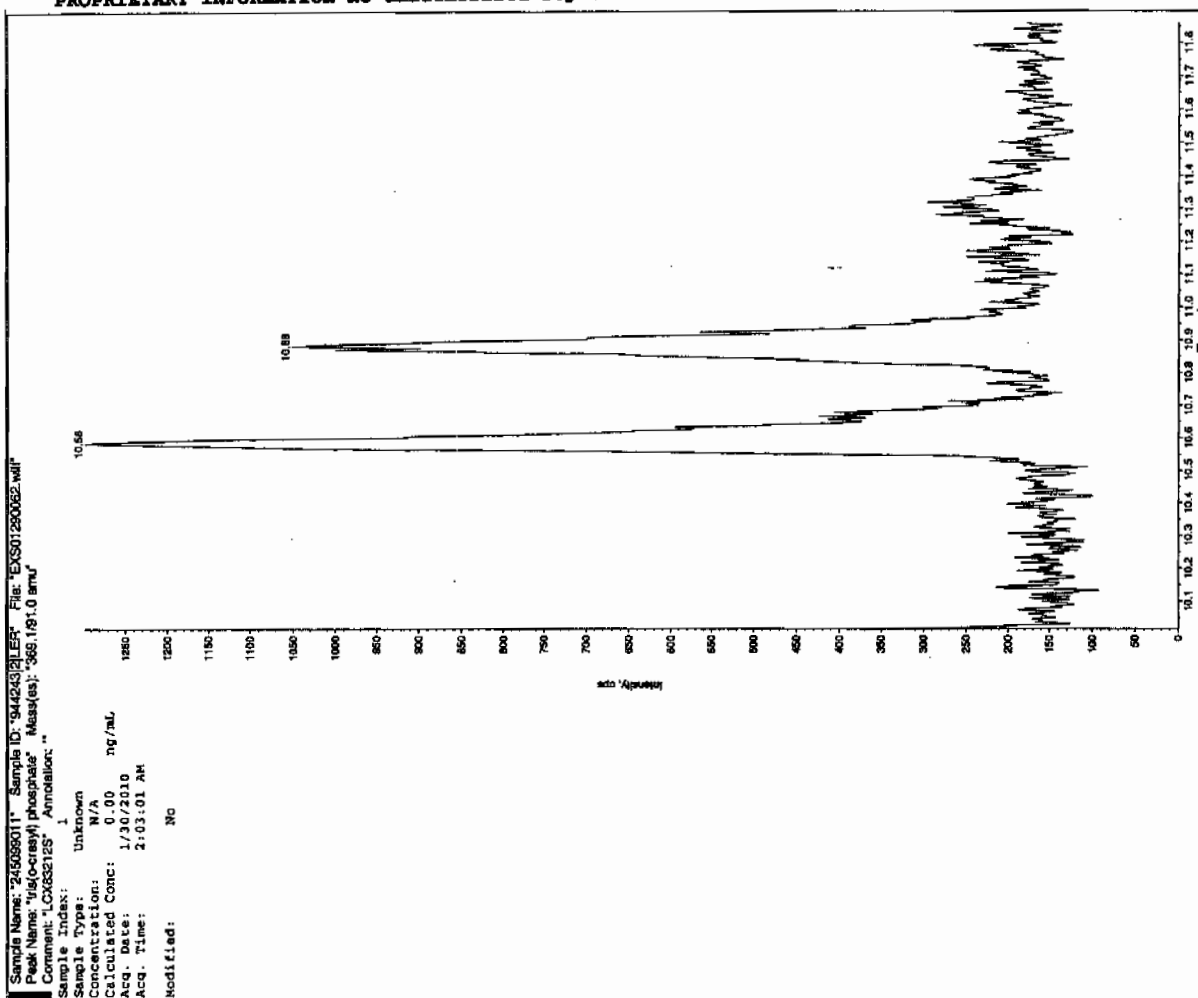


Sample Name: "24509011" Sample ID: "942432125" File: "EXS01290062.wif"
 Peak Name: "26-Dinitrofluorene" Mass(es): "162.17151.9 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 17.00 ng/mL
 Calculated Conc: 17.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 2:03:01 AM
 Modified: No
 c. Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Retention Width: 3 points
 Window: 15.0 sec
 Retention RT: 8.36 min
 Relative RT: No
 . Type: Valley
 Retention Time: 8.37 min
 Area: 4.14e+006 counts
 Height: 108824.219 cps
 Retention Time: 8.28 min
 Time: 8.50 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



ML SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7188

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099012

Sample Amount 2

Moisture: 12.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203128a

Date Analyzed: 06-FEB-10 05:05

Units: ug/kg

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

*Concentration =

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

Name: C:\MASSLYNX\NEW_EXP.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Date: 06-Feb-2010

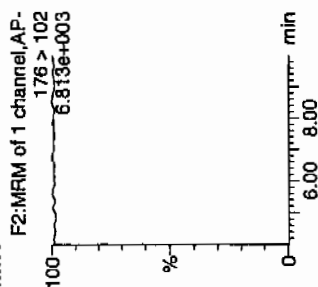
Time: 05:05:19

ID: 245099012

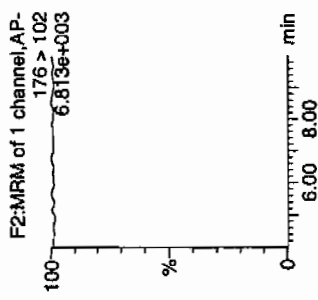
Vial: 3:3,D

944243 / 2-1
2/8/10

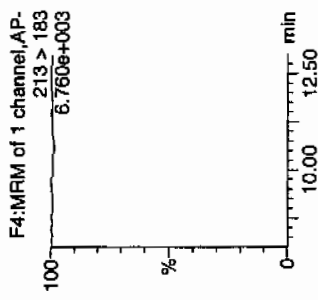
HMX



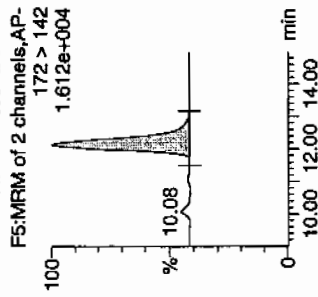
RDX



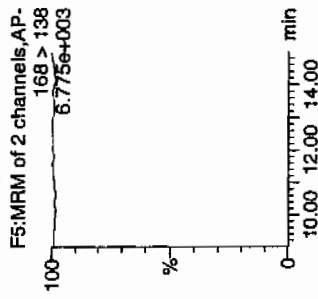
135-Trinitrobenzene



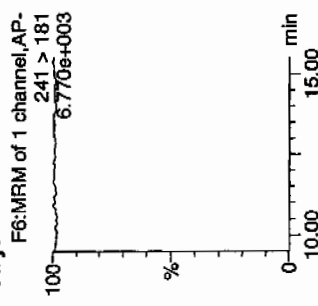
13-Dinitrobenzene-d4



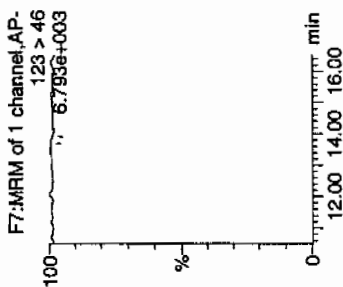
13-Dinitrobenzene



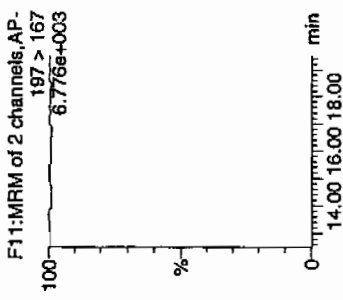
Tetryl



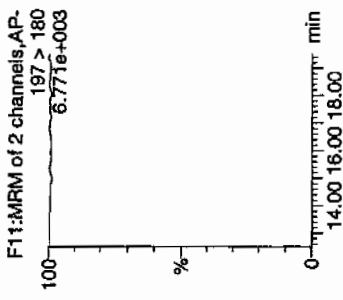
4-Amino-26-dinitrotoluene



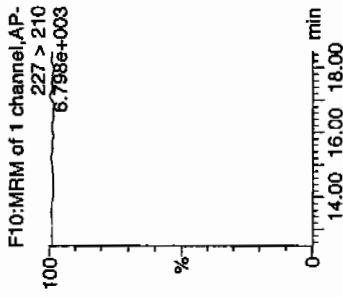
4-Amino-26-dinitrotoluene



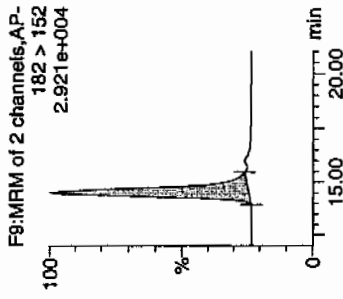
2-Amino-46-dinitrotoluene



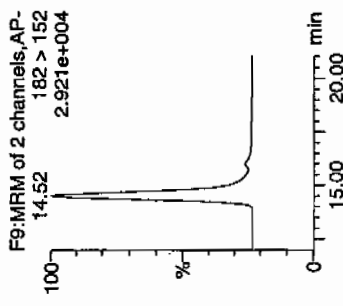
246-Trinitrotoluene



34-dinitrotoluene



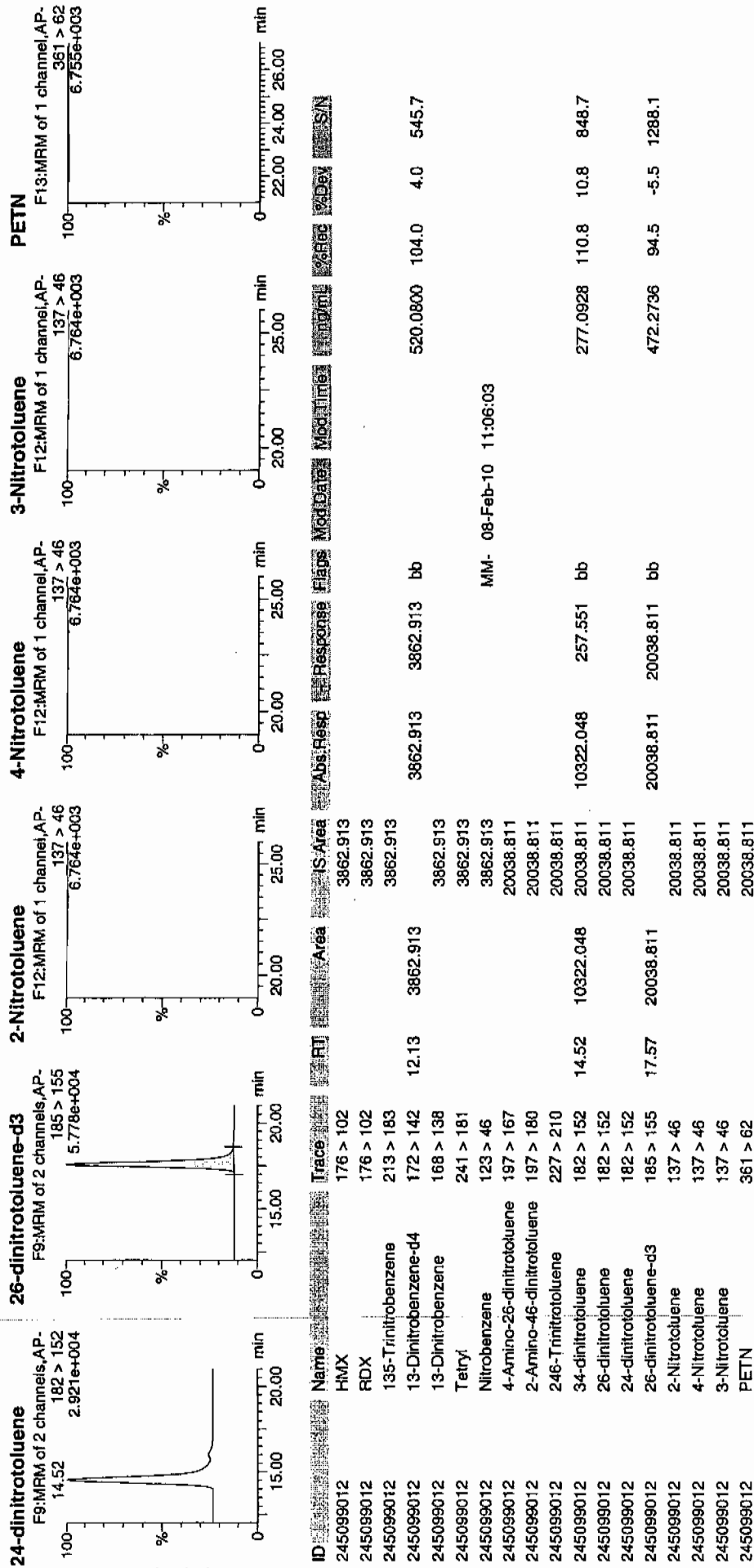
26-dinitrotoluene



amine analysis

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7188

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099012

Sample Amount 2

Moisture: 12.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290063.wiff

Date Analyzed: 30-JAN-10 02:18

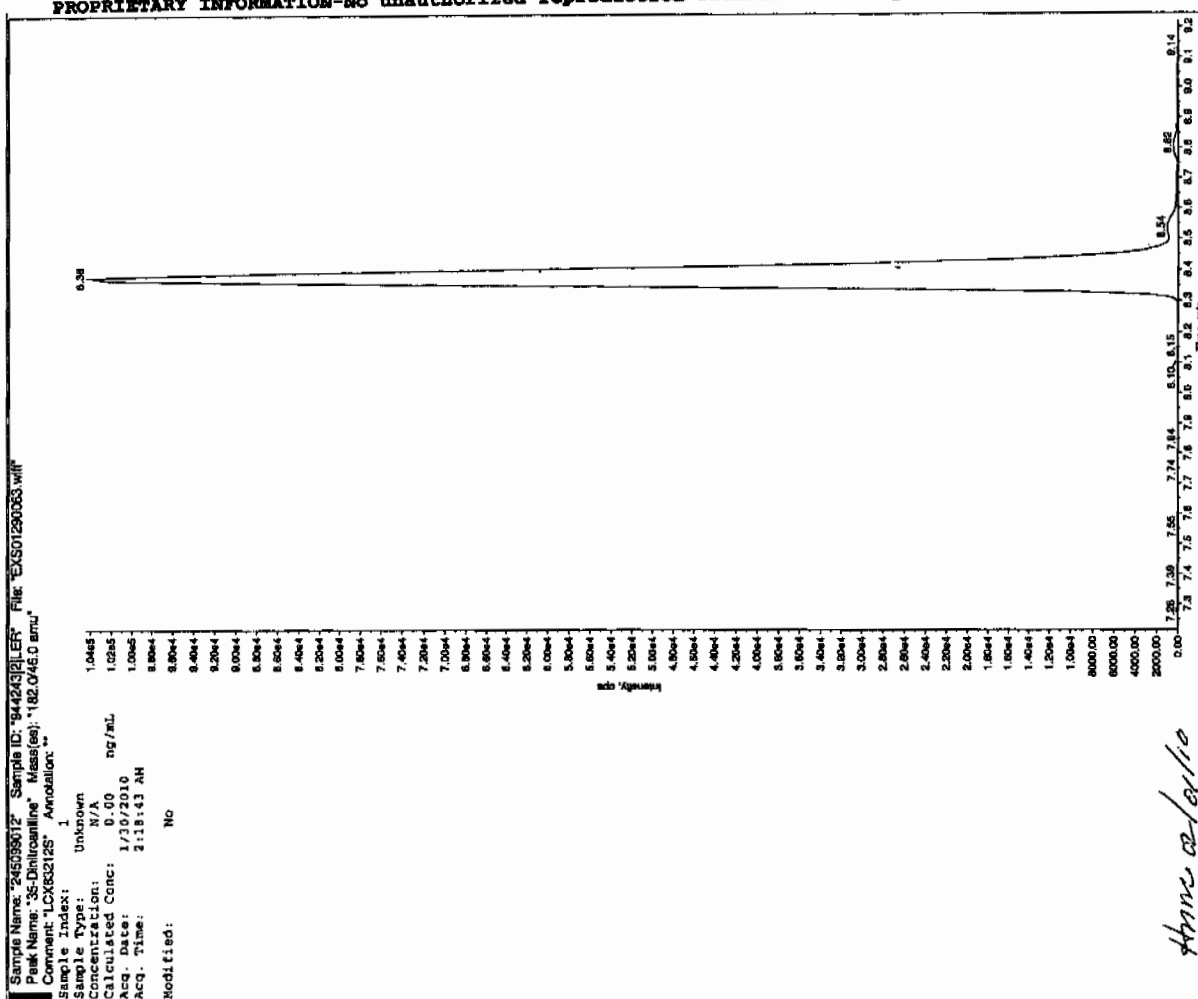
Units: ug/kg

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

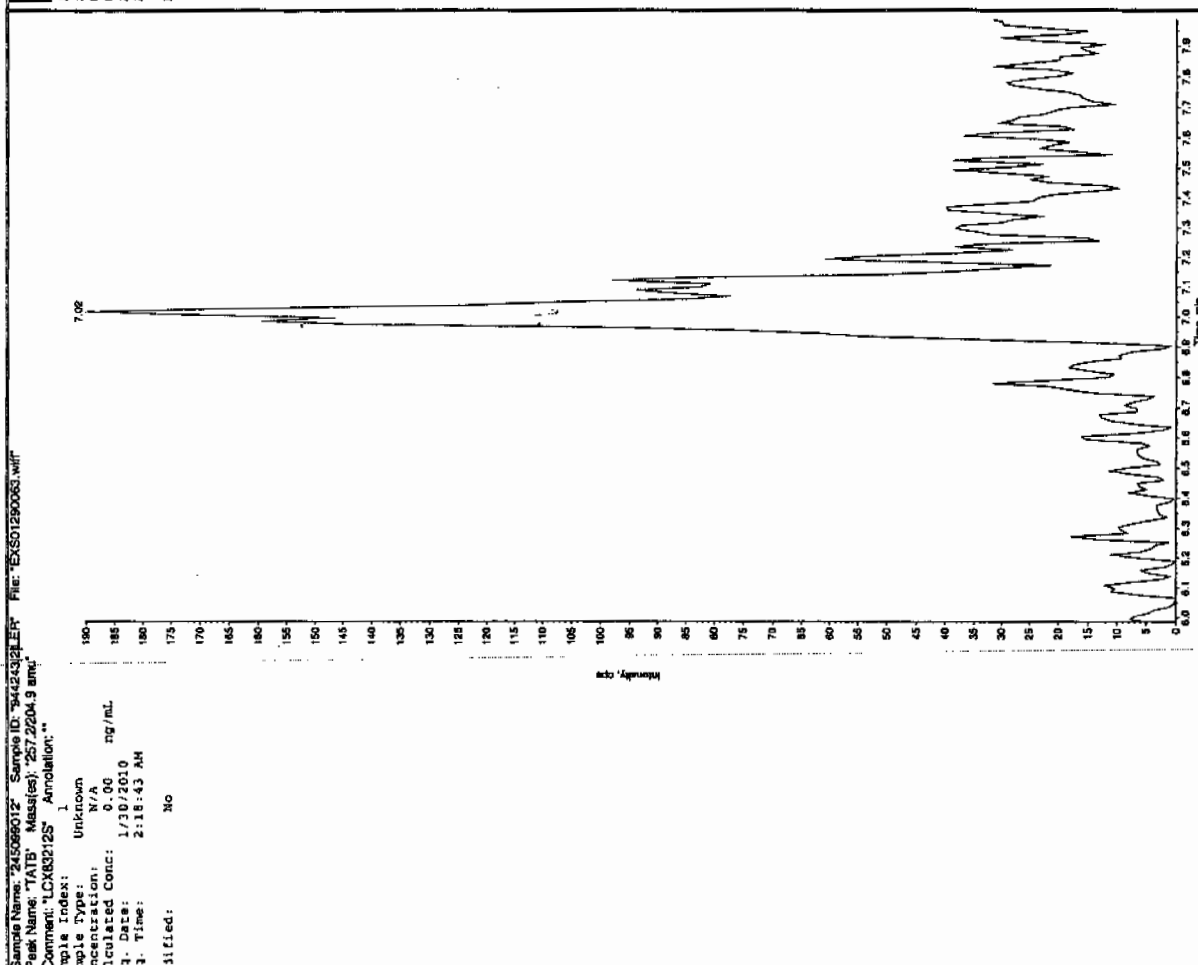
*Concentration =

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

See 26110



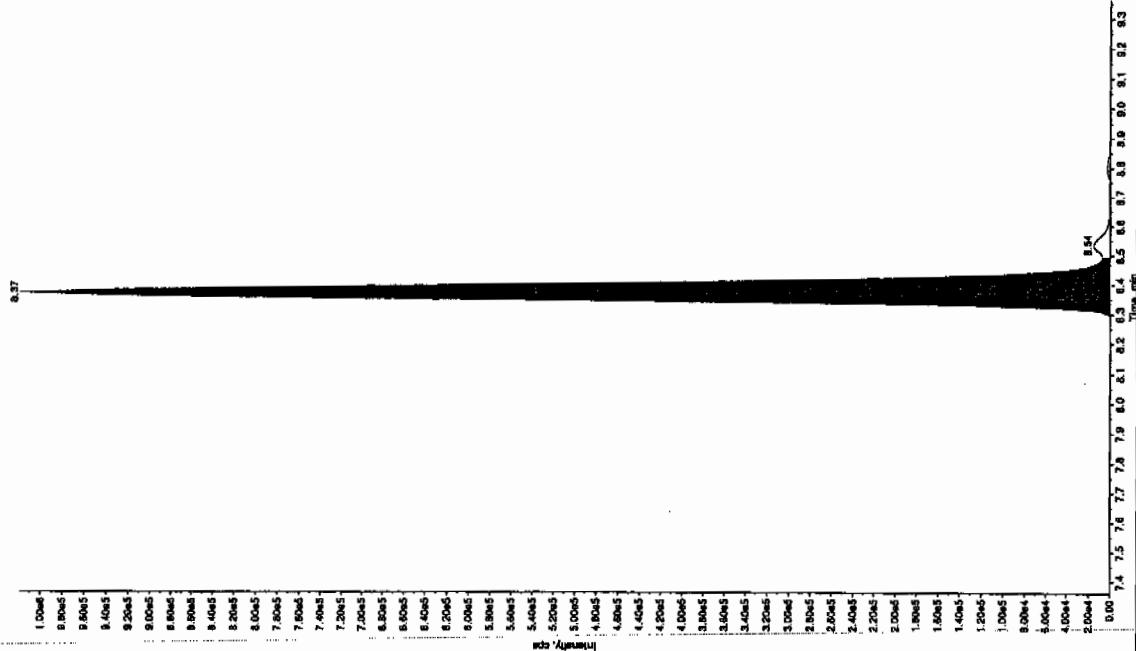
Time 26110



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: '245098012' Sample ID: '9442432121.E' File: 'EX501290063.wit'
 Peak Name: '14-Dehydrothiophene' Mass(es): '182.1715.9 amu'
 Comment: 'LCX83212S' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 2:18:43 AM
 Modified: No



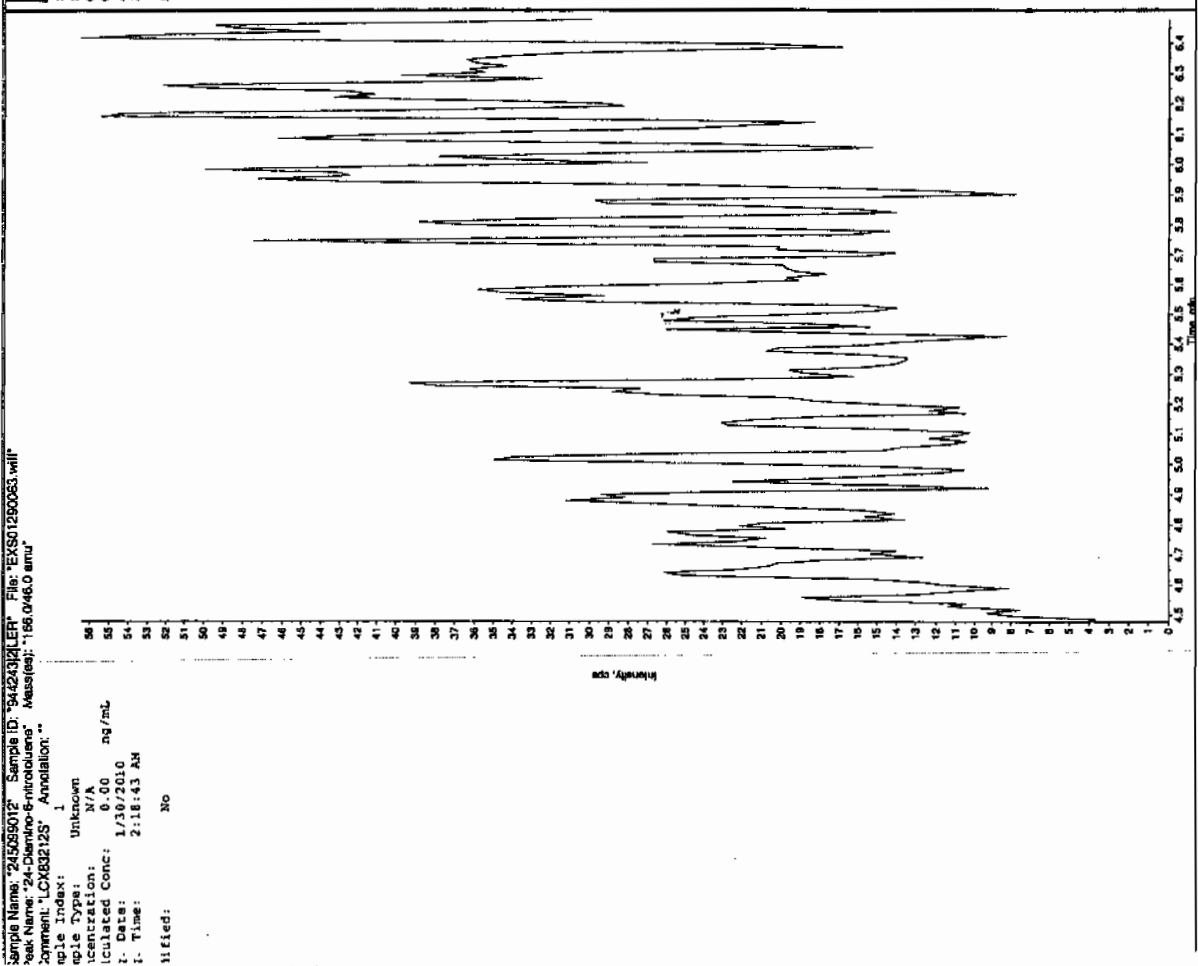
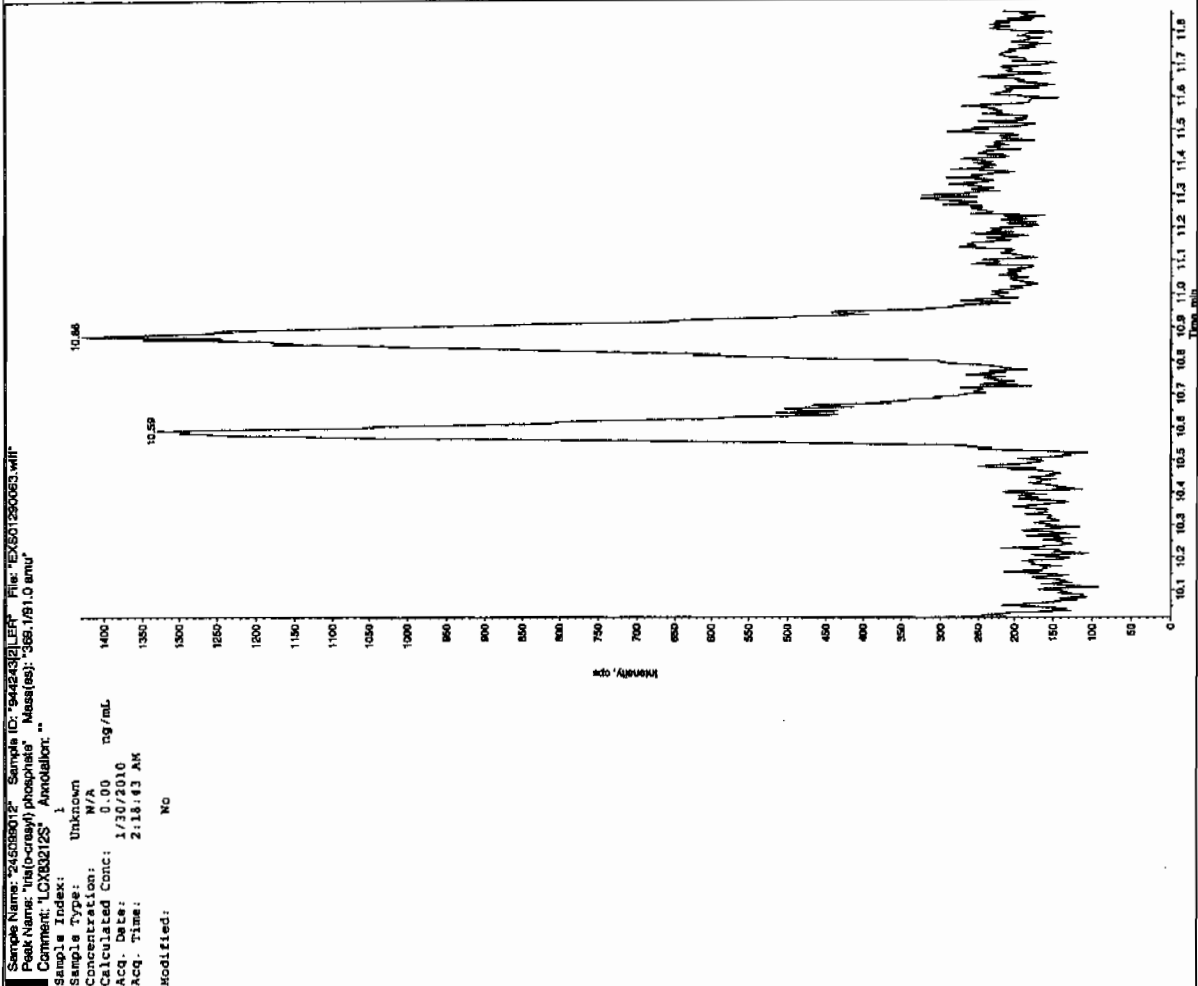
Sample Name: '245098012' Sample ID: '9442432121.E' File: 'EX501290063.wit'
 Peak Name: '14-Dehydrothiophene' Mass(es): '182.1715.9 amu'
 Comment: 'LCX83212S' Annotation: ''

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 276. ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 2:18:43 AM

Method: 'LCX83212S' Annotation: ''

Peak Data:
 Peak Name: '14-Dehydrothiophene'
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Peak Area: 15.0 points
 Peak RT: 8.36 min
 Peak Relative RT: No

Integration Data:
 Integration Time: 8.37 min
 Integration Counts: 3.92e+006
 Integration Rate: 101821.753 cps
 Integration Time: 8.20 min
 Integration Rate: 8.50 min



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7190

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099013

Sample Amount 2

Moisture: 28.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203129a

Date Analyzed: 06-FEB-10 05:34

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0203129a

Date: 06-Feb-2010

Time: 05:34:48

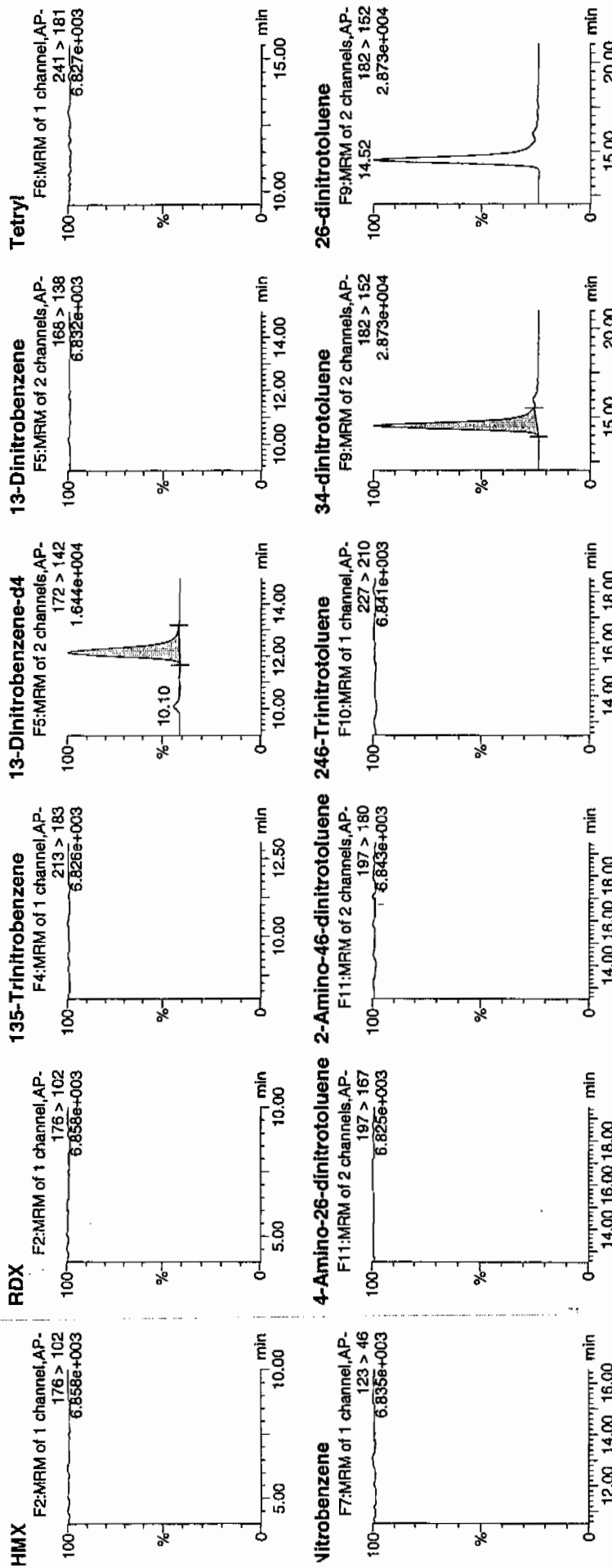
ID: 245099013

Vial: 3-3,E

100%
2/5/10

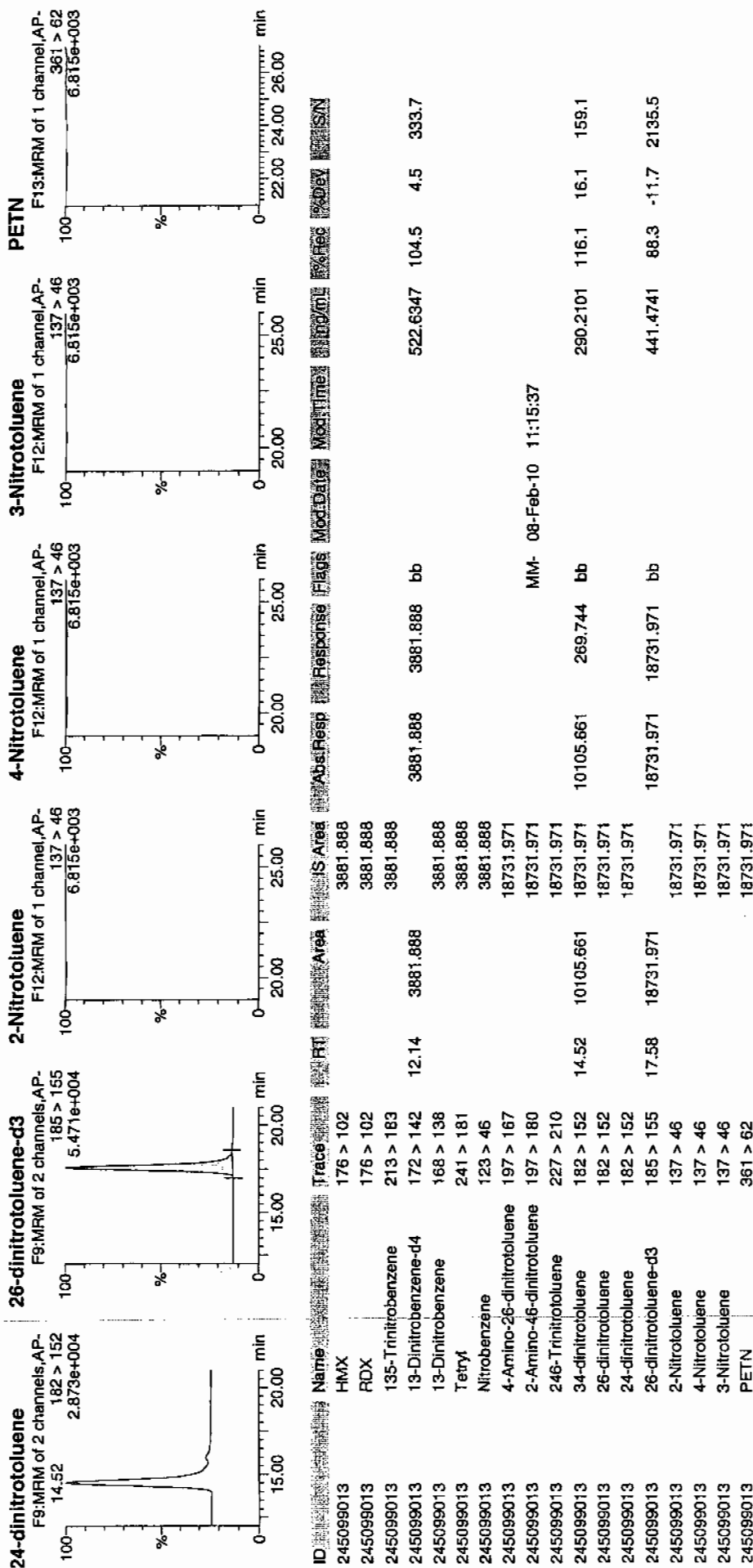
944243 / 2000 / 21

1177 of 1610



4/11/10 02/08/10

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7190

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099013

Sample Amount 2

Molsture: 28.3

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290064.wiff

Date Analyzed: 30-JAN-10 02:34

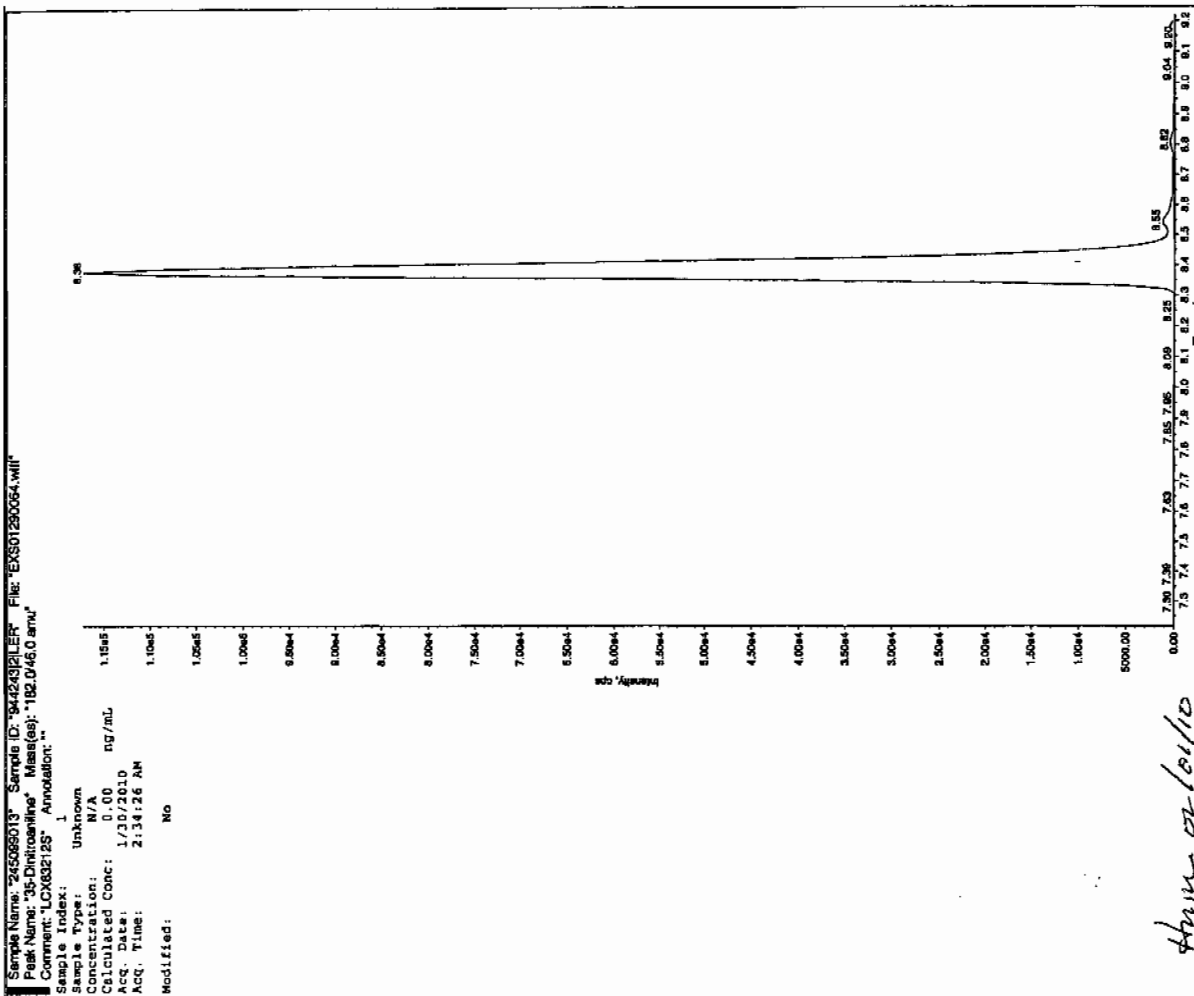
Units: ug/kg

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

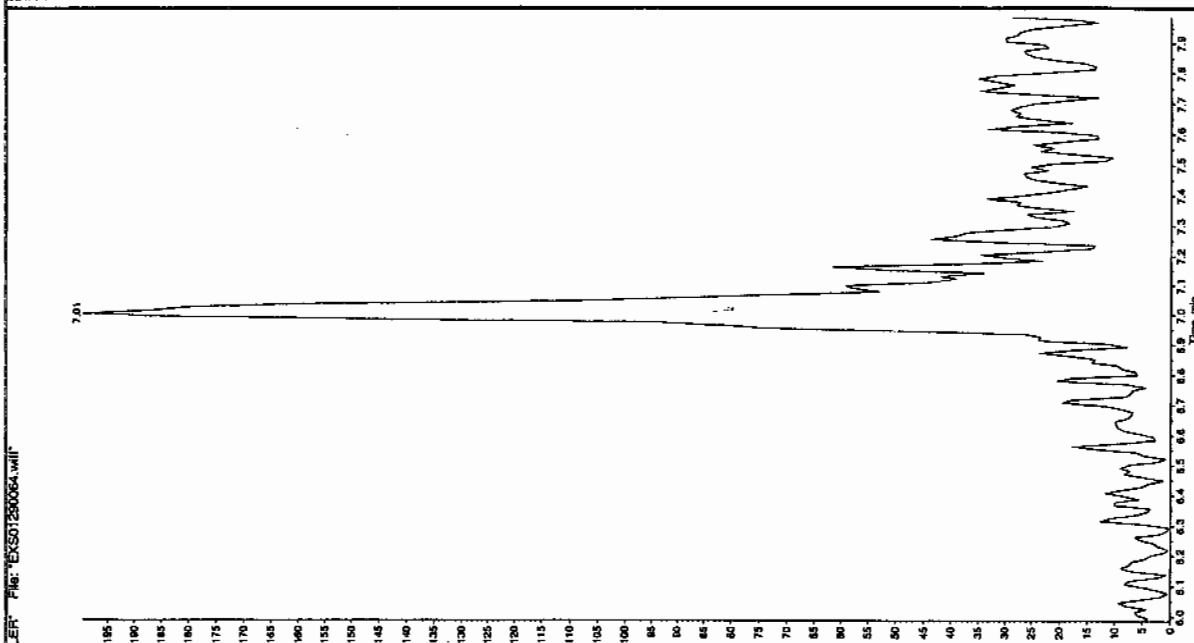
*Concentration =

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

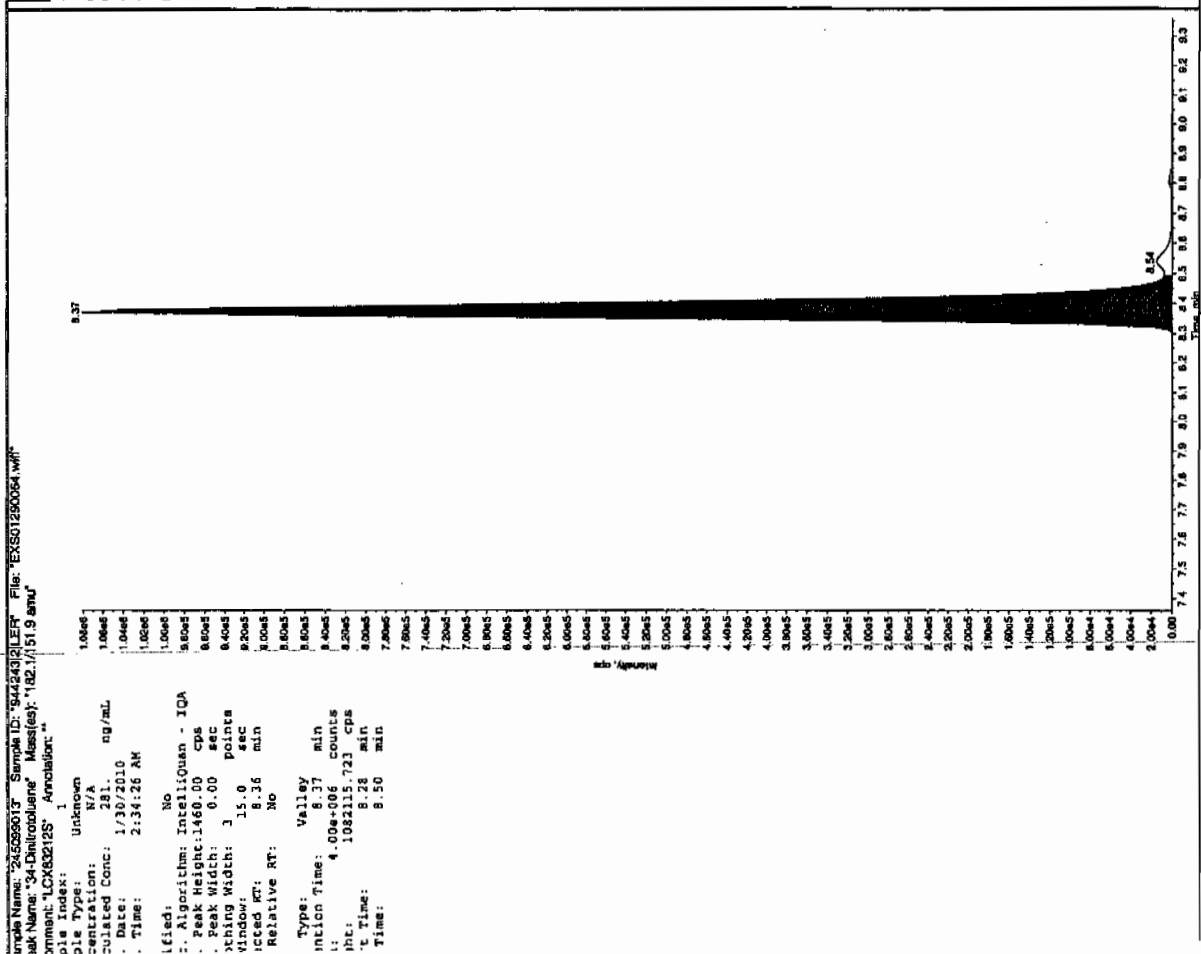
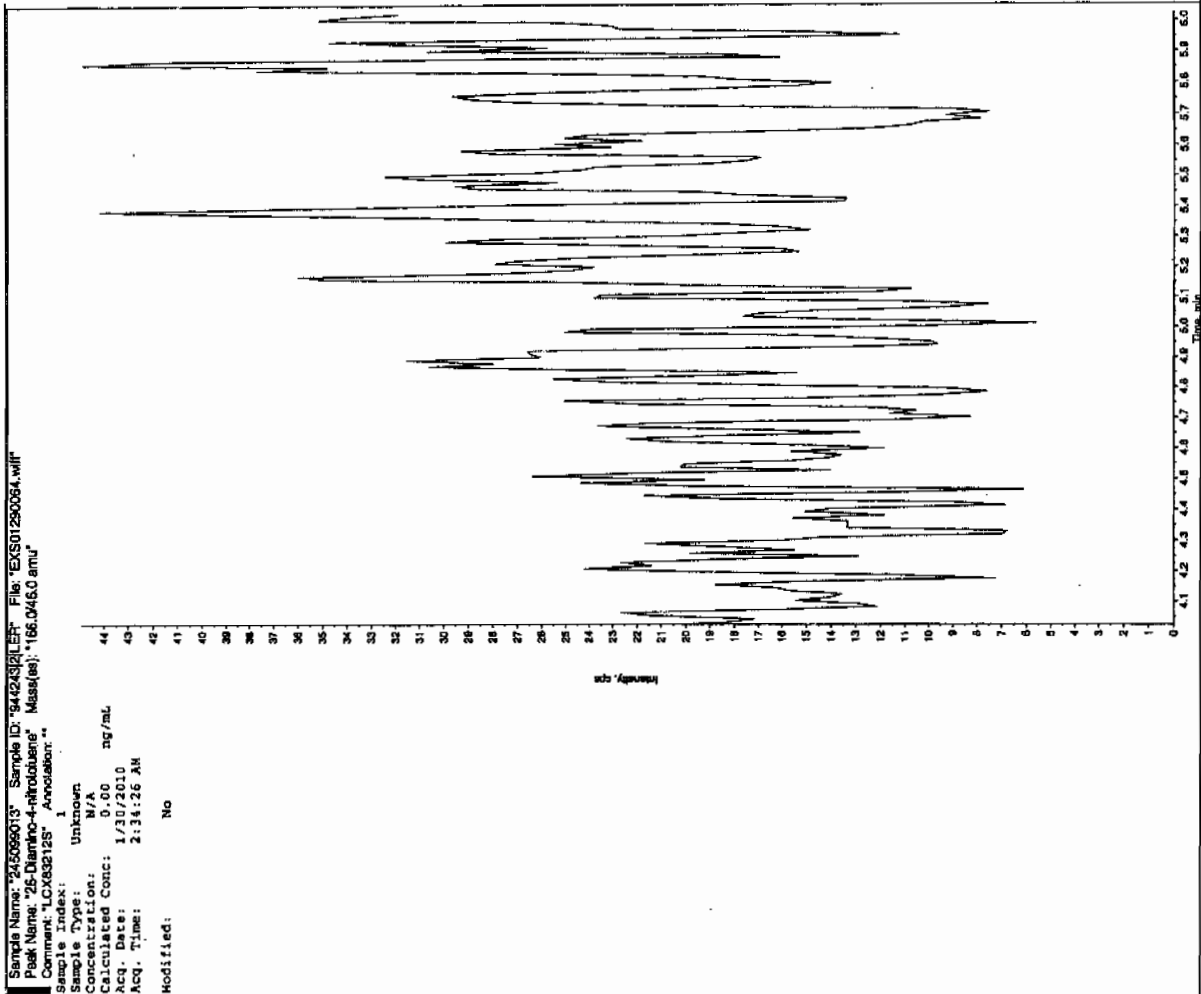
Jan 26/10



Jan 26/10



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

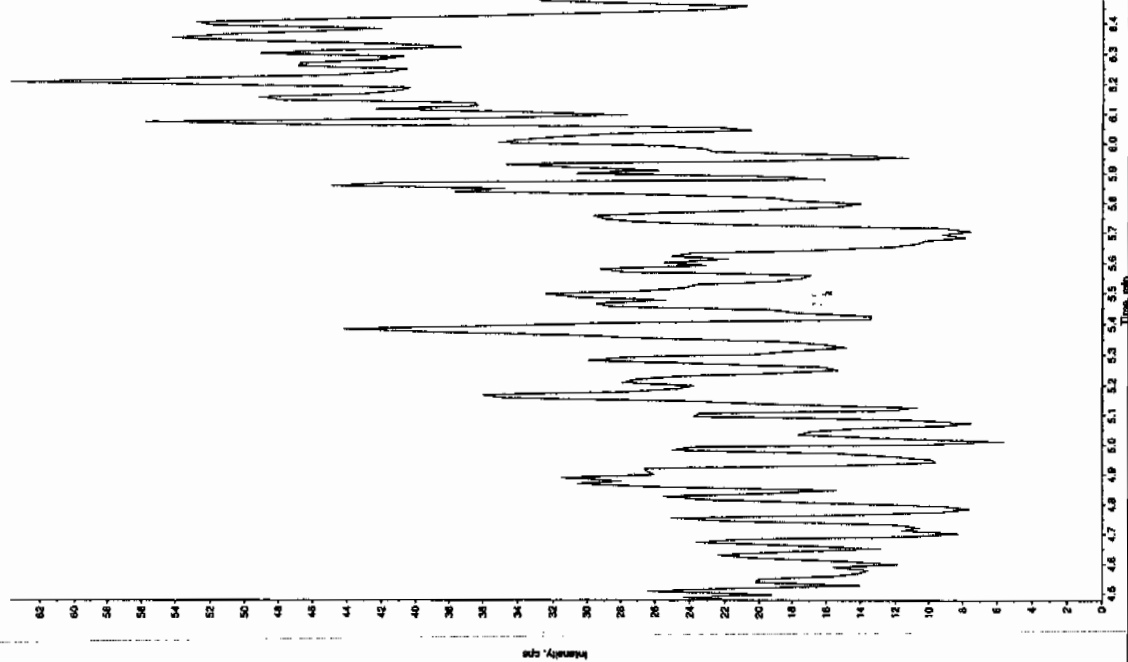


L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "245099013" Sample ID: "9442432JLER" File: "EX501290064.wif"
Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.046.0 amu"
Comment: "LCX032125" Annotation: ""

Sample Index: 1

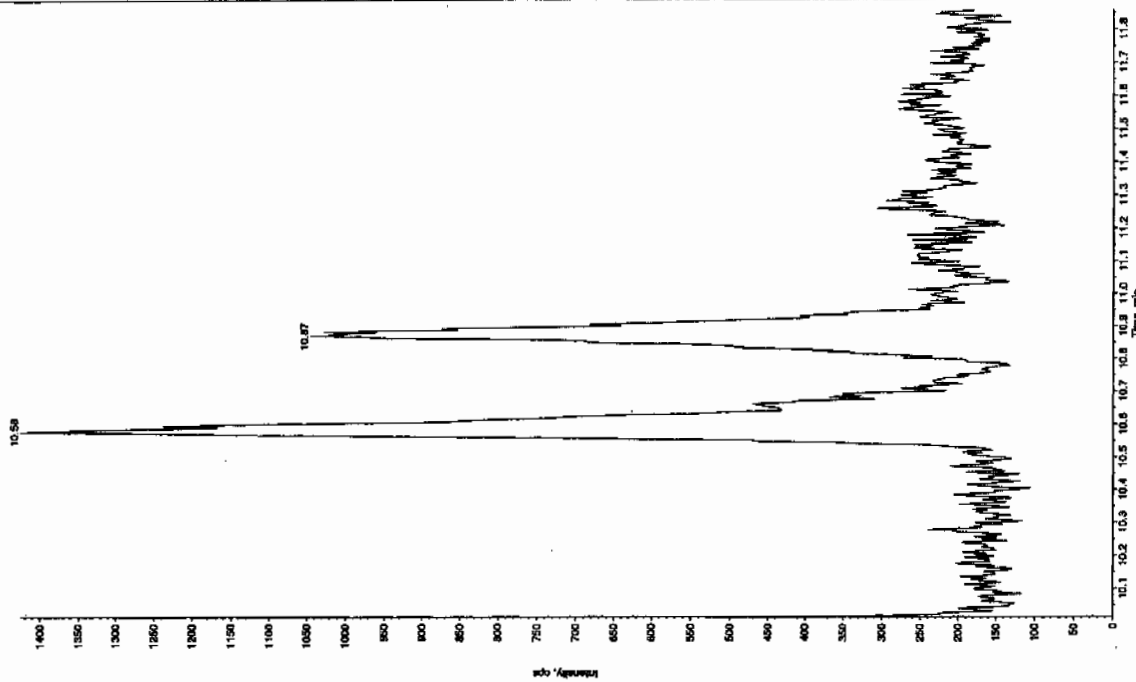
Sample Type: Unknown
Concentration: N/A ng/mL
Acq. Date: 1/30/2010
Acq. Time: 2:34:26 AM
Modified: No



Sample Name: "245099013" Sample ID: "9442432JLER" File: "EX501290064.wif"
Peak Name: "trifluoromethyl phosphate" Mass(es): "369.161.0 amu"
Comment: "LCX032125" Annotation: ""

Sample Index: 1

Sample Type: Unknown
Concentration: N/A ng/mL
Acq. Date: 1/30/2010
Acq. Time: 2:34:26 AM
Modified: No



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7192

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099014

Sample Amount 2

Moisture: 34.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203130a

Date Analyzed: 06-FEB-10 06:04

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		

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203130a

Date: 06-Feb-2010

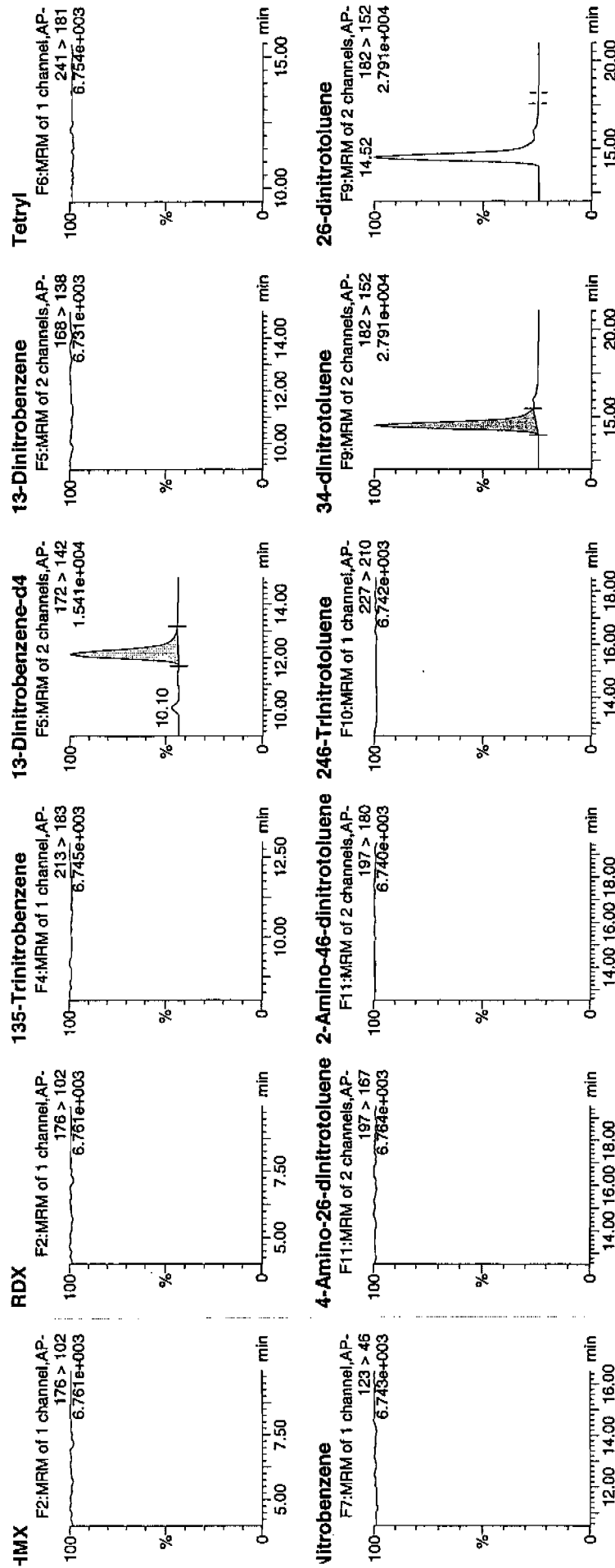
Time: 06:04:16

D: 245099014

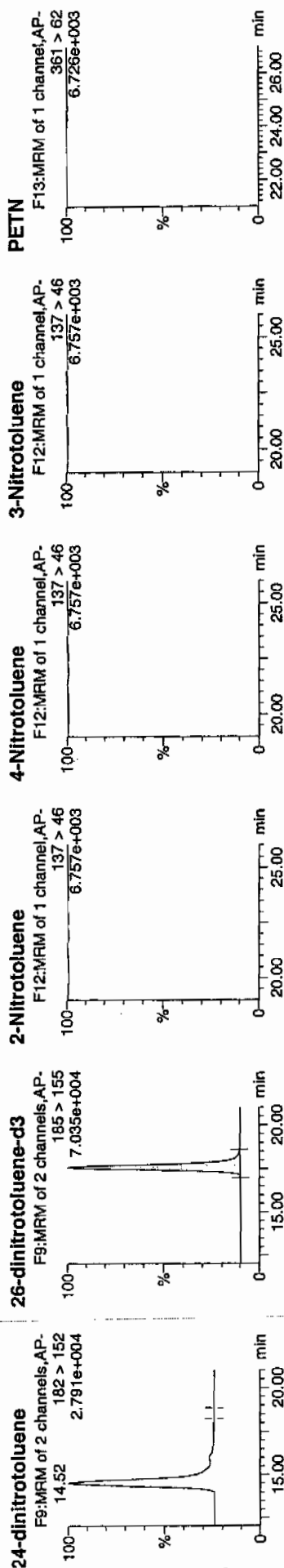
Vial: 3:3,F

447
2/8/10

LANC 944243 / 8025 / 21



447
2/8/10

[illegible]

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7192

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099014

Sample Amount 2

Moisture: 34.4

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290065.wiff

Date Analyzed: 30-JAN-10 02:50

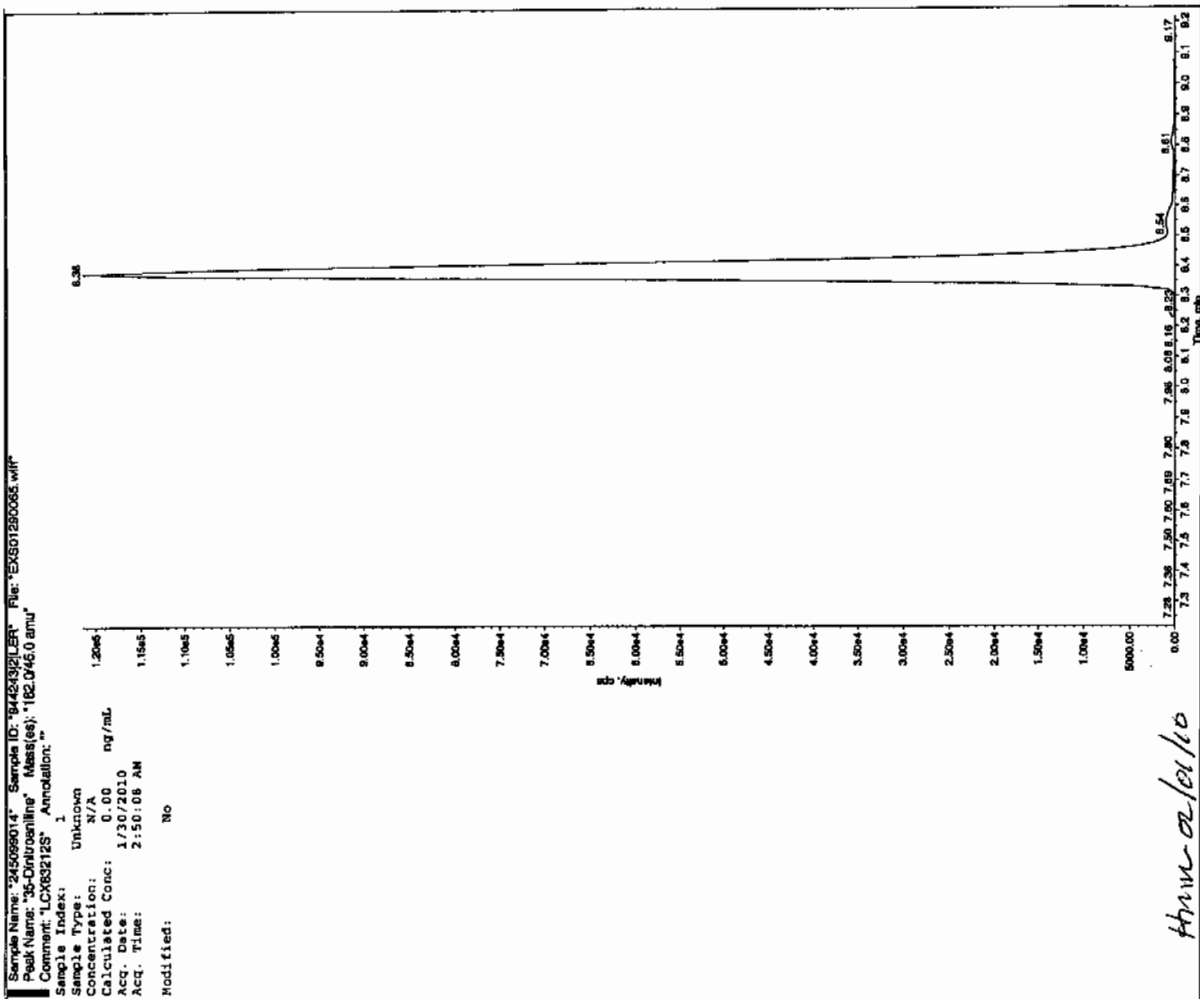
Units: ug/kg

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

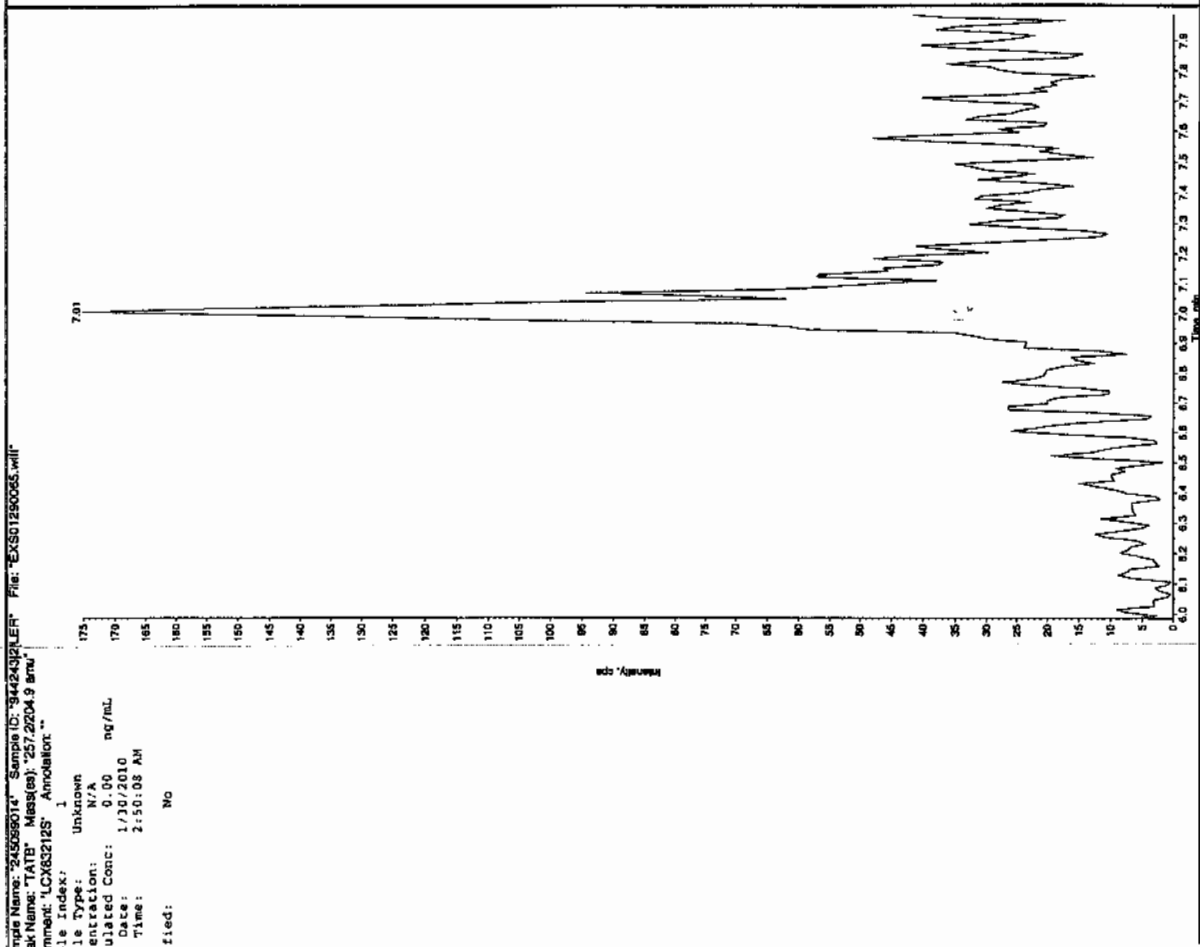
*Concentration =

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

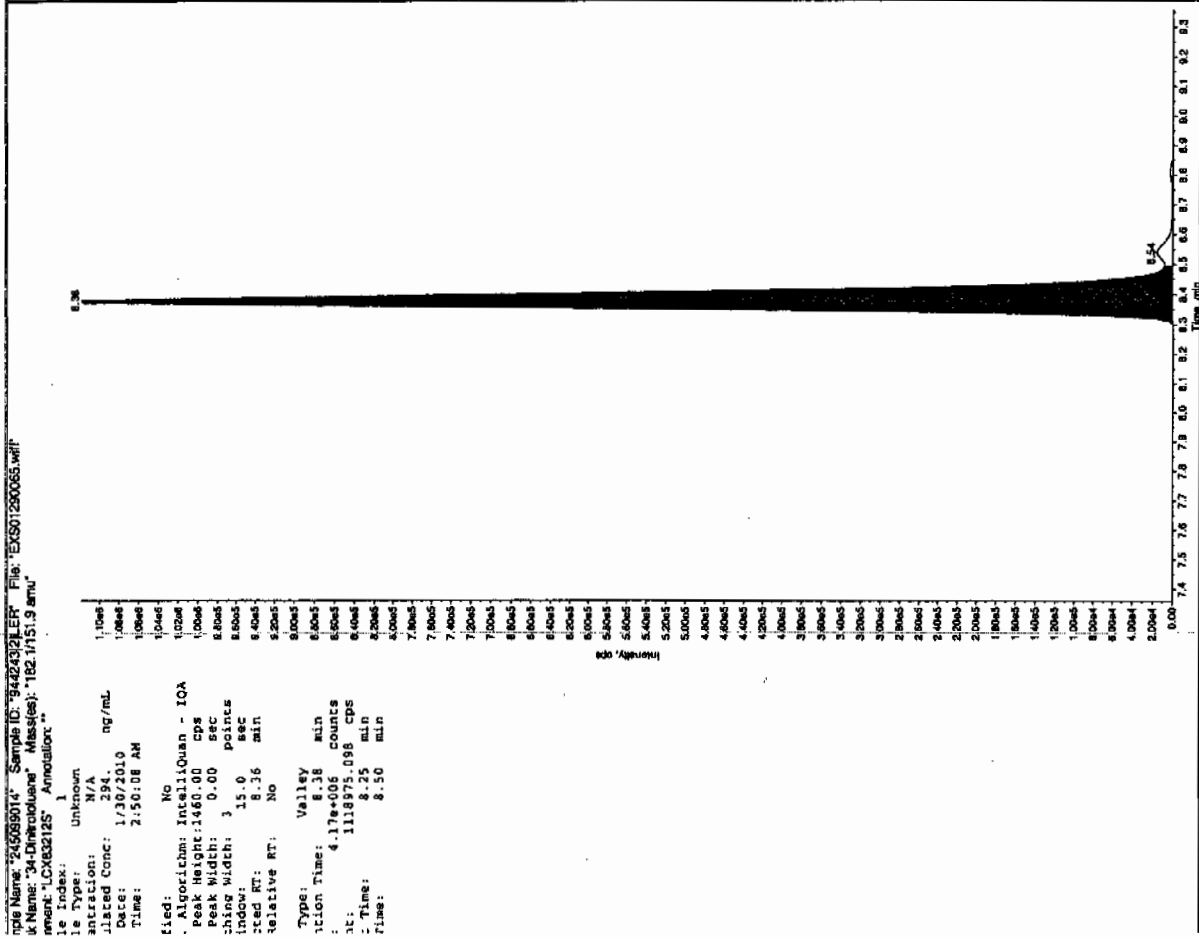
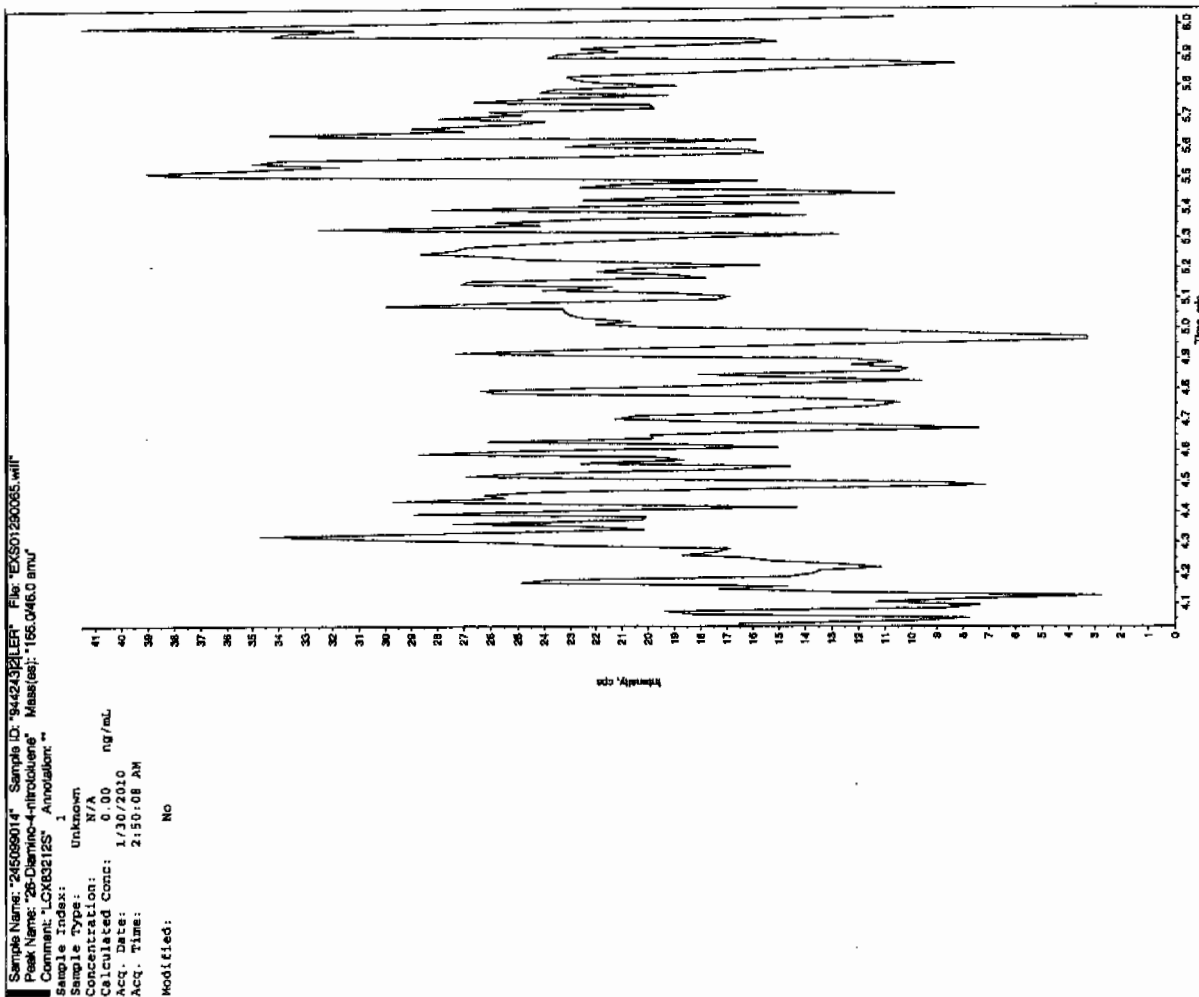
See 21110



21110

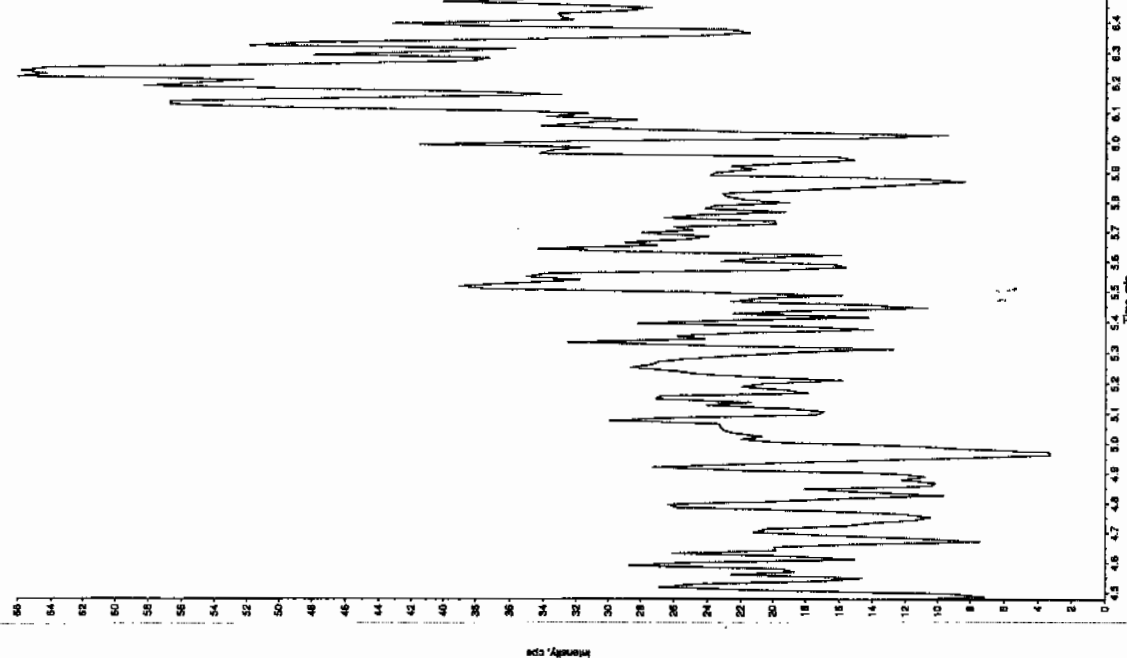


Method 8321A-Modified LCMSMS#4



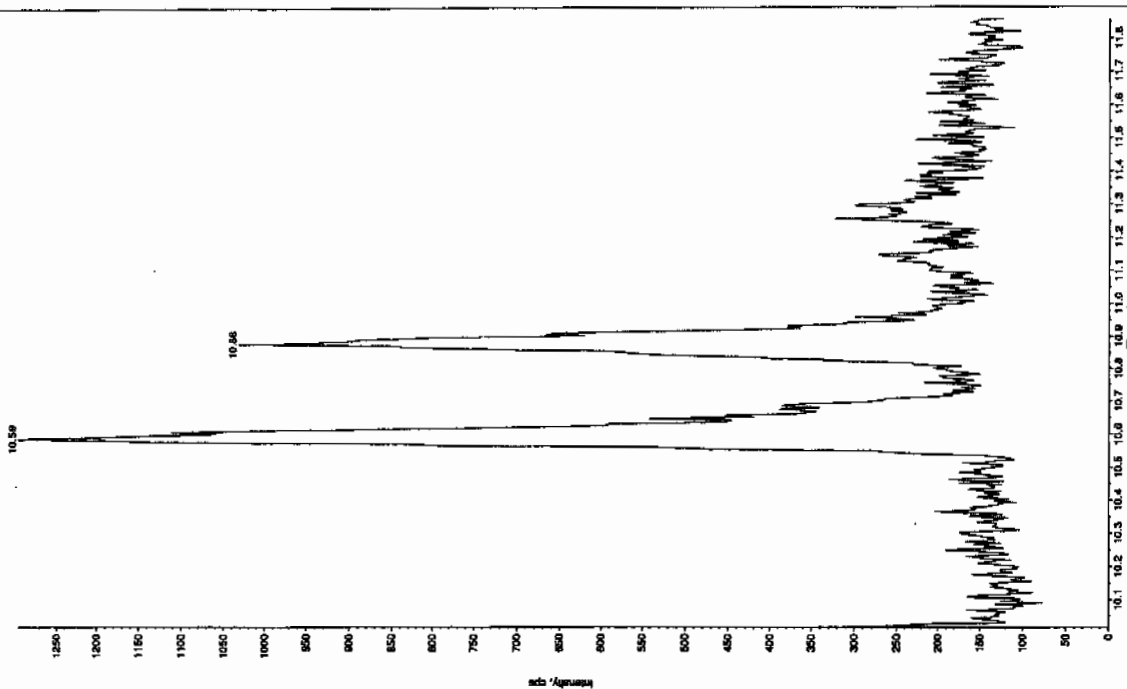
Sample Name: "24089014" Sample ID: "8424321ER" File: "EXS01290065.will"
 Peak Name: "24-Diamino-6-nitroourea" Mass(es): "162.046.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 ACQ. Date: 2:50:08 AM
 ACQ. Time: 2:50:08 AM
 Modified: No



Sample Name: "24089014" Sample ID: "8424321ER" File: "EXS01290065.will"
 Peak Name: "tris(4-cisyl) phosphate" Mass(es): "389.191.0 amu"
 Comment: "LCX83212S" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/30/2010
 ACQ. Date: 2:50:08 AM
 ACQ. Time: 2:50:08 AM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7219

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099015

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203131a

Date Analyzed: 06-FEB-10 06:33

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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203131a

Date: 06-Feb-2010

Time: 06:33:43

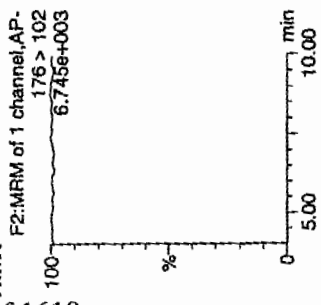
ID: 245099015

Vial: 3:4,A

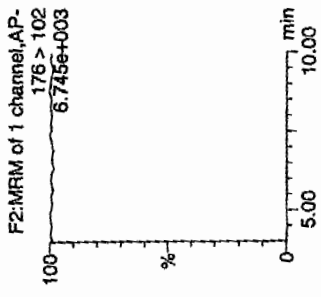
944243 / Source 121

4477
2/8/10

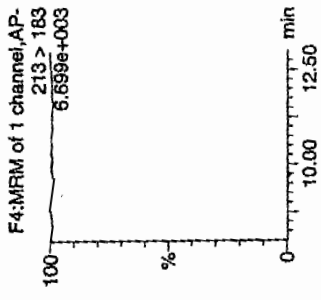
HMX



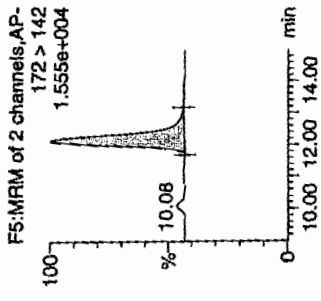
RDX



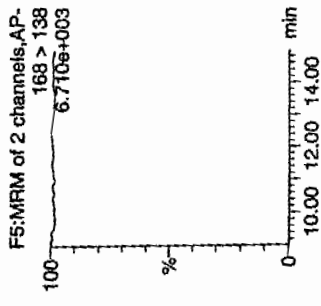
135-Trinitrobenzene



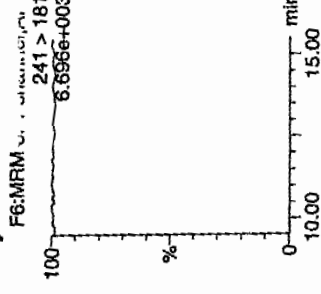
13-Dinitrobenzene-d4



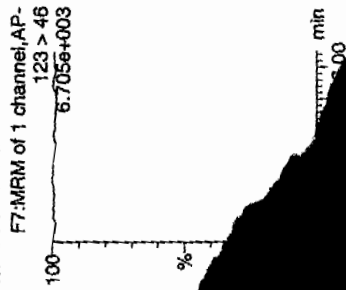
13-Dinitrobenzene



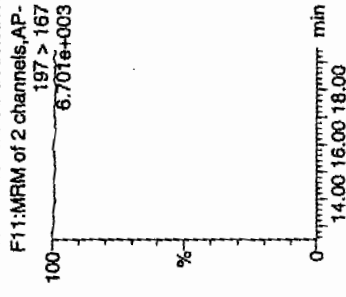
Tetryl



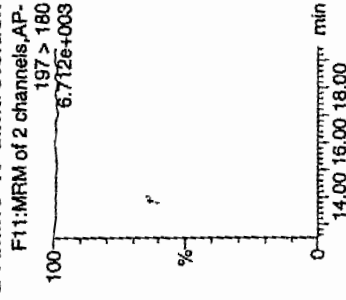
4-Trobenzene



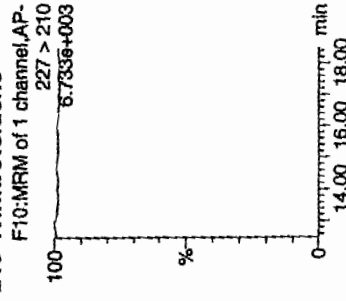
4-Amino-26-dinitrotoluene



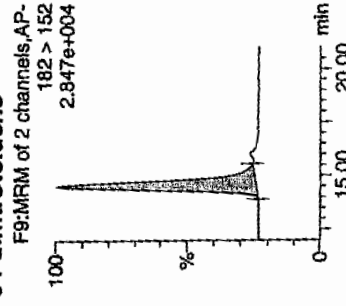
2-Amino-46-dinitrotoluene



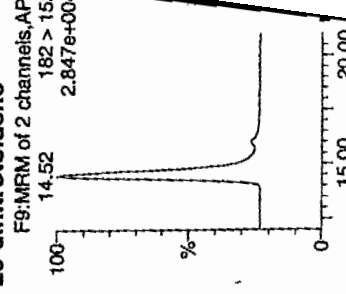
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



Handwritten signature

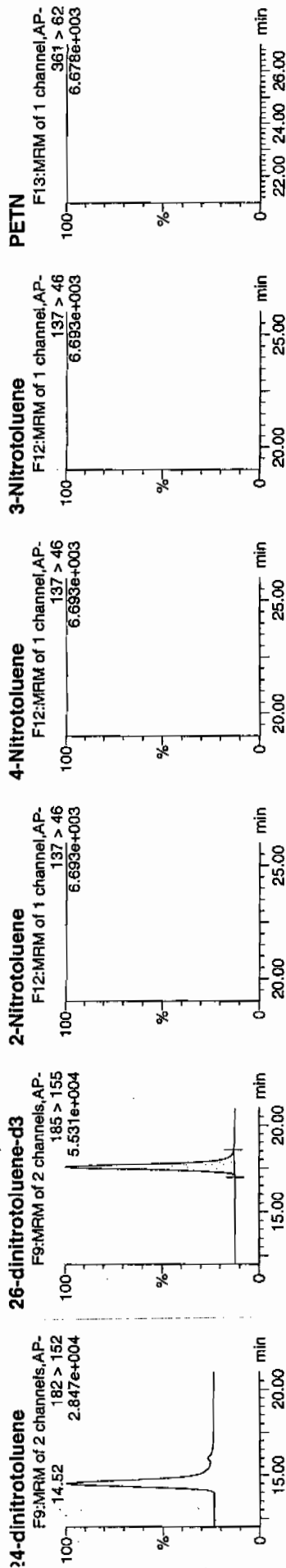
Manual Modification

Quantify Sample Report

3EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Feb 08 11:31:28 2010, Page 96 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Time	Mod:Date	%Rec	%Dev
45099015	HMx	176 > 102		3586.391							
45099015	RDX	176 > 102		3586.391							
45099015	135-Trinitrobenzene	213 > 183		3586.391							
45099015	13-Dinitrobenzene-d4	172 > 142	12.14	3586.391		3586.391	bb	482.8507	96.6	-3.4	332.5
45099015	13-Dinitrobenzene	168 > 138		3586.391							
45099015	Tetryl	241 > 181		3586.391							
45099015	Nitrobenzene	123 > 46		3586.391							
45099015	4-Amino-2,6-dinitrotoluene	197 > 167		19149.285							
45099015	2-Amino-4,6-dinitrotoluene	197 > 180		19149.285							
45099015	246-Trinitrotoluene	227 > 210		19149.285							
45099015	34-dinitrotoluene	182 > 152	14.52	19149.285		10141.196	bb	284.8839	114.0	14.0	600.5
45099015	26-dinitrotoluene	182 > 152		19149.285							
45099015	24-dinitrotoluene	182 > 152		19149.285							
45099015	26-dinitrotoluene-d3	185 > 155	17.58	19149.285							
45099015	2-Nitrotoluene	137 > 46		19149.285		19149.285	bb	451.3093	90.3	-9.7	1618.7
45099015	4-Nitrotoluene	137 > 46		19149.285							
45099015	3-Nitrotoluene	137 > 46		19149.285							
45099015	PETN	361 > 62		19149.285							

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7219

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 245099015

Sample Amount 2

Moisture: 23.2

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290066.wiff

Date Analyzed: 30-JAN-10 03:05

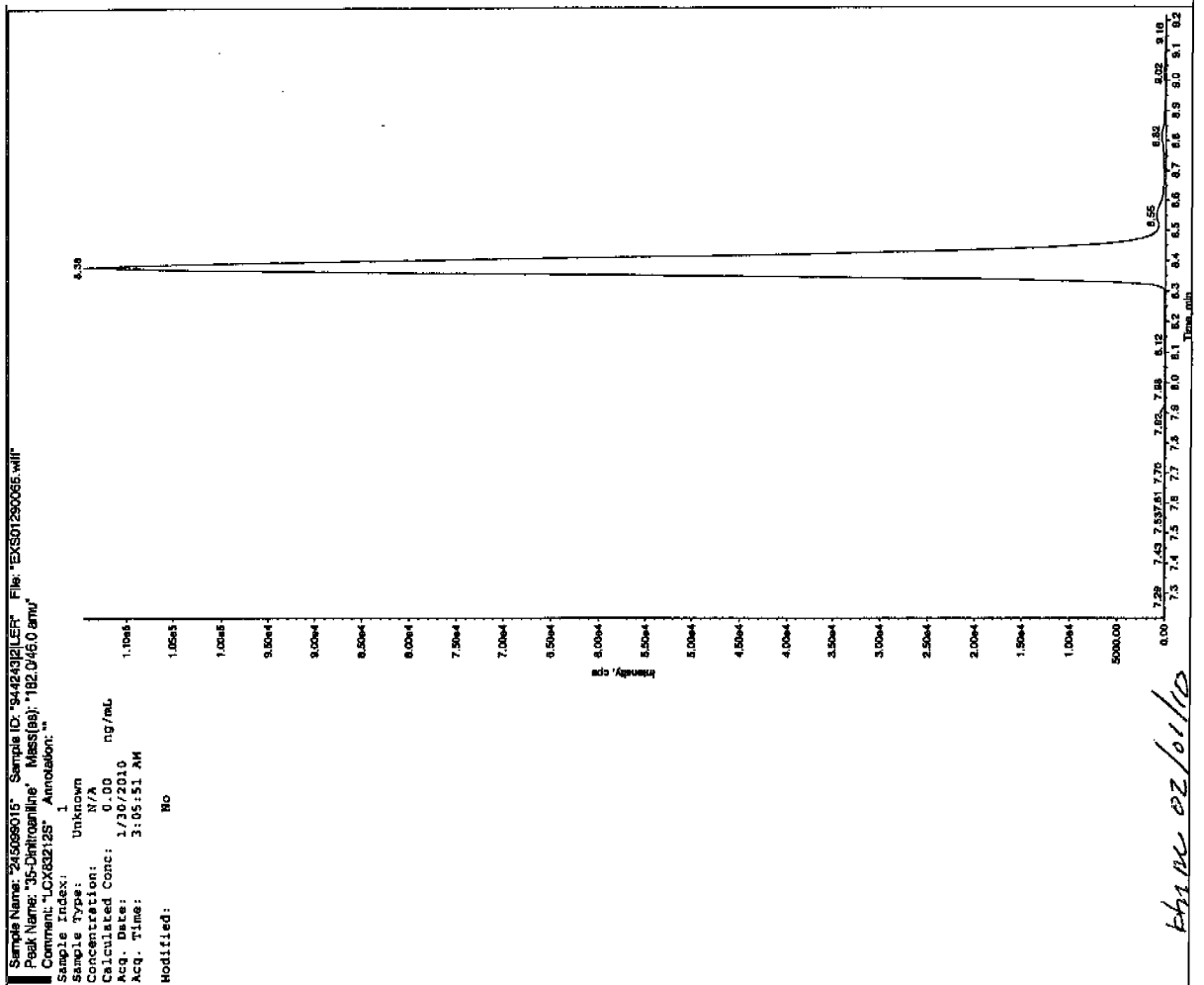
Units: ug/kg

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

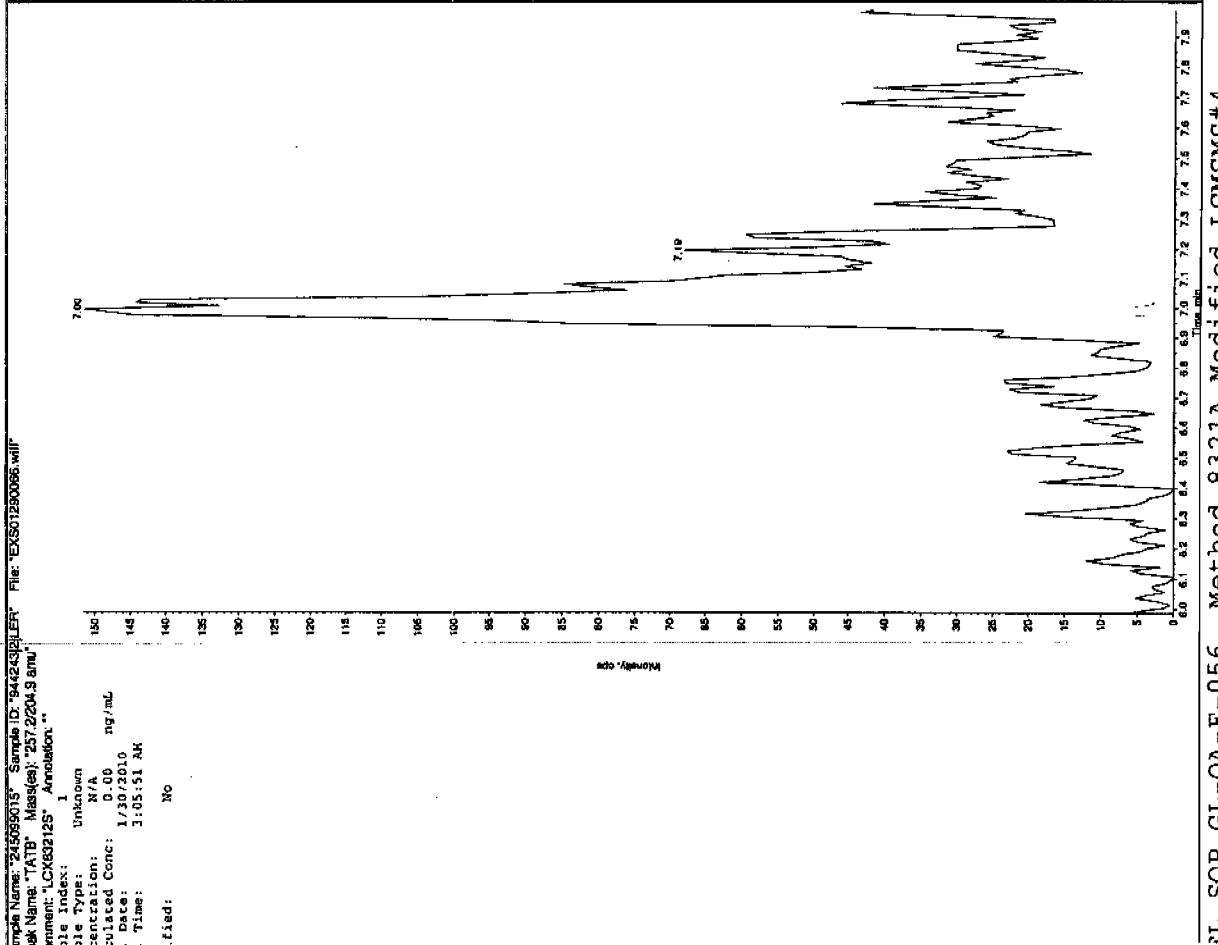
*Concentration =

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

See 21110



three 02/01/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

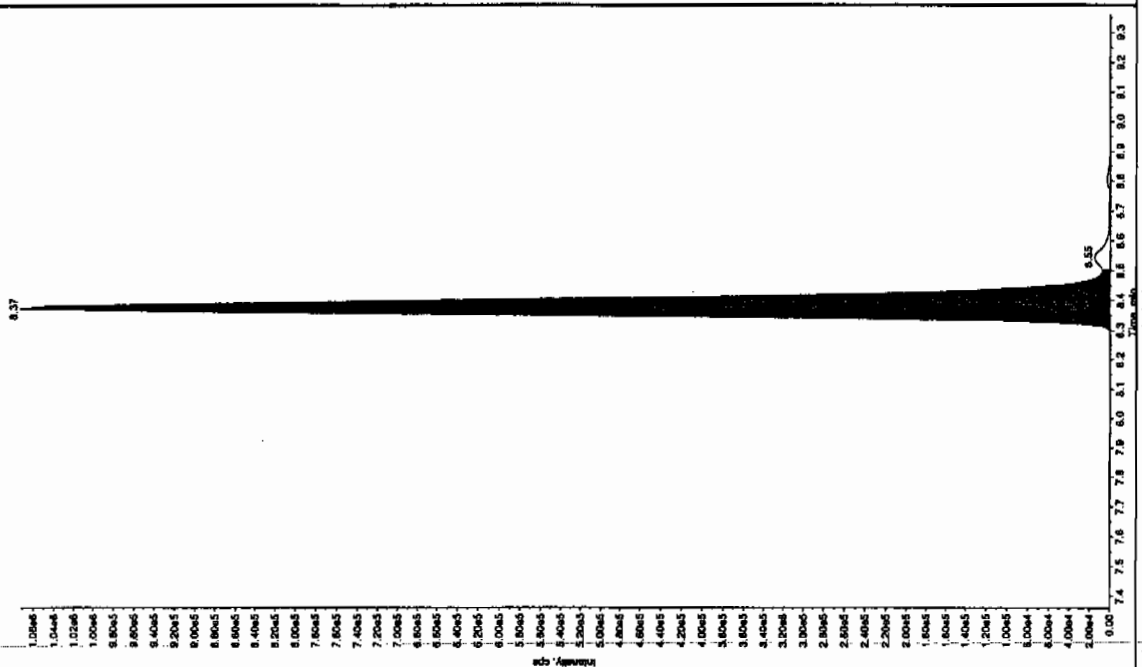
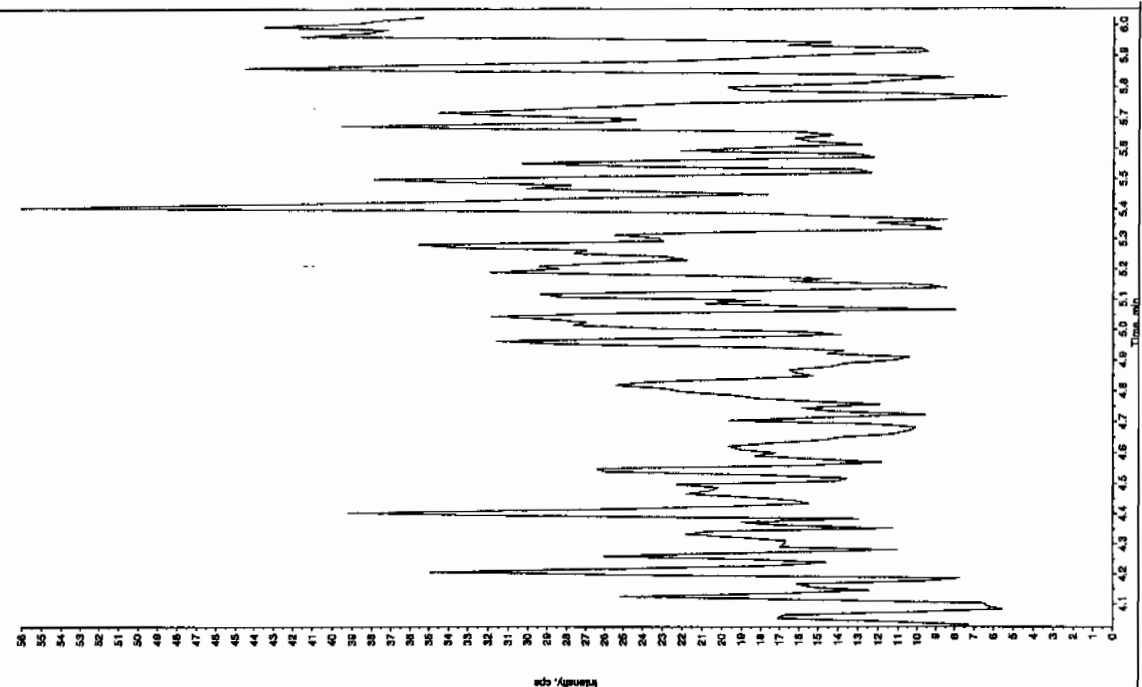
Sample Name: "24509015" Sample ID: "8424321" File: "EX501280066.wil"
 Peak Name: "34-Dinitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: M/L
 Calculated Conc: 1.70/2010 ng/mL
 Acq. Time: 3.05:51 AM
 Modified: No

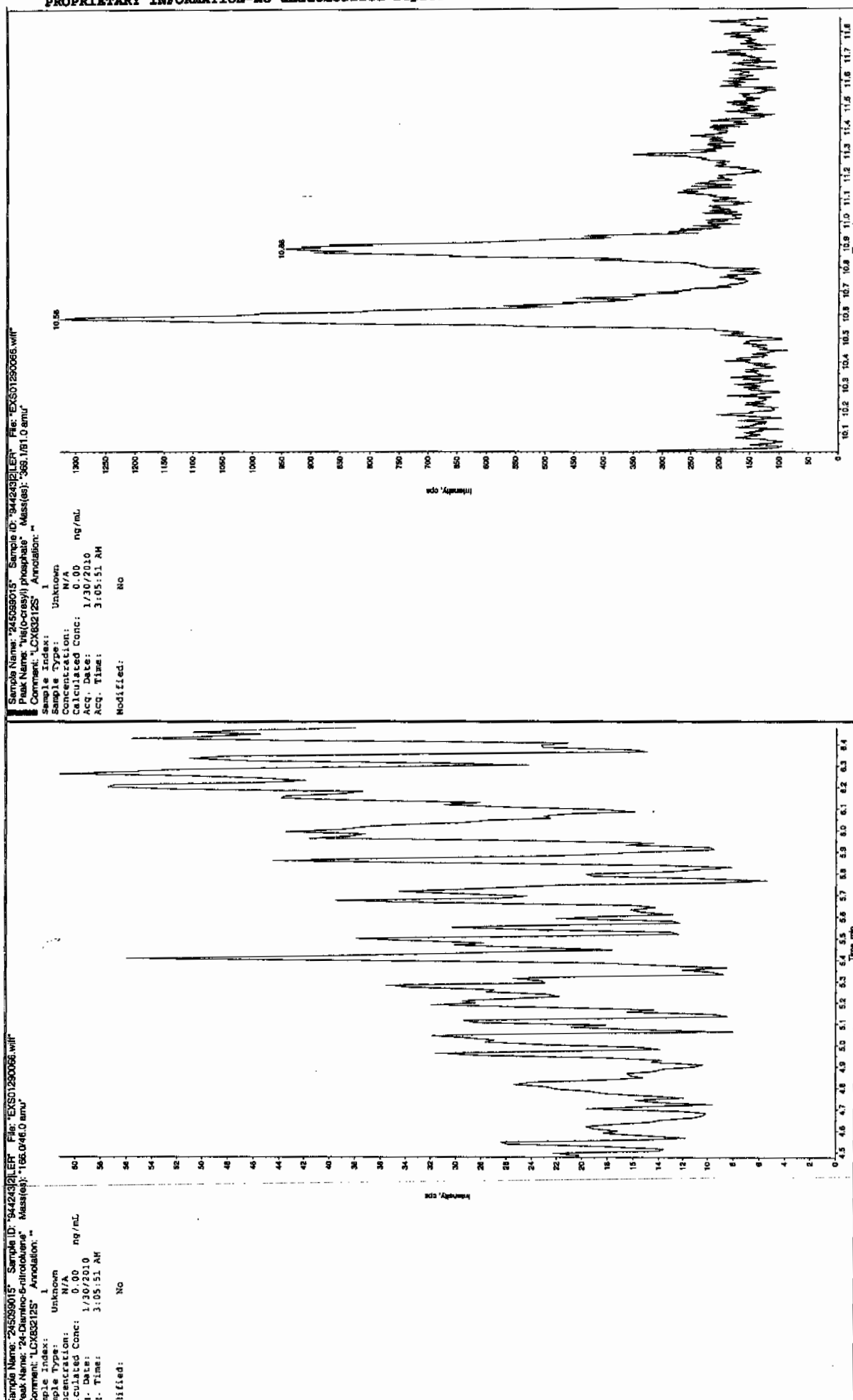
Sample Name: "24509015" Sample ID: "8424321" File: "EX501280066.wil"
 Peak Name: "34-Dinitrofluorene" Mass(es): "162.171.9 amu"
 Comment: "LCX83212S" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: M/L
 Calculated Conc: 1.70/2010 ng/mL
 Acq. Time: 3.05:51 AM
 Modified: No

Algorithm: IntelliQuan - IQA
 Peak Height: 1460.00 cps
 Peak Width: 0.00 sec
 Peak Width: 3 points
 Window: 15.0 sec
 Retention Time: 8.36 min
 Relative RT: No
 Type: Valley
 Retention Time: 8.37 min
 Counts: 4.11e+05
 RT: 107405.823 cps
 Time: 8.28 min
 Time: 8.51 min



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL 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

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC GEL Job No: 10-1301 Run Date: 03-FEB-10 22:10 HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Lab Code: GEL Method: 8321A Modified

LCMSMS Instrument ID: LCMSMS Calibration Type: Average RF

Parameter	1	2	3	4	5	6	Ave RF	RSD	Q
Calibration Level:	EXP0203003a	EXP0203004a	EXP0203005a	EXP0203006a	EXP0203007a	EXP0203008a			
Data File:									
1,3,5-Trinitrobenzene	3.678	3.664	3.306	3.151	3.211	3.244	3.376	6.937	
1,3-Dinitrobenzene-d4	7.759	7.786	7.399	7.465	7.043	7.114	7.428	4.201	
2,4,6-Trinitrotoluene	.284	.366	.298	.315	.341	.347	0.325	9.726	
2,4-Dinitrotoluene	.215	.252	.253	.233	.248	.259	0.243	6.825	
2,6-Dinitrotoluene	1.081	1.113	1.068	1.105	1.095	1.102	1.097	1.951	
2,6-Dinitrotoluene-d3	45.524	43.306	43.037	42.939	40.029	39.748	42.431	5.156	
2-Amino-4,6-dinitrotoluene	.378	.385	.396	.407	.408	.435	0.402	4.996	
3,4-Dinitrotoluene	.858	.935	.906	.931	.967	.979	0.929	4.708	
4-Amino-2,6-dinitrotoluene	.302	.285	.28	.289	.301	.311	0.295	4.107	
HMX	3.288	3.435	3.351	3.883	3.52	3.544	3.504	5.993	
Nitrobenzene	.86	.788	.81	.814	.793	.784	0.808	3.48	
PETN	1.325	1.293	1.183	1.332	1.22	.923	1.213	12.68	
RDX	2.199	2.19	2.386	2.386	2.475	2.475	2.352	5.448	
Tetryl	.803	.688	.768	.781	.779	.769	0.765	5.188	
m-Dinitrobenzene	1.346	1.133	1.207	1.309	1.255	1.244	1.249	6.028	
m-Nitrotoluene	.109	.097	.087	.087	.088	.091	0.093	9.262	
o-Nitrotoluene	.121	.162	.15	.154	.154	.158	0.150	9.955	
p-Nitrotoluene	.086	.074	.072	.071	.074	.077	0.076	7.067	

Q column used to flag RSD values outside of Limit (>20%)

* Values outside of QC Limit

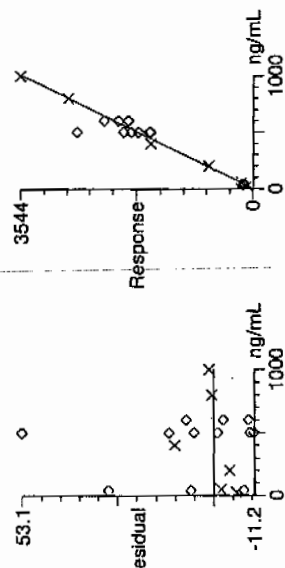
Quantify Calibration Report

iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO1020310expA.qld, Time: Thu Feb 04 09:07:11 2010

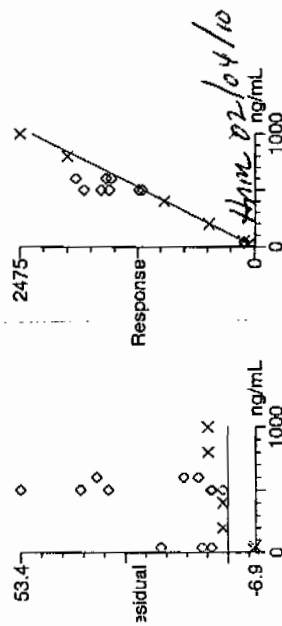
Method: C:\MASSLYNX\New_Exp\PRO1020310expA.mdb, Time: Wed Feb 03 16:20:50 2010
 Calibration: Untitled, Time: Thu Feb 04 09:07:11 2010

Compound name: HMX
 Response Factor: 3.50357
 RF SD: 0.209964, % Relative SD: 5.99285
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



Page 1200 of 1610

Compound name: RDX
 Response Factor: 2.35181
 RF SD: 0.128137, % Relative SD: 5.44843
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF

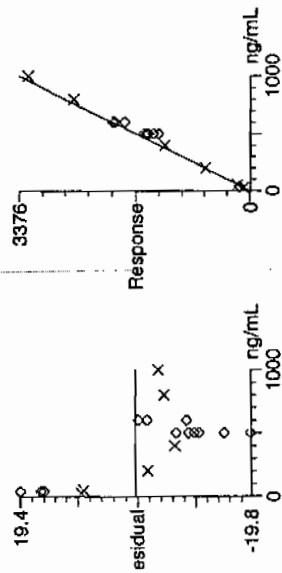


Quantify Calibration Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

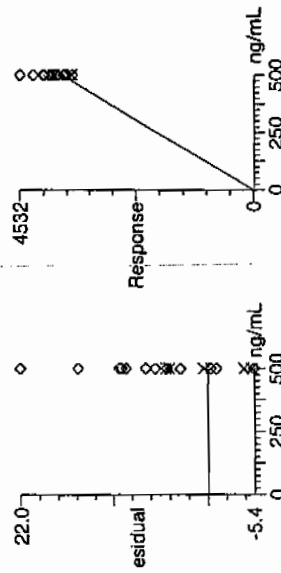
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compound name: 135-Trinitrobenzene
response factor: 3.37561
RF SD: 0.234181, % Relative SD: 6.93744
response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
curve type: RF

Page 1201 of 1610



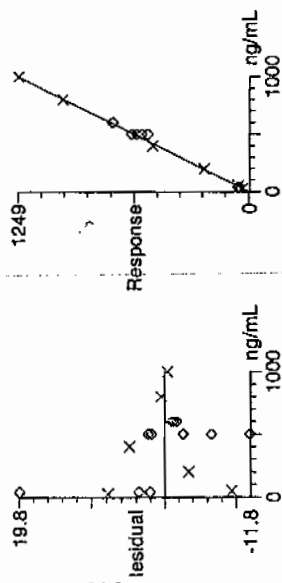
compound name: 13-Dinitrobenzene-d4
response factor: 7.42754
RF SD: 0.312056, % Relative SD: 4.20134
response type: External Std, Area
curve type: RF



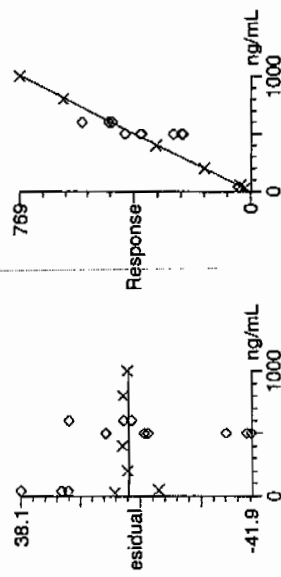
Quantify Calibration Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Compound name: 13-Dinitrobenzene
Response Factor: 1.24891
RF SD: 0.0752803, % Relative SD: 6.02768
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



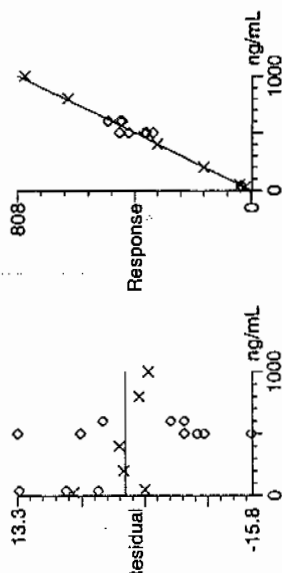
Compound name: Tetraol
Response Factor: 0.764502
RF SD: 0.0396626, % Relative SD: 5.18802
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



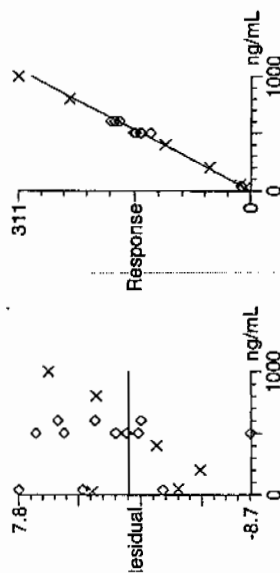
Quantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atlaset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

compound name: Nitrobenzene
response factor: 0.808148
RF SD: 0.0281217, % Relative SD: 3.47977
response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
curve type: RF



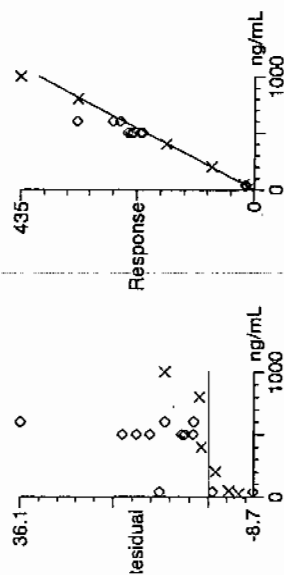
compound name: 4-Amino-26-dinitrotoluene
response factor: 0.294696
RF SD: 0.0121042, % Relative SD: 4.10735
response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
curve type: RF



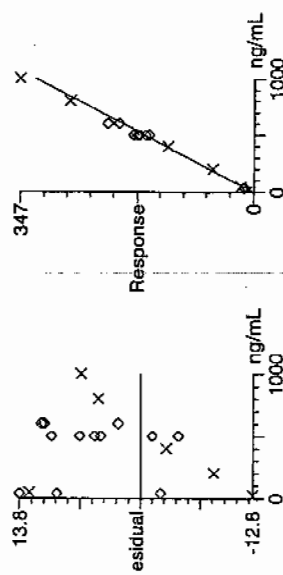
Quantify Calibration Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

atset: C:\MASSLYNX\New_Exp\PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

compound name: 2-Amino-46-dinitrotoluene
response factor: 0.401348
RF SD: 0.0200515, % Relative SD: 4.99604
response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
curve type: RF



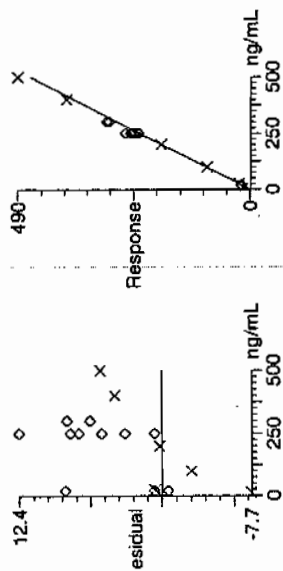
compound name: 246-Trinitrotoluene
response factor: 0.32507
RF SD: 0.0316167, % Relative SD: 9.72613
response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
curve type: RF



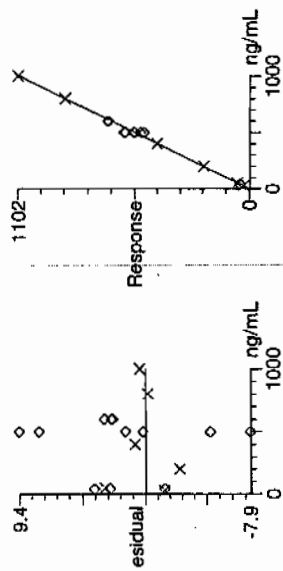
unintify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

dataset: C:\MASSLYNX\New_Exp\PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Compound name: 34-dinitrotoluene
Response Factor: 0.929477
RF SD: 0.0437561, % Relative SD: 4.7076
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



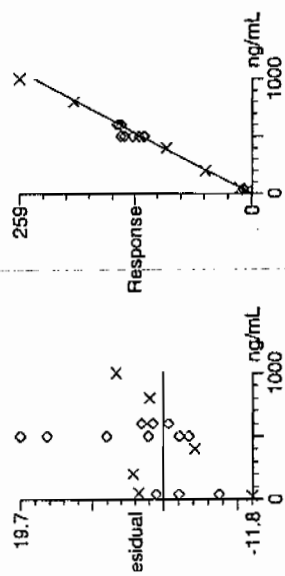
Compound name: 26-dinitrotoluene
Response Factor: 1.09687
RF SD: 0.0213985, % Relative SD: 1.95087
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



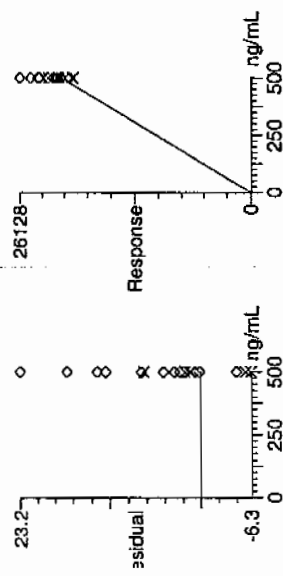
uantify Calibration Report
EL Laboratories, LLC / Analyst: Michael A. Penny

alaset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Compound name: 24-dinitrotoluene
Response Factor: 0.243265
RF SD: 0.0168026, % Relative SD: 6.8249
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



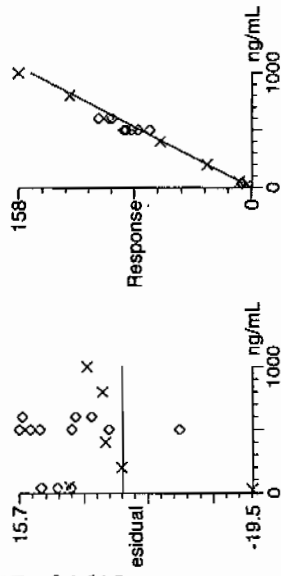
Compound name: 26-dinitrotoluene-d3
Response Factor: 42.4305
RF SD: 2.18753, % Relative SD: 5.15556
Response type: External Std, Area
Curve type: RF



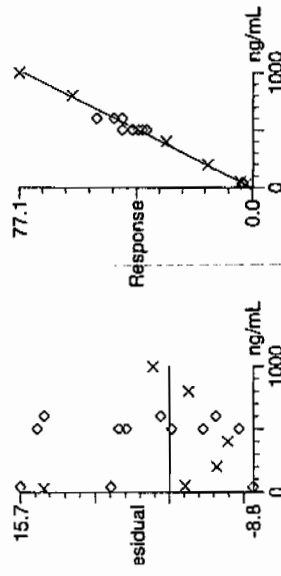
uantify Calibration Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

ompound name: 2-Nitrotoluene
esponse Factor: 0.149821
RF SD: 0.0149144, % Relative SD: 9.9548
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



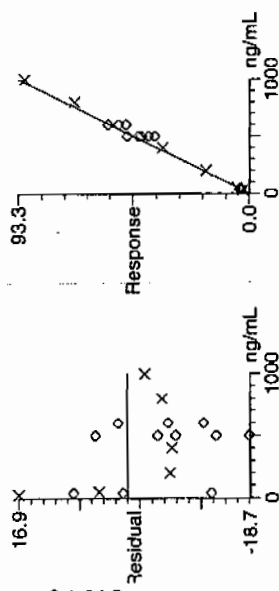
ompound name: 4-Nitrotoluene
esponse Factor: 0.0757635
RF SD: 0.00535422, % Relative SD: 7.06702
esponse type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
urve type: RF



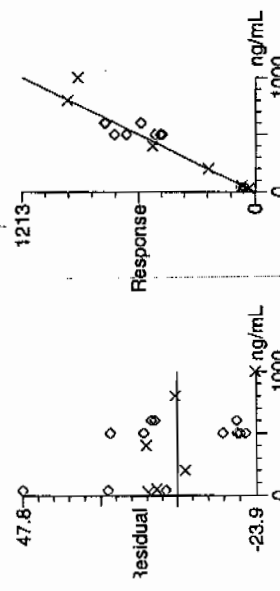
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Compound name: 3-Nitrotoluene
Response Factor: 0.0932747
RIF SD: 0.00863932, % Relative SD: 9.26223
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RIF



Compound name: PETN
Response Factor: 1.21277
RIF SD: 0.153776, % Relative SD: 12.6797
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RIF



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0203010a

Analysis Date: 03-FEB-10 14:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	547.973	91	
1,3-Dinitrobenzene-d4	500	535.969	107	
2,4,6-Trinitrotoluene	600	665.738	111	
2,4-Dinitrotoluene	600	595.765	99	
2,6-Dinitrotoluene	600	618.505	103	
2,6-Dinitrotoluene-d3	500	513.811	103	
2-Amino-4,6-dinitrotoluene	600	617.05	103	
3,4-Dinitrotoluene	300	318.582	106	
4-Amino-2,6-dinitrotoluene	600	594.745	99	
HMX	600	584.705	97	
Nitrobenzene	600	616.529	103	
PETN	600	490.439	82	
RDX	600	668.708	111	
Tetryl	600	610.576	102	
m-Dinitrobenzene	600	589.951	98	
m-Nitrotoluene	600	562.569	94	
o-Nitrotoluene	600	628.553	105	
p-Nitrotoluene	600	605.344	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203010a

Date: 03-Feb-2010

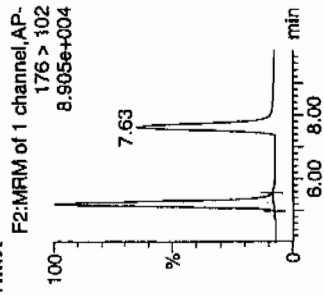
Time: 14:35:38

ID: WXX100203-07ICV

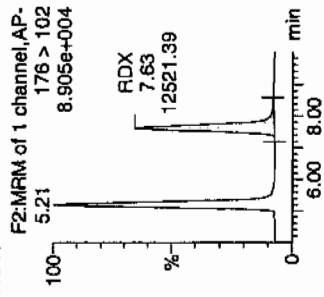
Vial: 1:1,B

2/4/10

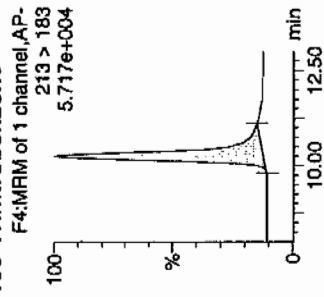
HMZ



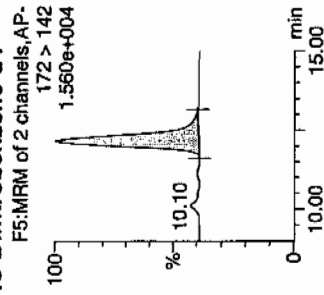
RDX



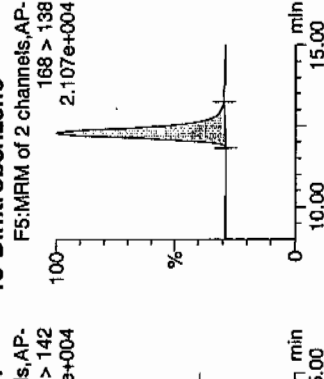
135-Trinitrobenzene



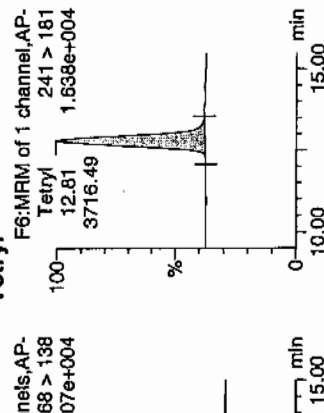
13-Dinitrobenzene-d4



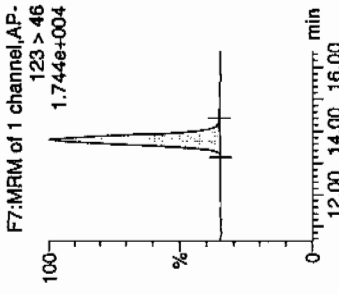
13-Dinitrobenzene



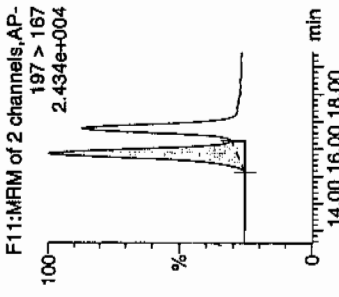
Tetryl



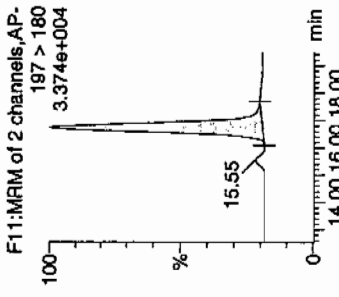
Nitrobenzene



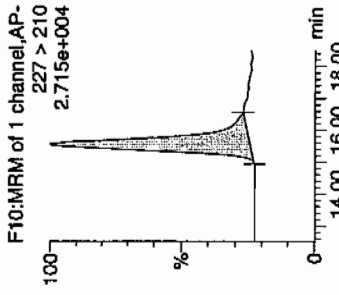
4-Amino-26-dinitrotoluene



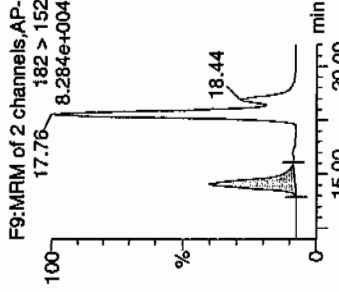
2-Amino-46-dinitrotoluene



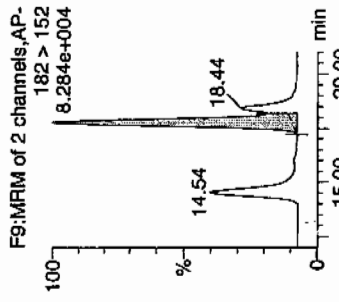
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

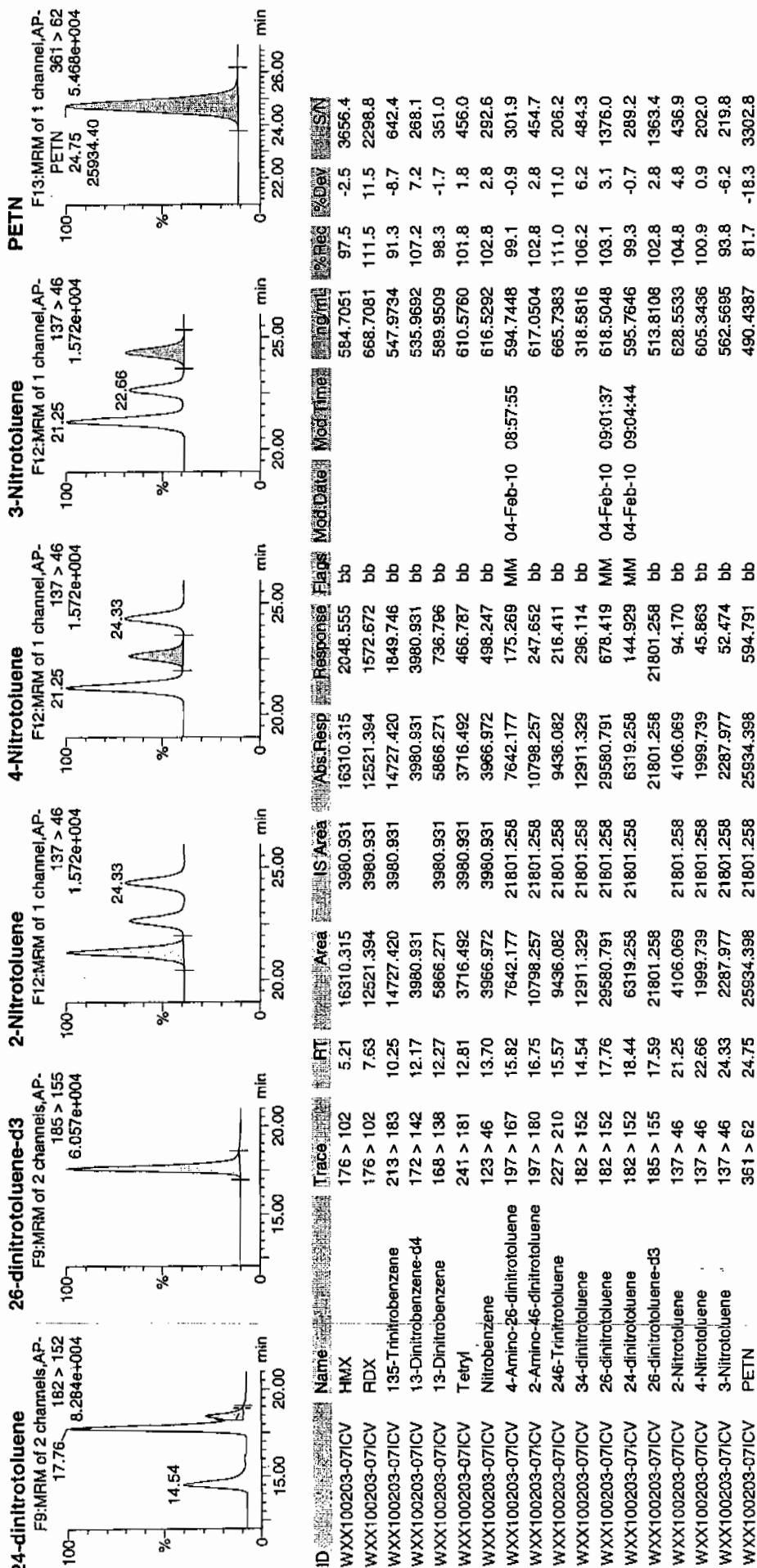


Quantify Sample Report

3EL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

Printed: Thu Feb 04 09:09:25 2010, Page 20 of 73



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/03/10
 Time of Injection: 1435
 Standard Number: WXX100203-07ICV
 Data File: EXP0203010a

HMX	97.5
RDX	111.5
135-TNB	91.3
13-DNB	98.3
Tetryl	101.8
Nitrobenzene	102.8
4A-26-DNT	99.1
2A-46-DNT	102.8
246-TNT	111.0
34-DNT(surr)	106.2
26-DNT	103.1
24-DNT	99.3
2-NT	104.8
4-NT	100.9
3-NT	93.8
PETN	81.7

*WTF
2/4/10*

Total 1605.9

Average 100.4

Sum 02/04/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1301

Lab Code: GEL

Run Date: 03-FEB-10.29-JAN-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8Q

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS01290003.wif	EXS01290004.wif	EXS01290005.wif	EXS01290006.wif	EXS01290007.wif	EXS01290008.wif	EXS01290009.wif					
Parname:												
2,4-Diamino-6-nitrotoluene	122000	190000	433000	1050000	1240000	1960000	3300000	-12100	2050	-194	.9965	
2,6-Diamino-4-nitrotoluene	196000	288000	791000	1650000	2180000	3560000	5340000	-98800	3890	-575	.9945	
3,4-Dinitrotoluene	363000	681000	1700000	3320000	4950000	6640000	11500000	-102000	15800	-4.14	.9988	
3,5-Dinitroaniline	542000	1040000	2590000	4970000	7130000	9320000	15700000	-2510	10700	-1.42	1	
TATB	90100	172000	426000	858000	1300000	1730000	3270000	-11600	1810	-.086	.9999	
tris(o-cresyl) phosphate	1230000	2430000	5700000	10800000	15300000	19600000	31000000	79200	23500	-4.02	1	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

012910ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.16e+004			
a1	1.81e+003			
a2	-0.0863			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.51e+003			
a1	1.07e+004			
a2	-1.42			
Correlation coefficient 1.0000				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.02e+005			
a1	1.58e+004			
a2	-4.14			
Correlation coefficient 0.9988				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-9.88e+004			
a1	3.89e+003			
a2	-0.575			
Correlation coefficient 0.9945				
Use Area				

Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Page 1

Jan
2/1/10

Jan
2/1/10

012910ICAL

Iterate No

None

weighting

Fit Quadratic
a0 -1.21e+004
a1 2.05e+003
a2 -0.194

Correlation coefficient 0.9965
Use Area

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

Iterate No

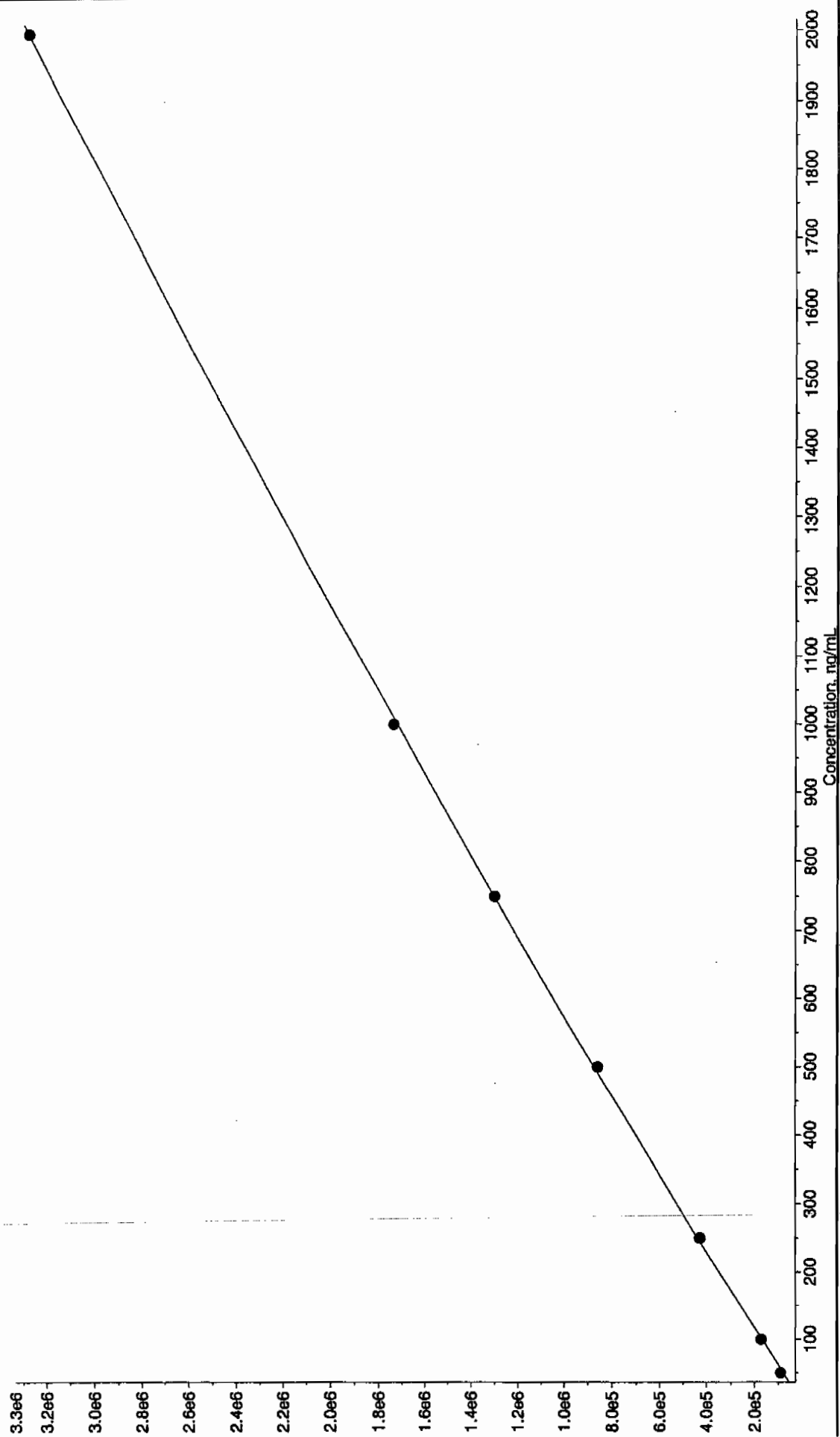
None

weighting

Fit Quadratic
a0 7.92e+004
a1 2.35e+004
a2 -4.02

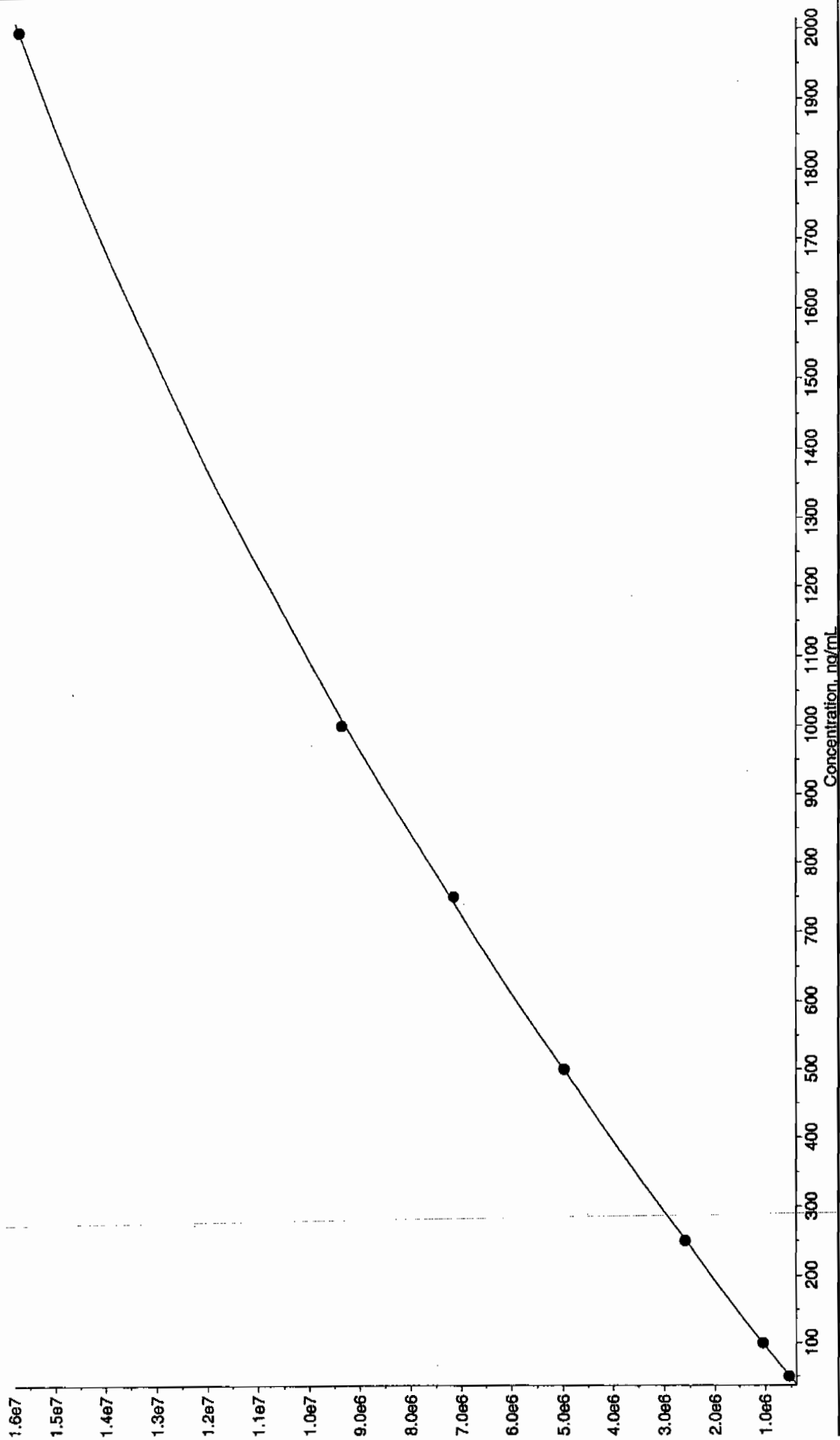
Correlation coefficient 1.0000
Use Area

012910.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.0863 x^2 + 1.81e+003 x + -1.16e+004$ ($r = 0.9999$)



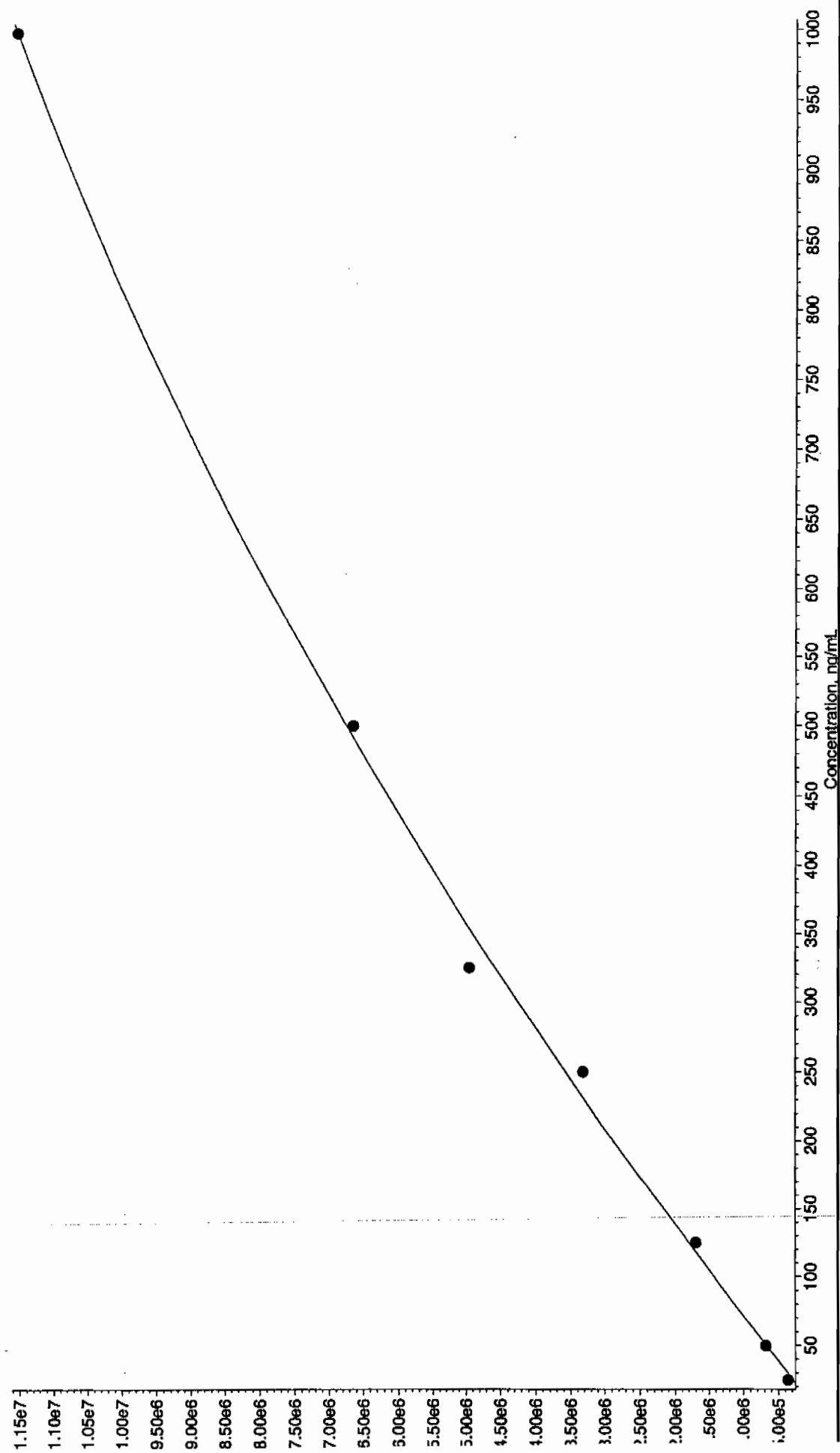
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012910.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -1.42 x^2 + 1.07e+004 x + -2.51e+003$ ($r = 1.0000$)



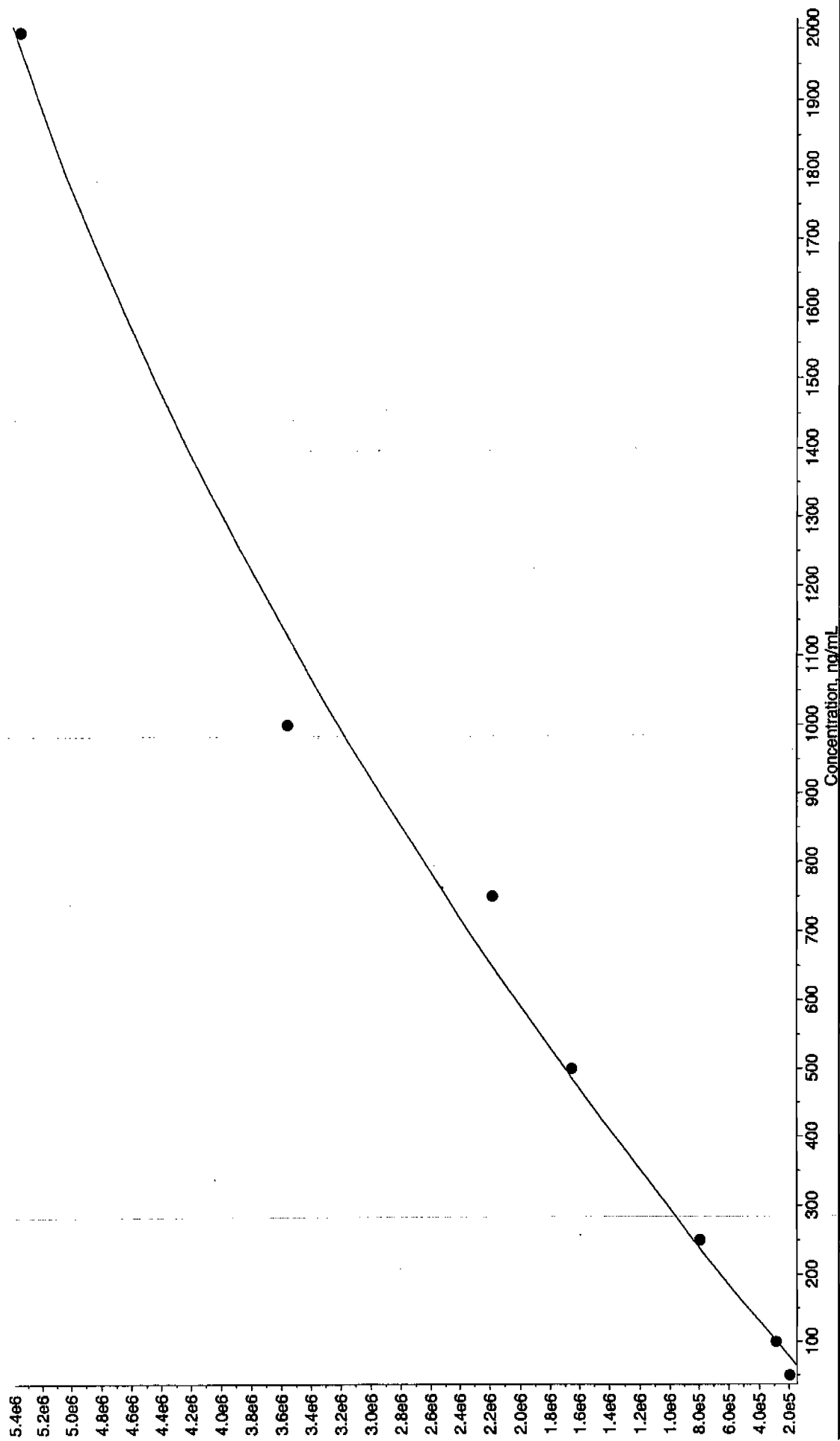
J. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012910.rdb (34-Dinitrotoluene): "Quadratic" Regression ("No" weighting): $y = -4.14 \times 10^{-5} x^2 + 1.58 \times 10^{-4} x + -1.02 \times 10^5$ ($r = 0.9988$)



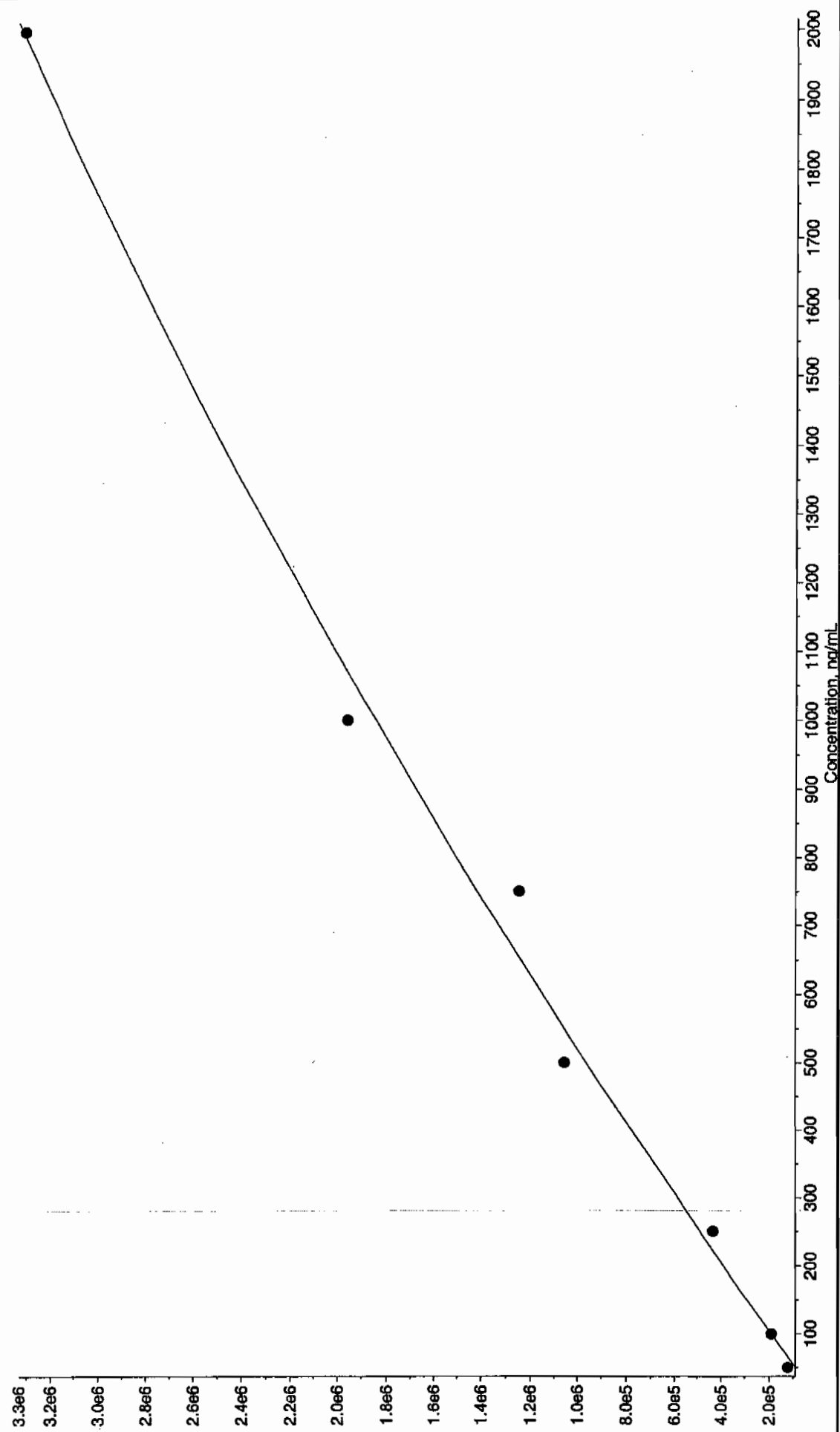
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012910.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.575 x^2 + 3.89e+003 x + -9.88e+004$ ($r = 0.9945$)



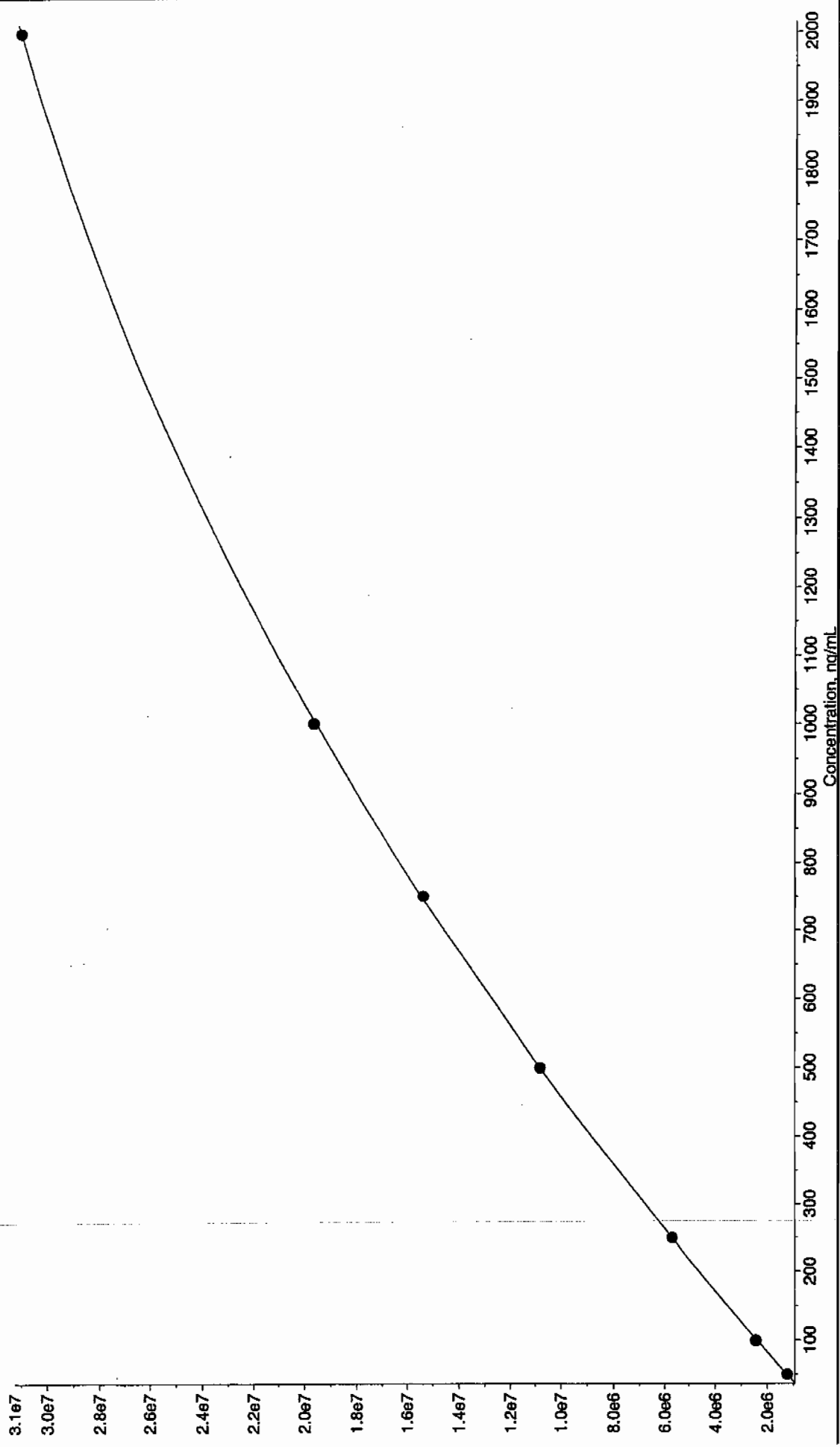
L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012910.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.194 x^2 + 2.05e+003 x + -1.21e+004$ ($r = 0.9965$)



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

012910.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -4.02 x^2 + 2.35e+004 x + 7.92e+004$ ($r = 1.0000$)



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01290011.wiff

Analysis Date: 29-JAN-10 12:41

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	530	106	
2,6-Diamino-4-nitrotoluene	500	450	90	
3,4-Dinitrotoluene	250	239	95	
3,5-Dinitroaniline	500	513	103	
TATB	500	515	103	
tris(o-cresyl) phosphate	500	495	99	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

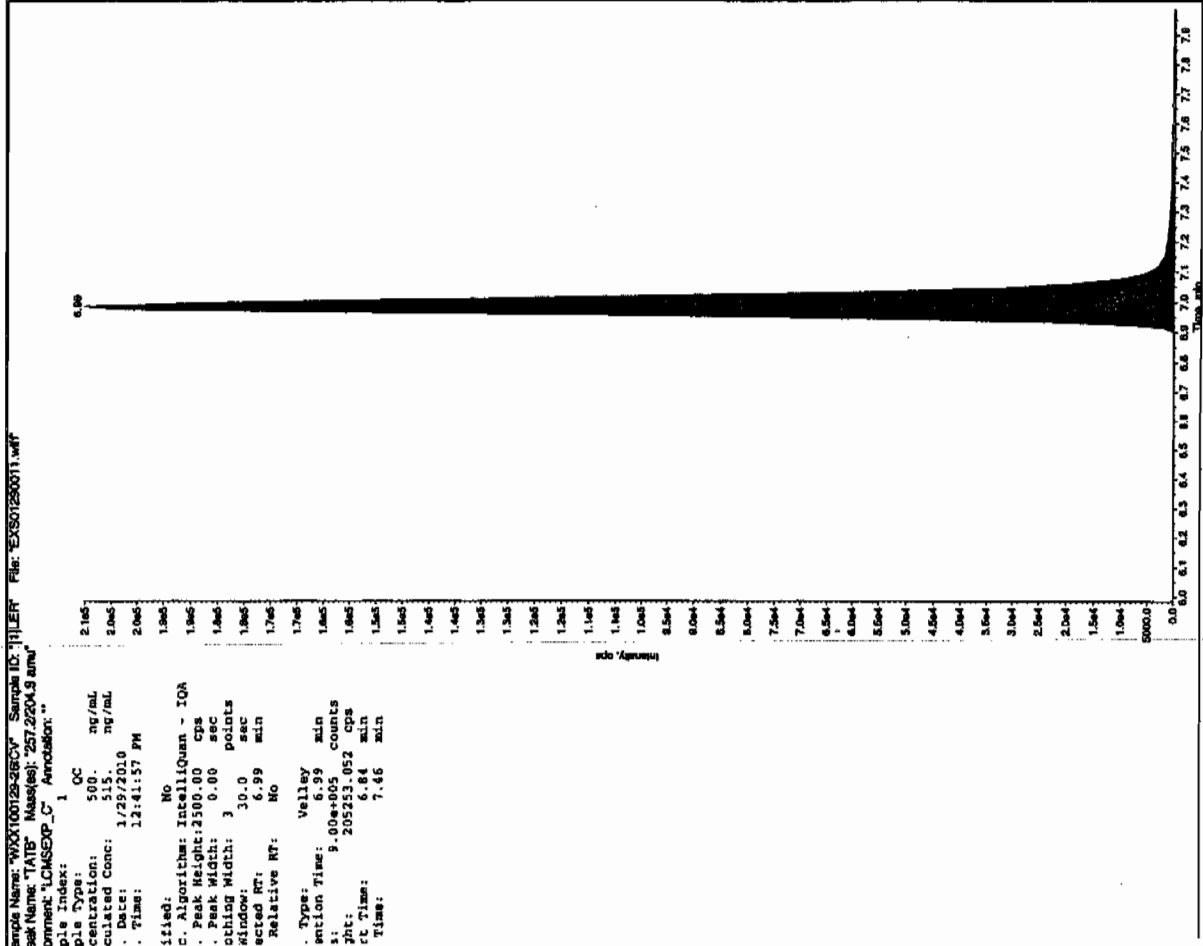
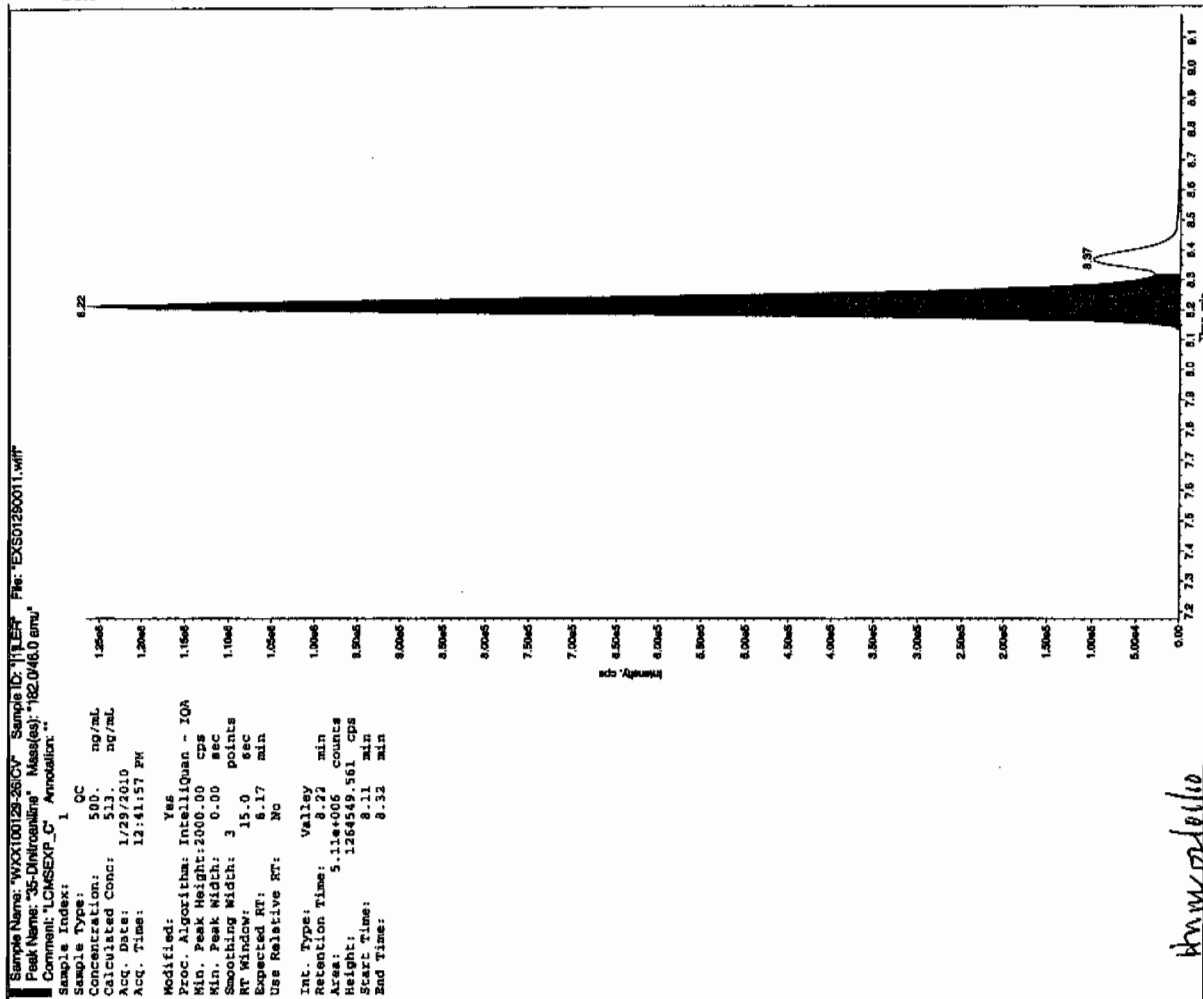
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

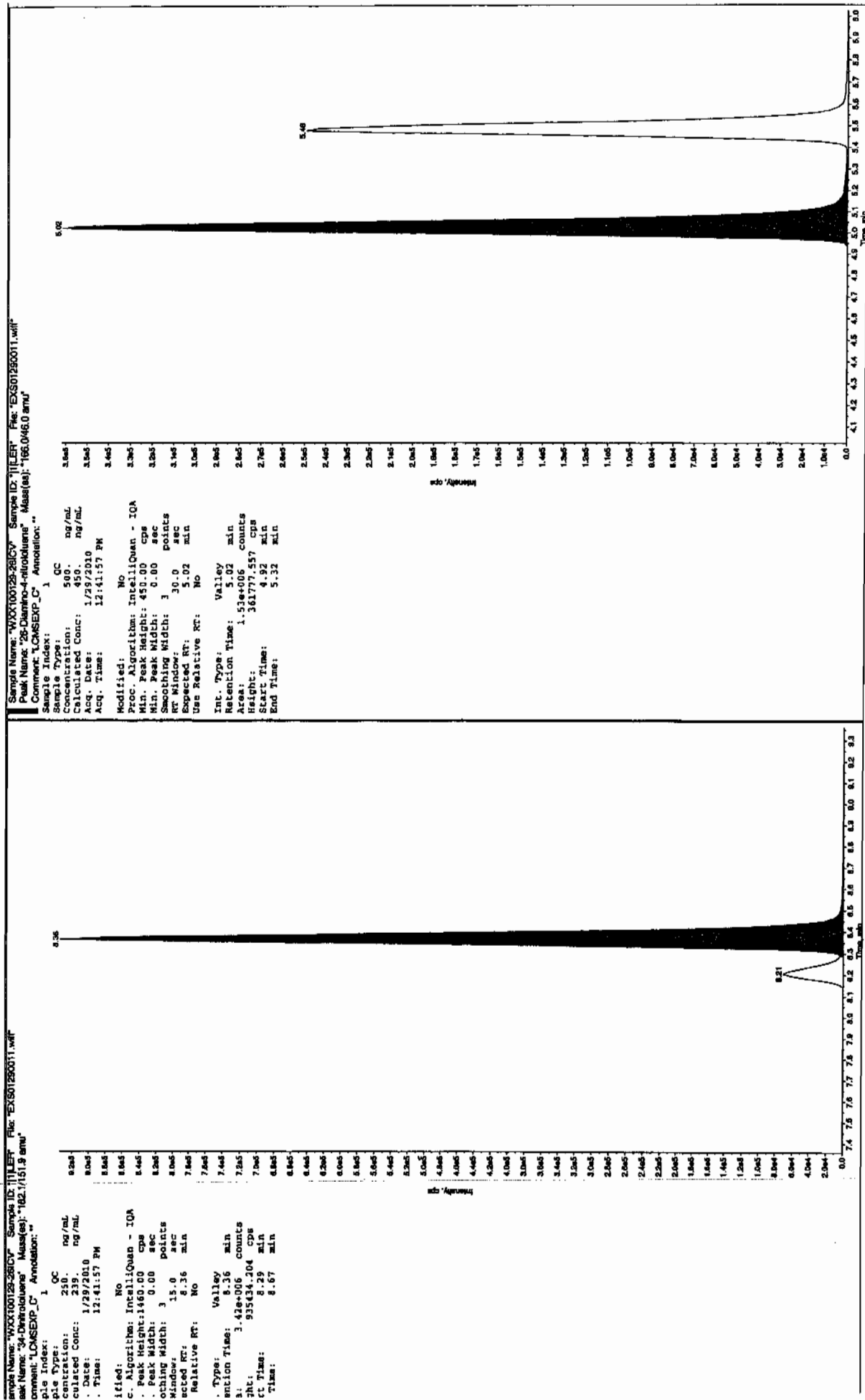
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Jan 21/10



EL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

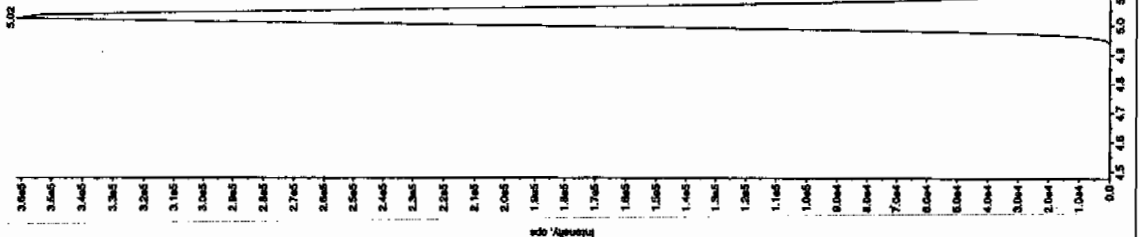
Sample Name: "WXX100129-260V" Sample ID: "HLEP" File: "EXS01290011.wif"
 Peak Name: "194-Chloro-6-ethoxybenzoate" Mass(es): 365.191.0 amu
 Comment: "LCMS-EXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 1 QC
 Concentration: 500 ng/mL
 Calculated Conc: 495 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 12:41:57 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.07e+007 counts
 Height: 2572127.930 cps
 Start Time: 10.6 min
 End Time: 11.2 min



Sample Name: "WXX100129-260V" Sample ID: "HLEP" File: "EXS01290011.wif"
 Peak Name: "294-Chloro-6-ethoxybenzoate" Mass(es): 365.191.0 amu
 Comment: "LCMS-EXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 1 QC
 Concentration: 500 ng/mL
 Calculated Conc: 510 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 12:41:57 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.46 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.46 min
 Area: 1.02e+006 counts
 Height: 2490573.4 cps
 Start Time: 5.38 min
 End Time: 5.61 min



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203012a

Analysis Date: 03-FEB-10 15:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	46.366	116	
1,3-Dinitrobenzene-d4	500	494.923	99	
2,4,6-Trinitrotoluene	40	45.504	114	
2,4-Dinitrotoluene	40	40.396	101	
2,6-Dinitrotoluene	40	41.541	104	
2,6-Dinitrotoluene-d3	500	500.835	100	
2-Amino-4,6-dinitrotoluene	40	39.642	99	
3,4-Dinitrotoluene	20	20.129	101	
4-Amino-2,6-dinitrotoluene	40	43.138	108	
HMX	40	42.577	106	
Nitrobenzene	40	45.24	113	
PETN	40	59.129	148	*
RDX	40	42.692	107	
Tetryl	40	49.604	124	
m-Dinitrobenzene	40	40.819	102	
m-Nitrotoluene	40	40.312	101	
o-Nitrotoluene	40	43.188	108	
p-Nitrotoluene	40	42.499	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

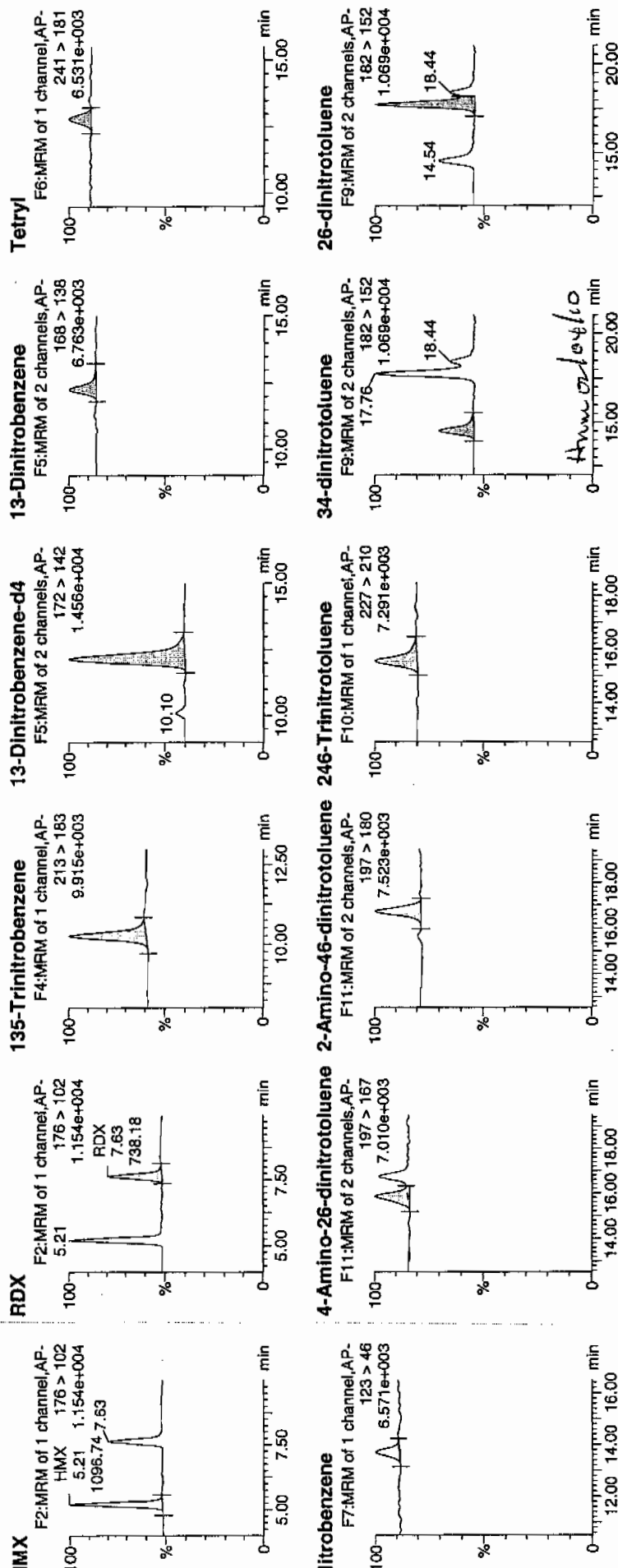
Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203012a

Date: 03-Feb-2010

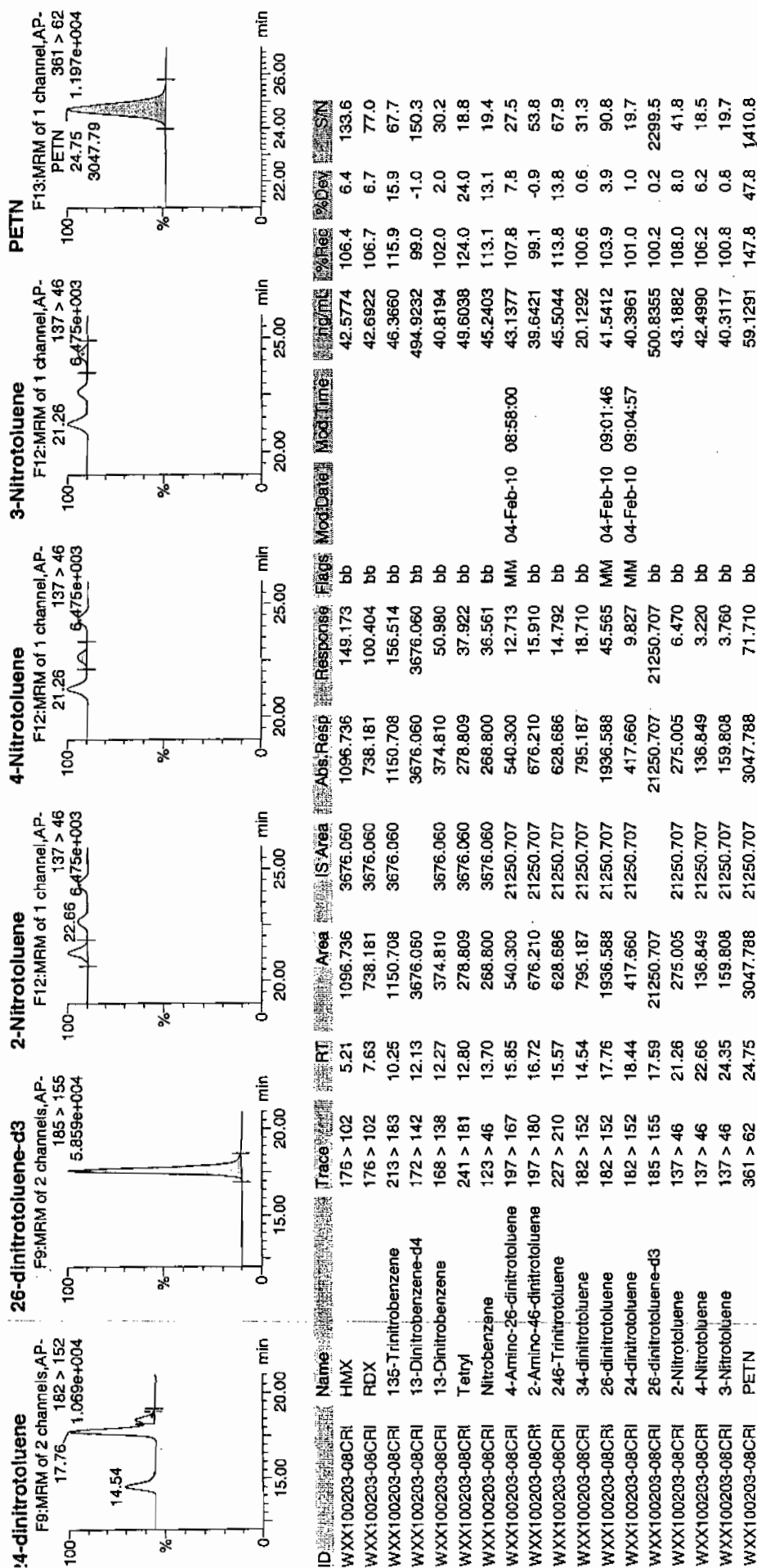
Time: 15:34:35

File: WXX100203-08CRI

Label: 1:1,C



Dataset: C:\MASSLYNX\New_Exp\PRO1020310expA.qld, Time: Thu Feb 04 09:07:11 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/03/10
 Time of Injection 1534
 Standard Number WXX100203-08CRI
 Data File EXP0203012a

HMX	106.4
RDX	106.7
135-TNB	115.9
13-DNB	102.0
Tetryl	124.0
Nitrobenzene	113.1
4A-26-DNT	107.8
2A-46-DNT	99.1
246-TNT	113.8
34-DNT(surr)	100.6
26-DNT	103.9
24-DNT	101.0
2-NT	108.0
4-NT	106.2
3-NT	100.8
PETN	147.8

*not
2/4/10*

Total 1757.1

Average 109.8

Handwritten signature

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203023a

Analysis Date: 03-FEB-10 20:59

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	597.119	100	
1,3-Dinitrobenzene-d4	500	550.113	110	
2,4,6-Trinitrotoluene	600	667.706	111	
2,4-Dinitrotoluene	600	608.546	101	
2,6-Dinitrotoluene	600	615.557	103	
2,6-Dinitrotoluene-d3	500	477.247	95	
2-Amino-4,6-dinitrotoluene	600	649.314	108	
3,4-Dinitrotoluene	300	318.844	106	
4-Amino-2,6-dinitrotoluene	600	629.969	105	
HMX	600	541.779	90	
Nitrobenzene	600	565.004	94	
PETN	600	649.459	108	
RDX	600	645.543	108	
Tetryl	600	728.242	121	*
m-Dinitrobenzene	600	592.287	99	
m-Nitrotoluene	600	608.958	101	
o-Nitrotoluene	600	691.529	115	
p-Nitrotoluene	600	679.168	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 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0203023a

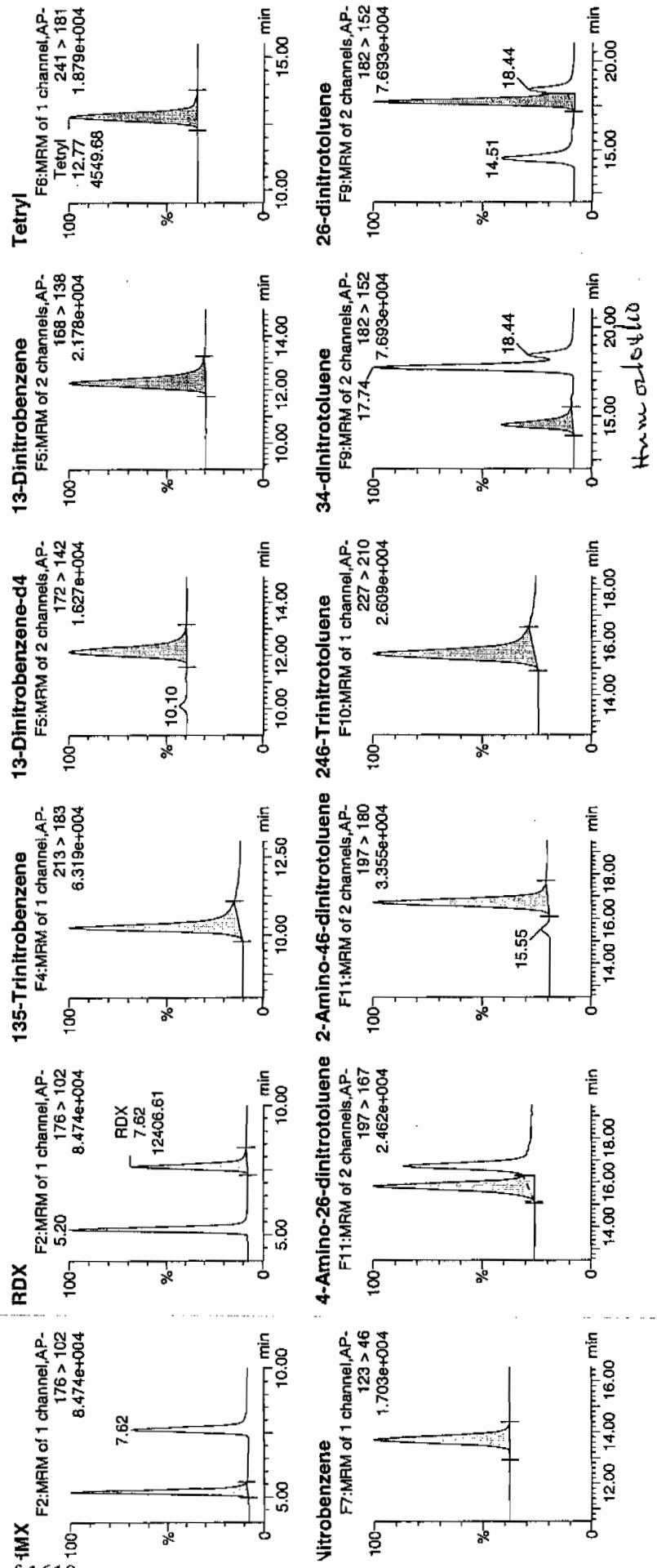
Date: 03-Feb-2010

Time: 20:59:26

D: WXX100203-07CCV

File: 1:1,B

1/4/10

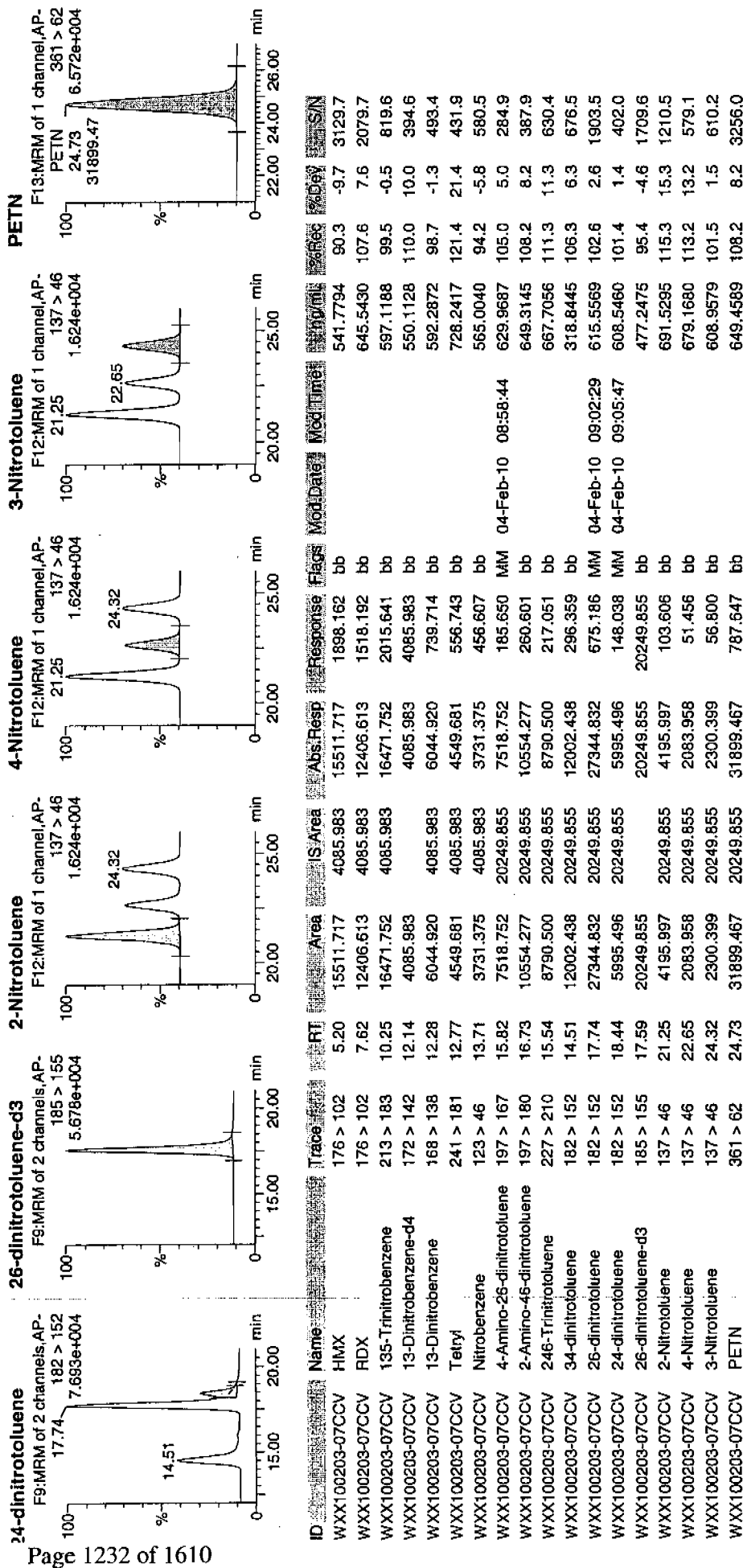


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Feb 04 09:09:25 2010, Page 46 of 73

Dataset: C:\MASSLYNX\New_Exp\PRO1020310expA.qld, Time: Thu Feb 04 09:07:11 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/03/10
 Time of Injection: 2059
 Standard Number: WXX100203-07CCV
 Data File: EXP0203023a

HMX	90.3
RDX	107.6
135-TNB	99.5
13-DNB	98.7
Tetryl	121.4
Nitrobenzene	94.2
4A-26-DNT	105.0
2A-46-DNT	108.2
246-TNT	111.3
34-DNT(surr)	106.3
26-DNT	102.6
24-DNT	101.4
2-NT	115.3
4-NT	113.2
3-NT	101.5
PETN	108.2

*not
2/4/10*

Total 1684.7

Average 105.3

Handwritten: 105.3 on 2/4/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203025a

Analysis Date: 03-FEB-10 21:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	46.164	115	
1,3-Dinitrobenzene-d4	500	547.571	110	
2,4,6-Trinitrotoluene	40	39.051	98	
2,4-Dinitrotoluene	40	39.187	98	
2,6-Dinitrotoluene	40	41.067	103	
2,6-Dinitrotoluene-d3	500	565.894	113	
2-Amino-4,6-dinitrotoluene	40	43.703	109	
3,4-Dinitrotoluene	20	19.895	99	
4-Amino-2,6-dinitrotoluene	40	39.055	98	
HMX	40	51.632	129	
Nitrobenzene	40	42.904	107	
PETN	40	48.71	122	
RDX	40	46.971	117	
Tetryl	40	55.256	138	*
m-Dinitrobenzene	40	41.421	104	
m-Nitrotoluene	40	43.404	109	
o-Nitrotoluene	40	44.979	112	
p-Nitrotoluene	40	46.294	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

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203025a

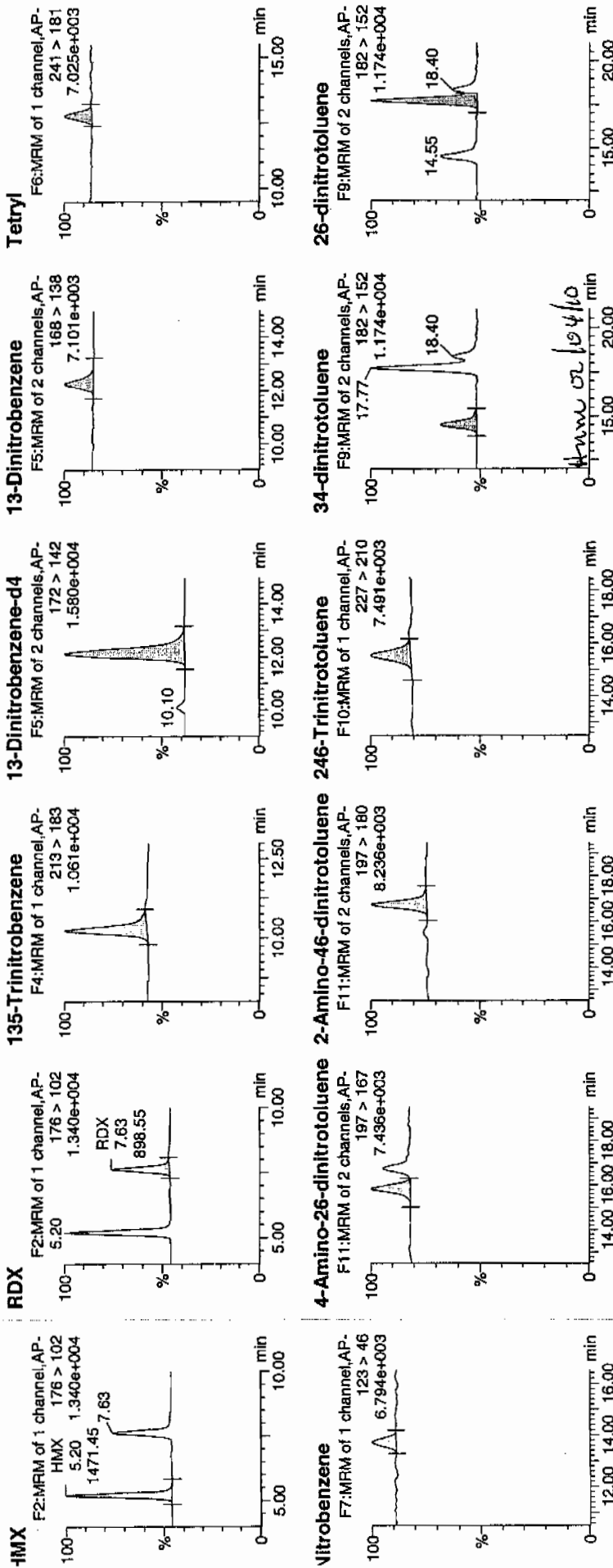
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Time: 21:58:23

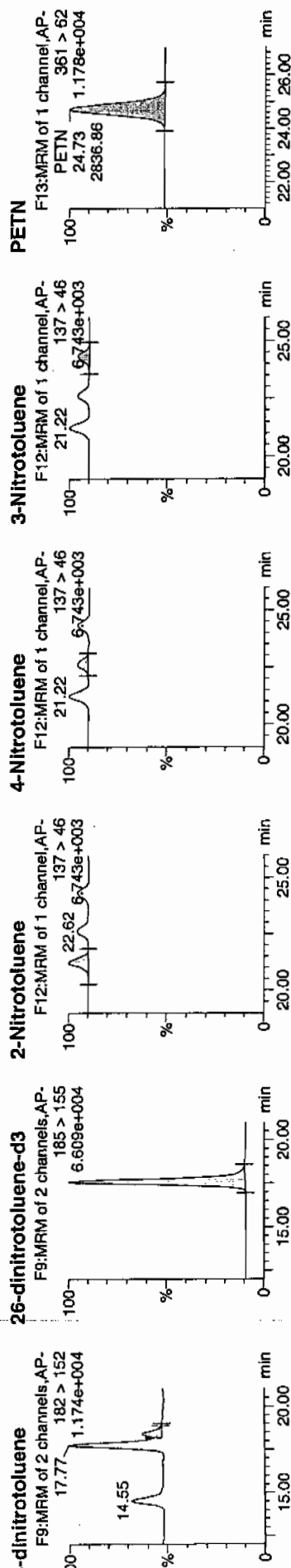
D: WXX100203-08CRI

/Inl: 1:1,C

10/10
2/4/10



itaset: C:\MASSLYNX\New_Exp\PROV020310expA.qld, Time: Thu Feb 04 09:07:11 2010



Name	Trace	RT	Area	S:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	%Rec	%Dev	S/N
'XX100203-08CRI	176 > 102	5.20	1471.447	4067.103	1471.447	180.896	bb			51.6320	129.1	29.1
'XX100203-08CRI	176 > 102	7.63	898.550	4067.103	898.550	110.466	bb			46.9705	117.4	17.4
'XX100203-08CRI	213 > 183	10.25	1267.565	4067.103	1267.565	155.831	bb			46.1639	115.4	15.4
'XX100203-08CRI	172 > 142	12.14	4067.103	4067.103	4067.103	4067.103	bb			547.5709	109.5	9.5
'XX100203-08CRI	168 > 138	12.28	420.790	4067.103	420.790	51.731	bb			41.4208	103.6	3.6
'XX100203-08CRI	241 > 181	12.82	343.614	4067.103	343.614	42.243	bb			55.2557	138.1	38.1
'XX100203-08CRI	123 > 46	13.71	282.032	4067.103	282.032	34.672	bb			42.9035	107.3	7.3
'XX100203-08CRI	197 > 167	15.82	552.702	24011.156	552.702	11.509	MM	04-Feb-10	08:58:50	39.0547	97.6	-2.4
'XX100203-08CRI	197 > 180	16.73	842.322	24011.156	842.322	17.540	bb			43.7032	109.3	9.3
'XX100203-08CRI	227 > 210	15.54	609.616	24011.156	609.616	12.694	bb			39.0514	97.6	-2.4
'XX100203-08CRI	182 > 152	14.55	888.027	24011.156	888.027	18.492	bb			19.8950	99.5	-0.5
'XX100203-08CRI	182 > 152	17.77	2163.189	24011.156	2163.189	45.045	MM	04-Feb-10	09:02:35	41.0673	102.7	2.7
'XX100203-08CRI	182 > 152	18.40	457.783	24011.156	457.783	9.533	MM	04-Feb-10	09:05:55	39.1865	98.0	-2.0
'XX100203-08CRI	185 > 155	17.57	24011.156	24011.156	24011.156	24011.156	bb			565.8936	113.2	13.2
'XX100203-08CRI	137 > 46	21.22	323.614	24011.156	323.614	6.739	bb			44.9792	112.4	12.4
'XX100203-08CRI	137 > 46	22.62	168.434	24011.156	168.434	3.507	bb			46.2942	115.7	15.7
'XX100203-08CRI	137 > 46	24.34	194.419	24011.156	194.419	4.049	bb			43.4042	108.5	8.5
'XX100203-08CRI	361 > 52	24.73	2836.863	24011.156	2836.863	59.074	bb			48.7097	121.8	21.8

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/03/10
 Time of Injection 2158
 Standard Number WXX100203-08CRI
 Data File EXP0203025a

HMX	129.1
RDX	117.4
135-TNB	115.4
13-DNB	103.6
Tetryl	138.1
Nitrobenzene	107.3
4A-26-DNT	97.6
2A-46-DNT	109.3
246-TNT	97.6
34-DNT(surr)	99.5
26-DNT	102.7
24-DNT	98.0
2-NT	112.4
4-NT	115.7
3-NT	108.5
PETN	121.8

*WAT
2/4/10*

Total 1774.0

Average 110.9

Amn 2/4/10
 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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203034a

Analysis Date: 04-FEB-10 02:23

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	588.212	98	
1,3-Dinitrobenzene-d4	500	515.74	103	
2,4,6-Trinitrotoluene	600	615.339	103	
2,4-Dinitrotoluene	600	618.043	103	
2,6-Dinitrotoluene	600	614.686	102	
2,6-Dinitrotoluene-d3	500	524.205	105	
2-Amino-4,6-dinitrotoluene	600	816.403	136	*
3,4-Dinitrotoluene	300	324.782	108	
4-Amino-2,6-dinitrotoluene	600	613.909	102	
HMX	600	645.427	108	
Nitrobenzene	600	554.939	92	
PETN	600	642.536	107	
RDX	600	804.307	134	*
Tetryl	600	594.69	99	
m-Dinitrobenzene	600	594.422	99	
m-Nitrotoluene	600	530.239	88	
o-Nitrotoluene	600	643.334	107	
p-Nitrotoluene	600	570.118	95	

Recovery Limits:

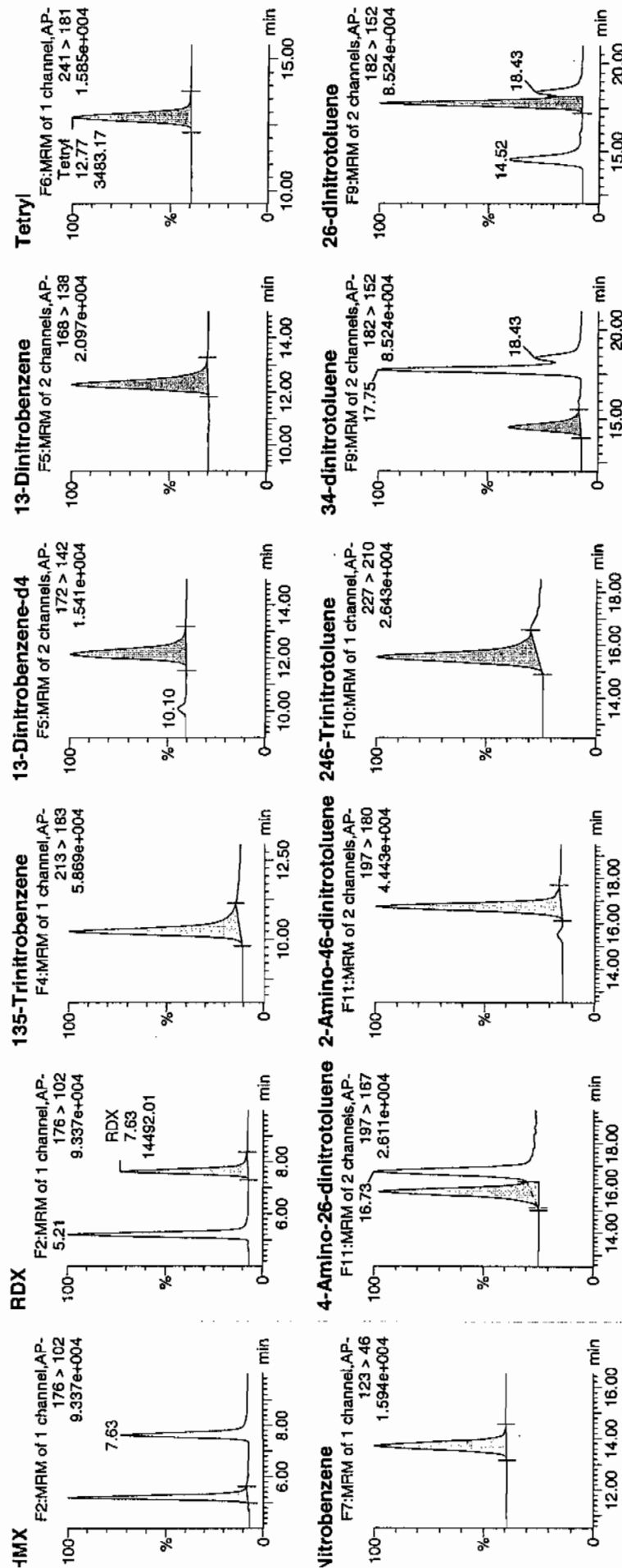
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

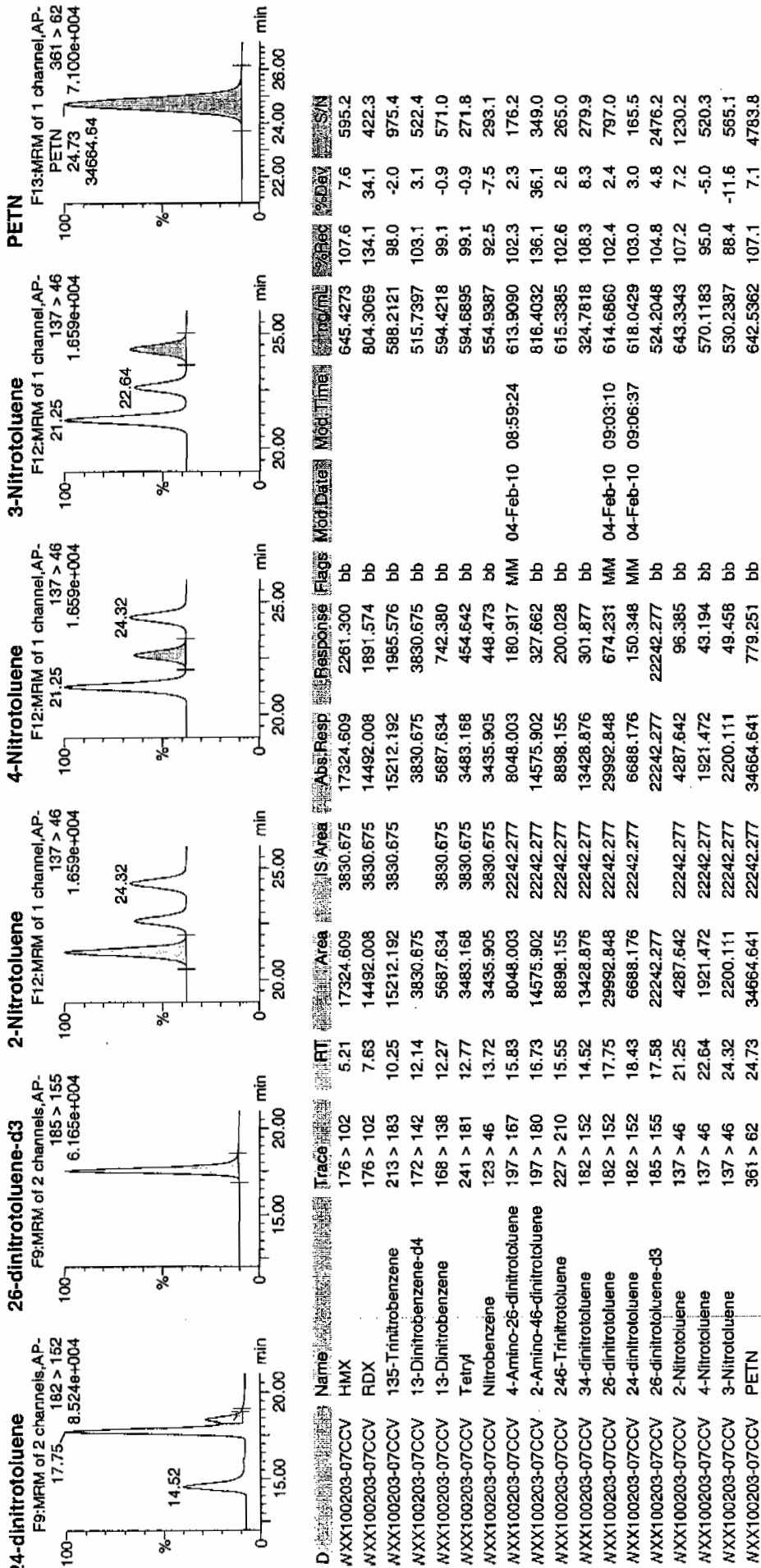
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

WXX
2/4/10



Hum 02/04/10



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/04/10
 Time of Injection: 0223
 Standard Number: WXX100203-07CCV
 Data File: EXP0203034a

HMX	107.6
RDX	134.1
135-TNB	98.0
13-DNB	99.1
Tetryl	99.1
Nitrobenzene	92.5
4A-26-DNT	102.3
2A-46-DNT	136.1
246-TNT	102.6
34-DNT(surr)	108.3
26-DNT	102.4
24-DNT	103.0
2-NT	107.2
4-NT	95.0
3-NT	88.4
PETN	107.1

*not
2/4/10*

Total 1682.8

Average 105.2

same as 2/4/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203036a

Analysis Date: 04-FEB-10 03:22

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	47.752	119	
1,3-Dinitrobenzene-d4	500	576.286	115	
2,4,6-Trinitrotoluene	40	43.799	109	
2,4-Dinitrotoluene	40	37.058	93	
2,6-Dinitrotoluene	40	39.415	99	
2,6-Dinitrotoluene-d3	500	584.902	117	
2-Amino-4,6-dinitrotoluene	40	36.509	91	
3,4-Dinitrotoluene	20	21.685	108	
4-Amino-2,6-dinitrotoluene	40	41.295	103	
HMX	40	36.673	92	
Nitrobenzene	40	41.35	103	
PETN	40	41.466	104	
RDX	40	41.75	104	
Tetryl	40	48.631	122	
m-Dinitrobenzene	40	47.934	120	
m-Nitrotoluene	40	34.882	87	
o-Nitrotoluene	40	44.021	110	
p-Nitrotoluene	40	36.489	91	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

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

ataset: C:\MASSLYNX\New_Exp.PRO\020310expA.qld, Time: Thu Feb 04 09:07:11 2010

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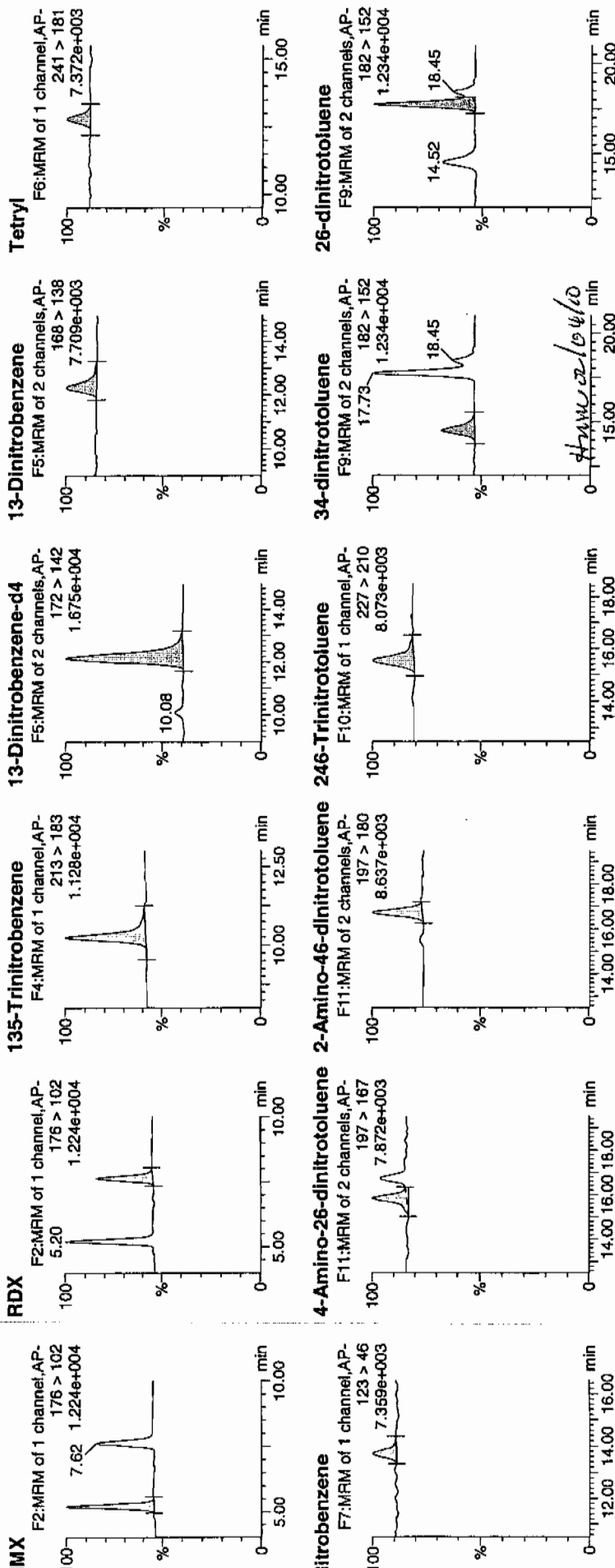
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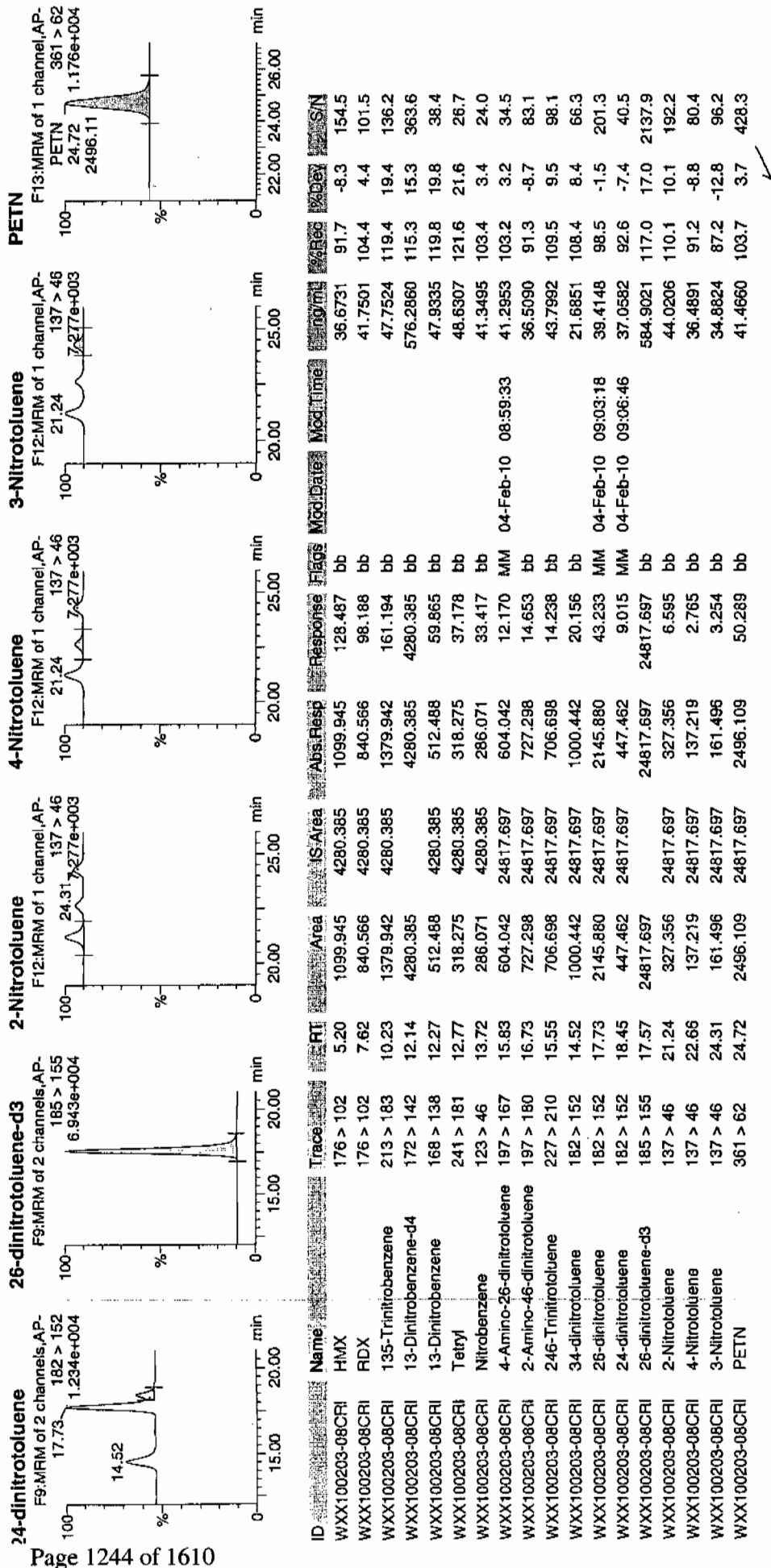
: WXX100203-08CRI

ial: 1:1,C

Page 1243 of 1610



Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA.qtd, Time: Thu Feb 04 09:07:11 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/04/10
 Time of Injection 0322
 Standard Number WXX100203-08CRI
 Data File EXP0203036a

HMX	91.7
RDX	104.4
135-TNB	119.4
13-DNB	119.8
Tetryl	121.6
Nitrobenzene	103.4
4A-26-DNT	103.2
2A-46-DNT	91.3
246-TNT	109.5
34-DNT(surr)	108.4
26-DNT	98.5
24-DNT	92.6
2-NT	110.1
4-NT	91.2
3-NT	87.2
PETN	103.7

*MTT
24/10*

Total 1656.0

Average 103.5

Time 02/04/10

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203047a

Analysis Date: 04-FEB-10 08:47

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	705.581	118	
1,3-Dinitrobenzene-d4	500	496.625	99	
2,4,6-Trinitrotoluene	600	745.427	124	*
2,4-Dinitrotoluene	600	604.959	101	
2,6-Dinitrotoluene	600	602.618	100	
2,6-Dinitrotoluene-d3	500	600.395	120	*
2-Amino-4,6-dinitrotoluene	600	706.239	118	
3,4-Dinitrotoluene	300	350.267	117	
4-Amino-2,6-dinitrotoluene	600	655.853	109	
HMX	600	772.37	129	*
Nitrobenzene	600	808.991	135	*
PETN	600	553.029	92	
RDX	600	849.883	142	*
Tetryl	600	636.197	106	
m-Dinitrobenzene	600	594.906	99	
m-Nitrotoluene	600	565.183	94	
o-Nitrotoluene	600	626.536	104	
p-Nitrotoluene	600	642.023	107	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 05 09:55:30 2010, Page 21 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

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Date: 04-Feb-2010

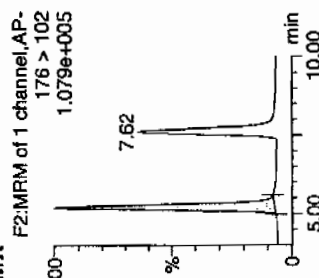
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ID: WXX100203-07CCV

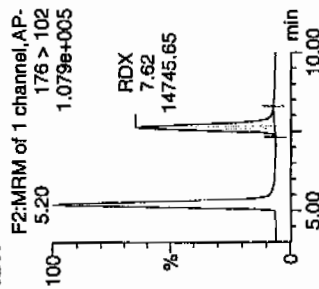
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Page 1247 of 1610

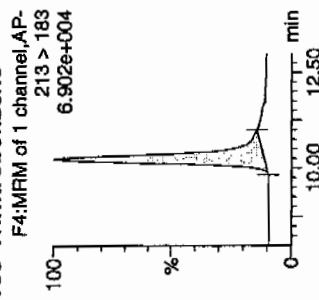
IMX



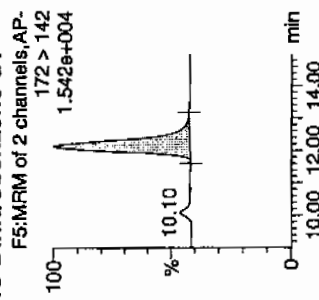
RDX



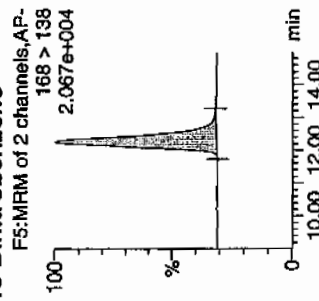
135-Trinitrobenzene



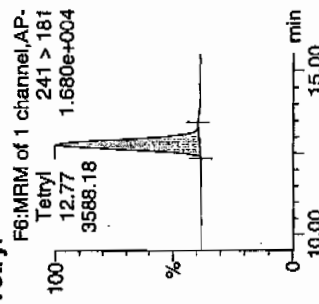
13-Dinitrobenzene-d4



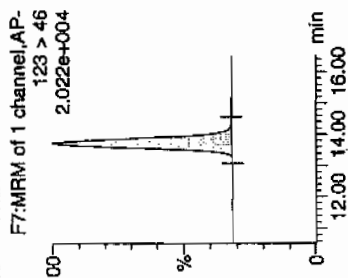
13-Dinitrobenzene



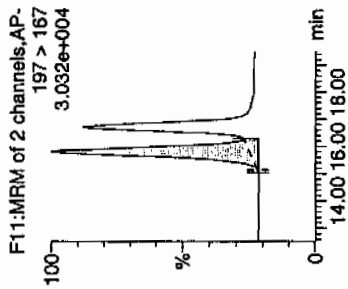
Tetryl



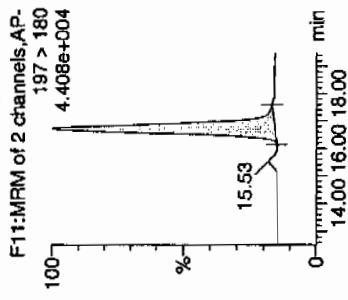
itrobenzene



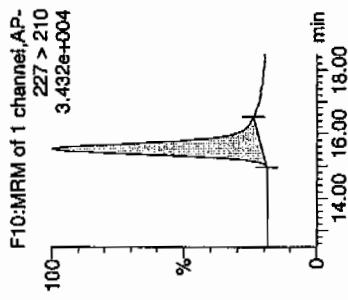
4-Amino-26-dinitrotoluene



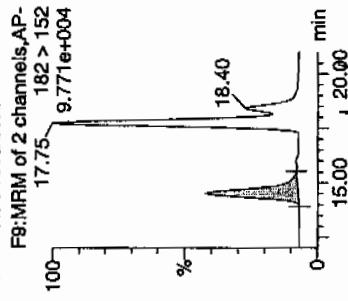
2-Amino-46-dinitrotoluene



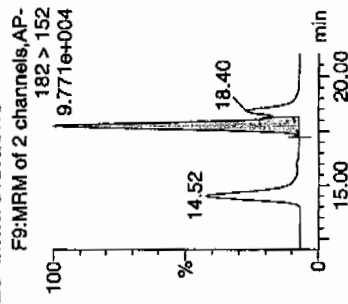
246-Trinitrotoluene



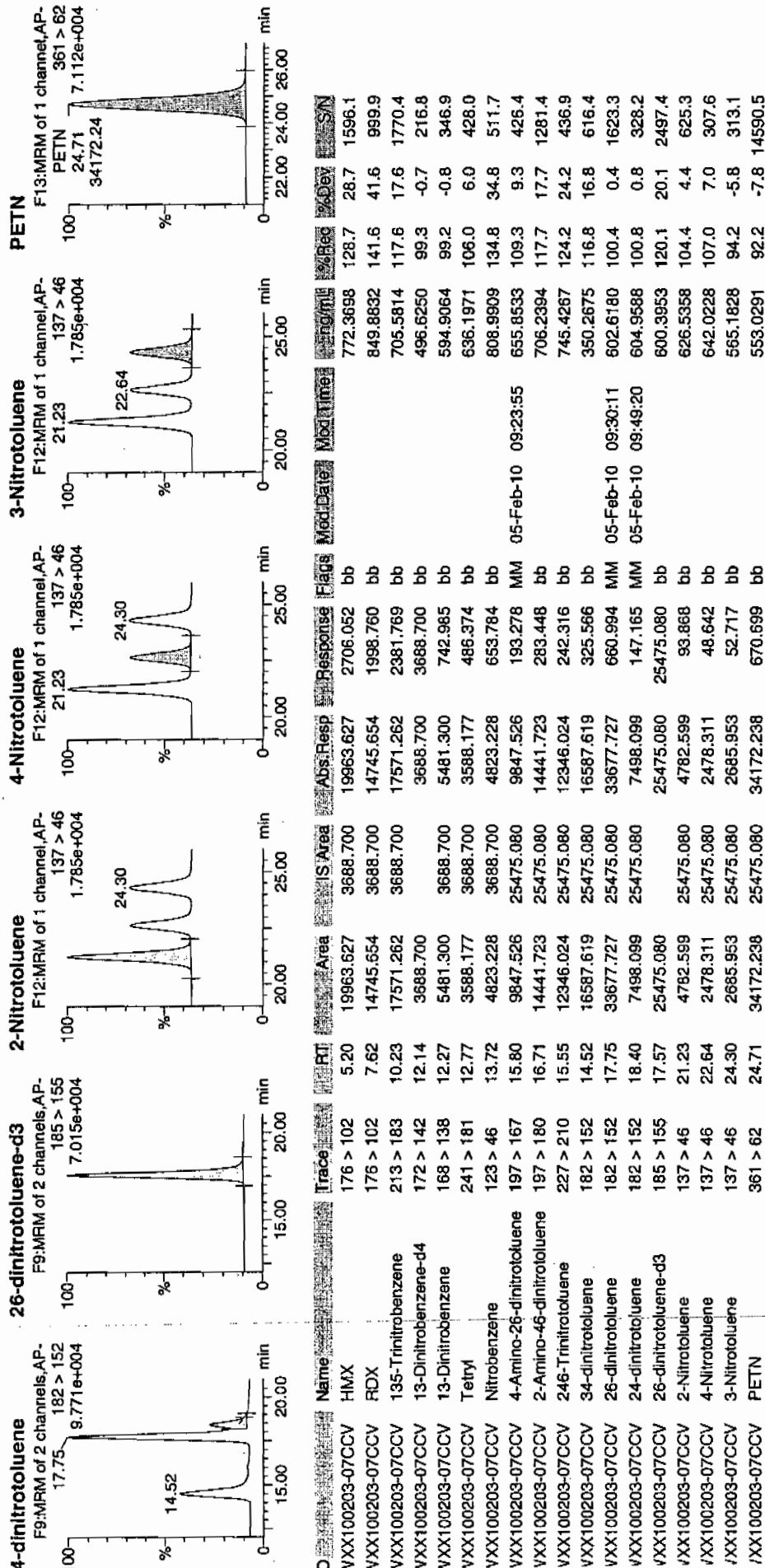
34-dinitrotoluene



26-dinitrotoluene



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GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/04/10
 Time of Injection: 0847
 Standard Number: WXX100203-07CCV
 Data File: EXP0203047a

HMX	128.7
RDX	141.6
135-TNB	117.6
13-DNB	99.2
Tetryl	106.0
Nitrobenzene	134.8
4A-26-DNT	109.3
2A-46-DNT	117.7
246-TNT	124.2
34-DNT(surr)	116.8
26-DNT	100.4
24-DNT	100.8
2-NT	104.4
4-NT	107.0
3-NT	94.2
PETN	92.2

Handwritten: 1117 2/5/10

Total 1794.9

Average 112.2

Handwritten: 1114 02/05/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203049a

Analysis Date: 04-FEB-10 09:46

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.034	120	
1,3-Dinitrobenzene-d4	500	550.771	110	
2,4,6-Trinitrotoluene	40	44.432	111	
2,4-Dinitrotoluene	40	37.522	94	
2,6-Dinitrotoluene	40	38.891	97	
2,6-Dinitrotoluene-d3	500	569.236	114	
2-Amino-4,6-dinitrotoluene	40	42.532	106	
3,4-Dinitrotoluene	20	22.206	111	
4-Amino-2,6-dinitrotoluene	40	41.114	103	
HMX	40	54.469	136	*
Nitrobenzene	40	44.032	110	
PETN	40	51.052	128	
RDX	40	54.241	136	*
Tetryl	40	63.808	160	*
m-Dinitrobenzene	40	52.234	131	*
m-Nitrotoluene	40	33.086	83	
o-Nitrotoluene	40	40.916	102	
p-Nitrotoluene	40	38.964	97	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203049a

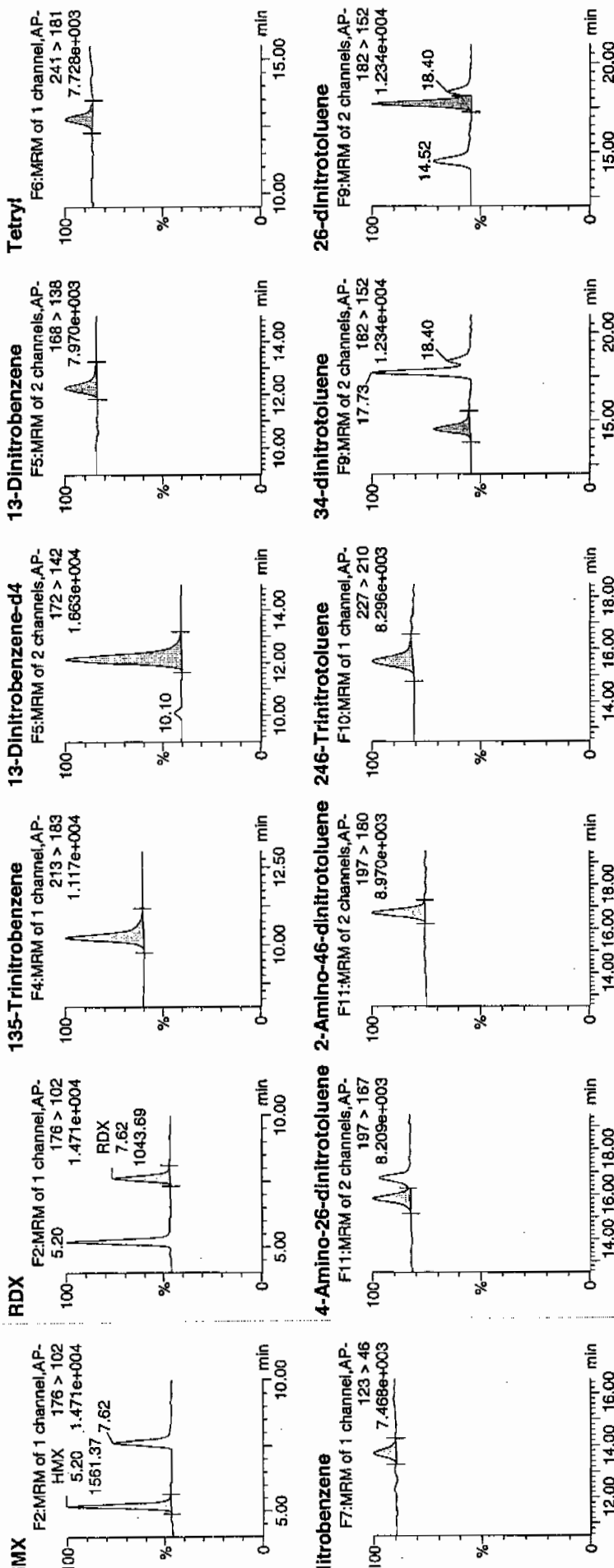
Date: 04-Feb-2010

Time: 09:46:45

File: D:\WXX100203-08CRI

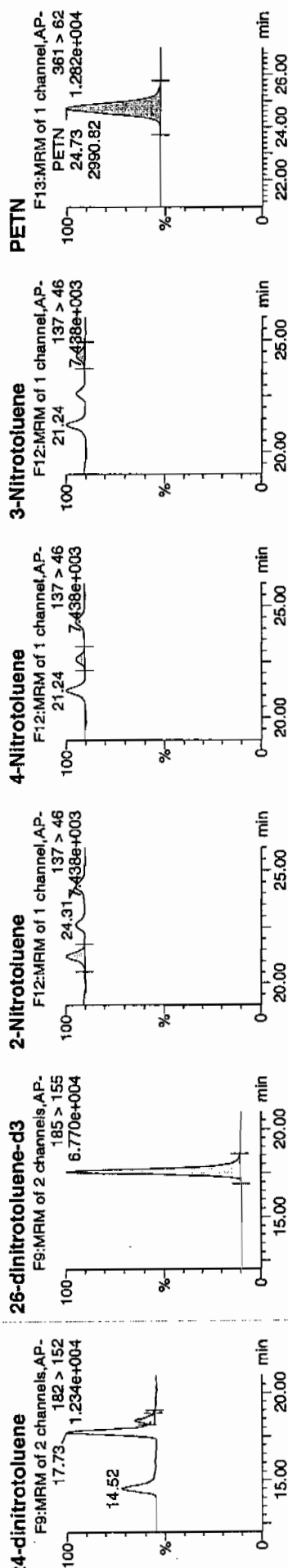
Label: 1:1,C

10/10
2/10



10/10
2/10

Dataset: C:\MASSLYNX\New_Exp\PRO1020310expA1.qld, Time: Fri Feb 05 09:51:58 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Integr	Area	%Area	Dev	SN
NXX100203-08CRI	HMX	176 > 102	5.20	1561.368	4090.871	1561.368	190.836	bb				54.4689	136.2	36.2	126.3
NXX100203-08CRI	RDX	176 > 102	7.62	1043.689	4090.871	1043.689	127.563	bb				54.2405	135.6	35.6	71.1
NXX100203-08CRI	135-Trinitrobenzene	213 > 183	10.25	1326.608	4090.871	1326.608	162.142	bb				48.0335	120.1	20.1	176.8
NXX100203-08CRI	13-Dinitrobenzene-d4	172 > 142	12.14	4090.871	4090.871	4090.871	4090.871	bb				550.7709	110.2	10.2	204.0
NXX100203-08CRI	13-Dinitrobenzene	168 > 138	12.27	533.745	4090.871	533.745	65.236	bb				52.2344	130.6	30.6	89.3
NXX100203-08CRI	Tetryl	241 > 181	12.77	399.115	4090.871	399.115	48.781	bb				63.8077	159.5	59.5	49.6
NXX100203-08CRI	Nitrobenzene	123 > 46	13.72	291.144	4090.871	291.144	35.585	db				44.0323	110.1	10.1	30.7
NXX100203-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.80	585.281	24152.984	585.281	12.116	MM	05-Feb-10	09:24:10		41.1139	102.8	2.8	35.5
NXX100203-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.73	824.582	24152.984	824.582	17.070	bb				42.5316	106.3	6.3	47.3
NXX100203-08CRI	246-Trinitrotoluene	227 > 210	15.55	697.714	24152.984	697.714	14.444	bb				44.4324	111.1	11.1	41.5
NXX100203-08CRI	34-dinitrotoluene	182 > 152	14.52	997.036	24152.984	997.036	20.840	bb				22.2061	111.0	11.0	51.4
NXX100203-08CRI	26-dinitrotoluene	182 > 152	17.73	2060.625	24152.984	2060.625	42.658	MM	05-Feb-10	09:30:01		38.8905	97.2	-2.8	136.8
NXX100203-08CRI	24-dinitrotoluene	182 > 152	18.40	440.928	24152.984	440.928	9.128	MM	05-Feb-10	09:49:29		37.5221	93.8	-6.2	29.7
NXX100203-08CRI	26-dinitrotoluene-d3	185 > 155	17.57	24152.984	24152.984	24152.984	24152.984	bb				569.2362	113.8	13.8	1901.8
NXX100203-08CRI	2-Nitrotoluene	137 > 46	21.24	296.117	24152.984	296.117	6.130	bb				40.9157	102.3	2.3	69.3
NXX100203-08CRI	4-Nitrotoluene	137 > 46	22.64	142.602	24152.984	142.602	2.952	bb				38.9641	97.4	-2.6	31.8
NXX100203-08CRI	3-Nitrotoluene	137 > 46	24.31	149.077	24152.984	149.077	3.086	bb				33.0861	82.7	-17.3	31.2
NXX100203-08CRI	PETN	361 > 62	24.73	2990.821	24152.984	2990.821	61.914	bb				51.0516	127.6	27.6	663.7

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/04/10
 Time of Injection 0946
 Standard Number WXX100203-08CRI
 Data File EXP0203049a

HMX	136.2
RDX	135.6
135-TNB	120.1
13-DNB	130.6
Tetryl	159.5
Nitrobenzene	110.1
4A-26-DNT	102.8
2A-46-DNT	106.3
246-TNT	111.1
34-DNT(surr)	111.0
26-DNT	97.2
24-DNT	93.8
2-NT	102.3
4-NT	97.4
3-NT	82.7
PETN	127.6

mtf
2/5/10

Total 1824.3

Average 114.0

mtf
02-05-10

JCV 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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203060a

Analysis Date: 04-FEB-10 15:11

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	636.08	106	
1,3-Dinitrobenzene-d4	500	540.479	108	
2,4,6-Trinitrotoluene	600	680.585	113	
2,4-Dinitrotoluene	600	627.193	105	
2,6-Dinitrotoluene	600	603.206	101	
2,6-Dinitrotoluene-d3	500	527.679	106	
2-Amino-4,6-dinitrotoluene	600	654.805	109	
3,4-Dinitrotoluene	300	321.769	107	
4-Amino-2,6-dinitrotoluene	600	596.163	99	
HMX	600	559.11	93	
Nitrobenzene	600	557.235	93	
PETN	600	603.864	101	
RDX	600	713.031	119	
Tetryl	600	696.426	116	
m-Dinitrobenzene	600	589.335	98	
m-Nitrotoluene	600	574.139	96	
o-Nitrotoluene	600	632.948	105	
p-Nitrotoluene	600	627.964	105	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203060a

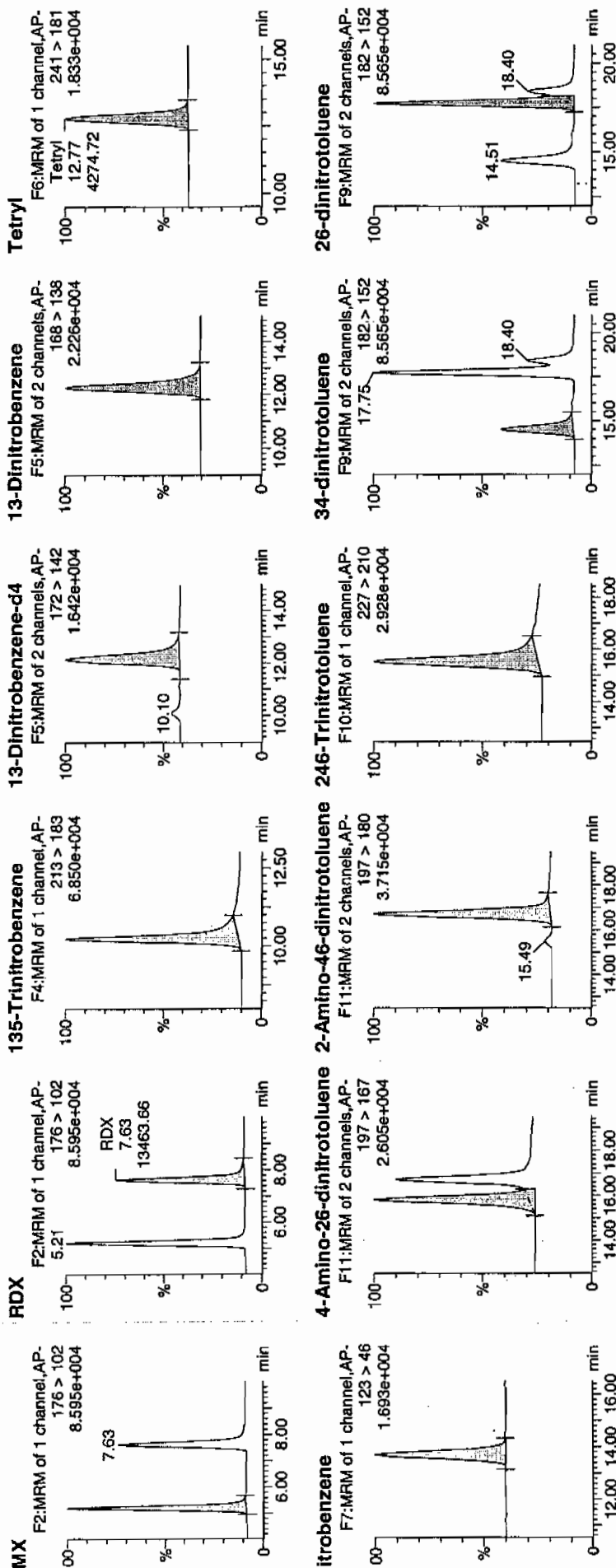
Plate: 04-Feb-2010

Time: 15:11:34

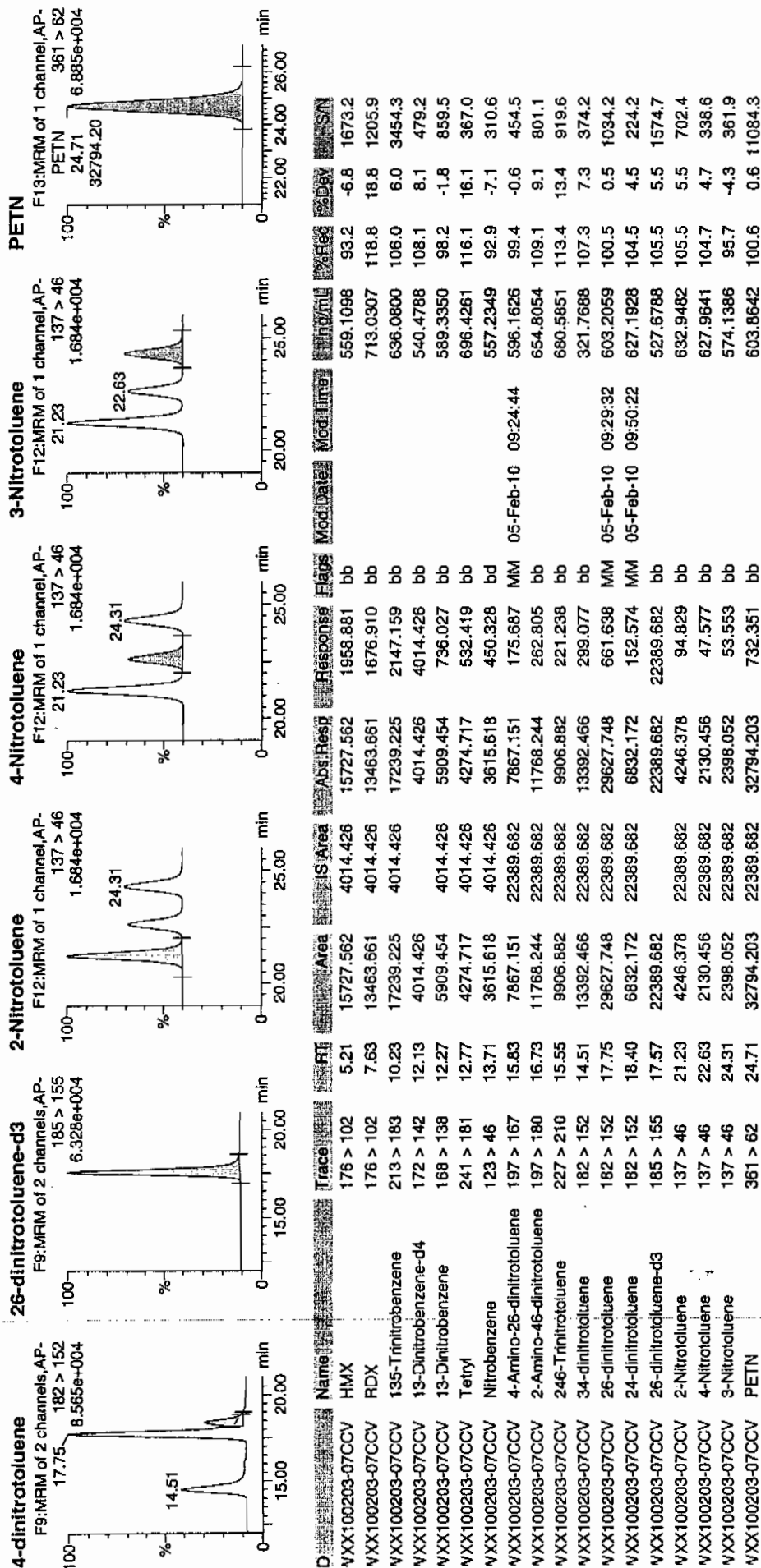
Job: WXX100203-07CCV

Label: 1:1,B

15/10



from 02/05/10



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/04/10
 Time of Injection: 1511
 Standard Number: WXX100203-07CCV
 Data File: EXP0203060a

HMX	93.2
RDX	118.8
135-TNB	106.0
13-DNB	98.2
Tetryl	116.1
Nitrobenzene	92.9
4A-26-DNT	99.4
2A-46-DNT	109.1
246-TNT	113.4
34-DNT(surr)	107.3
26-DNT	100.5
24-DNT	104.5
2-NT	105.5
4-NT	104.7
3-NT	95.7
PETN	100.6

*MTT
2/5/10*

Total 1665.9

done 02/05/10

Average 104.1

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203062a

Analysis Date: 04-FEB-10 16:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.831	122	
1,3-Dinitrobenzene-d4	500	517.273	103	
2,4,6-Trinitrotoluene	40	38.376	96	
2,4-Dinitrotoluene	40	37.657	94	
2,6-Dinitrotoluene	40	42.734	107	
2,6-Dinitrotoluene-d3	500	486.305	97	
2-Amino-4,6-dinitrotoluene	40	40.426	101	
3,4-Dinitrotoluene	20	21.314	107	
4-Amino-2,6-dinitrotoluene	40	37.604	94	
HMX	40	42.509	106	
Nitrobenzene	40	41.996	105	
PETN	40	54.563	136	*
RDX	40	45.963	115	
Tetryl	40	63.155	158	*
m-Dinitrobenzene	40	45.707	114	
m-Nitrotoluene	40	51.621	129	
o-Nitrotoluene	40	43.315	108	
p-Nitrotoluene	40	40.541	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203062a

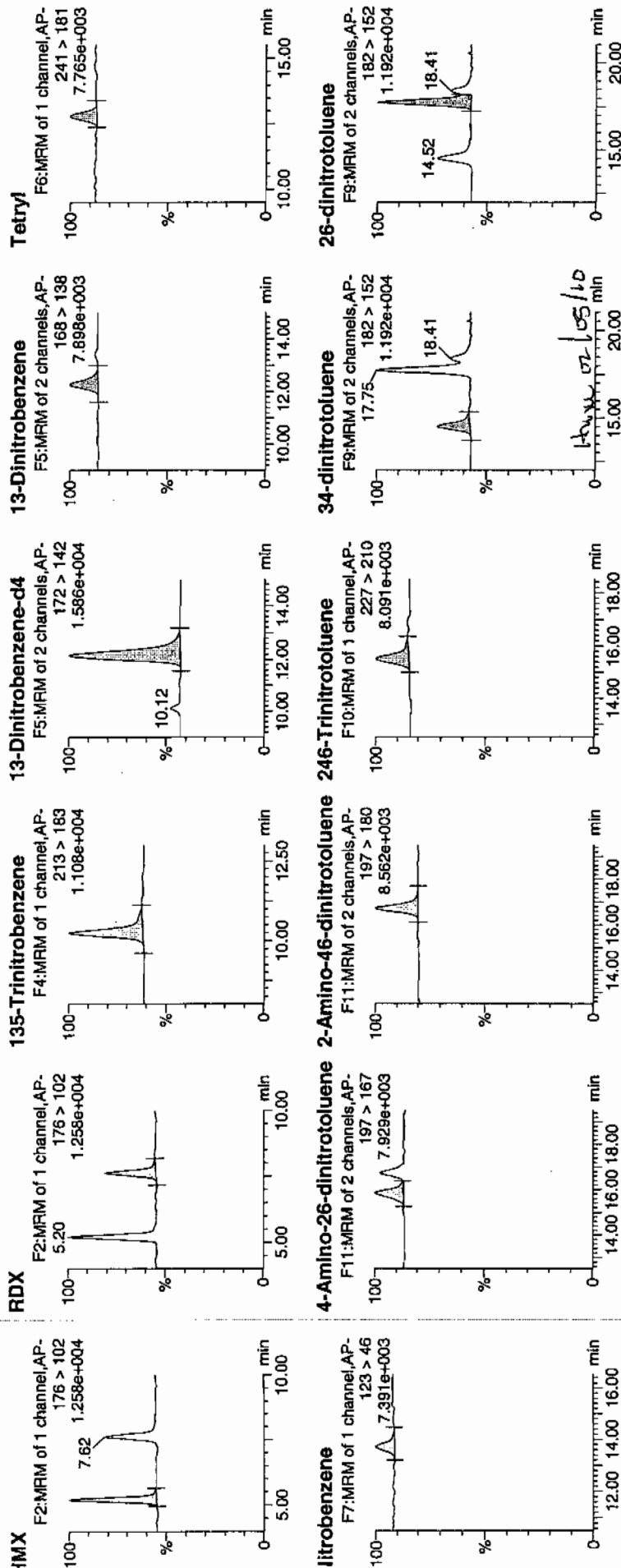
Date: 04-Feb-2010

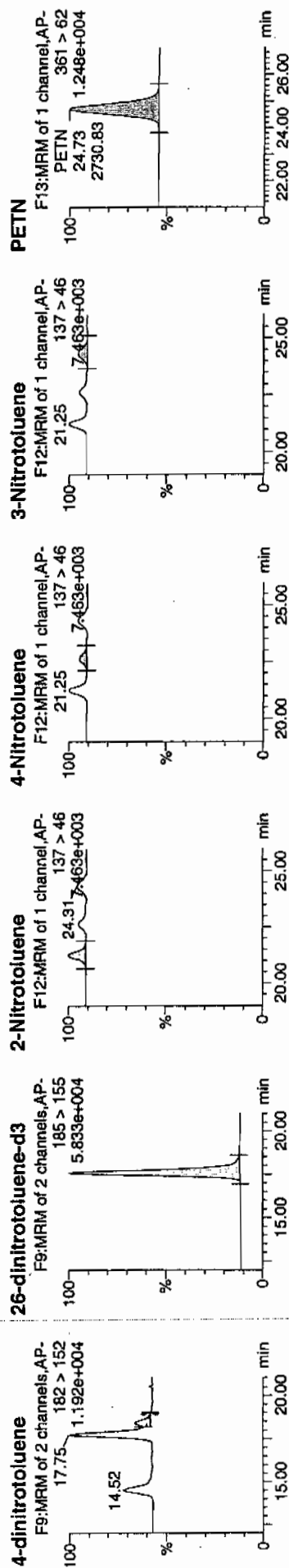
Time: 16:10:38

D: WXX100203-08CRI

Ratio: 1:1,C

Handwritten: 2/5/10





Name	Trace	RT	Area	IS:Area	Abs:Resp	Response	Flags	Mod:Date	Mod:Time	Int:Unit	2:Req	2:Dev	1:SN
HMX	176 > 102	5.20	1144.433	3842.064	1144.433	148.935	bb			42.5094	106.3	6.3	167.4
RDX	176 > 102	7.62	830.628	3842.064	830.628	108.097	bb			45.9832	114.9	14.9	99.3
135-Trinitrobenzene	213 > 183	10.25	1266.611	3842.064	1266.611	164.835	bb			48.8311	122.1	22.1	173.6
13-Dinitrobenzene-d4	172 > 142	12.14	3842.064		3842.064	3842.064	bb			517.2730	103.5	3.5	229.6
13-Dinitrobenzene	168 > 138	12.27	438.641	3842.064	438.641	57.084	bb			45.7070	114.3	14.3	77.7
Tetryl	241 > 181	12.82	371.005	3842.064	371.005	48.282	bb			63.1548	157.9	57.9	31.8
Nitrobenzene	123 > 46	13.72	260.791	3842.064	260.791	33.939	bb			41.9959	105.0	5.0	25.8
4-Amino-26-dinitrotoluene	197 > 167	15.83	457.325	20634.176	457.325	11.082	MM	05-Feb-10	09:24:52	37.6039	94.0	-6.0	29.3
2-Amino-46-dinitrotoluene	197 > 180	16.73	669.575	20634.176	669.575	16.225	bb			40.4260	101.1	1.1	62.6
246-Trinitrotoluene	227 > 210	15.52	514.818	20634.176	514.818	12.475	bb			38.3760	95.9	-4.1	34.6
34-dinitrotoluene	182 > 152	14.52	817.565	20634.176	817.565	19.811	bb			21.3141	106.6	6.6	73.1
26-dinitrotoluene	182 > 152	17.75	1934.405	20634.176	1934.405	46.874	MM	05-Feb-10	09:29:24	42.7342	106.8	6.8	211.7
24-dinitrotoluene	182 > 152	18.41	378.046	20634.176	378.046	9.161	MM	05-Feb-10	09:50:32	37.6572	94.1	-5.9	39.2
26-dinitrotoluene-d3	185 > 155	17.57	20634.176		20634.176	20634.176	bb			486.3051	97.3	-2.7	2256.8
2-Nitrotoluene	137 > 46	21.25	267.812	20634.176	267.812	6.490	bb			43.3152	108.3	8.3	62.6
4-Nitrotoluene	137 > 46	22.62	126.757	20634.176	126.757	3.072	bb			40.5411	101.4	1.4	25.1
3-Nitrotoluene	137 > 46	24.31	198.706	20634.176	198.706	4.815	bb			51.6214	129.1	28.1	33.2
PETN	361 > 62	24.73	2730.831	20634.176	2730.831	66.173	bb			54.5629	136.4	36.4	682.6

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/04/10
 Time of Injection 1610
 Standard Number WXX100203-08CRI
 Data File EXP0203062a

HMX	106.3
RDX	114.9
135-TNB	122.1
13-DNB	114.3
Tetryl	157.9
Nitrobenzene	105.0
4A-26-DNT	94.0
2A-46-DNT	101.1
246-TNT	95.9
34-DNT(surr)	106.6
26-DNT	106.8
24-DNT	94.1
2-NT	108.3
4-NT	101.4
3-NT	129.1
PETN	136.4

Handwritten: 1457
2/5/10

Total 1794.2

Average 112.1

Handwritten: 4/11/10 or 10/5/10

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203070a

Analysis Date: 05-FEB--10 00:33

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	625.57	104	
1,3-Dinitrobenzene-d4	500	438.448	88	
2,4,6-Trinitrotoluene	600	702.288	117	
2,4-Dinitrotoluene	600	612.058	102	
2,6-Dinitrotoluene	600	615.562	103	
2,6-Dinitrotoluene-d3	500	436.25	87	
2-Amino-4,6-dinitrotoluene	600	663.145	111	
3,4-Dinitrotoluene	300	337.376	112	
4-Amino-2,6-dinitrotoluene	600	614.498	102	
HMX	600	582.729	97	
Nitrobenzene	600	631.604	105	
PETN	600	627.327	105	
RDX	600	783.941	131	*
Tetryl	600	683.827	114	
m-Dinitrobenzene	600	576.216	96	
m-Nitrotoluene	600	586.632	98	
o-Nitrotoluene	600	670.853	112	
p-Nitrotoluene	600	635.907	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp\PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

ame: C:\MASSLYNX\NEW_EXP\PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

ate: 05-Feb-2010

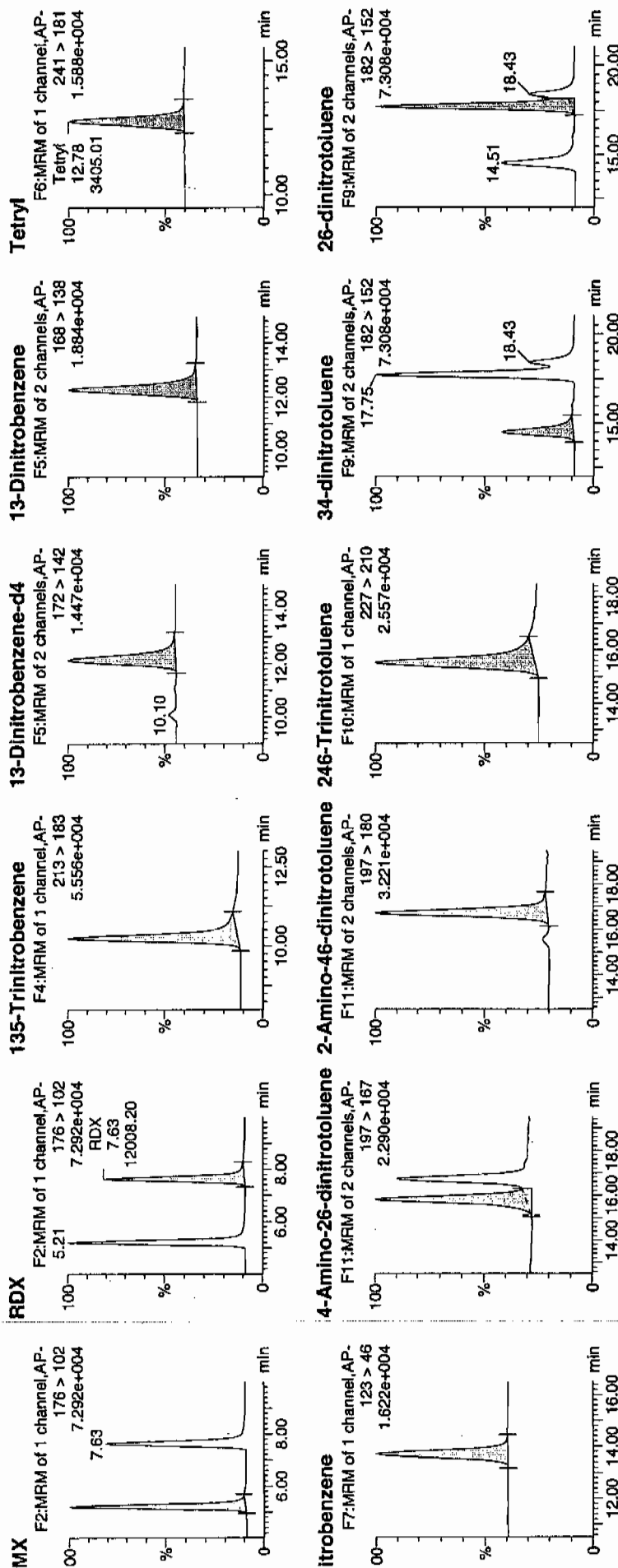
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: WXX100203-07CCV

ial: 1:1,B

2/5/10

Page 1263 of 1610



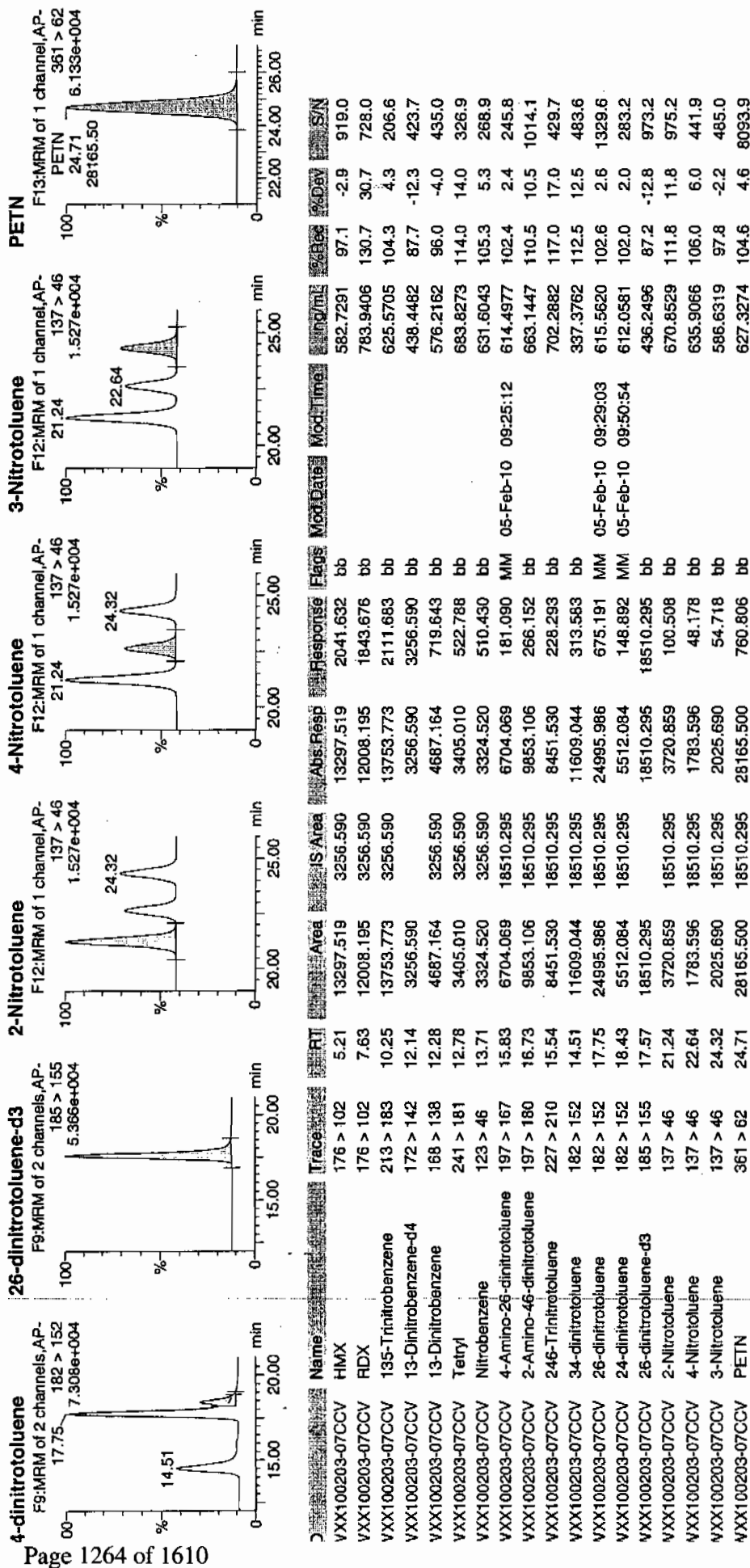
thru on 10/5/10

Quantify Sample Report

EL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Feb 05 09:55:30 2010, Page 68 of 95

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qtd, Time: Fri Feb 05 09:51:58 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/05/10
 Time of Injection: 0033
 Standard Number: WXX100203-07CCV
 Data File: EXP0203070a

HMX	97.1
RDX	130.7
135-TNB	104.3
13-DNB	96.0
Tetryl	114.0
Nitrobenzene	105.3
4A-26-DNT	102.4
2A-46-DNT	110.5
246-TNT	117.0
34-DNT(surr)	112.5
26-DNT	102.6
24-DNT	102.0
2-NT	111.8
4-NT	106.0
3-NT	97.8
PETN	104.6

*WAT
2/5/10*

Total 1714.6

Average 107.2

WAT 2/5/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203072a

Analysis Date: 05-FEB-10 01:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	47.796	119	
1,3-Dinitrobenzene-d4	500	446.543	89	
2,4,6-Trinitrotoluene	40	55.924	140	*
2,4-Dinitrotoluene	40	40.651	102	
2,6-Dinitrotoluene	40	39.309	98	
2,6-Dinitrotoluene-d3	500	435.583	87	
2-Amino-4,6-dinitrotoluene	40	43.843	110	
3,4-Dinitrotoluene	20	22.301	112	
4-Amino-2,6-dinitrotoluene	40	45.279	113	
HMX	40	38.957	97	
Nitrobenzene	40	47.809	120	
PETN	40	56.548	141	*
RDX	40	36.382	91	
Tetryl	40	55.97	140	*
m-Dinitrobenzene	40	39.819	100	
m-Nitrotoluene	40	36.564	91	
o-Nitrotoluene	40	37.468	94	
p-Nitrotoluene	40	35.865	90	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\20310expA1.qld, Time: Fri Feb 05 09:51:58 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203072a

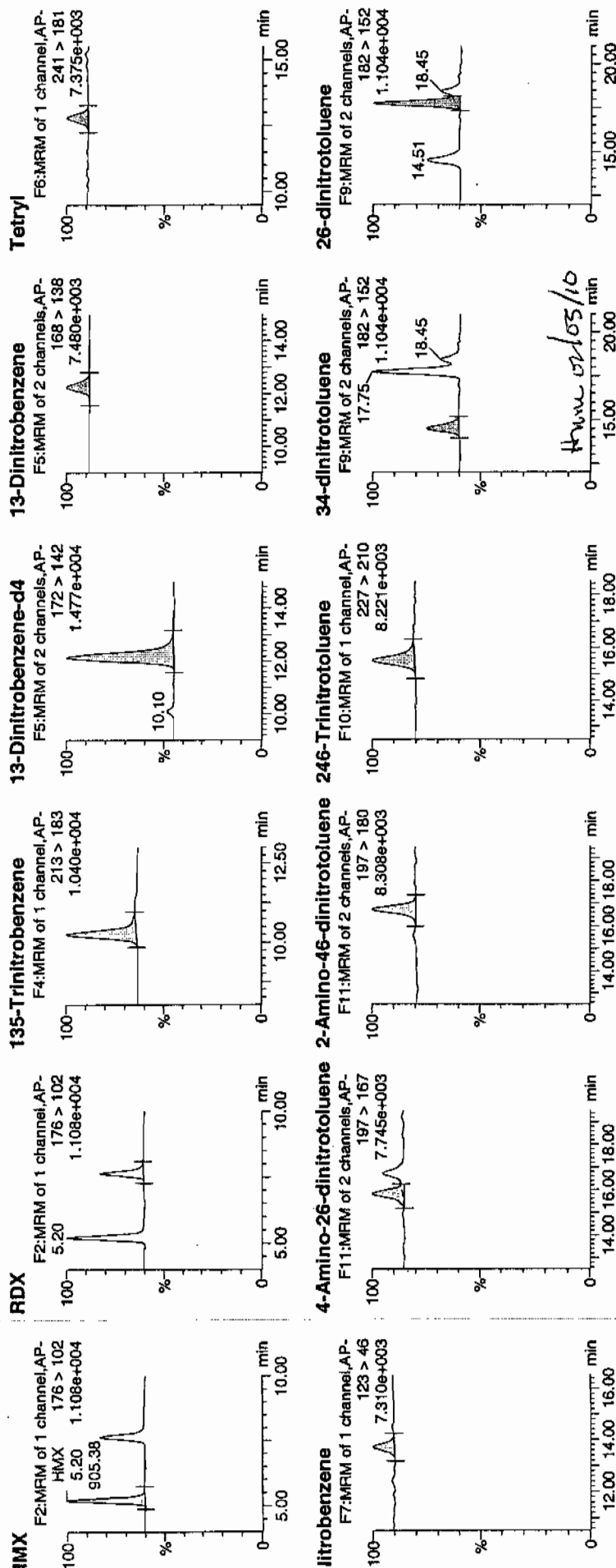
Plate: 05-Feb-2010

Time: 01:32:13

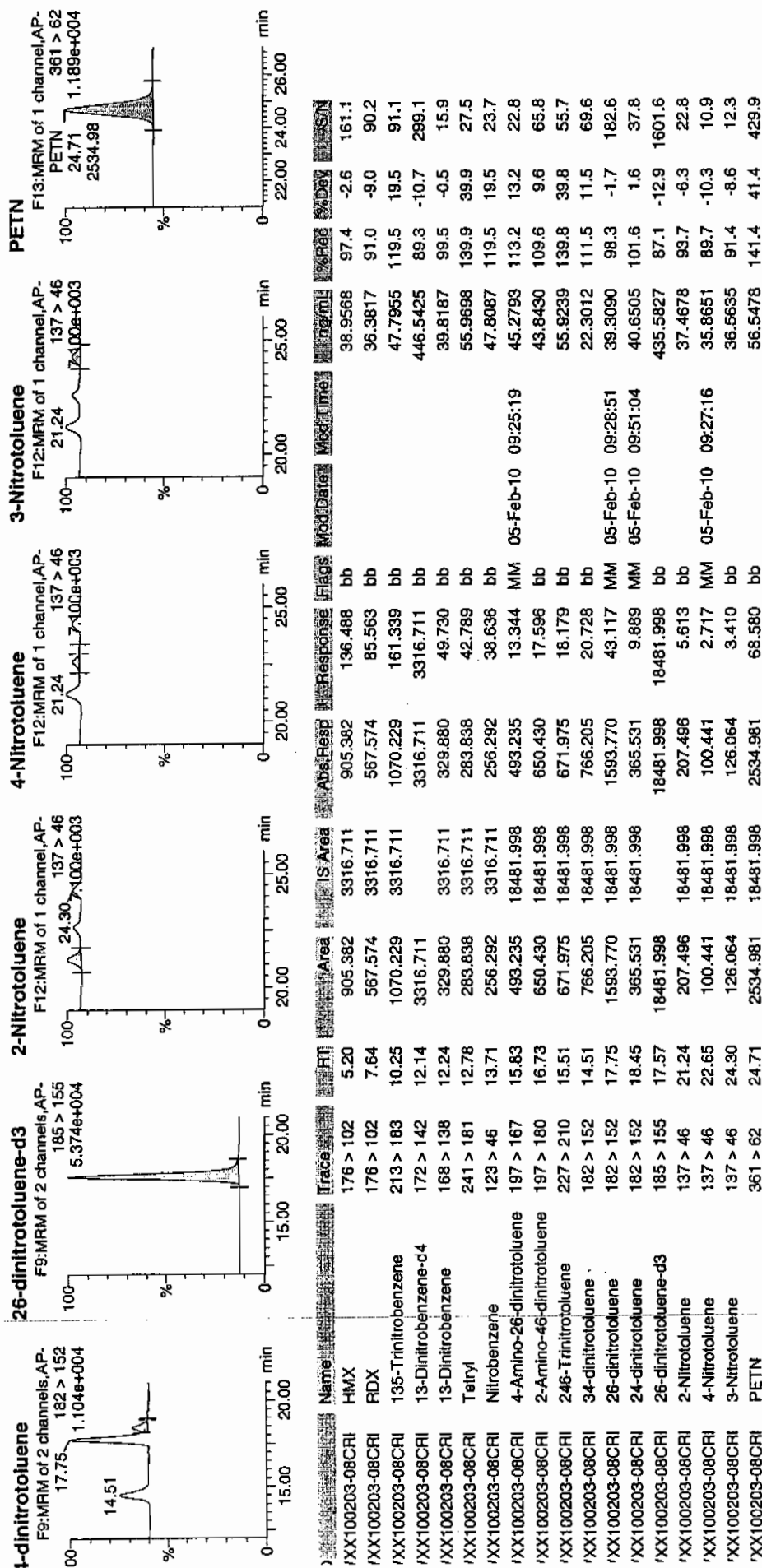
File: WXX100203-08CRI

Ratio: 1:1,C

AP-10/10



atset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/05/10
 Time of Injection 0132
 Standard Number WXX100203-08CRI
 Data File EXP0203072a

HMX	97.4
RDX	91.0
135-TNB	119.5
13-DNB	99.5
Tetryl	139.9
Nitrobenzene	119.5
4A-26-DNT	113.2
2A-46-DNT	109.6
246-TNT	139.8
34-DNT(surr)	111.5
26-DNT	98.3
24-DNT	101.6
2-NT	93.7
4-NT	89.7
3-NT	91.4
PETN	141.4

*with
2/5/10*

Total 1757.0

Average 109.8

HPM 02/05/10

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203081a

Analysis Date: 05-FEB-10 05:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	615.207	103	
1,3-Dinitrobenzene-d4	500	435.708	87	
2,4,6-Trinitrotoluene	600	695.574	116	
2,4-Dinitrotoluene	600	659.965	110	
2,6-Dinitrotoluene	600	614.175	102	
2,6-Dinitrotoluene-d3	500	434.254	87	
2-Amino-4,6-dinitrotoluene	600	677.814	113	
3,4-Dinitrotoluene	300	330.67	110	
4-Amino-2,6-dinitrotoluene	600	622.456	104	
HMX	600	637.153	106	
Nitrobenzene	600	589.657	98	
PETN	600	634.387	106	
RDX	600	718.937	120	
Tetryl	600	675.978	113	
m-Dinitrobenzene	600	616.78	103	
m-Nitrotoluene	600	572.551	95	
o-Nitrotoluene	600	640.391	107	
p-Nitrotoluene	600	638.449	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

ataset: C:\MASSLYNX\New_Exp.PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010

ame: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203081a

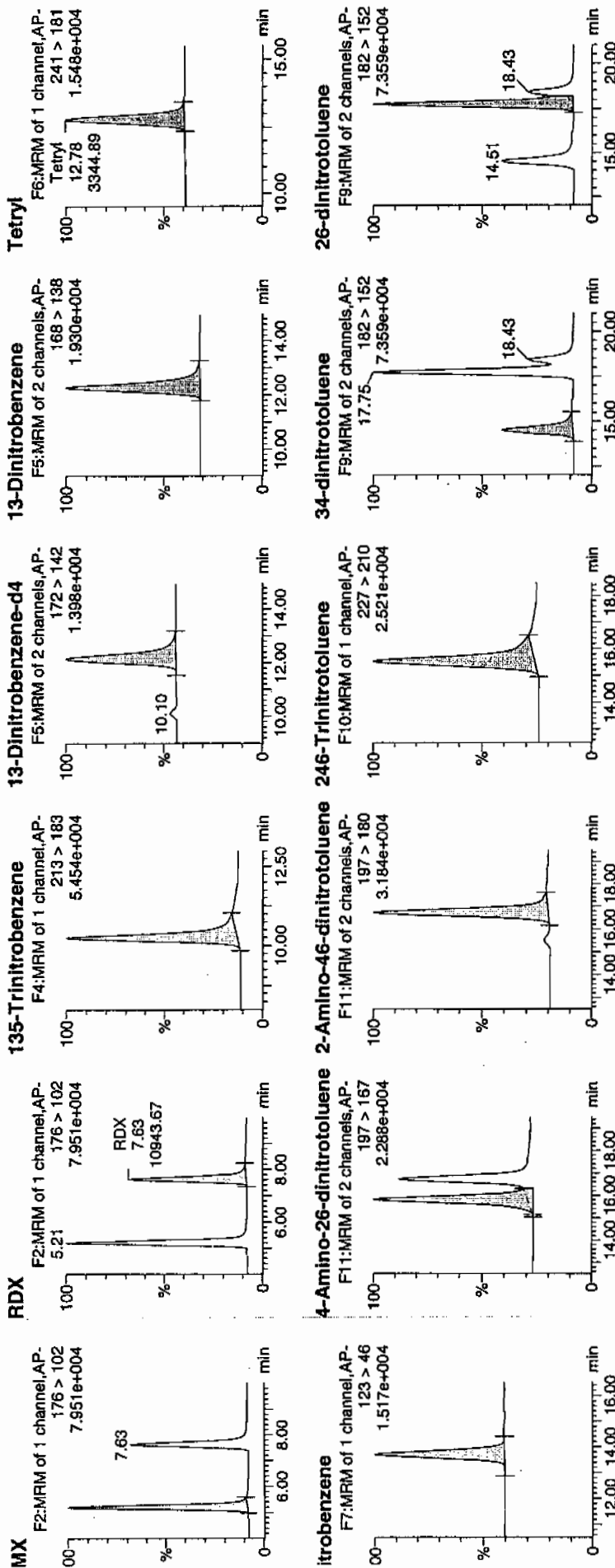
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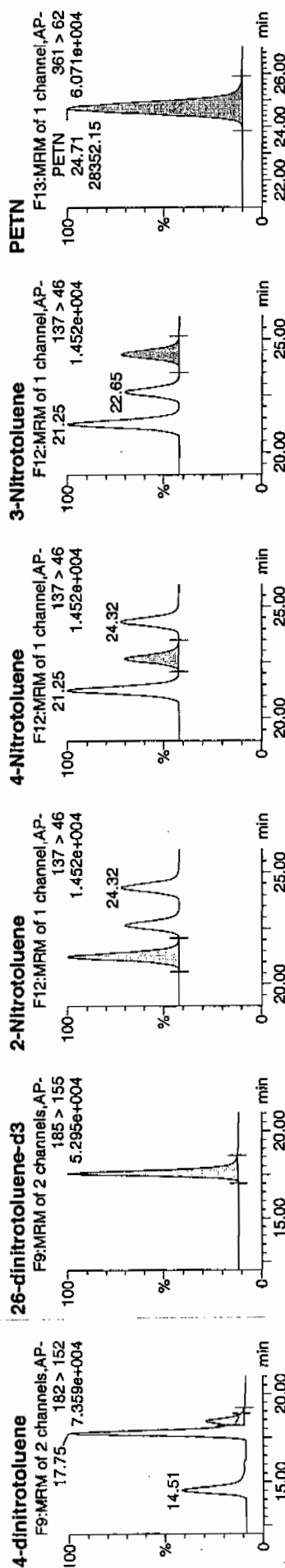
i: WXX100203-07CCV

al: 1:1,B

2/5/10



Handwritten note: 10/10



Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc	%Rec	%Dev	SN
XX100203-07CCV	176 > 102	5.21	14448.580	3236.239	14448.580	2232.310	bb			637.1531	106.2	6.2	1636.2
XX100203-07CCV	176 > 102	7.63	10943.672	3236.239	10943.672	1690.801	bb			718.9373	119.8	19.8	1075.0
XX100203-07CCV	213 > 183	10.25	13441.402	3236.239	13441.402	2076.701	bb			615.2073	102.5	2.5	1641.5
XX100203-07CCV	172 > 142	12.14	3236.239		3236.239	3236.239	bb			435.7083	87.1	-12.9	438.4
XX100203-07CCV	168 > 138	12.28	4985.774	3236.239	4985.774	770.304	bb			616.7801	102.8	2.8	531.2
XX100203-07CCV	241 > 181	12.78	3344.891	3236.239	3344.891	516.787	bb			675.9780	112.7	12.7	221.4
XX100203-07CCV	123 > 46	13.71	3084.330	3236.239	3084.330	476.530	bb			589.6570	98.3	-1.7	281.1
XX100203-07CCV	197 > 167	15.83	6759.823	18425.604	6759.823	183.436	MM	05-Feb-10	09:25:47	622.4561	103.7	3.7	487.9
XX100203-07CCV	2-Amino-46-dinitrotoluene	16.73	10024.985	18425.604	10024.985	272.040	bb			677.8140	113.0	13.0	1074.2
XX100203-07CCV	246-Trinitrotoluene	15.54	8332.432	18425.604	8332.432	226.110	bb			695.5741	115.9	15.9	648.8
XX100203-07CCV	182 > 152	14.51	11326.234	18425.604	11326.234	307.350	bb			330.6702	110.2	10.2	358.6
XX100203-07CCV	34-dinitrotoluene	17.75	24825.549	18425.604	24825.549	673.670	MM	05-Feb-10	09:28:21	614.1748	102.4	2.4	1009.3
XX100203-07CCV	182 > 152	18.43	5916.329	18425.604	5916.329	160.546	MM	05-Feb-10	09:51:48	659.9648	110.0	10.0	217.7
XX100203-07CCV	24-dinitrotoluene	17.57	18425.604		18425.604	18425.604	bb			434.2536	86.9	-13.1	1730.0
XX100203-07CCV	26-dinitrotoluene-d3	21.25	3535.651	18425.604	3535.651	95.944	bb			640.3908	106.7	6.7	1036.3
XX100203-07CCV	2-Nitrotoluene	22.65	1782.535	18425.604	1782.535	48.371	bb			638.4495	106.4	6.4	507.6
XX100203-07CCV	4-Nitrotoluene	24.32	1968.021	18425.604	1968.021	53.405	bb			572.5508	95.4	-4.6	538.2
XX100203-07CCV	3-Nitrotoluene	24.71	28352.145	18425.604	28352.145	769.368	bb			634.3871	105.7	5.7	2521.6
XX100203-07CCV	361 > 62	24.71	28352.145	18425.604	28352.145	769.368	bb			634.3871	105.7	5.7	2521.6

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/05/10
 Time of Injection: 0557
 Standard Number: WXX100203-07CCV
 Data File: EXP0203081a

HMX	106.2
RDX	119.8
135-TNB	102.5
13-DNB	102.8
Tetryl	112.7
Nitrobenzene	98.3
4A-26-DNT	103.7
2A-46-DNT	113.0
246-TNT	115.9
34-DNT(surr)	110.2
26-DNT	102.4
24-DNT	110.0
2-NT	106.7
4-NT	106.4
3-NT	95.4
PETN	105.7

*WXX
2/5/10*

Total 1711.7

02/05/10

Average 107.0

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203083a

Analysis Date: 05-FEB-10 06:56

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.41	111	
1,3-Dinitrobenzene-d4	500	510.956	102	
2,4,6-Trinitrotoluene	40	38.404	96	
2,4-Dinitrotoluene	40	41.538	104	
2,6-Dinitrotoluene	40	40.694	102	
2,6-Dinitrotoluene-d3	500	505.746	101	
2-Amino-4,6-dinitrotoluene	40	42.646	107	
3,4-Dinitrotoluene	20	23.848	119	
4-Amino-2,6-dinitrotoluene	40	40.493	101	
HMX	40	43.065	108	
Nitrobenzene	40	44.425	111	
PETN	40	46.856	117	
RDX	40	46.661	117	
Tetryl	40	55.443	139	*
m-Dinitrobenzene	40	42.541	106	
m-Nitrotoluene	40	36.342	91	
o-Nitrotoluene	40	41.359	103	
p-Nitrotoluene	40	54.859	137	*

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tri(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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ame: C:\MASSLYNX\NEW_EXP\PRO\data\EXP0203083a

ate: 05-Feb-2010

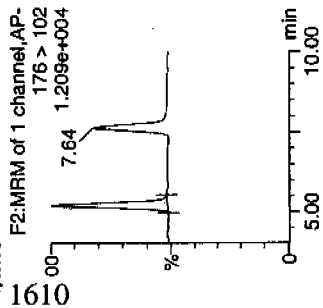
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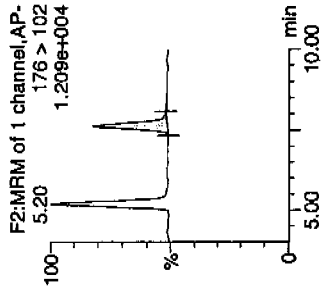
ial: 1:1,C

WXX
1/3/10

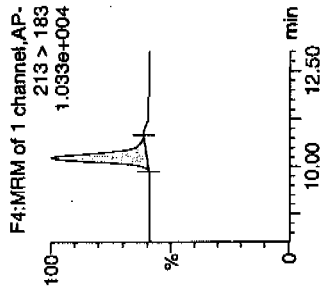
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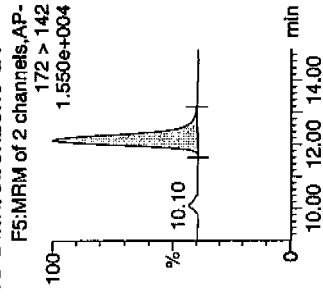
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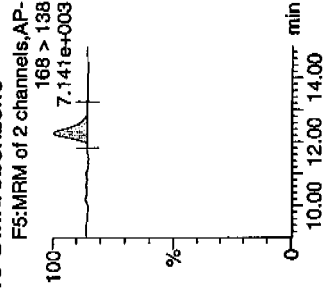
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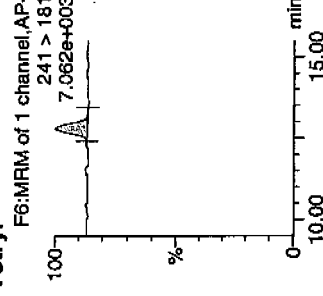
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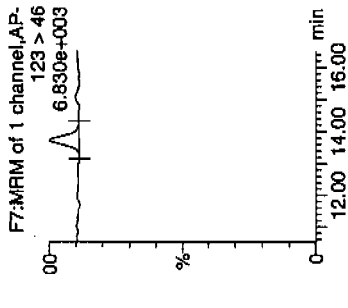
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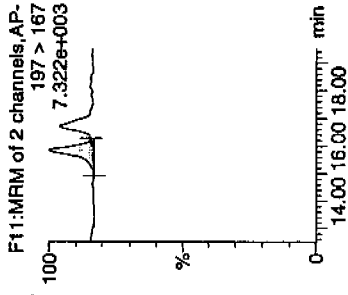
Tetryl



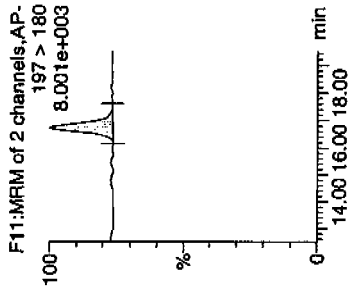
itrobenzene



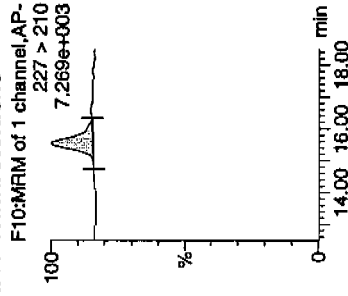
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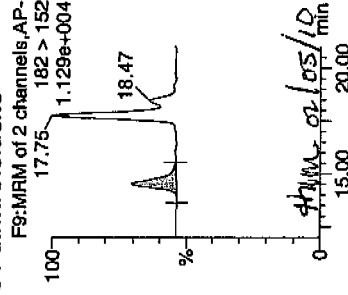
2-Amino-46-dinitrotoluene



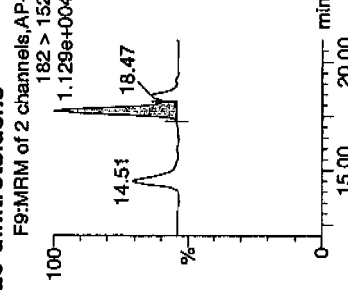
246-Trinitrotoluene



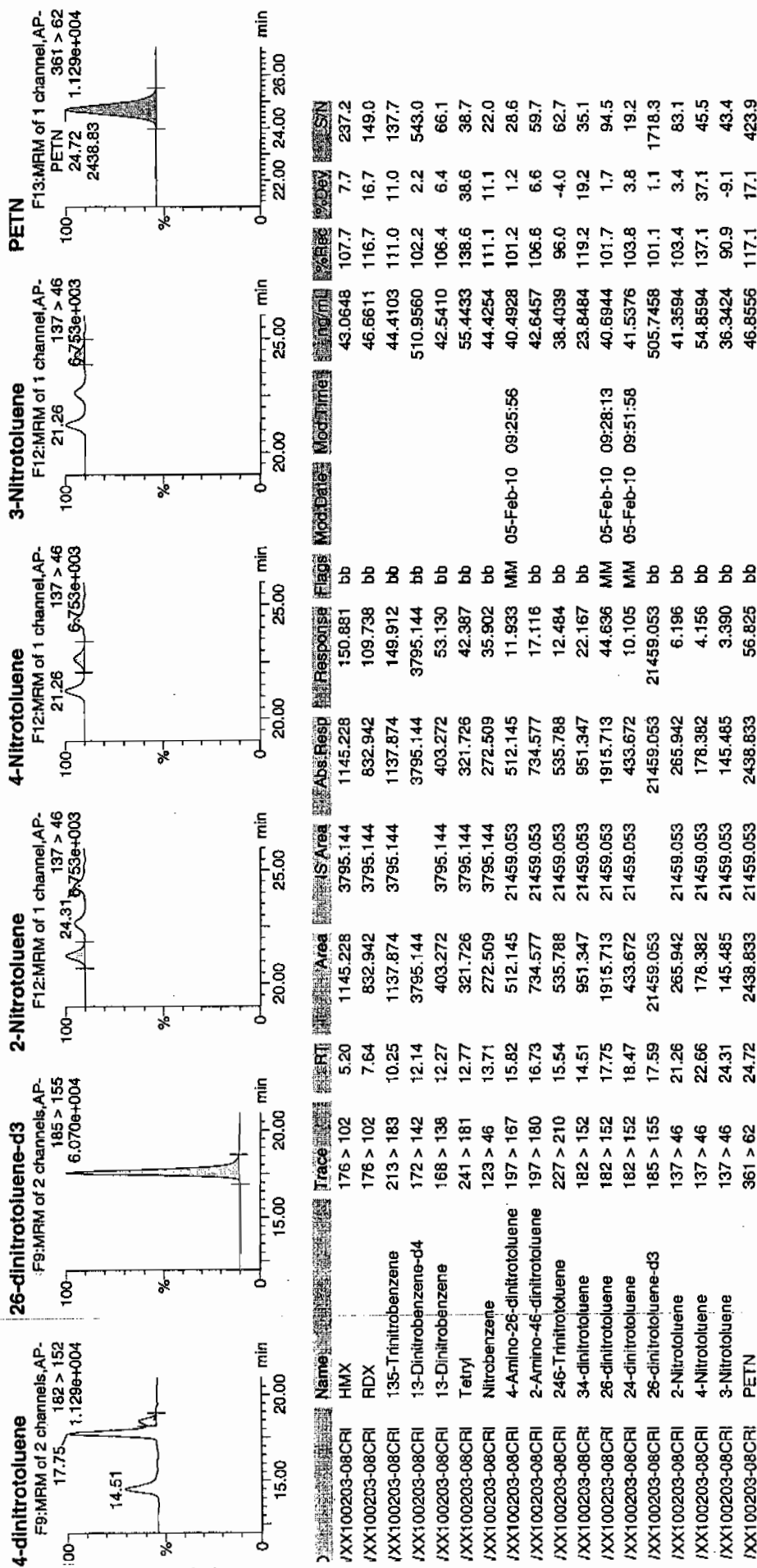
34-dinitrotoluene



26-dinitrotoluene



Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA1.qld, Time: Fri Feb 05 09:51:58 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/05/10
 Time of Injection 0656
 Standard Number WXX100203-08CRI
 Data File EXP0203083a

HMX	107.7
RDX	116.7
135-TNB	111.0
13-DNB	106.4
Tetryl	138.6
Nitrobenzene	111.1
4A-26-DNT	101.2
2A-46-DNT	106.6
246-TNT	96.0
34-DNT(surr)	119.2
26-DNT	101.7
24-DNT	103.8
2-NT	103.4
4-NT	137.1
3-NT	90.9
PETN	117.1

*WAT
2/5/10*

Total 1768.5

Average 110.5

WAT 02/05/10

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203091a

Analysis Date: 05-FEB-10 10:52

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	568.001	95	
1,3-Dinitrobenzene-d4	500	501.185	100	
2,4,6-Trinitrotoluene	600	689.692	115	
2,4-Dinitrotoluene	600	647.186	108	
2,6-Dinitrotoluene	600	610.027	102	
2,6-Dinitrotoluene-d3	500	471.448	94	
2-Amino-4,6-dinitrotoluene	600	688.03	115	
3,4-Dinitrotoluene	300	327.699	109	
4-Amino-2,6-dinitrotoluene	600	614.935	102	
HMX	600	653.7	109	
Nitrobenzene	600	554.996	92	
PETN	600	581.623	97	
RDX	600	752.631	125	*
Tetryl	600	623.23	104	
m-Dinitrobenzene	600	591.45	99	
m-Nitrotoluene	600	563.157	94	
o-Nitrotoluene	600	645.162	108	
p-Nitrotoluene	600	634.752	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other/Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO1020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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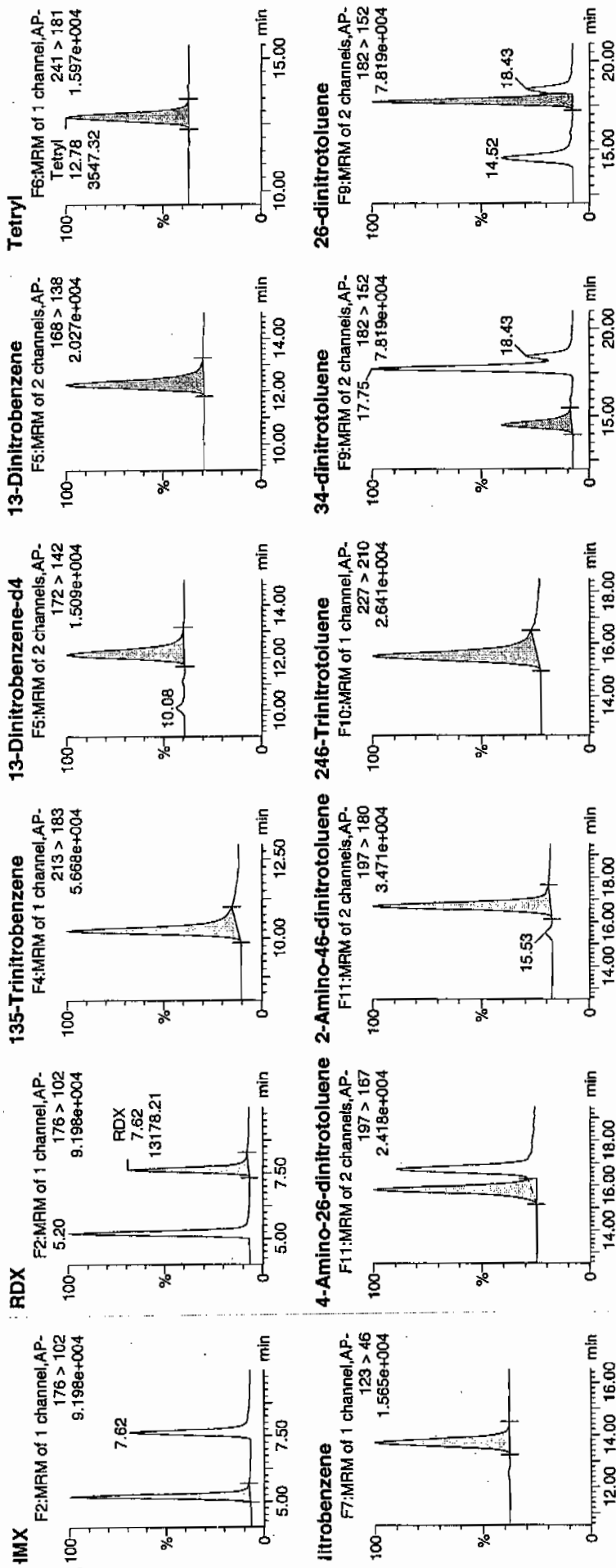
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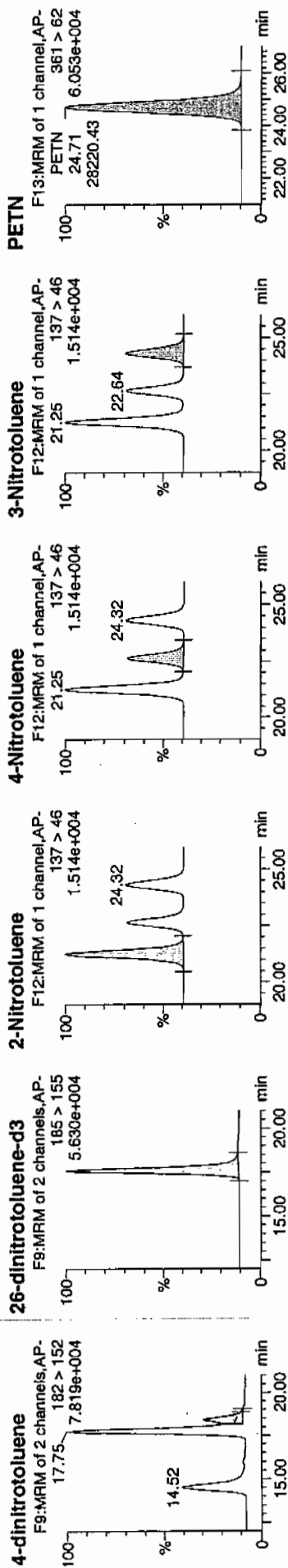
D: WXX100203-07CCV

/rat: 1:1,B

2/8/10



Handwritten signature



ID	Name	Trace	RT	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Yr	Mon	Day	Sec	SN
1	135-Trinitrobenzene	178 > 102	5.20	17051.473	3722.569	17051.473	2290.283	bb		653.6988	108.9	8.9	1308.3	
2	135-Trinitrobenzene	178 > 102	7.62	13178.207	3722.569	13178.207	1770.042	bb		752.6310	125.4	25.4	869.8	
3	13-Dinitrobenzene-d4	213 > 183	10.23	14274.934	3722.569	14274.934	1917.350	bb		568.0007	94.7	-5.3	1195.8	
4	13-Dinitrobenzene	172 > 142	12.14	3722.569		3722.569	3722.569	bb		501.1849	100.2	0.2	338.3	
5	13-Dinitrobenzene	168 > 138	12.28	5499.490		5499.490	738.669	bb		591.4500	98.6	-1.4	612.8	
6	Tetyl	241 > 181	12.78	3547.316	3722.569	3547.316	476.461	db		623.2299	103.9	3.9	250.2	
7	Nitrobenzene	123 > 46	13.72	3339.282	3722.569	3339.282	448.518	bb		554.9956	92.5	-7.5	309.7	
8	4-Amino-26-dinitrotoluene	197 > 167	15.83	7250.138	20003.779	7250.138	181.219	MM	08-Feb-10	614.9352	102.5	2.5	229.4	
9	2-Amino-46-dinitrotoluene	197 > 180	16.73	11047.669	20003.779	11047.669	276.140	bb		688.0296	114.7	14.7	517.6	
10	246-Trinitrotoluene	227 > 210	15.55	8969.611	20003.779	8969.611	224.198	bb		689.6916	114.9	14.9	686.0	
11	34-dinitrotoluene	182 > 152	14.52	12185.850	20003.779	12185.850	304.589	bb		327.6990	109.2	9.2	174.1	
12	26-dinitrotoluene	182 > 152	17.75	26769.854	20003.779	26769.854	669.120	MM	08-Feb-10	610.0267	101.7	1.7	488.0	
13	24-dinitrotoluene	182 > 152	18.43	6298.704	20003.779	6298.704	157.438	MM	08-Feb-10	647.1863	107.9	7.9	107.3	
14	26-dinitrotoluene-d3	185 > 155	17.57	20003.779		20003.779	20003.779	bb		471.4480	94.3	-5.7	2311.6	
15	2-Nitrotoluene	137 > 46	21.25	3867.084	20003.779	3867.084	96.659	bb		645.1623	107.5	7.5	716.1	
16	4-Nitrotoluene	137 > 46	22.64	1924.004	20003.779	1924.004	48.091	bb		634.7521	105.8	5.8	347.4	
17	3-Nitrotoluene	137 > 46	24.32	2101.530	20003.779	2101.530	52.528	bb		563.1571	93.9	-6.1	355.7	
18	PETN	361 > 62	24.71	28220.432	20003.779	28220.432	705.378	bb		581.6232	96.9	-3.1	6966.6	

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/05/10
 Time of Injection: 1052
 Standard Number: WXX100203-07CCV
 Data File: EXP0203091a

HMX	108.9
RDX	125.4
135-TNB	94.7
13-DNB	98.6
Tetryl	103.9
Nitrobenzene	92.5
4A-26-DNT	102.5
2A-46-DNT	114.7
246-TNT	114.9
34-DNT(surr)	109.2
26-DNT	101.7
24-DNT	107.9
2-NT	107.5
4-NT	105.8
3-NT	93.9
PETN	96.9

*MTT
4/8/10*

Total 1679.0

Average 104.9

Home 02/08/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203093a

Analysis Date: 05-FEB-10 11:51

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.599	121	
1,3-Dinitrobenzene-d4	500	478.755	96	
2,4,6-Trinitrotoluene	40	37.04	93	
2,4-Dinitrotoluene	40	39.252	98	
2,6-Dinitrotoluene	40	41.459	104	
2,6-Dinitrotoluene-d3	500	482.07	96	
2-Amino-4,6-dinitrotoluene	40	41.582	104	
3,4-Dinitrotoluene	20	20.172	101	
4-Amino-2,6-dinitrotoluene	40	40.229	101	
HMX	40	47.8	119	
Nitrobenzene	40	38.98	97	
PETN	40	50.918	127	
RDX	40	42.948	107	
Tetryl	40	56.716	142	*
m-Dinitrobenzene	40	43.938	110	
m-Nitrotoluene	40	32.39	81	
o-Nitrotoluene	40	41.273	103	
p-Nitrotoluene	40	42.647	107	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other/Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
SEL Laboratories, LLC / Analyst : Michael A. Penny

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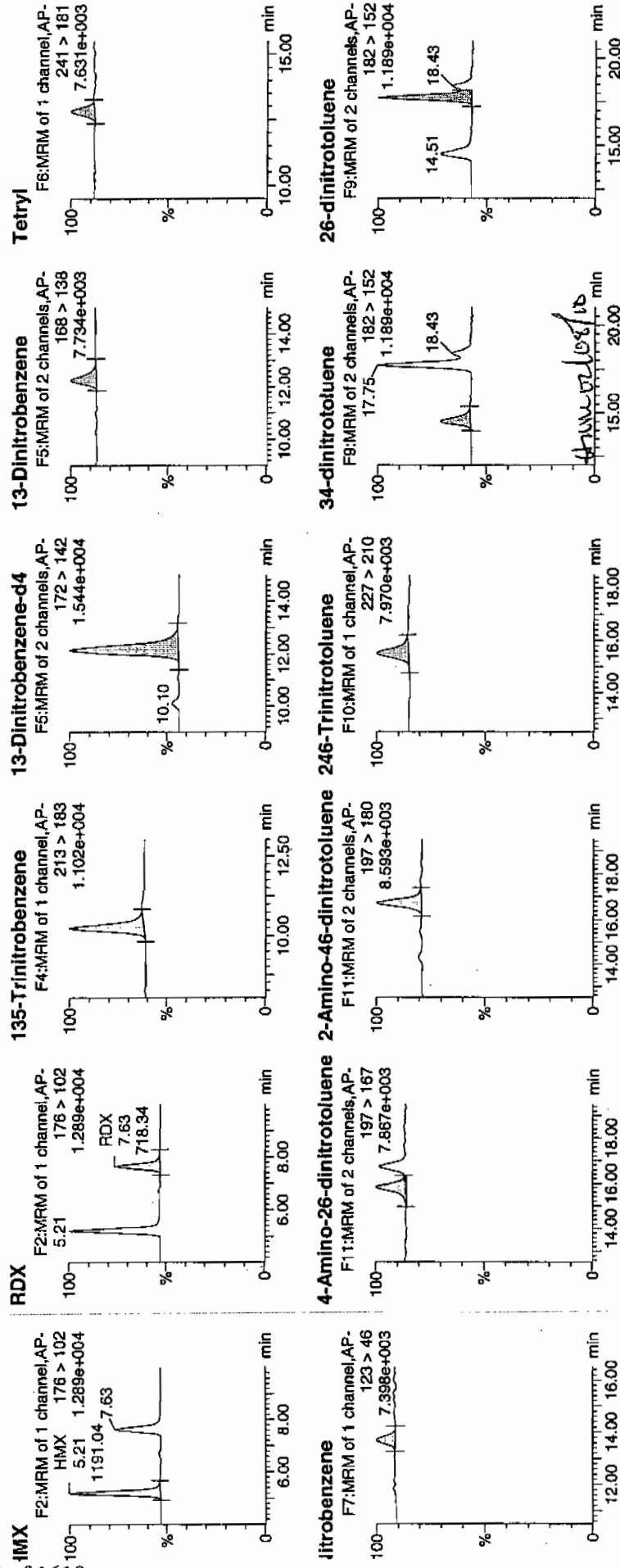
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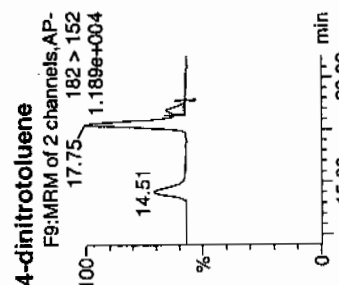
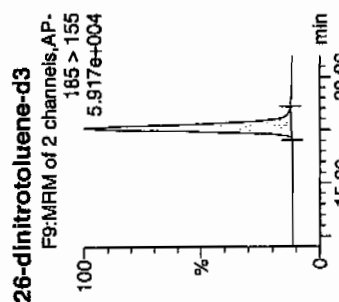
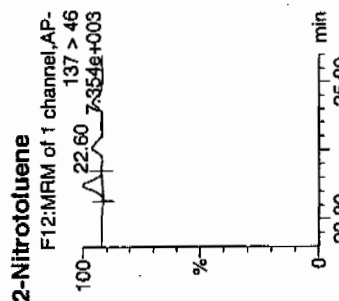
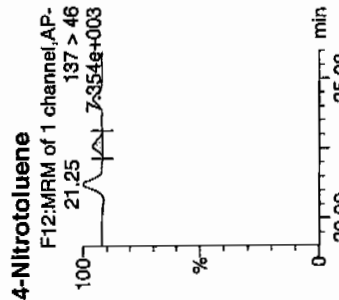
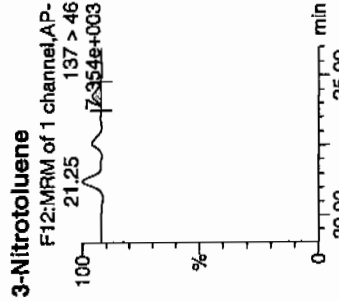
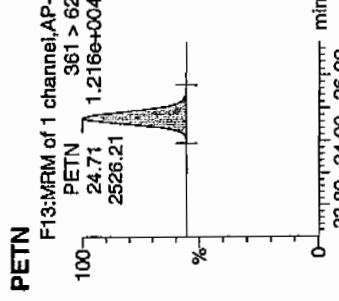
D: WXX100203-08CRI

Fial: 1:1,C

WAT
2/8/10



Dataset: C:\MASSLYNX\New_Exp\PRO\20310expA2.qld, Time: Mon Feb 08 11:28:50 2010

4-dinitrotoluene F9:MRM of 2 channels,AP- 182 > 152 1.189e+004	26-dinitrotoluene-d3 F9:MRM of 2 channels,AP- 185 > 155 5.917e+004	2-Nitrotoluene F12:MRM of 1 channel,AP- 137 > 46 7.354e+003	4-Nitrotoluene F12:MRM of 1 channel,AP- 137 > 46 7.354e+003	3-Nitrotoluene F12:MRM of 1 channel,AP- 137 > 46 7.354e+003	PETN F13:MRM of 1 channel,AP- 361 > 62 1.216e+004									
														
Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod Date	Mod Time	Int Time	Ref	Mod	Day	SN
VXX100203-08CRI	HMX	176 > 102	5.21	1191.039	3555.972	1191.039	167.470	bb		47.7999	119.5	19.5	251.7	
VXX100203-08CRI	RDX	176 > 102	7.63	718.337	3555.972	718.337	101.004	bb		42.9476	107.4	7.4	127.8	
VXX100203-08CRI	135-Trinitrobenzene	213 > 183	10.25	1166.711	3555.972	1166.711	164.050	bb		48.5985	121.5	21.5	367.8	
VXX100203-08CRI	13-Dinitrobenzene-d4	172 > 142	12.14	3555.972	3555.972	3555.972	3555.972	bb		478.7552	95.8	-4.2	215.2	
VXX100203-08CRI	13-Dinitrobenzene	168 > 138	12.28	390.261	3555.972	390.261	54.874	bb		43.9375	109.8	9.8	45.8	
VXX100203-08CRI	Tetryl	241 > 181	12.82	308.372	3555.972	308.372	43.360	bb		56.7163	141.8	41.8	31.6	
VXX100203-08CRI	Nitrobenzene	123 > 46	13.71	224.035	3555.972	224.035	31.501	bb		38.9795	97.4	-2.6	17.2	
VXX100203-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.83	484.987	20454.494	484.987	11.855	MM	08-Feb-10	11:10:46	100.6	0.6	60.9	
VXX100203-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.73	682.719	20454.494	682.719	16.689	bb		41.5817	104.0	4.0	103.3	
VXX100203-08CRI	246-Trinitrotoluene	227 > 210	15.54	492.570	20454.494	492.570	12.041	bb		37.0401	92.6	-7.4	57.4	
VXX100203-08CRI	34-dinitrotoluene	182 > 152	14.51	767.028	20454.494	767.028	18.750	bb		20.1722	100.9	0.9	51.1	
VXX100203-08CRI	26-dinitrotoluene	182 > 152	17.75	1860.324	20454.494	1860.324	45.475	MM	08-Feb-10	11:21:45	103.6	3.6	159.1	
VXX100203-08CRI	24-dinitrotoluene	182 > 152	18.43	390.625	20454.494	390.625	9.549	MM	08-Feb-10	11:23:36	98.1	-1.9	30.9	
VXX100203-08CRI	26-dinitrotoluene-d3	185 > 155	17.57	20454.494	20454.494	20454.494	20454.494	bb		482.0704	96.4	-3.6	1034.0	
VXX100203-08CRI	2-Nitrotoluene	137 > 46	21.25	252.962	20454.494	252.962	6.184	bb		41.2728	103.2	3.2	41.4	
VXX100203-08CRI	4-Nitrotoluene	137 > 46	22.60	132.180	20454.494	132.180	3.231	bb		42.6469	106.6	6.6	21.3	
VXX100203-08CRI	3-Nitrotoluene	137 > 46	24.28	123.593	20454.494	123.593	3.021	bb		32.3900	81.0	-19.0	19.1	
VXX100203-08CRI	PETN	361 > 62	24.71	2526.211	20454.494	2526.211	61.752	bb		50.9180	127.3	27.3	436.0	

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/05/10
 Time of Injection 1151
 Standard Number WXX100203-08CRI
 Data File EXP0203093a

HMX	119.5
RDX	107.4
135-TNB	121.5
13-DNB	109.8
Tetryl	141.8
Nitrobenzene	97.4
4A-26-DNT	100.6
2A-46-DNT	104.0
246-TNT	92.6
34-DNT(surr)	100.9
26-DNT	103.6
24-DNT	98.1
2-NT	103.2
4-NT	106.6
3-NT	81.0
PETN	127.3

*WFF
2/8/10*

Total 1715.3

Average 107.2

HMM 02/08/10

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203099a

Analysis Date: 05-FEB-10 14:48

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	639.27	107	
1,3-Dinitrobenzene-d4	500	425.354	85	
2,4,6-Trinitrotoluene	600	692.748	115	
2,4-Dinitrotoluene	600	677.631	113	
2,6-Dinitrotoluene	600	622.909	104	
2,6-Dinitrotoluene-d3	500	450.137	90	
2-Amino-4,6-dinitrotoluene	600	652.301	109	
3,4-Dinitrotoluene	300	313.462	104	
4-Amino-2,6-dinitrotoluene	600	612.54	102	
HMX	600	671.71	112	
Nitrobenzene	600	643.879	107	
PETN	600	592.766	99	
RDX	600	789.269	132	*
Tetryl	600	754.009	126	*
m-Dinitrobenzene	600	649.055	108	
m-Nitrotoluene	600	568.353	95	
o-Nitrotoluene	600	626.257	104	
p-Nitrotoluene	600	609.068	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

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203099a

Date: 05-Feb-2010

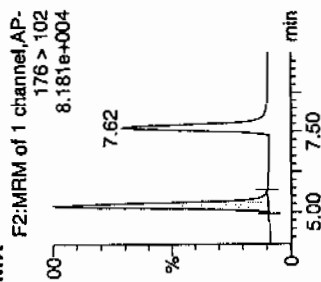
Time: 14:48:50

File: WXX100205-07CCV

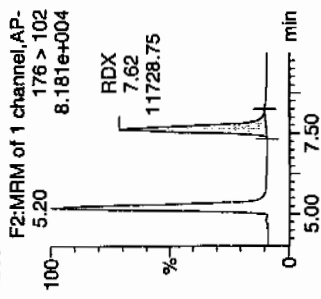
Label: 1:1,B

100%
2/8/10

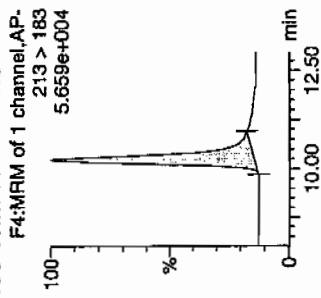
MX



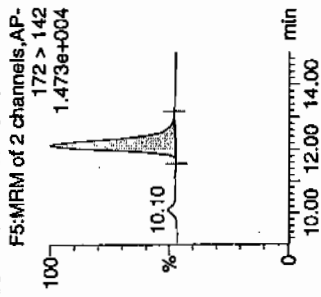
RDX



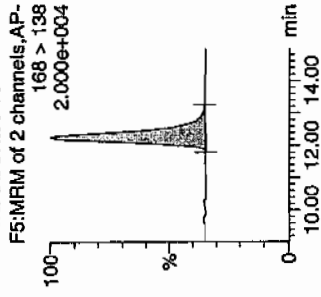
135-Trinitrobenzene



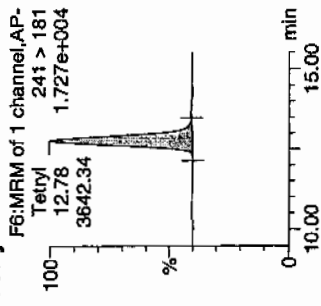
13-Dinitrobenzene-d4



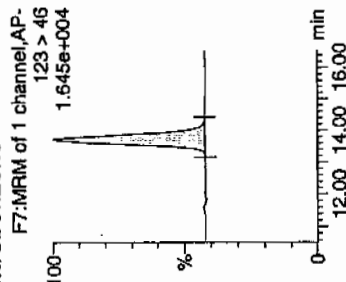
13-Dinitrobenzene



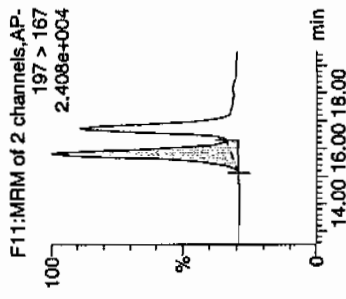
Tetryl



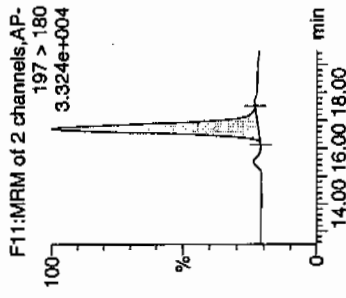
nitrobenzene



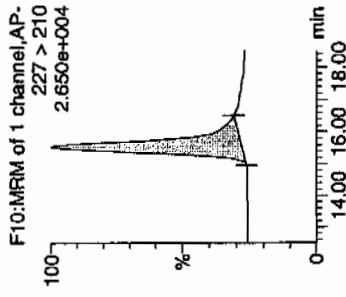
4-Amino-26-dinitrotoluene



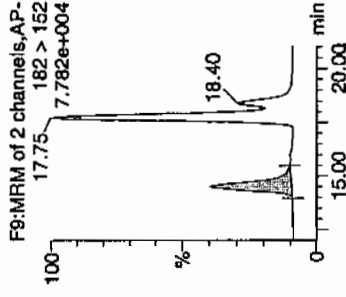
2-Amino-46-dinitrotoluene



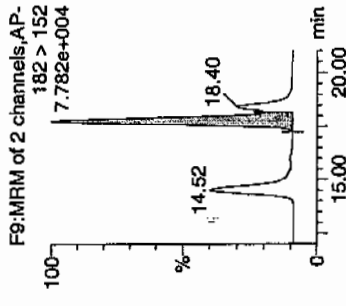
246-Trinitrotoluene



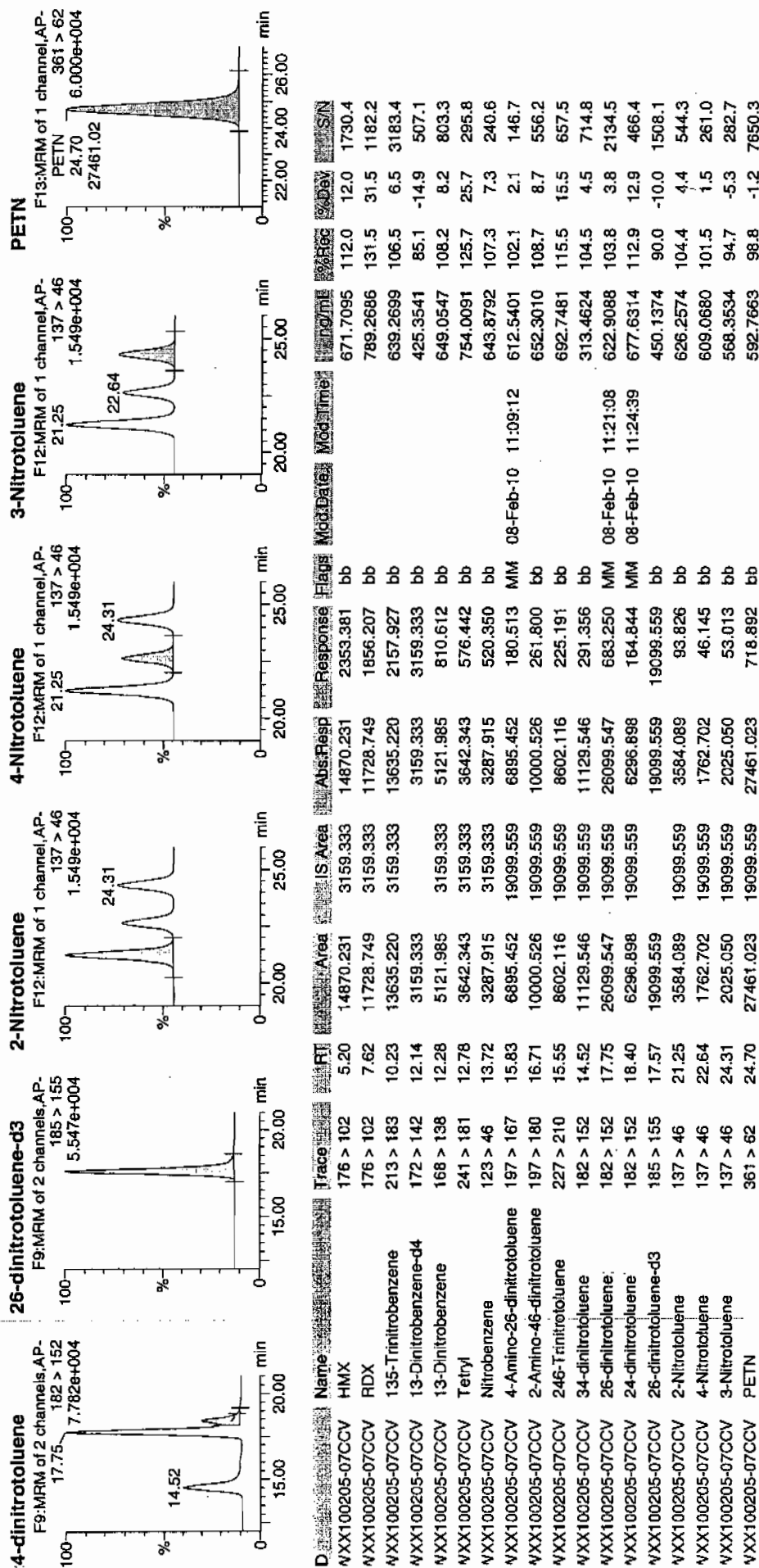
34-dinitrotoluene



26-dinitrotoluene



Handwritten signature: H. M. M. 2/8/10



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/05/10
 Time of Injection: 1448
 Standard Number: WXX100205-07CCV
 Data File: EXP0203099a

HMX	112.0
RDX	131.5
135-TNB	106.5
13-DNB	108.2
Tetryl	125.7
Nitrobenzene	107.3
4A-26-DNT	102.1
2A-46-DNT	108.7
246-TNT	115.5
34-DNT(surr)	104.5
26-DNT	103.8
24-DNT	112.9
2-NT	104.4
4-NT	101.5
3-NT	94.7
PETN	98.8

Handwritten:
 2/8/10

Total 1738.1

Average 108.6

Handwritten: 108.6 or 108.10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203101a

Analysis Date: 05-FEB-10 15:48

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5µ ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.853	130	
1,3-Dinitrobenzene-d4	500	465.593	93	
2,4,6-Trinitrotoluene	40	41.215	103	
2,4-Dinitrotoluene	40	39.863	100	
2,6-Dinitrotoluene	40	41.613	104	
2,6-Dinitrotoluene-d3	500	466.284	93	
2-Amino-4,6-dinitrotoluene	40	43.51	109	
3,4-Dinitrotoluene	20	19.397	97	
4-Amino-2,6-dinitrotoluene	40	44.336	111	
HMX	40	44.118	110	
Nitrobenzene	40	40.538	101	
PETN	40	51.172	128	
RDX	40	42.826	107	
Tetryl	40	59.555	149	*
m-Dinitrobenzene	40	37.295	93	
m-Nitrotoluene	40	37.688	94	
o-Nitrotoluene	40	45.345	113	
p-Nitrotoluene	40	41.214	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

uantify Sample Report
EL Laboratories, LLC / Analyst : Michael A. Penny

atset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

ame: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0203101a

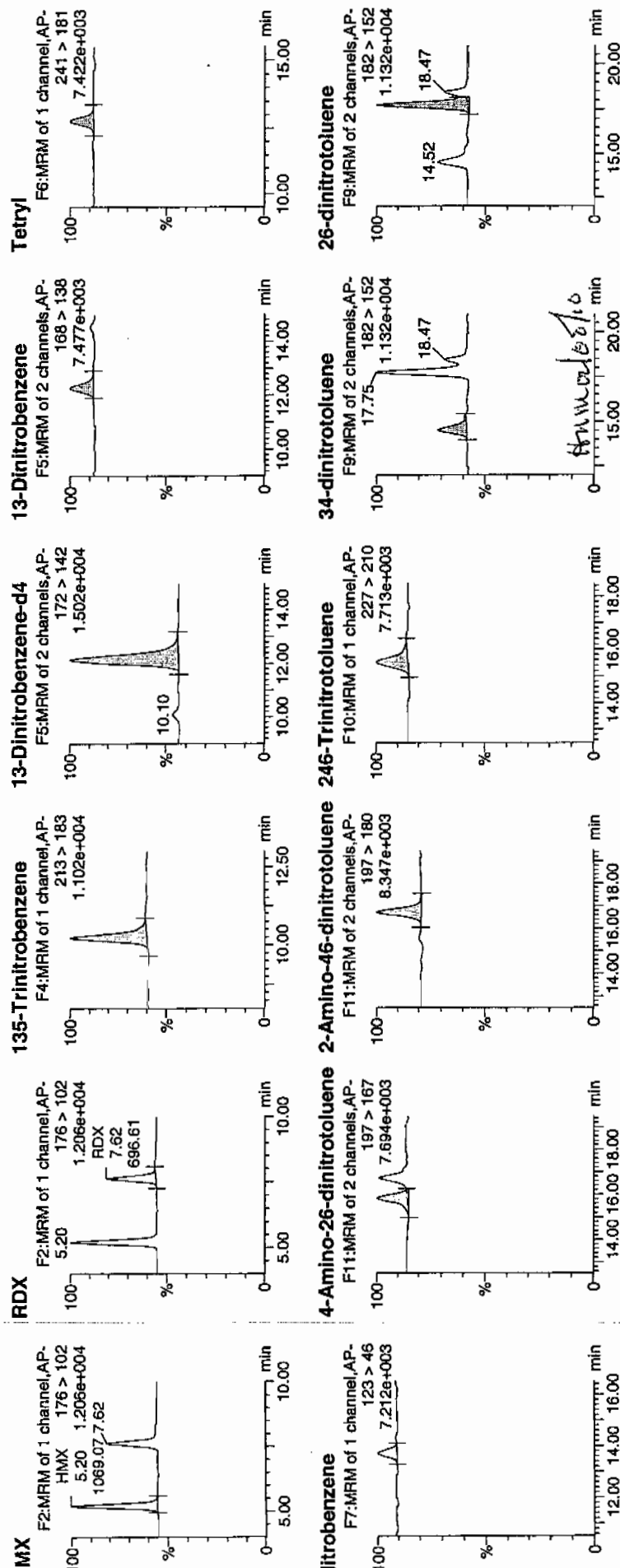
ate: 05-Feb-2010

ime: 15:48:28

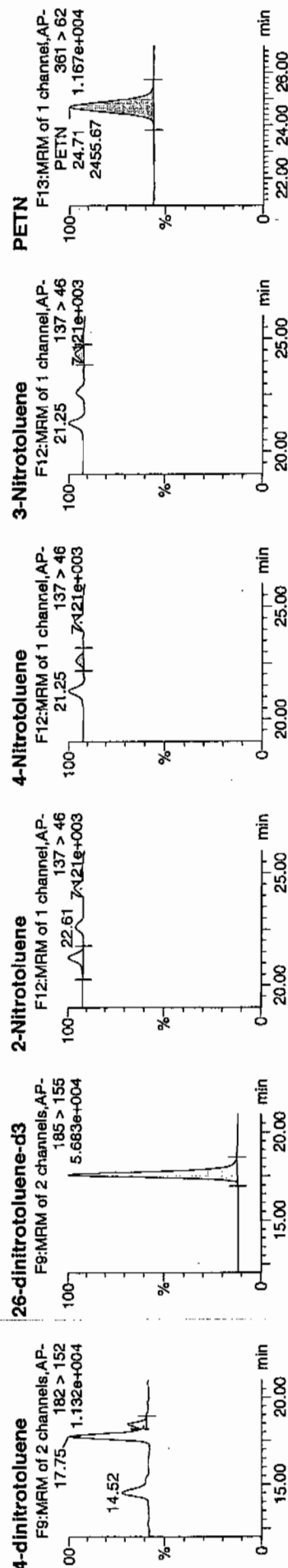
3: WXX100205-08CRI

ial: 1:1,C

WXX
1/8/10



atset: C:\MASSLYNX\New_Exp\PRO1020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	mg/ml	%Rec	%Dev	SN
4XX100205-08CRI	176 > 102	5.20	1069.073	3458.212	1069.073	154.570	bb			44.1179	110.3	10.3	206.9
4XX100205-08CRI	176 > 102	7.62	696.608	3458.212	696.608	100.718	bb			42.8258	107.1	7.1	117.5
4XX100205-08CRI	213 > 183	10.23	1210.611	3458.212	1210.611	175.034	bb			51.8526	129.6	29.6	157.5
4XX100205-08CRI	172 > 142	12.14	3458.212	3458.212	3458.212	3458.212	bb			465.5934	93.1	-6.9	180.0
4XX100205-08CRI	168 > 138	12.27	322.155	3458.212	322.155	46.578	bb			37.2951	93.2	-6.8	38.2
4XX100205-08CRI	241 > 161	12.77	314.904	3458.212	314.904	45.530	bb			59.5549	148.9	48.9	36.7
4XX100205-08CRI	123 > 46	13.72	226.587	3458.212	226.587	32.761	bb			40.5380	101.3	1.3	20.5
4XX100205-08CRI	197 > 167	15.83	517.001	19784.688	517.001	13.066	MM	08-Feb-10	11:08:04	44.3361	110.8	10.8	29.0
4XX100205-08CRI	197 > 180	16.71	690.993	19784.688	690.993	17.463	bb			43.5104	108.8	8.8	43.9
4XX100205-08CRI	227 > 210	15.52	530.138	19784.688	530.138	13.398	bb			41.2148	103.0	3.0	49.9
4XX100205-08CRI	182 > 152	14.52	713.389	19784.688	713.389	18.029	bb			19.3967	97.0	-3.0	42.6
4XX100205-08CRI	182 > 152	17.75	1806.121	19784.688	1806.121	45.644	MM	08-Feb-10	11:20:36	41.6133	104.0	4.0	138.2
4XX100205-08CRI	182 > 152	18.47	383.716	19784.688	383.716	9.697	MM	08-Feb-10	11:24:53	39.8631	99.7	-0.3	31.3
4XX100205-08CRI	185 > 155	17.58	19784.688	19784.688	19784.688	19784.688	bb			466.2844	93.3	-6.7	1738.0
4XX100205-08CRI	137 > 46	21.25	268.822	19784.688	268.822	6.794	bb			45.3454	113.4	13.4	23.9
4XX100205-08CRI	137 > 46	22.61	123.557	19784.688	123.557	3.123	bb			41.2143	103.0	3.0	11.7
4XX100205-08CRI	137 > 46	24.35	139.100	19784.688	139.100	3.515	bb			37.6881	94.2	-5.8	13.5
4XX100205-08CRI	361 > 62	24.71	2455.667	19784.688	2455.667	62.060	bb			51.1718	127.9	27.9	701.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/05/10
 Time of Injection 1548
 Standard Number WXX100205-08CRI
 Data File EXP0203101a

HMX	110.3
RDX	107.1
135-TNB	129.6
13-DNB	93.2
Tetryl	148.9
Nitrobenzene	101.3
4A-26-DNT	110.8
2A-46-DNT	108.8
246-TNT	103.0
34-DNT(surr)	97.0
26-DNT	104.0
24-DNT	99.7
2-NT	113.4
4-NT	103.0
3-NT	94.2
PETN	127.9

*mtf
4/8/10*

Total 1752.2

Average 109.5

Hum 02/05/10

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203107a

Analysis Date: 05-FEB-10 18:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	631.903	105	
1,3-Dinitrobenzene-d4	500	412.788	83	
2,4,6-Trinitrotoluene	600	728.258	121	*
2,4-Dinitrotoluene	600	655.363	109	
2,6-Dinitrotoluene	600	634.927	106	
2,6-Dinitrotoluene-d3	500	413.96	83	
2-Amino-4,6-dinitrotoluene	600	653.618	109	
3,4-Dinitrotoluene	300	342.605	114	
4-Amino-2,6-dinitrotoluene	600	591.134	99	
HMX	600	630.53	105	
Nitrobenzene	600	619.229	103	
PETN	600	637.535	106	
RDX	600	767.729	128	*
Tetryl	600	738.539	123	*
m-Dinitrobenzene	600	650.935	108	
m-Nitrotoluene	600	581.014	97	
o-Nitrotoluene	600	655.003	109	
p-Nitrotoluene	600	633.454	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qid, Time: Mon Feb 08 11:28:50 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0203107a

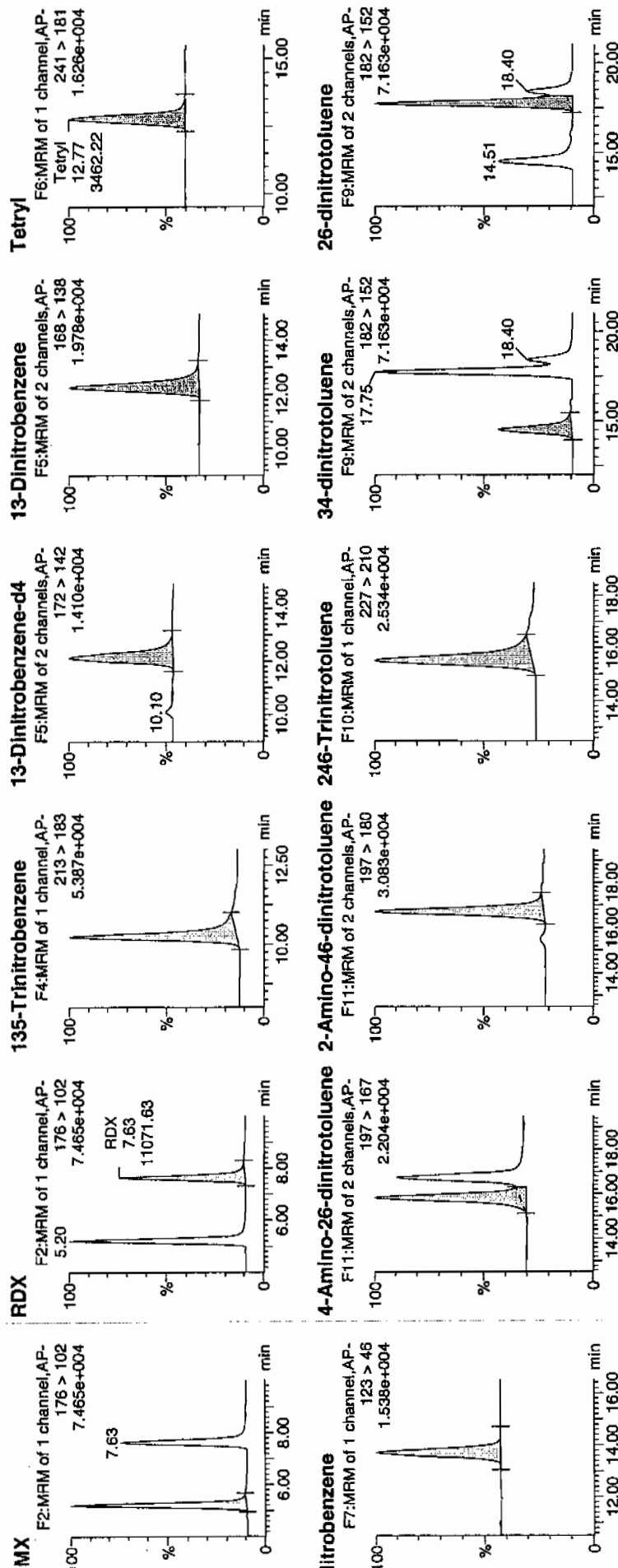
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Time: 18:45:46

Job: WXX100205-07CCV

Ratio: 1:1,B

Handwritten: 2/8/10

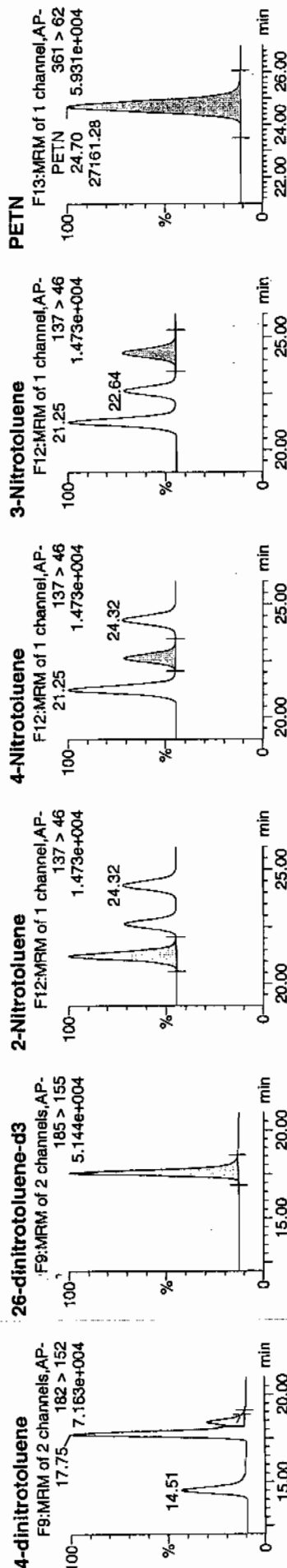


Handwritten: 2/8/10

Quantify Sample Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

D	Name	Trace	RT	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Mod User	Area	%Dev	SIN
VXX100205-07CCV	HMX	176 > 102	5.20	13546.239	3066.001	13546.239	2209.105	bb			630.5298	105.1	5.1
VXX100205-07CCV	FDX	176 > 102	7.63	11071.631	3066.001	11071.631	1805.549	bb			767.7288	128.0	28.0
VXX100205-07CCV	135-Trinitrobenzene	213 > 183	10.23	13078.931	3066.001	13078.931	2133.060	bb			631.9033	105.3	5.3
VXX100205-07CCV	13-Dinitrobenzene-d4	172 > 142	12.14	3066.001	3066.001	3066.001	3066.001	bb			412.7884	82.6	-17.4
VXX100205-07CCV	13-Dinitrobenzene	168 > 138	12.27	4985.073	3066.001	4985.073	812.960	bb			650.9350	108.5	8.5
VXX100205-07CCV	Tetyl	241 > 181	12.77	3462.220	3066.001	3462.220	564.615	bb			738.5392	123.1	23.1
VXX100205-07CCV	Nitrobenzene	123 > 46	13.71	3068.627	3066.001	3068.627	500.428	bb			619.2286	103.2	3.2
VXX100205-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.82	6119.661	17564.523	6119.661	174.205	MM	08-Feb-10 11:08:24		591.1343	98.5	-1.5
VXX100205-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.70	9215.353	17564.523	9215.353	262.329	bb			653.6182	108.9	8.9
VXX100205-07CCV	246-Trinitrotoluene	227 > 210	15.54	8316.258	17564.523	8316.258	236.735	bb			728.2575	121.4	21.4
VXX100205-07CCV	34-dinitrotoluene	182 > 152	14.51	11186.621	17564.523	11186.621	318.444	bb			342.6051	114.2	14.2
VXX100205-07CCV	26-dinitrotoluene	182 > 152	17.75	24465.008	17564.523	24465.008	696.432	MM	08-Feb-10 11:19:04		634.9271	105.8	5.8
VXX100205-07CCV	24-dinitrotoluene	182 > 152	18.40	5600.516	17564.523	5600.516	159.427	MM	08-Feb-10 11:25:40		655.3629	109.2	9.2
VXX100205-07CCV	26-dinitrotoluene-d3	185 > 155	17.57	17564.523	17564.523	17564.523	17564.523	bb			413.9597	82.8	-17.2
VXX100205-07CCV	2-Nitrotoluene	137 > 46	21.25	3447.326	17564.523	3447.326	98.133	bb			655.0032	109.2	9.2
VXX100205-07CCV	4-Nitrotoluene	137 > 46	22.64	1685.936	17564.523	1685.936	47.993	bb			633.4538	105.6	5.6
VXX100205-07CCV	3-Nitrotoluene	137 > 46	24.32	1903.781	17564.523	1903.781	54.194	bb			581.0141	96.8	-3.2
VXX100205-07CCV	PETN	361 > 62	24.70	27161.277	17564.523	27161.277	773.186	bb			637.5349	106.3	6.3



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/05/10
 Time of Injection: 1845
 Standard Number: WXX100205-07CCV
 Data File: EXP0203107a

HMX	105.1
RDX	128.0
135-TNB	105.3
13-DNB	108.5
Tetryl	123.1
Nitrobenzene	103.2
4A-26-DNT	98.5
2A-46-DNT	108.9
246-TNT	121.4
34-DNT(surr)	114.2
26-DNT	105.8
24-DNT	109.2
2-NT	109.2
4-NT	105.6
3-NT	96.8
PETN	106.3

*WXX
2/5/10*

Total 1749.1

Average 109.3

477m out of 10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203109a

Analysis Date: 05-FEB-10 19:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	46.84	117	
1,3-Dinitrobenzene-d4	500	442.642	89	
2,4,6-Trinitrotoluene	40	42.405	106	
2,4-Dinitrotoluene	40	36.899	92	
2,6-Dinitrotoluene	40	39.966	100	
2,6-Dinitrotoluene-d3	500	432.393	86	
2-Amino-4,6-dinitrotoluene	40	40.834	102	
3,4-Dinitrotoluene	20	22.857	114	
4-Amino-2,6-dinitrotoluene	40	39.28	98	
HMX	40	42.692	107	
Nitrobenzene	40	42.909	107	
PETN	40	42.897	107	
RDX	40	45.259	113	
Tetryl	40	47.808	120	
m-Dinitrobenzene	40	40.302	101	
m-Nitrotoluene	40	40.909	102	
o-Nitrotoluene	40	42.65	107	
p-Nitrotoluene	40	42.5	106	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Sample Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0203109a

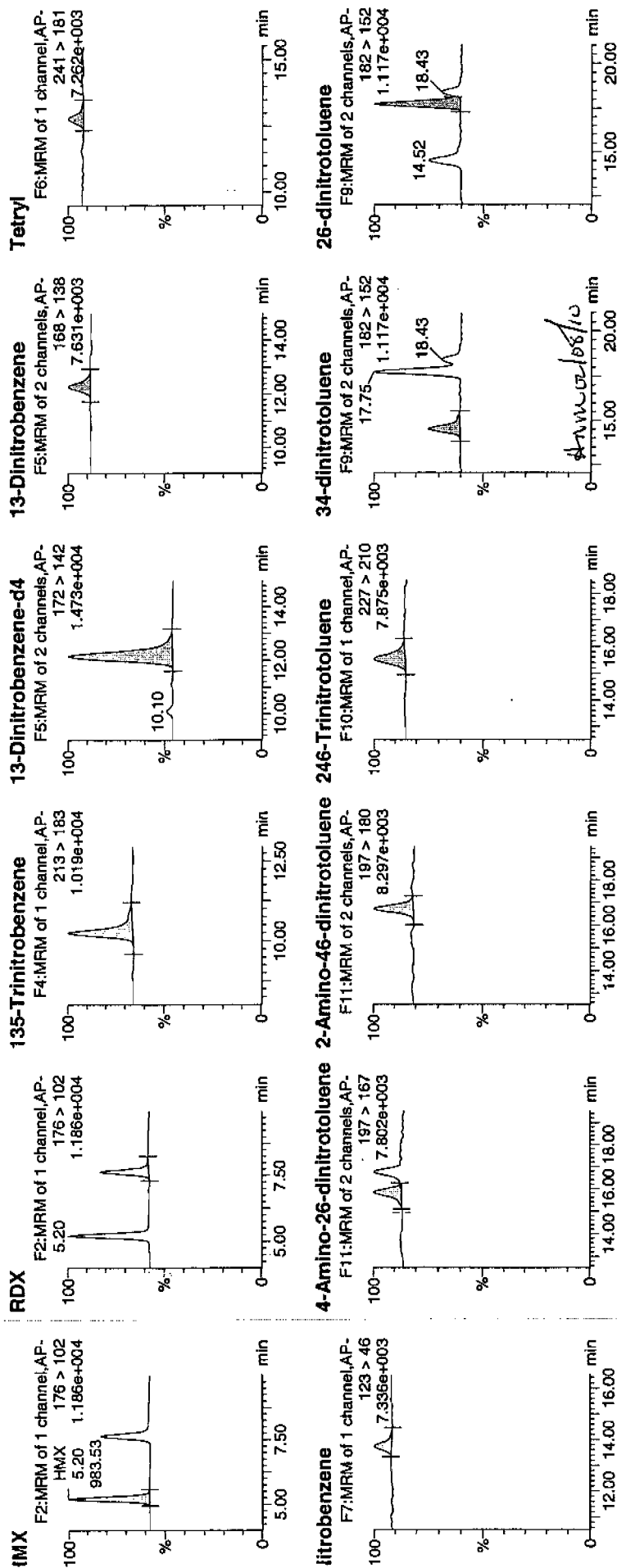
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Time: 19:44:50

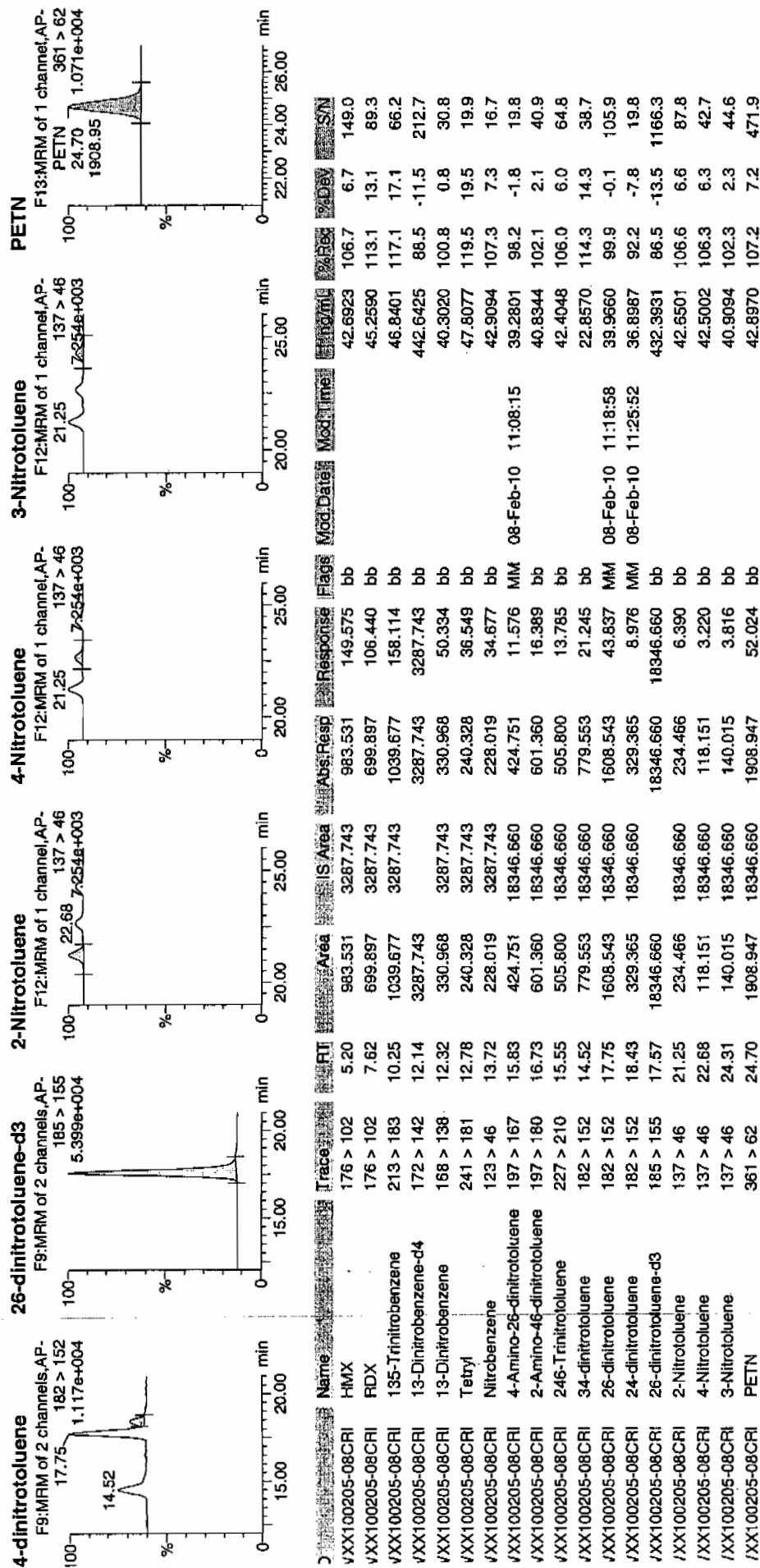
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File: 1:1,C

1.07
2/5/10



Dataset: C:\MASSLYNX\New_Exp_PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/05/10
 Time of Injection 1944
 Standard Number WXX100205-08CRI
 Data File EXP0203109a

HMX	106.7
RDX	113.1
135-TNB	117.1
13-DNB	100.8
Tetryl	119.5
Nitrobenzene	107.3
4A-26-DNT	98.2
2A-46-DNT	102.1
246-TNT	106.0
34-DNT(surr)	114.3
26-DNT	99.9
24-DNT	92.2
2-NT	106.6
4-NT	106.3
3-NT	102.3
PETN	107.2

NOT
4/8/10

Total 1699.6

Average 106.2

Hyman 02/08/10

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203120a

Analysis Date: 06-FEB-10 01:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	573.36	96	
1,3-Dinitrobenzene-d4	500	432.185	86	
2,4,6-Trinitrotoluene	600	730.26	122	*
2,4-Dinitrotoluene	600	679.014	113	
2,6-Dinitrotoluene	600	647.023	108	
2,6-Dinitrotoluene-d3	500	405.425	81	
2-Amino-4,6-dinitrotoluene	600	719.118	120	
3,4-Dinitrotoluene	300	345.361	115	
4-Amino-2,6-dinitrotoluene	600	654.442	109	
HMX	600	706.815	118	
Nitrobenzene	600	620.264	103	
PETN	600	642.695	107	
RDX	600	847.277	141	*
Tetryl	600	649.186	108	
m-Dinitrobenzene	600	606.585	101	
m-Nitrotoluene	600	661.745	110	
o-Nitrotoluene	600	742.653	124	*
p-Nitrotoluene	600	722.878	120	*

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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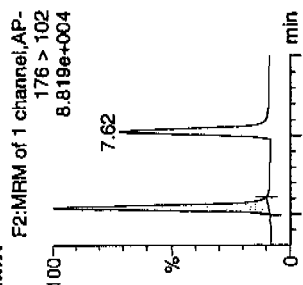
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Time: 01:09:21

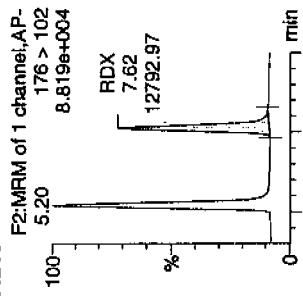
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Ratio: 1:1,B

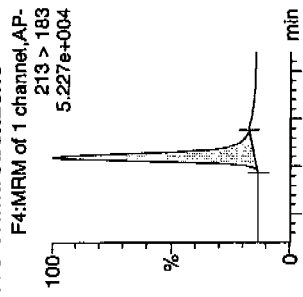
IMX



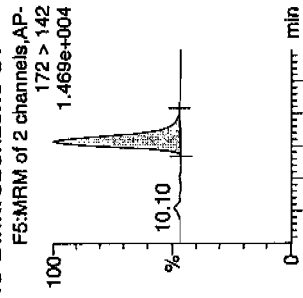
RDX



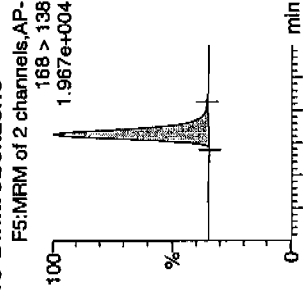
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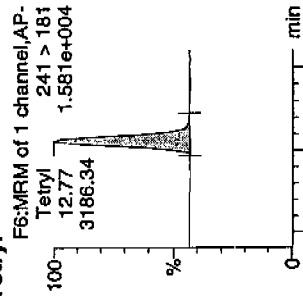
13-Dinitrobenzene-d4



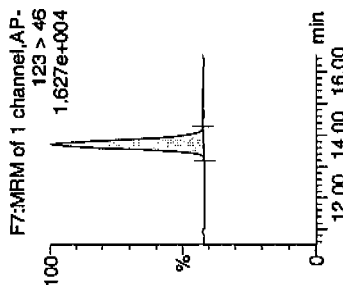
13-Dinitrobenzene



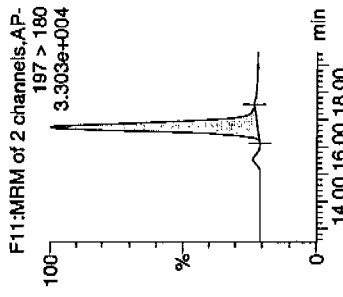
Tetryl



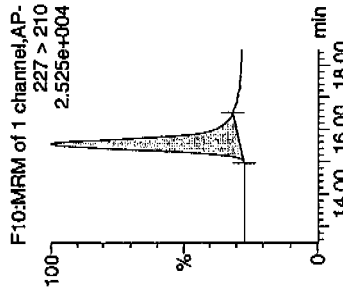
4-Amino-26-dinitrotoluene



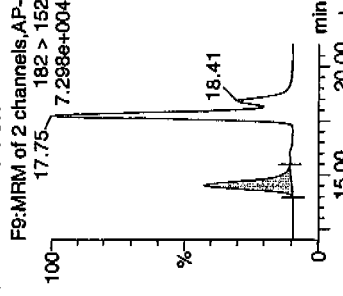
2-Amino-46-dinitrotoluene



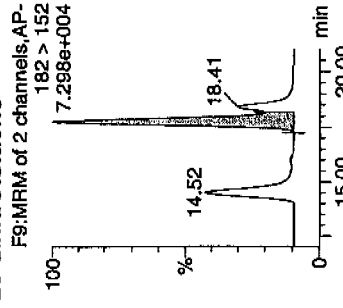
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

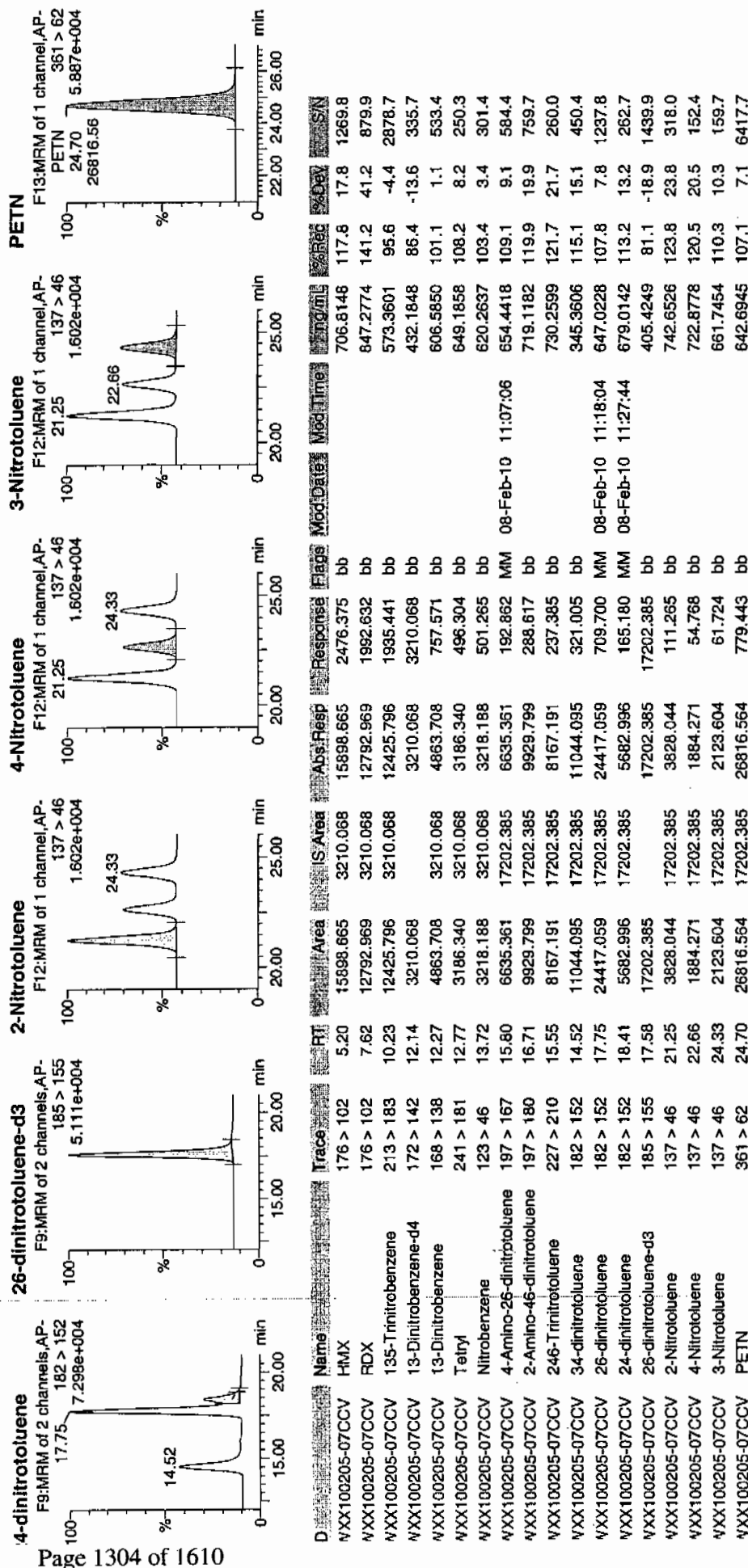


11/10/10

11/10/10

Quantify Sample Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/06/10
 Time of Injection: 0109
 Standard Number: WXX100205-07CCV
 Data File: EXP0203120a

HMX	117.8
RDX	141.2
135-TNB	95.6
13-DNB	101.1
Tetryl	108.2
Nitrobenzene	103.4
4A-26-DNT	109.1
2A-46-DNT	119.9
246-TNT	121.7
34-DNT(surr)	115.1
26-DNT	107.8
24-DNT	113.2
2-NT	123.8
4-NT	120.5
3-NT	110.3
PETN	107.1

*not
2/5/10*

Total 1815.8

Average 113.5

Handwritten: 02/05/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203122a

Analysis Date: 06-FEB-10 02:08

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	46.69	117	
1,3-Dinitrobenzene-d4	500	445.04	89	
2,4,6-Trinitrotoluene	40	42.436	106	
2,4-Dinitrotoluene	40	39.872	100	
2,6-Dinitrotoluene	40	41.604	104	
2,6-Dinitrotoluene-d3	500	450.366	90	
2-Amino-4,6-dinitrotoluene	40	49.318	123	
3,4-Dinitrotoluene	20	20.934	105	
4-Amino-2,6-dinitrotoluene	40	36.78	92	
HMX	40	46.696	117	
Nitrobenzene	40	56.175	140	*
PETN	40	42.887	107	
RDX	40	48.4	121	
Tetryl	40	50.365	126	
m-Dinitrobenzene	40	47.577	119	
m-Nitrotoluene	40	41.733	104	
o-Nitrotoluene	40	55.756	139	*
p-Nitrotoluene	40	45.809	115	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
JEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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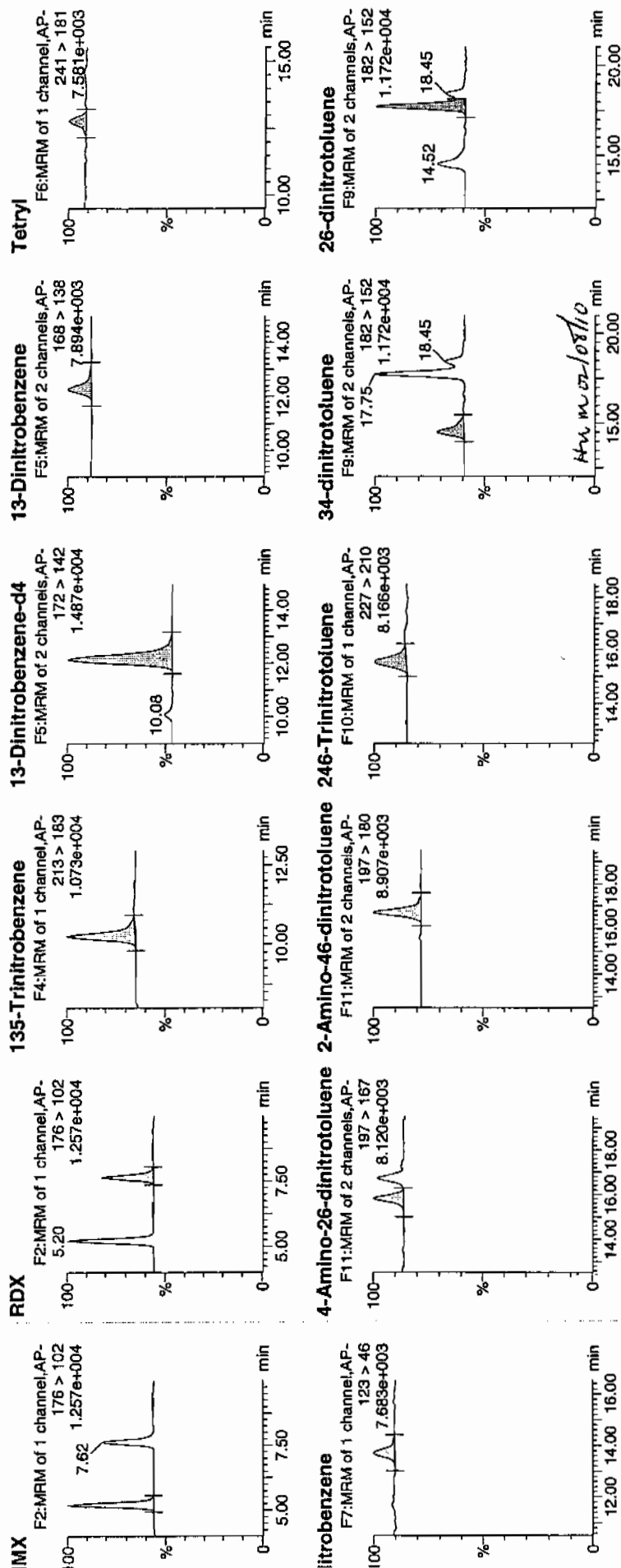
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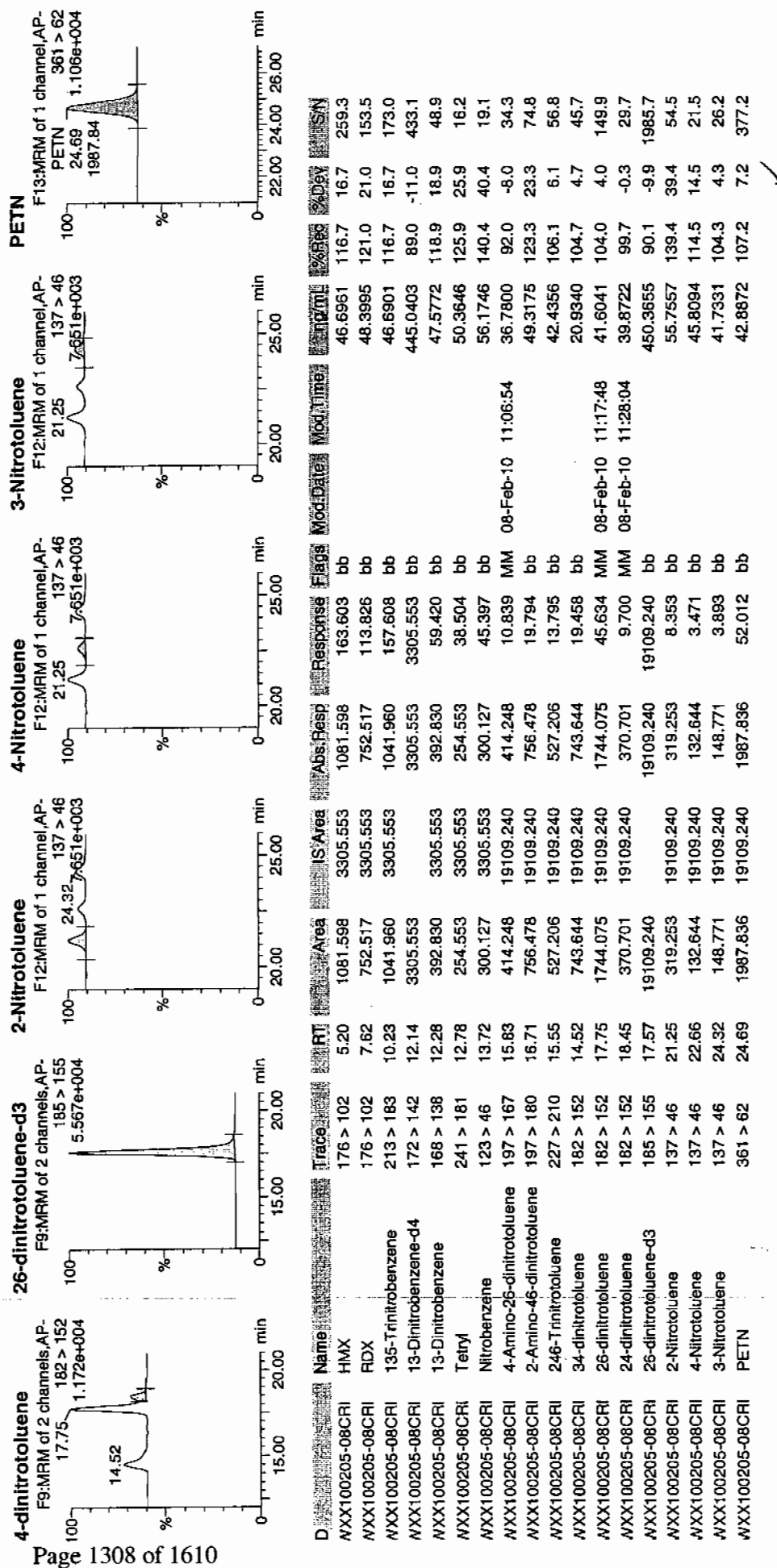
3: WXX100205-08CRI

al: 1:1,C

WJF
2/8/10



Dataset: C:\MASSLYN\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/06/10
 Time of Injection 0208
 Standard Number WXX100205-08CRI
 Data File EXP0203122a

HMX	116.7
RDX	121.0
135-TNB	116.7
13-DNB	118.9
Tetryl	125.9
Nitrobenzene	140.4
4A-26-DNT	92.0
2A-46-DNT	123.3
246-TNT	106.1
34-DNT(surr)	104.7
26-DNT	104.0
24-DNT	99.7
2-NT	139.4
4-NT	114.5
3-NT	104.3
PETN	107.2

*MTT
2/8/10*

Total 1834.8

Hammer 2/8/10

Average 114.7

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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0203132a

Analysis Date: 06-FEB-10 07:03

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	639.636	107	
1,3-Dinitrobenzene-d4	500	372.815	75	*
2,4,6-Trinitrotoluene	600	597.455	100	
2,4-Dinitrotoluene	600	611.408	102	
2,6-Dinitrotoluene	600	598.33	100	
2,6-Dinitrotoluene-d3	500	419.103	84	
2-Amino-4,6-dinitrotoluene	600	650.658	108	
3,4-Dinitrotoluene	300	318.2	106	
4-Amino-2,6-dinitrotoluene	600	540.384	90	
HMX	600	766.156	128	*
Nitrobenzene	600	597.083	100	
PETN	600	648.331	108	
RDX	600	852.568	142	*
Tetryl	600	753.505	126	*
m-Dinitrobenzene	600	632.361	105	
m-Nitrotoluene	600	498.835	83	
o-Nitrotoluene	600	572.802	95	
p-Nitrotoluene	600	546.808	91	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

SEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Mon Feb 08 11:31:28 2010, Page 97 of 103

Dataset: C:\MASSLYNX\New_Exp_PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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Date: 06-Feb-2010

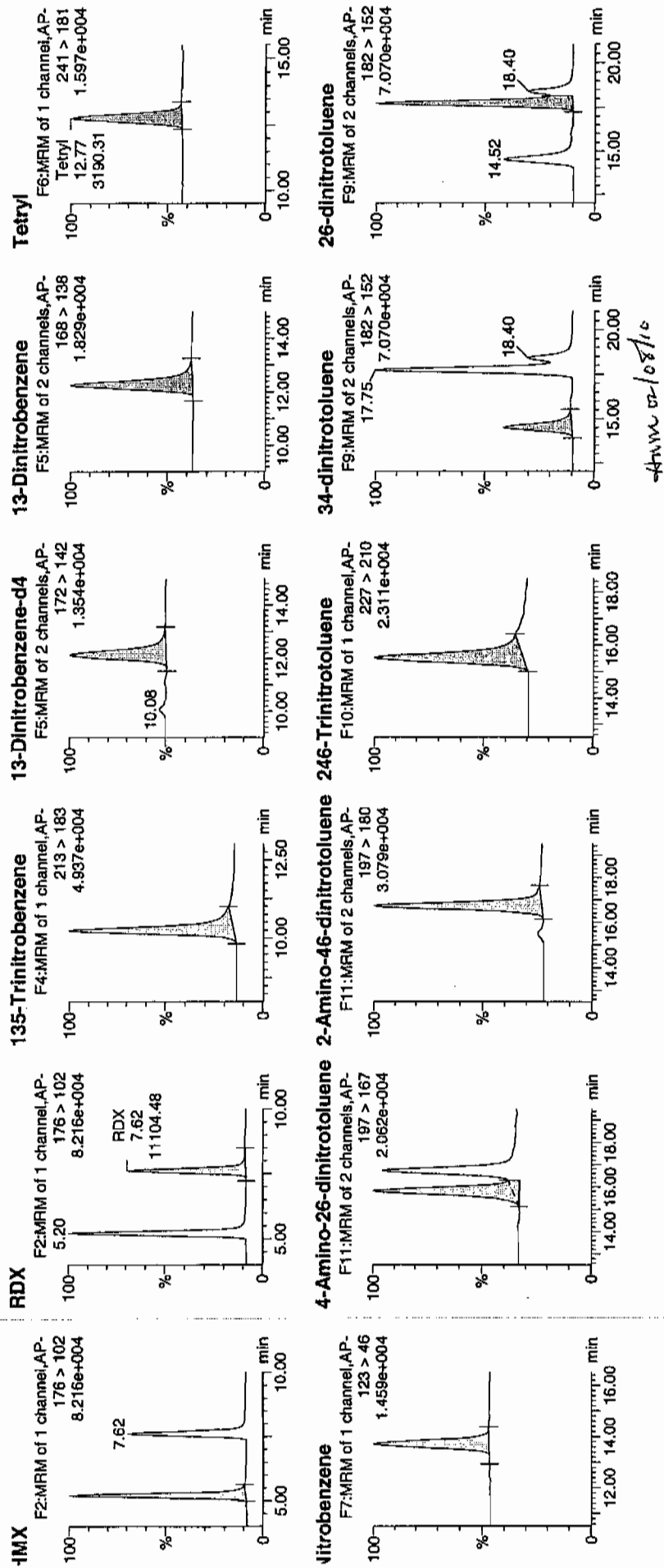
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D: WXX100205-07CCV

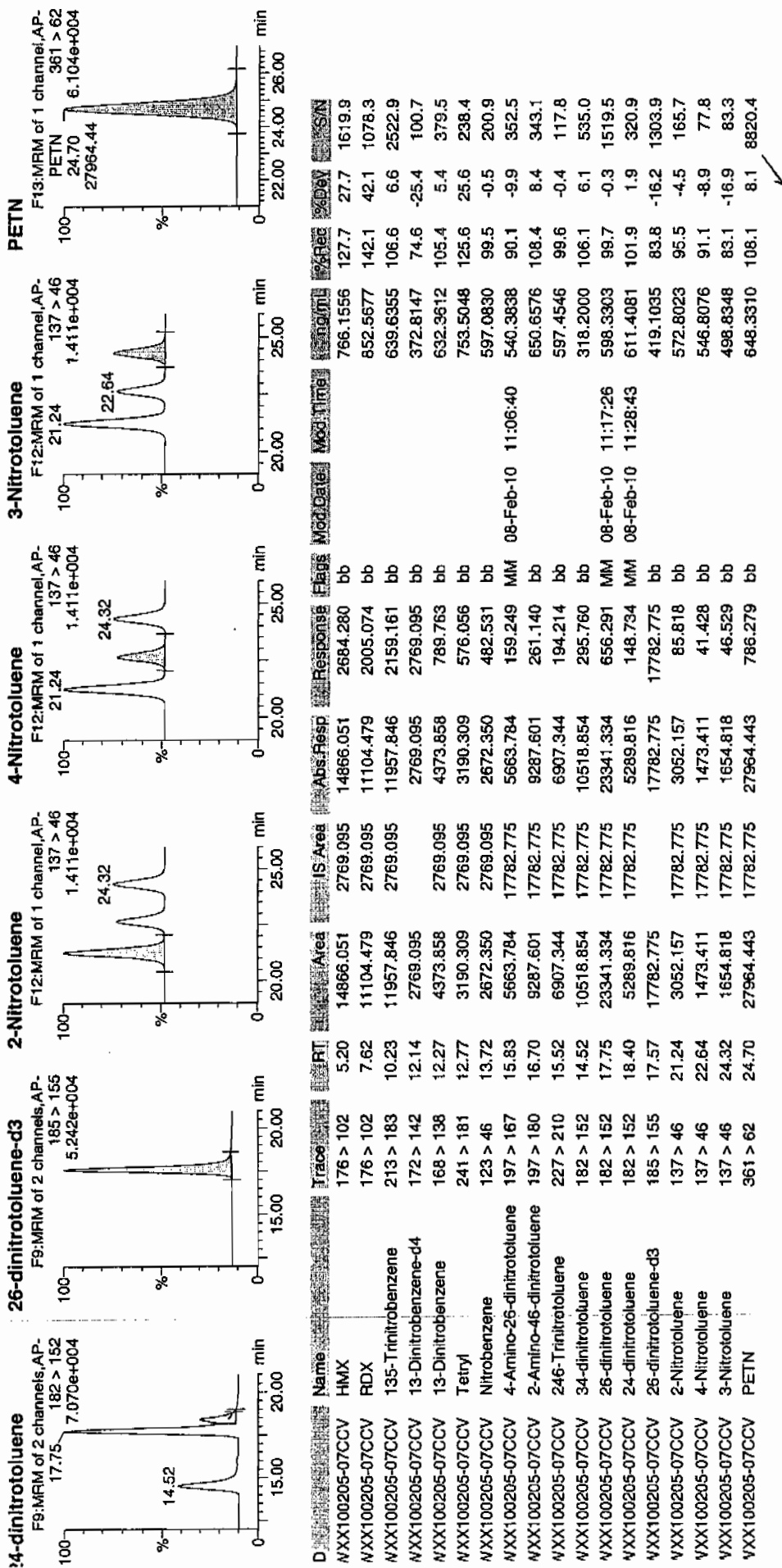
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WXX
1/10

Page 1311 of 1610



Dataset: C:\MASSLYNX\New_Exp\PRO1020310expA2.qtd, Time: Mon Feb 08 11:28:50 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 02/06/10
 Time of Injection: 0703
 Standard Number: WXX100205-07CCV
 Data File: EXP0203132a

HMX	127.7
RDX	142.1
135-TNB	106.6
13-DNB	105.4
Tetryl	125.6
Nitrobenzene	99.5
4A-26-DNT	90.1
2A-46-DNT	108.4
246-TNT	99.6
34-DNT(surr)	106.1
26-DNT	99.7
24-DNT	101.9
2-NT	95.5
4-NT	91.1
3-NT	83.1
PETN	108.1

Handwritten: 107.7
2/8/10

Total 1690.5

Average 105.7

Handwritten: 105.7 or 105.1

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0203134a

Analysis Date: 06-FEB-10 08:02

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.361	128	
1,3-Dinitrobenzene-d4	500	391.776	78	
2,4,6-Trinitrotoluene	40	38.816	97	
2,4-Dinitrotoluene	40	37.991	95	
2,6-Dinitrotoluene	40	42.231	106	
2,6-Dinitrotoluene-d3	500	391.154	78	
2-Amino-4,6-dinitrotoluene	40	41.326	103	
3,4-Dinitrotoluene	20	22.444	112	
4-Amino-2,6-dinitrotoluene	40	42.585	106	
HMX	40	42.391	106	
Nitrobenzene	40	38.054	95	
PETN	40	58.394	146	*
RDX	40	47.693	119	
Tetryl	40	57.594	144	*
m-Dinitrobenzene	40	33.287	83	
m-Nitrotoluene	40	43.13	108	
o-Nitrotoluene	40	46.479	116	
p-Nitrotoluene	40	51.133	128	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
SEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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Date: 06-Feb-2010

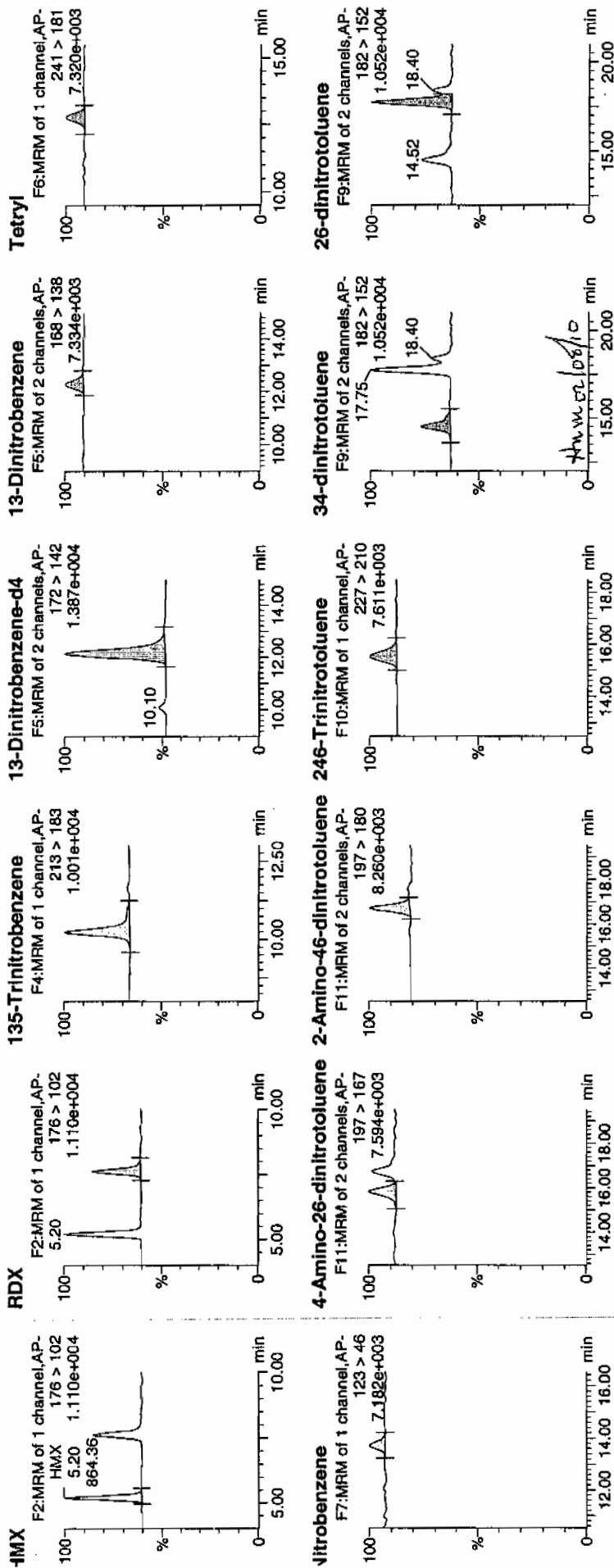
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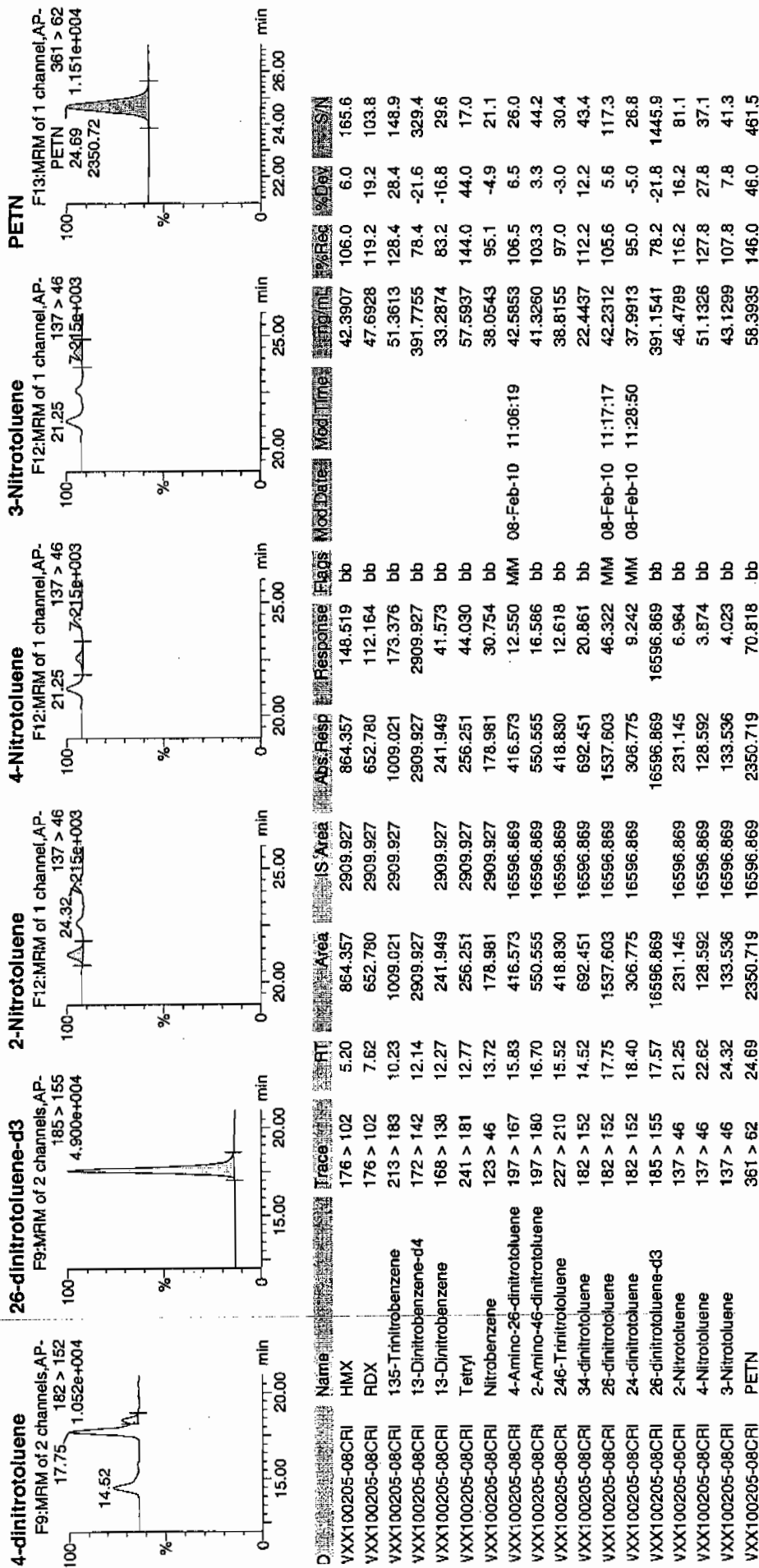
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Page 1315 of 1610



Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New Exp.\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 02/06/10
 Time of Injection 0802
 Standard Number WXX100205-08CRI
 Data File EXP0203134a

HMX	106.0
RDX	119.2
135-TNB	128.4
13-DNB	83.2
Tetryl	144.0
Nitrobenzene	95.1
4A-26-DNT	106.5
2A-46-DNT	103.3
246-TNT	97.0
34-DNT(surr)	112.2
26-DNT	105.6
24-DNT	95.0
2-NT	116.2
4-NT	127.8
3-NT	107.8
PETN	146.0

*WTF
2/8/10*

Total 1793.3

Average 112.1

Home as per 110
 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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01290013.wiff

Analysis Date: 29-JAN-10 13:13

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	95.9	96	
2,6-Diamino-4-nitrotoluene	100	107	107	
3,4-Dinitrotoluene	50	52.3	105	
3,5-Dinitroaniline	100	107	107	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	101	101	

Recovery Limits:

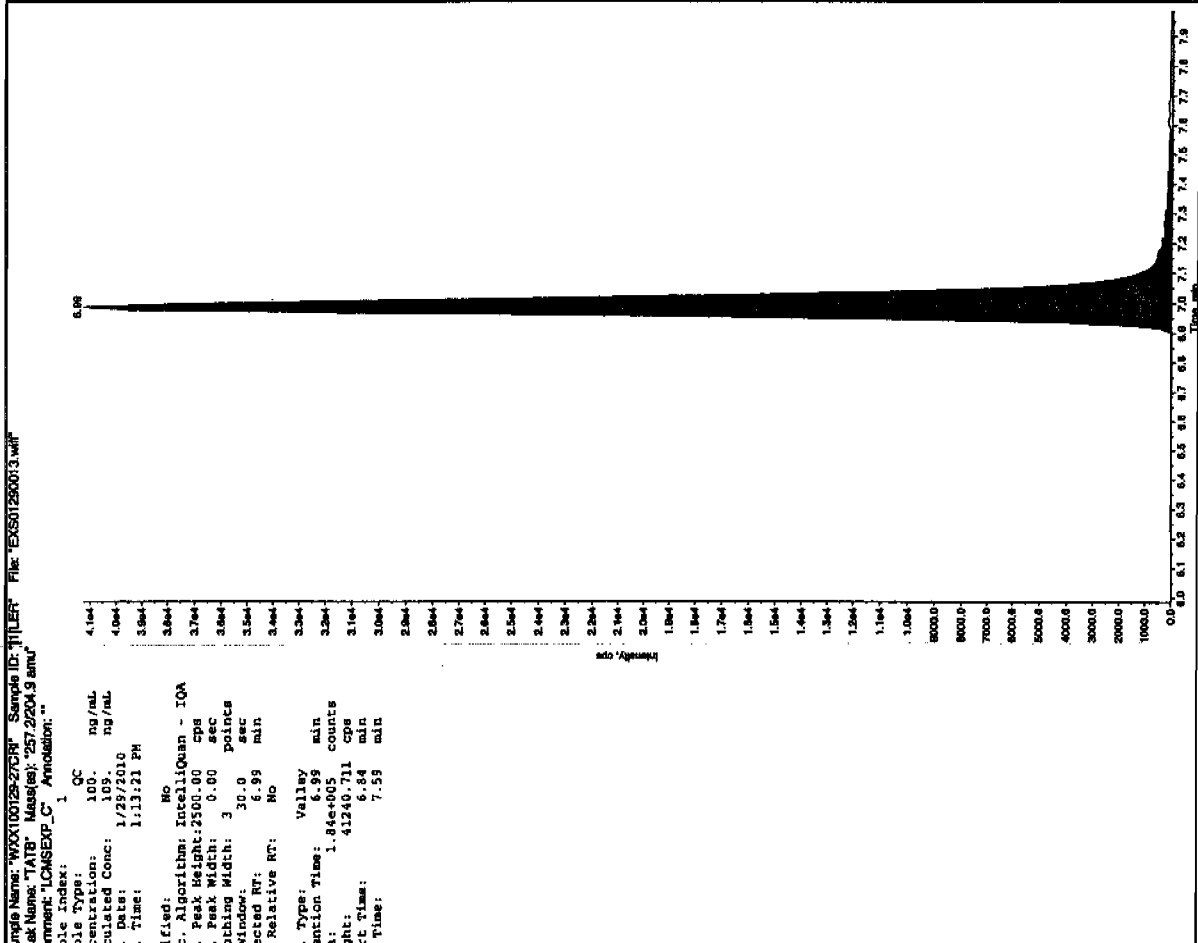
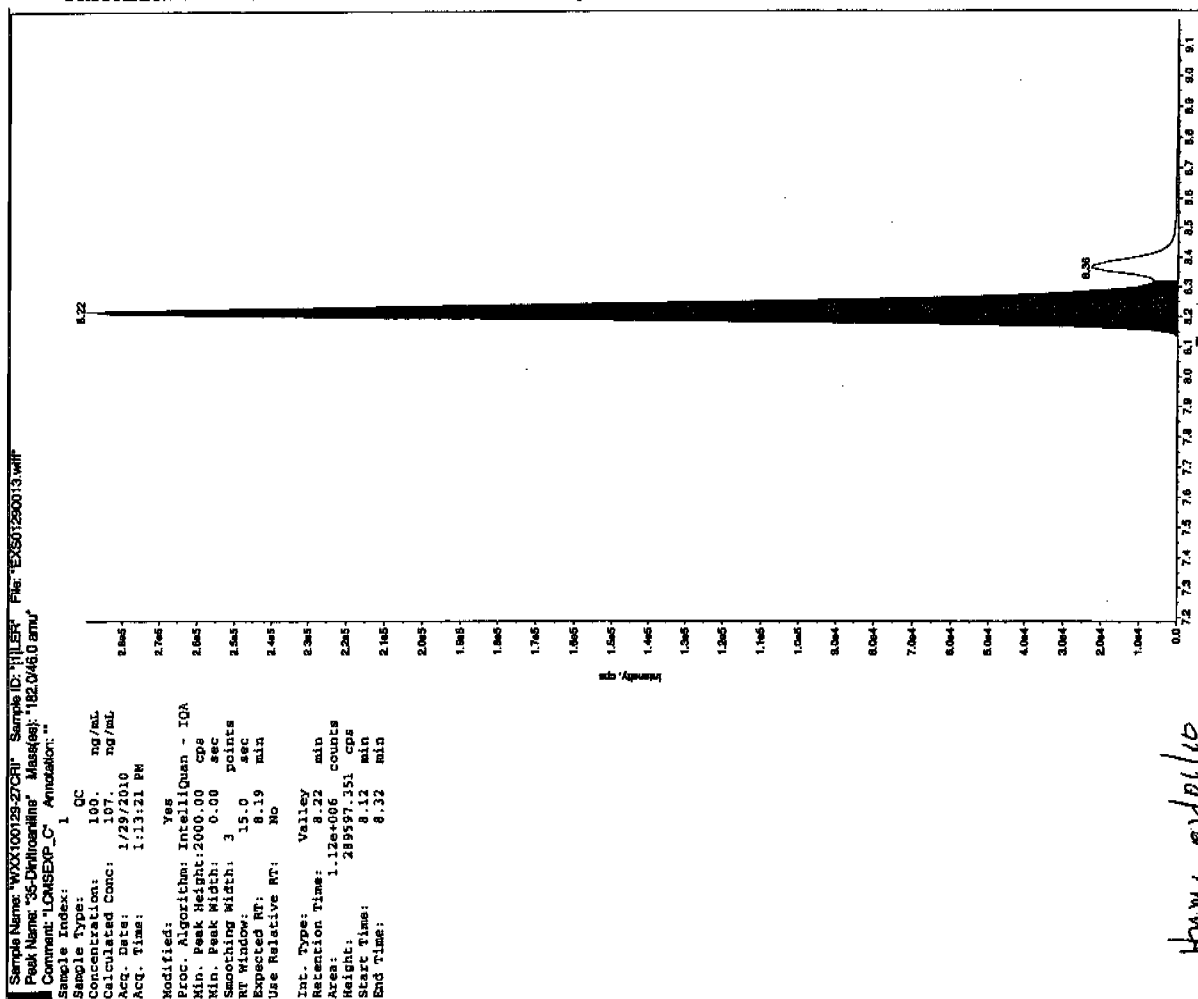
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

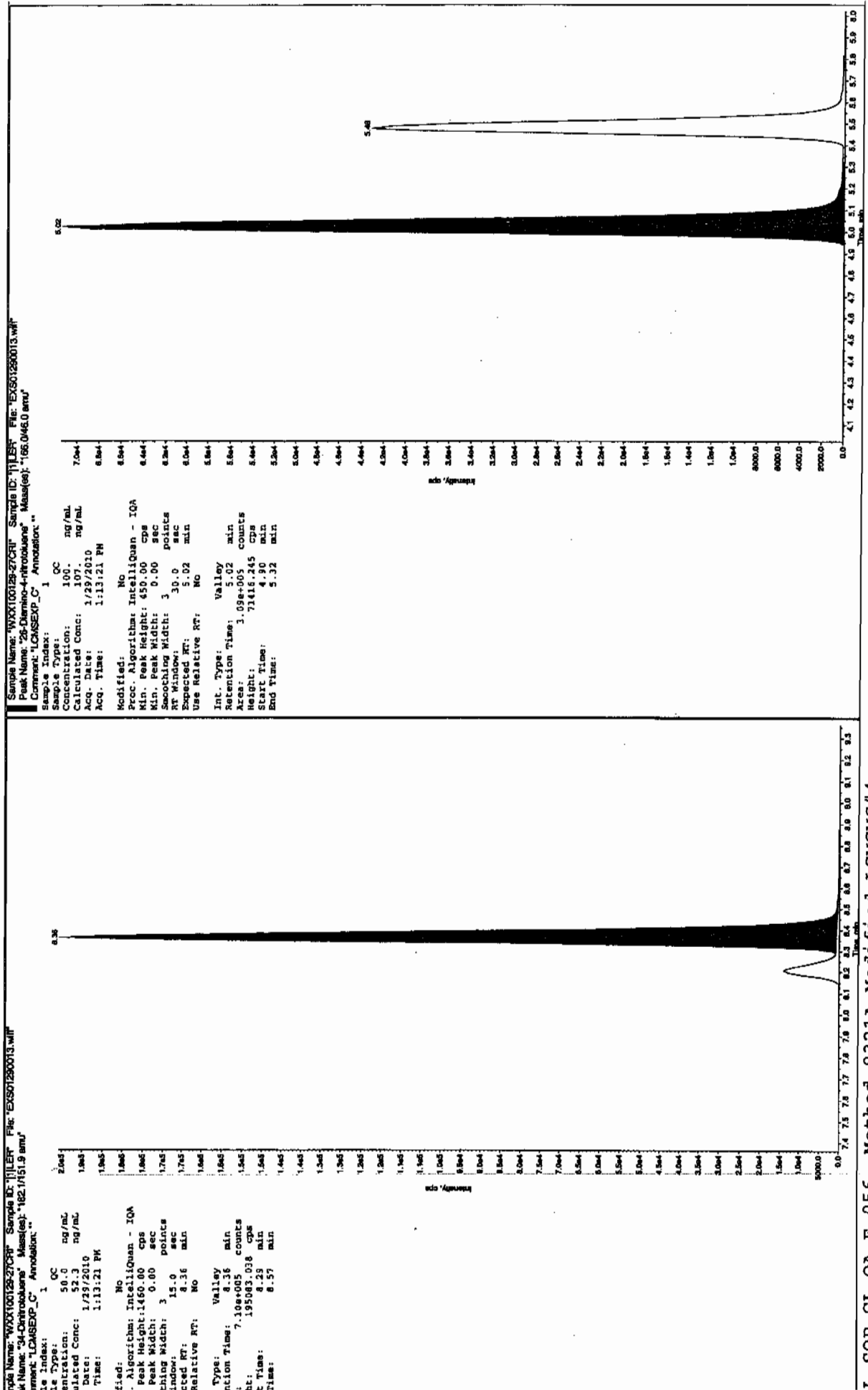
Column used to flag Recovery outside of Limits

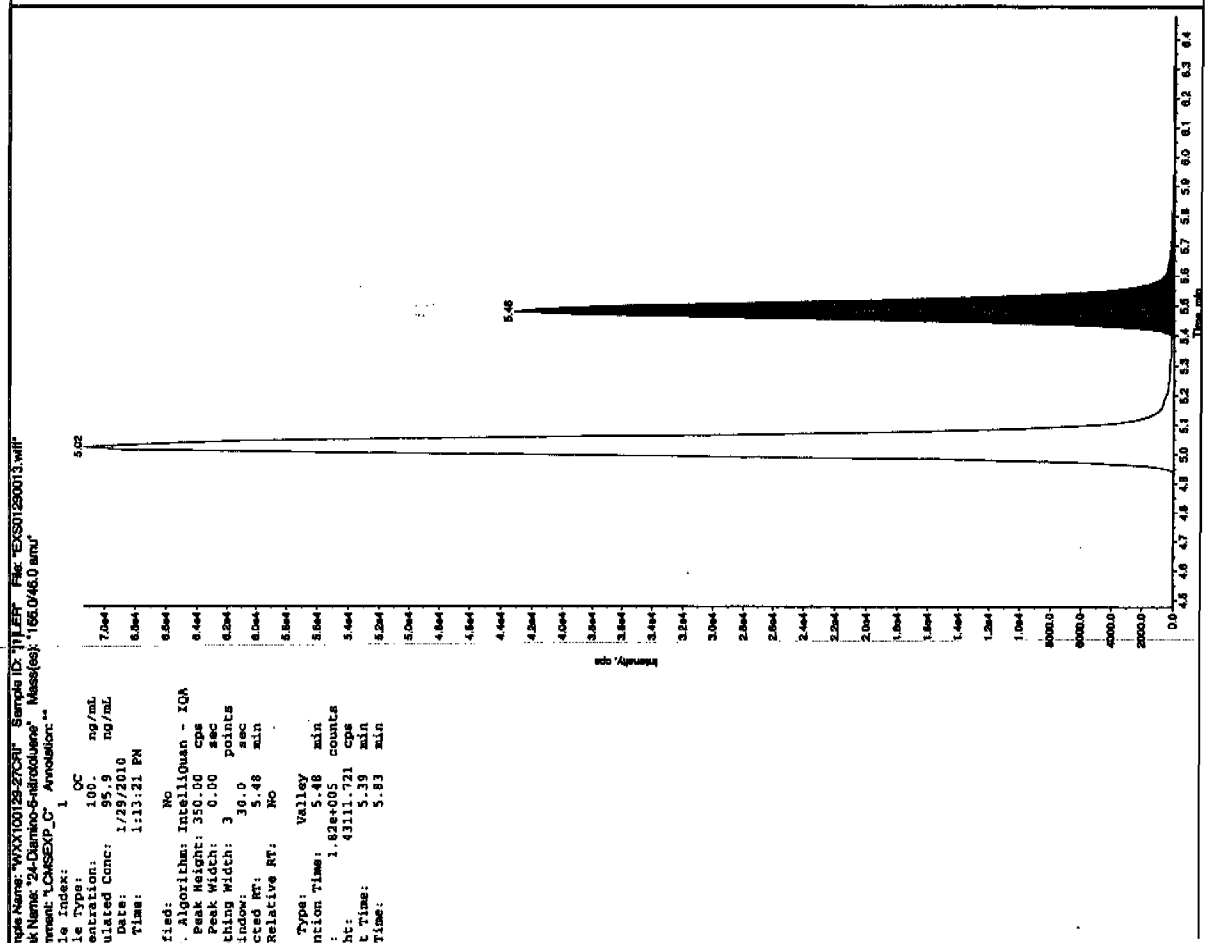
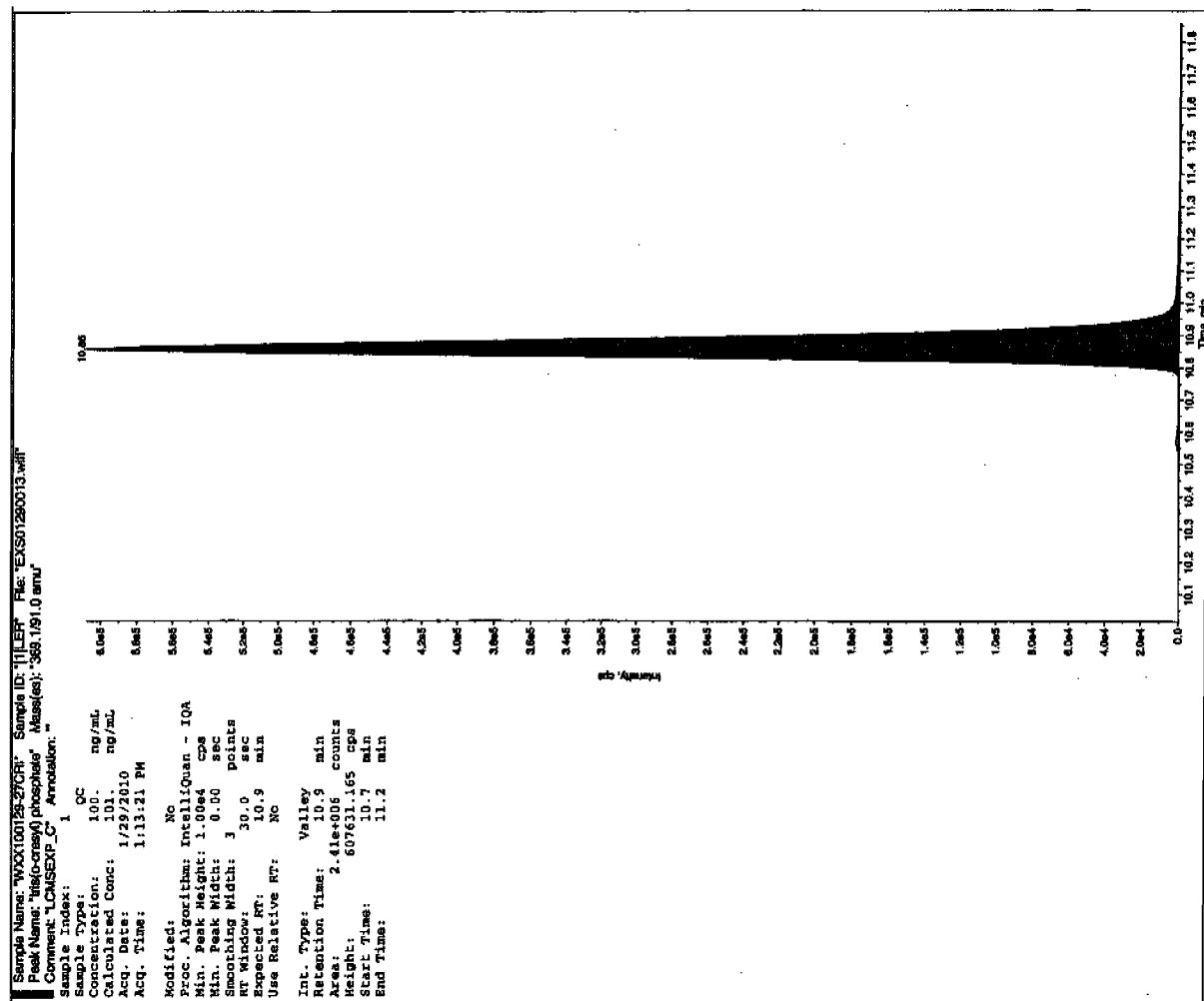
* Value outside of Recovery Limits

Dec 21/10



How exdellio





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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01290024.wiff

Analysis Date: 29-JAN-10 16:06

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	442	89	
2,6-Diamino-4-nitrotoluene	500	422	84	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	499	100	
TATB	500	507	101	
tris(o-cresyl) phosphate	500	502	100	

Recovery Limits:

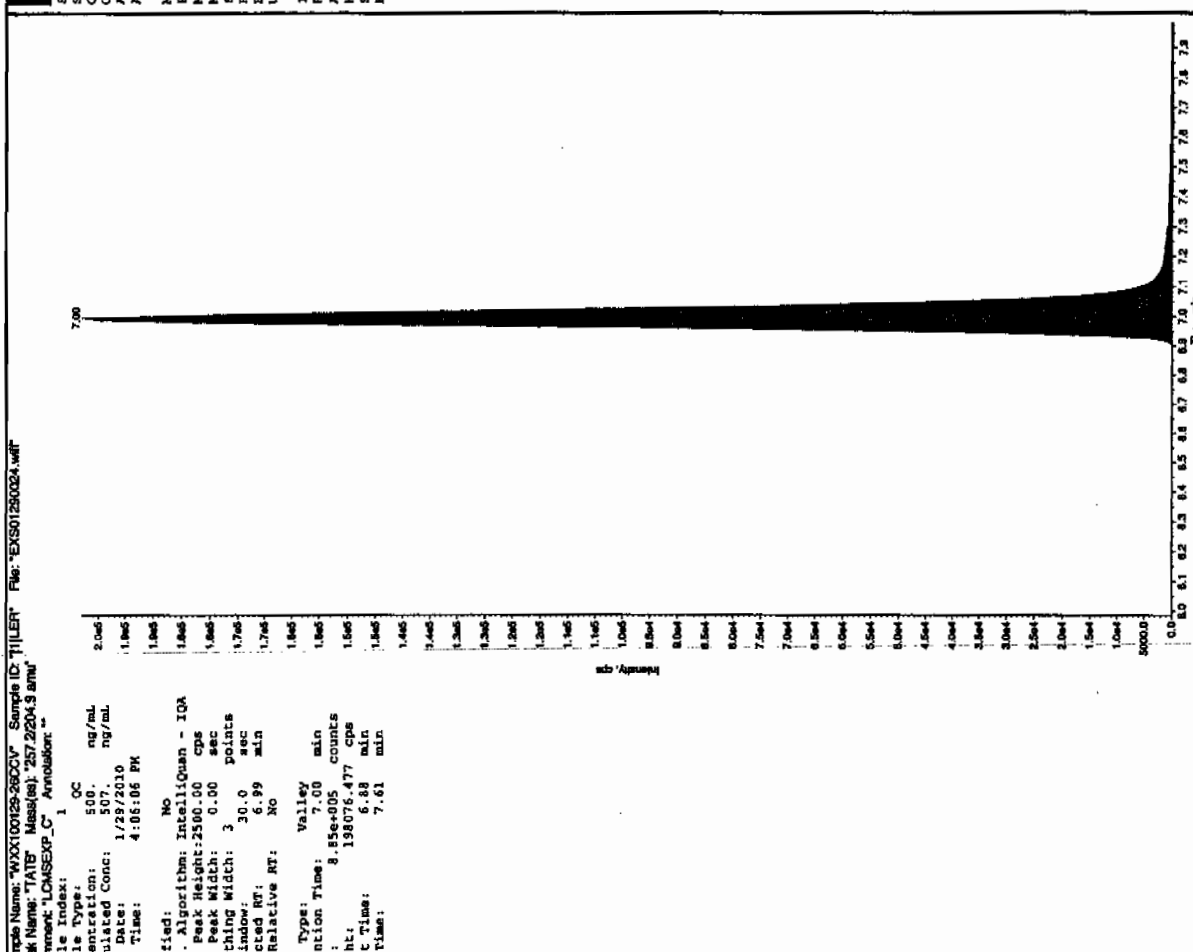
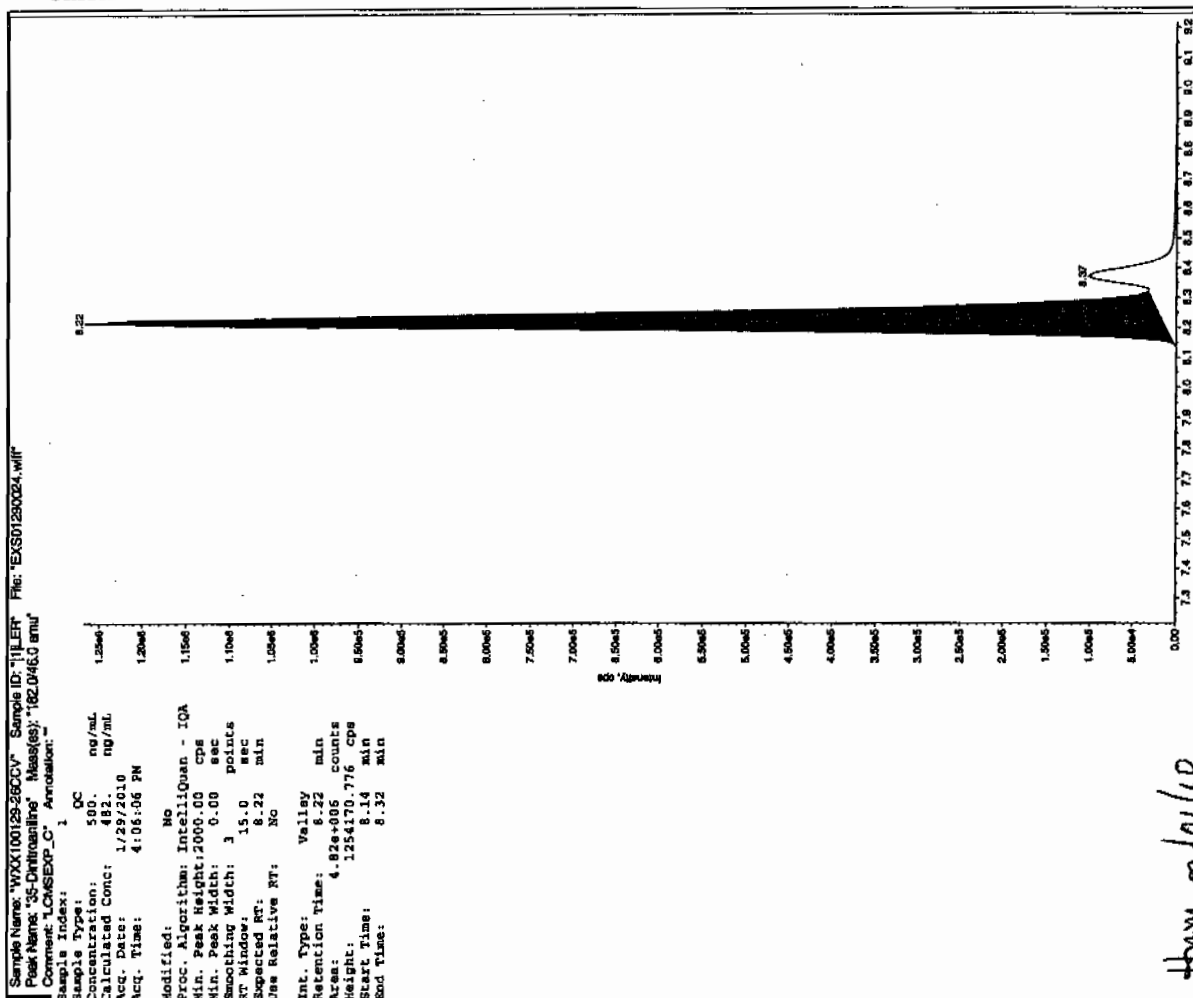
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

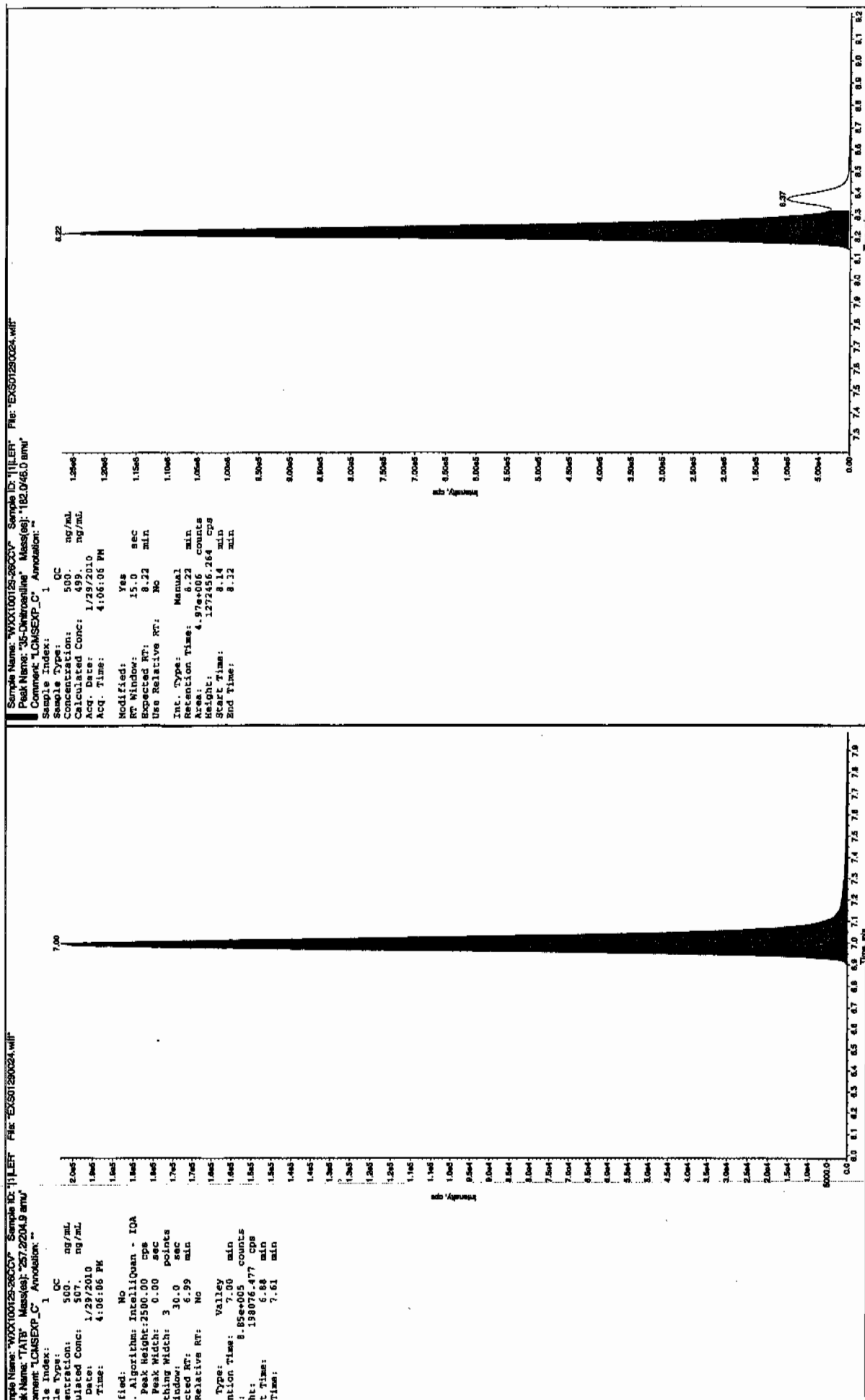
* Value outside of Recovery Limits

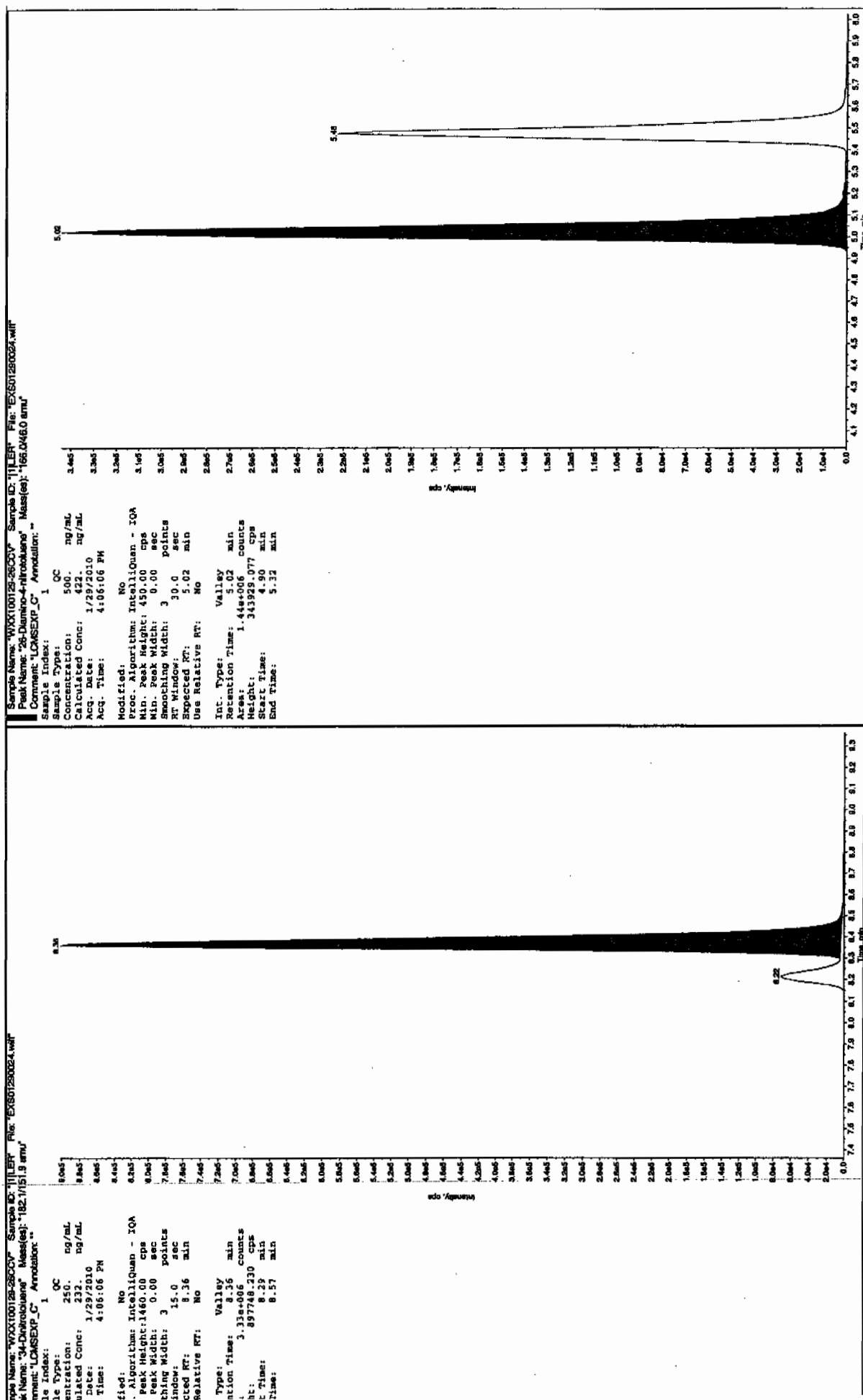
Before Jan 21/10



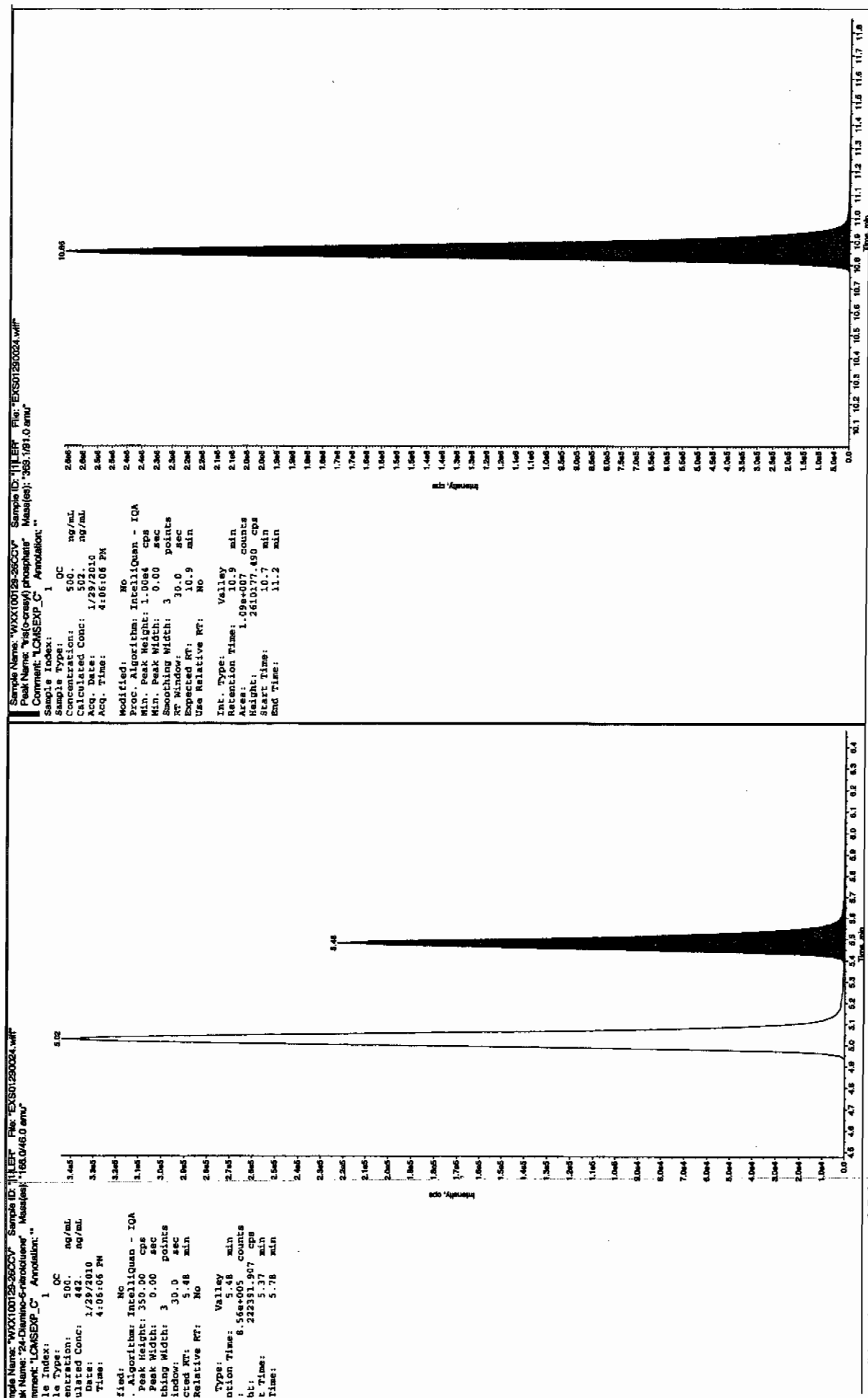
Handwritten signature/initials

after Jan 21/10





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): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01290026.wiff

Analysis Date: 29-JAN-10 16:37

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	91.6	92	
2,6-Diamino-4-nitrotoluene	100	98	98	
3,4-Dinitrotoluene	50	50.8	102	
3,5-Dinitroaniline	100	106	106	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	102	102	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

for 2/1/10

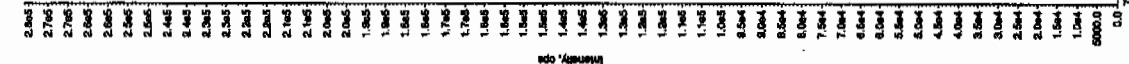
Sample Name: "WXX100125-2709" Sample ID: "111EF" File: "EXS01260026.wif"
 Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

File Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 106. ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 4:37:29 PM
 Modified: Yes
 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: 6.99 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.99 min
 Area: 1.87e+005 counts
 Height: 41393.585 cps
 Start Time: 6.88 min
 End Time: 7.38 min



Sample Name: "WXX100125-2709" Sample ID: "111EF" File: "EXS01260026.wif"
 Peak Name: "3S-Dibenzodioxine" Mass(es): "182.0/46.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

File Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 106. ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 4:37:29 PM
 Modified: Yes
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 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: 8.22 min
 Area: 1.11e+006 counts
 Height: 276213.165 cps
 Start Time: 8.11 min
 End Time: 8.32 min

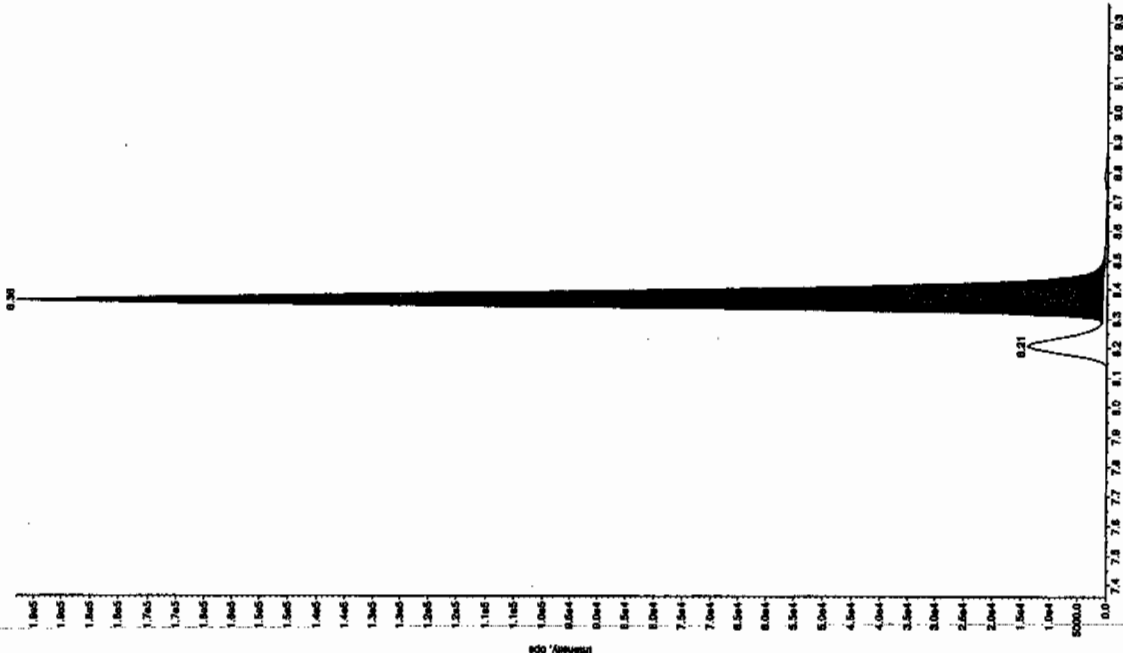


for 2/1/10

Sample Name: "WXX100128-27C" Sample ID: "1111" File: "EXS0128028.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1519 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Le Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 50.8 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 4:37:29 PM

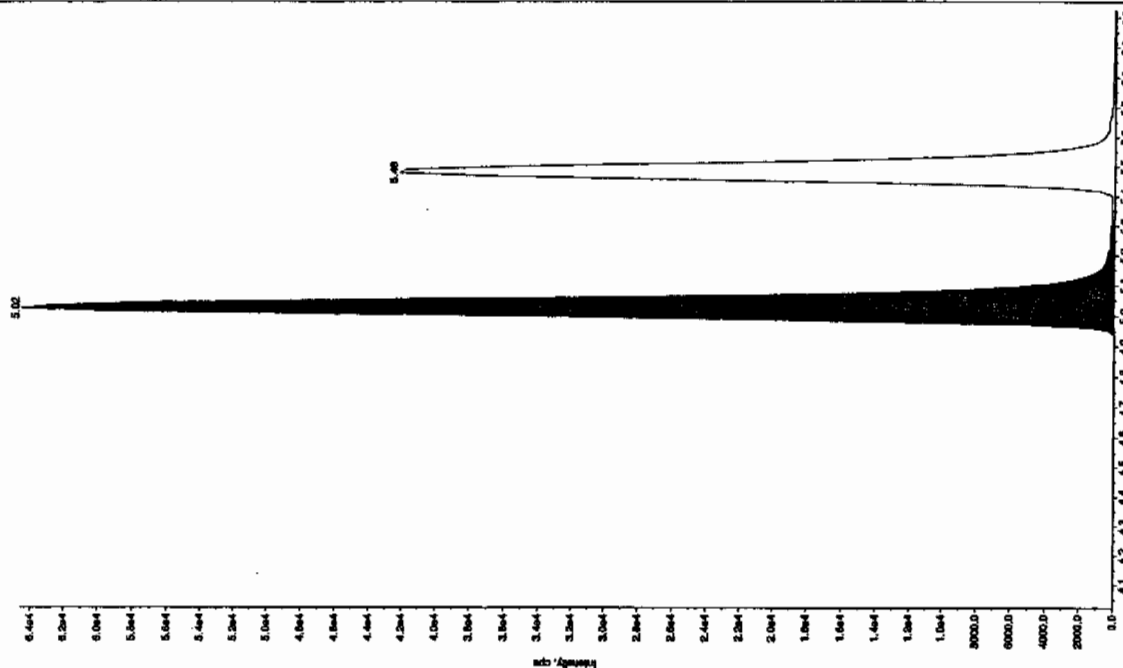
Method: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.36 min
 Area: 6.87e+005 counts
 Height: 192460.222 cps
 Start Time: 8.29 min
 End Time: 8.56 min

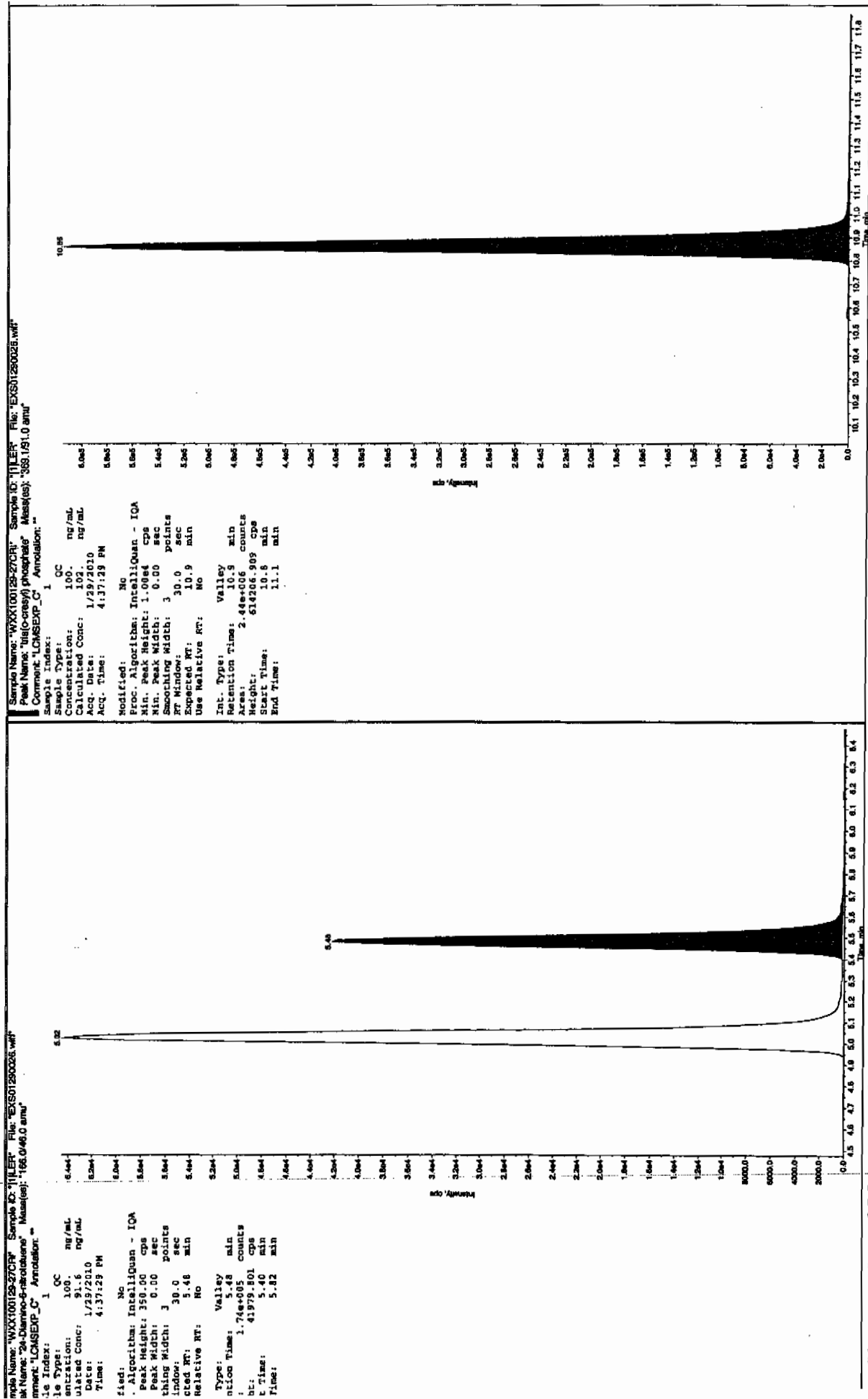


Sample Name: "WXX100128-27C" Sample ID: "1111" File: "EXS0128028.wif"
 Peak Name: "26-Dinitro-4-nitrofluorene" Mass(es): "166.0460 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 98.0 ng/mL
 Acq. Date: 1/29/2010
 Acq. Time: 4:37:29 PM

Method: 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: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 2.77e+005 counts
 Height: 64533.661 cps
 Start Time: 4.91 min
 End Time: 5.32 min





J SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01290034.wiff

Analysis Date: 29-JAN-10 18:43

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	421	84	
2,6-Diamino-4-nitrotoluene	500	407	81	
3,4-Dinitrotoluene	250	239	96	
3,5-Dinitroaniline	500	498	100	
TATB	500	530	106	
tris(o-cresyl) phosphate	500	518	104	

Recovery Limits:

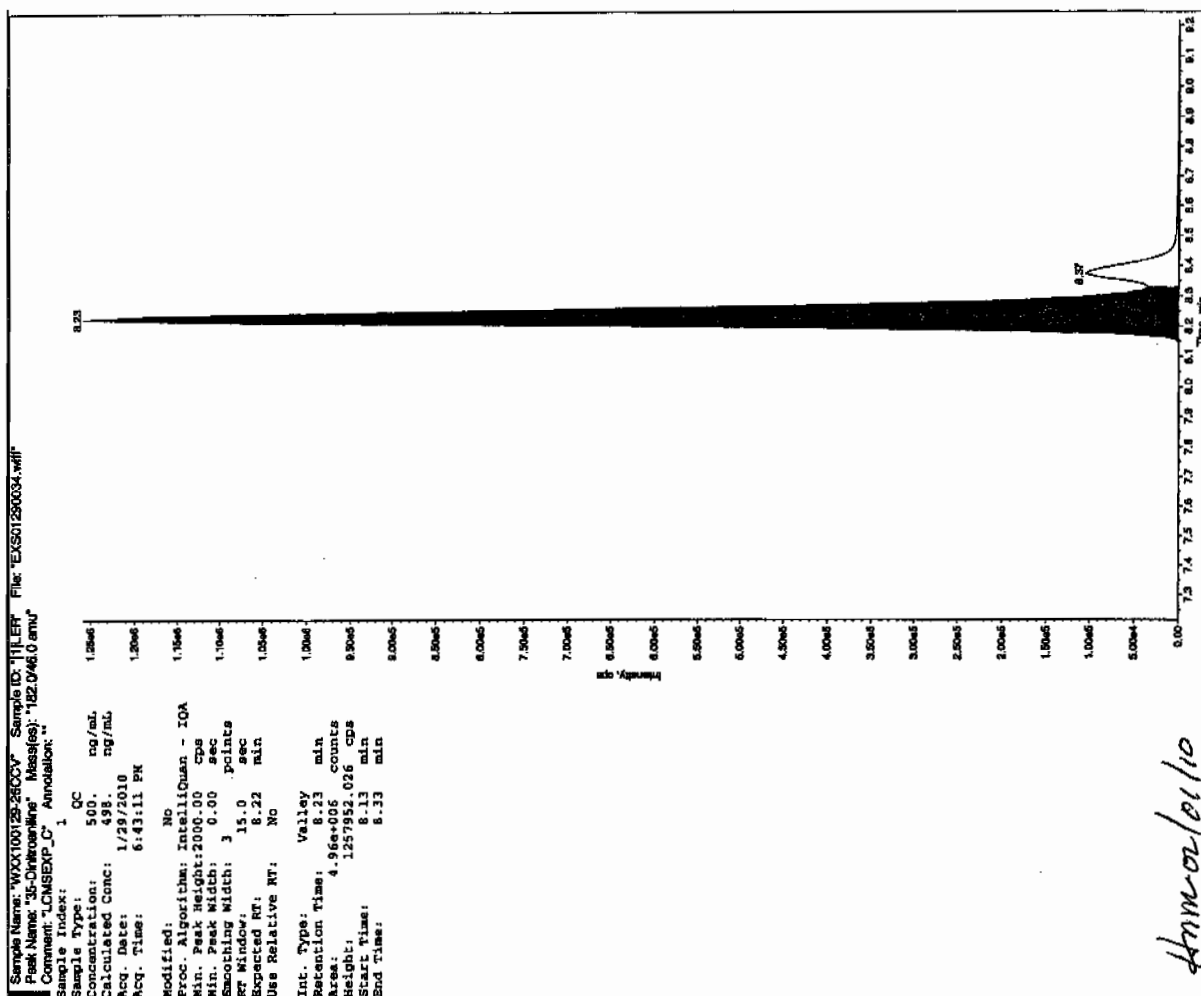
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

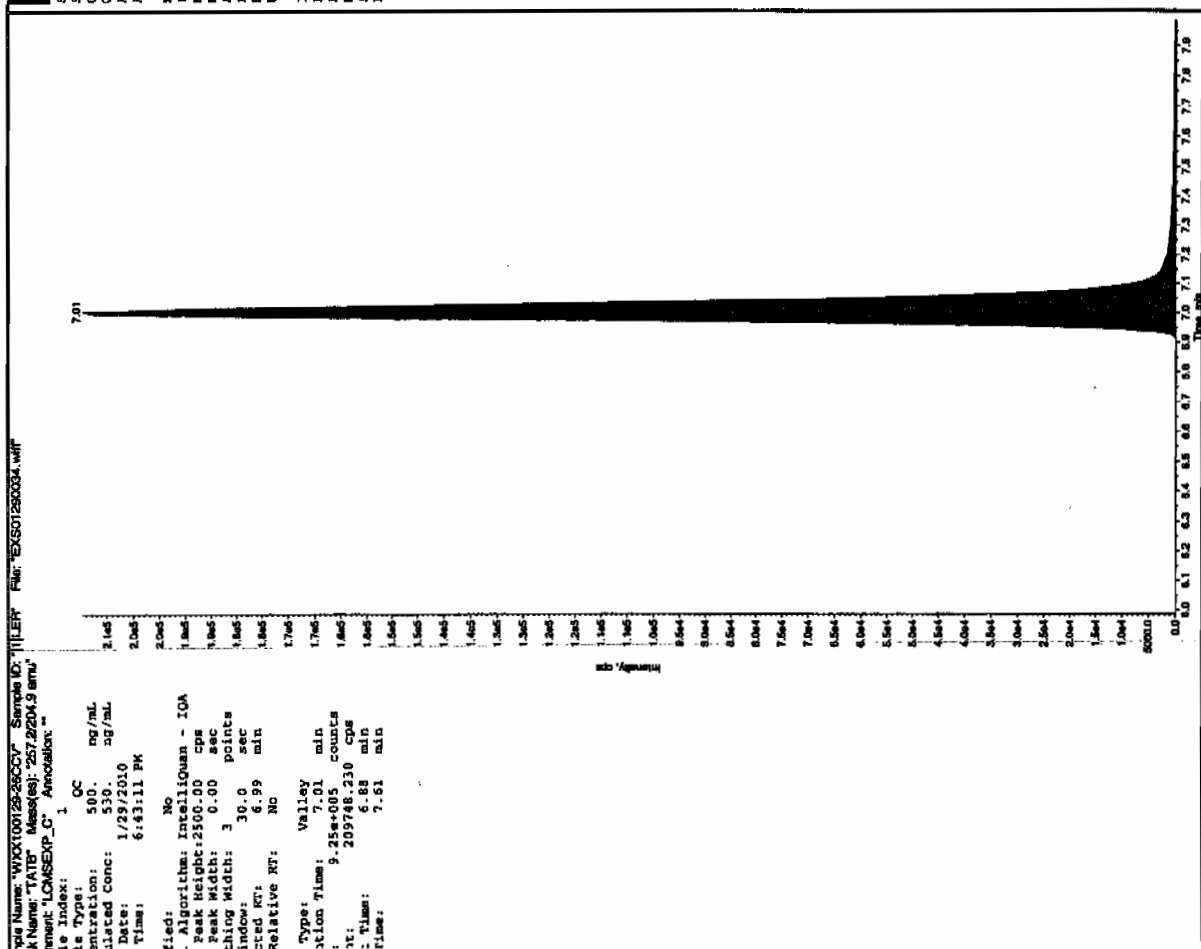
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

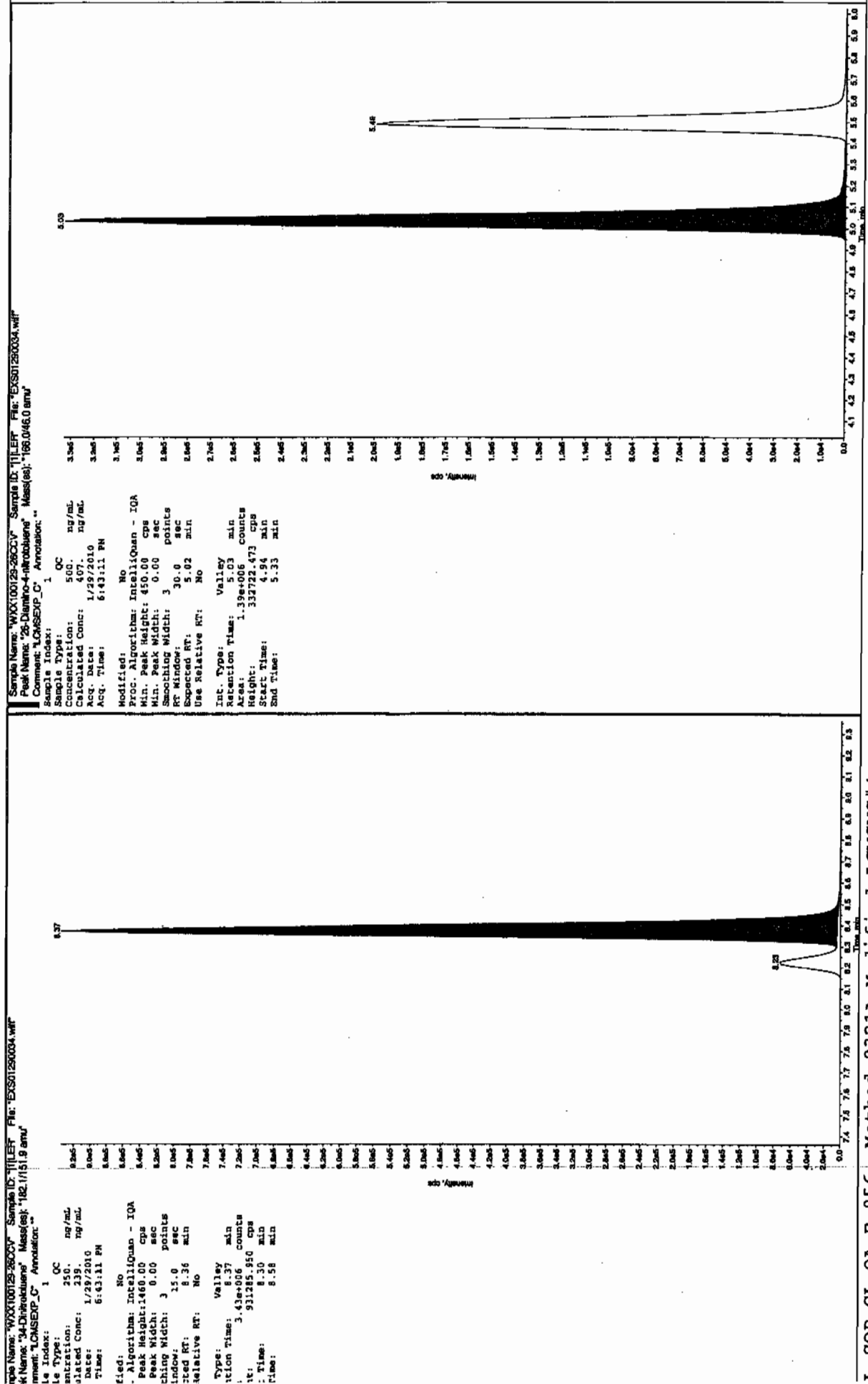
Scan 2/1/10



Amended 2/1/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSEXP#4



Sample Name	"WXX100129-26.CCV"	Sample ID	"11LEA"	File	"EXS01290034.wiff"
Peak Name	"tris(c-crestyl) phosphatite"	Mass(es)	"369.1791.0 amu"		

Peak Name: "tris(o-cresyl) phosphole" Mass(es): "369.1/81.0 amu"

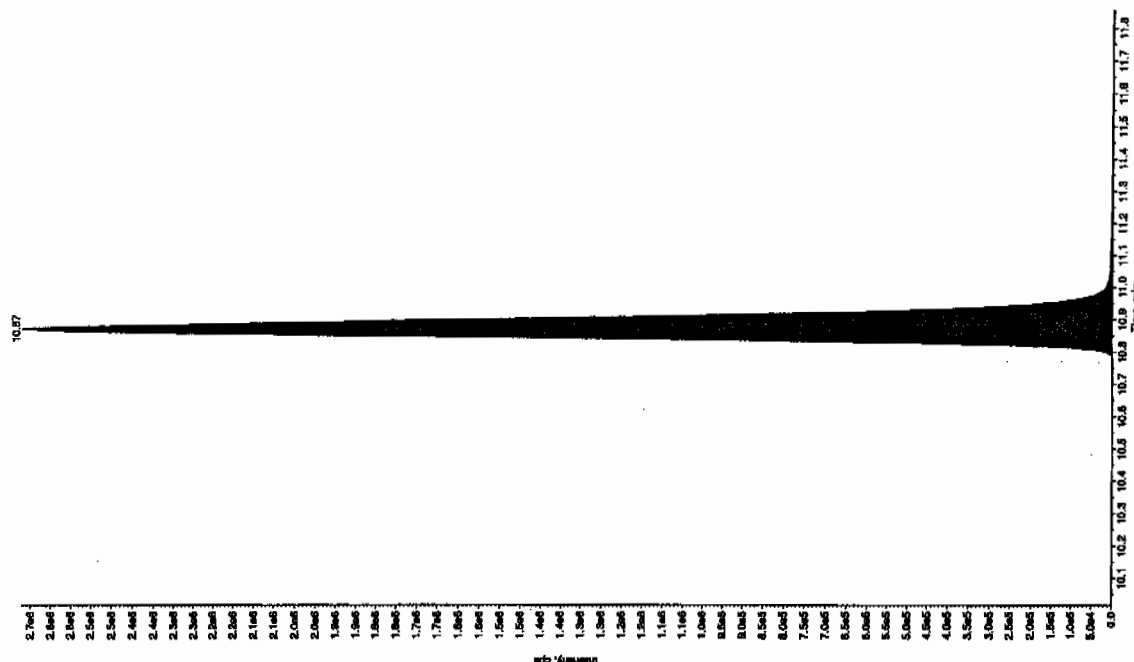
```

Sample Index: 1
Sample Type: OC
Sample Type: No. 508
Sample Type: 100/mL
Sample Type: 100/mL
Calculated Conc: 518
Acq. Date: 1/23/2010
Acq. Time: 6:43:11 PM
Annotation: **

Modified: No
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 1.00e4 cps
Min. Peak Width: 0.00 sec
Min. Peak Width: 3.00 sec
Peak Window: 30.0 sec
Expected RT: 10.9 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 10.9 min
Height: 1.12e+08 counts
Area: 2671940.08
Start Time: 10.8 min
End Time: 11.2 min

```



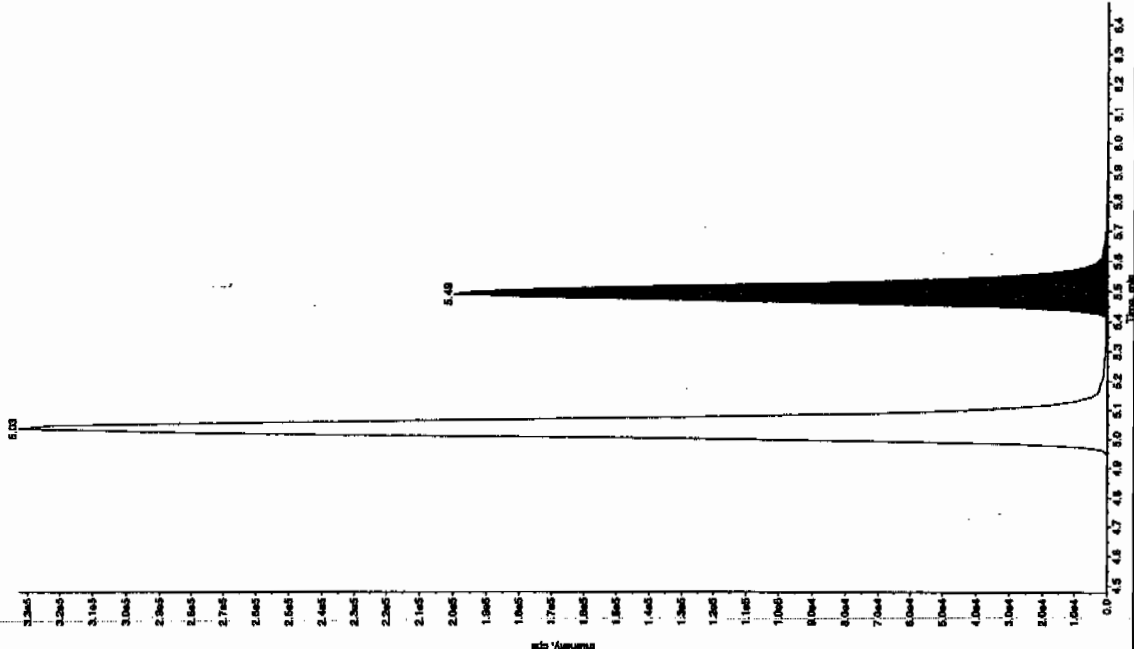
Sample Name: "WXX100129-260CV" Sample ID: "11LER" File: "EXS01290034.wiff"
Name: "24-Diamino-6-nitrotoluene" Mass(es): "168.0/46.0 amu"

Name: "2,4-Diamino-6-nitrophenol"
Molar mass: 168.14 g/mol

```

Name: LCMSEXP.C  Annotation:
Index: 1
OC:
Concentration: 500. ng/mL
Dilution: 421. ng/mL
Diluted Conc: 1/29/2010
Date: 6:43:11 PM
Method:
Algorithm: IntelliQuan - IGA
Peak Height: 350.00 cps
Peak Width: 3.00 points
Rising Width: 30.0 sec
Falling Width: 5.48 min
Ret RT: 5.48 min
Qualitative RT: No
Type: Valley
Run Time: 6.1567005 min
Injection Time: 1.98482.010 cps
Time: 5.38 min
Time: 4.96 min

```



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01290036.wiff

Analysis Date: 29-JAN-10 19:14

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	96.8	97	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	50.4	101	
3,5-Dinitroaniline	100	103	103	
TATB	100	113	113	
tris(o-cresyl) phosphate	100	106	106	

Recovery Limits:

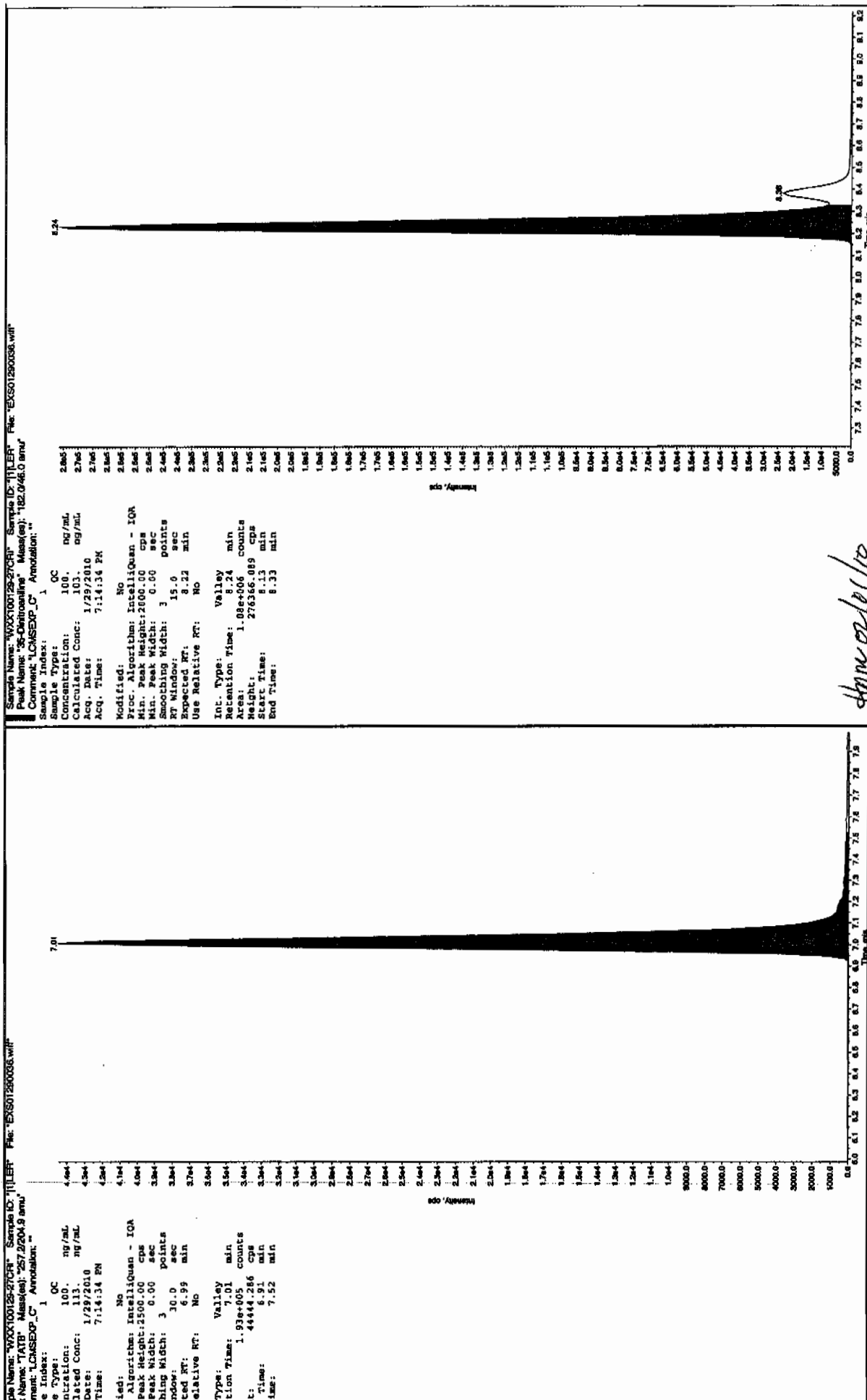
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

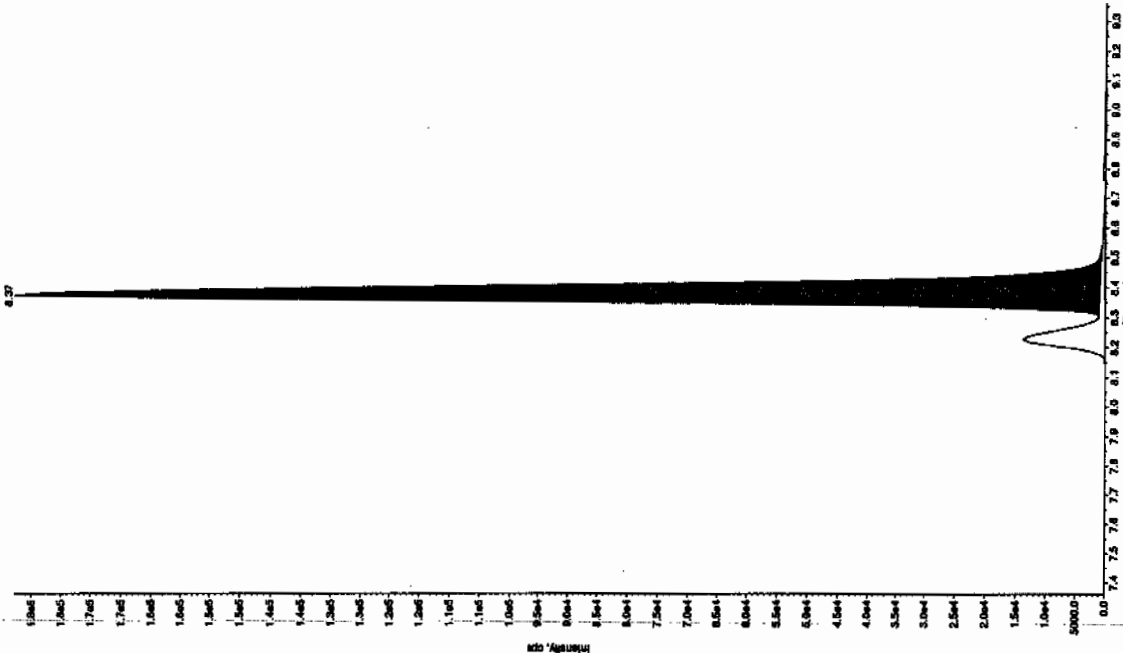
Low 21/10



Low 21/10

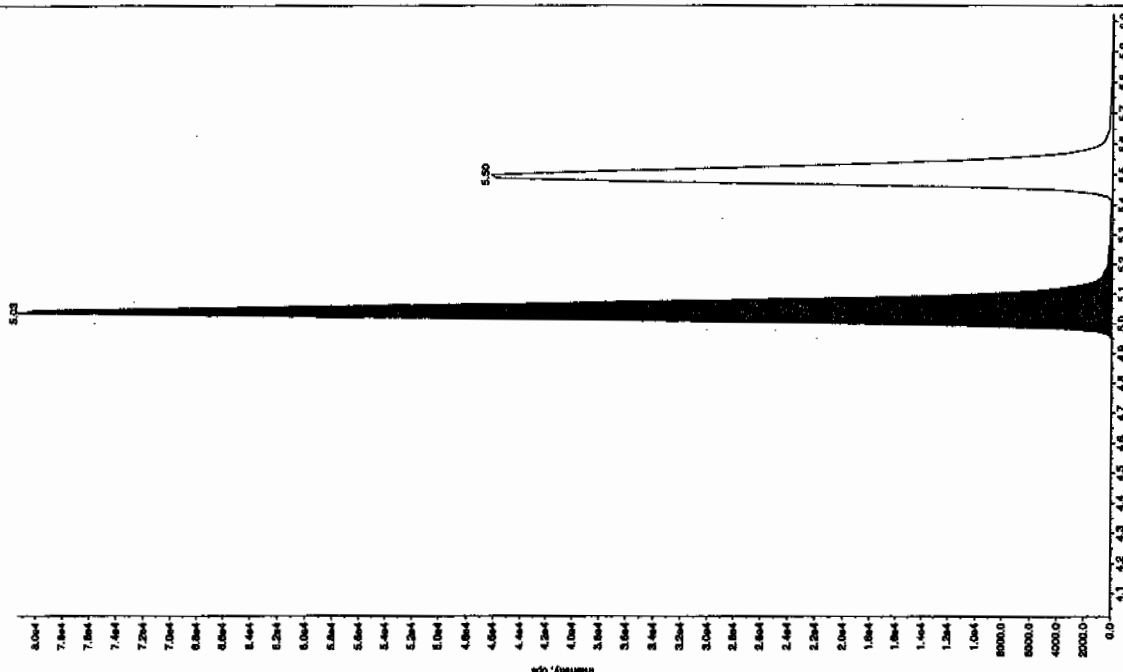
File Name: "WXX100129-2701" Sample ID: "TLER" File: "EX501290036.wif"
 Name: "34-Dienrino-4-hydrodrene" Mass(es): "162.151.9 amu"
 Method: "LCMS-EXP_C" Annotation: ""

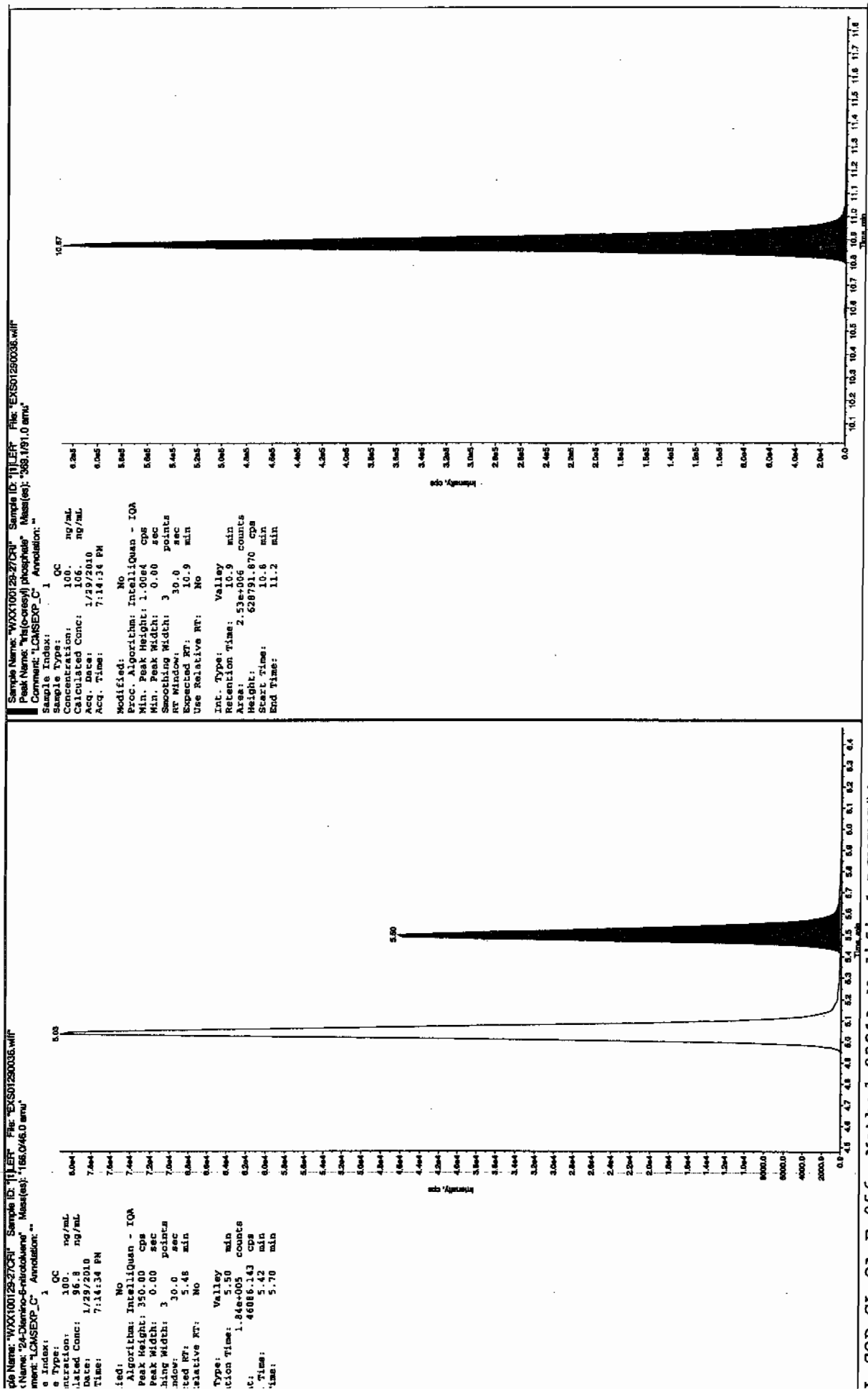
Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Concentrated Conc: 50.4 ng/mL
 Date: 1/29/2010
 Time: 7:14:34 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.36 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 6.80e+003 counts
 Height: 18280.246 cps
 Start Time: 8.30 min
 End Time: 8.56 min



Sample Name: "WXX100129-2701" Sample ID: "TLER" File: "EX501290036.wif"
 Peak Name: "26-Dienrino-4-hydrodrene" Mass(es): "166.046.0 amu"
 Method: "LCMS-EXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Concentrated Conc: 100. ng/mL
 Date: 1/29/2010
 Time: 7:14:34 PM
 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: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.03 min
 Area: 3.20e+005 counts
 Height: 81297.287 cps
 Start Time: 4.92 min
 End Time: 5.29 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): 10-1301

Lab Code: GEI

GEL Sample ID: WXXCCV

GEL Data File EXS01290042.wiff

Analysis Date: 29-JAN-10 20:48

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	426	85	
2,6-Diamino-4-nitrotoluene	500	443	89	
3,4-Dinitrotoluene	250	234	93	
3,5-Dinitroaniline	500	497	100	
TATB	500	537	107	
tris(o-cresyl) phosphate	500	524	105	

Recovery Limits:

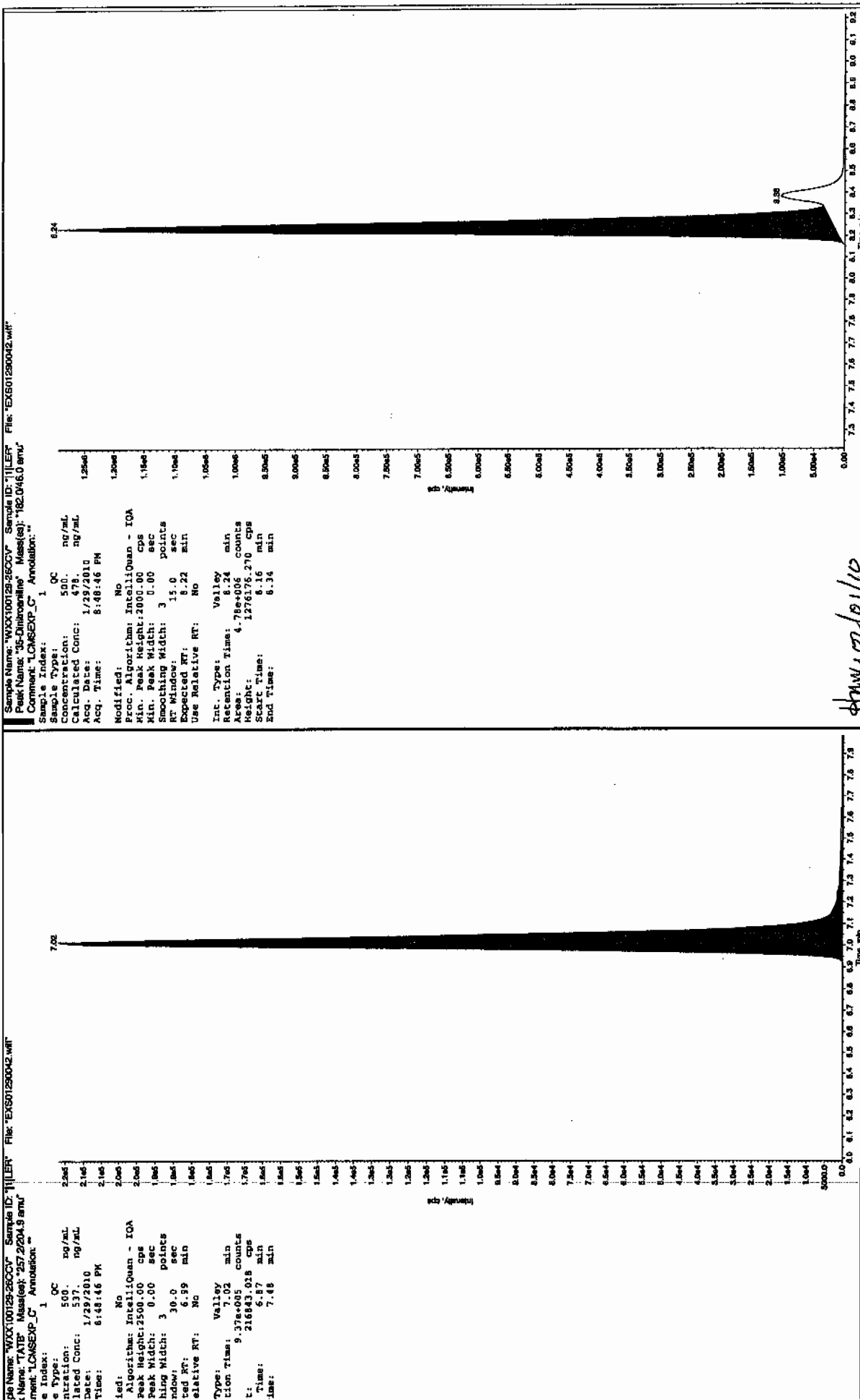
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

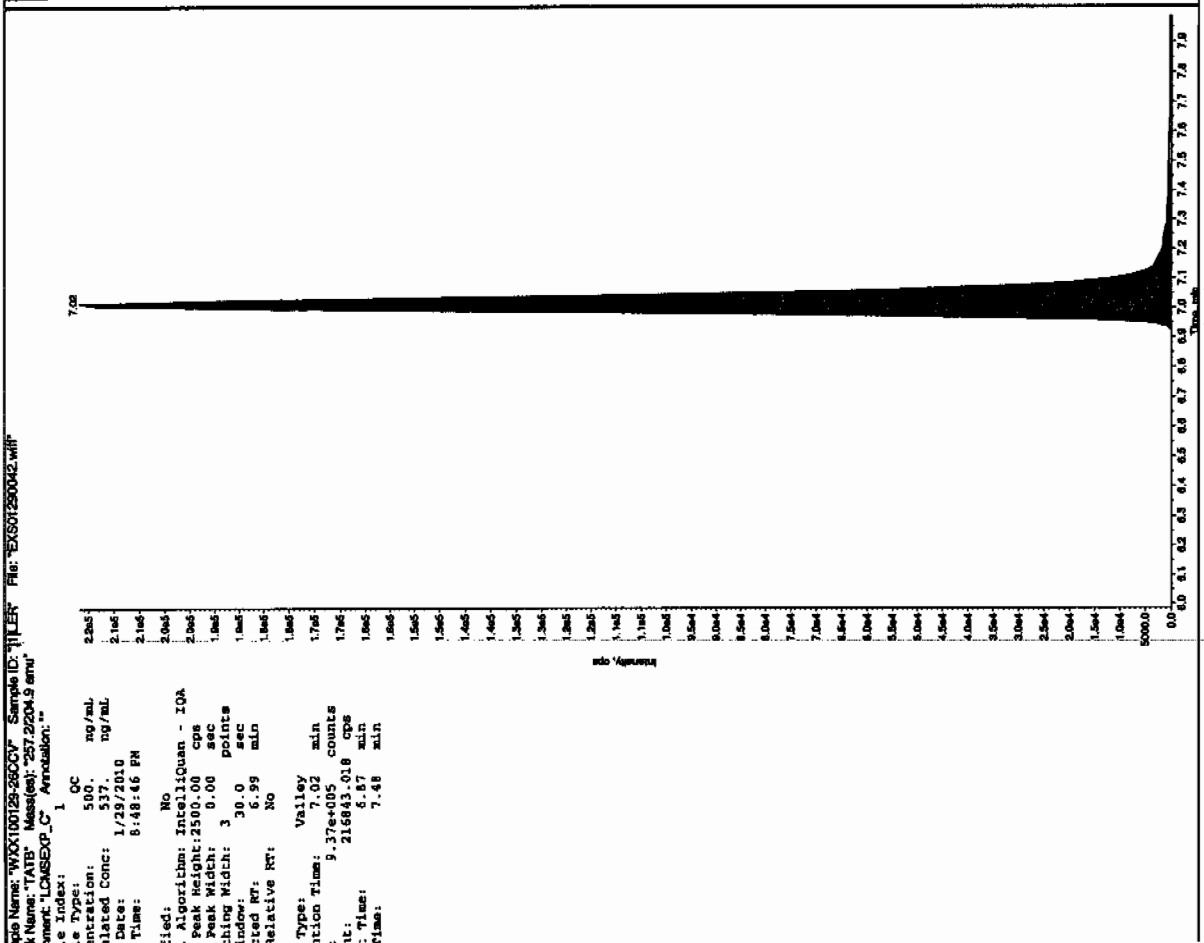
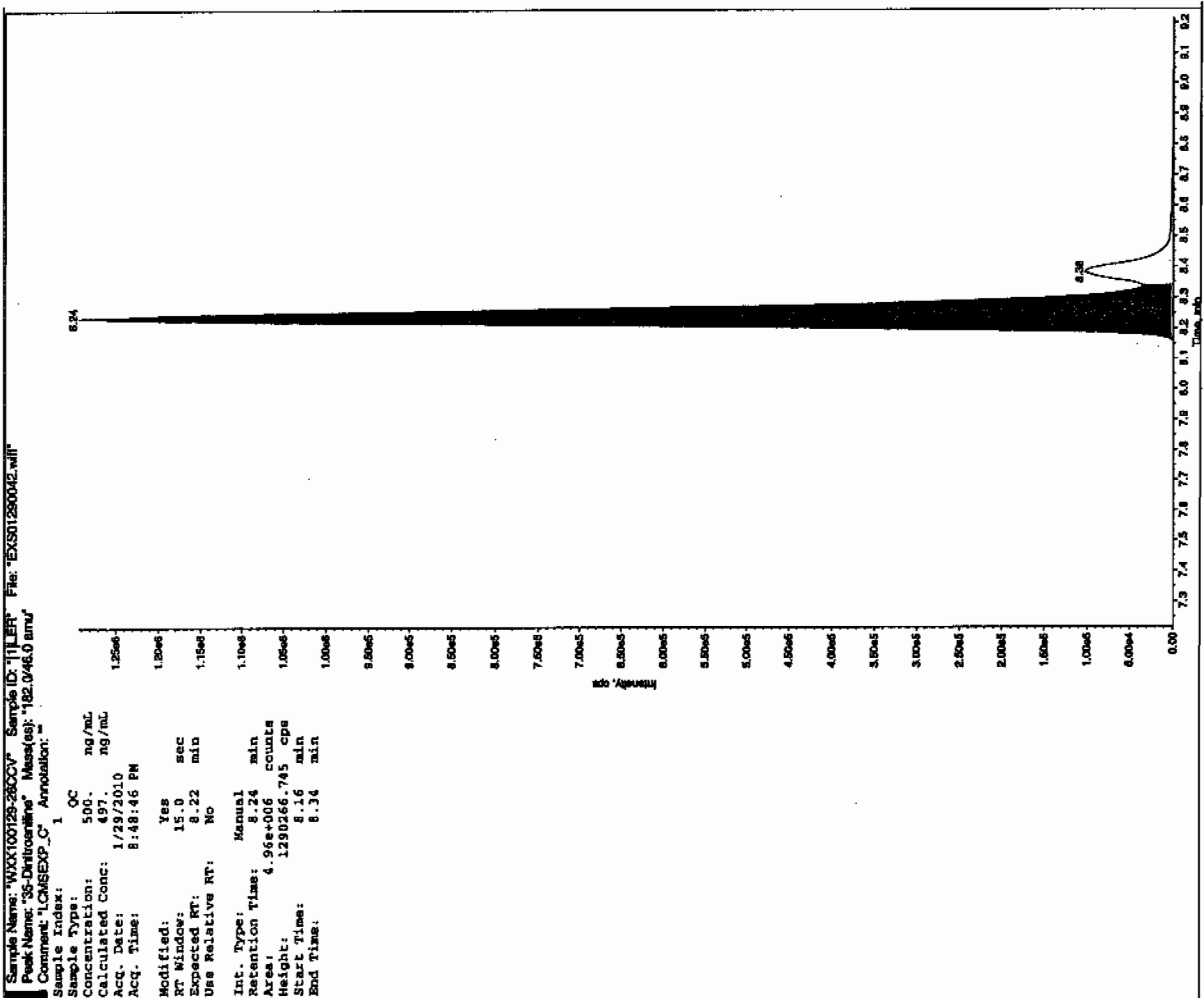
* Value outside of Recovery Limits

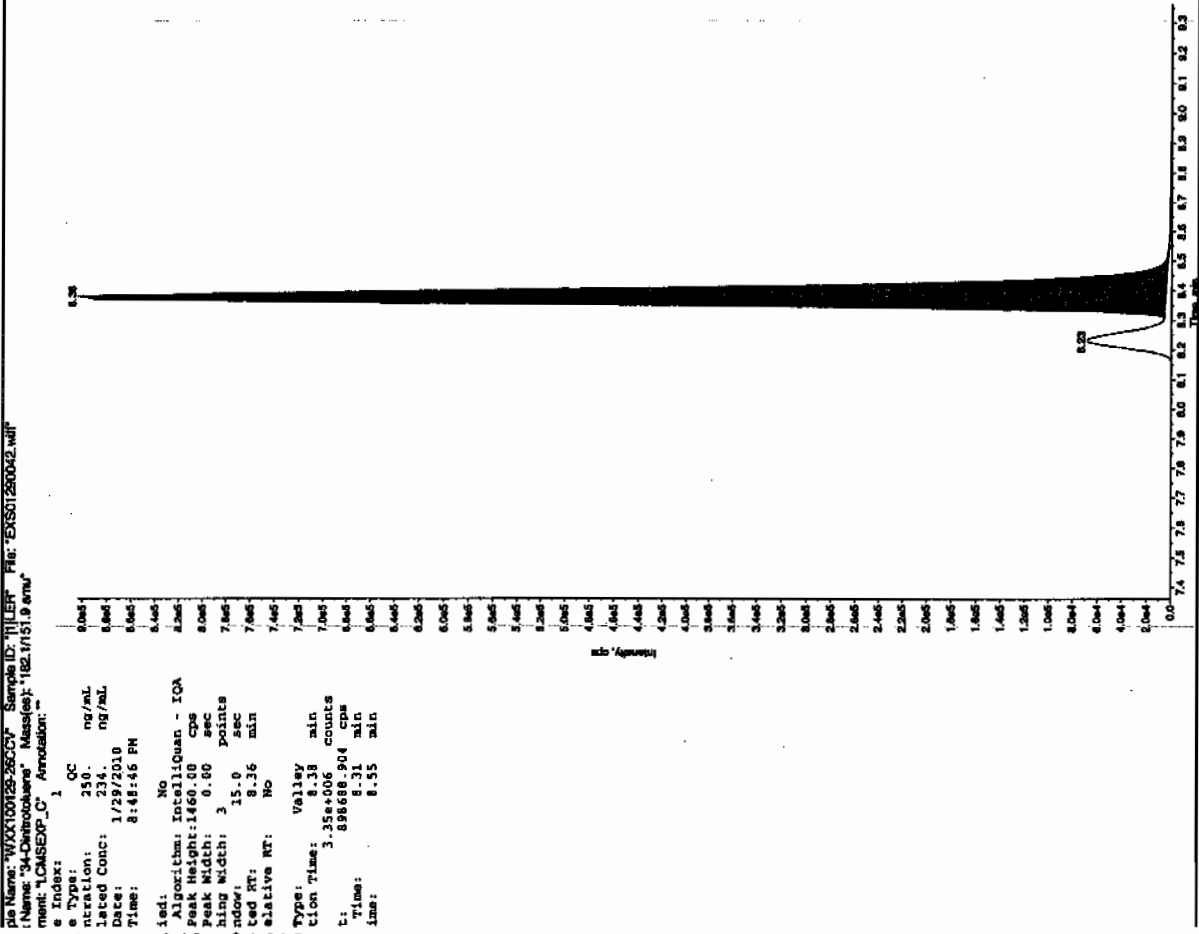
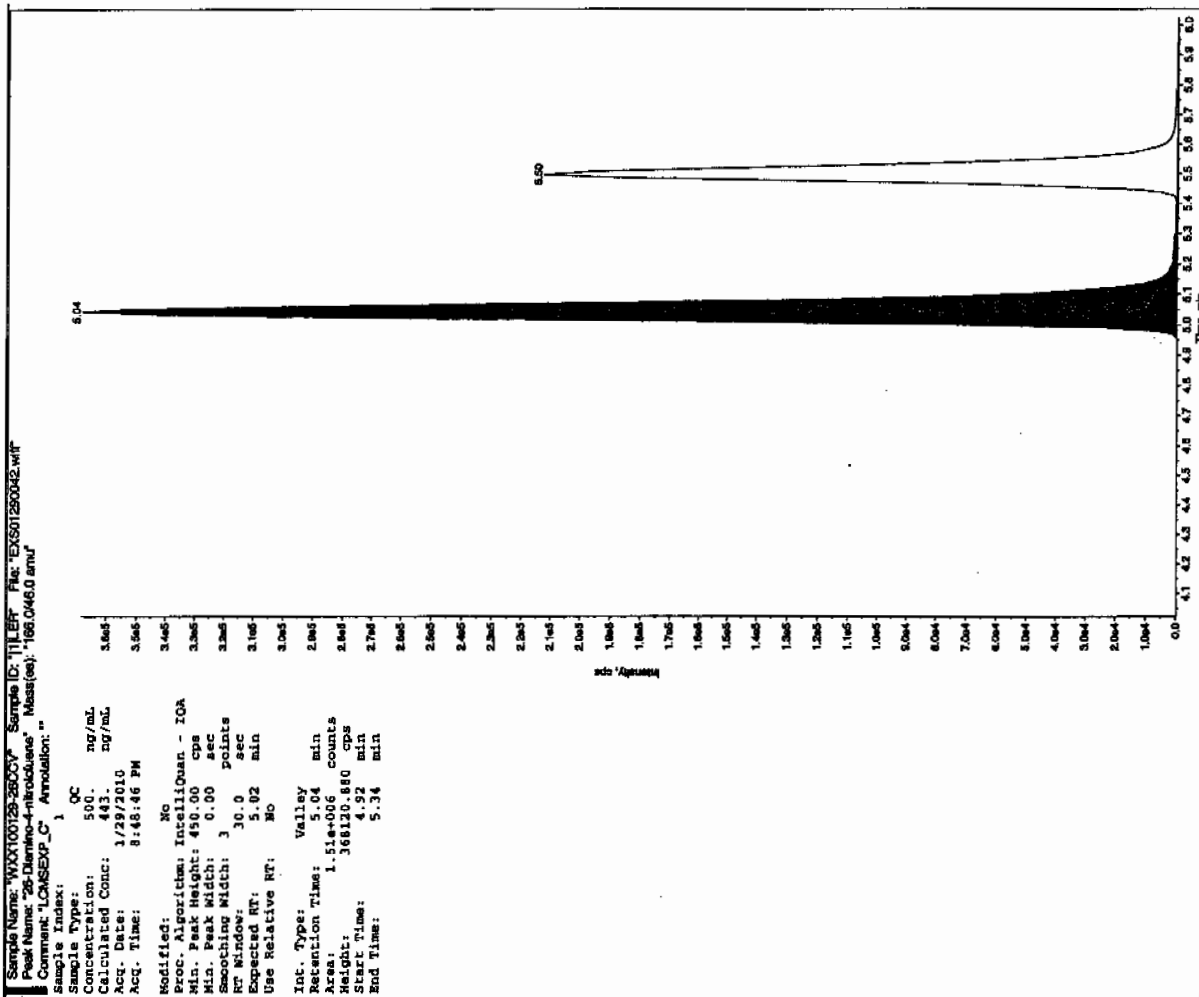
Before Jan 24/10

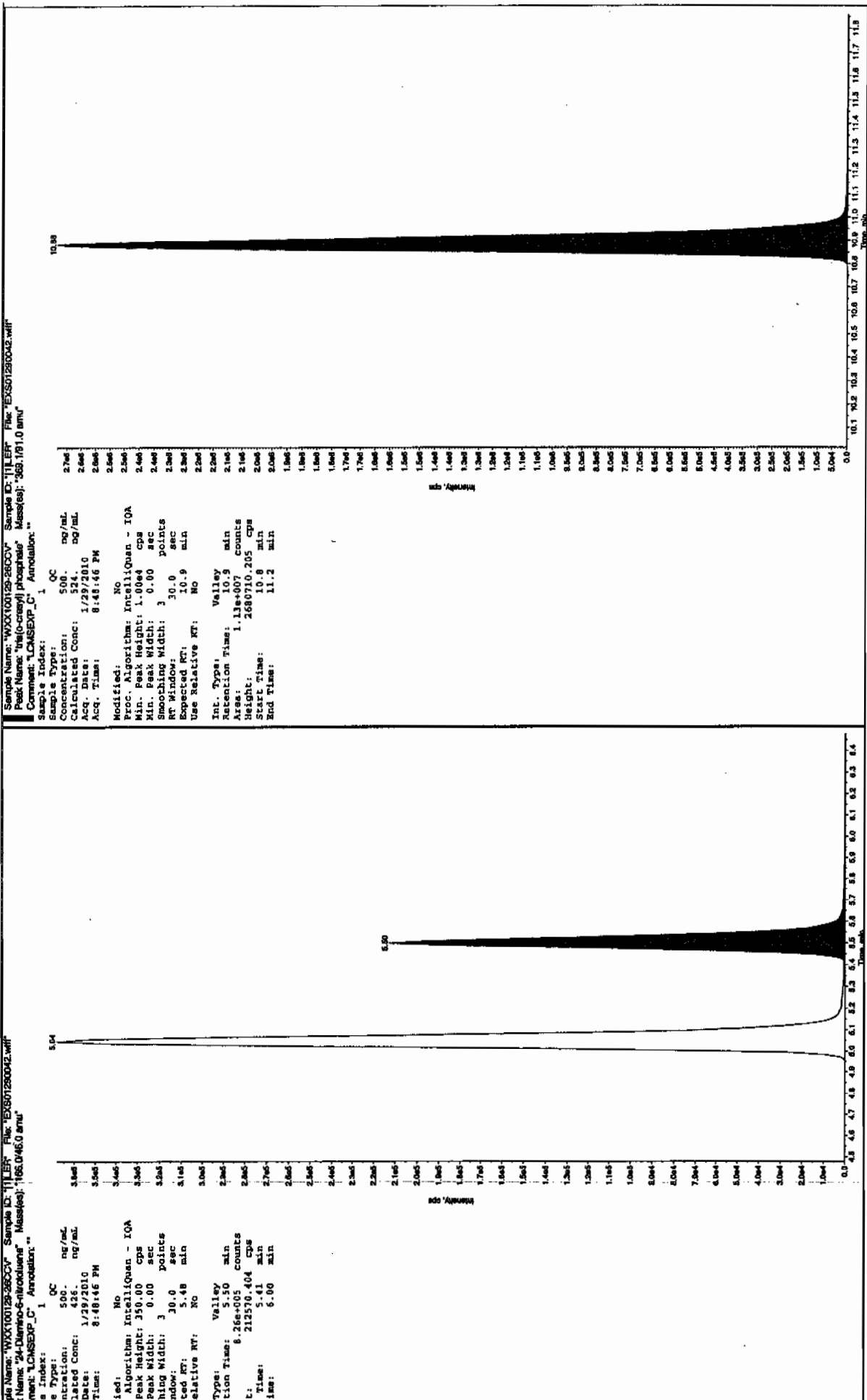


After Jan 24/10

after Dec-2/1/10







L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01290044.wiff

Analysis Date: 29-JAN-10 21:20

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	93.7	94	
2,6-Diamino-4-nitrotoluene	100	97.5	98	
3,4-Dinitrotoluene	50	51.7	103	
3,5-Dinitroaniline	100	105	105	
TATB	100	113	113	
tris(o-cresyl) phosphate	100	106	106	

Recovery Limits:

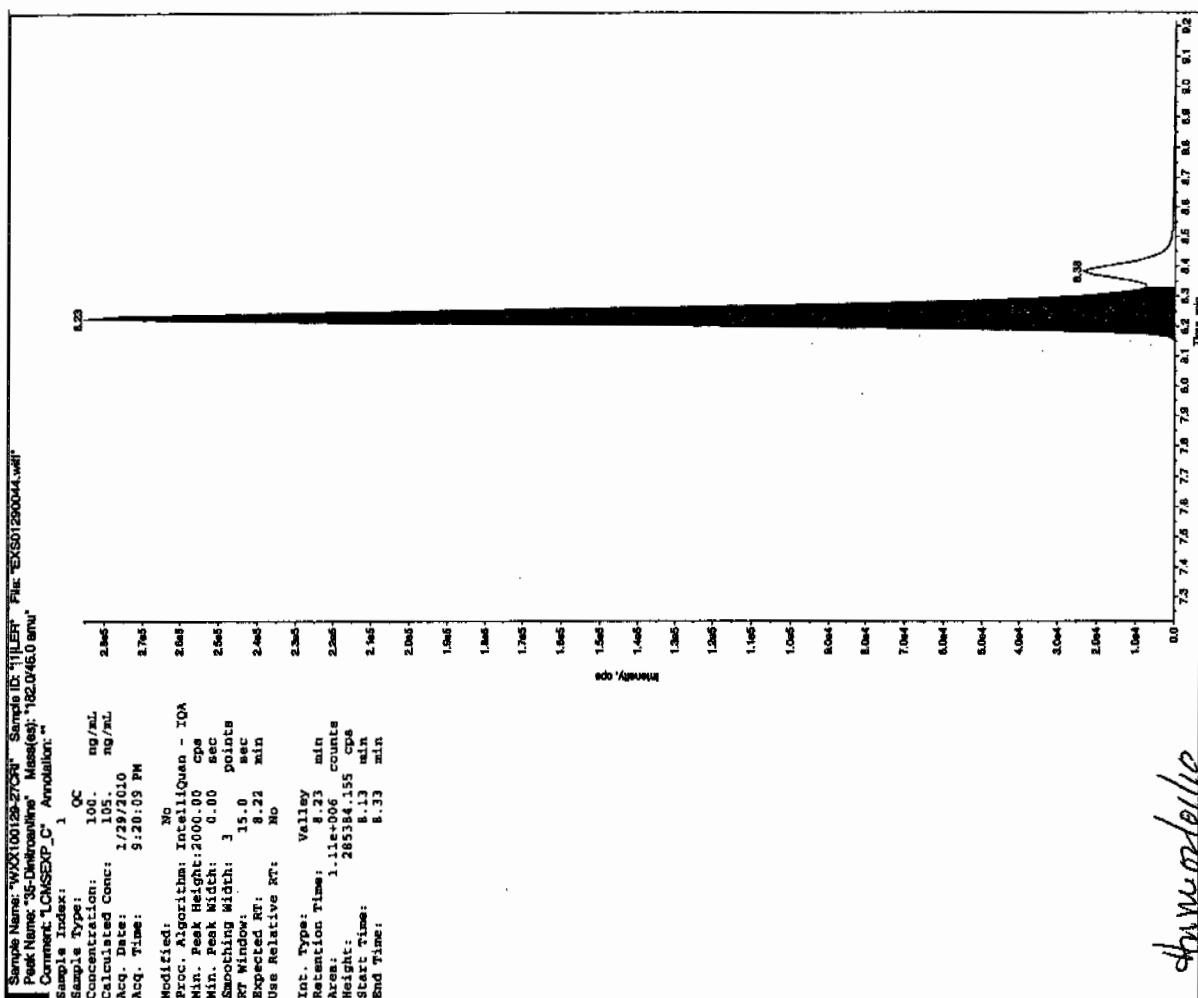
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

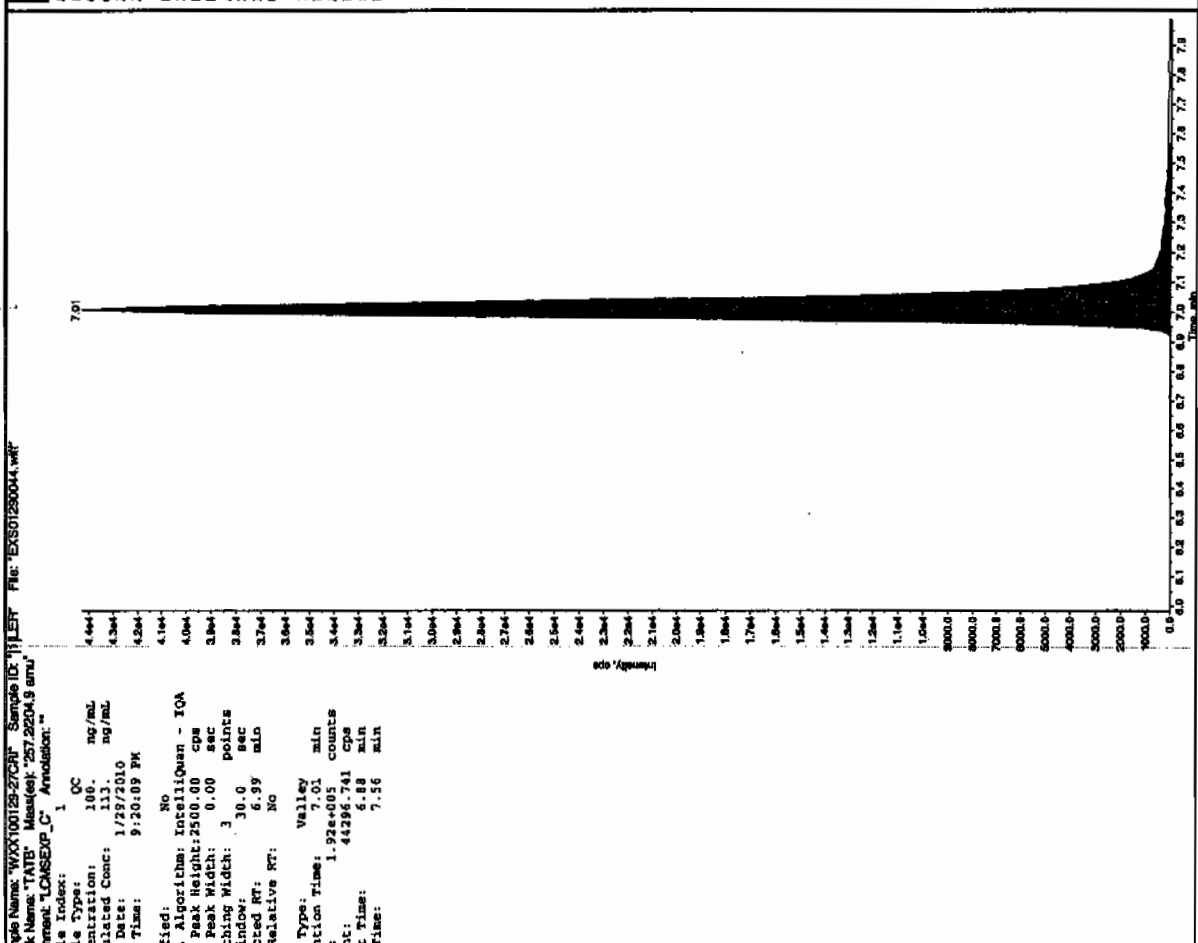
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

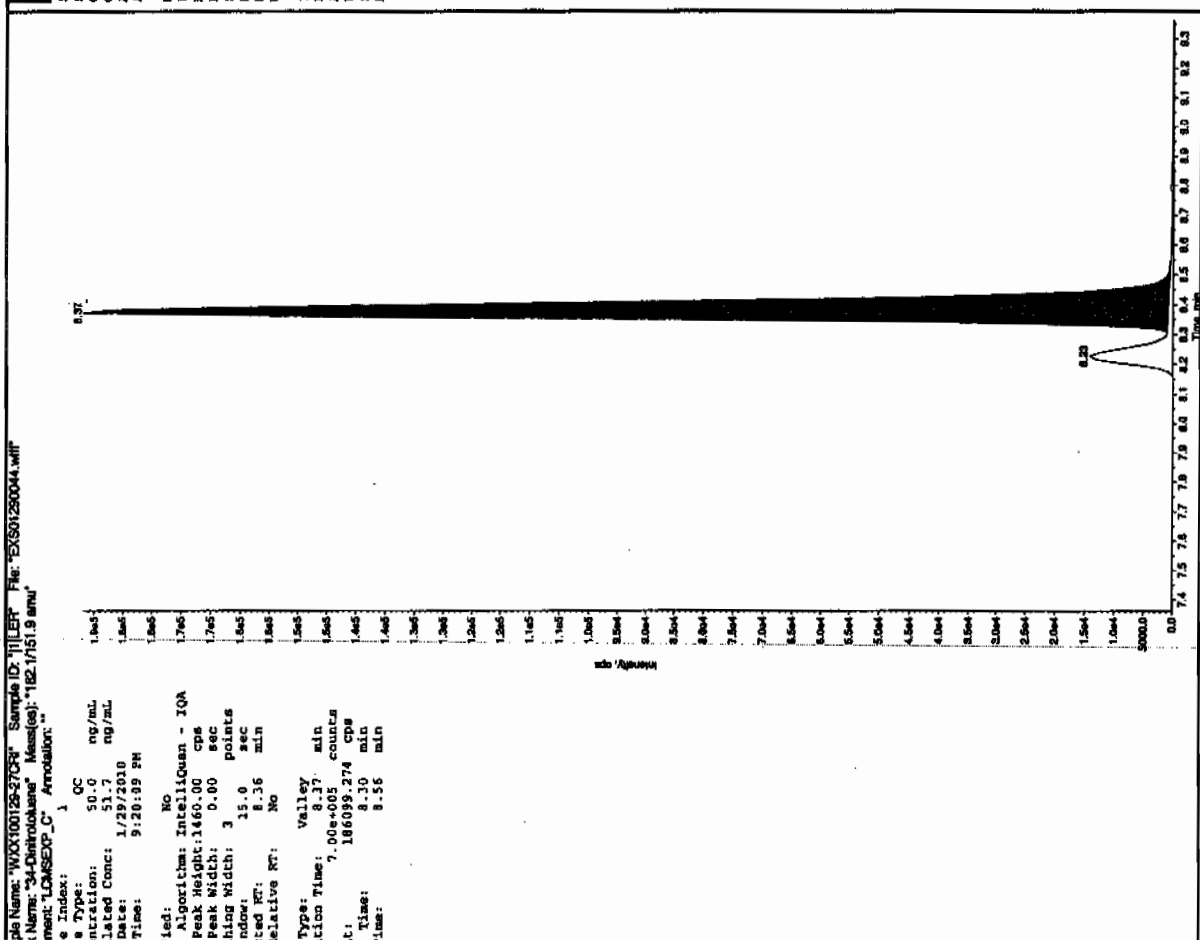
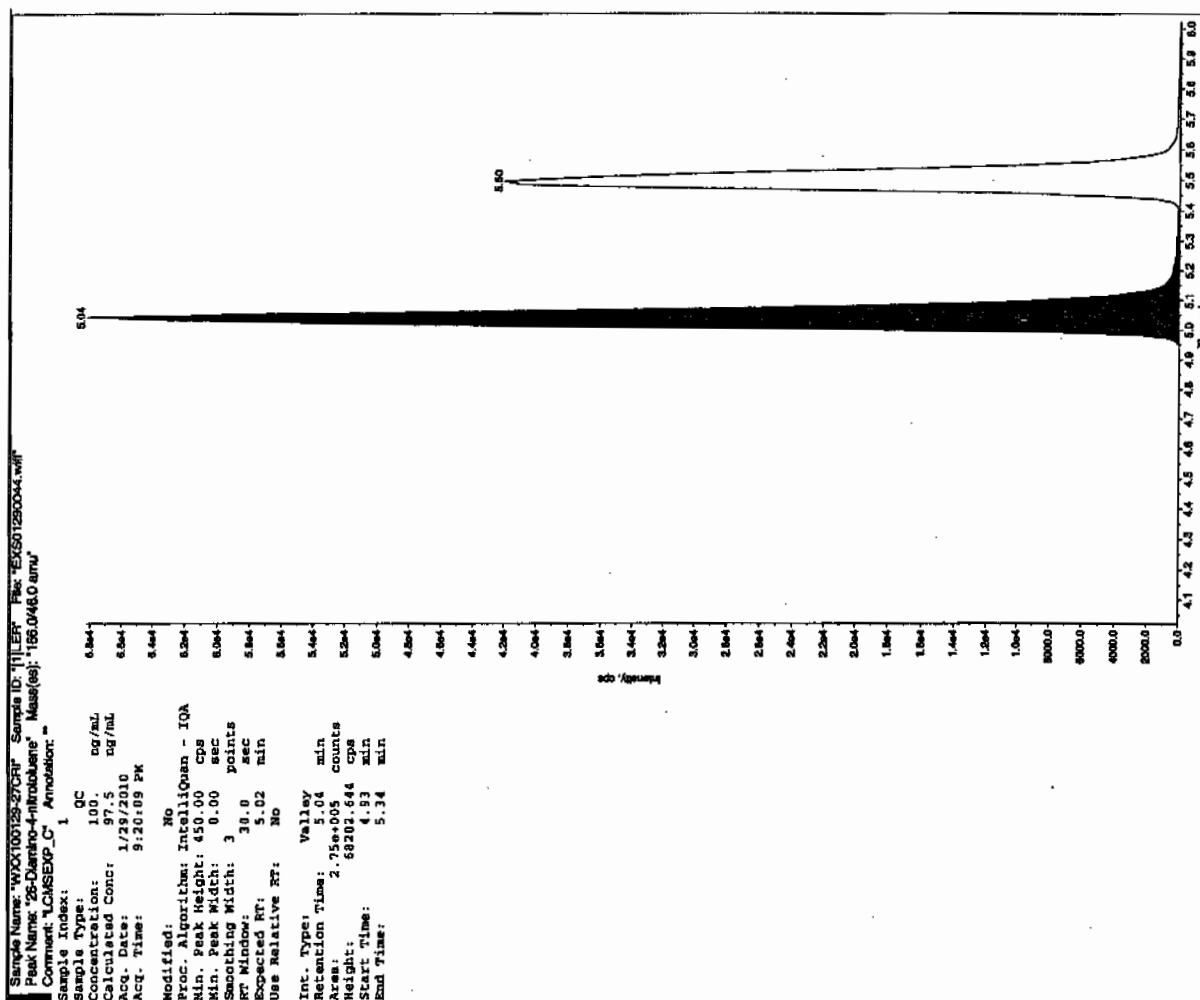
Sax 2/1/10



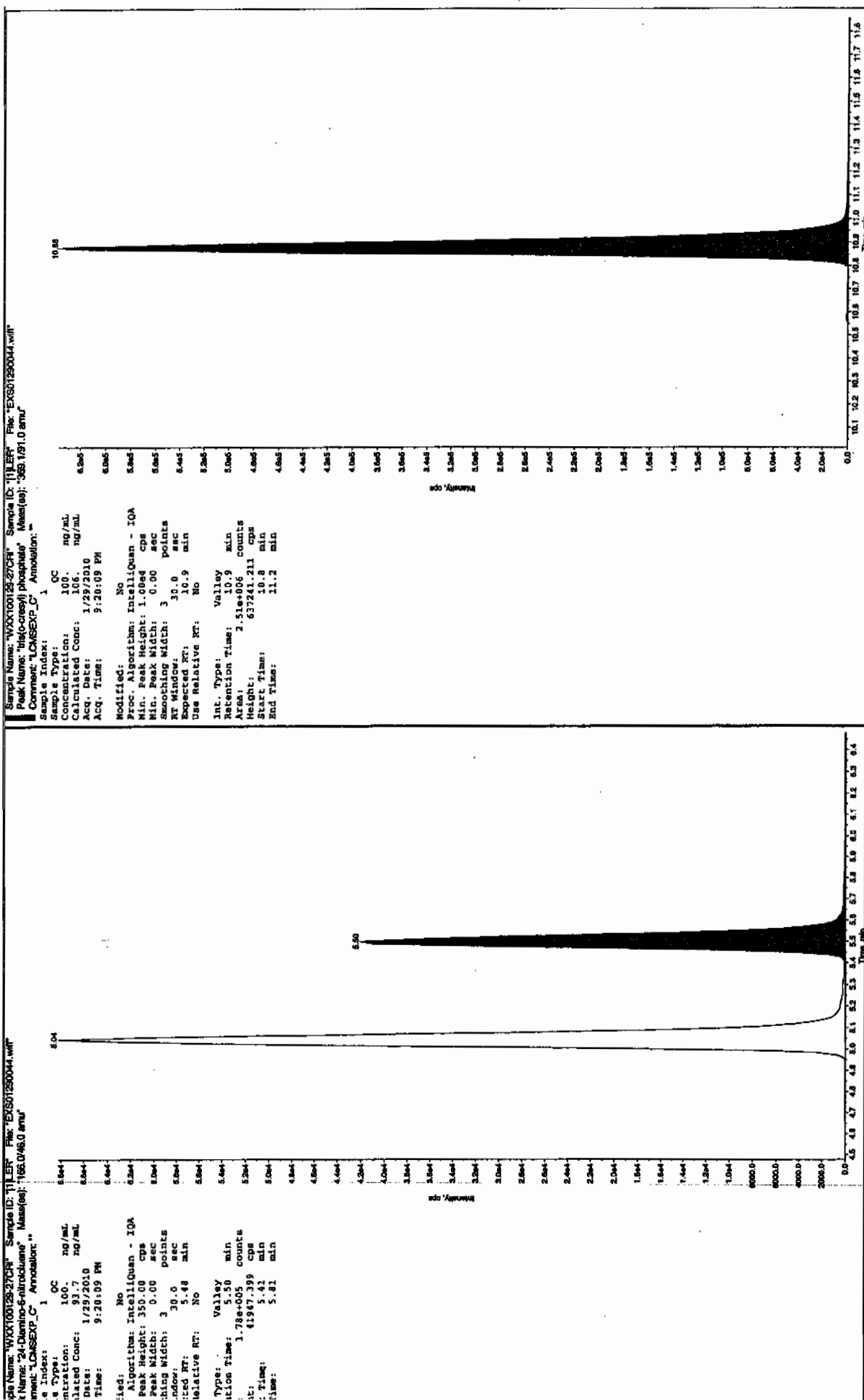
Amundelle



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



GL SOP GL-OA-E-056, Method 8321A-Modified LCMSSMS#4



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01290055.wiff

Analysis Date: 30-JAN-10 00:13

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	549	110	
2,6-Diamino-4-nitrotoluene	500	504	101	
3,4-Dinitrotoluene	250	225	90	
3,5-Dinitroaniline	500	505	101	
TATB	500	513	103	
tris(o-cresyl) phosphate	500	506	101	

Recovery Limits:

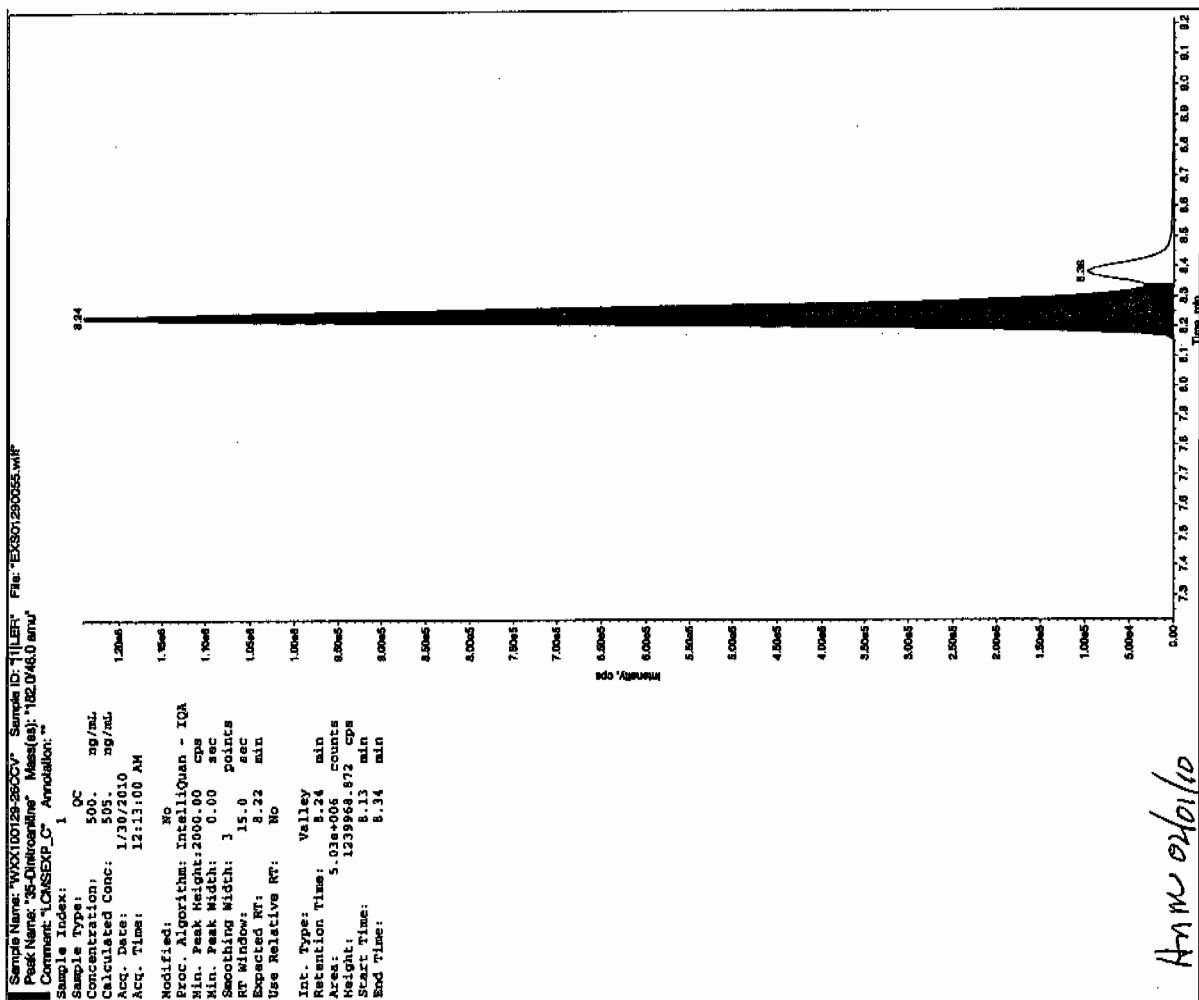
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

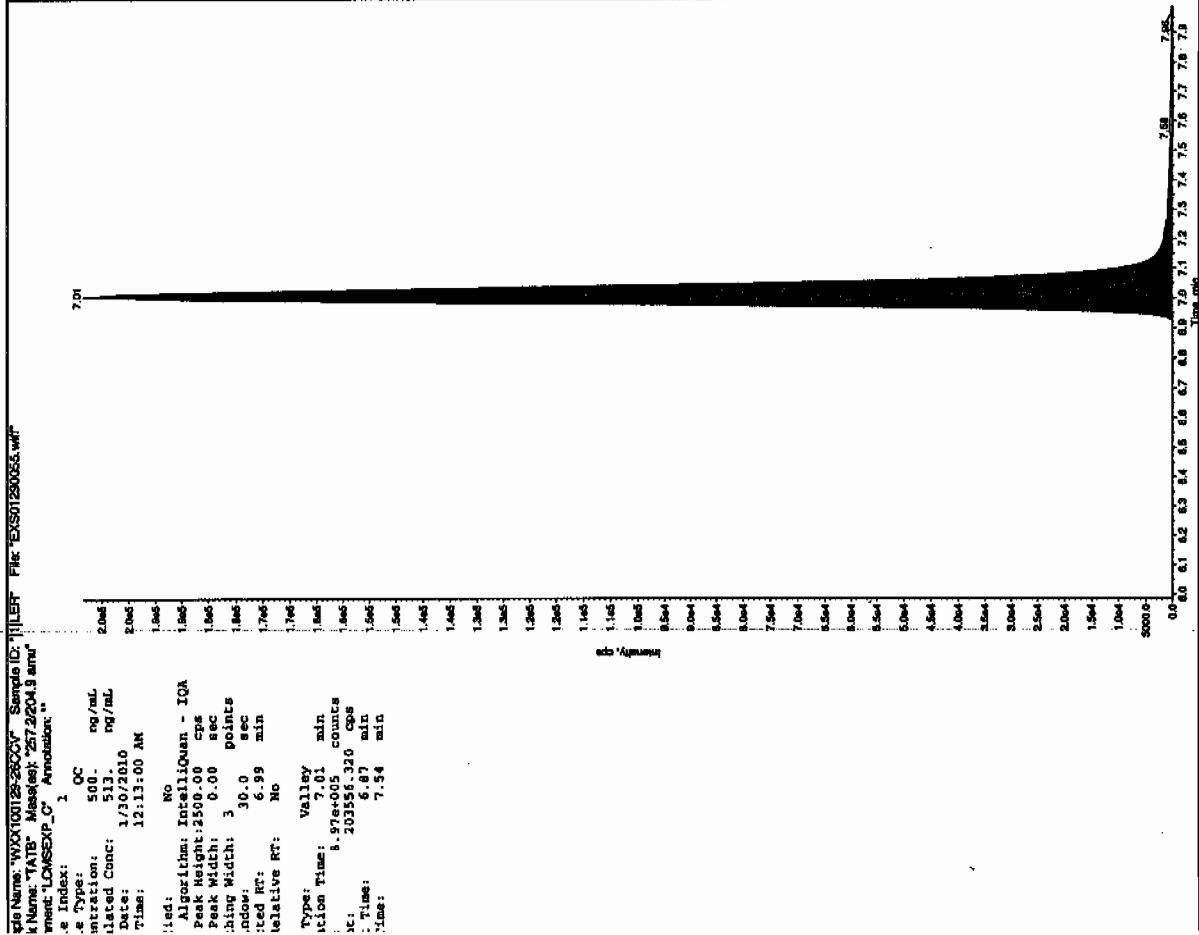
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

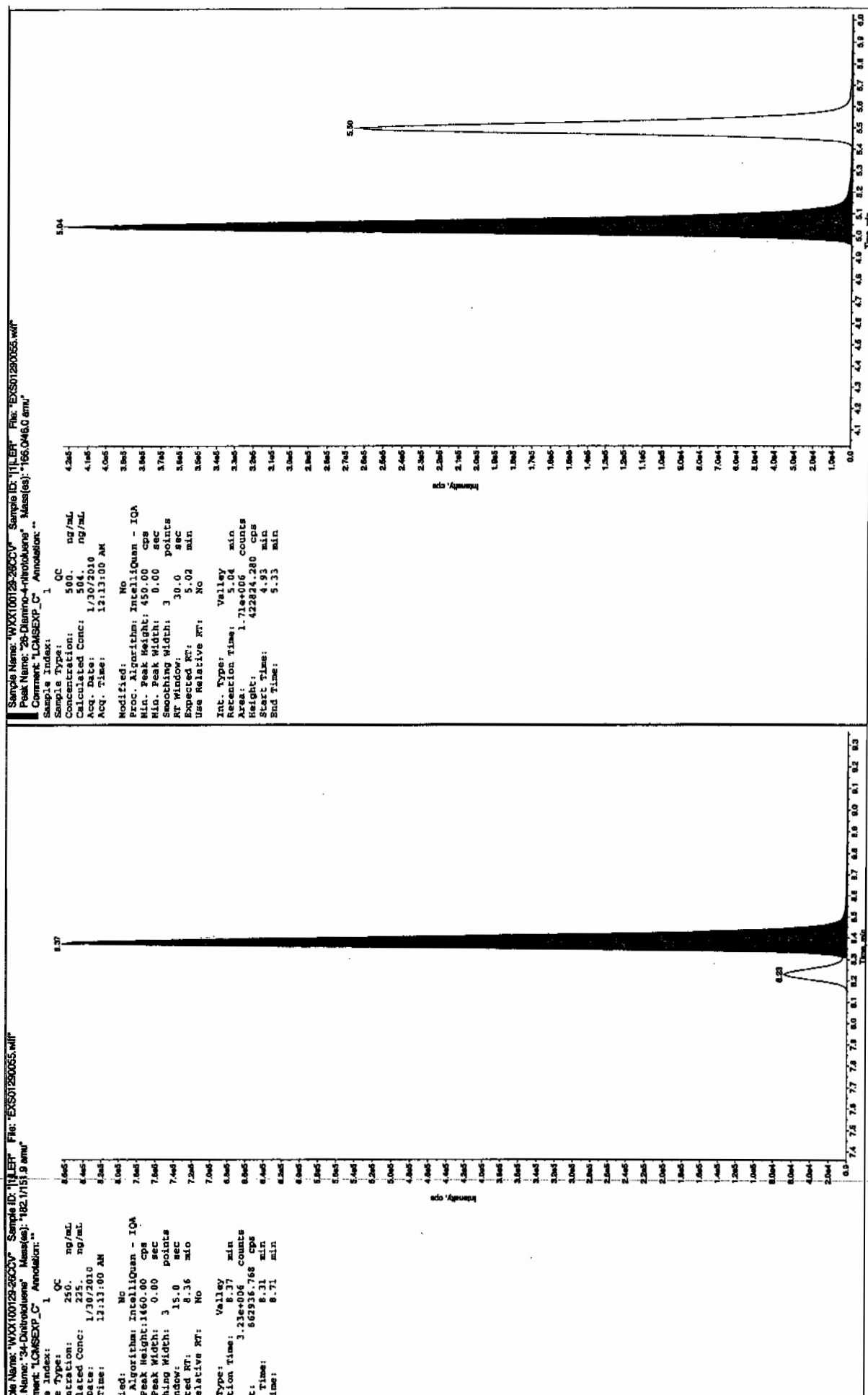
San 21/10

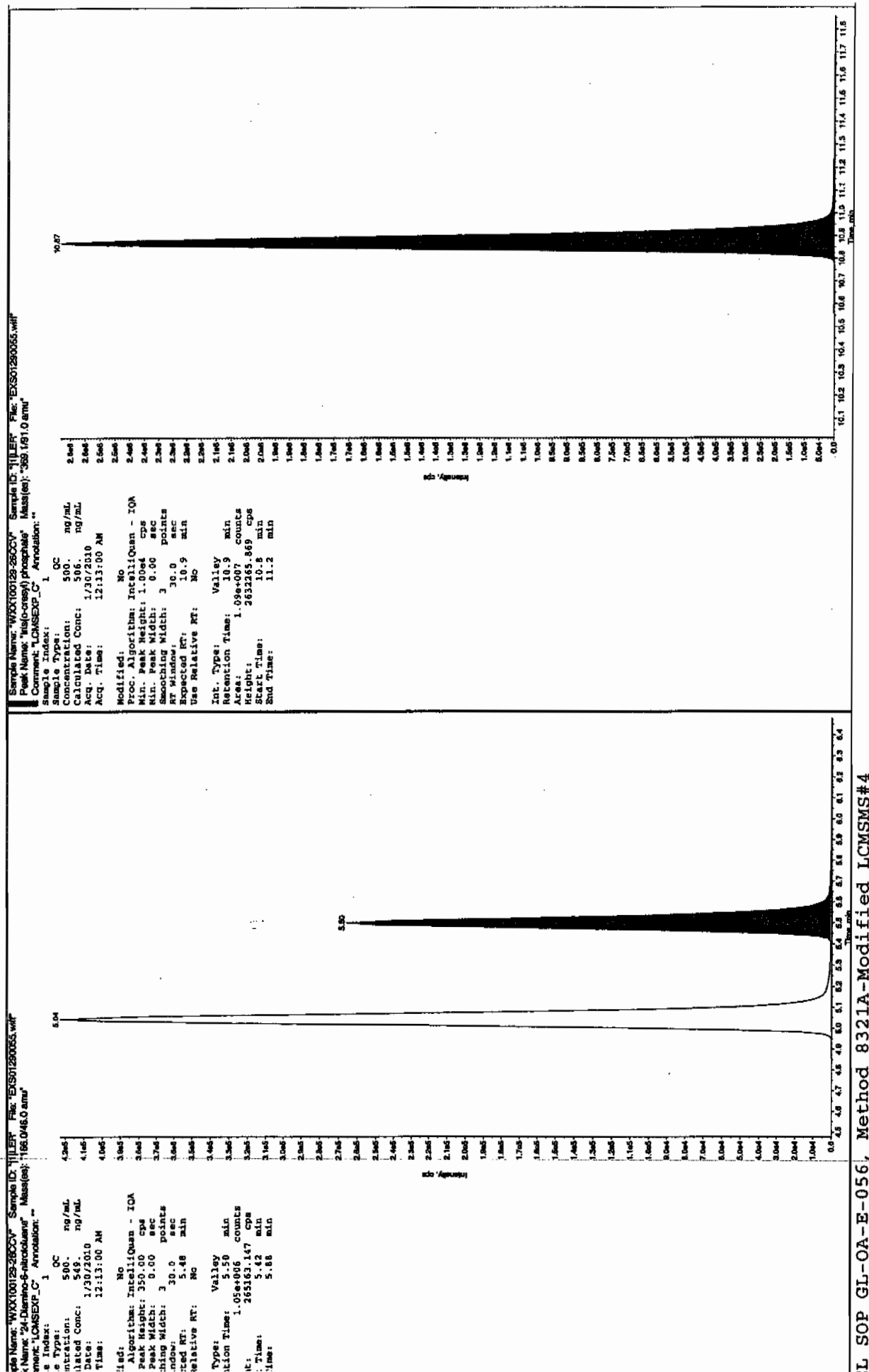


Amw 04/10



IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01290057.wiff

Analysis Date: 30-JAN-10 00:44

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	106	106	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	49.4	99	
3,5-Dinitroaniline	100	103	103	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	104	104	

Recovery Limits:

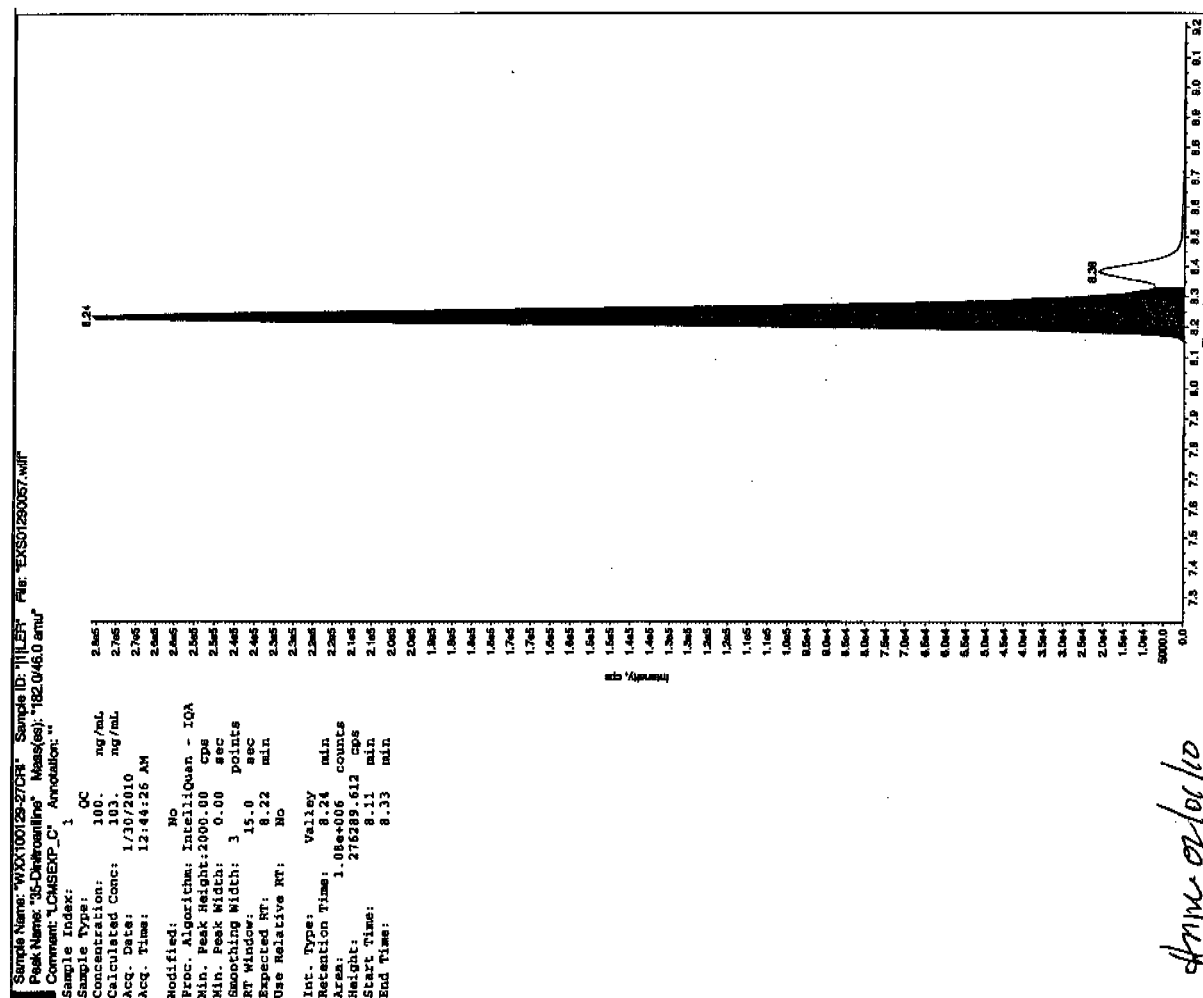
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

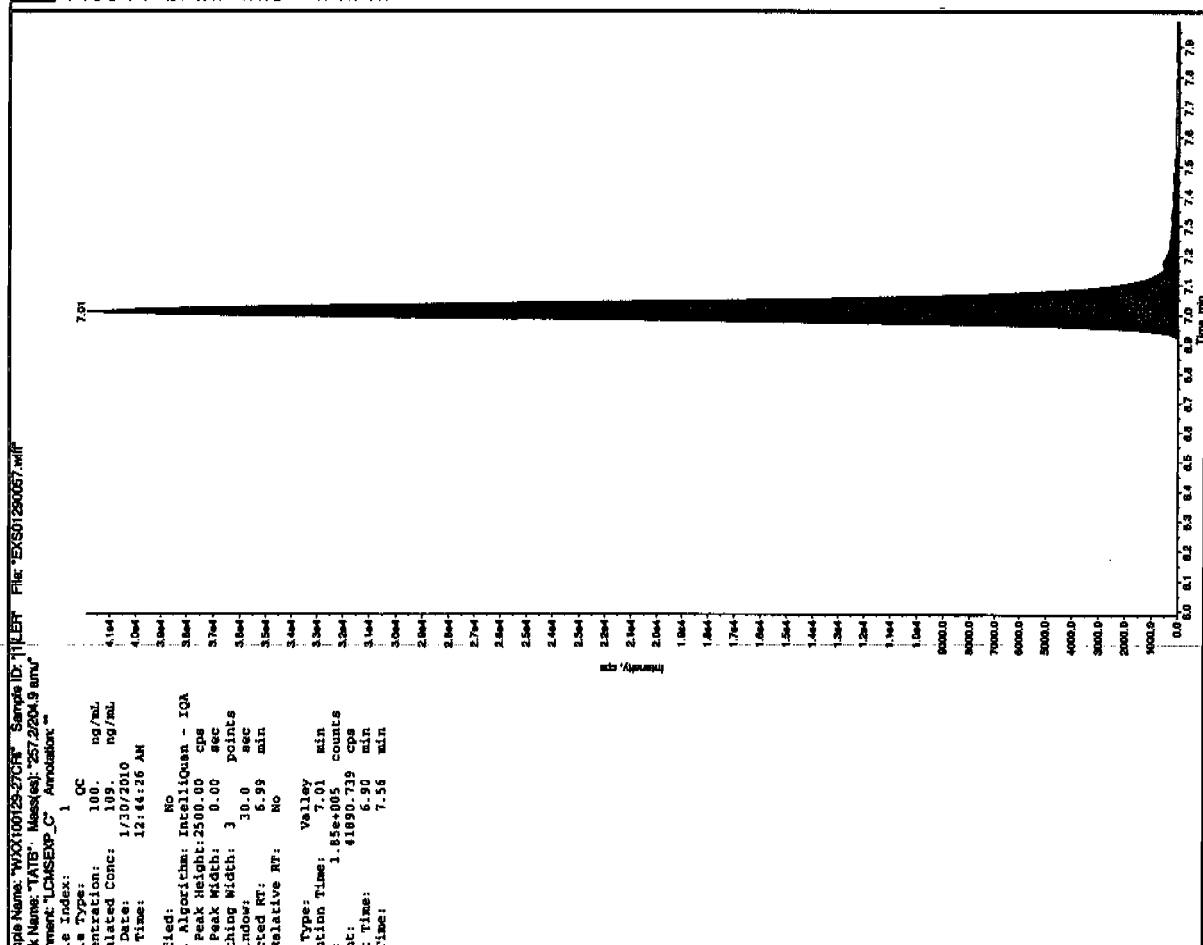
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 21110



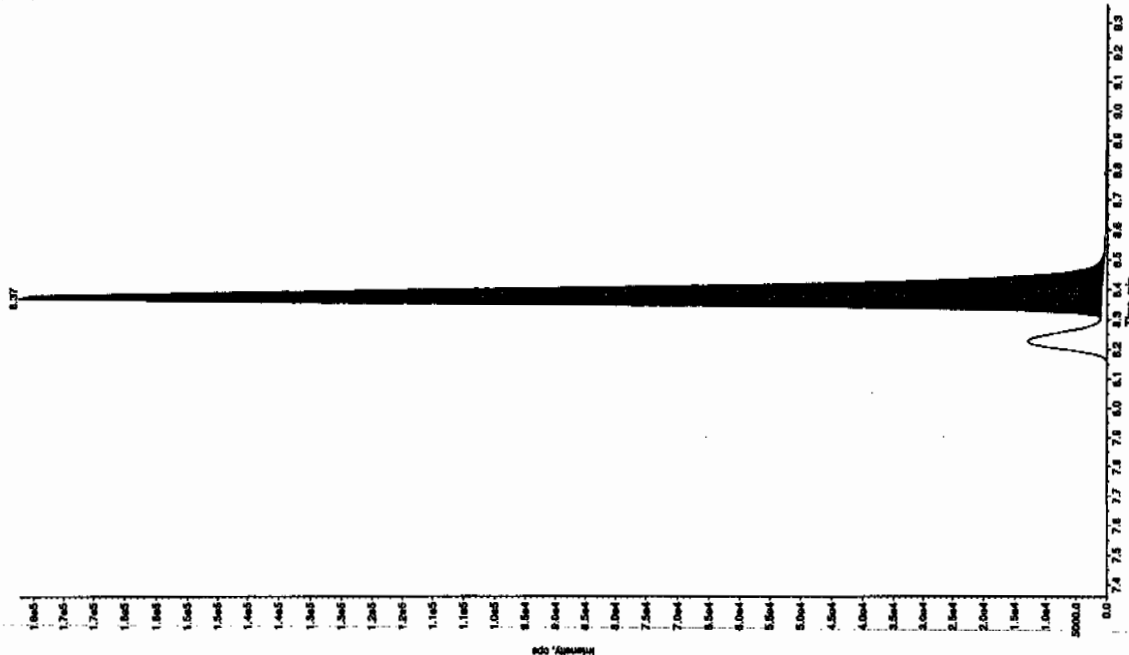
4mm or 10/10



L SOP GL-OA-E-056, Method 8321A-Modified LCMSEMS#4

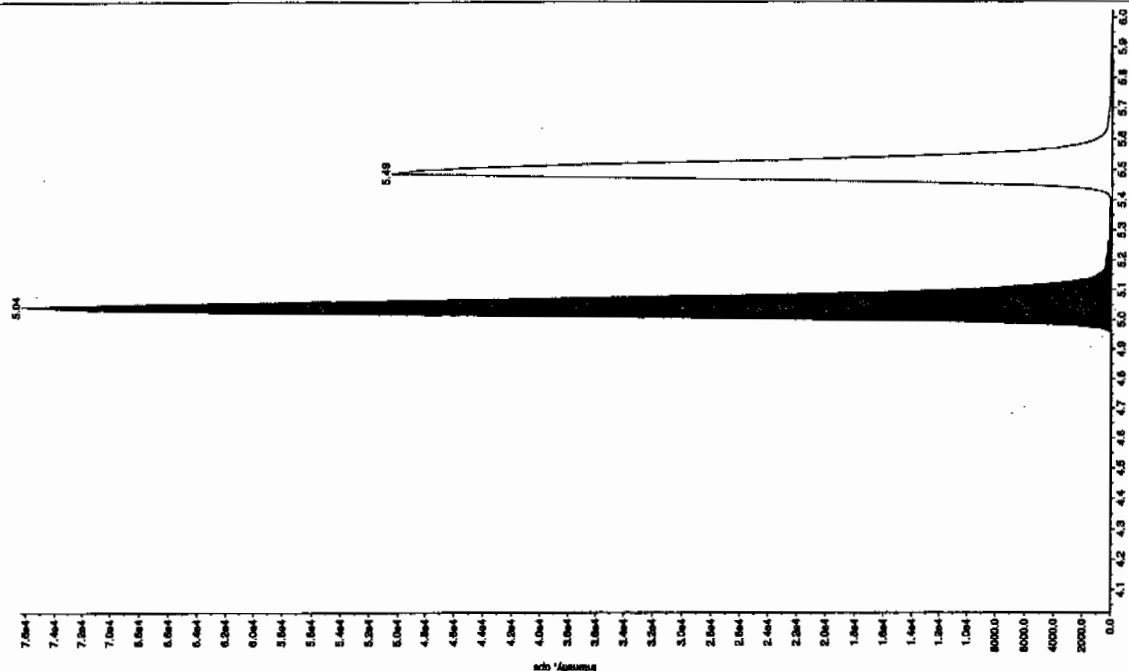
Sample Name: WYX100125-27057 Sample ID: 111111 File: EX501250057.wif
 Peak Name: 34-Dichlorobenzene Mass(es): 182.0151.9 amu
 Concent: LCMSEXP_C1 Annotation: "

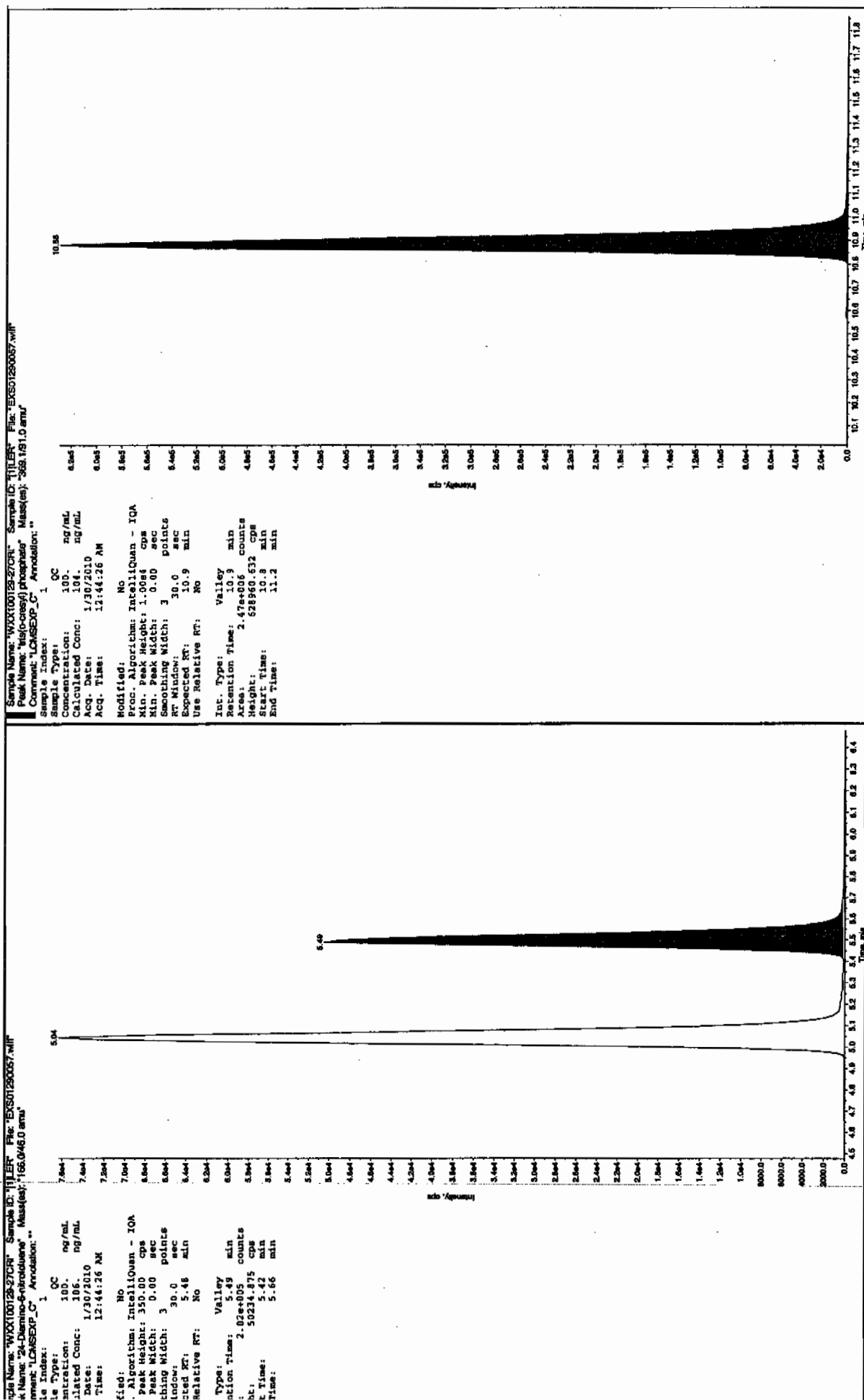
Method: 1 QC
 Sample Type: 1 QC
 Concentration: 100. ng/mL
 Calculated Conc: 108. ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 12:44:26 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.04 min
 Area: 3.13e+005 counts
 Height: 76286.301 cps
 Start Time: 4.90 min
 End Time: 5.32 min



Sample Name: WYX100125-27057 Sample ID: 111111 File: EX501250057.wif
 Peak Name: 34-Dichlorobenzene Mass(es): 182.0151.9 amu
 Concent: LCMSEXP_C1 Annotation: "

Method: 1 QC
 Sample Type: 1 QC
 Concentration: 100. ng/mL
 Calculated Conc: 108. ng/mL
 Acq. Date: 1/30/2010
 Acq. Time: 12:44:26 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.02 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.04 min
 Area: 3.13e+005 counts
 Height: 76286.301 cps
 Start Time: 4.90 min
 End Time: 5.32 min





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01290067.wiff

Analysis Date: 30-JAN-10 03:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	550	110	
2,6-Diamino-4-nitrotoluene	500	464	93	
3,4-Dinitrotoluene	250	220	88	
3,5-Dinitroaniline	500	500	100	
TATB	500	489	98	
tris(o-cresyl) phosphate	500	511	102	

Recovery Limits:

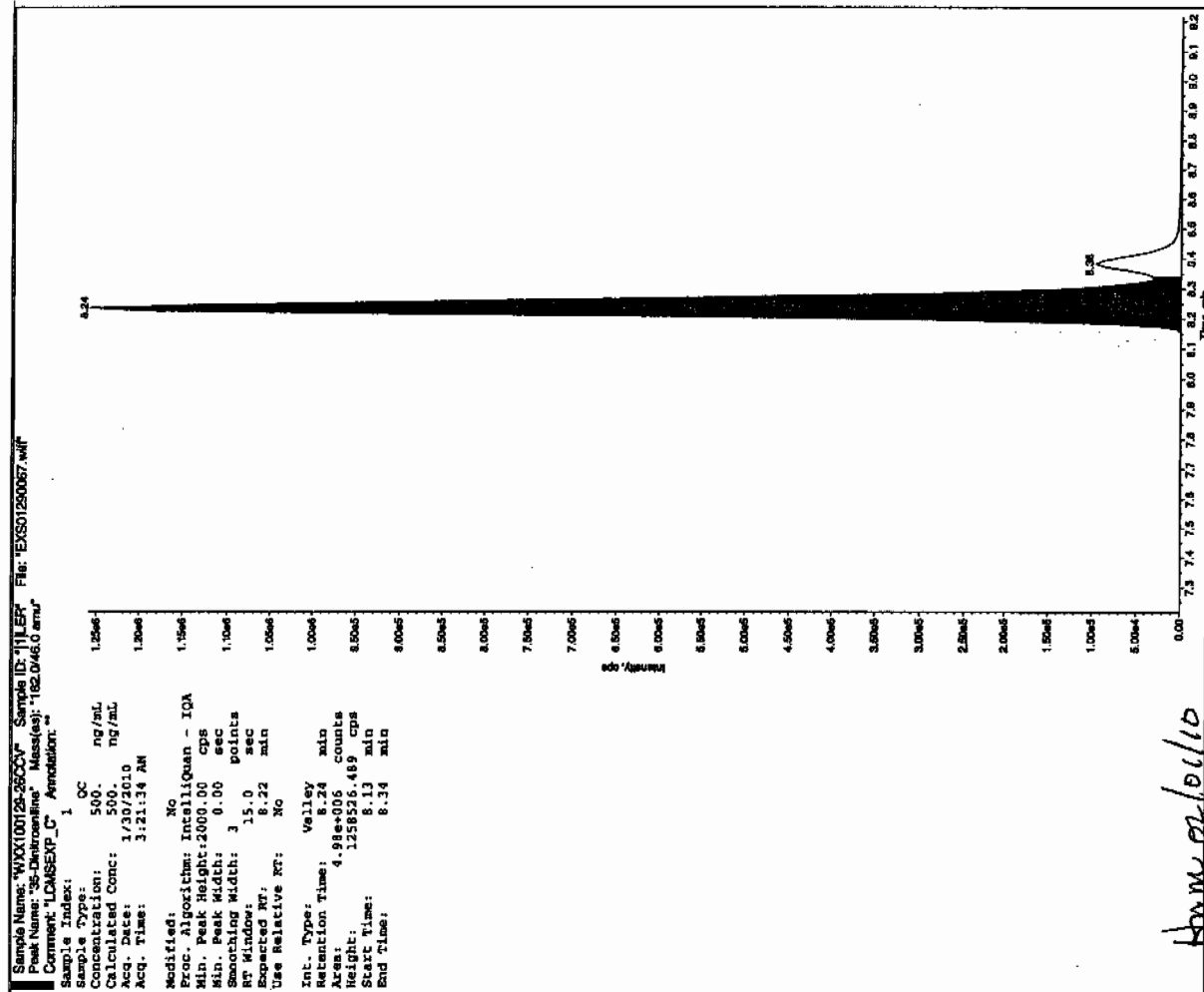
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

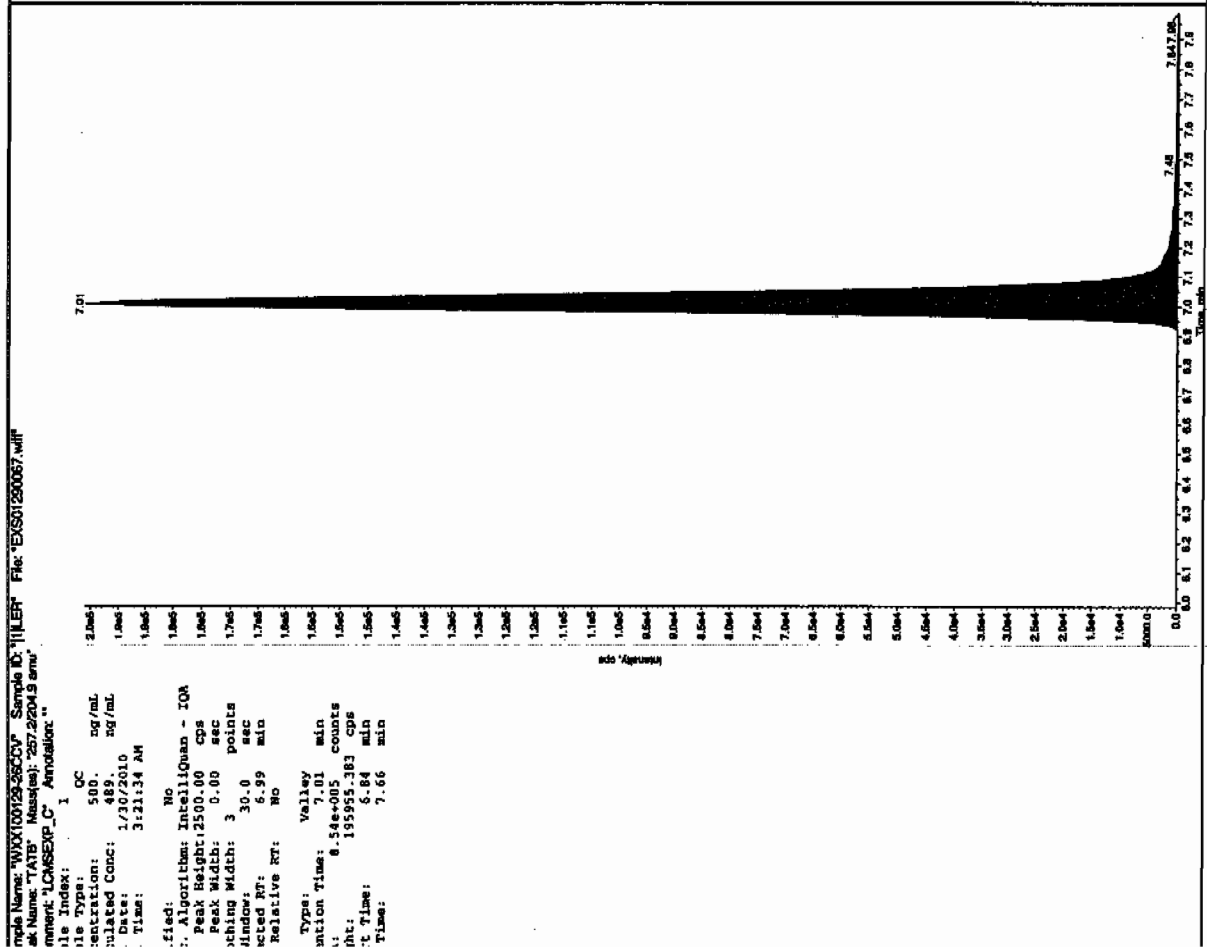
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

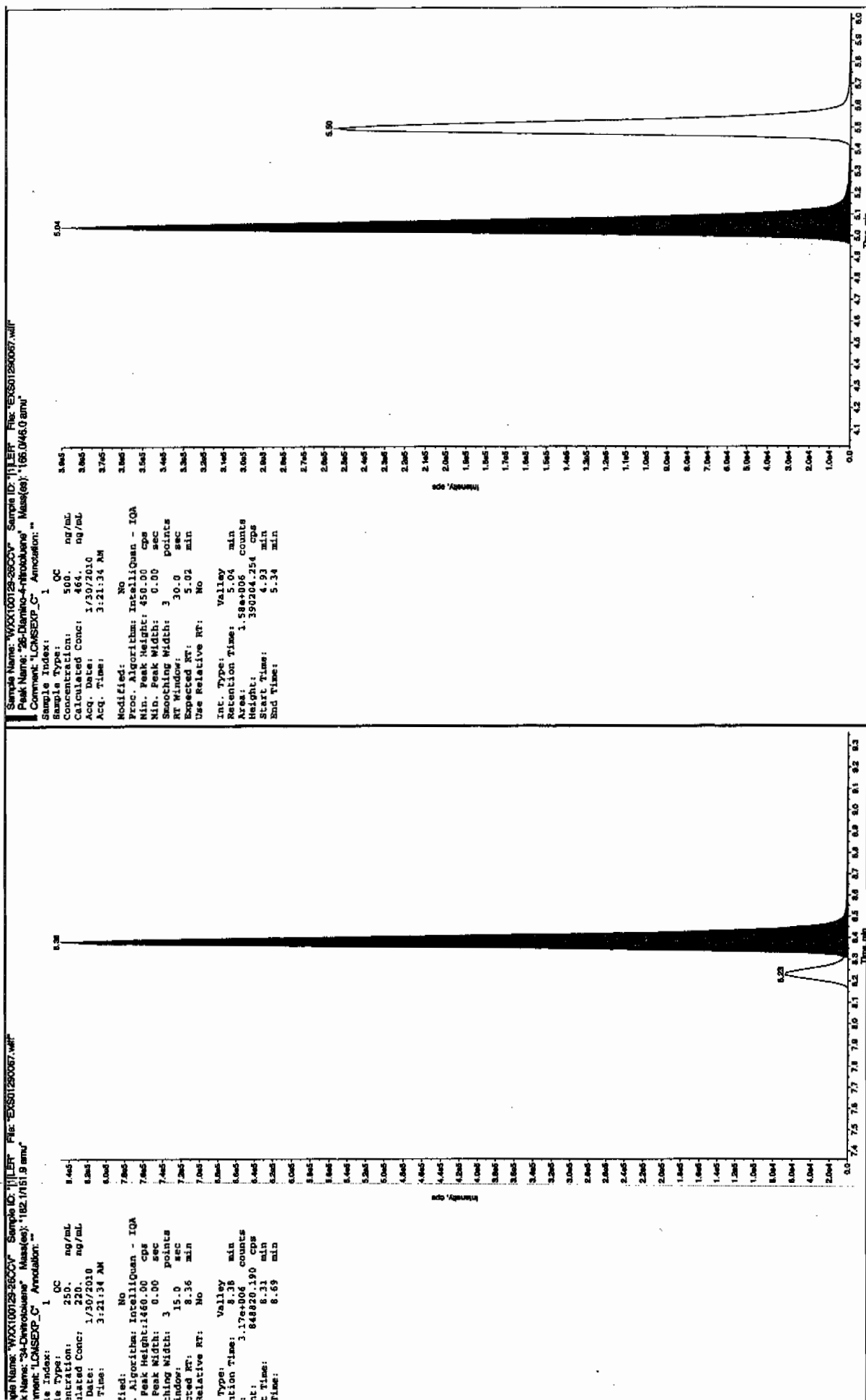
Don 2/11/10

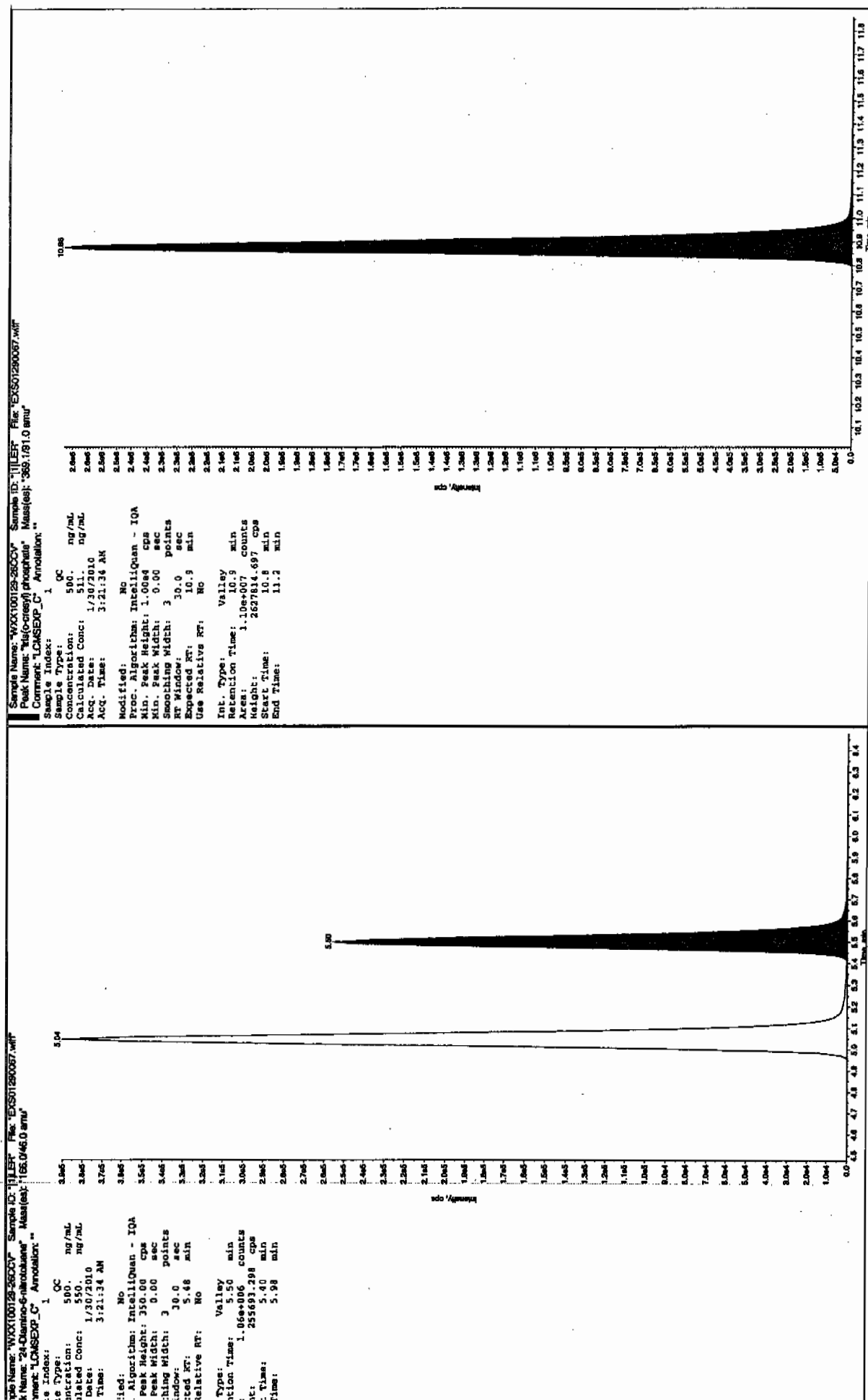


Don 2/11/10



3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





IL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1301

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01290069.wiff

Analysis Date: 30-JAN-10 03:53

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	106	106	
2,6-Diamino-4-nitrotoluene	100	111	111	
3,4-Dinitrotoluene	50	47.3	95	
3,5-Dinitroaniline	100	101	101	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	106	106	

Recovery Limits:

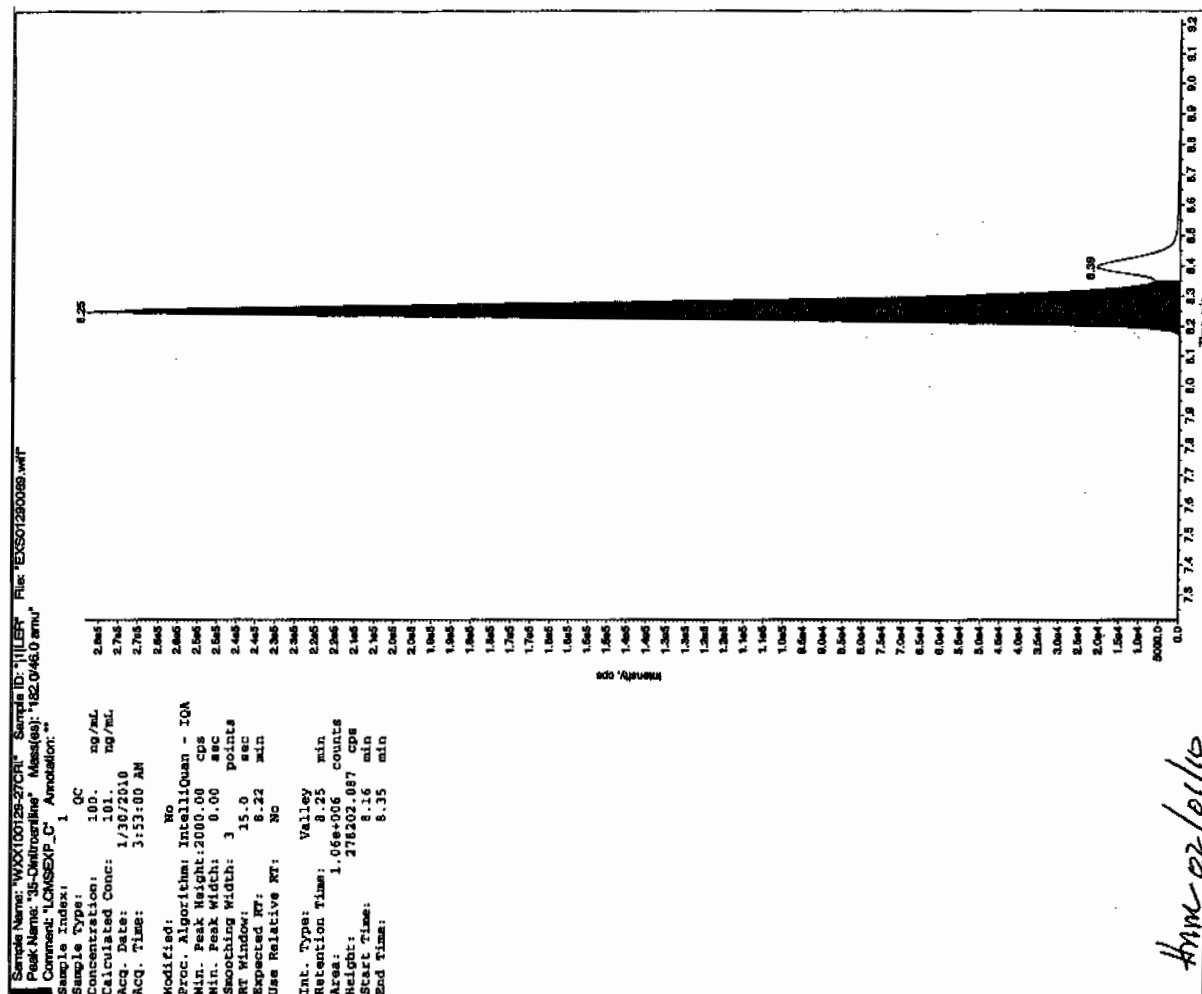
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

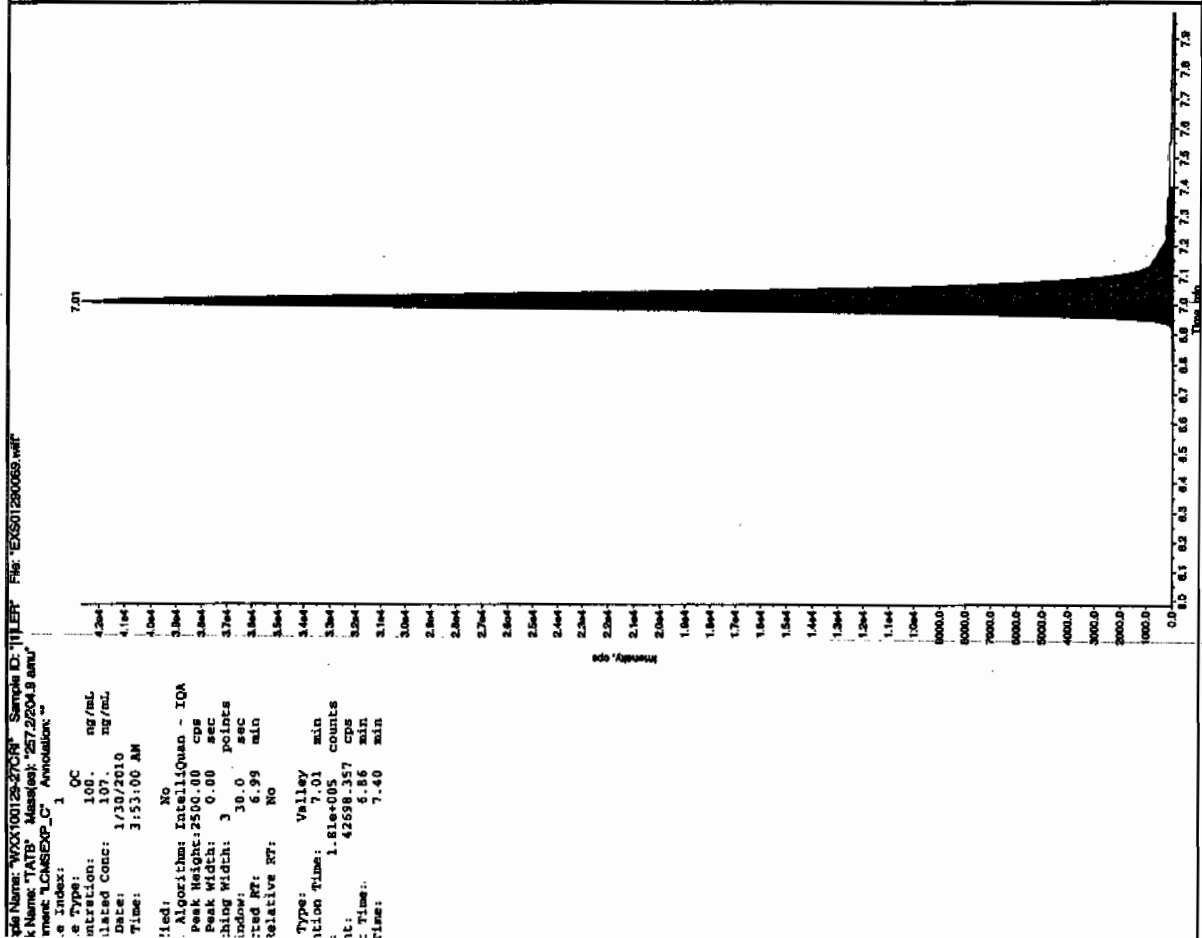
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

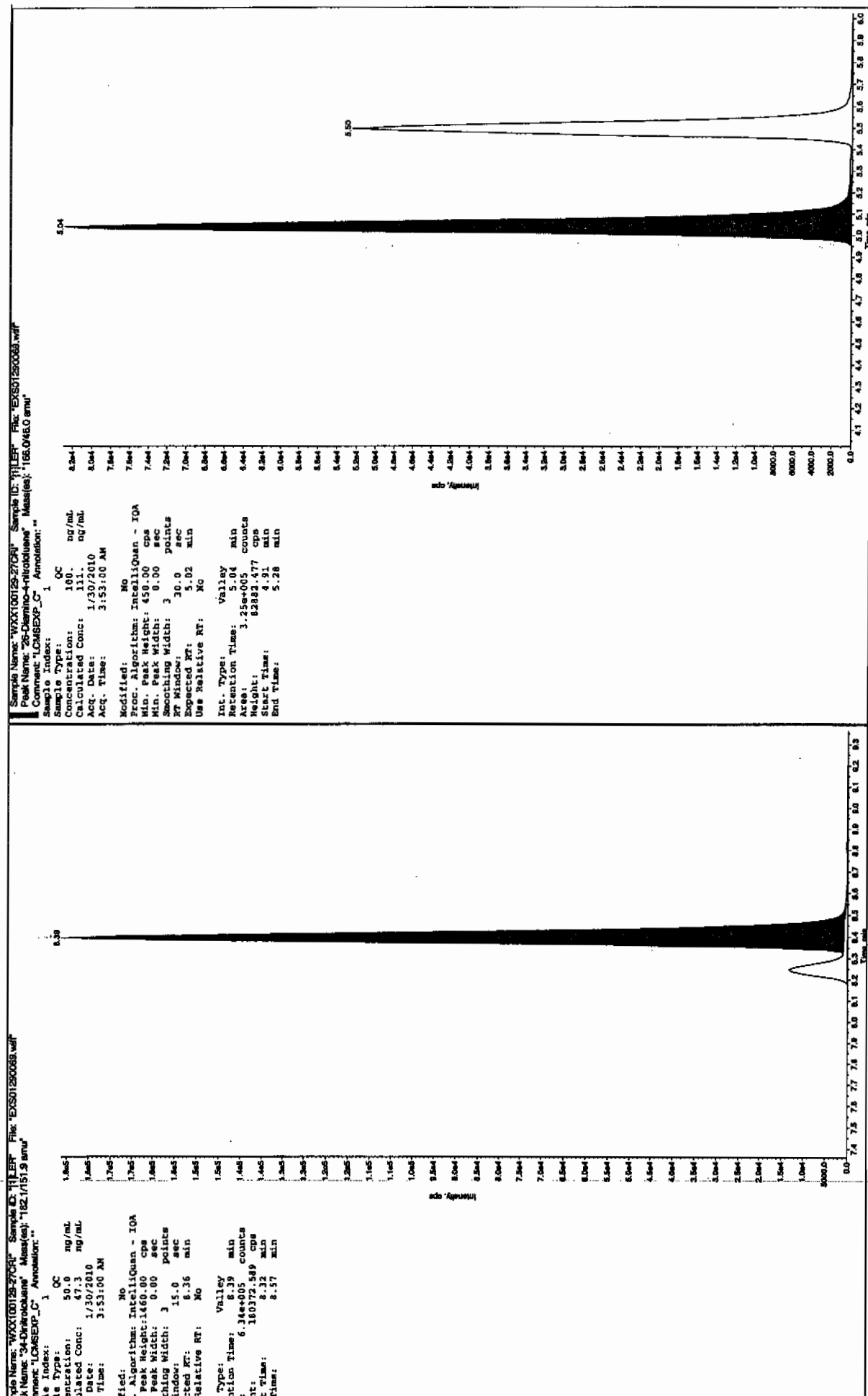
See 21110



HW 02/11/10



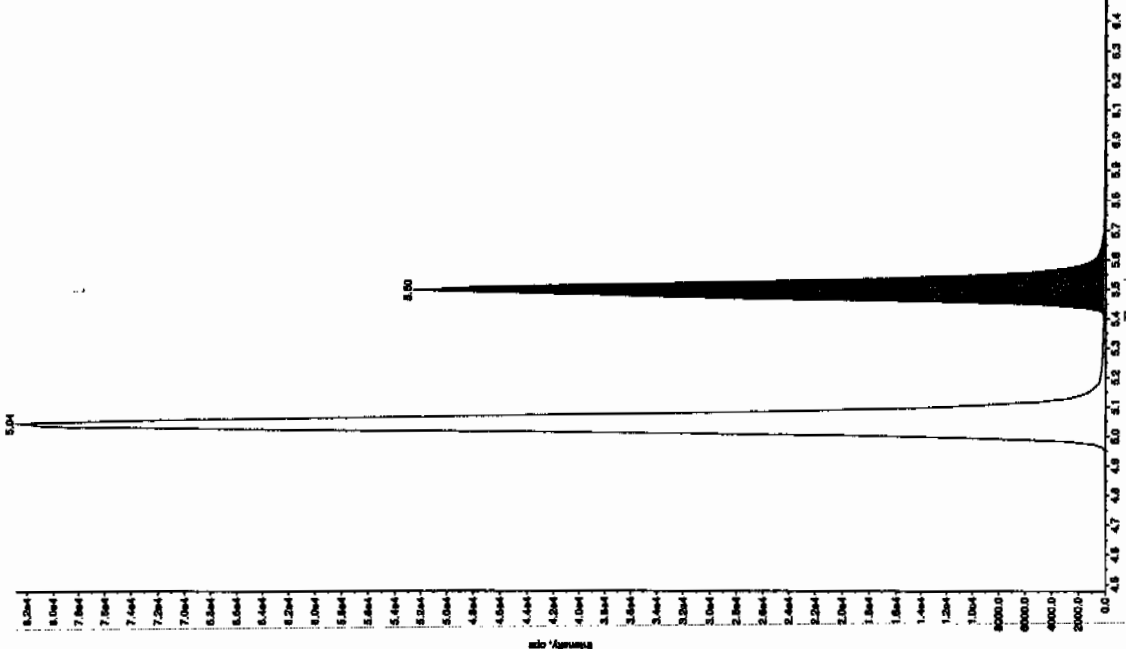
3L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



L SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

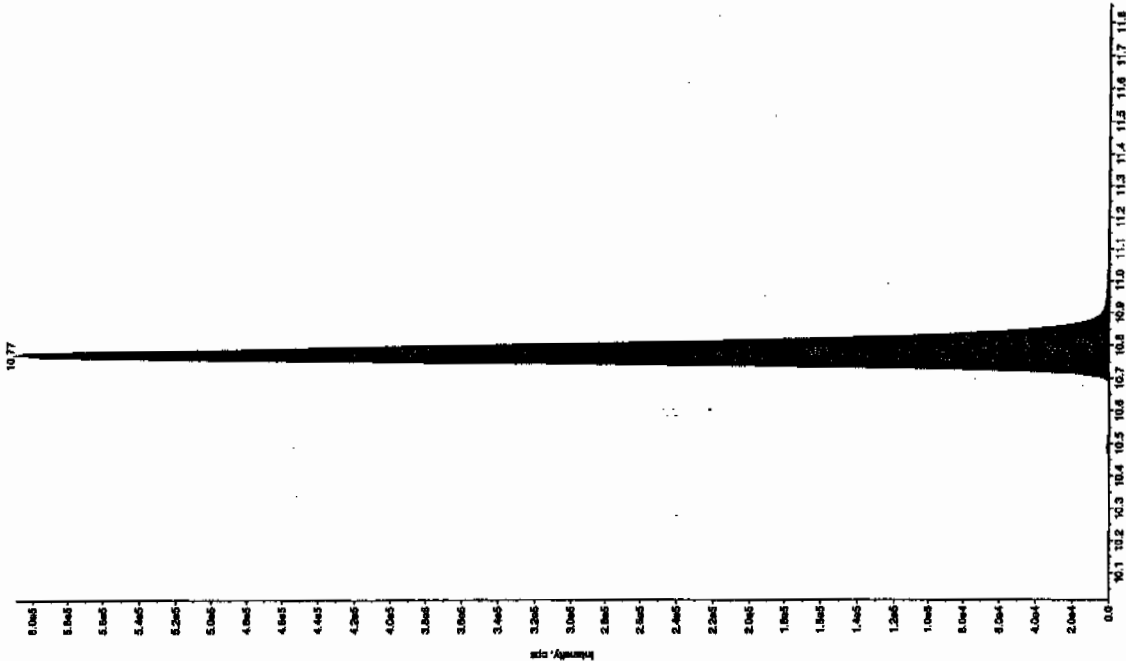
Sample Name: "WXX100125-27CR" Sample ID: "111ER" File: "EX501250058.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 106. ng/mL
 Date: 1/30/2010
 Acq. Time: 3:53:00 AM
 Modified: No
 Acquisition: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 5.48 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.50 min
 Area: 2.02e+005 counts
 Height: 52394.726 cps
 Start Time: 5.42 min
 End Time: 5.72 min



Sample Name: "WXX100125-27CR" Sample ID: "111ER" File: "EX501250058.wif"
 Peak Name: "1,3-bis(o-cresyl) phosphazene" Mass(es): "368.191.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 106. ng/mL
 Date: 1/30/2010
 Acq. Time: 3:53:00 AM
 Modified: No
 Acquisition: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 3.00 sec
 Smoothing Width: 3.00 points
 RT Window: 30.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 2.52e+006 counts
 Height: 608952.156 cps
 Start Time: 10.7 min
 End Time: 11.1 min



L. SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

QUALITY CONTROL DATA

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944241

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021896

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203110a

Date Analyzed: 05-FEB-10 20:14

Units: ug/kg

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

*Concentration =

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

name: C:\MASSLYN\NEW_EXP.PRO\DATA\EXP0203110a

ate: 05-Feb-2010

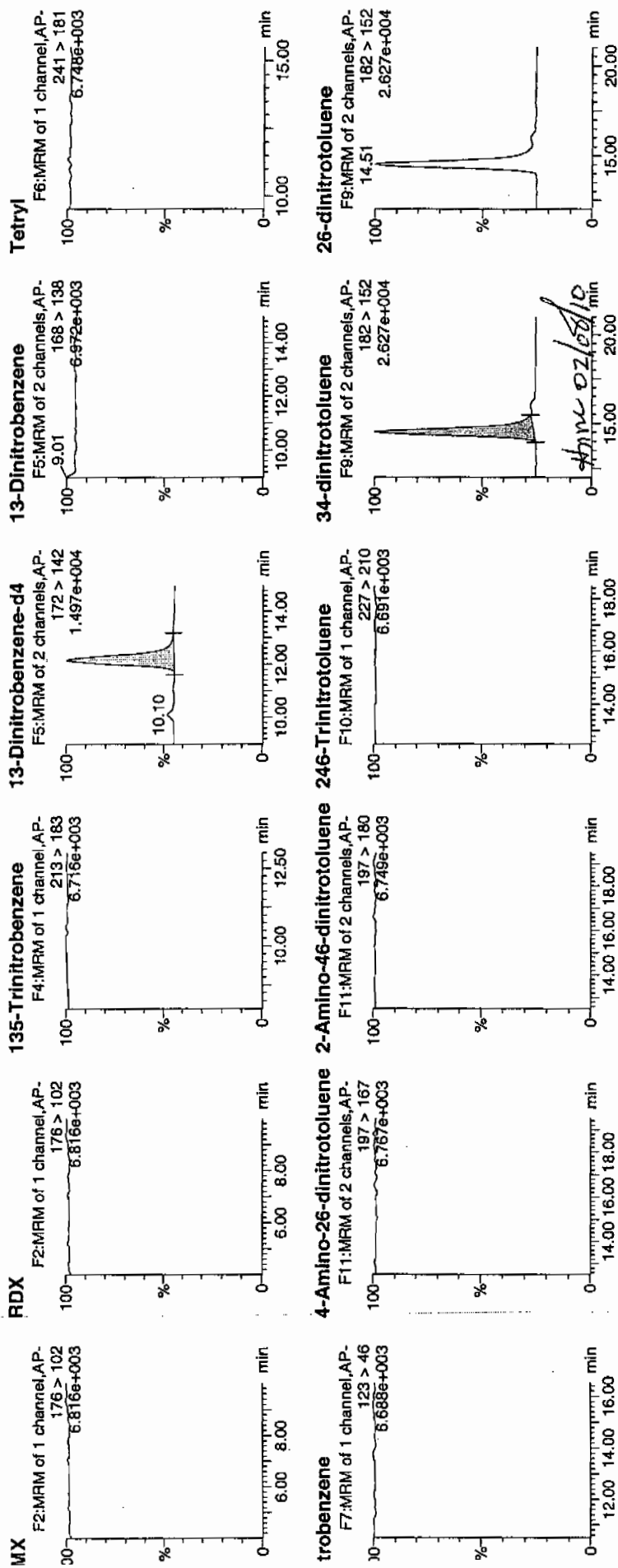
me: 20:14:18

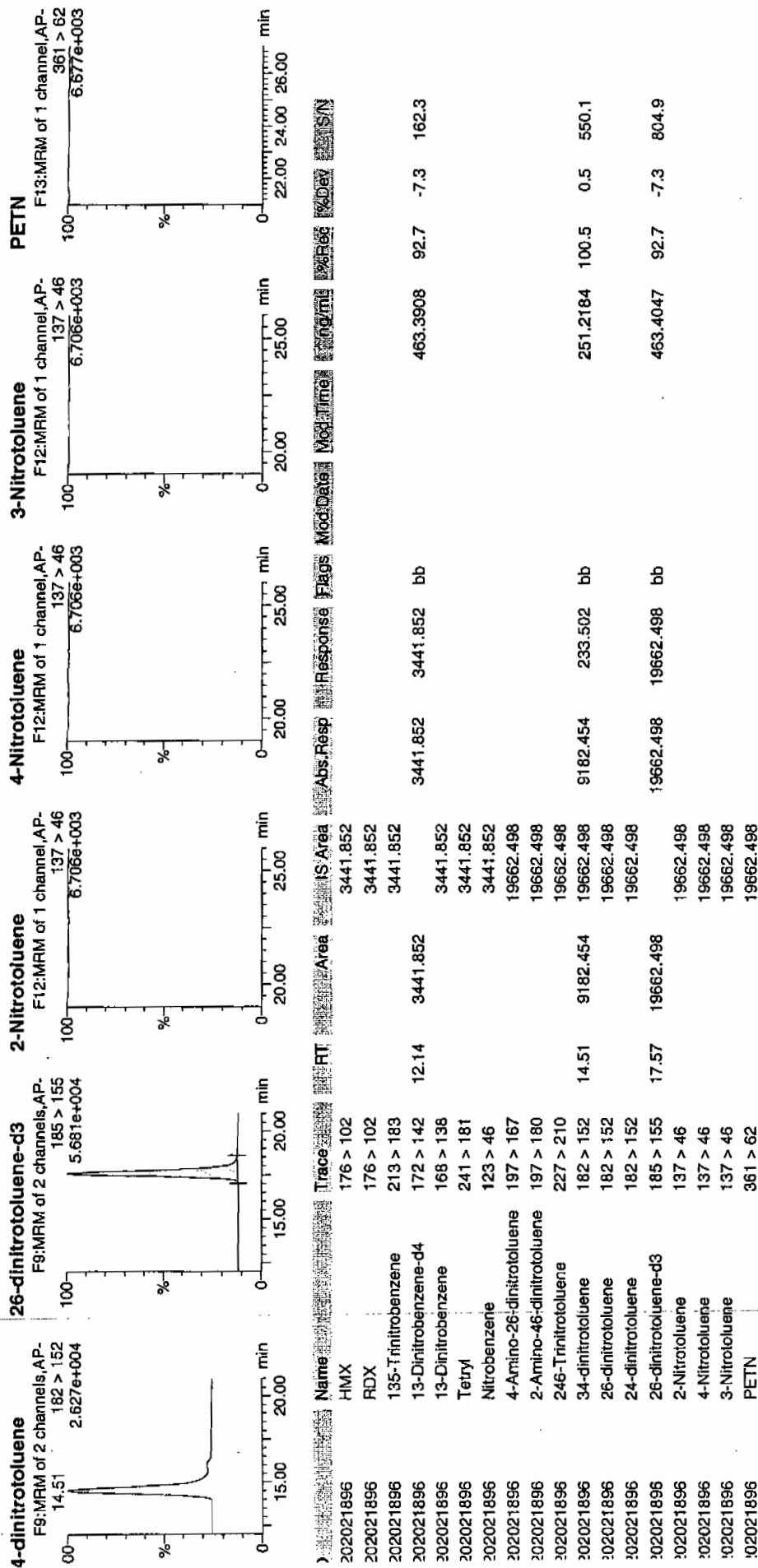
© 2022

al: 3:1,A

MX

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 944241

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021896

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290045.wiff

Date Analyzed: 29-JAN-10 21:35

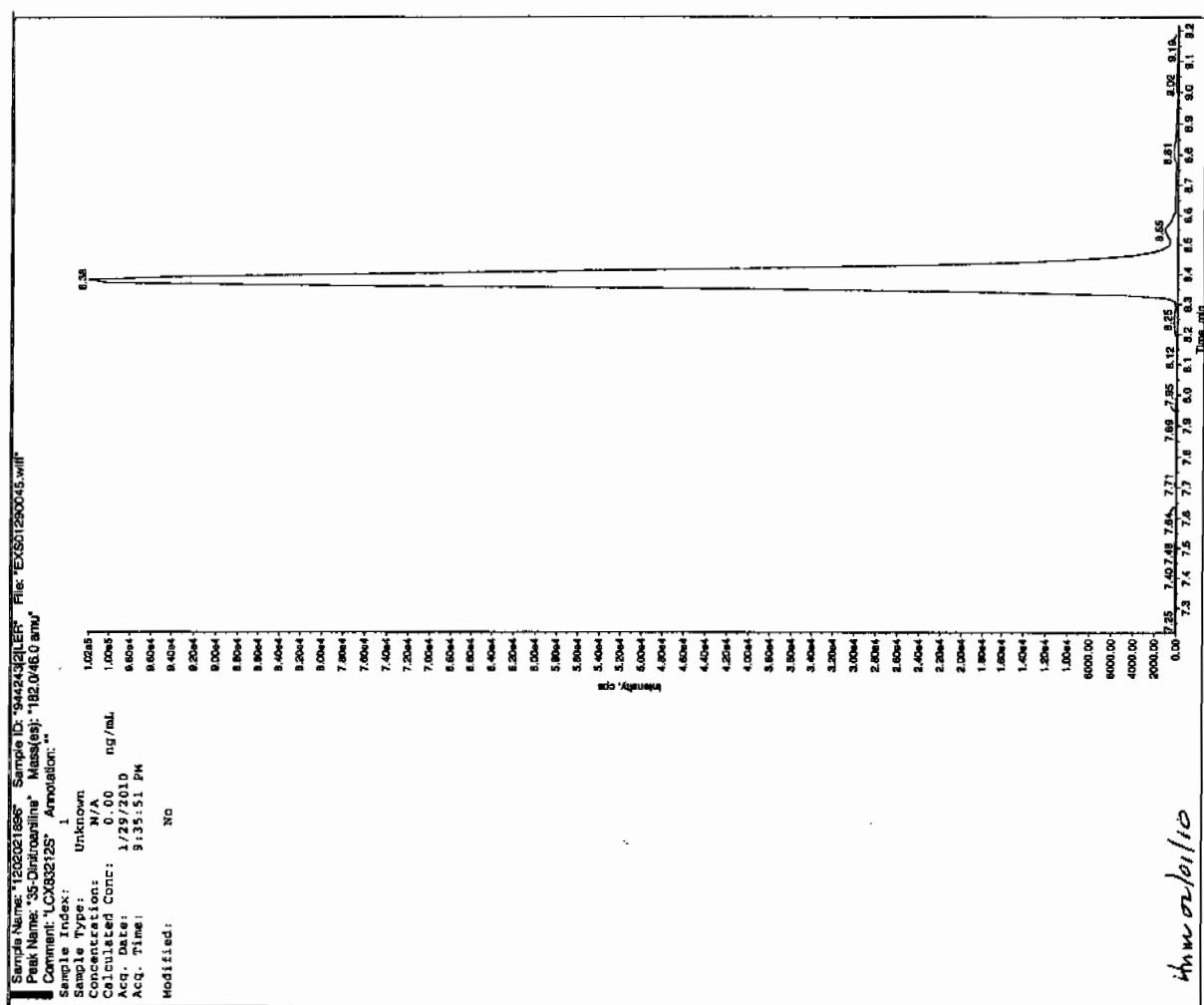
Units: ug/kg

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

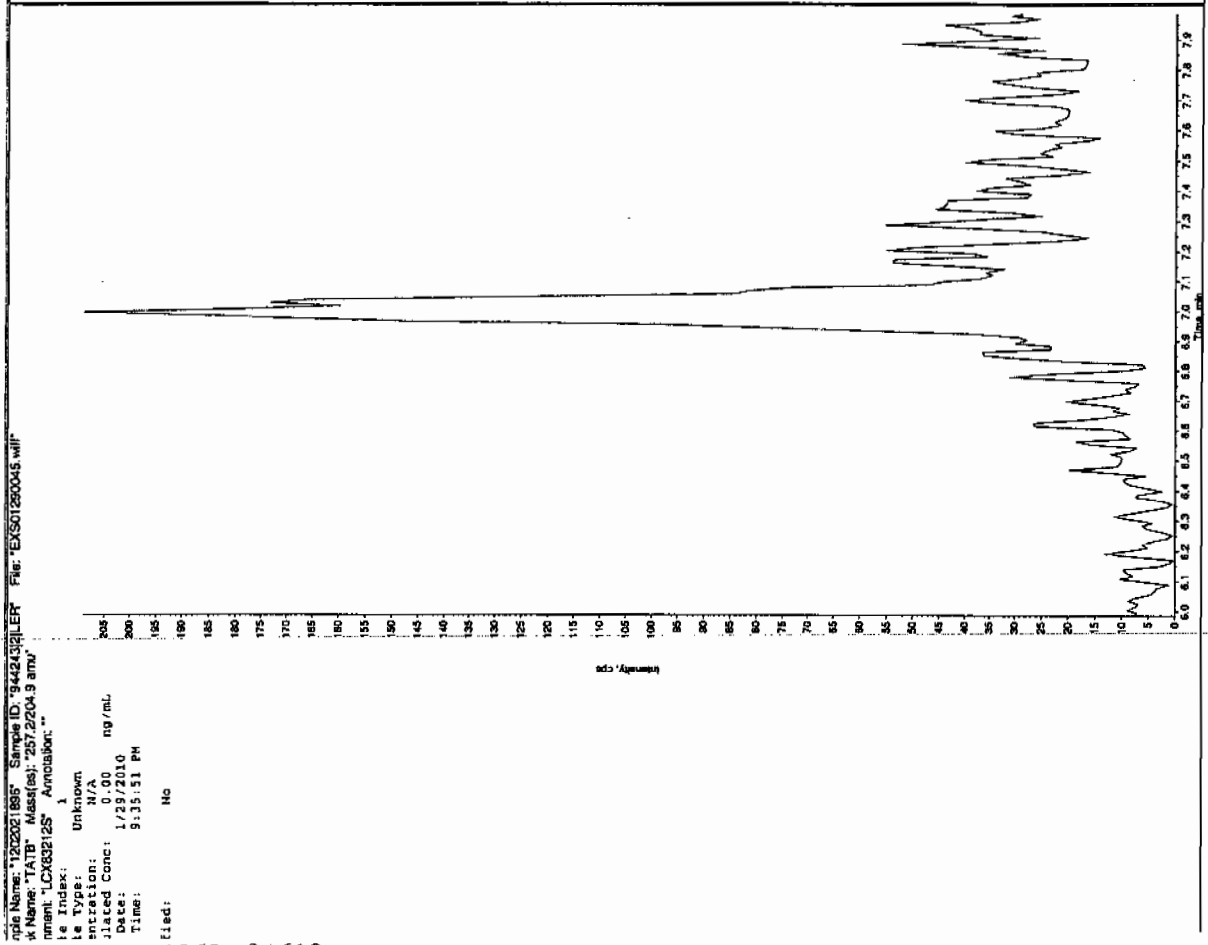
*Concentration =

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

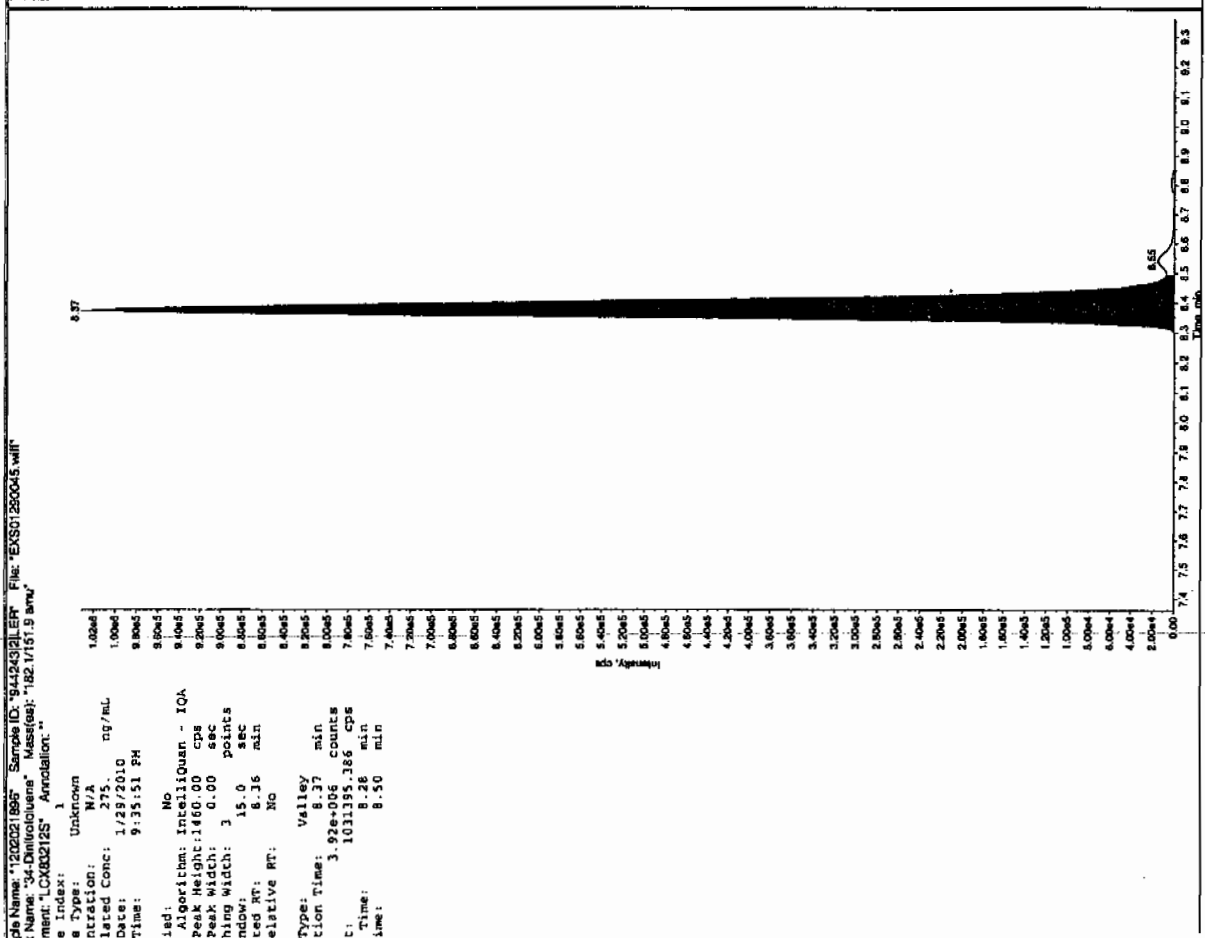
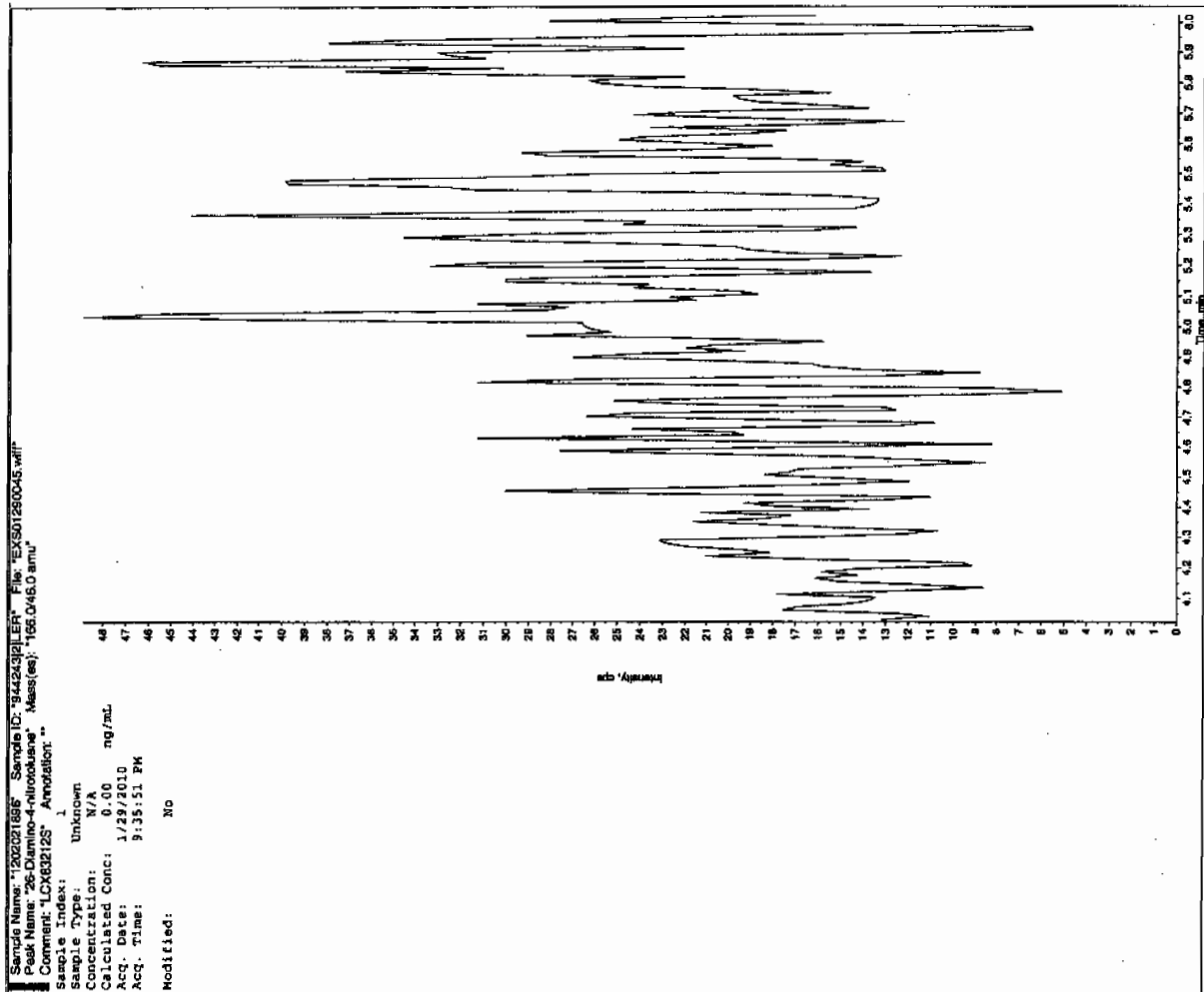
See 2/1/10

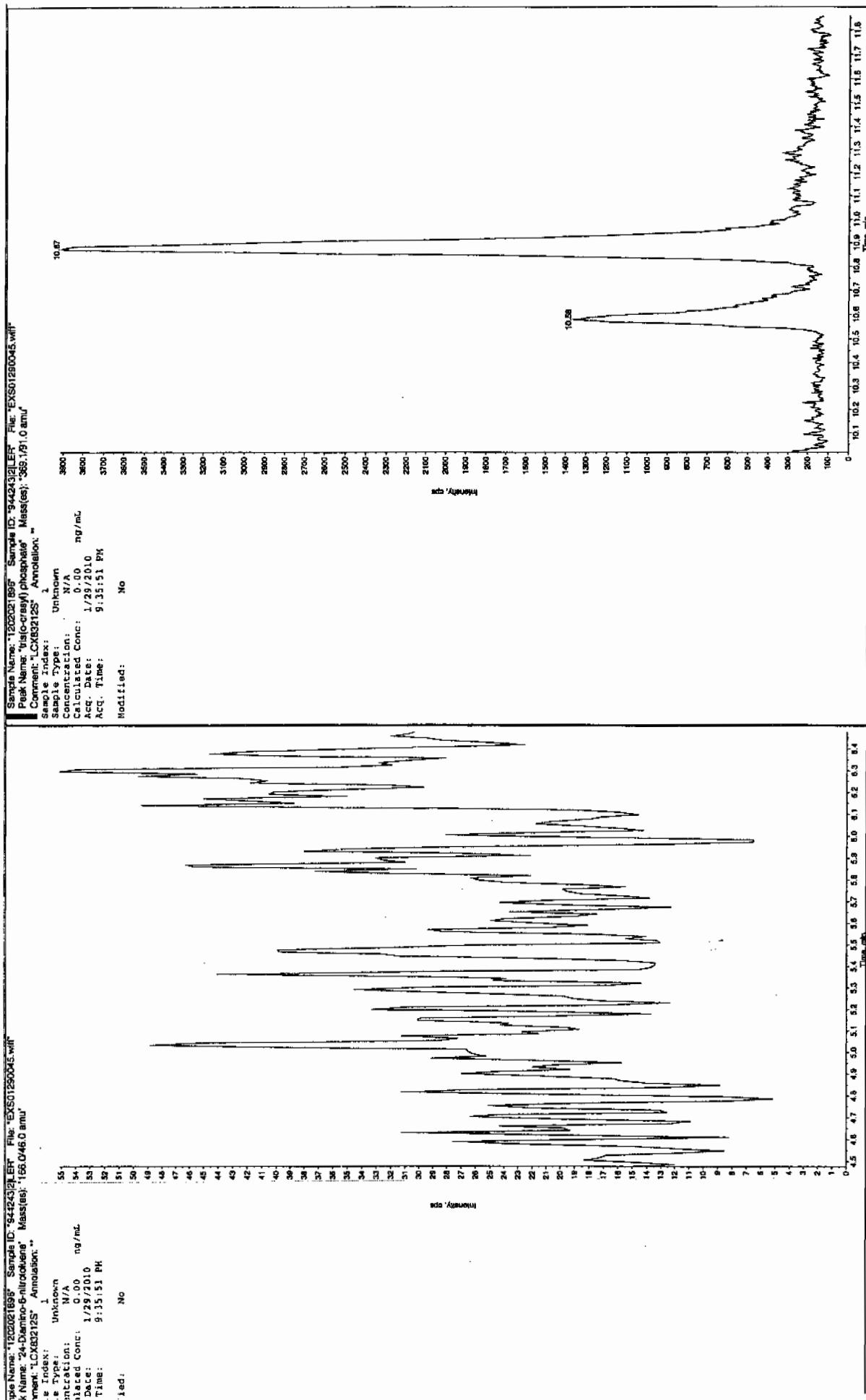


See 2/1/10



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: LCS for batch 944241

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021897

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203111a

Date Analyzed: 05-FEB-10 20:43

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5110	
121-14-2	2,4-Dinitrotoluene	5070	
121-82-4	RDX	5170	
19406-51-0	4-Amino-2,6-dinitrotoluene	4920	
2691-41-0	HMX	4500	
35572-78-2	2-Amino-4,6-dinitrotoluene	5310	
479-45-8	Tetryl	2630	
606-20-2	2,6-Dinitrotoluene	5030	
78-11-5	PETN	4070	
88-72-2	o-Nitrotoluene	4860	
98-95-3	Nitrobenzene	4350	
99-08-1	m-Nitrotoluene	4290	
99-35-4	1,3,5-Trinitrobenzene	4060	
99-65-0	m-Dinitrobenzene	4750	
99-99-0	p-Nitrotoluene	4720	

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0203111a

Date: 05-Feb-2010

Time: 20:43:53

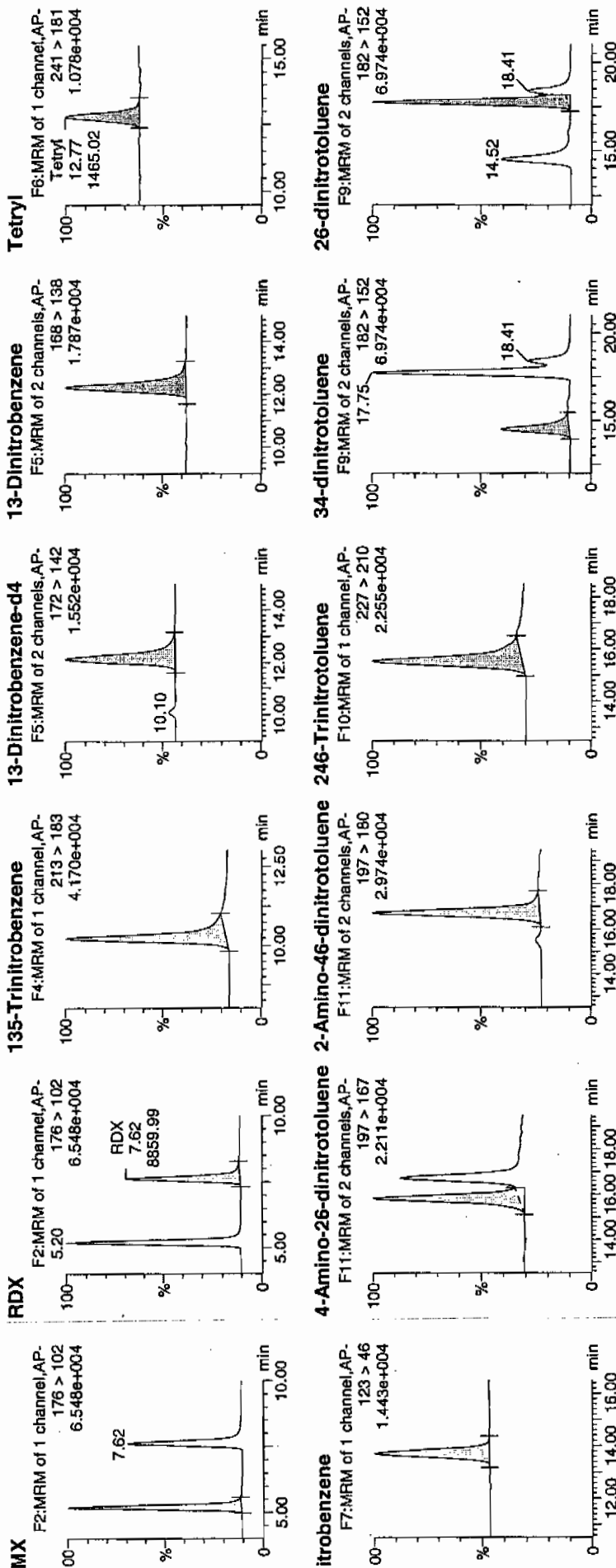
Page: 1373 of 1610

Sample: 1202021897

Label: 3:1,B

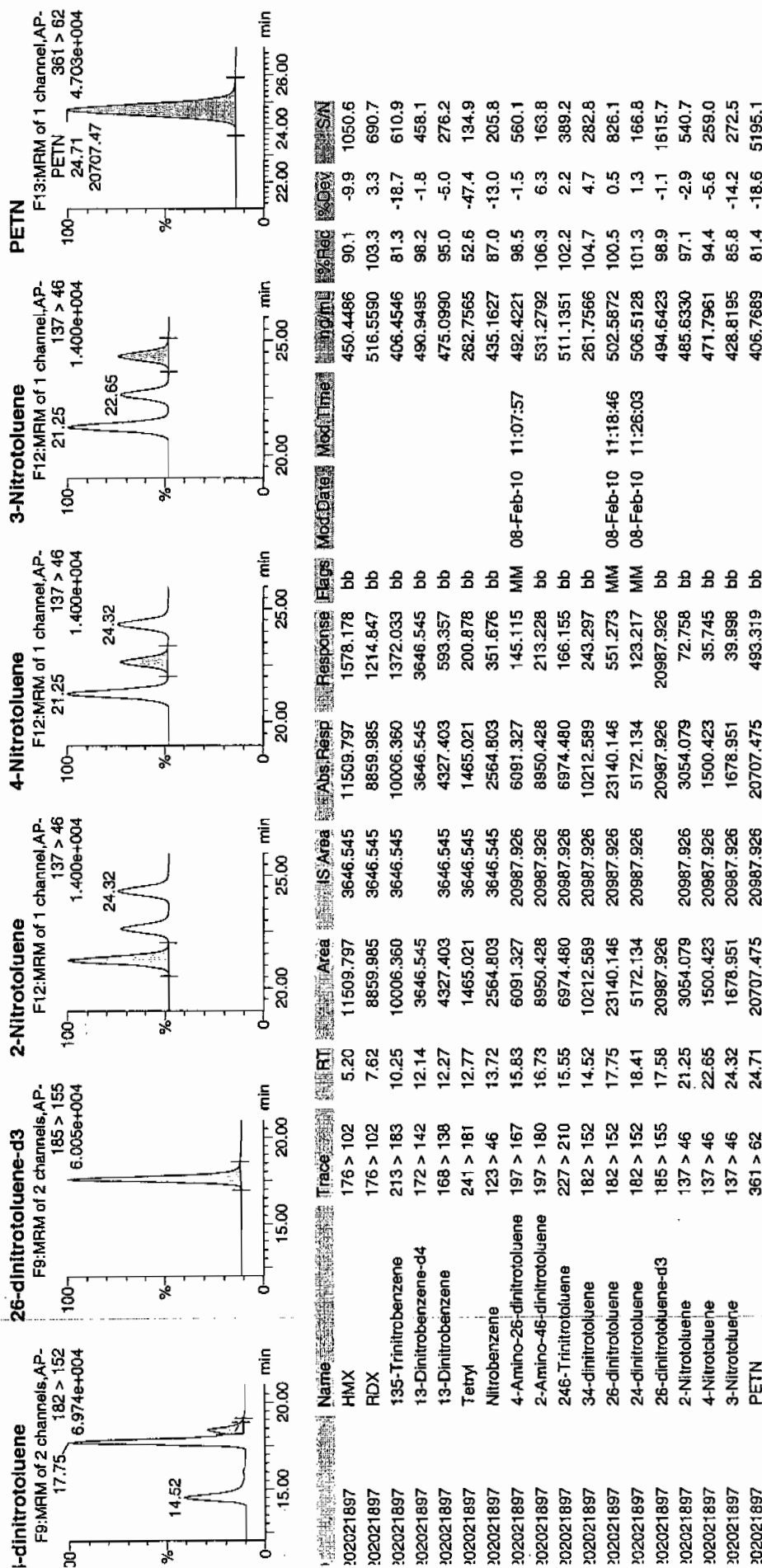
10/10
2/5/10

1944243 | 10/10 | 2/5/10



4/11/10
10/10/10

Dataset: C:\MASSLYNX\New Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 944241

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021897

Sample Amount 2

Moisture:

Amount Units g

Date Received: 21-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290046.wiff

Date Analyzed: 29-JAN-10 21:51

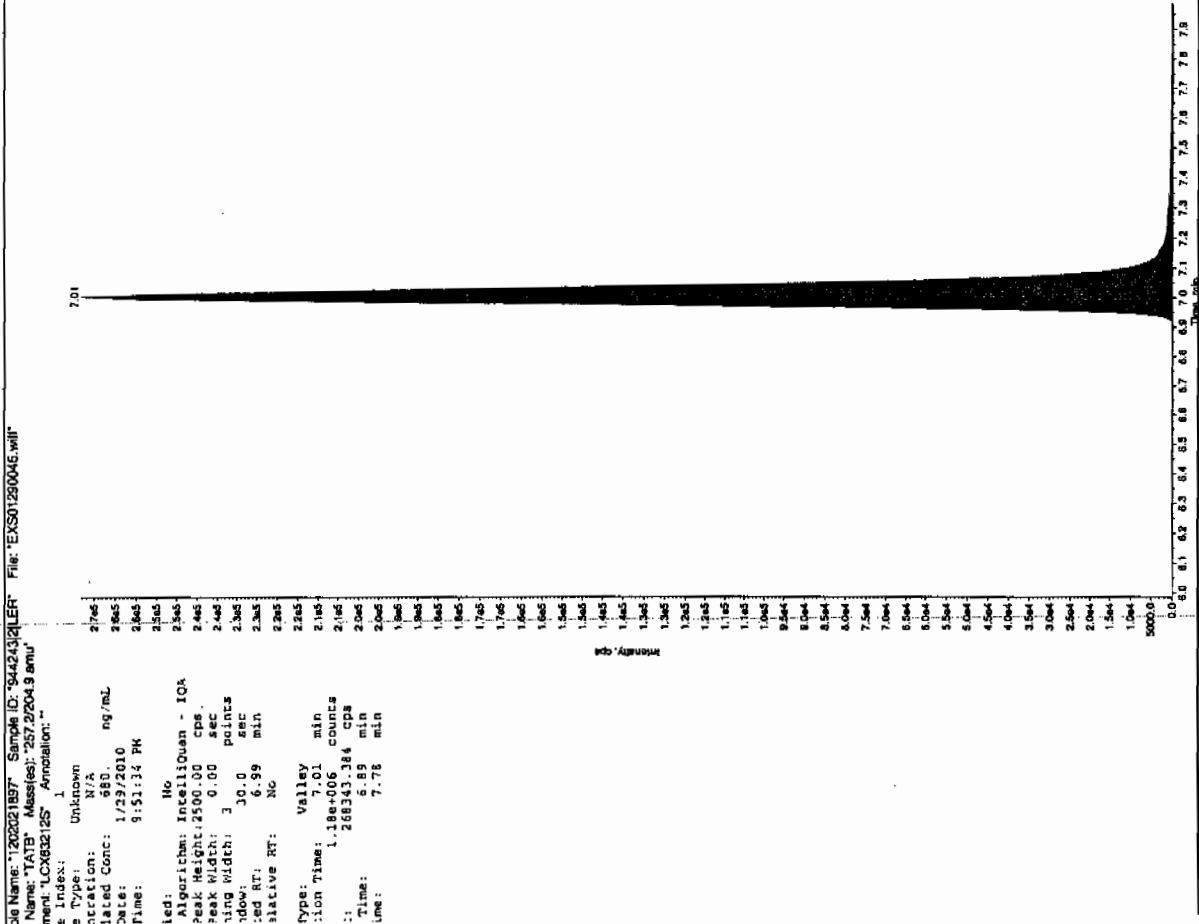
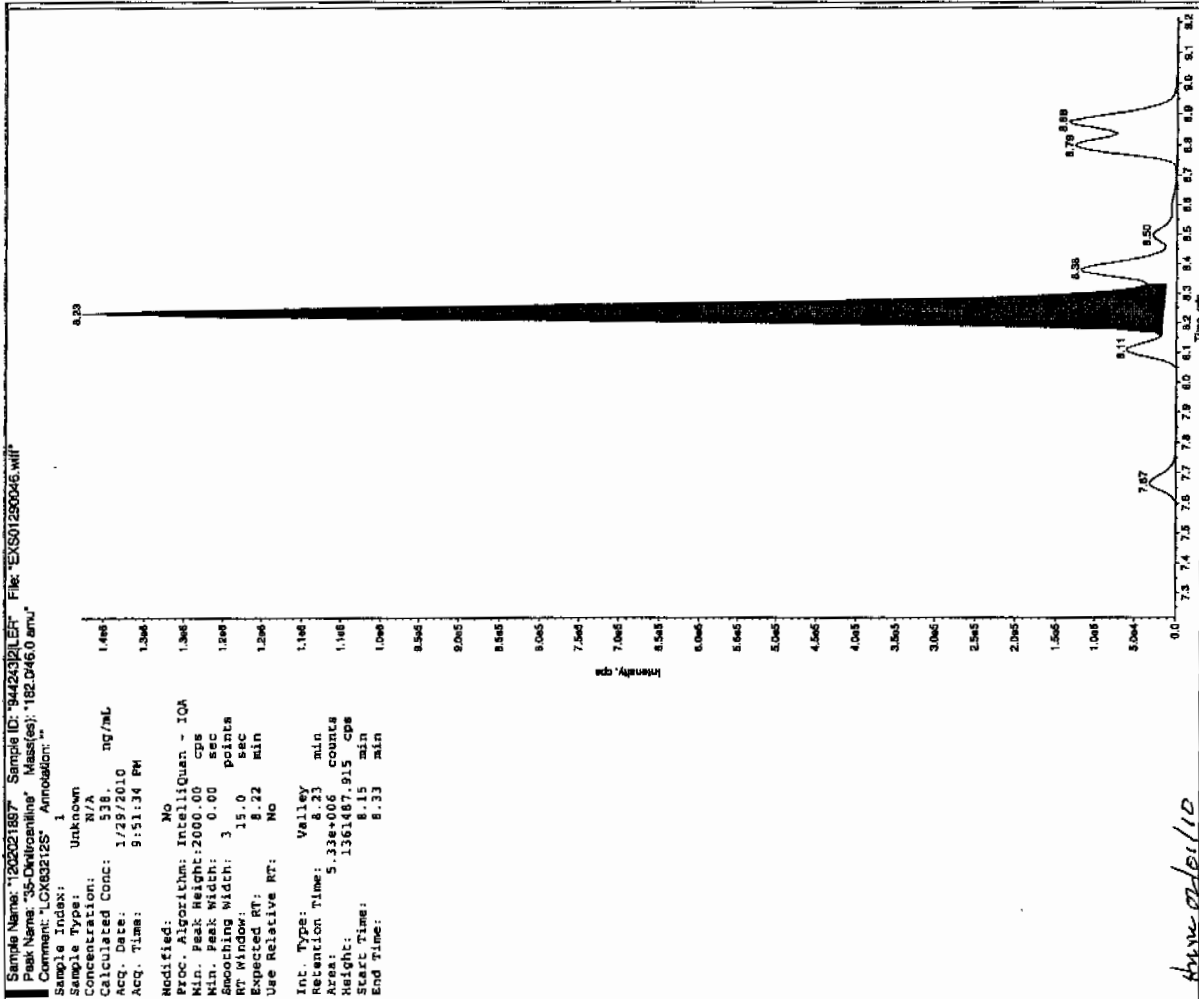
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6800	
59229-75-3	2,6-Diamino-4-nitrotoluene	4710	
618-87-1	3,5-Dinitroaniline	5520	
6629-29-4	2,4-Diamino-6-nitrotoluene	4680	
78-30-8	tris(o-cresyl) phosphate	5400	

*Concentration =

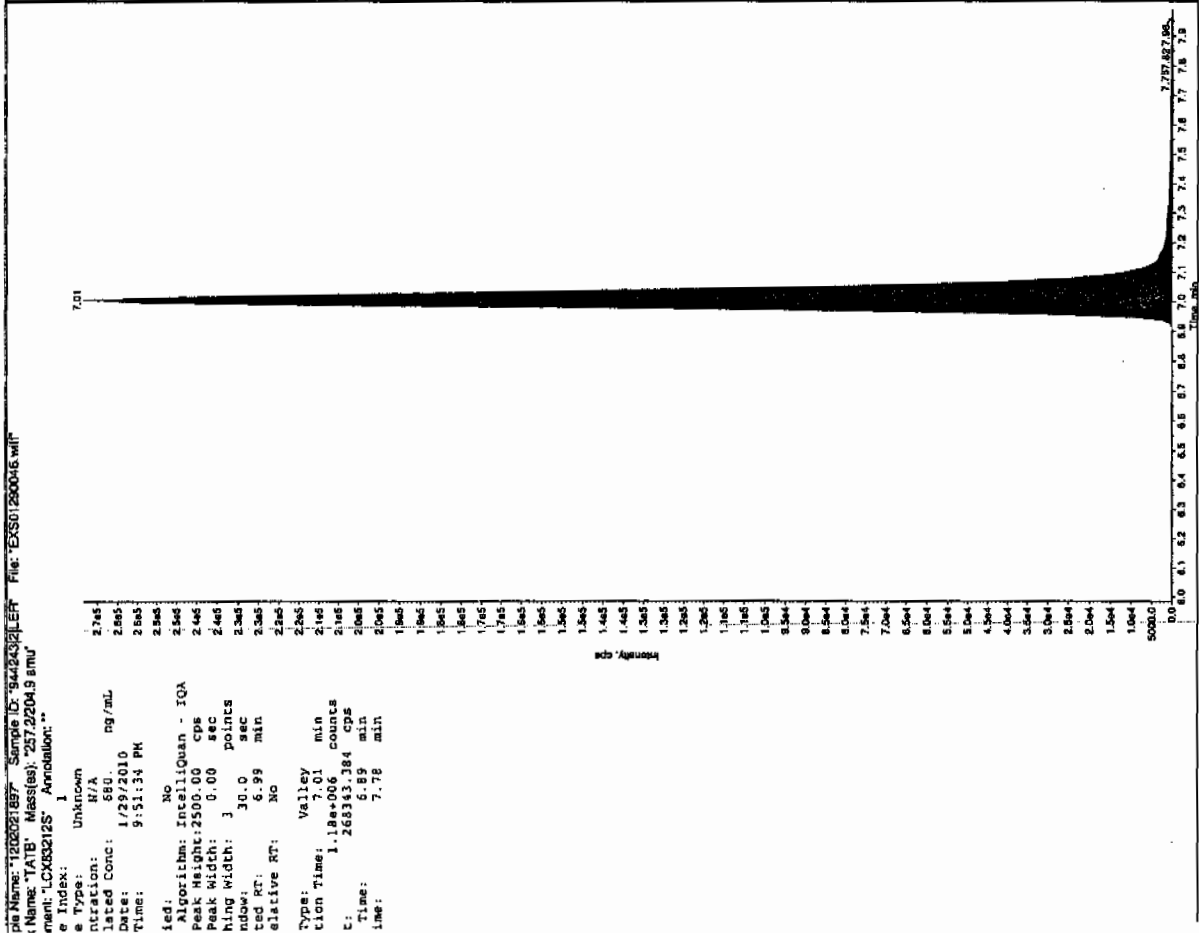
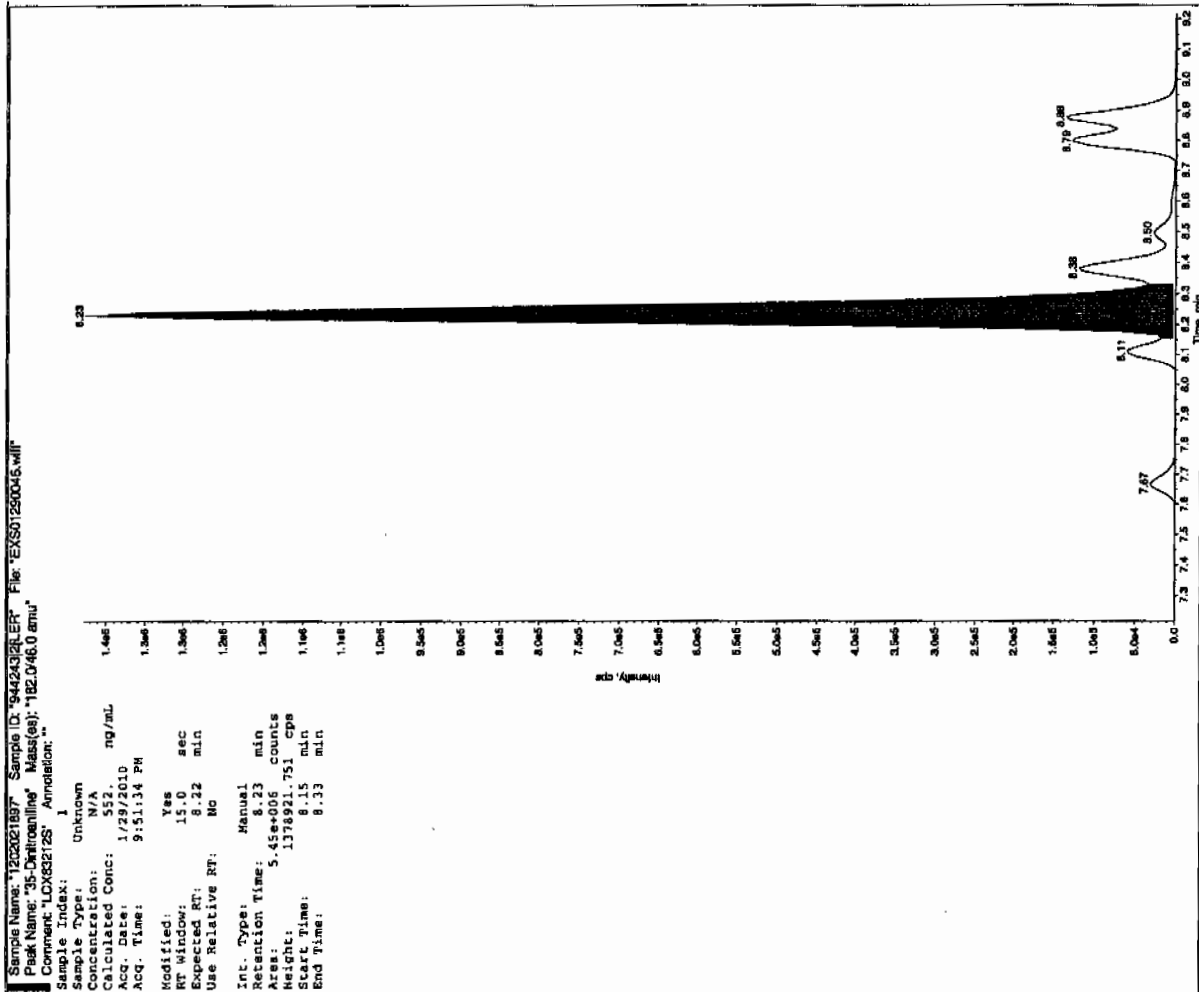
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

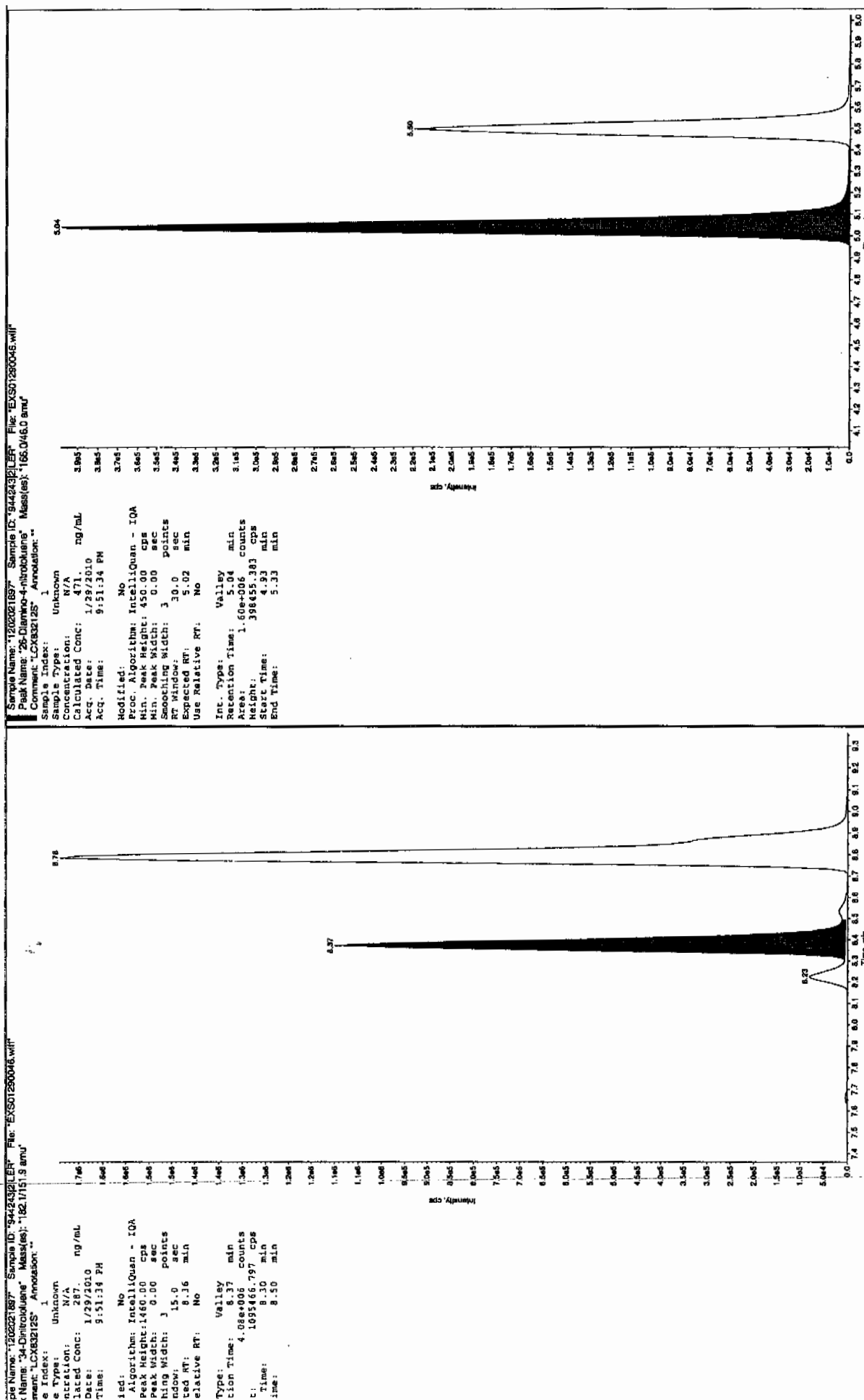
Before Saw 2/1/10

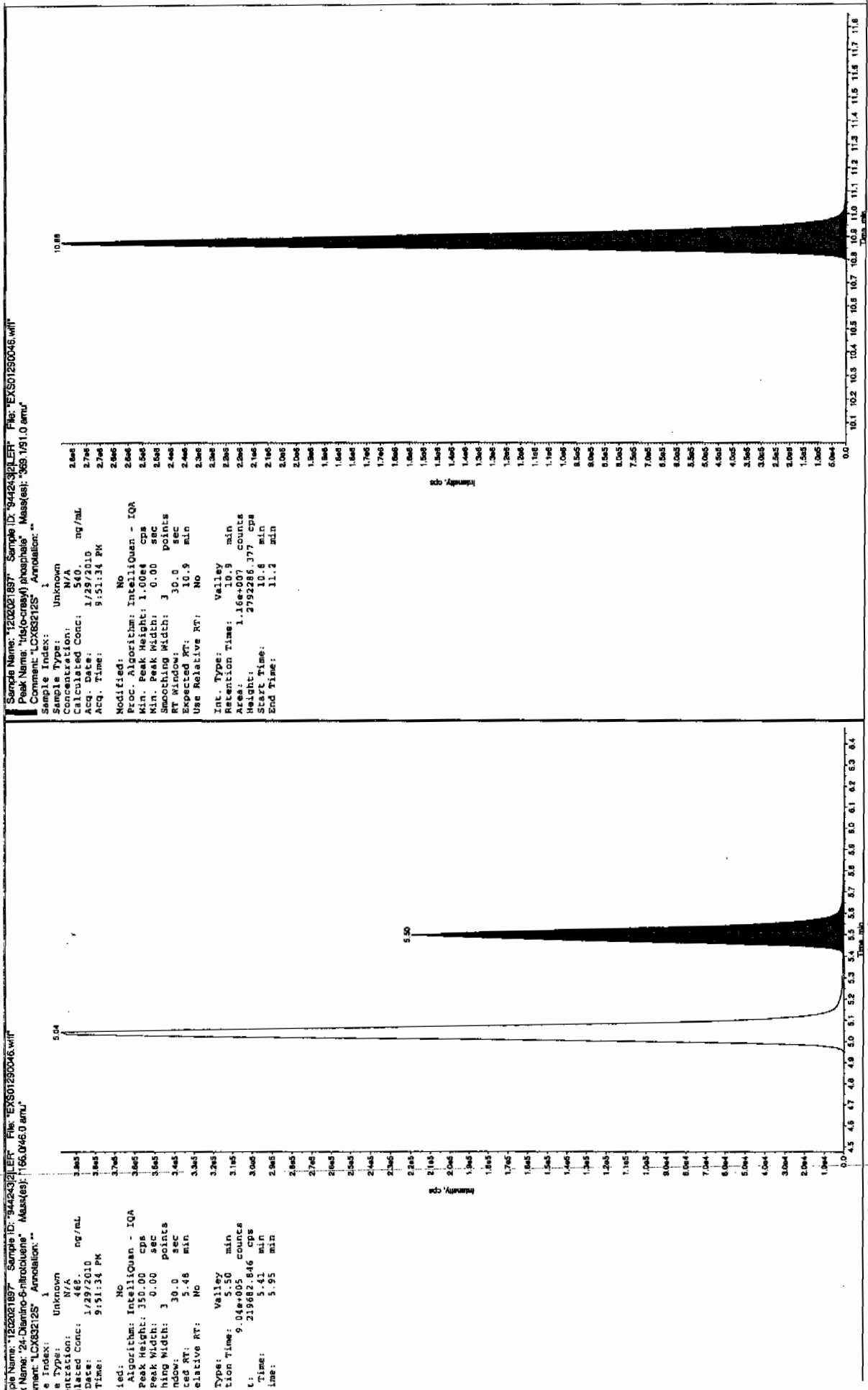


have order 1/10

after Jan 26/10







1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194(245099001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021898

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203113a

Date Analyzed: 05-FEB-10 21:42

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5240	
121-14-2	2,4-Dinitrotoluene	5170	
121-82-4	RDX	4860	
19406-51-0	4-Amino-2,6-dinitrotoluene	5080	
2691-41-0	HMX	4370	
35572-78-2	2-Amino-4,6-dinitrotoluene	5390	
479-45-8	Tetryl	3190	
606-20-2	2,6-Dinitrotoluene	5100	
78-11-5	PETN	5510	
88-72-2	o-Nitrotoluene	5100	
98-95-3	Nitrobenzene	4350	
99-08-1	m-Nitrotoluene	5180	
99-35-4	1,3,5-Trinitrobenzene	4300	
99-65-0	m-Dinitrobenzene	4860	
99-99-0	p-Nitrotoluene	4880	

*Concentration =

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

uantify Sample Report
iEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

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ate: 05-Feb-2010

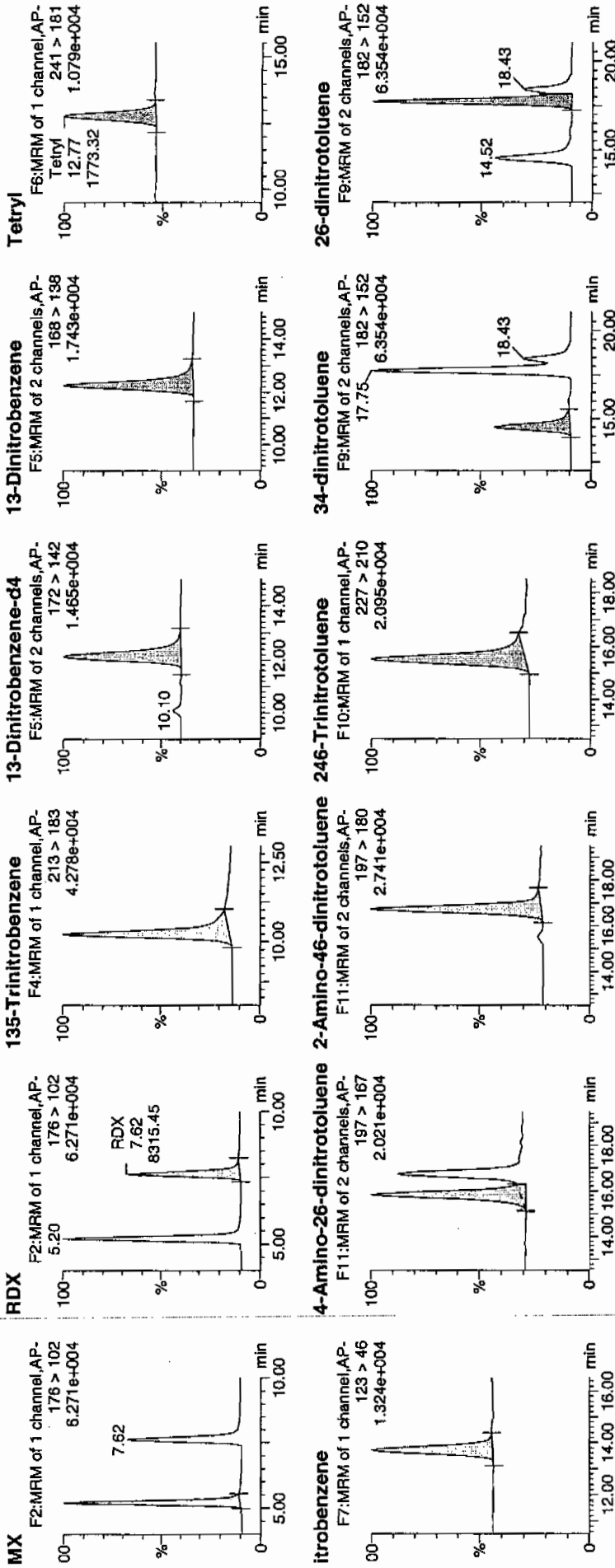
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2: 1202021898

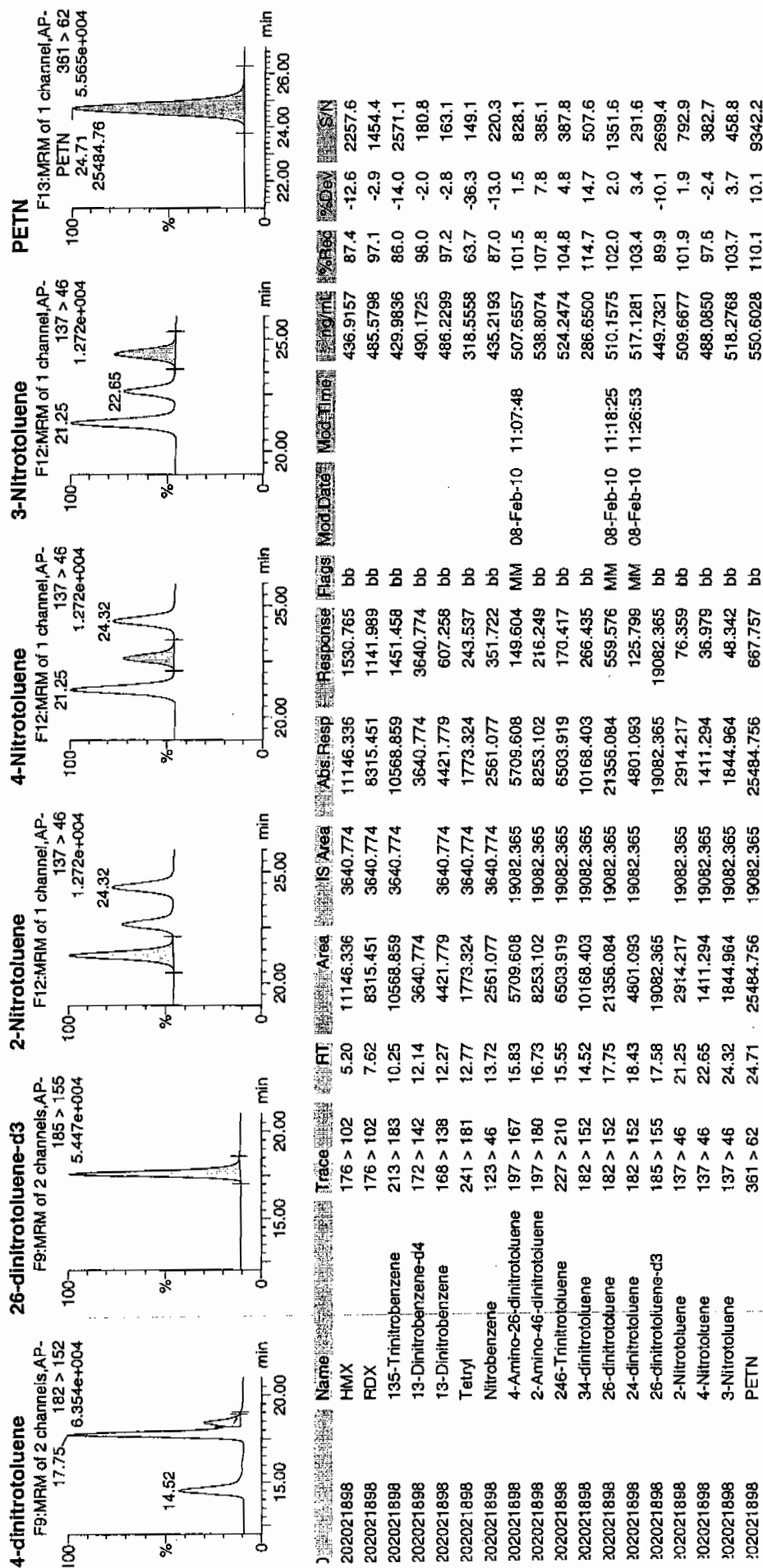
ial: 3:1,D

not
2/6/10

WAV 944243 | 245099001 us | 21



Handwritten signature and date: 2/6/10



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194(245099001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021898

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290048.wiff

Date Analyzed: 29-JAN-10 22:23

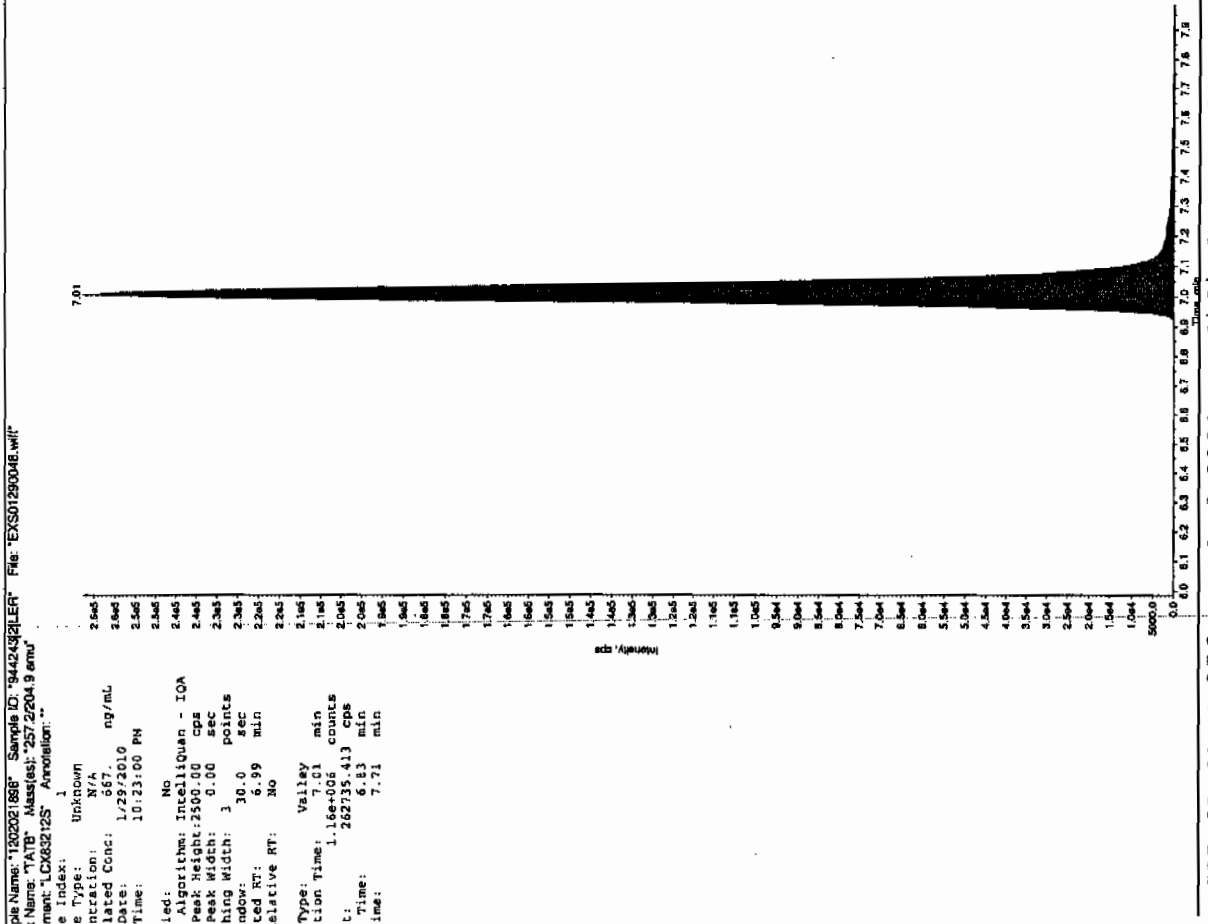
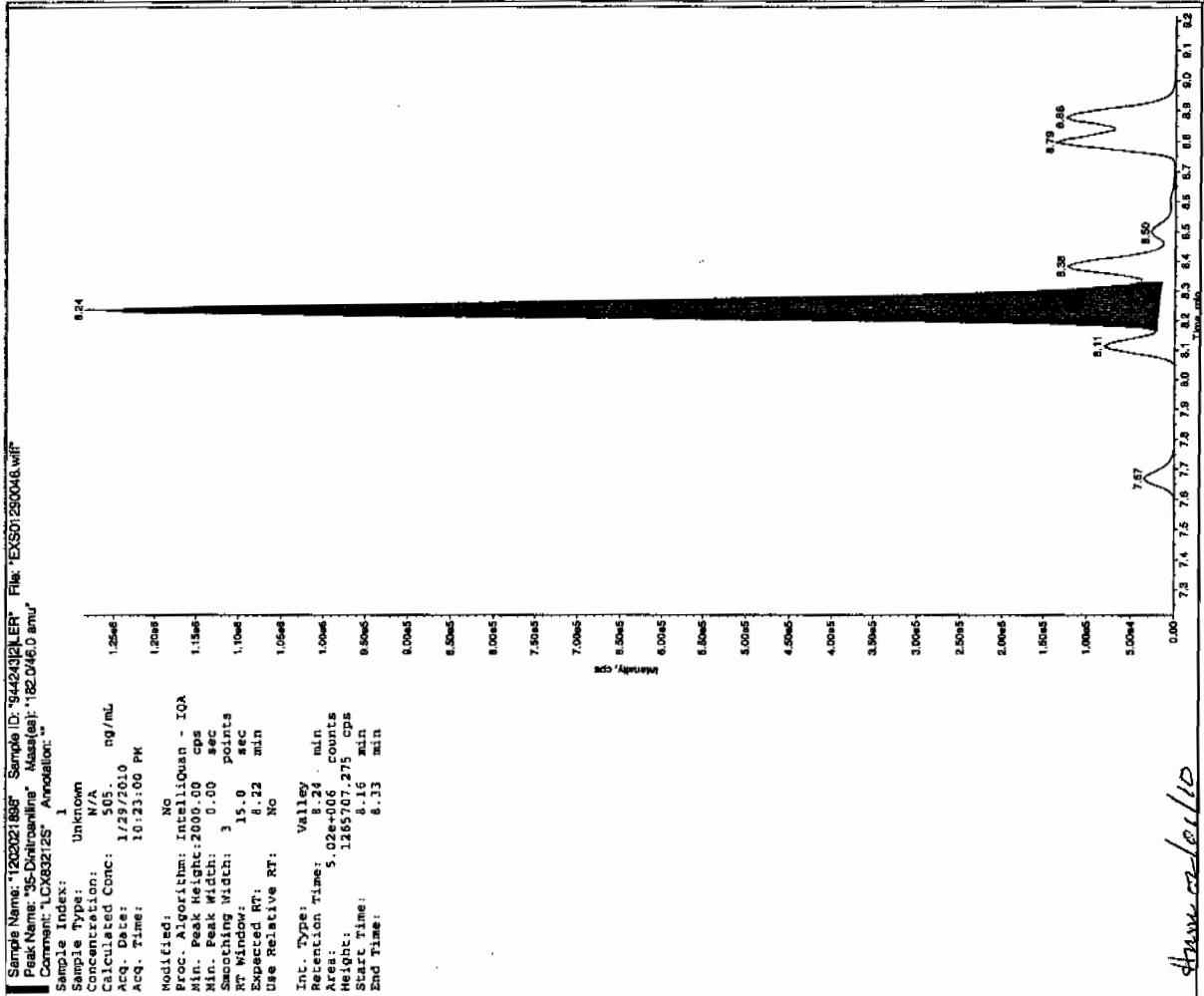
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6670	
59229-75-3	2,6-Diamino-4-nitrotoluene	4300	
618-87-1	3,5-Dinitroaniline	5210	
6629-29-4	2,4-Diamino-6-nitrotoluene	4170	
78-30-8	tris(o-cresyl) phosphate	5380	

*Concentration =

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

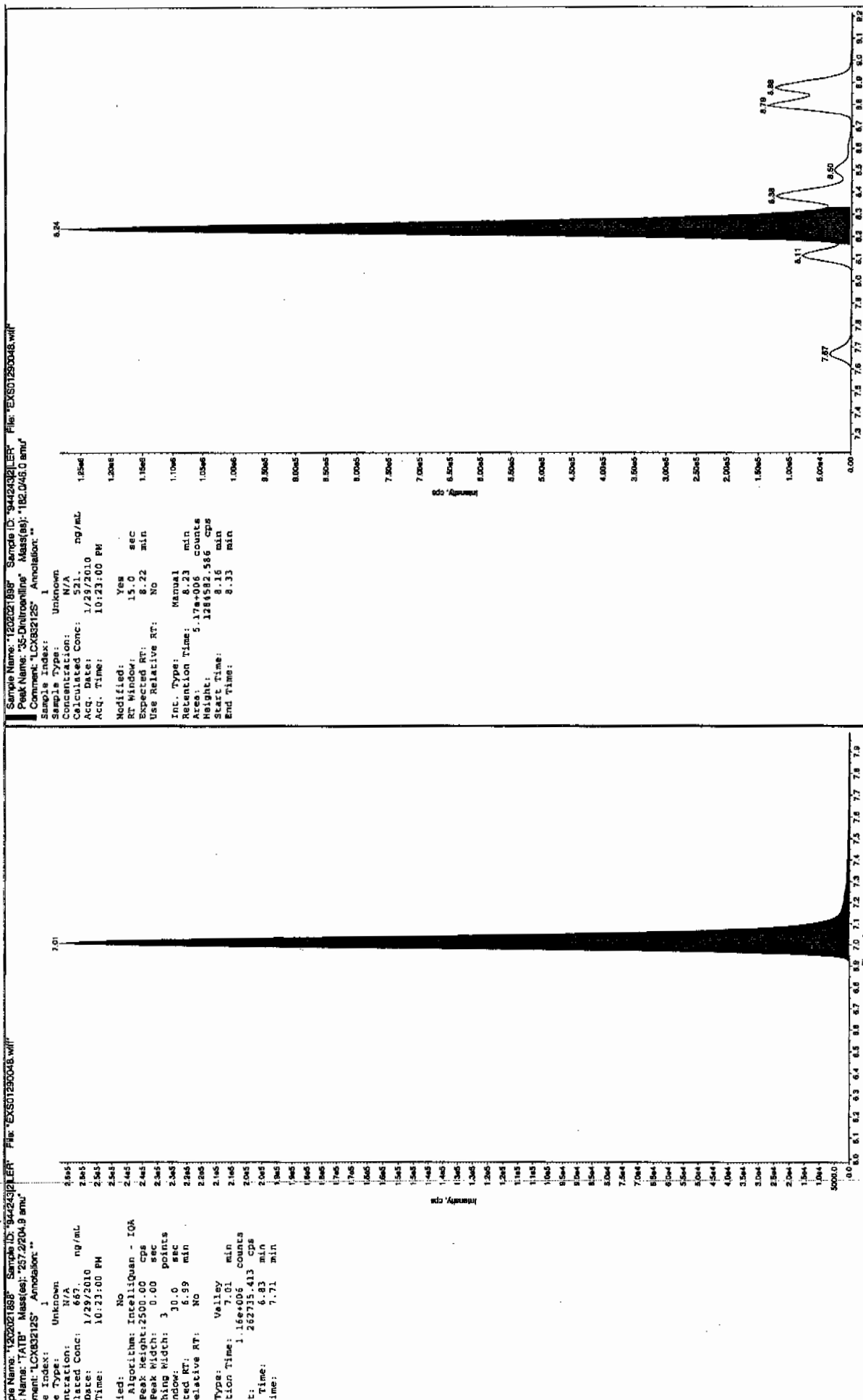
Before Jan 26/10

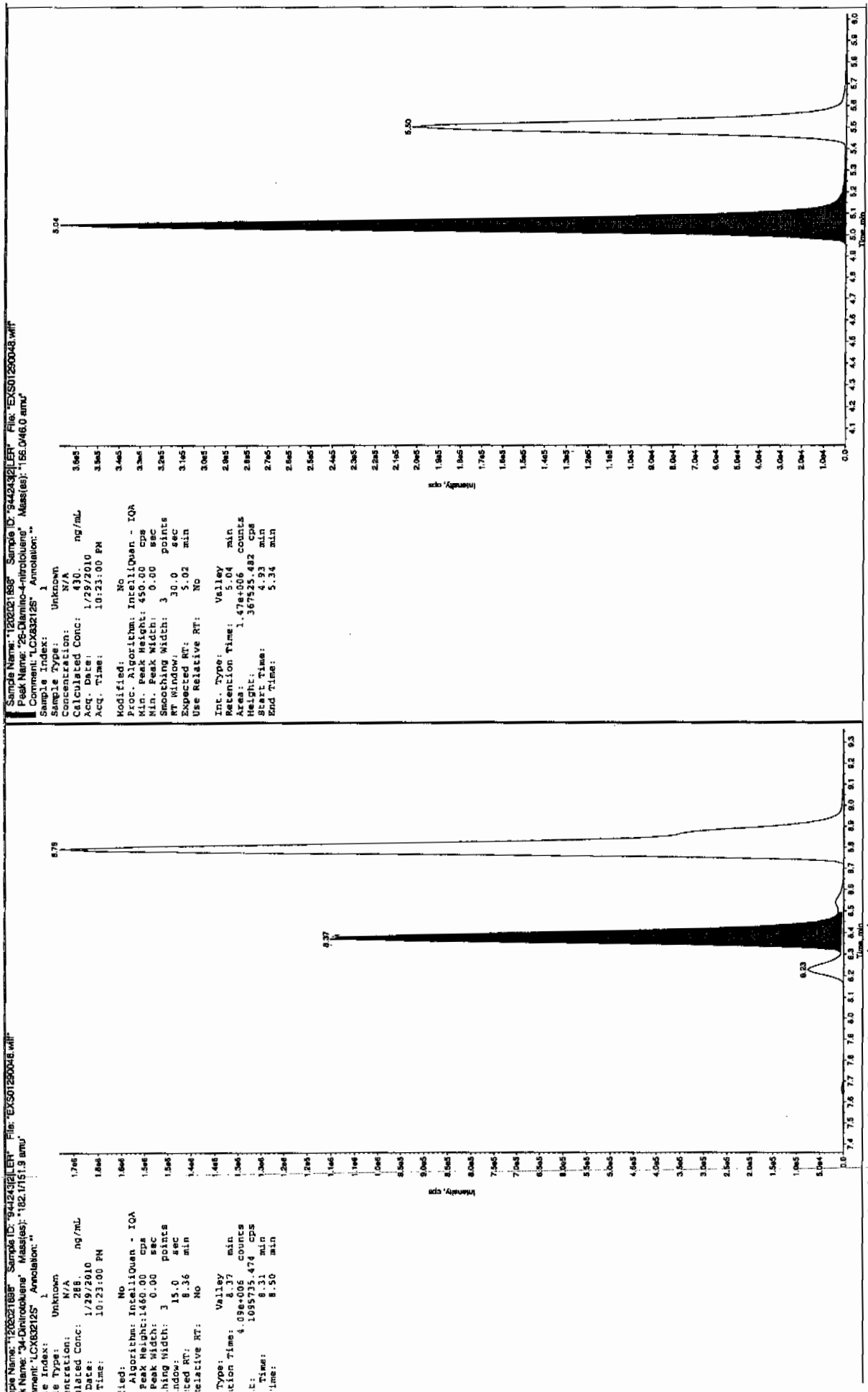


After Jan 26/10

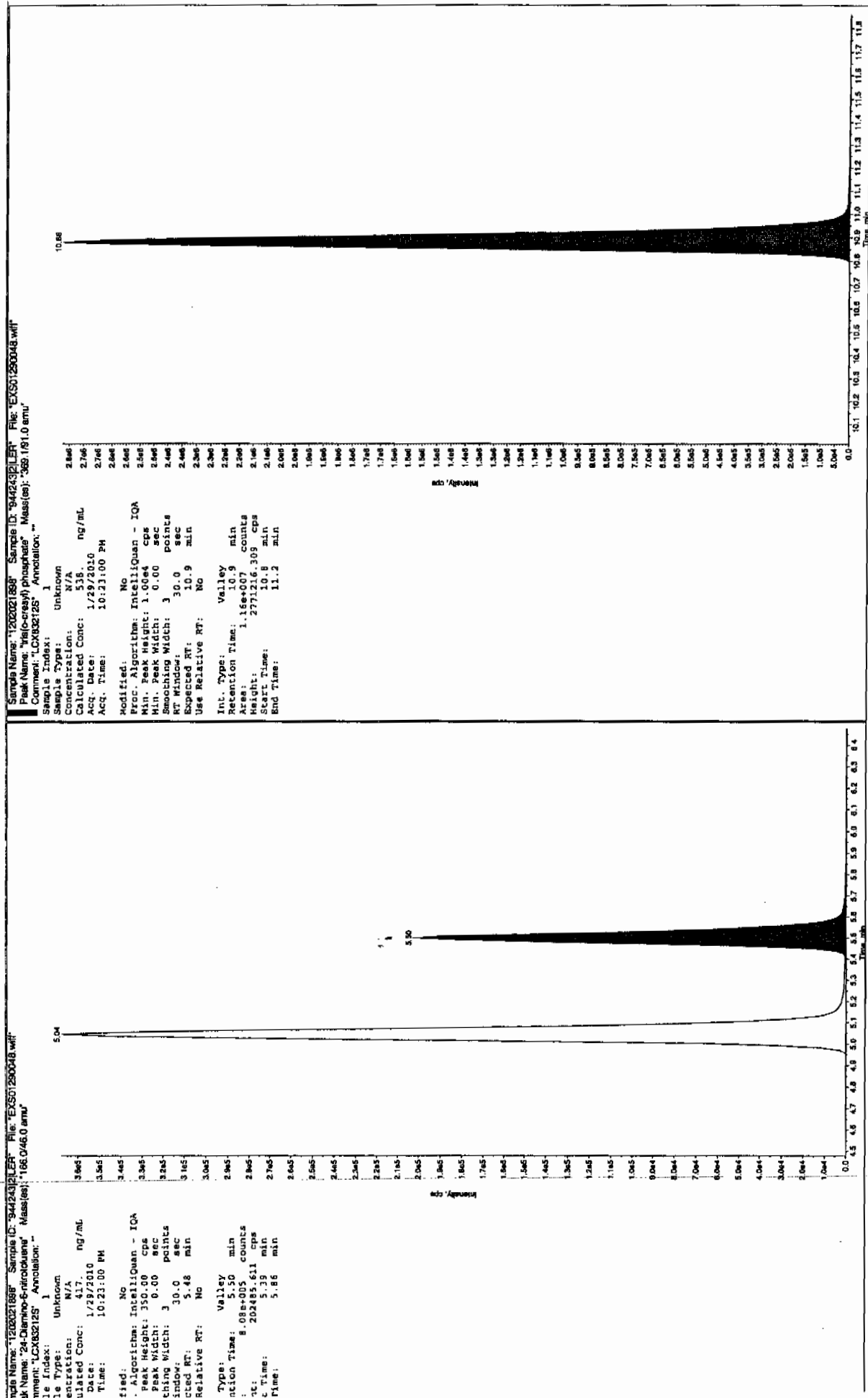
, SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

after Jan 21/10





SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194(245099001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021899

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0203114a

Date Analyzed: 05-FEB-10 22:12

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5200	
121-14-2	2,4-Dinitrotoluene	5360	
121-82-4	RDX	5310	
19406-51-0	4-Amino-2,6-dinitrotoluene	5120	
2691-41-0	HMX	4910	
35572-78-2	2-Amino-4,6-dinitrotoluene	5600	
479-45-8	Tetryl	2890	
606-20-2	2,6-Dinitrotoluene	5020	
78-11-5	PETN	5710	
88-72-2	o-Nitrotoluene	5280	
98-95-3	Nitrobenzene	4820	
99-08-1	m-Nitrotoluene	4830	
99-35-4	1,3,5-Trinitrobenzene	4130	
99-65-0	m-Dinitrobenzene	4810	
99-99-0	p-Nitrotoluene	5300	

*Concentration =

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

Identify Sample Report
iEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Sample Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0203114a

Date: 05-Feb-2010

Time: 22:12:17

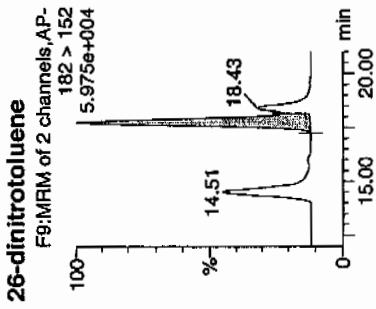
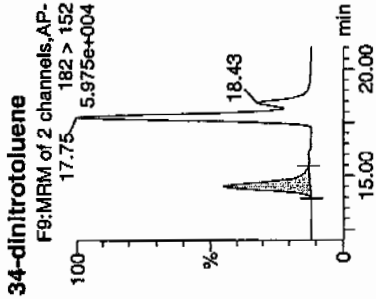
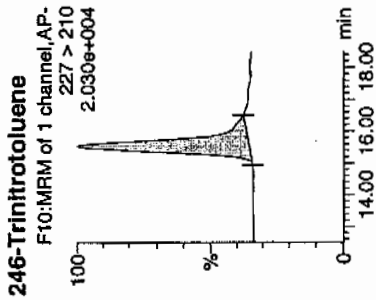
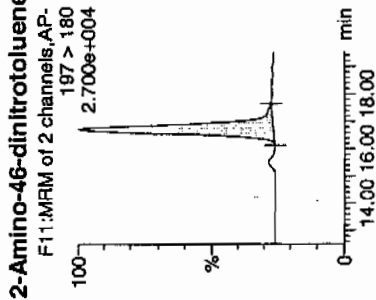
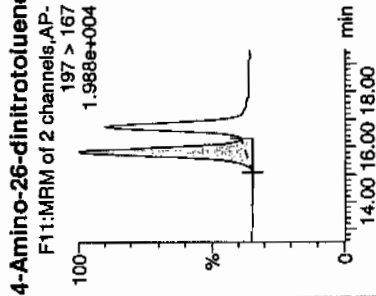
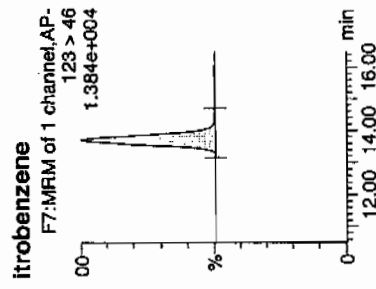
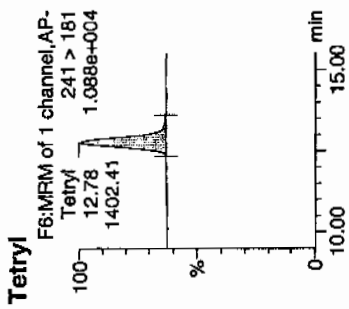
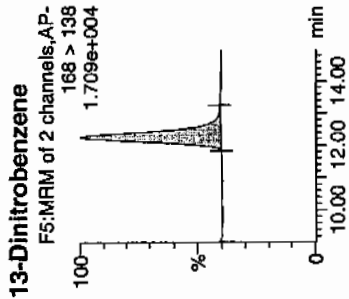
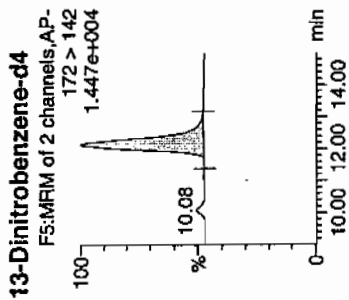
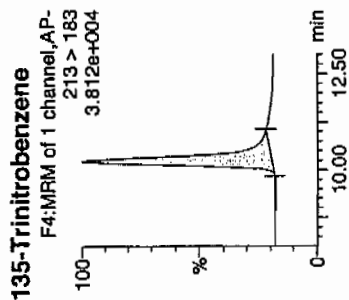
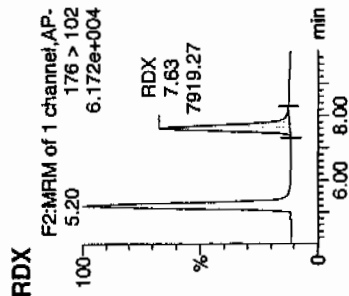
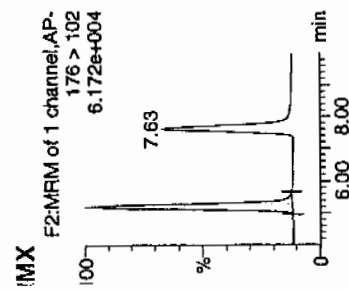
ID: 1202021899

Label: 3:1,E

MSD
2/8/10

WALW 944243 / SCS / 245099001 MSB / 2-1

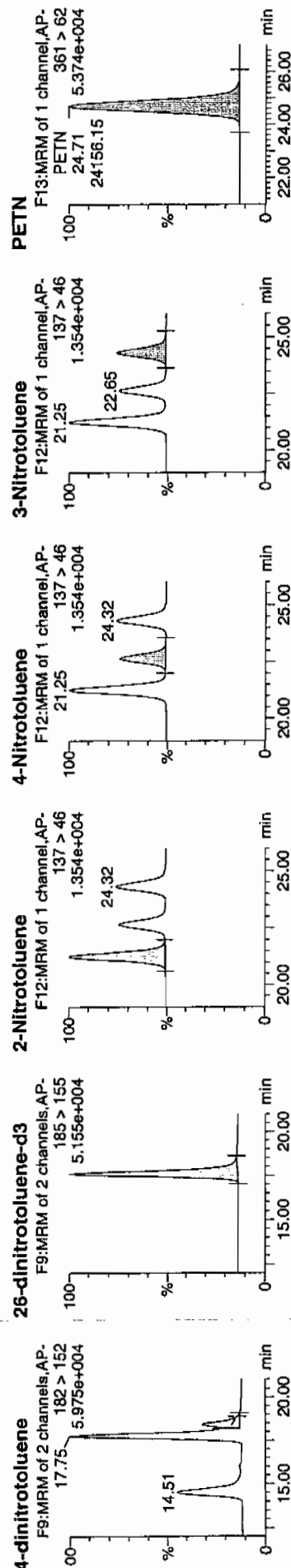
IMX



477716 02/08/10

ataset: C:\MASSLYNX\New_Exp\PRO\020310expA2.qld, Time: Mon Feb 08 11:28:50 2010

Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc (mg/ml)	% Rec	% Dev	SN
202021899	HMX	176 > 102	5.20	10922.167	3172.805	10922.167	1721.216	bb		491.2750	98.3	-1.7	1761.3
202021899	RDX	176 > 102	7.63	7919.266	3172.805	7919.266	1247.991	bb		530.6523	106.1	6.1	1099.4
202021899	135-Trinitrobenzene	213 > 183	10.25	8839.157	3172.805	8839.157	1392.956	bb		412.6529	82.5	-17.5	848.7
202021899	13-Dinitrobenzene-d4	172 > 142	12.14	3172.805		3172.805	3172.805	bb		427.1679	85.4	-14.6	511.3
202021899	13-Dinitrobenzene	168 > 138	12.28	3808.465	3172.805	3808.465	600.173	bb		480.5571	96.1	-3.9	251.9
202021899	Tetryl	241 > 181	12.78	1402.408	3172.805	1402.408	221.004	bb		289.0827	57.8	-42.2	175.1
202021899	Nitrobenzene	123 > 46	13.71	2472.475	3172.805	2472.475	389.636	bb		482.1340	96.4	-3.6	262.8
202021899	4-Amino-26-dinitrobenzene	197 > 167	15.83	5258.906	17426.828	5258.906	150.885	MM	08-Feb-10 11:07:15	512.0027	102.4	2.4	370.1
202021899	2-Amino-46-dinitrobenzene	197 > 180	16.73	7829.357	17426.828	7829.357	224.635	bb		559.7012	111.9	11.9	500.1
202021899	246-Trinitrobenzene	227 > 210	15.55	5894.165	17426.828	5894.165	169.112	bb		520.2323	104.0	4.0	218.5
202021899	34-dinitrobenzene	182 > 152	14.51	9121.778	17426.828	9121.778	261.717	bb		281.5739	112.6	12.6	257.0
202021899	26-dinitrobenzene	182 > 152	17.75	19207.131	17426.828	19207.131	551.079	MM	08-Feb-10 11:18:18	502.4109	100.5	0.5	682.1
202021899	24-dinitrobenzene	182 > 152	18.43	4545.330	17426.828	4545.330	130.412	MM	08-Feb-10 11:27:04	536.0895	107.2	7.2	148.6
202021899	26-dinitrobenzene-d3	185 > 155	17.57	17426.828		17426.828	17426.828	bb		410.7145	82.1	-17.9	1059.2
202021899	2-Nitrotoluene	137 > 46	21.25	2756.106	17426.828	2756.106	79.077	bb		527.8068	105.6	5.6	589.4
202021899	4-Nitrotoluene	137 > 46	22.65	1399.624	17426.828	1399.624	40.157	bb		530.0334	106.0	6.0	281.7
202021899	3-Nitrotoluene	137 > 46	24.32	1569.175	17426.828	1569.175	45.022	bb		482.6798	96.5	-3.5	302.4
202021899	PETN	361 > 62	24.71	24156.150	17426.828	24156.150	693.074	bb		571.4780	114.3	14.3	4739.5



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7194(245099001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1301

Matrix: SOIL

GEL Sample ID: 1202021899

Sample Amount 2

Moisture: 20.7

Amount Units g

Date Received: 20-JAN-10

Extraction Type Sonication

Extraction Batch ID: 944241

Concentrated Extract Volume (mL) 10

Date Extracted: 26-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01290049.wiff

Date Analyzed: 29-JAN-10 22:38

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	25300	
59229-75-3	2,6-Diamino-4-nitrotoluene	4060	
618-87-1	3,5-Dinitroaniline	5480	
6629-29-4	2,4-Diamino-6-nitrotoluene	4100	
78-30-8	tris(o-cresyl) phosphate	5310	

*Concentration =

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

Before Jan 2/1/10

Sample Name: "120202189" Sample ID: "944243121" File: "EX501250049.wif"

Peak Name: "35-Dichloroaniline" Mass(es): "182.0460 amu"

Comment: "LCX632125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 531 ng/mL

Calculated Conc: 531 ng/mL

Acq. Date: 1/29/2010

Acq. Time: 10:38:43 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2500.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 30.0 sec

Expected RT: 6.99 min

Use Relative RT: No

Int. Type: Valley

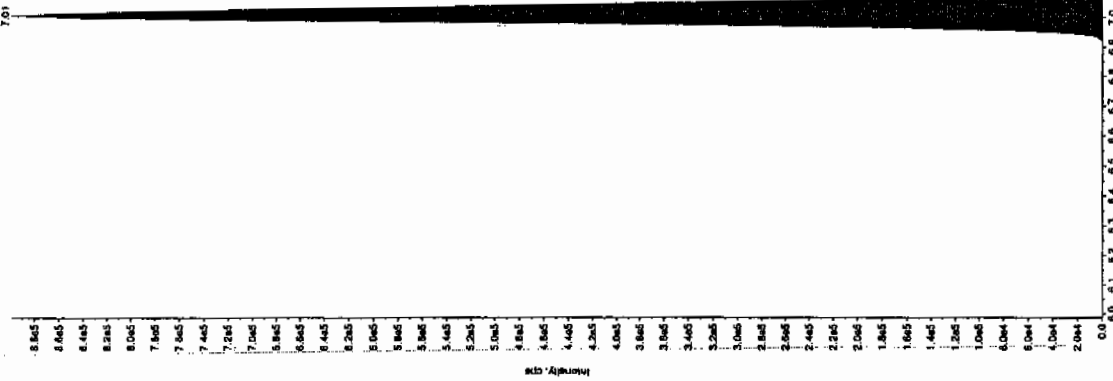
Retention Time: 4.02 min

Area: 898536 counts

Height: 5.85 cps

Start Time: 7.67 min

End Time: 7.67 min



Sample Name: "120202189" Sample ID: "944243121" File: "EX501250049.wif"

Peak Name: "35-Dichloroaniline" Mass(es): "182.0460 amu"

Comment: "LCX632125" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: 531 ng/mL

Calculated Conc: 531 ng/mL

Acq. Date: 1/29/2010

Acq. Time: 10:38:43 PM

Modified: No

Proc. Algorithm: IntelliQuan - IOA

Min. Peak Height: 2000.00 cps

Min. Peak Width: 0.00 sec

Smoothing Width: 3 points

RT Window: 15.0 sec

Expected RT: 8.23 min

Use Relative RT: No

Int. Type: Valley

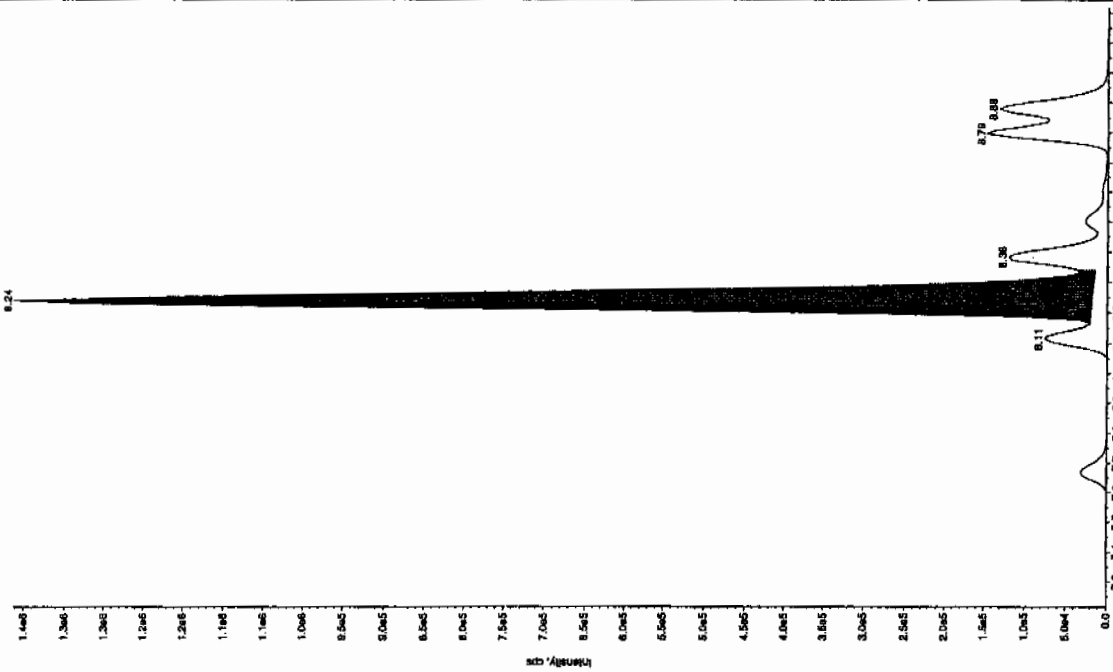
Retention Time: 8.24 min

Area: 3.27e6 counts

Height: 134306.95 cps

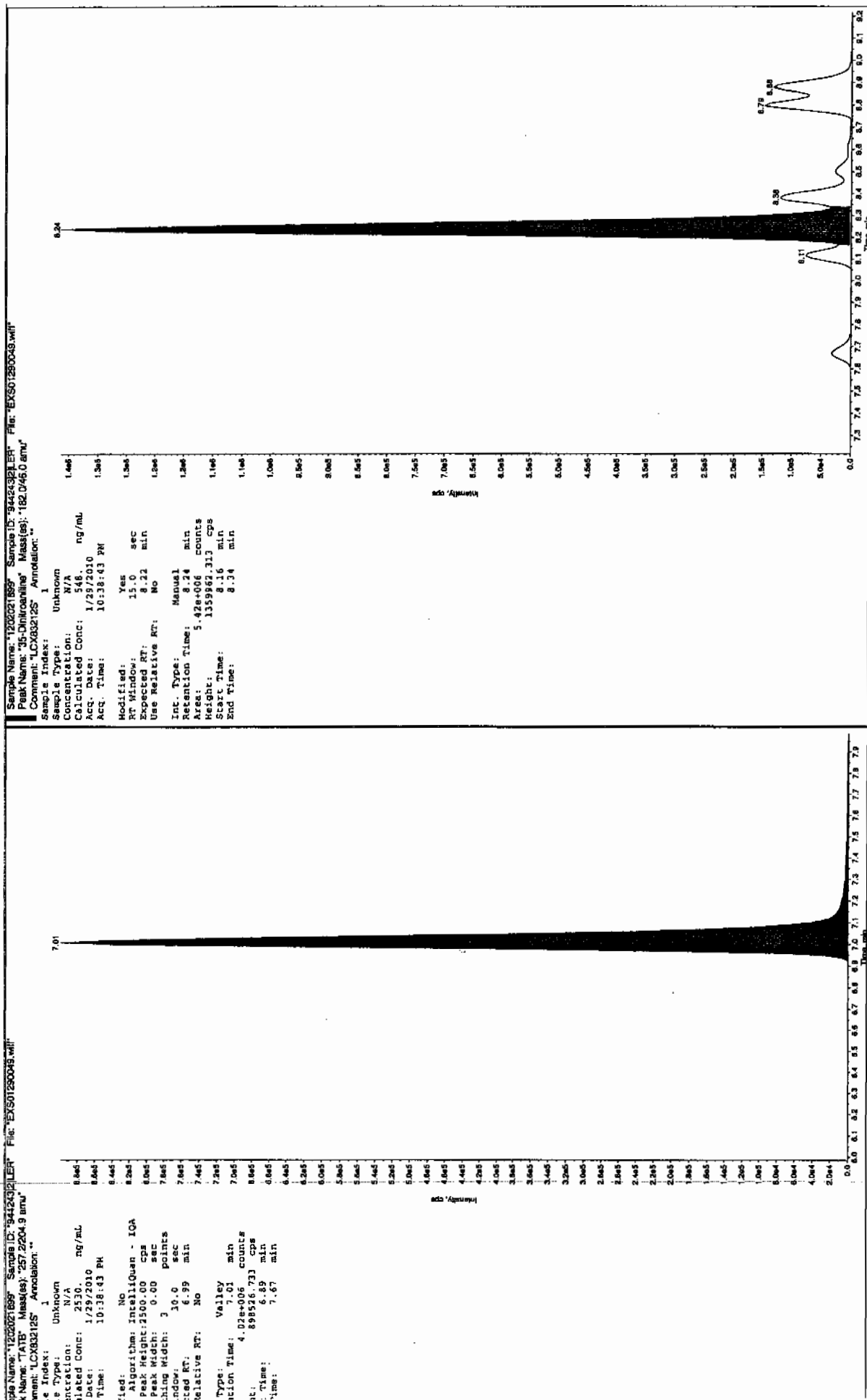
Start Time: 8.16 min

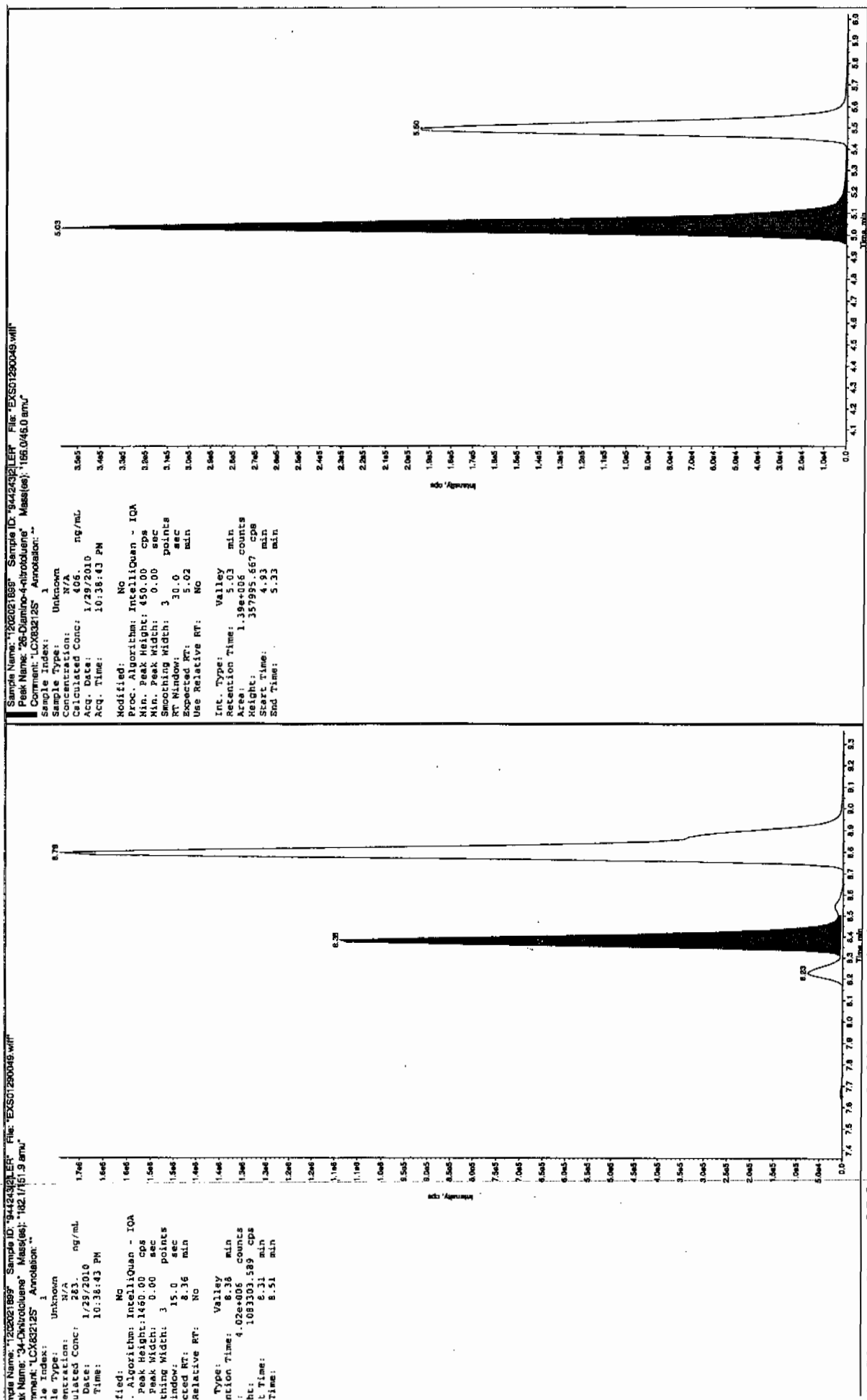
End Time: 8.34 min

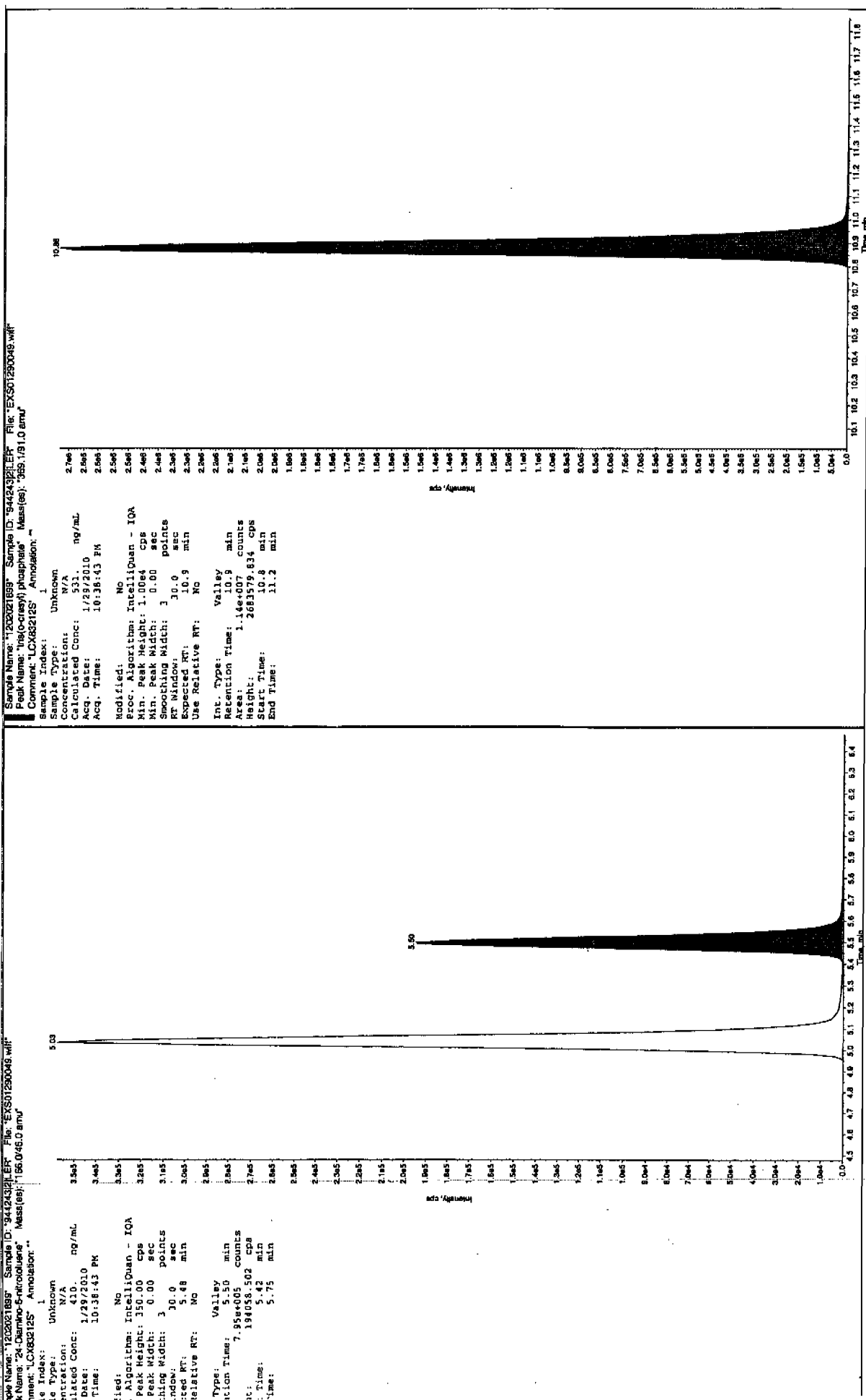


After Jan 2/1/10

after Scan 21110







L 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: 944241 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)
1202021896 MB	26-JAN-2010 14:23:00	2	10	5
1202021897 LCS	26-JAN-2010 14:23:00	2	10	5
245099001	26-JAN-2010 14:23:00	2	10	5
1202021898 MS (245099001)	26-JAN-2010 14:23:00	2	10	5
1202021899 MSD (245099001)	26-JAN-2010 14:23:00	2	10	5
245099002	26-JAN-2010 14:23:00	2	10	5
245099003	26-JAN-2010 14:23:00	2	10	5
245099004	26-JAN-2010 14:23:00	2	10	5
245099005	26-JAN-2010 14:23:00	2	10	5
245099006	26-JAN-2010 14:23:00	2	10	5
245099007	26-JAN-2010 14:23:00	2	10	5
245099008	26-JAN-2010 14:23:00	2	10	5
245099009	26-JAN-2010 14:23:00	2	10	5
245099010	26-JAN-2010 14:23:00	2	10	5
245099011	26-JAN-2010 14:23:00	2	10	5
245099012	26-JAN-2010 14:23:00	2	10	5
245099013	26-JAN-2010 14:23:00	2	10	5
245099014	26-JAN-2010 14:23:00	2	10	5
245099015	26-JAN-2010 14:23:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202021897	8321 Explosives LCS	UXX100125-03	.1	mL	Final Solvent: ACN
LCS	1202021897	8321 LANL Explosives Mix 10mg/L	UXX100108-01.2	1	mL	
MS	1202021898	8321 Explosives LCS	UXX100125-03	.1	mL	
MS	1202021898	8321 LANL Explosives Mix 10mg/L	UXX100108-01.2	1	mL	
MSD	1202021899	8321 Explosives LCS	UXX100125-03	.1	mL	
MSD	1202021899	8321 LANL Explosives Mix 10mg/L	UXX100108-01.2	1	mL	
SURR	All	3,4-Dinitrotoluene (8330 Sur.) 100ppm	DXP100121-02	.05	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 02/03/10
 Extr. Injection Volume: 50ul
 Sequence Number: 020310expA
 Initial Calibration Date: 02/03/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX091230-01.4
 Mobile Phase Lot#: 1261302, 1250738
 Standard-Samp Reagent Lot#: 1260901, 1246195
 Reviewed By: *Amu*
 Date: *02/08/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100203-07 & WXX100205-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0203001a	XIBLK01	MAP	2/3/10 10:10			1		USE	B
EXP0203002a	XIBLK01	MAP	2/3/10 10:39			1		USE	B
EXP0203003a	WXXICAL-01	MAP	2/3/10 11:09			1		USE	I
EXP0203004a	WXXICAL-02	MAP	2/3/10 11:38			1		USE	I
EXP0203005a	WXXICAL-03	MAP	2/3/10 12:08			1		USE	I
EXP0203006a	WXXICAL-04	MAP	2/3/10 12:37			1		USE	I
EXP0203007a	WXXICAL-05	MAP	2/3/10 13:07			1		USE	I
EXP0203008a	WXXICAL-06	MAP	2/3/10 13:36			1		USE	I
EXP0203009a	XIBLK02	MAP	2/3/10 14:06			1		USE	B
EXP0203010a	WXXICV	MAP	2/3/10 14:35			1		USE	C
EXP0203011a	XIBLK03	MAP	2/3/10 15:05			1		USE	B
EXP0203012a	WXXCRI	MAP	2/3/10 15:34			1		USE	C
EXP0203013a	1202021945	MAP	2/3/10 16:04	944262	10-1330	2	LANL	USE	S
EXP0203014a	1202021946	MAP	2/3/10 16:33	944262	10-1330	2	LANL	USE	S
EXP0203015a	245124002	MAP	2/3/10 17:03	944262	10-1330	2	LANL	USE	S
EXP0203016a	1202021947	MAP	2/3/10 17:32	944262	10-1330	2	LANL	USE	S
EXP0203017a	1202021948	MAP	2/3/10 18:02	944262	10-1330	2	LANL	USE	S
EXP0203018a	245124003	MAP	2/3/10 18:31	944262	10-1330	2	LANL	USE	S
EXP0203019a	245124004	MAP	2/3/10 19:01	944262	10-1330	2	LANL	USE	S
EXP0203020a	245124005	MAP	2/3/10 19:30	944262	10-1330	2	LANL	USE	S
EXP0203021a	245124006	MAP	2/3/10 20:00	944262	10-1330	2	LANL	USE	S
EXP0203022a	245124007	MAP	2/3/10 20:29	944262	10-1330	2	LANL	USE	S
EXP0203023a	WXXCCV	MAP	2/3/10 20:59			1		USE	C
EXP0203024a	XIBLK04	MAP	2/3/10 21:28			1		USE	B
EXP0203025a	WXXCRI	MAP	2/3/10 21:58			1		USE	C
EXP0203026a	245124008	MAP	2/3/10 22:27	944262	10-1330	2	LANL	USE	S
EXP0203027a	245124009	MAP	2/3/10 22:57	944262	10-1330	2	LANL	USE	S
EXP0203028a	XIBLK05	MAP	2/3/10 23:26			1		USE	B
EXP0203029a	1202027560	MAP	2/3/10 23:56	946603	10-1422	2	LANL	USE	S

EXP0203030a	1202027561	MAP	2/4/10 0:25	946603	10-1422	2	LANL	USE	S
EXP0203031a	245618007	MAP	2/4/10 0:55	946603	10-1422	2	LANL	USE	S
EXP0203032a	1202027562	MAP	2/4/10 1:24	946603	10-1422	2	LANL	USE	S
EXP0203033a	1202027563	MAP	2/4/10 1:54	946603	10-1422	2	LANL	USE	S
EXP0203034a	WXXCCV	MAP	2/4/10 2:23			1		USE	C
EXP0203035a	XIBLK06	MAP	2/4/10 2:53			1		USE	B
EXP0203036a	WXXCRI	MAP	2/4/10 3:22			1		USE	C
EXP0203037a	1202014483	MAP	2/4/10 3:52	941226	Various	2	LANL	USE	S
EXP0203038a	1202014484	MAP	2/4/10 4:21	941226	Various	2	LANL	USE	S
EXP0203039a	1202014487	MAP	2/4/10 4:51	941226	Various	2	LANL	USE	S
EXP0203040a	244509007	MAP	2/4/10 5:20	941226	10-1187	2	LANL	USE	S
EXP0203041a	244524007	MAP	2/4/10 5:50	941226	10-1184	2	LANL	USE	S
EXP0203042a	XIBLK07	MAP	2/4/10 6:19			1		USE	B
EXP0203043a	1202016494	MAP	2/4/10 6:49	941994	10-1232	2	LANL	USE	S
EXP0203044a	1202016495	MAP	2/4/10 7:18	941994	10-1232	2	LANL	USE	S
EXP0203045a	1202016498	MAP	2/4/10 7:48	941994	10-1232	2	LANL	DUSE-RA	S
EXP0203046a	244705002	MAP	2/4/10 8:18	941994	10-1232	2	LANL	DUSE-RA	S
EXP0203047a	WXXCCV	MAP	2/4/10 8:47			1		USE	C
EXP0203048a	XIBLK08	MAP	2/4/10 9:17			1		USE	B
EXP0203049a	WXXCRI	MAP	2/4/10 9:46			1		USE	C
EXP0203050a	1202023432	MAP	2/4/10 10:16	944852	Various	2	LANL	USE	S
EXP0203051a	1202023433	MAP	2/4/10 10:45	944852	Various	2	LANL	USE	S
EXP0203052a	245371001	MAP	2/4/10 11:15	944852	10-1374	2	LANL	USE	S
EXP0203053a	245371002	MAP	2/4/10 11:44	944852	10-1374	2	LANL	DUSE-RA	S
EXP0203054a	245372002	MAP	2/4/10 12:14	944852	10-1375	2	LANL	DUSE-RA	S
EXP0203055a	1202023434	MAP	2/4/10 12:43	944852	10-1375	2	LANL	DUSE-RA	S
EXP0203056a	1202023435	MAP	2/4/10 13:13	944852	10-1375	2	LANL	DUSE-RA	S
EXP0203057a	245372003	MAP	2/4/10 13:42	944852	10-1375	2	LANL	DUSE-RA	S
EXP0203058a	245372004	MAP	2/4/10 14:12	944852	10-1375	2	LANL	DUSE-RA	S
EXP0203059a	245381002	MAP	2/4/10 14:41	944852	10-1375	2	LANL	DUSE-RA	S
EXP0203060a	WXXCCV	MAP	2/4/10 15:11			1		USE	C
EXP0203061a	XIBLK09	MAP	2/4/10 15:41			1		USE	B
EXP0203062a	WXXCRI	MAP	2/4/10 16:10			1		USE	C
EXP0203063a	245381003	MAP	2/4/10 16:40	944852	10-1380	2	LANL	DUSE-RA	S
EXP0203064a	245381004	MAP	2/4/10 21:36	944852	10-1380	2	LANL	USE	S
EXP0203065a	245381005	MAP	2/4/10 22:05	944852	10-1380	2	LANL	USE	S
EXP0203066a	245381006	MAP	2/4/10 22:35	944852	10-1380	2	LANL	USE	S

[illegible]

EXP0203104a	244943001	MAP	2/5/10 17:17	943475	10-1291	2	LANL	USE	S
EXP0203105a	1202020098	MAP	2/5/10 17:46	943475	10-1291	2	LANL	USE	S
EXP0203106a	1202020099	MAP	2/5/10 18:16	943475	10-1291	2	LANL	USE	S
EXP0203107a	WXXCCV	MAP	2/5/10 18:45			1		USE	C
EXP0203108a	XIBLK15	MAP	2/5/10 19:15			1		USE	B
EXP0203109a	WXXCRI	MAP	2/5/10 19:44			1		USE	C
EXP0203110a	1202021896	MAP	2/5/10 20:14	944243	10-1301	2	LANL	USE	S
EXP0203111a	1202021897	MAP	2/5/10 20:43	944243	10-1301	2	LANL	USE	S
EXP0203112a	245099001	MAP	2/5/10 21:13	944243	10-1301	2	LANL	USE	S
EXP0203113a	1202021898	MAP	2/5/10 21:42	944243	10-1301	2	LANL	USE	S
EXP0203114a	1202021899	MAP	2/5/10 22:12	944243	10-1301	2	LANL	USE	S
EXP0203115a	245099002	MAP	2/5/10 22:41	944243	10-1301	2	LANL	USE	S
EXP0203116a	245099003	MAP	2/5/10 23:11	944243	10-1301	2	LANL	USE	S
EXP0203117a	245099004	MAP	2/5/10 23:40	944243	10-1301	2	LANL	USE	S
EXP0203118a	245099005	MAP	2/6/10 0:10	944243	10-1301	2	LANL	USE	S
EXP0203119a	245099006	MAP	2/6/10 0:39	944243	10-1301	2	LANL	USE	S
EXP0203120a	WXXCCV	MAP	2/6/10 1:09	944243	10-1301	2	LANL	USE	S
EXP0203121a	XIBLK16	MAP	2/6/10 1:38			1		USE	C
EXP0203122a	WXXCRI	MAP	2/6/10 2:08			1		USE	B
EXP0203123a	245099007	MAP	2/6/10 2:37	944243	10-1301	2	LANL	USE	C
EXP0203124a	245099008	MAP	2/6/10 3:07	944243	10-1301	2	LANL	USE	S
EXP0203125a	245099009	MAP	2/6/10 3:36	944243	10-1301	2	LANL	USE	S
EXP0203126a	245099010	MAP	2/6/10 4:06	944243	10-1301	2	LANL	USE	S
EXP0203127a	245099011	MAP	2/6/10 4:35	944243	10-1301	2	LANL	USE	S
EXP0203128a	245099012	MAP	2/6/10 5:05	944243	10-1301	2	LANL	USE	S
EXP0203129a	245099013	MAP	2/6/10 5:34	944243	10-1301	2	LANL	USE	S
EXP0203130a	245099014	MAP	2/6/10 6:04	944243	10-1301	2	LANL	USE	S
EXP0203131a	245099015	MAP	2/6/10 6:33	944243	10-1301	2	LANL	USE	S
EXP0203132a	WXXCCV	MAP	2/6/10 7:03			1		USE	C
EXP0203133a	XIBLK17	MAP	2/6/10 7:32			1		USE	B
EXP0203134a	WXXCRI	MAP	2/6/10 8:02			1		USE	C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS4

Date: 01/29/10
 Extr. Injection Volume: 10uL
 Sequence Number: 012910
 Initial Calibration Date: 012910
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1250738, 1246467
 Standard-Samp Reagent Lot#: 1246195, 1253092
 Reviewed By: *hml*
 Date: 02/01/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100129-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01290001.wiff	XIBLK01	LER	1/29/2010 10:04			1		USE	B
EXS01290002.wiff	XIBLK01	LER	1/29/2010 10:20			1		USE	B
EXS01290003.wiff	WXXICAL-19	LER	1/29/2010 10:36			1		USE	I
EXS01290004.wiff	WXXICAL-20	LER	1/29/2010 10:52			1		USE	I
EXS01290005.wiff	WXXICAL-21	LER	1/29/2010 11:07			1		USE	I
EXS01290006.wiff	WXXICAL-22	LER	1/29/2010 11:23			1		USE	I
EXS01290007.wiff	WXXICAL-23	LER	1/29/2010 11:39			1		USE	I
EXS01290008.wiff	WXXICAL-24	LER	1/29/2010 11:54			1		USE	I
EXS01290009.wiff	WXXICAL-25	LER	1/29/2010 12:10			1		USE	I
EXS01290010.wiff	XIBLK02	LER	1/29/2010 12:26			1		USE	B
EXS01290011.wiff	WXXICV	LER	1/29/2010 12:41			1		USE	C
EXS01290012.wiff	XIBLK03	LER	1/29/2010 12:57			1		USE	B
EXS01290013.wiff	WXXCRI	LER	1/29/2010 13:13			1		USE	C
EXS01290014.wiff	1202021948	LER	1/29/2010 13:29	944262	10-1330	2	LANL	USE	S
EXS01290015.wiff	XIBLK04	LER	1/29/2010 13:44			1		USE	B
EXS01290016.wiff	1202023432	LER	1/29/2010 14:00	944852	VARIOUS	2	LANL	USE	S
EXS01290017.wiff	1202023433	LER	1/29/2010 14:16	944852	VARIOUS	2	LANL	USE	S
EXS01290018.wiff	245371001	LER	1/29/2010 14:31	944852	10-1374	2	LANL	USE	S
EXS01290019.wiff	245371002	LER	1/29/2010 14:47	944852	10-1374	2	LANL	USE	S
EXS01290020.wiff	245372002	LER	1/29/2010 15:03	944852	10-1375	2	LANL	USE	S
EXS01290021.wiff	1202023434	LER	1/29/2010 15:18	944852	10-1375	2	LANL	USE	S
EXS01290022.wiff	1202023435	LER	1/29/2010 15:34	944852	10-1375	2	LANL	USE	S
EXS01290023.wiff	245372003	LER	1/29/2010 15:50	944852	10-1375	2	LANL	USE	S
EXS01290024.wiff	WXXCCV	LER	1/29/2010 16:06			1		USE	C
EXS01290025.wiff	XIBLK05	LER	1/29/2010 16:21			1		USE	B
EXS01290026.wiff	WXXCRI	LER	1/29/2010 16:37			1		USE	C
EXS01290027.wiff	245372004	LER	1/29/2010 16:53	944852	10-1375	2	LANL	USE	S
EXS01290028.wiff	245381002	LER	1/29/2010 17:08	944852	10-1380	2	LANL	USE	S
EXS01290029.wiff	245381003	LER	1/29/2010 17:24	944852	10-1380	2	LANL	USE	S

EXS01290030.wiff	245381004	LER	1/29/2010 17:40	944852	10-1380	2	LANL	USE	S
EXS01290031.wiff	245381005	LER	1/29/2010 17:56	944852	10-1380	2	LANL	USE	S
EXS01290032.wiff	245381006	LER	1/29/2010 18:11	944852	10-1380	2	LANL	USE	S
EXS01290033.wiff	UXX100122-01.1	LER	1/29/2010 18:27	SCREEN	SOLID	2	O2SI	USE	S
EXS01290034.wiff	WXXCCV	LER	1/29/2010 18:43			1		USE	C
EXS01290035.wiff	XIBLK06	LER	1/29/2010 18:58			1		USE	B
EXS01290036.wiff	WXXCRI	LER	1/29/2010 19:14			1		USE	C
EXS01290037.wiff	1202020096	LER	1/29/2010 19:30	943475	10-1291	2	LANL	USE	S
EXS01290038.wiff	1202020097	LER	1/29/2010 19:45	943475	10-1291	2	LANL	USE	S
EXS01290039.wiff	244943001	LER	1/29/2010 20:01	943475	10-1291	2	LANL	USE	S
EXS01290040.wiff	1202020098	LER	1/29/2010 20:17	943475	10-1291	2	LANL	USE	S
EXS01290041.wiff	1202020099	LER	1/29/2010 20:33	943475	10-1291	2	LANL	USE	S
EXS01290042.wiff	WXXCCV	LER	1/29/2010 20:48			1		USE	C
EXS01290043.wiff	XIBLK07	LER	1/29/2010 21:04			1		USE	B
EXS01290044.wiff	WXXCRI	LER	1/29/2010 21:20			1		USE	C
EXS01290045.wiff	1202021896	LER	1/29/2010 21:35	944243	10-1301	2	LANL	USE	S
EXS01290046.wiff	1202021897	LER	1/29/2010 21:51	944243	10-1301	2	LANL	USE	S
EXS01290047.wiff	245099001	LER	1/29/2010 22:07	944243	10-1301	2	LANL	USE	S
EXS01290048.wiff	1202021898	LER	1/29/2010 22:23	944243	10-1301	2	LANL	USE	S
EXS01290049.wiff	1202021899	LER	1/29/2010 22:38	944243	10-1301	2	LANL	USE	S
EXS01290050.wiff	245099002	LER	1/29/2010 22:54	944243	10-1301	2	LANL	USE	S
EXS01290051.wiff	245099003	LER	1/29/2010 23:10	944243	10-1301	2	LANL	USE	S
EXS01290052.wiff	245099004	LER	1/29/2010 23:25	944243	10-1301	2	LANL	USE	S
EXS01290053.wiff	245099005	LER	1/29/2010 23:41	944243	10-1301	2	LANL	USE	S
EXS01290054.wiff	245099006	LER	1/29/2010 23:57	944243	10-1301	2	LANL	USE	S
EXS01290055.wiff	WXXCCV	LER	1/30/2010 0:13			1		USE	C
EXS01290056.wiff	XIBLK08	LER	1/30/2010 0:28			1		USE	B
EXS01290057.wiff	WXXCRI	LER	1/30/2010 0:44			1		USE	C
EXS01290058.wiff	245099007	LER	1/30/2010 1:00	944243	10-1301	2	LANL	USE	S
EXS01290059.wiff	245099008	LER	1/30/2010 1:15	944243	10-1301	2	LANL	USE	S
EXS01290060.wiff	245099009	LER	1/30/2010 1:31	944243	10-1301	2	LANL	USE	S
EXS01290061.wiff	245099010	LER	1/30/2010 1:47	944243	10-1301	2	LANL	USE	S
EXS01290062.wiff	245099011	LER	1/30/2010 2:03	944243	10-1301	2	LANL	USE	S
EXS01290063.wiff	245099012	LER	1/30/2010 2:18	944243	10-1301	2	LANL	USE	S
EXS01290064.wiff	245099013	LER	1/30/2010 2:34	944243	10-1301	2	LANL	USE	S
EXS01290065.wiff	245099014	LER	1/30/2010 2:50	944243	10-1301	2	LANL	USE	S
EXS01290066.wiff	245099015	LER	1/30/2010 3:05	944243	10-1301	2	LANL	USE	S

C B C

USE
USE
USE

1
1
1

1/30/2010 3:21
1/30/2010 3:37
1/30/2010 3:53

LER
LER
LER

WXXCCV
XIBLK09
WXXCRI

EXS01290067.wiff
EXS01290068.wiff
EXS01290069.wiff

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 788280

Revision No.:

DATA EXCEPTION REPORT

Mo./Day Yr. 08-FEB-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: 944243	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 245099(10-1301) Application Issues: Failed Recovery for MSD/PSD Failed RPD for MS/MSD, or PS/PSD			
Specification and Requirements		DER Disposition:	
Exception Description: 1. The Matrix Spike Duplicate (1202021899) did not meet spike recovery limits for TATB at 337%. The recovery limits are 44-166%. 2. The MS/MSD pair (1202021898/9) did not meet RPD acceptance limits for TATB at 117%. The acceptance limits are 0-30%.		1. Since both the LCS and MS spike 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. 2. 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 08-FEB-10

Data Validator/Group Leader:

Herbert Maier 08-FEB-10

GC
SEMIVOLATILE
PCB
ANALYSIS

**PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1301**

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 944883
Prep Batch Number: 944882

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
245099015	RE15-10-7219
1202023521	Method Blank (MB)
1202023522	Laboratory Control Sample (LCS)
1202023863	245114003(RE15-10-8411) Matrix Spike (MS)
1202023864	245114003(RE15-10-8411) 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 inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

A LANL sample of similar matrix associated with another SDG (#10-1324) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

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

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

Data Exception (DER) Documentation

Data exception report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. A DER was not required for this SDG.

Manual Integration

Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments

The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

Due to software limitation, the Form VII's will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analytes.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD1A.I_1	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD1A.I_2	HP Gas Chromatograph	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticideII)

Certification Statement

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

Review Validation

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

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

Reviewer: Jimmi Cao

Date: 2/15/10

Roadmap for LANL 10-1301 PCB

This roadmap was analyzed by YIP00818 on 01-29-2010, 14:07.

This roadmap was packaged by yml on 02-15-2010, 10:38.

This roadmap was reviewed by jim01140 on 02-15-2010, 14:59.

This roadmap was packaged by jim01140 on 02-15-2010, 16:09.

Front Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input checked="" type="checkbox"/>	N	/chem/ecd1a.i/012710.b/048f4801.d	245099015	sample	27-JAN-2010	15:28	10-1301.sub	RE15-10-7219	1.00000	944883	DUSE RR
<input type="checkbox"/>	N	/chem/ecd1a.i/012810a.b/045f4501.d	245099015	sample	28-JAN-2010	17:20	10-1301.sub	RE15-10-7219	1.00000	944883	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input checked="" type="checkbox"/>	N	/chem/ecd1a.i/012710.b/048f4801.d	245099015	sample	27-JAN-2010	15:28	10-1301.sub	RE15-10-7219	1.00000	944883	DUSE RR
<input type="checkbox"/>	N	/chem/ecd1a.i/012810a.b/045f4501.d	245099015	sample	28-JAN-2010	17:20	10-1301.sub	RE15-10-7219	1.00000	944883	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/012710.b/034f3401-1.d	1202023521	mb	27-JAN-2010	12:40	10-1301.sub	PBLK01	1.00000	944883	
<input type="checkbox"/>	N	/chem/ecd1a.i/012710.b/035f3501-1.d	1202023522	lcs	27-JAN-2010	12:51	10-1301.sub	PBLK01LCS	1.00000	944883	

Back QC Sample Column

exclude	manual	datafile	srpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/012710.b/034f3401-1.d	1202023521	mb	27-JAN-2010	12:40	10-1301.sub	PBLK01	1.00000	944883	
<input type="checkbox"/>	N	/chem/ecd1a.i/012710.b/035f3501-1.d	1202023522	lcs	27-JAN-2010	12:51	10-1301.sub	PBLK01LCS	1.00000	944883	

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1301
Lab Sample ID: 245099015

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 23.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7219
Batch ID: 944883
Run Date: 01/28/2010 17:20
Prep Date: 01/25/2010 20:44
Data File: 045f4501.d
045b4501.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.34	ug/kg	1.45	4.34	1
11104-28-2	Aroclor-1221	U	4.34	ug/kg	1.45	4.34	1
11141-16-5	Aroclor-1232	U	4.34	ug/kg	1.45	4.34	1
53469-21-9	Aroclor-1242	U	4.34	ug/kg	1.45	4.34	1
12672-29-6	Aroclor-1248	U	4.34	ug/kg	1.45	4.34	1
11097-69-1	Aroclor-1254	U	4.34	ug/kg	1.45	4.34	1
11096-82-5	Aroclor-1260		5.00	ug/kg	1.45	4.34	2

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1301

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1	4CMX 2	DCB 1	DCB 2
		%REC #	%REC #	%REC #	%REC #
1202023521	MB for batch 944882	68	65	70	66
1202023522	LCS for batch 944882	63	60	67	63
245099015	RE15-10-7219	57	56	53	63

Surrogate

Acceptance Limits

4CMX = 4cmx

(34%-105%)

DCB = Decachlorobiphenyl

(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: 10-1301

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944882

Matrix: SOIL

Lab Sample ID:1202023522

Instrument: ECD1A.I

Analysis Date: 01/27/2010 12:51

Dilution: 1

Analyst: YS1

Prep Batch ID: 944882

Inj. Vol: 1 uL

Batch ID: 944883

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	21.1	63	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	24.5	74	48-110

PCB

Page 1 of 2

**Quality Control Summary
Spike Recovery Report**

SDG Number: 10-1324

Sample Type: Matrix Spike

Client ID: RE15-10-8411MS

Matrix: R

Lab Sample ID:1202023863

%Moisture: 15.4

Instrument: ECD1A.I

Analysis Date: 01/28/2010 17:45

Dilution: 1

Analyst: YS1

Prep Batch ID: 944882

Inj. Vol: 1 uL

Batch ID: 944883

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	39.2	0.00	U 15.2	39	23-117
11096-82-5	MS Aroclor-1260	39.2	0.00	U 15.5	40	27-116

PCB

Page 2 of 2

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1324

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-8411MSD

Matrix: R

Lab Sample ID:1202023864

%Moisture: 15.4

Instrument: ECD1A.I

Analysis Date: 01/28/2010 17:58

Dilution: 1

Analyst: YS1

Pre Batch ID 944882

Inj. Vol: 1 uL

Batch ID: 944883

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	39.4	0.00 U	14.9	38	23-117	2	0-30
11096-82-5	MSD Aroclor-1260	39.4	0.00 U	15.3	39	27-116	1	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1301	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 944882	Instrument ID:	ECD1A.I_2	Data File:	034b3401-1.d
Lab Sample ID:	1202023521		ECD1A.I_1		034f3401-1.d
Column:	CLP2	Prep Date:	01/25/2010 20:44	Analyzed:	01/27/10 12:40
	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 944882	1202023522	035f3501-1.d 035b3501-1.d	01/27/10	1251
02 RE15-10-7219	245099015	045f4501.d 045b4501.d	01/28/10	1720

SAMPLE DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1301
Lab Sample ID: 245099015

Date Collected: 01/13/2010 12:00
Date Received: 01/20/2010 08:45
Client: LANL010
Method: SW846 8082
Inst: ECD1AJ
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 23.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7219
Batch ID: 944883
Run Date: 01/28/2010 17:20
Prep Date: 01/25/2010 20:44
Data File: 045f4501.d
045b4501.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.34	ug/kg	1.45	4.34	1
11104-28-2	Aroclor-1221	U	4.34	ug/kg	1.45	4.34	1
11141-16-5	Aroclor-1232	U	4.34	ug/kg	1.45	4.34	1
53469-21-9	Aroclor-1242	U	4.34	ug/kg	1.45	4.34	1
12672-29-6	Aroclor-1248	U	4.34	ug/kg	1.45	4.34	1
11097-69-1	Aroclor-1254	U	4.34	ug/kg	1.45	4.34	1
11096-82-5	Aroclor-1260		5.00	ug/kg	1.45	4.34	2

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/012810a.b/045f4501.d
Lab Smp Id: 245099015 Client Smp ID: RE15-10-7219
Inj Date : 28-JAN-2010 17:20
Operator : YS1 Inst ID: ecdla.i
Smp Info : |245099015|1|
Misc Info : |ECD82P_1S|944883|SVA|LANL|SOIL|RE15-10-7219|||
Comment :
Method : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m
Meth Date : 29-Jan-2010 06:55 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1301.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	23.21380	% 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						
1.965	1.966	-0.001	44093449	113.949	4.9 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.275	5.278	-0.003	30439461	106.001	4.6 80.00- 120.00	100.00

7 Aroclor-1260 CAS #: 11096-82-5						
3.756	3.765	-0.009	2455748	146.370	6.4 80.00- 120.00	100.00(aM)
3.925	3.928	-0.003	335264	13.2337	0.57 131.11- 171.11	13.65
4.155	4.158	-0.003	1892680	126.357	5.5 68.60- 108.60	77.07
4.284	4.301	-0.017	1174658	75.4841	3.3 71.52- 111.52	47.83

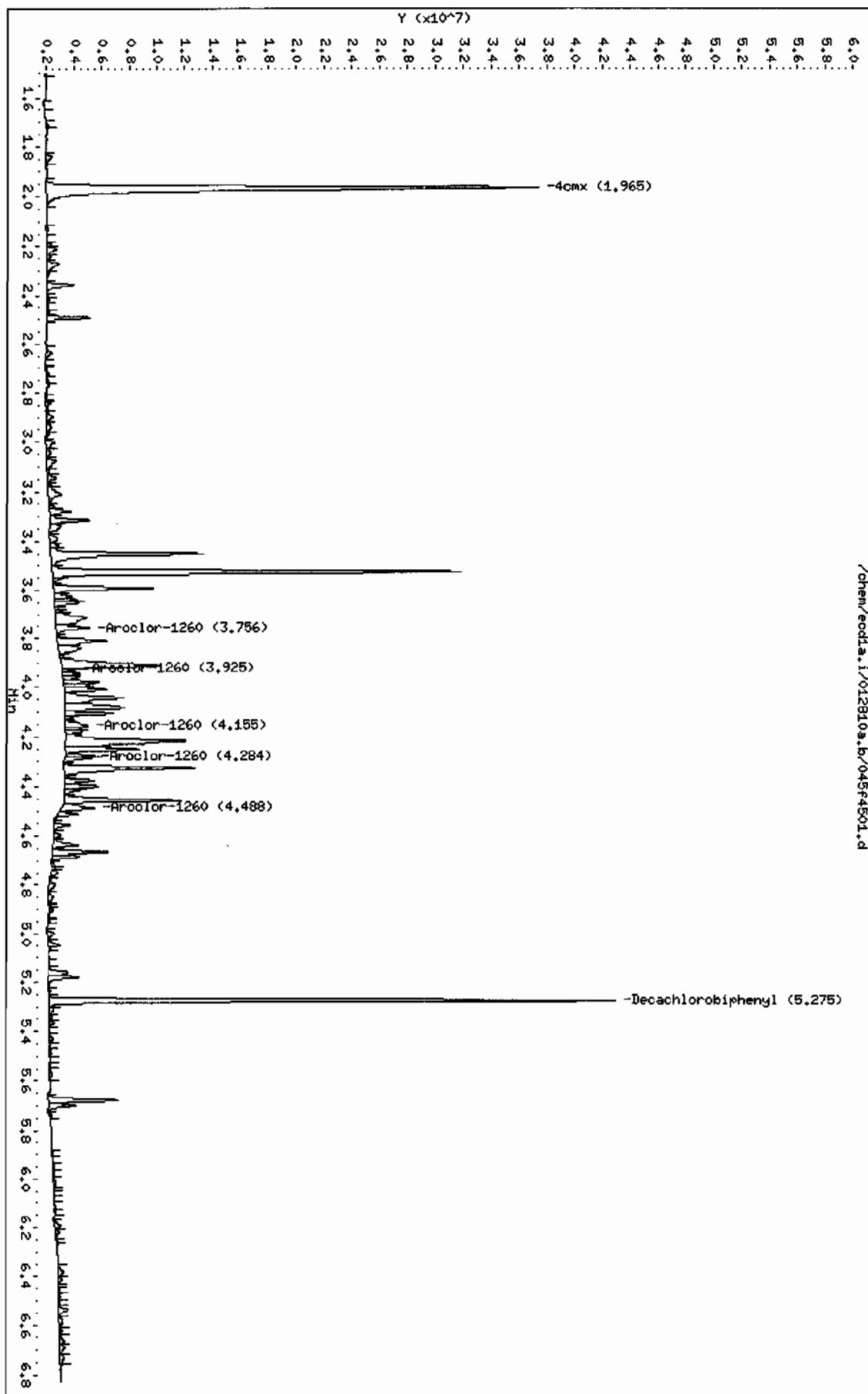
CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
7 Aroclor-1260 (continued)						
4.488	4.480	0.008	2613096	75.4232	3.3 185.98- 225.98	106.41
Average of Peak Concentrations =				3.8		

QC Flag Legend

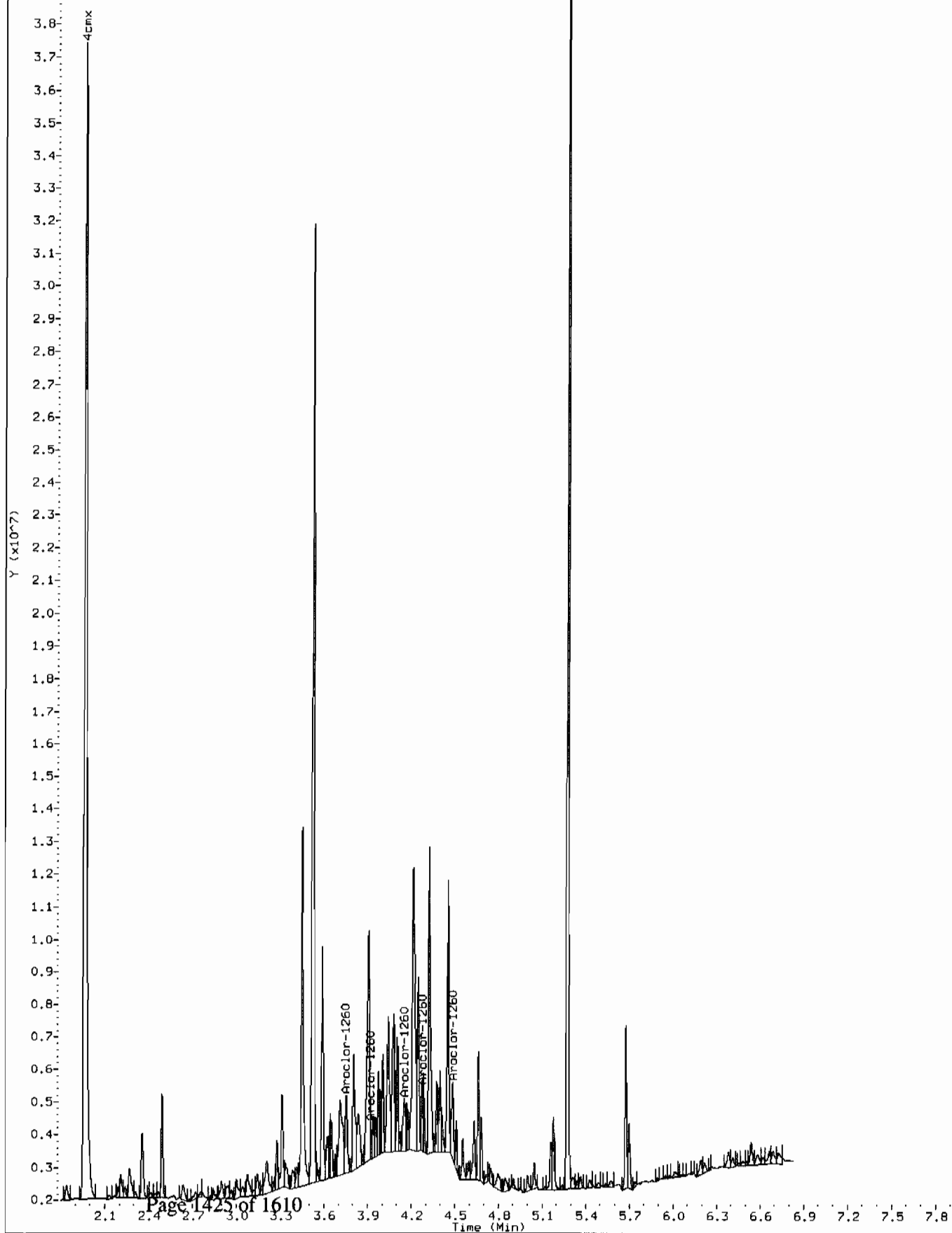
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/012810a.b/045f4501.d
Date : 28-JUN-2010 17:20
Client ID: RE15-10-7219
Sample Info: 124509901511
Volume Injected (uL): 1.0
Column phase: CLP1

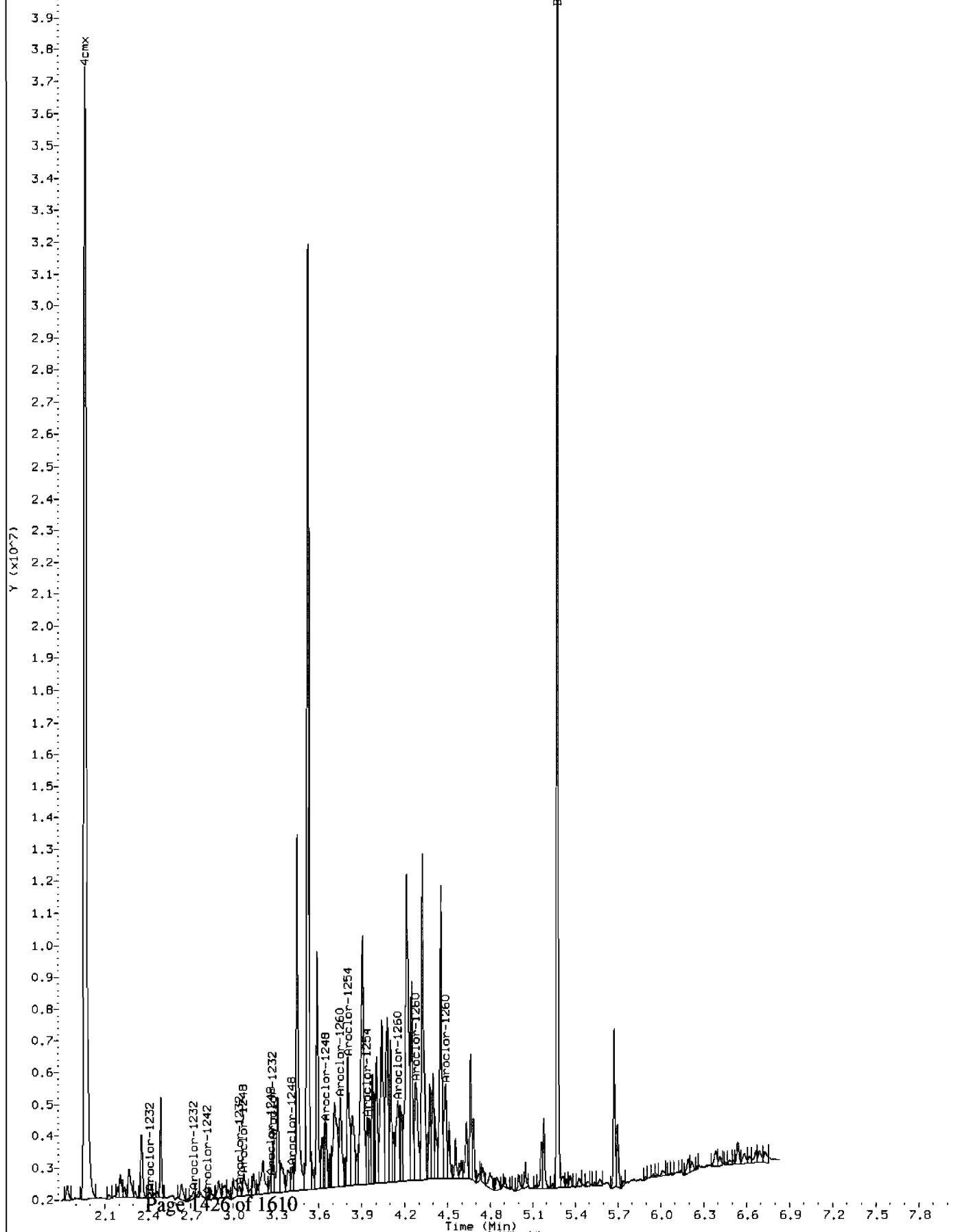
Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012810a.b/04f4501.d
Operator: YS1
Injection Date: 28-JAN-2010 17:20
Instrument: ecd1a.i
Client Sample ID: RE15-10-7219



Comment: Before manual integration
Data File: /chem/ecdl1a.i/012810a.b/orfing-045f4501.d
Operator: YS1
Injection Date: 28-JAN-2010 17:20
Instrument: ecd1a.i
Client Sample ID: RE15-10-7219



Data File: /chem/ecdl1a.i/012810a.b/045b4501.d
 Report Date: 29-Jan-2010 08:03

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/045b4501.d
 Lab Smp Id: 245099015 Client Smp ID: RE15-10-7219
 Inj Date : 28-JAN-2010 17:20
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |245099015|1|
 Misc Info : |ECD82P_1S|944883|SVA|LANL|SOIL|RE15-10-7219|||
 Comment :
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 45
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1301.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	23.21380	% 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	
2.297	2.298	-0.001	31190442	111.723	4.8 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.943	5.944	-0.001	21993648	125.955	5.5 80.00- 120.00	100.00
7 Aroclor-1260					CAS #: 11096-82-5	
4.324	4.335	-0.011	484519	40.6240	1.8 80.00- 120.00	100.00(M)
4.464	4.459	0.005	3622668	252.129	10.9 101.61- 141.61	747.68
4.740	4.725	0.015	1201398	110.133	4.8 71.00- 111.00	366.37
4.896	4.899	-0.003	442508	39.4904	1.7 73.09- 113.09	91.33

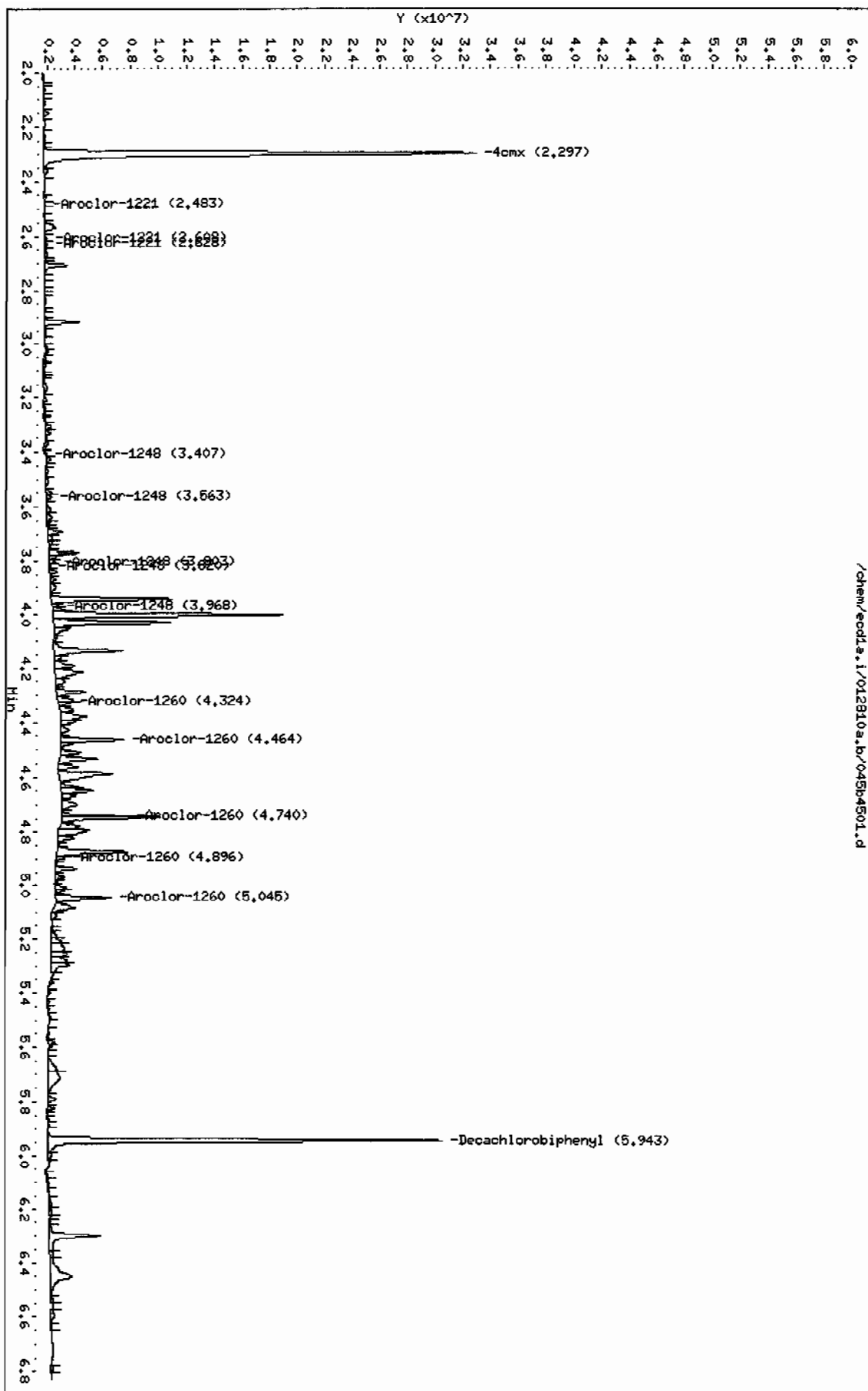
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)		TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260 (continued)									
5.045	5.046	-0.001	3195990	131.723	5.7	185.37-	225.37	659.62	
Average of Peak Concentrations *					5.0				

QC Flag Legend

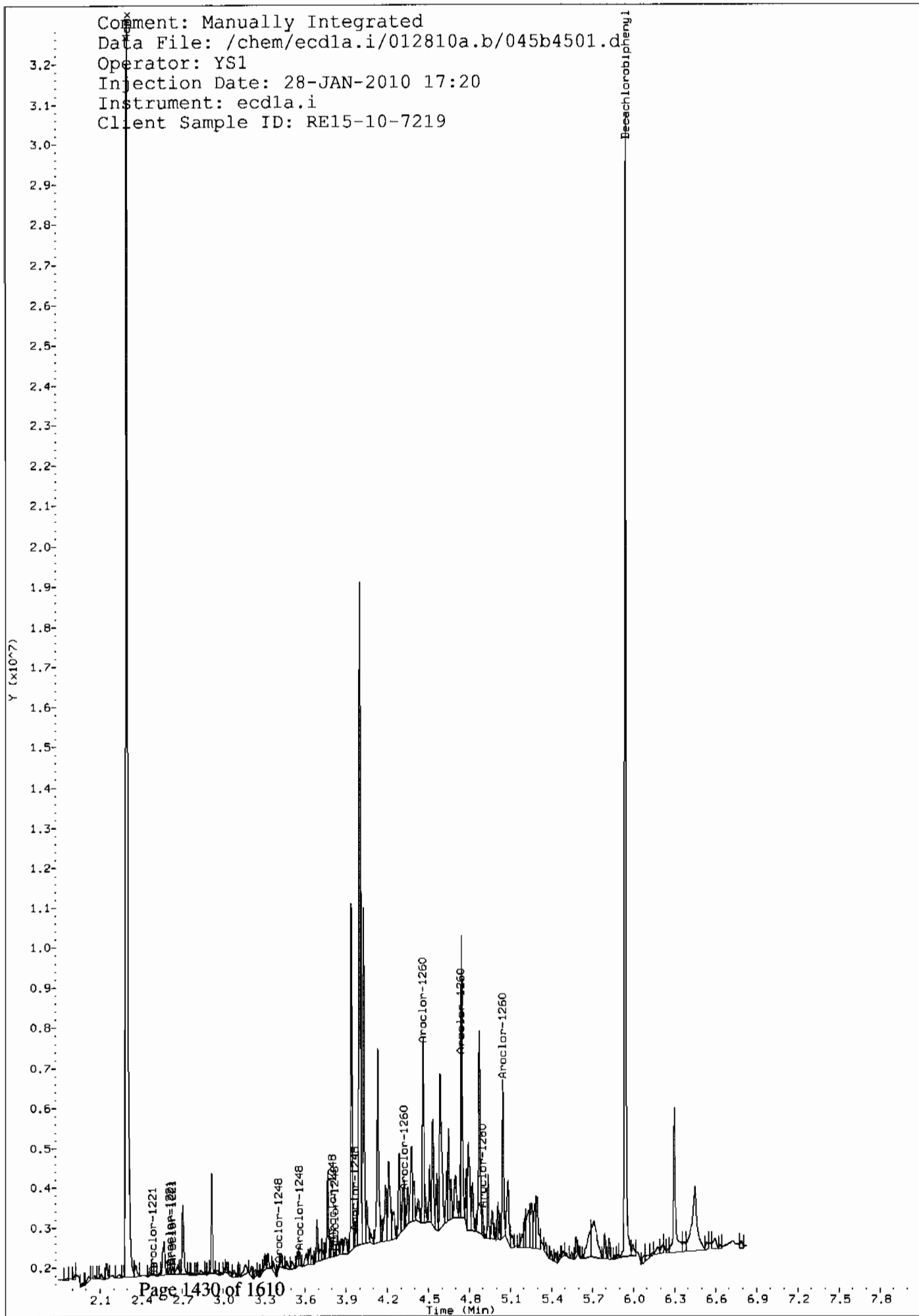
M - Compound response manually integrated.

Data File: /chem/ecdl.a.i/012810a.b/045b4501.d
 Date: 28-JAN-2010 17:20
 Client ID: RE15-10-7219
 Sample Info: 124509901511
 Volume Injected (uL): 1.0
 Column phases: CLP2

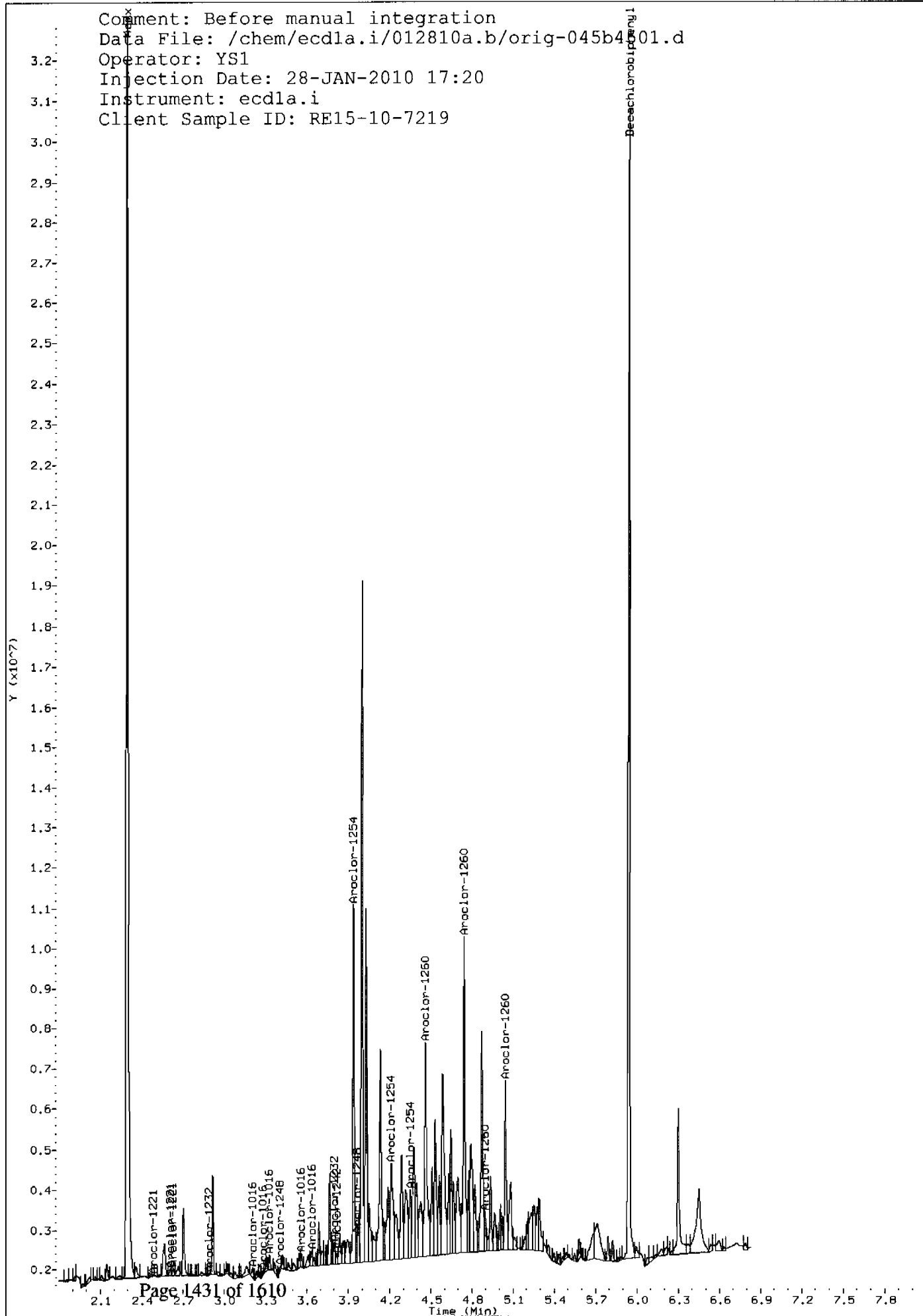
Instrument: ecdl.a.i
 Operator: YSL
 Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdla.i/012810a.b/045b4501.d
Operator: YS1
Injection Date: 28-JAN-2010 17:20
Instrument: ecdla.i
Client Sample ID: RE15-10-7219



Comment: Before manual integration
Data File: /chem/ecdl1a.i/012810a.b/orig-045b4001.d
Operator: YS1
Injection Date: 28-JAN-2010 17:20
Instrument: ecd1a.i
Client Sample ID: RE15-10-7219



STANDARDS DATA

Report Date: 28-Jan-2010 11:08

Calibration History

Method : /chem/ecd1a.i/012710.b/ECD1-F-8082-121409.m
Start Cal Date: 14-DEC-2009 05:36
End Cal Date : 22-JAN-2010 09:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecd1a.i/012210.b/013f1301.d
22-JAN-2010 06:48	AR1232	/chem/ecd1a.i/012210.b/006f0601.d
14-DEC-2009 11:34	AR1268	/chem/ecd1a.i/121409.b/040f4001.d
14-DEC-2009 09:28	AR1248	/chem/ecd1a.i/121409.b/028f2801.d
14-DEC-2009 08:25	AR1242	/chem/ecd1a.i/121409.b/022f2201.d
14-DEC-2009 07:22	AR1254	/chem/ecd1a.i/121409.b/016f1601.d
22-JAN-2010 09:08	AR1660	/chem/ecd1a.i/012210.b/019f1901.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecd1a.i/012210.b/014f1401.d
22-JAN-2010 06:58	AR1232	/chem/ecd1a.i/012210.b/007f0701.d
14-DEC-2009 11:44	AR1268	/chem/ecd1a.i/121409.b/041f4101.d
14-DEC-2009 09:38	AR1248	/chem/ecd1a.i/121409.b/029f2901.d
14-DEC-2009 08:35	AR1242	/chem/ecd1a.i/121409.b/023f2301.d
14-DEC-2009 07:32	AR1254	/chem/ecd1a.i/121409.b/017f1701.d
22-JAN-2010 09:19	AR1660	/chem/ecd1a.i/012210.b/020f2001.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecd1a.i/012210.b/015f1501.d
22-JAN-2010 07:09	AR1232	/chem/ecd1a.i/012210.b/008f0801.d
14-DEC-2009 11:55	AR1268	/chem/ecd1a.i/121409.b/042f4201.d
14-DEC-2009 09:49	AR1248	/chem/ecd1a.i/121409.b/030f3001.d
14-DEC-2009 08:46	AR1242	/chem/ecd1a.i/121409.b/024f2401.d
14-DEC-2009 07:43	AR1254	/chem/ecd1a.i/121409.b/018f1801.d
22-JAN-2010 09:29	AR1660	/chem/ecd1a.i/012210.b/021f2101.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecd1a.i/121409.b/046f4601.d
14-DEC-2009 09:59	AR1248	/chem/ecd1a.i/121409.b/031f3101.d
14-DEC-2009 08:56	AR1242	/chem/ecd1a.i/121409.b/025f2501.d
14-DEC-2009 07:53	AR1254	/chem/ecd1a.i/121409.b/019f1901.d
22-JAN-2010 09:40	AR1660	/chem/ecd1a.i/012210.b/022f2201.d
14-DEC-2009 12:06	AR1268	/chem/ecd1a.i/121409.b/043f4301.d
22-JAN-2010 08:36	AR1262	/chem/ecd1a.i/012210.b/016f1601.d
14-DEC-2009 05:47	AR1221	/chem/ecd1a.i/121409.b/007f0701.d
22-JAN-2010 07:19	AR1232	/chem/ecd1a.i/012210.b/009f0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
---------------------------------------	--	--

22-JAN-2010 08:47	AR1262	/chem/ecdla.i/012210.b/017f1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdla.i/012210.b/010f1001.d
14-DEC-2009 12:16	AR1268	/chem/ecdla.i/121409.b/044f4401.d
14-DEC-2009 10:10	AR1248	/chem/ecdla.i/121409.b/032f3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdla.i/121409.b/026f2601.d
14-DEC-2009 08:04	AR1254	/chem/ecdla.i/121409.b/020f2001.d
22-JAN-2010 09:50	AR1660	/chem/ecdla.i/012210.b/023f2301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 18:37	AR1660	/chem/ecdla.i/012710.b/063f6301.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 16:18	AR1660	/chem/ecdla.i/012710.b/052f5201.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 14:42	AR1660	/chem/ecdla.i/012710.b/044f4401.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 12:19	AR1660	/chem/ecdla.i/012710.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 10:09	AR1660	/chem/ecdla.i/012710.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:51	AR1268	/chem/ecdla.i/012710.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:41	AR1262	/chem/ecdla.i/012710.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:30	AR1221	/chem/ecdla.i/012710.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:20	AR1232	/chem/ecdla.i/012710.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:09	AR1248	/chem/ecdla.i/012710.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 06:59	AR1242	/chem/ecdla.i/012710.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 06:49	AR1254	/chem/ecdla.i/012710.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 06:38	AR1660	/chem/ecdla.i/012710.b/002f0201.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 09:40	AR1660	/chem/ecdla.i/012210.b/022f2201.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 08:36	AR1262	/chem/ecdla.i/012210.b/016f1601.d

Ccal Level: 4 , Ccal Amount: 1000	
+-----+	+
22-JAN-2010 07:19 AR1232	/chem/ecd1a.i/012210.b/009f0901.d
+-----+	+

Report Date: 28-Jan-2010 11:08

Calibration History

Method : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m
Start Cal Date: 11-DEC-2009 10:17
End Cal Date : 22-JAN-2010 09:50

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecdla.i/012210.b/013b1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdla.i/012210.b/006b0601.d
14-DEC-2009 11:34	AR1268	/chem/ecdla.i/121409.b/040b4001.d
14-DEC-2009 09:28	AR1248	/chem/ecdla.i/121409.b/028b2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdla.i/121409.b/022b2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdla.i/121409.b/016b1601.d
22-JAN-2010 09:08	AR1660	/chem/ecdla.i/012210.b/019b1901.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdla.i/012210.b/014b1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdla.i/012210.b/007b0701.d
14-DEC-2009 11:44	AR1268	/chem/ecdla.i/121409.b/041b4101.d
14-DEC-2009 09:38	AR1248	/chem/ecdla.i/121409.b/029b2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdla.i/121409.b/023b2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdla.i/121409.b/017b1701.d
22-JAN-2010 09:19	AR1660	/chem/ecdla.i/012210.b/020b2001.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdla.i/012210.b/015b1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdla.i/012210.b/008b0801.d
14-DEC-2009 11:55	AR1268	/chem/ecdla.i/121409.b/042b4201.d
14-DEC-2009 09:49	AR1248	/chem/ecdla.i/121409.b/030b3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdla.i/121409.b/024b2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdla.i/121409.b/018b1801.d
22-JAN-2010 09:29	AR1660	/chem/ecdla.i/012210.b/021b2101.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046b4601.d
14-DEC-2009 12:06	AR1268	/chem/ecdla.i/121409.b/043b4301.d
22-JAN-2010 08:36	AR1262	/chem/ecdla.i/012210.b/016b1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007b0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdla.i/012210.b/009b0901.d
14-DEC-2009 09:59	AR1248	/chem/ecdla.i/121409.b/031b3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdla.i/121409.b/025b2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdla.i/121409.b/019b1901.d
22-JAN-2010 09:40	AR1660	/chem/ecdla.i/012210.b/022b2201.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-JAN-2010 08:47	AR1262	/chem/ecdla.i/012210.b/017b1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdla.i/012210.b/010b1001.d
14-DEC-2009 12:16	AR1268	/chem/ecdla.i/121409.b/044b4401.d
14-DEC-2009 10:10	AR1248	/chem/ecdla.i/121409.b/032b3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdla.i/121409.b/026b2601.d

14-DEC-2009 08:04	AR1254	/chem/ecd1a.i/121409.b/020b2001.d
22-JAN-2010 09:50	AR1660	/chem/ecd1a.i/012210.b/023b2301.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 18:37	AR1660	/chem/ecd1a.i/012710.b/063b6301.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 16:18	AR1660	/chem/ecd1a.i/012710.b/052b5201.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 14:42	AR1660	/chem/ecd1a.i/012710.b/044b4401.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 12:19	AR1660	/chem/ecd1a.i/012710.b/032b3201.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 10:09	AR1660	/chem/ecd1a.i/012710.b/021b2101.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 06:38	AR1660	/chem/ecd1a.i/012710.b/002b0201.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 09:40	AR1660	/chem/ecd1a.i/012210.b/022b2201.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:51	AR1268	/chem/ecd1a.i/012710.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:41	AR1262	/chem/ecd1a.i/012710.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:30	AR1221	/chem/ecd1a.i/012710.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:20	AR1232	/chem/ecd1a.i/012710.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 07:09	AR1248	/chem/ecd1a.i/012710.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 06:59	AR1242	/chem/ecd1a.i/012710.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
27-JAN-2010 06:49	AR1254	/chem/ecd1a.i/012710.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 08:36	AR1262	/chem/ecd1a.i/012210.b/016b1601.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 07:19	AR1232	/chem/ecd1a.i/012210.b/009b0901.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 28-Jan-2010 10:52 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	1.445e+04
	2.710	2.680-2.740	1.820e+04
	2.791	2.761-2.821	1.198e+04
	2.829	2.799-2.859	7.178e+03
	3.039	3.009-3.069	9.259e+03
63 4,4-DDD	3.953	3.933-3.973	3.938e+05
64 4,4-DDE	3.603	3.583-3.623	4.795e+05
62 4,4-DDT	4.118	4.098-4.138	3.238e+05
2 Aroclor-1221	2.081	2.051-2.111	4.301e+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	6.849e+03
3 Aroclor-1232	2.711	2.681-2.741	8.426e+03
	2.792	2.762-2.822	5.627e+03
	3.040	3.010-3.070	3.983e+03
	3.294	3.264-3.324	3.858e+03
	2.422	2.392-2.452	1.166e+04
4 Aroclor-1242	2.711	2.681-2.741	1.345e+04
	2.829	2.799-2.859	5.506e+03
	3.039	3.009-3.069	7.245e+03
	3.293	3.263-3.323	6.811e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.091	3.062-3.122	7.848e+03
	3.242	3.212-3.272	6.870e+03
	3.293	3.263-3.323	1.331e+04
	3.426	3.396-3.456	1.101e+04
	3.658	3.628-3.688	7.455e+03
6 Aroclor-1254	3.268	3.238-3.298	1.249e+04
	3.423	3.393-3.453	1.672e+04
	3.658	3.628-3.688	2.071e+04
	3.820	3.790-3.850	1.569e+04
	3.929	3.899-3.959	1.517e+04
7 Aroclor-1260	3.765	3.735-3.795	1.772e+04
	3.928	3.898-3.958	2.693e+04
	4.158	4.128-4.188	1.619e+04
	4.300	4.270-4.330	1.691e+04
	4.480	4.450-4.510	3.767e+04
8 Aroclor-1262	3.765	3.735-3.795	1.500e+04
	3.929	3.899-3.959	2.038e+04
	4.159	4.129-4.189	2.520e+04
	4.301	4.271-4.331	2.299e+04
	4.481	4.451-4.511	4.717e+04
9 Aroclor-1268	4.667	4.637-4.697	5.438e+04
	4.689	4.659-4.719	5.419e+04
	4.802	4.772-4.832	4.052e+04
	5.005	4.975-5.035	1.833e+04
	5.171	5.141-5.201	1.233e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.967	1.937-1.997	3.929e+05
\$ 12 Decachlorobiphenyl	5.279	5.249-5.309	3.299e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 28-Jan-2010 10:52 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	1.269e+04
	3.279	3.249-3.309	8.798e+03
	3.342	3.312-3.372	5.479e+03
	3.569	3.539-3.599	6.997e+03
	3.644	3.614-3.674	6.564e+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	2.497	2.467-2.527	3.640e+03
	2.591	2.561-2.621	2.329e+03
	2.632	2.602-2.662	8.119e+03
3 Aroclor-1232	2.898	2.868-2.928	5.892e+03
	3.196	3.166-3.226	6.222e+03
	3.279	3.249-3.309	4.345e+03
	3.570	3.540-3.600	3.111e+03
4 Aroclor-1242	3.803	3.773-3.833	3.193e+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
	3.803	3.773-3.833	6.057e+03
	3.831	3.801-3.861	6.701e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.404	3.374-3.434	8.054e+03
	3.570	3.540-3.600	9.874e+03
	3.803	3.773-3.833	1.122e+04
	3.832	3.801-3.861	1.248e+04
	3.968	3.938-3.998	1.210e+04
6 Aroclor-1254	3.403	3.373-3.433	6.435e+03
	3.826	3.796-3.856	1.156e+04
	3.943	3.913-3.973	1.243e+04
	4.218	4.188-4.248	1.688e+04
	4.355	4.325-4.385	1.244e+04
7 Aroclor-1260	4.335	4.305-4.365	1.328e+04
	4.459	4.429-4.489	1.616e+04
	4.725	4.695-4.755	1.250e+04
	4.899	4.869-4.929	1.293e+04
	5.046	5.016-5.076	2.845e+04
8 Aroclor-1262	4.460	4.430-4.490	1.356e+04
	4.726	4.696-4.756	1.889e+04
	4.900	4.870-4.930	1.747e+04
	5.047	5.017-5.077	3.453e+04
	5.260	5.230-5.290	2.487e+04
9 Aroclor-1268	5.259	5.229-5.289	4.358e+04
	5.287	5.257-5.317	4.039e+04
	5.437	5.407-5.467	3.144e+04
	5.601	5.571-5.631	1.427e+04
	5.794	5.764-5.824	8.886e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	2.299	2.269-2.329	2.902e+05
\$ 12 Decachlorobiphenyl	5.945	5.915-5.975	2.440e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36
 End Cal Date : 22-JAN-2010 09:50
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m
 Cal Date : 28-Jan-2010 10:52 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/012210.b/013f1301.d
 Level 2: /chem/ecdl1a.i/012210.b/014f1401.d
 Level 3: /chem/ecdl1a.i/012210.b/015f1501.d
 Level 4: /chem/ecdl1a.i/121409.b/046f4601.d
 Level 5: /chem/ecdl1a.i/012210.b/017f1701.d

	100.000	250.000	500.000	1000.000	4000.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 Aroclor-1016(1)	17152	15723	14340	13165	11871	14450	14.366
(2)	20222	18880	18157	17319	16420	18200	8.008
(3)	13841	12775	11738	11182	10381	11983	11.310
(4)	8068	7610	7065	6751	6396	7178	9.308
(5)	10742	9730	9060	8692	8073	9259	11.051
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)	8031	7459	6765	6313	5679	6849	13.524
(2)	9246	8871	8229	8095	7686	8426	7.427
(3)	6376	6076	5599	5256	4827	5627	11.031
(4)	4642	4328	3905	3655	3384	3983	12.710
(5)	4445	4061	3757	3587	3443	3858	10.378
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 : 22-JAN-2010 09:50
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl.a.i/012710.b/ECD1-F-8082-121409.m
 Cal Date : 28-Jan-2010 10:52 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	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)	19893	18582	17373	16964	15783	17719	8.883
(2)	29870	28088	26601	25873	24210	26928	8.011
(3)	18146	16901	15831	15388	14665	16186	8.420
(4)	18726	17599	16558	16161	15497	16908	7.512
(5)	40163	39110	37340	36803	34911	37666	5.434
8 Aroclor-1262(1)	16796	15375	14585	14470	13775	15000	7.687
(2)	22563	20964	19865	19587	18936	20383	6.975
(3)	27641	25661	24522	24605	23554	25197	6.179
(4)	25041	23378	22465	22352	21708	22989	5.624
(5)	49563	47861	46825	46728	44852	47166	3.655
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	418599	402993	390421	384479	368225	392944	4.842
12 Decachlorobiphenyl	365576	343871	322200	315067	302545	329852	7.572

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17
 End Cal Date : 22-JAN-2010 09:50
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m
 Cal Date : 28-Jan-2010 10:52 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdla.i/012210.b/013b1301.d
 Level 2: /chem/ecdla.i/012210.b/014b1401.d
 Level 3: /chem/ecdla.i/012210.b/015b1501.d
 Level 4: /chem/ecdla.i/121409.b/046b4601.d
 Level 5: /chem/ecdla.i/012210.b/017b1701.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	14547	13492	12382	12014	10999	12687	10.796
(2)	10711	9528	8572	8001	7178	8798	15.569
(3)	6657	5897	5299	4960	4582	5479	14.907
(4)	8356	7487	6966	6298	5879	6997	13.980
(5)	7909	7061	6442	5919	5487	6564	14.548
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)	7405	6518	5773	5260	4504	5892	19.017
(2)	7294	6687	6058	5769	5299	6222	12.576
(3)	5336	4800	4249	3912	3427	4345	17.180
(4)	3854	3418	3039	2783	2462	3111	17.466
(5)	3940	3492	3102	2870	2562	3193	16.853
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 : 22-JAN-2010 09:50
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m
 Cal Date : 28-Jan-2010 10:52 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	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)	15831	14170	12897	12253	11224	13275	13.436
(2)	18938	17236	15730	15062	13823	16158	12.272
(3)	14824	13336	12121	11559	10656	12499	12.980
(4)	15326	13753	12528	11996	11041	12929	12.837
(5)	32399	30081	27859	27071	24818	28446	10.204
8 Aroclor-1262(1)	15849	14211	13033	12748	11945	13557	11.192
(2)	21776	19630	18382	17939	16725	18890	10.157
(3)	20222	18124	16968	16542	15497	17471	10.323
(4)	38743	35618	34053	33297	30946	34532	8.384
(5)	28740	25266	23755	23937	22633	24866	9.485
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
M 10 Aroclor-Total	++++	++++	++++	++++	++++	++++	++++
11 4cmx	322636	305092	287884	278003	257406	290204	8.621
12 Decachlorobiphenyl	286142	259289	233988	227231	213222	243974	11.841

Report Date: 29-Jan-2010 15:46

Calibration History

Method : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m
Start Cal Date: 14-DEC-2009 05:36
End Cal Date : 28-JAN-2010 13:00

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecdla.i/012210.b/013f1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdla.i/012210.b/006f0601.d
28-JAN-2010 12:18	AR1268	/chem/ecdla.i/012810a.b/018f1801.d
14-DEC-2009 09:28	AR1248	/chem/ecdla.i/121409.b/028f2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdla.i/121409.b/022f2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdla.i/121409.b/016f1601.d
28-JAN-2010 10:51	AR1660	/chem/ecdla.i/012810a.b/010f1001.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdla.i/012210.b/014f1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdla.i/012210.b/007f0701.d
28-JAN-2010 12:29	AR1268	/chem/ecdla.i/012810a.b/019f1901.d
14-DEC-2009 09:38	AR1248	/chem/ecdla.i/121409.b/029f2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdla.i/121409.b/023f2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdla.i/121409.b/017f1701.d
28-JAN-2010 11:01	AR1660	/chem/ecdla.i/012810a.b/011f1101.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdla.i/012210.b/015f1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdla.i/012210.b/008f0801.d
28-JAN-2010 12:39	AR1268	/chem/ecdla.i/012810a.b/020f2001.d
14-DEC-2009 09:49	AR1248	/chem/ecdla.i/121409.b/030f3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdla.i/121409.b/024f2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdla.i/121409.b/018f1801.d
28-JAN-2010 11:12	AR1660	/chem/ecdla.i/012810a.b/012f1201.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046f4601.d
14-DEC-2009 09:59	AR1248	/chem/ecdla.i/121409.b/031f3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdla.i/121409.b/025f2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdla.i/121409.b/019f1901.d
28-JAN-2010 11:22	AR1660	/chem/ecdla.i/012810a.b/013f1301.d
28-JAN-2010 12:50	AR1268	/chem/ecdla.i/012810a.b/021f2101.d
22-JAN-2010 08:36	AR1262	/chem/ecdla.i/012210.b/016f1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007f0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdla.i/012210.b/009f0901.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-JAN-2010 08:47	AR1262	/chem/ecdla.i/012210.b/017f1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdla.i/012210.b/010f1001.d
28-JAN-2010 13:00	AR1268	/chem/ecdla.i/012810a.b/022f2201.d
14-DEC-2009 10:10	AR1248	/chem/ecdla.i/121409.b/032f3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdla.i/121409.b/026f2601.d

14-DEC-2009 08:04	AR1254	/chem/ecdla.i/121409.b/020f2001.d
28-JAN-2010 11:34	AR1660	/chem/ecdla.i/012810a.b/014f1401.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
29-JAN-2010 02:38	AR1660	/chem/ecdla.i/012810a.b/089f8901.d
Ccal Level: 4 , Ccal Amount: 1000		
29-JAN-2010 00:19	AR1660	/chem/ecdla.i/012810a.b/078f7801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 21:48	AR1660	/chem/ecdla.i/012810a.b/066f6601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 19:17	AR1660	/chem/ecdla.i/012810a.b/054f5401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 18:38	AR1660	/chem/ecdla.i/012810a.b/051f5101.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 16:09	AR1268	/chem/ecdla.i/012810a.b/039f3901.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:58	AR1262	/chem/ecdla.i/012810a.b/038f3801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:48	AR1221	/chem/ecdla.i/012810a.b/037f3701.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:38	AR1232	/chem/ecdla.i/012810a.b/036f3601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:27	AR1248	/chem/ecdla.i/012810a.b/035f3501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:16	AR1242	/chem/ecdla.i/012810a.b/034f3401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 15:06	AR1254	/chem/ecdla.i/012810a.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 14:56	AR1660	/chem/ecdla.i/012810a.b/032f3201.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 13:11	AR1268	/chem/ecdla.i/012810a.b/023f2301.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 12:50	AR1268	/chem/ecdla.i/012810a.b/021f2101.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 11:44	AR1660	/chem/ecdla.i/012810a.b/015f1501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 11:22	AR1660	/chem/ecdla.i/012810a.b/013f1301.d
Ccal Level: 4 , Ccal Amount: 1000		

28-JAN-2010 10:30	AR1262	/chem/ecd1a.i/012810a.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:19	AR1221	/chem/ecd1a.i/012810a.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:09	AR1232	/chem/ecd1a.i/012810a.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 09:58	AR1248	/chem/ecd1a.i/012810a.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 09:48	AR1242	/chem/ecd1a.i/012810a.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 09:37	AR1254	/chem/ecd1a.i/012810a.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
29-JAN-2010 00:57	AR1660	/chem/ecd1a.i/012810a.b/081f8101.d

Report Date: 29-Jan-2010 11:16

Calibration History

Method : /chem/ecdla.i/012810a.b/ECD1-B-8082-121409.m
Start Cal Date: 11-DEC-2009 10:17
End Cal Date : 28-JAN-2010 13:00

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-JAN-2010 08:01	AR1262	/chem/ecdla.i/012210.b/013b1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdla.i/012210.b/006b0601.d
28-JAN-2010 12:18	AR1268	/chem/ecdla.i/012810a.b/018b1801.d
14-DEC-2009 09:28	AR1248	/chem/ecdla.i/121409.b/028b2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdla.i/121409.b/022b2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdla.i/121409.b/016b1601.d
28-JAN-2010 10:51	AR1660	/chem/ecdla.i/012810a.b/010b1001.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdla.i/012210.b/014b1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdla.i/012210.b/007b0701.d
28-JAN-2010 12:29	AR1268	/chem/ecdla.i/012810a.b/019b1901.d
14-DEC-2009 09:38	AR1248	/chem/ecdla.i/121409.b/029b2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdla.i/121409.b/023b2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdla.i/121409.b/017b1701.d
28-JAN-2010 11:01	AR1660	/chem/ecdla.i/012810a.b/011b1101.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdla.i/012210.b/015b1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdla.i/012210.b/008b0801.d
28-JAN-2010 12:39	AR1268	/chem/ecdla.i/012810a.b/020b2001.d
14-DEC-2009 09:49	AR1248	/chem/ecdla.i/121409.b/030b3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdla.i/121409.b/024b2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdla.i/121409.b/018b1801.d
28-JAN-2010 11:12	AR1660	/chem/ecdla.i/012810a.b/012b1201.d

Cal Level: 4 , Cal Amount: 1000.00000		
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdla.i/121409.b/046b4601.d
28-JAN-2010 12:50	AR1268	/chem/ecdla.i/012810a.b/021b2101.d
22-JAN-2010 08:36	AR1262	/chem/ecdla.i/012210.b/016b1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdla.i/121409.b/007b0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdla.i/012210.b/009b0901.d
14-DEC-2009 09:59	AR1248	/chem/ecdla.i/121409.b/031b3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdla.i/121409.b/025b2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdla.i/121409.b/019b1901.d
28-JAN-2010 11:22	AR1660	/chem/ecdla.i/012810a.b/013b1301.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-JAN-2010 08:47	AR1262	/chem/ecdla.i/012210.b/017b1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdla.i/012210.b/010b1001.d
28-JAN-2010 13:00	AR1268	/chem/ecdla.i/012810a.b/022b2201.d
14-DEC-2009 10:10	AR1248	/chem/ecdla.i/121409.b/032b3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdla.i/121409.b/026b2601.d

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|14-DEC-2009 08:04 |AR1254 |/chem/ecd1a.i/121409.b/020b2001.d
|28-JAN-2010 11:34 |AR1660 |/chem/ecd1a.i/012810a.b/014b1401.d
+-----+-----+-----+
```

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

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+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|29-JAN-2010 02:38 |AR1660 |/chem/ecd1a.i/012810a.b/089b8901.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|29-JAN-2010 00:19 |AR1660 |/chem/ecd1a.i/012810a.b/078b7801.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 21:48 |AR1660 |/chem/ecd1a.i/012810a.b/066b6601.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 19:17 |AR1660 |/chem/ecd1a.i/012810a.b/054b5401.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 18:38 |AR1660 |/chem/ecd1a.i/012810a.b/051b5101.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 16:09 |AR1268 |/chem/ecd1a.i/012810a.b/039b3901.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 15:58 |AR1262 |/chem/ecd1a.i/012810a.b/038b3801.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 15:48 |AR1221 |/chem/ecd1a.i/012810a.b/037b3701.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 15:38 |AR1232 |/chem/ecd1a.i/012810a.b/036b3601.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 15:27 |AR1248 |/chem/ecd1a.i/012810a.b/035b3501.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 15:16 |AR1242 |/chem/ecd1a.i/012810a.b/034b3401.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 15:06 |AR1254 |/chem/ecd1a.i/012810a.b/033b3301.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 14:56 |AR1660 |/chem/ecd1a.i/012810a.b/032b3201.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 13:11 |AR1268 |/chem/ecd1a.i/012810a.b/023b2301.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 12:50 |AR1268 |/chem/ecd1a.i/012810a.b/021b2101.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 11:44 |AR1660 |/chem/ecd1a.i/012810a.b/015b1501.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
|28-JAN-2010 11:22 |AR1660 |/chem/ecd1a.i/012810a.b/013b1301.d
+-----+-----+-----+
| Ccal Level: 4 , Ccal Amount: 1000
+-----+-----+-----+
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28-JAN-2010 10:30	AR1262	/chem/ecdl1a.i/012810a.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:19	AR1221	/chem/ecdl1a.i/012810a.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 10:09	AR1232	/chem/ecdl1a.i/012810a.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 09:58	AR1248	/chem/ecdl1a.i/012810a.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 09:48	AR1242	/chem/ecdl1a.i/012810a.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
28-JAN-2010 09:37	AR1254	/chem/ecdl1a.i/012810a.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
29-JAN-2010 00:57	AR1660	/chem/ecdl1a.i/012810a.b/081b8101.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 28-Jan-2010 13:36 Number of Cpnds : 15
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

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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	2.422	2.392-2.452	1.378e+04
	2.710	2.680-2.740	1.751e+04
	2.791	2.761-2.821	1.150e+04
	2.828	2.798-2.858	6.846e+03
	3.039	3.009-3.069	8.881e+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
	2.078	2.048-2.108	4.301e+03
	2.171	2.141-2.201	2.440e+03
2 Aroclor-1221	2.197	2.167-2.227	1.027e+04
	2.421	2.391-2.451	6.849e+03
	2.711	2.681-2.741	8.426e+03
	2.791	2.761-2.821	5.627e+03
	3.040	3.010-3.070	3.983e+03
3 Aroclor-1232	3.292	3.262-3.322	3.858e+03
	2.421	2.391-2.451	1.166e+04
	2.710	2.680-2.740	1.345e+04
	2.828	2.798-2.858	5.506e+03
	3.038	3.008-3.068	7.245e+03
4 Aroclor-1242	3.292	3.262-3.322	6.811e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.090	3.060-3.120	7.848e+03
	3.241	3.211-3.271	6.870e+03
	3.293	3.263-3.323	1.331e+04
	3.424	3.394-3.454	1.101e+04
	3.657	3.627-3.687	7.455e+03
6 Aroclor-1254	3.267	3.237-3.297	1.249e+04
	3.422	3.392-3.452	1.672e+04
	3.656	3.626-3.686	2.071e+04
	3.820	3.790-3.850	1.569e+04
	3.928	3.898-3.958	1.517e+04
7 Aroclor-1260	3.765	3.735-3.795	1.678e+04
	3.928	3.898-3.958	2.533e+04
	4.158	4.128-4.188	1.498e+04
	4.301	4.271-4.331	1.556e+04
	4.480	4.450-4.510	3.465e+04
8 Aroclor-1262	3.765	3.735-3.795	1.500e+04
	3.928	3.898-3.958	2.038e+04
	4.158	4.128-4.188	2.520e+04
	4.301	4.271-4.331	2.299e+04
	4.480	4.450-4.510	4.717e+04
9 Aroclor-1268	4.665	4.635-4.695	5.248e+04
	4.688	4.658-4.718	4.812e+04
	4.800	4.770-4.830	3.703e+04
	5.003	4.973-5.033	1.629e+04
	5.169	5.139-5.199	1.083e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
\$ 11 4cmx	1.966	1.936-1.996	3.870e+05
\$ 12 Decachlorobiphenyl	5.278	5.248-5.308	2.872e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012810a.b/ECD1-B-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 28-Jan-2010 13:36 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	1.219e+04
	3.278	3.248-3.308	8.191e+03
	3.341	3.311-3.371	5.077e+03
	3.568	3.538-3.598	6.398e+03
	3.644	3.614-3.674	5.918e+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	2.494	2.464-2.524	3.640e+03
	2.589	2.559-2.619	2.329e+03
	2.629	2.599-2.659	8.119e+03
3 Aroclor-1232	2.897	2.867-2.927	5.892e+03
	3.195	3.165-3.225	6.222e+03
	3.278	3.248-3.308	4.345e+03
	3.569	3.539-3.599	3.111e+03
4 Aroclor-1242	3.802	3.772-3.832	3.193e+03
	3.195	3.165-3.225	1.059e+04
	3.277	3.247-3.307	8.054e+03
	3.568	3.538-3.598	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/ecdla.i/012810a.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
6 Aroclor-1254	3.967	3.937-3.997	1.210e+04
	3.403	3.373-3.433	6.435e+03
	3.825	3.795-3.855	1.156e+04
	3.942	3.912-3.972	1.243e+04
7 Aroclor-1260	4.218	4.188-4.248	1.688e+04
	4.355	4.325-4.385	1.244e+04
	4.335	4.305-4.365	1.193e+04
	4.459	4.429-4.489	1.437e+04
8 Aroclor-1262	4.725	4.695-4.755	1.091e+04
	4.899	4.869-4.929	1.121e+04
	5.046	5.016-5.076	2.426e+04
	4.460	4.430-4.490	1.356e+04
9 Aroclor-1268	4.726	4.696-4.756	1.889e+04
	4.899	4.869-4.929	1.747e+04
	5.047	5.017-5.077	3.453e+04
	5.259	5.229-5.289	2.487e+04
M 10 Aroclor-Total	5.258	5.228-5.287	3.626e+04
	5.286	5.256-5.316	3.358e+04
	5.435	5.405-5.465	2.598e+04
	5.599	5.569-5.629	1.135e+04
\$ 11 4cmx	5.793	5.763-5.822	6.708e+04
\$ 12 Decachlorobiphenyl	1.000	0.980-1.020	
	2.298	2.268-2.328	2.792e+05
	5.944	5.914-5.974	1.746e+05

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 14-DEC-2009 05:36
 End Cal Date : 28-JAN-2010 13:00
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/012810a.b/ECD1-F-8082-121409.m
 Cal Date : 29-Jan-2010 09:10 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdla.i/012210.b/013f1301.d
 Level 2: /chem/ecdla.i/012210.b/014f1401.d
 Level 3: /chem/ecdla.i/012210.b/015f1501.d
 Level 4: /chem/ecdla.i/121409.b/046f4601.d
 Level 5: /chem/ecdla.i/012210.b/017f1701.d

Compound	100.000	250.000	500.000	1000.000	4000.000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 Aroclor-1016(1)	16134	14486	13661	12966	11652	13780	12.168
(2)	18792	17690	17879	16896	16269	17505	5.515
(3)	13185	11958	11430	10875	10056	11501	10.222
(4)	7676	7050	6835	6501	6164	6846	8.375
(5)	10168	9120	8829	8334	7956	8881	9.537
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)	8031	7459	6765	6313	5679	6849	13.524
(2)	9246	8871	8229	8095	7686	8426	7.427
(3)	6376	6076	5599	5256	4827	5627	11.031
(4)	4642	4328	3905	3655	3384	3983	12.710
(5)	4445	4061	3757	3587	3443	3858	10.378
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 : 28-JAN-2010 13:00
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m
 Cal Date : 29-Jan-2010 09:10 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	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)	18482	17000	16776	16216	15414	16778	6.750
(2)	27693	25623	25301	24615	23439	25334	6.166
(3)	16527	15230	14827	14401	13909	14979	6.644
(4)	16835	15754	15479	15081	14660	15562	5.287
(5)	36480	34657	34807	34164	33121	34646	3.519
8 Aroclor-1262(1)	16796	15375	14585	14470	13775	15000	7.687
(2)	22563	20964	19865	19587	18936	20383	6.975
(3)	27641	25661	24522	24605	23554	25197	6.179
(4)	25041	23378	22465	22352	21708	22989	5.624
(5)	49563	47861	46825	46728	44852	47166	3.655
9 Aroclor-1268(1)	55111	53385	52967	52495	48466	52485	4.676
(2)	51014	48609	47960	48222	44786	48118	4.620
(3)	39244	37391	36973	36968	34562	37028	4.505
(4)	17802	16531	16072	16029	15038	16294	6.158
(5)	113064	109648	108755	109096	100824	108277	4.162
10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 4cmx	407237	387000	390592	382838	367117	386957	3.734
12 Decachlorobiphenyl	318112	288964	284032	275190	269510	287162	6.575

GEL Laboratories LLC
INITIAL CALIBRATION DATA

Start Cal Date : 11-DEC-2009 10:17
 End Cal Date : 28-JAN-2010 13:00
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdla.i/012810a.b/ECD1-B-8082-121409.m
 Cal Date : 29-Jan-2010 09:10 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdla.i/012210.b/013b1301.d
 Level 2: /chem/ecdla.i/012210.b/014b1401.d
 Level 3: /chem/ecdla.i/012210.b/015b1501.d
 Level 4: /chem/ecdla.i/121409.b/046b4601.d
 Level 5: /chem/ecdla.i/012210.b/017b1701.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
1 Aroclor-1016 (1)	13982	12726	12217	11338	10711	12195	10.384
(2)	9780	8665	8148	7574	6789	8191	13.781
(3)	6025	5334	5012	4694	4319	5077	12.802
(4)	7579	6747	6320	5936	5407	6398	12.884
(5)	6928	6222	5792	5544	5107	5918	11.725
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)	7405	6518	5773	5260	4504	5892	19.017
(2)	7294	6687	6058	5769	5299	6222	12.576
(3)	5336	4800	4249	3912	3427	4345	17.180
(4)	3854	3418	3039	2783	2462	3111	17.466
(5)	3940	3492	3102	2870	2562	3193	16.853
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 : 28-JAN-2010 13:00
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : Falcon
 Method file : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m
 Cal Date : 29-Jan-2010 09:10 yip00818
 Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254(1)	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)	13890	12304	11796	11185	10460	11927	10.863
(2)	16464	14760	14222	13591	12805	14368	9.604
(3)	12572	11270	10771	10249	9681	10909	10.105
(4)	12859	11547	11081	10528	10011	11205	9.728
(5)	26918	24616	24307	23294	22179	24263	7.274
8 Aroclor-1262(1)	15849	14211	13033	12748	11945	13557	11.192
(2)	21776	19630	18382	17939	16725	18890	10.157
(3)	20222	18124	16968	16542	15497	17471	10.323
(4)	38743	35618	34053	33297	30946	34532	8.384
(5)	28740	25266	23755	23937	22633	24866	9.485
9 Aroclor-1268(1)	40076	37508	36193	35765	31736	36256	8.369
(2)	36699	34342	33454	33223	30195	33583	6.968
(3)	29294	26633	25688	25340	22957	25982	8.826
(4)	12990	11609	11161	10996	9978	11347	9.656
(5)	67306	67058	67598	69416	64002	67076	2.911
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx	304363	285683	280339	271241	254259	279177	6.609
\$ 12 Decachlorobiphenyl	196626	178854	170134	166074	161388	174615	7.948

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.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 0638
 Lab File ID: 002F0201 Init. Calib. Date(s): 01/22/10 01/22/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	14450.346	13180.285	0.01	-8.8	15.0
(2)	18199.756	17549.438	0.01	-3.6	15.0
(3)	11983.312	10929.610	0.01	-8.8	15.0
(4)	7177.742	6627.786	0.01	-7.7	15.0
(5)	9259.441	8396.142	0.01	-9.3	15.0
Aroclor-1260	17718.759	17015.251	0.01	-4.0	15.0
(2)	26928.394	25808.456	0.01	-4.2	15.0
(3)	16186.368	15394.593	0.01	-4.9	15.0
(4)	16907.951	16117.435	0.01	-4.7	15.0
(5)	37665.571	36837.731	0.01	-2.2	15.0
4cmx	392943.52	386499.14	0.01	-1.6	15.0
Decachlorobiphenyl	329851.94	309775.97	0.01	-6.1	15.0

FORM VII PEST .

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 0638
 Lab File ID: 002B0201 Init. Calib. Date(s): 01/22/10 01/22/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12686.880	11678.065	0.01	-8.0	15.0
(2)	8798.138	7752.303	0.01	-11.9	15.0
(3)	5479.218	4818.670	0.01	-12.0	15.0
(4)	6997.244	6102.985	0.01	-12.8	15.0
(5)	6563.576	5861.011	0.01	-10.7	15.0
Aroclor-1260	13275.098	12036.593	0.01	-9.3	15.0
(2)	16157.966	14779.154	0.01	-8.5	15.0
(3)	12499.207	11279.235	0.01	-9.8	15.0
(4)	12928.717	11702.807	0.01	-9.5	15.0
(5)	28445.628	26365.962	0.01	-7.3	15.0
4cmx	290204.15	276758.30	0.01	-4.6	15.0
Decachlorobiphenyl	243974.44	218045.72	0.01	-10.6	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.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1219
 Lab File ID: 032F3201 Init. Calib. Date(s): 01/22/10 01/22/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	14450.346	13577.456	0.01	-6.0	15.0
(2)	18199.756	17423.956	0.01	-4.3	15.0
(3)	11983.312	11289.690	0.01	-5.8	15.0
(4)	7177.742	6778.474	0.01	-5.6	15.0
(5)	9259.441	8727.797	0.01	-5.7	15.0
Aroclor-1260	17718.759	17375.942	0.01	-1.9	15.0
(2)	26928.394	26471.010	0.01	-1.7	15.0
(3)	16186.368	15743.525	0.01	-2.7	15.0
(4)	16907.951	16500.621	0.01	-2.4	15.0
(5)	37665.571	37661.267	0.01	-0.0	15.0
4cmx	392943.52	400248.28	0.01	1.8	15.0
Decachlorobiphenyl	329851.94	317239.32	0.01	-3.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1219
 Lab File ID: 032B3201 Init. Calib. Date(s): 01/22/10 01/22/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12686.880	11724.689	0.01	-7.6	15.0
(2)	8798.138	7830.339	0.01	-11.0	15.0
(3)	5479.218	4863.804	0.01	-11.2	15.0
(4)	6997.244	6166.973	0.01	-11.9	15.0
(5)	6563.576	5742.668	0.01	-12.5	15.0
Aroclor-1260	13275.098	12161.017	0.01	-8.4	15.0
(2)	16157.966	14980.969	0.01	-7.3	15.0
(3)	12499.207	11415.201	0.01	-8.7	15.0
(4)	12928.717	11845.521	0.01	-8.4	15.0
(5)	28445.628	26537.228	0.01	-6.7	15.0
4cmx	290204.15	279660.03	0.01	-3.6	15.0
Decachlorobiphenyl	243974.44	221347.69	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.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1442
 Lab File ID: 044F4401 Init. Calib. Date(s): 01/22/10 01/22/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	14450.346	13134.245	0.01	-9.1	15.0
(2)	18199.756	17203.527	0.01	-5.5	15.0
(3)	11983.312	11178.908	0.01	-6.7	15.0
(4)	7177.742	6787.876	0.01	-5.4	15.0
(5)	9259.441	8697.748	0.01	-6.1	15.0
Aroclor-1260	17718.759	17186.940	0.01	-3.0	15.0
(2)	26928.394	26162.710	0.01	-2.8	15.0
(3)	16186.368	15516.005	0.01	-4.1	15.0
(4)	16907.951	16254.802	0.01	-3.9	15.0
(5)	37665.571	36996.472	0.01	-1.8	15.0
4cmx	392943.52	395985.78	0.01	0.8	15.0
Decachlorobiphenyl	329851.94	299939.29	0.01	-9.1	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/27/10 Time: 1442
 Lab File ID: 044B4401 Init. Calib. Date(s): 01/22/10 01/22/10
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0950
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12686.880	11792.540	0.01	-7.0	15.0
(2)	8798.138	7865.146	0.01	-10.6	15.0
(3)	5479.218	4903.057	0.01	-10.5	15.0
(4)	6997.244	6139.887	0.01	-12.2	15.0
(5)	6563.576	5825.962	0.01	-11.2	15.0
Aroclor-1260	13275.098	12126.061	0.01	-8.6	15.0
(2)	16157.966	14847.749	0.01	-8.1	15.0
(3)	12499.207	11209.196	0.01	-10.3	15.0
(4)	12928.717	11540.243	0.01	-10.7	15.0
(5)	28445.628	26215.322	0.01	-7.8	15.0
4cmx	290204.15	280447.74	0.01	-3.4	15.0
Decachlorobiphenyl	243974.44	210169.56	0.01	-13.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1144
 Lab File ID: 015F1501 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13779.667	13239.829	0.01	-3.9	15.0
(2)	17505.109	17830.982	0.01	1.9	15.0
(3)	11500.916	11177.489	0.01	-2.8	15.0
(4)	6845.610	6706.479	0.01	-2.0	15.0
(5)	8881.386	8669.925	0.01	-2.4	15.0
Aroclor-1260	16777.675	17007.480	0.01	1.4	15.0
(2)	25334.129	25794.447	0.01	1.8	15.0
(3)	14978.848	15114.035	0.01	0.9	15.0
(4)	15561.673	15902.550	0.01	2.2	15.0
(5)	34645.808	35916.863	0.01	3.7	15.0
4cmx	386956.77	401572.33	0.01	3.8	15.0
Decachlorobiphenyl	287161.57	287962.67	0.01	0.3	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.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1144
 Lab File ID: 015B1501 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12194.849	11627.012	0.01	-4.6	15.0
(2)	8191.125	7750.692	0.01	-5.4	15.0
(3)	5077.048	4814.965	0.01	-5.2	15.0
(4)	6397.915	6066.099	0.01	-5.2	15.0
(5)	5918.363	5594.879	0.01	-5.5	15.0
Aroclor-1260	11926.917	11752.154	0.01	-1.5	15.0
(2)	14368.290	14264.405	0.01	-0.7	15.0
(3)	10908.621	10757.070	0.01	-1.4	15.0
(4)	11205.457	11094.832	0.01	-1.0	15.0
(5)	24262.909	24615.643	0.01	1.4	15.0
4cmx	279177.29	283491.33	0.01	1.5	15.0
Decachlorobiphenyl	174615.32	172597.55	0.01	-1.2	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.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1456
 Lab File ID: 032F3201 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13779.667	13010.923	0.01	-5.6	15.0
(2)	17505.109	16921.766	0.01	-3.3	15.0
(3)	11500.916	10983.417	0.01	-4.5	15.0
(4)	6845.610	6541.145	0.01	-4.4	15.0
(5)	8881.386	8470.741	0.01	-4.6	15.0
Aroclor-1260	16777.675	16357.926	0.01	-2.5	15.0
(2)	25334.129	25033.402	0.01	-1.2	15.0
(3)	14978.848	14649.411	0.01	-2.2	15.0
(4)	15561.673	15281.375	0.01	-1.8	15.0
(5)	34645.808	34496.244	0.01	-0.4	15.0
4cmx	386956.77	393377.53	0.01	1.6	15.0
Decachlorobiphenyl	287161.57	256266.84	0.01	-10.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1456
 Lab File ID: 032B3201 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12194.849	11633.899	0.01	-4.6	15.0
(2)	8191.125	7638.987	0.01	-6.7	15.0
(3)	5077.048	4697.437	0.01	-7.5	15.0
(4)	6397.915	5952.993	0.01	-7.0	15.0
(5)	5918.363	5500.663	0.01	-7.0	15.0
Aroclor-1260	11926.917	11411.400	0.01	-4.3	15.0
(2)	14368.290	13804.017	0.01	-3.9	15.0
(3)	10908.621	10442.327	0.01	-4.3	15.0
(4)	11205.457	10750.486	0.01	-4.1	15.0
(5)	24262.909	23833.089	0.01	-1.8	15.0
4cmx	279177.29	278364.92	0.01	-0.3	15.0
Decachlorobiphenyl	174615.32	185762.15	0.01	6.4	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1838
 Lab File ID: 051F5101 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	13779.667	13468.292	0.01	-2.2	15.0
(2)	17505.109	17643.264	0.01	0.8	15.0
(3)	11500.916	11072.496	0.01	-3.7	15.0
(4)	6845.610	6660.058	0.01	-2.7	15.0
(5)	8881.386	8624.865	0.01	-2.9	15.0
Aroclor-1260	16777.675	16445.980	0.01	-2.0	15.0
(2)	25334.129	24856.986	0.01	-1.9	15.0
(3)	14978.848	14515.485	0.01	-3.1	15.0
(4)	15561.673	14999.370	0.01	-3.6	15.0
(5)	34645.808	34281.505	0.01	-1.0	15.0
4cmx	386956.77	396011.20	0.01	2.3	15.0
Decachlorobiphenyl	287161.57	261957.76	0.01	-8.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301
 Instrument ID: ECD1A Calibration Date: 01/28/10 Time: 1838
 Lab File ID: 051B5101 Init. Calib. Date(s): 01/28/10 01/28/10
 Heated Purge: (Y/N) N Init. Calib. Times: 1051 1134
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12194.849	11844.806	0.01	-2.9	15.0
(2)	8191.125	7613.238	0.01	-7.0	15.0
(3)	5077.048	4737.947	0.01	-6.7	15.0
(4)	6397.915	5921.989	0.01	-7.4	15.0
(5)	5918.363	5493.730	0.01	-7.2	15.0
Aroclor-1260	11926.917	11077.109	0.01	-7.1	15.0
(2)	14368.290	13481.775	0.01	-6.2	15.0
(3)	10908.621	10117.432	0.01	-7.2	15.0
(4)	11205.457	10366.108	0.01	-7.5	15.0
(5)	24262.909	23064.767	0.01	-4.9	15.0
4cmx	279177.29	278402.79	0.01	-0.3	15.0
Decachlorobiphenyl	174615.32	175886.94	0.01	0.7	15.0

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/002f0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 27-JAN-2010 06:38

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

				CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)		TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8				
1.967	1.967	0.000	38649914	100.000	98.4	80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3				
5.279	5.279	0.000	30977597	100.000	93.9	80.00-	120.00	100.00	

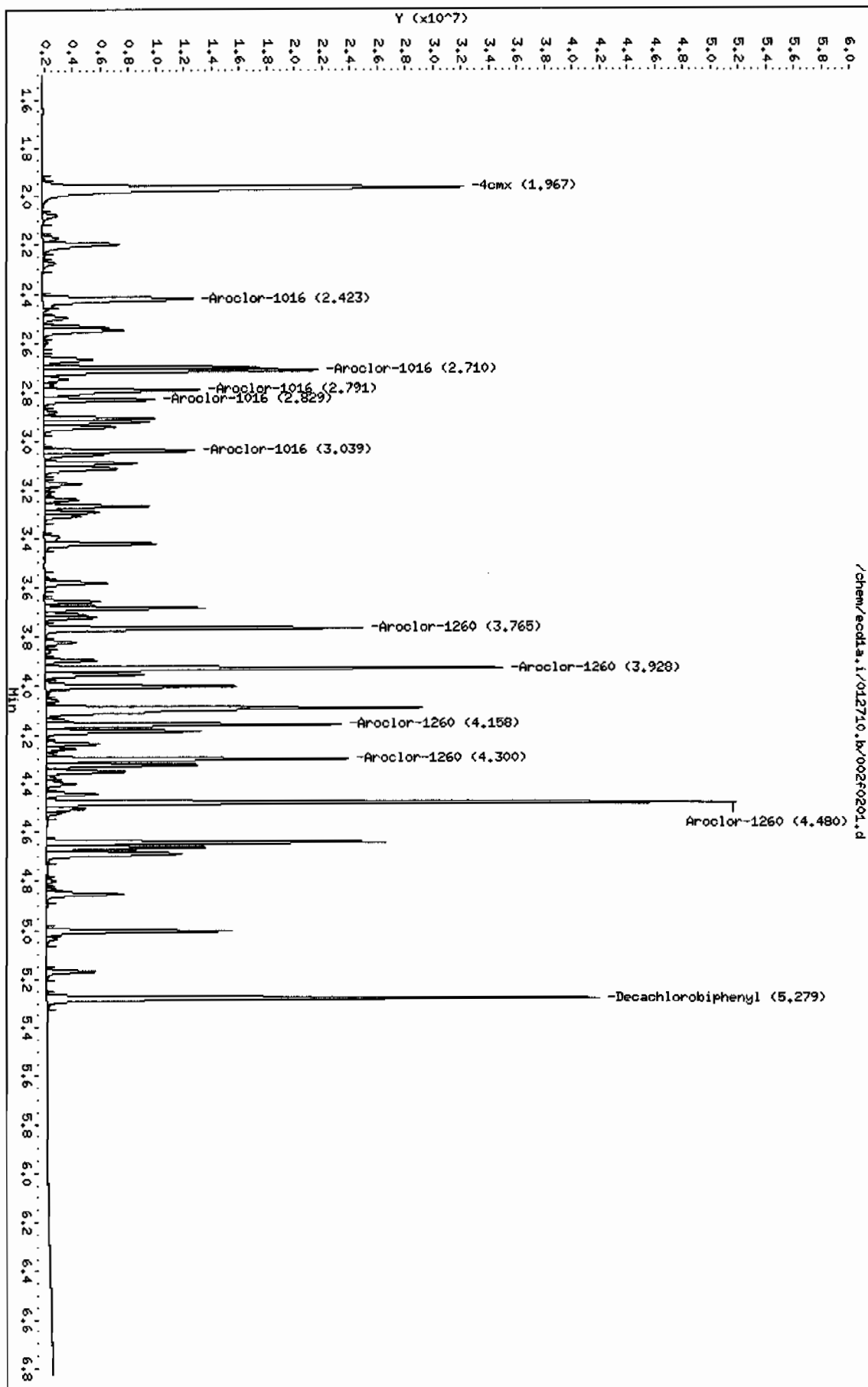
1 Aroclor-1016					CAS #: 12674-11-2				
2.423	2.423	0.000	13180284	1000.00	912	80.00-	120.00	100.00	
2.710	2.710	0.000	17549437	1000.00	964	106.82-	146.82	133.15	
2.791	2.791	0.000	10929609	1000.00	912	65.47-	105.47	82.92	
2.829	2.829	0.000	6627786	1000.00	923	31.32-	71.32	50.29	
3.039	3.039	0.000	8396141	1000.00	907	44.60-	84.60	63.70	
Average of Peak Amounts =					924				

7 Aroclor-1260					CAS #: 11096-82-5				
3.765	3.765	0.000	17015251	1000.00	960	80.00-	120.00	100.00	
3.928	3.928	0.000	25808456	1000.00	958	131.61-	171.61	151.68	
4.158	4.158	0.000	15394593	1000.00	951	68.06-	108.06	90.48	
4.300	4.300	0.000	16117435	1000.00	953	71.84-	111.84	94.72	
4.480	4.480	0.000	36837730	1000.00	978	194.61-	234.61	216.50	
Average of Peak Amounts =					960				

Data File: /chem/ecdl.a.i/012710.b/002f0201.d
Date: 27-JAN-2010 06:38
Client ID: ARL66001
Sample Info: IMA100104-60 01

Column phase: CLP1

Instrument: ecdl.a.i
Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/002b0201.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 27-JAN-2010 06:38

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 2

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8			
2.299	2.299	0.000	27675830	100.000	95.4	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.945	5.945	0.000	21804572	100.000	89.4	80.00-	120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2			
3.195	3.195	0.000	11678065	1000.00	920	80.00-	120.00	100.00 (M)
3.279	3.279	0.000	7752303	1000.00	881	44.37-	84.37	66.38
3.342	3.342	0.000	4818670	1000.00	879	19.84-	59.84	41.26
3.569	3.569	0.000	6102985	1000.00	872	31.13-	71.13	52.26
3.644	3.644	0.000	5861011	1000.00	893	27.00-	67.00	58.88
Average of Peak Amounts =					889			

7 Aroclor-1260					CAS #: 11096-82-5			
4.335	4.335	0.000	12036593	1000.00	907	80.00-	120.00	100.00
4.459	4.459	0.000	14779154	1000.00	915	104.23-	144.23	122.79
4.725	4.725	0.000	11279235	1000.00	902	72.03-	112.03	93.71
4.899	4.899	0.000	11702807	1000.00	905	75.50-	115.50	97.23
5.046	5.046	0.000	26365962	1000.00	927	197.36-	237.36	219.05
Average of Peak Amounts =					911			

Data File: /chem/ecdl1a.i/012710.b/002b0201.d
Report Date: 28-Jan-2010 11:09

Page 2

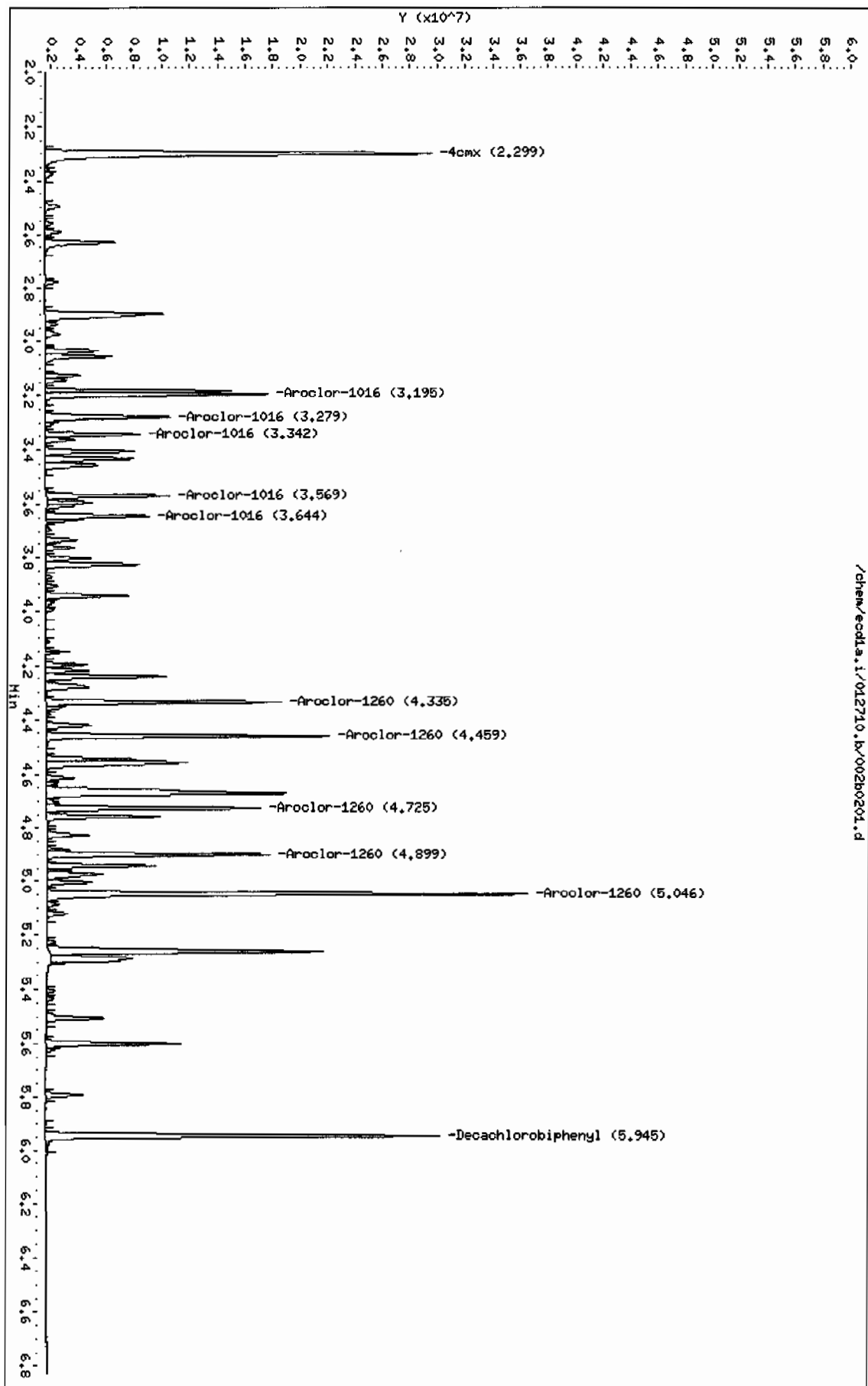
QC Flag Legend

M - Compound response manually integrated.

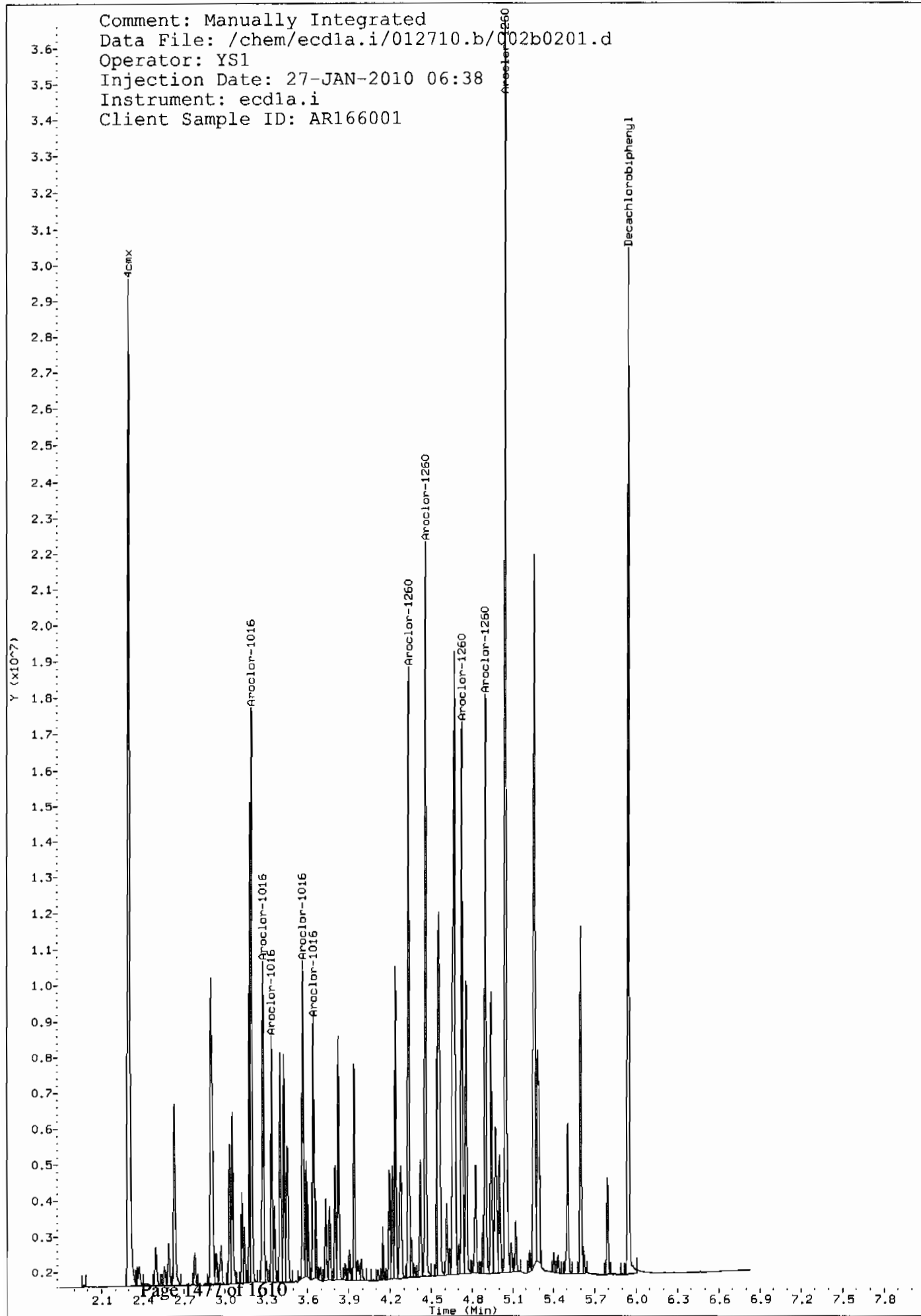
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Date: 27-JAN-2010 06:38
Client ID: AR166004
Sample Info: 1MR100104-60 01

Column phase: CLP2

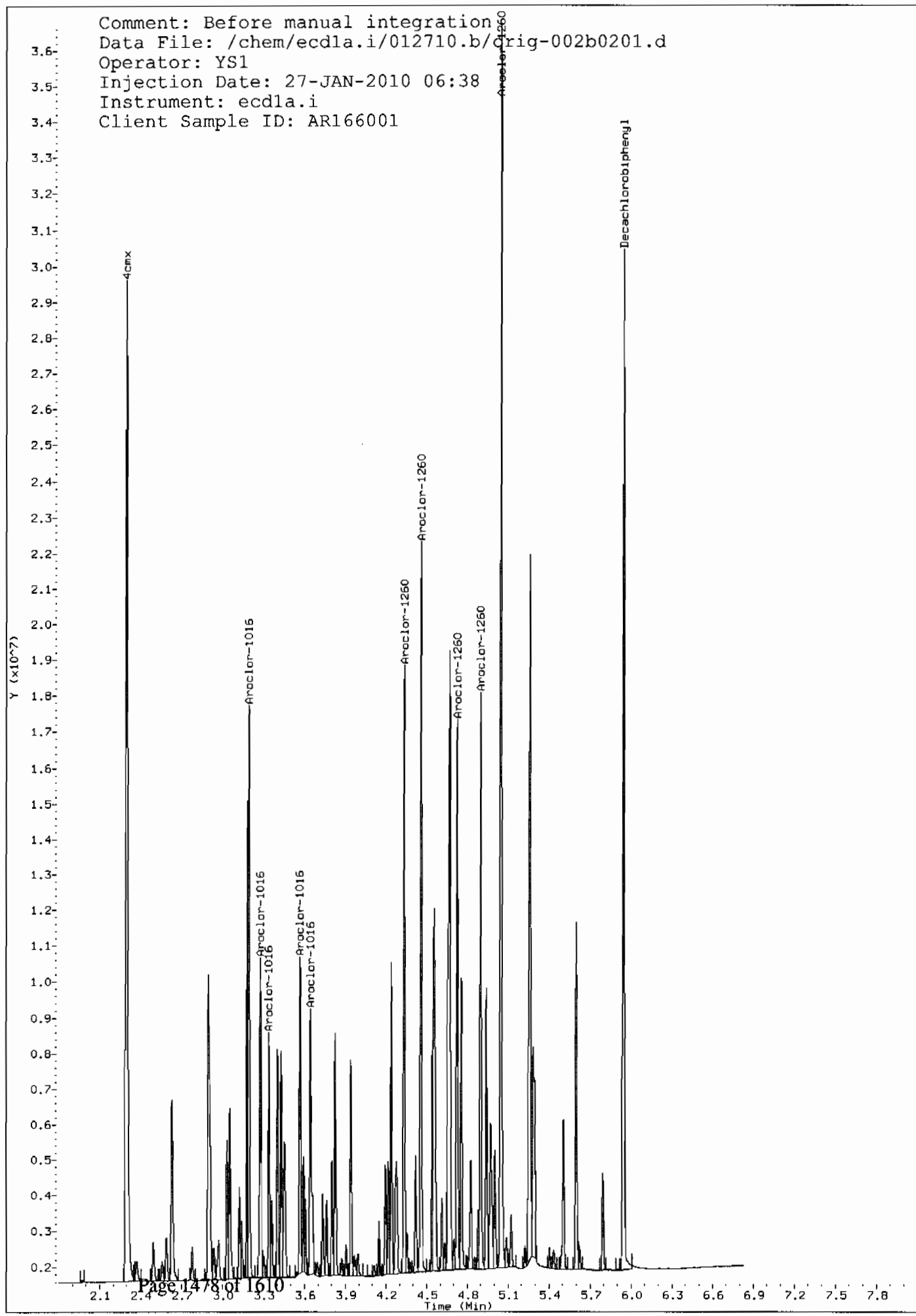
Instrument: ecdl1a.i
Operator: YS1
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012710.b/002b0201.d
Operator: YS1
Injection Date: 27-JAN-2010 06:38
Instrument: ecd1a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdl1.i/012710.b/Orig-002b0201.d
Operator: YS1
Injection Date: 27-JAN-2010 06:38
Instrument: ecd1a.i
Client Sample ID: AR166001



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/003f0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 27-JAN-2010 06:49

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

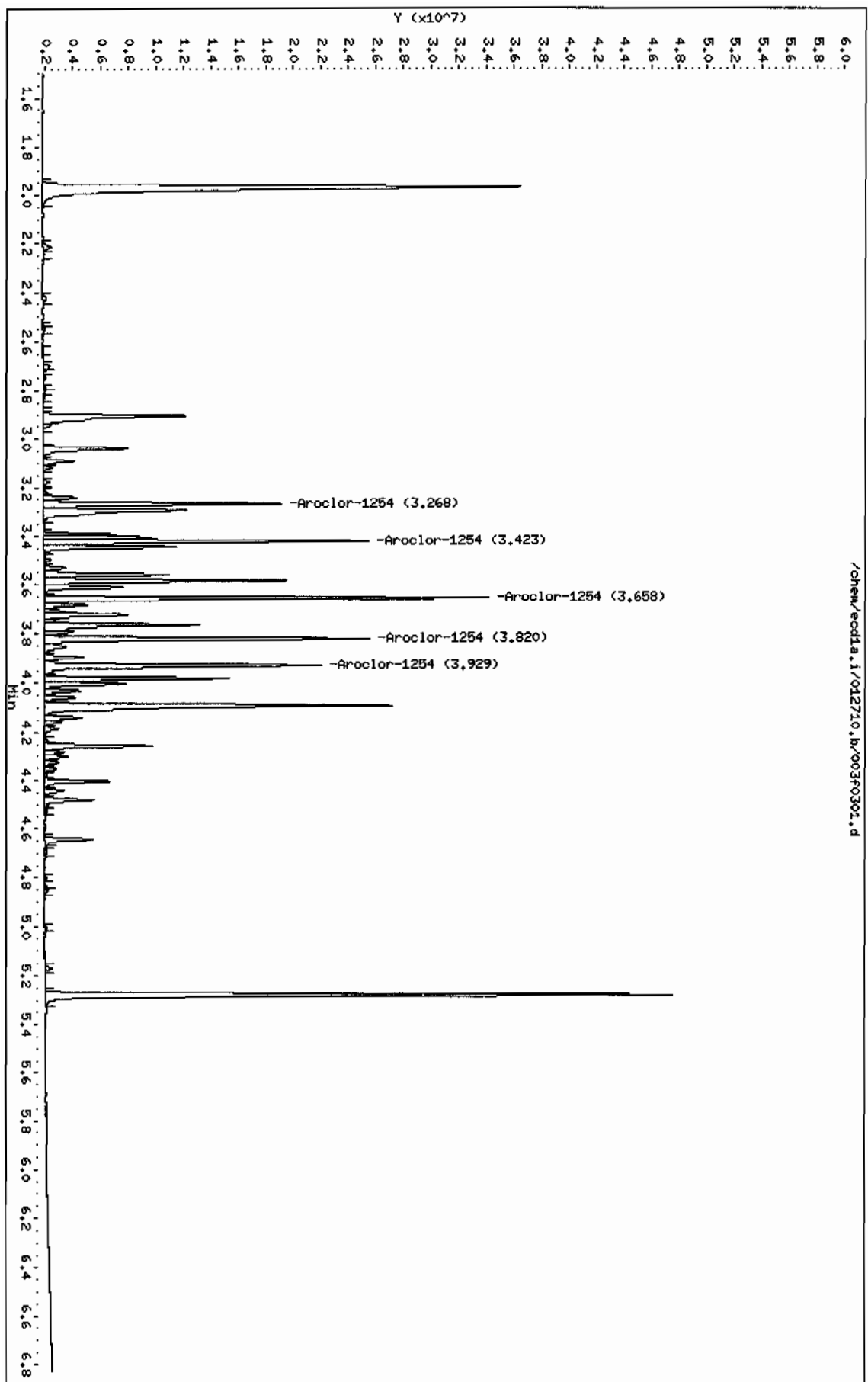
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1	
3.268	3.268	0.000	13037940 1000.00	1040	80.00- 120.00	100.00
3.423	3.423	0.000	17824436 1000.00	1060	116.71- 156.71	136.71
3.658	3.658	0.000	23591553 1000.00	1140	160.95- 200.95	180.95
3.820	3.820	0.000	18043855 1000.00	1150	118.39- 158.39	138.39
3.929	3.929	0.000	17151813 1000.00	1130	111.55- 151.55	131.55
Average of Peak Amounts =			1.11e+03			

Data File: /chem/ecdda.i/012710.b/003f0301.d
Date : 27-JAN-2010 06:49
Client ID: AR125401
Sample Info: 1HAR091216-54

Page 1

Column phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/003b0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 27-JAN-2010 06:49

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 3

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1254.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254						
3.403	3.403	0.000	5975812 1000.00	929 80.00- 120.00	100.00	
3.826	3.826	0.000	10635326 1000.00	920 157.97- 197.97	177.97	
3.943	3.943	0.000	11946792 1000.00	961 179.92- 219.92	199.92	
4.218	4.218	0.000	16753234 1000.00	992 260.35- 300.35	280.35	
4.355	4.355	0.000	12298914 1000.00	989 185.81- 225.81	205.81	
Average of Peak Amounts =				958		

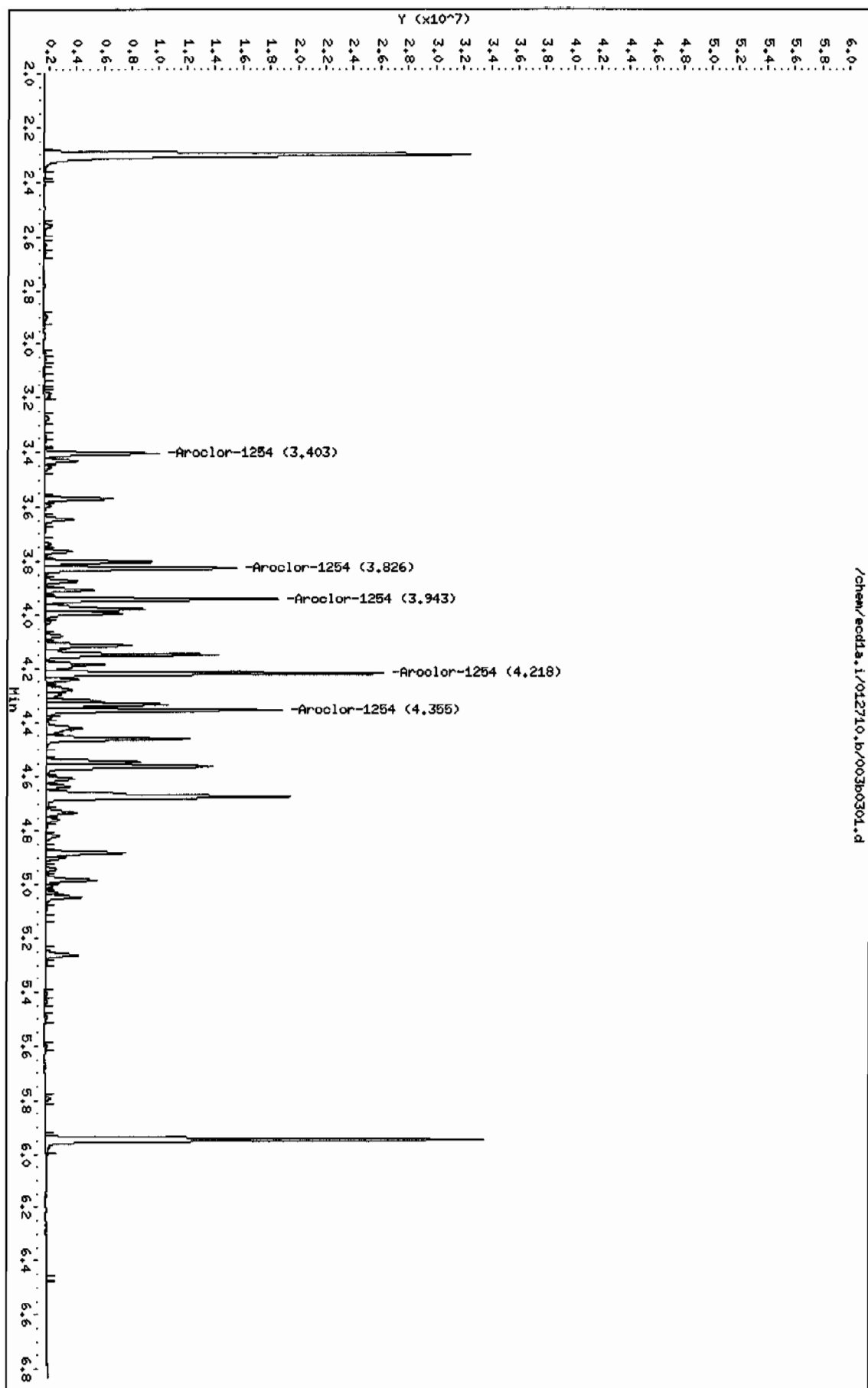
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Date: 27-JAN-2010 06:49
Client ID: AR125401
Sample Info: ILMR091216-54

Instrument: ecdda.i

Page 1

Column phase: CLP2

Operator: YSI
Column diameter: 0.25



Report Date: 28-Jan-2010 11:09

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/004f0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 27-JAN-2010 06:59

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9	
2.422	2.422	0.000	11591185 1000.00	994	80.00- 120.00	100.00
2.711	2.711	0.000	14736599 1000.00	1100	107.14- 147.14	127.14
2.829	2.829	0.000	5646703 1000.00	1020	28.72- 68.72	48.72
3.039	3.039	0.000	7310017 1000.00	1010	43.07- 83.07	63.07
3.293	3.293	0.000	7436684 1000.00	1090	44.16- 84.16	64.16
Average of Peak Amounts =				1.04e+03		

Data File: /chem/ecdl1/012710.b/004f0401.d

Date: 27-JAN-2010 06:59

Client ID: AR124201

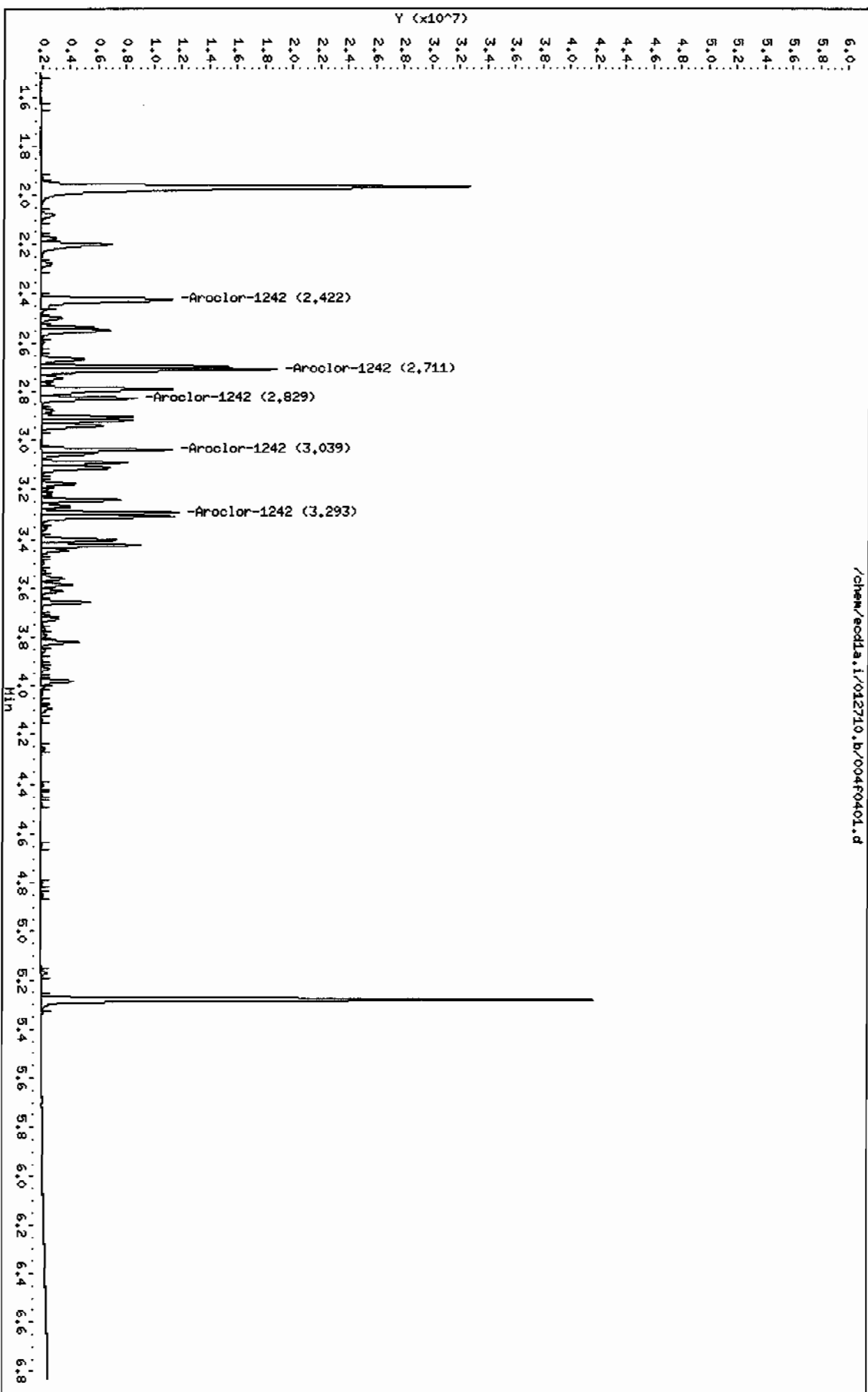
Sample Info: 14AR091217-42

Column phase: CLP1

Instrument: ecdl1

Operator: YSL

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/004b0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 27-JAN-2010 06:59

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 4

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1242.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.195	3.195	0.000	10304226	1000.00	973 80.00- 120.00	100.00
3.279	3.279	0.000	6676006	1000.00	829 44.79- 84.79	64.79
3.569	3.569	0.000	5312751	1000.00	891 31.56- 71.56	51.56
3.803	3.803	0.000	5532759	1000.00	913 33.69- 73.69	53.69
3.831	3.831	0.000	6140169	1000.00	916 39.59- 79.59	59.59
Average of Peak Amounts =				905		

Data File: /chem/ecdl.a.i/012710.b/004b0401.d

Date: 27-JAN-2010 06:59

Client ID: AR124201

Sample Info: 1HAR091217-42

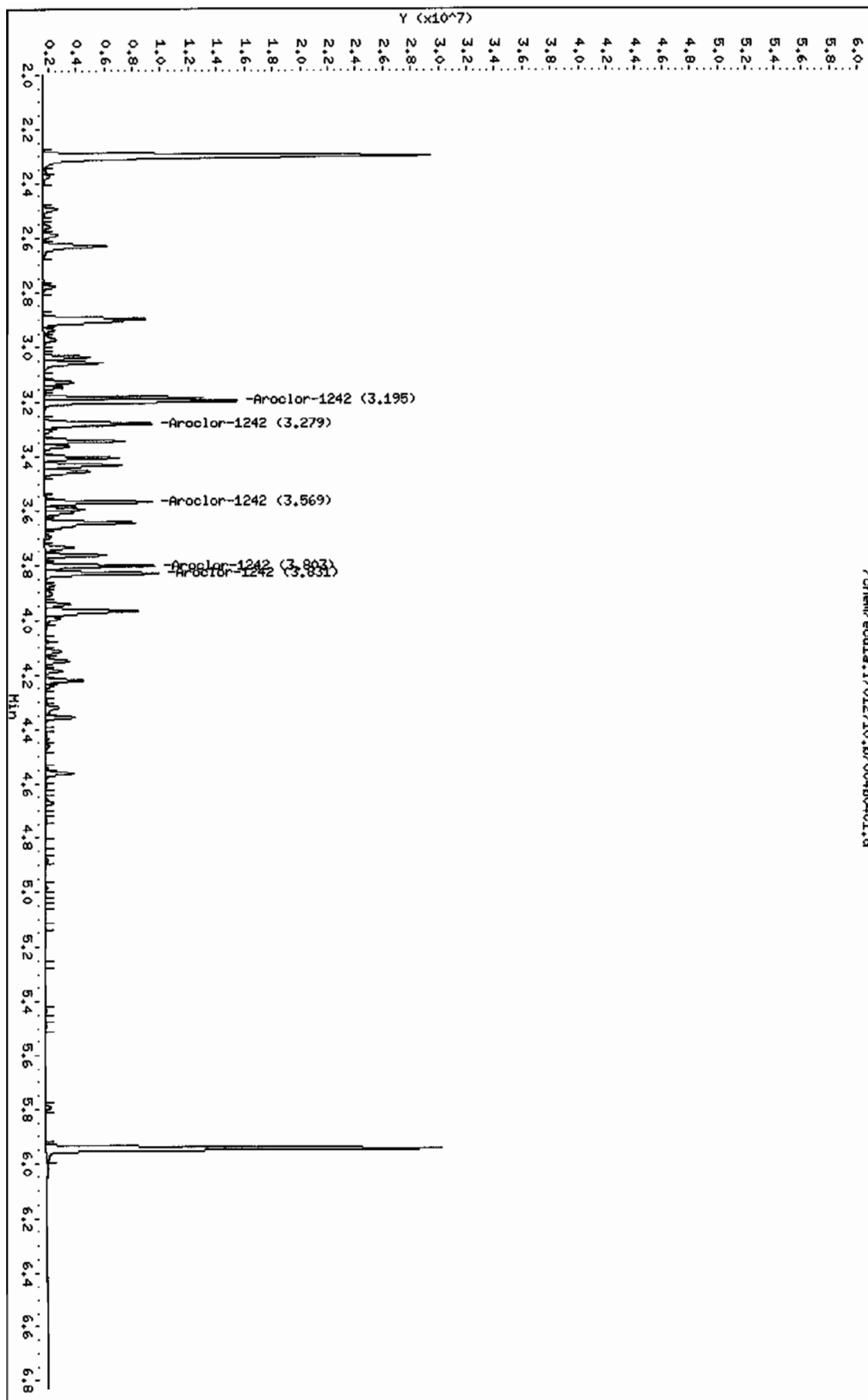
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

/chem/ecdl.a.i/012710.b/004b0401.d



Report Date: 28-Jan-2010 11:09

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 27-JAN-2010 07:09

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
----	--------	--------	------------------	---------	--------------	-------

5 Aroclor-1248			CAS #: 12672-29-6			
3.091	3.091	0.000	8131395 1000.00	1040	80.00- 120.00	100.00
3.242	3.242	0.000	7103907 1000.00	1030	67.36- 107.36	87.36
3.293	3.293	0.000	14022707 1000.00	1050	152.45- 192.45	172.45
3.426	3.426	0.000	11106664 1000.00	1010	116.59- 156.59	136.59
3.658	3.658	0.000	7099803 1000.00	952	67.31- 107.31	87.31

Average of Peak Amounts = 1.02e+03

Data File: /chem/ecdl1a.i/012710.b/005f0501.d
Date : 27-JAN-2010 07:09
Client ID: AR124801
Sample Info: 1MAR091217-48

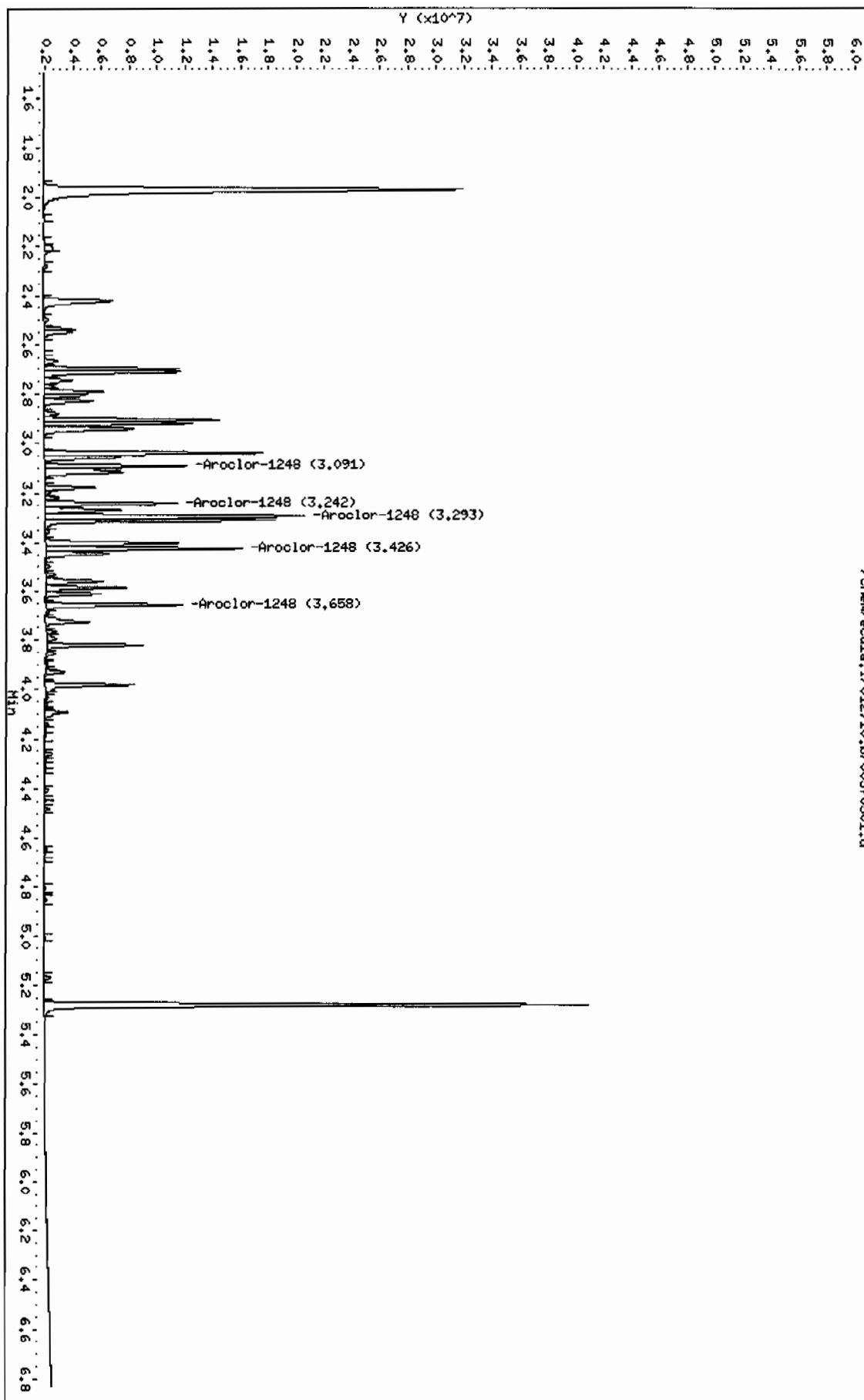
Instrument: ecdl1a.i

Page 1

Column phase: CLP1

Operator: VSI
Column diameter: 0.25

/chem/ecdl1a.i/012710.b/005f0501.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/005b0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 27-JAN-2010 07:09

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 5

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1248.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
5 Aroclor-1248			CAS #: 12672-29-6			
3.404	3.404	0.000	7159053	1000.00	889 80.00- 120.00	100.00
3.570	3.570	0.000	8957102	1000.00	907 105.12- 145.12	125.12
3.803	3.803	0.000	10274340	1000.00	916 123.52- 163.52	143.52
3.832	3.832	0.000	11521178	1000.00	923 140.93- 180.93	160.93
3.968	3.968	0.000	11027978	1000.00	911 134.04- 174.04	154.04
Average of Peak Amounts =			909			

Data File: /chem/ecdl.a.i/012710.b/005b0501.d

Date : 27-JUN-2010 07:09

Client ID: AR124801

Sample Info: 1MAR091217-48

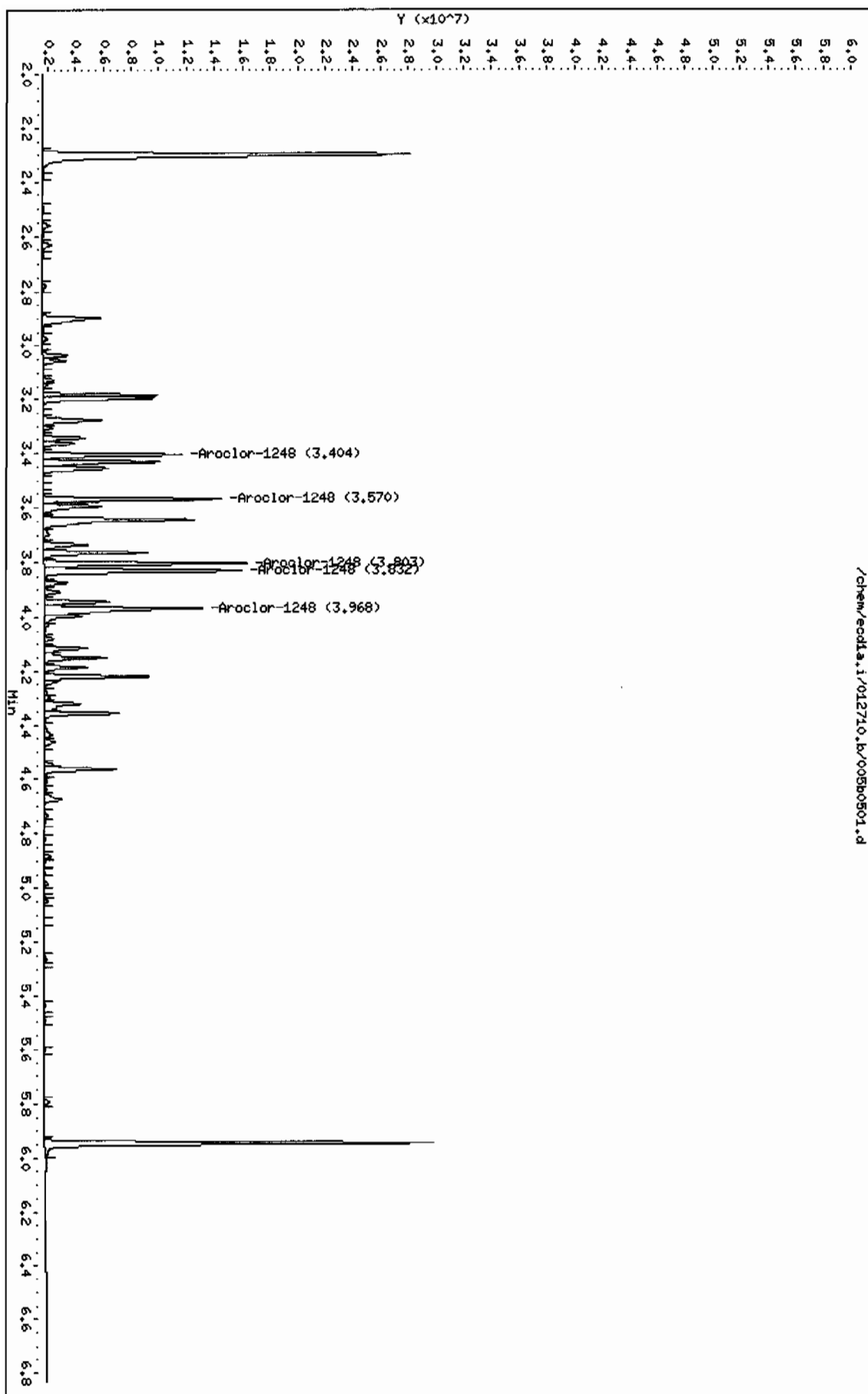
Page 1

Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 27-JAN-2010 07:20

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 6

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1232.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
----	--------	--------	-----------------------------	-------------------	--------------	-------

3 Aroclor-1232

CAS #: 11141-16-5

2.423	2.423	0.000	6635278 1000.00	969	80.00- 120.00	100.00
2.711	2.711	0.000	8653894 1000.00	1030	110.42- 150.42	130.42
2.792	2.792	0.000	5646580 1000.00	1000	65.10- 105.10	85.10
3.040	3.040	0.000	4217924 1000.00	1060	43.57- 83.57	63.57
3.294	3.294	0.000	3888682 1000.00	1010	38.61- 78.61	58.61

Average of Peak Amounts ~

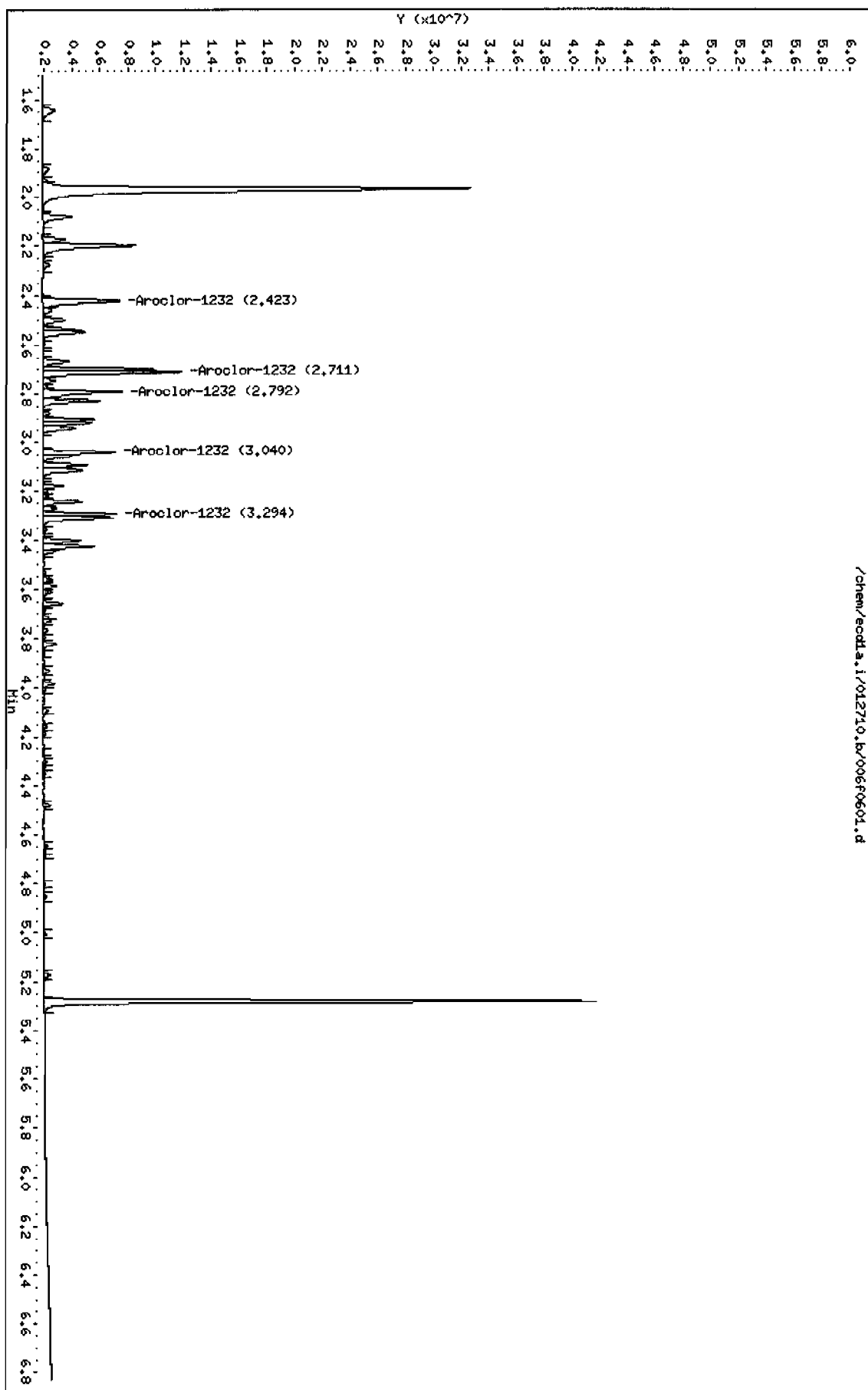
1.01e+03

Data File: /chem/ecdda.i/012710.b/006f0601.d
Date : 27-JAN-2010 07:20
Client ID: MR123201
Sample Info: IMR100104-32

Column phase: CLP1

Instrument: ecdda.i
Operator: YSL
Column diameter: 0.25

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Data File: /chem/ecdl1a.i/012710.b/006b0601.d
Report Date: 28-Jan-2010 11:09

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/006b0601.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 27-JAN-2010 07:20
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.898	2.898	0.000	5367921 1000.00	911	80.00- 120.00	100.00
3.196	3.196	0.000	5876629 1000.00	944	89.48- 129.48	109.48
3.279	3.279	0.000	4095318 1000.00	943	56.29- 96.29	76.29
3.570	3.570	0.000	3046069 1000.00	979	36.75- 76.75	56.75
3.803	3.803	0.000	3033413 1000.00	950	36.51- 76.51	56.51
Average of Peak Amounts =				945		

Data File: /chem/ecdl.a.i/012710.b/006b0601.d

Date: 27-Jan-2010 07:20

Client ID: AR123201

Sample Info: 1MAR100104-32

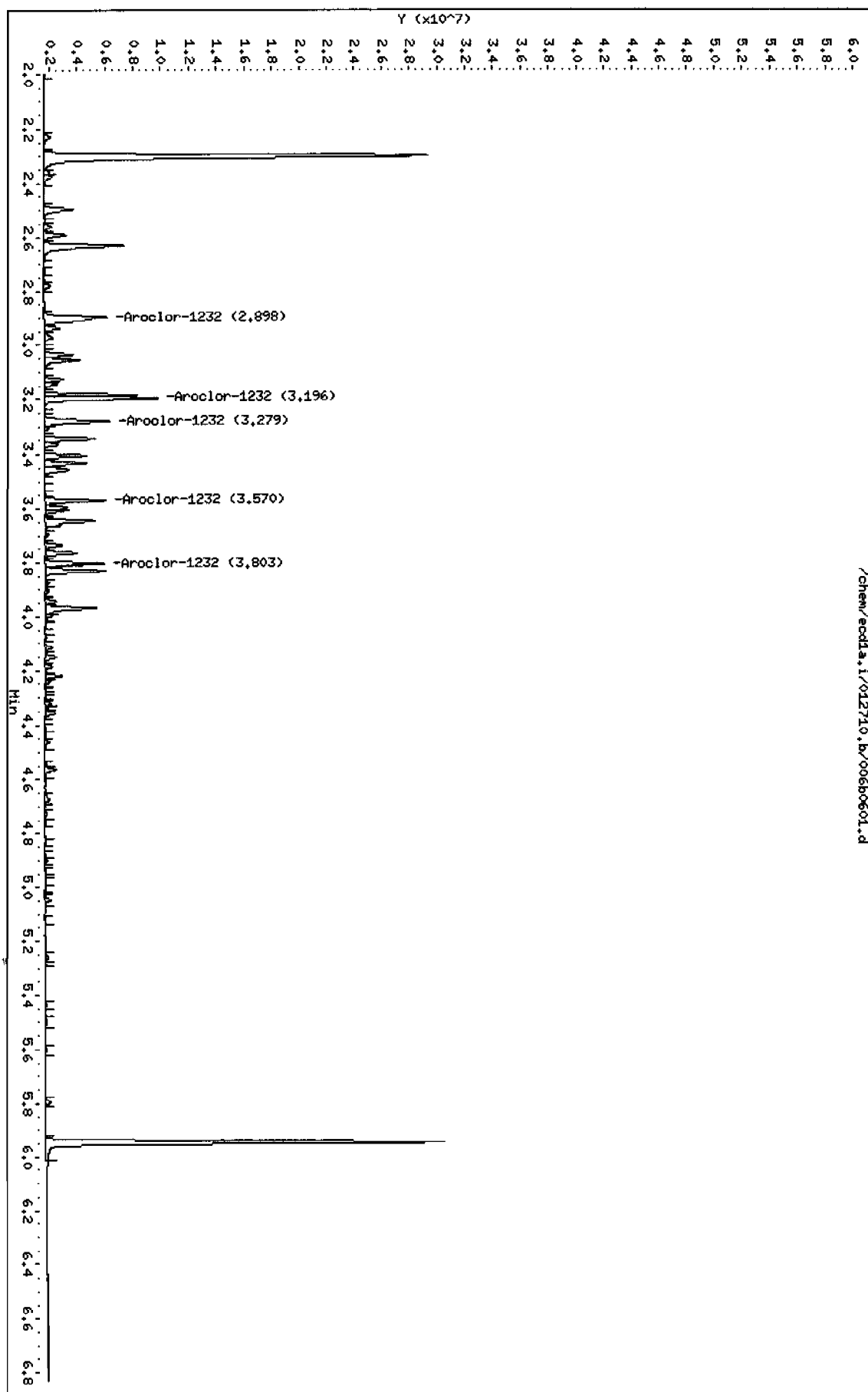
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

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Report Date: 28-Jan-2010 11:10

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/007f0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 27-JAN-2010 07:30

Operator : YS1

Inst ID: ecdla.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 7

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.081	2.081	0.000	4220283 1000.00	981	80.00- 120.00	100.00
2.174	2.174	0.000	2323622 1000.00	952	35.06- 75.06	55.06
2.200	2.200	0.000	10119206 1000.00	985	219.78- 259.78	239.78
Average of Peak Amounts =				973		

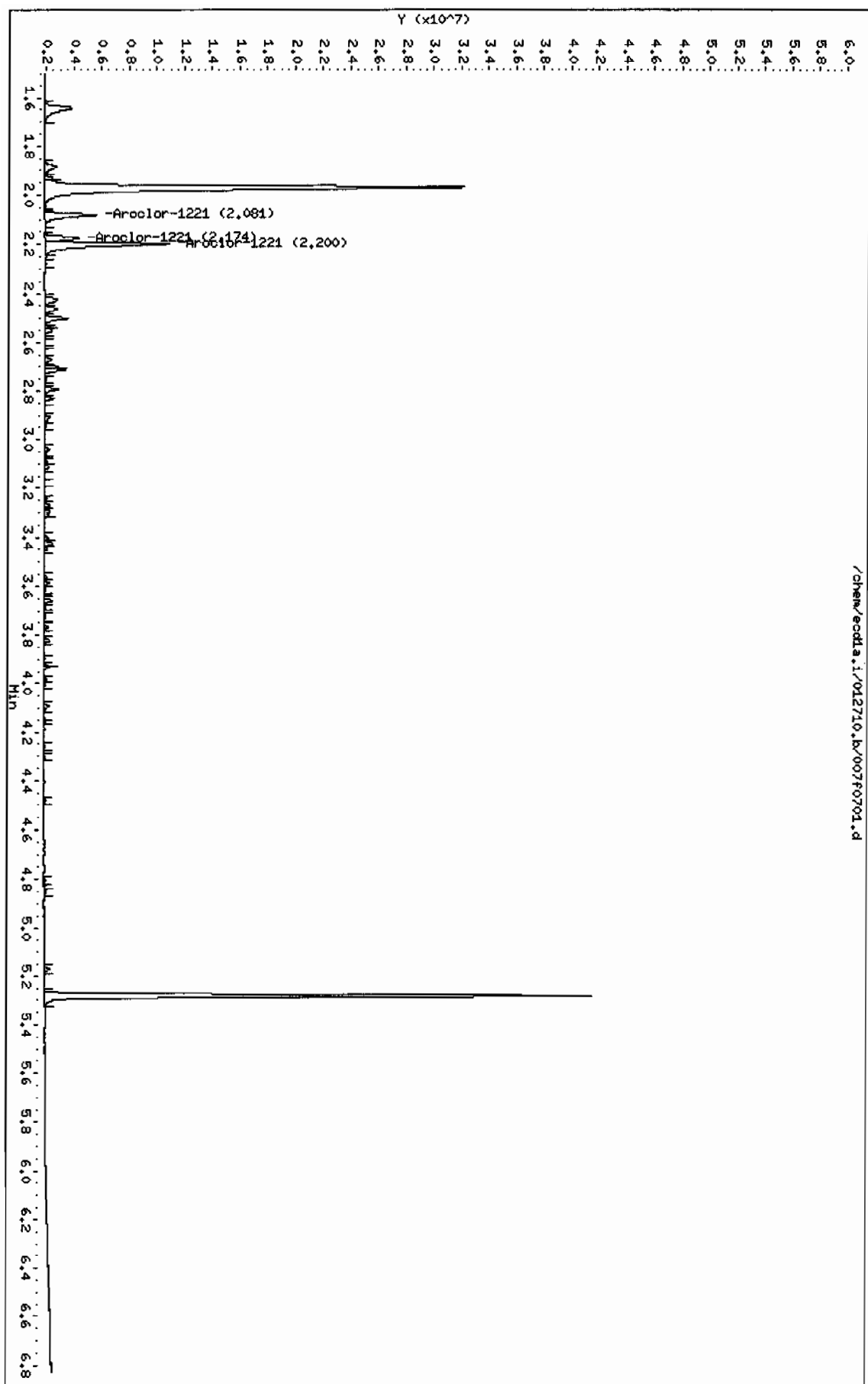
Data File: /chem/ecdda.i/012710.b/007f0701.d
Date: 27-JAN-2010 07:30
Client ID: BR122101
Sample Info: IMR100104-21

Instrument: ecdda.i

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Column phase: CLP1

Operator: YSL
Column diameter: 0.25



Data File: /chem/ecdla.i/012710.b/007b0701.d
Report Date: 28-Jan-2010 11:10

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/007b0701.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 27-JAN-2010 07:30
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

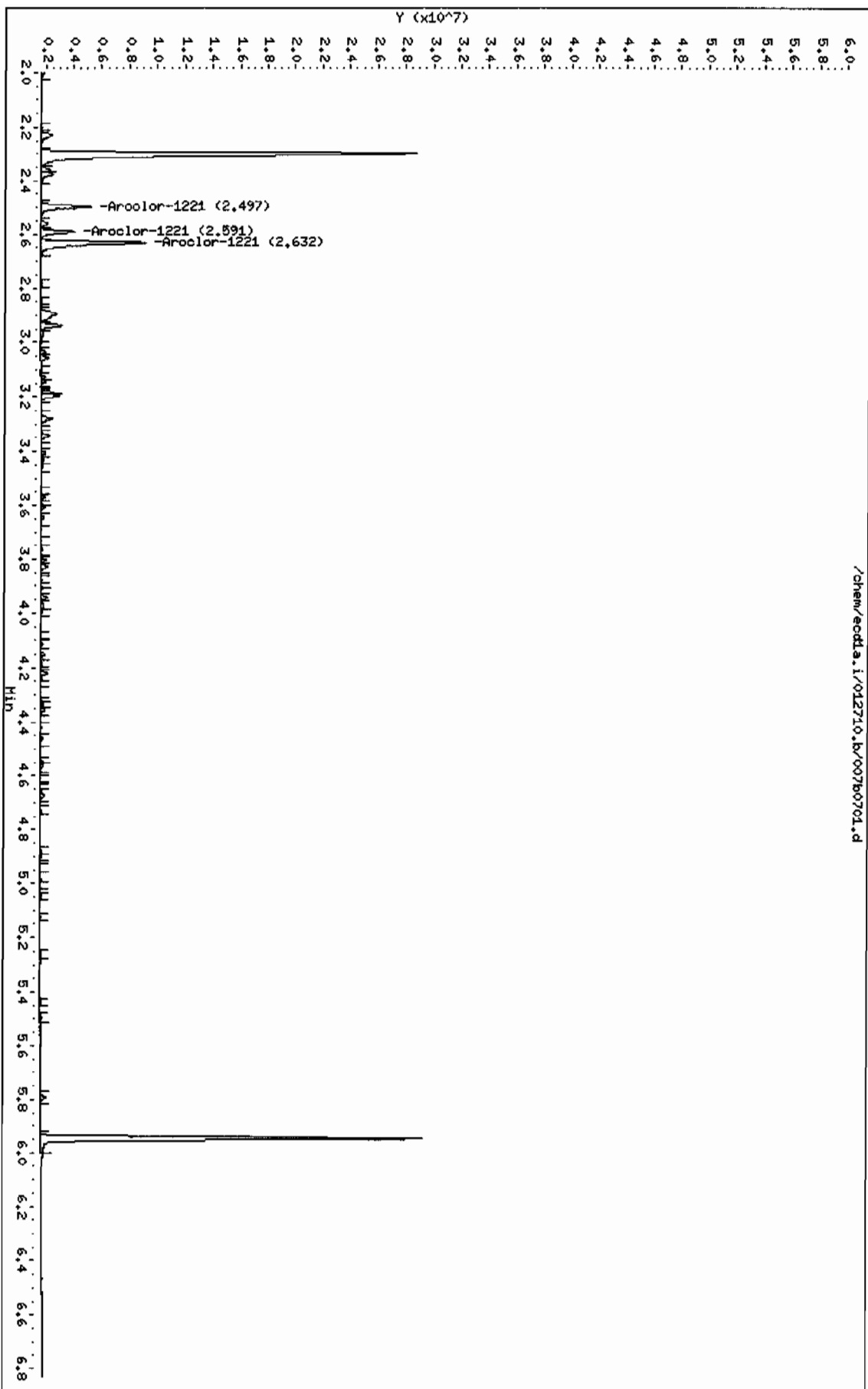
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
2 Aroclor-1221			CAS #: 11104-28-2			
2.497	2.497	0.000	3218709 1000.00	884	80.00- 120.00	100.00
2.591	2.591	0.000	2087410 1000.00	896	44.85- 84.85	64.85
2.632	2.632	0.000	7171188 1000.00	883	202.80- 242.80	222.80
Average of Peak Amounts =			888			

Data File: /chem/ecdl1a.i/012710.b/007b0701.d
Date : 27-JAN-2010 07:30
Client ID: AR122101
Sample Info: IHR100104-21

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Column phase: CLP2

Instrument: ecdl1a.i
Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/032f3201.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 27-JAN-2010 12:19

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 27-Jan-2010 14:19 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 32

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

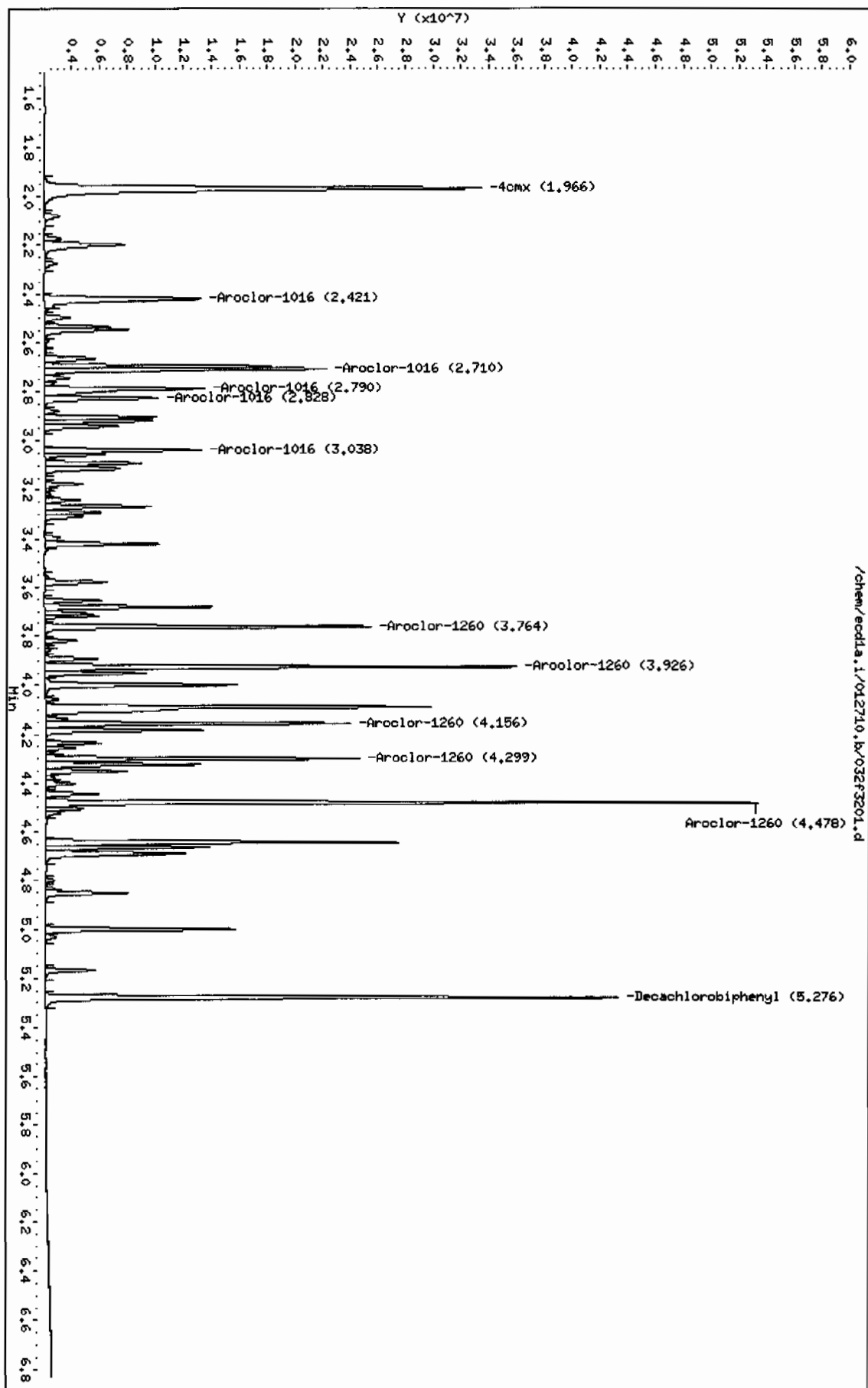
AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
<hr/>								
\$ 11 4cmx			CAS #: 877-09-8					
1.966	1.967	-0.001	40024828	100.000	102	80.00- 120.00	100.00	
<hr/>								
\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3					
5.276	5.279	-0.003	31723932	100.000	96.2	80.00- 120.00	100.00	
<hr/>								
1 Aroclor-1016			CAS #: 12674-11-2					
2.421	2.423	-0.002	13577456	1000.00	940	80.00- 120.00	100.00	
2.710	2.710	0.000	17423956	1000.00	957	108.33- 148.33	128.33	
2.790	2.791	-0.001	11289690	1000.00	942	63.15- 103.15	83.15	
2.828	2.829	-0.001	6778474	1000.00	944	29.92- 69.92	49.92	
3.038	3.039	-0.001	8727797	1000.00	942	44.28- 84.28	64.28	
Average of Peak Amounts =					945			
<hr/>								
7 Aroclor-1260			CAS #: 11096-82-5					
3.764	3.765	-0.001	17375942	1000.00	981	80.00- 120.00	100.00	
3.926	3.928	-0.002	26471010	1000.00	983	132.34- 172.34	152.34	
4.156	4.158	-0.002	15743525	1000.00	973	70.61- 110.61	90.61	
4.299	4.300	-0.001	16500621	1000.00	976	74.96- 114.96	94.96	
4.478	4.480	-0.002	37661267	1000.00	1000	196.74- 236.74	216.74	
Average of Peak Amounts =					982			

Data File: /chem/ecdda.i/012710.b/032f3201.d
Date: 27-JAN-2010 12:19
Client ID: A6166003
Sample Info: INARI00104-60 03

Column phase: CLP1

Instrument: ecdda.i
Operator: VSI
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/032b3201.d
Lab Smp Id: WAR100104-60 03 Client Smp ID: AR166003
Inj Date : 27-JAN-2010 12:19
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-60 03
Misc Info :
Comment :
Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m
Meth Date : 27-Jan-2010 14:18 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:12 Cal File: 014b1401.d
Als bottle: 32 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			
2.298	2.299	-0.001	27966003	100.000	96.4	80.00-	120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.944	5.945	-0.001	22134769	100.000	90.7	80.00-	120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2			
3.195	3.195	0.000	11724689	1000.00	924	80.00-	120.00	100.00 (M)
3.278	3.279	-0.001	7830339	1000.00	890	46.79-	86.79	66.79
3.341	3.342	-0.001	4863804	1000.00	888	21.48-	61.48	41.48
3.568	3.569	-0.001	6166973	1000.00	881	32.60-	72.60	52.60
3.644	3.644	0.000	5742668	1000.00	875	28.98-	68.98	48.98
Average of Peak Amounts =					892			

7 Aroclor-1260					CAS #: 11096-82-5			
4.334	4.335	-0.001	12161017	1000.00	916	80.00-	120.00	100.00
4.459	4.459	0.000	14980969	1000.00	927	103.19-	143.19	123.19
4.724	4.725	-0.001	11415201	1000.00	913	73.87-	113.87	93.87
4.898	4.899	-0.001	11845521	1000.00	916	77.41-	117.41	97.41
5.045	5.046	-0.001	26537228	1000.00	933	198.22-	238.22	218.22
Average of Peak Amounts =					921			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/012710.b/032b3201.d

Date: 27-JAN-2010 12:19

Client ID: RRL66003

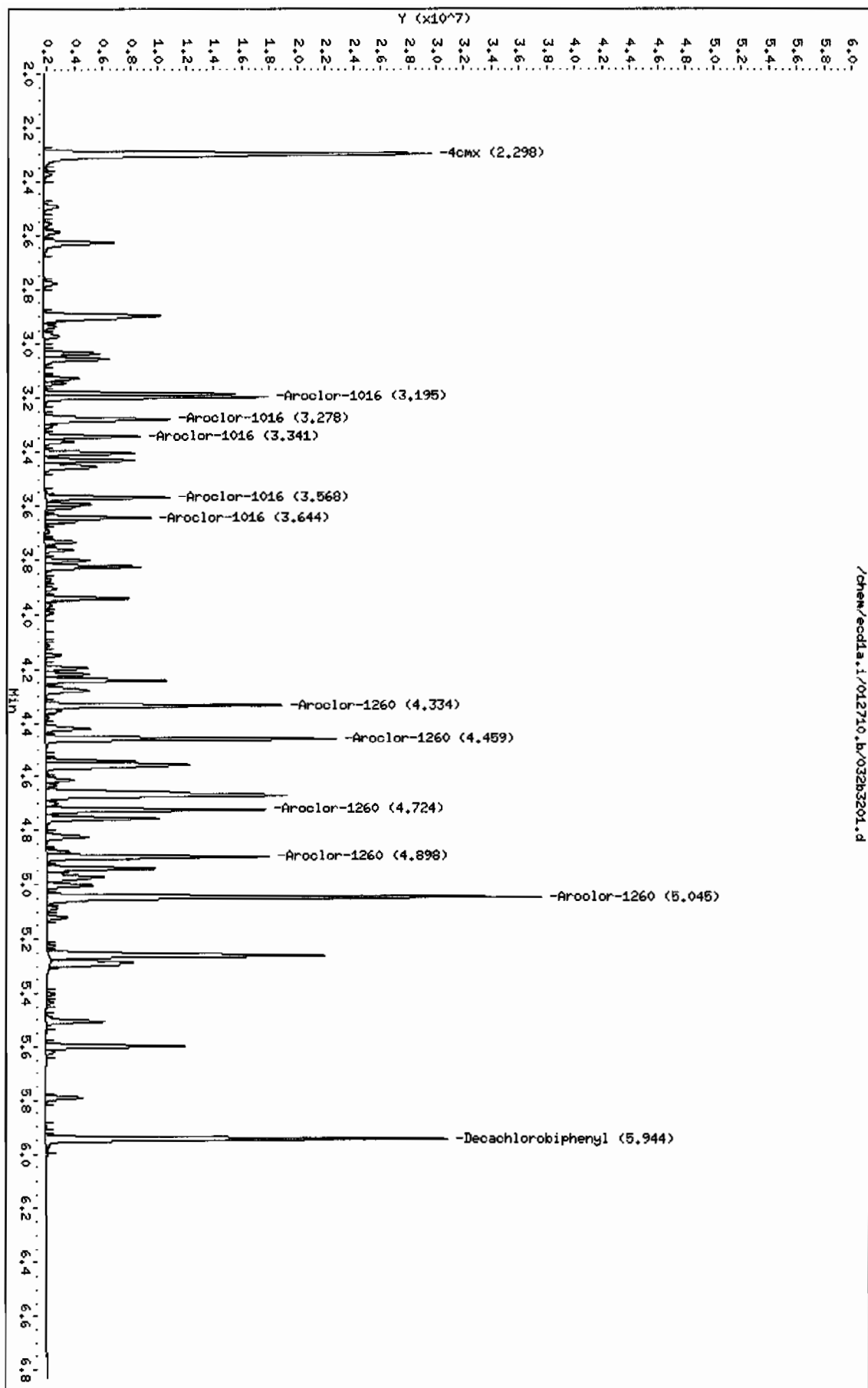
Sample Info: IAR100104-60 03

Instrument: ecdda.i

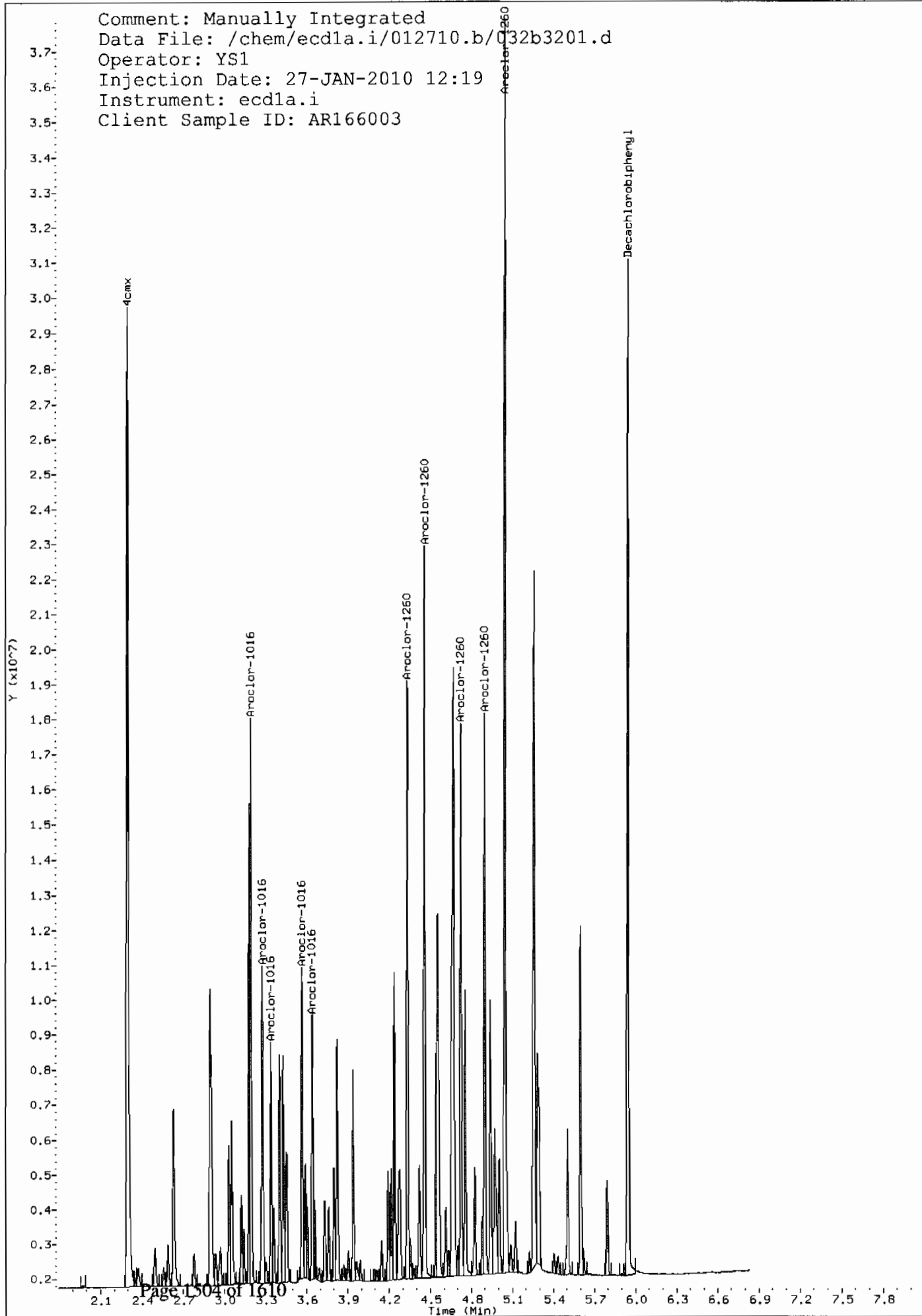
Page 1

Column phase: CLP2

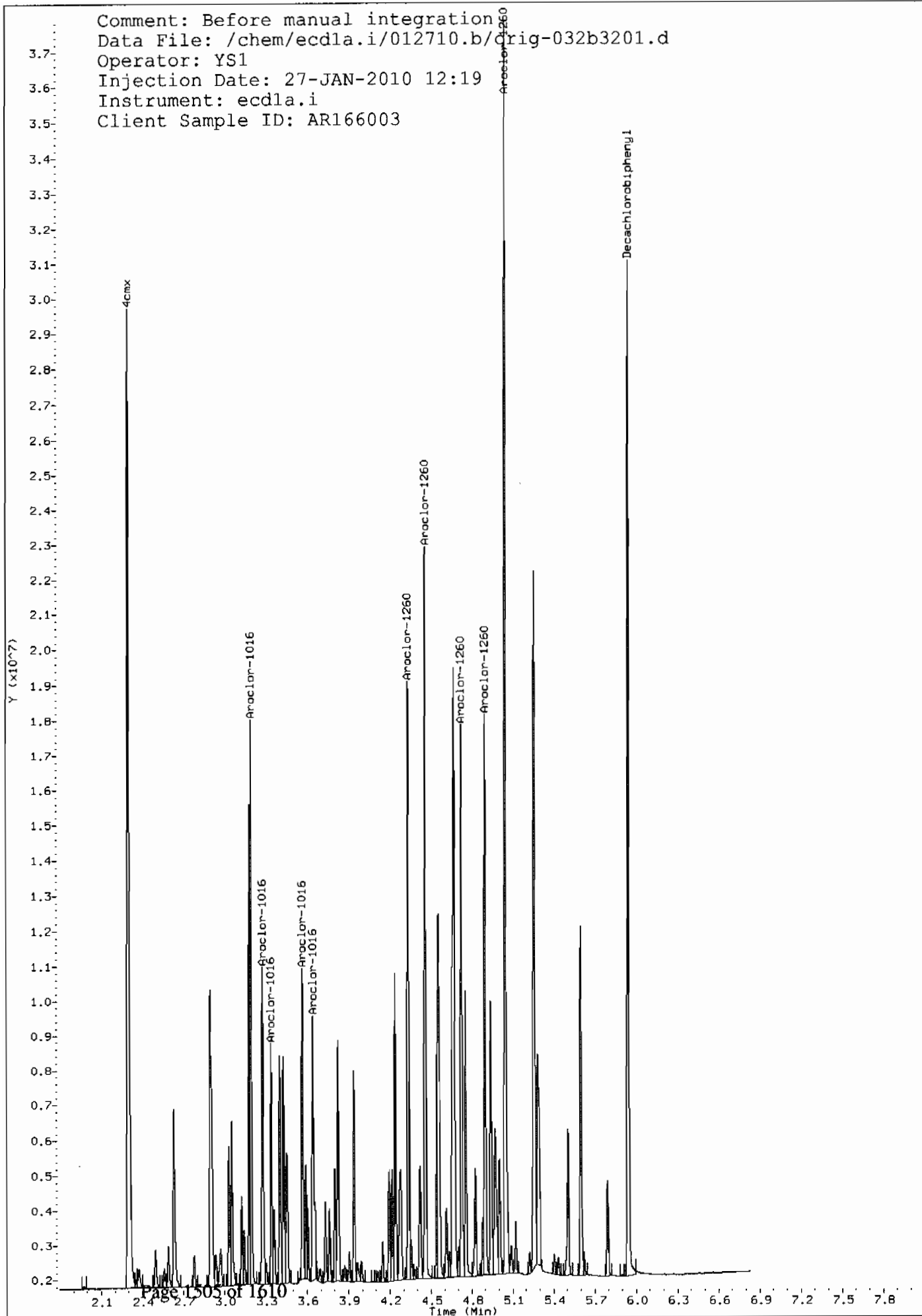
Operator: YSL
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdla.i/012710.b/032b3201.d
Operator: YS1
Injection Date: 27-JAN-2010 12:19
Instrument: ecdla.i
Client Sample ID: AR166003



Comment: Before manual integration
Data File: /chem/ecdl1.i/012710.b/orig-032b3201.d
Operator: YS1
Injection Date: 27-JAN-2010 12:19
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/012710.b/044f4401.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 27-JAN-2010 14:42

Operator : YS1

Inst ID: ecd1.i

Smp Info : |WAR100104-60 04

Misc Info :

Comment :

Method : /chem/ecdl1.i/012710.b/ECD1-F-8082-121409.m

Meth Date : 28-Jan-2010 08:45 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d

Als bottle: 44 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

			CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO
RT	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.966	1.967	-0.001	39598578	100.000	101	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.277	5.279	-0.002	29993929	100.000	90.9	80.00- 120.00	100.00

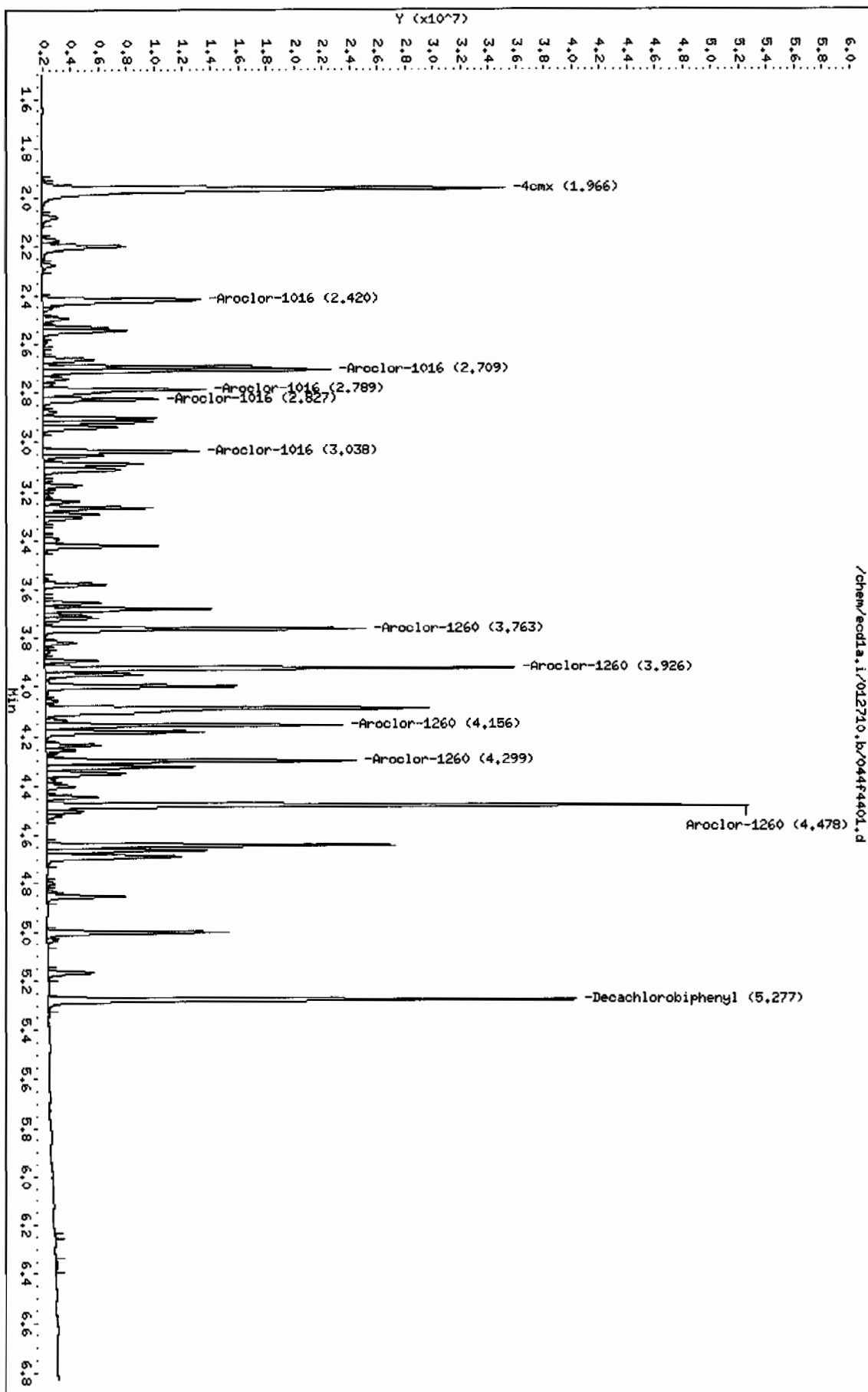
1 Aroclor-1016					CAS #: 12674-11-2		
2.420	2.423	-0.003	13134245	1000.00	909	80.00- 120.00	100.00
2.709	2.710	-0.001	17203526	1000.00	945	110.98- 150.98	130.98
2.789	2.791	-0.002	11178907	1000.00	933	65.11- 105.11	85.11
2.827	2.829	-0.002	6787876	1000.00	946	31.68- 71.68	51.68
3.038	3.039	-0.001	8697748	1000.00	939	46.22- 86.22	66.22
Average of Peak Amounts =					934		

7 Aroclor-1260					CAS #: 11096-82-5		
3.763	3.765	-0.002	17186939	1000.00	970	80.00- 120.00	100.00
3.926	3.928	-0.002	26162709	1000.00	972	132.22- 172.22	152.22
4.156	4.158	-0.002	15516005	1000.00	958	70.28- 110.28	90.28
4.299	4.300	-0.001	16254802	1000.00	961	74.58- 114.58	94.58
4.478	4.480	-0.002	36996472	1000.00	982	195.26- 235.26	215.26
Average of Peak Amounts =					969		

Data File: /chem/ecdl1a.i/012710.b/044f4401.d
Date: 27-JAN-2010 14:42
Client ID: PR166004
Sample Info: IMR100104-60 04

Column phase: CLP1

Instrument: ecdl1a.i
Operator: VSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/044b4401.d

Lab Smp Id: WAR100104-60 04

Client Smp ID: AR166004

Inj Date : 27-JAN-2010 14:42

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 04

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m

Meth Date : 28-Jan-2010 09:41 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:12

Cal File: 014b1401.d

Als bottle: 44

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			
2.298	2.299	-0.001		28044774 100.000	96.6	80.00-	120.00	100.00	

\$ 12 Decachlorobiphenyl						CAS #: 2051-24-3			
5.943	5.945	-0.002		21016956 100.000	86.1	80.00-	120.00	100.00	

1 Aroclor-1016						CAS #: 12674-11-2			
3.194	3.195	-0.001		11792540 1000.00	930	80.00-	120.00	100.00(M)	
3.277	3.279	-0.002		7865146 1000.00	894	46.70-	86.70	66.70	
3.341	3.342	-0.001		4903057 1000.00	895	21.58-	61.58	41.58	
3.568	3.569	-0.001		6139887 1000.00	877	32.07-	72.07	52.07	
3.643	3.644	-0.001		5825962 1000.00	888	29.40-	69.40	49.40	
Average of Peak Amounts =					897				

7 Aroclor-1260						CAS #: 11096-82-5			
4.333	4.335	-0.002		12126061 1000.00	913	80.00-	120.00	100.00	
4.458	4.459	-0.001		14847749 1000.00	919	102.44-	142.44	122.44	
4.724	4.725	-0.001		11209196 1000.00	897	72.44-	112.44	92.44	
4.898	4.899	-0.001		11540243 1000.00	893	75.17-	115.17	95.17	
5.045	5.046	-0.001		26215322 1000.00	922	196.19-	236.19	216.19	
Average of Peak Amounts =					909				

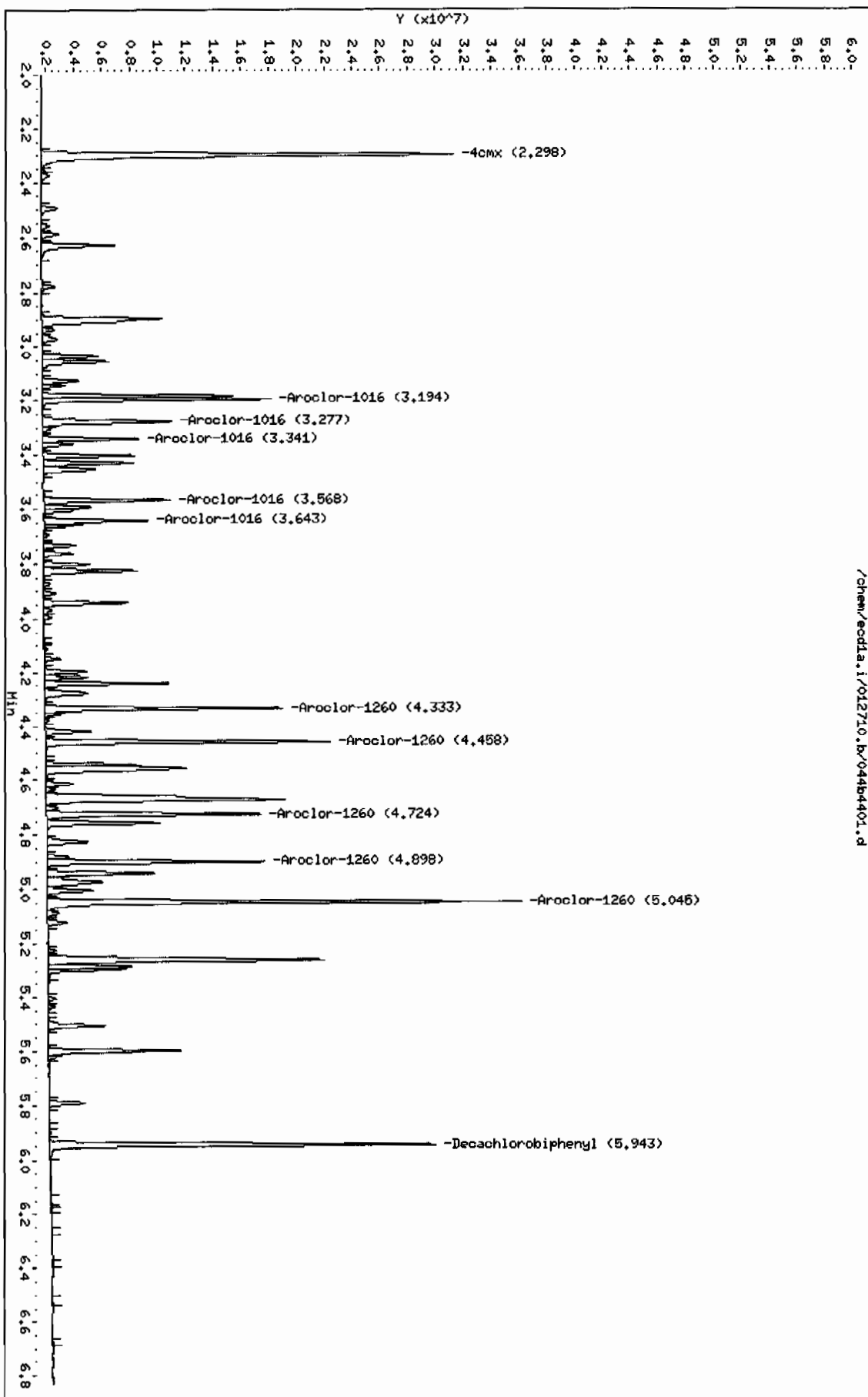
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/012710.b/044b4401.d
Date: 27-JAN-2010 14:42
Client ID: AR166004
Sample Info: 1MR100104-60 04

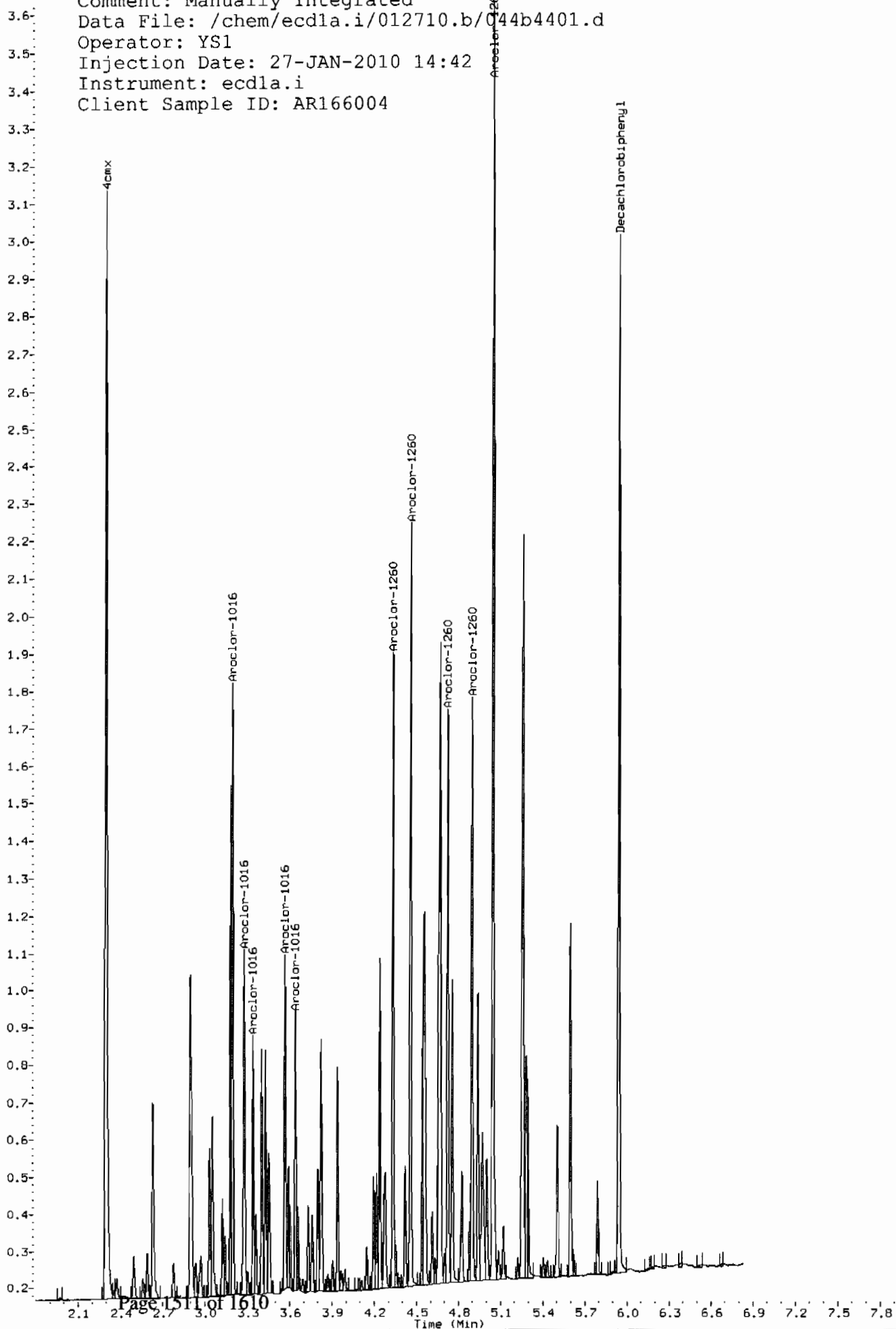
Column Phase: CLP2

Instrument: ecdl1a.i
Operator: VSI
Column diameter: 0.25

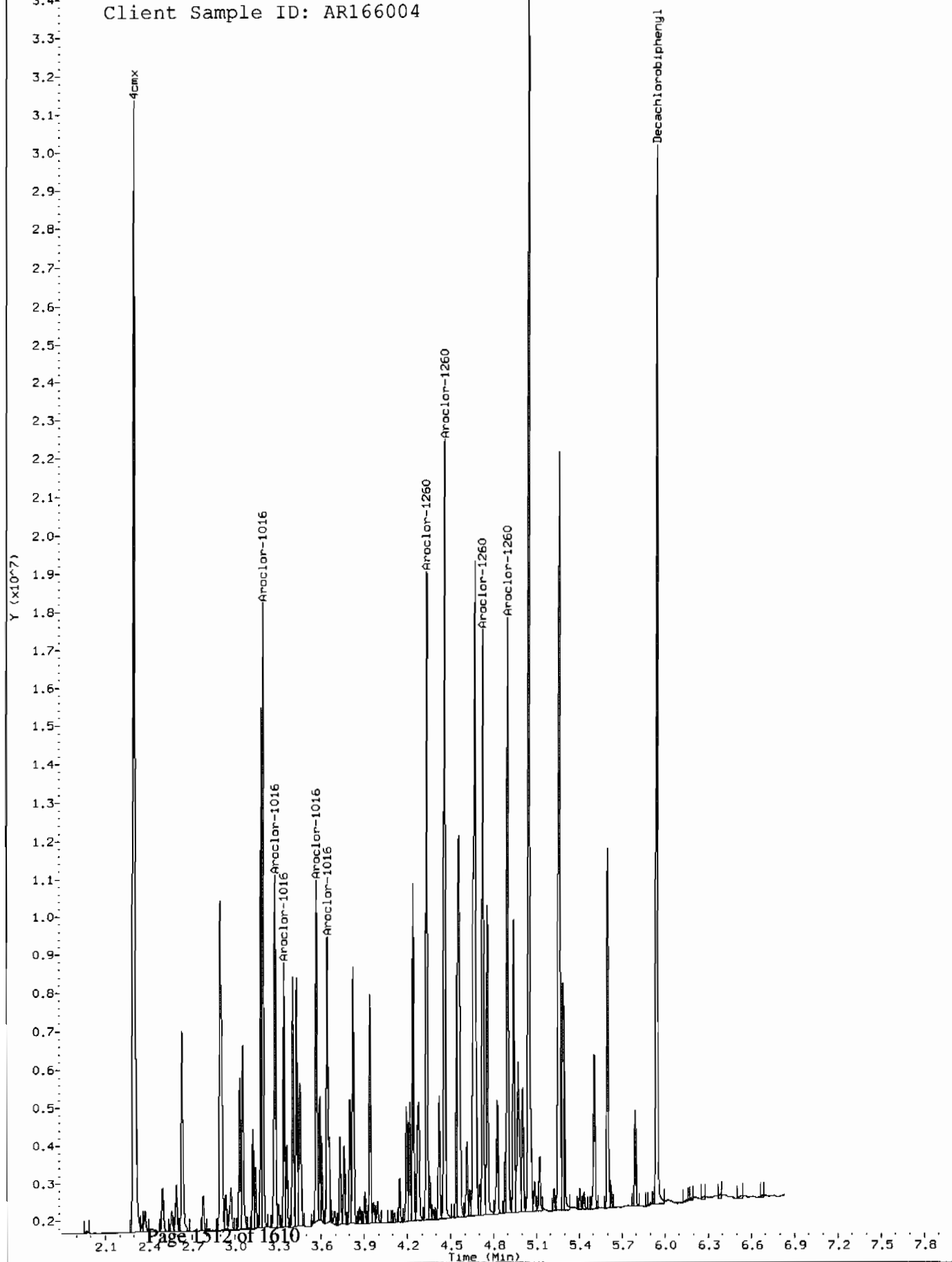


Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012710.b/044b4401.d
Operator: YSl
Injection Date: 27-JAN-2010 14:42
Instrument: ecd1a.i
Client Sample ID: AR166004

Y (x10⁻⁷)



Comment: Before manual integration
Data File: /chem/ecdl.a.i/012710.b/Orig-044b4401.d
Operator: YS1
Injection Date: 27-JAN-2010 14:42
Instrument: ecdla.i
Client Sample ID: AR166004



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/003f0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 28-JAN-2010 09:37

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.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
3.267	3.267	0.000	12761173 1000.00	1020 80.00- 120.00	100.00	
3.422	3.422	0.000	17529670 1000.00	1050 117.37- 157.37	137.37	
3.656	3.656	0.000	22662913 1000.00	1090 157.59- 197.59	177.59	
3.820	3.820	0.000	17089279 1000.00	1090 113.92- 153.92	133.92	
3.928	3.928	0.000	16050089 1000.00	1060 105.77- 145.77	125.77	
Average of Peak Amounts =			1.06e+03			

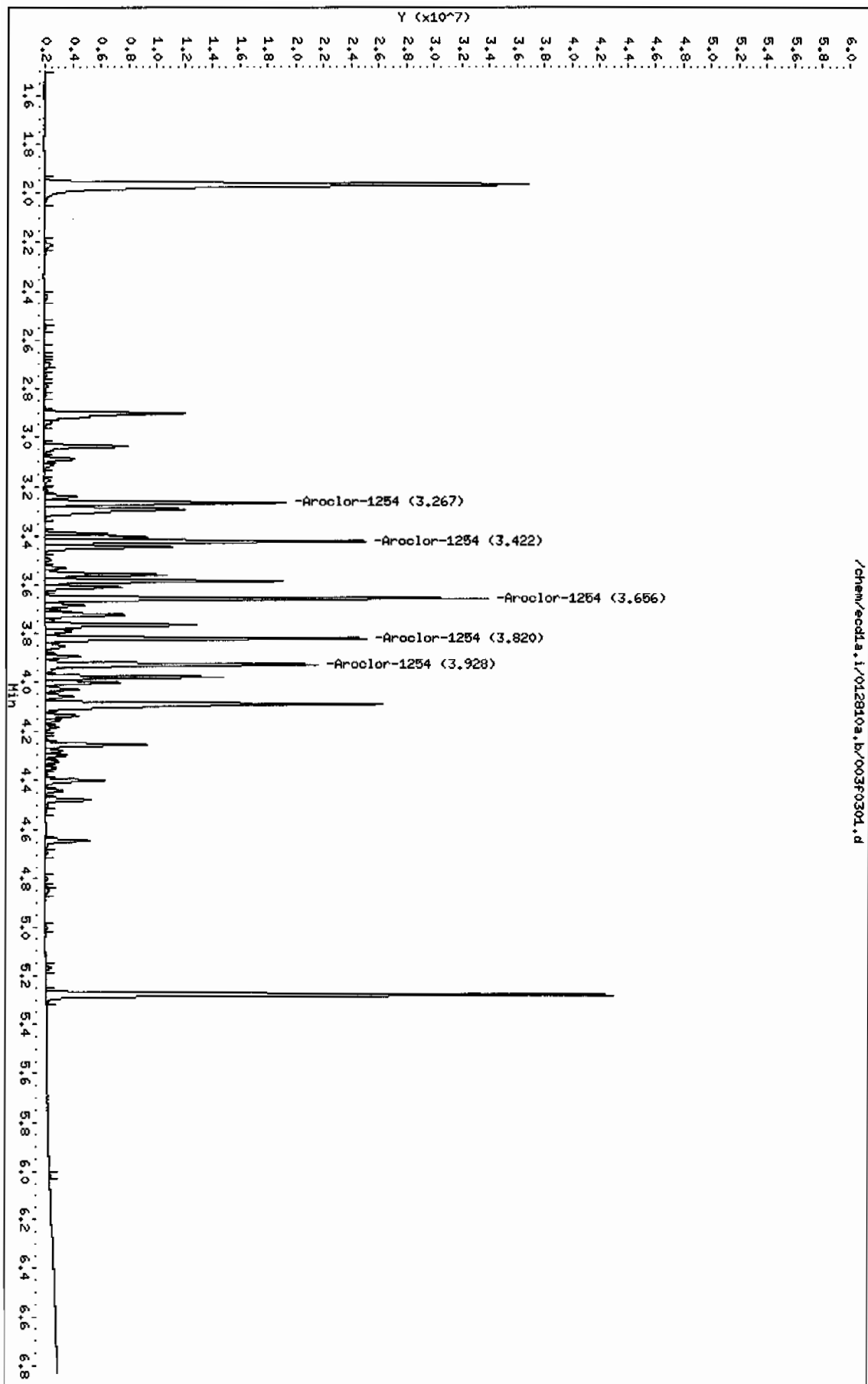
Data File: /chem/ecdda.i/012810a.b/003f0301.d
Date : 28-JAN-2010 09:37
Client ID: 6R128401
Sample Info: 1MAR091216-54

Instrument: ecdda.i

Page 1

Column phase: CLP1

Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/003b0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 28-JAN-2010 09:37

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:01

Cal File: 013b1301.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
3.403	3.403	0.000	5761305 1000.00	895 80.00- 120.00	100.00	
3.825	3.825	0.000	10125587 1000.00	876 155.75- 195.75	175.75	
3.942	3.942	0.000	11368908 1000.00	914 177.33- 217.33	197.33	
4.218	4.218	0.000	15759096 1000.00	934 253.53- 293.53	273.53	
4.355	4.355	0.000	11362020 1000.00	914 177.21- 217.21	197.21	
Average of Peak Amounts =				907		

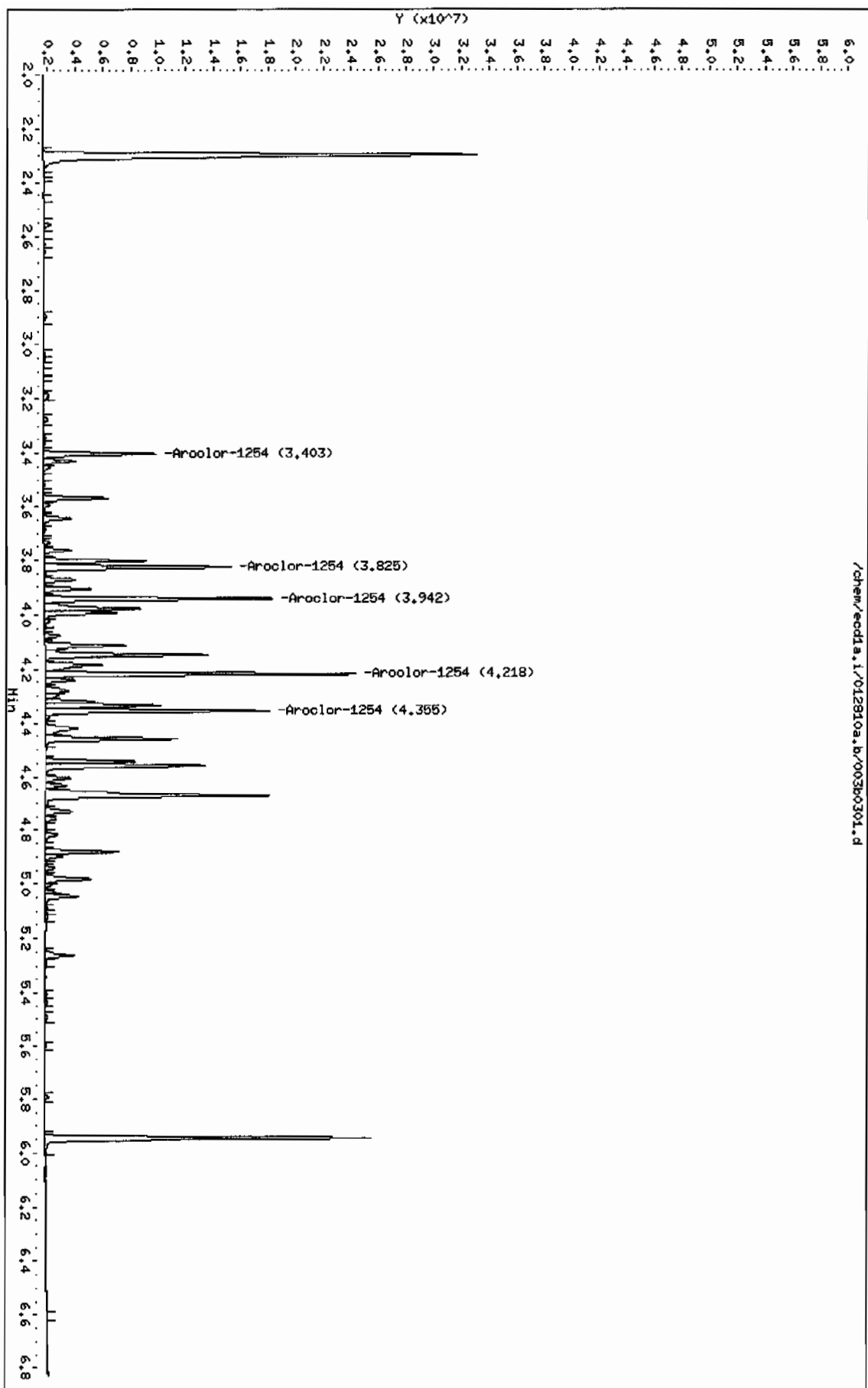
Data File: /chem/ecdl1a.i/012810a.b/003b0301.d
Date: 28-JUN-2010 09:37
Client ID: AR125401
Sample Info: 11AK091216-54

Instrument: ecdl1a.i

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Column phase: CLP2

Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/004f0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 28-JAN-2010 09:48

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.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			
2.421	2.421	0.000	11700726 1000.00	1000	80.00- 120.00	100.00
2.710	2.710	0.000	14682042 1000.00	1090	105.48- 145.48	125.48
2.828	2.828	0.000	5594368 1000.00	1020	27.81- 67.81	47.81
3.038	3.038	0.000	7341144 1000.00	1010	42.74- 82.74	62.74
3.292	3.292	0.000	7422864 1000.00	1090	43.44- 83.44	63.44

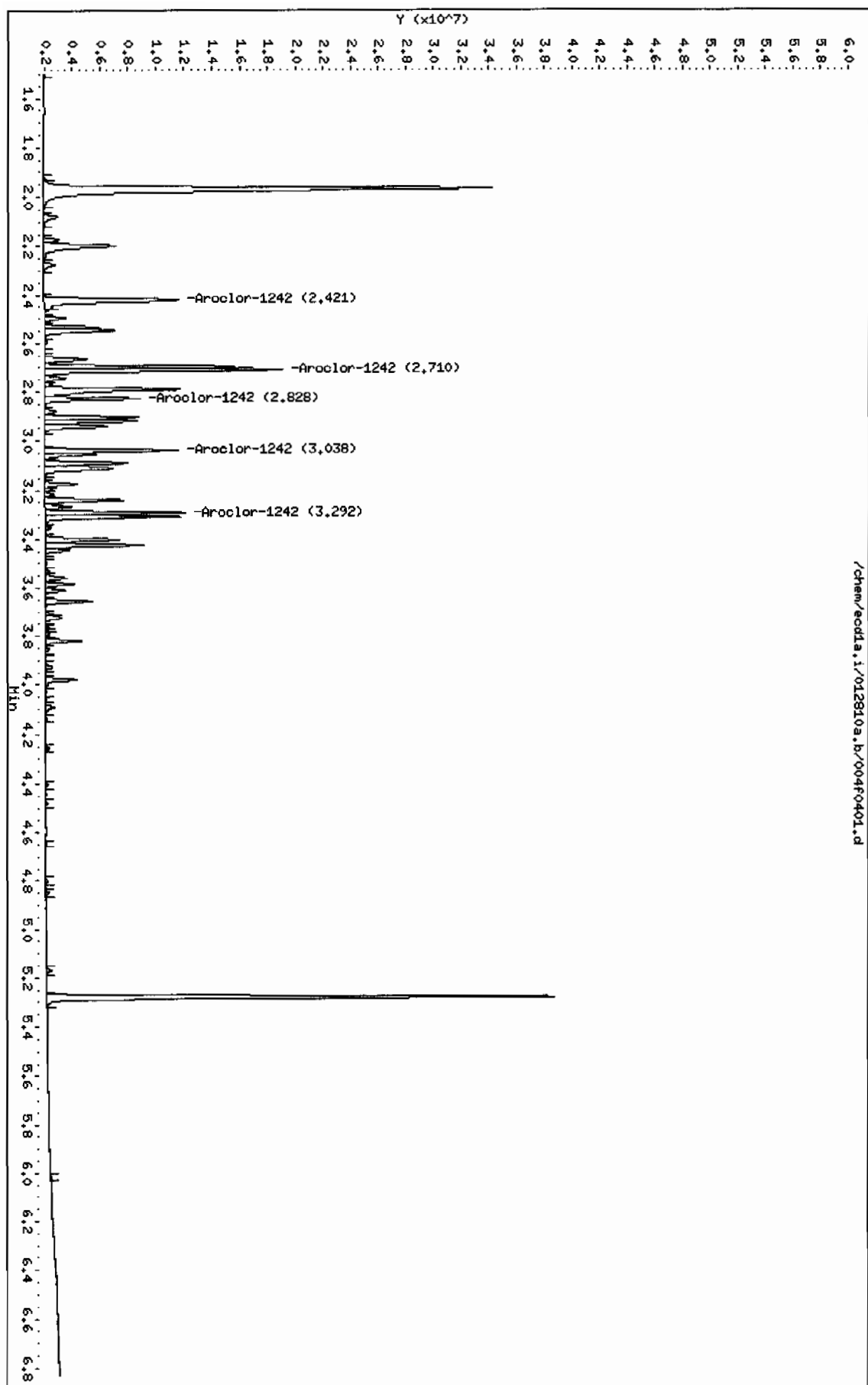
Average of Peak Amounts = 1.04e+03

Data File: /chem/eod1a.i/012810a.b/004f0401.d
Date: 28-JAN-2010 09:48
Client ID: AR124204
Sample Info: 146R091217-42

Page 1

Column phase: CLP1

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012810a.b/004b0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 28-JAN-2010 09:48

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecd1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:01

Cal File: 013b1301.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

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
---	-----	-----	-----	-----	-----	-----

4 Aroclor-1242

CAS #: 53469-21-9

3.195	3.195	0.000	9836869	1000.00	929	80.00-	120.00	100.00
-------	-------	-------	---------	---------	-----	--------	--------	--------

3.277	3.277	0.000	6589412	1000.00	818	46.99-	86.99	66.99
-------	-------	-------	---------	---------	-----	--------	-------	-------

3.568	3.568	0.000	5260989	1000.00	882	33.48-	73.48	53.48
-------	-------	-------	---------	---------	-----	--------	-------	-------

3.802	3.802	0.000	5406358	1000.00	893	34.96-	74.96	54.96
-------	-------	-------	---------	---------	-----	--------	-------	-------

3.830	3.830	0.000	5973536	1000.00	891	40.73-	80.73	60.73
-------	-------	-------	---------	---------	-----	--------	-------	-------

Average of Peak Amounts =

883

Data File: /chem/ecdl1a.i/012810a.b/004b0401.d

Date : 28-JAN-2010 09:48

Client ID: AR124201

Sample Info: 144R091217-42

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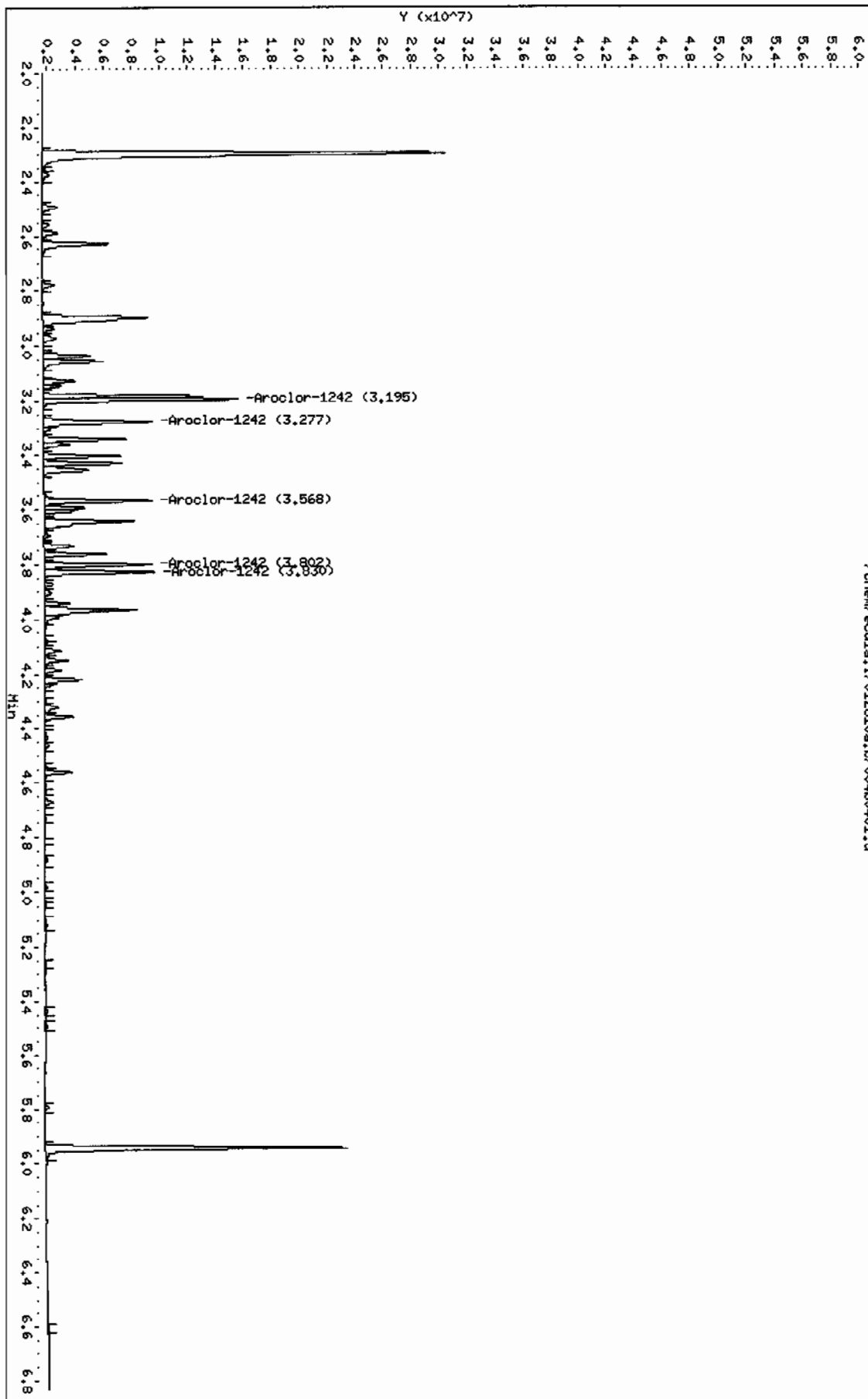
Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25

Column phase: CLP2

/chem/ecdl1a.i/012810a.b/004b0401.d



Data File: /chem/ecdl1a.i/012810a.b/005f0501.d
Report Date: 29-Jan-2010 06:35

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 28-JAN-2010 09:58

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.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	
3.090	3.090	0.000	8195837 1000.00	1040	80.00- 120.00	100.00
3.241	3.241	0.000	7239990 1000.00	1050	68.34- 108.34	88.34
3.293	3.293	0.000	14295779 1000.00	1070	154.43- 194.43	174.43
3.424	3.424	0.000	11213181 1000.00	1020	116.82- 156.82	136.82
3.657	3.657	0.000	7220919 1000.00	968	68.10- 108.10	88.10
Average of Peak Amounts %			1.03e+03			

Data File: /chem/eod1a.i/012810a.b/005f0501.d

Date: 28-JAN-2010 09:58

Client ID: AR124801

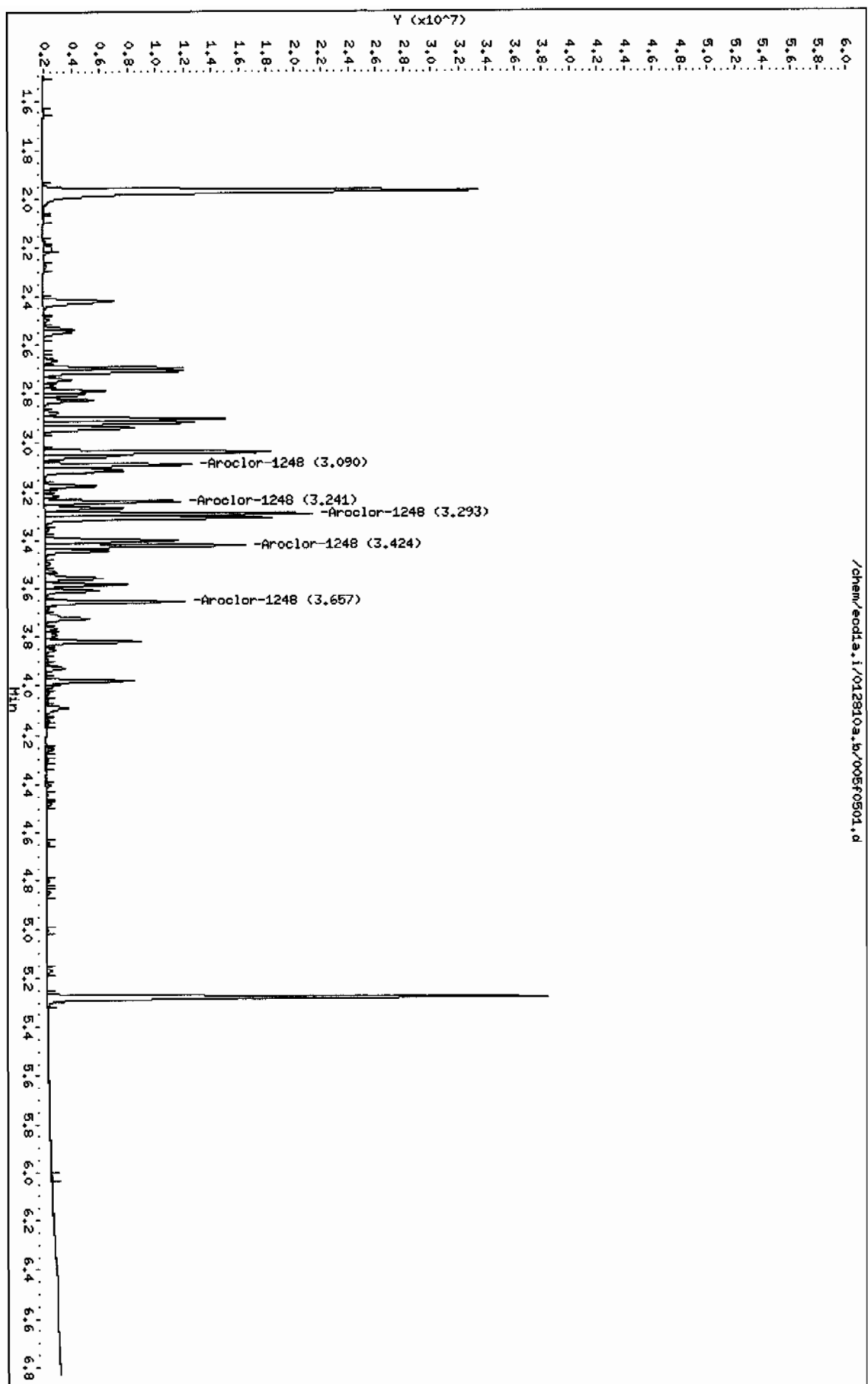
Sample Info: 14AR091217-48

Column phase: CLP1

Instrument: eod1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/005b0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 28-JAN-2010 09:58

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:01

Cal File: 013b1301.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

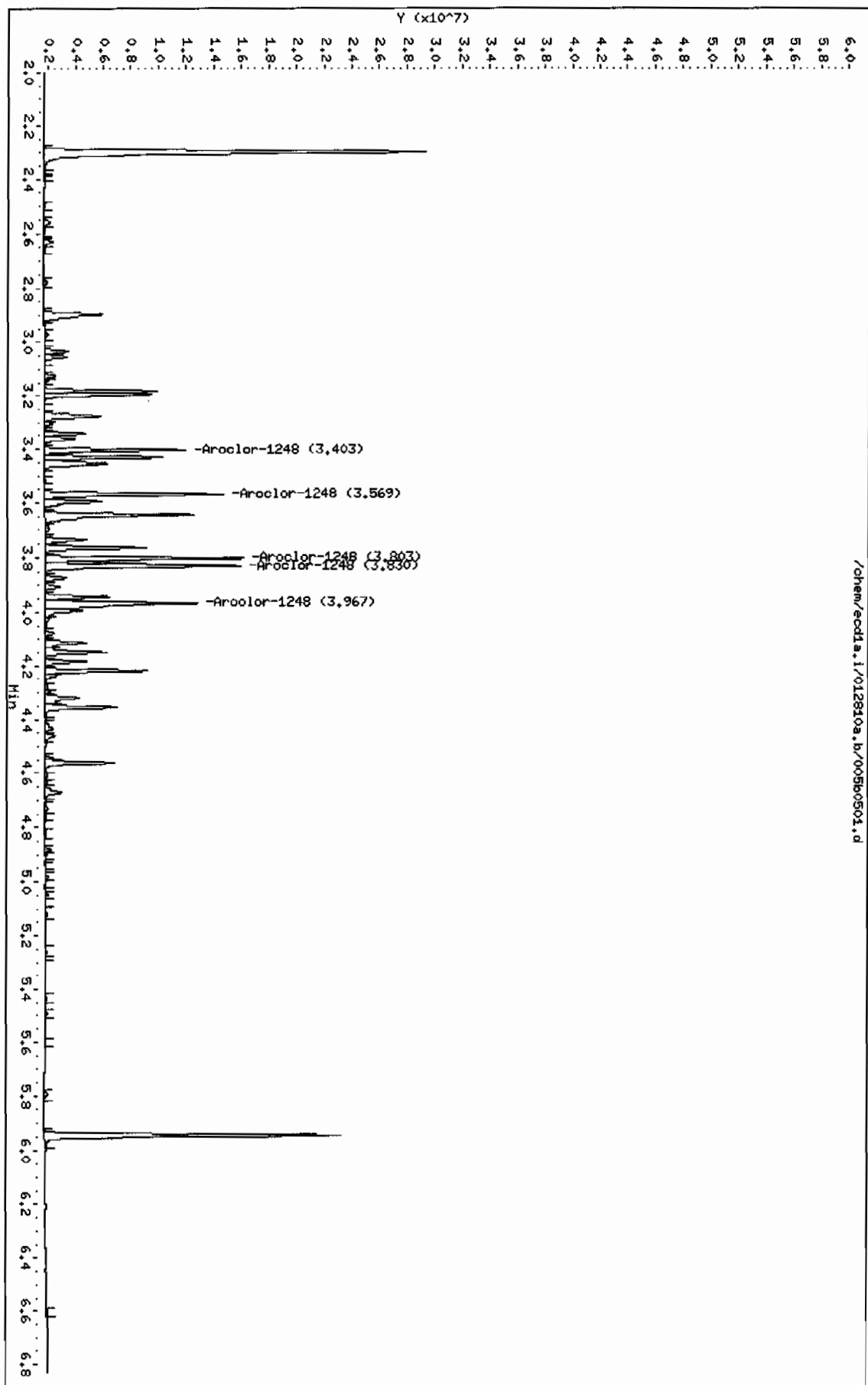
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6	
3.403	3.403	0.000	7166216 1000.00	890	80.00- 120.00	100.00
3.569	3.569	0.000	8911660 1000.00	902	104.36- 144.36	124.36
3.803	3.803	0.000	10167206 1000.00	906	121.88- 161.88	141.88
3.830	3.830	0.000	11179228 1000.00	896	136.00- 176.00	156.00
3.967	3.967	0.000	10733641 1000.00	887	129.78- 169.78	149.78
Average of Peak Amounts =				896		

Data File: /chem/ecdl1a.i/012810a.b/005b0501.d
Date : 28-JAN-2010 09:38
Client ID: AR124801
Sample Info: IMR091217-48

Page 1

Column Phase: CLP2

Operator: YSL
Column diameter: 0.25



Report Date: 29-Jan-2010 06:35

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/006f0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 28-JAN-2010 10:09

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.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
3 Aroclor-1232			CAS #: 11141-16-5			
2.421	2.421	0.000	6428613 1000.00	938	80.00- 120.00	100.00
2.711	2.711	0.000	8344523 1000.00	990	109.80- 149.80	129.80
2.791	2.791	0.000	5431354 1000.00	965	64.49- 104.49	84.49
3.040	3.040	0.000	4063213 1000.00	1020	43.21- 83.21	63.21
3.292	3.292	0.000	3799065 1000.00	985	39.10- 79.10	59.10
Average of Peak Amounts				980		

Data File: /chem/eodla.i/012810a.b/006f0601.d
Date : 28-JAN-2010 10:09
Client ID: AR123201
Sample Info: IMAR100104-32

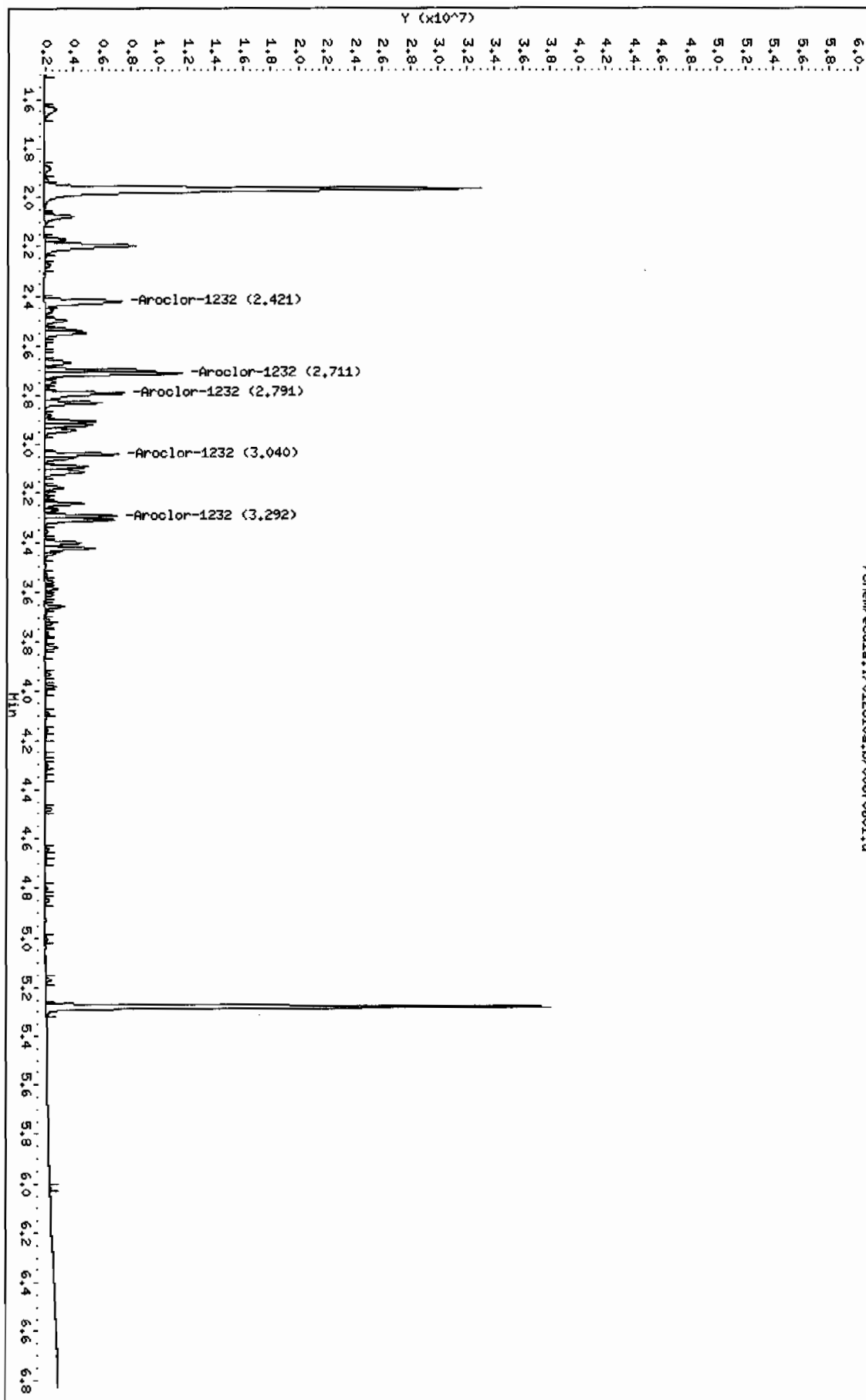
Instrument: eodla.i

Page 1

Column phase: CLP1

Operator: YSL
Column diameter: 0.25

/chem/eodla.i/012810a.b/006f0601.d



Data File: /chem/ecdl1a.i/012810a.b/006b0601.d
Report Date: 29-Jan-2010 06:35

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/006b0601.d

Lab Smp Id: WAR100104-32

Client Smp ID: AR123201

Inj Date : 28-JAN-2010 10:09

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-32

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:01

Cal File: 013b1301.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
2.897	2.897	0.000	5164473 1000.00	876	80.00- 120.00	100.00
3.195	3.195	0.000	5571782 1000.00	896	87.89- 127.89	107.89
3.278	3.278	0.000	3905179 1000.00	899	55.62- 95.62	75.62
3.569	3.569	0.000	2903326 1000.00	933	36.22- 76.22	56.22
3.802	3.802	0.000	2859048 1000.00	895	35.36- 75.36	55.36
Average of Peak Amounts =				900		

Data File: /chem/ecdd1a.i/012810a.b/0060601.d

Date: 28-JAN-2010 10:09

Client ID: PK123201

Sample Info: HMR100104-32

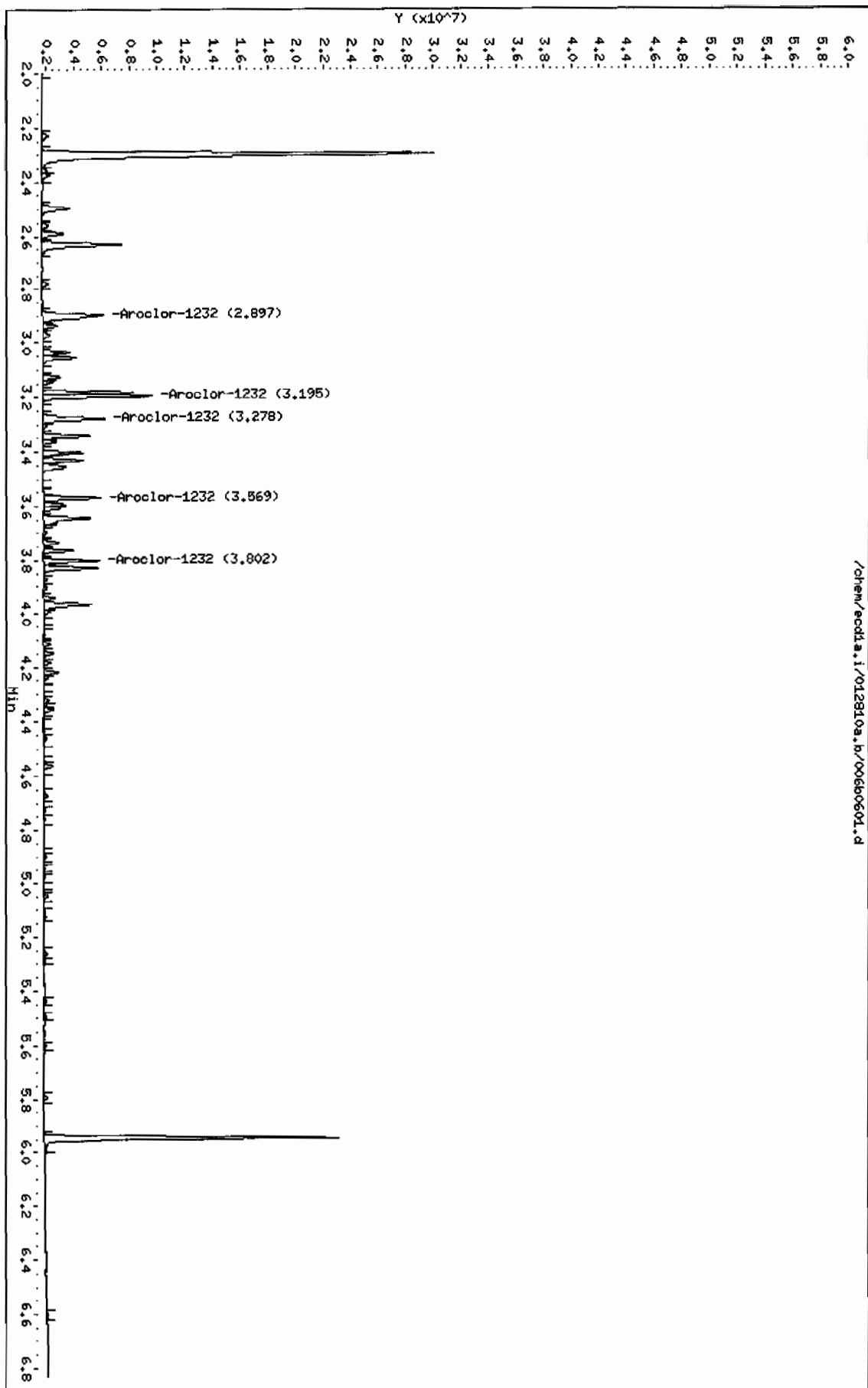
Column phase: CLP2

Instrument: ecdd1a.i

Operator: YS1

Column diameter: 0.25

/chem/ecdd1a.i/012810a.b/0060601.d



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/007f0701.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 28-JAN-2010 10:19

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:35 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.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

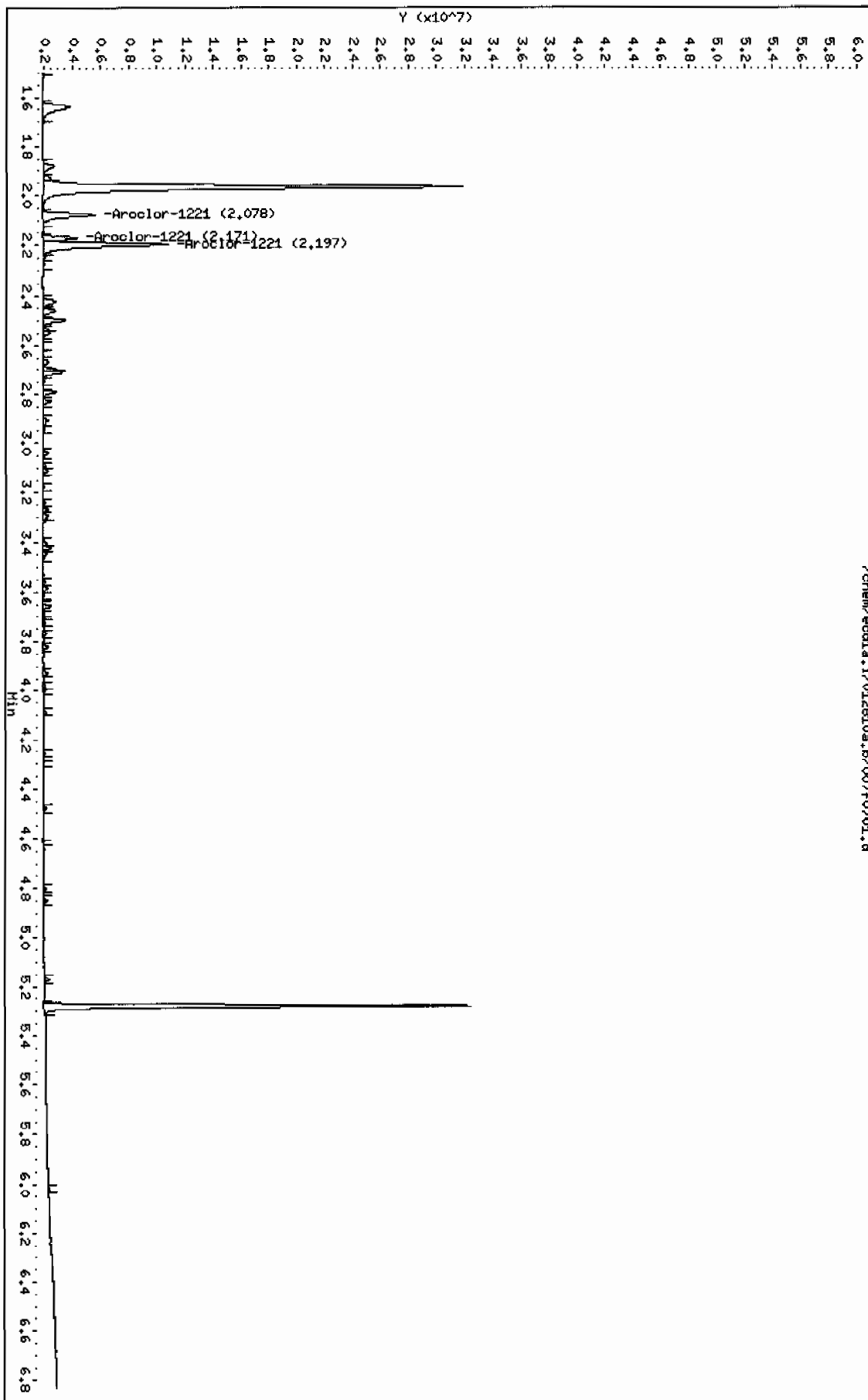
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.078	2.078	0.000	4144638 1000.00	964	80.00- 120.00	100.00
2.171	2.171	0.000	2286452 1000.00	937	35.17- 75.17	55.17
2.197	2.197	0.000	9972671 1000.00	971	220.62- 260.62	240.62
Average of Peak Amounts =				957		

Data File: /chem/ecdl.a.i/012810a.b/0070701.d
Date : 28-JAN-2010 10:19
Client ID: AR122101
Sample Info: IMA100104-21

Column phase: CLP1

Instrument: ecdl.a.i
Operator: YSL
Column diameter: 0.25

/chem/ecdl.a.i/012810a.b/0070701.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/007b0701.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 28-JAN-2010 10:19
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m
Meth Date : 29-Jan-2010 06:35 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:01 Cal File: 013b1301.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
2.494	2.494	0.000	3258705 1000.00	895	80.00- 120.00	100.00
2.589	2.589	0.000	2058765 1000.00	884	43.18- 83.18	63.18
2.629	2.629	0.000	7100543 1000.00	874	197.89- 237.89	217.89
Average of Peak Amounts =				885		

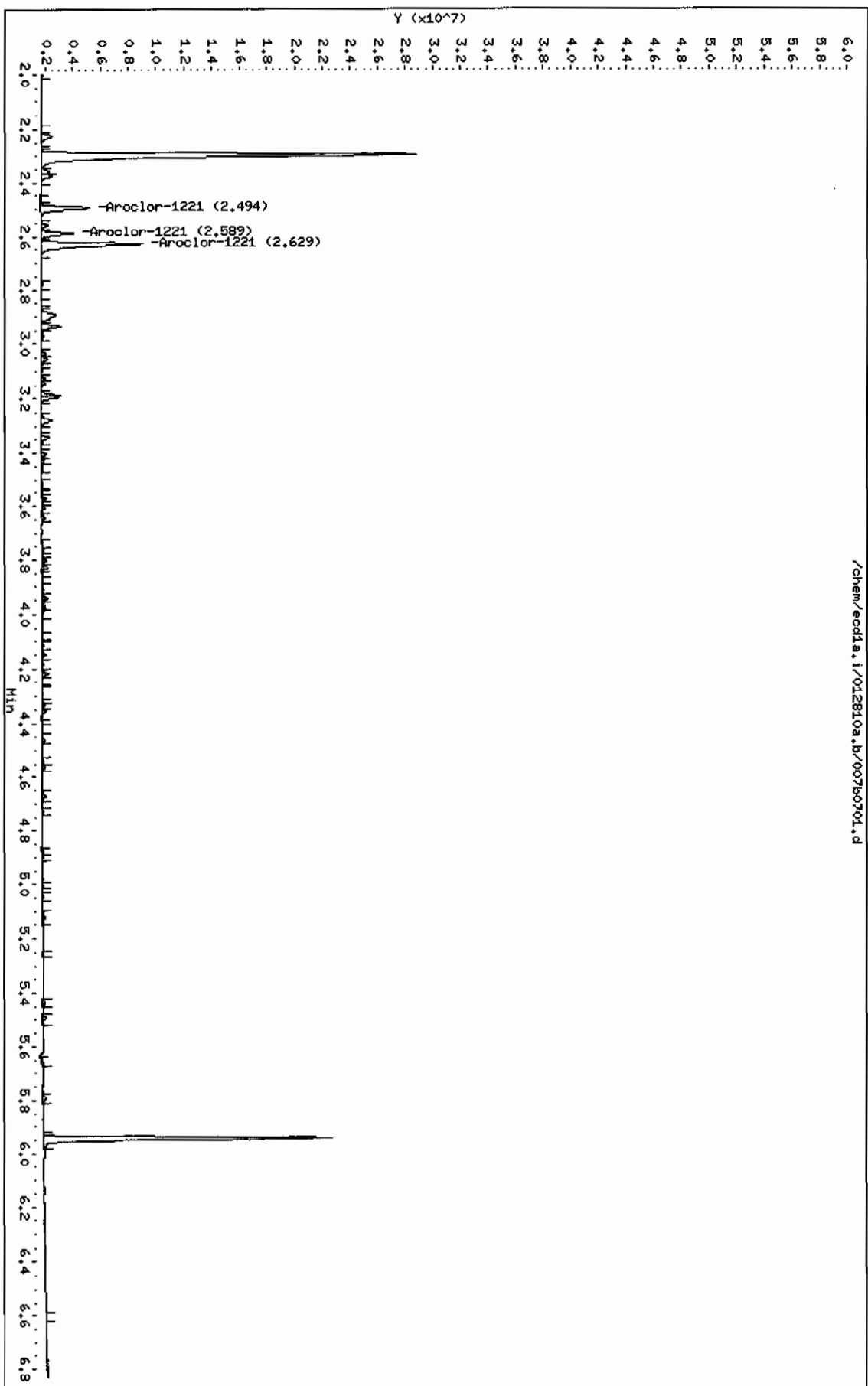
Data File: /chem/ecdd1a.i/012810a.b/007b0701.d
Date : 28-JAN-2010 10:19
Client ID: AR122101
Sample Info: IMR100104-21

Instrument: ecdd1a.i

Page 1

Column phase: CLP2

Operator: YSL
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/015f1501.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 28-JAN-2010 11:44

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:37 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 15

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpc1pl

AMOUNTS

			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/L)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8			
1.966	1.966	0.000	40157233	100.000	104	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.278	5.278	0.000	28796267	100.000	100	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
2.422	2.422	0.000	13239829	1000.00	961	80.00- 120.00	100.00	
2.710	2.710	0.000	17830982	1000.00	1020	114.68- 154.68	134.68	
2.791	2.791	0.000	11177489	1000.00	972	64.42- 104.42	84.42	
2.828	2.828	0.000	6706479	1000.00	980	30.65- 70.65	50.65	
3.039	3.039	0.000	8669925	1000.00	976	45.48- 85.48	65.48	
Average of Peak Amounts =					981			

7 Aroclor-1260					CAS #: 11096-82-5			
3.765	3.765	0.000	17007480	1000.00	1010	80.00- 120.00	100.00	
3.928	3.928	0.000	25794447	1000.00	1020	131.67- 171.67	151.67	
4.158	4.158	0.000	15114035	1000.00	1010	68.87- 108.87	88.87	
4.301	4.301	0.000	15902550	1000.00	1020	73.50- 113.50	93.50	
4.480	4.480	0.000	35916863	1000.00	1040	191.18- 231.18	211.18	
Average of Peak Amounts =					1.02e+03			

Data File: /chem/ecdda.i/012810a.b/015f1501.d

Date: 28-JUN-2010 11:44

Client ID: AR166001

Sample Info: IMA100104-60 01

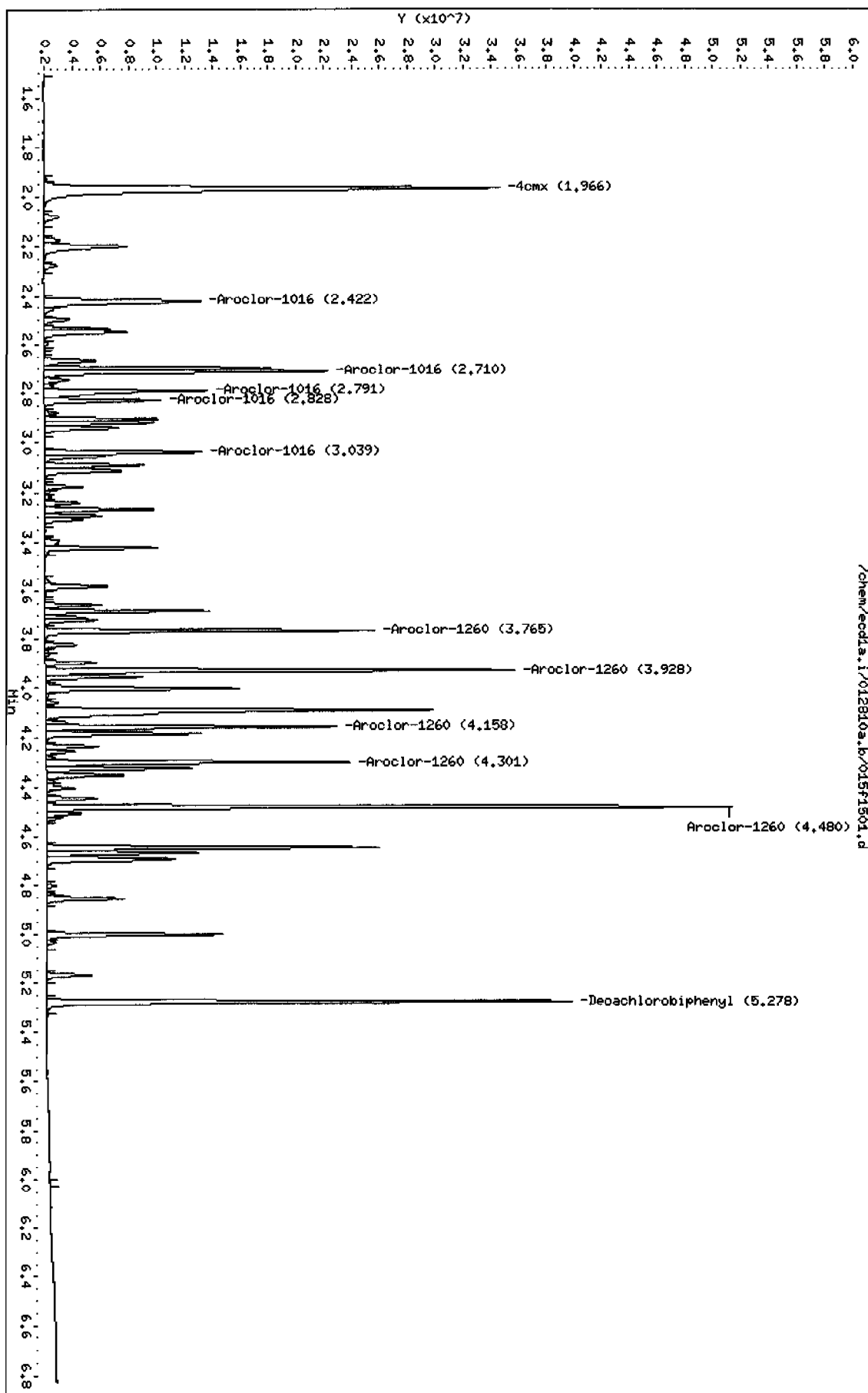
Page 1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25

Column phase: CLP1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/015b1501.d

Lab Smp Id: WAR100104-60 01

Client Smp ID: AR166001

Inj Date : 28-JAN-2010 11:44

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 01

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:37 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 15

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		
2.298	2.298	0.000	28349133	100.000	102	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.944	5.944	0.000	17259755	100.000	98.8	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
3.195	3.195	0.000	11627012	1000.00	953	80.00- 120.00	100.00(M)
3.278	3.278	0.000	7750692	1000.00	946	46.66- 86.66	66.66
3.341	3.341	0.000	4814965	1000.00	948	21.41- 61.41	41.41
3.568	3.568	0.000	6066099	1000.00	948	32.17- 72.17	52.17
3.644	3.644	0.000	5594879	1000.00	945	28.12- 68.12	48.12
Average of Peak Amounts =					948		

7 Aroclor-1260					CAS #: 11096-82-5		
4.335	4.335	0.000	11752154	1000.00	985	80.00- 120.00	100.00
4.459	4.459	0.000	14264405	1000.00	993	101.38- 141.38	121.38
4.725	4.725	0.000	10757070	1000.00	986	71.53- 111.53	91.53
4.899	4.899	0.000	11094832	1000.00	990	74.41- 114.41	94.41
5.046	5.046	0.000	24615643	1000.00	1010	189.46- 229.46	209.46
Average of Peak Amounts =					994		

QC Flag Legend

M - Compound response manually integrated.

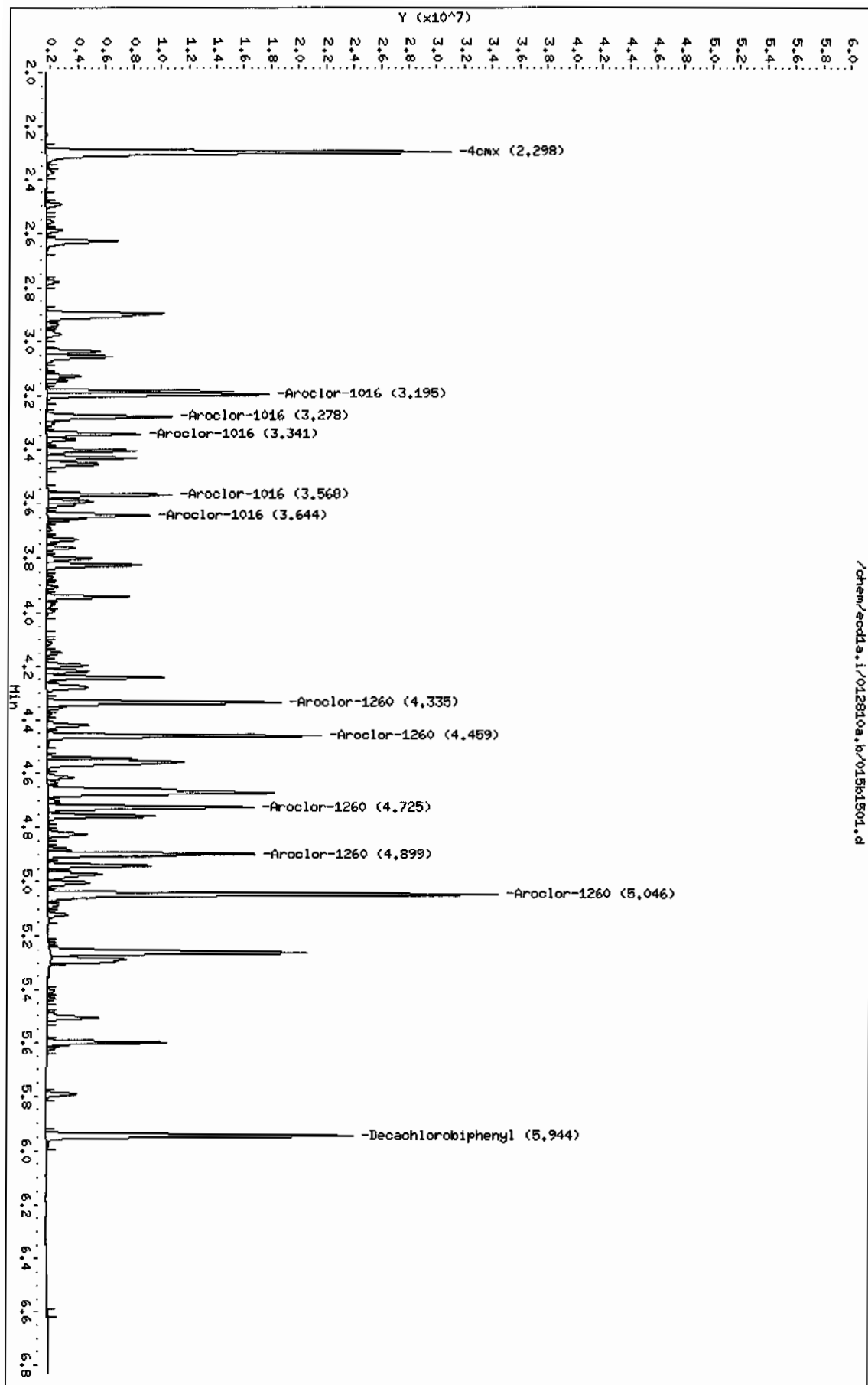
Data File: /chem/ecdl1a.i/012810a.b/015b1501.d
Date : 28-JAN-2010 11:44
Client ID: AR166001
Sample Info: IMR100104-60 01

Instrument: ecdl1a.i

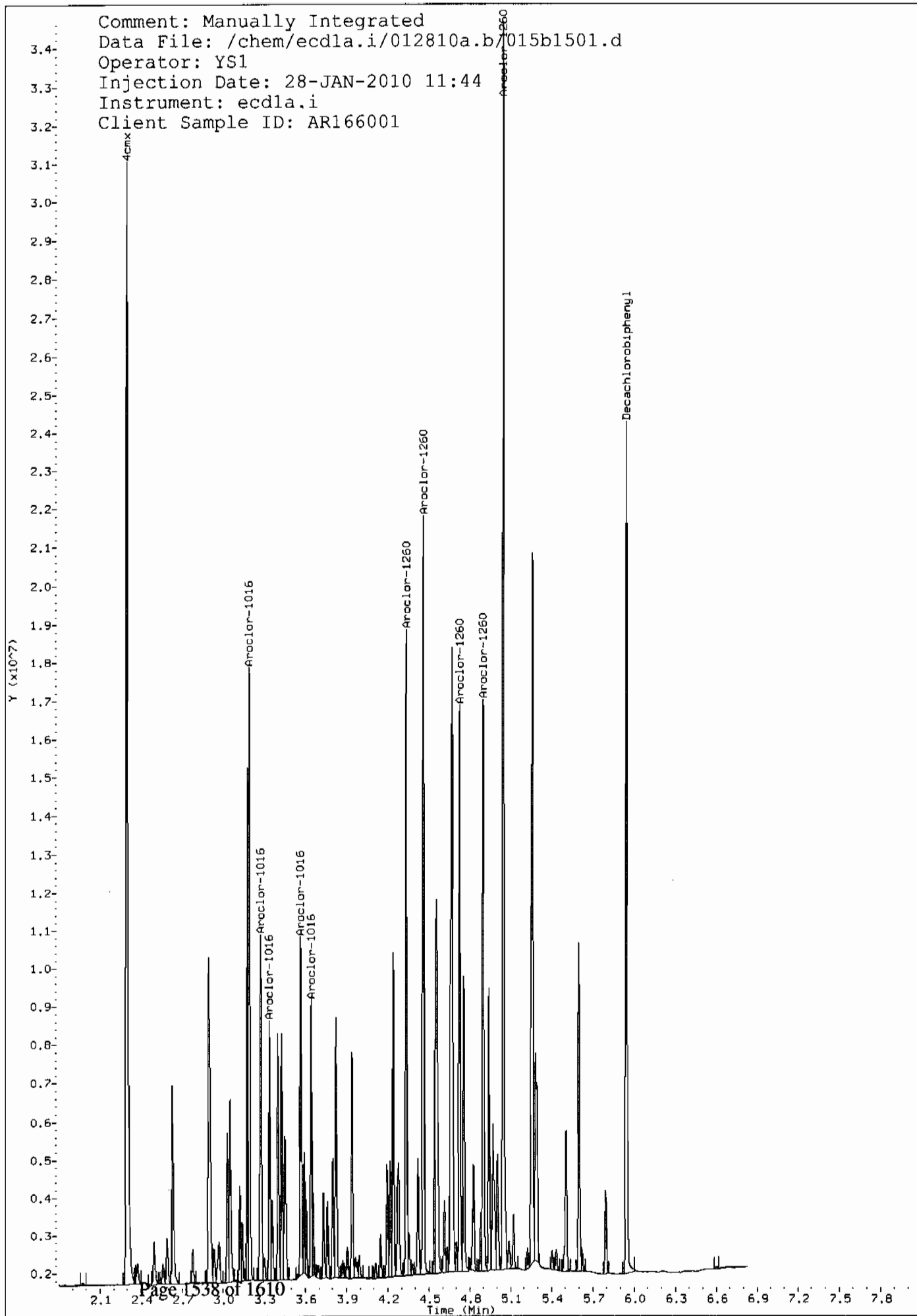
Page 1

Column phase: CLP2

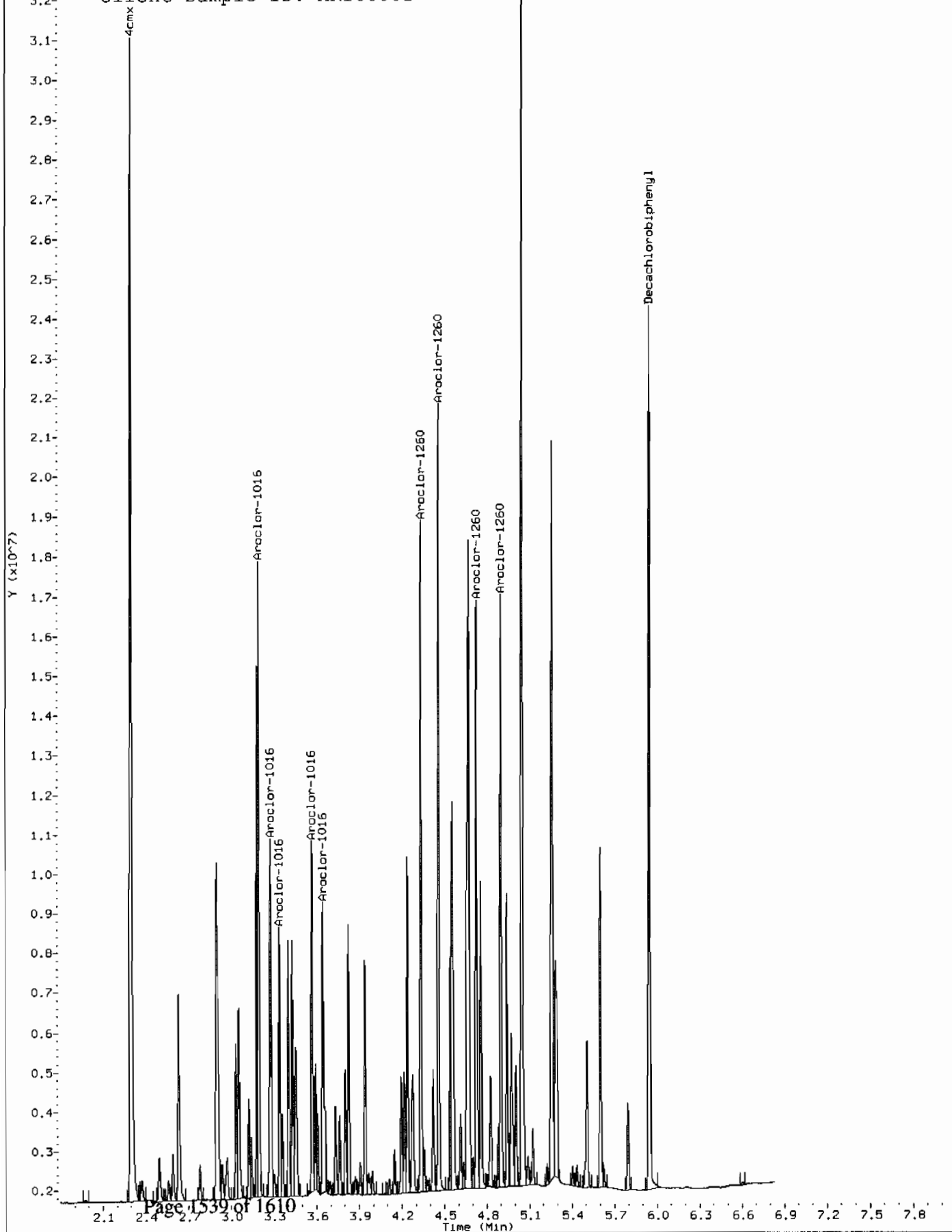
Operator: YS1
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl.a.i/012810a.b/015b1501.d
Operator: YS1
Injection Date: 28-JAN-2010 11:44
Instrument: ecdl.a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdl1a.i/012810a.b/orig-015b1501.d
Operator: YS1
Injection Date: 28-JAN-2010 11:44
Instrument: ecd1a.i
Client Sample ID: AR166001



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/032f3201.d

Lab Smp Id: WAR100104-60 02

Client Smp ID: AR166002

Inj Date : 28-JAN-2010 14:56

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 02

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:40 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 32

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: hpclp1

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx					CAS #: 877-09-8		
1.966	1.966	0.000	39337753	100.000	102	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.277	5.278	-0.001	25626684	100.000	89.2	80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2		
2.421	2.422	-0.001	13010923	1000.00	944	80.00- 120.00	100.00
2.709	2.710	-0.001	16921766	1000.00	967	110.06- 150.06	130.06
2.789	2.791	-0.002	10983417	1000.00	955	64.42- 104.42	84.42
2.826	2.828	-0.002	6541145	1000.00	956	30.27- 70.27	50.27
3.037	3.039	-0.002	8470741	1000.00	954	45.10- 85.10	65.10
Average of Peak Amounts =					955		

7 Aroclor-1260					CAS #: 11096-82-5		
3.763	3.765	-0.002	16357926	1000.00	975	80.00- 120.00	100.00(M)
3.926	3.928	-0.002	25033402	1000.00	988	133.04- 173.04	153.04
4.156	4.158	-0.002	14649411	1000.00	978	69.56- 109.56	89.56
4.299	4.301	-0.002	15281375	1000.00	982	73.42- 113.42	93.42
4.478	4.480	-0.002	34496244	1000.00	996	190.88- 230.88	210.88
Average of Peak Amounts =					984		

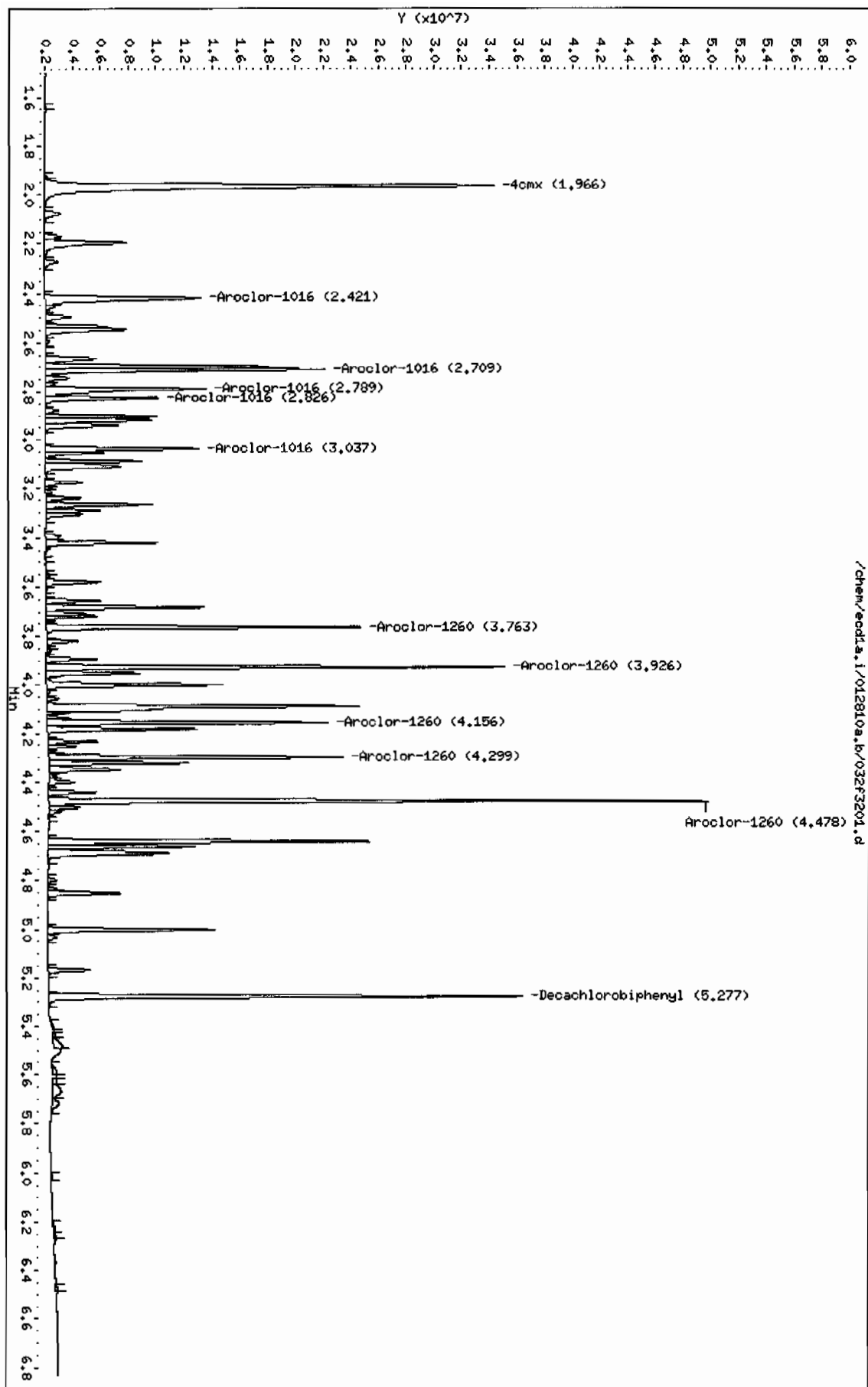
QC Flag Legend

M - Compound response manually integrated.

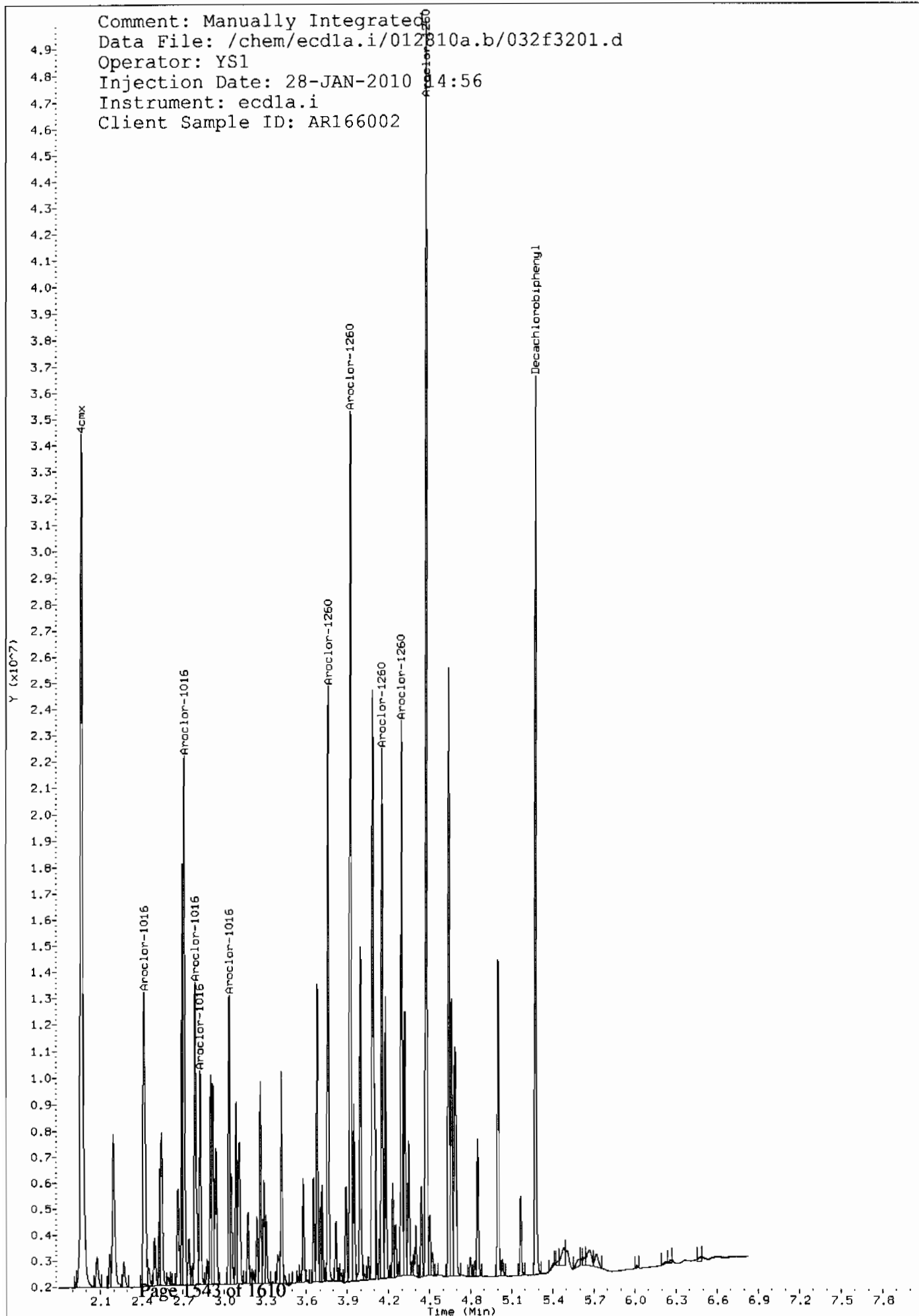
Data File: /chem/eod1a.i/012810a.b/032f3201.d
Date : 28-JAN-2010 14:56
Client ID: PR166002
Sample Info: IMR100104-60 02

Column phase: CLP1

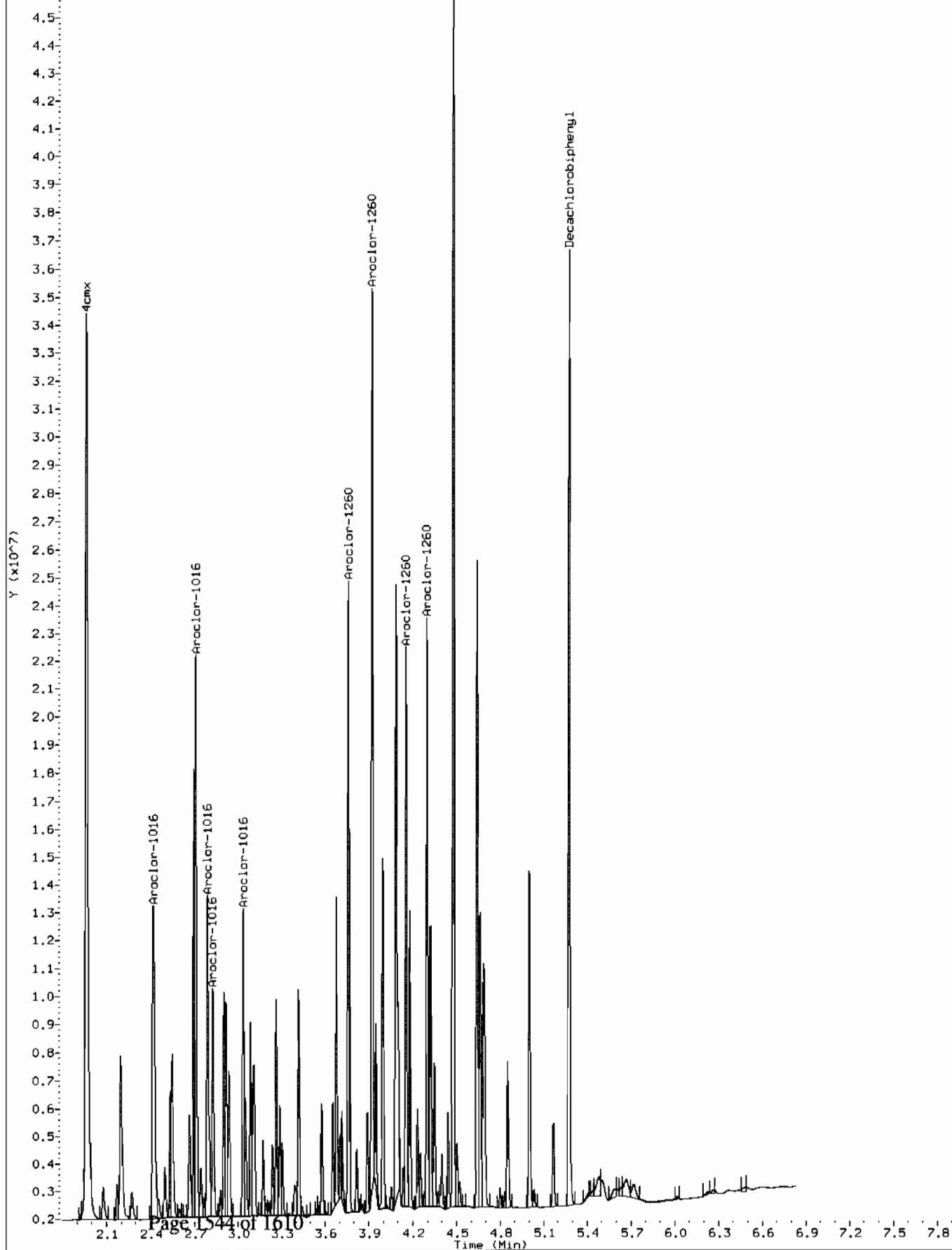
Instrument: eod1a.i
Operator: YSI
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1.i/012810a.b/032f3201.d
Operator: YS1
Injection Date: 28-JAN-2010 14:56
Instrument: ecd1a.i
Client Sample ID: AR166002



Comment: Before manual integration
Data File: /chem/ecdl1.i/012810a.b/orig-032f3201.d
Operator: YS1
Injection Date: 28-JAN-2010 14:56
Instrument: ecd1a.i
Client Sample ID: AR166002



Report Date: 29-Jan-2010 06:40

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/032b3201.d

Lab Smp Id: WAR100104-60 02

Client Smp ID: AR166002

Inj Date : 28-JAN-2010 14:56

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 02

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:40 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 32

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		
2.297	2.298	-0.001	27836492 100.000	99.7	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.943	5.944	-0.001	18576215 100.000	106	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.194	3.195	-0.001	11633899 1000.00	954	80.00- 120.00	100.00 (M)
3.276	3.278	-0.002	7638987 1000.00	932	45.66- 85.66	65.66
3.341	3.341	0.000	4697437 1000.00	925	20.38- 60.38	40.38
3.567	3.568	-0.001	5952993 1000.00	930	31.17- 71.17	51.17
3.643	3.644	-0.001	5500663 1000.00	929	27.28- 67.28	47.28
Average of Peak Amounts -				934		

7 Aroclor-1260				CAS #: 11096-82-5		
4.333	4.335	-0.002	11411400 1000.00	957	80.00- 120.00	100.00
4.458	4.459	-0.001	13804017 1000.00	961	100.97- 140.97	120.97
4.724	4.725	-0.001	10442327 1000.00	957	71.51- 111.51	91.51
4.897	4.899	-0.002	10750486 1000.00	959	74.21- 114.21	94.21
5.045	5.046	-0.001	23833089 1000.00	982	188.85- 228.85	208.85
Average of Peak Amounts -				963		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/012810a.b/032b3201.d

Date: 28-JAN-2010 14:56

Client ID: AR16002

Sample Info: 1MAR100104-60 02

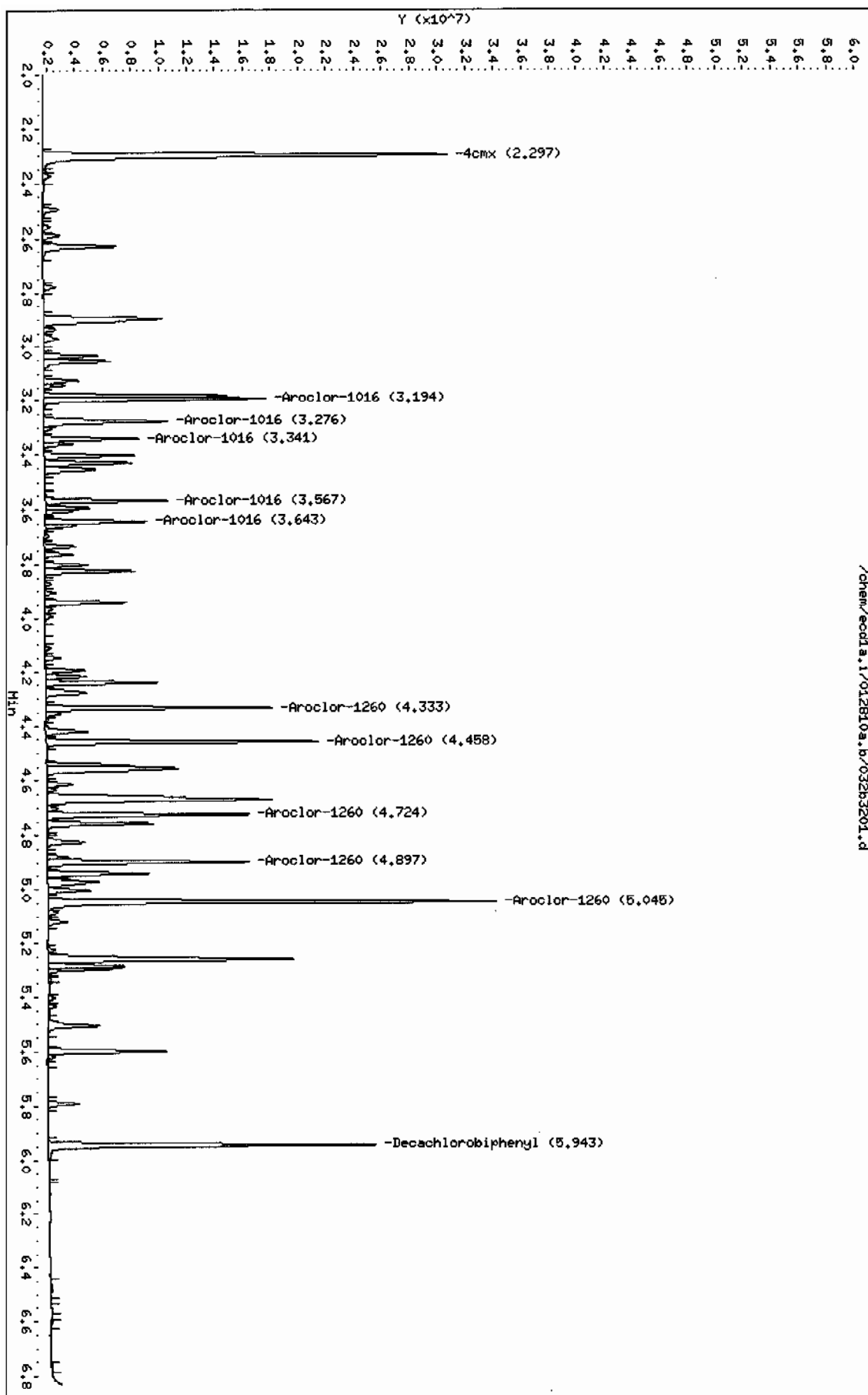
Page 1

Column phase: CLP2

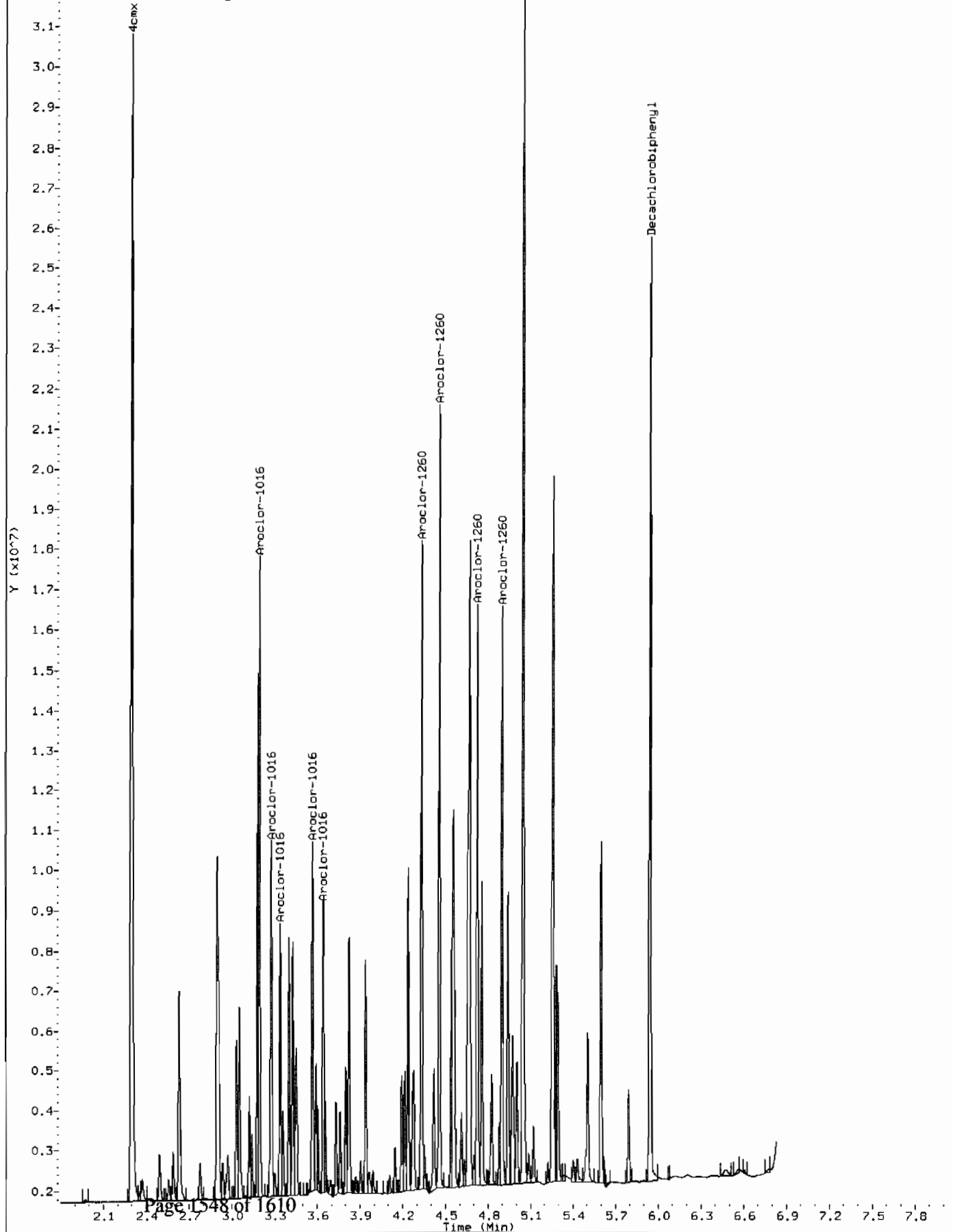
Instrument: ecdl1a.i

Operator: YSL

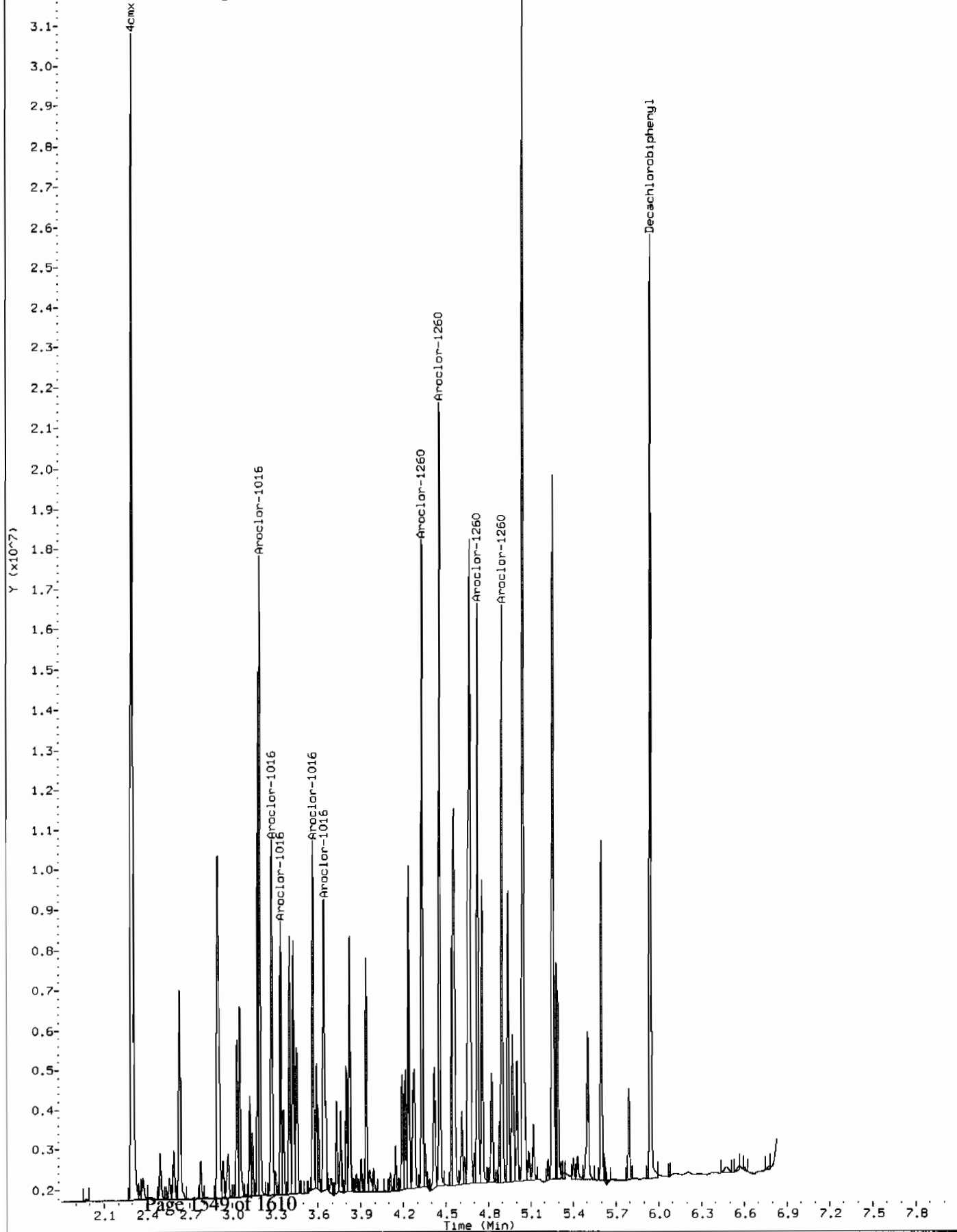
Column diameter: 0.25



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012810a.b/032b3201.d
Operator: YS1
Injection Date: 28-JAN-2010 14:56
Instrument: ecd1a.i
Client Sample ID: AR166002



Comment: Before manual integration
Data File: /chem/ecdl1.i/012810a.b/orig-032b3201.d
Operator: YS1
Injection Date: 28-JAN-2010 14:56
Instrument: ecd1a.i
Client Sample ID: AR166002



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/051f5101.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 28-JAN-2010 18:38

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m

Meth Date : 29-Jan-2010 06:55 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 51

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

CAL-AMT ON-COL

RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.966	1.966	0.000	39601120 100.000	102	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.277	5.278	-0.001	26195776 100.000	91.2	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.421	2.422	-0.001	13468292 1000.00	977	80.00- 120.00	100.00
2.708	2.710	-0.002	17643264 1000.00	1010	110.41- 150.41	131.00
2.789	2.791	-0.002	11072496 1000.00	963	64.79- 104.79	82.21
2.827	2.828	-0.001	6660058 1000.00	973	30.68- 70.68	49.45
3.037	3.039	-0.002	8624865 1000.00	971	45.02- 85.02	64.04
Average of Peak Amounts =				978		

7 Aroclor-1260				CAS #: 11096-82-5		
3.763	3.765	-0.002	16445980 1000.00	980	80.00- 120.00	100.00
3.926	3.928	-0.002	24856986 1000.00	981	131.11- 171.11	151.14
4.156	4.158	-0.002	14515485 1000.00	969	68.60- 108.60	88.26
4.299	4.301	-0.002	14999370 1000.00	964	71.52- 111.52	91.20
4.478	4.480	-0.002	34281505 1000.00	989	185.98- 225.98	208.45
Average of Peak Amounts =				977		

Data File: /chem/ecdda.i/012810a.b/051f5101.d

Date : 28-JAN-2010 18:38

Client ID: PR166003

Sample Info: IMR100104-60 03

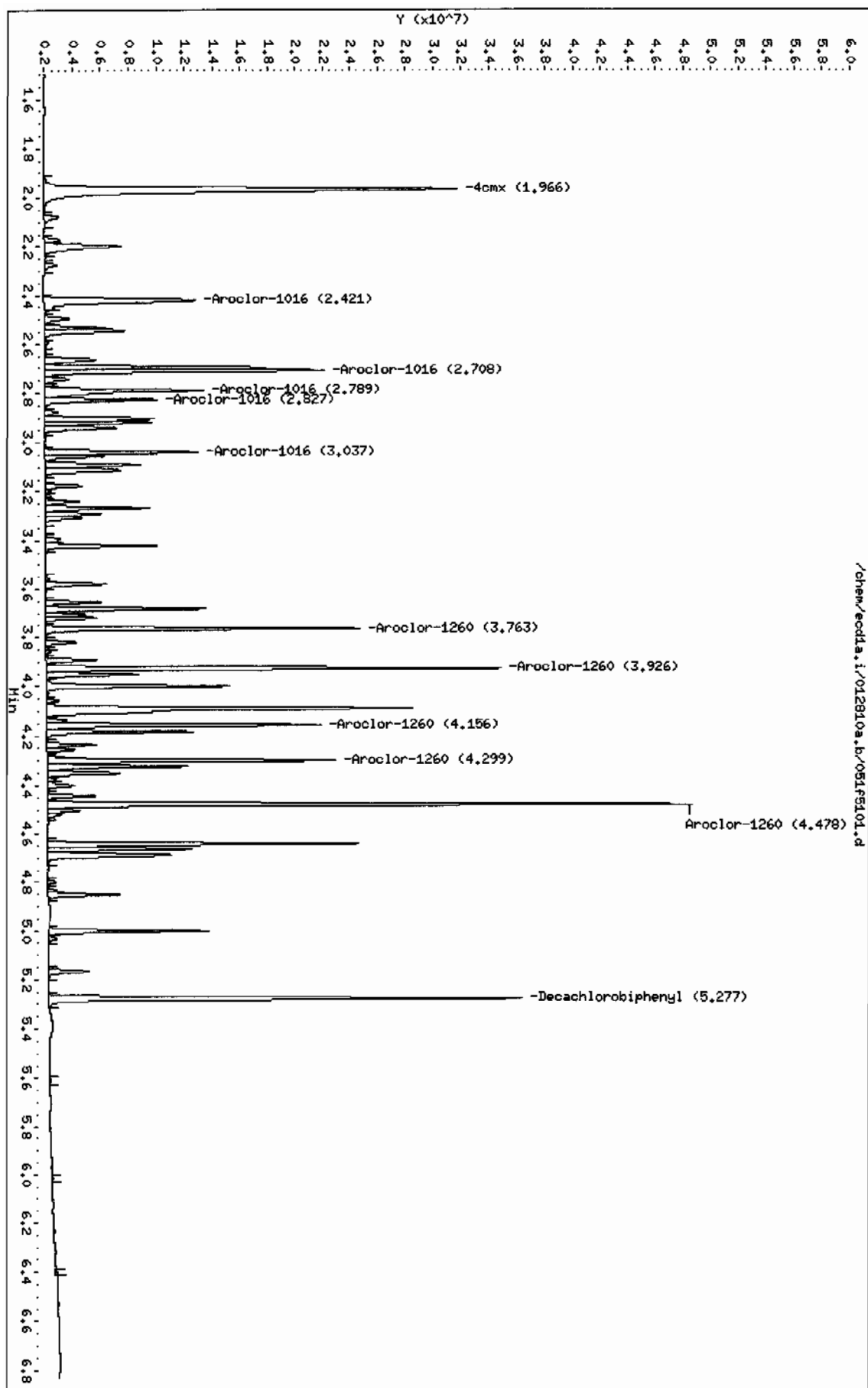
Page 1

Column phase: CLP1

Instrument: ecdda.i

Operator: YSL

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/051b5101.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 28-JAN-2010 18:38

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m

Meth Date : 29-Jan-2010 06:54 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 51

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

AMOUNTS

			CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/L)	TARGET RANGE	RATIO	
=====	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.297	2.298	-0.001	27840279 100.000	99.7	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.943	5.944	-0.001	17588694 100.000	101	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
3.194	3.195	-0.001	11844806 1000.00	971	80.00- 120.00	100.00 (M)	
3.277	3.278	-0.001	7613238 1000.00	929	44.90- 84.90	64.27	
3.340	3.341	-0.001	4737947 1000.00	933	20.22- 60.22	40.00	
3.567	3.568	-0.001	5921989 1000.00	926	30.82- 70.82	50.00	
3.643	3.644	-0.001	5493730 1000.00	928	27.45- 67.45	46.38	
Average of Peak Amounts =				938			

7 Aroclor-1260				CAS #: 11096-82-5			
4.333	4.335	-0.002	11077109 1000.00	929	80.00- 120.00	100.00	
4.458	4.459	-0.001	13481775 1000.00	938	101.61- 141.61	121.71	
4.724	4.725	-0.001	10117432 1000.00	927	71.00- 111.00	91.34	
4.898	4.899	-0.001	10366108 1000.00	925	73.09- 113.09	93.58	
5.045	5.046	-0.001	23064767 1000.00	951	185.37- 225.37	208.22	
Average of Peak Amounts =				934			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdda.i/012810a.b/051b5101.d

Date: 28-JAN-2010 18:38

Client ID: AR166003

Sample Info: 1MAR100104-60 03

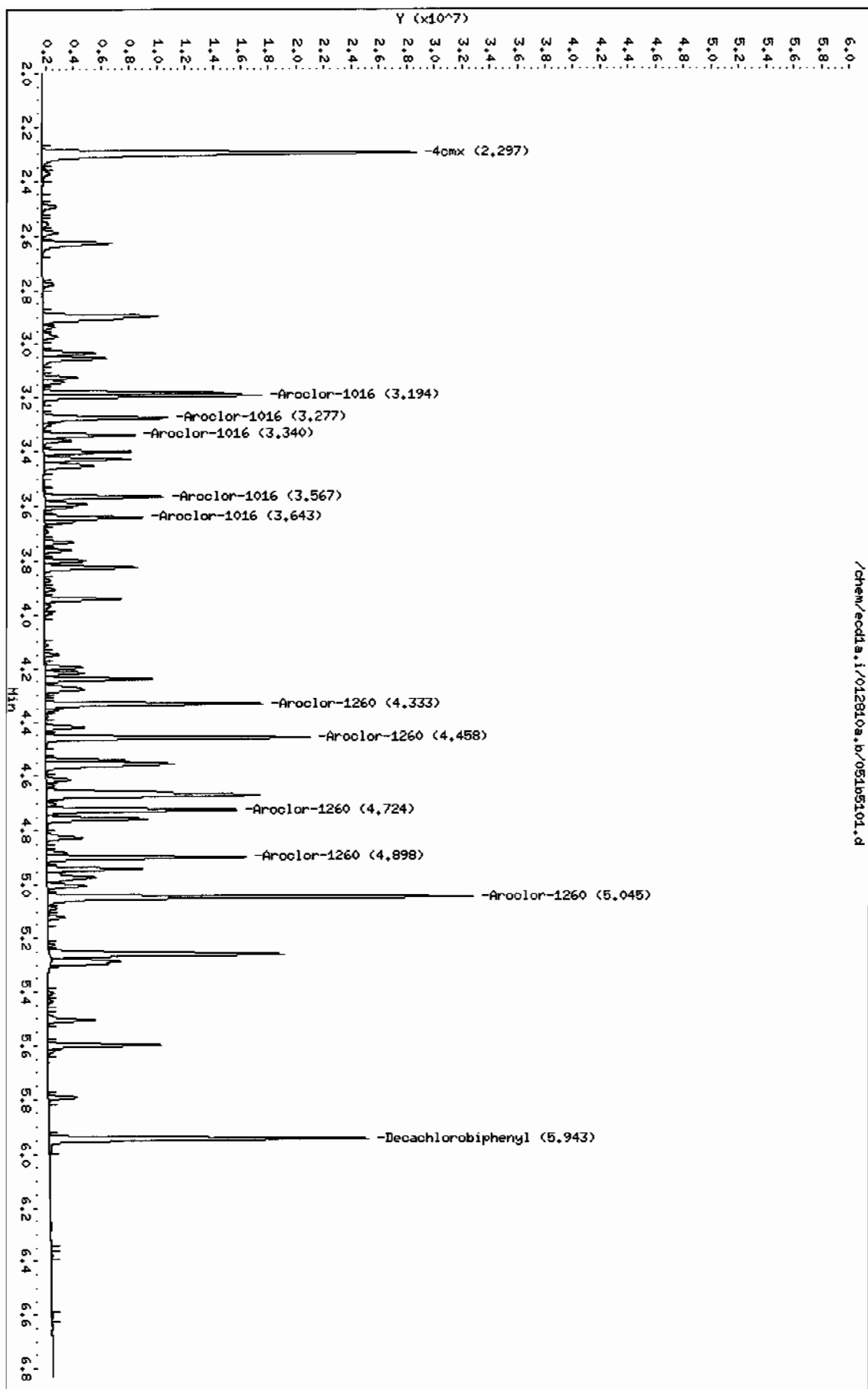
Page 1

Column phase: CLP2

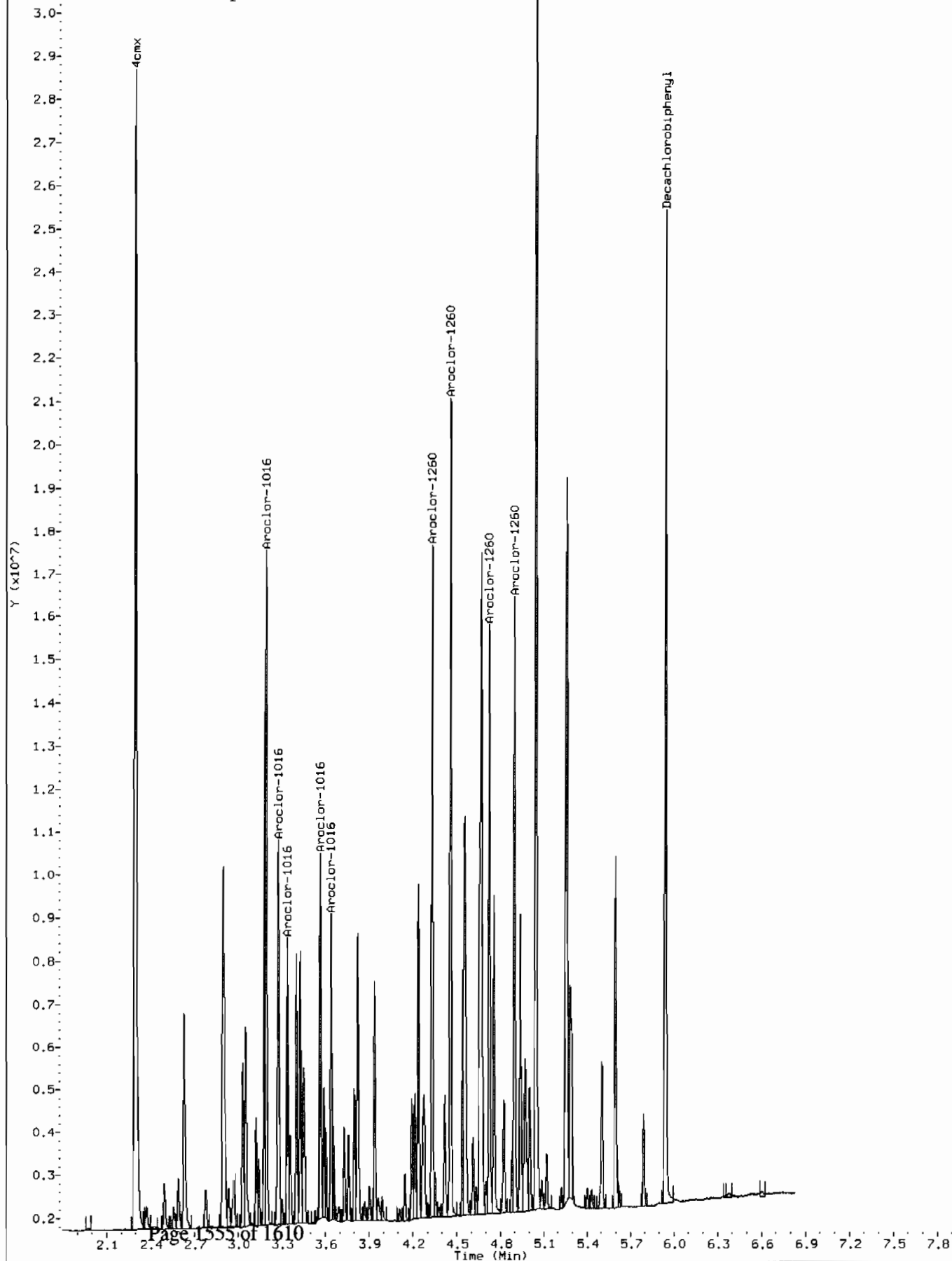
Instrument: ecdda.i

Operator: YSL

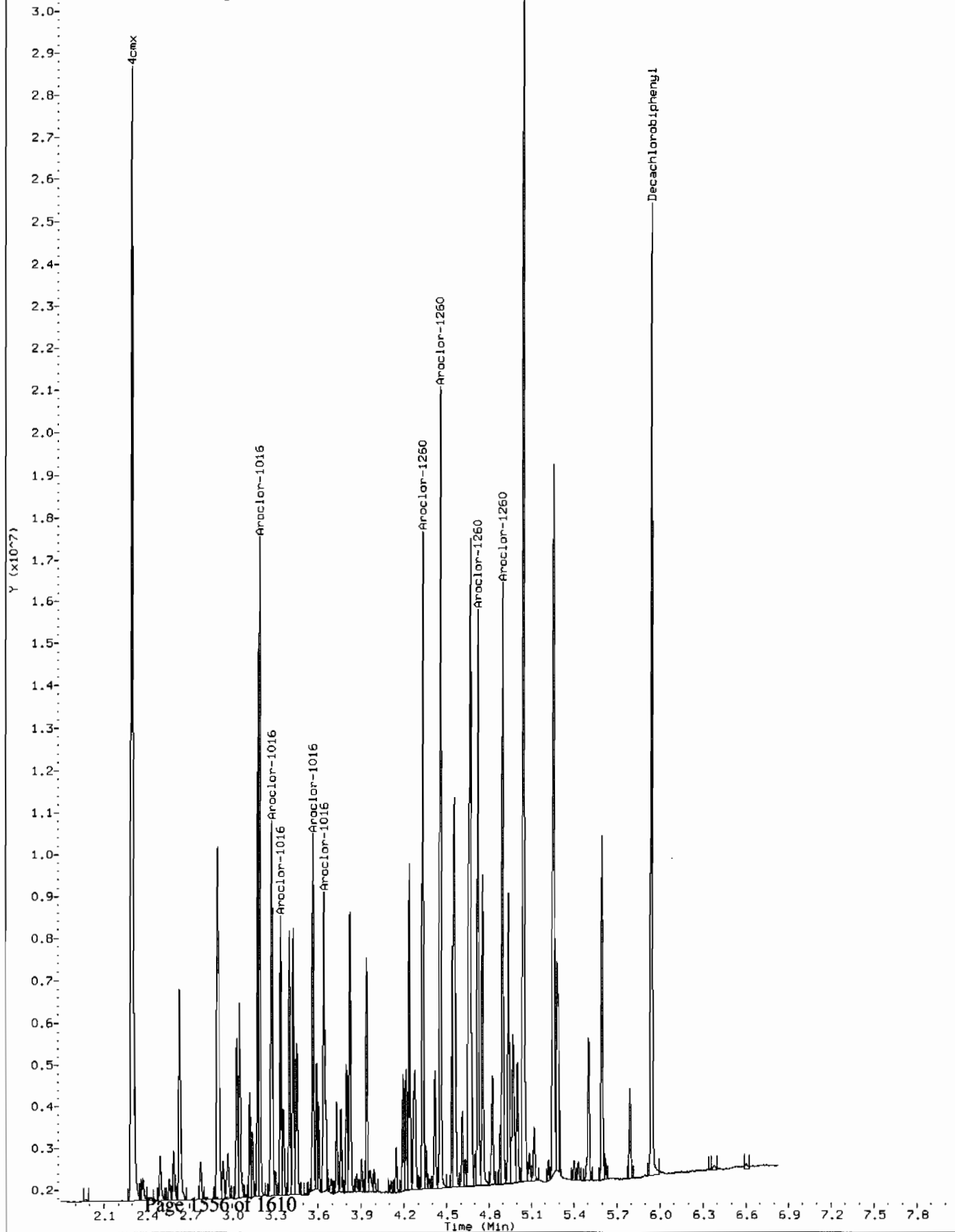
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Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012810a.b/051b5101.d
Operator: YS1
Injection Date: 28-JAN-2010 18:38
Instrument: ecd1a.i
Client Sample ID: AR166003



Comment: Before manual integration
Data File: /chem/ecdl1.i/012810a.b/orig-051b5101.d
Operator: YS1
Injection Date: 28-JAN-2010 18:38
Instrument: ecd1a.i
Client Sample ID: AR166003



8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1301

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/22/10	0555	1.96	5.28
02	AR166001	WAR100104-60	01/22/10	0606	1.97	5.28
03	AR125401	WAR091216-54	01/22/10	0616		
04	AR124201	WAR091217-42	01/22/10	0627		
05	AR124801	WAR091217-48	01/22/10	0637		
06	AR123201	WAR100122-05	01/22/10	0648		
07	AR123202	WAR100122-06	01/22/10	0658		
08	AR123203	WAR100122-07	01/22/10	0709		
09	AR123204	WAR100122-08	01/22/10	0719		
10	AR123205	IAR100104-03	01/22/10	0730		
11	AR123201	WAR100104-32	01/22/10	0740		
12	AR122101	WAR100104-21	01/22/10	0751		
13	AR126201	WAR100122-09	01/22/10	0801		
14	AR126202	WAR100122-10	01/22/10	0812		
15	AR126203	WAR100122-11	01/22/10	0822		
16	AR126204	WAR100122-12	01/22/10	0836		
17	AR126205	IAR100104-04	01/22/10	0847		
18	AR126201	WAR100104-62	01/22/10	0857		
19	AR166001	WAR100122-13	01/22/10	0908	1.97	5.28
20	AR166002	WAR100122-14	01/22/10	0919	1.97	5.28
21	AR166003	WAR100122-15	01/22/10	0929	1.97	5.28
22	AR166004	WAR100122-16	01/22/10	0940	1.97	5.28
23	AR166005	IAR100104-01	01/22/10	0950	1.97	5.28
24	AR166001	WAR100104-60	01/22/10	1001	1.97	5.28
25	AR126801	WAR100122-68	01/22/10	1011		
26	DDTANALOGSTD	WAR091219-DD	01/22/10	1022		
27	PIBLK02	WAR100105-99	01/22/10	1032	1.97	5.28
28	ZZZZZ	ZZZZZ	01/22/10	1043	1.97	5.28
29	ZZZZZ	ZZZZZ	01/22/10	1055	1.97	5.28
30	ZZZZZ	ZZZZZ	01/22/10	1108	1.97	5.28
31	ZZZZZ	ZZZZZ	01/22/10	1121	1.97	5.28
32	ZZZZZ	ZZZZZ	01/22/10	1133	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.: 10-1301

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.95			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/22/10 0555	2.30	5.95	
02	AR1660	WAR100104-60	01/22/10 0606	2.30	5.95	
03	AR125401	WAR091216-54	01/22/10 0616			
04	AR124201	WAR091217-42	01/22/10 0627			
05	AR124801	WAR091217-48	01/22/10 0637			
06	AR123201	WAR100122-05	01/22/10 0648			
07	AR123202	WAR100122-06	01/22/10 0658			
08	AR123203	WAR100122-07	01/22/10 0709			
09	AR123204	WAR100122-08	01/22/10 0719			
10	AR123205	IAR100104-03	01/22/10 0730			
11	AR123201	WAR100104-32	01/22/10 0740			
12	AR122101	WAR100104-21	01/22/10 0751			
13	AR126201	WAR100122-09	01/22/10 0801			
14	AR126202	WAR100122-10	01/22/10 0812			
15	AR126203	WAR100122-11	01/22/10 0822			
16	AR126204	WAR100122-12	01/22/10 0836			
17	AR126205	IAR100104-04	01/22/10 0847			
18	AR126201	WAR100104-62	01/22/10 0857			
19	AR166001	WAR100122-13	01/22/10 0908	2.30	5.95	
20	AR166002	WAR100122-14	01/22/10 0919	2.30	5.95	
21	AR166003	WAR100122-15	01/22/10 0929	2.30	5.95	
22	AR166004	WAR100122-16	01/22/10 0940	2.30	5.95	
23	AR166005	IAR100104-01	01/22/10 0950	2.30	5.95	
24	AR166001	WAR100104-60	01/22/10 1001	2.30	5.95	
25	AR126801	WAR100122-68	01/22/10 1011			
26	DDTANALOGSTD	WAR091219-DD	01/22/10 1022			
27	PIBLK02	WAR100105-99	01/22/10 1032	2.30	5.95	
28	ZZZZZ	ZZZZZ	01/22/10 1043	2.30	5.95	
29	ZZZZZ	ZZZZZ	01/22/10 1055	2.30	5.95	
30	ZZZZZ	ZZZZZ	01/22/10 1108	2.30	5.95	
31	ZZZZZ	ZZZZZ	01/22/10 1121	2.30	5.95	
32	ZZZZZ	ZZZZZ	01/22/10 1133	2.30	5.95	

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.: 10-1301

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 1.97		DCB: 5.28			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100105-99	01/27/10 0627	1.96	5.28
02	AR166001	WAR100104-60	01/27/10 0638	1.97	5.28
03	AR125401	WAR091216-54	01/27/10 0649		
04	AR124201	WAR091217-42	01/27/10 0659		
05	AR124801	WAR091217-48	01/27/10 0709		
06	AR123201	WAR100104-32	01/27/10 0720		
07	AR122101	WAR100104-21	01/27/10 0730		
08	AR126201	WAR100104-62	01/27/10 0741		
09	AR126801	WAR100107-68	01/27/10 0751		
10	DDTANALOGSTD	WAR091219-DD	01/27/10 0802		
11	PIBLK02	WAR100105-99	01/27/10 0812	1.97	5.28
12	ZZZZZ	ZZZZZ	01/27/10 0823	1.97	5.28
13	ZZZZZ	ZZZZZ	01/27/10 0833	1.97	5.28
14	ZZZZZ	ZZZZZ	01/27/10 0844	1.97	5.28
15	ZZZZZ	ZZZZZ	01/27/10 0854	1.97	5.28
16	ZZZZZ	ZZZZZ	01/27/10 0907	1.97	5.28
17	ZZZZZ	ZZZZZ	01/27/10 0919	1.97	5.28
18	ZZZZZ	ZZZZZ	01/27/10 0932	1.97	5.28
19	ZZZZZ	ZZZZZ	01/27/10 0944	1.97	5.28
20	ZZZZZ	ZZZZZ	01/27/10 0957	1.97	5.28
21	AR166002	WAR100104-60	01/27/10 1009	1.97	5.28
22	PIBLK03	WAR100105-99	01/27/10 1020	1.97	5.28
23	ZZZZZ	ZZZZZ	01/27/10 1030	1.97	5.28
24	ZZZZZ	ZZZZZ	01/27/10 1041	1.97	5.28
25	ZZZZZ	ZZZZZ	01/27/10 1051	1.97	5.28
26	ZZZZZ	ZZZZZ	01/27/10 1104	1.97	5.28
27	ZZZZZ	ZZZZZ	01/27/10 1117	1.97	5.28
28	ZZZZZ	ZZZZZ	01/27/10 1129	1.97	5.28
29	ZZZZZ	ZZZZZ	01/27/10 1142	1.96	5.28
30	ZZZZZ	ZZZZZ	01/27/10 1154	1.97	5.28
31	ZZZZZ	ZZZZZ	01/27/10 1207	1.97	5.28
32	AR166003	WAR100104-60	01/27/10 1219	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.: 10-1301

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.28			
EPA	LAB	DATE	TIME	S1	DCB	
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT #	RT #	
01	PIBLK04	WAR100105-99	01/27/10	1230	1.97	5.28
02	PBLK01	1202023521	01/27/10	1240	1.97	5.28
03	PBLK01LCS	1202023522	01/27/10	1251	1.97	5.28
04	ZZZZZ	ZZZZZ	01/27/10	1301	1.97	5.28
05	ZZZZZ	ZZZZZ	01/27/10	1314	1.97	5.28
06	ZZZZZ	ZZZZZ	01/27/10	1326	1.97	5.28
07	ZZZZZ	ZZZZZ	01/27/10	1339	1.97	5.28
08	ZZZZZ	ZZZZZ	01/27/10	1352	1.97	5.28
09	ZZZZZ	ZZZZZ	01/27/10	1404	1.97	5.28
10	ZZZZZ	ZZZZZ	01/27/10	1417	1.97	5.28
11	ZZZZZ	ZZZZZ	01/27/10	1429	1.97	5.28
12	AR166004	WAR100104-60	01/27/10	1442	1.97	5.28
13	PIBLK05	WAR100105-99	01/27/10	1452	1.97	5.28
14	ZZZZZ	ZZZZZ	01/27/10	1503	1.97	5.28
15	ZZZZZ	ZZZZZ	01/27/10	1515	1.97	5.28
16	ZZZZZ	ZZZZZ	01/27/10	1528	1.97	5.28
17	ZZZZZ	ZZZZZ	01/27/10	1540	1.97	5.28
18	ZZZZZ	ZZZZZ	01/27/10	1553	1.97	5.28
19	ZZZZZ	ZZZZZ	01/27/10	1606	1.97	5.28
20	AR166006	WAR100104-60	01/27/10	1618	1.97	5.28
21	PIBLK07	WAR100105-99	01/27/10	1631	1.97	5.28
22	ZZZZZ	ZZZZZ	01/27/10	1643	1.97	5.28
23	ZZZZZ	ZZZZZ	01/27/10	1656	1.97	5.28
24	ZZZZZ	ZZZZZ	01/27/10	1709	1.97	5.28
25	ZZZZZ	ZZZZZ	01/27/10	1721	1.97	5.30
26	ZZZZZ	ZZZZZ	01/27/10	1734	1.97	5.28
27	ZZZZZ	ZZZZZ	01/27/10	1746	1.97	5.28
28	PIBLK07	WAR100105-99	01/27/10	1759	1.97	5.28
29	ZZZZZ	ZZZZZ	01/27/10	1812	1.97	5.28
30	ZZZZZ	ZZZZZ	01/27/10	1824	1.97	5.28
31	AR166006	WAR100104-60	01/27/10	1837	1.97	5.28
32	PIBLK08	WAR100105-99	01/27/10	1849	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.: 10-1301

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 2.30			DCB: 5.95			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	PIBLK01	WAR100105-99	01/27/10	0627	2.30	5.94
02	AR166001	WAR100104-60	01/27/10	0638	2.30	5.95
03	AR125401	WAR091216-54	01/27/10	0649		
04	AR124201	WAR091217-42	01/27/10	0659		
05	AR124801	WAR091217-48	01/27/10	0709		
06	AR123201	WAR100104-32	01/27/10	0720		
07	AR122101	WAR100104-21	01/27/10	0730		
08	AR126201	WAR100104-62	01/27/10	0741		
09	AR126801	WAR100107-68	01/27/10	0751		
10	DDTANALOGSTD	WAR091219-DD	01/27/10	0802		
11	PIBLK02	WAR100105-99	01/27/10	0812	2.30	5.95
12	ZZZZZ	ZZZZZ	01/27/10	0823	2.30	5.95
13	ZZZZZ	ZZZZZ	01/27/10	0833	2.30	5.95
14	ZZZZZ	ZZZZZ	01/27/10	0844	2.30	5.95
15	ZZZZZ	ZZZZZ	01/27/10	0854	2.30	5.95
16	ZZZZZ	ZZZZZ	01/27/10	0907	2.30	5.94
17	ZZZZZ	ZZZZZ	01/27/10	0919	2.30	5.94
18	ZZZZZ	ZZZZZ	01/27/10	0932	2.30	5.95
19	ZZZZZ	ZZZZZ	01/27/10	0944	2.30	5.94
20	ZZZZZ	ZZZZZ	01/27/10	0957	2.30	5.94
21	AR166002	WAR100104-60	01/27/10	1009	2.30	5.94
22	PIBLK03	WAR100105-99	01/27/10	1020	2.30	5.95
23	ZZZZZ	ZZZZZ	01/27/10	1030	2.30	5.94
24	ZZZZZ	ZZZZZ	01/27/10	1041	2.30	5.94
25	ZZZZZ	ZZZZZ	01/27/10	1051	2.30	5.94
26	ZZZZZ	ZZZZZ	01/27/10	1104	2.30	5.94
27	ZZZZZ	ZZZZZ	01/27/10	1117	2.30	5.94
28	ZZZZZ	ZZZZZ	01/27/10	1129	2.30	5.94
29	ZZZZZ	ZZZZZ	01/27/10	1142	2.30	5.94
30	ZZZZZ	ZZZZZ	01/27/10	1154	2.30	5.94
31	ZZZZZ	ZZZZZ	01/27/10	1207	2.30	5.94
32	AR166003	WAR100104-60	01/27/10	1219	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.: 10-1301

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/22/10 01/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.30			DCB: 5.95		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK04	WAR100105-99	01/27/10	1230	2.30 5.94
02	PBLK01	1202023521	01/27/10	1240	2.30 5.94
03	PBLK01LCS	1202023522	01/27/10	1251	2.30 5.94
04	ZZZZZ	ZZZZZ	01/27/10	1301	2.30 5.95
05	ZZZZZ	ZZZZZ	01/27/10	1314	2.30 5.94
06	ZZZZZ	ZZZZZ	01/27/10	1326	2.30 5.94
07	ZZZZZ	ZZZZZ	01/27/10	1339	2.30 5.94
08	ZZZZZ	ZZZZZ	01/27/10	1352	2.30 5.94
09	ZZZZZ	ZZZZZ	01/27/10	1404	2.30 5.94
10	ZZZZZ	ZZZZZ	01/27/10	1417	2.30 5.94
11	ZZZZZ	ZZZZZ	01/27/10	1429	2.30 5.94
12	AR166004	WAR100104-60	01/27/10	1442	2.30 5.94
13	PIBLK05	WAR100105-99	01/27/10	1452	2.30 5.95
14	ZZZZZ	ZZZZZ	01/27/10	1503	2.30 5.94
15	ZZZZZ	ZZZZZ	01/27/10	1515	2.30 5.94
16	ZZZZZ	ZZZZZ	01/27/10	1528	2.30 5.94
17	ZZZZZ	ZZZZZ	01/27/10	1540	2.30 5.94
18	ZZZZZ	ZZZZZ	01/27/10	1553	2.30 5.94
19	ZZZZZ	ZZZZZ	01/27/10	1606	2.30 5.94
20	AR166006	WAR100104-60	01/27/10	1618	2.30 5.94
21	PIBLK07	WAR100105-99	01/27/10	1631	2.30 5.94
22	ZZZZZ	ZZZZZ	01/27/10	1643	2.30 5.94
23	ZZZZZ	ZZZZZ	01/27/10	1656	2.30 5.94
24	ZZZZZ	ZZZZZ	01/27/10	1709	2.30 5.94
25	ZZZZZ	ZZZZZ	01/27/10	1721	2.30 5.96
26	ZZZZZ	ZZZZZ	01/27/10	1734	2.30 5.95
27	ZZZZZ	ZZZZZ	01/27/10	1746	2.30 5.95
28	PIBLK07	WAR100105-99	01/27/10	1759	2.30 5.95
29	ZZZZZ	ZZZZZ	01/27/10	1812	2.30 5.94
30	ZZZZZ	ZZZZZ	01/27/10	1824	2.30 5.94
31	AR166006	AR100104-60	01/27/10	1837	2.30 5.94
32	PIBLK08	WAR100105-99	01/27/10	1849	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.: 10-1301

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	PIBLK01	WAR100105-99	01/28/10	0916		
02	ZZZZZ	ZZZZZ	01/28/10	0927		
03	AR125401	WAR091216-54	01/28/10	0937		
04	AR124201	WAR091217-42	01/28/10	0948		
05	AR124801	WAR091217-48	01/28/10	0958		
06	AR123201	WAR100104-32	01/28/10	1009		
07	AR122101	WAR100104-21	01/28/10	1019		
08	AR126201	WAR100104-62	01/28/10	1030		
09	ZZZZZ	ZZZZZ	01/28/10	1040		
10	AR166001	WAR100128-01	01/28/10	1051		
11	AR166002	WAR100128-02	01/28/10	1101		
12	AR166003	WAR100128-03	01/28/10	1112		
13	AR166004	WAR100128-04	01/28/10	1122		
14	AR166005	IAR100104-01	01/28/10	1134		
15	AR166001	WAR100104-60	01/28/10	1144		
16	ZZZZZ	ZZZZZ	01/28/10	1155		
17	DDTANALOGSTD	WAR091219-DD	01/28/10	1205		
18	AR126801	WAR100128-05	01/28/10	1218		
19	AR126802	WAR100128-06	01/28/10	1229		
20	AR126803	WAR100128-07	01/28/10	1239		
21	AR126804	WAR100128-08	01/28/10	1250		
22	AR126805	IAR100104-05	01/28/10	1300		
23	AR126801	WAR100107-68	01/28/10	1311		
24	PIBLK02	WAR100105-99	01/28/10	1321		
25	ZZZZZ	ZZZZZ	01/28/10	1332		
26	ZZZZZ	ZZZZZ	01/28/10	1342		
27	ZZZZZ	ZZZZZ	01/28/10	1353		
28	ZZZZZ	ZZZZZ	01/28/10	1405		
29	ZZZZZ	ZZZZZ	01/28/10	1418		
30	ZZZZZ	ZZZZZ	01/28/10	1430		
31	ZZZZZ	ZZZZZ	01/28/10	1443		
32	AR166002	WAR100104-60	01/28/10	1456		

QC LIMITS

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.: 10-1301

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION								
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT	#	RT	#
	=====	=====	=====	=====	=====		=====	
01	AR125402	WAR091216-54	01/28/10	1506				
02	AR124201	WAR091217-42	01/28/10	1516				
03	AR124801	WAR091217-48	01/28/10	1527				
04	AR123201	WAR100104-32	01/28/10	1538				
05	AR122101	WAR100104-21	01/28/10	1548				
06	AR126201	WAR100104-62	01/28/10	1558				
07	AR126801	WAR100122-68	01/28/10	1609				
08	PIBLK03	WAR100105-99	01/28/10	1619				
09	ZZZZZ	ZZZZZ	01/28/10	1630				
10	ZZZZZ	ZZZZZ	01/28/10	1643				
11	ZZZZZ	ZZZZZ	01/28/10	1655				
12	ZZZZZ	ZZZZZ	01/28/10	1708				
13	RE15-10-7219	245099015	01/28/10	1720				
14	ZZZZZ	ZZZZZ	01/28/10	1733				
15	ZZZZZ	ZZZZZ	01/28/10	1745				
16	ZZZZZ	ZZZZZ	01/28/10	1758				
17	ZZZZZ	ZZZZZ	01/28/10	1811				
18	ZZZZZ	ZZZZZ	01/28/10	1823				
19	AR166003	WAR100104-60	01/28/10	1838				
20	PIBLK04	WAR100105-99	01/28/10	1850				
21	ZZZZZ	ZZZZZ	01/28/10	1903				
22	AR166004	WAR100104-60	01/28/10	1917				
23	PIBLKL05	WAR100105-99	01/28/10	1930				
24	ZZZZZ	ZZZZZ	01/28/10	1942				
25	ZZZZZ	ZZZZZ	01/28/10	1955				
26	ZZZZZ	ZZZZZ	01/28/10	2008				
27	ZZZZZ	ZZZZZ	01/28/10	2020				
28	ZZZZZ	ZZZZZ	01/28/10	2033				
29	ZZZZZ	ZZZZZ	01/28/10	2045				
30	ZZZZZ	ZZZZZ	01/28/10	2058				
31	ZZZZZ	ZZZZZ	01/28/10	2110				
32	ZZZZZ	ZZZZZ	01/28/10	2123				

QC LIMITS

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.: 10-1301

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	PIBLK01	WAR100105-99	01/28/10	0916		
02	ZZZZZ	ZZZZZ	01/28/10	0927		
03	AR125401	WAR091216-54	01/28/10	0937		
04	AR124201	WAR091217-42	01/28/10	0948		
05	AR124801	WAR091217-48	01/28/10	0958		
06	AR123201	WAR100104-32	01/28/10	1009		
07	AR122101	WAR100104-21	01/28/10	1019		
08	AR126201	WAR100104-62	01/28/10	1030		
09	ZZZZZ	ZZZZZ	01/28/10	1040		
10	AR166001	WAR100128-01	01/28/10	1051		
11	AR166002	WAR100128-02	01/28/10	1101		
12	AR166003	WAR100128-03	01/28/10	1112		
13	AR166004	WAR100128-04	01/28/10	1122		
14	AR166005	IAR100104-01	01/28/10	1134		
15	AR166001	WAR100104-60	01/28/10	1144		
16	ZZZZZ	ZZZZZ	01/28/10	1155		
17	DDTANALOGSTD	WAR091219-DD	01/28/10	1205		
18	AR126801	WAR100128-05	01/28/10	1218		
19	AR126802	WAR100128-06	01/28/10	1229		
20	AR126803	WAR100128-07	01/28/10	1239		
21	AR126804	WAR100128-08	01/28/10	1250		
22	AR126805	IAR100104-05	01/28/10	1300		
23	AR126801	WAR100107-68	01/28/10	1311		
24	PIBLK02	WAR100105-99	01/28/10	1321		
25	ZZZZZ	ZZZZZ	01/28/10	1332		
26	ZZZZZ	ZZZZZ	01/28/10	1342		
27	ZZZZZ	ZZZZZ	01/28/10	1353		
28	ZZZZZ	ZZZZZ	01/28/10	1405		
29	ZZZZZ	ZZZZZ	01/28/10	1418		
30	ZZZZZ	ZZZZZ	01/28/10	1430		
31	ZZZZZ	ZZZZZ	01/28/10	1443		
32	AR166002	WAR100104-60	01/28/10	1456		

QC LIMITS

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.: 10-1301

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 01/28/10 01/28/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	AR125402	WAR091216-54	01/28/10	1506		
02	AR124202	WAR091217-42	01/28/10	1516		
03	AR124802	WAR091217-48	01/28/10	1527		
04	AR123202	WAR100104-32	01/28/10	1538		
05	AR122102	WAR100104-21	01/28/10	1548		
06	AR126202	WAR100104-62	01/28/10	1558		
07	AR126802	WAR100122-68	01/28/10	1609		
08	PIBLKL04	WAR100105-99	01/28/10	1619		
09	ZZZZZ	ZZZZZ	01/28/10	1630		
10	ZZZZZ	ZZZZZ	01/28/10	1643		
11	ZZZZZ	ZZZZZ	01/28/10	1655		
12	ZZZZZ	ZZZZZ	01/28/10	1708		
13	RE15-10-7219	245099015	01/28/10	1720		
14	ZZZZZ	ZZZZZ	01/28/10	1733		
15	ZZZZZ	ZZZZZ	01/28/10	1745		
16	ZZZZZ	ZZZZZ	01/28/10	1758		
17	ZZZZZ	ZZZZZ	01/28/10	1811		
18	ZZZZZ	ZZZZZ	01/28/10	1823		
19	AR166003	WAR100104-60	01/28/10	1838		
20	PIBLKL04	WAR100105-99	01/28/10	1850		
21	ZZZZZ	ZZZZZ	01/28/10	1903		
22	AR166004	WAR100104-60	01/28/10	1917		
23	PIBLKL05	WAR100105-99	01/28/10	1930		
24	ZZZZZ	ZZZZZ	01/28/10	1942		
25	ZZZZZ	ZZZZZ	01/28/10	1955		
26	ZZZZZ	ZZZZZ	01/28/10	2008		
27	ZZZZZ	ZZZZZ	01/28/10	2020		
28	ZZZZZ	ZZZZZ	01/28/10	2033		
29	ZZZZZ	ZZZZZ	01/28/10	2045		
30	ZZZZZ	ZZZZZ	01/28/10	2058		
31	ZZZZZ	ZZZZZ	01/28/10	2110		
32	ZZZZZ	ZZZZZ	01/28/10	2123		

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Identification Summary

Page 1 of 1

SDG Number: 10-1301

Client ID: LCS for batch 944882

Lab Sample ID: 1202023522

Data File: 035f3501.d

Data File: 035b3501.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 27-JAN-10 12:51

Analyzed: 27-JAN-10 12:51

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							4.37
Column 1	1	2.42	2.39 – 2.45	21.1		ug/kg	
	2	2.71	2.68 – 2.74	21.3		ug/kg	
	3	2.79	2.76 – 2.82	21		ug/kg	
	4	2.83	2.8 – 2.86	21		ug/kg	
	5	3.04	3.01 – 3.07	21		ug/kg	
					21.1		
Column 2	1	3.2	3.17 – 3.23	21.1		ug/kg	
	2	3.28	3.25 – 3.31	20.2		ug/kg	
	3	3.34	3.31 – 3.37	19.8		ug/kg	
	4	3.57	3.54 – 3.6	19.9		ug/kg	
	5	3.64	3.61 – 3.67	19.8		ug/kg	
					20.2		
Aroclor-1260							5.74
Column 1	1	3.77	3.74 – 3.8	23.9		ug/kg	
	2	3.93	3.9 – 3.96	24.1		ug/kg	
	3	4.16	4.13 – 4.19	24.4		ug/kg	
	4	4.3	4.27 – 4.33	24.5		ug/kg	
	5	4.48	4.45 – 4.51	25.5		ug/kg	
					24.5		
Column 2	1	4.34	4.31 – 4.37	22.6		ug/kg	
	2	4.46	4.43 – 4.49	23		ug/kg	
	3	4.73	4.7 – 4.76	22.9		ug/kg	
	4	4.9	4.87 – 4.93	23.1		ug/kg	
	5	5.05	5.02 – 5.08	23.9		ug/kg	
					23.1		

Identification Summary

Page 1 of 1

SDG Number: 10-1301

Client ID: RE15-10-7219

Lab Sample ID: 245099015

Data File: 045f4501.d

Data File: 045b4501.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 28-JAN-10 17:20

Analyzed: 28-JAN-10 17:20

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1260							27.1
Column 1	1	3.76	3.74 - 3.8	6.35		ug/kg	
	2	3.93	3.9 - 3.96	.574		ug/kg	
	3	4.16	4.13 - 4.19	5.48		ug/kg	
	4	4.28	4.27 - 4.33	3.28		ug/kg	
	5	4.49	4.45 - 4.51	3.27		ug/kg	
					3.79		
Column 2	1	4.32	4.31 - 4.37	1.76		ug/kg	
	2	4.46	4.43 - 4.49	10.9		ug/kg	
	3	4.74	4.7 - 4.76	4.78		ug/kg	
	4	4.9	4.87 - 4.93	1.71		ug/kg	
	5	5.05	5.02 - 5.08	5.72		ug/kg	
					4.98		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202023521

Client Sample: QC for batch 944882

Client: LANL010

Project: QC

Client ID: MB for batch 944882

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 944883

Inst: ECD1A.I

Dilution: 1

Run Date: 01/27/2010 12:40

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/25/2010 20:44

Aliquot: 30 g

Final Volume: 1 mL

Data File: 034f3401-1.d

Column: 1 CLP1

Level: LOW

034b3401-1.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

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/034f3401-1.d
Lab Smp Id: 1202023521 Client Smp ID: PBLK01
Inj Date : 27-JAN-2010 12:40
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202023521|1|
Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdla.i/012710.b/ECD1-F-8082-121409.m
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1301.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx CAS #: 877-09-8							
1.967	1.967	0.000	53582314	136.361	4.5 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.278	5.279	-0.001	46068813	139.665	4.6 80.00- 120.00	100.00	

Data File: /chem/eod1a.i/012710.b/034f3401-1.d

Date : 27-JAN-2010 12:40

Client ID: PBLK01

Sample Info: 1120202352111

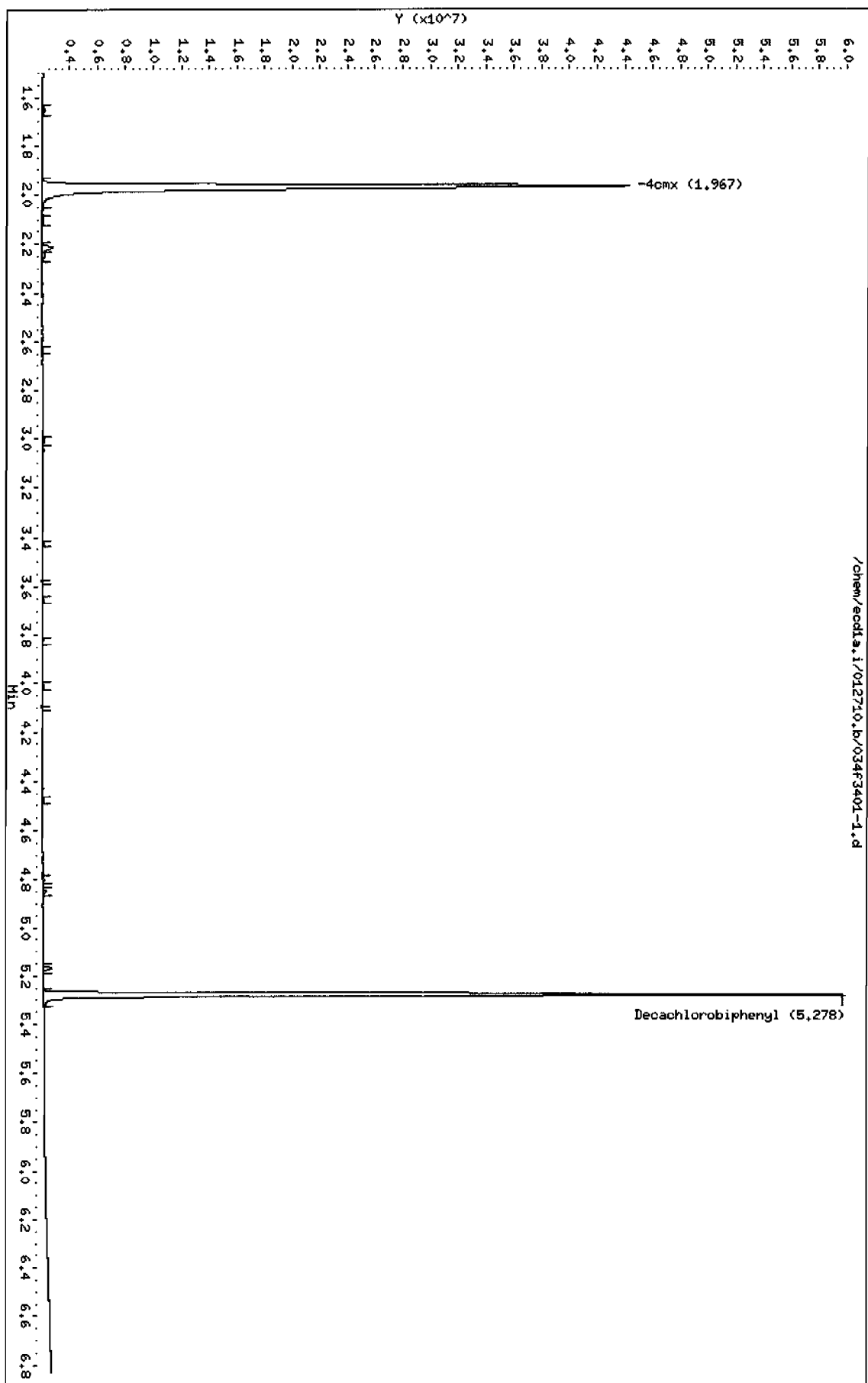
Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012710.b/034b3401-1.d
Lab Smp Id: 1202023521 Client Smp ID: PBLK01
Inj Date : 27-JAN-2010 12:40
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202023521|1|
Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdla.i/012710.b/ECD1-B-8082-121409.m
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:12 Cal File: 014b1401.d
Als bottle: 34 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1301.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

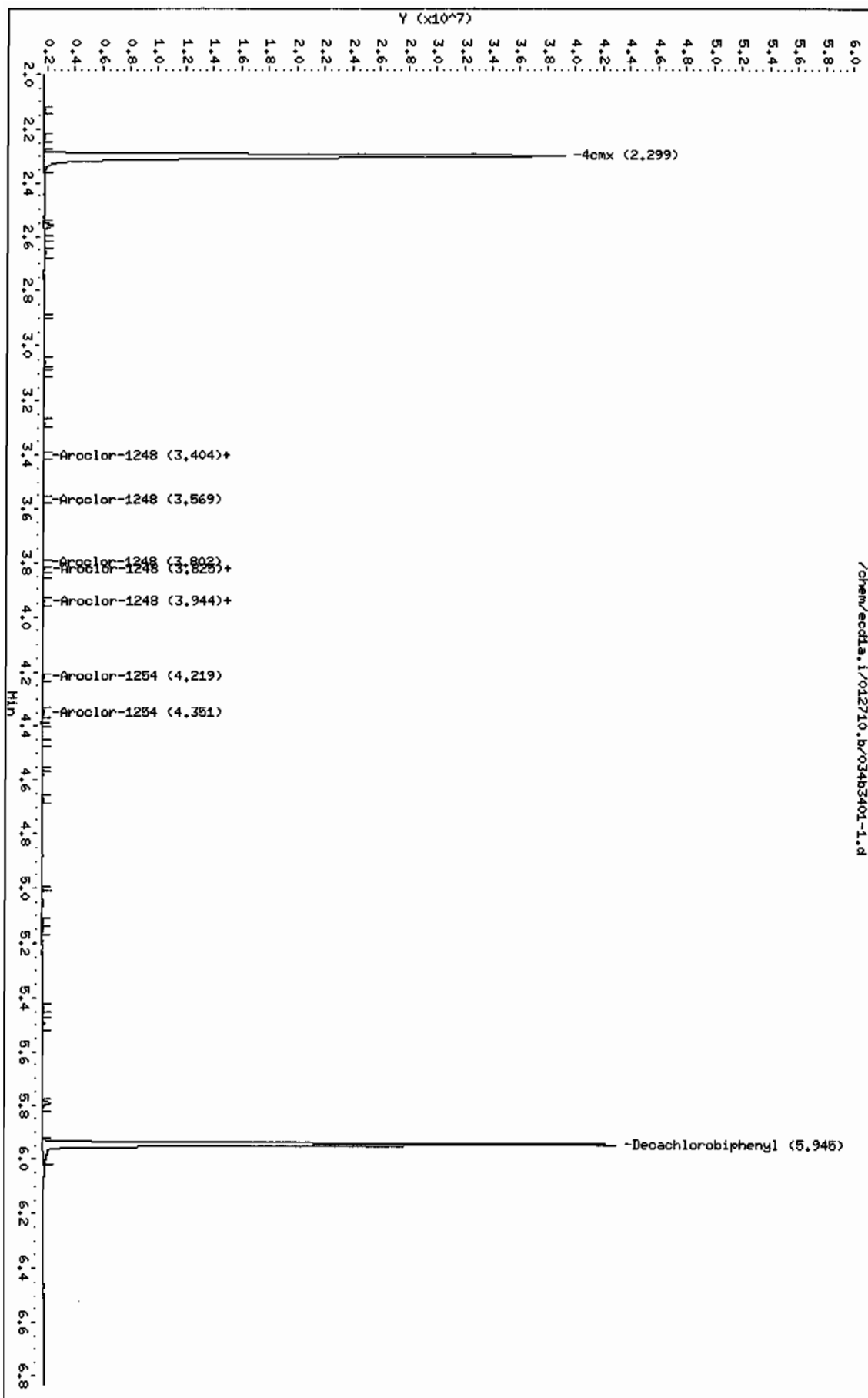
Cpnd Variable Local Compound Variable

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8	
2.299	2.299	0.000	37667961 129.798	4.3	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.945	5.945	0.000	32259788 132.226	4.4	80.00- 120.00	100.00

Data File: /chem/ecdl1.i/012710.b/034b3401-1.d
Date: 27-JAN-2010 12:40
Client ID: PBLK01
Sample Info: 1120202352111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdl1.i
Operator: VSI
Column diameter: 0.25

/chem/ecdl1.i/012710.b/034b3401-1.d



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1301

Matrix: SOIL

Lab Sample ID: 1202023522

Client Sample: QC for batch 944882

Client: LANL010

Project: QC

Client ID: LCS for batch 944882

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 944883

Inst: ECD1A.I

Dilution: 1

Run Date: 01/27/2010 12:51

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/25/2010 20:44

Aliquot: 30 g

Final Volume: 1 mL

Data File: 035f3501-1.d

Column: 1 CLP1

Level: LOW

035b3501-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		21.1	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		24.5	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/012710.b/035f3501-1.d
Lab Smp Id: 1202023522 Client Smp ID: PBLK01LCS
Inj Date : 27-JAN-2010 12:51
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202023522|1|
Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecdl1a.i/012710.b/ECD1-F-8082-121409.m
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 35 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1301.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

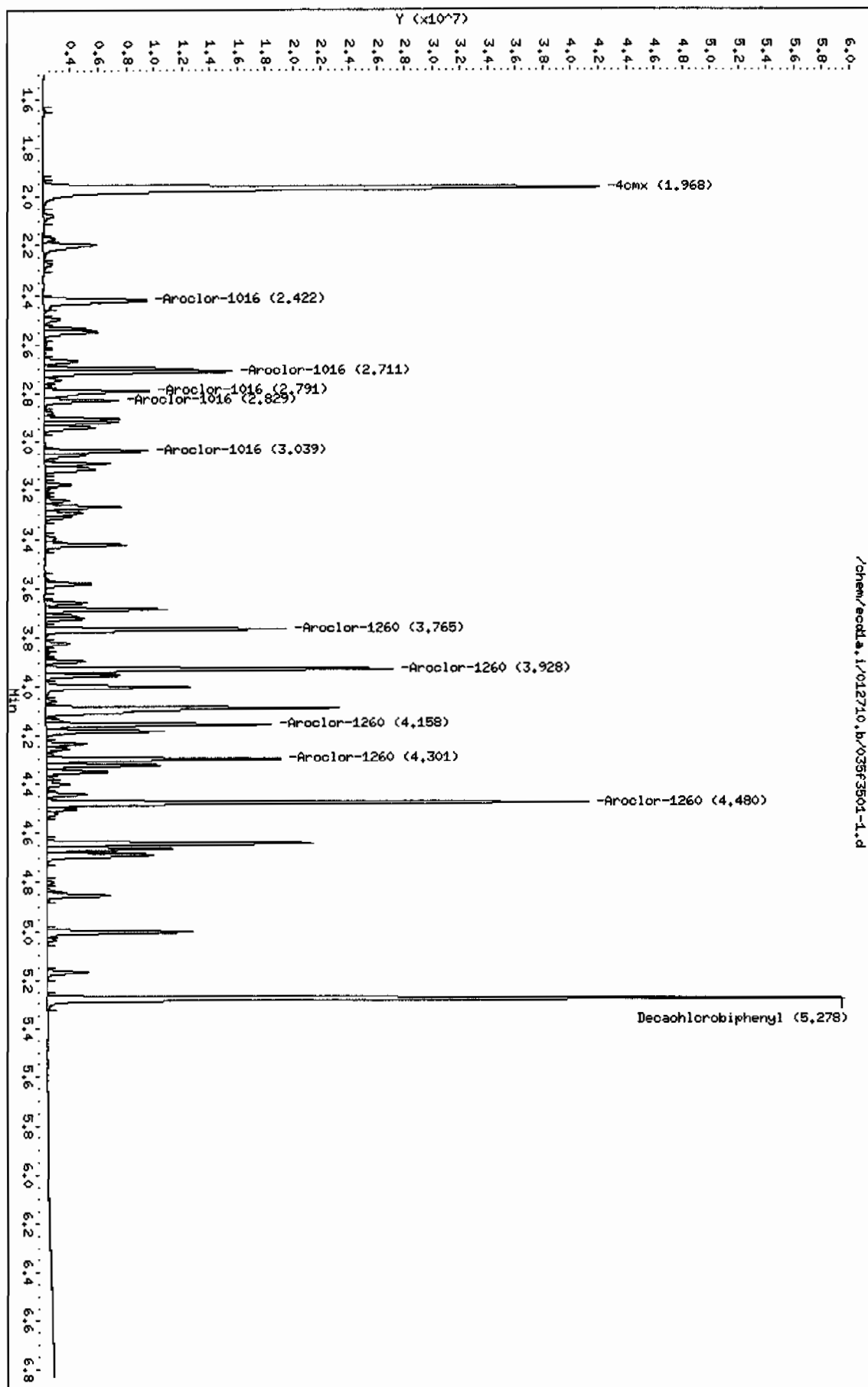
CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8							
1.968	1.967	0.001	49826642	126.804	4.2	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.278	5.279	-0.001	44059823	133.575	4.4	80.00- 120.00	100.00
1 Aroclor-1016 CAS #: 12674-11-2							
2.422	2.423	-0.001	9154294	633.500	21.1	80.00- 120.00	100.00
2.711	2.710	0.001	11603648	637.572	21.2	106.82- 146.82	126.76
2.791	2.791	0.000	7560618	630.929	21.0	65.47- 105.47	82.59
2.829	2.829	0.000	4518066	629.455	21.0	31.32- 71.32	49.35

CONCENTRATIONS									
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE	RATIO		
			RESPONSE	(ug/L)	(ug/Kg)				
==	=====	=====	=====	=====	=====	=====	=====		
1 Aroclor-1016 (continued)									
3.039	3.039	0.000	5835820	630.256	21.0	44.60-	84.60	63.75	
Average of Peak Concentrations =					21.1				

7 Aroclor-1260					CAS #: 11096-82-5				
3.765	3.765	0.000	12696403	716.551	23.9	80.00-	120.00	100.00	
3.928	3.928	0.000	19510041	724.516	24.2	131.61-	171.61	153.67	
4.158	4.158	0.000	11833422	731.073	24.4	68.06-	108.06	93.20	
4.301	4.300	0.001	12410729	734.017	24.5	71.84-	111.84	97.75	
4.480	4.480	0.000	28768957	763.800	25.4	194.61-	234.61	226.59	
Average of Peak Concentrations =					24.5				

Data File: /chem/eod1a.i/012710.b/035f3501-1.d
Date : 27-JAN-2010 12:51
Client ID: PBLK01LCS
Sample Info: 11202023522111
Volume Injected (uL): 1.0
Column phases: CLP1

Instrument: eod1a.i
Operator: YS1
Column diameter: 0.25



Data File: /chem/ecdl1a.i/012710.b/035b3501-1.d
Report Date: 28-Jan-2010 11:31

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012710.b/035b3501-1.d
Lab Smp Id: 1202023522 Client Smp ID: PBLK01LCS
Inj Date : 27-JAN-2010 12:51
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202023522|1|
Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecdl1a.i/012710.b/ECD1-B-8082-121409.m
Meth Date : 28-Jan-2010 10:52 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:12 Cal File: 014b1401.d
Als bottle: 35 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1301.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	ON-COL	FINAL	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
§ 11 4cmx CAS #: 877-09-8								
2.298	2.299	-0.001	34917748	120.321	4.0	80.00- 120.00	100.00	
§ 12 Decachlorobiphenyl CAS #: 2051-24-3								
5.944	5.945	-0.001	30826726	126.352	4.2	80.00- 120.00	100.00	
1 Aroclor-1016 CAS #: 12674-11-2								
3.195	3.195	0.000	8037223	633.507	21.1	80.00- 120.00	100.00(M)	
3.278	3.279	-0.001	5324719	605.210	20.2	44.37- 84.37	66.25	
3.342	3.342	0.000	3257459	594.512	19.8	19.84- 59.84	40.53	
3.568	3.569	-0.001	4182408	597.722	19.9	31.13- 71.13	52.04	

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE RATIO
==	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)						
3.644	3.644	0.000	3908485	595.481	19.8	27.00- 67.00 48.63
Average of Peak Concentrations =					20.2	

7 Aroclor-1260			CAS #: 11096-82-5			
4.335	4.335	0.000	8991900	677.351	22.6	80.00- 120.00 100.00
4.460	4.459	0.001	11143876	689.683	23.0	104.23- 144.23 123.93
4.725	4.725	0.000	8604631	688.414	22.9	72.03- 112.03 95.69
4.899	4.899	0.000	8958671	692.928	23.1	75.50- 115.50 99.63
5.046	5.046	0.000	20389073	716.774	23.9	197.36- 237.36 226.75
Average of Peak Concentrations =					23.1	

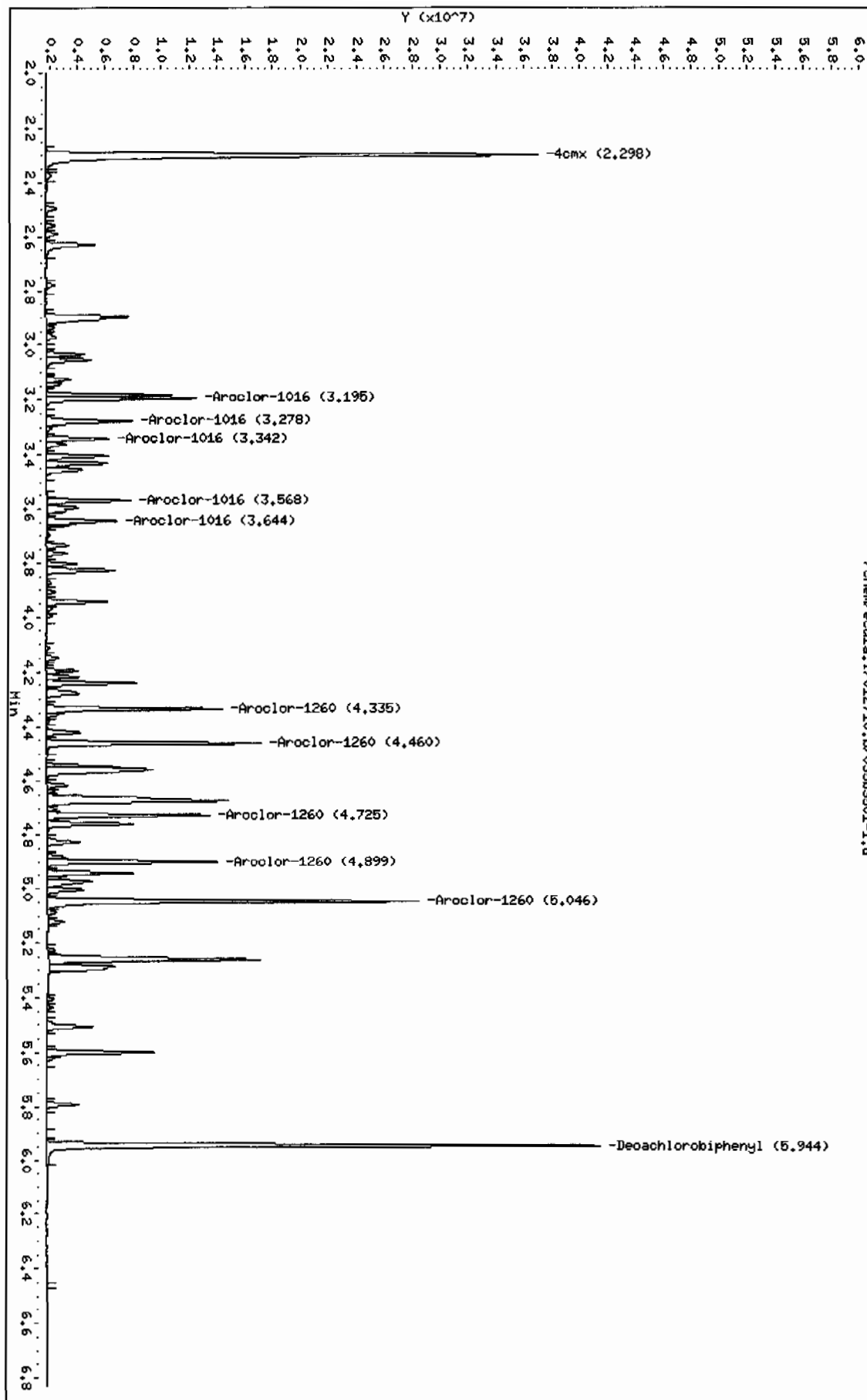
QC Flag Legend

M - Compound response manually integrated.

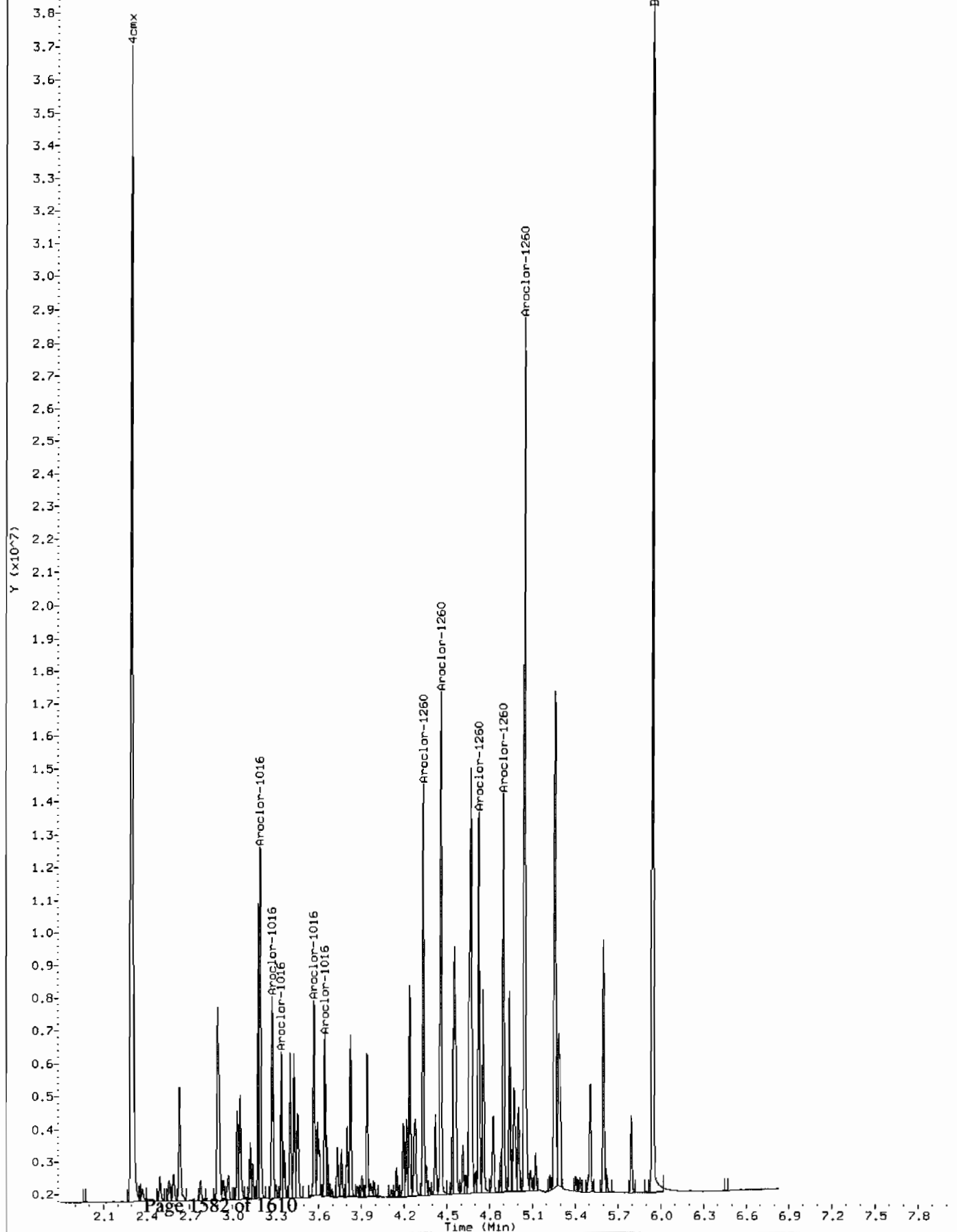
Data File: /chem/ecdl.a.i/012710.b/035b3501-1.d
Date: 27-JAN-2010 12:51
Client ID: PRLK01LCS
Sample Info: 11202023522111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdl.a.i
Operator: YSL
Column diameter: 0.25

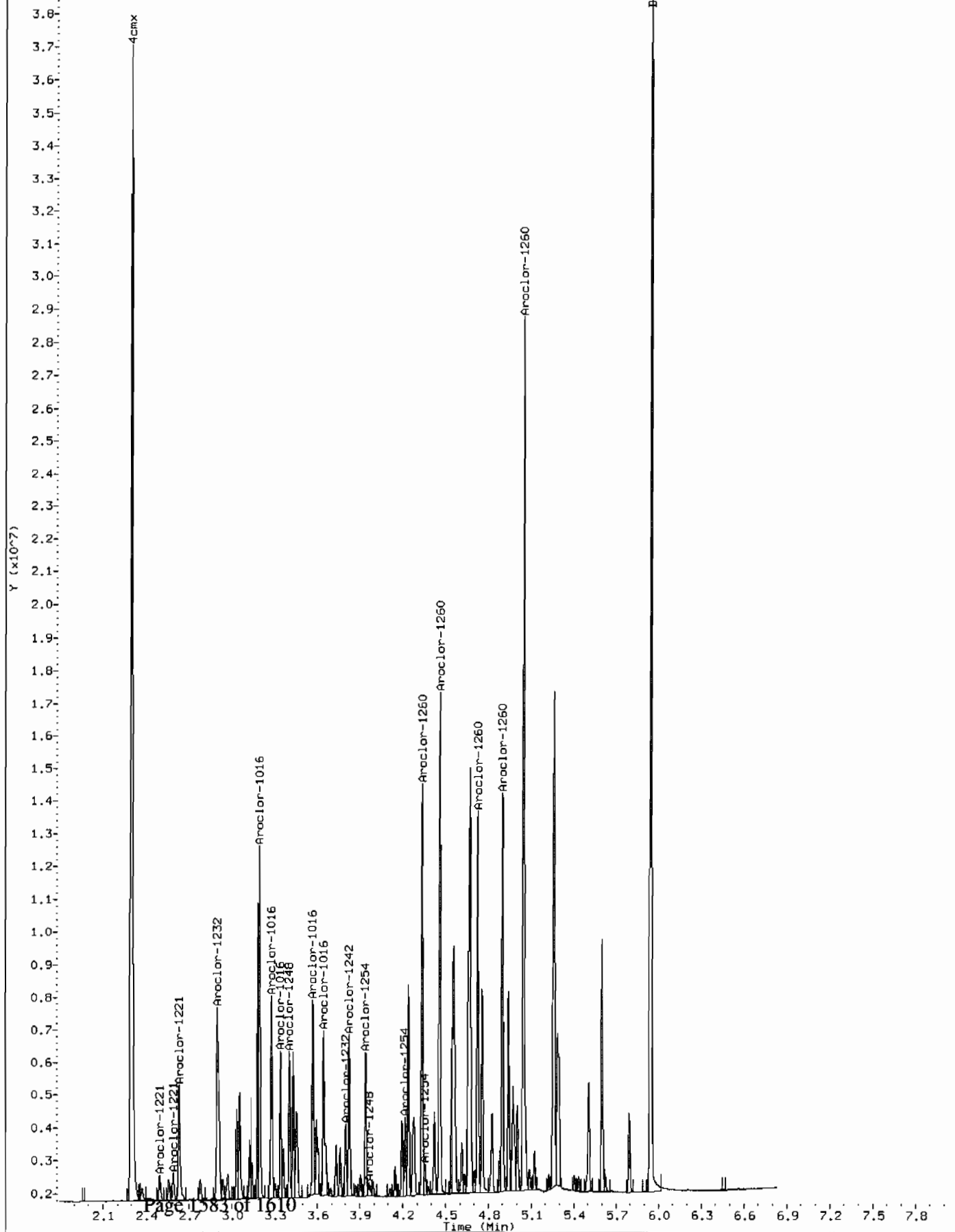
/chem/ecdl.a.i/012710.b/035b3501-1.d



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012710.b/035b3501-1.0
Operator: YS1
Injection Date: 27-JAN-2010 12:51
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS



Comment: Before manual integration
Data File: /chem/ecdl1.i/012710.b/orig-035b3501-1.d
Operator: YSl
Injection Date: 27-JAN-2010 12:51
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS



MISCELLANEOUS DATA

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standard Logbook.
Initial Calibration Std ID's: See Calibration History and Standard Logbook.
GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention
BF-Before, AF-After.

Injection Volume: 0.5 ul

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016f1601.d	WARI00122-12 62	YS1	22-JAN-2010 08:36		1012210	1.01	IARI262 I-CAL LEVEL 4
017f1701.d	IARI00104-04 62	YS1	22-JAN-2010 08:47		1012210	1.01	IARI262 I-CAL LEVEL 5
018f1801.d	WARI00104-62	YS1	22-JAN-2010 08:57		1012210	1.01	PASSED ON BOTH COLUMNS
019f1901.d	WARI00122-13 60	YS1	22-JAN-2010 09:08		1012210	1.01	IARI660 I-CAL LEVEL 1
020f2001.d	WARI00122-14 60	YS1	22-JAN-2010 09:19		1012210	1.01	IARI660 I-CAL LEVEL 2
021f2101.d	WARI00122-15 60	YS1	22-JAN-2010 09:29		1012210	1.01	IARI660 I-CAL LEVEL 3
022f2201.d	WARI00122-16 60	YS1	22-JAN-2010 09:40		1012210	1.01	IARI660 I-CAL LEVEL 4
023f2301.d	IARI00104-01 60	YS1	22-JAN-2010 09:50		1012210	1.01	IARI660 I-CAL LEVEL 5
024f2401.d	WARI00104-60 01	YS1	22-JAN-2010 10:01		1012210	1.01	PASSED ON BOTH COLUMNS
025f2501.d	WARI00122-68	YS1	22-JAN-2010 10:11		1012210	1.01	PASSED ON BOTH COLUMNS
026f2601.d	WARI00129-DDT	YS1	22-JAN-2010 10:22		1012210	1.01	DDT ANALOG STANDARD
027f2701.d	WARI00105-99 02	YS1	22-JAN-2010 10:32		1012210	1.01	CLEAN
028f2801.d	I202021361	YS1	22-JAN-2010 10:43	1944018	ISP4017	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	I202021362	YS1	22-JAN-2010 10:55	1944018	ISP4017	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	I245199001	YS1	22-JAN-2010 11:08	1944018	ISP4017	2.01ORNL	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	I202021363	YS1	22-JAN-2010 11:21	1944018	ISP4017	2.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	I202021364	YS1	22-JAN-2010 11:33	1944018	ISP4017	2.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	WARI00104-60 02	YS1	22-JAN-2010 11:46		1012210	1.01	PASSED ON BOTH COLUMNS
034f3401.d	WARI00105-99 03	YS1	22-JAN-2010 11:56		1012210	1.01	CLEAN
035f3501.d	I202018791	YS1	22-JAN-2010 12:07	1942925		1.01QC A	REPORT FROM ECD8

Instrument Batch: /chem/ecd1a.i/012210.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	I202018792	YS1	22-JAN-2010 12:17	1942925		1.01QC A		REPORT FROM ECD8
037f3701.d	I243909001	YS1	22-JAN-2010 12:28	1942925	I2010MDLVECD11232-L1	1.01QCQA		UPLOAD BOTH COLUMNS
038f3801.d	I243909002	YS1	22-JAN-2010 12:39	1942925	I2010MDLVECD11232-L1	1.01QCQA		UPLOAD BOTH COLUMNS
039f3901.d	I243909003	YS1	22-JAN-2010 12:49	1942925	I2010MDLVECD11232-L1	1.01QCQA		UPLOAD BOTH COLUMNS
040f4001.d	I243909004	YS1	22-JAN-2010 13:00	1942925	I2010MDLVECD11232-L1	1.01QCQA		UPLOAD BOTH COLUMNS

041f4101.d	WARI00104-60 03	YS1	122-JAN-2010 13:10		1012210	1.01	PASSED ON BOTH COLUMNS
042f4201.d	WARI00105-99 04	YS1	122-JAN-2010 13:21		1012210	1.01	CLEAN
043f4301.d	1202021249	YS1	122-JAN-2010 13:31	943953	110-1274	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	1202021250	YS1	122-JAN-2010 13:42	943953	110-1274	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	1244920001	YS1	122-JAN-2010 13:53	943953	110-1274	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1244923001	YS1	122-JAN-2010 14:03	943953	110-1287	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	1244923002	YS1	122-JAN-2010 14:16	943953	110-1287	1.01LANL	DUES RR 10X
048f4801.d	1244923003	YS1	122-JAN-2010 14:28	943953	110-1287	1.01LANL	DUES RR
049f4901.d	1244923004	YS1	122-JAN-2010 14:41	943953	110-1287	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1244923005	YS1	122-JAN-2010 14:54	943953	110-1287	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	1244923006	YS1	122-JAN-2010 15:06	943953	110-1287	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	1244923007	YS1	122-JAN-2010 15:19	943953	110-1287	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	WARI00104-60 04	YS1	122-JAN-2010 15:32		1012210	1.01	PASSED ON BOTH COLUMNS
054f5401.d	WARI00105-99 05	YS1	122-JAN-2010 15:44		1012210	1.01	CLEAN
055f5501.d	1244923008	YS1	122-JAN-2010 15:57	943953	110-1287	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/012210.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1244923009	YS1	122-JAN-2010 16:10	943953	110-1287	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	1244923010	YS1	122-JAN-2010 16:22	943953	110-1287	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	1245106001	YS1	122-JAN-2010 16:35	943953	110-1304	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	1202021251	YS1	122-JAN-2010 16:48	943953	110-1304	1.01QC A		UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	1202021252	YS1	122-JAN-2010 17:00	943953	110-1304	1.01QC A		UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1245106002	YS1	122-JAN-2010 17:13	943953	110-1304	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	1245106003	YS1	122-JAN-2010 17:26	943953	110-1304	5.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	1245106004	YS1	122-JAN-2010 17:38	943953	110-1304	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1245106005	YS1	122-JAN-2010 17:51	943953	110-1304	1.01LANL		UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	WAR100104-60 05	YS1	22-JAN-2010 18:03	1	012210	1	1.01	PASSED ON BOTH COLUMNS	1
066f6601.d	WAR100105-99 06	YS1	22-JAN-2010 18:16	1	012210	1	1.01	CLEAN	1
067f6701.d	245106006	YS1	22-JAN-2010 18:29	943953	10-1304	1	1.01	LANL	1
068f6801.d	245106007	YS1	22-JAN-2010 18:41	943953	10-1304	1	1.01	LANL	1
069f6901.d	245106008	YS1	22-JAN-2010 18:54	943953	10-1304	1	1.01	LANL	1
070f7001.d	244923002	YS1	22-JAN-2010 19:07	943953	10-1287	1	10.01	LANL	1
071f7101.d	244923003	YS1	22-JAN-2010 19:19	943953	10-1287	1	1.01	LANL	1
072f7201.d	WAR100104-60 06	YS1	22-JAN-2010 19:32	1	012210	1	1.01	PASSED ON BOTH COLUMNS	1
073f7301.d	WAR100105-99 07	YS1	22-JAN-2010 19:44	1	012210	1	1.01	CLEAN	1

Instrument Batch: /chem/ecdl1a.i/012210.b

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GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/28/2010 METHOD: ECD1-F-8082-121409.m OPERATOR: YSI REVIEWED BY: _____
 HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DA699
 ALUMINA LOT 1240553-A
 COPPER LOT 236547-A

Calibration & QC Information
 Initial Calibration Dates: See Calibration History and Standard Logbook.
 Initial Calibration Std ID's: See Calibration History and Standard Logbook.
 GEL SOP GL-OA-E-040 Polychlorinated Biphenyl: EPA 8082
 Chromatogram Abbreviation Legend: AB-Assign Baseline, AP-Assign Peak,
 DNC-Do Not Call, DMP-Doesn't Match Pattern, NC-Not Confirmed, RT-Retention Time,
 BF-Before, AF-After.

Sequence Number: /chem/ecd1a.i/012710.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100105-99 01	YS1	27-JAN-2010 06:27		012710	1.0	CLEAN	
002f0201.d	WAR100104-60 01	YS1	27-JAN-2010 06:38		012710	1.0	PASSED ON BOTH COLUMNS	
003f0301.d	WAR091216-54	YS1	27-JAN-2010 06:49		012710	1.0	PASSED ON BOTH COLUMNS	
004f0401.d	WAR091217-42	YS1	27-JAN-2010 06:59		012710	1.0	PASSED ON BOTH COLUMNS	
005f0501.d	WAR091217-48	YS1	27-JAN-2010 07:09		012710	1.0	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100104-32	YS1	27-JAN-2010 07:20		012710	1.0	PATTERN ONLY	
007f0701.d	WAR100104-21	YS1	27-JAN-2010 07:30		012710	1.0	PATTERN ONLY	
008f0801.d	WAR100104-62	YS1	27-JAN-2010 07:41		012710	1.0	PATTERN ONLY	
009f0901.d	WAR100107-68	YS1	27-JAN-2010 07:51		012710	1.0	PATTERN ONLY	
010f1001.d	WAR091219-DDT	YS1	27-JAN-2010 08:02		012710	1.0	DDT ANALOG STANDARD	
011f1101.d	WAR100105-99 02	YS1	27-JAN-2010 08:12		012710	1.0	CLEAN	
012f1201.d	1202024973	YS1	27-JAN-2010 08:23	945490	012710	1.0	QC A UPLOAD BOTH COLUMNS, USE FRONT	
013f1301.d	1202024974	YS1	27-JAN-2010 08:33	945490		1.0	QC A UPLOAD BOTH COLUMNS, USE FRONT	
014f1401.d	1202024975	YS1	27-JAN-2010 08:44	945490		1.0	QC A UPLOAD BOTH COLUMNS, USE FRONT	
015f1501.d	1245452001	YS1	27-JAN-2010 08:54	945490	1245452	1.0	MECP UPLOAD BOTH COLUMNS, USE FRONT	

Instrument Batch: /chem/ecd1a.i/012710.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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1016f1601.d	1245452002	YS1	127-JAN-2010 09:07	1945490	1245452	1.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1017f1701.d	1245452003	YS1	127-JAN-2010 09:19	1945490	1245452	1.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1018f1801.d	1245452004	YS1	127-JAN-2010 09:32	1945490	1245452	1.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1019f1901.d	1245452005	YS1	127-JAN-2010 09:44	1945490	1245452	1.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1020f2001.d	1245452006	YS1	127-JAN-2010 09:57	1945490	1245452	1.0	MECP	UPLOAD BOTH COLUMNS, USE FRONT
1021f2101.d	1245452007	YS1	127-JAN-2010 10:09	1012710	1012710	1.0		PASSED ON BOTH COLUMNS
1022f2201.d	1245452008	YS1	127-JAN-2010 10:20	1012710	1012710	1.0		CLEAN
1023f2301.d	1245452009	YS1	127-JAN-2010 10:30	1945138	1245337	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1024f2401.d	1245452010	YS1	127-JAN-2010 10:41	1945138	1245337	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1025f2501.d	1245452011	YS1	127-JAN-2010 10:51	1945138	1245337	1.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1026f2601.d	1245452012	YS1	127-JAN-2010 11:04	1945138	1245337	1.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1027f2701.d	1245452013	YS1	127-JAN-2010 11:17	1945138	1245452	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1028f2801.d	1245452014	YS1	127-JAN-2010 11:29	1945138	1245452	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
1029f2901.d	1245452015	YS1	127-JAN-2010 11:42	1945138	1245337	1.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1030f3001.d	1245452016	YS1	127-JAN-2010 11:54	1945138	1245337	1.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1031f3101.d	1245452017	YS1	127-JAN-2010 12:07	1945138	1245337	1.0	WSRB	UPLOAD BOTH COLUMNS, USE HIGHER
1032f3201.d	1245452018	YS1	127-JAN-2010 12:19	1012710	1012710	1.0		PASSED ON BOTH COLUMNS
1033f3301.d	1245452019	YS1	127-JAN-2010 12:30	1012710	1012710	1.0		CLEAN
1034f3401.d	1245452020	YS1	127-JAN-2010 12:40	1944883	110-1299	1.0	QC A	UPLOAD BOTH COLUMNS, HIGHER
1035f3501.d	1245452021	YS1	127-JAN-2010 12:51	1944883	110-1299	1.0	QC A	UPLOAD BOTH COLUMNS, HIGHER

Instrument Batch: /chem/ecdl1a.i/012710.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	1245096001	YS1	127-JAN-2010 13:01	1944883	110-1299	1.0	LANL	UPLOAD BOTH COLUMNS, HIGHER
1037f3701.d	1245096002	YS1	127-JAN-2010 13:14	1944883	110-1299	1.0	LANL	UPLOAD BOTH COLUMNS, HIGHER
1038f3801.d	1245096003	YS1	127-JAN-2010 13:26	1944883	110-1299	10.0	LANL	UPLOAD BOTH COLUMNS, HIGHER
1039f3901.d	1245096004	YS1	127-JAN-2010 13:39	1944883	110-1299	5.0	LANL	UPLOAD BOTH COLUMNS, HIGHER
1040f4001.d	1245096005	YS1	127-JAN-2010 13:52	1944883	110-1299	1.0	LANL	UPLOAD BOTH COLUMNS, HIGHER

1041f4101.d	1245096006	YS1	127-JAN-2010 14:04	1944883	10-1299	1	5.0 LANL	1	UPLOAD BOTH COLUMNS,HIGHER
1042f4201.d	1245096008	YS1	127-JAN-2010 14:17	1944883	10-1299	1	1.0 LANL	1	DOSE RR 20X
1043f4301.d	1245096009	YS1	127-JAN-2010 14:29	1944883	10-1299	1	10.0 LANL	1	DOSE RR 10X
1044f4401.d	1245096009	YS1	127-JAN-2010 14:42	1	012710	1	1.0	1	PASSED ON BOTH COLUMNS
1045f4501.d	1245096005	YS1	127-JAN-2010 14:52	1	012710	1	1.0	1	CLEAN
1046f4601.d	1245096010	YS1	127-JAN-2010 15:03	1944883	10-1299	1	1.0 LANL	1	DOSE RR 20X
1047f4701.d	1245096011	YS1	127-JAN-2010 15:15	1944883	10-1299	1	1.0 LANL	1	DOSE RR 20X
1048f4801.d	1245099015	YS1	127-JAN-2010 15:28	1944883	10-1301	1	1.0 LANL	1	DOSE RR
1049f4901.d	1245114002	YS1	127-JAN-2010 15:40	1944883	10-1324	1	1.0 LANL	1	UPLOAD BOTH COLUMNS,HIGHER
1050f5001.d	1245116013	YS1	127-JAN-2010 15:53	1944883	10-1327	1	1.0 LANL	1	UPLOAD BOTH COLUMNS,HIGHER
1051f5101.d	1245116016	YS1	127-JAN-2010 16:06	1944883	10-1327	1	1.0 LANL	1	UPLOAD BOTH COLUMNS,HIGHER
1052f5201.d	1245096014	YS1	127-JAN-2010 16:18	1944883	012710	1	1.0	1	PASSED ON BOTH COLUMNS
1053f5301.d	1245096005	YS1	127-JAN-2010 16:31	1944883	012710	1	1.0	1	CLEAN
1054f5401.d	1245114006	YS1	127-JAN-2010 16:43	1944883	10-1324	1	1.0 LANL	1	DOSE RR
1055f5501.d	1245114005	YS1	127-JAN-2010 16:56	1944883	10-1324	1	1.0 LANL	1	DOSE RR

Instrument Batch: /chem/ecd1a.i/012710.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1056f5601.d	1245114004	YS1	127-JAN-2010 17:09	1944883	10-1324	1	1.0 LANL	DOSE RR
1057f5701.d	1202023864	YS1	127-JAN-2010 17:21	1944883	10-1324	1	1.0 QC A	DOSE RR
1058f5801.d	1202023863	YS1	127-JAN-2010 17:34	1944883	10-1324	1	1.0 QC A	DOSE RR
1059f5901.d	1245114003	YS1	127-JAN-2010 17:46	1944883	10-1324	1	1.0 LANL	DOSE RR
1060f6001.d	1245096005	YS1	127-JAN-2010 17:59	1	012710	1	1.0	DOSE RR
1061f6101.d	1245096008	YS1	127-JAN-2010 18:12	1944883	10-1299	1	20.0 LANL	DOSE RR
1062f6201.d	1245096009	YS1	127-JAN-2010 18:24	1944883	10-1299	1	10.0 LANL	DOSE RR
1063f6301.d	1245096009	YS1	127-JAN-2010 18:37	1	012710	1	1.0	DOSE LOW ON BACK
1064f6401.d	1245096008	YS1	127-JAN-2010 18:49	1	012710	1	1.0	CLEAN

REVIEWED BY: _____

DA699 _____

T 236547-A

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
0001f0101.d	WAR1001005-99 01	YS1	128-JAN-2010 09:16		012810a	1.0		CLEAN
0002f0201.d	WAR1001004-60 01	YS1	128-JAN-2010 09:27		012810a	1.0		DOSE RE-I-CAL
0003f0301.d	WAR091216-54	YS2	128-JAN-2010 09:37		012810a	1.0		PASSED ON BOTH COLUMNS
0004f0401.d	WAR091217-42	YS1	128-JAN-2010 09:48		012810a	1.0		PASSED ON BOTH COLUMNS
0005f0501.d	WAR091217-48	YS1	128-JAN-2010 09:58		012810a	1.0		PASSED ON BOTH COLUMNS
0006f0601.d	WAR-00104-32	YS1	128-JAN-2010 10:09		012810a	1.0		PATTERN ONLY
0007f0701.d	WAR1001004-21	YS1	128-JAN-2010 10:19		012810a	1.0		PATTERN ONLY
0008f0801.d	WAR1001004-62	YS1	128-JAN-2010 10:30		012810a	1.0		PATTERN ONLY
0009f0901.d	WAR1001007-68	YS1	128-JAN-2010 10:40		012810a	1.0		DOSE RE-I-CAL
0010f1001.d	WAR100100128-01 60	YS1	128-JAN-2010 10:51		012810a	1.0		ARI660 I-CAL LEVEL 1
0011f1101.d	WAR100100128-02 60	YS1	128-JAN-2010 11:01		012810a	1.0		ARI660 I-CAL LEVEL 2
0012f1201.d	WAR100100128-03 60	YS1	128-JAN-2010 11:12		012810a	1.0		ARI660 I-CAL LEVEL 3
0013f1301.d	WAR100100128-04 60	YS1	128-JAN-2010 11:22		012810a	1.0		ARI660 I-CAL LEVEL 4
0014f1401.d	WAR100100104-01-01	YS1	128-JAN-2010 11:34		012810a	1.0		ARI660 I-CAL LEVEL 5
0015f1501.d	WAR100100104-60 01	YS1	128-JAN-2010 11:44		012810a	1.0		PASSED ON BOTH COLUMNS

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016f1601.d	WAR100122-68	YS1	28-JAN-2010 11:55		012810a		1.0	DUSE RE-ICAL	
017f1701.d	WAR091219-DDT	YS1	28-JAN-2010 12:05		012810a		1.0	DDT ANALOG STANDARD	
018f1801.d	WAR100128-05 68	YS1	28-JAN-2010 12:18		012810a		1.0	AR1268 I-CAL LEVEL 1	
019f1901.d	WAR100128-06 68	YS1	28-JAN-2010 12:29		012810a		1.0	AR1268 I-CAL LEVEL 2	
020f2001.d	WAR100128-07 68	YS1	28-JAN-2010 12:39		012810a		1.0	AR1268 I-CAL LEVEL 3	
021f2101.d	WAR100128-08 68	YS1	28-JAN-2010 12:50		012810a		1.0	AR1268 I-CAL LEVEL 4	
022f2201.d	IAR100104-05	YS1	28-JAN-2010 13:00		012810a		1.0	AR1268 I-CAL LEVEL 5	
023f2301.d	WAR100107-68	YS1	28-JAN-2010 13:11		012810a		1.0	PASSED ON BOTH COLUMNS	
024f2401.d	WAR100105-99 02	YS1	28-JAN-2010 13:21		012810a		1.0	CLEAN	
025f2501.d	1202026135	YS1	28-JAN-2010 13:32	945965	245586		1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
026f2601.d	1202026136	YS1	28-JAN-2010 13:42	945965	245586		1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
027f2701.d	245586001	YS1	28-JAN-2010 13:53	945965	245586		250.0 NNES	UPLOAD BOTH COLUMNS, USE HIGHER	
028f2801.d	1202026137	YS1	28-JAN-2010 14:05	945965	245586		250.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
029f2901.d	1202026138	YS1	28-JAN-2010 14:18	945965	245586		250.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER	
030f3001.d	245586002	YS1	28-JAN-2010 14:30	945965	245586		50.0 NNES	UPLOAD BOTH COLUMNS, USE HIGHER	
031f3101.d	245586003	YS1	28-JAN-2010 14:43	945965	245586		1.0 NNES	UPLOAD BOTH COLUMNS, USE HIGHER	
032f3201.d	WAR100104-60 02	YS1	28-JAN-2010 14:56		012810a		1.0	PASSED ON BOTH COLUMNS	
033f3301.d	WAR091216-54 02	YS1	28-JAN-2010 15:06		012810a		1.0	PASSED ON BOTH COLUMNS	
034f3401.d	WAR091217-42 02	YS1	28-JAN-2010 15:16		012810a		1.0	PASSED ON BOTH COLUMNS	
035f3501.d	WAR091217-48 02	YS1	28-JAN-2010 15:27		012810a		1.0	PASSED ON BOTH COLUMNS	

Instrument Batch: /chem/ecd1a.i/012810a.b

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Data File		GEL Lab Sample ID		Analyst		Injection Date/Time		Batch		SDG		Dilution		Client		Comments
036f3601.d		WAR100104-32 02		YS1		28-JAN-2010 15:38				012810a		1.0				PATTERN ONLY
037f3701.d		WAR100104-21 02		YS1		28-JAN-2010 15:48				012810a		1.0				PATTERN ONLY
038f3801.d		WAR100104-62 02		YS1		28-JAN-2010 15:58				012810a		1.0				PATTERN ONLY
039f3901.d		WAR100122-68 02		YS1		28-JAN-2010 16:09				012810a		1.0				PASSED ON BOTH COLUMNS

040f4001.d	WAR100105--99 03	YS1	128-JAN-2010 16:19		1012810a	1.01	CLEAN
041f4101.d	1245096008	YS1	128-JAN-2010 16:30	944883	110-1299	20.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	1245096009	YS1	128-JAN-2010 16:43	944883	110-1299	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	1245096010	YS1	128-JAN-2010 16:55	944883	110-1299	20.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	1245096011	YS1	128-JAN-2010 17:08	944883	110-1299	20.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	1245099015	YS1	128-JAN-2010 17:20	944883	110-1301	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1245114003	YS1	128-JAN-2010 17:33	944883	110-1324	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	11202023863	YS1	128-JAN-2010 17:45	944883	110-1324	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	11202023864	YS1	128-JAN-2010 17:58	944883	110-1324	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1245114004	YS1	128-JAN-2010 18:11	944883	110-1324	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1245114005	YS1	128-JAN-2010 18:23	944883	110-1324	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	WAR100104--60 03	YS1	128-JAN-2010 18:38		1012810a	1.01	PASSED ON BOTH COLUMNS
052f5201.d	WAR100105--99 04	YS1	128-JAN-2010 18:50		1012810a	1.01	CLEAN
053f5301.d	1245114006	YS1	128-JAN-2010 19:03	944883	110-1324	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	WAR100104--60 04	YS1	128-JAN-2010 19:17		1012810a	1.01	PASSED ON BOTH COLUMNS
055f5501.d	WAR100105--99 05	YS1	128-JAN-2010 19:30		1012810a	1.01	CLEAN

Instrument Batch: /chem/ecdl1a.i/012810a.b

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056f5601.d	11202026131	YS1	128-JAN-2010 19:42	945963	110-1372	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	11202026132	YS1	128-JAN-2010 19:55	945963	110-1372	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	1245376001	YS1	128-JAN-2010 20:08	945963	110-1372	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	1245376002	YS1	128-JAN-2010 20:20	945963	110-1372	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	1245376003	YS1	128-JAN-2010 20:33	945963	110-1372	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1245376004	YS1	128-JAN-2010 20:45	945963	110-1372	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	1245376005	YS1	128-JAN-2010 20:58	945963	110-1372	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	1245376006	YS1	128-JAN-2010 21:10	945963	110-1372	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1245376007	YS1	128-JAN-2010 21:23	945963	110-1372	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER

065f6501.d	1245381002	YS1	128-JAN-2010 21:36	945963	110-1380	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	1245381004-60 05	YS1	128-JAN-2010 21:48		1012810a	1.0	PASSED ON BOTH COLUMNS
067f6701.d	1245381005-99 06	YS1	128-JAN-2010 22:01		1012810a	1.0	CLEAN
068f6801.d	1245384001	YS1	128-JAN-2010 22:13	945963	110-1382	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	1202026133	YS1	128-JAN-2010 22:26	945963	110-1382	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	1202026134	YS1	128-JAN-2010 22:39	945963	110-1382	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	1245384002	YS1	128-JAN-2010 22:51	945963	110-1382	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	1245384003	YS1	128-JAN-2010 23:04	945963	110-1382	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	1245384004	YS1	128-JAN-2010 23:16	945963	110-1382	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
074f7401.d	1245384005	YS1	128-JAN-2010 23:29	945963	110-1382	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
075f7501.d	1245384006	YS1	128-JAN-2010 23:41	945963	110-1382	1.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/012810a.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1245384007	YS1	128-JAN-2010 23:54	945963	110-1382	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	1245384008	YS1	129-JAN-2010 00:07	945963	110-1382	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	WAR100104-60 06	YS1	129-JAN-2010 00:19		012810a	1.0		PASSED ON BOTH COLUMNS
079f7901.d	WAR100105-99 07	YS1	129-JAN-2010 00:32		012810a	1.0		CLEAN
080f8001.d	1245384012	YS1	129-JAN-2010 00:45	945963	110-1382	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	WAR100104-60 07	YS1	129-JAN-2010 00:57		012810a	1.0		PASSED ON BOTH COLUMNS
082f8201.d	WAR100105-99 08	YS1	129-JAN-2010 01:10		012810a	1.0		CLEAN
083f8301.d	1202026309	YS1	129-JAN-2010 01:22	946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	1202026310	YS1	129-JAN-2010 01:35	946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	1202026313	YS1	129-JAN-2010 01:48	946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
086f8601.d	1245309001	YS1	129-JAN-2010 02:00	946042	EUI-7483	1.0	CARE	UPLOAD BOTH COLUMNS, USE HIGHER
087f8701.d	1202026311	YS1	129-JAN-2010 02:13	946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	1202026312	YS1	129-JAN-2010 02:25	946042	EUI-7483	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

089f8901.d	WAR100104-60 08	YSL	29-JAN-2010 02:38		012810a		1.0	PASSED ON BOTH COLUMNS	
090f9001.d	WAR100105-99 09	YSL	29-JAN-2010 02:51		012810a		1.0	CLEAN	

Instrument Batch: /chem/ecdl1a.i/012810a.b

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/047b4701.d
 Lab Smp Id: 1202023863 Client Smp ID: RE15-10-8411MS
 Inj Date : 28-JAN-2010 17:45
 Operator : YSl Inst ID: ecd1a.i
 Smp Info : |1202023863|1|
 Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|MS|
 Comment :
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 47 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1324.sub
 Target Version: 3.50 Sample Matrix: Soil

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	30.13000	Weight of sample extracted (g)
M	15.35810	% 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			
2.297	2.298	-0.001	22582641 80.8900	3.2	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.943	5.944	-0.001	15282444 87.5206	3.4	80.00- 120.00	100.00	
1 Aroclor-1016				CAS #: 12674-11-2			
3.194	3.195	-0.001	4481905 367.525	14.4	80.00- 120.00	100.00(M)	
3.276	3.278	-0.002	3351514 409.164	16.0	44.90- 84.90	74.78	
3.340	3.341	-0.001	2198327 432.993	17.0	20.22- 60.22	49.05	
3.566	3.568	-0.002	2768403 432.704	17.0	30.82- 70.82	61.77	
3.642	3.644	-0.002	2021044 341.487	13.4	27.45- 67.45	45.09	
Average of Peak Concentrations =				15.6			

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
7 Aroclor-1260					CAS #: 11096-82-5				
4.332	4.335	-0.003	4605277	386.125	15.1	80.00-	120.00	100.00	
4.458	4.459	-0.001	5359160	372.985	14.6	101.61-	141.61	116.37	
4.724	4.725	-0.001	4606165	422.250	16.6	71.00-	111.00	100.02	
4.897	4.899	-0.002	4819413	430.095	16.9	73.09-	113.09	104.65	
5.046	5.046	0.000	15012515	618.743	24.3	185.37-	225.37	325.99	
Average of Peak Concentrations =					17.5				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecod1a.i/012810a.b/047b4701.d

Date: 28-JAN-2010 17:45

Client ID: REIS-10-841HS

Sample Info: 1120202386311

Volume Injected (uL): 1.0

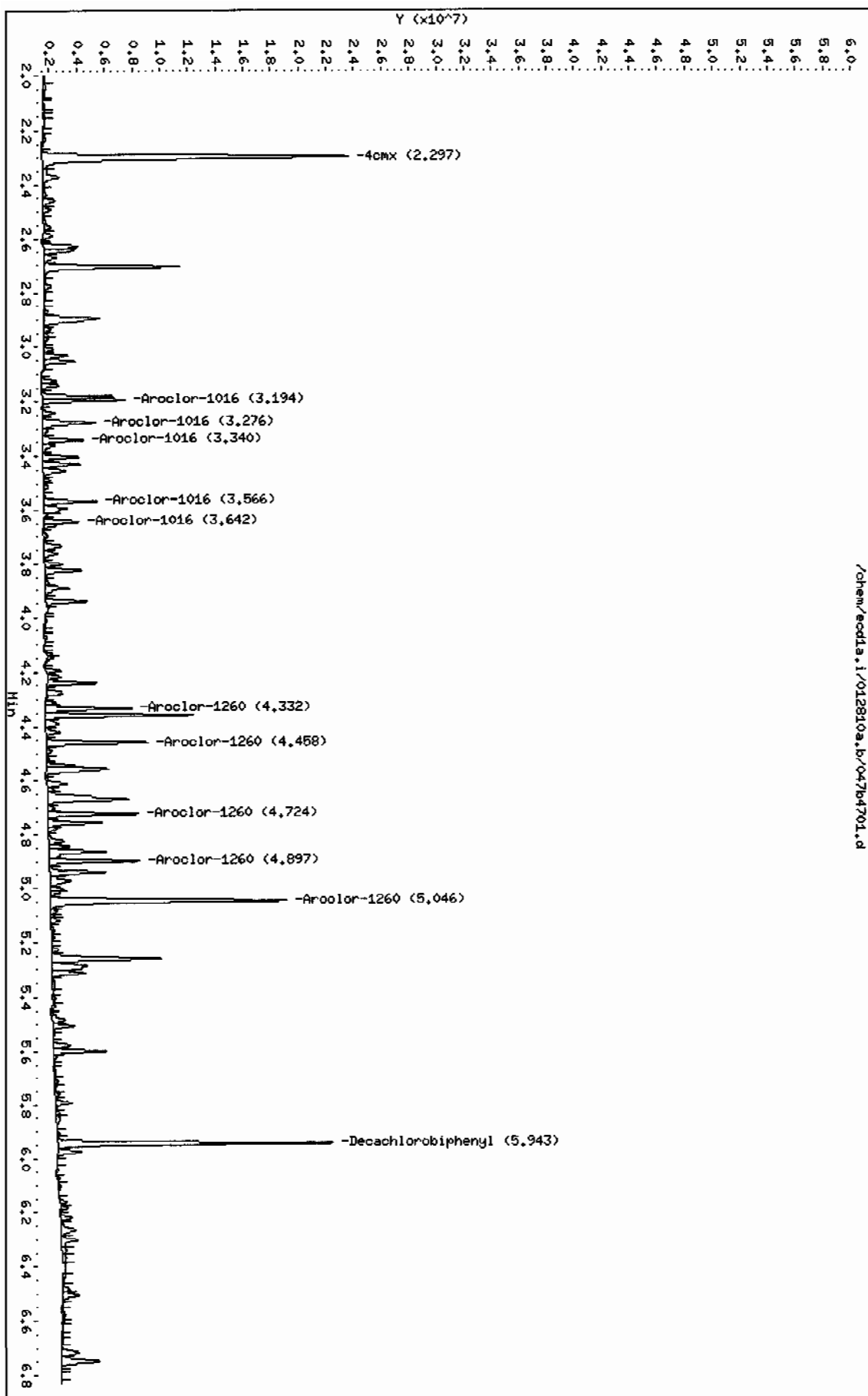
Column phase: CLP2

Instrument: ecod1a.i

Operator: YSL

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/047f4701.d
 Lab Smp Id: 1202023863 Client Smp ID: RE15-10-8411MS
 Inj Date : 28-JAN-2010 17:45
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202023863|1|
 Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|MS|||
 Comment :
 Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m
 Meth Date : 29-Jan-2010 09:10 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 47 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1324.sub
 Target Version: 3.50 Sample Matrix: Soil

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	30.13000	Weight of sample extracted (g)
M	15.35810	% Moisture

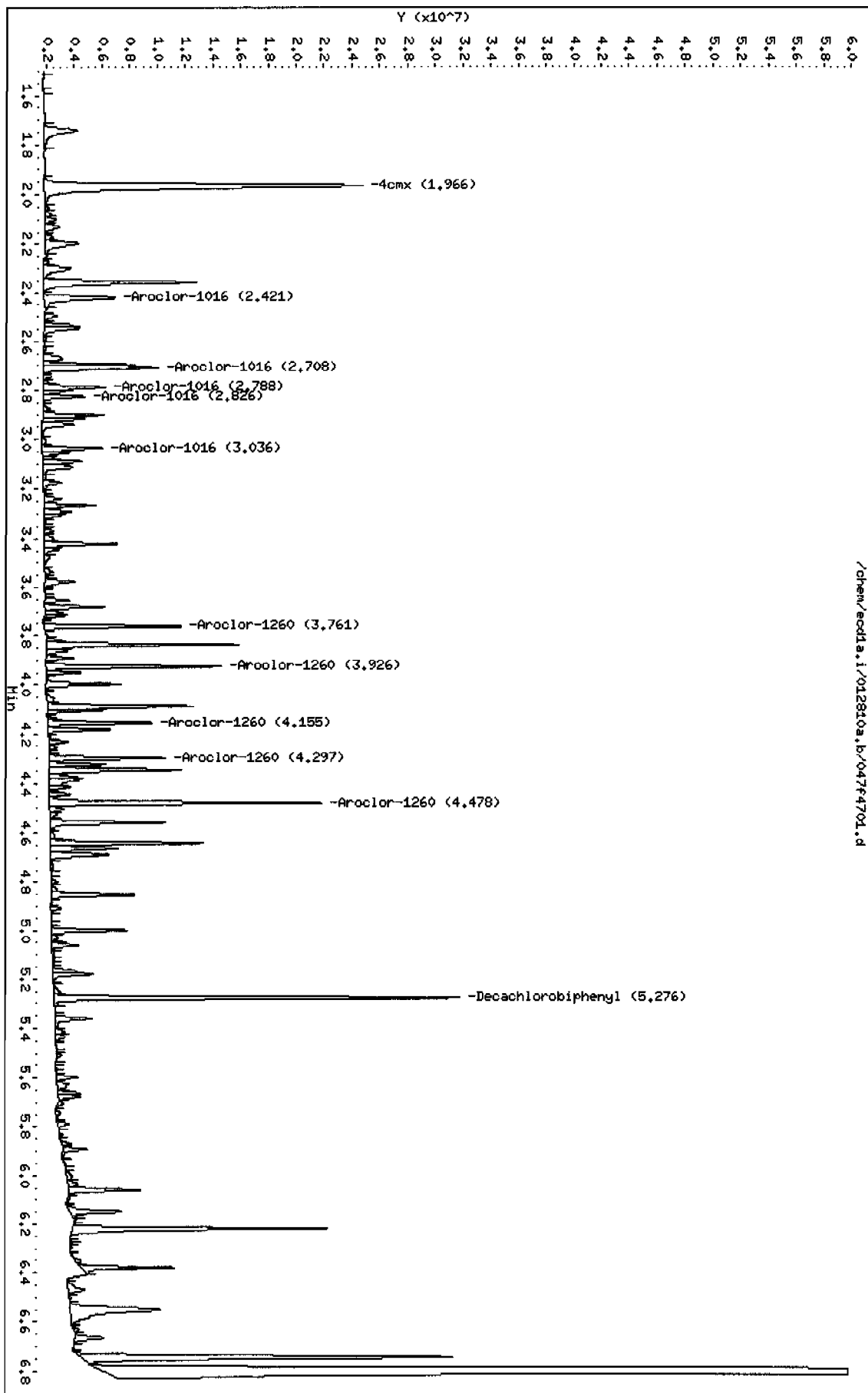
Cpnd Variable Local Compound Variable

CONCENTRATIONS							
RT	EXP RT	DLT RT	RESPONSE (ug/L)	ON-COL	FINAL	TARGET RANGE	RATIO
\$ 11 4cmx					CAS #: 877-09-8		
1.966	1.966	0.000	30341325 78.4101	3.1	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.276	5.278	-0.002	21992037 76.5842	3.0	80.00- 120.00	100.00	
1 Aroclor-1016					CAS #: 12674-11-2		
2.421	2.422	-0.001	6570351 476.815	18.7	80.00- 120.00	100.00	
2.708	2.710	-0.002	7220628 412.487	16.2	113.22- 153.22	109.90	
2.788	2.791	-0.003	3829520 332.975	13.0	65.23- 105.23	58.28	
2.826	2.828	-0.002	2333184 340.829	13.4	31.10- 71.10	35.51	
3.036	3.039	-0.003	3334206 375.415	14.7	45.89- 85.89	50.75	
Average of Peak Concentrations =				15.2			

CONCENTRATIONS						
			ON-COL		FINAL	
RT	EXP RT	DLT RT	RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE RATIO
=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260			CAS #: 11096-82-5			
3.761	3.765	-0.004	7223961	430.570	16.9	80.00- 120.00 100.00
3.926	3.928	-0.002	9478423	374.137	14.7	131.66- 171.66 131.21
4.155	4.158	-0.003	5280990	352.563	13.8	70.17- 110.17 73.10
4.297	4.301	-0.004	5987350	384.750	15.1	74.48- 114.48 82.88
4.478	4.480	-0.002	15089262	435.529	17.1	193.45- 233.45 208.88
Average of Peak Concentrations =			15.5			

Data File: /chem/ecdda.i/012810a.b/0474701.d
Date: 28-JAN-2010 17:45
Client ID: RELS-10-841MS
Sample Info: 1420202386311
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdda.i
Operator: VSL
Column diameter: 0.25



Data File: /chem/ecdl1a.i/012810a.b/048b4801.d
 Report Date: 29-Jan-2010 07:35

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/048b4801.d
 Lab Smp Id: 1202023864 Client Smp ID: RE15-10-8411MSD
 Inj Date : 28-JAN-2010 17:58
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202023864|1|
 Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|MSD|
 Comment :
 Method : /chem/ecdl1a.i/012810a.b/ECD1-B-8082-121409.m
 Meth Date : 29-Jan-2010 06:54 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 48 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1324.sub
 Target Version: 3.50 Sample Matrix: Soil

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	15.35810	% 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							
2.298	2.298	0.000	20988745 75.1807	3.0	80.00- 120.00	100.00	
CAS #: 2051-24-3							
5.943	5.944	-0.001	15120019 86.5904	3.4	80.00- 120.00	100.00	
CAS #: 12674-11-2							
3.194	3.195	-0.001	4035215 330.895	13.0	80.00- 120.00	100.00	
3.278	3.278	0.000	2887696 352.540	13.9	44.90- 84.90	71.56	
3.341	3.341	0.000	1761972 347.047	13.6	20.22- 60.22	43.66	
3.567	3.568	-0.001	2236066 349.499	13.8	30.82- 70.82	55.41	
3.643	3.644	-0.001	2123643 358.823	14.1	27.45- 67.45	52.63	
Average of Peak Concentrations =				13.7			

CONCENTRATIONS							
			ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
7 Aroclor-1260					CAS #: 11096-82-5		
4.333	4.335	-0.002	4352999	364.973	14.4	80.00~ 120.00	100.00
4.458	4.459	-0.001	4978632	346.501	13.6	101.61~ 141.61	114.37
4.724	4.725	-0.001	4320943	396.104	15.6	71.00~ 111.00	99.26
4.898	4.899	-0.001	4698664	419.319	16.5	73.09~ 113.09	107.94
5.046	5.046	0.000	14500527	597.642	23.5	185.37~ 225.37	333.12
Average of Peak Concentrations *					16.7		

Data File: /chem/eod1a.i/012810a.b/048b4801.d

Date: 28-JUN-2010 17:58

Client ID: REIS-10-841MSD

Sample Info: 1120202386411

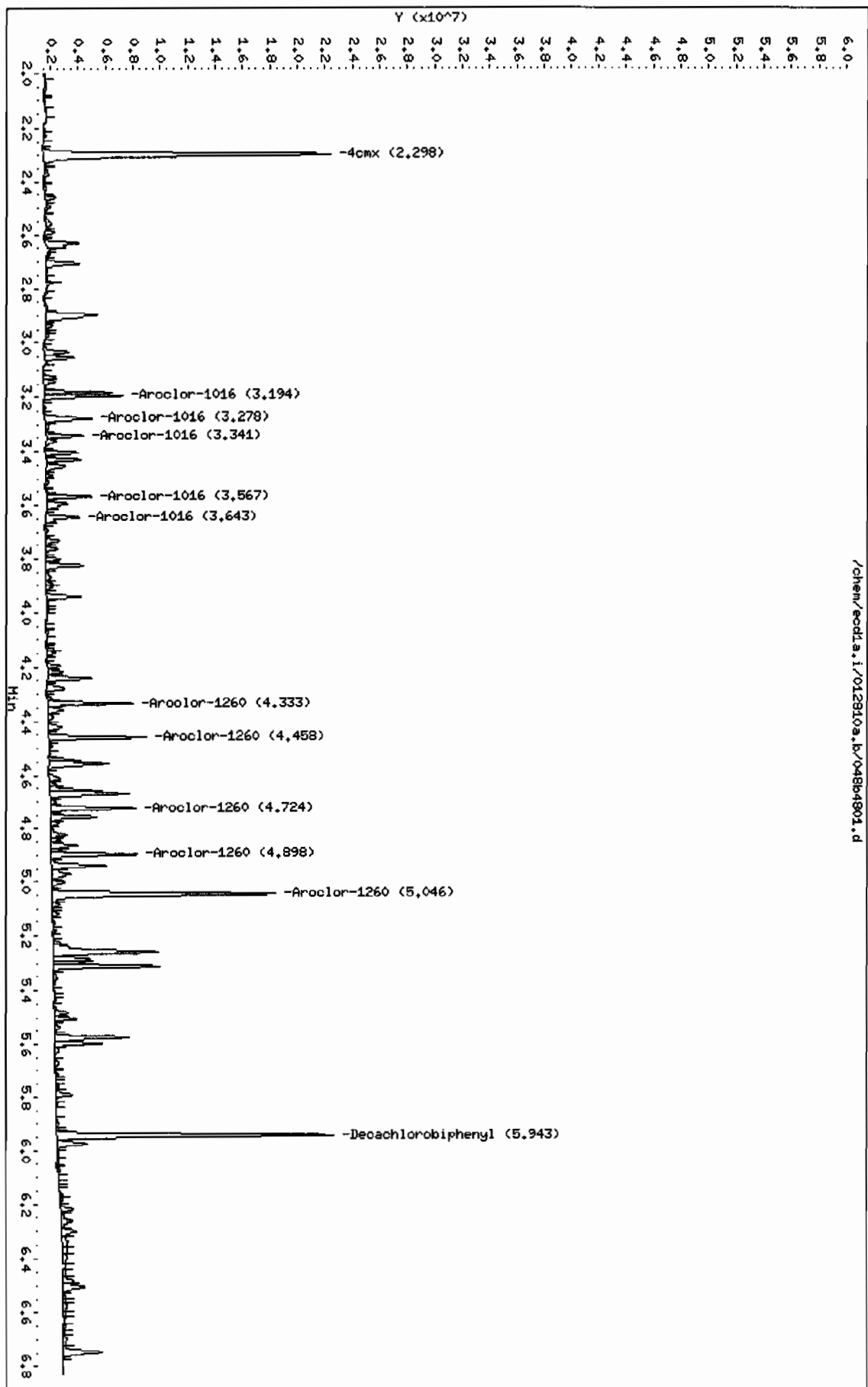
Volume Injected (uL): 1.0

Column phase: CLP2

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012810a.b/048f4801.d
 Lab Smp Id: 1202023864 Client Smp ID: RE15-10-8411MSD
 Inj Date : 28-JAN-2010 17:58
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202023864|1|
 Misc Info : |ECD82P_1S|944883|SVA|QC A|SOIL|MSD|1|
 Comment :
 Method : /chem/ecdl1a.i/012810a.b/ECD1-F-8082-121409.m
 Meth Date : 29-Jan-2010 06:55 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 48 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1324.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	15.35810	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	RESPONSE (ug/L)	(ug/Kg)	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
1.967	1.966	0.001	28732274 74.2519	2.9	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.277	5.278	-0.001	22030930 76.7196	3.0	80.00- 120.00	100.00

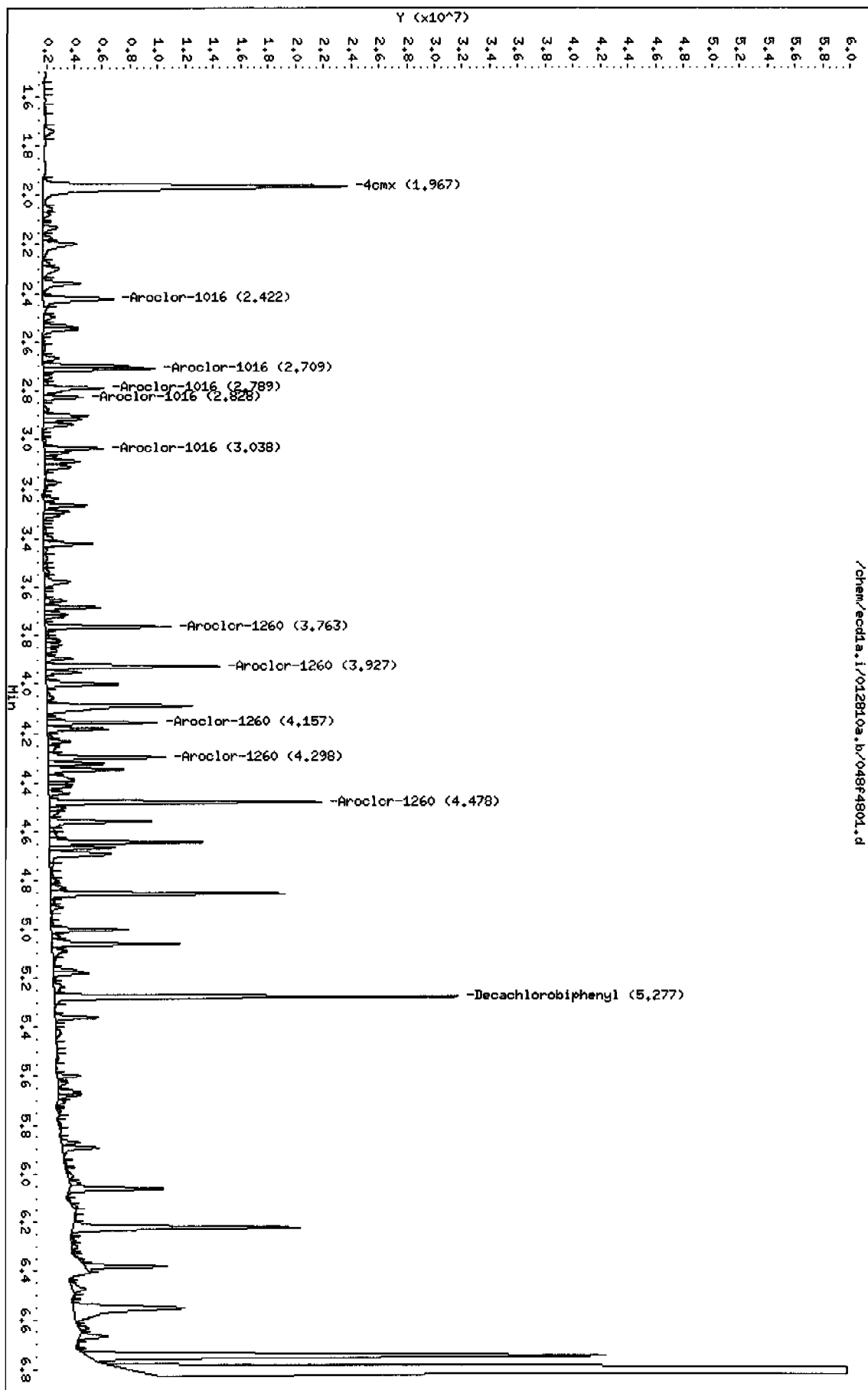
1 Aroclor-1016 CAS #: 12674-11-2						
2.422	2.422	0.000	6175043 448.127	17.6	80.00- 120.00	100.00
2.709	2.710	-0.001	6913850 394.962	15.5	110.41- 150.41	111.96
2.789	2.791	-0.002	4327371 376.263	14.8	64.79- 104.79	70.08
2.828	2.828	0.000	2174859 317.701	12.5	30.68- 70.68	35.22

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====		=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.038	3.039	-0.001	3224034	363.010	14.3	45.02~	85.02	52.21	
Average of Peak Concentrations =					14.9				

7 Aroclor-1260					CAS #: 11096-82-5				
3.763	3.765	-0.002	6531300	389.285	15.3	80.00~	120.00	100.00	
3.927	3.928	-0.001	9340624	368.697	14.5	131.11~	171.11	143.01	
4.157	4.158	-0.001	5408845	361.099	14.2	68.60~	108.60	82.81	
4.298	4.301	-0.003	6469057	415.704	16.4	71.52~	111.52	99.05	
4.478	4.480	-0.002	14077454	406.325	16.0	185.98~	225.98	215.54	
Average of Peak Concentrations =					15.3				

Data File: /chem/ecda.i/012810a.b/048f4801.d
Date: 28-JAN-2010 17:58
Client ID: RE15-10-841KSD
Sample Info: 1120202386411
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecda.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: 944882 Verified by: _____

Analyst: Andrew Schwemin

Method: SW846 3550B

Lab SOP: GL-OA-E-010 REV# 18

Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped
1202023521 MB	25-JAN-2010 20:44:00	30	H2SO4/KM2	2	9	1	0.03333
1202023522 LCS	25-JAN-2010 20:44:00	30	H2SO4/KM2	2	9	1	0.03333
245096001	25-JAN-2010 20:44:00	30.06	H2SO4/KM2	2	9	1	0.03327
245096002	25-JAN-2010 20:44:00	30.01	H2SO4/KM2	2	9	1	0.03332
245096003	25-JAN-2010 20:44:00	30.18	H2SO4/KM2	2	9	1	0.03313
245096004	25-JAN-2010 20:44:00	30.19	H2SO4/KM2	2	9	1	0.03312
245096005	25-JAN-2010 20:44:00	30.11	H2SO4/KM2	2	9	1	0.03321
245096006	25-JAN-2010 20:44:00	30.19	H2SO4/KM2	2	9	1	0.03312
245096008	25-JAN-2010 20:44:00	30.01	H2SO4/KM2	2	9	1	0.03332
245096009	25-JAN-2010 20:44:00	30.02	H2SO4/KM2	2	9	1	0.03331
245096010	25-JAN-2010 20:44:00	30.01	H2SO4/KM2	2	9	1	0.03332
245096011	25-JAN-2010 20:44:00	30.04	H2SO4/KM2	2	9	1	0.03329
245099015	25-JAN-2010 20:44:00	30.01	H2SO4/KM2	2	9	1	0.03332
245114002	25-JAN-2010 20:44:00	30.04	H2SO4/KM2	2	9	1	0.03329
245114003	25-JAN-2010 20:44:00	30.07	H2SO4/KM2	2	9	1	0.03326
1202023863 MS (245114003)	25-JAN-2010 20:44:00	30.13	H2SO4/KM2	2	9	1	0.03319
1202023864 MSD (245114003)	25-JAN-2010 20:44:00	30.02	H2SO4/KM2	2	9	1	0.03331
245114004	25-JAN-2010 20:44:00	30.15	H2SO4/KM2	2	9	1	0.03317
245114005	25-JAN-2010 20:44:00	30.18	H2SO4/KM2	2	9	1	0.03313
245114006	25-JAN-2010 20:44:00	30.17	H2SO4/KM2	2	9	1	0.03315
245116013	25-JAN-2010 20:44:00	30.09	H2SO4/KM2	2	9	1	0.03323
245116016	25-JAN-2010 20:44:00	30.12	H2SO4/KM2	2	9	1	0.0332
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:	
LCS	1202023522	PCB Laboratory Control	WE100105-07	1	mL	Clean up Date: 01/25/10	
MS	1202023863	PCB Laboratory Control	WE100105-07	1	mL	Clean up Initials: AJS	
MSD	1202023864	PCB Laboratory Control	WE100105-07	1	mL	Verified By: AV	
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE100108-15	1	mL	Final Solvent: Hexane	
REGNT	All	1:1 sulfuric acid	1133264a	5	mL	Clean Up SOP: GL-OA-E-037	
REGNT	All	Acetone	1259670	150	mL		
REGNT	All	Hexane	1259672-B2	150	mL		
REGNT	All	5% Potassium Permanganate	B1202457-F	5	mL		
SOURC	All	SODIUM SULFATE	1256907	30	g		