

Friday, January 15, 2010

Page 1 of 3
REQUEST NUMBER: 10-1287

**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: 10-1287

Per Agreement Number: 126310011

Project Cost Code: MFR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 1/15/2010

TURNAROUND/REPORT DUE: 2/14/2010

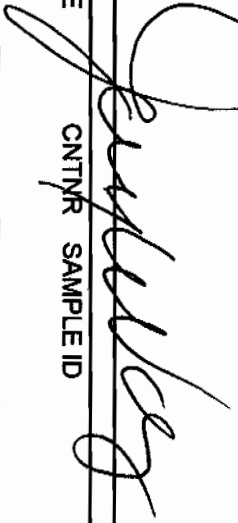
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:


Signature: *Valerie Davis*

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
	SW-846:8260B	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	

Friday, January 15, 2010

Page 2 of 3
REQUEST NUMBER: 10-1287

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:8260B		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
		1	RE15-10-7235	S	1/12/2010	
		1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
SW-846:8270C		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
		1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
SW-846:8321A_MOD		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	

Friday, January 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1287

LOS ALAMOS

REQUEST NUMBER: 10-1287

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/14/2010

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
RE15-10-7163	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7162	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7161	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7160	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7174	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7174	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7173	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7173	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7175	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7175	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7172	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7172	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7218	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7218	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7223	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7223	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7162	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7161	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7160	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7163	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7235	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

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

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

SAMPLE ID: RE15-10-7160

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1258		SUB-MEDIA:		TUFF 1	
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE:		HA	
LOCATION ID:	15-610501	↓		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	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY Liter Re 12/16/09	Ice	Yes	
1		8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Yes	
1	↓	H3	500 ML POLY	Ice	Yes	

SAMPLE DESC: moist dark brown silty sand, some clay, roots, and small rocks

FTB RE15-10-7235

SAMPLE COMMENTS:

NA

LOCATION DESC:

14h-2, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

HE neg

Alpha ≤ 49 dpm
Beta/Gamma ≤ 2150 dpmPID $\frac{\text{Ambient}}{\text{Reading}} \frac{0.0}{0.0}$ ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/13/10 8:13	RECEIVED BY (Printed Name) Jay Wells (Signature) Jay Wells	Date/Time 1/13/10 8:13
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: RE15-10-7161

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA: OBT3		SED	
TIME COLLECTED(HH:MM)		1308		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	15-610501	↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE:	GENERIC	↓		FIELD PREP: NA		↓	
TOP DEPTH:	0	R30-12-10 0.5 1.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH:	0	2.2		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		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY LITER AC 12/16/09	Ice	Yes	
1		8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Yes	
1		H3	500 ML POLY	Ice	Yes	

SAMPLE DESC: redish brown silty sand, some clay and white tuff fragments

FD: RE15-10-7223

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-2, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 38 dpm
Beta/Gamma ≤ 2340 dpmPID $\frac{\text{Ambient Reading}}{D.O.}$ ppm

COLLECTED BY (PRINT)

R. Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/13/10 813	RECEIVED BY (Printed Name) Jay Wells (Signature) Jay Wells	Date/Time 1/13/10 813
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: RE15-10-7162

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA: QBT3		SED	
TIME COLLECTED (HH:MM)		1334		SUB-MEDIA: TUFF 1		NA	
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID:	15-610502	↓		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		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		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	
1		Met+U+CLO4+C N	1 GAL POLY Liter 1/11/10	Ice	Yes	
1		8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Yes	
1	✓	H3	500 ML POLY	Ice	Yes	

SAMPLE DESC: Brown silty clay and white tuff fragments

SAMPLE COMMENTS: hit tuff at 0.5"

LOCATION DESC: 14h-3, drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 44 dpm
Beta/Gamma \leq 2280 dpm

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

HE Neg

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TLMcFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/13/10 8:14	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 1/13/10 8:14
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: RE15-10-7163

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA: QBT3		OK	
TIME COLLECTED (HH:MM)		1345		SUB-MEDIA: TUFF 1		↓	
PRS ID: 15-014(h)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 15-610502		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		1.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		2.5		SCREEN/PORT DESC: NA			
FIELD MATRIX: R		OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8260B	125 ML SEPTUM AMBER GLASS	Ice	Yes	
1		AM241+GS+ISO PU+ISOU	1 LITER POLY	None	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	
1		Met+U+CLO4+C N	1 GAT POLY Liter RC 12/16/09	Ice	Yes	
1		8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Yes	
1	↓	H3	500 ML POLY	Ice	Yes	

SAMPLE DESC: pinkish grey tuff, minor clay

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-3 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 11 dpm
Beta/Gamma ≤ 2730 dpmPID Ambient 0.0
Reading 0.0 ppm

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REVIEWED BY (PRINT) TL McFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/13/10 8:13	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/13/10 8:13
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: RE15-10-7172

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	01/12/2010	MEDIA:	OBT3
TIME COLLECTED (HH:MM)	1424	SUB-MEDIA:	TUFF 1
PRS ID: 15-014(h)	OK	SAMPLE TECH CODE: HA	OK
LOCATION ID: 15-610507	↓	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	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 GA POLY Lite+ RC 12/16/09	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: brown + black, silty clay, minor sand, Pine needles, roots

FR: RE15-10-7229

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-4 drainage
25 01-12-10

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 16 dpmBeta/Gamma \leq 2640 dpmHE neg
PID $\frac{\text{Ambient Reading}}{0.0} = 0.0$ ppm

HE Neg.

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/15/10 8:12	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/13/10 812
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: RE15-10-7173

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA: OBT3		ALLH	
TIME COLLECTED (HH:MM)		1430		SUB-MEDIA: TUFF 1		NA	
PRS ID: 15-014(h)		OK		SAMPLE TECH CODE: HA		OK	
LOCATION ID: 15-610507		↓		FIELD QC TYPE: NA		↓	
LOCATION TYPE: GENERIC		↓		FIELD PREP: NA		↓	
TOP DEPTH: 0		1.0		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		2.6		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 AC 12/16/09	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Light brown silty sand, numerous small tuff fragments

ED: RE15-10-7218

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 49 dpm
Beta/Gamma \leq 2240 dpm

PID Ambient 0.0
Reading 0.0 ppm

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R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/13/10 8:10	RECEIVED BY (Printed Name) Jay Williams (Signature) Jay Williams	Date/Time 1/13/10 8:10
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: RE15-10-7174

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1505		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610508	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	0.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	1.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	S		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	NA		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	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 12/16/09	Ice	Yes	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Dark brown clayey silt and light brown silt, some rock + roots

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-5

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 27 dpm
Beta/Gamma \leq 2390 dpmPID $\frac{\text{Ambient } 0.0}{\text{Reading } 0.0}$ ppm

HE NEG

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/17/10 08:10	RECEIVED BY (Printed Name) Jay Wells (Signature) Jay Wells	Date/Time 1/13/16 810
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: RE15-10-7175

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		1530		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	15-610508	↓		FIELD QC TYPE:	NA		↓
LOCATION TYPE:	GENERIC	↓		FIELD PREP:	NA		↓
TOP DEPTH:	0	1.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	2.0		SCREEN/PORT DESC:	NA		
FIELD MATRIX:	R	OK		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
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 RC 12/16/09	Ice	Yes	
1	✓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: Weathered tuff pinkish grey

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h - 5

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 33 dpm
Beta/Gamma \leq 2462 dpm

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

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT)

TL McFarland

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon R. Marin	Date/Time 1/13/10 810	RECEIVED BY (Printed Name) Jay Williams (Signature) Jay Williams	Date/Time 1/13/10 810
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: RE15-10-7218

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA:	QBT3		ALLH
TIME COLLECTED (HH:MM)		1430		SUB-MEDIA:	TUFF 1		NA
PRS ID:	15-014(h)	OK		SAMPLE TECH CODE:	HA		OK
LOCATION ID:	UNK	15-610507		FIELD QC TYPE:	ED		
LOCATION TYPE:	GENERIC	OK		FIELD PREP:	NA		
TOP DEPTH:	0	1.0		SAMPLE USAGE:	QC		
BOTTOM DEPTH:	0	2.6		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	S		EXCAVATED: YES (NO) NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES (NO) NA
BOREHOLE: YES (NO) NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Yes	
1		8260B	125 ML SEPTUM 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	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: QC Sample of RE15-10-7173

Light brown silty sand, numerous small tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC: 14h-4

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 49 dpm
 Beta/Gamma \leq 2242 dpm

PID Ambient 0.0
 Reading 0.0 ppm

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARINX	1/13/10	(Printed Name) Sherri Sherwood	1/13/10
(Signature) Jon R. Marin	812	(Signature) Sherri Sherwood	812
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: RE15-10-7223

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010		MEDIA:		QBT3	
TIME COLLECTED (HH:MM)		1308		SUB-MEDIA:		TUFF 1	
PRS ID: 15-014(h)		OK		SAMPLE TECH CODE:		HA	
LOCATION ID: UNK		15-610501		FIELD QC TYPE:		ED	
LOCATION TYPE: GENERIC		OK		FIELD PREP:		NA	
TOP DEPTH: 0		1.0		SAMPLE USAGE:		QC	
BOTTOM DEPTH: 0		2.2		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		SED		EXCAVATED: YES/NO/NA		NA	
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA		NA	
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA		BOREHOLE DIRECTION: NA		NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+8270+NME D-EXP	500 ML AMBER GLASS	Ice	Yes	
1		8260B	125 ML SEPTUM 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 6 liter to 12/17/09	Ice	Yes	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Yes	

SAMPLE DESC: QC Sample of RE15-10-7161

redish brown silty sand, some clay and white tuff fragments

SAMPLE COMMENTS:
NA

LOCATION DESC: 14h-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alphas \leq 38 dpm
Beta/Gamma \leq 2340 dpm

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

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY (Printed Name) JOW MA RIN (Signature) JOW MA RIN	Date/Time 1/13/10 8:13	RECEIVED BY (Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	Date/Time 1/13/10 813
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: RE15-10-7229

WORK ORDER:

AS PLANNED		AS COLLECTED	AS PLANNED		AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		01/12/2010	MEDIA:		NA
TIME COLLECTED (HH:MM)		1445	SUB-MEDIA:		OTHER
PRS ID:	15-014(h)	ok	SAMPLE TECH CODE:		DC
LOCATION ID:	UNK	15-1610507	FIELD QC TYPE:		FR
LOCATION TYPE:	GENERIC	ok	FIELD PREP:		UF
TOP DEPTH:	0	↓	SAMPLE USAGE:		QC
BOTTOM DEPTH:	0	↓	SCREEN/PORT DESC:		NA
FIELD MATRIX:	W	w	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA		
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: NA	BOREHOLE DIRECTION: NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS+U-GEL	1 LITER POLY	Nitric Acid	Y	
1	↓	SW-846:6850	250 ML POLY	Ice	Y	
1	↓	TCN	500 ML POLY	Sodium Hydroxide	Y	

SAMPLE DESC: QC Sample of RE15-10-717a

SAMPLE COMMENTS:

Rinsate

LOCATION DESC: 14h-4

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

R Saunders

REVIEWED BY (PRINT) TLMcFarland

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) JON MARIN	1/13/10	(Printed Name) Sherri Sherwood	1/13/10
(Signature) Jon R. Marin	8:12	(Signature) Sherri Sherwood	8:12
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2479

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

SAMPLE ID: RE15-10-7235

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		01/12/2010	MEDIA:	NA		ok	
TIME COLLECTED (HH:MM)		1255	SUB-MEDIA:	OTHER			
PRS ID:	15-014(h)	ok	SAMPLE TECH CODE:	DC			
LOCATION ID:	UNK	15-610501	FIELD QC TYPE:	FTB			
LOCATION TYPE:	GENERIC	ok	FIELD PREP:	NA			
TOP DEPTH:	0		SAMPLE USAGE:	QC			
BOTTOM DEPTH:	0		SCREEN/PORT DESC:	NA			
FIELD MATRIX:	S		EXCAVATED: YES/NO/NA				
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION:	NA	BOREHOLE DIRECTION:	NA		

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

SAMPLE DESC: QC Sample of RE15-10-8 7160

13m
1/12/10

SAMPLE COMMENTS: FTB

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

JLMcFarland

REVIEWED BY (PRINT) R Saunders

RELINQUISHED BY (Printed Name) JON MARIN (Signature) Jon A. Marin	Date/Time 1/13/10 8:13	RECEIVED BY (Printed Name) Jay W (Signature) Jay W	Date/Time 1/13/10 8:13
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Rad Screening Data Release Form

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

RE 12-10-7163

RE 12-10-7161

7218

"

7162

7223

7172

7173

7160

7174

7175

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

.....

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

RE 12-10-7229 FR

7235 FTB

Reason:

.....

Print Last Name MARIN

Signature

John R. Marin

Date

1/13/00



2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-10-00060

Request or PO Number: N/A

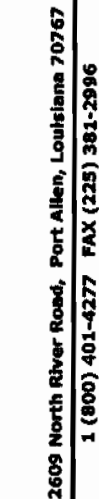
Analysis Description: Gross Alpha/Beta In (Soil, Sludge, Waste, Sediment (SO))

Date Received: 1/14/2010

Analysis Test Method: GPC-A-003

Report Date: 01/15/10 10:01

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00060-001	RE16-10-1374	GROSS ALPHA	7.558	4.686	13.085	3.783	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-001	RE16-10-1374	GROSS BETA	16.241	3.851	7.851	3.387		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-002	RE16-10-1376	GROSS ALPHA	23.939	7.972	13.415	3.921		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-002	RE16-10-1376	GROSS BETA	19.162	4.763	10.591	4.742		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-003	RE16-10-1378	GROSS ALPHA	9.494	5.272	14.237	4.512	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-003	RE16-10-1378	GROSS BETA	25.257	4.872	7.690	3.302		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-004	RE16-10-1380	GROSS ALPHA	16.399	6.502	13.362	4.038		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-004	RE16-10-1380	GROSS BETA	18.415	4.133	7.641	3.274		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-005	RE16-10-1382	GROSS ALPHA	8.992	6.107	19.348	6.986	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-005	RE16-10-1382	GROSS BETA	25.351	4.950	8.205	3.559		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-006	RE16-10-1396	GROSS ALPHA	1.535	3.471	15.114	4.887	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-006	RE16-10-1396	GROSS BETA	18.015	3.977	7.697	3.318		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-007	RE16-10-1502	GROSS ALPHA	9.248	5.126	14.139	4.521	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-007	RE16-10-1502	GROSS BETA	14.780	3.724	7.922	3.420		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-008	RE16-10-1504	GROSS ALPHA	-0.002	2.754	14.066	4.457	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-008	RE16-10-1504	GROSS BETA	26.457	4.994	8.076	3.502		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-009	RE16-10-1506	GROSS ALPHA	17.355	6.792	14.064	4.414		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-009	RE16-10-1506	GROSS BETA	23.293	4.622	7.420	3.180		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-010	RE16-10-1510	GROSS ALPHA	2.063	3.696	15.319	4.839	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-010	RE16-10-1510	GROSS BETA	18.484	4.131	8.190	3.549		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-011	RE16-10-1529	GROSS ALPHA	12.644	6.281	16.290	5.421	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-011	RE16-10-1529	GROSS BETA	21.960	4.489	7.679	3.306		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-012	RE16-10-1531	GROSS ALPHA	7.586	4.889	14.201	4.486	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-012	RE16-10-1531	GROSS BETA	26.910	5.024	7.615	3.273		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-013	RE16-10-1533	GROSS ALPHA	4.463	4.762	16.523	5.487	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-013	RE16-10-1533	GROSS BETA	34.905	5.990	7.905	3.407		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-014	RE16-10-1535	GROSS ALPHA	6.098	5.030	16.514	5.761	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-014	RE16-10-1535	GROSS BETA	31.741	5.644	8.076	3.497		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-015	RE16-10-1537	GROSS ALPHA	5.322	4.676	15.748	5.119	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-015	RE16-10-1537	GROSS BETA	33.705	5.857	7.812	3.354		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-016	RE16-10-1539	GROSS ALPHA	8.641	5.333	15.349	5.039	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-016	RE16-10-1539	GROSS BETA	29.563	5.381	7.824	3.367		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-017	RE16-10-1541	GROSS ALPHA	8.121	4.752	12.481	3.447	U	PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-017	RE16-10-1541	GROSS BETA	25.234	4.819	7.528	3.232		PCI/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-018	RE16-10-1549	GROSS ALPHA	12.026	5.396	11.009	2.859		PCI/g	1/14/2010	CR	N/A	SO	



ARS Sample Delivery Group:	ARS1-10-00060
Analysis Description:	Gross Alpha/Beta
Analysis Test Method:	GPC-A-003

Request or PO Number: N/A
Date Received: 1/14
Report Date: 01/14

Date Received: 1/14/2010
Report Date: 01/15/10 10:01

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00060-018	RE16-10-1549	GROSS BETA	30.498	5.449	7.667	3.309		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-019	RE16-10-943	GROSS ALPHA	2.952	3.511	13.421	4.021	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-019	RE16-10-943	GROSS BETA	32.665	5.687	7.716	3.321		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-020	RE16-10-941	GROSS ALPHA	9.648	5.124	13.578	4.247	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-020	RE16-10-941	GROSS BETA	14.991	3.651	7.549	3.257		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-021	RE16-10-945	GROSS ALPHA	14.025	5.856	11.236	2.948		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-021	RE16-10-945	GROSS BETA	33.627	5.899	8.051	3.482		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-022	RE16-10-2798	GROSS ALPHA	1.842	3.154	13.530	3.816	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-022	RE16-10-2798	GROSS BETA	29.426	5.401	8.318	3.609		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-023	RE16-10-2797	GROSS ALPHA	5.495	4.127	12.955	3.745	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-023	RE16-10-2797	GROSS BETA	31.476	5.566	7.982	3.467		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-024	RE15-10-7163	GROSS ALPHA	-0.281	2.151	12.918	3.644	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-024	RE15-10-7163	GROSS BETA	32.626	5.724	8.211	3.567		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-025	RE15-10-7218	GROSS ALPHA	17.429	6.528	11.797	3.258		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-025	RE15-10-7218	GROSS BETA	18.644	4.281	8.556	3.746		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-026	RE15-10-7223	GROSS ALPHA	1.730	3.186	13.915	3.975	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-026	RE15-10-7223	GROSS BETA	24.675	4.858	8.389	3.649		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-027	RE15-10-7172	GROSS ALPHA	16.315	6.701	13.883	4.058		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-027	RE15-10-7172	GROSS BETA	33.494	5.865	7.838	3.377		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-028	RE15-10-7173	GROSS ALPHA	5.674	4.062	12.334	3.479	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-028	RE15-10-7173	GROSS BETA	22.517	4.732	9.115	4.022		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-029	RE15-10-7160	GROSS ALPHA	15.795	6.594	13.729	4.034		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-029	RE15-10-7160	GROSS BETA	25.552	4.957	7.960	3.443		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-030	RE15-10-7174	GROSS ALPHA	11.637	5.541	12.609	3.580	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-030	RE15-10-7174	GROSS BETA	28.941	5.280	7.675	3.306		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-031	RE15-10-7175	GROSS ALPHA	4.091	3.555	11.788	3.179	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-031	RE15-10-7175	GROSS BETA	29.055	5.248	7.574	3.254		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-032	RE15-10-7161	GROSS ALPHA	10.290	5.551	14.873	4.683	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-032	RE15-10-7161	GROSS BETA	22.332	4.583	8.164	3.551		pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-033	RE15-10-7162	GROSS ALPHA	2.165	2.686	10.612	2.784	U	pCi/g	1/14/2010	CR	N/A	SO	
ARS1-10-00060-033	RE15-10-7162	GROSS BETA	30.579	5.361	7.386	3.179		pCi/g	1/14/2010	CR	N/A	SO	
NOTES:													



2609 North River Road, Port Allen, Louisiana 70767

1 (800) 401-4277 FAX (225) 381-2996

ARS Sample Delivery Group: ARS1-10-00060

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: 1/14/2010

Report Date: 01/15/10 10:01

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery	Sample Matrix	Collection Date
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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.

LELAP Certificate# 01949

LELAP Certificate # E87558

Rad Screening Data Release Form

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

RE 12-10-7163

RE 12-10-7161

7218

"

7162

7223

7172

7173

7160

7174

7175

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

.....

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

RE 12-10-7229 FR

7235 FTB

Reason:

.....

Print Last Name MARIN

Signature

J. R. Marin

Date

1/13/10

DATA VALIDATION COVER SHEET

5114-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1287 VALIDATION DATE: 02/23/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Maryann Jordan 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 by GC/MS

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):

- Acetone was detected in the MB associated with sample RE15-10-7172. The result for acetone in this sample was an ND and, thus, was not qualified.
- Acetone was detected in FTB -7235, associated with samples -7160; -7161; and -7223. All associated sample results were NDs and, thus, were not qualified.
- In the ICV and/or CCV associated with sample -7172, the %Ds were >20% for acetone; chloromethane and dichlorodifluoromethane. In the ICV and/or CCV associated with all other samples, the %Ds were >20% for acetone; 1,1,2-trichloro-1,2,2-trifluoroethane; chloromethane and dichlorodifluoromethane. The results for acetone in samples -7173; -7175; -7235 were detects and, thus, were qualified J,V7c. All other associated sample results were NDs and, thus, were qualified UJ,V7c.
- It should be noted that 1,1,2-trichloro-1,2,2-trifluoroethane was not included in the MS/MSD. Since analysis of a MS/MSD pair is not a client requirement, no sample data were qualified.

Reviewed by: Mary Donovan

Level: I

Date: 02/24/10

VALIDATOR'S SIGNATURE:



DATE: 02/23/10

Form 5114-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST

5114-2

Volatile Organic Compound (VOC) Analytical Data Validation Checklist

Records Use only



Yes No N/A (Check One)				Assign Qualifier Listed Below If Criterion = Yes	
				Non-detected Analyte	Detected Analyte
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12. The sample result is $\leq 5X$ (10X for common organic laboratory contaminants) the concentration of the related analyte in the method blank.	U, V4	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was $>5X$ (10X for common laboratory contaminants).	N/A	J, V4a
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. The sample result is $\leq 5X$ the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, V4d	N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Required method blank information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V4e	R, V4e
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. The IS retention time has shifted by more than 30 seconds.	UJ, V0	J, V0
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17. Analyte is positively confirmed but outside the IS retention time window; however, spectral matches must be provided.	N/A	J, V0a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Required IS retention time documentation is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V0b	R, V0b
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19. The quantitating IS are count is $<10\%$ of the expected value, which indicates increased potential for false negative results and other possible problems with sample quantitation. Follow method-specific windows.	R, V1a	J, V1a
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. The IS area count for the quantitating IS is $<50\%$ but $>10\%$ for organics window relation to the previous continuing calibration. Follow the method-specific windows.	UJ, V1b	J, V1b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	25. The surrogate %R is > the Upper Acceptance Limit (UAL) Follow the external laboratory limits located within the associated data package.	N/A	J+, V3b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26. At least one surrogate is > the UAL and one surrogate is < the LAL. Follow the external laboratory limits located within the associated data package.	UJ, V3c	J, V3c
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	27. Required surrogate information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, V3d	R, V3d
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, V12	J-, V12
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	29. The LCS percent recovery was < the LAL but > 10%. Follow the external laboratory limits located within the associated data package.	UV, V12a	J-, V12a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	30. The LCS percent recover was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, V12b

VOLATILE ORGANIC COMPOUND (VOC) ANALYTICAL DATA VALIDATION CHECKLIST	
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: 10-1287
 Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 6.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7163
 Batch ID: 944501
 Run Date: 01/22/2010 16:28
 Prep Date: 01/22/2010 13:48
 Data File: 012210V6\6U513.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07 UJ,V7c
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07 UJ,V7c
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.78	5.35 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.61	5.35
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.61	5.35
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

MJ
02/23/10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7163
Batch ID: 944501
Run Date: 01/22/2010 16:28
Prep Date: 01/22/2010 13:48
Data File: 012210V66U513.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07	
179601-23-1	m,p-Xylenes	J	0.375	ug/kg	0.321	2.14	
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07	
100-42-5	Styrene	U	1.07	ug/kg	0.321	1.07	
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07	
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07	
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07	
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07	
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07	
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07	
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07	
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07	
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07	
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07	
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07	
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07	
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07	
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07	
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.35	ug/kg	1.71	5.35	UJ,V7c
	<i>Trichlorotrifluoroethane</i>						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07	
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	100	ug/kg	0	J
013466-78-9	3-Carene	15.19	32.9	ug/kg	96	NJ
	unknown	16.17	17.3	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923002	Date Received: 01/16/2010 08:55	%Moisture: 9.7
Client ID: RE15-10-7162	Client: LANL010	Project: LANL01004
Batch ID: 944501	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/22/2010 16:55	Inst: VOA6.I	Dilution: 1
Prep Date: 01/22/2010 13:54	Analyst: RXD1	Purge Vol: 5 mL
Data File: 012210V6\6U514.D	Allquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11 UJ,V7c
74-87-3	Chloromethane	U	1.11	ug/kg	0.332	1.11 UJ,V7c
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.332	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.332	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.332	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.332	1.11
67-64-1	Acetone	U	5.54	ug/kg	1.84	5.54 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.38	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.332	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.332	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.332	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.332	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.332	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.332	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.332	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.332	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.332	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.332	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.332	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.38	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.332	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.332	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.332	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.332	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.332	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.332	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.332	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.332	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.332	1.11

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923002

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Allquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7162
 Batch ID: 944501
 Run Date: 01/22/2010 16:55
 Prep Date: 01/22/2010 13:54
 Data File: 012210V6\6U514.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.332	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.332	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.332	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.332	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.332	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.332	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.332	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.332	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.332	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.332	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.332	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.332	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.332	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.332	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.332	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.332	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.332	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.332	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.332	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	5.54	ug/kg	1.77	5.54 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.332	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	13.85	5.64	ug/kg	99	NJ
	unknown siloxane	14.24	15.3	ug/kg	0	J
	unknown	16.17	5.82	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923003

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7161
 Batch ID: 944501
 Run Date: 01/22/2010 17:23
 Prep Date: 01/22/2010 13:56
 Data File: 012210V6\6U515.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.382	1.12	UJ,V7c
74-87-3	Chloromethane	U	1.12	ug/kg	0.337	1.12	UJ,V7c
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.337	1.12	
74-83-9	Bromomethane	U	1.12	ug/kg	0.337	1.12	
75-00-3	Chloroethane	U	1.12	ug/kg	0.337	1.12	
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.337	1.12	
67-64-1	Acetone	U	5.61	ug/kg	1.86	5.61	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.337	1.12	
74-88-4	Iodomethane	U	5.61	ug/kg	1.80	5.61	
75-09-2	Methylene chloride	U	5.61	ug/kg	2.24	5.61	
75-15-0	Carbon disulfide	U	5.61	ug/kg	1.40	5.61	
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.337	1.12	
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.337	1.12	
78-93-3	2-Butanone	U	5.61	ug/kg	1.68	5.61	
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.337	1.12	
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.337	1.12	
67-66-3	Chloroform	U	1.12	ug/kg	0.337	1.12	
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.370	1.12	
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.337	1.12	
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.337	1.12	
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.337	1.12	
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.337	1.12	
71-43-2	Benzene	U	1.12	ug/kg	0.337	1.12	
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.370	1.12	
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.337	1.12	
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.337	1.12	
74-95-3	Dibromomethane	U	1.12	ug/kg	0.337	1.12	
108-10-1	4-Methyl-2-pentanone	U	5.61	ug/kg	1.40	5.61	
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.337	1.12	
108-88-3	Toluene	U	1.12	ug/kg	0.337	1.12	
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.337	1.12	
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.337	1.12	
591-78-6	2-Hexanone	U	5.61	ug/kg	1.68	5.61	
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.337	1.12	
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.337	1.12	
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.337	1.12	
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.337	1.12	
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.337	1.12	

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923003

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7161
 Batch ID: 944501
 Run Date: 01/22/2010 17:23
 Prep Date: 01/22/2010 13:56
 Data File: 012210V66U515.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.337	1.12	
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.337	2.24	
95-47-6	o-Xylene	U	1.12	ug/kg	0.337	1.12	
100-42-5	Styrene	U	1.12	ug/kg	0.337	1.12	
75-25-2	Bromoform	U	1.12	ug/kg	0.337	1.12	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.337	1.12	
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.337	1.12	
108-86-1	Bromobenzene	U	1.12	ug/kg	0.337	1.12	
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.337	1.12	
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.337	1.12	
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.337	1.12	
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.337	1.12	
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.337	1.12	
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.337	1.12	
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.337	1.12	
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.337	1.12	
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.337	1.12	
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12	
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12	
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.337	1.12	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.337	1.12	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.61	ug/kg	1.80	5.61	UJ,V7c
	<i>Trichlorotrifluoroethane</i>						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.337	1.12	
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	18.6	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1287
Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 20
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7160
Batch ID: 944501
Run Date: 01/22/2010 17:51
Prep Date: 01/22/2010 13:58
Data File: 012210V6V6U516.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.425	1.25	UJ,V7c
74-87-3	Chloromethane	U	1.25	ug/kg	0.375	1.25	UJ,V7c
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.375	1.25	
74-83-9	Bromomethane	U	1.25	ug/kg	0.375	1.25	
75-00-3	Chloroethane	U	1.25	ug/kg	0.375	1.25	
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.375	1.25	
67-64-1	Acetone	U	6.25	ug/kg	2.07	6.25	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.375	1.25	
74-88-4	Iodomethane	U	6.25	ug/kg	2.00	6.25	
75-09-2	Methylene chloride	U	6.25	ug/kg	2.50	6.25	
75-15-0	Carbon disulfide	U	6.25	ug/kg	1.56	6.25	
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.375	1.25	
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.375	1.25	
78-93-3	2-Butanone	U	6.25	ug/kg	1.87	6.25	
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.375	1.25	
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.375	1.25	
67-66-3	Chloroform	U	1.25	ug/kg	0.375	1.25	
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.412	1.25	
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.375	1.25	
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.375	1.25	
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.375	1.25	
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.375	1.25	
71-43-2	Benzene	U	1.25	ug/kg	0.375	1.25	
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.412	1.25	
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.375	1.25	
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.375	1.25	
74-95-3	Dibromomethane	U	1.25	ug/kg	0.375	1.25	
108-10-1	4-Methyl-2-pentanone	U	6.25	ug/kg	1.56	6.25	
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.375	1.25	
108-88-3	Toluene	U	1.25	ug/kg	0.375	1.25	
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.375	1.25	
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.375	1.25	
591-78-6	2-Hexanone	U	6.25	ug/kg	1.87	6.25	
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.375	1.25	
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.375	1.25	
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.375	1.25	
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.375	1.25	
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.375	1.25	

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 20
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7160
 Batch ID: 944501
 Run Date: 01/22/2010 17:51
 Prep Date: 01/22/2010 13:58
 Data File: 012210V6V6U516.D

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.375	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.375	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.375	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.375	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.375	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.375	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.375	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.375	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.375	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.375	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.375	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.375	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.375	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.375	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.375	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.375	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.375	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.375	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.375	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.25	ug/kg	2.00	6.25 UJ,V7c
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.375	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	unknown siloxane	14.24	6.55	ug/kg	0	J
	unknown siloxane	16.17	6.29	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 19.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7174
 Batch ID: 944501
 Run Date: 01/22/2010 18:19
 Prep Date: 01/22/2010 14:00
 Data File: 012210V6\6U517.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.423	1.25	UJ,V7c
74-87-3	Chloromethane	U	1.25	ug/kg	0.374	1.25	UJ,V7c
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.374	1.25	
74-83-9	Bromomethane	U	1.25	ug/kg	0.374	1.25	
75-00-3	Chloroethane	U	1.25	ug/kg	0.374	1.25	
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.374	1.25	
67-64-1	Acetone	U	6.23	ug/kg	2.07	6.23	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.374	1.25	
74-88-4	Iodomethane	U	6.23	ug/kg	1.99	6.23	
75-09-2	Methylene chloride	J	3.19	ug/kg	2.49	6.23	
75-15-0	Carbon disulfide	U	6.23	ug/kg	1.56	6.23	
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.374	1.25	
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.374	1.25	
78-93-3	2-Butanone	U	6.23	ug/kg	1.87	6.23	
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.374	1.25	
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.374	1.25	
67-66-3	Chloroform	U	1.25	ug/kg	0.374	1.25	
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.411	1.25	
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.374	1.25	
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.374	1.25	
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.374	1.25	
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.374	1.25	
71-43-2	Benzene	U	1.25	ug/kg	0.374	1.25	
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.411	1.25	
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.374	1.25	
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.374	1.25	
74-95-3	Dibromomethane	U	1.25	ug/kg	0.374	1.25	
108-10-1	4-Methyl-2-pentanone	U	6.23	ug/kg	1.56	6.23	
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.374	1.25	
108-88-3	Toluene	U	1.25	ug/kg	0.374	1.25	
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.374	1.25	
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.374	1.25	
591-78-6	2-Hexanone	U	6.23	ug/kg	1.87	6.23	
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.374	1.25	
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.374	1.25	
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.374	1.25	
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.374	1.25	
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.374	1.25	

MJ
02/23/10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

Client ID: RE15-10-7174
Batch ID: 944501
Run Date: 01/22/2010 18:19
Prep Date: 01/22/2010 14:00
Data File: 012210V6\6U517.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.374	1.25
179601-23-1	m,p-Xylenes	U	2.49	ug/kg	0.374	2.49
95-47-6	o-Xylene	U	1.25	ug/kg	0.374	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.374	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.374	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.374	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.374	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.374	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.374	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.374	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.374	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.374	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.374	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.374	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.374	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.374	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.374	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.374	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.374	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.23	ug/kg	1.99	6.23 UJ,V7c
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.374	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	34.7	ug/kg	0	J
	unknown siloxane	16.18	16.1	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

Client ID: RE15-10-7173
 Batch ID: 944501
 Run Date: 01/22/2010 18:47
 Prep Date: 01/22/2010 14:02
 Data File: 012210V6\6U518.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11	UJ,V7c
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11	UJ,V7c
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11	
67-64-1	Acetone	J	5.35	ug/kg	1.84	5.54	J,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54	
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54	
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.39	5.54	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54	
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11	
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.39	5.54	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54	
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11	

MJ
 02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Allquot: 5 g
 Column: DB-624

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

Client ID: RE15-10-7173
 Batch ID: 944501
 Run Date: 01/22/2010 18:47
 Prep Date: 01/22/2010 14:02
 Data File: 012210V6V6U518.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.599	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54
	Trichlorotrifluoroethane					UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	109	ug/kg	0	J
013466-78-9	3-Carene	15.19	49.5	ug/kg	96	NJ
	unknown siloxane	16.17	27.3	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923007	Date Received: 01/16/2010 08:55	%Moisture: 9.3
Client ID: RE15-10-7175	Client: LANL010	Project: LANL01004
Batch ID: 944501	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/22/2010 19:14	Inst: VOA6.I	Dilution: 1
Prep Date: 01/22/2010 14:04	Analyst: RXD1	Purge Vol: 5 mL
Data File: 012210V66U519.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	ug/kg	0.375	1.10 UJ,V7c
74-87-3	Chloromethane	U	1.10	ug/kg	0.331	1.10 UJ,V7c
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		8.39	ug/kg	1.83	5.51 J,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	2.21	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	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	5.51	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	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	5.51	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	U	1.10	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

MJ
02/23/10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Allquot: 5 g
Column: DB-624

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

Client ID: RE15-10-7175
Batch ID: 944501
Run Date: 01/22/2010 19:14
Prep Date: 01/22/2010 14:04
Data File: 012210V6WU519.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	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 <i>Trichlorotrifluoroethane</i>	U	5.51	ug/kg	1.76	5.51	UJ,V7c
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 siloxane	14.24	102	ug/kg	0	J
	unknown siloxane	16.17	7.68	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	%Moisture: 21.2
Client ID: RE15-10-7172	Client: LANL010	Project: LANL01004
Batch ID: 944501	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/25/2010 15:09	Inst: VOA6.I	Dilution: 1
Prep Date: 01/25/2010 13:14	Analyst: RXD1	Purge Vol: 5 mL
Data File: 012510V6\6V112.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.432	1.27 UJ,V7c
74-87-3	Chloromethane	U	1.27	ug/kg	0.381	1.27 UJ,V7c
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.381	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.381	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.381	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.381	1.27
67-64-1	Acetone	U	6.35	ug/kg	2.11	6.35 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
74-88-4	Iodomethane	U	6.35	ug/kg	2.03	6.35
75-09-2	Methylene chloride	J	4.43	ug/kg	2.54	6.35
75-15-0	Carbon disulfide	U	6.35	ug/kg	1.59	6.35
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.381	1.27
78-93-3	2-Butanone	U	6.35	ug/kg	1.90	6.35
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.381	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.381	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.419	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.381	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.381	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.381	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.381	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.381	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.419	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.381	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.381	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.381	1.27
108-10-1	4-Methyl-2-pentanone	U	6.35	ug/kg	1.59	6.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.381	1.27
108-88-3	Toluene	J	0.546	ug/kg	0.381	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.381	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.381	1.27
591-78-6	2-Hexanone	U	6.35	ug/kg	1.90	6.35
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.381	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.381	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.381	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.381	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.381	1.27

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	%Moisture: 21.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7172	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/25/2010 15:09	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/25/2010 13:14	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012510V6\6V112.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.381	1.27
179601-23-1	m,p-Xylenes	U	2.54	ug/kg	0.381	2.54
95-47-6	o-Xylene	U	1.27	ug/kg	0.381	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.381	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.381	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.381	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.381	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.381	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.381	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.381	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.381	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.381	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.381	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.381	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.381	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.381	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.381	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.381	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.381	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.35	ug/kg	2.03	6.35
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.381	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	19.8	ug/kg	0	J

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287

Lab Sample ID: 244923009

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Matrix: R

%Moisture: 9.9

Client ID: RE15-10-7218

Batch ID: 944501

Run Date: 01/22/2010 20:10

Prep Date: 01/22/2010 14:08

Data File: 012210V66U521.D

Client: LANL010

Method: SW846 8260B

Inst: VOA6.I

Analyst: RXD1

Allquot: 5 g

Column: DB-624

Project: LANL01004

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11	UJ,V7c
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11	UJ,V7c
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11	
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11	
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11	
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11	
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55	UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55	
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55	
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55	
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55	
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11	
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11	
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11	
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11	
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11	
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11	
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11	
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11	
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11	
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11	
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55	
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11	
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11	
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11	
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55	
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11	
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11	
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11	
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11	
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11	

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923009	Date Received: 01/16/2010 08:55	%Moisture: 9.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7218	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/22/2010 20:10	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 14:08	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V66U521.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11	
179601-23-1	m,p-Xylenes	J	0.500	ug/kg	0.333	2.22	
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11	
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11	
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11	
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11	
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11	
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11	
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11	
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11	
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11	
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11	
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11	
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.55	ug/kg	1.78	5.55	UJ,V7c
	Trichlorotrifluoroethane						
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11	
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11	

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	70.7	ug/kg	0	J
013466-78-9	3-Carene	15.19	48.3	ug/kg	97	NJ
	unknown siloxane	16.17	20.3	ug/kg	0	J

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923010	Date Received: 01/16/2010 08:55	%Moisture: 10.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7223	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/22/2010 20:37	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 14:10	Allquot: 5 g	Final Volume: 5 mL
Data File: 012210V6\6U522.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.381	1.12 UJ,V7c
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12 UJ,V7c
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12
67-64-1	Acetone	U	5.60	ug/kg	1.86	5.60 UJ,V7c
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
74-88-4	Iodomethane	U	5.60	ug/kg	1.79	5.60
75-09-2	Methylene chloride	U	5.60	ug/kg	2.24	5.60
75-15-0	Carbon disulfide	U	5.60	ug/kg	1.40	5.60
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12
78-93-3	2-Butanone	U	5.60	ug/kg	1.68	5.60
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.370	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.370	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12
108-10-1	4-Methyl-2-pentanone	U	5.60	ug/kg	1.40	5.60
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12
591-78-6	2-Hexanone	U	5.60	ug/kg	1.68	5.60
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12

MJ
02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7223
 Batch ID: 944501
 Run Date: 01/22/2010 20:37
 Prep Date: 01/22/2010 14:10
 Data File: 012210V66U522.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane <i>Trichlorotrifluoroethane</i>	U	5.60	ug/kg	1.79	5.60 UJ,V7c
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	48.1	ug/kg	0	J
	unknown siloxane	16.17	29.9	ug/kg	0	J

MJ
 02/23/10

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923011

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55

Matrix: S

Client ID: RE15-10-7235
 Batch ID: 944501
 Run Date: 01/22/2010 21:05
 Prep Date: 01/22/2010 14:12
 Data File: 012210V6V6U523.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00	UJ,V7c
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00	UJ,V7c
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		7.82	ug/kg	1.66	5.00	J,V7c
75-33-4	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	

MJ
02/23/10

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923011

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55

Matrix: S

Client ID: RE15-10-7235

Client: LANL010

Project: LANL01004

Batch ID: 944501

Method: SW846 8260B

SOP Ref: GL-OA-E-038

Run Date: 01/22/2010 21:05

Inst: VOA6.I

Dilution: 1

Prep Date: 01/22/2010 14:12

Analyst: RXD1

Purge Vol: 5 mL

Data File: 012210V6V6U523.D

Allquot: 5 g

Final Volume: 5 mL

Column: DB-624

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	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 Trichlorotrifluoroethane	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		

MJ
02/23/10

DATA VALIDATION COVER SHEET

5115-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1287 VALIDATION DATE: 02/23/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Maryann Jordan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

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 and/or CCV %Ds were >20% for hexachlorocyclopentadiene; benzoic acid; 2,4-dinitrophenol and 4-nitroaniline. The result for benzoic acid in sample RE15-10-7172 was a detect and, thus, was qualified J,SV7c. All other associated sample results were NDs and, thus, were qualified UJ,SV7c.
- The %R in the MS was < the laboratory LAL for 3,3'-dichlorobenzidine. It should be noted that the MS/MSD analyses were performed on a sample from another LANL RN and that the parent sample raw data was not included in the data package. Since analysis of a MS/MSD pair is not a client requirement, no sample data were qualified.

Reviewed by: Mary Donovan Level: I Date: 02/24/10


VALIDATOR'S SIGNATURE: Maryann Jordan DATE: 02/23/10

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


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

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

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

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

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

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

Yes No N/A (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: 10-1287
Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7160
Batch ID: 943386
Run Date: 01/21/2010 00:05
Prep Date: 01/20/2010 11:13
Data File: s5a2019.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	417	ug/kg	83.3	417
108-95-2	Phenol	U	417	ug/kg	83.3	417
95-57-8	2-Chlorophenol	U	417	ug/kg	83.3	417
106-46-7	1,4-Dichlorobenzene	U	417	ug/kg	83.3	417
621-64-7	N-Nitrosodipropylamine	U	417	ug/kg	83.3	417
59-50-7	4-Chloro-3-methylphenol	U	417	ug/kg	83.3	417
83-32-9	Acenaphthene	U	41.7	ug/kg	13.7	41.7
121-14-2	2,4-Dinitrotoluene	U	417	ug/kg	41.7	417
100-02-7	4-Nitrophenol	U	417	ug/kg	137	417
87-86-5	Pentachlorophenol	U	417	ug/kg	104	417
129-00-0	Pyrene	J	17.9	ug/kg	12.5	41.7
110-86-1	Pyridine	U	417	ug/kg	83.3	417
62-53-3	Aniline	U	417	ug/kg	125	417
111-44-4	bis(2-Chloroethyl) ether	U	417	ug/kg	83.3	417
541-73-1	1,3-Dichlorobenzene	U	417	ug/kg	83.3	417
100-51-6	Benzyl alcohol	U	417	ug/kg	125	417
95-50-1	1,2-Dichlorobenzene	U	417	ug/kg	83.3	417
108-60-1	bis(2-Chloroisopropyl)ether	U	417	ug/kg	83.3	417
95-48-7	o-Cresol	U	417	ug/kg	83.3	417
65794-96-9	m,p-Cresols	U	417	ug/kg	125	417
67-72-1	Hexachloroethane	U	417	ug/kg	83.3	417
98-95-3	Nitrobenzene	U	417	ug/kg	83.3	417
78-59-1	Isophorone	U	417	ug/kg	83.3	417
88-75-5	2-Nitrophenol	U	417	ug/kg	83.3	417
105-67-9	2,4-Dimethylphenol	U	417	ug/kg	146	417
111-91-1	bis(2-Chloroethoxy)methane	U	417	ug/kg	83.3	417
120-83-2	2,4-Dichlorophenol	U	417	ug/kg	83.3	417
65-85-0	Benzoic acid	U	833	ug/kg	208	833 UJ,SV7c
91-20-3	Naphthalene	U	41.7	ug/kg	12.5	41.7
106-47-8	4-Chloroaniline	U	417	ug/kg	83.3	417
87-68-3	Hexachlorobutadiene	U	417	ug/kg	83.3	417
91-57-6	2-Methylnaphthalene	U	41.7	ug/kg	8.33	41.7
77-47-4	Hexachlorocyclopentadiene	U	417	ug/kg	83.3	417 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	417	ug/kg	83.3	417
95-95-4	2,4,5-Trichlorophenol	U	417	ug/kg	83.3	417
91-58-7	2-Chloronaphthalene	U	41.7	ug/kg	13.7	41.7
88-74-4	2-Nitroaniline	U	417	ug/kg	83.3	417
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	417	ug/kg	83.3	417

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline	U	417	ug/kg	83.3	417
606-20-2	Dimethylphthalate	U	417	ug/kg	41.7	417
208-96-8	2,6-Dinitrotoluene	U	41.7	ug/kg	12.5	41.7
51-28-5	Acenaphthylene	U	833	ug/kg	158	833
132-64-9	2,4-Dinitrophenol	U	417	ug/kg	83.3	417
84-66-2	Dibenzofuran	U	417	ug/kg	83.3	417
86-73-7	Diethylphthalate	U	41.7	ug/kg	12.5	41.7
7005-72-3	Fluorene	U	417	ug/kg	83.3	417
534-52-1	4-Chlorophenylphenylether	U	417	ug/kg	83.3	417
100-01-6	2-Methyl-4,6-dinitrophenol	U	417	ug/kg	125	417
122-39-4	4-Nitroaniline	U	417	ug/kg	83.3	417
122-66-7	<i>p</i> -Nitroaniline	U	417	ug/kg	83.3	417
101-55-3	Diphenylamine	U	417	ug/kg	83.3	417
118-74-1	Azobenzene	U	417	ug/kg	83.3	417
85-01-8	1,2-Diphenylhydrazine	U	417	ug/kg	83.3	417
120-12-7	4-Bromophenylphenylether	U	41.7	ug/kg	12.5	41.7
84-74-2	Hexachlorobenzene	U	41.7	ug/kg	8.33	41.7
206-44-0	Phenanthrene	U	417	ug/kg	83.3	417
85-68-7	Anthracene	U	417	ug/kg	83.3	417
56-55-3	Di-n-butylphthalate	J	18.3	ug/kg	12.5	41.7
91-94-1	Butylbenzylphthalate	U	417	ug/kg	83.3	417
218-01-9	Benzo(a)anthracene	J	21.6	ug/kg	12.5	41.7
117-81-7	3,3'-Dichlorobenzidine	U	417	ug/kg	125	417
117-84-0	Chrysene	J	17.2	ug/kg	12.5	41.7
205-99-2	bis(2-Ethylhexyl)phthalate	U	417	ug/kg	83.3	417
207-08-9	Di-n-octylphthalate	U	417	ug/kg	83.3	417
50-32-8	Benzo(b)fluoranthene	J	31.2	ug/kg	12.5	41.7
193-39-5	Benzo(k)fluoranthene	U	41.7	ug/kg	12.5	41.7
53-70-3	Benzo(a)pyrene	J	14.4	ug/kg	12.5	41.7
191-24-2	Indeno(1,2,3-cd)pyrene	U	130	ug/kg	12.5	41.7
120-82-1	Dibenzo(a,h)anthracene	U	41.7	ug/kg	12.5	41.7
	Benzo(ghi)perylene	U	41.7	ug/kg	12.5	41.7
	1,2,4-Trichlorobenzene	U	417	ug/kg	83.3	417

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
	Unknown Aldol Condensate	2.94	395	ug/kg		JA
112-95-8	Eicosane	10.79	655	ug/kg	98	NJ

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

SDG Number: 10-1287
Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7160
Batch ID: 943386
Run Date: 01/21/2010 00:05
Prep Date: 01/20/2010 11:13
Data File: s5a2019.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
62016-79-9	Unknown		11.57	321	ug/kg		J
	Heptacosane, 1-chloro-		11.77	545	ug/kg	96	NJ
	Unknown		11.89	544	ug/kg		J
	Unknown		12.12	307	ug/kg		J
	Unknown		12.38	193	ug/kg		J
	Unknown		12.65	203	ug/kg		J
	Unknown		13.11	290	ug/kg		J
83-46-5	.beta.-Sitosterol		13.81	309	ug/kg	91	NJ

MJ
02/23/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923003

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7161
Batch ID: 943386
Run Date: 01/20/2010 23:42
Prep Date: 01/20/2010 11:13
Data File: s5a2018.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.7	373	
108-95-2	Phenol	U	373	ug/kg	74.7	373	
95-57-8	2-Chlorophenol	U	373	ug/kg	74.7	373	
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.7	373	
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.7	373	
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.7	373	
83-32-9	Acenaphthene	U	37.3	ug/kg	12.3	37.3	
121-14-2	2,4-Dinitrotoluene	U	373	ug/kg	37.3	373	
100-02-7	4-Nitrophenol	U	373	ug/kg	123	373	
87-86-5	Pentachlorophenol	U	373	ug/kg	93.3	373	
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3	
110-86-1	Pyridine	U	373	ug/kg	74.7	373	
62-53-3	Aniline	U	373	ug/kg	112	373	
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.7	373	
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.7	373	
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373	
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.7	373	
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.7	373	
95-48-7	o-Cresol	U	373	ug/kg	74.7	373	
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373	
67-72-1	Hexachloroethane	U	373	ug/kg	74.7	373	
98-95-3	Nitrobenzene	U	373	ug/kg	74.7	373	
78-59-1	Isophorone	U	373	ug/kg	74.7	373	
88-75-5	2-Nitrophenol	U	373	ug/kg	74.7	373	
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	131	373	
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.7	373	
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.7	373	
65-85-0	Benzoic acid	U	747	ug/kg	187	747	UJ,SV7c
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3	
106-47-8	4-Chloroaniline	U	373	ug/kg	74.7	373	
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.7	373	
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.47	37.3	
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.7	373	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.7	373	
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.7	373	
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3	
88-74-4	2-Nitroaniline	U	373	ug/kg	74.7	373	
99-09-2	o-Nitroaniline	U	373	ug/kg	74.7	373	
	3-Nitroaniline						

MJ
02/23/10

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

SDG Number: 10-1287
Lab Sample ID: 244923003

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	373	ug/kg	74.7	373
606-20-2	2,6-Dinitrotoluene	U	373	ug/kg	37.3	373
208-96-8	Acenaphthylene	U	37.3	ug/kg	11.2	37.3
51-28-5	2,4-Dinitrophenol	U	747	ug/kg	142	747 UJ,SV7c
132-64-9	Dibenzofuran	U	373	ug/kg	74.7	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.7	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.7	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.7	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.7	373
122-66-7	Azobenzene	U	373	ug/kg	74.7	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.7	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.7	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.47	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.7	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.7	373
56-55-3	Benzo(a)anthracene	U	37.3	ug/kg	11.2	37.3
91-94-1	3,3'-Dichlorobenzidine	U	373	ug/kg	112	373
218-01-9	Chrysene	U	37.3	ug/kg	11.2	37.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	373	ug/kg	74.7	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.7	373
205-99-2	Benzo(b)fluoranthene	U	37.3	ug/kg	11.2	37.3
207-08-9	Benzo(k)fluoranthene	U	37.3	ug/kg	11.2	37.3
50-32-8	Benzo(a)pyrene	U	37.3	ug/kg	11.2	37.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.3	ug/kg	11.2	37.3
53-70-3	Dibenzo(a,h)anthracene	U	37.3	ug/kg	11.2	37.3
191-24-2	Benzo(ghi)perylene	U	37.3	ug/kg	11.2	37.3
120-82-1	1,2,4-Trichlorobenzene	U	373	ug/kg	74.7	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	428	ug/kg		J
	Unknown Aldol Condensate	2.93	384	ug/kg		JA

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923003	Date Received: 01/16/2010 08:55	%Moisture: 10.9
Client ID: RE15-10-7161	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 23:42	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2018.d	Aliquot: 30.06 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary							
CAS No.	Tentatively Identified Compound (TIC)		RT	Estimated	Units	Flt	Qual
301-02-0	9-Octadecenamide, (Z)-		10.38	173	ug/kg	90	NJ
62906-36-9	1,2-Dicarbododecaborane(12), 1-[(propylt		11.9	683	ug/kg	90	NJ
	Unknown		12.65	919	ug/kg		J

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

SDG Number: 10-1287
Lab Sample ID: 244923002

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7162
Batch ID: 943386
Run Date: 01/20/2010 23:19
Prep Date: 01/20/2010 11:13
Data File: s5a2017.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.8	369	
108-95-2	Phenol	U	369	ug/kg	73.8	369	
95-57-8	2-Chlorophenol	U	369	ug/kg	73.8	369	
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.8	369	
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.8	369	
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.8	369	
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9	
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369	
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369	
87-86-5	Pentachlorophenol	U	369	ug/kg	92.2	369	
129-00-0	Pyrene	J	16.4	ug/kg	11.1	36.9	
110-86-1	Pyridine	U	369	ug/kg	73.8	369	
62-53-3	Aniline	U	369	ug/kg	111	369	
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.8	369	
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.8	369	
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369	
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.8	369	
108-60-1	bis(2-Chloroisopropyl) ether	U	369	ug/kg	73.8	369	
95-48-7	o-Cresol	U	369	ug/kg	73.8	369	
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369	
67-72-1	Hexachloroethane	U	369	ug/kg	73.8	369	
98-95-3	Nitrobenzene	U	369	ug/kg	73.8	369	
78-59-1	Isophorone	U	369	ug/kg	73.8	369	
88-75-5	2-Nitrophenol	U	369	ug/kg	73.8	369	
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369	
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.8	369	
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.8	369	
65-85-0	Benzoic acid	U	738	ug/kg	184	738	UJ,SV7c
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9	
106-47-8	4-Chloroaniline	U	369	ug/kg	73.8	369	
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.8	369	
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.38	36.9	
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.8	369	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.8	369	
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.8	369	
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9	
88-74-4	2-Nitroaniline	U	369	ug/kg	73.8	369	
99-09-2	o-Nitroaniline						
	3-Nitroaniline	U	369	ug/kg	73.8	369	

MJ
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Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923002

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.7
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	369	ug/kg	73.8	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	738	ug/kg	140	738 UJ,SV7c
132-64-9	Dibenzofuran	U	369	ug/kg	73.8	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.8	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.8	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.8	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.8	369
122-66-7	Azobenzene	U	369	ug/kg	73.8	369
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.8	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.8	369
85-01-8	Phenanthrene	J	14.0	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.38	36.9
84-74-2	Di-n-butylphthalate	J	129	ug/kg	73.8	369
206-44-0	Fluoranthene	J	23.1	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.8	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	J	11.2	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.8	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.8	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.8	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	1480	ug/kg		J
	Unknown Aldol Condensate	2.94	389	ug/kg		JA

MJ
02/23/10

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

SDG Number: 10-1287
Lab Sample ID: 244923002

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7162
Batch ID: 943386
Run Date: 01/20/2010 23:19
Prep Date: 01/20/2010 11:13
Data File: s5a2017.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	9.45	164	ug/kg		J
	Unknown	9.54	176	ug/kg		J
	Unknown	9.8	419	ug/kg		J
	Unknown	9.97	189	ug/kg		J
112-95-8	Eicosane	10.04	190	ug/kg	96	NJ
	Unknown	10.39	274	ug/kg		J
	Unknown	10.8	364	ug/kg		J
630-02-4	Octacosane	11.77	289	ug/kg	98	NJ
	Unknown	11.9	384	ug/kg		J
	Unknown	11.91	286	ug/kg		J
	Unknown	12.12	314	ug/kg		J
	Unknown	12.38	219	ug/kg		J
	Unknown	12.65	583	ug/kg		J
	Unknown	13.11	329	ug/kg		J
	Unknown	13.35	279	ug/kg		J
	Unknown	13.45	218	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	335	ug/kg	95	NJ

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7163
Batch ID: 943386
Run Date: 01/20/2010 22:11
Prep Date: 01/20/2010 11:13
Data File: s5a2014.d

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357	
108-95-2	Phenol	U	357	ug/kg	71.4	357	
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357	
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357	
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357	
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357	
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7	
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357	
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357	
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357	
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7	
110-86-1	Pyridine	U	357	ug/kg	71.4	357	
62-53-3	Aniline	U	357	ug/kg	107	357	
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357	
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357	
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357	
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357	
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357	
95-48-7	o-Cresol	U	357	ug/kg	71.4	357	
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357	
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357	
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357	
78-59-1	Isophorone	U	357	ug/kg	71.4	357	
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357	
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357	
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357	
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357	
65-85-0	Benzoic acid	U	714	ug/kg	178	714	UJ,SV7c
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7	
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357	
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357	
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	71.4	35.7	
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357	UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357	
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357	
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7	
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357	
99-09-2	o-Nitroaniline						
	3-Nitroaniline	U	357	ug/kg	71.4	357	

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

SDG Number: 10-1287
Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7163
Batch ID: 943386
Run Date: 01/20/2010 22:11
Prep Date: 01/20/2010 11:13
Data File: s5a2014.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714 UJ,SV7c
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	J	93.0	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	816	ug/kg		J
	Unknown Aldol Condensate	2.94	298	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923001Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MSMatrix: R
%Moisture: 6.6
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
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	158	ug/kg	99	NJ
	Unknown	9.8	164	ug/kg		J
	Unknown	10.38	180	ug/kg		J

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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923008

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7172
Batch ID: 943386
Run Date: 01/21/2010 01:36
Prep Date: 01/20/2010 11:13
Data File: s5a2023.d

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	423	ug/kg	84.7	423
108-95-2	Phenol	U	423	ug/kg	84.7	423
95-57-8	2-Chlorophenol	U	423	ug/kg	84.7	423
106-46-7	1,4-Dichlorobenzene	U	423	ug/kg	84.7	423
621-64-7	N-Nitrosodipropylamine	U	423	ug/kg	84.7	423
59-50-7	4-Chloro-3-methylphenol	U	423	ug/kg	84.7	423
83-32-9	Acenaphthene	U	42.3	ug/kg	14.0	42.3
121-14-2	2,4-Dinitrotoluene	U	423	ug/kg	42.3	423
100-02-7	4-Nitrophenol	U	423	ug/kg	140	423
87-86-5	Pentachlorophenol	U	423	ug/kg	106	423
129-00-0	Pyrene	U	42.3	ug/kg	12.7	42.3
110-86-1	Pyridine	U	423	ug/kg	84.7	423
62-53-3	Aniline	U	423	ug/kg	127	423
111-44-4	bis(2-Chloroethyl) ether	U	423	ug/kg	84.7	423
541-73-1	1,3-Dichlorobenzene	U	423	ug/kg	84.7	423
100-51-6	Benzyl alcohol	U	423	ug/kg	127	423
95-50-1	1,2-Dichlorobenzene	U	423	ug/kg	84.7	423
108-60-1	bis(2-Chloroisopropyl)ether	U	423	ug/kg	84.7	423
95-48-7	o-Cresol	U	423	ug/kg	84.7	423
65794-96-9	m,p-Cresols	U	423	ug/kg	127	423
67-72-1	Hexachloroethane	U	423	ug/kg	84.7	423
98-95-3	Nitrobenzene	U	423	ug/kg	84.7	423
78-59-1	Isophorone	U	423	ug/kg	84.7	423
88-75-5	2-Nitrophenol	U	423	ug/kg	84.7	423
105-67-9	2,4-Dimethylphenol	U	423	ug/kg	148	423
111-91-1	bis(2-Chloroethoxy)methane	U	423	ug/kg	84.7	423
120-83-2	2,4-Dichlorophenol	U	423	ug/kg	84.7	423
65-85-0	Benzoic acid		1010	ug/kg	212	847 J,SV7c
91-20-3	Naphthalene	U	42.3	ug/kg	12.7	42.3
106-47-8	4-Chloroaniline	U	423	ug/kg	84.7	423
87-68-3	Hexachlorobutadiene	U	423	ug/kg	84.7	423
91-57-6	2-Methylnaphthalene	U	42.3	ug/kg	8.47	42.3
77-47-4	Hexachlorocyclopentadiene	U	423	ug/kg	84.7	423 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	423	ug/kg	84.7	423
95-95-4	2,4,5-Trichlorophenol	U	423	ug/kg	84.7	423
91-58-7	2-Chloronaphthalene	U	42.3	ug/kg	14.0	42.3
88-74-4	2-Nitroaniline	U	423	ug/kg	84.7	423
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	423	ug/kg	84.7	423

MJ
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Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923008

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 21.2
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					
606-20-2	Dimethylphthalate	U	423	ug/kg	84.7	423
208-96-8	2,6-Dinitrotoluene	U	423	ug/kg	42.3	423
51-28-5	Acenaphthylene	U	42.3	ug/kg	12.7	42.3
132-64-9	2,4-Dinitrophenol	U	847	ug/kg	161	847 UJ,SV7c
84-66-2	Dibenzofuran	U	423	ug/kg	84.7	423
86-73-7	Diethylphthalate	U	423	ug/kg	84.7	423
7005-72-3	Fluorene	U	42.3	ug/kg	12.7	42.3
534-52-1	4-Chlorophenylphenylether	U	423	ug/kg	84.7	423
100-01-6	2-Methyl-4,6-dinitrophenol	U	423	ug/kg	84.7	423
	4-Nitroaniline	U	423	ug/kg	127	423 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	423	ug/kg	84.7	423
122-66-7	Azobenzene	U	423	ug/kg	84.7	423
101-55-3	1,2-Diphenylhydrazine					
118-74-1	4-Bromophenylphenylether	U	423	ug/kg	84.7	423
85-01-8	Hexachlorobenzene	U	423	ug/kg	84.7	423
120-12-7	Phenanthrene	U	42.3	ug/kg	12.7	42.3
84-74-2	Anthracene	U	42.3	ug/kg	8.47	42.3
206-44-0	Di-n-butylphthalate	U	423	ug/kg	84.7	423
85-68-7	Fluoranthene	U	42.3	ug/kg	12.7	42.3
56-55-3	Butylbenzylphthalate	U	423	ug/kg	84.7	423
91-94-1	Benzo(a)anthracene	U	42.3	ug/kg	12.7	42.3
218-01-9	3,3'-Dichlorobenzidine	U	423	ug/kg	127	423
117-81-7	Chrysene	U	42.3	ug/kg	12.7	42.3
117-84-0	bis(2-Ethylhexyl)phthalate	U	423	ug/kg	84.7	423
205-99-2	Di-n-octylphthalate	U	423	ug/kg	84.7	423
207-08-9	Benzo(b)fluoranthene	U	42.3	ug/kg	12.7	42.3
50-32-8	Benzo(k)fluoranthene	U	42.3	ug/kg	12.7	42.3
193-39-5	Benzo(a)pyrene	U	42.3	ug/kg	12.7	42.3
53-70-3	Indeno(1,2,3-cd)pyrene	U	42.3	ug/kg	12.7	42.3
191-24-2	Dibenzo(a,h)anthracene	U	42.3	ug/kg	12.7	42.3
120-82-1	Benzo(ghi)perylene	U	42.3	ug/kg	12.7	42.3
	1,2,4-Trichlorobenzene	U	423	ug/kg	84.7	423

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.78	4140	ug/kg	99	NJ
	Unknown	7.81	1780	ug/kg		J

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	%Moisture: 21.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7172	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 01:36	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Allquot: 30 g	Final Volume: 1 mL
Data File: s5a2023.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	8.28	1630	ug/kg		J
	Unknown	8.49	598	ug/kg		J
	Unknown	8.8	610	ug/kg		J
	Unknown	8.84	546	ug/kg		J
	Unknown	8.91	1610	ug/kg		J
	Unknown	8.94	1720	ug/kg		J
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.98	737	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.07	1160	ug/kg	98	NJ
51195-74-5	Nordextromethorphan	9.1	1570	ug/kg	90	NJ
	Unknown	9.14	746	ug/kg		J
	Unknown	9.24	827	ug/kg		J
	Unknown	9.45	2070	ug/kg		J
480-39-7	4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d	9.58	1640	ug/kg	98	NJ
110936-78-2	7-Oxodehydroabietic acid, methyl ester	9.85	820	ug/kg	90	NJ
	Unknown	9.92	1050	ug/kg		J

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

SDG Number: 10-1287
Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7173
Batch ID: 943386
Run Date: 01/21/2010 00:51
Prep Date: 01/20/2010 11:13
Data File: s5a2021.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 UJ,SV7c
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	73.9	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	73.9	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.39	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	73.9	370 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	73.9	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	73.9	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	73.9	370
99-09-2	o-Nitroaniline	U	370	ug/kg	73.9	370
	3-Nitroaniline					

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

SDG Number: 10-1287
Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7173
Batch ID: 943386
Run Date: 01/21/2010 00:51
Prep Date: 01/20/2010 11:13
Data File: s5a2021.d

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 UJ,SV7c
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 UJ,SV7c
	<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
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	1.98	1740	ug/kg		J
79-09-4	Propanoic acid	2.12	184	ug/kg	81	NJ

MJ
02/23/10

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923006	Date Received: 01/16/2010 08:55	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7173	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 00:51	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2021.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.93	269	ug/kg		JA
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.88	175	ug/kg	97	NJ
1686-66-4	Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	8	151	ug/kg	95	NJ
	Unknown	8.79	173	ug/kg		J
	Unknown	8.92	225	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	159	ug/kg	93	NJ
	Unknown	9.12	164	ug/kg		J
629-96-9	1-Eicosanol	9.42	240	ug/kg	89	NJ
1599-67-3	1-Docosene	10.08	271	ug/kg	99	NJ
	Unknown	11.91	1560	ug/kg		J
	Unknown	12.67	1400	ug/kg		J
	Unknown	13.11	164	ug/kg		J
	Unknown	13.25	237	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1330	ug/kg	95	NJ

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

SDG Number: 10-1287
Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7174
Batch ID: 943386
Run Date: 01/21/2010 00:28
Prep Date: 01/20/2010 11:13
Data File: s5a2020.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	414	ug/kg	82.9	414
108-95-2	Phenol	U	414	ug/kg	82.9	414
95-57-8	2-Chlorophenol	U	414	ug/kg	82.9	414
106-46-7	1,4-Dichlorobenzene	U	414	ug/kg	82.9	414
621-64-7	N-Nitrosodipropylamine	U	414	ug/kg	82.9	414
59-50-7	4-Chloro-3-methylphenol	U	414	ug/kg	82.9	414
83-32-9	Acenaphthene		232	ug/kg	13.7	41.4
121-14-2	2,4-Dinitrotoluene	U	414	ug/kg	41.4	414
100-02-7	4-Nitrophenol	U	414	ug/kg	137	414
87-86-5	Pentachlorophenol	U	414	ug/kg	104	414
129-00-0	Pyrene	U	41.4	ug/kg	12.4	41.4
110-86-1	Pyridine	U	414	ug/kg	82.9	414
62-53-3	Aniline	U	414	ug/kg	124	414
111-44-4	bis(2-Chloroethyl) ether	U	414	ug/kg	82.9	414
541-73-1	1,3-Dichlorobenzene	U	414	ug/kg	82.9	414
100-51-6	Benzyl alcohol	U	414	ug/kg	124	414
95-50-1	1,2-Dichlorobenzene	U	414	ug/kg	82.9	414
108-60-1	bis(2-Chloroisopropyl) ether	U	414	ug/kg	82.9	414
95-48-7	o-Cresol	U	414	ug/kg	82.9	414
65794-96-9	m,p-Cresols	U	414	ug/kg	124	414
67-72-1	Hexachloroethane	U	414	ug/kg	82.9	414
98-95-3	Nitrobenzene	U	414	ug/kg	82.9	414
78-59-1	Isophorone	U	414	ug/kg	82.9	414
88-75-5	2-Nitrophenol	U	414	ug/kg	82.9	414
105-67-9	2,4-Dimethylphenol	U	414	ug/kg	145	414
111-91-1	bis(2-Chloroethoxy)methane	U	414	ug/kg	82.9	414
120-83-2	2,4-Dichlorophenol	U	414	ug/kg	82.9	414
65-85-0	Benzoic acid	U	829	ug/kg	207	829 UJ,SV7c
91-20-3	Naphthalene	U	41.4	ug/kg	12.4	41.4
106-47-8	4-Chloroaniline	U	414	ug/kg	82.9	414
87-68-3	Hexachlorobutadiene	U	414	ug/kg	82.9	414
91-57-6	2-Methylnaphthalene	U	41.4	ug/kg	8.29	41.4
77-47-4	Hexachlorocyclopentadiene	U	414	ug/kg	82.9	414 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	414	ug/kg	82.9	414
95-95-4	2,4,5-Trichlorophenol	U	414	ug/kg	82.9	414
91-58-7	2-Chloronaphthalene	U	41.4	ug/kg	13.7	41.4
88-74-4	2-Nitroaniline	U	414	ug/kg	82.9	414
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	414	ug/kg	82.9	414

MJ
02/23/10

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

SDG Number: 10-1287
Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.05 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7174
Batch ID: 943386
Run Date: 01/21/2010 00:28
Prep Date: 01/20/2010 11:13
Data File: s5a2020.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	414	ug/kg	82.9	414
606-20-2	2,6-Dinitrotoluene	U	414	ug/kg	41.4	414
208-96-8	Acenaphthylene	U	41.4	ug/kg	12.4	41.4
51-28-5	2,4-Dinitrophenol	U	829	ug/kg	157	829 UJ,SV7c
132-64-9	Dibenzofuran	U	414	ug/kg	82.9	414
84-66-2	Diethylphthalate	U	414	ug/kg	82.9	414
86-73-7	Fluorene	U	41.4	ug/kg	12.4	41.4
7005-72-3	4-Chlorophenylphenylether	U	414	ug/kg	82.9	414
534-52-1	2-Methyl-4,6-dinitrophenol	U	414	ug/kg	82.9	414
100-01-6	4-Nitroaniline	U	414	ug/kg	124	414 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	414	ug/kg	82.9	414
122-66-7	Azobenzene	U	414	ug/kg	82.9	414
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	414	ug/kg	82.9	414
118-74-1	Hexachlorobenzene	U	414	ug/kg	82.9	414
85-01-8	Phenanthrene	U	41.4	ug/kg	12.4	41.4
120-12-7	Anthracene	U	41.4	ug/kg	8.29	41.4
84-74-2	Di-n-butylphthalate	U	414	ug/kg	82.9	414
206-44-0	Fluoranthene	U	41.4	ug/kg	12.4	41.4
85-68-7	Butylbenzylphthalate	U	414	ug/kg	82.9	414
56-55-3	Benzo(a)anthracene	U	41.4	ug/kg	12.4	41.4
91-94-1	3,3'-Dichlorobenzidine	U	414	ug/kg	124	414
218-01-9	Chrysene	U	41.4	ug/kg	12.4	41.4
117-81-7	bis(2-Ethylhexyl)phthalate	J	343	ug/kg	82.9	414
117-84-0	Di-n-octylphthalate	U	414	ug/kg	82.9	414
205-99-2	Benzo(b)fluoranthene	U	41.4	ug/kg	12.4	41.4
207-08-9	Benzo(k)fluoranthene	U	41.4	ug/kg	12.4	41.4
50-32-8	Benzo(a)pyrene	U	41.4	ug/kg	12.4	41.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.4	ug/kg	12.4	41.4
53-70-3	Dibenzo(a,h)anthracene	U	41.4	ug/kg	12.4	41.4
191-24-2	Benzo(ghi)perylene	U	41.4	ug/kg	12.4	41.4
120-82-1	1,2,4-Trichlorobenzene	U	414	ug/kg	82.9	414

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.13	361	ug/kg	81	NJ
	Unknown Aldol Condensate	2.93	344	ug/kg		JA

MJ
02/23/10

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Allquot: 30.05 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7174
Batch ID: 943386
Run Date: 01/21/2010 00:28
Prep Date: 01/20/2010 11:13
Data File: s5a2020.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Flt	Qual
120-08-1	2H-1-Benzopyran-2-one, 6,7-dimethoxy-	7.76	753	ug/kg	98	NJ
	Unknown	8.67	242	ug/kg		J
544-76-3	Hexadecane	8.76	208	ug/kg	86	NJ
	Unknown	8.85	239	ug/kg		J
	Unknown	8.92	219	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	313	ug/kg	96	NJ
1599-67-3	1-Docosene	9.42	212	ug/kg	96	NJ
	Unknown	9.84	213	ug/kg		J
	Unknown	10.04	282	ug/kg		J
56221-91-1	13-Tetradecen-1-ol acetate	10.08	526	ug/kg	90	NJ
	Unknown	10.39	281	ug/kg		J
	Unknown	10.49	316	ug/kg		J
112-95-8	Eicosane	10.79	506	ug/kg	97	NJ
	Unknown	11.11	391	ug/kg		J
	Unknown	11.88	631	ug/kg		J
	Unknown	12.01	376	ug/kg		J
	Unknown	12.13	419	ug/kg		J
	Unknown	13.1	373	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1390	ug/kg	95	NJ

MJ
02/23/10

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7175
Batch ID: 943386
Run Date: 01/21/2010 01:13
Prep Date: 01/20/2010 11:13
Data File: s5a2022.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.5	367
108-95-2	Phenol	U	367	ug/kg	73.5	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.5	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.5	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.5	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.5	367
83-32-9	Acenaphthene		121	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	91.8	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.5	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.5	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.5	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.5	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.5	367
95-48-7	o-Cresol	U	367	ug/kg	73.5	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.5	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.5	367
78-59-1	Isophorone	U	367	ug/kg	73.5	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.5	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.5	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.5	367
65-85-0	Benzoic acid	U	735	ug/kg	184	735 UJ,SV7c
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.5	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.5	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.35	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.5	367 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.5	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.5	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.5	367
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	367	ug/kg	73.5	367

MJ
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Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7175
Batch ID: 943386
Run Date: 01/21/2010 01:13
Prep Date: 01/20/2010 11:13
Data File: s5a2022.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	367	ug/kg	73.5	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	735	ug/kg	140	735 UJ,SV7c
132-64-9	Dibenzofuran	U	367	ug/kg	73.5	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.5	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.5	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.5	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.5	367
122-66-7	Azobenzene	U	367	ug/kg	73.5	367
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.5	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.5	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.35	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.5	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.5	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	73.5	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.5	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	73.5	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	504	ug/kg		J
	Unknown Aldol Condensate	2.93	289	ug/kg		JA

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Matrix: R

%Moisture: 9.3

Client ID: RE15-10-7175

Client: LANL010

Project: LANL01004

Batch ID: 943386

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Run Date: 01/21/2010 01:13

Inst: MSD5.I

Dilution: 1

Prep Date: 01/20/2010 11:13

Analyst: RMB

Inj. Vol: .5 uL

Data File: s5a2022.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		11.9	659	ug/kg		J
	Unknown		12.65	825	ug/kg		J
	Unknown		13.25	390	ug/kg		J
	Unknown		13.47	242	ug/kg		J
83-46-5	.beta.-Sitosterol		13.81	399	ug/kg	91	NJ

MJ
02/23/10

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923009

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7218
Batch ID: 943386
Run Date: 01/21/2010 01:59
Prep Date: 01/20/2010 11:13
Data File: s5a2024.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	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	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl) ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740 UJ,SV7c
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
99-09-2	o-Nitroaniline	U	370	ug/kg	74.0	370
	3-Nitroaniline					

MJ
02/23/10

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

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SDG Number: 10-1287
Lab Sample ID: 244923009

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	370	ug/kg	74.0	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	740	ug/kg	141	740 UJ,SV7c
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	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	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	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	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	1160	ug/kg		J
79-09-4	Propanoic acid	2.13	174	ug/kg	87	NJ

MJ
02/23/10

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

SDG Number: 10-1287
Lab Sample ID: 244923009

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7218
Batch ID: 943386
Run Date: 01/21/2010 01:59
Prep Date: 01/20/2010 11:13
Data File: s5a2024.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identfied Compound Summary						
CAS No.	Tentatively Identfied Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	281	ug/kg		JA
25491-20-7	1H-3a,7-Methanoazulene, octahydro-1,4,9,	9.1	180	ug/kg	80	NJ
56221-91-1	13-Tetradecen-1-ol acetate	9.41	182	ug/kg	91	NJ
1599-67-3	1-Docosene	10.07	211	ug/kg	96	NJ
301-02-0	9-Octadecenamide, (Z)-	10.39	211	ug/kg	91	NJ
	Unknown	11.91	862	ug/kg		J
	Unknown	12.67	1040	ug/kg		J
	Unknown	12.9	198	ug/kg		J
	Unknown	13.1	174	ug/kg		J
	Unknown	13.26	195	ug/kg		J
	Unknown	13.46	174	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.77	977	ug/kg	97	NJ

MJ
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Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287

Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Matrix: R

%Moisture: 10.8

Client ID: RE15-10-7223

Client: LANL010

Project: LANL01004

Batch ID: 943386

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Run Date: 01/21/2010 02:21

Inst: MSD5.I

Dilution: 1

Prep Date: 01/20/2010 11:13

Analyst: RMB

Inj. Vol: .5 uL

Data File: s5a2025.d

Aliquot: 30.01 g

Final Volume: 1 mL

Column: J&W DB-5MS

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.7	373
108-95-2	Phenol	U	373	ug/kg	74.7	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.7	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.7	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.7	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.7	373
83-32-9	Acenaphthene	U	37.3	ug/kg	12.3	37.3
121-14-2	2,4-Dinitrotoluene	U	373	ug/kg	37.3	373
100-02-7	4-Nitrophenol	U	373	ug/kg	123	373
87-86-5	Pentachlorophenol	U	373	ug/kg	93.4	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.7	373
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.7	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.7	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.7	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.7	373
95-48-7	o-Cresol	U	373	ug/kg	74.7	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.7	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.7	373
78-59-1	Isophorone	U	373	ug/kg	74.7	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.7	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	131	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.7	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.7	373
65-85-0	Benzoic acid	U	747	ug/kg	187	747 UJ,SV7c
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.7	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.7	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.47	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.7	373 UJ,SV7c
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.7	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.7	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.7	373
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	373	ug/kg	74.7	373

MJ
02/23/10

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923010	Date Received: 01/16/2010 08:55	%Moisture: 10.8
Client ID: RE15-10-7223	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/21/2010 02:21	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2025.d	Allquot: 30.01 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmaame	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	373	ug/kg	74.7	373
606-20-2	2,6-Dinitrotoluene	U	373	ug/kg	37.3	373
208-96-8	Acenaphthylene	U	37.3	ug/kg	11.2	37.3
51-28-5	2,4-Dinitrophenol	U	747	ug/kg	142	747 UJ,SV7c
132-64-9	Dibenzofuran	U	373	ug/kg	74.7	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.7	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.7	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.7	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373 UJ,SV7c
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.7	373
122-66-7	Azobenzene	U	373	ug/kg	74.7	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.7	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.7	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.47	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.7	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.7	373
56-55-3	Benzo(a)anthracene	U	37.3	ug/kg	11.2	37.3
91-94-1	3,3'-Dichlorobenzidine	U	373	ug/kg	112	373
218-01-9	Chrysene	U	37.3	ug/kg	11.2	37.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	373	ug/kg	74.7	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.7	373
205-99-2	Benzo(b)fluoranthene	U	37.3	ug/kg	11.2	37.3
207-08-9	Benzo(k)fluoranthene	U	37.3	ug/kg	11.2	37.3
50-32-8	Benzo(a)pyrene	U	37.3	ug/kg	11.2	37.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.3	ug/kg	11.2	37.3
53-70-3	Dibenzo(a,h)anthracene	U	37.3	ug/kg	11.2	37.3
191-24-2	Benzo(ghi)perylene	U	37.3	ug/kg	11.2	37.3
120-82-1	1,2,4-Trichlorobenzene	U	373	ug/kg	74.7	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	623	ug/kg		J
	Unknown Aldol Condensate	2.94	403	ug/kg		JA


Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923010Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MSMatrix: R
%Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW


CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.52	181	ug/kg		J
	Unknown	11.54	214	ug/kg		J
	Unknown	11.9	403	ug/kg		J
	Unknown	12.24	249	ug/kg		J
	Unknown	12.65	304	ug/kg		J
	Unknown	12.66	276	ug/kg		J


MJ
02/23/10

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


Section I.			
REQUEST NUMBER:	10-1287	VALIDATION DATE:	02/23/10
		LAB CODE:	GEL
CONTRACT LABORATORY NAME: GEL Laboratories LLC			
VALIDATOR:	Maryann Jordan	ORGANIZATION:	Analytical Quality Associates, Inc.
ANALYTICAL SUITE (CHECK ALL THAT APPLY):			
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS	<input type="checkbox"/> LCMSMS PERCHLORATES
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS	<input type="checkbox"/> ORGANOCHLORINE
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input checked="" type="checkbox"/> LCMSMS HIGH EXPLOSIVES	<input type="checkbox"/> PESTICIDES/POLYCHLORINATED BIPHENYLS
<input type="checkbox"/> OTHER (DESCRIBE): _____			

Section II. Completeness Check							
YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. CHAIN-OF-CUSTODY FORM(S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. RAW/BSS DATA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. CASE NARRATIVE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. QUALITY CONTROL FORMS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. SAMPLE RESULT FORMS	<input 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): <ol style="list-style-type: none"> The ICV and/or CCV %Ds were >20% with a positive bias for 1,3,5-trinitrobenzene; 2,4,6-trinitrotoluene; HMX and RDX. All associated sample results were NDs and, thus, were not qualified. It should be noted that the raw ICAL data from the instrument used for the secondary HE analysis were not reported in the data package. Thus, the surrogate retention time criteria could not be evaluated. No sample data were qualified as a result. 							
Reviewed by: <u>Mary Donovan</u> Level: <u>I</u> Date: <u>02/24/10</u>							


VALIDATOR'S SIGNATURE: 	DATE: <u>02/23/10</u>
Form 5122-1, Revision 0.0	
LOS ALAMOS Environmental Restoration Project	

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

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

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

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

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

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

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

Records Use only



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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923001

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125189a

Date Analyzed: 29-JAN-10 07:49

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: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923001

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250129.wiff

Date Analyzed: 26-JAN-10 20:03

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

MJ
02/23/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7162

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125195a

Date Analyzed: 29-JAN-10 10:46

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7162

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923002

Sample Amount 2

Moisture: 2.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250135.wiff

Date Analyzed: 26-JAN-10 21:37

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7161

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125196a

Date Analyzed: 29-JAN-10 11:15

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7161

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250136.wiff

Date Analyzed: 26-JAN-10 21:53

Units: ug/kg

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

*Concentration =

Instrument Value X Concentrated Extract Volume X Dilution Factor
Sample Amount

MJ
02/23/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7160

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923004

Sample Amount 2

Moisture: 20.0

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125197a

Date Analyzed: 29-JAN-10 11:45

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7160

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923004

Sample Amount 2

Moisture: 20.0

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250137.wiff

Date Analyzed: 26-JAN-10 22:09

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7174

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923005

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125198a

Date Analyzed: 29-JAN-10 12:14

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7174

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923005

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250138.wiff

Date Analyzed: 26-JAN-10 22:24

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7173

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923006

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125199a

Date Analyzed: 29-JAN-10 12:44

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7173

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923006

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250139.wiff

Date Analyzed: 26-JAN-10 22:40

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7175

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923007

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125200a

Date Analyzed: 29-JAN-10 13:13

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7175

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923007

Sample Amount 2

Moisture: 2.3

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250140.wiff

Date Analyzed: 26-JAN-10 22:56

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7172

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923008

Sample Amount 2

Moisture: 21.2

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125201a

Date Analyzed: 29-JAN-10 13:43

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

MJ
02/23/10

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7172

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923008

Sample Amount 2

Moisture: 21.2

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250141.wiff

Date Analyzed: 26-JAN-10 23:12

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7218

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125202a

Date Analyzed: 29-JAN-10 14:12

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7218

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250142.wiff

Date Analyzed: 26-JAN-10 23:27

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7223

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923010

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125203a

Date Analyzed: 29-JAN-10 14:42

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

MJ
02/23/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7223

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923010

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250143.wiff

Date Analyzed: 26-JAN-10 23:43

Units: ug/kg

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

*Concentration =

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

MJ
02/23/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1287 VALIDATION DATE: 02/23/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Maryann Jordan ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check

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

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

- It should be noted that the MS/MSD analysis was performed on a sample from another RN and that the parent sample raw data was not included in the data package. Since analysis of a MS/MSD pair is not a client requirement, no sample data were qualified.

Reviewed by: Mary Donovan

Level: I

Date: 02/24/10

VALIDATOR'S SIGNATURE:

A handwritten signature in black ink, appearing to read "Maryann Jordan".

DATE: 02/23/10

Form 5116-1, Revision 0.0

 LOS ALAMOS
 Environmental Restoration Project

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

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

5116-2

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

Records Use only



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

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.18 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 20
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.14	ug/kg	1.38	4.14	1
11104-28-2	Aroclor-1221	U	4.14	ug/kg	1.38	4.14	1
11141-16-5	Aroclor-1232	U	4.14	ug/kg	1.38	4.14	1
53469-21-9	Aroclor-1242	U	4.14	ug/kg	1.38	4.14	1
12672-29-6	Aroclor-1248	U	4.14	ug/kg	1.38	4.14	1
11097-69-1	Aroclor-1254		114	ug/kg	1.38	4.14	1
11096-82-5	Aroclor-1260		38.5	ug/kg	1.38	4.14	1

MJ
02/23/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923003Client ID: RE15-10-7161
Batch ID: 943953
Run Date: 01/22/2010 19:19
Prep Date: 01/21/2010 19:38
Data File: 071f7101.d
071b7101.dDate Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.03 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 10.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.74	ug/kg	1.24	3.74	1
11104-28-2	Aroclor-1221	U	3.74	ug/kg	1.24	3.74	1
11141-16-5	Aroclor-1232	U	3.74	ug/kg	1.24	3.74	1
53469-21-9	Aroclor-1242	U	3.74	ug/kg	1.24	3.74	1
12672-29-6	Aroclor-1248	U	3.74	ug/kg	1.24	3.74	1
11097-69-1	Aroclor-1254		5.20	ug/kg	1.24	3.74	1
11096-82-5	Aroclor-1260	J	3.30	ug/kg	1.24	3.74	1

MJ
02/23/10

PCB

Page 1 of 1

Certificate of Analysis
Sample Summary

SDG Number:	10-1287	Date Collected:	01/12/2010 12:00	Matrix:	R
Lab Sample ID:	244923002	Date Received:	01/16/2010 08:55	%Moisture:	9.7
Client ID:	RE15-10-7162	Client:	LANL010	Project:	LANL01004
Batch ID:	943953	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Run Date:	01/22/2010 19:07	Inst:	ECD1A.I	Dilution:	10
Prep Date:	01/21/2010 19:38	Analyst:	YS1	Inj. Vol:	1 uL
Data File:	070f7001.d	Aliquot:	30.07 g	Final Volume:	1 mL
	070b7001.d	Column:	1 CLP1	Level:	LOW
			2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	36.8	ug/kg	12.3	36.8	1
11104-28-2	Aroclor-1221	U	36.8	ug/kg	12.3	36.8	1
11141-16-5	Aroclor-1232	U	36.8	ug/kg	12.3	36.8	1
53469-21-9	Aroclor-1242	U	36.8	ug/kg	12.3	36.8	1
12672-29-6	Aroclor-1248	U	36.8	ug/kg	12.3	36.8	1
11097-69-1	Aroclor-1254		704	ug/kg	12.3	36.8	1
11096-82-5	Aroclor-1260		258	ug/kg	12.3	36.8	1

MJ
02/23/10

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923001

Client ID: RE15-10-7163
Batch ID: 943953
Run Date: 01/22/2010 14:03
Prep Date: 01/21/2010 19:38
Data File: 046f4601.d
046b4601.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.16 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254		114	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260		36.9	ug/kg	1.18	3.55	1

MJ
02/23/10

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923008

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 21.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.23	ug/kg	1.41	4.23	1
11104-28-2	Aroclor-1221	U	4.23	ug/kg	1.41	4.23	1
11141-16-5	Aroclor-1232	U	4.23	ug/kg	1.41	4.23	1
53469-21-9	Aroclor-1242	U	4.23	ug/kg	1.41	4.23	1
12672-29-6	Aroclor-1248	U	4.23	ug/kg	1.41	4.23	1
11097-69-1	Aroclor-1254	U	4.23	ug/kg	1.41	4.23	1
11096-82-5	Aroclor-1260	U	4.23	ug/kg	1.41	4.23	1

MJ
02/23/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923006Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 9.8
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.67	ug/kg	1.22	3.67	1
11104-28-2	Aroclor-1221	U	3.67	ug/kg	1.22	3.67	1
11141-16-5	Aroclor-1232	U	3.67	ug/kg	1.22	3.67	1
53469-21-9	Aroclor-1242	U	3.67	ug/kg	1.22	3.67	1
12672-29-6	Aroclor-1248	U	3.67	ug/kg	1.22	3.67	1
11097-69-1	Aroclor-1254	U	3.67	ug/kg	1.22	3.67	1
11096-82-5	Aroclor-1260	U	3.67	ug/kg	1.22	3.67	1

MJ
02/23/10

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YSI
Allquot: 30.05 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.14	ug/kg	1.38	4.14	1
11104-28-2	Aroclor-1221	U	4.14	ug/kg	1.38	4.14	1
11141-16-5	Aroclor-1232	U	4.14	ug/kg	1.38	4.14	1
53469-21-9	Aroclor-1242	U	4.14	ug/kg	1.38	4.14	1
12672-29-6	Aroclor-1248	U	4.14	ug/kg	1.38	4.14	1
11097-69-1	Aroclor-1254	U	4.14	ug/kg	1.38	4.14	1
11096-82-5	Aroclor-1260	U	4.14	ug/kg	1.38	4.14	1

MJ
02/23/10

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923007

Client ID: RE15-10-7175
Batch ID: 943953
Run Date: 01/22/2010 15:19
Prep Date: 01/21/2010 19:38
Data File: 052f5201.d
052b5201.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 9.3
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

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

MJ
02/23/10

PCB

Page 1 of 1

Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923009Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.11 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.69	ug/kg	1.23	3.69	1
11104-28-2	Aroclor-1221	U	3.69	ug/kg	1.23	3.69	1
11141-16-5	Aroclor-1232	U	3.69	ug/kg	1.23	3.69	1
53469-21-9	Aroclor-1242	U	3.69	ug/kg	1.23	3.69	1
12672-29-6	Aroclor-1248	U	3.69	ug/kg	1.23	3.69	1
11097-69-1	Aroclor-1254	U	3.69	ug/kg	1.23	3.69	1
11096-82-5	Aroclor-1260	U	3.69	ug/kg	1.23	3.69	1

MJ
02/23/10

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.14 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7223
Batch ID: 943953
Run Date: 01/22/2010 16:22
Prep Date: 01/21/2010 19:38
Data File: 057f5701.d
057b5701.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.72	ug/kg	1.24	3.72	1
11104-28-2	Aroclor-1221	U	3.72	ug/kg	1.24	3.72	1
11141-16-5	Aroclor-1232	U	3.72	ug/kg	1.24	3.72	1
53469-21-9	Aroclor-1242	U	3.72	ug/kg	1.24	3.72	1
12672-29-6	Aroclor-1248	U	3.72	ug/kg	1.24	3.72	1
11097-69-1	Aroclor-1254		8.00	ug/kg	1.24	3.72	1
11096-82-5	Aroclor-1260		4.20	ug/kg	1.24	3.72	2

MJ
02/23/10

Friday, January 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1287

LOS ALAMOS

REQUEST NUMBER: 10-1287

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/14/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244925°/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7163	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7162	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7161	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7160	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7174	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7174	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7173	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7173	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7175	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7175	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7172	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7172	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7218	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7218	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7223	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7223	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7162	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7161	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7160	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7163	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7235	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

Friday, January 15, 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: 1/15/2010

TURNAROUND/REPORT DUE: 2/14/2010

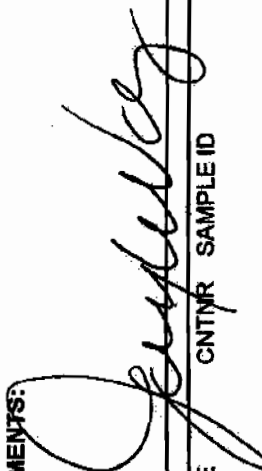
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 3

REQUEST NUMBER: 10-1287

These Samples are on:

LANL Request Number: 10-1287

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
		1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
	SW-846:8260B	1	RE15-10-7162	R	1/12/2010	

Friday, January 15, 2010

Page 2 of 3

REQUEST NUMBER: 10-1287

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
		1	RE15-10-7235	S	1/12/2010	
	SW-846:8270C	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
	SW-846:8321A_MOD	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
		1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	



Laboratories LLC

a member of The GEL Group INC



PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

P 843.556.8171 F 843.766.1178

January 19, 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: 244923
SDG: 10-1287

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on January 16, 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: 10-1287
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 244923
SDG: 10-1287

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Quality Control Data.....	1468
Miscellaneous Data.....	1481

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 244923
SDG # : 10-1287**

January 19, 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 16, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

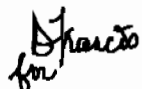
<u>Laboratory ID</u>	<u>Client ID</u>
244923001	RE15-10-7163
244923002	RE15-10-7162
244923003	RE15-10-7161
244923004	RE15-10-7160
244923005	RE15-10-7174
244923006	RE15-10-7173
244923007	RE15-10-7175
244923008	RE15-10-7172
244923009	RE15-10-7218
244923010	RE15-10-7223
244923011	RE15-10-7235

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 19 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

Friday, January 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1287

LOS ALAMOS

REQUEST NUMBER: 10-1287

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 2/14/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

244923°/.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7163	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7162	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7161	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7160	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7174	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7174	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7173	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7173	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7175	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7175	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7172	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7172	1	AMBER GLASS	8270C+NMED Exp	Ice	R
RE15-10-7218	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7218	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7223	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7223	1	SEPTUM AMBER GLASS	8260B	Ice	R
RE15-10-7162	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7161	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7160	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7163	1	AMBER GLASS	8082+8270+NMED-EXP	Ice	R
RE15-10-7235	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

Friday, January 15, 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: 1/15/2010

TURNAROUND/REPORT DUE: 2/14/2010

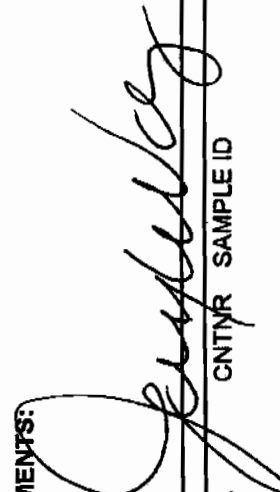
TURNAROUND REQ'D: 30 Days

RAD SCREENING: Not Required

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:



Page 1 of 3

REQUEST NUMBER: 10-1287

These Samples are on:

LANL Request Number: 10-1287

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
		1	RE15-10-7160	R	1/12/2010	
	SW-846:8260B	1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	

Friday, January 15, 2010

Page 2 of 3

REQUEST NUMBER: 10-1287

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8260B	1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
		1	RE15-10-7235	S	1/12/2010	
	SW-846:8270C	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	
	SW-846:8321A_MOD	1	RE15-10-7160	R	1/12/2010	
		1	RE15-10-7161	R	1/12/2010	
		1	RE15-10-7162	R	1/12/2010	
		1	RE15-10-7163	R	1/12/2010	
		1	RE15-10-7172	R	1/12/2010	
		1	RE15-10-7173	R	1/12/2010	
		1	RE15-10-7174	R	1/12/2010	
		1	RE15-10-7175	R	1/12/2010	
		1	RE15-10-7218	R	1/12/2010	
		1	RE15-10-7223	R	1/12/2010	



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL		SDG/ARCOC/Work Order: 10-1287	
Received By: Patricia Dover-Dent		Date Received: JANUARY 16, 2009	
Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group of further
COC/Samples marked as radioactive?		X	Maximum Counts Observed*: 40CPM
Classified Radioactive II by RSO?		X	
COC/Samples marked containing PCBs?		X	
Shipped as a DOT Hazardous?		X	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		X	

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

Comments: FED EX #'S

7209 7849 5335 1C	7209 7849 5302 12C
7209 7849 5265 3C	7209 7849 5313 13C
7209 7849 5368 3C	7209 7849 5298 13C
7209 7849 5416 3C	
7209 7849 5357 4C	
7209 7849 5380 4C	
7209 7849 5390 4C	
7209 7849 5346 5C	
7209 7849 5405 5C	

ORIGIN ID: SAFA (505) 655-5958
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15 JAN 18
ACTGCT: 55.0 LB HAN
CAD: 0014176/CAPE2449
BILL SENDER

ORIGIN ID: SAFA (505) 655-5958
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

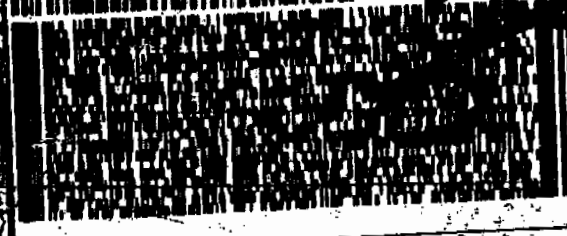
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BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

VALERIE DAVIS
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REF: 6B01AMR3A05528E00



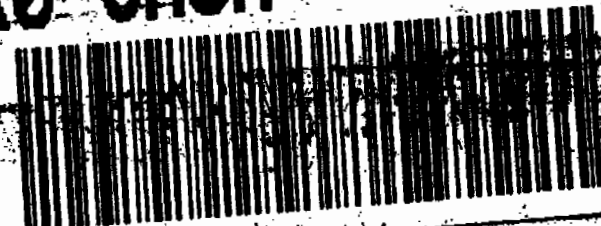
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1 of 3
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SATURDAY ###
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PRIORITY OVERNIGHT

X0 CHSA



X0 CHSA



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

SHIP DATE: 15 JAN 18
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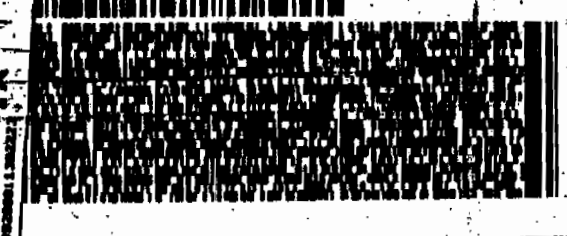
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LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

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SATURDAY ###
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PRIORITY OVERNIGHT

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PRIORITY OVERNIGHT

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Page 1 of 1

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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 63
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15JAN10
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CRD: 0014176/CAFE2449

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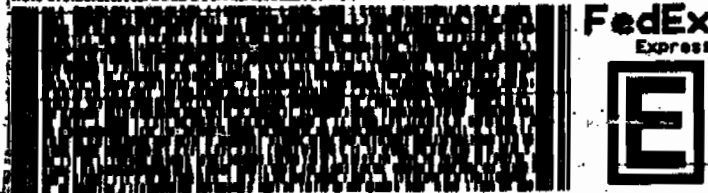
VALERIE DAVIS
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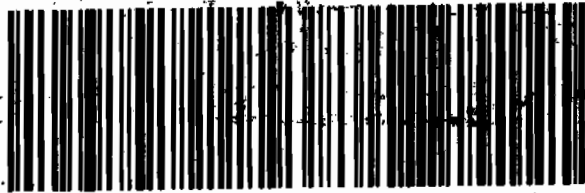
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SATURDAY ### A1
PRIORITY OVERNIGHT



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 63
LOS ALAMOS, NM 87545
UNITED STATES US

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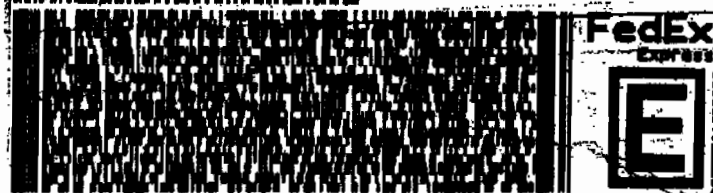
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1 of 2



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SATURDAY ### A1
PRIORITY OVERNIGHT

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 63
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15JAN10
ACTWT: 55.0 LB MAN
CRD: 0014176/CAFE2449

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REF: 6801AMR3A05529E00

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SATURDAY ### A1
PRIORITY OVERNIGHT



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 63
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15JAN10
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SATURDAY ### A1
PRIORITY OVERNIGHT

2 of 2

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83

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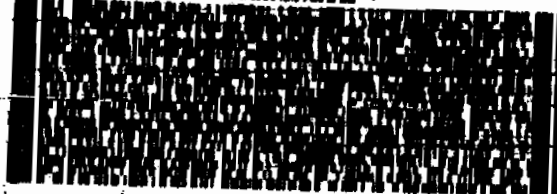
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GENERAL ENGINEERING LAB
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(843) 556-8171
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15JAN10
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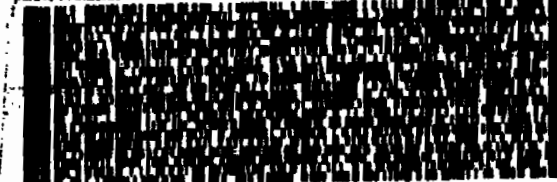
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Page 13 of 1503

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15JAN10
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ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83

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UNITED STATES US

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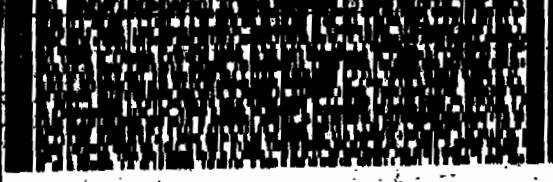
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SATURDAY ### A1
PRIORITY OVERNIGHT

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Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
-----------	-------------

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

GC/MS Volatile Analysis

Case Narrative

**ChemStation Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1287**

Method/Analysis Information

Procedure: Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
Analytical Method: SW846 8260B
Prep Method: SW846 5030
Analytical Batch Number: 944501
Prep Batch Number: 944498

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
244923001	RE15-10-7163
244923002	RE15-10-7162
244923003	RE15-10-7161
244923004	RE15-10-7160
244923005	RE15-10-7174
244923006	RE15-10-7173
244923007	RE15-10-7175
244923008	RE15-10-7172
244923009	RE15-10-7218
244923010	RE15-10-7223
244923011	RE15-10-7235
1202022573	Method Blank (MB)
1202022576	Laboratory Control Sample (LCS)
1202022577	Laboratory Control Sample (LCS)
1202036752	Method Blank (MB)
1202036753	Laboratory Control Sample (LCS)
1202036754	Laboratory Control Sample (LCS)
1202022574	244923001(RE15-10-7163) Post Spike (PS)
1202022575	244923001(RE15-10-7163) 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 244923 001, 002, 003, 004, 005, 006, 007, 008, 009 and 010 in this SDG were analyzed on an "dry weight" basis. Samples 244923 011 in this SDG were analyzed on a "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

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

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

Calibration Information

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

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

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

Initial Calibration

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

Continuing Calibration Verification Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

Target analytes were detected in the following blank below the reporting limit: 1202036752 (MB).

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 244923001 (RE15-10-7163) was designated for spike analysis in this SDG.

Matrix Spike (PS) Recovery Statement

The spike recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement

The spike duplicate recoveries for this SDG were within the required acceptance limits.

Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

In the following samples, internal standard responses were outside the required acceptance criteria. Sample reanalysis confirmed matrix interference: 244923005 (RE15-10-7174), 244923006 (RE15-10-7173) and 244923008 (RE15-10-7172). See DER# 788285.

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

The samples in this SDG were re-analyzed due to unacceptable recoveries in the initial analysis: 1202022574 (RE15-10-7163), 1202022575 (RE15-10-7163), 244923005 (RE15-10-7174), 244923006 (RE15-10-7173) and 244923008 (RE15-10-7172).

Miscellaneous Information**Electronic Packaging Comment**

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

Data Exception (DER) Documentation

The following DER was generated for this SDG: 788285

Manual Integrations

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

TIC Comment

Tentatively identified compounds (TIC) were required for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will not be present on the Form I. These detected analytes are included in the calibrated method and as a result cannot be reported on the TIC quantitation report.

Additional Comments

Additional comments were not required for this SDG.

Residual Chlorine

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

System Configuration

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

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA6.I	Gas Chromatograph/Mass Spectrometer	HP6890N/HP5975	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

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

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

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

Client SDG: 10-1287 GEL Work Order: 244923


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
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Review/Validation

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

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

Signature: 

Name: Stacy Calloway

Date: 11 FEB 2010

Title: Data Validator

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1287
 Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 6.6
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7163
 Batch ID: 944501
 Run Date: 01/22/2010 16:28
 Prep Date: 01/22/2010 13:48
 Data File: 012210V66U513.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.78	5.35
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.61	5.35
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.61	5.35
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923001

Client ID: RE15-10-7163
Batch ID: 944501
Run Date: 01/22/2010 16:28
Prep Date: 01/22/2010 13:48
Data File: 012210V66U513.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	J	0.375	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.35	ug/kg	1.71	5.35
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	100	ug/kg	0	J
013466-78-9	3-Carene	15.19	32.9	ug/kg	96	NJ
	unknown	16.17	17.3	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923002	Date Received: 01/16/2010 08:55	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7162	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/22/2010 16:55	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 13:54	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V66U514.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.332	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.332	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.332	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.332	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.332	1.11
67-64-1	Acetone	U	5.54	ug/kg	1.84	5.54
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.38	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.332	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.332	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.332	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.332	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.332	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.332	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.332	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.332	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.332	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.332	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.332	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.38	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.332	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.332	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.332	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.332	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.332	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.332	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.332	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.332	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.332	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923002

 Client ID: RE15-10-7162
 Batch ID: 944501
 Run Date: 01/22/2010 16:55
 Prep Date: 01/22/2010 13:54
 Data File: 012210V6V6U514.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.332	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.332	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.332	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.332	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.332	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.332	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.332	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.332	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.332	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.332	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.332	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.332	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.332	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.332	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.332	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.332	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.332	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.332	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.332	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.332	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	13.85	5.64	ug/kg	99	NJ
	unknown siloxane	14.24	15.3	ug/kg	0	J
	unknown	16.17	5.82	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923003

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7161
 Batch ID: 944501
 Run Date: 01/22/2010 17:23
 Prep Date: 01/22/2010 13:56
 Data File: 012210V6U515.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.382	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.337	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.337	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.337	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.337	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.337	1.12
67-64-1	Acetone	U	5.61	ug/kg	1.86	5.61
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.337	1.12
74-88-4	Iodomethane	U	5.61	ug/kg	1.80	5.61
75-09-2	Methylene chloride	U	5.61	ug/kg	2.24	5.61
75-15-0	Carbon disulfide	U	5.61	ug/kg	1.40	5.61
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.337	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.337	1.12
78-93-3	2-Butanone	U	5.61	ug/kg	1.68	5.61
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.337	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.337	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.337	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.370	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.337	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.337	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.337	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.337	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.337	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.370	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.337	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.337	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.337	1.12
108-10-1	4-Methyl-2-pentanone	U	5.61	ug/kg	1.40	5.61
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.337	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.337	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.337	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.337	1.12
591-78-6	2-Hexanone	U	5.61	ug/kg	1.68	5.61
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.337	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.337	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.337	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.337	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.337	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923003

 Client ID: RE15-10-7161
 Batch ID: 944501
 Run Date: 01/22/2010 17:23
 Prep Date: 01/22/2010 13:56
 Data File: 012210V66U515.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.337	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.337	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.337	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.337	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.337	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.337	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.337	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.337	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.337	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.337	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.337	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.337	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.337	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.337	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.337	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.337	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.337	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.337	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.337	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.61	ug/kg	1.80	5.61
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.337	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	18.6	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923004

 Client ID: RE15-10-7160
 Batch ID: 944501
 Run Date: 01/22/2010 17:51
 Prep Date: 01/22/2010 13:58
 Data File: 012210V66U516.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 20
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.425	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.375	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.375	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.375	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.375	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.375	1.25
67-64-1	Acetone	U	6.25	ug/kg	2.07	6.25
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.375	1.25
74-88-4	Iodomethane	U	6.25	ug/kg	2.00	6.25
75-09-2	Methylene chloride	U	6.25	ug/kg	2.50	6.25
75-15-0	Carbon disulfide	U	6.25	ug/kg	1.56	6.25
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.375	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.375	1.25
78-93-3	2-Butanone	U	6.25	ug/kg	1.87	6.25
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.375	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.375	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.375	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.412	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.375	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.375	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.375	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.375	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.375	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.412	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.375	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.375	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.375	1.25
108-10-1	4-Methyl-2-pentanone	U	6.25	ug/kg	1.56	6.25
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.375	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.375	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.375	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.375	1.25
591-78-6	2-Hexanone	U	6.25	ug/kg	1.87	6.25
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.375	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.375	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.375	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.375	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.375	1.25

Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
 Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 20
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7160
 Batch ID: 944501
 Run Date: 01/22/2010 17:51
 Prep Date: 01/22/2010 13:58
 Data File: 012210V66U516.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.375	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.375	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.375	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.375	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.375	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.375	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.375	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.375	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.375	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.375	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.375	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.375	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.375	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.375	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.375	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.375	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.375	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.375	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.375	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.25	ug/kg	2.00	6.25
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.375	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	6.55	ug/kg	0	J
	unknown siloxane	16.17	6.29	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1287
 Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 19.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7174
 Batch ID: 944501
 Run Date: 01/22/2010 18:19
 Prep Date: 01/22/2010 14:00
 Data File: 012210V66U517.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.423	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.374	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.374	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.374	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.374	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.374	1.25
67-64-1	Acetone	U	6.23	ug/kg	2.07	6.23
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.374	1.25
74-88-4	Iodomethane	U	6.23	ug/kg	1.99	6.23
75-09-2	Methylene chloride	J	3.19	ug/kg	2.49	6.23
75-15-0	Carbon disulfide	U	6.23	ug/kg	1.56	6.23
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.374	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.374	1.25
78-93-3	2-Butanone	U	6.23	ug/kg	1.87	6.23
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.374	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.374	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.374	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.411	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.374	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.374	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.374	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.374	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.374	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.411	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.374	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.374	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.374	1.25
108-10-1	4-Methyl-2-pentanone	U	6.23	ug/kg	1.56	6.23
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.374	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.374	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.374	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.374	1.25
591-78-6	2-Hexanone	U	6.23	ug/kg	1.87	6.23
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.374	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.374	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.374	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.374	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.374	1.25

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923005

Client ID: RE15-10-7174
Batch ID: 944501
Run Date: 01/22/2010 18:19
Prep Date: 01/22/2010 14:00
Data File: 012210V66U517.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.374	1.25
179601-23-1	m,p-Xylenes	U	2.49	ug/kg	0.374	2.49
95-47-6	o-Xylene	U	1.25	ug/kg	0.374	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.374	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.374	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.374	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.374	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.374	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.374	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.374	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.374	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.374	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.374	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.374	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.374	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.374	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.374	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.374	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.374	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.23	ug/kg	1.99	6.23
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.374	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	34.7	ug/kg	0	J
	unknown siloxane	16.18	16.1	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923006	Date Received: 01/16/2010 08:55	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7173	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/22/2010 18:47	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 14:02	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V66U518.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	J	5.35	ug/kg	1.84	5.54
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.39	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.39	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923006

 Client ID: RE15-10-7173
 Batch ID: 944501
 Run Date: 01/22/2010 18:47
 Prep Date: 01/22/2010 14:02
 Data File: 012210V66U518.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.599	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	109	ug/kg	0	J
013466-78-9	3-Carene	15.19	49.5	ug/kg	96	NJ
	unknown siloxane	16.17	27.3	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

Client ID: RE15-10-7175
 Batch ID: 944501
 Run Date: 01/22/2010 19:14
 Prep Date: 01/22/2010 14:04
 Data File: 012210V66U519.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		8.39	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	2.21	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	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	5.51	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	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	5.51	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	U	1.10	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: 10-1287
 Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL.010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

Client ID: RE15-10-7175
 Batch ID: 944501
 Run Date: 01/22/2010 19:14
 Prep Date: 01/22/2010 14:04
 Data File: 012210V66U519.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	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	5.51	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 siloxane	14.24	102	ug/kg	0	J
	unknown siloxane	16.17	7.68	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923008

 Client ID: RE15-10-7172
 Batch ID: 944501
 Run Date: 01/25/2010 15:09
 Prep Date: 01/25/2010 13:14
 Data File: 012510V66V112.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.432	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.381	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.381	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.381	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.381	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.381	1.27
67-64-1	Acetone	U	6.35	ug/kg	2.11	6.35
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
74-88-4	Iodomethane	U	6.35	ug/kg	2.03	6.35
75-09-2	Methylene chloride	J	4.43	ug/kg	2.54	6.35
75-15-0	Carbon disulfide	U	6.35	ug/kg	1.59	6.35
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.381	1.27
78-93-3	2-Butanone	U	6.35	ug/kg	1.90	6.35
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.381	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.381	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.419	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.381	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.381	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.381	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.381	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.381	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.419	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.381	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.381	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.381	1.27
108-10-1	4-Methyl-2-pentanone	U	6.35	ug/kg	1.59	6.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.381	1.27
108-88-3	Toluene	J	0.546	ug/kg	0.381	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.381	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.381	1.27
591-78-6	2-Hexanone	U	6.35	ug/kg	1.90	6.35
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.381	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.381	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.381	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.381	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.381	1.27

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923008
 Client ID: RE15-10-7172
 Batch ID: 944501
 Run Date: 01/25/2010 15:09
 Prep Date: 01/25/2010 13:14
 Data File: 012510V66V112.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 21.2
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.381	1.27
179601-23-1	m,p-Xylenes	U	2.54	ug/kg	0.381	2.54
95-47-6	o-Xylene	U	1.27	ug/kg	0.381	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.381	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.381	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.381	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.381	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.381	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.381	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.381	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.381	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.381	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.381	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.381	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.381	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.381	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.381	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.381	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.381	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.35	ug/kg	2.03	6.35
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.381	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	19.8	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923009

Client ID: RE15-10-7218
 Batch ID: 944501
 Run Date: 01/22/2010 20:10
 Prep Date: 01/22/2010 14:08
 Data File: 012210V66U521.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923009

Client ID: RE15-10-7218
Batch ID: 944501
Run Date: 01/22/2010 20:10
Prep Date: 01/22/2010 14:08
Data File: 012210V66U521.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.500	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.55	ug/kg	1.78	5.55
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	70.7	ug/kg	0	J
013466-78-9	3-Carene	15.19	48.3	ug/kg	97	NJ
	unknown siloxane	16.17	20.3	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923010
 Client ID: RE15-10-7223
 Batch ID: 944501
 Run Date: 01/22/2010 20:37
 Prep Date: 01/22/2010 14:10
 Data File: 012210V66U522.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6J
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.381	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12
67-64-1	Acetone	U	5.60	ug/kg	1.86	5.60
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
74-88-4	Iodomethane	U	5.60	ug/kg	1.79	5.60
75-09-2	Methylene chloride	U	5.60	ug/kg	2.24	5.60
75-15-0	Carbon disulfide	U	5.60	ug/kg	1.40	5.60
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12
78-93-3	2-Butanone	U	5.60	ug/kg	1.68	5.60
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.370	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.370	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12
108-10-1	4-Methyl-2-pentanone	U	5.60	ug/kg	1.40	5.60
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12
591-78-6	2-Hexanone	U	5.60	ug/kg	1.68	5.60
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923010	Date Received: 01/16/2010 08:55	%Moisture: 10.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7223	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.1	Dilution: 1
Run Date: 01/22/2010 20:37	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 14:10	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V66U522.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.60	ug/kg	1.79	5.60
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	48.1	ug/kg	0	J
	unknown siloxane	16.17	29.9	ug/kg	0	J

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923011

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

Client ID: RE15-10-7235
 Batch ID: 944501
 Run Date: 01/22/2010 21:05
 Prep Date: 01/22/2010 14:12
 Data File: 012210V6U523.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone		7.82	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: 10-1287
 Lab Sample ID: 244923011

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

Client ID: RE15-10-7235
 Batch ID: 944501
 Run Date: 01/22/2010 21:05
 Prep Date: 01/22/2010 14:12
 Data File: 012210V66U523.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
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Tentatively Identified Compound Summary

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

Quality Control Summary

Volatile
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1287

Matrix Type: SOLID

Sample ID	Client ID	DCED4 %REC	TOL %REC	BFB %REC
1202022576	LCS for batch 944498	105	95	98
1202022577	LCS for batch 944498	106	95	100
1202022573	MB for batch 944498	106	94	102
244923001	RE15-10-7163	108	96	106
244923002	RE15-10-7162	101	98	116
244923003	RE15-10-7161	102	95	101
244923004	RE15-10-7160	102	99	114
244923005	RE15-10-7174	103	110	128
244923006	RE15-10-7173	106	97	109
244923007	RE15-10-7175	104	94	104
244923009	RE15-10-7218	104	98	111
244923010	RE15-10-7223	105	95	103
244923011	RE15-10-7235	105	94	99
1202036753	LCS for batch 944498	104	94	92
1202036754	LCS for batch 944498	102	93	96
1202036752	MB for batch 944498	105	93	95
244923008	RE15-10-7172	113	121	132
1202022574	RE15-10-7163PS	112	97	99
1202022575	RE15-10-7163PSD	101	96	100

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: 10-1287

Sample Type: Post Spike

Client ID: RE15-10-7163PS

Matrix: R

Lab Sample ID: 1202022574

%Moisture: 6.6

Instrument: VOA6.I

Analysis Date: 01/25/2010 15:36

Dilution: 1

Analyst: RXD1

Pren Batch II 944498

Purge Vol: 5 mL

Batch ID: 944501

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 28.3	57	25-149
74-87-3	PS Chloromethane	50.0	0.00	U 35.7	71	39-140
75-01-4	PS Vinyl chloride	50.0	0.00	U 38.5	77	47-129
74-83-9	PS Bromomethane	50.0	0.00	U 40.4	81	31-135
75-00-3	PS Chloroethane	50.0	0.00	U 41.7	83	53-128
75-69-4	PS Trichlorofluoromethane	50.0	0.00	U 42.0	84	51-151
67-64-1	PS Acetone	250	0.00	U 225	90	21-153
75-35-4	PS 1,1-Dichloroethylene	50.0	0.00	U 42.4	85	61-125
74-88-4	PS Iodomethane	250	0.00	U 202	81	53-142
75-09-2	PS Methylene chloride	50.0	0.00	U 39.1	78	59-136
75-15-0	PS Carbon disulfide	250	0.00	U 213	85	46-129
156-60-5	PS trans-1,2-Dichloroethylene	50.0	0.00	U 41.5	83	56-126
75-34-3	PS 1,1-Dichloroethane	50.0	0.00	U 41.3	83	62-125
78-93-3	PS 2-Butanone	250	0.00	U 256	103	26-152
156-59-2	PS cis-1,2-Dichloroethylene	50.0	0.00	U 42.7	85	60-130
594-20-7	PS 2,2-Dichloropropane	50.0	0.00	U 48.0	96	55-135
67-66-3	PS Chloroform	50.0	0.00	U 41.8	84	60-127
74-97-5	PS Bromochloromethane	50.0	0.00	U 42.0	84	61-131
71-55-6	PS 1,1,1-Trichloroethane	50.0	0.00	U 45.0	90	59-131
563-58-6	PS 1,1-Dichloropropene	50.0	0.00	U 43.0	86	57-128
56-23-5	PS Carbon tetrachloride	50.0	0.00	U 46.9	94	58-136
107-06-2	PS 1,2-Dichloroethane	50.0	0.00	U 44.6	89	58-126

Volatile

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1287

Sample Type: Post Spike

Client ID: RE15-10-7163PS

Matrix: R

Lab Sample ID: 1202022574

%Moisture: 6.6

Instrument: VOA6.I

Analysis Date: 01/25/2010 15:36

Dilution: 1

Analyst: RXD1

Pren Batch II 944498

Purge Vol: 5 mL

Batch ID: 944501

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	39.9	80 56-123
79-01-6	PS Trichloroethylene	50.0	0.00	U	41.3	83 51-137
78-87-5	PS 1,2-Dichloropropane	50.0	0.00	U	42.6	85 60-126
75-27-4	PS Bromodichloromethane	50.0	0.00	U	45.6	91 55-138
74-95-3	PS Dibromomethane	50.0	0.00	U	44.4	89 60-132
108-10-1	PS 4-Methyl-2-pentanone	250	0.00	U	243	97 58-136
10061-01-5	PS cis-1,3-Dichloropropylene	50.0	0.00	U	44.4	89 54-133
108-88-3	PS Toluene	50.0	0.00	U	38.7	77 52-128
10061-02-6	PS trans-1,3-Dichloropropylene	50.0	0.00	U	44.5	89 53-137
79-00-5	PS 1,1,2-Trichloroethane	50.0	0.00	U	41.2	82 59-130
591-78-6	PS 2-Hexanone	250	0.00	U	265	106 31-148
142-28-9	PS 1,3-Dichloropropane	50.0	0.00	U	41.2	82 57-127
127-18-4	PS Tetrachloroethylene	50.0	0.00	U	39.7	79 51-128
124-48-1	PS Dibromochloromethane	50.0	0.00	U	46.9	94 59-139
106-93-4	PS 1,2-Dibromoethane	50.0	0.00	U	42.9	86 57-133
108-90-7	PS Chlorobenzene	50.0	0.00	U	40.3	81 53-122
100-41-4	PS Ethylbenzene	50.0	0.00	U	40.8	82 51-125
179601-23-1	PS m,p-Xylenes	100	0.350	J	80.8	80 50-126
95-47-6	PS o-Xylene	50.0	0.00	U	40.4	81 52-127
100-42-5	PS Styrene	50.0	0.00	U	41.5	83 49-135
75-25-2	PS Bromoform	50.0	0.00	U	49.3	99 57-149
79-34-5	PS 1,1,2,2-Tetrachloroethane	50.0	0.00	U	43.2	86 63-127

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 6

SDG Number: 10-1287

Sample Type: Post Spike

Client ID: RE15-10-7163PS

Matrix: R

Lab Sample ID:1202022574

%Moisture: 6.6

Instrument: VOA6.I

Analysis Date: 01/25/2010 15:36

Dilution: 1

Analyst: RXD1

Prep Batch ID: 944498

Purge Vol: 5 mL

Batch ID: 944501

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	45.1	90	57-149
108-86-1	PS Bromobenzene	50.0	0.00 U	38.5	77	49-131
103-65-1	PS n-Propylbenzene	50.0	0.00 U	39.5	79	40-136
95-49-8	PS 2-Chlorotoluene	50.0	0.00 U	39.5	79	44-135
98-82-8	PS Isopropylbenzene	50.0	0.00 U	39.4	79	44-140
108-67-8	PS 1,3,5-Trimethylbenzene	50.0	0.00 U	39.4	79	42-140
106-43-4	PS 4-Chlorotoluene	50.0	0.00 U	39.1	78	44-132
98-06-6	PS tert-Butylbenzene	50.0	0.00 U	38.6	77	42-142
95-63-6	PS 1,2,4-Trimethylbenzene	50.0	0.00 U	38.1	76	43-137
135-98-8	PS sec-Butylbenzene	50.0	0.00 U	39.3	79	39-139
99-87-6	PS 4-Isopropyltoluene	50.0	0.00 U	38.7	77	38-145
541-73-1	PS 1,3-Dichlorobenzene	50.0	0.00 U	37.2	74	43-129
106-46-7	PS 1,4-Dichlorobenzene	50.0	0.00 U	36.8	74	44-125
104-51-8	PS n-Butylbenzene	50.0	0.00 U	37.9	76	36-141
96-12-8	PS 1,2-Dibromo-3-chloropropane	50.0	0.00 U	46.3	93	47-151
630-20-6	PS 1,1,1,2-Tetrachloroethane	50.0	0.00 U	43.8	88	59-131
95-50-1	PS 1,2-Dichlorobenzene	50.0	0.00 U	36.3	73	43-129

Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 6

SDG Number: 10-1287

Sample Type: Post Spike Duplicate

Client ID: RE15-10-7163PSD

Matrix: R

Lab Sample ID: 1202022575

%Moisture: 6.6

Instrument: VOA6.I

Analysis Date: 01/25/2010 16:04

Dilution: 1

Analyst: RXD1

Prep Batch II 944498

Purge Vol: 5 mL

Batch ID: 944501

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 29.9	60	25-149	5	0-25
74-87-3	PSD Chloromethane	50.0	0.00	U 38.0	76	39-140	6	0-25
75-01-4	PSD Vinyl chloride	50.0	0.00	U 40.6	81	47-129	5	0-25
74-83-9	PSD Bromomethane	50.0	0.00	U 42.5	85	31-135	5	0-25
75-00-3	PSD Chloroethane	50.0	0.00	U 43.7	87	53-128	5	0-25
75-69-4	PSD Trichlorofluoromethane	50.0	0.00	U 43.8	88	51-151	4	0-25
67-64-1	PSD Acetone	250	0.00	U 209	84	21-153	7	0-25
75-35-4	PSD 1,1-Dichloroethylene	50.0	0.00	U 45.2	90	61-125	6	0-25
74-88-4	PSD Iodomethane	250	0.00	U 212	85	53-142	5	0-25
75-09-2	PSD Methylene chloride	50.0	0.00	U 40.8	82	59-136	4	0-25
75-15-0	PSD Carbon disulfide	250	0.00	U 224	90	46-129	5	0-25
156-60-5	PSD trans-1,2-Dichloroethylene	50.0	0.00	U 44.1	88	56-126	6	0-25
75-34-3	PSD 1,1-Dichloroethane	50.0	0.00	U 44.0	88	62-125	7	0-25
78-93-3	PSD 2-Butanone	250	0.00	U 252	101	26-152	2	0-25
156-59-2	PSD cis-1,2-Dichloroethylene	50.0	0.00	U 45.0	90	60-130	5	0-25
594-20-7	PSD 2,2-Dichloropropane	50.0	0.00	U 50.9	102	55-135	6	0-25
67-66-3	PSD Chloroform	50.0	0.00	U 44.2	88	60-127	6	0-25
74-97-5	PSD Bromochloromethane	50.0	0.00	U 43.4	87	61-131	3	0-25
71-55-6	PSD 1,1,1-Trichloroethane	50.0	0.00	U 47.6	95	59-131	6	0-25
563-58-6	PSD 1,1-Dichloropropene	50.0	0.00	U 45.3	91	57-128	5	0-25
56-23-5	PSD Carbon tetrachloride	50.0	0.00	U 49.4	99	58-136	5	0-25
107-06-2	PSD 1,2-Dichloroethane	50.0	0.00	U 45.1	90	58-126	1	0-25

Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 6

SDG Number: 10-1287

Sample Type: Post Spike Duplicate

Client ID: RE15-10-7163PSD

Matrix: R

Lab Sample ID: 1202022575

% Moisture: 6.6

Instrument: VOA6.I

Analysis Date: 01/25/2010 16:04

Dilution: 1

Analyst: RXD1

Prep Batch ID: 944498

Purge Vol: 5 mL

Batch ID: 944501

CAS No	Parname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
71-43-2	PSD Benzene	50.0	0.00	U	41.9	84	56-123	5	0-25
79-01-6	PSD Trichloroethylene	50.0	0.00	U	43.2	86	51-137	4	0-25
78-87-5	PSD 1,2-Dichloropropane	50.0	0.00	U	43.9	88	60-126	3	0-25
75-27-4	PSD Bromodichloromethane	50.0	0.00	U	47.3	95	55-138	4	0-25
74-95-3	PSD Dibromomethane	50.0	0.00	U	45.2	90	60-132	2	0-25
108-10-1	PSD 4-Methyl-2-pentanone	250	0.00	U	246	98	58-136	1	0-25
10061-01-5	PSD cis-1,3-Dichloropropylene	50.0	0.00	U	45.8	92	54-133	3	0-25
108-88-3	PSD Toluene	50.0	0.00	U	42.1	84	52-128	8	0-25
10061-02-6	PSD trans-1,3-Dichloropropylene	50.0	0.00	U	47.7	95	53-137	7	0-25
79-00-5	PSD 1,1,2-Trichloroethane	50.0	0.00	U	43.5	87	59-130	5	0-25
591-78-6	PSD 2-Hexanone	250	0.00	U	262	105	31-148	1	0-25
142-28-9	PSD 1,3-Dichloropropane	50.0	0.00	U	43.3	87	57-127	5	0-25
127-18-4	PSD Tetrachloroethylene	50.0	0.00	U	42.8	86	51-128	8	0-25
124-48-1	PSD Dibromochloromethane	50.0	0.00	U	49.2	98	59-139	5	0-25
106-93-4	PSD 1,2-Dibromoethane	50.0	0.00	U	44.7	89	57-133	4	0-25
108-90-7	PSD Chlorobenzene	50.0	0.00	U	43.4	87	53-122	8	0-25
100-41-4	PSD Ethylbenzene	50.0	0.00	U	43.6	87	51-125	7	0-25
179601-23-1	PSD m,p-Xylenes	100	0.350	J	86.7	86	50-126	7	0-25
95-47-6	PSD o-Xylene	50.0	0.00	U	44.4	89	52-127	9	0-25
100-42-5	PSD Styrene	50.0	0.00	U	44.1	88	49-135	6	0-25
75-25-2	PSD Bromoform	50.0	0.00	U	55.9	112	57-149	13	0-25
79-34-5	PSD 1,1,2,2-Tetrachloroethane	50.0	0.00	U	48.5	97	63-127	11	0-25

Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 6

SDG Number: 10-1287

Sample Type: Post Spike Duplicate

Client ID: RE15-10-7163PSD

Matrix: R

Lab Sample ID: 1202022575

%Moisture: 6.6

Instrument: VOA6.I

Analysis Date: 01/25/2010 16:04

Dilution: 1

Analyst: RXD1

Pren Batch II 944498

Purge Vol: 5 mL

Batch ID: 944501

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-18-4	PSD 1,2,3-Trichloropropane	50.0	0.00	U	48.7	97	57-149	8 0-25
108-86-1	PSD Bromobenzene	50.0	0.00	U	44.5	89	49-131	15 0-25
103-65-1	PSD n-Propylbenzene	50.0	0.00	U	45.5	91	40-136	14 0-25
95-49-8	PSD 2-Chlorotoluene	50.0	0.00	U	45.2	90	44-135	14 0-25
98-82-8	PSD Isopropylbenzene	50.0	0.00	U	46.3	93	44-140	16 0-25
108-67-8	PSD 1,3,5-Trimethylbenzene	50.0	0.00	U	44.7	89	42-140	13 0-25
106-43-4	PSD 4-Chlorotoluene	50.0	0.00	U	44.4	89	44-132	13 0-25
98-06-6	PSD tert-Butylbenzene	50.0	0.00	U	45.1	90	42-142	16 0-25
95-63-6	PSD 1,2,4-Trimethylbenzene	50.0	0.00	U	43.3	87	43-137	13 0-25
135-98-8	PSD sec-Butylbenzene	50.0	0.00	U	44.1	88	39-139	12 0-25
99-87-6	PSD 4-Isopropyltoluene	50.0	0.00	U	42.0	84	38-145	8 0-25
541-73-1	PSD 1,3-Dichlorobenzene	50.0	0.00	U	42.4	85	43-129	13 0-25
106-46-7	PSD 1,4-Dichlorobenzene	50.0	0.00	U	41.2	82	44-125	11 0-25
104-51-8	PSD n-Butylbenzene	50.0	0.00	U	40.7	81	36-141	7 0-25
96-12-8	PSD 1,2-Dibromo-3-chloropropane	50.0	0.00	U	53.0	106	47-151	14 0-25
630-20-6	PSD 1,1,1,2-Tetrachloroethane	50.0	0.00	U	45.8	92	59-131	4 0-25
95-50-1	PSD 1,2-Dichlorobenzene	50.0	0.00	U	40.9	82	43-129	12 0-25

Volatile

Page 1 of 3

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202022576

Instrument: VOA6.I

Analysis Date: 01/22/2010 11:29

Dilution: 1

Analyst: RXD1

Pre Batch II 944498

Purge Vol: 5 mL

Batch ID: 944501

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	37.2	74	33-155
74-87-3	LCS Chloromethane	50.0	0.0	41.4	83	53-132
75-01-4	LCS Vinyl chloride	50.0	0.0	44.7	89	61-128
74-83-9	LCS Bromomethane	50.0	0.0	45.1	90	63-126
75-00-3	LCS Chloroethane	50.0	0.0	47.0	94	67-124
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	47.7	95	67-151
67-64-1	LCS Acetone	250	0.0	230	92	29-160
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	48.0	96	70-125
74-88-4	LCS Iodomethane	250	0.0	224	90	74-131
75-09-2	LCS Methylene chloride	50.0	0.0	41.5	83	72-127
75-15-0	LCS Carbon disulfide	250	0.0	243	97	64-127
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	47.3	95	71-122
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	46.2	92	75-120
78-93-3	LCS 2-Butanone	250	0.0	269	108	35-162
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	46.8	94	76-122
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	53.9	108	74-135
67-66-3	LCS Chloroform	50.0	0.0	45.6	91	77-120
74-97-5	LCS Bromochloromethane	50.0	0.0	44.5	89	76-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	50.8	102	75-128
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	48.9	98	77-125
56-23-5	LCS Carbon tetrachloride	50.0	0.0	52.6	105	77-134
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	46.4	93	72-120

Volatile

Page 2 of 3

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202022576

Instrument: VOA6.I

Analysis Date: 01/22/2010 11:29

Dilution: 1

Analyst: RXD1

Prep Batch ID: 944498

Purge Vol: 5 mL

Batch ID: 944501

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	44.1	88	72-120
79-01-6	LCS Trichloroethylene	50.0	0.0	46.0	92	78-121
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	45.8	92	74-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	49.1	98	79-125
74-95-3	LCS Dibromomethane	50.0	0.0	46.9	94	78-122
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	258	103	71-134
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	48.2	96	80-125
108-88-3	LCS Toluene	50.0	0.0	43.2	86	65-124
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	48.4	97	71-134
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	43.4	87	76-120
591-78-6	LCS 2-Hexanone	250	0.0	275	110	42-159
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	43.3	87	72-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	45.1	90	74-123
124-48-1	LCS Dibromochloromethane	50.0	0.0	49.3	99	83-128
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	45.5	91	79-121
108-90-7	LCS Chlorobenzene	50.0	0.0	44.2	88	75-120
100-41-4	LCS Ethylbenzene	50.0	0.0	45.2	90	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	90.3	90	74-120
95-47-6	LCS o-Xylene	50.0	0.0	44.9	90	74-120
100-42-5	LCS Styrene	50.0	0.0	45.4	91	76-125
75-25-2	LCS Bromoform	50.0	0.0	53.4	107	77-138
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	47.0	94	72-122

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202022576

Instrument: VOA6.I

Analysis Date: 01/22/2010 11:29

Dilution: 1

Analyst: RXD1

Prep Batch ID: 944498

Purge Vol: 5 mL

Batch ID: 944501

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
96-18-4	LCS 1,2,3-Trichloropropane	50.0	0.0	46.7	93	75-135
108-86-1	LCS Bromobenzene	50.0	0.0	42.9	86	73-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	45.1	90	68-121
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	44.1	88	69-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	45.0	90	66-127
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	44.5	89	67-126
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	44.3	89	72-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	44.5	89	72-124
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	43.6	87	72-122
135-98-8	LCS sec-Butylbenzene	50.0	0.0	45.1	90	71-124
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	45.1	90	72-130
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	42.8	86	73-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	42.1	84	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	45.3	91	72-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	57.3	115	68-145
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	46.7	93	78-121
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	42.8	86	74-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202022577

Instrument: VOA6.I

Analysis Date: 01/22/2010 12:34

Dilution: 1

Analyst: RXD1

Prep Batch ID: 944498

Purge Vol: 5 mL

Batch ID: 944501

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	297	119	52-139

Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 3

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202036753

Instrument: VOA6.I

Analysis Date: 01/25/2010 11:54

Dilution: 1

Analyst: RXD1

Prep Batch ID: 944498

Purge Vol: 5 mL

Batch ID: 944501

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	32.1	64	33-155
74-87-3	LCS Chloromethane	50.0	0.0	39.5	79	53-132
75-01-4	LCS Vinyl chloride	50.0	0.0	42.0	84	61-128
74-83-9	LCS Bromomethane	50.0	0.0	44.4	89	63-126
75-00-3	LCS Chloroethane	50.0	0.0	44.6	89	67-124
75-69-4	LCS Trichlorofluoromethane	50.0	0.0	45.4	91	67-151
67-64-1	LCS Acetone	250	0.0	207	83	29-160
75-35-4	LCS 1,1-Dichloroethylene	50.0	0.0	45.6	91	70-125
74-88-4	LCS Iodomethane	250	0.0	214	86	74-131
75-09-2	LCS Methylene chloride	50.0	0.0	39.8	80	72-127
75-15-0	LCS Carbon disulfide	250	0.0	229	92	64-127
156-60-5	LCS trans-1,2-Dichloroethylene	50.0	0.0	44.8	90	71-122
75-34-3	LCS 1,1-Dichloroethane	50.0	0.0	44.3	89	75-120
78-93-3	LCS 2-Butanone	250	0.0	235	94	35-162
156-59-2	LCS cis-1,2-Dichloroethylene	50.0	0.0	45.3	91	76-122
594-20-7	LCS 2,2-Dichloropropane	50.0	0.0	52.2	104	74-135
67-66-3	LCS Chloroform	50.0	0.0	43.8	88	77-120
74-97-5	LCS Bromochloromethane	50.0	0.0	43.0	86	76-122
71-55-6	LCS 1,1,1-Trichloroethane	50.0	0.0	48.5	97	75-128
563-58-6	LCS 1,1-Dichloropropene	50.0	0.0	46.8	94	77-125
56-23-5	LCS Carbon tetrachloride	50.0	0.0	50.9	102	77-134
107-06-2	LCS 1,2-Dichloroethane	50.0	0.0	44.5	89	72-120

Volatile
Quality Control Summary
Spike Recovery Report

Page 2 of 3

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202036753

Instrument: VOA6.I

Analysis Date: 01/25/2010 11:54

Dilution: 1

Analyst: RXD1

Pren Batch II 944498

Purge Vol: 5 mL

Batch ID: 944501

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
71-43-2	LCS Benzene	50.0	0.0	42.1	84	72-120
79-01-6	LCS Trichloroethylene	50.0	0.0	44.1	88	78-121
78-87-5	LCS 1,2-Dichloropropane	50.0	0.0	43.2	86	74-120
75-27-4	LCS Bromodichloromethane	50.0	0.0	47.0	94	79-125
74-95-3	LCS Dibromomethane	50.0	0.0	43.8	88	78-122
108-10-1	LCS 4-Methyl-2-pentanone	250	0.0	233	93	71-134
10061-01-5	LCS cis-1,3-Dichloropropylene	50.0	0.0	45.6	91	80-125
108-88-3	LCS Toluene	50.0	0.0	41.0	82	65-124
10061-02-6	LCS trans-1,3-Dichloropropylene	50.0	0.0	45.9	92	71-134
79-00-5	LCS 1,1,2-Trichloroethane	50.0	0.0	41.3	83	76-120
591-78-6	LCS 2-Hexanone	250	0.0	245	98	42-159
142-28-9	LCS 1,3-Dichloropropane	50.0	0.0	41.1	82	72-120
127-18-4	LCS Tetrachloroethylene	50.0	0.0	43.8	88	74-123
124-48-1	LCS Dibromochloromethane	50.0	0.0	47.2	94	83-128
106-93-4	LCS 1,2-Dibromoethane	50.0	0.0	42.1	84	79-121
108-90-7	LCS Chlorobenzene	50.0	0.0	42.4	85	75-120
100-41-4	LCS Ethylbenzene	50.0	0.0	43.2	86	74-120
179601-23-1	LCS m,p-Xylenes	100	0.0	85.9	86	74-120
95-47-6	LCS o-Xylene	50.0	0.0	42.4	85	74-120
100-42-5	LCS Styrene	50.0	0.0	43.5	87	76-125
75-25-2	LCS Bromoform	50.0	0.0	47.7	95	77-138
79-34-5	LCS 1,1,2,2-Tetrachloroethane	50.0	0.0	42.1	84	72-122

Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 3

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202036753

Instrument: VOA6.I

Analysis Date: 01/25/2010 11:54

Dilution: 1

Analyst: RXD1

Prep Batch II 944498

Purge Vol: 5 mL

Batch ID: 944501

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	42.0	84	75-135
108-86-1	LCS Bromobenzene	50.0	0.0	40.2	80	73-120
103-65-1	LCS n-Propylbenzene	50.0	0.0	41.8	84	68-121
95-49-8	LCS 2-Chlorotoluene	50.0	0.0	41.3	83	69-120
98-82-8	LCS Isopropylbenzene	50.0	0.0	41.9	84	66-127
108-67-8	LCS 1,3,5-Trimethylbenzene	50.0	0.0	41.7	83	67-126
106-43-4	LCS 4-Chlorotoluene	50.0	0.0	41.2	82	72-120
98-06-6	LCS tert-Butylbenzene	50.0	0.0	41.5	83	72-124
95-63-6	LCS 1,2,4-Trimethylbenzene	50.0	0.0	40.8	82	72-122
135-98-8	LCS sec-Butylbenzene	50.0	0.0	42.1	84	71-124
99-87-6	LCS 4-Isopropyltoluene	50.0	0.0	42.2	84	72-130
541-73-1	LCS 1,3-Dichlorobenzene	50.0	0.0	40.4	81	73-120
106-46-7	LCS 1,4-Dichlorobenzene	50.0	0.0	39.8	80	73-120
104-51-8	LCS n-Butylbenzene	50.0	0.0	42.2	84	72-128
96-12-8	LCS 1,2-Dibromo-3-chloropropane	50.0	0.0	48.7	97	68-145
630-20-6	LCS 1,1,1,2-Tetrachloroethane	50.0	0.0	44.7	89	78-121
95-50-1	LCS 1,2-Dichlorobenzene	50.0	0.0	39.6	79	74-120

Volatile

Page 1 of 1

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 944498

Matrix: SOIL

Lab Sample ID: 1202036754

Instrument: VOA6.I

Analysis Date: 01/25/2010 12:49

Dilution: 1

Analyst: RXD1

Pre Batch ID: 944498

Purge Vol: 5 mL

Batch ID: 944501

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	291	116	52-139

Method Blank Summary

Page 1 of 1

SDG Number:	10-1287	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 944498	Instrument ID:	VOA6.I	Data File:	012210V66U506BL2.D
Lab Sample ID:	1202022573	Prep Date:	01/22/2010 09:22	Analyzed:	01/22/10 13:02
Column:	DB-624				

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 944498	1202022576	012210V66U503LL2.D	01/22/10	1129
02 LCS for batch 944498	1202022577	012210V66U505SL2.D	01/22/10	1234
03 RE15-10-7163	244923001	012210V66U513.D	01/22/10	1628
04 RE15-10-7162	244923002	012210V66U514.D	01/22/10	1655
05 RE15-10-7161	244923003	012210V66U515.D	01/22/10	1723
06 RE15-10-7160	244923004	012210V66U516.D	01/22/10	1751
07 RE15-10-7174	244923005	012210V66U517.D	01/22/10	1819
08 RE15-10-7173	244923006	012210V66U518.D	01/22/10	1847
09 RE15-10-7175	244923007	012210V66U519.D	01/22/10	1914
10 RE15-10-7218	244923009	012210V66U521.D	01/22/10	2010
11 RE15-10-7223	244923010	012210V66U522.D	01/22/10	2037
12 RE15-10-7235	244923011	012210V66U523.D	01/22/10	2105

Method Blank Summary

Page 1 of 1

SDG Number:	10-1287	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 944498	Instrument ID:	VOA6.1	Data File:	012510V66V108BL.D
Lab Sample ID:	1202036752	Prep Date:	01/25/2010 09:14	Analyzed:	01/25/10 13:17
Column:	DB-624				

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 944498	1202036753	012510V66V105LL.D	01/25/10	1154
02 LCS for batch 944498	1202036754	012510V66V107SL.D	01/25/10	1249
03 RE15-10-7172	244923008	012510V66V112.D	01/25/10	1509
04 RE15-10-7163PS	1202022574	012510V66V113.D	01/25/10	1536
05 RE15-10-7163PSD	1202022575	012510V66V114.D	01/25/10	1604

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date/Time: 10-DEC-09 10:12

Column Description: DB-624

Lab File ID 121009V6\6O404.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	48.2
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.8
174	50.0 - 100.0% of mass 95	84.2
175	5.0 - 9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	96.8
177	5.0 - 9.0% of mass 176	6.6

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W6VM091210-03	121009V6\6O407.D	10-DEC-09 11:34
ICALMIX[A]	W6VM091210-04	121009V6\6O408.D	10-DEC-09 12:02
ICALMIX[A]	W6VM091210-05	121009V6\6O409.D	10-DEC-09 12:30
ICALMIX[A]	W6VM091210-06	121009V6\6O410.D	10-DEC-09 12:58
ICALMIX[A]	W6VM091210-07	121009V6\6O411.D	10-DEC-09 13:26
ICALMIX[A]	W6VM091210-08	121009V6\6O412.D	10-DEC-09 13:54
ICALMIX[A]	W6VM091210-09	121009V6\6O414.D	10-DEC-09 14:49
ICALMIX[A]	W6VM091210-10	121009V6\6O415.D	10-DEC-09 15:17
ICVMIX[A]01	W6VM091210-11	121009V6\6O416.D	10-DEC-09 15:45
ICALMIX[B]	W6VM091210-13	121009V6\6O418.D	10-DEC-09 16:40
ICALMIX[B]	W6VM091210-14	121009V6\6O419.D	10-DEC-09 17:08
ICALMIX[B]	W6VM091210-15	121009V6\6O420.D	10-DEC-09 17:36
ICALMIX[B]	W6VM091210-16	121009V6\6O421.D	10-DEC-09 18:04
ICALMIX[B]	W6VM091210-17	121009V6\6O422.D	10-DEC-09 18:32
ICALMIX[B]	W6VM091210-18	121009V6\6O423.D	10-DEC-09 19:00
ICALMIX[B]	W6VM091210-19	121009V6\6O424.D	10-DEC-09 19:28
ICVMIX[B]02	W6VM091210-20	121009V6\6O426.D	10-DEC-09 20:23

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date/Time: 22-JAN-10 10:34

Column Description: DB-624

Lab File ID 012210V6\6U501.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	49.7
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.9
174	50.0 - 100.0% of mass 95	84.7
175	5.0 - 9.0% of mass 174	7.1
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
CCVMIX[A]02	W6VM100122-02	012210V6\6U503.D	22-JAN-10 11:29
BLK01LCS	1202022576	012210V6\6U503LL2.D	22-JAN-10 11:29
CCVMIX[B]03	W6VM100122-03	012210V6\6U504.D	22-JAN-10 12:07
BLK01SLCS	1202022577	012210V6\6U505SL2.D	22-JAN-10 12:34
BLK01	1202022573	012210V6\6U506BL2.D	22-JAN-10 13:02
RE15-10-7163	244923001	012210V6\6U513.D	22-JAN-10 16:28
RE15-10-7162	244923002	012210V6\6U514.D	22-JAN-10 16:55
RE15-10-7161	244923003	012210V6\6U515.D	22-JAN-10 17:23
RE15-10-7160	244923004	012210V6\6U516.D	22-JAN-10 17:51
RE15-10-7174	244923005	012210V6\6U517.D	22-JAN-10 18:19
RE15-10-7173	244923006	012210V6\6U518.D	22-JAN-10 18:47
RE15-10-7175	244923007	012210V6\6U519.D	22-JAN-10 19:14
RE15-10-7218	244923009	012210V6\6U521.D	22-JAN-10 20:10
RE15-10-7223	244923010	012210V6\6U522.D	22-JAN-10 20:37
RE15-10-7235	244923011	012210V6\6U523.D	22-JAN-10 21:05

Instrument Performance Check

BFB

Lab Name GEL Laboratories LLC

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date/Time: 25-JAN-10 10:58

Column Description: DB-624

Lab File ID 012510V6\6V103.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	49.9
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1
174	50.0 - 100.0% of mass 95	83.1
175	5.0 - 9.0% of mass 174	7.4
176	95.0 - 101.0% of mass 174	98.6
177	5.0 - 9.0% of mass 176	6.4

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]04	W6VM100125-01	012510V6\6V104.D	25-JAN-10 11:26
BLK02LCS	1202036753	012510V6\6V105LL.D	25-JAN-10 11:54
CCVMIX[B]05	W6VM100125-03	012510V6\6V106.D	25-JAN-10 12:21
BLK02SLCS	1202036754	012510V6\6V107SL.D	25-JAN-10 12:49
BLK02	1202036752	012510V6\6V108BL.D	25-JAN-10 13:17
RE15-10-7172	244923008	012510V6\6V112.D	25-JAN-10 15:09
RE15-10-7163MS	1202022574	012510V6\6V113.D	25-JAN-10 15:36
RE15-10-7163MSD	1202022575	012510V6\6V114.D	25-JAN-10 16:04

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1287

Instrument: VOA6.1

STD Analysis Time: 22-JAN-10 11:29

GC Column: DB-624

Data File: C:\msdchem\1\DATA\012210V6\6U503.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1891528		9.98	1402256		13.2	787181		15.6
Upper Limit	3783056		10.5	2804512		13.7	1574362		16.1
Lower Limit	945764		9.48	701128		12.7	393591		15.1
Sample ID									
BLK01LCS	1891528		9.98	1402256		13.2	787181		15.6
BLK01SLCS	1857679		9.98	1378986		13.2	785511		15.6
BLK01	1855297		9.98	1401968		13.2	764131		15.6
RE15-10-7163	1449472		9.97	1012830		13.2	493812		15.6
RE15-10-7162	1643494		9.98	1145447		13.2	495266		15.6
RE15-10-7161	1516879		9.97	1107772		13.2	587705		15.6
RE15-10-7160	1634768		9.98	1139091		13.2	497944		15.6
RE15-10-7174	1516960		9.98	902245		13.2	299084	*	15.6
RE15-10-7173	984078		9.97	700372	*	13.2	326493	*	15.6
RE15-10-7175	1213020		9.98	890208		13.2	460735		15.6
RE15-10-7218	1573989		9.97	1101146		13.2	505907		15.6
RE15-10-7223	1453860		9.97	1061007		13.2	560056		15.6
RE15-10-7235	1623665		9.97	1202059		13.2	652338		15.6

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: 10-1287

Instrument: VOA6.I

STD Analysis Time: 25-JAN-10 11:26

GC Column: DB-624

Data File: C:\msdchem\1\DATA\012510V6\6V104.D

	Fluorobenzene			Chlorobenzene-d5			1,4-Dichlorobenzene-d4		
	Area	#	RT #	Area	#	RT #	Area	#	RT #
12 Hour STD	1899772		9.98	1410285		13.2	803471		15.6
Upper Limit	3799544		10.5	2820570		13.7	1606942		16.1
Lower Limit	949886		9.48	705143		12.7	401736		15.1
Sample ID									
BLK02LCS	1818195		9.97	1361008		13.2	785808		15.6
BLK02SLCS	1951311		9.98	1439190		13.2	824927		15.6
BLK02	1935497		9.98	1423894		13.2	788433		15.6
RE15-10-7172	514808	*	9.97	267028	*	13.2	71940	*	15.6
RE15-10-7163MS	1732765		9.98	1315655		13.2	756395		15.6
RE15-10-7163MSD	1878182		9.98	1353835		13.2	706288		15.6

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: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923001	Date Received: 01/16/2010 08:55	%Moisture: 6.6
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7163	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/22/2010 16:28	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 13:48	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V6WU513.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.07	ug/kg	0.364	1.07
74-87-3	Chloromethane	U	1.07	ug/kg	0.321	1.07
75-01-4	Vinyl chloride	U	1.07	ug/kg	0.321	1.07
74-83-9	Bromomethane	U	1.07	ug/kg	0.321	1.07
75-00-3	Chloroethane	U	1.07	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane	U	1.07	ug/kg	0.321	1.07
67-64-1	Acetone	U	5.35	ug/kg	1.78	5.35
75-35-4	1,1-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
74-88-4	Iodomethane	U	5.35	ug/kg	1.71	5.35
75-09-2	Methylene chloride	U	5.35	ug/kg	2.14	5.35
75-15-0	Carbon disulfide	U	5.35	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane	U	1.07	ug/kg	0.321	1.07
78-93-3	2-Butanone	U	5.35	ug/kg	1.61	5.35
156-59-2	cis-1,2-Dichloroethylene	U	1.07	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
67-66-3	Chloroform	U	1.07	ug/kg	0.321	1.07
74-97-5	Bromochloromethane	U	1.07	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane	U	1.07	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene	U	1.07	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride	U	1.07	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane	U	1.07	ug/kg	0.321	1.07
71-43-2	Benzene	U	1.07	ug/kg	0.321	1.07
79-01-6	Trichloroethylene	U	1.07	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane	U	1.07	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane	U	1.07	ug/kg	0.321	1.07
74-95-3	Dibromomethane	U	1.07	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone	U	5.35	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
108-88-3	Toluene	U	1.07	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene	U	1.07	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane	U	1.07	ug/kg	0.321	1.07
591-78-6	2-Hexanone	U	5.35	ug/kg	1.61	5.35
142-28-9	1,3-Dichloropropane	U	1.07	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene	U	1.07	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane	U	1.07	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane	U	1.07	ug/kg	0.321	1.07
108-90-7	Chlorobenzene	U	1.07	ug/kg	0.321	1.07

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923001

Client ID: RE15-10-7163
Batch ID: 944501
Run Date: 01/22/2010 16:28
Prep Date: 01/22/2010 13:48
Data File: 012210V66U513.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.1
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.07	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes	J	0.375	ug/kg	0.321	2.14
95-47-6	o-Xylene	U	1.07	ug/kg	0.321	1.07
100-42-5	Styrene	U	1.07	ug/kg	0.321	1.07
75-25-2	Bromoform	U	1.07	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane	U	1.07	ug/kg	0.321	1.07
108-86-1	Bromobenzene	U	1.07	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene	U	1.07	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene	U	1.07	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene	U	1.07	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene	U	1.07	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene	U	1.07	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene	U	1.07	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene	U	1.07	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene	U	1.07	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	U	1.07	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.35	ug/kg	1.71	5.35
630-20-6	1,1,1,2-Tetrachloroethane	U	1.07	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene	U	1.07	ug/kg	0.321	1.07

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	100	ug/kg	0	J
013466-78-9	3-Carene	15.19	32.9	ug/kg	96	NJ
	unknown	16.17	17.3	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U513.D
Acq On : 22 Jan 2010 4:28 pm
Operator : RXD1
InstName : VOA6
Sample : |244923001|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 25 09:47:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.974	96	1450805	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1012830	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	493812	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	1449472	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1012830	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	493812	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	461417	53.90	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	107.80%	
43) Toluene-d8	11.626	98	1347960	48.00	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	96.00%	
61) Bromofluorobenzene	14.357	95	506207	53.19	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	106.38%	

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.712	43	1376	N.D.		
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.297	41	399	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.084	76	2577	N.D.		
15) Methylene chloride	7.285	84	11439	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	9.724	78	197	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U513.D
Acq On : 22 Jan 2010 4:28 pm
Operator : RXD1
InstName : VOA6
Sample : |244923001|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 25 09:47:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699	91	4160	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.254	91	3298	N.D.		
55) m,p-Xylenes	13.363	106	4572	0.35	ug/L	100
56) o-Xylene	13.790	106	1035	N.D.		
57) Styrene	13.808	104	437	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	0.000		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	14.583	91	217	N.D.		
66) 1,3,5-Trimethylbenzene	14.729	105	183	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000		0	N.D.		
69) tert-Butylbenzene	0.000		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	0.000		0m	N.D.	d	
71) sec-Butylbenzene	15.418	105	1648	N.D.		
72) 4-Isopropyltoluene	0.000		0m	N.D.	d	
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	15.887	91	447	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.295	128	2067	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.285	41	198	N.D.		
89) tert-Butyl Alcohol	0.000		0m	N.D.	d	
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U513.D
Acq On : 22 Jan 2010 4:28 pm
Operator : RXD1
InstName : VOA6
Sample : |244923001|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 25 09:47:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T. QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000	0	N.D.		
96) Methacrylonitrile	0.000	0	N.D.		
97) Tetrahydrofuran	0.000	0	N.D.		
98) Isobutyl alcohol	0.000	0	N.D.		
99) Methyl tert-amyl ether	0.000	0	N.D.		
100) Methyl methacrylate	0.000	0	N.D.		
101) 1,4-Dioxane	0.000	0	N.D.		
102) 2-Nitropropane	0.000	0	N.D.		
104) Ethyl methacrylate	0.000	0	N.D.		
106) 1-Chlorohexane	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene	0.000	0m	N.D.	d	
108) Cyclohexanone	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000	0	N.D.		
110) Pentachloroethane	0.000	0	N.D.		
111) Benzyl chloride	0.000	0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	0.000	0m	N.D.	d	

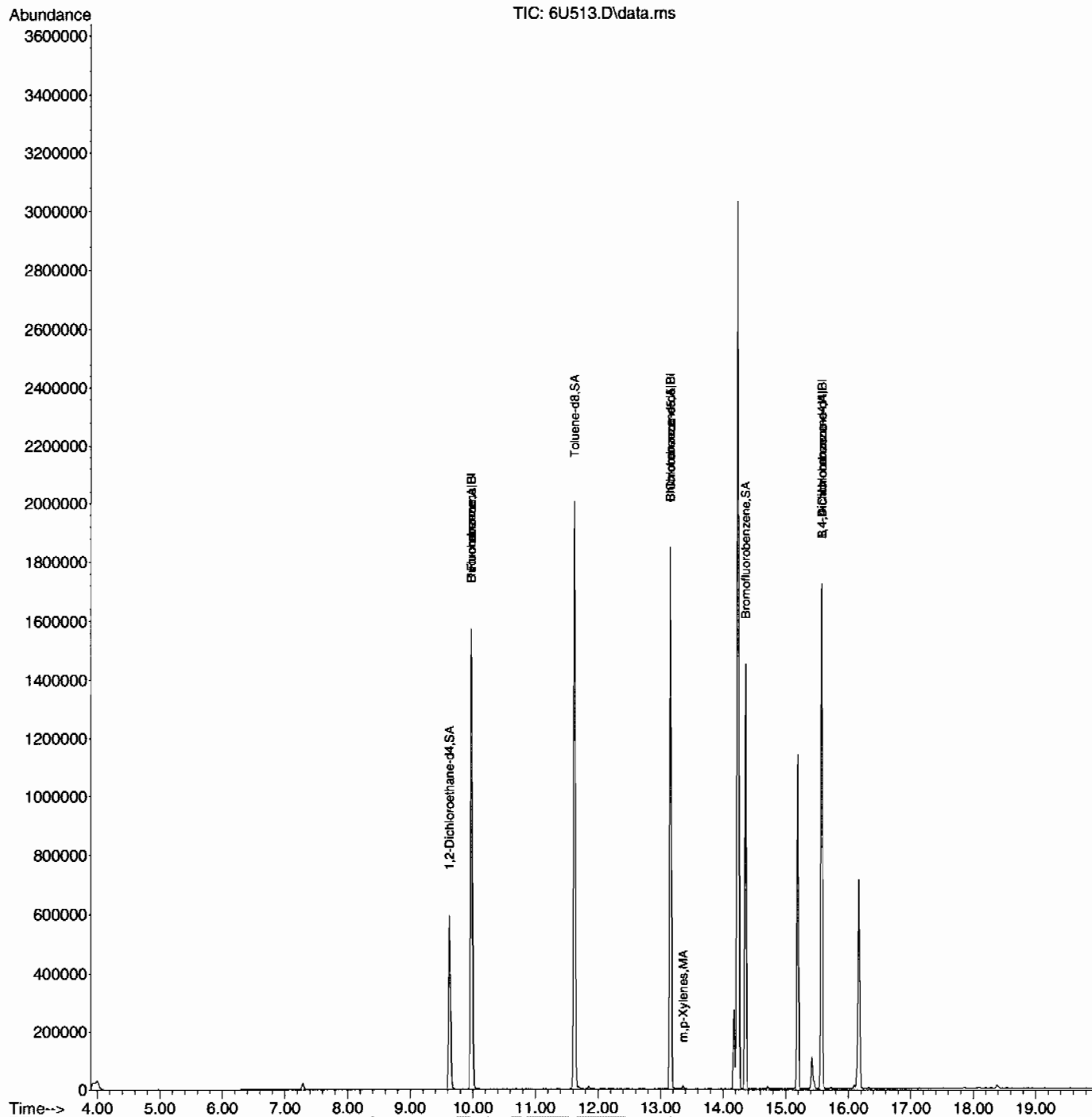
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

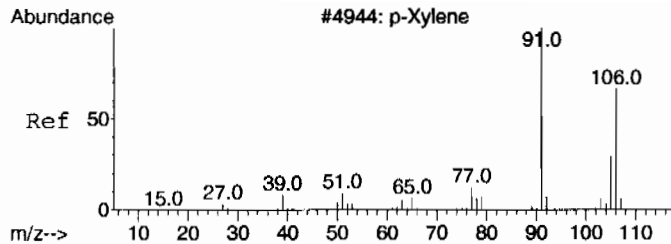
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U513.D
Acq On : 22 Jan 2010 4:28 pm
Operator : RXD1
InstName : VOA6
Sample : |244923001|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 25 09:47:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

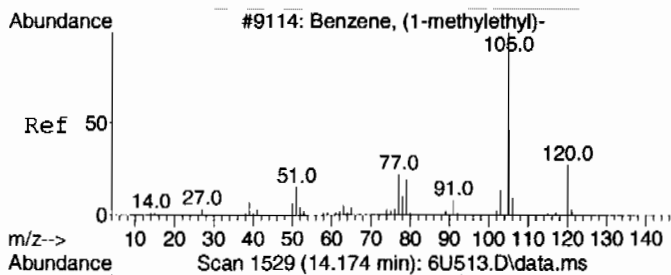
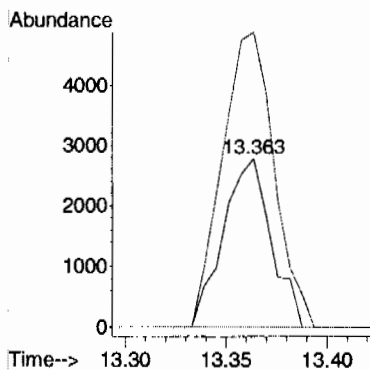
SubList :





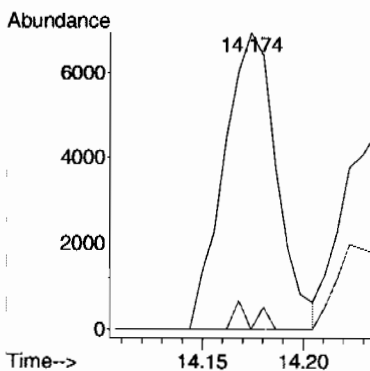
#55
m,p-Xylenes
Concen: 0.35 ug/L
RT: 13.363 min Scan# 1396
Delta R.T. 0.000 min
Lab File: 6U513.D
Acq: 22 Jan 2010 4:28 pm

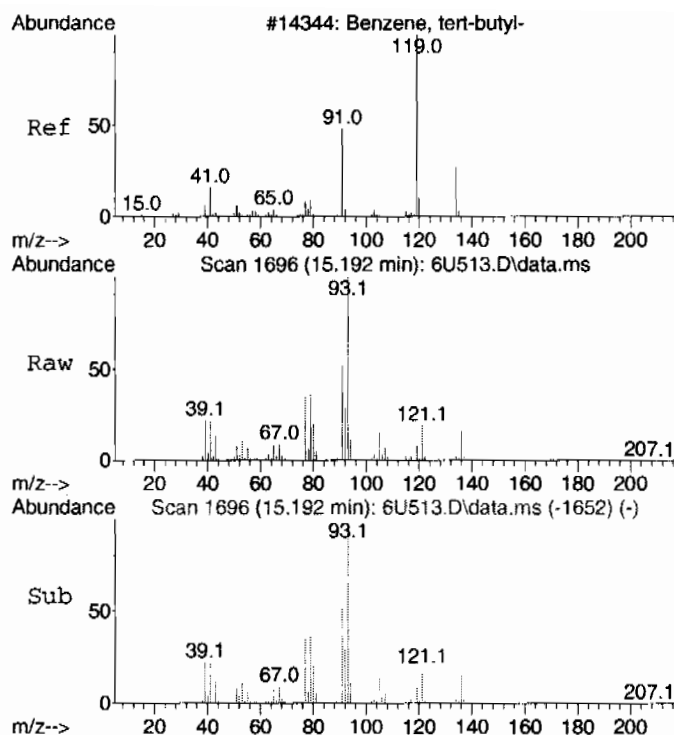
Tgt Ion:106 Resp: 4572
Ion Ratio Lower Upper
106 100
91 190.7 160.4 220.4



#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 0.42 ug/L
RT: 14.174 min Scan# 1529
Delta R.T. 0.018 min
Lab File: 6U513.D
Acq: 22 Jan 2010 4:28 pm

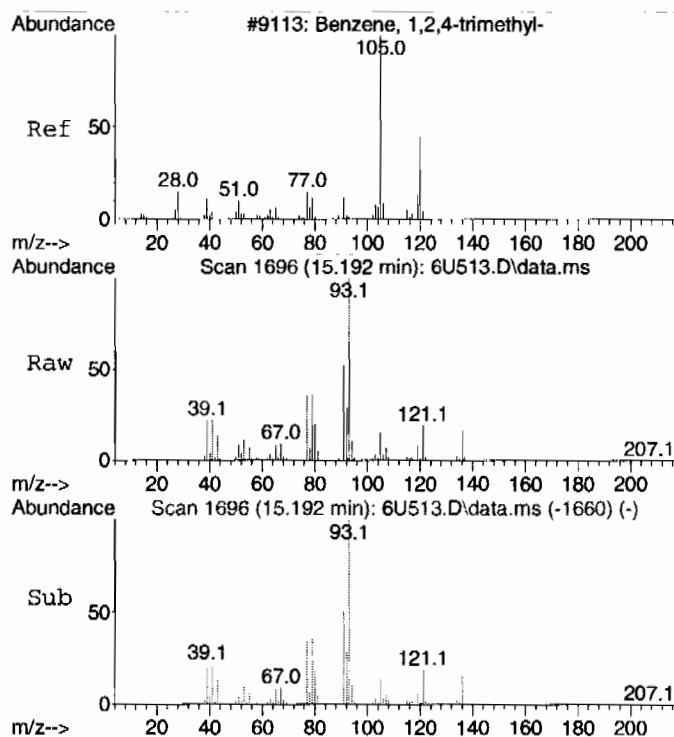
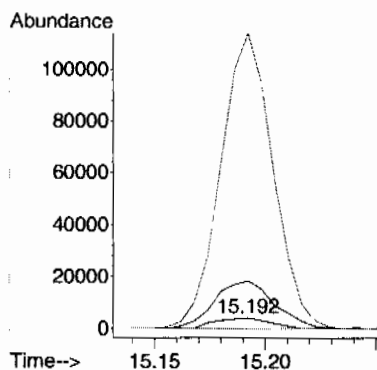
Tgt Ion:105 Resp: 12656
Ion Ratio Lower Upper
105 100
120 3.5 0.0 57.5





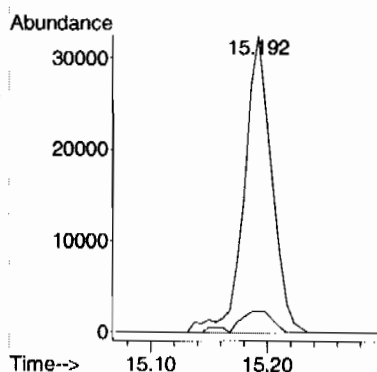
#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 1.23 ug/L
RT: 15.192 min Scan# 1696
Delta R.T. 0.085 min
Lab File: 6U513.D
Acq: 22 Jan 2010 4:28 pm

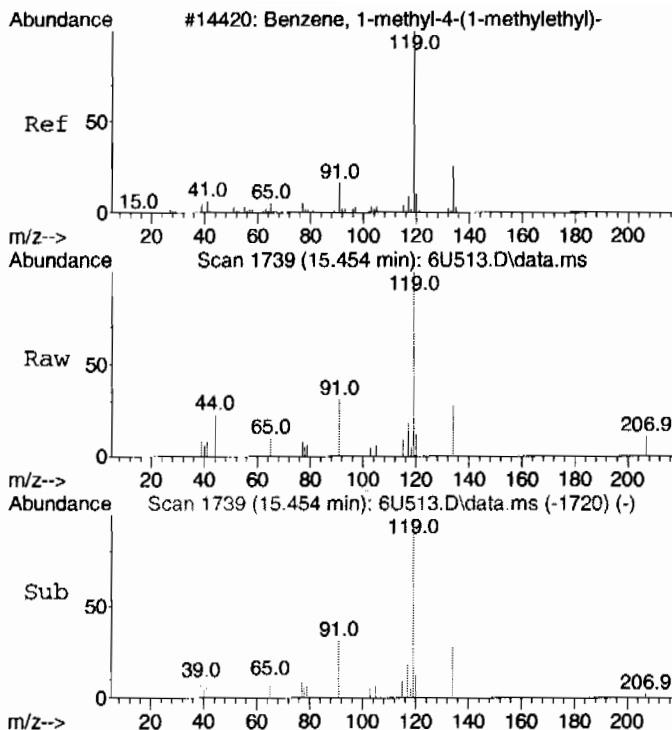
Tgt Ion:134 Resp: 7054
Ion Ratio Lower Upper
134 100
119 492.5 423.1 483.1#
91 2645.3 241.2 301.2#



#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 1.95 ug/L
RT: 15.192 min Scan# 1696
Delta R.T. 0.042 min
Lab File: 6U513.D
Acq: 22 Jan 2010 4:28 pm

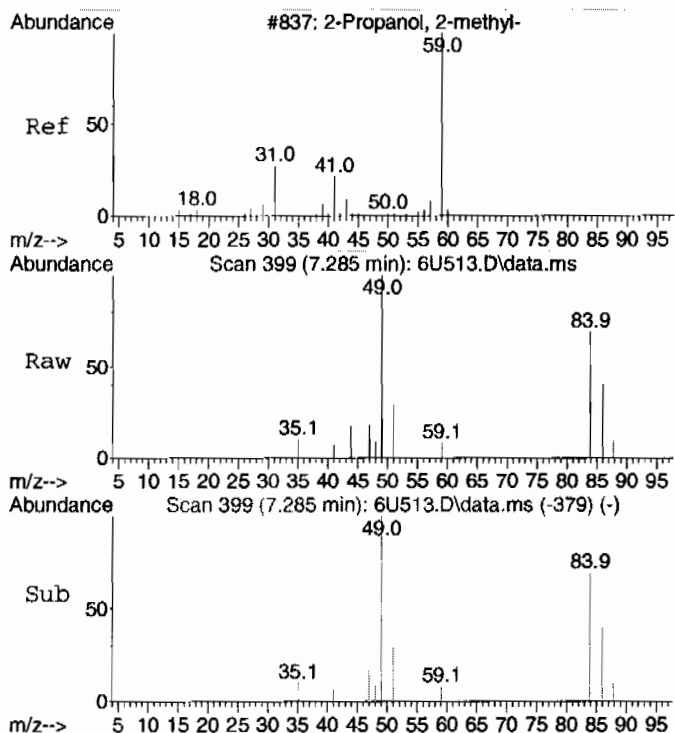
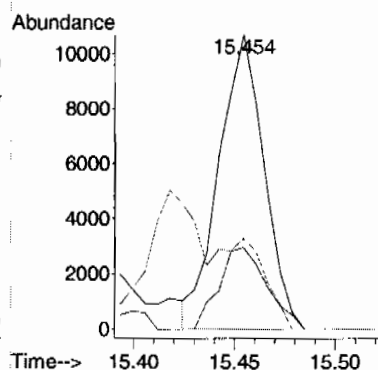
Tgt Ion:105 Resp: 53074
Ion Ratio Lower Upper
105 100
120 8.2 17.4 77.4#





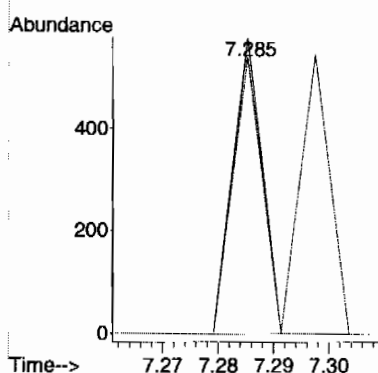
#72 BEFORE analyst DELETION
4-Isopropyltoluene
Concen: 0.59 ug/L
RT: 15.454 min Scan# 1739
Delta R.T. 0.000 min
Lab File: 6U513.D
Acq: 22 Jan 2010 4:28 pm

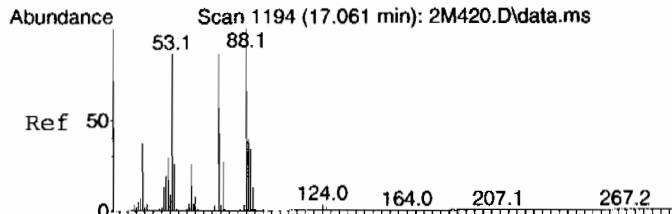
Tgt Ion	Ratio	Lower	Upper
119	100		
134	29.4	0.0	57.5
91	0.0	0.0	53.4



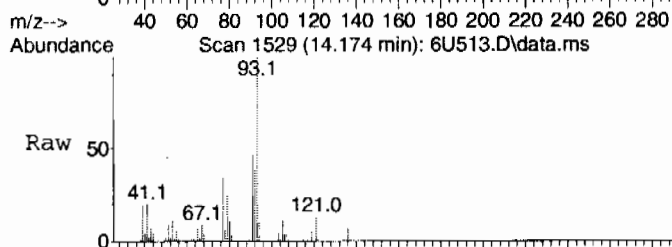
#89 BEFORE analyst DELETION
tert-Butyl Alcohol
Concen: 0.25 ug/L
RT: 7.285 min Scan# 399
Delta R.T. 0.000 min
Lab File: 6U513.D
Acq: 22 Jan 2010 4:28 pm

Tgt Ion	Ratio	Lower	Upper
59	100		
41	187.3	0.0	53.7#

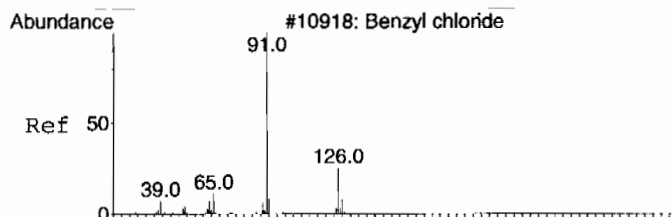
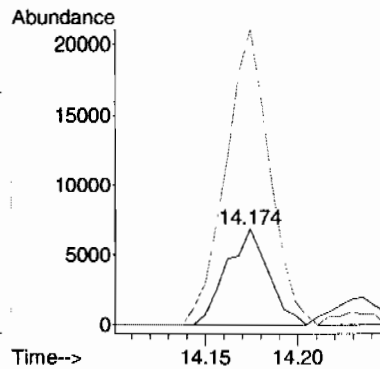
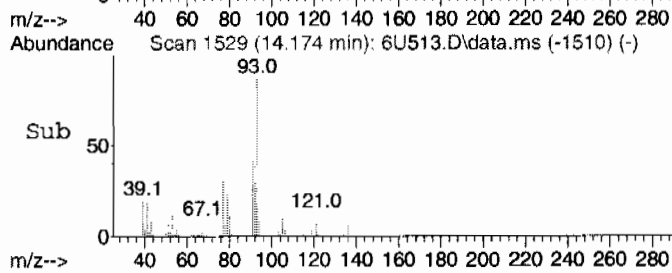




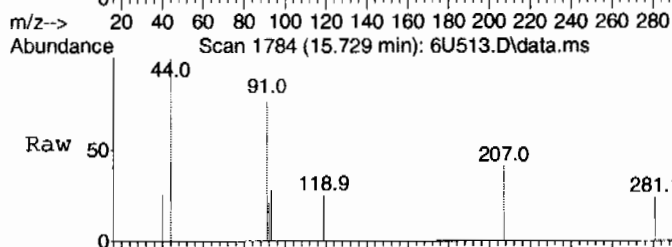
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 4.65 ug/L
 RT: 14.174 min Scan# 1529
 Delta R.T. -0.024 min
 Lab File: 6U513.D
 Acq: 22 Jan 2010 4:28 pm



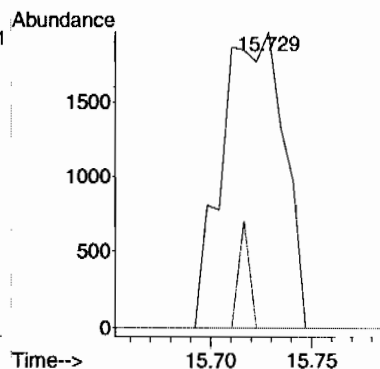
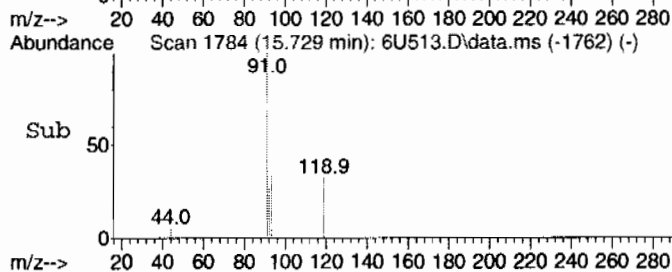
Tgt Ion	Resp	Lower	Upper
53	100		
88	0.0	76.1	136.1#
77	322.8	1.3	61.3#

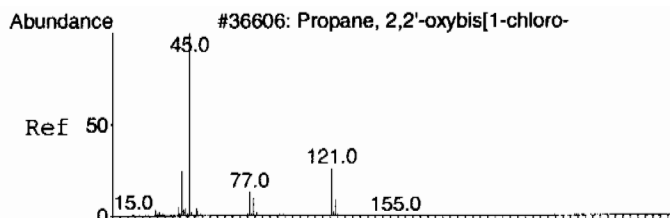


#111 BEFORE analyst DELETION
 Benzyl chloride
 Concen: 0.32 ug/L
 RT: 15.729 min Scan# 1784
 Delta R.T. 0.013 min
 Lab File: 6U513.D
 Acq: 22 Jan 2010 4:28 pm

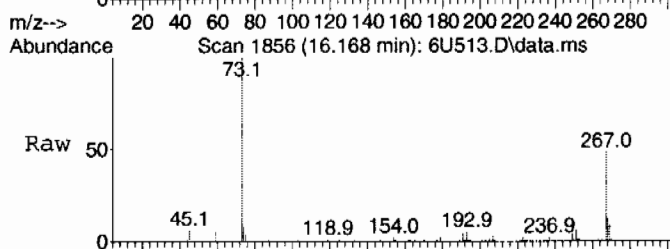


Tgt Ion	Resp	Lower	Upper
91	100		
126	6.2	0.0	52.6
65	0.0	0.0	42.9

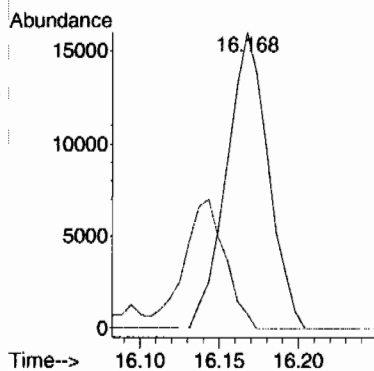
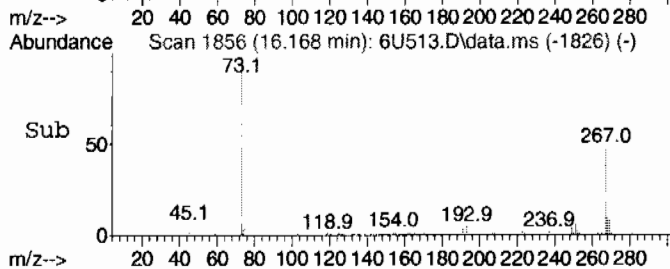




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 7.81 ug/L
 RT: 16.168 min Scan# 1856
 Delta R.T. 0.055 min
 Lab File: 6U513.D
 Acq: 22 Jan 2010 4:28 pm



Tgt Ion: 45 Resp: 29289
 Ion Ratio Lower Upper
 45 100
 121 42.9 0.0 53.0



Page 81 of 1503

Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U513.D
Acq On : 22 Jan 2010 4:28 pm
Operator : RXD1
Sample : |244923001|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

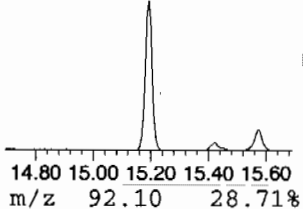
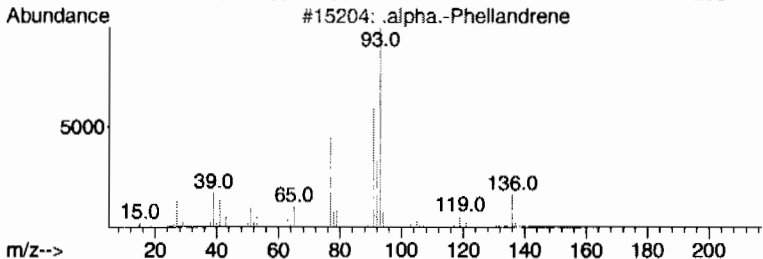
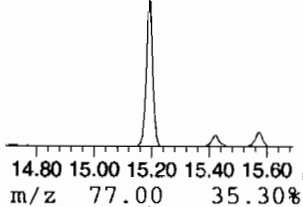
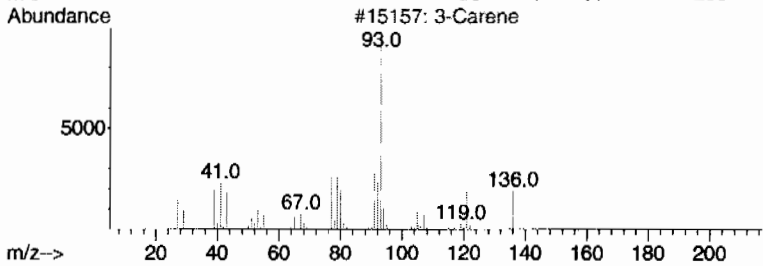
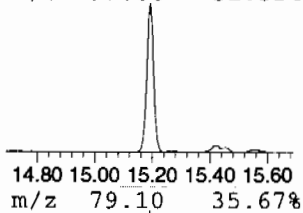
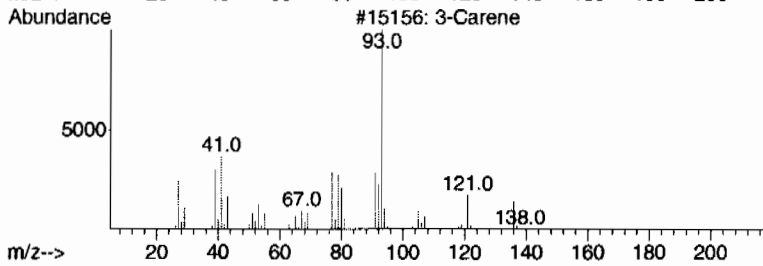
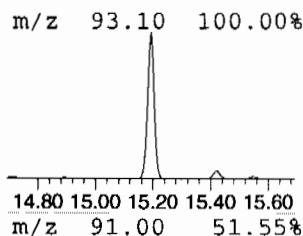
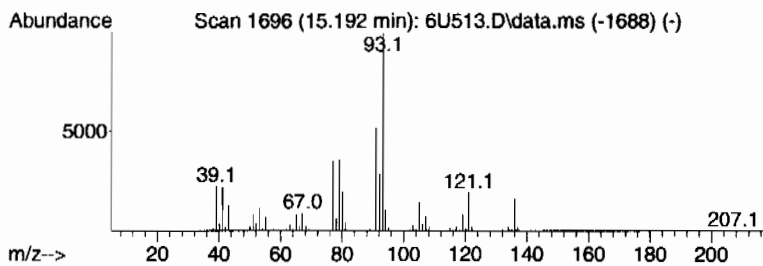
SubList :

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

Peak Number 3 3-Carene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.192	30.71 ug/L	1834140	1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Carene	136	C10H16	013466-78-9	96
2			3-Carene	136	C10H16	013466-78-9	95
3			.alpha.-Phellandrene	136	C10H16	000099-83-2	92
4			3-Carene	136	C10H16	013466-78-9	91
5			1S-.alpha.-Pinene	136	C10H16	007785-26-4	90



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U513.D
Acq On : 22 Jan 2010 4:28 pm
Operator : RXD1
Sample : |244923001|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

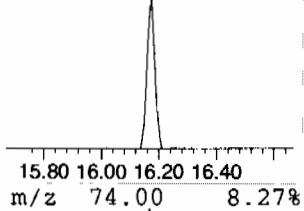
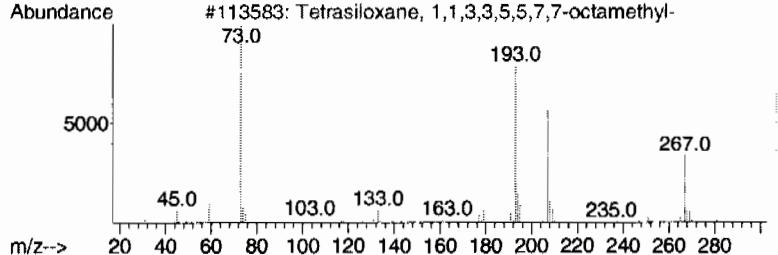
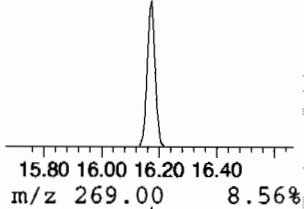
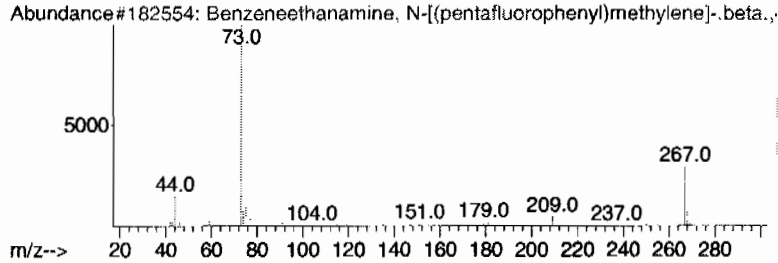
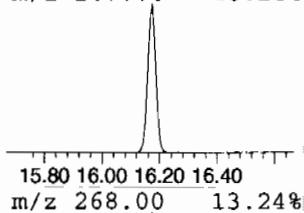
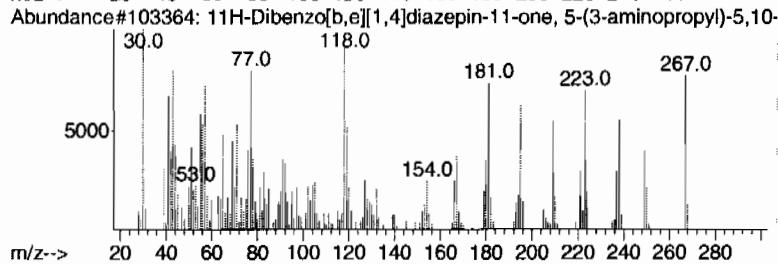
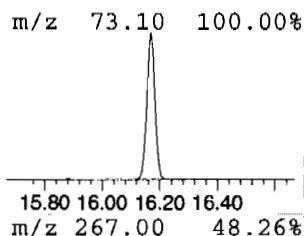
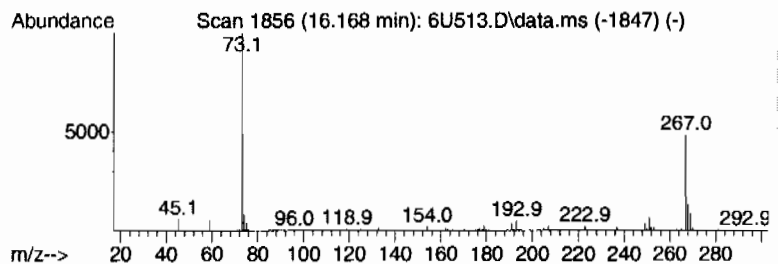
SubList :

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

Peak Number 4 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.168	16.21 ug/L	968274	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	38
2			Benzeneethanamine, N-[(pentaflu...	475	C21H26F5NO2Si2	055429-85-1	37
3			Tetrasiloxane, 1,1,3,3,5,5,7,7-o...	282	C8H26O3Si4	001000-05-1	12
4			3,5-Dimethoxyphenylacetic acid, ...	268	C13H20O4Si	1000071-82-4	10
5			1-Boraindane, 3-methyl-1-[1-(tri...	266	C17H23BSi	190316-36-0	10



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U513.D
Acq On : 22 Jan 2010 4:28 pm
Operator : RXD1
Sample : |244923001|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	93.5	ug/L	5923710	4	13.156	3166410	50.0
3-Carene	15.192	30.7	ug/L	1834140	5	15.576	2986620	50.0
unknown	16.168	16.2	ug/L	968274	6	15.576	2986620	50.0

Volatile
Certificate of Analysis
Sample Summary

Page 1 of 2

SDG Number: 10-1287
 Lab Sample ID: 244923002

 Client ID: RE15-10-7162
 Batch ID: 944501
 Run Date: 01/22/2010 16:55
 Prep Date: 01/22/2010 13:54
 Data File: 012210V6U514.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.332	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.332	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.332	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.332	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.332	1.11
67-64-1	Acetone	U	5.54	ug/kg	1.84	5.54
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.38	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.332	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.332	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.332	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.332	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.332	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.332	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.332	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.332	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.332	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.332	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.332	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.332	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.38	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.332	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.332	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.332	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.332	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.332	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.332	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.332	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.332	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.332	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923002

 Client ID: RE15-10-7162
 Batch ID: 944501
 Run Date: 01/22/2010 16:55
 Prep Date: 01/22/2010 13:54
 Data File: 012210V66U514.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.332	1.11
179601-23-1	m,p-Xylenes	U	2.22	ug/kg	0.332	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.332	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.332	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.332	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.332	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.332	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.332	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.332	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.332	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.332	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.332	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.332	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.332	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.332	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.332	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.332	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.332	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.332	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.332	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.332	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
000475-20-7	1,4-Methanoazulene, decahydro-4,8,	13.85	5.64	ug/kg	99	NJ
	unknown siloxane	14.24	15.3	ug/kg	0	J
	unknown	16.17	5.82	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
InstName : VOA6
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 25 10:25:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.980	96	1645359	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1145447	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	495266	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1643494	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1145447	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	495266	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	492256	50.71	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery = 101.42%			
43) Toluene-d8	11.626	98	1555378	48.98	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery = 97.96%			
61) Bromofluorobenzene	14.357	95	552246	57.86	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery = 115.72%			
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.652	50	322	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.706	43	591	N.D.		
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	0.000		0	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.078	76	1739	N.D.		
15) Methylene chloride	7.285	84	11784	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	0.000		0	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
InstName : VOA6
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 25 10:25:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0		N.D.	
39) 2-Chloroethylvinyl ether	0.000		0		N.D.	
40) cis-1,3-Dichloropropylene	0.000		0		N.D.	
42) 4-Methyl-2-pentanone	0.000		0		N.D.	
44) Toluene	11.693	91	4895		N.D.	
45) trans-1,3-Dichloroprop...	0.000		0		N.D.	
46) 1,1,2-Trichloroethane	0.000		0		N.D.	
47) 2-Hexanone	0.000		0		N.D.	
48) 1,3-Dichloropropane	0.000		0		N.D.	
49) Tetrachloroethylene	0.000		0		N.D.	
50) Dibromochloromethane	0.000		0		N.D.	
51) 1,2-Dibromoethane	0.000		0		N.D.	
52) Chlorobenzene	0.000		0		N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000		0		N.D.	
54) Ethylbenzene	13.254	91	3883		N.D.	
55) m,p-Xylenes	13.363	106	4153		N.D.	
56) o-Xylene	0.000		0m		N.D.	d
57) Styrene	13.802	104	684		N.D.	
59) Bromoform	0.000		0		N.D.	
60) Isopropylbenzene	14.168	105	199		N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
63) 1,2,3-Trichloropropane	0.000		0		N.D.	
64) Bromobenzene	0.000		0		N.D.	
65) n-Propylbenzene	0.000		0		N.D.	
66) 1,3,5-Trimethylbenzene	14.656	105	236		N.D.	
67) 2-Chlorotoluene	0.000		0		N.D.	
68) 4-Chlorotoluene	0.000		0		N.D.	
69) tert-Butylbenzene	15.192	134	884		N.D.	
70) 1,2,4-Trimethylbenzene	15.144	105	1573		N.D.	
71) sec-Butylbenzene	0.000		0		N.D.	
72) 4-Isopropyltoluene	15.461	119	842		N.D.	
73) 1,3-Dichlorobenzene	0.000		0		N.D.	
74) 1,4-Dichlorobenzene	0.000		0		N.D.	
75) n-Butylbenzene	0.000		0		N.D.	
76) 1,2-Dichlorobenzene	0.000		0		N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
78) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
79) Hexachlorobutadiene	0.000		0		N.D.	
80) Naphthalene	18.295	128	1992		N.D.	
81) 1,2,3-Trichlorobenzene	0.000		0		N.D.	
83) Chlorotrifluoroethylene	0.000		0		N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000		0		N.D.	
85) Acrolein	0.000		0		N.D.	
86) Trichlorotrifluoroethane	0.000		0		N.D.	
87) Isopropyl Alcohol	0.000		0		N.D.	
88) Allyl chloride	0.000		0		N.D.	
89) tert-Butyl Alcohol	0.000		0		N.D.	
90) Acrylonitrile	0.000		0		N.D.	
91) Isopropyl ether	0.000		0		N.D.	
92) 2-Chloro-1,3-butadiene	0.000		0		N.D.	
93) Ethyl tert-butyl ether	0.000		0		N.D.	
94) Ethyl acetate	0.000		0		N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
InstName : VOA6
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 25 10:25:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.		
96) Methacrylonitrile	0.000		0	N.D.		
97) Tetrahydrofuran	0.000		0	N.D.		
98) Isobutyl alcohol	0.000		0	N.D.		
99) Methyl tert-amyl ether	0.000		0	N.D.		
100) Methyl methacrylate	0.000		0	N.D.		
101) 1,4-Dioxane	0.000		0	N.D.		
102) 2-Nitropropane	0.000		0	N.D.		
104) Ethyl methacrylate	0.000		0	N.D.		
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.168	53	225	N.D.		
108) Cyclohexanone	0.000		0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110) Pentachloroethane	0.000		0	N.D.		
111) Benzyl chloride	0.000		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	0.000		0m	N.D.	d	

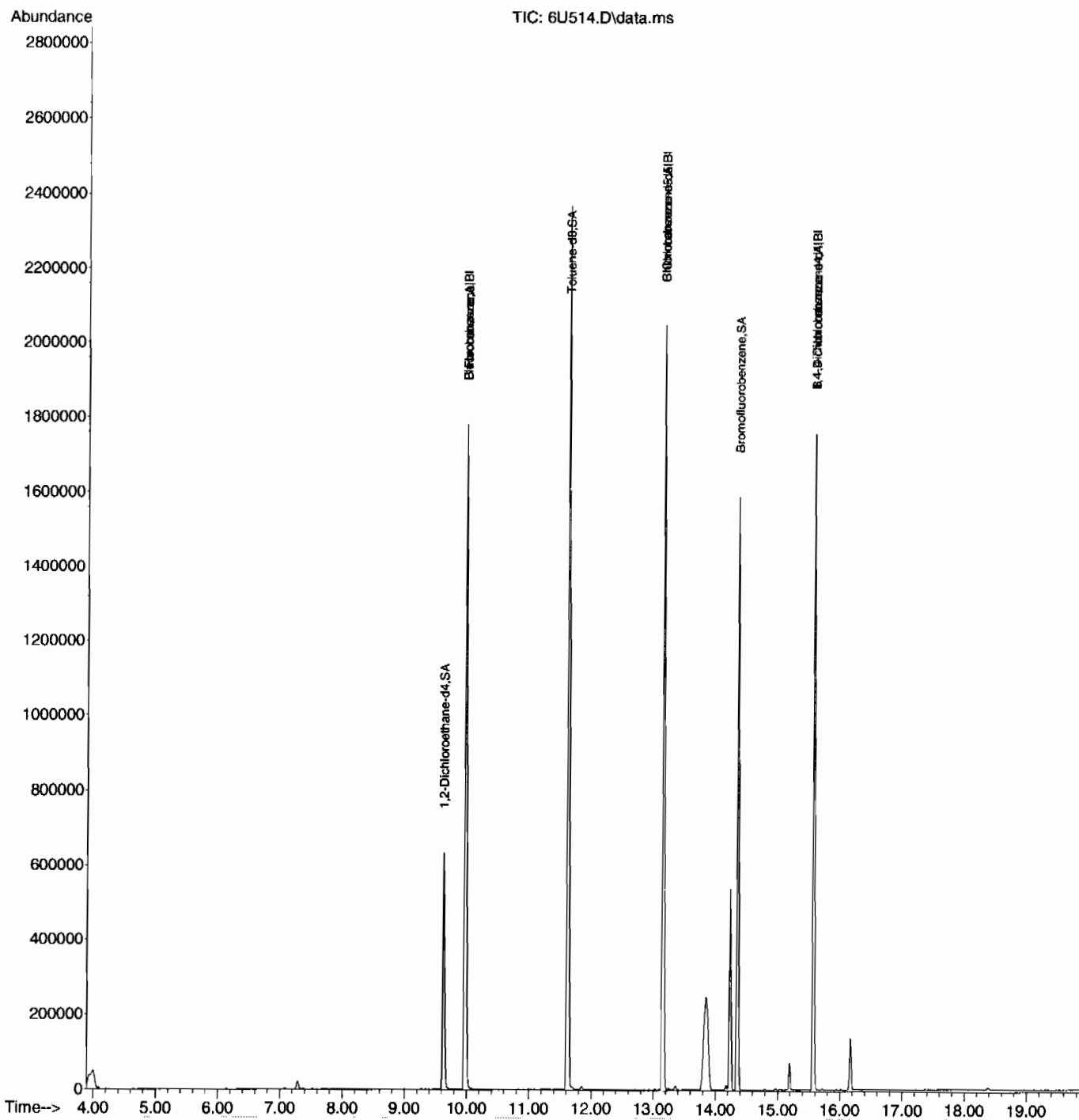
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

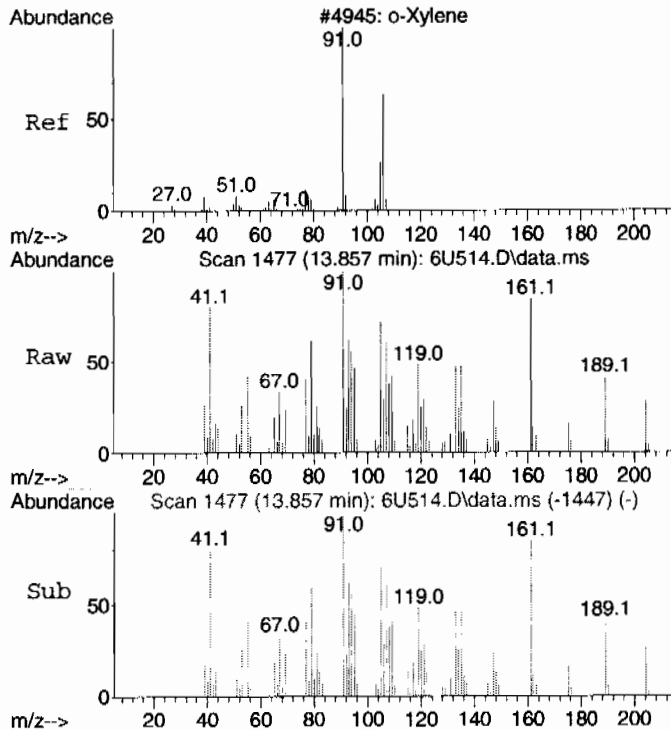
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
InstName : VOA6
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 25 10:25:08 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

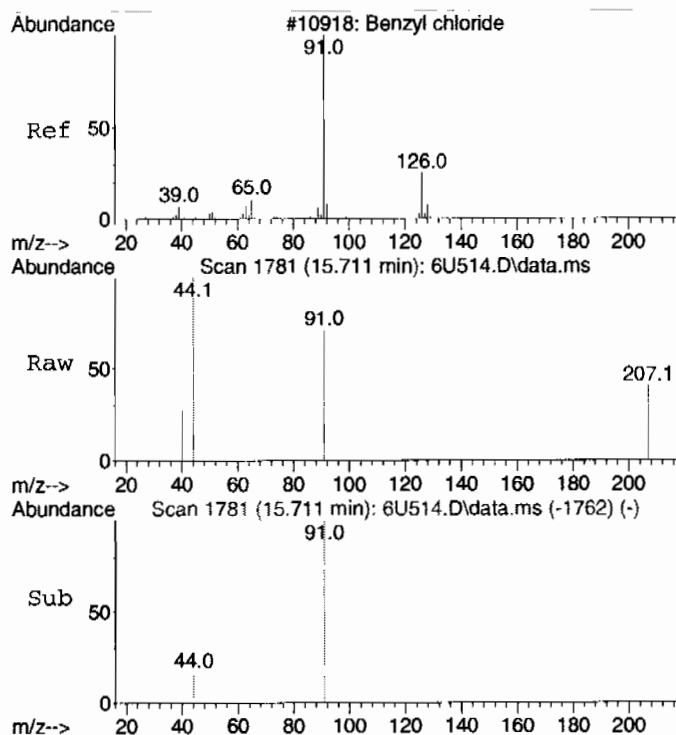
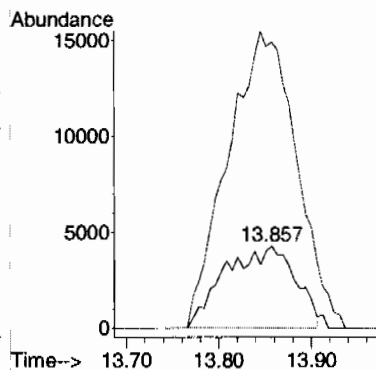
SubList :





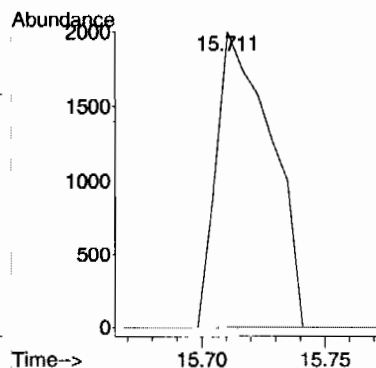
#56 BEFORE analyst DELETION
o-Xylene
Concen: 1.54 ug/L
RT: 13.857 min Scan# 1477
Delta R.T. 0.061 min
Lab File: 6U514.D
Acq: 22 Jan 2010 4:55 pm

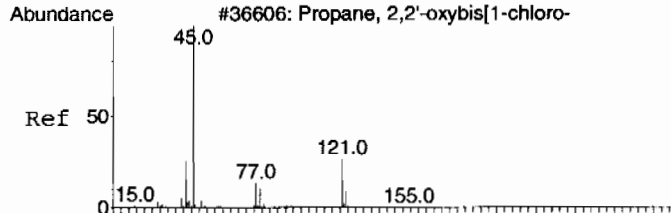
Tgt Ion: 106 Resp: 22682
Ion Ratio Lower Upper
106 100
91 342.4 173.1 233.1#



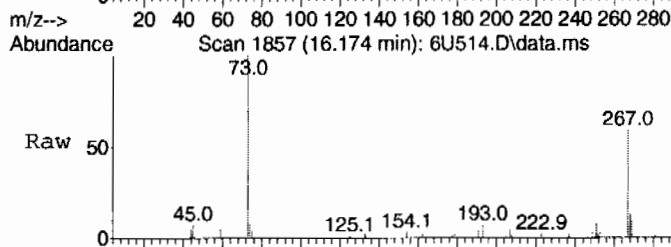
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.24 ug/L
RT: 15.711 min Scan# 1781
Delta R.T. -0.005 min
Lab File: 6U514.D
Acq: 22 Jan 2010 4:55 pm

Tgt Ion: 91 Resp: 3096
Ion Ratio Lower Upper
91 100
126 0.0 0.0 52.6
65 0.0 0.0 42.9

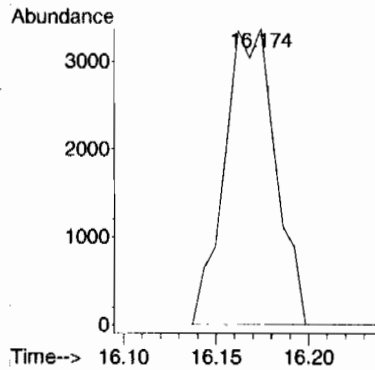
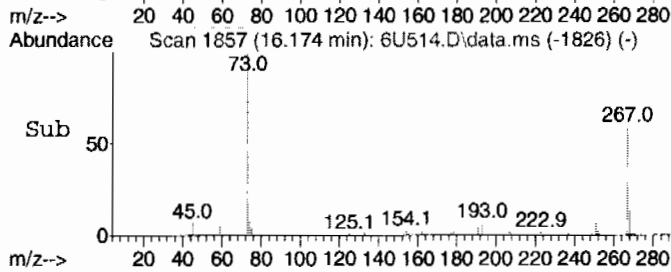




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 1.71 ug/L
 RT: 16.174 min Scan# 1857
 Delta R.T. 0.061 min
 Lab File: 6U514.D
 Acq: 22 Jan 2010 4:55 pm



Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

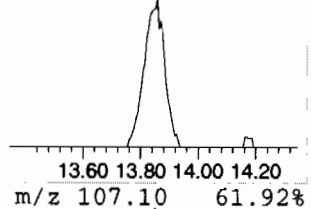
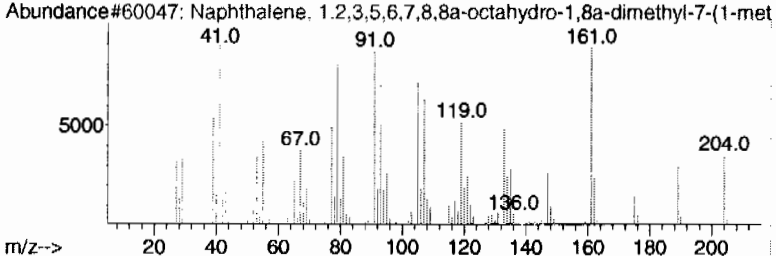
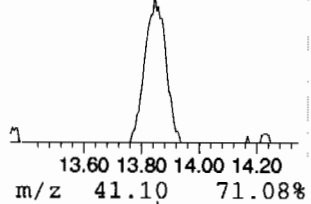
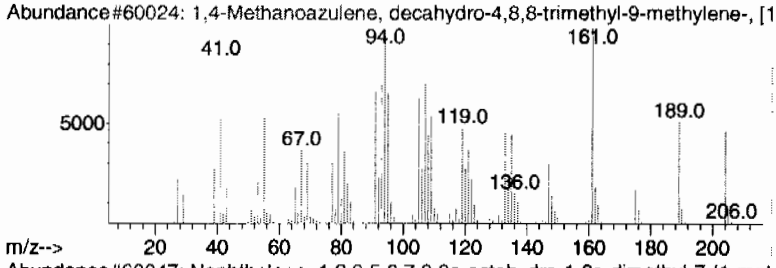
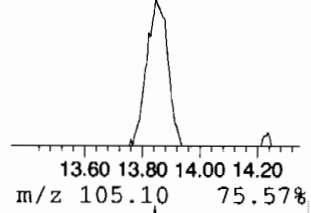
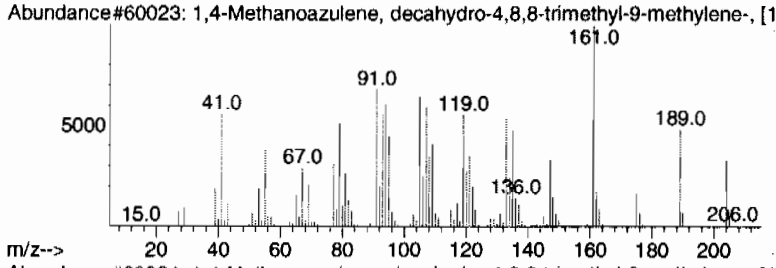
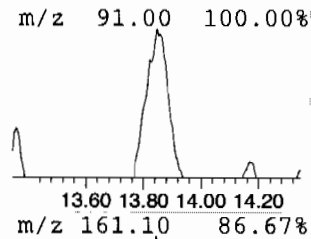
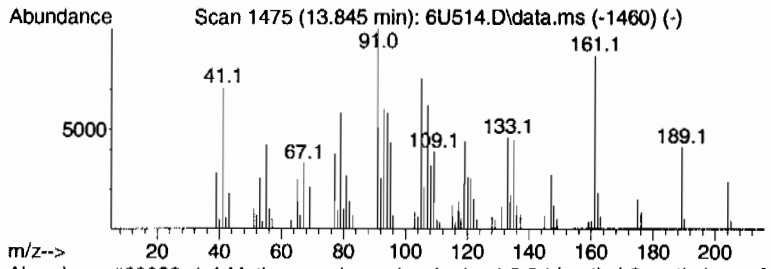
SubList :

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

Peak Number 1 1,4-Methanoazulene, decahyd... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.845	5.09 ug/L	366949	B Chlorobenzene-d5	13.156

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
2			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	99
3			Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	98
4			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	97
5			1,4-Methanoazulene, decahydro-4,...	204	C15H24	000475-20-7	97



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

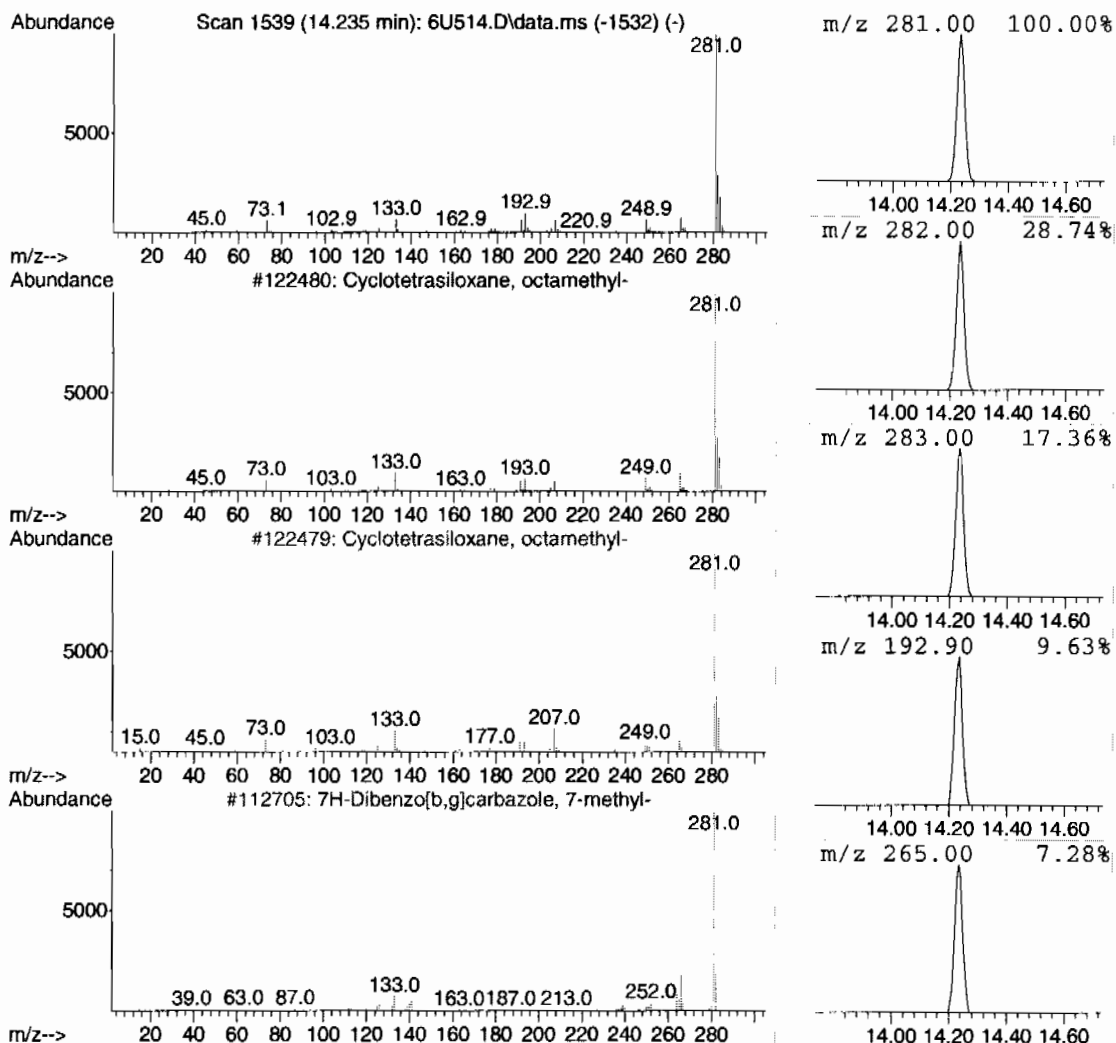
TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	13.81 ug/L	995538	B Chlorobenzene-d5	13.156

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3			7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
4			4H-1,2,4-Triazole-3-thiol, 4-all...	281	C16H15N3S	031803-13-1	47
5			5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	45



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

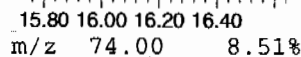
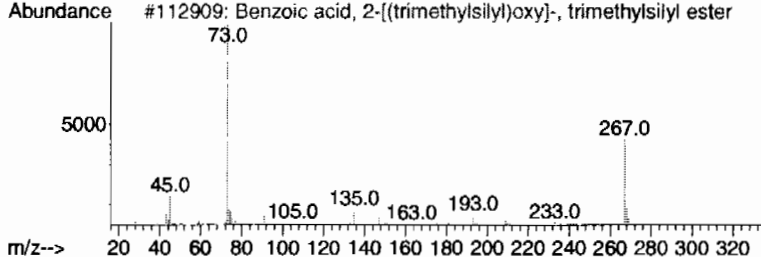
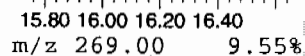
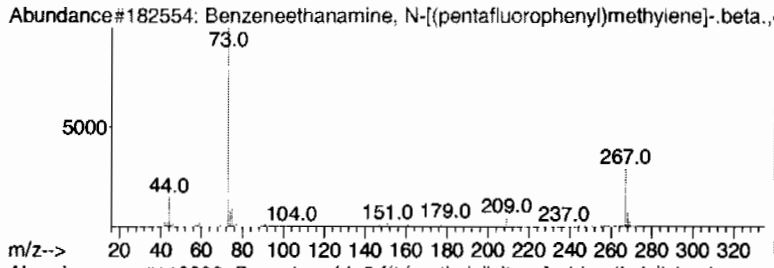
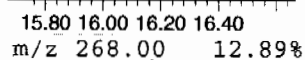
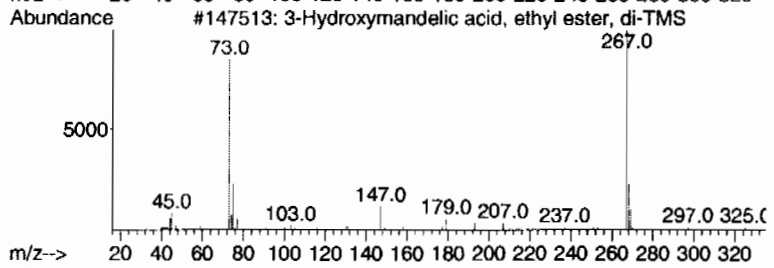
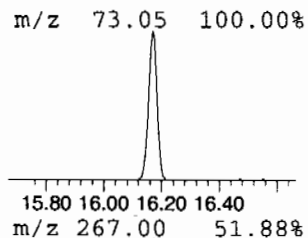
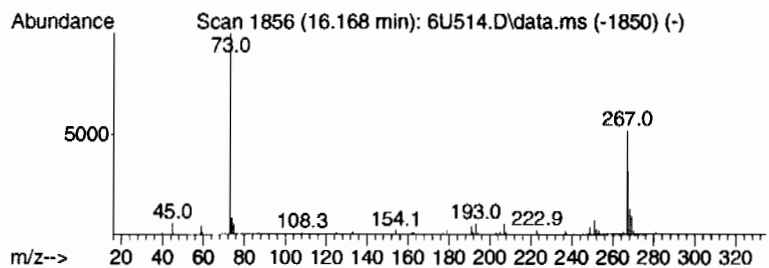
SubList :

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

Peak Number 3 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.168	5.25 ug/L	314676	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Hydroxymandelic acid, ethyl es...	340	C16H28O4Si2	1000071-88-9	72
2			Benzeneethanamine, N-[(pentaflu...	475	C21H26F5NO2Si2	055429-85-1	72
3			Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	50
4			Butanamide, 2,2,3,3,4,4,4-hepta...	493	C18H26F7NO3Si2	055471-01-7	50
5			4-Hydroxymandelic acid, ethyl es...	340	C16H28O4Si2	1000071-53-3	50



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U514.D
Acq On : 22 Jan 2010 4:55 pm
Operator : RXD1
Sample : |244923002|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
1,4-Methanoazul...	13.845	5.1	ug/L	366949	4	13.156	3604370	50.0
unknown siloxane	14.235	13.8	ug/L	995538	4	13.156	3604370	50.0
unknown	16.168	5.3	ug/L	314676	6	15.576	2995030	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923003	Date Received: 01/16/2010 08:55	%Moisture: 10.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7161	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/22/2010 17:23	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 13:56	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V6U515.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.382	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.337	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.337	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.337	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.337	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.337	1.12
67-64-1	Acetone	U	5.61	ug/kg	1.86	5.61
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.337	1.12
74-88-4	Iodomethane	U	5.61	ug/kg	1.80	5.61
75-09-2	Methylene chloride	U	5.61	ug/kg	2.24	5.61
75-15-0	Carbon disulfide	U	5.61	ug/kg	1.40	5.61
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.337	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.337	1.12
78-93-3	2-Butanone	U	5.61	ug/kg	1.68	5.61
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.337	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.337	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.337	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.370	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.337	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.337	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.337	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.337	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.337	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.370	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.337	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.337	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.337	1.12
108-10-1	4-Methyl-2-pentanone	U	5.61	ug/kg	1.40	5.61
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.337	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.337	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.337	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.337	1.12
591-78-6	2-Hexanone	U	5.61	ug/kg	1.68	5.61
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.337	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.337	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.337	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.337	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.337	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923003

 Client ID: RE15-10-7161
 Batch ID: 944501
 Run Date: 01/22/2010 17:23
 Prep Date: 01/22/2010 13:56
 Data File: 012210V66U515.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.337	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.337	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.337	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.337	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.337	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.337	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.337	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.337	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.337	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.337	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.337	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.337	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.337	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.337	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.337	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.337	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.337	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.337	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.337	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.61	ug/kg	1.80	5.61
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.337	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.337	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	18.6	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U515.D
Acq On : 22 Jan 2010 5:23 pm
Operator : RXD1
InstName : VOA6
Sample : |244923003|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 25 10:53:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.974	96	1518370	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1107772	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	587705	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	1516879	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1107772	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	587705	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	457478	51.07	ug/L	0.00
Spiked Amount 50.000	Range 68	- 131	Recovery	=	102.14%	
43) Toluene-d8	11.626	98	1462291	47.61	ug/L	0.00
Spiked Amount 50.000	Range 75	- 129	Recovery	=	95.22%	
61) Bromofluorobenzene	14.357	95	573111	50.60	ug/L	0.00
Spiked Amount 50.000	Range 68	- 133	Recovery	=	101.20%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.652	50	232	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	6.712	43	1182	N.D.	
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	7.291	41	210	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	7.084	76	2180	N.D.	
15) Methylene chloride	7.285	84	11645	N.D.	
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U515.D
Acq On : 22 Jan 2010 5:23 pm
Operator : RXD1
InstName : VOA6
Sample : |244923003|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 25 10:53:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.705	91	1109	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.241	91	423	N.D.		
55) m,p-Xylenes	13.357	106	1384	N.D.		
56) o-Xylene	13.839	106	3255	N.D.		
57) Styrene	0.000		0	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	14.229	105	812	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000		0	N.D.		
69) tert-Butylbenzene	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.149	105	227	N.D.		
71) sec-Butylbenzene	0.000		0	N.D.		
72) 4-Isopropyltoluene	0.000		0	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.289	128	1433	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.291	41	210	N.D.		
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U515.D
Acq On : 22 Jan 2010 5:23 pm
Operator : RXD1
InstName : VOA6
Sample : |244923003|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 25 10:53:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.		
96) Methacrylonitrile	0.000		0	N.D.		
97) Tetrahydrofuran	0.000		0	N.D.		
98) Isobutyl alcohol	0.000		0	N.D.		
99) Methyl tert-amyl ether	0.000		0	N.D.		
100) Methyl methacrylate	0.000		0	N.D.		
101) 1,4-Dioxane	0.000		0	N.D.		
102) 2-Nitropropane	0.000		0	N.D.		
104) Ethyl methacrylate	0.000		0	N.D.		
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.		
108) Cyclohexanone	0.000		0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110) Pentachloroethane	0.000		0	N.D.		
111) Benzyl chloride	0.000		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	0.000		0m	N.D.	d	

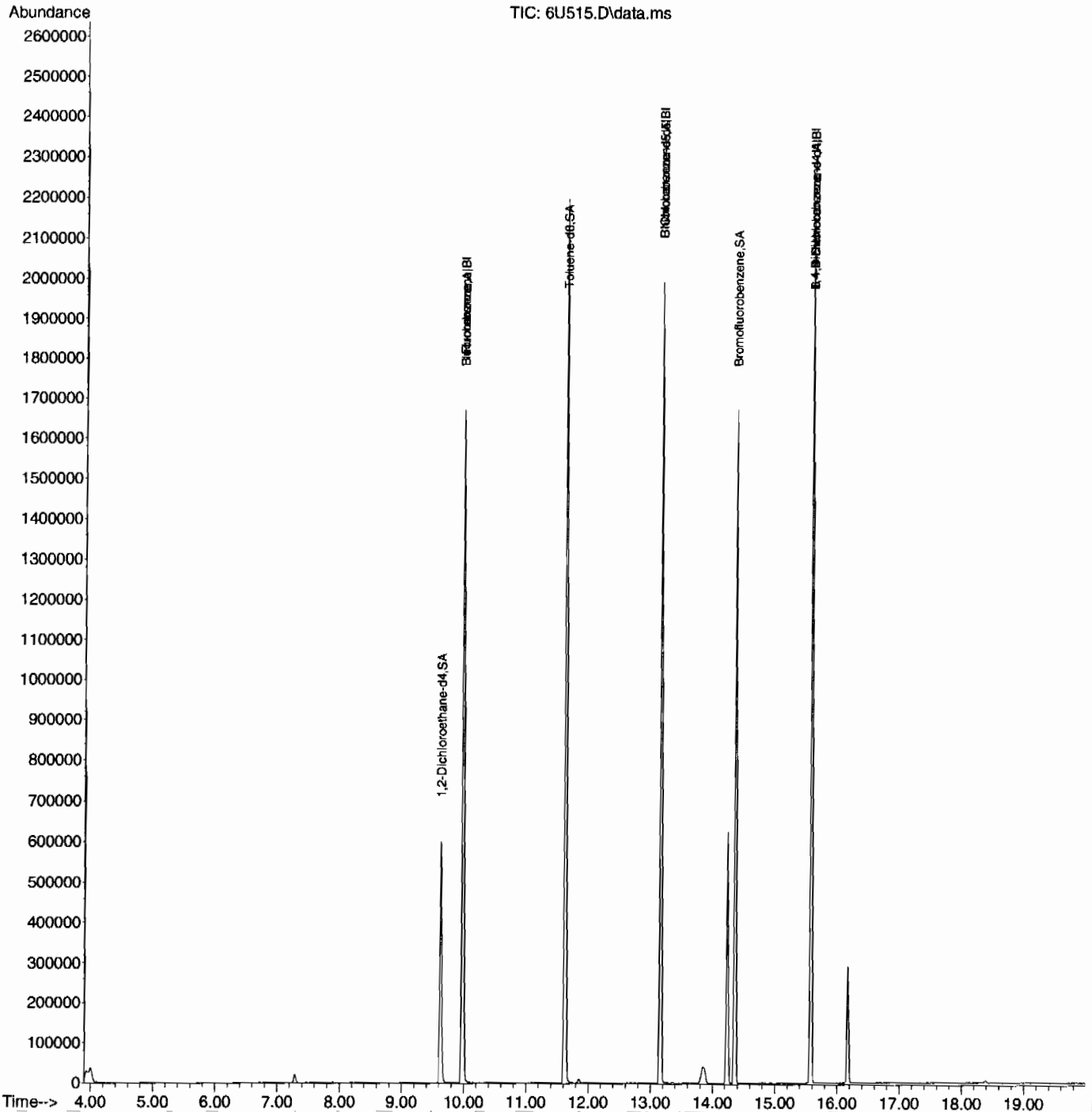
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

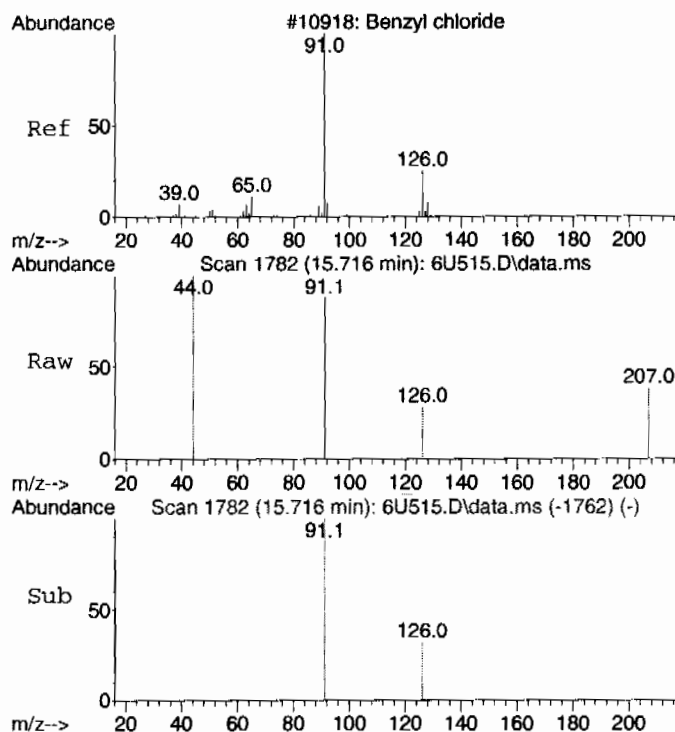
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U515.D
Acq On : 22 Jan 2010 5:23 pm
Operator : RXD1
InstName : VOA6
Sample : |244923003|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 25 10:53:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

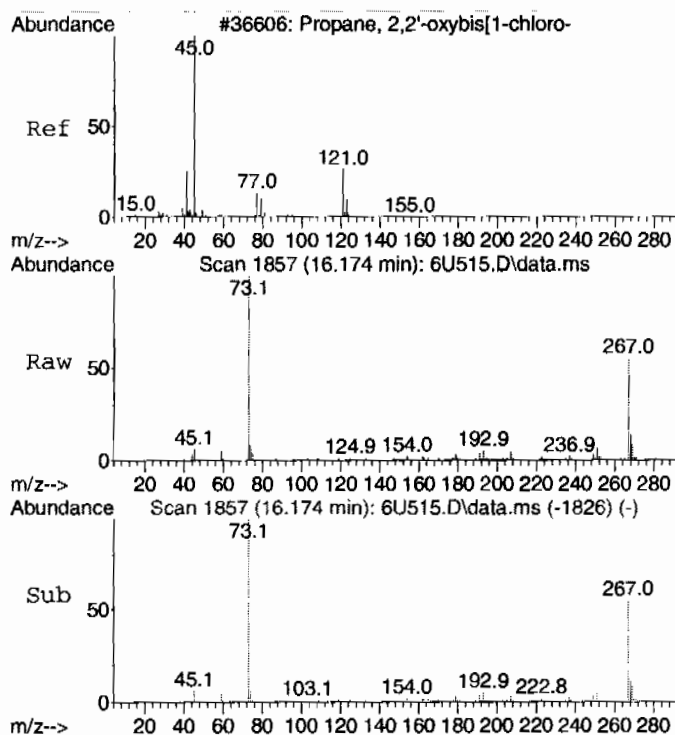
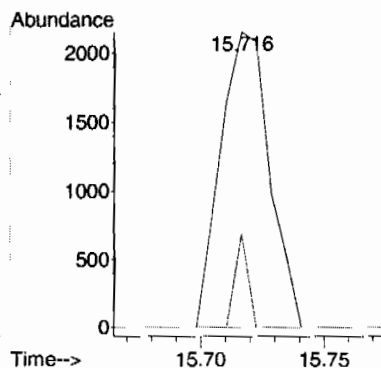
SubList :





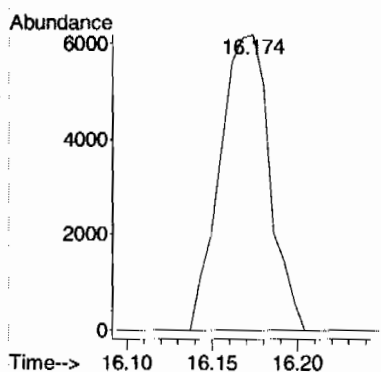
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.20 ug/L
RT: 15.716 min Scan# 1782
Delta R.T. 0.000 min
Lab File: 6U515.D
Acq: 22 Jan 2010 5:23 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
126	8.5	0.0	52.6
65	0.0	0.0	42.9



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 2.79 ug/L
RT: 16.174 min Scan# 1857
Delta R.T. 0.061 min
Lab File: 6U515.D
Acq: 22 Jan 2010 5:23 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U515.D
Acq On : 22 Jan 2010 5:23 pm
Operator : RXD1
Sample : |244923003|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

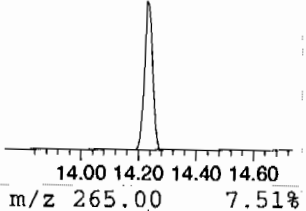
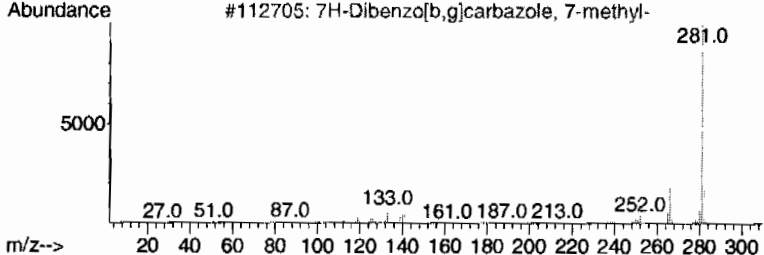
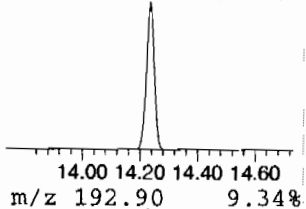
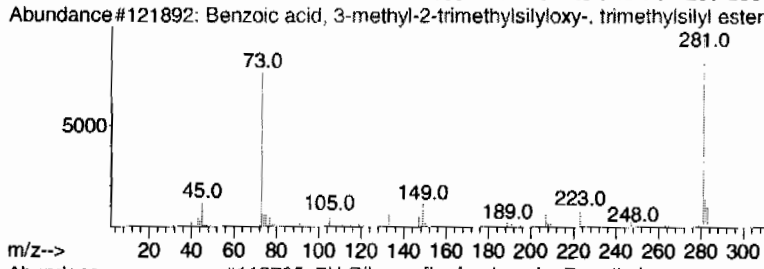
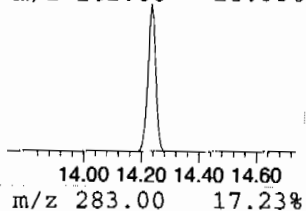
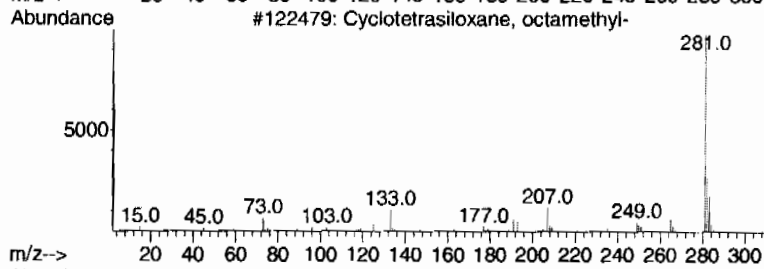
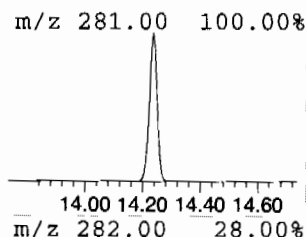
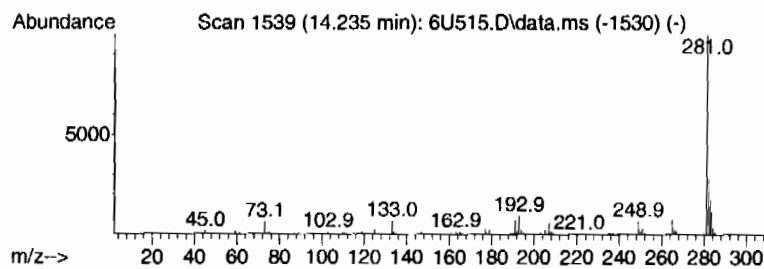
SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	16.60 ug/L	1157790	B Chlorobenzene-d5	13.156

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	90
2			Benzoic acid, 3-methyl-2-trimeth...	296	C14H24O3Si2	1000153-57-1	59
3			7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
4			4H-1,2,4-Triazole-3-thiol, 4-all...	281	C16H15N3S	031803-13-1	50
5			5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	50



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U515.D
Acq On : 22 Jan 2010 5:23 pm
Operator : RXD1
Sample : |244923003|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	16.6	ug/L	1157790	4	13.156	3486890	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923004	Date Received: 01/16/2010 08:55	%Moisture: 20
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7160	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.1	Dilution: 1
Run Date: 01/22/2010 17:51	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 13:58	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V66U516.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.425	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.375	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.375	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.375	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.375	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.375	1.25
67-64-1	Acetone	U	6.25	ug/kg	2.07	6.25
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.375	1.25
74-88-4	Iodomethane	U	6.25	ug/kg	2.00	6.25
75-09-2	Methylene chloride	U	6.25	ug/kg	2.50	6.25
75-15-0	Carbon disulfide	U	6.25	ug/kg	1.56	6.25
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.375	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.375	1.25
78-93-3	2-Butanone	U	6.25	ug/kg	1.87	6.25
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.375	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.375	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.375	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.412	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.375	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.375	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.375	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.375	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.375	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.412	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.375	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.375	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.375	1.25
108-10-1	4-Methyl-2-pentanone	U	6.25	ug/kg	1.56	6.25
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.375	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.375	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.375	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.375	1.25
591-78-6	2-Hexanone	U	6.25	ug/kg	1.87	6.25
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.375	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.375	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.375	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.375	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.375	1.25

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923004
 Client ID: RE15-10-7160
 Batch ID: 944501
 Run Date: 01/22/2010 17:51
 Prep Date: 01/22/2010 13:58
 Data File: 012210V6U516.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 20
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.375	1.25
179601-23-1	m,p-Xylenes	U	2.50	ug/kg	0.375	2.50
95-47-6	o-Xylene	U	1.25	ug/kg	0.375	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.375	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.375	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.375	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.375	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.375	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.375	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.375	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.375	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.375	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.375	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.375	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.375	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.375	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.375	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.375	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.375	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.25	ug/kg	2.00	6.25
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.375	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.375	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	6.55	ug/kg	0	J
	unknown siloxane	16.17	6.29	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U516.D
Acq On : 22 Jan 2010 5:51 pm
Operator : RXD1
InstName : VOA6
Sample : |244923004|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 25 10:53:54 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1636604	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1139091	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	497944	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1634768	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1139091	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	497944	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	490620	50.81	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	101.62%	
43) Toluene-d8	11.626	98	1558417	49.34	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	98.68%	
61) Bromofluorobenzene	14.357	95	548297	57.14	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	114.28%	

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.725	43	989	N.D.		
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.291	41	401	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.084	76	2029	N.D.		
15) Methylene chloride	7.285	84	11481	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	9.407	56	193	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	0.000		0	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U516.D
Acq On : 22 Jan 2010 5:51 pm
Operator : RXD1
InstName : VOA6
Sample : |244923004|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 25 10:53:54 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.693	91	186	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	0.000		0	N.D.		
55) m,p-Xylenes	13.363	106	203	N.D.		
56) o-Xylene	0.000		0	N.D.		
57) Styrene	0.000		0	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	0.000		0	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000		0	N.D.		
69) tert-Butylbenzene	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.144	105	219	N.D.		
71) sec-Butylbenzene	0.000		0	N.D.		
72) 4-Isopropyltoluene	15.455	119	823	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.289	128	848	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.291	41	400	N.D.		
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U516.D
Acq On : 22 Jan 2010 5:51 pm
Operator : RXD1
InstName : VOA6
Sample : |244923004|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 25 10:53:54 2010

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Dec 14 12:44:52 2009

Response via : Initial Calibration

Integrator: RTE

Compound	R.T. QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000	0	N.D.	
96) Methacrylonitrile	0.000	0	N.D.	
97) Tetrahydrofuran	0.000	0	N.D.	
98) Isobutyl alcohol	0.000	0	N.D.	
99) Methyl tert-amyl ether	0.000	0	N.D.	
100) Methyl methacrylate	0.000	0	N.D.	
101) 1,4-Dioxane	0.000	0	N.D.	
102) 2-Nitropropane	0.000	0	N.D.	
104) Ethyl methacrylate	0.000	0	N.D.	
106) 1-Chlorohexane	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	0	N.D.	
108) Cyclohexanone	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	0	N.D.	
110) Pentachloroethane	0.000	0	N.D.	
111) Benzyl chloride	0.000	0m	N.D. d	
112) bis(2-Chloroisopropyl)...	0.000	0m	N.D. d	

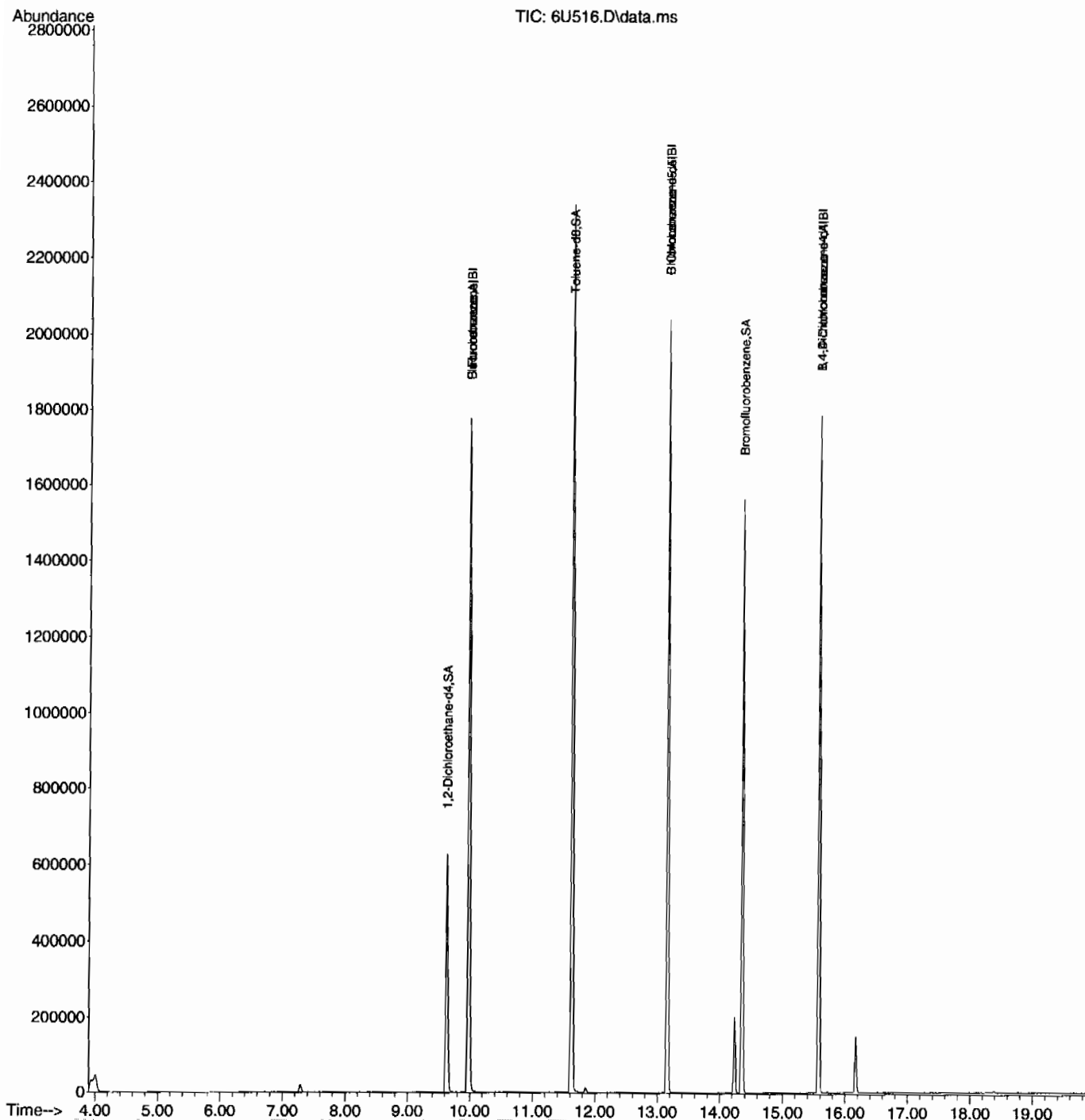
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

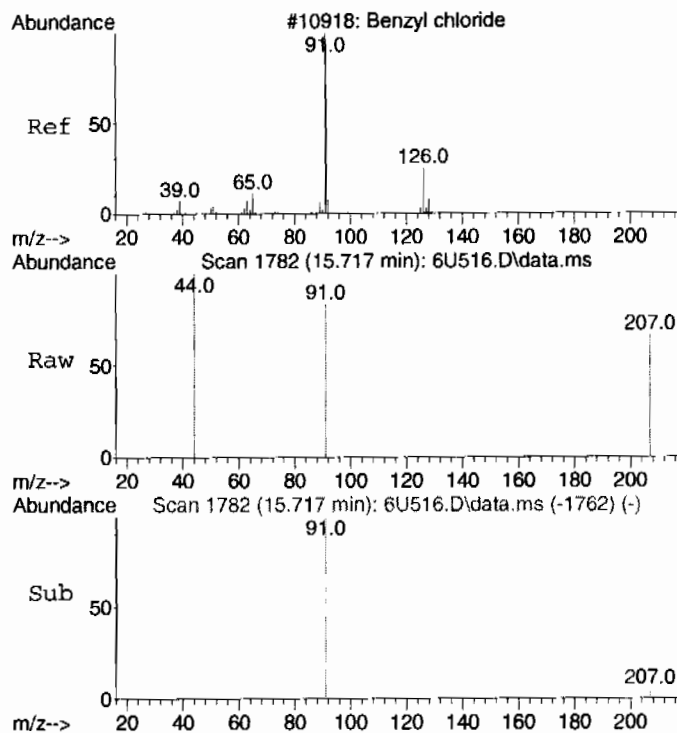
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U516.D
Acq On : 22 Jan 2010 5:51 pm
Operator : RXD1
InstName : VOA6
Sample : |244923004|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 25 10:53:54 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

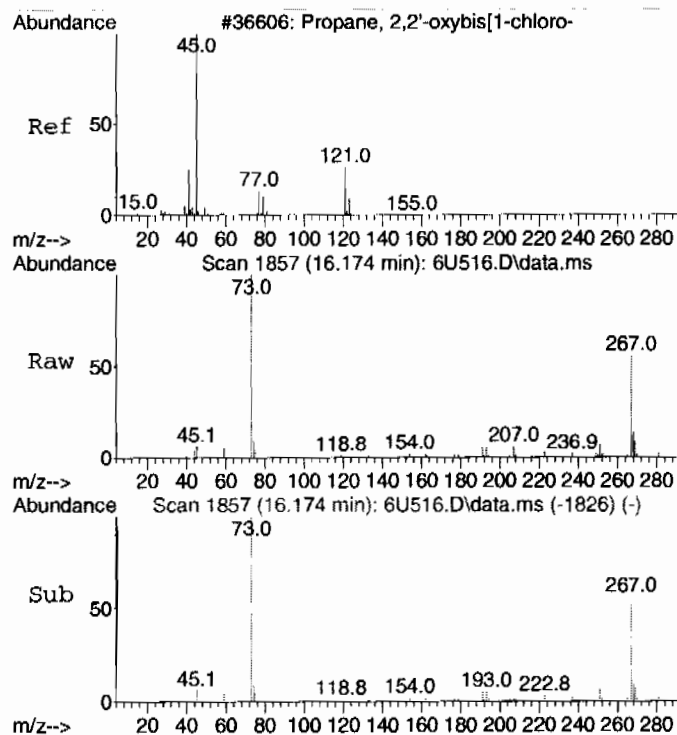
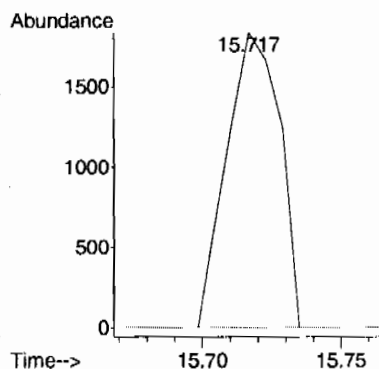
SubList :





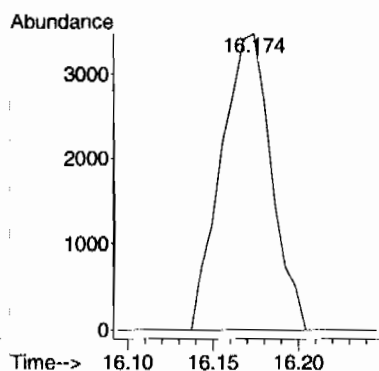
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.19 ug/L
RT: 15.717 min Scan# 1782
Delta R.T. 0.001 min
Lab File: 6U516.D
Acq: 22 Jan 2010 5:51 pm

Tgt Ion: 91	Resp: 2442
Ion Ratio	Lower Upper
91 100	
126 0.0	0.0 52.6
65 0.0	0.0 42.9



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl) ether
Concen: 1.86 ug/L
RT: 16.174 min Scan# 1857
Delta R.T. 0.061 min
Lab File: 6U516.D
Acq: 22 Jan 2010 5:51 pm

Tgt Ion: 45	Resp: 7022
Ion Ratio	Lower Upper
45 100	
121 0.0	0.0 53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U516.D
Acq On : 22 Jan 2010 5:51 pm
Operator : RXD1
Sample : |244923004|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

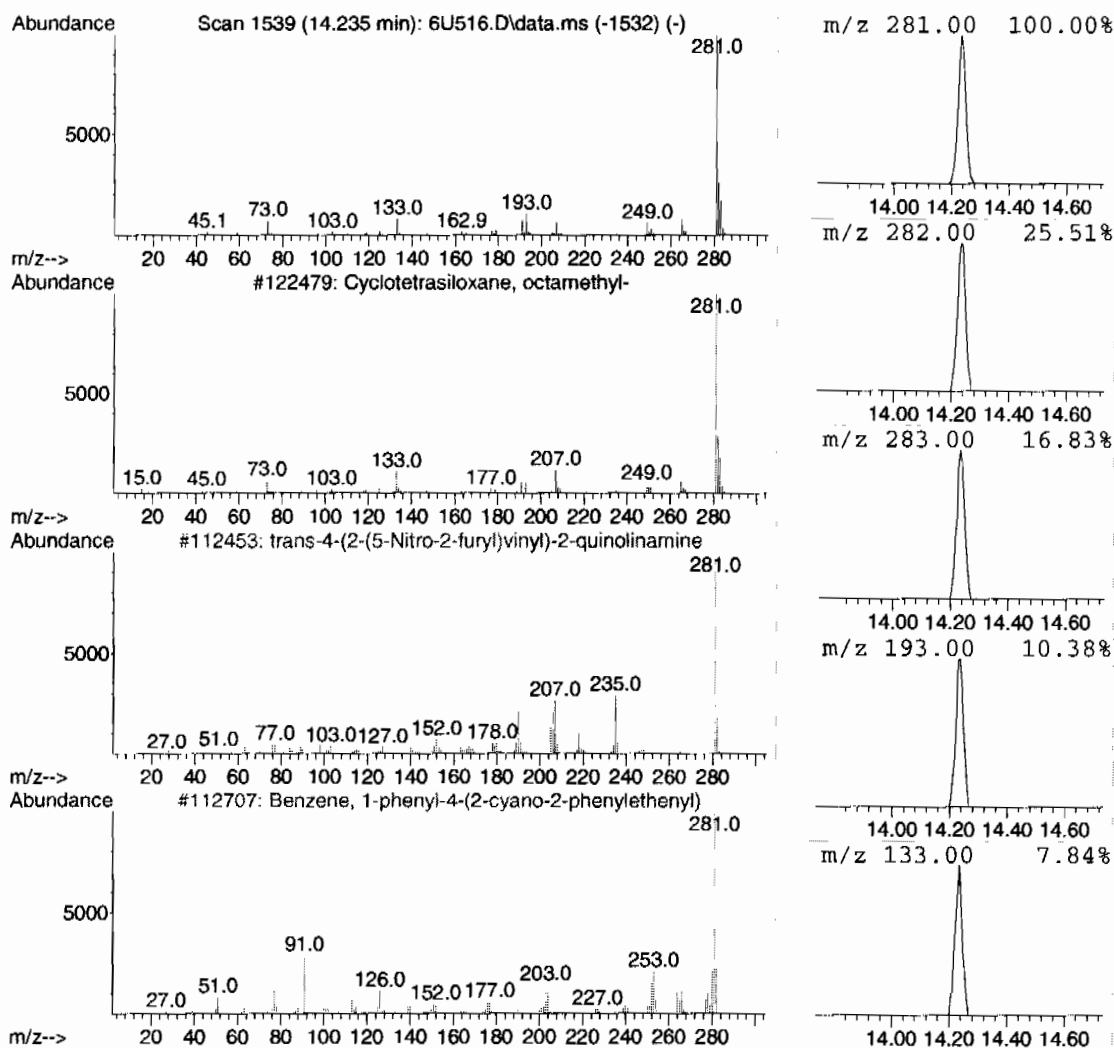
SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	5.24 ug/L	376204	B Chlorobenzene-d5	13.156

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
2		trans-4-(2-(5-Nitro-2-furyl)vinyl)...	281	C15H11N3O3	000847-10-9	59
3		Benzene, 1-phenyl-4-(2-cyano-2-p...	281	C21H15N	027869-56-3	59
4		7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
5		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	46



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U516.D
Acq On : 22 Jan 2010 5:51 pm
Operator : RXD1
Sample : |244923004|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

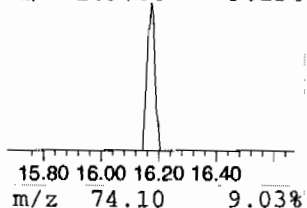
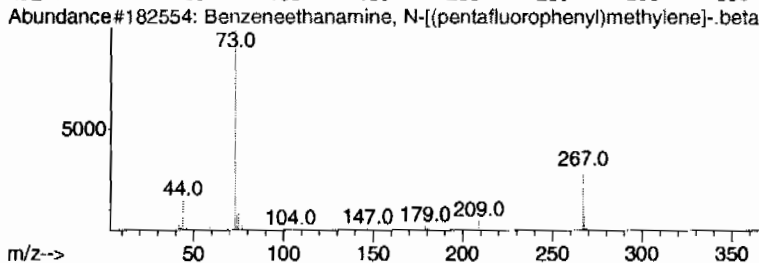
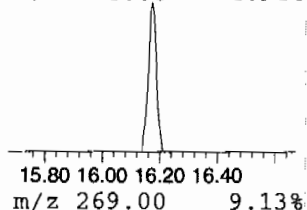
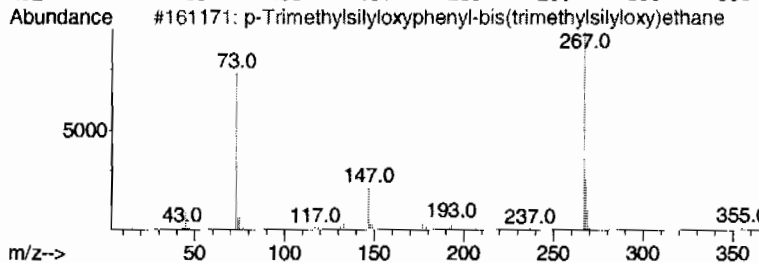
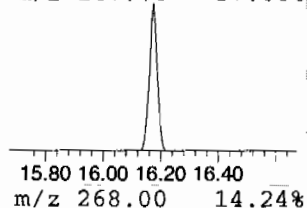
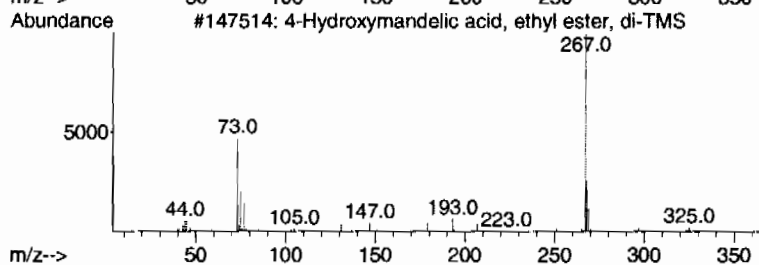
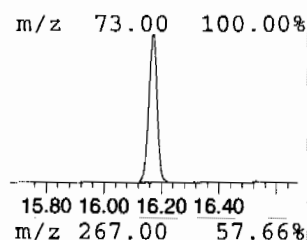
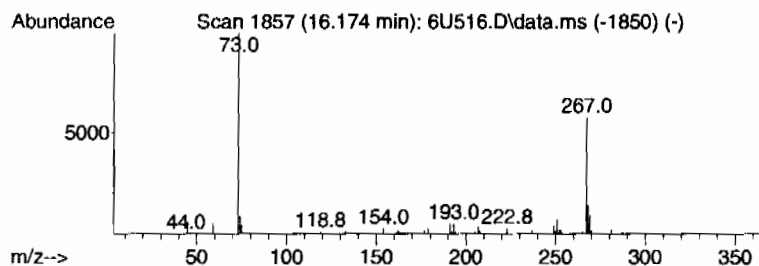
SubList :

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

Peak Number 2 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.174	5.03 ug/L	298766	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			4-Hydroxymandelic acid, ethyl es...	340	C16H28O4Si2	1000071-53-3	56
2			p-Trimethylsilyloxyphenyl-bis(tr...	370	C17H34O3Si3	1000079-08-1	50
3			Benzeneethanamine, N-[(pentaflu...	475	C21H26F5NO2Si2	055429-85-1	50
4			Phthalimide, N-(4-methoxybezy)-	267	C16H13NO3	1000314-94-0	47
5			2-Methyl-5-(3,4-methylenedioxi...	267	C16H13NO3	094298-70-1	43



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U516.D
Acq On : 22 Jan 2010 5:51 pm
Operator : RXD1
Sample : |244923004|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	5.2	ug/L	376204	4	13.156	3592510	50.0
unknown siloxane	16.174	5.0	ug/L	298766	6	15.576	2971230	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923005

 Client ID: RE15-10-7174
 Batch ID: 944501
 Run Date: 01/22/2010 18:19
 Prep Date: 01/22/2010 14:00
 Data File: 012210V66U517.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 19.7
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.25	ug/kg	0.423	1.25
74-87-3	Chloromethane	U	1.25	ug/kg	0.374	1.25
75-01-4	Vinyl chloride	U	1.25	ug/kg	0.374	1.25
74-83-9	Bromomethane	U	1.25	ug/kg	0.374	1.25
75-00-3	Chloroethane	U	1.25	ug/kg	0.374	1.25
75-69-4	Trichlorofluoromethane	U	1.25	ug/kg	0.374	1.25
67-64-1	Acetone	U	6.23	ug/kg	2.07	6.23
75-35-4	1,1-Dichloroethylene	U	1.25	ug/kg	0.374	1.25
74-88-4	Iodomethane	U	6.23	ug/kg	1.99	6.23
75-09-2	Methylene chloride	J	3.19	ug/kg	2.49	6.23
75-15-0	Carbon disulfide	U	6.23	ug/kg	1.56	6.23
156-60-5	trans-1,2-Dichloroethylene	U	1.25	ug/kg	0.374	1.25
75-34-3	1,1-Dichloroethane	U	1.25	ug/kg	0.374	1.25
78-93-3	2-Butanone	U	6.23	ug/kg	1.87	6.23
156-59-2	cis-1,2-Dichloroethylene	U	1.25	ug/kg	0.374	1.25
594-20-7	2,2-Dichloropropane	U	1.25	ug/kg	0.374	1.25
67-66-3	Chloroform	U	1.25	ug/kg	0.374	1.25
74-97-5	Bromochloromethane	U	1.25	ug/kg	0.411	1.25
71-55-6	1,1,1-Trichloroethane	U	1.25	ug/kg	0.374	1.25
563-58-6	1,1-Dichloropropene	U	1.25	ug/kg	0.374	1.25
56-23-5	Carbon tetrachloride	U	1.25	ug/kg	0.374	1.25
107-06-2	1,2-Dichloroethane	U	1.25	ug/kg	0.374	1.25
71-43-2	Benzene	U	1.25	ug/kg	0.374	1.25
79-01-6	Trichloroethylene	U	1.25	ug/kg	0.411	1.25
78-87-5	1,2-Dichloropropane	U	1.25	ug/kg	0.374	1.25
75-27-4	Bromodichloromethane	U	1.25	ug/kg	0.374	1.25
74-95-3	Dibromomethane	U	1.25	ug/kg	0.374	1.25
108-10-1	4-Methyl-2-pentanone	U	6.23	ug/kg	1.56	6.23
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/kg	0.374	1.25
108-88-3	Toluene	U	1.25	ug/kg	0.374	1.25
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/kg	0.374	1.25
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/kg	0.374	1.25
591-78-6	2-Hexanone	U	6.23	ug/kg	1.87	6.23
142-28-9	1,3-Dichloropropane	U	1.25	ug/kg	0.374	1.25
127-18-4	Tetrachloroethylene	U	1.25	ug/kg	0.374	1.25
124-48-1	Dibromochloromethane	U	1.25	ug/kg	0.374	1.25
106-93-4	1,2-Dibromoethane	U	1.25	ug/kg	0.374	1.25
108-90-7	Chlorobenzene	U	1.25	ug/kg	0.374	1.25

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923005

Client ID: RE15-10-7174
Batch ID: 944501
Run Date: 01/22/2010 18:19
Prep Date: 01/22/2010 14:00
Data File: 012210V66U517.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.1
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.25	ug/kg	0.374	1.25
179601-23-1	m,p-Xylenes	U	2.49	ug/kg	0.374	2.49
95-47-6	o-Xylene	U	1.25	ug/kg	0.374	1.25
100-42-5	Styrene	U	1.25	ug/kg	0.374	1.25
75-25-2	Bromoform	U	1.25	ug/kg	0.374	1.25
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/kg	0.374	1.25
96-18-4	1,2,3-Trichloropropane	U	1.25	ug/kg	0.374	1.25
108-86-1	Bromobenzene	U	1.25	ug/kg	0.374	1.25
103-65-1	n-Propylbenzene	U	1.25	ug/kg	0.374	1.25
95-49-8	2-Chlorotoluene	U	1.25	ug/kg	0.374	1.25
98-82-8	Isopropylbenzene	U	1.25	ug/kg	0.374	1.25
108-67-8	1,3,5-Trimethylbenzene	U	1.25	ug/kg	0.374	1.25
106-43-4	4-Chlorotoluene	U	1.25	ug/kg	0.374	1.25
98-06-6	tert-Butylbenzene	U	1.25	ug/kg	0.374	1.25
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/kg	0.374	1.25
135-98-8	sec-Butylbenzene	U	1.25	ug/kg	0.374	1.25
99-87-6	4-Isopropyltoluene	U	1.25	ug/kg	0.374	1.25
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25
104-51-8	n-Butylbenzene	U	1.25	ug/kg	0.374	1.25
96-12-8	1,2-Dibromo-3-chloropropane	U	1.25	ug/kg	0.374	1.25
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.23	ug/kg	1.99	6.23
630-20-6	1,1,1,2-Tetrachloroethane	U	1.25	ug/kg	0.374	1.25
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/kg	0.374	1.25

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	34.7	ug/kg	0	J
	unknown siloxane	16.18	16.1	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U517.D
Acq On : 22 Jan 2010 6:19 pm
Operator : RXD1
InstName : VOA6
Sample : |244923005|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 25 10:55:16 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1518234	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	902245	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	299084	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1516960	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	902245	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	299084	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	459778	51.33	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	102.66%	
43) Toluene-d8	11.626	98	1379393	55.14	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	110.28%	
61) Bromofluorobenzene	14.357	95	369678	64.14	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	128.28%	

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.692	50	166	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.712	43	2748	N.D.		
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.285	41	1207	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.084	76	2046	N.D.		
15) Methylene chloride	7.291	84	22374	2.56	ug/L	99
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	9.419	56	189	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	9.724	78	190	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U517.D
Acq On : 22 Jan 2010 6:19 pm
Operator : RXD1
InstName : VOA6
Sample : |244923005|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 25 10:55:16 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699	91	3213	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.247	91	1470	N.D.		
55) m,p-Xylenes	13.363	106	2662	N.D.		
56) o-Xylene	13.796	106	1373	N.D.		
57) Styrene	0.000		0	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	14.229	105	1816	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	14.802	91	222	N.D.		
69) tert-Butylbenzene	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.150	105	660	N.D.		
71) sec-Butylbenzene	0.000		0	N.D.		
72) 4-Isopropyltoluene	15.454	119	613	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	15.887	91	187	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.277	128	1725	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.285	41	1020	N.D.		
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U517.D
Acq On : 22 Jan 2010 6:19 pm
Operator : RXD1
InstName : VOA6
Sample : |244923005|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 25 10:55:16 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.		
96) Methacrylonitrile	0.000		0	N.D.		
97) Tetrahydrofuran	9.071	42	220	N.D.		
98) Isobutyl alcohol	0.000		0m	N.D.	d	
99) Methyl tert-amyl ether	0.000		0	N.D.		
100) Methyl methacrylate	0.000		0	N.D.		
101) 1,4-Dioxane	0.000		0	N.D.		
102) 2-Nitropropane	0.000		0	N.D.		
104) Ethyl methacrylate	0.000		0	N.D.		
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.		
108) Cyclohexanone	0.000		0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110) Pentachloroethane	0.000		0	N.D.		
111) Benzyl chloride	0.000		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	0.000		0m	N.D.	d	

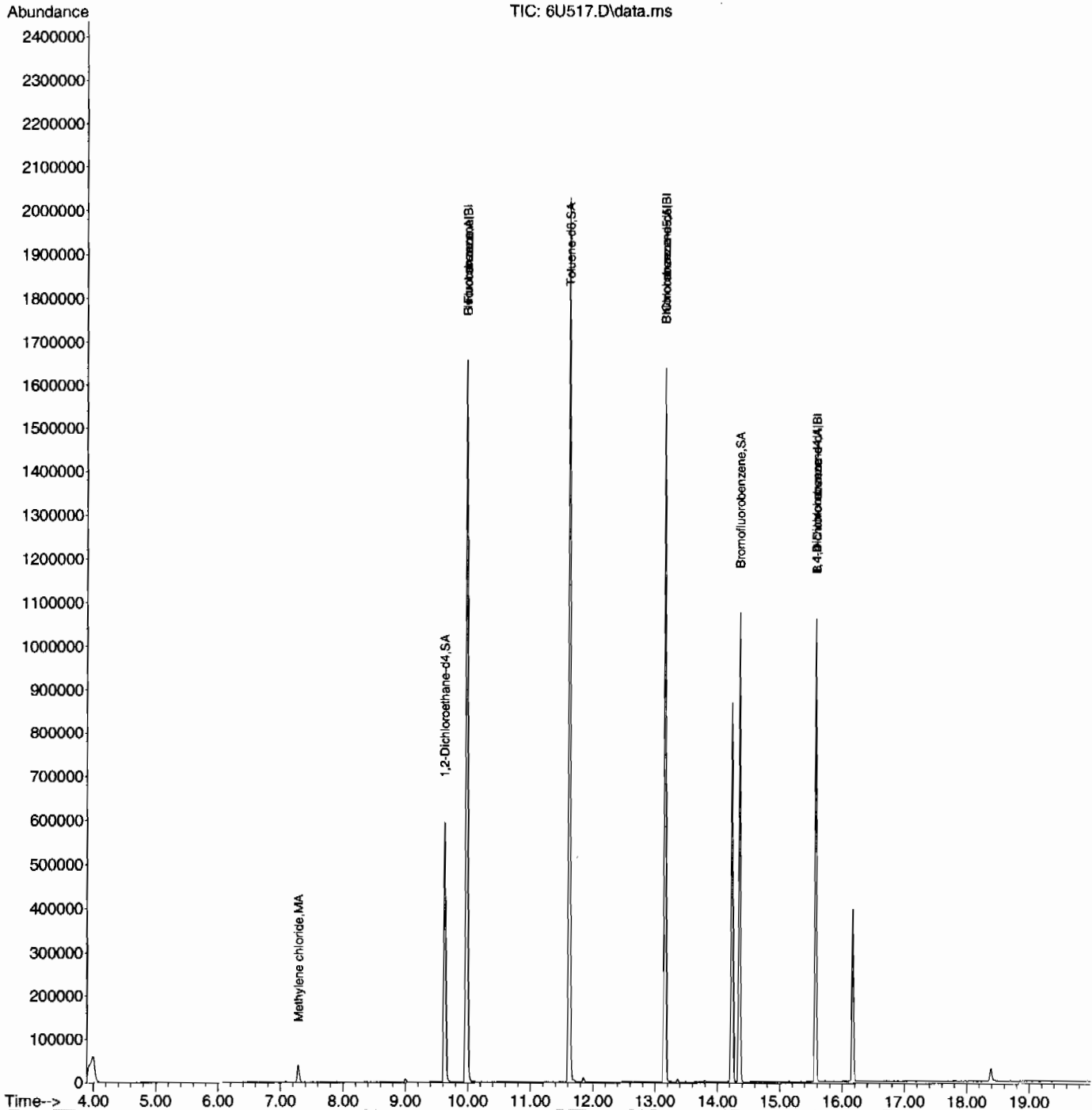
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

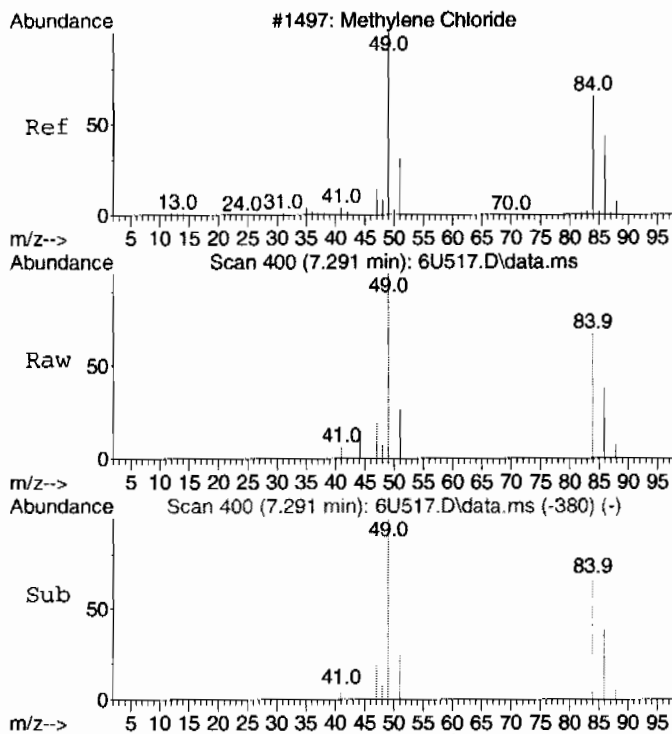
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U517.D
Acq On : 22 Jan 2010 6:19 pm
Operator : RXD1
InstName : VOA6
Sample : |244923005|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 25 10:55:16 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

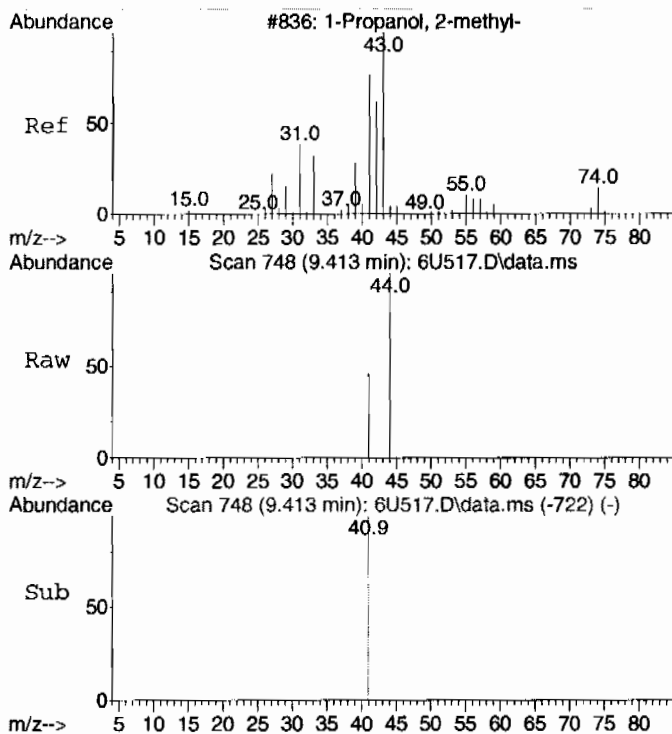
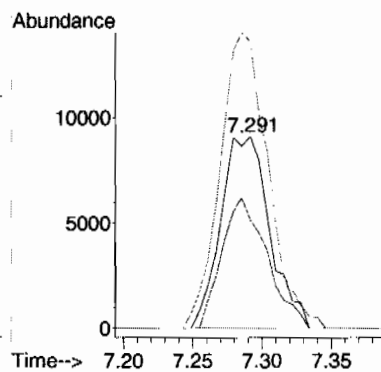
SubList :





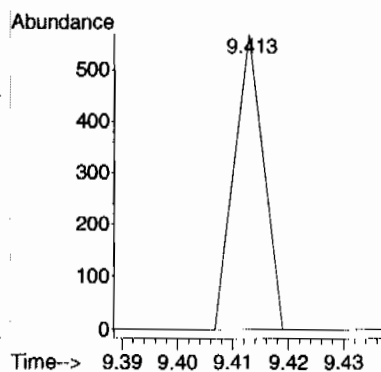
#15
Methylene chloride
Concen: 2.56 ug/L
RT: 7.291 min Scan# 400
Delta R.T. 0.006 min
Lab File: 6U517.D
Acq: 22 Jan 2010 6:19 pm

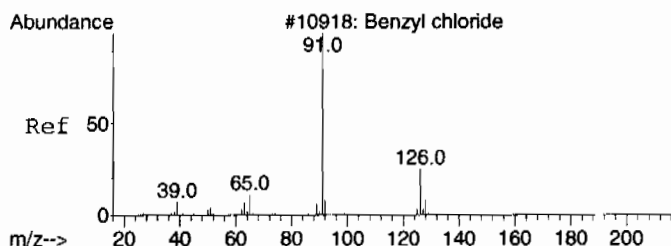
Tgt Ion	Ratio	Lower	Upper
84	100		
86	63.1	35.5	95.5
49	150.7	120.2	180.2



#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 0.72 ug/L
RT: 9.413 min Scan# 748
Delta R.T. 0.025 min
Lab File: 6U517.D
Acq: 22 Jan 2010 6:19 pm

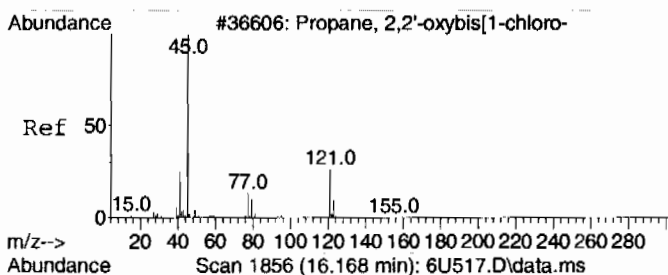
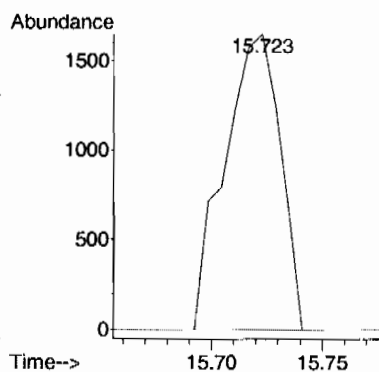
Tgt Ion	Ratio	Lower	Upper
41	100		
43	0.0	111.2	171.2#





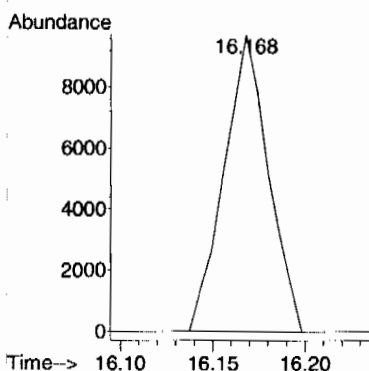
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.37 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.007 min
Lab File: 6U517.D
Acq: 22 Jan 2010 6:19 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	42.9



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 7.13 ug/L
RT: 16.168 min Scan# 1856
Delta R.T. 0.055 min
Lab File: 6U517.D
Acq: 22 Jan 2010 6:19 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U517.D
Acq On : 22 Jan 2010 6:19 pm
Operator : RXD1
Sample : |244923005|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

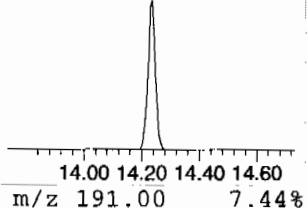
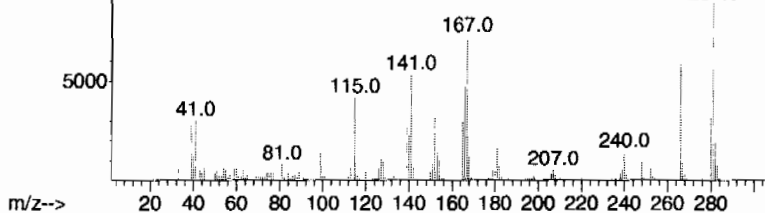
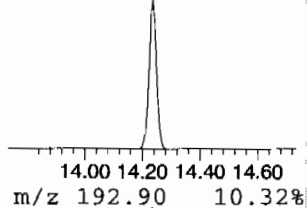
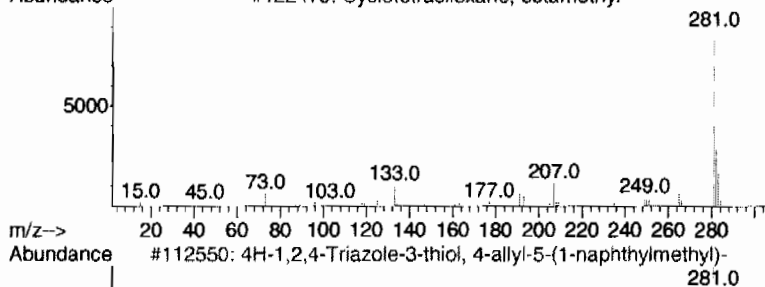
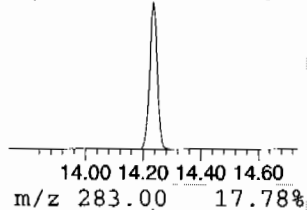
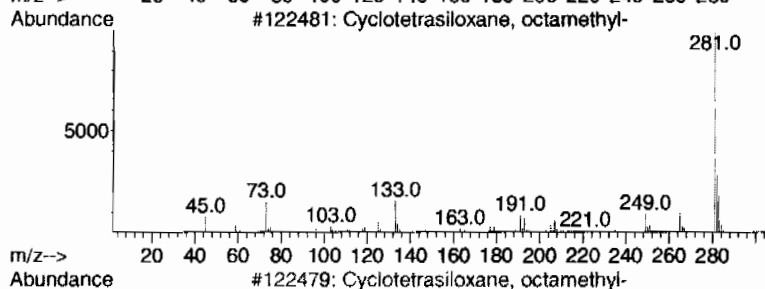
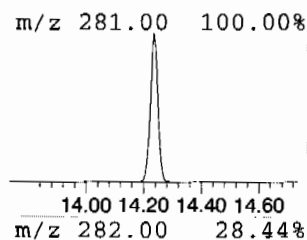
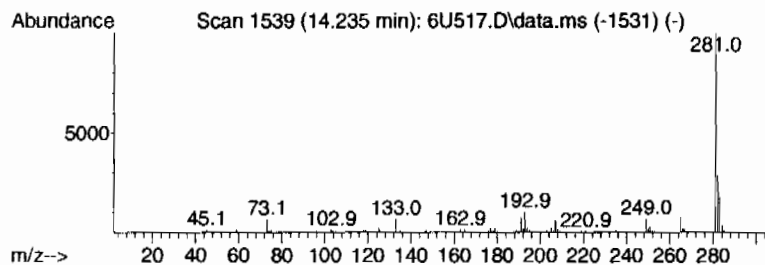
SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	27.83 ug/L	1576310	B Chlorobenzene-d5	13.156

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
2			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3			4H-1,2,4-Triazole-3-thiol, 4-allyl-	281	C16H15N3S	031803-13-1	52
4			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49
5			7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	42



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U517.D
Acq On : 22 Jan 2010 6:19 pm
Operator : RXD1
Sample : |244923005|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

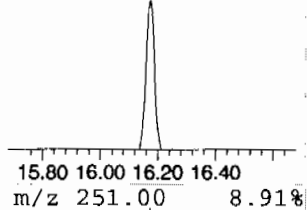
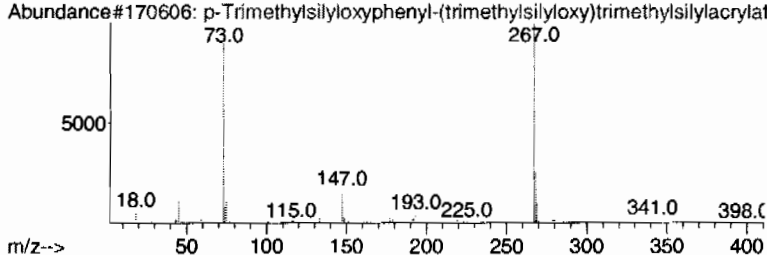
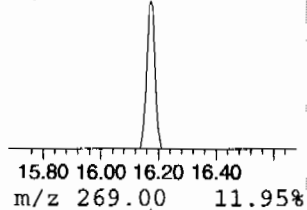
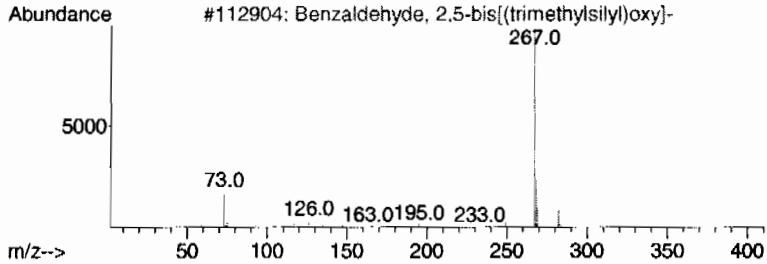
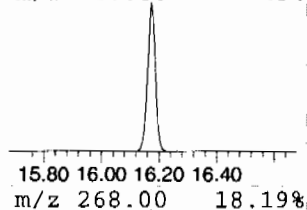
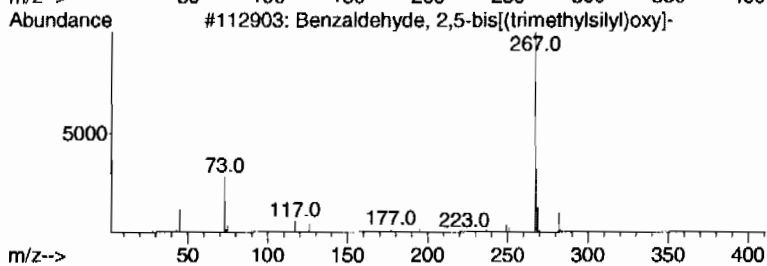
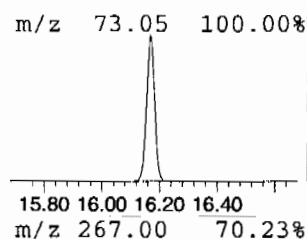
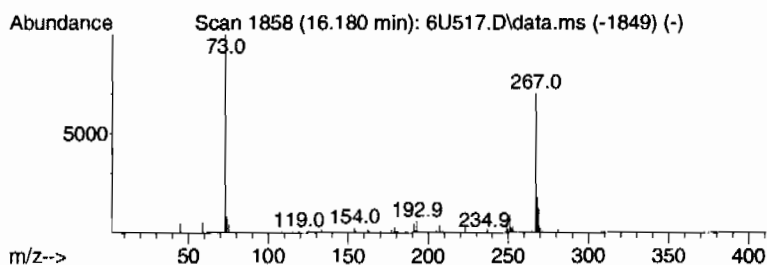
SubList :

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

Peak Number 2 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.180	12.95 ug/L	463465	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzaldehyde, 2,5-bis[(trimethyl...	282	C13H22O3Si2	056114-69-3	64
2			Benzaldehyde, 2,5-bis[(trimethyl...	282	C13H22O3Si2	056114-69-3	50
3			p-Trimethylsilyloxyphenyl-(trime...	398	C18H34O4Si3	1000079-05-1	50
4			4-Hydroxymandelic acid, ethyl es...	340	C16H28O4Si2	1000071-53-3	50
5			Propenone, 1-(4-nitrophenyl)-3-p...	268	C15H12N2O3	1000302-96-9	46



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U517.D
Acq On : 22 Jan 2010 6:19 pm
Operator : RXD1
Sample : |244923005|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown siloxane	14.235	27.8	ug/L	1576310	4	13.156	2831580	50.0
unknown siloxane	16.180	12.9	ug/L	463465	6	15.576	1789180	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923006	Date Received: 01/16/2010 08:55	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7173	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/22/2010 18:47	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/22/2010 14:02	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012210V66U518.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.377	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	J	5.35	ug/kg	1.84	5.54
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.54	ug/kg	1.77	5.54
75-09-2	Methylene chloride	U	5.54	ug/kg	2.22	5.54
75-15-0	Carbon disulfide	U	5.54	ug/kg	1.39	5.54
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.54	ug/kg	1.66	5.54
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.54	ug/kg	1.39	5.54
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.54	ug/kg	1.66	5.54
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923006

Client ID: RE15-10-7173
Batch ID: 944501
Run Date: 01/22/2010 18:47
Prep Date: 01/22/2010 14:02
Data File: 012210V66U518.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.599	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.54	ug/kg	1.77	5.54
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	109	ug/kg	0	J
013466-78-9	3-Carene	15.19	49.5	ug/kg	96	NJ
	unknown siloxane	16.17	27.3	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
InstName : VOA6
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 25 10:56:53 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.974	96	984078	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	700372	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	326493	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	984078	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	700372	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	326493	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	307503	52.96	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	105.92%	
43) Toluene-d8	11.626	98	937798	48.29	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	96.58%	
61) Bromofluorobenzene	14.357	95	341638	54.30	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	108.60%	

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.652	50	308	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.706	43	8644	4.83 ug/L	82	
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.292	41	210	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.072	76	1196	N.D.		
15) Methylene chloride	7.279	84	6792	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	9.053	83	675	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	9.724	78	191	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
InstName : VOA6
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 25 10:56:53 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699	91	5097	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.248	91	4032	N.D.		
55) m,p-Xylenes	13.357	106	4917	0.54 ug/L	#	67
56) o-Xylene	13.796	106	1116	N.D.		
57) Styrene	0.000		0	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	0.000		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	14.656	105	477	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	14.888	91	1164	N.D.		
69) tert-Butylbenzene	0.000		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	0.000		0m	N.D.	d	
71) sec-Butylbenzene	15.424	105	1069	N.D.		
72) 4-Isopropyltoluene	15.394	119	792	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	15.881	91	185	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.283	128	1710	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.292	41	210	N.D.		
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
InstName : VOA6
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 25 10:56:53 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.		
96) Methacrylonitrile	0.000		0	N.D.		
97) Tetrahydrofuran	0.000		0	N.D.		
98) Isobutyl alcohol	0.000		0	N.D.		
99) Methyl tert-amyl ether	0.000		0	N.D.		
100) Methyl methacrylate	0.000		0	N.D.		
101) 1,4-Dioxane	0.000		0	N.D.		
102) 2-Nitropropane	0.000		0	N.D.		
104) Ethyl methacrylate	0.000		0	N.D.		
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	0.000		0m	N.D.	d	
108) Cyclohexanone	0.000		0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110) Pentachloroethane	0.000		0	N.D.		
111) Benzyl chloride	0.000		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	0.000		0m	N.D.	d	

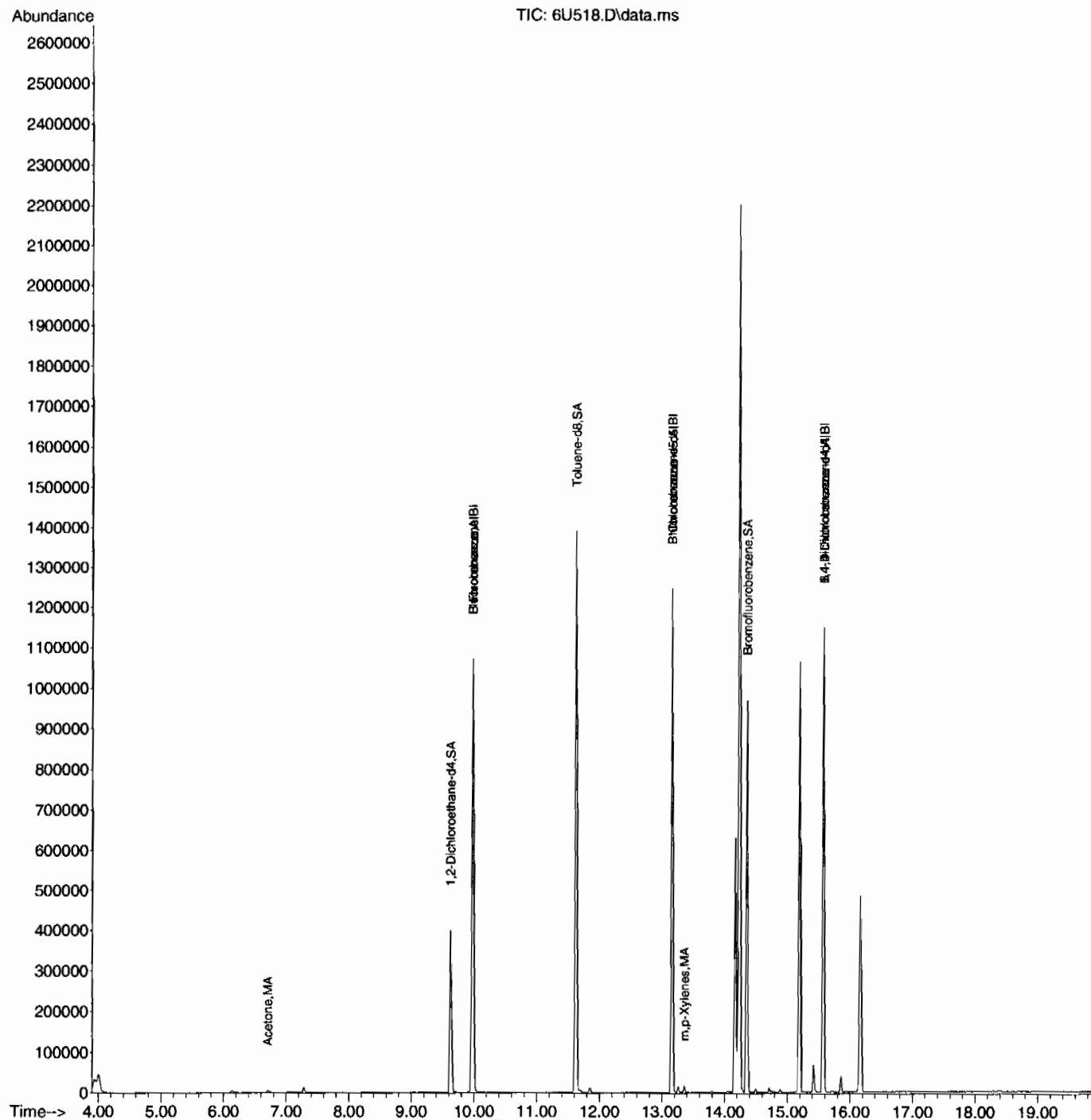
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

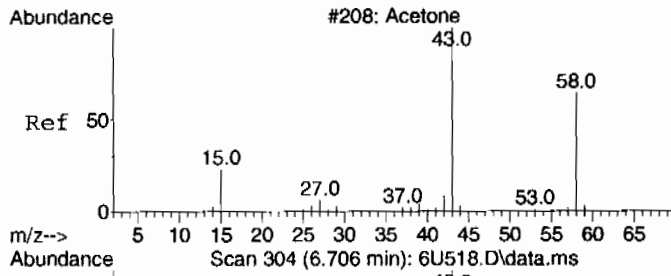
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
InstName : VOA6
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 25 10:56:53 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

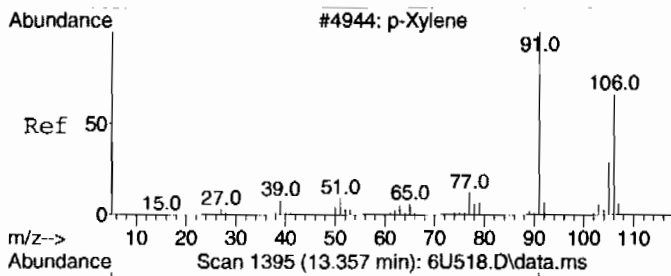
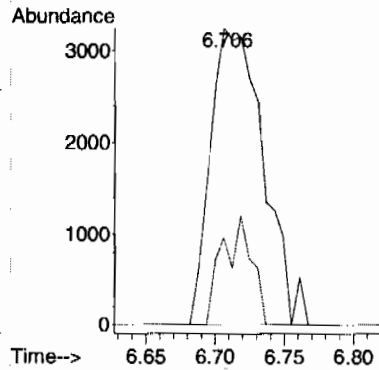
SubList :





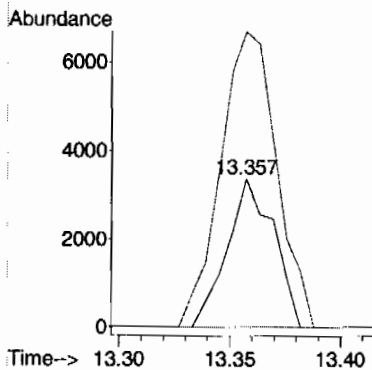
#9
Acetone
Concen: 4.83 ug/L
RT: 6.706 min Scan# 304
Delta R.T. -0.006 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm

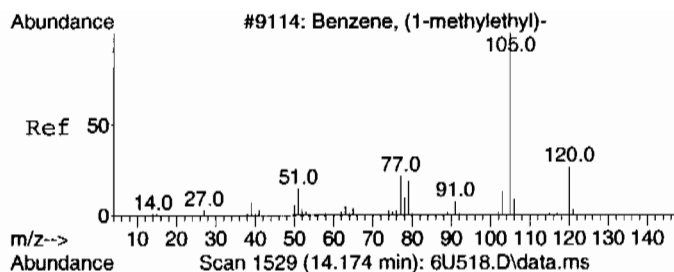
Tgt Ion: 43 Resp: 8644
Ion Ratio Lower Upper
43 100
58 20.7 0.4 60.4



#55
m,p-Xylenes
Concen: 0.54 ug/L
RT: 13.357 min Scan# 1395
Delta R.T. -0.006 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm

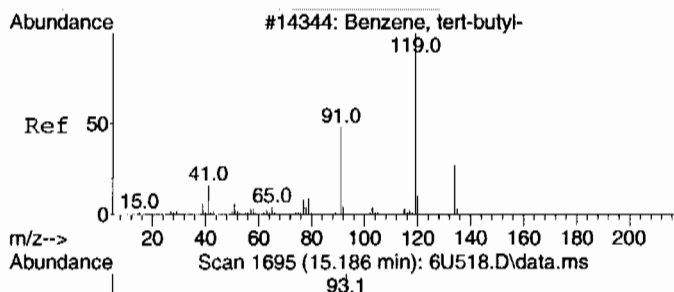
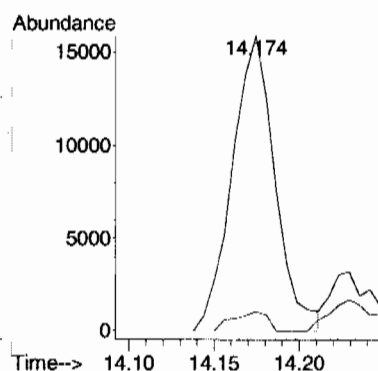
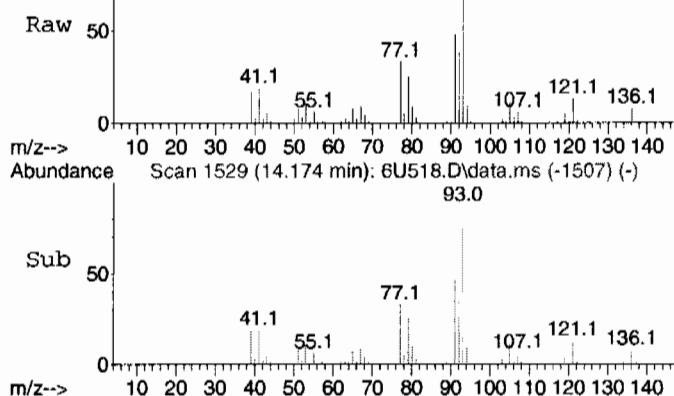
Tgt Ion: 106 Resp: 4917
Ion Ratio Lower Upper
106 100
91 239.3 160.4 220.4#





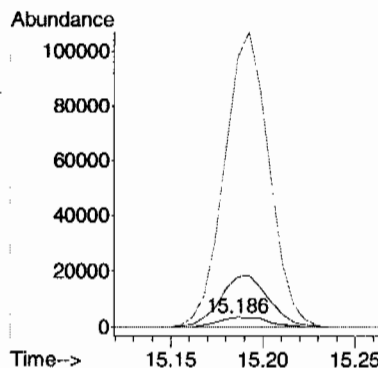
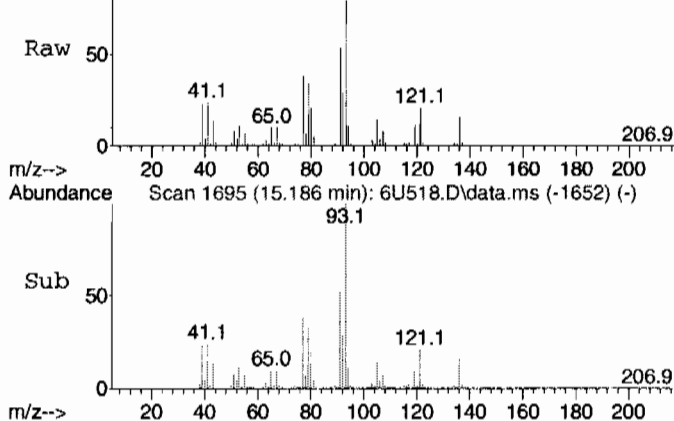
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 1.39 ug/L
RT: 14.174 min Scan# 1529
Delta R.T. 0.018 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm

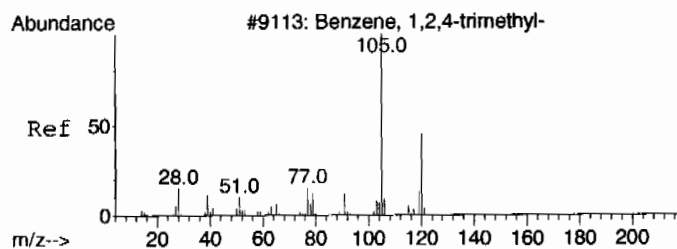
Tgt Ion	Ratio	Lower	Upper
105	100		
120	5.3	0.0	57.5



#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 1.83 ug/L
RT: 15.186 min Scan# 1695
Delta R.T. 0.079 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm

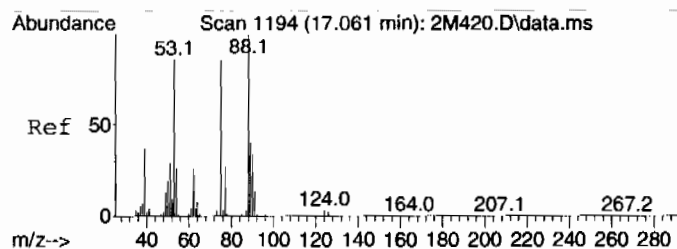
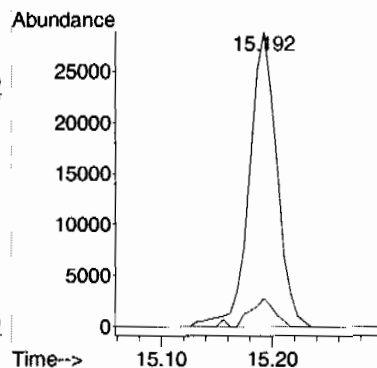
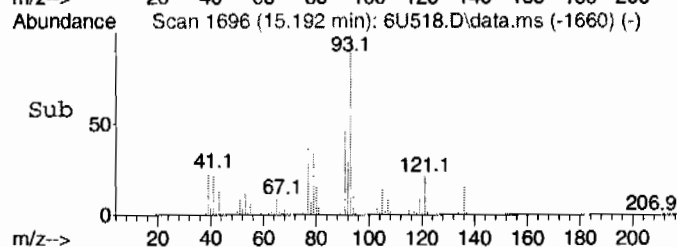
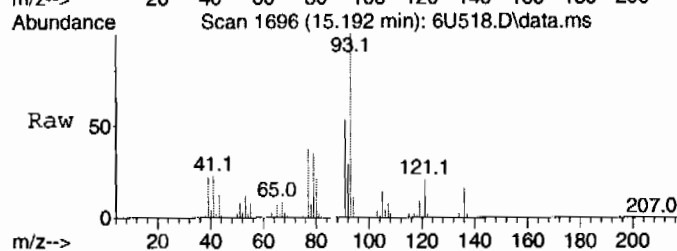
Tgt Ion	Ratio	Lower	Upper
134	100		
119	497.6	423.1	483.1#
91	2580.2	241.2	301.2#





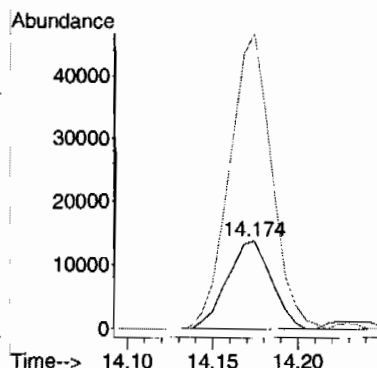
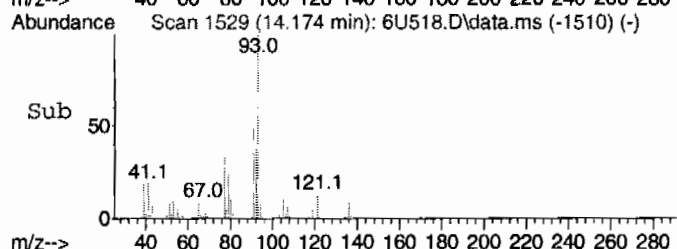
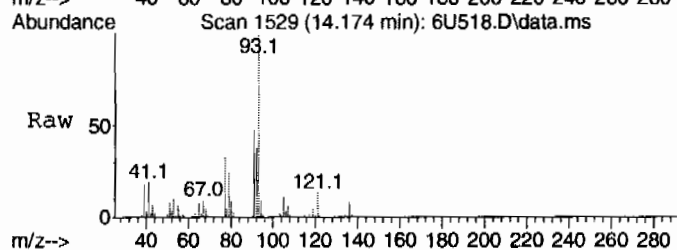
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 2.77 ug/L
RT: 15.192 min Scan# 1696
Delta R.T. 0.042 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm

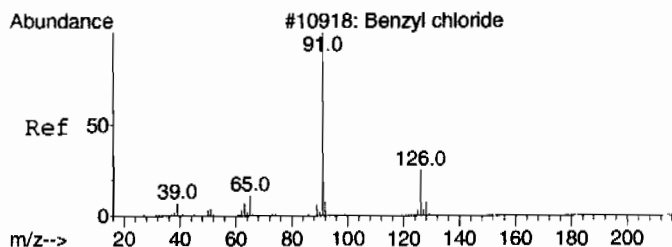
Tgt Ion: 105 Resp: 49846
Ion Ratio Lower Upper
105 100
120 8.3 17.4 77.4#



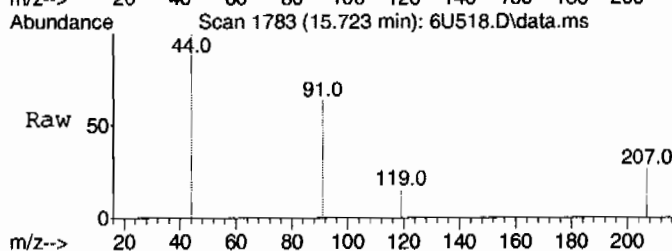
#107 BEFORE analyst DELETION
cis-1,4-Dichloro-2-butene
Concen: 16.12 ug/L
RT: 14.174 min Scan# 1529
Delta R.T. -0.024 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm

Tgt Ion: 53 Resp: 24774
Ion Ratio Lower Upper
53 100
88 0.0 76.1 136.1#
77 322.3 1.3 61.3#



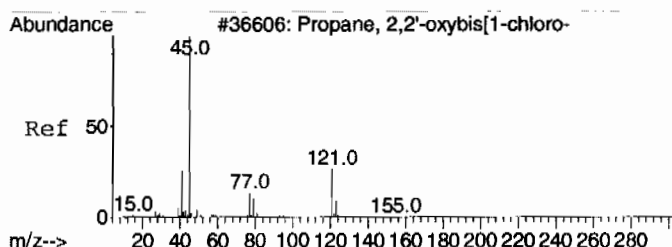
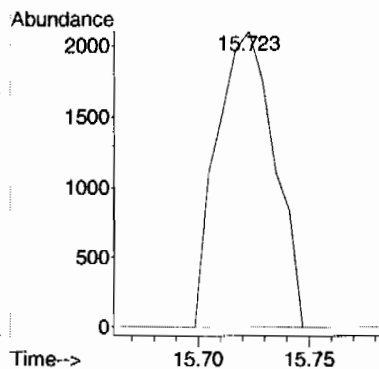
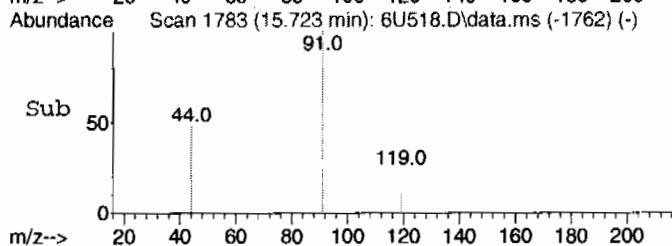


#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.45 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.007 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm

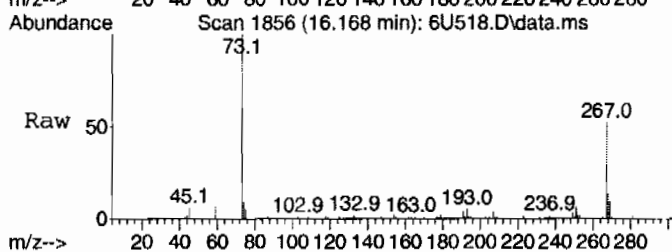


Tgt Ion: 91 Resp: 3800

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	42.9

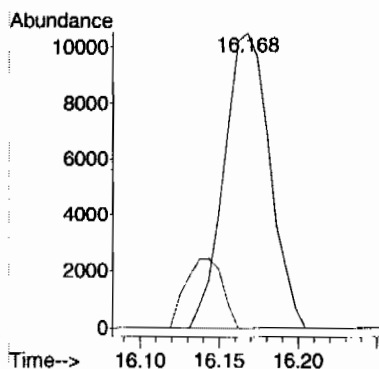
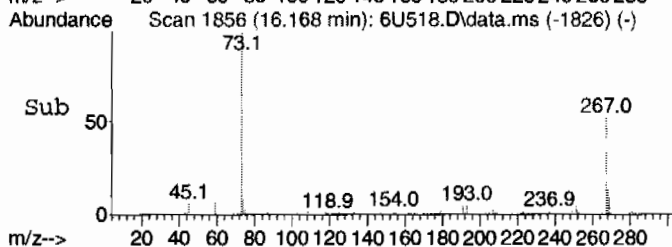


#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 8.46 ug/L
RT: 16.168 min Scan# 1856
Delta R.T. 0.055 min
Lab File: 6U518.D
Acq: 22 Jan 2010 6:47 pm



Tgt Ion: 45 Resp: 20969

Ion	Ratio	Lower	Upper
45	100		
121	18.7	0.0	53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

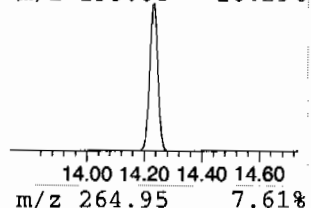
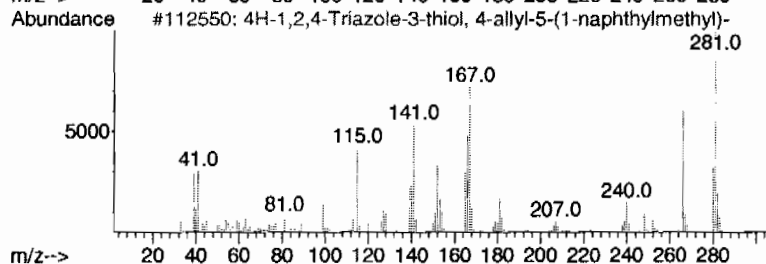
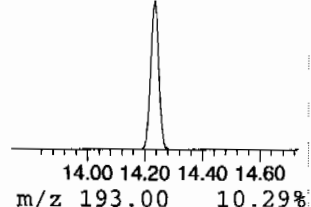
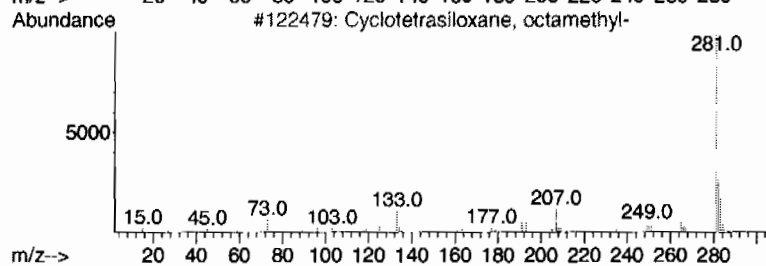
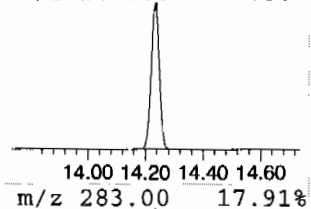
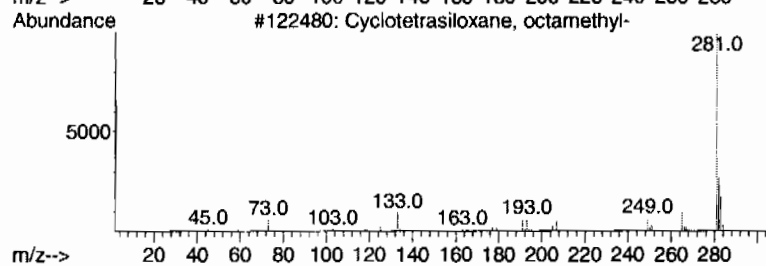
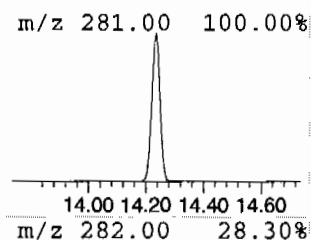
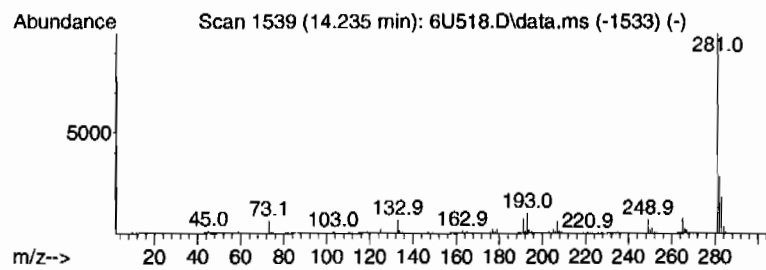
SubList :

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

Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	98.21 ug/L	4290850	B Chlorobenzene-d5	13.156

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
2		Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3		4H-1,2,4-Triazole-3-thiol, 4-allyl-	281	C16H15N3S	031803-13-1	53
4		7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
5		5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	45



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

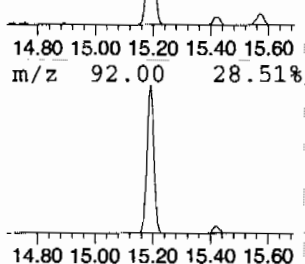
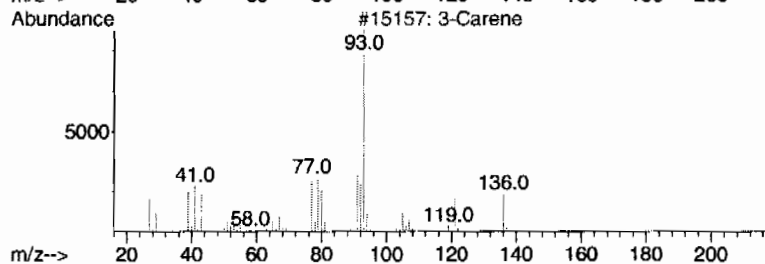
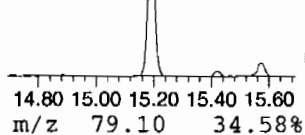
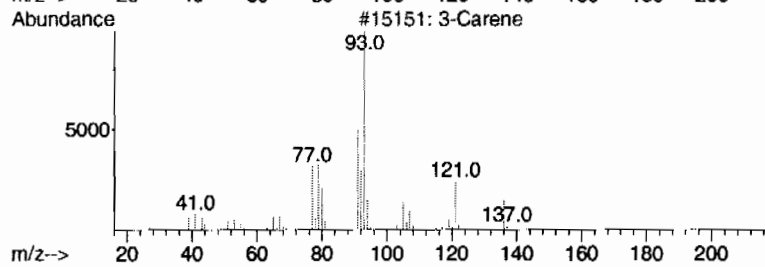
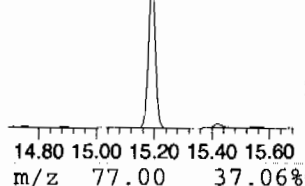
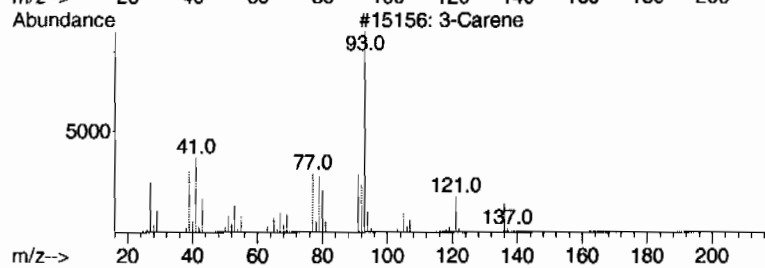
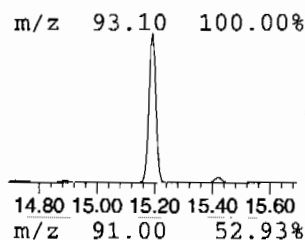
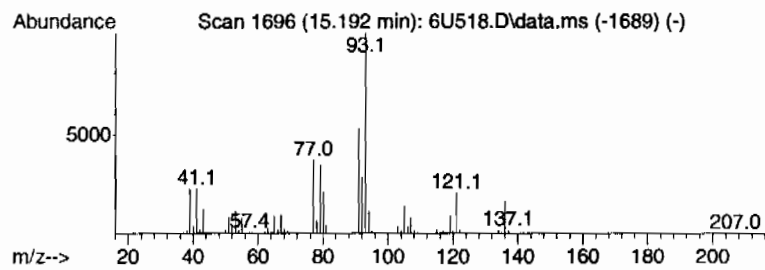
SubList :

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

Peak Number 3 3-Carene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.192	44.62 ug/L	1761590	1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Carene	136	C10H16	013466-78-9	96
2			3-Carene	136	C10H16	013466-78-9	96
3			3-Carene	136	C10H16	013466-78-9	95
4			.alpha.-Phellandrene	136	C10H16	000099-83-2	93
5			3-Carene	136	C10H16	013466-78-9	91



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

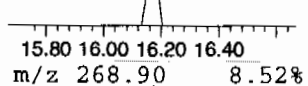
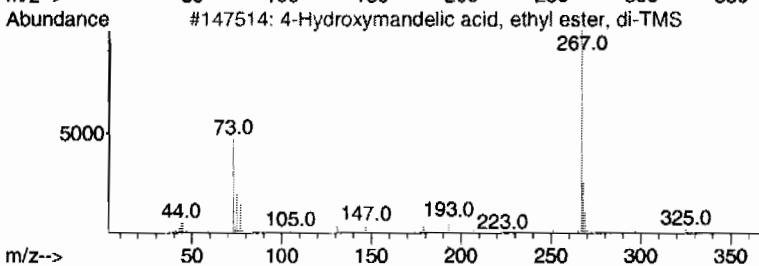
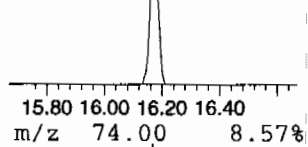
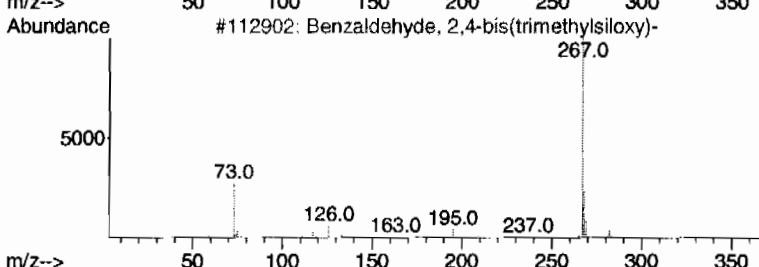
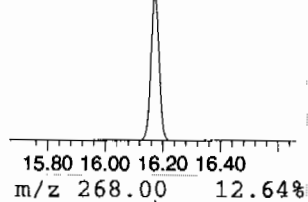
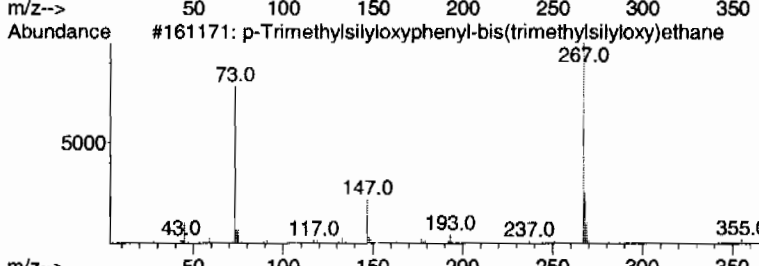
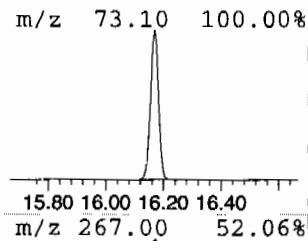
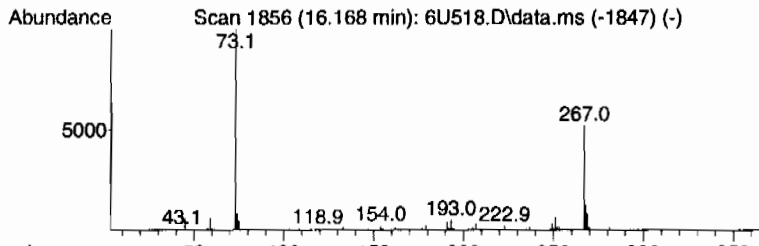
SubList :

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

Peak Number 4 unknown siloxane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.168	24.63 ug/L	972351	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			p-Trimethylsilyloxyphenyl-bis(tr...	370	C17H34O3Si3	1000079-08-1	64
2			Benzaldehyde, 2,4-bis(trimethyls...	282	C13H22O3Si2	033617-38-8	64
3			4-Hydroxymandelic acid, ethyl es...	340	C16H28O4Si2	1000071-53-3	56
4			3-Hydroxymandelic acid, ethyl es...	340	C16H28O4Si2	1000071-88-9	50
5			Benzoic acid, 2-[(trimethylsilyl...	282	C13H22O3Si2	003789-85-3	50



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U518.D
Acq On : 22 Jan 2010 6:47 pm
Operator : RXD1
Sample : |244923006|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	98.2	ug/L	4290850	4	13.156	2184530	50.0
3-Carene	15.192	44.6	ug/L	1761590	5	15.576	1974200	50.0
unknown siloxane	16.168	24.6	ug/L	972351	6	15.576	1974200	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923007
 Client ID: RE15-10-7175
 Batch ID: 944501
 Run Date: 01/22/2010 19:14
 Prep Date: 01/22/2010 14:04
 Data File: 012210V66U519.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.10	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		8.39	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	2.21	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	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	5.51	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	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	5.51	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	U	1.10	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: 10-1287
 Lab Sample ID: 244923007
 Client ID: RE15-10-7175
 Batch ID: 944501
 Run Date: 01/22/2010 19:14
 Prep Date: 01/22/2010 14:04
 Data File: 012210V6V6U519.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.J
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.10	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	5.51	ug/kg	1.76	5.51
	<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 siloxane	14.24	102	ug/kg	0	J
	unknown siloxane	16.17	7.68	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U519.D
Acq On : 22 Jan 2010 7:14 pm
Operator : RXD1
InstName : VOA6
Sample : |244923007|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 25 10:58:12 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1213387	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	890208	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	460735	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1213020	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	890208	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	460735	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	373771	52.21	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	= 104.42%		
43) Toluene-d8	11.626	98	1157908	46.91	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	= 93.82%		
61) Bromofluorobenzene	14.357	95	460189	51.83	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	= 103.66%		

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.652	50	182	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.712	43	16797	7.61	ug/L	91
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.285	41	412	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.078	76	1380	N.D.		
15) Methylene chloride	7.285	84	9510	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	8.694	43	2595	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	9.718	78	187	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U519.D
Acq On : 22 Jan 2010 7:14 pm
Operator : RXD1
InstName : VOA6
Sample : |244923007|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 25 10:58:12 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699	91	2120	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.248	91	700	N.D.		
55) m,p-Xylenes	13.357	106	734	N.D.		
56) o-Xylene	0.000		0m	N.D.	d	
57) Styrene	13.821	104	2148	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	14.229	105	6634	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	14.656	105	184	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000		0	N.D.		
69) tert-Butylbenzene	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.150	105	906	N.D.		
71) sec-Butylbenzene	0.000		0	N.D.		
72) 4-Isopropyltoluene	15.448	119	210	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.283	128	1151	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.285	41	412	N.D.		
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.694	43	2595	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U519.D
Acq On : 22 Jan 2010 7:14 pm
Operator : RXD1
InstName : VOA6
Sample : |244923007|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 25 10:58:12 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.		
96) Methacrylonitrile	0.000		0	N.D.		
97) Tetrahydrofuran	0.000		0	N.D.		
98) Isobutyl alcohol	0.000		0	N.D.		
99) Methyl tert-amyl ether	0.000		0	N.D.		
100) Methyl methacrylate	0.000		0	N.D.		
101) 1,4-Dioxane	0.000		0	N.D.		
102) 2-Nitropropane	0.000		0	N.D.		
104) Ethyl methacrylate	0.000		0	N.D.		
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.		
108) Cyclohexanone	0.000		0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110) Pentachloroethane	0.000		0	N.D.		
111) Benzyl chloride	0.000		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	0.000		0m	N.D.	d	

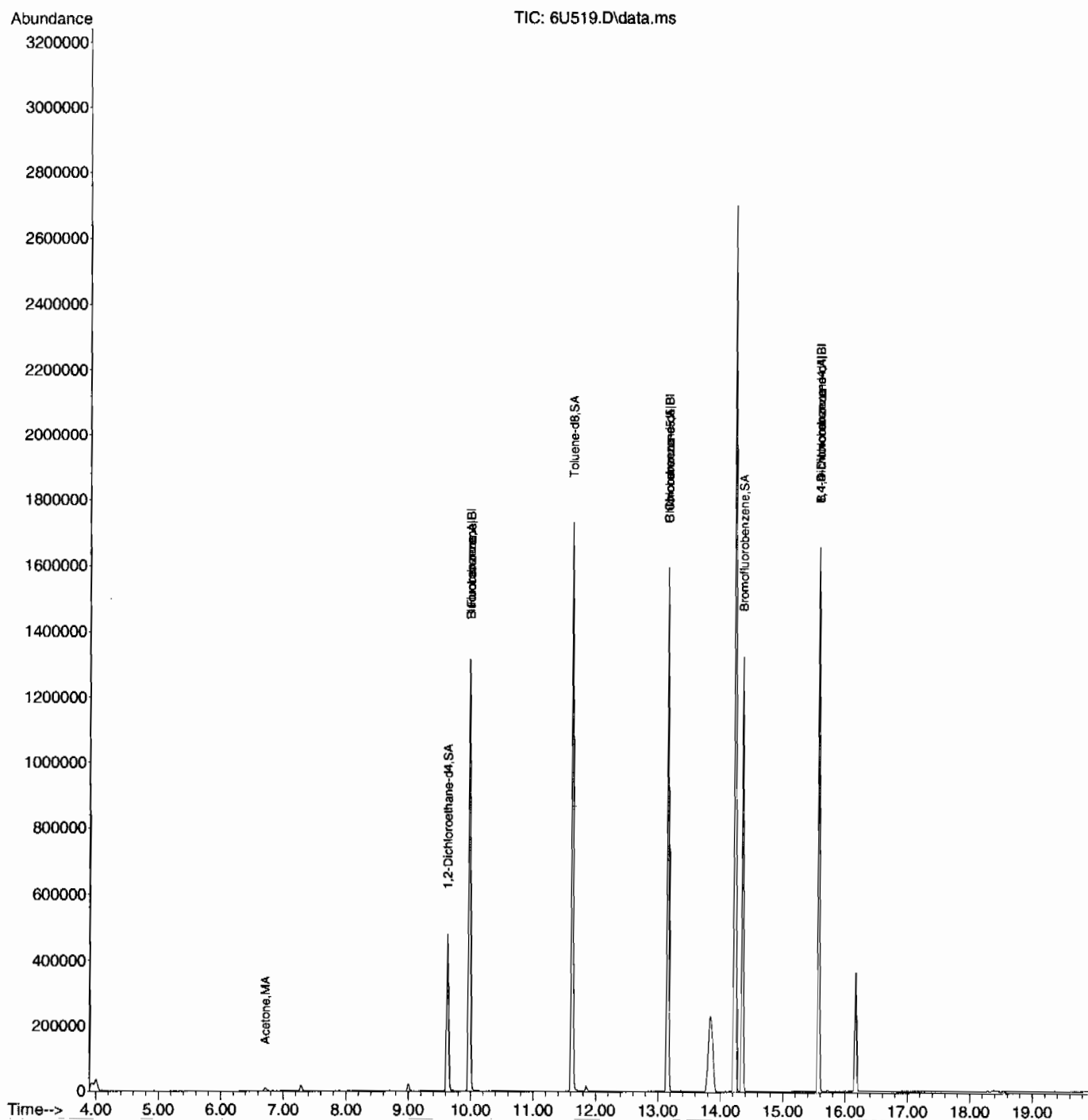
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

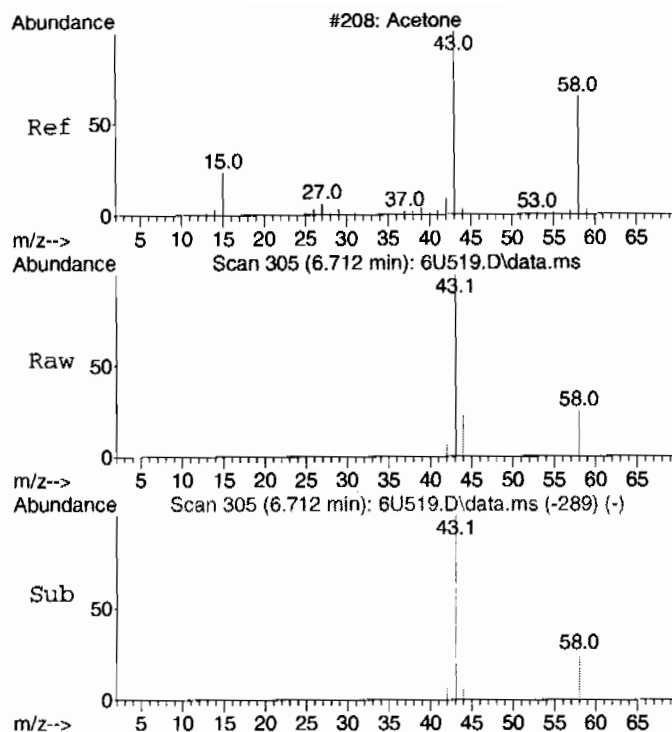
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U519.D
Acq On : 22 Jan 2010 7:14 pm
Operator : RXD1
InstName : VOA6
Sample : |244923007|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 25 10:58:12 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :





#9

Acetone

Concen: 7.61 ug/L

RT: 6.712 min Scan# 305

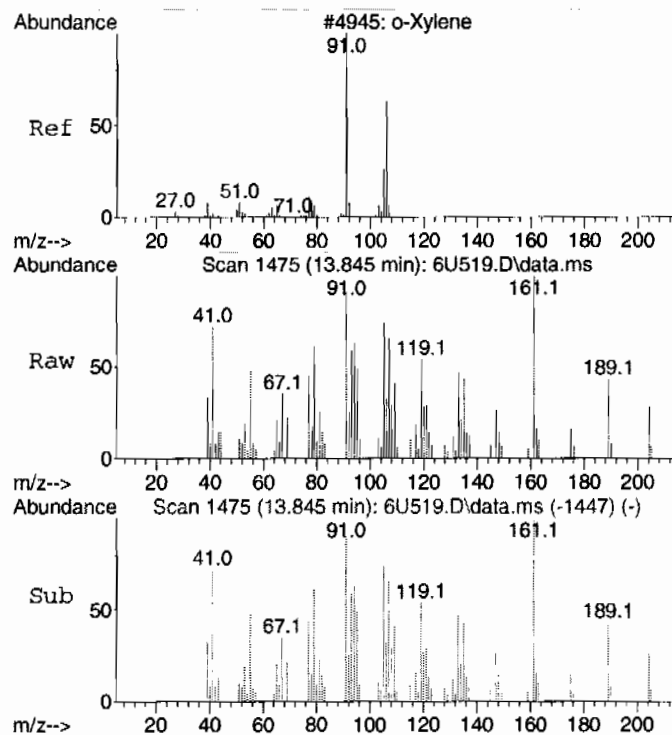
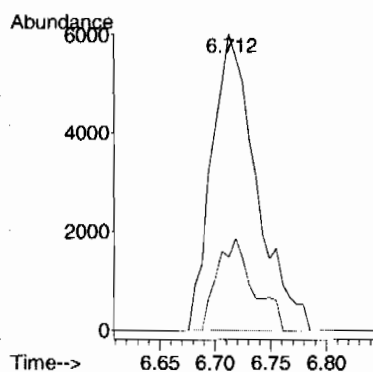
Delta R.T. 0.000 min

Lab File: 6U519.D

Acq: 22 Jan 2010 7:14 pm

Tgt Ion: 43 Resp: 16797

Ion	Ratio	Lower	Upper
43	100		
58	25.5	0.4	60.4



#56 BEFORE analyst DELETION

o-Xylene

Concen: 1.65 ug/L

RT: 13.845 min Scan# 1475

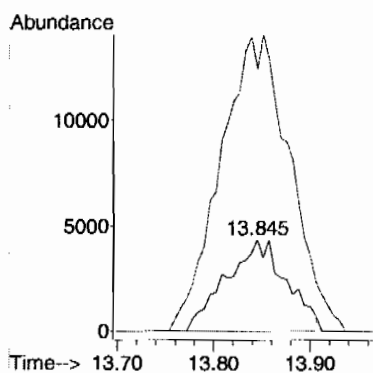
Delta R.T. 0.049 min

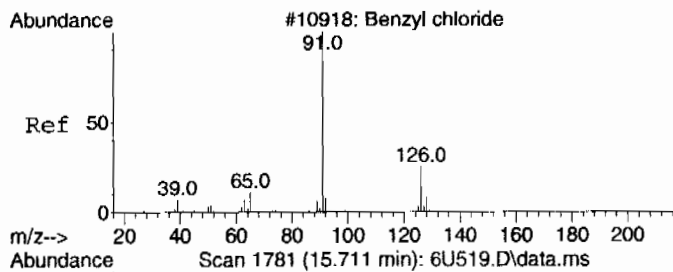
Lab File: 6U519.D

Acq: 22 Jan 2010 7:14 pm

Tgt Ion: 106 Resp: 18883

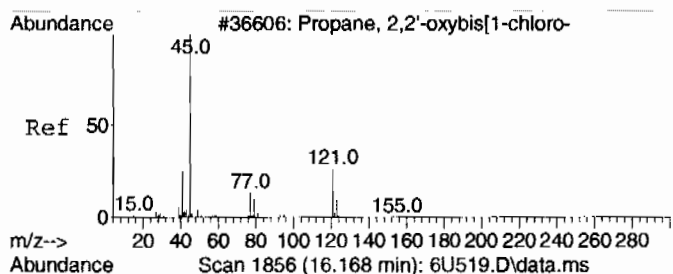
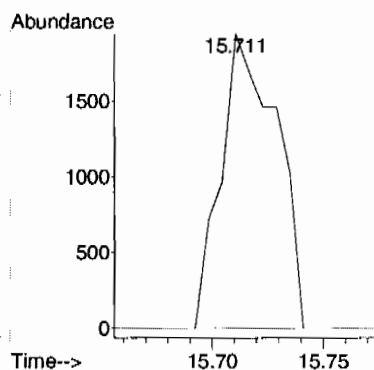
Ion	Ratio	Lower	Upper
106	100		
91	363.8	173.1	233.1#





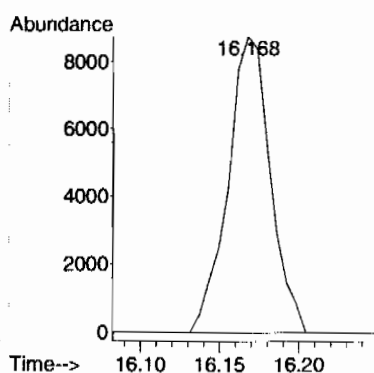
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.29 ug/L
RT: 15.711 min Scan# 1781
Delta R.T. -0.005 min
Lab File: 6U519.D
Acq: 22 Jan 2010 7:14 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	42.9



#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 4.65 ug/L
RT: 16.168 min Scan# 1856
Delta R.T. 0.055 min
Lab File: 6U519.D
Acq: 22 Jan 2010 7:14 pm

Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.0	0.0	53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U519.D
Acq On : 22 Jan 2010 7:14 pm
Operator : RXD1
Sample : |244923007|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

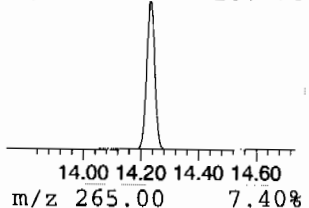
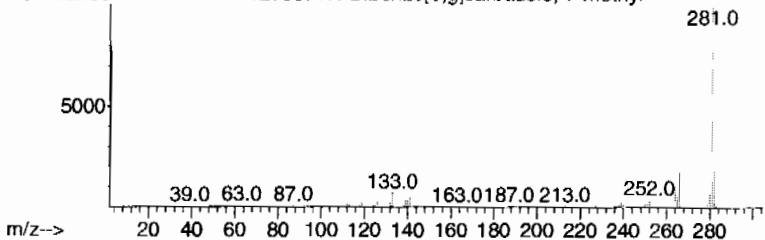
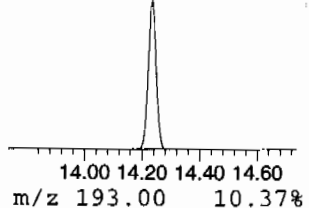
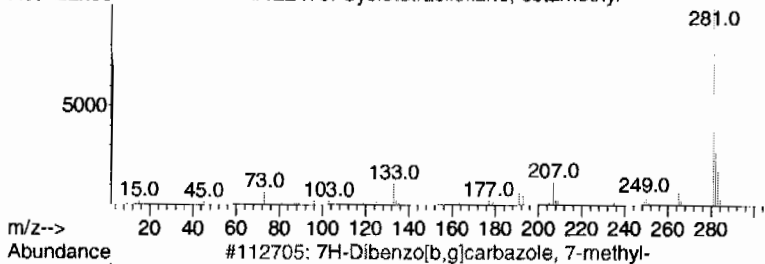
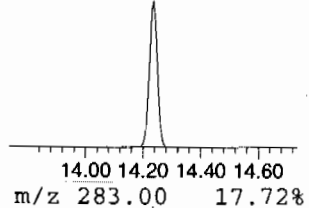
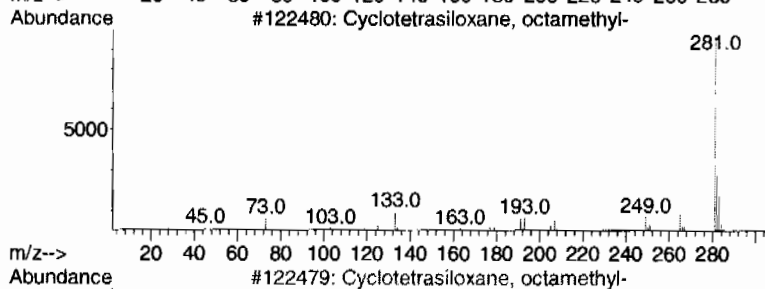
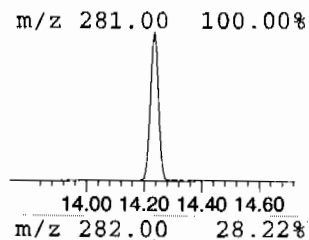
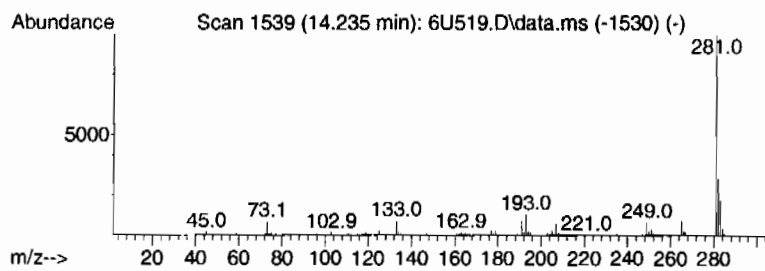
SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	92.80 ug/L	5181930	B Chlorobenzene-d5	13.156

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
2			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3			7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	64
4			4H-1,2,4-Triazole-3-thiol, 4-all...	281	C16H15N3S	031803-13-1	52
5			5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	50



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U519.D
Acq On : 22 Jan 2010 7:14 pm
Operator : RXD1
Sample : |244923007|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

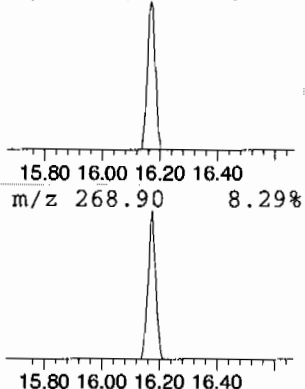
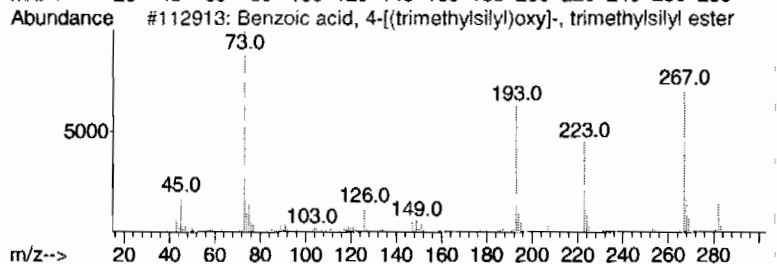
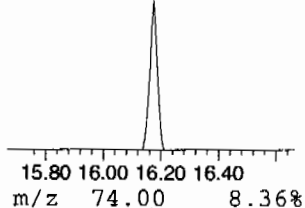
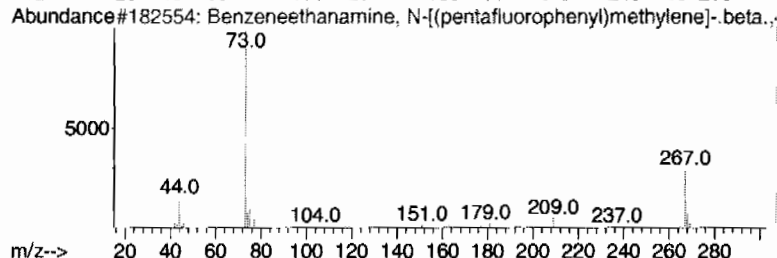
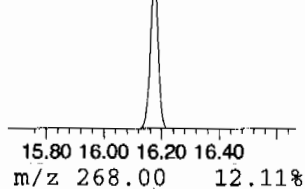
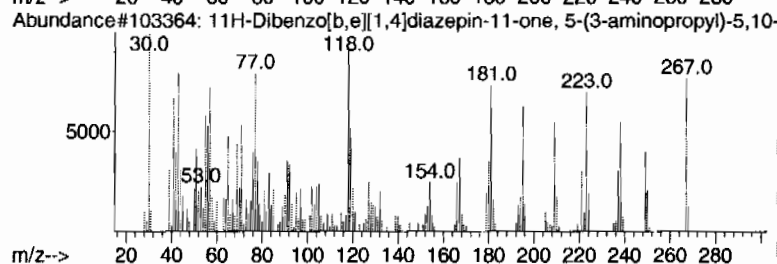
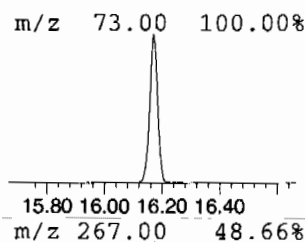
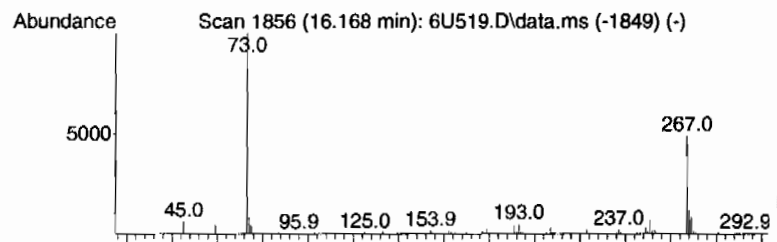
SubList :

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

Peak Number 2 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.168	6.96 ug/L	386974	B 1,4-Dichlorobenzene-d4	15.576

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	43
2		Benzeneethanamine, N-[(pentafluo...	475	C21H26F5NO2Si2	055429-85-1	38
3		Benzoic acid, 4-[(trimethylsilyl)...	282	C13H22O3Si2	002078-13-9	36
4		3,5-Dimethoxyphenylacetic acid, ...	268	C13H20O4Si	1000071-82-4	10
5		Monobenzylidene-d-glucose	268	C13H16O6	1000127-04-3	9



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U519.D
Acq On : 22 Jan 2010 7:14 pm
Operator : RXD1
Sample : |244923007|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	92.8	ug/L	5181930	4	13.156	2792110	50.0
unknown siloxane	16.168	7.0	ug/L	386974	6	15.576	2780570	50.0

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923009

Client ID: RE15-10-7218
Batch ID: 944501
Run Date: 01/22/2010 20:10
Prep Date: 01/22/2010 14:08
Data File: 012210V66U521.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6J
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.11	ug/kg	0.378	1.11
74-87-3	Chloromethane	U	1.11	ug/kg	0.333	1.11
75-01-4	Vinyl chloride	U	1.11	ug/kg	0.333	1.11
74-83-9	Bromomethane	U	1.11	ug/kg	0.333	1.11
75-00-3	Chloroethane	U	1.11	ug/kg	0.333	1.11
75-69-4	Trichlorofluoromethane	U	1.11	ug/kg	0.333	1.11
67-64-1	Acetone	U	5.55	ug/kg	1.84	5.55
75-35-4	1,1-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
74-88-4	Iodomethane	U	5.55	ug/kg	1.78	5.55
75-09-2	Methylene chloride	U	5.55	ug/kg	2.22	5.55
75-15-0	Carbon disulfide	U	5.55	ug/kg	1.39	5.55
156-60-5	trans-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
75-34-3	1,1-Dichloroethane	U	1.11	ug/kg	0.333	1.11
78-93-3	2-Butanone	U	5.55	ug/kg	1.67	5.55
156-59-2	cis-1,2-Dichloroethylene	U	1.11	ug/kg	0.333	1.11
594-20-7	2,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
67-66-3	Chloroform	U	1.11	ug/kg	0.333	1.11
74-97-5	Bromochloromethane	U	1.11	ug/kg	0.366	1.11
71-55-6	1,1,1-Trichloroethane	U	1.11	ug/kg	0.333	1.11
563-58-6	1,1-Dichloropropene	U	1.11	ug/kg	0.333	1.11
56-23-5	Carbon tetrachloride	U	1.11	ug/kg	0.333	1.11
107-06-2	1,2-Dichloroethane	U	1.11	ug/kg	0.333	1.11
71-43-2	Benzene	U	1.11	ug/kg	0.333	1.11
79-01-6	Trichloroethylene	U	1.11	ug/kg	0.366	1.11
78-87-5	1,2-Dichloropropane	U	1.11	ug/kg	0.333	1.11
75-27-4	Bromodichloromethane	U	1.11	ug/kg	0.333	1.11
74-95-3	Dibromomethane	U	1.11	ug/kg	0.333	1.11
108-10-1	4-Methyl-2-pentanone	U	5.55	ug/kg	1.39	5.55
10061-01-5	cis-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
108-88-3	Toluene	U	1.11	ug/kg	0.333	1.11
10061-02-6	trans-1,3-Dichloropropylene	U	1.11	ug/kg	0.333	1.11
79-00-5	1,1,2-Trichloroethane	U	1.11	ug/kg	0.333	1.11
591-78-6	2-Hexanone	U	5.55	ug/kg	1.67	5.55
142-28-9	1,3-Dichloropropane	U	1.11	ug/kg	0.333	1.11
127-18-4	Tetrachloroethylene	U	1.11	ug/kg	0.333	1.11
124-48-1	Dibromochloromethane	U	1.11	ug/kg	0.333	1.11
106-93-4	1,2-Dibromoethane	U	1.11	ug/kg	0.333	1.11
108-90-7	Chlorobenzene	U	1.11	ug/kg	0.333	1.11

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923009
 Client ID: RE15-10-7218
 Batch ID: 944501
 Run Date: 01/22/2010 20:10
 Prep Date: 01/22/2010 14:08
 Data File: 012210V66U521.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 9.9
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.11	ug/kg	0.333	1.11
179601-23-1	m,p-Xylenes	J	0.500	ug/kg	0.333	2.22
95-47-6	o-Xylene	U	1.11	ug/kg	0.333	1.11
100-42-5	Styrene	U	1.11	ug/kg	0.333	1.11
75-25-2	Bromoform	U	1.11	ug/kg	0.333	1.11
79-34-5	1,1,2,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
96-18-4	1,2,3-Trichloropropane	U	1.11	ug/kg	0.333	1.11
108-86-1	Bromobenzene	U	1.11	ug/kg	0.333	1.11
103-65-1	n-Propylbenzene	U	1.11	ug/kg	0.333	1.11
95-49-8	2-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-82-8	Isopropylbenzene	U	1.11	ug/kg	0.333	1.11
108-67-8	1,3,5-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
106-43-4	4-Chlorotoluene	U	1.11	ug/kg	0.333	1.11
98-06-6	tert-Butylbenzene	U	1.11	ug/kg	0.333	1.11
95-63-6	1,2,4-Trimethylbenzene	U	1.11	ug/kg	0.333	1.11
135-98-8	sec-Butylbenzene	U	1.11	ug/kg	0.333	1.11
99-87-6	4-Isopropyltoluene	U	1.11	ug/kg	0.333	1.11
541-73-1	1,3-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
106-46-7	1,4-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11
104-51-8	n-Butylbenzene	U	1.11	ug/kg	0.333	1.11
96-12-8	1,2-Dibromo-3-chloropropane	U	1.11	ug/kg	0.333	1.11
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.55	ug/kg	1.78	5.55
630-20-6	1,1,1,2-Tetrachloroethane	U	1.11	ug/kg	0.333	1.11
95-50-1	1,2-Dichlorobenzene	U	1.11	ug/kg	0.333	1.11

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	70.7	ug/kg	0	J
013466-78-9	3-Carene	15.19	48.3	ug/kg	97	NJ
	unknown siloxane	16.17	20.3	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
InstName : VOA6
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 25 11:00:07 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.974	96	1575576	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1101146	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	505907	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	1573989	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1101146	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	505907	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	485147	52.19	ug/L	0.00
Spiked Amount	50.000	Range	68 - 131	Recovery	=	104.38%
43) Toluene-d8	11.626	98	1495773	48.99	ug/L	0.00
Spiked Amount	50.000	Range	75 - 129	Recovery	=	97.98%
61) Bromofluorobenzene	14.357	95	538793	55.26	ug/L	0.00
Spiked Amount	50.000	Range	68 - 133	Recovery	=	110.52%

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.672	50	650	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	0.000		0m	N.D.	d	
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.285	41	185	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.072	76	1391	N.D.		
15) Methylene chloride	7.279	84	8809	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	9.059	83	1247	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	0.000		0	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
InstName : VOA6
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 25 11:00:07 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.693	91	9256	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.254	91	4345	N.D.		
55) m,p-Xylenes	13.363	106	6512	0.45	ug/L	89
56) o-Xylene	13.796	106	1264	N.D.		
57) Styrene	13.802	104	661	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	0.000		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	14.589	91	398	N.D.		
66) 1,3,5-Trimethylbenzene	14.735	105	452	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	14.790	91	905	N.D.		
69) tert-Butylbenzene	0.000		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	0.000		0m	N.D.	d	
71) sec-Butylbenzene	15.424	105	1003	N.D.		
72) 4-Isopropyltoluene	15.455	119	3726	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.283	128	1744	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.285	41	185	N.D.		
89) tert-Butyl Alcohol	0.000		0m	N.D.	d	
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
InstName : VOA6
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 25 11:00:07 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0		N.D.	
96) Methacrylonitrile	0.000		0		N.D.	
97) Tetrahydrofuran	0.000		0		N.D.	
98) Isobutyl alcohol	0.000		0		N.D.	
99) Methyl tert-amyl ether	0.000		0		N.D.	
100) Methyl methacrylate	0.000		0		N.D.	
101) 1,4-Dioxane	0.000		0		N.D.	
102) 2-Nitropropane	0.000		0		N.D.	
104) Ethyl methacrylate	0.000		0		N.D.	
106) 1-Chlorohexane	0.000		0		N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0m		N.D. d	
108) Cyclohexanone	0.000		0		N.D.	
109) trans-1,4-Dichloro-2-b...	14.497	53	1076		N.D.	
110) Pentachloroethane	0.000		0		N.D.	
111) Benzyl chloride	0.000		0m		N.D. d	
112) bis(2-Chloroisopropyl)...	0.000		0m		N.D. d	

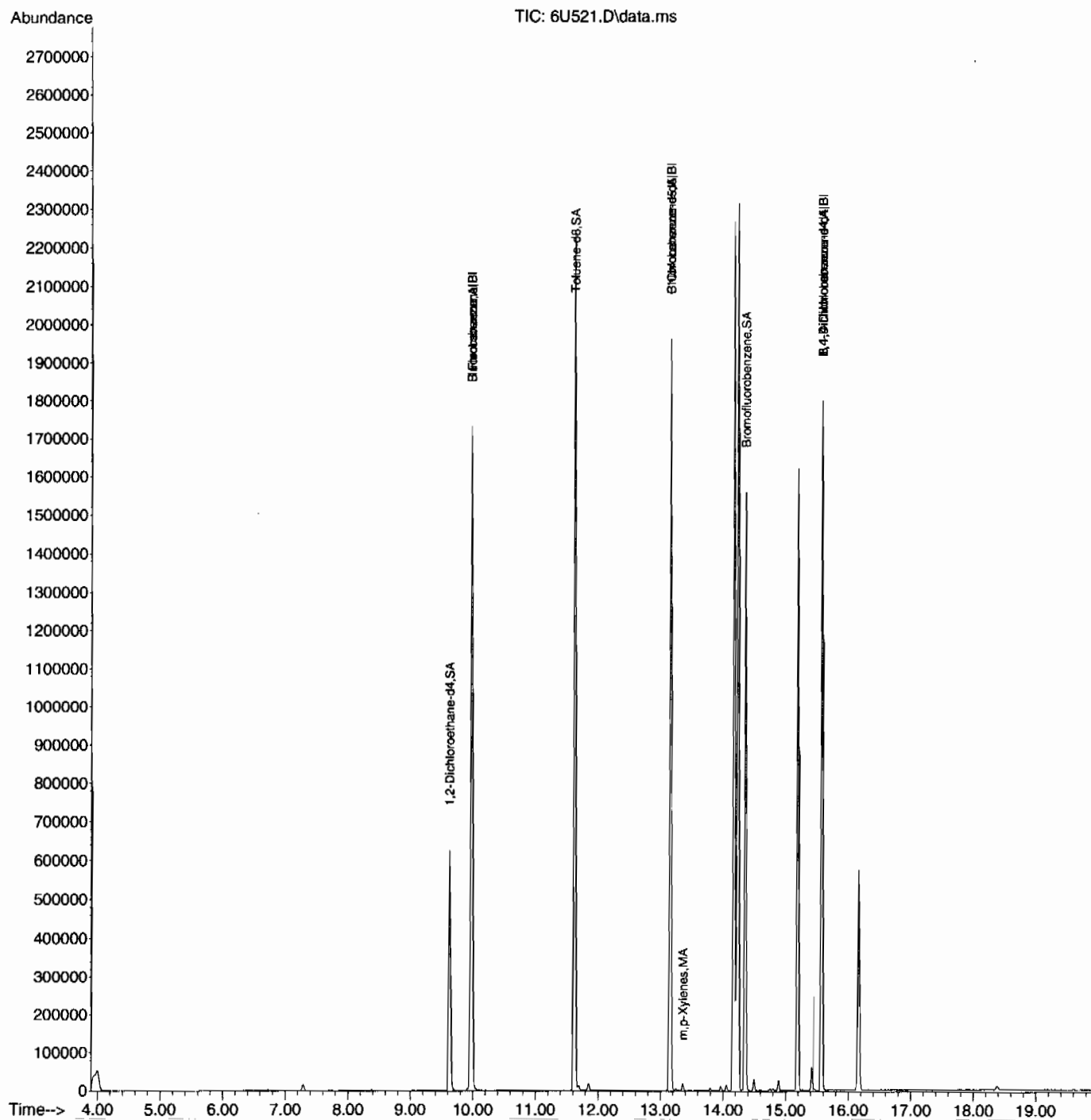
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

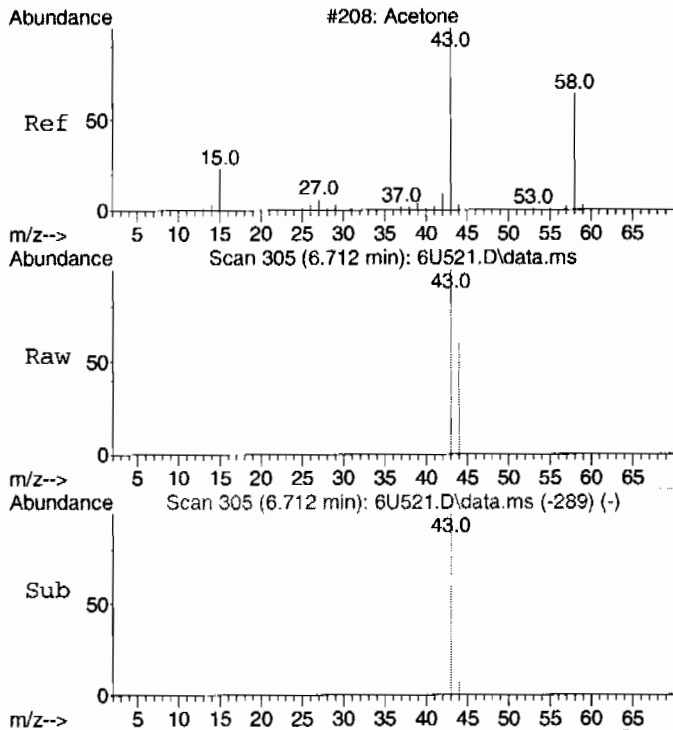
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
InstName : VOA6
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jan 25 11:00:07 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :





#9 BEFORE analyst DELETION

Acetone

Concen: 2.12 ug/L

RT: 6.712 min Scan# 305

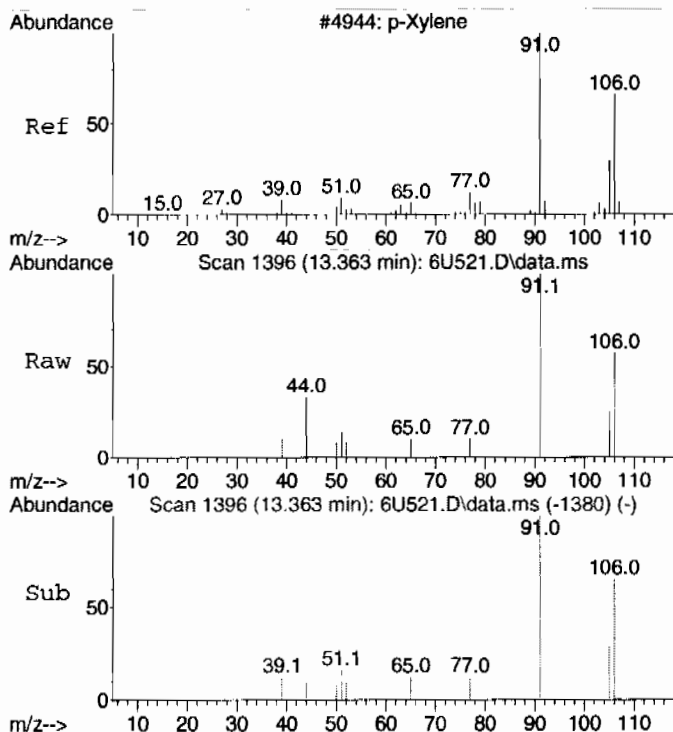
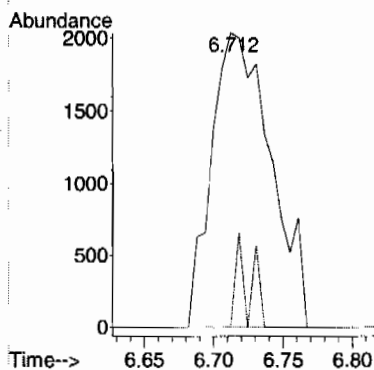
Delta R.T. 0.000 min

Lab File: 6U521.D

Acq: 22 Jan 2010 8:10 pm

Tgt Ion: 43 Resp: 6065

Ion	Ratio	Lower	Upper
43	100		
58	7.4	0.4	60.4



#55

m,p-Xylenes

Concen: 0.45 ug/L

RT: 13.363 min Scan# 1396

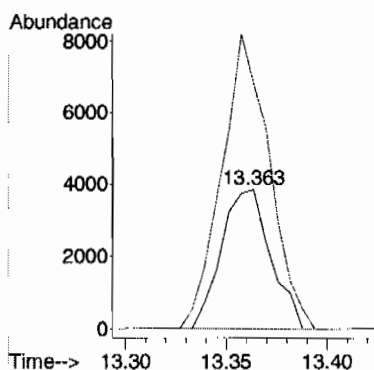
Delta R.T. 0.000 min

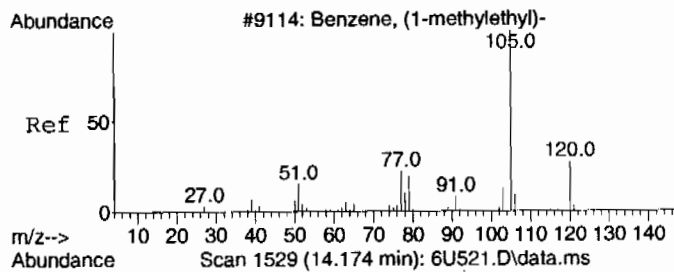
Lab File: 6U521.D

Acq: 22 Jan 2010 8:10 pm

Tgt Ion: 106 Resp: 6512

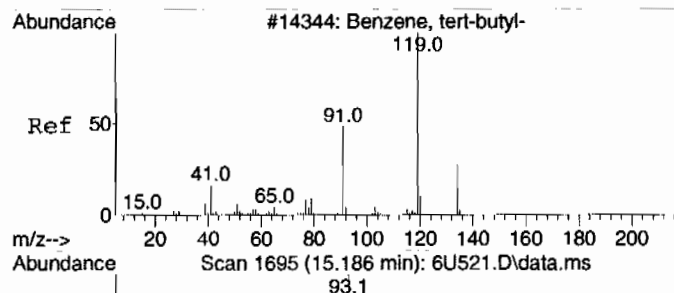
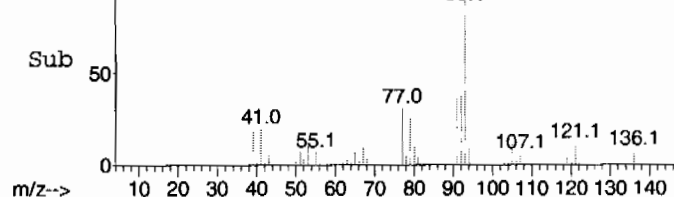
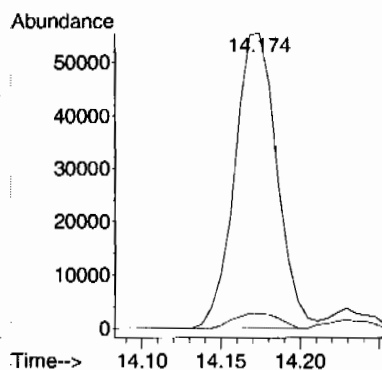
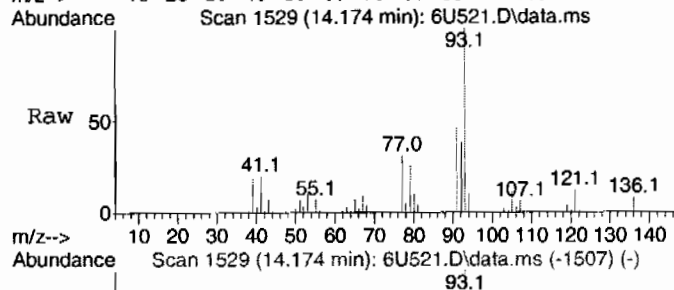
Ion	Ratio	Lower	Upper
106	100		
91	206.3	160.4	220.4





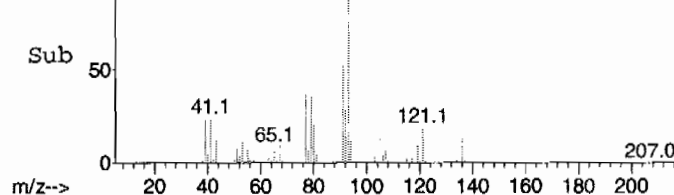
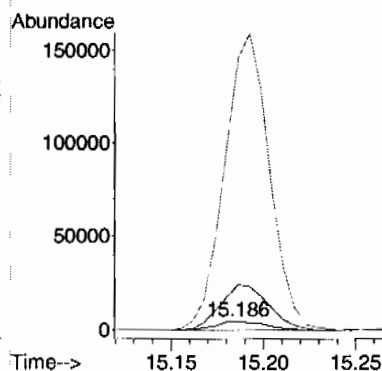
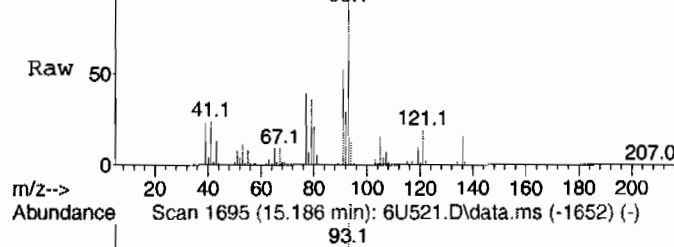
#60 BEFORE analyst DELETION
Isopropylbenzene
Concen: 3.34 ug/L
RT: 14.174 min Scan# 1529
Delta R.T. 0.018 min
Lab File: 6U521.D
Acq: 22 Jan 2010 8:10 pm

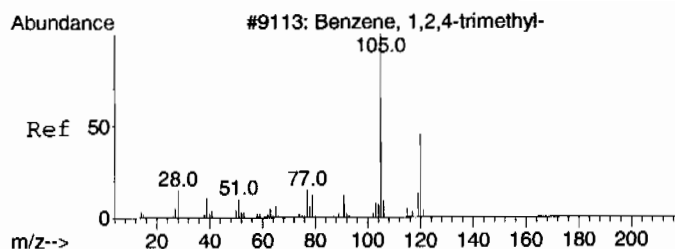
Tgt Ion:105 Resp: 102970
Ion Ratio Lower Upper
105 100
120 5.5 0.0 57.5



#69 BEFORE analyst DELETION
tert-Butylbenzene
Concen: 1.51 ug/L
RT: 15.186 min Scan# 1695
Delta R.T. 0.079 min
Lab File: 6U521.D
Acq: 22 Jan 2010 8:10 pm

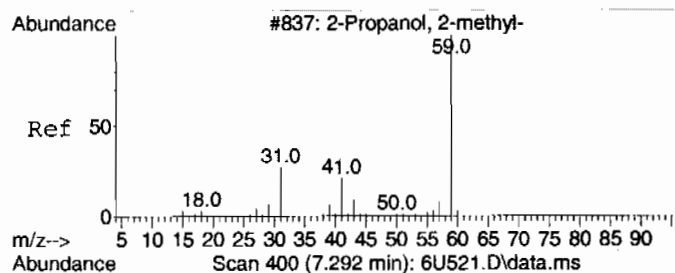
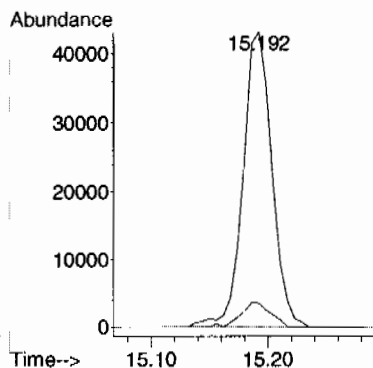
Tgt Ion:134 Resp: 8887
Ion Ratio Lower Upper
134 100
119 497.0 423.1 483.1#
91 3012.9 241.2 301.2#





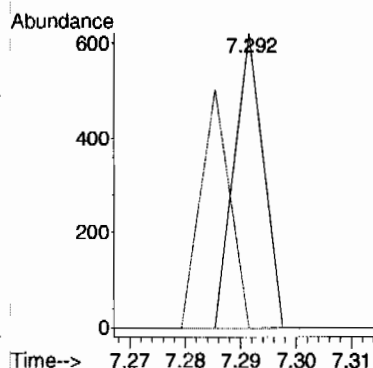
#70 BEFORE analyst DELETION
1,2,4-Trimethylbenzene
Concen: 2.67 ug/L
RT: 15.192 min Scan# 1696
Delta R.T. 0.042 min
Lab File: 6U521.D
Acq: 22 Jan 2010 8:10 pm

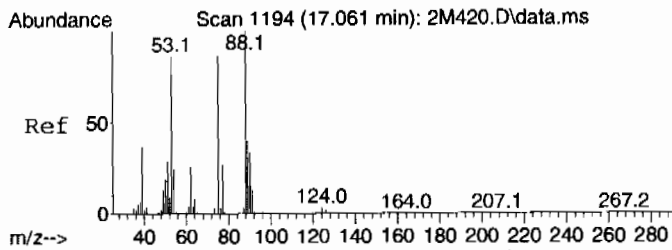
Tgt Ion: 105 Resp: 74492
Ion Ratio Lower Upper
105 100
120 8.7 17.4 77.4#



#89 BEFORE analyst DELETION
tert-Butyl Alcohol
Concen: 0.24 ug/L
RT: 7.292 min Scan# 400
Delta R.T. 0.006 min
Lab File: 6U521.D
Acq: 22 Jan 2010 8:10 pm

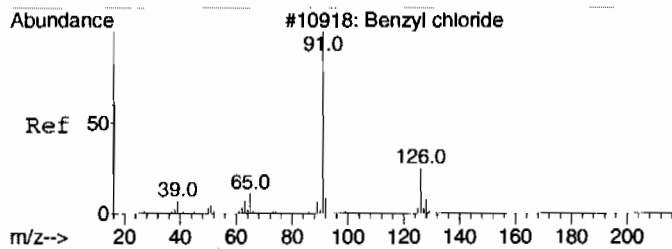
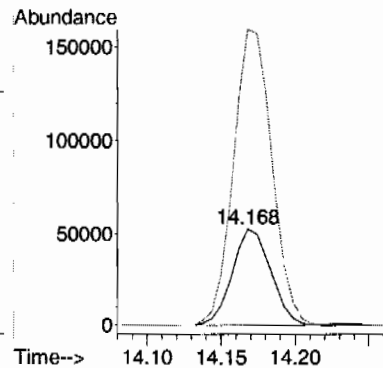
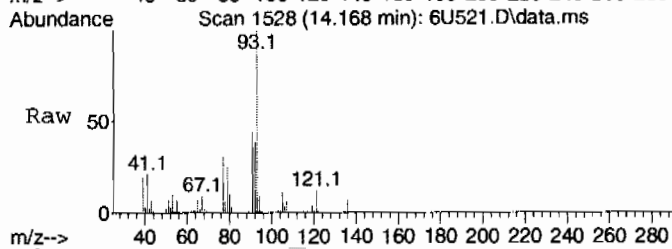
Tgt Ion: 59 Resp: 227
Ion Ratio Lower Upper
59 100
41 81.5 0.0 53.7#





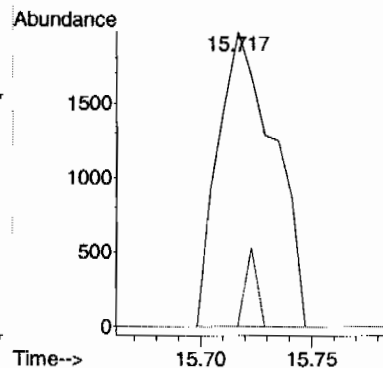
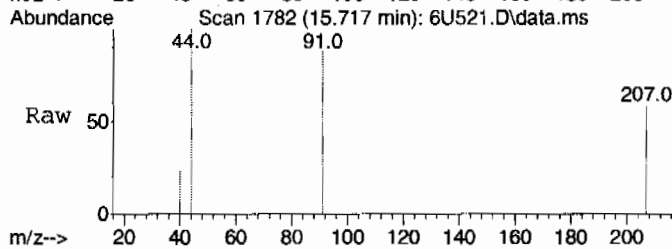
#107 BEFORE analyst DELETION
 cis-1,4-Dichloro-2-butene
 Concen: 40.23 ug/L
 RT: 14.168 min Scan# 1528
 Delta R.T. -0.030 min
 Lab File: 6U521.D
 Acq: 22 Jan 2010 8:10 pm

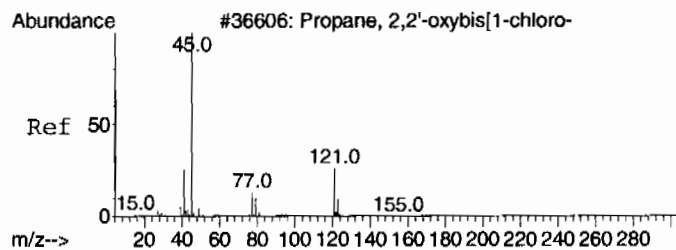
Tgt Ion	Ratio	Lower	Upper
53	100		
88	0.0	76.1	136.1#
77	304.2	1.3	61.3#



#111 BEFORE analyst DELETION
 Benzyl chloride
 Concen: 0.26 ug/L
 RT: 15.717 min Scan# 1782
 Delta R.T. 0.001 min
 Lab File: 6U521.D
 Acq: 22 Jan 2010 8:10 pm

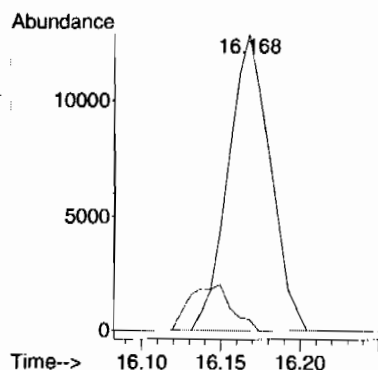
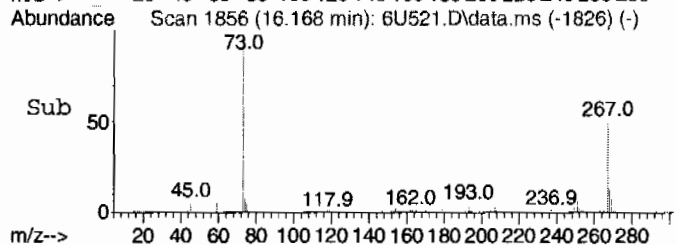
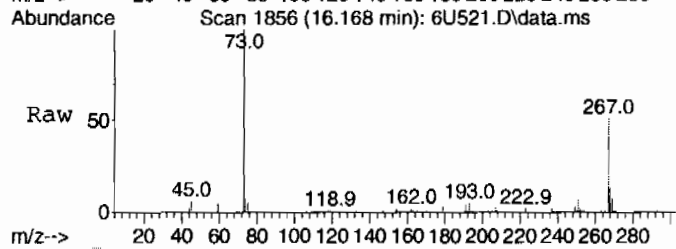
Tgt Ion	Ratio	Lower	Upper
91	100		
126	5.6	0.0	52.6
65	0.0	0.0	42.9





#112 BEFORE analyst DELETION
bis(2-Chloroisopropyl)ether
Concen: 6.17 ug/L
RT: 16.168 min Scan# 1856
Delta R.T. 0.055 min
Lab File: 6U521.D
Acq: 22 Jan 2010 8:10 pm

Tgt Ion: 45 Resp: 23696
Ion Ratio Lower Upper
45 100
121 15.8 0.0 53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

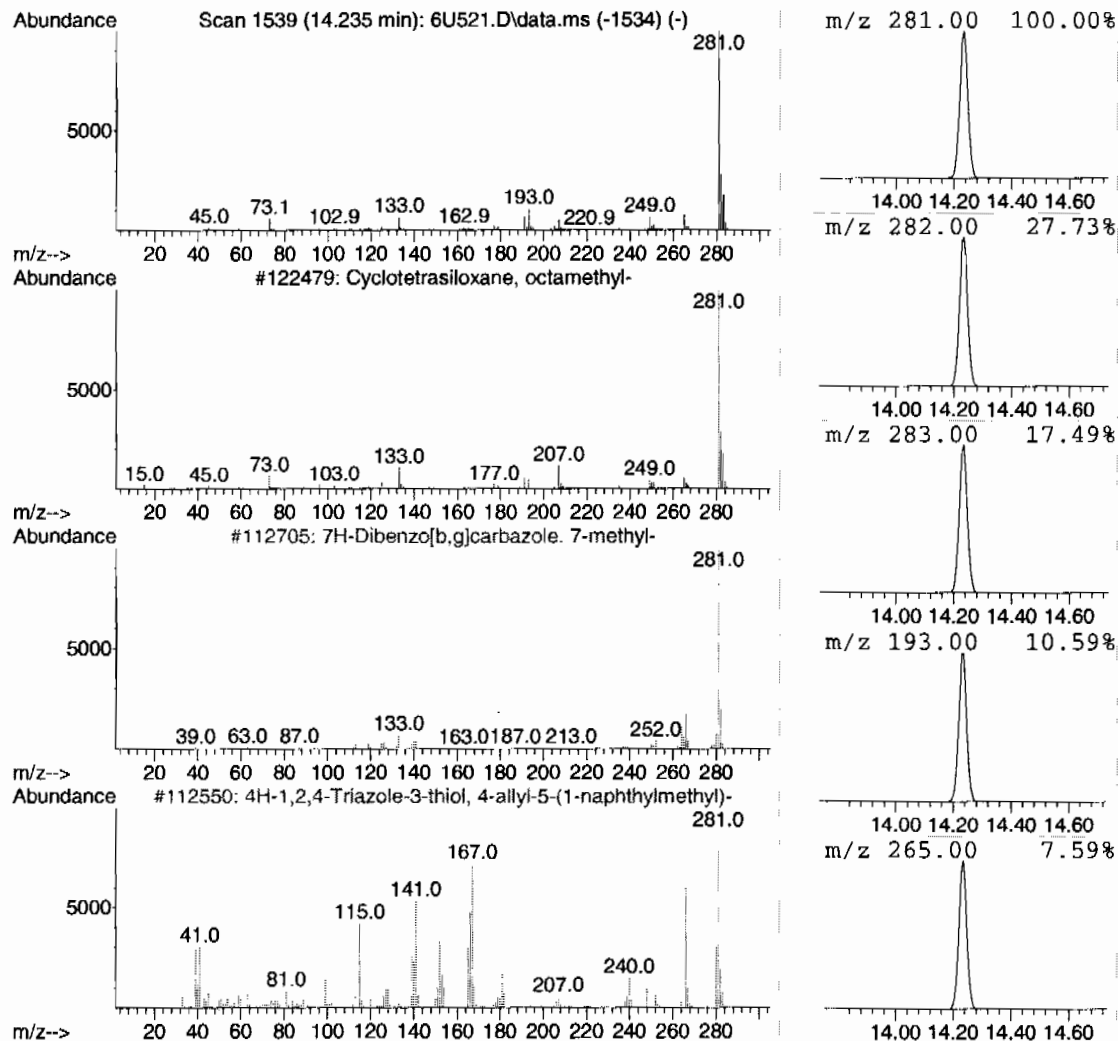
SubList :

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

Peak Number 2 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	63.72 ug/L	4419250	B Chlorobenzene-d5	13.156

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
2	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	59
3	4H-1,2,4-Triazole-3-thiol, 4-all...	281	C16H15N3S	031803-13-1	53
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49
5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	46



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

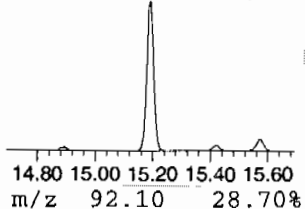
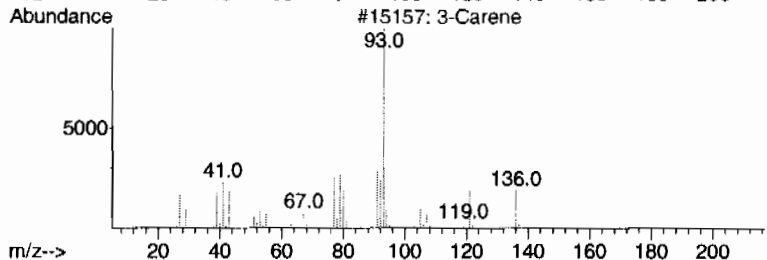
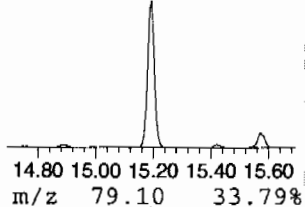
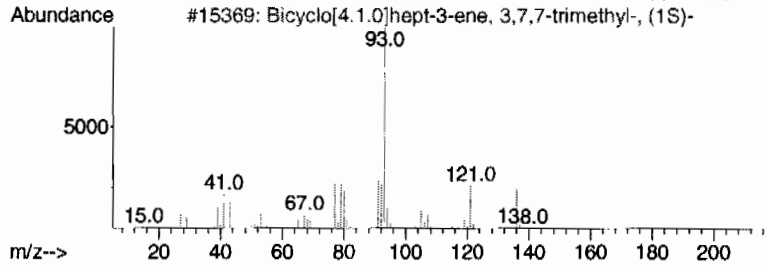
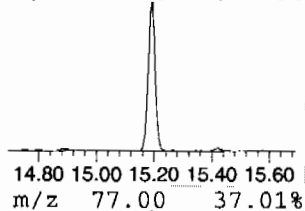
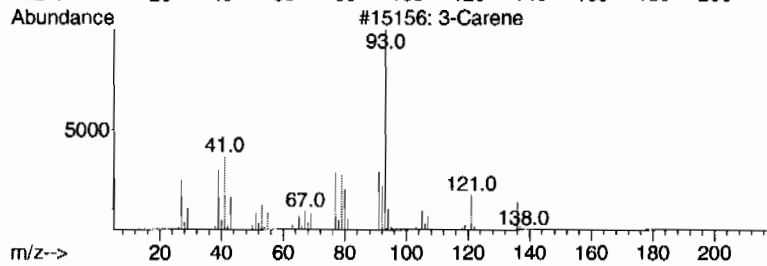
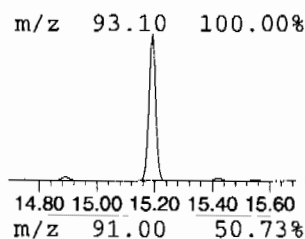
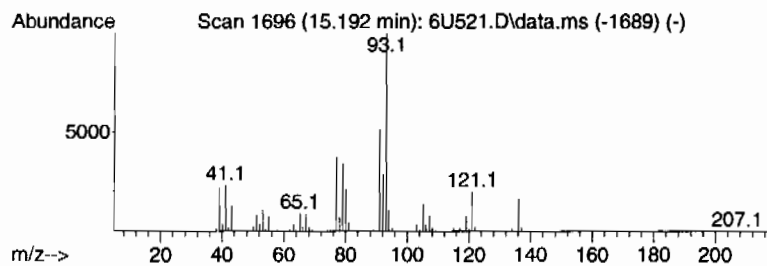
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

SubList :

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

Peak Number 3 3-Carene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.	
15.192	43.50 ug/L	2650980	1,4-Dichlorobenzene-d4	15.576	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Carene	136	C10H16	013466-78-9	97
2	Bicyclo[4.1.0]hept-3-ene, 3,7,7-...	136	C10H16	000498-15-7	96
3	3-Carene	136	C10H16	013466-78-9	95
4	1,4-Cyclohexadiene, 1-methyl-4-(...	136	C10H16	000099-85-4	94
5	.alpha.-Phellandrene	136	C10H16	000099-83-2	93



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

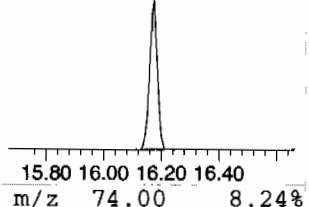
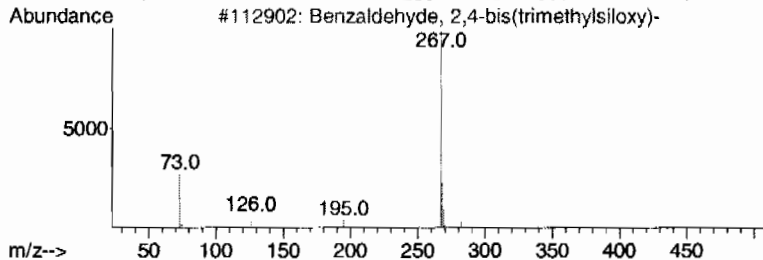
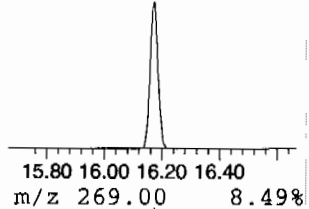
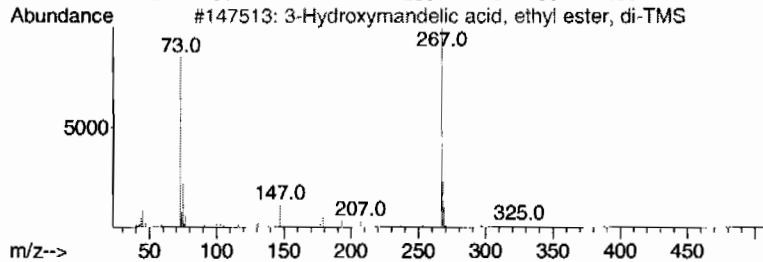
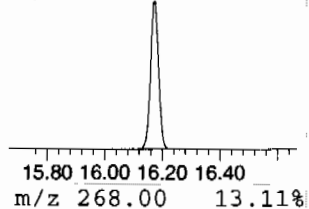
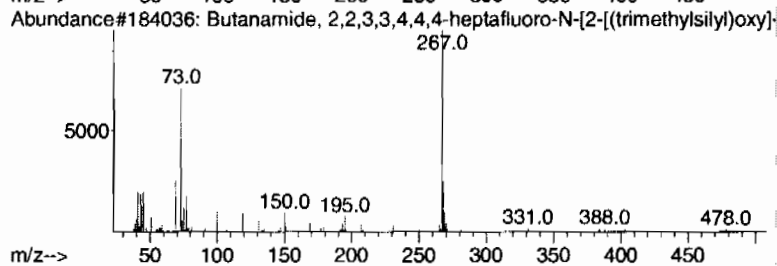
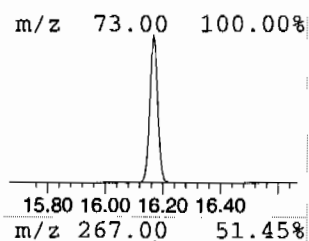
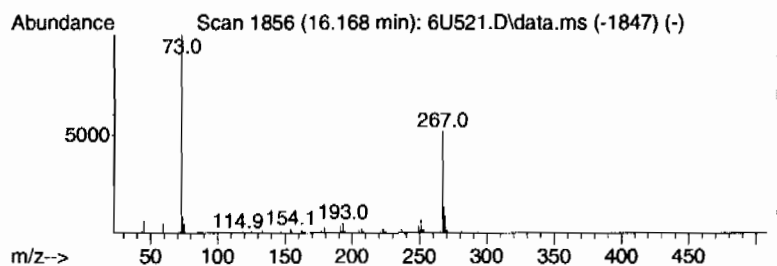
SubList :

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

Peak Number 4 unknown siloxane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.168	18.24 ug/L	1111630	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-[[trimethylsilyl]oxy]-	493	C18H26F7NO3Si2	055471-01-7	72
2			3-Hydroxymandelic acid, ethyl ester, di-TMS	340	C16H28O4Si2	1000071-88-9	56
3			Benzaldehyde, 2,4-bis(trimethylsiloxy)-	282	C13H22O3Si2	033617-38-8	53
4			Benzaldehyde, 2,5-bis(trimethylsiloxy)-	282	C13H22O3Si2	056114-69-3	50
5			p-Trimethylsilyloxyphenyl-bis(trimethylsiloxy)-	370	C17H34O3Si3	1000079-08-1	50



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U521.D
Acq On : 22 Jan 2010 8:10 pm
Operator : RXD1
Sample : |244923009|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	63.7	ug/L	4419250	4	13.156	3467670	50.0
3-Carene	15.192	43.5	ug/L	2650980	5	15.576	3047340	50.0
unknown siloxane	16.168	18.2	ug/L	1111630	6	15.576	3047340	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923010
 Client ID: RE15-10-7223
 Batch ID: 944501
 Run Date: 01/22/2010 20:37
 Prep Date: 01/22/2010 14:10
 Data File: 012210V66U522.D

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6J
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.12	ug/kg	0.381	1.12
74-87-3	Chloromethane	U	1.12	ug/kg	0.336	1.12
75-01-4	Vinyl chloride	U	1.12	ug/kg	0.336	1.12
74-83-9	Bromomethane	U	1.12	ug/kg	0.336	1.12
75-00-3	Chloroethane	U	1.12	ug/kg	0.336	1.12
75-69-4	Trichlorofluoromethane	U	1.12	ug/kg	0.336	1.12
67-64-1	Acetone	U	5.60	ug/kg	1.86	5.60
75-35-4	1,1-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
74-88-4	Iodomethane	U	5.60	ug/kg	1.79	5.60
75-09-2	Methylene chloride	U	5.60	ug/kg	2.24	5.60
75-15-0	Carbon disulfide	U	5.60	ug/kg	1.40	5.60
156-60-5	trans-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
75-34-3	1,1-Dichloroethane	U	1.12	ug/kg	0.336	1.12
78-93-3	2-Butanone	U	5.60	ug/kg	1.68	5.60
156-59-2	cis-1,2-Dichloroethylene	U	1.12	ug/kg	0.336	1.12
594-20-7	2,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
67-66-3	Chloroform	U	1.12	ug/kg	0.336	1.12
74-97-5	Bromochloromethane	U	1.12	ug/kg	0.370	1.12
71-55-6	1,1,1-Trichloroethane	U	1.12	ug/kg	0.336	1.12
563-58-6	1,1-Dichloropropene	U	1.12	ug/kg	0.336	1.12
56-23-5	Carbon tetrachloride	U	1.12	ug/kg	0.336	1.12
107-06-2	1,2-Dichloroethane	U	1.12	ug/kg	0.336	1.12
71-43-2	Benzene	U	1.12	ug/kg	0.336	1.12
79-01-6	Trichloroethylene	U	1.12	ug/kg	0.370	1.12
78-87-5	1,2-Dichloropropane	U	1.12	ug/kg	0.336	1.12
75-27-4	Bromodichloromethane	U	1.12	ug/kg	0.336	1.12
74-95-3	Dibromomethane	U	1.12	ug/kg	0.336	1.12
108-10-1	4-Methyl-2-pentanone	U	5.60	ug/kg	1.40	5.60
10061-01-5	cis-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
108-88-3	Toluene	U	1.12	ug/kg	0.336	1.12
10061-02-6	trans-1,3-Dichloropropylene	U	1.12	ug/kg	0.336	1.12
79-00-5	1,1,2-Trichloroethane	U	1.12	ug/kg	0.336	1.12
591-78-6	2-Hexanone	U	5.60	ug/kg	1.68	5.60
142-28-9	1,3-Dichloropropane	U	1.12	ug/kg	0.336	1.12
127-18-4	Tetrachloroethylene	U	1.12	ug/kg	0.336	1.12
124-48-1	Dibromochloromethane	U	1.12	ug/kg	0.336	1.12
106-93-4	1,2-Dibromoethane	U	1.12	ug/kg	0.336	1.12
108-90-7	Chlorobenzene	U	1.12	ug/kg	0.336	1.12

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

Matrix: R
 %Moisture: 10.8
 Project: LANL01004
 SOP Ref: GL-OA-E-038
 Dilution: 1
 Purge Vol: 5 mL
 Final Volume: 5 mL

Client ID: RE15-10-7223
 Batch ID: 944501
 Run Date: 01/22/2010 20:37
 Prep Date: 01/22/2010 14:10
 Data File: 012210V6U522.D

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.12	ug/kg	0.336	1.12
179601-23-1	m,p-Xylenes	U	2.24	ug/kg	0.336	2.24
95-47-6	o-Xylene	U	1.12	ug/kg	0.336	1.12
100-42-5	Styrene	U	1.12	ug/kg	0.336	1.12
75-25-2	Bromoform	U	1.12	ug/kg	0.336	1.12
79-34-5	1,1,2,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
96-18-4	1,2,3-Trichloropropane	U	1.12	ug/kg	0.336	1.12
108-86-1	Bromobenzene	U	1.12	ug/kg	0.336	1.12
103-65-1	n-Propylbenzene	U	1.12	ug/kg	0.336	1.12
95-49-8	2-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-82-8	Isopropylbenzene	U	1.12	ug/kg	0.336	1.12
108-67-8	1,3,5-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
106-43-4	4-Chlorotoluene	U	1.12	ug/kg	0.336	1.12
98-06-6	tert-Butylbenzene	U	1.12	ug/kg	0.336	1.12
95-63-6	1,2,4-Trimethylbenzene	U	1.12	ug/kg	0.336	1.12
135-98-8	sec-Butylbenzene	U	1.12	ug/kg	0.336	1.12
99-87-6	4-Isopropyltoluene	U	1.12	ug/kg	0.336	1.12
541-73-1	1,3-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
106-46-7	1,4-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12
104-51-8	n-Butylbenzene	U	1.12	ug/kg	0.336	1.12
96-12-8	1,2-Dibromo-3-chloropropane	U	1.12	ug/kg	0.336	1.12
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.60	ug/kg	1.79	5.60
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.12	ug/kg	0.336	1.12
95-50-1	1,2-Dichlorobenzene	U	1.12	ug/kg	0.336	1.12

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	48.1	ug/kg	0	J
	unknown siloxane	16.17	29.9	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U522.D
Acq On : 22 Jan 2010 8:37 pm
Operator : RXD1
InstName : VOA6
Sample : |244923010|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 25 11:01:04 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.974	96	1455497	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1061007	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	560056	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	1453860	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1061007	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	560056	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	449620	52.36	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	104.72%	
43) Toluene-d8	11.626	98	1402917	47.69	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	95.38%	
61) Bromofluorobenzene	14.357	95	553575	51.29	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	102.58%	

Target Compounds				Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.
3) Chloromethane	4.642	50	154	N.D.
4) Vinyl chloride	0.000		0	N.D.
5) Bromomethane	0.000		0	N.D.
6) Chloroethane	0.000		0	N.D.
7) Trichlorofluoromethane	0.000		0	N.D.
8) Ethyl ether	0.000		0	N.D.
9) Acetone	6.706	43	626	N.D.
10) 1,1-Dichloroethylene	0.000		0	N.D.
11) Iodomethane	0.000		0	N.D.
12) Acetonitrile	7.279	41	183	N.D.
13) Methyl acetate	0.000		0	N.D.
14) Carbon disulfide	7.084	76	1990	N.D.
15) Methylene chloride	7.291	84	10979	N.D.
16) tert-Butyl methyl ether	0.000		0	N.D.
17) trans-1,2-Dichloroethy...	0.000		0	N.D.
18) Vinyl acetate	0.000		0	N.D.
19) 1,1-Dichloroethane	0.000		0	N.D.
20) 2-Butanone	0.000		0	N.D.
21) cis-1,2-Dichloroethylene	0.000		0	N.D.
22) 2,2-Dichloropropane	0.000		0	N.D.
23) Bromochloromethane	0.000		0	N.D.
24) Chloroform	0.000		0	N.D.
25) 1,1,1-Trichloroethane	0.000		0	N.D.
26) Cyclohexane	0.000		0	N.D.
27) 1,1-Dichloropropene	0.000		0	N.D.
28) Carbon tetrachloride	0.000		0	N.D.
30) 1,2-Dichloroethane	0.000		0	N.D.
31) Benzene	0.000		0	N.D.
32) Cyclohexene	0.000		0	N.D.
33) n-Butyl alcohol	0.000		0	N.D.
34) Trichloroethylene	0.000		0	N.D.
35) 1,2-Dichloropropane	0.000		0	N.D.
36) Methylcyclohexane	0.000		0	N.D.
37) Dibromomethane	0.000		0	N.D.

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U522.D
Acq On : 22 Jan 2010 8:37 pm
Operator : RXD1
InstName : VOA6
Sample : |244923010|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 25 11:01:04 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699	91	1321	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.241	91	186	N.D.		
55) m,p-Xylenes	13.363	106	978	N.D.		
56) o-Xylene	13.802	106	2978	N.D.		
57) Styrene	13.839	104	855	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	14.229	105	3506	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000		0	N.D.		
69) tert-Butylbenzene	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.150	105	562	N.D.		
71) sec-Butylbenzene	0.000		0	N.D.		
72) 4-Isopropyltoluene	0.000		0	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.289	128	1725	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.279	41	183	N.D.		
89) tert-Butyl Alcohol	0.000		0m	N.D.	d	
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U522.D
Acq On : 22 Jan 2010 8:37 pm
Operator : RXD1
InstName : VOA6
Sample : |244923010|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 25 11:01:04 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0	N.D.		
96) Methacrylonitrile	0.000		0	N.D.		
97) Tetrahydrofuran	0.000		0	N.D.		
98) Isobutyl alcohol	0.000		0	N.D.		
99) Methyl tert-amyl ether	0.000		0	N.D.		
100) Methyl methacrylate	0.000		0	N.D.		
101) 1,4-Dioxane	0.000		0	N.D.		
102) 2-Nitropropane	0.000		0	N.D.		
104) Ethyl methacrylate	0.000		0	N.D.		
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	0.000		0	N.D.		
108) Cyclohexanone	0.000		0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110) Pentachloroethane	0.000		0	N.D.		
111) Benzyl chloride	0.000		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	0.000		0m	N.D.	d	

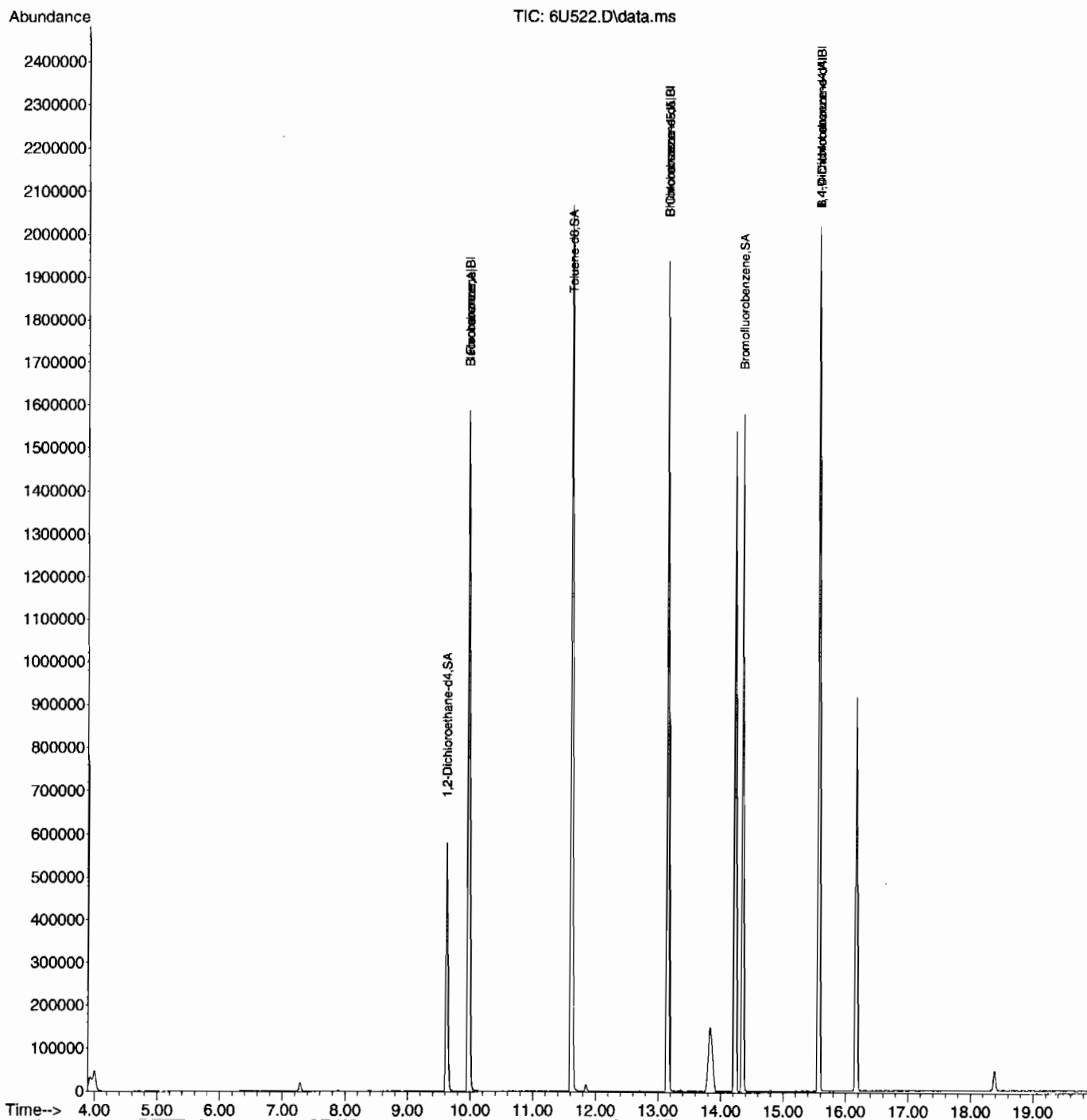
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

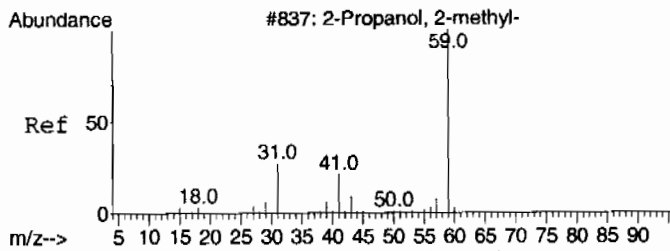
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U522.D
Acq On : 22 Jan 2010 8:37 pm
Operator : RXD1
InstName : VOA6
Sample : |244923010|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 25 11:01:04 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

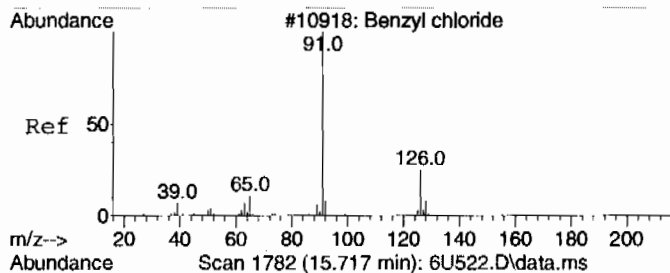
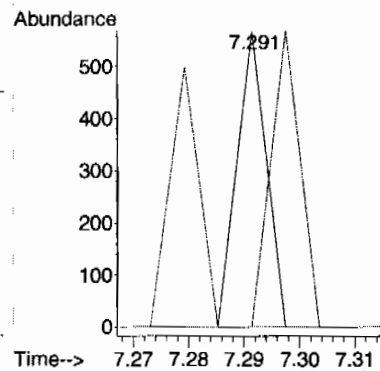
SubList :





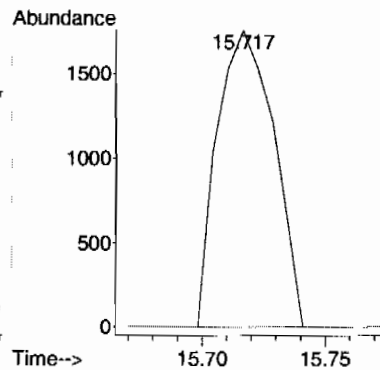
#89 BEFORE analyst DELETION
tert-Butyl Alcohol
Concen: 0.24 ug/L
RT: 7.291 min Scan# 400
Delta R.T. 0.006 min
Lab File: 6U522.D
Acq: 22 Jan 2010 8:37 pm

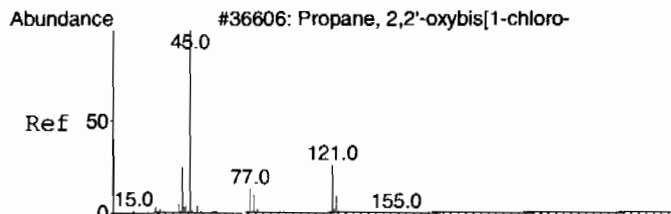
Tgt Ion: 59 Resp: 208
Ion Ratio Lower Upper
59 100
41 100.5 0.0 53.7#



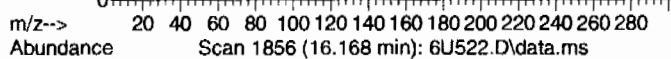
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.19 ug/L
RT: 15.717 min Scan# 1782
Delta R.T. 0.001 min
Lab File: 6U522.D
Acq: 22 Jan 2010 8:37 pm

Tgt Ion: 91 Resp: 2814
Ion Ratio Lower Upper
91 100
126 0.0 0.0 52.6
65 0.0 0.0 42.9

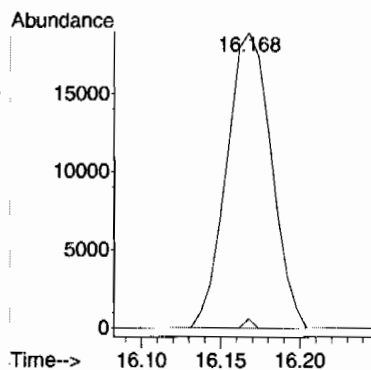
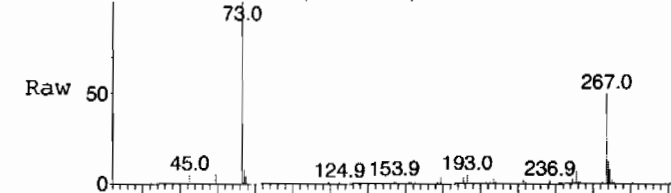




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 8.74 ug/L
 RT: 16.168 min Scan# 1856
 Delta R.T. 0.055 min
 Lab File: 6U522.D
 Acq: 22 Jan 2010 8:37 pm



Tgt Ion	Ratio	Lower	Upper
45	100		
121	0.6	0.0	53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U522.D
Acq On : 22 Jan 2010 8:37 pm
Operator : RXD1
Sample : |244923010|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

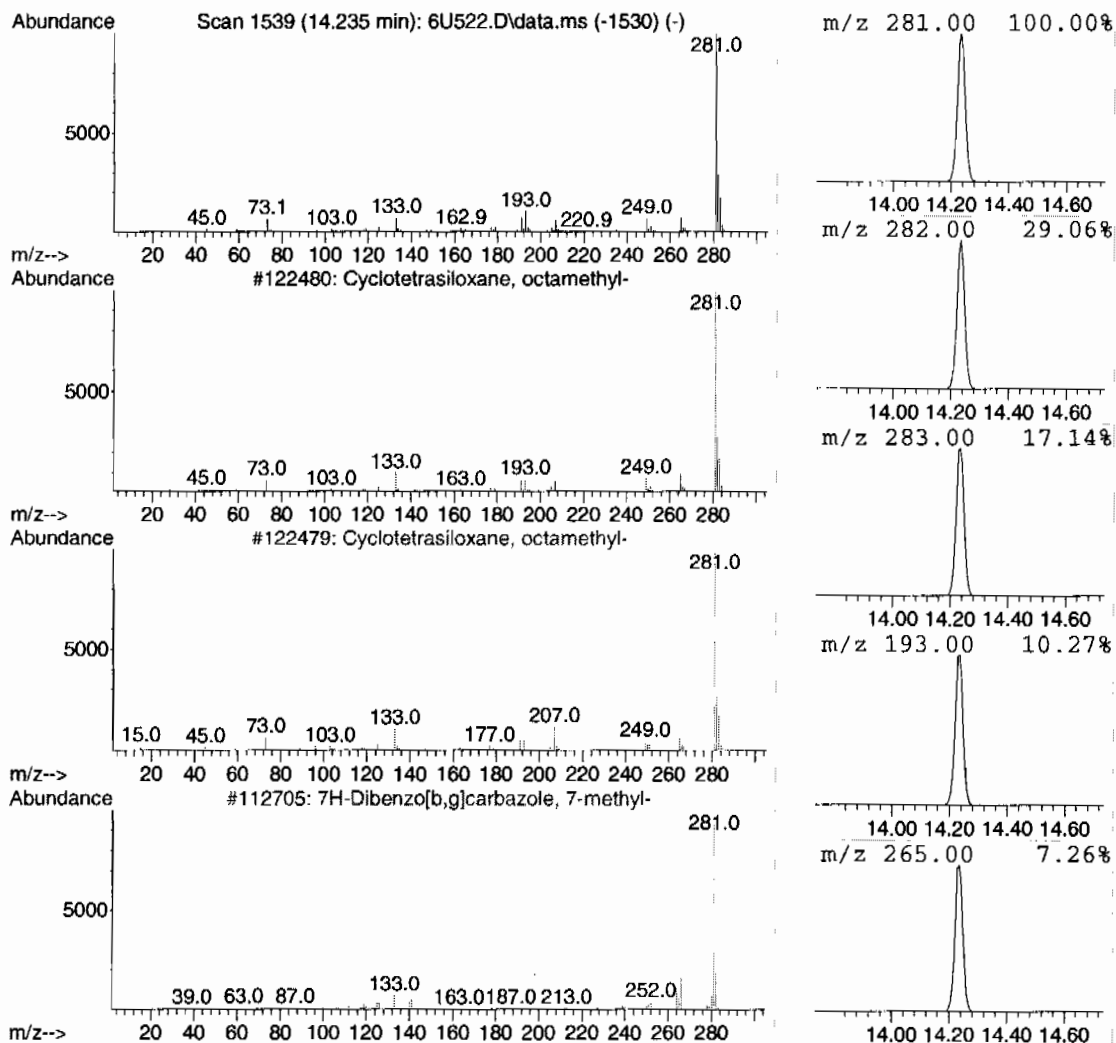
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.	
14.235	42.90 ug/L	2880300	B Chlorobenzene-d5	13.156	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
4	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	45
5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	43



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U522.D
Acq On : 22 Jan 2010 8:37 pm
Operator : RXD1
Sample : |244923010|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

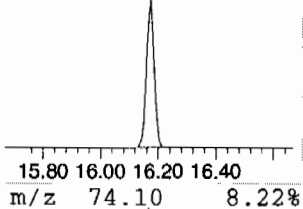
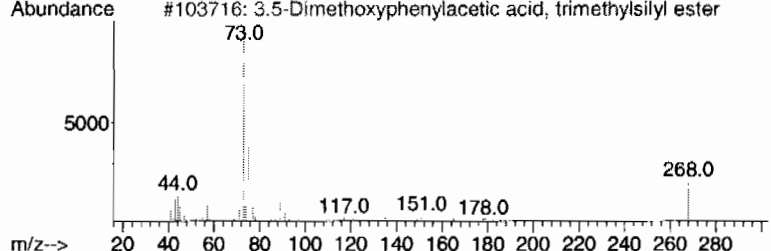
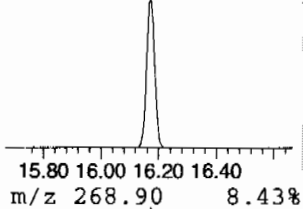
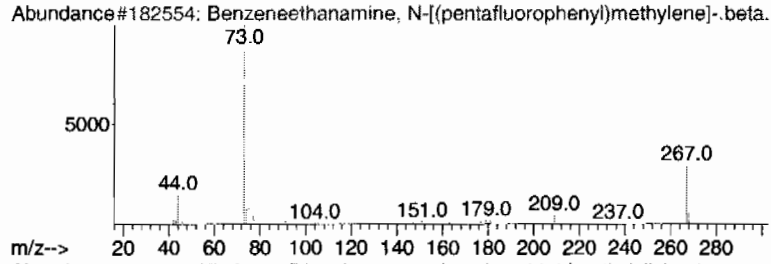
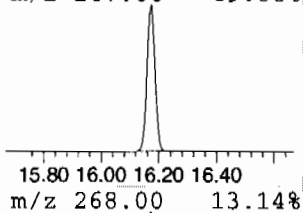
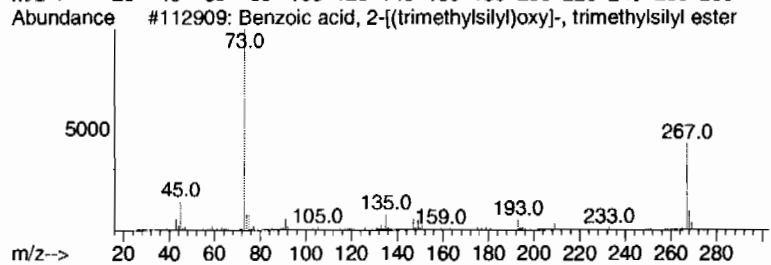
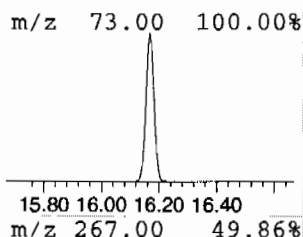
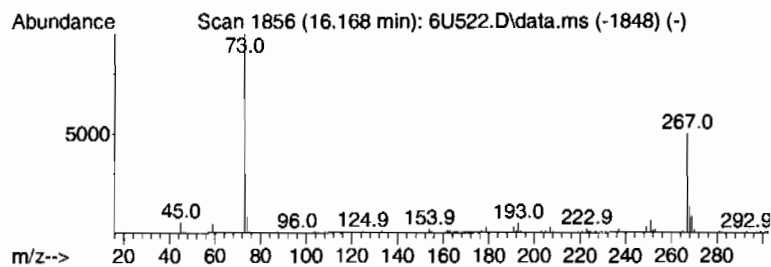
SubList :

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

Peak Number 2 unknown siloxane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.168	26.71 ug/L	1809540	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester	282	C13H22O3Si2	003789-85-3	40
2			Benzeneethanamine, N-[(pentafluorophenyl)methylene]-.beta.	475	C21H26F5NO2Si2	055429-85-1	37
3			3,5-Dimethoxyphenylacetic acid, trimethylsilyl ester	268	C13H20O4Si	1000071-82-4	22
4			Tetrasiloxane, 1,1,3,3,5,5,7,7-octa-	282	C8H26O3Si4	001000-05-1	22
5			1-Boraindane, 3-methyl-1-[1-(trimethylsilyl)oxy]-	266	C17H23BSi	190316-36-0	14



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U522.D
Acq On : 22 Jan 2010 8:37 pm
Operator : RXD1
Sample : |244923010|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	42.9	ug/L	2880300	4	13.156	3356960	50.0
unknown siloxane	16.168	26.7	ug/L	1809540	6	15.576	3387840	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: S
Lab Sample ID: 244923011	Date Received: 01/16/2010 08:55	
Client ID: RE15-10-7235	Client: LANL010	Project: LANL01004
Batch ID: 944501	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Run Date: 01/22/2010 21:05	Inst: VOA6.I	Dilution: 1
Prep Date: 01/22/2010 14:12	Analyst: RXD1	Purge Vol: 5 mL
Data File: 012210V66U523.D	Aliquot: 5 g	Final Volume: 5 mL
	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	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		7.82	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: 10-1287
Lab Sample ID: 244923011

Client ID: RE15-10-7235
Batch ID: 944501
Run Date: 01/22/2010 21:05
Prep Date: 01/22/2010 14:12
Data File: 012210V66U523.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: S

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

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U523.D
Acq On : 22 Jan 2010 9:05 pm
Operator : RXD1
InstName : VOA6
Sample : |244923011|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 25 11:02:03 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.974	96	1625343	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1202059	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	652338	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	1623665	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1202059	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	652338	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	502622	52.41	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	104.82%	
43) Toluene-d8	11.626	98	1566288	47.00	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	94.00%	
61) Bromofluorobenzene	14.357	95	622662	49.53	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	99.06%	

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.662	50	671	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.712	43	23130	7.82	ug/L	89
10) 1,1-Dichloroethylene	0.000		0	N.D.		
11) Iodomethane	0.000		0	N.D.		
12) Acetonitrile	7.285	41	214	N.D.		
13) Methyl acetate	0.000		0	N.D.		
14) Carbon disulfide	7.078	76	2298	N.D.		
15) Methylene chloride	7.285	84	12490	N.D.		
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000		0	N.D.		
20) 2-Butanone	0.000		0	N.D.		
21) cis-1,2-Dichloroethylene	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	9.718	78	594	N.D.		
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	0.000		0	N.D.		
37) Dibromomethane	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U523.D
Acq On : 22 Jan 2010 9:05 pm
Operator : RXD1
InstName : VOA6
Sample : |244923011|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 25 11:02:03 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699	91	1558	N.D.		
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	0.000		0	N.D.		
55) m,p-Xylenes	0.000		0	N.D.		
56) o-Xylene	0.000		0m	N.D.	d	
57) Styrene	0.000		0	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	0.000		0	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000		0	N.D.		
69) tert-Butylbenzene	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.150	105	423	N.D.		
71) sec-Butylbenzene	0.000		0	N.D.		
72) 4-Isopropyltoluene	0.000		0	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	15.887	91	394	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.283	128	1416	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	7.285	41	214	N.D.		
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U523.D
Acq On : 22 Jan 2010 9:05 pm
Operator : RXD1
InstName : VOA6
Sample : |244923011|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 25 11:02:03 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	0.000		0		N.D.	
96) Methacrylonitrile	0.000		0		N.D.	
97) Tetrahydrofuran	9.066	42	187		N.D.	
98) Isobutyl alcohol	0.000		0		N.D.	
99) Methyl tert-amyl ether	0.000		0		N.D.	
100) Methyl methacrylate	0.000		0		N.D.	
101) 1,4-Dioxane	0.000		0		N.D.	
102) 2-Nitropropane	0.000		0		N.D.	
104) Ethyl methacrylate	0.000		0		N.D.	
106) 1-Chlorohexane	0.000		0		N.D.	
107) cis-1,4-Dichloro-2-butene	0.000		0		N.D.	
108) Cyclohexanone	0.000		0		N.D.	
109) trans-1,4-Dichloro-2-b...	0.000		0		N.D.	
110) Pentachloroethane	0.000		0		N.D.	
111) Benzyl chloride	0.000		0m		N.D. d	
112) bis(2-Chloroisopropyl)...	16.168	45	3271		N.D.	

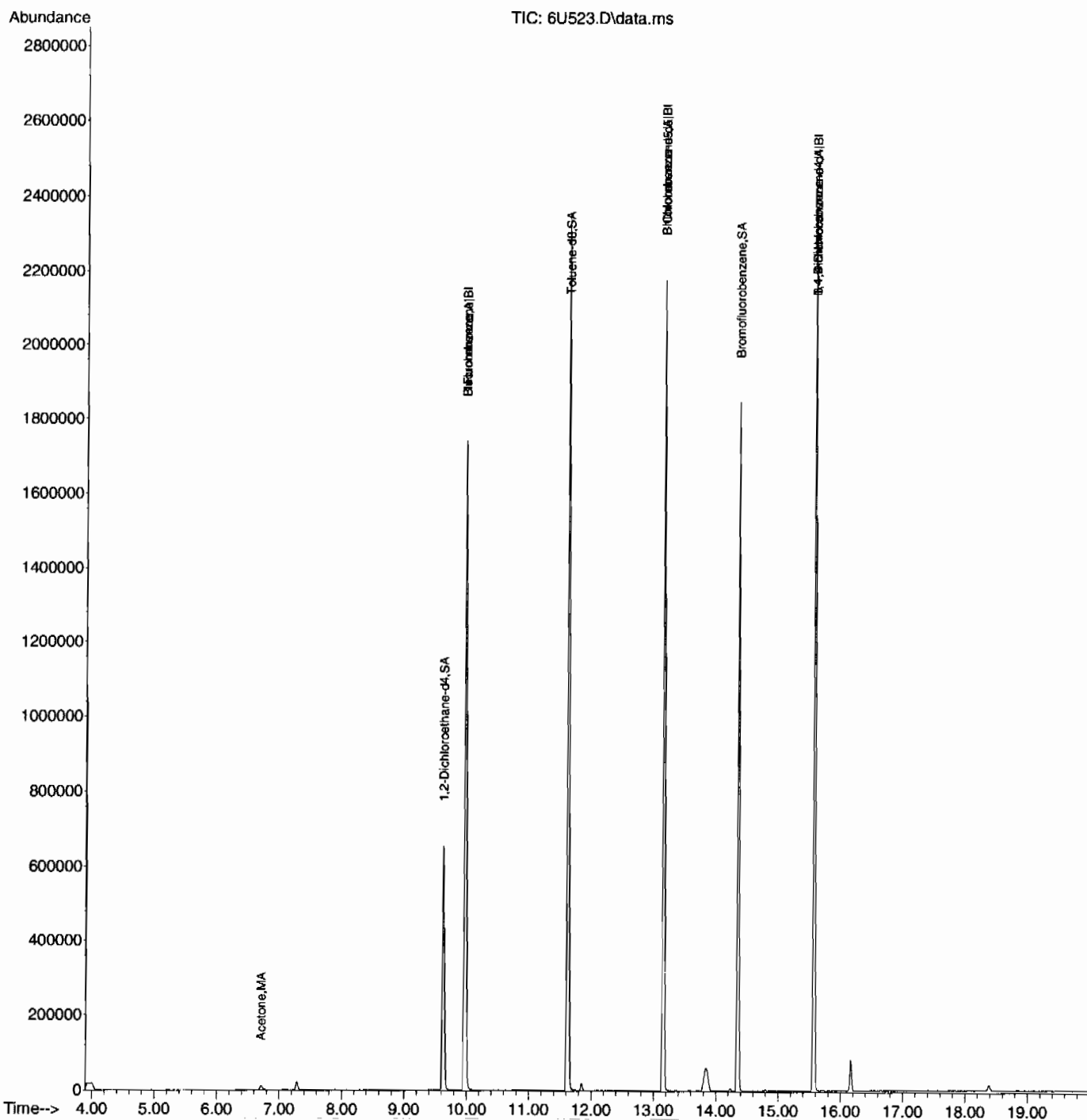
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

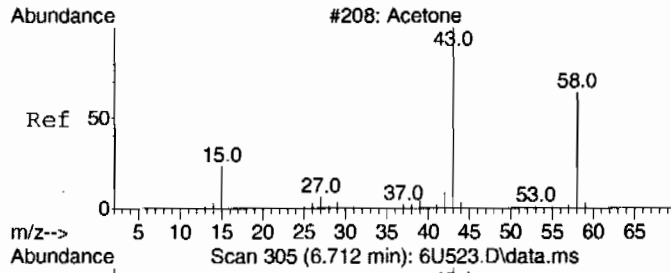
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U523.D
Acq On : 22 Jan 2010 9:05 pm
Operator : RXD1
InstName : VOA6
Sample : |244923011|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 25 11:02:03 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :





#9

Acetone

Concen: 7.82 ug/L

RT: 6.712 min Scan# 305

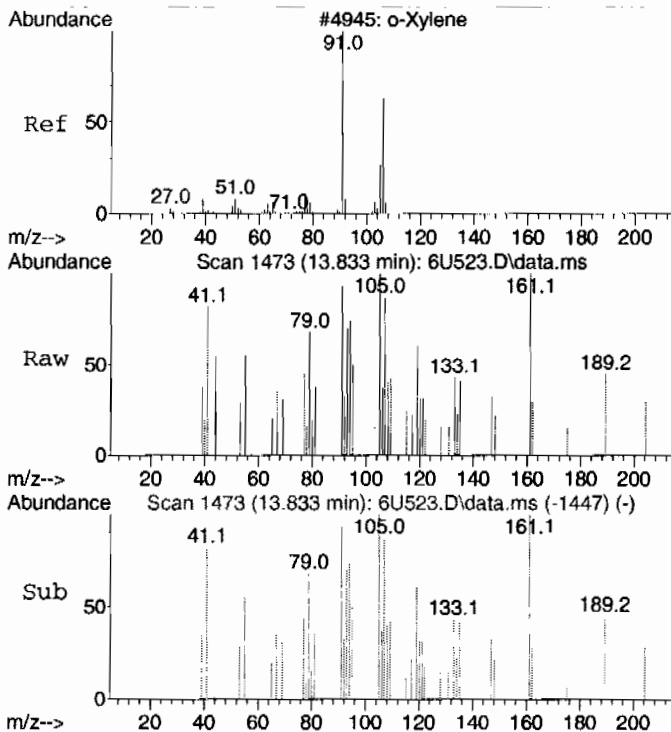
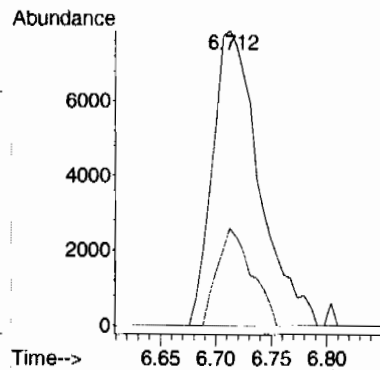
Delta R.T. 0.000 min

Lab File: 6U523.D

Acq: 22 Jan 2010 9:05 pm

Tgt Ion: 43 Resp: 23130

Ion	Ratio	Lower	Upper
43	100		
58	24.2	0.4	60.4



#56 BEFORE analyst DELETION

o-Xylene

Concen: 0.31 ug/L

RT: 13.833 min Scan# 1473

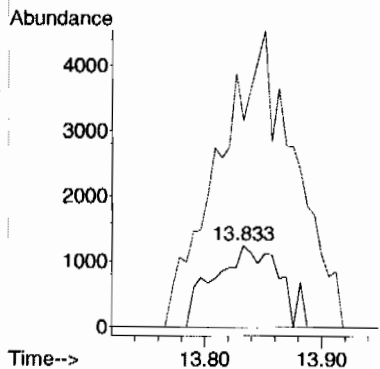
Delta R.T. 0.037 min

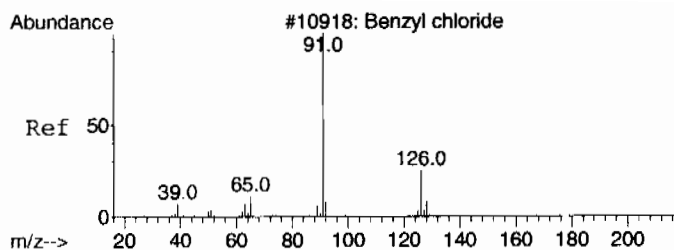
Lab File: 6U523.D

Acq: 22 Jan 2010 9:05 pm

Tgt Ion: 106 Resp: 4850

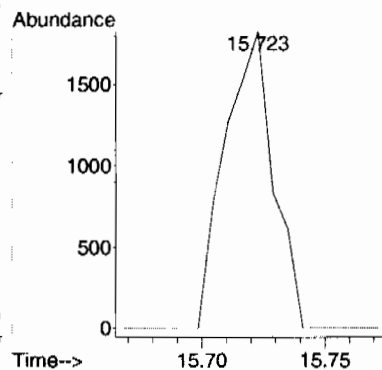
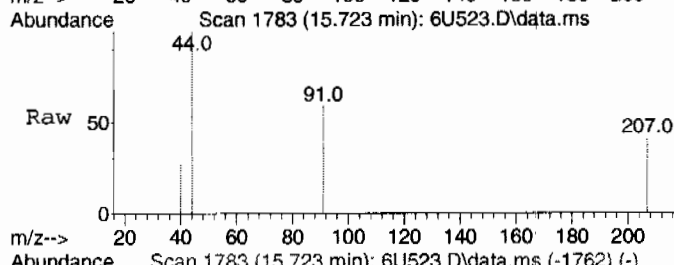
Ion	Ratio	Lower	Upper
106	100		
91	414.2	173.1	233.1#





#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 0.15 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.007 min
Lab File: 6U523.D
Acq: 22 Jan 2010 9:05 pm

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	42.9



Library Search Compound Report

GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U523.D
Acq On : 22 Jan 2010 9:05 pm
Operator : RXD1
Sample : |244923011|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U523.D
Acq On : 22 Jan 2010 9:05 pm
Operator : RXD1
Sample : |244923011|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	% Moisture: 21.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7172	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/25/2010 15:09	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/25/2010 13:14	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012510V6V112.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.27	ug/kg	0.432	1.27
74-87-3	Chloromethane	U	1.27	ug/kg	0.381	1.27
75-01-4	Vinyl chloride	U	1.27	ug/kg	0.381	1.27
74-83-9	Bromomethane	U	1.27	ug/kg	0.381	1.27
75-00-3	Chloroethane	U	1.27	ug/kg	0.381	1.27
75-69-4	Trichlorofluoromethane	U	1.27	ug/kg	0.381	1.27
67-64-1	Acetone	U	6.35	ug/kg	2.11	6.35
75-35-4	1,1-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
74-88-4	Iodomethane	U	6.35	ug/kg	2.03	6.35
75-09-2	Methylene chloride	J	4.43	ug/kg	2.54	6.35
75-15-0	Carbon disulfide	U	6.35	ug/kg	1.59	6.35
156-60-5	trans-1,2-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
75-34-3	1,1-Dichloroethane	U	1.27	ug/kg	0.381	1.27
78-93-3	2-Butanone	U	6.35	ug/kg	1.90	6.35
156-59-2	cis-1,2-Dichloroethylene	U	1.27	ug/kg	0.381	1.27
594-20-7	2,2-Dichloropropane	U	1.27	ug/kg	0.381	1.27
67-66-3	Chloroform	U	1.27	ug/kg	0.381	1.27
74-97-5	Bromochloromethane	U	1.27	ug/kg	0.419	1.27
71-55-6	1,1,1-Trichloroethane	U	1.27	ug/kg	0.381	1.27
563-58-6	1,1-Dichloropropene	U	1.27	ug/kg	0.381	1.27
56-23-5	Carbon tetrachloride	U	1.27	ug/kg	0.381	1.27
107-06-2	1,2-Dichloroethane	U	1.27	ug/kg	0.381	1.27
71-43-2	Benzene	U	1.27	ug/kg	0.381	1.27
79-01-6	Trichloroethylene	U	1.27	ug/kg	0.419	1.27
78-87-5	1,2-Dichloropropane	U	1.27	ug/kg	0.381	1.27
75-27-4	Bromodichloromethane	U	1.27	ug/kg	0.381	1.27
74-95-3	Dibromomethane	U	1.27	ug/kg	0.381	1.27
108-10-1	4-Methyl-2-pentanone	U	6.35	ug/kg	1.59	6.35
10061-01-5	cis-1,3-Dichloropropylene	U	1.27	ug/kg	0.381	1.27
108-88-3	Toluene	J	0.546	ug/kg	0.381	1.27
10061-02-6	trans-1,3-Dichloropropylene	U	1.27	ug/kg	0.381	1.27
79-00-5	1,1,2-Trichloroethane	U	1.27	ug/kg	0.381	1.27
591-78-6	2-Hexanone	U	6.35	ug/kg	1.90	6.35
142-28-9	1,3-Dichloropropane	U	1.27	ug/kg	0.381	1.27
127-18-4	Tetrachloroethylene	U	1.27	ug/kg	0.381	1.27
124-48-1	Dibromochloromethane	U	1.27	ug/kg	0.381	1.27
106-93-4	1,2-Dibromoethane	U	1.27	ug/kg	0.381	1.27
108-90-7	Chlorobenzene	U	1.27	ug/kg	0.381	1.27

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 244923008

Client ID: RE15-10-7172
Batch ID: 944501
Run Date: 01/25/2010 15:09
Prep Date: 01/25/2010 13:14
Data File: 012510V6V112.D

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

Matrix: R
%Moisture: 21.2
Project: LANL01004
SOP Ref: GL-OA-E-038
Dilution: 1
Purge Vol: 5 mL
Final Volume: 5 mL

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.27	ug/kg	0.381	1.27
179601-23-1	m,p-Xylenes	U	2.54	ug/kg	0.381	2.54
95-47-6	o-Xylene	U	1.27	ug/kg	0.381	1.27
100-42-5	Styrene	U	1.27	ug/kg	0.381	1.27
75-25-2	Bromoform	U	1.27	ug/kg	0.381	1.27
79-34-5	1,1,2,2-Tetrachloroethane	U	1.27	ug/kg	0.381	1.27
96-18-4	1,2,3-Trichloropropane	U	1.27	ug/kg	0.381	1.27
108-86-1	Bromobenzene	U	1.27	ug/kg	0.381	1.27
103-65-1	n-Propylbenzene	U	1.27	ug/kg	0.381	1.27
95-49-8	2-Chlorotoluene	U	1.27	ug/kg	0.381	1.27
98-82-8	Isopropylbenzene	U	1.27	ug/kg	0.381	1.27
108-67-8	1,3,5-Trimethylbenzene	U	1.27	ug/kg	0.381	1.27
106-43-4	4-Chlorotoluene	U	1.27	ug/kg	0.381	1.27
98-06-6	tert-Butylbenzene	U	1.27	ug/kg	0.381	1.27
95-63-6	1,2,4-Trimethylbenzene	U	1.27	ug/kg	0.381	1.27
135-98-8	sec-Butylbenzene	U	1.27	ug/kg	0.381	1.27
99-87-6	4-Isopropyltoluene	U	1.27	ug/kg	0.381	1.27
541-73-1	1,3-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27
106-46-7	1,4-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27
104-51-8	n-Butylbenzene	U	1.27	ug/kg	0.381	1.27
96-12-8	1,2-Dibromo-3-chloropropane	U	1.27	ug/kg	0.381	1.27
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	6.35	ug/kg	2.03	6.35
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.27	ug/kg	0.381	1.27
95-50-1	1,2-Dichlorobenzene	U	1.27	ug/kg	0.381	1.27

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	14.24	19.8	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V112.D
Acq On : 25 Jan 2010 3:09 pm
Operator : RXD1
InstName : VOA6
Sample : |244923008|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 26 10:09:00 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.974	96	514808	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	267028	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	71940	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	514808	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	267028	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	71940	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.633	65	171512	56.47	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	112.94%	
43) Toluene-d8	11.626	98	447710	60.47	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	120.94%	
61) Bromofluorobenzene	14.351	95	91250	65.82	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	131.64%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	4.693	50	176	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
9) Acetone	0.000		0m	N.D. d	
10) 1,1-Dichloroethylene	0.000		0	N.D.	
11) Iodomethane	0.000		0	N.D.	
12) Acetonitrile	0.000		0	N.D.	
13) Methyl acetate	0.000		0	N.D.	
14) Carbon disulfide	0.000		0	N.D.	
15) Methylene chloride	7.279	84	10335	3.49 ug/L	96
16) tert-Butyl methyl ether	0.000		0	N.D.	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.	
18) Vinyl acetate	0.000		0	N.D.	
19) 1,1-Dichloroethane	0.000		0	N.D.	
20) 2-Butanone	0.000		0	N.D.	
21) cis-1,2-Dichloroethylene	0.000		0	N.D.	
22) 2,2-Dichloropropane	0.000		0	N.D.	
23) Bromochloromethane	0.000		0	N.D.	
24) Chloroform	0.000		0	N.D.	
25) 1,1,1-Trichloroethane	0.000		0	N.D.	
26) Cyclohexane	0.000		0	N.D.	
27) 1,1-Dichloropropene	0.000		0	N.D.	
28) Carbon tetrachloride	0.000		0	N.D.	
30) 1,2-Dichloroethane	0.000		0	N.D.	
31) Benzene	0.000		0	N.D.	
32) Cyclohexene	0.000		0	N.D.	
33) n-Butyl alcohol	0.000		0	N.D.	
34) Trichloroethylene	0.000		0	N.D.	
35) 1,2-Dichloropropane	0.000		0	N.D.	
36) Methylcyclohexane	0.000		0	N.D.	
37) Dibromomethane	0.000		0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V112.D
Acq On : 25 Jan 2010 3:09 pm
Operator : RXD1
InstName : VOA6
Sample : |244923008|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 26 10:09:00 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	0.000		0	N.D.		
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699	91	3447	0.43	ug/L	99
45) trans-1,3-Dichloroprop...	0.000		0	N.D.		
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	0.000		0	N.D.		
48) 1,3-Dichloropropane	0.000		0	N.D.		
49) Tetrachloroethylene	0.000		0	N.D.		
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	0.000		0	N.D.		
52) Chlorobenzene	0.000		0	N.D.		
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	0.000		0	N.D.		
55) m,p-Xylenes	0.000		0	N.D.		
56) o-Xylene	0.000		0	N.D.		
57) Styrene	0.000		0	N.D.		
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	0.000		0	N.D.		
62) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	0.000		0	N.D.		
66) 1,3,5-Trimethylbenzene	0.000		0	N.D.		
67) 2-Chlorotoluene	0.000		0	N.D.		
68) 4-Chlorotoluene	0.000		0	N.D.		
69) tert-Butylbenzene	0.000		0	N.D.		
70) 1,2,4-Trimethylbenzene	15.156	105	383	N.D.		
71) sec-Butylbenzene	0.000		0	N.D.		
72) 4-Isopropyltoluene	15.461	119	187	N.D.		
73) 1,3-Dichlorobenzene	0.000		0	N.D.		
74) 1,4-Dichlorobenzene	0.000		0	N.D.		
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	0.000		0	N.D.		
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.289	128	811	N.D.		
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	0.000		0	N.D.		
88) Allyl chloride	0.000		0	N.D.		
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	0.000		0	N.D.		
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	0.000		0	N.D.		
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V112.D
Acq On : 25 Jan 2010 3:09 pm
Operator : RXD1
InstName : VOA6
Sample : |244923008|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 26 10:09:00 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T. QIon	Response	Conc Units	Dev(Min)
95) Propionitrile	0.000	0	N.D.	
96) Methacrylonitrile	0.000	0	N.D.	
97) Tetrahydrofuran	0.000	0	N.D.	
98) Isobutyl alcohol	0.000	0	N.D.	
99) Methyl tert-amyl ether	0.000	0	N.D.	
100) Methyl methacrylate	0.000	0	N.D.	
101) 1,4-Dioxane	0.000	0	N.D.	
102) 2-Nitropropane	0.000	0	N.D.	
104) Ethyl methacrylate	0.000	0	N.D.	
106) 1-Chlorohexane	0.000	0	N.D.	
107) cis-1,4-Dichloro-2-butene	0.000	0	N.D.	
108) Cyclohexanone	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	0	N.D.	
110) Pentachloroethane	0.000	0	N.D.	
111) Benzyl chloride	0.000	0m	N.D. d	
112) bis(2-Chloroisopropyl)...	0.000	0m	N.D. d	

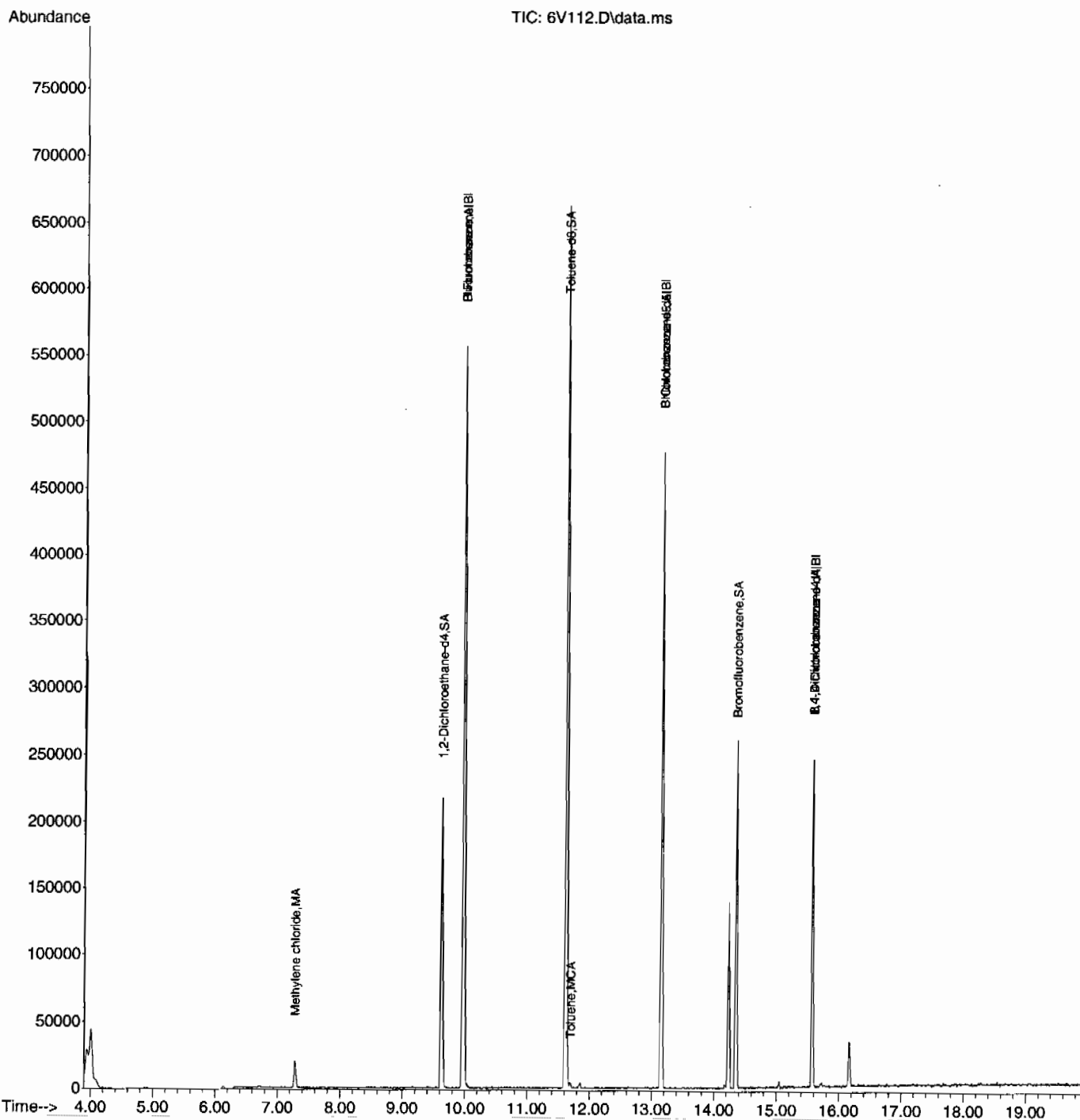
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

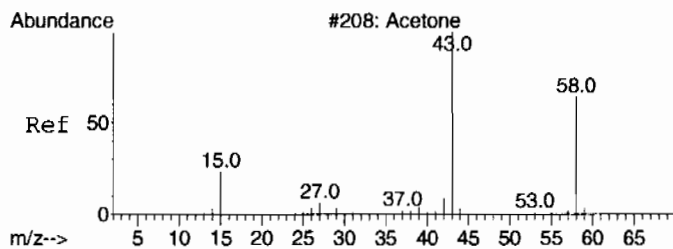
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V112.D
Acq On : 25 Jan 2010 3:09 pm
Operator : RXD1
InstName : VOA6
Sample : |244923008|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 26 10:09:00 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

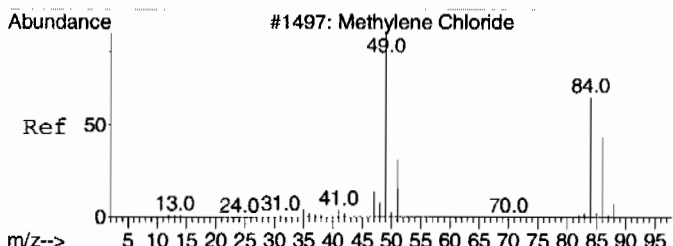
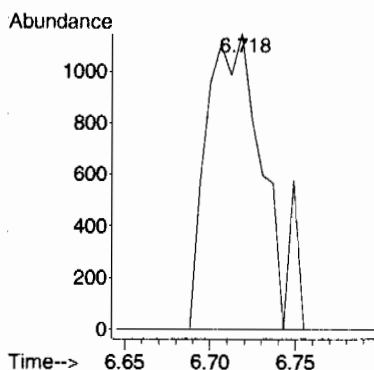
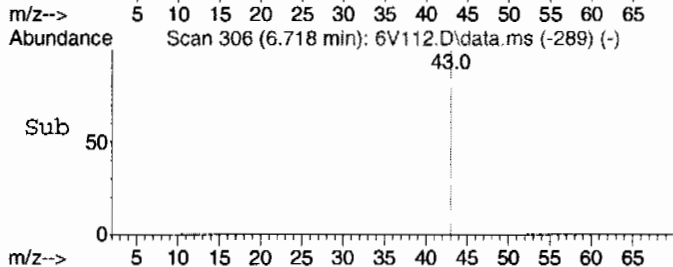
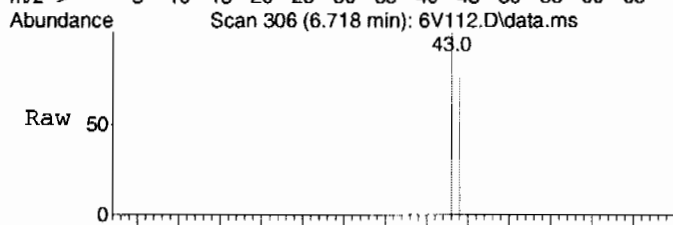
SubList :





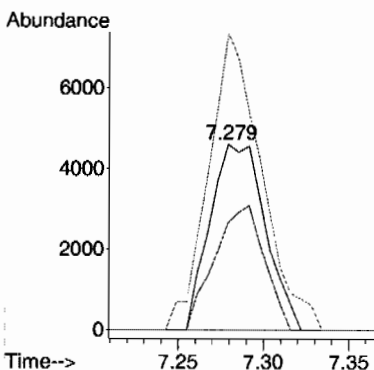
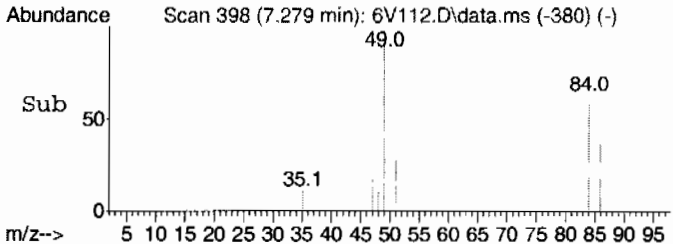
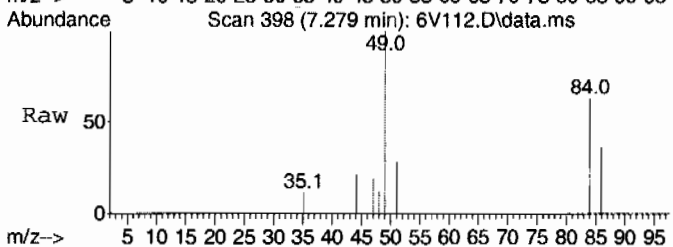
#9 BEFORE analyst DELETION
Acetone
Concen: 2.86 ug/L
RT: 6.718 min Scan# 306
Delta R.T. 0.006 min
Lab File: 6V112.D
Acq: 25 Jan 2010 3:09 pm

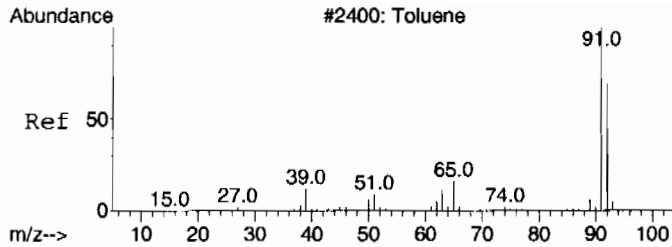
Tgt Ion: 43 Resp: 2674
Ion Ratio Lower Upper
43 100
58 0.0 0.4 60.4#



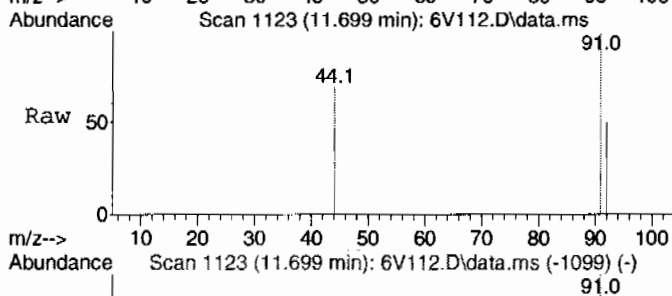
#15
Methylene chloride
Concen: 3.49 ug/L
RT: 7.279 min Scan# 398
Delta R.T. -0.006 min
Lab File: 6V112.D
Acq: 25 Jan 2010 3:09 pm

Tgt Ion: 84 Resp: 10335
Ion Ratio Lower Upper
84 100
86 60.2 35.5 95.5
49 153.8 120.2 180.2



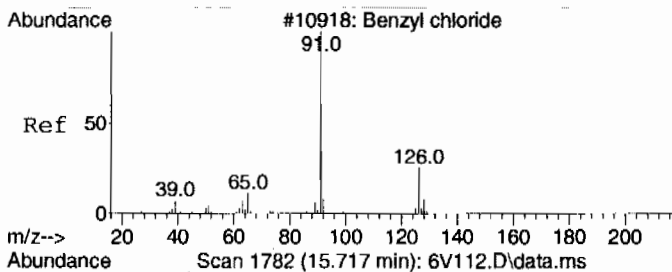
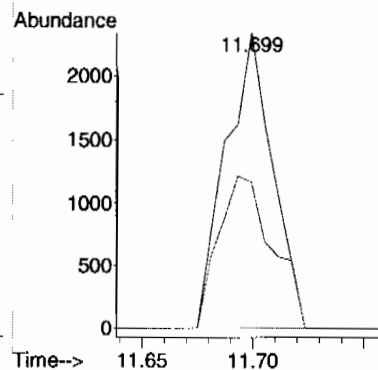
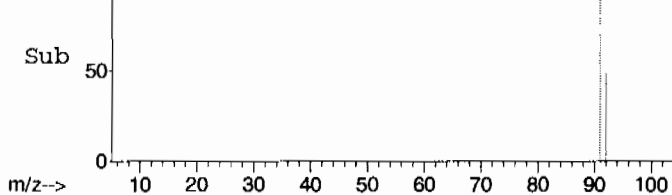


#44
Toluene
Concen: 0.43 ug/L
RT: 11.699 min Scan# 1123
Delta R.T. 0.000 min
Lab File: 6V112.D
Acq: 25 Jan 2010 3:09 pm

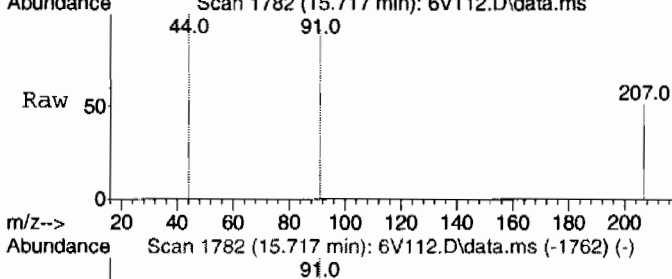


Tgt Ion: 91 Resp: 3447

Ion	Ratio	Lower	Upper
91	100		
92	60.0	29.4	89.4

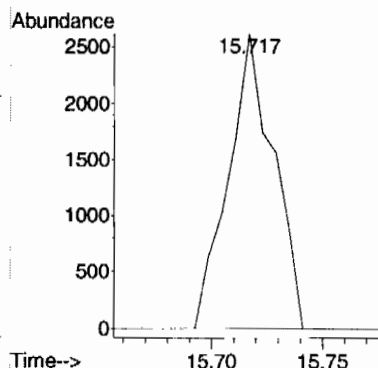
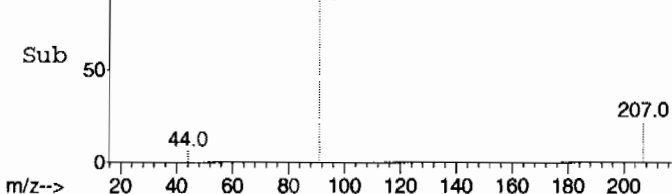


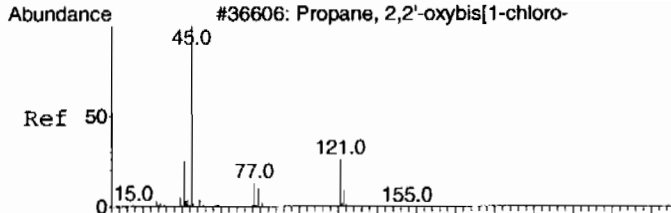
#111 BEFORE analyst DELETION
Benzyl chloride
Concen: 1.99 ug/L
RT: 15.717 min Scan# 1782
Delta R.T. 0.001 min
Lab File: 6V112.D
Acq: 25 Jan 2010 3:09 pm



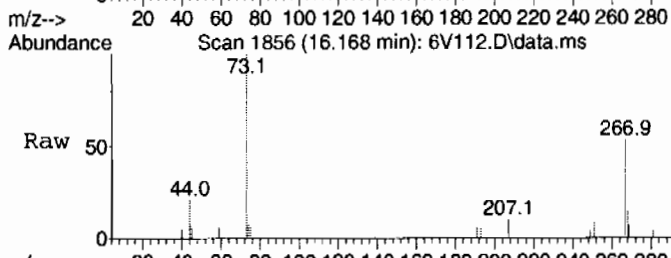
Tgt Ion: 91 Resp: 3708

Ion	Ratio	Lower	Upper
91	100		
126	0.0	0.0	52.6
65	0.0	0.0	42.9

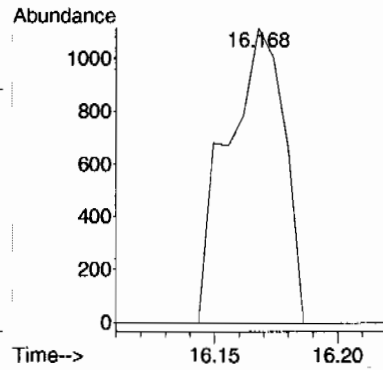
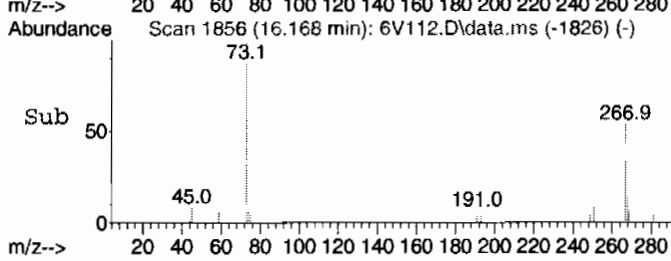




#112 BEFORE analyst DELETION
 bis(2-Chloroisopropyl)ether
 Concen: 3.29 ug/L
 RT: 16.168 min Scan# 1856
 Delta R.T. 0.055 min
 Lab File: 6V112.D
 Acq: 25 Jan 2010 3:09 pm



Tgt Ion: 45 Resp: 1797
 Ion Ratio Lower Upper
 45 100
 121 0.0 0.0 53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V112.D
Acq On : 25 Jan 2010 3:09 pm
Operator : RXD1
Sample : |244923008|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

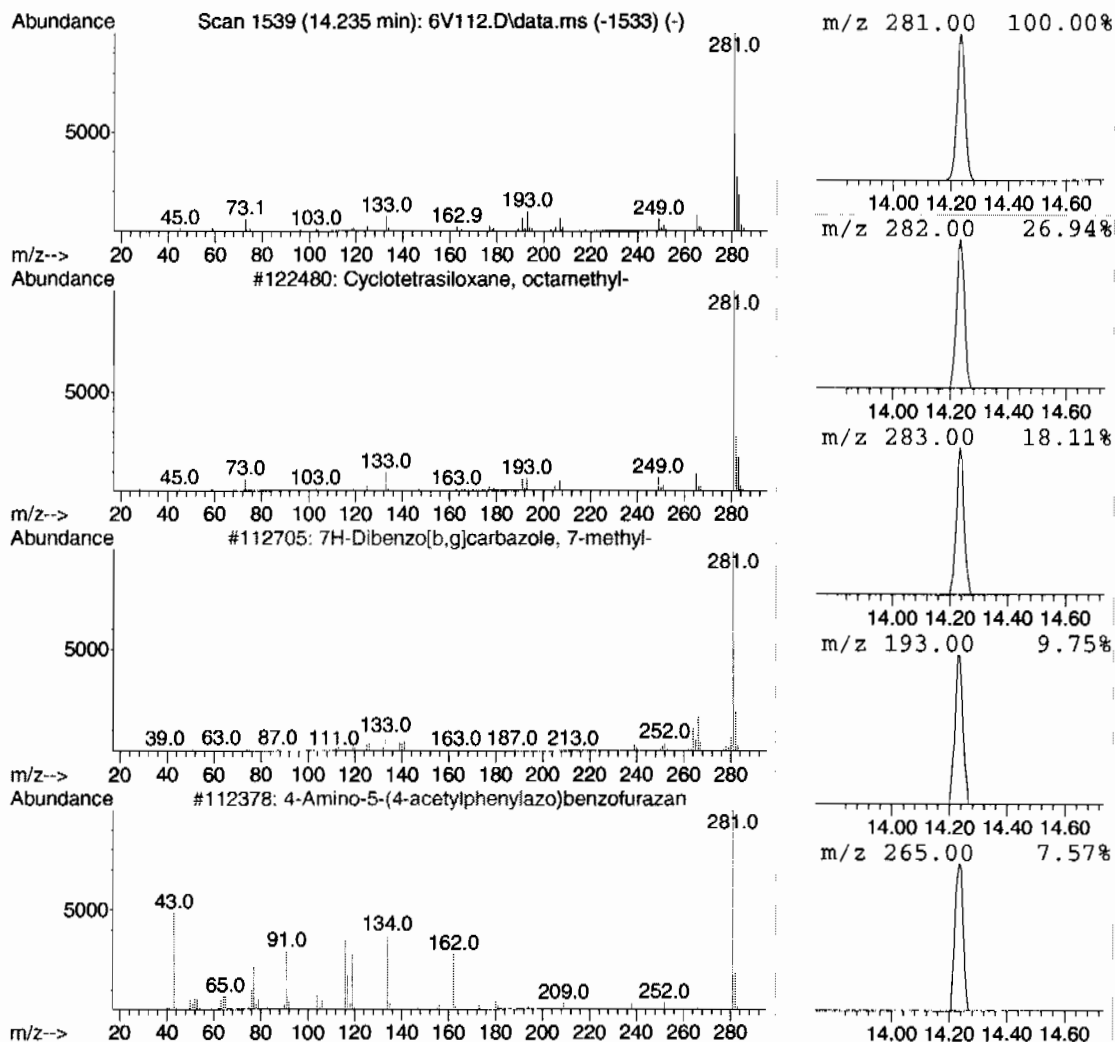
SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.235	15.56 ug/L	255955	B Chlorobenzene-d5	13.156

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2			7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
3			4-Amino-5-(4-acetylphenylazo)ben...	281	C14H11N5O2	166766-09-2	50
4			5-(p-Aminophenyl)-4-(p-tolyl)-2-...	281	C16H15N3S	094460-46-5	45
5			5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	45



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V112.D
Acq On : 25 Jan 2010 3:09 pm
Operator : RXD1
Sample : |244923008|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown siloxane	14.235	15.6	ug/L	255955	4	13.156	822279	50.0

Standards

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

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

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

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOA6

GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Last Update : Mon Dec 14 12:44:52 2009

Integrator : (RTE Integrator)

Response via : Initial Calibration

Cal Lvl:8 Amt:-1 Last Updated with: C:\msdchem\1\DATA\121009V6\60414.D

Injection Date	Mix	Calibration File
10 Dec 2009 2:49 pm	A	C:\msdchem\1\DATA\121009V6\60414.D

Cal Lvl:1 Amt:1 Last Updated with: C:\msdchem\1\DATA\121009V6\60418.D

Injection Date	Mix	Calibration File
10 Dec 2009 3:17 pm	A	C:\msdchem\1\DATA\121009V6\60415.D
10 Dec 2009 4:40 pm	B	C:\msdchem\1\DATA\121009V6\60418.D

Cal Lvl:2 Amt:2 Last Updated with: C:\msdchem\1\DATA\121009V6\60419.D

Injection Date	Mix	Calibration File
10 Dec 2009 11:34 am	A	C:\msdchem\1\DATA\121009V6\60407.D
10 Dec 2009 5:08 pm	B	C:\msdchem\1\DATA\121009V6\60419.D

Cal Lvl:3 Amt:5 Last Updated with: C:\msdchem\1\DATA\121009V6\60420.D

Injection Date	Mix	Calibration File
10 Dec 2009 12:02 pm	A	C:\msdchem\1\DATA\121009V6\60408.D
10 Dec 2009 5:36 pm	B	C:\msdchem\1\DATA\121009V6\60420.D

Cal Lvl:4 Amt:10 Last Updated with: C:\msdchem\1\DATA\121009V6\60421.D

Injection Date	Mix	Calibration File
10 Dec 2009 12:30 pm	A	C:\msdchem\1\DATA\121009V6\60409.D
10 Dec 2009 6:04 pm	B	C:\msdchem\1\DATA\121009V6\60421.D

Cal Lvl:5 Amt:20 Last Updated with: C:\msdchem\1\DATA\121009V6\60422.D

Injection Date	Mix	Calibration File
10 Dec 2009 12:58 pm	A	C:\msdchem\1\DATA\121009V6\60410.D
10 Dec 2009 6:32 pm	B	C:\msdchem\1\DATA\121009V6\60422.D

Cal Lvl:6 Amt:50 Last Updated with: C:\msdchem\1\DATA\121009V6\60423.D

Injection Date	Mix	Calibration File
10 Dec 2009 1:26 pm	A	C:\msdchem\1\DATA\121009V6\60411.D
10 Dec 2009 7:00 pm	B	C:\msdchem\1\DATA\121009V6\60423.D

Cal Lvl:7 Amt:100 Last Updated with: C:\msdchem\1\DATA\121009V6\60424.D

Injection Date	Mix	Calibration File
10 Dec 2009 1:54 pm	A	C:\msdchem\1\DATA\121009V6\60412.D
10 Dec 2009 7:28 pm	B	C:\msdchem\1\DATA\121009V6\60424.D

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
2)MA	Dichlorodifluoromethane	0.2122344	0.2232812 0.2116585	0.2246314	0.2792048	0.2086322	0.2094071	0.2241	AVRG		11.2099
3)MPA	Chloromethane	0.3018661	0.3377571 0.3004831	0.3107589	0.3220134	0.2922306	0.2928066	0.3083	AVRG		5.3998
4)MCA	Vinyl chloride	0.2701427	0.2854050 0.2661185	0.2798535	0.2793538	0.2574013	0.2562340	0.2706	AVRG		4.2191
5)MA	Bromomethane	0.2055878	0.2082186 0.2001872	0.2035578	0.2044313	0.1953195	0.1956995	0.2019	AVRG		2.4550
6)MA	Chloroethane	0.2053181	0.1952824 0.2012262	0.1986611	0.2015154	0.2002854	0.2038765	0.2009	AVRG		1.6487
7)MA	Trichlorofluoromethane	0.3997047	0.3941850 0.3884566	0.4116021	0.3975569	0.3941101	0.3917678	0.3968	AVRG		1.8892
8)MA	Ethyl ether	0.2476936	0.2981892 0.2357482	0.2773795	0.2492815	0.2442189	0.2520515	0.2578	AVRG		8.5179
9)MA	Acetone		0.1105217	0.0983102	0.0841360	0.0810798	0.0807655	0.0910	AVRG		14.3843
10)MCA	1,1-Dichloroethylene		0.3796793 0.3524014	0.3629430	0.3459163	0.3753148	0.3696478	0.3660	AVRG		3.4999
11)MA	Iodomethane	0.3943182	0.4027922 0.3607777	0.4129224	0.3859253	0.4079415	0.3958907	0.3944	AVRG		4.3937
12)MA	Acetonitrile	0.0374099	0.0381593 0.0355251	0.0364691	0.0362921	0.0381896	0.0389799	0.0373	AVRG		3.3243
13)MA	Methyl acetate	0.2119610	0.2062288 0.1961051	0.1959205	0.2011061	0.2042341	0.2165080	0.2046	AVRG		3.7782
14)MA	Carbon disulfide	0.7342336	0.7427821 0.6535432	0.7701791	0.7148046	0.7816045	0.7437036	0.7344	AVRG		5.7197
15)MA	Methylene chloride	0.2650295	0.2504097	0.3586873	0.2965955	0.2843227	0.2716573	0.2878	AVRG		13.2697
16)MA	tert-Butyl methyl ether	0.7178414	0.7916862 0.6912656	0.7640083	0.6846200	0.7126300	0.7280524	0.7272	AVRG		5.3019

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m1(x) + m2(xE2)$

b	Compound ml m2	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
17)MA	trans-1,2-Dichloroethylene	0.3776554	0.3683886 0.3524416	0.4015524	0.3537796	0.3876870	0.3732115	0.3735	AVRG		4.7187
18)MA	Vinyl acetate	0.5608365	0.4905047 0.5259008	0.5108814	0.5558842	0.5450210	0.5774248	0.5381	AVRG		5.6690
19)MPA	1,1-Dichloroethane	0.4689507	0.4735992 0.4394961	0.4838472	0.4549248	0.4839184	0.4670680	0.4674	AVRG		3.4037
20)MA	2-Butanone	0.1105573	0.1213262 0.1040462	0.1148871	0.1185865	0.1150297	0.1212154	0.1151	AVRG		5.3934
21)MA	cis-1,2-Dichloroethylene	0.4182469	0.4195003 0.3964212	0.4236643	0.4068955	0.4278609	0.4198225	0.4161	AVRG		2.5915
22)MA	2,2-Dichloropropane	0.3501550	0.3275044 0.3303592	0.3362806	0.3210795	0.3478993	0.3436341	0.3367	AVRG		3.2613
23)MA	Bromochloromethane	0.1316678	0.1243742 0.1258530	0.1254803	0.1274374	0.1331449	0.1291842	0.1282	AVRG		2.5792
24)MCA	Chloroform	0.4357051	0.4327655 0.4088180	0.4517753	0.4320750	0.4466964	0.4384843	0.4352	AVRG		3.1530
25)MA	1,1,1-Trichloroethane	0.3766651	0.3545665 0.3564585	0.3781073	0.3429955	0.3752445	0.3724629	0.3652	AVRG		3.7646
26)MA	Cyclohexane	0.4872574	0.4658020 0.4538365	0.4746435	0.4533501	0.4920645	0.4789968	0.4723	AVRG		3.2424
27)MA	1,1-Dichloropropene	0.3373146	0.3267449 0.3157520	0.3460611	0.3219637	0.3460734	0.3330388	0.3324	AVRG		3.5086
28)MA	Carbon tetrachloride	0.3318274	0.3260108 0.3186325	0.3191166	0.3100868	0.3287754	0.3271430	0.3231	AVRG		2.3243
29)SA	1,2-Dichloroethane-d4	0.2962702	0.2993517 0.2883697	0.2966709	0.2953114	0.2955918	0.2934623	0.2950	AVRG		1.1588
30)MA	1,2-Dichloroethane	0.3560932	0.3729201 0.3353587	0.3560339	0.3576492	0.3613600	0.3581947	0.3568	AVRG		3.1212
31)MA	Benzene	1.0999736 0.9930403	1.0415992 0.9179240	1.0414520	1.0006924	1.0382904	1.0154085	1.0185	AVRG		5.1392

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
32)MA	Cyclohexene	0.5019296	0.4667640	0.4824499	0.4619734	0.5039427	0.5027549	0.4845	AVRG		3.7748
33)MA	n-Butyl alcohol	13494	22120	45316	125907	295915	713263		LINR	#	0.9997
	-0.0092 0.0086 0.00	1762453	3606257								
34)MA	Trichloroethylene		0.2695070	0.2586517	0.2446072	0.2599620	0.2537951				
		0.2551409	0.2379508					0.2542	AVRG		4.0764
35)MCA	1,2-Dichloropropane		0.2681400	0.2688681	0.2668460	0.2754567	0.2731595				
		0.2733027	0.2586003					0.2692	AVRG		2.0947
36)MA	Methylcyclohexane		0.4399298	0.4571718	0.4146793	0.4625598	0.4491111				
		0.4528596	0.4205278					0.4424	AVRG		4.1597
37)MA	Dibromomethane		0.1361965	0.1387731	0.1434422	0.1437514	0.1473206				
		0.1493533	0.1421583					0.1430	AVRG		3.1875
38)MA	Bromodichloromethane		0.2757345	0.2864166	0.2900783	0.3029399	0.3149084				
		0.3274031	0.3128155					0.3015	AVRG		6.0602
39)MA	2-Chloroethylvinyl ether		0.1437961	0.1445594	0.1936062	0.1634662	0.1718516				
		0.1727019	0.1640503					0.1649	AVRG		10.4918
40)MA	cis-1,3-Dichloropropylene		0.3609206	0.3482530	0.3701967	0.3849783	0.3963204				
		0.4096143	0.3927613					0.3804	AVRG		5.6760
42)MA	4-Methyl-2-pentanone		0.1241555	0.1169303	0.1298552	0.1358418	0.1424309				
		0.1368731	0.1328924					0.1313	AVRG		6.5061
43)SA	Toluene-d8		1.4063658	1.4037116	1.3758963	1.3859025	1.3803183				
		1.3826016	1.3692128					1.3863	AVRG		1.0011
44)MCA	Toluene		1.6072192	1.5996153	1.4745282	1.5061227	1.4893060				
		1.4288332	1.3239846					1.4899	AVRG		6.5737
45)MA	trans-1,3-Dichloropropyl		0.4513267	0.4482156	0.4467542	0.4897035	0.5151138				
		0.5194597	0.5012892					0.4817	AVRG		6.7030
46)MA	1,1,2-Trichloroethane		0.2526383	0.2452014	0.2379916	0.2436152	0.2524711				
		0.2456732	0.2379460					0.2451	AVRG		2.4449
47)MA	2-Hexanone		0.2341341	0.2145162	0.2349889	0.2425614	0.2670615				
		0.2519791	0.2397697					0.2407	AVRG		6.7580

Response Factor Report VOA6

GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Last Update : Mon Dec 14 12:44:52 2009

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
48)MA	1,3-Dichloropropane	0.5182872	0.5277262 0.4833653	0.5198835	0.5294688	0.5366747	0.5355168	0.5216	AVRG		3.4972
49)MA	Tetrachloroethylene	0.2867699	0.3219671 0.2694709	0.3198263	0.2944521	0.3145210	0.3003462	0.3011	AVRG		6.3847
50)MA	Dibromochloromethane	0.3485497	0.2618656 0.3433980	0.2782664	0.2837730	0.3144298	0.3301487	0.3086	AVRG		11.0874
51)MA	1,2-Dibromoethane	0.3063965	0.2847395 0.2970674	0.2904709	0.2867757	0.2994790	0.3035953	0.2955	AVRG		2.8305
52)MPA	Chlorobenzene	0.9505480	0.9700730 0.8950379	1.0085837	0.9725408	0.9735874	0.9741070	0.9635	AVRG		3.6020
53)MA	1,1,1,2-Tetrachloroethane	0.3532770	0.2998710 0.3340249	0.3281956	0.3291800	0.3414970	0.3486527	0.3335	AVRG		5.2827
54)MCA	Ethylbenzene	1.6174875	1.6835128 1.4859878	1.6688459	1.6127534	1.7068395	1.6597100	1.6336	AVRG		4.4888
55)MA	m,p-Xylenes	0.6551259	0.6638384 0.6036628	0.6584253	0.6422963	0.6747784	0.6753009	0.6533	AVRG		3.7859
56)MA	o-Xylene	0.6530015	0.6611161 0.6096110	0.6142579	0.6238887	0.6636513	0.6637868	0.6413	AVRG		3.8053
57)MA	Styrene	1.0764753	0.9809620 1.0120490	0.9430807	0.9912570	1.0599807	1.0877000	1.0216	AVRG		5.3137
59)MPA	Bromoform	0.4129312	0.2977739 0.4168101	0.3003833	0.3111675	0.3463784	0.3890668	0.3535	AVRG		14.8681
60)MA	Isopropylbenzene	3.0509839	3.0934768 2.7744449	3.0640796	2.9850060	3.1810630	3.1851114	3.0477	AVRG		4.5944
61)SA	Bromofluorobenzene	0.9668800	0.9796877 0.9391525	0.9668644	0.9652127	0.9606038	0.9666108	0.9636	AVRG		1.2700
62)MPA	1,1,2,2-Tetrachloroethane	0.7003404	0.6497580 0.6714973	0.6785578	0.6772856	0.6866139	0.7187445	0.6833	AVRG		3.2069
63)MA	1,2,3-Trichloropropane	0.1964037	0.1611670 0.1907103	0.1973369	0.1998901	0.1957398	0.2040378	0.1922	AVRG		7.4232

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$, $y = b + m1(x) + m2(xE2)$

Page	b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
208 of 1503	64)MA	Bromobenzene	0.7696909	0.8413387 0.7077793	0.8187846	0.7620473	0.7933353	0.7923493	0.7836	AVRG		5.5012
	65)MA	n-Propylbenzene	3.5156399	3.7621957 3.1628154	3.6484124	3.5249531	3.7005892	3.6840295	3.5712	AVRG		5.6458
	66)MA	1,3,5-Trimethylbenzene	2.6038213	2.7105701 2.3810487	2.6419943	2.5446442	2.7125708	2.6942284	2.6127	AVRG		4.5671
	67)MA	2-Chlorotoluene	0.7510140	0.7793660 0.6930984	0.7646150	0.7553678	0.7855246	0.7866550	0.7594	AVRG		4.2785
	68)MA	4-Chlorotoluene	2.1634039	2.3003674 1.9979894	2.2344153	2.1711396	2.2741567	2.2514575	2.1990	AVRG		4.6368
	69)MA	tert-Butylbenzene	0.5865540	0.6374780 0.5500763	0.5556470	0.5469296	0.5969844	0.5948356	0.5812	AVRG		5.6311
	70)MA	1,2,4-Trimethylbenzene	2.7008576	2.9025961 2.4985635	2.8455061	2.7107079	2.8226597	2.7878638	2.7527	AVRG		4.8343
	71)MA	sec-Butylbenzene	3.5077111	3.6647193 3.2018291	3.5222670	3.4220850	3.6614145	3.6096166	3.5128	AVRG		4.6427
	72)MA	4-Isopropyltoluene	2.8893721	3.0039538 2.6637164	2.8435132	2.7611634	2.9810390	2.9650620	2.8725	AVRG		4.3745
	73)MA	1,3-Dichlorobenzene	1.4810019	1.6471735 1.3887383	1.5794464	1.5207738	1.5572737	1.5462071	1.5315	AVRG		5.3050
	74)MA	1,4-Dichlorobenzene	1.5004775	1.7340242 1.4068187	1.6203186	1.5941590	1.5891533	1.5468635	1.5703	AVRG		6.4936
	75)MA	n-Butylbenzene	2.7968535	2.8738367 2.5716912	2.7836913	2.6970713	2.9236329	2.8680236	2.7878	AVRG		4.3273
	76)MA	1,2-Dichlorobenzene	1.4471145	1.5622316 1.3570774	1.5360911	1.4861645	1.5057432	1.4982778	1.4847	AVRG		4.5168
	77)MA	1,2-Dibromo-3-chloroprop	0.1493914	0.1010395	0.1073264	0.1228811	0.1269645	0.1400227	0.1246	AVRG		14.8610
	78)MA	1,2,4-Trichlorobenzene	1.0959346	1.3000887 1.0145764	1.1132870	1.0888211	1.1105460	1.0936020	1.1167	AVRG		7.8283

Response Factor Report VOA6
GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Last Update : Mon Dec 14 12:44:52 2009

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m_1(x) + m_2(xE_2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
279)MA	Hexachlorobutadiene	0.6922023	0.7926004 0.6317986	0.7317473	0.7046472	0.7222174	0.6878052	0.7090	AVRG		6.9077
30)MA	Naphthalene	2.2616887	2.6711850 2.1625424	1.9890184	2.1503816	2.2126319	2.2623259	2.2443	AVRG		9.3561
81)MA	1,2,3-Trichlorobenzene	0.9162040	1.1336407 0.8601809	0.9105267	0.8813930	0.9286071	0.9152550	0.9351	AVRG		9.6948
83)B	Chlorotrifluoroethylene	0.1881216	0.1490342	0.1816961	0.1788430	0.1898346	0.1848474	0.1787	AVRG		8.4468
84)B	2-Chloro-1,1,1-trifluoro	0.3264422	0.2824525 0.2908168	0.2879324	0.2875075	0.3110905	0.2998157	0.2980	AVRG		5.2851
85)B	Acrolein	0.0395317	0.0356113 0.0363122	0.0359365	0.0356931	0.0348688	0.0373620	0.0365	AVRG		4.2451
86)B	Trichlorotrifluoroethane	0.0922475	0.1000504 0.0891276	0.0967221	0.0905673	0.0939880	0.0911033	0.0934	AVRG		4.1117
87)B	Isopropyl Alcohol	0.0215827	0.0196008 0.0194556	0.0187955	0.0177190	0.0189093	0.0196533	0.0194	AVRG		6.0674
88)B	Allyl chloride	0.4383010	0.4550005 0.4124570	0.4406552	0.4273726	0.4484022	0.4377811	0.4371	AVRG		3.1871
89)B	tert-Butyl Alcohol	0.0330042	0.0290000 0.0290688	0.0295413	0.0276804	0.0285352	0.0302175	0.0296	AVRG		5.7625
90)B	Acrylonitrile	0.0978829	0.0914371 0.0898519	0.0936750	0.0907006	0.0926063	0.0939948	0.0929	AVRG		2.8817
91)B	Isopropyl ether	1.0445233	0.9702112 0.9845102	0.9702464	0.9587353	1.0107760	1.0272262	0.9952	AVRG		3.2798
92)B	2-Chloro-1,3-butadiene	0.3994571	0.3469645 0.3937049	0.3501799	0.3461045	0.3820921	0.3856556	0.3720	AVRG		6.2913
93)B	Ethyl tert-butyl ether	0.8972627	0.8171915 0.8476037	0.8171509	0.8112386	0.8577802	0.8677665	0.8451	AVRG		3.7754
94)B	Ethyl acetate	0.2700764	0.2945890 0.2417925	0.2773388	0.2549074	0.2572784	0.2613638	0.2653	AVRG		6.4659

For Linear Calibration: $y = \text{concentration ratio}$, $x = \text{response ratio}$. $y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r ²
95)B	Propionitrile	0.0384242	0.0353437 0.0354602	0.0364254	0.0339544	0.0363230	0.0367154	0.0361	AVRG		3.8393
96)B	Methacrylonitrile	0.1675008	0.1506741 0.1527979	0.1625637	0.1539664	0.1616947	0.1620017	0.1587	AVRG		3.9332
97)B	Tetrahydrofuran	0.0864598	0.0896706 0.0775202	0.0877985	0.0827308	0.0816822	0.0841379	0.0843	AVRG		4.8691
98)B	Isobutyl alcohol	0.0106873	0.0090225 0.0093963	0.0095742	0.0089893	0.0091716	0.0098651	0.0095	AVRG	#	6.2815
99)B	Methyl tert-amyl ether	0.7785884	0.6722986 0.7250961	0.6932561	0.6933257	0.7362331	0.7538752	0.7218	AVRG		5.2294
100)B	Methyl methacrylate	0.1644996	0.1431557 0.1476097	0.1466455	0.1462899	0.1539413	0.1602513	0.1518	AVRG		5.2882
101)B	1,4-Dioxane	0.0024191	0.0024798 0.0022436	0.0024445	0.0023123	0.0022142	0.0023018	0.0023	AVRG	#	4.4001
102)B	2-Nitropropane	831550	11509 1561467	24133	59867	127906	294691		LINR		0.9983
104)B	Ethyl methacrylate	0.4180230	0.3499429 0.3693288	0.3833601	0.3903187	0.4136001	0.4152529	0.3914	AVRG		6.6315
106)B	1-Chlorohexane	0.7159302	0.6241483 0.7024941	0.6720327	0.6761025	0.7303460	0.7123984	0.6905	AVRG		5.2246
107)B	cis-1,4-Dichloro-2-buten	0.2492203	0.2250675 0.2345680	0.2295042	0.2248694	0.2388553	0.2451969	0.2353	AVRG		4.0759
108)B	Cyclohexanone	0.0212890	0.0183082 0.0197798	0.0189898	0.0173811	0.0187546	0.0202618	0.0193	AVRG		6.7576
109)B	trans-1,4-Dichloro-2-but	0.2381868	0.2140663 0.2222904	0.2271296	0.2192916	0.2301195	0.2313238	0.2261	AVRG		3.5950
110)B	Pentachloroethane	0.3483537	0.3198791 0.3218054	0.3046995	0.3480490	0.3529256	0.3443905	0.3343	AVRG		5.5636
111)B	Benzyl chloride	1.3269105	1.2676355 1.1561169	1.3106652	1.2969449	1.3396149	1.3571593	1.2936	AVRG		5.1997

Response Factor Report VOA6

GEL Laboratories, LLC

Method File : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Last Update : Mon Dec 14 12:44:52 2009

Integrator : (RTE Integrator)

Response via : Initial Calibration

For Linear Calibration: $y = \text{concentration ratio}, x = \text{response ratio. } y = b + m1(x) + m2(xE2)$

b	Compound	8 6	1 7	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
m1	m2										
m2)B	bis(2-Chloroisopropyl)et	0.3888848	0.3923756	0.3593955	0.3612045	0.3881230		0.3796	AVRG		4.5878
		0.4024800	0.3645249								

1#) = Out of Range

Continuing Calibration Summary

Client SDG: 10-1287

Instrument ID: VOA6.1

Injection Date 10-DEC-09 15:45

Data File: 121009V6\60416.D

Init. Cal. Date(s) 10-DEC-09 11:34 - 10-DEC-09 19:2

Lab Sample ID W6VM091210-11

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S 1,2-Dichloroethane-d4	0.295	0.28522		.01		-3.31525	30		Averaged	
S Toluene-d8	1.3863	1.37374		.01		-0.90601	30		Averaged	
S Bromofluorobenzene	0.9636	0.96409		.01		0.05085	30		Averaged	
Dichlorodifluoromethane	0.2241	0.17489		.01		-21.95895	30		Averaged	
Chloromethane	0.3083	0.24044		.1		-22.01103	30		Averaged	spcc
Vinyl chloride	0.2706	0.24311		.01		-10.15891	20		Averaged	ccc
Bromomethane	0.2019	0.18278		.01		-9.47003	30		Averaged	
Chloroethane	0.2009	0.18563		.01		-7.6008	30		Averaged	
Trichlorofluoromethane	0.3968	0.372		.01		-6.25	30		Averaged	
Ethyl ether	0.2578	0.2312		.01		-10.31808	30		Averaged	
Acetone	0.091	0.07078		.01		-22.21978	40		Averaged	
1,1-Dichloroethylene	0.366	0.34543		.01		-5.62022	20		Averaged	ccc
Iodomethane	0.3944	0.36435		.01		-7.61917	30		Averaged	
Acetonitrile	0.0373	0.03702		.01		-0.75067	30		Averaged	
Carbon disulfide	0.7344	0.7168		.01		-2.39651	30		Averaged	
Methyl acetate	0.2046	0.20258		.01		-0.98729	40		Averaged	
Methylene chloride	0.2878	0.25012		.01		-13.09243	30		Averaged	
tert-Butyl methyl ether	0.7272	0.68144		.01		-6.29263	30		Averaged	
trans-1,2-Dichloroethylene	0.3735	0.35831		.01		-4.06693	30		Averaged	
Vinyl acetate	0.5381	0.58958		.01		9.56699	40		Averaged	
1,1-Dichloroethane	0.4674	0.44799		.1		-4.15276	30		Averaged	spcc
2-Butanone	0.1151	0.1155		.01		0.34752	40		Averaged	
cis-1,2-Dichloroethylene	0.4161	0.40307		.01		-3.13146	30		Averaged	
2,2-Dichloropropane	0.3367	0.35182		.01		4.49064	30		Averaged	
Bromochloromethane	0.1282	0.12437		.01		-2.98752	30		Averaged	
Chloroform	0.4352	0.41847		.01		-3.84421	20		Averaged	ccc
1,1,1-Trichloroethane	0.3652	0.36984		.01		1.27054	30		Averaged	
Cyclohexane	0.4723	0.48637		.01		2.97904	30		Averaged	
1,1-Dichloropropene	0.3324	0.33568		.01		0.98676	30		Averaged	
Carbon tetrachloride	0.3231	0.32867		.01		1.72392	30		Averaged	
1,2-Dichloroethane	0.3568	0.33679		.01		-5.60818	30		Averaged	
Benzene	1.0185	0.96132		.01		-5.61414	30		Averaged	
Cyclohexene	0.4845	0.48291		.01		-0.32817	30		Averaged	
n-Butyl alcohol	5000	5176.1	5000			3.522	40		Linear	
Trichloroethylene	0.2542	0.24527		.01		-3.51298	30		Averaged	
Methylcyclohexane	0.4424	0.45818		.01		3.56691	30		Averaged	
1,2-Dichloropropane	0.2692	0.26546		.01		-1.3893	20		Averaged	ccc

Continuing Calibration Summary

Instrument ID: VOA6.J

Injection Date 10-DEC-09 15:45

Data File: 121009V6\60416.D

Init. Cal. Date(s) 10-DEC-09 11:34 10-DEC-09 19:2

Lab Sample ID W6VM091210-11

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.143	0.1431		.01		0.06993	30		Averaged	
Bromodichloromethane	0.3015	0.31168		.01		3.37645	30		Averaged	
2-Chloroethylvinyl ether	0.1649	0.1587		.01		-3.75985	30		Averaged	
cis-1,3-Dichloropropylene	0.3804	0.39161		.01		2.9469	30		Averaged	
4-Methyl-2-pentanone	0.1313	0.14172		.01		7.93602	40		Averaged	
Toluene	1.4899	1.40874		.01		-5.44735	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4817	0.50939		.01		5.74839	30		Averaged	
1,1,2-Trichloroethane	0.2451	0.24367		.01		-0.58344	30		Averaged	
2-Hexanone	0.2407	0.2584		.01		7.35355	40		Averaged	
1,3-Dichloropropane	0.5216	0.50181		.01		-3.7941	30		Averaged	
Tetrachloroethylene	0.3011	0.29232		.01		-2.91597	30		Averaged	
Dibromochloromethane	0.3086	0.33407		.01		8.2534	30		Averaged	
1,2-Dibromoethane	0.2955	0.29919		.01		1.24873	30		Averaged	
Chlorobenzene	0.9635	0.95414		.3		-0.97146	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3335	0.34501		.01		3.45127	30		Averaged	
Ethylbenzene	1.6336	1.60387		.01		-1.81991	20		Averaged	ccc
m,p-Xylenes	0.6533	0.64511		.01		-1.25364	30		Averaged	
o-Xylene	0.6413	0.64163		.01		0.05146	30		Averaged	
Styrene	1.0216	1.06105		.01		3.86159	30		Averaged	
Bromoform	0.3535	0.40598		.1		14.84583	30		Averaged	spcc
Isopropylbenzene	3.0477	3.05443		.01		0.22082	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6833	0.69191		.3		1.26006	30		Averaged	spcc
1,2,3-Trichloropropane	0.1922	0.19345		.01		0.65036	30		Averaged	
Bromobenzene	0.7836	0.762		.01		-2.75651	30		Averaged	
n-Propylbenzene	3.5712	3.52957		.01		-1.16571	30		Averaged	
2-Chlorotoluene	0.7594	0.7636		.01		0.55307	30		Averaged	
1,3,5-Trimethylbenzene	2.6127	2.61898		.01		0.24036	30		Averaged	
4-Chlorotoluene	2.199	2.19172		.01		-0.33106	30		Averaged	
tert-Butylbenzene	0.5812	0.58558		.01		0.75361	30		Averaged	
1,2,4-Trimethylbenzene	2.7527	2.70923		.01		-1.57918	30		Averaged	
sec-Butylbenzene	3.5128	3.57971		.01		1.90475	30		Averaged	
4-Isopropyltoluene	2.8725	2.93059		.01		2.02228	30		Averaged	
1,3-Dichlorobenzene	1.5315	1.50041		.01		-2.03004	30		Averaged	
1,4-Dichlorobenzene	1.5703	1.51104		.01		-3.7738	30		Averaged	
n-Butylbenzene	2.7878	2.86819		.01		2.88364	30		Averaged	
1,2-Dichlorobenzene	1.4847	1.45009		.01		-2.33111	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1246	0.14729		.01		18.21027	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6J

Injection Date 10-DEC-09 15:45

Data File: 121009V6\60416.D

Init. Cal. Date(s) 10-DEC-09 11:34 10-DEC-09 19:2

Lab Sample ID W6VM091210-11 Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.1167	1.09445		.01		-1.99248	30		Averaged
Hexachlorobutadiene	0.709	0.70257		.01		-0.90691	30		Averaged
Naphthalene	2.2443	2.17025		.01		-3.29947	30		Averaged
1,2,3-Trichlorobenzene	0.9351	0.90939		.01		-2.74944	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60416.D
Acq On : 10 Dec 2009 3:45 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-11|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[A] 1129-01C+1209-01
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 18 14:01:52 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.974	96	2076762	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1479289	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	821790	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	2074029	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1479289	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	821790	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	592342	48.34	ug/L	0.00
43) Toluene-d8	11.626	98	2032165	49.55	ug/L	0.00
61) Bromofluorobenzene	14.357	95	792283	50.03	ug/L	0.00
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	4.350	85	363203	39.01	ug/L	99
3) Chloromethane	4.672	50	499344	39.00	ug/L	100
4) Vinyl chloride	4.904	62	504880	44.91	ug/L	99
5) Bromomethane	5.468	94	379588	45.27	ug/L	99
6) Chloroethane	5.609	64	385512	46.20	ug/L	100
7) Trichlorofluoromethane	6.022	101	772555	46.88	ug/L	100
8) Ethyl ether	6.328	59	480153	44.84	ug/L	98
9) Acetone	6.706	43	734983	194.53	ug/L	99 E
10) 1,1-Dichloroethylene	6.706	61	717365	47.19	ug/L	99
11) Iodomethane	6.956	142	3783308	230.97	ug/L	99
12) Acetonitrile	7.066	41	1921932	1240.90	ug/L	100
13) Methyl acetate	7.096	43	2103597	247.56	ug/L	99
14) Carbon disulfide	7.078	76	7443145	244.01	ug/L	100
15) Methylene chloride	7.285	84	519443	43.46	ug/L	99
16) tert-Butyl methyl ether	7.572	73	1415189	46.86	ug/L	100
17) trans-1,2-Dichloroethy...	7.615	61	744131	47.96	ug/L	100
18) Vinyl acetate	8.060	43	6122051	273.93	ug/L	98
19) 1,1-Dichloroethane	8.102	63	930374	47.92	ug/L	100
20) 2-Butanone	8.694	43	1199321	250.88	ug/L	100
21) cis-1,2-Dichloroethylene	8.742	61	837075	48.44	ug/L	99
22) 2,2-Dichloropropane	8.767	77	730642	52.24	ug/L	100
23) Bromochloromethane	9.017	128	258291	48.52	ug/L	99
24) Chloroform	9.053	83	869059	48.08	ug/L	99
25) 1,1,1-Trichloroethane	9.322	97	768065	50.63	ug/L	99
26) Cyclohexane	9.413	56	1010074	51.49	ug/L	99
27) 1,1-Dichloropropene	9.480	75	697122	50.49	ug/L	99
28) Carbon tetrachloride	9.510	117	682571	50.86	ug/L	100
30) 1,2-Dichloroethane	9.712	62	699424	47.20	ug/L	100
31) Benzene	9.724	78	1996431	47.19	ug/L	100
32) Cyclohexene	9.834	67	1002879	49.84	ug/L	100
33) n-Butyl alcohol	10.084	56	1821129	5176.10	ug/L	99
34) Trichloroethylene	10.364	95	509356	48.24	ug/L	99
35) 1,2-Dichloropropane	10.614	63	551304	49.31	ug/L	100
36) Methylcyclohexane	10.602	83	951526	51.78	ug/L	99
37) Dibromomethane	10.748	93	297183	50.03	ug/L	99
38) Bromodichloromethane	10.864	83	647276	51.69	ug/L	100
39) 2-Chloroethylvinyl ether	11.089	63	1647879	240.65	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	75	813271	51.47	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60416.D
Acq On : 10 Dec 2009 3:45 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-11|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[A] 1129-01C+1209-01
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 18 14:01:52 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.413	58	1048244	269.88	ug/L	98
44) Toluene	11.699	91	2083933	47.27	ug/L	99
45) trans-1,3-Dichloroprop...	11.858	75	753539	52.88	ug/L	100
46) 1,1,2-Trichloroethane	12.083	83	360461	49.71	ug/L	99
47) 2-Hexanone	12.260	43	1911268	268.37	ug/L	98
48) 1,3-Dichloropropane	12.272	76	742316	48.11	ug/L	99
49) Tetrachloroethylene	12.290	164	432420	48.55	ug/L	100
50) Dibromochloromethane	12.540	129	494184	54.12	ug/L	99
51) 1,2-Dibromoethane	12.705	107	442584	50.62	ug/L	100
52) Chlorobenzene	13.187	112	1411452	49.51	ug/L	100
53) 1,1,1,2-Tetrachloroethane	13.241	131	510375	51.72	ug/L	100
54) Ethylbenzene	13.254	91	2372593	49.09	ug/L	100
55) m,p-Xylenes	13.363	106	1908607	98.74	ug/L	99
56) o-Xylene	13.796	106	949151	50.02	ug/L	100
57) Styrene	13.802	104	1569605	51.93	ug/L	100
59) Bromoform	14.064	173	333633	57.42	ug/L	99
60) Isopropylbenzene	14.156	105	2510102	50.11	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.442	83	568603	50.63	ug/L	100
63) 1,2,3-Trichloropropane	14.528	110	158978	50.33	ug/L	98
64) Bromobenzene	14.564	156	626203	48.62	ug/L	99
65) n-Propylbenzene	14.583	91	2900567	49.42	ug/L	100
66) 1,3,5-Trimethylbenzene	14.735	105	2152253	50.12	ug/L	100
67) 2-Chlorotoluene	14.729	126	627521	50.28	ug/L	100
68) 4-Chlorotoluene	14.833	91	1801130	49.83	ug/L	100
69) tert-Butylbenzene	15.107	134	481226	50.38	ug/L #	92
70) 1,2,4-Trimethylbenzene	15.150	105	2226416	49.21	ug/L	100
71) sec-Butylbenzene	15.333	105	2941769	50.95	ug/L	99
72) 4-Isopropyltoluene	15.454	119	2408327	51.01	ug/L	100
73) 1,3-Dichlorobenzene	15.515	146	1233026	48.98	ug/L	100
74) 1,4-Dichlorobenzene	15.601	146	1241759	48.11	ug/L	100
75) n-Butylbenzene	15.887	91	2357048	51.44	ug/L	100
76) 1,2-Dichlorobenzene	16.021	146	1191666	48.84	ug/L	100
77) 1,2-Dibromo-3-chloropr...	16.881	157	121043	59.10	ug/L	100 E
78) 1,2,4-Trichlorobenzene	17.911	180	899407	49.00	ug/L	99
79) Hexachlorobutadiene	18.076	225	577367	49.55	ug/L	100
80) Naphthalene	18.283	128	1783489	48.35	ug/L	100
81) 1,2,3-Trichlorobenzene	18.618	180	747330	48.62	ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	6.474		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	6.700		0m	N.D.	d	
88) Allyl chloride	7.066		0m	N.D.	d	
89) tert-Butyl Alcohol	7.298		0m	N.D.	d	
90) Acrylonitrile	7.578		0m	N.D.	d	
91) Isopropyl ether	8.060		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.212		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.694		0m	N.D.	d	
95) Propionitrile	8.694		0m	N.D.	d	
96) Methacrylonitrile	0.000		0	N.D.		
97) Tetrahydrofuran	9.053		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60416.D
Acq On : 10 Dec 2009 3:45 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-11|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[A] 1129-01C+1209-01
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 18 14:01:52 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T. QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.413	0m	N.D.	d	
99) Methyl tert-amyl ether	9.724	0m	N.D.	d	
100) Methyl methacrylate	10.602	0m	N.D.	d	
101) 1,4-Dioxane	10.748	0m	N.D.	d	
102) 2-Nitropropane	11.089	0m	N.D.	d	
104) Ethyl methacrylate	11.797	0m	N.D.	d	
106) 1-Chlorohexane	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.156	0m	N.D.	d	
108) Cyclohexanone	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...	14.577	0m	N.D.	d	
110) Pentachloroethane	15.180	0m	N.D.	d	
111) Benzyl chloride	15.717	0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	16.168	0m	N.D.	d	

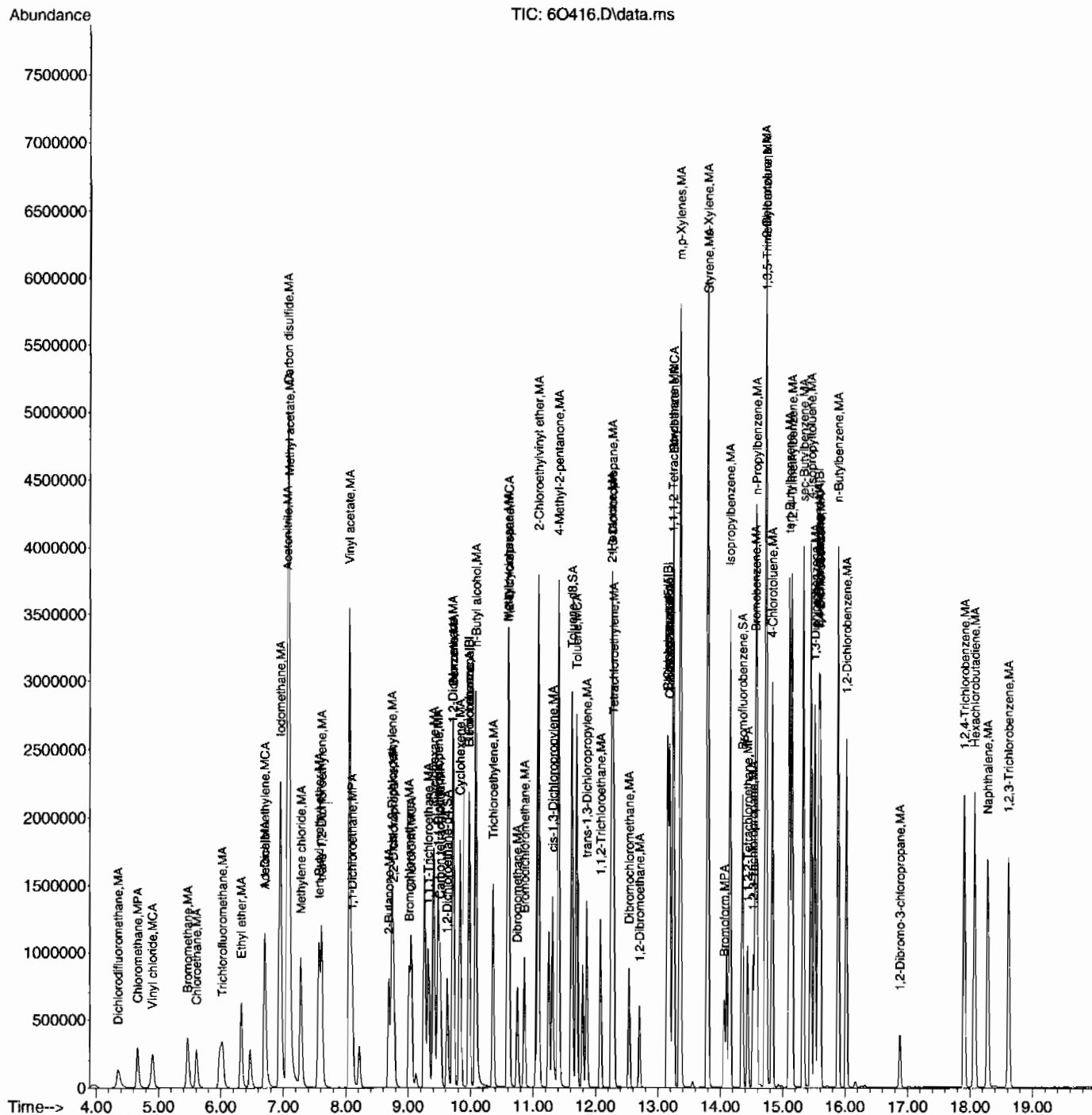
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60416.D
Acq On : 10 Dec 2009 3:45 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-11|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[A] 1129-01C+1209-01
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 18 14:01:52 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



Continuing Calibration Summary

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date 10-DEC-09 20:23

Data File: 121009V6\6O426.D

Init. Cal. Date(s) 10-DEC-09 11:34 - 10-DEC-09 19:2

Lab Sample ID W6VM091210-20

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S 1,2-Dichloroethane-d4	0.295	0.28775		.01		-2.45763	30		Averaged
S Toluene-d8	1.3863	1.32236		.01		-4.61228	30		Averaged
S Bromofluorobenzene	0.9636	0.9473		.01		-1.69157	30		Averaged
Chlorotrifluoroethylene	0.1787	0.17081		.01		-4.41522	30		Averaged
2-Chloro-1,1,1-trifluoroethane	0.298	0.3032		.01		1.74497	30		Averaged
Acrolein	0.0365	0.03752		.01		2.79452	30		Averaged
Trichlorotrifluoroethane	0.0934	0.09837		.01		5.3212	30		Averaged
Isopropyl Alcohol	0.0194	0.01952		.01		0.61856	40		Averaged
Allyl chloride	0.4371	0.43895		.01		0.42324	30		Averaged
tert-Butyl Alcohol	0.0296	0.02942		.01		-0.60811	40		Averaged
Acrylonitrile	0.0929	0.09193		.01		-1.04413	30		Averaged
Isopropyl ether	0.9952	1.00769		.01		1.25502	30		Averaged
2-Chloro-1,3-butadiene	0.372	0.39445		.01		6.03495	30		Averaged
Ethyl tert-butyl ether	0.8451	0.86472		.01		2.32162	30		Averaged
Ethyl acetate	0.2653	0.23815		.01		-10.2337	40		Averaged
Propionitrile	0.0361	0.03522		.01		-2.43767	30		Averaged
Methacrylonitrile	0.1587	0.15541		.01		-2.07309	30		Averaged
Tetrahydrofuran	0.0843	0.08134		.01		-3.51127	30		Averaged
Isobutyl alcohol	0.0095	0.00935		.01		-1.57895	40		Averaged
Methyl tert-amyl ether	0.7218	0.74518		.01		3.23912	30		Averaged
Methyl methacrylate	0.1518	0.15186		.01		0.03953	30		Averaged
1,4-Dioxane	0.0023	0.00225		.01		-2.17391	40		Averaged
2-Nitropropane	250	241.39	250			-3.444	30		Linear
Ethyl methacrylate	0.3914	0.38964		.01		-0.44967	30		Averaged
1-Chlorohexane	0.6905	0.6849		.01		-0.81101	30		Averaged
cis-1,4-Dichloro-2-butene	0.2353	0.24021		.01		2.0867	30		Averaged
Cyclohexanone	0.0193	0.01686		.01		-12.64249	40		Averaged
trans-1,4-Dichloro-2-butene	0.2261	0.23045		.01		1.92393	30		Averaged
Pentachloroethane	0.3343	0.31118		.01		-6.91594	30		Averaged
Benzyl chloride	1.2936	1.12957		.01		-12.68012	30		Averaged
bis(2-Chloroisopropyl)ether	0.3796	0.36692		.01		-3.34036	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60426.D
Acq On : 10 Dec 2009 8:23 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-20|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[B] 1118-08B+1105-02D
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 14:02:16 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.974	96	2070691	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1510228	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	850667	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	2067712	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1510228	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	850667	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	595841	48.77	ug/L	0.00
43) Toluene-d8	11.626	98	1997061	47.69	ug/L	0.00
61) Bromofluorobenzene	14.357	95	805834	49.16	ug/L	0.00
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	4.269		0m	N.D.	d	
3) Chloromethane	4.652		0m	N.D.	d	
4) Vinyl chloride	4.894		0m	N.D.	d	
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.676		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.663		0m	N.D.	d	
11) Iodomethane	6.956		0m	N.D.	d	
12) Acetonitrile	7.054		0m	N.D.	d	
13) Methyl acetate	7.102		0m	N.D.	d	
14) Carbon disulfide	7.139		0m	N.D.	d	
15) Methylene chloride	7.285		0m	N.D.	d	
16) tert-Butyl methyl ether	7.572		0m	N.D.	d	
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	8.078		0m	N.D.	d	
19) 1,1-Dichloroethane	8.206		0m	N.D.	d	
20) 2-Butanone	8.700		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.700		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	9.047		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	9.389		0m	N.D.	d	
27) 1,1-Dichloropropene	0.000		0	N.D.		
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	9.736		0m	N.D.	d	
31) Benzene	9.724		0m	N.D.	d	
32) Cyclohexene	0.000		0	N.D.		
33) n-Butyl alcohol	0.000		0	N.D.		
34) Trichloroethylene	10.370		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	10.590		0m	N.D.	d	
37) Dibromomethane	0.000		0	N.D.		
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	11.096		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60426.D
Acq On : 10 Dec 2009 8:23 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-20|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[B] 1118-08B+1105-02D
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 14:02:16 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	0.000		0	N.D.		
44) Toluene	11.699		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	11.852		0m	N.D.	d	
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	12.260		0m	N.D.	d	
48) 1,3-Dichloropropane	12.309		0m	N.D.	d	
49) Tetrachloroethylene	12.290		0m	N.D.	d	
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	12.705		0m	N.D.	d	
52) Chlorobenzene	13.187		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
54) Ethylbenzene	13.248		0m	N.D.	d	
55) m,p-Xylenes	13.363		0m	N.D.	d	
56) o-Xylene	0.000		0	N.D.		
57) Styrene	13.796		0m	N.D.	d	
59) Bromoform	0.000		0	N.D.		
60) Isopropylbenzene	14.156		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	14.491		0m	N.D.	d	
63) 1,2,3-Trichloropropane	0.000		0	N.D.		
64) Bromobenzene	0.000		0	N.D.		
65) n-Propylbenzene	14.583		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	14.735		0m	N.D.	d	
67) 2-Chlorotoluene	14.729		0m	N.D.	d	
68) 4-Chlorotoluene	14.833		0m	N.D.	d	
69) tert-Butylbenzene	15.180		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.150		0m	N.D.	d	
71) sec-Butylbenzene	15.333		0m	N.D.	d	
72) 4-Isopropyltoluene	15.454		0m	N.D.	d	
73) 1,3-Dichlorobenzene	15.515		0m	N.D.	d	
74) 1,4-Dichlorobenzene	15.601		0m	N.D.	d	
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	16.015		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
78) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
79) Hexachlorobutadiene	0.000		0	N.D.		
80) Naphthalene	18.283		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	0.000		0	N.D.		
83) Chlorotrifluoroethylene	4.280	116	1059558	143.35	ug/L	100
84) 2-Chloro-1,1,1-trifluo...	5.025	118	1880817	152.62	ug/L	100
85) Acrolein	6.535	56	387873	257.15	ug/L	99
86) Trichlorotrifluoroethane	6.676	85	1016953	263.29	ug/L	99
87) Isopropyl Alcohol	6.785	45	2017620	2516.44	ug/L	100
88) Allyl chloride	7.139	41	4538143	251.04	ug/L	100
89) tert-Butyl Alcohol	7.285	59	3041617	2486.64	ug/L	100
90) Acrylonitrile	7.541	53	950443	247.45	ug/L	100
91) Isopropyl ether	8.078	45	2083609	50.63	ug/L	99
92) 2-Chloro-1,3-butadiene	8.206	53	815608	53.01	ug/L	99
93) Ethyl tert-butyl ether	8.486	59	1787994	51.16	ug/L	100
94) Ethyl acetate	8.700	43	2462110	224.38	ug/L	100
95) Propionitrile	8.773	54	364096	243.94	ug/L	100
96) Methacrylonitrile	8.950	41	1606705	244.75	ug/L	100
97) Tetrahydrofuran	9.059	42	840938	241.26	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60426.D
Acq On : 10 Dec 2009 8:23 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-20|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[B] 1118-08B+1105-02D
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 14:02:16 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.389	41	966349	2452.14	ug/L	99
99) Methyl tert-amyl ether	9.742	73	1540810	51.62	ug/L	99
100) Methyl methacrylate	10.590	69	1570042	250.15	ug/L	99
101) 1,4-Dioxane	10.699	88	232295	2395.33	ug/L	99
102) 2-Nitropropane	11.071	43	766103	241.39	ug/L	98
104) Ethyl methacrylate	11.858	69	2942230	248.87	ug/L	100
106) 1-Chlorohexane	13.052	55	582623	49.60	ug/L	99
107) cis-1,4-Dichloro-2-butene	14.205	53	1021686	255.19	ug/L	100
108) Cyclohexanone	14.314	42	358486	1094.48	ug/L	98
109) trans-1,4-Dichloro-2-b...	14.491	53	980168	254.85	ug/L	99
110) Pentachloroethane	15.180	167	1323559	232.71	ug/L	99
111) Benzyl chloride	15.717	91	4804424	218.30	ug/L	100
112) bis(2-Chloroisopropyl)...	16.113	45	1560613	241.67	ug/L	100

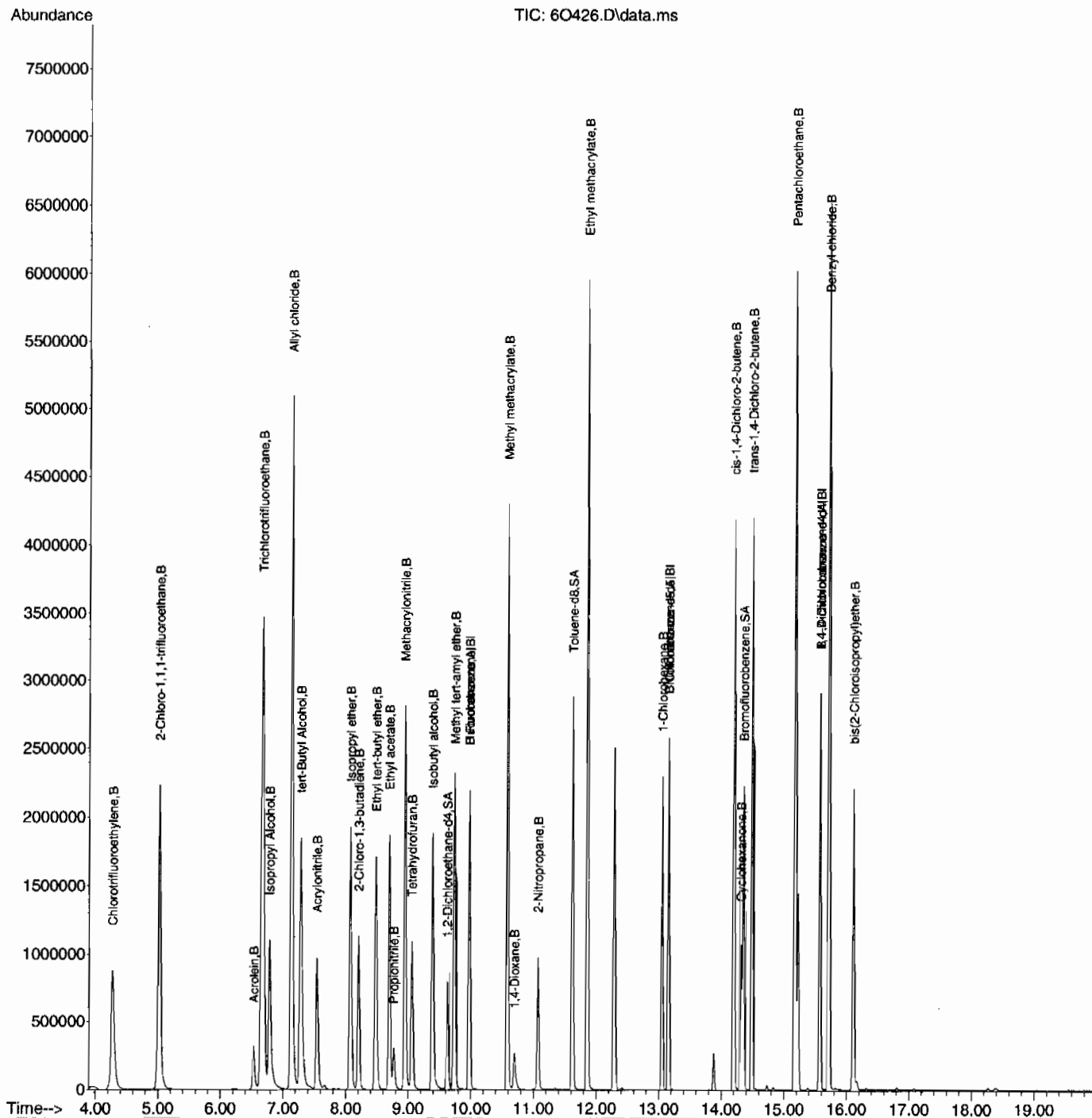
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60426.D
Acq On : 10 Dec 2009 8:23 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM091210-20|ICV|1|VOAF|1|VOA8260BLF|
Misc : ICV 5uL N/A MIX[B] 1118-08B+1105-02D
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 14:02:16 2009
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



Continuing Calibration Summary

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date: 22-JAN-10 11:29

Data File: 012210V6\6U503.D

Init. Cal. Date(s) 10-DEC-09 11:34 - 10-DEC-09 19:2

Lab Sample ID W6VM100122-02

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.295	0.30863		.01		4.62034	30		Averaged	
SToluene-d8	1.3863	1.3206		.01		-4.73923	30		Averaged	
SBromofluorobenzene	0.9636	0.94606		.01		-1.82026	30		Averaged	
Dichlorodifluoromethane	0.2241	0.16663		.01		-25.6448	30		Averaged	
Chloromethane	0.3083	0.25541		.1		-17.15537	30		Averaged	spcc
Vinyl chloride	0.2706	0.24174		.01		-10.66519	20		Averaged	ccc
Bromomethane	0.2019	0.1822		.01		-9.75731	30		Averaged	
Chloroethane	0.2009	0.18889		.01		-5.9781	30		Averaged	
Trichlorofluoromethane	0.3968	0.37836		.01		-4.64718	30		Averaged	
Ethyl ether	0.2578	0.21935		.01		-14.91466	30		Averaged	
Acetone	0.091	0.08366		.01		-8.06593	40		Averaged	
1,1-Dichloroethylene	0.366	0.35107		.01		-4.07923	20		Averaged	ccc
Iodomethane	0.3944	0.35401		.01		-10.24087	30		Averaged	
Acetonitrile	0.0373	0.03941		.01		5.65684	30		Averaged	
Carbon disulfide	0.7344	0.71277		.01		-2.94526	30		Averaged	
Methyl acetate	0.2046	0.20779		.01		1.55914	40		Averaged	
Methylene chloride	0.2878	0.23899		.01		-16.95969	30		Averaged	
tert-Butyl methyl ether	0.7272	0.64258		.01		-11.63641	30		Averaged	
trans-1,2-Dichloroethylene	0.3735	0.35311		.01		-5.45917	30		Averaged	
Vinyl acetate	0.5381	0.59499		.01		10.57238	40		Averaged	
1,1-Dichloroethane	0.4674	0.43228		.1		-7.51391	30		Averaged	spcc
2-Butanone	0.1151	0.12392		.01		7.6629	40		Averaged	
cis-1,2-Dichloroethylene	0.4161	0.38977		.01		-6.32781	30		Averaged	
2,2-Dichloropropane	0.3367	0.36314		.01		7.85269	30		Averaged	
Bromochloromethane	0.1282	0.114		.01		-11.07644	30		Averaged	
Chloroform	0.4352	0.3965		.01		-8.89246	20		Averaged	ccc
1,1,1-Trichloroethane	0.3652	0.37067		.01		1.49781	30		Averaged	
Cyclohexane	0.4723	0.47917		.01		1.45458	30		Averaged	
1,1-Dichloropropene	0.3324	0.3254		.01		-2.1059	30		Averaged	
Carbon tetrachloride	0.3231	0.3396		.01		5.10678	30		Averaged	
1,2-Dichloroethane	0.3568	0.33076		.01		-7.29821	30		Averaged	
Benzene	1.0185	0.8986		.01		-11.77221	30		Averaged	
Cyclohexene	0.4845	0.47109		.01		-2.7678	30		Averaged	
n-Butyl alcohol	5000	5805.97	5000			16.1194	40		Linear	
Trichloroethylene	0.2542	0.2341		.01		-7.90716	30		Averaged	
1,2-Dichloropropane	0.2692	0.24681		.01		-8.31724	20		Averaged	ccc
Methylcyclohexane	0.4424	0.43223		.01		-2.29882	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.1

Injection Date 22-JAN-10 11:29

Data File: 012210V6\6U503.D

Init. Cal. Date(s) 10-DEC-09 11:34

10-DEC-09 19:2

Lab Sample ID W6VM100122-02

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.143	0.13405		.01		-6.25874	30		Averaged	
Bromodichloromethane	0.3015	0.29576		.01		-1.90381	30		Averaged	
2-Chloroethylvinyl ether	0.1649	0.15205		.01		-7.7926	30		Averaged	
cis-1,3-Dichloropropylene	0.3804	0.36638		.01		-3.68559	30		Averaged	
4-Methyl-2-pentanone	0.1313	0.13556		.01		3.24448	40		Averaged	
Toluene	1.4899	1.28756		.01		-13.58078	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4817	0.46653		.01		-3.14926	30		Averaged	
1,1,2-Trichloroethane	0.2451	0.21272		.01		-13.21093	30		Averaged	
2-Hexanone	0.2407	0.26484		.01		10.02908	40		Averaged	
1,3-Dichloropropane	0.5216	0.45158		.01		-13.42408	30		Averaged	
Tetrachloroethylene	0.3011	0.27133		.01		-9.88708	30		Averaged	
Dibromochloromethane	0.3086	0.30407		.01		-1.46792	30		Averaged	
1,2-Dibromoethane	0.2955	0.26896		.01		-8.98139	30		Averaged	
Chlorobenzene	0.9635	0.85244		.3		-11.52673	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3335	0.3115		.01		-6.5967	30		Averaged	
Ethylbenzene	1.6336	1.4772		.01		-9.57395	20		Averaged	ccc
m,p-Xylenes	0.6533	0.58976		.01		-9.72601	30		Averaged	
o-Xylene	0.6413	0.57631		.01		-10.1341	30		Averaged	
Styrene	1.0216	0.92842		.01		-9.12099	30		Averaged	
Bromoform	0.3535	0.37747		.1		6.78076	30		Averaged	spcc
Isopropylbenzene	3.0477	2.74424		.01		-9.95702	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6833	0.6428		.3		-5.92712	30		Averaged	spcc
1,2,3-Trichloropropane	0.1922	0.17947		.01		-6.62331	30		Averaged	
Bromobenzene	0.7836	0.67268		.01		-14.15518	30		Averaged	
n-Propylbenzene	3.5712	3.21776		.01		-9.89695	30		Averaged	
2-Chlorotoluene	0.7594	0.66982		.01		-11.79615	30		Averaged	
1,3,5-Trimethylbenzene	2.6127	2.32256		.01		-11.10499	30		Averaged	
4-Chlorotoluene	2.199	1.94835		.01		-11.39836	30		Averaged	
tert-Butylbenzene	0.5812	0.51755		.01		-10.95148	30		Averaged	
1,2,4-Trimethylbenzene	2.7527	2.39766		.01		-12.89788	30		Averaged	
sec-Butylbenzene	3.5128	3.16661		.01		-9.8551	30		Averaged	
4-Isopropyltoluene	2.8725	2.58926		.01		-9.8604	30		Averaged	
1,3-Dichlorobenzene	1.5315	1.3103		.01		-14.44336	30		Averaged	
1,4-Dichlorobenzene	1.5703	1.32149		.01		-15.84474	30		Averaged	
n-Butylbenzene	2.7878	2.52329		.01		-9.48813	30		Averaged	
1,2-Dichlorobenzene	1.4847	1.27212		.01		-14.31804	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1246	0.14279		.01		14.59872	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I

Injection Date 22-JAN-10 11:29

Data File: 012210V6\6U503.D

Init. Cal. Date(s) 10-DEC-09 11:34 10-DEC-09 19:2

Lab Sample ID W6VM100122-02 Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.1167	0.96847		.01		-13.27393	30		Averaged
Hexachlorobutadiene	0.709	0.62704		.01		-11.55994	30		Averaged
Naphthalene	2.2443	2.14457		.01		-4.4437	30		Averaged
1,2,3-Trichlorobenzene	0.9351	0.8852		.01		-5.33633	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U503.D
Acq On : 22 Jan 2010 11:29 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM100122-02|CCV|1|VOAF|1|VOA8260BL|
Misc : CCV 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 22 11:46:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.980	96	1892720	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1402256	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	787181	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1891528	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1402256	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	787181	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	584158	52.31	ug/L	0.00
43) Toluene-d8	11.626	98	1851825	47.63	ug/L	0.00
61) Bromofluorobenzene	14.357	95	744719	49.09	ug/L	0.00
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	4.360	85	315381	37.17	ug/L	99
3) Chloromethane	4.682	50	483417	41.43	ug/L	100
4) Vinyl chloride	4.924	62	457549	44.66	ug/L	99
5) Bromomethane	5.478	94	344851	45.13	ug/L	100
6) Chloroethane	5.619	64	357521	47.02	ug/L	100
7) Trichlorofluoromethane	6.032	101	716131	47.68	ug/L	100
8) Ethyl ether	6.334	59	415169	42.54	ug/L	96
9) Acetone	6.712	43	791691	229.92	ug/L	96 E
10) 1,1-Dichloroethylene	6.712	61	664484	47.96	ug/L	98
11) Iodomethane	6.956	142	3350200	224.42	ug/L	98
12) Acetonitrile	7.072	41	1864890	1321.15	ug/L	99
13) Methyl acetate	7.096	43	1966396	253.92	ug/L	98
14) Carbon disulfide	7.078	76	6745401	242.64	ug/L	100
15) Methylene chloride	7.285	84	452343	41.52	ug/L	96
16) tert-Butyl methyl ether	7.578	73	1216227	44.18	ug/L	100
17) trans-1,2-Dichloroethy...	7.620	61	668342	47.27	ug/L	98
18) Vinyl acetate	8.066	43	5630723	276.45	ug/L	95
19) 1,1-Dichloroethane	8.102	63	818186	46.24	ug/L	100
20) 2-Butanone	8.693	43	1172757	269.18	ug/L	98
21) cis-1,2-Dichloroethylene	8.742	61	737733	46.84	ug/L	96
22) 2,2-Dichloropropane	8.767	77	687322	53.93	ug/L	95
23) Bromochloromethane	9.017	128	215760	44.47	ug/L	95
24) Chloroform	9.053	83	750461	45.55	ug/L	100
25) 1,1,1-Trichloroethane	9.327	97	701582	50.75	ug/L	99
26) Cyclohexane	9.413	56	906936	50.73	ug/L	99
27) 1,1-Dichloropropene	9.480	75	615888	48.94	ug/L	94
28) Carbon tetrachloride	9.510	117	642773	52.56	ug/L	100
30) 1,2-Dichloroethane	9.712	62	626042	46.35	ug/L	100
31) Benzene	9.724	78	1700792	44.11	ug/L	99
32) Cyclohexene	9.833	67	891639	48.62	ug/L	98
33) n-Butyl alcohol	10.083	56	1863829	5805.97	ug/L	97
34) Trichloroethylene	10.364	95	443076	46.04	ug/L	100
35) 1,2-Dichloropropane	10.614	63	467147	45.84	ug/L	100
36) Methylcyclohexane	10.608	83	818094	48.85	ug/L	98
37) Dibromomethane	10.748	93	253724	46.87	ug/L	99
38) Bromodichloromethane	10.864	83	559782	49.05	ug/L	99
39) 2-Chloroethylvinyl ether	11.089	63	1438945	230.57	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	75	693456	48.15	ug/L	96

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U503.D
Acq On : 22 Jan 2010 11:29 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM100122-02|CCV|1|VOAF|1|VOA8260BL|
Misc : CCV 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 22 11:46:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.412	58	950411	258.13	ug/L	93
44) Toluene	11.699	91	1805483	43.21	ug/L	100
45) trans-1,3-Dichloroprop...	11.857	75	654199	48.43	ug/L	96
46) 1,1,2-Trichloroethane	12.083	83	298285	43.40	ug/L	100
47) 2-Hexanone	12.260	43	1856876	275.06	ug/L	99
48) 1,3-Dichloropropane	12.272	76	633232	43.29	ug/L	90
49) Tetrachloroethylene	12.290	164	380472	45.06	ug/L	99
50) Dibromochloromethane	12.540	129	426388	49.26	ug/L	99
51) 1,2-Dibromoethane	12.711	107	377156	45.51	ug/L	99
52) Chlorobenzene	13.193	112	1195338	44.24	ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.247	131	436803	46.70	ug/L	100
54) Ethylbenzene	13.254	91	2071415	45.21	ug/L	100
55) m,p-Xylenes	13.363	106	1653995	90.27	ug/L	98
56) o-Xylene	13.796	106	808129	44.93	ug/L	99
57) Styrene	13.802	104	1301883	45.44	ug/L	97
59) Bromoform	14.058	173	297137	53.39	ug/L	100
60) Isopropylbenzene	14.156	105	2160213	45.02	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.436	83	506001	47.04	ug/L	100
63) 1,2,3-Trichloropropane	14.528	110	141275	46.69	ug/L	97
64) Bromobenzene	14.564	156	529521	42.92	ug/L	97
65) n-Propylbenzene	14.583	91	2532962	45.05	ug/L	100
66) 1,3,5-Trimethylbenzene	14.735	105	1828275	44.45	ug/L	99
67) 2-Chlorotoluene	14.729	126	527268	44.10	ug/L	98
68) 4-Chlorotoluene	14.833	91	1533704	44.30	ug/L	100
69) tert-Butylbenzene	15.107	134	407409	44.52	ug/L	# 90
70) 1,2,4-Trimethylbenzene	15.150	105	1887395	43.55	ug/L	99
71) sec-Butylbenzene	15.332	105	2492698	45.07	ug/L	99
72) 4-Isopropyltoluene	15.454	119	2038219	45.07	ug/L	99
73) 1,3-Dichlorobenzene	15.515	146	1031442	42.78	ug/L	99
74) 1,4-Dichlorobenzene	15.601	146	1040250	42.08	ug/L	100
75) n-Butylbenzene	15.887	91	1986285	45.26	ug/L	99
76) 1,2-Dichlorobenzene	16.021	146	1001387	42.84	ug/L	99
77) 1,2-Dibromo-3-chloropr...	16.881	157	112402	57.30	ug/L	98 E
78) 1,2,4-Trichlorobenzene	17.911	180	762362	43.36	ug/L	100
79) Hexachlorobutadiene	18.076	225	493593	44.22	ug/L	99
80) Naphthalene	18.289	128	1688163	47.78	ug/L	100
81) 1,2,3-Trichlorobenzene	18.618	180	696813	47.33	ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	6.474		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	6.712		0m	N.D.	d	
88) Allyl chloride	7.072		0m	N.D.	d	
89) tert-Butyl Alcohol	7.297		0m	N.D.	d	
90) Acrylonitrile	7.572		0m	N.D.	d	
91) Isopropyl ether	8.059		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.212		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.693		0m	N.D.	d	
95) Propionitrile	8.693		0m	N.D.	d	
96) Methacrylonitrile	8.931		0m	N.D.	d	
97) Tetrahydrofuran	9.047		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U503.D
Acq On : 22 Jan 2010 11:29 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM100122-02|CCV|1|VOAF|1|VOA8260BL|
Misc : CCV 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 22 11:46:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T. QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.413	0m	N.D.	d	
99) Methyl tert-amyl ether	9.724	0m	N.D.	d	
100) Methyl methacrylate	10.602	0m	N.D.	d	
101) 1,4-Dioxane	10.754	0m	N.D.	d	
102) 2-Nitropropane	11.089	0m	N.D.	d	
104) Ethyl methacrylate	11.797	0m	N.D.	d	
106) 1-Chlorohexane	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.156	0m	N.D.	d	
108) Cyclohexanone	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000	0	N.D.		
110) Pentachloroethane	15.180	0m	N.D.	d	
111) Benzyl chloride	15.716	0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	16.168	0m	N.D.	d	

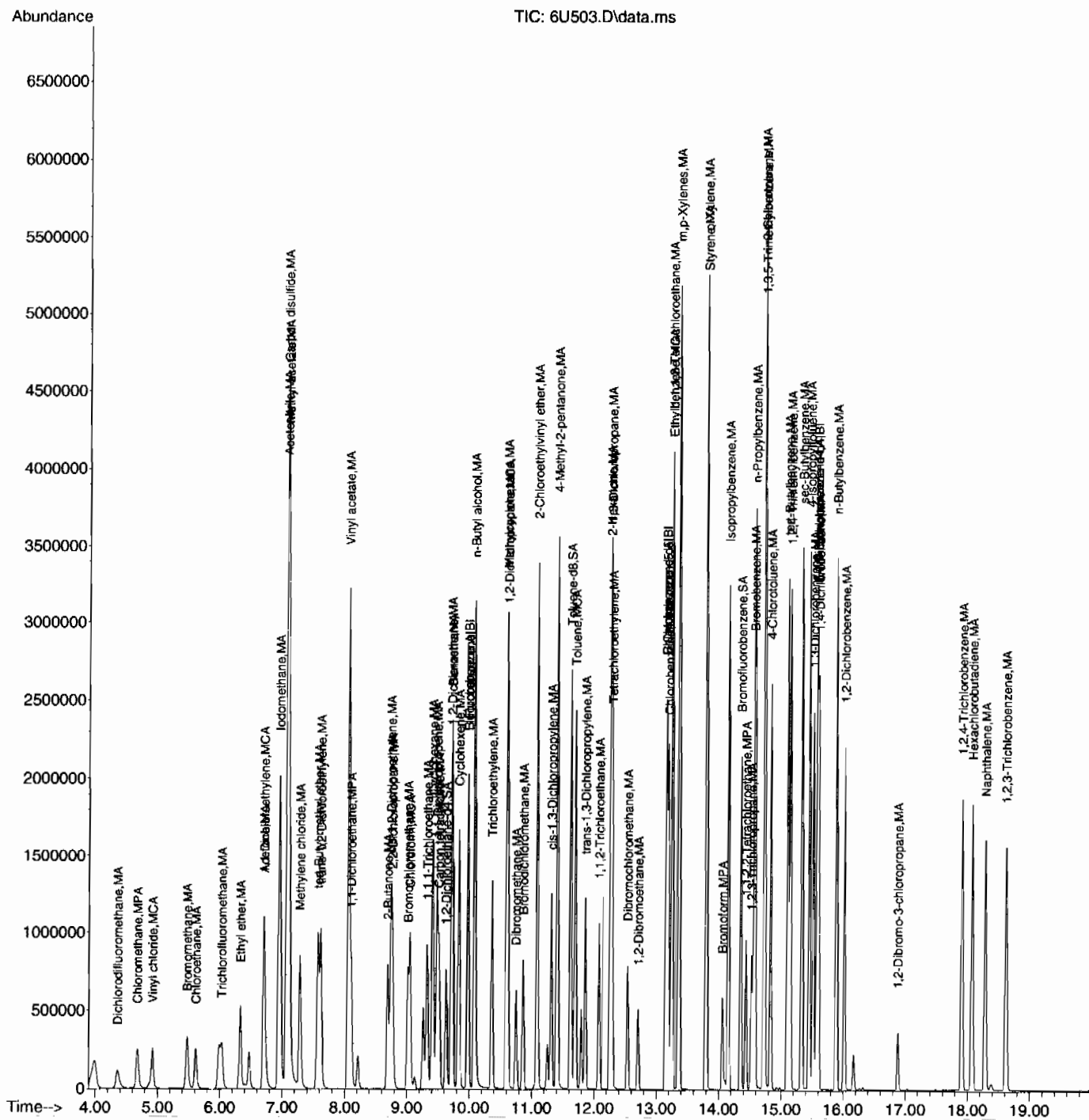
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

GEL Laboratories, LLC

ALS Vial : 3 Sample Multiplier: 1

Integrator: RTE

SubList :



Continuing Calibration Summary

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date 22-JAN-10 12:07

Data File: 012210V66U504.D

Init. Cal. Date(s) 10-DEC-09 11:34 - 10-DEC-09 19:2

Lab Sample ID W6VM100122-03

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.295	0.30148		.01		2.19661	30		Averaged
S Toluene-d8	1.3863	1.29774		.01		-6.38823	30		Averaged
S Bromofluorobenzene	0.9636	0.92831		.01		-3.66231	30		Averaged
Acrolein	0.0365	0.04683		.01		28.30137	30		Averaged
Trichlorotrifluoroethane	0.0934	0.11798		.01		26.31692	30		Averaged
Allyl chloride	0.4371	0.49655		.01		13.60101	30		Averaged
Acrylonitrile	0.0929	0.10248		.01		10.31216	30		Averaged
2-Chloro-1,3-butadiene	0.372	0.44542		.01		19.73656	30		Averaged
Ethyl acetate	0.2653	0.28055		.01		5.74821	40		Averaged
Propionitrile	0.0361	0.04011		.01		11.10803	30		Averaged
Methacrylonitrile	0.1587	0.1783		.01		12.35035	30		Averaged
Tetrahydrofuran	0.0843	0.09679		.01		14.81613	30		Averaged
Isobutyl alcohol	0.0095	0.01252		.01		31.78947	40		Averaged
Methyl methacrylate	0.1518	0.16245		.01		7.01581	30		Averaged
1,4-Dioxane	0.0023	0.00271		.01		17.82609	40		Averaged
2-Nitropropane	250	311.62	250			24.648	30		Linear
Ethyl methacrylate	0.3914	0.40405		.01		3.23199	30		Averaged
cis-1,4-Dichloro-2-butene	0.2353	0.27192		.01		15.56311	30		Averaged
Cyclohexanone	0.0193	0.02105		.01		9.06736	40		Averaged
trans-1,4-Dichloro-2-butene	0.2261	0.26251		.01		16.10349	30		Averaged
Pentachloroethane	0.3343	0.4424		.01		32.33622	30	*	Averaged
Benzyl chloride	1.2936	1.29899		.01		0.41667	30		Averaged
bis(2-Chloroisopropyl)ether	0.3796	0.41851		.01		10.25026	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U504.D
Acq On : 22 Jan 2010 12:07 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100122-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 22 14:09:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.980	96	1890659	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1401695	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	808809	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1888841	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1401695	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	808809	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	569992	51.10	ug/L	0.00
43) Toluene-d8	11.626	98	1819041	46.81	ug/L	0.00
61) Bromofluorobenzene	14.357	95	750823	48.17	ug/L	0.00
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	4.662		0m	N.D.	d	
4) Vinyl chloride	4.914		0m	N.D.	d	
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.676		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.688		0m	N.D.	d	
11) Iodomethane	6.950		0m	N.D.	d	
12) Acetonitrile	7.139		0m	N.D.	d	
13) Methyl acetate	7.096		0m	N.D.	d	
14) Carbon disulfide	7.139		0m	N.D.	d	
15) Methylene chloride	7.285		0m	N.D.	d	
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000		0	N.D.		
18) Vinyl acetate	8.212		0m	N.D.	d	
19) 1,1-Dichloroethane	8.212		0m	N.D.	d	
20) 2-Butanone	8.700		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.706		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	9.059		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	9.388		0m	N.D.	d	
27) 1,1-Dichloropropene	9.480		0m	N.D.	d	
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	9.705		0m	N.D.	d	
31) Benzene	9.724		0m	N.D.	d	
32) Cyclohexene	9.821		0m	N.D.	d	
33) n-Butyl alcohol	10.083		0m	N.D.	d	
34) Trichloroethylene	10.364		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	10.589		0m	N.D.	d	
37) Dibromomethane	0.000		0	N.D.		
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	11.083		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.315		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U504.D
Acq On : 22 Jan 2010 12:07 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100122-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 22 14:09:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.406		0m	N.D.	d	
44) Toluene	11.693		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	11.870		0m	N.D.	d	
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	12.260		0m	N.D.	d	
48) 1,3-Dichloropropane	12.272		0m	N.D.	d	
49) Tetrachloroethylene	12.290		0m	N.D.	d	
50) Dibromochloromethane	0.000		0	N.D.		
51) 1,2-Dibromoethane	12.711		0m	N.D.	d	
52) Chlorobenzene	13.186		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	13.241		0m	N.D.	d	
54) Ethylbenzene	13.254		0m	N.D.	d	
55) m,p-Xylenes	13.357		0m	N.D.	d	
56) o-Xylene	13.796		0m	N.D.	d	
57) Styrene	13.802		0m	N.D.	d	
59) Bromoform	14.052		0m	N.D.	d	
60) Isopropylbenzene	14.156		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	14.442		0m	N.D.	d	
63) 1,2,3-Trichloropropane	14.534		0m	N.D.	d	
64) Bromobenzene	14.564		0m	N.D.	d	
65) n-Propylbenzene	14.583		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	14.735		0m	N.D.	d	
67) 2-Chlorotoluene	14.735		0m	N.D.	d	
68) 4-Chlorotoluene	14.833		0m	N.D.	d	
69) tert-Butylbenzene	15.107		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.150		0m	N.D.	d	
71) sec-Butylbenzene	15.332		0m	N.D.	d	
72) 4-Isopropyltoluene	15.454		0m	N.D.	d	
73) 1,3-Dichlorobenzene	15.515		0m	N.D.	d	
74) 1,4-Dichlorobenzene	15.601		0m	N.D.	d	
75) n-Butylbenzene	0.000		0	N.D.		
76) 1,2-Dichlorobenzene	16.021		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	16.881		0m	N.D.	d	
78) 1,2,4-Trichlorobenzene	17.905		0m	N.D.	d	
79) Hexachlorobutadiene	18.082		0m	N.D.	d	
80) Naphthalene	18.289		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	18.624		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	6.535	56	442290	321.00	ug/L	100
86) Trichlorotrifluoroethane	6.682	85	1114194	315.78	ug/L	96
87) Isopropyl Alcohol	0.000		0m	N.D.	d	
88) Allyl chloride	7.139	41	4689513	283.98	ug/L	96
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	7.547	53	967804	275.83	ug/L	100
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	8.206	53	841321	59.86	ug/L	96
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.700	43	2649577	264.34	ug/L	99
95) Propionitrile	8.773	54	378799	277.82	ug/L	99
96) Methacrylonitrile	8.950	41	1683895	280.80	ug/L	100
97) Tetrahydrofuran	9.065	42	914119	287.09	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U504.D
Acq On : 22 Jan 2010 12:07 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100122-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 22 14:09:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.388	41	1182058	3283.55	ug/L	98
99) Methyl tert-amyl ether	9.736	73	387	N.D.		
100) Methyl methacrylate	10.589	69	1534175	267.59	ug/L	93
101) 1,4-Dioxane	10.699	88	256029	2890.08	ug/L	95
102) 2-Nitropropane	11.071	43	906660	311.62	ug/L	99
104) Ethyl methacrylate	11.857	69	2831751	258.08	ug/L	94
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.205	53	1099671	288.88	ug/L	99
108) Cyclohexanone	14.320	42	425670	1366.85	ug/L	96
109) trans-1,4-Dichloro-2-b...	14.491	53	1061596	290.31	ug/L	95
110) Pentachloroethane	15.180	167	1789087	330.84	ug/L	100
111) Benzyl chloride	15.716	91	5253174	251.05	ug/L	99
112) bis(2-Chloroisopropyl)...	16.113	45	1692456	275.64	ug/L	98

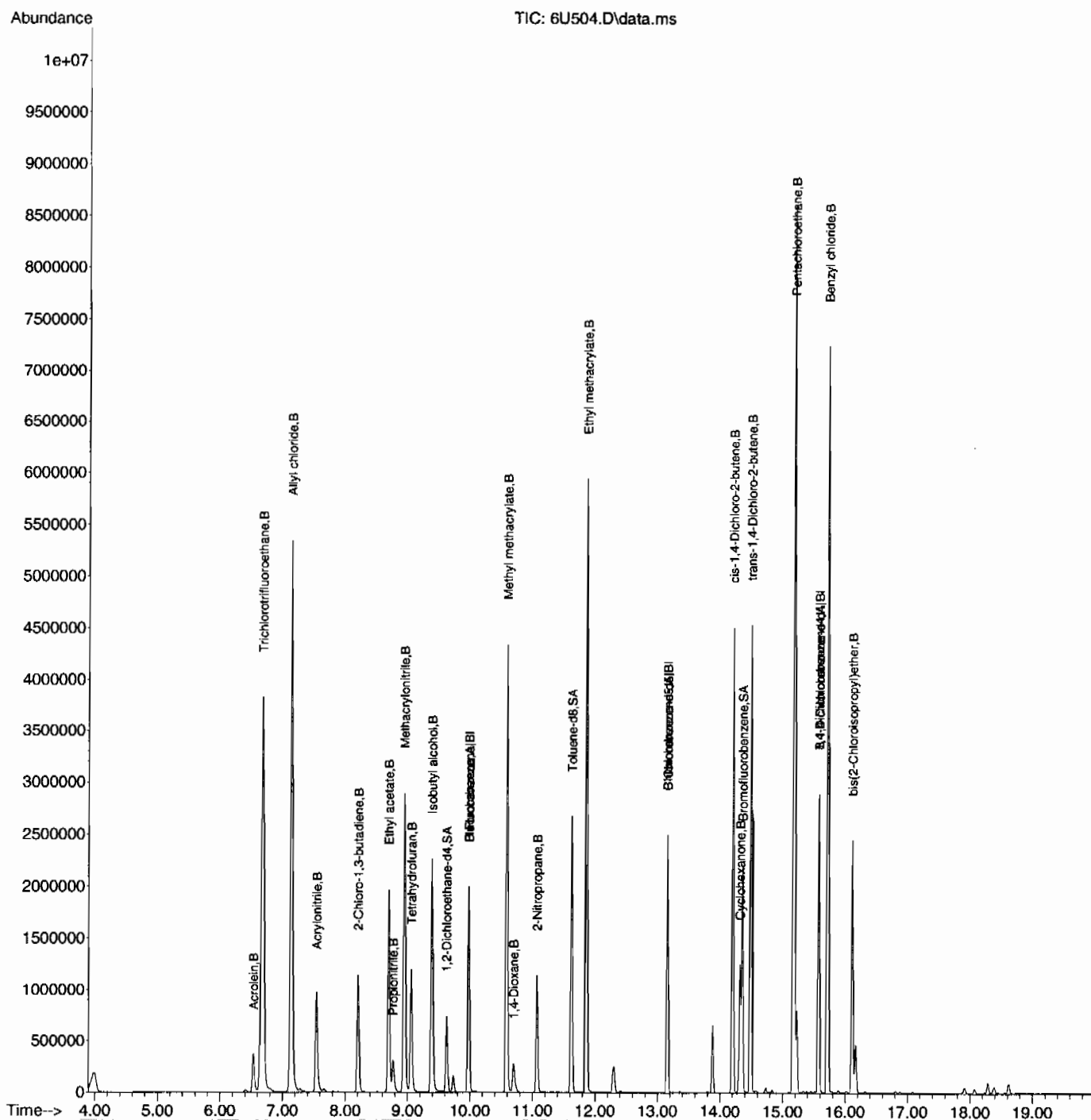
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U504.D
Acq On : 22 Jan 2010 12:07 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100122-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 22 14:09:01 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



Continuing Calibration Summary

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date 25-JAN-10 11:26

Data File: 012510V6\6V104.D

Init. Cal. Date(s) 10-DEC-09 11:34 - 10-DEC-09 19:2

Lab Sample ID W6VM100125-01

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S1,2-Dichloroethane-d4	0.295	0.29027		.01		-1.60339	30		Averaged	
SToluene-d8	1.3863	1.27184		.01		-8.25651	30		Averaged	
SBromofluorobenzene	0.9636	0.87182		.01		-9.5247	30		Averaged	
Dichlorodifluoromethane	0.2241	0.15187		.01		-32.23115	30	*	Averaged	
Chloromethane	0.3083	0.24529		.1		-20.43789	30		Averaged	spcc
Vinyl chloride	0.2706	0.23144		.01		-14.47154	20		Averaged	ccc
Bromomethane	0.2019	0.1849		.01		-8.42001	30		Averaged	
Chloroethane	0.2009	0.18618		.01		-7.32703	30		Averaged	
Trichlorofluoromethane	0.3968	0.37988		.01		-4.26411	30		Averaged	
Ethyl ether	0.2578	0.2035		.01		-21.06284	30		Averaged	
Acetone	0.091	0.07001		.01		-23.06593	40		Averaged	
1,1-Dichloroethylene	0.366	0.34235		.01		-6.46175	20		Averaged	ccc
Iodomethane	0.3944	0.34787		.01		-11.79767	30		Averaged	
Acetonitrile	0.0373	0.03428		.01		-8.09651	30		Averaged	
Carbon disulfide	0.7344	0.69402		.01		-5.49837	30		Averaged	
Methyl acetate	0.2046	0.18245		.01		-10.826	40		Averaged	
Methylene chloride	0.2878	0.23142		.01		-19.58999	30		Averaged	
tert-Butyl methyl ether	0.7272	0.58617		.01		-19.39356	30		Averaged	
trans-1,2-Dichloroethylene	0.3735	0.34685		.01		-7.13521	30		Averaged	
Vinyl acetate	0.5381	0.53901		.01		0.16911	40		Averaged	
1,1-Dichloroethane	0.4674	0.42224		.1		-9.66196	30		Averaged	spcc
2-Butanone	0.1151	0.09717		.01		-15.57776	40		Averaged	
cis-1,2-Dichloroethylene	0.4161	0.38251		.01		-8.07258	30		Averaged	
2,2-Dichloropropane	0.3367	0.36096		.01		7.20523	30		Averaged	
Bromochloromethane	0.1282	0.11073		.01		-13.62715	30		Averaged	
Chloroform	0.4352	0.39227		.01		-9.86443	20		Averaged	ccc
1,1,1-Trichloroethane	0.3652	0.36543		.01		0.06298	30		Averaged	
Cyclohexane	0.4723	0.4607		.01		-2.45607	30		Averaged	
1,1-Dichloropropene	0.3324	0.32211		.01		-3.09567	30		Averaged	
Carbon tetrachloride	0.3231	0.33908		.01		4.94584	30		Averaged	
1,2-Dichloroethane	0.3568	0.31672		.01		-11.23318	30		Averaged	
Benzene	1.0185	0.8737		.01		-14.21699	30		Averaged	
Cyclohexene	0.4845	0.45731		.01		-5.61197	30		Averaged	
n-Butyl alcohol	5000	4482.79	5000			-10.3442	40		Linear	
Trichloroethylene	0.2542	0.23186		.01		-8.78836	30		Averaged	
1,2-Dichloropropane	0.2692	0.23877		.01		-11.30386	20		Averaged	ccc
Methylcyclohexane	0.4424	0.42571		.01		-3.7726	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.J

Injection Date 25-JAN-10 11:26

Data File: 012510V6\6V104.D

Init. Cal. Date(s) 10-DEC-09 11:34

10-DEC-09 19:2

Lab Sample ID W6VM100125-01

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.143	0.12543		.01		-12.28671	30		Averaged	
Bromodichloromethane	0.3015	0.29028		.01		-3.72139	30		Averaged	
2-Chloroethylvinyl ether	0.1649	0.14077		.01		-14.63311	30		Averaged	
cis-1,3-Dichloropropylene	0.3804	0.35302		.01		-7.19769	30		Averaged	
4-Methyl-2-pentanone	0.1313	0.1145		.01		-12.79513	40		Averaged	
Toluene	1.4899	1.25461		.01		-15.79234	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.4817	0.44688		.01		-7.22857	30		Averaged	
1,1,2-Trichloroethane	0.2451	0.20567		.01		-16.08731	30		Averaged	
2-Hexanone	0.2407	0.21795		.01		-9.4516	40		Averaged	
1,3-Dichloropropane	0.5216	0.43511		.01		-16.58167	30		Averaged	
Tetrachloroethylene	0.3011	0.27105		.01		-9.98007	30		Averaged	
Dibromochloromethane	0.3086	0.2977		.01		-3.53208	30		Averaged	
1,2-Dibromoethane	0.2955	0.24958		.01		-15.53976	30		Averaged	
Chlorobenzene	0.9635	0.84096		.3		-12.71821	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.3335	0.30561		.01		-8.36282	30		Averaged	
Ethylbenzene	1.6336	1.46243		.01		-10.47809	20		Averaged	ccc
m,p-Xylenes	0.6533	0.58515		.01		-10.43165	30		Averaged	
o-Xylene	0.6413	0.56062		.01		-12.5807	30		Averaged	
Styrene	1.0216	0.92229		.01		-9.72103	30		Averaged	
Bromoform	0.3535	0.35116		.1		-0.66195	30		Averaged	spcc
Isopropylbenzene	3.0477	2.68565		.01		-11.87945	30		Averaged	
1,1,2,2-Tetrachloroethane	0.6833	0.58233		.3		-14.77682	30		Averaged	spcc
1,2,3-Trichloropropane	0.1922	0.16093		.01		-16.26951	30		Averaged	
Bromobenzene	0.7836	0.65549		.01		-16.3489	30		Averaged	
n-Propylbenzene	3.5712	3.1563		.01		-11.61794	30		Averaged	
2-Chlorotoluene	0.7594	0.66083		.01		-12.97998	30		Averaged	
1,3,5-Trimethylbenzene	2.6127	2.29933		.01		-11.99411	30		Averaged	
4-Chlorotoluene	2.199	1.90823		.01		-13.22283	30		Averaged	
tert-Butylbenzene	0.5812	0.50936		.01		-12.36063	30		Averaged	
1,2,4-Trimethylbenzene	2.7527	2.35006		.01		-14.62709	30		Averaged	
sec-Butylbenzene	3.5128	3.13431		.01		-10.7746	30		Averaged	
4-Isopropyltoluene	2.8725	2.5742		.01		-10.38468	30		Averaged	
1,3-Dichlorobenzene	1.5315	1.29706		.01		-15.30787	30		Averaged	
1,4-Dichlorobenzene	1.5703	1.30785		.01		-16.71337	30		Averaged	
n-Butylbenzene	2.7878	2.50067		.01		-10.29952	30		Averaged	
1,2-Dichlorobenzene	1.4847	1.23563		.01		-16.77578	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1246	0.1178		.01		-5.45746	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA6.I

Injection Date 25-JAN-10 11:26

Data File: 012510V6\6V104.D

Init. Cal. Date(s) 10-DEC-09 11:34 10-DEC-09 19:2

Lab Sample ID W6VM100125-01

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	1.1167	0.91311		.01		-18.2314	30		Averaged
Hexachlorobutadiene	0.709	0.616		.01		-13.11707	30		Averaged
Naphthalene	2.2443	1.74446		.01		-22.27153	30		Averaged
1,2,3-Trichlorobenzene	0.9351	0.77479		.01		-17.14362	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V104.D
Acq On : 25 Jan 2010 11:26 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-01|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[A] 1214-01H+0120-03
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 11:46:02 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.980	96	1901925	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1410285	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	803471	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1899772	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1410285	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	803471	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	552068	49.20	ug/L	0.00
43) Toluene-d8	11.626	98	1793654	45.87	ug/L	0.00
61) Bromofluorobenzene	14.357	95	700482	45.24	ug/L	0.00
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	4.360	85	288846	33.88	ug/L	100
3) Chloromethane	4.682	50	466520	39.78	ug/L	99
4) Vinyl chloride	4.924	62	440172	42.76	ug/L	99
5) Bromomethane	5.478	94	351665	45.80	ug/L	99
6) Chloroethane	5.619	64	354107	46.34	ug/L	100
7) Trichlorofluoromethane	5.992	101	722511	47.87	ug/L	100
8) Ethyl ether	6.328	59	387039	39.47	ug/L	96
9) Acetone	6.712	43	665778	192.42	ug/L	96 E
10) 1,1-Dichloroethylene	6.706	61	651123	46.77	ug/L	98
11) Iodomethane	6.956	142	3308120	220.52	ug/L	98
12) Acetonitrile	7.072	41	1630042	1149.19	ug/L	98
13) Methyl acetate	7.096	43	1734979	222.95	ug/L	99
14) Carbon disulfide	7.078	76	6599881	236.25	ug/L	100
15) Methylene chloride	7.285	84	440142	40.21	ug/L	96
16) tert-Butyl methyl ether	7.572	73	1114855	40.31	ug/L	100
17) trans-1,2-Dichloroethy...	7.621	61	659675	46.43	ug/L	99
18) Vinyl acetate	8.066	43	5125810	250.44	ug/L	98
19) 1,1-Dichloroethane	8.108	63	803060	45.17	ug/L	100
20) 2-Butanone	8.694	43	924030	211.06	ug/L	98
21) cis-1,2-Dichloroethylene	8.742	61	727512	45.97	ug/L	97
22) 2,2-Dichloropropane	8.767	77	686514	53.60	ug/L	94
23) Bromochloromethane	9.017	128	210605	43.20	ug/L	96
24) Chloroform	9.053	83	746068	45.07	ug/L	99
25) 1,1,1-Trichloroethane	9.328	97	695029	50.03	ug/L	99
26) Cyclohexane	9.413	56	876220	48.77	ug/L	100
27) 1,1-Dichloropropene	9.480	75	612623	48.45	ug/L	94
28) Carbon tetrachloride	9.517	117	644912	52.48	ug/L	98
30) 1,2-Dichloroethane	9.712	62	602378	44.38	ug/L	99
31) Benzene	9.724	78	1661709	42.89	ug/L	99
32) Cyclohexene	9.834	67	869774	47.20	ug/L	98
33) n-Butyl alcohol	10.084	56	1442072	4482.79	ug/L	96
34) Trichloroethylene	10.364	95	440970	45.60	ug/L	100
35) 1,2-Dichloropropane	10.614	63	454125	44.35	ug/L	99
36) Methylcyclohexane	10.608	83	809661	48.11	ug/L	99
37) Dibromomethane	10.754	93	238566	43.86	ug/L	99
38) Bromodichloromethane	10.864	83	552087	48.14	ug/L	100
39) 2-Chloroethylvinyl ether	11.090	63	1338634	213.46	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	75	671426	46.40	ug/L	96

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V104.D
Acq On : 25 Jan 2010 11:26 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-01|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[A] 1214-01H+0120-03
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 11:46:02 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.413	58	807351	218.03	ug/L	91
44) Toluene	11.699	91	1769359	42.10	ug/L	99
45) trans-1,3-Dichloroprop...	11.864	75	630226	46.39	ug/L	96
46) 1,1,2-Trichloroethane	12.083	83	290057	41.96	ug/L	99
47) 2-Hexanone	12.260	43	1536845	226.35	ug/L	98
48) 1,3-Dichloropropane	12.272	76	613627	41.71	ug/L	95
49) Tetrachloroethylene	12.291	164	382264	45.02	ug/L	99
50) Dibromochloromethane	12.540	129	419847	48.23	ug/L	99
51) 1,2-Dibromoethane	12.711	107	351976	42.23	ug/L	99
52) Chlorobenzene	13.193	112	1185991	43.64	ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.248	131	430994	45.81	ug/L	99
54) Ethylbenzene	13.254	91	2062447	44.76	ug/L	99
55) m,p-Xylenes	13.363	106	1650469	89.56	ug/L	98
56) o-Xylene	13.796	106	790633	43.71	ug/L	96
57) Styrene	13.802	104	1300686	45.14	ug/L	98
59) Bromoform	14.065	173	282143	49.67	ug/L	99
60) Isopropylbenzene	14.156	105	2157840	44.06	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.443	83	467883	42.61	ug/L	98
63) 1,2,3-Trichloropropane	14.528	110	129303	41.87	ug/L #	91
64) Bromobenzene	14.564	156	526668	41.82	ug/L	99
65) n-Propylbenzene	14.583	91	2535998	44.19	ug/L	99
66) 1,3,5-Trimethylbenzene	14.735	105	1847447	44.00	ug/L	99
67) 2-Chlorotoluene	14.735	126	530958	43.51	ug/L	97
68) 4-Chlorotoluene	14.833	91	1533208	43.39	ug/L	100
69) tert-Butylbenzene	15.107	134	409257	43.82	ug/L #	90
70) 1,2,4-Trimethylbenzene	15.150	105	1888203	42.69	ug/L	100
71) sec-Butylbenzene	15.333	105	2518328	44.61	ug/L	99
72) 4-Isopropyltoluene	15.455	119	2068295	44.81	ug/L	99
73) 1,3-Dichlorobenzene	15.515	146	1042147	42.35	ug/L	100
74) 1,4-Dichlorobenzene	15.601	146	1050821	41.64	ug/L	100
75) n-Butylbenzene	15.887	91	2009213	44.85	ug/L	100
76) 1,2-Dichlorobenzene	16.021	146	992791	41.61	ug/L	100
77) 1,2-Dibromo-3-chloropr...	16.881	157	94645	47.27	ug/L	97
78) 1,2,4-Trichlorobenzene	17.911	180	733661	40.88	ug/L	100
79) Hexachlorobutadiene	18.076	225	494939	43.44	ug/L	99
80) Naphthalene	18.289	128	1401625	38.87	ug/L	100
81) 1,2,3-Trichlorobenzene	18.625	180	622521	41.43	ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	6.468		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	6.785		0m	N.D.	d	
88) Allyl chloride	7.072		0m	N.D.	d	
89) tert-Butyl Alcohol	7.279		0m	N.D.	d	
90) Acrylonitrile	7.572		0m	N.D.	d	
91) Isopropyl ether	8.066		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.212		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.694		0m	N.D.	d	
95) Propionitrile	8.688		0m	N.D.	d	
96) Methacrylonitrile	8.956		0m	N.D.	d	
97) Tetrahydrofuran	9.041		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V104.D
Acq On : 25 Jan 2010 11:26 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-01|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[A] 1214-01H+0120-03
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 11:46:02 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T. QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.413	0m	N.D.	d	
99) Methyl tert-amyl ether	9.724	0m	N.D.	d	
100) Methyl methacrylate	10.602	0m	N.D.	d	
101) 1,4-Dioxane	10.754	0m	N.D.	d	
102) 2-Nitropropane	11.090	0m	N.D.	d	
104) Ethyl methacrylate	11.797	0m	N.D.	d	
106) 1-Chlorohexane	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.156	0m	N.D.	d	
108) Cyclohexanone	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000	0	N.D.		
110) Pentachloroethane	15.174	0m	N.D.	d	
111) Benzyl chloride	15.717	0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	16.168	0m	N.D.	d	

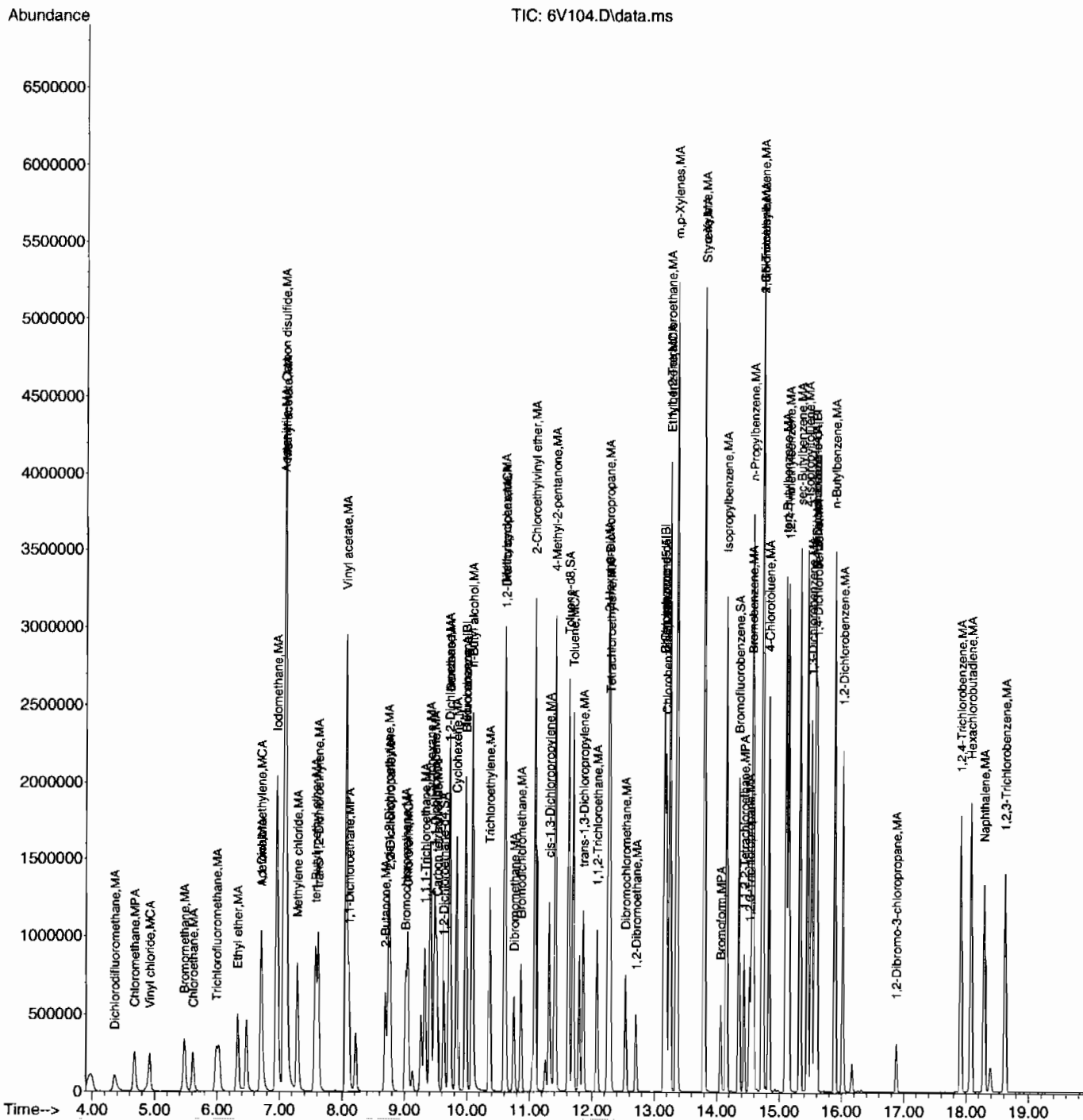
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(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V104.D
Acq On : 25 Jan 2010 11:26 am
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-01|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[A] 1214-01H+0120-03
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 25 11:46:02 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



Continuing Calibration Summary

Client SDG: 10-1287

Instrument ID: VOA6.I

Injection Date 25-JAN-10 12:21

Data File: 012510V6\6V106.D

Init. Cal. Date(s) 10-DEC-09 11:34 - 10-DEC-09 19:2

Lab Sample ID W6VM100125-03

Quant Type ISTD

Method:VOA6-8260-121009.M

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S1,2-Dichloroethane-d4	0.295	0.2971		.01		0.71186	30		Averaged
SToluene-d8	1.3863	1.29617		.01		-6.50148	30		Averaged
SBromofluorobenzene	0.9636	0.9189		.01		-4.63885	30		Averaged
Acrolein	0.0365	0.03798		.01		4.05479	30		Averaged
Trichlorotrifluoroethane	0.0934	0.11085		.01		18.68308	30		Averaged
Allyl chloride	0.4371	0.46855		.01		7.19515	30		Averaged
Acrylonitrile	0.0929	0.0847		.01		-8.8267	30		Averaged
2-Chloro-1,3-butadiene	0.372	0.41678		.01		12.03763	30		Averaged
Ethyl acetate	0.2653	0.22443		.01		-15.4052	40		Averaged
Propionitrile	0.0361	0.03165		.01		-12.32687	30		Averaged
Methacrylonitrile	0.1587	0.14754		.01		-7.03214	30		Averaged
Tetrahydrofuran	0.0843	0.07574		.01		-10.15421	30		Averaged
Isobutyl alcohol	0.0095	0.00912		.01		-4	40		Averaged
Methyl methacrylate	0.1518	0.13623		.01		-10.25692	30		Averaged
1,4-Dioxane	0.0023	0.00214		.01		-6.95652	40		Averaged
2-Nitropropane	250	249.84	250			-0.064	30		Linear
Ethyl methacrylate	0.3914	0.35413		.01		-9.52223	30		Averaged
cis-1,4-Dichloro-2-butene	0.2353	0.24222		.01		2.94093	30		Averaged
Cyclohexanone	0.0193	0.01627		.01		-15.69948	40		Averaged
trans-1,4-Dichloro-2-butene	0.2261	0.22817		.01		0.91552	30		Averaged
Pentachloroethane	0.3343	0.43287		.01		29.48549	30		Averaged
Benzyl chloride	1.2936	1.18677		.01		-8.25835	30		Averaged
bis(2-Chloroisopropyl)ether	0.3796	0.32007		.01		-15.6823	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V106.D
Acq On : 25 Jan 2010 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 25 13:29:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.974	96	1952312	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1423365	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	806285	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	96	1950115	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1423365	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	806285	50.00	ug/L	0.00

System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	580037	50.36	ug/L	0.00
43) Toluene-d8	11.626	98	1844923	46.75	ug/L	0.00
61) Bromofluorobenzene	14.357	95	740892	47.68	ug/L	0.00

Target Compounds				Qvalue		
2) Dichlorodifluoromethane	4.360		0m	N.D.	d	
3) Chloromethane	4.672		0m	N.D.	d	
4) Vinyl chloride	4.904		0m	N.D.	d	
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
8) Ethyl ether	0.000		0	N.D.		
9) Acetone	6.688		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.688		0m	N.D.	d	
11) Iodomethane	6.956		0m	N.D.	d	
12) Acetonitrile	7.139		0m	N.D.	d	
13) Methyl acetate	7.096		0m	N.D.	d	
14) Carbon disulfide	7.139		0m	N.D.	d	
15) Methylene chloride	7.291		0m	N.D.	d	
16) tert-Butyl methyl ether	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	7.627		0m	N.D.	d	
18) Vinyl acetate	8.066		0m	N.D.	d	
19) 1,1-Dichloroethane	8.206		0m	N.D.	d	
20) 2-Butanone	8.700		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.700		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000		0	N.D.		
23) Bromochloromethane	0.000		0	N.D.		
24) Chloroform	9.053		0m	N.D.	d	
25) 1,1,1-Trichloroethane	0.000		0	N.D.		
26) Cyclohexane	9.389		0m	N.D.	d	
27) 1,1-Dichloropropene	9.486		0m	N.D.	d	
28) Carbon tetrachloride	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000		0	N.D.		
31) Benzene	9.724		0m	N.D.	d	
32) Cyclohexene	9.821		0m	N.D.	d	
33) n-Butyl alcohol	10.090		0m	N.D.	d	
34) Trichloroethylene	10.364		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000		0	N.D.		
36) Methylcyclohexane	10.590		0m	N.D.	d	
37) Dibromomethane	0.000		0	N.D.		
38) Bromodichloromethane	0.000		0	N.D.		
39) 2-Chloroethylvinyl ether	11.096		0m	N.D.	d	
40) cis-1,3-Dichloropropylene	11.309		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V106.D
Acq On : 25 Jan 2010 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 25 13:29:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 4-Methyl-2-pentanone	11.413		0m	N.D.	d	
44) Toluene	11.699		0m	N.D.	d	
45) trans-1,3-Dichloroprop...	11.858		0m	N.D.	d	
46) 1,1,2-Trichloroethane	0.000		0	N.D.		
47) 2-Hexanone	12.266		0m	N.D.	d	
48) 1,3-Dichloropropane	12.266		0m	N.D.	d	
49) Tetrachloroethylene	12.290		0m	N.D.	d	
50) Dibromochloromethane	12.540		0m	N.D.	d	
51) 1,2-Dibromoethane	12.705		0m	N.D.	d	
52) Chlorobenzene	13.193		0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane	13.242		0m	N.D.	d	
54) Ethylbenzene	13.254		0m	N.D.	d	
55) m,p-Xylenes	13.363		0m	N.D.	d	
56) o-Xylene	13.796		0m	N.D.	d	
57) Styrene	13.802		0m	N.D.	d	
59) Bromoform	14.065		0m	N.D.	d	
60) Isopropylbenzene	14.156		0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane	14.443		0m	N.D.	d	
63) 1,2,3-Trichloropropane	14.522		0m	N.D.	d	
64) Bromobenzene	14.564		0m	N.D.	d	
65) n-Propylbenzene	14.583		0m	N.D.	d	
66) 1,3,5-Trimethylbenzene	14.741		0m	N.D.	d	
67) 2-Chlorotoluene	14.735		0m	N.D.	d	
68) 4-Chlorotoluene	14.833		0m	N.D.	d	
69) tert-Butylbenzene	15.113		0m	N.D.	d	
70) 1,2,4-Trimethylbenzene	15.150		0m	N.D.	d	
71) sec-Butylbenzene	15.333		0m	N.D.	d	
72) 4-Isopropyltoluene	15.454		0m	N.D.	d	
73) 1,3-Dichlorobenzene	15.515		0m	N.D.	d	
74) 1,4-Dichlorobenzene	15.601		0m	N.D.	d	
75) n-Butylbenzene	15.893		0m	N.D.	d	
76) 1,2-Dichlorobenzene	16.015		0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...	16.875		0m	N.D.	d	
78) 1,2,4-Trichlorobenzene	17.911		0m	N.D.	d	
79) Hexachlorobutadiene	18.076		0m	N.D.	d	
80) Naphthalene	18.289		0m	N.D.	d	
81) 1,2,3-Trichlorobenzene	18.619		0m	N.D.	d	
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	6.535	56	370346	260.34	ug/L	99
86) Trichlorotrifluoroethane	6.682	85	1080872	296.71	ug/L	98
87) Isopropyl Alcohol	0.000		0m	N.D.	d	
88) Allyl chloride	7.139	41	4568635	267.96	ug/L	96
89) tert-Butyl Alcohol	0.000		0	N.D.		
90) Acrylonitrile	7.548	53	825911	228.00	ug/L	100
91) Isopropyl ether	0.000		0	N.D.		
92) 2-Chloro-1,3-butadiene	8.206	53	812769	56.02	ug/L	95
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.700	43	2188350	211.46	ug/L	98
95) Propionitrile	8.779	54	308557	219.19	ug/L	99
96) Methacrylonitrile	8.950	41	1438587	232.35	ug/L	99
97) Tetrahydrofuran	9.059	42	738538	224.66	ug/L	96

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V106.D
Acq On : 25 Jan 2010 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 25 13:29:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98) Isobutyl alcohol	9.389	41	889554	2393.39	ug/L	97
99) Methyl tert-amyl ether	9.736	73	446	N.D.		
100) Methyl methacrylate	10.590	69	1328288	224.40	ug/L	93
101) 1,4-Dioxane	10.699	88	208570	2280.38	ug/L	97
102) 2-Nitropropane	11.071	43	748231	249.84	ug/L	98
104) Ethyl methacrylate	11.858	69	2520284	226.19	ug/L	95
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.205	53	976492	257.32	ug/L	98
108) Cyclohexanone	14.321	42	327915	1056.25	ug/L	97
109) trans-1,4-Dichloro-2-b...	14.491	53	919861	252.34	ug/L	95
110) Pentachloroethane	15.180	167	1745072	323.71	ug/L	100
111) Benzyl chloride	15.717	91	4784356	229.36	ug/L	99
112) bis(2-Chloroisopropyl)...	16.113	45	1290322	210.81	ug/L	98

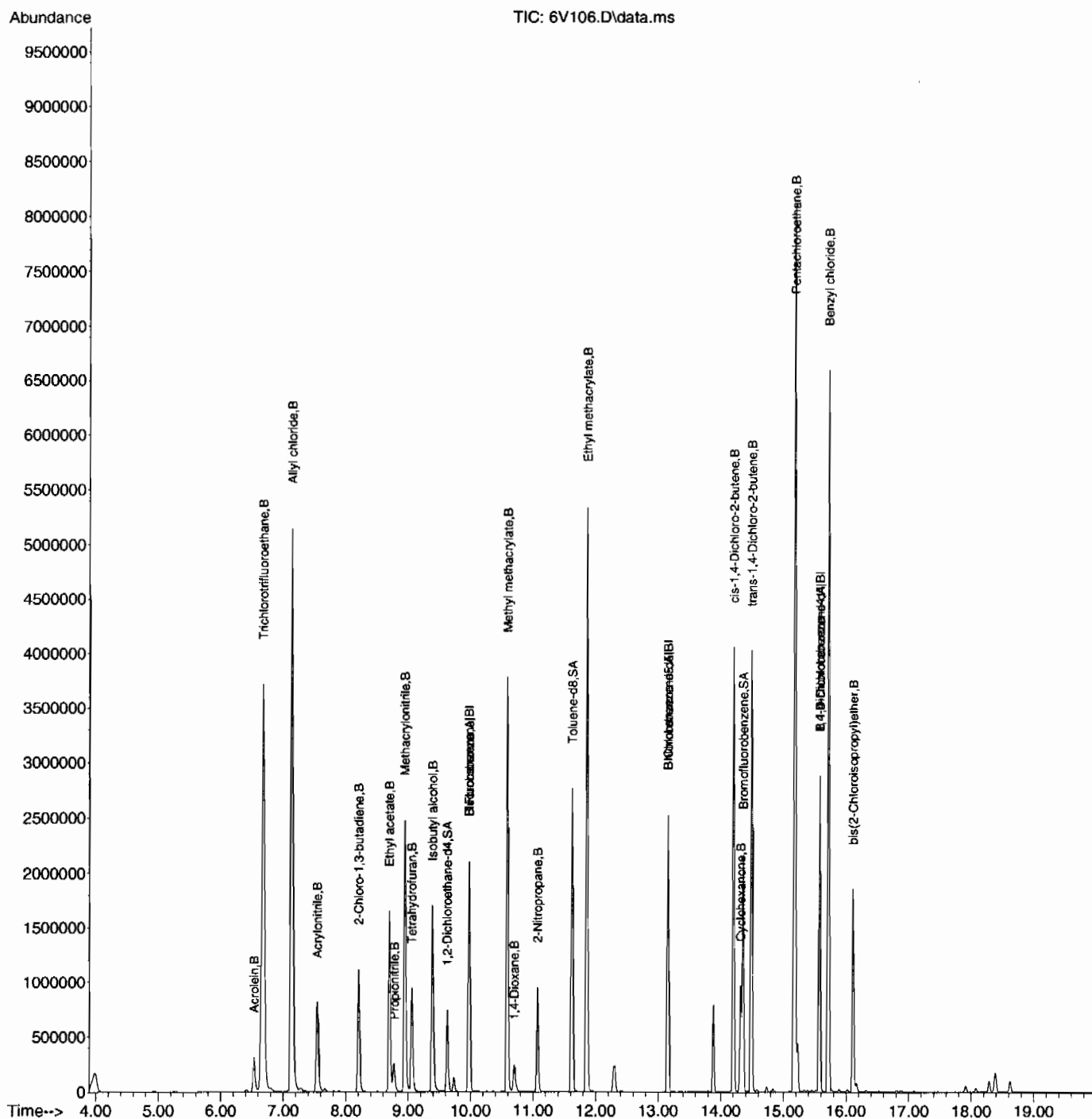
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V106.D
Acq On : 25 Jan 2010 12:21 pm
Operator : RXD1
InstName : VOA6
Sample : |W6VM100125-03|CCV|1|VOAF|1|VOA8260BS|
Misc : CCV 5mL N/A MIX[B] 1023-08B
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 25 13:29:46 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



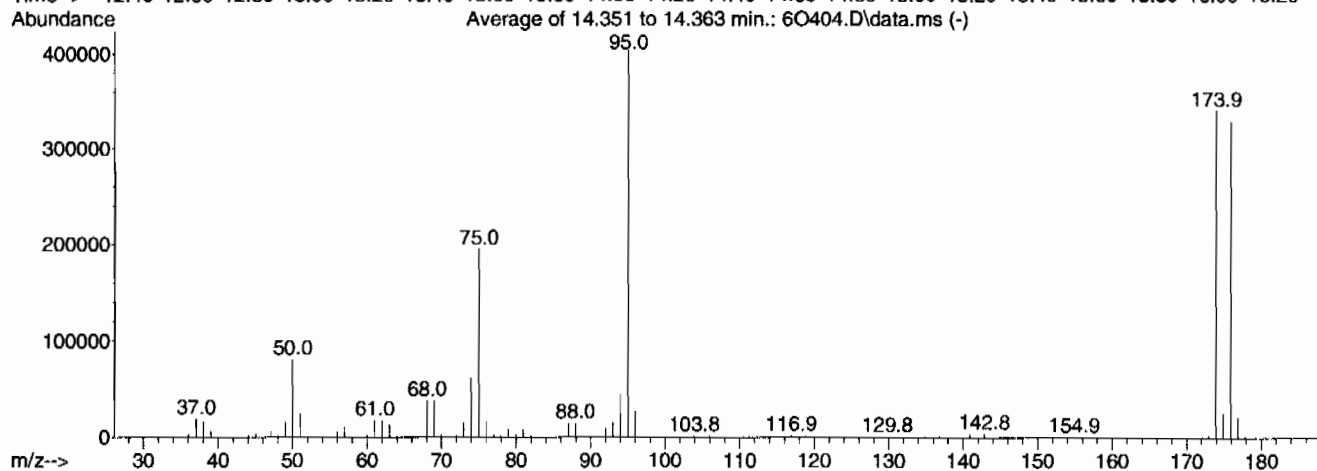
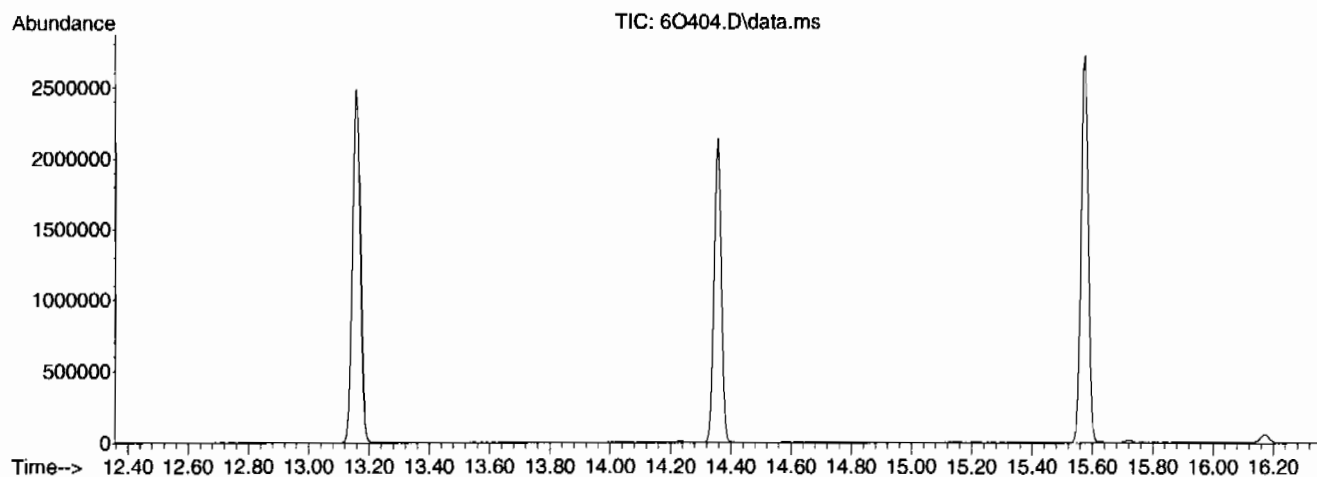
Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\121009V6\
Data File : 60404.D
Acq On : 10 Dec 2009 10:12 am
Operator : RXD1
Sample : |UVM091020-02|BFB|1|VOAF|1|VOA8260BLF|
Misc : GEL 5mL N/A BFB
ALS Vial : 4 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Title : Volatile Organics 8260B
Last Update : Mon Dec 14 12:44:52 2009
SubList :



AutoFind: Scans 1558, 1559, 1560; Background Corrected with Scan 1550

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.0	80893	PASS
75	95	30	60	48.2	194667	PASS
95	95	100	100	100.0	404032	PASS
96	95	5	9	6.7	27179	PASS
173	174	0.00	2	0.8	2837	PASS
174	95	50	100	84.2	340352	PASS
175	174	5	9	7.2	24547	PASS
176	174	95	101	96.8	329472	PASS
177	176	5	9	6.6	21595	PASS

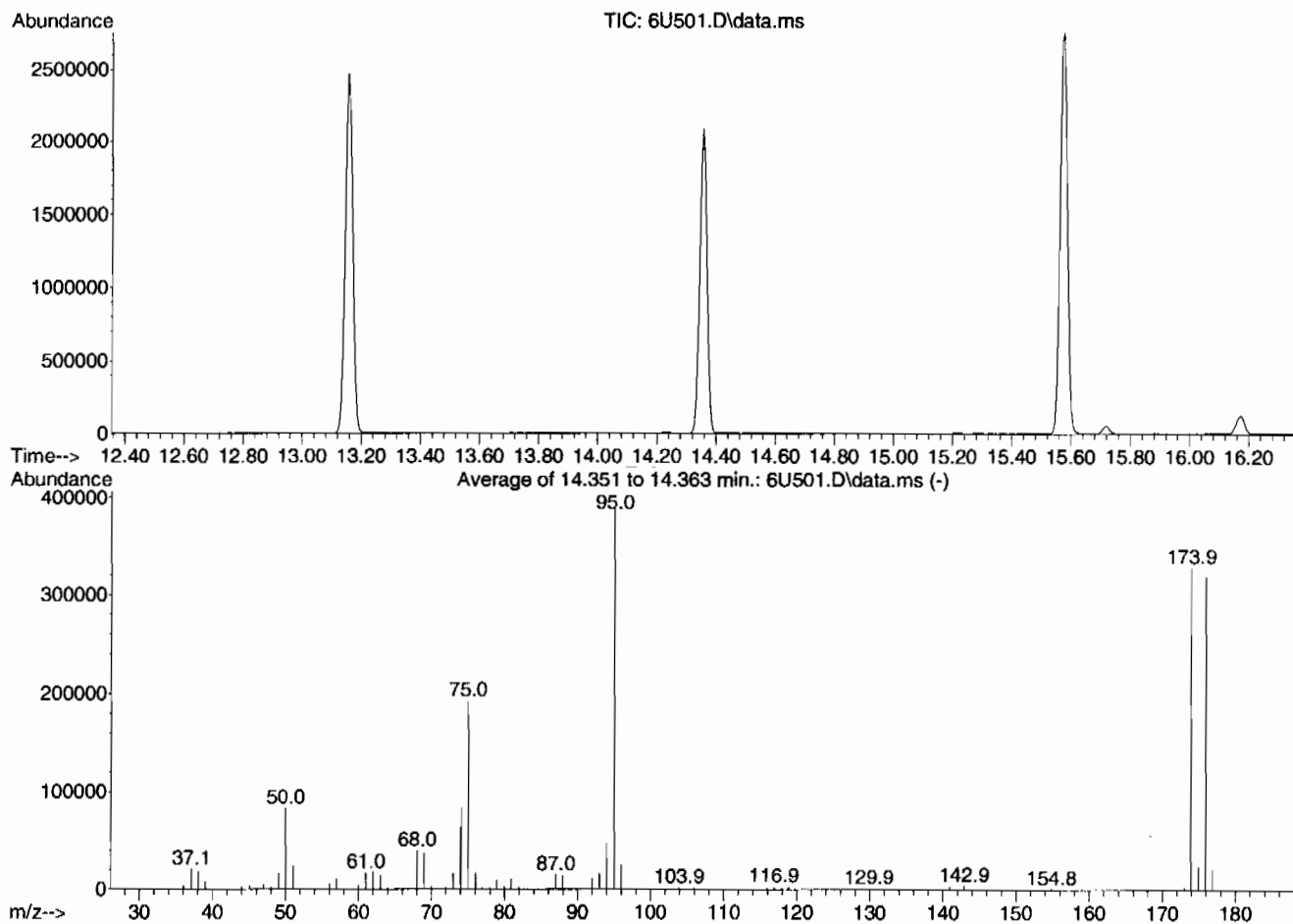
Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U501.D
Acq On : 22 Jan 2010 10:34 am
Operator : RXD1
Sample : |UVM091117-02|BFB|1|VOAF|1|
Misc : GEL 5mL N/A BFB
ALS Vial : 1 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Title : Volatile Organics 8260B
Last Update : Mon Dec 14 12:44:52 2009

SubList :



AutoFind: Scans 1558, 1559, 1560; Background Corrected with Scan 1549

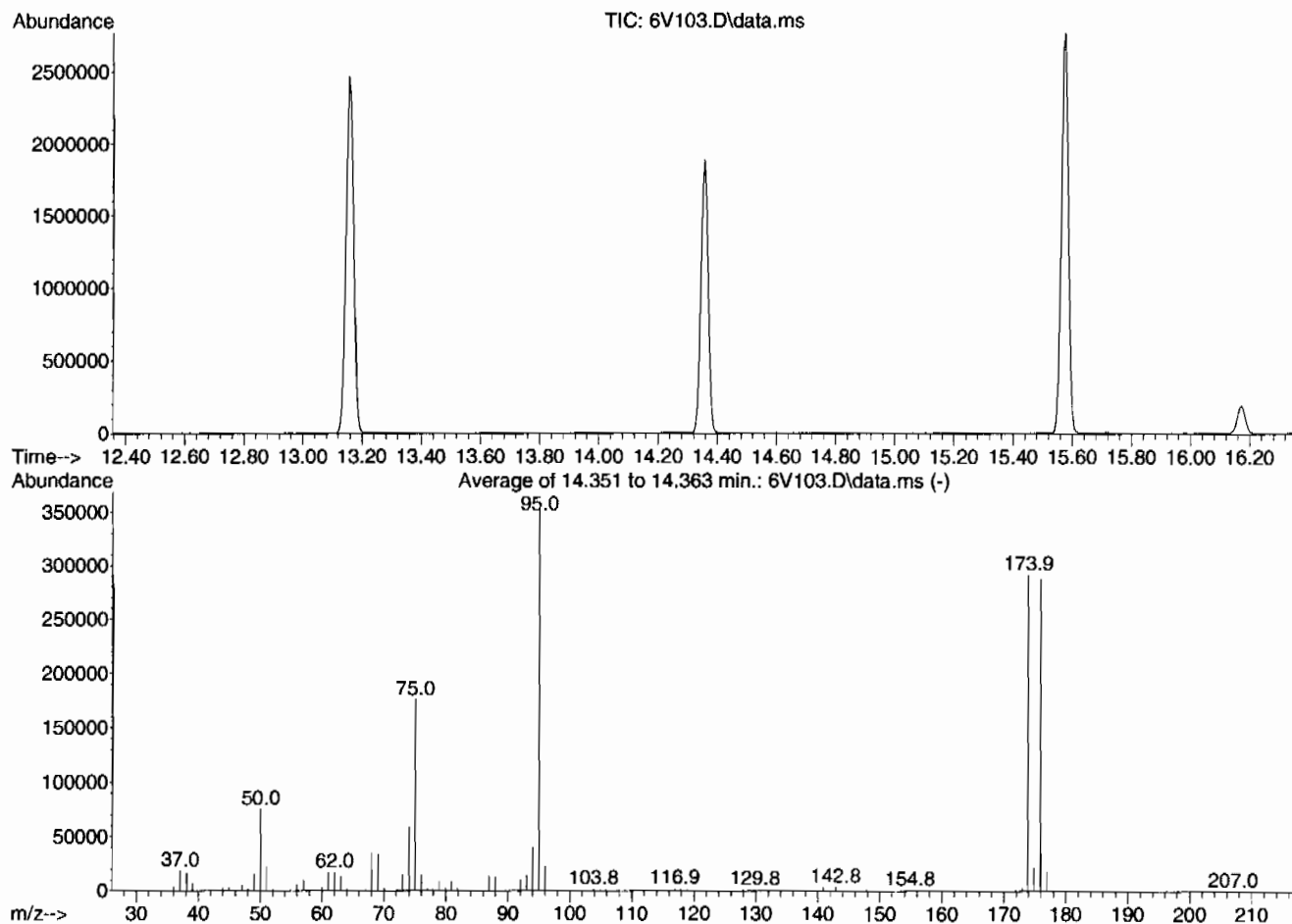
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4	82968	PASS
75	95	30	60	49.7	192533	PASS
95	95	100	100	100.0	387157	PASS
96	95	5	9	6.7	25872	PASS
173	174	0.00	2	0.9	2981	PASS
174	95	50	100	84.7	328043	PASS
175	174	5	9	7.1	23411	PASS
176	174	95	101	97.3	319168	PASS
177	176	5	9	6.7	21261	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V103.D
Acq On : 25 Jan 2010 10:58 am
Operator : RXD1
Sample : |UVM091216-01|BFB|1|VOAF|1|VOA8260BS|
Misc : GEL 5mL N/A BFB
ALS Vial : 3 Sample Multiplier: 1

Integration File: default.P

Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Title : Volatile Organics 8260B SubList :
Last Update : Mon Dec 14 12:44:52 2009



AutoFind: Scans 1558, 1559, 1560; Background Corrected with Scan 1550

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4	75104	PASS
75	95	30	60	49.9	175381	PASS
95	95	100	100	100.0	351147	PASS
96	95	5	9	6.7	23448	PASS
173	174	0.00	2	1.0	2903	PASS
174	95	50	100	83.1	291925	PASS
175	174	5	9	7.4	21616	PASS
176	174	95	101	98.6	287893	PASS
177	176	5	9	6.4	18401	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 1202022573
Client Sample: QC for batch 944498
Client ID: MB for batch 944498
Batch ID: 944501
Run Date: 01/22/2010 13:02
Prep Date: 01/22/2010 09:22
Data File: 012210V6U506BL2.D

Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 1202022573
 Client Sample: QC for batch 944498
 Client ID: MB for batch 944498
 Batch ID: 944501
 Run Date: 01/22/2010 13:02
 Prep Date: 01/22/2010 09:22
 Data File: 012210V6U506BL2.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

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

Tentatively Identified Compound Summary

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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U506BL2.D
Acq On : 22 Jan 2010 1:02 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022573|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 22 14:12:19 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.980	9.974	1.000	96	1857325	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	13.156	1.000	117	1401968	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	764131	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	9.974	1.000	96	1855297	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	13.156	1.000	117	1401968	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	764131	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	9.633	9.626	0.965	65	578987	52.84	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	105.68%			
43) Toluene-d8	11.626	11.626	0.884	98	1834675	47.20	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	94.40%			
61) Bromofluorobenzene	14.357	14.357	0.922	95	749375	50.89	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	101.78%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.360	0.000		0	N.D.		
3) Chloromethane	4.672	4.672	0.468	50	1335	N.D.		
4) Vinyl chloride	4.884	4.914	0.489	62	588	N.D.		
5) Bromomethane	0.000	5.478	0.000		0	N.D.		
6) Chloroethane	0.000	5.609	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.022	0.000		0	N.D.		
8) Ethyl ether	0.000	6.328	0.000		0	N.D.		
9) Acetone	6.718	6.712	0.673	43	4580	N.D.		
10) 1,1-Dichloroethylene	0.000	6.706	0.000		0	N.D.		
11) Iodomethane	0.000	6.956	0.000		0	N.D.		
12) Acetonitrile	7.139	7.066	0.715	41	1340	N.D.		
13) Methyl acetate	0.000	7.096	0.000		0	N.D.		
14) Carbon disulfide	7.078	7.084	0.709	76	2595	N.D.		
15) Methylene chloride	7.292	7.285	0.731	84	12624	N.D.		
16) tert-Butyl methyl ether	0.000	7.578	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	7.621	0.000		0	N.D.		
18) Vinyl acetate	8.066	8.060	0.808	43	191	N.D.		
19) 1,1-Dichloroethane	0.000	8.102	0.000		0	N.D.		
20) 2-Butanone	8.706	8.694	0.872	43	2603	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.742	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.767	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.017	0.000		0	N.D.		
24) Chloroform	0.000	9.053	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.328	0.000		0	N.D.		
26) Cyclohexane	0.000	9.413	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.480	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.517	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.712	0.000		0	N.D.		
31) Benzene	9.730	9.724	0.975	78	261	N.D.		
32) Cyclohexene	0.000	9.834	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.084	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.364	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	10.614	0.000		0	N.D.		
36) Methylcyclohexane	0.000	10.608	0.000		0	N.D.		
37) Dibromomethane	0.000	10.748	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U506BL2.D
Acq On : 22 Jan 2010 1:02 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022573|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 22 14:12:19 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	10.864	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.089	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.315	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.413	0.000		0	N.D.	
44) Toluene	11.699	11.699	0.889	91	725	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.858	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.083	0.000		0	N.D.	
47) 2-Hexanone	12.266	12.260	0.932	43	535	N.D.	
48) 1,3-Dichloropropane	0.000	12.272	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.540	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.705	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.193	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.242	0.000		0	N.D.	
54) Ethylbenzene	13.254	13.254	1.007	91	261	N.D.	
55) m,p-Xylenes	0.000	13.363	0.000		0	N.D.	
56) o-Xylene	0.000	13.796	0.000		0	N.D.	
57) Styrene	13.802	13.802	1.049	104	488	N.D.	
59) Bromoform	0.000	14.058	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.156	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.436	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.528	0.000		0	N.D.	
64) Bromobenzene	0.000	14.564	0.000		0	N.D.	
65) n-Propylbenzene	14.589	14.583	0.937	91	1229	N.D.	
66) 1,3,5-Trimethylbenzene	14.741	14.735	0.946	105	649	N.D.	
67) 2-Chlorotoluene	0.000	14.729	0.000		0	N.D.	
68) 4-Chlorotoluene	14.833	14.833	0.952	91	542	N.D.	
69) tert-Butylbenzene	15.174	15.107	0.974	134	577	N.D.	
70) 1,2,4-Trimethylbenzene	15.144	15.150	0.972	105	1091	N.D.	
71) sec-Butylbenzene	15.339	15.333	0.985	105	1385	N.D.	
72) 4-Isopropyltoluene	15.455	15.454	0.992	119	1535	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.515	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	15.601	15.601	1.002	146	469	N.D.	
75) n-Butylbenzene	15.887	15.887	1.020	91	1579	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.021	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.881	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.911	17.911	1.150	180	901	N.D.	
79) Hexachlorobutadiene	18.076	18.076	1.160	225	216	N.D.	
80) Naphthalene	18.289	18.289	1.174	128	6126	N.D.	
81) 1,2,3-Trichlorobenzene	18.625	18.619	1.196	180	1367	N.D.	
83) Chlorotrifluoroethylene	0.000	4.279	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.025	0.000		0	N.D.	
85) Acrolein	0.000	6.529	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.676	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.785	0.000		0	N.D.	
88) Allyl chloride	7.139	7.139	0.715	41	1340	N.D.	
89) tert-Butyl Alcohol	0.000	7.285	0.000		0	N.D.	
90) Acrylonitrile	7.554	7.541	0.757	53	239	N.D.	
91) Isopropyl ether	0.000	8.078	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.206	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.486	0.000		0	N.D.	
94) Ethyl acetate	8.706	8.700	0.872	43	2603	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U506BL2.D
Acq On : 22 Jan 2010 1:02 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022573|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 22 14:12:19 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	8.773	0.000		0	N.D.	
96) Methacrylonitrile	8.956	8.950	0.897	41	705	N.D.	
97) Tetrahydrofuran	9.066	9.059	0.908	42	1550	N.D.	
98) Isobutyl alcohol	0.000	9.388	0.000		0m	N.D.	d
99) Methyl tert-amyl ether	0.000	9.736	0.000		0	N.D.	
100) Methyl methacrylate	10.596	10.589	1.062	69	1472	N.D.	
101) 1,4-Dioxane	0.000	10.699	0.000		0	N.D.	
102) 2-Nitropropane	0.000	11.071	0.000		0m	N.D.	d
104) Ethyl methacrylate	11.864	11.857	0.902	69	3094	N.D.	
106) 1-Chlorohexane	0.000	13.052	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.199	14.198	0.912	53	2510	N.D.	
108) Cyclohexanone	14.315	14.320	0.919	42	1615	N.D.	
109) trans-1,4-Dichloro-2-b...	14.491	14.491	0.930	53	4089	1.18 ug/L	83
110) Pentachloroethane	15.180	15.180	0.975	167	5934	1.16 ug/L	69
111) Benzyl chloride	15.723	15.716	1.009	91	36233	1.83 ug/L	96
112) bis(2-Chloroisopropyl)...	16.113	16.113	1.034	45	18299	3.15 ug/L	93

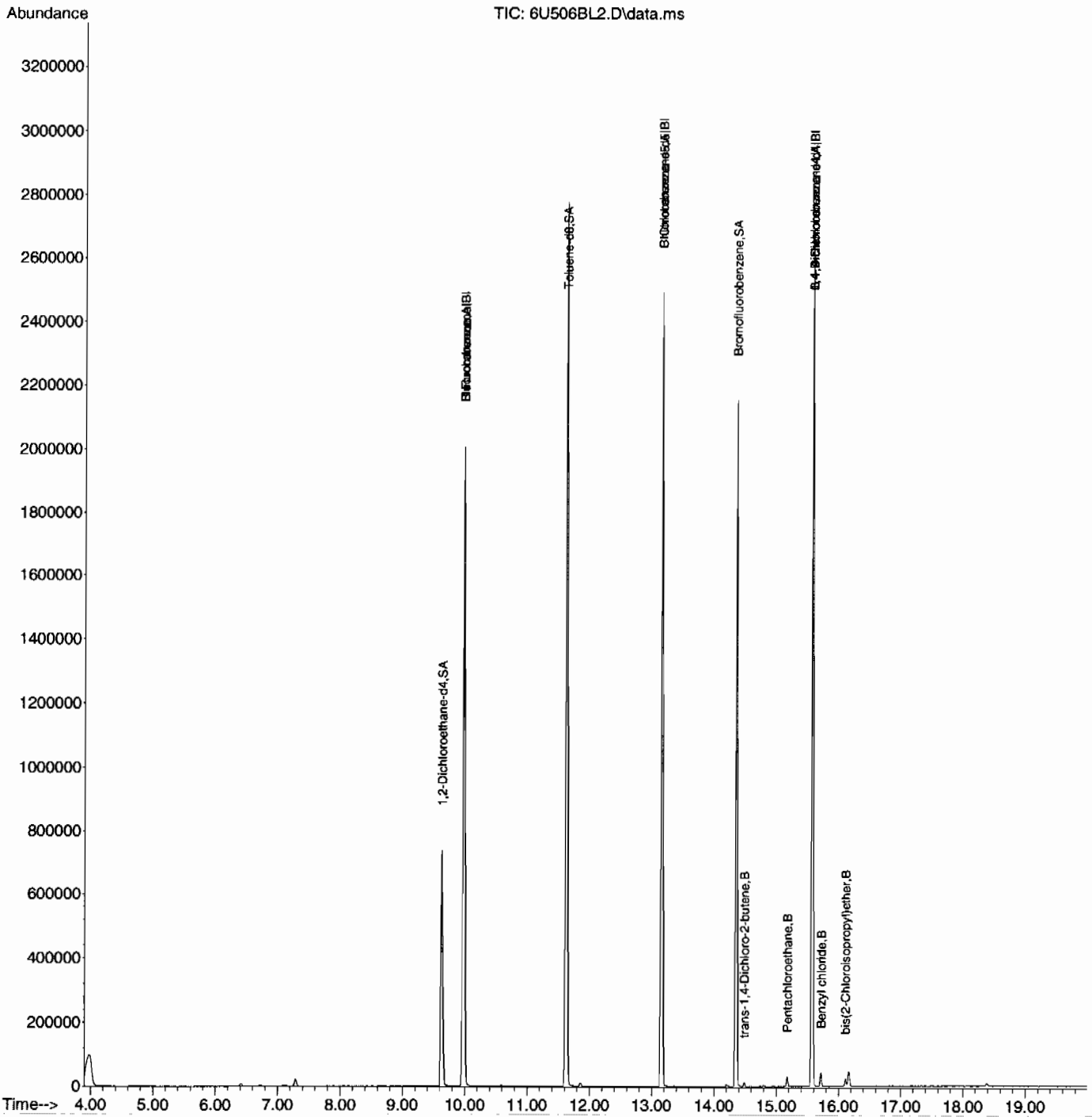
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

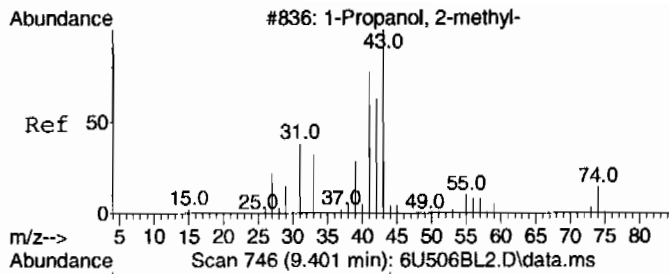
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U506BL2.D
Acq On : 22 Jan 2010 1:02 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022573|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 22 14:12:19 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

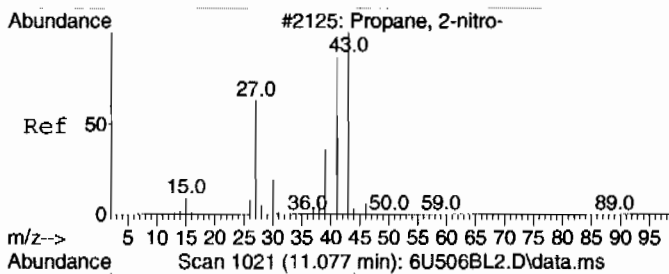
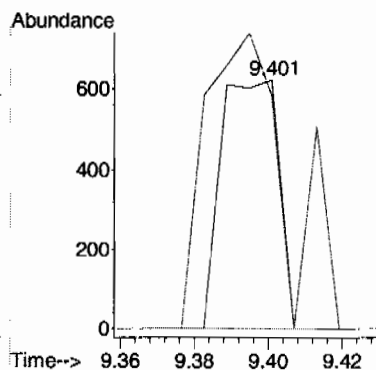
SubList :





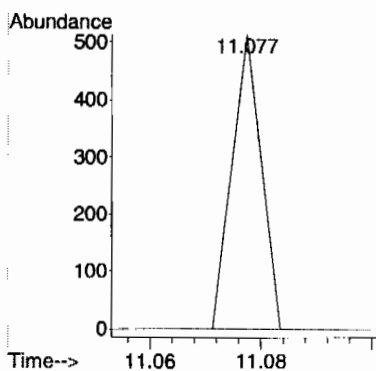
#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 1.90 ug/L
RT: 9.401 min Scan# 746
Delta R.T. 0.013 min
Lab File: 6U506BL2.D
Acq: 22 Jan 2010 1:02 pm

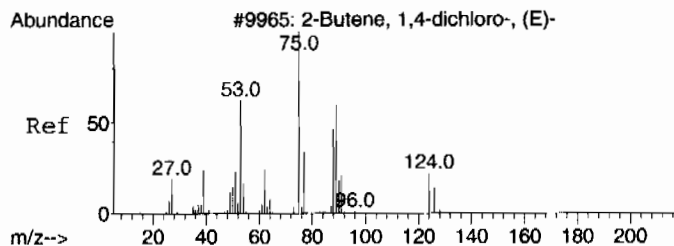
Tgt Ion: 41 Resp: 671
Ion Ratio Lower Upper
41 100
43 167.5 111.2 171.2



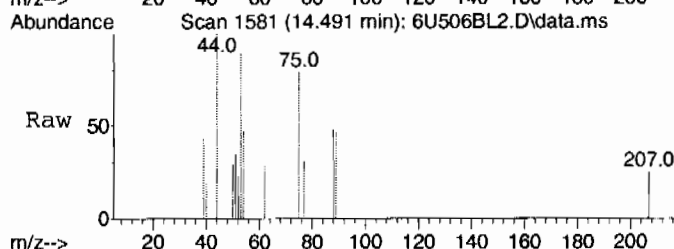
#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 3.80 ug/L
RT: 11.077 min Scan# 1021
Delta R.T. 0.006 min
Lab File: 6U506BL2.D
Acq: 22 Jan 2010 1:02 pm

Tgt Ion: 43 Resp: 188
Ion Ratio Lower Upper
43 100
41 0.0 52.2 112.2#



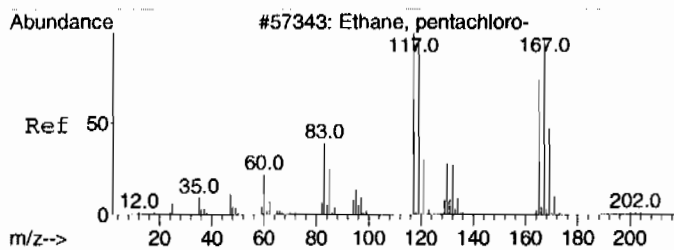
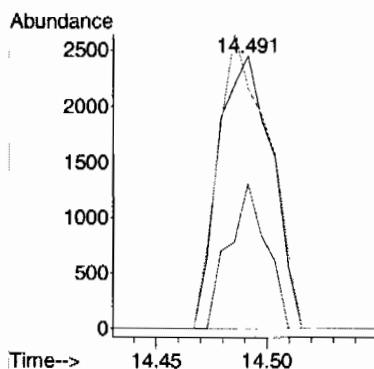
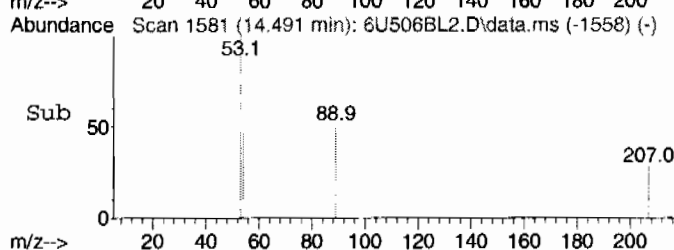


#109
trans-1,4-Dichloro-2-butene
Concen: 1.18 ug/L
RT: 14.491 min Scan# 1581
Delta R.T. 0.000 min
Lab File: 6U506BL2.D
Acq: 22 Jan 2010 1:02 pm

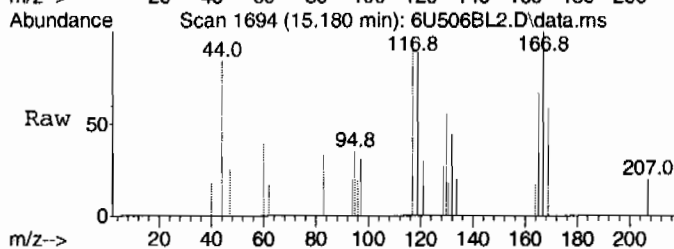


Tgt Ion: 53 Resp: 4089

Ion	Ratio	Lower	Upper
53	100		
88	37.8	19.8	79.8
75	103.3	91.6	151.6

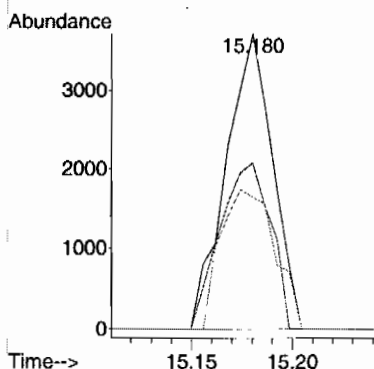
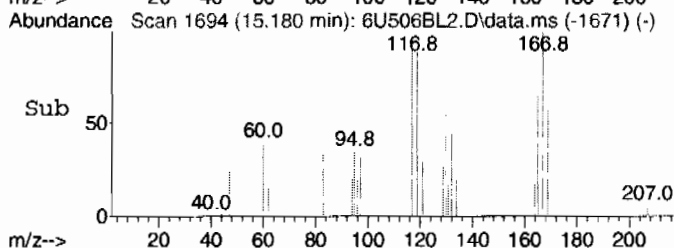


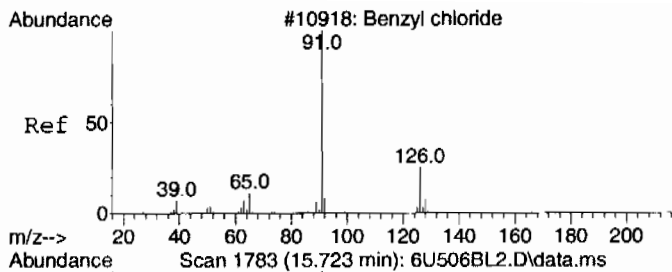
#110
Pentachloroethane
Concen: 1.16 ug/L
RT: 15.180 min Scan# 1694
Delta R.T. 0.000 min
Lab File: 6U506BL2.D
Acq: 22 Jan 2010 1:02 pm



Tgt Ion: 167 Resp: 5934

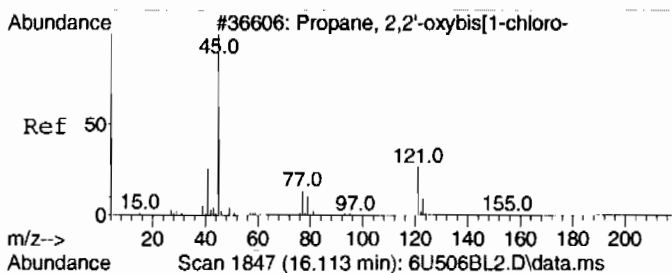
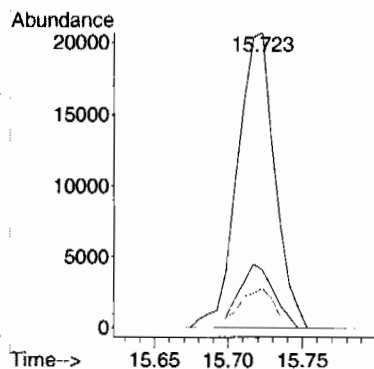
Ion	Ratio	Lower	Upper
167	100		
130	60.6	10.0	70.0
132	54.6	7.5	67.5





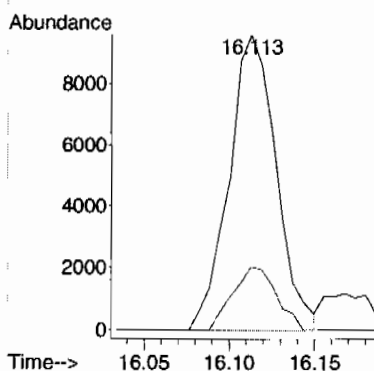
#111
Benzyl chloride
Concen: 1.83 ug/L
RT: 15.723 min Scan# 1783
Delta R.T. 0.007 min
Lab File: 6U506BL2.D
Acq: 22 Jan 2010 1:02 pm

Tgt Ion: 91 Resp: 36233
Ion Ratio Lower Upper
91 100
126 20.3 0.0 52.6
65 12.4 0.0 42.9



#112
bis(2-Chloroisopropyl)ether
Concen: 3.15 ug/L
RT: 16.113 min Scan# 1847
Delta R.T. -0.000 min
Lab File: 6U506BL2.D
Acq: 22 Jan 2010 1:02 pm

Tgt Ion: 45 Resp: 18299
Ion Ratio Lower Upper
45 100
121 19.6 0.0 53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U506BL2.D
Acq On : 22 Jan 2010 1:02 pm
Operator : RXD1
Sample : |1202022573|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :

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

No Library Search Compounds Detected

Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U506BL2.D
Acq On : 22 Jan 2010 1:02 pm
Operator : RXD1
Sample : |1202022573|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 1202036752
 Client Sample: QC for batch 944498
 Client ID: MB for batch 944498
 Batch ID: 944501
 Run Date: 01/25/2010 13:17
 Prep Date: 01/25/2010 09:14
 Data File: 012510V6V108BLD

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.00	ug/kg	0.340	1.00
74-87-3	Chloromethane	U	1.00	ug/kg	0.300	1.00
75-01-4	Vinyl chloride	U	1.00	ug/kg	0.300	1.00
74-83-9	Bromomethane	U	1.00	ug/kg	0.300	1.00
75-00-3	Chloroethane	U	1.00	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/kg	0.300	1.00
67-64-1	Acetone	J	2.13	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: 10-1287
 Lab Sample ID: 1202036752
 Client Sample: QC for batch 944498
 Client ID: MB for batch 944498
 Batch ID: 944501
 Run Date: 01/25/2010 13:17
 Prep Date: 01/25/2010 09:14
 Data File: 012510V66V108BL.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.1
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

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

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	unknown siloxane	16.17	6.09	ug/kg	0	J

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V108BL.D
Acq On : 25 Jan 2010 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036752|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 25 15:38:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.980	9.974	1.000	96	1937779	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	13.156	1.000	117	1423894	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	788433	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	9.974	1.000	96	1935497	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	13.156	1.000	117	1423894	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	788433	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	9.626	9.626	0.965	65	598085	52.31	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	104.62%			
43) Toluene-d8	11.626	11.626	0.884	98	1839396	46.59	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	93.18%			
61) Bromofluorobenzene	14.357	14.357	0.922	95	722385	47.54	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	95.08%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.360	0.000		0	N.D.		
3) Chloromethane	4.672	4.672	0.468	50	1723	N.D.		
4) Vinyl chloride	4.924	4.914	0.493	62	654	N.D.		
5) Bromomethane	0.000	5.478	0.000		0	N.D.		
6) Chloroethane	0.000	5.609	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.022	0.000		0	N.D.		
8) Ethyl ether	0.000	6.328	0.000		0	N.D.		
9) Acetone	6.712	6.712	0.673	43	7517	2.13	ug/L	79
10) 1,1-Dichloroethylene	0.000	6.706	0.000		0	N.D.		
11) Iodomethane	0.000	6.956	0.000		0	N.D.		
12) Acetonitrile	7.127	7.066	0.714	41	1115	N.D.		
13) Methyl acetate	0.000	7.096	0.000		0	N.D.		
14) Carbon disulfide	7.084	7.084	0.710	76	768	N.D.		
15) Methylene chloride	7.291	7.285	0.731	84	8661	N.D.		
16) tert-Butyl methyl ether	0.000	7.578	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	7.621	0.000		0	N.D.		
18) Vinyl acetate	0.000	8.060	0.000		0	N.D.		
19) 1,1-Dichloroethane	0.000	8.102	0.000		0	N.D.		
20) 2-Butanone	8.712	8.694	0.873	43	2608	N.D.		
21) cis-1,2-Dichloroethylene	0.000	8.742	0.000		0	N.D.		
22) 2,2-Dichloropropane	0.000	8.767	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.017	0.000		0	N.D.		
24) Chloroform	0.000	9.053	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.328	0.000		0	N.D.		
26) Cyclohexane	0.000	9.413	0.000		0	N.D.		
27) 1,1-Dichloropropene	0.000	9.480	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.517	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.712	0.000		0	N.D.		
31) Benzene	0.000	9.724	0.000		0	N.D.		
32) Cyclohexene	0.000	9.834	0.000		0	N.D.		
33) n-Butyl alcohol	0.000	10.084	0.000		0	N.D.		
34) Trichloroethylene	0.000	10.364	0.000		0	N.D.		
35) 1,2-Dichloropropane	0.000	10.614	0.000		0	N.D.		
36) Methylcyclohexane	0.000	10.608	0.000		0	N.D.		
37) Dibromomethane	0.000	10.748	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V108BL.D
Acq On : 25 Jan 2010 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036752|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 25 15:38:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	10.864	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.089	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.315	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.413	0.000		0	N.D.	
44) Toluene	11.693	11.699	0.889	91	1206	N.D.	
45) trans-1,3-Dichloroprop...	0.000	11.858	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.083	0.000		0	N.D.	
47) 2-Hexanone	12.266	12.260	0.932	43	245	N.D.	
48) 1,3-Dichloropropane	0.000	12.272	0.000		0	N.D.	
49) Tetrachloroethylene	0.000	12.290	0.000		0	N.D.	
50) Dibromochloromethane	0.000	12.540	0.000		0	N.D.	
51) 1,2-Dibromoethane	0.000	12.705	0.000		0	N.D.	
52) Chlorobenzene	0.000	13.193	0.000		0	N.D.	
53) 1,1,1,2-Tetrachloroethane	0.000	13.242	0.000		0	N.D.	
54) Ethylbenzene	13.253	13.254	1.007	91	261	N.D.	
55) m,p-Xylenes	0.000	13.363	0.000		0	N.D.	
56) o-Xylene	0.000	13.796	0.000		0	N.D.	
57) Styrene	0.000	13.802	0.000		0	N.D.	
59) Bromoform	0.000	14.058	0.000		0	N.D.	
60) Isopropylbenzene	0.000	14.156	0.000		0	N.D.	
62) 1,1,2,2-Tetrachloroethane	0.000	14.436	0.000		0	N.D.	
63) 1,2,3-Trichloropropane	0.000	14.528	0.000		0	N.D.	
64) Bromobenzene	0.000	14.564	0.000		0	N.D.	
65) n-Propylbenzene	14.582	14.583	0.936	91	511	N.D.	
66) 1,3,5-Trimethylbenzene	0.000	14.735	0.000		0	N.D.	
67) 2-Chlorotoluene	0.000	14.729	0.000		0	N.D.	
68) 4-Chlorotoluene	14.832	14.833	0.952	91	291	N.D.	
69) tert-Butylbenzene	15.186	15.107	0.975	134	917	N.D.	
70) 1,2,4-Trimethylbenzene	15.143	15.150	0.972	105	1149	N.D.	
71) sec-Butylbenzene	15.338	15.333	0.985	105	700	N.D.	
72) 4-Isopropyltoluene	15.454	15.454	0.992	119	671	N.D.	
73) 1,3-Dichlorobenzene	0.000	15.515	0.000		0	N.D.	
74) 1,4-Dichlorobenzene	15.601	15.601	1.002	146	1380	N.D.	
75) n-Butylbenzene	15.887	15.887	1.020	91	1399	N.D.	
76) 1,2-Dichlorobenzene	0.000	16.021	0.000		0	N.D.	
77) 1,2-Dibromo-3-chloropr...	0.000	16.881	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.917	17.911	1.150	180	642	N.D.	
79) Hexachlorobutadiene	0.000	18.076	0.000		0	N.D.	
80) Naphthalene	18.289	18.289	1.174	128	6100	N.D.	
81) 1,2,3-Trichlorobenzene	18.624	18.619	1.196	180	1186	N.D.	
83) Chlorotrifluoroethylene	0.000	4.279	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.025	0.000		0	N.D.	
85) Acrolein	0.000	6.529	0.000		0	N.D.	
86) Trichlorotrifluoroethane	0.000	6.676	0.000		0	N.D.	
87) Isopropyl Alcohol	0.000	6.785	0.000		0	N.D.	
88) Allyl chloride	7.127	7.139	0.714	41	1115	N.D.	
89) tert-Butyl Alcohol	0.000	7.285	0.000		0	N.D.	
90) Acrylonitrile	7.553	7.541	0.757	53	683	N.D.	
91) Isopropyl ether	0.000	8.078	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	0.000	8.206	0.000		0	N.D.	
93) Ethyl tert-butyl ether	0.000	8.486	0.000		0	N.D.	
94) Ethyl acetate	8.712	8.700	0.873	43	2608	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V108BL.D
Acq On : 25 Jan 2010 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036752|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 25 15:38:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	0.000	8.773	0.000		0	N.D.	
96) Methacrylonitrile	8.956	8.950	0.897	41	545	N.D.	
97) Tetrahydrofuran	9.071	9.059	0.909	42	1098	N.D.	
98) Isobutyl alcohol	0.000	9.388	0.000		0m	N.D.	d
99) Methyl tert-amyl ether	0.000	9.736	0.000		0	N.D.	
100) Methyl methacrylate	10.595	10.589	1.062	69	1521	N.D.	
101) 1,4-Dioxane	0.000	10.699	0.000		0m	N.D.	d
102) 2-Nitropropane	0.000	11.071	0.000		0	N.D.	
104) Ethyl methacrylate	11.857	11.857	0.901	69	3544	N.D.	
106) 1-Chlorohexane	0.000	13.052	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.204	14.198	0.912	53	2791	N.D.	
108) Cyclohexanone	14.320	14.320	0.919	42	1628	N.D.	
109) trans-1,4-Dichloro-2-b...	14.491	14.491	0.930	53	4309	1.21 ug/L	90
110) Pentachloroethane	15.180	15.180	0.975	167	7238	1.37 ug/L	82
111) Benzyl chloride	15.716	15.716	1.009	91	43359	2.13 ug/L	95
112) bis(2-Chloroisopropyl)...	16.113	16.113	1.034	45	23076	3.86 ug/L	90

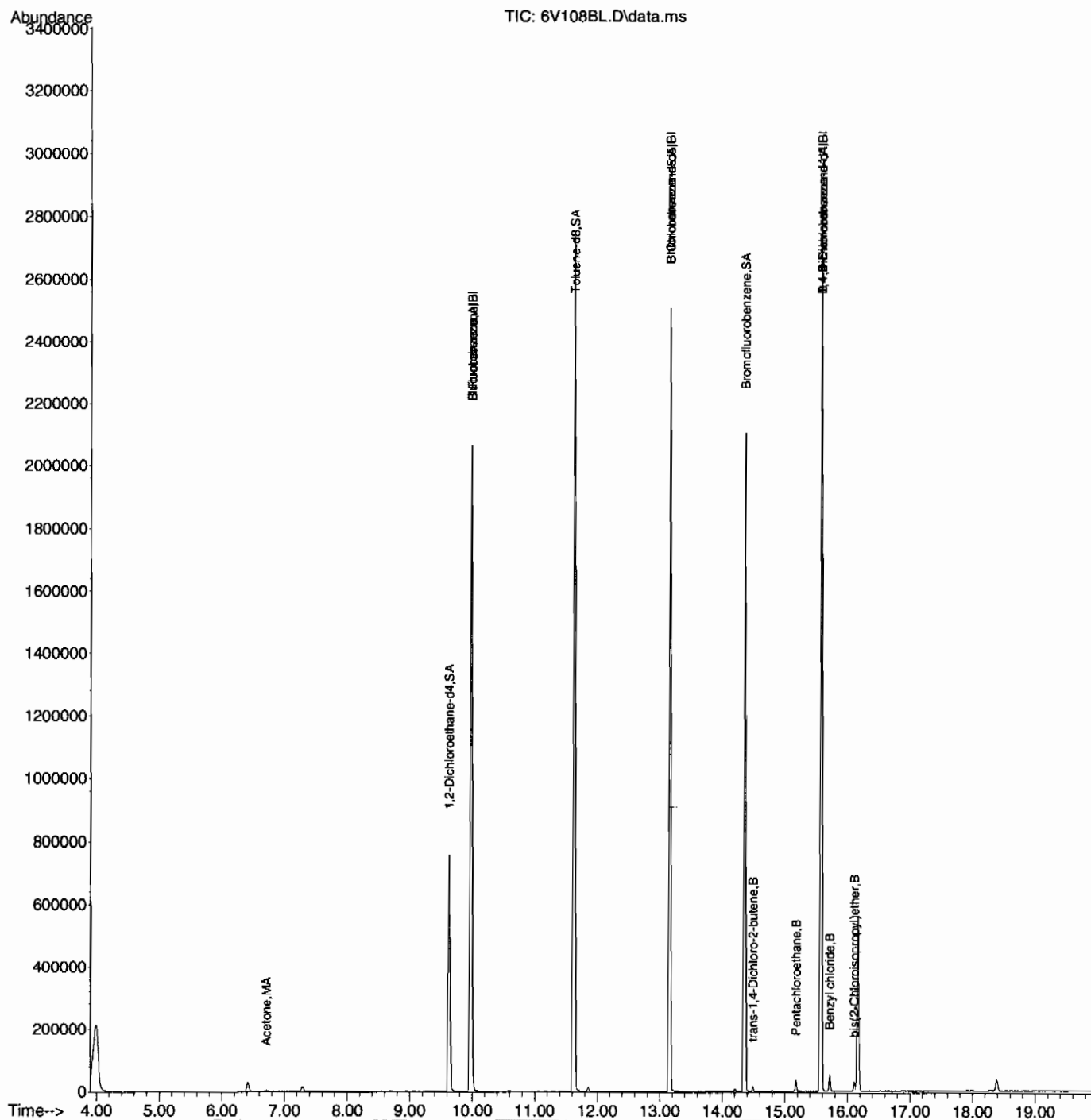
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

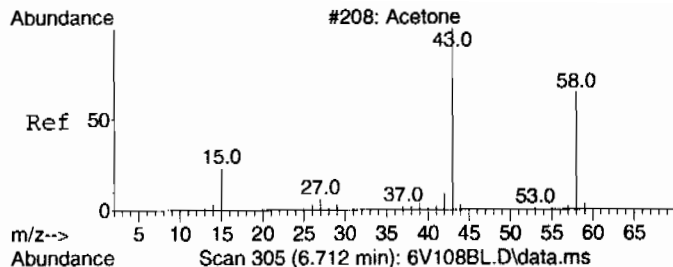
Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V108BL.D
Acq On : 25 Jan 2010 1:17 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036752|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 25 15:38:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

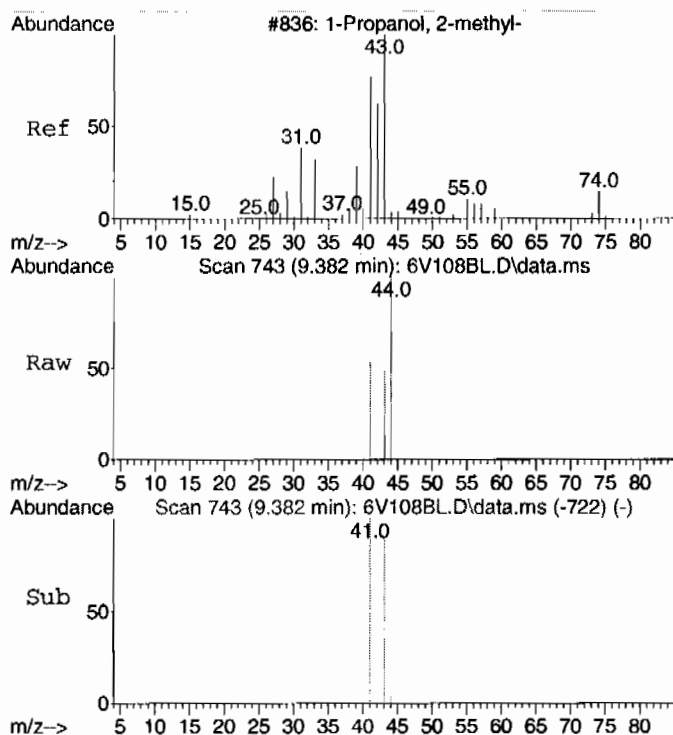
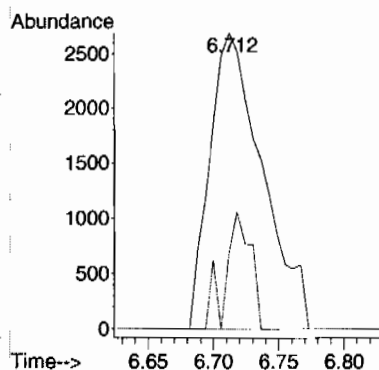
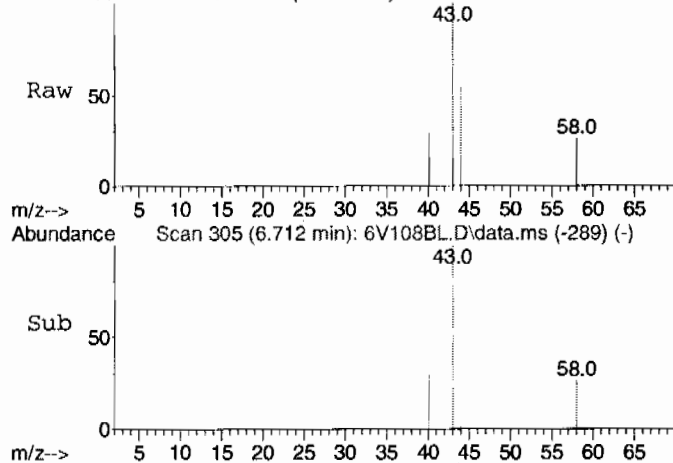
SubList :





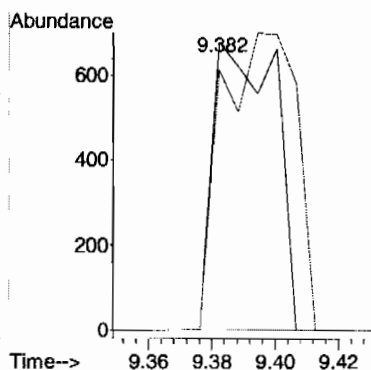
#9
Acetone
Concen: 2.13 ug/L
RT: 6.712 min Scan# 305
Delta R.T. 0.000 min
Lab File: 6V108BL.D
Acq: 25 Jan 2010 1:17 pm

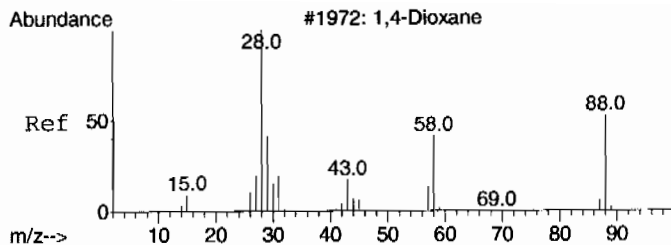
Tgt Ion	Ratio	Lower	Upper
43	100		
58	19.0	0.4	60.4



#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 2.50 ug/L
RT: 9.382 min Scan# 743
Delta R.T. -0.006 min
Lab File: 6V108BL.D
Acq: 25 Jan 2010 1:17 pm

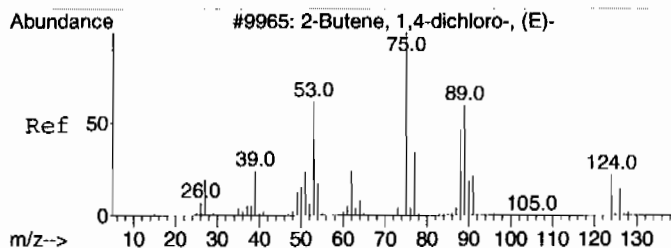
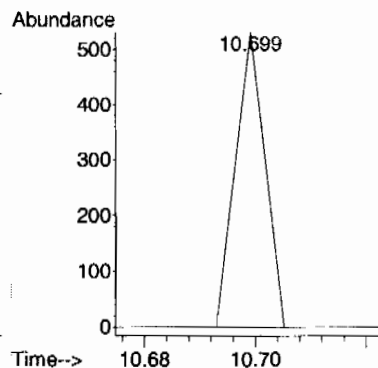
Tgt Ion	Ratio	Lower	Upper
41	100		
43	123.2	111.2	171.2





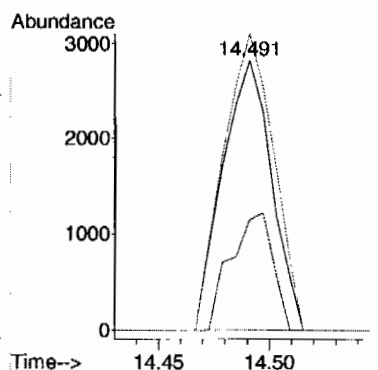
#101 BEFORE analyst DELETION
1,4-Dioxane
Concen: 2.15 ug/L
RT: 10.699 min Scan# 959
Delta R.T. 0.000 min
Lab File: 6V108BL.D
Acq: 25 Jan 2010 1:17 pm

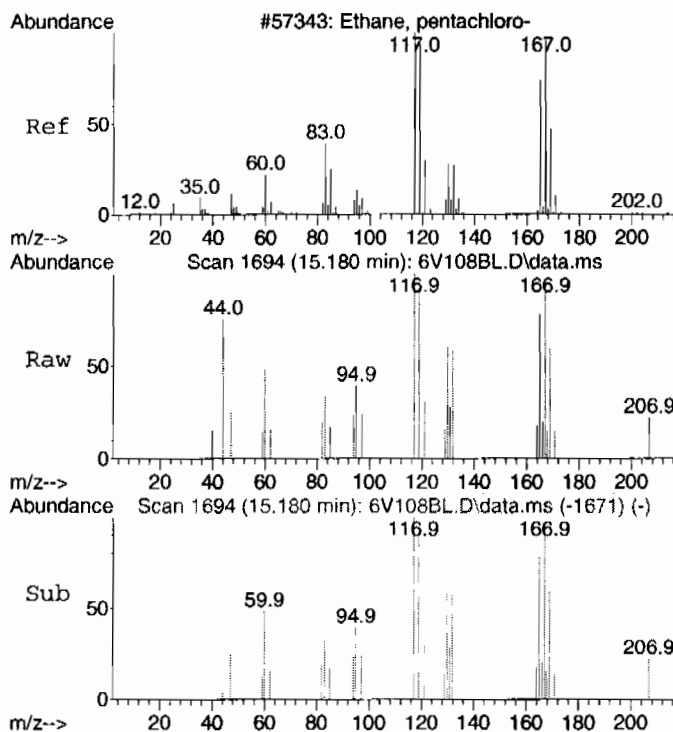
Tgt Ion	Resp	Ion Ratio	Lower	Upper
88	195	100		
58	0.0	44.2	104.2	



#109
trans-1,4-Dichloro-2-butene
Concen: 1.21 ug/L
RT: 14.491 min Scan# 1581
Delta R.T. 0.000 min
Lab File: 6V108BL.D
Acq: 25 Jan 2010 1:17 pm

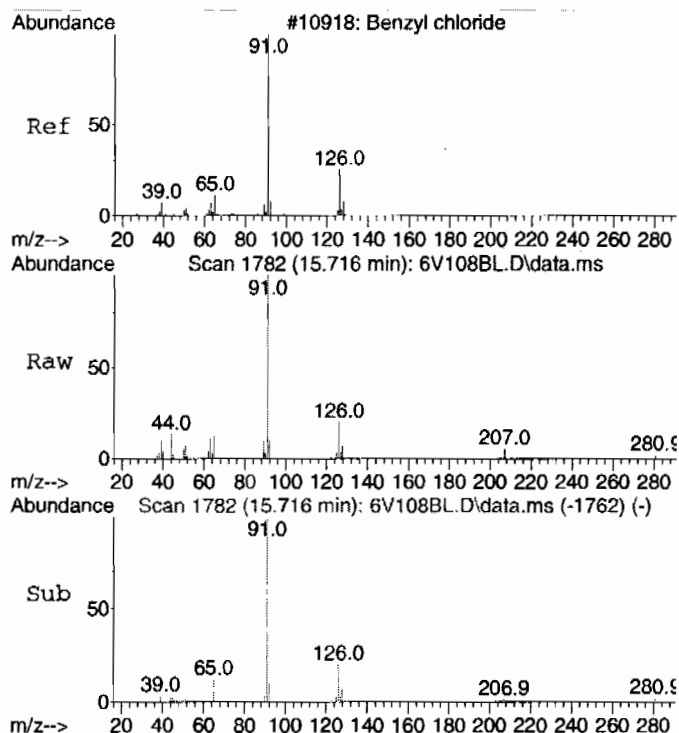
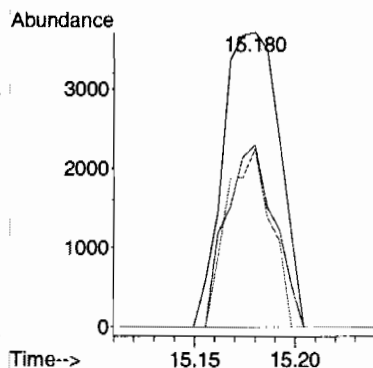
Tgt Ion	Resp	Ion Ratio	Lower	Upper
53	4309	100		
88	37.4	19.8	79.8	
75	113.4	91.6	151.6	





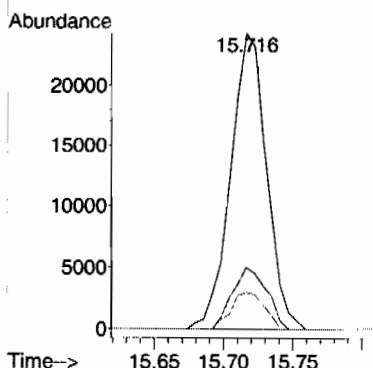
#110
Pentachloroethane
Concen: 1.37 ug/L
RT: 15.180 min Scan# 1694
Delta R.T. -0.000 min
Lab File: 6V108BL.D
Acq: 25 Jan 2010 1:17 pm

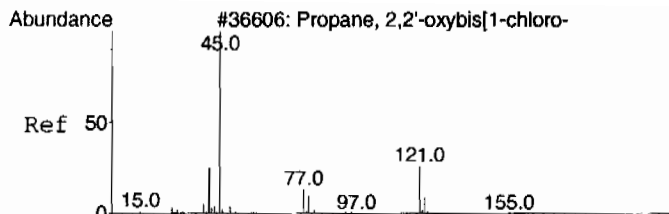
Tgt Ion: 167 Resp: 7238
Ion Ratio Lower Upper
167 100
130 52.5 10.0 70.0
132 47.2 7.5 67.5



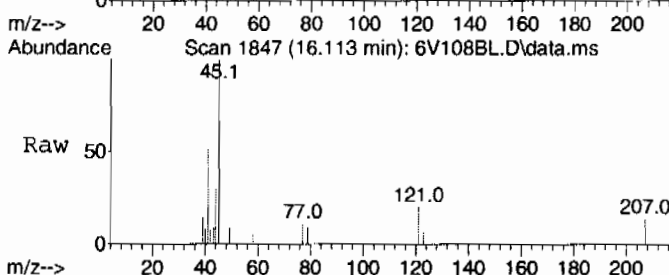
#111
Benzyl chloride
Concen: 2.13 ug/L
RT: 15.716 min Scan# 1782
Delta R.T. 0.000 min
Lab File: 6V108BL.D
Acq: 25 Jan 2010 1:17 pm

Tgt Ion: 91 Resp: 43359
Ion Ratio Lower Upper
91 100
126 19.8 0.0 52.6
65 11.4 0.0 42.9

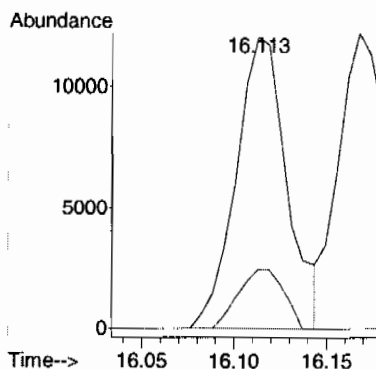
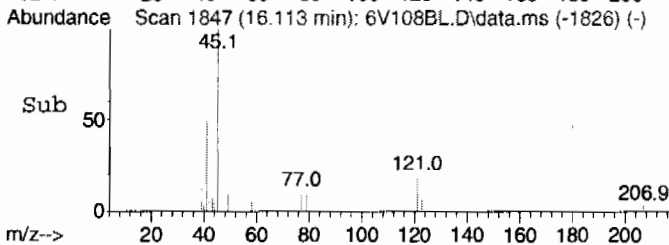




#112
 bis(2-Chloroisopropyl)ether
 Concen: 3.86 ug/L
 RT: 16.113 min Scan# 1847
 Delta R.T. -0.000 min
 Lab File: 6V108BL.D
 Acq: 25 Jan 2010 1:17 pm



Tgt Ion: 45 Resp: 23076
 Ion Ratio Lower Upper
 45 100
 121 18.1 0.0 53.0



Library Search Compound Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V108BL.D
Acq On : 25 Jan 2010 1:17 pm
Operator : RXD1
Sample : |1202036752|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B

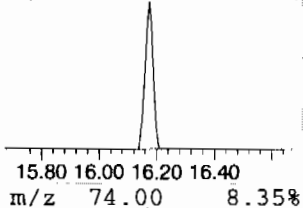
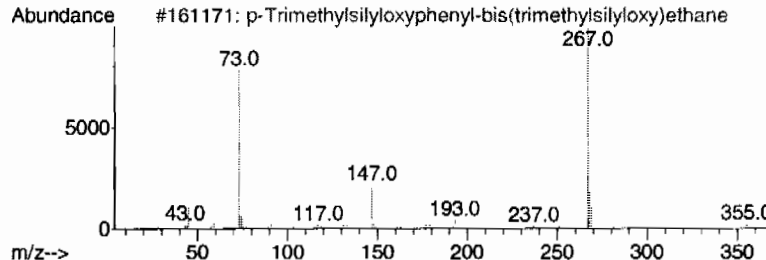
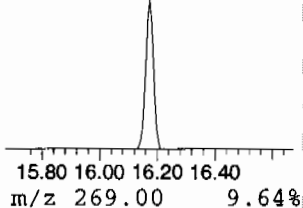
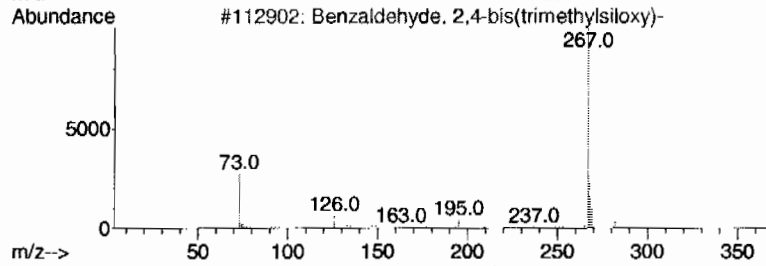
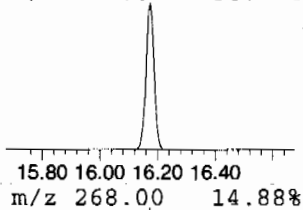
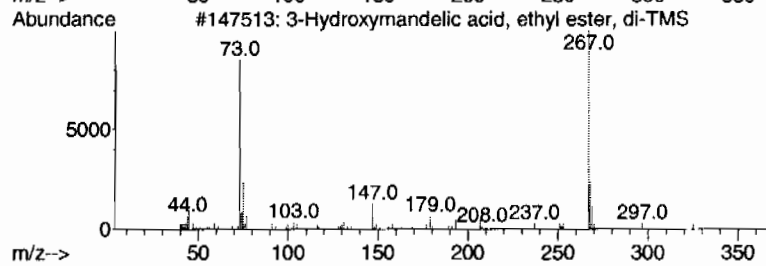
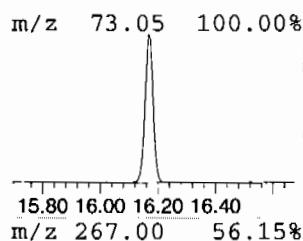
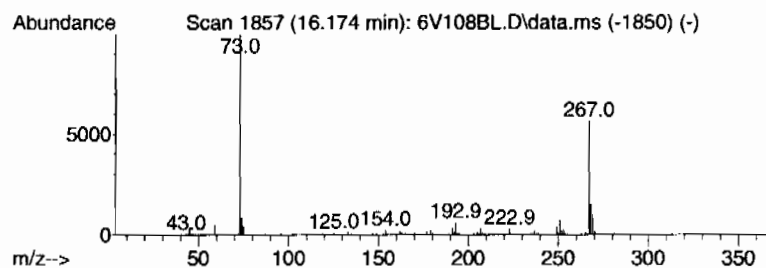
SubList :

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

Peak Number 1 unknown siloxane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.174	6.09 ug/L	577325	B 1,4-Dichlorobenzene-d4	15.576

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Hydroxymandelic acid, ethyl es...	340	C16H28O4Si2	1000071-88-9	72
2		Benzaldehyde, 2,4-bis(trimethyls...	282	C13H22O3Si2	033617-38-8	53
3		p-Trimethylsilyloxyphenyl-bis(tr...	370	C17H34O3Si3	1000079-08-1	42
4		p-Trimethylsilyloxyphenyl-(trime...	398	C18H34O4Si3	1000079-05-1	42
5		Benzaldehyde, 2,5-bis[(trimethyl...	282	C13H22O3Si2	056114-69-3	38



Tentatively Identified Compound (LSC) summary
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V108BL.D
Acq On : 25 Jan 2010 1:17 pm
Operator : RXD1
Sample : |1202036752|944501|1|VOAF|1|VOA8260BS|
Misc : BLANK 5g N/A SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

TIC Library : C:\Database\NIST05.L

TIC Integration Parameters: default.P

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown siloxane	16.174	6.1	ug/L	577325	6	15.576	4738080	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 1202022576
 Client Sample: QC for batch 944498
 Client ID: LCS for batch 944498
 Batch ID: 944501
 Run Date: 01/22/2010 11:29
 Prep Date: 01/22/2010 09:18
 Data File: 012210V6U503LL2.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		37.2	ug/kg	0.340	1.00
74-87-3	Chloromethane		41.4	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		44.7	ug/kg	0.300	1.00
74-83-9	Bromomethane		45.1	ug/kg	0.300	1.00
75-00-3	Chloroethane		47.0	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		47.7	ug/kg	0.300	1.00
67-64-1	Acetone	E	230	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		48.0	ug/kg	0.300	1.00
74-88-4	Iodomethane		224	ug/kg	1.60	5.00
75-09-2	Methylene chloride		41.5	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		243	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		47.3	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		46.2	ug/kg	0.300	1.00
78-93-3	2-Butanone		269	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		46.8	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		53.9	ug/kg	0.300	1.00
67-66-3	Chloroform		45.6	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		44.5	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		50.8	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		48.9	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		52.6	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		46.4	ug/kg	0.300	1.00
71-43-2	Benzene		44.1	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		46.0	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		45.8	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		49.1	ug/kg	0.300	1.00
74-95-3	Dibromomethane		46.9	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		258	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		48.2	ug/kg	0.300	1.00
108-88-3	Toluene		43.2	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		48.4	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		43.4	ug/kg	0.300	1.00
591-78-6	2-Hexanone		275	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		43.3	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		45.1	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		49.3	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		45.5	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		44.2	ug/kg	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 1202022576
 Client Sample: QC for batch 944498
 Client ID: LCS for batch 944498
 Batch ID: 944501
 Run Date: 01/22/2010 11:29
 Prep Date: 01/22/2010 09:18
 Data File: 012210V6\U503LL2.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		45.2	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		90.3	ug/kg	0.300	2.00
95-47-6	o-Xylene		44.9	ug/kg	0.300	1.00
100-42-5	Styrene		45.4	ug/kg	0.300	1.00
75-25-2	Bromoform		53.4	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.0	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		46.7	ug/kg	0.300	1.00
108-86-1	Bromobenzene		42.9	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		45.1	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		44.1	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		45.0	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		44.5	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		44.3	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		44.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		43.6	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		45.1	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		45.1	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		42.8	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		42.1	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		45.3	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	E	57.3	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
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		46.7	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		42.8	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U503LL2.D
Acq On : 22 Jan 2010 11:29 am
Operator : RXD1
InstName : VOA6
Sample : |1202022576|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 22 11:46:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	9.980	9.974	1.000	96	1892720	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	13.156	1.000	117	1402256	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	787181	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	9.974	1.000	96	1891528	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	13.156	1.000	117	1402256	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	787181	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	9.626	9.626	0.965	65	584158	52.31	ug/L	0.00
Spiked Amount 50.000	Range 68	- 131	Recovery	=	104.62%			
43) Toluene-d8	11.626	11.626	0.884	98	1851825	47.63	ug/L	0.00
Spiked Amount 50.000	Range 75	- 129	Recovery	=	95.26%			
61) Bromofluorobenzene	14.357	14.357	0.922	95	744719	49.09	ug/L	0.00
Spiked Amount 50.000	Range 68	- 133	Recovery	=	98.18%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	4.360	4.360	0.437	85	315381	37.17	ug/L	99
3) Chloromethane	4.682	4.672	0.469	50	483417	41.43	ug/L	100
4) Vinyl chloride	4.924	4.914	0.493	62	457549	44.66	ug/L	99
5) Bromomethane	5.478	5.478	0.549	94	344851	45.13	ug/L	100
6) Chloroethane	5.619	5.609	0.563	64	357521	47.02	ug/L	100
7) Trichlorofluoromethane	6.032	6.022	0.604	101	716131	47.68	ug/L	100
8) Ethyl ether	6.334	6.328	0.635	59	415169	42.54	ug/L	96
9) Acetone	6.712	6.712	0.673	43	791691	229.92	ug/L	96 E
10) 1,1-Dichloroethylene	6.712	6.706	0.673	61	664484	47.96	ug/L	98
11) Iodomethane	6.956	6.956	0.697	142	3350200	224.42	ug/L	98
12) Acetonitrile	7.072	7.066	0.709	41	1864890	1321.15	ug/L	99
13) Methyl acetate	7.096	7.096	0.711	43	1966396	253.92	ug/L	98
14) Carbon disulfide	7.078	7.084	0.709	76	6745401	242.64	ug/L	100
15) Methylene chloride	7.285	7.285	0.730	84	452343	41.52	ug/L	96
16) tert-Butyl methyl ether	7.578	7.578	0.759	73	1216227	44.18	ug/L	100
17) trans-1,2-Dichloroethy...	7.620	7.621	0.764	61	668342	47.27	ug/L	98
18) Vinyl acetate	8.066	8.060	0.808	43	5630723	276.45	ug/L	95
19) 1,1-Dichloroethane	8.102	8.102	0.812	63	818186	46.24	ug/L	100
20) 2-Butanone	8.693	8.694	0.871	43	1172757	269.18	ug/L	98
21) cis-1,2-Dichloroethylene	8.742	8.742	0.876	61	737733	46.84	ug/L	96
22) 2,2-Dichloropropane	8.767	8.767	0.878	77	687322	53.93	ug/L	95
23) Bromochloromethane	9.017	9.017	0.903	128	215760	44.47	ug/L	95
24) Chloroform	9.053	9.053	0.907	83	750461	45.55	ug/L	100
25) 1,1,1-Trichloroethane	9.327	9.328	0.935	97	701582	50.75	ug/L	99
26) Cyclohexane	9.413	9.413	0.943	56	906936	50.73	ug/L	99
27) 1,1-Dichloropropene	9.480	9.480	0.950	75	615888	48.94	ug/L	94
28) Carbon tetrachloride	9.510	9.517	0.953	117	642773	52.56	ug/L	100
30) 1,2-Dichloroethane	9.712	9.712	0.973	62	626042	46.35	ug/L	100
31) Benzene	9.724	9.724	0.974	78	1700792	44.11	ug/L	99
32) Cyclohexene	9.833	9.834	0.985	67	891639	48.62	ug/L	98
33) n-Butyl alcohol	10.083	10.084	1.010	56	1863829	5805.97	ug/L	97
34) Trichloroethylene	10.364	10.364	1.038	95	443076	46.04	ug/L	100
35) 1,2-Dichloropropane	10.614	10.614	1.064	63	467147	45.84	ug/L	100
36) Methylcyclohexane	10.608	10.608	1.063	83	818094	48.85	ug/L	98
37) Dibromomethane	10.748	10.748	1.077	93	253724	46.87	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U503LL2.D
Acq On : 22 Jan 2010 11:29 am
Operator : RXD1
InstName : VOA6
Sample : |1202022576|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 22 11:46:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	10.864	10.864	1.089	83	559782	49.05	ug/L	99
39) 2-Chloroethylvinyl ether	11.089	11.089	1.111	63	1438945	230.57	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	11.315	1.134	75	693456	48.15	ug/L	96
42) 4-Methyl-2-pentanone	11.412	11.413	0.867	58	950411	258.13	ug/L	93
44) Toluene	11.699	11.699	0.889	91	1805483	43.21	ug/L	100
45) trans-1,3-Dichloroprop...	11.857	11.858	0.901	75	654199	48.43	ug/L	96
46) 1,1,2-Trichloroethane	12.083	12.083	0.918	83	298285	43.40	ug/L	100
47) 2-Hexanone	12.260	12.260	0.932	43	1856876	275.06	ug/L	99
48) 1,3-Dichloropropane	12.272	12.272	0.933	76	633232	43.29	ug/L	90
49) Tetrachloroethylene	12.290	12.290	0.934	164	380472	45.06	ug/L	99
50) Dibromochloromethane	12.540	12.540	0.953	129	426388	49.26	ug/L	99
51) 1,2-Dibromoethane	12.711	12.705	0.966	107	377156	45.51	ug/L	99
52) Chlorobenzene	13.193	13.193	1.003	112	1195338	44.24	ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.247	13.242	1.007	131	436803	46.70	ug/L	100
54) Ethylbenzene	13.254	13.254	1.007	91	2071415	45.21	ug/L	100
55) m,p-Xylenes	13.363	13.363	1.016	106	1653995	90.27	ug/L	98
56) o-Xylene	13.796	13.796	1.049	106	808129	44.93	ug/L	99
57) Styrene	13.802	13.802	1.049	104	1301883	45.44	ug/L	97
59) Bromoform	14.058	14.058	0.903	173	297137	53.39	ug/L	100
60) Isopropylbenzene	14.156	14.156	0.909	105	2160213	45.02	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.436	14.436	0.927	83	506001	47.04	ug/L	100
63) 1,2,3-Trichloropropane	14.528	14.528	0.933	110	141275	46.69	ug/L	97
64) Bromobenzene	14.564	14.564	0.935	156	529521	42.92	ug/L	97
65) n-Propylbenzene	14.583	14.583	0.936	91	2532962	45.05	ug/L	100
66) 1,3,5-Trimethylbenzene	14.735	14.735	0.946	105	1828275	44.45	ug/L	99
67) 2-Chlorotoluene	14.729	14.729	0.946	126	527268	44.10	ug/L	98
68) 4-Chlorotoluene	14.833	14.833	0.952	91	1533704	44.30	ug/L	100
69) tert-Butylbenzene	15.107	15.107	0.970	134	407409	44.52	ug/L	# 90
70) 1,2,4-Trimethylbenzene	15.150	15.150	0.973	105	1887395	43.55	ug/L	99
71) sec-Butylbenzene	15.332	15.333	0.984	105	2492698	45.07	ug/L	99
72) 4-Isopropyltoluene	15.454	15.454	0.992	119	2038219	45.07	ug/L	99
73) 1,3-Dichlorobenzene	15.515	15.515	0.996	146	1031442	42.78	ug/L	99
74) 1,4-Dichlorobenzene	15.601	15.601	1.002	146	1040250	42.08	ug/L	100
75) n-Butylbenzene	15.887	15.887	1.020	91	1986285	45.26	ug/L	99
76) 1,2-Dichlorobenzene	16.021	16.021	1.029	146	1001387	42.84	ug/L	99
77) 1,2-Dibromo-3-chloropr...	16.881	16.881	1.084	157	112402	57.30	ug/L	98 E
78) 1,2,4-Trichlorobenzene	17.911	17.911	1.150	180	762362	43.36	ug/L	100
79) Hexachlorobutadiene	18.076	18.076	1.160	225	493593	44.22	ug/L	99
80) Naphthalene	18.289	18.289	1.174	128	1688163	47.78	ug/L	100
81) 1,2,3-Trichlorobenzene	18.618	18.619	1.195	180	696813	47.33	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.279	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.025	0.000		0	N.D.		
85) Acrolein	6.474	6.529	0.649		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.676	0.000		0	N.D.		
87) Isopropyl Alcohol	6.712	6.785	0.673		0m	N.D.	d	
88) Allyl chloride	7.072	7.139	0.709		0m	N.D.	d	
89) tert-Butyl Alcohol	7.297	7.285	0.731		0m	N.D.	d	
90) Acrylonitrile	7.572	7.541	0.759		0m	N.D.	d	
91) Isopropyl ether	8.059	8.078	0.808		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.212	8.206	0.823		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	8.486	0.000		0	N.D.		
94) Ethyl acetate	8.693	8.700	0.871		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U503LL2.D
Acq On : 22 Jan 2010 11:29 am
Operator : RXD1
InstName : VOA6
Sample : |1202022576|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 3 Sample Multiplier: 1

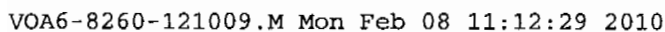
Quant Time: Jan 22 11:46:39 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	8.693	8.773	0.871		0m	N.D.	d
96) Methacrylonitrile	8.931	8.950	0.895		0m	N.D.	d
97) Tetrahydrofuran	9.047	9.059	0.907		0m	N.D.	d
98) Isobutyl alcohol	9.413	9.388	0.943		0m	N.D.	d
99) Methyl tert-amyl ether	9.724	9.736	0.974		0m	N.D.	d
100) Methyl methacrylate	10.602	10.589	1.062		0m	N.D.	d
101) 1,4-Dioxane	10.754	10.699	1.078		0m	N.D.	d
102) 2-Nitropropane	11.089	11.071	1.111		0m	N.D.	d
104) Ethyl methacrylate	11.797	11.857	0.897		0m	N.D.	d
106) 1-Chlorohexane	0.000	13.052	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.156	14.198	0.909		0m	N.D.	d
108) Cyclohexanone	0.000	14.320	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.491	0.000		0	N.D.	
110) Pentachloroethane	15.180	15.180	0.975		0m	N.D.	d
111) Benzyl chloride	15.716	15.716	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.168	16.113	1.038		0m	N.D.	d

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

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U503LL2.D
Acq On : 22 Jan 2010 11:29 am
Operator : RXD1
InstName : VOA6
Sample : |1202022576|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 3 Sample Multiplier: 1

SubList :



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Lab Sample ID: 1202022577

Client Sample: QC for batch 944498

Client ID: LCS for batch 944498

Batch ID: 944501

Run Date: 01/22/2010 12:34

Prep Date: 01/22/2010 09:19

Data File: 012210V6U505SL2.D

Client: LANL010

Method: SW846 8260B

Inst: VOA6.I

Analyst: RXD1

Aliquot: 5 g

Column: DB-624

Matrix: SOIL

Project: QC

SOP Ref: GL-OA-E-038

Dilution: 1

Purge Vol: 5 mL

Final Volume: 5 mL

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 1202022577
 Client Sample: QC for batch 944498
 Client ID: LCS for batch 944498
 Batch ID: 944501
 Run Date: 01/22/2010 12:34
 Prep Date: 01/22/2010 09:19
 Data File: 012210V66U505SL2.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		297	ug/kg	1.60	5.00
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U505SL2.D
Acq On : 22 Jan 2010 12:34 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022577|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 22 14:09:57 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	9.980	9.974	1.000	96	1859653	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	13.156	1.000	117	1378986	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	785511	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	9.974	1.000	96	1857679	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	13.156	1.000	117	1378986	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	785511	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	9.626	9.626	0.965	65	579166	52.79	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	105.58%			
43) Toluene-d8	11.626	11.626	0.884	98	1823590	47.70	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	95.40%			
61) Bromofluorobenzene	14.357	14.357	0.922	95	753184	49.75	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	99.50%			
Target Compounds								
Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	0.000	4.360	0.000		0	N.D.		
3) Chloromethane	4.662	4.672	0.467		0m	N.D.	d	
4) Vinyl chloride	4.914	4.914	0.492		0m	N.D.	d	
5) Bromomethane	0.000	5.478	0.000		0	N.D.		
6) Chloroethane	0.000	5.609	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.022	0.000		0	N.D.		
8) Ethyl ether	0.000	6.328	0.000		0	N.D.		
9) Acetone	6.682	6.712	0.670		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.676	6.706	0.669		0m	N.D.	d	
11) Iodomethane	0.000	6.956	0.000		0	N.D.		
12) Acetonitrile	7.139	7.066	0.715		0m	N.D.	d	
13) Methyl acetate	7.102	7.096	0.712		0m	N.D.	d	
14) Carbon disulfide	7.139	7.084	0.715		0m	N.D.	d	
15) Methylene chloride	7.285	7.285	0.730		0m	N.D.	d	
16) tert-Butyl methyl ether	0.000	7.578	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	7.621	0.000		0	N.D.		
18) Vinyl acetate	8.212	8.060	0.823		0m	N.D.	d	
19) 1,1-Dichloroethane	8.206	8.102	0.822		0m	N.D.	d	
20) 2-Butanone	8.706	8.694	0.872		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.706	8.742	0.872		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	8.767	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.017	0.000		0	N.D.		
24) Chloroform	0.000	9.053	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.328	0.000		0	N.D.		
26) Cyclohexane	9.389	9.413	0.941		0m	N.D.	d	
27) 1,1-Dichloropropene	0.000	9.480	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.517	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.712	0.000		0	N.D.		
31) Benzene	9.718	9.724	0.974		0m	N.D.	d	
32) Cyclohexene	0.000	9.834	0.000		0	N.D.		
33) n-Butyl alcohol	10.071	10.084	1.009		0m	N.D.	d	
34) Trichloroethylene	10.364	10.364	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	10.614	0.000		0	N.D.		
36) Methylcyclohexane	10.589	10.608	1.061		0m	N.D.	d	
37) Dibromomethane	0.000	10.748	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U505SL2.D
Acq On : 22 Jan 2010 12:34 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022577|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 22 14:09:57 2010

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Dec 14 12:44:52 2009

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	10.864	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.089	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.315	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.413	0.000		0	N.D.	
44) Toluene	11.693	11.699	0.889		0m	N.D.	d
45) trans-1,3-Dichloroprop...	11.864	11.858	0.902		0m	N.D.	d
46) 1,1,2-Trichloroethane	0.000	12.083	0.000		0	N.D.	
47) 2-Hexanone	12.266	12.260	0.932		0m	N.D.	d
48) 1,3-Dichloropropane	12.315	12.272	0.936		0m	N.D.	d
49) Tetrachloroethylene	12.290	12.290	0.934		0m	N.D.	d
50) Dibromochloromethane	0.000	12.540	0.000		0	N.D.	
51) 1,2-Dibromoethane	12.705	12.705	0.966		0m	N.D.	d
52) Chlorobenzene	13.193	13.193	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	13.254	13.242	1.007		0m	N.D.	d
54) Ethylbenzene	13.254	13.254	1.007		0m	N.D.	d
55) m,p-Xylenes	13.357	13.363	1.015		0m	N.D.	d
56) o-Xylene	13.802	13.796	1.049		0m	N.D.	d
57) Styrene	13.802	13.802	1.049		0m	N.D.	d
59) Bromoform	0.000	14.058	0.000		0	N.D.	
60) Isopropylbenzene	14.162	14.156	0.909		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	14.491	14.436	0.930		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	14.528	0.000		0	N.D.	
64) Bromobenzene	14.564	14.564	0.935		0m	N.D.	d
65) n-Propylbenzene	14.583	14.583	0.936		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	14.735	14.735	0.946		0m	N.D.	d
67) 2-Chlorotoluene	14.729	14.729	0.946		0m	N.D.	d
68) 4-Chlorotoluene	14.833	14.833	0.952		0m	N.D.	d
69) tert-Butylbenzene	15.180	15.107	0.975		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.150	15.150	0.973		0m	N.D.	d
71) sec-Butylbenzene	15.332	15.333	0.984		0m	N.D.	d
72) 4-Isopropyltoluene	15.448	15.454	0.992		0m	N.D.	d
73) 1,3-Dichlorobenzene	15.521	15.515	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	15.601	15.601	1.002		0m	N.D.	d
75) n-Butylbenzene	0.000	15.887	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	16.021	16.021	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	16.881	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.911	17.911	1.150		0m	N.D.	d
79) Hexachlorobutadiene	18.076	18.076	1.160		0m	N.D.	d
80) Naphthalene	18.289	18.289	1.174		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	18.625	18.619	1.196		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.279	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.025	0.000		0	N.D.	
85) Acrolein	6.535	6.529	0.655	56	387889	286.24 ug/L	99
86) Trichlorotrifluoroethane	6.682	6.676	0.670	85	1031618	297.28 ug/L	97
87) Isopropyl Alcohol	0.000	6.785	0.000		0m	N.D.	d
88) Allyl chloride	7.139	7.139	0.715	41	4350592	267.87 ug/L	96
89) tert-Butyl Alcohol	0.000	7.285	0.000		0	N.D.	
90) Acrylonitrile	7.541	7.541	0.756	53	848844	245.99 ug/L	99
91) Isopropyl ether	8.218	8.078	0.823	45	198	N.D.	
92) 2-Chloro-1,3-butadiene	8.206	8.206	0.822	53	777057	56.22 ug/L	96
93) Ethyl tert-butyl ether	0.000	8.486	0.000		0	N.D.	
94) Ethyl acetate	8.706	8.700	0.872	43	2307971	234.12 ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U505SL2.D
Acq On : 22 Jan 2010 12:34 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022577|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 22 14:09:57 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	8.779	8.773	0.880	54	326157	243.23	ug/L	100
96) Methacrylonitrile	8.950	8.950	0.897	41	1491473	252.88	ug/L	99
97) Tetrahydrofuran	9.065	9.059	0.908	42	780522	249.25	ug/L	97
98) Isobutyl alcohol	9.389	9.388	0.941	41	987850	2790.11	ug/L	98
99) Methyl tert-amyl ether	0.000	9.736	0.000		0	N.D.		
100) Methyl methacrylate	10.589	10.589	1.061	69	1367651	242.54	ug/L	93
101) 1,4-Dioxane	10.699	10.699	1.072	88	229162	2630.19	ug/L	97
102) 2-Nitropropane	11.071	11.071	1.109	43	783058	274.11	ug/L	97
104) Ethyl methacrylate	11.858	11.857	0.901	69	2566648	237.77	ug/L	94
106) 1-Chlorohexane	0.000	13.052	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.205	14.198	0.912	53	984443	266.28	ug/L	98
108) Cyclohexanone	14.314	14.320	0.919	42	370865	1226.19	ug/L	94
109) trans-1,4-Dichloro-2-b...	14.491	14.491	0.930	53	934320	263.08	ug/L	95
110) Pentachloroethane	15.180	15.180	0.975	167	1667795	317.56	ug/L	100
111) Benzyl chloride	15.717	15.716	1.009	91	4690048	230.78	ug/L	99
112) bis(2-Chloroisopropyl)...	16.113	16.113	1.034	45	1437895	241.13	ug/L	98

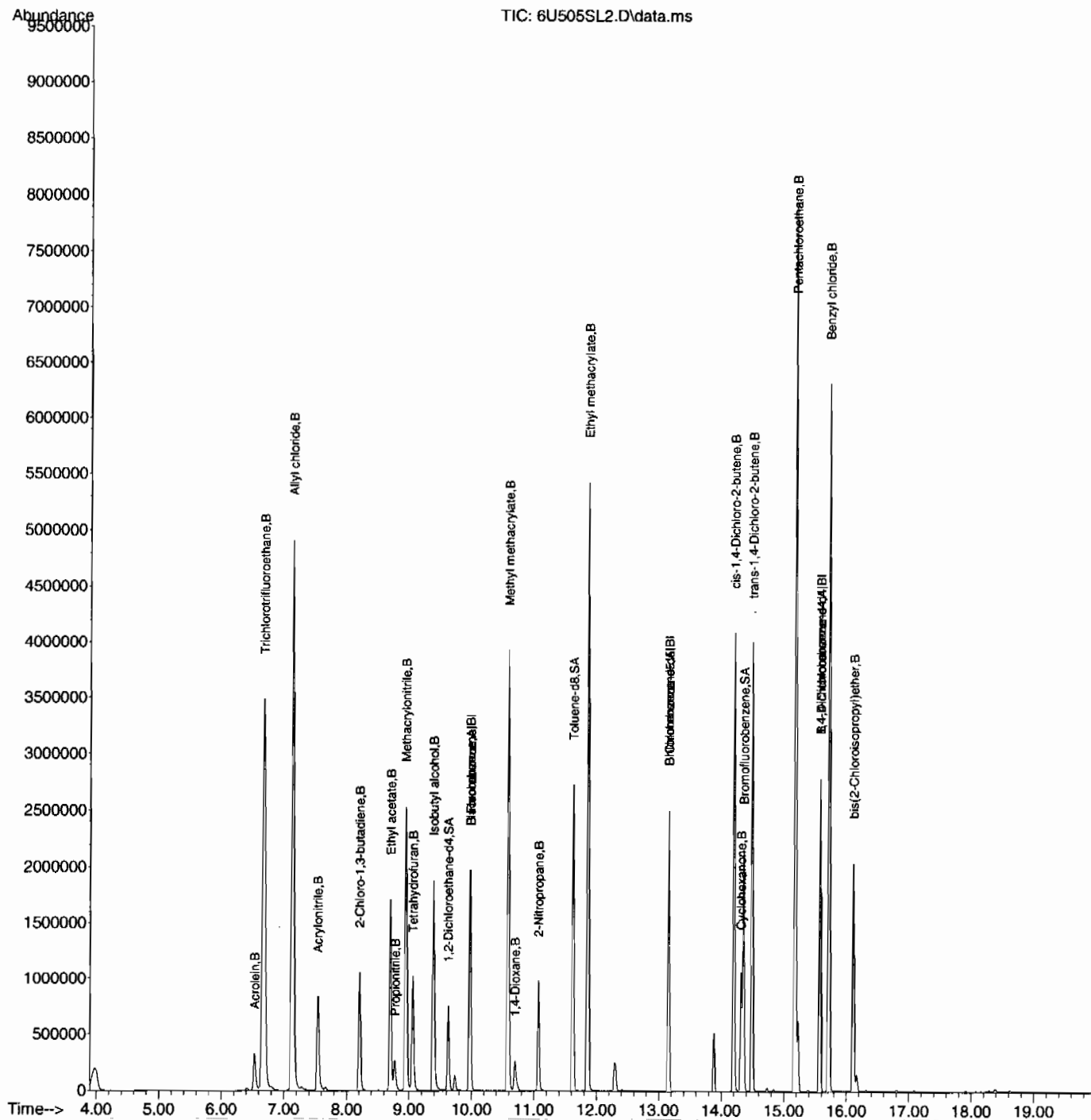
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012210V6\
Data File : 6U505SL2.D
Acq On : 22 Jan 2010 12:34 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022577|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 22 14:09:57 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 1202036753
Client Sample: QC for batch 944498
Client ID: LCS for batch 944498
Batch ID: 944501
Run Date: 01/25/2010 11:54
Prep Date: 01/25/2010 09:11
Data File: 012510V66V105LL.D

Client: LANL010
Method: SW846 8260B
Inst: VOA6.1
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		32.1	ug/kg	0.340	1.00
74-87-3	Chloromethane		39.5	ug/kg	0.300	1.00
75-01-4	Vinyl chloride		42.0	ug/kg	0.300	1.00
74-83-9	Bromomethane		44.4	ug/kg	0.300	1.00
75-00-3	Chloroethane		44.6	ug/kg	0.300	1.00
75-69-4	Trichlorofluoromethane		45.4	ug/kg	0.300	1.00
67-64-1	Acetone	BE	207	ug/kg	1.66	5.00
75-35-4	1,1-Dichloroethylene		45.6	ug/kg	0.300	1.00
74-88-4	Iodomethane		214	ug/kg	1.60	5.00
75-09-2	Methylene chloride		39.8	ug/kg	2.00	5.00
75-15-0	Carbon disulfide		229	ug/kg	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene		44.8	ug/kg	0.300	1.00
75-34-3	1,1-Dichloroethane		44.3	ug/kg	0.300	1.00
78-93-3	2-Butanone		235	ug/kg	1.50	5.00
156-59-2	cis-1,2-Dichloroethylene		45.3	ug/kg	0.300	1.00
594-20-7	2,2-Dichloropropane		52.2	ug/kg	0.300	1.00
67-66-3	Chloroform		43.8	ug/kg	0.300	1.00
74-97-5	Bromochloromethane		43.0	ug/kg	0.330	1.00
71-55-6	1,1,1-Trichloroethane		48.5	ug/kg	0.300	1.00
563-58-6	1,1-Dichloropropene		46.8	ug/kg	0.300	1.00
56-23-5	Carbon tetrachloride		50.9	ug/kg	0.300	1.00
107-06-2	1,2-Dichloroethane		44.5	ug/kg	0.300	1.00
71-43-2	Benzene		42.1	ug/kg	0.300	1.00
79-01-6	Trichloroethylene		44.1	ug/kg	0.330	1.00
78-87-5	1,2-Dichloropropane		43.2	ug/kg	0.300	1.00
75-27-4	Bromodichloromethane		47.0	ug/kg	0.300	1.00
74-95-3	Dibromomethane		43.8	ug/kg	0.300	1.00
108-10-1	4-Methyl-2-pentanone		233	ug/kg	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		45.6	ug/kg	0.300	1.00
108-88-3	Toluene		41.0	ug/kg	0.300	1.00
10061-02-6	trans-1,3-Dichloropropylene		45.9	ug/kg	0.300	1.00
79-00-5	1,1,2-Trichloroethane		41.3	ug/kg	0.300	1.00
591-78-6	2-Hexanone		245	ug/kg	1.50	5.00
142-28-9	1,3-Dichloropropane		41.1	ug/kg	0.300	1.00
127-18-4	Tetrachloroethylene		43.8	ug/kg	0.300	1.00
124-48-1	Dibromochloromethane		47.2	ug/kg	0.300	1.00
106-93-4	1,2-Dibromoethane		42.1	ug/kg	0.300	1.00
108-90-7	Chlorobenzene		42.4	ug/kg	0.300	1.00

**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 1202036753
Client Sample: QC for batch 944498
Client ID: LCS for batch 944498
Batch ID: 944501
Run Date: 01/25/2010 11:54
Prep Date: 01/25/2010 09:11
Data File: 012510V6V105LL.D

Client: LANL010
Method: SW846 8260B
Inst: VOA6.I
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		43.2	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes		85.9	ug/kg	0.300	2.00
95-47-6	o-Xylene		42.4	ug/kg	0.300	1.00
100-42-5	Styrene		43.5	ug/kg	0.300	1.00
75-25-2	Bromoform		47.7	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane		42.1	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane		42.0	ug/kg	0.300	1.00
108-86-1	Bromobenzene		40.2	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene		41.8	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene		41.3	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene		41.9	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene		41.7	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene		41.2	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene		41.5	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		40.8	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene		42.1	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene		42.2	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene		40.4	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene		39.8	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene		42.2	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane		48.7	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.00	ug/kg	1.60	5.00
	<i>Trichlorotrifluoroethane</i>					
630-20-6	1,1,1,2-Tetrachloroethane		44.7	ug/kg	0.300	1.00
95-50-1	1,2-Dichlorobenzene		39.6	ug/kg	0.300	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V105LL.D
Acq On : 25 Jan 2010 11:54 am
Operator : RXD1
InstName : VOA6
Sample : |1202036753|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 25 12:11:24 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	Dev (Min)
Internal Standards								
1) Fluorobenzene	9.974	9.974	1.000	96	1820500	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	13.156	1.000	117	1361008	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	785808	50.00	ug/L	0.00
82) B Fluorobenzene	9.974	9.974	1.000	96	1818195	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	13.156	1.000	117	1361008	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	785808	50.00	ug/L	0.00
System Monitoring Compounds								
29) 1,2-Dichloroethane-d4	9.626	9.626	0.965	65	561137	52.24	ug/L	0.00
Spiked Amount 50.000	Range 68	- 131	Recovery	=	104.48%			
43) Toluene-d8	11.626	11.626	0.884	98	1775348	47.05	ug/L	0.00
Spiked Amount 50.000	Range 75	- 129	Recovery	=	94.10%			
61) Bromofluorobenzene	14.357	14.357	0.922	95	698547	46.13	ug/L	0.00
Spiked Amount 50.000	Range 68	- 133	Recovery	=	92.26%			
Target Compounds								
2) Dichlorodifluoromethane	4.360	4.360	0.437	85	261742	32.07	ug/L	99
3) Chloromethane	4.682	4.672	0.469	50	443146	39.48	ug/L	99
4) Vinyl chloride	4.924	4.914	0.494	62	414193	42.03	ug/L	100
5) Bromomethane	5.478	5.478	0.549	94	325958	44.35	ug/L	100
6) Chloroethane	5.619	5.609	0.563	64	326313	44.61	ug/L	100
7) Trichlorofluoromethane	5.992	6.022	0.601	101	656403	45.44	ug/L	100
8) Ethyl ether	6.328	6.328	0.634	59	372258	39.66	ug/L	96
9) Acetone	6.706	6.712	0.672	43	686402	207.25	ug/L	96 E
10) 1,1-Dichloroethylene	6.712	6.706	0.673	61	608032	45.63	ug/L	99
11) Iodomethane	6.956	6.956	0.697	142	3075893	214.22	ug/L	98
12) Acetonitrile	7.072	7.066	0.709	41	1596196	1175.66	ug/L	97
13) Methyl acetate	7.096	7.096	0.711	43	1747484	234.60	ug/L	98
14) Carbon disulfide	7.084	7.084	0.710	76	6131229	229.29	ug/L	100
15) Methylene chloride	7.285	7.285	0.730	84	417151	39.81	ug/L	96
16) tert-Butyl methyl ether	7.572	7.578	0.759	73	1099966	41.55	ug/L	100
17) trans-1,2-Dichloroethy...	7.621	7.621	0.764	61	609594	44.82	ug/L	99
18) Vinyl acetate	8.066	8.060	0.809	43	5036413	257.08	ug/L	96
19) 1,1-Dichloroethane	8.102	8.102	0.812	63	753776	44.29	ug/L	100
20) 2-Butanone	8.694	8.694	0.872	43	985801	235.25	ug/L	98
21) cis-1,2-Dichloroethylene	8.742	8.742	0.877	61	686541	45.32	ug/L	96
22) 2,2-Dichloropropane	8.767	8.767	0.879	77	640461	52.24	ug/L	97
23) Bromochloromethane	9.017	9.017	0.904	128	200777	43.03	ug/L	96
24) Chloroform	9.053	9.053	0.908	83	694042	43.80	ug/L	97
25) 1,1,1-Trichloroethane	9.328	9.328	0.935	97	644799	48.49	ug/L	99
26) Cyclohexane	9.413	9.413	0.944	56	818404	47.59	ug/L	99
27) 1,1-Dichloropropene	9.480	9.480	0.950	75	566871	46.84	ug/L	95
28) Carbon tetrachloride	9.517	9.517	0.954	117	598375	50.87	ug/L	99
30) 1,2-Dichloroethane	9.712	9.712	0.974	62	577954	44.49	ug/L	99
31) Benzene	9.724	9.724	0.975	78	1560134	42.07	ug/L	99
32) Cyclohexene	9.834	9.834	0.986	67	818208	46.38	ug/L	99
33) n-Butyl alcohol	10.078	10.084	1.010	56	1470425	4771.86	ug/L	97
34) Trichloroethylene	10.364	10.364	1.039	95	408627	44.14	ug/L	100
35) 1,2-Dichloropropane	10.614	10.614	1.064	63	423632	43.22	ug/L	99
36) Methylcyclohexane	10.602	10.608	1.063	83	750365	46.58	ug/L	99
37) Dibromomethane	10.748	10.748	1.078	93	227832	43.76	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V105LL.D
Acq On : 25 Jan 2010 11:54 am
Operator : RXD1
InstName : VOA6
Sample : |1202036753|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 25 12:11:24 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
38) Bromodichloromethane	10.864	10.864	1.089	83	515483	46.96	ug/L	100
39) 2-Chloroethylvinyl ether	11.090	11.089	1.112	63	1366635	227.67	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	11.315	1.134	75	631827	45.61	ug/L	96
42) 4-Methyl-2-pentanone	11.413	11.413	0.867	58	831325	232.63	ug/L	93
44) Toluene	11.699	11.699	0.889	91	1661424	40.97	ug/L	100
45) trans-1,3-Dichloroprop...	11.858	11.858	0.901	75	601383	45.87	ug/L	96
46) 1,1,2-Trichloroethane	12.083	12.083	0.918	83	275569	41.31	ug/L	99
47) 2-Hexanone	12.260	12.260	0.932	43	1602062	244.50	ug/L	99
48) 1,3-Dichloropropane	12.272	12.272	0.933	76	582782	41.05	ug/L	93
49) Tetrachloroethylene	12.291	12.290	0.934	164	358487	43.75	ug/L	99
50) Dibromochloromethane	12.540	12.540	0.953	129	396214	47.16	ug/L	99
51) 1,2-Dibromoethane	12.705	12.705	0.966	107	338308	42.06	ug/L	100
52) Chlorobenzene	13.193	13.193	1.003	112	1111015	42.36	ug/L	99
53) 1,1,1,2-Tetrachloroethane	13.248	13.242	1.007	131	405803	44.70	ug/L	99
54) Ethylbenzene	13.254	13.254	1.007	91	1918796	43.15	ug/L	99
55) m,p-Xylenes	13.363	13.363	1.016	106	1526815	85.85	ug/L	97
56) o-Xylene	13.796	13.796	1.049	106	740217	42.40	ug/L	97
57) Styrene	13.802	13.802	1.049	104	1208441	43.45	ug/L	98
59) Bromoform	14.058	14.058	0.903	173	264991	47.70	ug/L	100
60) Isopropylbenzene	14.156	14.156	0.909	105	2006087	41.88	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.436	14.436	0.927	83	451798	42.07	ug/L	100
63) 1,2,3-Trichloropropane	14.528	14.528	0.933	110	126820	41.99	ug/L	98
64) Bromobenzene	14.564	14.564	0.935	156	495171	40.21	ug/L	99
65) n-Propylbenzene	14.583	14.583	0.936	91	2348385	41.84	ug/L	100
66) 1,3,5-Trimethylbenzene	14.735	14.735	0.946	105	1710034	41.65	ug/L	99
67) 2-Chlorotoluene	14.735	14.729	0.946	126	493021	41.31	ug/L	96
68) 4-Chlorotoluene	14.833	14.833	0.952	91	1424509	41.22	ug/L	100
69) tert-Butylbenzene	15.107	15.107	0.970	134	379266	41.52	ug/L #	89
70) 1,2,4-Trimethylbenzene	15.150	15.150	0.973	105	1763727	40.77	ug/L	98
71) sec-Butylbenzene	15.333	15.333	0.984	105	2321502	42.05	ug/L	100
72) 4-Isopropyltoluene	15.455	15.454	0.992	119	1905801	42.21	ug/L	99
73) 1,3-Dichlorobenzene	15.515	15.515	0.996	146	971592	40.37	ug/L	100
74) 1,4-Dichlorobenzene	15.601	15.601	1.002	146	981627	39.78	ug/L	100
75) n-Butylbenzene	15.887	15.887	1.020	91	1850311	42.23	ug/L	100
76) 1,2-Dichlorobenzene	16.022	16.021	1.029	146	924110	39.60	ug/L	100
77) 1,2-Dibromo-3-chloropr...	16.881	16.881	1.084	157	95266	48.65	ug/L	98
78) 1,2,4-Trichlorobenzene	17.911	17.911	1.150	180	691117	39.38	ug/L	100
79) Hexachlorobutadiene	18.076	18.076	1.160	225	452611	40.62	ug/L	100
80) Naphthalene	18.289	18.289	1.174	128	1407239	39.90	ug/L	100
81) 1,2,3-Trichlorobenzene	18.619	18.619	1.195	180	598395	40.72	ug/L	99
83) Chlorotrifluoroethylene	0.000	4.279	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000	5.025	0.000		0	N.D.		
85) Acrolein	6.456	6.529	0.647		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000	6.676	0.000		0	N.D.		
87) Isopropyl Alcohol	6.706	6.785	0.672		0m	N.D.	d	
88) Allyl chloride	7.072	7.139	0.709		0m	N.D.	d	
89) tert-Butyl Alcohol	7.285	7.285	0.730		0m	N.D.	d	
90) Acrylonitrile	7.578	7.541	0.760		0m	N.D.	d	
91) Isopropyl ether	8.066	8.078	0.809		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.218	8.206	0.824		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000	8.486	0.000		0	N.D.		
94) Ethyl acetate	8.694	8.700	0.872		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V105LL.D
Acq On : 25 Jan 2010 11:54 am
Operator : RXD1
InstName : VOA6
Sample : |1202036753|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 25 12:11:24 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
95) Propionitrile	8.688	8.773	0.871		0m	N.D.	d
96) Methacrylonitrile	8.944	8.950	0.897		0m	N.D.	d
97) Tetrahydrofuran	9.059	9.059	0.908		0m	N.D.	d
98) Isobutyl alcohol	9.413	9.388	0.944		0m	N.D.	d
99) Methyl tert-amyl ether	9.724	9.736	0.975		0m	N.D.	d
100) Methyl methacrylate	10.608	10.589	1.064		0m	N.D.	d
101) 1,4-Dioxane	10.699	10.699	1.073		0m	N.D.	d
102) 2-Nitropropane	11.090	11.071	1.112		0m	N.D.	d
104) Ethyl methacrylate	11.797	11.857	0.897		0m	N.D.	d
106) 1-Chlorohexane	0.000	13.052	0.000		0	N.D.	
107) cis-1,4-Dichloro-2-butene	14.156	14.198	0.909		0m	N.D.	d
108) Cyclohexanone	0.000	14.320	0.000		0	N.D.	
109) trans-1,4-Dichloro-2-b...	0.000	14.491	0.000		0	N.D.	
110) Pentachloroethane	15.174	15.180	0.974		0m	N.D.	d
111) Benzyl chloride	15.717	15.716	1.009		0m	N.D.	d
112) bis(2-Chloroisopropyl)...	16.168	16.113	1.038		0m	N.D.	d

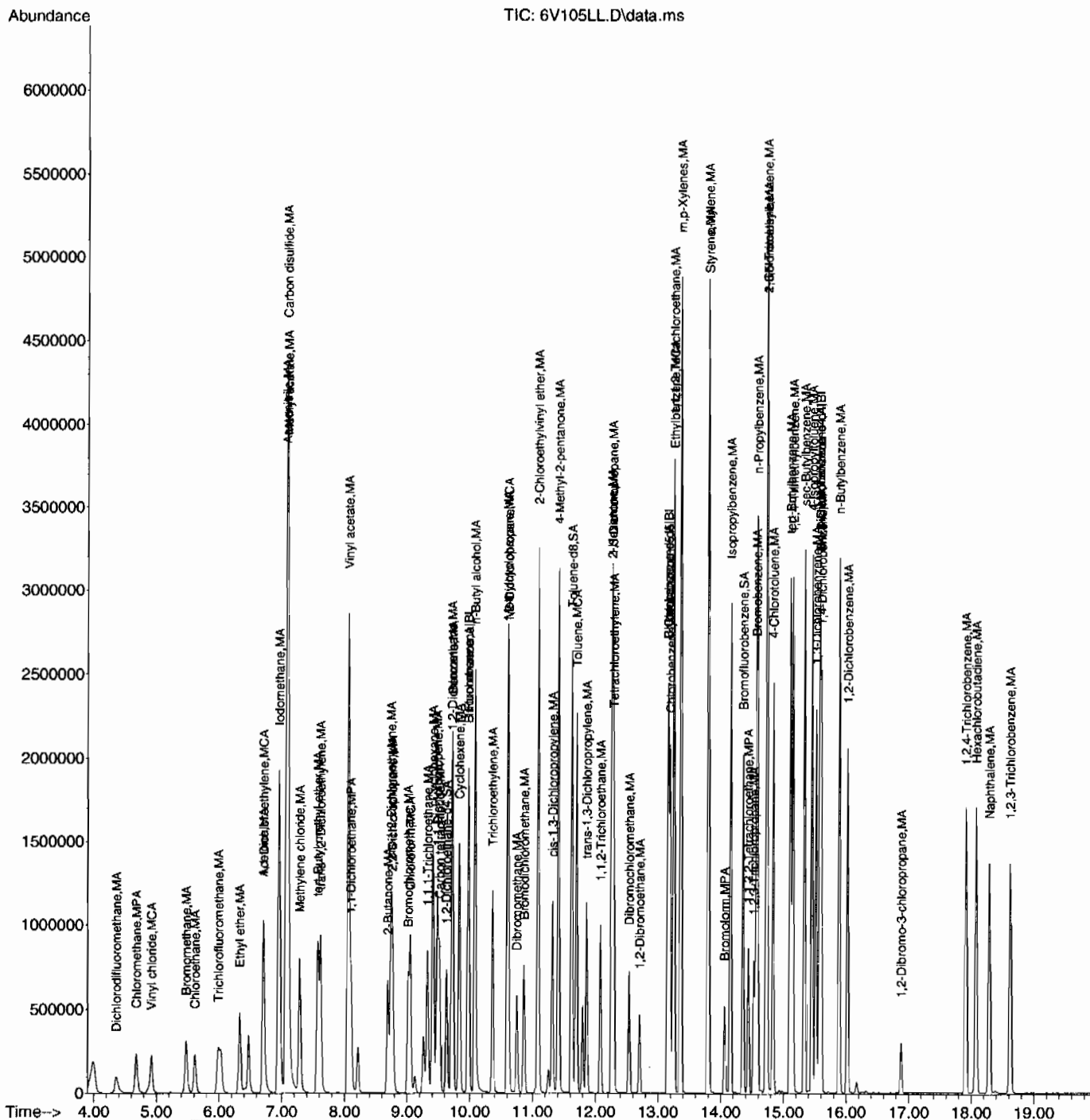
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V105LL.D
Acq On : 25 Jan 2010 11:54 am
Operator : RXD1
InstName : VOA6
Sample : |1202036753|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[A] 1214-01H+0120-03
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 25 12:11:24 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



**Volatile
Certificate of Analysis
Sample Summary**

SDG Number: 10-1287
Lab Sample ID: 1202036754
Client Sample: QC for batch 944498
Client ID: LCS for batch 944498
Batch ID: 944501
Run Date: 01/25/2010 12:49
Prep Date: 01/25/2010 09:10
Data File: 012510V6V107SL.D

Client: LANL010
Method: SW846 8260B
Inst: VOA6J
Analyst: RXD1
Aliquot: 5 g
Column: DB-624

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

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

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 1202036754
 Client Sample: QC for batch 944498
 Client ID: LCS for batch 944498
 Batch ID: 944501
 Run Date: 01/25/2010 12:49
 Prep Date: 01/25/2010 09:10
 Data File: 012510V6V107SL.D

Client: LANL010
 Method: SW846 8260B
 Inst: VOA6.I
 Analyst: RXD1
 Aliquot: 5 g
 Column: DB-624

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene	U	1.00	ug/kg	0.300	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/kg	0.300	2.00
95-47-6	o-Xylene	U	1.00	ug/kg	0.300	1.00
100-42-5	Styrene	U	1.00	ug/kg	0.300	1.00
75-25-2	Bromoform	U	1.00	ug/kg	0.300	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/kg	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/kg	0.300	1.00
108-86-1	Bromobenzene	U	1.00	ug/kg	0.300	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/kg	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/kg	0.300	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/kg	0.300	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/kg	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/kg	0.300	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/kg	0.300	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/kg	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/kg	0.300	1.00
104-51-8	n-Butylbenzene	U	1.00	ug/kg	0.300	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/kg	0.300	1.00
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane		291	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

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V107SL.D
Acq On : 25 Jan 2010 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036754|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 13:30:36 2010

Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M

Quant Title : Volatile Organics 8260B

SubList :

QLast Update : Mon Dec 14 12:44:52 2009

Response via : Initial Calibration

Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
Internal Standards								Dev (Min)
1) Fluorobenzene	9.980	9.974	1.000	96	1953917	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	13.156	1.000	117	1439190	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	824927	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	9.974	1.000	96	1951311	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	13.156	1.000	117	1439190	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	15.576	1.000	152	824927	50.00	ug/L	0.00
System Monitoring Compounds								Dev (Min)
29) 1,2-Dichloroethane-d4	9.626	9.626	0.965	65	590538	51.23	ug/L	0.00
Spiked Amount 50.000	Range 68	- 131	Recovery	=	102.46%			
43) Toluene-d8	11.626	11.626	0.884	98	1855420	46.50	ug/L	0.00
Spiked Amount 50.000	Range 75	- 129	Recovery	=	93.00%			
61) Bromofluorobenzene	14.357	14.357	0.922	95	763087	48.00	ug/L	0.00
Spiked Amount 50.000	Range 68	- 133	Recovery	=	96.00%			
Target Compounds								QValue
2) Dichlorodifluoromethane	0.000	4.360	0.000		0	N.D.		
3) Chloromethane	4.672	4.672	0.468		0m	N.D.	d	
4) Vinyl chloride	4.914	4.914	0.492		0m	N.D.	d	
5) Bromomethane	0.000	5.478	0.000		0	N.D.		
6) Chloroethane	0.000	5.609	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000	6.022	0.000		0	N.D.		
8) Ethyl ether	0.000	6.328	0.000		0	N.D.		
9) Acetone	6.682	6.712	0.670		0m	N.D.	d	
10) 1,1-Dichloroethylene	6.682	6.706	0.670		0m	N.D.	d	
11) Iodomethane	0.000	6.956	0.000		0	N.D.		
12) Acetonitrile	7.139	7.066	0.715		0m	N.D.	d	
13) Methyl acetate	7.102	7.096	0.712		0m	N.D.	d	
14) Carbon disulfide	7.139	7.084	0.715		0m	N.D.	d	
15) Methylene chloride	7.285	7.285	0.730		0m	N.D.	d	
16) tert-Butyl methyl ether	0.000	7.578	0.000		0	N.D.		
17) trans-1,2-Dichloroethy...	0.000	7.621	0.000		0	N.D.		
18) Vinyl acetate	8.072	8.060	0.809		0m	N.D.	d	
19) 1,1-Dichloroethane	8.206	8.102	0.822		0m	N.D.	d	
20) 2-Butanone	8.706	8.694	0.872		0m	N.D.	d	
21) cis-1,2-Dichloroethylene	8.706	8.742	0.872		0m	N.D.	d	
22) 2,2-Dichloropropane	0.000	8.767	0.000		0	N.D.		
23) Bromochloromethane	0.000	9.017	0.000		0	N.D.		
24) Chloroform	0.000	9.053	0.000		0	N.D.		
25) 1,1,1-Trichloroethane	0.000	9.328	0.000		0	N.D.		
26) Cyclohexane	9.389	9.413	0.941		0m	N.D.	d	
27) 1,1-Dichloropropene	0.000	9.480	0.000		0	N.D.		
28) Carbon tetrachloride	0.000	9.517	0.000		0	N.D.		
30) 1,2-Dichloroethane	0.000	9.712	0.000		0	N.D.		
31) Benzene	9.718	9.724	0.974		0m	N.D.	d	
32) Cyclohexene	0.000	9.834	0.000		0	N.D.		
33) n-Butyl alcohol	10.090	10.084	1.011		0m	N.D.	d	
34) Trichloroethylene	10.364	10.364	1.038		0m	N.D.	d	
35) 1,2-Dichloropropane	0.000	10.614	0.000		0	N.D.		
36) Methylcyclohexane	10.583	10.608	1.060		0m	N.D.	d	
37) Dibromomethane	0.000	10.748	0.000		0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V107SL.D
Acq On : 25 Jan 2010 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036754|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 13:30:36 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units
38) Bromodichloromethane	0.000	10.864	0.000		0	N.D.	
39) 2-Chloroethylvinyl ether	0.000	11.089	0.000		0	N.D.	
40) cis-1,3-Dichloropropylene	0.000	11.315	0.000		0	N.D.	
42) 4-Methyl-2-pentanone	0.000	11.413	0.000		0	N.D.	
44) Toluene	11.693	11.699	0.889		0m	N.D.	d
45) trans-1,3-Dichloroprop...	0.000	11.858	0.000		0	N.D.	
46) 1,1,2-Trichloroethane	0.000	12.083	0.000		0	N.D.	
47) 2-Hexanone	12.266	12.260	0.932		0m	N.D.	d
48) 1,3-Dichloropropane	12.321	12.272	0.937		0m	N.D.	d
49) Tetrachloroethylene	12.290	12.290	0.934		0m	N.D.	d
50) Dibromochloromethane	0.000	12.540	0.000		0	N.D.	
51) 1,2-Dibromoethane	12.717	12.705	0.967		0m	N.D.	d
52) Chlorobenzene	13.199	13.193	1.003		0m	N.D.	d
53) 1,1,1,2-Tetrachloroethane	13.241	13.242	1.006		0m	N.D.	d
54) Ethylbenzene	13.254	13.254	1.007		0m	N.D.	d
55) m,p-Xylenes	13.363	13.363	1.016		0m	N.D.	d
56) o-Xylene	13.784	13.796	1.048		0m	N.D.	d
57) Styrene	13.802	13.802	1.049		0m	N.D.	d
59) Bromoform	0.000	14.058	0.000		0	N.D.	
60) Isopropylbenzene	14.156	14.156	0.909		0m	N.D.	d
62) 1,1,2,2-Tetrachloroethane	14.485	14.436	0.930		0m	N.D.	d
63) 1,2,3-Trichloropropane	0.000	14.528	0.000		0	N.D.	
64) Bromobenzene	0.000	14.564	0.000		0	N.D.	
65) n-Propylbenzene	14.589	14.583	0.937		0m	N.D.	d
66) 1,3,5-Trimethylbenzene	14.735	14.735	0.946		0m	N.D.	d
67) 2-Chlorotoluene	14.729	14.729	0.946		0m	N.D.	d
68) 4-Chlorotoluene	14.833	14.833	0.952		0m	N.D.	d
69) tert-Butylbenzene	15.180	15.107	0.975		0m	N.D.	d
70) 1,2,4-Trimethylbenzene	15.156	15.150	0.973		0m	N.D.	d
71) sec-Butylbenzene	15.326	15.333	0.984		0m	N.D.	d
72) 4-Isopropyltoluene	15.454	15.454	0.992		0m	N.D.	d
73) 1,3-Dichlorobenzene	15.515	15.515	0.996		0m	N.D.	d
74) 1,4-Dichlorobenzene	15.595	15.601	1.001		0m	N.D.	d
75) n-Butylbenzene	0.000	15.887	0.000		0	N.D.	
76) 1,2-Dichlorobenzene	16.021	16.021	1.029		0m	N.D.	d
77) 1,2-Dibromo-3-chloropr...	0.000	16.881	0.000		0	N.D.	
78) 1,2,4-Trichlorobenzene	17.911	17.911	1.150		0m	N.D.	d
79) Hexachlorobutadiene	18.082	18.076	1.161		0m	N.D.	d
80) Naphthalene	18.289	18.289	1.174		0m	N.D.	d
81) 1,2,3-Trichlorobenzene	18.612	18.619	1.195		0m	N.D.	d
83) Chlorotrifluoroethylene	0.000	4.279	0.000		0	N.D.	
84) 2-Chloro-1,1,1-trifluo...	0.000	5.025	0.000		0	N.D.	
85) Acrolein	6.535	6.529	0.655	56	388467	272.91 ug/L	98
86) Trichlorotrifluoroethane	6.682	6.676	0.670	85	1061288	291.16 ug/L	97
87) Isopropyl Alcohol	0.000	6.785	0.000		0m	N.D.	d
88) Allyl chloride	7.139	7.139	0.715	41	4534835	265.82 ug/L	96
89) tert-Butyl Alcohol	0.000	7.285	0.000		0	N.D.	
90) Acrylonitrile	7.547	7.541	0.756	53	858649	236.89 ug/L	100
91) Isopropyl ether	0.000	8.078	0.000		0	N.D.	
92) 2-Chloro-1,3-butadiene	8.212	8.206	0.823	53	808389	55.68 ug/L	96
93) Ethyl tert-butyl ether	0.000	8.486	0.000		0	N.D.	
94) Ethyl acetate	8.706	8.700	0.872	43	2304823	222.58 ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V107SL.D
Acq On : 25 Jan 2010 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036754|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 13:30:36 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	Exp RT	Rel RT	QIon	Response	Conc	Units	
95) Propionitrile	8.779	8.773	0.880	54	323755	229.85	ug/L	100
96) Methacrylonitrile	8.950	8.950	0.897	41	1491927	240.82	ug/L	98
97) Tetrahydrofuran	9.065	9.059	0.908	42	772891	234.97	ug/L	97
98) Isobutyl alcohol	9.389	9.388	0.941	41	936937	2519.33	ug/L	98
99) Methyl tert-amyl ether	0.000	9.736	0.000		0	N.D.		
100) Methyl methacrylate	10.589	10.589	1.061	69	1376914	232.47	ug/L	93
101) 1,4-Dioxane	10.699	10.699	1.072	88	208092	2273.76	ug/L	99
102) 2-Nitropropane	11.071	11.071	1.109	43	780194	260.20	ug/L	98
104) Ethyl methacrylate	11.858	11.857	0.901	69	2600235	230.80	ug/L	95
106) 1-Chlorohexane	0.000	13.052	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.205	14.198	0.912	53	1004833	258.81	ug/L	99
108) Cyclohexanone	14.320	14.320	0.919	42	330155	1039.43	ug/L	97
109) trans-1,4-Dichloro-2-b...	14.491	14.491	0.930	53	953420	255.63	ug/L	95
110) Pentachloroethane	15.180	15.180	0.975	167	1743738	316.15	ug/L	100
111) Benzyl chloride	15.717	15.716	1.009	91	4862798	227.85	ug/L	99
112) bis(2-Chloroisopropyl)...	16.113	16.113	1.034	45	1393506	222.52	ug/L	98

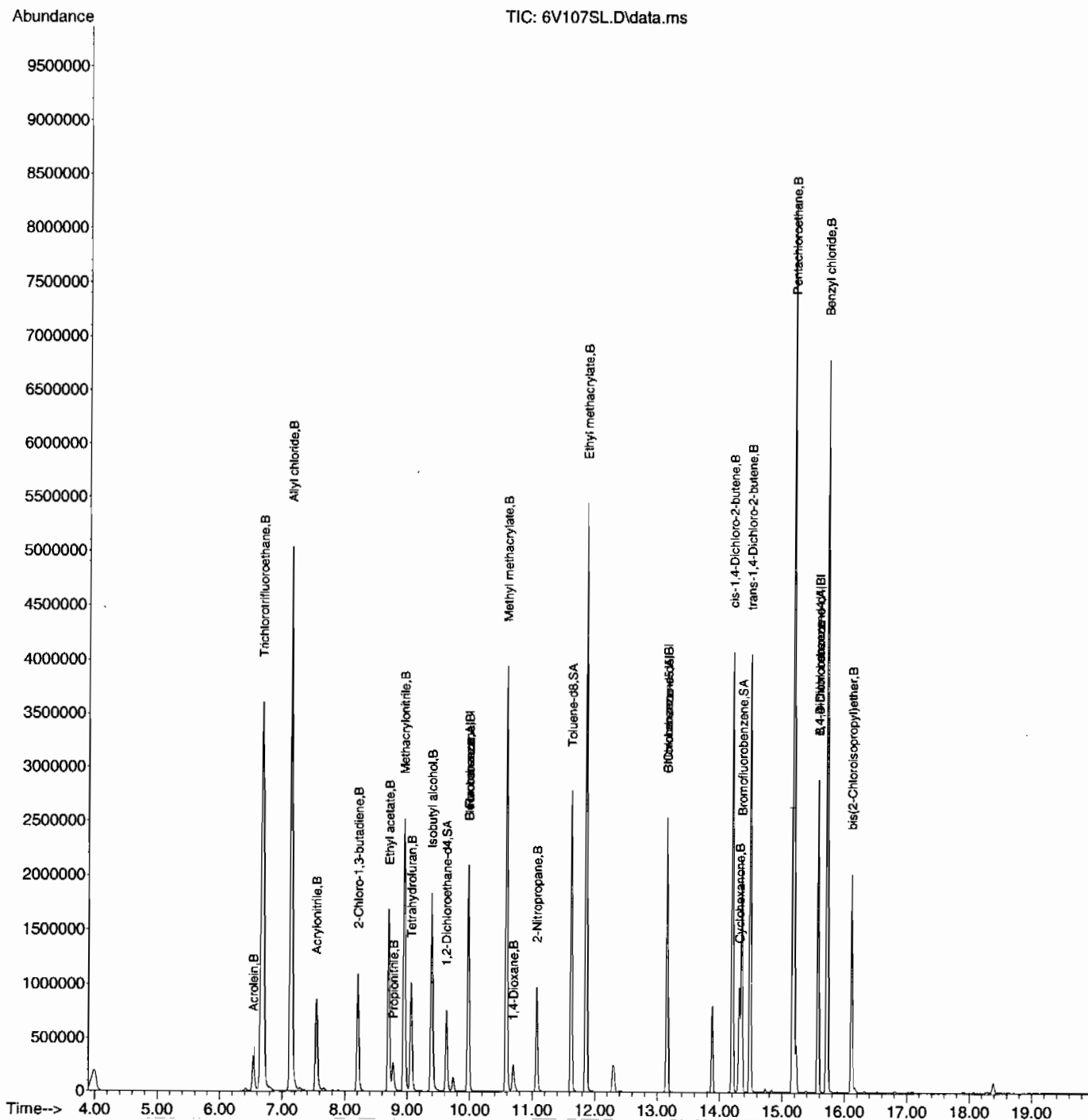
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V107SL.D
Acq On : 25 Jan 2010 12:49 pm
Operator : RXD1
InstName : VOA6
Sample : |1202036754|944501|1|VOAF|1|VOA8260BS|
Misc : LCS 5g N/A SOIL MIX[B] 1023-08B
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 25 13:30:36 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202022574	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 944498	Client: LANL010	Project: QC
Client ID: RE15-10-7163PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/25/2010 15:36	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/25/2010 13:06	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012510V66V113.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		30.3	ug/kg	0.364	1.07
74-87-3	Chloromethane		38.2	ug/kg	0.321	1.07
75-01-4	Vinyl chloride		41.2	ug/kg	0.321	1.07
74-83-9	Bromomethane		43.2	ug/kg	0.321	1.07
75-00-3	Chloroethane		44.6	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane		45.0	ug/kg	0.321	1.07
67-64-1	Acetone	BE	241	ug/kg	1.78	5.35
75-35-4	1,1-Dichloroethylene		45.4	ug/kg	0.321	1.07
74-88-4	Iodomethane		216	ug/kg	1.71	5.35
75-09-2	Methylene chloride		41.9	ug/kg	2.14	5.35
75-15-0	Carbon disulfide		228	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene		44.4	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane		44.2	ug/kg	0.321	1.07
78-93-3	2-Butanone		275	ug/kg	1.61	5.35
156-59-2	cis-1,2-Dichloroethylene		45.7	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane		51.3	ug/kg	0.321	1.07
67-66-3	Chloroform		44.8	ug/kg	0.321	1.07
74-97-5	Bromochloromethane		44.9	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane		48.2	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene		46.0	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride		50.2	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane		47.7	ug/kg	0.321	1.07
71-43-2	Benzene		42.7	ug/kg	0.321	1.07
79-01-6	Trichloroethylene		44.2	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane		45.5	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane		48.8	ug/kg	0.321	1.07
74-95-3	Dibromomethane		47.5	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone		260	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene		47.5	ug/kg	0.321	1.07
108-88-3	Toluene		41.4	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene		47.7	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane		44.0	ug/kg	0.321	1.07
591-78-6	2-Hexanone		283	ug/kg	1.61	5.35
142-28-9	1,3-Dichloropropane		44.1	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene		42.5	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane		50.2	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane		45.9	ug/kg	0.321	1.07
108-90-7	Chlorobenzene		43.1	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202022574	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 944498	Client: LANL010	Project: QC
Client ID: RE15-10-7163PS	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/25/2010 15:36	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/25/2010 13:06	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012510V66V113.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		43.7	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes		86.5	ug/kg	0.321	2.14
95-47-6	o-Xylene		43.3	ug/kg	0.321	1.07
100-42-5	Styrene		44.4	ug/kg	0.321	1.07
75-25-2	Bromoform		52.7	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane		46.3	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane		48.3	ug/kg	0.321	1.07
108-86-1	Bromobenzene		41.2	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene		42.3	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene		42.3	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene		42.1	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene		42.1	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene		41.8	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene		41.3	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene		40.8	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene		42.1	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene		41.4	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene		39.8	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene		39.4	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene		40.5	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane		49.5	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.35	ug/kg	1.71	5.35
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		46.9	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene		38.9	ug/kg	0.321	1.07

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V113.D
Acq On : 25 Jan 2010 3:36 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022574|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 244923001
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 26 09:30:15 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.980	96	1732765	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1315655	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	756395	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1732765	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1315655	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	756395	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	571080	55.86	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	111.72%	
43) Toluene-d8	11.626	98	1762180	48.31	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	96.62%	
61) Bromofluorobenzene	14.357	95	723563	49.64	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	99.28%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	4.360	85	219633	28.27	ug/L	100
3) Chloromethane	4.672	50	381393	35.70	ug/L	99
4) Vinyl chloride	4.914	62	360600	38.45	ug/L	100
5) Bromomethane	5.468	94	282412	40.37	ug/L	99
6) Chloroethane	5.619	64	290013	41.66	ug/L	100
7) Trichlorofluoromethane	5.992	101	578099	42.04	ug/L	99
8) Ethyl ether	6.328	59	354544	39.69	ug/L	97
9) Acetone	6.712	43	710068	225.25	ug/L	96 E
10) 1,1-Dichloroethylene	6.712	61	537865	42.41	ug/L	97
11) Iodomethane	6.956	142	2755378	201.61	ug/L	98
12) Acetonitrile	7.072	41	1626661	1258.76	ug/L	98
13) Methyl acetate	7.096	43	2212264	312.03	ug/L	98
14) Carbon disulfide	7.078	76	5425631	213.18	ug/L	100
15) Methylene chloride	7.285	84	390395	39.14	ug/L	97
16) tert-Butyl methyl ether	7.578	73	1039085	41.23	ug/L	100
17) trans-1,2-Dichloroethy...	7.621	61	536775	41.47	ug/L	99
18) Vinyl acetate	8.066	43	2175744	116.68	ug/L	91
19) 1,1-Dichloroethane	8.102	63	668146	41.25	ug/L	100
20) 2-Butanone	8.694	43	1023027	256.49	ug/L	98
21) cis-1,2-Dichloroethylene	8.742	61	615261	42.67	ug/L	96
22) 2,2-Dichloropropane	8.767	77	559456	47.95	ug/L	94
23) Bromochloromethane	9.017	128	186455	41.98	ug/L	96
24) Chloroform	9.053	83	630994	41.84	ug/L	98
25) 1,1,1-Trichloroethane	9.328	97	569964	45.03	ug/L	99
26) Cyclohexane	9.413	56	718435	43.90	ug/L	99
27) 1,1-Dichloropropene	9.480	75	494990	42.97	ug/L	93
28) Carbon tetrachloride	9.510	117	524648	46.86	ug/L	99
30) 1,2-Dichloroethane	9.712	62	551338	44.59	ug/L	98
31) Benzene	9.724	78	1406545	39.85	ug/L	99
32) Cyclohexene	9.834	67	711298	42.36	ug/L	99
33) n-Butyl alcohol	10.084	56	1562959	5322.69	ug/L	97
34) Trichloroethylene	10.364	95	364081	41.32	ug/L	99
35) 1,2-Dichloropropane	10.614	63	396929	42.55	ug/L	100
36) Methylcyclohexane	10.602	83	655208	42.74	ug/L	99
37) Dibromomethane	10.748	93	219908	44.37	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V113.D
Acq On : 25 Jan 2010 3:36 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022574|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 244923001
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 26 09:30:15 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	10.864	83	475911	45.55	ug/L	99
39) 2-Chloroethylvinyl ether	11.089	63	1245087	217.93	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	75	585507	44.41	ug/L	95
42) 4-Methyl-2-pentanone	11.413	58	840119	243.20	ug/L	92
44) Toluene	11.699	91	1516519	38.68	ug/L	100
45) trans-1,3-Dichloroprop...	11.858	75	564475	44.53	ug/L	96
46) 1,1,2-Trichloroethane	12.083	83	265341	41.15	ug/L	99
47) 2-Hexanone	12.260	43	1677172	264.79	ug/L	99
48) 1,3-Dichloropropane	12.272	76	565961	41.24	ug/L	89
49) Tetrachloroethylene	12.290	164	314401	39.69	ug/L	100
50) Dibromochloromethane	12.540	129	380601	46.87	ug/L	98
51) 1,2-Dibromoethane	12.705	107	333237	42.86	ug/L	99
52) Chlorobenzene	13.187	112	1020509	40.25	ug/L	100
53) 1,1,1,2-Tetrachloroethane	13.241	131	384178	43.78	ug/L	99
54) Ethylbenzene	13.254	91	1754558	40.82	ug/L	99
55) m,p-Xylenes	13.363	106	1388965	80.79	ug/L	97
56) o-Xylene	13.796	106	682138	40.42	ug/L	96
57) Styrene	13.802	104	1114915	41.47	ug/L	97
59) Bromoform	14.058	173	263550	49.28	ug/L	99
60) Isopropylbenzene	14.156	105	1814336	39.35	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.436	83	446813	43.23	ug/L	99
63) 1,2,3-Trichloropropane	14.528	110	131086	45.09	ug/L #	86
64) Bromobenzene	14.564	156	455977	38.46	ug/L	97
65) n-Propylbenzene	14.583	91	2135293	39.52	ug/L	99
66) 1,3,5-Trimethylbenzene	14.735	105	1556578	39.38	ug/L	99
67) 2-Chlorotoluene	14.729	126	453671	39.49	ug/L	97
68) 4-Chlorotoluene	14.833	91	1299608	39.07	ug/L	99
69) tert-Butylbenzene	15.107	134	338931	38.55	ug/L	95
70) 1,2,4-Trimethylbenzene	15.150	105	1587853	38.13	ug/L	99
71) sec-Butylbenzene	15.333	105	2088142	39.29	ug/L	99
72) 4-Isopropyltoluene	15.454	119	1682635	38.72	ug/L	99
73) 1,3-Dichlorobenzene	15.515	146	860728	37.15	ug/L	100
74) 1,4-Dichlorobenzene	15.601	146	874190	36.80	ug/L	99
75) n-Butylbenzene	15.887	91	1597018	37.87	ug/L	99
76) 1,2-Dichlorobenzene	16.021	146	816165	36.34	ug/L	100
77) 1,2-Dibromo-3-chloropr...	16.881	157	87246	46.28	ug/L	98
78) 1,2,4-Trichlorobenzene	17.911	180	503957	29.83	ug/L	100
79) Hexachlorobutadiene	18.076	225	363609	33.90	ug/L	100
80) Naphthalene	18.289	128	1086266	32.00	ug/L	100
81) 1,2,3-Trichlorobenzene	18.625	180	420239	29.71	ug/L	99
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	6.474		0m	N.D.	d	
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	6.798		0m	N.D.	d	
88) Allyl chloride	7.072		0m	N.D.	d	
89) tert-Butyl Alcohol	7.285		0m	N.D.	d	
90) Acrylonitrile	7.572		0m	N.D.	d	
91) Isopropyl ether	8.060		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.212		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.694		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V113.D
Acq On : 25 Jan 2010 3:36 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022574|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 244923001
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 26 09:30:15 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	8.681		0m	N.D.	d	
96) Methacrylonitrile	8.956		0m	N.D.	d	
97) Tetrahydrofuran	9.053		0m	N.D.	d	
98) Isobutyl alcohol	9.413		0m	N.D.	d	
99) Methyl tert-amyl ether	9.730		0m	N.D.	d	
100) Methyl methacrylate	10.608		0m	N.D.	d	
101) 1,4-Dioxane	10.754		0m	N.D.	d	
102) 2-Nitropropane	11.089		0m	N.D.	d	
104) Ethyl methacrylate	11.791		0m	N.D.	d	
106) 1-Chlorohexane	0.000		0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.156		0m	N.D.	d	
108) Cyclohexanone	0.000		0	N.D.		
109) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
110) Pentachloroethane	15.180		0m	N.D.	d	
111) Benzyl chloride	15.723		0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	16.168		0m	N.D.	d	

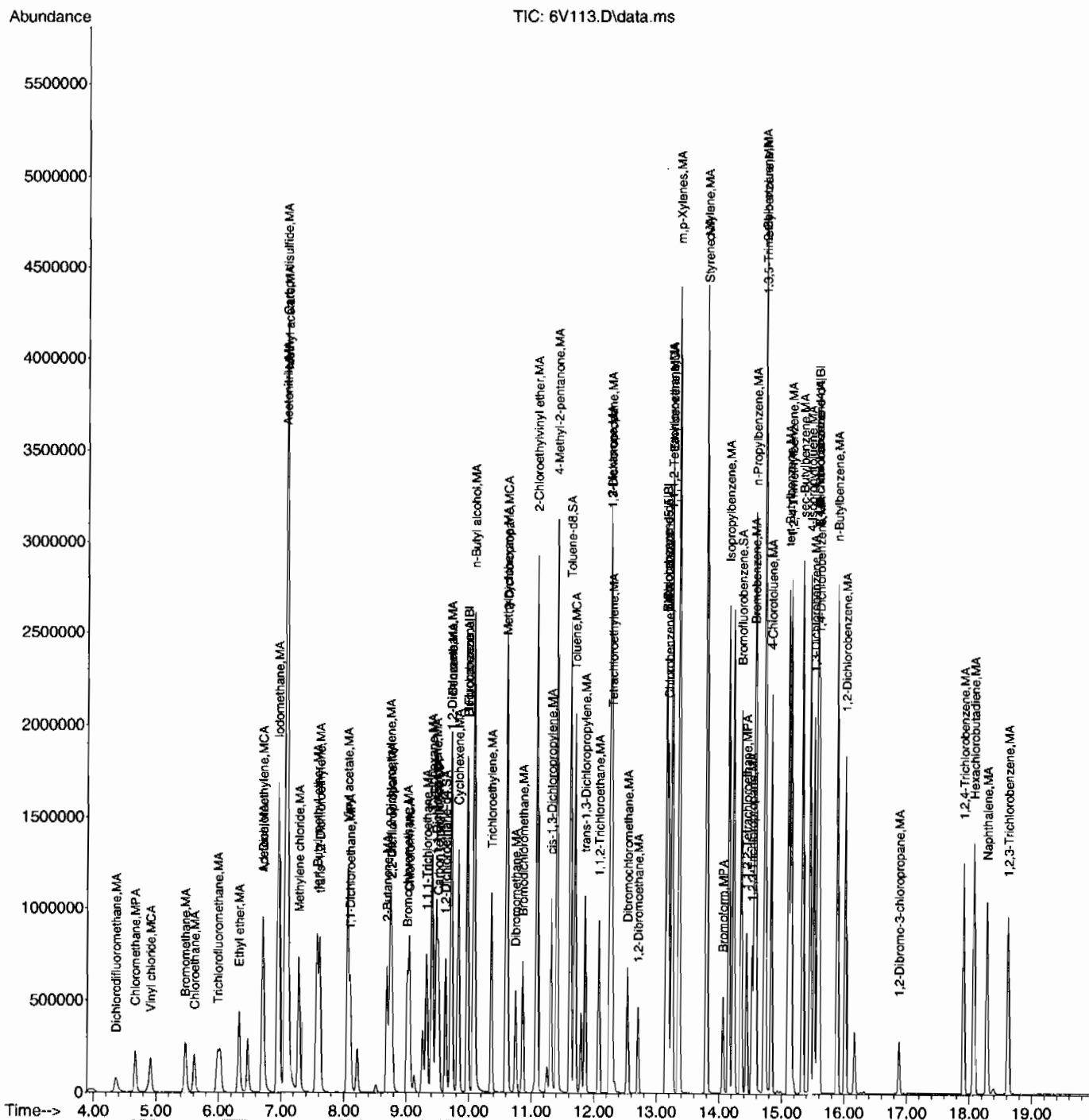
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(E) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V113.D
Acq On : 25 Jan 2010 3:36 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022574|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MS 244923001
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 26 09:30:15 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :



Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202022575	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 944498	Client: LANL010	Project: QC
Client ID: RE15-10-7163PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6I	Dilution: 1
Run Date: 01/25/2010 16:04	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/25/2010 13:08	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012510V6V114.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		32.0	ug/kg	0.364	1.07
74-87-3	Chloromethane		40.7	ug/kg	0.321	1.07
75-01-4	Vinyl chloride		43.4	ug/kg	0.321	1.07
74-83-9	Bromomethane		45.4	ug/kg	0.321	1.07
75-00-3	Chloroethane		46.8	ug/kg	0.321	1.07
75-69-4	Trichlorofluoromethane		46.9	ug/kg	0.321	1.07
67-64-1	Acetone	BE	224	ug/kg	1.78	5.35
75-35-4	1,1-Dichloroethylene		48.3	ug/kg	0.321	1.07
74-88-4	Iodomethane		227	ug/kg	1.71	5.35
75-09-2	Methylene chloride		43.7	ug/kg	2.14	5.35
75-15-0	Carbon disulfide		240	ug/kg	1.34	5.35
156-60-5	trans-1,2-Dichloroethylene		47.2	ug/kg	0.321	1.07
75-34-3	1,1-Dichloroethane		47.1	ug/kg	0.321	1.07
78-93-3	2-Butanone		270	ug/kg	1.61	5.35
156-59-2	cis-1,2-Dichloroethylene		48.1	ug/kg	0.321	1.07
594-20-7	2,2-Dichloropropane		54.5	ug/kg	0.321	1.07
67-66-3	Chloroform		47.4	ug/kg	0.321	1.07
74-97-5	Bromochloromethane		46.4	ug/kg	0.353	1.07
71-55-6	1,1,1-Trichloroethane		50.9	ug/kg	0.321	1.07
563-58-6	1,1-Dichloropropene		48.5	ug/kg	0.321	1.07
56-23-5	Carbon tetrachloride		52.9	ug/kg	0.321	1.07
107-06-2	1,2-Dichloroethane		48.2	ug/kg	0.321	1.07
71-43-2	Benzene		44.8	ug/kg	0.321	1.07
79-01-6	Trichloroethylene		46.2	ug/kg	0.353	1.07
78-87-5	1,2-Dichloropropane		46.9	ug/kg	0.321	1.07
75-27-4	Bromodichloromethane		50.6	ug/kg	0.321	1.07
74-95-3	Dibromomethane		48.3	ug/kg	0.321	1.07
108-10-1	4-Methyl-2-pentanone		263	ug/kg	1.34	5.35
10061-01-5	cis-1,3-Dichloropropylene		49.0	ug/kg	0.321	1.07
108-88-3	Toluene		45.0	ug/kg	0.321	1.07
10061-02-6	trans-1,3-Dichloropropylene		51.1	ug/kg	0.321	1.07
79-00-5	1,1,2-Trichloroethane		46.5	ug/kg	0.321	1.07
591-78-6	2-Hexanone		280	ug/kg	1.61	5.35
142-28-9	1,3-Dichloropropane		46.4	ug/kg	0.321	1.07
127-18-4	Tetrachloroethylene		45.9	ug/kg	0.321	1.07
124-48-1	Dibromochloromethane		52.7	ug/kg	0.321	1.07
106-93-4	1,2-Dibromoethane		47.8	ug/kg	0.321	1.07
108-90-7	Chlorobenzene		46.5	ug/kg	0.321	1.07

Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202022575	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 944498	Client: LANL010	Project: QC
Client ID: RE15-10-7163PSD	Method: SW846 8260B	SOP Ref: GL-OA-E-038
Batch ID: 944501	Inst: VOA6.I	Dilution: 1
Run Date: 01/25/2010 16:04	Analyst: RXD1	Purge Vol: 5 mL
Prep Date: 01/25/2010 13:08	Aliquot: 5 g	Final Volume: 5 mL
Data File: 012510V66V114.D	Column: DB-624	

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
100-41-4	Ethylbenzene		46.7	ug/kg	0.321	1.07
179601-23-1	m,p-Xylenes		92.8	ug/kg	0.321	2.14
95-47-6	o-Xylene		47.5	ug/kg	0.321	1.07
100-42-5	Styrene		47.2	ug/kg	0.321	1.07
75-25-2	Bromoform		59.8	ug/kg	0.321	1.07
79-34-5	1,1,2,2-Tetrachloroethane		51.9	ug/kg	0.321	1.07
96-18-4	1,2,3-Trichloropropane		52.1	ug/kg	0.321	1.07
108-86-1	Bromobenzene		47.6	ug/kg	0.321	1.07
103-65-1	n-Propylbenzene		48.7	ug/kg	0.321	1.07
95-49-8	2-Chlorotoluene		48.4	ug/kg	0.321	1.07
98-82-8	Isopropylbenzene		49.5	ug/kg	0.321	1.07
108-67-8	1,3,5-Trimethylbenzene		47.8	ug/kg	0.321	1.07
106-43-4	4-Chlorotoluene		47.5	ug/kg	0.321	1.07
98-06-6	tert-Butylbenzene		48.3	ug/kg	0.321	1.07
95-63-6	1,2,4-Trimethylbenzene		46.4	ug/kg	0.321	1.07
135-98-8	sec-Butylbenzene		47.2	ug/kg	0.321	1.07
99-87-6	4-Isopropyltoluene		45.0	ug/kg	0.321	1.07
541-73-1	1,3-Dichlorobenzene		45.4	ug/kg	0.321	1.07
106-46-7	1,4-Dichlorobenzene		44.1	ug/kg	0.321	1.07
104-51-8	n-Butylbenzene		43.6	ug/kg	0.321	1.07
96-12-8	1,2-Dibromo-3-chloropropane	E	56.7	ug/kg	0.321	1.07
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	U	5.35	ug/kg	1.71	5.35
	Trichlorotrifluoroethane					
630-20-6	1,1,1,2-Tetrachloroethane		49.0	ug/kg	0.321	1.07
95-50-1	1,2-Dichlorobenzene		43.7	ug/kg	0.321	1.07

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V114.D
Acq On : 25 Jan 2010 4:04 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022575|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 244923001
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 26 09:30:18 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Fluorobenzene	9.980	96	1880262	50.00	ug/L	0.00
41) Chlorobenzene-d5	13.156	117	1353835	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	15.576	152	706288	50.00	ug/L	0.00
82) B Fluorobenzene	9.980	96	1878182	50.00	ug/L	0.00
103) B Chlorobenzene-d5	13.156	117	1353835	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	15.576	152	706288	50.00	ug/L	0.00
System Monitoring Compounds						
29) 1,2-Dichloroethane-d4	9.626	65	560240	50.50	ug/L	0.00
Spiked Amount	50.000	Range 68 - 131	Recovery	=	101.00%	
43) Toluene-d8	11.626	98	1792490	47.75	ug/L	0.00
Spiked Amount	50.000	Range 75 - 129	Recovery	=	95.50%	
61) Bromofluorobenzene	14.357	95	681176	50.05	ug/L	0.00
Spiked Amount	50.000	Range 68 - 133	Recovery	=	100.10%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	4.360	85	251665	29.86	ug/L	99
3) Chloromethane	4.682	50	440632	38.01	ug/L	100
4) Vinyl chloride	4.924	62	412687	40.55	ug/L	100
5) Bromomethane	5.478	94	322289	42.46	ug/L	100
6) Chloroethane	5.619	64	330364	43.73	ug/L	100
7) Trichlorofluoromethane	6.032	101	653304	43.79	ug/L	100
8) Ethyl ether	6.328	59	405738	41.85	ug/L	100
9) Acetone	6.712	43	716342	209.42	ug/L	96 E
10) 1,1-Dichloroethylene	6.712	61	621480	45.16	ug/L	98
11) Iodomethane	6.956	142	3151307	212.49	ug/L	97
12) Acetonitrile	7.072	41	1705661	1216.35	ug/L	98
13) Methyl acetate	7.096	43	2501813	325.19	ug/L	98
14) Carbon disulfide	7.084	76	6186025	223.99	ug/L	100
15) Methylene chloride	7.285	84	442025	40.84	ug/L	95
16) tert-Butyl methyl ether	7.578	73	1154836	42.23	ug/L	99
17) trans-1,2-Dichloroethy...	7.621	61	619031	44.07	ug/L	99
18) Vinyl acetate	8.066	43	1138198	56.25	ug/L	91
19) 1,1-Dichloroethane	8.102	63	773700	44.02	ug/L	100
20) 2-Butanone	8.694	43	1092395	252.40	ug/L	98
21) cis-1,2-Dichloroethylene	8.742	61	703606	44.97	ug/L	97
22) 2,2-Dichloropropane	8.767	77	644957	50.94	ug/L	94
23) Bromochloromethane	9.017	128	208919	43.35	ug/L	96
24) Chloroform	9.053	83	723978	44.24	ug/L	100
25) 1,1,1-Trichloroethane	9.328	97	653801	47.60	ug/L	99
26) Cyclohexane	9.413	56	813634	45.81	ug/L	100
27) 1,1-Dichloropropene	9.480	75	566567	45.32	ug/L	95
28) Carbon tetrachloride	9.517	117	600062	49.39	ug/L	99
30) 1,2-Dichloroethane	9.712	62	604516	45.05	ug/L	100
31) Benzene	9.724	78	1602945	41.85	ug/L	99
32) Cyclohexene	9.834	67	815694	44.77	ug/L	98
33) n-Butyl alcohol	10.084	56	1587393	4985.28	ug/L	97
34) Trichloroethylene	10.364	95	412945	43.19	ug/L	99
35) 1,2-Dichloropropane	10.614	63	444021	43.86	ug/L	99
36) Methylcyclohexane	10.602	83	741279	44.56	ug/L	98
37) Dibromomethane	10.754	93	242895	45.17	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V114.D
Acq On : 25 Jan 2010 4:04 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022575|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 244923001
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 26 09:30:18 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

SubList :

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Bromodichloromethane	10.864	83	536309	47.31	ug/L	99
39) 2-Chloroethylvinyl ether	11.089	63	1332792	214.98	ug/L	99
40) cis-1,3-Dichloropropylene	11.315	75	655089	45.79	ug/L	96
42) 4-Methyl-2-pentanone	11.413	58	874272	245.95	ug/L	93
44) Toluene	11.699	91	1697972	42.09	ug/L	100
45) trans-1,3-Dichloroprop...	11.858	75	622198	47.70	ug/L	96
46) 1,1,2-Trichloroethane	12.077	83	288442	43.47	ug/L	100
47) 2-Hexanone	12.260	43	1707170	261.92	ug/L	99
48) 1,3-Dichloropropane	12.272	76	612118	43.34	ug/L	92
49) Tetrachloroethylene	12.290	164	349248	42.84	ug/L	100
50) Dibromochloromethane	12.540	129	411209	49.21	ug/L	100
51) 1,2-Dibromoethane	12.705	107	357645	44.70	ug/L	100
52) Chlorobenzene	13.187	112	1133347	43.44	ug/L	100
53) 1,1,1,2-Tetrachloroethane	13.248	131	413316	45.77	ug/L	99
54) Ethylbenzene	13.254	91	1929428	43.62	ug/L	100
55) m,p-Xylenes	13.363	106	1534014	86.71	ug/L	97
56) o-Xylene	13.796	106	770815	44.39	ug/L	96
57) Styrene	13.802	104	1219147	44.07	ug/L	97
59) Bromoform	14.064	173	279046	55.88	ug/L	99
60) Isopropylbenzene	14.156	105	1992330	46.28	ug/L	100
62) 1,1,2,2-Tetrachloroethane	14.436	83	467643	48.45	ug/L	99
63) 1,2,3-Trichloropropane	14.528	110	132184	48.69	ug/L	96
64) Bromobenzene	14.564	156	492508	44.49	ug/L	98
65) n-Propylbenzene	14.583	91	2297347	45.54	ug/L	99
66) 1,3,5-Trimethylbenzene	14.735	105	1649440	44.69	ug/L	99
67) 2-Chlorotoluene	14.735	126	485006	45.21	ug/L	96
68) 4-Chlorotoluene	14.833	91	1379068	44.40	ug/L	100
69) tert-Butylbenzene	15.107	134	370446	45.12	ug/L	99
70) 1,2,4-Trimethylbenzene	15.150	105	1684937	43.33	ug/L	99
71) sec-Butylbenzene	15.333	105	2190018	44.13	ug/L	99
72) 4-Isopropyltoluene	15.454	119	1705060	42.02	ug/L	99
73) 1,3-Dichlorobenzene	15.515	146	917936	42.43	ug/L	99
74) 1,4-Dichlorobenzene	15.601	146	913872	41.20	ug/L	100
75) n-Butylbenzene	15.887	91	1603251	40.71	ug/L	99
76) 1,2-Dichlorobenzene	16.021	146	856622	40.85	ug/L	99
77) 1,2-Dibromo-3-chloropr...	16.881	157	93263	52.99	ug/L	99 E
78) 1,2,4-Trichlorobenzene	17.911	180	485120	30.75	ug/L	100
79) Hexachlorobutadiene	18.076	225	323194	32.27	ug/L	99
80) Naphthalene	18.289	128	1110677	35.04	ug/L	100
81) 1,2,3-Trichlorobenzene	18.618	180	408235	30.91	ug/L	100
83) Chlorotrifluoroethylene	0.000		0	N.D.		
84) 2-Chloro-1,1,1-trifluo...	0.000		0	N.D.		
85) Acrolein	0.000		0	N.D.		
86) Trichlorotrifluoroethane	0.000		0	N.D.		
87) Isopropyl Alcohol	6.822		0m	N.D.	d	
88) Allyl chloride	7.072		0m	N.D.	d	
89) tert-Butyl Alcohol	7.291		0m	N.D.	d	
90) Acrylonitrile	7.572		0m	N.D.	d	
91) Isopropyl ether	8.072		0m	N.D.	d	
92) 2-Chloro-1,3-butadiene	8.218		0m	N.D.	d	
93) Ethyl tert-butyl ether	0.000		0	N.D.		
94) Ethyl acetate	8.694		0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V114.D
Acq On : 25 Jan 2010 4:04 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022575|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 244923001
ALS Vial : 14 Sample Multiplier: 1

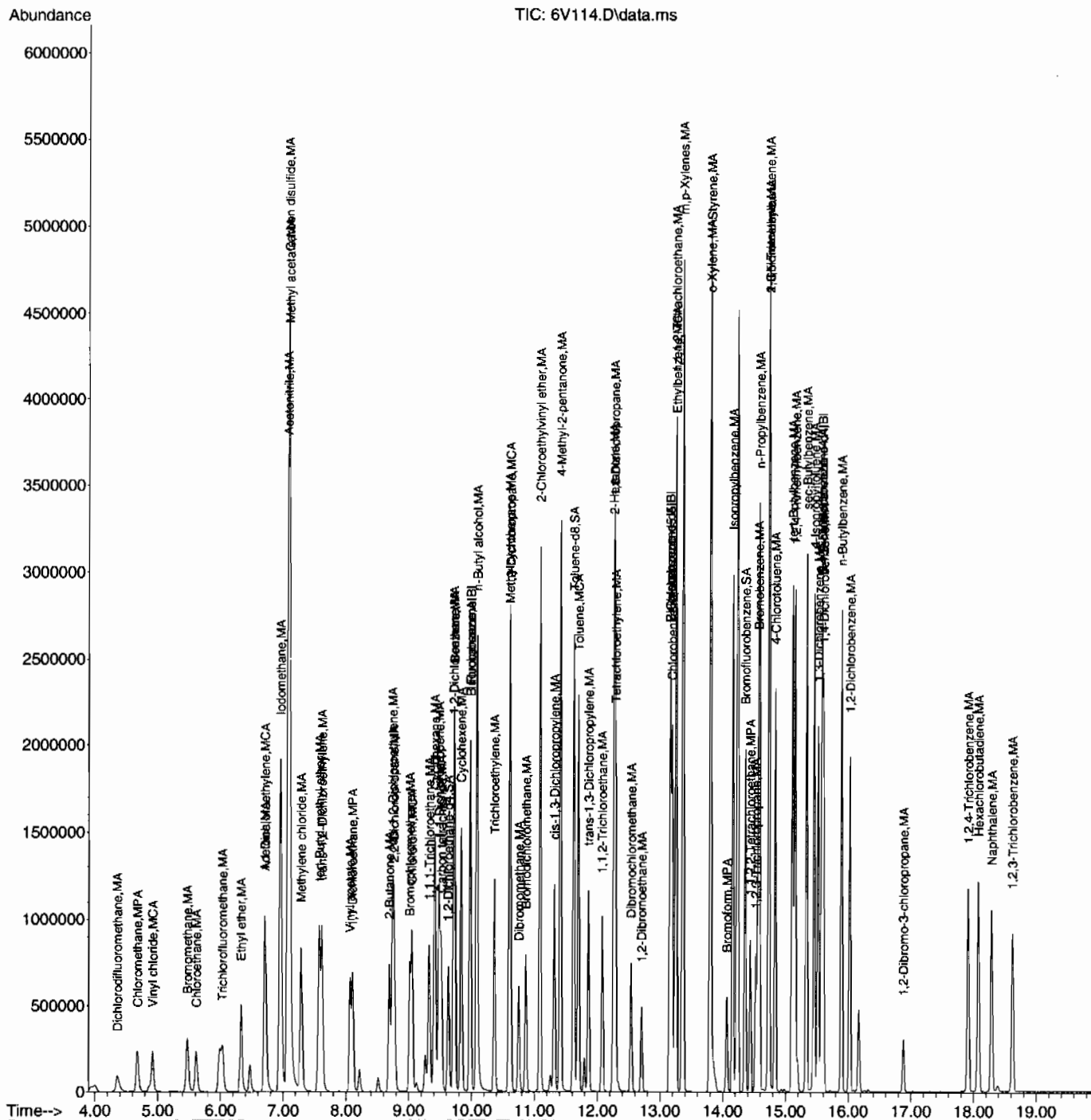
Quant Time: Jan 26 09:30:18 2010
Quant Method : C:\msdchem\1\METHODS\VOA6-8260-121009.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Mon Dec 14 12:44:52 2009
Response via : Initial Calibration
Integrator: RTE

Compound	R.T. QIon	Response	Conc	Units	Dev(Min)
95) Propionitrile	8.694	0m	N.D.	d	
96) Methacrylonitrile	8.956	0m	N.D.	d	
97) Tetrahydrofuran	9.059	0m	N.D.	d	
98) Isobutyl alcohol	9.413	0m	N.D.	d	
99) Methyl tert-amyl ether	9.724	0m	N.D.	d	
100) Methyl methacrylate	10.602	0m	N.D.	d	
101) 1,4-Dioxane	10.736	0m	N.D.	d	
102) 2-Nitropropane	11.089	0m	N.D.	d	
104) Ethyl methacrylate	11.858	0m	N.D.	d	
106) 1-Chlorohexane	0.000	0	N.D.		
107) cis-1,4-Dichloro-2-butene	14.156	0m	N.D.	d	
108) Cyclohexanone	14.235	0m	N.D.	d	
109) trans-1,4-Dichloro-2-b...	0.000	0	N.D.		
110) Pentachloroethane	15.186	0m	N.D.	d	
111) Benzyl chloride	15.717	0m	N.D.	d	
112) bis(2-Chloroisopropyl)...	16.168	0m	N.D.	d	

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

Data Path : C:\msdchem\1\DATA\012510V6\
Data File : 6V114.D
Acq On : 25 Jan 2010 4:04 pm
Operator : RXD1
InstName : VOA6
Sample : |1202022575|944501|1|VOAF|1|VOA8260BS|
Misc : LANL 5g N/A SOIL MIX[A] MSD 244923001
ALS Vial : 14 Sample Multiplier: 1

SubList :



Miscellaneous

Prep Logbook

Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer

Batch ID: 944498 Verified by: _____
Analyst: Ryan Dushak
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	Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
1202022576 LCS	22-JAN-2010 09:18:00	Soil	5	5	1							
1202022577 LCS	22-JAN-2010 09:19:00	Soil	5	5	1							
1202022573 MB	22-JAN-2010 09:22:00	Soil	5	5	1							
244923001	22-JAN-2010 13:48:00	Soil	5	5	1							
244923002	22-JAN-2010 13:54:00	Soil	5	5	1							
244923003	22-JAN-2010 13:56:00	Soil	5	5	1							
244923004	22-JAN-2010 13:58:00	Soil	5	5	1							
244923005	22-JAN-2010 14:00:00	Soil	5	5	1							
244923006	22-JAN-2010 14:02:00	Soil	5	5	1							
244923007	22-JAN-2010 14:04:00	Soil	5	5	1							
244923009	22-JAN-2010 14:08:00	Soil	5	5	1							
244923010	22-JAN-2010 14:10:00	Soil	5	5	1							
244923011	22-JAN-2010 14:12:00	Soil	5	5	1							
1202036754 LCS	25-JAN-2010 09:10:00	Soil	5	5	1							
1202036753 LCS	25-JAN-2010 09:11:00	Soil	5	5	1							
1202036752 MB	25-JAN-2010 09:14:00	Soil	5	5	1							
1202022574 PS (244923001)	25-JAN-2010 13:06:00	Soil	5	5	1							
1202022575 PSD (244923001)	25-JAN-2010 13:08:00	Soil	5	5	1							
244923008	25-JAN-2010 13:14:00	Soil	5	5	1							

Comments:

Amount

Description

Reagent/Solvent Lot ID

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

ORGANIC RUN LOG - INSTRUMENT ID#VOA6

Method 8260B/624 Operator: RXD1
HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 4
REVIEWED BY: _____
DATE: _____
Daily Instrument Readings: _____
Multiplier Voltage: 1624

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 12/10/2009

(See pg. _____)
for ICAL Std. Std. Ids) _____
NaHSO4 lot # _____
Cl test lot # 72612
Sequence Number: 121009V6
Daily Standard Volume Added for Purge (ul) MS/
Blk/ CCV LCS BFB
Solution ID# W6VM091210-11
L-ICV W6VM091210-01 1 1
IS UVM091203-01 1 1
SS UVM091020-02 1 1
S-ICV W6VM091210-20 5+5
BFB UVM091020-02 1
N/A
N/A
5 Water Purge Vol:ML
N/A Soil Purge Wt.:G
N/A Mid level ext. MeOH Vol:
N/A ul
N/A Methanol Lot #
x Heated Purge

Analysis			Lab Sample ID		Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil.	AS	Matrix Analyst	Ci test (Y/N)	Acceptable (O/X)	Comments		
Date	Time	Data File													
12/10/2009 8:31		60401.D	12019--	BLANK	BLANK	BLANK	5mL	1	N/A	1	RXD1	N/A	X	RINSE	
12/10/2009 8:59		60402.D	W6VM091210-00	GEL	GEL	CCV	5mL	1	N/A	2	RXD1	N/A	X	MIX[A] UVM091129-01C+UVM091209-01	
12/10/2009 9:26		60403.D	12019--	BLANK	BLANK	BLANK	5mL	1	N/A	3	RXD1	N/A	X	RINSE	
12/10/2009 10:12		60404.D	UVM091020-02	GEL	GEL	BFB	5mL	1	N/A	4	RXD1	N/A	O	BFB	
12/10/2009 10:39		60405.D	W6VM091210-01	VSTD001	VSTD001	ICAL	5uL	1	N/A	5	RXD1	N/A	X	MIX[A] UVM090911-02C+UVM091130-02B, see 60415	
12/10/2009 11:07		60406.D	W6VM091210-02	VSTD001	VSTD001	ICAL	5uL	1	N/A	6	RXD1	N/A	X	MIX[A] UVM090911-02C+UVM091130-02B, see 60415	
12/10/2009 11:34		60407.D	W6VM091210-03	VSTD002	VSTD002	ICAL	5uL	1	N/A	7	RXD1	N/A	O	MIX[A] UVM090911-03C+UVM091130-03B	
12/10/2009 12:02		60408.D	W6VM091210-04	VSTD005	VSTD005	ICAL	5uL	1	N/A	8	RXD1	N/A	O	MIX[A] UVM090911-04C+UVM091130-04B	
12/10/2009 12:30		60409.D	W6VM091210-05	VSTD010	VSTD010	ICAL	5uL	1	N/A	9	RXD1	N/A	O	MIX[A] UVM090911-05C+UVM091130-05B	
12/10/2009 12:58		60410.D	W6VM091210-06	VSTD020	VSTD020	ICAL	5uL	1	N/A	10	RXD1	N/A	O	MIX[A] UVM090911-06C+UVM091130-06B	
12/10/2009 13:26		60411.D	W6VM091210-07	VSTD050	VSTD050	ICAL	5uL	1	N/A	11	RXD1	N/A	O	MIX[A] UVM090911-07C+UVM091130-07B	
12/10/2009 13:54		60412.D	W6VM091210-08	VSTD100	VSTD100	ICAL	5uL	1	N/A	12	RXD1	N/A	O	MIX[A] UVM090911-08C+UVM091130-08B	
12/10/2009 14:22		60413.D	12019--	BLANK	BLANK	BLANK	5mL	1	N/A	13	RXD1	N/A	X	RINSE	
12/10/2009 14:49		60414.D	W6VM091210-09	VSTD005	VSTD005	ICAL	5uL	1	N/A	14	RXD1	N/A	O	MIX[A] UVM090911-01C+UVM091130-01B	
12/10/2009 15:17		60415.D	W6VM091210-10	VSTD001	VSTD001	ICAL	2.5uL	1	N/A	15	RXD1	N/A	O	MIX[A] UVM090911-03C+UVM091130-03B	
12/10/2009 15:45		60416.D	W6VM091210-11	ICV	ICV	ICV	5uL	1	N/A	16	RXD1	N/A	O	MIX[A] UVM091129-01C+UVM091209-01	
12/10/2009 16:13		60417.D	W6VM091210-12	ICV	ICV	ICV	5uL	1	N/A	17	RXD1	N/A	X	MIX[A] UVM091105-01D+UVM091209-01	
12/10/2009 16:40		60418.D	W6VM091210-13	VSTD005S	VSTD005S	ICAL	5uL	1	N/A	18	RXD1	N/A	O	MIX[B] UVM091118-01+UVM091110-01B	
12/10/2009 17:08		60419.D	W6VM091210-14	VSTD010S	VSTD010S	ICAL	5uL	1	N/A	19	RXD1	N/A	O	MIX[B] UVM091118-02+UVM091110-02B	
12/10/2009 17:36		60420.D	W6VM091210-15	VSTD025S	VSTD025S	ICAL	5uL	1	N/A	20	RXD1	N/A	O	MIX[B] UVM091118-03+UVM091110-03B	
12/10/2009 18:04		60421.D	W6VM091210-16	VSTD050S	VSTD050S	ICAL	5uL	1	N/A	21	RXD1	N/A	O	MIX[B] UVM091118-04+UVM091110-04B	
12/10/2009 18:32		60422.D	W6VM091210-17	VSTD100S	VSTD100S	ICAL	5uL	1	N/A	22	RXD1	N/A	O	MIX[B] UVM091118-05+UVM091110-05B	
12/10/2009 19:00		60423.D	W6VM091210-18	VSTD250S	VSTD250S	ICAL	5uL	1	N/A	23	RXD1	N/A	O	MIX[B] UVM091118-06+UVM091110-06B	
12/10/2009 19:28		60424.D	W6VM091210-19	VSTD500S	VSTD500S	ICAL	5uL	1	N/A	24	RXD1	N/A	O	MIX[B] UVM091118-07+UVM091110-07B	
12/10/2009 19:56		60425.D	12019--	BLANK	BLANK	BLANK	5mL	1	N/A	25	RXD1	N/A	X	RINSE	
12/10/2009 20:23		60426.D	W6VM091210-20	ICV	ICV	ICV	5mL	1	N/A	26	RXD1	N/A	O	MIX[B] UVM091118-08B+UVM091105-02D	
12/10/2009 20:51		60427.D	12019--	BLANK	BLANK	BLANK	5mL	1	N/A	27	RXD1	N/A	X	RINSE	

ORGANIC RUN LOG - INSTRUMENT ID#VOA6

Method 8260B/624 Operator: RXD1

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 4

Daily Instrument Readings: _____

Multiplier Voltage: 1753

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 12/10/2009

Purge Amount

5	Water Purge Vol:ML
5	Soil Purge Wt.:G
N/A	Mid level ext. MeOH Vol:
N/A	ul
N/A	Methanol Lot #
x	Heated Purge

Daily Standard	Solution ID#	Volume Added for Purge (ul)	MS/
CCV	W6VM100122-02	Blk/	LCS
IS	UVM091216-09	1	1
SS	UVM091117-02	1	1
LCS/MS	W6VM100122-02		5+5
BFB	UVM091117-02		1
SHORT	W6VM100122-03/04	5	5
DHEC	N/A	0	

(See pg. 234 for I/CAL Std. Sol. Ids)
NaHSO4 lot # n/a
Cl test lot # 72612
Sequence Number: 012210V6

Analysis		Lab Sample ID		Client		Batch #		Wt.(g) or Vol(ml/vol)		Dil.		AS		Matrix Analyst		Cl test Acceptable		Comments	
Date	Time	Data File																	
1/22/2010	10:34	6U501.D	UVM091117-02	GEL		GEL	BFB	5mL	1	N/A	1	N/A	1	RXD1	N/A	O		BFB	
1/22/2010	11:02	6U502.D	W6VM100122-01	GEL		GEL	CCV	5mL	1	N/A	2	N/A	2	RXD1	N/A	X		MIX(A) 1214-01H+0120-03	
1/22/2010	11:29	6U503.D	W6VM100122-02	GEL		GEL	CCV/LCS	5g	1	N/A	3	N/A	3	RXD1	N/A	O		SOIL MIX(A) 1214-01H+0120-03	
1/22/2010	12:07	6U504.D	W6VM100122-03	GEL		GEL	CCV	5mL	1	N/A	4	N/A	4	RXD1	N/A	O		MIX(B) 1023-08B	
1/22/2010	12:34	6U505.D	W6VM100122-04	GEL		GEL	LCS	5g	1	N/A	5	N/A	5	RXD1	N/A	O		SOIL MIX(B) 1023-08B	
1/22/2010	13:02	6U506.D	12020--	BLANK		BLANK	BLANK	5g	1	N/A	6	N/A	6	RXD1	N/A	O		SOIL	
1/22/2010	13:30	6U507.D	12020--	BLANK		BLANK	BLANK	5mL	1	N/A	7	N/A	7	RXD1	N/A	O			
1/22/2010	14:08	6U508.D	244910005	LANL		LANL	944011	5g	1	N/A	8	N/A	8	RXD1	N/A	O		SOIL, RR of 6U417	
1/22/2010	14:36	6U509.D	244910006	LANL		LANL	944011	5g	1	N/A	9	N/A	9	RXD1	N/A	x		SOIL, Confirmation of 6U418	
1/22/2010	15:04	6U510.D	244910007	LANL		LANL	944011	5g	1	N/A	10	N/A	10	RXD1	N/A	x		SOIL, Confirmation of 6U419	
1/22/2010	15:32	6U511.D	244910008	LANL		LANL	944011	5g	1	N/A	11	N/A	11	RXD1	N/A	x		SOIL, Confirmation of 6U420	
1/22/2010	16:00	6U512.D	244910009	LANL		LANL	944011	5g	1	N/A	12	N/A	12	RXD1	N/A	x		SOIL, Confirmation of 6U421	
1/22/2010	16:28	6U513.D	244923001	LANL		LANL	944501	5g	1	N/A	13	N/A	13	RXD1	N/A	O		SOIL	
1/22/2010	16:55	6U514.D	244923002	LANL		LANL	944501	5g	1	N/A	14	N/A	14	RXD1	N/A	O		SOIL	
1/22/2010	17:23	6U515.D	244923003	LANL		LANL	944501	5g	1	N/A	15	N/A	15	RXD1	N/A	O		SOIL	
1/22/2010	17:51	6U516.D	244923004	LANL		LANL	944501	5g	1	N/A	16	N/A	16	RXD1	N/A	O		SOIL	
1/22/2010	18:19	6U517.D	244923005	LANL		LANL	944501	5g	1	N/A	17	N/A	17	RXD1	N/A	O		SOIL, IS low, see 012510V6	
1/22/2010	18:47	6U518.D	244923006	LANL		LANL	944501	5g	1	N/A	18	N/A	18	RXD1	N/A	O		SOIL, IS low, see 012510V6	
1/22/2010	19:14	6U519.D	244923007	LANL		LANL	944501	5g	1	N/A	19	N/A	19	RXD1	N/A	O		SOIL	
1/22/2010	19:42	6U520.D	244923008	LANL		LANL	944501	5g	1	N/A	20	N/A	20	RXD1	N/A	X		SOIL, SS high, IS low see 012510V6	
1/22/2010	20:10	6U521.D	244923009	LANL		LANL	944501	5g	1	N/A	21	N/A	21	RXD1	N/A	O		SOIL	
1/22/2010	20:37	6U522.D	244923010	LANL		LANL	944501	5g	1	N/A	22	N/A	22	RXD1	N/A	O		SOIL	
1/22/2010	21:05	6U523.D	244923011	LANL		LANL	944501	5g	1	N/A	23	N/A	23	RXD1	N/A	O		SOIL	
1/22/2010	21:33	6U524.D	1202022574	LANL		LANL	944501	5g	1	N/A	24	N/A	24	RXD1	N/A	X		SOIL MIX(A) MS 244923001, IS low	
1/22/2010	22:00	6U525.D	1202022575	LANL		LANL	944501	5g	1	N/A	25	N/A	25	RXD1	N/A	X		SOIL MIX(A) MSD 244923001	
1/22/2010	22:28	6U526.D	12020--	BLANK		BLANK	BLANK	5mL	1	N/A	26	N/A	26	RXD1	N/A	X		RINSE	

GEL Laboratories, LLC
Revision: 11/22/04

Date: 1/25/2010

Method 8260B/624

Operator: RXD1

ORGANIC RUN LOG - INSTRUMENT ID#VOA6

REVIEWED BY:

DATE:

Daily Instrument Readings:

Multiplier Voltage: 1753

CALIBRATION & QC INFORMATION:

Initial Calibration Date: 12/10/2009

(See pg. 234

for ICAI Std. Sci. Ids)

NaHSO4 lot #

n/a

Cl test lot #

72612

Sequence Number: 012510V6

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 4

Purge Amount

5 Water Purge Vol:ML
 5 Soil Purge Wt.:G
 N/A Mid level ext. MeOH Vol:
 N/A ul
 N/A Methanol Lot #
 x Heated Purge

Daily Standard	Solution ID#	Volume Added for Purge (ul)	MS/
CCV	W6VM100125-01	5-5	BFB
IS	UVM100114-01	1	1
SS	UVM091216-01	1	1
LCS/MS	W6VM100125-01/02		5+5
BFB	UVM091216-01		1
SHORT	W6VM100125-03/04	5	5
DEEC	N/A	0	

Analysis	Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol.(mL)	Dil.	Factor	pH	AS	Matrix	Analyst	Cl test	Acceptable	Comments
	1/25/2010	10:03	6V101.D	12020--	BLANK	BLANK	5mL	1	1	N/A	1	w	RXD1	N/A	X	RINSE
	1/25/2010	10:30	6V102.D	12020--	BLANK	BLANK	5mL	1	1	N/A	2	w	RXD1	N/A	X	RINSE
	1/25/2010	10:58	6V103.D	UVM091216-01	GEL	BFB	5mL	1	1	N/A	3	w	RXD1	N/A	O	BFB
	1/25/2010	11:26	6V104.D	W6VM100125-01	GEL	CCV/LCS	5mL	1	1	N/A	4	w	RXD1	N/A	O	MIX[A] UVM091214-01H+IVM090120-03
	1/25/2010	11:54	6V105.D	W6VM100125-02	GEL	LCS	5g	1	1	N/A	5	s	RXD1	N/A	O	SOIL MIX[A] UVM091214-01H+IVM090120-03
	1/25/2010	12:21	6V106.D	W6VM100125-03	GEL	CCV	5mL	1	1	N/A	6	w	RXD1	N/A	O	MIX[B] UVM091023-08B
	1/25/2010	12:49	6V107.D	W6VM100125-04	GEL	LCS	5g	1	1	N/A	7	s	RXD1	N/A	O	SOIL MIX[B] UVM091023-08B
	1/25/2010	13:17	6V108.D	12020--	BLANK	BLANK	5g	1	1	N/A	8	s	RXD1	N/A	O	SOIL
	1/25/2010	13:45	6V109.D	12020--	BLANK	BLANK	5mL	1	1	N/A	9	w	RXD1	N/A	O	
	1/25/2010	14:13	6V110.D	244923005	LANL	944501	5g	1	1	N/A	10	s	RXD1	N/A	X	SOIL, RR of 6U517 IS low, not needed
	1/25/2010	14:41	6V111.D	244923006	LANL	944501	5g	1	1	N/A	11	s	RXD1	N/A	X	SOIL, RR of 6U518 IS low, not needed
	1/25/2010	15:09	6V112.D	244923008	LANL	944501	5g	1	1	N/A	12	s	RXD1	N/A	O	SOIL, RR of 6U520 IS low
	1/25/2010	15:36	6V113.D	1202022574	LANL	944501	5g	1	1	N/A	13	s	RXD1	N/A	O	SOIL MIX[A] MS 244923001
	1/25/2010	16:04	6V114.D	1202022575	LANL	944501	5g	1	1	N/A	14	s	RXD1	N/A	O	SOIL MIX[A] MSD 244923001
	1/25/2010	16:04	6V115.D	No MS or GC data present		Software crash										

DATA EXCEPTION REPORT

Mo. Day Yr. 08-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: 944501	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 244923(10-1287)			
Application Issues: Other			
Specification and Requirements Exception Description: 1. In the following samples, internal standard responses were outside the required acceptance criteria: 244923005 244923006 244923008		DER Disposition: 1. Sample reanalysis confirmed matrix interference. Narrate and report data.	

Originator's Name:

Ryan Dushak

08-FEB-10

Data Validator/Group Leader:

Stacy Calloway

11-FEB-10

GC/MS Semivolatile Analysis

**Semi-Volatile Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1287**

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: 943386

Prep Batch Number: 943385

Sample Analysis

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

Sample ID	Client ID
244923001	RE15-10-7163
244923002	RE15-10-7162
244923003	RE15-10-7161
244923004	RE15-10-7160
244923005	RE15-10-7174
244923006	RE15-10-7173
244923007	RE15-10-7175
244923008	RE15-10-7172
244923009	RE15-10-7218
244923010	RE15-10-7223
1202019888	Method Blank (MB)
1202019889	Laboratory Control Sample (LCS)
1202019890	244923001(RE15-10-7163) Matrix Spike (MS)
1202019891	244923001(RE15-10-7163) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 23.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

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

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. Please note that the second level of the initial calibration (5 mg/L) is only used for n-Nitrosodipropylamine. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

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

Initial Calibration

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

CCV Requirements

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

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Sample 244923001(RE15-10-7163) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement

The MS(1202019890) recovered 3,3'-Dichlorobenzidine at 34%. The limits are 35%-106%. Since the

MSD displayed a similar low (but passing) recovery for 3,3'-Dichlorobenzidine to the MS, the failure was attributed to matrix interference and the data results have been reported.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The relative percent differences (RPD) were not within the acceptance limits.

Internal Standard (ISTD) Acceptance

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

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

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

Miscellaneous Information

Data Exception (DER) Documentation

The following DER was generated for this SDG: 782200. It is located in the Miscellaneous Section of the data report.

Manual Integrations

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

Additional Comments

Additional comments were not required for this SDG.

Electronic Package Comment

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

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

System Configuration

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

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD5.1	HP Mass Spectrometer	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

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

Review Validation:

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

Reviewer: Dan Revchun Date: 2-17-10

Roadmap for LANL 10-1287 SVOA

This roadmap was analyzed by rmb on 01-21-2010, 12:47.

This roadmap was reviewed by bar00895 on 01-25-2010, 14:08.

Sample

exclude	manual	datafile	smid	injdate	inftime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2014.d	244923001	20-JAN-2010	22:11	10-1287.sub	RE15-10-7163	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2017.d	244923002	20-JAN-2010	23:19	10-1287.sub	RE15-10-7162	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2018.d	244923003	20-JAN-2010	23:42	10-1287.sub	RE15-10-7161	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2019.d	244923004	21-JAN-2010	00:05	10-1287.sub	RE15-10-7160	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2020.d	244923005	21-JAN-2010	00:28	10-1287.sub	RE15-10-7174	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2021.d	244923006	21-JAN-2010	00:51	10-1287.sub	RE15-10-7173	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2022.d	244923007	21-JAN-2010	01:13	10-1287.sub	RE15-10-7175	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2023.d	244923008	21-JAN-2010	01:36	10-1287.sub	RE15-10-7172	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2024.d	244923009	21-JAN-2010	01:59	10-1287.sub	RE15-10-7218	1	943386	<input type="checkbox"/>
<input type="checkbox"/>	N	/chem/MSD5.i/s012010.b/s5a2025.d	244923010	21-JAN-2010	02:21	10-1287.sub	RE15-10-7223	1	943386	<input type="checkbox"/>

QC Sample

exclude	manual	datafile	smid	sampletype	injdate	inftime	sublist	clientid	dilution	batchid	comment
<input type="checkbox"/>	Y	/chem/MSD5.i/s012010.b/s5a2006-4.d	1202019888	mb	20-JAN-2010	19:05	10-1287.sub	SBLK01	1.00000	943386	<input type="checkbox"/>
<input type="checkbox"/>	Y	/chem/MSD5.i/s012010.b/s5a2007-4.d	1202019889	lcs	20-JAN-2010	19:29	10-1287.sub	SBLK01LCS	1.00000	943386	<input type="checkbox"/>
<input type="checkbox"/>	Y	/chem/MSD5.i/s012010.b/s5a2015.d	1202019890	ms	20-JAN-2010	22:34	10-1287.sub	RE15-10-7163MS	1.00000	943386	<input type="checkbox"/>
<input type="checkbox"/>	Y	/chem/MSD5.i/s012010.b/s5a2016.d	1202019891	msd	20-JAN-2010	22:57	10-1287.sub	RE15-10-7163MSD	1.00000	943386	<input type="checkbox"/>

Sample Data Summary

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923004	Date Received: 01/16/2010 08:55	% Moisture: 20
Client ID: RE15-10-7160	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/21/2010 00:05	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2019.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	417	ug/kg	83.3	417
108-95-2	Phenol	U	417	ug/kg	83.3	417
95-57-8	2-Chlorophenol	U	417	ug/kg	83.3	417
106-46-7	1,4-Dichlorobenzene	U	417	ug/kg	83.3	417
621-64-7	N-Nitrosodipropylamine	U	417	ug/kg	83.3	417
59-50-7	4-Chloro-3-methylphenol	U	417	ug/kg	83.3	417
83-32-9	Acenaphthene	U	41.7	ug/kg	13.7	41.7
121-14-2	2,4-Dinitrotoluene	U	417	ug/kg	41.7	417
100-02-7	4-Nitrophenol	U	417	ug/kg	137	417
87-86-5	Pentachlorophenol	U	417	ug/kg	104	417
129-00-0	Pyrene	J	17.9	ug/kg	12.5	41.7
110-86-1	Pyridine	U	417	ug/kg	83.3	417
62-53-3	Aniline	U	417	ug/kg	125	417
111-44-4	bis(2-Chloroethyl) ether	U	417	ug/kg	83.3	417
541-73-1	1,3-Dichlorobenzene	U	417	ug/kg	83.3	417
100-51-6	Benzyl alcohol	U	417	ug/kg	125	417
95-50-1	1,2-Dichlorobenzene	U	417	ug/kg	83.3	417
108-60-1	bis(2-Chloroisopropyl)ether	U	417	ug/kg	83.3	417
95-48-7	o-Cresol	U	417	ug/kg	83.3	417
65794-96-9	m,p-Cresols	U	417	ug/kg	125	417
67-72-1	Hexachloroethane	U	417	ug/kg	83.3	417
98-95-3	Nitrobenzene	U	417	ug/kg	83.3	417
78-59-1	Isophorone	U	417	ug/kg	83.3	417
88-75-5	2-Nitrophenol	U	417	ug/kg	83.3	417
105-67-9	2,4-Dimethylphenol	U	417	ug/kg	146	417
111-91-1	bis(2-Chloroethoxy)methane	U	417	ug/kg	83.3	417
120-83-2	2,4-Dichlorophenol	U	417	ug/kg	83.3	417
65-85-0	Benzoic acid	U	833	ug/kg	208	833
91-20-3	Naphthalene	U	41.7	ug/kg	12.5	41.7
106-47-8	4-Chloroaniline	U	417	ug/kg	83.3	417
87-68-3	Hexachlorobutadiene	U	417	ug/kg	83.3	417
91-57-6	2-Methylnaphthalene	U	41.7	ug/kg	8.33	41.7
77-47-4	Hexachlorocyclopentadiene	U	417	ug/kg	83.3	417
88-06-2	2,4,6-Trichlorophenol	U	417	ug/kg	83.3	417
95-95-4	2,4,5-Trichlorophenol	U	417	ug/kg	83.3	417
91-58-7	2-Chloronaphthalene	U	41.7	ug/kg	13.7	41.7
88-74-4	2-Nitroaniline	U	417	ug/kg	83.3	417
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	417	ug/kg	83.3	417

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923004	Date Received: 01/16/2010 08:55	% Moisture: 20
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7160	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 00:05	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2019.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/A.O.Q
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	417	ug/kg	83.3	417
606-20-2	2,6-Dinitrotoluene	U	417	ug/kg	41.7	417
208-96-8	Acenaphthylene	U	41.7	ug/kg	12.5	41.7
51-28-5	2,4-Dinitrophenol	U	833	ug/kg	158	833
132-64-9	Dibenzofuran	U	417	ug/kg	83.3	417
84-66-2	Diethylphthalate	U	417	ug/kg	83.3	417
86-73-7	Fluorene	U	41.7	ug/kg	12.5	41.7
7005-72-3	4-Chlorophenylphenylether	U	417	ug/kg	83.3	417
534-52-1	2-Methyl-4,6-dinitrophenol	U	417	ug/kg	83.3	417
100-01-6	4-Nitroaniline	U	417	ug/kg	125	417
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	417	ug/kg	83.3	417
122-66-7	Azobenzene	U	417	ug/kg	83.3	417
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	417	ug/kg	83.3	417
118-74-1	Hexachlorobenzene	U	417	ug/kg	83.3	417
85-01-8	Phenanthrene	U	41.7	ug/kg	12.5	41.7
120-12-7	Anthracene	U	41.7	ug/kg	8.33	41.7
84-74-2	Di-n-butylphthalate	U	417	ug/kg	83.3	417
206-44-0	Fluoranthene	J	18.3	ug/kg	12.5	41.7
85-68-7	Butylbenzylphthalate	U	417	ug/kg	83.3	417
56-55-3	Benzo(a)anthracene	J	21.6	ug/kg	12.5	41.7
91-94-1	3,3'-Dichlorobenzidine	U	417	ug/kg	125	417
218-01-9	Chrysene	J	17.2	ug/kg	12.5	41.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	417	ug/kg	83.3	417
117-84-0	Di-n-octylphthalate	U	417	ug/kg	83.3	417
205-99-2	Benzo(b)fluoranthene	J	31.2	ug/kg	12.5	41.7
207-08-9	Benzo(k)fluoranthene	U	41.7	ug/kg	12.5	41.7
50-32-8	Benzo(a)pyrene	J	14.4	ug/kg	12.5	41.7
193-39-5	Indeno(1,2,3-cd)pyrene		130	ug/kg	12.5	41.7
53-70-3	Dibenzo(a,h)anthracene	U	41.7	ug/kg	12.5	41.7
191-24-2	Benzo(ghi)perylene	U	41.7	ug/kg	12.5	41.7
120-82-1	1,2,4-Trichlorobenzene	U	417	ug/kg	83.3	417

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	395	ug/kg		JA
112-95-8	Eicosane	10.79	655	ug/kg	98	NJ

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923004	Date Received: 01/16/2010 08:55	%Moisture: 20
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7160	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 00:05	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2019.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.57	321	ug/kg		J
62016-79-9	Heptacosane, 1-chloro-	11.77	545	ug/kg	96	NJ
	Unknown	11.89	544	ug/kg		J
	Unknown	12.12	307	ug/kg		J
	Unknown	12.38	193	ug/kg		J
	Unknown	12.65	203	ug/kg		J
	Unknown	13.11	290	ug/kg		J
83-46-5	.beta.-Sitosterol	13.81	309	ug/kg	91	NJ

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

SDG Number: 10-1287
Lab Sample ID: 244923003

Client ID: RE15-10-7161
Batch ID: 943386
Run Date: 01/20/2010 23:42
Prep Date: 01/20/2010 11:13
Data File: s5a2018.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 10.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.7	373
108-95-2	Phenol	U	373	ug/kg	74.7	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.7	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.7	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.7	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.7	373
83-32-9	Acenaphthene	U	37.3	ug/kg	12.3	37.3
121-14-2	2,4-Dinitrotoluene	U	373	ug/kg	37.3	373
100-02-7	4-Nitrophenol	U	373	ug/kg	123	373
87-86-5	Pentachlorophenol	U	373	ug/kg	93.3	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.7	373
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.7	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.7	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.7	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.7	373
95-48-7	o-Cresol	U	373	ug/kg	74.7	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.7	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.7	373
78-59-1	Isophorone	U	373	ug/kg	74.7	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.7	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	131	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.7	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.7	373
65-85-0	Benzoic acid	U	747	ug/kg	187	747
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.7	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.7	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.47	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.7	373
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.7	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.7	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.7	373
99-09-2	<i>o</i> -Nitroaniline	U	373	ug/kg	74.7	373
	3-Nitroaniline					

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923003	Date Received: 01/16/2010 08:55	%Moisture: 10.9
Client ID: RE15-10-7161	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 23:42	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2018.d	Aliquot: 30.06 g	Final Volume: 1 mL
	Column: J&W DB-SMS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	373	ug/kg	74.7	373
606-20-2	2,6-Dinitrotoluene	U	373	ug/kg	37.3	373
208-96-8	Acenaphthylene	U	37.3	ug/kg	11.2	37.3
51-28-5	2,4-Dinitrophenol	U	747	ug/kg	142	747
132-64-9	Dibenzofuran	U	373	ug/kg	74.7	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.7	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.7	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.7	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.7	373
122-66-7	Azobenzene	U	373	ug/kg	74.7	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.7	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.7	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.47	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.7	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.7	373
56-55-3	Benzo(a)anthracene	U	37.3	ug/kg	11.2	37.3
91-94-1	3,3'-Dichlorobenzidine	U	373	ug/kg	112	373
218-01-9	Chrysene	U	37.3	ug/kg	11.2	37.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	373	ug/kg	74.7	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.7	373
205-99-2	Benzo(b)fluoranthene	U	37.3	ug/kg	11.2	37.3
207-08-9	Benzo(k)fluoranthene	U	37.3	ug/kg	11.2	37.3
50-32-8	Benzo(a)pyrene	U	37.3	ug/kg	11.2	37.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.3	ug/kg	11.2	37.3
53-70-3	Dibenzo(a,h)anthracene	U	37.3	ug/kg	11.2	37.3
191-24-2	Benzo(ghi)perylene	U	37.3	ug/kg	11.2	37.3
120-82-1	1,2,4-Trichlorobenzene	U	373	ug/kg	74.7	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	428	ug/kg		J
	Unknown Aldol Condensate	2.93	384	ug/kg		JA

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923003	Date Received: 01/16/2010 08:55	%Moisture: 10.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7161	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 23:42	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.06 g	Final Volume: 1 mL
Data File: s5a2018.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
301-02-0	9-Octadecenamide, (Z)-	10.38	173	ug/kg	90	NJ
62906-36-9	1,2-Dicarbododecaborane(12), 1-[(propyl	11.9	683	ug/kg	90	NJ
	Unknown	12.65	919	ug/kg		J

Semi-Volatile
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923002

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.7
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7162
Batch ID: 943386
Run Date: 01/20/2010 23:19
Prep Date: 01/20/2010 11:13
Data File: s5a2017.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	369	ug/kg	73.8	369
108-95-2	Phenol	U	369	ug/kg	73.8	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.8	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.8	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.8	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.8	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.2	369
129-00-0	Pyrene	J	16.4	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.8	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.8	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.8	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.8	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.8	369
95-48-7	o-Cresol	U	369	ug/kg	73.8	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.8	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.8	369
78-59-1	Isophorone	U	369	ug/kg	73.8	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.8	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.8	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.8	369
65-85-0	Benzoic acid	U	738	ug/kg	184	738
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.8	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.8	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.38	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.8	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.8	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.8	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.8	369
99-09-2	o-Nitroaniline 3-Nitroaniline	U	369	ug/kg	73.8	369

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923002	Date Received: 01/16/2010 08:55	%Moisture: 9.7
Client ID: RE15-10-7162	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 23:19	Inst: MSD5.1	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2017.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
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	369	ug/kg	73.8	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	738	ug/kg	140	738
132-64-9	Dibenzofuran	U	369	ug/kg	73.8	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.8	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.8	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.8	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.8	369
122-66-7	Azobenzene	U	369	ug/kg	73.8	369
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.8	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.8	369
85-01-8	Phenanthrene	J	14.0	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.38	36.9
84-74-2	Di-n-butylphthalate	J	129	ug/kg	73.8	369
206-44-0	Fluoranthene	J	23.1	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.8	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	J	11.2	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.8	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.8	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.8	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	1480	ug/kg		J
	Unknown Aldol Condensate	2.94	389	ug/kg		JA

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

SDG Number: 10-1287
Lab Sample ID: 244923002

Client ID: RE15-10-7162
Batch ID: 943386
Run Date: 01/20/2010 23:19
Prep Date: 01/20/2010 11:13
Data File: s5a2017.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.03 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 9.7
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
112-95-8	Unknown	9.45	164	ug/kg		J
	Unknown	9.54	176	ug/kg		J
	Unknown	9.8	419	ug/kg		J
	Unknown	9.97	189	ug/kg		J
	Eicosane	10.04	190	ug/kg	96	NJ
	Unknown	10.39	274	ug/kg		J
630-02-4	Unknown	10.8	364	ug/kg		J
	Octacosane	11.77	289	ug/kg	98	NJ
	Unknown	11.9	384	ug/kg		J
	Unknown	11.91	286	ug/kg		J
	Unknown	12.12	314	ug/kg		J
	Unknown	12.38	219	ug/kg		J
	Unknown	12.65	583	ug/kg		J
	Unknown	13.11	329	ug/kg		J
	Unknown	13.35	279	ug/kg		J
	Unknown	13.45	218	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.82	335	ug/kg	95	NJ

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

SDG Number: 10-1287
Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7163
Batch ID: 943386
Run Date: 01/20/2010 22:11
Prep Date: 01/20/2010 11:13
Data File: s5a2014.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
99-09-2	o-Nitroaniline	U	357	ug/kg	71.4	357
	3-Nitroaniline					

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923001	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client ID: RE15-10-7163	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 22:11	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2014.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
122-39-4	<i>p</i> -Nitroaniline					
	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
101-55-3	<i>1,2</i> -Diphenylhydrazine					
	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	J	93.0	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	816	ug/kg		J
	Unknown Aldol Condensate	2.94	298	ug/kg		JA

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

SDG Number: 10-1287
Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7163
Batch ID: 943386
Run Date: 01/20/2010 22:11
Prep Date: 01/20/2010 11:13
Data File: sSa2014.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
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	158	ug/kg	99	NJ
	Unknown	9.8	164	ug/kg		J
	Unknown	10.38	180	ug/kg		J

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	%Moisture: 21.2
Client ID: RE15-10-7172	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/21/2010 01:36	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2023.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	423	ug/kg	84.7	423
108-95-2	Phenol	U	423	ug/kg	84.7	423
95-57-8	2-Chlorophenol	U	423	ug/kg	84.7	423
106-46-7	1,4-Dichlorobenzene	U	423	ug/kg	84.7	423
621-64-7	N-Nitrosodipropylamine	U	423	ug/kg	84.7	423
59-50-7	4-Chloro-3-methylphenol	U	423	ug/kg	84.7	423
83-32-9	Acenaphthene	U	42.3	ug/kg	14.0	42.3
121-14-2	2,4-Dinitrotoluene	U	423	ug/kg	42.3	423
100-02-7	4-Nitrophenol	U	423	ug/kg	140	423
87-86-5	Pentachlorophenol	U	423	ug/kg	106	423
129-00-0	Pyrene	U	42.3	ug/kg	12.7	42.3
110-86-1	Pyridine	U	423	ug/kg	84.7	423
62-53-3	Aniline	U	423	ug/kg	127	423
111-44-4	bis(2-Chloroethyl) ether	U	423	ug/kg	84.7	423
541-73-1	1,3-Dichlorobenzene	U	423	ug/kg	84.7	423
100-51-6	Benzyl alcohol	U	423	ug/kg	127	423
95-50-1	1,2-Dichlorobenzene	U	423	ug/kg	84.7	423
108-60-1	bis(2-Chloroisopropyl)ether	U	423	ug/kg	84.7	423
95-48-7	o-Cresol	U	423	ug/kg	84.7	423
65794-96-9	m,p-Cresols	U	423	ug/kg	127	423
67-72-1	Hexachloroethane	U	423	ug/kg	84.7	423
98-95-3	Nitrobenzene	U	423	ug/kg	84.7	423
78-59-1	Isophorone	U	423	ug/kg	84.7	423
88-75-5	2-Nitrophenol	U	423	ug/kg	84.7	423
105-67-9	2,4-Dimethylphenol	U	423	ug/kg	148	423
111-91-1	bis(2-Chloroethoxy)methane	U	423	ug/kg	84.7	423
120-83-2	2,4-Dichlorophenol	U	423	ug/kg	84.7	423
65-85-0	Benzoic acid		1010	ug/kg	212	847
91-20-3	Naphthalene	U	42.3	ug/kg	12.7	42.3
106-47-8	4-Chloroaniline	U	423	ug/kg	84.7	423
87-68-3	Hexachlorobutadiene	U	423	ug/kg	84.7	423
91-57-6	2-Methylnaphthalene	U	42.3	ug/kg	8.47	42.3
77-47-4	Hexachlorocyclopentadiene	U	423	ug/kg	84.7	423
88-06-2	2,4,6-Trichlorophenol	U	423	ug/kg	84.7	423
95-95-4	2,4,5-Trichlorophenol	U	423	ug/kg	84.7	423
91-58-7	2-Chloronaphthalene	U	42.3	ug/kg	14.0	42.3
88-74-4	2-Nitroaniline	U	423	ug/kg	84.7	423
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	423	ug/kg	84.7	423

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	%Moisture: 21.2
Client ID: RE15-10-7172	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/21/2010 01:36	Inst: MSD5.1	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2023.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	423	ug/kg	84.7	423
606-20-2	2,6-Dinitrotoluene	U	423	ug/kg	42.3	423
208-96-8	Acenaphthylene	U	42.3	ug/kg	12.7	42.3
51-28-5	2,4-Dinitrophenol	U	847	ug/kg	161	847
132-64-9	Dibenzofuran	U	423	ug/kg	84.7	423
84-66-2	Diethylphthalate	U	423	ug/kg	84.7	423
86-73-7	Fluorene	U	42.3	ug/kg	12.7	42.3
7005-72-3	4-Chlorophenylphenylether	U	423	ug/kg	84.7	423
534-52-1	2-Methyl-4,6-dinitrophenol	U	423	ug/kg	84.7	423
100-01-6	4-Nitroaniline	U	423	ug/kg	127	423
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	423	ug/kg	84.7	423
122-66-7	Azobenzene	U	423	ug/kg	84.7	423
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	423	ug/kg	84.7	423
118-74-1	Hexachlorobenzene	U	423	ug/kg	84.7	423
85-01-8	Phenanthrene	U	42.3	ug/kg	12.7	42.3
120-12-7	Anthracene	U	42.3	ug/kg	8.47	42.3
84-74-2	Di-n-butylphthalate	U	423	ug/kg	84.7	423
206-44-0	Fluoranthene	U	42.3	ug/kg	12.7	42.3
85-68-7	Butylbenzylphthalate	U	423	ug/kg	84.7	423
56-55-3	Benzo(a)anthracene	U	42.3	ug/kg	12.7	42.3
91-94-1	3,3'-Dichlorobenzidine	U	423	ug/kg	127	423
218-01-9	Chrysene	U	42.3	ug/kg	12.7	42.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	423	ug/kg	84.7	423
117-84-0	Di-n-octylphthalate	U	423	ug/kg	84.7	423
205-99-2	Benzo(b)fluoranthene	U	42.3	ug/kg	12.7	42.3
207-08-9	Benzo(k)fluoranthene	U	42.3	ug/kg	12.7	42.3
50-32-8	Benzo(a)pyrene	U	42.3	ug/kg	12.7	42.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.3	ug/kg	12.7	42.3
53-70-3	Dibenzo(a,h)anthracene	U	42.3	ug/kg	12.7	42.3
191-24-2	Benzo(ghi)perylene	U	42.3	ug/kg	12.7	42.3
120-82-1	1,2,4-Trichlorobenzene	U	423	ug/kg	84.7	423

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.78	4140	ug/kg	99	NJ
	Unknown	7.81	1780	ug/kg		J

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	% Moisture: 21.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7172	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 01:36	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2023.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown	8.28	1630	ug/kg		J
	Unknown	8.49	598	ug/kg		J
	Unknown	8.8	610	ug/kg		J
	Unknown	8.84	546	ug/kg		J
	Unknown	8.91	1610	ug/kg		J
	Unknown	8.94	1720	ug/kg		J
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl	8.98	737	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.07	1160	ug/kg	98	NJ
51195-74-5	Nordextromethorphan	9.1	1570	ug/kg	90	NJ
	Unknown	9.14	746	ug/kg		J
	Unknown	9.24	827	ug/kg		J
	Unknown	9.45	2070	ug/kg		J
480-39-7	4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d	9.58	1640	ug/kg	98	NJ
110936-78-2	7-Oxodehydroabietic acid, methyl ester	9.85	820	ug/kg	90	NJ
	Unknown	9.92	1050	ug/kg		J

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

SDG Number: 10-1287
Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7173
Batch ID: 943386
Run Date: 01/21/2010 00:51
Prep Date: 01/20/2010 11:13
Data File: s5a2021.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
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	370	ug/kg	73.9	370

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

SDG Number: 10-1287
Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7173
Batch ID: 943386
Run Date: 01/21/2010 00:51
Prep Date: 01/20/2010 11:13
Data File: sSa2021.d

CAS No.	Parname	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	1.98	1740	ug/kg		J
79-09-4	Propanoic acid	2.12	184	ug/kg	81	NJ

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923006	Date Received: 01/16/2010 08:55	%Moisture: 9.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7173	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 00:51	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2021.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQI/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.93	269	ug/kg		JA
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.88	175	ug/kg	97	NJ
1686-66-4	Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	8	151	ug/kg	95	NJ
	Unknown	8.79	173	ug/kg		J
	Unknown	8.92	225	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	159	ug/kg	93	NJ
	Unknown	9.12	164	ug/kg		J
629-96-9	1-Eicosanol	9.42	240	ug/kg	89	NJ
1599-67-3	1-Docosene	10.08	271	ug/kg	99	NJ
	Unknown	11.91	1560	ug/kg		J
	Unknown	12.67	1400	ug/kg		J
	Unknown	13.11	164	ug/kg		J
	Unknown	13.25	237	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1330	ug/kg	95	NJ

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

SDG Number: 10-1287
Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7174
Batch ID: 943386
Run Date: 01/21/2010 00:28
Prep Date: 01/20/2010 11:13
Data File: s5a2020.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	414	ug/kg	82.9	414
108-95-2	Phenol	U	414	ug/kg	82.9	414
95-57-8	2-Chlorophenol	U	414	ug/kg	82.9	414
106-46-7	1,4-Dichlorobenzene	U	414	ug/kg	82.9	414
621-64-7	N-Nitrosodipropylamine	U	414	ug/kg	82.9	414
59-50-7	4-Chloro-3-methylphenol	U	414	ug/kg	82.9	414
83-32-9	Acenaphthene		232	ug/kg	13.7	41.4
121-14-2	2,4-Dinitrotoluene	U	414	ug/kg	41.4	414
100-02-7	4-Nitrophenol	U	414	ug/kg	137	414
87-86-5	Pentachlorophenol	U	414	ug/kg	104	414
129-00-0	Pyrene	U	41.4	ug/kg	12.4	41.4
110-86-1	Pyridine	U	414	ug/kg	82.9	414
62-53-3	Aniline	U	414	ug/kg	124	414
111-44-4	bis(2-Chloroethyl) ether	U	414	ug/kg	82.9	414
541-73-1	1,3-Dichlorobenzene	U	414	ug/kg	82.9	414
100-51-6	Benzyl alcohol	U	414	ug/kg	124	414
95-50-1	1,2-Dichlorobenzene	U	414	ug/kg	82.9	414
108-60-1	bis(2-Chloroisopropyl)ether	U	414	ug/kg	82.9	414
95-48-7	o-Cresol	U	414	ug/kg	82.9	414
65794-96-9	m,p-Cresols	U	414	ug/kg	124	414
67-72-1	Hexachloroethane	U	414	ug/kg	82.9	414
98-95-3	Nitrobenzene	U	414	ug/kg	82.9	414
78-59-1	Isophorone	U	414	ug/kg	82.9	414
88-75-5	2-Nitrophenol	U	414	ug/kg	82.9	414
105-67-9	2,4-Dimethylphenol	U	414	ug/kg	145	414
111-91-1	bis(2-Chloroethoxy)methane	U	414	ug/kg	82.9	414
120-83-2	2,4-Dichlorophenol	U	414	ug/kg	82.9	414
65-85-0	Benzoic acid	U	829	ug/kg	207	829
91-20-3	Naphthalene	U	41.4	ug/kg	12.4	41.4
106-47-8	4-Chloroaniline	U	414	ug/kg	82.9	414
87-68-3	Hexachlorobutadiene	U	414	ug/kg	82.9	414
91-57-6	2-Methylnaphthalene	U	41.4	ug/kg	8.29	41.4
77-47-4	Hexachlorocyclopentadiene	U	414	ug/kg	82.9	414
88-06-2	2,4,6-Trichlorophenol	U	414	ug/kg	82.9	414
95-95-4	2,4,5-Trichlorophenol	U	414	ug/kg	82.9	414
91-58-7	2-Chloronaphthalene	U	41.4	ug/kg	13.7	41.4
88-74-4	2-Nitroaniline	U	414	ug/kg	82.9	414
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	414	ug/kg	82.9	414

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923005	Date Received: 01/16/2010 08:55	%Moisture: 19.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7174	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.1	Dilution: 1
Run Date: 01/21/2010 00:28	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s5a2020.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					
606-20-2	Dimethylphthalate	U	414	ug/kg	82.9	414
208-96-8	2,6-Dinitrotoluene	U	414	ug/kg	41.4	414
51-28-5	Acenaphthylene	U	41.4	ug/kg	12.4	41.4
132-64-9	2,4-Dinitrophenol	U	829	ug/kg	157	829
84-66-2	Dibenzofuran	U	414	ug/kg	82.9	414
86-73-7	Diethylphthalate	U	414	ug/kg	82.9	414
7005-72-3	Fluorene	U	41.4	ug/kg	12.4	41.4
534-52-1	4-Chlorophenylphenylether	U	414	ug/kg	82.9	414
100-01-6	2-Methyl-4,6-dinitrophenol	U	414	ug/kg	82.9	414
122-39-4	4-Nitroaniline	U	414	ug/kg	124	414
122-66-7	<i>p</i> -Nitroaniline					
101-55-3	Diphenylamine	U	414	ug/kg	82.9	414
118-74-1	Azobenzene	U	414	ug/kg	82.9	414
85-01-8	<i>1,2</i> -Diphenylhydrazine					
120-12-7	4-Bromophenylphenylether	U	414	ug/kg	82.9	414
84-74-2	Hexachlorobenzene	U	414	ug/kg	82.9	414
206-44-0	Phenanthrene	U	41.4	ug/kg	12.4	41.4
85-68-7	Anthracene	U	41.4	ug/kg	8.29	41.4
56-55-3	Di-n-butylphthalate	U	414	ug/kg	82.9	414
91-94-1	Fluoranthene	U	41.4	ug/kg	12.4	41.4
218-01-9	Butylbenzylphthalate	U	414	ug/kg	82.9	414
117-81-7	Benzo(a)anthracene	U	41.4	ug/kg	12.4	41.4
117-84-0	3,3'-Dichlorobenzidine	U	414	ug/kg	124	414
205-99-2	Chrysene	U	41.4	ug/kg	12.4	41.4
207-08-9	bis(2-Ethylhexyl)phthalate	J	343	ug/kg	82.9	414
50-32-8	Di-n-octylphthalate	U	414	ug/kg	82.9	414
193-39-5	Benzo(b)fluoranthene	U	41.4	ug/kg	12.4	41.4
53-70-3	Benzo(k)fluoranthene	U	41.4	ug/kg	12.4	41.4
191-24-2	Benzo(a)pyrene	U	41.4	ug/kg	12.4	41.4
120-82-1	Indeno(1,2,3-cd)pyrene	U	41.4	ug/kg	12.4	41.4
	Dibenzo(a,h)anthracene	U	41.4	ug/kg	12.4	41.4
	Benzo(ghi)perylene	U	41.4	ug/kg	12.4	41.4
	1,2,4-Trichlorobenzene	U	414	ug/kg	82.9	414

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.13	361	ug/kg	81	NJ
	Unknown Aldol Condensate	2.93	344	ug/kg		JA

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923005	Date Received: 01/16/2010 08:55	%Moisture: 19.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7174	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 00:28	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s5a2020.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary				Estimated			
CAS No.	Tentatively Identified Compound (TIC)		RT	Units	Fit	Qual	
120-08-1	2H-1-Benzopyran-2-one, 6,7-dimethoxy-		7.76	753	ug/kg	98	NJ
	Unknown		8.67	242	ug/kg		J
544-76-3	Hexadecane		8.76	208	ug/kg	86	NJ
	Unknown		8.85	239	ug/kg		J
	Unknown		8.92	219	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4		9.05	313	ug/kg	96	NJ
1599-67-3	1-Docosene		9.42	212	ug/kg	96	NJ
	Unknown		9.84	213	ug/kg		J
	Unknown		10.04	282	ug/kg		J
56221-91-1	13-Tetradecen-1-ol acetate		10.08	526	ug/kg	90	NJ
	Unknown		10.39	281	ug/kg		J
	Unknown		10.49	316	ug/kg		J
112-95-8	Eicosane		10.79	506	ug/kg	97	NJ
	Unknown		11.11	391	ug/kg		J
	Unknown		11.88	631	ug/kg		J
	Unknown		12.01	376	ug/kg		J
	Unknown		12.13	419	ug/kg		J
	Unknown		13.1	373	ug/kg		J
83-47-6	.gamma.-Sitosterol		13.78	1390	ug/kg	95	NJ

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

SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7175
Batch ID: 943386
Ran Date: 01/21/2010 01:13
Prep Date: 01/20/2010 11:13
Data File: s5a2022.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.5	367
108-95-2	Phenol	U	367	ug/kg	73.5	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.5	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.5	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.5	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.5	367
83-32-9	Acenaphthene		121	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	91.8	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.5	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.5	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.5	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.5	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.5	367
95-48-7	o-Cresol	U	367	ug/kg	73.5	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.5	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.5	367
78-59-1	Isophorone	U	367	ug/kg	73.5	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.5	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.5	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.5	367
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.5	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.5	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.35	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.5	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.5	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.5	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.5	367
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	367	ug/kg	73.5	367

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923007	Date Received: 01/16/2010 08:55	%Moisture: 9.3
Client ID: RE15-10-7175	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/21/2010 01:13	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2022.d	Aliquot: 30.02 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDI/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	367	ug/kg	73.5	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	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	367	ug/kg	73.5	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.5	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.5	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.5	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
122-39-4	<i>p</i> -Nitroaniline					
	Diphenylamine	U	367	ug/kg	73.5	367
122-66-7	Azobenzene	U	367	ug/kg	73.5	367
101-55-3	<i>1,2</i> -Diphenylhydrazine					
	4-Bromophenylphenylether	U	367	ug/kg	73.5	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.5	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.35	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.5	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.5	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	73.5	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.5	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	73.5	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	504	ug/kg		J
	Unknown Aldol Condensate	2.93	289	ug/kg		JA

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

SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

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

CAS No.	Parimname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.9	659	ug/kg		J
	Unknown	12.65	825	ug/kg		J
	Unknown	13.25	390	ug/kg		J
	Unknown	13.47	242	ug/kg		J
83-46-5	.beta.-Sitosterol	13.81	399	ug/kg	91	NJ

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923009	Date Received: 01/16/2010 08:55	%Moisture: 9.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7218	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 01:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2024.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	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	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	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	370	ug/kg	74.0	370

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923009	Date Received: 01/16/2010 08:55	%Moisture: 9.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7218	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: J
Run Date: 01/21/2010 01:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2024.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	370	ug/kg	74.0	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	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di- <i>n</i> -butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	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	74.0	370
117-84-0	Di- <i>n</i> -octylphthalate	U	370	ug/kg	74.0	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- <i>cd</i>)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	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	1160	ug/kg		J
79-09-4	Propanoic acid	2.13	174	ug/kg	87	NJ

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923009	Date Received: 01/16/2010 08:55	%Moisture: 9.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7218	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.1	Dilution: 1
Run Date: 01/21/2010 01:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2024.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	281	ug/kg		JA
25491-20-7	1H-3a,7-Methanoazulene, octahydro-1,4,9,	9.1	180	ug/kg	80	NJ
56221-91-1	13-Tetradecen-1-ol acetate	9.41	182	ug/kg	91	NJ
1599-67-3	1-Docosene	10.07	211	ug/kg	96	NJ
301-02-0	9-Octadecenamide, (Z)-	10.39	211	ug/kg	91	NJ
	Unknown	11.91	862	ug/kg		J
	Unknown	12.67	1040	ug/kg		J
	Unknown	12.9	198	ug/kg		J
	Unknown	13.1	174	ug/kg		J
	Unknown	13.26	195	ug/kg		J
	Unknown	13.46	174	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.77	977	ug/kg	97	NJ

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

Page 1 of 3

SDG Number: 10-1287
Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7223
Batch ID: 943386
Run Date: 01/21/2010 02:21
Prep Date: 01/20/2010 11:13
Data File: s5a2025.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.7	373
108-95-2	Phenol	U	373	ug/kg	74.7	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.7	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.7	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.7	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.7	373
83-32-9	Acenaphthene	U	37.3	ug/kg	12.3	37.3
121-14-2	2,4-Dinitrotoluene	U	373	ug/kg	37.3	373
100-02-7	4-Nitrophenol	U	373	ug/kg	123	373
87-86-5	Pentachlorophenol	U	373	ug/kg	93.4	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.7	373
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.7	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.7	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.7	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.7	373
95-48-7	o-Cresol	U	373	ug/kg	74.7	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.7	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.7	373
78-59-1	Isophorone	U	373	ug/kg	74.7	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.7	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	131	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.7	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.7	373
65-85-0	Benzoic acid	U	747	ug/kg	187	747
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.7	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.7	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.47	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.7	373
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.7	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.7	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.7	373
99-09-2	3-Nitroaniline	U	373	ug/kg	74.7	373

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

SDG Number: 10-1287
Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7223
Batch ID: 943386
Run Date: 01/21/2010 02:21
Prep Date: 01/20/2010 11:13
Data File: s5a2025.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	373	ug/kg	74.7	373
606-20-2	2,6-Dinitrotoluene	U	373	ug/kg	37.3	373
208-96-8	Acenaphthylene	U	37.3	ug/kg	11.2	37.3
51-28-5	2,4-Dinitrophenol	U	747	ug/kg	142	747
132-64-9	Dibenzofuran	U	373	ug/kg	74.7	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.7	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.7	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.7	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.7	373
122-66-7	Azobenzene	U	373	ug/kg	74.7	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.7	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.7	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.47	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.7	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.7	373
56-55-3	Benzo(a)anthracene	U	37.3	ug/kg	11.2	37.3
91-94-1	3,3'-Dichlorobenzidine	U	373	ug/kg	112	373
218-01-9	Chrysene	U	37.3	ug/kg	11.2	37.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	373	ug/kg	74.7	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.7	373
205-99-2	Benzo(b)fluoranthene	U	37.3	ug/kg	11.2	37.3
207-08-9	Benzo(k)fluoranthene	U	37.3	ug/kg	11.2	37.3
50-32-8	Benzo(a)pyrene	U	37.3	ug/kg	11.2	37.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.3	ug/kg	11.2	37.3
53-70-3	Dibenzo(a,h)anthracene	U	37.3	ug/kg	11.2	37.3
191-24-2	Benzo(ghi)perylene	U	37.3	ug/kg	11.2	37.3
120-82-1	1,2,4-Trichlorobenzene	U	373	ug/kg	74.7	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	623	ug/kg		J
	Unknown Aldol Condensate	2.94	403	ug/kg		JA

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

SDG Number: 10-1287
Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7223
Batch ID: 943386
Run Date: 01/21/2010 02:21
Prep Date: 01/20/2010 11:13
Data File: s5a2025.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.52	181	ug/kg		J
	Unknown	11.54	214	ug/kg		J
	Unknown	11.9	403	ug/kg		J
	Unknown	12.24	249	ug/kg		J
	Unknown	12.65	304	ug/kg		J
	Unknown	12.66	276	ug/kg		J

QC Summary

**Semi-Volatile
Surrogate Recovery Report**

Page 1 of 1

SDG Number: 10-1287**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
1202019888	MB for batch 943385	75	74	73	73	76	88
1202019889	LCS for batch 943385	79	74	85	80	88	91
244923001	RE15-10-7163	50	51	49	57	66	75
1202019890	RE15-10-7163MS	62	60	64	62	69	71
1202019891	RE15-10-7163MSD	67	66	68	66	79	75
244923002	RE15-10-7162	59	65	59	66	79	85
244923003	RE15-10-7161	58	63	57	55	77	91
244923004	RE15-10-7160	60	64	58	53	75	69
244923005	RE15-10-7174	62	65	66	64	74	73
244923006	RE15-10-7173	67	70	65	68	84	92
244923007	RE15-10-7175	70	70	68	66	84	97
244923008	RE15-10-7172	63	64	67	66	75	84
244923009	RE15-10-7218	52	53	52	53	64	75
244923010	RE15-10-7223	58	62	58	56	73	89

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: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 943385

Matrix: SOIL

Lab Sample ID: 1202019889

Instrument: MSD5.I

Analysis Date: 01/20/2010 19:29

Dilution: 1

Analyst: RMB

Pre Batch II 943385

Inj. Vol: .5 uL

Batch ID: 943386

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	1260	76	31-95
108-95-2	LCS Phenol	1670	0.0	1330	80	37-104
95-57-8	LCS 2-Chlorophenol	1670	0.0	1340	80	40-105
106-46-7	LCS 1,4-Dichlorobenzene	1670	0.0	1250	75	34-103
621-64-7	LCS N-Nitrosodipropylamine	1670	0.0	1410	85	36-110
59-50-7	LCS 4-Chloro-3-methylphenol	1670	0.0	1430	86	46-114
83-32-9	LCS Acenaphthene	1670	0.0	1380	83	40-105
121-14-2	LCS 2,4-Dinitrotoluene	1670	0.0	1380	83	49-107
100-02-7	LCS 4-Nitrophenol	1670	0.0	1700	102	33-110
87-86-5	LCS Pentachlorophenol	1670	0.0	1610	96	38-116
129-00-0	LCS Pyrene	1670	0.0	1380	83	43-108
110-86-1	LCS Pyridine	1670	0.0	1410	84	13-129
62-53-3	LCS Aniline	1670	0.0	1290	77	30-121
111-44-4	LCS bis(2-Chloroethyl) ether	1670	0.0	1280	77	37-106
541-73-1	LCS 1,3-Dichlorobenzene	1670	0.0	1230	74	33-103
100-51-6	LCS Benzyl alcohol	1670	0.0	1590	96	31-100
95-50-1	LCS 1,2-Dichlorobenzene	1670	0.0	1370	82	34-108
108-60-1	LCS bis(2-Chloroisopropyl)ether	1670	0.0	1310	79	34-120
95-48-7	LCS o-Cresol	1670	0.0	1410	85	39-111
65794-96-9	LCS m,p-Cresols	1670	0.0	1470	88	43-118
67-72-1	LCS Hexachloroethane	1670	0.0	1250	75	34-105
98-95-3	LCS Nitrobenzene	1670	0.0	1420	85	37-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 943385

Matrix: SOIL

Lab Sample ID: 1202019889

Instrument: MSD5.I

Analysis Date: 01/20/2010 19:29

Dilution: 1

Analyst: RMB

Prep Batch II 943385

Inj. Vol: .5 uL

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	LCS Isophorone	1670	0.0	1340	80	41-108
88-75-5	LCS 2-Nitrophenol	1670	0.0	1400	84	35-112
105-67-9	LCS 2,4-Dimethylphenol	1670	0.0	1310	79	35-114
111-91-1	LCS bis(2-Chloroethoxy)methane	1670	0.0	1270	76	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	3290	99	27-137
91-20-3	LCS Naphthalene	1670	0.0	1270	76	35-105
106-47-8	LCS 4-Chloroaniline	1670	0.0	1250	75	30-122
87-68-3	LCS Hexachlorobutadiene	1670	0.0	1350	81	37-111
91-57-6	LCS 2-Methylnaphthalene	1670	0.0	1380	83	40-106
77-47-4	LCS Hexachlorocyclopentadiene	1670	0.0	1220	73	24-135
88-06-2	LCS 2,4,6-Trichlorophenol	1670	0.0	1520	91	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	1390	83	44-104
88-74-4	LCS 2-Nitroaniline <i>o</i> -Nitroaniline	1670	0.0	1460	87	44-113
99-09-2	LCS 3-Nitroaniline <i>m</i> -Nitroaniline	1670	0.0	1340	80	48-113
131-11-3	LCS Dimethylphthalate	1670	0.0	1360	82	47-104
606-20-2	LCS 2,6-Dinitrotoluene	1670	0.0	1330	80	47-103
208-96-8	LCS Acenaphthylene	1670	0.0	1370	82	43-104
51-28-5	LCS 2,4-Dinitrophenol	1670	0.0	1880	113	32-114
132-64-9	LCS Dibenzofuran	1670	0.0	1640	98	47-112
84-66-2	LCS Diethylphthalate	1670	0.0	1390	83	50-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 4

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 943385

Matrix: SOIL

Lab Sample ID: 1202019889

Instrument: MSD5.I

Analysis Date: 01/20/2010 19:29

Dilution: 1

Analyst: RMB

Prep Batch II 943385

Inj. Vol: .5 uL

Batch ID: 943386

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	1340	81	49-102
7005-72-3	LCS 4-Chlorophenylphenylether	1670	0.0	1330	80	50-109
534-52-1	LCS 2-Methyl-4,6-dinitrophenol	1670	0.0	1540	92	35-114
100-01-6	LCS 4-Nitroaniline <i>p-Nitroaniline</i>	1670	0.0	1580	95	44-139
122-39-4	LCS Diphenylamine	1670	0.0	1350	81	46-111
122-66-7	LCS Azobenzene <i>1,2-Diphenylhydrazine</i>	1670	0.0	1480	89	40-119
101-55-3	LCS 4-Bromophenylphenylether	1670	0.0	1290	78	45-112
118-74-1	LCS Hexachlorobenzene	1670	0.0	1340	80	44-115
85-01-8	LCS Phenanthrene	1670	0.0	1390	83	45-107
120-12-7	LCS Anthracene	1670	0.0	1390	83	46-106
84-74-2	LCS Di-n-butylphthalate	1670	0.0	1420	85	52-115
206-44-0	LCS Fluoranthene	1670	0.0	1410	85	50-115
85-68-7	LCS Butylbenzylphthalate	1670	0.0	1400	84	49-115
56-55-3	LCS Benzo(a)anthracene	1670	0.0	1410	85	48-105
91-94-1	LCS 3,3'-Dichlorobenzidine	1670	0.0	1090	65	45-98
218-01-9	LCS Chrysene	1670	0.0	1420	85	48-105
117-81-7	LCS bis(2-Ethylhexyl)phthalate	1670	0.0	1460	87	50-117
117-84-0	LCS Di-n-octylphthalate	1670	0.0	1300	78	39-123
205-99-2	LCS Benzo(b)fluoranthene	1670	0.0	1410	85	46-111
207-08-9	LCS Benzo(k)fluoranthene	1670	0.0	1410	84	46-114
50-32-8	LCS Benzo(a)pyrene	1670	0.0	1460	87	49-112
193-39-5	LCS Indeno(1,2,3-cd)pyrene	1670	0.0	1600	96	45-128

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 4

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 943385

Matrix: SOIL

Lab Sample ID:1202019889

Instrument: MSD5.I

Analysis Date: 01/20/2010 19:29

Dilution: 1

Analyst: RMB

Prep Batch ID: 943385

Inj. Vol: .5 uL

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	LCS Dibenzo(a,h)anthracene	1670	0.0	1650	99	44-131
191-24-2	LCS Benzo(ghi)perylene	1670	0.0	1700	102	42-128
120-82-1	LCS 1,2,4-Trichlorobenzene	1670	0.0	1320	79	36-109

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 1 of 8

SDG Number: 10-1287

Sample Type: Matrix Spike

Client ID: RE15-10-7163MS

Matrix: R

Lab Sample ID: 1202019890

%Moisture: 6.6

Instrument: MSD5.I

Analysis Date: 01/20/2010 22:34

Dilution: 1

Analyst: RMB

Prep Batch ID: 943385

Inj. Vol: .5 uL

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
62-75-9	MS N-Methyl-N-nitrosomethylam	1780	0.00 U	1020	57	32-90
108-95-2	MS Phenol	1780	0.00 U	1200	67	32-105
95-57-8	MS 2-Chlorophenol	1780	0.00 U	1120	63	33-106
106-46-7	MS 1,4-Dichlorobenzene	1780	0.00 U	890	50	33-95
621-64-7	MS N-Nitrosodipropylamine	1780	0.00 U	1240	70	31-109
59-50-7	MS 4-Chloro-3-methylphenol	1780	0.00 U	1340	75	38-119
83-32-9	MS Acenaphthene	1780	0.00 U	1170	65	39-100
121-14-2	MS 2,4-Dinitrotoluene	1780	0.00 U	1170	65	42-107
100-02-7	MS 4-Nitrophenol	1780	0.00 U	1490	84	24-120
87-86-5	MS Pentachlorophenol	1780	0.00 U	1510	85	26-121
129-00-0	MS Pyrene	1780	0.00 U	1160	65	34-120
110-86-1	MS Pyridine	1780	0.00 U	899	50	30-95
62-53-3	MS Aniline	1780	0.00 U	970	54	34-111
111-44-4	MS bis(2-Chloroethyl) ether	1780	0.00 U	1040	59	34-101
541-73-1	MS 1,3-Dichlorobenzene	1780	0.00 U	874	49	31-97
100-51-6	MS Benzyl alcohol	1780	0.00 U	1300	73	17-120
95-50-1	MS 1,2-Dichlorobenzene	1780	0.00 U	1020	57	32-102
108-60-1	MS bis(2-Chloroisopropyl)ether	1780	0.00 U	1100	62	32-113
95-48-7	MS o-Cresol	1780	0.00 U	1380	77	31-119
65794-96-9	MS m,p-Cresols	1780	0.00 U	1310	74	35-125
67-72-1	MS Hexachloroethane	1780	0.00 U	861	48	30-100
98-95-3	MS Nitrobenzene	1780	0.00 U	1210	68	33-108

Semi-Volatile
Quality Control Summary
Spike Recovery Report

SDG Number: 10-1287

Sample Type: Matrix Spike

Client ID: RE15-10-7163MS

Matrix: R

Lab Sample ID: 1202019890

%Moisture: 6.6

Instrument: MSD5.I

Analysis Date: 01/20/2010 22:34

Dilution: 1

Analyst: RMB

Pre Batch II 943385

Inj. Vol: .5 uL

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
78-59-1	MS Isophorone	1780	0.00 U	1200	68	34-110
88-75-5	MS 2-Nitrophenol	1780	0.00 U	1220	68	32-108
105-67-9	MS 2,4-Dimethylphenol	1780	0.00 U	1120	63	32-115
111-91-1	MS bis(2-Chloroethoxy)methane	1780	0.00 U	1150	64	35-108
120-83-2	MS 2,4-Dichlorophenol	1780	0.00 U	1240	69	38-110
65-85-0	MS Benzoic acid	3570	0.00 U	3000	84	18-134
91-20-3	MS Naphthalene	1780	0.00 U	1060	60	31-105
106-47-8	MS 4-Chloroaniline	1780	0.00 U	1170	65	29-123
87-68-3	MS Hexachlorobutadiene	1780	0.00 U	1020	57	31-109
91-57-6	MS 2-Methylnaphthalene	1780	0.00 U	1170	66	32-110
77-47-4	MS Hexachlorocyclopentadiene	1780	0.00 U	780	44	21-122
88-06-2	MS 2,4,6-Trichlorophenol	1780	0.00 U	1340	75	37-108
95-95-4	MS 2,4,5-Trichlorophenol	1780	0.00 U	1310	73	37-116
91-58-7	MS 2-Chloronaphthalene	1780	0.00 U	1200	67	37-103
88-74-4	MS 2-Nitroaniline o-Nitroaniline	1780	0.00 U	1280	72	36-115
99-09-2	MS 3-Nitroaniline m-Nitroaniline	1780	0.00 U	1130	63	39-117
131-11-3	MS Dimethylphthalate	1780	0.00 U	1200	67	41-105
606-20-2	MS 2,6-Dinitrotoluene	1780	0.00 U	1170	66	41-103
208-96-8	MS Acenaphthylene	1780	0.00 U	1190	67	41-103
51-28-5	MS 2,4-Dinitrophenol	1780	0.00 U	1410	79	25-104
132-64-9	MS Dibenzofuran	1780	0.00 U	1410	79	40-114
84-66-2	MS Diethylphthalate	1780	0.00 U	1230	69	43-110

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 3 of 8

SDG Number: 10-1287

Sample Type: Matrix Spike

Client ID: RE15-10-7163MS

Matrix: R

Lab Sample ID: 1202019890

%Moisture: 6.6

Instrument: MSD5.I

Analysis Date: 01/20/2010 22:34

Dilution: 1

Analyst: RMB

Pren Batch II 943385

Inj. Vol: .5 uL

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
86-73-7	MS Fluorene	1780	0.00 U	1170	66	48-99
7005-72-3	MS 4-Chlorophenylphenylether	1780	0.00 U	1140	64	42-111
534-52-1	MS 2-Methyl-4,6-dinitrophenol	1780	0.00 U	1300	73	19-118
100-01-6	MS 4-Nitroaniline <i>p</i> -Nitroaniline	1780	0.00 U	1260	71	35-139
122-39-4	MS Diphenylamine	1780	0.00 U	1140	64	41-112
122-66-7	MS Azobenzene <i>1,2-Diphenylhydrazine</i>	1780	0.00 U	1290	73	37-118
101-55-3	MS 4-Bromophenylphenylether	1780	0.00 U	1120	63	39-112
118-74-1	MS Hexachlorobenzene	1780	0.00 U	1150	64	38-113
85-01-8	MS Phenanthrene	1780	0.00 U	1190	67	38-110
120-12-7	MS Anthracene	1780	0.00 U	1210	68	38-112
84-74-2	MS Di-n-butylphthalate	1780	93.0 J	1340	70	42-119
206-44-0	MS Fluoranthene	1780	0.00 U	1210	68	38-119
85-68-7	MS Butylbenzylphthalate	1780	0.00 U	1300	73	39-126
56-55-3	MS Benzo(a)anthracene	1780	0.00 U	1200	67	39-110
91-94-1	MS 3,3'-Dichlorobenzidine	1780	0.00 U	609	34 *	35-106
218-01-9	MS Chrysene	1780	0.00 U	1220	69	39-109
117-81-7	MS bis(2-Ethylhexyl)phthalate	1780	0.00 U	1370	77	40-125
117-84-0	MS Di-n-octylphthalate	1780	0.00 U	1300	73	30-147
205-99-2	MS Benzo(b)fluoranthene	1780	0.00 U	1230	69	38-117
207-08-9	MS Benzo(k)fluoranthene	1780	0.00 U	1240	70	39-120
50-32-8	MS Benzo(a)pyrene	1780	0.00 U	1230	69	40-115
193-39-5	MS Indeno(1,2,3-cd)pyrene	1780	0.00 U	1100	62	32-120

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 4 of 8

SDG Number: 10-1287

Client ID: RE15-10-7163MS

Lab Sample ID: 1202019890

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike

Matrix: R

%Moisture: 6.6

Analysis Date: 01/20/2010 22:34

Dilution: 1

Prep Batch ID: 943385

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
53-70-3	MS Dibenzo(a,h)anthracene	1780	0.00 U	1140	64	32-124
191-24-2	MS Benzo(ghi)perylene	1780	0.00 U	1050	59	28-119
120-82-1	MS 1,2,4-Trichlorobenzene	1780	0.00 U	1040	58	31-105

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 5 of 8

SDG Number: 10-1287

Client ID: RE15-10-7163MSD

Lab Sample ID: 1202019891

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 6.6

Analysis Date: 01/20/2010 22:57

Dilution: 1

Prep Batch ID: 943385

Batch ID: 943386

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	1780	0.00	U	1120	63	32-90	9	0-30
108-95-2	MSD Phenol	1780	0.00	U	1310	74	32-105	9	0-30
95-57-8	MSD 2-Chlorophenol	1780	0.00	U	1250	70	33-106	11	0-30
106-46-7	MSD 1,4-Dichlorobenzene	1780	0.00	U	921	52	33-95	4	0-30
621-64-7	MSD N-Nitrosodipropylamine	1780	0.00	U	1340	75	31-109	8	0-30
59-50-7	MSD 4-Chloro-3-methylphenol	1780	0.00	U	1470	82	38-119	9	0-30
83-32-9	MSD Acenaphthene	1780	0.00	U	1280	72	39-100	9	0-30
121-14-2	MSD 2,4-Dinitrotoluene	1780	0.00	U	1200	67	42-107	3	0-30
100-02-7	MSD 4-Nitrophenol	1780	0.00	U	1680	94	24-120	12	0-30
87-86-5	MSD Pentachlorophenol	1780	0.00	U	1640	92	26-121	8	0-30
129-00-0	MSD Pyrene	1780	0.00	U	1270	71	34-120	9	0-30
110-86-1	MSD Pyridine	1780	0.00	U	946	53	30-95	5	0-30
62-53-3	MSD Aniline	1780	0.00	U	1110	62	34-111	14	0-30
111-44-4	MSD bis(2-Chloroethyl) ether	1780	0.00	U	1150	64	34-101	10	0-30
541-73-1	MSD 1,3-Dichlorobenzene	1780	0.00	U	906	51	31-97	4	0-30
100-51-6	MSD Benzyl alcohol	1780	0.00	U	1430	80	17-120	10	0-30
95-50-1	MSD 1,2-Dichlorobenzene	1780	0.00	U	1060	60	32-102	4	0-30
108-60-1	MSD bis(2-Chloroisopropyl)ether	1780	0.00	U	1160	65	32-113	6	0-30
95-48-7	MSD o-Cresol	1780	0.00	U	1410	79	31-119	2	0-30
65794-96-9	MSD m,p-Cresols	1780	0.00	U	1450	81	35-125	10	0-30
67-72-1	MSD Hexachloroethane	1780	0.00	U	886	50	30-100	3	0-30
98-95-3	MSD Nitrobenzene	1780	0.00	U	1280	72	33-108	5	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 6 of 8

SDG Number: 10-1287

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7163MSD

Matrix: R

Lab Sample ID: 1202019891

% Moisture: 6.6

Instrument: MSD5.I

Analysis Date: 01/20/2010 22:57

Dilution: 1

Analyst: RMB

Prep Batch ID: 943385

Inj. Vol: .5 uL

Batch ID: 943386

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	1780	0.00	U	1290	72	34-110	7	0-30
88-75-5	MSD 2-Nitrophenol	1780	0.00	U	1330	74	32-108	8	0-30
105-67-9	MSD 2,4-Dimethylphenol	1780	0.00	U	1220	68	32-115	9	0-30
111-91-1	MSD bis(2-Chloroethoxy)methane	1780	0.00	U	1220	69	35-108	6	0-30
120-83-2	MSD 2,4-Dichlorophenol	1780	0.00	U	1340	75	38-110	8	0-30
65-85-0	MSD Benzoic acid	3570	0.00	U	3340	94	18-134	11	0-30
91-20-3	MSD Naphthalene	1780	0.00	U	1120	63	31-105	5	0-30
106-47-8	MSD 4-Chloroaniline	1780	0.00	U	1270	71	29-123	8	0-30
87-68-3	MSD Hexachlorobutadiene	1780	0.00	U	1010	57	31-109	0	0-30
91-57-6	MSD 2-Methylnaphthalene	1780	0.00	U	1250	70	32-110	7	0-30
77-47-4	MSD Hexachlorocyclopentadiene	1780	0.00	U	870	49	21-122	11	0-30
88-06-2	MSD 2,4,6-Trichlorophenol	1780	0.00	U	1480	83	37-108	10	0-30
95-95-4	MSD 2,4,5-Trichlorophenol	1780	0.00	U	1340	75	37-116	3	0-30
91-58-7	MSD 2-Chloronaphthalene	1780	0.00	U	1260	71	37-103	5	0-30
88-74-4	MSD 2-Nitroaniline	1780	0.00	U	1410	79	36-115	10	0-30
99-09-2	MSD 3-Nitroaniline	1780	0.00	U	1330	75	39-117	17	0-30
131-11-3	MSD Dimethylphthalate	1780	0.00	U	1310	73	41-105	9	0-30
606-20-2	MSD 2,6-Dinitrotoluene	1780	0.00	U	1290	72	41-103	9	0-30
208-96-8	MSD Acenaphthylene	1780	0.00	U	1280	72	41-103	7	0-30
51-28-5	MSD 2,4-Dinitrophenol	1780	0.00	U	1530	86	25-104	8	0-30
132-64-9	MSD Dibenzofuran	1780	0.00	U	1480	83	40-114	5	0-30
84-66-2	MSD Diethylphthalate	1780	0.00	U	1340	75	43-110	9	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 7 of 8

SDG Number: 10-1287

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7163MSD

Matrix: R

Lab Sample ID: 1202019891

%Moisture: 6.6

Instrument: MSD5.I

Analysis Date: 01/20/2010 22:57

Dilution: 1

Analyst: RMB

Prep Batch II 943385

Inj. Vol: .5 uL

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	U	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
86-73-7	MSD Fluorene	1780	0.00	U	1300	73	48-99	10	0-30
7005-72-3	MSD 4-Chlorophenylphenylether	1780	0.00	U	1260	71	42-111	10	0-30
534-52-1	MSD 2-Methyl-4,6-dinitrophenol	1780	0.00	U	1400	78	19-118	7	0-30
100-01-6	MSD 4-Nitroaniline <i>p</i> -Nitroaniline	1780	0.00	U	1500	84	35-139	17	0-30
122-39-4	MSD Diphenylamine	1780	0.00	U	1280	72	41-112	11	0-30
122-66-7	MSD Azobenzene <i>1,2</i> -Diphenylhydrazine	1780	0.00	U	1410	79	37-118	9	0-30
101-55-3	MSD 4-Bromophenylphenylether	1780	0.00	U	1210	68	39-112	7	0-30
118-74-1	MSD Hexachlorobenzene	1780	0.00	U	1250	70	38-113	8	0-30
85-01-8	MSD Phenanthrene	1780	0.00	U	1320	74	38-110	11	0-30
120-12-7	MSD Anthracene	1780	0.00	U	1330	74	38-112	9	0-30
84-74-2	MSD Di-n-butylphthalate	1780	93.0	J	1450	76	42-119	8	0-30
206-44-0	MSD Fluoranthene	1780	0.00	U	1350	76	38-119	11	0-30
85-68-7	MSD Butylbenzylphthalate	1780	0.00	U	1360	76	39-126	4	0-30
56-55-3	MSD Benzo(a)anthracene	1780	0.00	U	1320	74	39-110	10	0-30
91-94-1	MSD 3,3'-Dichlorobenzidine	1780	0.00	U	826	46	35-106	30	0-30
218-01-9	MSD Chrysene	1780	0.00	U	1340	75	39-109	9	0-30
117-81-7	MSD bis(2-Ethylhexyl)phthalate	1780	0.00	U	1450	81	40-125	5	0-30
117-84-0	MSD Di-n-octylphthalate	1780	0.00	U	1350	76	30-147	4	0-30
205-99-2	MSD Benzo(b)fluoranthene	1780	0.00	U	1320	74	38-117	7	0-30
207-08-9	MSD Benzo(k)fluoranthene	1780	0.00	U	1380	77	39-120	10	0-30
50-32-8	MSD Benzo(a)pyrene	1780	0.00	U	1350	75	40-115	9	0-30
193-39-5	MSD Indeno(1,2,3-cd)pyrene	1780	0.00	U	1260	70	32-120	13	0-30

Semi-Volatile
Quality Control Summary
Spike Recovery Report

Page 8 of 8

SDG Number: 10-1287

Client ID: RE15-10-7163MSD

Lab Sample ID: 1202019891

Instrument: MSD5.I

Analyst: RMB

Inj. Vol: .5 uL

Sample Type: Matrix Spike Duplicate

Matrix: R

%Moisture: 6.6

Analysis Date: 01/20/2010 22:57

Dilution: 1

Prep Batch ID: 943385

Batch ID: 943386

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
53-70-3	MSD Dibenzo(a,h)anthracene	1780	0.00 U	1280	72	32-124	12	0-30
191-24-2	MSD Benzo(ghi)perylene	1780	0.00 U	1230	69	28-119	16	0-30
120-82-1	MSD 1,2,4-Trichlorobenzene	1780	0.00 U	1080	60	31-105	3	0-30

Method Blank Summary

Page 1 of 1

SDG Number:	10-1287	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 943385	Instrument ID:	MSD5.I	Data File:	s5a2006-2.d
Lab Sample ID:	1202019888	Prep Date:	01/20/2010 11:13	Analyzed:	01/20/10 19:05
Column:	J&W DB-5MS	Level:	LOW		

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

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 943385	1202019889	s5a2007-2.d	01/20/10	1929
02 RE15-10-7163	244923001	s5a2014.d	01/20/10	2211
03 RE15-10-7163MS	1202019890	s5a2015.d	01/20/10	2234
04 RE15-10-7163MSD	1202019891	s5a2016.d	01/20/10	2257
05 RE15-10-7162	244923002	s5a2017.d	01/20/10	2319
06 RE15-10-7161	244923003	s5a2018.d	01/20/10	2342
07 RE15-10-7160	244923004	s5a2019.d	01/21/10	0005
08 RE15-10-7174	244923005	s5a2020.d	01/21/10	0028
09 RE15-10-7173	244923006	s5a2021.d	01/21/10	0051
10 RE15-10-7175	244923007	s5a2022.d	01/21/10	0113
11 RE15-10-7172	244923008	s5a2023.d	01/21/10	0136
12 RE15-10-7218	244923009	s5a2024.d	01/21/10	0159
13 RE15-10-7223	244923010	s5a2025.d	01/21/10	0221

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1287

Instrument ID: MSD5.I

Injection Date/Time: 05-JAN-10 07:45

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s010510.b/s5a0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	37.4
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	35.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.5
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	24.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	77.1
442	Greater than 40% of mass 198	71
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
MEGAICAL001	WBN091225-09	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 08:21
MEGAICAL010	WBN091225-10	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 08:49
MEGAICAL020	WBN091225-11	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 09:17
MEGAICAL040	WBN091225-12.1	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 09:45
MEGAICAL050	WBN091225-13	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 10:13
MEGAICAL080	WBN091225-14	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 10:42
MEGAICAL100	WBN091225-15	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 11:10
MEGAICAL120	WBN091225-16	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 11:38
MEGAICV	WBN091223-17.1	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 12:29
AP12ICAL010	WBN100103-01	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 12:58
AP12ICAL020	WBN100103-02	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 13:21
AP12ICAL040	WBN100103-03.1	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 13:44
AP12ICAL050	WBN100103-04	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 14:07
AP12ICAL080	WBN100103-05	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 14:30
AP12ICAL100	WBN100103-06	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 14:53
AP12ICAL120	WBN100103-07	/chem/MSD5.i/s010510.b/s5a0501	05-JAN-10 15:16

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1287

Instrument ID: MSD5.I

Injection Date/Time: 05-JAN-10 07:45

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s010510.b/s5a0501.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	37.4
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	35.6
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	47.5
197	0 - 1% of mass 198	0.5
199	5 - 9% of mass 198	7
275	10 - 30% of mass 198	24.8
365	Greater than 1% of mass 198	2.9
441	Present, but less than mass 443	77.1
442	Greater than 40% of mass 198	71
443	17 - 23% of mass 442	19.1

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

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
AP12ICV	WBN100103-08.1	/chem/MSD5.i/s010510.b/s5a052	05-JAN-10 17:55

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC

Client SDG: 10-1287

Instrument ID: MSD5.1

Injection Date/Time: 20-JAN-10 18:01

Column Description: Phenomenex ZB-5MS

Lab File ID /chem/MSD5.i/s012010.b/s5a2003.d

m/e	Ion Abundance Criteria	% Relative Abundance
198	Base Peak, 100% Relative Abundance	100
51	30 - 60% of mass 198	41.5
68	Less than 2% of mass 69	1.7
69	Mass 69 Relative Abundance	38
70	Less than 2% of mass 69	0.5
127	40 - 60% of mass 198	49.5
197	0 - 1% of mass 198	0.4
199	5 - 9% of mass 198	6.7
275	10 - 30% of mass 198	24.9
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	77.4
442	Greater than 40% of mass 198	68.3
443	17 - 23% of mass 442	19.5

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
MEGACVS	WBN091225-12.3	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 18:15
AP12CVS	WBN100103-03.5	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 18:42
SBLK01	1202019888	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 19:05
SBLK01LCS	1202019889	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 19:29
RE15-10-7163	244923001	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 22:11
RE15-10-7163MS	1202019890	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 22:34
RE15-10-7163MSD	1202019891	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 22:57
RE15-10-7162	244923002	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 23:19
RE15-10-7161	244923003	/chem/MSD5.i/s012010.b/s5a2003.d	20-JAN-10 23:42
RE15-10-7160	244923004	/chem/MSD5.i/s012010.b/s5a2003.d	21-JAN-10 00:05
RE15-10-7174	244923005	/chem/MSD5.i/s012010.b/s5a2003.d	21-JAN-10 00:28
RE15-10-7173	244923006	/chem/MSD5.i/s012010.b/s5a2003.d	21-JAN-10 00:51
RE15-10-7175	244923007	/chem/MSD5.i/s012010.b/s5a2003.d	21-JAN-10 01:13
RE15-10-7172	244923008	/chem/MSD5.i/s012010.b/s5a2003.d	21-JAN-10 01:36
RE15-10-7218	244923009	/chem/MSD5.i/s012010.b/s5a2003.d	21-JAN-10 01:59
RE15-10-7223	244923010	/chem/MSD5.i/s012010.b/s5a2003.d	21-JAN-10 02:21

Internal Standard Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 10-1287

Instrument: MSD5.1

STD Analysis Time: 20-JAN-10 18:15

GC Column: J&W DB-5MS

Data File: s5a2004.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	418800		3.93	1583893		4.79	846205		6.04	1470218		7.21	1270815		9.62	1076386		11.3
Upper Limit	837600		4.43	3167786		5.29	1692410		6.54	2940436		7.71	2541630		10.1	2152772		11.8
Lower Limit	209400		3.43	791947		4.29	423103		5.54	735109		6.71	635408		9.12	538193		10.8
Sample ID																		
BLK01	402539		3.92	1430437		4.78	811923		6.04	1453912		7.21	1321517		9.61	1199085		11.3
BLK01LCS	492019		3.92	1831100		4.79	954503		6.04	1699090		7.21	1535043		9.62	1362267		11.3
RE15-10-7163	471936		3.92	1622613		4.78	937784		6.04	1652583		7.21	1481408		9.62	1195568		11.3
RE15-10-7163MS	514516		3.92	1898064		4.79	1025420		6.04	1810158		7.21	1638824		9.62	1333553		11.3
RE15-10-7163MSD	481027		3.92	1817899		4.78	994355		6.04	1792705		7.21	1673771		9.62	1421506		11.3
RE15-10-7162	448489		3.92	1590394		4.78	942850		6.04	1675214		7.21	1499989		9.62	1062992		11.3
RE15-10-7161	368250		3.92	1343951		4.78	760975		6.04	1398730		7.21	1265352		9.62	992177		11.3
RE15-10-7160	533449		3.92	1865099		4.78	1076872		6.04	1890713		7.21	1703004		9.62	1146740		11.3
RE15-10-7174	409495		3.92	1464329		4.78	838737		6.04	1513819		7.21	1333892		9.62	843750		11.3
RE15-10-7173	371977		3.92	1364718		4.78	773408		6.04	1385129		7.21	1183284		9.62	765965		11.3
RE15-10-7175	362625		3.92	1322609		4.78	761742		6.04	1332078		7.21	1137136		9.62	880863		11.3
RE15-10-7172	499128		3.92	1763693		4.78	1012544		6.04	1771089		7.21	1330091		9.63	676466		11.3
RE15-10-7218	447920		3.92	1594149		4.79	902609		6.04	1579153		7.21	1250625		9.62	818848		11.3
RE15-10-7223	403295		3.92	1448569		4.78	826286		6.04	1473357		7.21	1295031		9.62	1024593		11.3

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = + 0.50 minutes of internal standard RT

RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

* Value outside of QC Limits

Sample Data

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

SDG Number: 10-1287
Lab Sample ID: 244923004

Client ID: RE15-10-7160
Batch ID: 943386
Run Date: 01/21/2010 00:05
Prep Date: 01/20/2010 11:13
Data File: s5a2019.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20
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	417	ug/kg	83.3	417
108-95-2	Phenol	U	417	ug/kg	83.3	417
95-57-8	2-Chlorophenol	U	417	ug/kg	83.3	417
106-46-7	1,4-Dichlorobenzene	U	417	ug/kg	83.3	417
621-64-7	N-Nitrosodipropylamine	U	417	ug/kg	83.3	417
59-50-7	4-Chloro-3-methylphenol	U	417	ug/kg	83.3	417
83-32-9	Acenaphthene	U	41.7	ug/kg	13.7	41.7
121-14-2	2,4-Dinitrotoluene	U	417	ug/kg	41.7	417
100-02-7	4-Nitrophenol	U	417	ug/kg	137	417
87-86-5	Pentachlorophenol	U	417	ug/kg	104	417
129-00-0	Pyrene	J	17.9	ug/kg	12.5	41.7
110-86-1	Pyridine	U	417	ug/kg	83.3	417
62-53-3	Aniline	U	417	ug/kg	125	417
111-44-4	bis(2-Chloroethyl) ether	U	417	ug/kg	83.3	417
541-73-1	1,3-Dichlorobenzene	U	417	ug/kg	83.3	417
100-51-6	Benzyl alcohol	U	417	ug/kg	125	417
95-50-1	1,2-Dichlorobenzene	U	417	ug/kg	83.3	417
108-60-1	bis(2-Chloroisopropyl)ether	U	417	ug/kg	83.3	417
95-48-7	o-Cresol	U	417	ug/kg	83.3	417
65794-96-9	m,p-Cresols	U	417	ug/kg	125	417
67-72-1	Hexachloroethane	U	417	ug/kg	83.3	417
98-95-3	Nitrobenzene	U	417	ug/kg	83.3	417
78-59-1	Isophorone	U	417	ug/kg	83.3	417
88-75-5	2-Nitrophenol	U	417	ug/kg	83.3	417
105-67-9	2,4-Dimethylphenol	U	417	ug/kg	146	417
111-91-1	bis(2-Chloroethoxy)methane	U	417	ug/kg	83.3	417
120-83-2	2,4-Dichlorophenol	U	417	ug/kg	83.3	417
65-85-0	Benzoic acid	U	833	ug/kg	208	833
91-20-3	Naphthalene	U	41.7	ug/kg	12.5	41.7
106-47-8	4-Chloroaniline	U	417	ug/kg	83.3	417
87-68-3	Hexachlorobutadiene	U	417	ug/kg	83.3	417
91-57-6	2-Methylnaphthalene	U	41.7	ug/kg	8.33	41.7
77-47-4	Hexachlorocyclopentadiene	U	417	ug/kg	83.3	417
88-06-2	2,4,6-Trichlorophenol	U	417	ug/kg	83.3	417
95-95-4	2,4,5-Trichlorophenol	U	417	ug/kg	83.3	417
91-58-7	2-Chloronaphthalene	U	41.7	ug/kg	13.7	41.7
88-74-4	2-Nitroaniline	U	417	ug/kg	83.3	417
99-09-2	<i>o</i> -Nitroaniline	U	417	ug/kg	83.3	417
	3-Nitroaniline					

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

SDG Number: 10-1287
Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 20
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7160
Batch ID: 943386
Run Date: 01/21/2010 00:05
Prep Date: 01/20/2010 11:13
Data File: s5a2019.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m-Nitroaniline</i>					
131-11-3	Dimethylphthalate	U	417	ug/kg	83.3	417
606-20-2	2,6-Dinitrotoluene	U	417	ug/kg	41.7	417
208-96-8	Acenaphthylene	U	41.7	ug/kg	12.5	41.7
51-28-5	2,4-Dinitrophenol	U	833	ug/kg	158	833
132-64-9	Dibenzofuran	U	417	ug/kg	83.3	417
84-66-2	Diethylphthalate	U	417	ug/kg	83.3	417
86-73-7	Fluorene	U	41.7	ug/kg	12.5	41.7
7005-72-3	4-Chlorophenylphenylether	U	417	ug/kg	83.3	417
534-52-1	2-Methyl-4,6-dinitrophenol	U	417	ug/kg	83.3	417
100-01-6	4-Nitroaniline	U	417	ug/kg	125	417
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	417	ug/kg	83.3	417
122-66-7	Azobenzene	U	417	ug/kg	83.3	417
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	417	ug/kg	83.3	417
118-74-1	Hexachlorobenzene	U	417	ug/kg	83.3	417
85-01-8	Phenanthrene	U	41.7	ug/kg	12.5	41.7
120-12-7	Anthracene	U	41.7	ug/kg	8.33	41.7
84-74-2	Di-n-butylphthalate	U	417	ug/kg	83.3	417
206-44-0	Fluoranthene	J	18.3	ug/kg	12.5	41.7
85-68-7	Butylbenzylphthalate	U	417	ug/kg	83.3	417
56-55-3	Benzo(a)anthracene	J	21.6	ug/kg	12.5	41.7
91-94-1	3,3'-Dichlorobenzidine	U	417	ug/kg	125	417
218-01-9	Chrysene	J	17.2	ug/kg	12.5	41.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	417	ug/kg	83.3	417
117-84-0	Di-n-octylphthalate	U	417	ug/kg	83.3	417
205-99-2	Benzo(b)fluoranthene	J	31.2	ug/kg	12.5	41.7
207-08-9	Benzo(k)fluoranthene	U	41.7	ug/kg	12.5	41.7
50-32-8	Benzo(a)pyrene	J	14.4	ug/kg	12.5	41.7
193-39-5	Indeno(1,2,3-cd)pyrene		130	ug/kg	12.5	41.7
53-70-3	Dibenzo(a,h)anthracene	U	41.7	ug/kg	12.5	41.7
191-24-2	Benzo(ghi)perylene	U	41.7	ug/kg	12.5	41.7
120-82-1	1,2,4-Trichlorobenzene	U	417	ug/kg	83.3	417

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	395	ug/kg		JA
112-95-8	Eicosane	10.79	655	ug/kg	98	NJ

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923004	Date Received: 01/16/2010 08:55	% Moisture: 20
Client ID: RE15-10-7160	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/21/2010 00:05	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2019.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
62016-79-9	Unknown	11.57	321	ug/kg		J
	Heptacosane, 1-chloro-	11.77	545	ug/kg	96	NJ
	Unknown	11.89	544	ug/kg		J
	Unknown	12.12	307	ug/kg		J
	Unknown	12.38	193	ug/kg		J
	Unknown	12.65	203	ug/kg		J
83-46-5	Unknown	13.11	290	ug/kg		J
	.beta.-Sitosterol	13.81	309	ug/kg	91	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2019.d
Lab Smp Id: 244923004 Client Smp ID: RE15-10-7160
Inj Date : 21-JAN-2010 00:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923004|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	19.98660	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	533449	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1865099	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044	(1.000)	1076872	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1890713	40.0000	
* 91 Chrysene-d12	240	9.619	9.622	(1.000)	1703004	40.0000	
* 98 Perylene-d12	264	11.295	11.298	(1.000)	1146740	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	793864	60.0070	2500
\$ 5 Phenol-d5	99	3.631	3.637	(0.926)	1039092	63.6885	2650
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	417362	29.1443	1210
\$ 39 2-Fluorobiphenyl	172	5.525	5.534	(0.914)	751099	26.3664	1100
\$ 60 2,4,6-Tribromophenol	329	6.636	6.641	(1.098)	257744	75.3044	3140
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.893)	916113	34.2596	1430

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	=====	=====	=====	=====	=====	=====	=====
79 Pyrene		202	8.483	8.490	(0.882)	18544	0.42900	17.9(a)
76 Fluoranthene		202	8.272	8.279	(1.147)	17831	0.43995	18.3(a)
89 Benzo(a)anthracene		228	9.607	9.612	(0.999)	18736	0.51813	21.6(a)
92 Chrysene		228	9.642	9.651	(1.002)	13604	0.41385	17.2(a)
95 Benzo(b)fluoranthene		252	10.772	10.783	(0.954)	19500	0.74939	31.2(a)
97 Benzo(a)pyrene		252	11.207	11.221	(0.992)	7720	0.34638	14.4(a)
99 Indeno(1,2,3-cd)pyrene		276	13.042	13.060	(1.155)	5067	3.12850	130

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5a2019.d

Report Date: 01/21/2010 07:47

Lab. ID: 244923004

SampleType: SAMPLE

Injection Date: 21-JAN-2010 00:05

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923004|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	58835	3.63	3.70	80-120	100	(T)
93	2068	3.60	3.70	220-280	4	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	59021	4.28	4.16	80-120	100	(T)
42	35364	4.28	4.16	44-104	60	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	6169	4.51	4.55	80-120	100	()
122	3482	4.51	4.55	47-107	56	()
77	3712	4.52	4.55	44-104	60	()

43 Dimethylphthalate		CAS#: 131-11-3				
163	194213	6.04	5.80	80-120	100	(T)
164	1076872	6.04	5.80	0- 41	554	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	147359	6.04	5.86	80-120	100	(T)
63	1828	6.04	5.86	47-107	1	(QT)

48 2,4-Dinitrophenol		CAS#: 51-28-5				
184	404	6.31	6.06	80-120	100	(T)
154	4168	6.04	6.07	933-993	1030	(Q)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	147359	6.04	6.16	80-120	100	(T)
89	2897	6.04	6.16	48-108	2	(QT)
63	1710	6.04	6.16	25- 85	1	(QT)

52 4-Nitrophenol		CAS#: 100-02-7				
139	313	6.10	6.08	80-120	100	()
109	1624	6.12	6.08	40-100	519	(Q)
65	1404	6.10	6.08	71-131	449	(Q)

53 Fluorene		CAS#: 86-73-7				
166	14617	6.64	6.46	80-120	100	(T)
165	14093	6.64	6.46	57-117	96	(T)
167	5557	6.64	6.46	0- 44	38	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	1121	6.64	6.47	80-120	100	(T)
105	3019	6.64	6.47	13- 73	269	(QT)
51	1649	6.64	6.47	55-115	147	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	18059	6.64	6.82	80-120	100	(T)
141	121182	6.64	6.82	46-106	671	(QT)
250	34859	6.64	6.82	69-129	193	(QT)

69 Anthracene		CAS#: 120-12-7				
178	8003	7.23	7.28	80-120	100	()
179	2469	7.23	7.28	0- 46	31	()
176	1920	7.23	7.28	0- 49	24	()

76 Fluoranthene		CAS#: 206-44-0				
202	17831	8.27	8.28	80-120	100	()
203	3376	8.27	8.27	0- 48	19	()
101	2996	8.27	8.27	0- 42	17	()

79 Pyrene		CAS#: 129-00-0				
202	18544	8.48	8.49	80-120	100	()
200	3813	8.48	8.49	0- 50	21	()
101	3258	8.48	8.49	0- 44	18	()

89 Benzo(a)anthracene		CAS#: 56-55-3				
228	18736	9.61	9.61	80-120	100	()
226	3255	9.61	9.61	0- 57	17	()
229	5404	9.61	9.61	0- 50	29	()

92 Chrysene		CAS#: 218-01-9				
228	13604	9.64	9.65	80-120	100	()
229	2927	9.64	9.65	0- 50	22	()
226	5492	9.64	9.65	0- 59	40	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
95 Benzo(b)fluoranthene				CAS#: 205-99-2		
252	19500	10.77	10.78	80-120	100	()
253	7763	10.78	10.78	0- 52	40	()
125	7809	10.80	10.78	0- 42	40	()

96 Benzo(k)fluoranthene				CAS#: 207-08-9		
252	19320	10.77	10.82	80-120	100	()
253	7810	10.78	10.82	0- 52	40	()
125	7803	10.80	10.82	0- 41	40	()

97 Benzo(a)pyrene				CAS#: 50-32-8		
252	7720	11.21	11.22	80-120	100	()
253	1525	11.21	11.22	0- 52	20	()
125	1254	11.21	11.22	0- 30	16	()

99 Indeno(1,2,3-cd)pyrene				CAS#: 193-39-5		
276	5067	13.04	13.06	80-120	100	()
138	2033	13.04	13.07	1- 61	40	()

100 Dibenzo(a,h)anthracene				CAS#: 53-70-3		
278	1571	13.05	13.08	80-120	100	()
139	570	13.05	13.07	0- 30	36	(Q)

101 Benzo(ghi)perylene				CAS#: 191-24-2		
276	4993	13.58	13.60	80-120	100	()
138	1609	13.59	13.60	0- 30	32	(Q)

Q qualifier indicates ion failed ratio requirement

Data File: /chem/MSD5.i/s012010.b/s5a2019.d
Report Date: 21-Jan-2010 08:31

Page 3

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2019.d
Lab Smp Id: 244923004 Client Smp ID: RE15-10-7160
Inj Date : 21-JAN-2010 00:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923004|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	19.98660	% moisture

Cpnd Variable Local Compound Variable

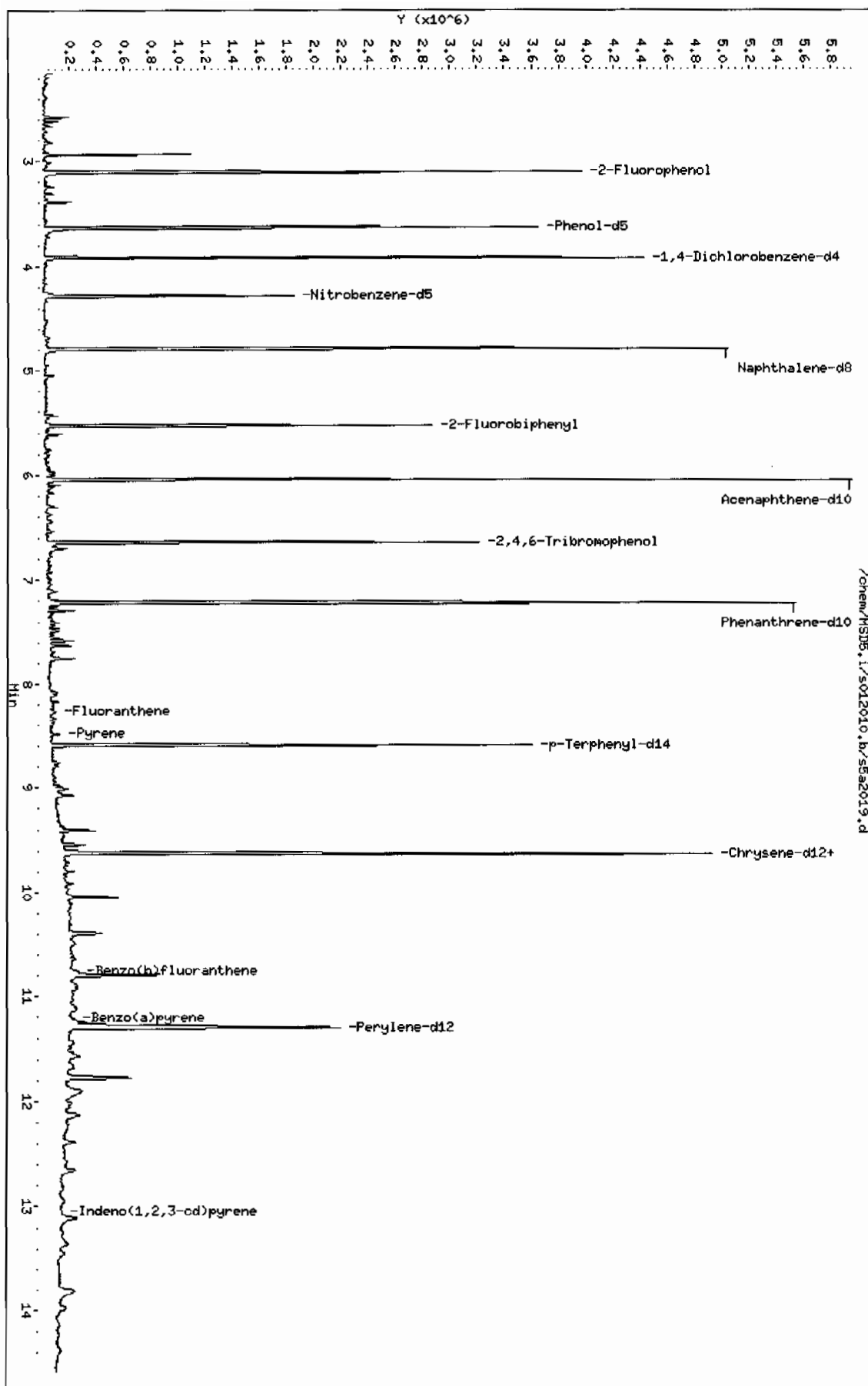
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	3310816	40.000
* 98 Perylene-d12	11.295	3611960	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.937	785470	9.48974089	395	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Eicosane					CAS #: 112-95-8		
10.789	1419728	15.7225161	655	98	NIST05.L	113490	98
Unknown					CAS #:		
11.571	696628	7.71468412	321	0		0	98
Heptacosane, 1-chloro-					CAS #: 62016-79-9		
11.771	1180529	13.0735555	545	96	NIST05.L	174384	98
Unknown					CAS #:		
11.895	1179955	13.0671974	544	0		0	98
Unknown					CAS #:		
12.124	664538	7.35930307	306	0		0	98
Unknown					CAS #:		
12.383	418864	4.63863295	193	0		0	98
Unknown					CAS #:		
12.648	440610	4.87945187	203	0		0	98
Unknown					CAS #:		
13.107	629466	6.97091086	290	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.812	670448	7.42475496	309	91	NIST05.L	174399	98

Data File: /chem/HSD5.1/5012010.b/55a2019.d
 Date: 21-JAN-2010 00:05
 Client ID: REL5-10-7160
 Sample Info: 1244923004194338611SVH11.LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: HSD5.1
 Operator: RMB
 Column diameter: 0.20



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 1244923004194338611ISVH11ILANL

Volume Injected (uL): 0.5

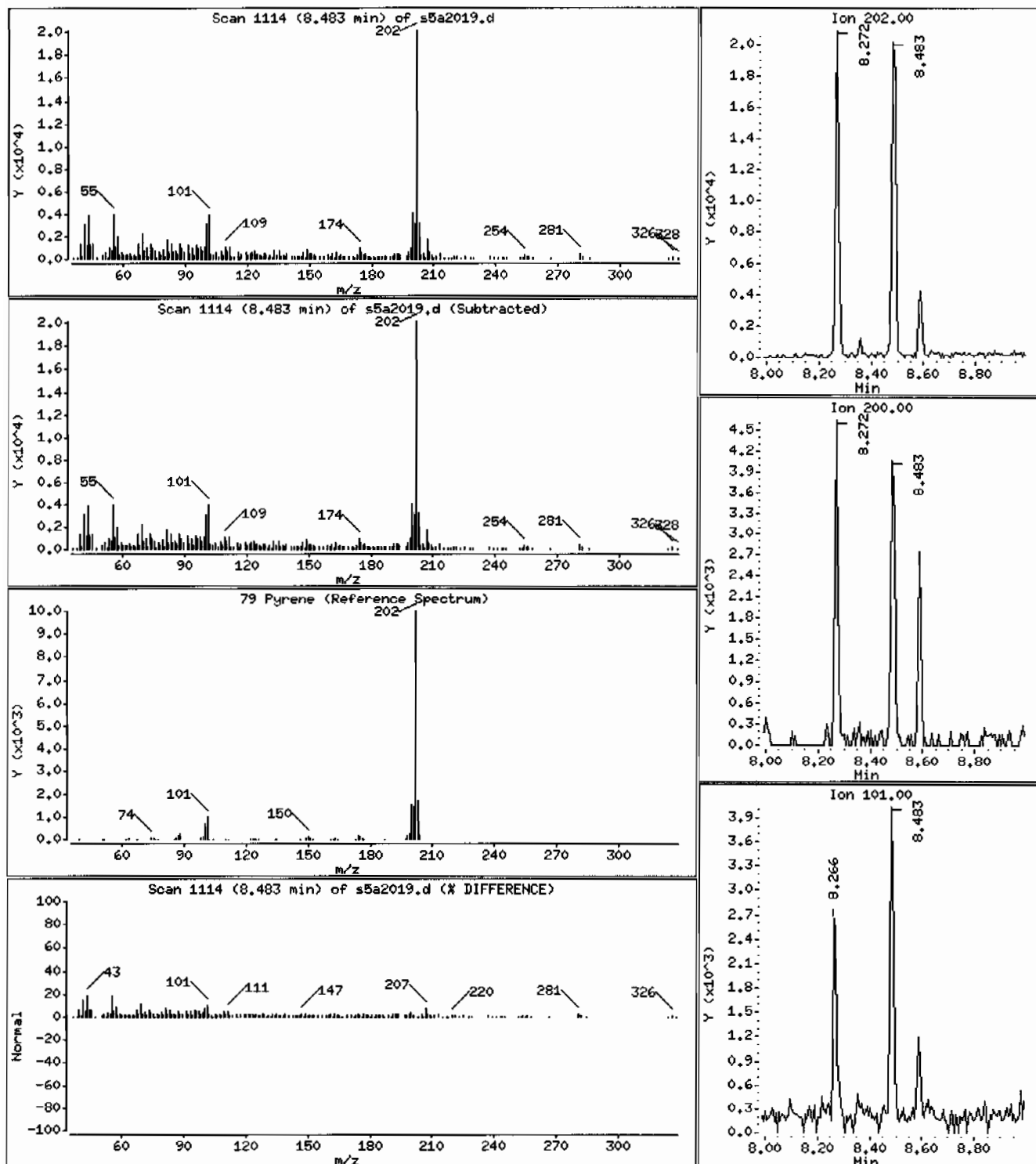
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 17.9 ug/Kg



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: HSD5.1

Sample Info: I244923004194338611ISVH11ILANL

Volume Injected (uL): 0.5

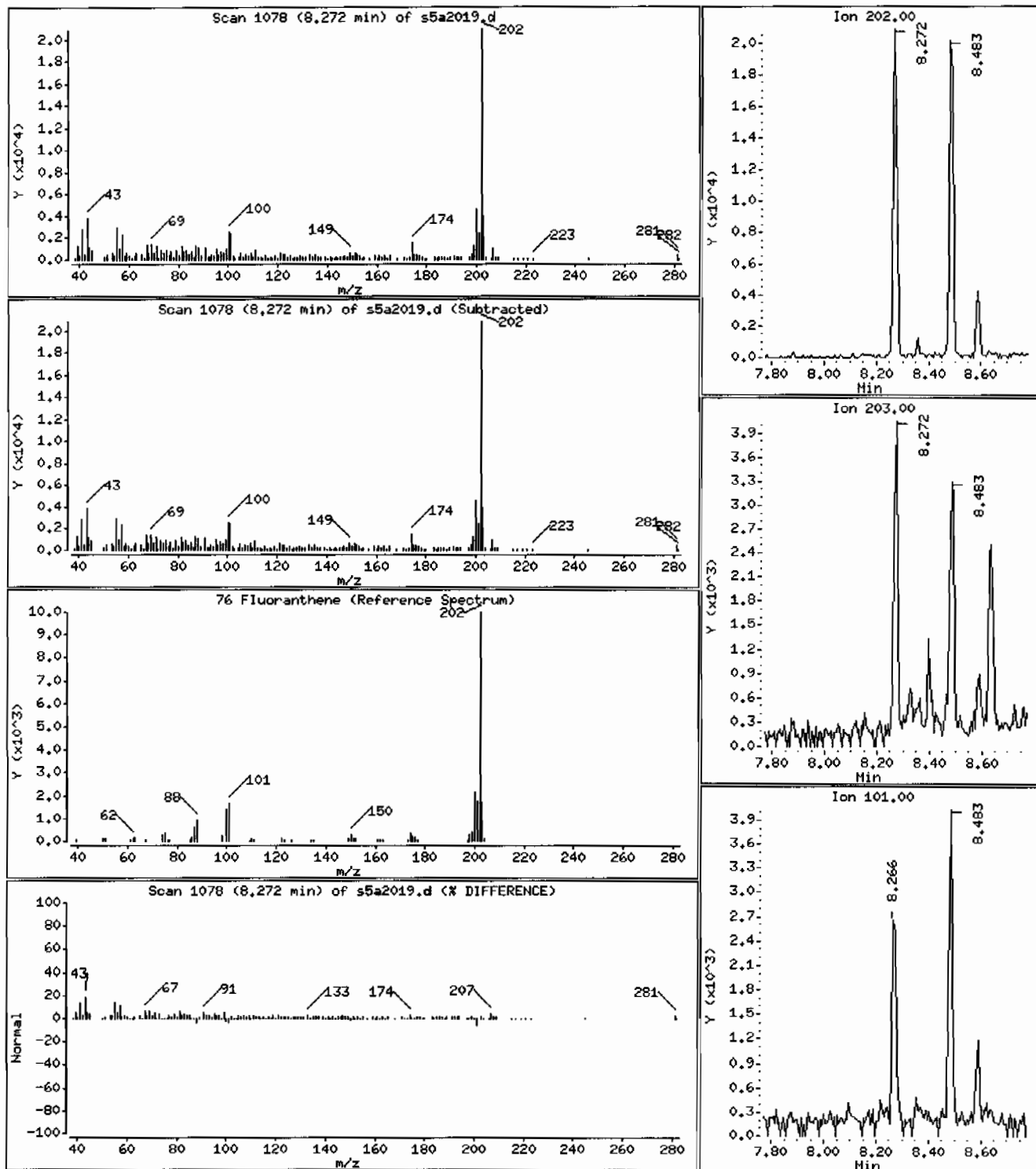
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 18.3 ug/Kg



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 1244923004194338611|SVH11|LANL

Volume Injected (uL): 0.5

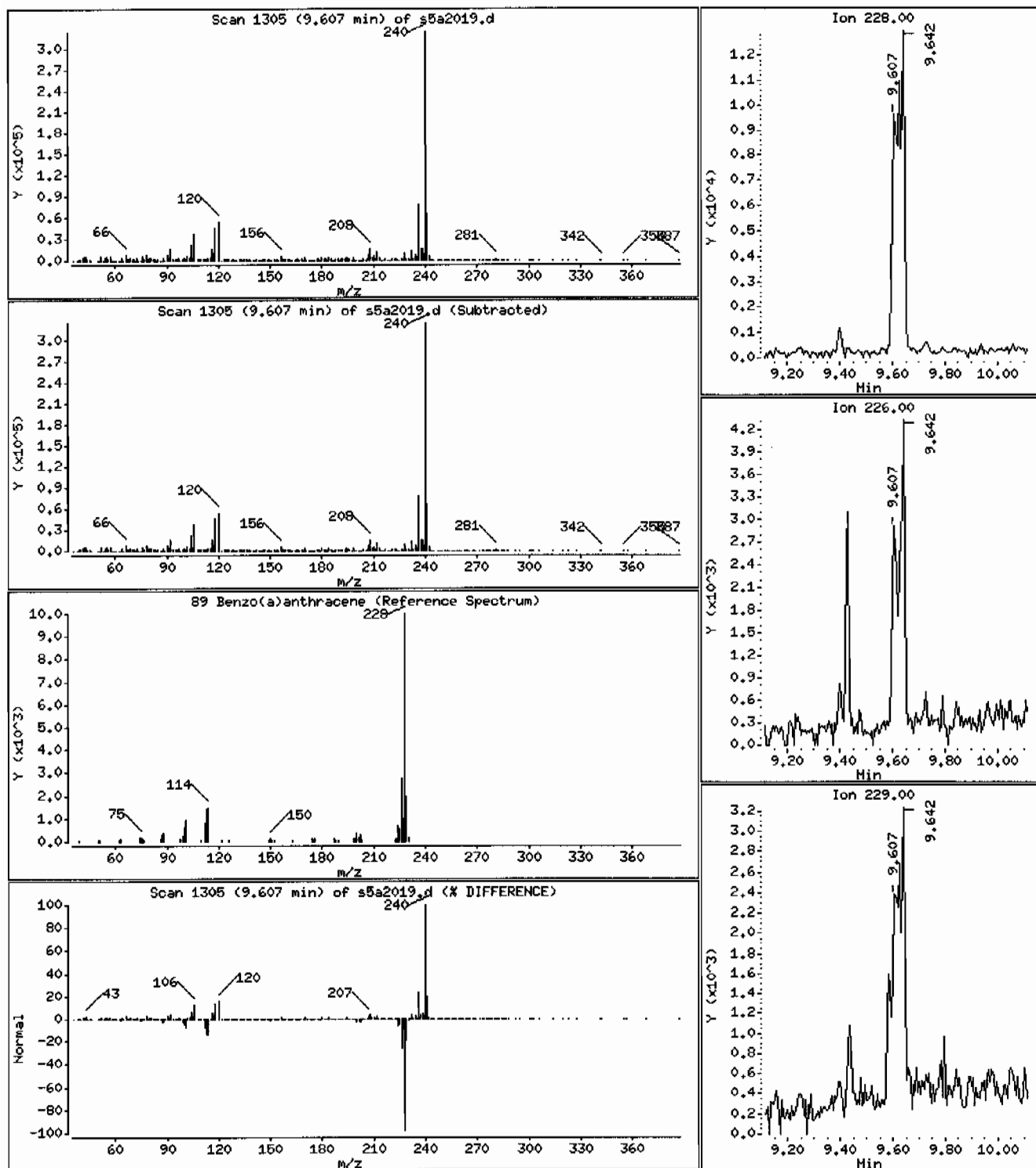
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

89 Benzo(a)anthracene

Concentration: 21.6 ug/Kg



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 12449230041943386111SVH111LANL

Volume Injected (uL): 0.5

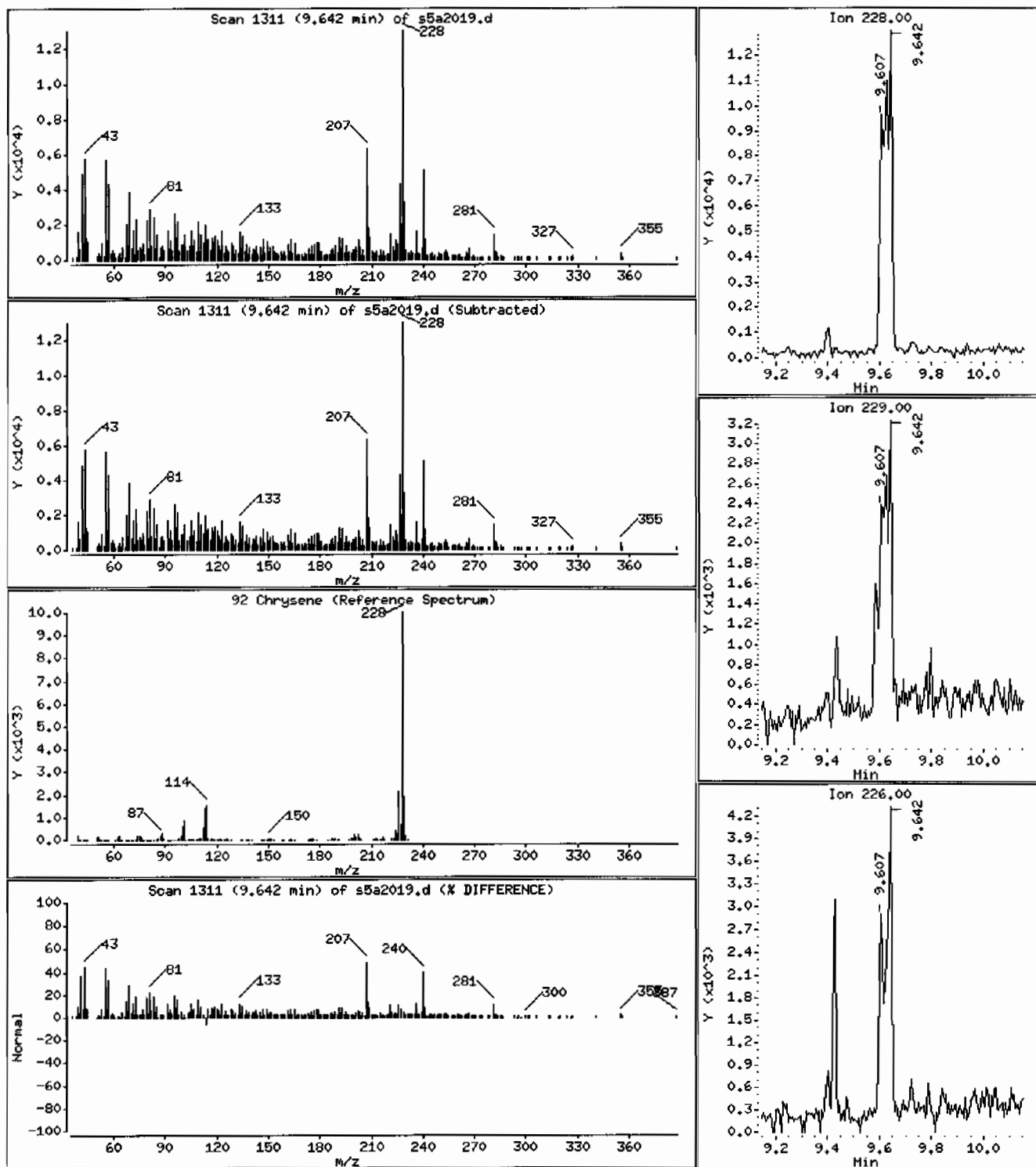
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 17.2 ug/Kg



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: I244923004I943386I1ISVM11ILANL

Volume Injected (uL): 0.5

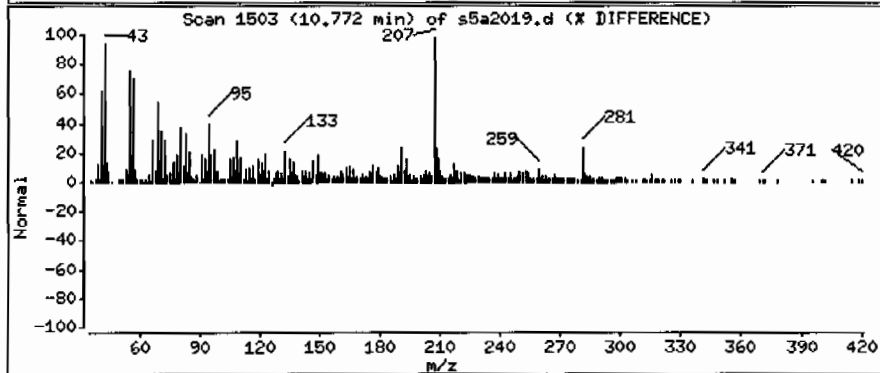
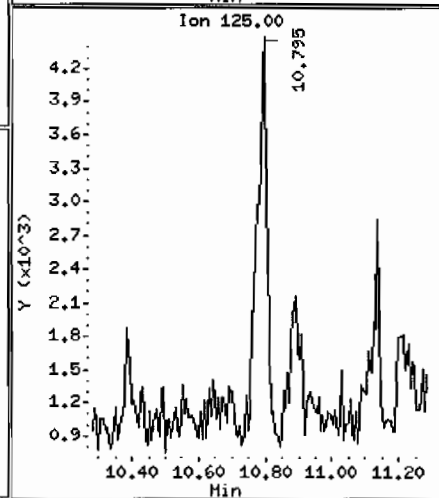
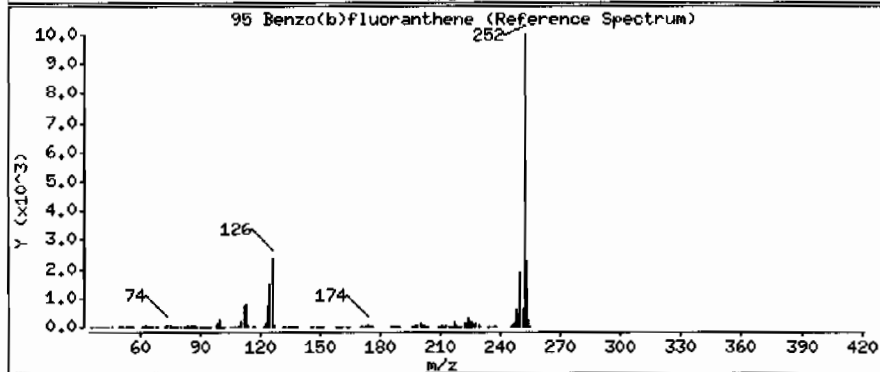
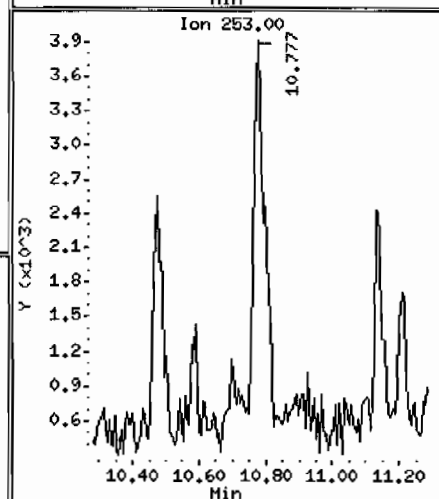
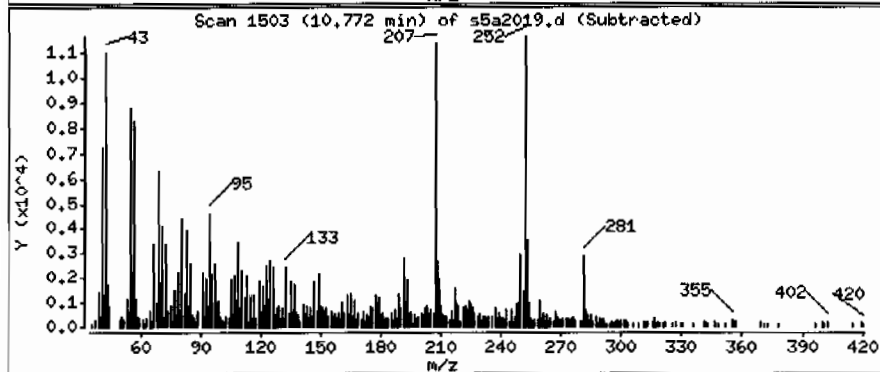
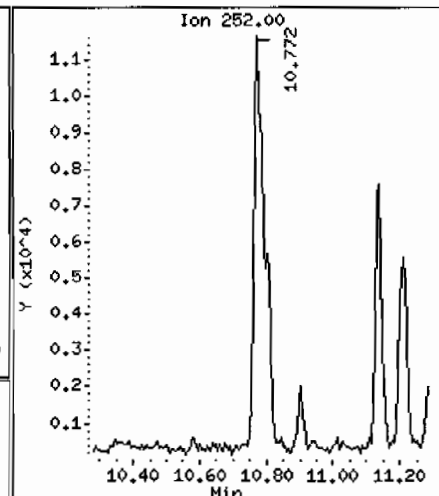
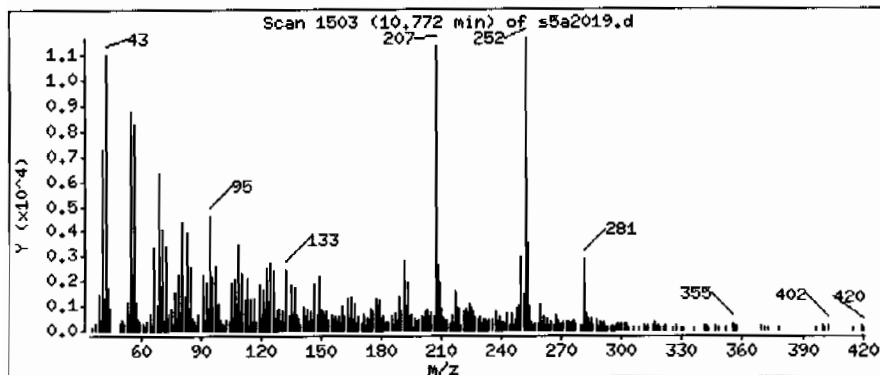
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

95 Benzo(b)fluoranthene

Concentration: 31.2 ug/Kg



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: HSD5.i

Sample Info: 1244923004|94338611|SVH11|LANL

Volume Injected (uL): 0.5

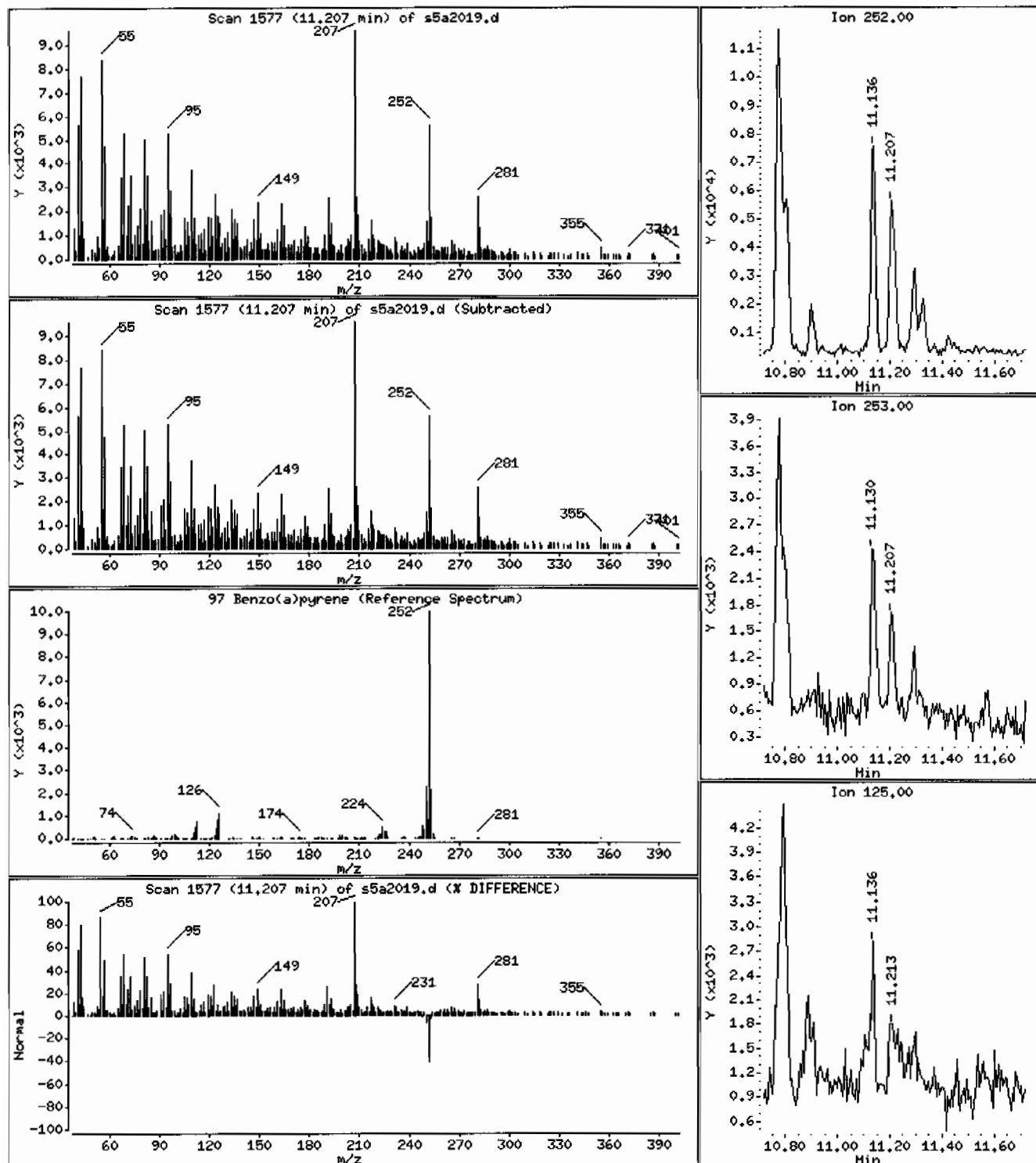
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

97 Benzo(a)pyrene

Concentration: 14.4 ug/Kg



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: HSD5.i

Sample Info: 1244923004194338611ISVH11ILANL

Volume Injected (uL): 0.5

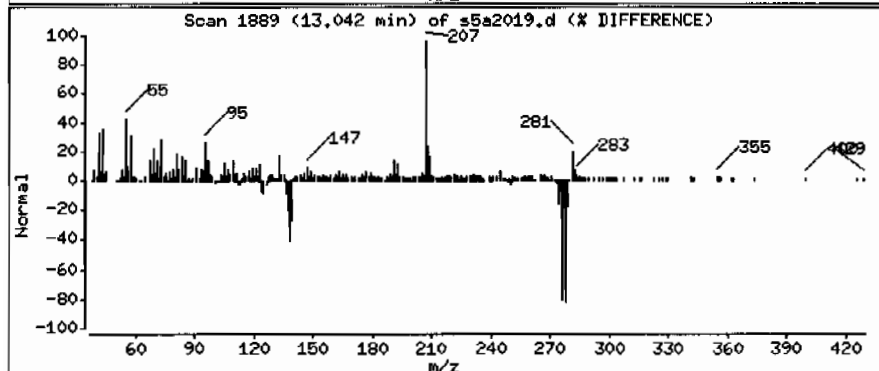
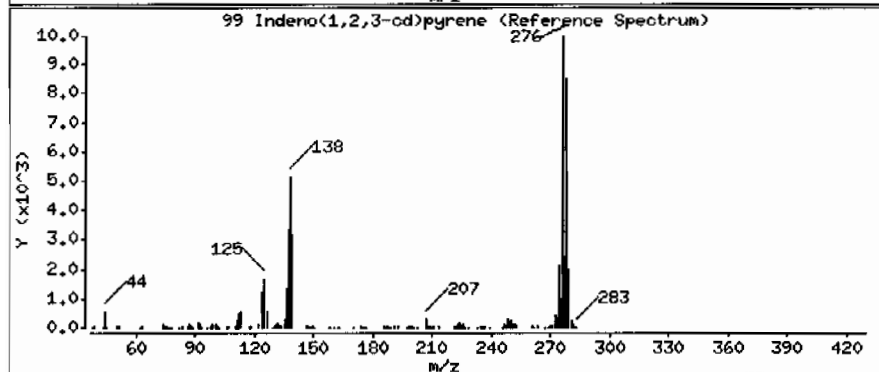
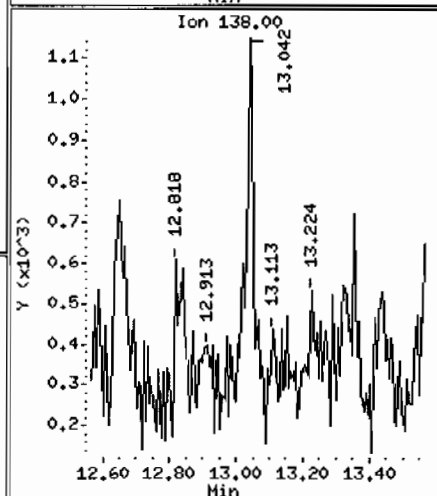
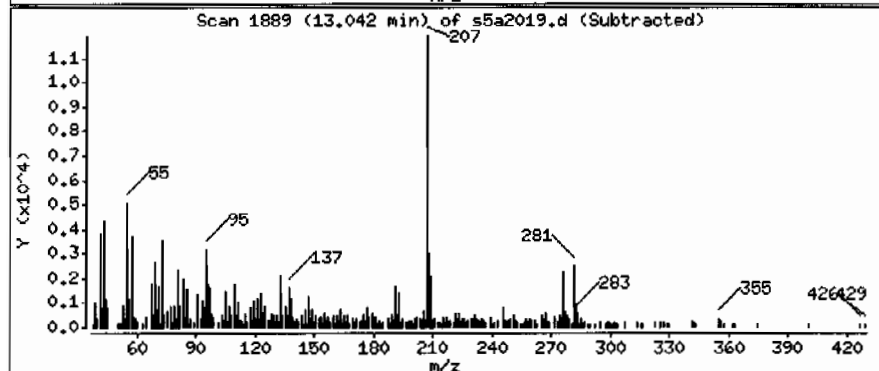
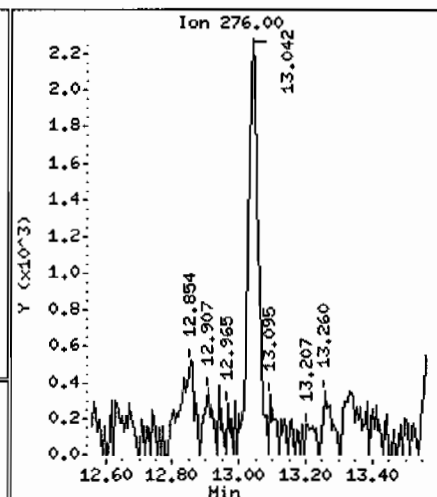
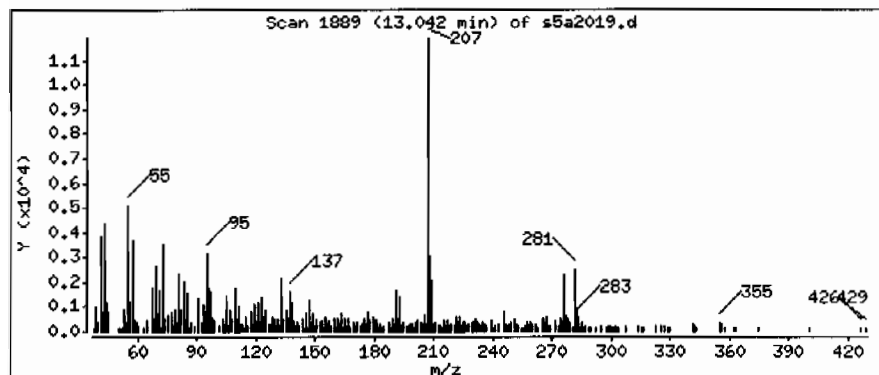
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

99 Indeno(1,2,3-cd)pyrene

Concentration: 130 ug/Kg



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: HSD5.i

Sample Info: 1244923004194338611SVH111LANL

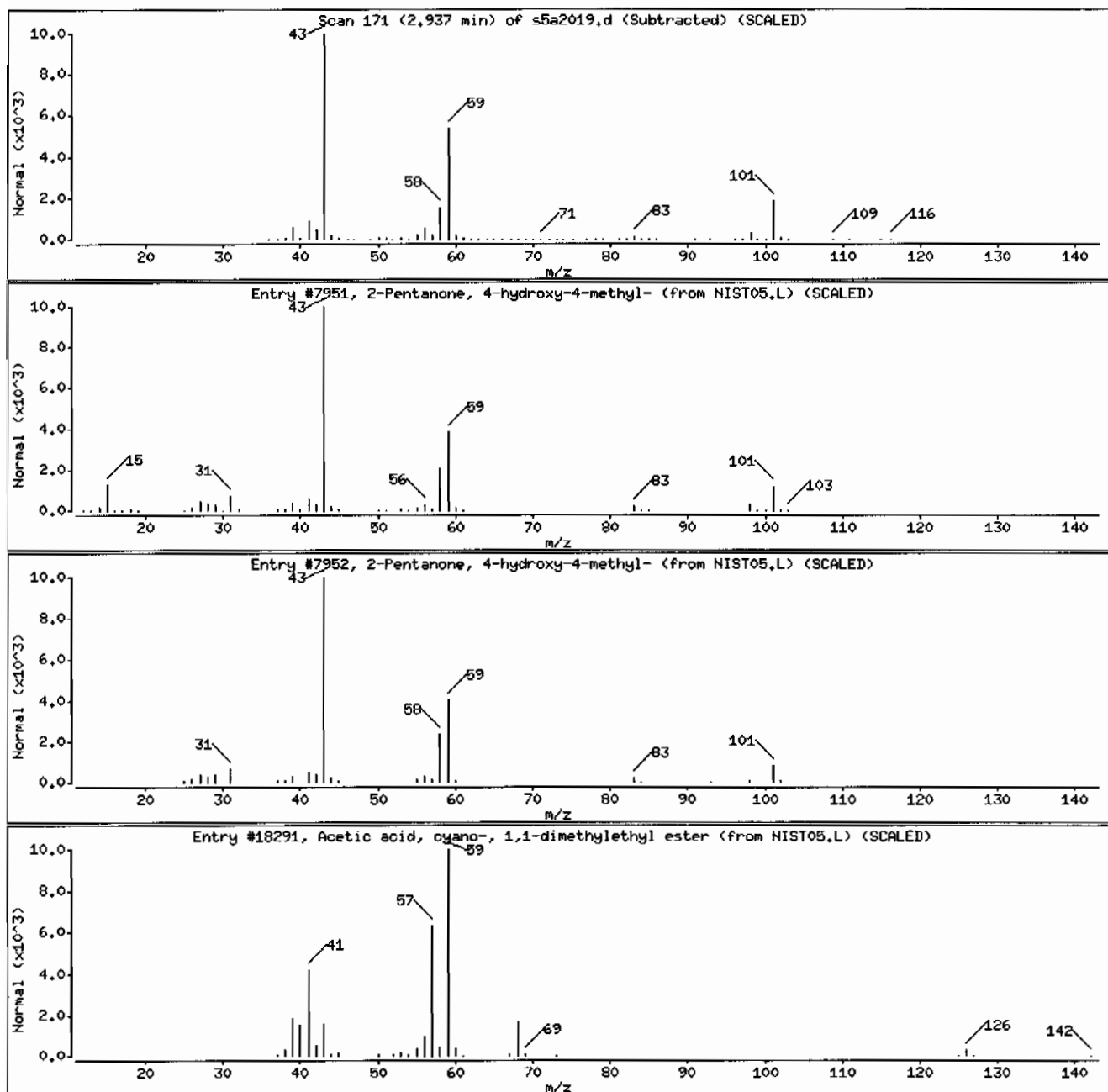
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: HSD5.i

Sample Info: 1244923004194338611(SVM11)LANL

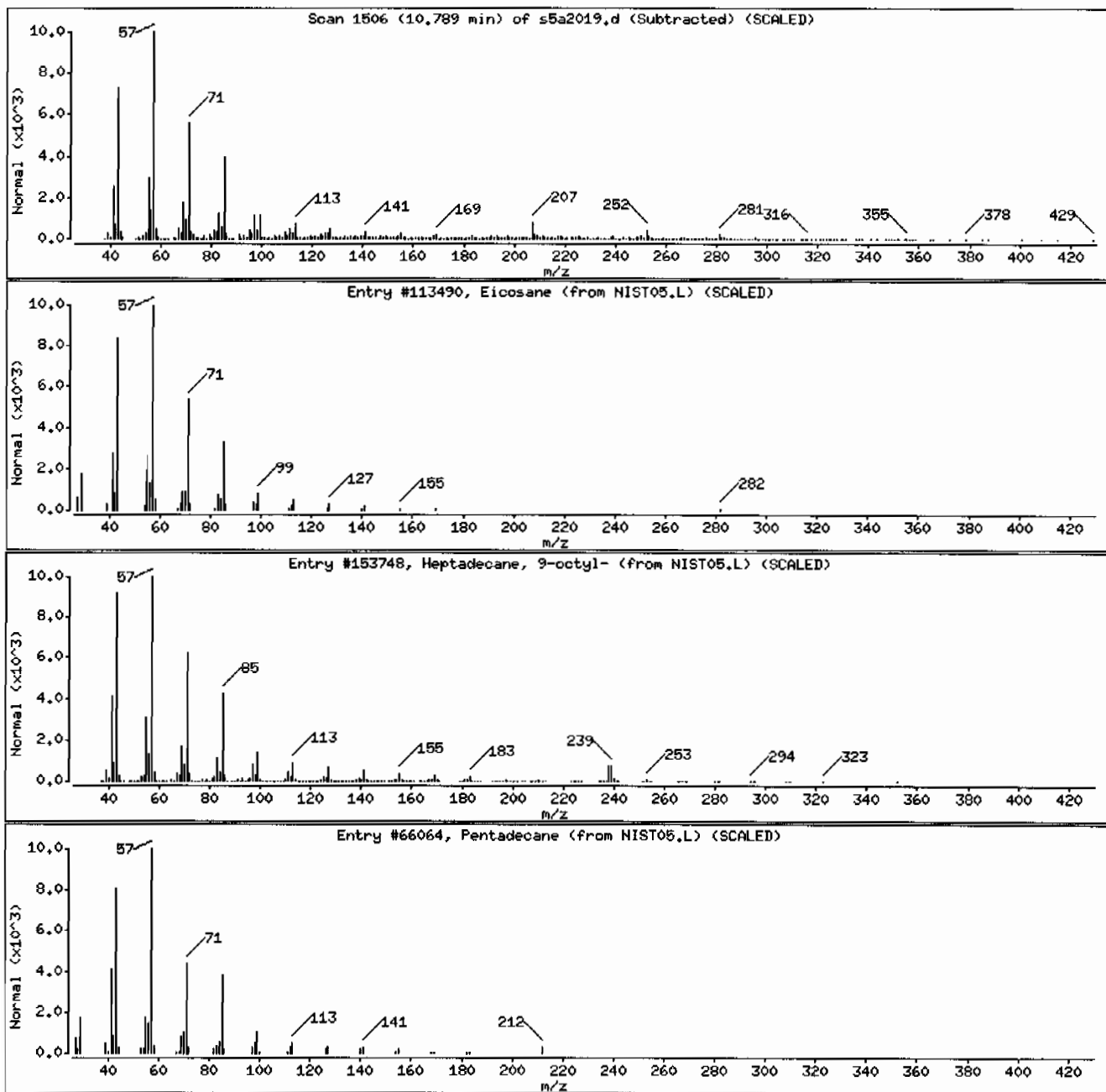
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	98	C20H42	282
Heptadecane, 9-octyl-	7225-64-1	NIST05.L	153748	94	C25H52	352
Pentadecane	629-62-9	NIST05.L	66064	92	C15H32	212



Date: 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: HSD5.i

Sample Info: 1244923004|94338611|SVH11|LANL

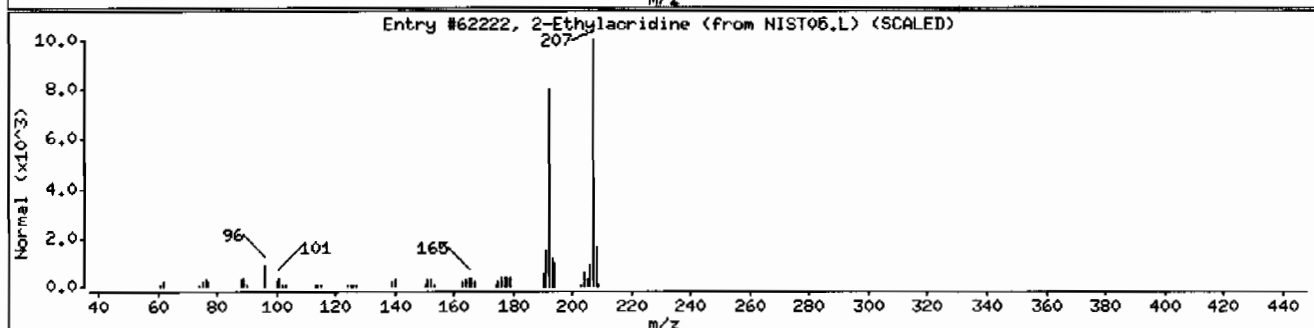
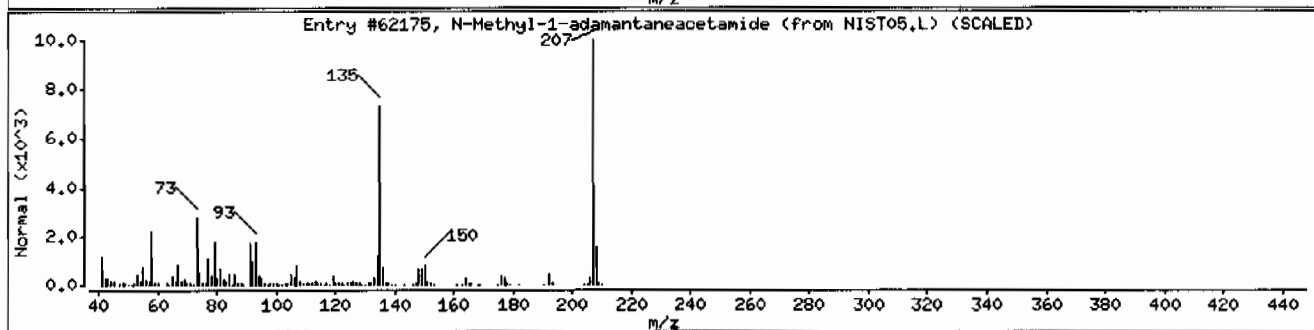
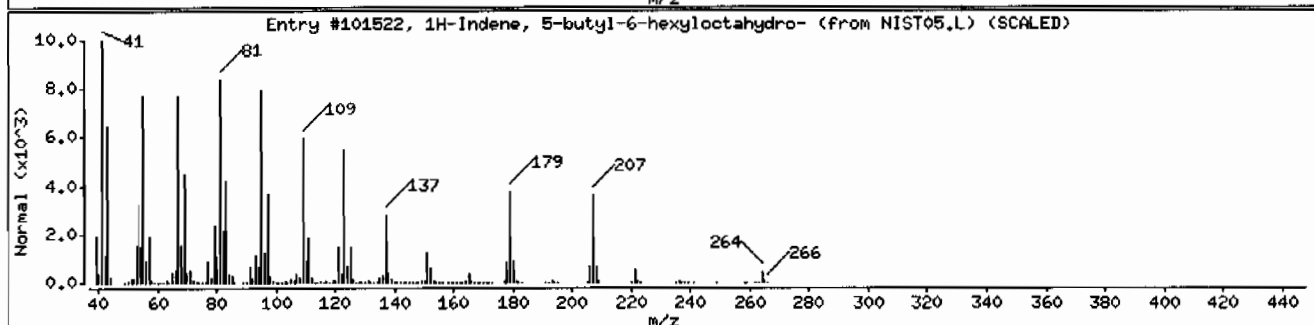
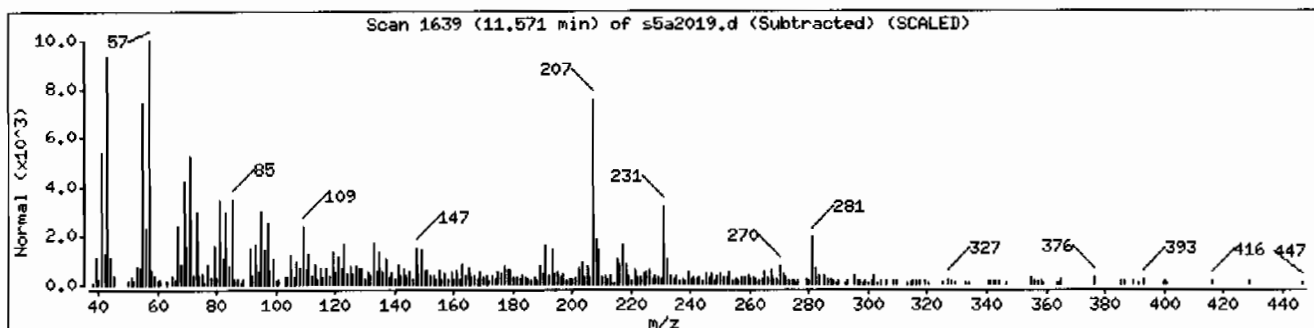
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	44	C19H36	264
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	41	C13H21NO	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	38	C16H13N	207



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 12449230041943386111SVMI11LANL

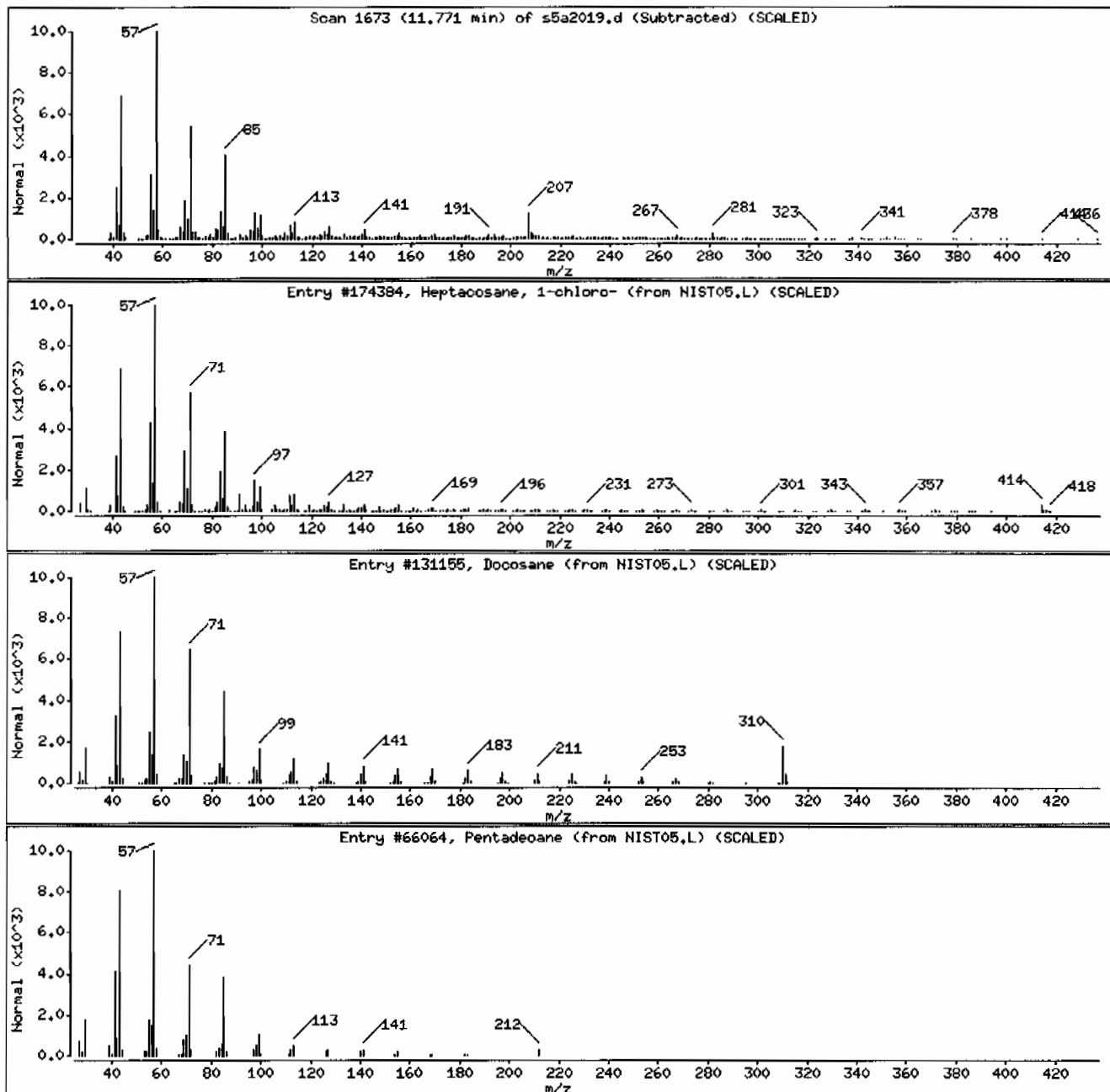
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Heptacosane, 1-chloro-	62016-79-9	NIST05.L	174384	96	C27H55Cl	414
Docosane	629-97-0	NIST05.L	131155	95	C22H46	310
Pentadecane	629-62-9	NIST05.L	66064	95	C15H32	212



Date: 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: I244923004I943386I1ISVHI1ILANL

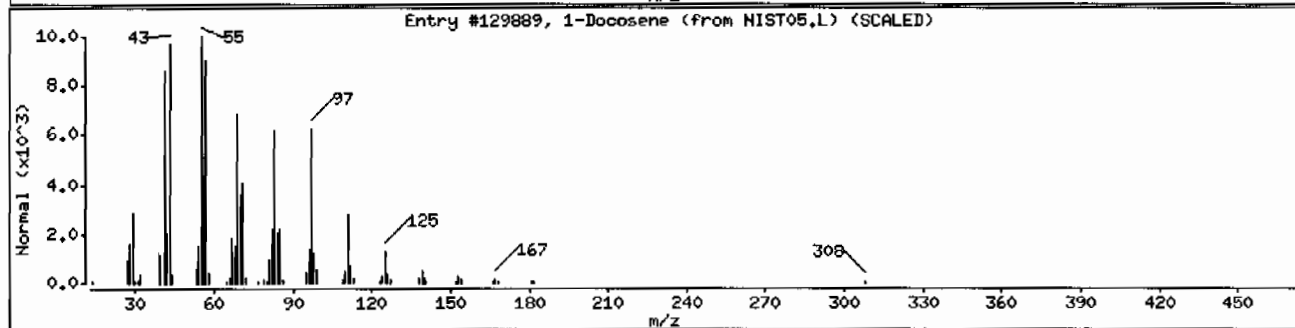
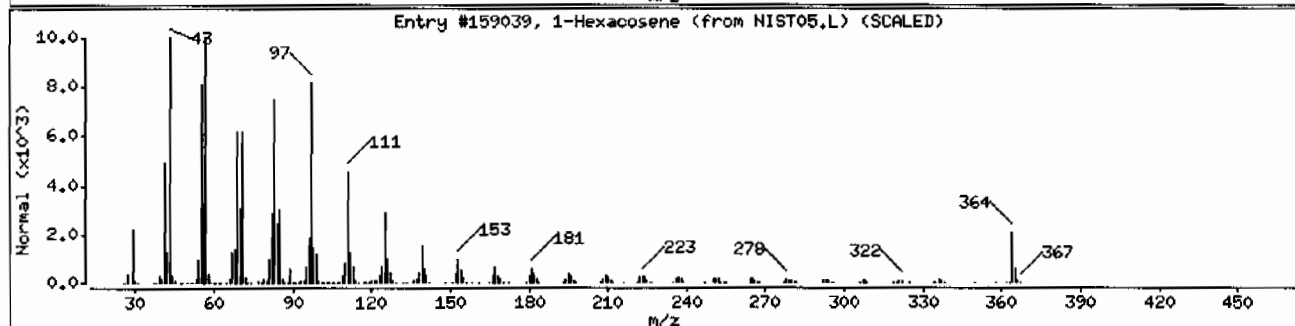
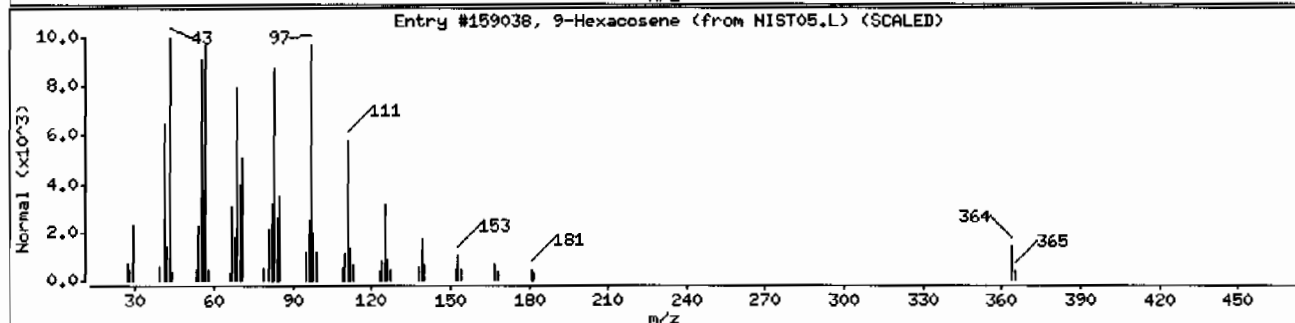
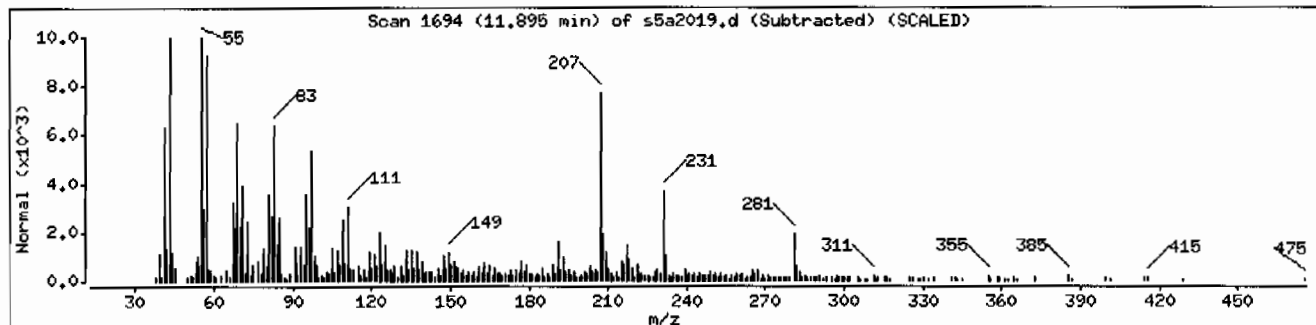
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Hexacosene	71502-22-2	NIST05.L	159038	59	C26H52	364
1-Hexacosene	18835-33-1	NIST05.L	159039	56	C26H52	364
1-Docosene	1599-67-3	NIST05.L	129889	53	C22H44	308



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 1244923004194338611SVMI11LANL

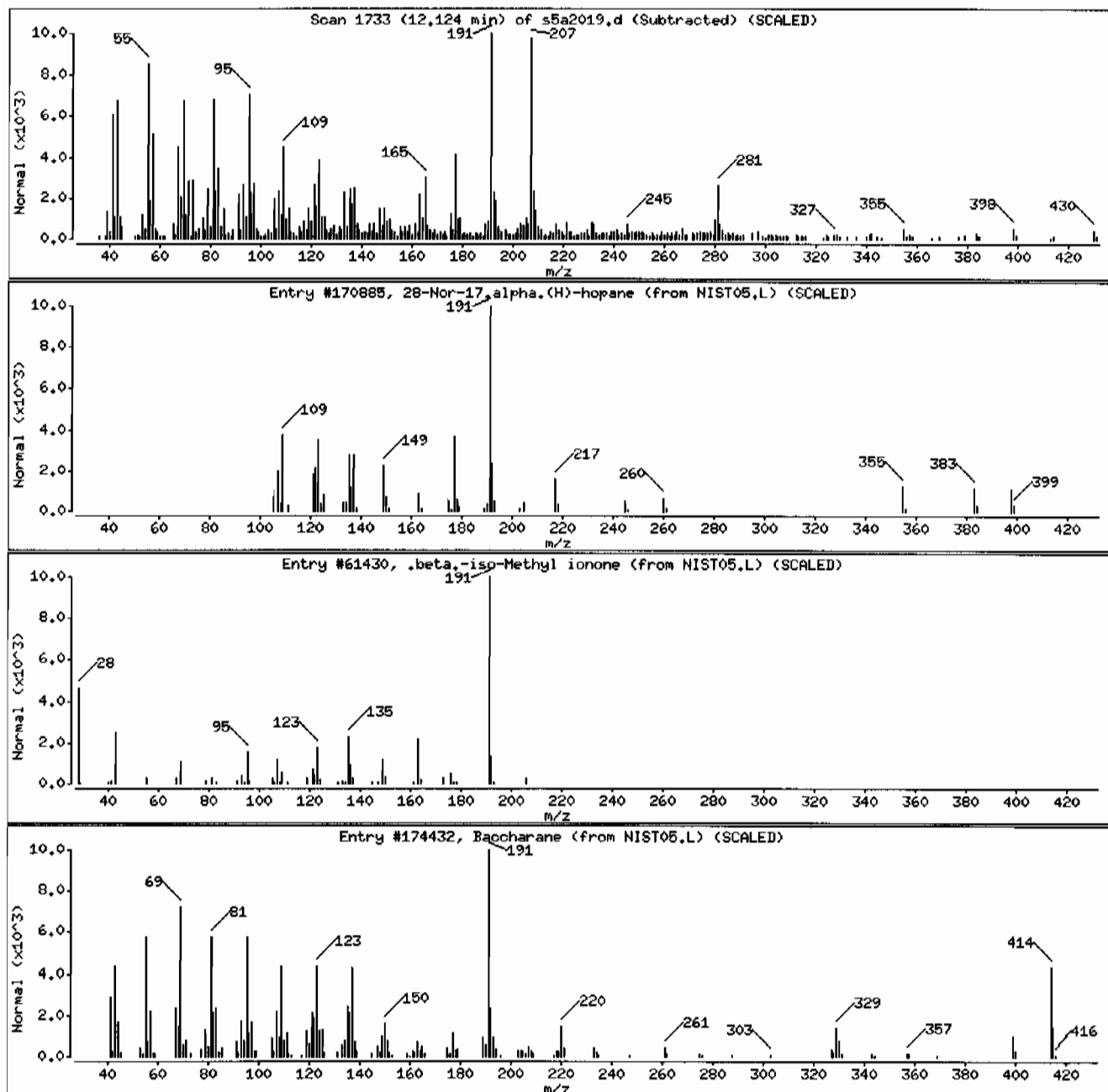
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
28-Nor-17.alpha.(H)-hopane	53584-60-4	NIST05.L	170885	60	C29H50	398
.beta.-iso-Methyl ionone	1000285-40-2	NIST05.L	61430	53	C14H22O	206
Baccharane	36441-74-4	NIST05.L	174432	49	C30H54	414



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 12449230041943386111SVH111LANL

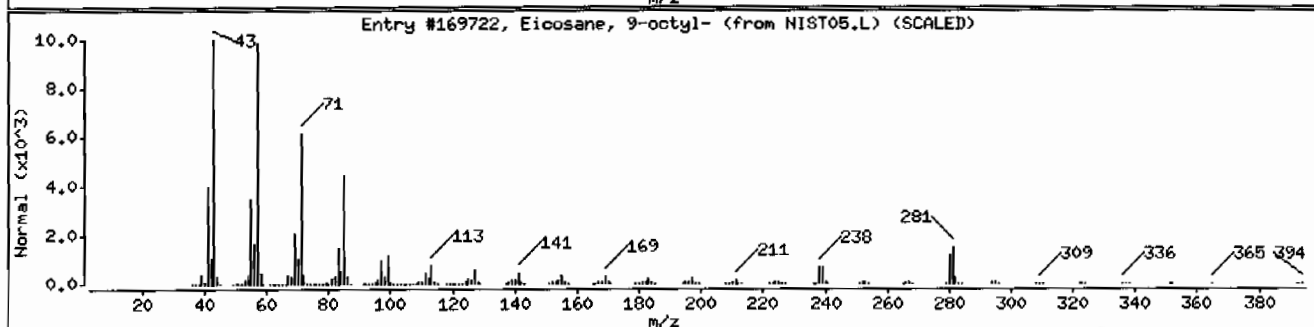
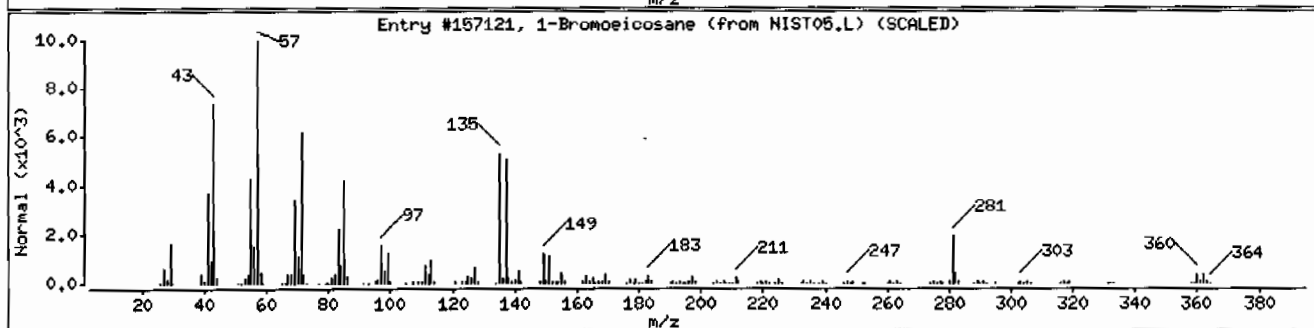
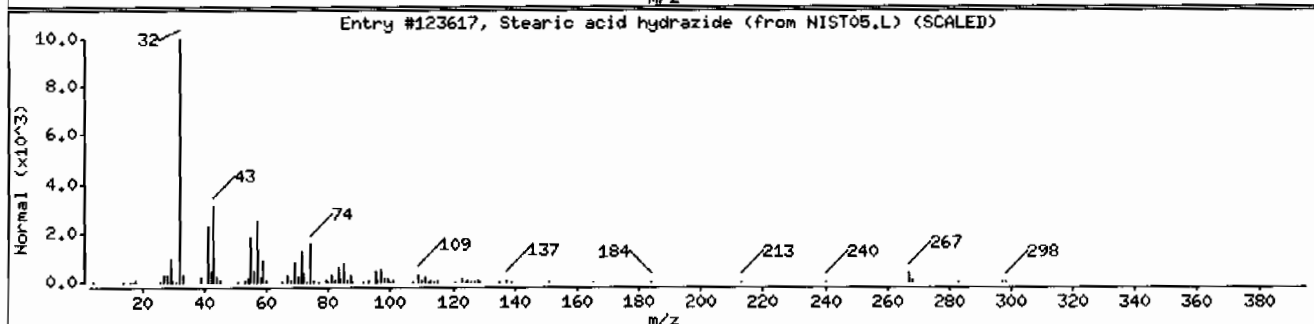
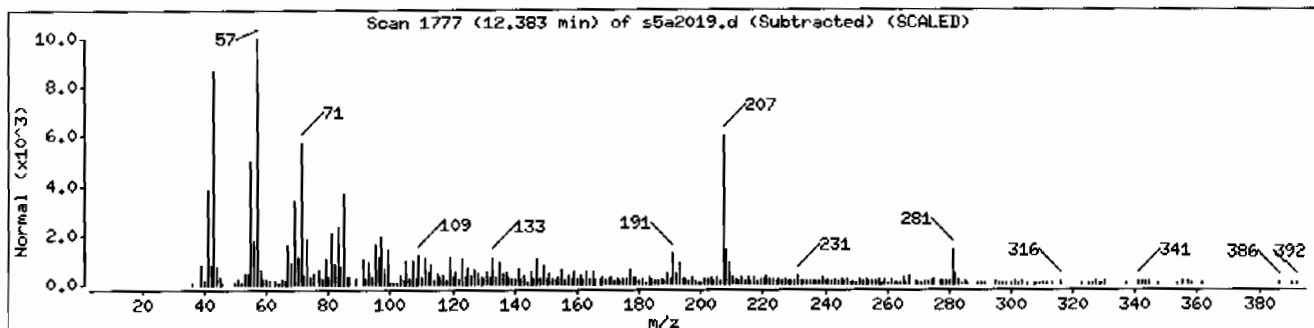
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stearic acid hydrazide	4130-54-5	NIST05.L	123617	46	C18H38N2O	298
1-Bromoeicosane	4276-49-7	NIST05.L	157121	43	C20H41Br	360
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	41	C28H58	394



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 12449230041943386111SVMI11LANL

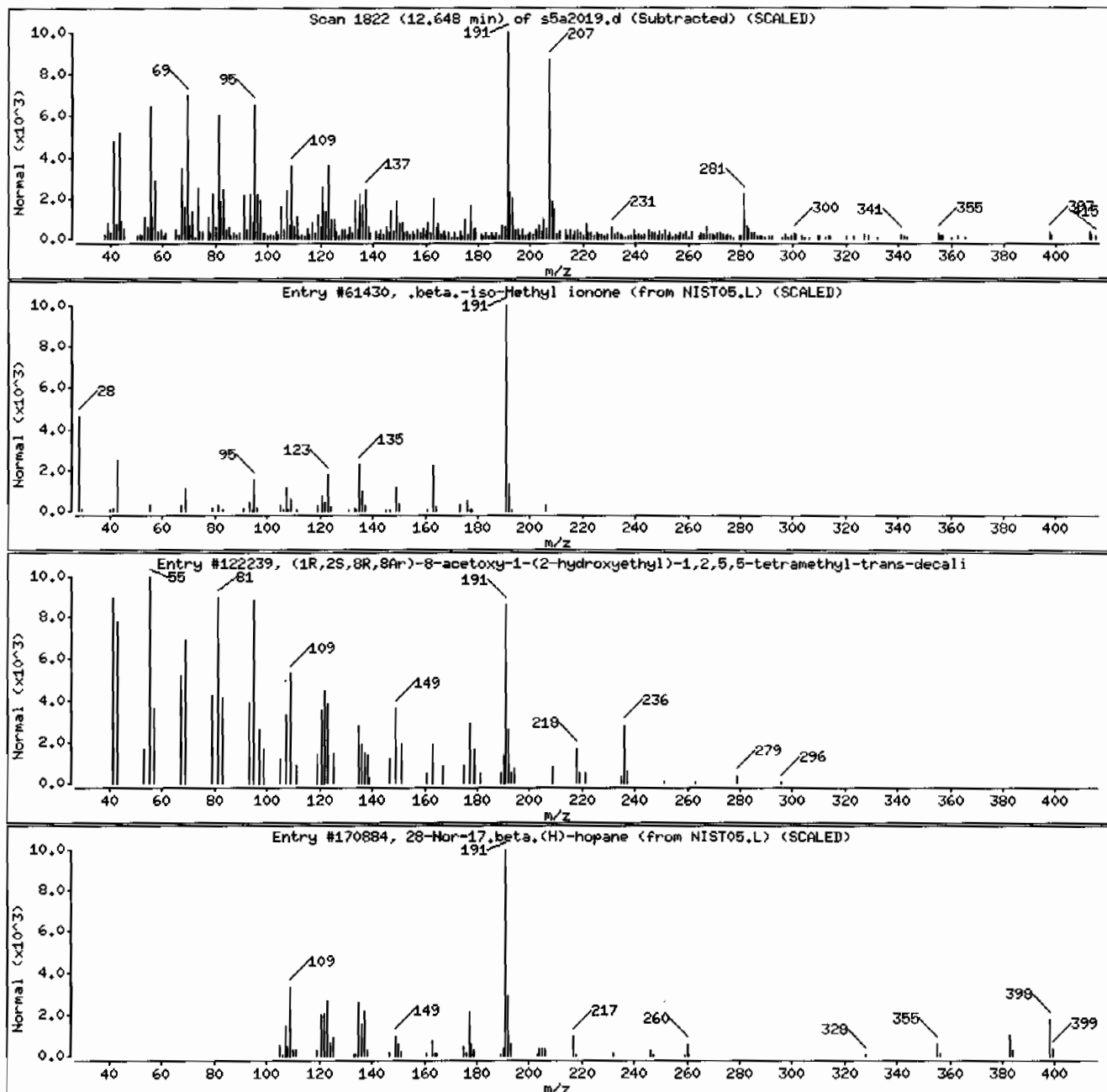
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.beta.-iso-Methyl ionone	1000285-40-2	NIST05.L	61430	60	C14H22O	206
(1R,2S,8R,8Ar)-8-acetoxy-1-(2-hydroxyethyl	1000298-98-4	NIST05.L	122239	41	C18H32O3	296
28-Nor-17.beta.(H)-hopane	36728-72-0	NIST05.L	170884	30	C29H50	398



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.1

Sample Info: 1244923004194338611ISVM111LANL

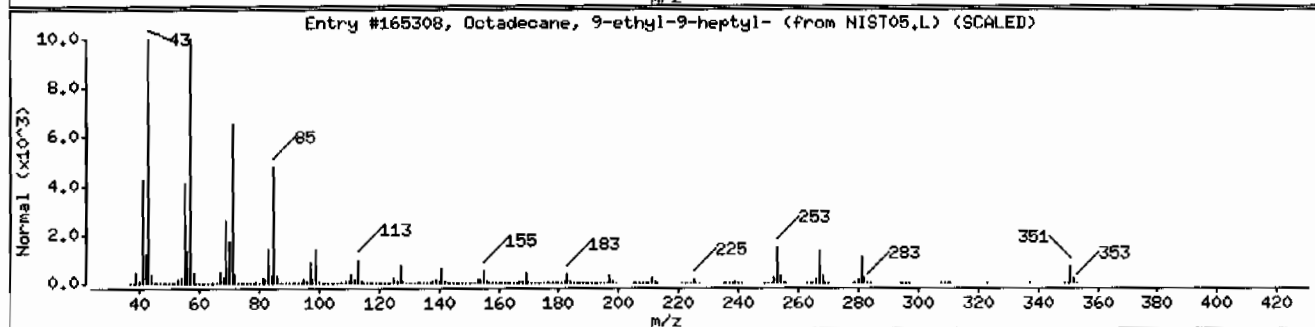
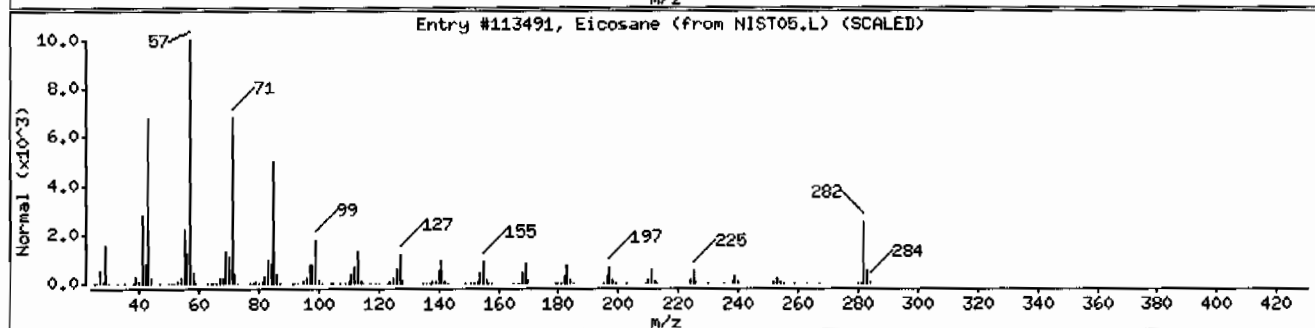
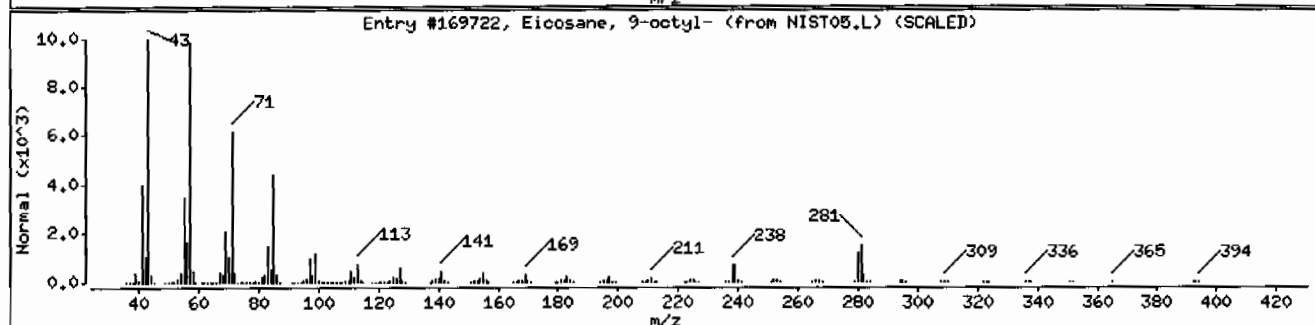
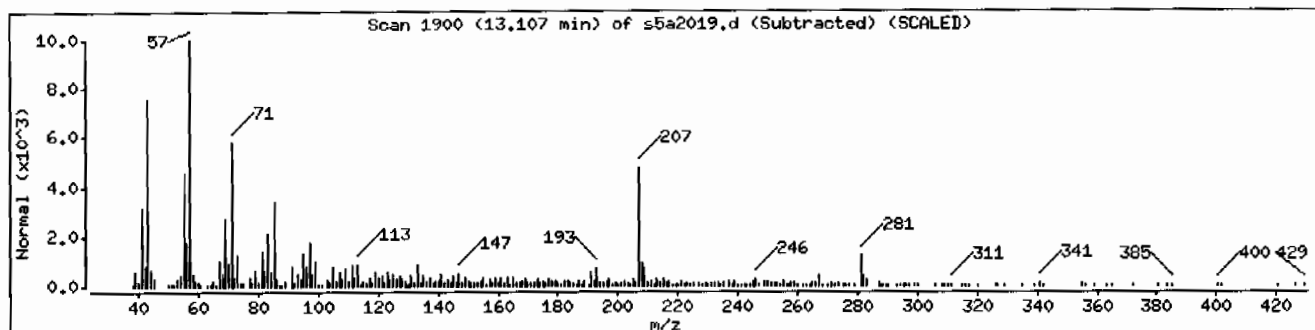
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	53	C28H58	394
Eicosane	112-95-8	NIST05.L	113491	50	C20H42	282
Octadecane, 9-ethyl-9-heptyl-	55282-27-4	NIST05.L	165308	43	C27H56	380



Date : 21-JAN-2010 00:05

Client ID: RE15-10-7160

Instrument: MSD5.i

Sample Info: 1244923004194338611ISVM111LANL

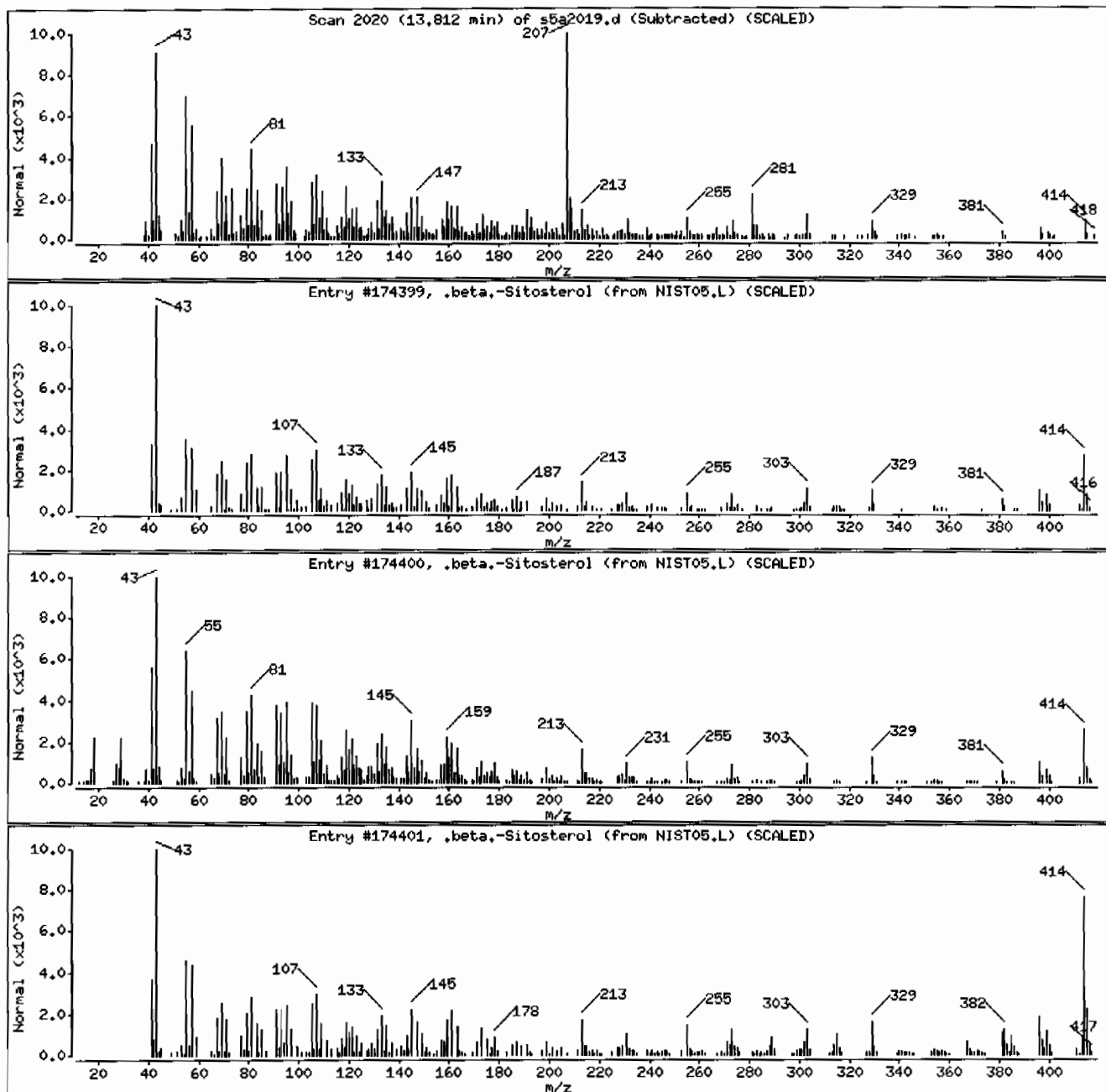
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	91	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	68	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	49	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1287
Lab Sample ID: 244923003

Client ID: RE15-10-7161
Batch ID: 943386
Run Date: 01/20/2010 23:42
Prep Date: 01/20/2010 11:13
Data File: s5a2018.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.06 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.9
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.7	373
108-95-2	Phenol	U	373	ug/kg	74.7	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.7	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.7	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.7	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.7	373
83-32-9	Acenaphthene	U	37.3	ug/kg	12.3	37.3
121-14-2	2,4-Dinitrotoluene	U	373	ug/kg	37.3	373
100-02-7	4-Nitrophenol	U	373	ug/kg	123	373
87-86-5	Pentachlorophenol	U	373	ug/kg	93.3	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.7	373
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.7	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.7	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.7	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.7	373
95-48-7	o-Cresol	U	373	ug/kg	74.7	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.7	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.7	373
78-59-1	Isophorone	U	373	ug/kg	74.7	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.7	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	131	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.7	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.7	373
65-85-0	Benzoic acid	U	747	ug/kg	187	747
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.7	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.7	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.47	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.7	373
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.7	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.7	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.7	373
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline	U	373	ug/kg	74.7	373

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923003	Date Received: 01/16/2010 08:55	%Moisture: 10.9
Client ID: RE15-10-7161	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 23:42	Inst: MSD5.1	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2018.d	Aliquot: 30.06 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
	<i>m</i> -Nitroaniline					
131-11-3	Dimethylphthalate	U	373	ug/kg	74.7	373
606-20-2	2,6-Dinitrotoluene	U	373	ug/kg	37.3	373
208-96-8	Acenaphthylene	U	37.3	ug/kg	11.2	37.3
51-28-5	2,4-Dinitrophenol	U	747	ug/kg	142	747
132-64-9	Dibenzofuran	U	373	ug/kg	74.7	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.7	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.7	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.7	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.7	373
122-66-7	Azobenzene	U	373	ug/kg	74.7	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.7	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.7	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.47	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.7	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.7	373
56-55-3	Benzo(a)anthracene	U	37.3	ug/kg	11.2	37.3
91-94-1	3,3'-Dichlorobenzidine	U	373	ug/kg	112	373
218-01-9	Chrysene	U	37.3	ug/kg	11.2	37.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	373	ug/kg	74.7	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.7	373
205-99-2	Benzo(b)fluoranthene	U	37.3	ug/kg	11.2	37.3
207-08-9	Benzo(k)fluoranthene	U	37.3	ug/kg	11.2	37.3
50-32-8	Benzo(a)pyrene	U	37.3	ug/kg	11.2	37.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.3	ug/kg	11.2	37.3
53-70-3	Dibenzo(a,h)anthracene	U	37.3	ug/kg	11.2	37.3
191-24-2	Benzo(ghi)perylene	U	37.3	ug/kg	11.2	37.3
120-82-1	1,2,4-Trichlorobenzene	U	373	ug/kg	74.7	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	428	ug/kg		J
	Unknown Aldol Condensate	2.93	384	ug/kg		JA

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923003	Date Received: 01/16/2010 08:55	%Moisture: 10.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7161	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 23:42	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.06 g	Final Volume: 1 mL
Data File: s5a2018.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
301-02-0	9-Octadecenamide, (Z)-	10.38	173	ug/kg	90	NJ
62906-36-9	1,2-Dicarbododecaborane(12), 1-[(propylt	11.9	683	ug/kg	90	NJ
	Unknown	12.65	919	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2018.d
 Lab Smp Id: 244923003 Client Smp ID: RE15-10-7161
 Inj Date : 20-JAN-2010 23:42
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244923003|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	10.89340	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926 (1.000)	368250	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792 (1.000)	1343951	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044 (1.000)	760975	40.0000	
* 67 Phenanthrene-d10	188	7.207	7.214 (1.000)	1398730	40.0000	
* 91 Chrysene-d12	240	9.619	9.622 (1.000)	1265352	40.0000	
* 98 Perylene-d12	264	11.289	11.298 (1.000)	992177	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102 (0.793)	532793	58.3397	2180
\$ 5 Phenol-d5	99	3.631	3.637 (0.926)	706597	62.7378	2340
\$ 20 Nitrobenzene-d5	82	4.278	4.287 (0.894)	294010	28.4919	1060
\$ 39 2-Fluorobiphenyl	172	5.525	5.534 (0.914)	554659	27.5533	1030
\$ 60 2,4,6-Tribromophenol	329	6.637	6.641 (1.098)	186888	77.2692	2880
\$ 81 p-Terphenyl-d14	244	8.589	8.592 (0.893)	907798	45.6906	1700

ION RATIO REPORT

SV REPORT

Data file: s5a2018.d

Report Date: 01/21/2010 07:46

Lab. ID: 244923003

SampleType: SAMPLE

Injection Date: 20-JAN-2010 23:42

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923003|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	37356	3.63	3.70	80-120	100	(T)
93	536	3.60	3.70	220-280	1	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	40847	4.28	4.16	80-120	100	(T)
42	24672	4.28	4.16	44-104	60	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	378	4.54	4.55	80-120	100	()
122	592	4.78	4.55	47-107	157	(QT)
77	729	4.53	4.55	44-104	193	(Q)

43 Dimethylphthalate		CAS#: 131-11-3				
163	136455	6.04	5.80	80-120	100	(T)
164	760975	6.04	5.80	0- 41	558	(QT)

44 2,6-Dinitrotoluene		CAS#: 606-20-2				
165	100410	6.04	5.86	80-120	100	(T)
63	1329	6.04	5.86	47-107	1	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	100410	6.04	6.16	80-120	100	(T)
89	1463	6.04	6.16	48-108	1	(QT)
63	1329	6.04	6.16	25- 85	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
53 Fluorene		CAS#: 86-73-7				
166	10421	6.64	6.46	80-120	100	(T)
165	11232	6.64	6.46	57-117	108	(T)
167	4010	6.64	6.46	0- 44	38	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	940	6.64	6.47	80-120	100	(T)
105	2111	6.64	6.47	13- 73	224	(QT)
51	1536	6.64	6.47	55-115	163	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	12898	6.64	6.82	80-120	100	(T)
141	87409	6.64	6.82	46-106	678	(QT)
250	26582	6.64	6.82	69-129	206	(QT)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	380	13.04	13.06	80-120	100	()
138	336	13.05	13.07	1- 61	88	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2018.d
Lab Smp Id: 244923003 Client Smp ID: RE15-10-7161
Inj Date : 20-JAN-2010 23:42
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923003|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.06000	weight of sample
M	10.89340	% moisture

Cpnd Variable

Local Compound Variable

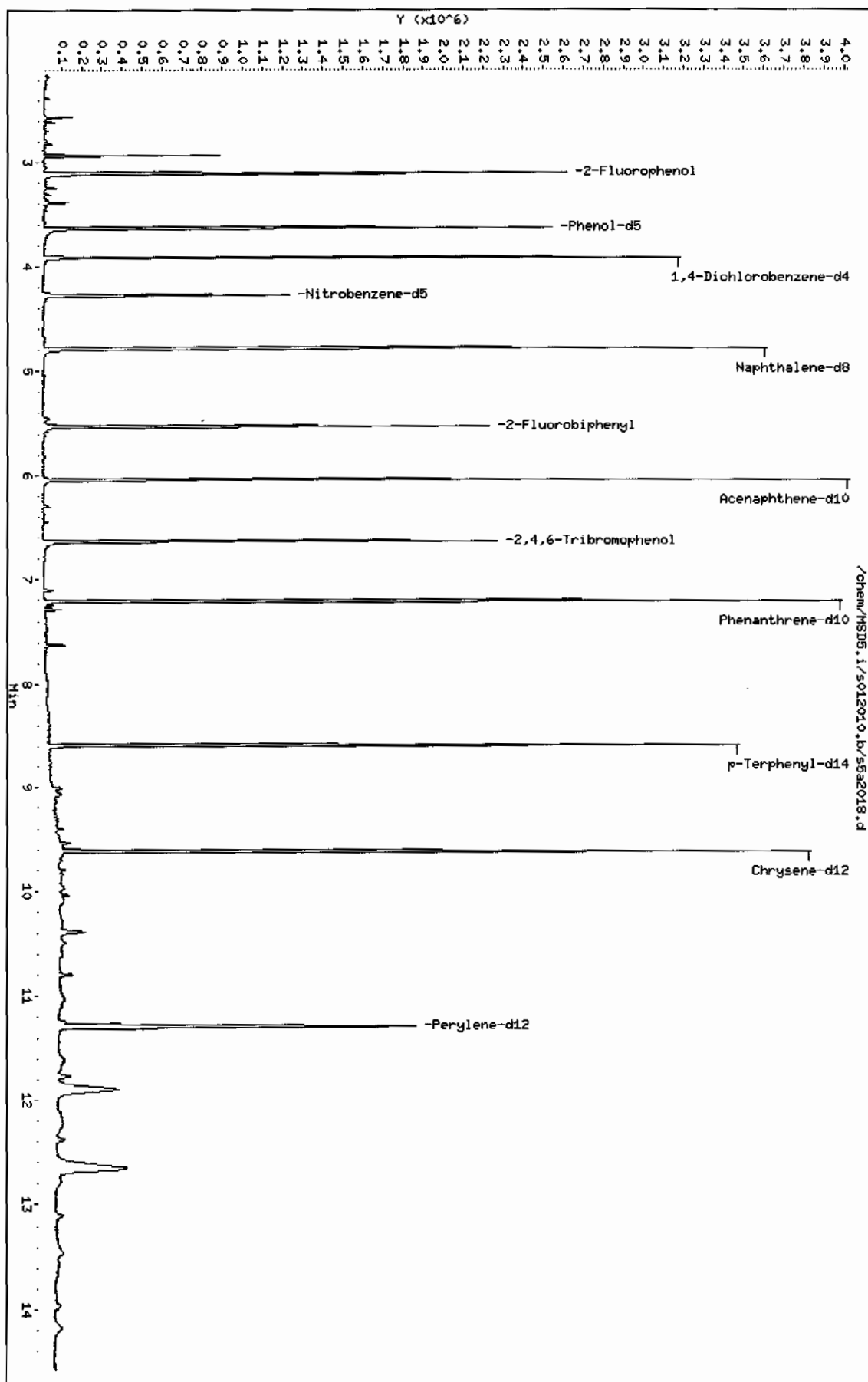
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2283668	40.000
* 91 Chrysene-d12	9.619	3468434	40.000
* 98 Perylene-d12	11.289	2709929	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.978	654444	11.4630199	428	0		0	10
Unknown Aldol Condensate					CAS #:		
2.931	587591	10.2920606	384	0		0	10
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
10.383	401751	4.63322477	173	90	NIST05.L	112655	91
1,2-Dicarbododecaborane(12), 1-(propyl)					CAS #: 62906-36-9		
11.895	1238823	18.2856896	683	90	NIST05.L	81316	98
Unknown					CAS #:		
12.648	1667391	24.6115816	919	0		0	98

Data File: /chem/MSD5.i/sol2010.b/s5a2018.d
 Date: 20-JAN-2010 23:42
 Client ID: RE15-10-7161
 Sample Info: 12449230031943396:11SVH111LNL
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20



Date : 20-JAN-2010 23:42

Client ID: RE15-10-7161

Instrument: MSD5.i

Sample Info: 1244923003194338611|SVH11|LANL

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match

Unknown

Propane, 2,2-dimethoxy-

Propane, 2,2-dimethoxy-

Acetamide, N-methyl-

CAS Number

Library

Entry

Quality

Formula

Weight

77-76-9

NIST05.L

4663

59

C5H12O2

104

77-76-9

NIST05.L

4662

42

C5H12O2

104

79-16-3

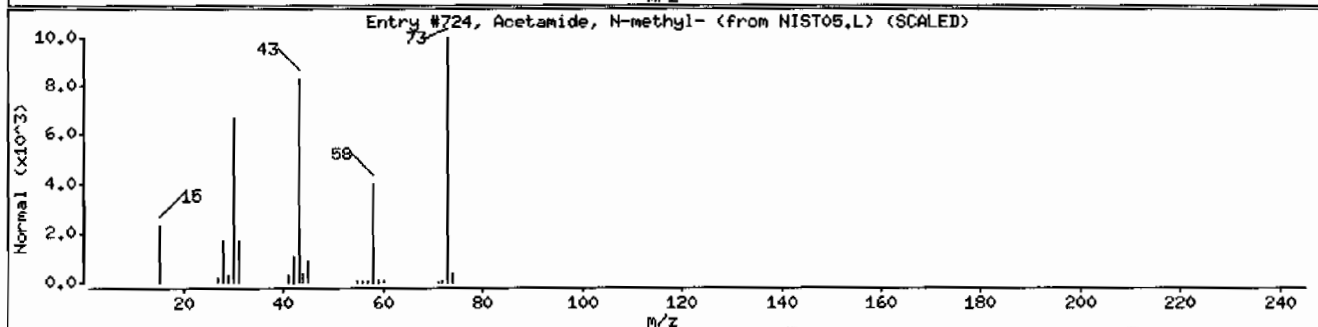
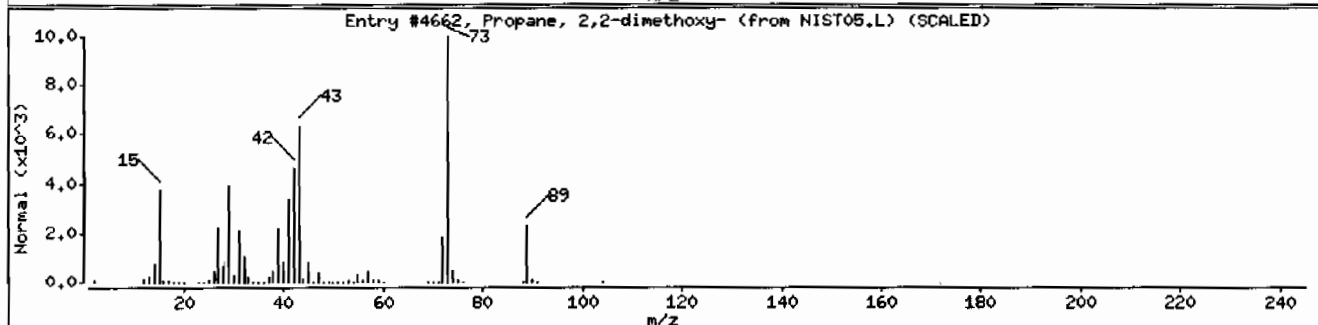
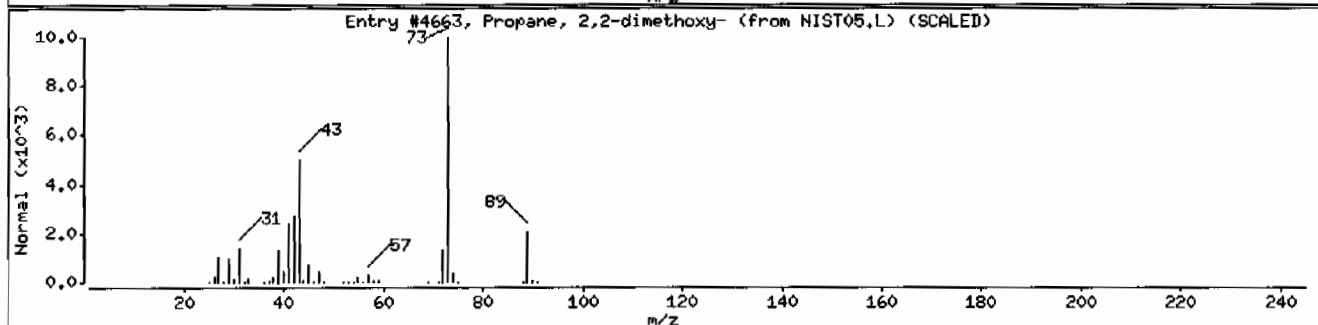
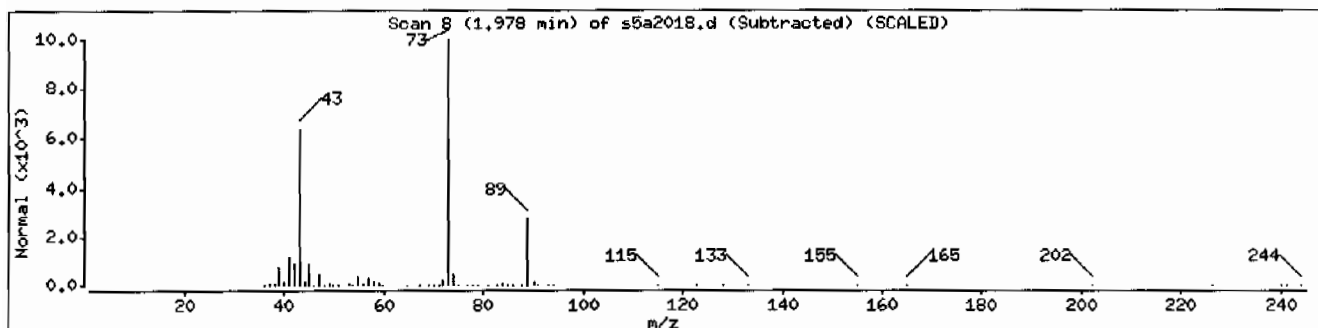
NIST05.L

724

38

C3H7NO

73



Date: 20-JAN-2010 23:42

Client ID: RE15-10-7161

Instrument: MSD5.i

Sample Info: I244923003I943386I1ISVH11ILANL

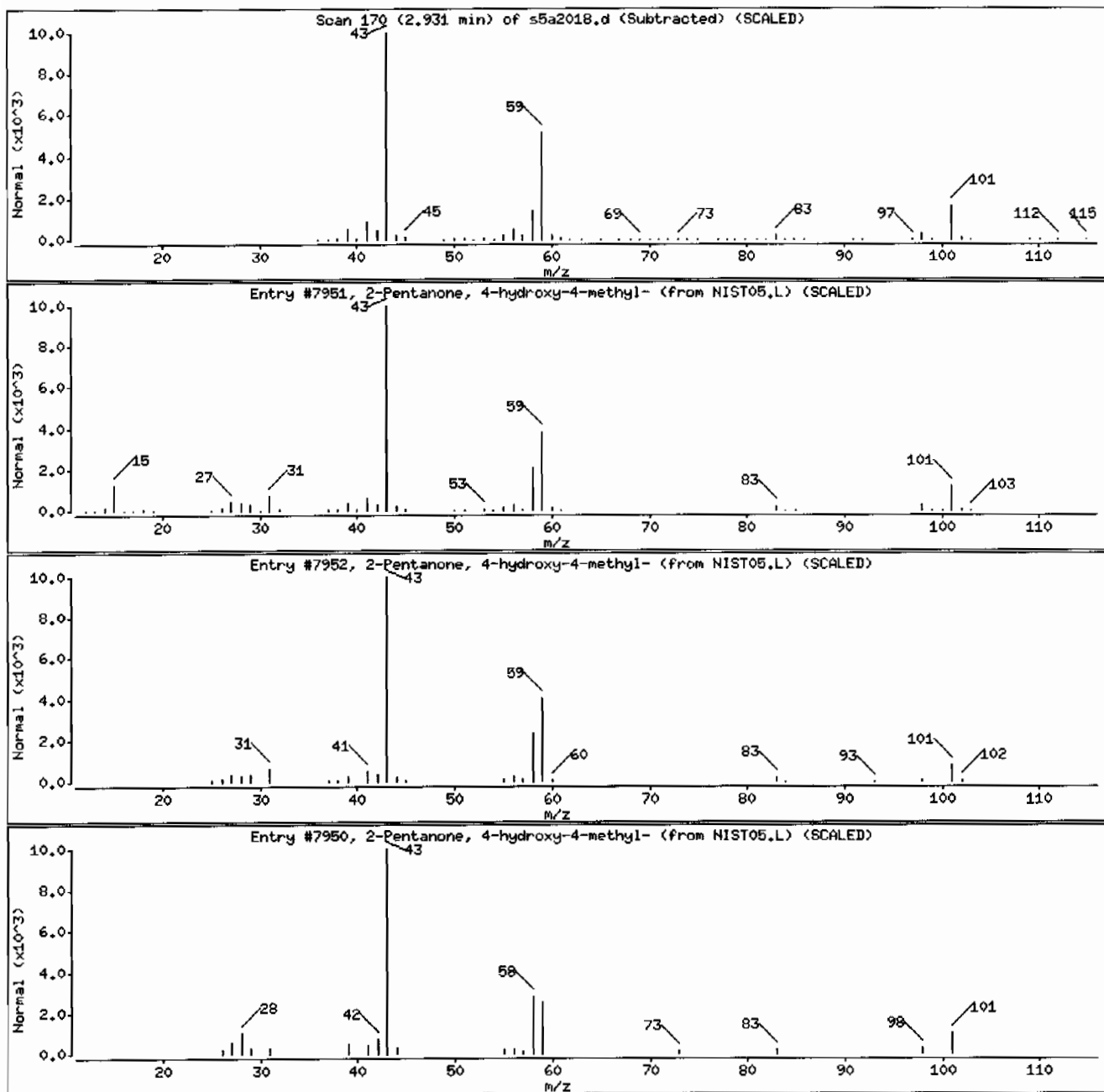
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C ₆ H ₁₂ O ₂	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C ₆ H ₁₂ O ₂	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7950	25	C ₆ H ₁₂ O ₂	116



Date : 20-JAN-2010 23:42

Client ID: RE15-10-7161

Instrument: MSD5.i

Sample Info: 12449230031943386111SVH111LANL

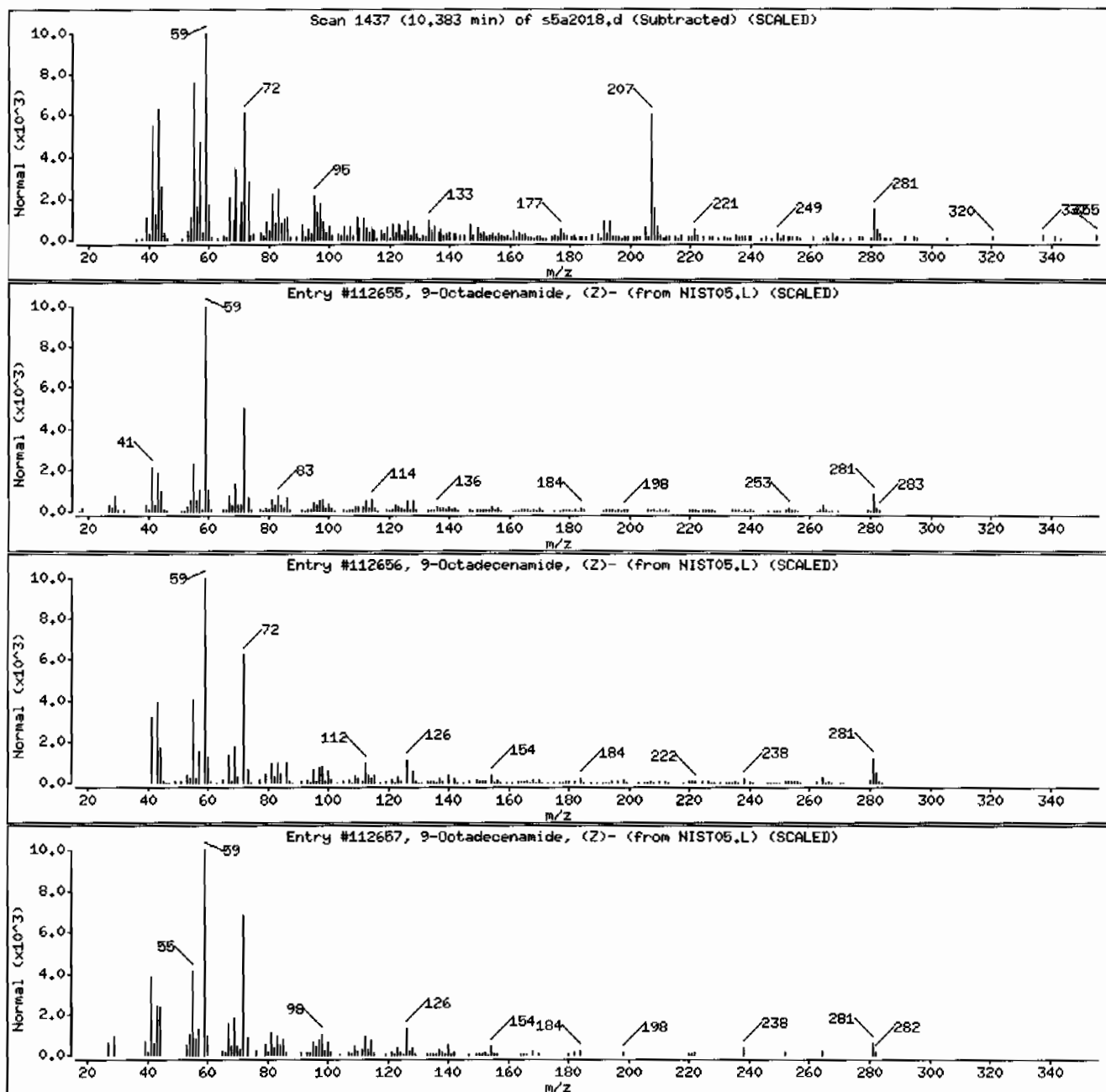
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	90	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112656	80	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	70	C18H35NO	281



Date : 20-JAN-2010 23:42

Client ID: RE15-10-7161

Instrument: MSD5.i

Sample Info: 1244923003194338611SVH11ILANL

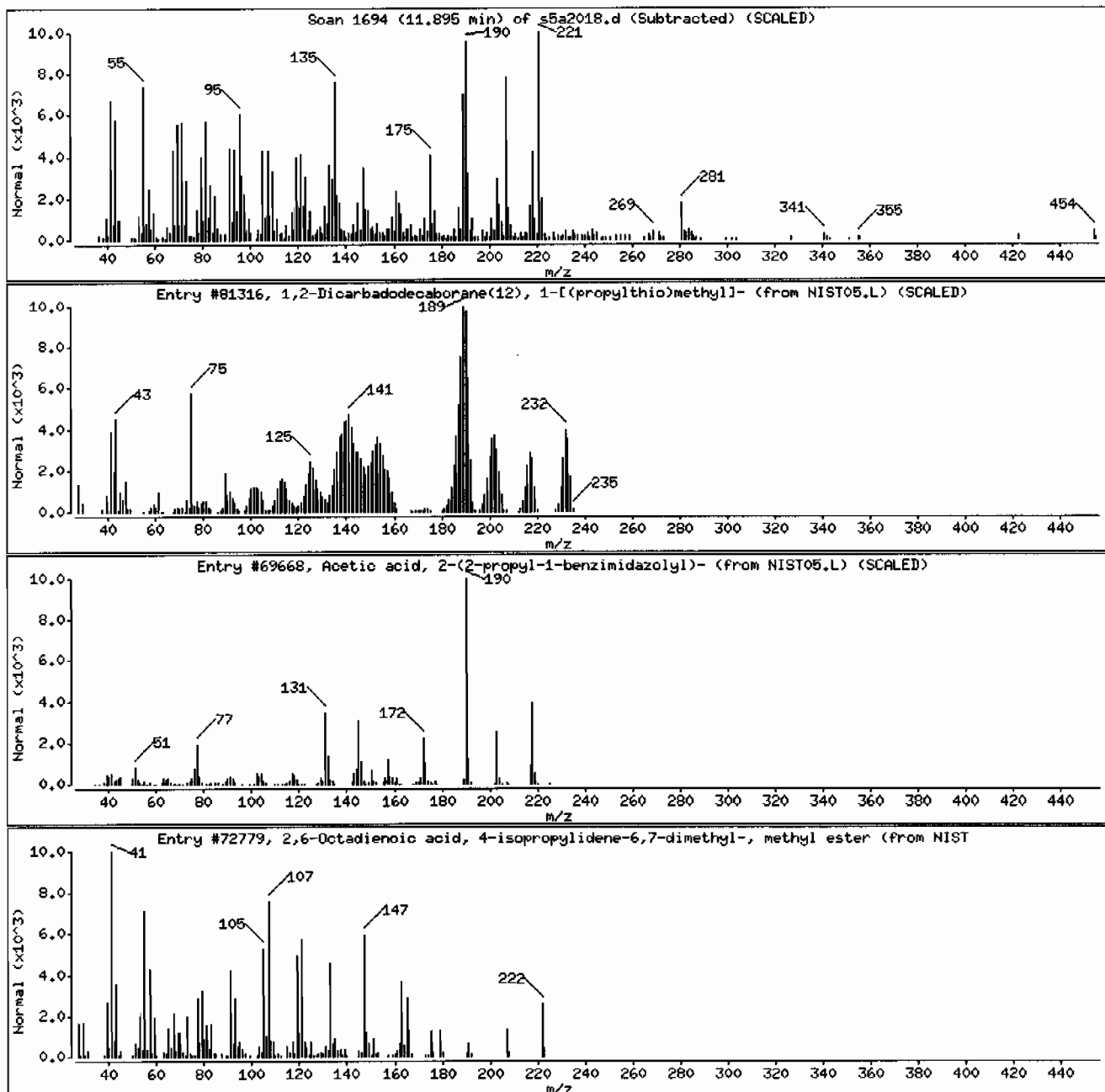
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2-Dicarbododecaborane(12), 1-[(propylthio)acetic acid, 2-(2-propyl-1-benzimidazolyl	62906-36-9	NIST05.L	81316	90	C6H20B10S	234
2,6-Octadienoic acid, 4-isopropylidene-6	331736-92-6	NIST05.L	69668	44	C12H14N2O2	218
	1000151-99-3	NIST05.L	72779	41	C14H22O2	222



Date: 20-JAN-2010 23:42

Client ID: RE15-10-7161

Instrument: MSD5.i

Sample Info: 1244923003194338611SVMI11LANL

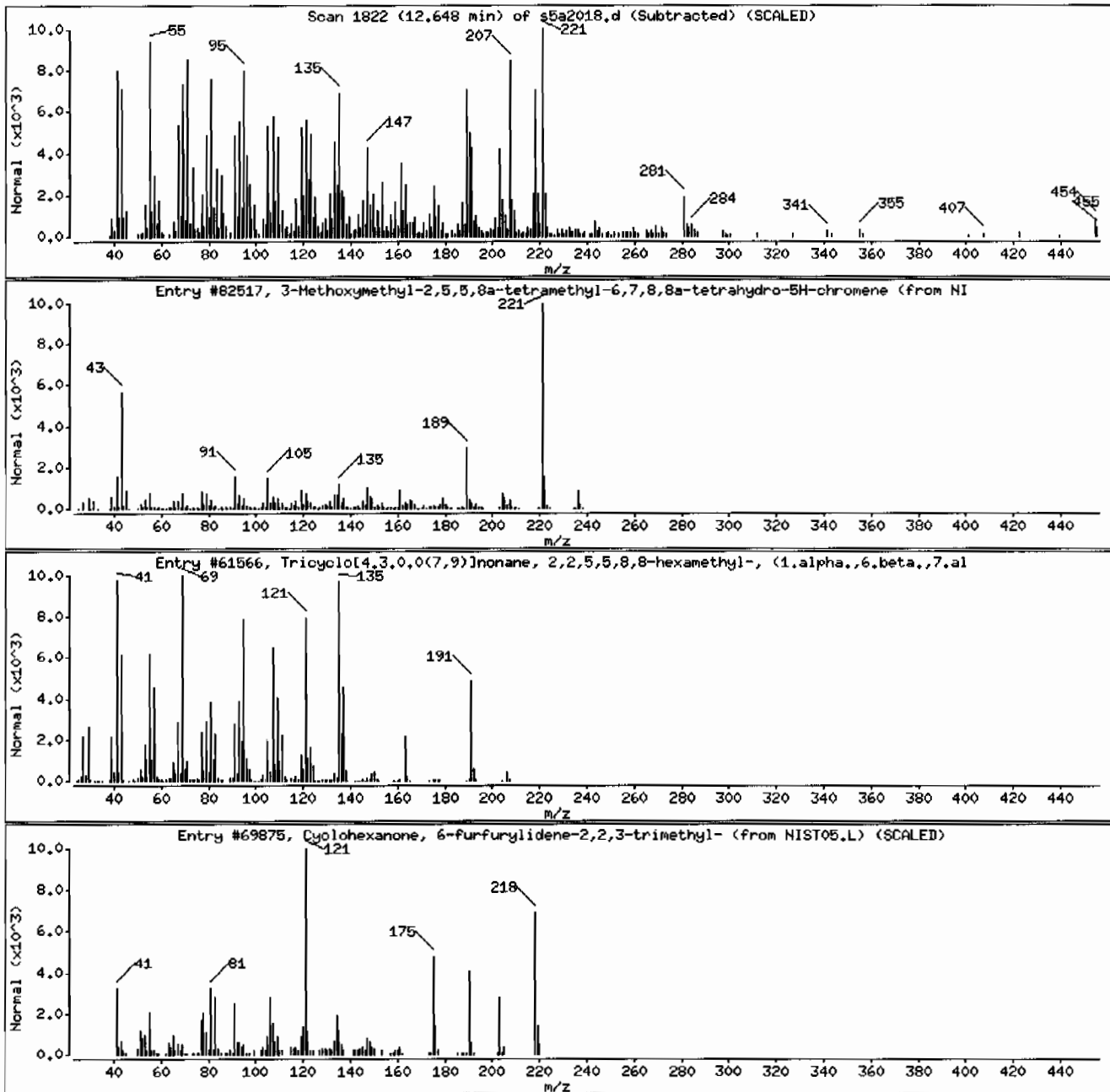
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Methoxymethyl-2,5,5,8a-tetramethyl-6,7	64201-73-6	NIST05.L	82517	60	C15H24O2	236
Tricyclo[4.3.0.0(7,9)]nonane, 2,2,5,5,8,	54832-82-5	NIST05.L	61566	43	C15H26	206
Cyclohexanone, 6-furfurylidene-2,2,3-tri	17429-55-9	NIST05.L	69875	25	C14H18O2	218



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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923002	Date Received: 01/16/2010 08:55	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7162	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 23:19	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s5a2017.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	369	ug/kg	73.8	369
108-95-2	Phenol	U	369	ug/kg	73.8	369
95-57-8	2-Chlorophenol	U	369	ug/kg	73.8	369
106-46-7	1,4-Dichlorobenzene	U	369	ug/kg	73.8	369
621-64-7	N-Nitrosodipropylamine	U	369	ug/kg	73.8	369
59-50-7	4-Chloro-3-methylphenol	U	369	ug/kg	73.8	369
83-32-9	Acenaphthene	U	36.9	ug/kg	12.2	36.9
121-14-2	2,4-Dinitrotoluene	U	369	ug/kg	36.9	369
100-02-7	4-Nitrophenol	U	369	ug/kg	122	369
87-86-5	Pentachlorophenol	U	369	ug/kg	92.2	369
129-00-0	Pyrene	J	16.4	ug/kg	11.1	36.9
110-86-1	Pyridine	U	369	ug/kg	73.8	369
62-53-3	Aniline	U	369	ug/kg	111	369
111-44-4	bis(2-Chloroethyl) ether	U	369	ug/kg	73.8	369
541-73-1	1,3-Dichlorobenzene	U	369	ug/kg	73.8	369
100-51-6	Benzyl alcohol	U	369	ug/kg	111	369
95-50-1	1,2-Dichlorobenzene	U	369	ug/kg	73.8	369
108-60-1	bis(2-Chloroisopropyl)ether	U	369	ug/kg	73.8	369
95-48-7	o-Cresol	U	369	ug/kg	73.8	369
65794-96-9	m,p-Cresols	U	369	ug/kg	111	369
67-72-1	Hexachloroethane	U	369	ug/kg	73.8	369
98-95-3	Nitrobenzene	U	369	ug/kg	73.8	369
78-59-1	Isophorone	U	369	ug/kg	73.8	369
88-75-5	2-Nitrophenol	U	369	ug/kg	73.8	369
105-67-9	2,4-Dimethylphenol	U	369	ug/kg	129	369
111-91-1	bis(2-Chloroethoxy)methane	U	369	ug/kg	73.8	369
120-83-2	2,4-Dichlorophenol	U	369	ug/kg	73.8	369
65-85-0	Benzoic acid	U	738	ug/kg	184	738
91-20-3	Naphthalene	U	36.9	ug/kg	11.1	36.9
106-47-8	4-Chloroaniline	U	369	ug/kg	73.8	369
87-68-3	Hexachlorobutadiene	U	369	ug/kg	73.8	369
91-57-6	2-Methylnaphthalene	U	36.9	ug/kg	7.38	36.9
77-47-4	Hexachlorocyclopentadiene	U	369	ug/kg	73.8	369
88-06-2	2,4,6-Trichlorophenol	U	369	ug/kg	73.8	369
95-95-4	2,4,5-Trichlorophenol	U	369	ug/kg	73.8	369
91-58-7	2-Chloronaphthalene	U	36.9	ug/kg	12.2	36.9
88-74-4	2-Nitroaniline	U	369	ug/kg	73.8	369
99-09-2	<i>o</i> -Nitroaniline	U	369	ug/kg	73.8	369
	3-Nitroaniline					

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923002	Date Received: 01/16/2010 08:55	%Moisture: 9.7
Client ID: RE15-10-7162	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/20/2010 23:19	Inst: MSD5.1	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2017.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	369	ug/kg	73.8	369
606-20-2	2,6-Dinitrotoluene	U	369	ug/kg	36.9	369
208-96-8	Acenaphthylene	U	36.9	ug/kg	11.1	36.9
51-28-5	2,4-Dinitrophenol	U	738	ug/kg	140	738
132-64-9	Dibenzofuran	U	369	ug/kg	73.8	369
84-66-2	Diethylphthalate	U	369	ug/kg	73.8	369
86-73-7	Fluorene	U	36.9	ug/kg	11.1	36.9
7005-72-3	4-Chlorophenylphenylether	U	369	ug/kg	73.8	369
534-52-1	2-Methyl-4,6-dinitrophenol	U	369	ug/kg	73.8	369
100-01-6	4-Nitroaniline	U	369	ug/kg	111	369
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	369	ug/kg	73.8	369
122-66-7	Azobenzene	U	369	ug/kg	73.8	369
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	369	ug/kg	73.8	369
118-74-1	Hexachlorobenzene	U	369	ug/kg	73.8	369
85-01-8	Phenanthrene	J	14.0	ug/kg	11.1	36.9
120-12-7	Anthracene	U	36.9	ug/kg	7.38	36.9
84-74-2	Di-n-butylphthalate	J	129	ug/kg	73.8	369
206-44-0	Fluoranthene	J	23.1	ug/kg	11.1	36.9
85-68-7	Butylbenzylphthalate	U	369	ug/kg	73.8	369
56-55-3	Benzo(a)anthracene	U	36.9	ug/kg	11.1	36.9
91-94-1	3,3'-Dichlorobenzidine	U	369	ug/kg	111	369
218-01-9	Chrysene	J	11.2	ug/kg	11.1	36.9
117-81-7	bis(2-Ethylhexyl)phthalate	U	369	ug/kg	73.8	369
117-84-0	Di-n-octylphthalate	U	369	ug/kg	73.8	369
205-99-2	Benzo(b)fluoranthene	U	36.9	ug/kg	11.1	36.9
207-08-9	Benzo(k)fluoranthene	U	36.9	ug/kg	11.1	36.9
50-32-8	Benzo(a)pyrene	U	36.9	ug/kg	11.1	36.9
193-39-5	Indeno(1,2,3-cd)pyrene	U	36.9	ug/kg	11.1	36.9
53-70-3	Dibenzo(a,h)anthracene	U	36.9	ug/kg	11.1	36.9
191-24-2	Benzo(ghi)perylene	U	36.9	ug/kg	11.1	36.9
120-82-1	1,2,4-Trichlorobenzene	U	369	ug/kg	73.8	369

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	1480	ug/kg		J
	Unknown Aldol Condensate	2.94	389	ug/kg		JA

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923002	Date Received: 01/16/2010 08:55	%Moisture: 9.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7162	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 23:19	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.03 g	Final Volume: 1 mL
Data File: s5a2017.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary				Estimated			
CAS No.	Tentatively Identified Compound (TIC)		RT	Units	Fit	Qual	
112-95-8	Unknown		9.45	164	ug/kg		J
	Unknown		9.54	176	ug/kg		J
	Unknown		9.8	419	ug/kg		J
	Unknown		9.97	189	ug/kg		J
	Eicosane		10.04	190	ug/kg	96	NJ
	Unknown		10.39	274	ug/kg		J
630-02-4	Unknown		10.8	364	ug/kg		J
	Octacosane		11.77	289	ug/kg	98	NJ
	Unknown		11.9	384	ug/kg		J
	Unknown		11.91	286	ug/kg		J
	Unknown		12.12	314	ug/kg		J
	Unknown		12.38	219	ug/kg		J
	Unknown		12.65	583	ug/kg		J
	Unknown		13.11	329	ug/kg		J
	Unknown		13.35	279	ug/kg		J
	Unknown		13.45	218	ug/kg		J
83-47-6	.gamma.-Sitosterol		13.82	335	ug/kg	95	NJ

Data File: /chem/MSD5.i/s012010.b/s5a2017.d
Report Date: 21-Jan-2010 08:31

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2017.d
Lab Smp Id: 244923002 Client Smp ID: RE15-10-7162
Inj Date : 20-JAN-2010 23:19
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923002|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.74530	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	448489	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1590394	40.0000	
* 46 Acenaphthene-d10	164	6.043	6.044	(1.000)	942850	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1675214	40.0000	
* 91 Chrysene-d12	240	9.619	9.622	(1.000)	1499989	40.0000	
* 98 Perylene-d12	264	11.295	11.298	(1.000)	1062992	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	656494	59.0239	2180
\$ 5 Phenol-d5	99	3.631	3.637	(0.926)	890418	64.9146	2400
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	363187	29.7419	1100
\$ 39 2-Fluorobiphenyl	172	5.525	5.534	(0.914)	826111	33.1217	1220
\$ 60 2,4,6-Tribromophenol	329	6.637	6.641	(1.098)	236036	78.7646	2910
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.893)	1001929	42.5400	1570

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng/ul)	(ug/Kg)	
79 Pyrene	202	8.484	8.490	(0.882)	16898	0.44383	16.4 (a)	
68 Phenanthrene	178	7.231	7.234	(1.002)	12384	0.37915	14.0 (a)	
72 Di-n-butylphthalate	149	7.631	7.633	(1.058)	142589	3.48714	129 (a)	
76 Fluoranthene	202	8.272	8.279	(1.147)	22467	0.62565	23.1 (a)	
92 Chrysene	228	9.642	9.651	(1.002)	8793	0.30370	11.2 (a)	

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5a2017.d

Report Date: 01/21/2010 07:46

Lab. ID: 244923002

SampleType: SAMPLE

Injection Date: 20-JAN-2010 23:19

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923002|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	50184	3.63	3.70	80-120	100	(T)
93	444	3.60	3.70	220-280	1	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	51944	4.28	4.16	80-120	100	(T)
42	32084	4.28	4.16	44-104	62	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	7991	4.51	4.55	80-120	100	()
122	6038	4.51	4.55	47-107	76	()
77	4563	4.51	4.55	44-104	57	()

43	Dimethylphthalate		CAS#: 131-11-3			
163	171431	6.04	5.80	80-120	100	(T)
164	942850	6.04	5.80	0- 41	550	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	127433	6.04	5.86	80-120	100	(T)
63	1685	6.04	5.86	47-107	1	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	127433	6.04	6.16	80-120	100	(T)
89	1845	6.04	6.16	48-108	1	(QT)
63	1685	6.04	6.16	25- 85	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52 4-Nitrophenol			CAS#: 100-02-7			
139	458	6.19	6.08	80-120	100	(T)
109	196	6.18	6.08	40-100	43	(T)
65	227	6.16	6.08	71-131	50	(QT)

53 Fluorene			CAS#: 86-73-7			
166	13585	6.64	6.46	80-120	100	(T)
165	13303	6.64	6.46	57-117	98	(T)
167	4584	6.64	6.46	0- 44	34	(T)

55 2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1			
198	1011	6.64	6.47	80-120	100	(T)
105	2669	6.64	6.47	13- 73	264	(QT)
51	1793	6.64	6.47	55-115	177	(QT)

61 4-Bromophenylphenylether			CAS#: 101-55-3			
248	15817	6.64	6.82	80-120	100	(T)
141	107463	6.64	6.82	46-106	679	(QT)
250	31743	6.64	6.82	69-129	201	(QT)

68 Phenanthrene			CAS#: 85-01-8			
178	12384	7.23	7.23	80-120	100	()
179	1690	7.23	7.23	0- 46	14	()
176	2222	7.23	7.23	0- 50	18	()

69 Anthracene			CAS#: 120-12-7			
178	12384	7.23	7.28	80-120	100	()
179	1690	7.23	7.28	0- 46	14	()
176	2222	7.23	7.28	0- 49	18	()

72 Di-n-butylphthalate			CAS#: 84-74-2			
149	142589	7.63	7.63	80-120	100	()
150	13463	7.63	7.63	0- 40	9	()
104	8301	7.63	7.63	0- 36	6	()

76 Fluoranthene			CAS#: 206-44-0			
202	22467	8.27	8.28	80-120	100	()
203	4178	8.27	8.27	0- 48	19	()
101	3008	8.27	8.27	0- 42	13	()

79 Pyrene			CAS#: 129-00-0			
202	16898	8.48	8.49	80-120	100	()
200	3228	8.48	8.49	0- 50	19	()
101	2533	8.48	8.49	0- 44	15	()

89 Benzo(a)anthracene			CAS#: 56-55-3			
228	18017	9.64	9.61	80-120	100	()
226	5044	9.64	9.61	0- 57	28	()
229	4608	9.64	9.61	0- 50	26	()

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
92 Chrysene		CAS#: 218-01-9				
228	8793	9.64	9.65	80-120	100	()
229	2350	9.64	9.65	0- 50	27	()
226	3203	9.64	9.65	0- 59	36	()

95 Benzo(b)fluoranthene		CAS#: 205-99-2				
252	8785	10.77	10.78	80-120	100	()
253	2034	10.78	10.78	0- 52	23	()
125	650	10.77	10.78	0- 42	7	()

96 Benzo(k)fluoranthene		CAS#: 207-08-9				
252	8669	10.77	10.82	80-120	100	()
253	2037	10.78	10.82	0- 52	24	()
125	930	10.77	10.82	0- 41	11	()

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	2279	13.05	13.06	80-120	100	()
138	1628	13.05	13.07	1- 61	71	(Q)

100 Dibenzo(a,h)anthracene		CAS#: 53-70-3				
278	827	13.06	13.08	80-120	100	()
139	902	13.10	13.07	0- 30	109	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2017.d
Lab Smp Id: 244923002 Client Smp ID: RE15-10-7162
Inj Date : 20-JAN-2010 23:19
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923002|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.03000	weight of sample
M	9.74530	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2749365	40.000
* 91 Chrysene-d12	9.619	4491367	40.000
* 98 Perylene-d12	11.295	3366068	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.996	2759451	40.1467359	1480	0		0	10
Unknown Aldol Condensate					CAS #:		
2.937	725293	10.5521556	389	0		0	10
Unknown					CAS #:		
9.454	499485	4.44840052	164	0		0	91
Unknown					CAS #:		
9.542	535129	4.76584514	176	0		0	91
Unknown					CAS #:		
9.801	1275482	11.3594039	419	0		0	91
Unknown					CAS #:		
9.966	576288	5.13240775	189	0		0	91
Eicosane					CAS #: 112-95-8		
10.036	576842	5.13734021	190	96	NIST05.L	113490	91
Unknown					CAS #:		
10.389	834048	7.42800930	274	0		0	91
Unknown					CAS #:		
10.795	831033	9.87541707	364	0		0	98
Octacosane					CAS #: 630-02-4		
11.772	658444	7.82448679	289	98	NIST05.L	169721	98
Unknown					CAS #:		
11.895	876632	10.4172810	384	0		0	98
Unknown					CAS #:		
11.913	652634	7.75544562	286	0		0	98
Unknown					CAS #:		
12.125	717211	8.52283440	314	0		0	98
Unknown					CAS #:		
12.383	498630	5.92536401	219	0		0	98
Unknown					CAS #:		
12.654	1328822	15.7907927	583	0		0	98

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
13.113	751221	8.92698245	329	0		0	98
Unknown					CAS #:		
13.354	635629	7.55336392	279	0		0	98
Unknown					CAS #:		
13.448	498285	5.92126816	218	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.824	764973	9.09040763	335	95	NIST05.L	174402	98

Data File: /chem/HSD5.i/s012010.b/s5a2017.d

Date: 20-JAN-2010 23:19

Client ID: RE15-10-7162

Sample Info: 1244923002194338611SWH11.LANL

Volume Injected (uL): 0.5

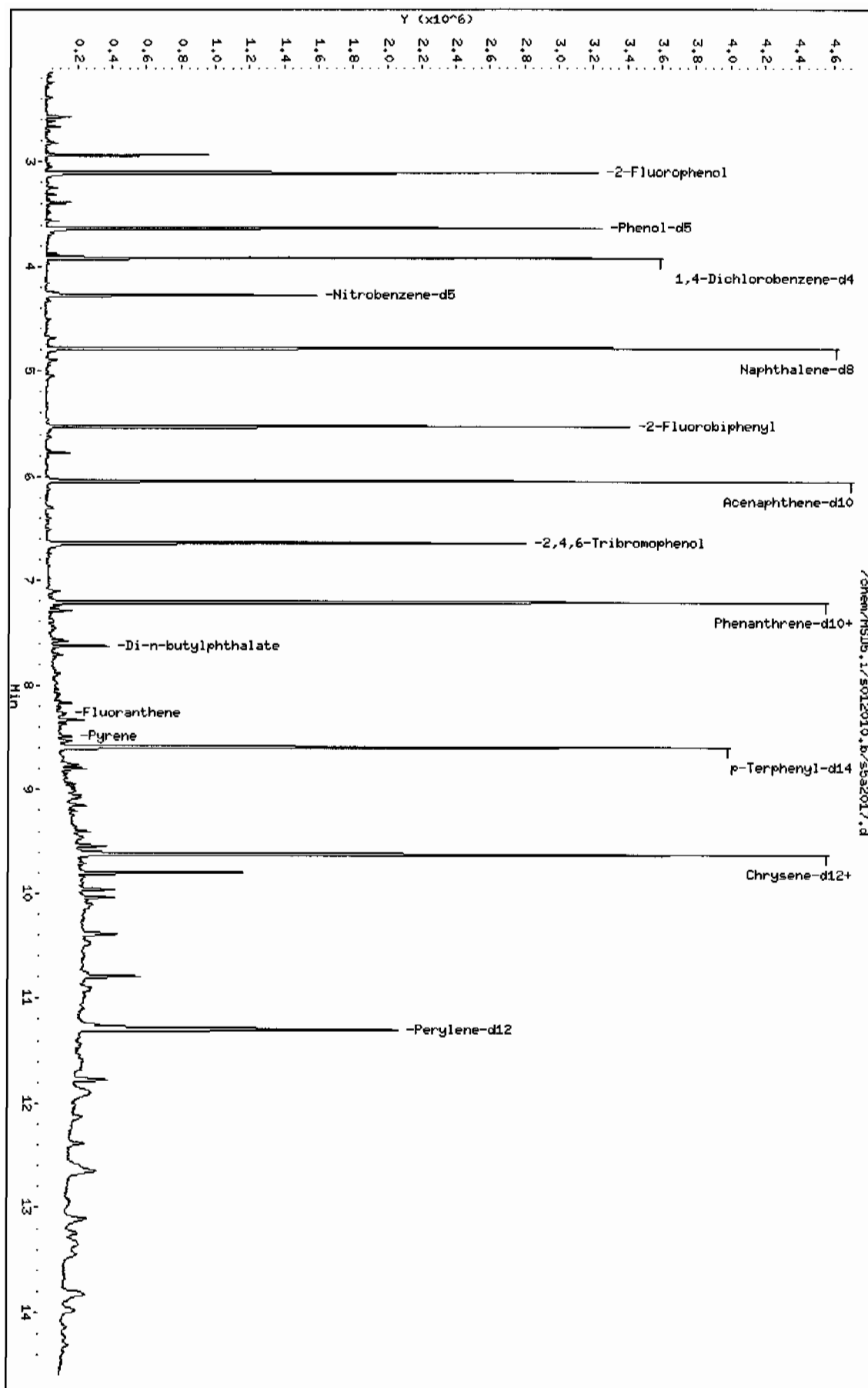
Column phase: JMW DB-5MS

Instrument: HSD5.i

Operator: RMB

Column diameter: 0.20

Page 1



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 12449230021943386111SVH111LANL

Volume Injected (uL): 0.5

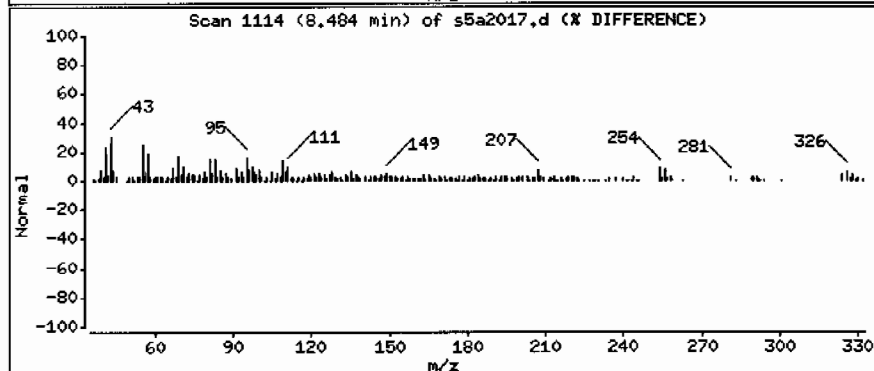
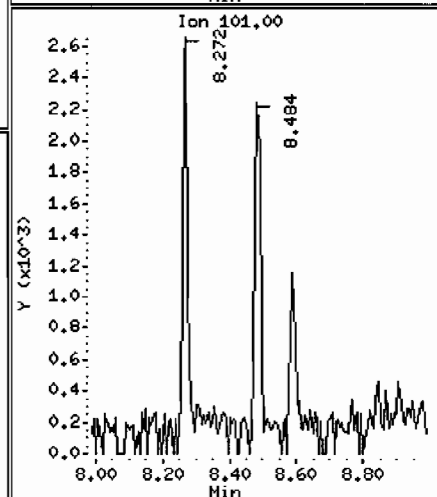
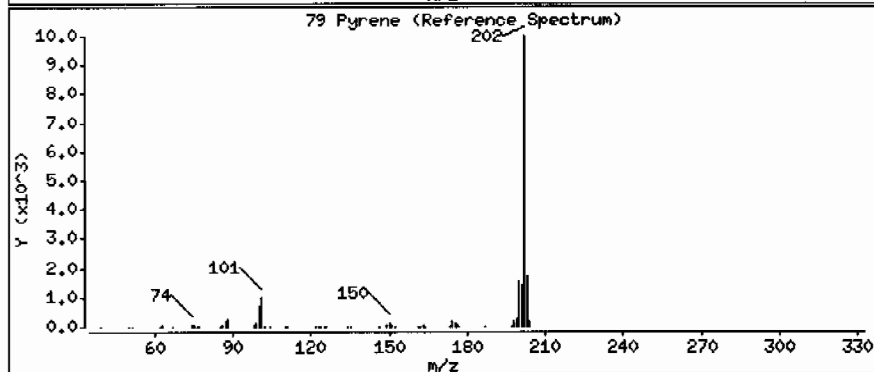
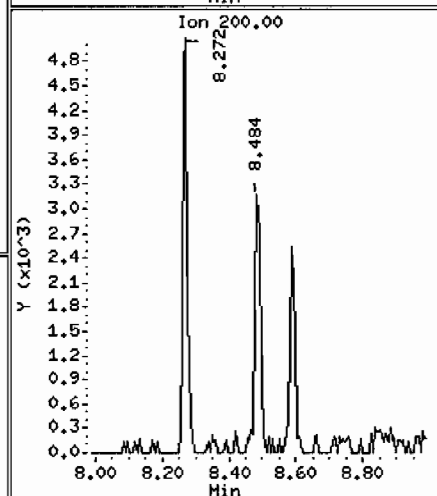
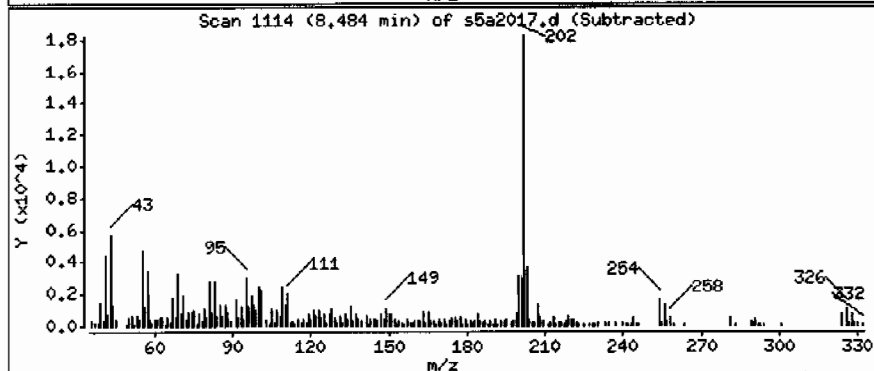
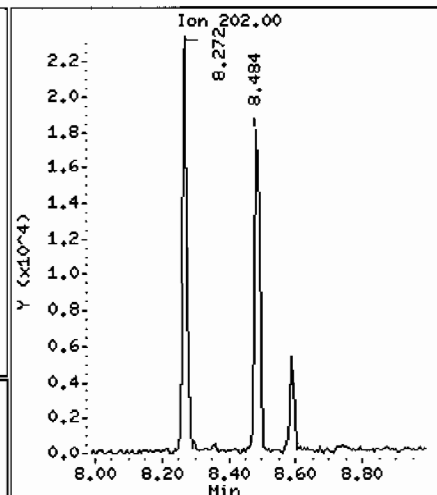
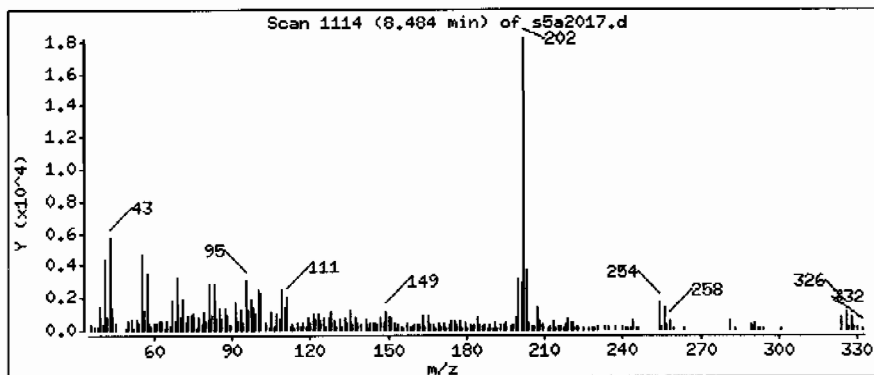
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

79 Pyrene

Concentration: 16.4 ug/Kg



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: 1244923002194338611ISVM11ILANL

Volume Injected (uL): 0.5

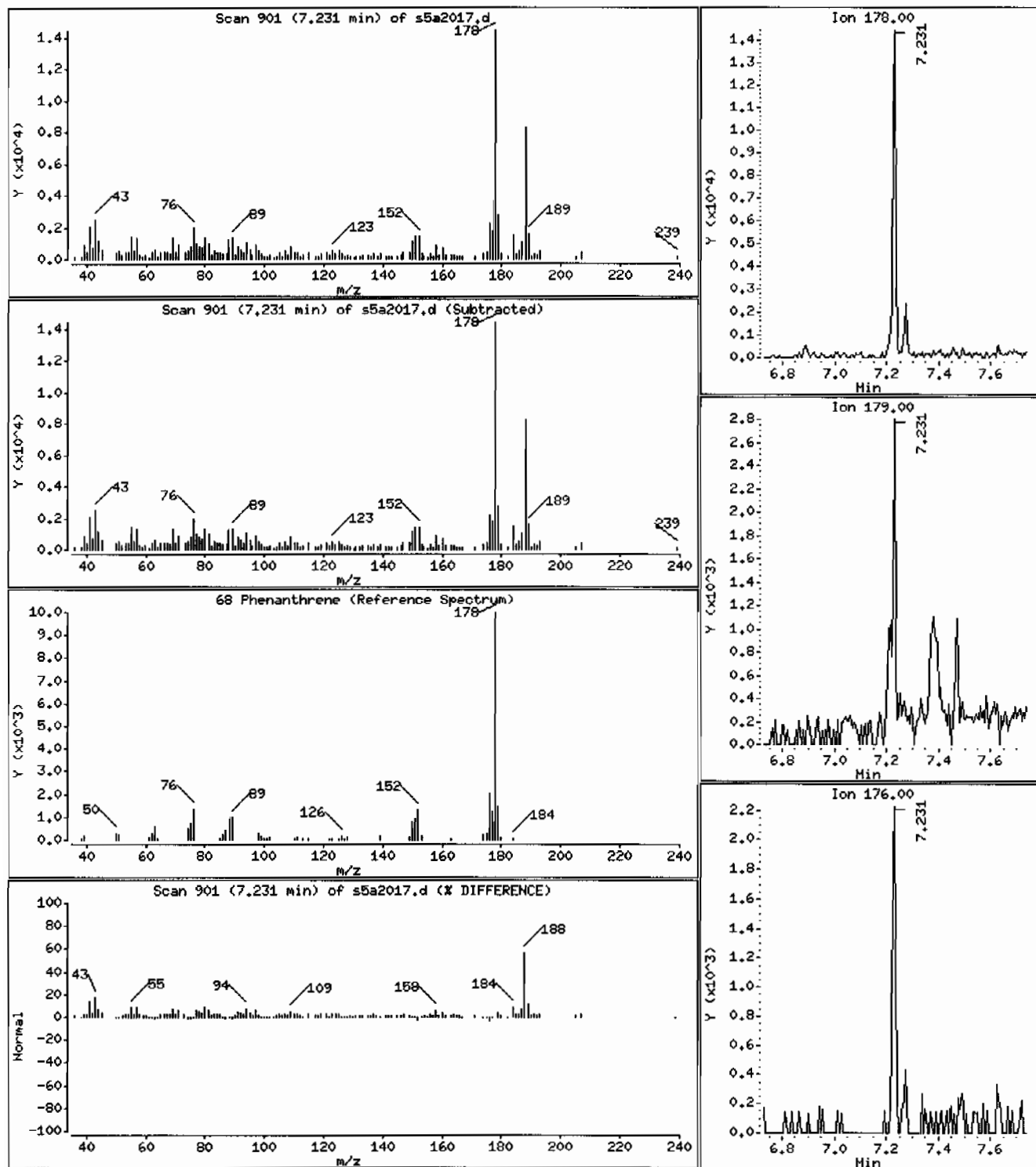
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

68 Phenanthrene

Concentration: 14.0 ug/Kg



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 12449230021943386111SVMI11LANL

Volume Injected (uL): 0.5

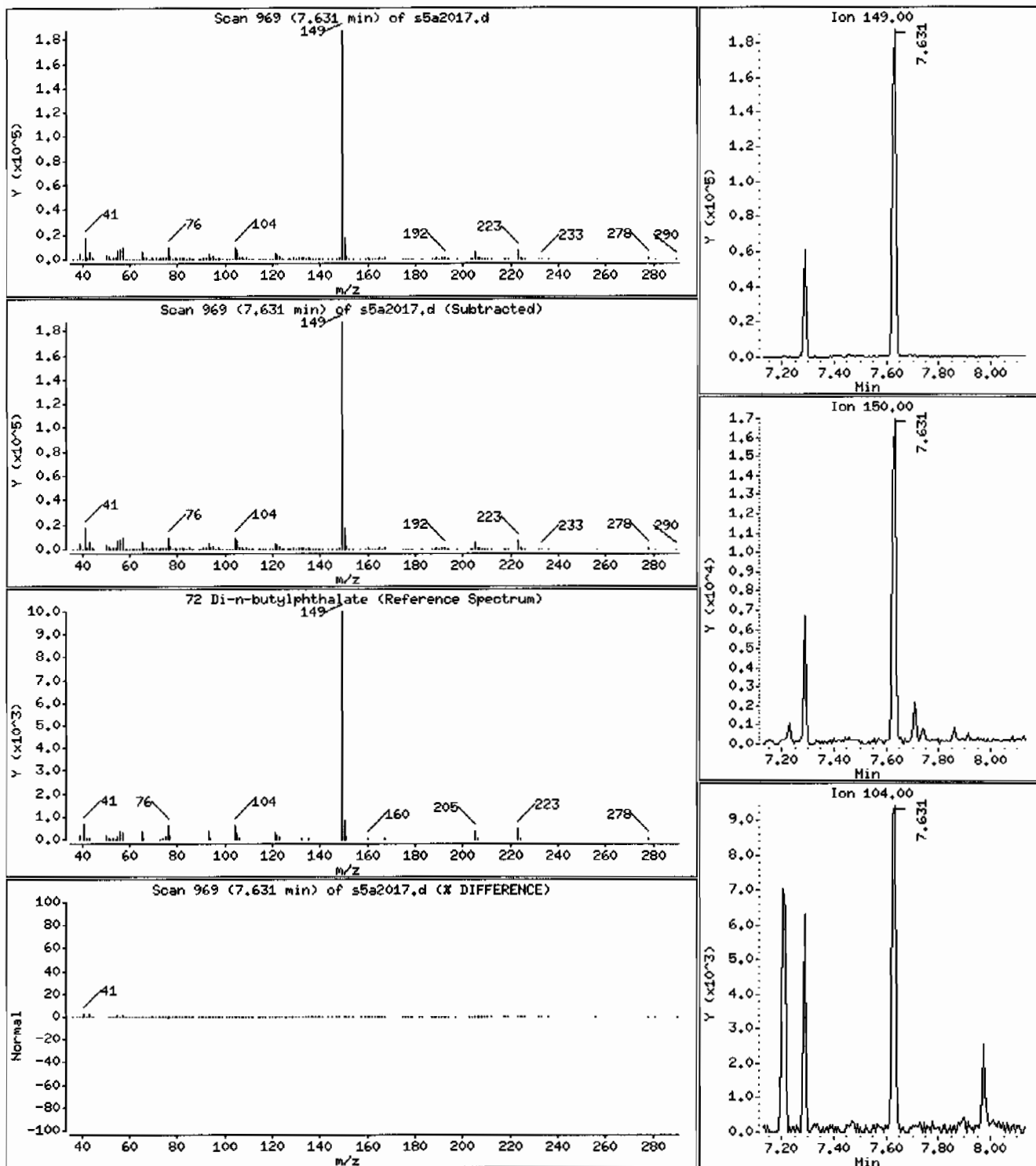
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 129 ug/Kg



Date: 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: I244923002I94338611ISVH11ILANL

Volume Injected (uL): 0.5

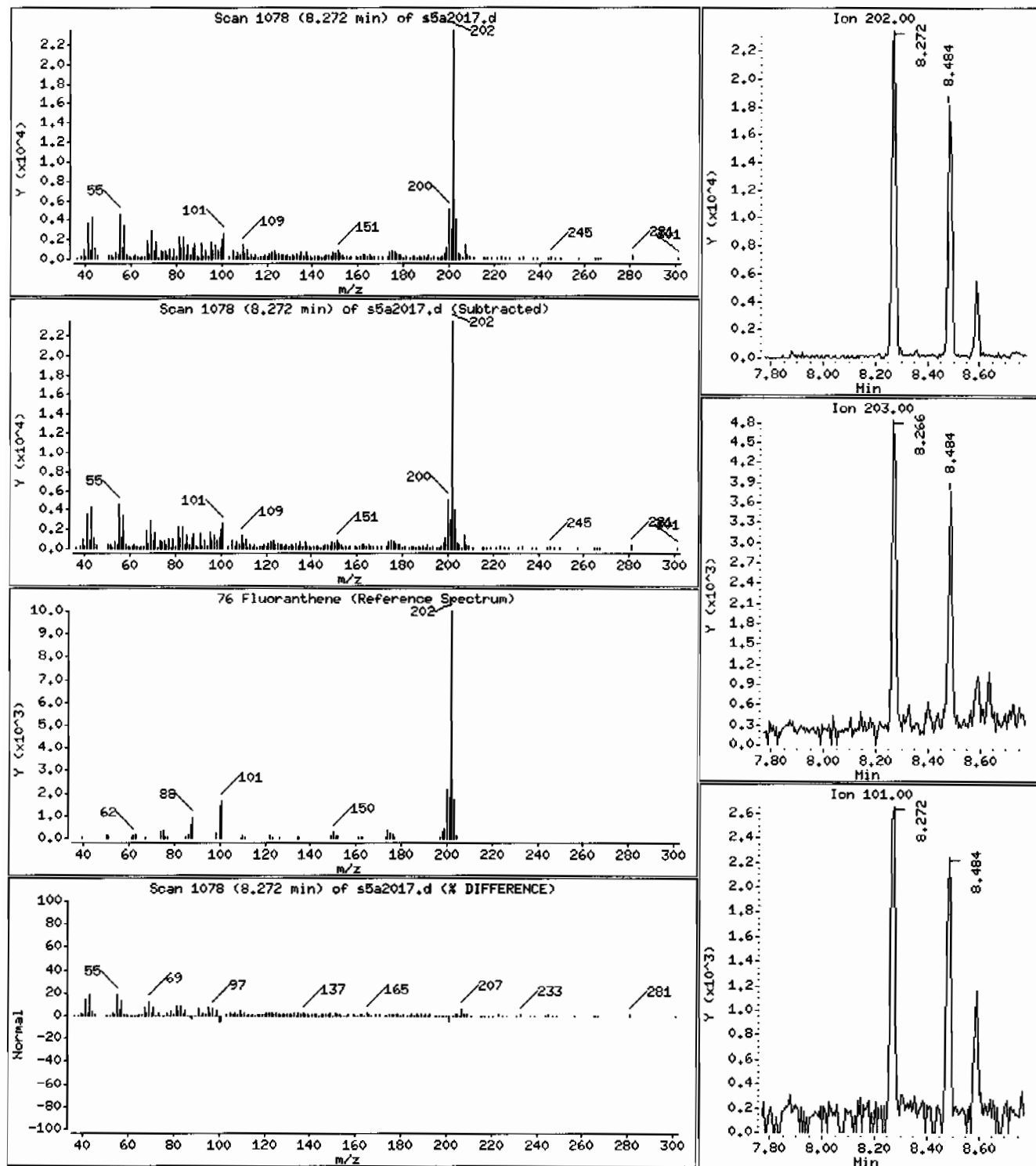
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

76 Fluoranthene

Concentration: 23.1 ug/Kg



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: 12449230021943386111SVH111LANL

Volume Injected (uL): 0.5

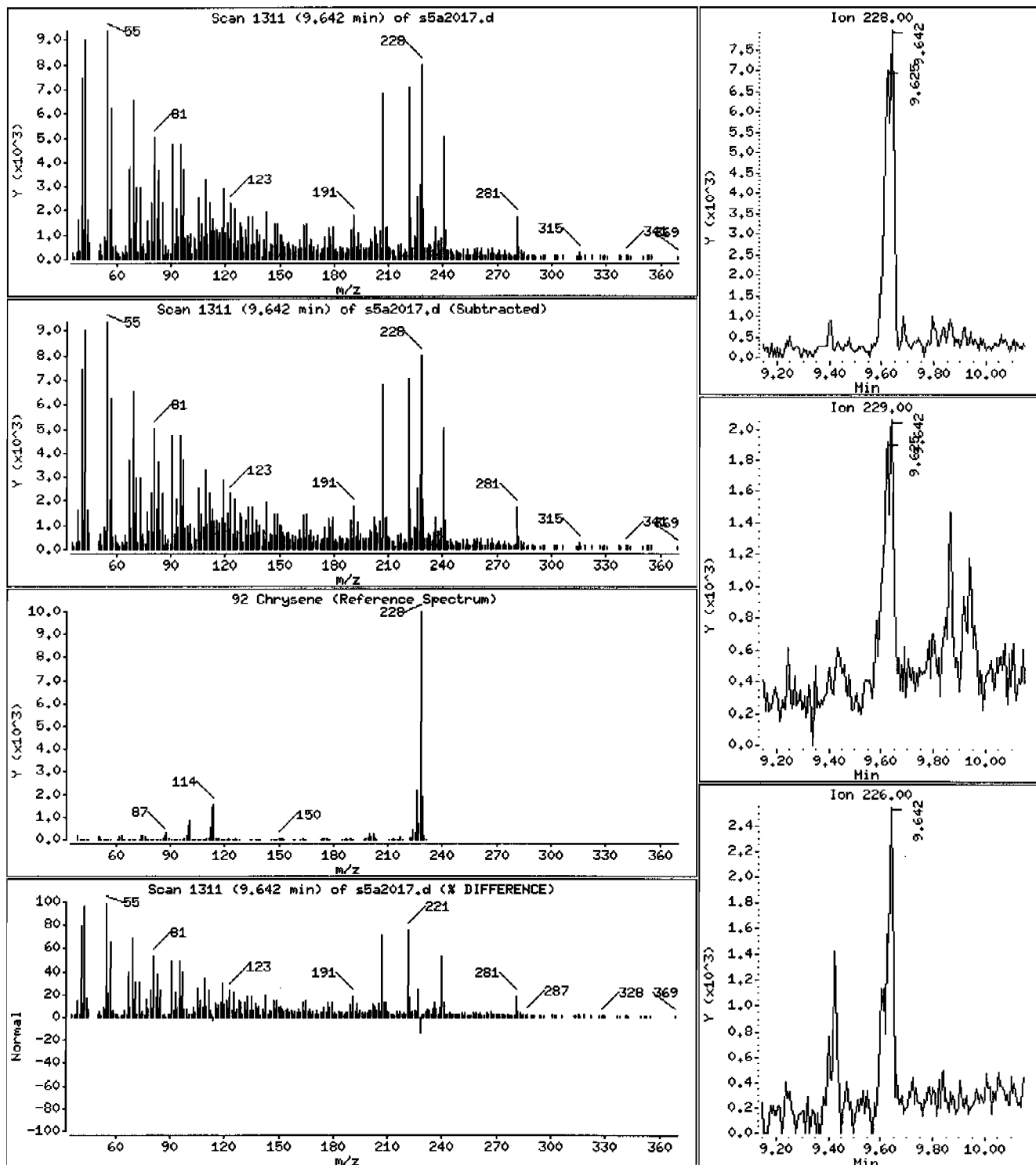
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

92 Chrysene

Concentration: 11.2 ug/Kg



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: 1244923002194338611|SVH11|LANL

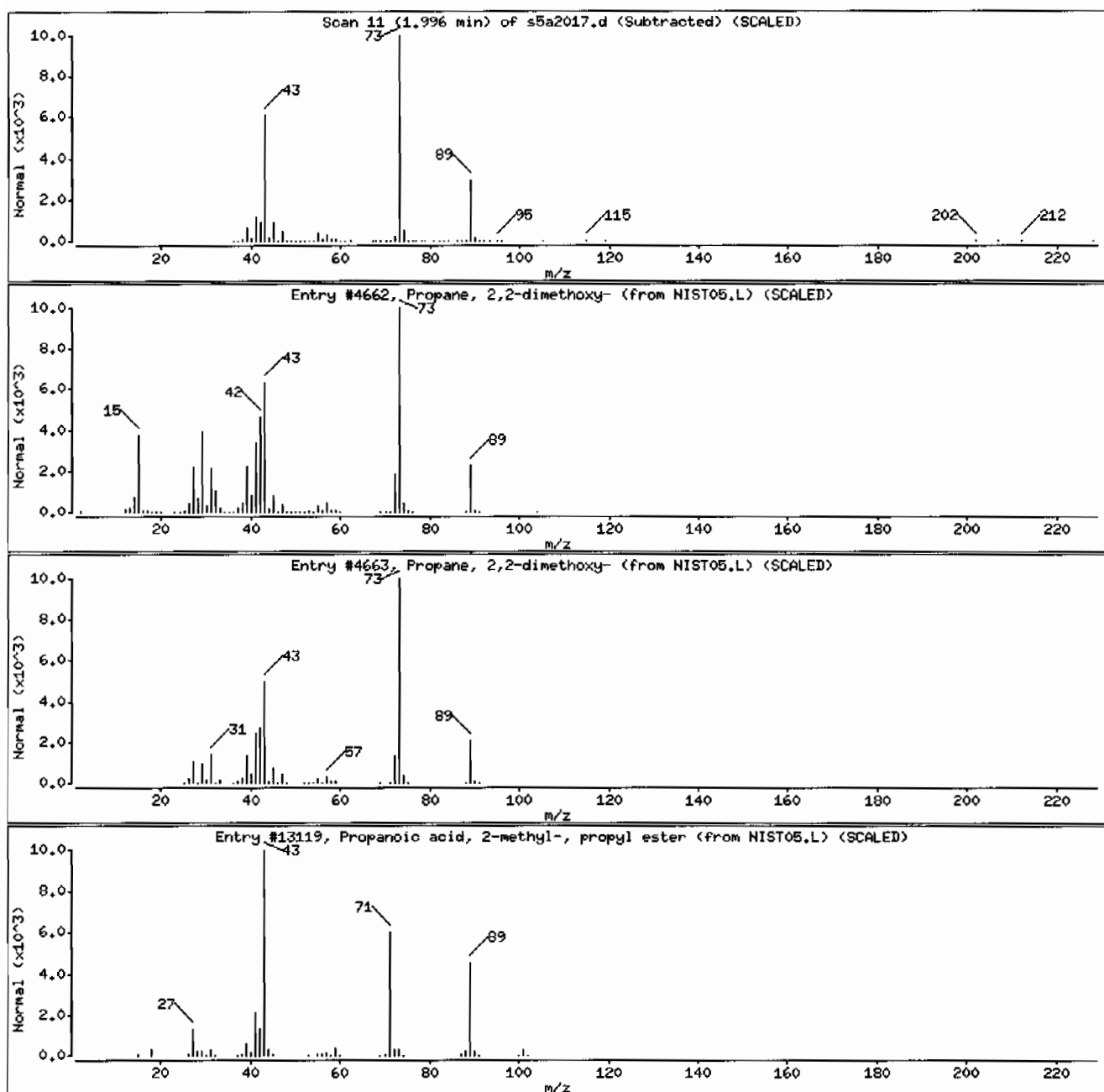
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
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 : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: 12449230021943386111SVMI11LANL

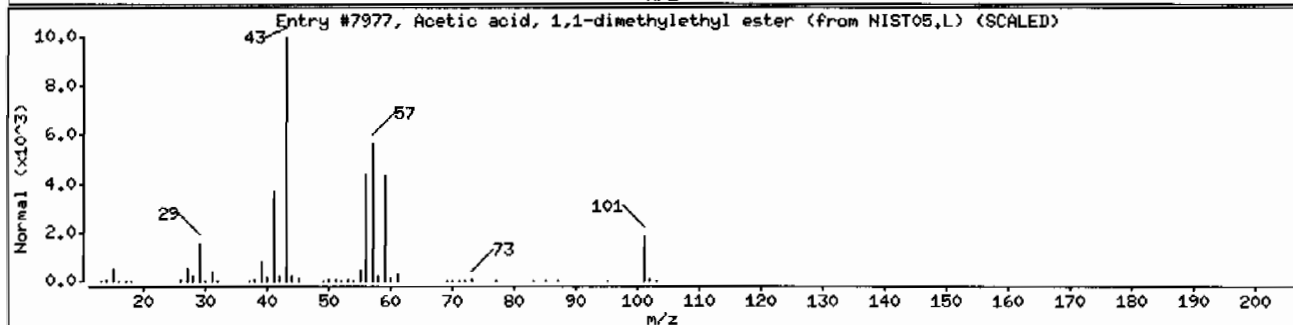
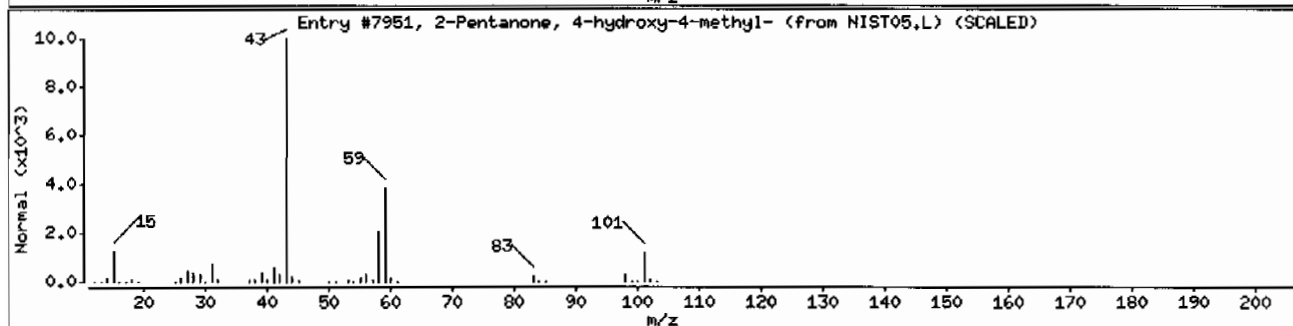
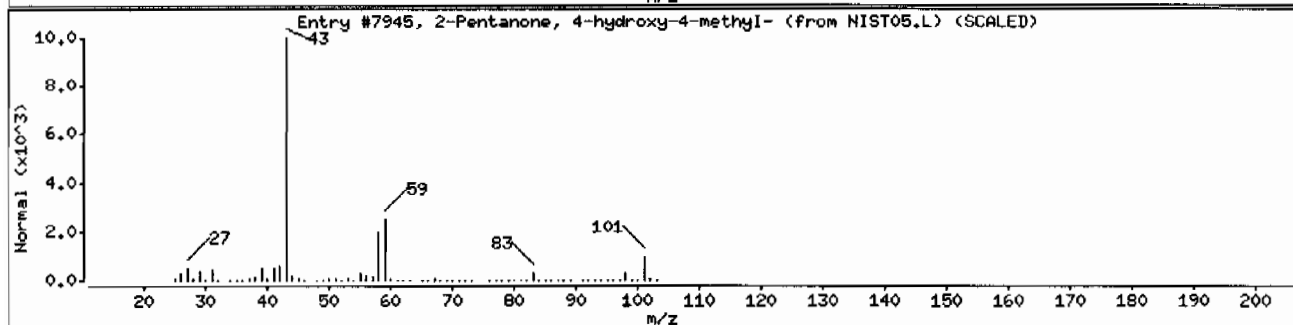
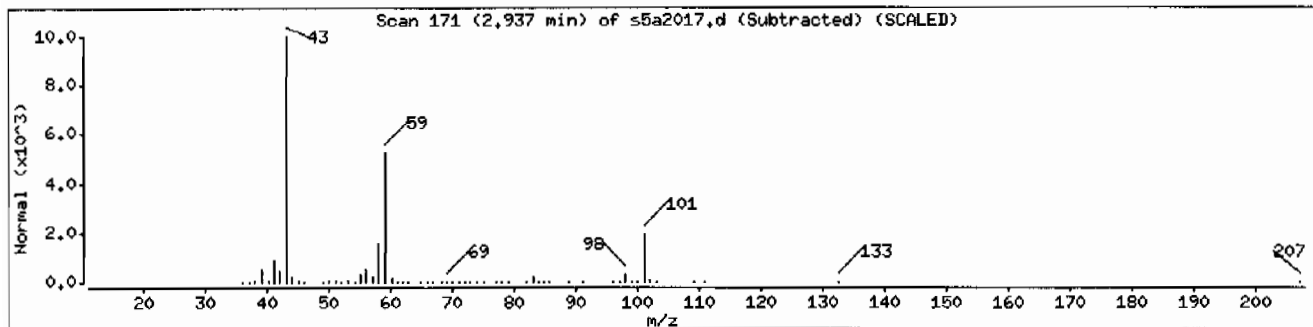
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	50	C ₆ H ₁₂ O ₂	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	45	C ₆ H ₁₂ O ₂	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C ₆ H ₁₂ O ₂	116



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002194338611|SVMI1|LANL

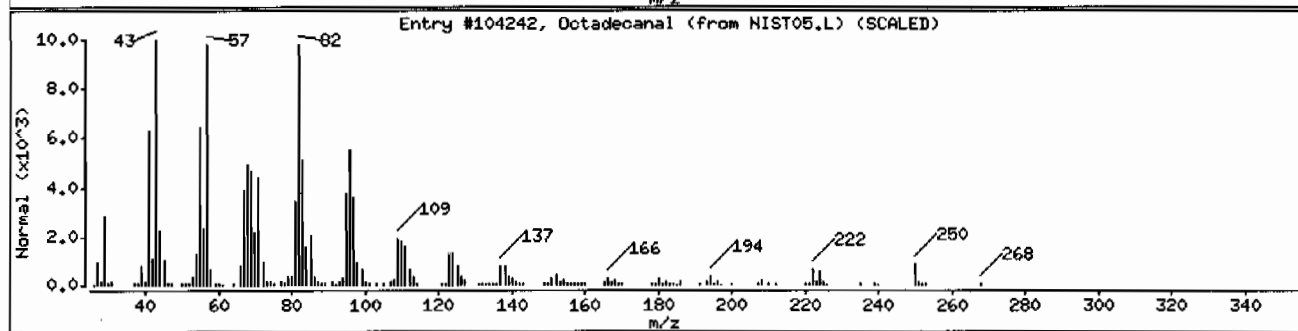
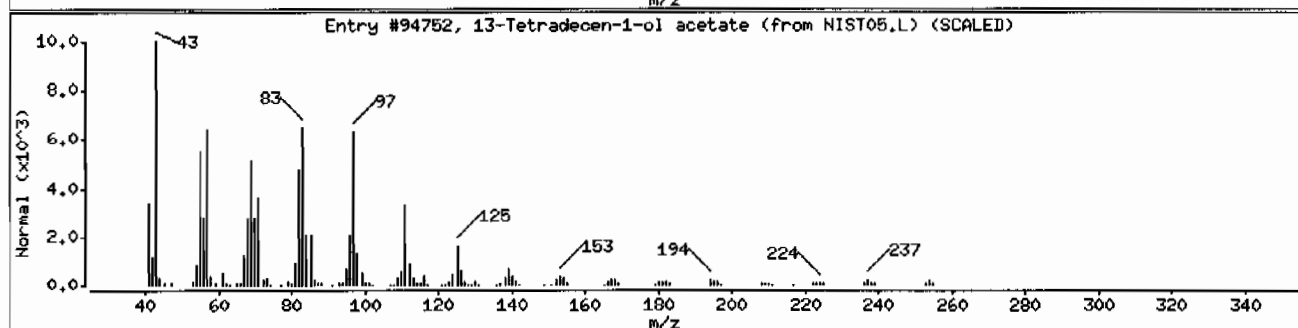
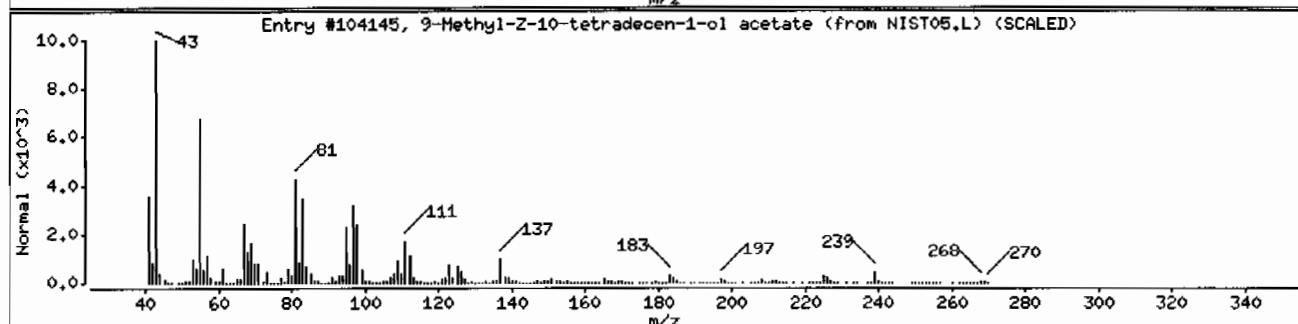
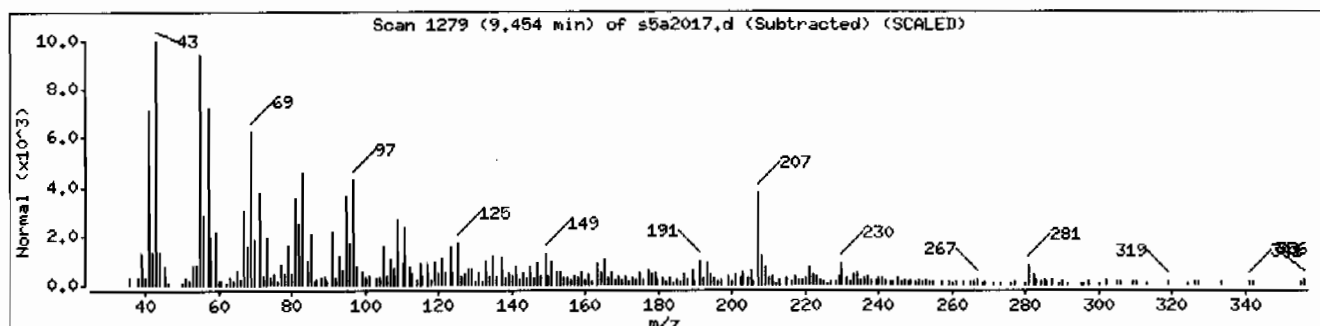
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Methyl-7-10-tetradecen-1-ol acetate	1000130-99-4	NIST05.L	104145	60	C17H32O2	268
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	50	C16H30O2	254
Octadecanal	638-66-4	NIST05.L	104242	49	C18H36O	268



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002194338611SVH111LANL

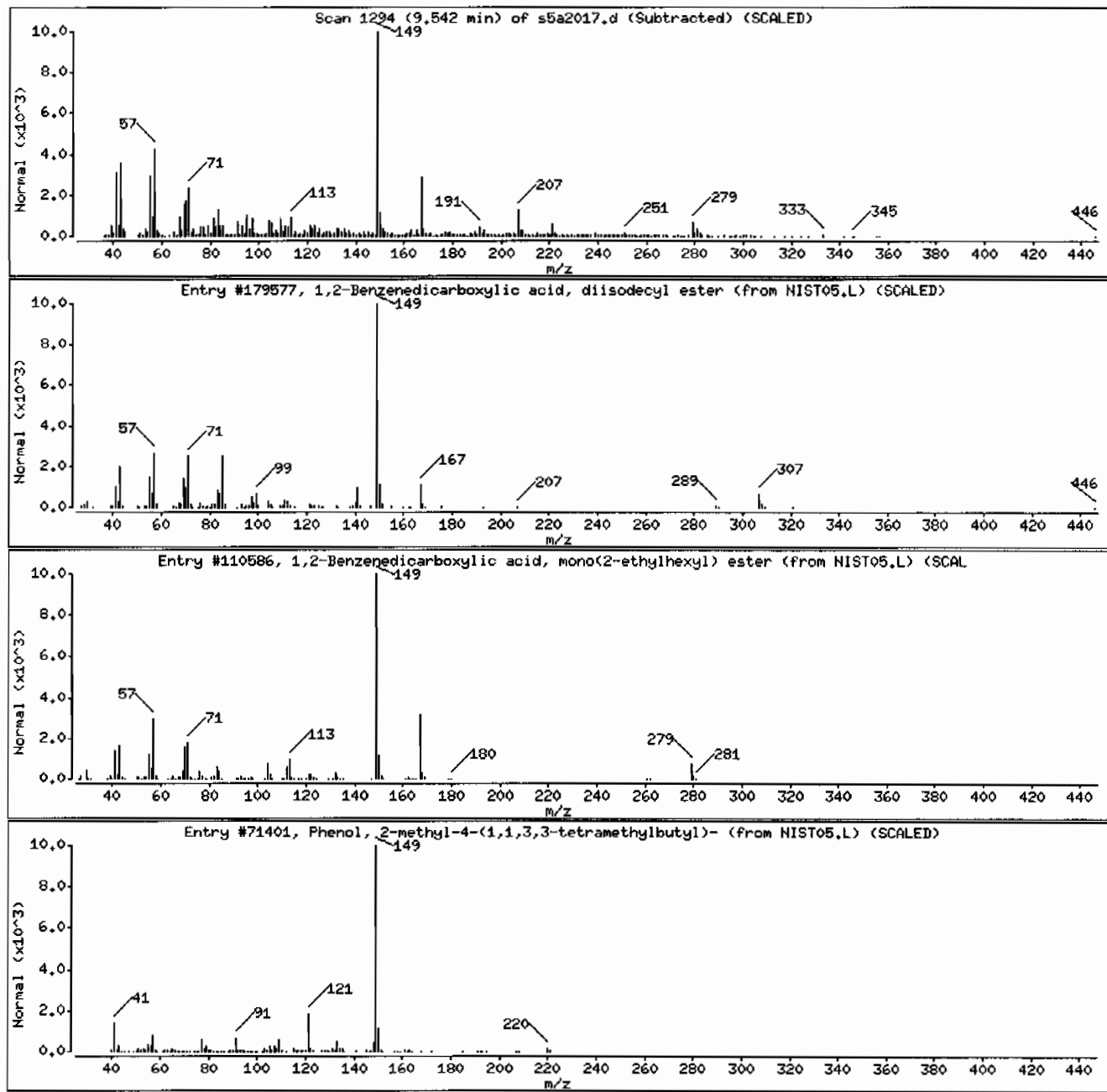
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Benzenedicarboxylic acid, diisodecyl	26761-40-0	NIST05.L	179577	68	C28H46O4	446
1,2-Benzenedicarboxylic acid, mono(2-eth	4376-20-9	NIST05.L	110586	68	C16H22O4	278
Phenol, 2-methyl-4-(1,1,3,3-tetramethylb	2219-84-3	NIST05.L	71401	55	C15H24O	220



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002194338611SVH111LANL

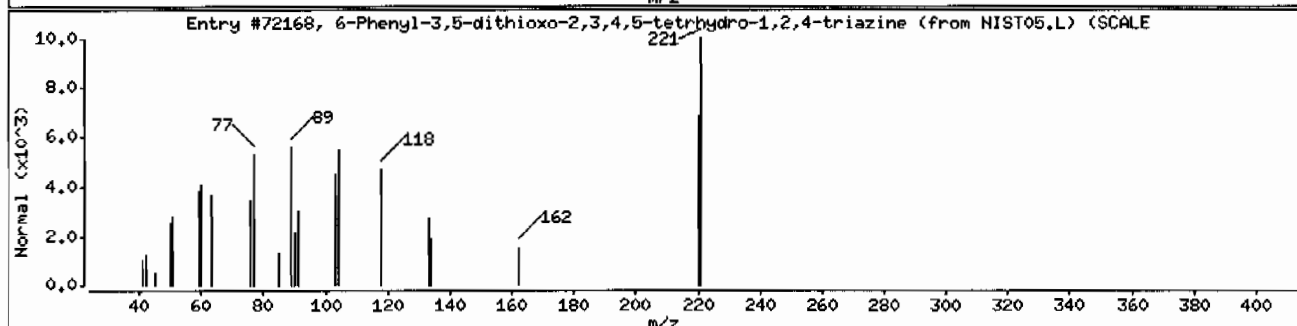
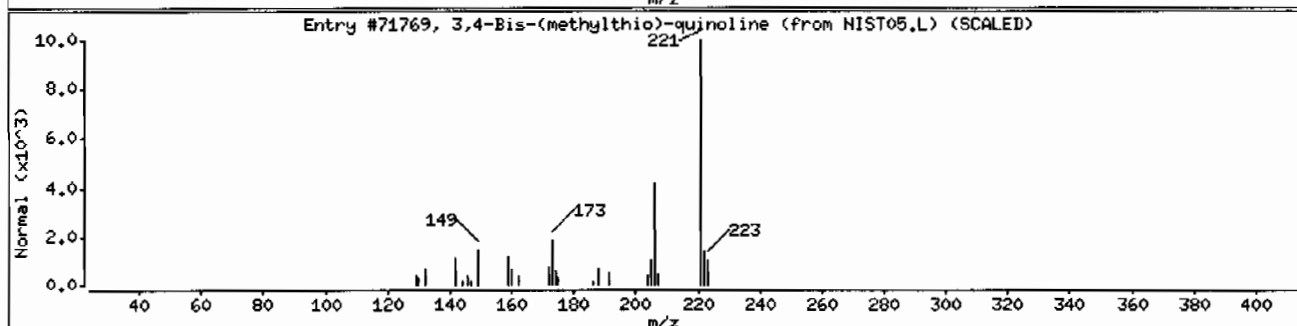
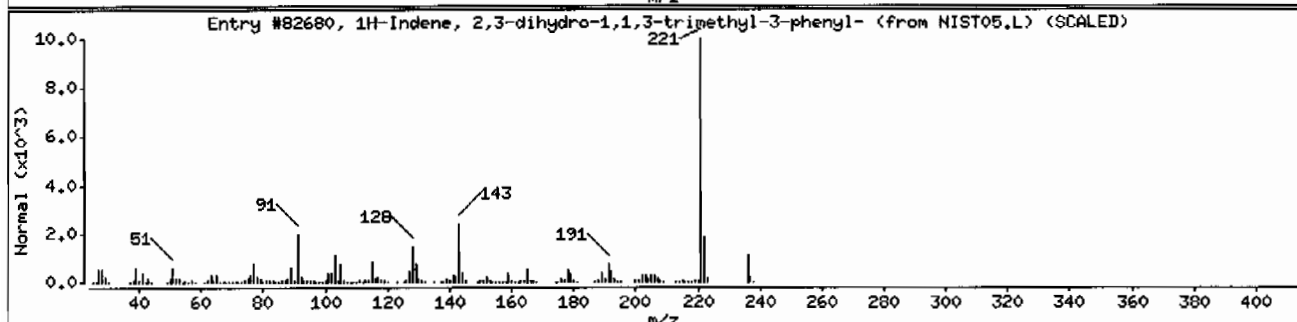
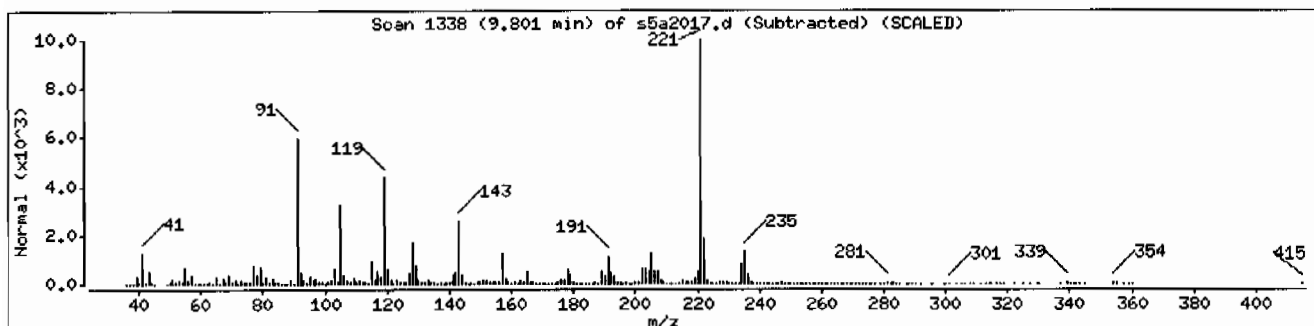
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	3910-35-8	NIST05.L	82680	53	C18H20	236
3,4-Bis-(methylthio)-quinoline	74579-34-3	NIST05.L	71769	50	C11H11NS2	221
6-Phenyl-3,5-dithioxo-2,3,4,5-tetrahydro-	38119-57-2	NIST05.L	72168	46	C9H7N3S2	221



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 12449230021943386111SVH111LANL

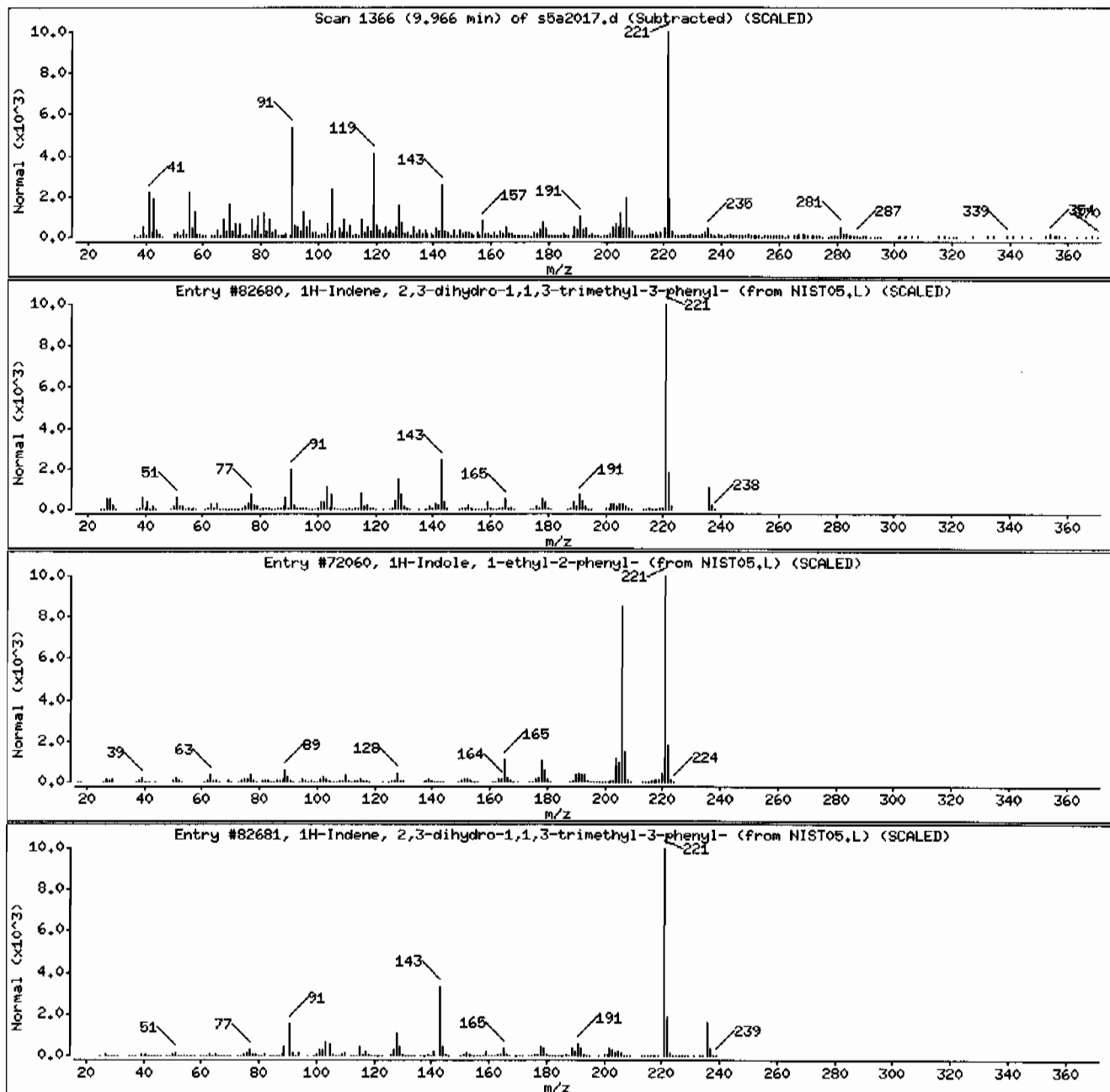
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	3910-35-8	NIST05.L	82680	53	C18H20	236
1H-Indole, 1-ethyl-2-phenyl-	13228-39-2	NIST05.L	72060	46	C16H15N	221
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	3910-35-8	NIST05.L	82681	43	C18H20	236



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: 1244923002194338611SVH11ILANL

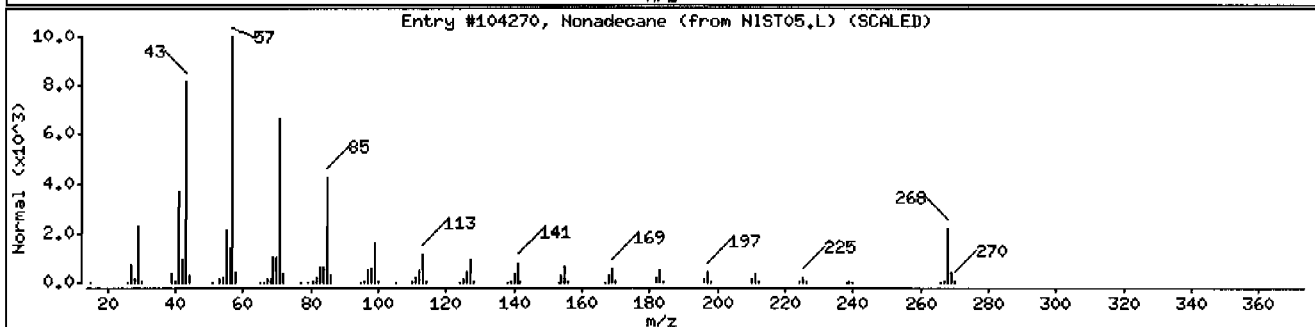
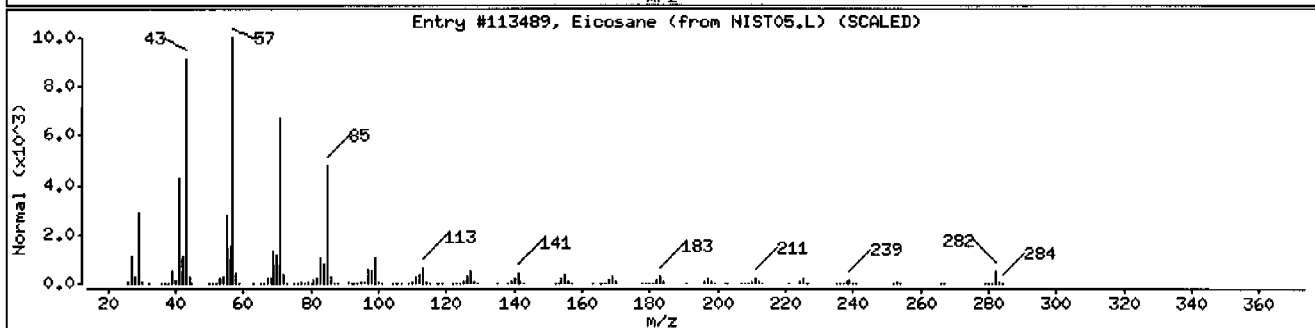
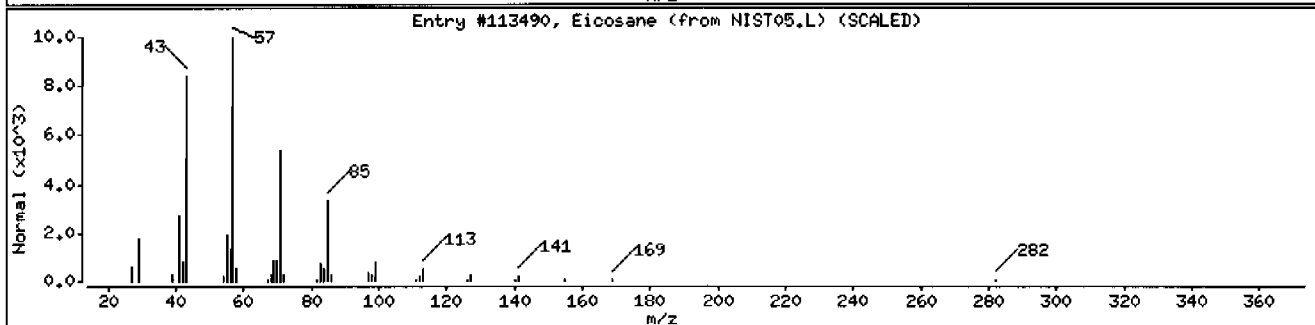
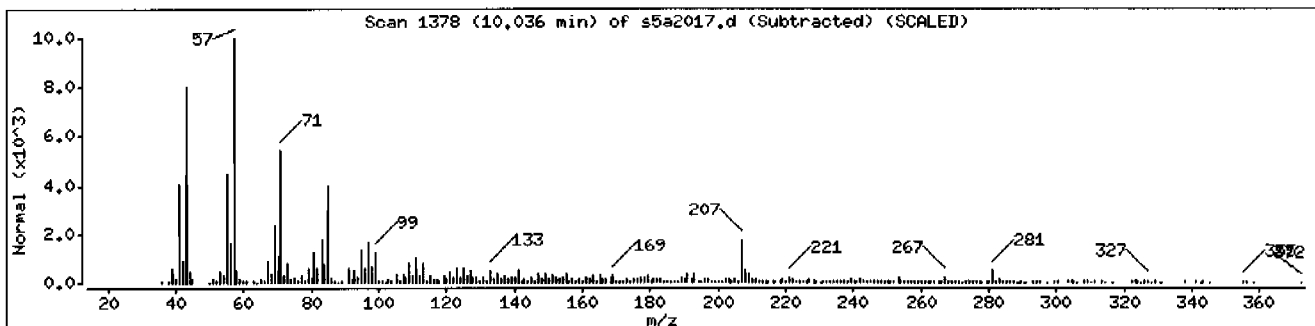
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113490	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	95	C ₂₀ H ₄₂	282
Nonadecane	629-92-5	NIST05.L	104270	91	C ₁₉ H ₄₀	268



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: 12449230021943386111SVMI11LANL

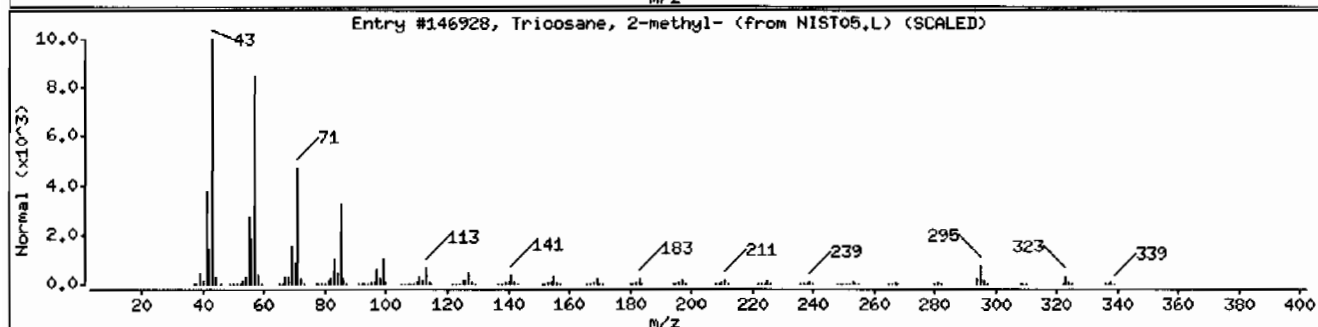
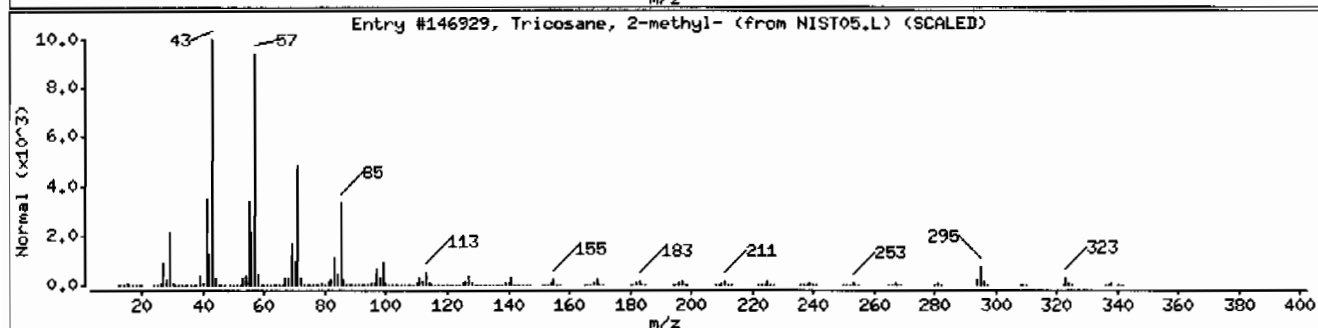
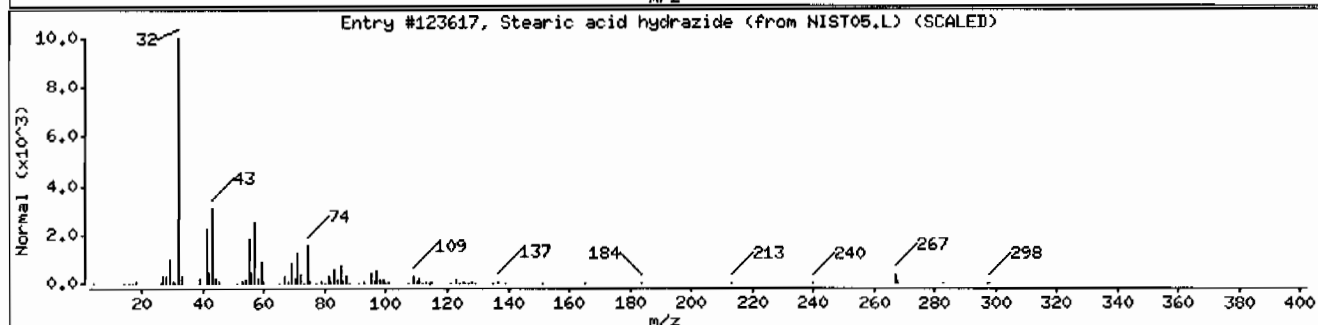
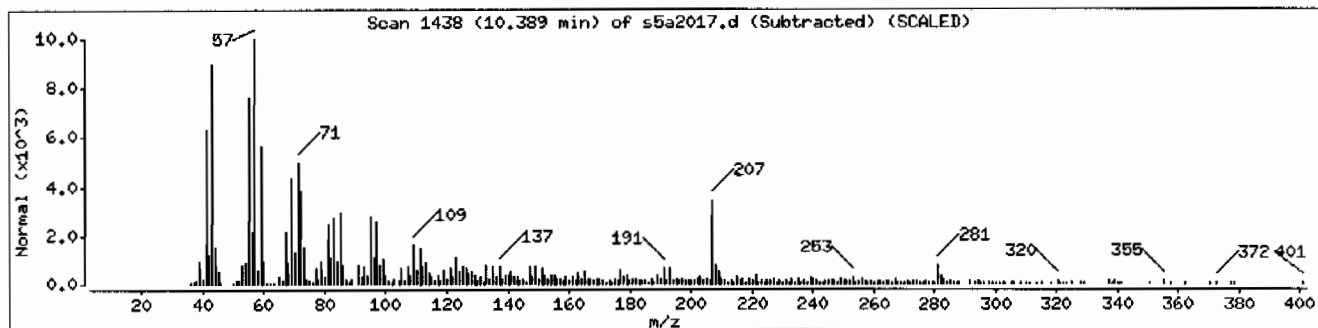
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Stearic acid hydrazide	4130-54-5	NIST05.L	123617	55	C18H38N2O	298
Tricosane, 2-methyl-	1928-30-9	NIST05.L	146929	50	C24H50	338
Tricosane, 2-methyl-	1928-30-9	NIST05.L	146928	48	C24H50	338



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: I244923002194338611SVH111LANL

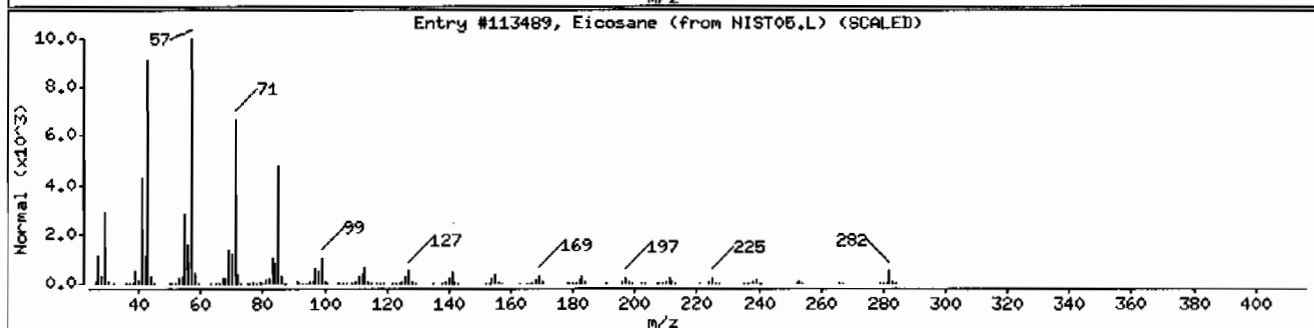
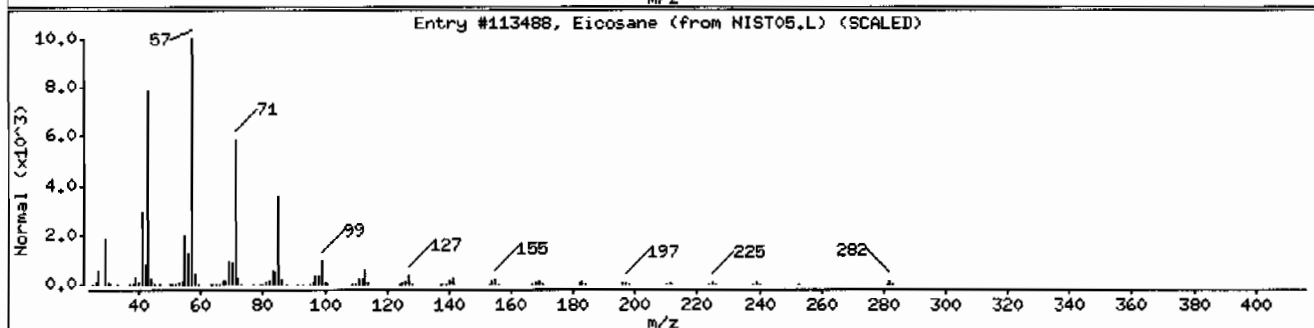
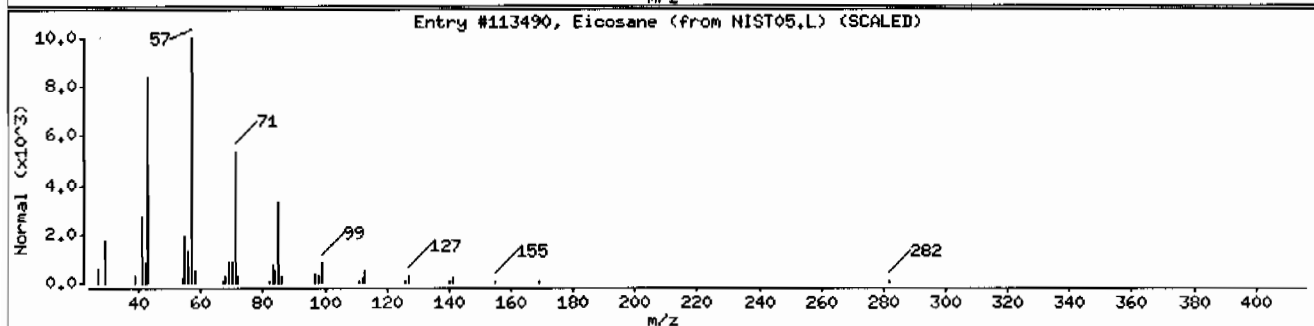
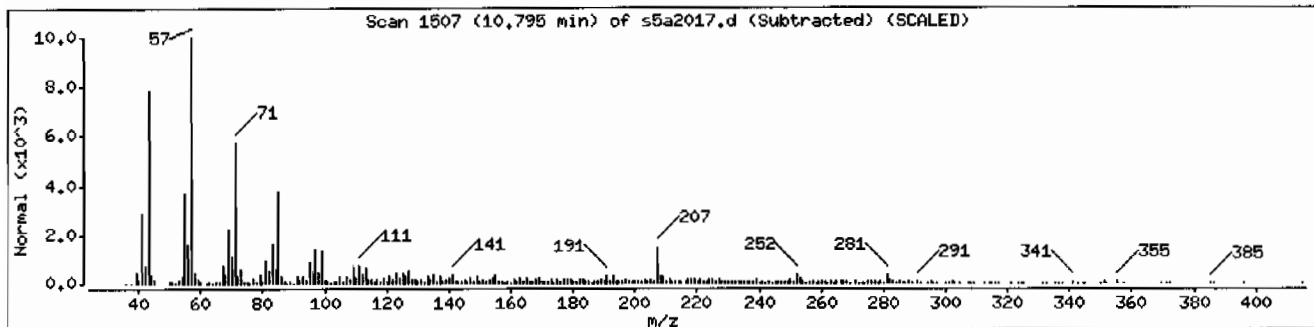
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113490	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113488	96	C ₂₀ H ₄₂	282
Eicosane	112-95-8	NIST05.L	113489	95	C ₂₀ H ₄₂	282



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 12449230021943386111SVH111LANL

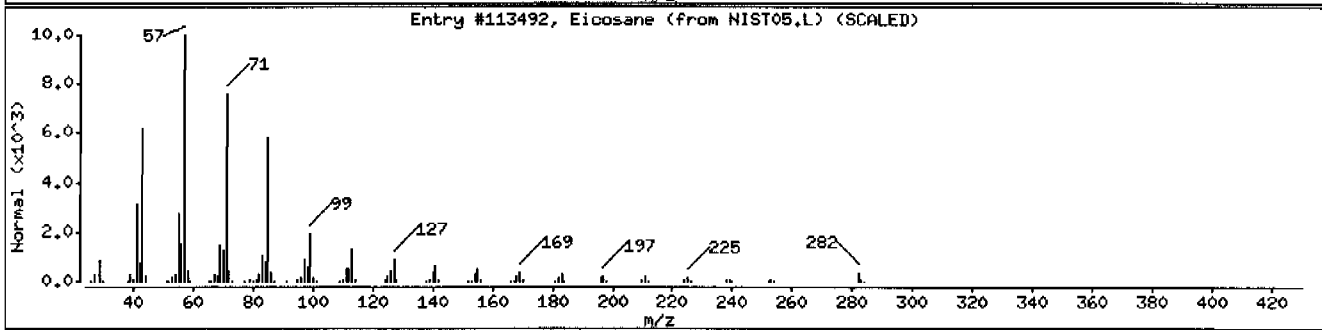
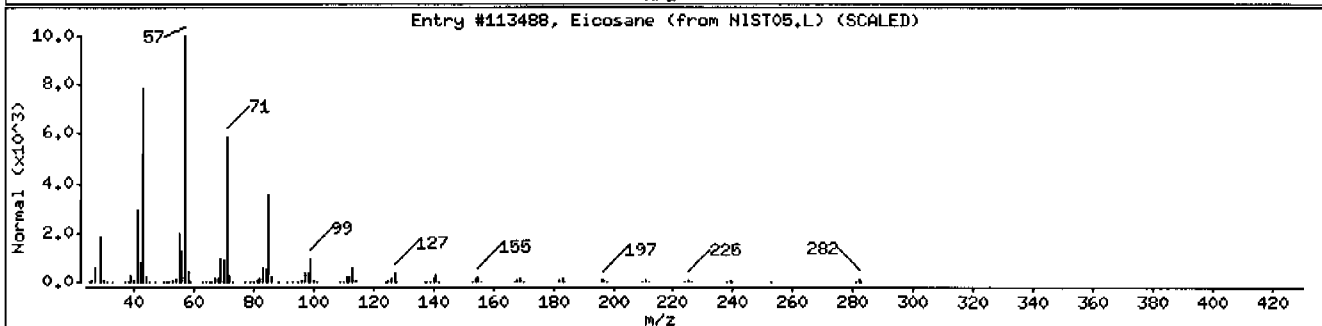
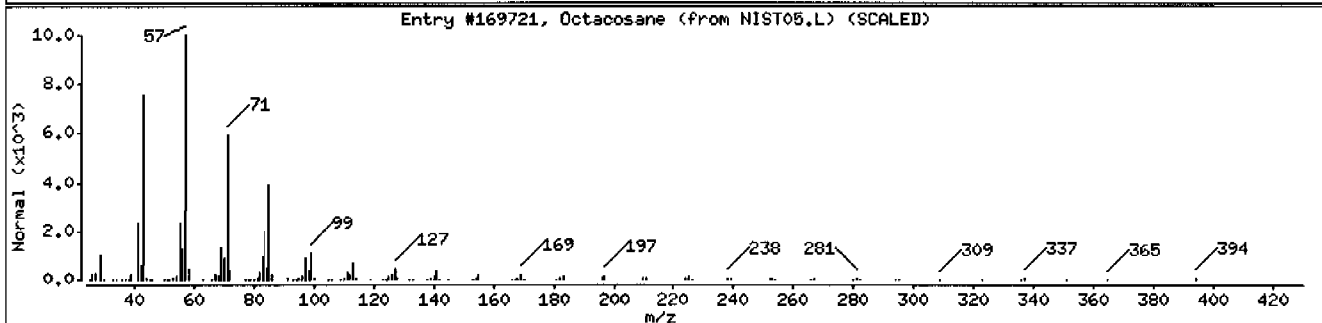
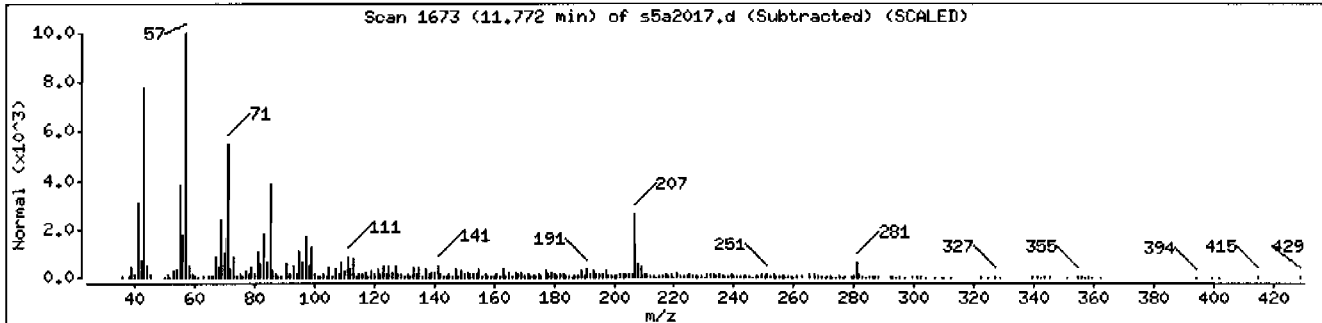
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octacosane	630-02-4	NIST05.L	169721	98	C28H58	394
Eicosane	112-95-8	NIST05.L	113488	96	C20H42	282
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002194338611SVH111LANL

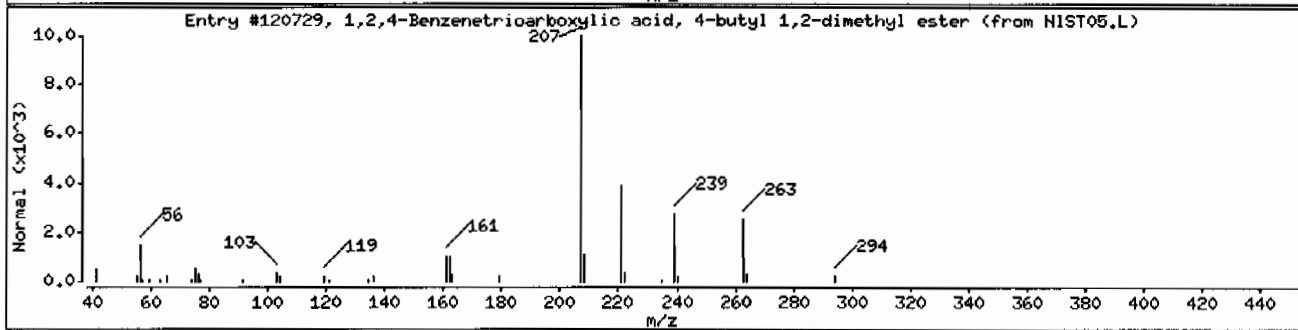
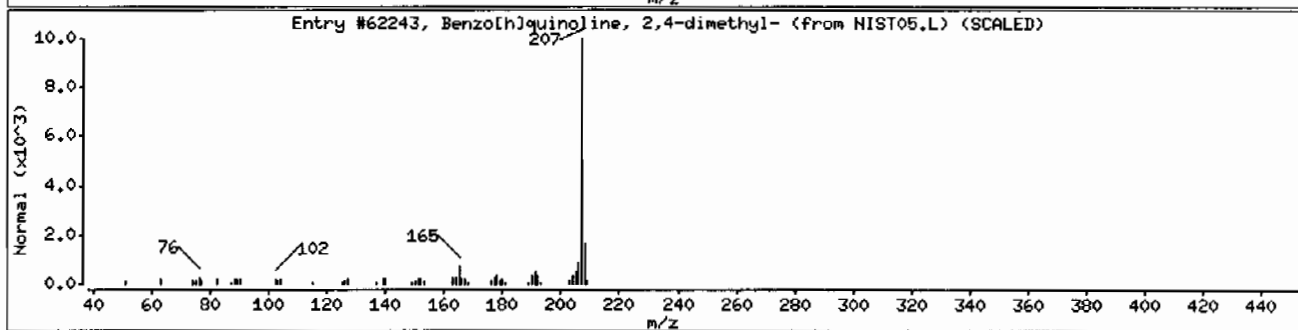
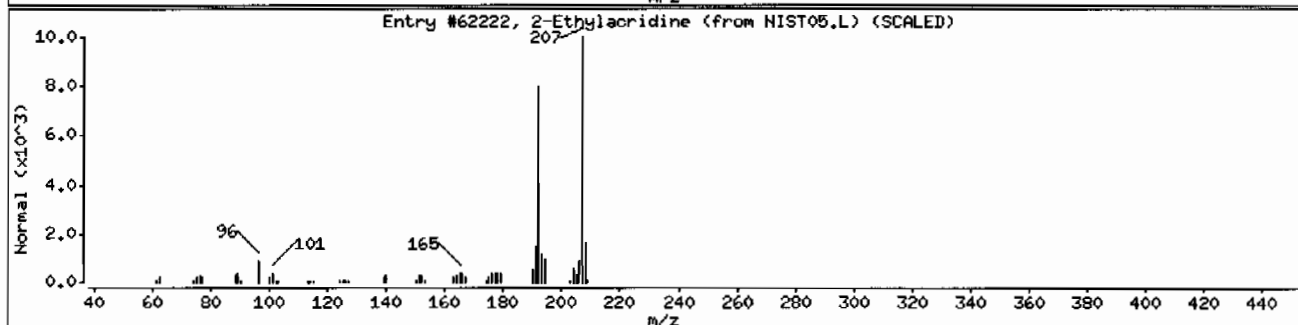
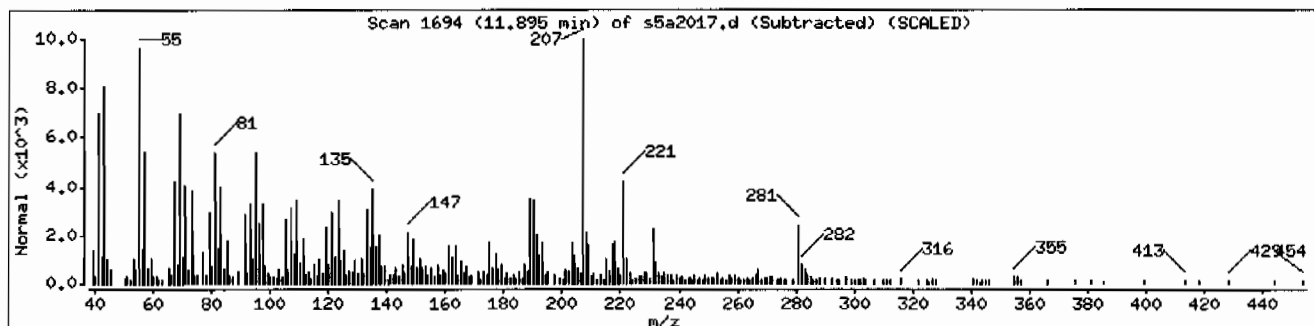
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Ethylacridine	55751-83-2	NIST05.L	62222	42	C15H13N	207
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	42	C15H13N	207
1,2,4-Benzenetricarboxylic acid, 4-butyl	43049-07-6	NIST05.L	120729	42	C15H18O6	294



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5,i

Sample Info: 1244923002194338611SVMI1ILANL

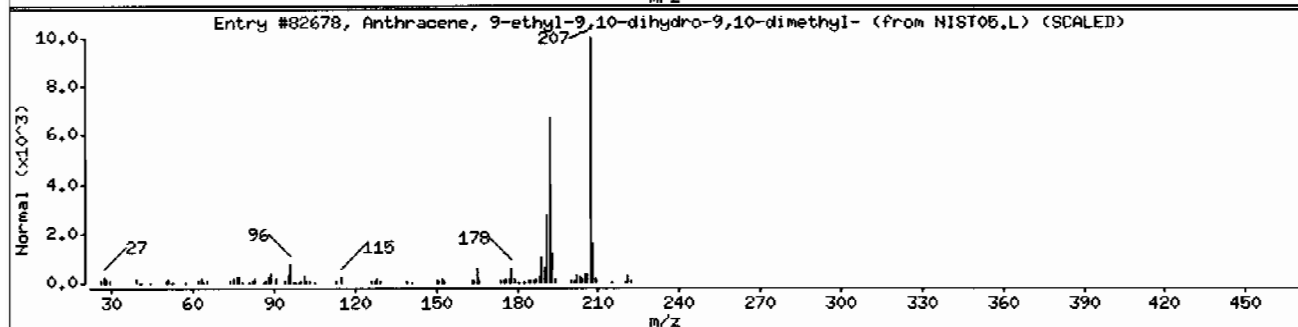
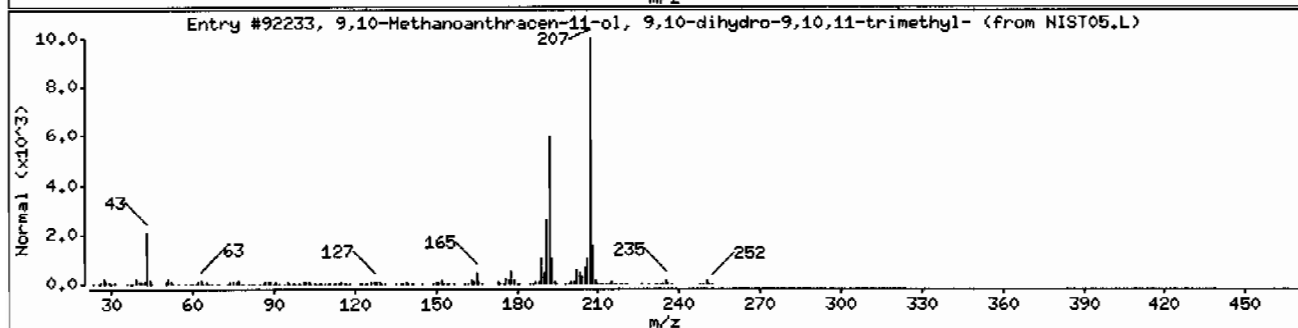
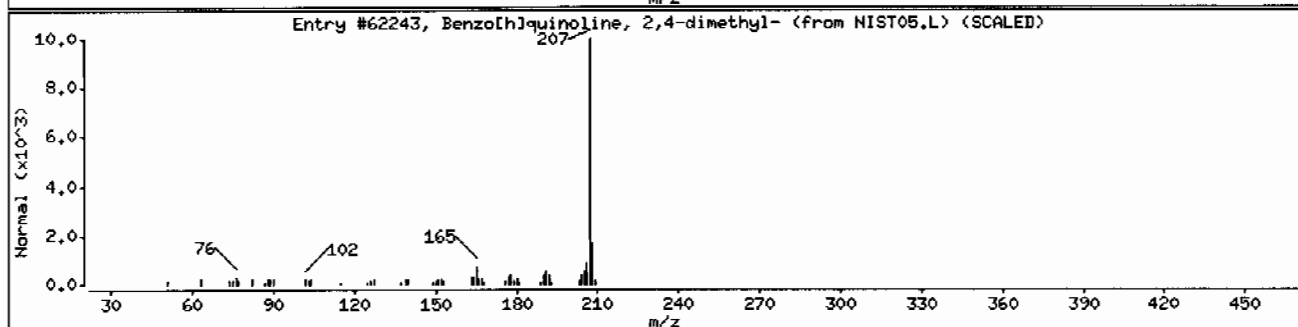
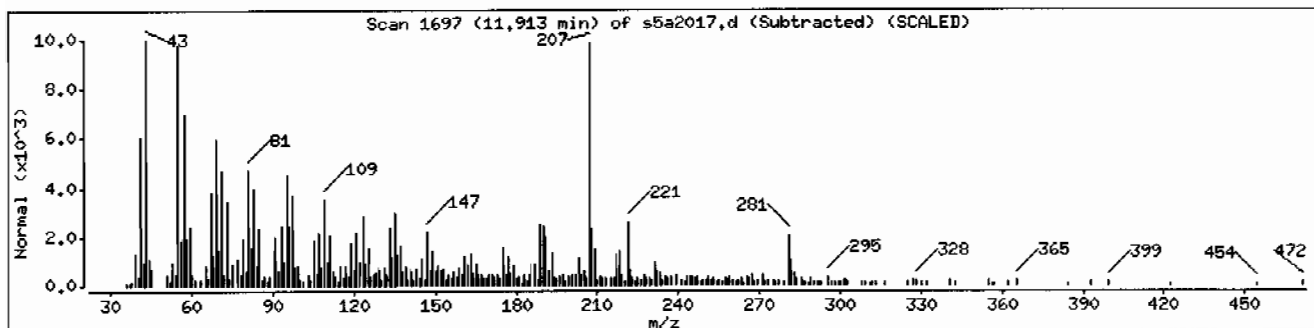
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	42	C15H13N	207
9,10-Methanoanthracen-11-ol, 9,10-dihydro	126615-74-5	NIST05.L	92233	38	C18H18O	250
Anthracene, 9-ethyl-9,10-dihydro-9,10-di	54947-86-3	NIST05.L	82678	35	C18H20	236



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002194338611/SVM11/LANL

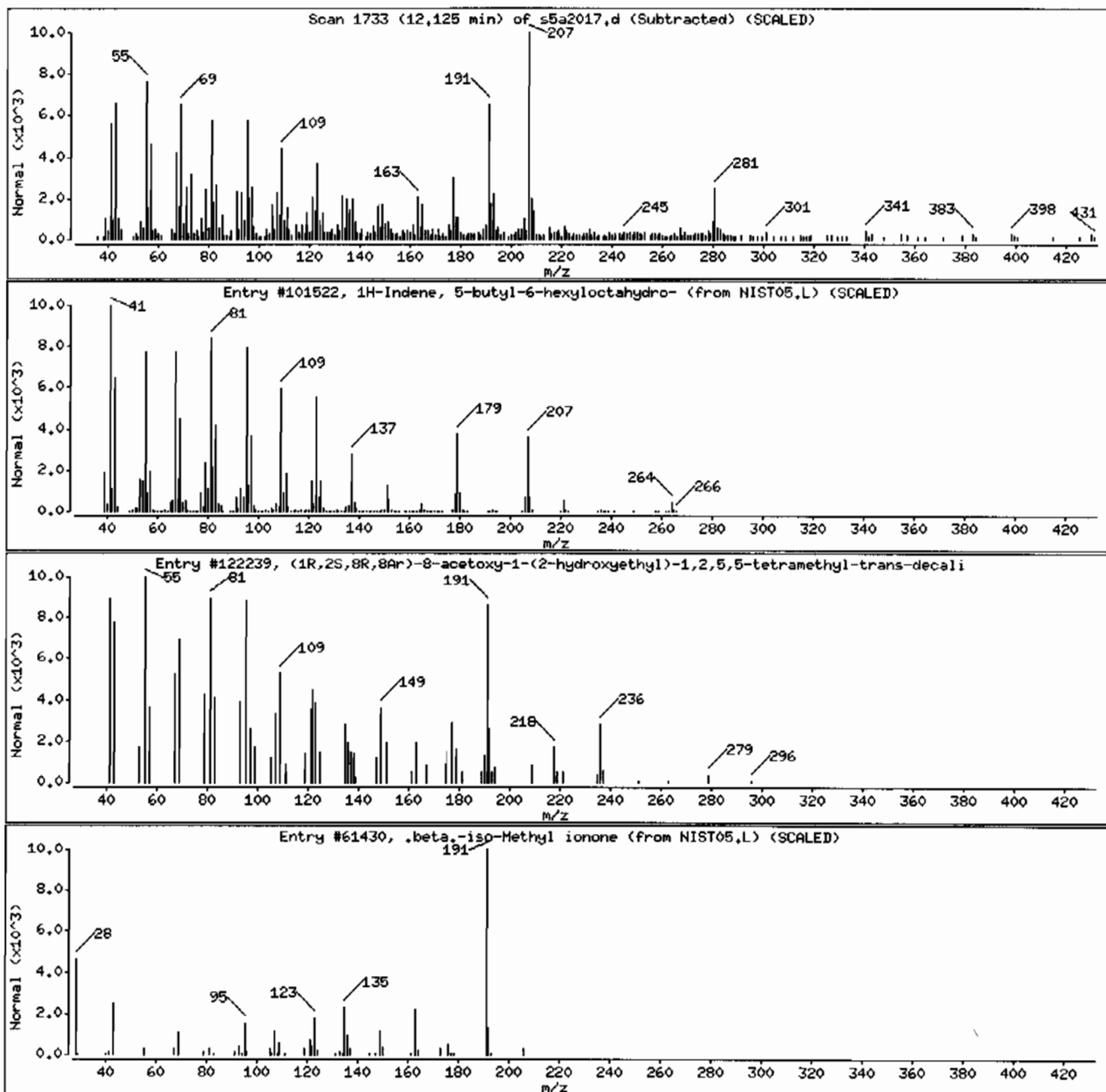
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Indene, 5-butyl-6-hexyloctahydro-	55044-36-5	NIST05.L	101522	48	C19H36	264
(1R,2S,8R,8Ar)-8-acetoxy-1-(2-hydroxyeth	1000298-98-4	NIST05.L	122239	38	C18H32O3	296
.beta.-iso-Methyl ionone	1000285-40-2	NIST05.L	61430	38	C14H22O	206



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 12449230021943386111SVMI11LANL

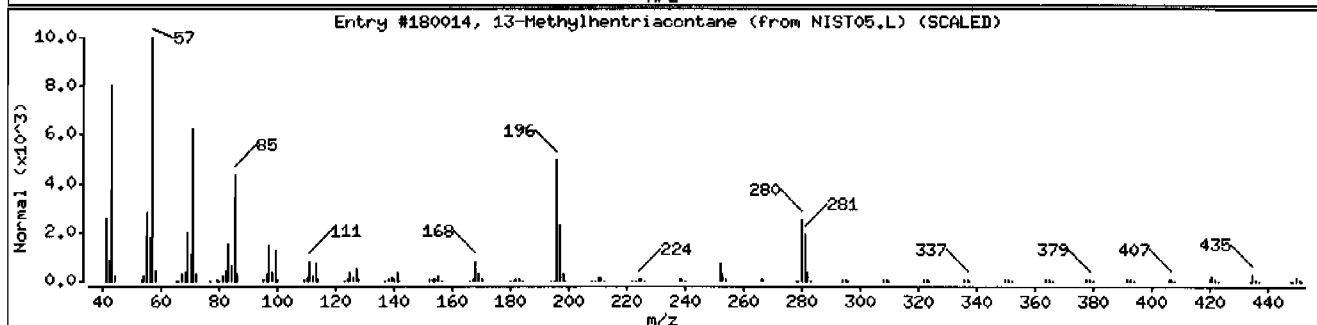
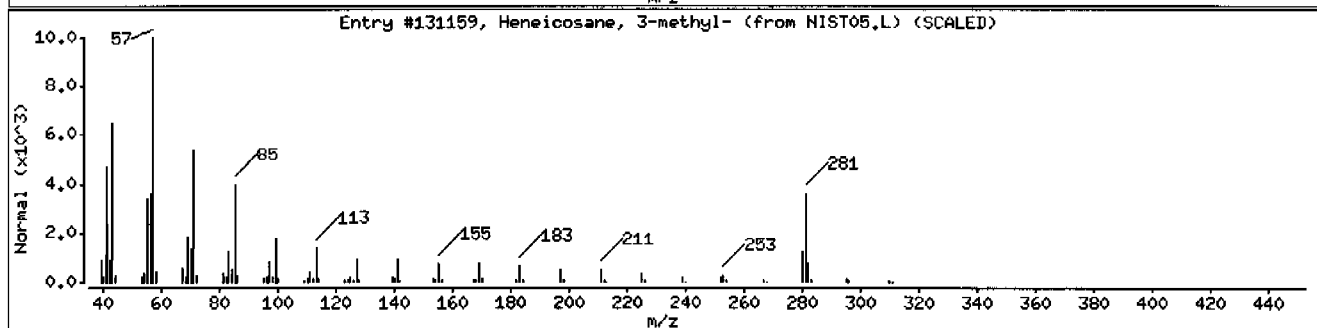
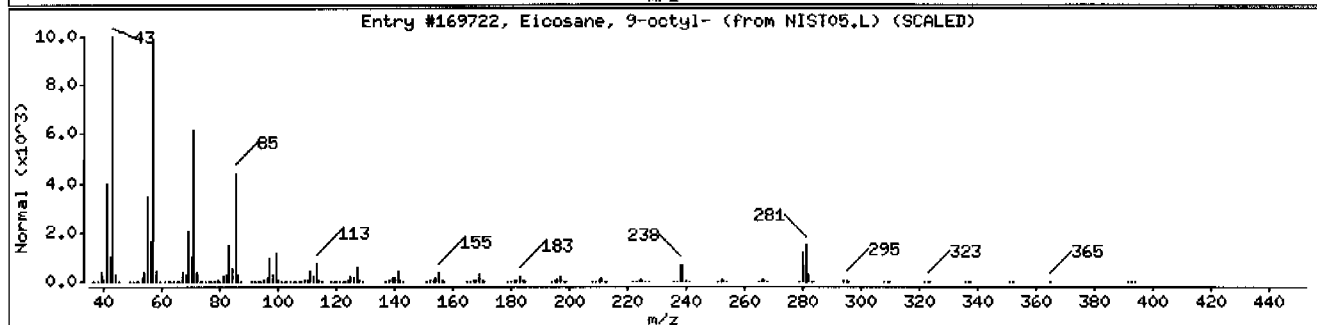
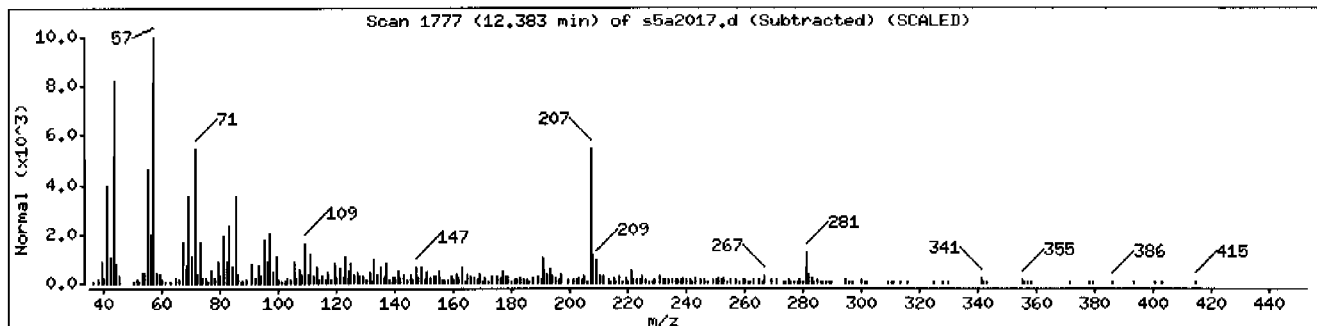
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane, 9-octyl-	13475-77-9	NIST05.L	169722	41	C28H58	394
Heneicosane, 3-methyl-	6418-47-9	NIST05.L	131159	41	C22H46	310
13-Methylhentriacontane	1000131-19-4	NIST05.L	180014	38	C32H66	451



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 12449230021943386111SVH111LANL

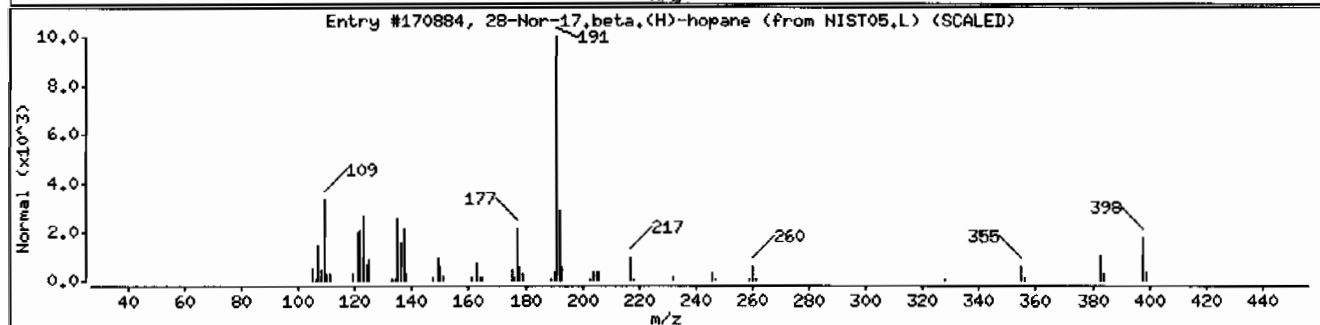
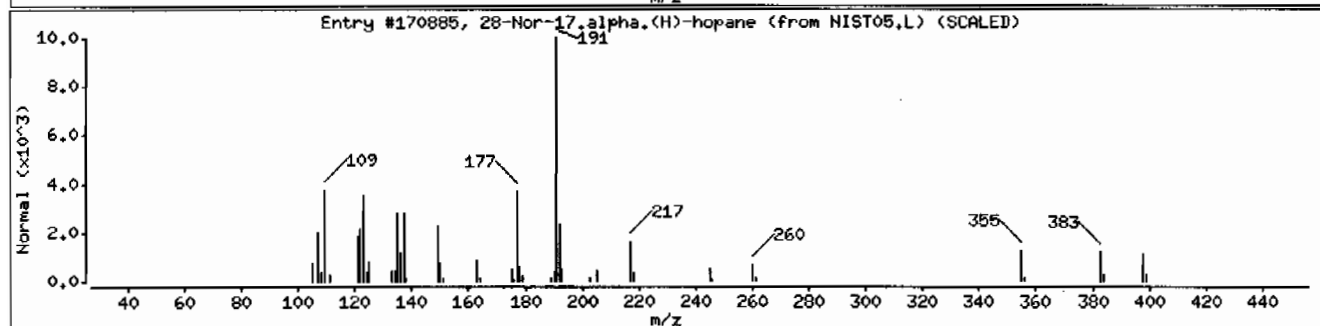
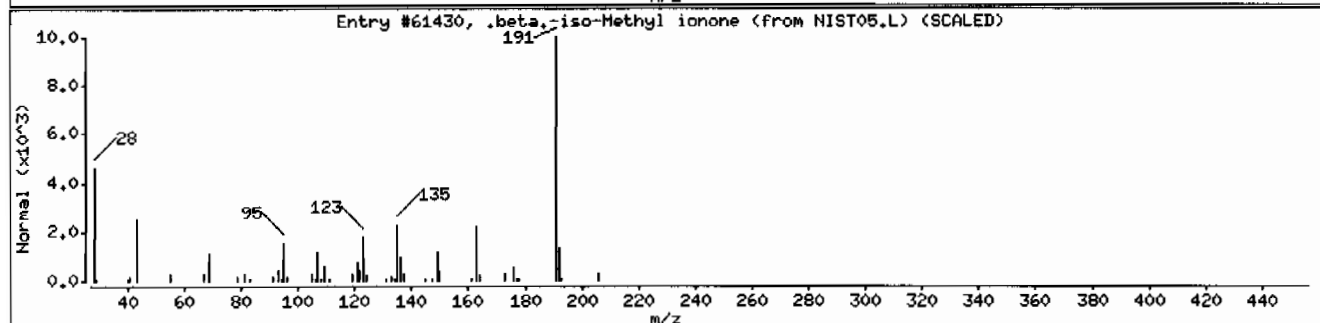
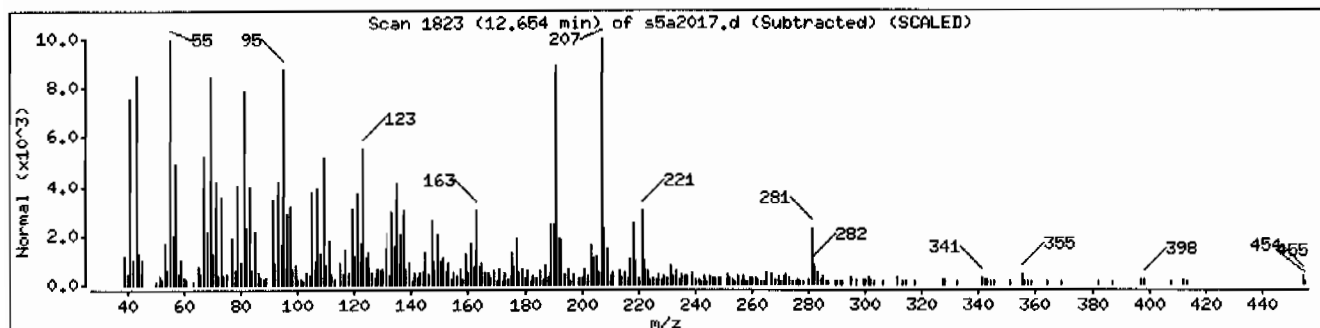
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.beta.-iso-Methyl ionone	1000285-40-2	NIST05.L	61430	59	C14H22O	206
28-Nor-17.alpha.(H)-hopane	53584-60-4	NIST05.L	170885	58	C29H50	398
28-Nor-17.beta.(H)-hopane	36728-72-0	NIST05.L	170884	53	C29H50	398



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002194338611ISVMI1ILANL

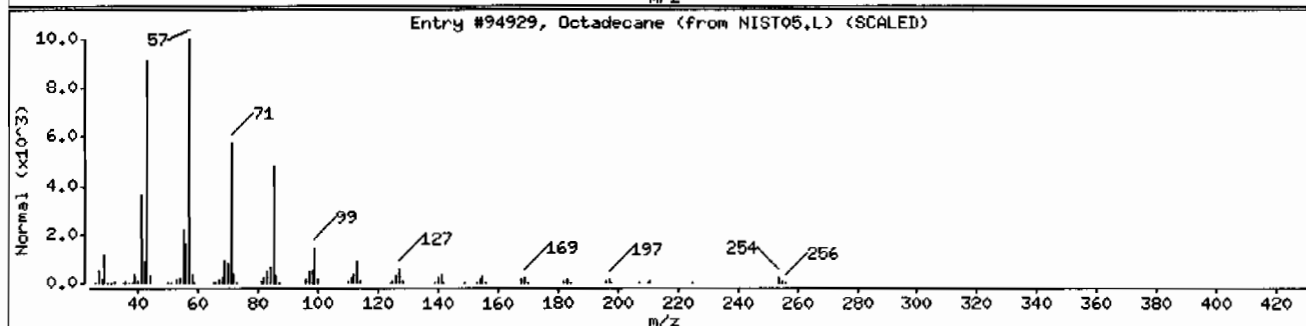
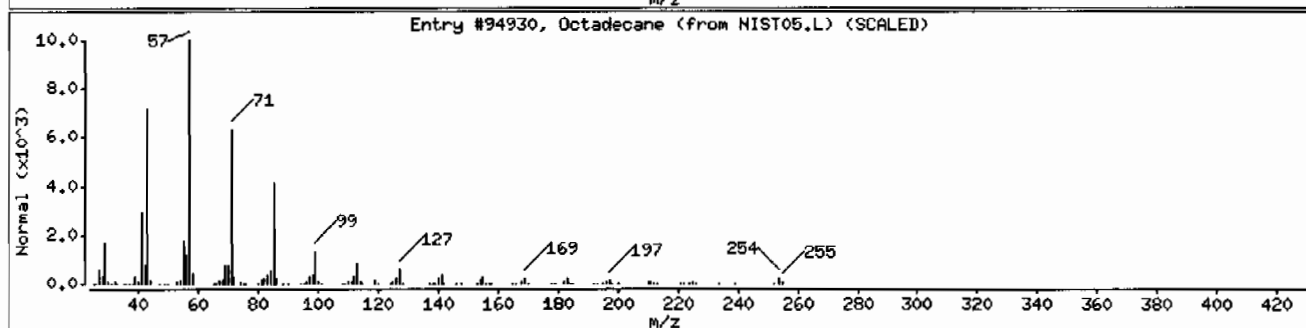
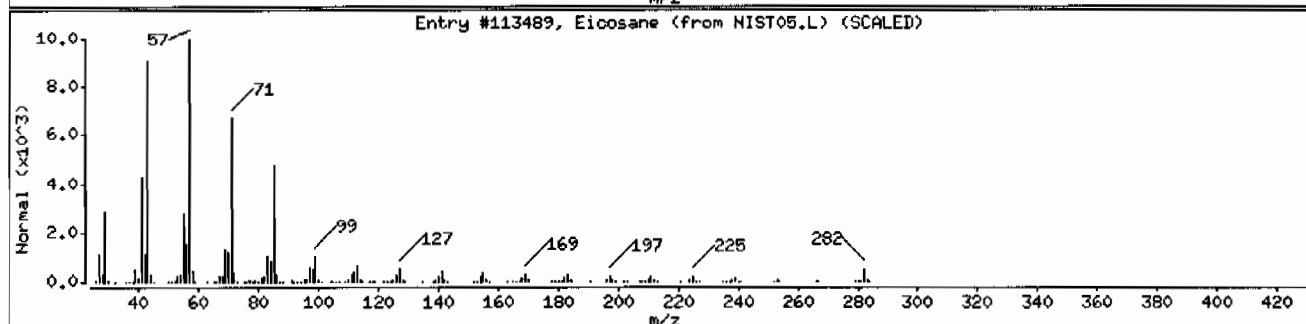
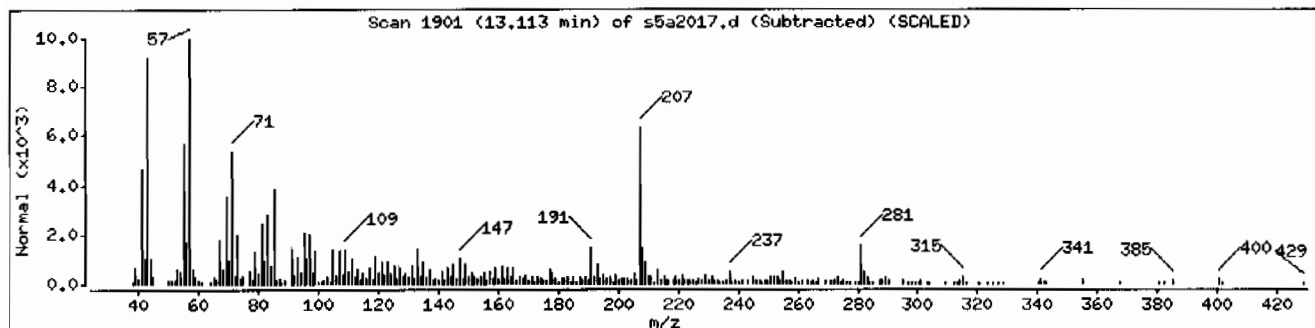
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113489	94	C20H42	282
Octadecane	593-45-3	NIST05.L	94930	92	C18H38	254
Octadecane	593-45-3	NIST05.L	94929	86	C18H38	254



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002194338611SVMI11LANL

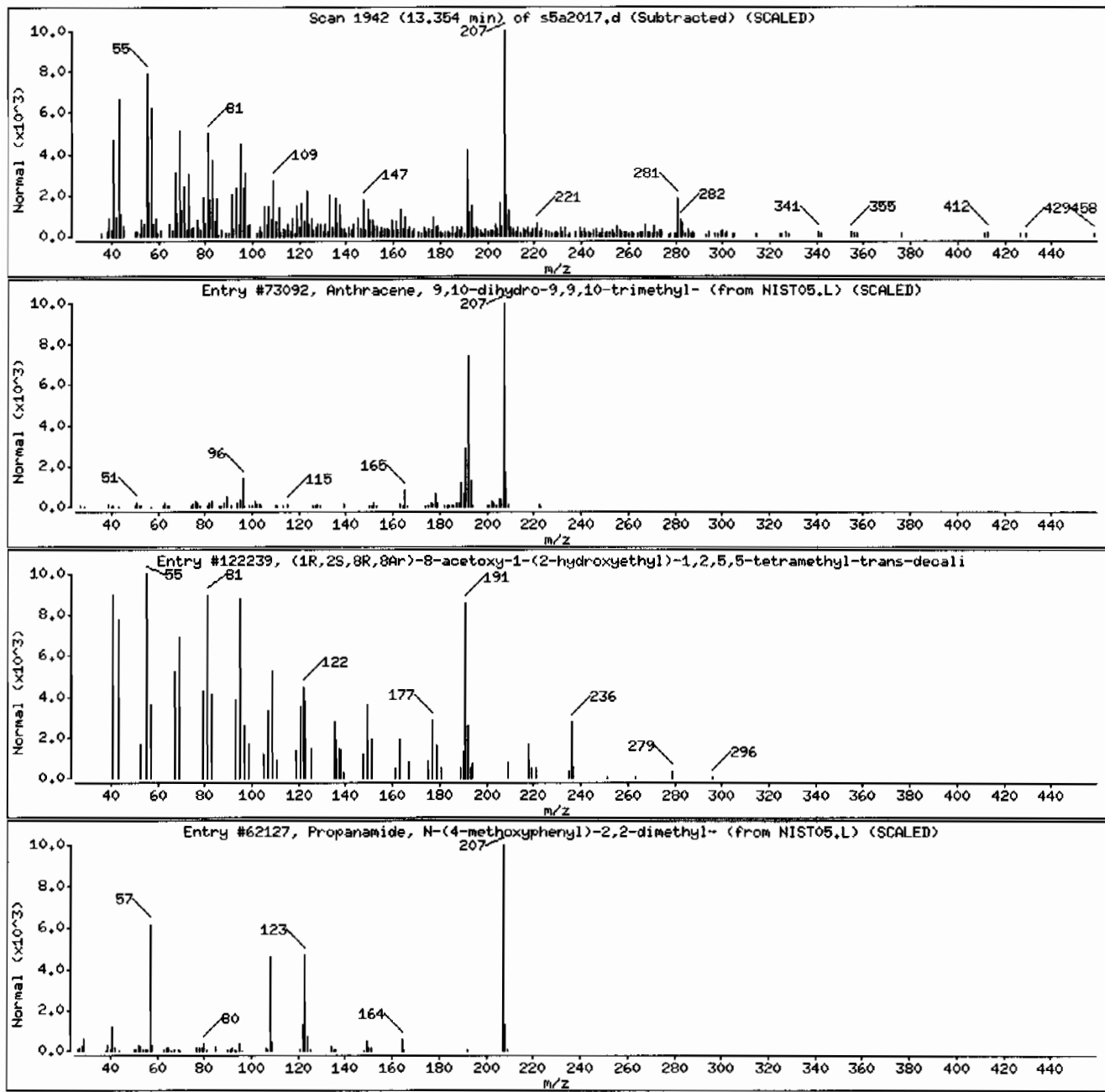
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Anthracene, 9,10-dihydro-9,9,10-trimethyl	14923-29-6	NIST05.L	73092	50	C17H18	222
(1R,2S,8R,8Ar)-8-acetoxy-1-(2-hydroxyethyl	1000298-98-4	NIST05.L	122239	43	C18H32O3	296
Propanamide, N-(4-methoxyphenyl)-2,2-dim	56619-94-4	NIST05.L	62127	35	C12H17NO2	207



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: HSD5.i

Sample Info: 1244923002|94338611|SVH11|LANL

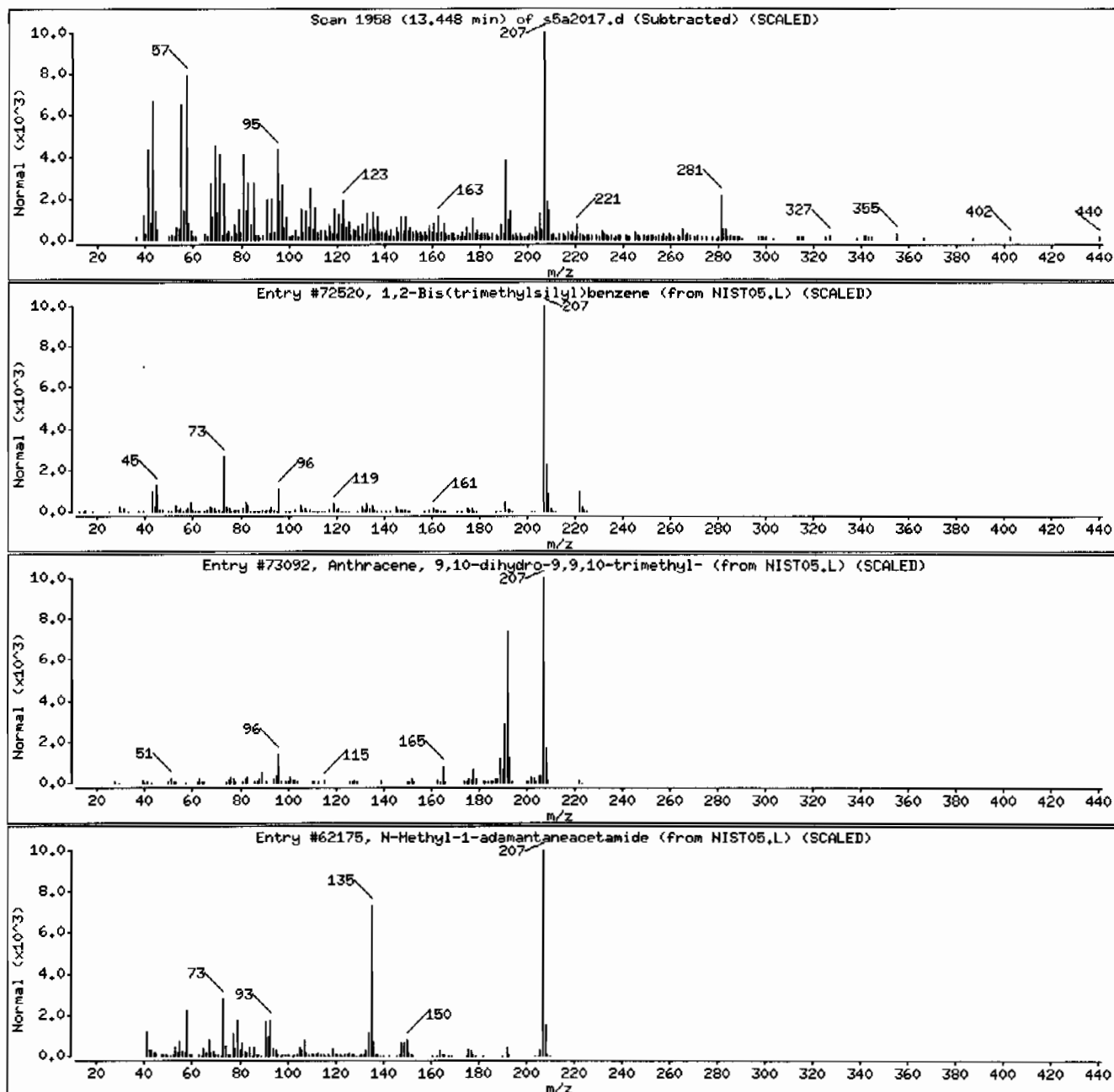
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	38	C12H22Si2	222
Anthracene, 9,10-dihydro-9,9,10-trimethy	14923-29-6	NIST05.L	73092	35	C17H18	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	30	C13H21NO	207



Date : 20-JAN-2010 23:19

Client ID: RE15-10-7162

Instrument: MSD5.i

Sample Info: 1244923002|943386|1|SVH|1|LANL

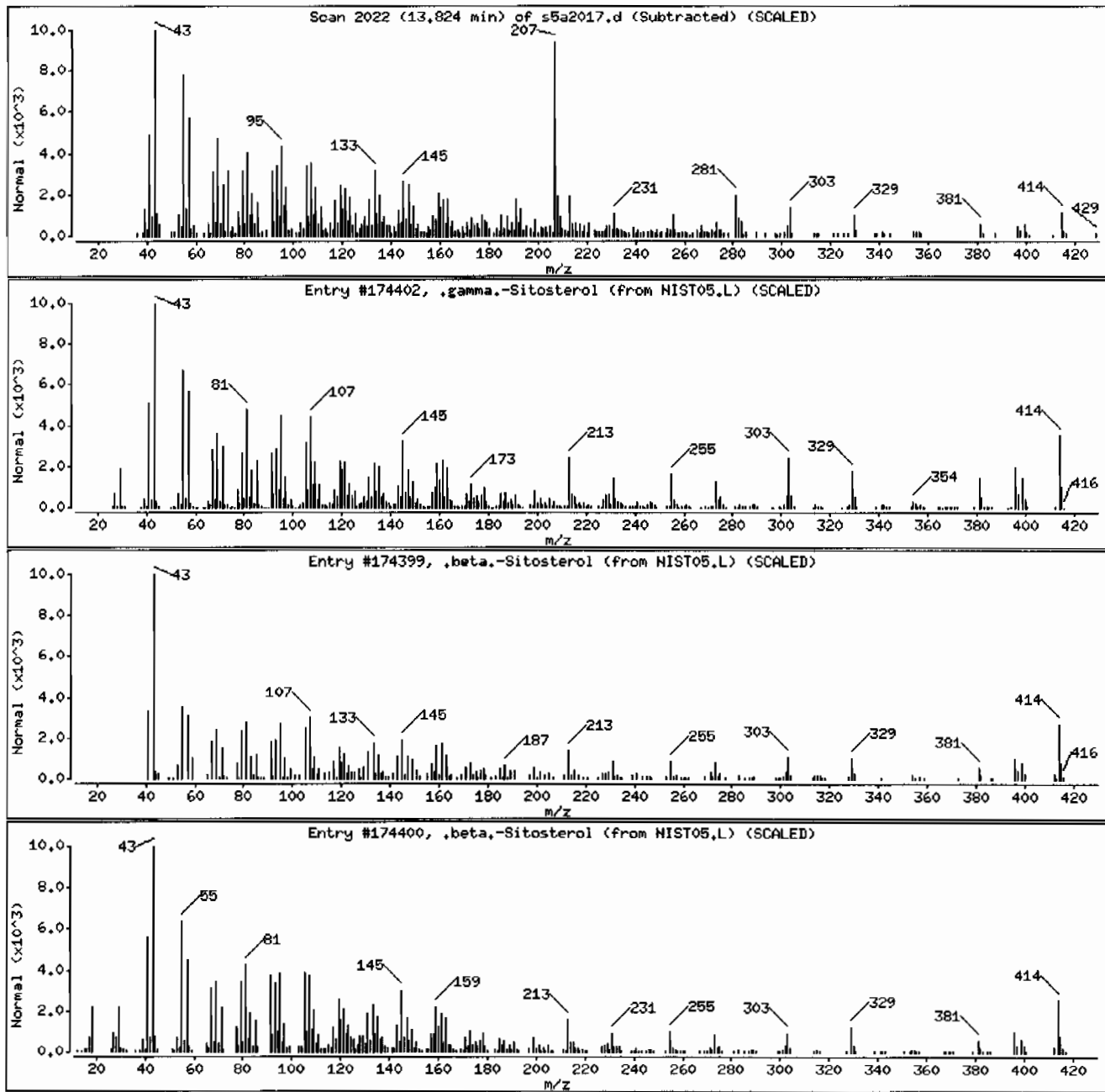
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	93	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	91	C29H50O	414



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

SDG Number: 10-1287
Lab Sample ID: 244923001

Client ID: RE15-10-7163
Batch ID: 943386
Run Date: 01/20/2010 22:11
Prep Date: 01/20/2010 11:13
Data File: s5a2014.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 6.6
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	357	ug/kg	71.4	357
108-95-2	Phenol	U	357	ug/kg	71.4	357
95-57-8	2-Chlorophenol	U	357	ug/kg	71.4	357
106-46-7	1,4-Dichlorobenzene	U	357	ug/kg	71.4	357
621-64-7	N-Nitrosodipropylamine	U	357	ug/kg	71.4	357
59-50-7	4-Chloro-3-methylphenol	U	357	ug/kg	71.4	357
83-32-9	Acenaphthene	U	35.7	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene	U	357	ug/kg	35.7	357
100-02-7	4-Nitrophenol	U	357	ug/kg	118	357
87-86-5	Pentachlorophenol	U	357	ug/kg	89.2	357
129-00-0	Pyrene	U	35.7	ug/kg	10.7	35.7
110-86-1	Pyridine	U	357	ug/kg	71.4	357
62-53-3	Aniline	U	357	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether	U	357	ug/kg	71.4	357
541-73-1	1,3-Dichlorobenzene	U	357	ug/kg	71.4	357
100-51-6	Benzyl alcohol	U	357	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene	U	357	ug/kg	71.4	357
108-60-1	bis(2-Chloroisopropyl)ether	U	357	ug/kg	71.4	357
95-48-7	o-Cresol	U	357	ug/kg	71.4	357
65794-96-9	m,p-Cresols	U	357	ug/kg	107	357
67-72-1	Hexachloroethane	U	357	ug/kg	71.4	357
98-95-3	Nitrobenzene	U	357	ug/kg	71.4	357
78-59-1	Isophorone	U	357	ug/kg	71.4	357
88-75-5	2-Nitrophenol	U	357	ug/kg	71.4	357
105-67-9	2,4-Dimethylphenol	U	357	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane	U	357	ug/kg	71.4	357
120-83-2	2,4-Dichlorophenol	U	357	ug/kg	71.4	357
65-85-0	Benzoic acid	U	714	ug/kg	178	714
91-20-3	Naphthalene	U	35.7	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline	U	357	ug/kg	71.4	357
87-68-3	Hexachlorobutadiene	U	357	ug/kg	71.4	357
91-57-6	2-Methylnaphthalene	U	35.7	ug/kg	7.14	35.7
77-47-4	Hexachlorocyclopentadiene	U	357	ug/kg	71.4	357
88-06-2	2,4,6-Trichlorophenol	U	357	ug/kg	71.4	357
95-95-4	2,4,5-Trichlorophenol	U	357	ug/kg	71.4	357
91-58-7	2-Chloronaphthalene	U	35.7	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline	U	357	ug/kg	71.4	357
99-09-2	<i>o</i> -Nitroaniline	U	357	ug/kg	71.4	357
	3-Nitroaniline					

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

SDG Number: 10-1287
Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-SMS

Matrix: R
%Moisture: 6.6
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7163
Batch ID: 943386
Run Date: 01/20/2010 22:11
Prep Date: 01/20/2010 11:13
Data File: s5a2014.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	357	ug/kg	71.4	357
606-20-2	2,6-Dinitrotoluene	U	357	ug/kg	35.7	357
208-96-8	Acenaphthylene	U	35.7	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol	U	714	ug/kg	136	714
132-64-9	Dibenzofuran	U	357	ug/kg	71.4	357
84-66-2	Diethylphthalate	U	357	ug/kg	71.4	357
86-73-7	Fluorene	U	35.7	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether	U	357	ug/kg	71.4	357
534-52-1	2-Methyl-4,6-dinitrophenol	U	357	ug/kg	71.4	357
100-01-6	4-Nitroaniline	U	357	ug/kg	107	357
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	357	ug/kg	71.4	357
122-66-7	Azobenzene	U	357	ug/kg	71.4	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	357	ug/kg	71.4	357
118-74-1	Hexachlorobenzene	U	357	ug/kg	71.4	357
85-01-8	Phenanthrene	U	35.7	ug/kg	10.7	35.7
120-12-7	Anthracene	U	35.7	ug/kg	7.14	35.7
84-74-2	Di-n-butylphthalate	J	93.0	ug/kg	71.4	357
206-44-0	Fluoranthene	U	35.7	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate	U	357	ug/kg	71.4	357
56-55-3	Benzo(a)anthracene	U	35.7	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine	U	357	ug/kg	107	357
218-01-9	Chrysene	U	35.7	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate	U	357	ug/kg	71.4	357
117-84-0	Di-n-octylphthalate	U	357	ug/kg	71.4	357
205-99-2	Benzo(b)fluoranthene	U	35.7	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene	U	35.7	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene	U	35.7	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene	U	35.7	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene	U	35.7	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene	U	35.7	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene	U	357	ug/kg	71.4	357

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	816	ug/kg		J
	Unknown Aldol Condensate	2.94	298	ug/kg		JA

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

SDG Number:	10-1287	Date Collected:	01/12/2010 12:00	Matrix:	R
Lab Sample ID:	244923001	Date Received:	01/16/2010 08:55	%Moisture:	6.6
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15-10-7163	Method:	SW846 8270C	SOP Ref:	GL-OA-E-009
Batch ID:	943386	Inst:	MSD5.I	Dilution:	1
Run Date:	01/20/2010 22:11	Analyst:	RMB	Inj. Vol:	.5 uL
Prep Date:	01/20/2010 11:13	Aliquot:	30 g	Final Volume:	1 mL
Data File:	s5a2014.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
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	158	ug/kg	99	NJ
	Unknown	9.8	164	ug/kg		J
	Unknown	10.38	180	ug/kg		J

Data File: /chem/MSD5.i/s012010.b/s5a2014.d
Report Date: 21-Jan-2010 08:31

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2014.d
Lab Smp Id: 244923001 Client Smp ID: RE15-10-7163
Inj Date : 20-JAN-2010 22:11
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923001|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	6.56910	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	471936	40.0000
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1622613	40.0000
* 46 Acenaphthene-d10	164	6.043	6.044	(1.000)	937784	40.0000
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1652583	40.0000
* 91 Chrysene-d12	240	9.619	9.622	(1.000)	1481408	40.0000
* 98 Perylene-d12	264	11.289	11.298	(1.000)	1195568	40.0000
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	579667	49.5272 1770
\$ 5 Phenol-d5	99	3.631	3.637	(0.926)	741448	51.3686 1830
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	302503	24.2805 866
\$ 39 2-Fluorobiphenyl	172	5.525	5.534	(0.914)	702618	28.3226 1010
\$ 60 2,4,6-Tribromophenol	329	6.637	6.641	(1.098)	197745	66.3435 2370
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.893)	868311	37.3293 1330

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
72 Di-n-butylphthalate		149	7.631	7.633	(1.058)	105184	2.60759	93.0 (a)

QC Flag Legend

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

ION RATIO REPORT

SV REPORT

Data file: s5a2014.d

Report Date: 01/21/2010 07:44

Lab. ID: 244923001

SampleType: SAMPLE

Injection Date: 20-JAN-2010 22:11

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923001|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	43402	3.63	3.70	80-120	100	(T)
93	355	3.60	3.70	220-280	1	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	43606	4.28	4.16	80-120	100	(T)
42	26655	4.28	4.16	44-104	61	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	2179	4.52	4.55	80-120	100	()
122	1449	4.51	4.55	47-107	66	()
77	1676	4.51	4.55	44-104	77	()

40	2-Chloronaphthalene		CAS#: 91-58-7			
162	13323	5.77	5.64	80-120	100	(T)
164	758	5.77	5.64	3- 63	6	(T)
127	1427	5.77	5.64	9- 69	11	(T)

42	o-Nitroaniline		CAS#: 88-74-4			
65	18694	5.77	5.70	80-120	100	(T)
92	22212	5.77	5.70	33- 93	119	(QT)
138	1601	5.77	5.70	71-131	9	(QT)

43	Dimethylphthalate		CAS#: 131-11-3			
163	167966	6.04	5.80	80-120	100	(T)
164	937593	6.04	5.80	0- 41	558	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44	2,6-Dinitrotoluene			CAS#: 606-20-2		
165	125241	6.04	5.86	80-120	100	(T)
63	1227	6.04	5.86	47-107	1	(QT)

50	2,4-Dinitrotoluene			CAS#: 121-14-2		
165	125241	6.04	6.16	80-120	100	(T)
89	1576	6.04	6.16	48-108	1	(QT)
63	1227	6.04	6.16	25- 85	1	(QT)

53	Fluorene			CAS#: 86-73-7		
166	11533	6.64	6.46	80-120	100	(T)
165	12081	6.64	6.46	57-117	105	(T)
167	4162	6.64	6.46	0- 44	36	(T)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	852	6.64	6.47	80-120	100	(T)
105	2815	6.64	6.47	13- 73	330	(QT)
51	1556	6.63	6.47	55-115	183	(QT)

72	Di-n-butylphthalate			CAS#: 84-74-2		
149	105184	7.63	7.63	80-120	100	()
150	8898	7.63	7.63	0- 40	8	()
104	6081	7.63	7.63	0- 36	6	()

99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	587	13.02	13.06	80-120	100	()
138	645	13.05	13.07	1- 61	110	(Q)

100	Dibenzo(a,h)anthracene			CAS#: 53-70-3		
278	143	13.32	13.08	80-120	100	(T)
139	683	13.36	13.07	0- 30	476	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2014.d
Lab Smp Id: 244923001 Client Smp ID: RE15-10-7163
Inj Date : 20-JAN-2010 22:11
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923001|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	6.56910	% moisture

Cpnd Variable

Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.919	2901875	40.000
* 91 Chrysene-d12	9.619	3984025	40.000

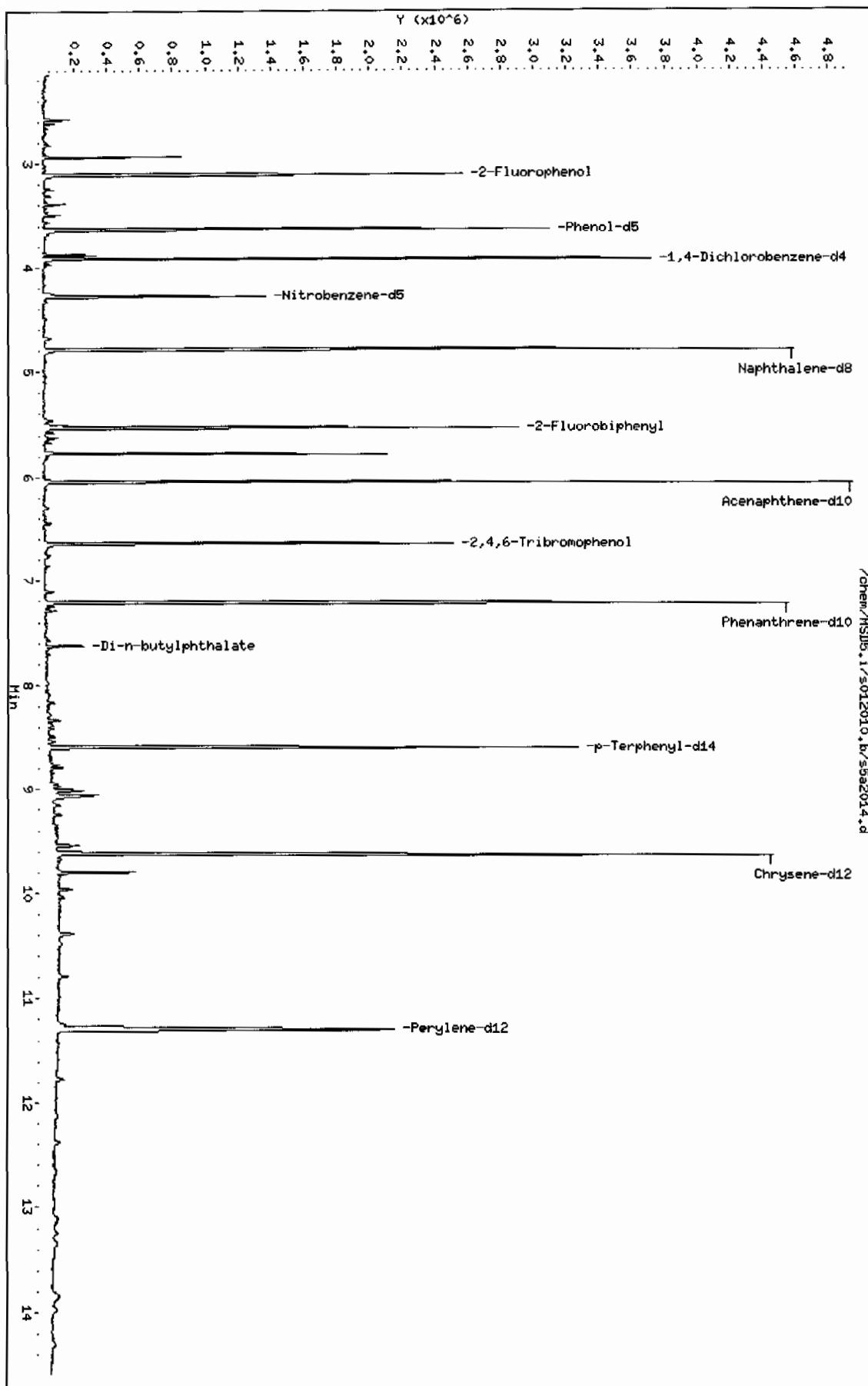
CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown							
2.002	1659807	22.8790931	816	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.937	606163	8.35546184	298	0		0	10
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.054	441077	4.42845796	158	99	NIST05.L	133618	91
Unknown					CAS #:		
9.795	458267	4.60104692	164	0		0	91
Unknown					CAS #:		
10.383	502815	5.04830900	180	0		0	91

Data File: /chem/HSD5.i/s012010.b/s5a2014.d
Date : 20-JAN-2010 22:11
Client ID: REL5-10-7163
Sample Info: 124492300194338611|SVH111LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-SMS

Instrument: HSD5.i
Operator: RMB
Column diameter: 0.20

Page 1



Date : 20-JAN-2010 22:11

Client ID: RE15-10-7163

Instrument: MSD5.i

Sample Info: 1244923001194338611SVH111LANL

Volume Injected (uL): 0.5

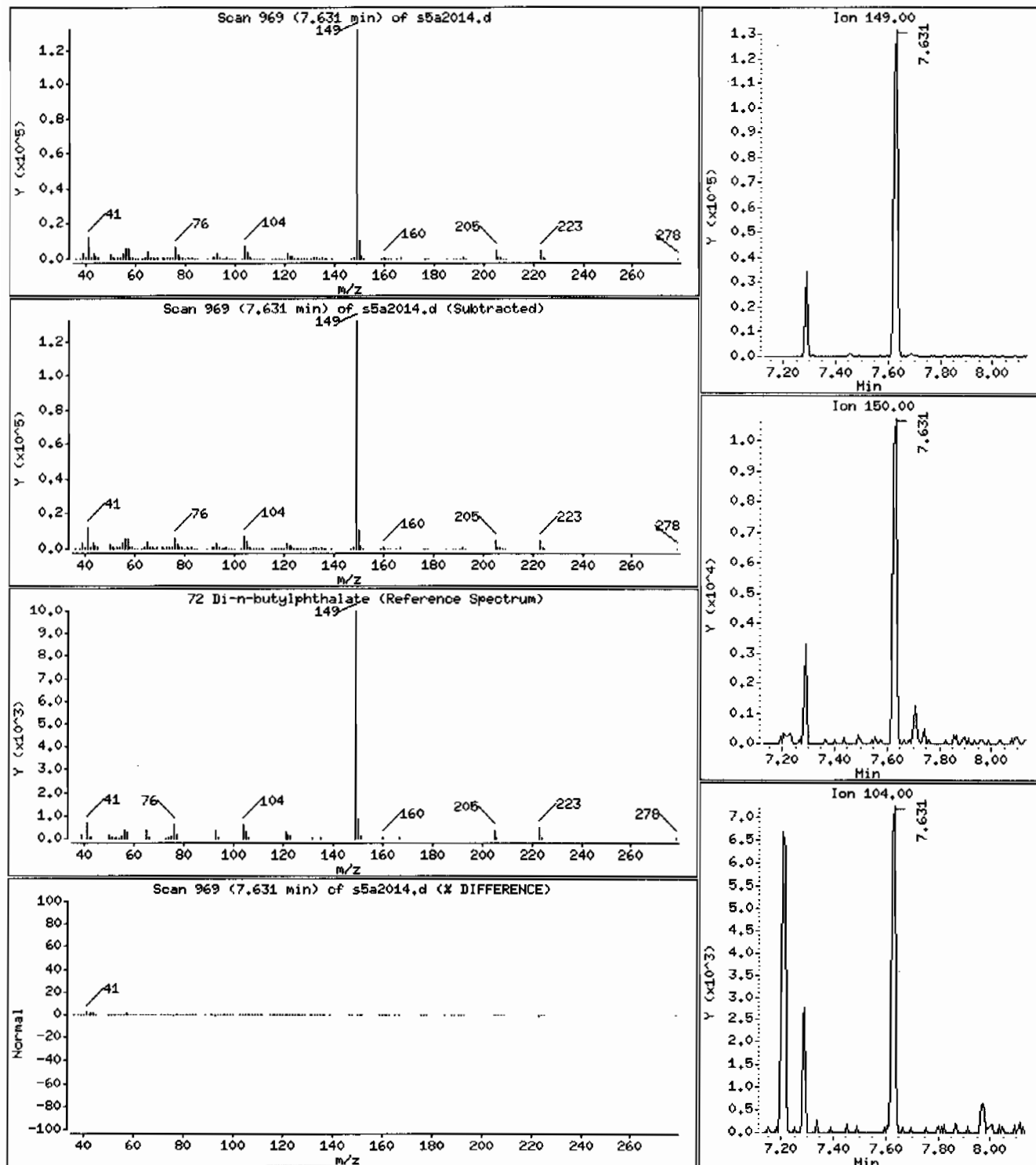
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

72 Di-n-butylphthalate

Concentration: 93.0 ug/Kg



Date : 20-JAN-2010 22:11

Client ID: RE15-10-7163

Instrument: MSD5.i

Sample Info: 1244923001|94338611|SVH11|LANL

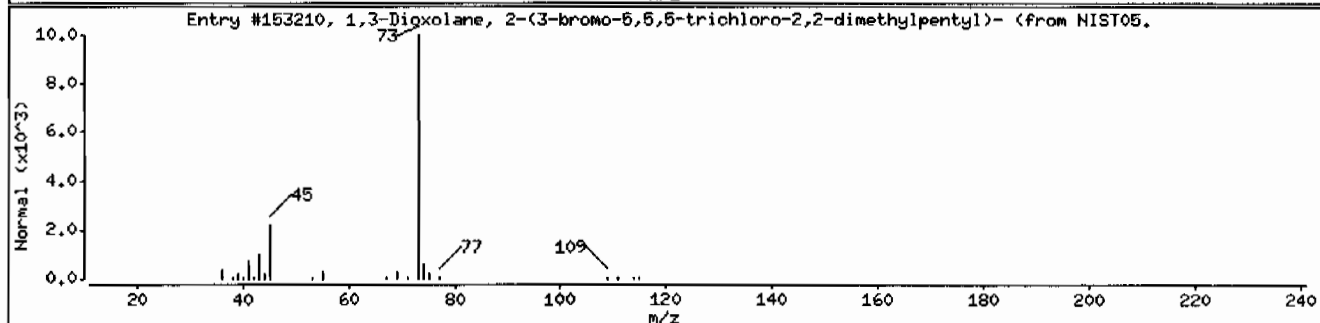
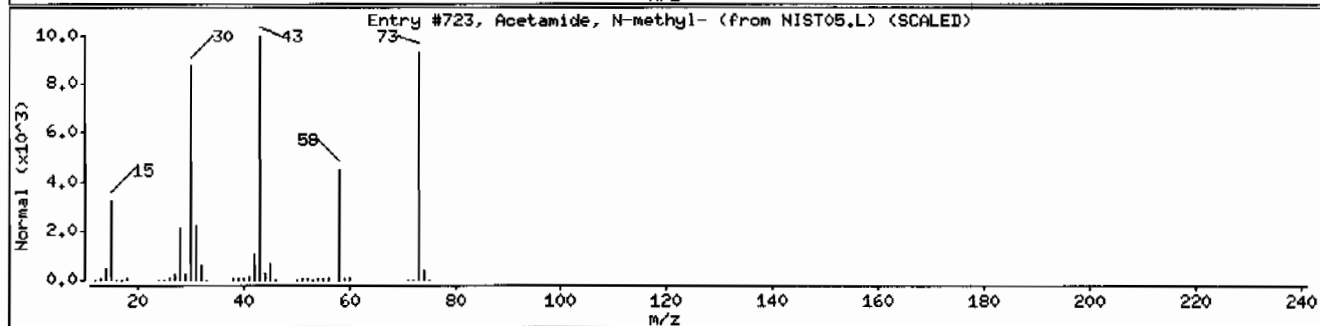
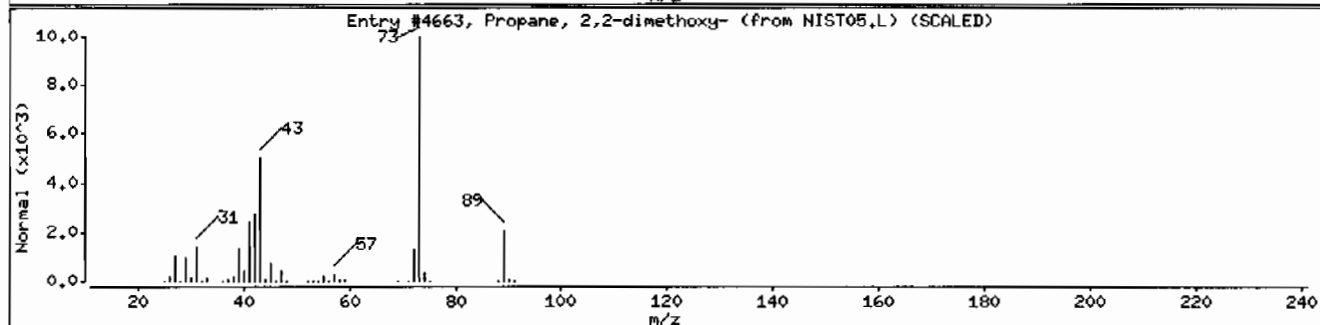
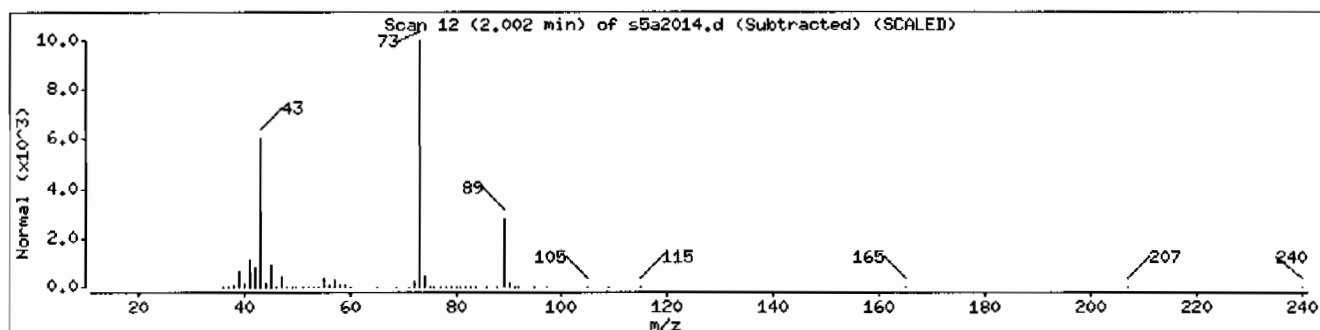
Volume Injected (uL): 0,5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0,20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	9	C3H7NO	73
1,3-Dioxolane, 2-(3-bromo-5,5,5-trichloro	1000115-31-4	NIST05.L	153210	9	C10H16BrCl3O2	352



Date : 20-JAN-2010 22:11

Client ID: RE15-10-7163

Instrument: MSD5.i

Sample Info: 1244923001194338611SVH111LANL

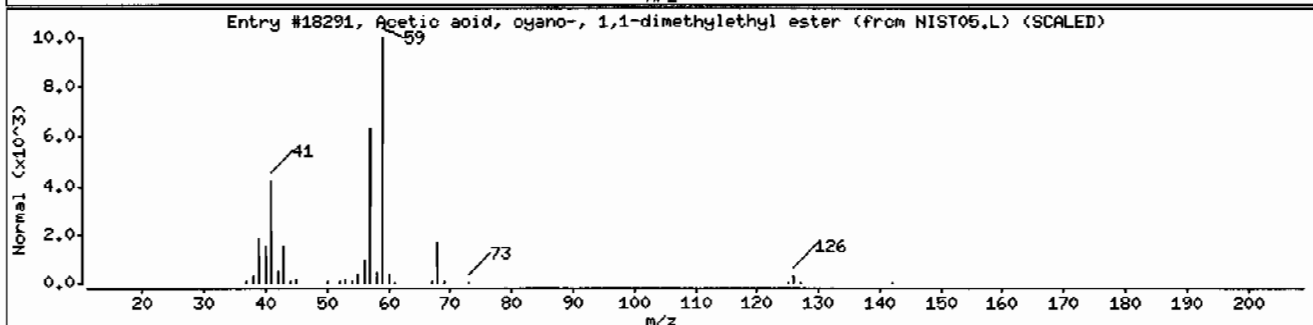
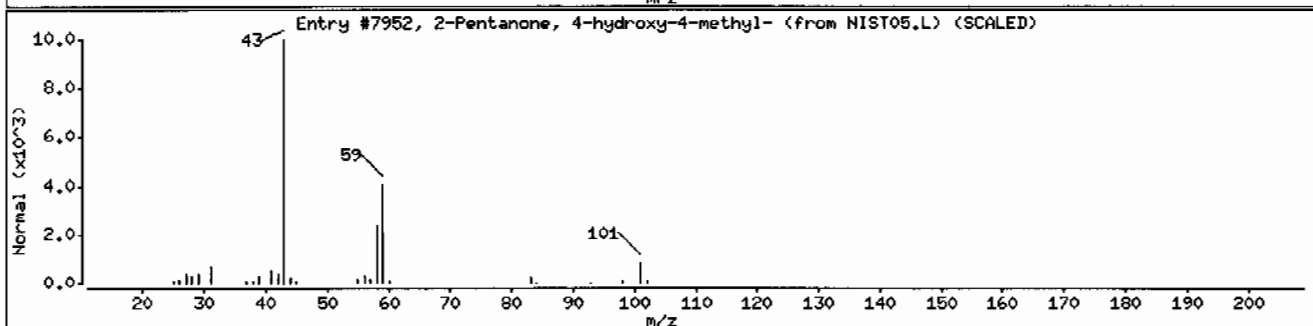
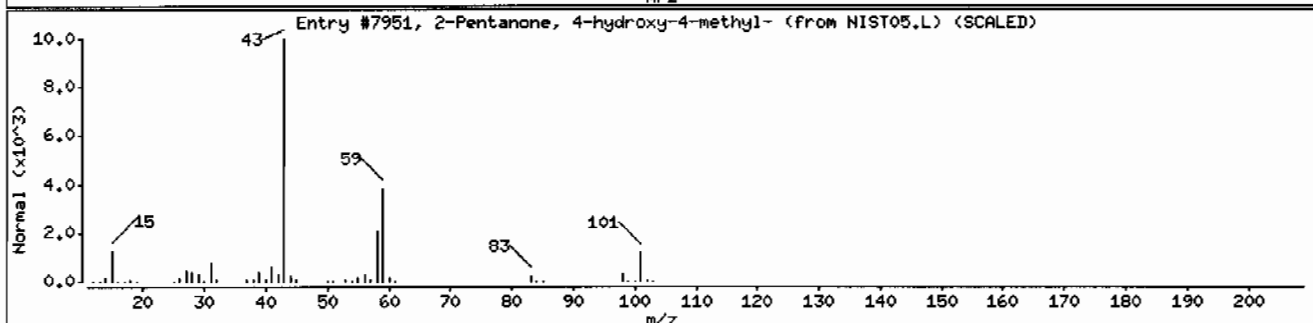
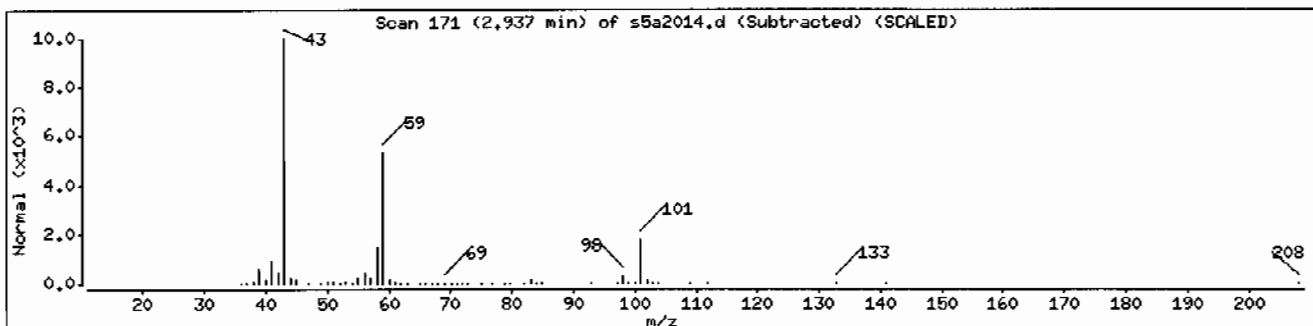
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	25	C7H11NO2	141



Date : 20-JAN-2010 22:11

Client ID: RE15-10-7163

Instrument: HSD5.i

Sample Info: I2449230011943386111SVH111LANL

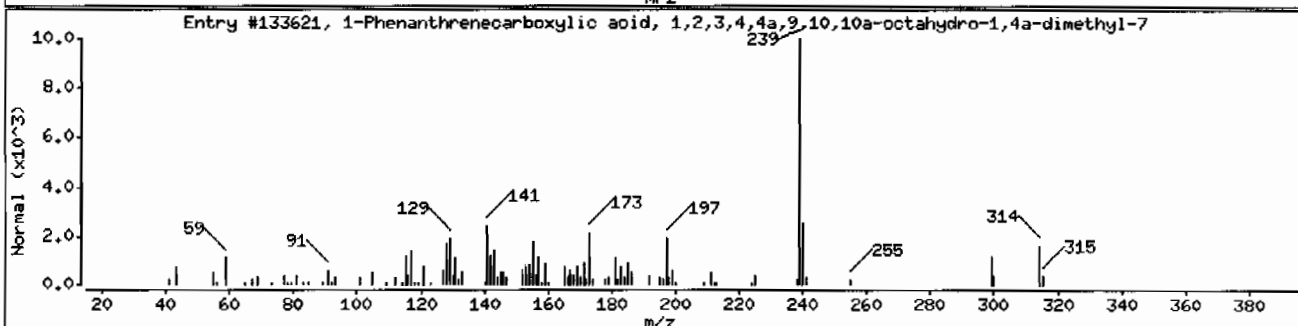
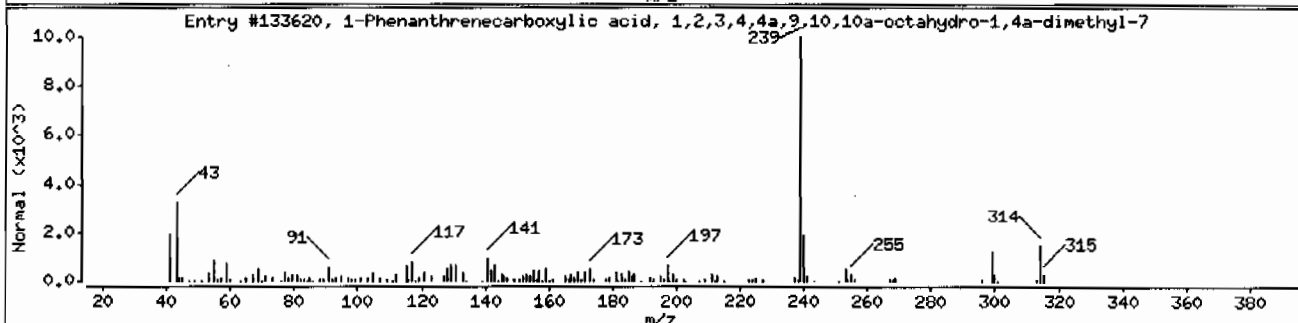
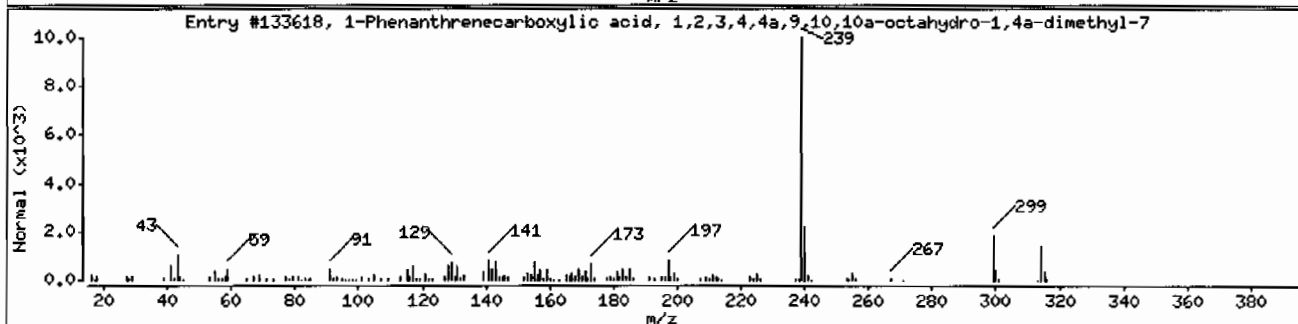
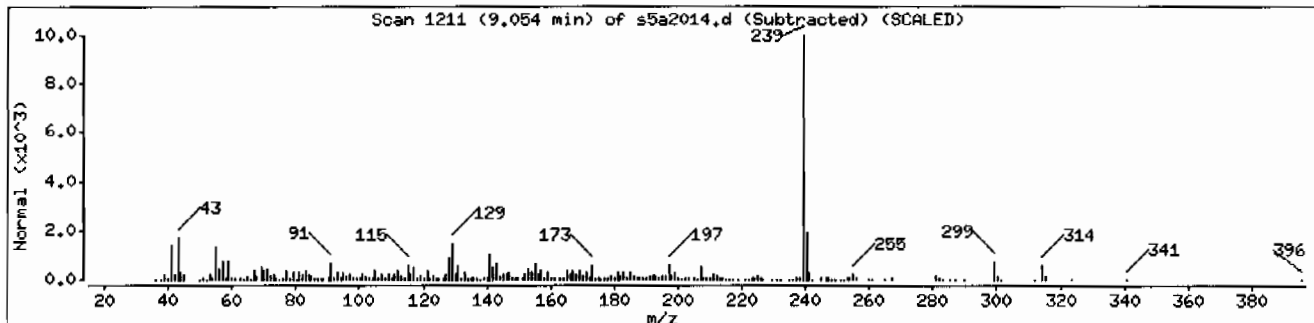
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	99	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	91	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	83	C21H30O2	314



Date : 20-JAN-2010 22:11

Client ID: RE15-10-7163

Instrument: HSD5.i

Sample Info: 1244923001194338611SVH111LANL

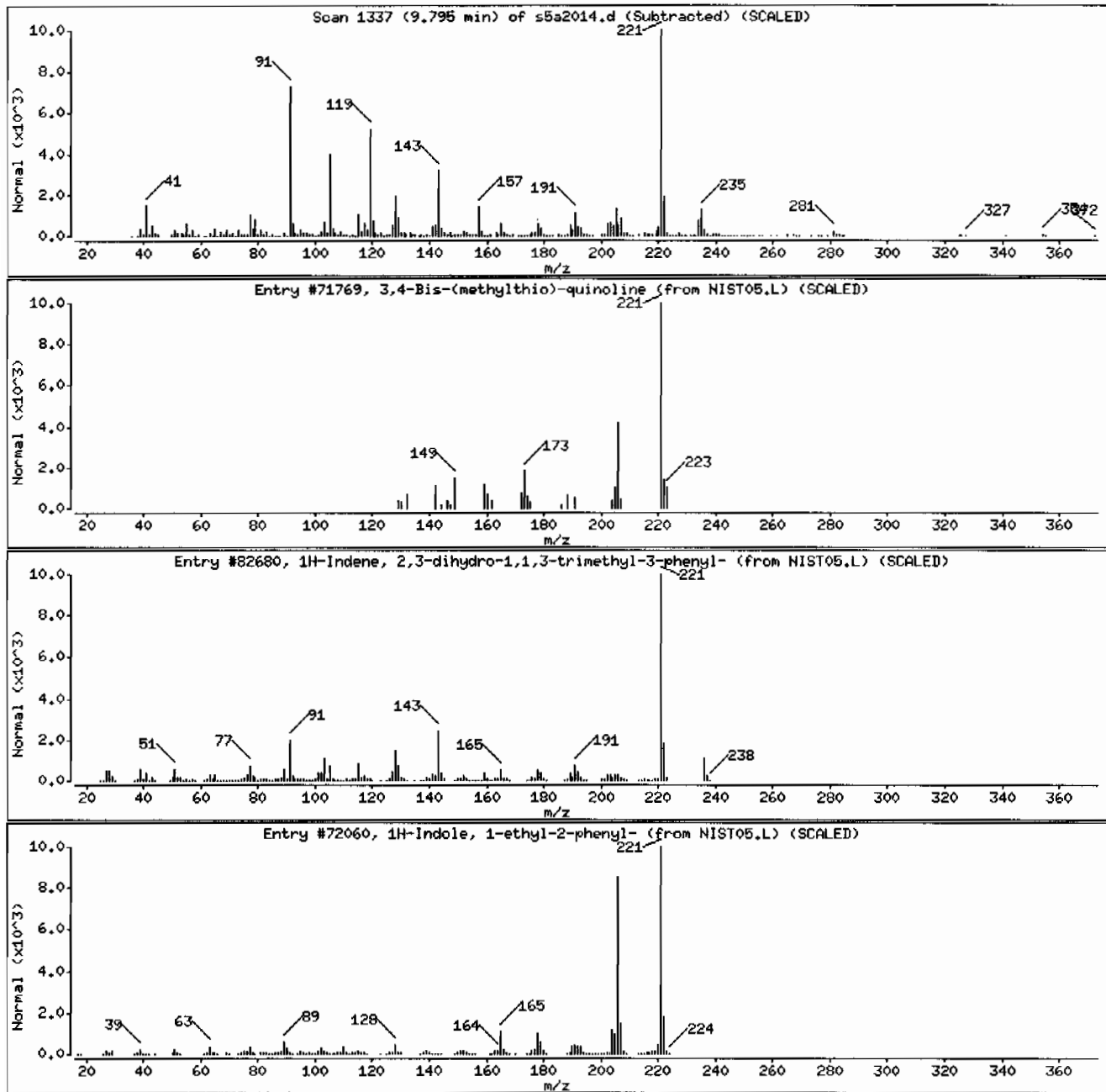
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3,4-Bis-(methylthio)-quinoline	74579-34-3	NIST05.L	71769	53	C11H11NS2	221
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3	3910-35-8	NIST05.L	82680	49	C18H20	236
1H-Indole, 1-ethyl-2-phenyl-	13228-39-2	NIST05.L	72060	43	C16H15N	221



Date : 20-JAN-2010 22:11

Client ID: RE15-10-7163

Instrument: MSD5.i

Sample Info: 1244923001194338611|SVH11|LANL

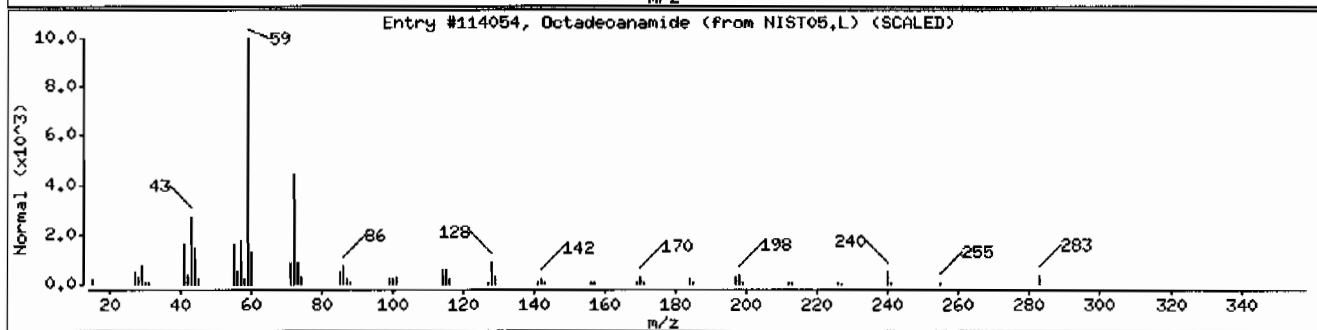
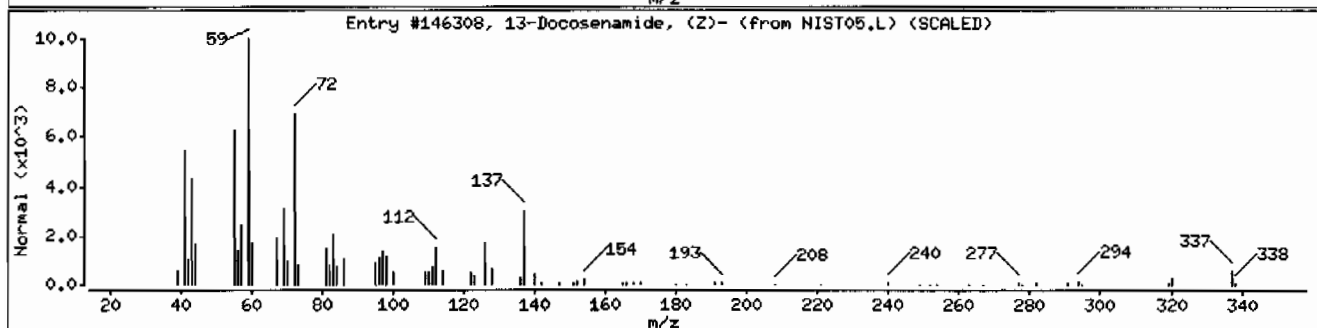
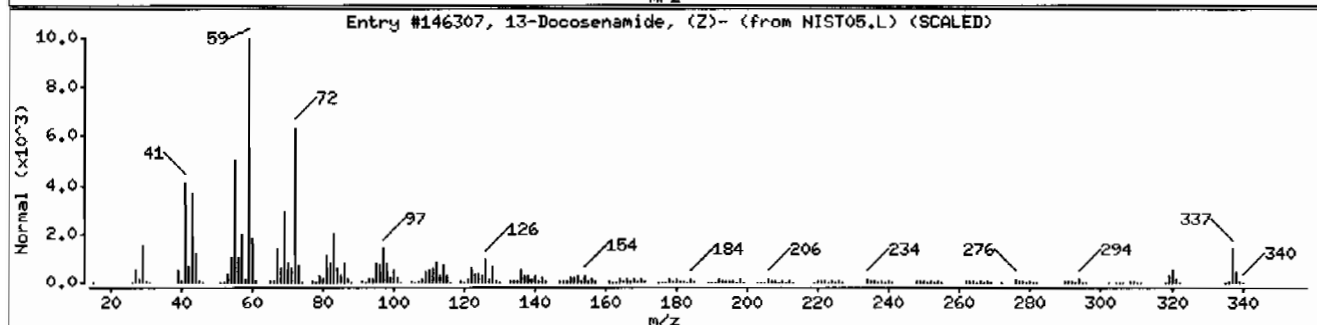
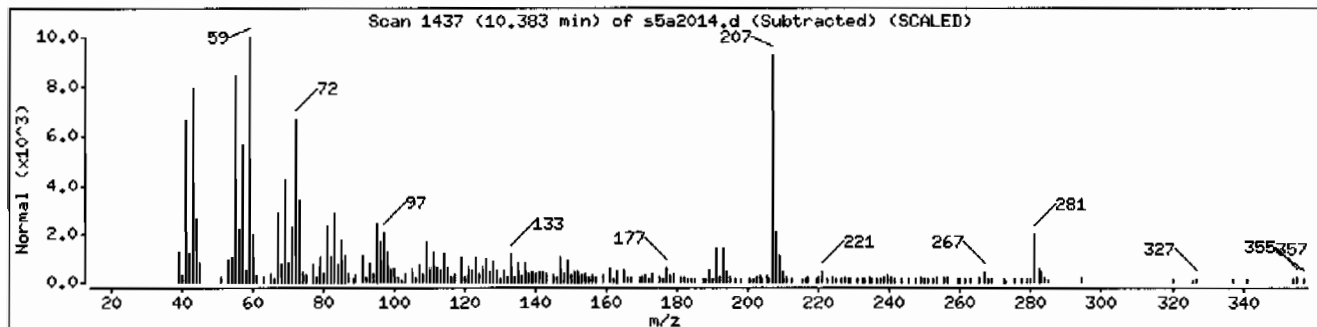
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146307	64	C22H43NO	337
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	38	C22H43NO	337
Octadecanamide	124-26-5	NIST05.L	114054	30	C18H37NO	283



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

SDG Number: 10-1287
Lab Sample ID: 244923008

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

Matrix: R
% Moisture: 21.2
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7172
Batch ID: 943386
Run Date: 01/21/2010 01:36
Prep Date: 01/20/2010 11:13
Data File: s5a2023.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	423	ug/kg	84.7	423
108-95-2	Phenol	U	423	ug/kg	84.7	423
95-57-8	2-Chlorophenol	U	423	ug/kg	84.7	423
106-46-7	1,4-Dichlorobenzene	U	423	ug/kg	84.7	423
621-64-7	N-Nitrosodipropylamine	U	423	ug/kg	84.7	423
59-50-7	4-Chloro-3-methylphenol	U	423	ug/kg	84.7	423
83-32-9	Acenaphthene	U	42.3	ug/kg	14.0	42.3
121-14-2	2,4-Dinitrotoluene	U	423	ug/kg	42.3	423
100-02-7	4-Nitrophenol	U	423	ug/kg	140	423
87-86-5	Pentachlorophenol	U	423	ug/kg	106	423
129-00-0	Pyrene	U	42.3	ug/kg	12.7	42.3
110-86-1	Pyridine	U	423	ug/kg	84.7	423
62-53-3	Aniline	U	423	ug/kg	127	423
111-44-4	bis(2-Chloroethyl) ether	U	423	ug/kg	84.7	423
541-73-1	1,3-Dichlorobenzene	U	423	ug/kg	84.7	423
100-51-6	Benzyl alcohol	U	423	ug/kg	127	423
95-50-1	1,2-Dichlorobenzene	U	423	ug/kg	84.7	423
108-60-1	bis(2-Chloroisopropyl)ether	U	423	ug/kg	84.7	423
95-48-7	o-Cresol	U	423	ug/kg	84.7	423
65794-96-9	m,p-Cresols	U	423	ug/kg	127	423
67-72-1	Hexachloroethane	U	423	ug/kg	84.7	423
98-95-3	Nitrobenzene	U	423	ug/kg	84.7	423
78-59-1	Isophorone	U	423	ug/kg	84.7	423
88-75-5	2-Nitrophenol	U	423	ug/kg	84.7	423
105-67-9	2,4-Dimethylphenol	U	423	ug/kg	148	423
111-91-1	bis(2-Chloroethoxy)methane	U	423	ug/kg	84.7	423
120-83-2	2,4-Dichlorophenol	U	423	ug/kg	84.7	423
65-85-0	Benzoic acid		1010	ug/kg	212	847
91-20-3	Naphthalene	U	42.3	ug/kg	12.7	42.3
106-47-8	4-Chloroaniline	U	423	ug/kg	84.7	423
87-68-3	Hexachlorobutadiene	U	423	ug/kg	84.7	423
91-57-6	2-Methylnaphthalene	U	42.3	ug/kg	8.47	42.3
77-47-4	Hexachlorocyclopentadiene	U	423	ug/kg	84.7	423
88-06-2	2,4,6-Trichlorophenol	U	423	ug/kg	84.7	423
95-95-4	2,4,5-Trichlorophenol	U	423	ug/kg	84.7	423
91-58-7	2-Chloronaphthalene	U	42.3	ug/kg	14.0	42.3
88-74-4	2-Nitroaniline	U	423	ug/kg	84.7	423
99-09-2	o-Nitroaniline					
	3-Nitroaniline	U	423	ug/kg	84.7	423

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	%Moisture: 21.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7172	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 01:36	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2023.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	423	ug/kg	84.7	423
606-20-2	2,6-Dinitrotoluene	U	423	ug/kg	42.3	423
208-96-8	Acenaphthylene	U	42.3	ug/kg	12.7	42.3
51-28-5	2,4-Dinitrophenol	U	847	ug/kg	161	847
132-64-9	Dibenzofuran	U	423	ug/kg	84.7	423
84-66-2	Diethylphthalate	U	423	ug/kg	84.7	423
86-73-7	Fluorene	U	42.3	ug/kg	12.7	42.3
7005-72-3	4-Chlorophenylphenylether	U	423	ug/kg	84.7	423
534-52-1	2-Methyl-4,6-dinitrophenol	U	423	ug/kg	84.7	423
100-01-6	4-Nitroaniline	U	423	ug/kg	127	423
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	423	ug/kg	84.7	423
122-66-7	Azobenzene	U	423	ug/kg	84.7	423
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	423	ug/kg	84.7	423
118-74-1	Hexachlorobenzene	U	423	ug/kg	84.7	423
85-01-8	Phenanthrene	U	42.3	ug/kg	12.7	42.3
120-12-7	Anthracene	U	42.3	ug/kg	8.47	42.3
84-74-2	Di-n-butylphthalate	U	423	ug/kg	84.7	423
206-44-0	Fluoranthene	U	42.3	ug/kg	12.7	42.3
85-68-7	Butylbenzylphthalate	U	423	ug/kg	84.7	423
56-55-3	Benzo(a)anthracene	U	42.3	ug/kg	12.7	42.3
91-94-1	3,3'-Dichlorobenzidine	U	423	ug/kg	127	423
218-01-9	Chrysene	U	42.3	ug/kg	12.7	42.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	423	ug/kg	84.7	423
117-84-0	Di-n-octylphthalate	U	423	ug/kg	84.7	423
205-99-2	Benzo(b)fluoranthene	U	42.3	ug/kg	12.7	42.3
207-08-9	Benzo(k)fluoranthene	U	42.3	ug/kg	12.7	42.3
50-32-8	Benzo(a)pyrene	U	42.3	ug/kg	12.7	42.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	42.3	ug/kg	12.7	42.3
53-70-3	Dibenzo(a,h)anthracene	U	42.3	ug/kg	12.7	42.3
191-24-2	Benzo(ghi)perylene	U	42.3	ug/kg	12.7	42.3
120-82-1	1,2,4-Trichlorobenzene	U	423	ug/kg	84.7	423

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
475-20-7	1,4-Methanoazulene, decahydro-4,8,8-trim	5.78	4140	ug/kg	99	NJ
	Unknown	7.81	1780	ug/kg		J

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923008	Date Received: 01/16/2010 08:55	%Moisture: 21.2
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7172	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.1	Dilution: 1
Run Date: 01/21/2010 01:36	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2023.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	
Tentatively Identified Compound Summary				Estimated			
CAS No.	Tentatively Identified Compound (TIC)		RT		Units	Fit	Qual
	Unknown		8.28	1630	ug/kg		J
	Unknown		8.49	598	ug/kg		J
	Unknown		8.8	610	ug/kg		J
	Unknown		8.84	546	ug/kg		J
	Unknown		8.91	1610	ug/kg		J
	Unknown		8.94	1720	ug/kg		J
1686-62-0	1-Phenanthrenecarboxylic acid, 7-ethenyl		8.98	737	ug/kg	90	NJ
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4		9.07	1160	ug/kg	98	NJ
51195-74-5	Nordextromethorphan		9.1	1570	ug/kg	90	NJ
	Unknown		9.14	746	ug/kg		J
	Unknown		9.24	827	ug/kg		J
	Unknown		9.45	2070	ug/kg		J
480-39-7	4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d		9.58	1640	ug/kg	98	NJ
110936-78-2	7-Oxodehydroabietic acid, methyl ester		9.85	820	ug/kg	90	NJ
	Unknown		9.92	1050	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2023.d
 Lab Smp Id: 244923008 Client Smp ID: RE15-10-7172
 Inj Date : 21-JAN-2010 01:36
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244923008|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	21.24980	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	499128		40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1763693		40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044	(1.000)	1012544		40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1771089		40.0000	
* 91 Chrysene-d12	240	9.630	9.622	(1.000)	1330091		40.0000	
* 98 Perylene-d12	264	11.307	11.298	(1.000)	676466		40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	775363		62.6386	2650
\$ 5 Phenol-d5	99	3.637	3.637	(0.928)	980835		64.2516	2720
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	452900		33.4443	1420
\$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	877844		32.7733	1390
\$ 60 2,4,6-Tribromophenol	329	6.637	6.641	(1.098)	240002		74.5756	3160
\$ 81 p-Terphenyl-d14	244	8.595	8.592	(0.892)	872080		41.7565	1770

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
=====	=====	==	=====	=====	=====		=====	=====
27 Benzoic acid	105	4.537	4.552	(0.948)	76522		23.8173	1010

ION RATIO REPORT

SV REPORT

Data file: s5a2023.d

Report Date: 01/21/2010 07:49

Lab. ID: 244923008

SampleType: SAMPLE

Injection Date: 21-JAN-2010 01:36

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923008|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	54567	3.64	3.70	80-120	100	(T)
93	38163	3.60	3.70	220-280	70	(QT)

6 Phenol		CAS#: 108-95-2				
94	49275	3.49	3.65	80-120	100	(T)
66	10432	3.49	3.65	14- 74	21	(T)
65	38593	3.49	3.65	0- 30	78	(QT)

15 o-Cresol		CAS#: 95-48-7				
107	19943	3.98	4.04	80-120	100	(T)
108	6419	3.98	4.04	88-148	32	(QT)
77	21586	3.98	4.04	19- 79	108	(QT)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	66489	4.28	4.16	80-120	100	(T)
42	40944	4.28	4.16	44-104	62	(T)

21 Nitrobenzene		CAS#: 98-95-3				
77	53044	4.17	4.30	80-120	100	(T)
65	14084	4.22	4.30	0- 45	27	(T)
123	485	4.24	4.30	17- 77	1	(Q)

22 Isophorone		CAS#: 78-59-1				
82	449336	4.28	4.45	80-120	100	(T)
138	252	4.30	4.45	0- 49	0	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
24 2,4-Dimethylphenol				CAS#: 105-67-9		
122	62280	4.54	4.50	80-120	100	()
107	3551	4.57	4.50	78-138	6	(QT)
121	2649	4.45	4.50	23- 83	4	(Q)

27 Benzoic acid				CAS#: 65-85-0		
105	76522	4.54	4.55	80-120	100	()
122	60060	4.54	4.55	47-107	78	()
77	62201	4.54	4.55	44-104	81	()

34 2-Methylnaphthalene				CAS#: 91-57-6		
142	4432	5.13	5.29	80-120	100	(T)
141	1056	5.14	5.29	54-114	24	(QT)

40 2-Chloronaphthalene				CAS#: 91-58-7		
162	119410	5.78	5.64	80-120	100	(T)
164	7791	5.78	5.64	3- 63	7	(T)
127	9584	5.78	5.64	9- 69	8	(QT)

42 o-Nitroaniline				CAS#: 88-74-4		
65	17118	5.62	5.70	80-120	100	(T)
92	11054	5.62	5.70	33- 93	65	(T)
138	1466	5.61	5.70	71-131	9	(QT)

41 m-Nitroaniline				CAS#: 99-09-2		
138	12059	5.78	5.99	80-120	100	(T)
92	169647	5.78	5.99	84-144	1407	(QT)
108	205588	5.78	5.99	0- 40	1705	(QT)

43 Dimethylphthalate				CAS#: 131-11-3		
163	57385	5.78	5.80	80-120	100	()
164	7791	5.78	5.80	0- 41	14	()

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	137202	6.04	5.86	80-120	100	(T)
63	1917	6.04	5.86	47-107	1	(QT)

45 Acenaphthylene				CAS#: 208-96-8		
152	17253	6.01	5.95	80-120	100	(T)
151	5192	6.01	5.95	0- 50	30	(T)
153	16760	6.01	5.95	0- 44	97	(QT)

47 Acenaphthene				CAS#: 83-32-9		
154	14492	6.01	6.07	80-120	100	(T)
153	16760	6.01	6.07	70-130	116	(T)
152	17235	6.01	6.07	18- 78	119	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
48 2,4-Dinitrophenol				CAS#: 51-28-5		
184	346	6.31	6.06	80-120	100	(T)
154	704	6.30	6.07	933-993	203	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	137424	6.04	6.16	80-120	100	(T)
89	21220	6.02	6.16	48-108	15	(QT)
63	1820	6.04	6.16	25- 85	1	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	1654	6.10	6.08	80-120	100	()
109	6403	6.02	6.08	40-100	387	(Q)
65	4723	6.10	6.08	71-131	286	(Q)

53 Fluorene				CAS#: 86-73-7		
166	13980	6.64	6.46	80-120	100	(T)
165	13964	6.64	6.46	57-117	100	(T)
167	5279	6.64	6.46	0- 44	38	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	189	6.37	6.47	80-120	100	(T)
105	2814	6.38	6.47	13- 73	1482	(QT)
51	1865	6.31	6.47	55-115	983	(QT)

61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	17665	6.64	6.82	80-120	100	(T)
141	112610	6.64	6.82	46-106	637	(QT)
250	34021	6.64	6.82	69-129	193	(QT)

79 Pyrene				CAS#: 129-00-0		
202	11026	8.49	8.49	80-120	100	()
200	10901	8.49	8.49	0- 50	99	(Q)
101	1841	8.48	8.49	0- 44	17	()

85 Butylbenzylphthalate				CAS#: 85-68-7		
149	58492	9.10	9.02	80-120	100	(T)
91	283490	9.10	9.02	42-102	485	(QT)
206	4294	9.11	9.02	0- 52	7	(T)

89 Benzo(a)anthracene				CAS#: 56-55-3		
228	11969	9.63	9.61	80-120	100	()
226	3080	9.62	9.61	0- 57	26	()
229	8336	9.62	9.61	0- 50	70	(Q)

90 3,3'-Dichlorobenzidine				CAS#: 91-94-1		
252	72227	9.35	9.55	80-120	100	(T)
254	4190	9.32	9.55	35- 95	6	(QT)
126	6058	9.35	9.55	0- 43	8	(T)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
92 Chrysene		CAS#: 218-01-9				
228	18890	9.58	9.65	80-120	100	(T)
229	10983	9.60	9.65	0- 50	58	(Q)
226	1303	9.58	9.65	0- 59	7	(T)

93 bis(2-Ethylhexyl)phthalate		CAS#: 117-81-7				
149	49193	9.41	9.55	80-120	100	(T)
167	37122	9.38	9.55	4- 64	75	(QT)

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	796	13.08	13.06	80-120	100	()
138	567	13.03	13.07	1- 61	71	(Q)

100 Dibenzo(a,h)anthracene		CAS#: 53-70-3				
278	479	13.09	13.08	80-120	100	()
139	970	13.12	13.07	0- 30	202	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2023.d
 Lab Smp Id: 244923008 Client Smp ID: RE15-10-7172
 Inj Date : 21-JAN-2010 01:36
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244923008|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 21
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	21.24980	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Acenaphthene-d10	6.042	4383269	40.000
* 67 Phenanthrene-d10	7.213	4802885	40.000
* 91 Chrysene-d12	9.630	13222718	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
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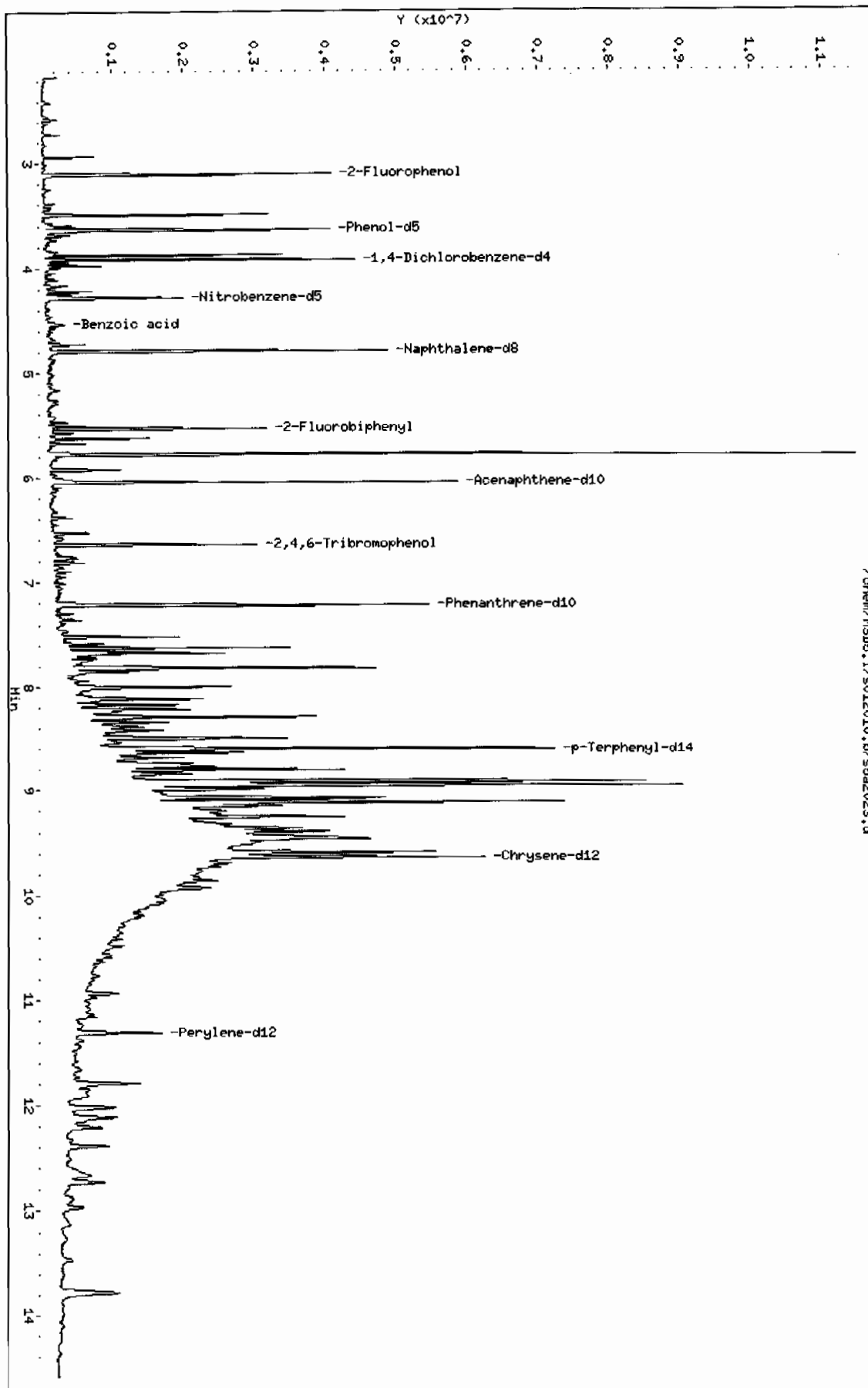
RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
1,4-Methanoazulene, decahydro-4,8,8-trim					CAS #: 475-20-7		
5.778	10718261	97.8106527	4140	99	NIST05.L	60024	46
Unknown					CAS #:		
7.813	5052886	42.0820910	1780	0		0	67
Unknown					CAS #:		
8.284	4609700	38.3910924	1620	0		0	67
Unknown					CAS #:		
8.489	4666626	14.1169949	598	0		0	91
Unknown					CAS #:		
8.795	4763060	14.4087172	610	0		0	91
Unknown					CAS #:		
8.836	4260269	12.8877260	546	0		0	91
Unknown					CAS #:		
8.907	12607074	38.1376183	1610	0		0	91
Unknown					CAS #:		
8.942	13450144	40.6879840	1720	0		0	91
1-Phenanthrenecarboxylic acid, 7-ethenyl					CAS #: 1686-62-0		
8.978	5758442	17.4198431	737	90	NIST05.L	134785	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.066	9062487	27.4148993	1160	98	NIST05.L	133618	91
Nordextromethorphan					CAS #: 51195-74-5		
9.101	12257783	37.0809771	1570	90	NIST05.L	96865	91
Unknown					CAS #:		
9.142	5828146	17.6307036	746	0		0	91
Unknown					CAS #:		
9.242	6460889	19.5448138	827	0		0	91
Unknown					CAS #:		
9.454	16141857	48.8306759	2070	0		0	91
4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d					CAS #: 480-39-7		
9.583	12769264	38.6282586	1640	98	NIST05.L	96015	91

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
7-Oxodehydroabiatic acid, methyl ester					CAS #: 110936-78-2		
9.854	6404276	19.3735534	820	90	NIST05.L	141448	91
Unknown					CAS #:		
9.925	8202807	24.8142833	1050	0		0	91

Data File: /chem/HSD5.i/s012010.b/s5a2023.d
Date: 21-JAN-2010 01:36
Client ID: REIS-10-7172
Sample Info: 1244923008194338611SVH11LPHL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.1
Operator: RHB
Column diameter: 0.20

/chem/HSD5.i/s012010.b/s5a2023.d



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.1

Sample Info: 12449230081943386111SVH111LANL

Volume Injected (uL): 0.5

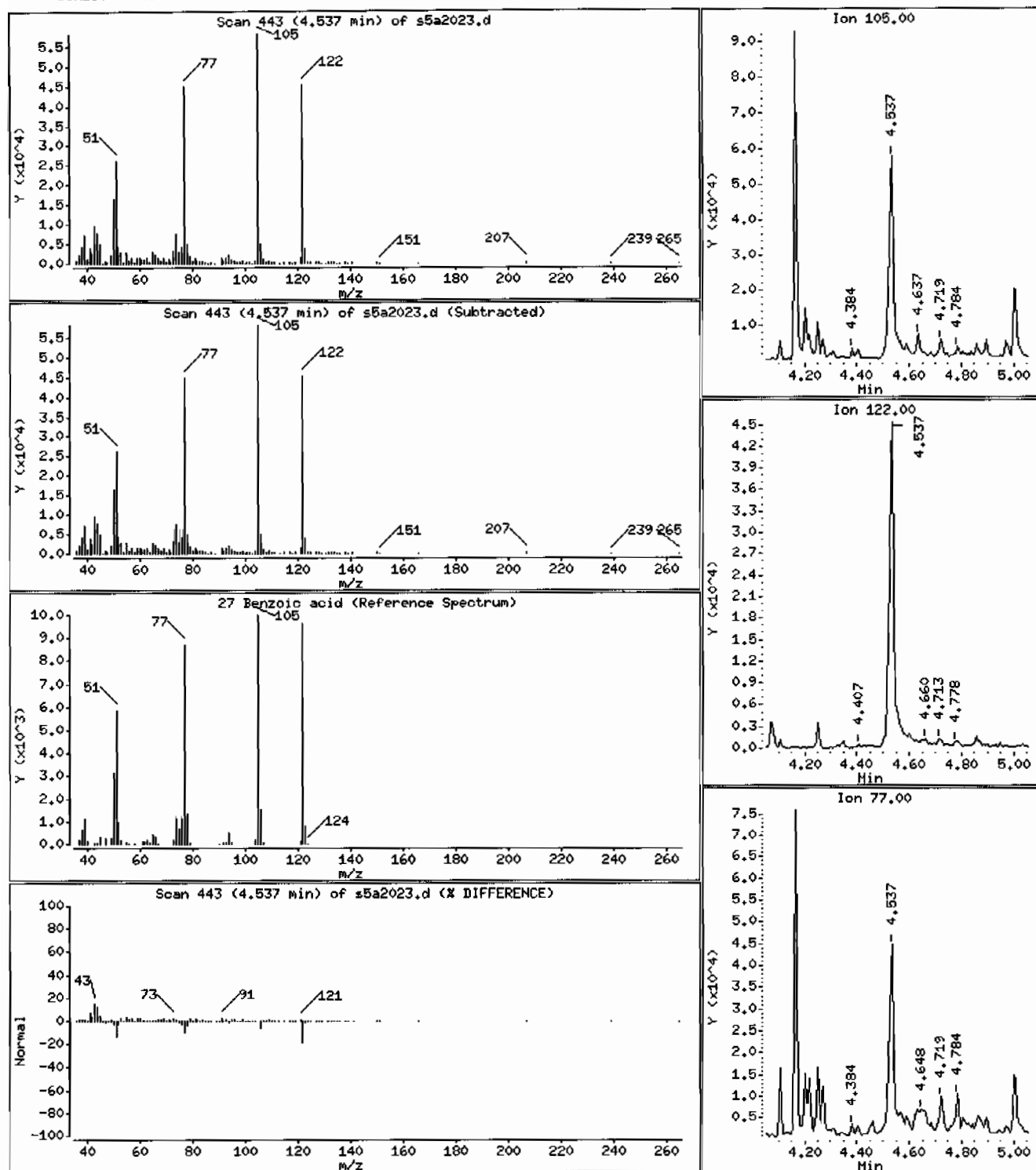
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

27 Benzoic acid

Concentration: 1010 ug/Kg



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: I244923008194338611SVH111LANL

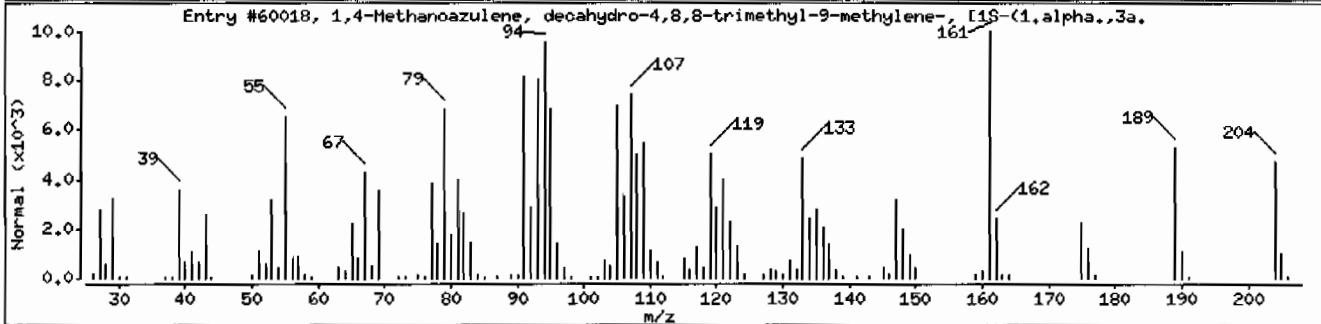
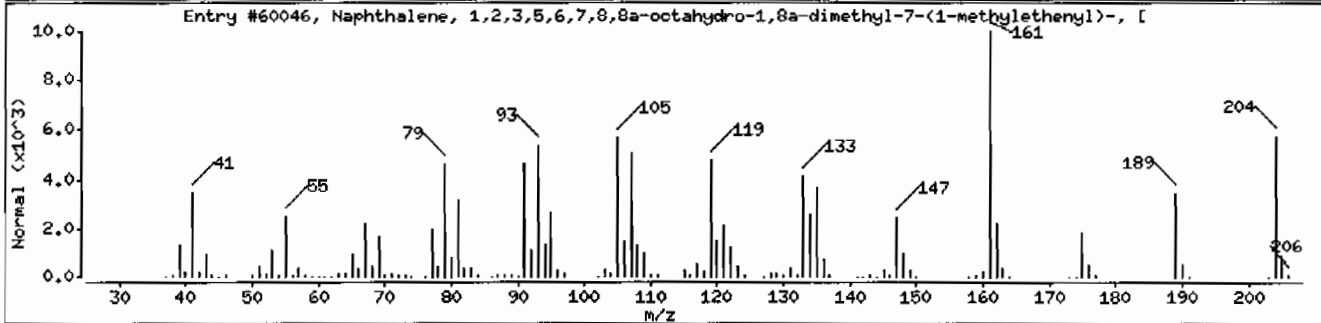
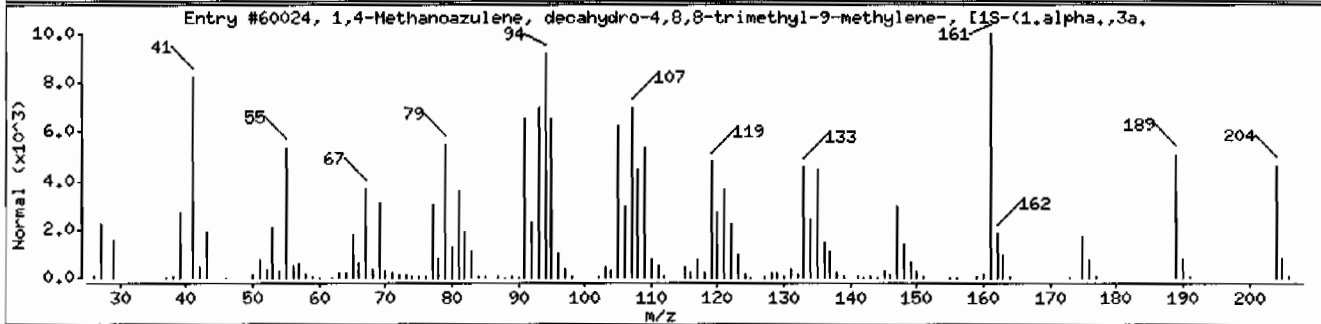
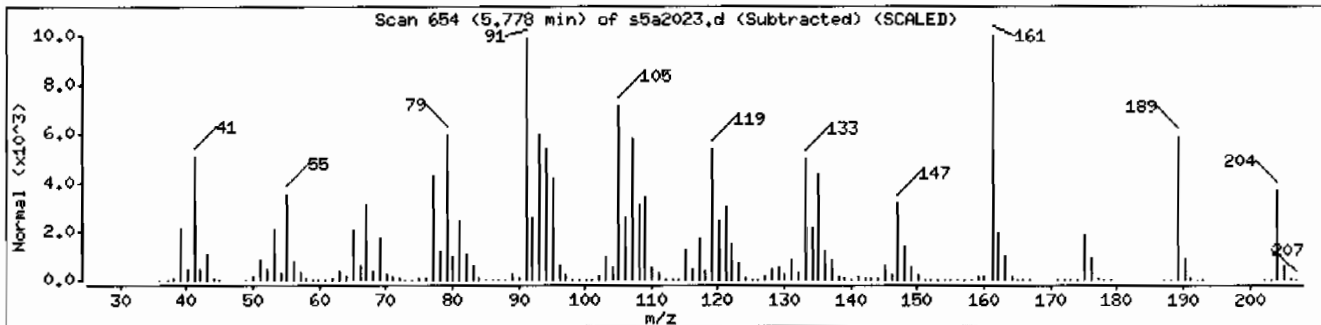
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60024	99	C15H24	204
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60046	98	C15H24	204
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60018	97	C15H24	204



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 1244923008194338611|SVM11|LANL

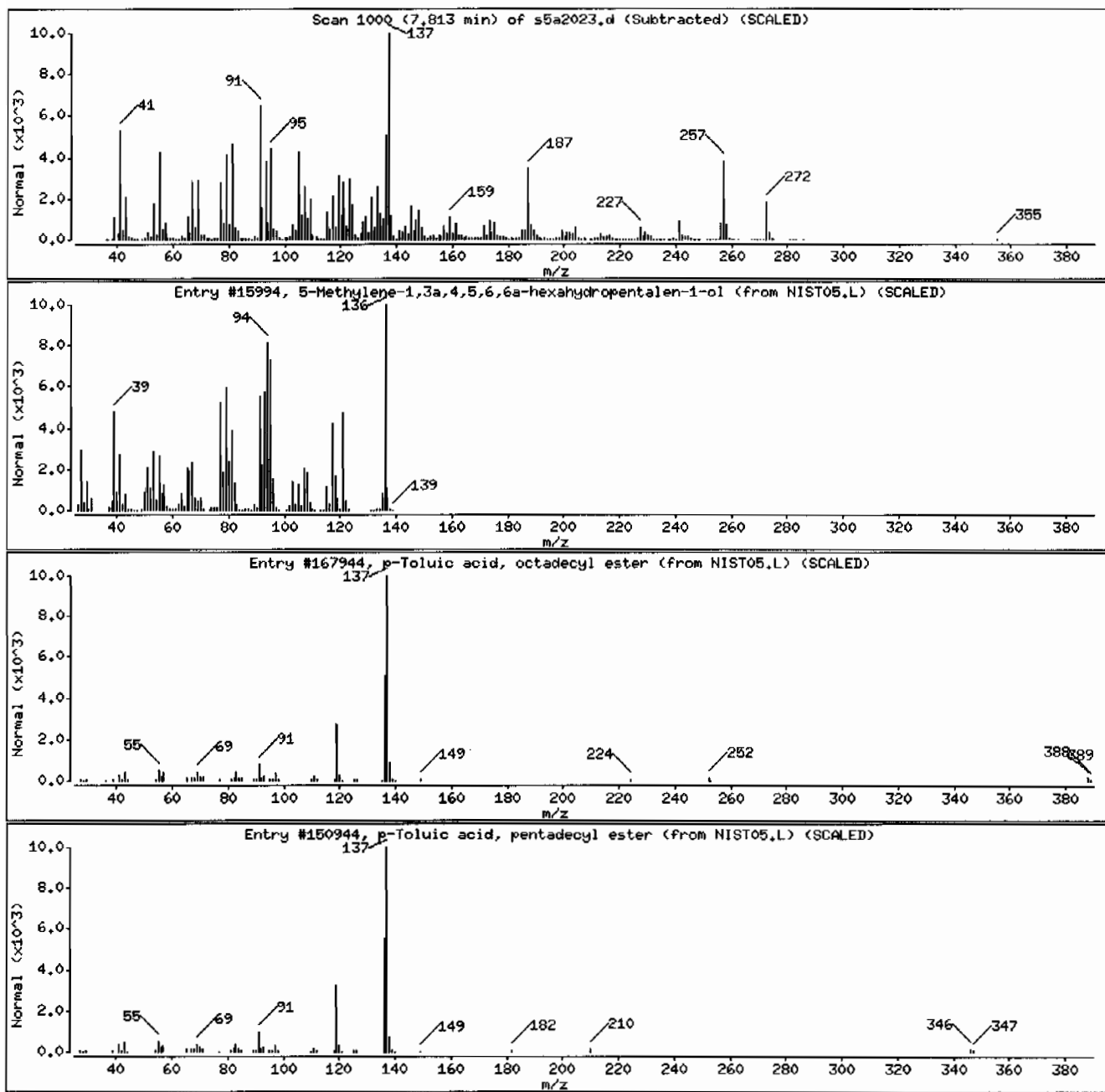
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Methylene-1,3a,4,5,6,6a-hexahydropenta	1000193-00-3	NIST05.L	15994	41	C9H12O	136
p-Toluic acid, octadecyl ester	75260-42-3	NIST05.L	167944	35	C26H44O2	388
p-Toluic acid, pentadecyl ester	1000292-40-7	NIST05.L	150944	35	C23H38O2	346



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: I244923006I943386I1ISVM11ILANL

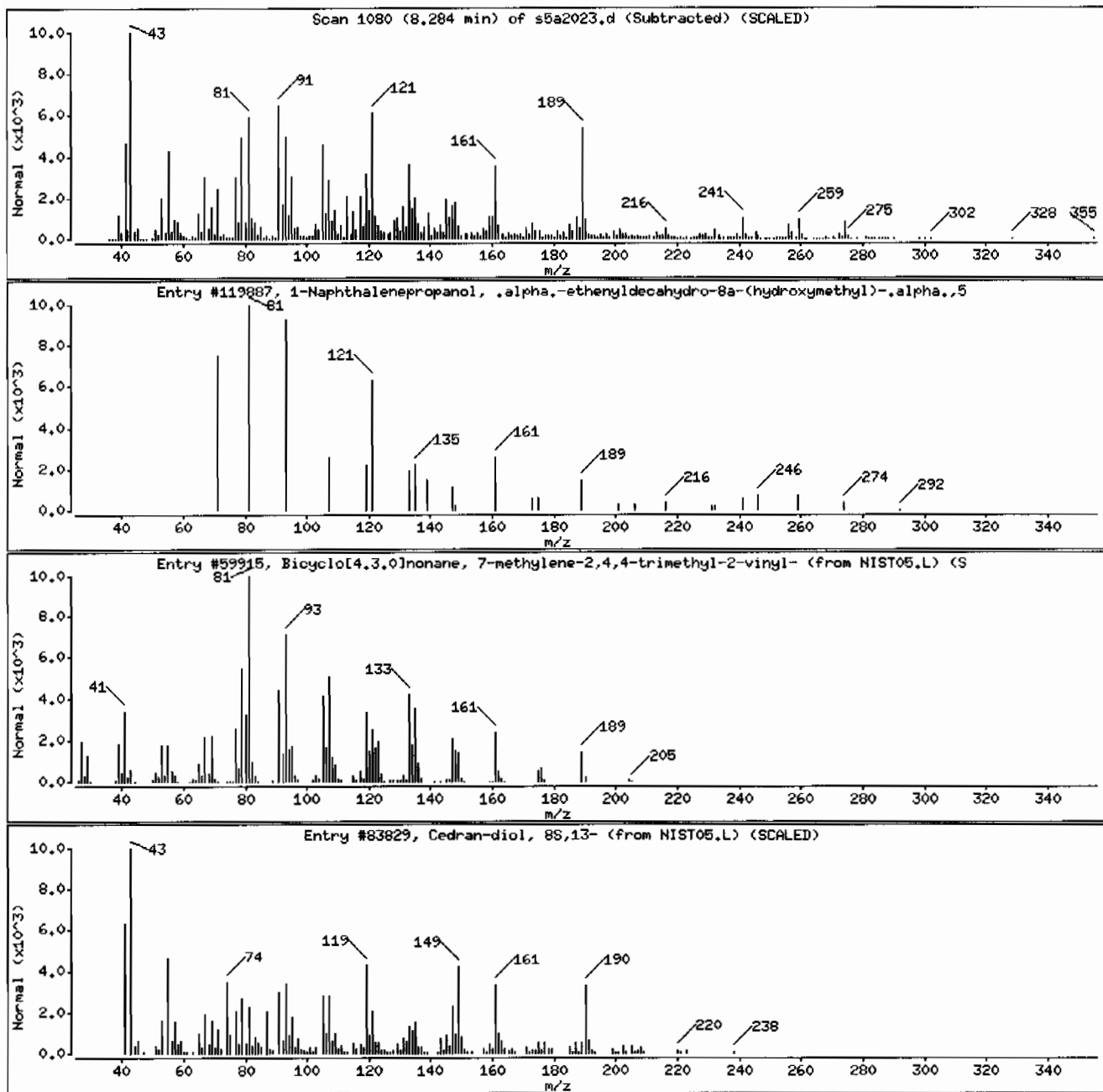
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Naphthalenepropanol, .alpha.-ethenylide	55649-42-8	NIST05.L	119887	32	C19H32O2	292
Bicyclo[4.3.0]nonane, 7-methylene-2,4,4-	1000156-11-9	NIST05.L	59915	27	C15H24	204
Cedran-diol, 8S,13-	88588-48-1	NIST05.L	83829	27	C15H26O2	238



Date: 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: I244923008I943386I1ISVHI1ILANL

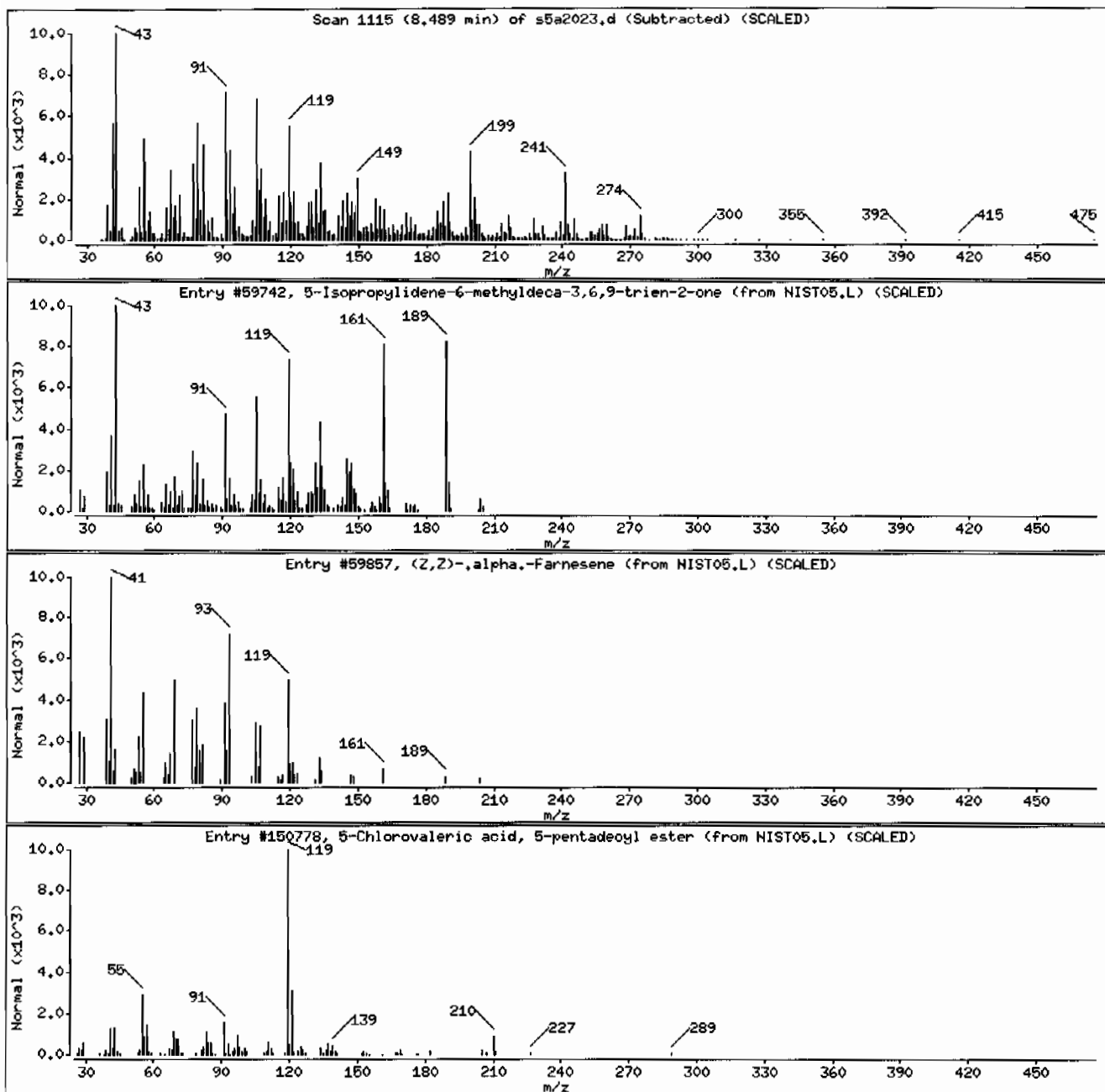
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Isopropylidene-6-methyldeca-3,6,9-triene	1000197-84-7	NIST05.L	59742	15	C14H20O	204
(Z,Z)-,alpha.-Farnesene	1000293-03-1	NIST05.L	59857	15	C15H24	204
5-Chlorovaleric acid, 5-pentadecyl ester	1000299-92-3	NIST05.L	150778	11	C20H39ClO2	346



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 1244923008194338611ISVM11ILANL

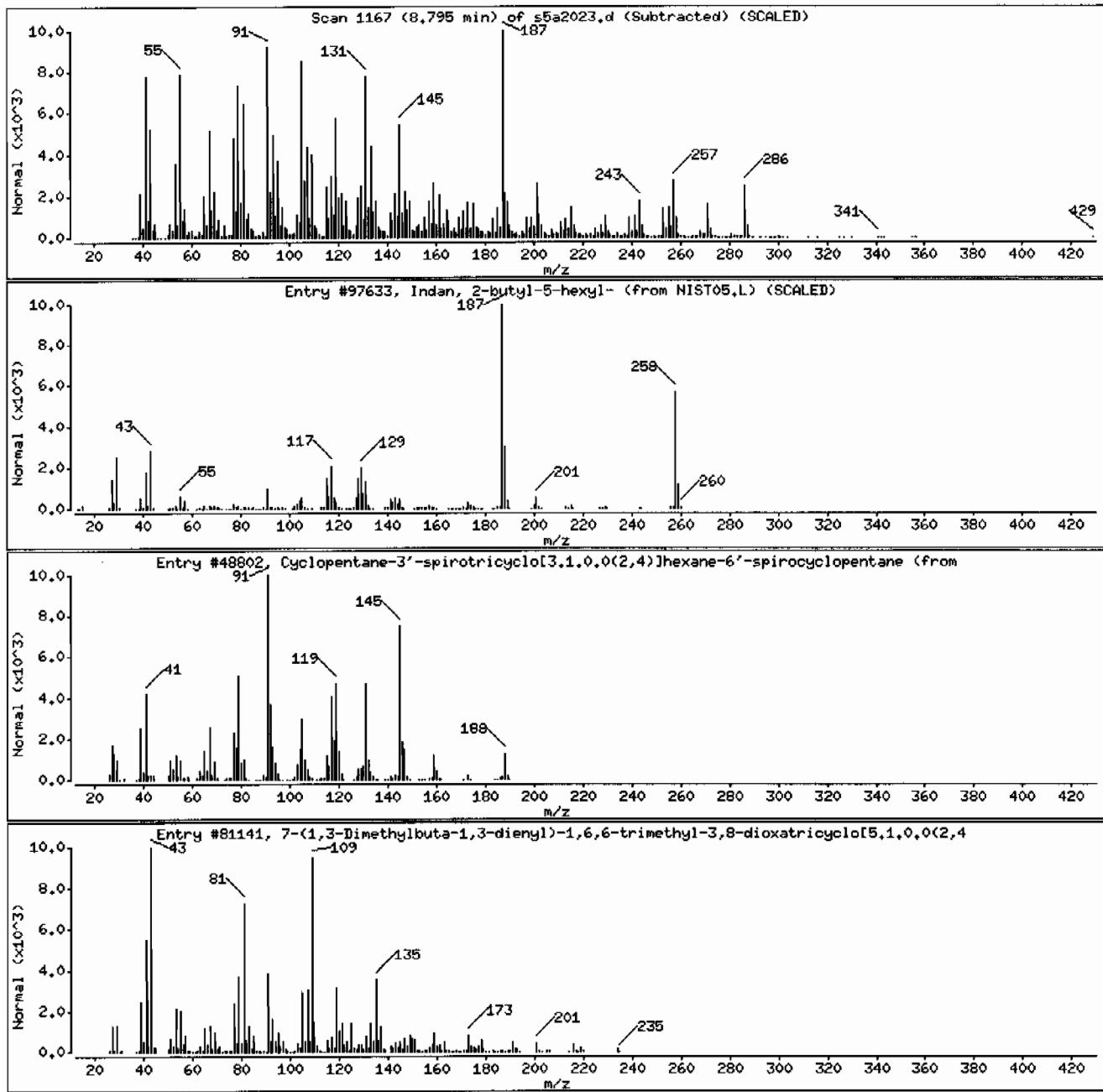
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Indan, 2-butyl-5-hexyl-	25446-32-6	NIST05.L	97633	55	C ₁₉ H ₃₀	258
Cyclopentane-3'-spirotricyclo[3.1.0.0(2,	78578-93-5	NIST05.L	48802	41	C ₁₄ H ₂₀	188
7-(1,3-Dimethylbuta-1,3-dienyl)-1,6,6-tr	1000190-22-7	NIST05.L	81141	38	C ₁₅ H ₂₂ O ₂	234



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 1244923008|94338611|SVH11|LANL

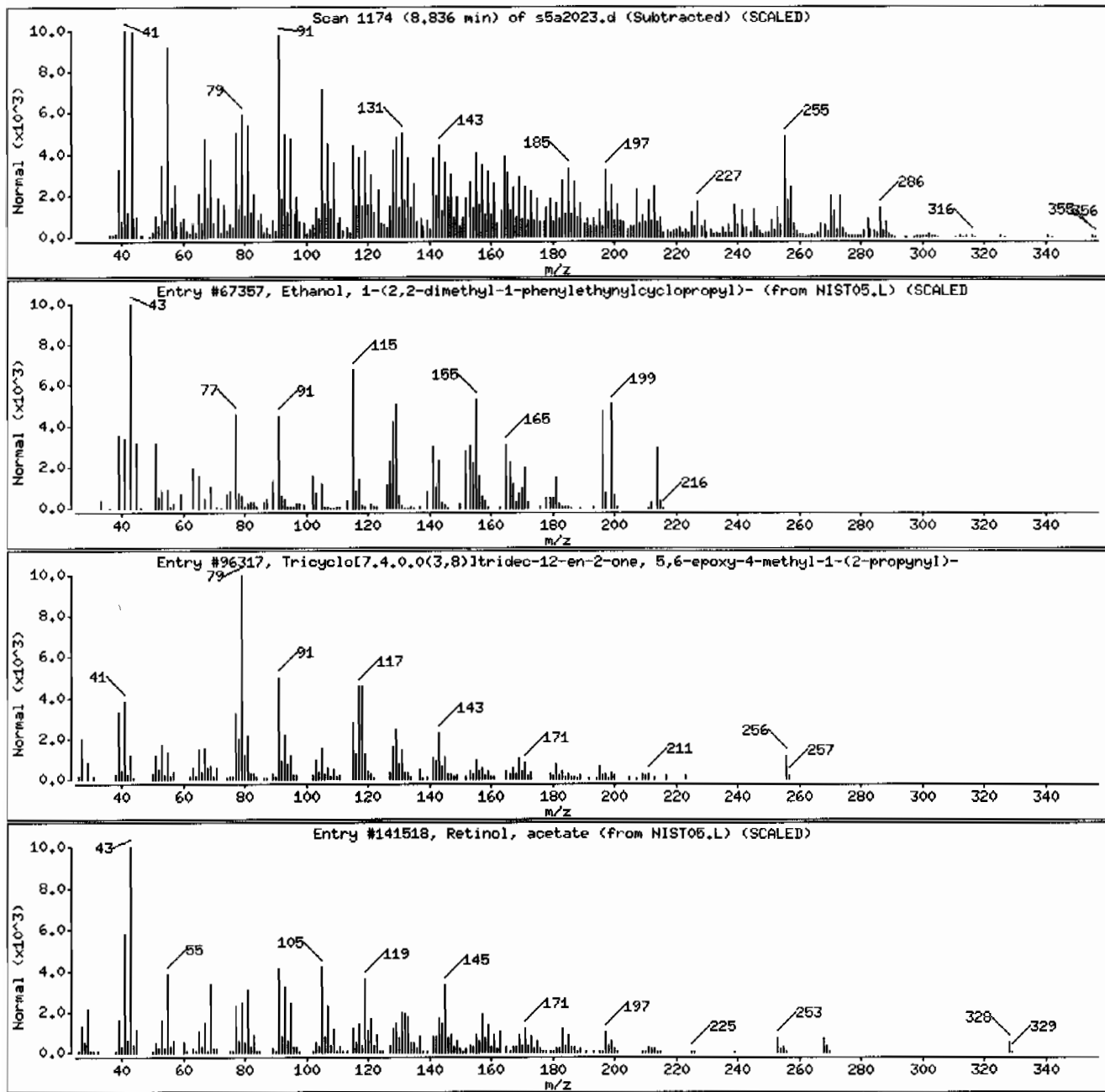
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethanol, 1-(2,2-dimethyl-1-phenylethynyl	1000268-53-7	NIST05.L	67357	35	C15H18O	214
Tricyclo[7.4.0.0(3,8)]tridec-12-en-2-one	1000157-14-6	NIST05.L	96317	22	C17H20O2	256
Retinol, acetate	127-47-9	NIST05.L	141518	18	C22H32O2	328



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: I244923008I943386I1ISVMI1ILANL

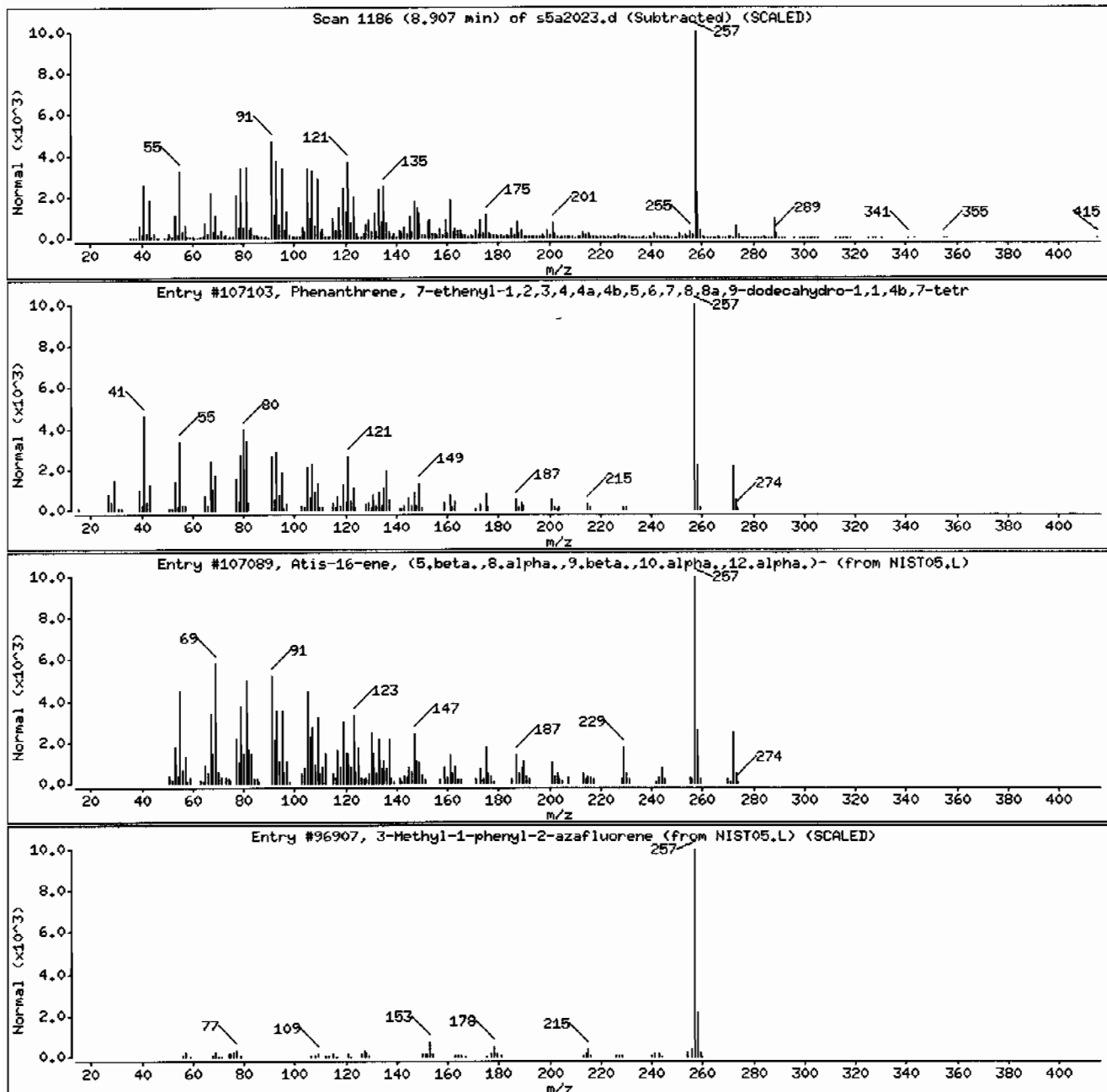
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	1686-67-5	NIST05.L	107103	50	C20H32	272
Atis-16-ene, (5.beta.,8.alpha.,9.beta.,1	20230-48-2	NIST05.L	107089	50	C20H32	272
3-Methyl-1-phenyl-2-azafluorene	62578-39-6	NIST05.L	96907	42	C19H15N	257



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 1244923008194338611SVH111LANL

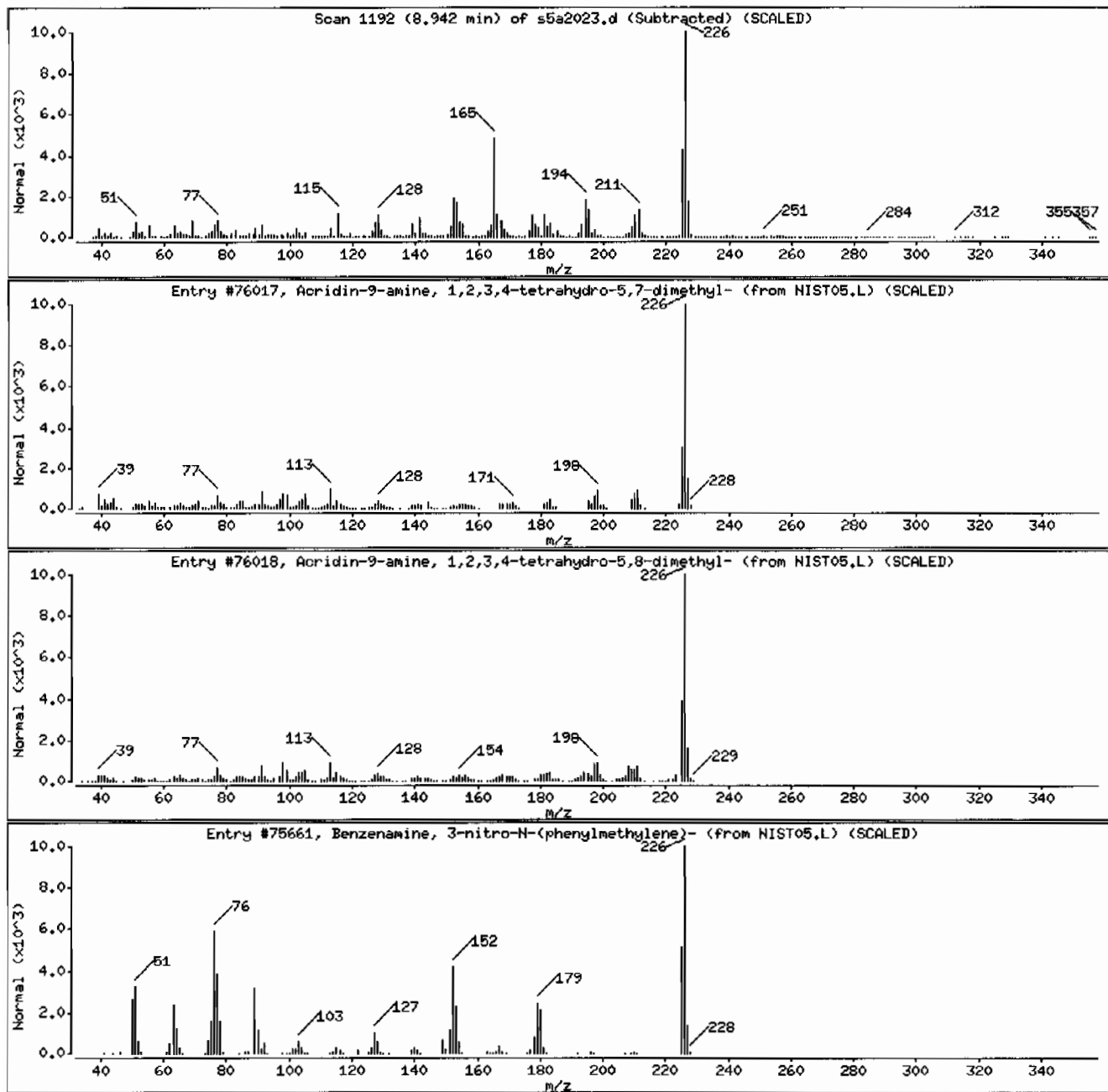
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acridin-9-amine, 1,2,3,4-tetrahydro-5,7-	1000300-57-6	NIST05.L	76017	64	C15H18N2	226
Acridin-9-amine, 1,2,3,4-tetrahydro-5,8-	297758-19-1	NIST05.L	76018	64	C15H18N2	226
Benzenamine, 3-nitro-N-(phenylmethylene)	5341-44-6	NIST05.L	75661	53	C13H10N2O2	226



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 1244923008194338611SVH111LANL

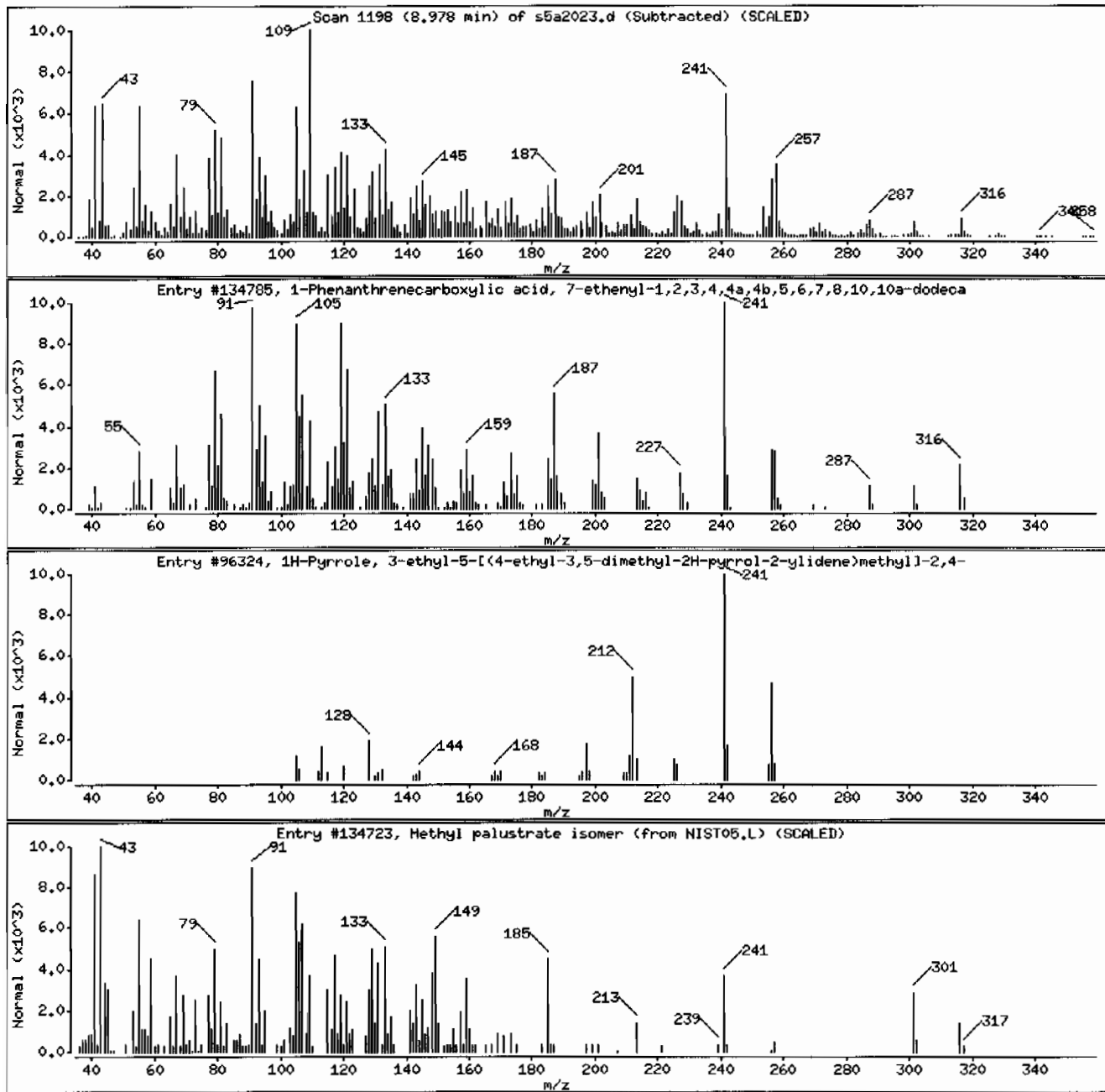
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 7-ethenyl	1686-62-0	NIST05.L	134785	90	C21H32O2	316
1H-Pyrrole, 3-ethyl-5-[(4-ethyl-3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-2,4-	2407-83-2	NIST05.L	96324	46	C17H24N2	256
Methyl palustrate isomer	3310-94-9	NIST05.L	134723	25	C21H32O2	316



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 1244923008194338611SVH111LANL

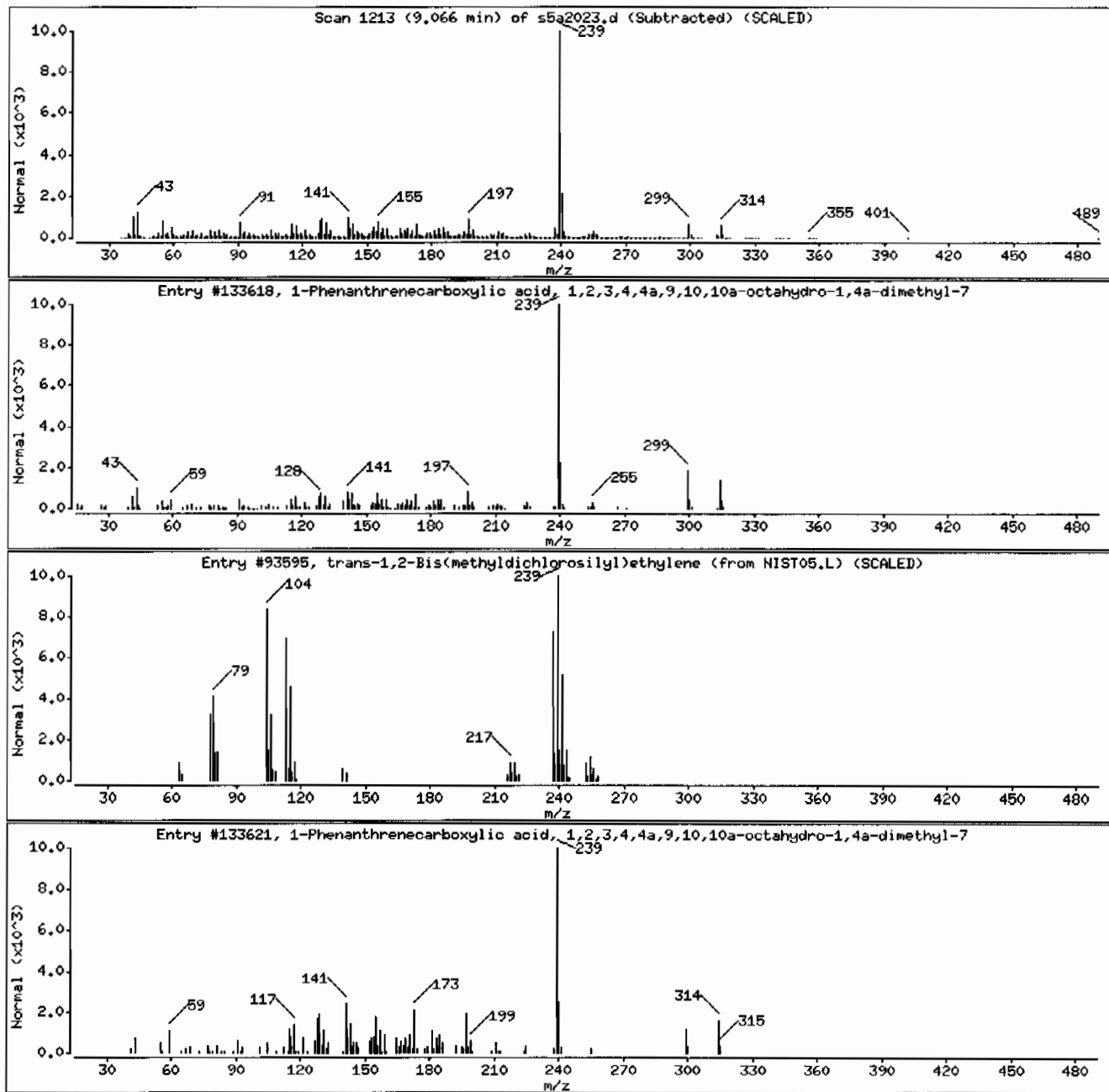
Volume Injected (uL): 0,5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0,20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	98	C21H30O2	314
trans-1,2-Bis(methyldichlorosilyl)ethyle	65899-10-7	NIST05.L	93595	96	C4H8Cl4Si2	252
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	95	C21H30O2	314



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: HSD5.i

Sample Info: 1244923008194338611SVMI11LANL

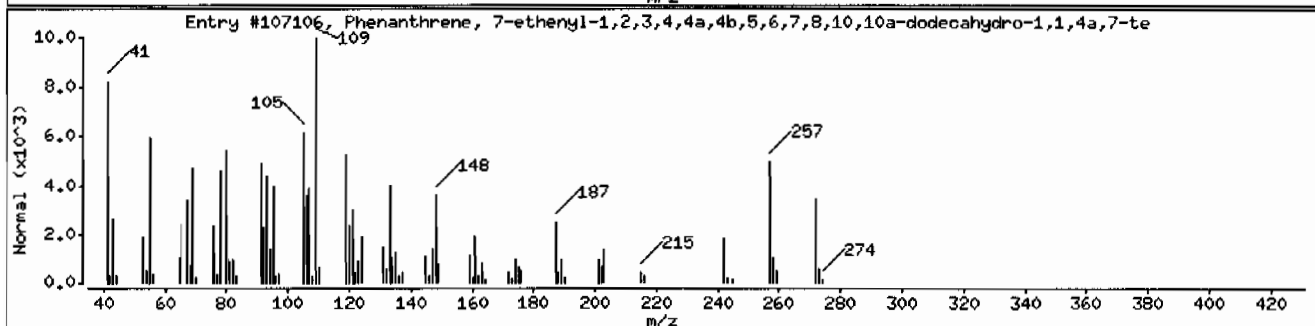
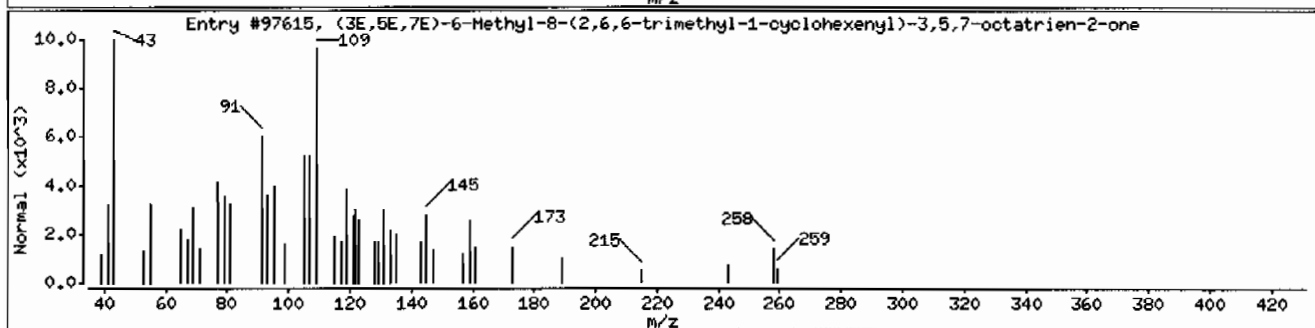
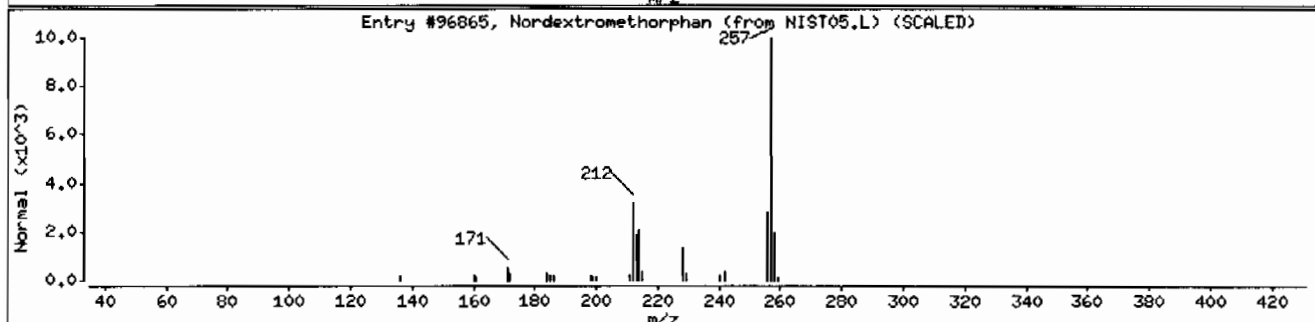
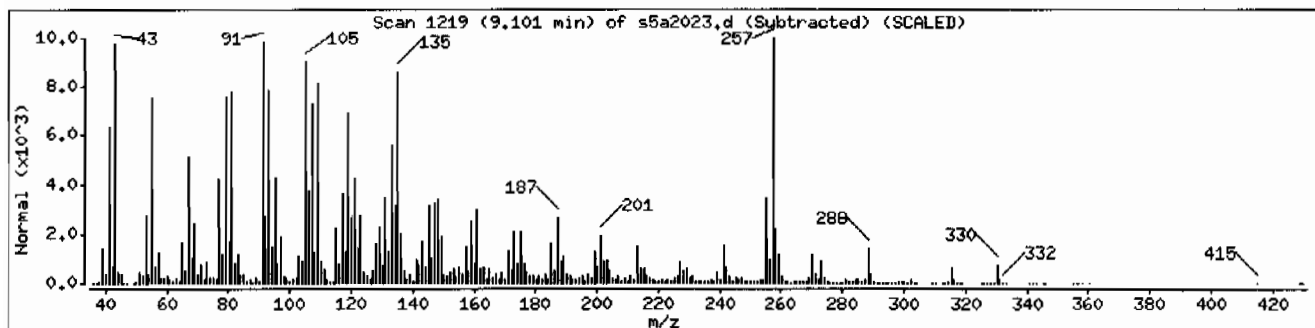
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Nordextromethorphan	51195-74-5	NIST05.L	96865	90	C17H23NO	257
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	70	C18H26O	258
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	1686-66-4	NIST05.L	107106	35	C20H32	272



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 1244923008194338611|SVH11|LANL

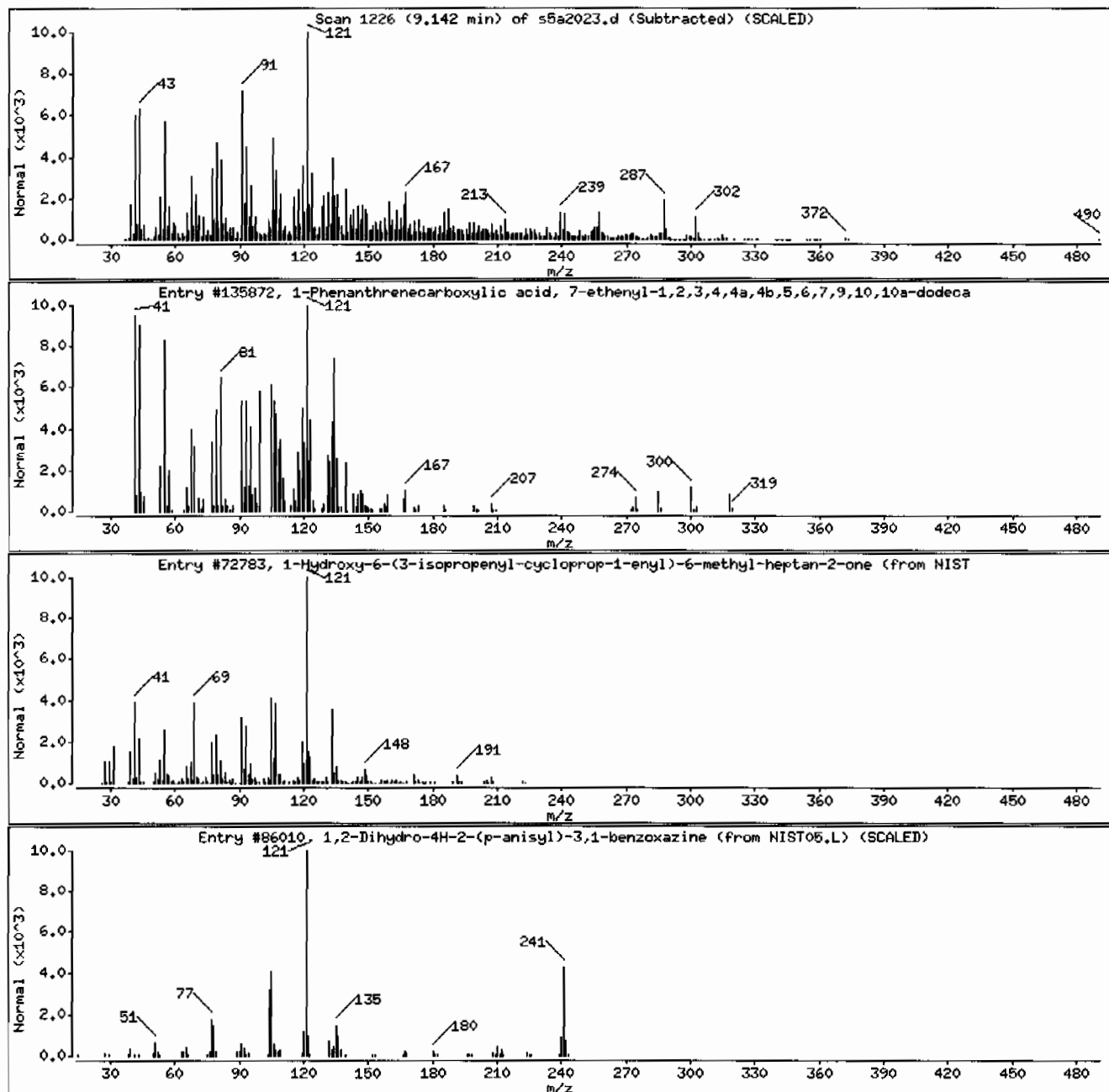
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 7-ethenyl	56051-66-2	NIST05.L	135872	52	C20H30O3	318
1-Hydroxy-6-(3-isopropenyl-cycloprop-1-en-1-yl)-6-methyl-heptan-2-one	1000189-14-9	NIST05.L	72783	41	C14H22O2	222
1,2-Dihydro-4H-2-(p-anisyl)-3,1-benzoxaz	82085-87-8	NIST05.L	86010	38	C15H15N02	241



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 12449230081943386111SVMI11LANL

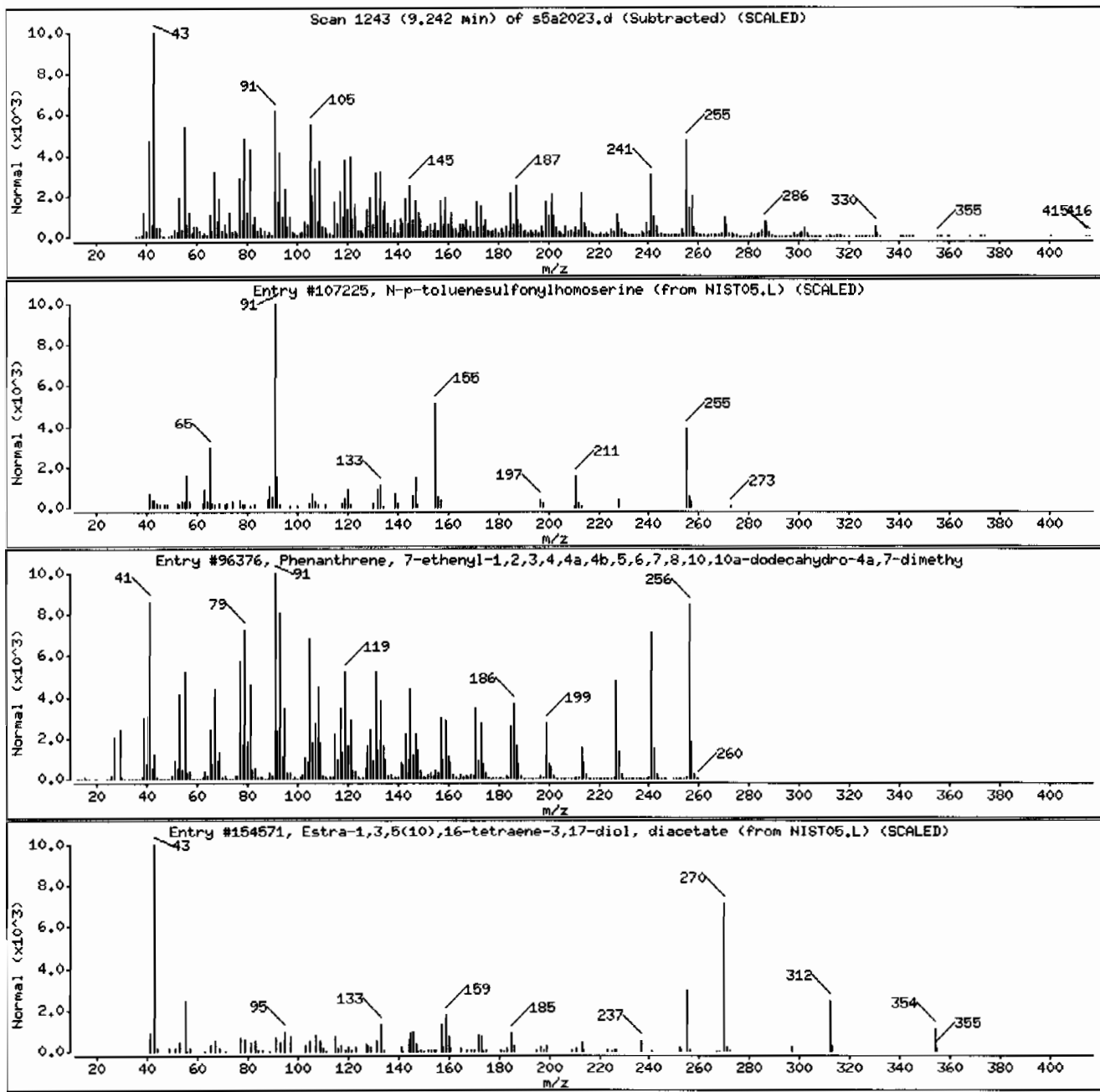
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-p-toluenesulfonylhomoserine	41088-83-9	NIST05.L	107225	25	C11H15NO5S	273
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	26549-04-2	NIST05.L	96376	18	C19H28	256
Estra-1,3,5(10),16-tetraene-3,17-diol, d	20592-42-1	NIST05.L	154571	12	C22H26O4	354



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: HSD5.i

Sample Info: I244923008194338611ISVMI1ILANL

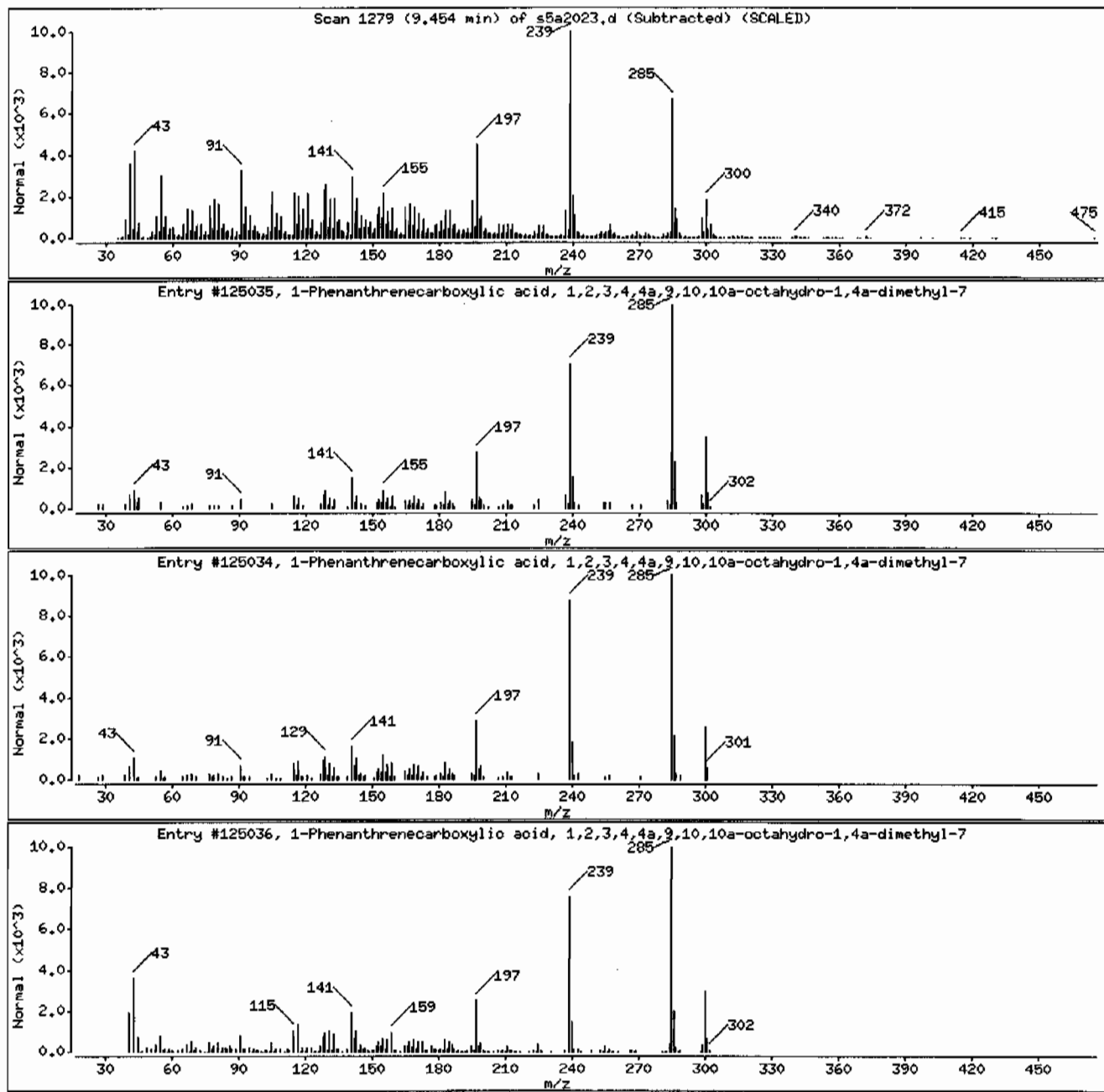
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	5155-70-4	NIST05.L	125035	95	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125034	91	C20H28O2	300
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1740-19-8	NIST05.L	125036	81	C20H28O2	300



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: 12449230081943386111SVH111LANL

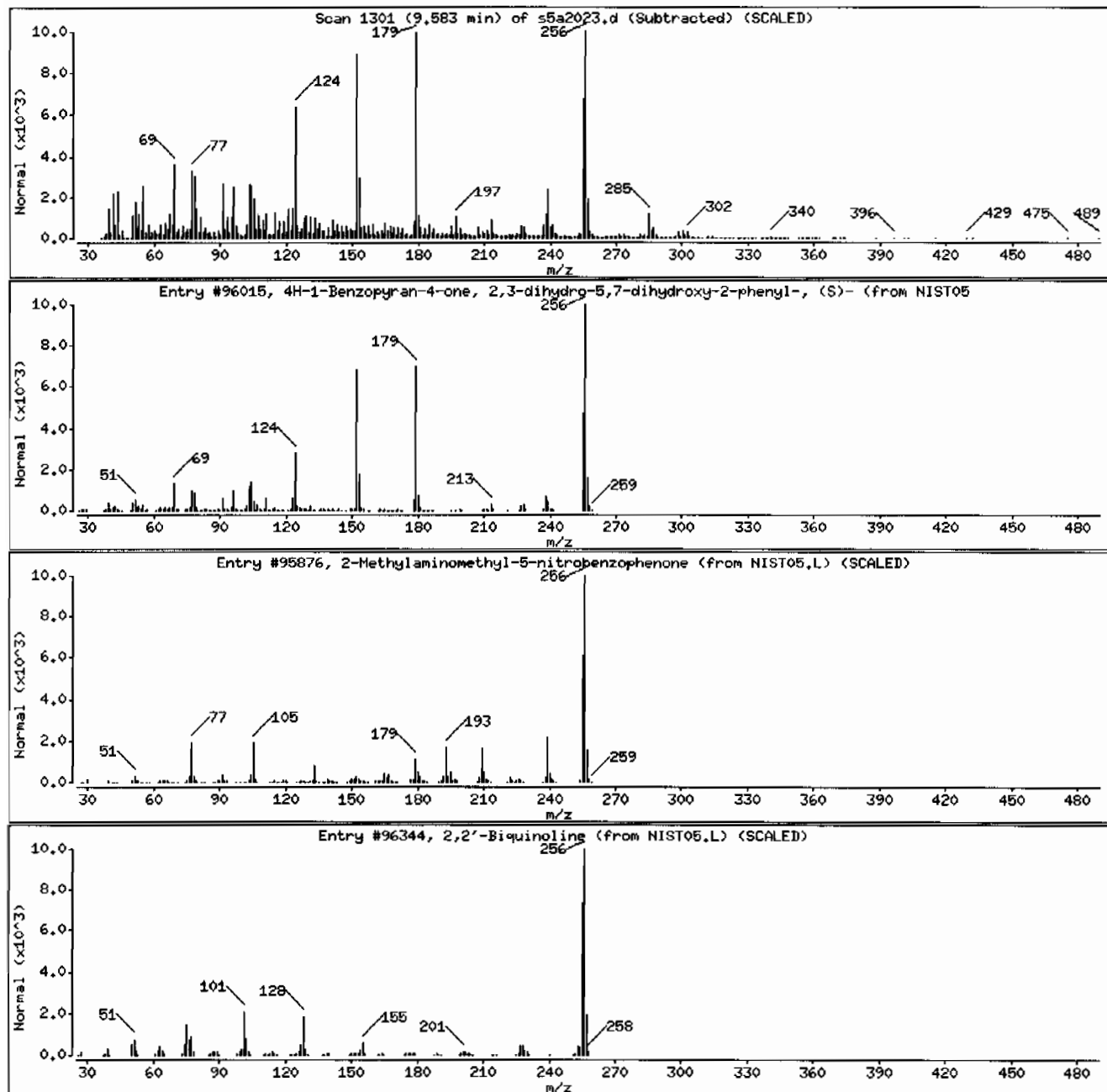
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4H-1-Benzopyran-4-one, 2,3-dihydro-5,7-d	480-39-7	NIST05.L	96015	98	C15H12O4	256
2-Methylaminomethyl-5-nitrobenzophenone	4958-56-9	NIST05.L	95876	42	C14H12N2O3	256
2,2'-Biquinoline	119-91-5	NIST05.L	96344	38	C18H12N2	256



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: HSD5.i

Sample Info: 1244923008|94338611|SVH11|LANL

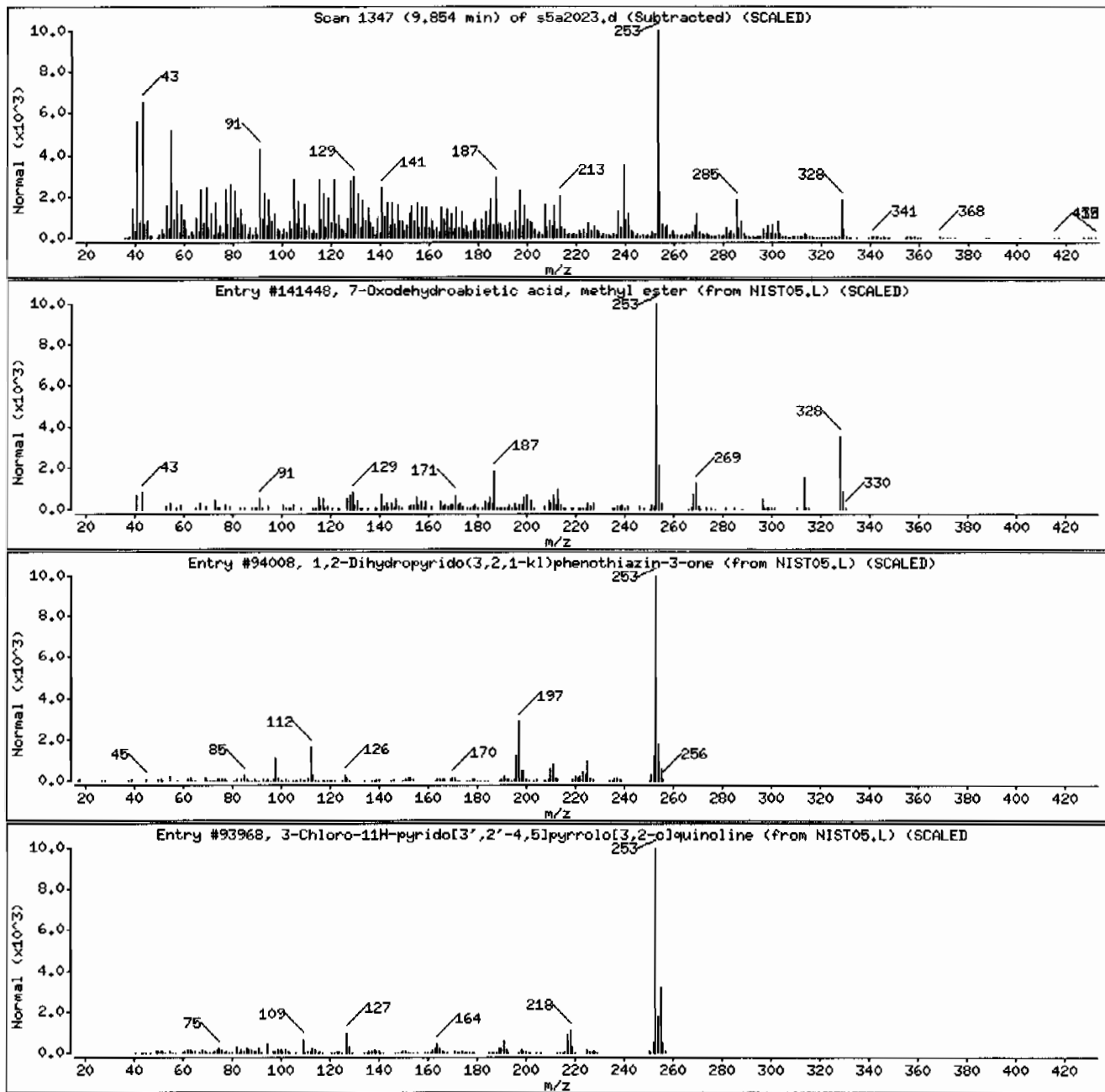
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
7-Oxodehydroabietic acid, methyl ester	110936-78-2	NIST05.L	141448	90	C21H28O3	328
1,2-Dihydropyrido(3,2,1-k1)phenothiazin-	69513-42-4	NIST05.L	94008	50	C15H11NOS	253
3-Chloro-11H-pyrido[3',2'-4,5]pyrrolo[3,	1000212-59-4	NIST05.L	93968	38	C14H8ClN3	253



Date : 21-JAN-2010 01:36

Client ID: RE15-10-7172

Instrument: MSD5.i

Sample Info: I244923008|943386|11SVH11|LANL

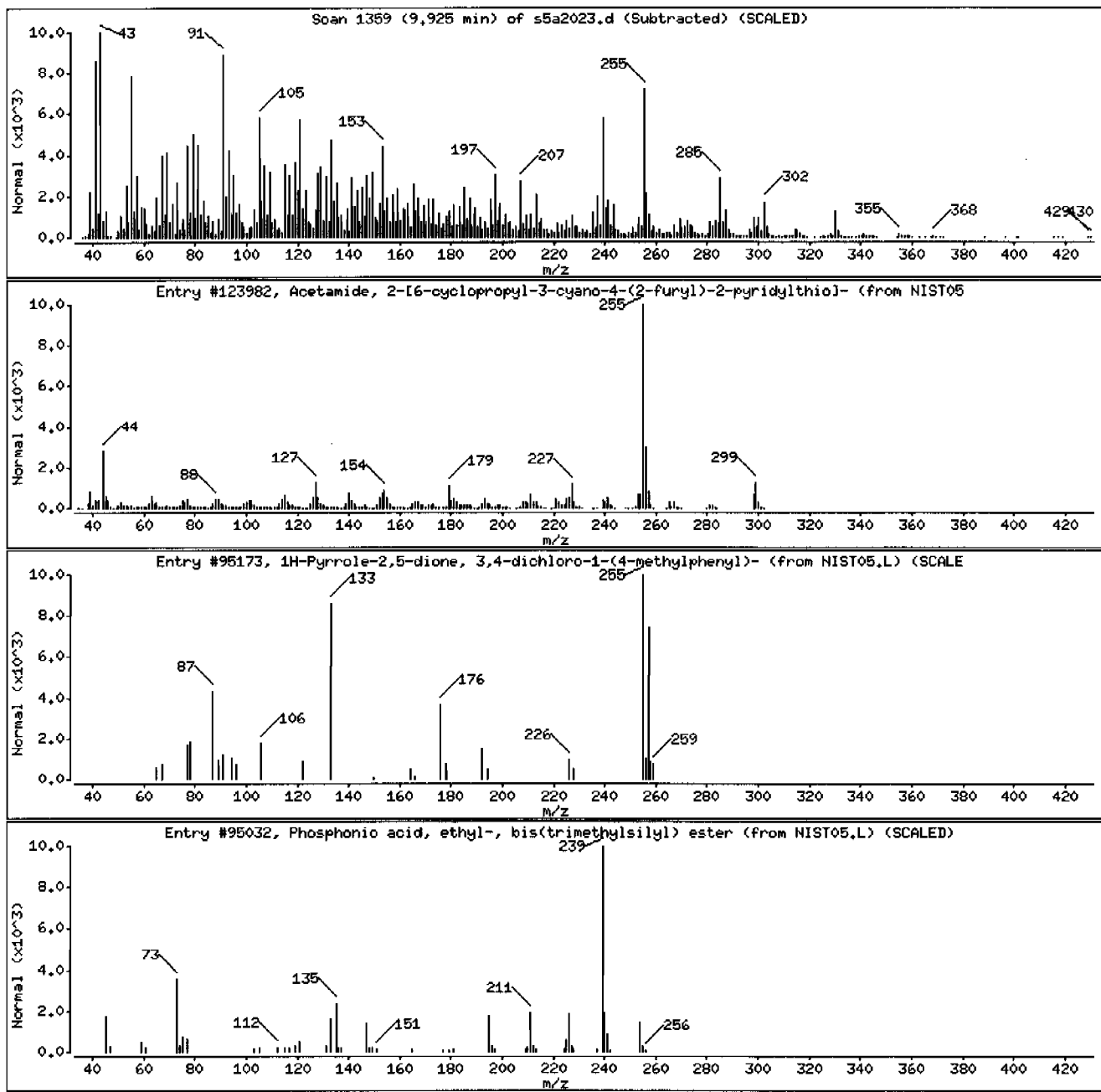
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, 2-[6-cyclopropyl-3-cyano-4-(2	1000276-67-9	NIST05.L	123982	25	C15H13N3O2S	299
1H-Pyrrole-2,5-dione, 3,4-dichloro-1-(4-	29244-55-1	NIST05.L	95173	22	C11H7Cl2N2O2	255
Phosphonic acid, ethyl-, bis(trimethylsi	1641-57-2	NIST05.L	95032	15	C8H23O3PSi2	254



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

SDG Number: 10-1287
Lab Sample ID: 244923006

Client ID: RE15-10-7173
Batch ID: 943386
Run Date: 01/21/2010 00:51
Prep Date: 01/20/2010 11:13
Data File: s5a2021.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

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

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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: 10-1287
Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7173
Batch ID: 943386
Run Date: 01/21/2010 00:51
Prep Date: 01/20/2010 11:13
Data File: s5a2021.d

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
	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
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	1.98	1740	ug/kg		J
79-09-4	Propanoic acid	2.12	184	ug/kg	81	NJ

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923006	Date Received: 01/16/2010 08:55	%Moisture: 9.8
Client ID: RE15-10-7173	Client: LANL010	Project: LANL01004
Batch ID: 943386	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Run Date: 01/21/2010 00:51	Inst: MSD5.I	Dilution: 1
Prep Date: 01/20/2010 11:13	Analyst: RMB	Inj. Vol: .5 uL
Data File: s5a2021.d	Aliquot: 30 g	Final Volume: 1 mL
	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary			Estimated			
CAS No.	Tentatively Identified Compound (TIC)	RT		Units	Fit	Qual
	Unknown Aldol Condensate	2.93	269	ug/kg		JA
498-15-7	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy	3.88	175	ug/kg	97	NJ
1686-66-4	Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	8	151	ug/kg	95	NJ
	Unknown	8.79	173	ug/kg		J
	Unknown	8.92	225	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	159	ug/kg	93	NJ
	Unknown	9.12	164	ug/kg		J
629-96-9	1-Eicosanol	9.42	240	ug/kg	89	NJ
1599-67-3	1-Docosene	10.08	271	ug/kg	99	NJ
	Unknown	11.91	1560	ug/kg		J
	Unknown	12.67	1400	ug/kg		J
	Unknown	13.11	164	ug/kg		J
	Unknown	13.25	237	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1330	ug/kg	95	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2021.d
Lab Smp Id: 244923006 Client Smp ID: RE15-10-7173
Inj Date : 21-JAN-2010 00:51
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923006|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.79830	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926 (1.000)	371977	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792 (1.000)	1364718	40.0000	
* 46 Acenaphthene-d10	164	6.043	6.044 (1.000)	773408	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214 (1.000)	1385129	40.0000	
* 91 Chrysene-d12	240	9.619	9.622 (1.000)	1183284	40.0000	
* 98 Perylene-d12	264	11.289	11.298 (1.000)	765965	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102 (0.793)	621337	67.3534	2490
\$ 5 Phenol-d5	99	3.637	3.637 (0.928)	791342	69.5582	2570
\$ 20 Nitrobenzene-d5	82	4.278	4.287 (0.894)	340634	32.5078	1200
\$ 39 2-Fluorobiphenyl	172	5.525	5.534 (0.914)	696631	34.0496	1260
\$ 60 2,4,6-Tribromophenol	329	6.637	6.641 (1.098)	206333	83.9374	3100
\$ 81 p-Terphenyl-d14	244	8.589	8.592 (0.893)	857665	46.1612	1700

ION RATIO REPORT

SV REPORT

Data file: s5a2021.d

Report Date: 01/21/2010 07:48

Lab. ID: 244923006

SampleType: SAMPLE

Injection Date: 21-JAN-2010 00:51

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923006|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4 Aniline		CAS#: 62-53-3				
66	43206	3.64	3.70	80-120	100	(T)
93	21135	3.69	3.70	220-280	49	(Q)

17 N-Nitrosodipropylamine		CAS#: 621-64-7				
70	46456	4.28	4.16	80-120	100	(T)
42	29022	4.28	4.16	44-104	62	(T)

27 Benzoic acid		CAS#: 65-85-0				
105	4553	4.52	4.55	80-120	100	()
122	2177	4.53	4.55	47-107	48	()
77	2450	4.52	4.55	44-104	54	()

34 2-Methylnaphthalene		CAS#: 91-57-6				
142	3837	5.13	5.29	80-120	100	(T)
141	470	5.13	5.29	54-114	12	(QT)

40 2-Chloronaphthalene		CAS#: 91-58-7				
162	19894	5.77	5.64	80-120	100	(T)
164	1205	5.77	5.64	3- 63	6	(T)
127	1668	5.77	5.64	9- 69	8	(QT)

42 o-Nitroaniline		CAS#: 88-74-4				
65	25567	5.77	5.70	80-120	100	(T)
92	32215	5.77	5.70	33- 93	126	(QT)
138	2390	5.77	5.70	71-131	9	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
43 Dimethylphthalate				CAS#: 131-11-3		
163	141225	6.04	5.80	80-120	100	(T)
164	773408	6.04	5.80	0- 41	548	(QT)

44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	103087	6.04	5.86	80-120	100	(T)
63	1686	6.04	5.86	47-107	2	(QT)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	103087	6.04	6.16	80-120	100	(T)
89	1722	6.04	6.16	48-108	2	(QT)
63	1686	6.04	6.16	25- 85	2	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	1123	6.01	6.08	80-120	100	(T)
109	2223	6.04	6.08	40-100	198	(Q)
65	3357	6.04	6.08	71-131	299	(Q)

53 Fluorene				CAS#: 86-73-7		
166	11533	6.64	6.46	80-120	100	(T)
165	11905	6.64	6.46	57-117	103	(T)
167	4419	6.64	6.46	0- 44	38	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	843	6.64	6.47	80-120	100	(T)
105	1730	6.64	6.47	13- 73	205	(QT)
51	1350	6.64	6.47	55-115	160	(QT)

61 4-Bromophenylphenylether				CAS#: 101-55-3		
248	14362	6.64	6.82	80-120	100	(T)
141	95333	6.64	6.82	46-106	664	(QT)
250	28358	6.64	6.82	69-129	197	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2021.d
 Lab Smp Id: 244923006 Client Smp ID: RE15-10-7173
 Inj Date : 21-JAN-2010 00:51
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244923006|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.79830	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2327782	40.000
* 67 Phenanthrene-d10	7.213	3435278	40.000
* 91 Chrysene-d12	9.619	3601234	40.000
* 98 Perylene-d12	11.289	2186886	40.000

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

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.984	2736950	47.0310246	1740	0		0	10
Propanoic acid					CAS #: 79-09-4		
2.119	290070	4.98448394	184	81	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.931	423596	7.27896307	269	0		0	10
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethy					CAS #: 498-15-7		
3.878	275514	4.73436626	175	97	NIST05.L	15369	10
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,					CAS #: 1686-66-4		
7.995	351145	4.08868983	151	95	NIST05.L	107106	67
Unknown					CAS #:		
8.789	421990	4.68717085	173	0		0	91
Unknown					CAS #:		
8.925	549343	6.10172023	225	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.054	387005	4.29857931	159	93	NIST05.L	133621	91
Unknown					CAS #:		
9.125	398592	4.42728225	164	0		0	91
1-Eicosanol					CAS #: 629-96-9		
9.425	585801	6.50667291	240	89	NIST05.L	123792	91
1-Docosene					CAS #: 1599-67-3		
10.084	660173	7.33274431	271	99	NIST05.L	129889	91
Unknown					CAS #:		
11.907	2301982	42.1051791	1560	0		0	98
Unknown					CAS #:		
12.666	2067568	37.8175534	1400	0		0	98
Unknown					CAS #:		
13.107	242087	4.42797938	164	0		0	98
Unknown					CAS #:		
13.254	350560	6.41204181	237	0		0	98

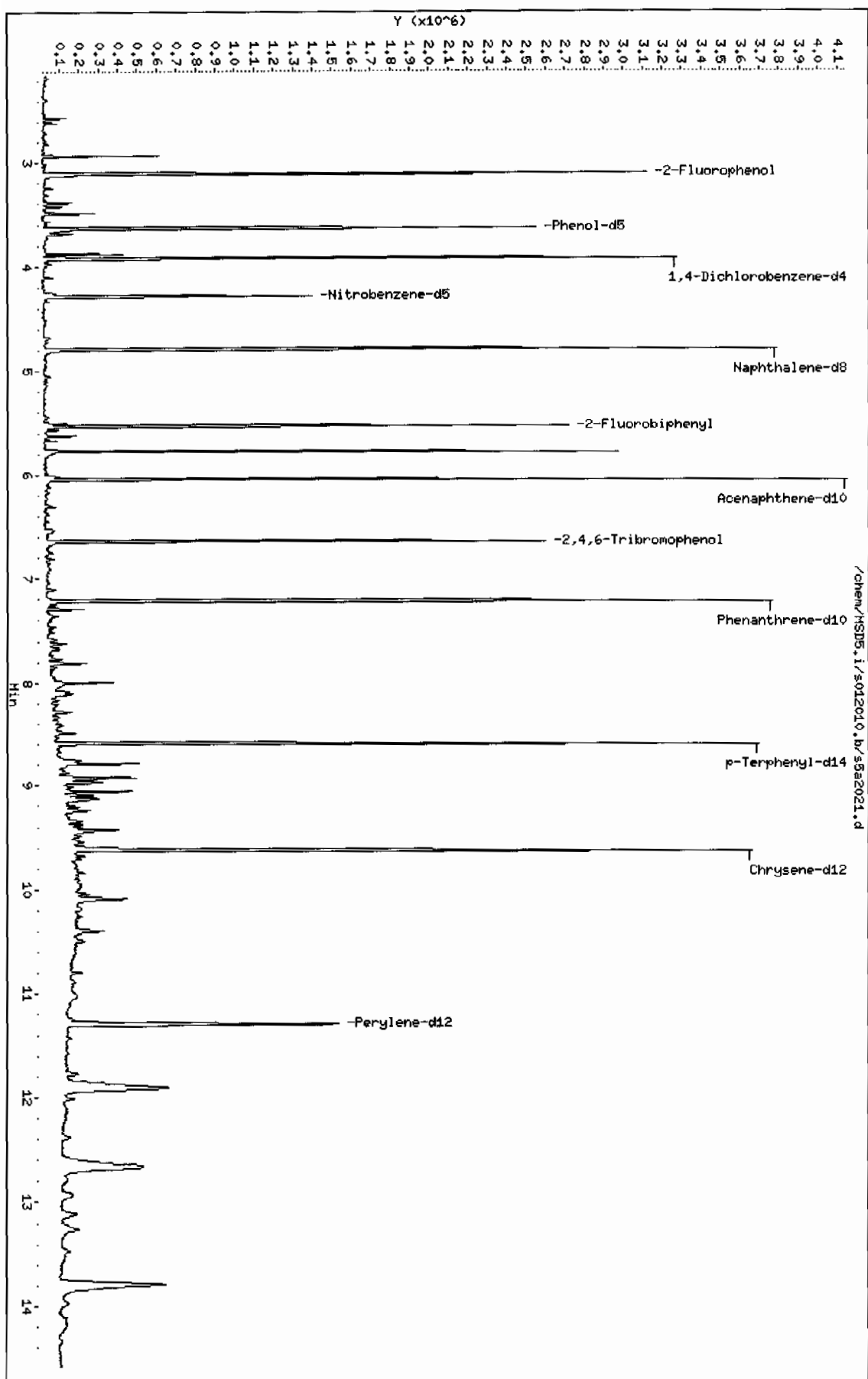
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Report Date: 21-Jan-2010 08:32

Page 4

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
====	=====	=====	=====	=====	=====	=====	=====
.gamma.-Sitosterol					CAS #: 83-47-6		
13.783	1969782	36.0289691	1330	95	NIST05.L	174402	98

Data File: /chem/MSDS.i/s012010.b/s5a2021.d
Date: 21-Jan-2010 00:51
Client ID: RELS-10-7173
Sample Info: 124492306194338611SWH11.LANL
Volume Injected (uL): 0.5
Column phase: 3M DB-SHS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: I2449230061943386111SVH111LANL

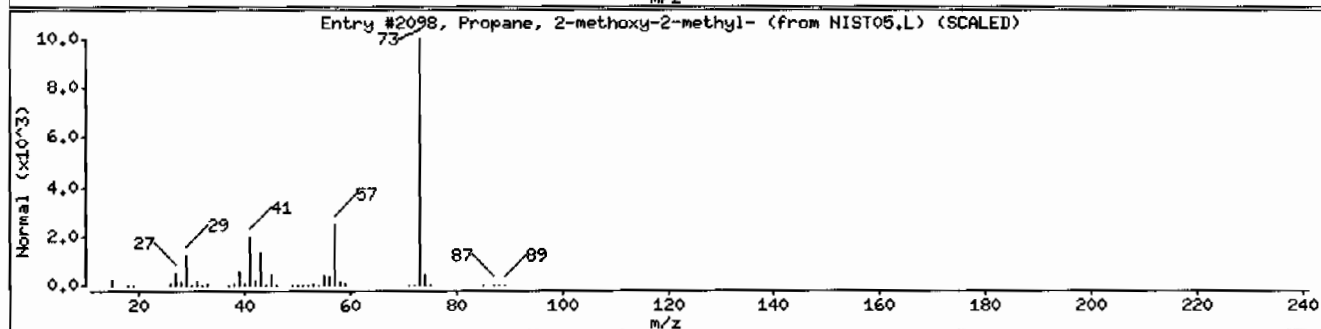
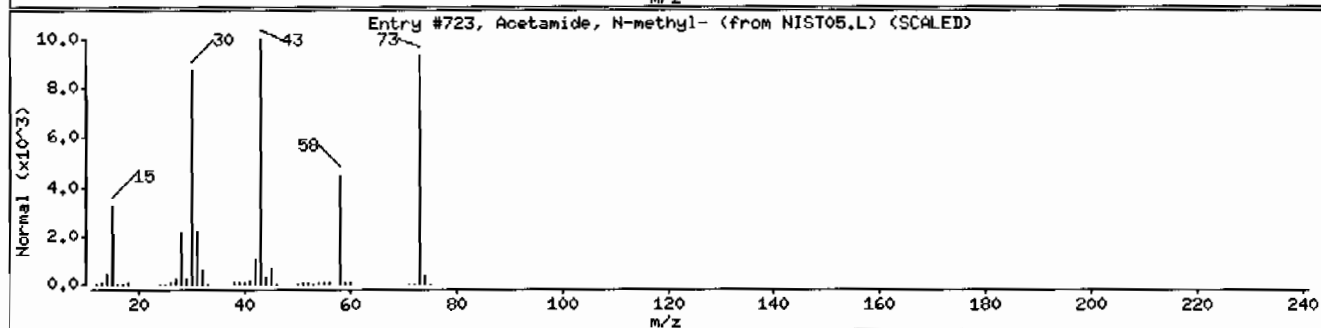
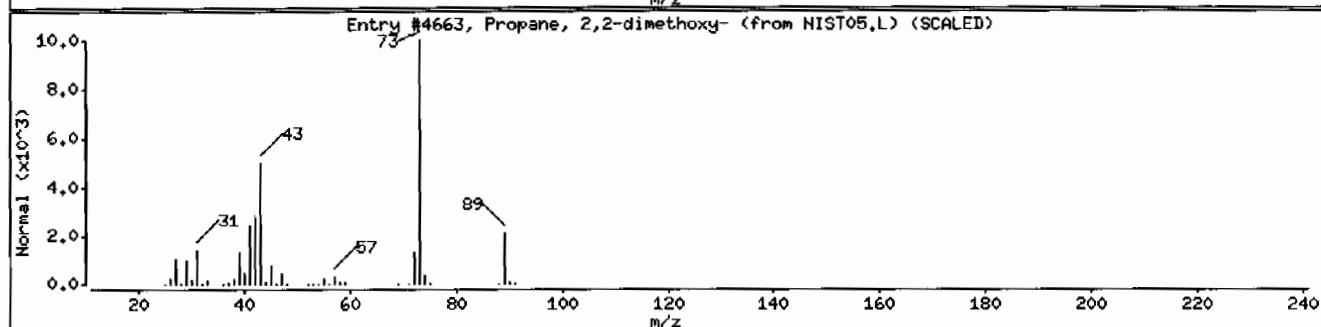
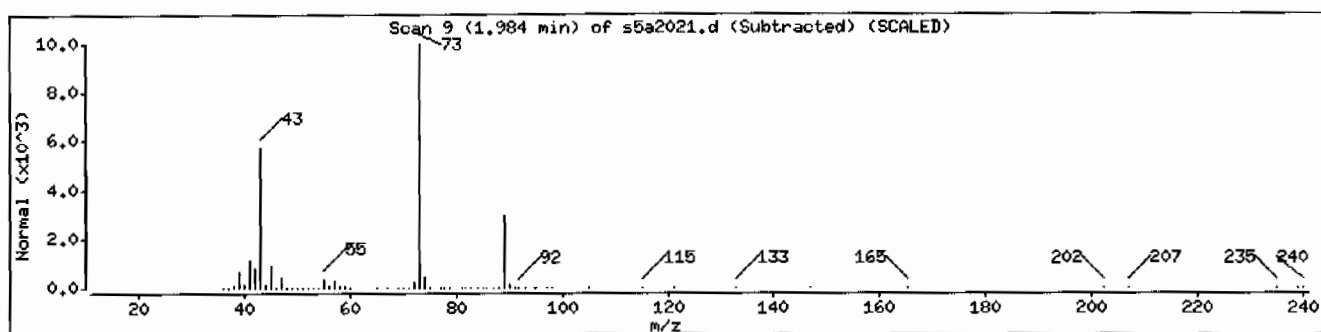
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	9	C3H7NO	73
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2098	9	C5H12O	88



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5,i

Sample Info: I244923006I943386I1ISVM11ILANL

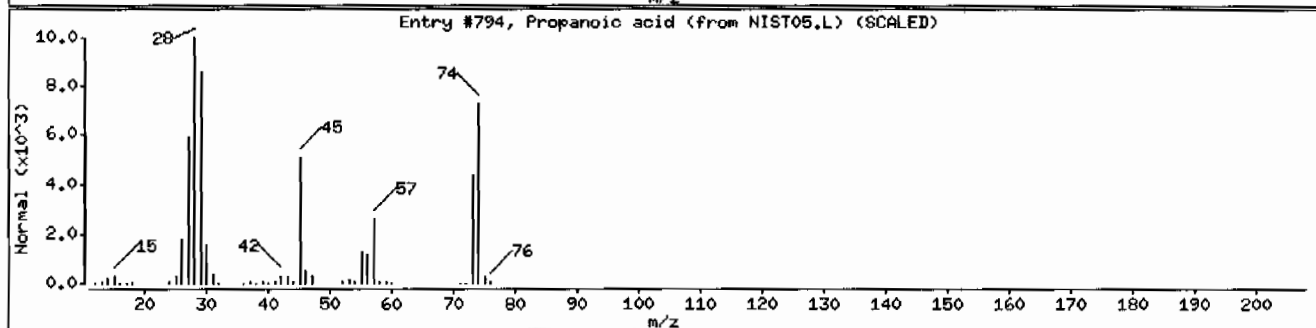
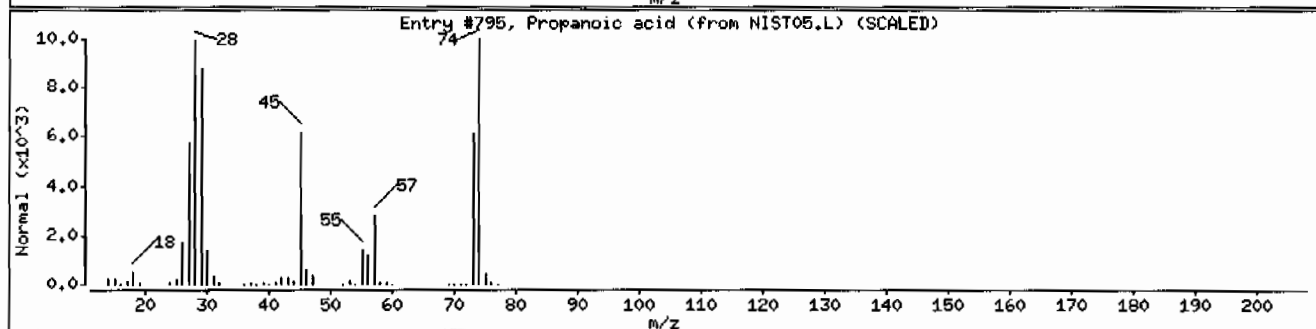
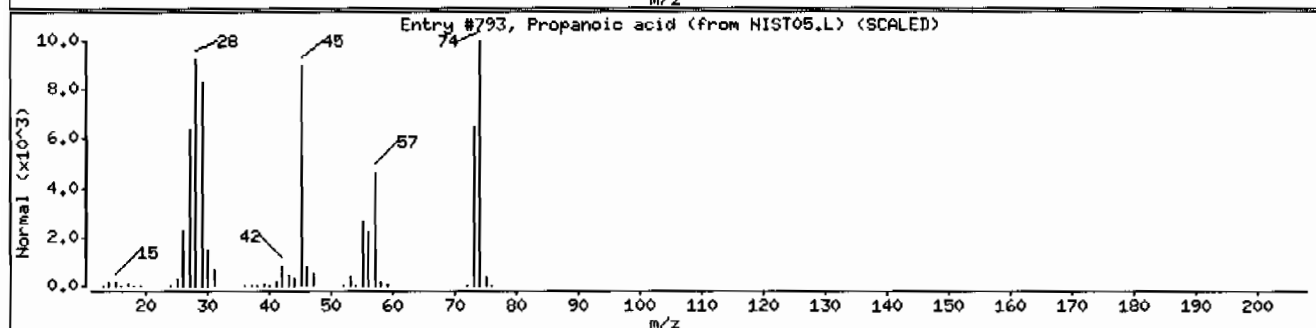
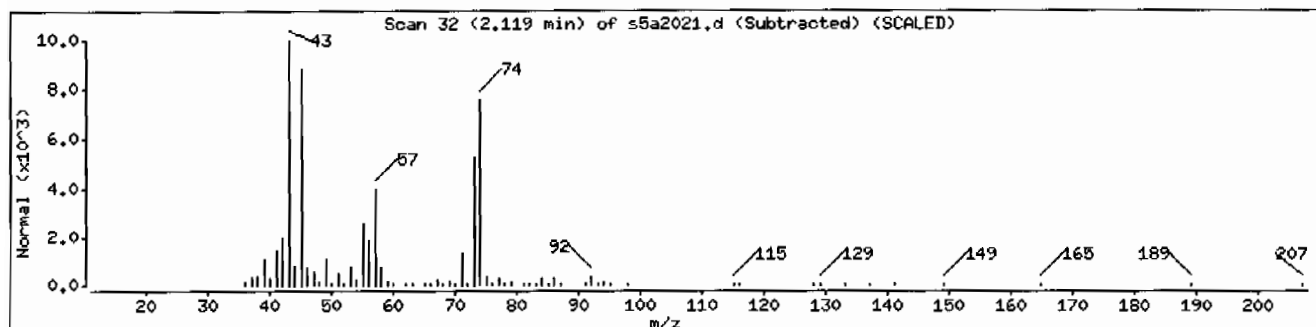
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	81	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	795	72	C3H6O2	74
Propanoic acid	79-09-4	NIST05.L	794	47	C3H6O2	74



Date: 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 1244923006194338611SVH111LANL

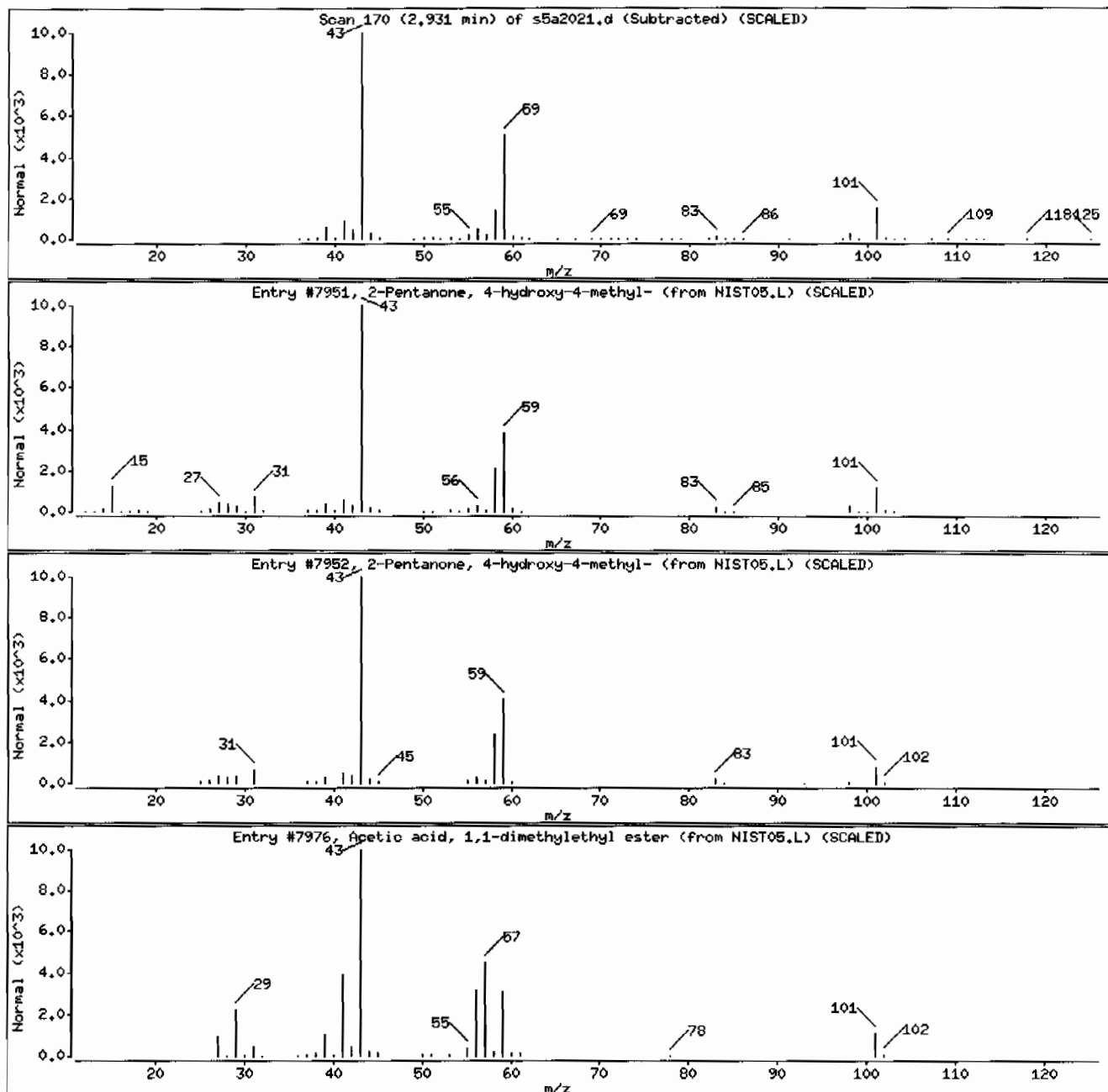
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	53	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 1244923006194338611SVMI11LANL

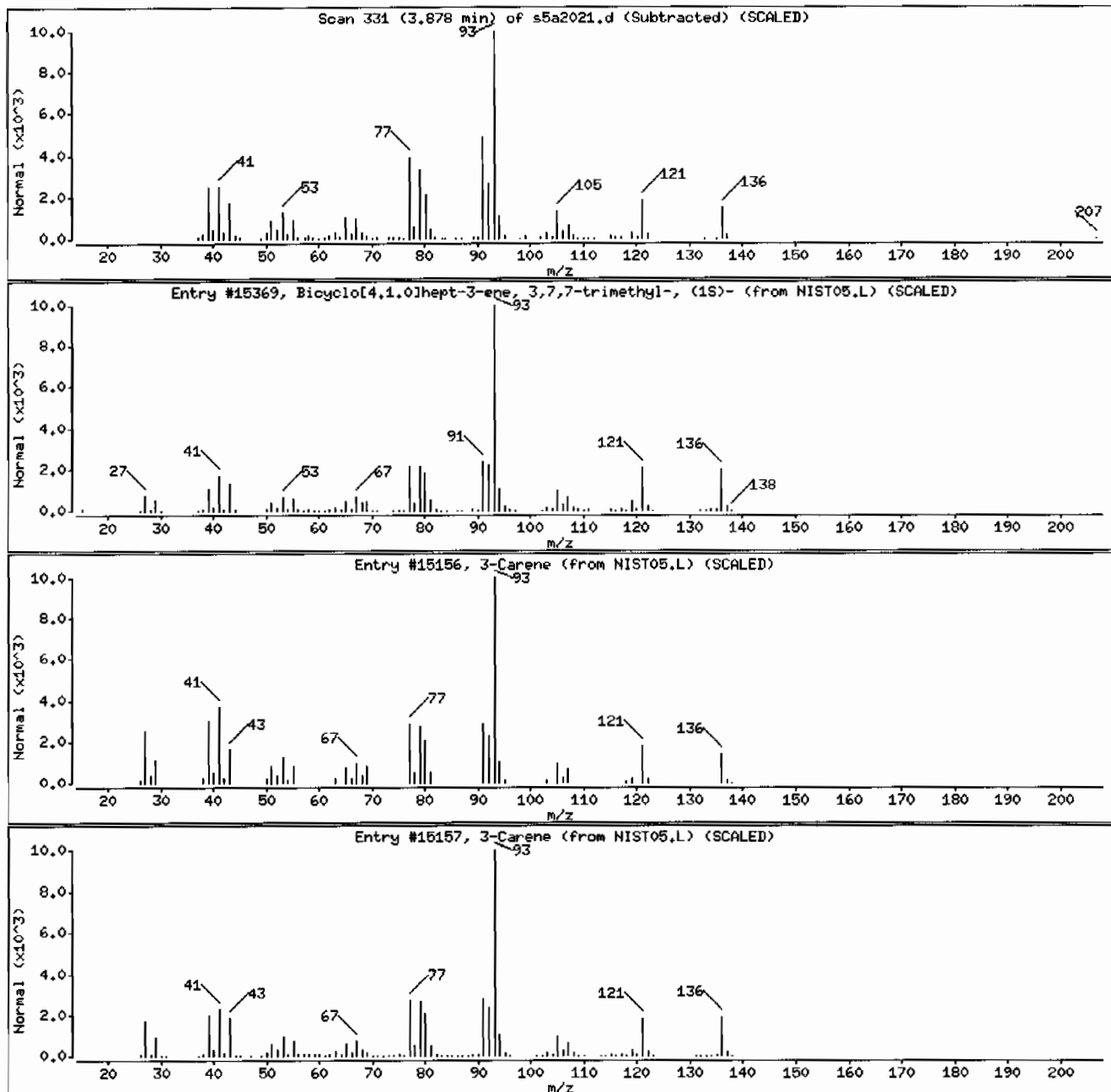
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl	498-15-7	NIST05.L	15369	97	C ₁₀ H ₁₆	136
3-Carene	13466-78-9	NIST05.L	15156	97	C ₁₀ H ₁₆	136
3-Carene	13466-78-9	NIST05.L	15157	95	C ₁₀ H ₁₆	136



Date: 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 1244923006194338611SVH111LANL

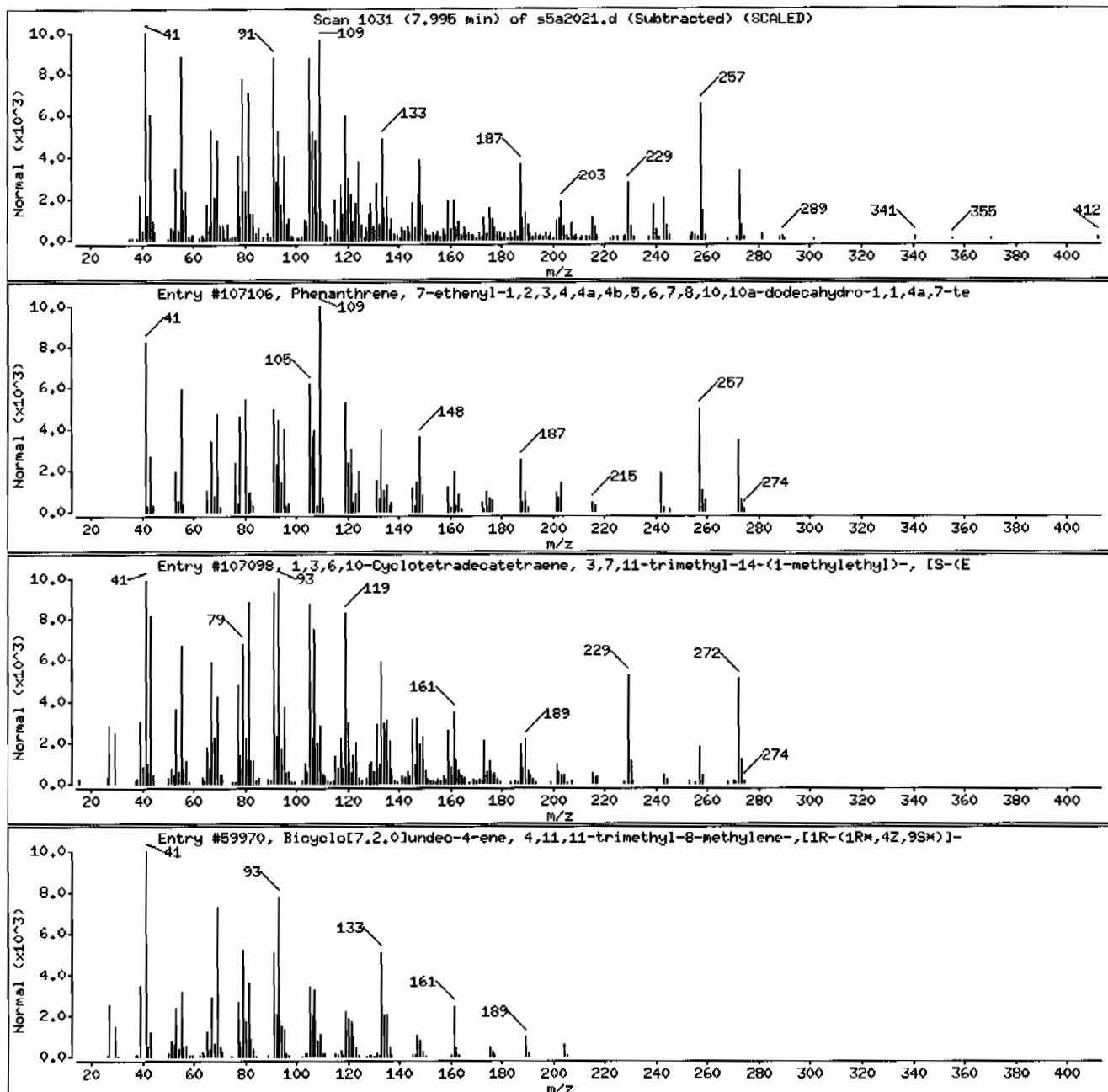
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Phenanthrene, 7-ethenyl-1,2,3,4,4a,4b,5,	1686-66-4	NIST05.L	107106	95	C20H32	272
1,3,6,10-Cyclotetradecatetraene, 3,7,11-	1898-13-1	NIST05.L	107098	59	C20H32	272
Bicyclo[7.2.0]undec-4-ene, 4,11,11-trime	118-65-0	NIST05.L	59970	53	C15H24	204



Date: 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 1244923006194338611ISVH11ILANL

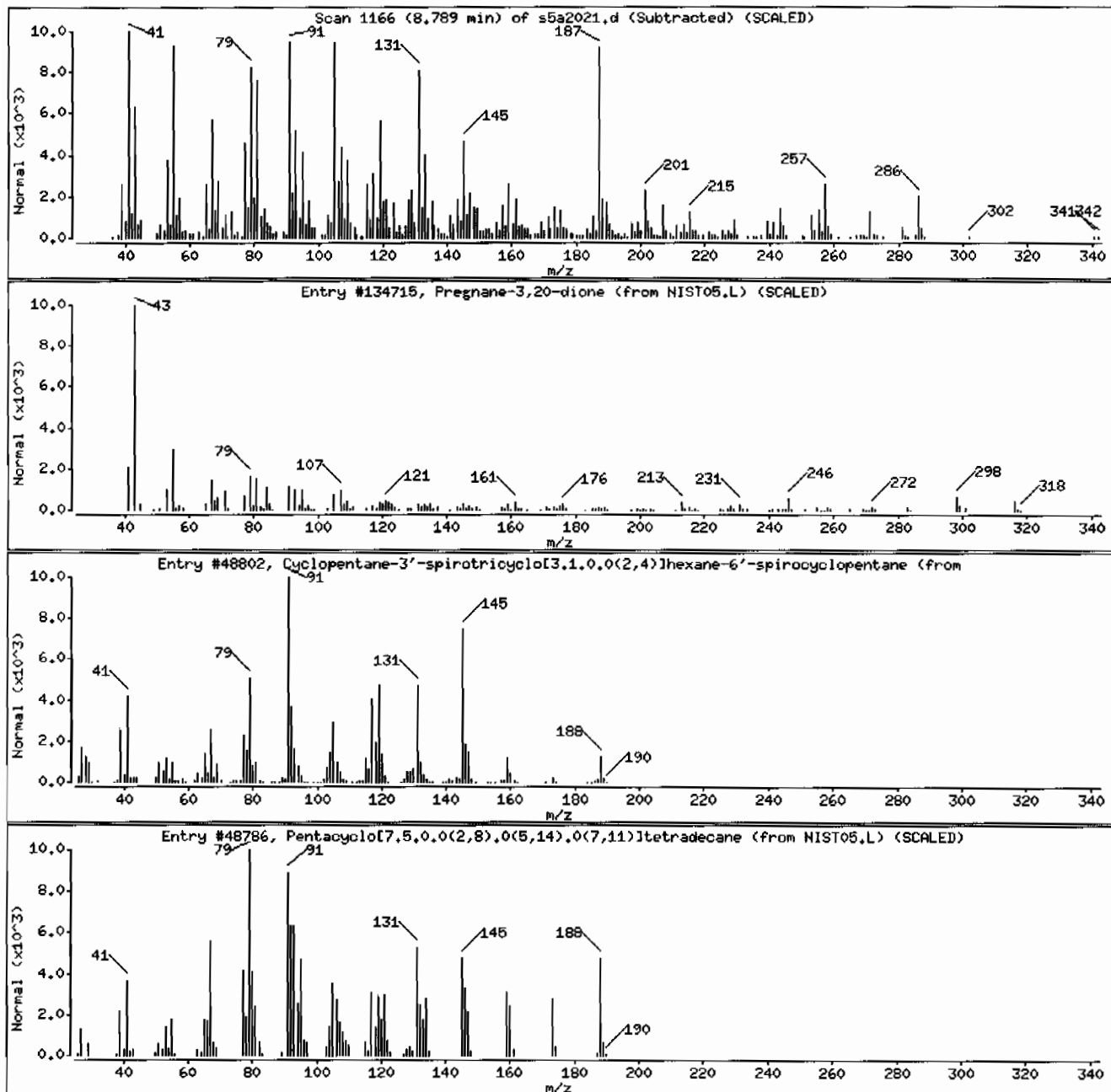
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pregnane-3,20-dione	7350-00-7	NIST05.L	134715	35	C ₂₁ H ₃₂ O ₂	316
Cyclopentane-3'-spirotricyclo[3.1.0.0(2,	78578-93-5	NIST05.L	48802	30	C ₁₄ H ₂₀	188
Pentacyclo[7.5.0.0(2,8).0(5,14).0(7,11)]	79772-15-9	NIST05.L	48786	27	C ₁₄ H ₂₀	188



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 12449230061943386111SVH111LANL

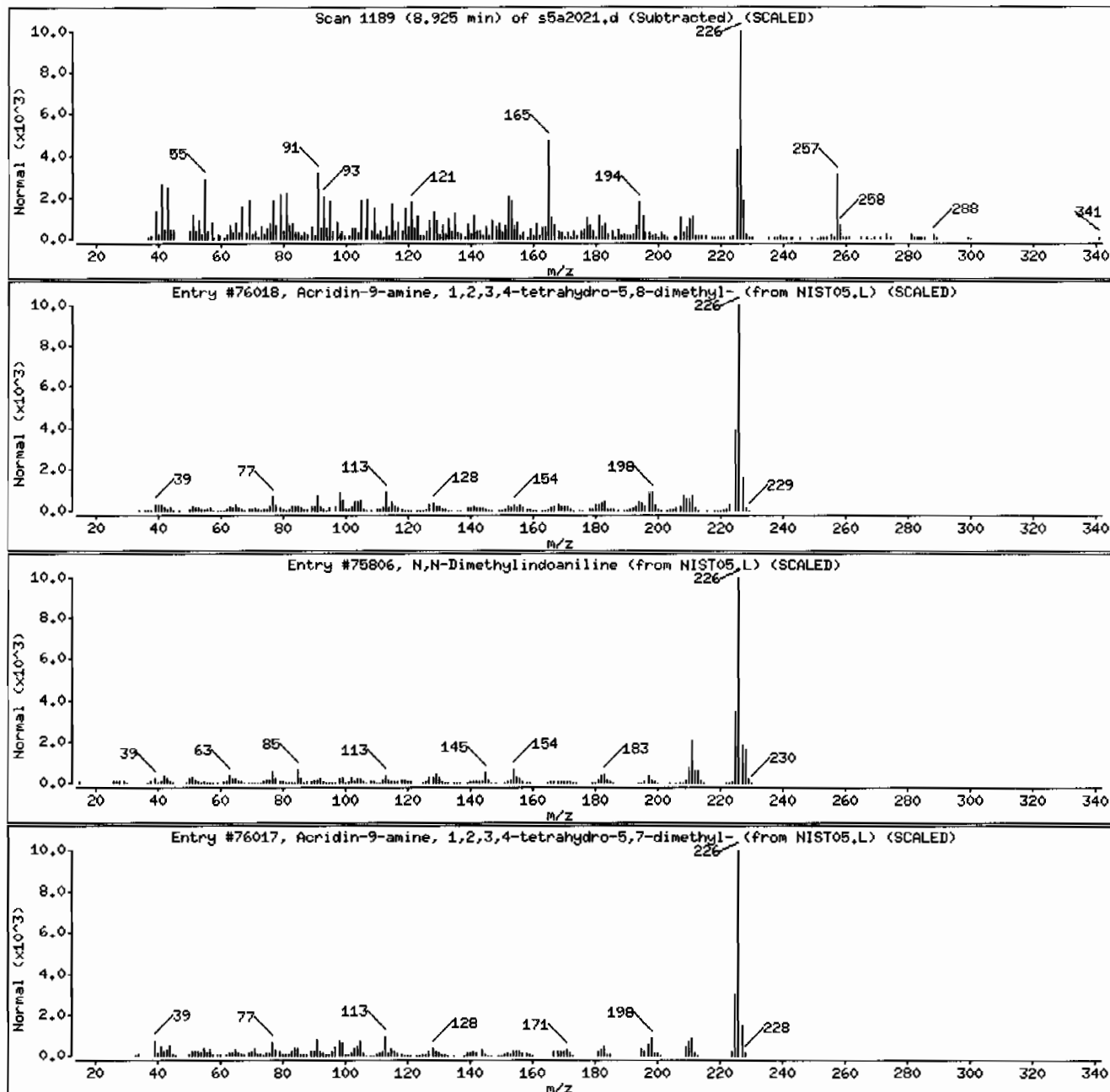
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acridin-9-amine, 1,2,3,4-tetrahydro-5,8-	297758-19-1	NIST05.L	76018	78	C15H18N2	226
N,N-Dimethylindooaniline	2150-58-5	NIST05.L	75806	62	C14H14N2O	226
Acridin-9-amine, 1,2,3,4-tetrahydro-5,7-	1000300-57-6	NIST05.L	76017	47	C15H18N2	226



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 12449230061943386111SVH111LANL

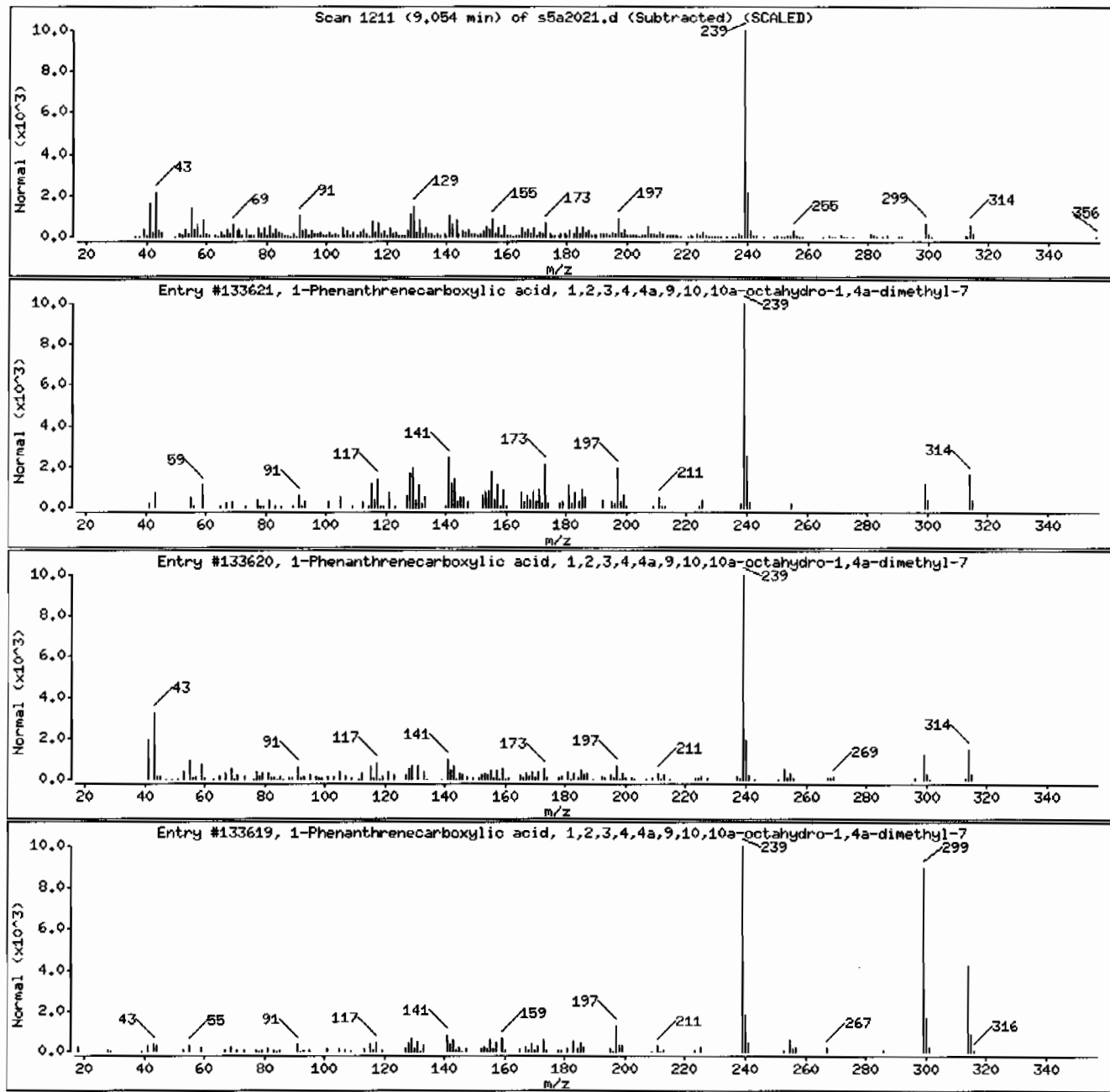
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	93	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	24035-60-7	NIST05.L	133619	47	C21H30O2	314



Date: 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSDS.i

Sample Info: 1244923006194338611SVH11LANL

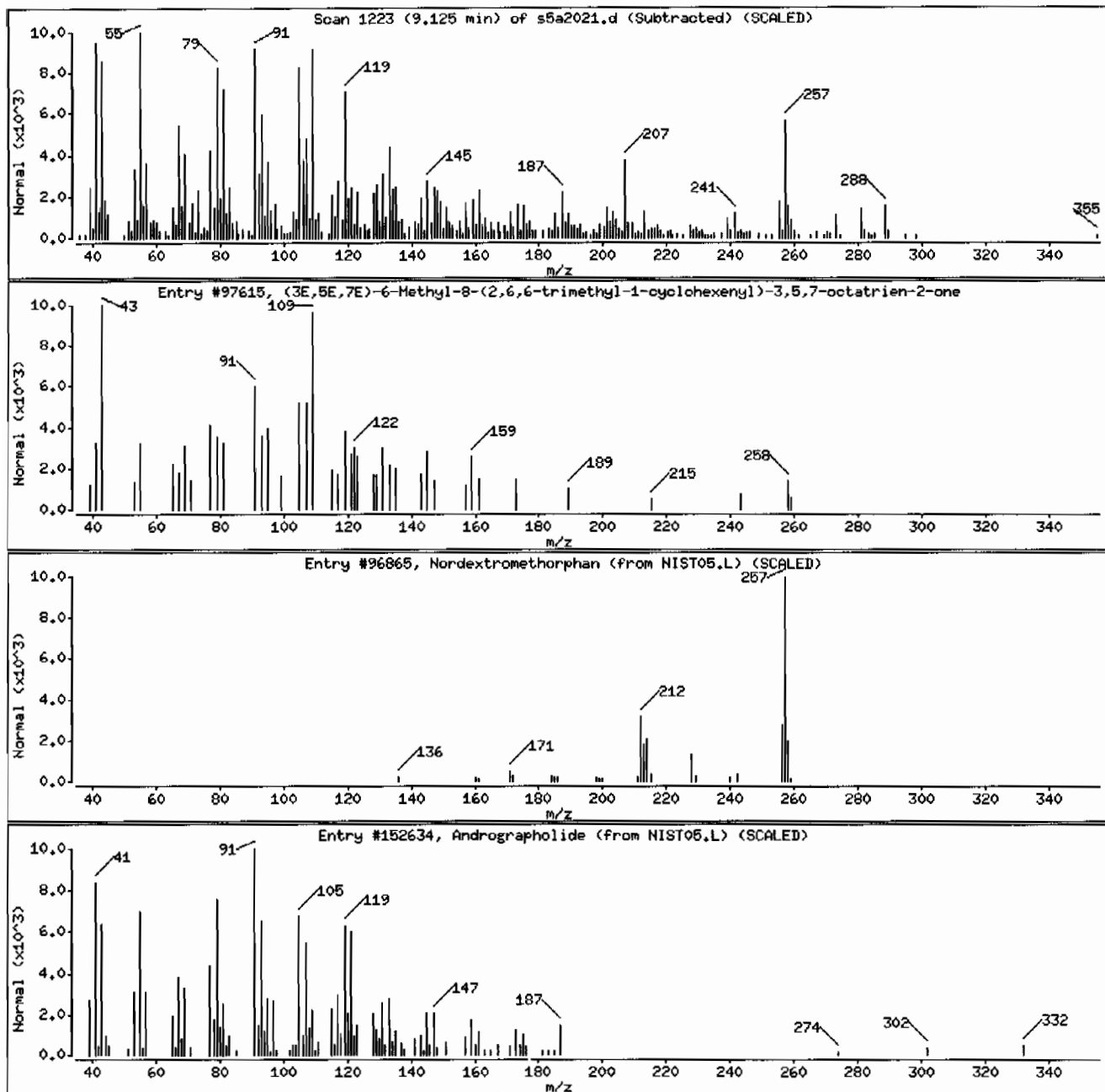
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	60	C18H26O	258
Nordextromethorphan	51195-74-5	NIST05.L	96865	47	C17H23NO	257
Andrographolide	5508-58-7	NIST05.L	152634	41	C20H30O5	350



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: HSD5.i

Sample Info: 1244923006|94338611|SVMI1|LANL

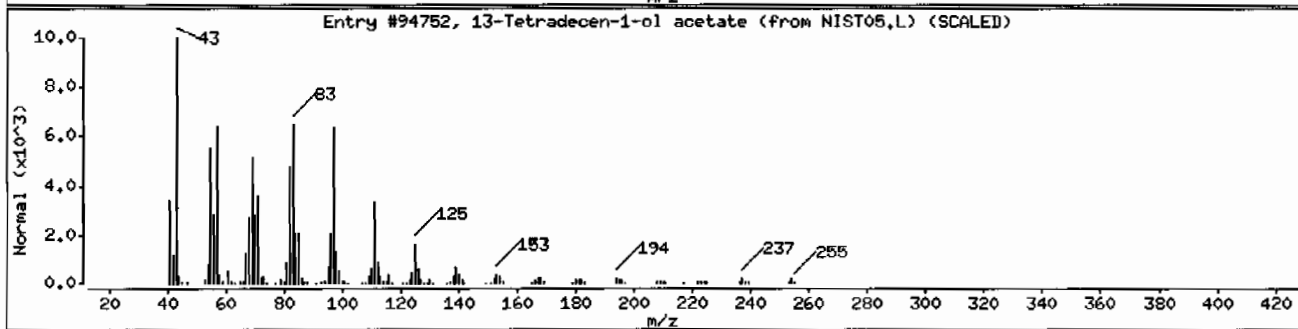
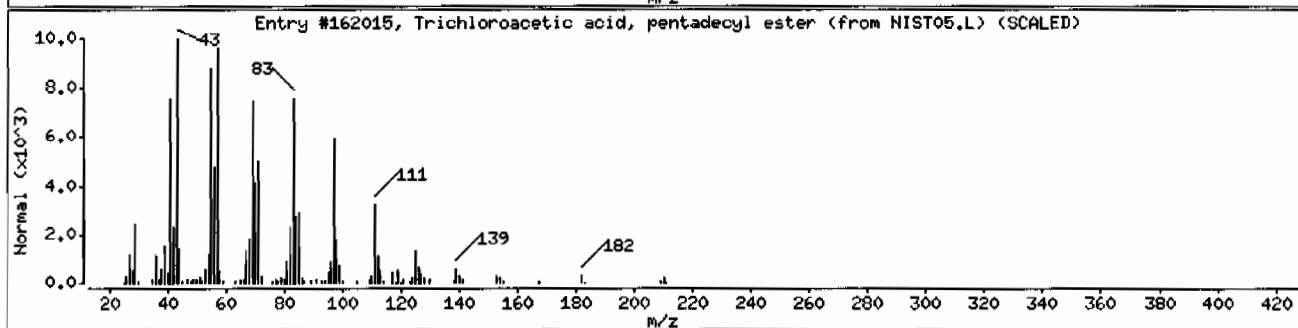
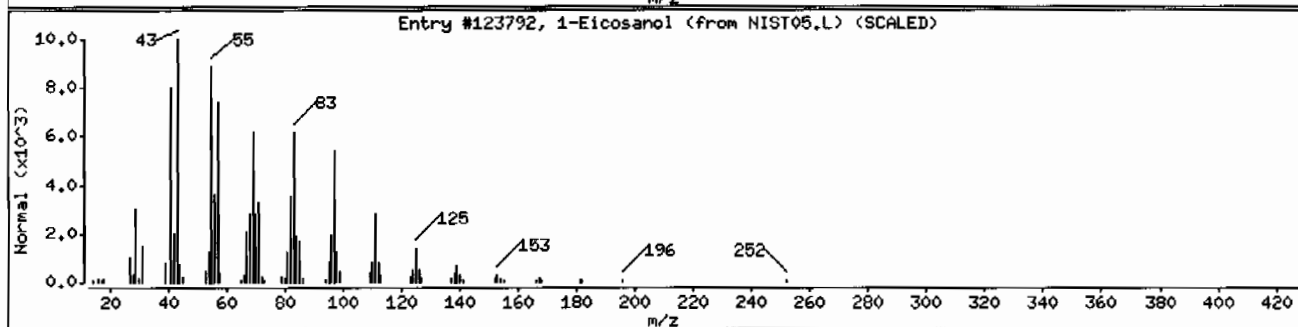
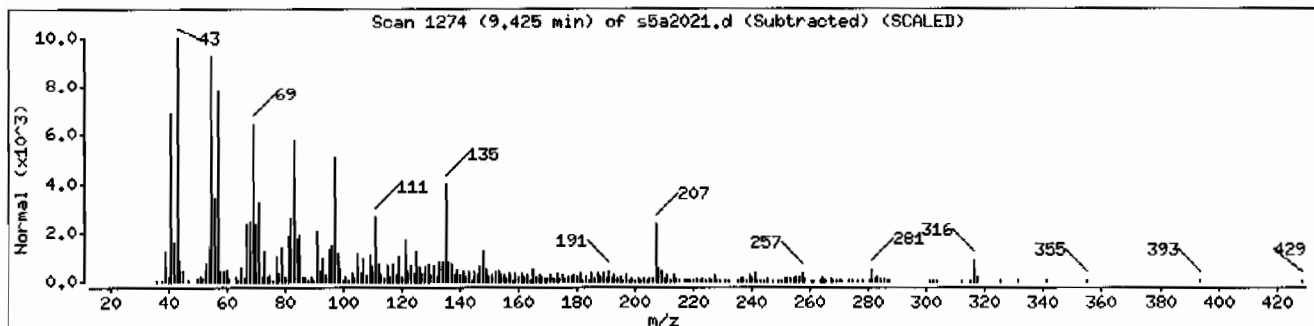
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Eicosanol	629-96-9	NIST05.L	123792	89	C20H42O	298
Trichloroacetic acid, pentadecyl ester	74339-53-0	NIST05.L	162015	89	C17H31Cl3O2	372
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	83	C16H30O2	254



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 1244923006|943386|1|SVH11|LANL

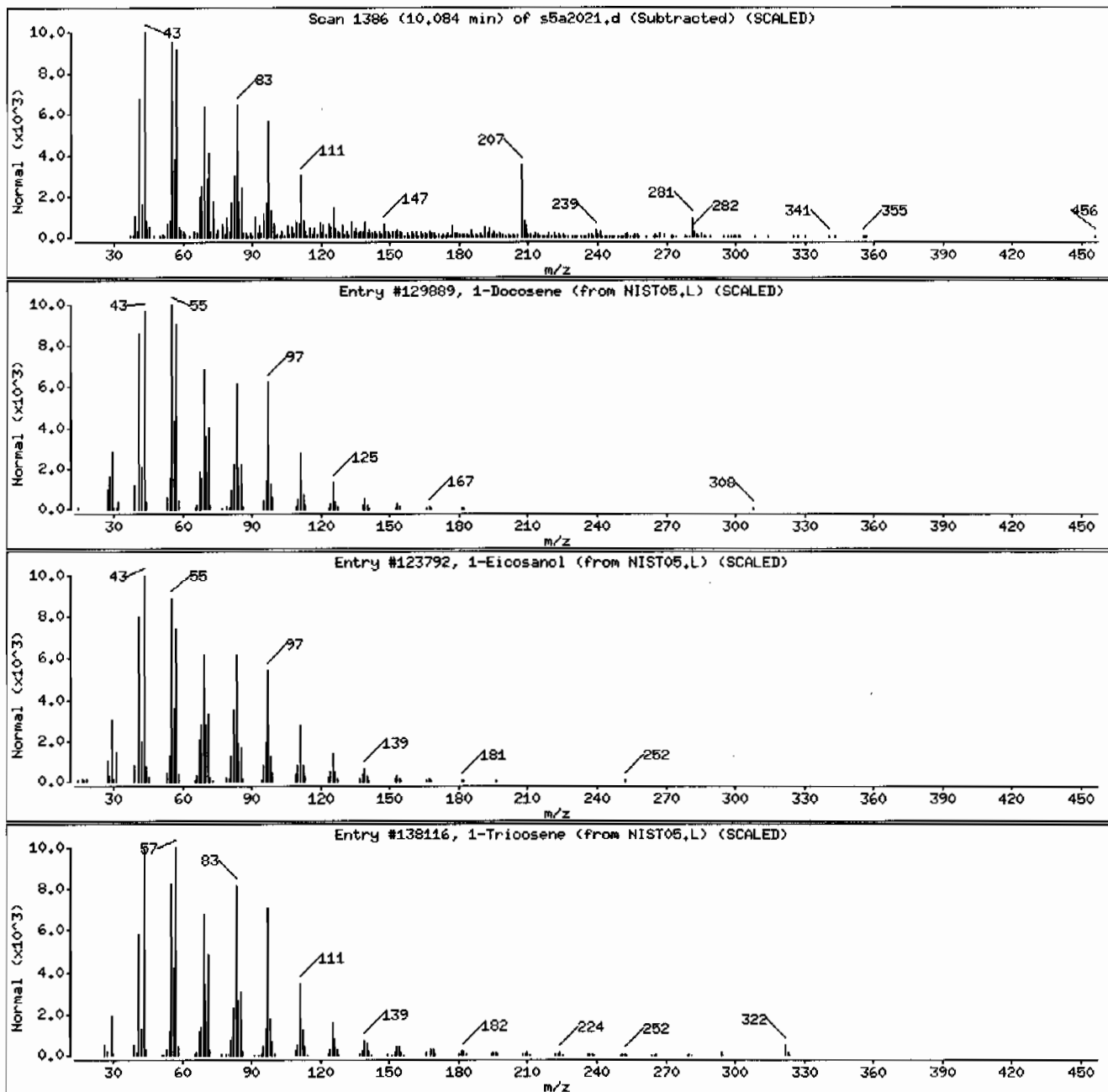
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1699-67-3	NIST05.L	129889	99	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	93	C20H42O	298
1-Tricosene	18835-32-0	NIST05.L	138116	87	C23H46	322



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 12449230061943386111SVH111LANL

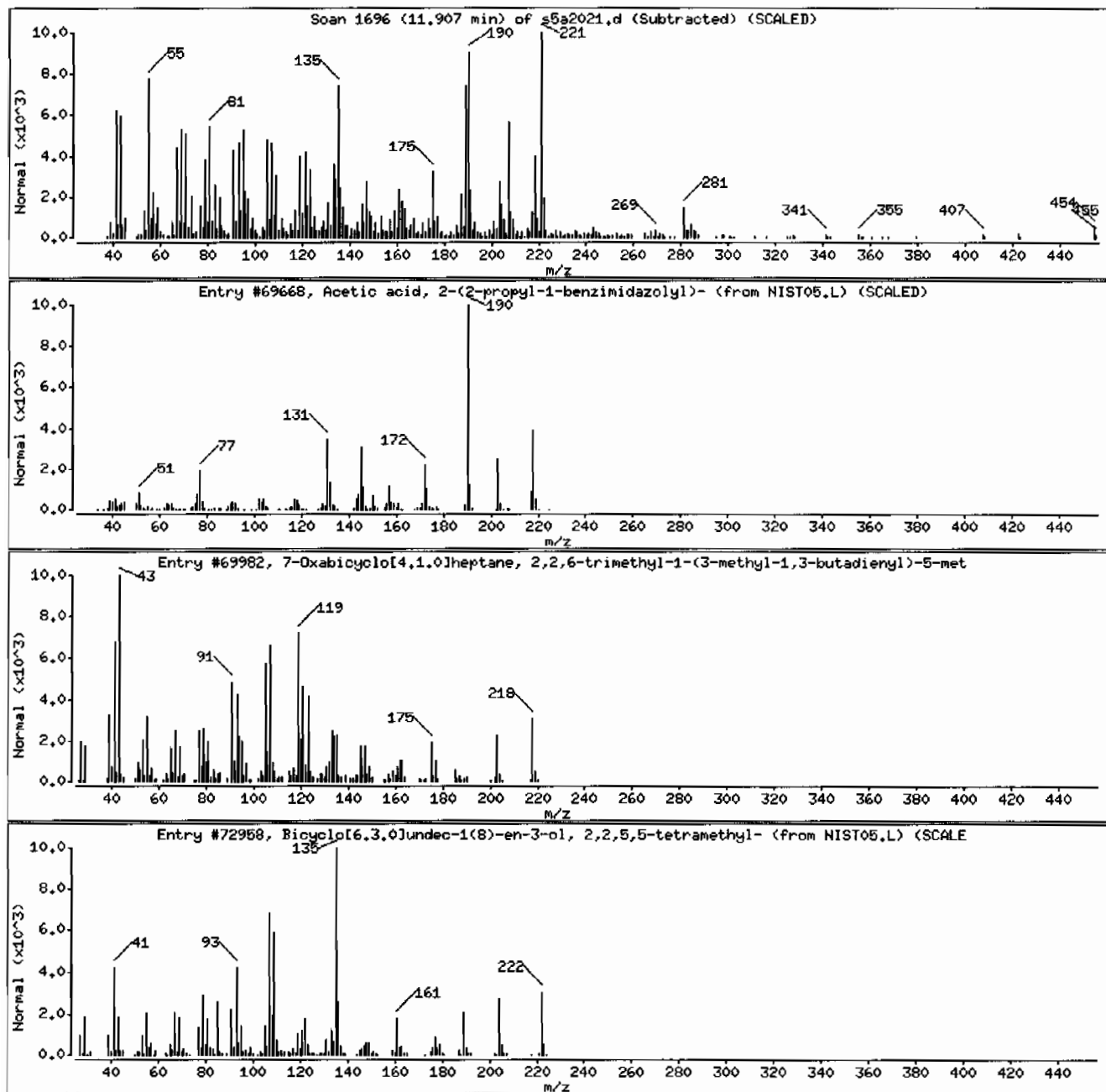
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetic acid, 2-(2-propyl-1-benzimidazolyl	331736-92-6	NIST05.L	69668	53	C12H14N2O2	218
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	40	C15H22O	218
Bicyclo[6.3.0]undec-1(8)-en-3-ol, 2,2,5,	1000164-02-6	NIST05.L	72958	35	C15H26O	222



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: I244923006194338611SVH11ILANL

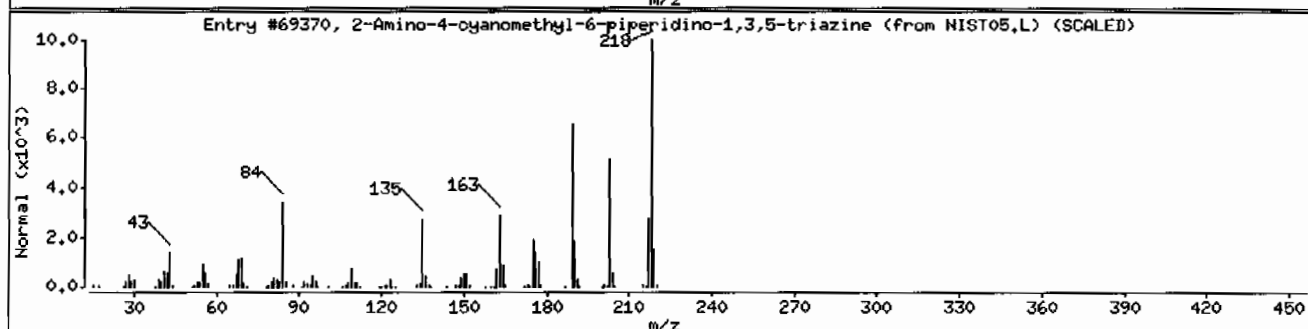
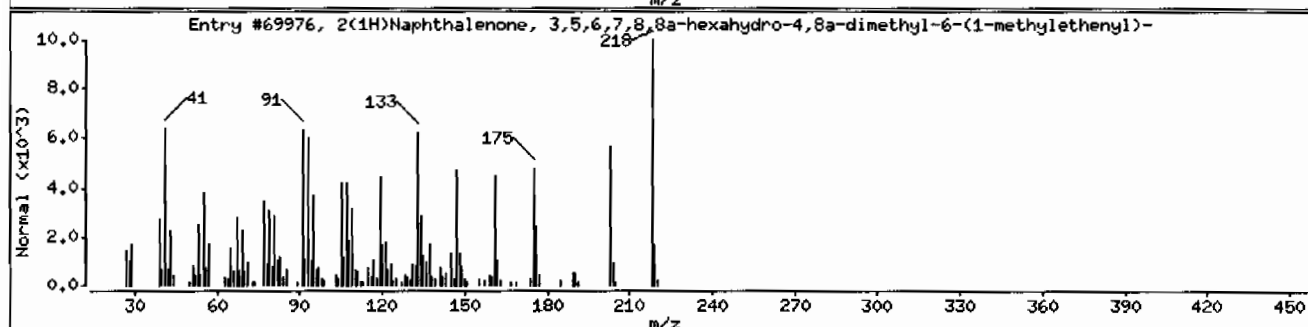
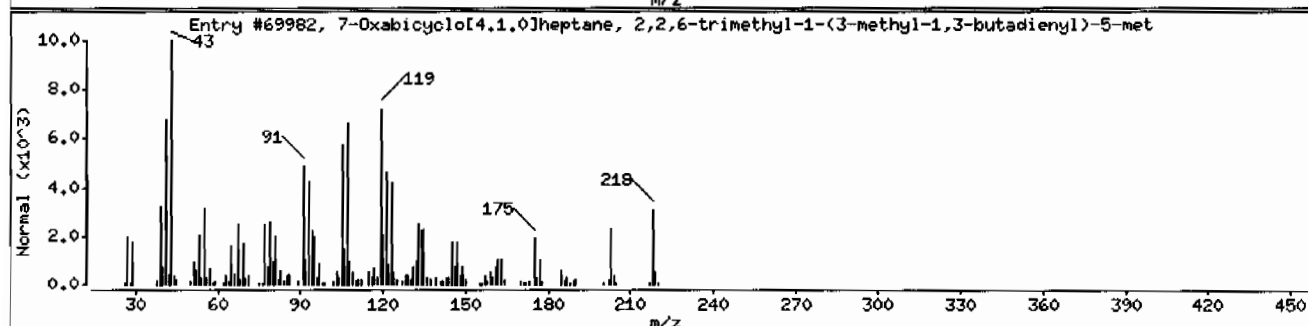
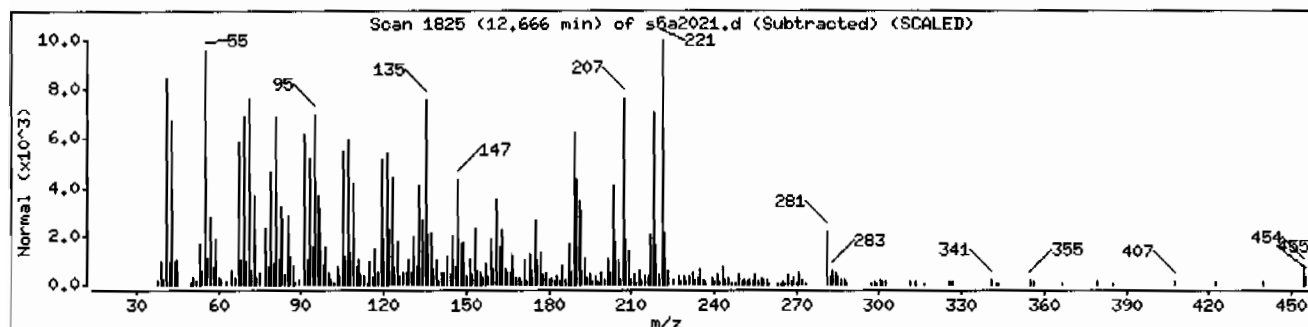
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxabicyclo[4.1.0]heptane, 2,2,6-trimet	70038-20-9	NIST05.L	69982	59	C15H22O	218
2(1H)-Naphthalenone, 3,5,6,7,8,8a-hexahyd	1000188-66-5	NIST05.L	69976	41	C15H22O	218
2-Amino-4-cyanomethyl-6-piperidino-1,3,5	1000241-05-9	NIST05.L	69370	35	C10H14N6	218



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: HSD5.i

Sample Info: 1244923006|94338611|SVH11|LANL

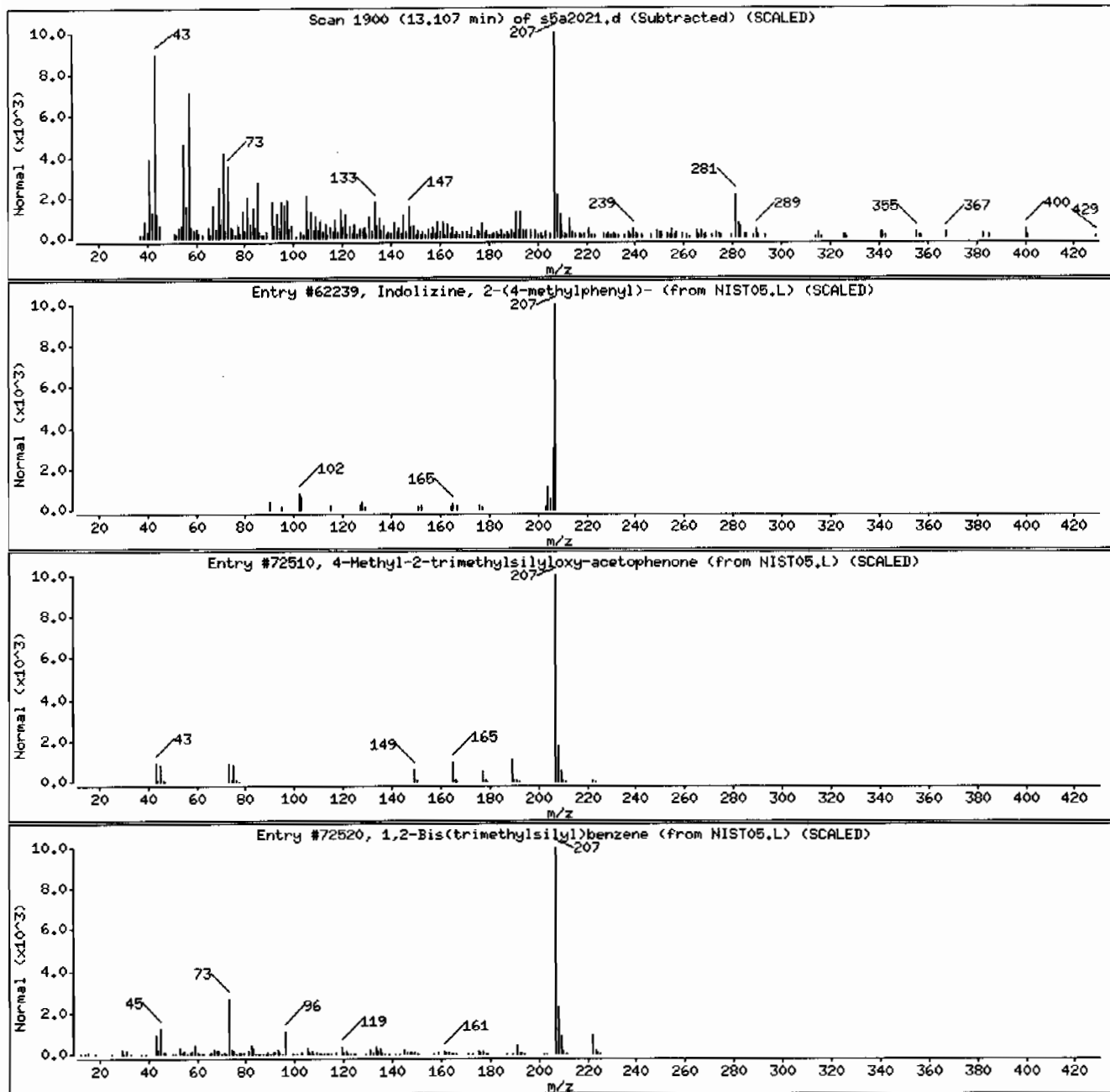
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Indolizine, 2-(4-methylphenyl)-	7496-81-3	NIST05.L	62239	47	C15H13N	207
4-Methyl-2-trimethylsilyloxy-acetophenon	97389-70-3	NIST05.L	72510	43	C12H18O2Si	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	43	C12H22Si2	222



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 1244923006194338611|SVM11|LANL

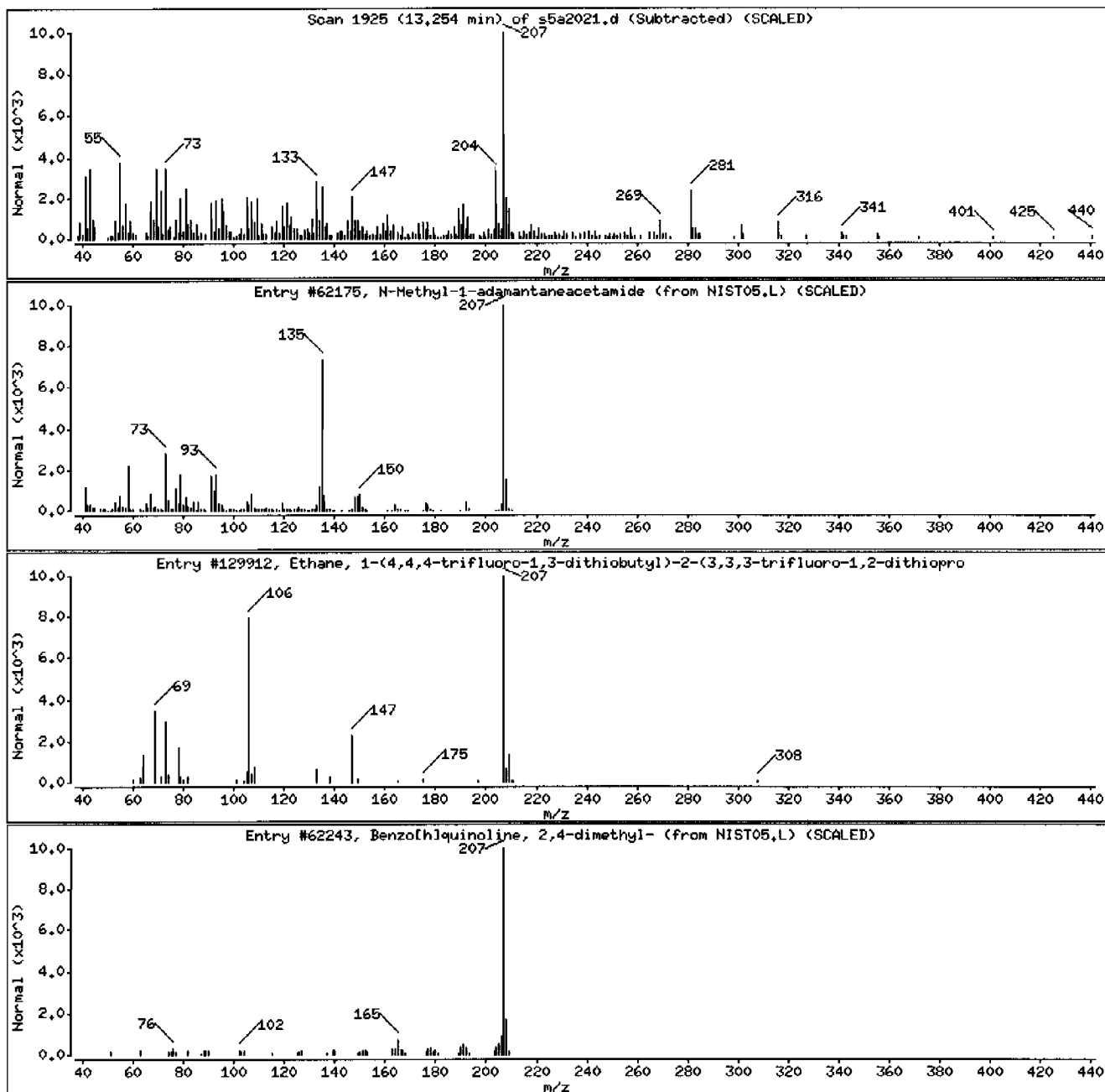
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	46	C13H21NO	207
Ethane, 1-(4,4,4-trifluoro-1,3-dithiobut	1000226-87-3	NIST05.L	129912	38	C5H6F6S4	308
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	38	C15H13N	207



Date : 21-JAN-2010 00:51

Client ID: RE15-10-7173

Instrument: MSD5.i

Sample Info: 1244923006194338611SVH11ILANL

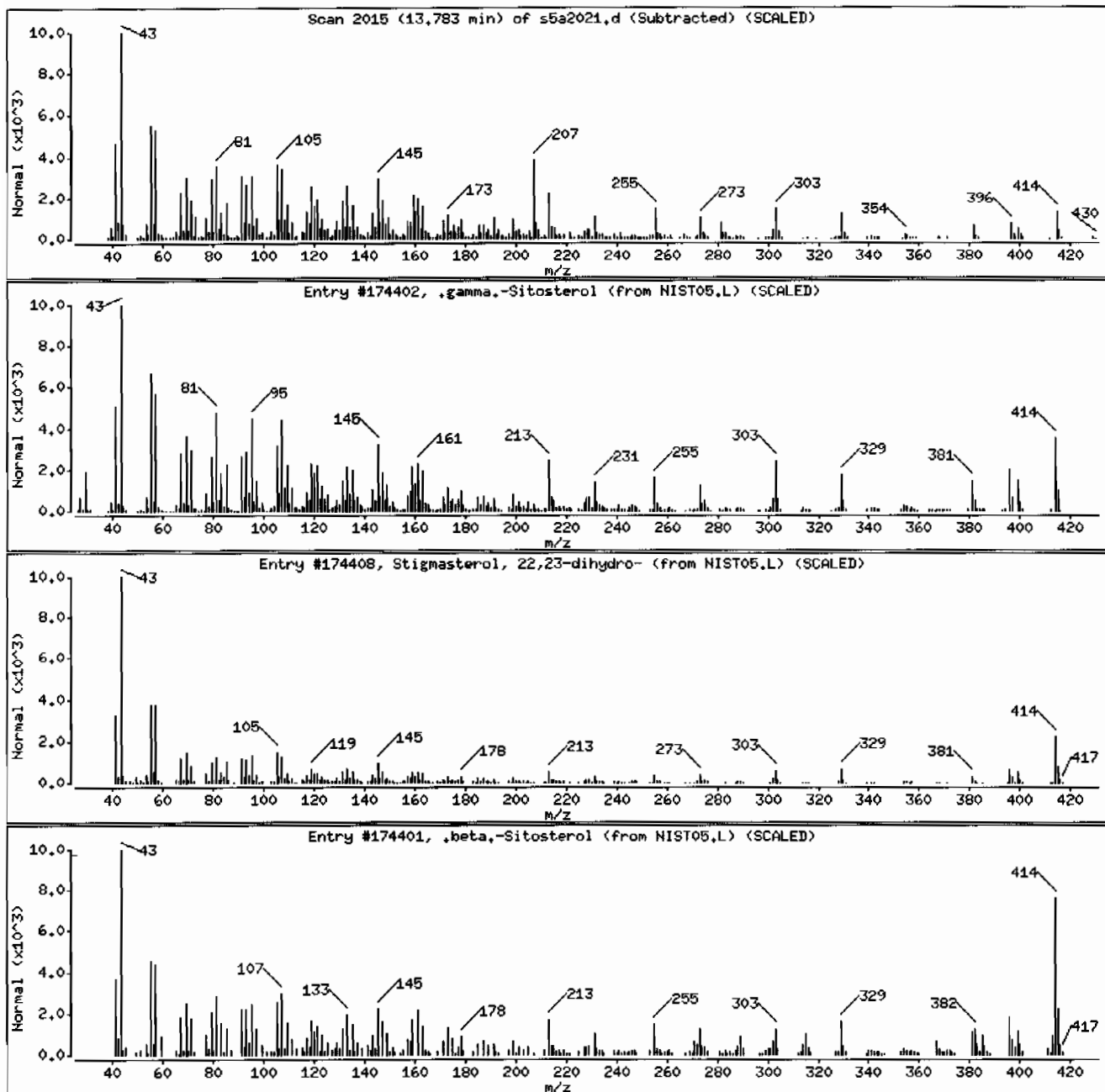
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C29H50O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	95	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174401	90	C29H50O	414



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

SDG Number: 10-1287
Lab Sample ID: 244923005

Client ID: RE15-10-7174
Batch ID: 943386
Run Date: 01/21/2010 00:28
Prep Date: 01/20/2010 11:13
Data File: s5a2020.d

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 19.7
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	414	ug/kg	82.9	414
108-95-2	Phenol	U	414	ug/kg	82.9	414
95-57-8	2-Chlorophenol	U	414	ug/kg	82.9	414
106-46-7	1,4-Dichlorobenzene	U	414	ug/kg	82.9	414
621-64-7	N-Nitrosodipropylamine	U	414	ug/kg	82.9	414
59-50-7	4-Chloro-3-methylphenol	U	414	ug/kg	82.9	414
83-32-9	Acenaphthene		232	ug/kg	13.7	41.4
121-14-2	2,4-Dinitrotoluene	U	414	ug/kg	41.4	414
100-02-7	4-Nitrophenol	U	414	ug/kg	137	414
87-86-5	Pentachlorophenol	U	414	ug/kg	104	414
129-00-0	Pyrene	U	41.4	ug/kg	12.4	41.4
110-86-1	Pyridine	U	414	ug/kg	82.9	414
62-53-3	Aniline	U	414	ug/kg	124	414
111-44-4	bis(2-Chloroethyl) ether	U	414	ug/kg	82.9	414
541-73-1	1,3-Dichlorobenzene	U	414	ug/kg	82.9	414
100-51-6	Benzyl alcohol	U	414	ug/kg	124	414
95-50-1	1,2-Dichlorobenzene	U	414	ug/kg	82.9	414
108-60-1	bis(2-Chloroisopropyl)ether	U	414	ug/kg	82.9	414
95-48-7	o-Cresol	U	414	ug/kg	82.9	414
65794-96-9	m,p-Cresols	U	414	ug/kg	124	414
67-72-1	Hexachloroethane	U	414	ug/kg	82.9	414
98-95-3	Nitrobenzene	U	414	ug/kg	82.9	414
78-59-1	Isophorone	U	414	ug/kg	82.9	414
88-75-5	2-Nitrophenol	U	414	ug/kg	82.9	414
105-67-9	2,4-Dimethylphenol	U	414	ug/kg	145	414
111-91-1	bis(2-Chloroethoxy)methane	U	414	ug/kg	82.9	414
120-83-2	2,4-Dichlorophenol	U	414	ug/kg	82.9	414
65-85-0	Benzoic acid	U	829	ug/kg	207	829
91-20-3	Naphthalene	U	41.4	ug/kg	12.4	41.4
106-47-8	4-Chloroaniline	U	414	ug/kg	82.9	414
87-68-3	Hexachlorobutadiene	U	414	ug/kg	82.9	414
91-57-6	2-Methylnaphthalene	U	41.4	ug/kg	8.29	41.4
77-47-4	Hexachlorocyclopentadiene	U	414	ug/kg	82.9	414
88-06-2	2,4,6-Trichlorophenol	U	414	ug/kg	82.9	414
95-95-4	2,4,5-Trichlorophenol	U	414	ug/kg	82.9	414
91-58-7	2-Chloronaphthalene	U	41.4	ug/kg	13.7	41.4
88-74-4	2-Nitroaniline	U	414	ug/kg	82.9	414
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	414	ug/kg	82.9	414

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923005	Date Received: 01/16/2010 08:55	%Moisture: 19.7
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7174	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 00:28	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.05 g	Final Volume: 1 mL
Data File: s5a2020.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	414	ug/kg	82.9	414
606-20-2	2,6-Dinitrotoluene	U	414	ug/kg	41.4	414
208-96-8	Acenaphthylene	U	41.4	ug/kg	12.4	41.4
51-28-5	2,4-Dinitrophenol	U	829	ug/kg	157	829
132-64-9	Dibenzofuran	U	414	ug/kg	82.9	414
84-66-2	Diethylphthalate	U	414	ug/kg	82.9	414
86-73-7	Fluorene	U	41.4	ug/kg	12.4	41.4
7005-72-3	4-Chlorophenylphenylether	U	414	ug/kg	82.9	414
534-52-1	2-Methyl-4,6-dinitrophenol	U	414	ug/kg	82.9	414
100-01-6	4-Nitroaniline	U	414	ug/kg	124	414
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	414	ug/kg	82.9	414
122-66-7	Azobenzene	U	414	ug/kg	82.9	414
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	414	ug/kg	82.9	414
118-74-1	Hexachlorobenzene	U	414	ug/kg	82.9	414
85-01-8	Phenanthrene	U	41.4	ug/kg	12.4	41.4
120-12-7	Anthracene	U	41.4	ug/kg	8.29	41.4
84-74-2	Di-n-butylphthalate	U	414	ug/kg	82.9	414
206-44-0	Fluoranthene	U	41.4	ug/kg	12.4	41.4
85-68-7	Butylbenzylphthalate	U	414	ug/kg	82.9	414
56-55-3	Benzo(a)anthracene	U	41.4	ug/kg	12.4	41.4
91-94-1	3,3'-Dichlorobenzidine	U	414	ug/kg	124	414
218-01-9	Chrysene	U	41.4	ug/kg	12.4	41.4
117-81-7	bis(2-Ethylhexyl)phthalate	J	343	ug/kg	82.9	414
117-84-0	Di-n-octylphthalate	U	414	ug/kg	82.9	414
205-99-2	Benzo(b)fluoranthene	U	41.4	ug/kg	12.4	41.4
207-08-9	Benzo(k)fluoranthene	U	41.4	ug/kg	12.4	41.4
50-32-8	Benzo(a)pyrene	U	41.4	ug/kg	12.4	41.4
193-39-5	Indeno(1,2,3-cd)pyrene	U	41.4	ug/kg	12.4	41.4
53-70-3	Dibenzo(a,h)anthracene	U	41.4	ug/kg	12.4	41.4
191-24-2	Benzo(ghi)perylene	U	41.4	ug/kg	12.4	41.4
120-82-1	1,2,4-Trichlorobenzene	U	414	ug/kg	82.9	414

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
79-09-4	Propanoic acid	2.13	361	ug/kg	81	NJ
	Unknown Aldol Condensate	2.93	344	ug/kg		JA

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

SDG Number: 10-1287
Lab Sample ID: 244923005

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.05 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7174
Batch ID: 943386
Run Date: 01/21/2010 00:28
Prep Date: 01/20/2010 11:13
Data File: s5a2020.d

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
120-08-1	2H-1-Benzopyran-2-one, 6,7-dimethoxy-	7.76	753	ug/kg	98	NJ
	Unknown	8.67	242	ug/kg		J
544-76-3	Hexadecane	8.76	208	ug/kg	86	NJ
	Unknown	8.85	239	ug/kg		J
	Unknown	8.92	219	ug/kg		J
1235-74-1	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	9.05	313	ug/kg	96	NJ
1599-67-3	1-Docosene	9.42	212	ug/kg	96	NJ
	Unknown	9.84	213	ug/kg		J
	Unknown	10.04	282	ug/kg		J
56221-91-1	13-Tetradecen-1-ol acetate	10.08	526	ug/kg	90	NJ
	Unknown	10.39	281	ug/kg		J
	Unknown	10.49	316	ug/kg		J
112-95-8	Eicosane	10.79	506	ug/kg	97	NJ
	Unknown	11.11	391	ug/kg		J
	Unknown	11.88	631	ug/kg		J
	Unknown	12.01	376	ug/kg		J
	Unknown	12.13	419	ug/kg		J
	Unknown	13.1	373	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.78	1390	ug/kg	95	NJ

Data File: /chem/MSD5.i/s012010.b/s5a2020.d
Report Date: 21-Jan-2010 08:32

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2020.d
Lab Smp Id: 244923005 Client Smp ID: RE15-10-7174
Inj Date : 21-JAN-2010 00:28
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923005|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	19.68900	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	409495		40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1464329		40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044	(1.000)	838737		40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1513819		40.0000	
* 91 Chrysene-d12	240	9.619	9.622	(1.000)	1333892		40.0000	
* 98 Perylene-d12	264	11.295	11.298	(1.000)	843750		40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	627470		61.7864	2560
\$ 5 Phenol-d5	99	3.631	3.637	(0.926)	813367		64.9438	2690
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	371874		33.0750	1370
\$ 39 2-Fluorobiphenyl	172	5.525	5.534	(0.914)	711896		32.0854	1330
\$ 60 2,4,6-Tribromophenol	329	6.636	6.641	(1.098)	196526		73.7208	3050
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.893)	769428		36.7364	1520

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
47 Acenaphthene	154	6.013	6.073	(0.995)	102062	5.59957	232 (Q)
93 bis(2-Ethylhexyl)phthalate	149	9.542	9.545	(0.992)	183205	8.28164	343 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s5a2020.d

Report Date: 01/21/2010 07:48

Lab. ID: 244923005

SampleType: SAMPLE

Injection Date: 21-JAN-2010 00:28

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923005|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	45186	3.63	3.70	80-120	100	(T)
93	4488	3.60	3.70	220-280	10	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	51894	4.28	4.16	80-120	100	(T)
42	30588	4.28	4.16	44-104	59	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	2037	4.59	4.55	80-120	100	()
122	1215	4.58	4.55	47-107	60	()
77	3168	4.57	4.55	44-104	155	(Q)

34	2-Methylnaphthalene		CAS#: 91-57-6			
142	4273	5.13	5.29	80-120	100	(T)
141	1355	5.15	5.29	54-114	32	(QT)

43	Dimethylphthalate		CAS#: 131-11-3			
163	153376	6.04	5.80	80-120	100	(T)
164	838737	6.04	5.80	0- 41	547	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	112046	6.04	5.86	80-120	100	(T)
63	1583	6.04	5.86	47-107	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
45 Acenaphthylene		CAS#: 208-96-8				
152	124633	6.01	5.95	80-120	100	(T)
151	32787	6.01	5.95	0- 50	26	(T)
153	130066	6.01	5.95	0- 44	104	(QT)

47 Acenaphthene		CAS#: 83-32-9				
154	102062	6.01	6.07	80-120	100	(T)
153	130066	6.01	6.07	70-130	127	(T)
152	124633	6.01	6.07	18- 78	122	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	112046	6.04	6.16	80-120	100	(T)
89	6651	6.04	6.16	48-108	6	(QT)
63	1468	6.04	6.16	25- 85	1	(QT)

52 4-Nitrophenol		CAS#: 100-02-7				
139	1432	6.11	6.08	80-120	100	()
109	556	6.11	6.08	40-100	39	(Q)
65	1093	6.10	6.08	71-131	76	()

53 Fluorene		CAS#: 86-73-7				
166	12228	6.64	6.46	80-120	100	(T)
165	12152	6.64	6.46	57-117	99	(T)
167	4309	6.64	6.46	0- 44	35	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	846	6.64	6.47	80-120	100	(T)
105	1846	6.64	6.47	13- 73	218	(QT)
51	2822	6.64	6.47	55-115	333	(QT)

93 bis(2-Ethylhexyl)phthalate		CAS#: 117-81-7				
149	183205	9.54	9.55	80-120	100	()
167	55012	9.54	9.55	4- 64	30	()

99 Indeno(1,2,3-cd)pyrene		CAS#: 193-39-5				
276	428	13.04	13.06	80-120	100	()
138	1378	13.08	13.07	1- 61	321	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2020.d
 Lab Smp Id: 244923005 Client Smp ID: RE15-10-7174
 Inj Date : 21-JAN-2010 00:28
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244923005|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.05000	weight of sample
M	19.68900	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2568143	40.000
* 67 Phenanthrene-d10	7.213	3796414	40.000
* 91 Chrysene-d12	9.619	4132987	40.000
* 98 Perylene-d12	11.295	2569681	40.000

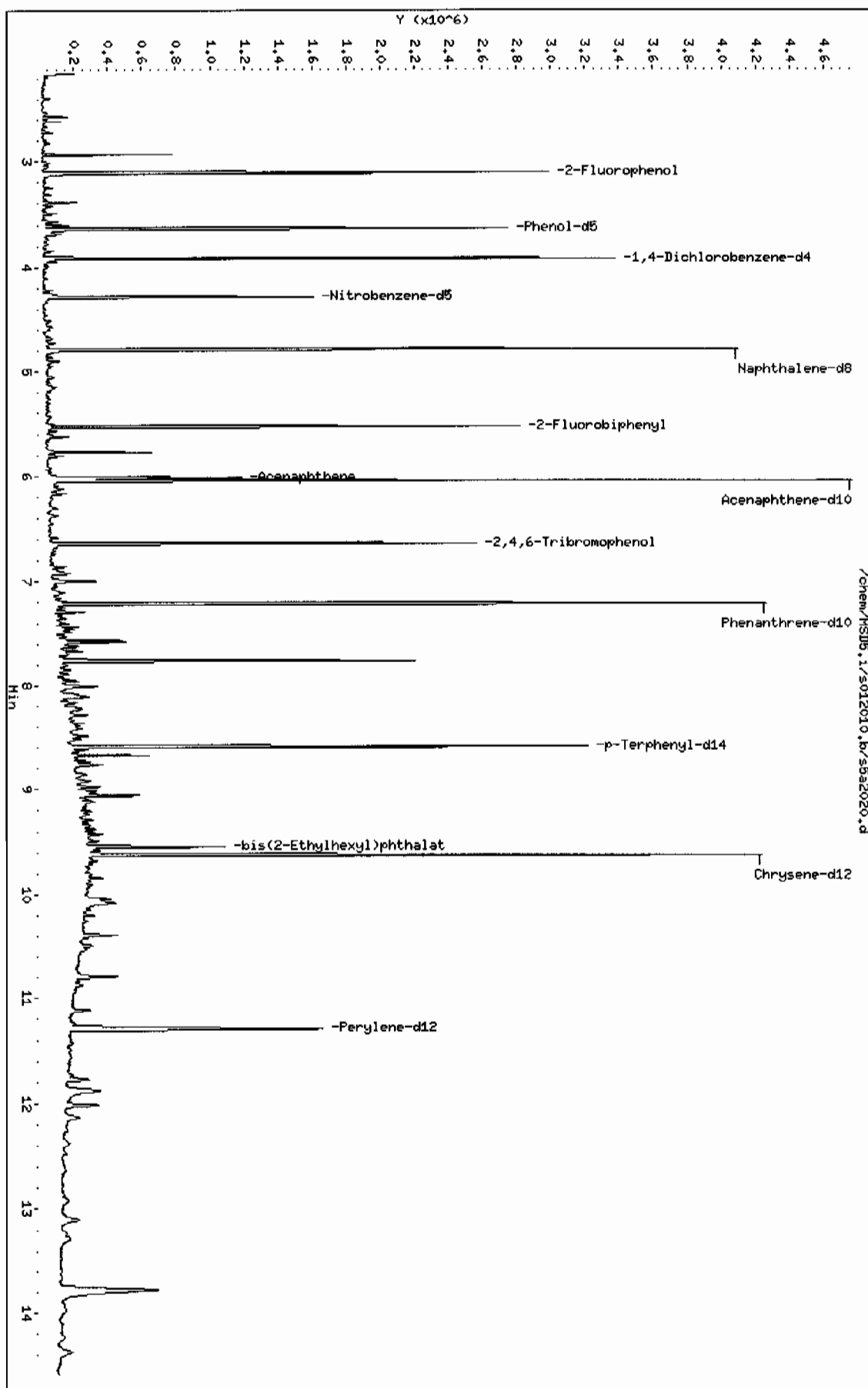
CONCENTRATIONS				QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY
====	====	=====	=====	=====	=====	=====

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Propanoic acid					CAS #: 79-09-4		
2.131	559675	8.71719670	361	81	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.931	532452	8.29318641	344	0		0	10
2H-1-Benzopyran-2-one, 6,7-dimethoxy-					CAS #: 120-08-1		
7.760	1725114	18.1762436	753	98	NIST05.L	61031	67
Unknown					CAS #:		
8.672	602843	5.83445367	242	0		0	91
Hexadecane					CAS #: 544-76-3		
8.760	519486	5.02770564	208	86	NIST05.L	76092	91
Unknown					CAS #:		
8.854	595549	5.76385731	239	0		0	91
Unknown					CAS #:		
8.919	545432	5.27881368	219	0		0	91
1-Phenanthrenecarboxylic acid, 1,2,3,4,4					CAS #: 1235-74-1		
9.054	781612	7.56462015	313	96	NIST05.L	133621	91
1-Docosene					CAS #: 1599-67-3		
9.425	527412	5.10441796	212	96	NIST05.L	129889	91
Unknown					CAS #:		
9.836	530078	5.13021849	212	0		0	91
Unknown					CAS #:		
10.036	703426	6.80791999	282	0		0	91
13-Tetradecen-1-ol acetate					CAS #: 56221-91-1		
10.077	1311850	12.6963850	526	90	NIST05.L	94752	91
Unknown					CAS #:		
10.389	699777	6.77260622	281	0		0	91
Unknown					CAS #:		
10.489	489694	7.62263583	316	0		0	98
Eicosane					CAS #: 112-95-8		
10.789	784326	12.2089154	506	97	NIST05.L	113489	98

RT	CONCENTRATIONS				QUANT		
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	L1B ENTRY	CPND #
====	====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
11.113	605560	9.42622176	390	0		0	98
Unknown				CAS #:			
11.877	978365	15.2293635	631	0		0	98
Unknown				CAS #:			
12.013	582347	9.06489353	376	0		0	98
Unknown				CAS #:			
12.130	648869	10.1003815	418	0		0	98
Unknown				CAS #:			
13.101	577723	8.99290376	373	0		0	98
.gamma.-Sitosterol				CAS #: 83-47-6			
13.777	2161224	33.6418891	1390	95	N1ST05.L	174402	98

Data File: /chem/MSD5.i/s012010.b/s5a2020.d
 Date: 21-JAN-2010 00:28
 Client ID: RELS-10-7174
 Sample Info: 1244923005194338611SVH11.LANL
 Volume Injected (uL): 0.5
 Column phase: JSM DB-SMS

Instrument: MSD5.i
 Operator: RMB
 Column diameter: 0.20



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611|SVH11|LANL

Volume Injected (uL): 0.5

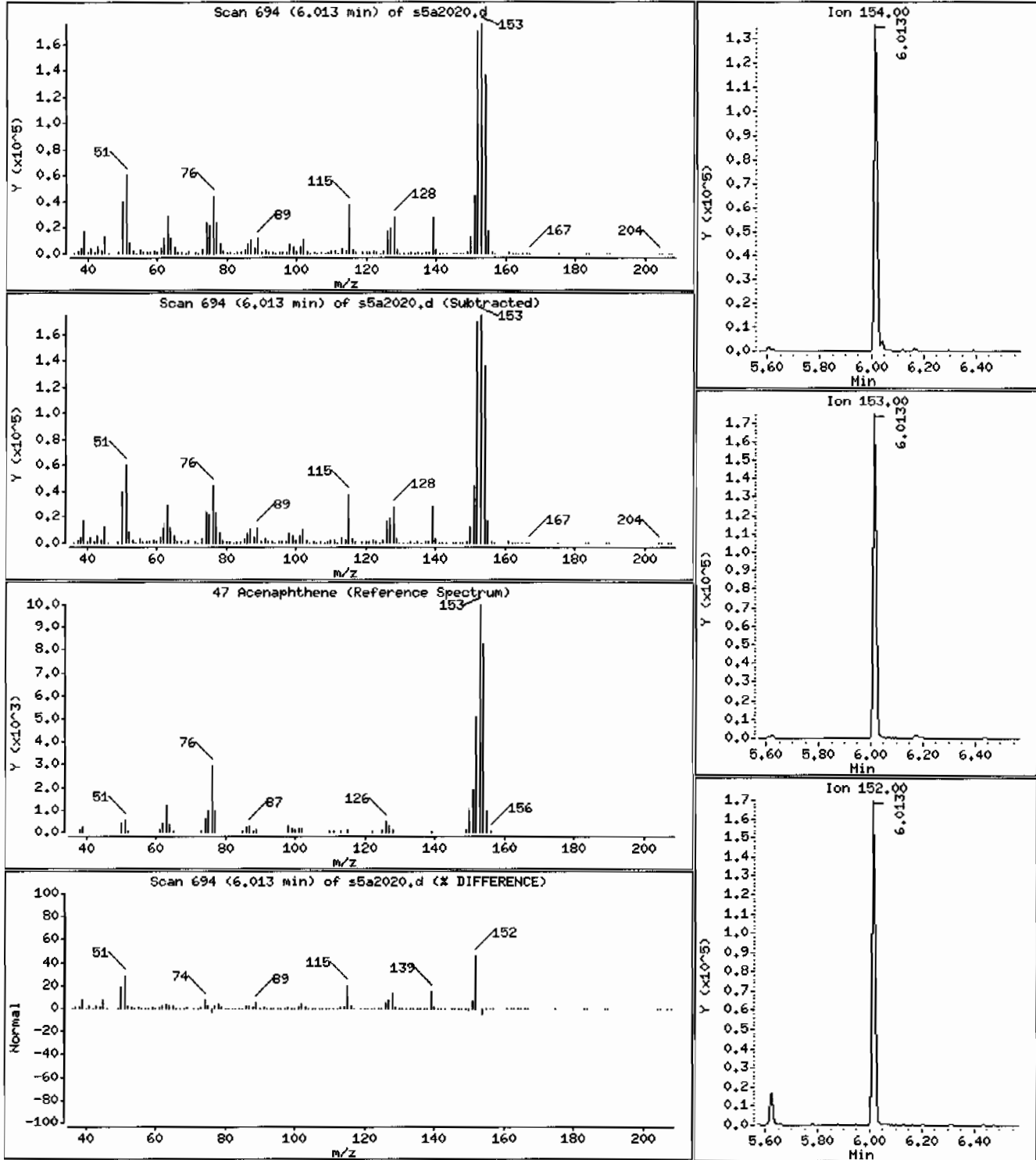
Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 232 ug/Kg



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: HSD5.i

Sample Info: 1244923005194338611SVH111LANL

Volume Injected (uL): 0.5

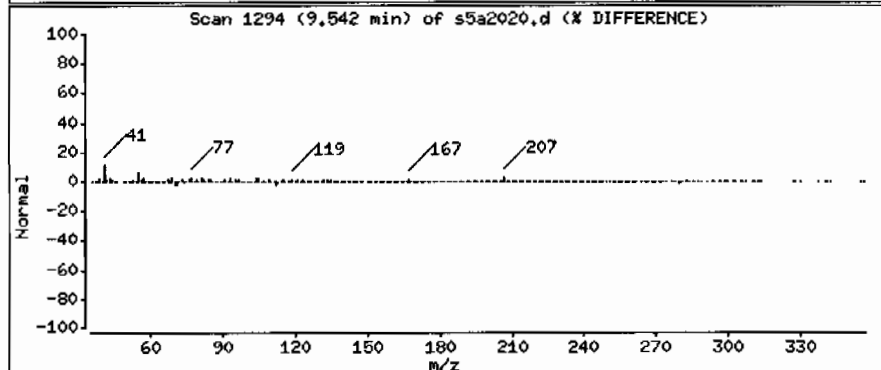
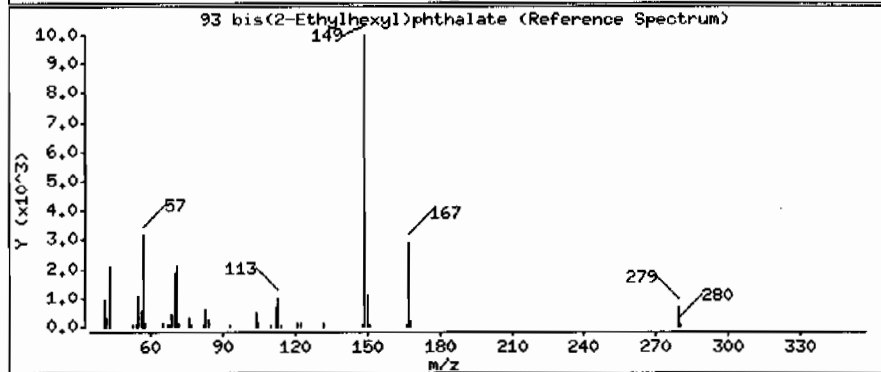
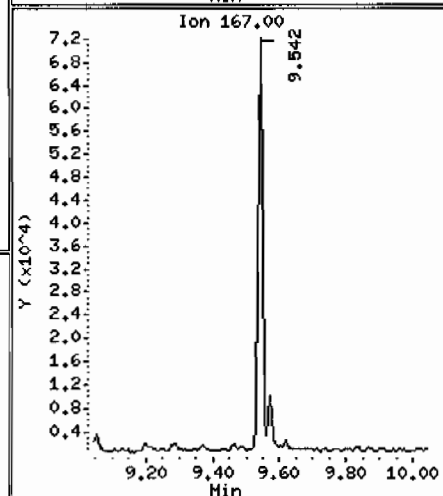
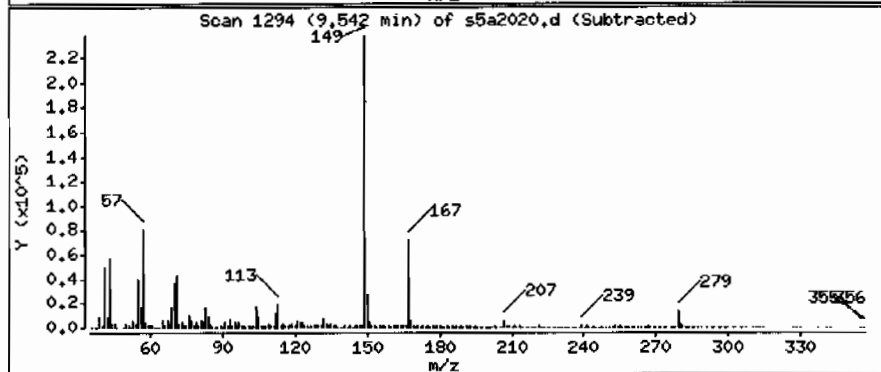
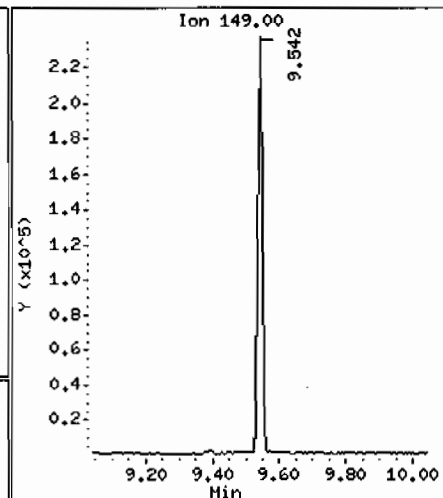
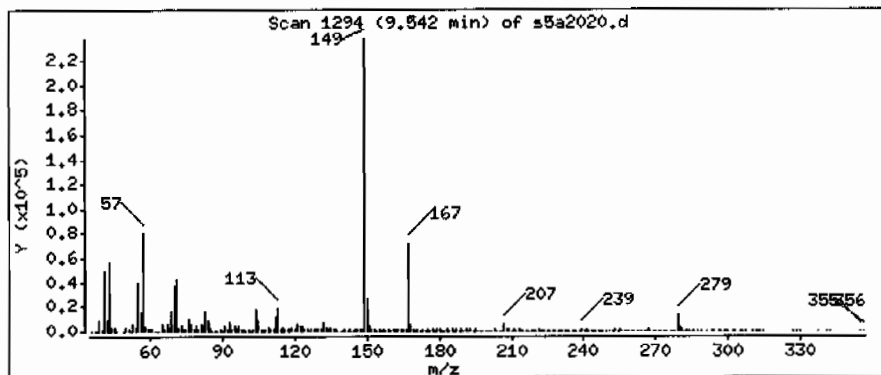
Operator: RMB

Column phase: J&W DB-5HS

Column diameter: 0.20

93 bis(2-Ethylhexyl)phthalate

Concentration: 343 ug/Kg



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611ISVM11ILANL

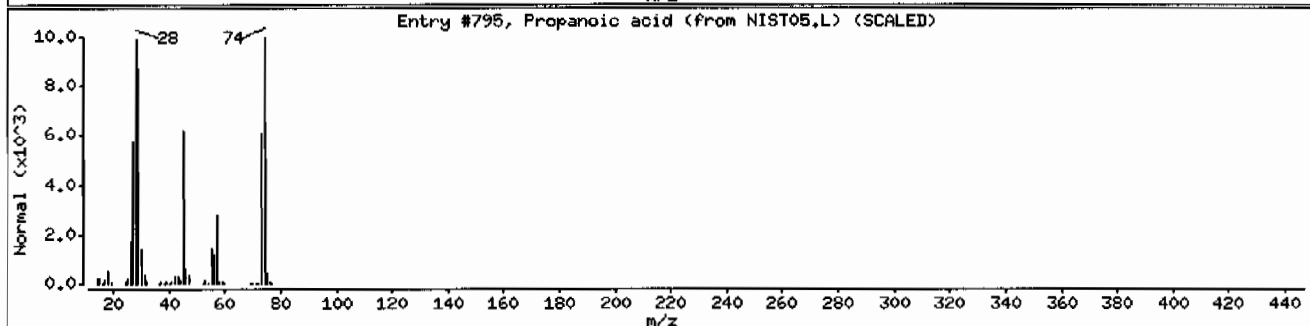
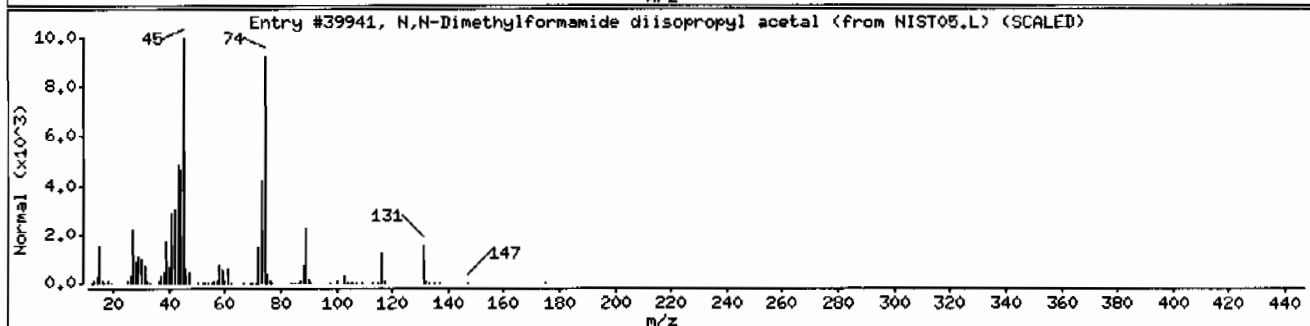
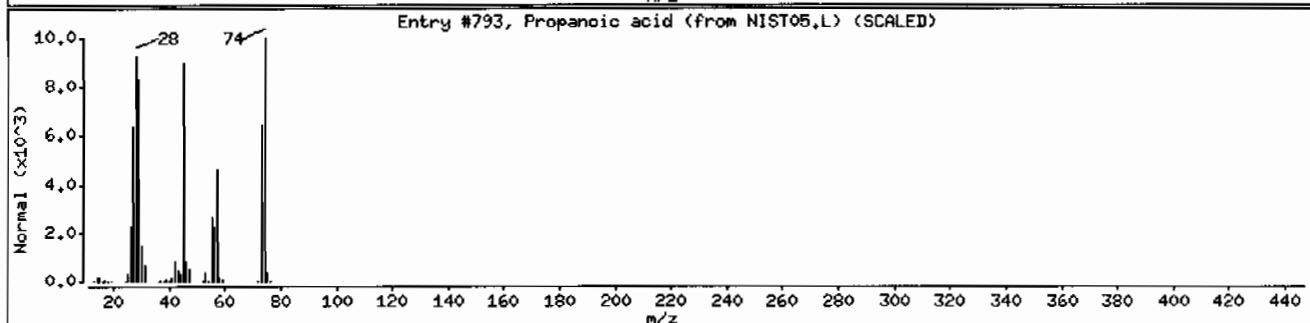
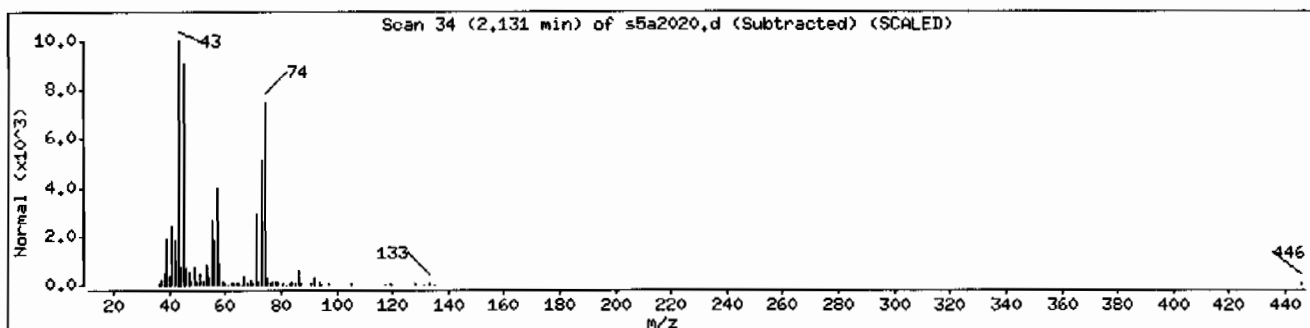
Volume Injected (uL): 0.6

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	81	C3H6O2	74
N,N-Dimethylformamide diisopropyl acetal	18503-89-4	NIST05.L	39941	56	C9H21NO2	175
Propanoic acid	79-09-4	NIST05.L	795	50	C3H6O2	74



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: HSD5.i

Sample Info: 12449230051943386111SVH111LANL

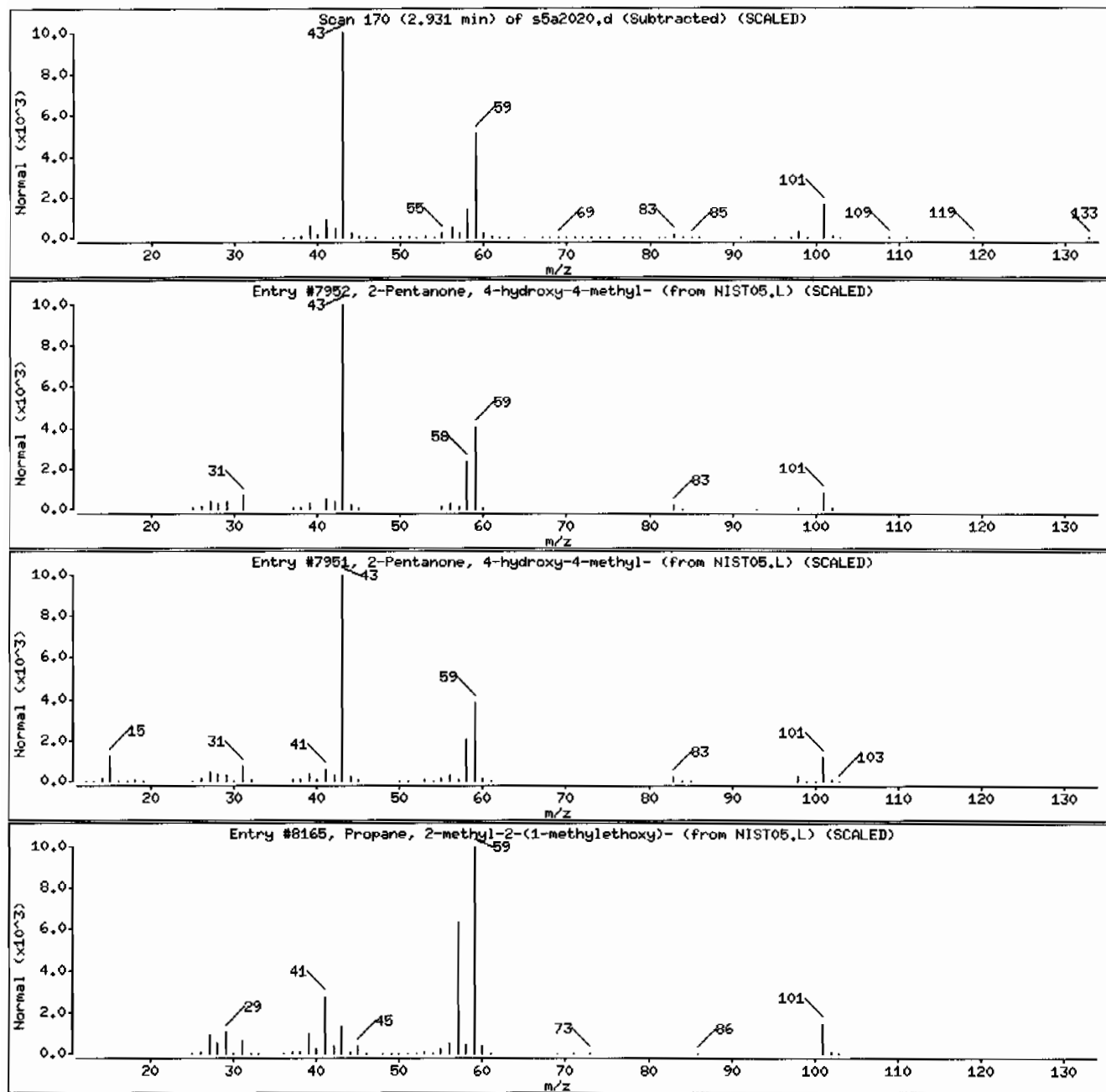
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	42	C6H12O2	116
Propane, 2-methyl-2-(1-methylethoxy)-	17348-59-3	NIST05.L	8165	42	C7H16O	116



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611SVH11ILANL

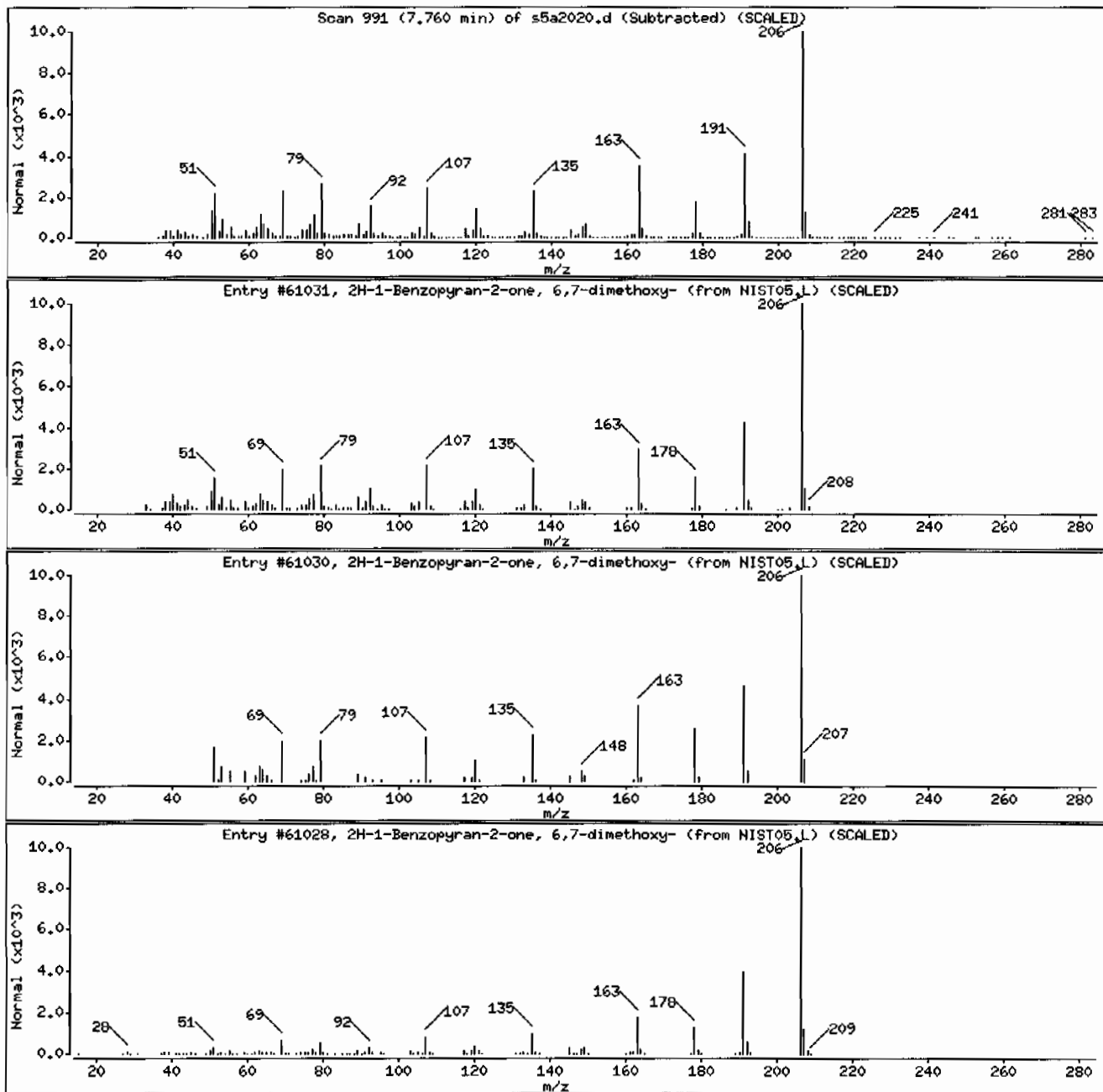
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2H-1-Benzopyran-2-one, 6,7-dimethoxy-	120-08-1	NIST05.L	61031	98	C11H10O4	206
2H-1-Benzopyran-2-one, 6,7-dimethoxy-	120-08-1	NIST05.L	61030	94	C11H10O4	206
2H-1-Benzopyran-2-one, 6,7-dimethoxy-	120-08-1	NIST05.L	61028	94	C11H10O4	206



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: I2449230051943386111SVH111LANL

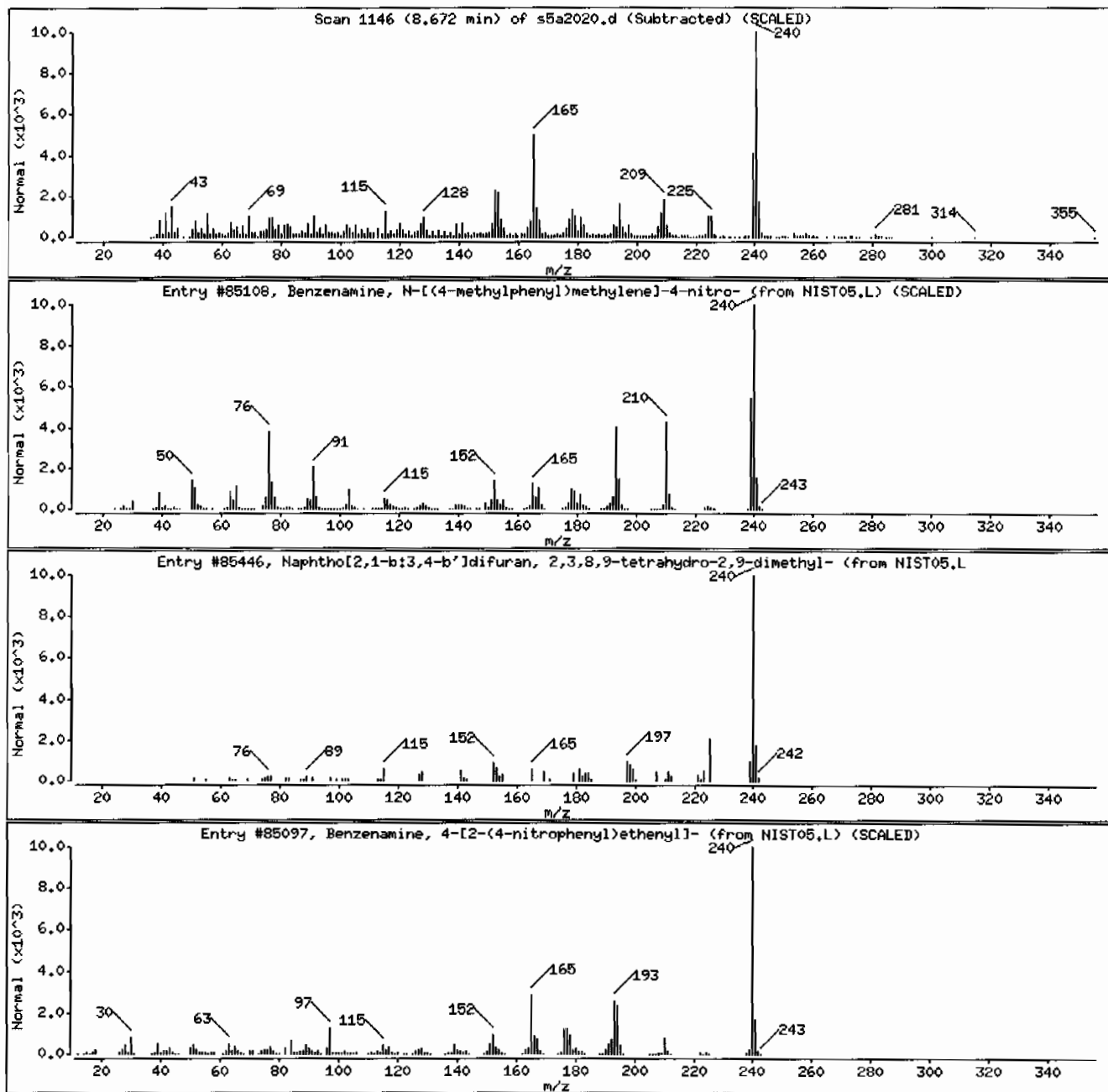
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenamine, N-[(4-methylphenyl)methylen	20192-50-1	NIST05.L	85108	60	C14H12N2O2	240
Naphtho[2,1-b:3,4-b']difuran, 2,3,8,9-te	68873-19-8	NIST05.L	85446	60	C16H16O2	240
Benzenamine, 4-[2-(4-nitrophenyl)ethenyl	4629-58-7	NIST05.L	85097	50	C14H12N2O2	240



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611ISVM111LAML

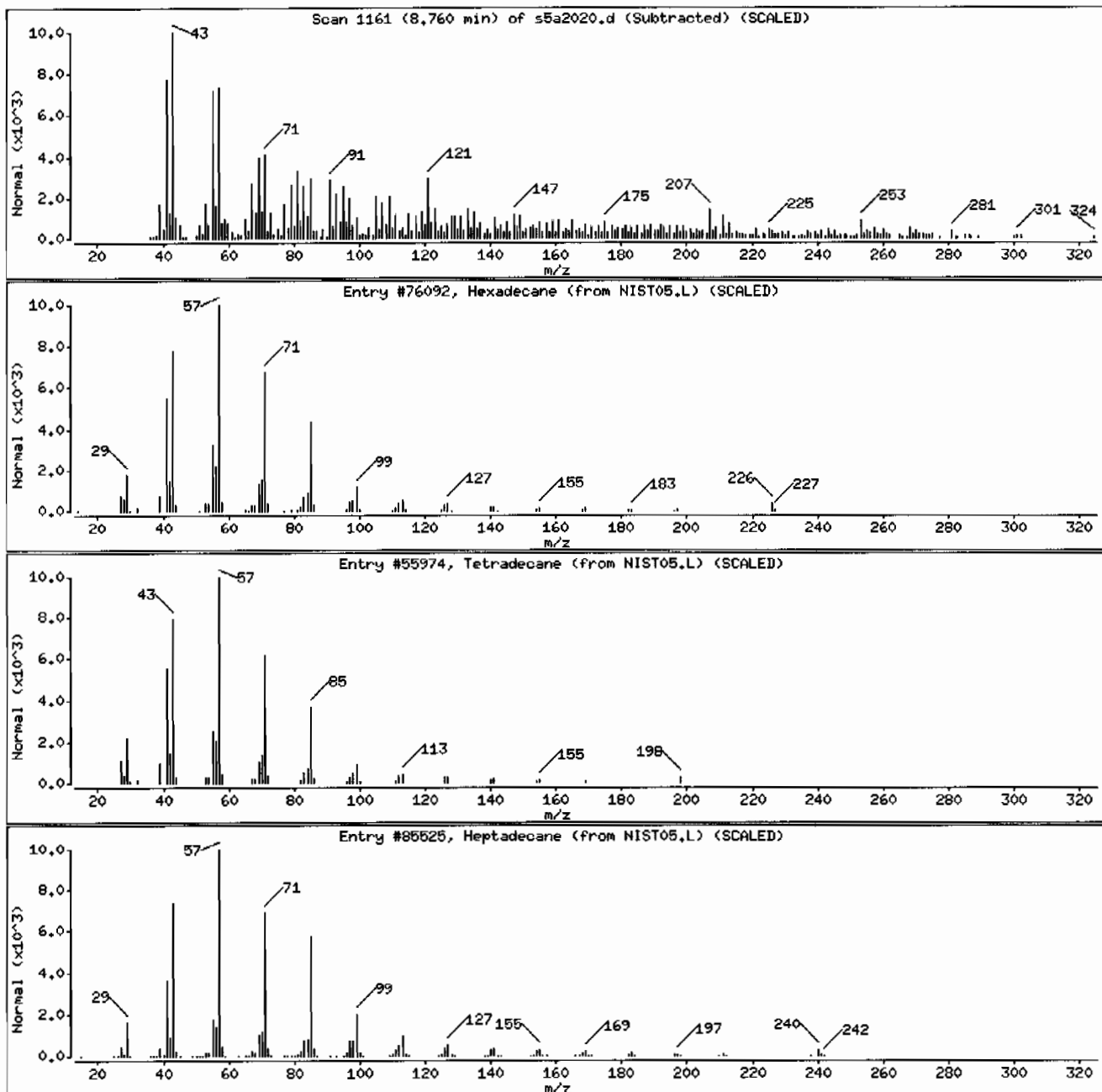
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane	544-76-3	NIST05.L	76092	86	C ₁₆ H ₃₄	226
Tetradecane	629-59-4	NIST05.L	55974	86	C ₁₄ H ₃₀	198
Heptadecane	629-78-7	NIST05.L	85525	83	C ₁₇ H ₃₆	240



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 12449230051943386111SVH111LANL

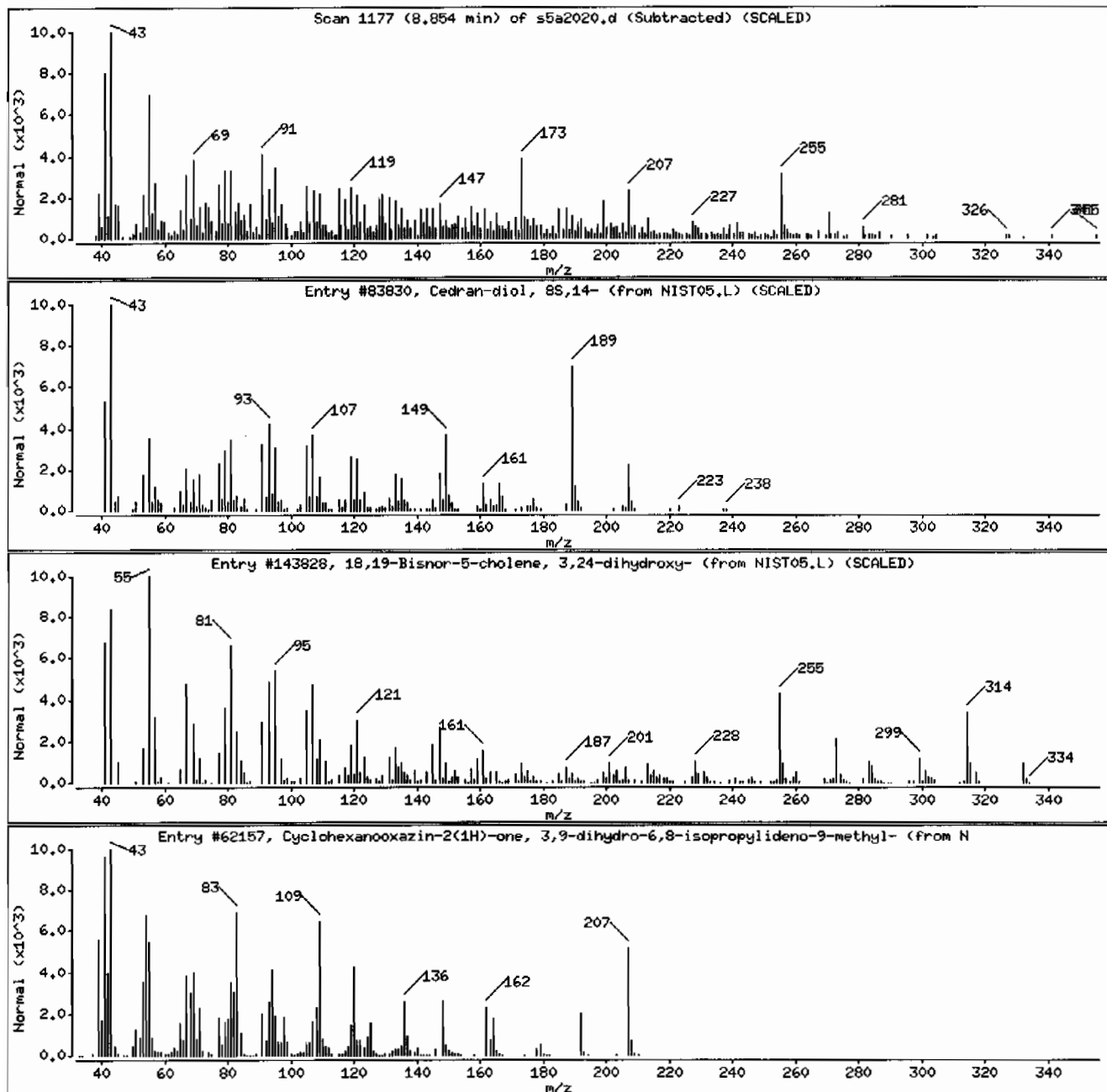
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	40	C15H26O2	238
18,19-Bisnor-5-cholesterol, 3,24-dihydroxy-	1000251-69-1	NIST05.L	143828	25	C22H36O2	332
Cyclohexanooxazin-2(1H)-one, 3,9-dihydro	1000260-31-8	NIST05.L	62157	15	C12H17NO2	207



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611SVH111LANL

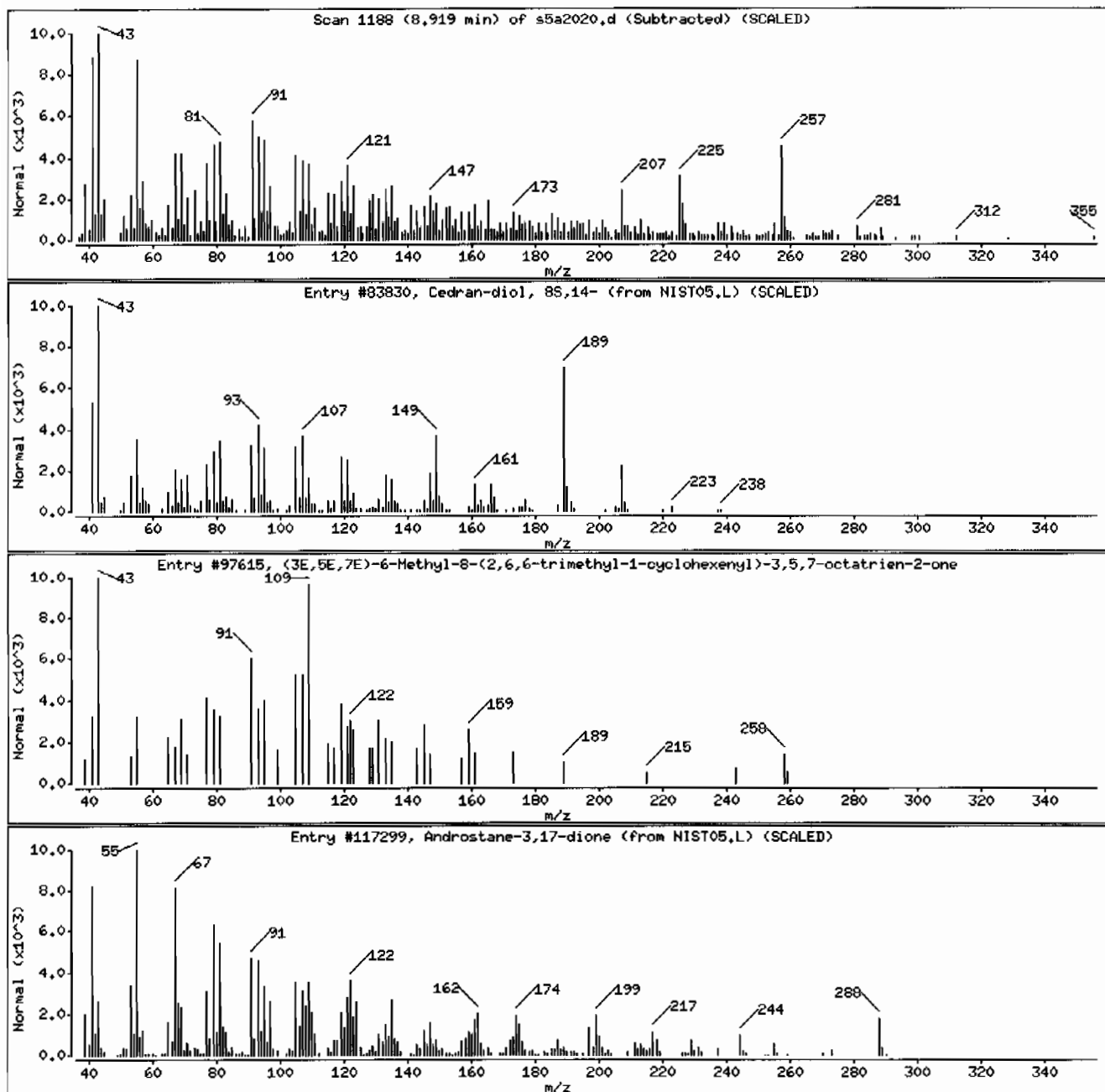
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cedran-diol, 8S,14-	62600-05-9	NIST05.L	83830	43	C15H26O2	238
(3E,5E,7E)-6-Methyl-8-(2,6,6-trimethyl-1	17974-57-1	NIST05.L	97615	41	C18H26O	258
Androstane-3,17-dione	5982-99-0	NIST05.L	117299	38	C19H28O2	288



Date: 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 12449230051943386111SVMI11LANL

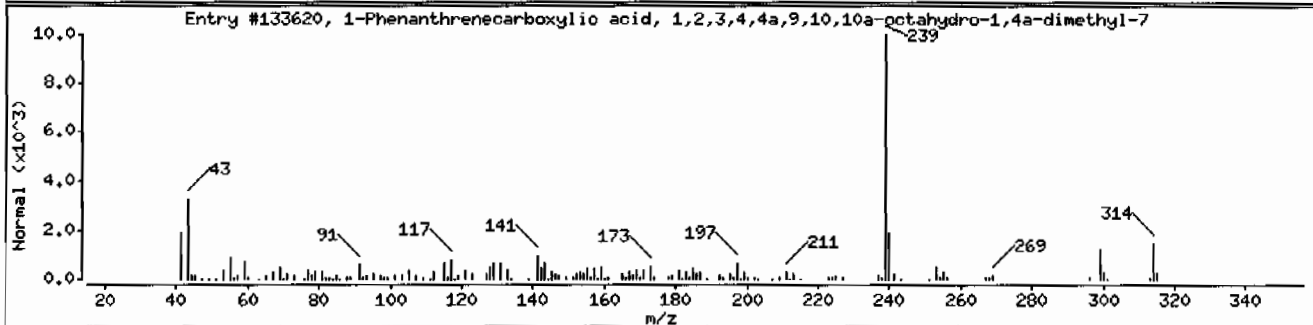
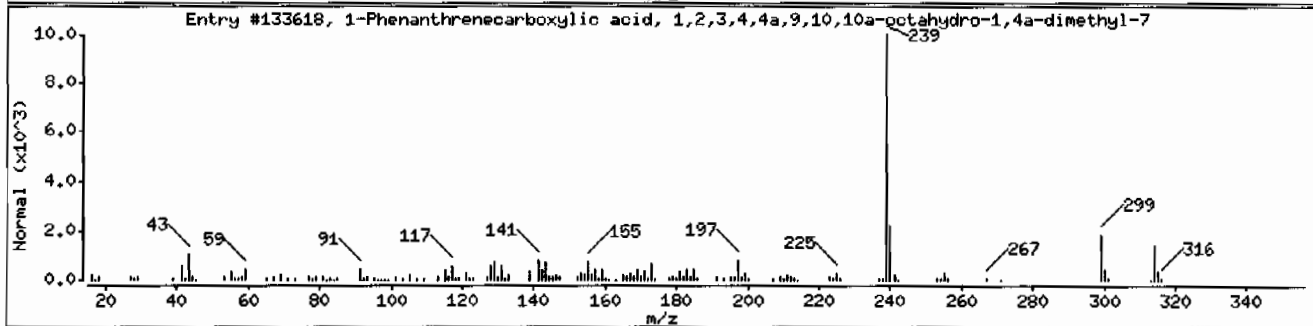
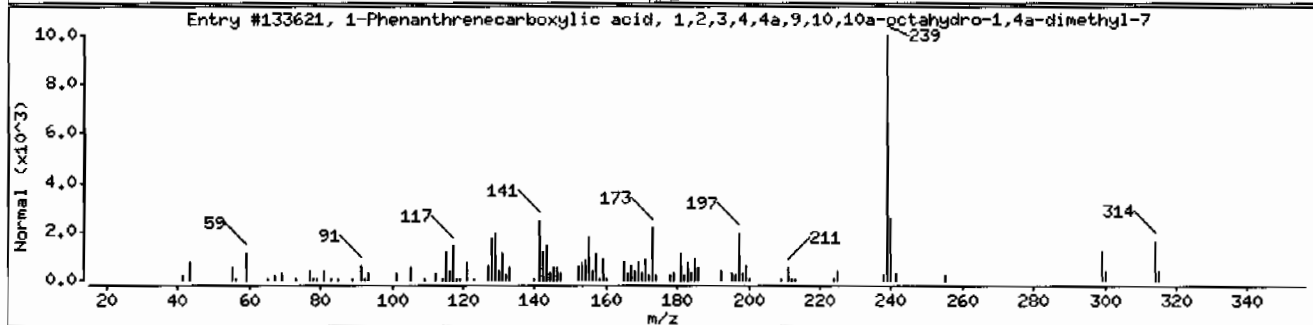
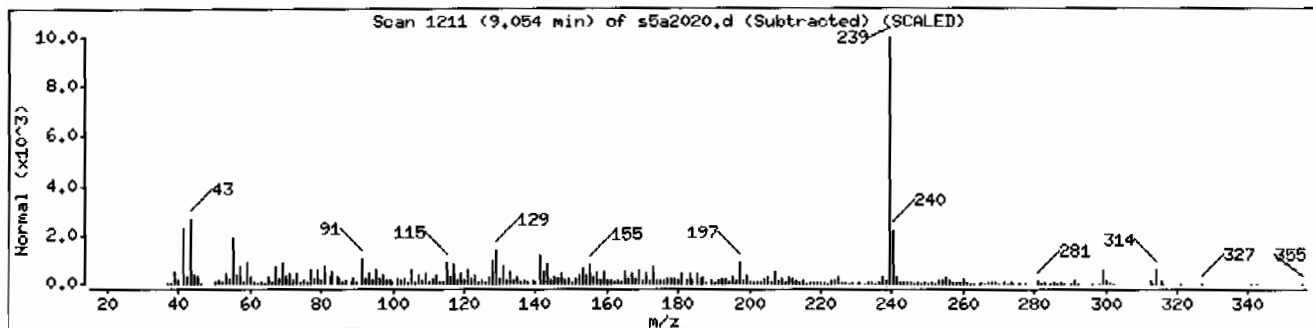
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133621	96	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133618	89	C21H30O2	314
1-Phenanthrenecarboxylic acid, 1,2,3,4,4	1235-74-1	NIST05.L	133620	64	C21H30O2	314



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: HSD5.i

Sample Info: 1244923005194338611SVMI11LANL

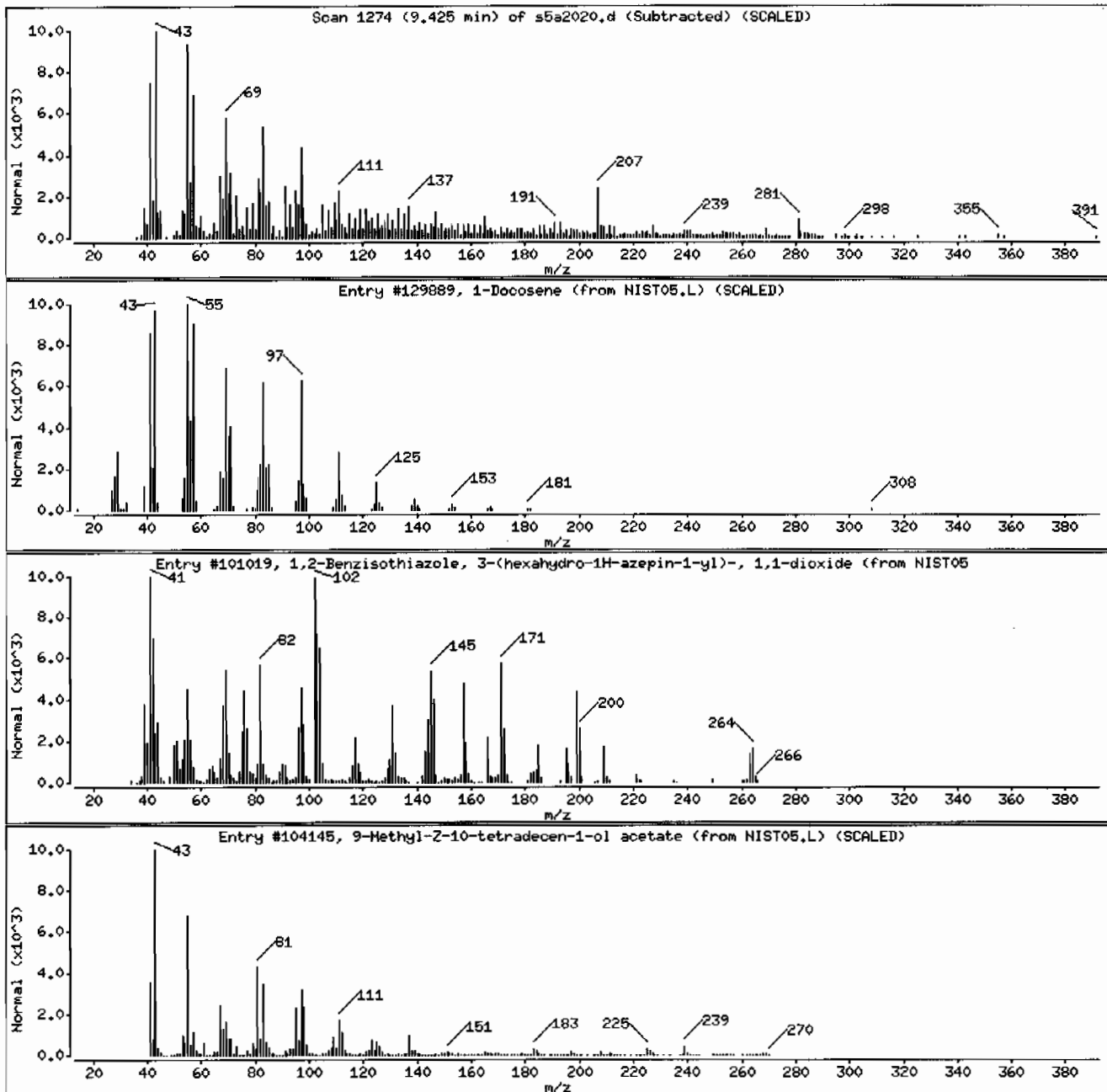
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	96	C22H44	308
1,2-Benzisothiazole, 3-(hexahydro-1H-aze	309735-29-3	NIST05.L	101019	91	C13H16N2O2S	264
9-Methyl-Z-10-tetradecen-1-ol acetate	1000130-99-4	NIST05.L	104145	70	C17H32O2	268



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: HSD5.i

Sample Info: 1244923005194338611SVMI11LANL

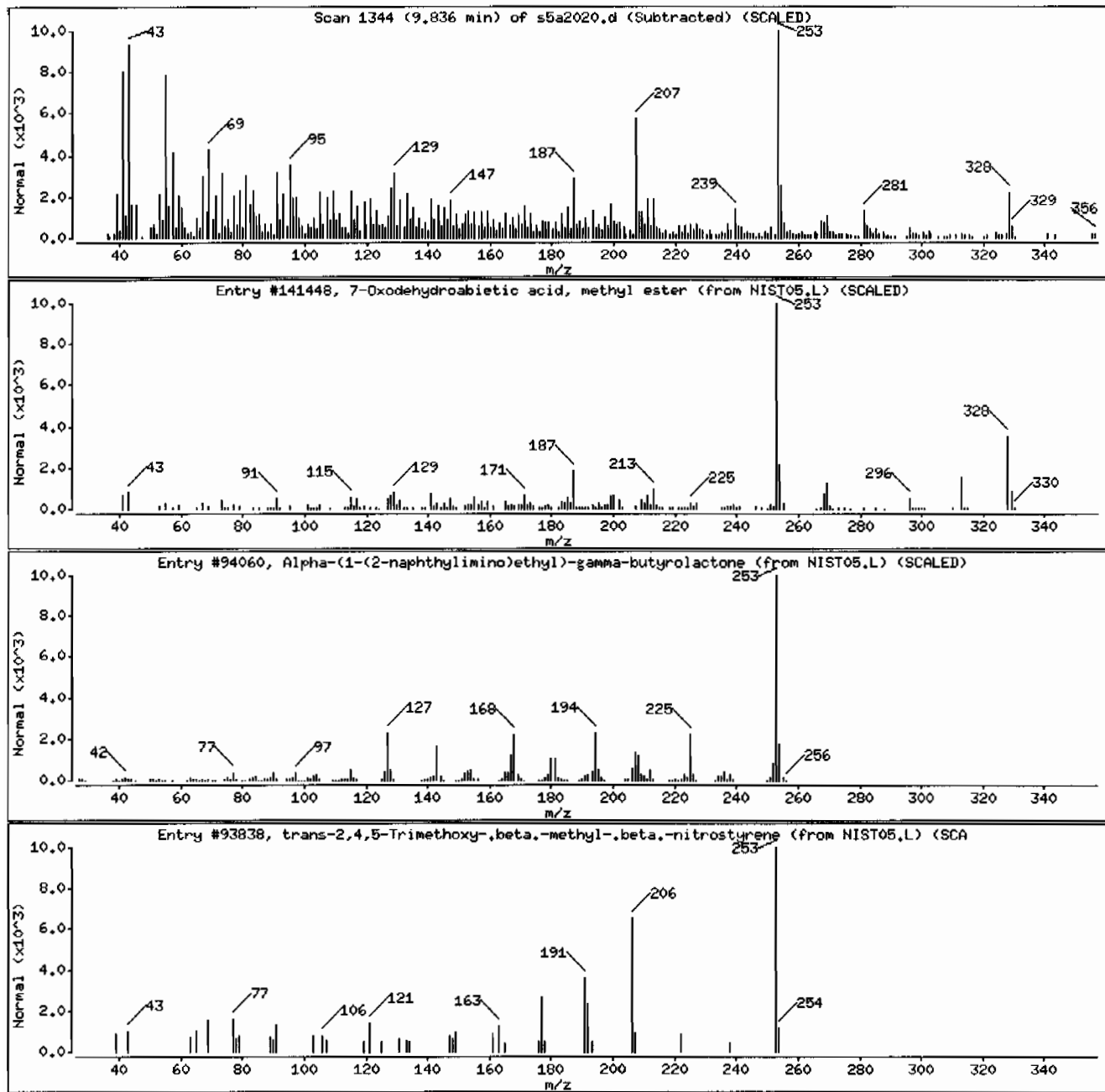
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
7-Oxodehydroabietic acid, methyl ester	110936-78-2	NIST05.L	141448	70	C21H28O3	328
Alpha-(1-(2-naphthylimino)ethyl)-gamma-b	1000240-01-3	NIST05.L	94060	38	C16H15N02	253
trans-2,4,5-Trimethoxy-.beta.-methyl-.be	134040-35-0	NIST05.L	93838	38	C12H15N05	253



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: HSD5.i

Sample Info: 1244923005194338611|SVMI1|LANL

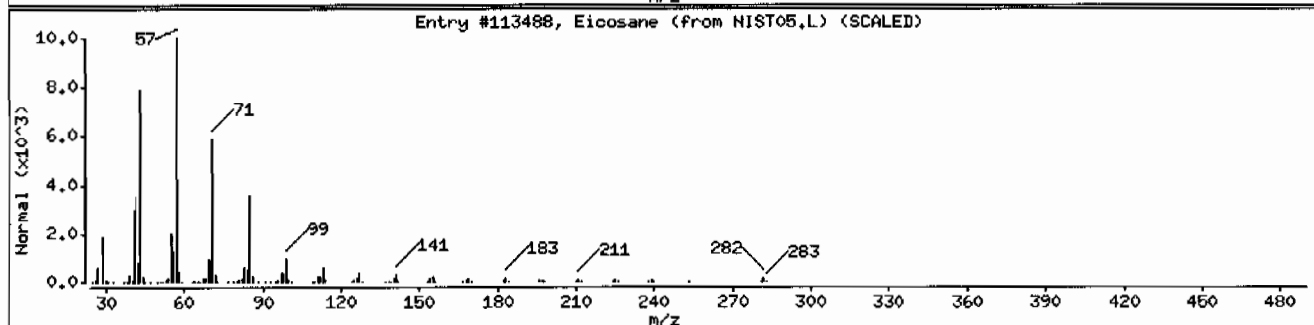
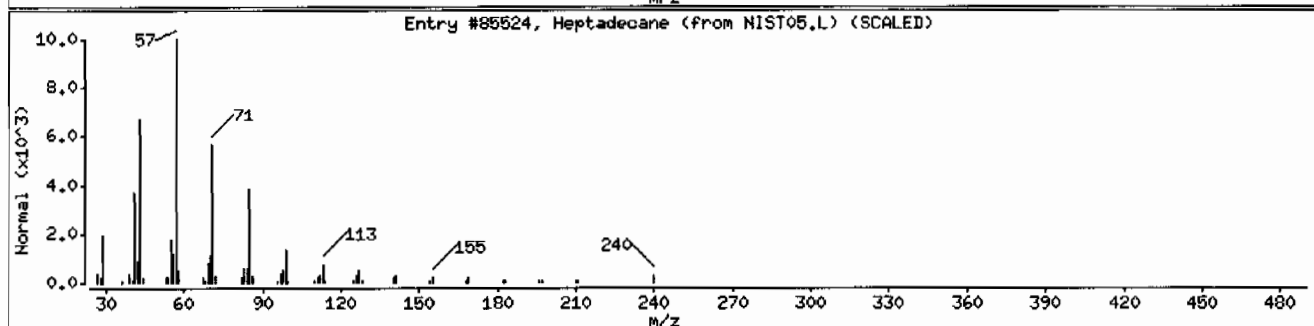
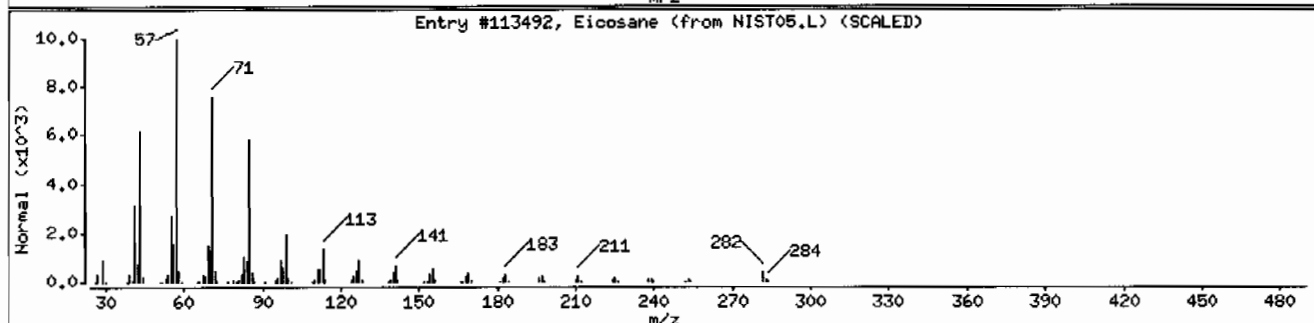
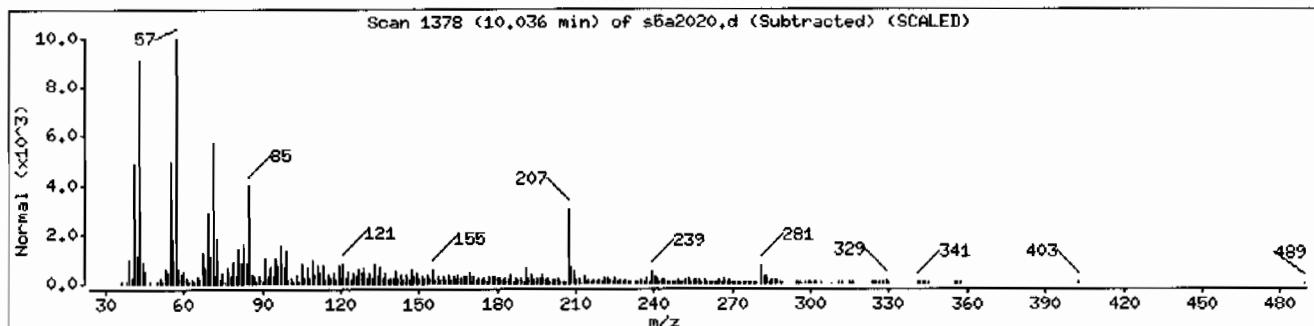
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Eicosane	112-95-8	NIST05.L	113492	95	C20H42	282
Heptadecane	629-78-7	NIST05.L	85524	95	C17H36	240
Eicosane	112-95-8	NIST05.L	113488	95	C20H42	282



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: I244923005I943386I1ISVH11ILANL

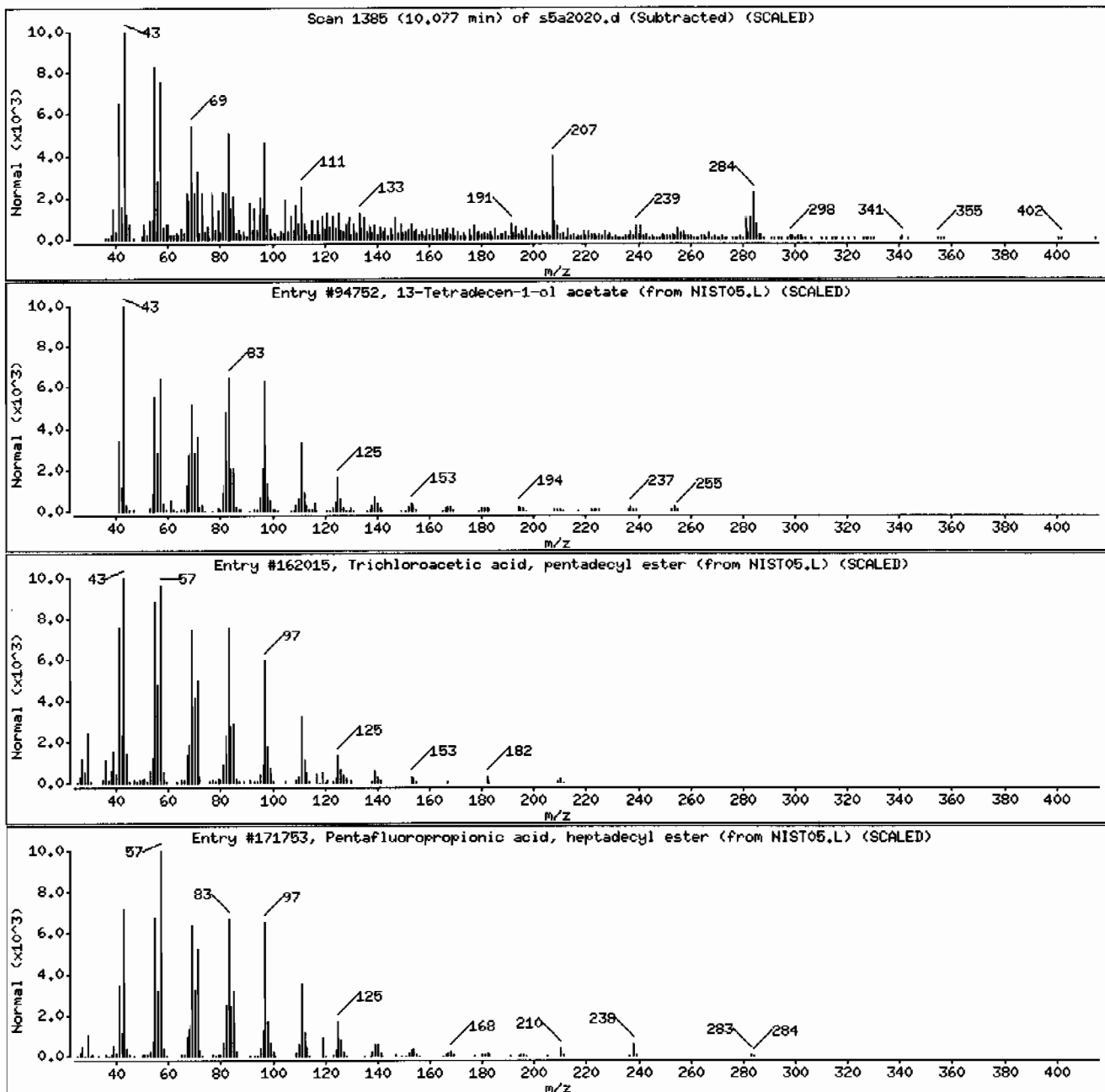
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	90	C16H30O2	254
Trichloroacetic acid, pentadecyl ester	74339-53-0	NIST05.L	162015	87	C17H31Cl3O2	372
Pentafluoropropionic acid, heptadecyl es	1000283-04-2	NIST05.L	171753	64	C20H35F5O2	402



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611ISVM11ILANL

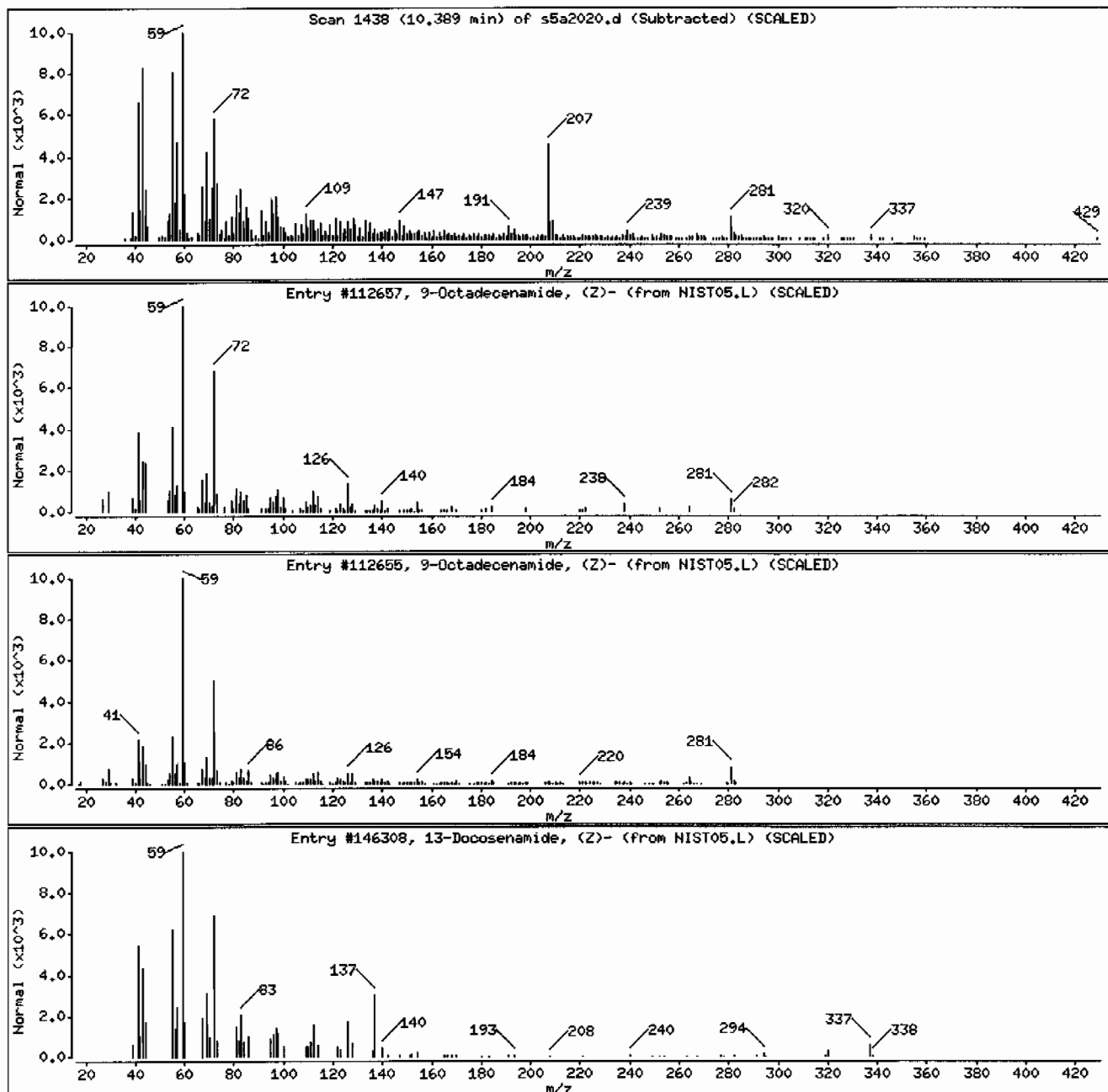
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112657	64	C18H35NO	281
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	60	C18H35NO	281
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	55	C22H43NO	337



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.1

Sample Info: 1244923005194338611SVH111LANL

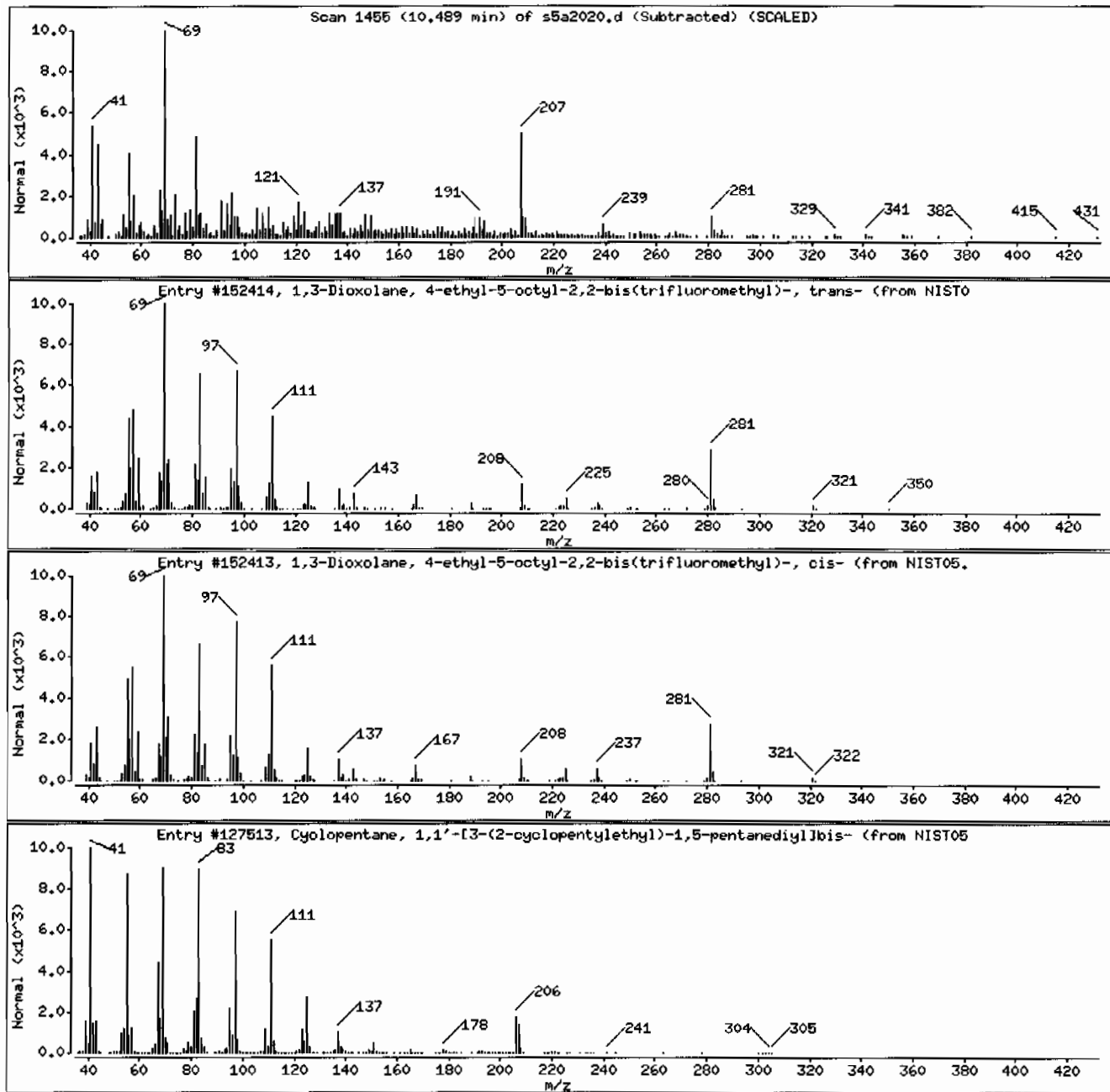
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3-Dioxolane, 4-ethyl-5-octyl-2,2-bis(t	38274-73-6	NIST05.L	152414	23	C15H24F6O2	350
1,3-Dioxolane, 4-ethyl-5-octyl-2,2-bis(t	38274-72-5	NIST05.L	152413	23	C15H24F6O2	350
Cyclopentane, 1,1'-[3-(2-cyclopentylethyl	55255-88-1	NIST05.L	127513	20	C22H40	304



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: I244923005I94338611ISVM11ILANL

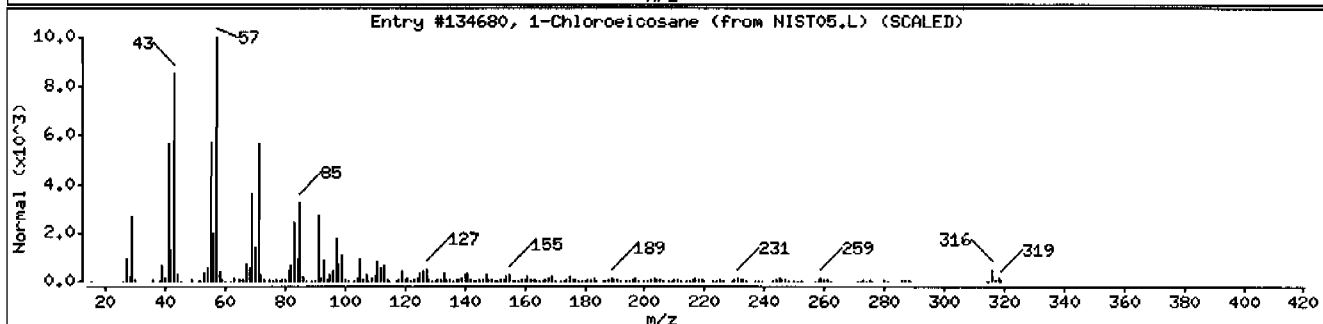
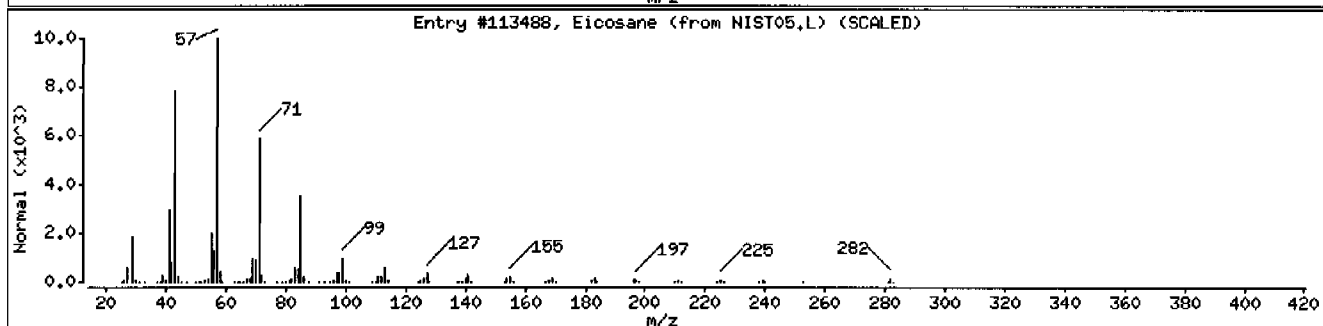
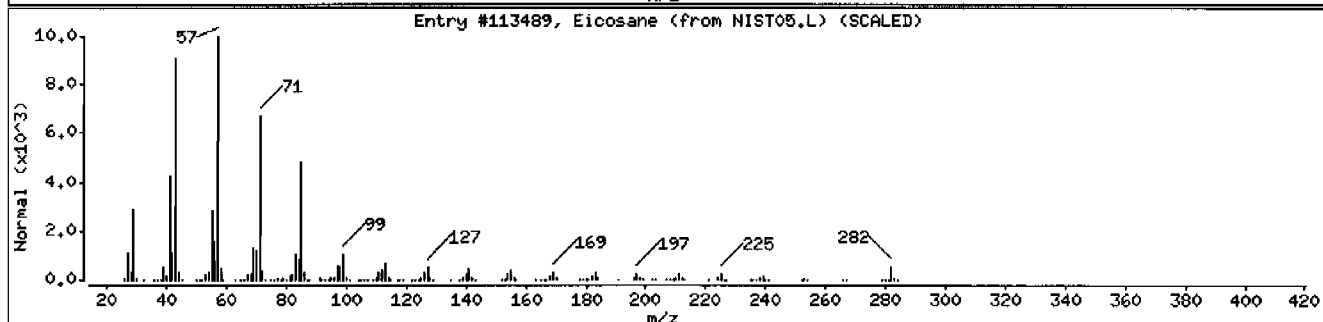
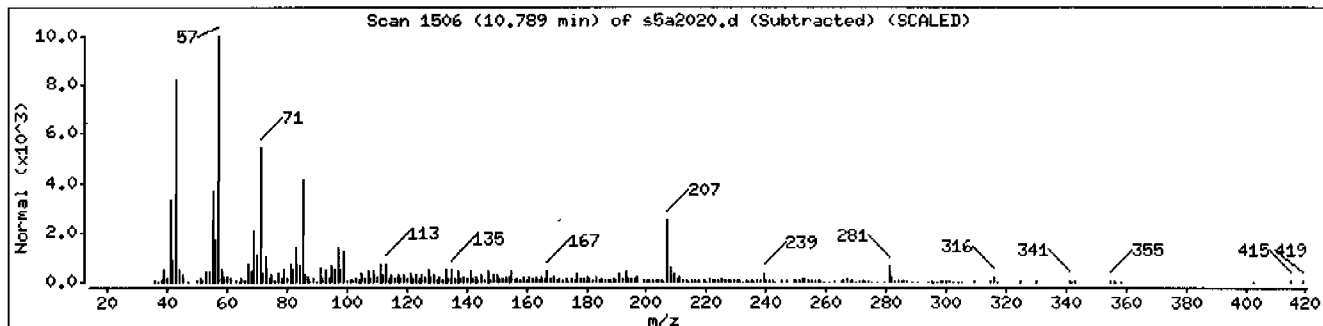
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Eicosane	112-95-8	NIST05.L	113489	97	C20H42	282
Eicosane	112-95-8	NIST05.L	113488	97	C20H42	282
1-Chloroeicosane	42217-02-7	NIST05.L	134680	78	C20H41Cl	316



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611ISVH11ILANL

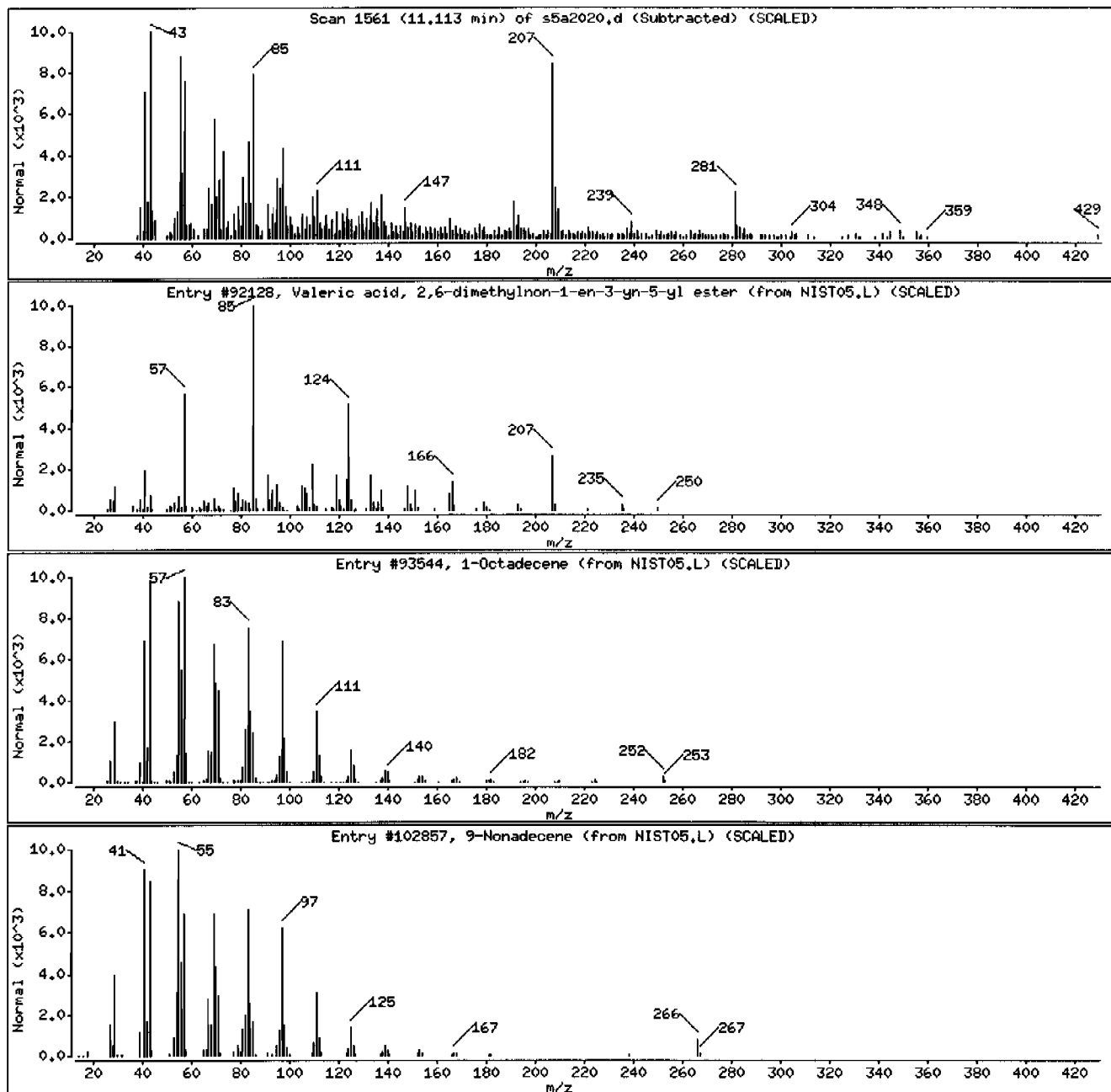
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Valeric acid, 2,6-dimethylnon-1-en-3-yn-	1000292-49-0	NIST05.L	92128	56	C16H26O2	250
1-Octadecene	112-88-9	NIST05.L	93544	25	C18H36	252
9-Nonadecene	31035-07-1	NIST05.L	102857	25	C19H38	266



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 1244923005194338611SVH111LANL

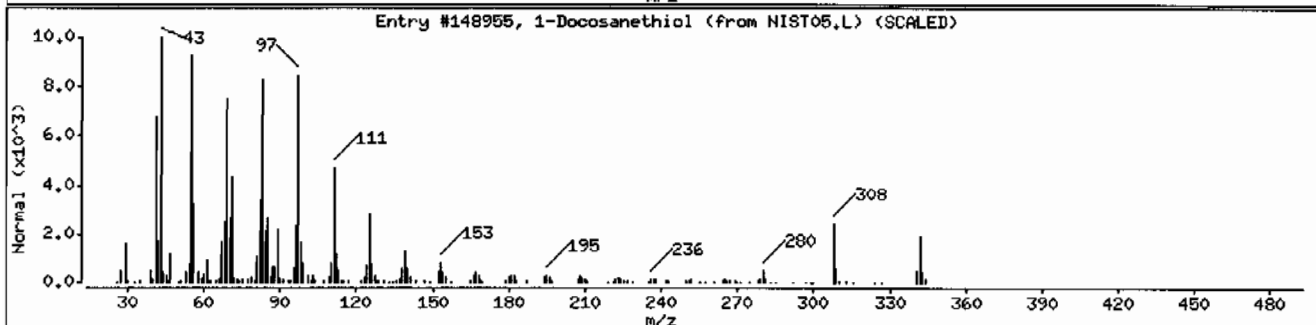
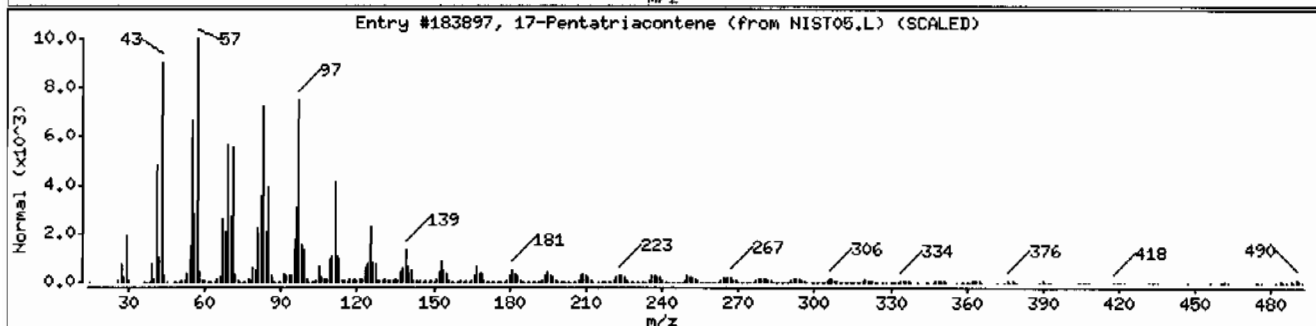
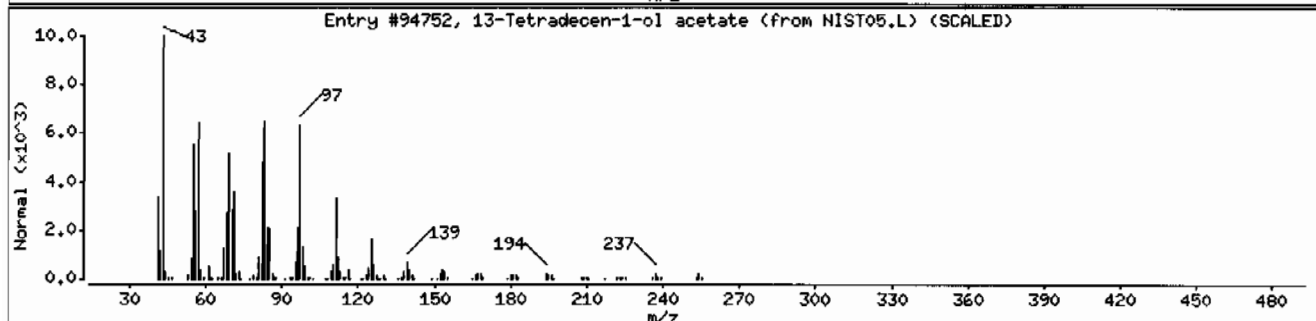
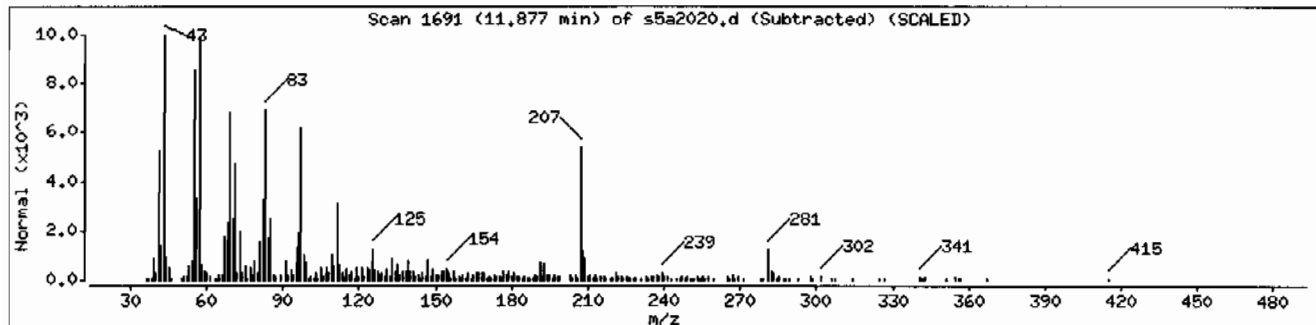
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	90	C16H30O2	254
17-Pentatriacontene	6971-40-0	NIST05.L	183897	70	C35H70	491
1-Docosanethiol	7773-83-3	NIST05.L	148955	70	C22H46S	342



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 12449230051943386111SVH111LANL

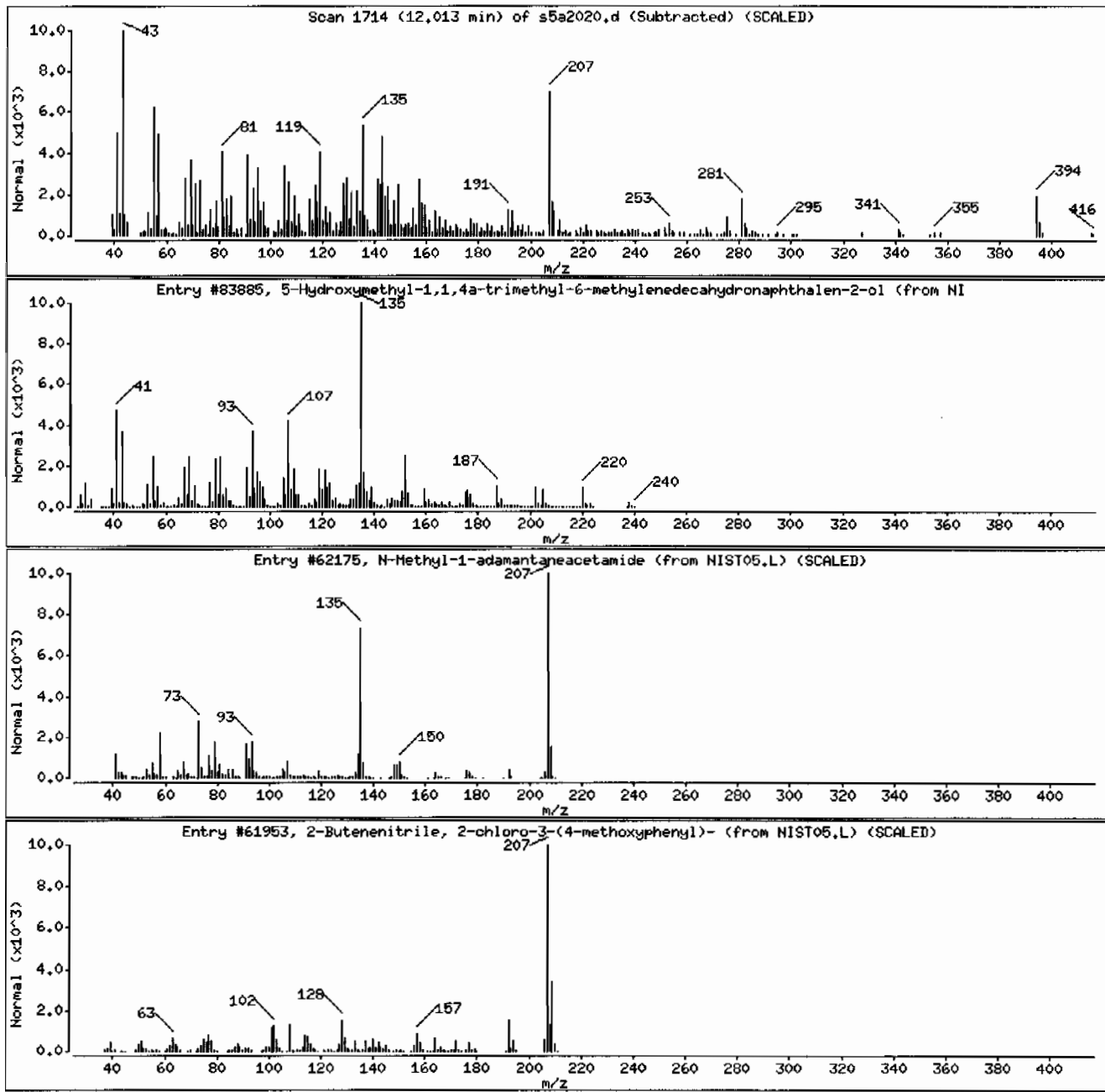
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Hydroxymethyl-1,1,4a-trimethyl-6-methy	1000191-00-4	NIST05.L	83885	25	C15H26O2	238
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	25	C13H21NO	207
2-Butenenitrile, 2-chloro-3-(4-methoxyph	1000305-66-7	NIST05.L	61953	15	C11H10ClNO	207



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 12449230051943386111SVH111LANL

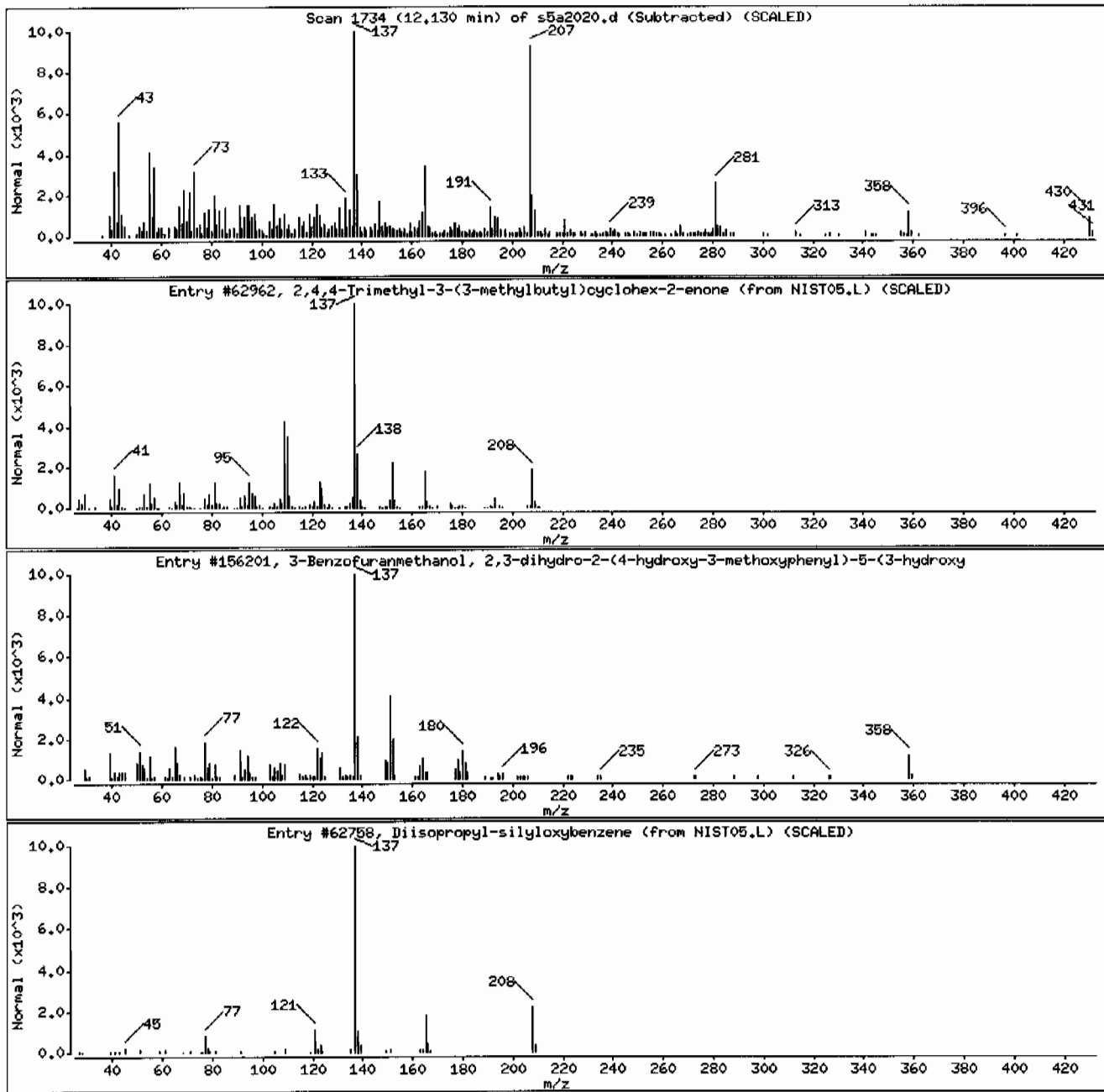
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,4,4-Trimethyl-3-(3-methylbutyl)cyclohe	88725-82-0	NIST05.L	62962	60	C14H24O	208
3-Benzofuranmethanol, 2,3-dihydro-2-(4-h	4263-87-0	NIST05.L	156201	47	C20H22O6	358
Diisopropyl-silyloxybenzene	1000292-68-7	NIST05.L	62758	38	C12H20O6Si	268



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: HSD5.i

Sample Info: 1244923005194338611SVMI11LANL

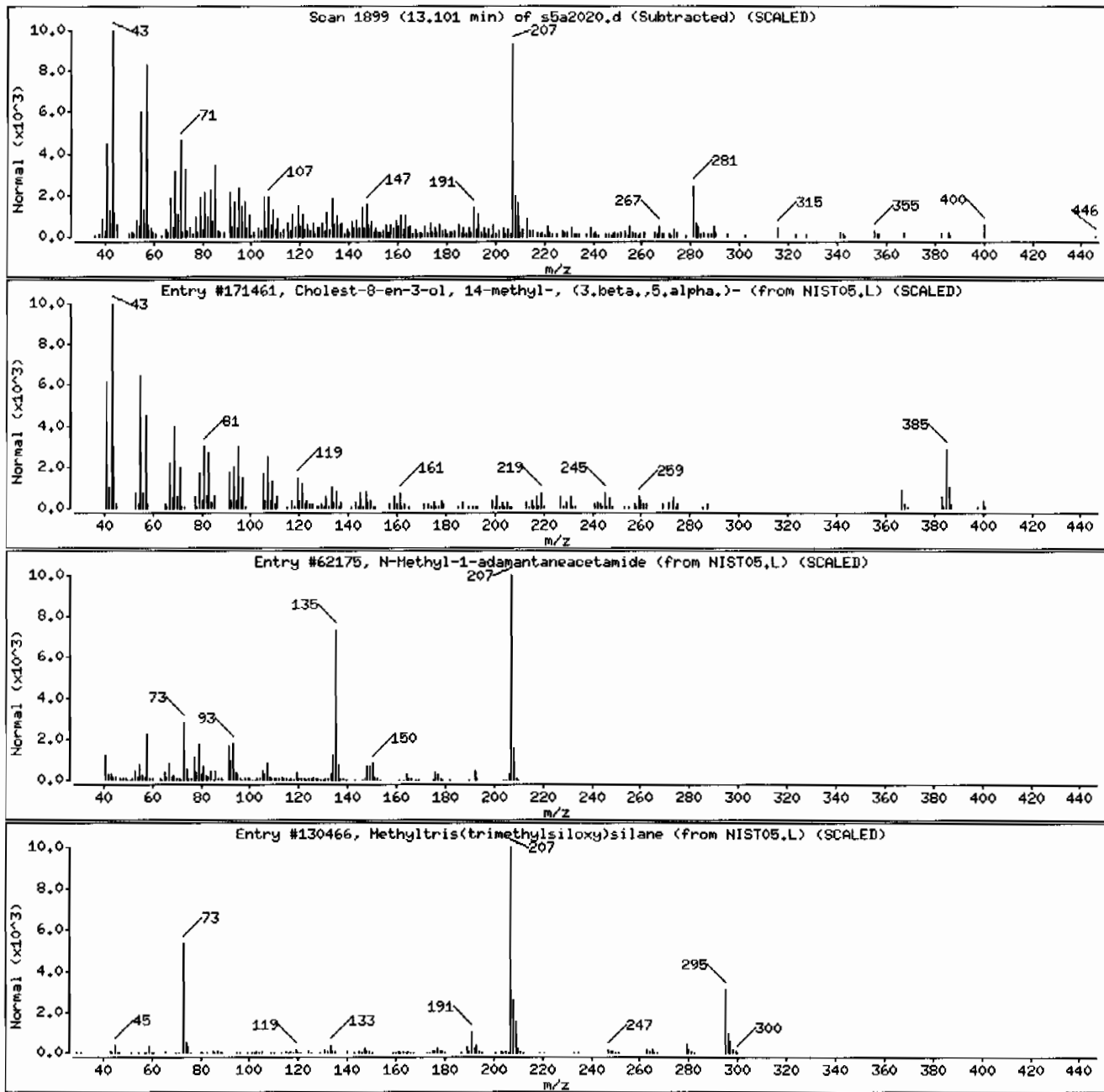
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholest-8-en-3-ol, 14-methyl-, (3.beta.,	6062-47-1	NIST05.L	171461	46	C28H48O	400
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	35	C13H21NO	207
Methyltris(trimethylsiloxy)silane	17928-28-8	NIST05.L	130466	35	C10H30O3Si4	310



Date : 21-JAN-2010 00:28

Client ID: RE15-10-7174

Instrument: MSD5.i

Sample Info: 12449230051943386111SVH111LANL

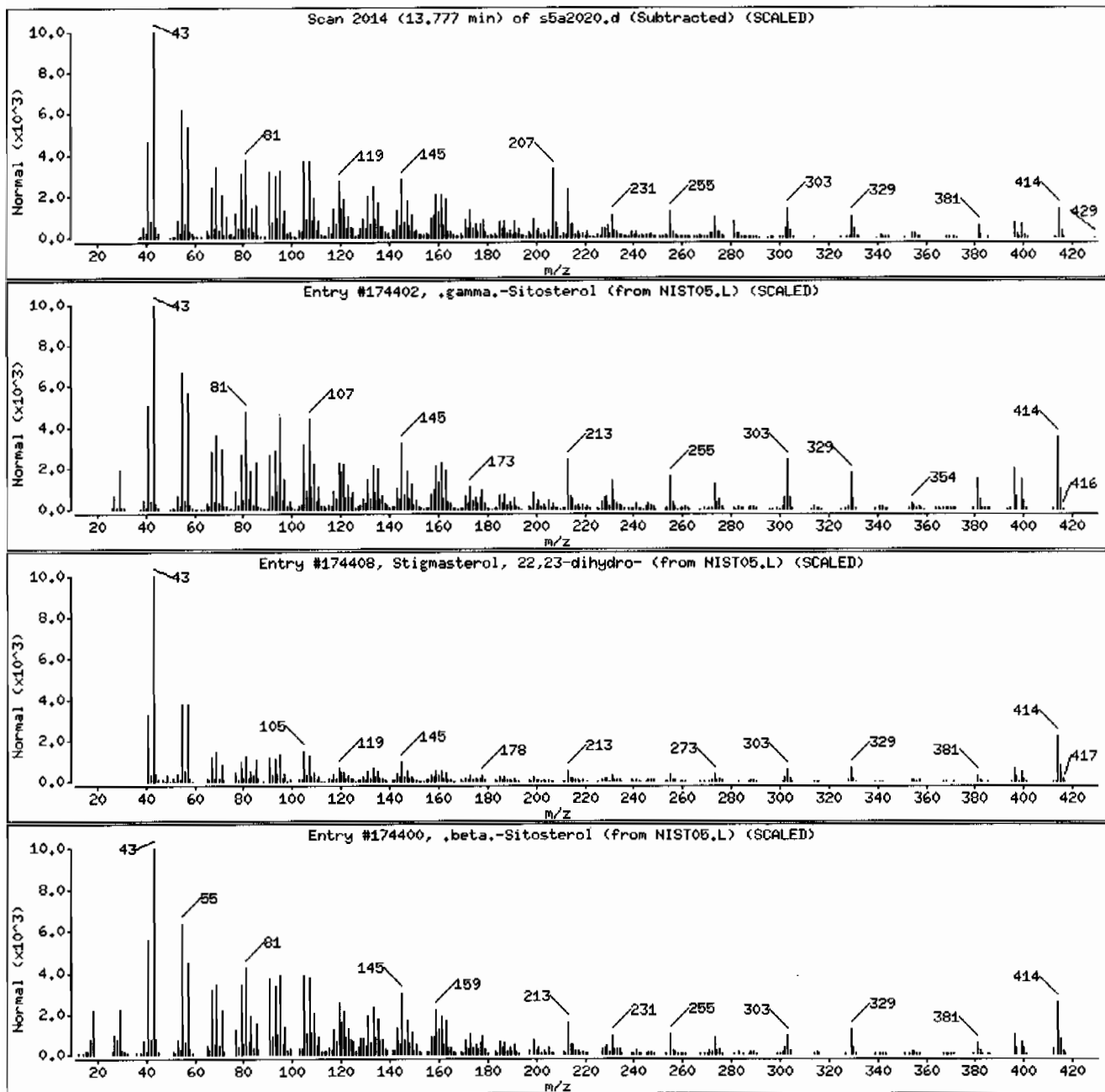
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	95	C29H50O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	95	C29H50O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174400	90	C29H50O	414



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

SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7175
Batch ID: 943386
Run Date: 01/21/2010 01:13
Prep Date: 01/20/2010 11:13
Data File: s5a2022.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	367	ug/kg	73.5	367
108-95-2	Phenol	U	367	ug/kg	73.5	367
95-57-8	2-Chlorophenol	U	367	ug/kg	73.5	367
106-46-7	1,4-Dichlorobenzene	U	367	ug/kg	73.5	367
621-64-7	N-Nitrosodipropylamine	U	367	ug/kg	73.5	367
59-50-7	4-Chloro-3-methylphenol	U	367	ug/kg	73.5	367
83-32-9	Acenaphthene		121	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	91.8	367
129-00-0	Pyrene	U	36.7	ug/kg	11.0	36.7
110-86-1	Pyridine	U	367	ug/kg	73.5	367
62-53-3	Aniline	U	367	ug/kg	110	367
111-44-4	bis(2-Chloroethyl) ether	U	367	ug/kg	73.5	367
541-73-1	1,3-Dichlorobenzene	U	367	ug/kg	73.5	367
100-51-6	Benzyl alcohol	U	367	ug/kg	110	367
95-50-1	1,2-Dichlorobenzene	U	367	ug/kg	73.5	367
108-60-1	bis(2-Chloroisopropyl)ether	U	367	ug/kg	73.5	367
95-48-7	o-Cresol	U	367	ug/kg	73.5	367
65794-96-9	m,p-Cresols	U	367	ug/kg	110	367
67-72-1	Hexachloroethane	U	367	ug/kg	73.5	367
98-95-3	Nitrobenzene	U	367	ug/kg	73.5	367
78-59-1	Isophorone	U	367	ug/kg	73.5	367
88-75-5	2-Nitrophenol	U	367	ug/kg	73.5	367
105-67-9	2,4-Dimethylphenol	U	367	ug/kg	129	367
111-91-1	bis(2-Chloroethoxy)methane	U	367	ug/kg	73.5	367
120-83-2	2,4-Dichlorophenol	U	367	ug/kg	73.5	367
65-85-0	Benzoic acid	U	735	ug/kg	184	735
91-20-3	Naphthalene	U	36.7	ug/kg	11.0	36.7
106-47-8	4-Chloroaniline	U	367	ug/kg	73.5	367
87-68-3	Hexachlorobutadiene	U	367	ug/kg	73.5	367
91-57-6	2-Methylnaphthalene	U	36.7	ug/kg	7.35	36.7
77-47-4	Hexachlorocyclopentadiene	U	367	ug/kg	73.5	367
88-06-2	2,4,6-Trichlorophenol	U	367	ug/kg	73.5	367
95-95-4	2,4,5-Trichlorophenol	U	367	ug/kg	73.5	367
91-58-7	2-Chloronaphthalene	U	36.7	ug/kg	12.1	36.7
88-74-4	2-Nitroaniline	U	367	ug/kg	73.5	367
	o-Nitroaniline					
99-09-2	3-Nitroaniline	U	367	ug/kg	73.5	367

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923007	Date Received: 01/16/2010 08:55	%Moisture: 9.3
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7175	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.1	Dilution: 1
Run Date: 01/21/2010 01:13	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.02 g	Final Volume: 1 mL
Data File: s5a2022.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	73.5	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	735	ug/kg	140	735
132-64-9	Dibenzofuran	U	367	ug/kg	73.5	367
84-66-2	Diethylphthalate	U	367	ug/kg	73.5	367
86-73-7	Fluorene	U	36.7	ug/kg	11.0	36.7
7005-72-3	4-Chlorophenylphenylether	U	367	ug/kg	73.5	367
534-52-1	2-Methyl-4,6-dinitrophenol	U	367	ug/kg	73.5	367
100-01-6	4-Nitroaniline	U	367	ug/kg	110	367
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	367	ug/kg	73.5	367
122-66-7	Azobenzene	U	367	ug/kg	73.5	367
	<i>1,2</i> -Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	367	ug/kg	73.5	367
118-74-1	Hexachlorobenzene	U	367	ug/kg	73.5	367
85-01-8	Phenanthrene	U	36.7	ug/kg	11.0	36.7
120-12-7	Anthracene	U	36.7	ug/kg	7.35	36.7
84-74-2	Di-n-butylphthalate	U	367	ug/kg	73.5	367
206-44-0	Fluoranthene	U	36.7	ug/kg	11.0	36.7
85-68-7	Butylbenzylphthalate	U	367	ug/kg	73.5	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	73.5	367
117-84-0	Di-n-octylphthalate	U	367	ug/kg	73.5	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	73.5	367

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	504	ug/kg		J
	Unknown Aldol Condensate	2.93	289	ug/kg		JA

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

SDG Number: 10-1287
Lab Sample ID: 244923007

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.02 g
Column: J&W DB-5MS

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

Client ID: RE15-10-7175
Batch ID: 943386
Run Date: 01/21/2010 01:13
Prep Date: 01/20/2010 11:13
Data File: s5a2022.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	11.9	659	ug/kg		J
	Unknown	12.65	825	ug/kg		J
	Unknown	13.25	390	ug/kg		J
	Unknown	13.47	242	ug/kg		J
83-46-5	.beta.-Sitosterol	13.81	399	ug/kg	91	NJ

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2022.d
Lab Smp Id: 244923007 Client Smp ID: RE15-10-7175
Inj Date : 21-JAN-2010 01:13
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923007|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.32970	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN	FINAL
=====	=====	==	=====	=====	=====	(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	362625	40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1322609	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044	(1.000)	761742	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1332078	40.0000	
* 91 Chrysene-d12	240	9.619	9.622	(1.000)	1137136	40.0000	
* 98 Perylene-d12	264	11.289	11.298	(1.000)	880863	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	627321	69.7559	2560
\$ 5 Phenol-d5	99	3.637	3.637	(0.928)	776199	69.9867	2570
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	343780	33.8526	1240
\$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	664876	32.9952	1210
\$ 60 2,4,6-Tribromophenol	329	6.636	6.641	(1.098)	202550	83.6604	3070
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.893)	866163	48.5105	1780

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng/vl)	(ug/Kg)	
=====	=====	=====	=====	=====	=====	=====	=====	
47 Acenaphthene	154	6.013	6.073	(0.995)	54669	3.30255	121 (Q)	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

ION RATIO REPORT

SV REPORT

Data file: s5a2022.d

Report Date: 01/21/2010 07:48

Lab. ID: 244923007

SampleType: SAMPLE

Injection Date: 21-JAN-2010 01:13

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923007|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	41852	3.64	3.70	80-120	100	(T)
93	3284	3.69	3.70	220-280	8	(Q)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	47527	4.28	4.16	80-120	100	(T)
42	29335	4.28	4.16	44-104	62	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	914	4.53	4.55	80-120	100	()
122	557	4.55	4.55	47-107	61	()
77	701	4.56	4.55	44-104	77	()

34	2-Methylnaphthalene		CAS#: 91-57-6			
142	3611	5.13	5.29	80-120	100	(T)
141	787	5.14	5.29	54-114	22	(QT)

43	Dimethylphthalate		CAS#: 131-11-3			
163	135229	6.04	5.80	80-120	100	(T)
164	761742	6.04	5.80	0- 41	563	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	102007	6.04	5.86	80-120	100	(T)
63	1402	6.04	5.86	47-107	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
45 Acenaphthylene		CAS#: 208-96-8				
152	67984	6.01	5.95	80-120	100	(T)
151	17430	6.02	5.95	0- 50	26	(T)
153	69841	6.02	5.95	0- 44	103	(QT)

47 Acenaphthene		CAS#: 83-32-9				
154	54669	6.01	6.07	80-120	100	(T)
153	69841	6.02	6.07	70-130	128	()
152	67984	6.01	6.07	18- 78	124	(QT)

50 2,4-Dinitrotoluene		CAS#: 121-14-2				
165	102007	6.04	6.16	80-120	100	(T)
89	1279	6.04	6.16	48-108	1	(QT)
63	1402	6.04	6.16	25- 85	1	(QT)

52 4-Nitrophenol		CAS#: 100-02-7				
139	10774	6.01	6.08	80-120	100	(T)
109	219	5.99	6.08	40-100	2	(QT)
65	1976	6.01	6.08	71-131	18	(QT)

53 Fluorene		CAS#: 86-73-7				
166	12133	6.64	6.46	80-120	100	(T)
165	11597	6.64	6.46	57-117	96	(T)
167	3955	6.64	6.46	0- 44	33	(T)

55 2-Methyl-4,6-dinitrophenol		CAS#: 534-52-1				
198	650	6.64	6.47	80-120	100	(T)
105	2466	6.64	6.47	13- 73	379	(QT)
51	2112	6.64	6.47	55-115	325	(QT)

61 4-Bromophenylphenylether		CAS#: 101-55-3				
248	13361	6.64	6.82	80-120	100	(T)
141	98972	6.64	6.82	46-106	741	(QT)
250	27025	6.64	6.82	69-129	202	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2022.d
 Lab Smp Id: 244923007 Client Smp ID: RE15-10-7175
 Inj Date : 21-JAN-2010 01:13
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244923007|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.02000	weight of sample
M	9.32970	% moisture

Cpnd Variable Local Compound Variable

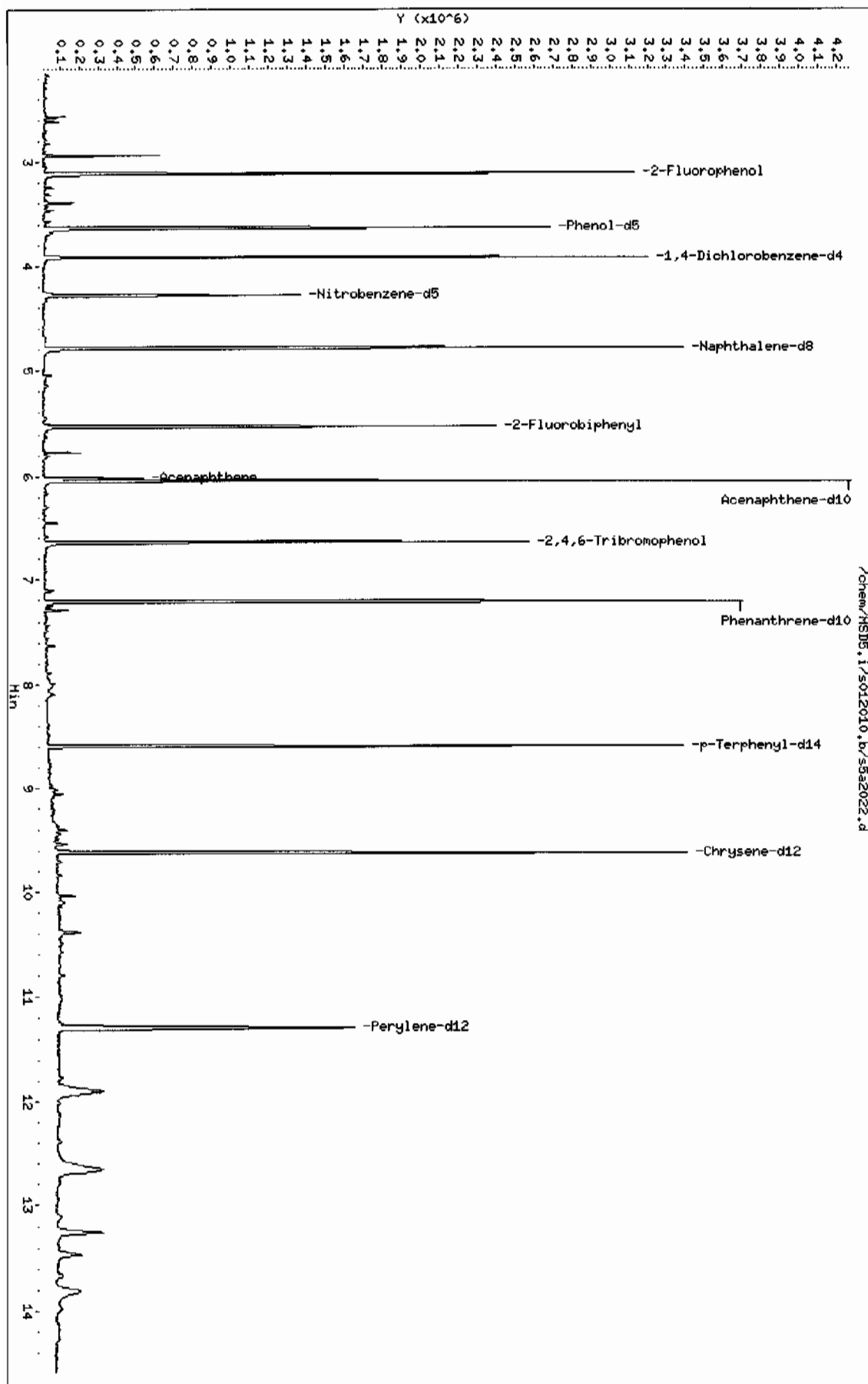
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2260309	40.000
* 98 Perylene-d12	11.289	2393969	40.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
----	----	-----	-----	----	-----	-----	-----
Unknown				CAS #:			
1.978	775728	13.7278296	504	0		0	10

RT	CONCENTRATIONS			QUAL	QUANT		CPND #
	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate					CAS #:		
2.931	444098	7.85906263	289	0		0	10
Unknown					CAS #:		
11.901	1073780	17.9414145	659	0		0	98
Unknown					CAS #:		
12.654	1343176	22.4426582	824	0		0	98
Unknown					CAS #:		
13.254	636079	10.6280162	390	0		0	98
Unknown					CAS #:		
13.465	394441	6.59058381	242	0		0	98
.beta.-Sitosterol					CAS #: 83-46-5		
13.807	649801	10.8573058	399	91	NIST05.L	174399	98

Data File: /chem/MSD5.i/s012010.b/s5a2022.d
Date: 21-JAN-2010 01:13
Client ID: RE15-10-7175
Sample Info: 124923007194338611SVH11LANL
Volume Injected (uL): 0.5
Column phase: 3uM DB-SHS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20



Date: 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: MSD5.i

Sample Info: 12449230071943386111SVH111LANL

Volume Injected (uL): 0.5

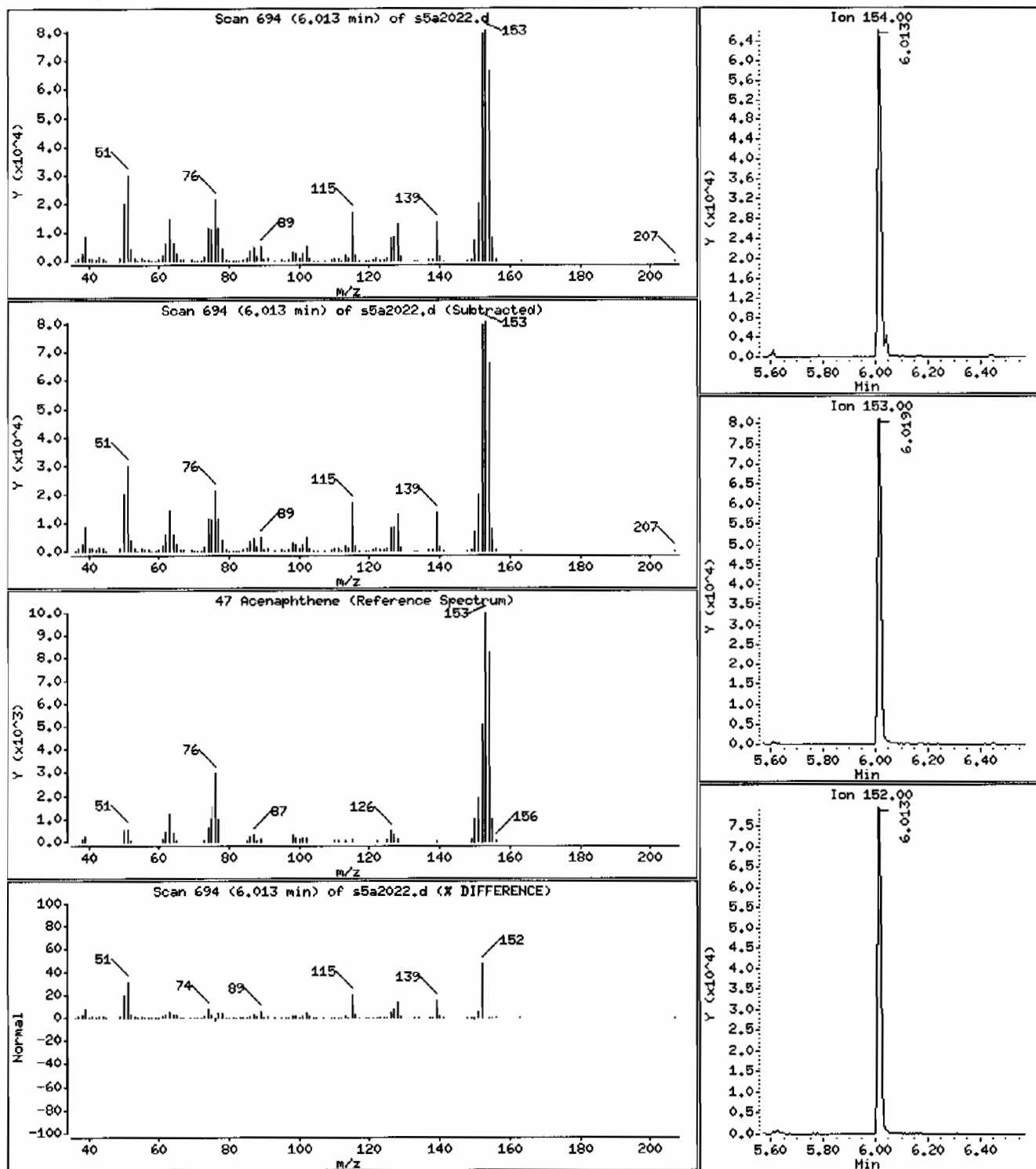
Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

47 Acenaphthene

Concentration: 121 ug/Kg



Date : 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: MSD5.i

Sample Info: 12449230071943386111SVMI11LANL

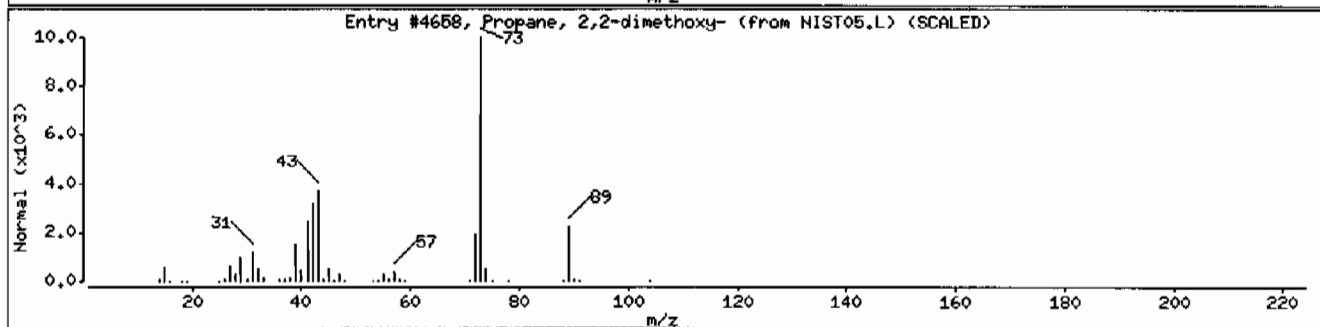
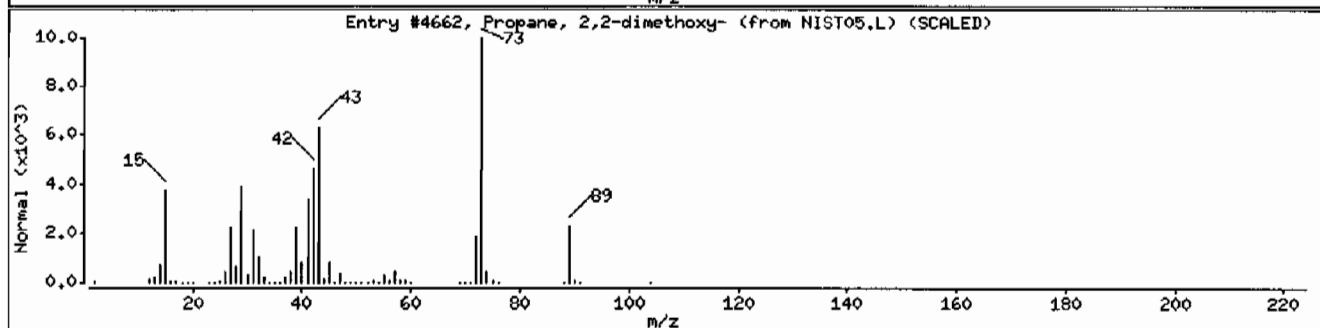
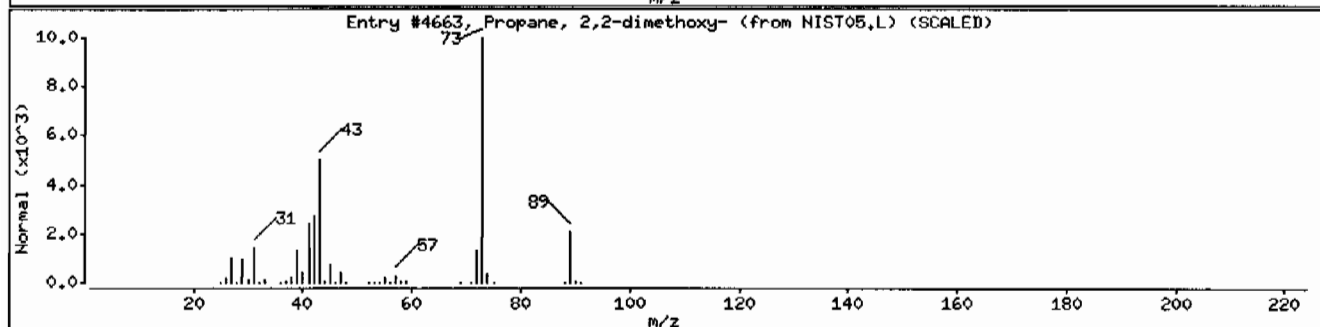
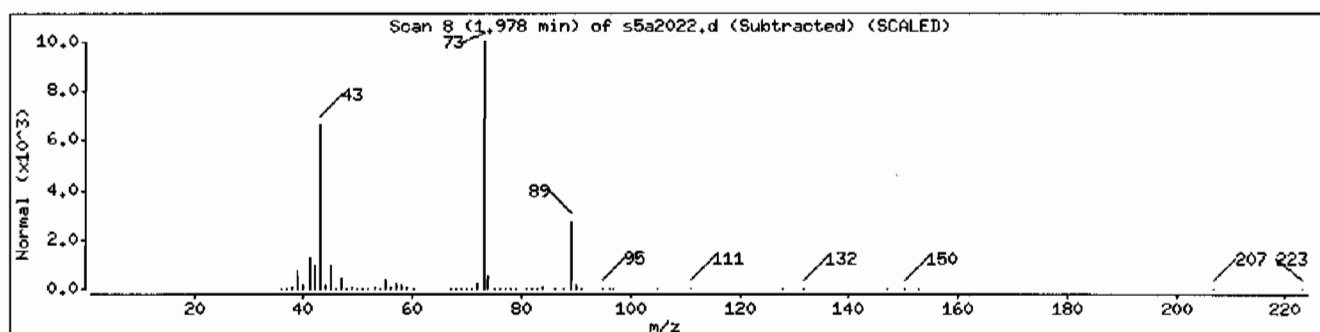
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	59	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	42	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4658	38	C5H12O2	104



Date : 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: MSD5.i

Sample Info: 1244923007194338611SVH111LANL

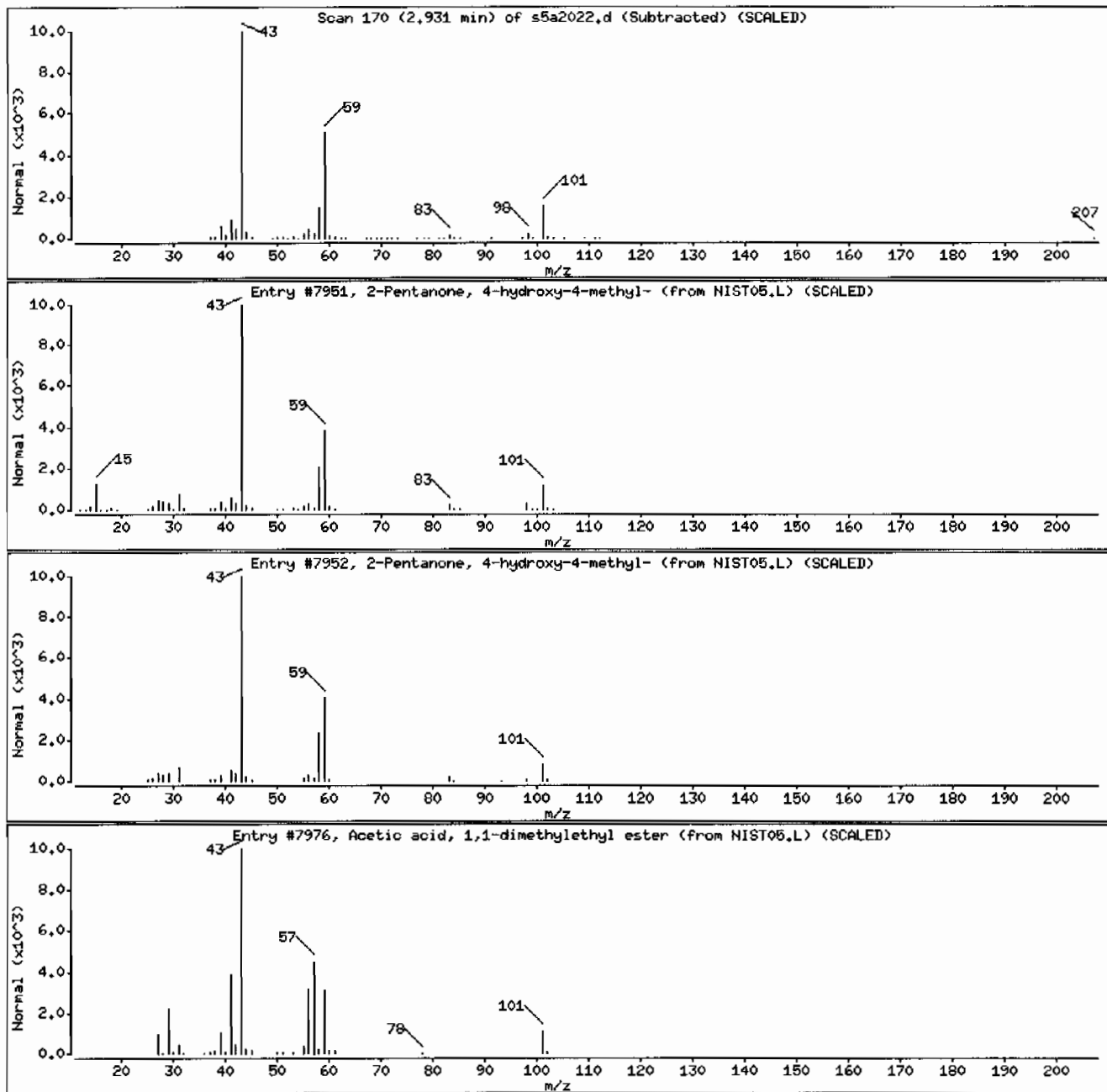
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	64	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	50	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7976	28	C6H12O2	116



Date : 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: MSD5.i

Sample Info: 1244923007194338611ISVM11ILANL

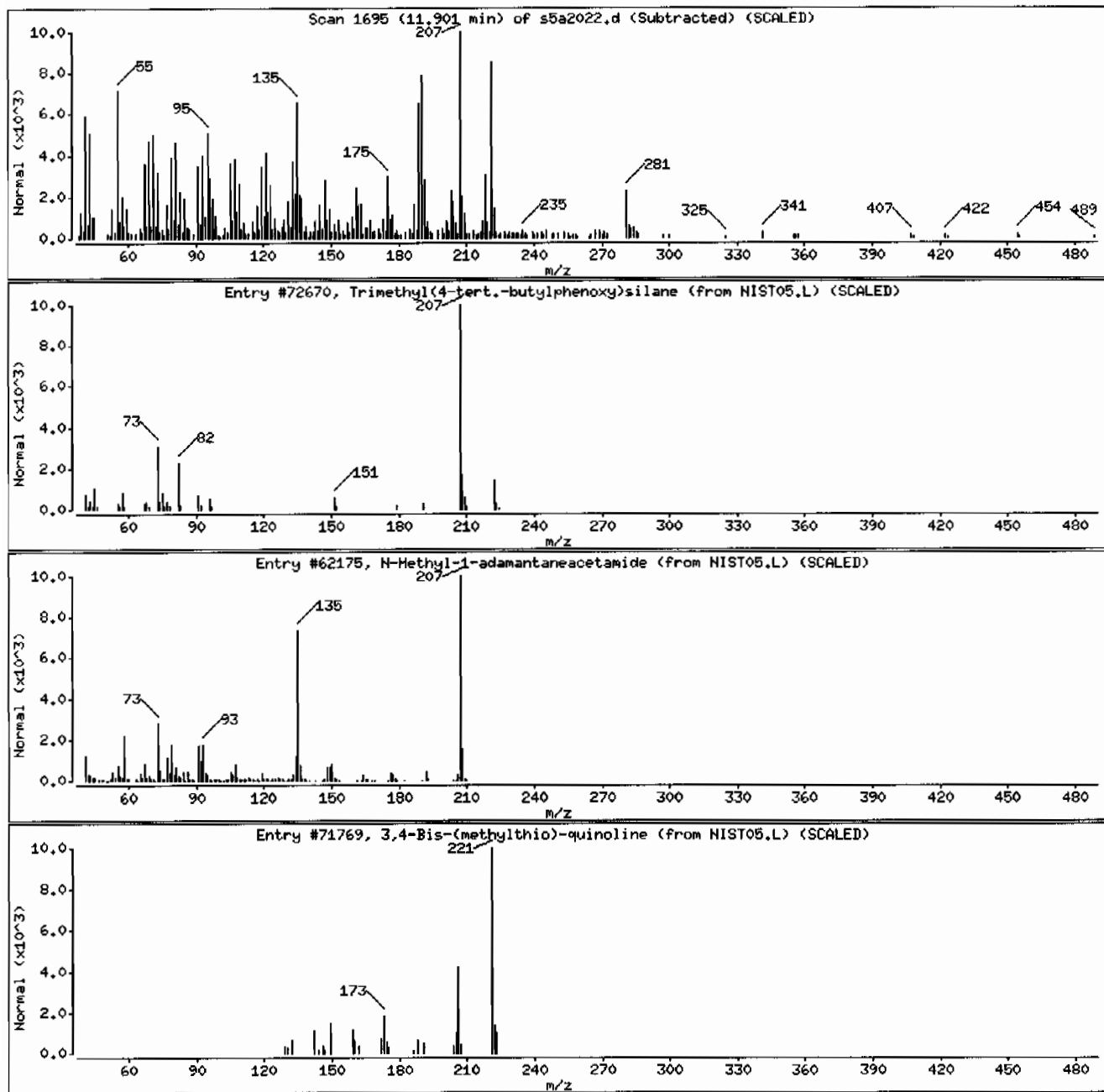
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Trimethyl(4-tert.-butylphenoxy)silane	25237-79-0	NIST05.L	72670	25	C ₁₃ H ₂₂ O ₃ Si	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	18	C ₁₃ H ₂₁ NO	207
3,4-Bis-(methylthio)-quinoline	74579-34-3	NIST05.L	71769	15	C ₁₁ H ₁₁ NS ₂	221



Date : 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: MSD5.i

Sample Info: 1244923007194338611SVH111LANL

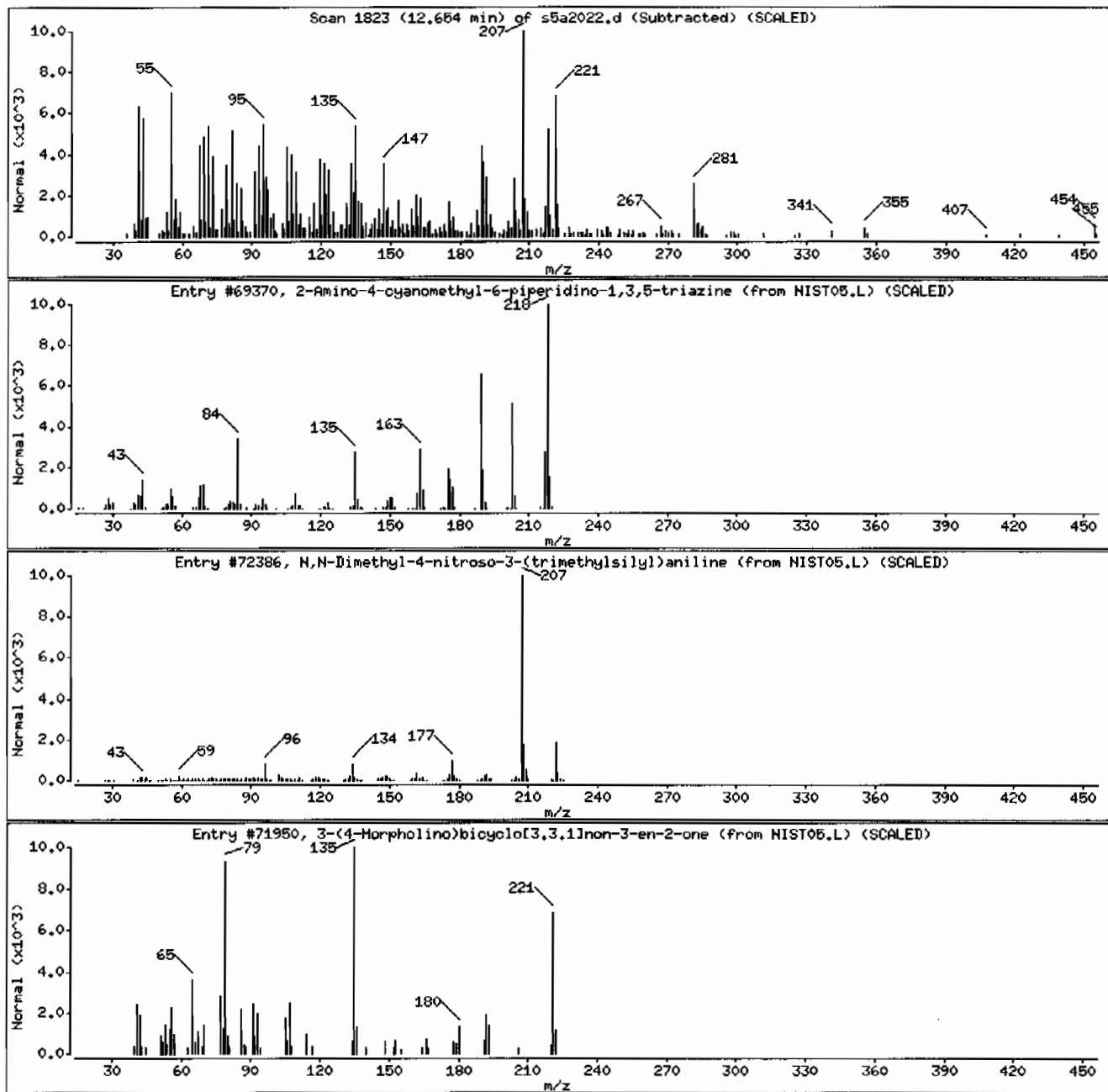
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Amino-4-cyanomethyl-6-piperidino-1,3,5	1000241-05-9	NIST05.L	69370	25	C10H14N6	218
N,N-Dimethyl-4-nitroso-3-(trimethylsilyl)	17993-84-9	NIST05.L	72386	25	C11H18N2OSi	222
3-(4-Morpholino)bicyclo[3.3.1]non-3-en-2	1000101-15-7	NIST05.L	71950	15	C13H19NO2	221



Date : 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: MSD5.i

Sample Info: 1244923007194338611SVH111LANL

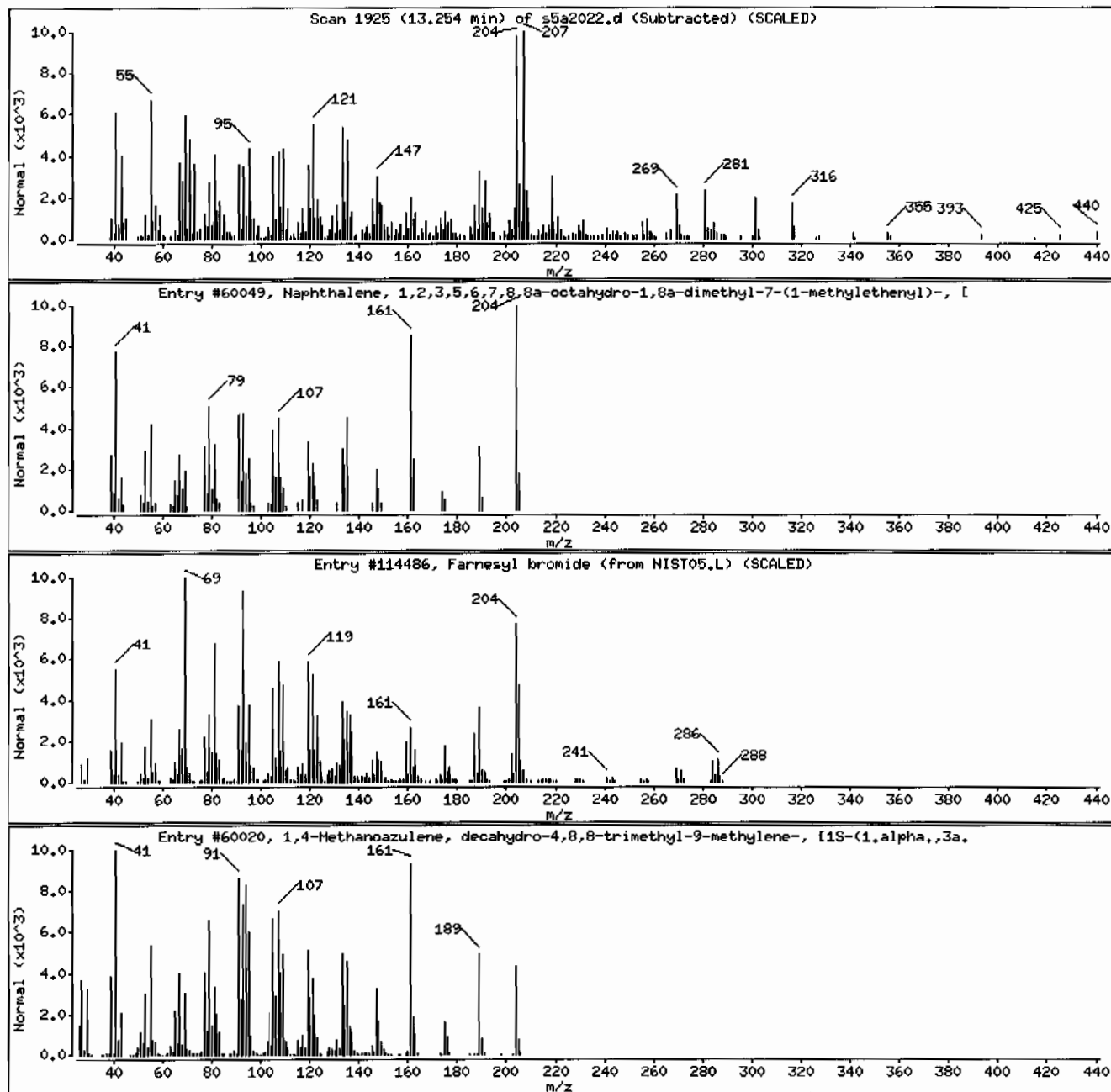
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-	4630-07-3	NIST05.L	60049	53	C ₁₆ H ₂₄	204
Farnesyl bromide	6874-67-5	NIST05.L	114486	50	C ₁₅ H ₂₅ Br	284
1,4-Methanoazulene, decahydro-4,8,8-trim	475-20-7	NIST05.L	60020	49	C ₁₅ H ₂₄	204



Date : 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: HSD5.i

Sample Info: 1244923007194338611SVH111LANL

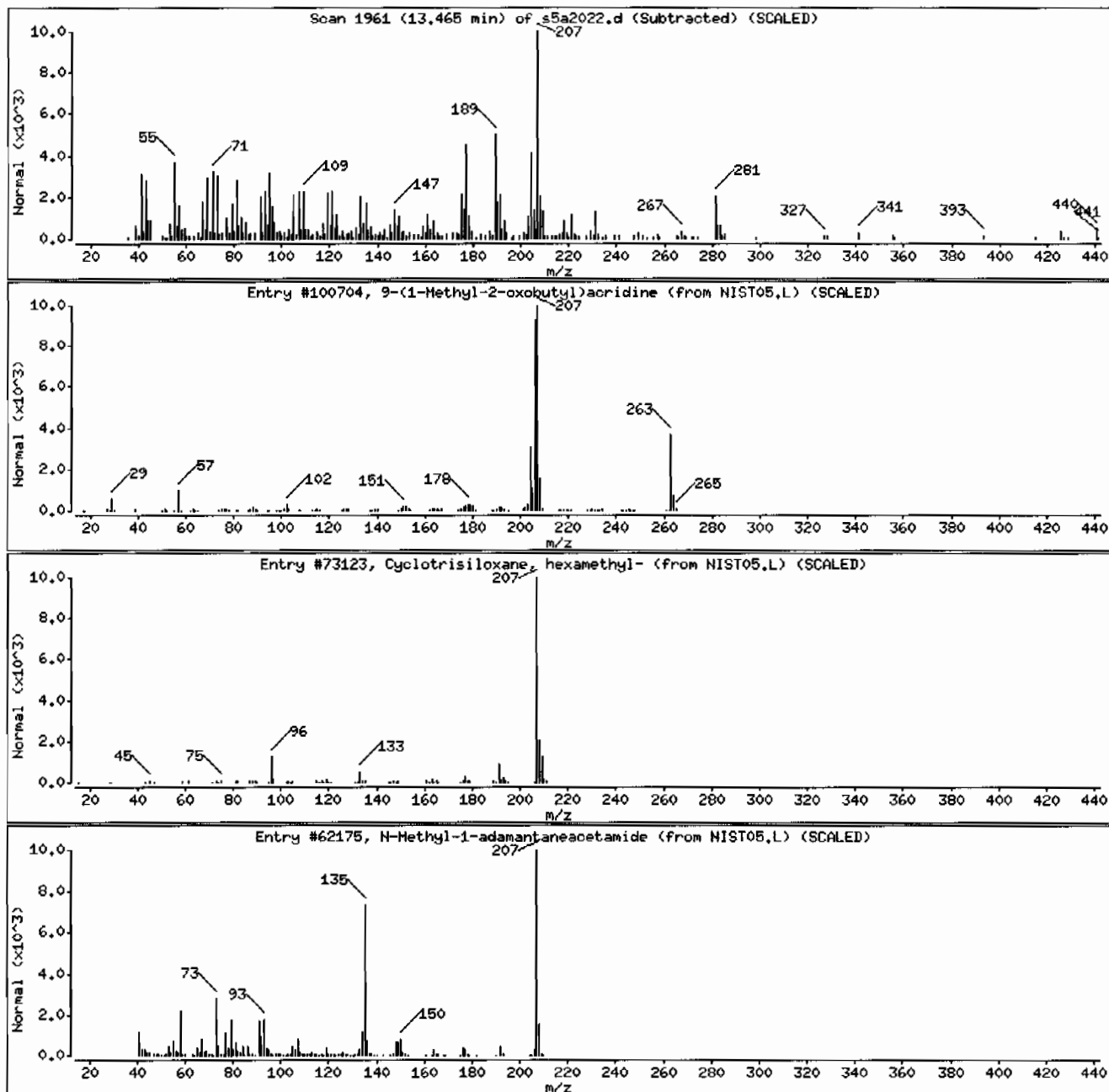
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-(1-Methyl-2-oxobutyl)acridine	15539-59-0	NIST05.L	100704	32	C18H17NO	263
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	27	C6H18OSi3	222
N-Methyl-1-adamantaneacetamide	31897-93-5	NIST05.L	62175	25	C13H21NO	207



Date : 21-JAN-2010 01:13

Client ID: RE15-10-7175

Instrument: HSD5.i

Sample Info: I244923007194338611SVH111LANL

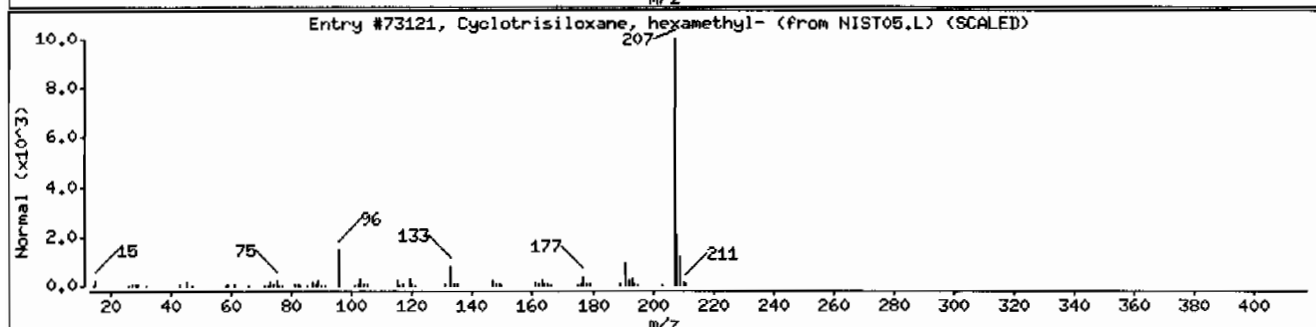
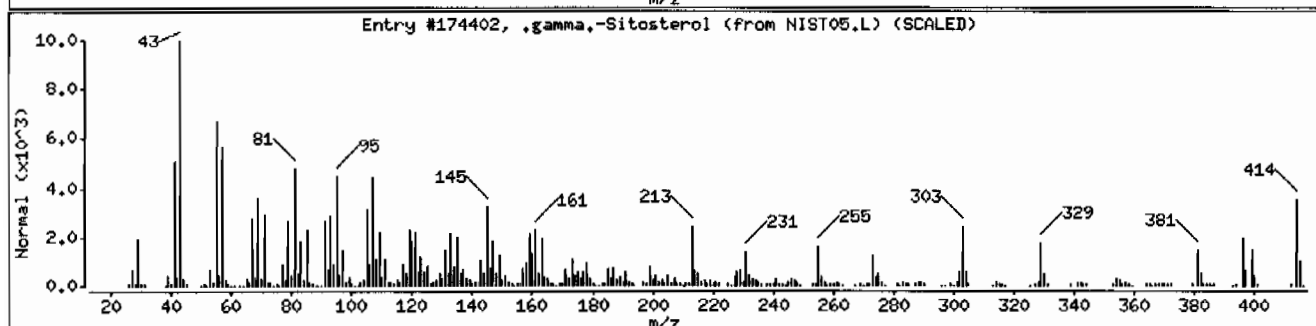
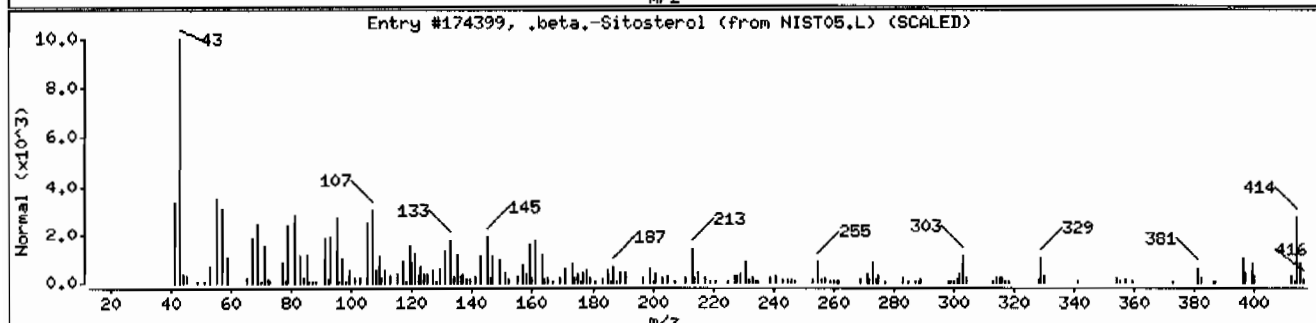
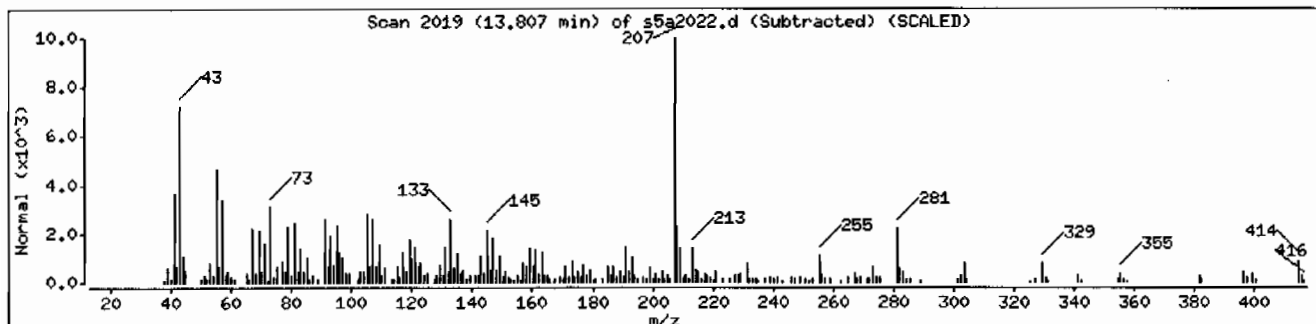
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIST05.L	174399	91	C ₂₉ H ₅₀ O	414
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	91	C ₂₉ H ₅₀ O	414
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	38	C ₆ H ₁₈ O ₃ Si ₃	222



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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923009	Date Received: 01/16/2010 08:55	% Moisture: 9.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7218	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.1	Dilution: 1
Run Date: 01/21/2010 01:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2024.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	370	ug/kg	74.0	370
108-95-2	Phenol	U	370	ug/kg	74.0	370
95-57-8	2-Chlorophenol	U	370	ug/kg	74.0	370
106-46-7	1,4-Dichlorobenzene	U	370	ug/kg	74.0	370
621-64-7	N-Nitrosodipropylamine	U	370	ug/kg	74.0	370
59-50-7	4-Chloro-3-methylphenol	U	370	ug/kg	74.0	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	92.5	370
129-00-0	Pyrene	U	37.0	ug/kg	11.1	37.0
110-86-1	Pyridine	U	370	ug/kg	74.0	370
62-53-3	Aniline	U	370	ug/kg	111	370
111-44-4	bis(2-Chloroethyl) ether	U	370	ug/kg	74.0	370
541-73-1	1,3-Dichlorobenzene	U	370	ug/kg	74.0	370
100-51-6	Benzyl alcohol	U	370	ug/kg	111	370
95-50-1	1,2-Dichlorobenzene	U	370	ug/kg	74.0	370
108-60-1	bis(2-Chloroisopropyl)ether	U	370	ug/kg	74.0	370
95-48-7	o-Cresol	U	370	ug/kg	74.0	370
65794-96-9	m,p-Cresols	U	370	ug/kg	111	370
67-72-1	Hexachloroethane	U	370	ug/kg	74.0	370
98-95-3	Nitrobenzene	U	370	ug/kg	74.0	370
78-59-1	Isophorone	U	370	ug/kg	74.0	370
88-75-5	2-Nitrophenol	U	370	ug/kg	74.0	370
105-67-9	2,4-Dimethylphenol	U	370	ug/kg	130	370
111-91-1	bis(2-Chloroethoxy)methane	U	370	ug/kg	74.0	370
120-83-2	2,4-Dichlorophenol	U	370	ug/kg	74.0	370
65-85-0	Benzoic acid	U	740	ug/kg	185	740
91-20-3	Naphthalene	U	37.0	ug/kg	11.1	37.0
106-47-8	4-Chloroaniline	U	370	ug/kg	74.0	370
87-68-3	Hexachlorobutadiene	U	370	ug/kg	74.0	370
91-57-6	2-Methylnaphthalene	U	37.0	ug/kg	7.40	37.0
77-47-4	Hexachlorocyclopentadiene	U	370	ug/kg	74.0	370
88-06-2	2,4,6-Trichlorophenol	U	370	ug/kg	74.0	370
95-95-4	2,4,5-Trichlorophenol	U	370	ug/kg	74.0	370
91-58-7	2-Chloronaphthalene	U	37.0	ug/kg	12.2	37.0
88-74-4	2-Nitroaniline	U	370	ug/kg	74.0	370
99-09-2	<i>o</i> -Nitroaniline	U	370	ug/kg	74.0	370
	3-Nitroaniline					

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923009	Date Received: 01/16/2010 08:55	%Moisture: 9.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7218	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 01:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2024.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	370	ug/kg	74.0	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	740	ug/kg	141	740
132-64-9	Dibenzofuran	U	370	ug/kg	74.0	370
84-66-2	Diethylphthalate	U	370	ug/kg	74.0	370
86-73-7	Fluorene	U	37.0	ug/kg	11.1	37.0
7005-72-3	4-Chlorophenylphenylether	U	370	ug/kg	74.0	370
534-52-1	2-Methyl-4,6-dinitrophenol	U	370	ug/kg	74.0	370
100-01-6	4-Nitroaniline	U	370	ug/kg	111	370
	<i>p-Nitroaniline</i>					
122-39-4	Diphenylamine	U	370	ug/kg	74.0	370
122-66-7	Azobenzene	U	370	ug/kg	74.0	370
	<i>1,2-Diphenylhydrazine</i>					
101-55-3	4-Bromophenylphenylether	U	370	ug/kg	74.0	370
118-74-1	Hexachlorobenzene	U	370	ug/kg	74.0	370
85-01-8	Phenanthrene	U	37.0	ug/kg	11.1	37.0
120-12-7	Anthracene	U	37.0	ug/kg	7.40	37.0
84-74-2	Di-n-butylphthalate	U	370	ug/kg	74.0	370
206-44-0	Fluoranthene	U	37.0	ug/kg	11.1	37.0
85-68-7	Butylbenzylphthalate	U	370	ug/kg	74.0	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	74.0	370
117-84-0	Di-n-octylphthalate	U	370	ug/kg	74.0	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	74.0	370

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	1160	ug/kg		J
79-09-4	Propanoic acid	2.13	174	ug/kg	87	NJ

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923009	Date Received: 01/16/2010 08:55	%Moisture: 9.9
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7218	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.1	Dilution: 1
Run Date: 01/21/2010 01:59	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2024.d	Column: J&W DB-5MS	Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
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Tentatively Identified Compound Summary						
CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown Aldol Condensate	2.94	281	ug/kg		JA
25491-20-7	1H-3a,7-Methanoazulene, octahydro-1,4,9,	9.1	180	ug/kg	80	NJ
56221-91-1	13-Tetradecen-1-ol acetate	9.41	182	ug/kg	91	NJ
1599-67-3	1-Docosene	10.07	211	ug/kg	96	NJ
301-02-0	9-Octadecenamide, (Z)-	10.39	211	ug/kg	91	NJ
	Unknown	11.91	862	ug/kg		J
	Unknown	12.67	1040	ug/kg		J
	Unknown	12.9	198	ug/kg		J
	Unknown	13.1	174	ug/kg		J
	Unknown	13.26	195	ug/kg		J
	Unknown	13.46	174	ug/kg		J
83-47-6	.gamma.-Sitosterol	13.77	977	ug/kg	97	NJ

Data File: /chem/MSD5.i/s012010.b/s5a2024.d
Report Date: 21-Jan-2010 08:33

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2024.d
Lab Smp Id: 244923009 Client Smp ID: RE15-10-7218
Inj Date : 21-JAN-2010 01:59
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923009|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.93460	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG			RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT REL RT		ON-COLUMN	FINAL
					(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926 (1.000)	447920	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792 (1.000)	1594149	40.0000	
* 46 Acenaphthene-d10	164	6.043	6.044 (1.000)	902609	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214 (1.000)	1579153	40.0000	
* 91 Chrysene-d12	240	9.619	9.622 (1.000)	1250625	40.0000	
* 98 Perylene-d12	264	11.295	11.298 (1.000)	818848	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102 (0.793)	576129	51.8642	1920
\$ 5 Phenol-d5	99	3.637	3.637 (0.928)	723136	52.7861	1950
\$ 20 Nitrobenzene-d5	82	4.278	4.287 (0.893)	316022	25.8185	956
\$ 39 2-Fluorobiphenyl	172	5.531	5.534 (0.915)	629757	26.3749	976
\$ 60 2,4,6-Tribromophenol	329	6.643	6.641 (1.099)	183374	63.9196	2360
\$ 81 p-Terphenyl-d14	244	8.589	8.592 (0.893)	736819	37.5217	1390

ION RATIO REPORT

SV REPORT

Data file: s5a2024.d

Report Date: 01/21/2010 07:50

Lab. ID: 244923009

SampleType: SAMPLE

Injection Date: 21-JAN-2010 01:59

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923009|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
4	Aniline		CAS#: 62-53-3			
66	38810	3.64	3.70	80-120	100	(T)
93	2491	3.60	3.70	220-280	6	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	42891	4.28	4.16	80-120	100	(T)
42	26490	4.28	4.16	44-104	62	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	3582	4.52	4.55	80-120	100	()
122	1705	4.52	4.55	47-107	48	()
77	1294	4.52	4.55	44-104	36	(Q)

40	2-Chloronaphthalene		CAS#: 91-58-7			
162	12538	5.77	5.64	80-120	100	(T)
164	603	5.77	5.64	3- 63	5	(T)
127	1161	5.77	5.64	9- 69	9	(T)

42	o-Nitroaniline		CAS#: 88-74-4			
65	16822	5.77	5.70	80-120	100	(T)
92	20307	5.77	5.70	33- 93	121	(QT)
138	1322	5.77	5.70	71-131	8	(QT)

43	Dimethylphthalate		CAS#: 131-11-3			
163	166016	6.04	5.80	80-120	100	(T)
164	902609	6.04	5.80	0- 41	544	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
44 2,6-Dinitrotoluene				CAS#: 606-20-2		
165	120550	6.04	5.86	80-120	100	(T)
63	1554	6.04	5.86	47-107	1	(QT)

48 2,4-Dinitrophenol				CAS#: 51-28-5		
184	267	6.04	6.06	80-120	100	()
154	3467	6.04	6.07	933-993	1298	(Q)

50 2,4-Dinitrotoluene				CAS#: 121-14-2		
165	120550	6.04	6.16	80-120	100	(T)
89	2080	6.04	6.16	48-108	2	(QT)
63	1721	6.04	6.16	25- 85	1	(QT)

52 4-Nitrophenol				CAS#: 100-02-7		
139	165	6.10	6.08	80-120	100	()
109	497	6.11	6.08	40-100	300	(Q)
65	716	6.11	6.08	71-131	432	(Q)

53 Fluorene				CAS#: 86-73-7		
166	11154	6.64	6.46	80-120	100	(T)
165	10754	6.64	6.46	57-117	96	(T)
167	3869	6.64	6.46	0- 44	35	(T)

55 2-Methyl-4,6-dinitrophenol				CAS#: 534-52-1		
198	609	6.64	6.47	80-120	100	(T)
105	2018	6.64	6.47	13- 73	331	(QT)
51	1557	6.64	6.47	55-115	255	(QT)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2024.d
Lab Smp Id: 244923009 Client Smp ID: RE15-10-7218
Inj Date : 21-JAN-2010 01:59
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923009|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	9.93460	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2762204	40.000
* 91 Chrysene-d12	9.619	3758851	40.000
* 98 Perylene-d12	11.295	2160281	40.000

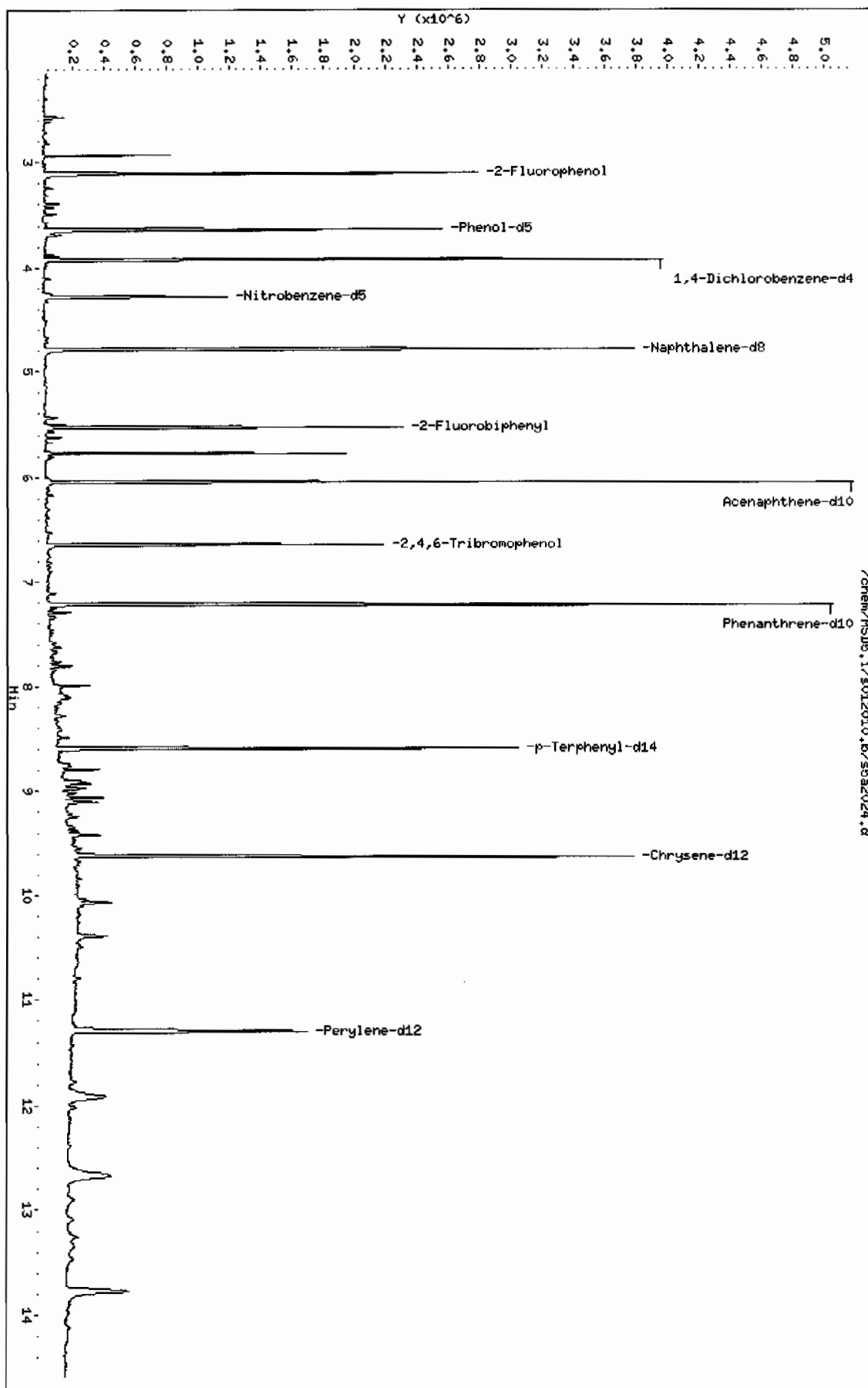
CONCENTRATIONS					QUANT		
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
Unknown					CAS #:		
1.996	2161900	31.3068823	1160	0		0	10
Propanoic acid					CAS #: 79-09-4		
2.131	324340	4.69683435	174	87	NIST05.L	793	10
Unknown Aldol Condensate					CAS #:		
2.937	525100	7.60406673	281	0		0	10
1H-3a,7-Methanoazulene, octahydro-1,4,9,					CAS #: 25491-20-7		
9.101	457483	4.86832458	180	80	NIST05.L	61560	91
13-Tetradecen-1-ol acetate					CAS #: 56221-91-1		
9.413	461621	4.91236200	182	91	NIST05.L	94752	91
1-Docosene					CAS #: 1599-67-3		
10.066	536890	5.71334573	211	96	NIST05.L	129889	91
9-Octadecenamide, (Z)-					CAS #: 301-02-0		
10.389	536590	5.71014595	211	91	NIST05.L	112655	91
Unknown					CAS #:		
11.913	1258009	23.2934274	862	0		0	98
Unknown					CAS #:		
12.672	1520649	28.1565071	1040	0		0	98
Unknown					CAS #:		
12.901	288970	5.35059702	198	0		0	98
Unknown					CAS #:		
13.101	253651	4.69662663	174	0		0	98
Unknown					CAS #:		
13.260	284736	5.27219977	195	0		0	98
Unknown					CAS #:		
13.460	254466	4.71171424	174	0		0	98
.gamma.-Sitosterol					CAS #: 83-47-6		
13.771	1425048	26.3863380	976	97	NIST05.L	174402	98

Data File: /chem/HSD5.i/s012010.b/s5a2024.d
Date : 21-JAN-2010 01:59
Client ID: RE15-10-7218
Sample Info: 1244923009194338611SVH11LNL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: HSD5.i
Operator: RMB
Column diameter: 0.20

Page 1



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 12449230091943386111SVMI11LANL

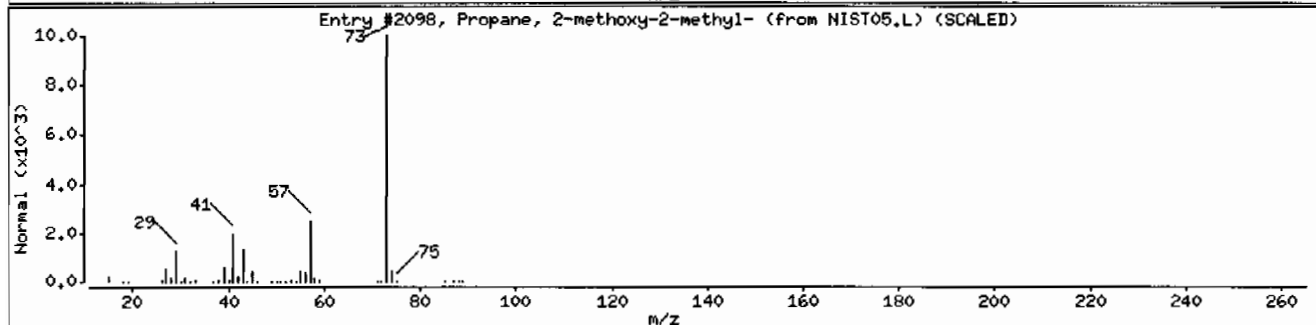
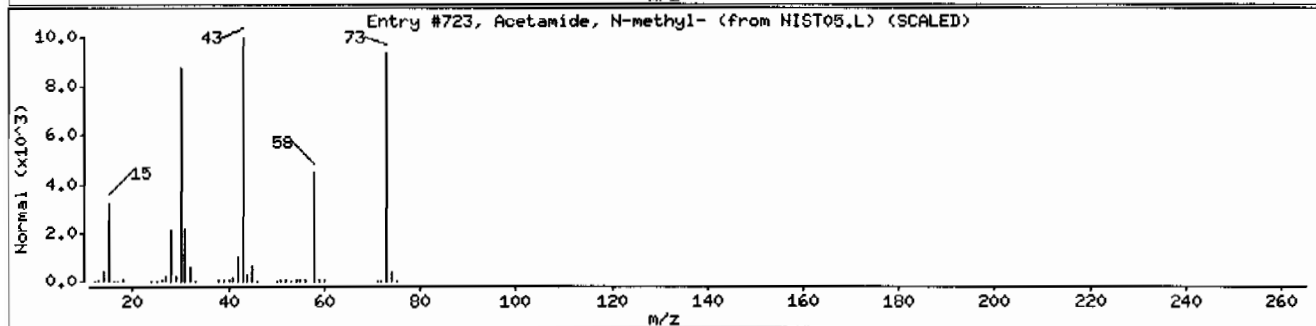
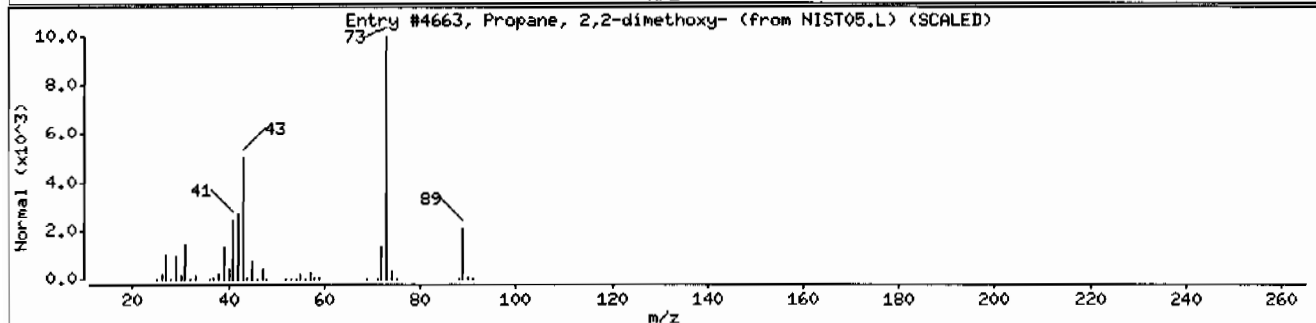
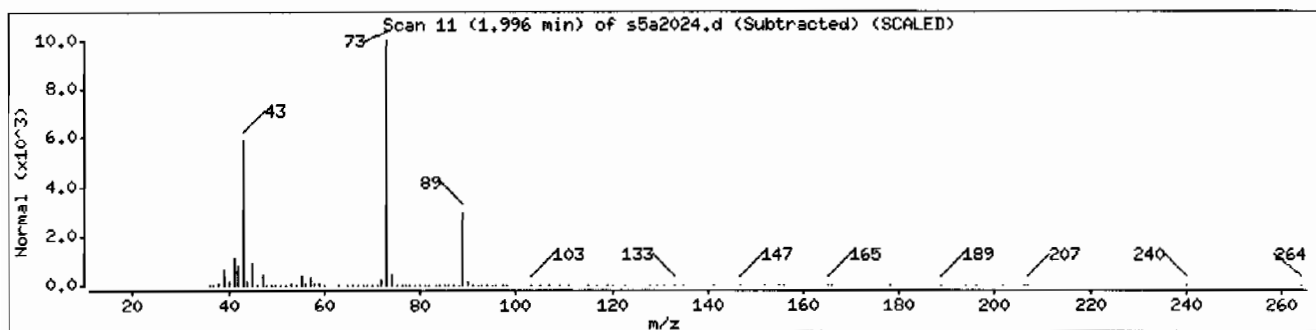
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	9	C3H7NO	73
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2098	9	C5H12O	88



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 1244923009194338611|SVH11|LANL

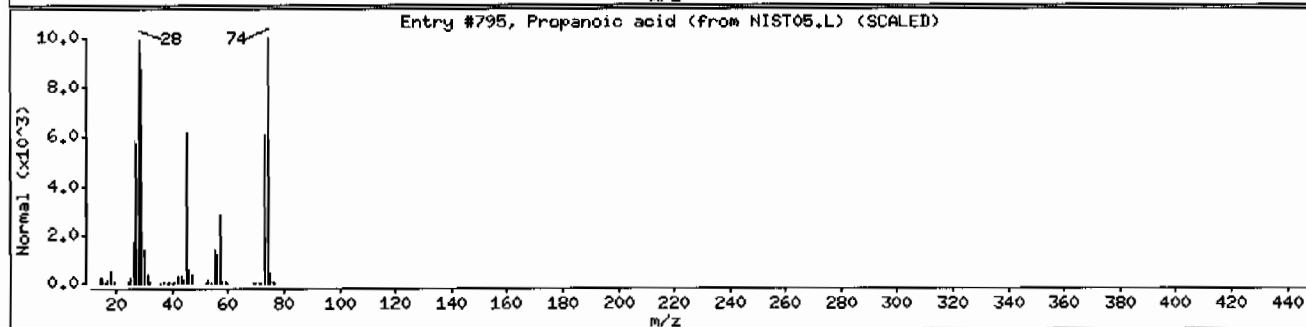
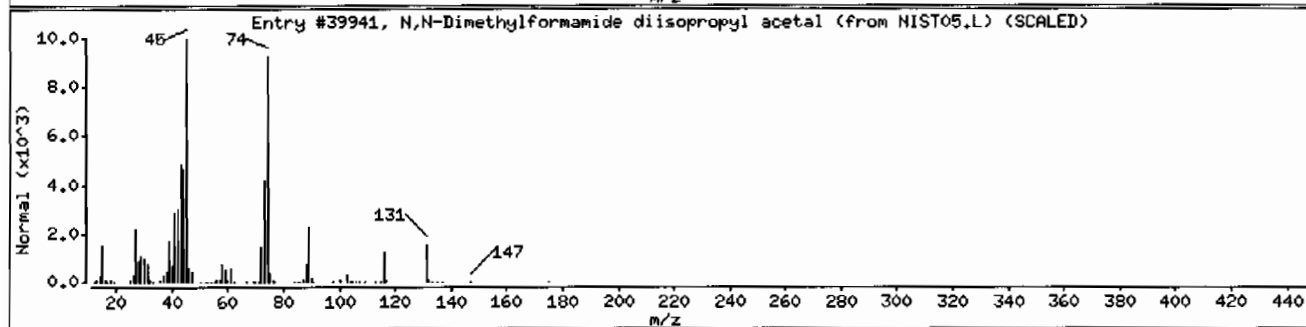
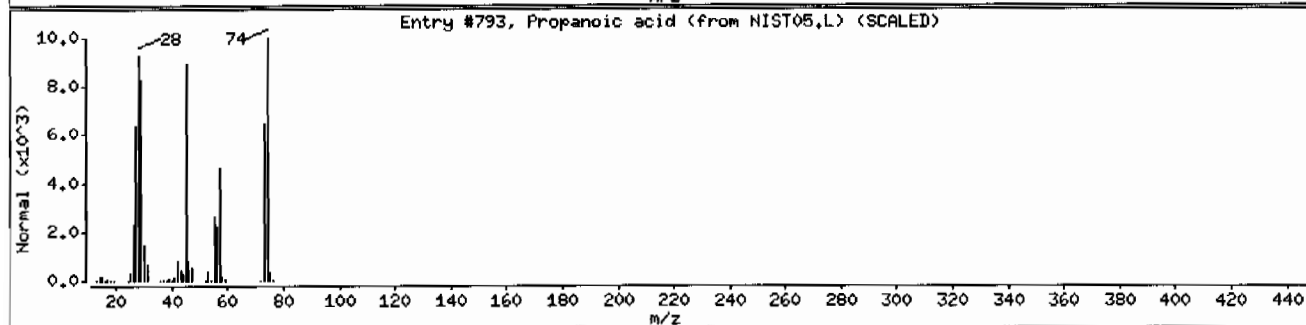
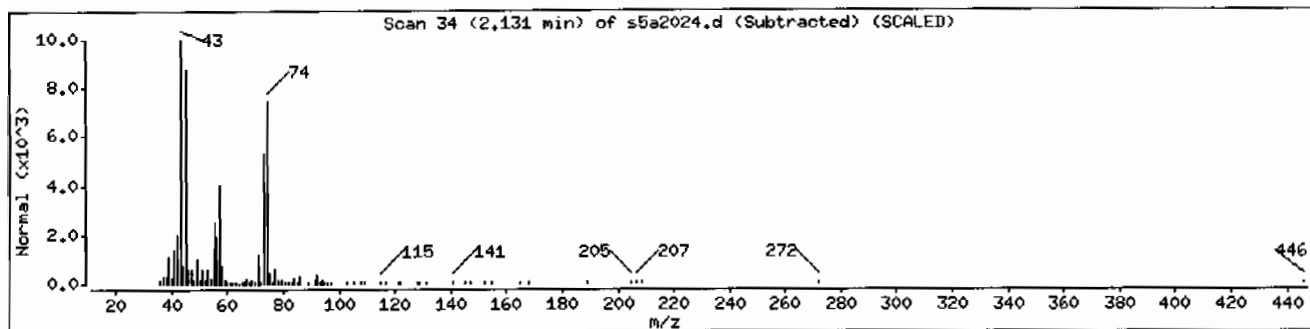
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Propanoic acid	79-09-4	NIST05.L	793	87	C3H6O2	74
N,N-Dimethylformamide diisopropyl acetal	18503-89-4	NIST05.L	39941	74	C9H21NO2	175
Propanoic acid	79-09-4	NIST05.L	795	64	C3H6O2	74



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: HSD5.i

Sample Info: 1244923009194338611|SVMI1|LANL

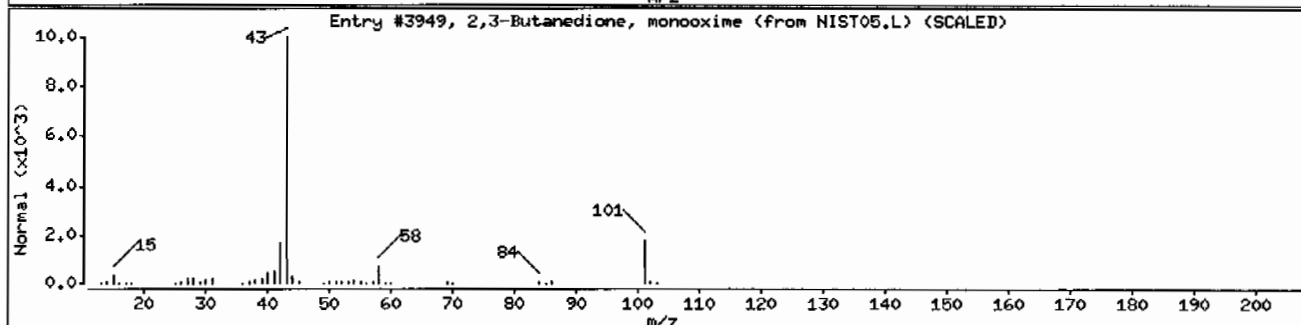
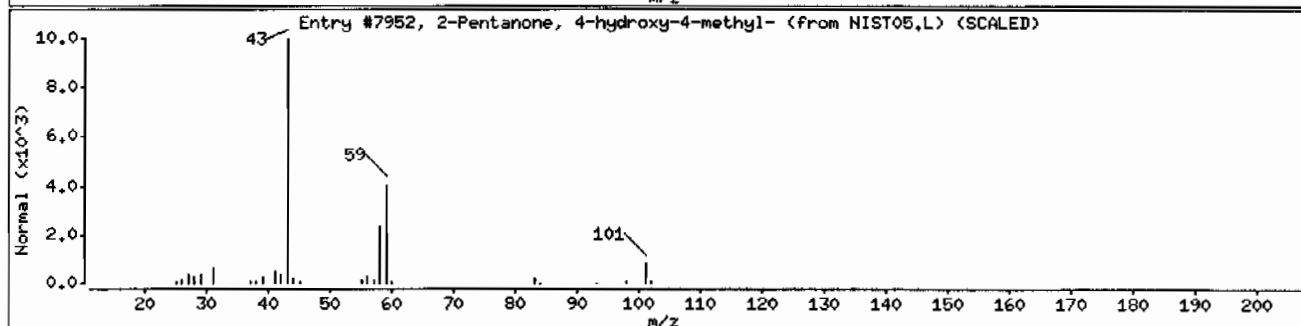
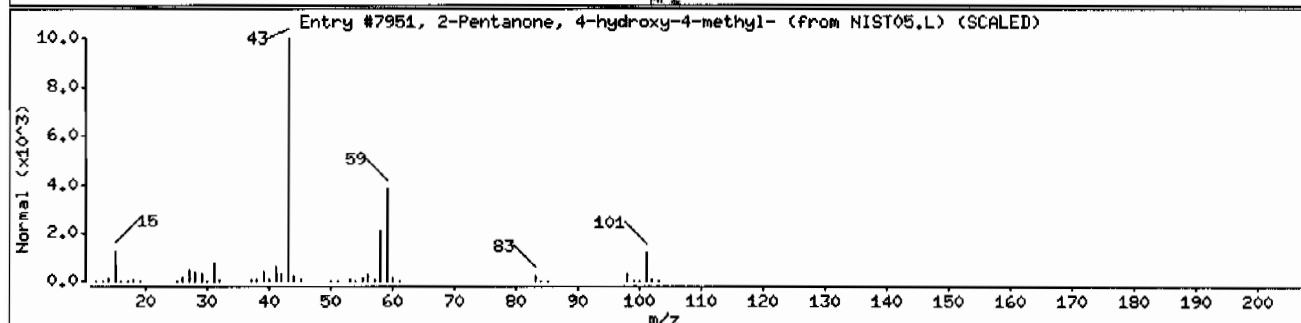
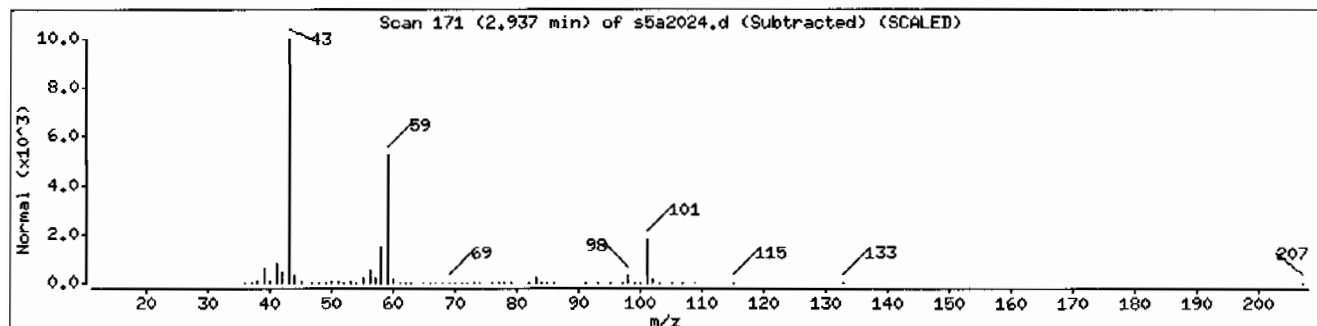
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	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 : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: HSD5.i

Sample Info: 1244923009|943386|1|SVH1|1|LANL

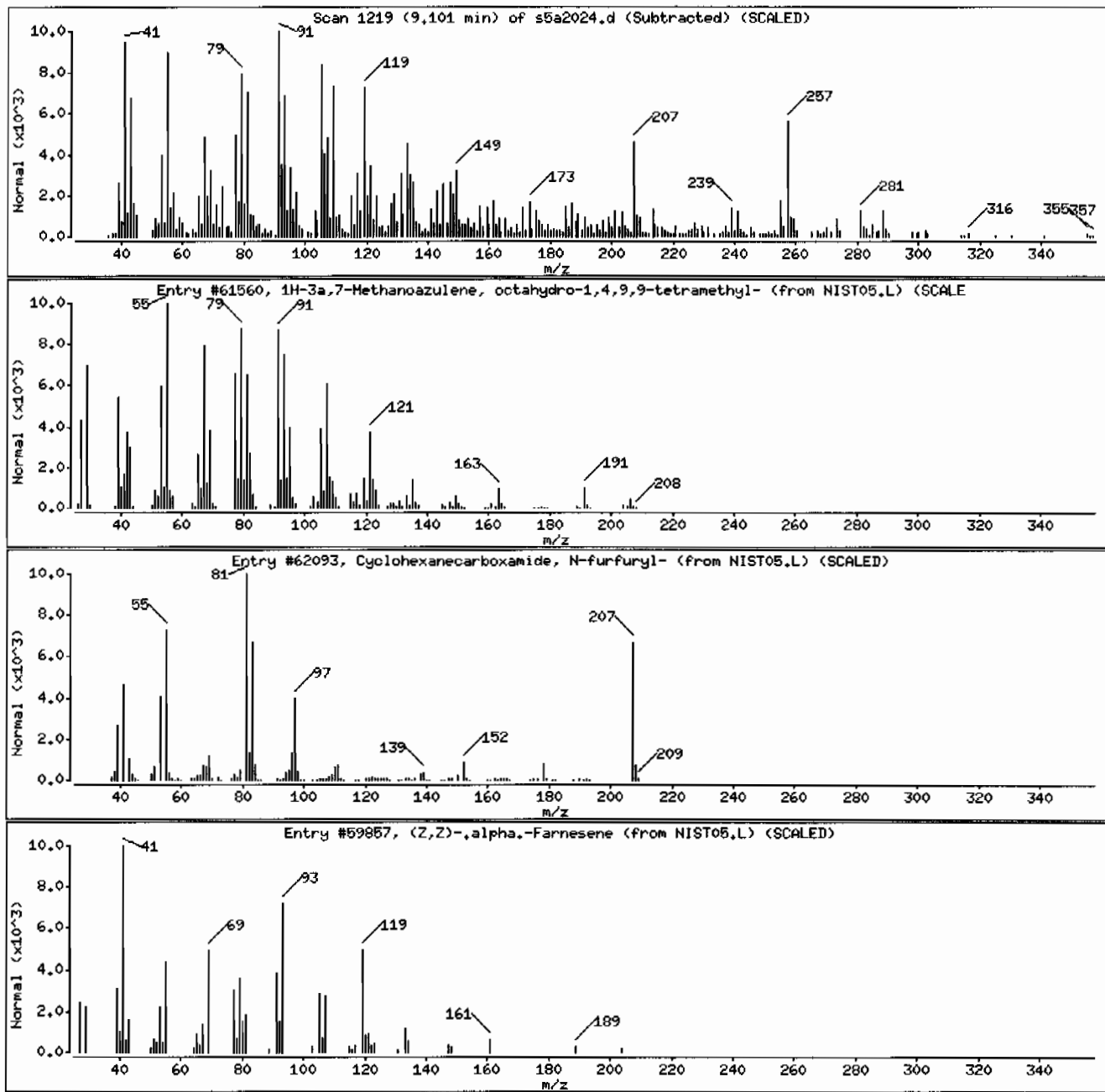
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1H-3a,7-Methanoazulene, octahydro-1,4,9,	25491-20-7	NIST05.L	61560	80	C15H26	206
Cyclohexanecarboxamide, N-furfuryl-	6341-32-8	NIST05.L	62093	49	C12H17NO2	207
(Z,Z)-.alpha.-Farnesene	1000293-03-1	NIST05.L	59857	43	C15H24	204



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 1244923009194338611SVH111LANL

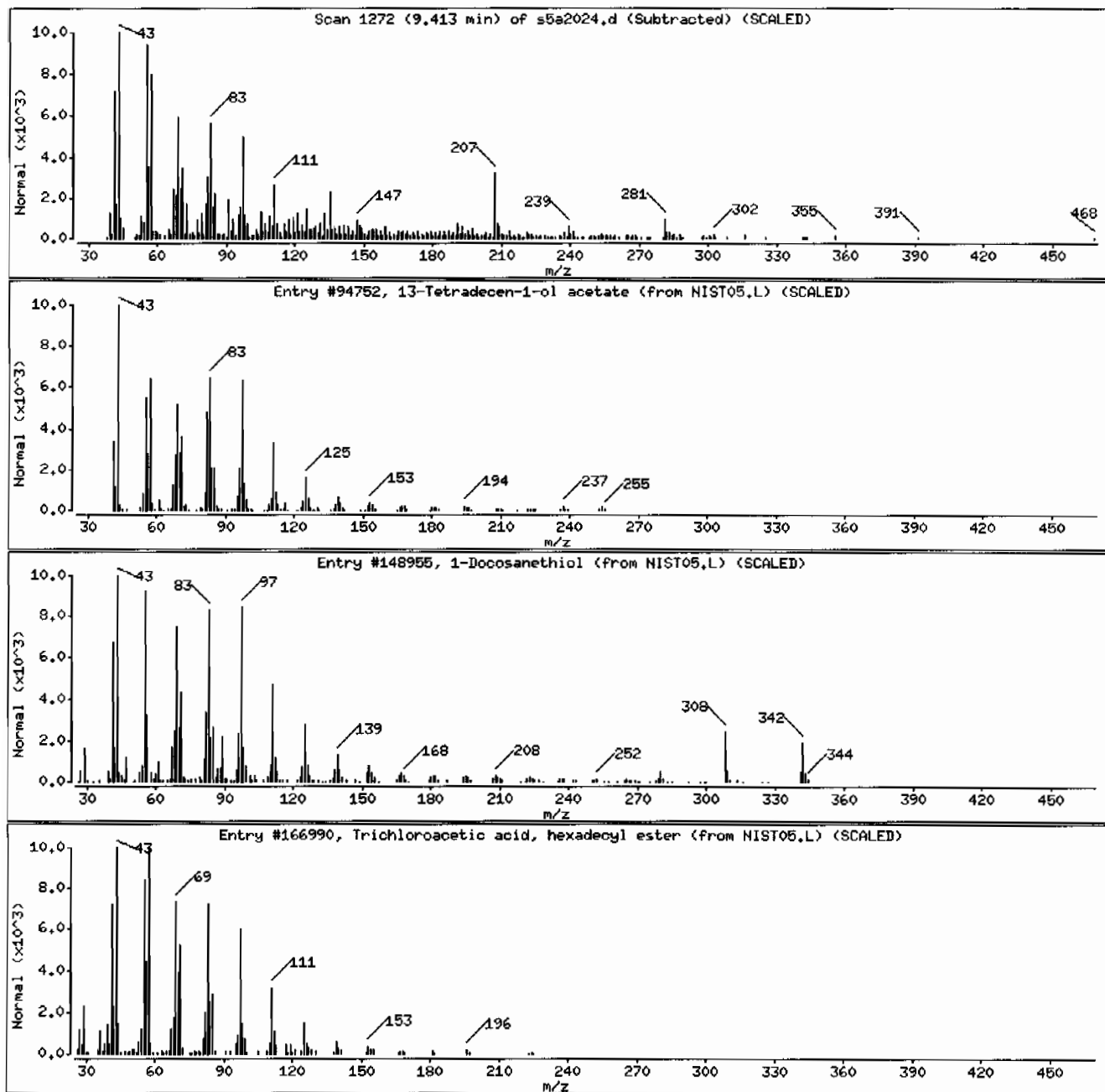
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Tetradecen-1-ol acetate	56221-91-1	NIST05.L	94752	91	C16H30O2	254
1-Docosanethiol	7773-83-3	NIST05.L	148955	90	C22H46S	342
Trichloroacetic acid, hexadecyl ester	74339-54-1	NIST05.L	166990	90	C18H33Cl3O2	386



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.1

Sample Info: I244923009194338611ISVH11ILANL

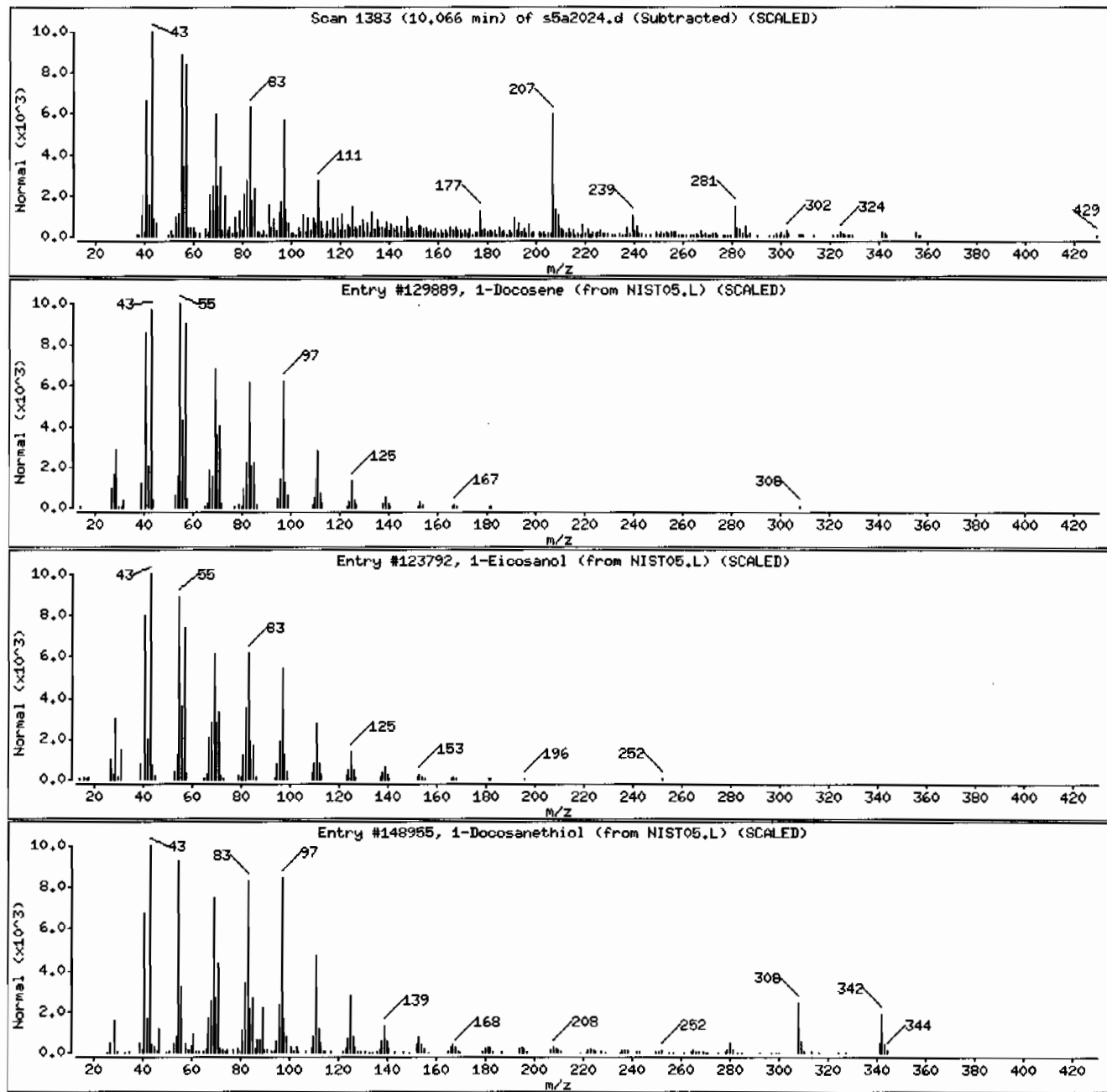
Volume Injected (uL): 0.5

Operator: RHB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1-Docosene	1599-67-3	NIST05.L	129889	96	C22H44	308
1-Eicosanol	629-96-9	NIST05.L	123792	87	C20H42O	298
1-Docosanethiol	7773-83-3	NIST05.L	148955	87	C22H46S	342



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 1244923009|94338611|SVH11|LANL

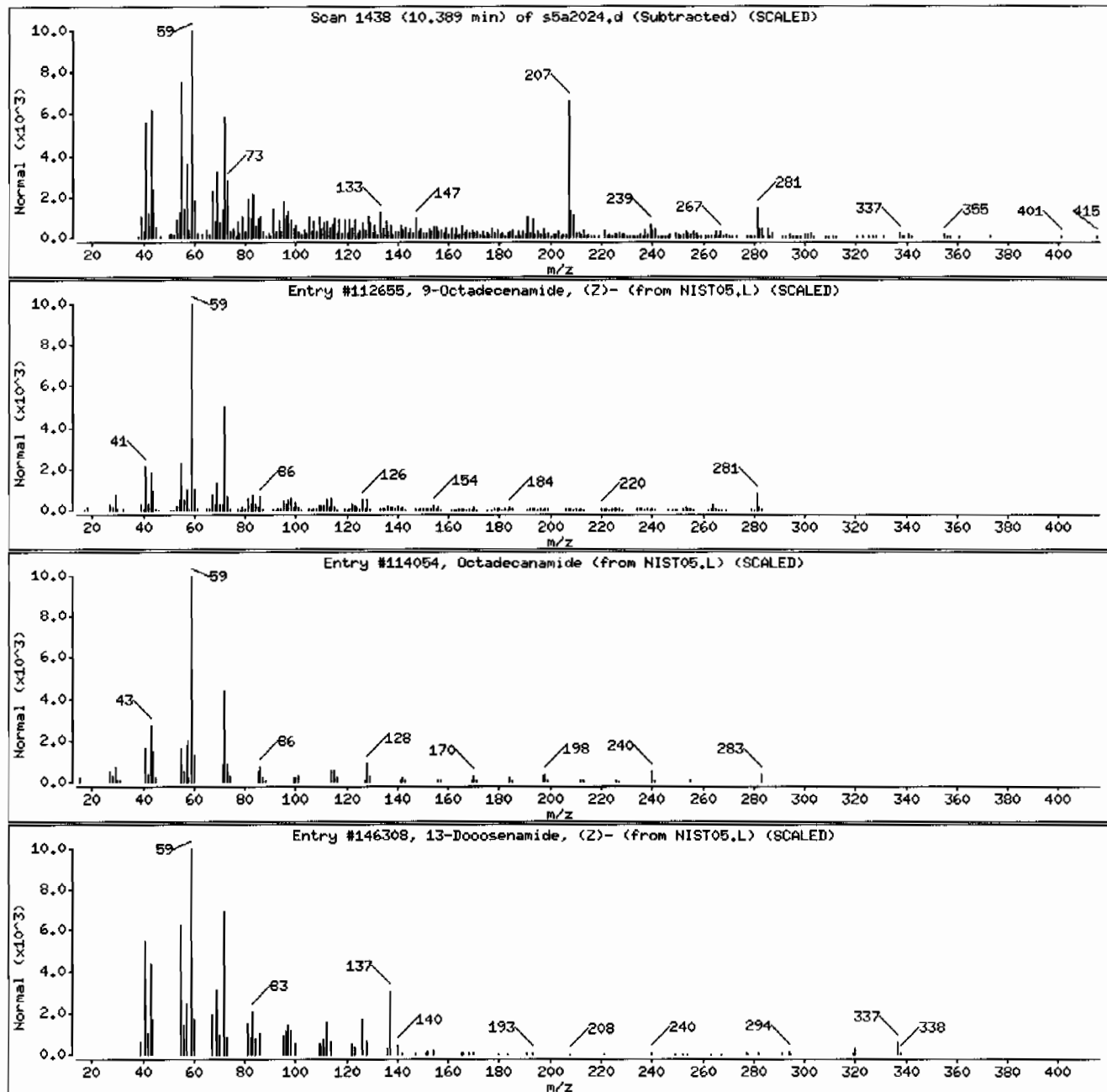
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9-Octadecenamide, (Z)-	301-02-0	NIST05.L	112655	91	C18H35NO	281
Octadecanamide	124-26-5	NIST05.L	114054	70	C18H37NO	283
13-Docosenamide, (Z)-	112-84-5	NIST05.L	146308	64	C22H43NO	337



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 12449230091943386111SVMI11LANL

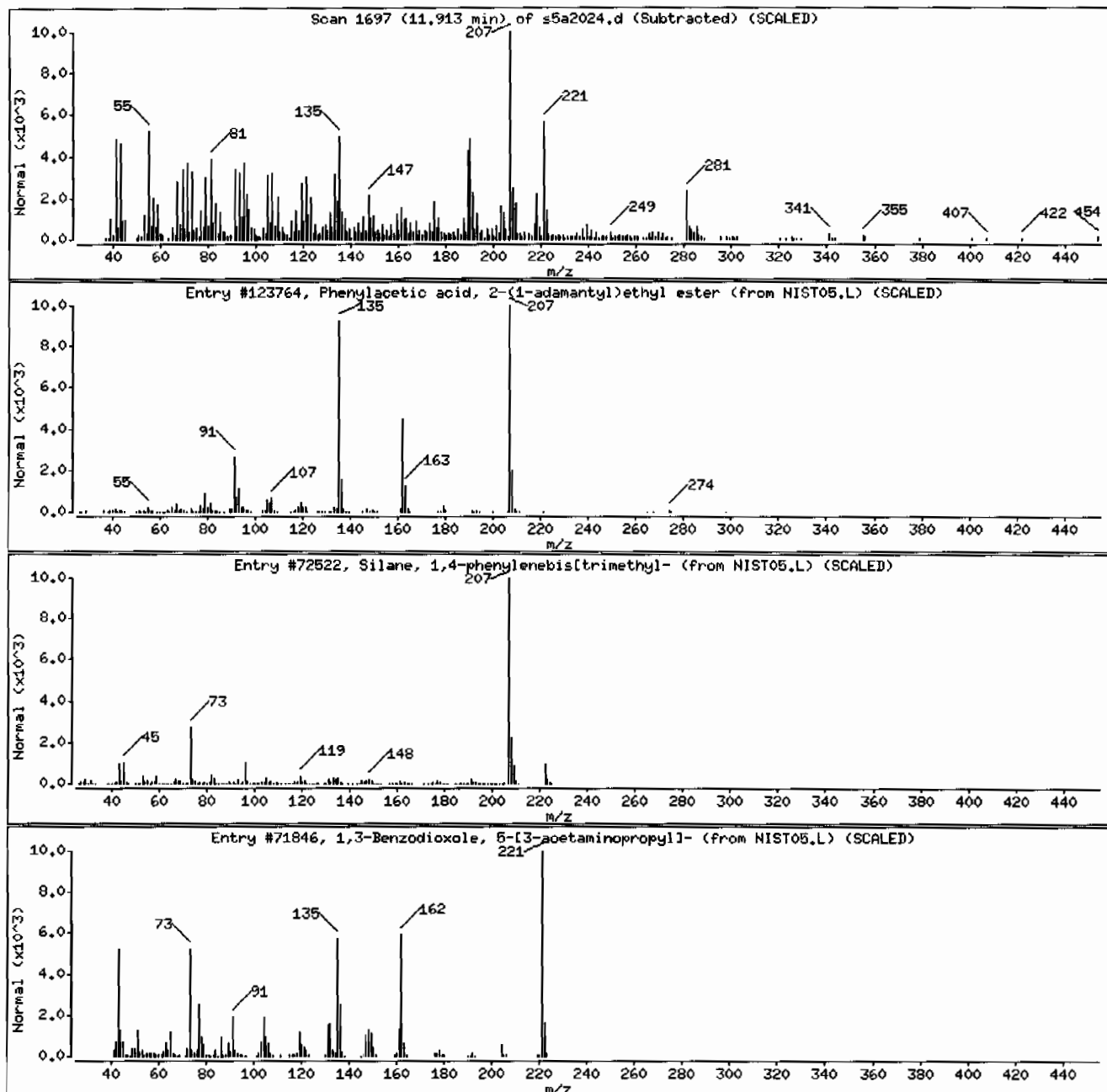
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenylacetic acid, 2-(1-adamantyl)ethyl	1000282-91-2	NIST05.L	123764	27	C ₂₀ H ₂₆ O ₂	298
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	25	C ₁₂ H ₂₂ Si ₂	222
1,3-Benzodioxole, 5-[3-acetaminopropyl]-	1000124-33-0	NIST05.L	71846	25	C ₁₂ H ₁₅ N ₃ O ₃	221



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: I244923009194338611|SVMI1|LANL

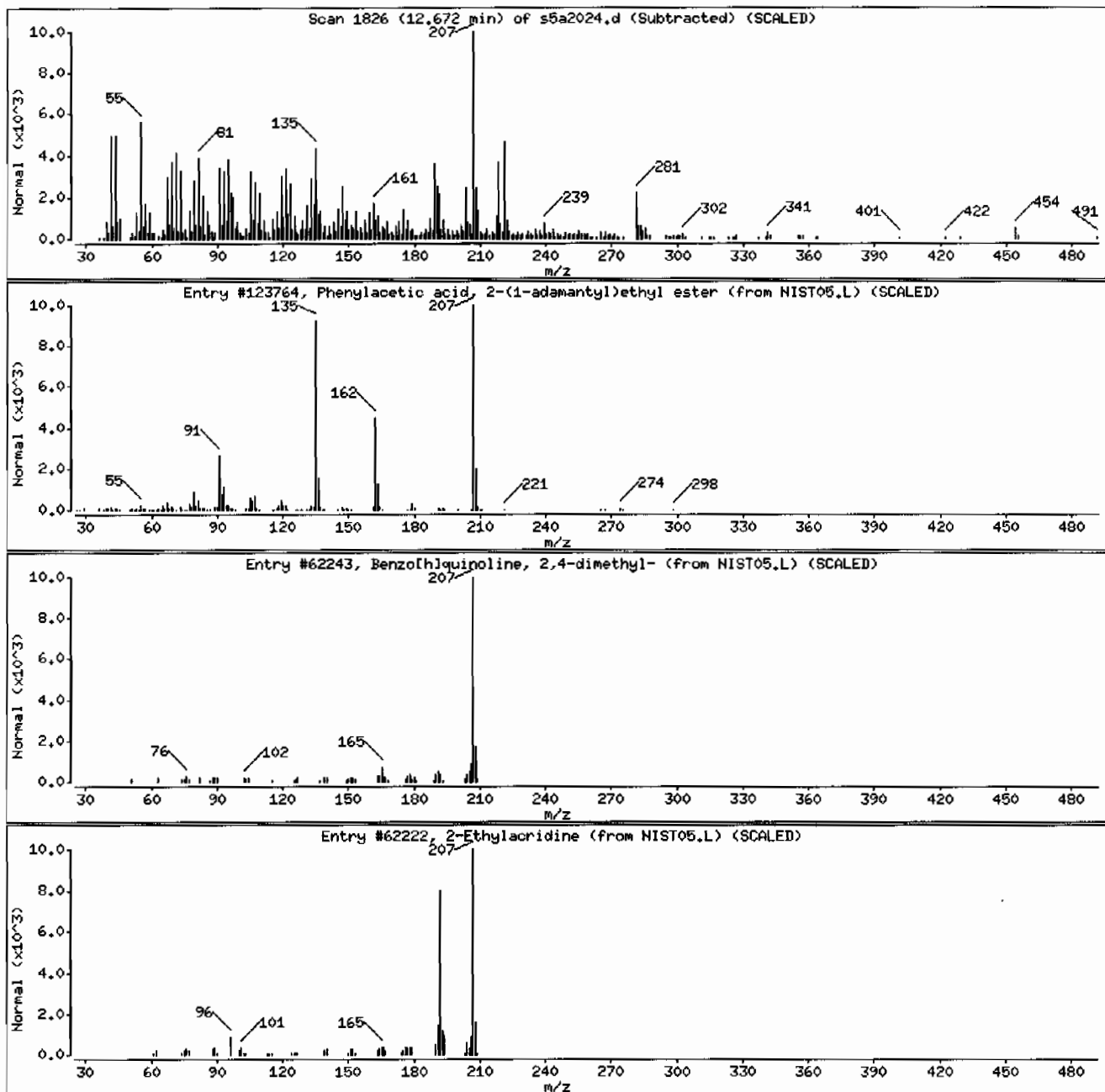
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Phenylacetic acid, 2-(1-adamantyl)ethyl	1000282-91-2	NIST05.L	123764	38	C20H26O2	298
Benzo[h]quinoline, 2,4-dimethyl-	605-67-4	NIST05.L	62243	30	C15H13N	207
2-Ethylacridine	55751-83-2	NIST05.L	62222	30	C15H13N	207



Date: 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 12449230091943386111SVH111LANL

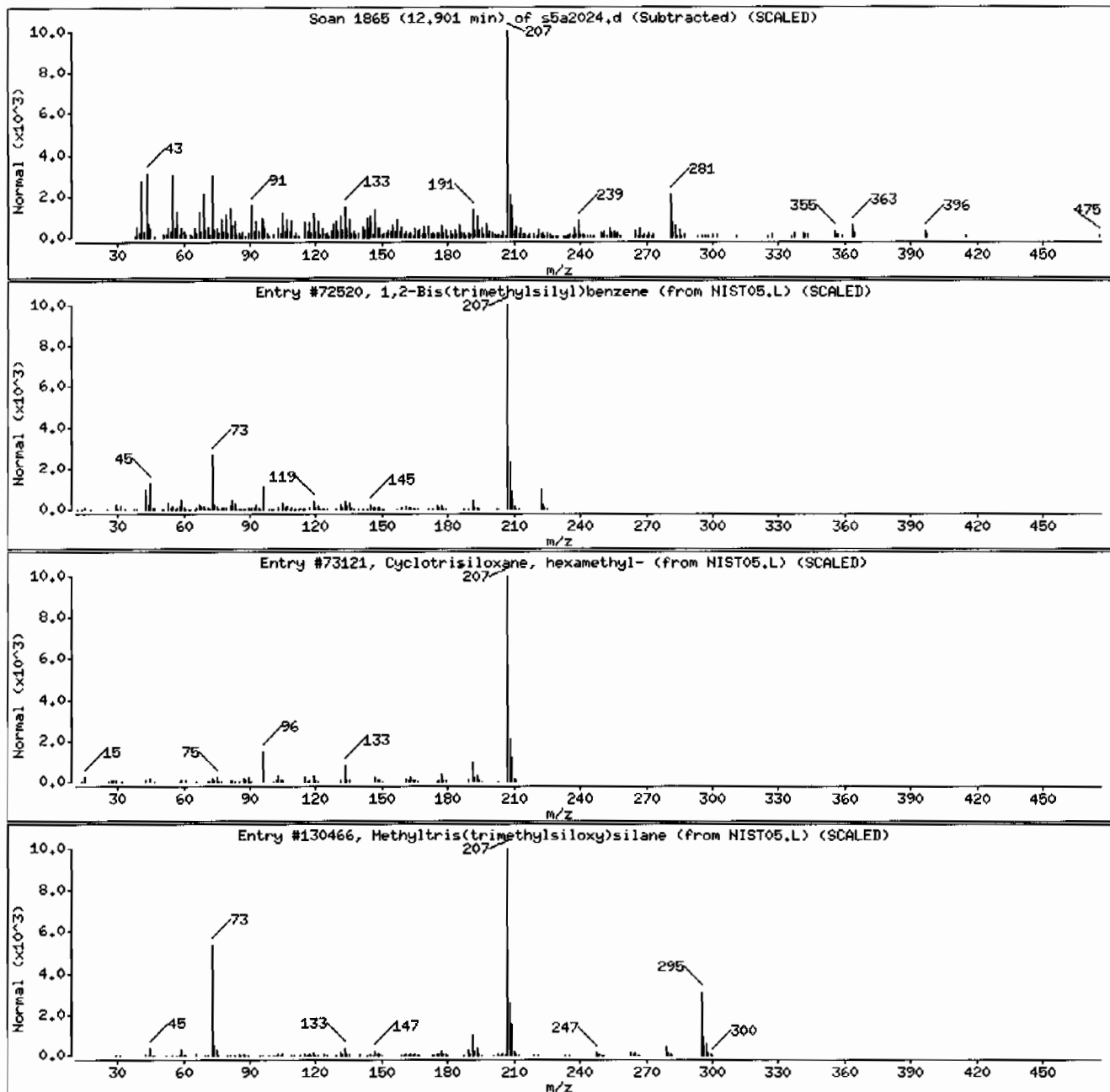
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	53	C ₁₂ H ₂₂ Si ₂	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	47	C ₆ H ₁₈ O ₃ Si ₃	222
Methyltris(trimethylsiloxy)silane	17920-28-8	NIST05.L	130466	47	C ₁₀ H ₃₀ O ₃ Si ₄	310



Date: 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 12449230091943386111SVMI11LANL

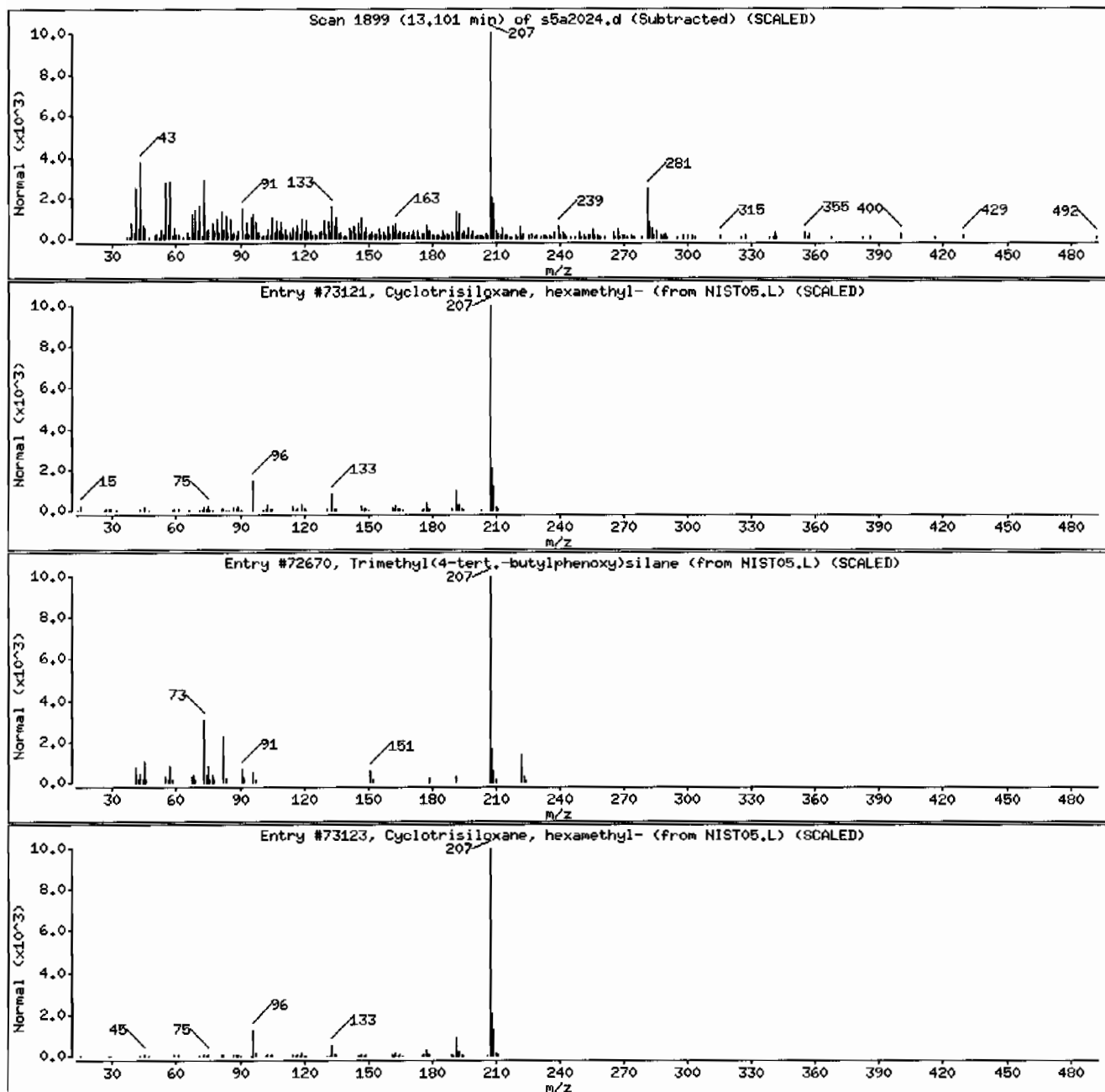
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	53	C6H18O3Si3	222
Trimethyl(4-tert.-butylphenoxy)silane	25237-79-0	NIST05.L	72670	50	C13H22OSi	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73123	50	C6H18O3Si3	222



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: I244923009I943386I1ISVMH11ILANL

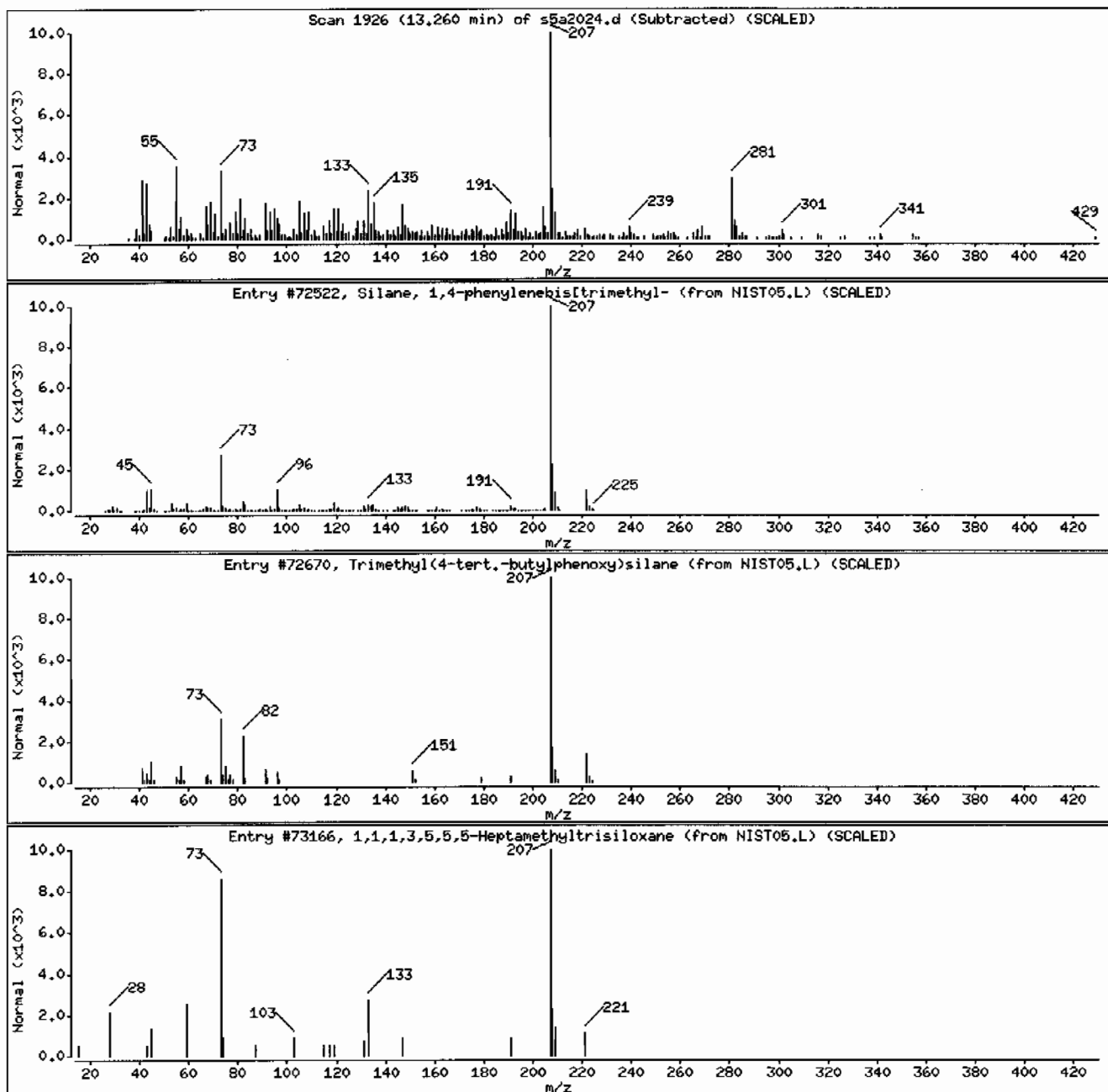
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	50	C ₁₂ H ₂₂ Si ₂	222
Trimethyl(4-tert.-butylphenoxy)silane	25237-79-0	NIST05.L	72670	47	C ₁₃ H ₂₂ O _{Si}	222
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	45	C ₇ H ₂₂ O _{Si} ₃	222



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: I244923009I943386I1ISVHI1ILANL

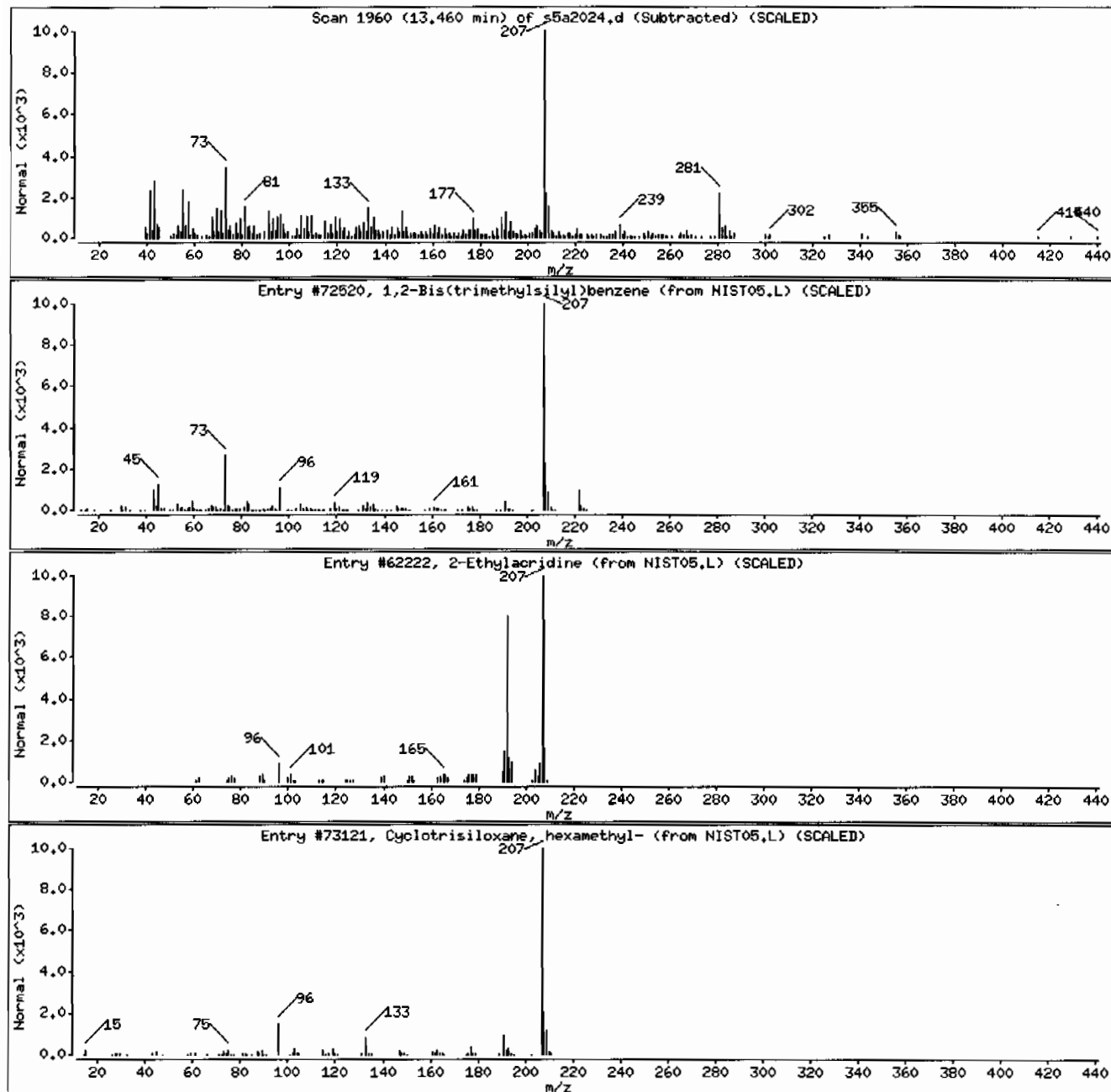
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17181-09-6	NIST05.L	72520	53	C ₁₂ H ₂₂ Si ₂	222
2-Ethylacridine	55751-83-2	NIST05.L	62222	50	C ₁₅ H ₁₃ N	207
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	50	C ₆ H ₁₈ OSi ₃	222



Date : 21-JAN-2010 01:59

Client ID: RE15-10-7218

Instrument: MSD5.i

Sample Info: 1244923009194338611SVH11ILANL

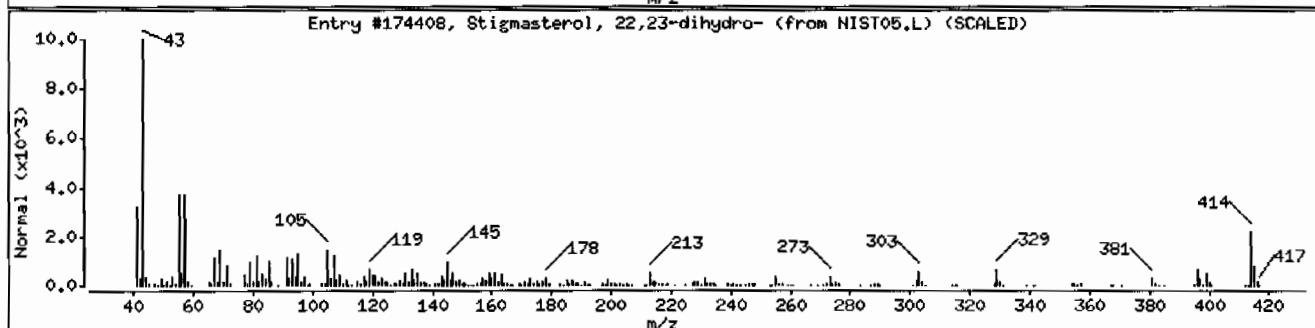
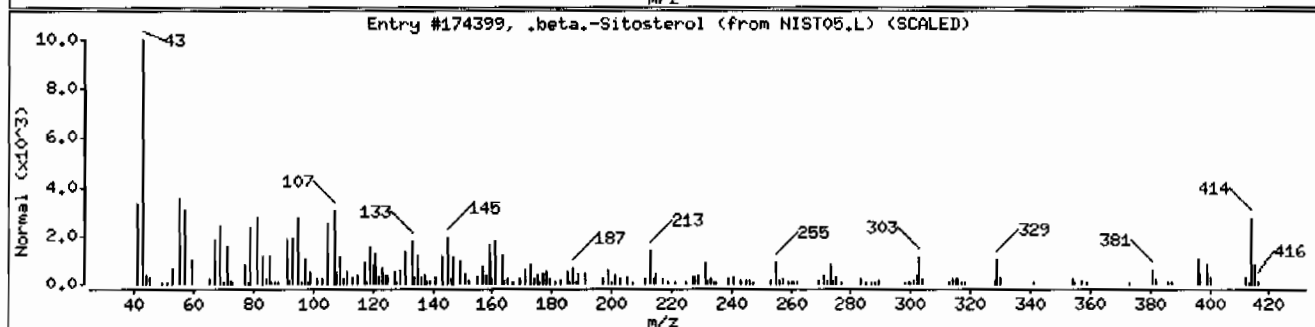
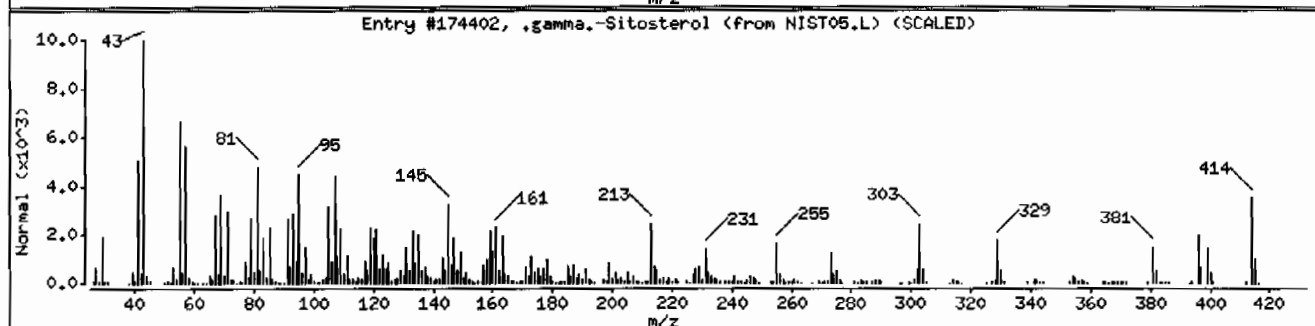
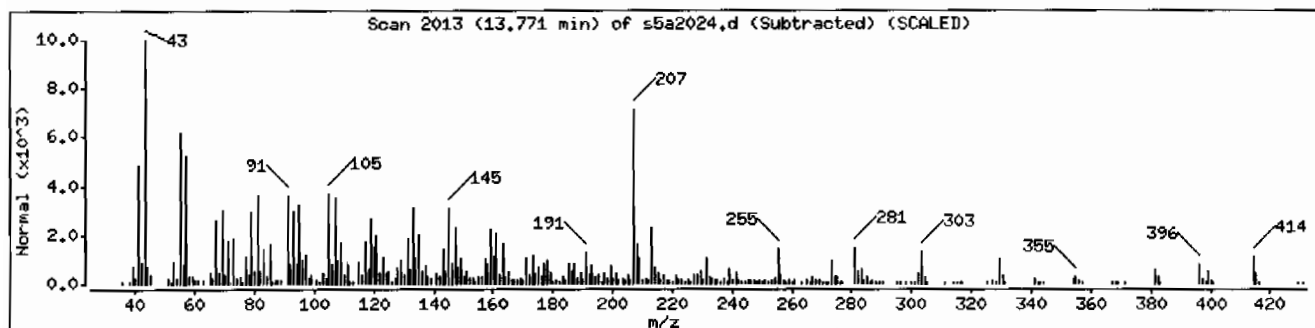
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.gamma.-Sitosterol	83-47-6	NIST05.L	174402	97	C ₂₉ H ₅₀ O	414
.beta.-Sitosterol	83-46-5	NIST05.L	174399	97	C ₂₉ H ₅₀ O	414
Stigmasterol, 22,23-dihydro-	1000214-20-7	NIST05.L	174408	93	C ₂₉ H ₅₀ O	414



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

SDG Number: 10-1287
Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.1
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7223
Batch ID: 943386
Run Date: 01/21/2010 02:21
Prep Date: 01/20/2010 11:13
Data File: s5a2025.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
62-75-9	N-Methyl-N-nitrosomethylamine	U	373	ug/kg	74.7	373
108-95-2	Phenol	U	373	ug/kg	74.7	373
95-57-8	2-Chlorophenol	U	373	ug/kg	74.7	373
106-46-7	1,4-Dichlorobenzene	U	373	ug/kg	74.7	373
621-64-7	N-Nitrosodipropylamine	U	373	ug/kg	74.7	373
59-50-7	4-Chloro-3-methylphenol	U	373	ug/kg	74.7	373
83-32-9	Acenaphthene	U	37.3	ug/kg	12.3	37.3
121-14-2	2,4-Dinitrotoluene	U	373	ug/kg	37.3	373
100-02-7	4-Nitrophenol	U	373	ug/kg	123	373
87-86-5	Pentachlorophenol	U	373	ug/kg	93.4	373
129-00-0	Pyrene	U	37.3	ug/kg	11.2	37.3
110-86-1	Pyridine	U	373	ug/kg	74.7	373
62-53-3	Aniline	U	373	ug/kg	112	373
111-44-4	bis(2-Chloroethyl) ether	U	373	ug/kg	74.7	373
541-73-1	1,3-Dichlorobenzene	U	373	ug/kg	74.7	373
100-51-6	Benzyl alcohol	U	373	ug/kg	112	373
95-50-1	1,2-Dichlorobenzene	U	373	ug/kg	74.7	373
108-60-1	bis(2-Chloroisopropyl)ether	U	373	ug/kg	74.7	373
95-48-7	o-Cresol	U	373	ug/kg	74.7	373
65794-96-9	m,p-Cresols	U	373	ug/kg	112	373
67-72-1	Hexachloroethane	U	373	ug/kg	74.7	373
98-95-3	Nitrobenzene	U	373	ug/kg	74.7	373
78-59-1	Isophorone	U	373	ug/kg	74.7	373
88-75-5	2-Nitrophenol	U	373	ug/kg	74.7	373
105-67-9	2,4-Dimethylphenol	U	373	ug/kg	131	373
111-91-1	bis(2-Chloroethoxy)methane	U	373	ug/kg	74.7	373
120-83-2	2,4-Dichlorophenol	U	373	ug/kg	74.7	373
65-85-0	Benzoic acid	U	747	ug/kg	187	747
91-20-3	Naphthalene	U	37.3	ug/kg	11.2	37.3
106-47-8	4-Chloroaniline	U	373	ug/kg	74.7	373
87-68-3	Hexachlorobutadiene	U	373	ug/kg	74.7	373
91-57-6	2-Methylnaphthalene	U	37.3	ug/kg	7.47	37.3
77-47-4	Hexachlorocyclopentadiene	U	373	ug/kg	74.7	373
88-06-2	2,4,6-Trichlorophenol	U	373	ug/kg	74.7	373
95-95-4	2,4,5-Trichlorophenol	U	373	ug/kg	74.7	373
91-58-7	2-Chloronaphthalene	U	37.3	ug/kg	12.3	37.3
88-74-4	2-Nitroaniline	U	373	ug/kg	74.7	373
99-09-2	<i>o</i> -Nitroaniline					
	3-Nitroaniline	U	373	ug/kg	74.7	373

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

SDG Number: 10-1287
Lab Sample ID: 244923010

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8270C
Inst: MSD5.I
Analyst: RMB
Aliquot: 30.01 g
Column: J&W DB-5MS

Matrix: R
%Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-009
Dilution: 1
Inj. Vol: .5 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7223
Batch ID: 943386
Run Date: 01/21/2010 02:21
Prep Date: 01/20/2010 11:13
Data File: s5a2025.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
131-11-3	<i>m</i> -Nitroaniline					
	Dimethylphthalate	U	373	ug/kg	74.7	373
606-20-2	2,6-Dinitrotoluene	U	373	ug/kg	37.3	373
208-96-8	Acenaphthylene	U	37.3	ug/kg	11.2	37.3
51-28-5	2,4-Dinitrophenol	U	747	ug/kg	142	747
132-64-9	Dibenzofuran	U	373	ug/kg	74.7	373
84-66-2	Diethylphthalate	U	373	ug/kg	74.7	373
86-73-7	Fluorene	U	37.3	ug/kg	11.2	37.3
7005-72-3	4-Chlorophenylphenylether	U	373	ug/kg	74.7	373
534-52-1	2-Methyl-4,6-dinitrophenol	U	373	ug/kg	74.7	373
100-01-6	4-Nitroaniline	U	373	ug/kg	112	373
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	373	ug/kg	74.7	373
122-66-7	Azobenzene	U	373	ug/kg	74.7	373
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	373	ug/kg	74.7	373
118-74-1	Hexachlorobenzene	U	373	ug/kg	74.7	373
85-01-8	Phenanthrene	U	37.3	ug/kg	11.2	37.3
120-12-7	Anthracene	U	37.3	ug/kg	7.47	37.3
84-74-2	Di-n-butylphthalate	U	373	ug/kg	74.7	373
206-44-0	Fluoranthene	U	37.3	ug/kg	11.2	37.3
85-68-7	Butylbenzylphthalate	U	373	ug/kg	74.7	373
56-55-3	Benzo(a)anthracene	U	37.3	ug/kg	11.2	37.3
91-94-1	3,3'-Dichlorobenzidine	U	373	ug/kg	112	373
218-01-9	Chrysene	U	37.3	ug/kg	11.2	37.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	373	ug/kg	74.7	373
117-84-0	Di-n-octylphthalate	U	373	ug/kg	74.7	373
205-99-2	Benzo(b)fluoranthene	U	37.3	ug/kg	11.2	37.3
207-08-9	Benzo(k)fluoranthene	U	37.3	ug/kg	11.2	37.3
50-32-8	Benzo(a)pyrene	U	37.3	ug/kg	11.2	37.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	37.3	ug/kg	11.2	37.3
53-70-3	Dibenzo(a,h)anthracene	U	37.3	ug/kg	11.2	37.3
191-24-2	Benzo(ghi)perylene	U	37.3	ug/kg	11.2	37.3
120-82-1	1,2,4-Trichlorobenzene	U	373	ug/kg	74.7	373

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	1.98	623	ug/kg		J
	Unknown Aldol Condensate	2.94	403	ug/kg		JA

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 244923010	Date Received: 01/16/2010 08:55	%Moisture: 10.8
	Client: LANL010	Project: LANL01004
Client ID: RE15-10-7223	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/21/2010 02:21	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a2025.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		11.52	181	ug/kg		J
	Unknown		11.54	214	ug/kg		J
	Unknown		11.9	403	ug/kg		J
	Unknown		12.24	249	ug/kg		J
	Unknown		12.65	304	ug/kg		J
	Unknown		12.66	276	ug/kg		J

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2025.d
Lab Smp Id: 244923010 Client Smp ID: RE15-10-7223
Inj Date : 21-JAN-2010 02:21
Operator : RMB Inst ID: MSD5.i
Smp Info : |244923010|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	10.77770	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	403295		40.0000	
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1448569		40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044	(1.000)	826286		40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1473357		40.0000	
* 91 Chrysene-d12	240	9.619	9.622	(1.000)	1295031		40.0000	
* 98 Perylene-d12	264	11.295	11.298	(1.000)	1024593		40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	579980		57.9881	2160
\$ 5 Phenol-d5	99	3.637	3.637	(0.928)	768800		62.3291	2330
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	325112		29.2305	1090
\$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	616291		28.1950	1050
\$ 60 2,4,6-Tribromophenol	329	6.642	6.641	(1.099)	190669		72.6015	2710
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.893)	907318		44.6199	1670

ION RATIO REPORT

SV REPORT

Data file: s5a2025.d

Report Date: 01/21/2010 07:50

Lab. ID: 244923010

SampleType: SAMPLE

Injection Date: 21-JAN-2010 02:21

Operator: RMB

Instrument: MSD5.i

Sample Info: |244923010|943386|1|SVM|1|LANL

Miscellaneous Info: |MSD8270_S|WBN100107-02

Comment:

Method used: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

Dilution Factor= 1.0

Integrator: HP RTE

Compound Sublist: 10-1287

Sample Matrix: SOIL

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL

4	Aniline		CAS#: 62-53-3			
66	41287	3.64	3.70	80-120	100	(T)
93	165	3.63	3.70	220-280	0	(QT)

17	N-Nitrosodipropylamine		CAS#: 621-64-7			
70	45785	4.28	4.16	80-120	100	(T)
42	28081	4.28	4.16	44-104	61	(T)

27	Benzoic acid		CAS#: 65-85-0			
105	274	4.53	4.55	80-120	100	()
122	504	4.78	4.55	47-107	184	(QT)
77	168	4.47	4.55	44-104	61	(T)

43	Dimethylphthalate		CAS#: 131-11-3			
163	147371	6.04	5.80	80-120	100	(T)
164	826286	6.04	5.80	0- 41	561	(QT)

44	2,6-Dinitrotoluene		CAS#: 606-20-2			
165	108799	6.04	5.86	80-120	100	(T)
63	1371	6.04	5.86	47-107	1	(QT)

50	2,4-Dinitrotoluene		CAS#: 121-14-2			
165	108799	6.04	6.16	80-120	100	(T)
89	1461	6.04	6.16	48-108	1	(QT)
63	1371	6.04	6.16	25- 85	1	(QT)

MASS	RESPONSE	RT	EXPECT RT	TARGET RANGE	RATIO	QUAL
=====						
52	4-Nitrophenol			CAS#: 100-02-7		
139	196	6.18	6.08	80-120	100	(T)
109	507	6.24	6.08	40-100	258	(QT)
65	423	6.20	6.08	71-131	215	(QT)

53	Fluorene			CAS#: 86-73-7		
166	11161	6.64	6.46	80-120	100	(T)
165	11764	6.64	6.46	57-117	105	(T)
167	3934	6.64	6.46	0- 44	35	(T)

55	2-Methyl-4,6-dinitrophenol			CAS#: 534-52-1		
198	642	6.64	6.47	80-120	100	(T)
105	1720	6.64	6.47	13- 73	268	(QT)
51	1433	6.64	6.47	55-115	223	(QT)

99	Indeno(1,2,3-cd)pyrene			CAS#: 193-39-5		
276	352	13.05	13.06	80-120	100	()
138	508	13.01	13.07	1- 61	144	(Q)

Q qualifier indicates ion failed ratio requirement

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2025.d
 Lab Smp Id: 244923010 Client Smp ID: RE15-10-7223
 Inj Date : 21-JAN-2010 02:21
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |244923010|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 23
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	10.77770	% moisture

Cpnd Variable Local Compound Variable

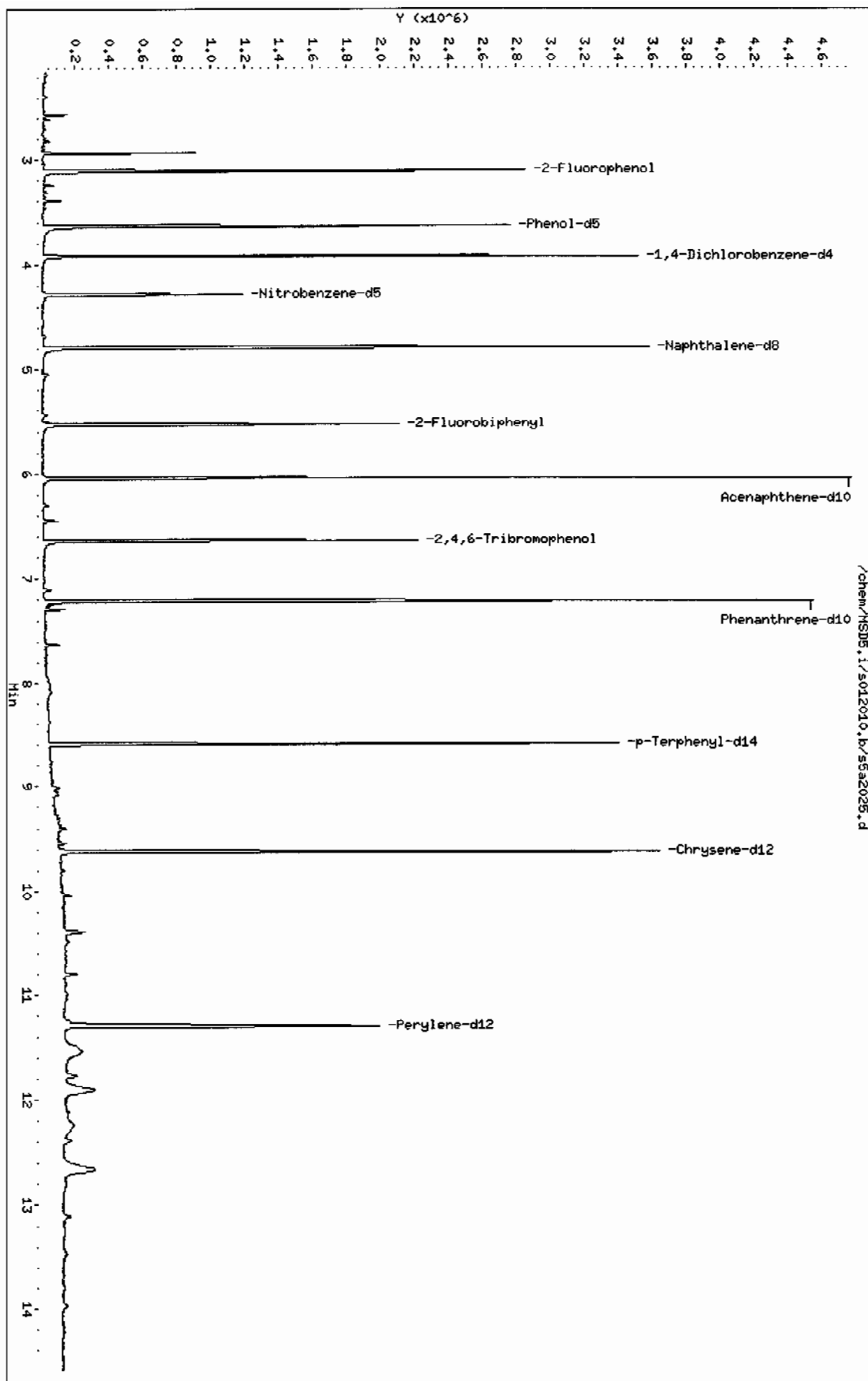
ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2487099	40.000
* 98 Perylene-d12	11.295	2742371	40.000

RT	AREA	CONCENTRATIONS		QUAL	QUANT		
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.984	1037613	16.6879142	623	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	LIBRARY	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)			LIB	ENTRY	
=====	=====	=====	=====	=====	=====	=====	=====	=====
Unknown Aldol Condensate				CAS #:				
2.937	670714	10.7870948	403	0			0	10
Unknown				CAS #:				
11.524	332496	4.84975744	181	0			0	98
Unknown				CAS #:				
11.542	393214	5.73538980	214	0			0	98
Unknown				CAS #:				
11.901	739782	10.7903934	403	0			0	98
Unknown				CAS #:				
12.242	456273	6.65516489	248	0			0	98
Unknown				CAS #:				
12.648	558652	8.14845160	304	0			0	98
Unknown				CAS #:				
12.660	507094	7.39643605	276	0			0	98

Data File: /chem/MSDS.i/s012010.b/s5a2025.d
Date: 21-JAN-2010 02:21
Client ID: RE15-10-7223
Sample Info: 1244923040194338611SVM11.LANL
Volume Injected (uL): 0.5
Column phase: J&W DB-5MS

Instrument: MSD5.i
Operator: RMB
Column diameter: 0.20



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: MSD5.i

Sample Info: 12449230101943386111SVH111LANL

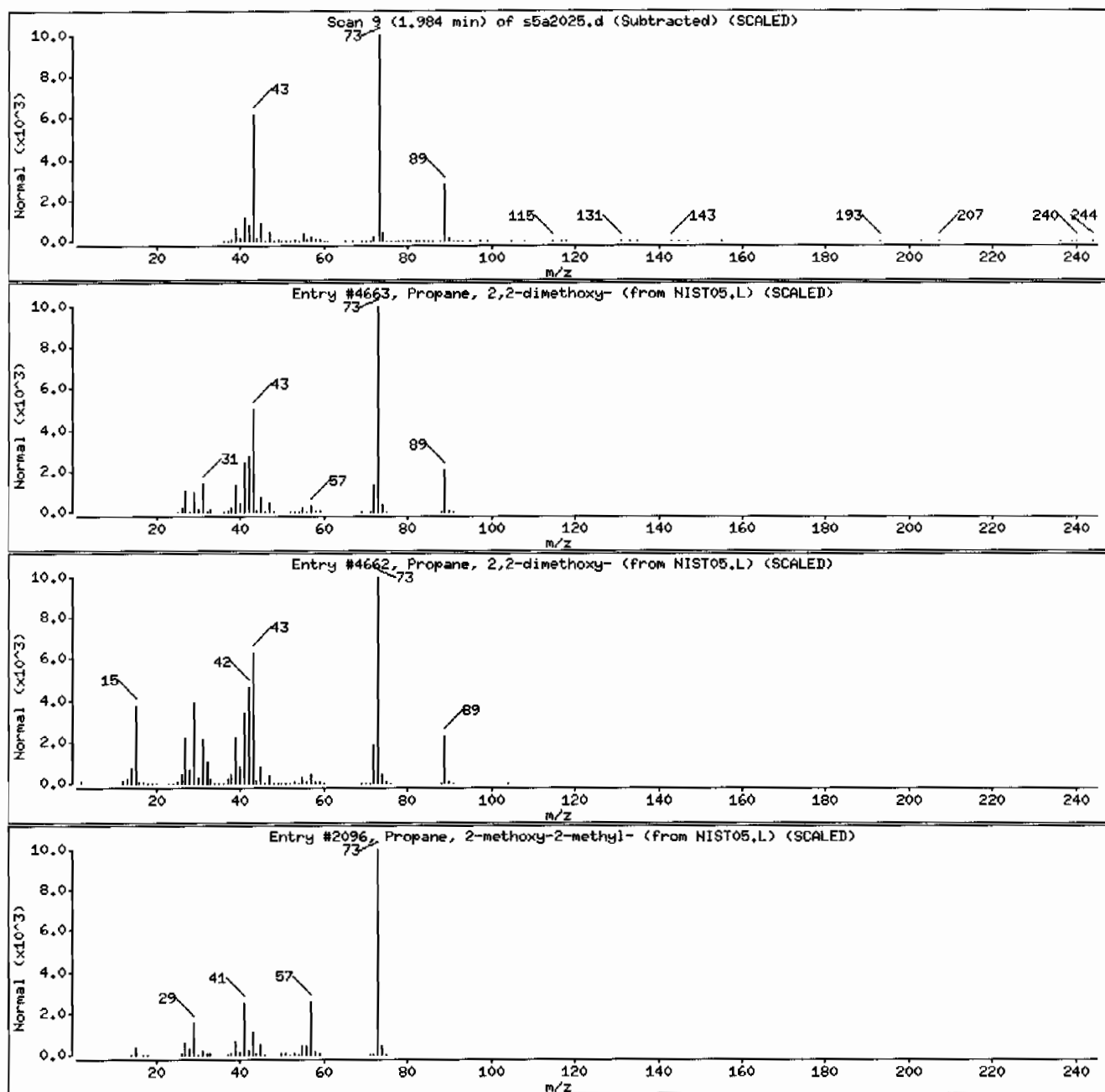
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	45	C5H12O2	104
Propane, 2-methoxy-2-methyl-	1634-04-4	NIST05.L	2096	23	C5H12O	88



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: MSD5.i

Sample Info: 1244923010194338611SVH11|LANL

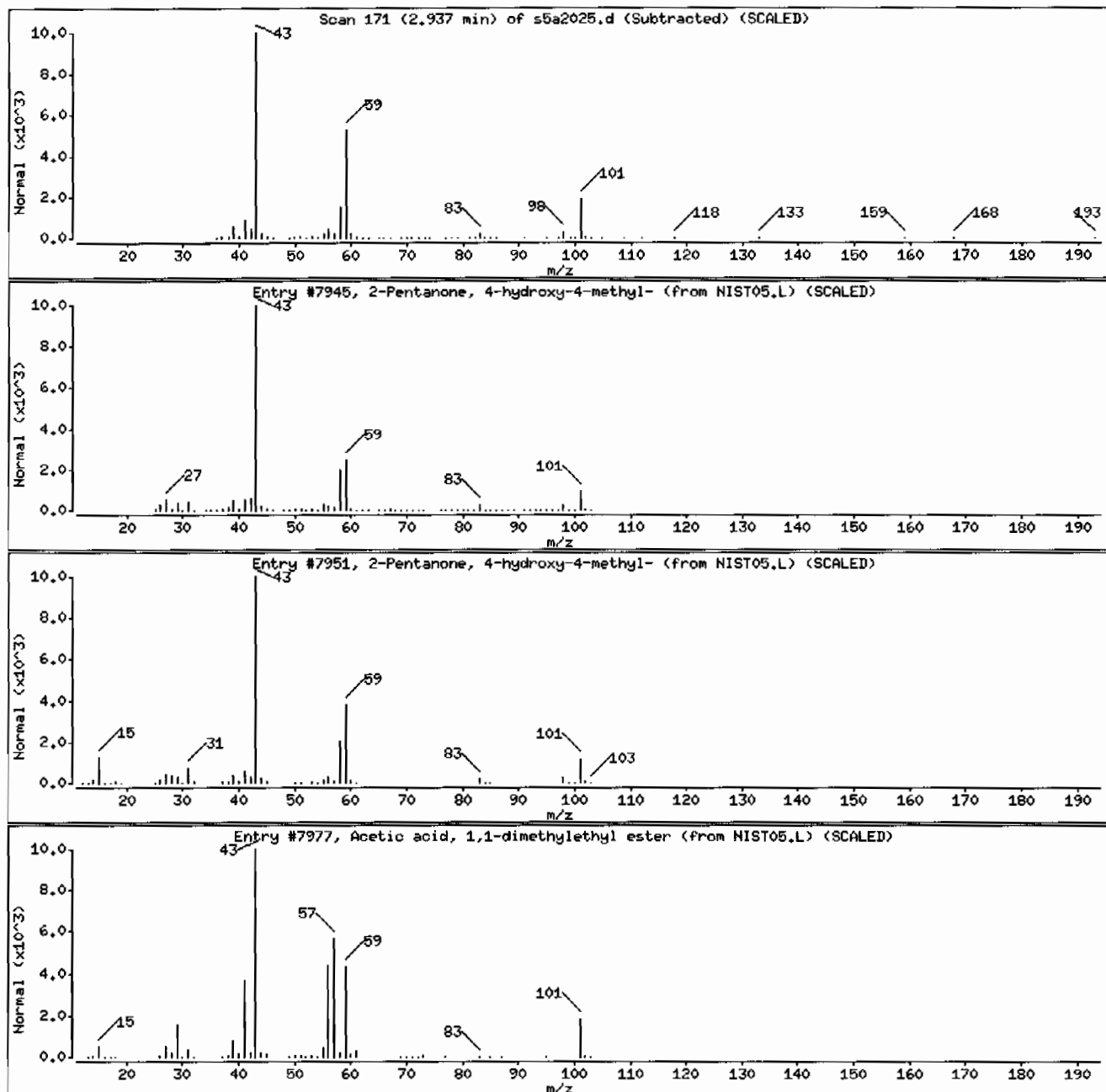
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7945	59	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
Acetic acid, 1,1-dimethylethyl ester	540-88-5	NIST05.L	7977	39	C6H12O2	116



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: MSD5.i

Sample Info: 1244923010194338611SVH111LANL

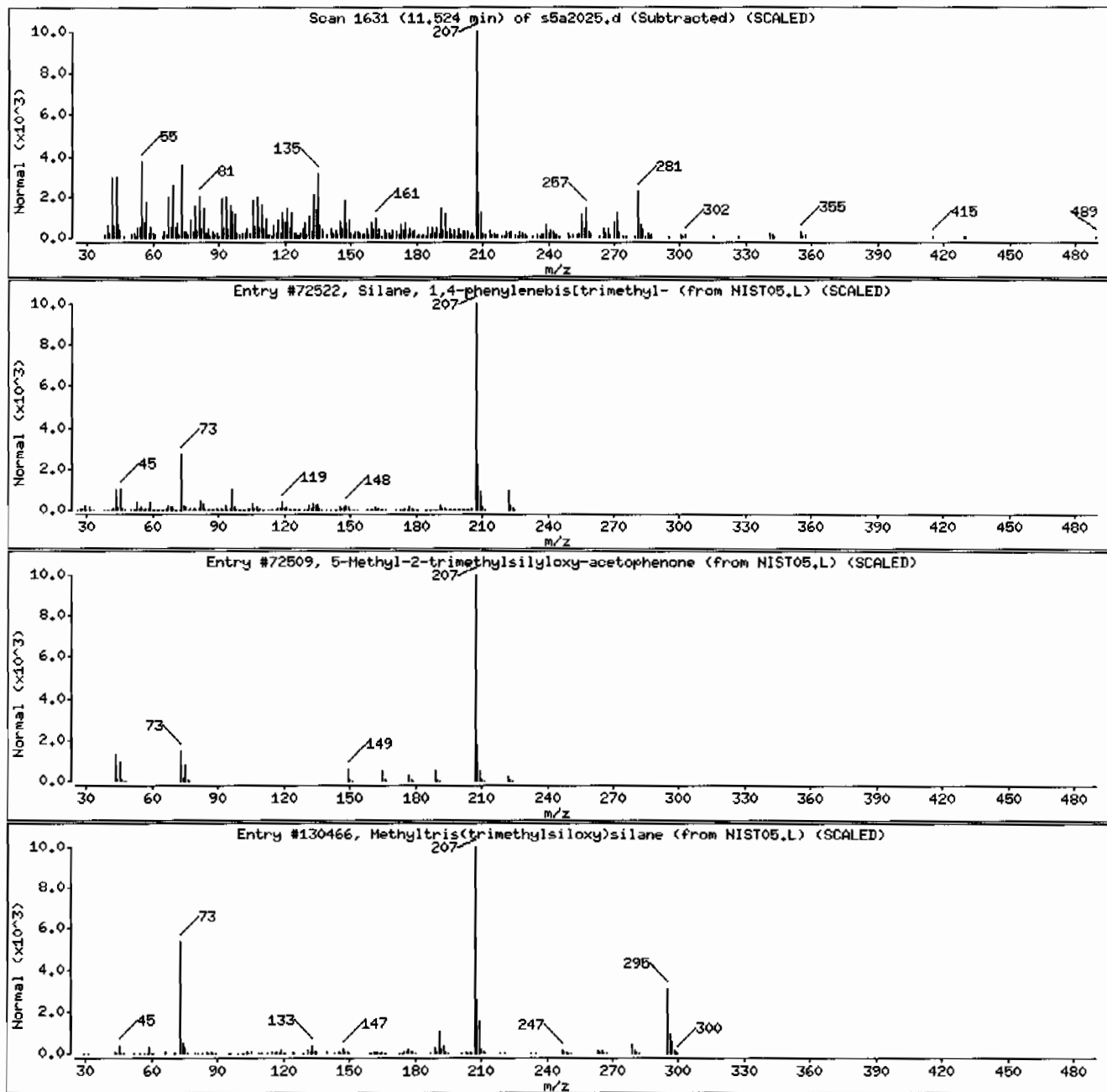
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Silane, 1,4-phenylenebis(trimethyl-	13183-70-6	NIST05.L	72522	55	C ₁₂ H ₂₂ Si ₂	222
5-Methyl-2-trimethylsilyloxy-acetophenon	97389-69-0	NIST05.L	72509	43	C ₁₂ H ₁₈ O ₂ Si	222
Methyltris(trimethylsilyloxy)silane	17928-28-8	NIST05.L	130466	43	C ₁₀ H ₃₀ O ₃ Si ₄	310



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: MSD5.i

Sample Info: 12449230101943386111SVMI11LANL

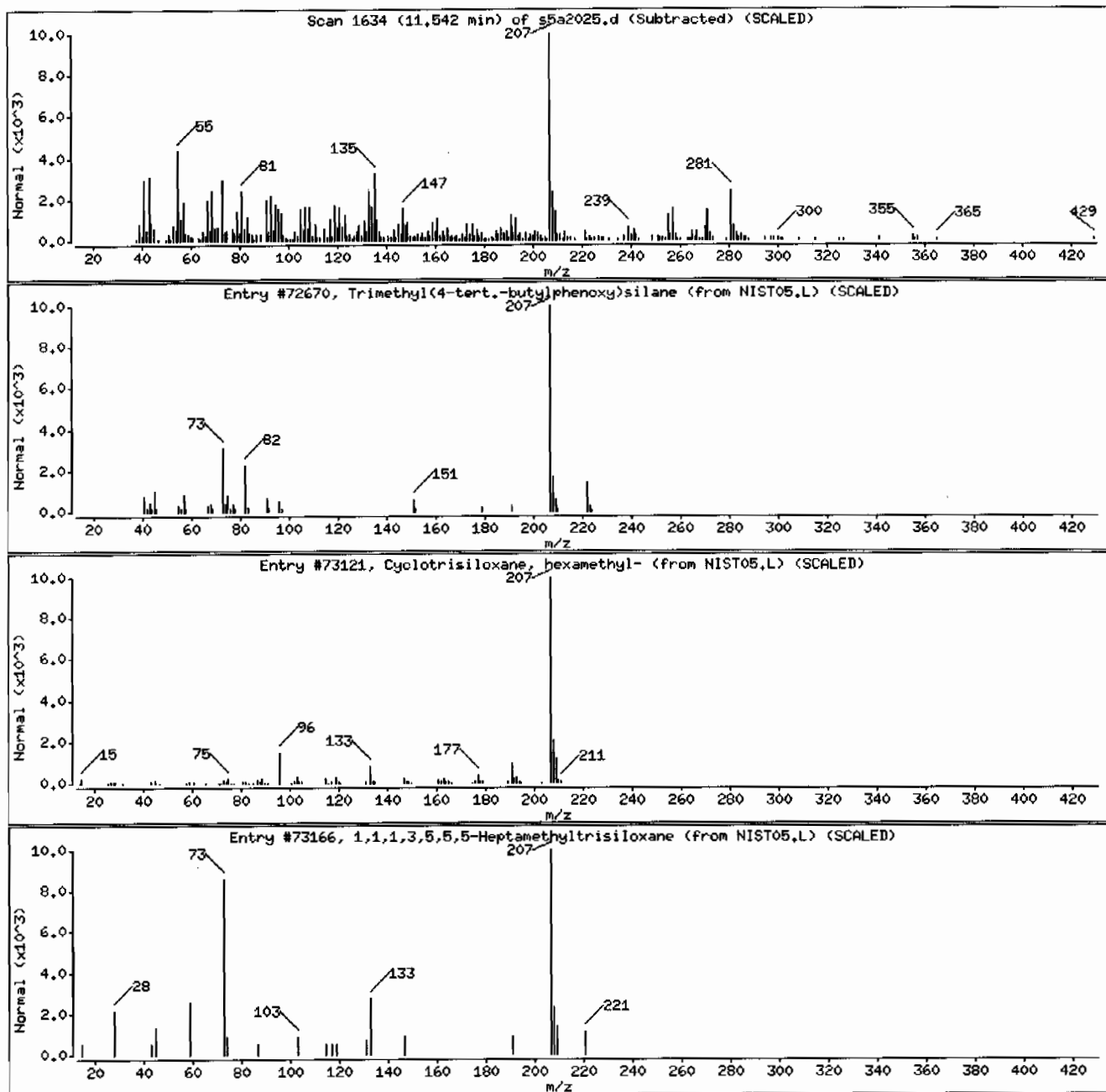
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Trimethyl(4-tert.-butylphenoxy)silane	26237-79-0	NIST05.L	72670	43	C ₁₃ H ₂₂ O ₂ Si	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	43	C ₆ H ₁₈ O ₃ Si ₃	222
1,1,1,3,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	43	C ₇ H ₂₂ O ₂ Si ₃	222



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: MSD5.i

Sample Info: I244923010194338611SVH11LANL

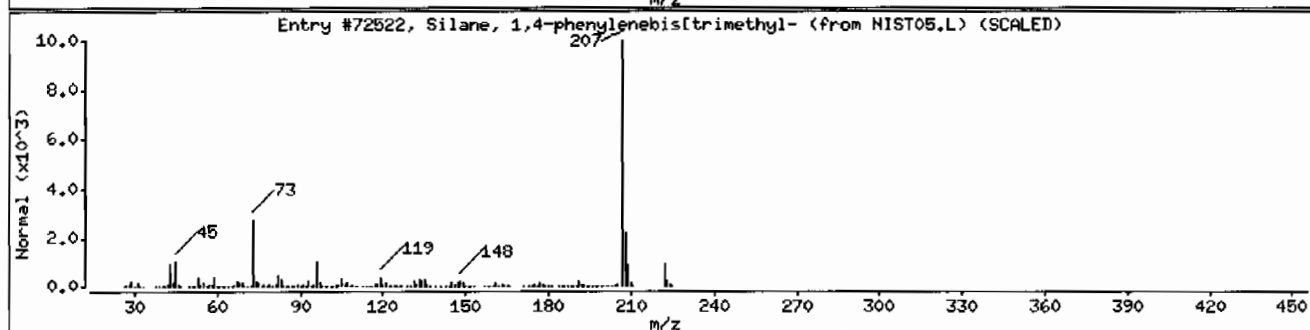
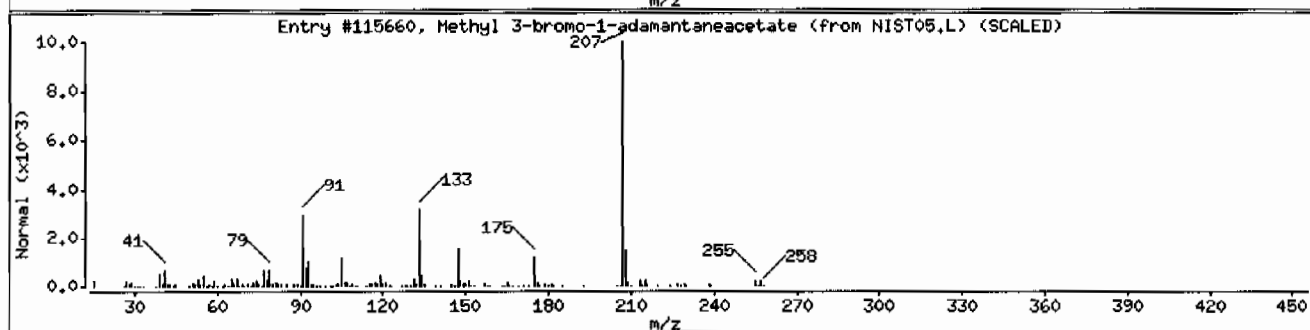
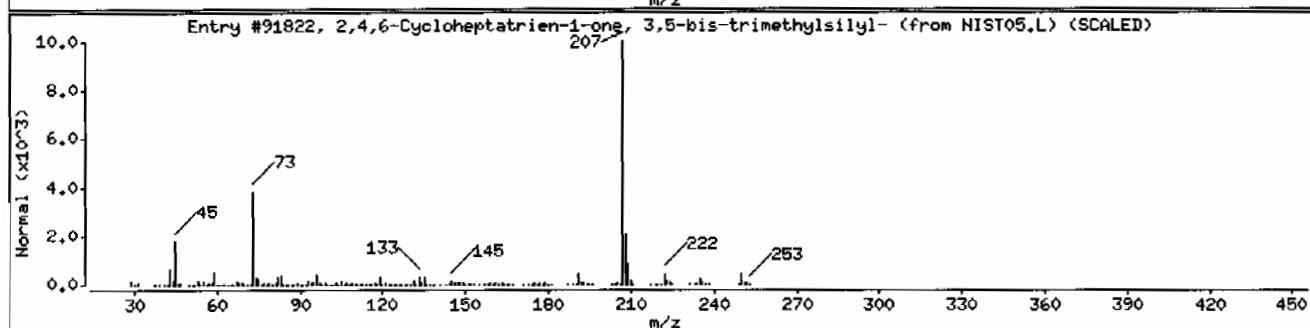
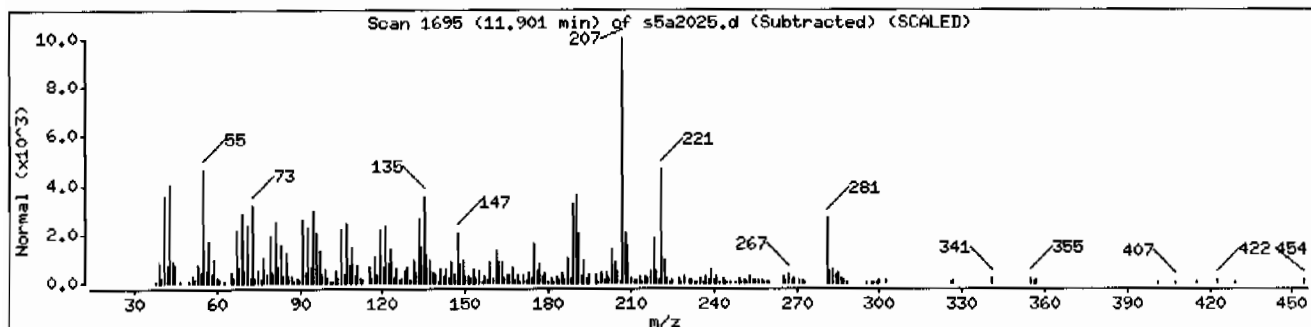
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,4,6-Cycloheptatrien-1-one, 3,5-bis-tri	1000161-21-8	NIST05.L	91822	35	C13H22OSi2	250
Methyl 3-bromo-1-adamantaneacetate	14575-01-0	NIST05.L	115660	35	C13H19BrO2	286
Silane, 1,4-phenylenebis(trimethyl-	13183-70-5	NIST05.L	72522	30	C12H22Si2	222



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: MSD5.i

Sample Info: 12449230101943386111SVH111LANL

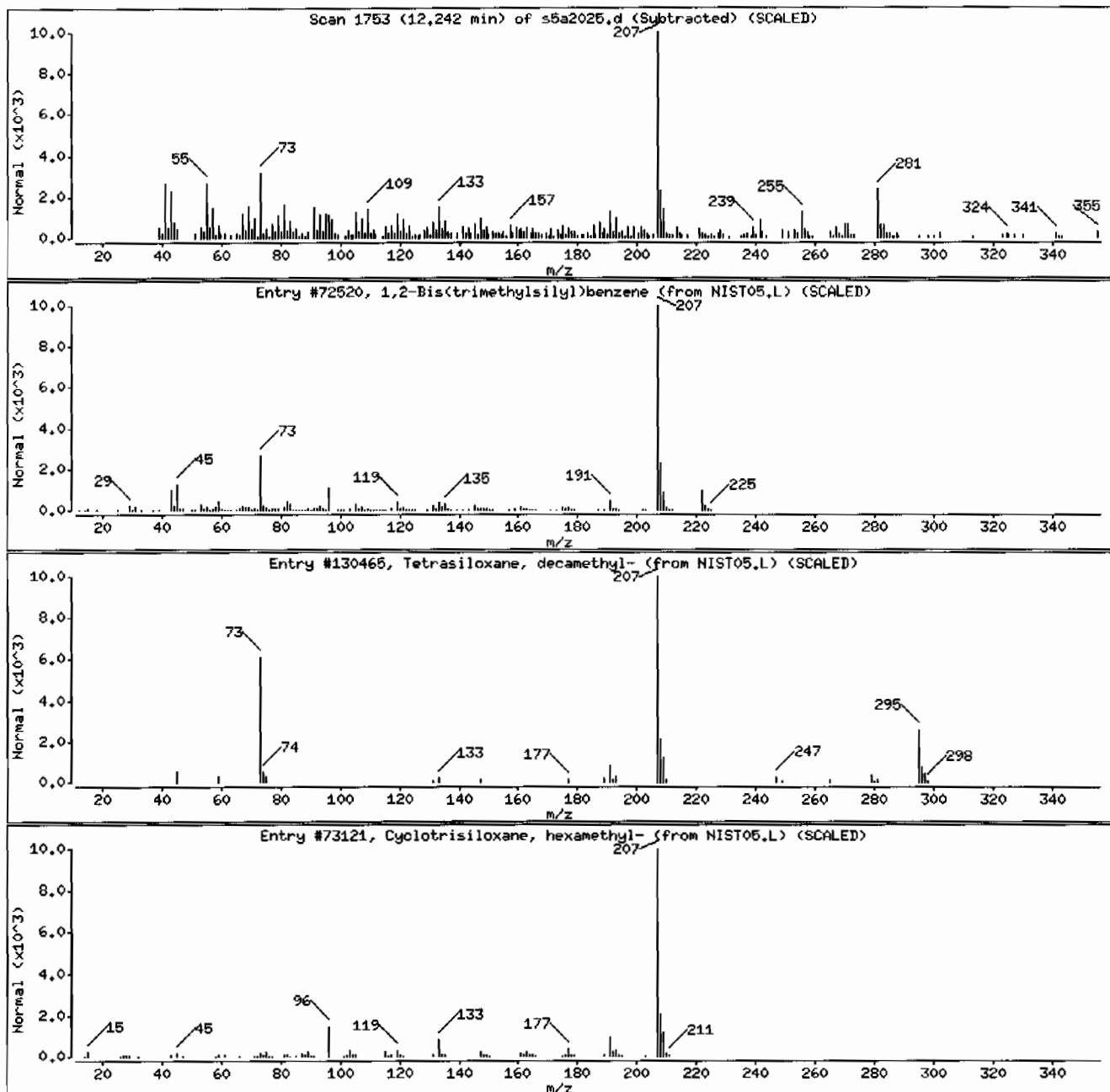
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2-Bis(trimethylsilyl)benzene	17161-09-6	NIST05.L	72520	53	C ₁₂ H ₂₂ Si ₂	222
Tetrasiloxane, decamethyl-	141-62-8	NIST05.L	130465	53	C ₁₀ H ₃₀ O ₃ Si ₄	310
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	47	C ₆ H ₁₈ O ₃ Si ₃	222



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: HSD5.i

Sample Info: 1244923010194338611SVMI1ILANL

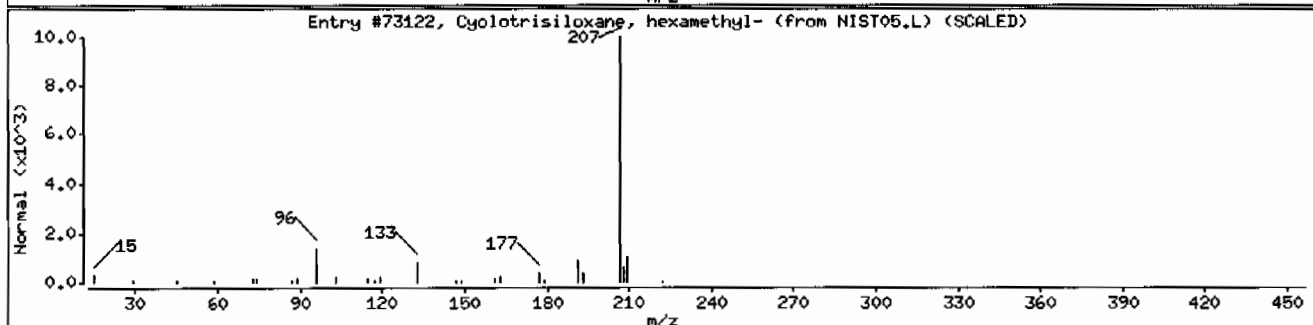
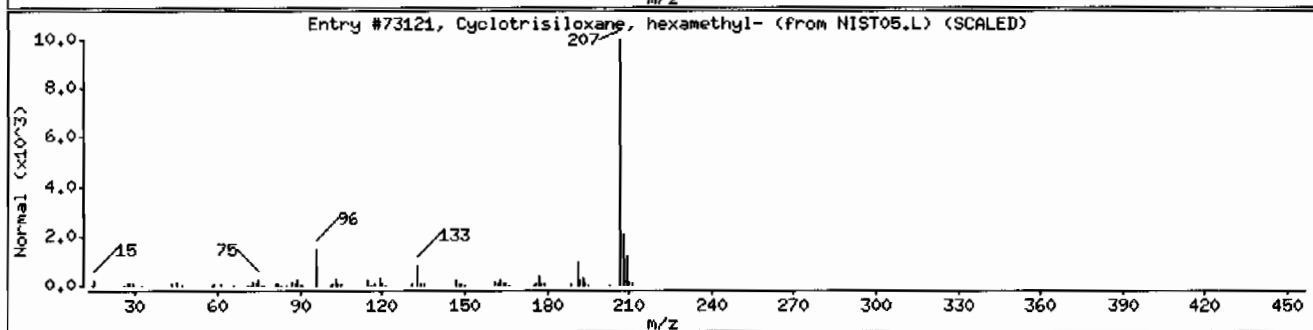
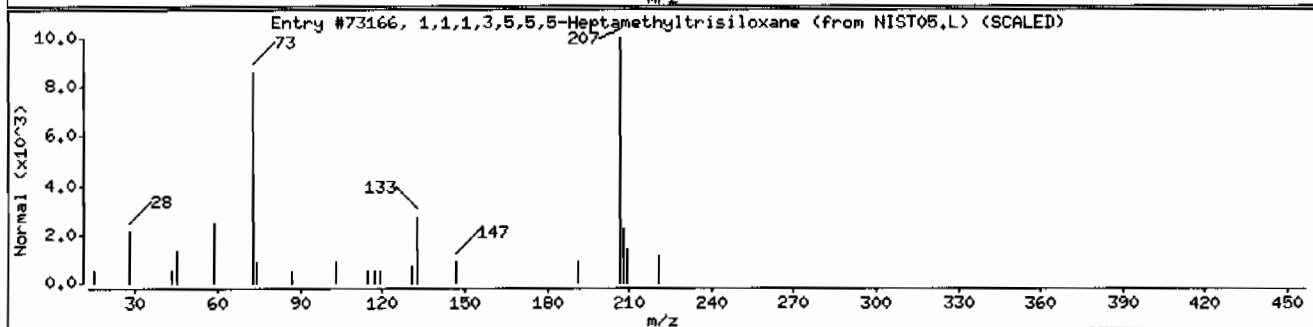
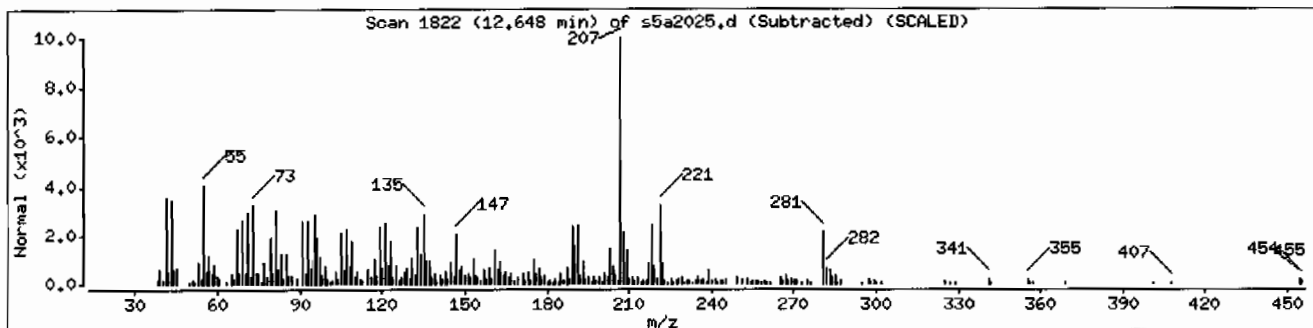
Volume Injected (ul): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	38	C ₇ H ₂₂ O ₂ Si ₃	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73121	35	C ₆ H ₁₈ O ₃ Si ₃	222
Cyclotrisiloxane, hexamethyl-	541-05-9	NIST05.L	73122	35	C ₆ H ₁₈ O ₃ Si ₃	222



Date : 21-JAN-2010 02:21

Client ID: RE15-10-7223

Instrument: MSD5.i

Sample Info: 1244923010194338611SVMI11LANL

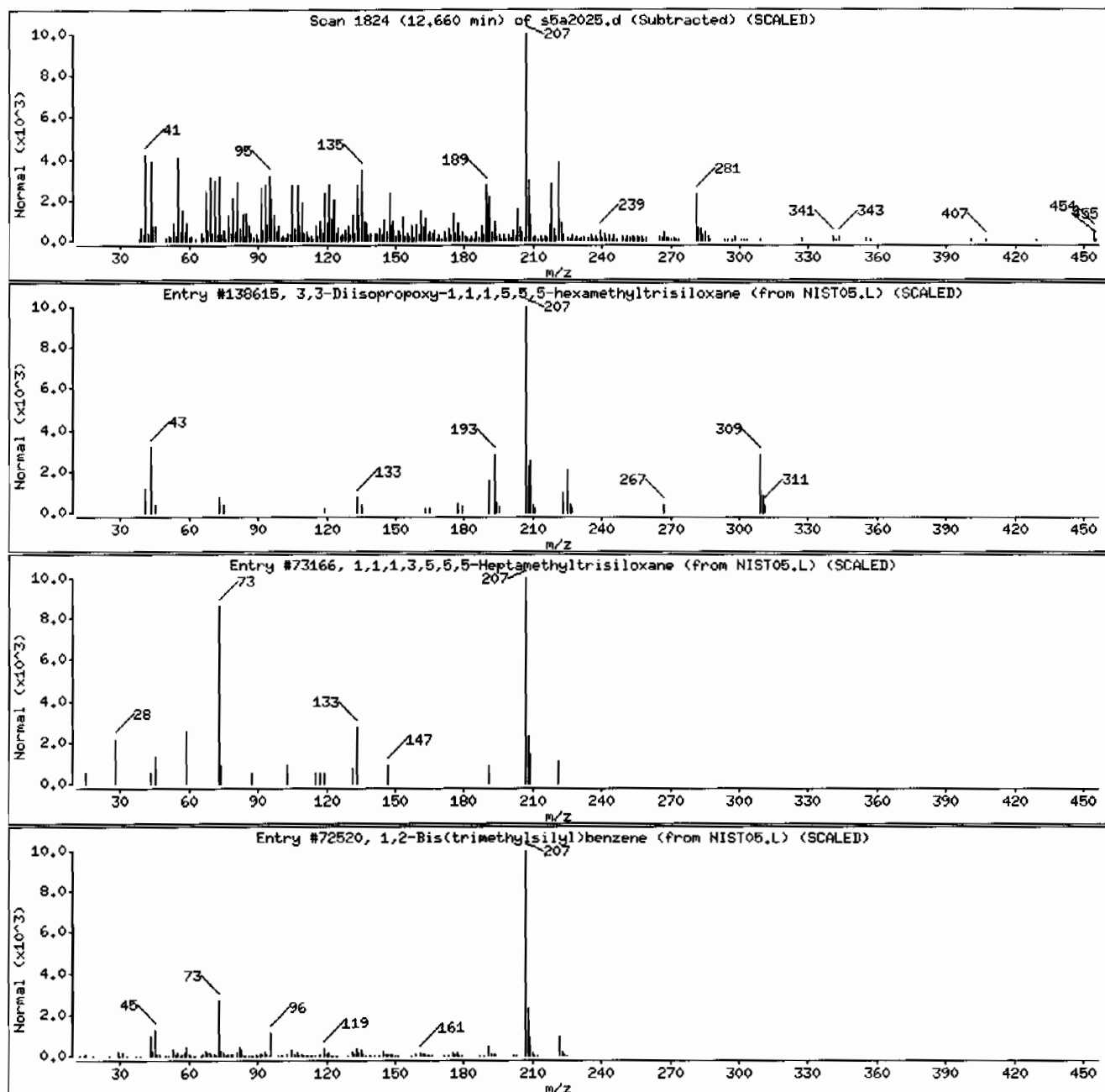
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3,3-Diisopropoxy-1,1,1,5,5,5-hexamethylt	18082-56-9	NIST05.L	138615	35	C ₁₂ H ₃₂ O ₄ Si ₃	324
1,1,1,3,5,5,5-Heptamethyltrisiloxane	1873-88-7	NIST05.L	73166	35	C ₇ H ₂₂ O ₂ Si ₃	222
1,2-Bis(trimethylsilyl)benzene	17151-09-6	NIST05.L	72520	30	C ₁₂ H ₂₂ Si ₂	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		10	20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenylether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625

Calibration Standard Concentration Levels*

AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
3,3'-Dichlorobenzidine		10	20	40	50	80	100	120
1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethylphenethylamine		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120

SW846 8270/EPA 625

Calibration Standard Concentration Levels*

AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate		10	20	40	50	80	100	120
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
4-Aminobiphenyl		10	20	40	50	80	100	120

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120
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SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol		10	20	40	50	80	100	120
Quinoline		10	20	40	50	80	100	120
2,4-Toluene diisocyanate		10	20	40	50	80	100	120
1-Nitropyrene		10	20	40	50	80	100	120
5-Methylchrysene		10	20	40	50	80	100	120
Benzo(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: 21-Jan-2010 07:10

Calibration History

Method : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Start Cal Date: 05-JAN-2010 08:21
End Cal Date : 06-JAN-2010 14:25

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
05-JAN-2010 08:21	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0503.d
Cal Level: 2 , Cal Amount: 10.00000		
06-JAN-2010 12:06	nev	/chem/MSD5.i/s010510.b/s5a0537.d
06-JAN-2010 09:26	pest	/chem/MSD5.i/s010510.b/s5a0530.d
05-JAN-2010 15:39	hex	/chem/MSD5.i/s010510.b/s5a0520.d
05-JAN-2010 12:58	apl2	/chem/MSD5.i/s010510.b/s5a0513.d
05-JAN-2010 08:49	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0504.d
Cal Level: 3 , Cal Amount: 20.00000		
06-JAN-2010 12:29	nev	/chem/MSD5.i/s010510.b/s5a0538.d
06-JAN-2010 09:49	pest	/chem/MSD5.i/s010510.b/s5a0531.d
05-JAN-2010 16:02	hex	/chem/MSD5.i/s010510.b/s5a0521.d
05-JAN-2010 13:21	apl2	/chem/MSD5.i/s010510.b/s5a0514.d
05-JAN-2010 09:17	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0505.d
Cal Level: 4 , Cal Amount: 40.00000		
06-JAN-2010 12:53	nev	/chem/MSD5.i/s010510.b/s5a0539.d
06-JAN-2010 10:12	pest	/chem/MSD5.i/s010510.b/s5a0532.d
05-JAN-2010 16:24	hex	/chem/MSD5.i/s010510.b/s5a0522.d
05-JAN-2010 13:44	apl2	/chem/MSD5.i/s010510.b/s5a0515.d
05-JAN-2010 09:45	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0506.d
Cal Level: 5 , Cal Amount: 50.00000		
06-JAN-2010 13:16	nev	/chem/MSD5.i/s010510.b/s5a0540.d
06-JAN-2010 10:35	pest	/chem/MSD5.i/s010510.b/s5a0533.d
05-JAN-2010 16:47	hex	/chem/MSD5.i/s010510.b/s5a0523.d
05-JAN-2010 14:07	apl2	/chem/MSD5.i/s010510.b/s5a0516.d
05-JAN-2010 10:13	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0507.d
Cal Level: 6 , Cal Amount: 80.00000		
06-JAN-2010 13:39	nev	/chem/MSD5.i/s010510.b/s5a0541.d
06-JAN-2010 10:58	pest	/chem/MSD5.i/s010510.b/s5a0534.d
05-JAN-2010 17:10	hex	/chem/MSD5.i/s010510.b/s5a0524.d
05-JAN-2010 14:30	apl2	/chem/MSD5.i/s010510.b/s5a0517.d
05-JAN-2010 10:42	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0508.d
Cal Level: 7 , Cal Amount: 100.00000		

06-JAN-2010 14:02	nev	/chem/MSD5.i/s010510.b/s5a0542.d
06-JAN-2010 11:21	pest	/chem/MSD5.i/s010510.b/s5a0535.d
05-JAN-2010 17:32	hex	/chem/MSD5.i/s010510.b/s5a0525.d
05-JAN-2010 14:53	ap12	/chem/MSD5.i/s010510.b/s5a0518.d
05-JAN-2010 11:10	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0509.d

Cal Level: 8 , Cal Amount: 120.00000

06-JAN-2010 14:25	nev	/chem/MSD5.i/s010510.b/s5a0543.d
06-JAN-2010 11:43	pest	/chem/MSD5.i/s010510.b/s5a0536.d
05-JAN-2010 15:16	ap12	/chem/MSD5.i/s010510.b/s5a0519.d
05-JAN-2010 11:38	MEGAIICARE	/chem/MSD5.i/s010510.b/s5a0510.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0

20-JAN-2010 18:15	MEGAIICARE	/chem/MSD5.i/s012010.b/s5a2004.d
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Ccal Level: 4 , Ccal Amount: 40.0

20-JAN-2010 18:42	ap12	/chem/MSD5.i/s012010.b/s5a2005.d
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Ccal Level: 4 , Ccal Amount: 40.0

20-JAN-2010 09:33	MEGAIICARE	/chem/MSD5.i/s012010.b/s5a2002.d
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GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 05-JAN-2010 08:21
 End Cal Date : 06-JAN-2010 14:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Cal Date : 21-Jan-2010 07:08 rmb

Calibration File Names:

Level 1: /chem/MSD5.i/s010510.b/s5a0503.d
 Level 2: /chem/MSD5.i/s010510.b/s5a0537.d
 Level 3: /chem/MSD5.i/s010510.b/s5a0538.d
 Level 4: /chem/MSD5.i/s010510.b/s5a0539.d
 Level 5: /chem/MSD5.i/s010510.b/s5a0540.d
 Level 6: /chem/MSD5.i/s010510.b/s5a0541.d
 Level 7: /chem/MSD5.i/s010510.b/s5a0542.d
 Level 8: /chem/MSD5.i/s010510.b/s5a0543.d

Compound	1	10	20	40	50	80	Curve	b	Coeficients	m1	m2	%RSD or R^2
1 N-Methyl-N-nitrosomethylamine:	++++	0.60168	0.60436	0.61687	0.60783	0.59199	AVRG			0.59451		3.18493
	0.56392	0.57492										
2 Pyridine	++++	0.82414	0.81597	0.82898	0.83066	0.80196	AVRG			0.81724		1.49870
	0.80002	0.81897										
4 Aniline	++++	0.53231	0.51667	0.50774	0.50536	0.48725	AVRG			0.50134		3.95817
	0.47853	0.48154										
209 Benzaldehyde	++++	0.92100	0.94578	0.89295	++++	0.82020	AVRG			0.86728		8.97019
	++++	0.75644										
6 Phenol	++++	1.29285	1.28692	1.25839	1.25522	1.16949	AVRG			1.21864		5.81319
	1.14415	1.12346										

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 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
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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
7 bis(2-Chloroethyl) ether	1.00983 0.83286	1.01785 0.80569	0.94420	0.93518	0.92205	0.84402	AVRG		0.91396		8.73413
8 2-Chlorophenol	++++ 0.98681	1.07356 0.98526	1.07344	1.06538	1.05073	0.99796	AVRG		1.03330		4.00640
203 n-Decane	++++ 0.99726	1.61448 0.88772	1.49548	1.34412	1.28232	1.05572	AVRG		1.23959		21.72463
9 1,3-Dichlorobenzene	++++ 1.06486	1.17215 1.03617	1.17216	1.15807	1.14319	1.08120	AVRG		1.11826		5.02964
11 1,4-Dichlorobenzene	++++ 1.04072	1.17667 1.00783	1.17551	1.15287	1.14606	1.06723	AVRG		1.10956		6.25951
12 Benzyl alcohol	++++ 0.66037	0.69641 0.66507	0.69406	0.69303	0.69244	0.67197	AVRG		0.68191		2.27112
13 1,2-Dichlorobenzene	++++ 0.86501	1.11234 0.80711	1.08973	1.05062	1.03198	0.90006	AVRG		0.97955		12.27506
14 bis(2-Chloroisopropyl) ether	++++ 1.60491	2.08722 1.53342	1.99778	1.86060	1.82612	1.65924	AVRG		1.79561		11.47595
15 o-Cresol	++++ 0.63235	0.82031 0.58390	0.80621	0.77347	0.75499	0.6547	AVRG		0.71791		12.97823

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Compound	1	10	20	40	50	80	Curve	b	Coefficients m1	m2	%RSD or R ²
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
100	120										
Level 7	Level 8										
16 Acetophenone	++++	1.12507	1.18754	1.15721	++++	1.08904	AVRG		1.12258		4.72418
	++++	1.05402									
17 N-Nitrosodipropylamine	0.58398	0.65931	0.62258	0.63285	0.62008	0.59856					
	0.56181	0.55212					AVRG		0.60391		6.06720
18 m,p-Cresols	++++	1.00834	1.01404	1.04775	1.04014	1.01984	AVRG		1.02193		1.56038
	1.00592	1.01747									
19 Hexachloroethane	++++	0.48678	0.47955	0.48237	0.47258	0.43783	AVRG		0.45803		6.27631
	0.42970	0.41736									
21 Nitrobenzene	++++	0.32660	0.30568	0.28758	0.27934	0.25512	AVRG		0.27592		12.22218
	0.23914	0.23801									
22 Isophorone	++++	0.61683	0.58060	0.53957	0.52438	0.47923	AVRG		0.52404		11.37227
	0.46251	0.46518									
23 2-Nitrophenol	++++	0.12872	0.13817	0.13776	0.13560	0.12898	AVRG		0.13005		5.81691
	0.12191	0.11919									
24 2,4-Dimethylphenol	++++	0.29403	0.31174	0.26176	0.24869	0.22846	AVRG		0.26000		14.34679
	0.21532	++++									
25 bis (2-Chloroethoxy)methane	++++	0.36536	0.35215	0.32576	0.31701	0.28326	AVRG		0.31106		12.84228
	0.26989	0.26396									

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Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	Coefficients ml	m2	SRSD or R ²
26 2,4-Dichlorophenol	++++ 0.19198	0.20899 0.19411	0.21531	0.20937	0.21725	0.20076	AVRG		0.20539		4.85397
27 Benzoic acid	++++ 478254	++++ 571122	33960	124214	187154	373760	LINR	0.33988	0.16978		0.99286
28 1,2,4-Trichlorobenzene	++++ 0.22568	0.28702 0.22001	0.27935	0.26612	0.26073	0.23707	AVRG		0.25371		10.38885
30 Naphthalene	0.90683 0.62203	0.89606 ++++	0.85471	0.80187	0.77070	0.66103	AVRG		0.78760		14.13908
204 alpha-Terpineol	++++ ++++	0.30152 ++++	0.28075	0.24842	0.24296	0.20255	AVRG		0.25524		14.87588
31 4-Chloroaniline	++++ 0.31089	0.37980 0.30851	0.36079	0.36457	0.35928	0.32796	AVRG		0.34454		8.23540
189 Caprolactam	++++ ++++	17378 343077	39729	86829	++++	228154	LINR	0.10774	0.09582		0.99993
32 Hexachlorobutadiene	++++ 0.13637	0.16600 0.13419	0.16011	0.15797	0.15496	0.14380	AVRG		0.15048		8.22423
33 4-Chloro-3-methylphenol	++++ 0.19409	0.20987 0.19407	0.22081	0.22519	0.22001	0.20165	AVRG		0.20939		6.23199

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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 of R^2
34 2-Methylnaphthalene	0.53336 0.42815	0.57194 0.40190	0.55001 0.40190	0.52026 0.40190	0.49827 0.40190	0.45090 0.40190	AVRG	0.49435	12.36274		
35 1-Methylnaphthalene	0.52554 0.40991	0.56288 0.38953	0.53836 0.38953	0.50921 0.38953	0.49153 0.38953	0.43368 0.38953	AVRG	0.48258	13.22802		
36 Hexachlorocyclopentadiene	++++ 0.21802	0.22432 0.23446	0.22721 0.23446	0.24669 0.23446	0.23561 0.23446	0.24607 0.23446	AVRG	0.23320	4.63359		
208 1,1'-Biphenyl	++++ ++++	1.17335 0.95224	1.25981 0.95224	1.18470 0.95224	++++ 0.95224	1.08141 0.95224	AVRG	1.13030	10.43813		
205 2,3-Dichloroaniline	++++ 0.45334	0.50365 0.43807	0.50697 0.43807	0.51727 0.43807	0.50826 0.43807	0.47428 0.43807	AVRG	0.48598	6.35673		
37 2,4,6-Trichlorophenol	++++ 0.28767	0.24557 0.26619	0.27051 0.26619	0.29501 0.26619	0.29989 0.26619	0.28467 0.26619	AVRG	0.27850	6.79942		
38 2,4,5-Trichlorophenol	++++ 0.30254	0.26914 0.31836	0.30331 0.31836	0.32718 0.31836	0.33231 0.31836	0.31827 0.31836	AVRG	0.31016	6.84038		
40 2-Chloronaphthalene	0.86992 0.81137	0.94306 0.77497	0.93216 0.77497	0.97783 0.77497	0.91010 0.77497	0.83148 0.77497	AVRG	0.87386	7.09785		
42 o-Nitroaniline	++++ 0.26171	0.26027 0.28425	0.28272 0.28425	0.29628 0.28425	0.29293 0.28425	0.28627 0.28425	AVRG	0.28349	4.08356		

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
41 m-Nitroaniline	++++ 0.20547	0.21305 0.22125	0.19674 0.21941	0.21590 0.21748	AVRG	0.21276	4.10704				
43 Dimethylphthalate	++++ 0.96194	1.10010 0.96311	1.07323 1.03373	1.03867 0.98687	AVRG	1.02309	5.28616				
44 2,6-Dinitrotoluene	++++ 0.23024	0.23644 0.23459	0.24612 0.24549	0.24706 0.23743	AVRG	0.23962	2.74818				
45 Acenaphthylene	1.46006 1.31841	1.54997 1.24618	1.52248 1.47469	1.47326 1.35224	AVRG	1.42466	7.49350				
47 Acenaphthene	0.90755 0.79355	0.94025 0.74660	0.91212 0.91818	0.91102 0.82470	AVRG	0.86925	8.16286				
48 2,4-Dinitrophenol	++++ 118971	++++ 174001	9111 131018	34897 1.30074	49003 1.29655	108260 1.19680	0.99240				
49 Dibenzofuran	++++ 1.15712	1.32340 1.13474	1.31018 0.30127	1.29655 0.30966	1.29655 0.31038	1.24565 0.30754	6.41904				
50 2,4-Dinitrotoluene	++++ 0.29796	0.28018 0.31209	0.30127 1.11968	0.31038 1.08617	0.31038 1.09194	0.30273 1.00740	3.69515				
51 Diethylphthalate	++++ 0.98424	1.16895 0.94920	1.11968 0.94920	1.08617 1.09194	1.09194 1.05823	1.05823 7.51016	7.51016				

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
52 4-Nitrophenol	++++	11455	29901	88625	110435	221460	LINR	0.19761	0.17478		0.99653
	240094	327378									
53 Fluorene	1.01956	1.12349	1.11598	1.10997	1.09264	0.99450	AVRG		1.04116		7.67724
	0.95139	0.92174									
54 4-Chlorophenylphenylether	++++	0.57726	0.56339	0.56572	0.56801	0.53722	AVRG		0.54928		4.74595
	0.52679	0.50659									
55 2-Methyl-4,6-dinitrophenol	++++	8960	23735	71371	96456	187642	LINR	0.22809	0.08469		0.99612
	206560	301854									
56 p-Nitroaniline	++++	0.16847	0.16742	0.17651	0.16596	0.17409	AVRG		0.17126		4.49446
	0.16174	0.18462									
133 Diphenylamine	++++	0.51944	0.50385	0.49568	0.50499	0.46731	AVRG		0.48238		6.66350
	0.45496	0.43044									
58 1,2-Diphenylhydrazine	++++	0.65843	0.62647	0.58999	0.59560	0.52910	AVRG		0.56816		12.16358
	0.51828	0.45924									
59 Tributylphosphate	++++	1.33123	1.37263	1.32751	1.31958	1.17651	AVRG		1.23111		11.61546
	1.08616	1.00411									
61 4-Bromophenylphenylether	++++	0.18216	0.17949	0.18028	0.18925	0.17816	AVRG		0.17919		3.54165
	0.17694	0.16805									

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	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	100	120										
	Level 7	Level 8										
63 Hexachlorobenzene	++++	0.18532	0.18319	0.18186	0.19193	0.17927	AVRG			0.18156		3.59119
	0.17857	0.17077										
207 Atrazine	++++	0.04257	0.04481	0.03450	++++	0.02811	AVRG			0.03286		37.48021<-
	++++	0.01430										
65 Pentachlorophenol	++++	12502	32789	92647	123698	227147						
	257286	351684					LINR	0.16665	0.09910			0.99917
206 n-Octadecane	++++	0.55672	0.50875	0.44965	0.43860	0.32797	AVRG			0.40416		28.15304<-
	0.29739	0.25204										
68 Phenanthrene	0.79996	0.82472	0.81503	0.80738	0.81686	0.74752	AVRG			0.77989		6.19942
	0.73413	0.69357										
69 Anthracene	0.78018	0.84074	0.82103	0.81248	0.81975	0.75186	AVRG			0.78118		6.54890
	0.72181	0.70160										
72 Di-n-butylphthalate	++++	1.11680	1.08795	1.01747	1.04305	0.90172	AVRG			0.97635		12.28834
	0.86373	0.80374										
76 Fluoranthene	0.80532	0.89905	0.89508	0.90079	0.90093	0.84160	AVRG			0.85744		5.41563
	0.82230	0.79442										
77 Benzidine	++++	83198	119870	207819	++++	520802	AVRG					
	++++	866541					LINR	-0.08564	0.21048			0.99601

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1		or R ²
79 Pyrene	1.09138	1.11299	1.08525	1.04403	1.08722	0.95800	AVRG		1.01529		10.02337
	0.90131	0.84211									
85 Butybenzylphthalate	++++	0.51217	0.51851	0.48934	0.52646	0.46557	AVRG		0.48062		8.92500
	0.43784	0.41448									
89 Benzo(a)anthracene	0.86581	0.86539	0.86246	0.86601	0.88599	0.83710	AVRG		0.84934		3.51489
	0.80735	0.80459									
90 3,3'-Dichlorobenzidine	++++	0.24476	0.26954	0.27690	++++	0.28523	AVRG		0.27423		6.91638
	++++	0.29473									
92 Chrysene	0.77178	0.80074	0.80787	0.79632	0.79406	0.75492	AVRG		0.77209		4.33491
	0.73005	0.72102									
93 bis(2-Ethylhexyl)phthalate	0.68582	0.76341	0.74227	0.68452	0.72567	0.60529	AVRG		0.66338		12.84174
	0.56828	0.53176									
94 Di-n-octylphthalate	++++	1.36548	1.42558	1.30173	1.48420	1.22606	AVRG		1.28101		12.83294
	1.15335	1.01068									
95 Benzo(b)fluoranthene	0.77288	0.87976	0.88603	0.93843	0.96543	0.92099	AVRG		0.90766		7.00428
	0.92629	0.97146									
96 Benzo(k)fluoranthene	0.75065	0.87496	0.92431	0.89366	0.96051	0.94448	AVRG		0.89031		7.62815
	0.92874	0.84514									

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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	or R ²	%RSD
		Level 1		Level 2		Level 3		Level 4		Level 5		Level 6							
		100		120															
		Level 7		Level 8															
97 Benzo(a)pyrene		0.63026		0.73955		0.77044		0.80572		0.82038		0.81264		AVRG		0.77742			8.51619
		0.82021		0.82014															
99 Indeno(1,2,3-cd)pyrene		6709		118547		253229		660710		666010		1305476		LINR		0.07239		0.75852	0.99612
		1671233		2568684															
100 Dibenzo(a,h)anthracene		4635		91327		194564		535195		525747		1054759		LINR		0.09168		0.62368	0.99506
		1371364		2100643															
101 Benzo(ghi)perylene		0.40800		0.54447		0.56363		0.60189		0.57993		0.57168		AVRG		0.56118			11.93662
		0.58998		0.62982															
102 1,4-Dioxane		++++		0.37172		0.32777		0.36252		++++		0.35066							
		++++		0.33902									AVRG			0.35034			5.03211
103 Methyl methacrylate		++++		0.19672		0.18995		0.18679		++++		0.19013							
		++++		0.18739									AVRG			0.19020			2.07071
104 Ethyl methacrylate		++++		0.80069		0.83965		0.81396		++++		0.76218							
		++++		0.73669									AVRG			0.79064			5.20264
105 2-Picoline		++++		1.23223		1.27993		1.22822		++++		1.15580							
		++++		1.13035									AVRG			1.20530			5.06149
106 N-Nitrosomethylethylamine		++++		0.39536		0.42694		0.42388		++++		0.44282		AVRG		0.42573			4.41372
		++++		0.43962									AVRG						

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
107 Methyl methanesulfonate	++++	0.49715	0.53533	0.51057	++++	0.50167	AVRG				
	++++	0.48893							0.50673		3.51216
108 N-Nitrosodiethylamine	++++	0.40307	0.42436	0.41312	++++	0.43211	AVRG				
	++++	0.42588							0.41971		2.75306
109 Ethyl Methanesulfonate	++++	0.63621	0.67228	0.64354	++++	0.63135	AVRG				
	++++	0.62943							0.64256		2.72101
110 Pentachloroethane	++++	0.30893	0.33024	0.32096	++++	0.32066	AVRG				
	++++	0.31808							0.31977		2.38199
111 N-Nitrosopyrrolidine	++++	0.36827	0.38604	0.40197	++++	0.43245	AVRG				
	++++	0.43332							0.40441		7.07162
113 N-Nitrosomorpholine	++++	0.50792	0.52969	0.50302	++++	0.51744	AVRG				
	++++	0.51735							0.51508		1.99186
114 o-Toluidine	++++	1.54043	1.60475	1.57505	++++	1.50592	AVRG				
	++++	1.40050							1.52533		5.17958
115 N-Nitrosopiperidine	++++	0.12530	0.13153	0.13438	++++	0.13937	AVRG				
	++++	0.13683							0.13348		4.05949
116 a,a-Dimethylphenethylamine	++++	0.70337	0.72973	0.76978	++++	0.83930	AVRG				
	++++	0.84008							0.77645		8.03435

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 05-JAN-2010 08:21
 End Cal Date : 06-JAN-2010 14:25
 Quant Method : ISTD
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Cal Date : 21-Jan-2010 07:08 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
117 Triethylphosphorothioate	++++ 0.14822	0.14783 0.14442	0.14833	0.15416	0.15466	0.15300	AVRG		0.15009		2.57840
118 2,6-Dichlorophenol	++++ ++++	0.16885 0.21645	0.18504	0.19740	++++	0.21626	AVRG		0.19680		10.42803
119 Hexachloropropene	++++ ++++	0.09017 0.11927	0.09651	0.10501	++++	0.12112	AVRG		0.10641		12.82796
120 p-Phenylenediamine	++++ ++++	0.13074 0.10919	0.16464	0.18825	++++	0.20469	AVRG		0.15550		23.68041
121 N-Nitrosodi-n-butylamine	++++ ++++	0.19243 0.15952	0.17632	0.16321	++++	0.16759	AVRG		0.17181		7.63641
122 Saffrole	++++ ++++	0.18688 0.18724	0.19626	0.19376	++++	0.19566	AVRG		0.19196		2.37955
123 1,2,4,5-Tetrachlorobenzene	++++ ++++	0.46397 0.41002	0.48717	0.47238	++++	0.44819	AVRG		0.45635		6.46181
124 Isosafrole	++++ ++++	0.29986 0.32162	0.33224	0.32567	++++	0.32763	AVRG		0.32140		3.93184
125 1,4-Naphthoquinone	++++ ++++	0.26575 0.26408	0.32398	0.34122	++++	0.27203	AVRG		0.29341		12.40909

GEL Laboratories LLC

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 Integrator : HP RTE
 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Cal Date : 21-Jan-2010 07:08 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients ml	m2	%RSD or R^2
126 m-Dinitrobenzene	++++ 0.17893	0.14819 0.18795	0.17055	0.18066	0.18640	0.18415	AVRG		0.17669		7.82704
127 Pentachlorobenzene	++++ 0.40776 0.38828	0.42518	0.4534	++++	0.41377	AVRG		0.41007			3.33927
128 1-Naphthylamine	++++ 0.72762 0.74737	0.80933	0.81550	++++	0.81167	AVRG		0.78230			5.31122
129 2-Naphthylamine	++++ 0.77252 0.77937	0.87164	0.69214	++++	0.79156	AVRG		0.78145			8.16788
130 2,3,4,6-Tetrachlorophenol	++++ 391940 530995	25044 0.19905	58324 0.25857	45004 0.26185	193603 ++++	337306 0.28362	LINR	0.14696	0.27529		0.99866
131 5-Nitro-o-toluidine	++++ 0.28774	0.18311	0.18465	0.18591	0.17793	AVRG		0.25817			13.73638
132 Thionazin	++++ 0.17550 0.16600	0.08992 0.09027	0.09183	0.09271	0.09045	AVRG		0.18013			4.22399
134 Sulfotepp	0.08848 0.41116	0.08376	0.41593	0.38362	0.37361	AVRG		0.08963			3.26308
135 Phorate	0.33437	0.30216				AVRG		0.36788			11.14605

GEL Laboratories LLC

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 Integrator : HP RTE
 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Cal Date : 21-Jan-2010 07:08 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
136 1,3,5-Trinitrobenzene	++++	18770	38921	103148	++++	307888					
	++++	471608					LINR	0.7886	0.12488		0.99889
137 Phenacetin	++++	0.24074	0.26215	0.26052	++++	0.25551					
	++++	0.25736					AVRG		0.25526		3.33797
138 Dillate	++++	0.25201	0.26705	0.23091	++++	0.21053					
	++++	0.19522					AVRG		0.23114		12.68714
139 Dimethoate	++++	0.20542	0.22193	0.23232	0.23839	0.23725					
	0.23500	0.22633					AVRG		0.22809		5.09517
140 4-Aminobiphenyl	++++	0.55016	0.53689	0.49001	++++	0.44480					
	++++	0.35287					AVRG		0.47494		16.82194
141 Pentachloronitrobenzene	++++	0.06928	0.07542	0.07114	++++	0.07160					
	++++	0.06576					AVRG		0.07064		4.98923
142 Pronamide	++++	0.26956	0.29817	0.27159	++++	0.24798					
	++++	0.21779					AVRG		0.26102		11.50002
143 Dinoseb	++++	14609	40146	120125	161049	306980					
	335384	489176					LINR	0.21025	0.13673		0.99656
144 Disulfoton	++++	0.36292	0.35575	0.33128	0.32567	0.30301					
	0.28872	0.25949					AVRG		0.31812		11.60966

GEL Laboratories LLC
INITIAL CALIBRATION DATA

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 Integrator : HP RTE
 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Cal Date : 21-Jan-2010 07:08 rmb

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R ²
145 Methyl parathion	++++ 0.19217	0.15317 0.18798	0.17382	0.18634	0.19157	0.19081	AVRG		0.18227		7.83913
146 4-Nitroquinoline-1-oxide	++++	0.01377	0.01547	0.01720	++++	0.01430	AVRG		0.01407		20.03521
147 Methapyrilene	++++	0.42810	0.46356	0.43308	++++	0.39005	AVRG		0.41371		10.26920
148 Isodrin	++++	0.10607	0.11554	0.10602	++++	0.10283	AVRG		0.10578		5.94218
149 Aramite	++++	0.04599	0.05159	0.04997	++++	0.05024	AVRG		0.04931		4.27978
150 Kepone	++++	0.04875	0.07114	0.07924	++++	0.07407	AVRG		0.07429		4.16121
151 p-(Dimethylamino)azobenzene	++++	0.07460	0.29776	0.27961	++++	0.26269	AVRG		0.26901		8.14447
152 Chlorobenzilate	++++	0.26657	0.32445	0.29604	++++	0.30029	AVRG		0.29431		7.12128
153 3,3'-Dimethylbenzidine	++++	0.23843	0.49297	0.43601	++++	0.42786	AVRG		0.44919		8.08801

GEL Laboratories LLC

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 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Cal Date : 21-Jan-2010 07:08 rmb

Compound	1	10	20	40	50	80	Curve	b	ml	m2	%RSD or R ²
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
154 Pamphur	++++	0.28027	0.33003	0.36616	0.38738	0.39999	AVRG		0.36393		12.15202
	0.40118	0.38248									
155 2-Acetylaminofluorene	++++	47321	104628	272723	++++	766805	LINR	0.14476	0.33678		0.99964
	++++	1264833									
157 7,12Dimethylbenz (a) anthracene	++++	0.45159	0.50078	0.48460	++++	0.50061	AVRG		0.48401		4.14588
	++++	0.48249									
158 3-Methylchoianthrene	++++	0.28933	0.33549	0.34334	++++	0.35935	AVRG		0.33921		9.06881
	++++	0.36854									
26 Phthalic anhydride	++++	19875	30292	115319	152300	263982	LINR	0.10484	0.10306		0.99487
	305648	382974									
173 Carbazole	0.61815	0.68768	0.60315	0.57235	0.57097	0.58141	AVRG		0.59613		6.93124
	0.56756	0.56776									
174 Hexachlorophene	++++	465068	1369075	1819555	2342006	2903825	LINR	5.18418	0.06522		0.99568
	3216878	++++									
179 Dibenzo (a,e) pyrene	++++	38356	88310	260797	252606	504258	LINR	0.18048	0.32546		0.99092
	696659	1061562	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
185 (2,3-Dibromopropyl)phosphate	++++	++++	++++	++++	++++	++++					
	++++	++++									

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 Method file : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Cal Date : 21-Jan-2010 07:08 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients ml	m2	%RSD or R ²
184 p-Benzquinone	++++ 115792	8149 158015	17103	41083	57940	90861	LINR	0.18045	0.16674		0.99202
191 Parathion	++++ 0.07149	0.05369 0.07167	0.05960	0.06519	0.06892	0.07094	AVRG		0.06593		10.51462
192 Methoxychlor	++++ 0.48429	0.52319 0.50960	0.56885	0.56986	0.61174	0.54725	AVRG		0.54497		7.87874
210 m-Toluidine	++++ 1.27755	1.15590 1.23332	1.13090	1.29464	1.26551	1.28269	AVRG		1.23436		5.29864
211 p-Toluidine	++++ 0.93840	1.09425 0.97584	0.98043	0.93742	1.00216	0.93622	AVRG		0.98068		5.74088
212 Cis Diallate	++++ 0.24183	0.24426 0.24183	0.27644	0.24776	++++	0.24915	AVRG		0.25189		5.56655
213 Trans Diallate	++++ 0.18150	0.29648 0.22967	0.31418	0.27165	++++	0.24769	AVRG		0.27193		12.68714
214 1,4-Dinitrobenzene	++++ 0.73271	0.13082 0.18942	0.15430	0.17983	0.18780	0.18683	AVRG		0.17293		12.77281
215 2-Ethoxyethanol	++++ 0.67681	0.73271 0.67742	0.73985	0.72223	0.72166	0.67696	AVRG		0.70680		4.03319

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 Cal Date : 21-Jan-2010 07:08 rmb

Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
216 Methylenebis(2-chloroaniline)	++++	0.10869	0.11509	0.12522	0.12893	0.13198	AVRG				
	0.12253	0.13841						0.12441			8.11823
229 2,2'-Dichlorobenzil	++++	0.56000	0.61845	0.63669	0.66691	0.59979	AVRG				
	0.61630	0.57303						0.61017			5.99705
230 4-Chlorothioanisole	++++	0.21206	0.22785	0.24603	0.24332	0.24988	AVRG				
	0.24674	0.23343						0.23704			5.71316
231 4-Chlorothiophenol	++++	23256	88326	248426	273990	540018	LINE	0.22385	0.21267		0.99809
	678460	879205									
232 bis(p-Chlorophenyl)sulfone	++++	0.36234	0.37196	0.36548	0.38857	0.35230	AVRG				
	0.36302	0.34730						0.36442			3.69430
233 bis(p-Chlorophenyl)disulfide	++++	0.10805	0.12976	0.13321	0.14786	0.13206	AVRG				
	0.13938	0.13432						0.13209			9.22893
234 Diphenyl disulfide	++++	0.21433	0.22704	0.22300	0.22745	0.21175	AVRG				
	0.21225	0.20248						0.21690			4.26801
235 Diphenyl sulfide	++++	0.74037	0.76379	0.76558	0.77229	0.75018	AVRG				
	0.71262	0.66259						0.73820			5.27172
236 Phenyl sulfone	++++	0.41200	0.41885	0.40986	0.41164	0.39249	AVRG				
	0.39193	0.37639						0.40188			3.78222

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6						
	100	120										
	Level 7	Level 8										
237 Hydroxymethyl phthalimide	++++	0.13345	0.17049	0.18661	0.18982	0.17468	AVRG			0.16873		11.33483
	0.16944	0.15663										
238 Phthalic acid	++++	18191	61252	173609	220071	424683	LINR	0.21995		0.16003		0.99625
	518772	642794										
239 Thiophenol	++++	52552	173692	429443	479869	866255	LINR	0.10121		1.06558		0.99792
	1043710	1285423										
240 bis (Chloromethyl) ether	++++	0.96674	0.94397	0.91488	0.89081	0.87783	AVRG			0.89338		6.29984
	0.86320	0.79821										
241 Octachlorostyrene	++++	0.06487	0.06936	0.07086	0.07364	0.07192	AVRG			0.07008		4.42931
	0.07256	0.06738										
M 225 Trichlorophenols	++++	0.25736	0.28691	0.31109	0.31610	0.30147	AVRG			0.29433		6.55390
	0.29511	0.29228										
M 226 Tetrachlorophenols	++++	25044	58324	145004	193603	337306	LINR	0.14696		0.27529		0.99866
	391940	530995										
M 227 Benzo (b,k) fluoranthene	0.76177	0.87736	0.90517	0.91605	0.96297	0.93273	AVRG			0.89898		6.74801
	0.92751	0.90830										
M 228 TTO Sum Semivolatiles	++++	++++	++++	++++	++++	++++	AVRG			0.000e+00		0.000e+00
	++++	++++										

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Compound	1	10	20	40	50	80	Curve	b	Coefficients	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					
	100	120									
	Level 7	Level 8									
\$ 3 2-Fluorophenol	++++	1.00692	1.02984	1.02656	1.01245	0.95098	AVRG				
	0.95815	0.95110							0.99200		3.48640
\$ 5 Phenol-d5	++++	1.27448	1.25292	1.25402	1.25041	1.19615	AVRG				
	1.17157	1.16407							1.22338		3.67027
\$ 187 2-Chlorophenol-d4	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
	++++	++++									
\$ 188 1,2-Dichlorobenzene-d4	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00
	++++	++++									
\$ 20 Nitrobenzene-d5	++++	0.34857	0.33951	0.31944	0.31085	0.28554	AVRG				
	0.27013	0.27584							0.30713		10.07527
\$ 39 2-Fluorobiphenyl	++++	1.15449	1.14554	1.12686	1.10095	0.99756	AVRG				
	0.96910	0.91246							1.05814		9.15434
\$ 60 2,4,6-Tribromophenol	++++	0.09542	0.11122	0.12451	0.13951	0.13834	AVRG				
	0.14244	0.14450							0.12713		14.24614
\$ 81 p-Terphenyl-d14	++++	0.66125	0.66473	0.65020	0.68566	0.60826	AVRG				
	0.57181	0.55461							0.62807		8.01491

GEL Laboratories LLC
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Cal Date : 21-Jan-2010 07:08 rmb

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 12:29
Lab File ID: s5a0512.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 11:38
Lab Sample ID: WBN091223-17.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D	%DRIFT	MAX %D	%DRIFT	CURVE TYPE
3 2-Fluorophenol	0.99200	0.98589	0.98589	0.000	-0.61563	60.00000	Averaged		
5 Phenol-d5	1.22338	1.18606	1.18606	0.000	-3.05014	60.00000	Averaged		
20 Nitrobenzene-d5	0.30713	0.31357	0.31357	0.000	2.09916	60.00000	Averaged		
39 2-Fluorobiphenyl	1.05814	1.09204	1.09204	0.000	3.20353	60.00000	Averaged		
60 2,4,6-Tribromophenol	0.12713	0.12659	0.12659	0.000	-0.42919	60.00000	Averaged		
81 p-Terphenyl-d14	0.62807	0.66568	0.66568	0.000	5.98755	60.00000	Averaged		
1 N-Methyl-N-nitrosomethylami	0.59451	0.57144	0.57144	0.000	-3.88053	60.00000	Averaged		
2 Pyridine	0.81724	0.82683	0.82683	0.000	1.17338	60.00000	Averaged		
4 Aniline	0.50134	0.49946	0.49946	0.000	-0.37612	60.00000	Averaged		
6 Phenol	1.21864	1.18810	1.18810	0.001	-2.50588	20.00000	Averaged	ccc	
7 bis(2-Chloroethyl) ether	0.91396	0.87044	0.87044	0.000	-4.76166	60.00000	Averaged		
8 2-Chlorophenol	1.03330	1.00009	1.00009	0.000	-3.21470	60.00000	Averaged		
203 n-Decane	1.24052	1.22124	1.22124	0.000	-1.55428	60.00000	Averaged		
9 1,3-Dichlorobenzene	1.11826	1.10326	1.10326	0.000	-1.34119	60.00000	Averaged		
11 1,4-Dichlorobenzene	1.10956	1.08204	1.08204	0.001	-2.47984	20.00000	Averaged	ccc	
13 1,2-Dichlorobenzene	0.97955	1.00197	1.00197	0.000	2.28836	60.00000	Averaged		
14 bis(2-Chloroisopropyl)ether	1.79561	1.76251	1.76251	0.000	-1.84363	60.00000	Averaged		
12 Benzyl alcohol	0.68191	0.66486	0.66486	0.000	-2.49934	60.00000	Averaged		
15 o-Cresol	0.71791	0.71066	0.71066	0.000	-1.01011	60.00000	Averaged		
18 m,p-Cresols	1.02193	1.01713	1.01713	0.000	-0.46949	60.00000	Averaged		
17 N-Nitrosodipropylamine	0.60391	0.60439	0.60439	0.050	0.08018	60.00000	Averaged	spcc	
19 Hexachloroethane	0.45803	0.43899	0.43899	0.000	-4.15529	60.00000	Averaged		
21 Nitrobenzene	0.27592	0.28190	0.28190	0.000	2.16578	60.00000	Averaged		
22 Isophorone	0.52404	0.51130	0.51130	0.000	-2.43216	60.00000	Averaged		
23 2-Nitrophenol	0.13005	0.13188	0.13188	0.001	1.40654	20.00000	Averaged	ccc	
24 2,4-Dimethylphenol	0.26000	0.24103	0.24103	0.000	-7.29554	60.00000	Averaged		
25 bis(2-Chloroethoxy)methane	0.31106	0.30308	0.30308	0.000	-2.56510	60.00000	Averaged		
26 2,4-Dichlorophenol	0.20539	0.20573	0.20573	0.001	0.16229	20.00000	Averaged	ccc	
27 Benzoic acid	43.27553	40.00000	0.12598	0.000	8.18881	60.00000	Linear		
28 1,2,4-Trichlorobenzene	0.25371	0.24714	0.24714	0.000	-2.58845	60.00000	Averaged		
30 Naphthalene	0.78760	0.81978	0.81978	0.000	4.08512	60.00000	Averaged		
204 alpha-Terpineol	0.25524	0.22388	0.22388	0.000	-12.28424	60.00000	Averaged		
31 4-Chloroaniline	0.34454	0.36098	0.36098	0.000	4.77058	60.00000	Averaged		
32 Hexachlorobutadiene	0.15048	0.15123	0.15123	0.001	0.49613	20.00000	Averaged	ccc	
33 4-Chloro-3-methylphenol	0.20939	0.21475	0.21475	0.001	2.56300	20.00000	Averaged	ccc	
34 2-Methylnaphthalene	0.49435	0.56037	0.56037	0.000	13.35472	60.00000	Averaged		

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 12:29
Lab File ID: s5a0512.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 11:38
Lab Sample ID: WBN091223-17.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.48258	0.52529	0.52529	0.000	8.85001	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.23320	0.17370	0.17370	0.050	-25.51571	60.00000	Averaged spcc
205 2,3-Dichloroaniline	0.48598	0.48645	0.48645	0.000	0.09715	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27850	0.27975	0.27975	0.001	0.44696	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31016	0.32095	0.32095	0.000	3.47953	60.00000	Averaged
40 2-Chloronaphthalene	0.87386	0.86789	0.86789	0.000	-0.68294	60.00000	Averaged
42 o-Nitroaniline	0.28349	0.28429	0.28429	0.000	0.28213	60.00000	Averaged
41 m-Nitroaniline	0.21276	0.21557	0.21557	0.000	1.32095	60.00000	Averaged
43 Dimethylphthalate	1.02309	1.02836	1.02836	0.000	0.51489	60.00000	Averaged
44 2,6-Dinitrotoluene	0.23962	0.23431	0.23431	0.000	-2.21807	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30273	0.30891	0.30891	0.000	2.04140	60.00000	Averaged
45 Acenaphthylene	1.42466	1.56830	1.56830	0.000	10.08265	60.00000	Averaged
47 Acenaphthene	0.86925	0.94508	0.94508	0.001	8.72419	20.00000	Averaged ccc
48 2,4-Dinitrophenol	39.51219	40.00000	0.05593	0.050	-1.21952	60.00000	Linear spcc
49 Dibenzofuran	1.24565	1.23814	1.23814	0.000	-0.60256	60.00000	Averaged
51 Diethylphthalate	1.05822	1.08156	1.08156	0.000	2.20474	60.00000	Averaged
52 4-Nitrophenol	43.35716	40.00000	0.15491	0.050	8.39290	60.00000	Linear spcc
53 Fluorene	1.04116	1.16236	1.16236	0.000	11.64150	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54928	0.54913	0.54913	0.000	-0.02699	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	45.65666	40.00000	0.07735	0.000	14.14165	60.00000	Linear
56 p-Nitroaniline	0.17126	0.16889	0.16889	0.000	-1.38331	60.00000	Averaged
133 Diphenylamine	0.48238	0.47918	0.47918	0.001	-0.66262	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.56816	0.57277	0.57277	0.000	0.81103	60.00000	Averaged
61 4-Bromophenylphenylether	0.17919	0.17218	0.17218	0.000	-3.91443	60.00000	Averaged
63 Hexachlorobenzene	0.18156	0.17105	0.17105	0.000	-5.78874	60.00000	Averaged
65 Pentachlorophenol	39.90292	40.00000	0.08235	0.001	-0.24271	20.00000	Linear ccc
206 n-Octadecane	0.40416	0.42903	0.42903	0.000	6.15429	60.00000	Averaged
68 Phenanthrene	0.77989	0.83345	0.83345	0.000	6.86728	60.00000	Averaged
69 Anthracene	0.78118	0.85578	0.85578	0.000	9.54971	60.00000	Averaged
72 Di-n-butylphthalate	0.97635	1.01661	1.01661	0.000	4.12290	60.00000	Averaged
76 Fluoranthene	0.85744	0.95622	0.95622	0.001	11.52033	20.00000	Averaged ccc
79 Pyrene	1.01529	1.05256	1.05256	0.000	3.67140	60.00000	Averaged
85 Butylbenzylphthalate	0.48062	0.47847	0.47847	0.000	-0.44815	60.00000	Averaged
89 Benzo(a)anthracene	0.84934	0.90825	0.90825	0.000	6.93670	60.00000	Averaged
92 Chrysene	0.77209	0.83424	0.83424	0.000	8.04902	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.66338	0.66727	0.66727	0.000	0.58616	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 12:29
Lab File ID: s5a0512.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 11:38
Lab Sample ID: WBN091223-17.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	MAX %D / %DRIFT	CURVE TYPE
94 Di-n-octylphthalate	1.28101	1.25168	1.25168 0.001	-2.28947	20.00000	Averaged ccc
95 Benzo(b)fluoranthene	0.90766	0.96663	0.96663 0.000	6.49706	60.00000	Averaged
96 Benzo(k)fluoranthene	0.89031	0.96981	0.96981 0.000	8.93015	60.00000	Averaged
97 Benzo(a)pyrene	0.77742	0.85130	0.85130 0.001	9.50338	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	42.91361	40.00000	0.75886 0.000	7.28402	60.00000	Linear
100 Dibenzo(a,h)anthracene	42.66667	40.00000	0.60808 0.000	6.66667	60.00000	Linear
101 Benzo(ghi)perylene	0.56118	0.64923	0.64923 0.000	15.69111	60.00000	Averaged
126 m-Dinitrobenzene	0.17669	0.17548	0.17548 0.000	-0.68799	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	40.44488	40.00000	0.23789 0.000	1.11220	60.00000	Linear
143 Dinoseb	37.33467	40.00000	0.09887 0.000	-6.66333	60.00000	Linear
173 Carbazole	0.59613	0.57799	0.57799 0.000	-3.04242	60.00000	Averaged
184 p-Benzoquinone	48.18680	40.00000	0.17078 0.000	20.46699	60.00000	Linear
192 Methoxychlor	0.54497	0.52567	0.52567 0.000	-3.54198	60.00000	Averaged
211 p-Toluidine	0.98067	0.88367	0.88367 0.000	-9.89153	60.00000	Averaged
210 m-Toluidine	1.23436	1.36896	1.36896 0.000	10.90465	60.00000	Averaged
26 Phthalic anhydride	57.02859	40.00000	0.13613 0.000	42.57147	60.00000	Linear
179 Dibenzo(a,e)pyrene	31.90406	40.00000	0.20084 0.000	-20.23984	60.00000	Linear
214 1,4-Dinitrobenzene	0.17293	0.17647	0.17647 0.000	2.04965	60.00000	Averaged
215 2-Ethoxyethanol	0.70680	0.71987	0.71987 0.000	1.84835	60.00000	Averaged
216 Methylenebis(2-chloroanilin	0.12441	0.12854	0.12854 0.000	3.32115	60.00000	Averaged
M 225 Trichlorophenols	0.29433	0.30035	0.30035 0.000	2.04466	60.00000	Averaged
M 226 Tetrachlorophenols	40.44488	40.00000	0.23789 0.000	1.11220	60.00000	Linear
M 227 Benzo(b,k)fluoranthene	0.89898	0.96822	0.96822 0.000	7.70183	60.00000	Averaged

Data File: /chem/MSD5.i/s010510.b/s5a0512.d
 Report Date: 05-Jan-2010 12:49

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s010510.b/s5a0512.d
 Lab Smp Id: WBN091223-17.1 Client Smp ID: MEGAICV
 Inj Date : 05-JAN-2010 12:29
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |WBN091223-17.1|40 PPM|1|SVM|1|MEGAICV
 Misc Info : |MSD8270|WBN091208-01
 Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
 Method : /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m
 Meth Date : 05-Jan-2010 12:48 rmb Quant Type: ISTD
 Cal Date : 05-JAN-2010 11:38 Cal File: s5a0510.d
 Als bottle: 12 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: MEGAICARE.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt / (Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
=====	=====	==	=====	=====	=====		(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.993	3.993	(1.000)	368438		40.0000	
* 29 Naphthalene-d8	136	4.864	4.864	(1.000)	1375001		40.0000	
* 46 Acenaphthene-d10	164	6.121	6.121	(1.000)	740435		40.0000	
* 67 Phenanthrene-d10	188	7.296	7.296	(1.000)	1348058		40.0000	
* 91 Chrysene-d12	240	9.718	9.718	(1.000)	1268614		40.0000	
* 98 Perylene-d12	264	11.442	11.442	(1.000)	1092324		40.0000	
\$ 3 2-Fluorophenol	112	3.165	3.165	(0.793)	363240		40.0000	39.8
\$ 5 Phenol-d5	99	3.699	3.699	(0.926)	436990		40.0000	38.8
\$ 20 Nitrobenzene-d5	82	4.354	4.354	(0.895)	431164		40.0000	40.8
\$ 39 2-Fluorobiphenyl	172	5.601	5.601	(0.915)	808582		40.0000	41.3
\$ 60 2,4,6-Tribromophenol	329	6.718	6.718	(1.098)	93731		40.0000	39.8
\$ 81 p-Terphenyl-d14	244	8.678	8.678	(0.893)	844492		40.0000	42.4
1 N-Methyl-N-nitrosomethylamine	74	2.462	2.462	(0.616)	210540		40.0000	38.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====	=====
2 Pyridine	79	2.495	2.495	(0.625)	304636	40.0000	40.5
4 Aniline	66	3.776	3.776	(0.946)	184019	40.0000	39.8
6 Phenol	94	3.709	3.709	(0.929)	437742	40.0000	39.0(Q)
7 bis(2-Chloroethyl) ether	63	3.791	3.791	(0.949)	320703	40.0000	38.1
8 2-Chlorophenol	128	3.853	3.853	(0.965)	368470	40.0000	38.7
203 n-Decane	43	3.839	3.839	(0.961)	449952	40.0000	39.4
9 1,3-Dichlorobenzene	146	3.959	3.959	(0.992)	406483	40.0000	39.5
11 1,4-Dichlorobenzene	146	4.003	4.003	(1.002)	398665	40.0000	39.0
13 1,2-Dichlorobenzene	146	4.108	4.108	(1.029)	369162	40.0000	40.9
14 bis(2-Chloroisopropyl) ether	45	4.133	4.133	(1.035)	649375	40.0000	39.3
12 Benzyl alcohol	108	4.056	4.056	(1.016)	244961	40.0000	39.0
15 o-Cresol	107	4.104	4.104	(1.028)	261835	40.0000	39.6
18 m,p-Cresols	107	4.205	4.205	(1.053)	374750	40.0000	39.8
17 N-Nitrosodipropylamine	70	4.229	4.229	(1.059)	222682	40.0000	40.0
19 Hexachloroethane	117	4.340	4.340	(1.087)	161742	40.0000	38.3
21 Nitrobenzene	77	4.369	4.369	(0.898)	387614	40.0000	40.9
22 Isophorone	82	4.523	4.523	(0.930)	703036	40.0000	39.0
23 2-Nitrophenol	139	4.585	4.585	(0.943)	181331	40.0000	40.6
24 2,4-Dimethylphenol	122	4.571	4.571	(0.940)	331416	40.0000	37.1
25 bis(2-Chloroethoxy)methane	93	4.643	4.643	(0.954)	416731	40.0000	39.0
26 2,4-Dichlorophenol	162	4.744	4.744	(0.975)	282875	40.0000	40.1
27 Benzoic acid	105	4.624	4.624	(0.950)	173217	40.0000	43.3
28 1,2,4-Trichlorobenzene	180	4.812	4.812	(0.989)	339823	40.0000	39.0
30 Naphthalene	128	4.879	4.879	(1.003)	1127193	40.0000	41.6(Q)
204 alpha-Terpineol	59	4.850	4.850	(0.997)	307842	40.0000	35.1
31 4-Chloroaniline	127	4.889	4.889	(1.005)	496347	40.0000	41.9
32 Hexachlorobutadiene	225	4.942	4.942	(1.016)	207943	40.0000	40.2
33 4-Chloro-3-methylphenol	107	5.197	5.197	(1.068)	295284	40.0000	41.0
34 2-Methylnaphthalene	142	5.360	5.360	(1.102)	770505	40.0000	45.3
35 1-Methylnaphthalene	142	5.433	5.433	(1.117)	722270	40.0000	43.5
36 Hexachlorocyclopentadiene	237	5.462	5.462	(0.892)	128611	40.0000	29.8
205 2,3-Dichloroaniline	161	5.553	5.553	(0.907)	360183	40.0000	40.0
37 2,4,6-Trichlorophenol	196	5.543	5.543	(0.906)	207134	40.0000	40.2
38 2,4,5-Trichlorophenol	196	5.572	5.572	(0.910)	237644	40.0000	41.4
40 2-Chloronaphthalene	162	5.712	5.712	(0.933)	642618	40.0000	39.7
42 o-Nitroaniline	65	5.765	5.765	(0.942)	210498	40.0000	40.1
41 m-Nitroaniline	138	6.064	6.064	(0.991)	159614	40.0000	40.5
43 Dimethylphthalate	163	5.876	5.876	(0.960)	761434	40.0000	40.2
44 2,6-Dinitrotoluene	165	5.929	5.929	(0.969)	173490	40.0000	39.1
50 2,4-Dinitrotoluene	165	6.227	6.227	(1.017)	228725	40.0000	40.8
45 Acenaphthylene	152	6.020	6.020	(0.983)	1161227	40.0000	44.0
47 Acenaphthene	154	6.145	6.145	(1.004)	699772	40.0000	43.5
48 2,4-Dinitrophenol	184	6.136	6.136	(1.002)	41412	40.0000	39.5
49 Dibenzofuran	168	6.271	6.271	(1.024)	916763	40.0000	39.8
51 Diethylphthalate	149	6.386	6.386	(1.043)	800822	40.0000	40.9
52 4-Nitrophenol	139	6.145	6.145	(1.004)	114703	40.0000	43.4
53 Fluorene	166	6.535	6.535	(1.068)	860655	40.0000	44.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng/ul)	ON-COL (ng/ul)
54 4-Chlorophenylphenylether	204	6.507	6.507	(1.063)	406598	40.0000	40.0
55 2-Methyl-4,6-dinitrophenol	198	6.545	6.545	(0.897)	104269	40.0000	45.6
56 p-Nitroaniline	138	6.526	6.526	(1.066)	125051	40.0000	39.4
133 Diphenylamine	169	6.593	6.593	(0.904)	645968	40.0000	39.7
58 1,2-Diphenylhydrazine	77	6.632	6.632	(0.909)	772122	40.0000	40.3
61 4-Bromophenylphenylether	248	6.897	6.897	(0.945)	232104	40.0000	38.4
63 Hexachlorobenzene	284	6.969	6.969	(0.955)	230585	40.0000	37.7
65 Pentachlorophenol	266	7.118	7.118	(0.976)	111007	40.0000	39.9
206 n-Octadecane	57	7.104	7.104	(0.974)	578361	40.0000	42.5
68 Phenanthrene	178	7.315	7.315	(1.003)	1123542	40.0000	42.7
69 Anthracene	178	7.359	7.359	(1.009)	1153642	40.0000	43.8
72 Di-n-butylphthalate	149	7.715	7.715	(1.057)	1370444	40.0000	41.6
76 Fluoranthene	202	8.360	8.360	(1.146)	1289035	40.0000	44.6
79 Pyrene	202	8.577	8.577	(0.883)	1335296	40.0000	41.5
85 Butylbenzylphthalate	149	9.107	9.107	(0.937)	606994	40.0000	39.8
89 Benzo(a)anthracene	228	9.704	9.704	(0.998)	1152223	40.0000	42.8
92 Chrysene	228	9.742	9.742	(1.002)	1058329	40.0000	43.2
93 bis(2-Ethylhexyl)phthalate	149	9.632	9.632	(0.991)	846502	40.0000	40.2
94 Di-n-octylphthalate	149	10.301	10.301	(0.900)	1367243	40.0000	39.1
95 Benzo(b)fluoranthene	252	10.908	10.908	(0.953)	1055873	40.0000	42.6 (H)
96 Benzo(k)fluoranthene	252	10.941	10.941	(0.956)	1059350	40.0000	43.6
97 Benzo(a)pyrene	252	11.360	11.360	(0.993)	929893	40.0000	43.8
99 Indeno(1,2,3-cd)pyrene	276	13.267	13.267	(1.159)	828920	40.0000	42.9
100 Dibenzo(a,h)anthracene	278	13.282	13.282	(1.161)	664220	40.0000	42.7
101 Benzo(ghi)perylene	276	13.831	13.831	(1.209)	709170	40.0000	46.3
126 m-Dinitrobenzene	168	5.914	5.914	(0.966)	129928	40.0000	39.7
130 2,3,4,6-Tetrachlorophenol	232	6.348	6.348	(1.037)	176142	40.0000	40.4 (H)
143 Dinoseb	211	7.238	7.238	(0.992)	133289	40.0000	37.3
173 Carbazole	167	7.474	7.474	(1.024)	779167	40.0000	38.8
184 p-Benzoquinone	54	3.473	3.473	(0.870)	62922	40.0000	48.2
192 Methoxychlor	227	9.579	9.579	(0.986)	666868	40.0000	38.6
211 p-Toluidine	106	4.267	4.267	(1.069)	325578	40.0000	36.0
210 m-Toluidine	106	4.291	4.291	(1.075)	504378	40.0000	44.4
26 Phthalic anhydride	104	5.389	5.389	(1.108)	187183	40.0000	57.0
179 Dibenzo(a,e)pyrene	302	18.097	18.097	(1.582)	219387	40.0000	31.9 (H)
214 1,4-Dinitrobenzene	75	5.856	5.856	(0.957)	130668	40.0000	40.8
215 2-Ethoxyethanol	59	2.303	2.303	(0.577)	265227	40.0000	40.7
216 Methylenebis(2-chloroaniline)	231	9.641	9.641	(0.992)	163064	40.0000	41.3 (Q)
M 225 Trichlorophenols	196				444778	80.0000	81.6
M 226 Tetrachlorophenols	232				176142	40.0000	40.4
M 227 Benzo(b,k)fluoranthene	252				2115223	80.0000	86.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

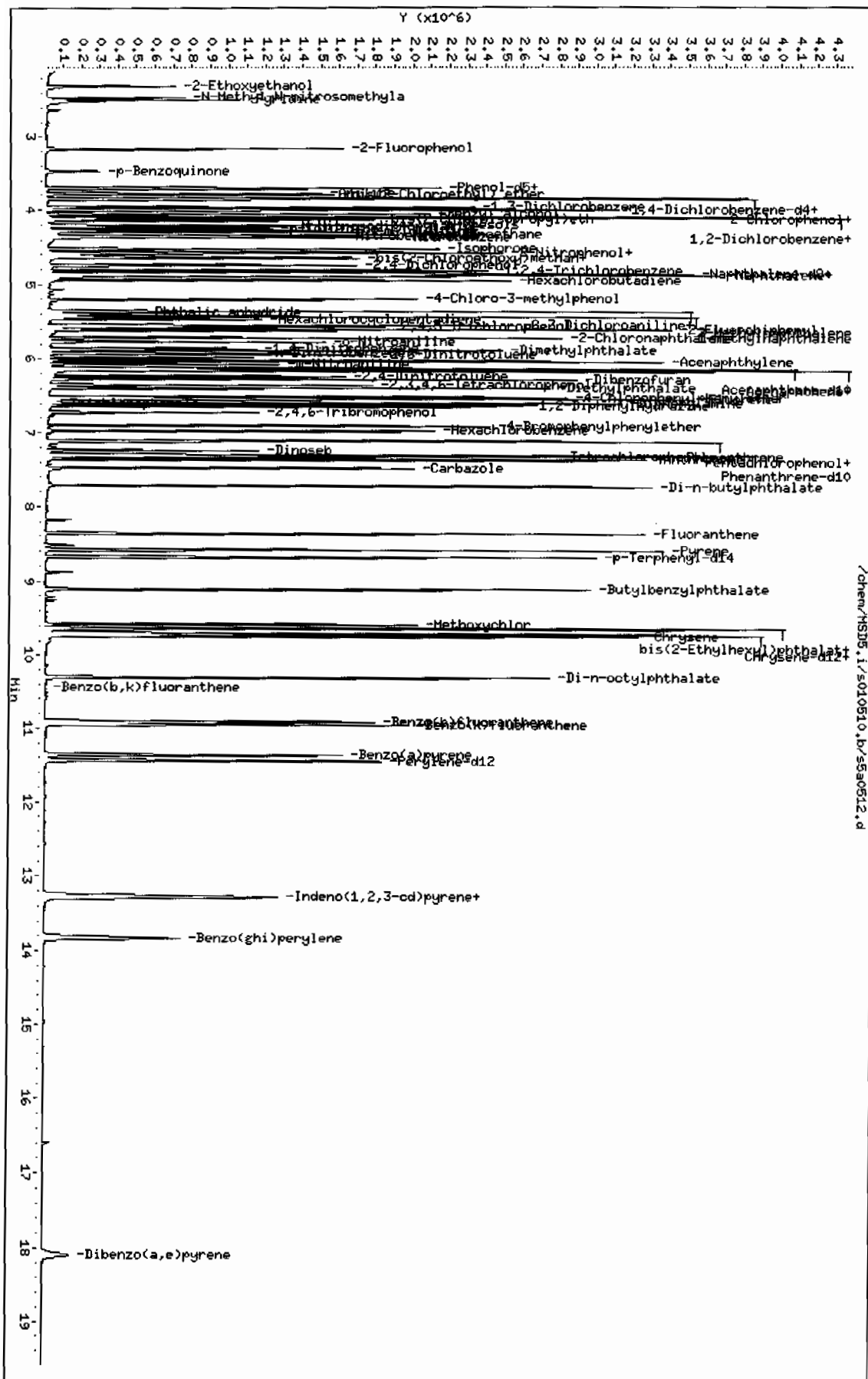
Page 1

Client ID: MECAICW

Instrument: MSD5.1

Column phase: J&W DB-5MS

Operator: RMB



Data File: /chem/MSD5.i/s010510.b/s5a0526.d
Report Date: 06-Jan-2010 08:08

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GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 17:55
Lab File ID: s5a0526.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 17:32
Lab Sample ID: WBN100103-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86728	0.75212	0.75212	0.010	-13.27728	60.00000	Averaged
16 Acetophenone	1.12258	1.11638	1.11638	0.010	-0.55224	60.00000	Averaged
189 Caprolactam	43.68381	40.00000	0.09432	0.010	9.20953	60.00000	Linear
208 1,1'-Biphenyl	1.13030	1.21150	1.21150	0.010	7.18402	60.00000	Averaged
207 Atrazine	0.03286	0.04079	0.04079	0.010	24.14841	60.00000	Averaged
77 Benzidine	41.85292	40.00000	0.23826	0.010	4.63229	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.27423	0.26897	0.26897	0.010	-1.91801	60.00000	Averaged
102 1,4-Dioxane	0.35034	0.41126	0.41126	0.010	17.38790	60.00000	Averaged
103 Methyl methacrylate	0.19020	0.23703	0.23703	0.010	24.62514	60.00000	Averaged
104 Ethyl methacrylate	0.79064	0.95373	0.95373	0.010	20.62765	60.00000	Averaged
105 2-Picoline	1.20530	1.15374	1.15374	0.010	-4.27823	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.42573	0.43567	0.43567	0.010	2.33571	60.00000	Averaged
107 Methyl methanesulfonate	0.50673	0.55961	0.55961	0.010	10.43462	60.00000	Averaged
108 N-Nitrosodiethylamine	0.41971	0.42676	0.42676	0.010	1.67940	60.00000	Averaged
109 Ethyl Methanesulfonate	0.64256	0.80489	0.80489	0.010	25.26191	60.00000	Averaged
110 Pentachloroethane	0.31977	0.43517	0.43517	0.010	36.08674	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.40441	0.41200	0.41200	0.010	1.87564	60.00000	Averaged
113 N-Nitrosomorpholine	0.51508	0.55362	0.55362	0.010	7.48212	60.00000	Averaged
114 o-Toluidine	1.52533	1.52910	1.52910	0.010	0.24740	60.00000	Averaged
115 N-Nitrosopiperidine	0.13348	0.13472	0.13472	0.010	0.92414	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.77645	0.84685	0.84685	0.010	9.06604	60.00000	Averaged
118 2,6-Dichlorophenol	0.19680	0.21685	0.21685	0.010	10.18785	60.00000	Averaged
119 Hexachloropropene	0.10641	0.17502	0.17502	0.010	64.46898	60.00000	Averaged
120 p-Phenylenediamine	0.15550	0.18572	0.18572	0.010	19.43068	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17181	0.18680	0.18680	0.010	8.72325	60.00000	Averaged
122 Safrole	0.19196	0.22555	0.22555	0.010	17.49521	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.45635	0.49639	0.49639	0.010	8.77408	60.00000	Averaged
124 Isosafrole	0.32140	0.43916	0.43916	0.010	36.63815	60.00000	Averaged
125 1,4-Naphthoquinone	0.29341	0.34417	0.34417	0.010	17.30012	60.00000	Averaged
127 Pentachlorobenzene	0.41007	0.42925	0.42925	0.010	4.67798	60.00000	Averaged
128 1-Naphthylamine	0.78230	0.83484	0.83484	0.010	6.71678	60.00000	Averaged
129 2-Naphthylamine	0.78145	0.87149	0.87149	0.010	11.52225	60.00000	Averaged
131 5-Nitro-o-toluidine	0.25817	0.26779	0.26779	0.010	3.72690	60.00000	Averaged
136 1,3,5-Trinitrobenzene	56.36703	40.00000	0.15365	0.010	40.91758	60.00000	Linear
137 Phenacetin	0.25526	0.27157	0.27157	0.010	6.38969	60.00000	Averaged
138 Diallate	0.23114	0.22075	0.22075	0.010	-4.49521	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 05-JAN-2010 17:55
Lab File ID: s5a0526.d Init. Cal. Date(s): 05-JAN-2010 05-JAN-2010
Analysis Type: WATER Init. Cal. Times: 08:21 17:32
Lab Sample ID: WBN100103-08.1 Quant Type: ISTD
Method: /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.25189	0.31917	0.31917	0.010	26.71116	60.00000	Averaged
213 Trans Diallate	0.27193	0.25971	0.25971	0.010	-4.49521	60.00000	Averaged
140 4-Aminobiphenyl	0.47494	0.48744	0.48744	0.010	2.63182	60.00000	Averaged
141 Pentachloronitrobenzene	0.07064	0.07555	0.07555	0.010	6.94925	60.00000	Averaged
142 Pronamide	0.26102	0.28974	0.28974	0.010	11.00218	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01407	0.01534	0.01534	0.010	9.02233	60.00000	Averaged
147 Methapyrilene	0.41371	0.43493	0.43493	0.010	5.12861	60.00000	Averaged
148 Isodrin	0.10578	0.09832	0.09832	0.010	-7.05419	60.00000	Averaged
149 Aramite	0.04931	0.04543	0.04543	0.010	-7.85515	60.00000	Averaged
150 Kepone	0.07429	0.07616	0.07616	0.010	2.52491	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.26901	0.26943	0.26943	0.010	0.15689	60.00000	Averaged
152 Chlorobenzilate	0.29431	0.30452	0.30452	0.010	3.46835	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.44919	0.40066	0.40066	0.010	-10.80342	60.00000	Averaged
155 2-Acetylaminofluorene	39.87515	40.00000	0.28698	0.010	-0.31212	60.00000	Linear
157 7,12Dimethylbenz(a)anthracene	0.48401	0.45352	0.45352	0.010	-6.30070	60.00000	Averaged
158 3-Methylcholanthrene	0.33921	0.34785	0.34785	0.010	2.54688	60.00000	Averaged

Data File: /chem/MSD5.i/s010510.b/s5a0526.d
Report Date: 06-Jan-2010 08:08

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Data file : /chem/MSD5.i/s010510.b/s5a0526.d
Lab Smp Id: WBN100103-08.1 Client Smp ID: AP12ICV
Inj Date : 05-JAN-2010 17:55
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN100103-08.1|40 PPM|1|SVM|1|AP12ICV
Misc Info : |MSD8270|WBN091208-01
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s010510.b/MSD5-M8270C-010510.m
Meth Date : 06-Jan-2010 08:08 rmb Quant Type: ISTD
Cal Date : 05-JAN-2010 16:24 Cal File: s5a0522.d
Als bottle: 26 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT S1G				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)
=====	=====	=====	=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	152	3.990	3.990	(1.000)	397349	40.0000
* 29 Naphthalene-d8	136	4.854	4.854	(1.000)	1386419	40.0000
* 46 Acenaphthene-d10	164	6.113	6.113	(1.000)	804456	40.0000
* 67 Phenanthrene-d10	188	7.290	7.290	(1.000)	1465645	40.0000
* 91 Chrysene-d12	240	9.707	9.707	(1.000)	1331973	40.0000
* 98 Perylene-d12	264	11.431	11.431	(1.000)	1039315	40.0000
209 Benzaldehyde	77	3.708	3.708	(0.929)	298856	40.0000 34.7
16 Acetophenone	105	4.237	4.237	(1.062)	443592	40.0000 39.8
189 Caprolactam	113	5.125	5.125	(1.056)	130769	40.0000 43.7
208 1,1'-Biphenyl	154	5.678	5.678	(0.929)	974602	40.0000 42.9
207 Atrazine	173	6.984	6.984	(0.958)	59788	40.0000 49.6
77 Benzidine	184	8.442	8.442	(0.870)	317353	40.0000 41.8
90 3,3'-Dichlorobenzidine	252	9.637	9.637	(0.993)	358262	40.0000 39.2

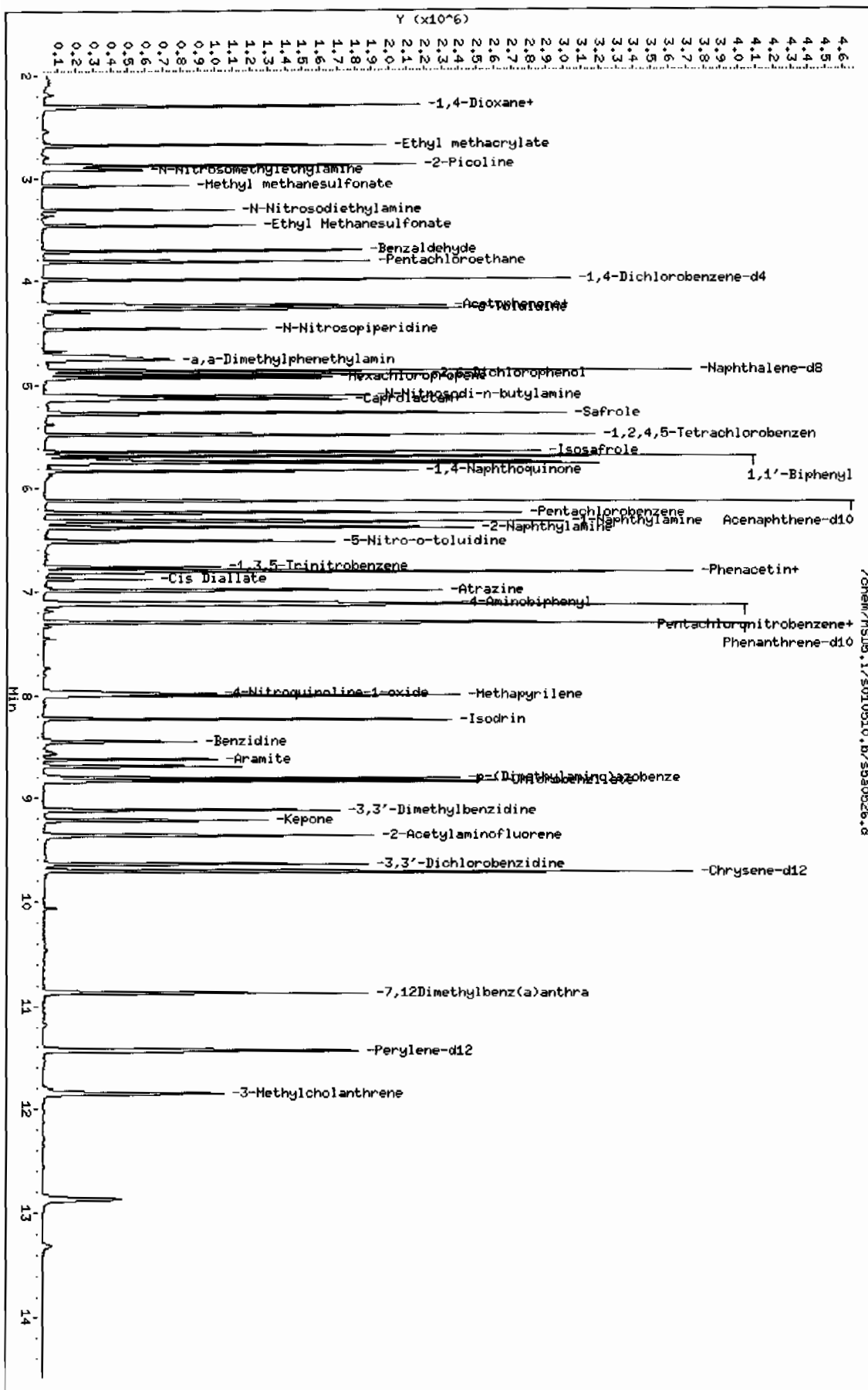
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
102 1,4-Dioxane	88	2.302	2.302	(0.577)	163412	40.0000	47.0
103 Methyl methacrylate	100	2.296	2.296	(0.575)	94184	40.0000	49.8
104 Ethyl methacrylate	69	2.678	2.678	(0.671)	378962	40.0000	48.2
105 2-Picoline	93	2.872	2.872	(0.720)	458437	40.0000	38.3
106 N-Nitrosomethylethylamine	88	2.919	2.919	(0.732)	173113	40.0000	40.9
107 Methyl methanesulfonate	80	3.072	3.072	(0.770)	222359	40.0000	44.2
108 N-Nitrosodiethylamine	102	3.313	3.313	(0.830)	169572	40.0000	40.7
109 Ethyl Methanesulfonate	79	3.466	3.466	(0.869)	319821	40.0000	50.1
110 Pentachloroethane	167	3.813	3.813	(0.956)	172914	40.0000	54.4
111 N-Nitrosopyrrolidine	100	4.225	4.225	(1.059)	163707	40.0000	40.8 (Q)
113 N-Nitrosomorpholine	56	4.243	4.243	(1.063)	219982	40.0000	43.0
114 o-Toluidine	106	4.266	4.266	(1.069)	607588	40.0000	40.1
115 N-Nitrosopiperidine	114	4.466	4.466	(0.920)	186776	40.0000	40.4
116 a,a-Dimethylphenethylamine	58	4.754	4.754	(0.979)	1174082	40.0000	43.6 (H)
118 2,6-Dichlorophenol	162	4.896	4.896	(1.008)	300644	40.0000	44.1
119 Hexachloropropene	213	4.931	4.931	(1.016)	242646	40.0000	65.8
120 p-Phenylenediamine	108	5.131	5.131	(1.057)	257481	40.0000	47.8
121 N-Nitrosodi-n-butylamine	84	5.096	5.096	(1.050)	258982	40.0000	43.5 (Q)
122 Safrole	162	5.266	5.266	(1.085)	312703	40.0000	47.0
123 1,2,4,5-Tetrachlorobenzene	216	5.472	5.472	(0.895)	399320	40.0000	43.5
124 Isosafrole	162	5.637	5.637	(0.922)	353286	40.0000	54.6
125 1,4-Naphthoquinone	158	5.825	5.825	(0.953)	276873	40.0000	46.9
127 Pentachlorobenzene	250	6.231	6.231	(1.019)	345311	40.0000	41.9
128 1-Naphthylamine	143	6.319	6.319	(1.034)	671596	40.0000	42.7
129 2-Naphthylamine	143	6.378	6.378	(1.043)	701073	40.0000	44.6
131 5-Nitro-o-toluidine	152	6.513	6.513	(1.065)	215424	40.0000	41.5
136 1,3,5-Trinitrobenzene	75	6.760	6.760	(0.927)	225192	40.0000	56.4
137 Phenacetin	108	6.807	6.807	(0.934)	398022	40.0000	42.6 (Q)
138 Diallate	86	6.801	6.801	(0.933)	323547	40.0000	38.2
212 Cis Diallate	86	6.878	6.878	(0.944)	70169	6.00000	7.6 (a)
213 Trans Diallate	86	6.801	6.801	(0.933)	323547	34.0000	32.5
140 4-Aminobiphenyl	169	7.101	7.101	(0.974)	714418	40.0000	41.0
141 Pentachloronitrobenzene	237	7.125	7.125	(0.977)	110730	40.0000	42.8 (Q)
142 Pronamide	173	7.119	7.119	(0.977)	424651	40.0000	44.4
146 4-Nitroquinoline-1-oxide	101	7.960	7.960	(1.092)	22482	40.0000	43.6
147 Methapyrilene	58	7.995	7.995	(1.097)	637453	40.0000	42.0
148 Isodrin	193	8.225	8.225	(1.128)	144096	40.0000	37.2
149 Aramite	185	8.619	8.619	(1.182)	66591	40.0000	36.8
150 Kepone	272	9.213	9.213	(1.264)	111627	40.0000	41.0
151 p-(Dimethylamino)azobenzene	120	8.795	8.795	(0.906)	358877	40.0000	40.1
152 Chlorobenzilate	251	8.831	8.831	(0.910)	405612	40.0000	41.4
153 3,3'-Dimethylbenzidine	212	9.113	9.113	(0.939)	533673	40.0000	35.7
155 2-Acetylaminofluorene	181	9.360	9.360	(0.964)	382249	40.0000	39.9
157 7,12Dimethylbenz(a)anthracene	256	10.872	10.872	(0.951)	471347	40.0000	37.5
158 3-Methylcholanthrene	268	11.848	11.848	(1.037)	361523	40.0000	41.0 (Q)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- H - Operator selected an alternate compound hit.

Data File: /chem/HSD5.i/s010510.b/s5a0526.d
 Date: 05-JAN-2010 17:55
 Client ID: AP121CV
 Sample Info: MBN100103-09.1140 PPH11(SW)11AP121CV
 Volume Injected (uL): 0.5
 Column phase: 3M DB-SHS

Instrument: HSD5.i
 Operator: RMB
 Column diameter: 0.20



Data File: /chem/MSD5.i/s012010.b/s5a2004.d
Report Date: 21-Jan-2010 07:08

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 20-JAN-2010 18:15
Lab File ID: s5a2004.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD
Method: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
3 2-Fluorophenol	0.99200	0.99962	0.99962	10.000	0.76827	60.00000	Averaged
5 Phenol-d5	1.22338	1.23161	1.23161	10.000	0.67280	60.00000	Averaged
20 Nitrobenzene-d5	0.30713	0.32232	0.32232	10.000	4.94773	60.00000	Averaged
39 2-Fluorobiphenyl	1.05814	1.04388	1.04388	10.000	-1.34725	60.00000	Averaged
60 2,4,6-Tribromophenol	0.12713	0.12175	0.12175	10.000	-4.23870	60.00000	Averaged
81 p-Terphenyl-d14	0.62807	0.63460	0.63460	10.000	1.03956	60.00000	Averaged
1 N-Methyl-N-nitrosomethylami	0.59451	0.60306	0.60306	10.000	1.43840	60.00000	Averaged
2 Pyridine	0.81724	0.65104	0.65104	10.000	-20.33710	60.00000	Averaged
4 Aniline	0.50134	0.49482	0.49482	10.000	-1.30042	60.00000	Averaged
6 Phenol	1.21864	1.27239	1.27239	10.001	4.41105	20.00000	Averaged
7 bis(2-Chloroethyl) ether	0.91396	0.93821	0.93821	10.000	2.65354	60.00000	Averaged
8 2-Chlorophenol	1.03330	1.05489	1.05489	10.000	2.08920	60.00000	Averaged
203 n-Decane	1.23959	1.38312	1.38312	10.000	11.57889	60.00000	Averaged
9 1,3-Dichlorobenzene	1.11826	1.14052	1.14052	10.000	1.99035	60.00000	Averaged
11 1,4-Dichlorobenzene	1.10956	1.13543	1.13543	10.001	2.33165	20.00000	Averaged
13 1,2-Dichlorobenzene	0.97955	1.05184	1.05184	10.000	7.38006	60.00000	Averaged
14 bis(2-Chloroisopropyl)ether	1.79561	1.87370	1.87370	10.000	4.34883	60.00000	Averaged
12 Benzyl alcohol	0.68191	0.67667	0.67667	10.000	-0.76810	60.00000	Averaged
15 o-Cresol	0.71791	0.78776	0.78776	10.000	9.72836	60.00000	Averaged
18 m,p-Cresols	1.02193	1.03673	1.03673	10.000	1.44789	60.00000	Averaged
17 N-Nitrosodipropylamine	0.60391	0.59822	0.59822	10.050	-0.94291	60.00000	Averaged
19 Hexachloroethane	0.45803	0.47618	0.47618	10.000	3.96338	60.00000	Averaged
21 Nitrobenzene	0.27592	0.29112	0.29112	10.000	5.50719	60.00000	Averaged
22 Isophorone	0.52404	0.52390	0.52390	10.000	-0.02829	60.00000	Averaged
23 2-Nitrophenol	0.13005	0.13196	0.13196	10.001	1.47013	20.00000	Averaged
24 2,4-Dimethylphenol	0.26000	0.25304	0.25304	10.000	-2.67741	60.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.31106	0.31566	0.31566	10.000	1.48068	60.00000	Averaged
26 2,4-Dichlorophenol	0.20539	0.21425	0.21425	10.001	4.31120	20.00000	Averaged
27 Benzoic acid	48.24210	40.00000	0.14706	10.000	20.60524	60.00000	Linear
28 1,2,4-Trichlorobenzene	0.25371	0.25445	0.25445	10.000	0.29289	60.00000	Averaged
30 Naphthalene	0.78760	0.76698	0.76698	10.000	-2.61790	60.00000	Averaged
204 alpha-Terpineol	0.25524	0.23715	0.23715	10.000	-7.08743	60.00000	Averaged
31 4-Chloroaniline	0.34454	0.33764	0.33764	10.000	-2.00355	60.00000	Averaged
32 Hexachlorobutadiene	0.15048	0.14985	0.14985	10.001	-0.42350	20.00000	Averaged
33 4-Chloro-3-methylphenol	0.20939	0.22513	0.22513	10.001	7.51865	20.00000	Averaged
34 2-Methylnaphthalene	0.49435	0.49348	0.49348	10.000	-0.17642	60.00000	Averaged

GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 20-JAN-2010 18:15
Lab File ID: s5a2004.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD
Method: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.48258	0.48678	0.48678	0.000	0.87146	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.23320	0.19950	0.19950	0.050	-14.44965	60.00000	Averaged
205 2,3-Dichloroaniline	0.48598	0.47445	0.47445	0.000	-2.37069	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.27850	0.30560	0.30560	0.001	9.72998	20.00000	Averaged
38 2,4,5-Trichlorophenol	0.31016	0.30810	0.30810	0.000	-0.66441	60.00000	Averaged
40 2-Chloronaphthalene	0.87386	0.88605	0.88605	0.000	1.39518	60.00000	Averaged
42 o-Nitroaniline	0.28349	0.29771	0.29771	0.000	5.01457	60.00000	Averaged
41 m-Nitroaniline	0.21276	0.17329	0.17329	0.000	-18.55205	60.00000	Averaged
43 Dimethylphthalate	1.02309	1.00962	1.00962	0.000	-1.31681	60.00000	Averaged
44 2,6-Dinitrotoluene	0.23962	0.23592	0.23592	0.000	-1.54479	60.00000	Averaged
50 2,4-Dinitrotoluene	0.30273	0.29037	0.29037	0.000	-4.08075	60.00000	Averaged
45 Acenaphthylene	1.42466	1.37839	1.37839	0.000	-3.24753	60.00000	Averaged
47 Acenaphthene	0.86925	0.88805	0.88805	0.001	2.16315	20.00000	Averaged
48 2,4-Dinitrophenol	54.27625	40.00000	0.09246	0.050	35.69063	60.00000	Linear
49 Dibenzofuran	1.24565	1.23204	1.23204	0.000	-1.09203	60.00000	Averaged
51 Diethylphthalate	1.05823	1.05744	1.05744	0.000	-0.07452	60.00000	Averaged
52 4-Nitrophenol	46.38046	40.00000	0.16812	0.050	15.95116	60.00000	Linear
53 Fluorene	1.04116	1.04298	1.04298	0.000	0.17526	60.00000	Averaged
54 4-Chlorophenylphenylether	0.54928	0.53251	0.53251	0.000	-3.05340	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	44.18794	40.00000	0.07424	0.000	10.46984	60.00000	Linear
56 p-Nitroaniline	0.17126	0.13477	0.13477	0.000	-21.30500	60.00000	Averaged
133 Diphenylamine	0.48238	0.40605	0.40605	0.001	-15.82442	20.00000	Averaged
58 1,2-Diphenylhydrazine	0.56816	0.61800	0.61800	0.000	8.77303	60.00000	Averaged
61 4-Bromophenylphenylether	0.17919	0.17099	0.17099	0.000	-4.57797	60.00000	Averaged
63 Hexachlorobenzene	0.18156	0.17503	0.17503	0.000	-3.59509	60.00000	Averaged
65 Pentachlorophenol	43.72353	40.00000	0.09181	0.001	9.30883	20.00000	Linear
206 n-Octadecane	0.40416	0.46016	0.46016	0.000	13.85559	60.00000	Averaged
68 Phenanthrene	0.77989	0.77448	0.77448	0.000	-0.69398	60.00000	Averaged
69 Anthracene	0.78118	0.76638	0.76638	0.000	-1.89492	60.00000	Averaged
72 Di-n-butylphthalate	0.97635	1.01423	1.01423	0.000	3.87924	60.00000	Averaged
76 Fluoranthene	0.85744	0.84490	0.84490	0.001	-1.46230	20.00000	Averaged
79 Pyrene	1.01529	1.05076	1.05076	0.000	3.49354	60.00000	Averaged
85 Butylbenzylphthalate	0.48062	0.49659	0.49659	0.000	3.32288	60.00000	Averaged
89 Benzo(a)anthracene	0.84934	0.84937	0.84937	0.000	0.00409	60.00000	Averaged
92 Chrysene	0.77209	0.78857	0.78857	0.000	2.13434	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.66338	0.72007	0.72007	0.000	8.54606	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 20-JAN-2010 18:15
Lab File ID: s5a2004.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN091225-12.3 Quant Type: ISTD
Method: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL	MIN	MAX	CURVE TYPE
			RRF40	RRF	%D / %DRIFT	
94 Di-n-octylphthalate	1.28101	1.29938	1.29938	0.001	1.43391	Averaged
95 Benzo(b)fluoranthene	0.90766	0.91350	0.91350	0.000	0.64308	Averaged
96 Benzo(k)fluoranthene	0.89031	0.90738	0.90738	0.000	1.91709	Averaged
97 Benzo(a)pyrene	0.77742	0.80424	0.80424	0.001	3.45056	Averaged
99 Indeno(1,2,3-cd)pyrene	41.02989	40.00000	0.72314	0.000	2.57472	Linear
100 Dibenzo(a,h)anthracene	41.62851	40.00000	0.59189	0.000	4.07127	Linear
101 Benzo(ghi)perylene	0.56118	0.61792	0.61792	0.000	10.11159	Averaged
126 m-Dinitrobenzene	0.17669	0.17064	0.17064	0.000	-3.42550	Averaged
130 2,3,4,6-Tetrachlorophenol	42.31764	40.00000	0.25078	0.000	5.79411	Linear
143 Dinoseb	40.95931	40.00000	0.11127	0.000	2.39828	Linear
173 Carbazole	0.59613	0.49108	0.49108	0.000	-17.62148	Averaged
184 p-Benzoquinone	31.81034	40.00000	0.10251	0.000	-20.47415	Linear
192 Methoxychlor	0.54497	0.54441	0.54441	0.000	-0.10269	Averaged
211 p-Toluidine	0.98068	0.78777	0.78777	0.000	-19.67042	Averaged
210 m-Toluidine	1.23436	1.12200	1.12200	0.000	-9.10247	Averaged
26 Phthalic anhydride	44.48291	40.00000	0.10381	0.000	11.20728	Linear
179 Dibenzo(a,e)pyrene	49.61641	40.00000	0.34496	0.000	24.04103	Linear
214 1,4-Dinitrobenzene	0.17293	0.18669	0.18669	0.000	7.95411	Averaged
215 2-Ethoxyethanol	0.70680	0.55130	0.55130	0.000	-22.00157	Averaged
216 Methylenebis(2-chloroanilin	0.12441	0.12291	0.12291	0.000	-1.20324	Averaged
M 225 Trichlorophenols	0.29433	0.30685	0.30685	0.000	4.25328	Averaged
M 226 Tetrachlorophenols	42.31764	40.00000	0.25078	0.000	5.79411	Linear
M 227 Benzo(b,k)fluoranthene	0.89898	0.91044	0.91044	0.000	1.27393	Averaged

Data File: /chem/MSD5.i/s012010.b/s5a2004.d
Report Date: 21-Jan-2010 07:08

Page 1

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2004.d
Lab Smp Id: WBN091225-12.3 Client Smp ID: MEGACVS
Inj Date : 20-JAN-2010 18:15
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN091225-12.3|40 PPM|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: MEGAICARE.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.926	3.926	(1.000)		418800	40.0000	
* 29 Naphthalene-d8	136	4.792	4.792	(1.000)		1583893	40.0000	
* 46 Acenaphthene-d10	164	6.044	6.044	(1.000)		846205	40.0000	
* 67 Phenanthrene-d10	188	7.214	7.214	(1.000)		1470218	40.0000	(H)
* 91 Chrysene-d12	240	9.622	9.622	(1.000)		1270815	40.0000	(H)
* 98 Perylene-d12	264	11.298	11.298	(1.000)		1076386	40.0000	(H)
\$ 3 2-Fluorophenol	112	3.102	3.102	(0.790)		418641	40.0000	40.3
\$ 5 Phenol-d5	99	3.637	3.637	(0.926)		515797	40.0000	40.3
\$ 20 Nitrobenzene-d5	82	4.287	4.287	(0.894)		510524	40.0000	42.0
\$ 39 2-Fluorobiphenyl	172	5.534	5.534	(0.916)		883339	40.0000	39.5
\$ 60 2,4,6-Tribromophenol	329	6.641	6.641	(1.099)		103022	40.0000	38.3
\$ 81 p-Terphenyl-d14	244	8.592	8.592	(0.889)		806464	40.0000	40.4
1 N-Methyl-N-nitrosomethylamine	74	2.399	2.399	(0.611)		252562	40.0000	40.6
2 Pyridine	79	2.428	2.428	(0.618)		272655	40.0000	31.9
4 Aniline	66	3.704	3.704	(0.944)		207232	40.0000	39.5
6 Phenol	94	3.646	3.646	(0.929)		532879	40.0000	41.8(Q)
7 bis(2-Chloroethyl) ether	63	3.723	3.723	(0.948)		392923	40.0000	41.1
8 2-Chlorophenol	128	3.786	3.786	(0.964)		441789	40.0000	40.8
203 n-Decane	43	3.771	3.771	(0.961)		579249	40.0000	44.6
9 1,3-Dichlorobenzene	146	3.892	3.892	(0.991)		477648	40.0000	40.8
11 1,4-Dichlorobenzene	146	3.935	3.935	(1.002)		475517	40.0000	40.9
13 1,2-Dichlorobenzene	146	4.041	4.041	(1.029)		440511	40.0000	43.0
14 bis(2-Chloroisopropyl) ether	45	4.065	4.065	(1.036)		784706	40.0000	41.7
12 Benzyl alcohol	108	3.988	3.988	(1.016)		283389	40.0000	39.7
15 o-Cresol	107	4.041	4.041	(1.029)		329912	40.0000	43.9
18 m,p-Cresols	107	4.142	4.142	(1.055)		434181	40.0000	40.6

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	==	=====	=====	=====	=====
17 N-Nitrosodipropylamine	70	4.157	4.157 (1.059)	250533	40.0000	39.6 (H)
19 Hexachloroethane	117	4.267	4.267 (1.087)	199424	40.0000	41.6
21 Nitrobenzene	77	4.301	4.301 (0.898)	461104	40.0000	42.2
22 Isophorone	82	4.450	4.450 (0.929)	829795	40.0000	40.0
23 2-Nitrophenol	139	4.513	4.513 (0.942)	209010	40.0000	40.6
24 2,4-Dimethylphenol	122	4.503	4.503 (0.940)	400783	40.0000	38.9
25 bis(2-Chloroethoxy)methane	93	4.571	4.571 (0.954)	499974	40.0000	40.6
26 2,4-Dichlorophenol	162	4.677	4.677 (0.976)	339347	40.0000	41.7
27 Benzoic acid	105	4.552	4.552 (0.950)	232921	40.0000	48.2
28 1,2,4-Trichlorobenzene	180	4.739	4.739 (0.989)	403028	40.0000	40.1
30 Naphthalene	128	4.807	4.807 (1.003)	1214819	40.0000	39.0 (Q)
204 alpha-Terpineol	59	4.778	4.778 (0.997)	375619	40.0000	37.2 (H)
31 4-Chloroaniline	127	4.821	4.821 (1.006)	534785	40.0000	39.2
32 Hexachlorobutadiene	225	4.869	4.869 (1.016)	237342	40.0000	39.8
33 4-Chloro-3-methylphenol	107	5.134	5.134 (1.071)	356579	40.0000	43.0
34 2-Methylnaphthalene	142	5.288	5.288 (1.103)	781613	40.0000	39.9
35 1-Methylnaphthalene	142	5.361	5.361 (1.119)	771014	40.0000	40.3
36 Hexachlorocyclopentadiene	237	5.389	5.389 (0.892)	168820	40.0000	34.2
205 2,3-Dichloroaniline	161	5.481	5.481 (0.907)	401486	40.0000	39.0
37 2,4,6-Trichlorophenol	196	5.476	5.476 (0.906)	258600	40.0000	43.9 (H)
38 2,4,5-Trichlorophenol	196	5.505	5.505 (0.911)	260715	40.0000	39.7
40 2-Chloronaphthalene	162	5.640	5.640 (0.933)	749782	40.0000	40.6
42 o-Nitroaniline	65	5.698	5.698 (0.943)	251920	40.0000	42.0
41 m-Nitroaniline	138	5.991	5.991 (0.991)	146636	40.0000	32.6
43 Dimethylphthalate	163	5.804	5.804 (0.960)	854346	40.0000	39.5
44 2,6-Dinitrotoluene	165	5.861	5.861 (0.970)	199638	40.0000	39.4
50 2,4-Dinitrotoluene	165	6.160	6.160 (1.019)	245715	40.0000	38.4
45 Acenaphthylene	152	5.948	5.948 (0.984)	1166404	40.0000	38.7 (H)
47 Acenaphthene	154	6.073	6.073 (1.005)	751473	40.0000	40.9 (H)
48 2,4-Dinitrophenol	184	6.064	6.064 (1.003)	78236	40.0000	54.3
49 Dibenzofuran	168	6.194	6.194 (1.025)	1042562	40.0000	39.6
51 Diethylphthalate	149	6.314	6.314 (1.045)	894808	40.0000	40.0
52 4-Nitrophenol	139	6.083	6.083 (1.006)	142267	40.0000	46.4
53 Fluorene	166	6.458	6.458 (1.068)	882577	40.0000	40.1
54 4-Chlorophenylphenylether	204	6.430	6.430 (1.064)	450613	40.0000	38.8
55 2-Methyl-4,6-dinitrophenol	198	6.468	6.468 (0.891)	109146	40.0000	44.2 (H)
56 p-Nitroaniline	138	6.449	6.449 (1.067)	114044	40.0000	31.5
133 Diphenylamine	169	6.516	6.516 (0.897)	596977	40.0000	33.7
58 1,2-Diphenylhydrazine	77	6.555	6.555 (0.903)	908599	40.0000	43.5
61 4-Bromophenylphenylether	248	6.820	6.820 (0.939)	251389	40.0000	38.2
63 Hexachlorobenzene	284	6.892	6.892 (0.949)	257336	40.0000	38.6
65 Pentachlorophenol	266	7.041	7.041 (0.969)	134983	40.0000	43.7
206 n-Octadecane	57	7.027	7.027 (0.968)	676533	40.0000	45.5 (H)
68 Phenanthrene	178	7.234	7.234 (0.996)	1138658	40.0000	39.7 (H)
69 Anthracene	178	7.277	7.277 (1.002)	1126742	40.0000	39.2
72 Di-n-butylphthalate	149	7.633	7.633 (1.051)	1491135	40.0000	41.6 (H)
76 Fluoranthene	202	8.279	8.279 (1.140)	1242185	40.0000	39.4 (H)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
=====	=====	=====	=====	=====	=====	=====	=====
79 Pyrene	202	8.490	8.490	(0.878)	1335318	40.0000	41.4
85 Butylbenzylphthalate	149	9.020	9.020	(0.933)	631080	40.0000	41.3(H)
89 Benzo(a)anthracene	228	9.612	9.612	(0.995)	1079395	40.0000	40.0(H)
92 Chrysene	228	9.651	9.651	(0.998)	1002131	40.0000	40.8(H)
93 bis(2-Ethylhexyl)phthalate	149	9.545	9.545	(0.988)	915075	40.0000	43.4
94 Di-n-octylphthalate	149	10.200	10.200	(0.899)	1398634	40.0000	40.6
95 Benzo(b)fluoranthene	252	10.783	10.783	(0.950)	983274	40.0000	40.2(H)
96 Benzo(k)fluoranthene	252	10.816	10.816	(0.953)	976686	40.0000	40.8
97 Benzo(a)pyrene	252	11.221	11.221	(0.989)	865675	40.0000	41.4
99 Indeno(1,2,3-cd)pyrene	276	13.060	13.060	(1.151)	778376	40.0000	41.0
100 Dibenzo(a,h)anthracene	278	13.079	13.079	(1.152)	637105	40.0000	41.6
101 Benzo(ghi)perylene	276	13.604	13.604	(1.199)	665120	40.0000	44.0
126 m-Dinitrobenzene	168	5.847	5.847	(0.967)	144395	40.0000	38.6
130 2,3,4,6-Tetrachlorophenol	232	6.275	6.275	(1.038)	212210	40.0000	42.3(H)
143 Dinoseb	211	7.161	7.161	(0.986)	163584	40.0000	41.0
173 Carbazole	167	7.393	7.393	(1.018)	721998	40.0000	33.0
184 p-Benzquinone	54	3.406	3.406	(0.868)	42933	40.0000	31.8
192 Methoxychlor	227	9.492	9.492	(0.982)	691844	40.0000	40.0
211 p-Toluidine	106	4.200	4.200	(1.070)	329919	40.0000	32.1(H)
210 m-Toluidine	106	4.224	4.224	(1.076)	469895	40.0000	36.4
26 Phthalic anhydride	104	5.317	5.317	(1.110)	164421	40.0000	44.5
179 Dibenzo(a,e)pyrene	302	17.726	17.726	(1.562)	371309	40.0000	49.6(H)
214 1,4-Dinitrobenzene	75	5.789	5.789	(0.958)	157974	40.0000	43.2(H)
215 2-Ethoxyethanol	59	2.235	2.235	(0.569)	230883	40.0000	31.2
216 Methylenebis(2-chloroaniline)	231	9.555	9.555	(0.989)	156194	40.0000	39.5(Q)
M 225 Trichlorophenols	196				519315	80.0000	83.4
M 226 Tetrachlorophenols	232				212210	40.0000	42.3
M 227 Benzo(b,k)fluoranthene	252				1959960	80.0000	81.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSDS.i/s012010,b/s5a2004,d

Date : 20-JAN-2010 18:15

Client ID: MEGACUS

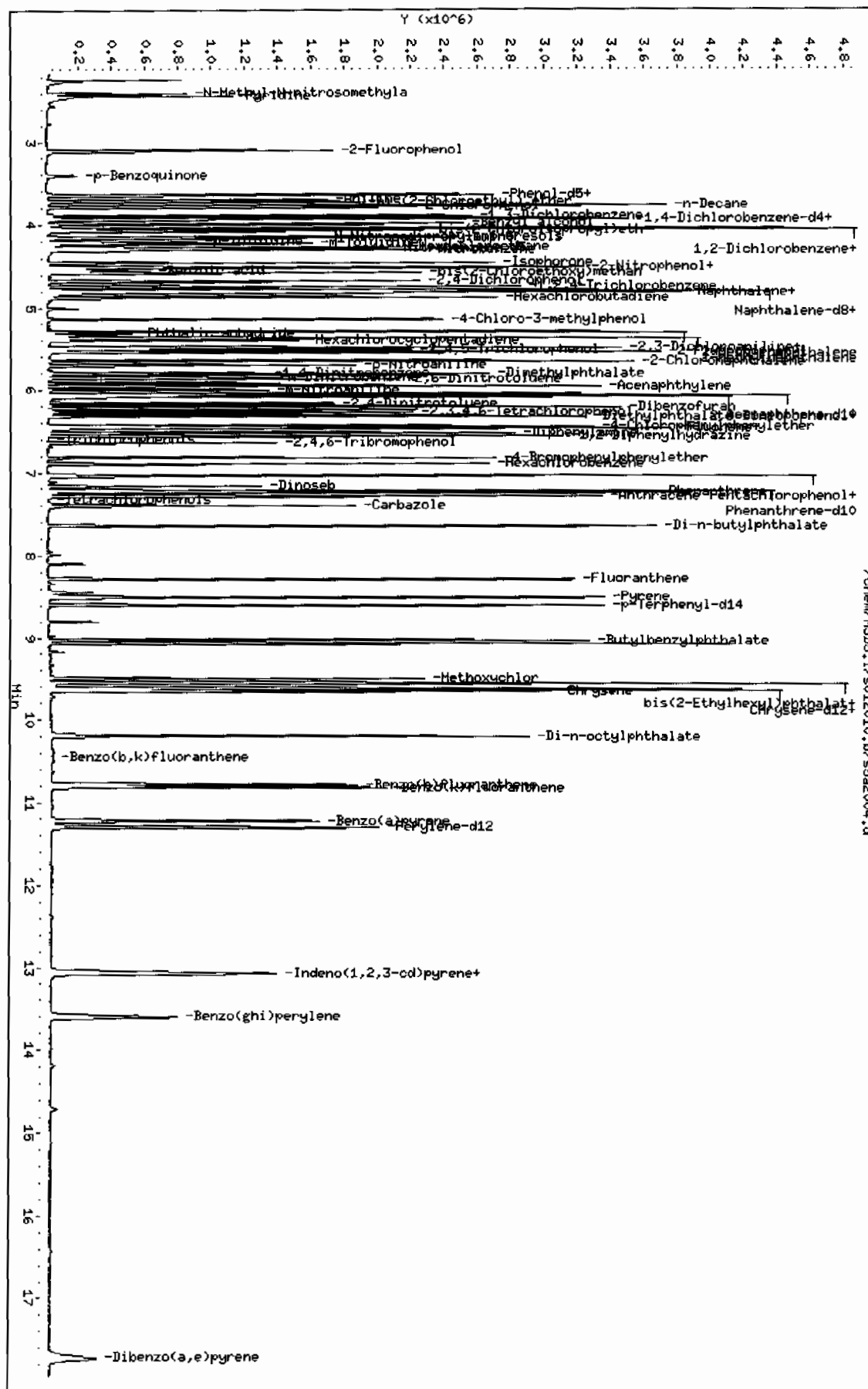
Sample Info: 1WBN091225-12,3140 PPH11SVH11MEGACVS

Column phase: J&W DB-5MS

Instrument: MSD5.1

Operator: RMJB

Column diameter: 0.20



GEL Laboratories LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 20-JAN-2010 18:42
Lab File ID: s5a2005.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
Analysis Type: Init. Cal. Times: 08:21 14:25
Lab Sample ID: WBN100103-03.5 Quant Type: ISTD
Method: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
209 Benzaldehyde	0.86728	0.95207	0.95207	0.000	9.77688	60.00000	Averaged
16 Acetophenone	1.12258	1.30274	1.30274	0.000	16.04856	60.00000	Averaged
189 Caprolactam	44.63019	40.00000	0.09659	0.000	11.57547	60.00000	Linear
208 1,1'-Biphenyl	1.13030	1.30048	1.30048	0.000	15.05599	60.00000	Averaged
207 Atrazine	0.03286	0.02204	0.02204	0.000	-32.92270	60.00000	Averaged
77 Benzidine	35.10628	40.00000	0.20276	0.000	-12.23429	60.00000	Linear
90 3,3'-Dichlorobenzidine	0.27423	0.30603	0.30603	0.000	11.59529	60.00000	Averaged
102 1,4-Dioxane	0.35034	0.40424	0.40424	0.000	15.38494	60.00000	Averaged
103 Methyl methacrylate	0.19020	0.20616	0.20616	0.000	8.39255	60.00000	Averaged
104 Ethyl methacrylate	0.79064	0.89271	0.89271	0.000	12.91088	60.00000	Averaged
105 2-Picoline	1.20530	1.34565	1.34565	0.000	11.64374	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.42573	0.48905	0.48905	0.000	14.87359	60.00000	Averaged
107 Methyl methanesulfonate	0.50673	0.53792	0.53792	0.000	6.15579	60.00000	Averaged
108 N-Nitrosodiethylamine	0.41971	0.47244	0.47244	0.000	12.56424	60.00000	Averaged
109 Ethyl Methanesulfonate	0.64256	0.66732	0.66732	0.000	3.85279	60.00000	Averaged
110 Pentachloroethane	0.31977	0.35934	0.35934	0.000	12.37352	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.40441	0.49008	0.49008	0.000	21.18212	60.00000	Averaged
113 N-Nitrosomorpholine	0.51508	0.61511	0.61511	0.000	19.41915	60.00000	Averaged
114 o-Toluidine	1.52533	1.72481	1.72481	0.000	13.07811	60.00000	Averaged
115 N-Nitrosopiperidine	0.13348	0.15520	0.15520	0.000	16.26495	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.77645	0.84303	0.84303	0.000	8.57491	60.00000	Averaged
118 2,6-Dichlorophenol	0.19680	0.23854	0.23854	0.000	21.20808	60.00000	Averaged
119 Hexachloropropene	0.10641	0.12149	0.12149	0.000	14.16370	60.00000	Averaged
120 p-Phenylenediamine	0.15550	0.07318	0.07318	0.000	-52.94063	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.17181	0.18879	0.18879	0.000	9.87949	60.00000	Averaged
122 Safrrole	0.19196	0.21957	0.21957	0.000	14.37918	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.45635	0.53087	0.53087	0.000	16.33088	60.00000	Averaged
124 Isosafrole	0.32140	0.37366	0.37366	0.000	16.25913	60.00000	Averaged
125 1,4-Naphthoquinone	0.29341	0.35808	0.35808	0.000	22.03960	60.00000	Averaged
127 Pentachlorobenzene	0.41007	0.45772	0.45772	0.000	11.62232	60.00000	Averaged
128 1-Naphthylamine	0.78230	0.80304	0.80304	0.000	2.65099	60.00000	Averaged
129 2-Naphthylamine	0.78145	0.62874	0.62874	0.000	-19.54165	60.00000	Averaged
131 5-Nitro-o-toluidine	0.25817	0.31821	0.31821	0.000	23.25946	60.00000	Averaged
136 1,3,5-Trinitrobenzene	46.57782	40.00000	0.12308	0.000	16.44455	60.00000	Linear
137 Phenacetin	0.25526	0.28906	0.28906	0.000	13.24104	60.00000	Averaged
138 Diallate	0.23114	0.27038	0.27038	0.000	16.97475	60.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD5.i Injection Date: 20-JAN-2010 18:42
 Lab File ID: s5a2005.d Init. Cal. Date(s): 05-JAN-2010 06-JAN-2010
 Analysis Type: Init. Cal. Times: 08:21 14:25
 Lab Sample ID: WBN100103-03.5 Quant Type: ISTD
 Method: /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
212 Cis Diallate	0.25189	0.27189	0.27189	0.000	7.94042	60.00000	Averaged
213 Trans Diallate	0.27193	0.31809	0.31809	0.000	16.97475	60.00000	Averaged
140 4-Aminobiphenyl	0.47494	0.40166	0.40166	0.000	-15.42973	60.00000	Averaged
141 Pentachloronitrobenzene	0.07064	0.08602	0.08602	0.000	21.76953	60.00000	Averaged
142 Pronamide	0.26102	0.30593	0.30593	0.000	17.20711	60.00000	Averaged
146 4-Nitroquinoline-1-oxide	0.01407	0.01466	0.01466	0.000	4.22519	60.00000	Averaged
147 Methapyrilene	0.41371	0.39488	0.39488	0.000	-4.55287	60.00000	Averaged
148 Isodrin	0.10578	0.12175	0.12175	0.000	15.09672	60.00000	Averaged
149 Aramite	0.04931	0.05042	0.05042	0.000	2.25289	60.00000	Averaged
150 Kepone	0.07429	0.07153	0.07153	0.000	-3.71083	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.26901	0.30035	0.30035	0.000	11.65028	60.00000	Averaged
152 Chlorobenzilate	0.29431	0.34699	0.34699	0.000	17.89891	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.44919	0.45439	0.45439	0.000	1.15744	60.00000	Averaged
155 2-Acetylaminofluorene	45.62903	40.00000	0.33543	0.000	14.07257	60.00000	Linear
157 7,12Dimethylbenz(a)anthracene	0.48401	0.51376	0.51376	0.000	6.14577	60.00000	Averaged
158 3-Methylcholanthrene	0.33921	0.41166	0.41166	0.000	21.35824	60.00000	Averaged

Data File: /chem/MSD5.i/s012010.b/s5a2005.d
Report Date: 20-Jan-2010 18:58

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2005.d
Lab Smp Id: WBN100103-03.5 Client Smp ID: AP12CVS
Inj Date : 20-JAN-2010 18:42
Operator : RMB Inst ID: MSD5.i
Smp Info : |WBN100103-03.5|40 PPM|1|SVM|1|AP12CVS
Misc Info : |MSD8270|WBN100107-02
Comment : Column: J&W DB-5MS, 25 m x 0.20 mm x 0.33 micron film
Method : /chem/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 20-Jan-2010 18:58 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ap12.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.919	(1.000)	476214	40.0000	
* 29 Naphthalene-d8	136	4.790	4.790	(1.000)	1651957	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.042	(1.000)	949443	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.213	(1.000)	1675967	40.0000	
* 91 Chrysene-d12	240	9.619	9.619	(1.000)	1457521	40.0000	
* 98 Perylene-d12	264	11.289	11.289	(1.000)	1272173	40.0000	
209 Benzaldehyde	77	3.643	3.643	(0.929)	453388	40.0000	43.9
16 Acetophenone	105	4.172	4.172	(1.065)	620381	40.0000	46.4 (H)
189 Caprolactam	113	5.060	5.060	(1.056)	159560	40.0000	44.6
208 1,1'-Biphenyl	154	5.607	5.607	(0.928)	1234733	40.0000	46.0
207 Atrazine	173	6.907	6.907	(0.958)	36939	40.0000	26.8
77 Benzidine	184	8.360	8.360	(0.869)	295522	40.0000	35.1
90 3,3'-Dichlorobenzidine	252	9.554	9.554	(0.993)	446043	40.0000	44.6
102 1,4-Dioxane	88	2.237	2.237	(0.571)	192504	40.0000	46.2
103 Methyl methacrylate	100	2.225	2.225	(0.568)	98175	40.0000	43.4
104 Ethyl methacrylate	69	2.613	2.613	(0.667)	425123	40.0000	45.2
105 2-Picoline	93	2.807	2.807	(0.716)	640816	40.0000	44.6
106 N-Nitrosomethylethylamine	88	2.854	2.854	(0.728)	232891	40.0000	45.9
107 Methyl methanesulfonate	80	3.013	3.013	(0.769)	256167	40.0000	42.5
108 N-Nitrosodiethylamine	102	3.248	3.248	(0.829)	224984	40.0000	45.0
109 Ethyl Methanesulfonate	79	3.401	3.401	(0.868)	317787	40.0000	41.5
110 Pentachloroethane	167	3.743	3.743	(0.955)	171123	40.0000	44.9
111 N-Nitrosopyrrolidine	100	4.160	4.160	(1.062)	233381	40.0000	48.5 (Q)
113 N-Nitrosomorpholine	56	4.178	4.178	(1.066)	292924	40.0000	47.8
114 o-Toluidine	106	4.195	4.195	(1.071)	821381	40.0000	45.2
115 N-Nitrosopiperidine	114	4.395	4.395	(0.918)	256377	40.0000	46.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
116 a,a-Dimethylphenethylamine	58	4.713	4.713	(0.984)	1392652	40.0000	43.4
118 2,6-Dichlorophenol	162	4.831	4.831	(1.009)	394053	40.0000	48.5
119 Hexachloropropene	213	4.854	4.854	(1.014)	200688	40.0000	45.7
120 p-Phenylenediamine	108	5.060	5.060	(1.056)	120887	40.0000	18.8
121 N-Nitrosodi-n-butylamine	84	5.031	5.031	(1.050)	311866	40.0000	44.0 (QH)
122 Safrole	162	5.195	5.195	(1.085)	362713	40.0000	45.8
123 1,2,4,5-Tetrachlorobenzene	216	5.401	5.401	(0.894)	504031	40.0000	46.5
124 Isosafrole	162	5.566	5.566	(0.921)	354771	40.0000	46.5
125 1,4-Naphthoquinone	158	5.754	5.754	(0.952)	339977	40.0000	48.8
127 Pentachlorobenzene	250	6.160	6.160	(1.019)	434583	40.0000	44.6
128 1-Naphthylamine	143	6.248	6.248	(1.034)	762439	40.0000	41.1
129 2-Naphthylamine	143	6.301	6.301	(1.043)	596952	40.0000	32.2
131 5-Nitro-o-toluidine	152	6.442	6.442	(1.066)	302127	40.0000	49.3
136 1,3,5-Trinitrobenzene	75	6.695	6.695	(0.928)	206285	40.0000	46.6 (H)
137 Phenacetin	108	6.737	6.737	(0.934)	484449	40.0000	45.3 (Q)
138 Diallate	86	6.725	6.725	(0.932)	453149	40.0000	46.8
212 Cis Diallate	86	6.801	6.801	(0.943)	68352	6.00000	6.5
213 Trans Diallate	86	6.725	6.725	(0.932)	453149	34.0000	39.8
140 4-Aminobiphenyl	169	7.025	7.025	(0.974)	673170	40.0000	33.8
141 Pentachloronitrobenzene	237	7.048	7.048	(0.977)	144166	40.0000	48.7 (Q)
142 Pronamide	173	7.042	7.042	(0.976)	512733	40.0000	46.9 (H)
146 4-Nitroquinoline-1-oxide	101	7.878	7.878	(1.092)	24577	40.0000	41.7 (H)
147 Methapyrilene	58	7.913	7.913	(1.097)	661800	40.0000	38.2
148 Isodrin	193	8.136	8.136	(1.128)	204043	40.0000	46.0
149 Aramite	185	8.536	8.536	(1.183)	84500	40.0000	40.9
150 Kepone	272	9.125	9.125	(1.265)	119882	40.0000	38.5
151 p-(Dimethylamino)azobenzene	120	8.713	8.713	(0.906)	437768	40.0000	44.7 (H)
152 Chlorobenzilate	251	8.742	8.742	(0.909)	505746	40.0000	47.2
153 3,3'-Dimethylbenzidine	212	9.030	9.030	(0.939)	662284	40.0000	40.5
155 2-Acetylaminofluorene	181	9.277	9.277	(0.965)	488889	40.0000	45.6
157 7,12Dimethylbenz(a)anthracene	256	10.754	10.754	(0.953)	653591	40.0000	42.4
158 3-Methylcholanthrene	268	11.695	11.695	(1.036)	523699	40.0000	48.5 (QH)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/HSD5.1/5012010.1/s5a2005.d

Date: 20-JAN-2010 18:42

Client ID: PP12CVS

Sample Info: IABN100103-03.6140 PPH11SVH11PP12CVS

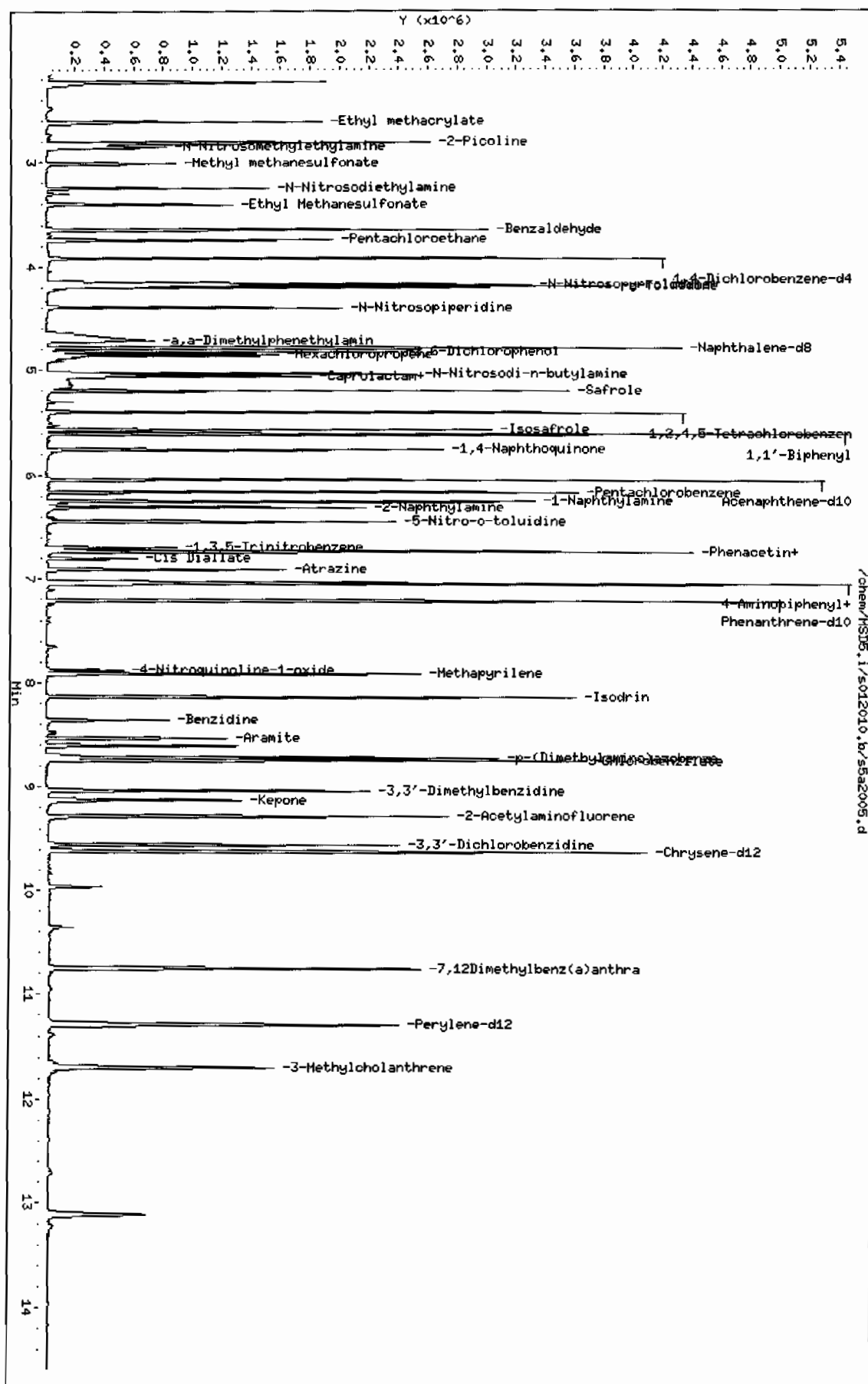
Column phase: 3M DB-5MS

Instrument: HSD5.1

Operator: RMB

Column diameter: 0.20

Page 1



QC Data

Data File: /chem/MSD5.i/s010510.b/s5a0501.d

Page 1

Date : 05-JAN-2010 07:45

Client ID: DFTTP

Instrument: MSD5.i

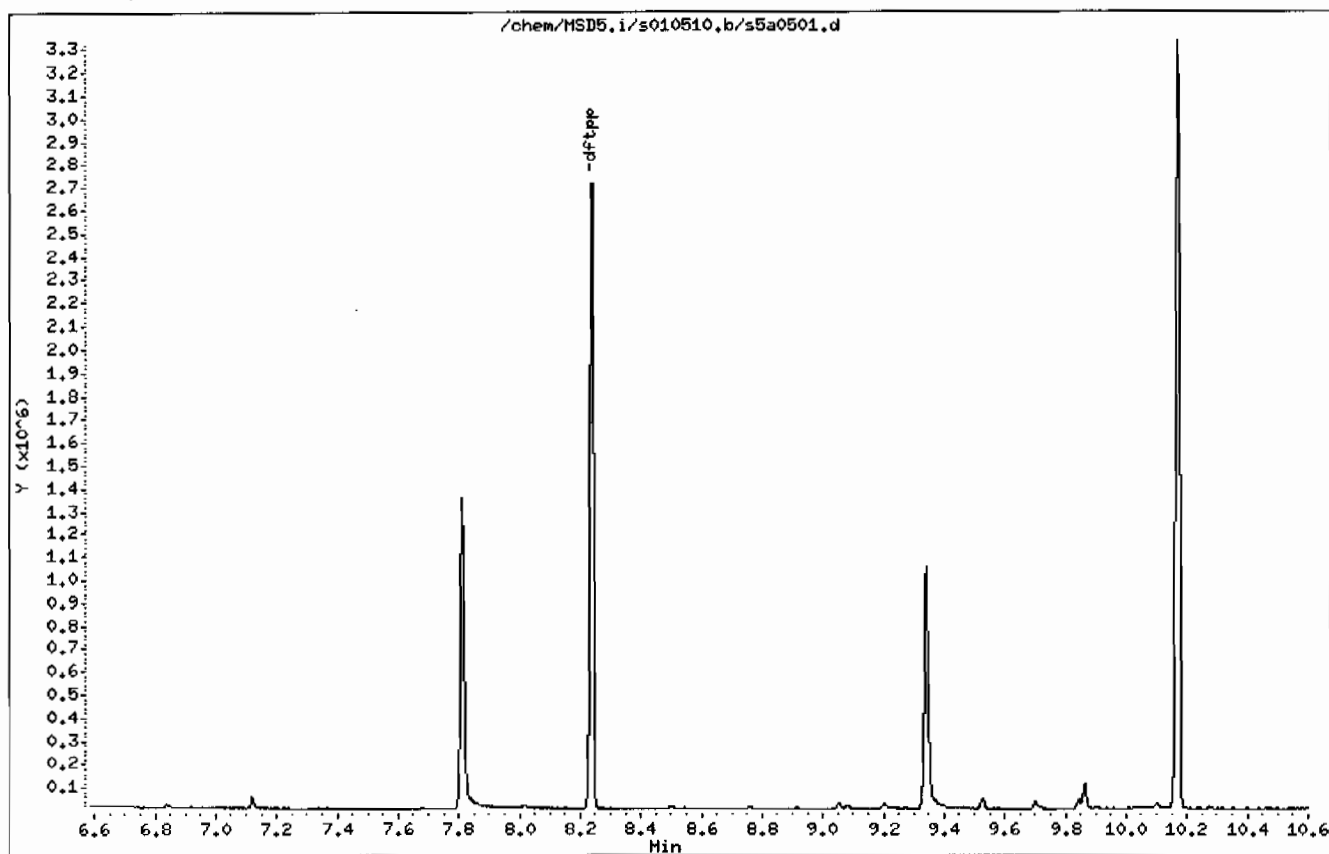
Sample Info: IWBNO91128-01150PPH111SVMF111DFTTP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNO91128-01150PPH11SVHF111DFTPP

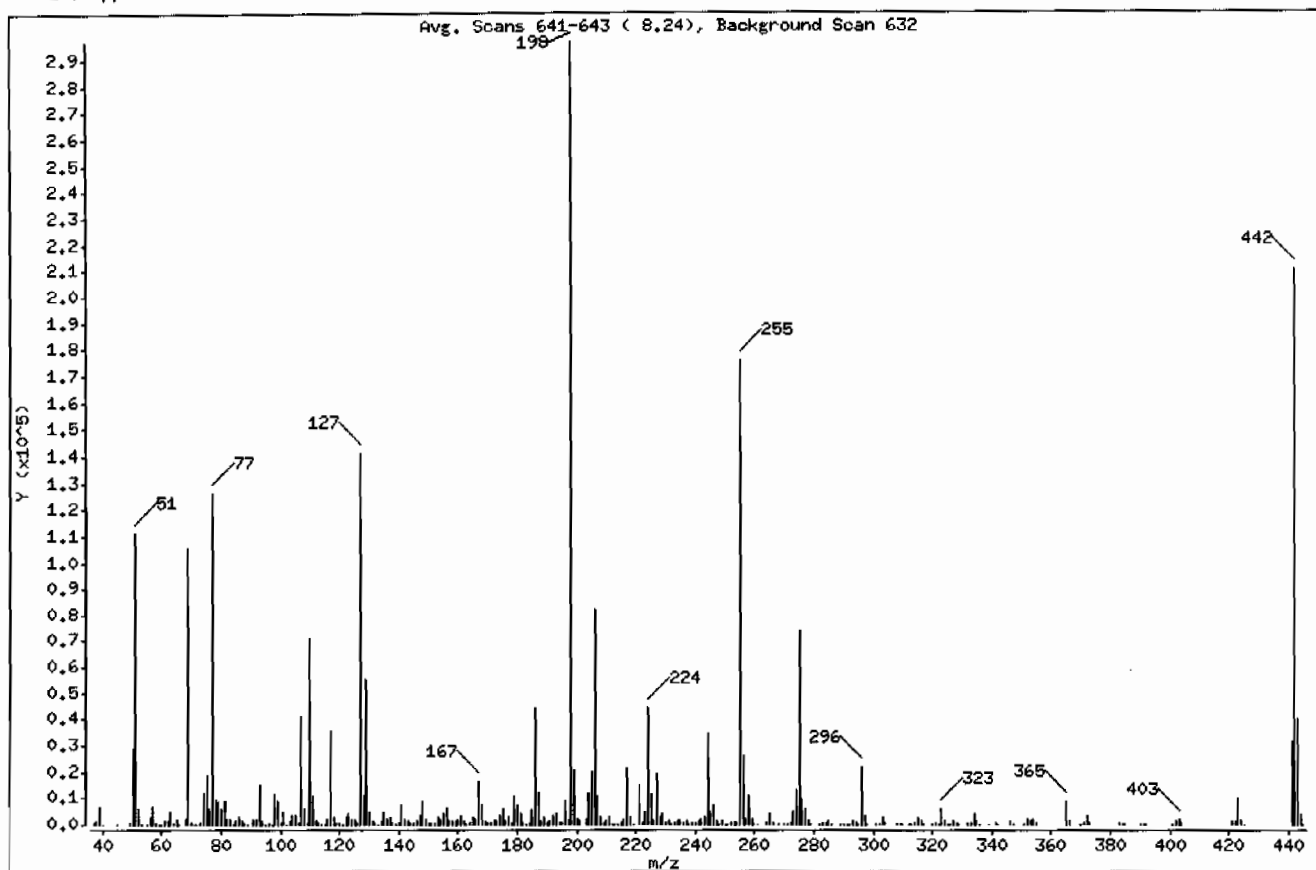
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	37.38
68	Less than 2.00% of mass 69	0.60 (1.68)
69	Mass 69 relative abundance	35.61
70	Less than 2.00% of mass 69	0.18 (0.52)
127	40.00 - 60.00% of mass 198	47.54
197	Less than 1.00% of mass 198	0.49
199	5.00 - 9.00% of mass 198	6.96
275	10.00 - 30.00% of mass 198	24.84
365	Greater than 1.00% of mass 198	2.90
441	Present, but less than mass 443	10.47
442	Greater than 40.00% of mass 198	70.97
443	17.00 - 23.00% of mass 442	13.58 (19.13)

Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNO91128-01150PPH11SVHF11DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-SMS

Column diameter: 0.20

Data File: s5a0501.d

Spectrum: Avg. Scans 641-643 (8.24), Background Scan 632

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	397	124.00	1924	201.00	1370	286.00	138
38.00	1056	125.00	1718	203.00	2231	289.00	291
39.00	7142	126.00	501	204.00	11815	290.00	158
40.00	326	127.00	141184	205.00	19576	291.00	47
45.00	138	128.00	10962	206.00	82152	292.00	209
49.00	741	129.00	56600	207.00	11227	293.00	1305
50.00	29008	130.00	4989	208.00	2846	294.00	360
51.00	111016	131.00	1026	209.00	787	295.00	259
52.00	5923	132.00	595	210.00	1342	296.00	21936
53.00	196	133.00	297	211.00	3068	297.00	3104
55.00	78	134.00	1691	212.00	215	298.00	120
56.00	3068	135.00	4483	213.00	249	301.00	335
57.00	7112	136.00	2037	214.00	43	302.00	281
58.00	360	137.00	2500	215.00	992	303.00	2566
59.00	112	138.00	543	216.00	1736	304.00	731
60.00	38	139.00	298	217.00	21416	308.00	255
61.00	1313	140.00	680	218.00	3054	309.00	209
62.00	1652	141.00	7283	219.00	216	310.00	232
63.00	4661	142.00	2123	221.00	14930	312.00	54
64.00	604	143.00	1568	222.00	1023	313.00	142
65.00	2336	144.00	391	223.00	4797	314.00	1019
66.00	174	145.00	394	224.00	44312	315.00	2424
68.00	1780	146.00	1300	225.00	11886	316.00	1308
69.00	105760	147.00	3657	226.00	1125	317.00	184
70.00	547	148.00	8561	227.00	19416	320.00	70
71.00	37	149.00	1877	228.00	2939	321.00	651
72.00	48	150.00	515	229.00	4164	322.00	264
73.00	910	151.00	948	230.00	660	323.00	6293
74.00	11695	152.00	424	231.00	1526	324.00	1245
75.00	18136	153.00	2532	232.00	295	325.00	44
76.00	5897	154.00	1927	233.00	369	326.00	156
77.00	126592	155.00	4231	234.00	1192	327.00	1340
78.00	9297	156.00	6072	235.00	1351	328.00	541
79.00	8029	157.00	1058	236.00	858	329.00	63
80.00	6450	158.00	1379	237.00	1459	332.00	514

Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNO91128-01150PPH11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a0501.d

Spectrum: Avg. Scans 641-643 (8.24), Background Scan 632

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	9121	159.00	1030	238.00	123	333.00	553
82.00	2368	160.00	2381	239.00	707	334.00	3949
83.00	2087	161.00	3496	240.00	566	335.00	1152
84.00	129	162.00	1129	241.00	1198	336.00	137
85.00	1643	163.00	302	242.00	2382	339.00	59
86.00	2862	164.00	438	243.00	2524	341.00	589
87.00	1080	165.00	2512	244.00	34552	342.00	207
88.00	477	166.00	2314	245.00	4897	346.00	1577
89.00	200	167.00	16149	246.00	7419	347.00	273
91.00	1971	168.00	7586	247.00	1417	351.00	59
92.00	2280	169.00	1403	248.00	316	352.00	2068
93.00	14878	170.00	535	249.00	1179	353.00	1162
94.00	1034	171.00	671	250.00	140	354.00	1836
95.00	174	172.00	1410	251.00	302	355.00	359
96.00	660	173.00	1618	252.00	366	365.00	8624
97.00	189	174.00	3292	253.00	713	366.00	1355
98.00	11715	175.00	6244	254.00	987	370.00	105
99.00	8794	176.00	1411	255.00	175936	371.00	514
100.00	769	177.00	2630	256.00	26216	372.00	3292
101.00	5054	178.00	954	257.00	1895	373.00	754
102.00	286	179.00	11078	258.00	11231	383.00	866
103.00	1657	180.00	7449	259.00	1742	384.00	269
104.00	3242	181.00	3773	260.00	288	385.00	49
105.00	3100	182.00	659	261.00	263	390.00	305
106.00	763	183.00	298	264.00	409	391.00	296
107.00	40888	184.00	870	265.00	3986	392.00	249
108.00	5960	185.00	5523	266.00	894	401.00	225
109.00	1002	186.00	44160	268.00	153	402.00	1229
110.00	71288	187.00	12583	270.00	237	403.00	1737
111.00	11111	188.00	1153	271.00	295	404.00	569
112.00	1371	189.00	2634	272.00	442	421.00	1593
113.00	496	190.00	491	273.00	5008	422.00	1243
114.00	107	191.00	1157	274.00	12958	423.00	10565
115.00	48	192.00	3591	275.00	73760	424.00	2373
116.00	2264	193.00	4146	276.00	9884	425.00	65

Date : 05-JAN-2010 07:45

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNO91128-01150PPH11SVHF111DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a0501.d

Spectrum: Avg. Scans 641-643 (8,24), Background Scan 632

Location of Maximum: 198.00

Number of points: 306

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	35768	194.00	793	277.00	6388	441.00	31080
118.00	2592	195.00	457	278.00	1073	442.00	210752
119.00	418	196.00	8975	279.00	213	443.00	40320
120.00	457	197.00	1444	282.00	104	444.00	4308
121.00	214	198.00	296960	283.00	702	445.00	57
122.00	2897	199.00	20656	284.00	445		
123.00	4122	200.00	1746	285.00	1234		

Data File: /chem/MSD5.i/s012010.b/s5a2003.d

Page 1

Date : 20-JAN-2010 18:01

Client ID: DFTPP

Instrument: MSD5.i

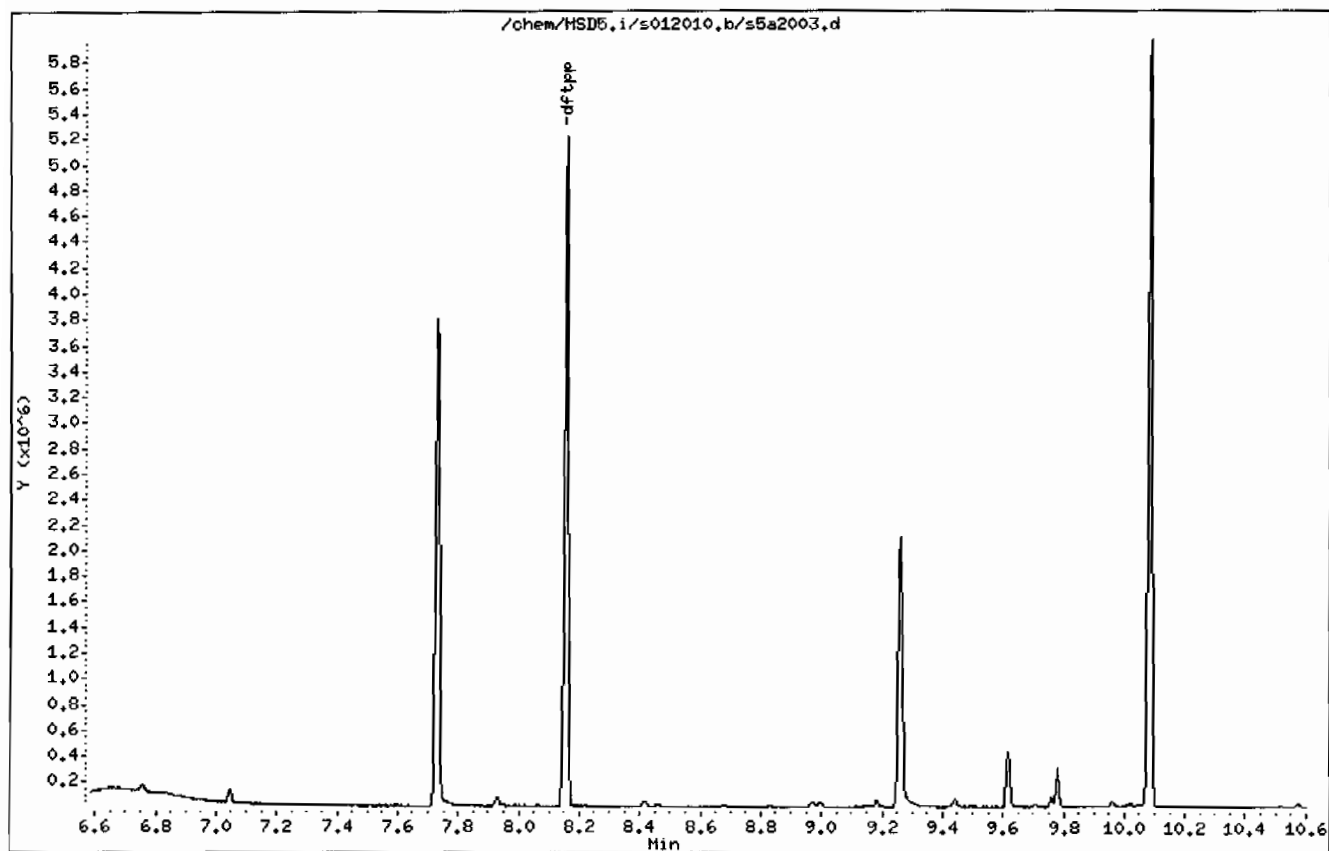
Sample Info: IWBNI00107-01I50PPH11ISVMF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20



Date : 20-JAN-2010 18:01

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IMBN100107-01150PPM11ISVMF111DFTPP

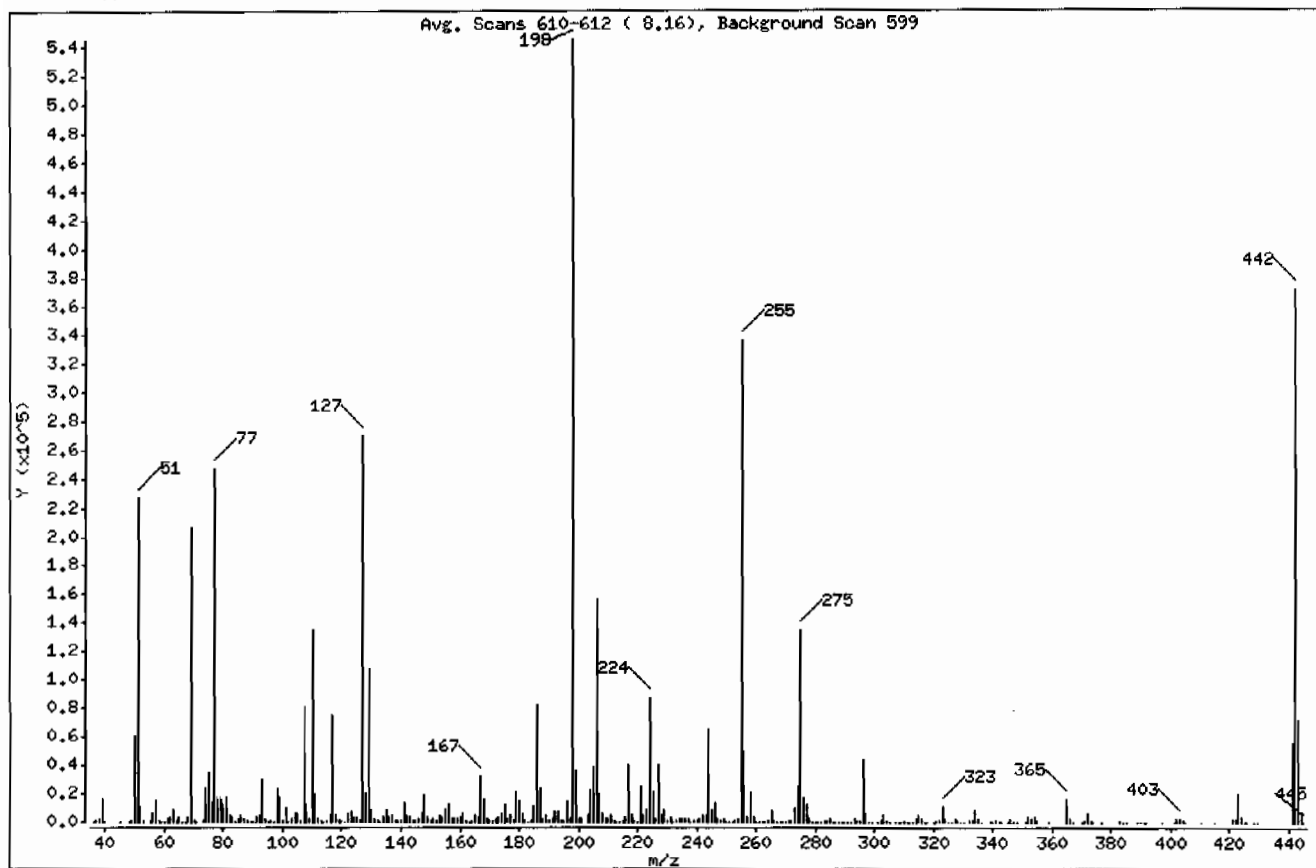
Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.55
68	Less than 2.00% of mass 69	0.66 (1.74)
69	Mass 69 relative abundance	37.99
70	Less than 2.00% of mass 69	0.19 (0.51)
127	40.00 - 60.00% of mass 198	49.50
197	Less than 1.00% of mass 198	0.41
199	5.00 - 9.00% of mass 198	6.74
275	10.00 - 30.00% of mass 198	24.91
365	Greater than 1.00% of mass 198	3.05
441	Present, but less than mass 443	10.33
442	Greater than 40.00% of mass 198	68.33
443	17.00 - 23.00% of mass 442	13.34 (19.53)

Date : 20-JAN-2010 18:01

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBNI00107-01150PPH11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a2003.d

Spectrum: Avg. Scans 610-612 (8,16), Background Scan 599

Location of Maximum: 198.00

Number of points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	288	130.00	8780	217.00	40256	304.00	1365
37.00	982	131.00	2126	218.00	5292	305.00	128
38.00	2309	132.00	973	219.00	652	307.00	47
39.00	16070	133.00	440	220.00	220	308.00	465
40.00	595	134.00	3384	221.00	25688	309.00	521
45.00	396	135.00	9129	222.00	5304	310.00	628
48.00	43	136.00	3900	223.00	8435	311.00	110
49.00	1263	137.00	4529	224.00	87424	312.00	227
50.00	59680	138.00	1035	225.00	21648	313.00	480
51.00	226624	139.00	795	226.00	2312	314.00	1981
52.00	11320	140.00	1427	227.00	40024	315.00	4453
53.00	696	141.00	13613	228.00	5567	316.00	2596
55.00	1195	142.00	4674	229.00	8202	317.00	409
56.00	6029	143.00	3448	230.00	1203	318.00	61
57.00	15067	144.00	747	231.00	3142	320.00	109
58.00	873	145.00	879	232.00	540	321.00	1265
59.00	132	146.00	2720	233.00	748	322.00	732
60.00	269	147.00	6896	234.00	2587	323.00	11387
61.00	2417	148.00	18416	235.00	2994	324.00	2415
62.00	3742	149.00	3731	236.00	1881	325.00	199
63.00	8847	150.00	911	237.00	2942	326.00	431
64.00	1135	151.00	2359	238.00	538	327.00	2518
65.00	4038	152.00	821	239.00	1388	328.00	1324
66.00	138	153.00	4524	240.00	1316	329.00	362
67.00	31	154.00	3377	241.00	2159	330.00	41
68.00	3602	155.00	8438	242.00	4492	332.00	1078
69.00	207232	156.00	12743	243.00	4885	333.00	1432
70.00	1049	157.00	2652	244.00	64920	334.00	8626
71.00	56	158.00	3126	245.00	8826	335.00	2303
73.00	1541	159.00	2384	246.00	14299	336.00	246
74.00	23640	160.00	4217	247.00	2725	339.00	53
75.00	34640	161.00	6600	248.00	711	340.00	206
76.00	13408	162.00	1800	249.00	2211	341.00	1575
77.00	247104	163.00	612	250.00	410	342.00	407
78.00	16600	164.00	695	251.00	485	343.00	45

Date : 20-JAN-2010 18:01

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: INBN100107-01150PPH11SVHF11IDFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a2003.d

Spectrum: Avg. Scans 610-612 (8.16), Background Scan 599

Location of Maximum: 198.00

Number of points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	16100	165.00	5468	252.00	521	345.00	67
80.00	12284	166.00	3865	253.00	1631	346.00	2922
81.00	17504	167.00	32072	254.00	1980	347.00	432
82.00	4535	168.00	16002	255.00	336512	348.00	42
83.00	3981	169.00	2931	256.00	50248	351.00	123
84.00	172	170.00	1096	257.00	4068	352.00	3867
85.00	2762	171.00	1180	258.00	21368	353.00	2540
86.00	5193	172.00	2873	259.00	3267	354.00	3606
87.00	2273	173.00	3544	260.00	465	355.00	687
88.00	824	174.00	6850	261.00	448	359.00	277
89.00	393	175.00	12402	262.00	61	365.00	16640
90.00	78	176.00	2940	263.00	184	366.00	2711
91.00	4293	177.00	5101	264.00	798	367.00	76
92.00	4607	178.00	1689	265.00	8951	370.00	332
93.00	30528	179.00	21640	266.00	1270	371.00	975
94.00	2184	180.00	15408	267.00	186	372.00	5669
95.00	541	181.00	6894	268.00	27	373.00	1282
96.00	1223	182.00	1080	269.00	111	374.00	146
97.00	367	183.00	406	270.00	376	377.00	69
98.00	23680	184.00	1852	271.00	835	383.00	1511
99.00	17896	185.00	10980	272.00	1249	384.00	423
100.00	1550	186.00	83152	273.00	9692	385.00	68
101.00	9487	187.00	23720	274.00	25328	389.00	52
102.00	425	188.00	2436	275.00	135872	390.00	617
103.00	3044	189.00	5483	276.00	17752	391.00	599
104.00	6375	190.00	1120	277.00	12846	392.00	314
105.00	6763	191.00	2778	278.00	2171	397.00	116
106.00	1744	192.00	7412	279.00	413	401.00	518
107.00	82056	193.00	8126	280.00	47	402.00	2112
108.00	12465	194.00	1575	281.00	366	403.00	3088
109.00	2100	195.00	931	282.00	257	404.00	1025
110.00	134848	196.00	15476	283.00	1550	405.00	230
111.00	20456	197.00	2243	284.00	850	410.00	59
112.00	2665	198.00	545472	285.00	2506	415.00	53
113.00	980	199.00	36768	286.00	589	421.00	2714

Date : 20-JAN-2010 18:01

Client ID: DFTPP

Instrument: MSD5.i

Sample Info: IWBH100107-01150PPH11SVHF111DFTPP

Volume Injected (uL): 1.0

Operator: rmb

Column phase: Phenomenex ZB-5MS

Column diameter: 0.20

Data File: s5a2003.d

Spectrum: Avg. Scans 610-612 (8.16), Background Scan 599

Location of Maximum: 198.00

Number of points: 340

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	222	200.00	3043	287.00	99	422.00	2700
115.00	660	201.00	2510	288.00	121	423.00	20184
116.00	4613	203.00	4624	289.00	549	424.00	3745
117.00	75176	204.00	22328	290.00	470	425.00	517
118.00	5437	205.00	38576	291.00	341	426.00	67
119.00	692	206.00	156736	292.00	612	428.00	46
120.00	843	207.00	20128	293.00	2698	429.00	45
121.00	396	208.00	6112	294.00	816	441.00	56360
122.00	6351	209.00	1887	295.00	732	442.00	372736
123.00	7910	210.00	2498	296.00	43400	443.00	72792
124.00	3842	211.00	5642	297.00	6058	444.00	6624
125.00	3283	212.00	954	298.00	401	445.00	230
126.00	778	213.00	555	299.00	45		
127.00	270016	214.00	235	301.00	618		
128.00	20088	215.00	1663	302.00	692		
129.00	107976	216.00	3396	303.00	4790		

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

SDG Number: 10-1287		Matrix: SOIL
Lab Sample ID: 1202019888		
Client Sample: QC for batch 943385	Client: LANL010	Project: QC
Client ID: MB for batch 943385	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 19:05	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2006-2.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	o-Nitroaniline	U	333	ug/kg	66.7	333
	3-Nitroaniline					

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

SDG Number: 10-1287		Matrix: SOIL
Lab Sample ID: 1202019888		
Client Sample: QC for batch 943385	Client: LANL010	Project: QC
Client ID: MB for batch 943385	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.1	Dilution: 1
Run Date: 01/20/2010 19:05	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30 g	Final Volume: 1 mL
Data File: s5a2006-2.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					
131-11-3	Dimethylphthalate	U	333	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene	U	333	ug/kg	33.3	333
208-96-8	Acenaphthylene	U	33.3	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol	U	667	ug/kg	127	667
132-64-9	Dibenzofuran	U	333	ug/kg	66.7	333
84-66-2	Diethylphthalate	U	333	ug/kg	66.7	333
86-73-7	Fluorene	U	33.3	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether	U	333	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol	U	333	ug/kg	66.7	333
100-01-6	4-Nitroaniline	U	333	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine	U	333	ug/kg	66.7	333
122-66-7	Azobenzene	U	333	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether	U	333	ug/kg	66.7	333
118-74-1	Hexachlorobenzene	U	333	ug/kg	66.7	333
85-01-8	Phenanthrene	U	33.3	ug/kg	10.0	33.3
120-12-7	Anthracene	U	33.3	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate	U	333	ug/kg	66.7	333
206-44-0	Fluoranthene	U	33.3	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate	U	333	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene	U	33.3	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine	U	333	ug/kg	100	333
218-01-9	Chrysene	U	33.3	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate	U	333	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate	U	333	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene	U	33.3	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene	U	33.3	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene	U	33.3	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene	U	33.3	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene	U	33.3	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene	U	33.3	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene	U	333	ug/kg	66.7	333

Tentatively Identified Compound Summary

CAS No.	Tentatively Identified Compound (TIC)	RT	Estimated	Units	Fit	Qual
	Unknown	2	1430	ug/kg		J
	Unknown	2.13	193	ug/kg		J

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

SDG Number: 10-1287

Matrix: SOIL

Lab Sample ID: 1202019888

Client Sample: QC for batch 943385

Client: LANL010

Project: QC

Client ID: MB for batch 943385

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 943386

Inst: MSD5.I

Dilution: 1

Run Date: 01/20/2010 19:05

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 01/20/2010 11:13

Aliquot: 30 g

Final Volume: 1 mL

Data File: s5a2006-2.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		2.94	466	ug/kg		JA

Data File: /chem/MSD5.i/s012010.b/s5a2006-4.d
 Report Date: 21-Jan-2010 07:32

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2006-4.d
 Lab Smp Id: 1202019888 Client Smp ID: SBLK01
 Inj Date : 20-JAN-2010 19:05
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202019888|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 4 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng/ul)	(ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	402539	40.0000		
* 29 Naphthalene-d8	136	4.784	4.792	(1.000)	1430437	40.0000		
* 46 Acenaphthene-d10	164	6.037	6.044	(1.000)	811923	40.0000		
* 67 Phenanthrene-d10	188	7.207	7.214	(1.000)	1453912	40.0000		
* 91 Chrysene-d12	240	9.613	9.622	(1.000)	1321517	40.0000		
* 98 Perylene-d12	264	11.289	11.298	(1.000)	1199085	40.0000		
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	750001	75.1281	2500	
\$ 5 Phenol-d5	99	3.631	3.637	(0.926)	905300	73.5334	2450	
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.894)	398937	36.3227	1210	
\$ 39 2-Fluorobiphenyl	172	5.525	5.534	(0.915)	787435	36.6621	1220	
\$ 60 2,4,6-Tribromophenol	329	6.637	6.641	(1.099)	196785	76.2558	2540	
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.894)	914051	44.0501	1470	

Data File: /chem/MSD5.i/s012010.b/s5a2006-4.d
Report Date: 21-Jan-2010 07:32

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2006-4.d
Lab Smp Id: 1202019888 Client Smp ID: SBLK01
Inj Date : 20-JAN-2010 19:05
Operator : RMB Inst ID: MSD5.i
Smp Info : |1202019888|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10-1287.sub
Target Version: 3.50
Processing Host: kilroy

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 10 1,4-Dichlorobenzene-d4	3.919	2507092	40.000

CONCENTRATIONS				QUANT			
RT	AREA	ON-COL (ng/ul)	FINAL (ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown					CAS #:		
1.996	2681059	42.7755924	1420	0		0	10
Unknown					CAS #:		
2.131	362899	5.78996298	193	0		0	10

RT	AREA	CONCENTRATIONS		QUAL	QUANT		CPND #
		ON-COL (ng/ul)	FINAL (ug/Kg)		LIBRARY	LIB ENTRY	
2.937	876020	13.9766687	466	0		0	10

Unknown Aldol Condensate CAS #:

Data File: /chem/HSD5.i/s012010.b/s5a2006-4.d

Date: 20-Jan-2010 19:05

Client ID: SBLK01

Sample Info: 1120201988194338611SVH11SBLK01

Volume Injected (uL): 0.5

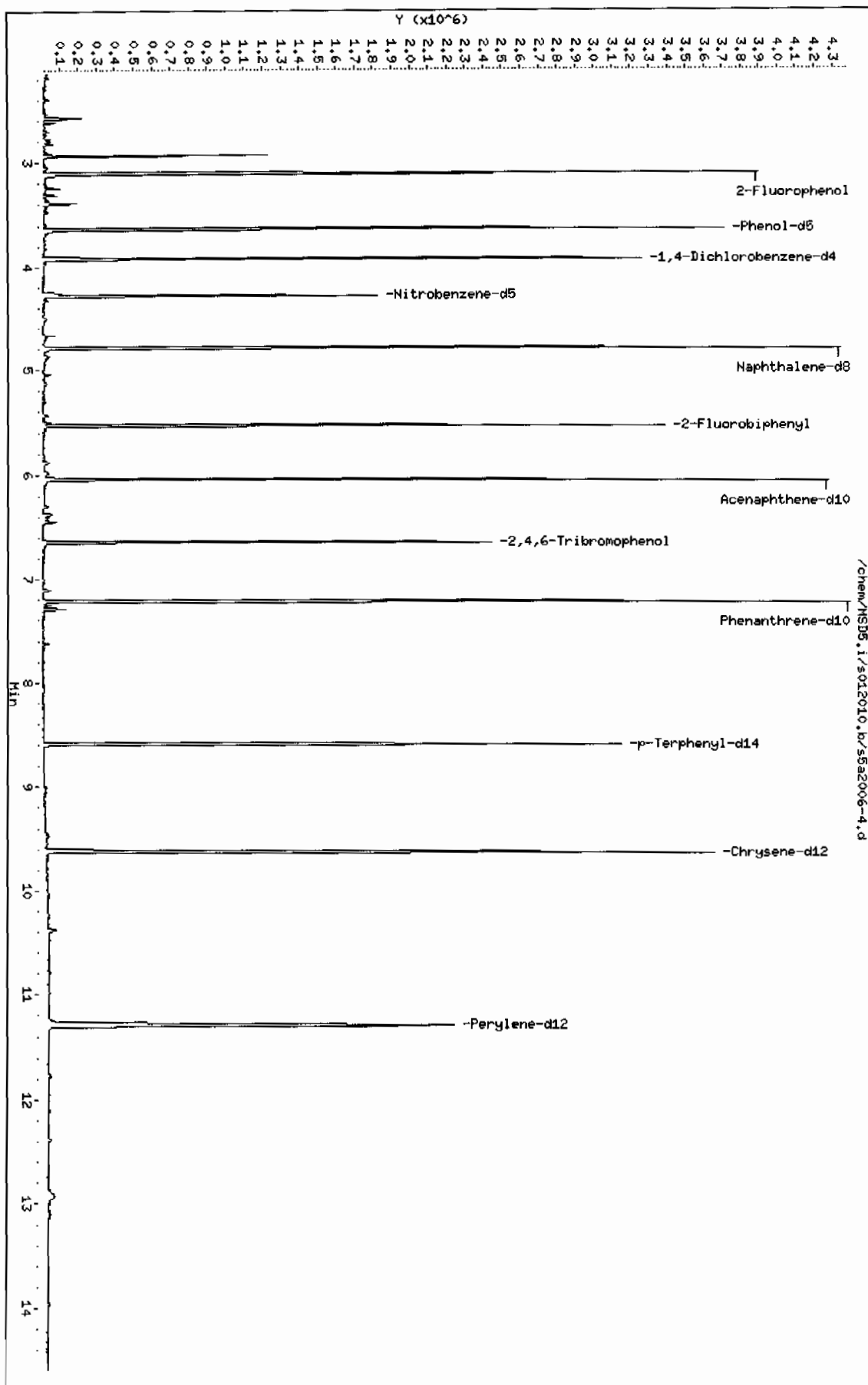
Column phase: J&W DB-SMS

Instrument: HSD5.i

Operator: RMB

Column diameter: 0.20

Page 1



Date : 20-JAN-2010 19:05

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: I12020198881943386111SVH111SBLK01

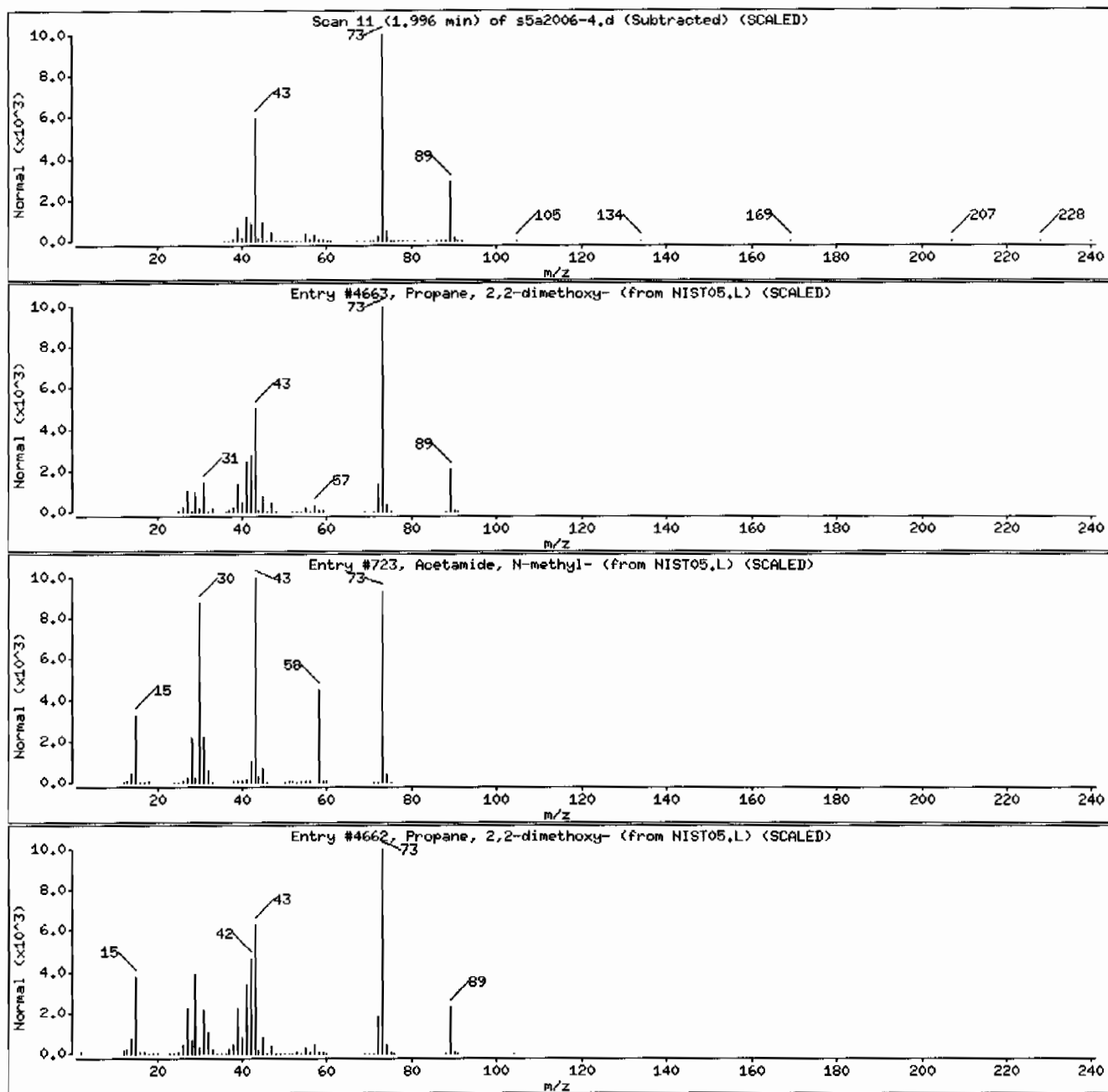
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4663	72	C5H12O2	104
Acetamide, N-methyl-	79-16-3	NIST05.L	723	9	C3H7NO	73
Propane, 2,2-dimethoxy-	77-76-9	NIST05.L	4662	9	C5H12O2	104



Date : 20-JAN-2010 19:05

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: I12020198881943386111SVMI11SBLK01

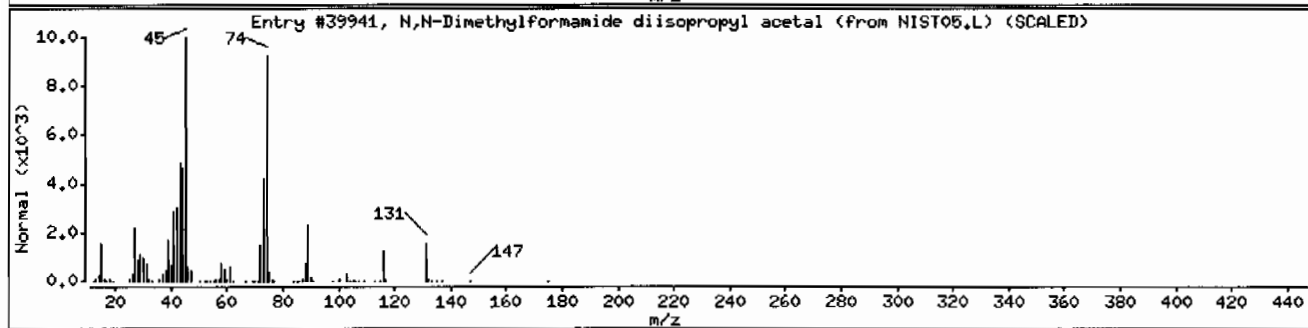
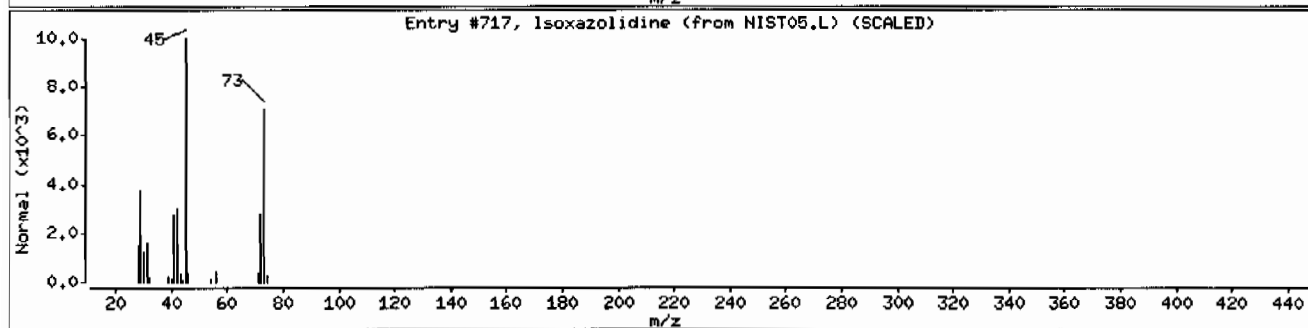
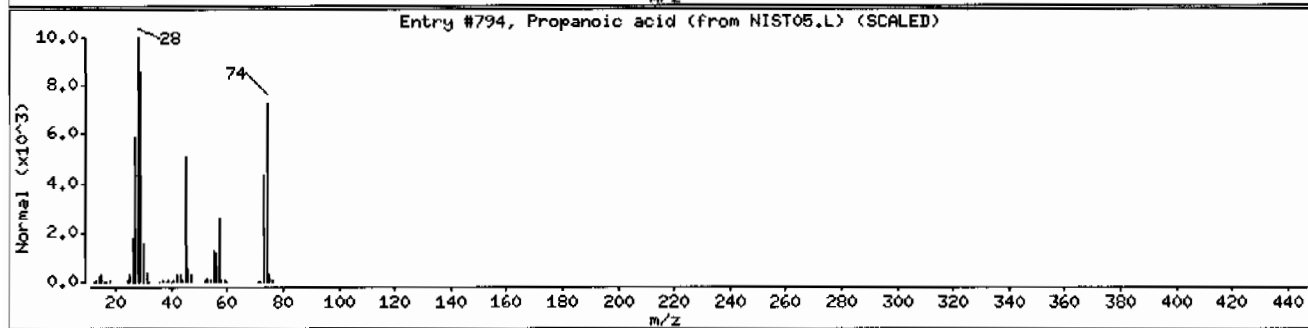
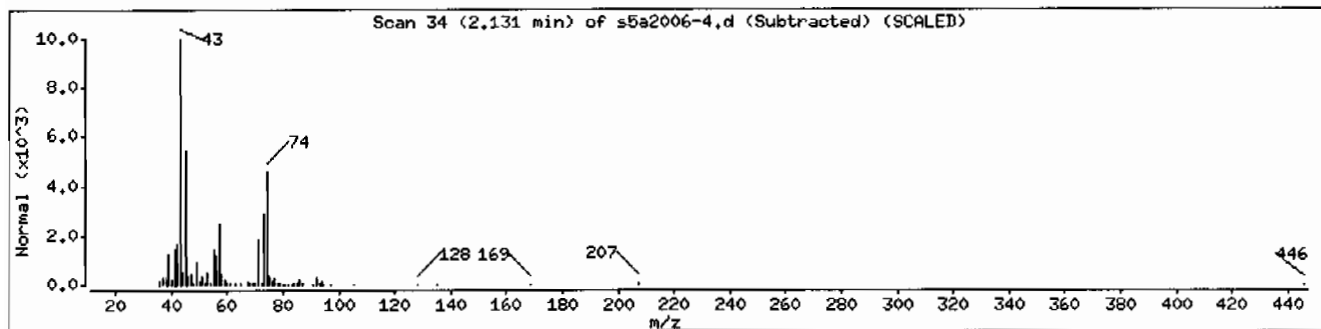
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Propanoic acid	79-09-4	NIST05.L	794	47	C3H6O2	74
Isoxazolidine	504-72-3	NIST05.L	717	35	C3H7NO	73
N,N-Dimethylformamide diisopropyl acetal	18503-89-4	NIST05.L	39941	33	C9H21NO2	175



Date: 20-JAN-2010 19:05

Client ID: SBLK01

Instrument: MSD5.i

Sample Info: I1202019888194338611ISVM11ISBLK01

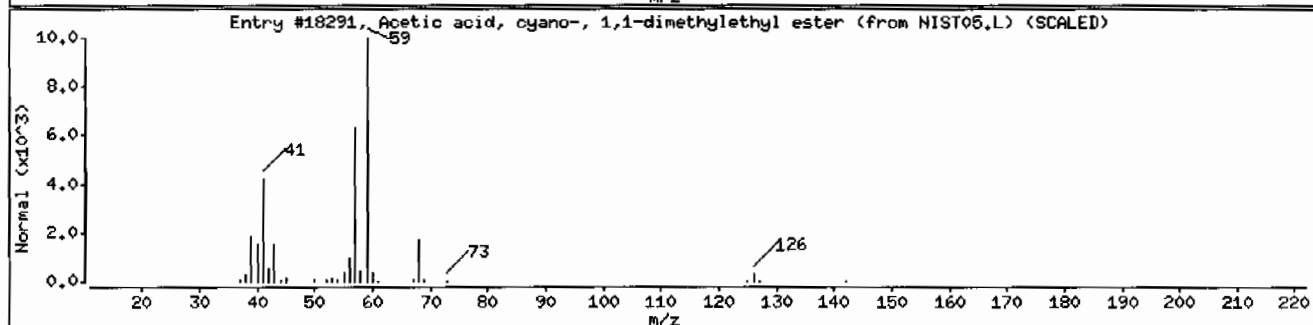
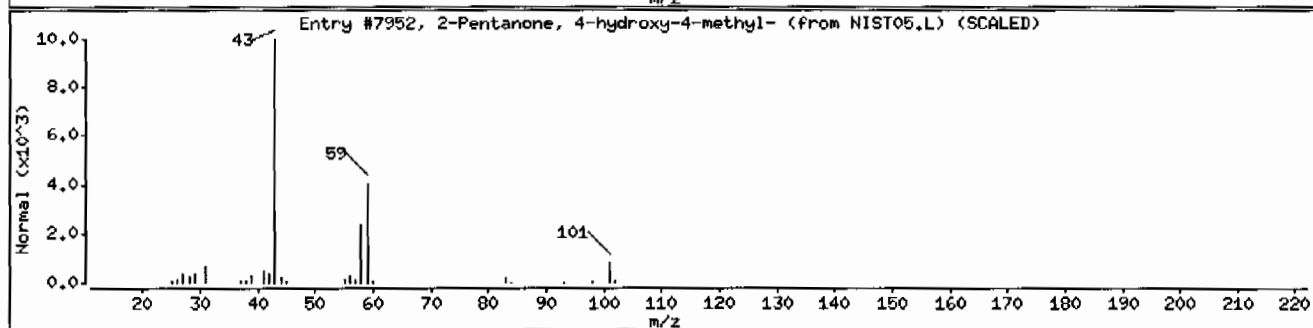
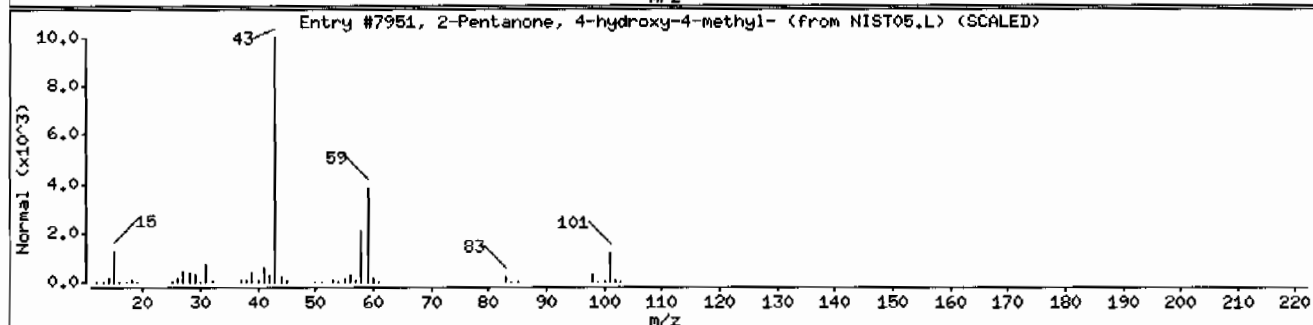
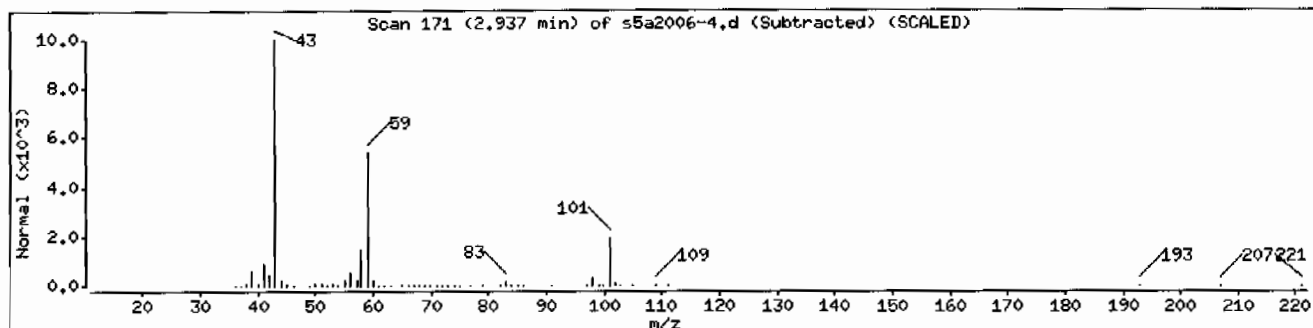
Volume Injected (uL): 0.5

Operator: RMB

Column phase: J&W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7951	56	C6H12O2	116
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIST05.L	7952	38	C6H12O2	116
Acetic acid, cyano-, 1,1-dimethylethyl e	1116-98-9	NIST05.L	18291	23	C7H11NO2	141



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

SDG Number: 10-1287

Matrix: SOIL

Lab Sample ID: 1202019889

Client Sample: QC for batch 943385

Client: LANL010

Project: QC

Client ID: LCS for batch 943385

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 943386

Inst: MSD5.J

Dilution: 1

Run Date: 01/20/2010 19:29

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 01/20/2010 11:13

Aliquot: 30 g

Final Volume: 1 mL

Data File: s5a2007-2.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		1260	ug/kg	66.7	333
108-95-2	Phenol		1330	ug/kg	66.7	333
95-57-8	2-Chlorophenol		1340	ug/kg	66.7	333
106-46-7	1,4-Dichlorobenzene		1250	ug/kg	66.7	333
621-64-7	N-Nitrosodipropylamine		1410	ug/kg	66.7	333
59-50-7	4-Chloro-3-methylphenol		1430	ug/kg	66.7	333
83-32-9	Acenaphthene		1380	ug/kg	11.0	33.3
121-14-2	2,4-Dinitrotoluene		1380	ug/kg	33.3	333
100-02-7	4-Nitrophenol		1700	ug/kg	110	333
87-86-5	Pentachlorophenol		1610	ug/kg	83.3	333
129-00-0	Pyrene		1380	ug/kg	10.0	33.3
110-86-1	Pyridine		1410	ug/kg	66.7	333
62-53-3	Aniline		1290	ug/kg	100	333
111-44-4	bis(2-Chloroethyl) ether		1280	ug/kg	66.7	333
541-73-1	1,3-Dichlorobenzene		1230	ug/kg	66.7	333
100-51-6	Benzyl alcohol		1590	ug/kg	100	333
95-50-1	1,2-Dichlorobenzene		1370	ug/kg	66.7	333
108-60-1	bis(2-Chloroisopropyl)ether		1310	ug/kg	66.7	333
95-48-7	o-Cresol		1410	ug/kg	66.7	333
65794-96-9	m,p-Cresols		1470	ug/kg	100	333
67-72-1	Hexachloroethane		1250	ug/kg	66.7	333
98-95-3	Nitrobenzene		1420	ug/kg	66.7	333
78-59-1	Isophorone		1340	ug/kg	66.7	333
88-75-5	2-Nitrophenol		1400	ug/kg	66.7	333
105-67-9	2,4-Dimethylphenol		1310	ug/kg	117	333
111-91-1	bis(2-Chloroethoxy)methane		1270	ug/kg	66.7	333
120-83-2	2,4-Dichlorophenol		1380	ug/kg	66.7	333
65-85-0	Benzoic acid		3290	ug/kg	167	667
91-20-3	Naphthalene		1270	ug/kg	10.0	33.3
106-47-8	4-Chloroaniline		1250	ug/kg	66.7	333
87-68-3	Hexachlorobutadiene		1350	ug/kg	66.7	333
91-57-6	2-Methylnaphthalene		1380	ug/kg	6.67	33.3
77-47-4	Hexachlorocyclopentadiene		1220	ug/kg	66.7	333
88-06-2	2,4,6-Trichlorophenol		1520	ug/kg	66.7	333
95-95-4	2,4,5-Trichlorophenol		1450	ug/kg	66.7	333
91-58-7	2-Chloronaphthalene		1390	ug/kg	11.0	33.3
88-74-4	2-Nitroaniline		1460	ug/kg	66.7	333
	<i>o</i> -Nitroaniline					
99-09-2	3-Nitroaniline		1340	ug/kg	66.7	333

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

SDG Number: 10-1287

Matrix: SOIL

Lab Sample ID: 1202019889

Client Sample: QC for batch 943385

Client: LANL010

Project: QC

Client ID: LCS for batch 943385

Method: SW846 8270C

SOP Ref: GL-OA-E-009

Batch ID: 943386

Inst: MSD5.I

Dilution: 1

Run Date: 01/20/2010 19:29

Analyst: RMB

Inj. Vol: .5 uL

Prep Date: 01/20/2010 11:13

Aliquot: 30 g

Final Volume: 1 mL

Data File: s5a2007-2.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		1360	ug/kg	66.7	333
606-20-2	2,6-Dinitrotoluene		1330	ug/kg	33.3	333
208-96-8	Acenaphthylene		1370	ug/kg	10.0	33.3
51-28-5	2,4-Dinitrophenol		1880	ug/kg	127	667
132-64-9	Dibenzofuran		1640	ug/kg	66.7	333
84-66-2	Diethylphthalate		1390	ug/kg	66.7	333
86-73-7	Fluorene		1340	ug/kg	10.0	33.3
7005-72-3	4-Chlorophenylphenylether		1330	ug/kg	66.7	333
534-52-1	2-Methyl-4,6-dinitrophenol		1540	ug/kg	66.7	333
100-01-6	4-Nitroaniline		1580	ug/kg	100	333
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1350	ug/kg	66.7	333
122-66-7	Azobenzene		1480	ug/kg	66.7	333
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1290	ug/kg	66.7	333
118-74-1	Hexachlorobenzene		1340	ug/kg	66.7	333
85-01-8	Phenanthrene		1390	ug/kg	10.0	33.3
120-12-7	Anthracene		1390	ug/kg	6.67	33.3
84-74-2	Di-n-butylphthalate		1420	ug/kg	66.7	333
206-44-0	Fluoranthene		1410	ug/kg	10.0	33.3
85-68-7	Butylbenzylphthalate		1400	ug/kg	66.7	333
56-55-3	Benzo(a)anthracene		1410	ug/kg	10.0	33.3
91-94-1	3,3'-Dichlorobenzidine		1090	ug/kg	100	333
218-01-9	Chrysene		1420	ug/kg	10.0	33.3
117-81-7	bis(2-Ethylhexyl)phthalate		1460	ug/kg	66.7	333
117-84-0	Di-n-octylphthalate		1300	ug/kg	66.7	333
205-99-2	Benzo(b)fluoranthene		1410	ug/kg	10.0	33.3
207-08-9	Benzo(k)fluoranthene		1410	ug/kg	10.0	33.3
50-32-8	Benzo(a)pyrene		1460	ug/kg	10.0	33.3
193-39-5	Indeno(1,2,3-cd)pyrene		1600	ug/kg	10.0	33.3
53-70-3	Dibenzo(a,h)anthracene		1650	ug/kg	10.0	33.3
191-24-2	Benzo(ghi)perylene		1700	ug/kg	10.0	33.3
120-82-1	1,2,4-Trichlorobenzene		1320	ug/kg	66.7	333

GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2007-4.d
 Lab Smp Id: 1202019889 Client Smp ID: SBLK01LCS
 Inj Date : 20-JAN-2010 19:29
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202019889|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 5 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.00000	weight of sample
M	0.00000	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	492019	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1831100	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044	(1.000)	954503	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1699090	40.0000	
* 91 Chrysene-d12	240	9.625	9.622	(1.000)	1535043	40.0000	
* 98 Perylene-d12	264	11.295	11.298	(1.000)	1362267	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	965282	79.1081	2640
\$ 5 Phenol-d5	99	3.637	3.637	(0.928)	1106379	73.5228	2450
\$ 20 Nitrobenzene-d5	82	4.284	4.287	(0.894)	597286	42.4828	1420
\$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	1014732	40.1875	1340
\$ 60 2,4,6-Tribromophenol	329	6.642	6.641	(1.099)	268309	88.4410	2950
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.892)	1097404	45.5297	1520

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.643	3.646	(0.929)	600065	40.0314	1330 (Q)
8 2-Chlorophenol	128	3.784	3.786	(0.965)	509972	40.1232	1340
11 1,4-Dichlorobenzene	146	3.931	3.935	(1.003)	510039	37.3708	1240
17 N-Nitrosodipropylamine	70	4.154	4.157	(1.060)	315021	42.4077	1410 (Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.739	(0.989)	460919	39.6856	1320
33 4-Chloro-3-methylphenol	107	5.137	5.134	(1.072)	410920	42.8706	1430
47 Acenaphthene	154	6.066	6.073	(1.004)	860606	41.4900	1380
50 2,4-Dinitrotoluene	165	6.154	6.160	(1.018)	299060	41.3991	1380
52 4-Nitrophenol	139	6.084	6.083	(1.007)	179867	51.0301	1700
65 Pentachlorophenol	266	7.042	7.041	(0.976)	174971	48.2311	1610
79 Pyrene	202	8.489	8.490	(0.882)	1613602	41.4140	1380
2 Pyridine	79	2.454	2.428	(0.626)	424237	42.2023	1410
4 Aniline	66	3.701	3.704	(0.944)	238437	38.6649	1290
7 bis(2-Chloroethyl) ether	63	3.713	3.723	(0.947)	430046	38.2531	1280
9 1,3-Dichlorobenzene	146	3.884	3.892	(0.991)	506791	36.8438	1230
12 Benzyl alcohol	108	3.984	3.988	(1.016)	400803	47.7842	1590
13 1,2-Dichlorobenzene	146	4.031	4.041	(1.028)	495605	41.1327	1370
14 bis(2-Chloroisopropyl) ether	45	4.060	4.065	(1.036)	867575	39.2801	1310
15 o-Cresol	107	4.043	4.041	(1.032)	373227	42.2648	1410
18 m,p-Cresols	107	4.137	4.142	(1.056)	555455	44.1882	1470
19 Hexachloroethane	117	4.266	4.267	(1.089)	211275	37.5004	1250
21 Nitrobenzene	77	4.295	4.301	(0.897)	538845	42.6600	1420
22 Isophorone	82	4.448	4.450	(0.929)	962356	40.1158	1340
23 2-Nitrophenol	139	4.507	4.513	(0.941)	250763	42.1219	1400
24 2,4-Dimethylphenol	122	4.501	4.503	(0.940)	468437	39.3577	1310
25 bis(2-Chloroethoxy) methane	93	4.566	4.571	(0.953)	540797	37.9790	1260
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	388036	41.2698	1380
27 Benzoic acid	105	4.572	4.552	(0.955)	660743	98.6117	3290
30 Naphthalene	128	4.801	4.807	(1.002)	1377927	38.2180	1270 (Q)
31 4-Chloroaniline	127	4.819	4.821	(1.006)	592893	37.5908	1250
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	279506	40.5739	1350
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	939130	41.4993	1380
36 Hexachlorocyclopentadiene	237	5.389	5.389	(0.892)	204214	36.6979	1220
37 2,4,6-Trichlorophenol	196	5.472	5.476	(0.906)	303459	45.6620	1520
38 2,4,5-Trichlorophenol	196	5.501	5.505	(0.910)	320985	43.3692	1440
40 2-Chloronaphthalene	162	5.637	5.640	(0.933)	870165	41.7294	1390
42 o-Nitroaniline	65	5.695	5.698	(0.943)	295411	43.6689	1460
41 m-Nitroaniline	138	5.989	5.991	(0.991)	203899	40.1618	1340
43 Dimethylphthalate	163	5.801	5.804	(0.960)	995450	40.7744	1360
44 2,6-Dinitrotoluene	165	5.854	5.861	(0.969)	228757	40.0063	1330
45 Acenaphthylene	152	5.942	5.948	(0.983)	1392773	40.9687	1360
48 2,4-Dinitrophenol	184	6.060	6.064	(1.003)	93411	56.4624	1880 (Q)
49 Dibenzofuran	168	6.189	6.194	(1.024)	1462423	49.1995	1640
51 Diethylphthalate	149	6.313	6.314	(1.045)	1052095	41.6639	1390
53 Fluorene	166	6.454	6.458	(1.068)	1000292	40.2618	1340
54 4-Chlorophenylphenylether	204	6.425	6.430	(1.063)	522435	39.8584	1330
55 2-Methyl-4,6-dinitrophenol	198	6.466	6.468	(0.896)	133255	46.1666	1540

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng/ul)	(ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.448	6.449	(1.067)	193691	47.3961	1580
133 Diphenylamine	169	6.519	6.516	(0.904)	831474	40.5791	1350
58 1,2-Diphenylhydrazine	77	6.554	6.555	(0.909)	1068821	44.2873	1480
61 4-Bromophenylphenylether	248	6.819	6.820	(0.945)	295223	38.7863	1290
63 Hexachlorobenzene	284	6.889	6.892	(0.955)	309824	40.1734	1340
68 Phenanthrene	178	7.231	7.234	(1.002)	1380045	41.6582	1390
69 Anthracene	178	7.278	7.277	(1.009)	1379650	41.5778	1380
72 Di-n-butylphthalate	149	7.631	7.633	(1.058)	1767514	42.6187	1420
76 Fluoranthene	202	8.272	8.279	(1.147)	1545290	42.4279	1410
85 Butylbenzylphthalate	149	9.019	9.020	(0.937)	776238	42.0851	1400
89 Benzo(a)anthracene	228	9.607	9.612	(0.998)	1382493	42.4153	1410
90 3,3'-Dichlorobenzidine	252	9.554	9.554	(0.993)	343727	32.6616	1090
92 Chrysene	228	9.648	9.651	(1.002)	1262155	42.5973	1420
93 bis(2-Ethylhexyl)phthalate	149	9.542	9.545	(0.991)	1113258	43.7295	1460
94 Di-n-octylphthalate	149	10.195	10.200	(0.903)	1704484	39.0695	1300
95 Benzo(b)fluoranthene	252	10.777	10.783	(0.954)	1309788	42.3717	1410
96 Benzo(k)fluoranthene	252	10.813	10.816	(0.957)	1278413	42.1628	1400
97 Benzo(a)pyrene	252	11.219	11.221	(0.993)	1155839	43.6557	1460
99 Indeno(1,2,3-cd)pyrene	276	13.060	13.060	(1.156)	1168508	48.1295	1600
100 Dibenzo(a,h)anthracene	278	13.077	13.079	(1.158)	970401	49.3537	1640
101 Benzo(ghi)perylene	276	13.607	13.604	(1.205)	974965	51.0138	1700
1 N-Methyl-N-nitrosomethylamine	74	2.407	2.399	(0.614)	276114	37.7579	1260

QC Flag Legend

Q - Qualifier signal failed the ratio test.

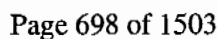
Page 1

Instrument: MSD5.i

Operator: RMB

Column diameter: 0.20

/chem/MSID5.i/s012010,b/s5a2007-4,a



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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202019890	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 943385	Client: LANL010	Project: QC
Client ID: RE15-10-7163MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 22:34	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a2015.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		1020	ug/kg	71.3	357
108-95-2	Phenol		1200	ug/kg	71.3	357
95-57-8	2-Chlorophenol		1120	ug/kg	71.3	357
106-46-7	1,4-Dichlorobenzene		890	ug/kg	71.3	357
621-64-7	N-Nitrosodipropylamine		1240	ug/kg	71.3	357
59-50-7	4-Chloro-3-methylphenol		1340	ug/kg	71.3	357
83-32-9	Acenaphthene		1170	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene		1170	ug/kg	35.7	357
100-02-7	4-Nitrophenol		1490	ug/kg	118	357
87-86-5	Pentachlorophenol		1510	ug/kg	89.2	357
129-00-0	Pyrene		1160	ug/kg	10.7	35.7
110-86-1	Pyridine		899	ug/kg	71.3	357
62-53-3	Aniline		970	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether		1040	ug/kg	71.3	357
541-73-1	1,3-Dichlorobenzene		874	ug/kg	71.3	357
100-51-6	Benzyl alcohol		1300	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene		1020	ug/kg	71.3	357
108-60-1	bis(2-Chloroisopropyl)ether		1100	ug/kg	71.3	357
95-48-7	o-Cresol		1380	ug/kg	71.3	357
65794-96-9	m,p-Cresols		1310	ug/kg	107	357
67-72-1	Hexachloroethane		861	ug/kg	71.3	357
98-95-3	Nitrobenzene		1210	ug/kg	71.3	357
78-59-1	Isophorone		1200	ug/kg	71.3	357
88-75-5	2-Nitrophenol		1220	ug/kg	71.3	357
105-67-9	2,4-Dimethylphenol		1120	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane		1150	ug/kg	71.3	357
120-83-2	2,4-Dichlorophenol		1240	ug/kg	71.3	357
65-85-0	Benzoic acid		3000	ug/kg	178	713
91-20-3	Naphthalene		1060	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline		1170	ug/kg	71.3	357
87-68-3	Hexachlorobutadiene		1020	ug/kg	71.3	357
91-57-6	2-Methylnaphthalene		1170	ug/kg	7.13	35.7
77-47-4	Hexachlorocyclopentadiene		780	ug/kg	71.3	357
88-06-2	2,4,6-Trichlorophenol		1340	ug/kg	71.3	357
95-95-4	2,4,5-Trichlorophenol		1310	ug/kg	71.3	357
91-58-7	2-Chloronaphthalene		1200	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline		1280	ug/kg	71.3	357
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1130	ug/kg	71.3	357

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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202019890	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 943385	Client: LANL010	Project: QC
Client ID: RE15-10-7163MS	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 22:34	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a2015.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		1200	ug/kg	71.3	357
606-20-2	2,6-Dinitrotoluene		1170	ug/kg	35.7	357
208-96-8	Acenaphthylene		1190	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol		1410	ug/kg	136	713
132-64-9	Dibenzofuran		1410	ug/kg	71.3	357
84-66-2	Diethylphthalate		1230	ug/kg	71.3	357
86-73-7	Fluorene		1170	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether		1140	ug/kg	71.3	357
534-52-1	2-Methyl-4,6-dinitrophenol		1300	ug/kg	71.3	357
100-01-6	4-Nitroaniline		1260	ug/kg	107	357
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1140	ug/kg	71.3	357
122-66-7	Azobenzene		1290	ug/kg	71.3	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1120	ug/kg	71.3	357
118-74-1	Hexachlorobenzene		1150	ug/kg	71.3	357
85-01-8	Phenanthrene		1190	ug/kg	10.7	35.7
120-12-7	Anthracene		1210	ug/kg	7.13	35.7
84-74-2	Di-n-butylphthalate		1340	ug/kg	71.3	357
206-44-0	Fluoranthene		1210	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate		1300	ug/kg	71.3	357
56-55-3	Benzo(a)anthracene		1200	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine		609	ug/kg	107	357
218-01-9	Chrysene		1220	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate		1370	ug/kg	71.3	357
117-84-0	Di-n-octylphthalate		1300	ug/kg	71.3	357
205-99-2	Benzo(b)fluoranthene		1230	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene		1240	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene		1230	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene		1100	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene		1140	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene		1050	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene		1040	ug/kg	71.3	357

Data File: /chem/MSD5.i/s012010.b/s5a2015.d
 Report Date: 21-Jan-2010 07:44

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2015.d
 Lab Smp Id: 1202019890 Client Smp ID: RE15-10-7163MS
 Inj Date : 20-JAN-2010 22:34
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202019890|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 13 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	6.56910	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	152	3.919	3.926	(1.000)	514516	40.0000	
* 29 Naphthalene-d8	136	4.790	4.792	(1.000)	1898064	40.0000	
* 46 Acenaphthene-d10	164	6.042	6.044	(1.000)	1025420	40.0000	
* 67 Phenanthrene-d10	188	7.213	7.214	(1.000)	1810158	40.0000	
* 91 Chrysene-d12	240	9.625	9.622	(1.000)	1638824	40.0000	
* 98 Perylene-d12	264	11.295	11.298	(1.000)	1333553	40.0000	
\$ 3 2-Fluorophenol	112	3.107	3.102	(0.793)	795772	62.3647	2220
\$ 5 Phenol-d5	99	3.637	3.637	(0.928)	948915	60.3015	2150
\$ 20 Nitrobenzene-d5	82	4.278	4.287	(0.893)	467444	32.0747	1140
\$ 39 2-Fluorobiphenyl	172	5.531	5.534	(0.915)	844384	31.1283	1110
\$ 60 2,4,6-Tribromophenol	329	6.642	6.641	(1.099)	226225	69.4120	2480
\$ 81 p-Terphenyl-d14	244	8.589	8.592	(0.892)	919652	35.7388	1270

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	----	==	=====	=====	=====	=====	=====
6 Phenol	94	3.643	3.646	(0.929)	525721	33.5383	1200 (Q)
8 2-Chlorophenol	128	3.784	3.786	(0.965)	416977	31.3722	1120
11 1,4-Dichlorobenzene	146	3.931	3.935	(1.003)	355960	24.9409	890
17 N-Nitrosodipropylamine	70	4.154	4.157	(1.060)	270566	34.8307	1240 (Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.739	(0.989)	351664	29.2105	1040
33 4-Chloro-3-methylphenol	107	5.137	5.134	(1.072)	373334	37.5752	1340
47 Acenaphthene	154	6.066	6.073	(1.004)	729753	32.7484	1170
50 2,4-Dinitrotoluene	165	6.154	6.160	(1.018)	253982	32.7274	1170
52 4-Nitrophenol	139	6.084	6.083	(1.007)	151836	41.7917	1490
65 Pentachlorophenol	266	7.042	7.041	(0.976)	160030	42.3494	1510
79 Pyrene	202	8.489	8.490	(0.882)	1350960	32.4774	1160
2 Pyridine	79	2.454	2.428	(0.626)	264918	25.2013	899
4 Aniline	66	3.701	3.704	(0.944)	175407	27.2003	970
7 bis(2-Chloroethyl) ether	63	3.713	3.723	(0.947)	344139	29.2731	1040
9 1,3-Dichlorobenzene	146	3.884	3.892	(0.991)	352554	24.5101	874
12 Benzyl alcohol	108	3.990	3.988	(1.018)	318718	36.3365	1300
13 1,2-Dichlorobenzene	146	4.037	4.041	(1.030)	358970	28.4901	1020
14 bis(2-Chloroisopropyl) ether	45	4.060	4.065	(1.036)	710661	30.7688	1100
15 o-Cresol	107	4.043	4.041	(1.032)	357281	38.6900	1380
18 m,p-Cresols	107	4.137	4.142	(1.056)	484096	36.8274	1310
19 Hexachloroethane	117	4.266	4.267	(1.089)	142236	24.1425	861
21 Nitrobenzene	77	4.295	4.301	(0.897)	444841	33.9753	1210
22 Isophorone	82	4.448	4.450	(0.929)	839703	33.7682	1200
23 2-Nitrophenol	139	4.507	4.513	(0.941)	210887	34.1742	1220
24 2,4-Dimethylphenol	122	4.501	4.503	(0.940)	387059	31.3731	1120
25 bis(2-Chloroethoxy) methane	93	4.566	4.571	(0.953)	474943	32.1775	1150
26 2,4-Dichlorophenol	162	4.672	4.677	(0.975)	337800	34.6594	1240
27 Benzoic acid	105	4.572	4.552	(0.955)	568230	84.1288	3000
30 Naphthalene	128	4.801	4.807	(1.002)	1112732	29.7737	1060 (Q)
31 4-Chloroaniline	127	4.819	4.821	(1.006)	535281	32.7408	1170
32 Hexachlorobutadiene	225	4.866	4.869	(1.016)	203884	28.5523	1020
34 2-Methylnaphthalene	142	5.284	5.288	(1.103)	770987	32.8673	1170
36 Hexachlorocyclopentadiene	237	5.389	5.389	(0.892)	130673	21.8585	780
37 2,4,6-Trichlorophenol	196	5.472	5.476	(0.906)	268474	37.6040	1340
38 2,4,5-Trichlorophenol	196	5.507	5.505	(0.911)	291800	36.6993	1310
40 2-Chloronaphthalene	162	5.637	5.640	(0.933)	752386	33.5859	1200
42 o-Nitroaniline	65	5.695	5.698	(0.943)	260147	35.7964	1280
41 m-Nitroaniline	138	5.989	5.991	(0.991)	172401	31.6092	1130
43 Dimethylphthalate	163	5.801	5.804	(0.960)	880721	33.5801	1200
44 2,6-Dinitrotoluene	165	5.854	5.861	(0.969)	202046	32.8912	1170
45 Acenaphthylene	152	5.942	5.948	(0.983)	1215083	33.2700	1190
48 2,4-Dinitrophenol	184	6.060	6.064	(1.003)	57458	39.5545	1410 (Q)
49 Dibenzofuran	168	6.189	6.194	(1.024)	1259835	39.4527	1410
51 Diethylphthalate	149	6.313	6.314	(1.045)	932601	34.3776	1230
53 Fluorene	166	6.454	6.458	(1.068)	878576	32.9171	1170
54 4-Chlorophenylphenylether	204	6.431	6.430	(1.064)	451190	32.0422	1140
55 2-Methyl-4,6-dinitrophenol	198	6.466	6.468	(0.896)	104488	36.3878	1300

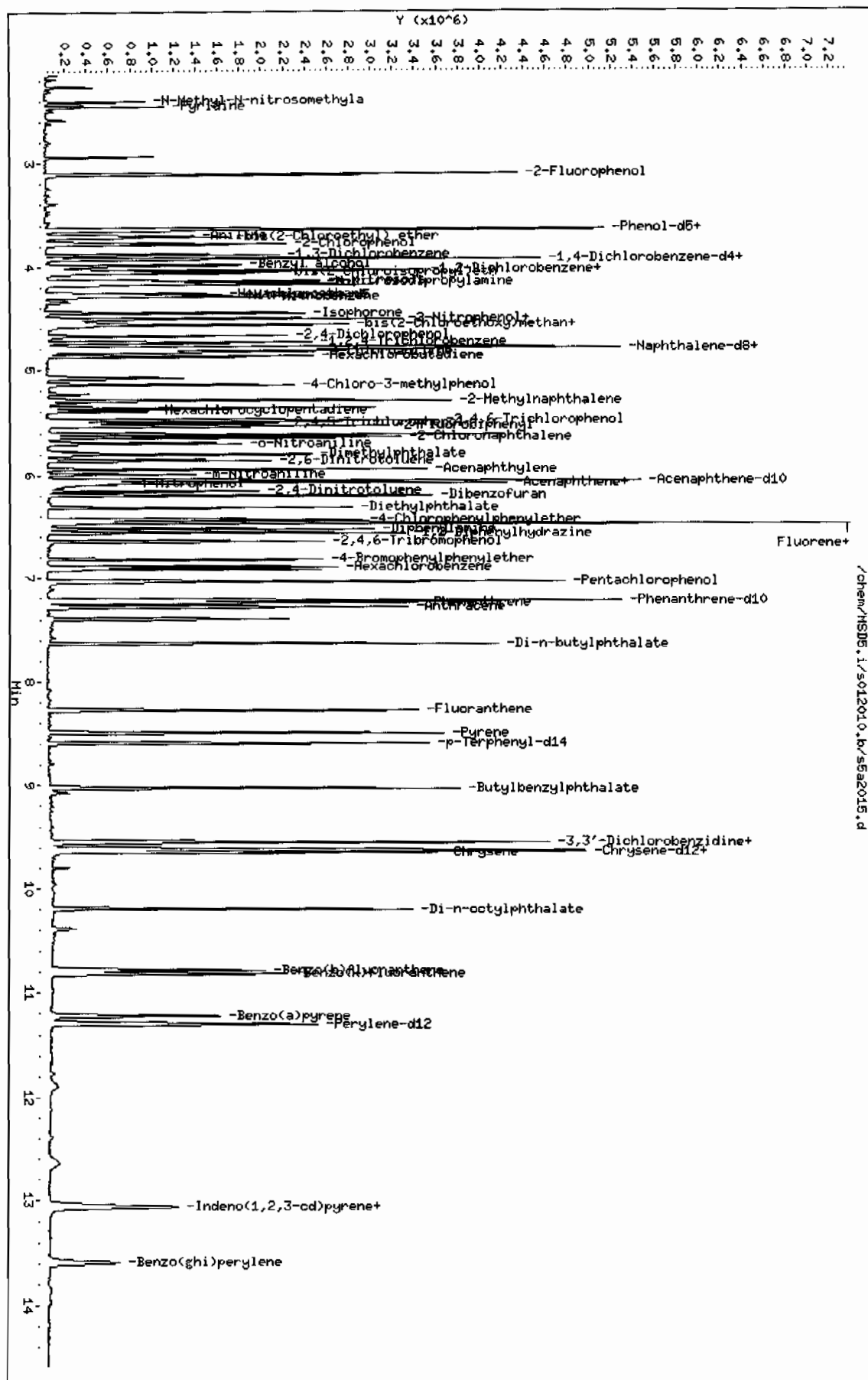
Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.448	6.449	(1.067)	155225	35.3567	1260
133 Diphenylamine	169	6.519	6.516	(0.904)	700659	32.0967	1140
58 1,2-Diphenylhydrazine	77	6.554	6.555	(0.909)	932595	36.2717	1290
61 4-Bromophenylphenylether	248	6.819	6.820	(0.945)	254732	31.4132	1120
63 Hexachlorobenzene	284	6.889	6.892	(0.955)	264128	32.1468	1150
68 Phenanthrene	178	7.231	7.234	(1.002)	1179371	33.4163	1190
69 Anthracene	178	7.278	7.277	(1.009)	1195337	33.8129	1200
72 Di-n-butylphthalate	149	7.631	7.633	(1.058)	1658483	37.5360	1340
76 Fluoranthene	202	8.272	8.279	(1.147)	1321567	34.0589	1210
85 Butylbenzylphthalate	149	9.019	9.020	(0.937)	718149	36.4701	1300
89 Benzo(a)anthracene	228	9.613	9.612	(0.999)	1171853	33.6760	1200
90 3,3'-Dichlorobenzidine	252	9.554	9.554	(0.993)	191764	17.0679	609(R)
92 Chrysene	228	9.648	9.651	(1.002)	1085380	34.3115	1220
93 bis(2-Ethylhexyl)phthalate	149	9.542	9.545	(0.991)	1045419	38.4643	1370
94 Di-n-octylphthalate	149	10.195	10.200	(0.903)	1562060	36.5759	1300
95 Benzo(b)fluoranthene	252	10.777	10.783	(0.954)	1040008	34.3688	1220
96 Benzo(k)fluoranthene	252	10.813	10.816	(0.957)	1032641	34.7904	1240
97 Benzo(a)pyrene	252	11.219	11.221	(0.993)	892240	34.4253	1230
99 Indeno(1,2,3-cd)pyrene	276	13.054	13.060	(1.156)	708652	30.9187	1100
100 Dibenzo(a,h)anthracene	278	13.071	13.079	(1.157)	590088	32.0467	1140
101 Benzo(ghi)perylene	276	13.595	13.604	(1.204)	552505	29.5316	1050
1 N-Methyl-N-nitrosomethylamine	74	2.407	2.399	(0.614)	217871	28.4906	1020

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/HSD5.i/s012010.b/s5a2015.d
 Date: 20-JAN-2010 22:34
 Client ID: REIS-10-7163MS
 Sample Info: 11202019890194338611SVH11MS
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: HSD5.i
 Operator: RNB
 Column diameter: 0.20



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

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202019891	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 943385	Client: LANL010	Project: QC
Client ID: RE15-10-7163MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5J	Dilution: 1
Run Date: 01/20/2010 22:57	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a2016.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		1120	ug/kg	71.3	357
108-95-2	Phenol		1310	ug/kg	71.3	357
95-57-8	2-Chlorophenol		1250	ug/kg	71.3	357
106-46-7	1,4-Dichlorobenzene		921	ug/kg	71.3	357
621-64-7	N-Nitrosodipropylamine		1340	ug/kg	71.3	357
59-50-7	4-Chloro-3-methylphenol		1470	ug/kg	71.3	357
83-32-9	Acenaphthene		1280	ug/kg	11.8	35.7
121-14-2	2,4-Dinitrotoluene		1200	ug/kg	35.7	357
100-02-7	4-Nitrophenol		1680	ug/kg	118	357
87-86-5	Pentachlorophenol		1640	ug/kg	89.2	357
129-00-0	Pyrene		1270	ug/kg	10.7	35.7
110-86-1	Pyridine		946	ug/kg	71.3	357
62-53-3	Aniline		1110	ug/kg	107	357
111-44-4	bis(2-Chloroethyl) ether		1150	ug/kg	71.3	357
541-73-1	1,3-Dichlorobenzene		906	ug/kg	71.3	357
100-51-6	Benzyl alcohol		1430	ug/kg	107	357
95-50-1	1,2-Dichlorobenzene		1060	ug/kg	71.3	357
108-60-1	bis(2-Chloroisopropyl)ether		1160	ug/kg	71.3	357
95-48-7	o-Cresol		1410	ug/kg	71.3	357
65794-96-9	m,p-Cresols		1450	ug/kg	107	357
67-72-1	Hexachloroethane		886	ug/kg	71.3	357
98-95-3	Nitrobenzene		1280	ug/kg	71.3	357
78-59-1	Isophorone		1290	ug/kg	71.3	357
88-75-5	2-Nitrophenol		1330	ug/kg	71.3	357
105-67-9	2,4-Dimethylphenol		1220	ug/kg	125	357
111-91-1	bis(2-Chloroethoxy)methane		1220	ug/kg	71.3	357
120-83-2	2,4-Dichlorophenol		1340	ug/kg	71.3	357
65-85-0	Benzoic acid		3340	ug/kg	178	713
91-20-3	Naphthalene		1120	ug/kg	10.7	35.7
106-47-8	4-Chloroaniline		1270	ug/kg	71.3	357
87-68-3	Hexachlorobutadiene		1010	ug/kg	71.3	357
91-57-6	2-Methylnaphthalene		1250	ug/kg	71.3	35.7
77-47-4	Hexachlorocyclopentadiene		870	ug/kg	71.3	357
88-06-2	2,4,6-Trichlorophenol		1480	ug/kg	71.3	357
95-95-4	2,4,5-Trichlorophenol		1340	ug/kg	71.3	357
91-58-7	2-Chloronaphthalene		1260	ug/kg	11.8	35.7
88-74-4	2-Nitroaniline		1410	ug/kg	71.3	357
	o-Nitroaniline					
99-09-2	3-Nitroaniline		1330	ug/kg	71.3	357

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number: 10-1287	Date Collected: 01/12/2010 12:00	Matrix: R
Lab Sample ID: 1202019891	Date Received: 01/16/2010 08:55	%Moisture: 6.6
Client Sample: QC for batch 943385	Client: LANL010	Project: QC
Client ID: RE15-10-7163MSD	Method: SW846 8270C	SOP Ref: GL-OA-E-009
Batch ID: 943386	Inst: MSD5.I	Dilution: 1
Run Date: 01/20/2010 22:57	Analyst: RMB	Inj. Vol: .5 uL
Prep Date: 01/20/2010 11:13	Aliquot: 30.01 g	Final Volume: 1 mL
Data File: s5a2016.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		1310	ug/kg	71.3	357
606-20-2	2,6-Dinitrotoluene		1290	ug/kg	35.7	357
208-96-8	Acenaphthylene		1280	ug/kg	10.7	35.7
51-28-5	2,4-Dinitrophenol		1530	ug/kg	136	713
132-64-9	Dibenzofuran		1480	ug/kg	71.3	357
84-66-2	Diethylphthalate		1340	ug/kg	71.3	357
86-73-7	Fluorene		1300	ug/kg	10.7	35.7
7005-72-3	4-Chlorophenylphenylether		1260	ug/kg	71.3	357
534-52-1	2-Methyl-4,6-dinitrophenol		1400	ug/kg	71.3	357
100-01-6	4-Nitroaniline		1500	ug/kg	107	357
	<i>p</i> -Nitroaniline					
122-39-4	Diphenylamine		1280	ug/kg	71.3	357
122-66-7	Azobenzene		1410	ug/kg	71.3	357
	1,2-Diphenylhydrazine					
101-55-3	4-Bromophenylphenylether		1210	ug/kg	71.3	357
118-74-1	Hexachlorobenzene		1250	ug/kg	71.3	357
85-01-8	Phenanthrene		1320	ug/kg	10.7	35.7
120-12-7	Anthracene		1330	ug/kg	7.13	35.7
84-74-2	Di-n-butylphthalate		1450	ug/kg	71.3	357
206-44-0	Fluoranthene		1350	ug/kg	10.7	35.7
85-68-7	Butylbenzylphthalate		1360	ug/kg	71.3	357
56-55-3	Benzo(a)anthracene		1320	ug/kg	10.7	35.7
91-94-1	3,3'-Dichlorobenzidine		826	ug/kg	107	357
218-01-9	Chrysene		1340	ug/kg	10.7	35.7
117-81-7	bis(2-Ethylhexyl)phthalate		1450	ug/kg	71.3	357
117-84-0	Di-n-octylphthalate		1350	ug/kg	71.3	357
205-99-2	Benzo(b)fluoranthene		1320	ug/kg	10.7	35.7
207-08-9	Benzo(k)fluoranthene		1380	ug/kg	10.7	35.7
50-32-8	Benzo(a)pyrene		1350	ug/kg	10.7	35.7
193-39-5	Indeno(1,2,3-cd)pyrene		1260	ug/kg	10.7	35.7
53-70-3	Dibenzo(a,h)anthracene		1280	ug/kg	10.7	35.7
191-24-2	Benzo(ghi)perylene		1230	ug/kg	10.7	35.7
120-82-1	1,2,4-Trichlorobenzene		1080	ug/kg	71.3	357

Data File: /chem/MSD5.i/s012010.b/s5a2016.d
 Report Date: 21-Jan-2010 07:45

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GEL Laboratories LLC

Data file : /chem/MSD5.i/s012010.b/s5a2016.d
 Lab Smp Id: 1202019891 Client Smp ID: RE15-10-7163MSD
 Inj Date : 20-JAN-2010 22:57
 Operator : RMB Inst ID: MSD5.i
 Smp Info : |1202019891|943386|1|SVM|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/MSD5.i/s012010.b/MSD5-M8270C-010510.m
 Meth Date : 21-Jan-2010 07:08 rmb Quant Type: ISTD
 Cal Date : 06-JAN-2010 14:25 Cal File: s5a0543.d
 Als bottle: 14 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 10-1287.sub
 Target Version: 3.50
 Processing Host: kilroy

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vi	0.50000	volume injected
Ws	30.01000	weight of sample
M	6.56910	% moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng/ul)	FINAL (ug/Kg)
* 10 1,4-Dichlorobenzene-d4	=====	152	3.919	3.926	(1.000)	481027	40.0000	
* 29 Naphthalene-d8		136	4.784	4.792	(1.000)	1817899	40.0000	
* 46 Acenaphthene-d10		164	6.042	6.044	(1.000)	994355	40.0000	
* 67 Phenanthrene-d10		188	7.213	7.214	(1.000)	1792705	40.0000	
* 91 Chrysene-d12		240	9.625	9.622	(1.000)	1673771	40.0000	
* 98 Perylene-d12		264	11.295	11.298	(1.000)	1421506	40.0000	
\$ 3 2-Fluorophenol		112	3.107	3.102	(0.793)	797552	66.8557	2380
\$ 5 Phenol-d5		99	3.637	3.637	(0.928)	968777	65.8498	2350
\$ 20 Nitrobenzene-d5		82	4.278	4.287	(0.894)	475667	34.0782	1220
\$ 39 2-Fluorobiphenyl		172	5.531	5.534	(0.915)	868429	33.0149	1180
\$ 60 2,4,6-Tribromophenol		329	6.642	6.641	(1.099)	249518	78.9508	2820
\$ 81 p-Terphenyl-d14		244	8.589	8.592	(0.892)	988203	37.6010	1340

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng/ul)	FINAL (ug/Kg)
6 Phenol	94	3.643	3.646 (0.929)		539203	36.7932	1310 (Q)
8 2-Chlorophenol	128	3.784	3.786 (0.965)		436684	35.1423	1250
11 1,4-Dichlorobenzene	146	3.931	3.935 (1.003)		344672	25.8314	921
17 N-Nitrosodipropylamine	70	4.154	4.157 (1.060)		273877	37.7115	1340 (Q)
28 1,2,4-Trichlorobenzene	180	4.737	4.739 (0.990)		348197	30.1979	1080
33 4-Chloro-3-methylphenol	107	5.137	5.134 (1.074)		392472	41.2432	1470
47 Acenaphthene	154	6.066	6.073 (1.004)		777554	35.9837	1280
50 2,4-Dinitrotoluene	165	6.154	6.160 (1.018)		252667	33.5751	1200
52 4-Nitrophenol	139	6.084	6.083 (1.007)		170783	47.2110	1680
65 Pentachlorophenol	266	7.042	7.041 (0.976)		174351	45.9211	1640
79 Pyrene	202	8.489	8.490 (0.882)		1516172	35.6881	1270
2 Pyridine	79	2.454	2.428 (0.626)		260810	26.5378	946
4 Aniline	66	3.701	3.704 (0.944)		187775	31.1455	1110
7 bis(2-Chloroethyl) ether	63	3.713	3.723 (0.947)		354100	32.2173	1150
9 1,3-Dichlorobenzene	146	3.884	3.892 (0.991)		341553	25.3984	906
12 Benzyl alcohol	108	3.984	3.988 (1.016)		327827	39.9770	1420
13 1,2-Dichlorobenzene	146	4.031	4.041 (1.028)		350487	29.7534	1060
14 bis(2-Chloroisopropyl) ether	45	4.060	4.065 (1.036)		703946	32.6000	1160
15 o-Cresol	107	4.043	4.041 (1.032)		341176	39.5182	1410
18 m,p-Cresols	107	4.137	4.142 (1.056)		498701	40.5798	1450
19 Hexachloroethane	117	4.260	4.267 (1.087)		136852	24.8457	886
21 Nitrobenzene	77	4.295	4.301 (0.898)		448421	35.7590	1280
22 Isophorone	82	4.448	4.450 (0.930)		861384	36.1676	1290
23 2-Nitrophenol	139	4.507	4.513 (0.942)		219696	37.1715	1320
24 2,4-Dimethylphenol	122	4.501	4.503 (0.941)		403762	34.1701	1220
25 bis(2-Chloroethoxy)methane	93	4.566	4.571 (0.954)		485144	34.3181	1220
26 2,4-Dichlorophenol	162	4.672	4.677 (0.977)		350763	37.5766	1340
27 Benzoic acid	105	4.572	4.552 (0.956)		618266	93.7240	3340
30 Naphthalene	128	4.801	4.807 (1.004)		1122331	31.3549	1120 (Q)
31 4-Chloroaniline	127	4.819	4.821 (1.007)		556877	35.5637	1270
32 Hexachlorobutadiene	225	4.866	4.869 (1.017)		194426	28.4285	1010
34 2-Methylnaphthalene	142	5.284	5.288 (1.105)		790231	35.1732	1250
36 Hexachlorocyclopentadiene	237	5.384	5.389 (0.891)		141451	24.4006	870
37 2,4,6-Trichlorophenol	196	5.472	5.476 (0.906)		287274	41.4943	1480
38 2,4,5-Trichlorophenol	196	5.507	5.505 (0.911)		290747	37.7093	1340
40 2-Chloronaphthalene	162	5.637	5.640 (0.933)		766252	35.2735	1260
42 o-Nitroaniline	65	5.695	5.698 (0.943)		278169	39.4721	1410
41 m-Nitroaniline	138	5.989	5.991 (0.991)		197256	37.2963	1330
43 Dimethylphthalate	163	5.801	5.804 (0.960)		931715	36.6342	1310
44 2,6-Dinitrotoluene	165	5.854	5.861 (0.969)		215117	36.1131	1290
45 Acenaphthylene	152	5.942	5.948 (0.983)		1267315	35.7842	1280
48 2,4-Dinitrophenol	184	6.060	6.064 (1.003)		63918	42.8881	1530 (Q)
49 Dibenzofuran	168	6.189	6.194 (1.024)		1281359	41.3804	1480
51 Diethylphthalate	149	6.313	6.314 (1.045)		991725	37.6992	1340
53 Fluorene	166	6.454	6.458 (1.068)		940859	36.3519	1300
54 4-Chlorophenylphenylether	204	6.431	6.430 (1.064)		483234	35.3900	1260
55 2-Methyl-4,6-dinitrophenol	198	6.466	6.468 (0.896)		114113	39.1891	1400

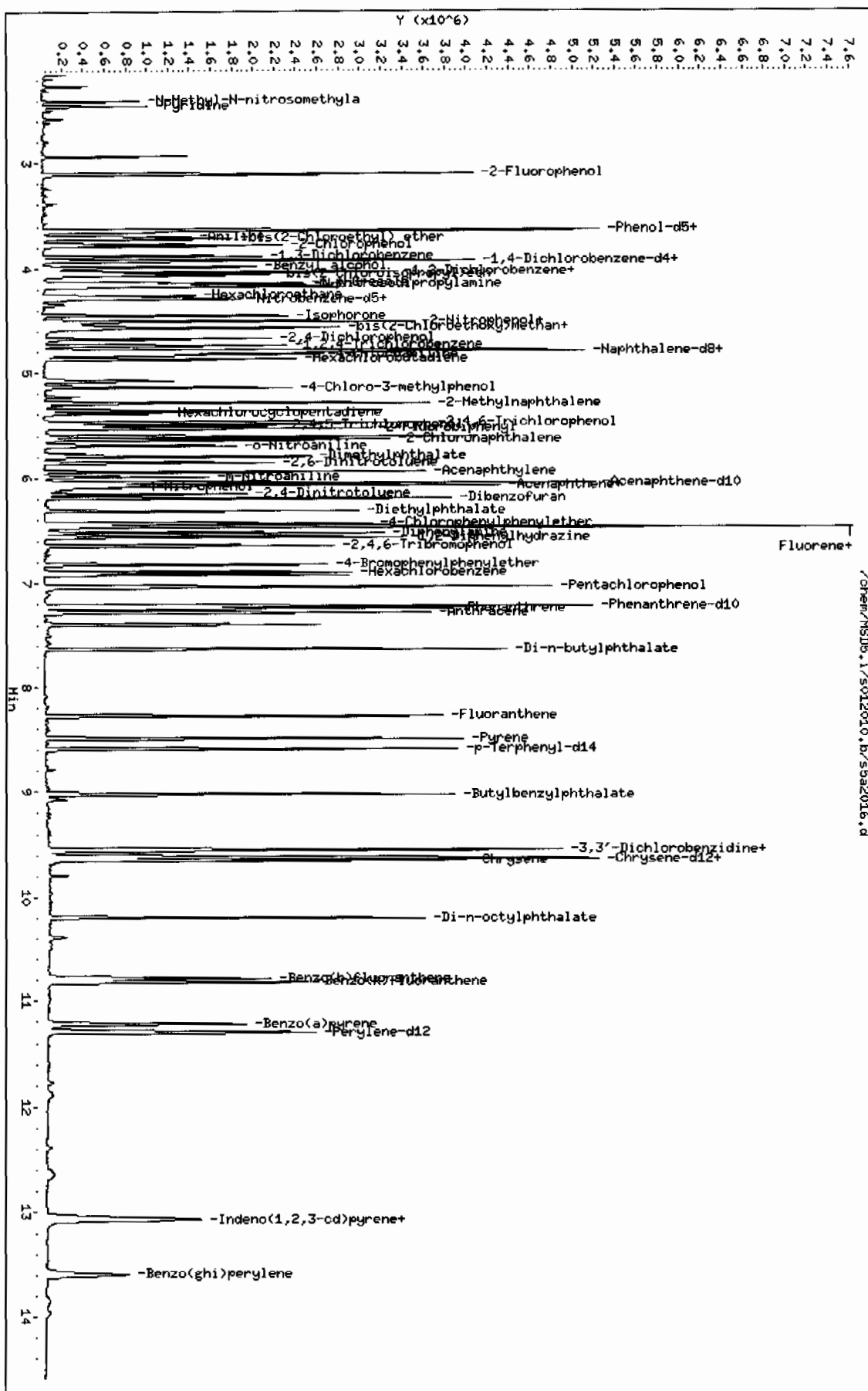
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng/ul)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
56 p-Nitroaniline	138	6.448	6.449	(1.067)	179145	42.0800	1500
133 Diphenylamine	169	6.519	6.516	(0.904)	775567	35.8741	1280
58 1,2-Diphenylhydrazine	77	6.554	6.555	(0.909)	1009527	39.6460	1410
61 4-Bromophenylphenylether	248	6.819	6.820	(0.945)	271878	33.8541	1210
63 Hexachlorobenzene	284	6.889	6.892	(0.955)	284752	34.9944	1250
68 Phenanthrene	178	7.231	7.234	(1.002)	1298028	37.1364	1320
69 Anthracene	178	7.278	7.277	(1.009)	1301642	37.1785	1320
72 Di-n-butylphthalate	149	7.631	7.633	(1.058)	1778710	40.6490	1450
76 Fluoranthene	202	8.272	8.279	(1.147)	1459609	37.9827	1350
85 Butylbenzylphthalate	149	9.019	9.020	(0.937)	765594	38.0677	1360
89 Benzo(a)anthracene	228	9.613	9.612	(0.999)	1319813	37.1361	1320
90 3,3'-Dichlorobenzidine	252	9.554	9.554	(0.993)	265852	23.1680	826
92 Chrysene	228	9.648	9.651	(1.002)	1212346	37.5249	1340
93 bis(2-Ethylhexyl)phthalate	149	9.542	9.545	(0.991)	1127306	40.6112	1450
94 Di-n-octylphthalate	149	10.195	10.200	(0.903)	1728951	37.9788	1350
95 Benzo(b)fluoranthene	252	10.783	10.783	(0.955)	1191553	36.9404	1320
96 Benzo(k)fluoranthene	252	10.813	10.816	(0.957)	1220892	38.5877	1380
97 Benzo(a)pyrene	252	11.219	11.221	(0.993)	1042221	37.7239	1340
99 Indeno(1,2,3-cd)pyrene	276	13.060	13.060	(1.156)	870880	35.2031	1260
100 Dibenzo(a,h)anthracene	278	13.077	13.079	(1.158)	716977	36.0157	1280
101 Benzo(ghi)perylene	276	13.595	13.604	(1.204)	688896	34.5435	1230
1 N-Methyl-N-nitrosomethylamine	74	2.407	2.399	(0.614)	223933	31.3220	1120

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD5.1/5012010.b/55a2016.d
 Date: 20-JAN-2010 22:57
 Client ID: RE15-10-7163MSD
 Sample Info: 1120201991.943386.11.SW111MSD
 Volume Injected (uL): 0.5
 Column phase: J&W DB-5MS

Instrument: MSD5.1
 Operator: RHB
 Column diameter: 0.20



Miscellaneous Data

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 943385 Verified by: _____
 Analyst: Robin Hunt
 Method: SW846 3550B
 Lab SOP: GL-OA-E-010 REV# 18
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202019888 MB	20-JAN-2010 11:13:11	30	1	0.03333
1202019889 LCS	20-JAN-2010 11:13:11	30	1	0.03333
244902001	20-JAN-2010 11:13:11	30.02	1	0.03331
244916002	20-JAN-2010 11:13:11	30.02	1	0.03331
244916003	20-JAN-2010 11:13:11	30	1	0.03333
244917002	20-JAN-2010 11:13:11	30.04	1	0.03329
244917003	20-JAN-2010 11:13:11	30.04	1	0.03329
244917004	20-JAN-2010 11:13:11	30.02	1	0.03331
244923001	20-JAN-2010 11:13:11	30	1	0.03333
1202019890 MS (244923001)	20-JAN-2010 11:13:11	30.01	1	0.03332
1202019891 MSD (244923001)	20-JAN-2010 11:13:11	30.01	1	0.03332
244923002	20-JAN-2010 11:13:11	30.03	1	0.0333
244923003	20-JAN-2010 11:13:11	30.06	1	0.03327
244923004	20-JAN-2010 11:13:11	30	1	0.03333
244923005	20-JAN-2010 11:13:11	30.05	1	0.03328
244923006	20-JAN-2010 11:13:11	30	1	0.03333
244923007	20-JAN-2010 11:13:11	30.02	1	0.03331
244923008	20-JAN-2010 11:13:11	30	1	0.03333
244923009	20-JAN-2010 11:13:11	30	1	0.03333
244923010	20-JAN-2010 11:13:11	30.01	1	0.03332

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202019889	BNA LCS w/o Benzidine 50ppm	UE091217-12A	1	mL	Verified By: JAM
LCS	1202019889	BENZIDINE LCS	UE100108-22	1	mL	Final Solvent: CH2Cl2
MS	1202019890	BNA LCS w/o Benzidine 50ppm	UE091217-12A	1	mL	
MS	1202019890	BENZIDINE LCS	UE100108-22	1	mL	
MSD	1202019891	BNA LCS w/o Benzidine 50ppm	UE091217-12A	1	mL	
MSD	1202019891	BENZIDINE LCS	UE100108-22	1	mL	
SURR	ALL	BNA for all Surrogate	UE100108-10	1	mL	
REGNT	ALL	Acetone	1233927	150	mL	
REGNT	ALL	Methylene Chloride	1239699-D	150	mL	
SOURC	ALL	SODIUM SULFATE	1242582	30	g	

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 01/05/2010

METHOD: 8270C MSD5-DFTPP8270D.m

OPERATOR: rmb

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT: 239699-D

Multiplier Voltage: 1494 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN091213-01 Internal Std ID: WBN091223-01

CALIBRATION & QC INFORMATION:

Initial Calibration Dates: See Calibration History and Standard Logbook.

Initial Calibration Std ID's: See Calibration History and Standard Logbook.

SOP: GL-OA-E-009 Rev. 23 Sequence Number: /chem/MSD5.i/s010510.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
Is5a0501.d	WBN091128-01	rmb	05-JAN-2010 07:45	50PPM	Is010510	1.0	DFTPP	
Is5a0501.d	WBN091128-01	rmb	05-JAN-2010 07:45	50PPM	Is010510	1.0	DFTPP	
Is5a0502.d	Instrument blank	rmb	05-JAN-2010 07:58		Is010510	1.0		
Is5a0503-TEST.d	WBN091225-09	rmb	05-JAN-2010 08:21	11 PPM	Is010510	1.0	MEGICAL001	8270D linear test
Is5a0503.d	WBN091225-09	rmb	05-JAN-2010 08:21	11 PPM	Is010510	1.0	MEGICAL001	
Is5a0504-TEST.d	WBN091225-10	rmb	05-JAN-2010 08:49	110 PPM	Is010510	1.0	MEGICAL010	8270D linear test
Is5a0504.d	WBN091225-10	rmb	05-JAN-2010 08:49	110 PPM	Is010510	1.0	MEGICAL010	
Is5a0505.d	WBN091225-11	rmb	05-JAN-2010 09:17	120 PPM	Is010510	1.0	MEGICAL020	
Is5a0506.d	WBN091225-12.1	rmb	05-JAN-2010 09:45	140 PPM	Is010510	1.0	MEGICAL040	
Is5a0507.d	WBN091225-13	rmb	05-JAN-2010 10:13	150 PPM	Is010510	1.0	MEGICAL050	
Is5a0508.d	WBN091225-14	rmb	05-JAN-2010 10:42	180 PPM	Is010510	1.0	MEGICAL080	
Is5a0509.d	WBN091225-15	rmb	05-JAN-2010 11:10	1100 PPM	Is010510	1.0	MEGICAL100	
Is5a0510.d	WBN091225-16	rmb	05-JAN-2010 11:38	1120 PPM	Is010510	1.0	MEGICAL120	
Is5a0511.d	Instrument blank	rmb	05-JAN-2010 12:06		Is010510	1.0		
Is5a0512-625.d	WBN091223-17.1	rmb	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICAL	MEGICALV - 625 - 010510
Is5a0512-8270D.d	WBN091223-17.1	rmb	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICALV	MEGICALV - 8270D - 010510
Is5a0512-BOE.d	WBN091223-17.1	rmb	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICALV	MEGICALV - BOE - 010510
Is5a0512.d	WBN091223-17.1	rmb	05-JAN-2010 12:29	140 PPM	Is010510	1.0	MEGICALV	MEGICALV - 8270C - 010510
Is5a0513-TEST.d	WBN100103-01	rmb	05-JAN-2010 12:58	110 PPM	Is010510	1.0	AP12ICAL010	8270D linear test

Isa0513.d	WBN100103-01	RMB	05-JAN-2010 12:58	10 PPM	s010510	1.0 API2ICAL010
Isa0514.d	WBN100103-02	RMB	05-JAN-2010 13:21	120 PPM	s010510	1.0 API2ICAL020
Isa0515.d	WBN100103-03.1	RMB	05-JAN-2010 13:44	140 PPM	s010510	1.0 API2ICAL040
Isa0516.d	WBN100103-04	RMB	05-JAN-2010 14:07	150 PPM	s010510	1.0 API2ICAL050
Isa0517.d	WBN100103-05	RMB	05-JAN-2010 14:30	180 PPM	s010510	1.0 API2ICAL080
Isa0518.d	WBN100103-06	RMB	05-JAN-2010 14:53	1100 PPM	s010510	1.0 API2ICAL100
Isa0519.d	WBN100103-07	RMB	05-JAN-2010 15:16	1120 PPM	s010510	1.0 API2ICAL120
Isa0520.d	WBN091202-16	RMB	05-JAN-2010 15:39	1500 PPM	s010510	1.0 HEXICAL500
Isa0521.d	WBN091202-15	RMB	05-JAN-2010 16:02	1000 PPM	s010510	1.0 HEXICAL1000
Isa0522.d	WBN091202-14	RMB	05-JAN-2010 16:24	11250 PPM	s010510	1.0 HEXICAL1250
Isa0523.d	WBN091202-13	RMB	05-JAN-2010 16:47	11500 PPM	s010510	1.0 HEXICAL1500
Isa0524.d	WBN091202-12	RMB	05-JAN-2010 17:10	11750 PPM	s010510	1.0 HEXICAL1750
Isa0525.d	WBN090828-02	RMB	05-JAN-2010 17:32	12000 PPM	s010510	1.0 HEXICAL2000
Isa0526-625.d	WBN100103-08.1	RMB	05-JAN-2010 17:55	140 PPM	s010510	1.0 API2ICV API2ICV - 625 - 010510
Isa0526-8270D.d	WBN100103-08.1	RMB	05-JAN-2010 17:55	140 PPM	s010510	1.0 API2ICV API2ICV - 8270D - 010510
Isa0526.d	WBN100103-08.1	RMB	05-JAN-2010 17:55	140 PPM	s010510	1.0 API2ICV API2ICV - 8270C - 010510
Isa0527-625.d	WBN100103-10.4	RMB	05-JAN-2010 18:18	11250 PPM	s010510	1.0 HEXICV HEXICV - 625 - 010510
Isa0527-8270D.d	WBN100103-10.4	RMB	05-JAN-2010 18:18	11250 PPM	s010510	1.0 HEXICV HEXICV - 8270D - 010510
Isa0527.d	WBN100103-10.4	RMB	05-JAN-2010 18:18	11250 PPM	s010510	1.0 HEXICV HEXICV - 8270C - 010510
Isa0528-D.d	WBN091128-01	RMB	06-JAN-2010 08:51	150PPM	s010510	1.0 DFTTP
Isa0528.d	WBN091128-01	RMB	06-JAN-2010 08:51	150PPM	s010510	1.0 DFTTP
Isa0529.d	Instrument blank	RMB	06-JAN-2010 09:04		s010510	1.0
Isa0530.d	WBN100103-25	RMB	06-JAN-2010 09:26	110 PPM	s010510	1.0 PESTICAL010
Isa0531.d	WBN100103-24	RMB	06-JAN-2010 09:49	120 PPM	s010510	1.0 PESTICAL020
Isa0532.d	WBN100103-23.1	RMB	06-JAN-2010 10:12	140 PPM	s010510	1.0 PESTICAL040
Isa0533.d	WBN100103-22	RMB	06-JAN-2010 10:35	150 PPM	s010510	1.0 PESTICAL050
Isa0534.d	WBN100103-21	RMB	06-JAN-2010 10:58	180 PPM	s010510	1.0 PESTICAL080

ls5a0535.d	WBN100103-20	RMB	06-JAN-2010 11:21	100 PPM	s010510		1.0 PEST:CAL100	
ls5a0536.d	WBN100103-19	RMB	06-JAN-2010 11:43	120 PPM	s010510		1.0 PEST:CAL120	
ls5a0537-TEST.d	UBN091117-01	RMB	06-JAN-2010 12:06	10 PPM	s010510		1.0 NEVADA:CAL010	8270D linear test
ls5a0537.d	UBN091117-01	RMB	06-JAN-2010 12:06	10 PPM	s010510		1.0 NEVADA:CAL010	
ls5a0538.d	UBN091117-02	RMB	06-JAN-2010 12:29	20 PPM	s010510		1.0 NEVADA:CAL020	
ls5a0539.d	UBN091117-03	RMB	06-JAN-2010 12:53	40 PPM	s010510		1.0 NEVADA:CAL040	
ls5a0540.d	UBN091117-04	RMB	06-JAN-2010 13:16	50 PPM	s010510		1.0 NEVADA:CAL050	
ls5a0541.d	UBN091117-05	RMB	06-JAN-2010 13:39	80 PPM	s010510		1.0 NEVADA:CAL080	
ls5a0542.d	UBN091117-06	RMB	06-JAN-2010 14:02	100 PPM	s010510		1.0 NEVADA:CAL100	
ls5a0543.d	UBN091117-07	RMB	06-JAN-2010 14:25	120 PPM	s010510		1.0 NEVADA:CAL120	
ls5a0544-625.d	WBN100103-26.1	RMB	06-JAN-2010 14:48	40 PPM	s010510		1.0 PESTICV	PESTICV - 625 - 010510
ls5a0544-8270D.d	WBN100103-26.1	RMB	06-JAN-2010 14:48	40 PPM	s010510		1.0 PESTICV	PESTICV - 8270D - 010510
ls5a0544.d	WBN100103-26.1	RMB	06-JAN-2010 14:48	40 PPM	s010510		1.0 PESTICV	PESTICV - 8270C - 010510

Instrument Batch: /chem/MSD5.i/s010510.b

Page: 1

GEL ORGANIC RUN LOG

INSTRUMENT ID: MSD5

DATE: 01/20/2010

METHOD:8270C MSD5-DFTPPx.m

OPERATOR:rmb

REVIEWED BY:

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT:1253574-D

Multiplier Voltage: 1447 Emv Extr. Injection Volume: 0.5, 1.0 ul

DFTPP Solution ID: WBN100107-01 Internal Std ID: 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/MSD5.i/s012010.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SBG	Dilution	Client	Comments
Is5a2001.d	WBN100107-01	rmb	120-JAN-2010 09:20	150PPM	1s012010	1.0	DFTPP	DUSE
Is5a2002.d	WBN091225-12.3	rmb	120-JAN-2010 09:33	140 PPM	1s012010	1.0	MEGACVS	DUSE - fail - clean IP
Is5a2003.d	WBN100107-01	rmb	120-JAN-2010 18:01	150PPM	1s012010	1.0	DFTPP	
Is5a2004.d	WBN091225-12.3	rmb	120-JAN-2010 18:15	140 PPM	1s012010	1.0	MEGACVS	418800
Is5a2005.d	WBN100103-03.5	rmb	120-JAN-2010 18:42	140 PPM	1s012010	1.0	API2CVS	
Is5a2006-2.d	1202019888	rmb	120-JAN-2010 19:05	943386	110-1284	1.0	SBLK01	
Is5a2006-3.d	1202019888	rmb	120-JAN-2010 19:05	943386	110-1285	1.0	SBLK01	
Is5a2006-4.d	1202019888	rmb	120-JAN-2010 19:05	943386	110-1287	1.0	SBLK01	
Is5a2006.d	1202019888	rmb	120-JAN-2010 19:05	943386	110-1274	1.0	SBLK01	
Is5a2007-2.d	1202019889	rmb	120-JAN-2010 19:29	943386	110-1284	1.0	SBLK01LCS	
Is5a2007-3.d	1202019889	rmb	120-JAN-2010 19:29	943386	110-1285	1.0	SBLK01LCS	
Is5a2007-4.d	1202019889	rmb	120-JAN-2010 19:29	943386	110-1287	1.0	SBLK01LCS	
Is5a2007.d	1202019889	rmb	120-JAN-2010 19:29	943386	110-1274	1.0	SBLK01LCS	
Is5a2008.d	1244902001	rmb	120-JAN-2010 19:52	943386	110-1274	1.0	LANL	
Is5a2009.d	1244916002	rmb	120-JAN-2010 20:15	943386	110-1284	1.0	LANL	
Is5a2010.d	1244916003	rmb	120-JAN-2010 20:38	943386	110-1284	1.0	LANL	
Is5a2011.d	1244917002	rmb	120-JAN-2010 21:02	943386	110-1285	1.0	LANL	Fail SS - confirmed by s5a2215
Is5a2012.d	1244917003	rmb	120-JAN-2010 21:25	943386	110-1285	1.0	LANL	
Is5a2013.d	1244917004	rmb	120-JAN-2010 21:48	943386	110-1285	1.0	LANL	

ls5a2014.d	1244923001	RMB	20-JAN-2010 22:11	943386	110-1287	1.0	LANL	
ls5a2015.d	1202019890	RMB	20-JAN-2010 22:34	943386	110-1287	1.0	MS	
ls5a2016.d	1202019891	RMB	20-JAN-2010 22:57	943386	110-1287	1.0	MSD	
ls5a2017.d	1244923002	RMB	20-JAN-2010 23:19	943386	110-1287	1.0	LANL	
ls5a2018.d	1244923003	RMB	20-JAN-2010 23:42	943386	110-1287	1.0	LANL	
ls5a2019.d	1244923004	RMB	21-JAN-2010 00:05	943386	110-1287	1.0	LANL	
ls5a2020.d	1244923005	RMB	21-JAN-2010 00:28	943386	110-1287	1.0	LANL	
ls5a2021.d	1244923006	RMB	21-JAN-2010 00:51	943386	110-1287	1.0	LANL	
ls5a2022.d	1244923007	RMB	21-JAN-2010 01:13	943386	110-1287	1.0	LANL	
ls5a2023.d	1244923008	RMB	21-JAN-2010 01:36	943386	110-1287	1.0	LANL	
ls5a2024.d	1244923009	RMB	21-JAN-2010 01:59	943386	110-1287	1.0	LANL	
ls5a2025.d	1244923010	RMB	21-JAN-2010 02:21	943386	110-1287	1.0	LANL	

DATA EXCEPTION REPORT

Mo. Day Yr. 21-JAN-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: SEM/VOA GC/MS	Test / Method: SW846 8270C	Matrix Type: Solid	Client Code: LANL
Batch ID: 943386	Sample Numbers: See Below		
Potentially affected work order(s)(SDG): 244902(10-1274),244916(10-1284),244917(10-1285),244923(10-1287)			
Application Issues: Failed Recovery for MS/PS Failed Yield for Surrogates			
Specification and Requirements Exception Description:		DER Disposition:	
1. Sample 244917002 recovered 2-Fluorophenol at 26% (limits are 35%-96%) and 2,4,6-Tribromophenol at 1% (limits are 37%-106%). 2. The MS(1202019890) recovered 3,3'-Dichlorobenzidine at 34%. The limits are 35%-106%.		1. The sample was re-extracted in batch 943938. Since the re-extraction confirmed the surrogate failures, the failures were attributed to matrix interference and the original data results have been reported. 2. Since the MSD displayed a similar low (but passing) recovery for 3,3'-Dichlorobenzidine to the MS, the failure was attributed to matrix interference and the data results have been reported.	

Originator's Name:

Richard Bomar 21-JAN-10

Data Validator/Group Leader:

Barbara Bailey 25-JAN-10

LC/MS/MS EXPLOSIVES ANALYSIS

**LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1287**

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: 942339

Prep Batch Number: 942338

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
244923001	RE15-10-7163
244923002	RE15-10-7162
244923003	RE15-10-7161
244923004	RE15-10-7160
244923005	RE15-10-7174
244923006	RE15-10-7173
244923007	RE15-10-7175
244923008	RE15-10-7172
244923009	RE15-10-7218
244923010	RE15-10-7223
1202017308	Method Blank (MB)
1202017309	Laboratory Control Sample (LCS)
1202017310	244923001(RE15-10-7163) Matrix Spike (MS)
1202017311	244923001(RE15-10-7163) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 12.

Primary Analyte Analysis

Calibration Information

Initial Calibration

All initial calibration requirements for this analysis have been met for this SDG.

10-1287-EXPLCMS

Calibration Verification Standard Requirements

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

Calibration Blank Requirements

All initial or continuing calibration blanks (ICB or CCB) bracketing the analyses associated with this batch for this analysis were within acceptance criteria. Due to software limitations, the CCBs and/or the ICBs may have a concentration for target analytes in the Found column. These values should be zero.

CRI Requirements

All low level calibration verification (CRI) requirements for this analysis were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB(s) analyzed with this SDG for this analysis met the acceptance criteria.

Surrogate Recoveries

All the surrogate recoveries were within the established acceptance criteria in this SDG in this analytical batch for this analysis.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 244923001 (RE15-10-7163) 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.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries were within the established acceptance limits.

QC Sample Designation

Sample 244923001 (RE15-10-7163) was chosen for matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement

The MS spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD spike recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

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

Internal Standard (ISTD) Acceptance

The internal standards were not added to the secondary analyte extracts.

10-1287-EXPLCMS

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 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 required manual integrations due to software limitations.

Flagging Convention

The samples were not originally analyzed using SW-846 Method 8330.

Additional Comments

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data.

Due to software limitations, file extensions such as DL, RE, etc. may not appear on the generated forms and/or raw data.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1, and LCMSMS #2, respectively. It is fitted with an APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for the primary analyte analysis. The laboratory also utilizes an Agilent 1100 liquid chromatography instrument for either primary or secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as either LCMSMS #3 or LCMSMS #4. It is fitted with a APCI (Atmospheric Pressure chemical Ionization) probe that is operated in the negative ionization mode for both the primary and secondary analyte analysis.

Chromatographic Columns

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column:

Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column:

YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

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

Review Validation:

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

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

Reviewer: Herbert H. Mauk Date: 02/02/10

SAMPLE DATA SUMMARY

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923001

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125189a

Date Analyzed: 29-JAN-10 07:49

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: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923001

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250129.wiff

Date Analyzed: 26-JAN-10 20:03

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7162

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923002

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125195a

Date Analyzed: 29-JAN-10 10:46

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: RE15-10-7162

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923002

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250135.wiff

Date Analyzed: 26-JAN-10 21:37

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7161

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125196a

Date Analyzed: 29-JAN-10 11:15

Units: ug/kg

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

*Concentration =

Instrument Value	X	<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: RE15-10-7161

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250136.wiff

Date Analyzed: 26-JAN-10 21:53

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7160

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923004

Sample Amount 2

Moisture: 20.0

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125197a

Date Analyzed: 29-JAN-10 11:45

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7160

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923004

Sample Amount 2

Moisture: 20.0

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250137.wiff

Date Analyzed: 26-JAN-10 22:09

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7174

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923005

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125198a

Date Analyzed: 29-JAN-10 12:14

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7174

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923005

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250138.wiff

Date Analyzed: 26-JAN-10 22:24

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7173

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923006

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125199a

Date Analyzed: 29-JAN-10 12:44

Units: ug/kg

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

*Concentration =

Instrument 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: RE15-10-7173

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923006

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250139.wiff

Date Analyzed: 26-JAN-10 22:40

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7175

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923007

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125200a

Date Analyzed: 29-JAN-10 13:13

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7175

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923007

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250140.wiff

Date Analyzed: 26-JAN-10 22:56

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7172

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923008

Sample Amount 2

Moisture: 21.2

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125201a

Date Analyzed: 29-JAN-10 13:43

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: RE15-10-7172

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923008

Sample Amount 2

Moisture: 21.2

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250141.wiff

Date Analyzed: 26-JAN-10 23:12

Units: ug/kg

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

*Concentration =

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

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7218

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125202a

Date Analyzed: 29-JAN-10 14:12

Units: ug/kg

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

*Concentration =

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

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7218

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250142.wiff

Date Analyzed: 26-JAN-10 23:27

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: RE15-10-7223

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923010

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125203a

Date Analyzed: 29-JAN-10 14:42

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: RE15-10-7223

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923010

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250143.wiff

Date Analyzed: 26-JAN-10 23:43

Units: ug/kg

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

*Concentration =

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

QUALITY CONTROL SUMMARY

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
244923001	RE15-10-7163	114	73.7 - 133.3	
244923001	RE15-10-7163	114	73.7 - 133.3	
244923002	RE15-10-7162	108	73.7 - 133.3	
244923002	RE15-10-7162	112	73.7 - 133.3	
244923003	RE15-10-7161	105	73.7 - 133.3	
244923003	RE15-10-7161	106	73.7 - 133.3	
244923004	RE15-10-7160	115	73.7 - 133.3	
244923004	RE15-10-7160	105	73.7 - 133.3	
244923005	RE15-10-7174	106	73.7 - 133.3	
244923005	RE15-10-7174	106	73.7 - 133.3	
244923006	RE15-10-7173	119	73.7 - 133.3	
244923006	RE15-10-7173	112	73.7 - 133.3	
244923007	RE15-10-7175	97.7	73.7 - 133.3	
244923007	RE15-10-7175	113	73.7 - 133.3	
244923008	RE15-10-7172	101	73.7 - 133.3	
244923008	RE15-10-7172	113	73.7 - 133.3	
244923009	RE15-10-7218	109	73.7 - 133.3	
244923009	RE15-10-7218	110	73.7 - 133.3	
244923010	RE15-10-7223	119	73.7 - 133.3	
244923010	RE15-10-7223	116	73.7 - 133.3	
1202017308	MB for batch 942338	110	73.7 - 133.3	
1202017308	MB for batch 942338	109	73.7 - 133.3	
1202017309	LCS for batch 942338	96.9	73.7 - 133.3	
1202017309	LCS for batch 942338	102	73.7 - 133.3	
1202017310	RE15-10-7163(244923001MS)	102	73.7 - 133.3	
1202017310	RE15-10-7163(244923001MS)	110	73.7 - 133.3	
1202017311	RE15-10-7163(244923001MSD)	107	73.7 - 133.3	
1202017311	RE15-10-7163(244923001MSD)	108	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) 10-1287

Extract Batch Code: 942338

Date Extracted: 25-JAN-10

GEL LCS ID: 1202017309

GEL LCSDUP ID:

Analysis Date/Time: 29-JAN-10 04:52

DUP Analysis Date/Time:

Reporting Units: ug/kg

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
o-Nitrotoluene	5000	4190	83.8					75 - 123
2-Amino-4,6-dinitrotoluene	5000	5340	107					84.2 - 149
HMX	5000	5080	102					66.5 - 142
PETN	5000	4720	94.4					64.6 - 147
m-Nitrotoluene	5000	4360	87.1					71.9 - 126
m-Dinitrobenzene	5000	4750	95					80.9 - 127
Tetryl	5000	2740	54.8					31.2 - 119
RDX	5000	5670	113					78.7 - 144
Nitrobenzene	5000	4260	85.2					71.8 - 126
4-Amino-2,6-dinitrotoluene	5000	5340	107					85.6 - 133
2,6-Dinitrotoluene	5000	4830	96.6					86.9 - 122
1,3,5-Trinitrobenzene	5000	4560	91.3					62.1 - 124
2,4,6-Trinitrotoluene	5000	4840	96.9					78.3 - 132
2,4-Dinitrotoluene	5000	4910	98.2					82.7 - 132
p-Nitrotoluene	5000	4270	85.3					73.7 - 124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: GEL Laboratories LLC

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 10-1287

Extract Batch Code: 942338

Date Extracted: 25-JAN-10

GEL LCS ID: 1202017309

GEL LCSDUP ID:

Analysis Date/Time: 26-JAN-10 18:29

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	4640	92.8					64.8 - 128
2,6-Diamino-4-nitrotoluene	5000	4330	86.6					69.6 - 133
3,5-Dinitroaniline	5000	5140	103					77.3 - 123
TATB	7500	7260	96.8					46.8 - 166
tris(o-cresyl) phosphate	5000	4890	97.8					84.3 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Extract Batch Code: 942338

Date Extracted: 25-JAN-10

GEL Spike ID: 1202017310

GEL SpikeDup ID: 1202017311

Analysis Date/Time: 29-JAN-10 08:18

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	5180	104	5220	104	.924	30	70.7 - 130
2,4,6-Trinitrotoluene	5000	0	5500	110	5670	113	2.93	30	83.4 - 138
2,4-Dinitrotoluene	5000	0	5350	107	5120	102	4.44	30	79.1 - 137
2,6-Dinitrotoluene	5000	0	4990	99.9	5140	103	2.92	30	85.4 - 125
2-Amino-4,6-dinitrotoluene	5000	0	5400	108	5780	116	6.89	30	77.4 - 154
4-Amino-2,6-dinitrotoluene	5000	0	5420	108	5760	115	5.98	30	77.3 - 140
HMX	5000	0	5220	104	5350	107	2.48	30	66.7 - 144
Nitrobenzene	5000	0	4240	84.8	4640	92.8	8.99	30	70.4 - 129
PETN	5000	0	4720	94.3	4960	99.3	5.11	30	61.9 - 153
RDX	5000	0	5220	104	5720	114	9.14	30	73 - 140
Tetryl	5000	0	4440	88.8	4380	87.7	1.21	30	46.8 - 138
m-Dinitrobenzene	5000	0	5020	100	5180	104	3.05	30	83.5 - 126
m-Nitrotoluene	5000	0	4270	85.5	4530	90.6	5.86	30	68.6 - 135
o-Nitrotoluene	5000	0	4190	83.8	4220	84.3	.613	30	71.2 - 131
p-Nitrotoluene	5000	0	4340	86.8	4390	87.9	1.24	30	69.3 - 133

#Column to be used to flag recovery and RPD values with an asterisk

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Extract Batch Code: 942338

Date Extracted: 25-JAN-10

GEL Spike ID: 1202017310

GEL SpikeDup ID: 1202017311

Analysis Date/Time: 26-JAN-10 20:19

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	4830	96.6	4570	91.4	5.53	30	51.6 - 127
2,6-Diamino-4-nitrotoluene	5000	0	4720	94.4	4920	98.4	4.15	30	58.9 - 135
3,5-Dinitroaniline	5000	0	5500	110	5230	105	5.03	30	72.8 - 125
tris(o-cresyl) phosphate	5000	0	5370	107	5170	103	3.8	30	79.1 - 124
TATB	7500	0	9590	128	9790	131	2.06	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): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 11:20

GEL Data File: EXP0125001a

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	557.589
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	586.101
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Tue Jan 26 11:27:45 2010, Page 1 of 73

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Method: C:\MASSLYNX\New_Exp_PRO\MethDB\012510expa.mdb, Time: Mon Jan 25 16:14:14 2010
Calibration: Untitled, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0125001a

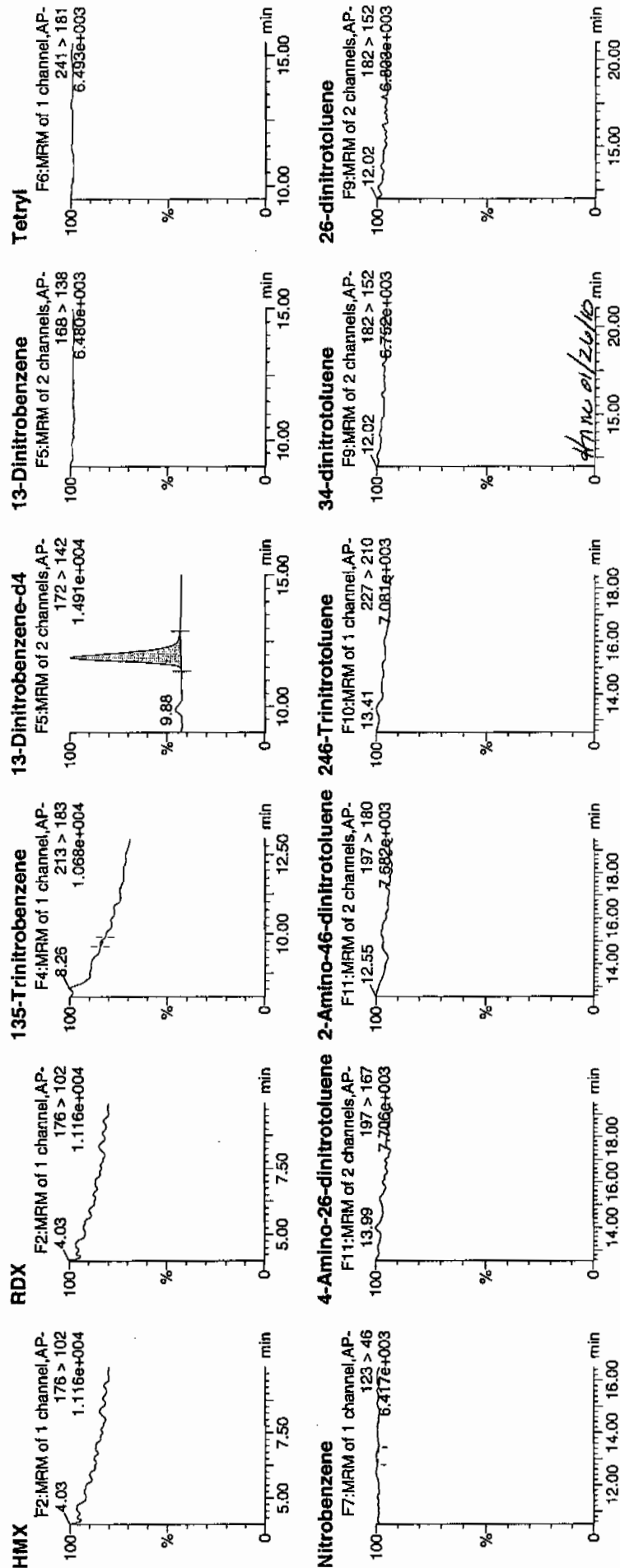
Date: 25-Jan-2010

Time: 11:20:43

ID: XIBLK01

Vial: 1:1,A

1/26/10
MJP

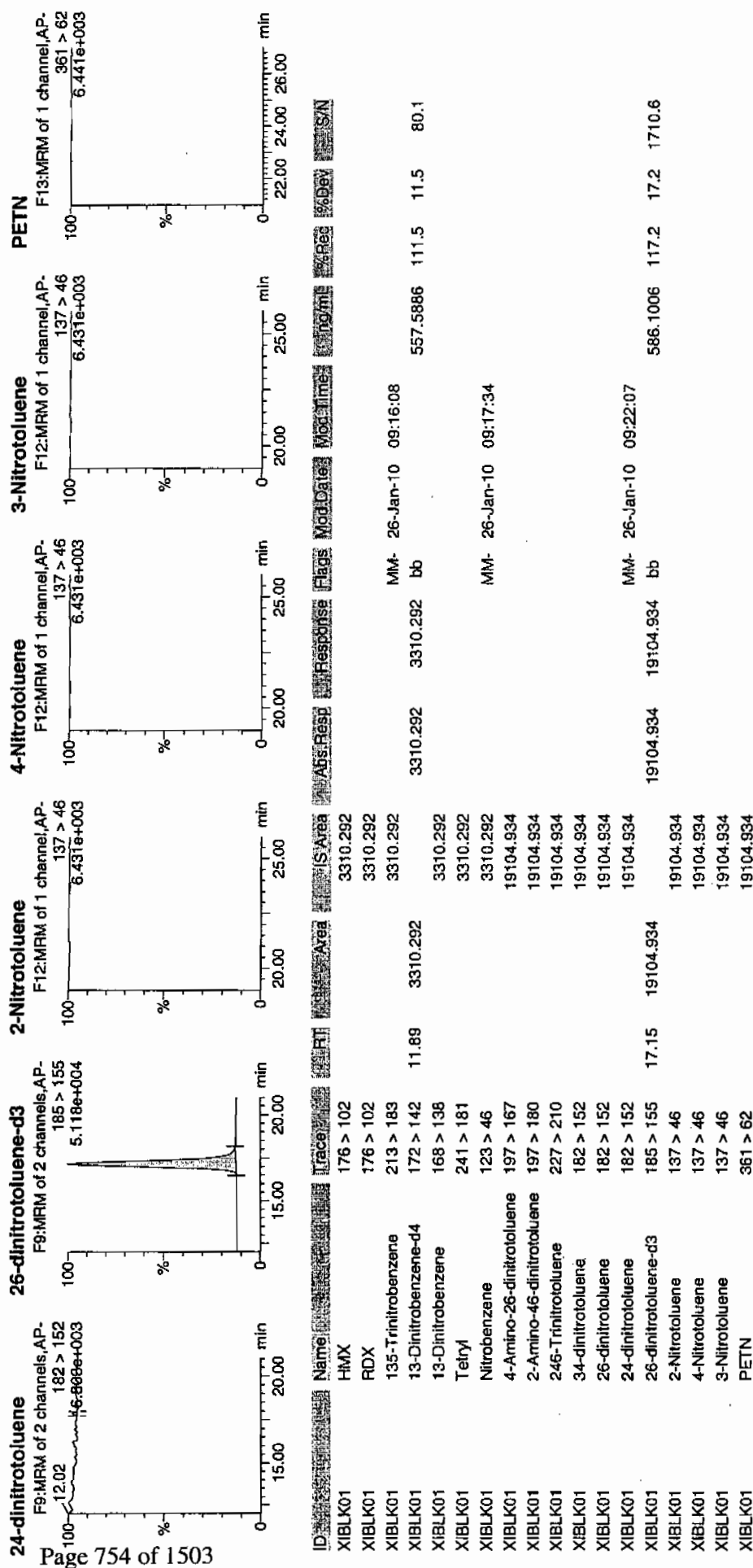


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 2 of 73

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: X1BLK01

Analysis Date: 25-JAN-10 11:50

GEL Data File: EXP0125002a

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	490.527
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	511.129
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Printed: Tue Jan 26 11:27:45 2010, Page 3 of 73

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125002a

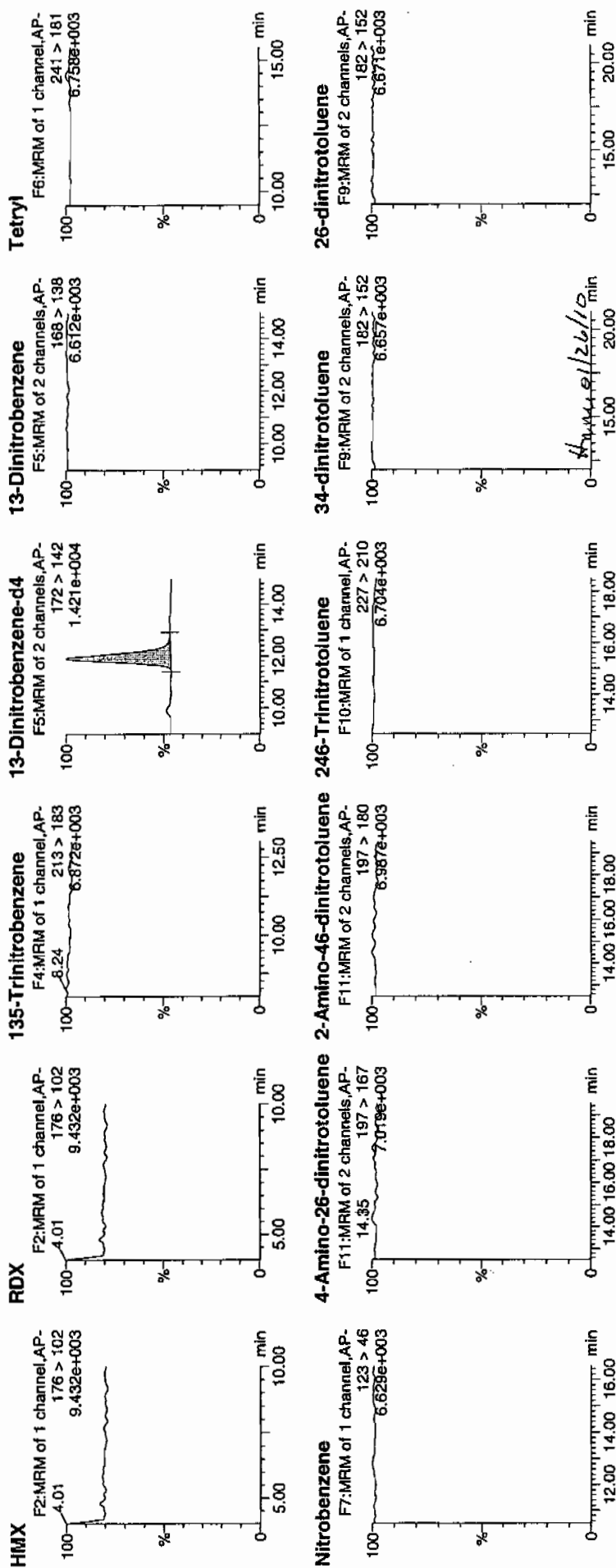
Date: 25-Jan-2010

Time: 11:50:16

ID: XIBLK01

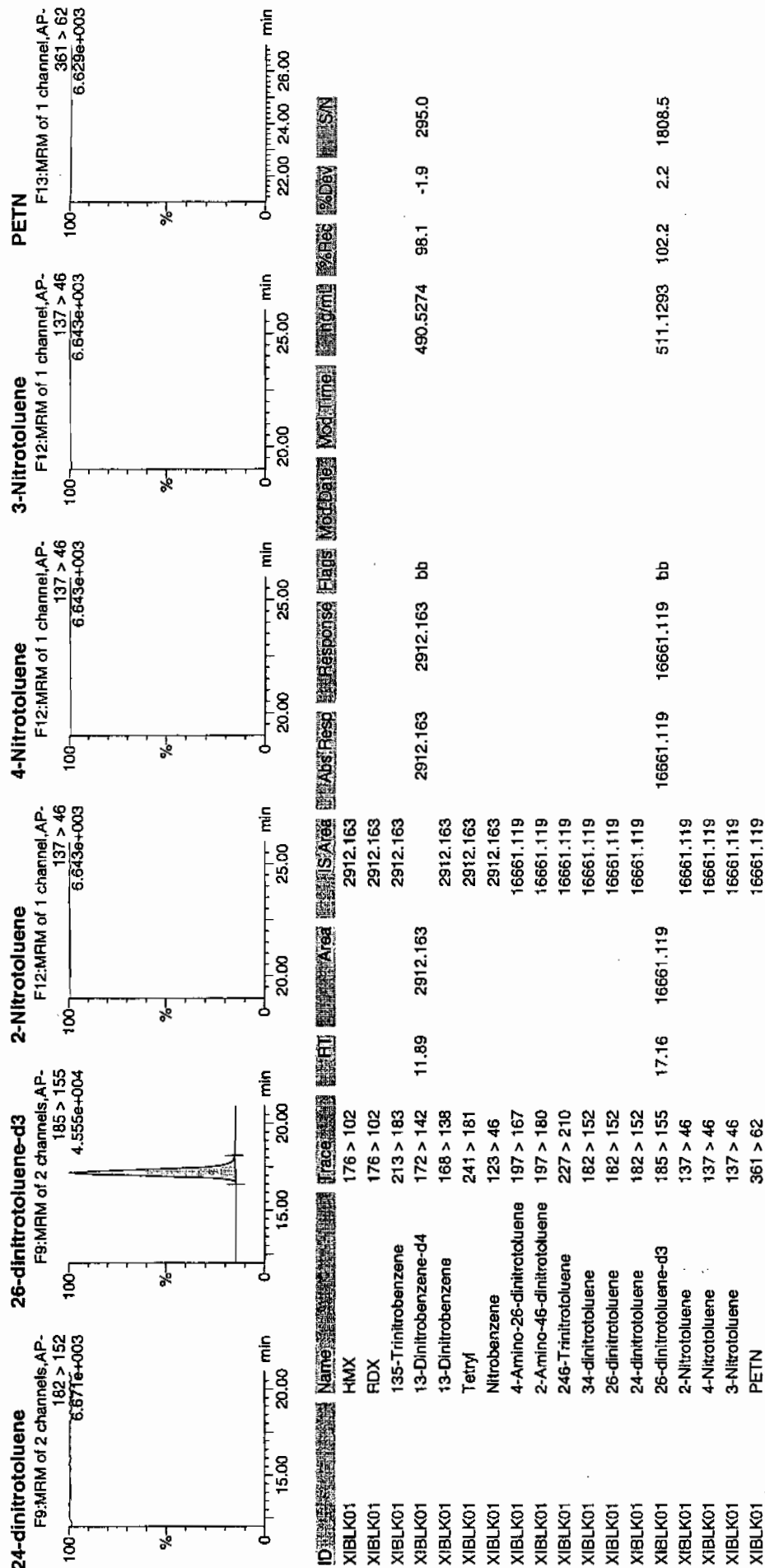
Vial: 1:1,A

WMT
1/26/10



Dataset: C:\MASSLYN\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

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Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 10:28

GEL Data File: EXS01250001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 1/27/10

Sample Name: "XBLX01" Sample ID: "111ER" File: "EXS01250001.wif"

Peak Name: "3S-Dinitrocarilina" Mass(es): "182.046.0 amu"

Comment: "LCMEEXP_5" Annotation: "

Sample Index: 1

Sample Type: Unknown

Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/25/2010

Acq. Time: 10:28:30 AM

Modified: No

Sample Name: "XBLX01" Sample ID: "111ER" File: "EXS01250001.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMEEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

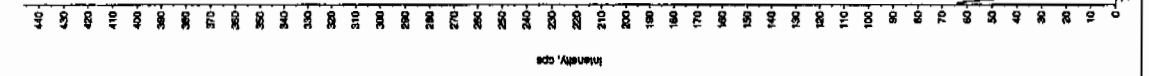
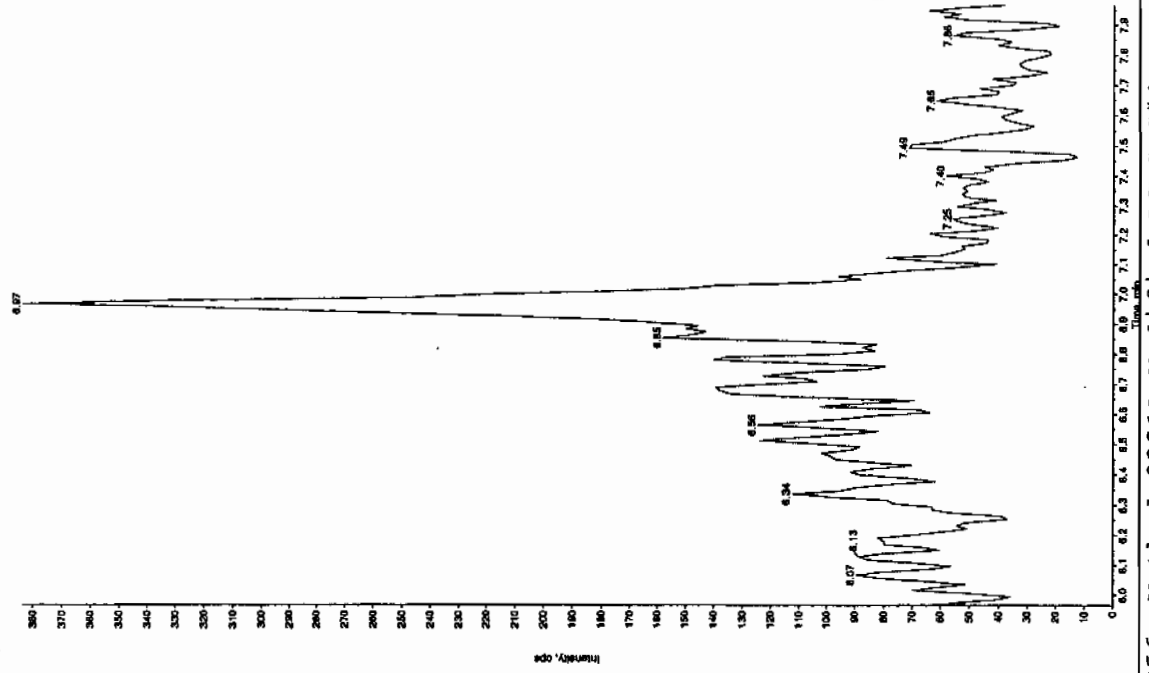
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/25/2010

Acq. Time: 10:28:30 AM

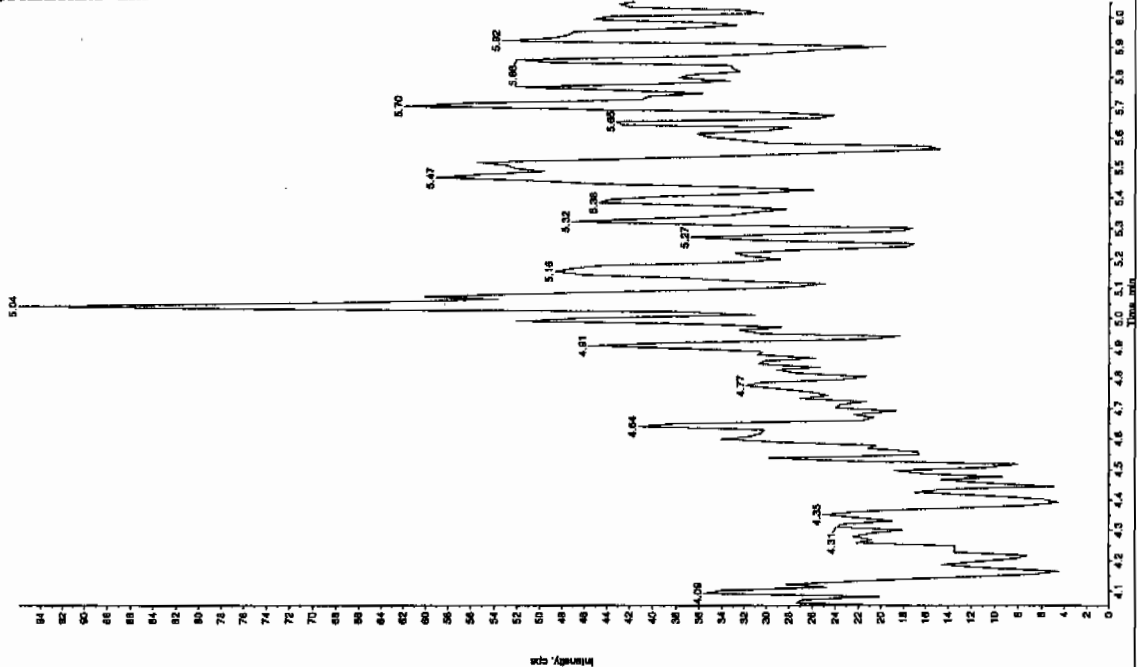
Modified: No



See 2/27/10

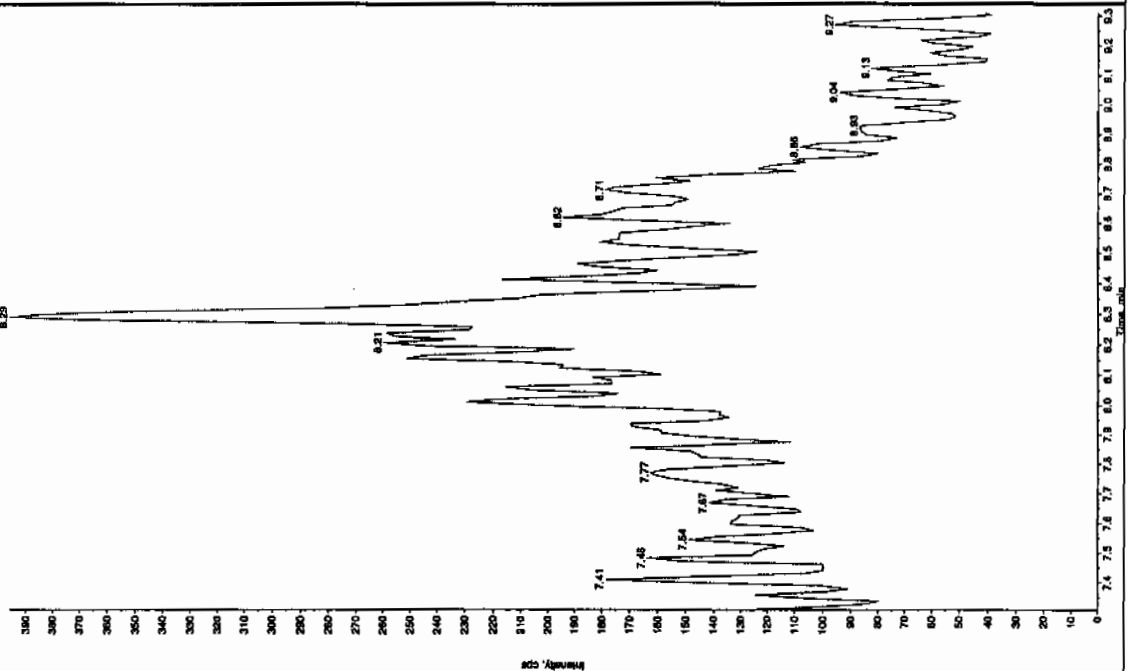
Sample Name: "XIBLK01" Sample ID: "11111" File: "EXS01250001.wif"
 Peak Name: "24-Chloro-4-iodobenzene" Mass(es): "186.046.0 amu"
 Comment: "LCMSXP_1" Annotation: "

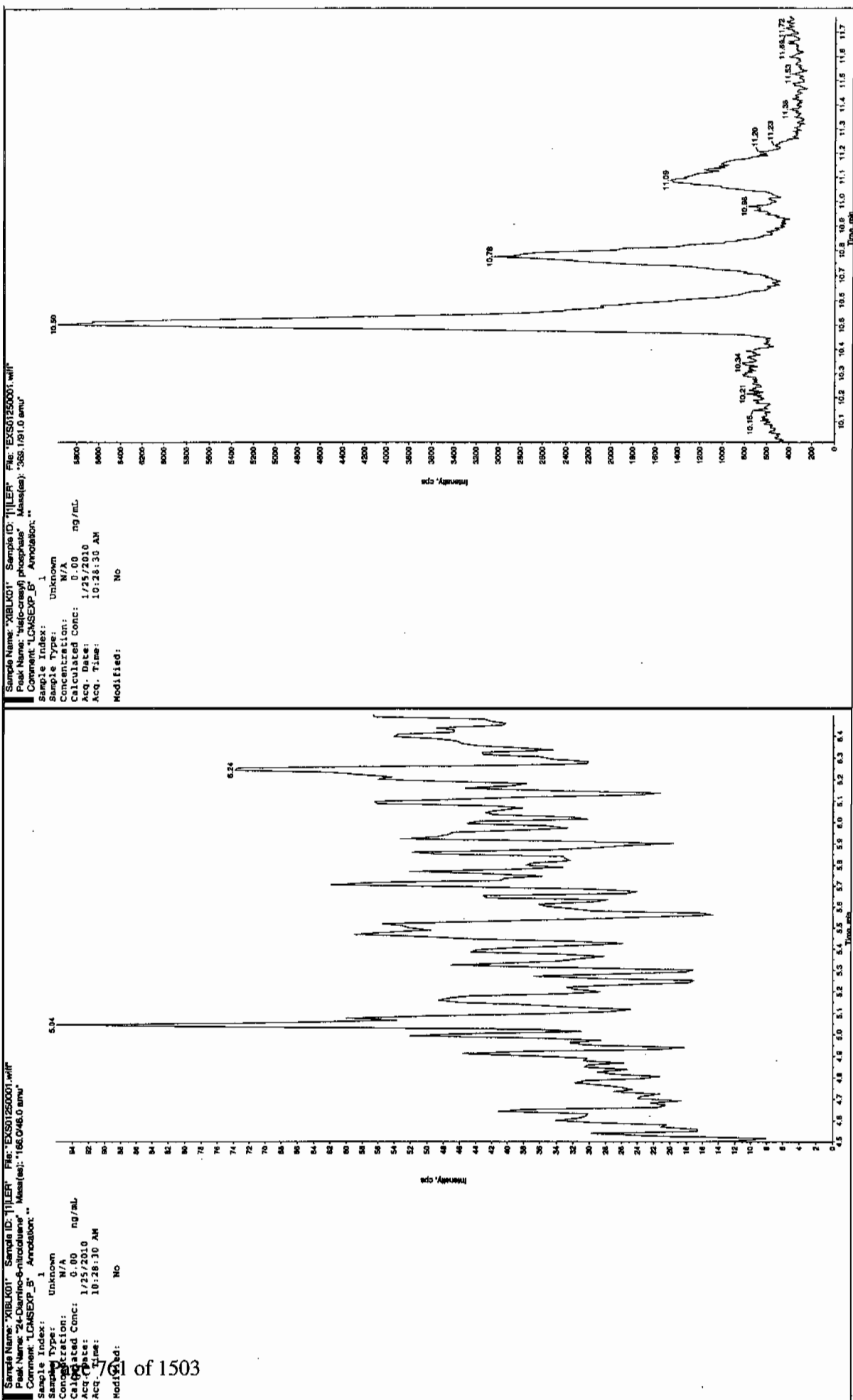
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:28:30 AM
 Modified: No



Sample Name: "XIBLK01" Sample ID: "11111" File: "EXS01250001.wif"
 Peak Name: "34-Chlorobenzene" Mass(es): "182.1715.9 amu"
 Comment: "LCMSXP_1" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:28:30 AM
 Modified: No





Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 25-JAN-10 10:46

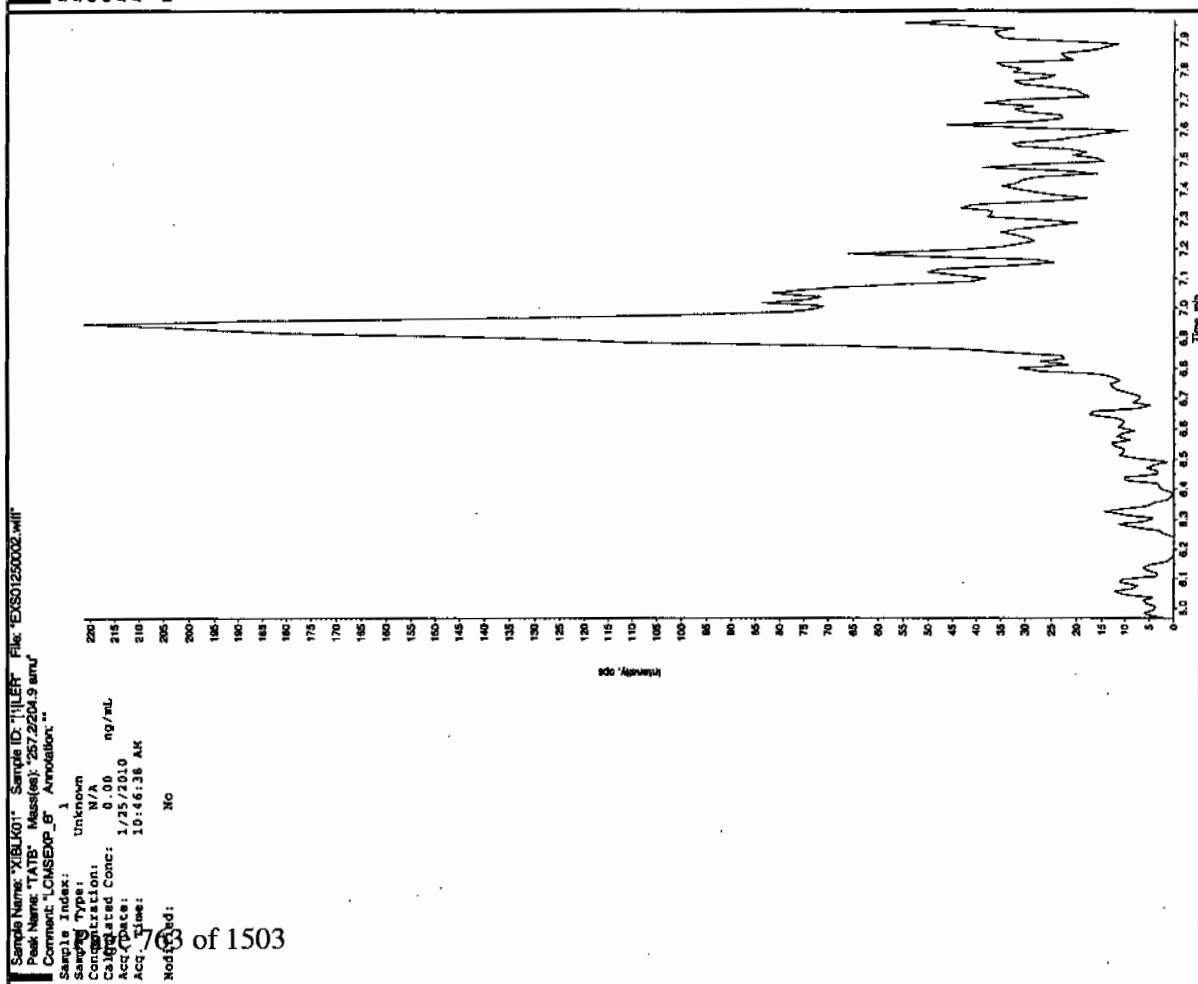
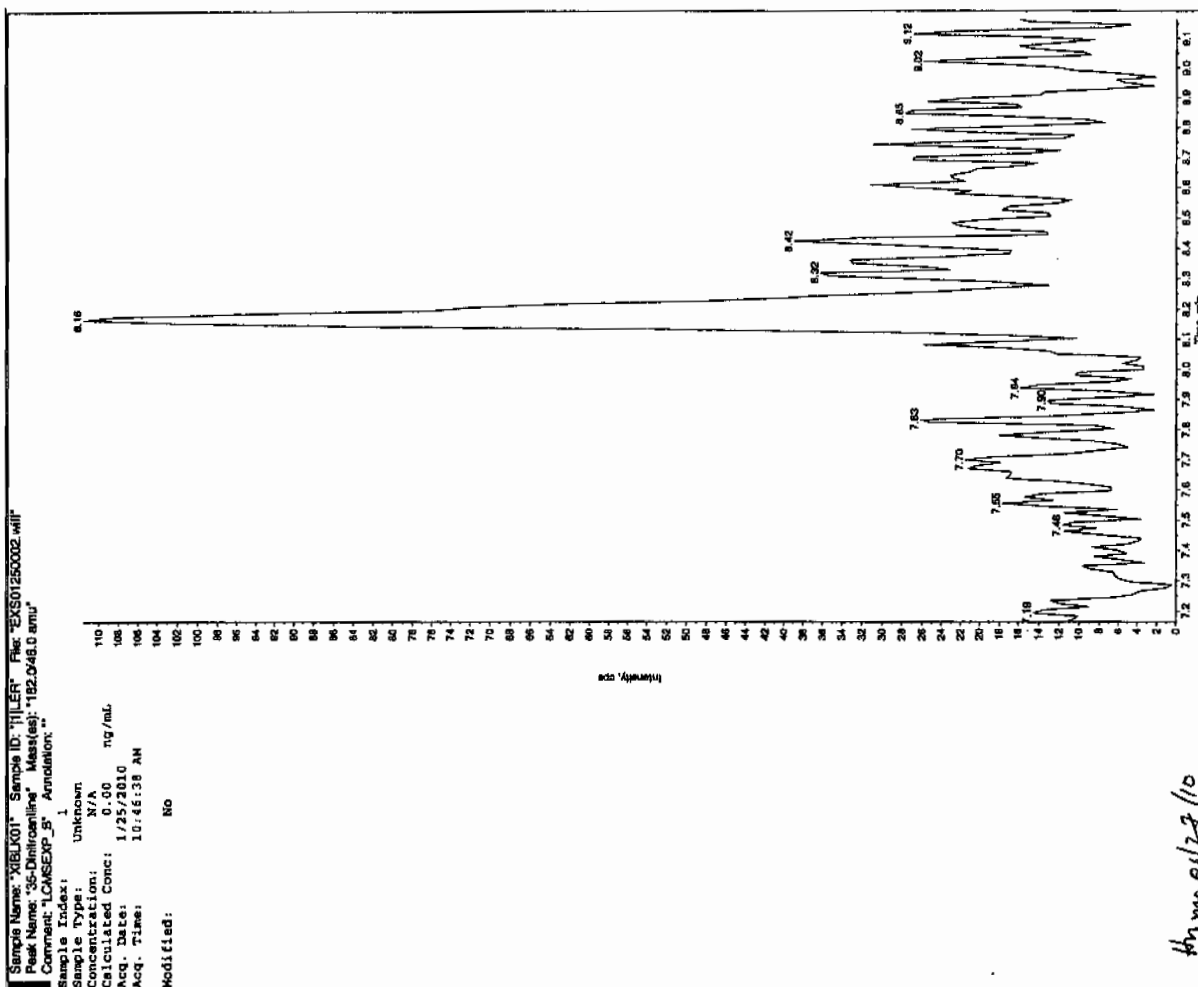
GEL Data File: EXS01250002.wiff

Instrument ID: LCMSMS

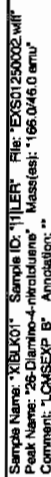
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

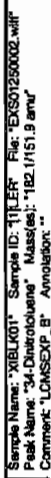
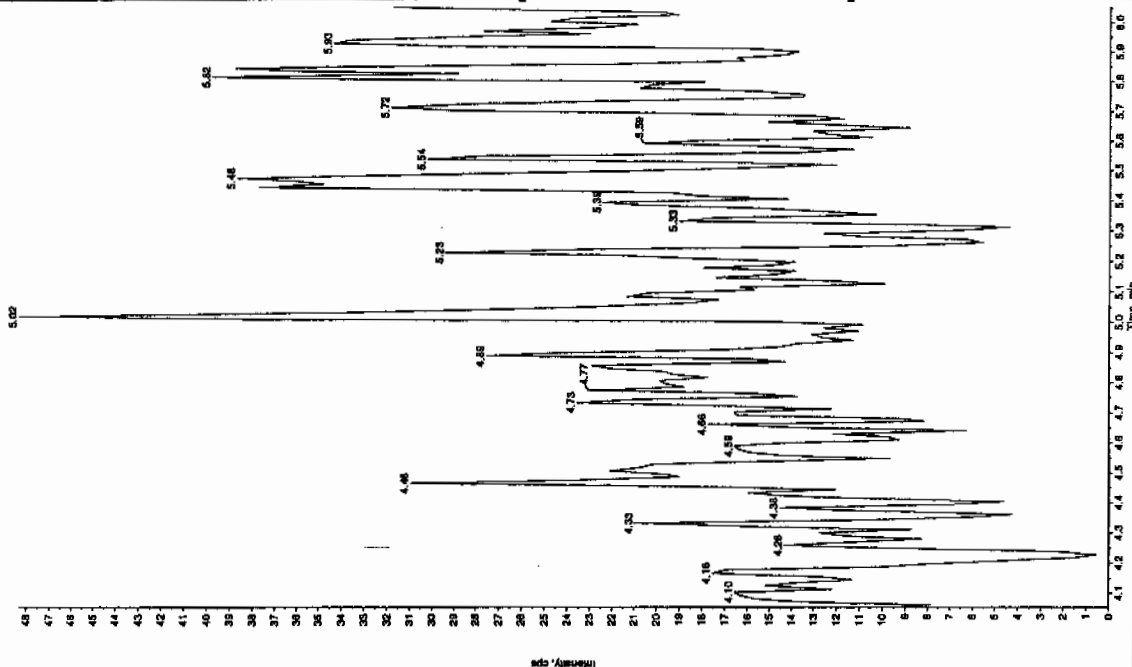
San 1/27/10



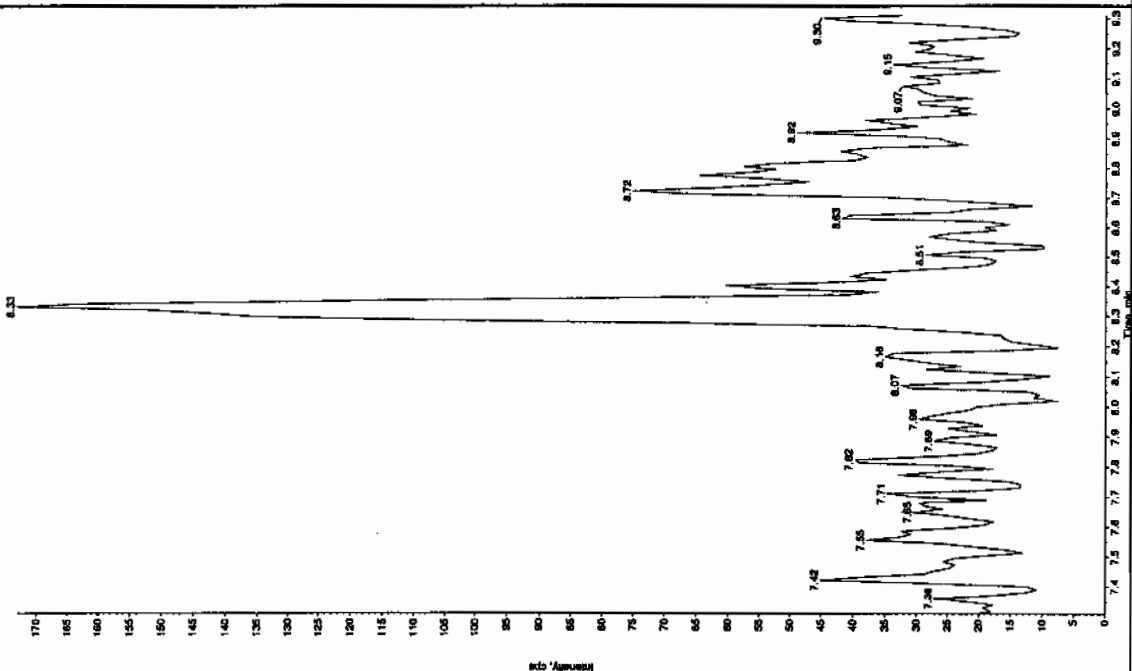
Hy m. 2/27/10

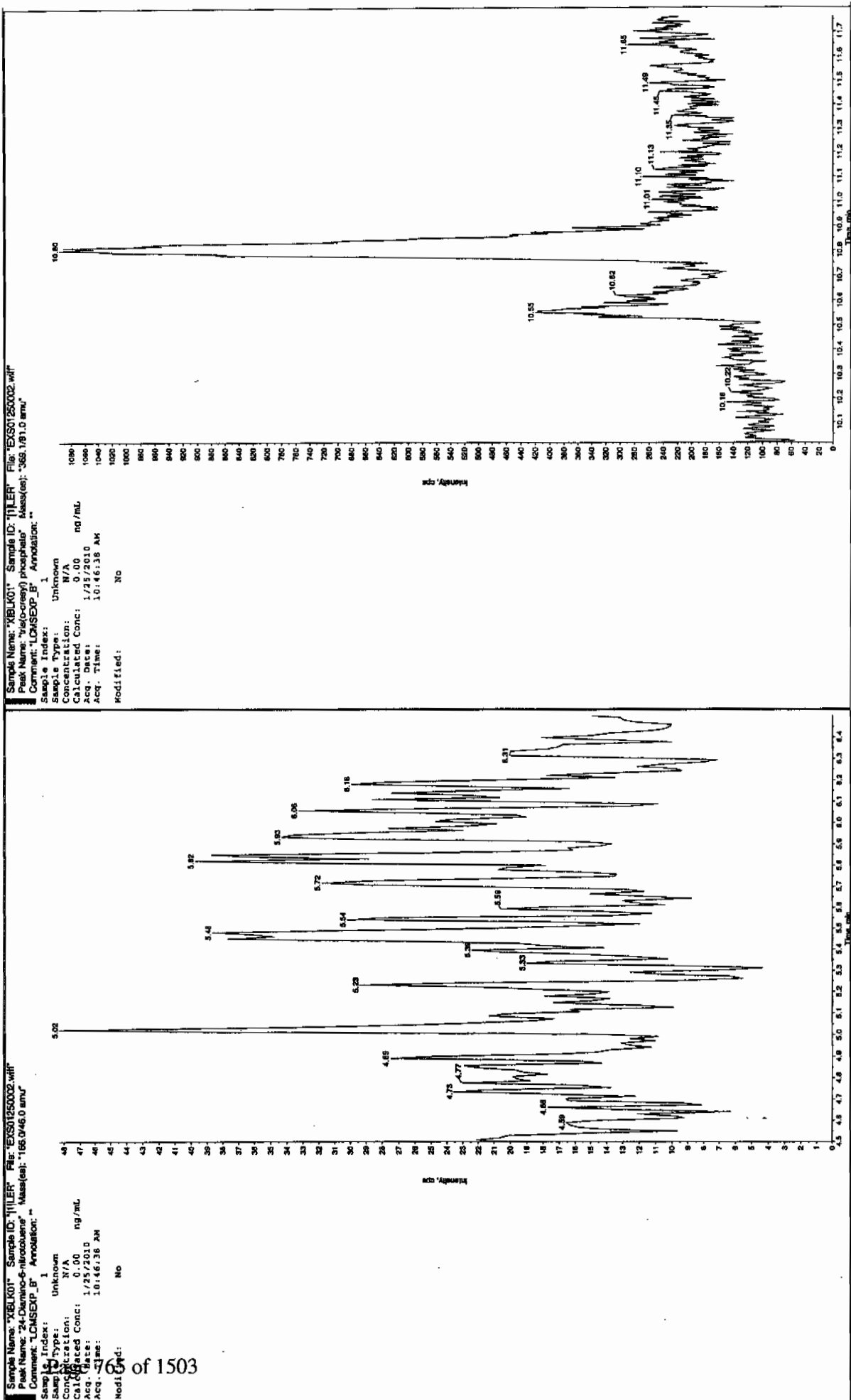


Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	1/25/2010
Acq. Time:	10:46:38 AM
Modified:	NO



Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Concentrated Conc:	0.00 ng/mL
Acq. Date:	1/25/2010
Acq. Time:	10:46:38 AM
Modified:	No





4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 25-JAN-10 15:16

GEL Data File: EXP0125009a

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	502.66
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	519.883
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125009a

Date: 25-Jan-2010

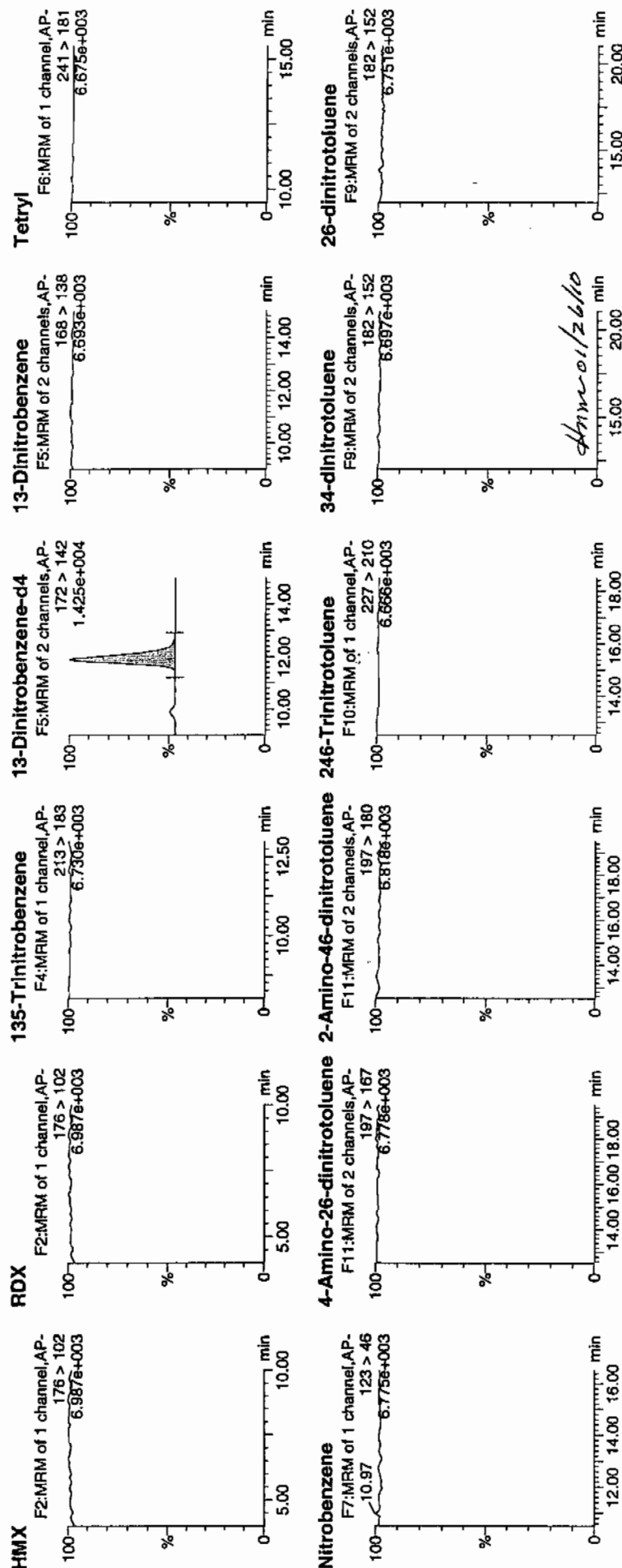
Time: 15:16:35

ID: XIBLK02

Vial: 1:1,A

1/26/10
10:11

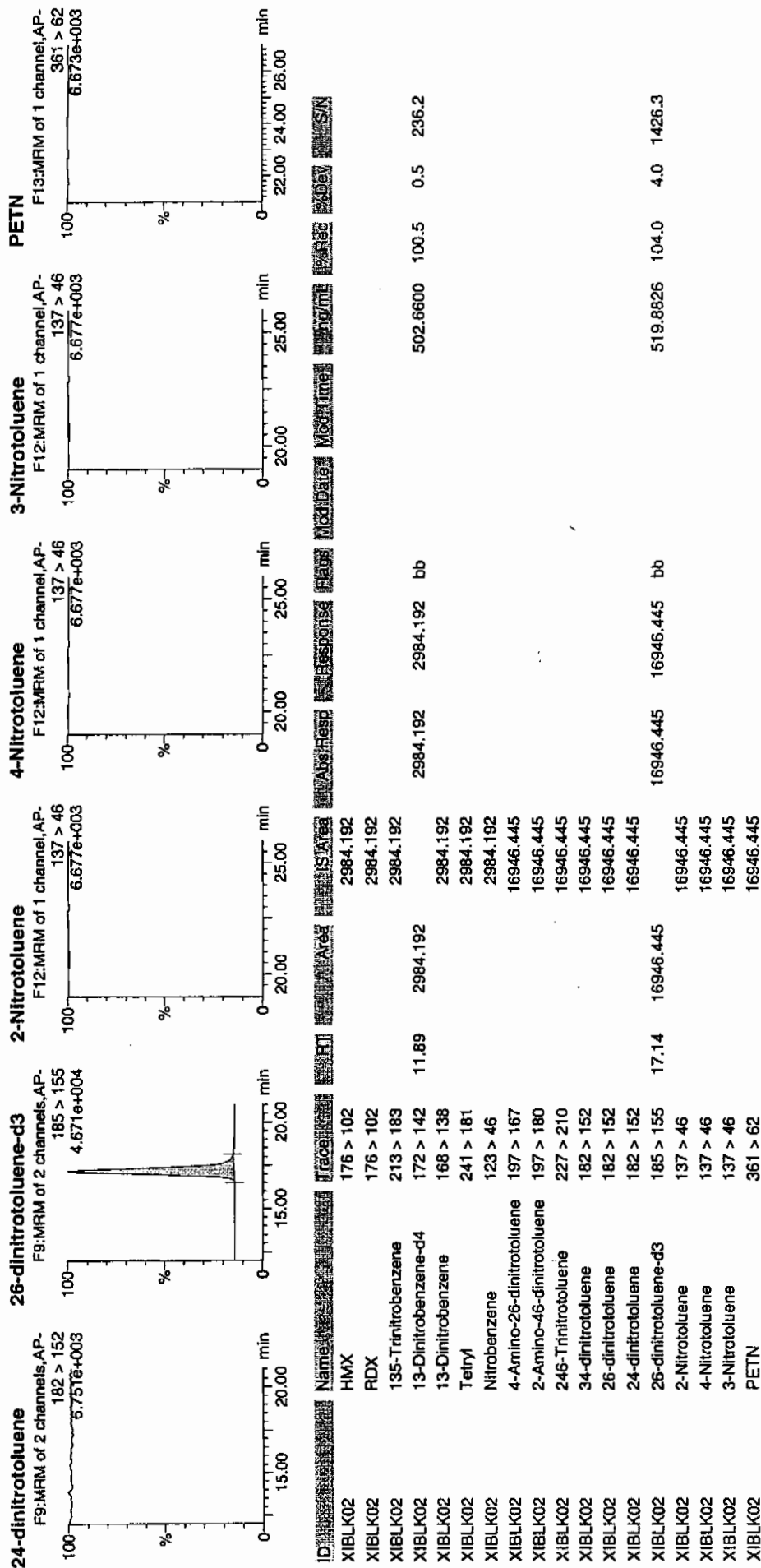
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Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 25-JAN-10 16:15

GEL Data File: EXP0125011a

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	508.032
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	524.258
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\12510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0125011a

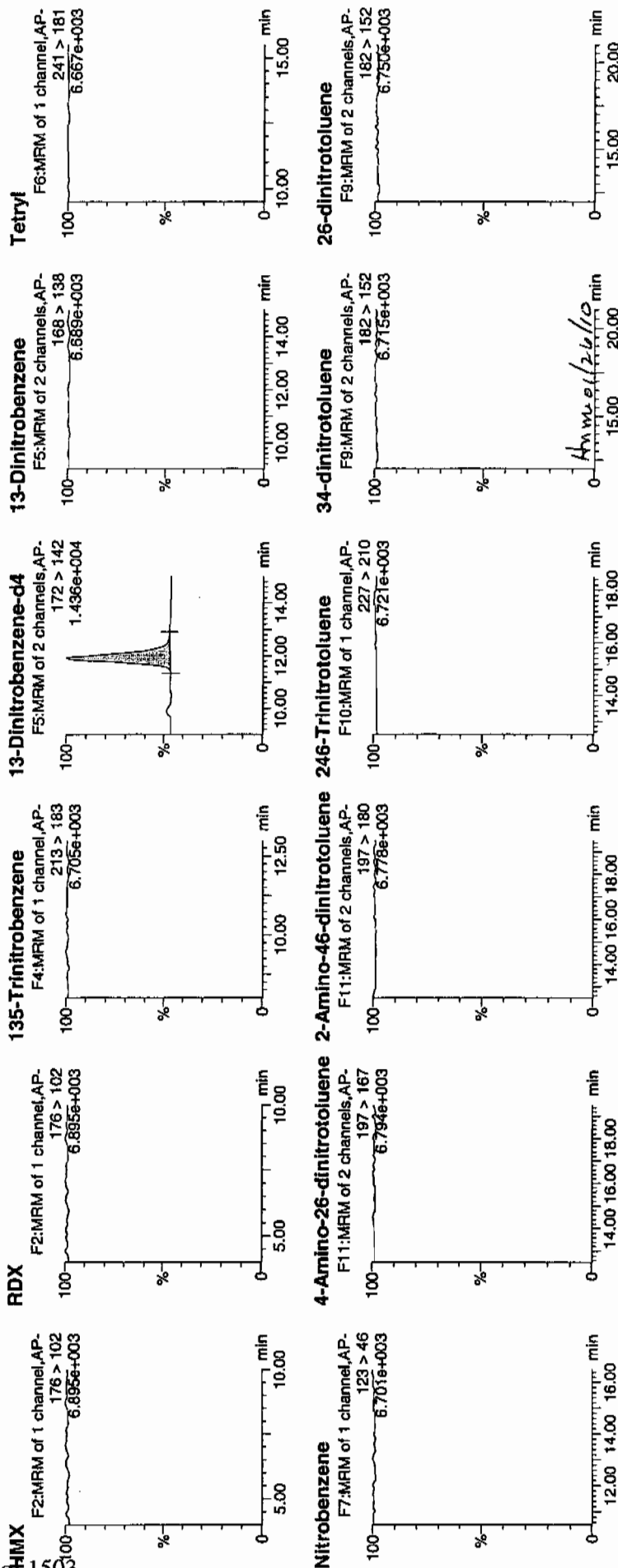
Date: 25-Jan-2010

Time: 16:15:32

ID: XIBLK03

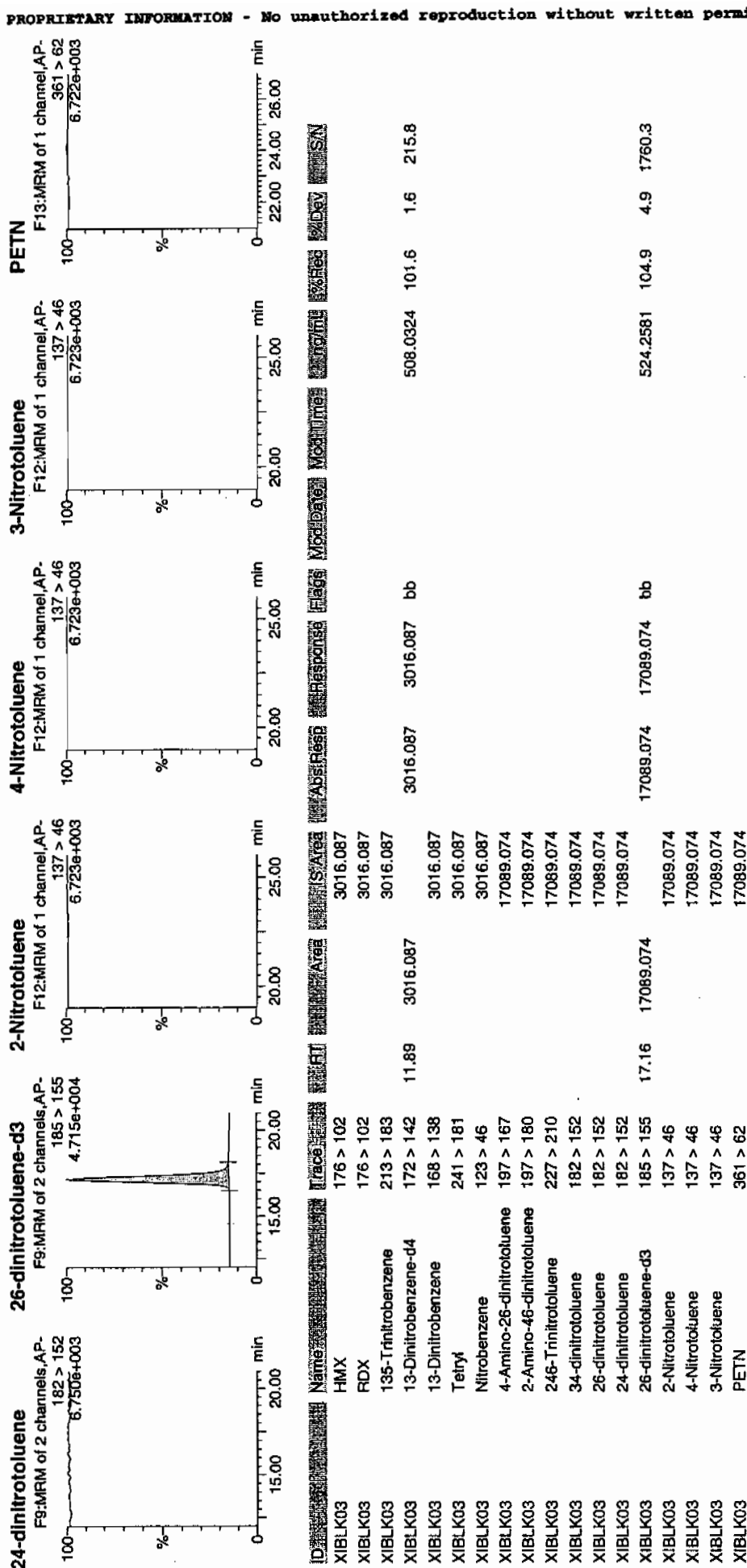
Vial: 1:1,A

WTR
1/26/10



Quantify Sample Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO012510expA.qld, Time: Tue Jan 26 09:24:51 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 25-JAN-10 22:39

GEL Data File: EXP0125024a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	536.181
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	610.208
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\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125024a

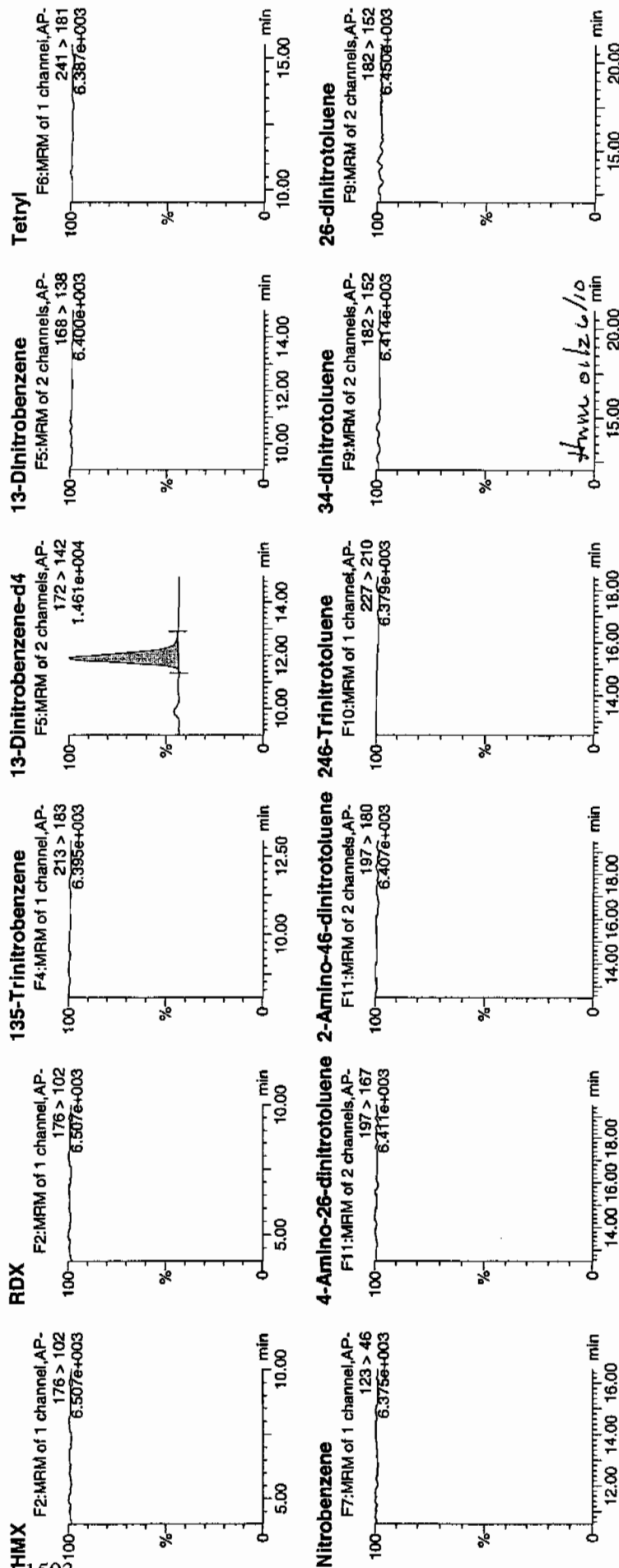
Date: 25-Jan-2010

Time: 22:39:19

ID: XIBLK04

Vial: 1:1,A

1/26/10
M.A.P.

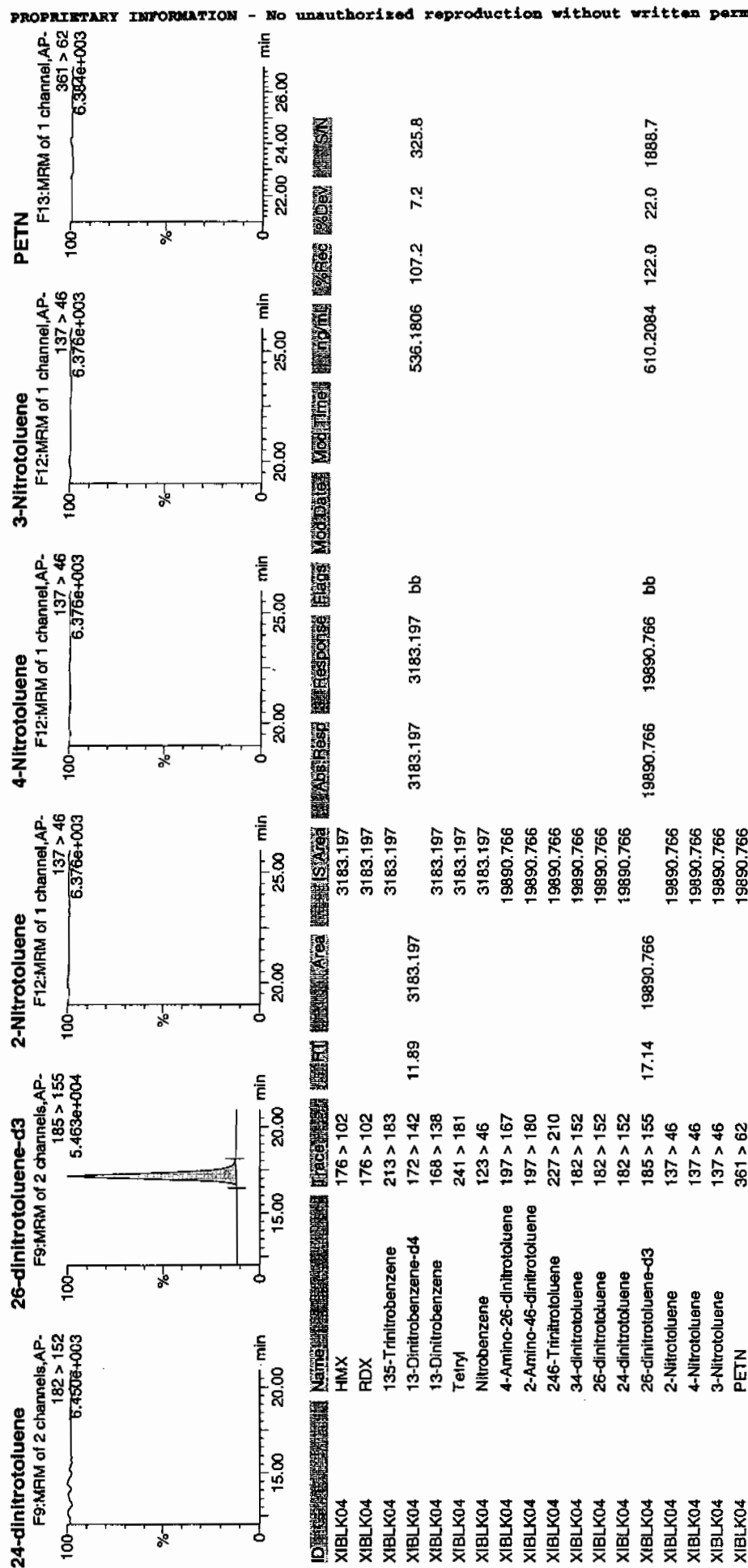


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 48 of 73

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 26-JAN-10 04:03

GEL Data File: EXP0125035a

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	530.31
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	567.52
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\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125035a

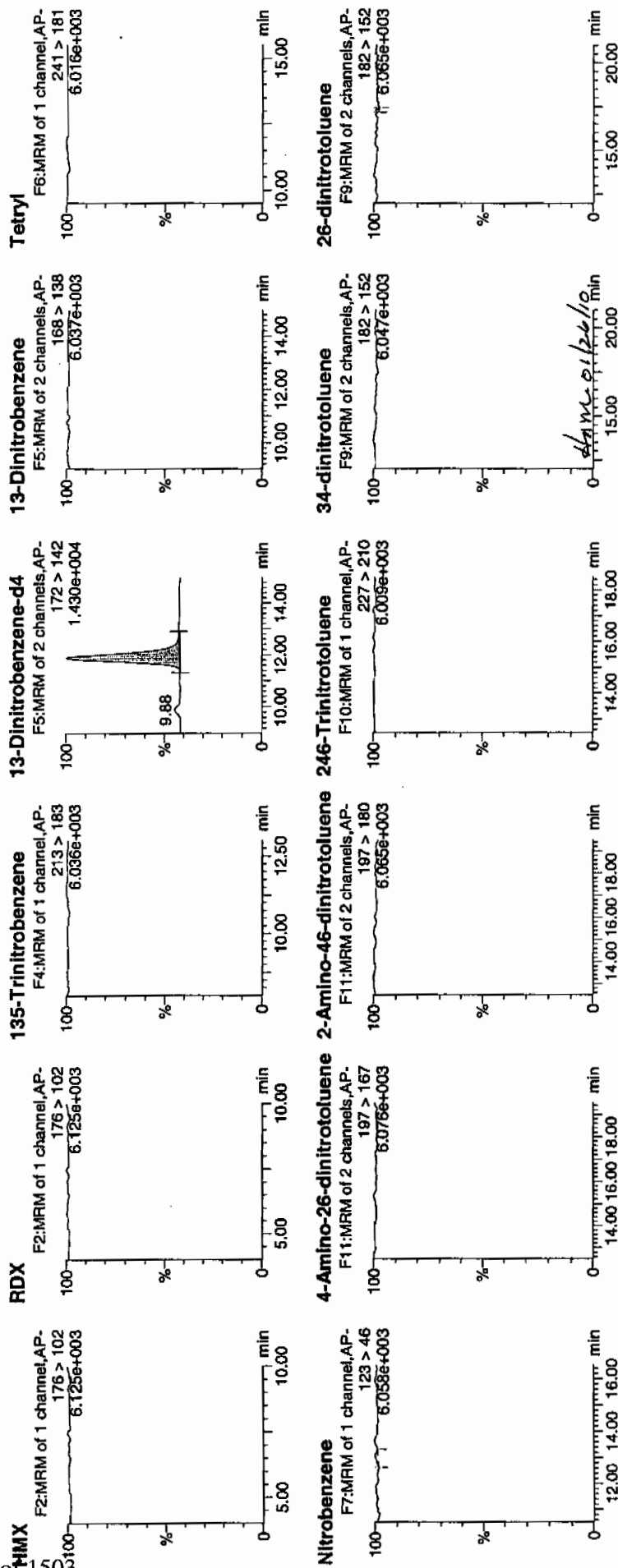
Date: 26-Jan-2010

Time: 04:03:54

ID: XIBLK05

Vial: 1:1,A

1/16/10



Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

24-dinitrotoluene

F9:MRM of 2 channels,AP-

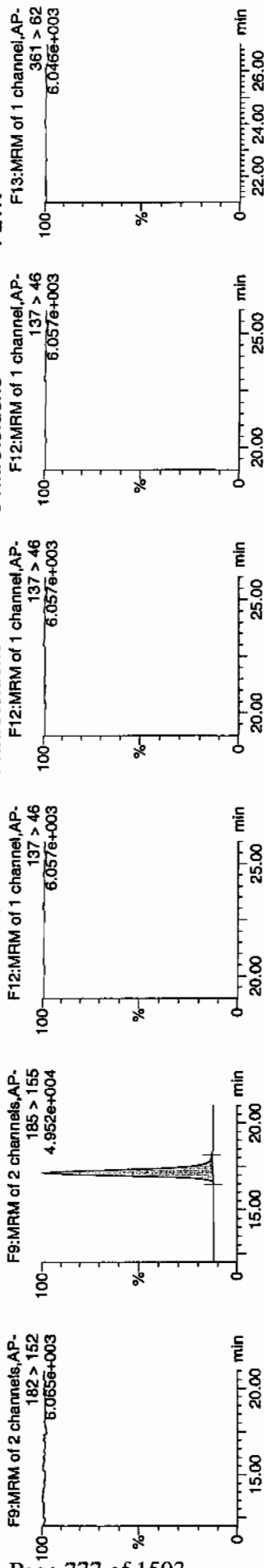
F9:MRM of 2 channels

F12:MRM of 1

F12:MRM of 1

F12:MRM of 1

3

[illegible]

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 26-JAN-10 10:27

GEL Data File: EXP0125048a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	526.699
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	549.419
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0125048a

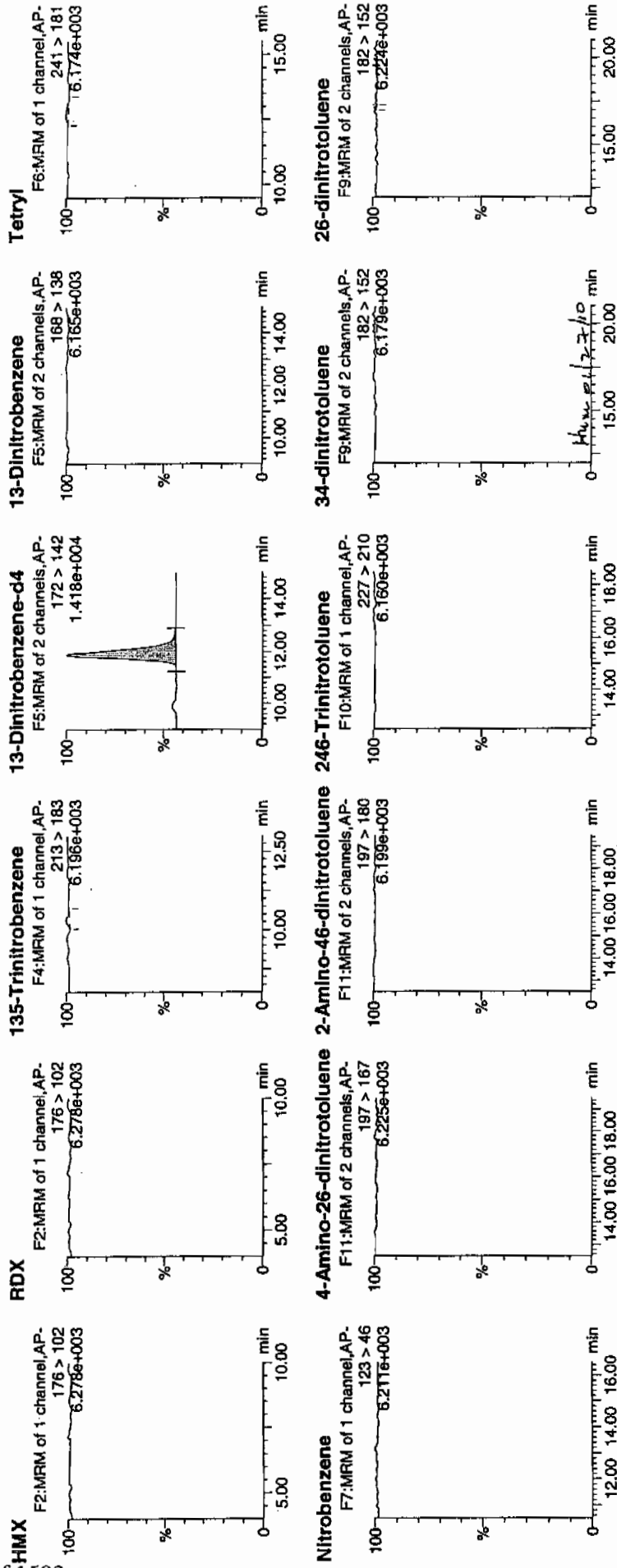
Date: 26-Jan-2010

Time: 10:27:39

ID: XIBLK06

Vial: 1:1,A

10/21/10

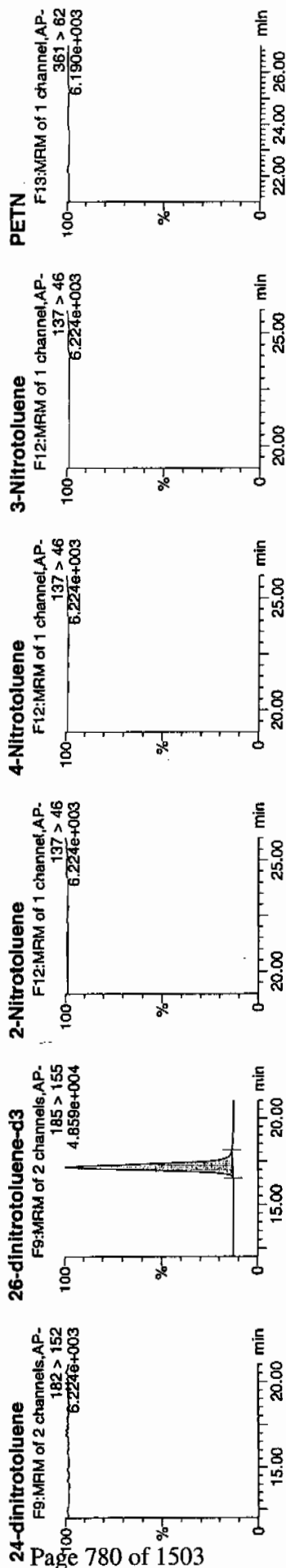


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 24 of 97

Dataset: C:\MASSLYN\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	RT	Area	IS Area	AbstrResp	Flags	Mod Date	Mod Time	Exp Time	% Rec	% Dev	SN
XIBLK06	HMX	176 > 102			3126.909								
XIBLK06	ROX	176 > 102			3126.909								
XIBLK06	135-Trinitrobenzene	213 > 183			3126.909								
XIBLK06	13-Dinitrobenzene-d4	172 > 142	11.89	3126.909		3126.909	MM- 27-Jan-10 bb	09:08:39		526.6994	105.3	5.3	413.0
XIBLK06	13-Dinitrobenzene	168 > 138			3126.909								
XIBLK06	Tearyl	241 > 181			3126.909		MM- 27-Jan-10	09:10:31					
XIBLK06	Nitrobenzene	123 > 46			3126.909								
XIBLK06	4-Amino-26-dinitrotoluene	197 > 167			17909.232								
XIBLK06	2-Amino-46-dinitrotoluene	197 > 180			17909.232								
XIBLK06	246-Trinitrotoluene	227 > 210			17909.232								
XIBLK06	34-dinitrotoluene	182 > 152			17909.232								
XIBLK06	26-dinitrotoluene	182 > 152			17909.232		MM- 27-Jan-10	09:15:19					
XIBLK06	24-dinitrotoluene	182 > 152			17909.232								
XIBLK06	26-dinitrotoluene-d3	185 > 155	17.14	17909.232		17909.232	bb			549.4189	109.9	9.9	1335.7
XIBLK06	2-Nitrotoluene	137 > 46			17909.232								
XIBLK06	4-Nitrotoluene	137 > 46			17909.232								
XIBLK06	3-Nitrotoluene	137 > 46			17909.232								
XIBLK06	PETN	361 > 62			17909.232								

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 26-JAN-10 16:50

GEL Data File: EXP0125061a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	597.432
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	608.457
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125061a

Date: 26-Jan-2010

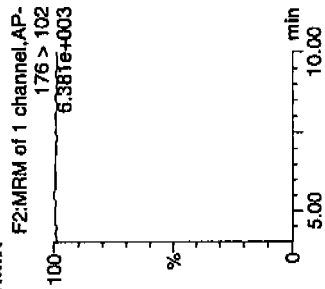
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ID: XIBLK07

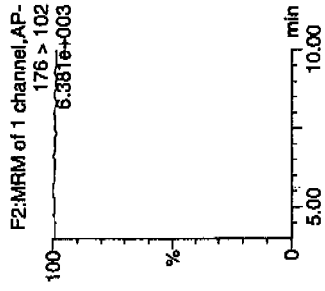
Vial: 1:1,A

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1/27/10

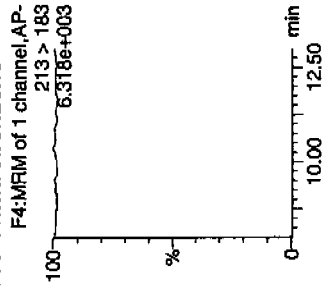
HMX



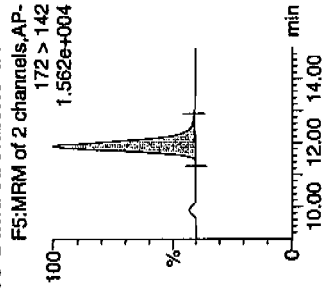
RDX



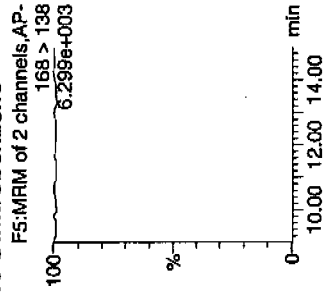
135-Trinitrobenzene



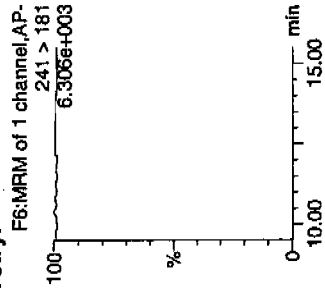
13-Dinitrobenzene-d4



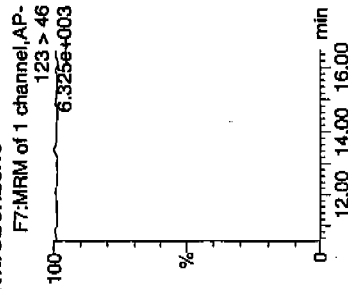
13-Dinitrobenzene



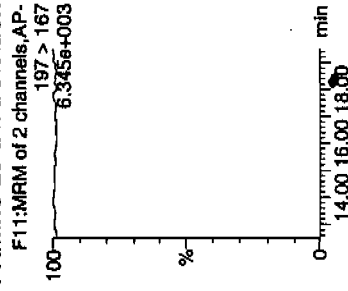
Tetryl



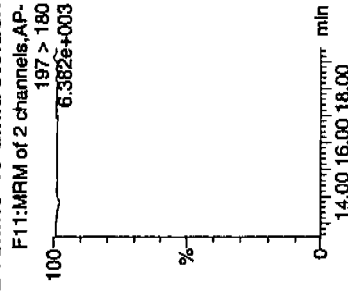
Nitrobenzene



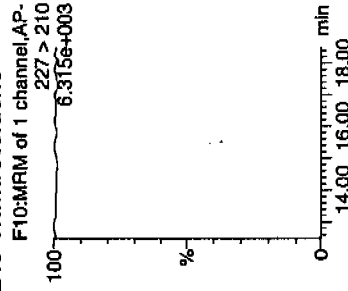
4-Amino-26-dinitrotoluene



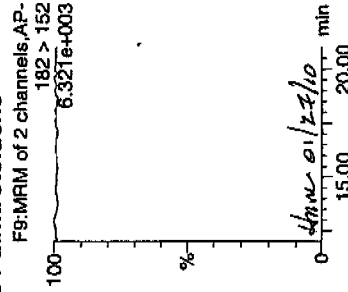
2-Amino-46-dinitrotoluene



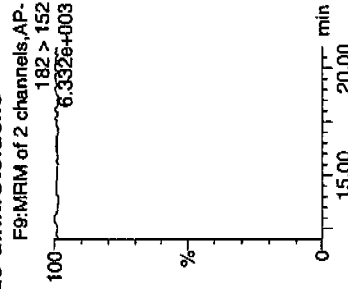
246-Trinitrotoluene



34-dinitrotoluene



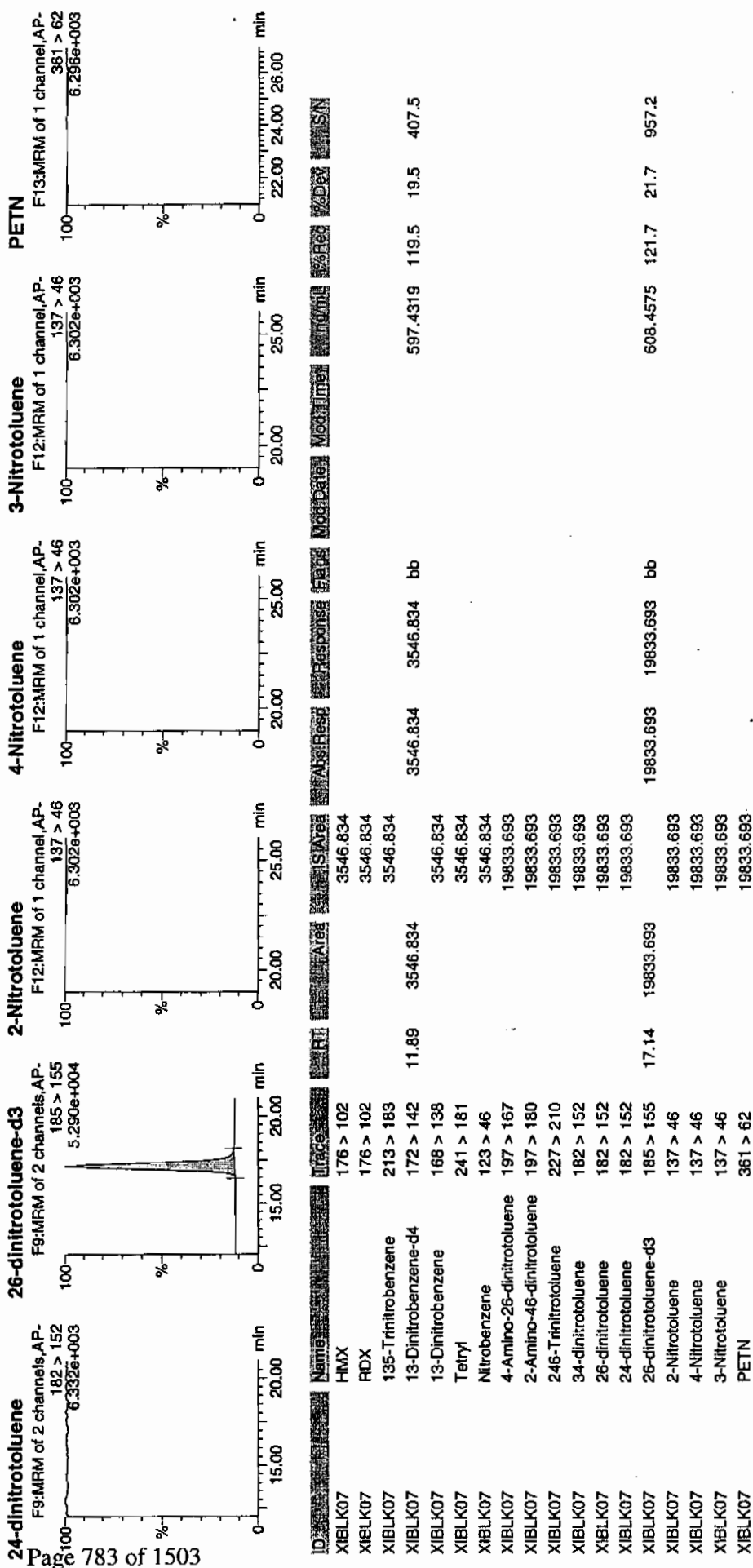
26-dinitrotoluene



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Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 26-JAN-10 19:48

GEL Data File: EXP0125067a

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	538.014
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	566.746
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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0125067a

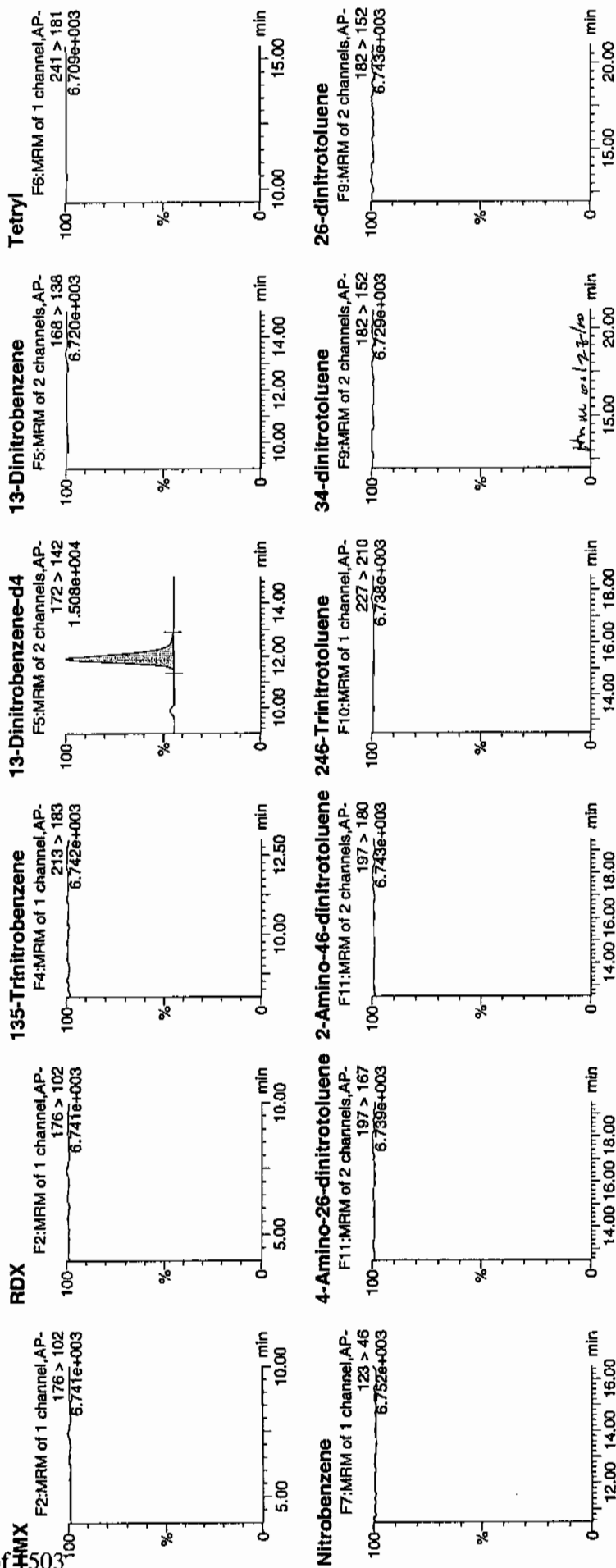
Date: 26-Jan-2010

Time: 19:48:13

ID: XIBLK08

Anal: 1:1,A

1/27/10

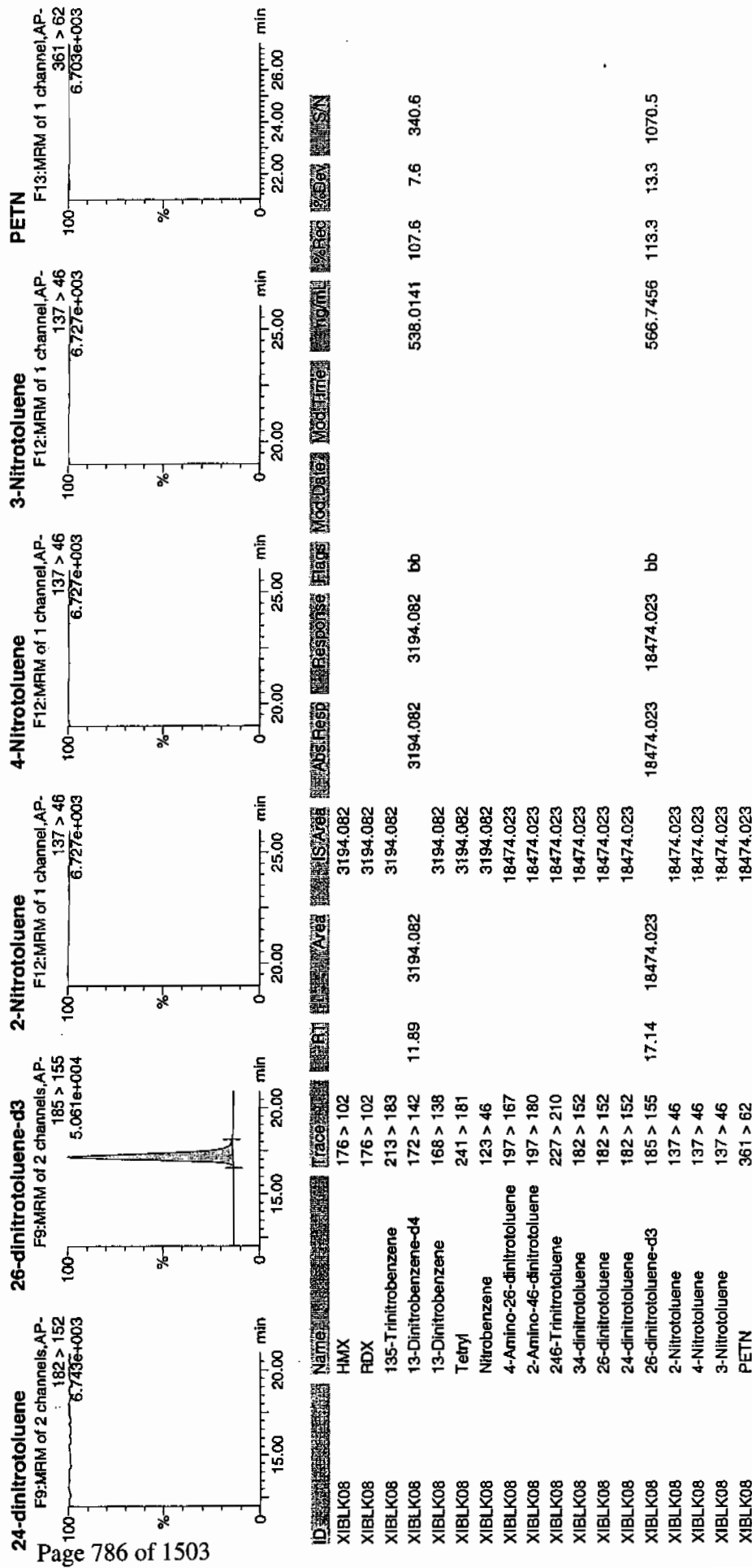


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYN\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 26-JAN-10 23:14

GEL Data File: EXP0125074a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	524.417
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	524.016
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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125074a

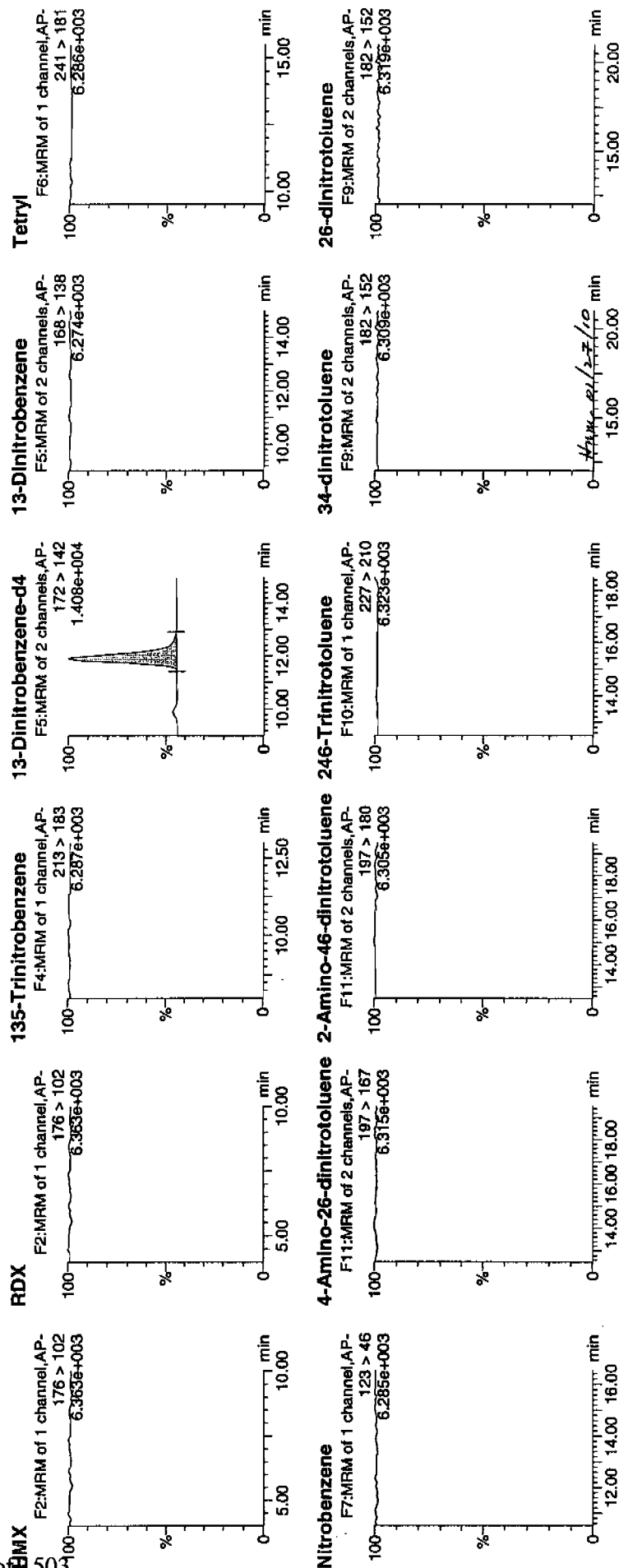
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Time: 23:14:40

ID: XIBLK09

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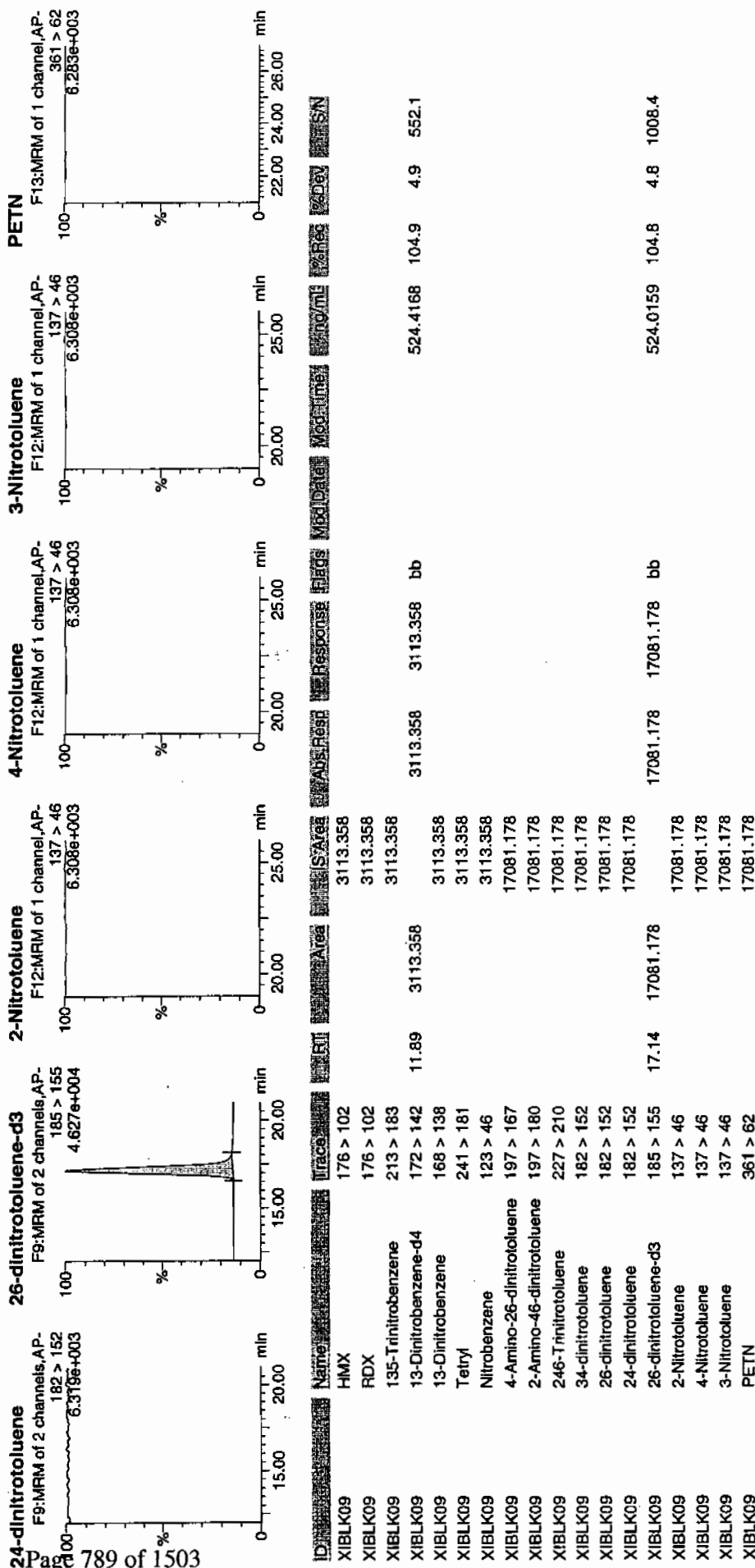
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Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 27-JAN-10 03:40

GEL Data File: EXP0125083a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	574.551
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	599.188
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125083a

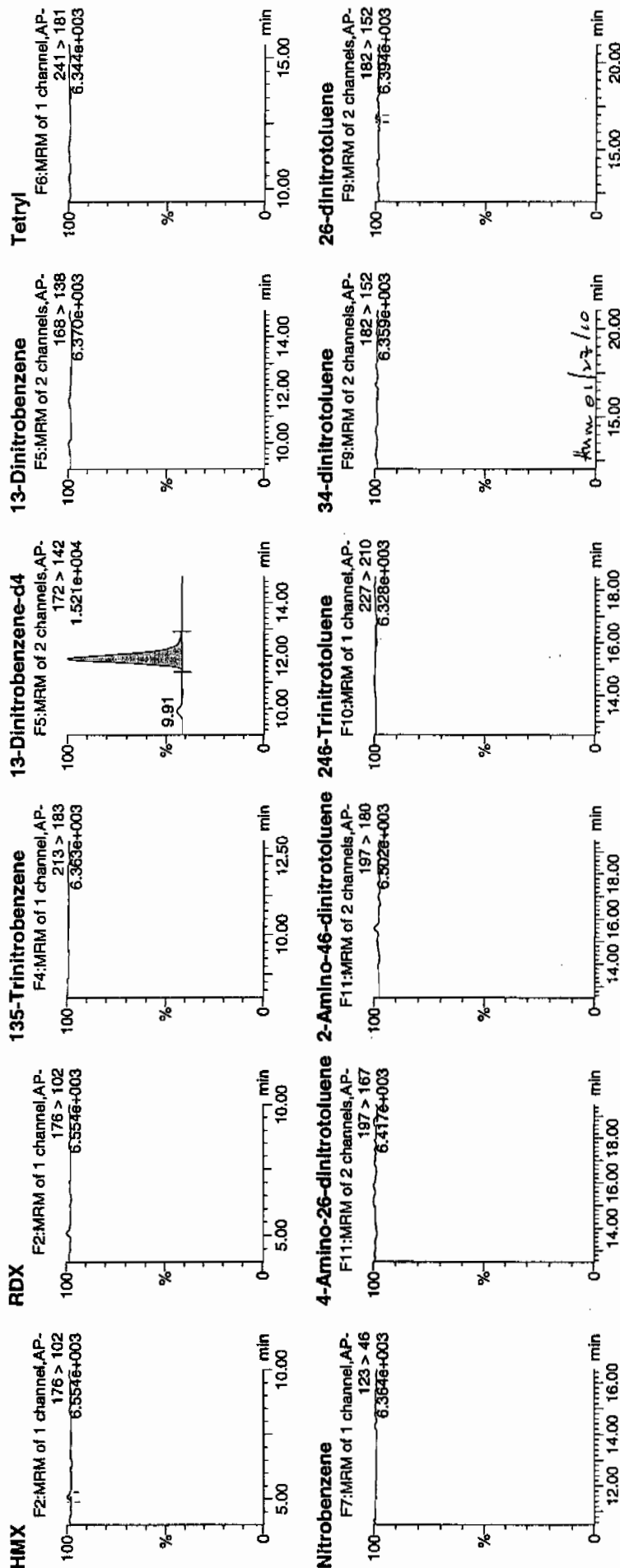
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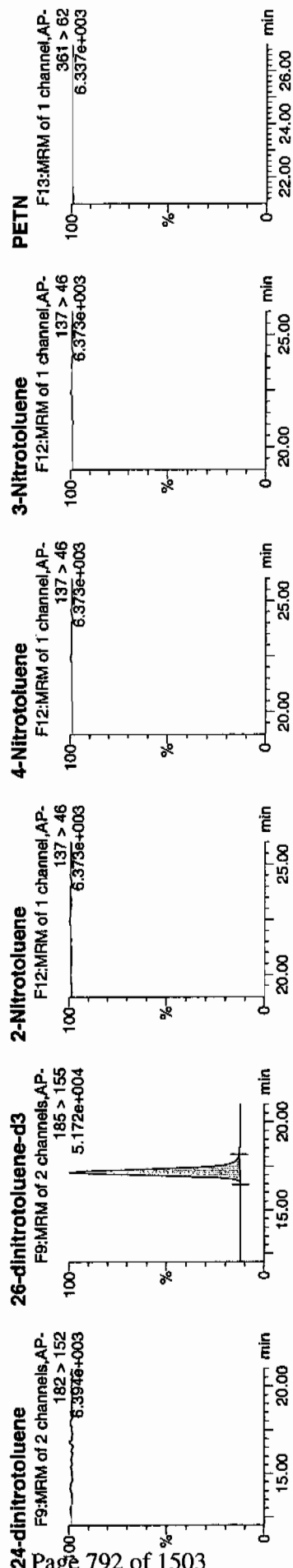
ID: XIBLK10

Vial: 1:1,A

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MTP



Dataset: C:\MASSLYN\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 27-JAN-10 10:04

GEL Data File: EXP0125096a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	558.477
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	528.84
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

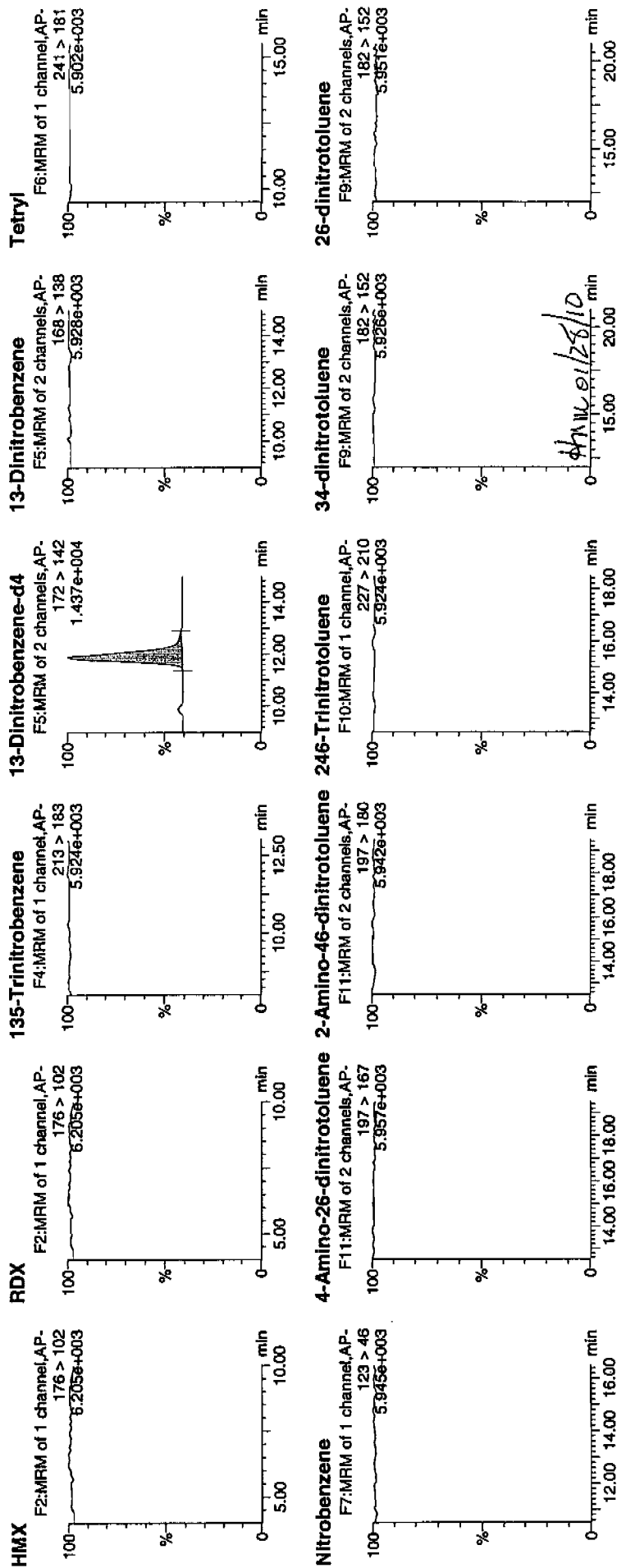
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Date: 27-Jan-2010

Time: 10:04:30

ID: XIBLK11

Vial: 1:1,A

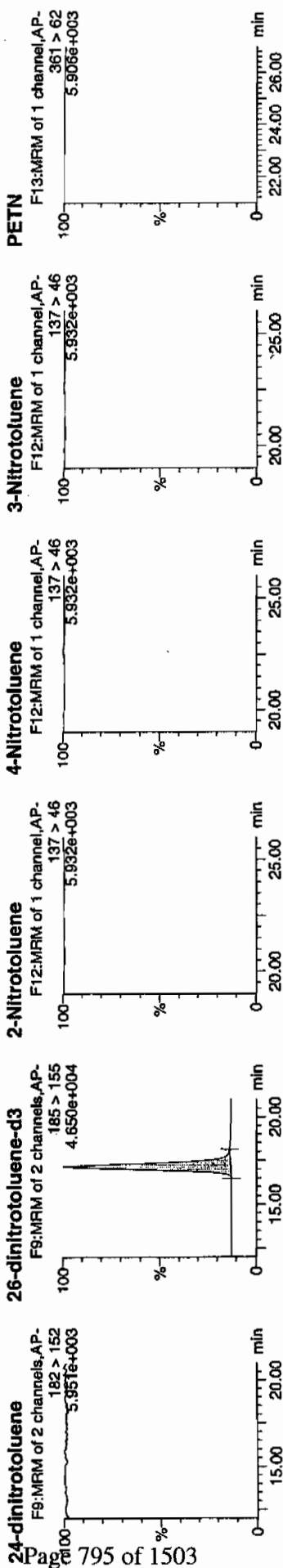


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYN\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	InChI Key	MW	Vol	Density	SAVES	Abs Resp	Response	PAGE	Mod Time	Shed ml	% Shed	% Day	SIN
XIBLK11	HMX	176 > 102				3315.568								
XIBLK11	RDX	176 > 102				3315.568								
XIBLK11	135-Trinitrobenzene	213 > 183				3315.568								
XIBLK11	13-Dinitrobenzene-d4	172 > 142				3315.568	3315.568	3315.568	bb		558.4773	111.7	11.7	115.3
XIBLK11	13-Dinitrobenzene	168 > 138				3315.568								
XIBLK11	Tetryl	241 > 181				3315.568								
XIBLK11	Nitrobenzene	123 > 46				3315.568								
XIBLK11	4-Amino-26-dinitrotoluene	197 > 167				17238.420								
XIBLK11	2-Amino-46-dinitrotoluene	197 > 180				17238.420								
XIBLK11	246-Trinitrotoluene	227 > 210				17238.420								
XIBLK11	34-dinitrotoluene	182 > 152				17238.420								
XIBLK11	26-dinitrotoluene	182 > 152				17238.420								
XIBLK11	24-dinitrotoluene	182 > 152				17238.420								
XIBLK11	26-dinitrotoluene-d3	185 > 155				17238.420	17238.420	17238.420	bb		528.8398	105.8	5.8	1765.2
XIBLK11	2-Nitrotoluene	137 > 46				17238.420								
XIBLK11	4-Nitrotoluene	137 > 46				17238.420								
XIBLK11	3-Nitrotoluene	137 > 46				17238.420								
XIBLK11	PETN	361 > 62				17238.420								

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 27-JAN-10 16:28

GEL Data File: EXP0125109a

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	568.05
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	575.906
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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\data\EXP0125109a

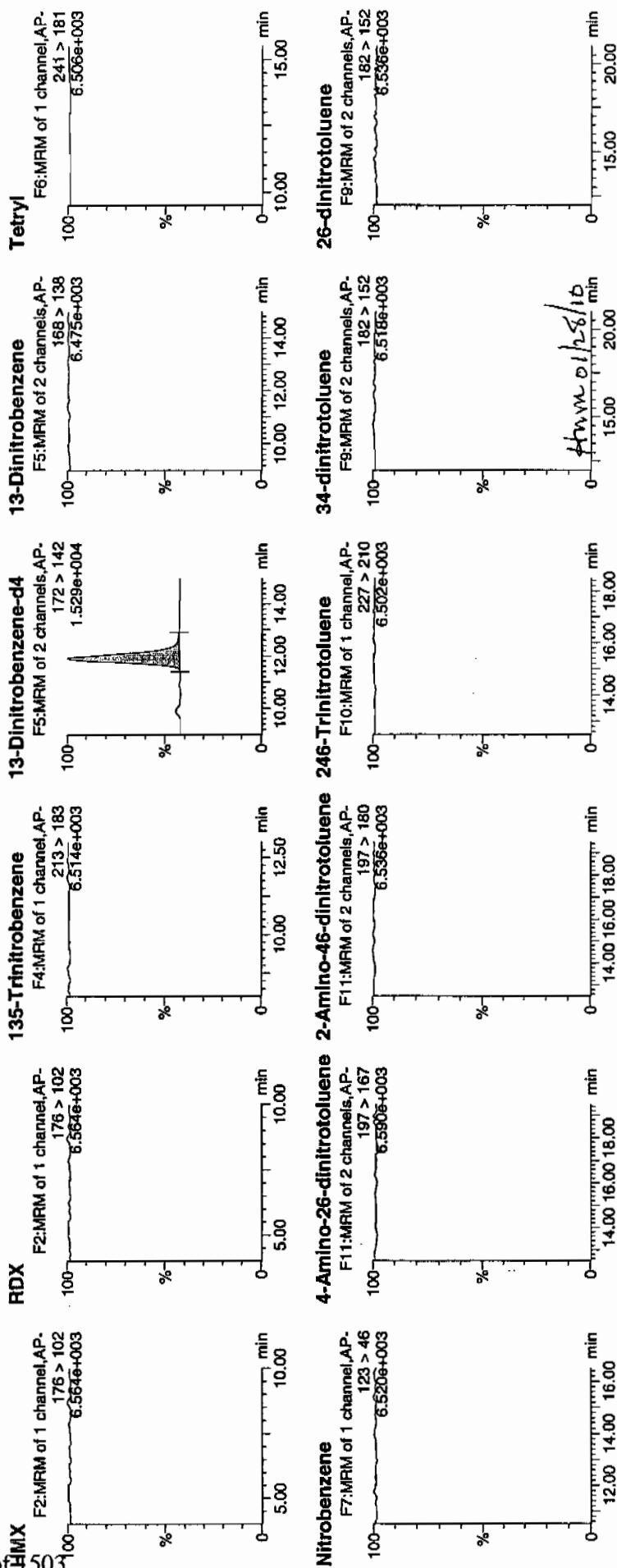
Date: 27-Jan-2010

Time: 16:28:07

ID: XIBLK12

Gal: 1:1,A

11/18/10

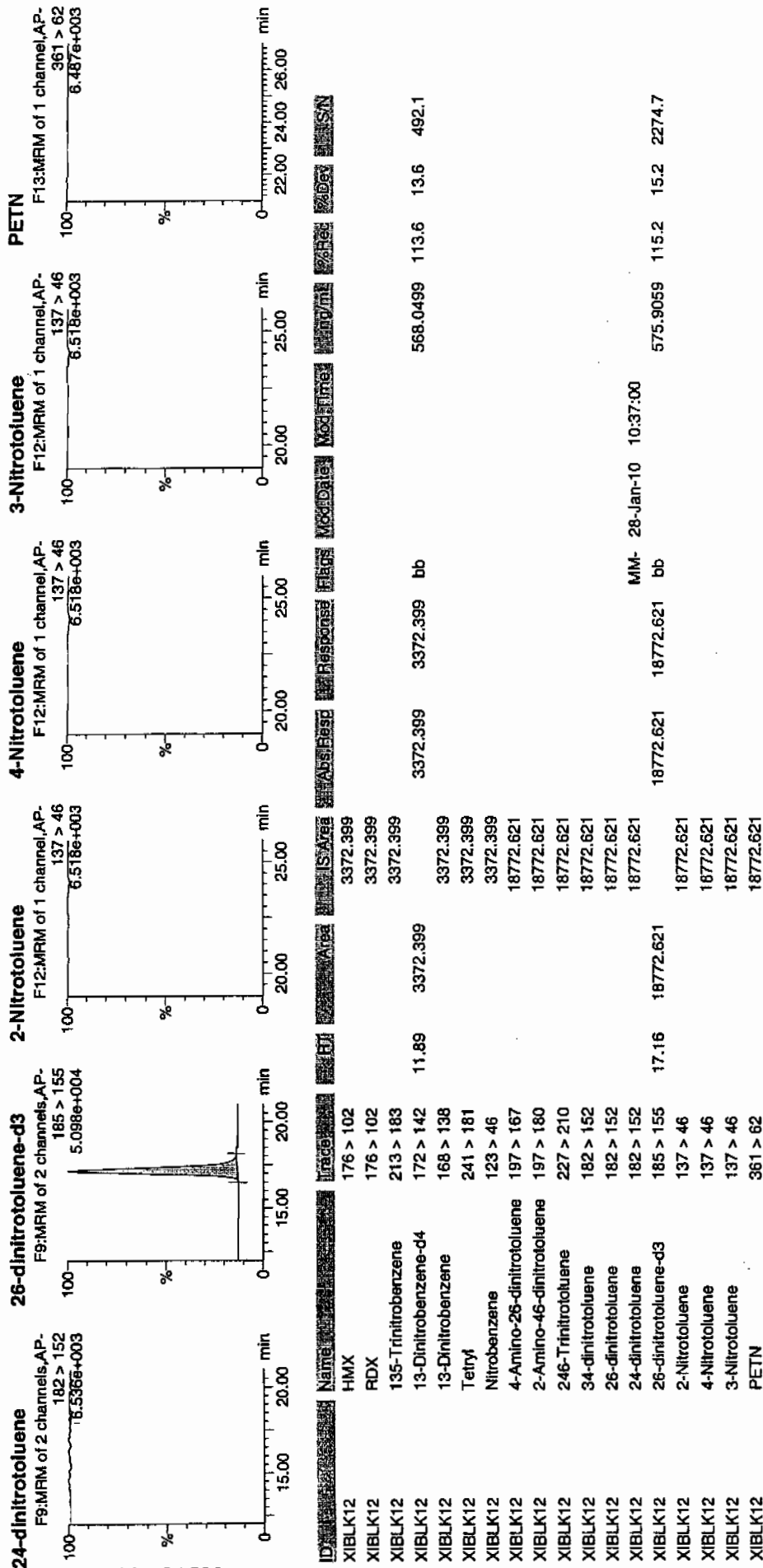


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp\PRO1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 27-JAN-10 18:55

GEL Data File: EXP0125114a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	505.557
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	509.162
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qtd, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125114a

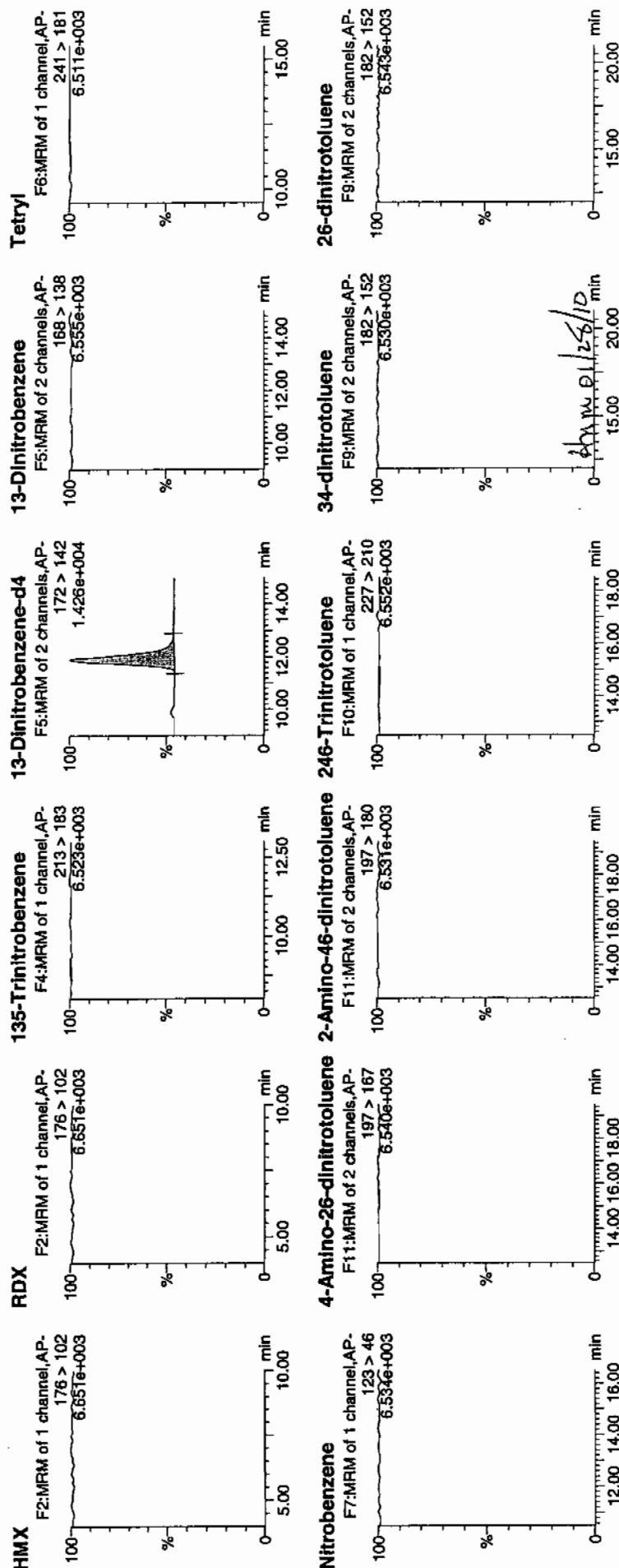
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Time: 18:55:56

ID: XIBLK13

Vial: 1:1,A

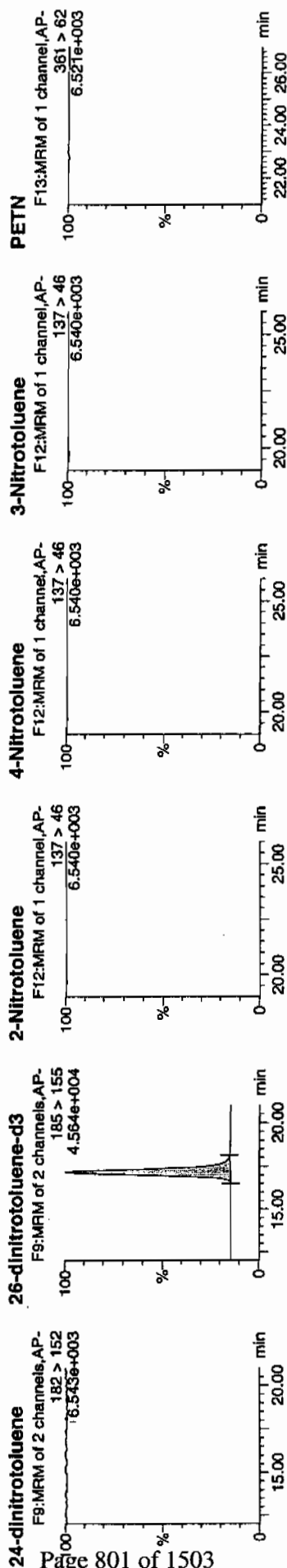
WFF
1/28/10



Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 27-JAN-10 20:24

GEL Data File: EXP0125117a

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	487.356
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	507.261
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0125117a

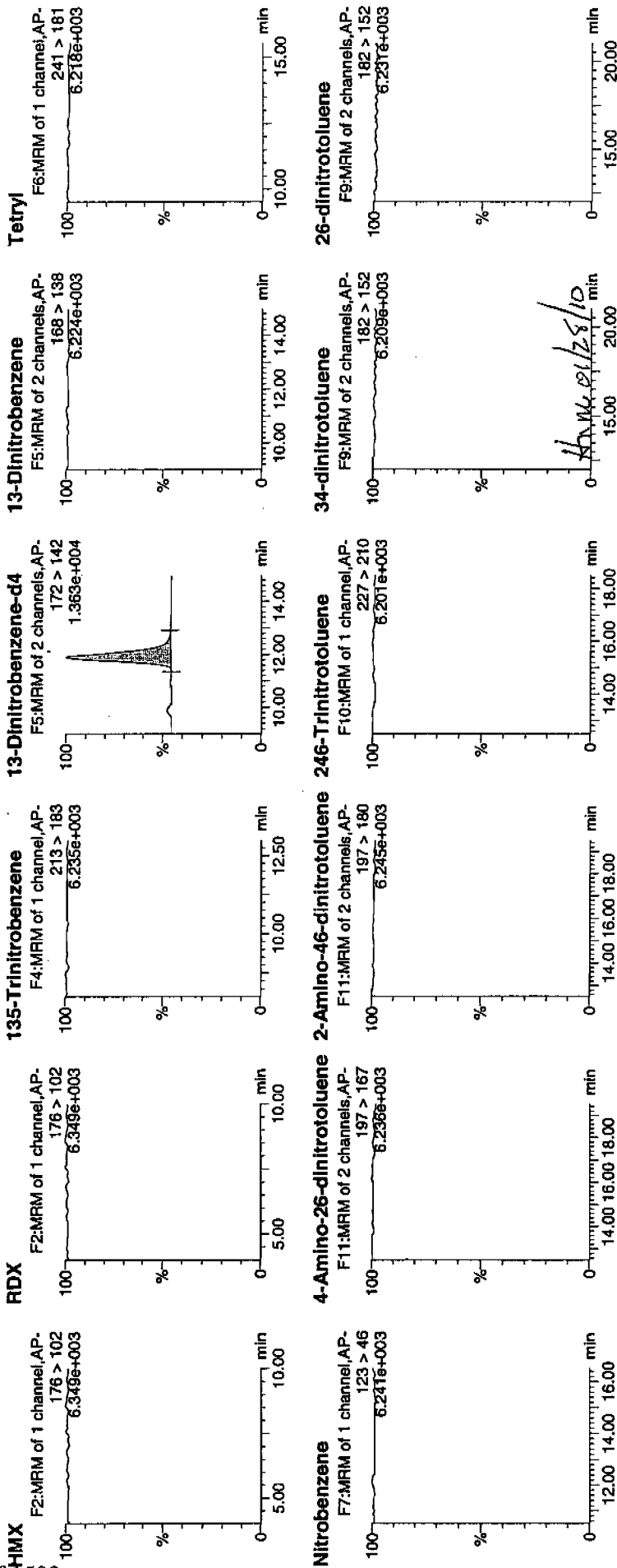
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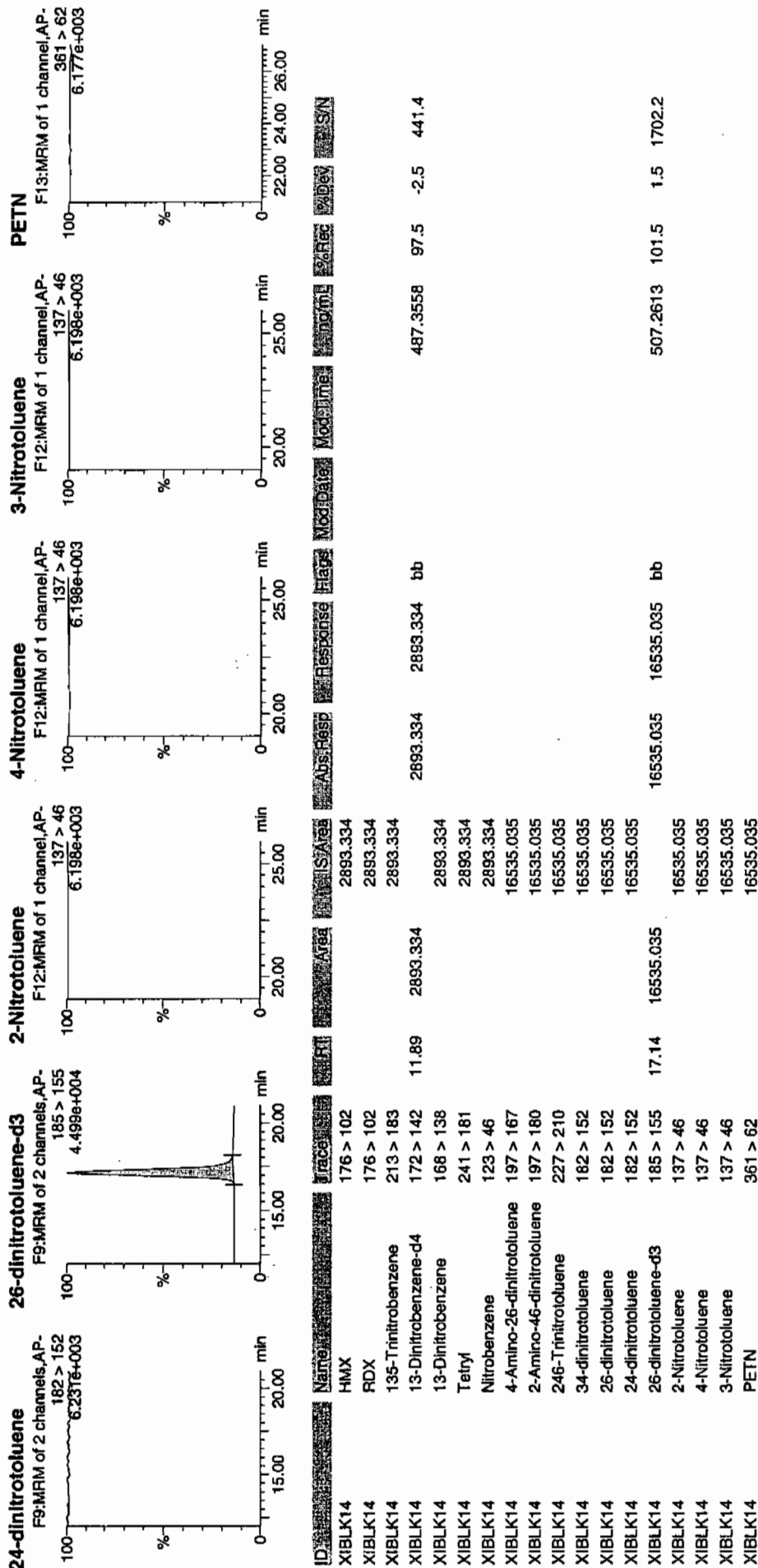
ID: XIBLK14

Vial: 1:1,A

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Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 28-JAN-10 02:47

GEL Data File: EXP0125130a

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	480.578
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	473.198
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125130a

Date: 28-Jan-2010

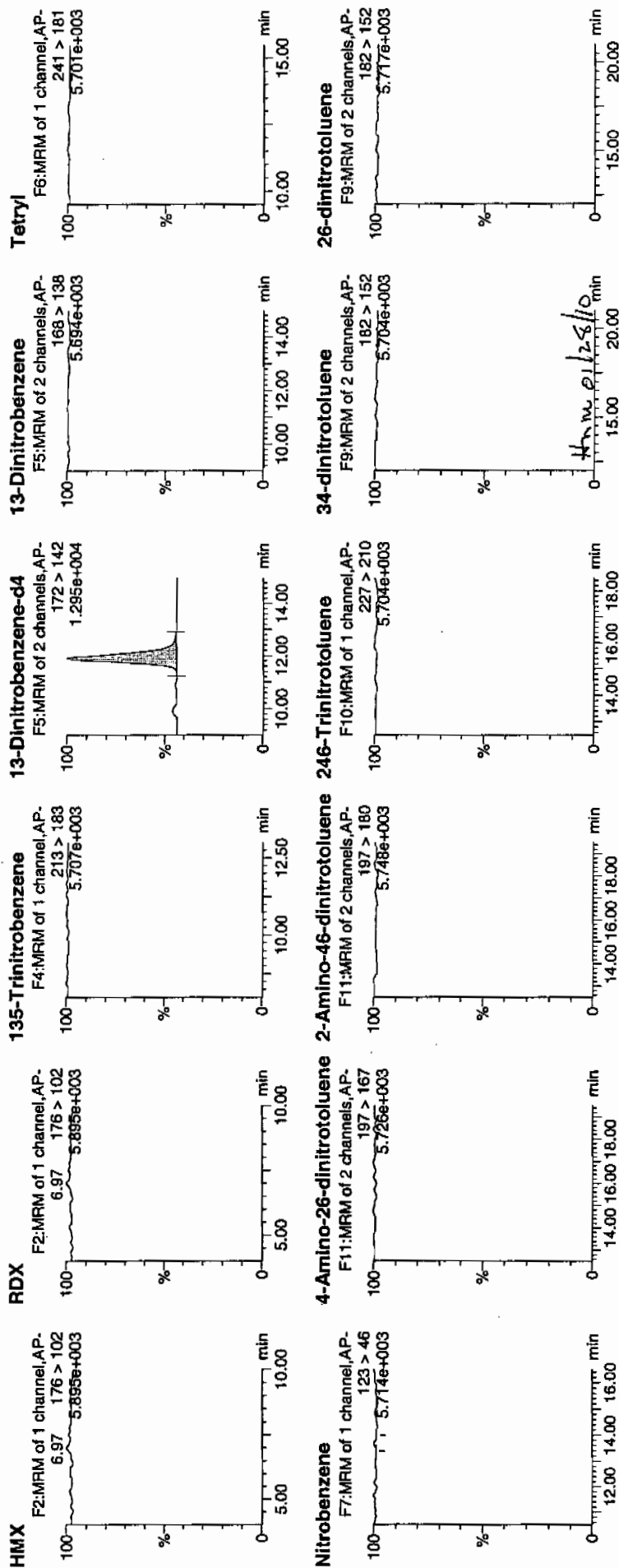
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Vial: 1:1, A

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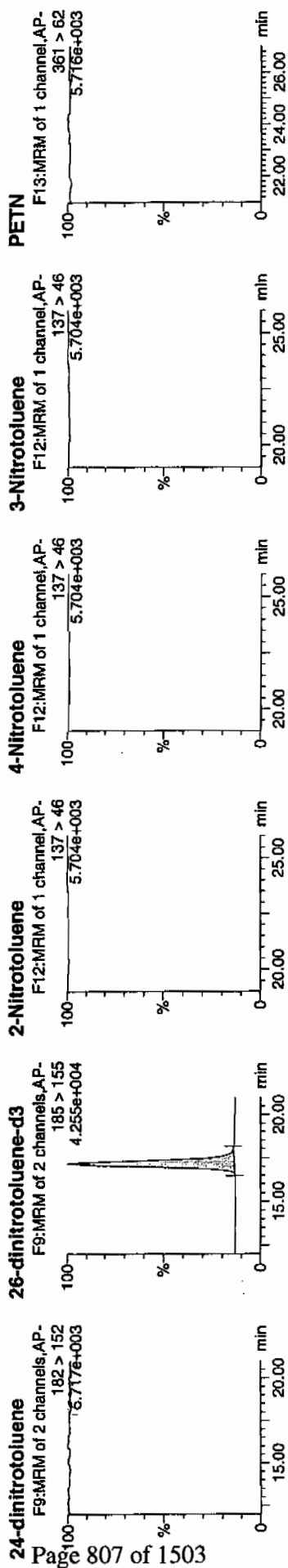
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Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 28-JAN-10 09:11

GEL Data File: EXP0125143a

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	519.151
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	494.217
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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125143a

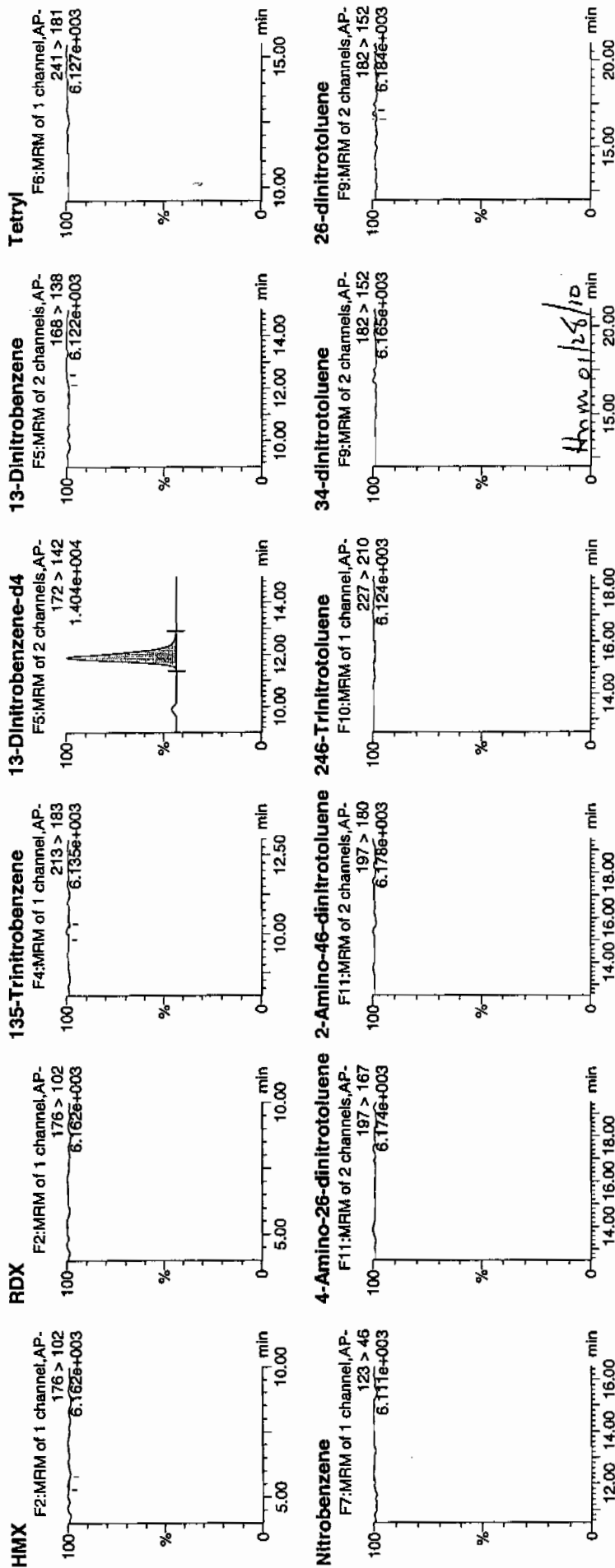
Date: 28-Jan-2010

Time: 09:11:19

ID: XIBLK16

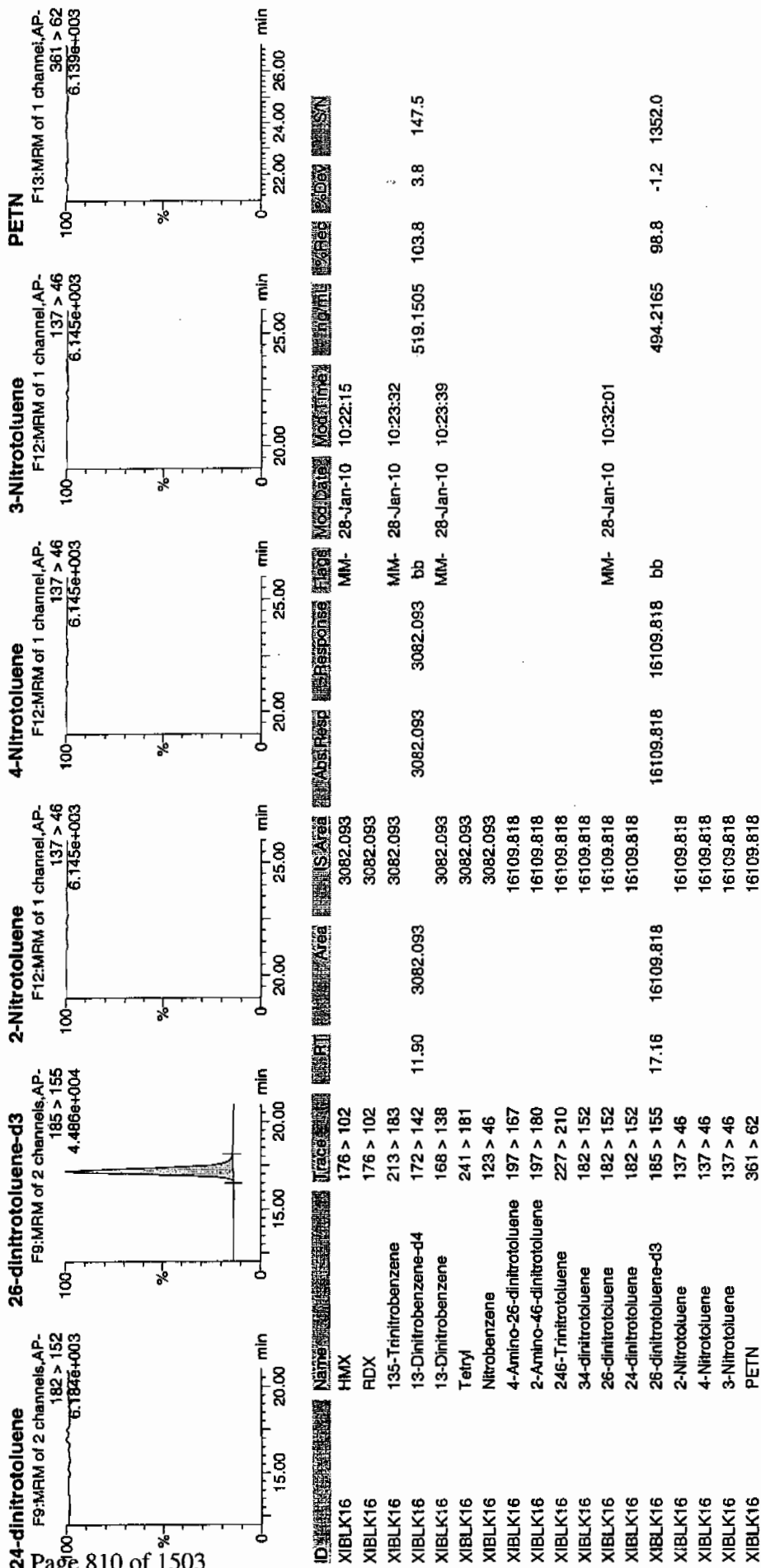
Vial: 1:1,A

Page 809 of 1503



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK17

Analysis Date: 28-JAN-10 15:35

GEL Data File: EXP0125156a

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	612.197
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	577.738
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qtd, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125156a

Date: 28-Jan-2010

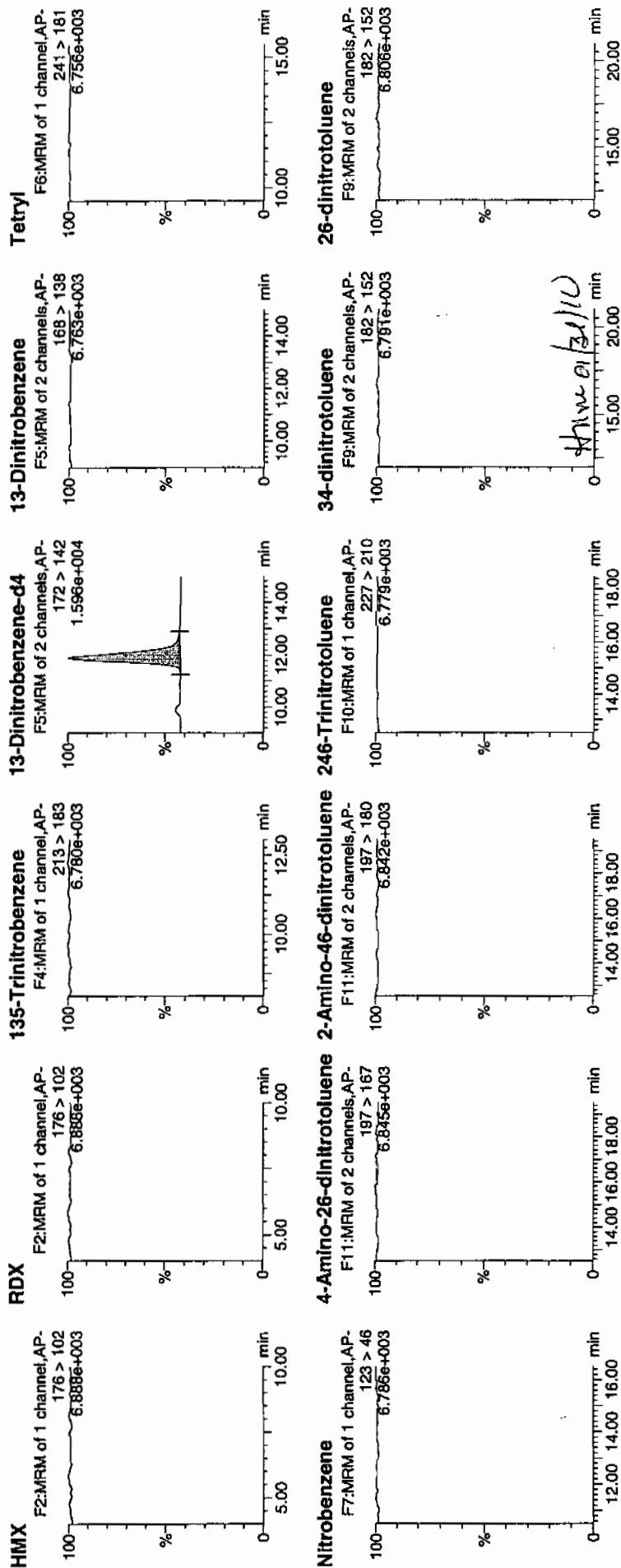
Time: 15:35:37

ID: XIBLK17

Vial: 1:1,A

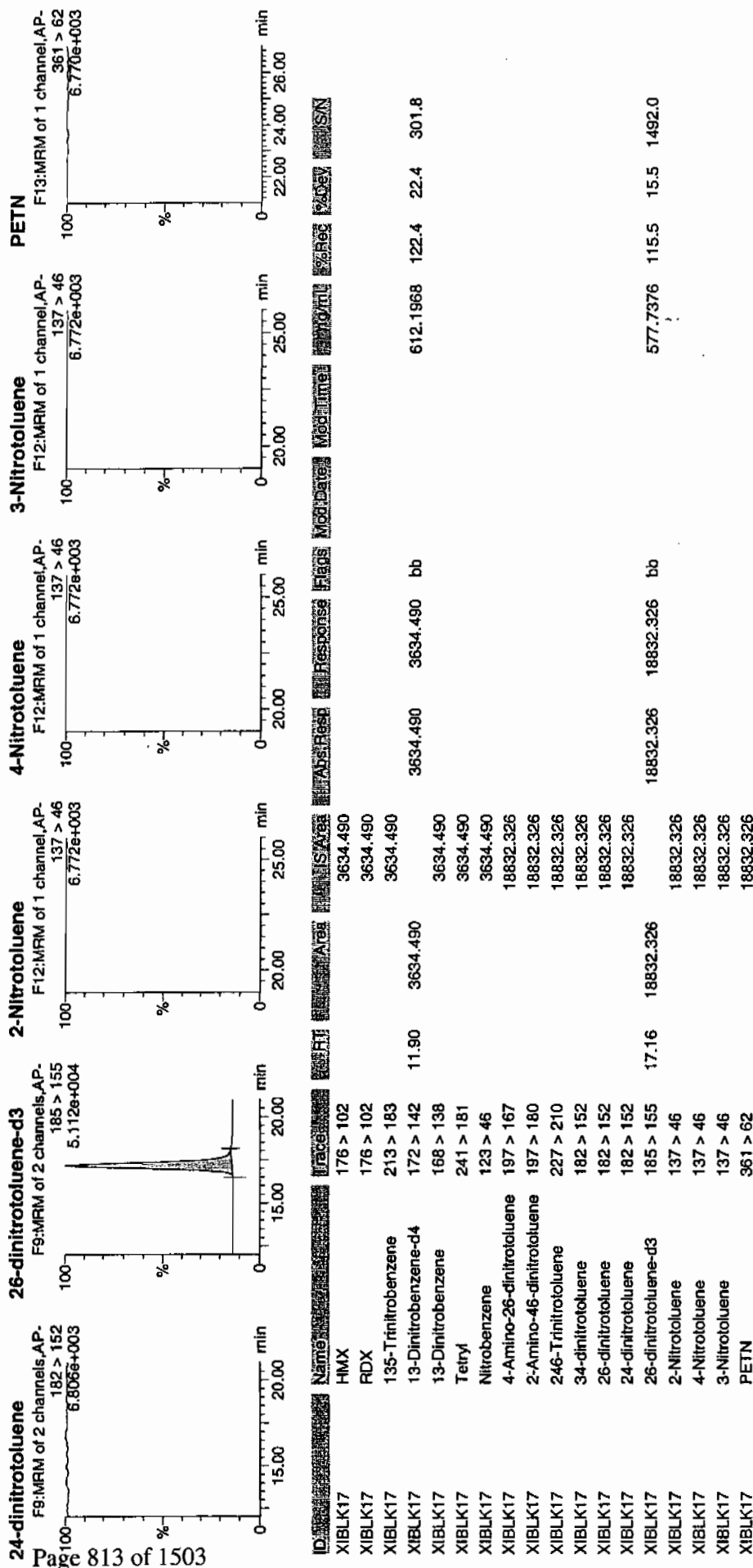
1/29/10
MPT

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Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PROV012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK18

Analysis Date: 28-JAN-10 17:04

GEL Data File: EXP0125159a

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	507.456
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	534.04
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\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125159a

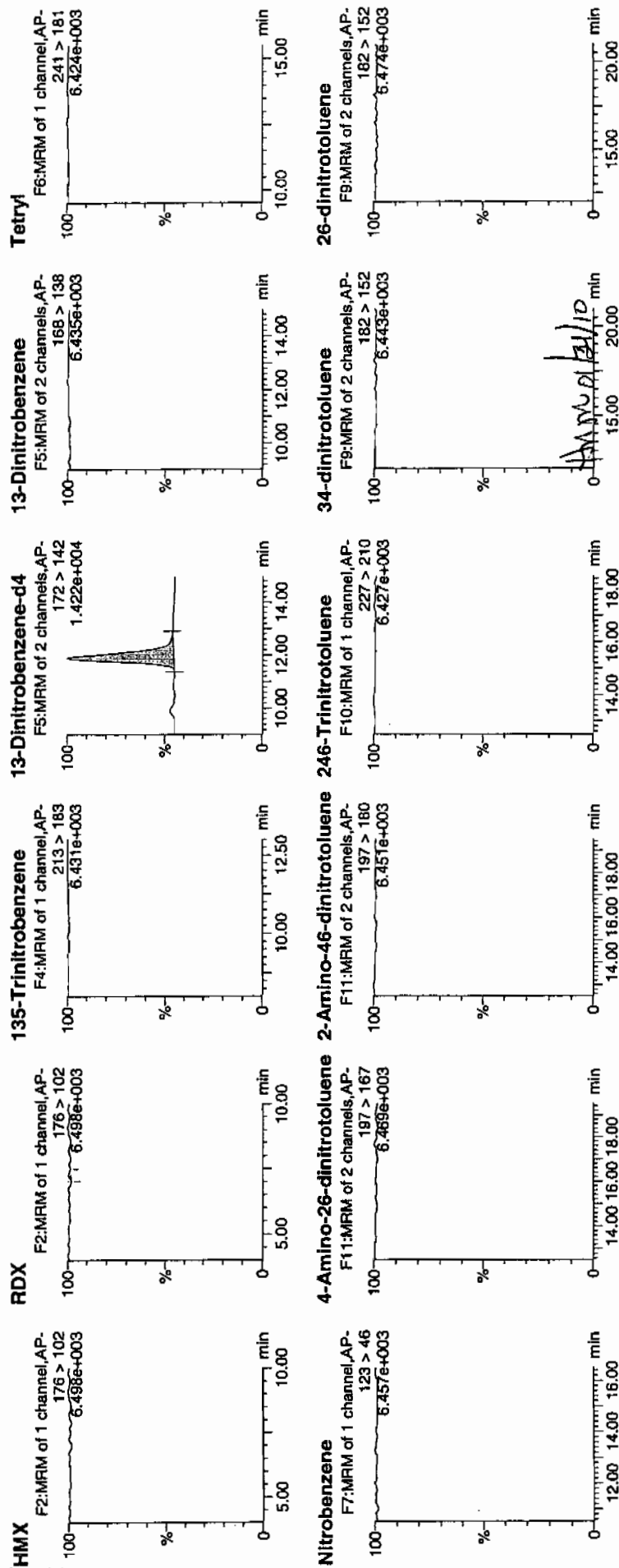
Date: 28-Jan-2010

Time: 17:04:03

ID: XIBLK18

Vial: 1:1,A

1/29/10
 MRP



GEL Laboratories, LLC / Analyst: Michael A. Penny

24-dinitrotoluene
 F8:MRM of 2 channels,AP-
 182 > 152
 16.4746e+003

26-dinitrotoluene-d3
 F8:MRM of 2 channels,AP-
 185 > 155
 16.4749e+004

2-Nitrotoluene
 F12:MRM of 1 channel,AP-
 137 > 46
 6.424e+003

4-Nitrotoluene
 F12:MRM of 1 channel,AP-
 137 > 46
 6.424e+003

3-Nitrotoluene
 F12:MRM of 1 channel,AP-
 137 > 46
 6.424e+003

PETN
 F13:MRM of 1 channel,AP-
 361 > 62
 6.426e+003

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[illegible]

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK19

Analysis Date: 28-JAN-10 21:00

GEL Data File: EXP0125167a

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	539.662
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	508.524
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\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125167a

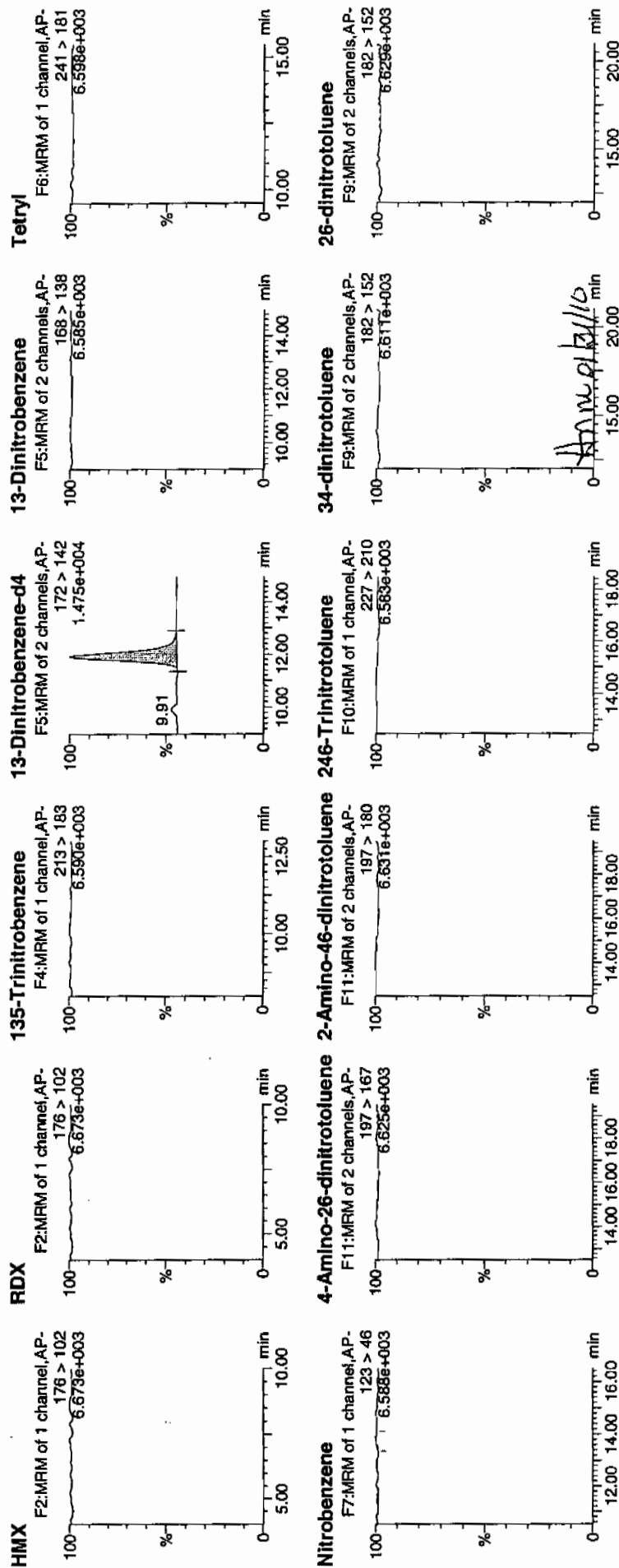
Date: 28-Jan-2010

Time: 21:00:06

ID: XIBLK19

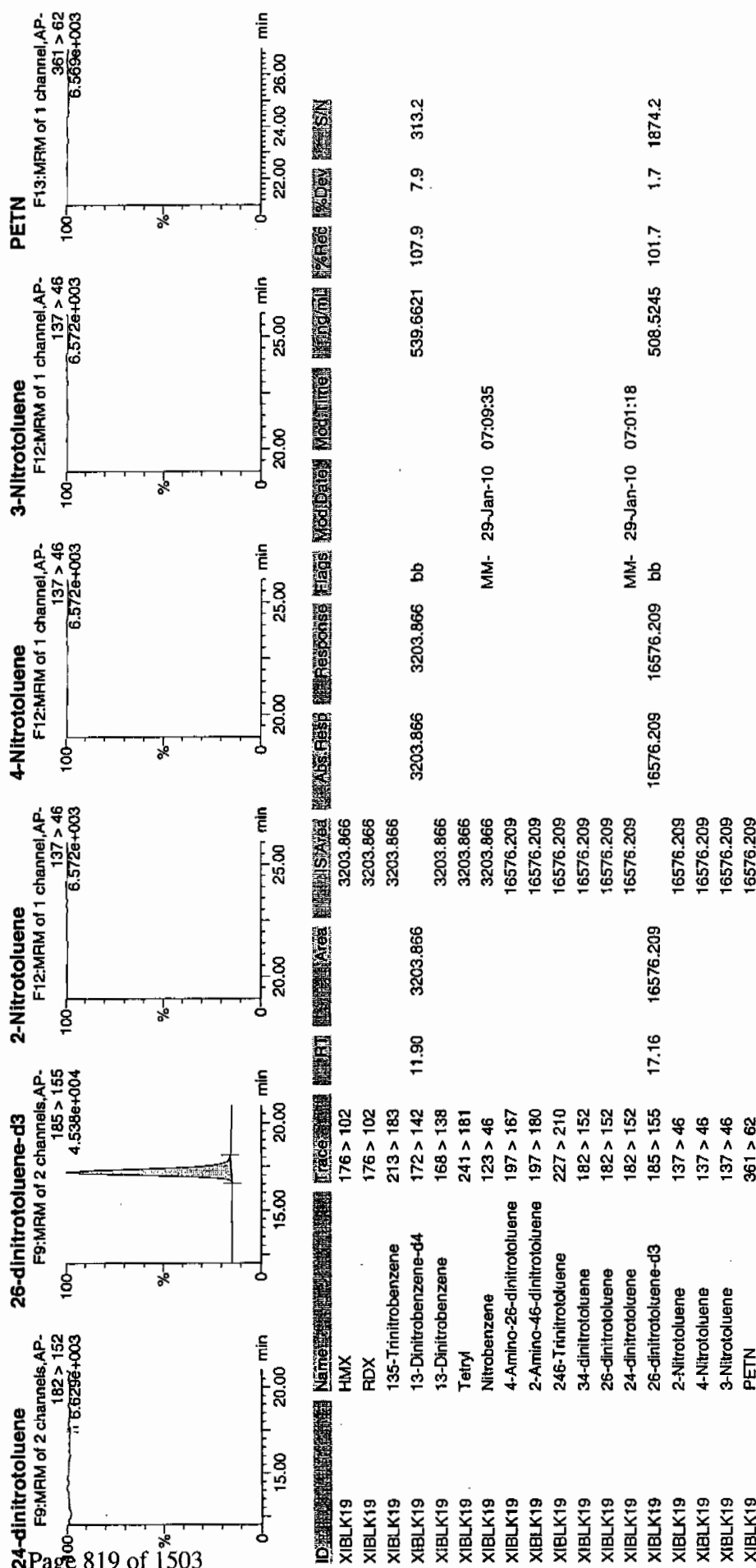
Vial: 1:1,A

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Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK20

Analysis Date: 29-JAN-10 03:23

GEL Data File: EXP0125180a

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	495.296
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	542.599
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125180a

Date: 29-Jan-2010

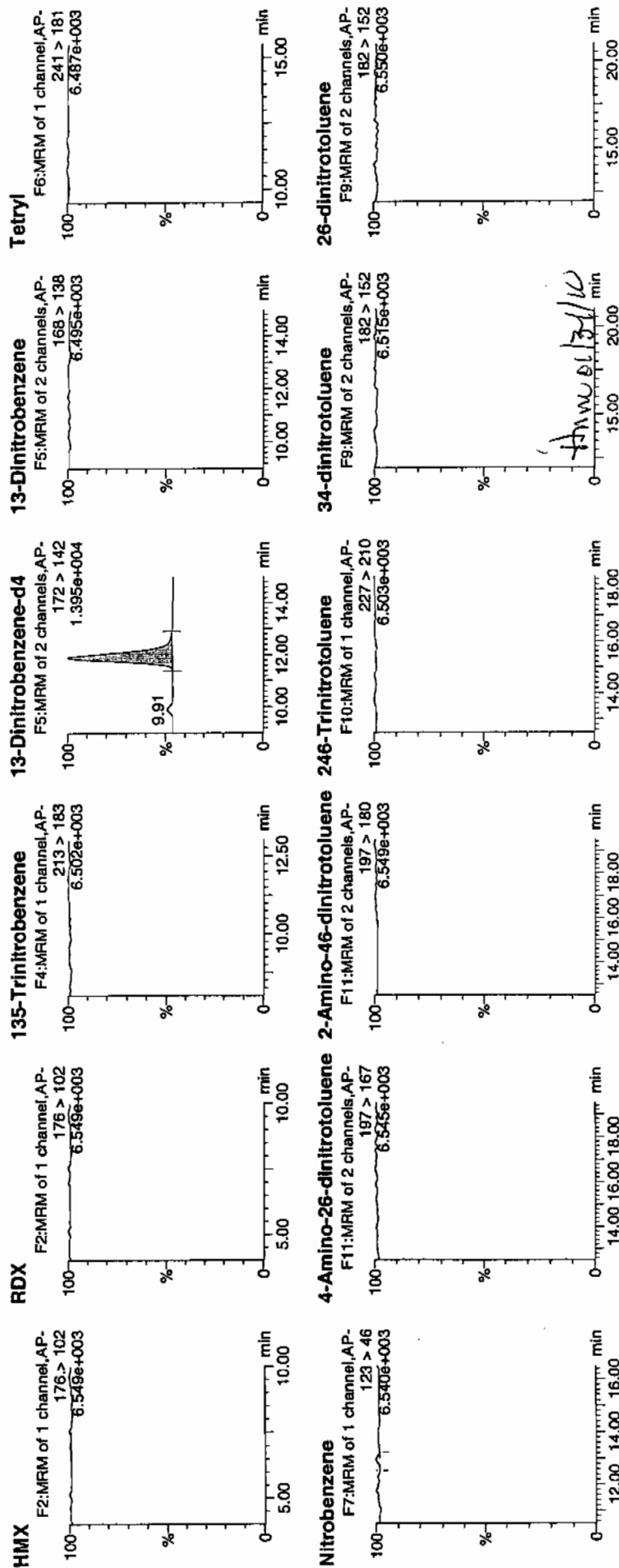
Time: 03:23:35

ID: XIBLK20

Vial: 1:1,A

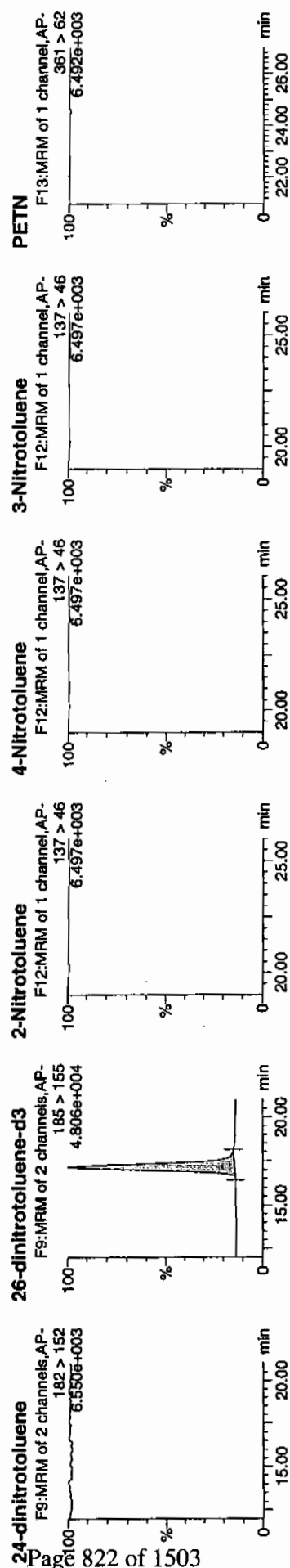
Page 821 of 1503

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Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID	Name	Trace	RT	IS Area	Abs Resp	Response	FIDts	Mob Date	Mob Time	Point	% Rec	% Dev
XIBLK20	HMX	176 > 102		2940.476								
XIBLK20	RDX	176 > 102		2940.476								
XIBLK20	135-Trinitrobenzene	213 > 183		2940.476								
XIBLK20	13-Dinitrobenzene-d4	172 > 142	11.89	2940.476	2940.476	2940.476	bb			495.2964	99.1	-0.9
XIBLK20	13-Dinitrobenzene	168 > 138		2940.476								208.8
XIBLK20	Tetryl	241 > 181		2940.476								
XIBLK20	Nitrobenzene	123 > 46		2940.476			MM-	29-Jan-10	07:09:30			
XIBLK20	4-Amino-26-dinitrotoluene	197 > 167		17686.930								
XIBLK20	2-Amino-46-dinitrotoluene	197 > 180		17686.930								
XIBLK20	246-Trinitrotoluene	227 > 210		17686.930								
XIBLK20	34-dinitrotoluene	182 > 152		17686.930								
XIBLK20	26-dinitrotoluene	182 > 152		17686.930								
XIBLK20	24-dinitrotoluene	182 > 152		17686.930								
XIBLK20	26-dinitrotoluene-d3	185 > 155	17.16	17686.930	17686.930	17686.930	bb			542.5991	108.5	8.5
XIBLK20	2-Nitrotoluene	137 > 46		17686.930								1388.3
XIBLK20	4-Nitrotoluene	137 > 46		17686.930								
XIBLK20	3-Nitrotoluene	137 > 46		17686.930								
XIBLK20	PETN	361 > 62		17686.930								

4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK21

Analysis Date: 29-JAN-10 09:47

GEL Data File: EXP0125193a

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	474.634
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	484.797
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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP\PROData\EXP0125193a

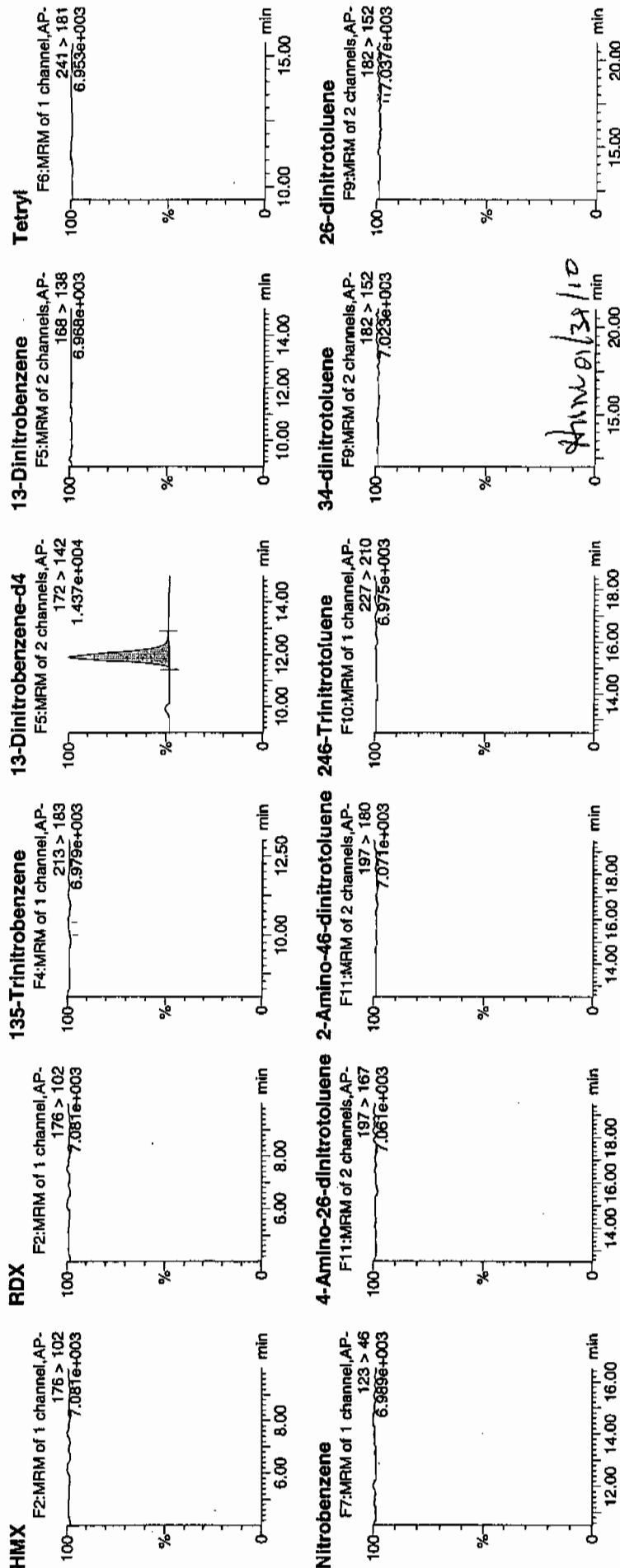
Date: 29-Jan-2010

Time: 09:47:18

ID: XIBLK21

Vial: 1:1,A

1/29/10

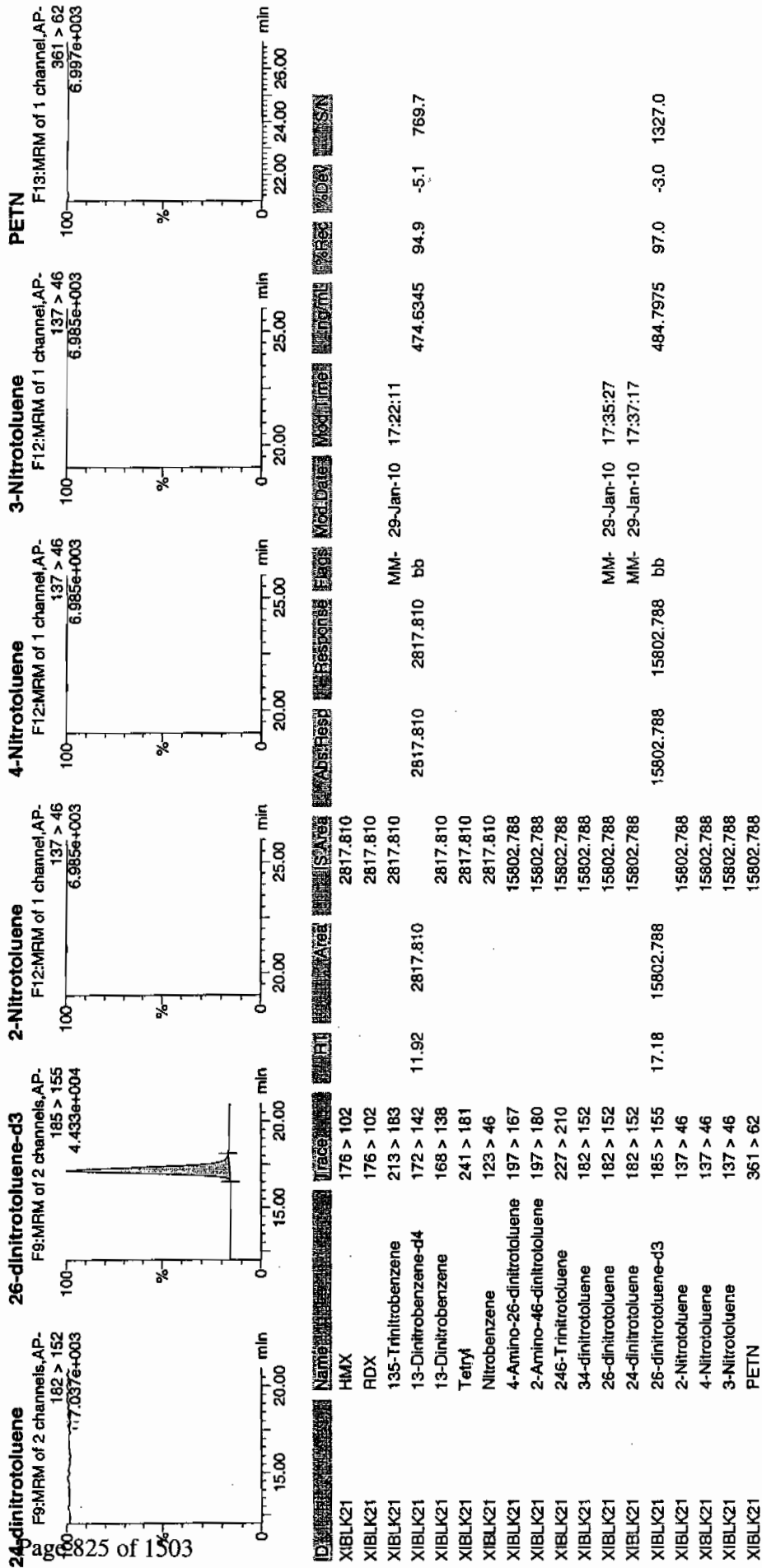


Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 24 of 51

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK22

Analysis Date: 29-JAN-10 15:41

GEL Data File: EXP0125205a

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	473.694
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	472.723
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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0125205a

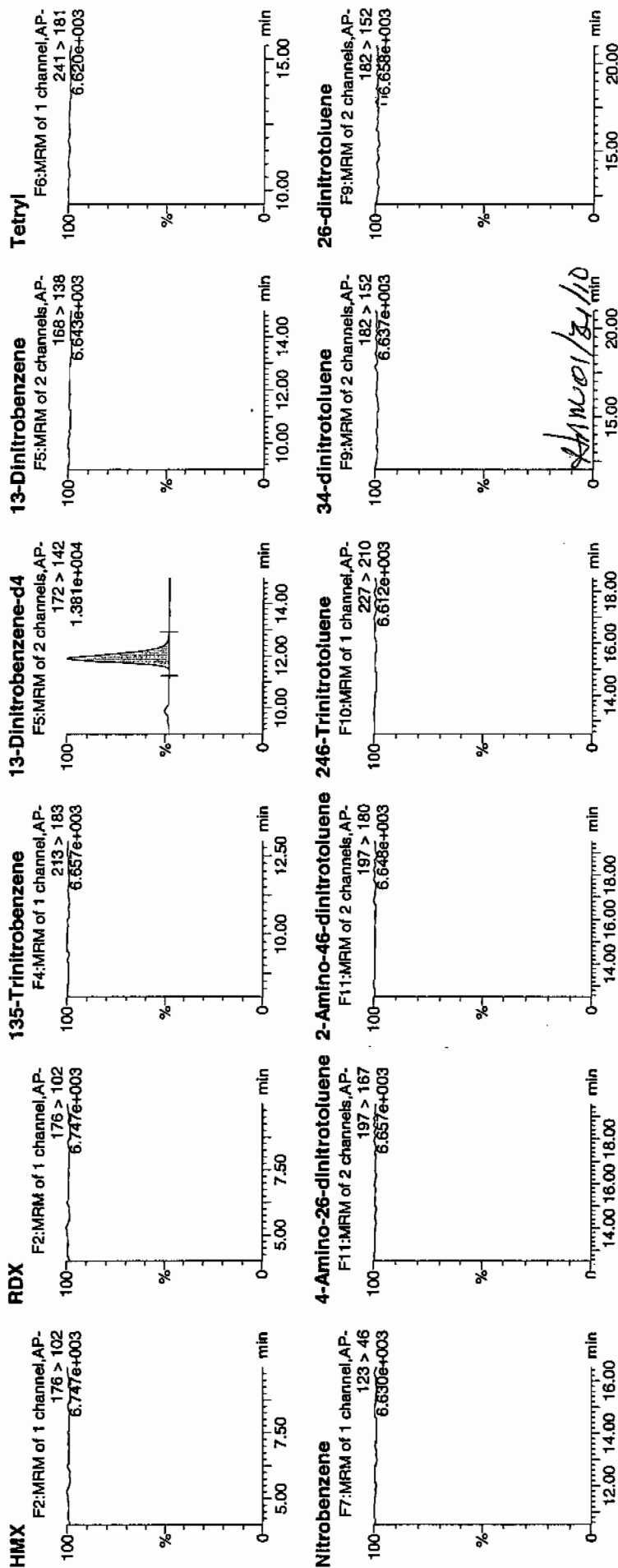
Date: 29-Jan-2010

Time: 15:41:10

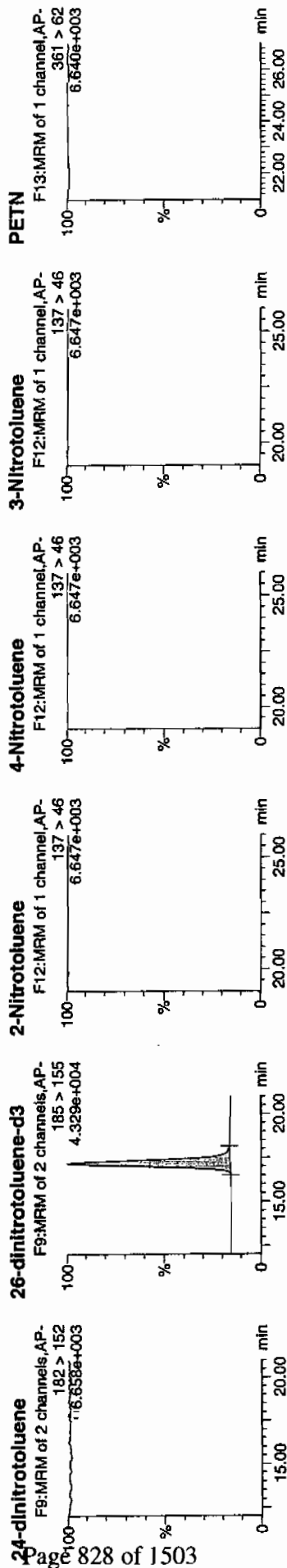
ID: XIBLK22

Vial: 1:1,A

100%
1/10/10



Dataset: C:\MASSLYN\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

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4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 25-JAN-10 12:54

GEL Data File: EXS01250010.wiff

Instrument ID: LCMSMS

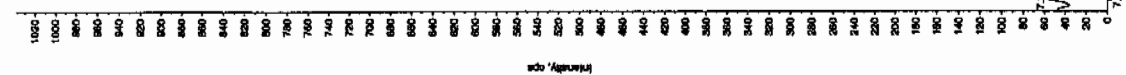
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.7
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

See 1/27/10

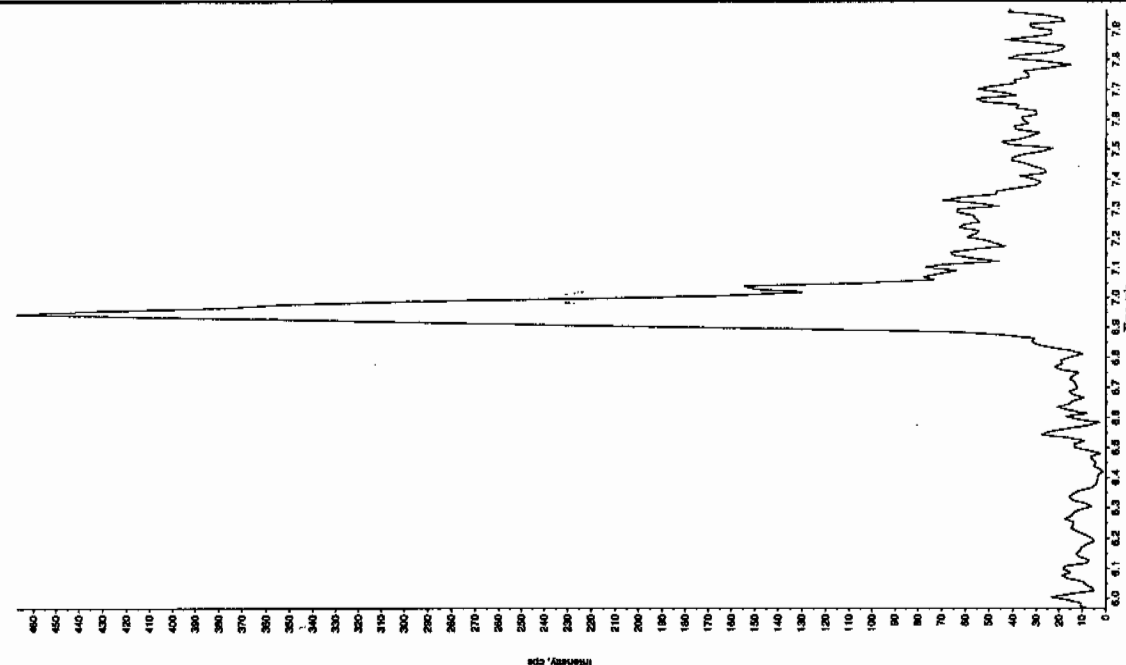
Sample Name: "XIBL002" Sample ID: "HILLER" File: "EX501250010.wif"
 Peak Name: "35-Dinitroanthracene" Mass(es): "182.046.0 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/25/2010 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 12:54:10 PM
 Modified: No

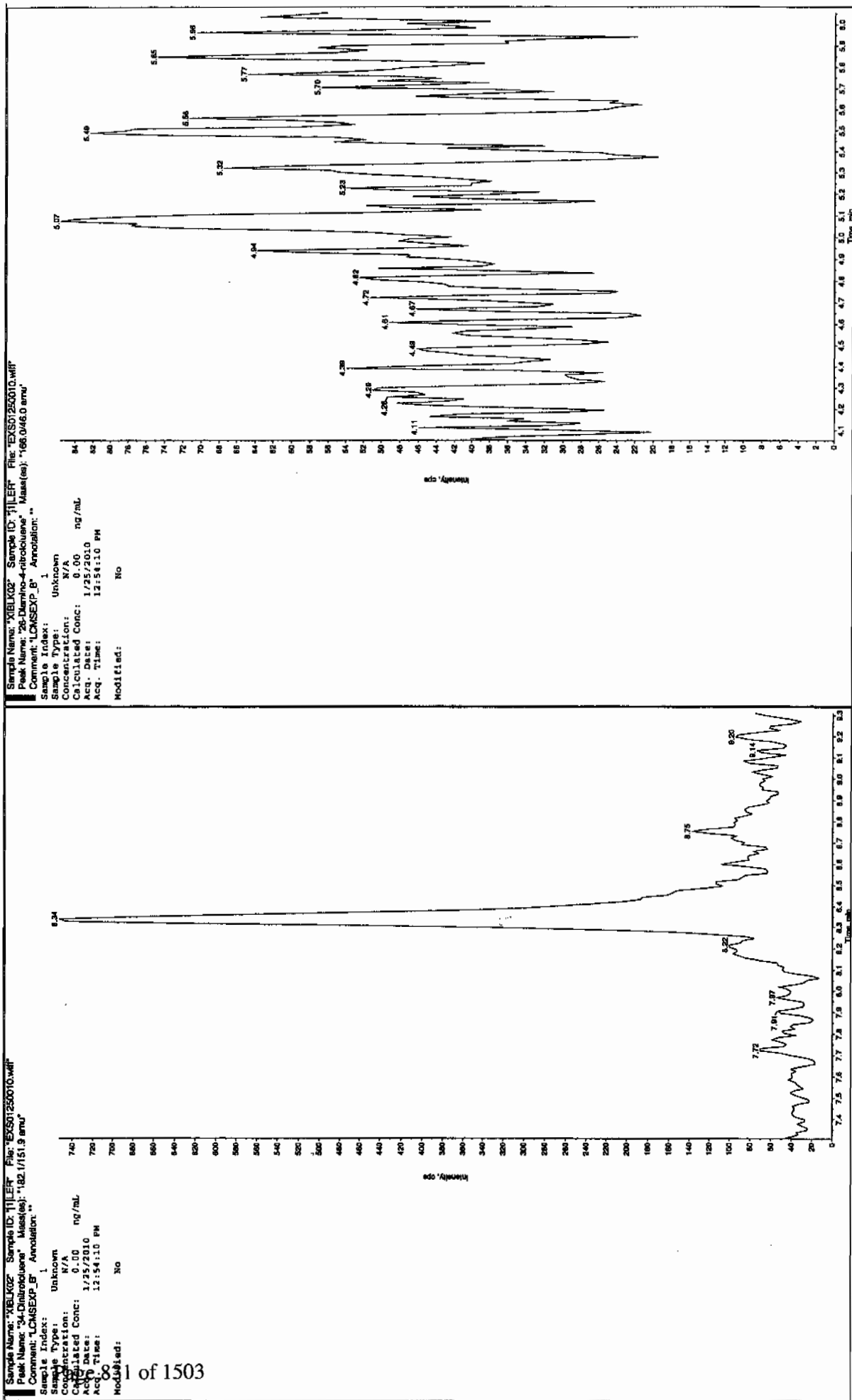


Sample Name: "XIBL002" Sample ID: "HILLER" File: "EX501250010.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/25/2010 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 12:54:10 PM
 Modified: No

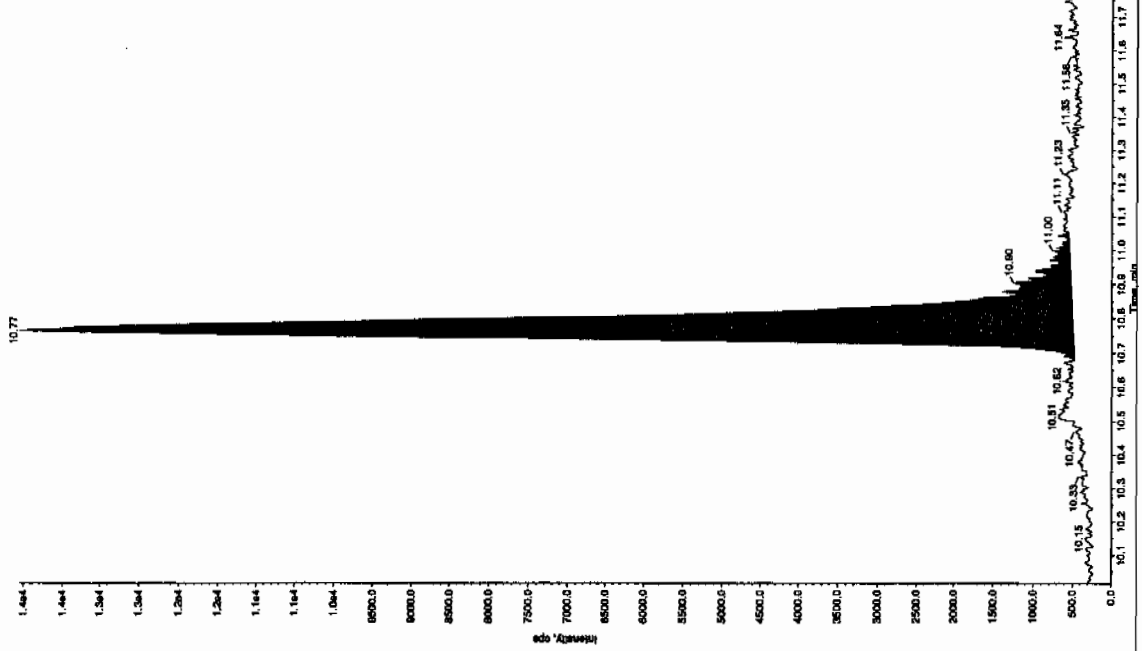


See 01/27/10



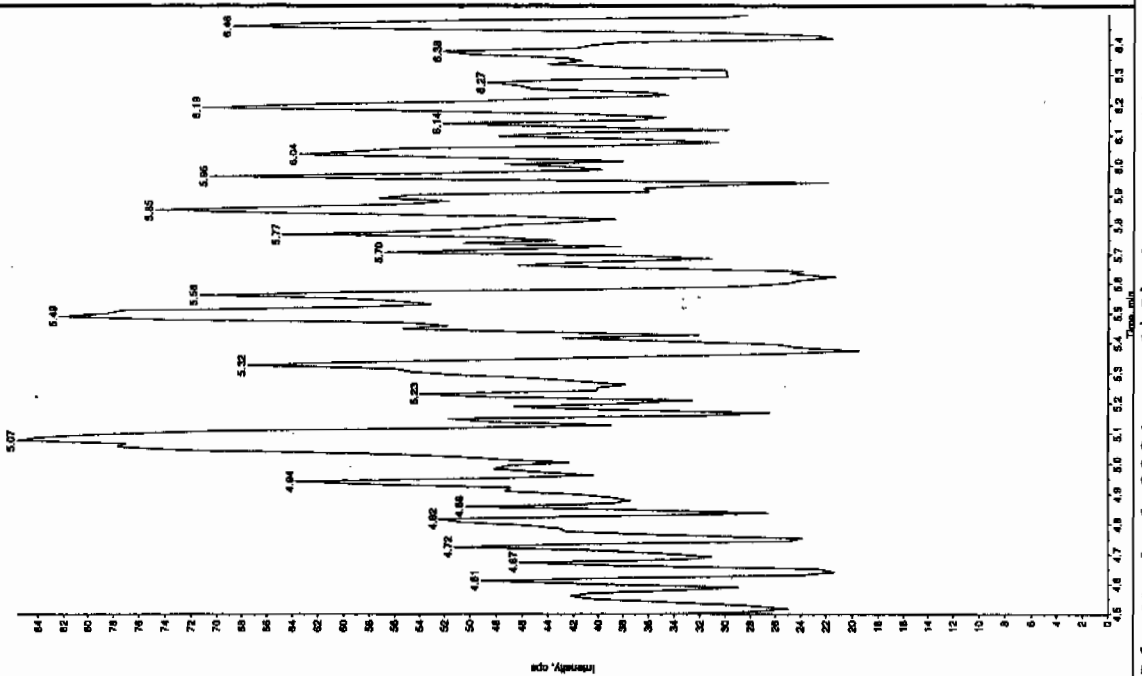
Sample Name: XBL002 Sample ID: 111ER File: E250125010.wml
Peak Name: 24-Nitro-5-trocholine Mass(es): 368.191.0 amu
Comment: LCMS-EXP_B Annotation:

Sample Index: 1
Sample Type: Unknown
Concentration: 16.7 ng/mL
Calculated Conc: 1/25/2010
Acq. Date: 12:54:10 PM
Acq. Time: 12:54:10 PM
Modified: No
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 1.00e4 cps
Min. Peak Width: 0.00 sec
Smoother Width: 3 points
RT Window: 30.0 sec
Expected RT: 10.8 min
Use Relative RT: No
Int. Type: Valley
Retention Time: 10.8 min
Height: 6.01e4 cps
Start Time: 1355:476 min
End Time: 11.1 min



Sample Name: XBL002 Sample ID: 111ER File: E250125010.wml
Peak Name: 24-Nitro-5-trocholine Mass(es): 368.191.0 amu
Comment: LCMS-EXP_B Annotation:

Sample Index: 1
Sample Type: Unknown
Concentration: 0.00 ng/mL
Calculated Conc: 1/25/2010
Acq. Date: 12:54:10 PM
Acq. Time: 12:54:10 PM
Modified: No



4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 25-JAN-10 13:25

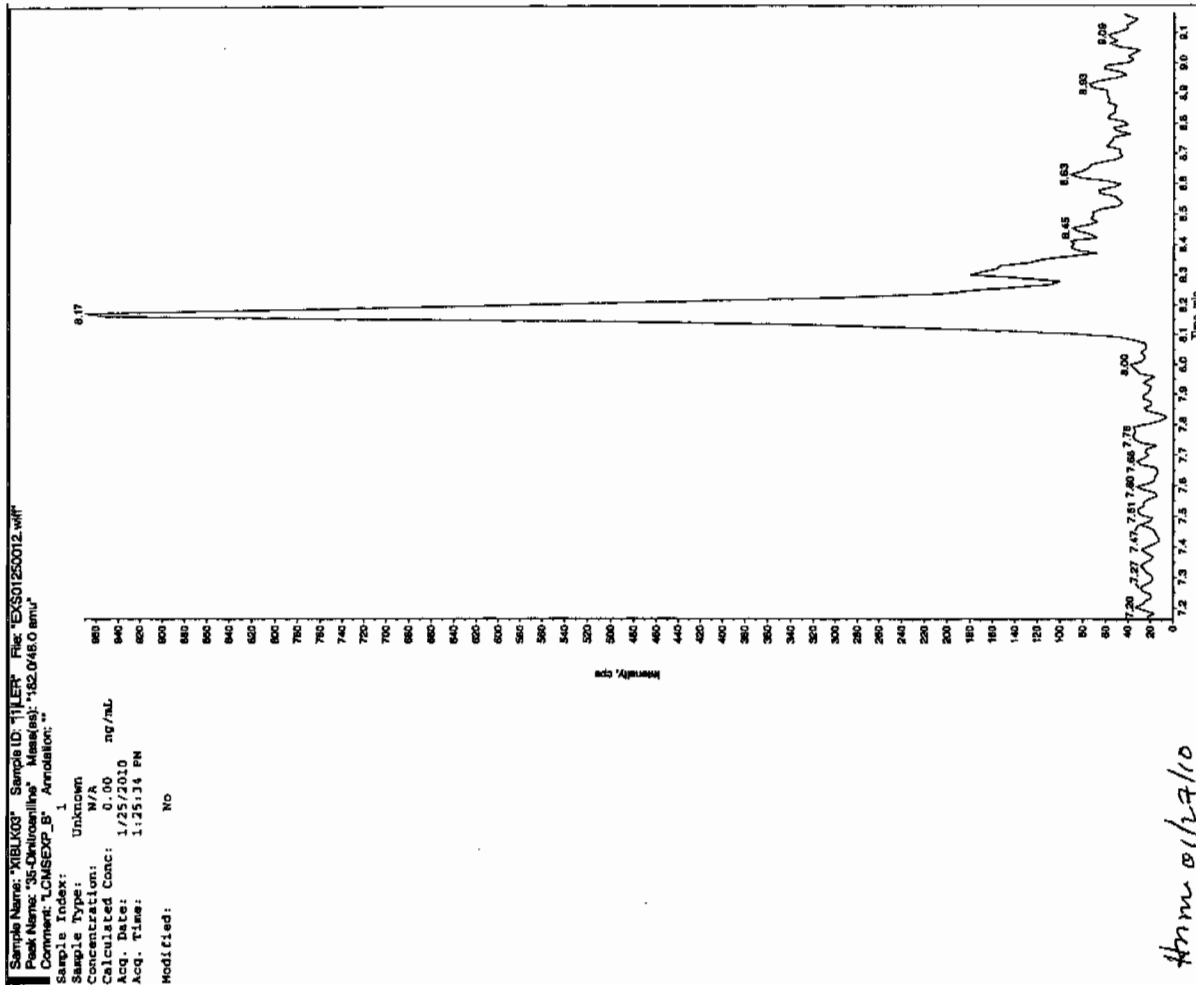
GEL Data File: EXS01250012.wiff

Instrument ID: LCMSMS

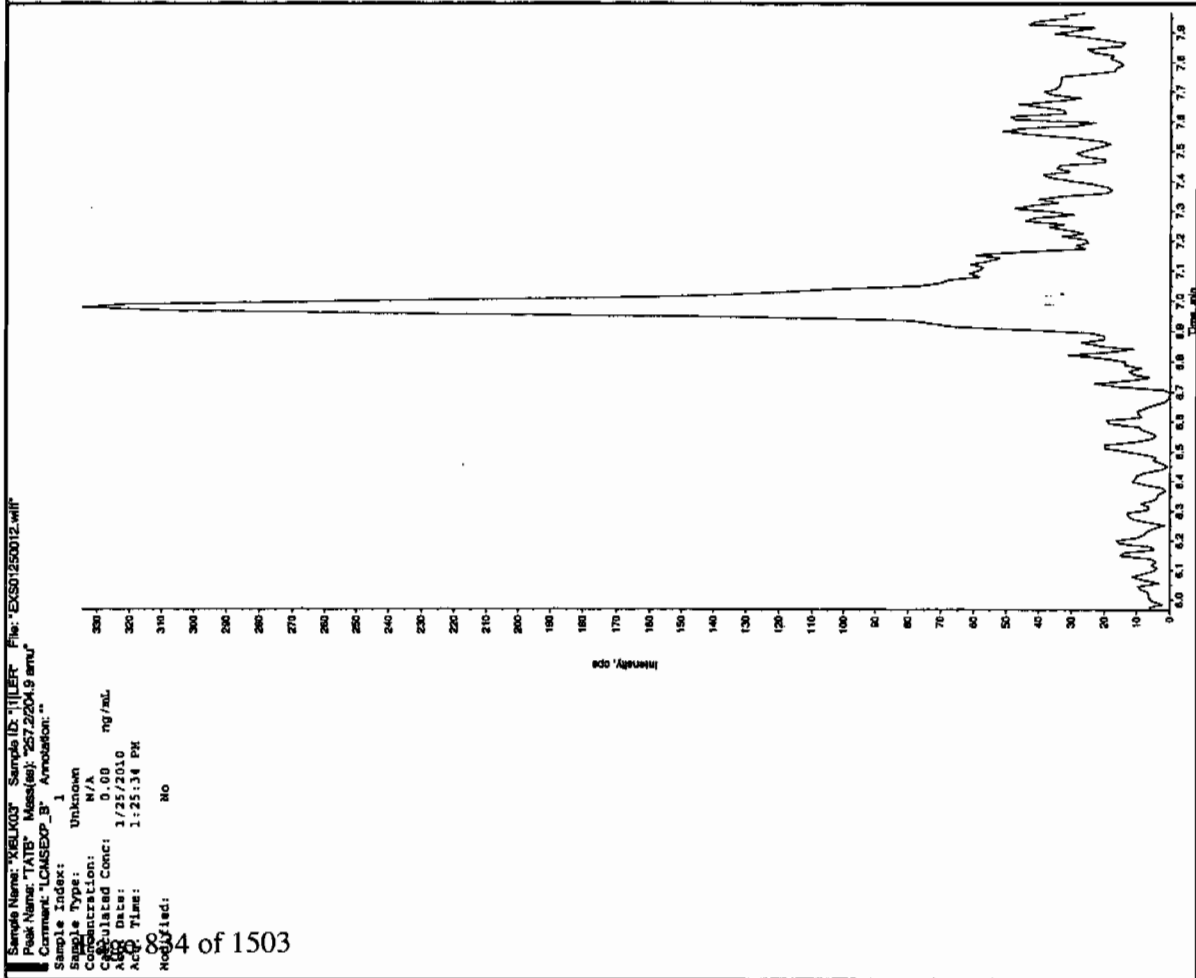
Column: Phenomenex Ultracarb 5u ODS(20)

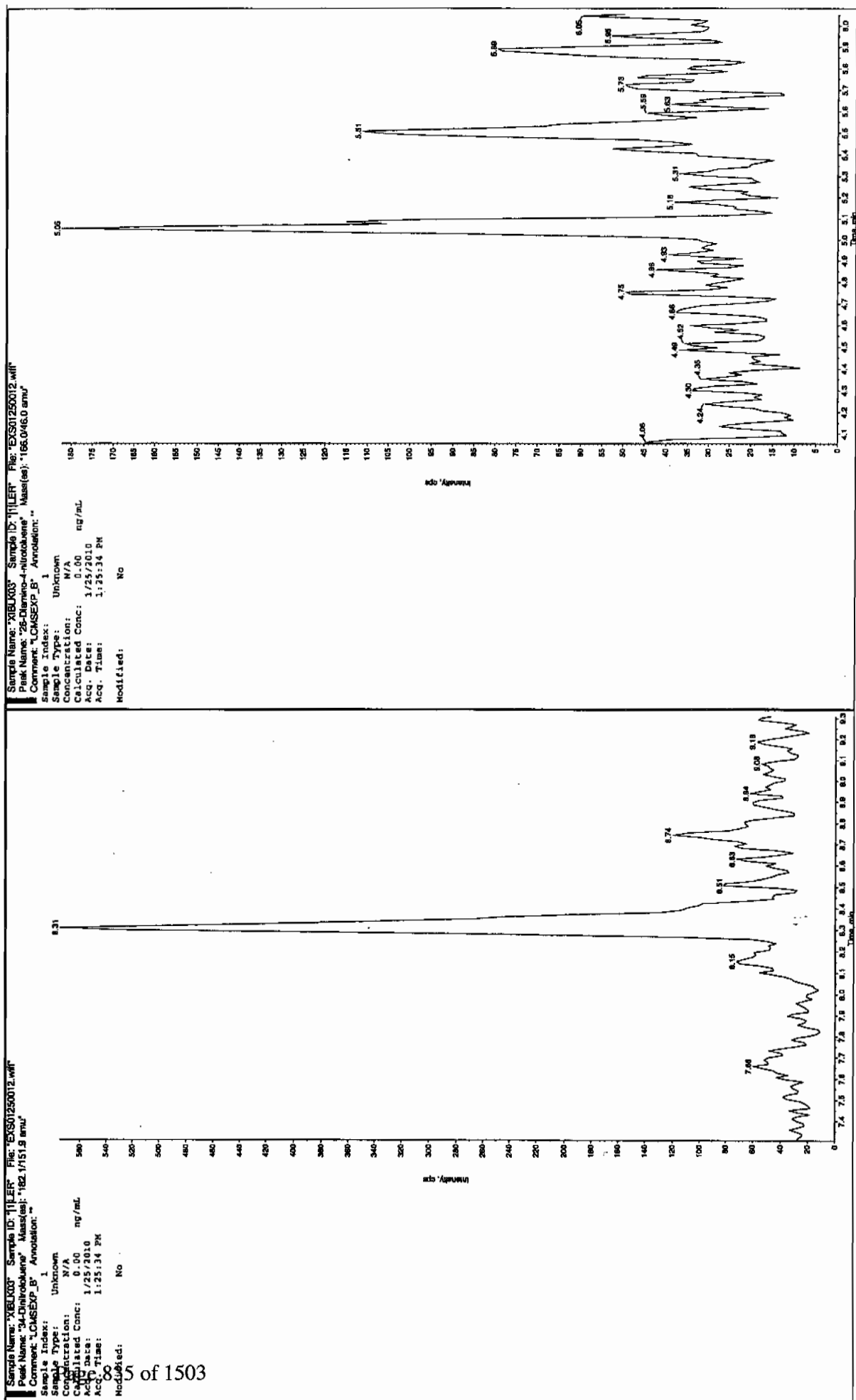
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Jan 1/27/10



Ann 01/27/10

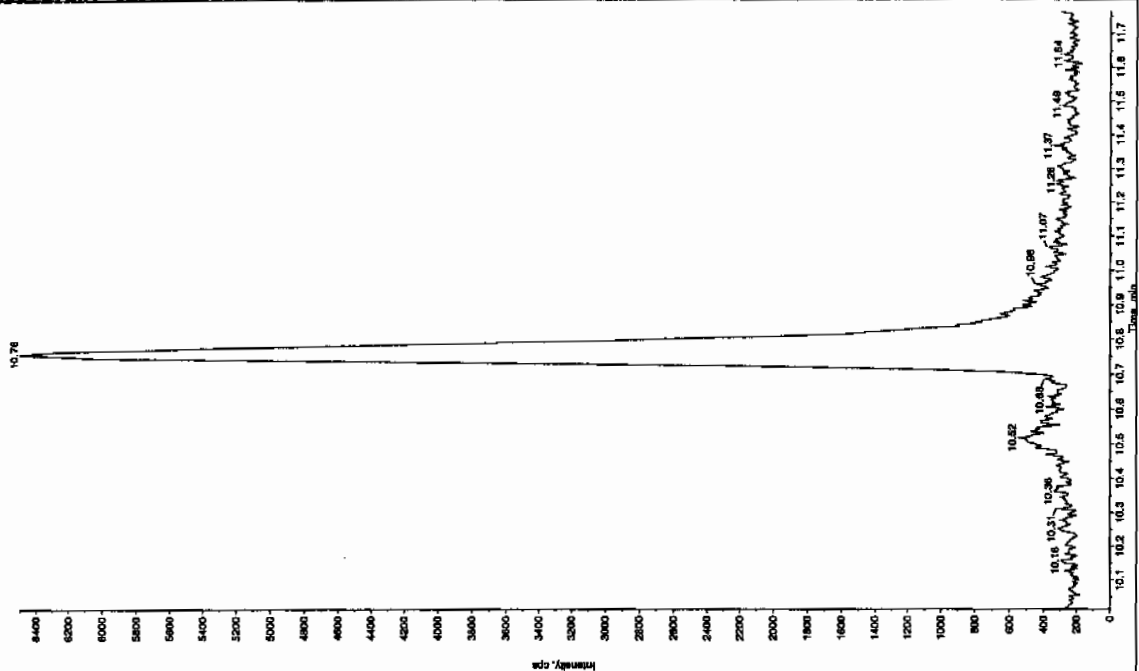




*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

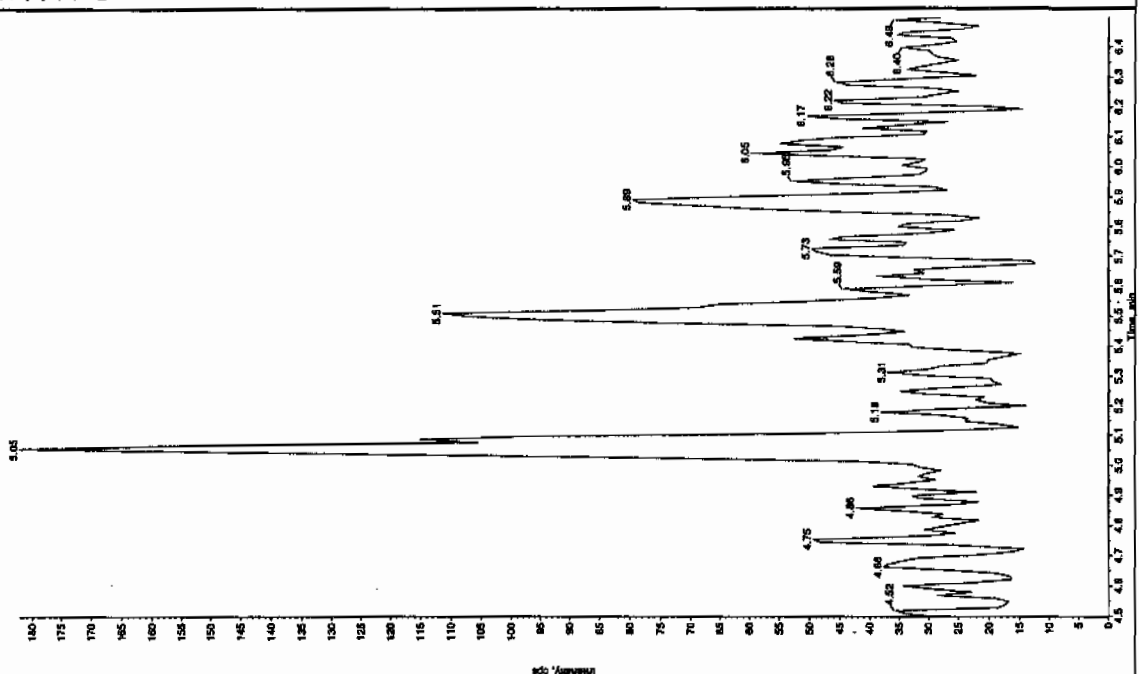
Sample Name: "XBL003" Sample ID: "TILER" File: "EXS01250012.wif"
 Peak Name: "tris(2-chloroethyl) phosphite" Mass(es): "359.1/91.0 amu"
 Comment: "LCMS EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/25/2010
 Acq. Time: 1:25:13.4 PM
 Modified: No



Sample Name: "XBL003" Sample ID: "TILER" File: "EXS01250012.wif"
 Peak Name: "24-Diamino-6-nitrobenzene" Mass(es): "166.0/46.0 amu"
 Comment: "LCMS EXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/25/2010
 Acq. Time: 1:25:13.4 PM
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 25-JAN-10 14:28

GEL Data File: EXS01250016.wiff

Instrument ID: LCMSMS

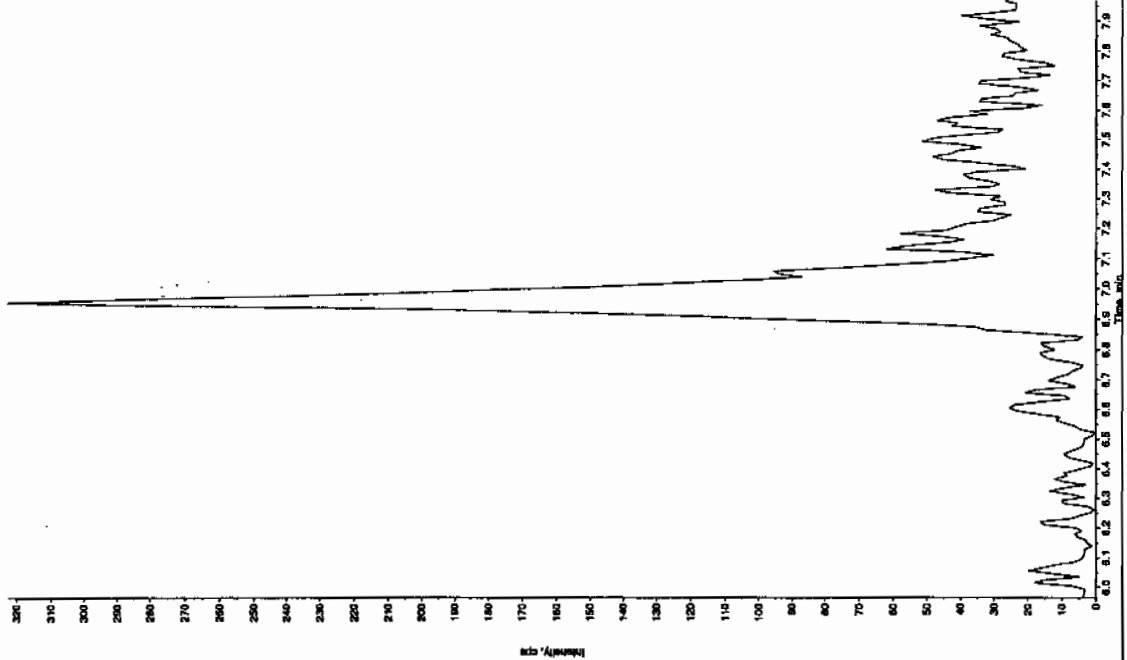
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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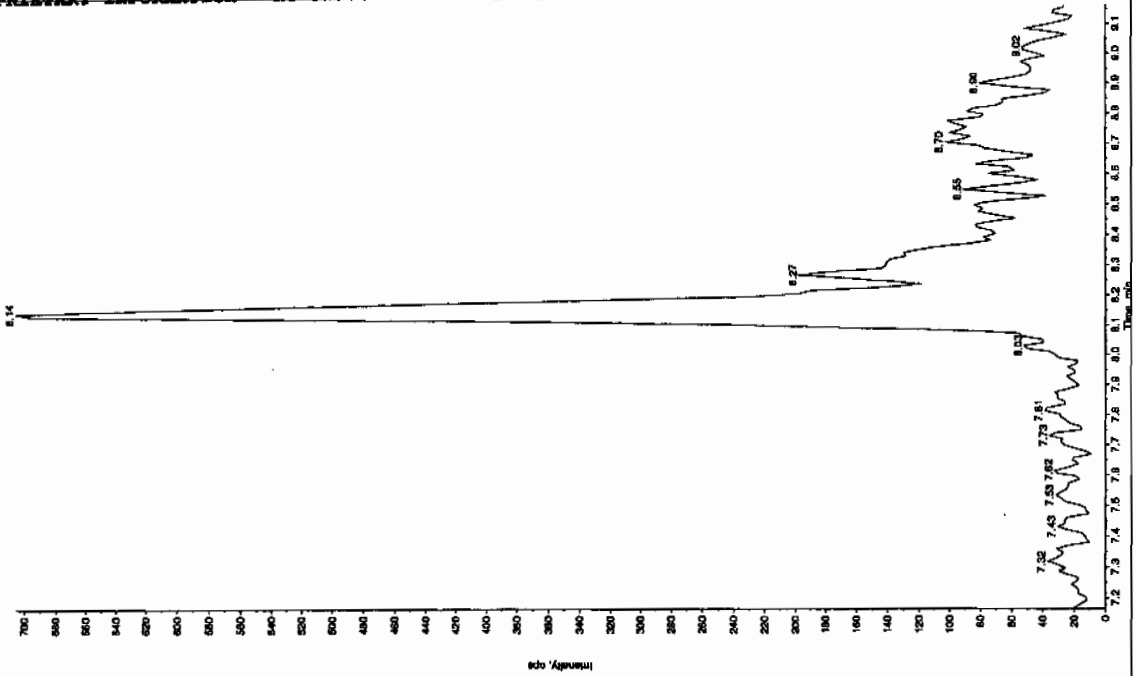
Sample Name: "YBUX04" Sample ID: "11LEP" File: "EX501250016.wif"
 Peak Name: "TATE" Mass(es): "257.2204.9 amu"
 Concentration: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 2:28:22 PM
 Modified: No

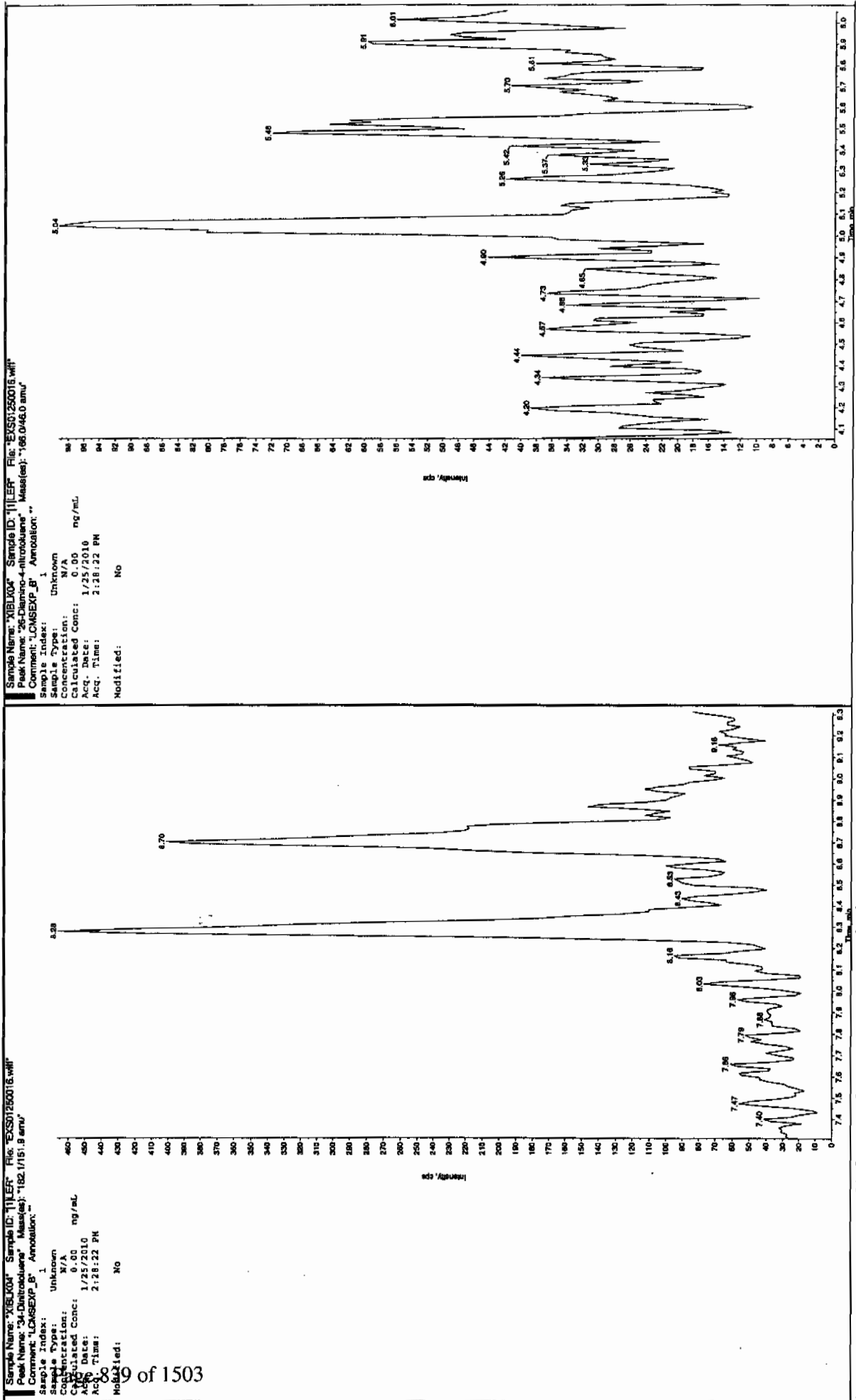


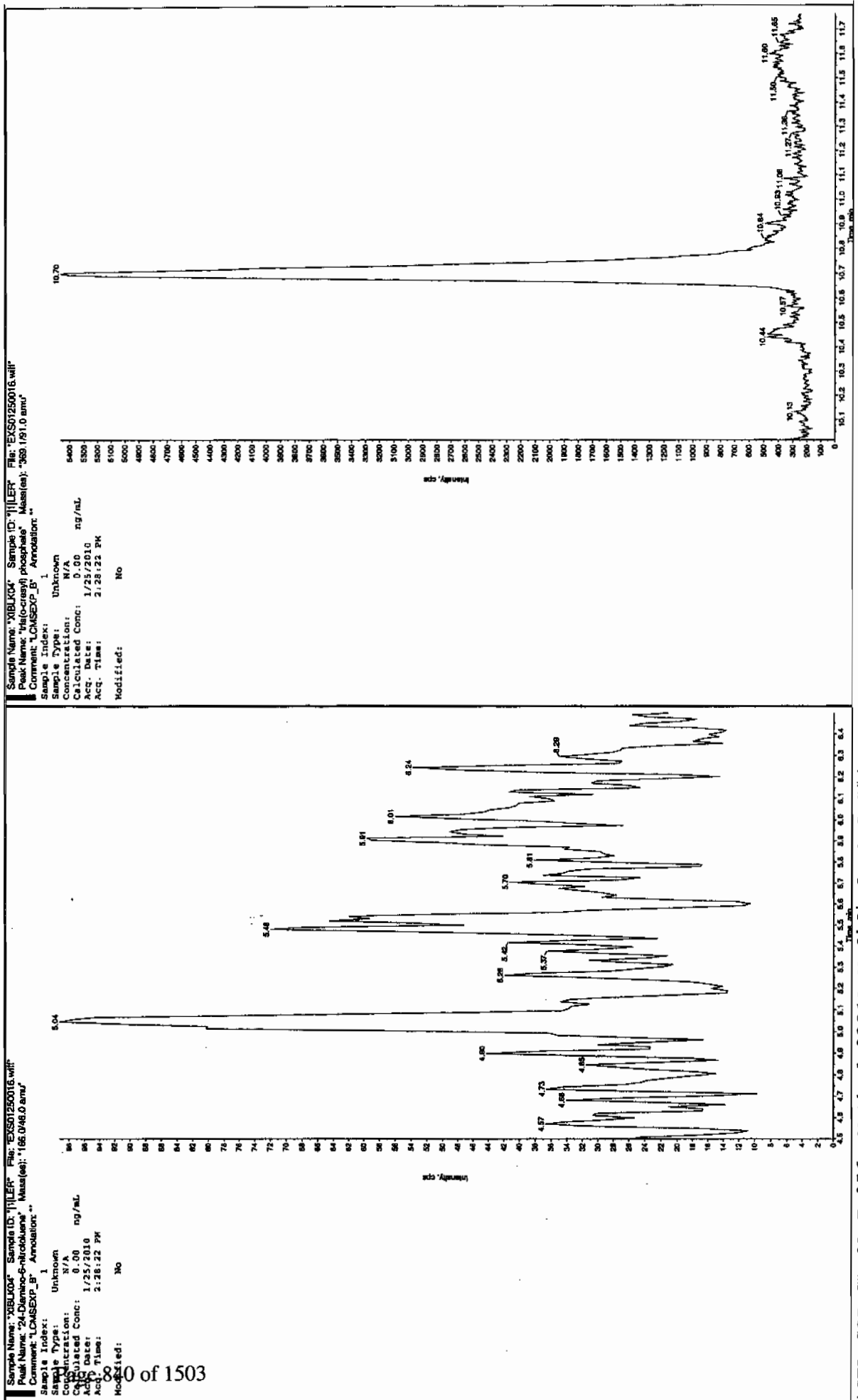
Sample Name: "YBUX04" Sample ID: "11LEP" File: "EX501250016.wif"
 Peak Name: "TATE" Mass(es): "162.046.0 amu"
 Concentration: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 2:28:22 PM
 Modified: No



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 25-JAN-10 16:49

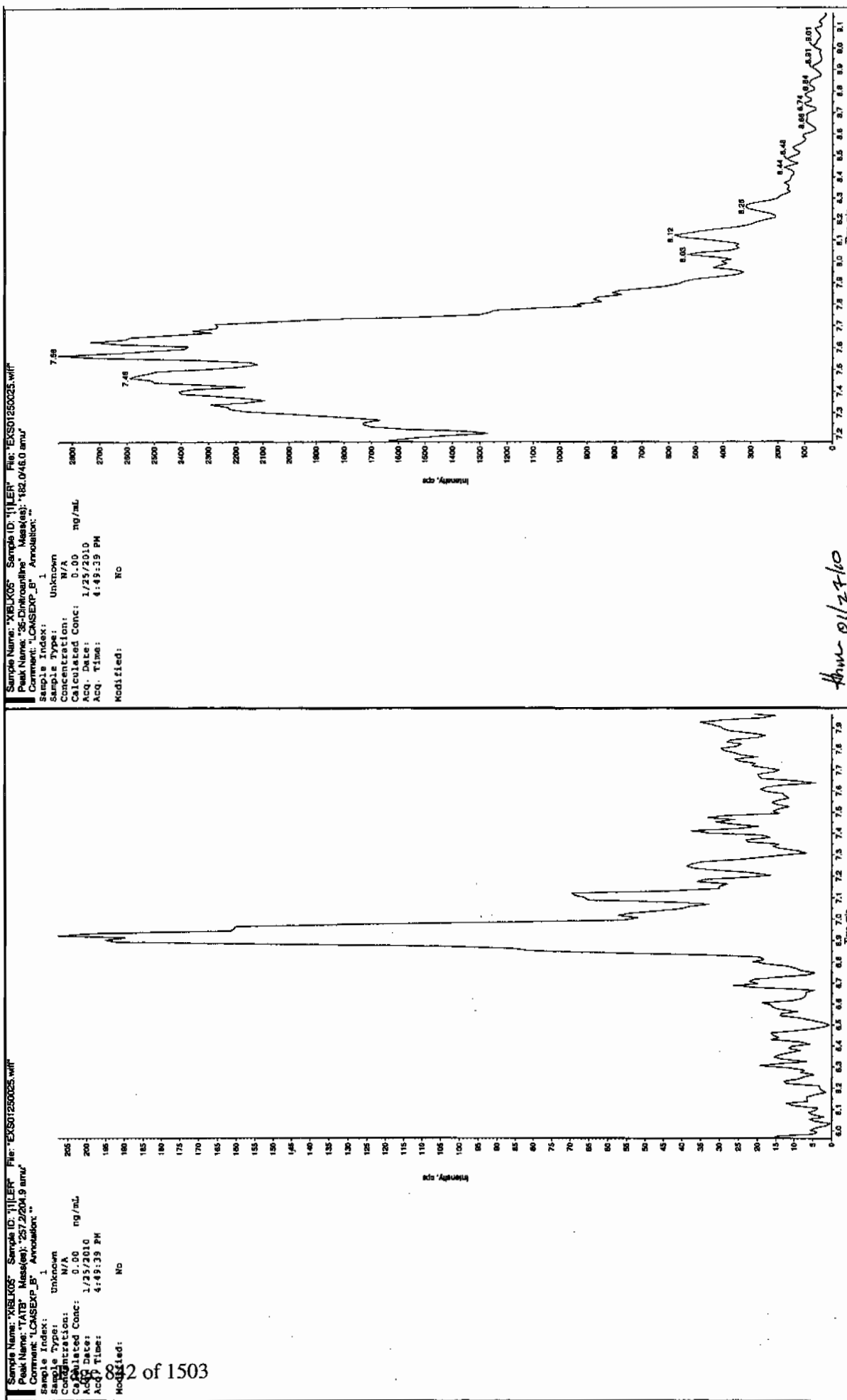
GEL Data File: EXS01250025.wiff

Instrument ID: LCMSMS

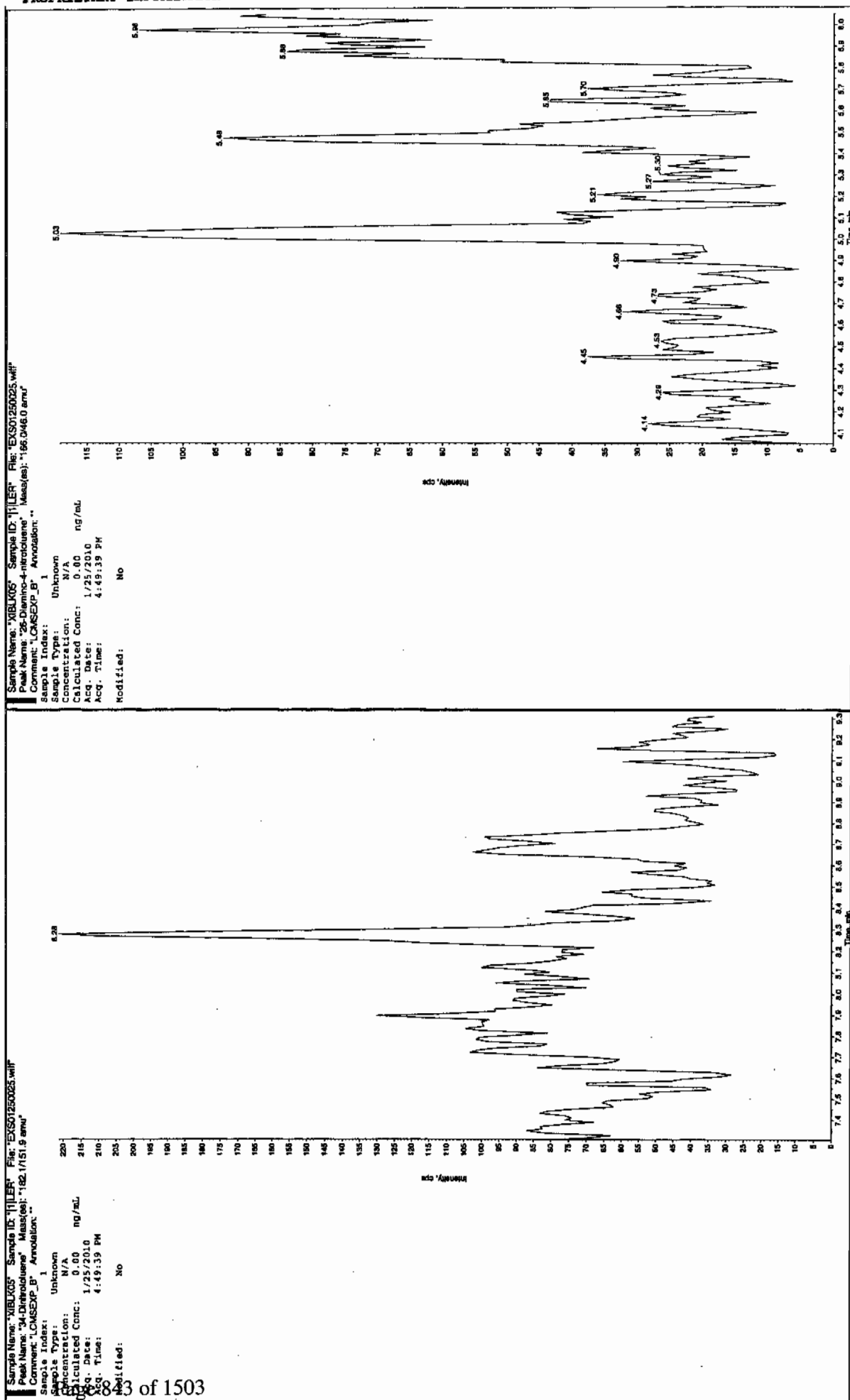
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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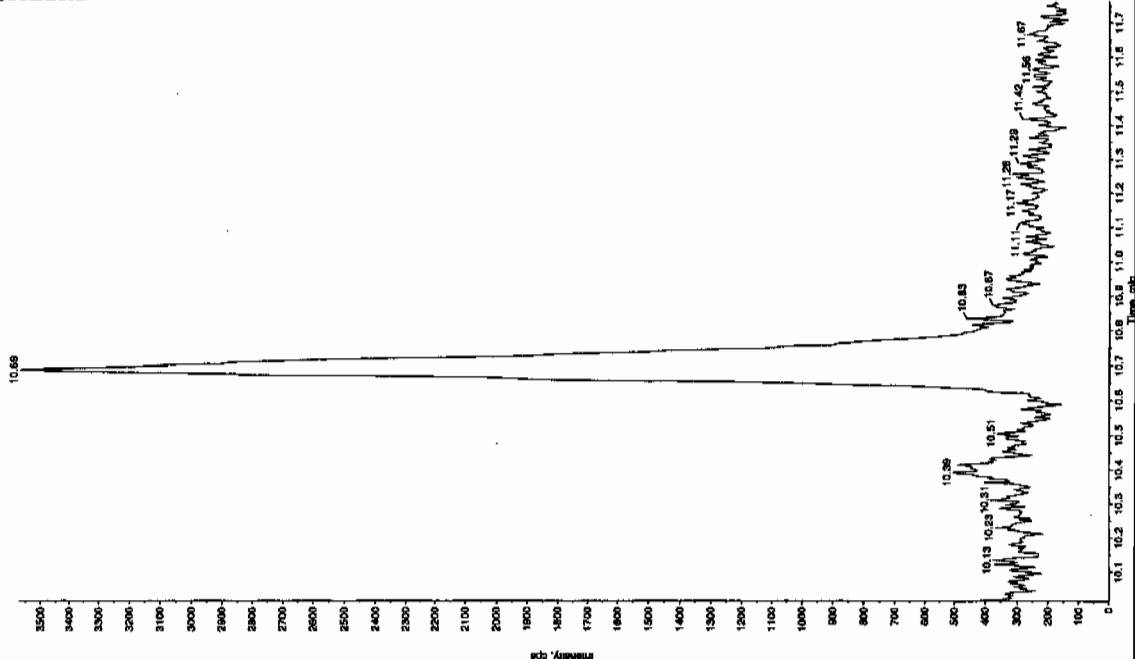


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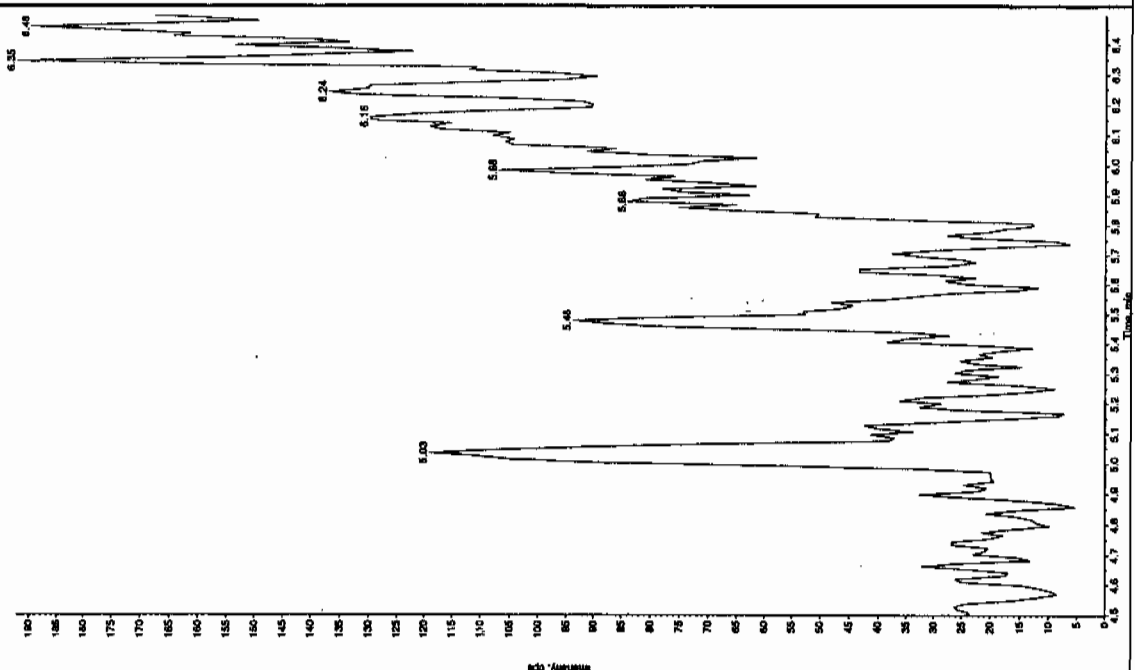
Sample Name: "XBLK05" Sample ID: "1111" File: "EX501250025.wif"
 Peak Name: "tris(o-cresyl) phosphate" Mass(es): "398.191.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 4:49:39 PM
 Modified: No



Sample Name: "XBLK05" Sample ID: "1111" File: "EX501250025.wif"
 Peak Name: "2,4-Dinitro-6-nitrofluorene" Mass(es): "168.048.0 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 4:49:39 PM
 Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 25-JAN-10 20:14

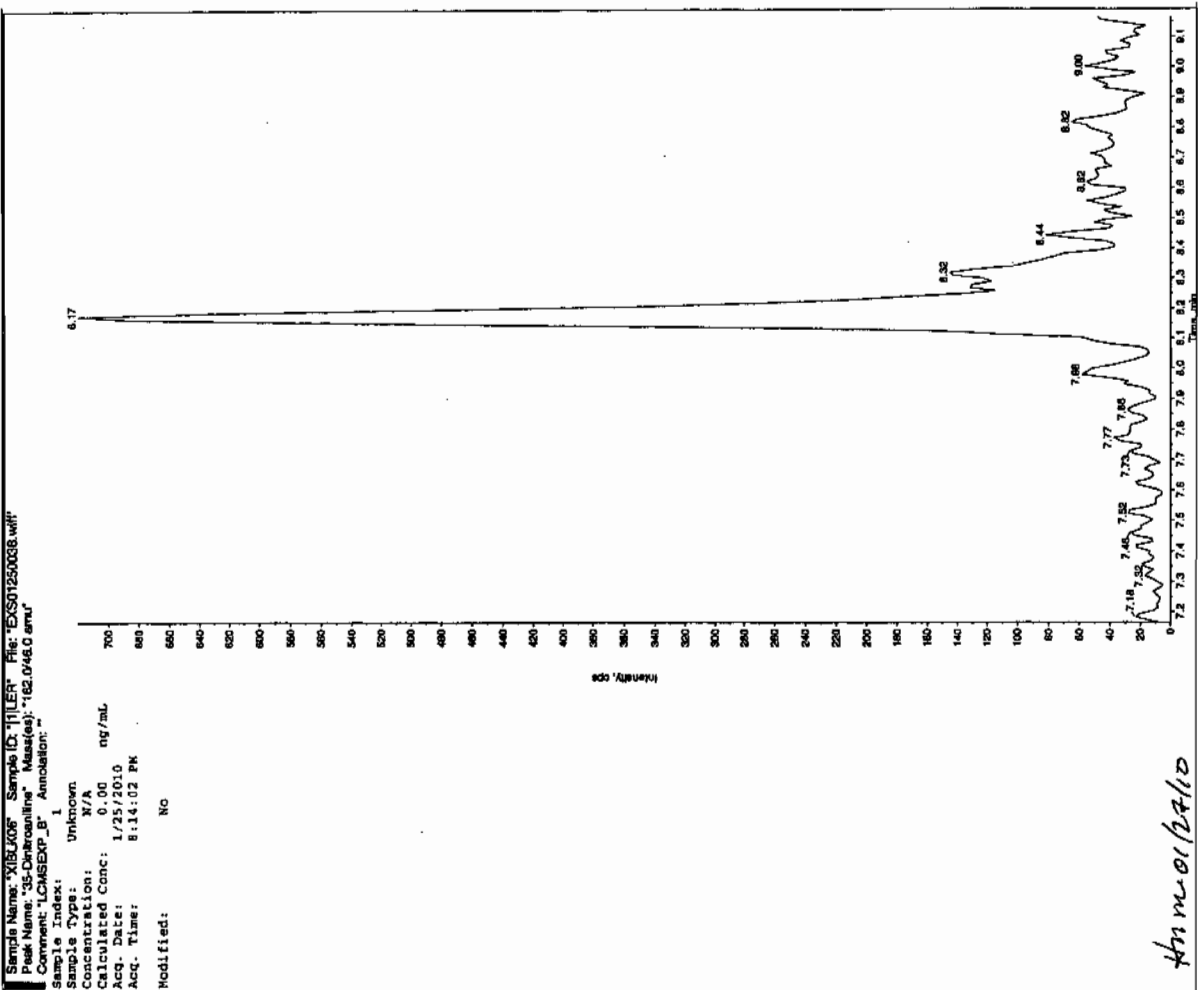
GEL Data File: EXS01250038.wiff

Instrument ID: LCMSMS

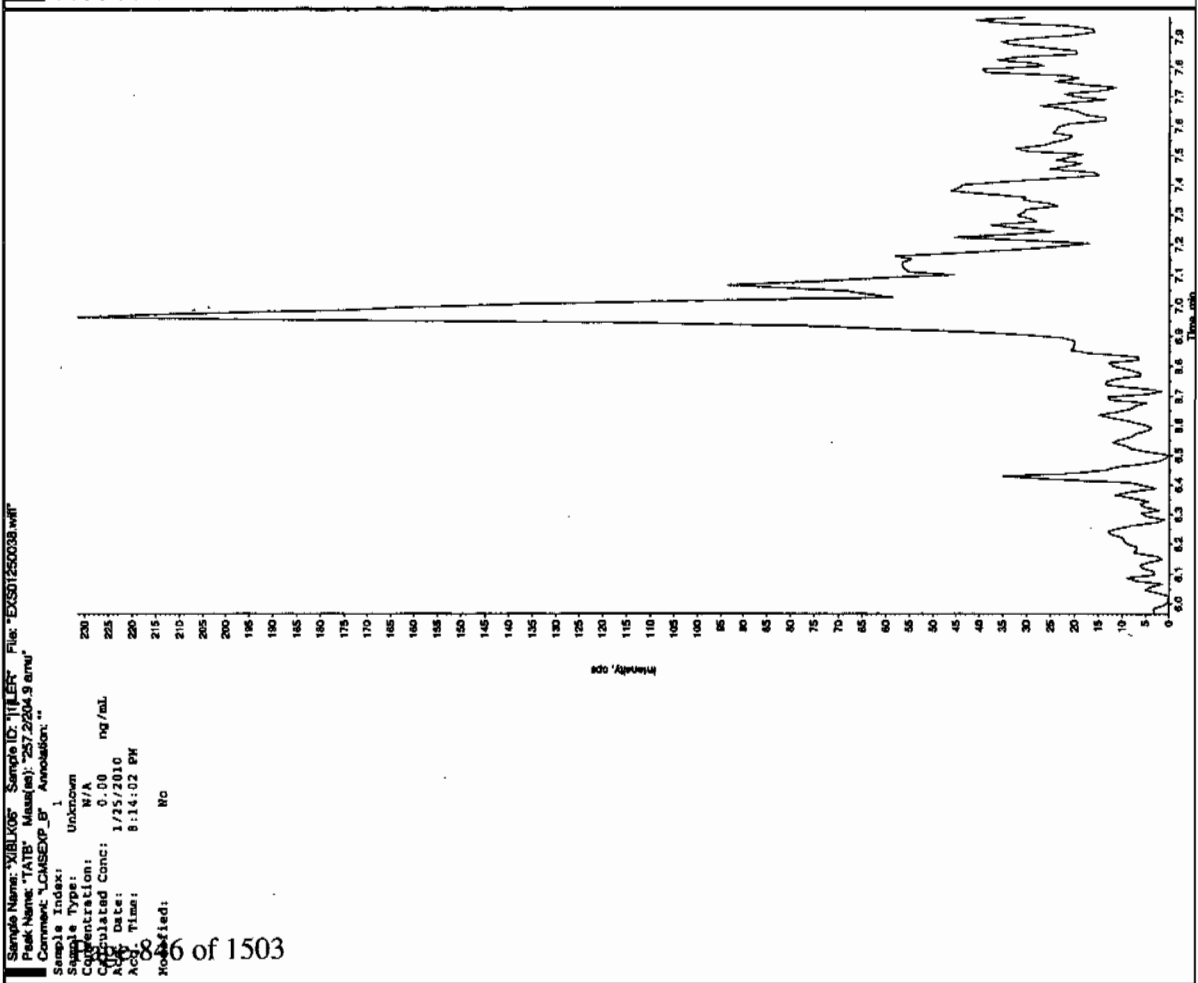
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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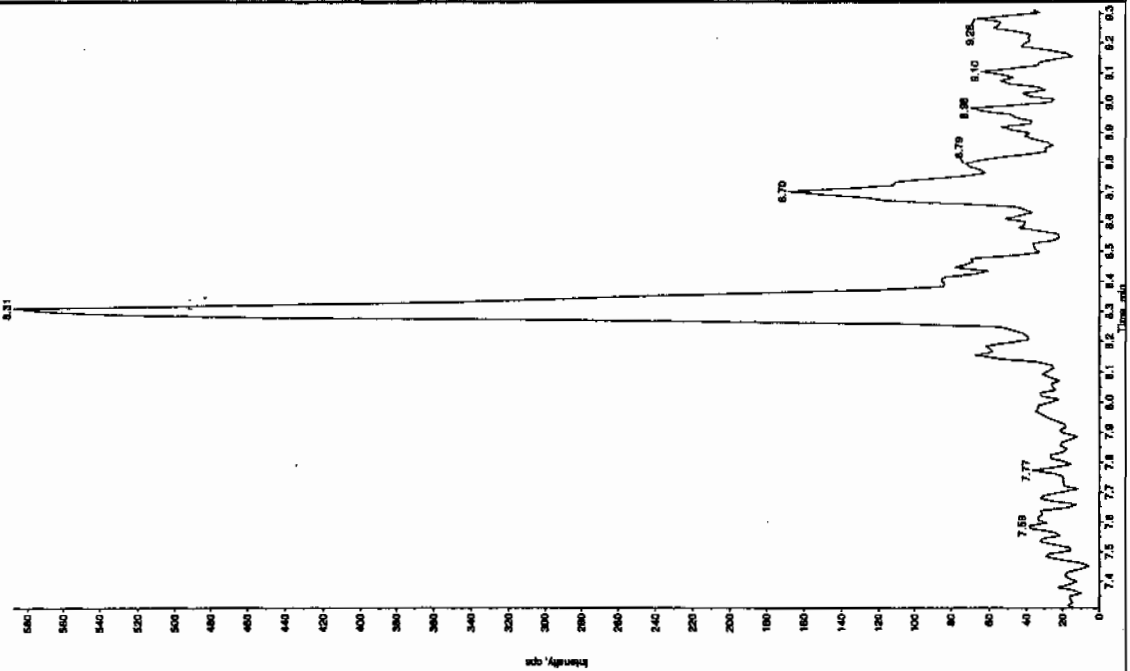


Am m o i p a i o



Sample Name: "XBLK05" Sample ID: "HLEP" File: "EX0125X038.wif"
 Peak Name: "26-Dinitro-4-nitrobenzene" 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: 1/25/2010
 Acq. Time: 8:14:02 PM
 Modified: No



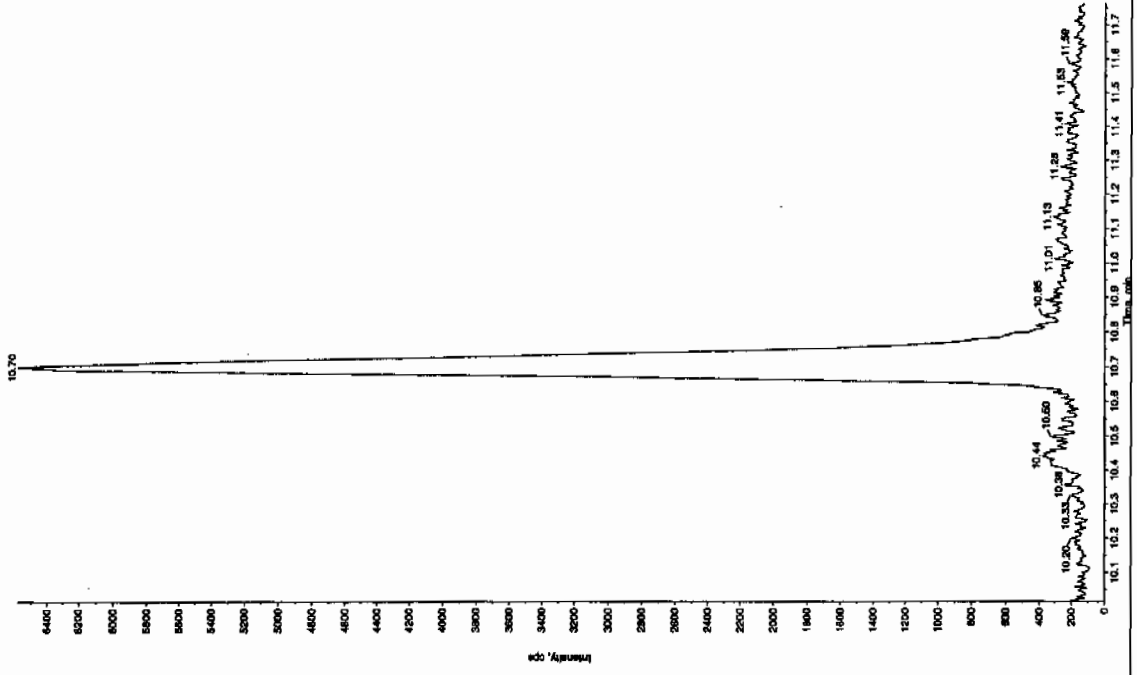
Sample Name: "XBLK05" Sample ID: "HLEP" File: "EX0125X038.wif"
 Peak Name: "26-Dinitro-4-nitrobenzene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 8:14:02 PM
 Modified: No



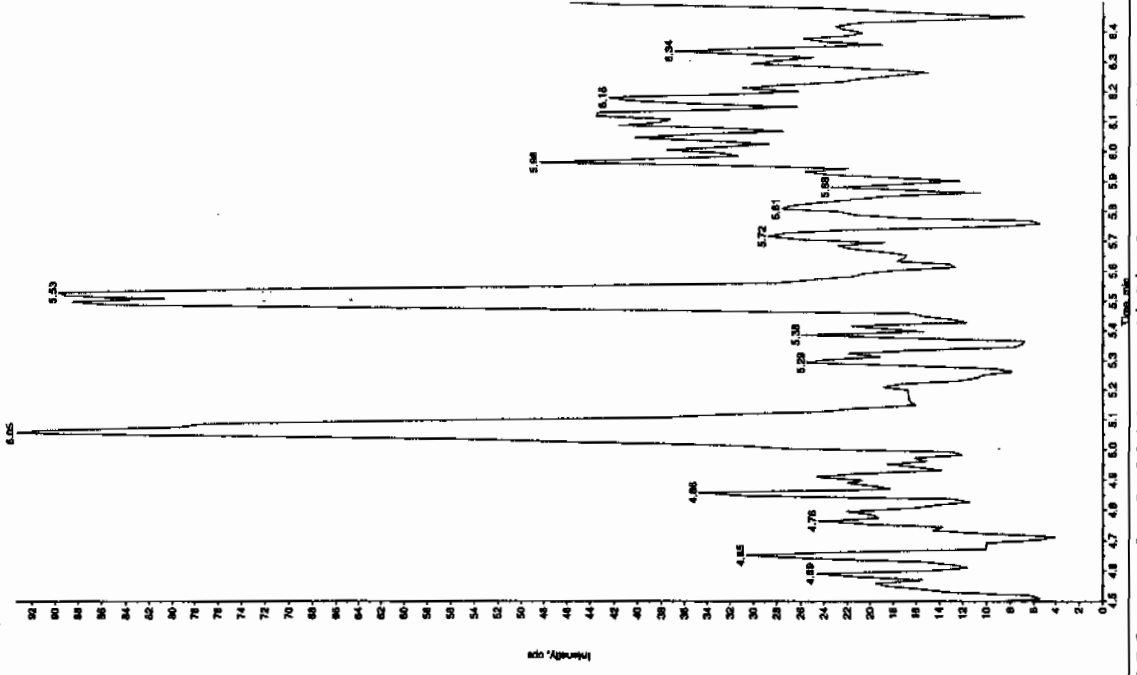
Sample Name: "XBLK06" Sample ID: "11LEF" File: "EXS01250038.wif"
Peak Name: "tri(n-octyl) phosphat" Mass(es): "558.191.0 amu"
Comment: "LONSEXP_B" Annotation: "1"

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 1/25/2010
Acq. Time: 8:14:02 PM
Modified: No



Sample Name: "XBLK06" Sample ID: "11LEF" File: "EXS01250038.wif"
Peak Name: "24-Olefin-6-nitrotoluene" Mass(es): "186.046.0 amu"
Comment: "LONSEXP_B" Annotation: "1"

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 1/25/2010
Acq. Time: 8:14:02 PM
Modified: No



4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 25-JAN-10 22:19

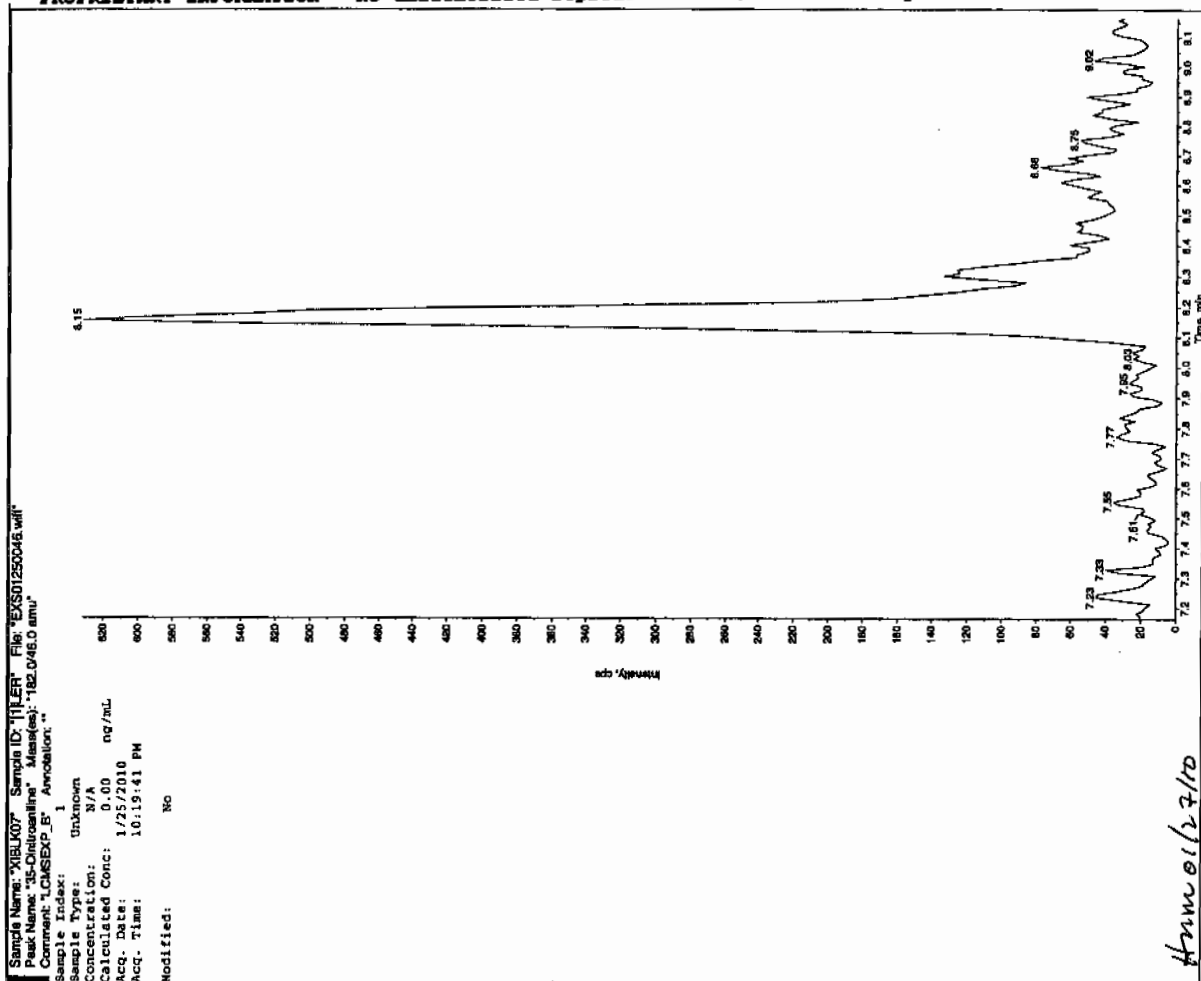
GEL Data File: EXS01250046.wiff

Instrument ID: LCMSMS

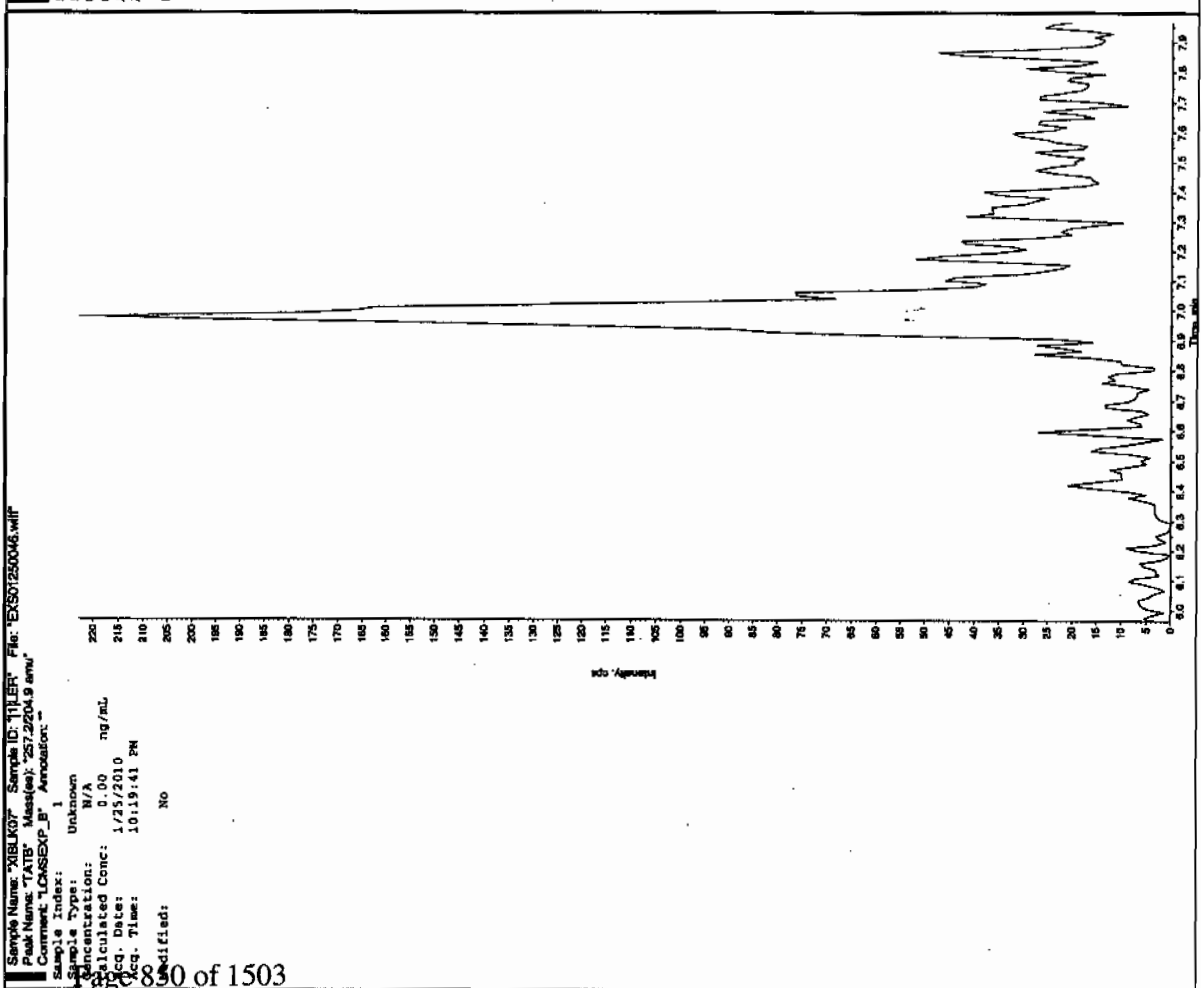
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

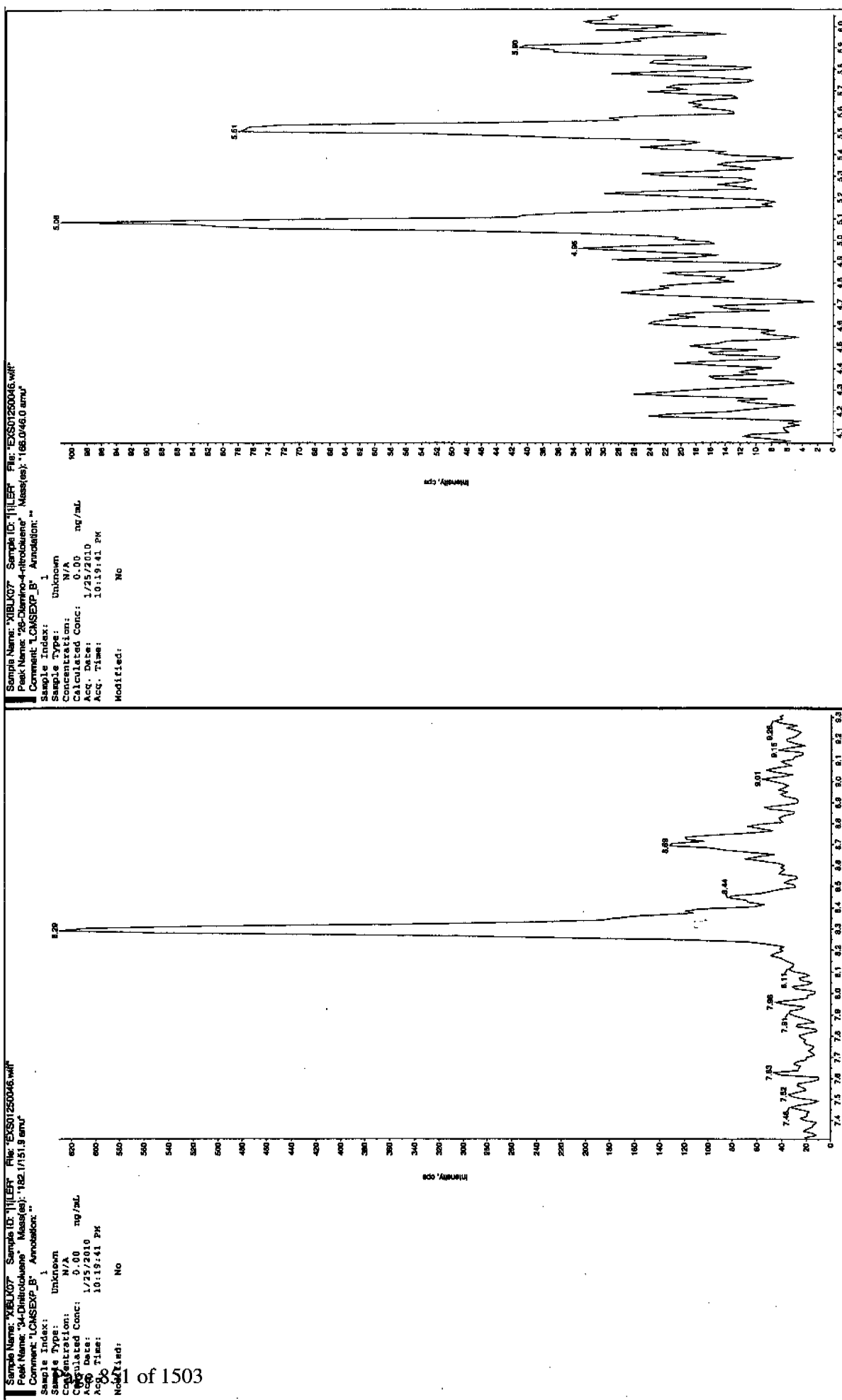
See 112710

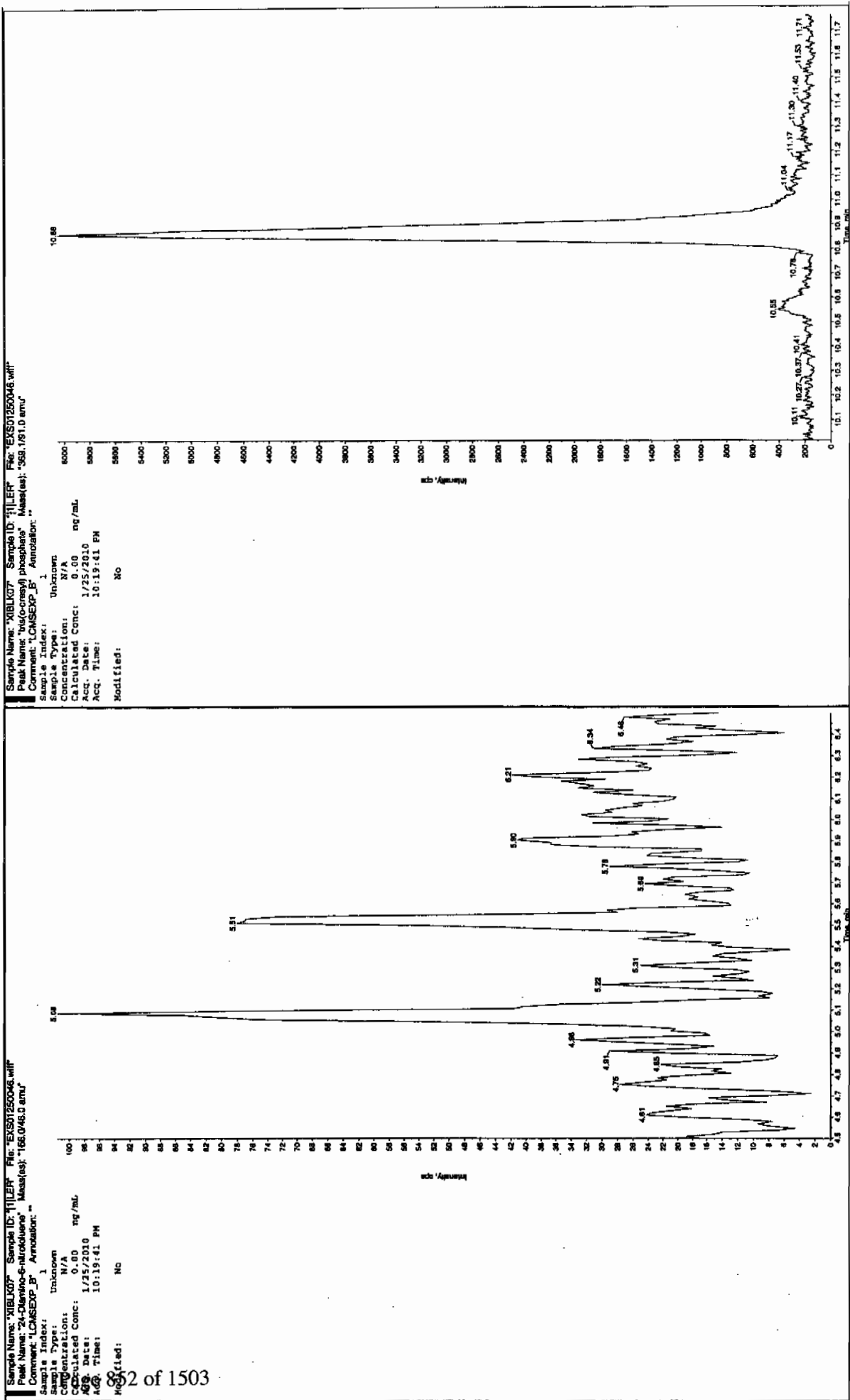


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*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 26-JAN-10 01:44

GEL Data File: EXS01250059.wiff

Instrument ID: LCMSMS

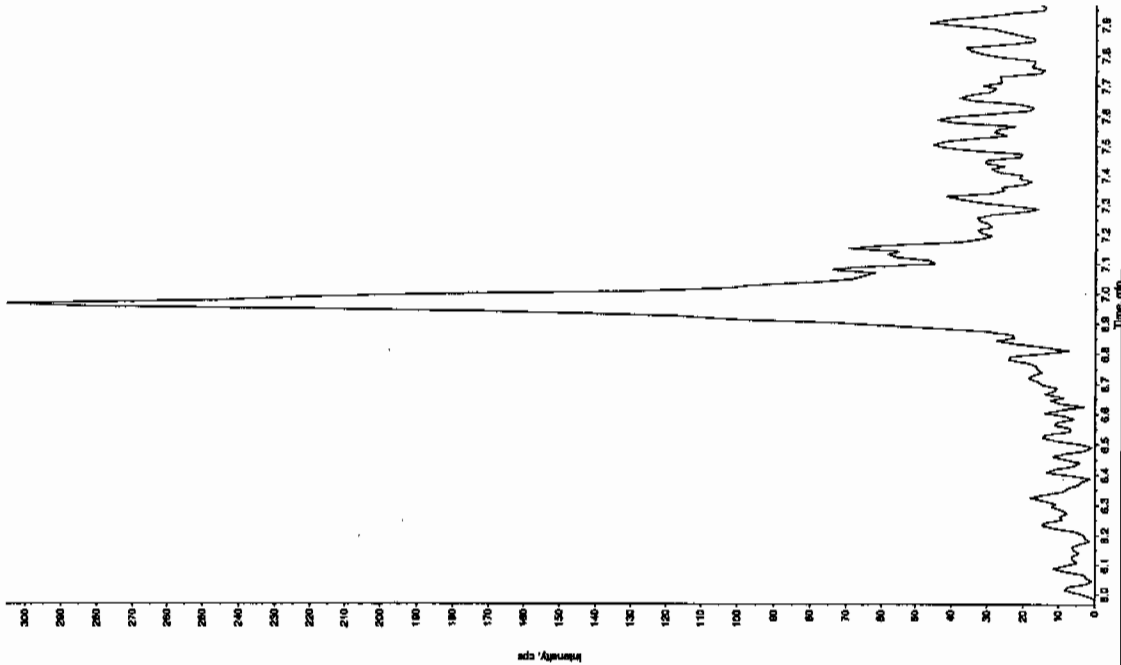
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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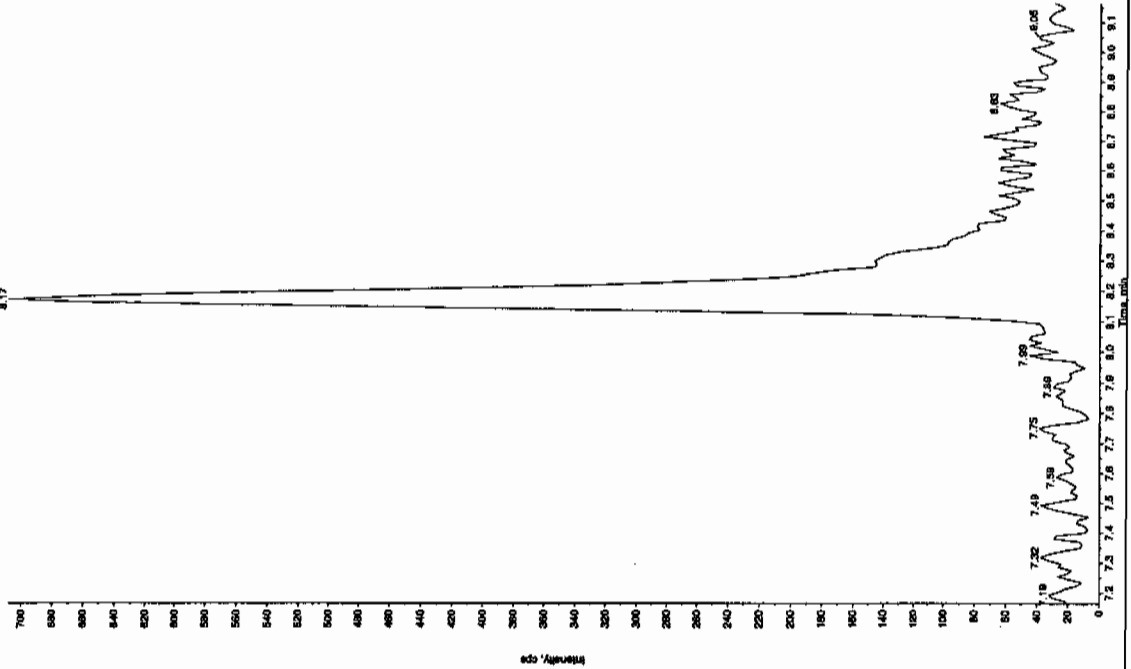
Sample Name: "XBLK08" Sample ID: "1111" File: "EXS01250059.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/28/2010
 Acq. Time: 1:44:00 AM
 Modified: No

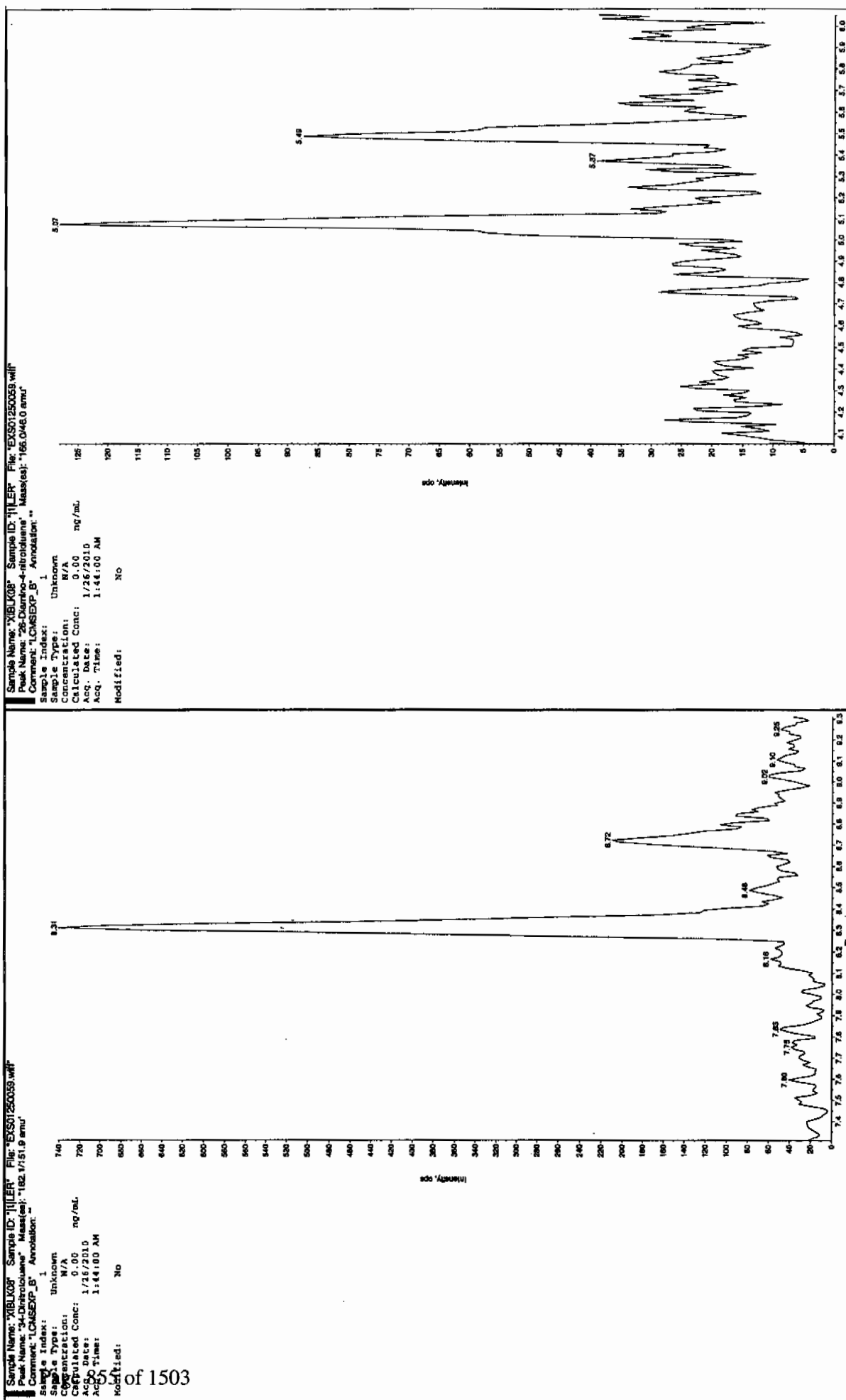


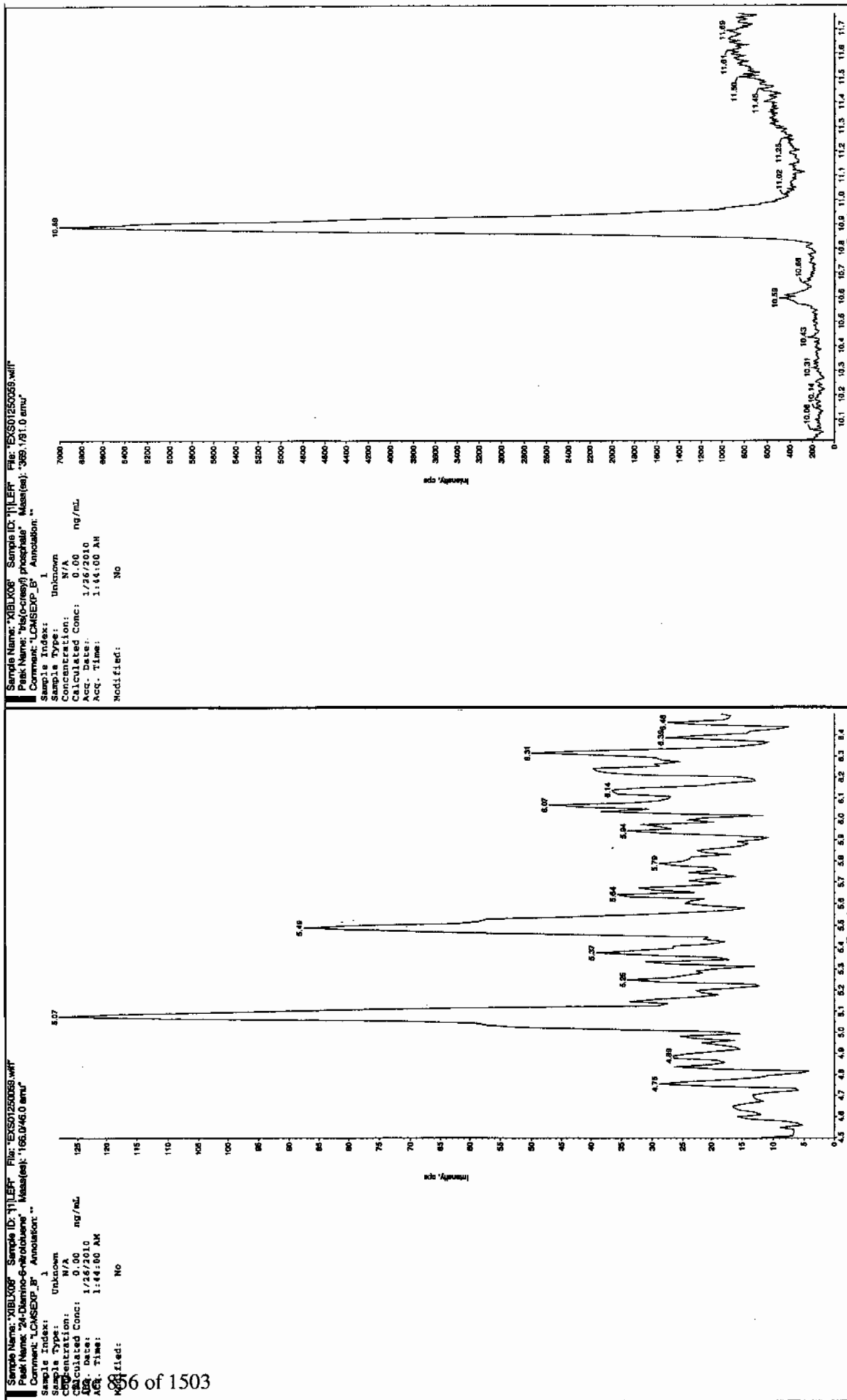
Sample Name: "XBLK08" Sample ID: "1111" File: "EXS01250059.wif"
 Peak Name: "35-Dechloroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/28/2010
 Acq. Time: 1:44:00 AM
 Modified: No



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4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 26-JAN-10 04:05

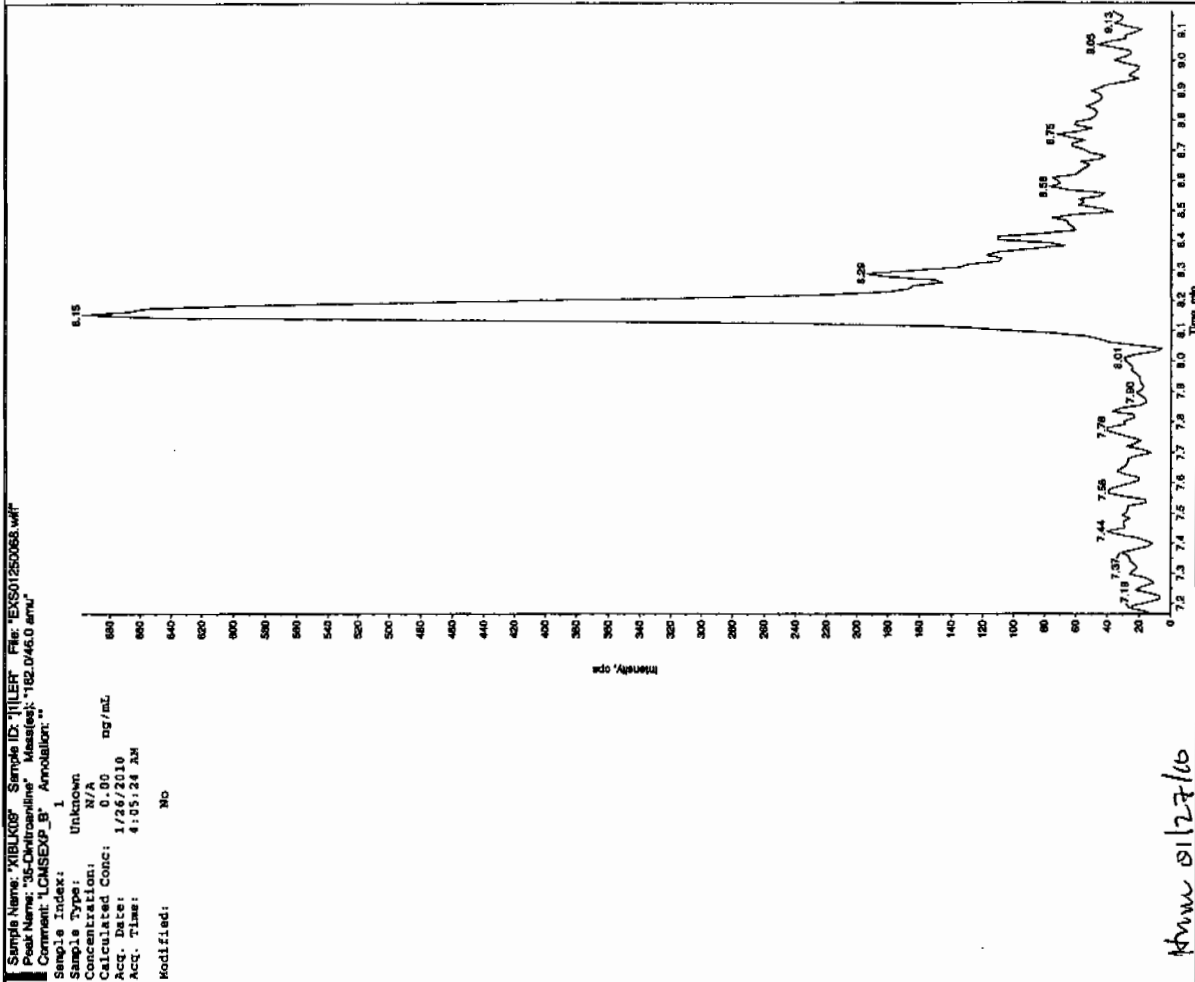
GEL Data File: EXS01250068.wiff

Instrument ID: LCMSMS

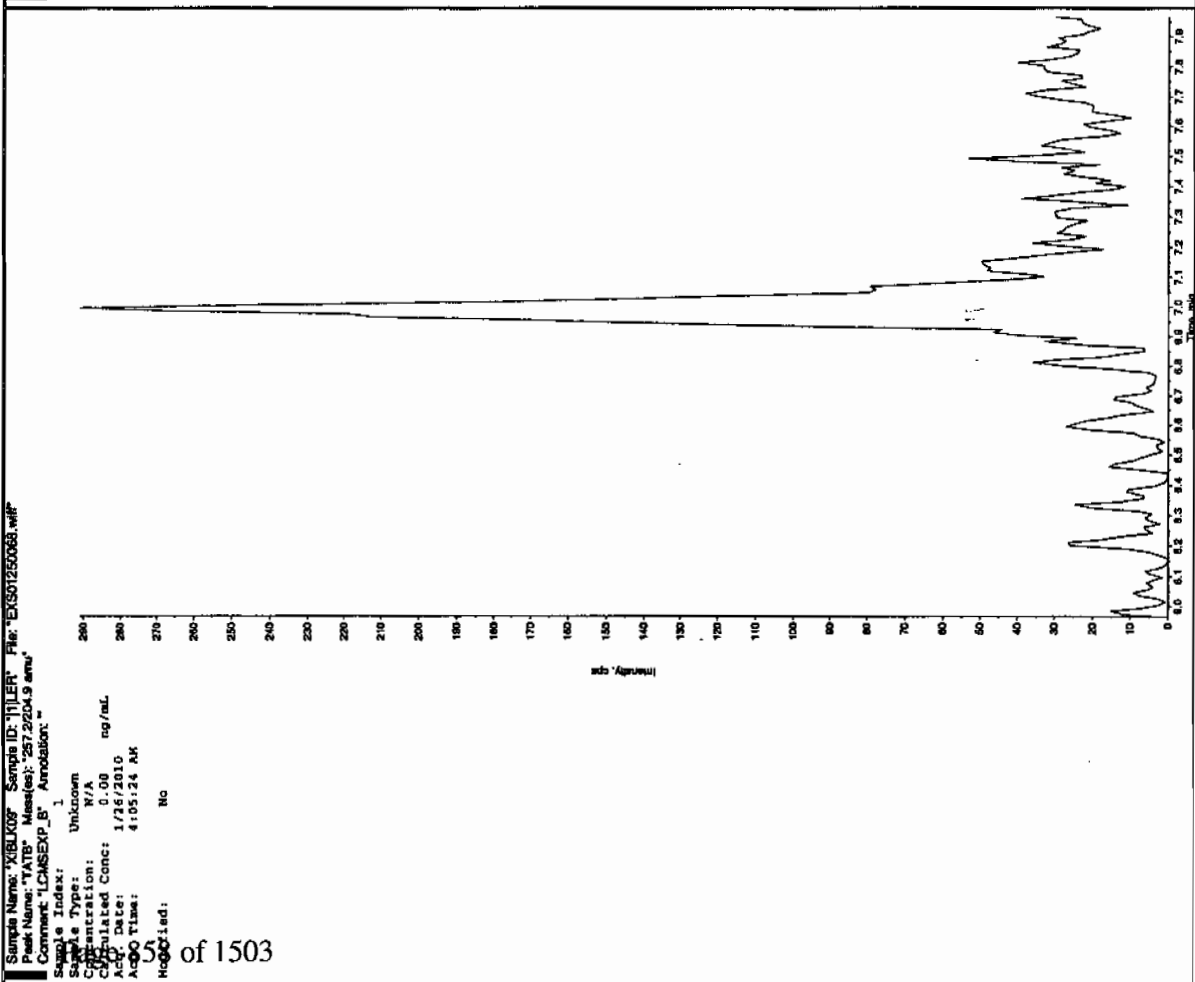
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Len 112710

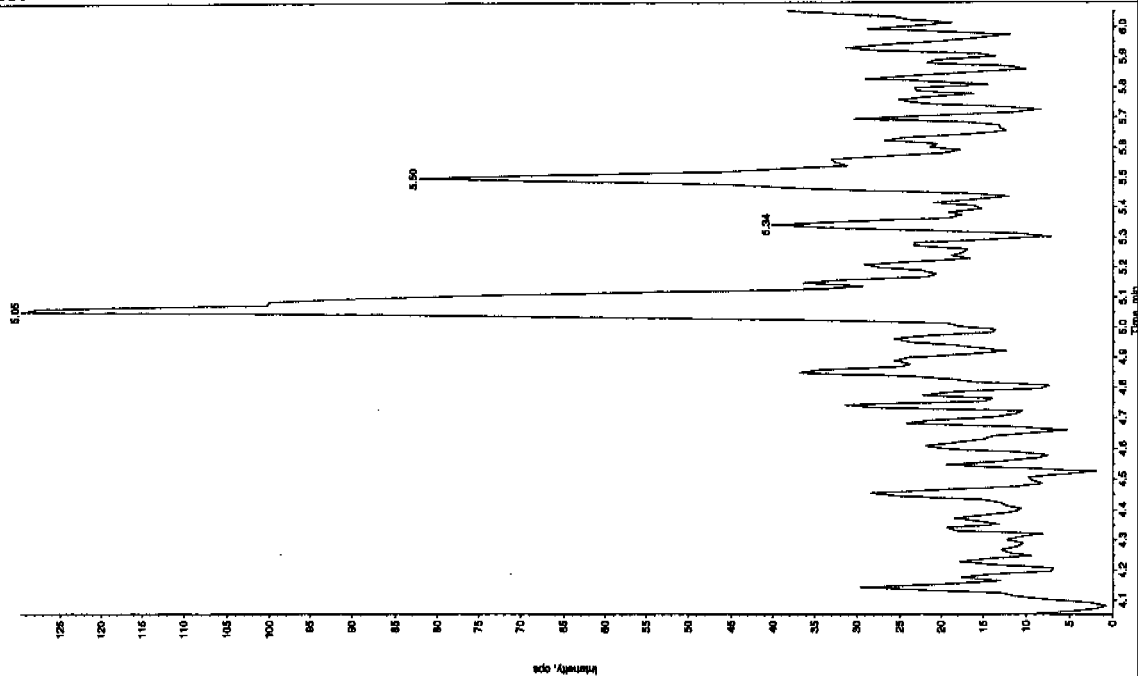


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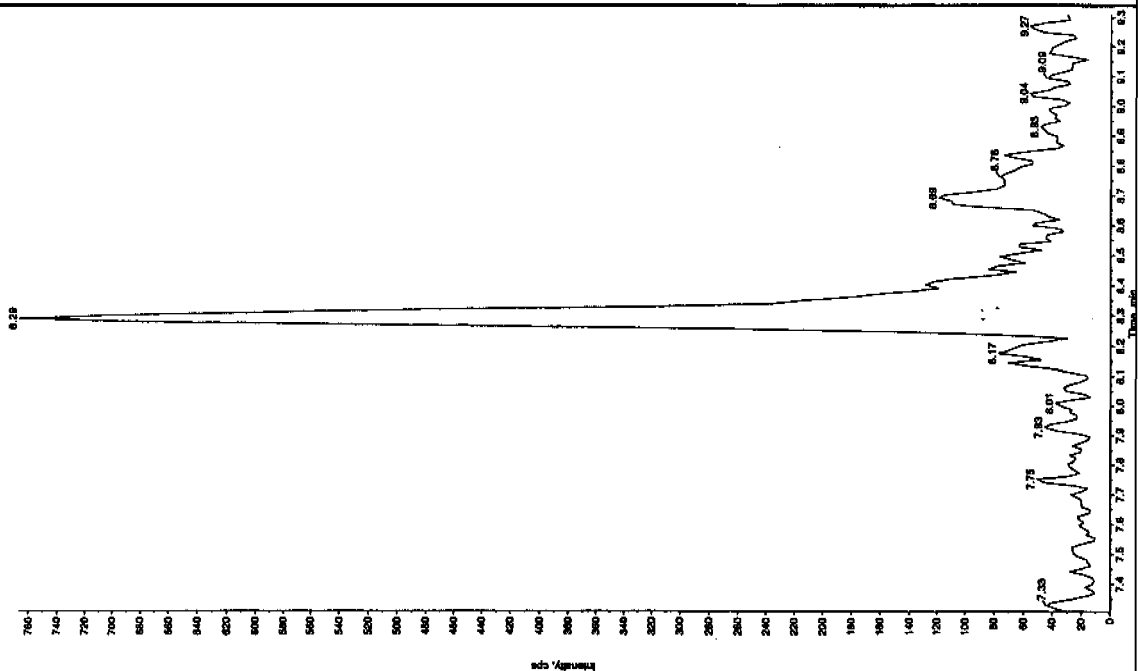
Sample Name: "XBLX08" Sample ID: "11LRF" File: "EX901250088.wif"
 Peak Name: "28-Dinitro-4-nitrofluorene" Mass(es): "166.0460 amu"
 Comment: "LCMSXP_B" Annotation: ""

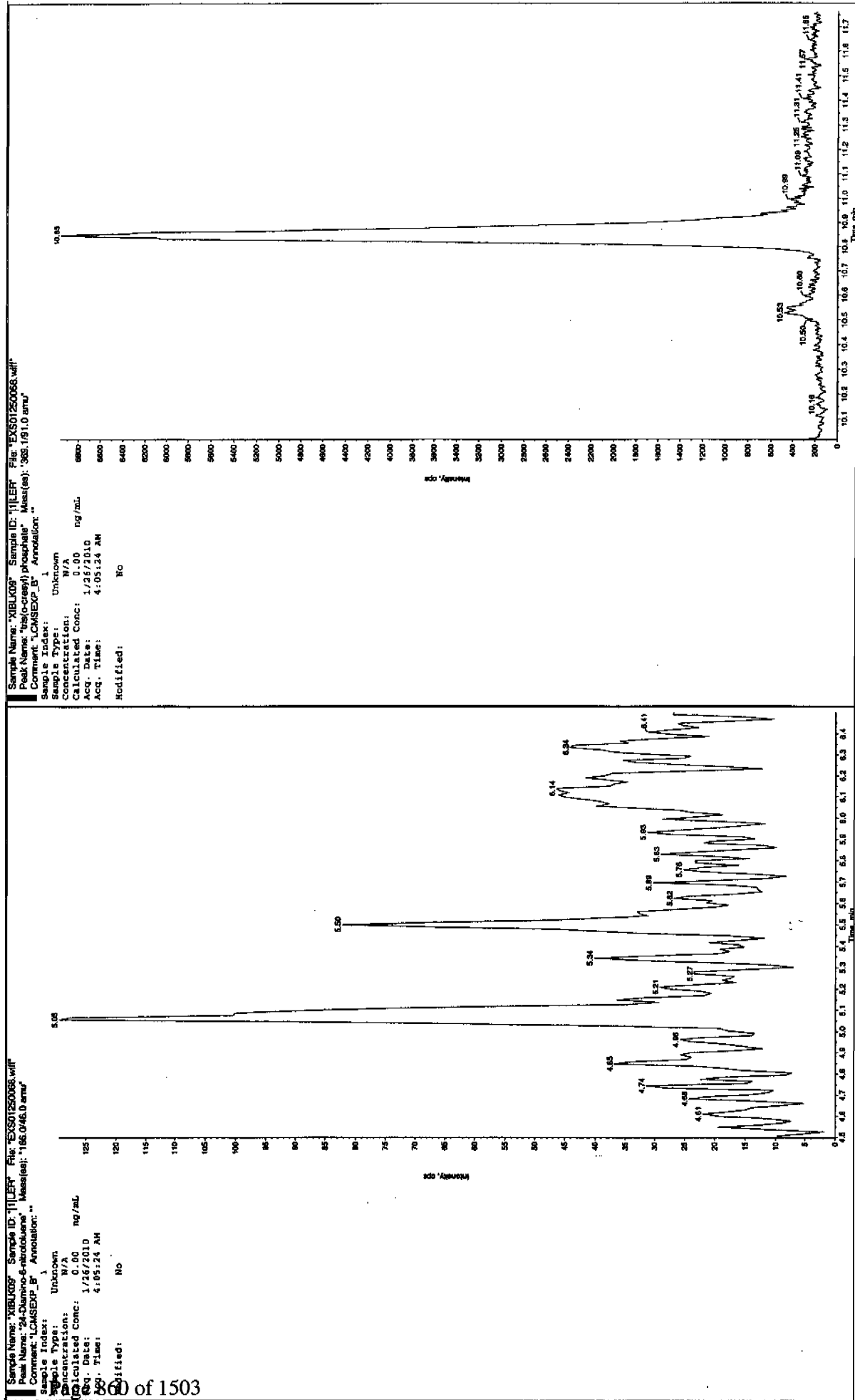
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/26/2010
 Acq. Time: 4:05:24 AM
 Modified: No



Sample Name: "XBLX08" Sample ID: "11LRF" File: "EX901250088.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.11519 amu"
 Comment: "LCMSXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Date: 1/26/2010
 Acq. Time: 4:05:24 AM
 Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 26-JAN-10 07:29

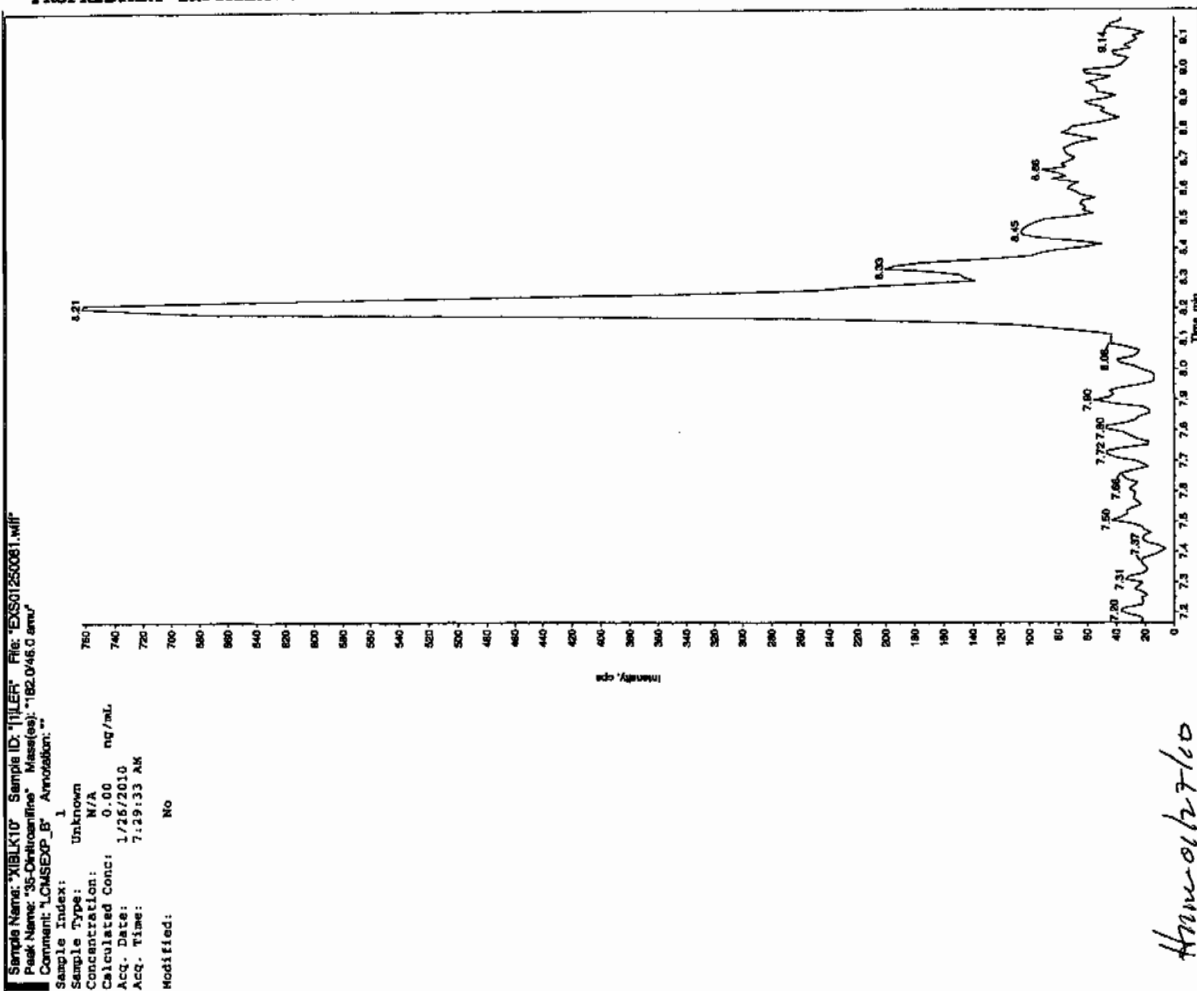
GEL Data File: EXS01250081.wiff

Instrument ID: LCMSMS

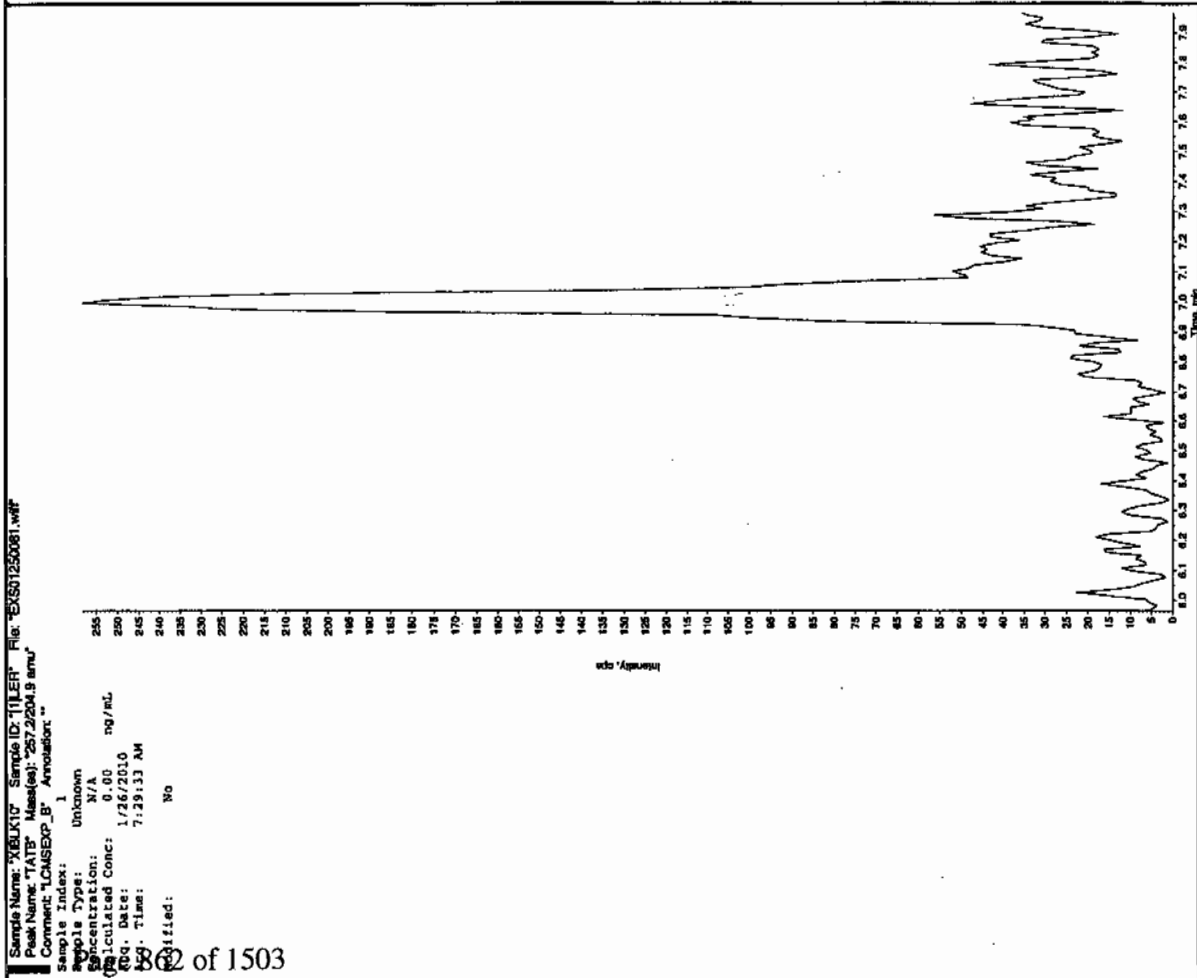
Column: Phenomenex Ultracarb 5u ODS(20)

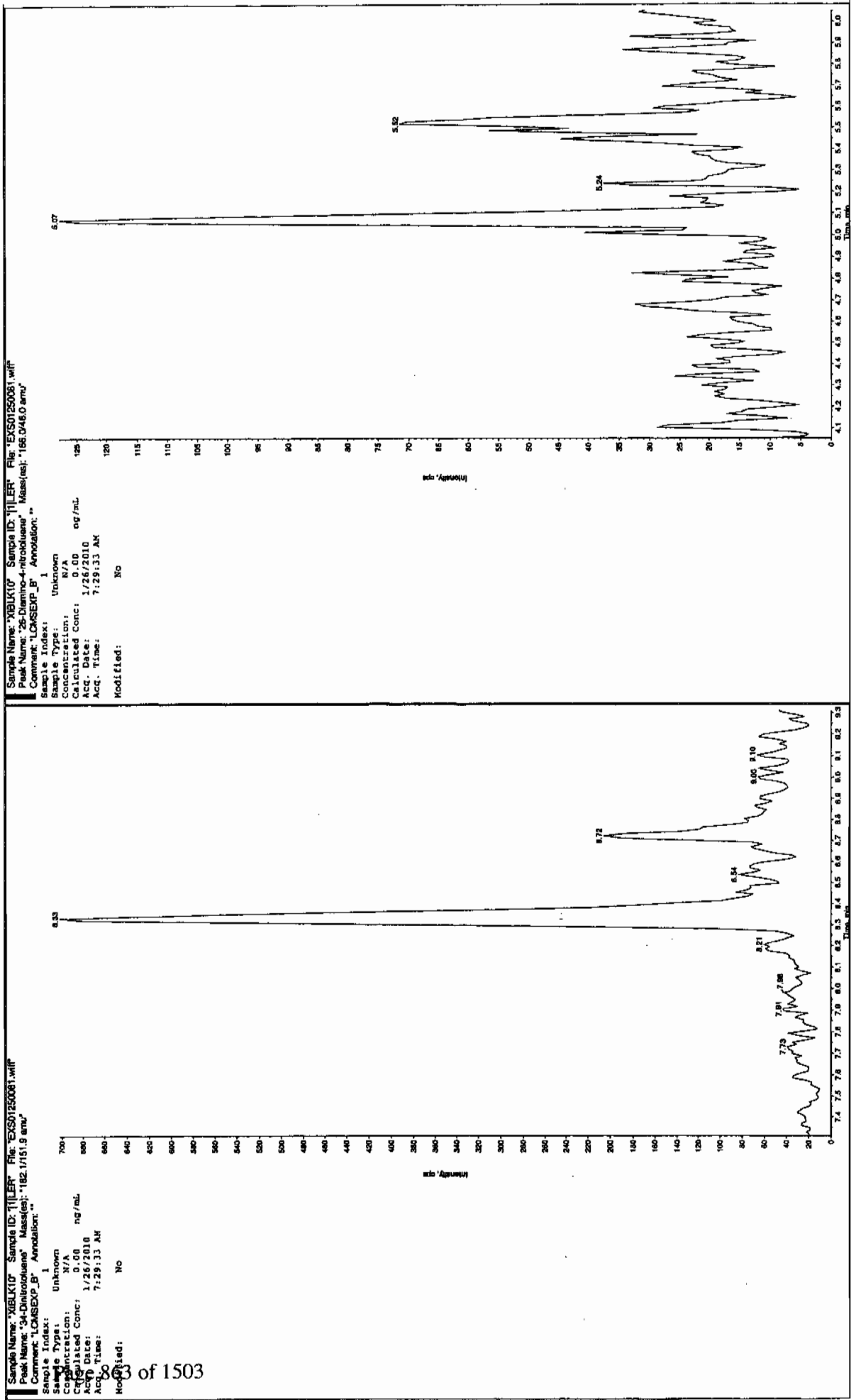
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.2
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

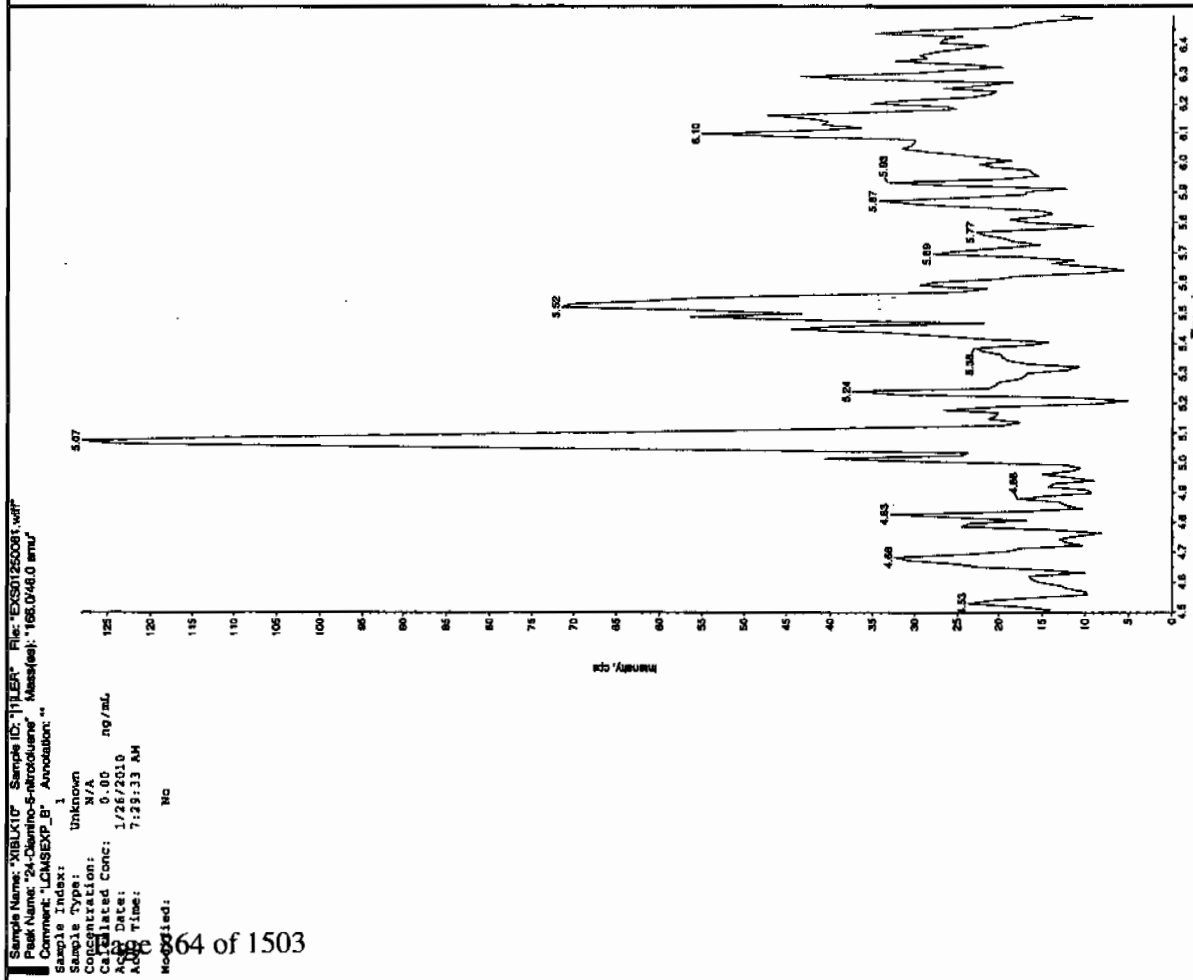
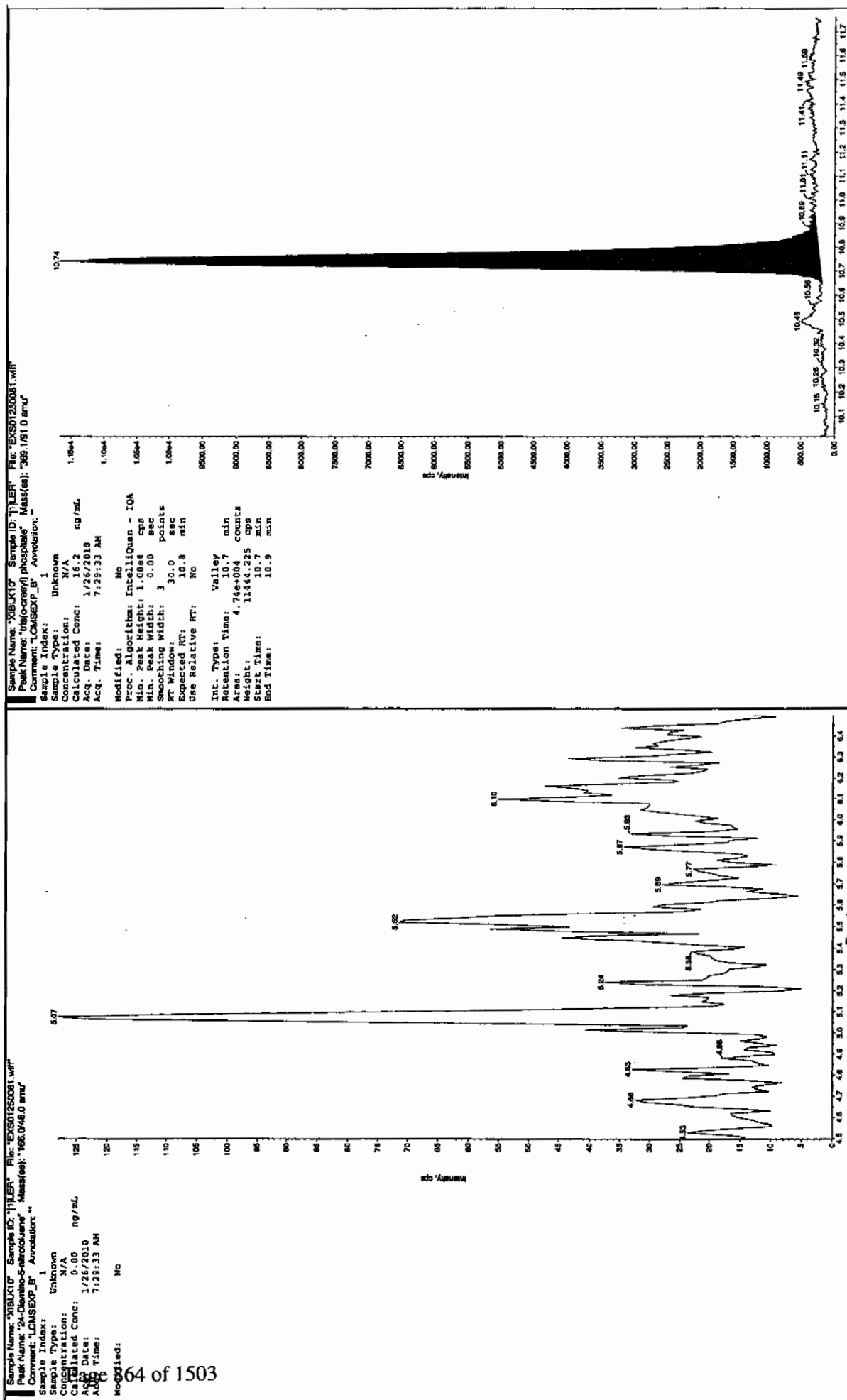
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Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK11

Analysis Date: 26-JAN-10 10:53

GEL Data File: EXS01250094.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.4
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Scan 127110

Sample Name: "XBLK11" Sample ID: "1111" File: "EX501250084.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

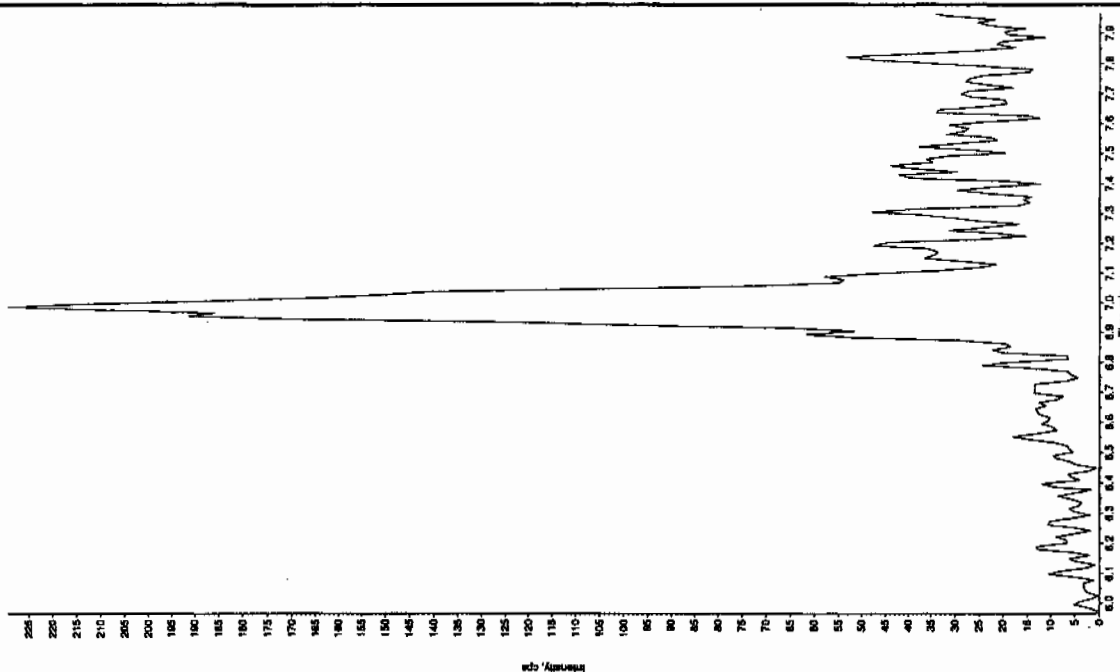
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/28/2010

Acq. Time: 10:53:40 AM

Modified: No



Sample Name: "XBLK11" Sample ID: "1111" File: "EX501250084.wif"

Peak Name: "35-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

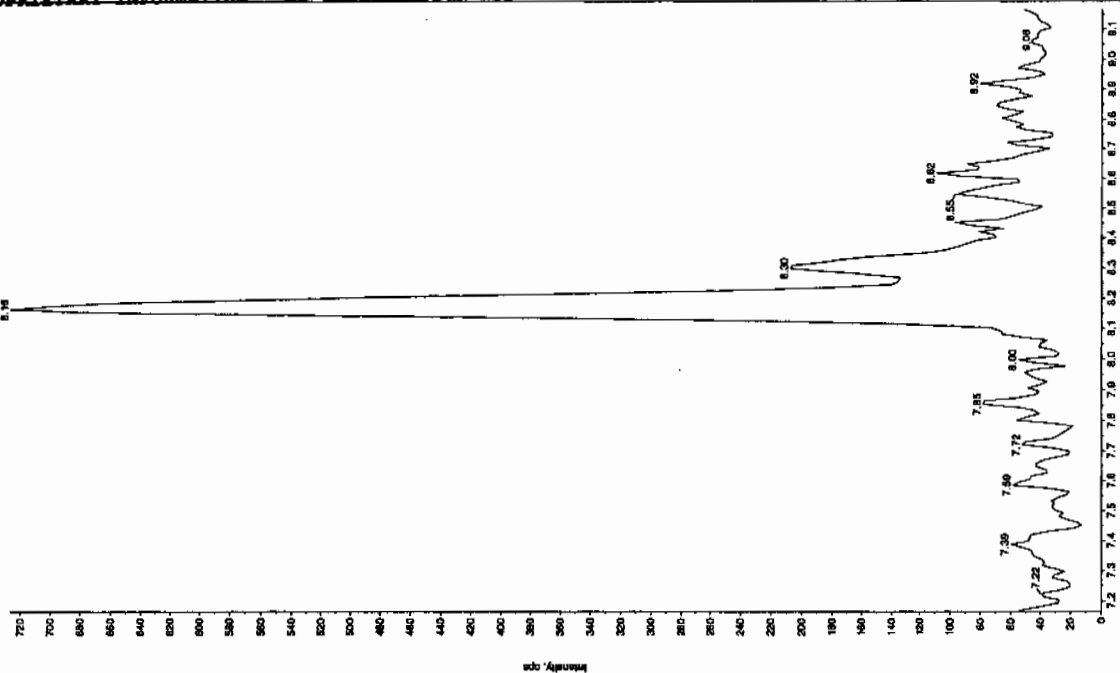
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/28/2010

Acq. Time: 10:53:40 AM

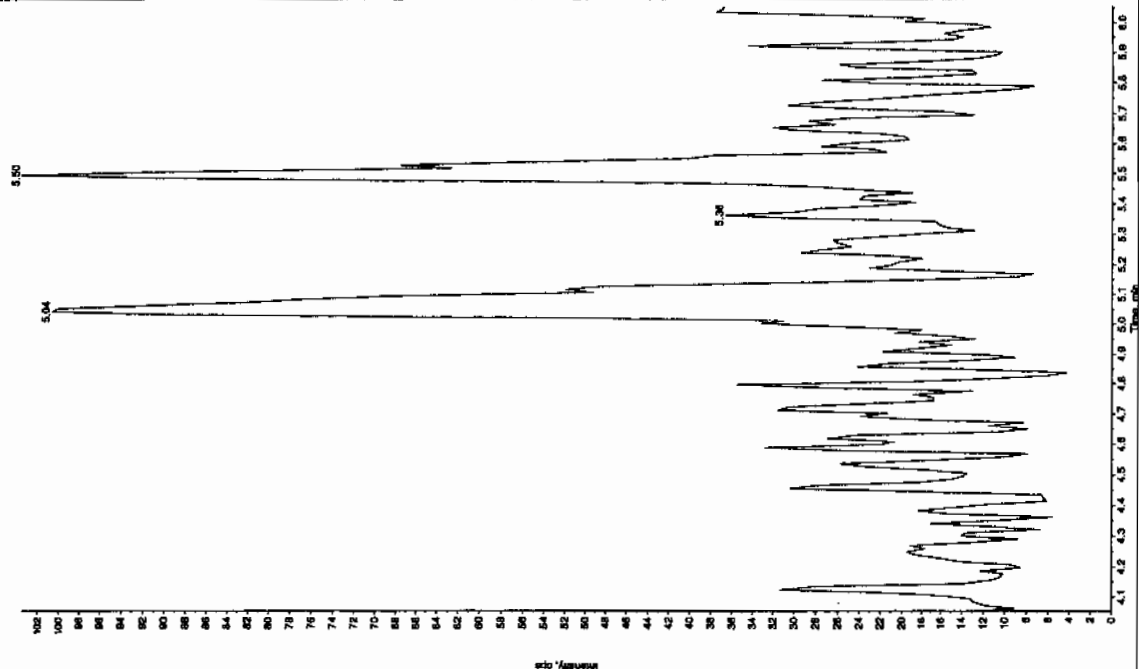
Modified: No



Scan 127110

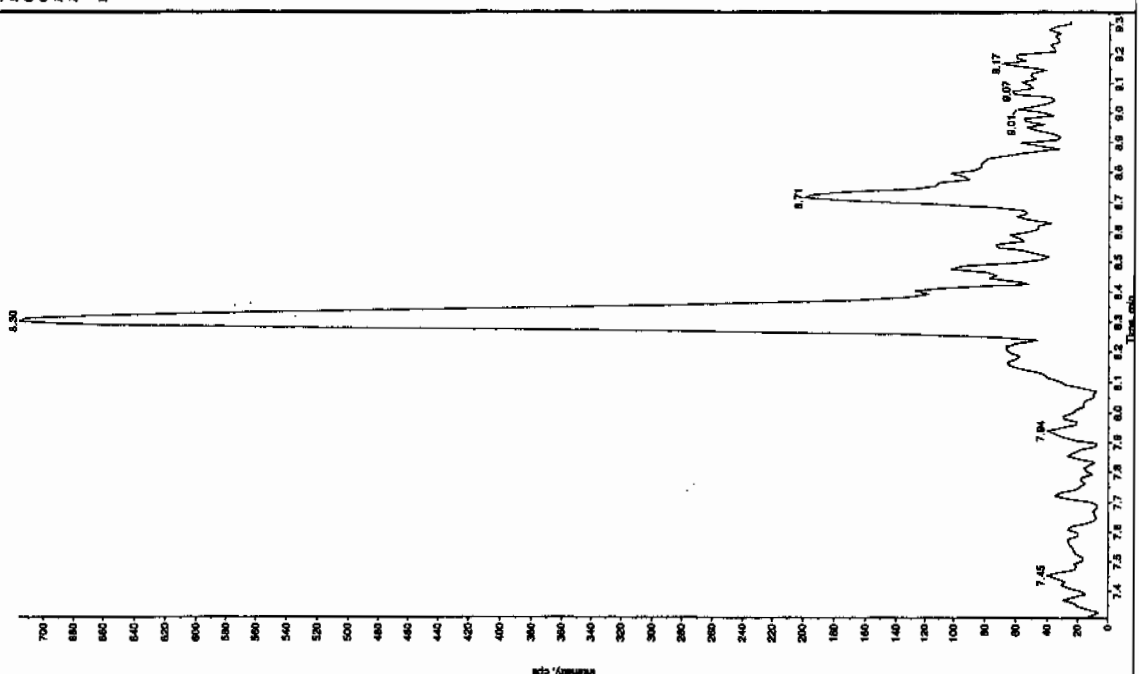
Sample Name: "XBLK11" Sample ID: "11LEP" File: "EX50126084.wif"
 Peak Name: "28-Dienr-4-ribo-2-ene" Mass(es): "166.0463.0 amu"
 Comment: "LONEXP_B" Annotation: ""

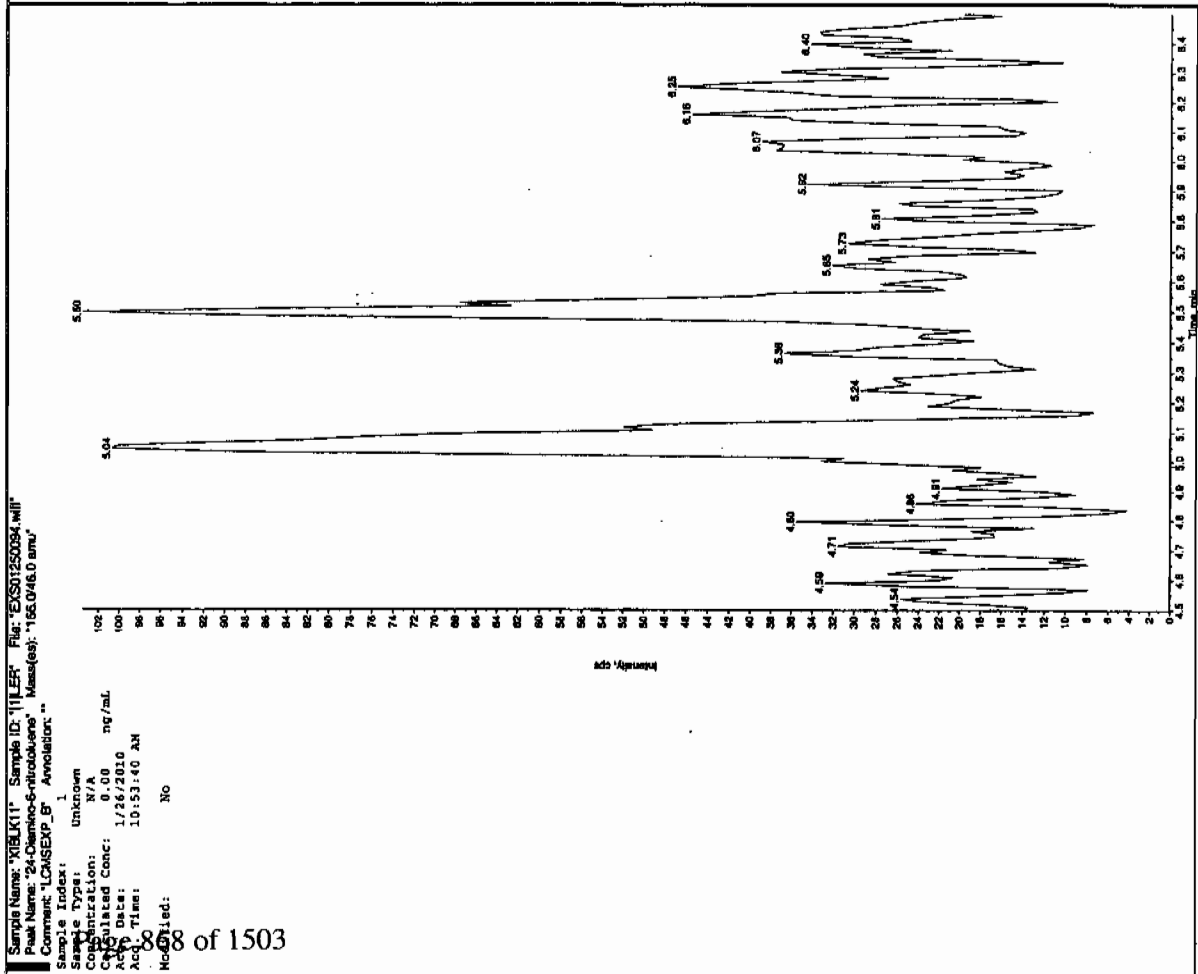
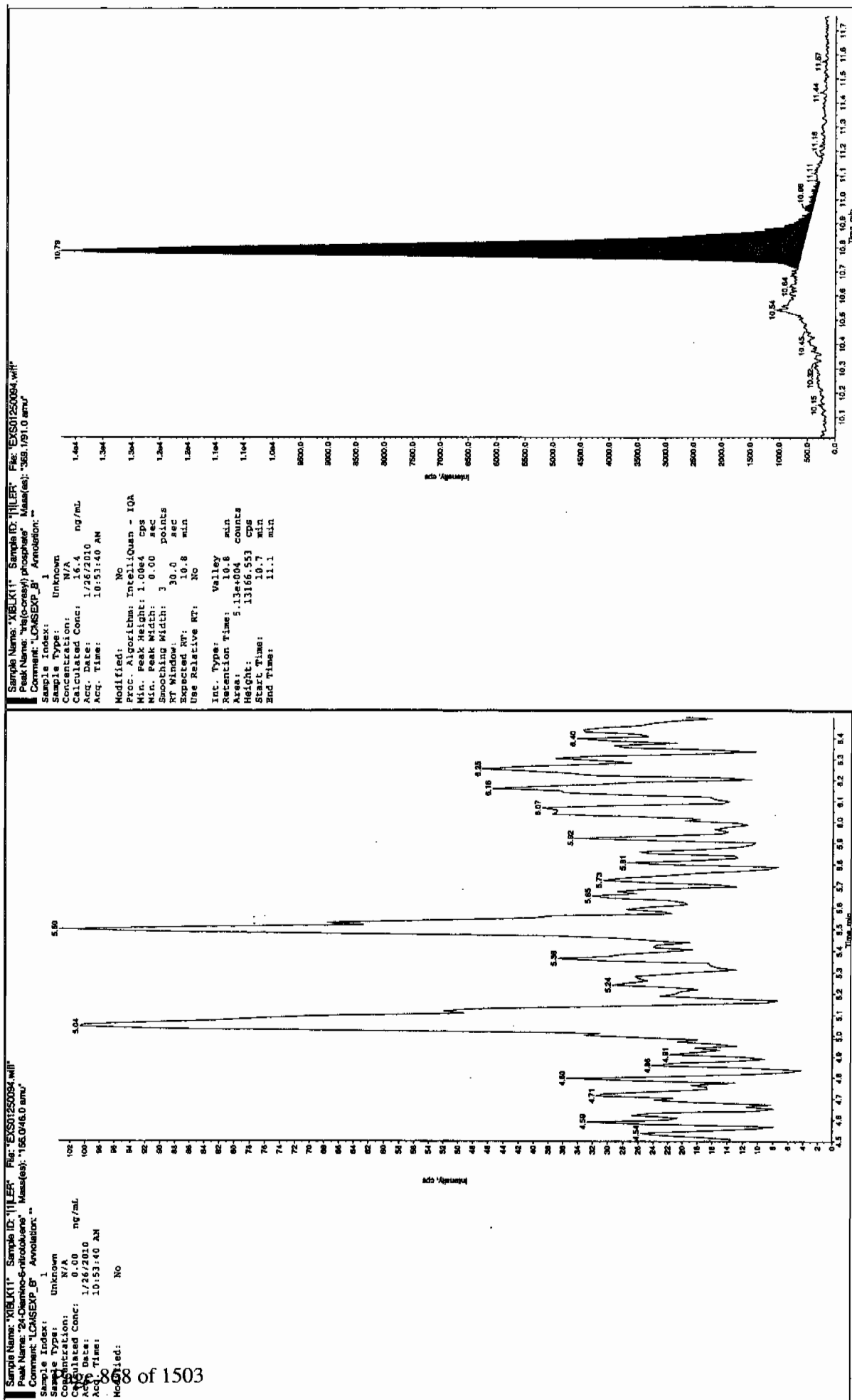
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 10:53:40 AM
 Modified: No



Sample Name: "XBLK11" Sample ID: "11LEP" File: "EX50126084.wif"
 Peak Name: "34-Dienr-2-ene" Mass(es): "182.1151.9 amu"
 Comment: "LONEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 10:53:40 AM
 Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 26-JAN-10 11:40

GEL Data File: EXS01250097.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

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Sample Name: "XBLK12" Sample ID: "TILER" File: "EXS01250097.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

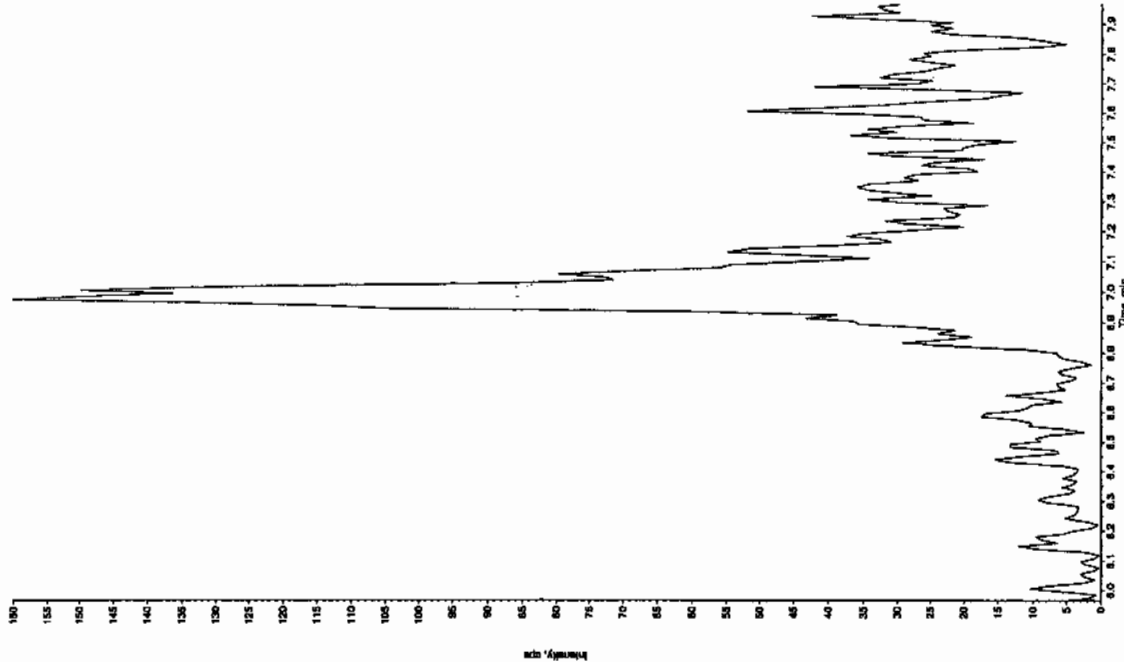
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/26/2010

Acq. Time: 11:40:53 AM

Modified: No



Sample Name: "XBLK12" Sample ID: "TILER" File: "EXS01250097.wif"

Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"

Comment: "LCMSEXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

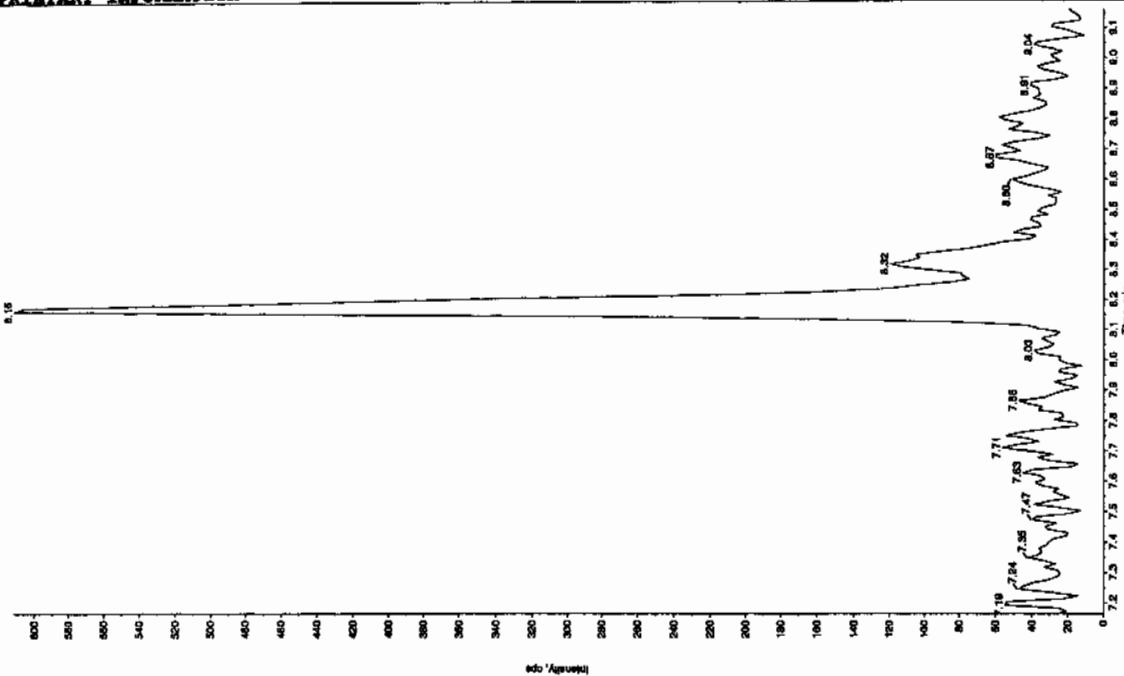
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/26/2010

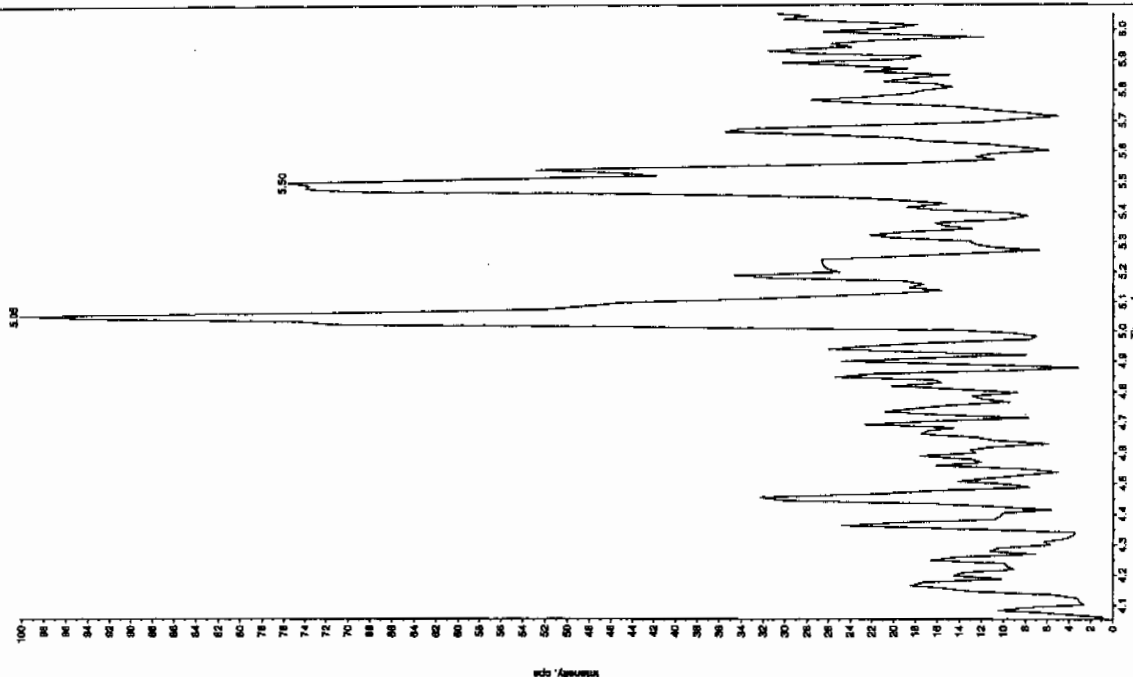
Acq. Time: 11:40:53 AM

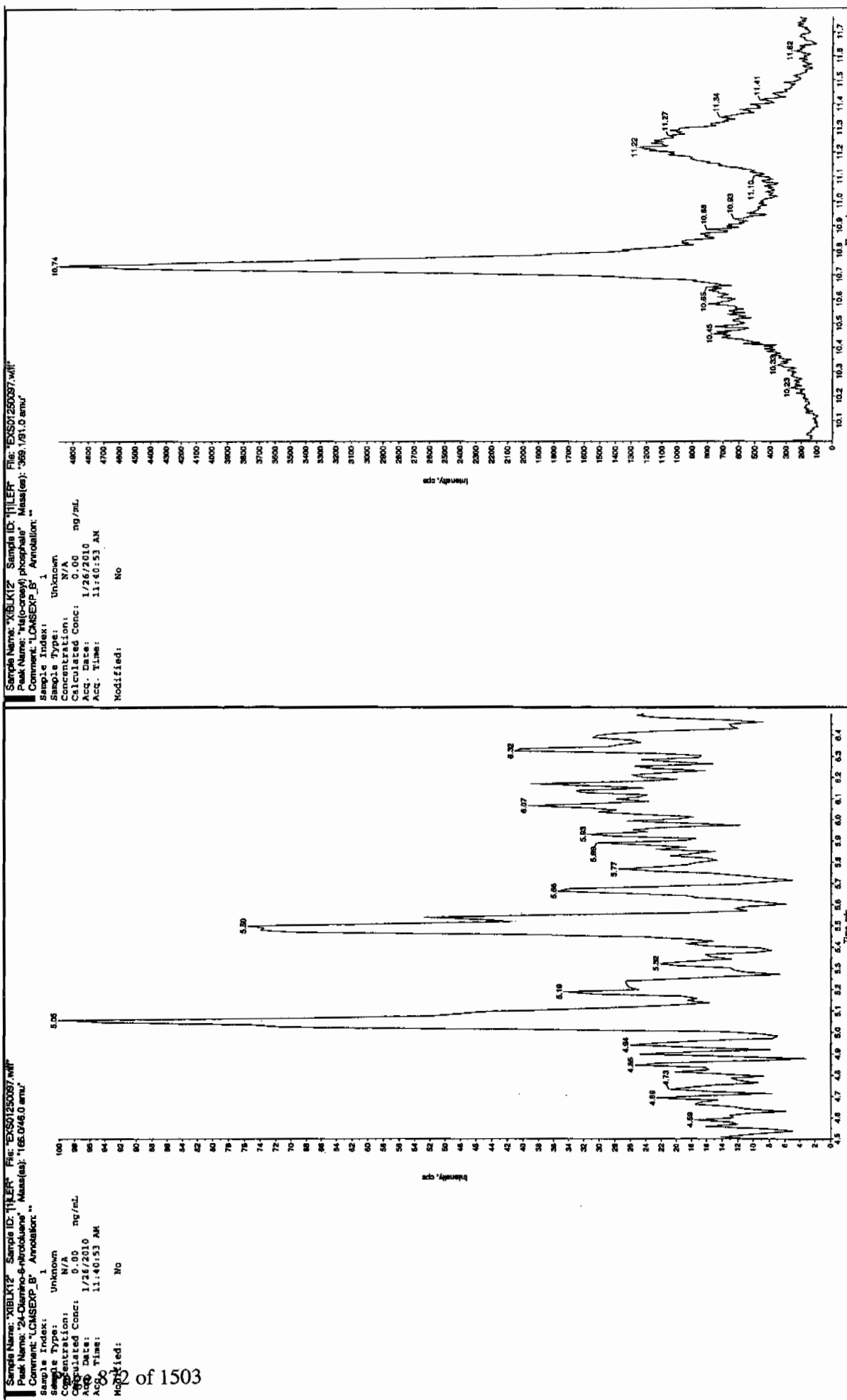
Modified: No



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Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	1/26/2010
Acq. Time:	11:40:53 AM
Modified:	NO





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 26-JAN-10 14:17

GEL Data File: EXS01250107.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.3
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

OK 1/27/10

Sample Name: "XIBLK13" Sample ID: "HILFER" File: "EXS01250107.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

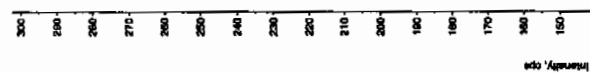
Concentration: N/A

Calculated Conc: 0.00 ng/mL

Acq. Date: 1/26/2010

Acq. Time: 2:17:56 PM

Modified: No



Sample Name: "XIBLK13" Sample ID: "HILFER" File: "EXS01250107.wif"

Peak Name: "35-Dichlorostyrene" Mass(es): "182.046.0 amu"

Comment: "LCMS EXP_B" Annotation: "

Sample Index: 1

Sample Type: Unknown

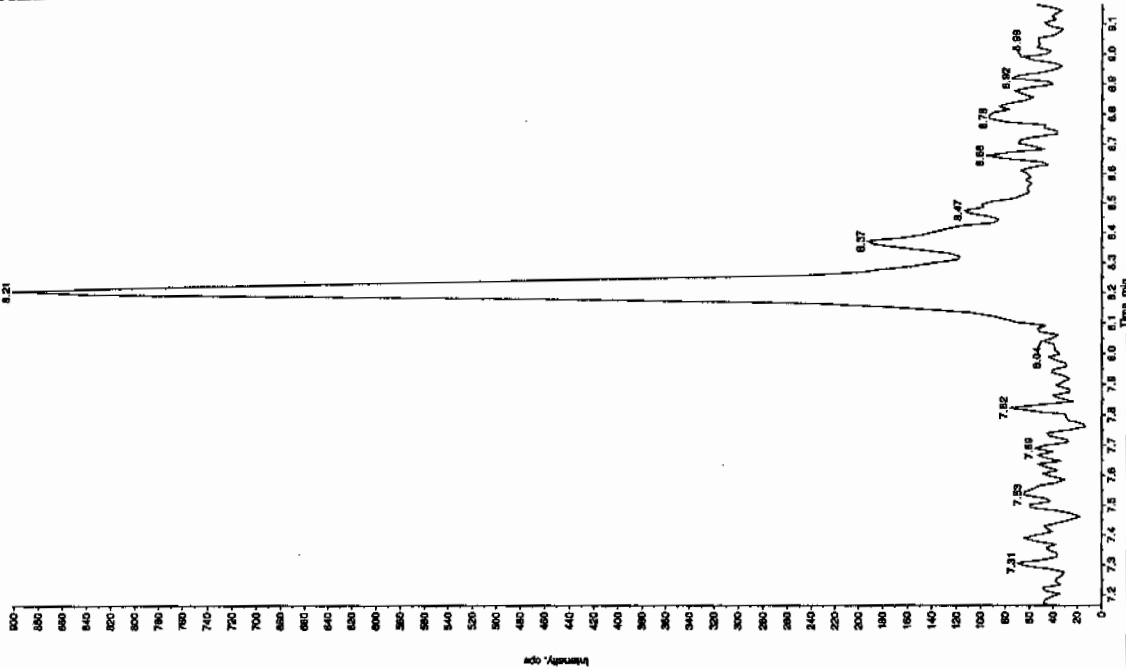
Concentration: N/A

Calculated Conc: 0.00 ng/mL

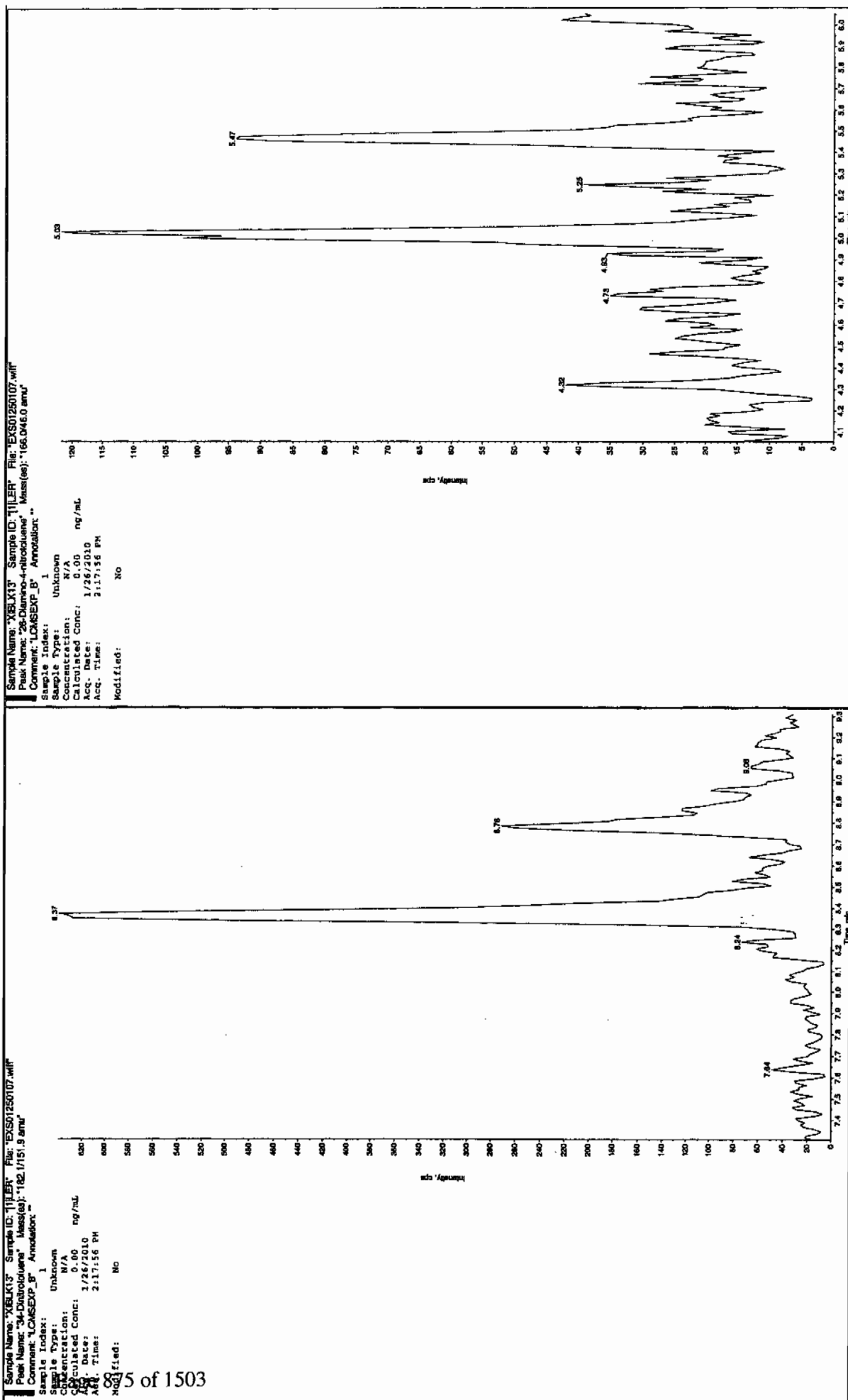
Acq. Date: 1/26/2010

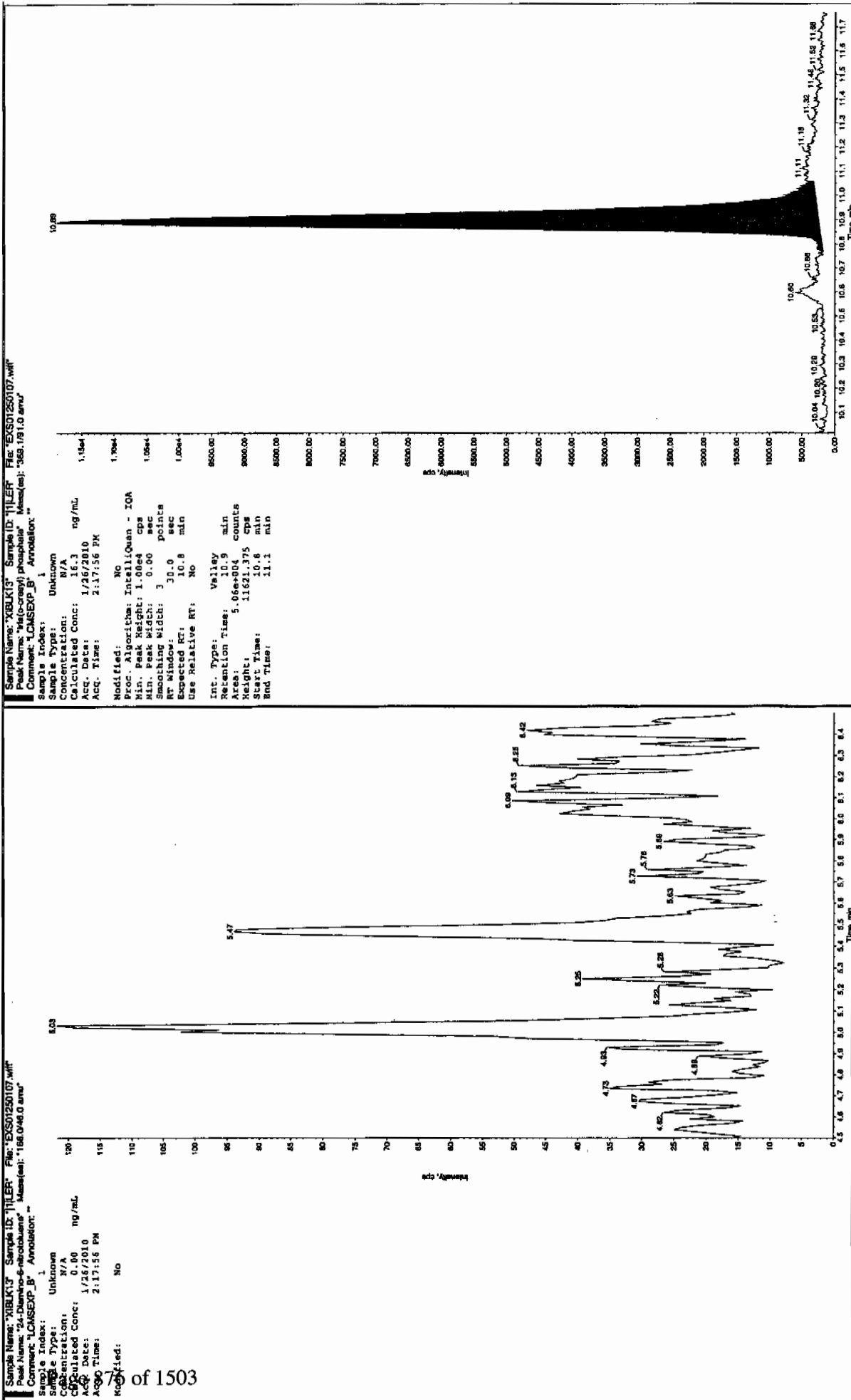
Acq. Time: 2:17:56 PM

Modified: No



Time 01/27/10





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK14

Analysis Date: 26-JAN-10 17:42

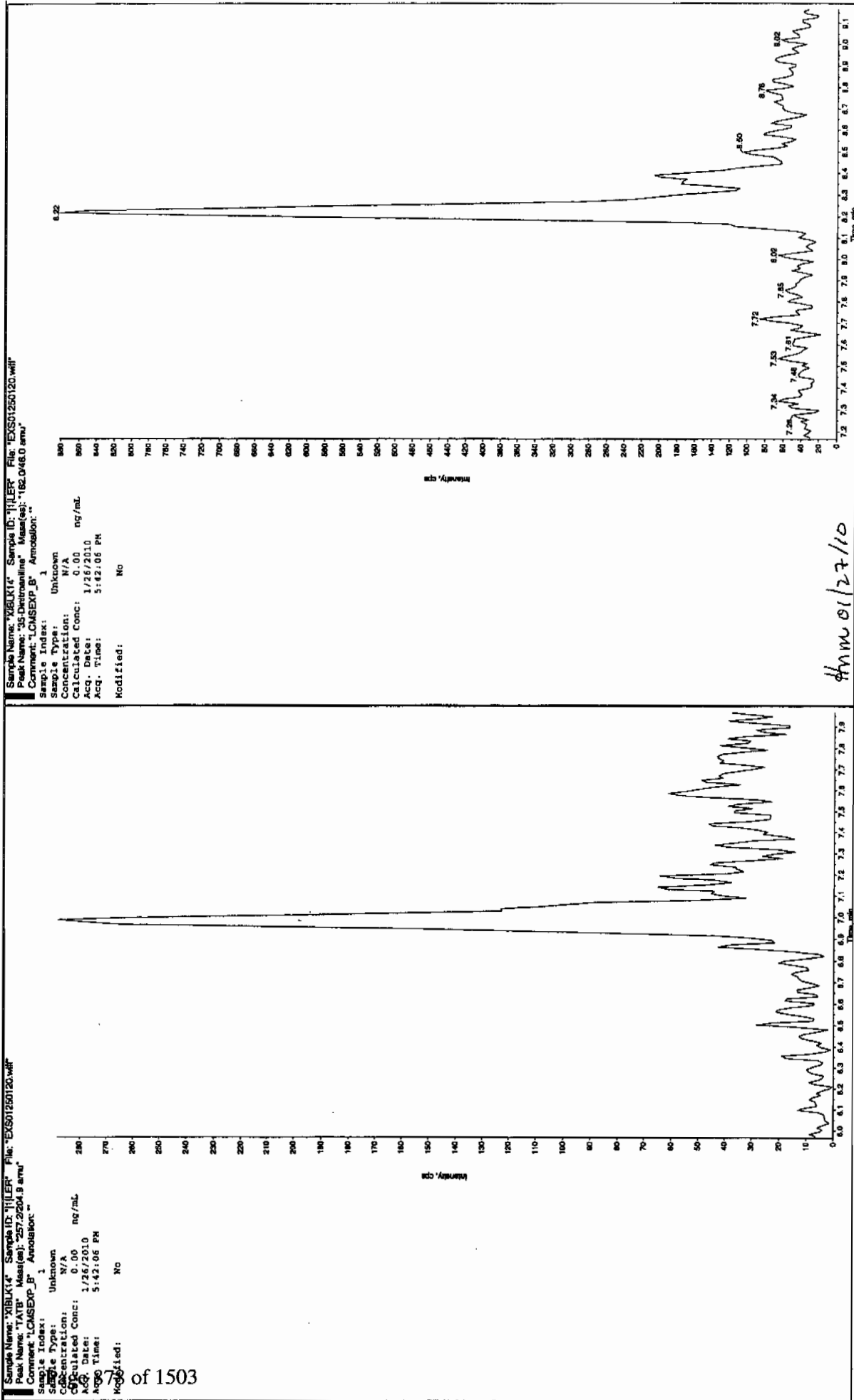
GEL Data File: EXS01250120.wiff

Instrument ID: LCMSMS

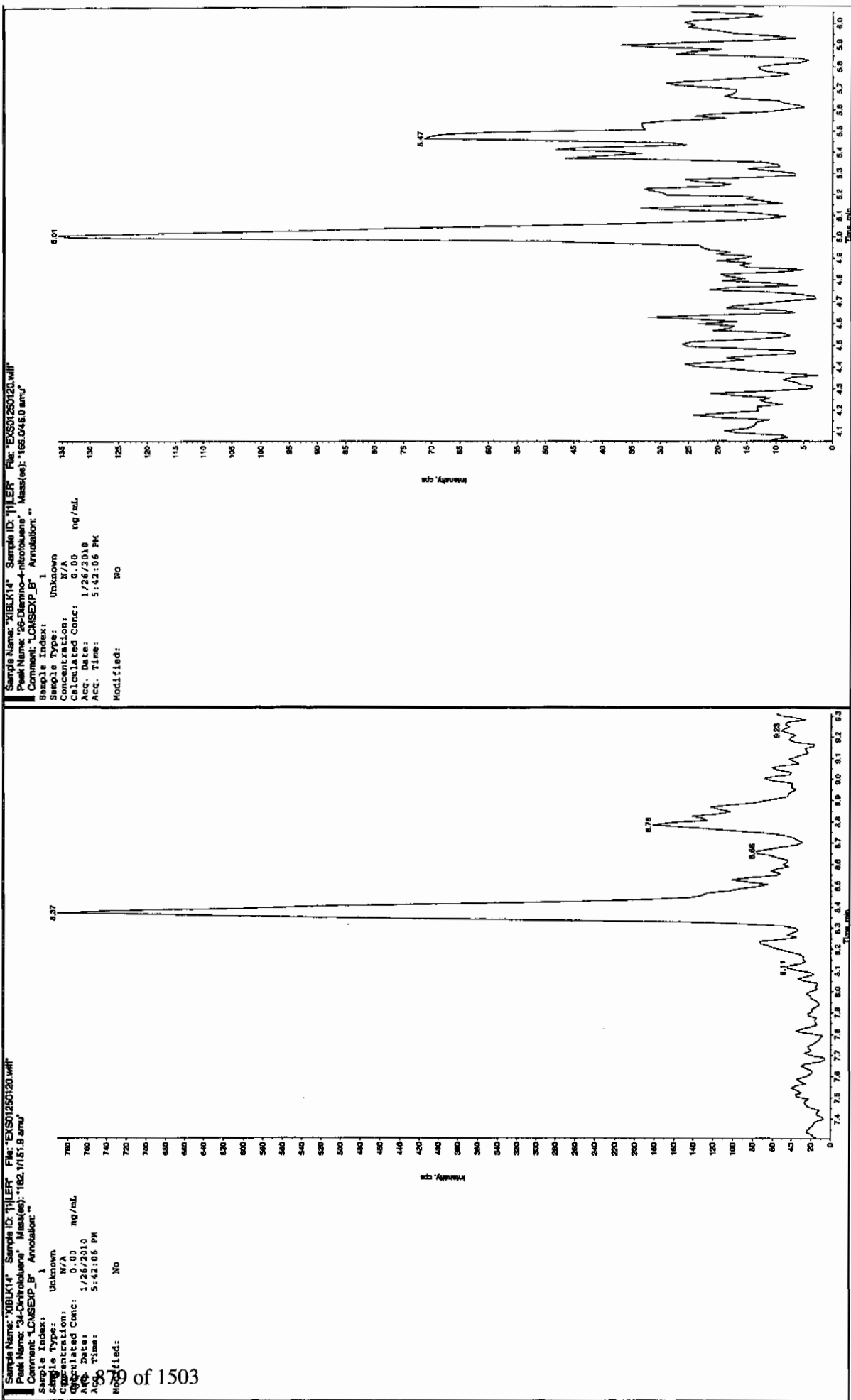
Column: Phenomenex Ultracarb 5u ODS(20)

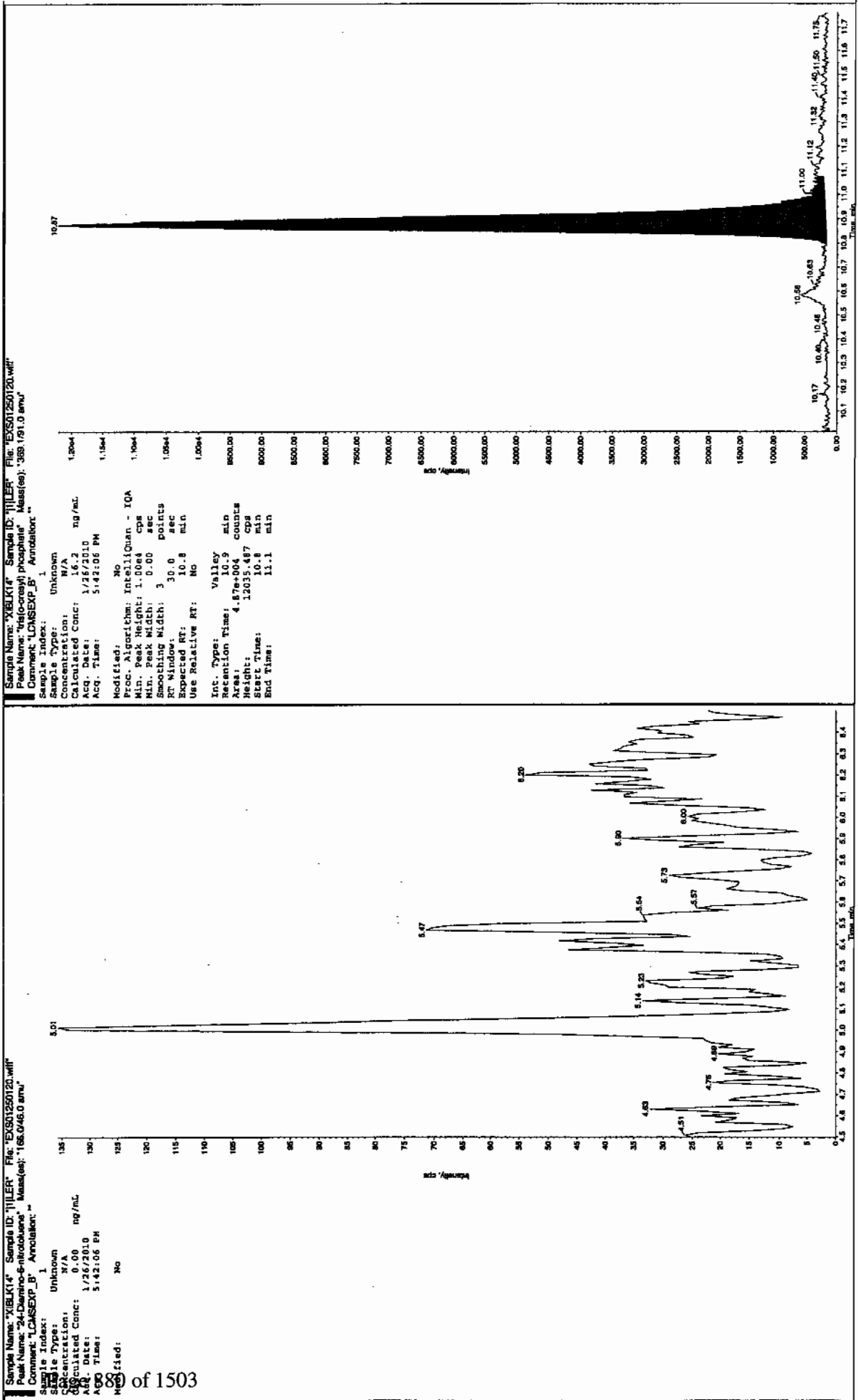
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.2
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Law 1/27/10



Am 01/27/10





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK15

Analysis Date: 26-JAN-10 21:06

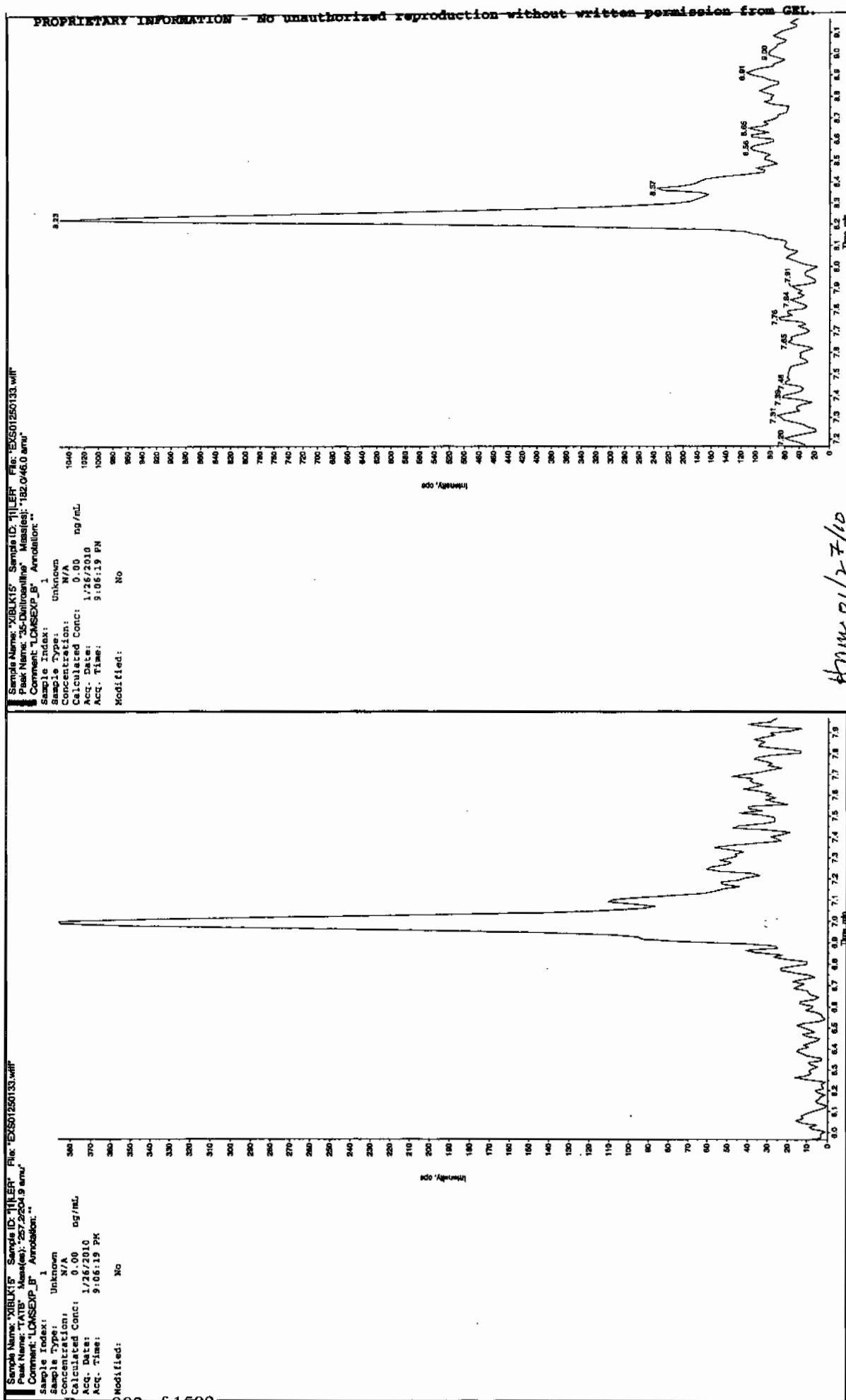
GEL Data File: EXS01250133.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	17.1
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

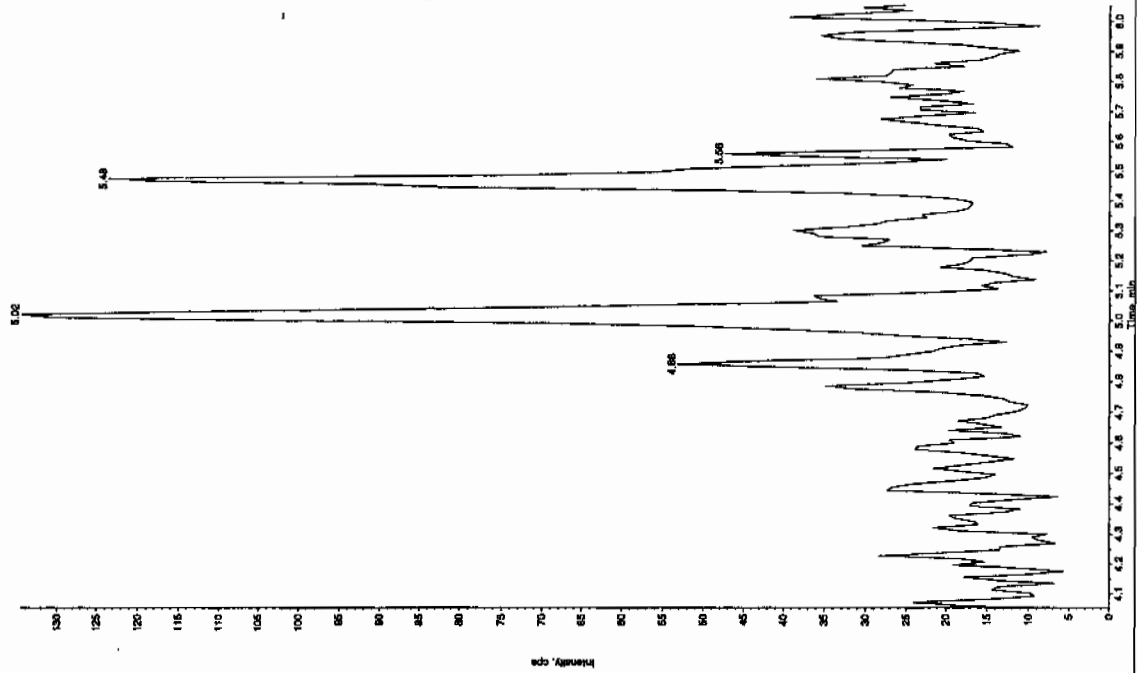
See 1/27/10



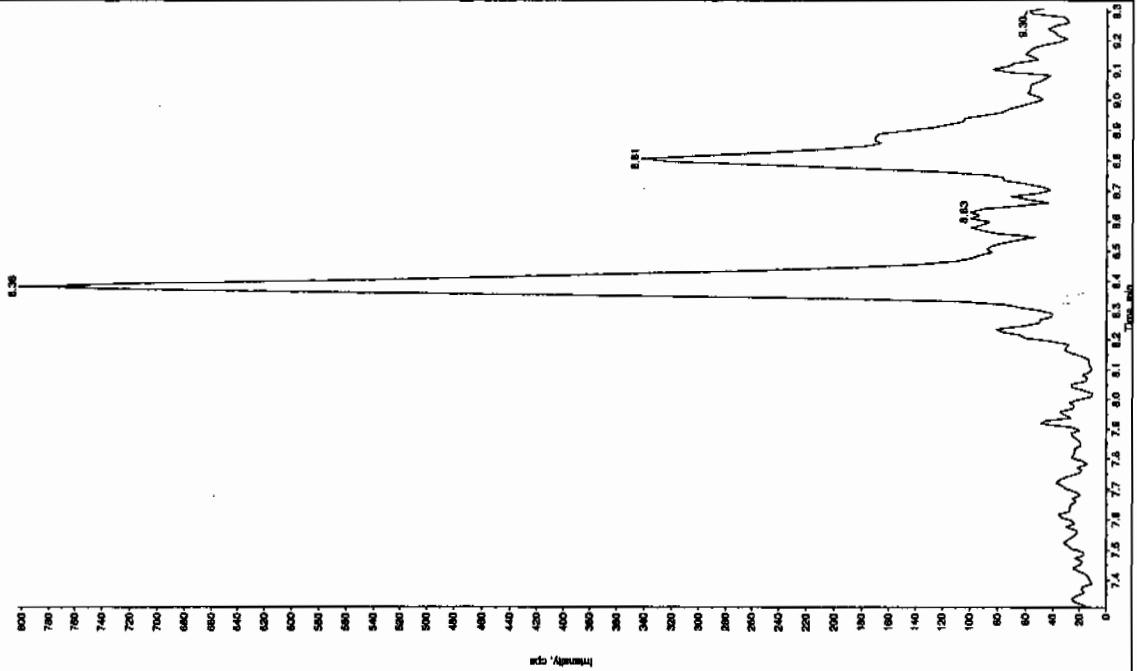
See 1/27/10

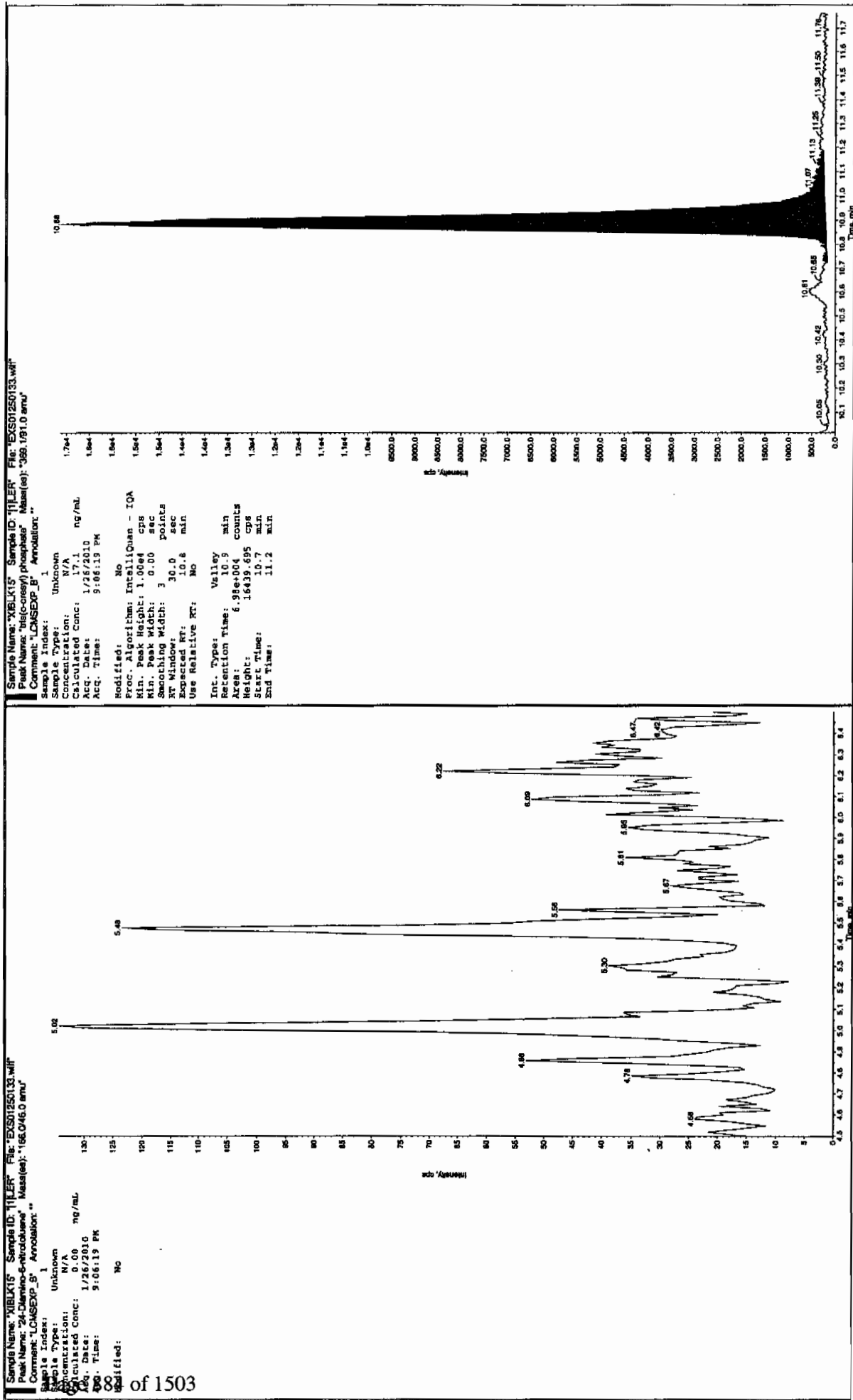
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XBLX15" Sample ID: "111ER" File: "EXS01250133.wif"
 Peak Name: "28-Dinitro-4-nitrofluorene" 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: 1/28/2010
 Acq. Time: 9:08:19 PM
 Modified: No



Sample Name: "XBLX15" Sample ID: "111ER" File: "EXS01250133.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.151.9 amu"
 Comment: "LCMSEXP_B" Annotation: "
 Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/28/2010
 Acq. Time: 9:08:19 PM
 Modified: No





4A

Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1287

Lab Code: GEL

Lab Sample ID: XIBLK16

Analysis Date: 27-JAN-10 00:14

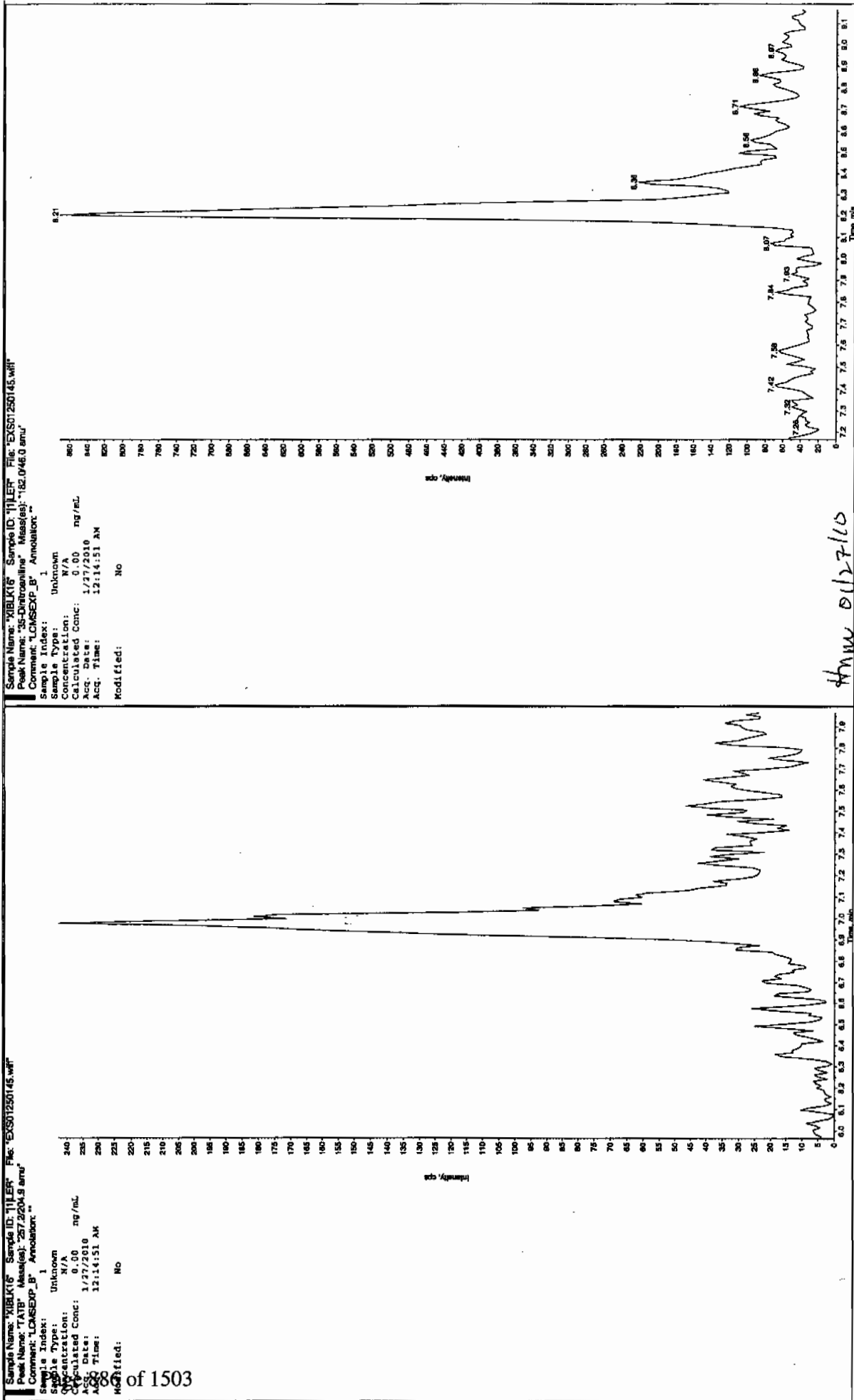
GEL Data File: EXS01250145.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	16.3
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

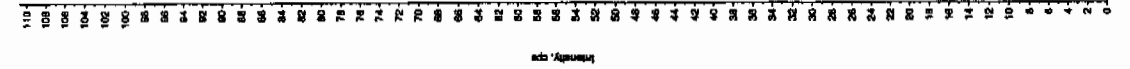
cler 1127110



thru 0127110

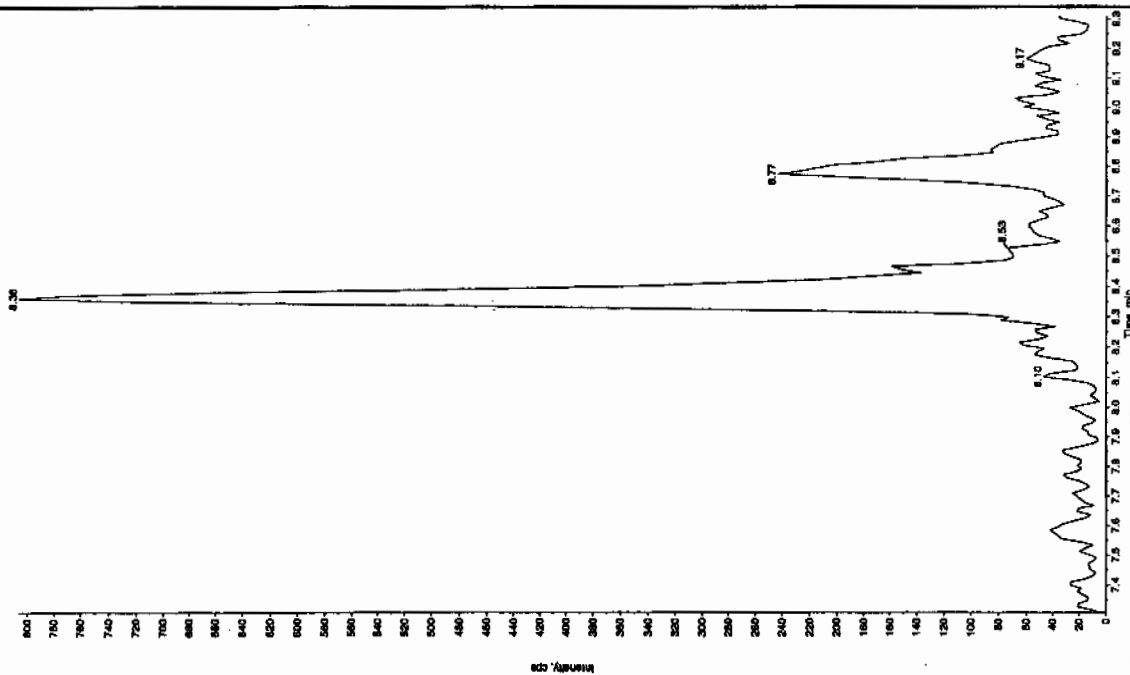
Sample Name: "XBLK16" Sample ID: "111ER" File: "EXS01280145.wif"
 Peak Name: "28-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_B" Annotation: ""

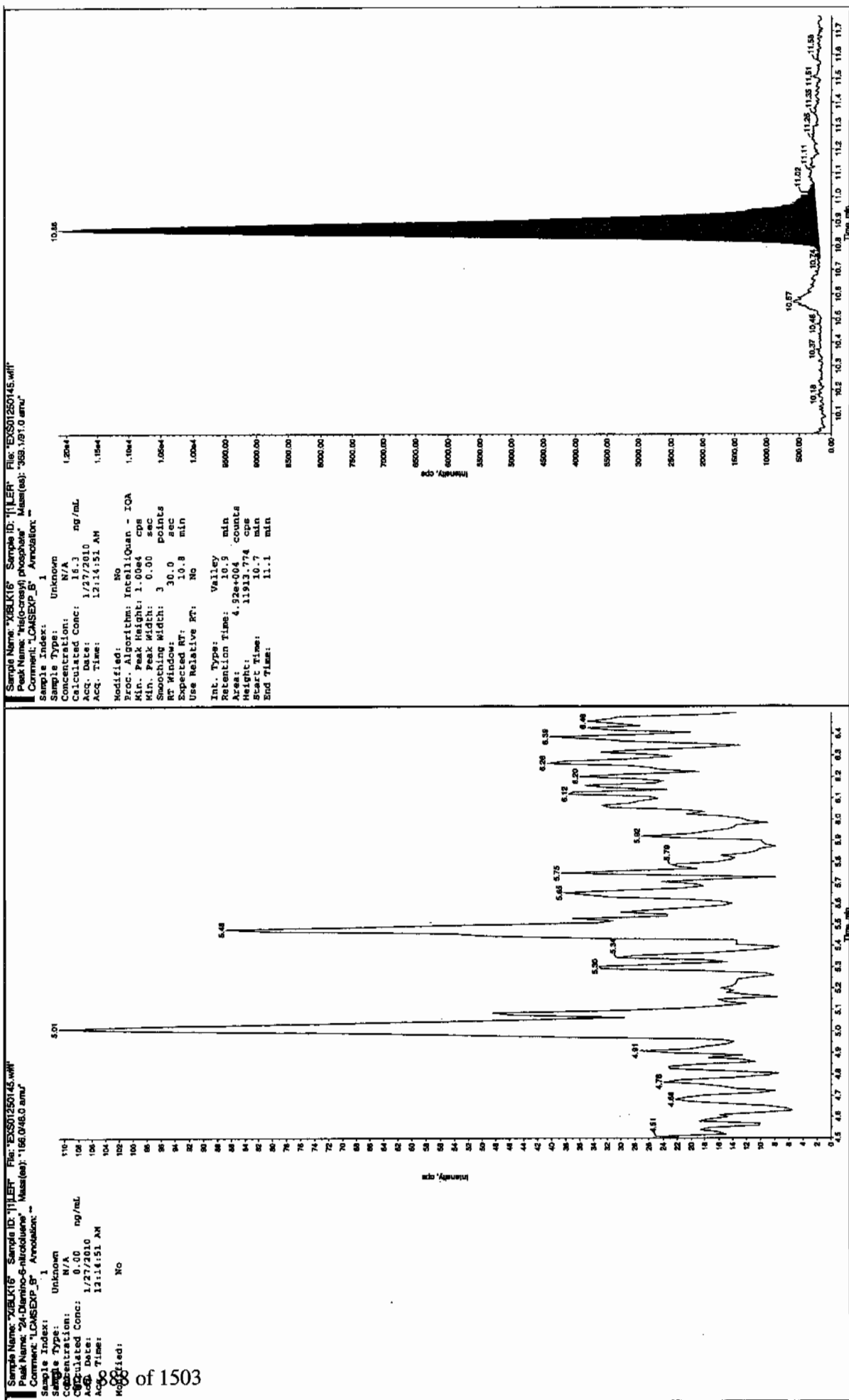
Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/27/2010
 Acq. Time: 12:14:51 AM
 Modified: No



Sample Name: "XBLK16" Sample ID: "111ER" File: "EXS01280145.wif"
 Peak Name: "34-Nitrofluorene" Mass(es): "182.151.9 amu"
 Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/27/2010
 Acq. Time: 12:14:51 AM
 Modified: No





Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

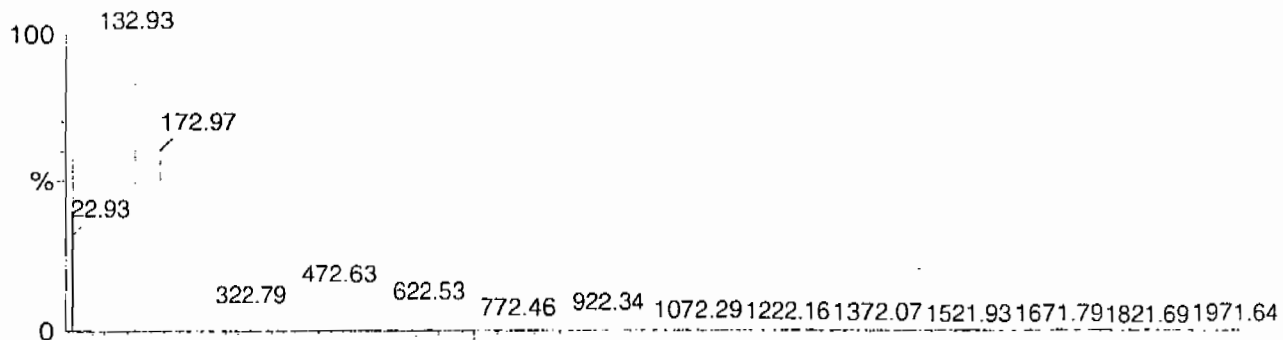
Calibration Report - MS1 Static

Page 1 of 1

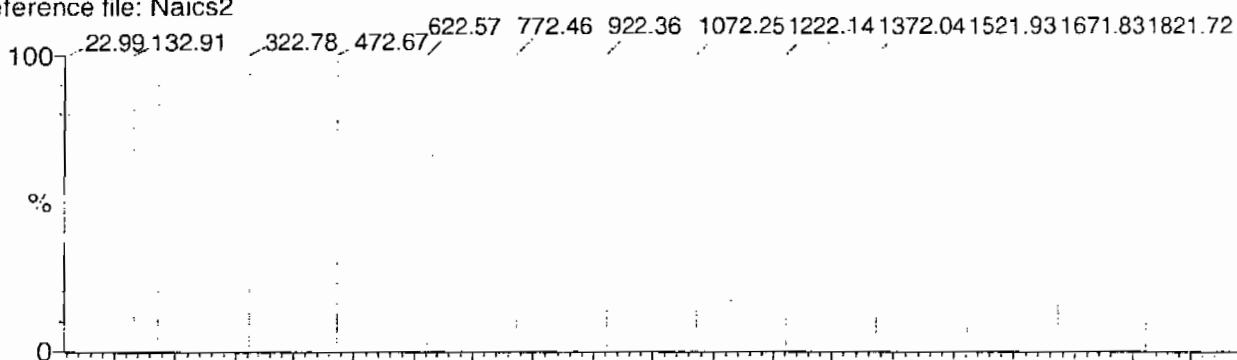
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

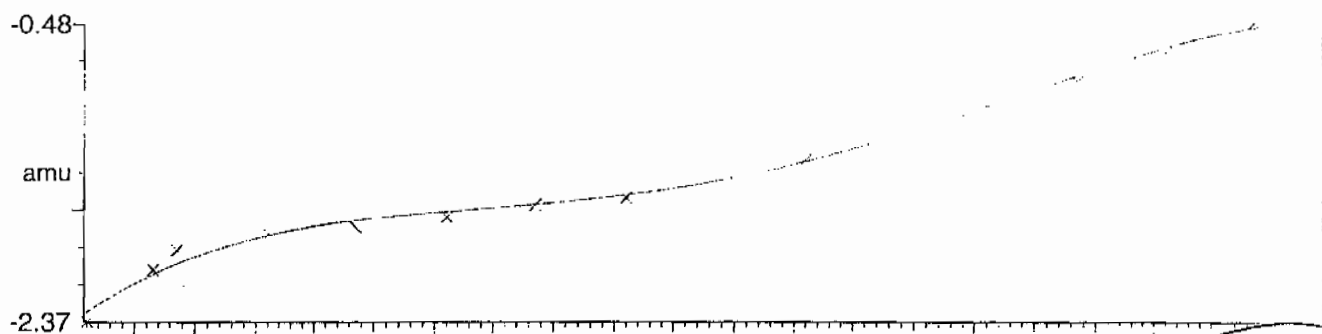
15 matches of 15 tested references



Reference file: Naics2

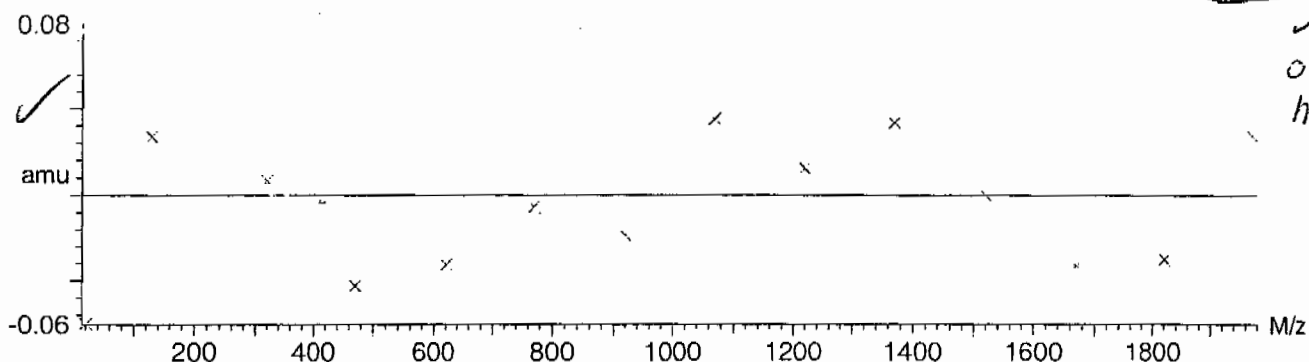


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-1.673470 \times 10^{-9} \pm 0.036953$



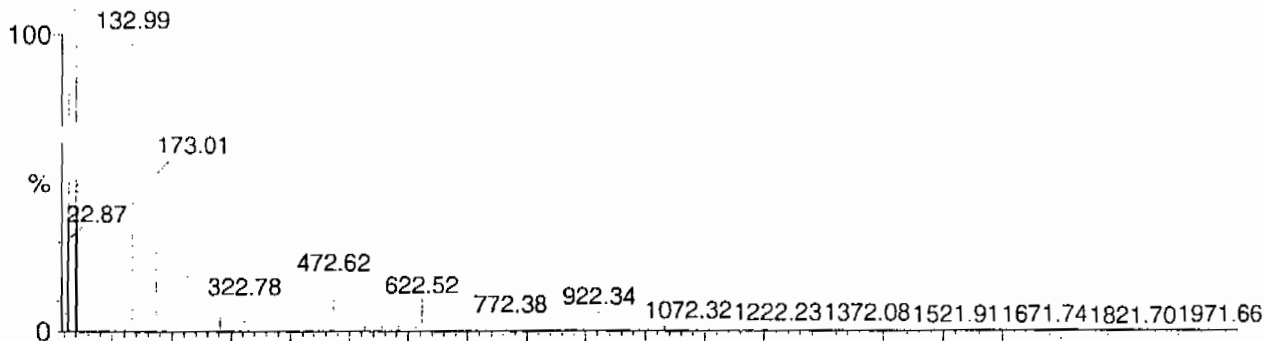
Calibration Report - MS1 Scanning

Page 1 of 1

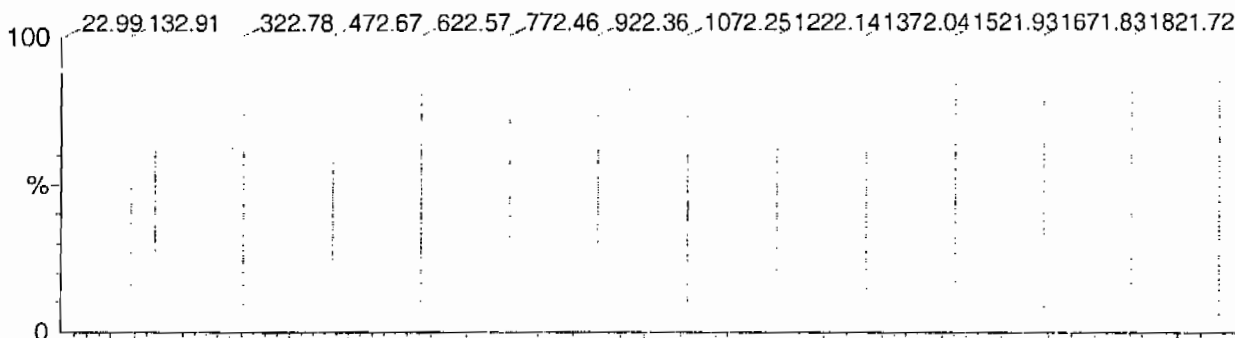
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

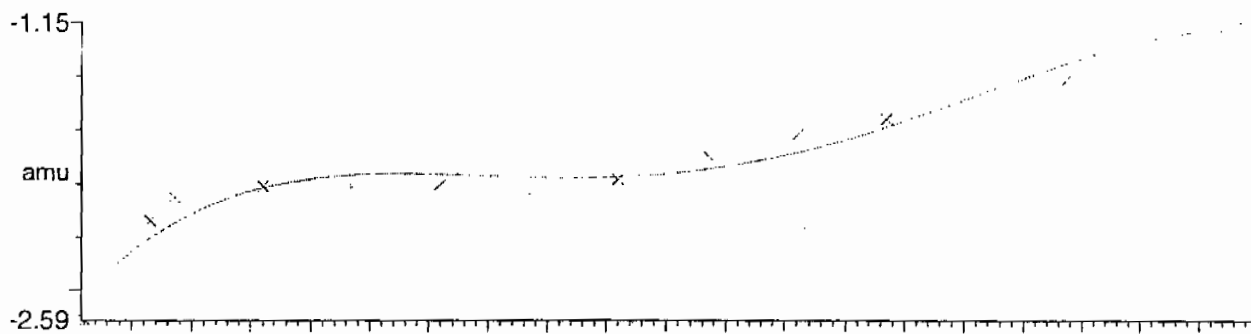
15 matches of 15 tested references



Reference file: Naics2

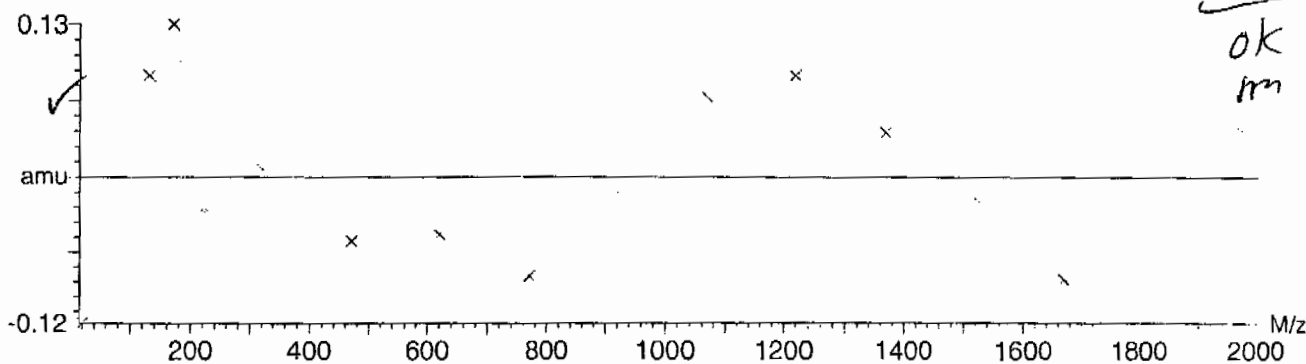


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-5.432715 \times 10^{-9} \pm 0.069858$



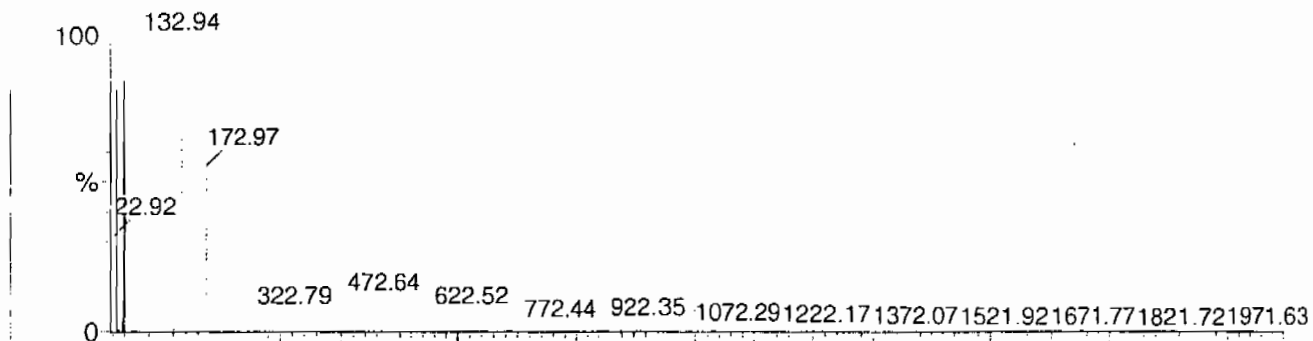
Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

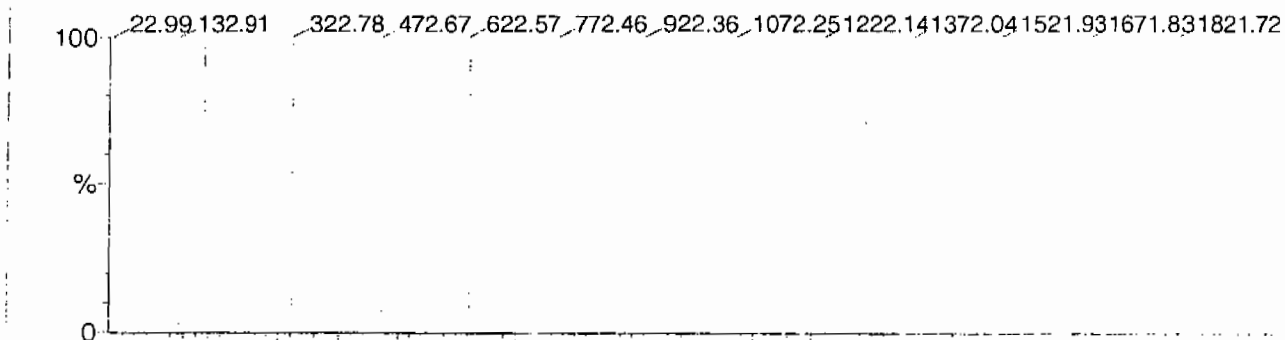
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

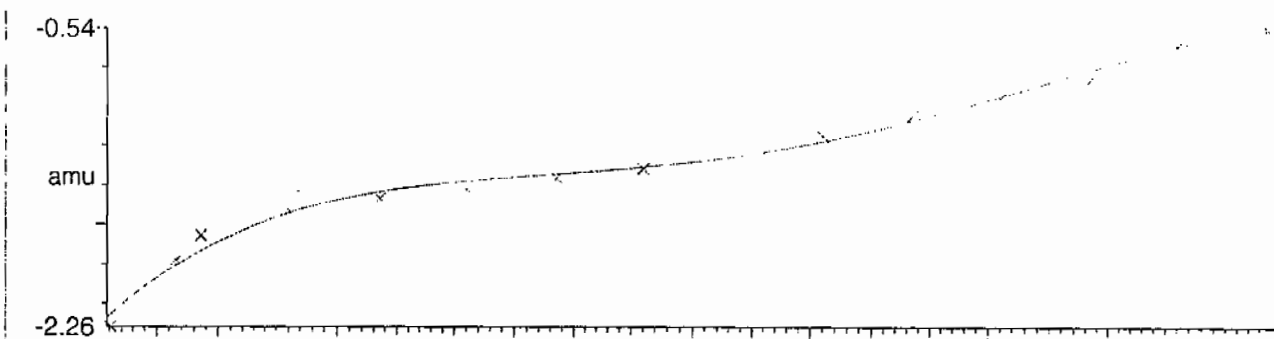
15 matches of 15 tested references



Reference file: Naics2

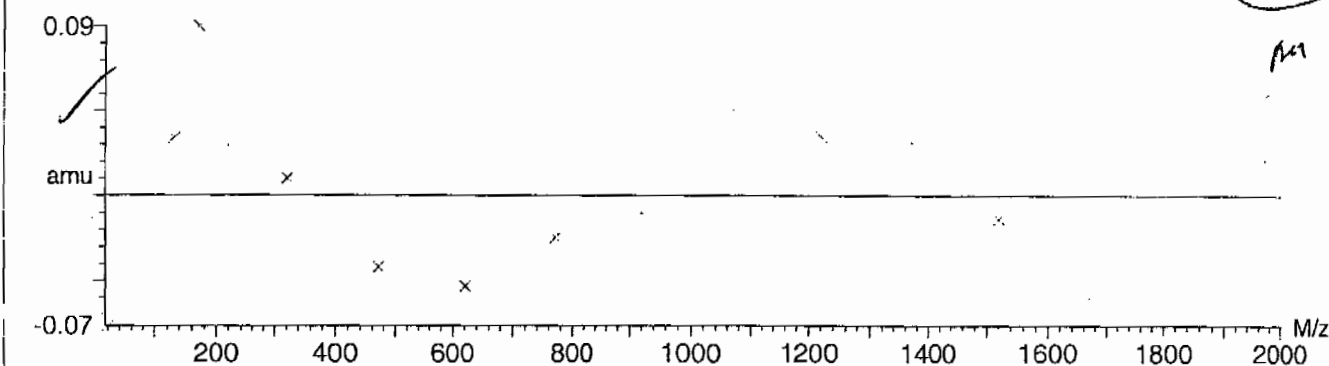


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $3.486639 \times 10^{-9} \pm 0.040487$



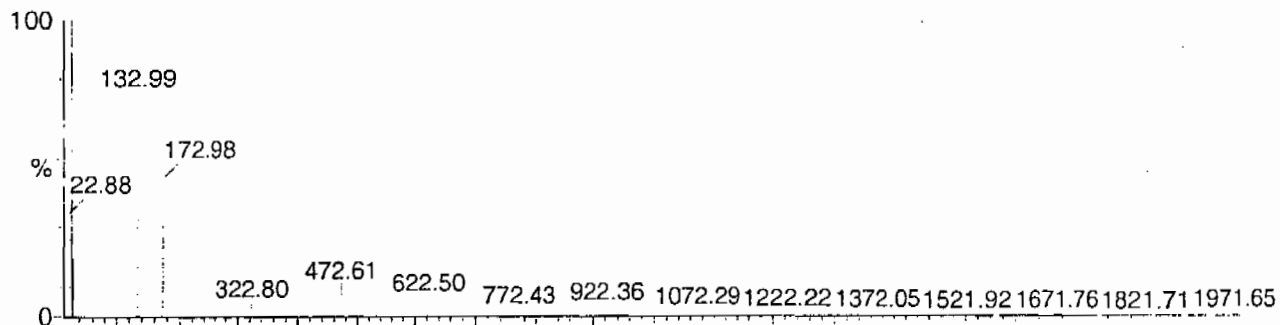
Calibration Report - MS2 Static

Page 1 of 1

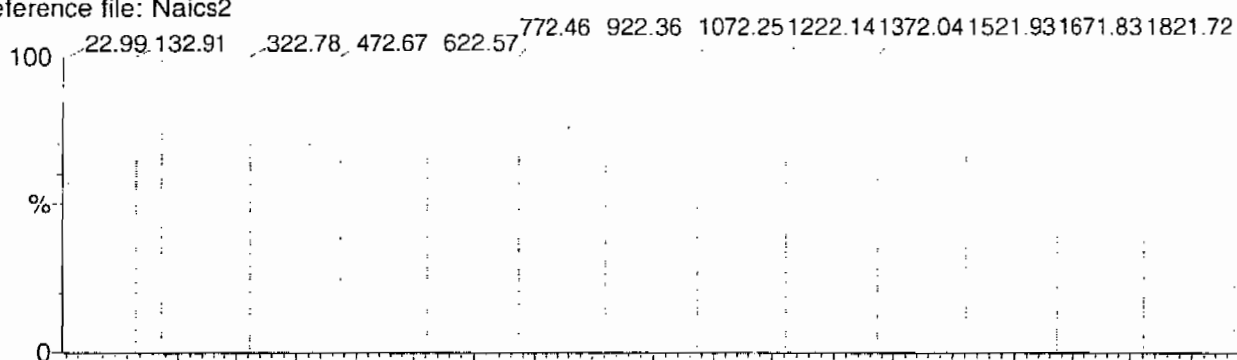
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

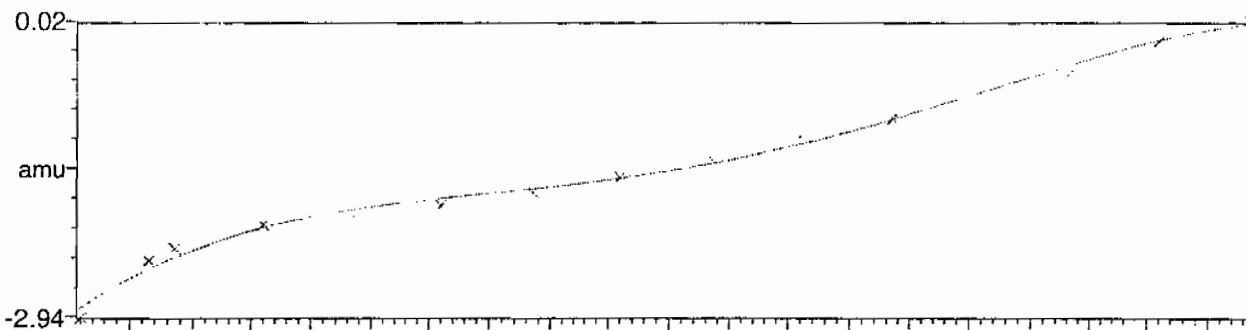
15 matches of 15 tested references



Reference file: Naics2

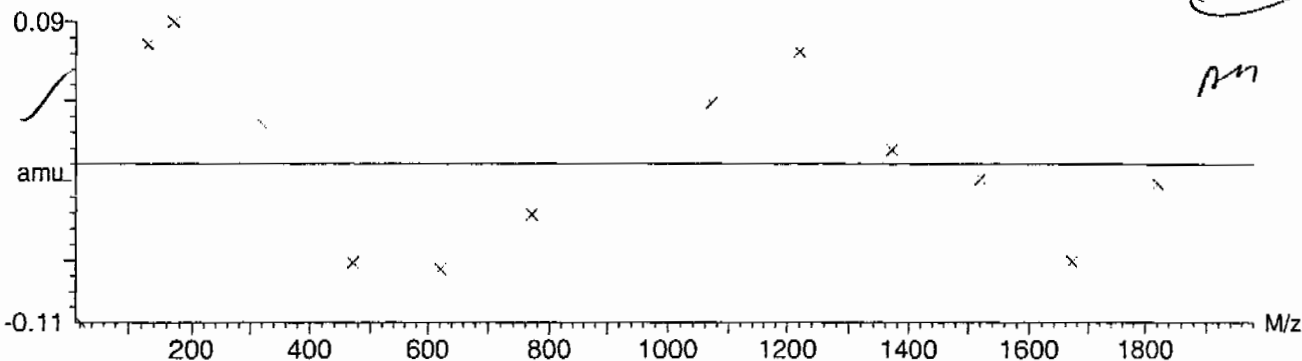


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $2.048910 \times 10^{-9} \pm 0.057803$



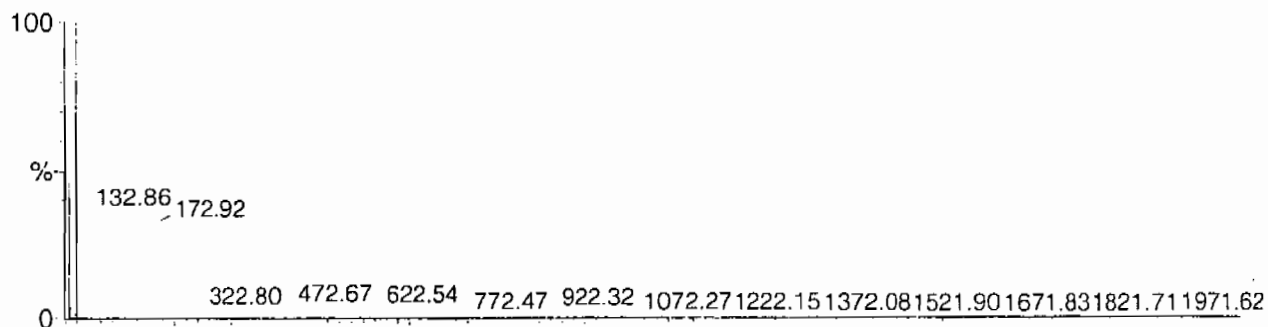
Calibration Report - MS2 Scanning

Page 1 of 1

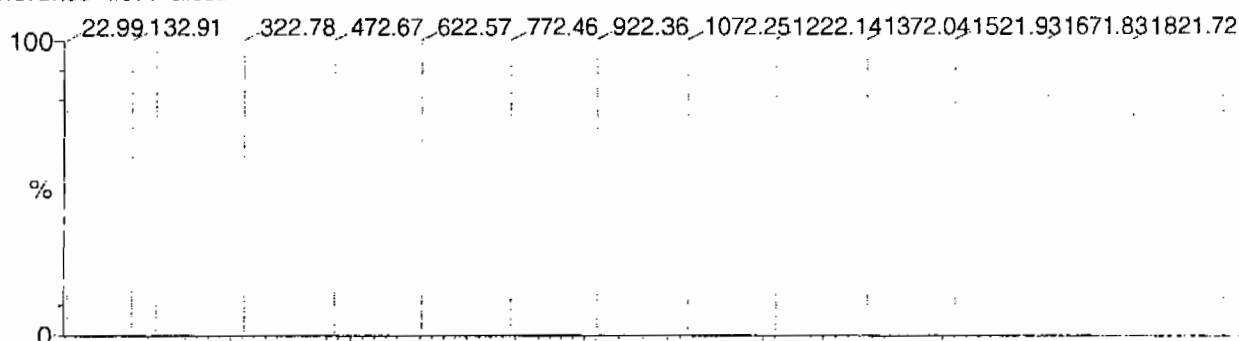
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

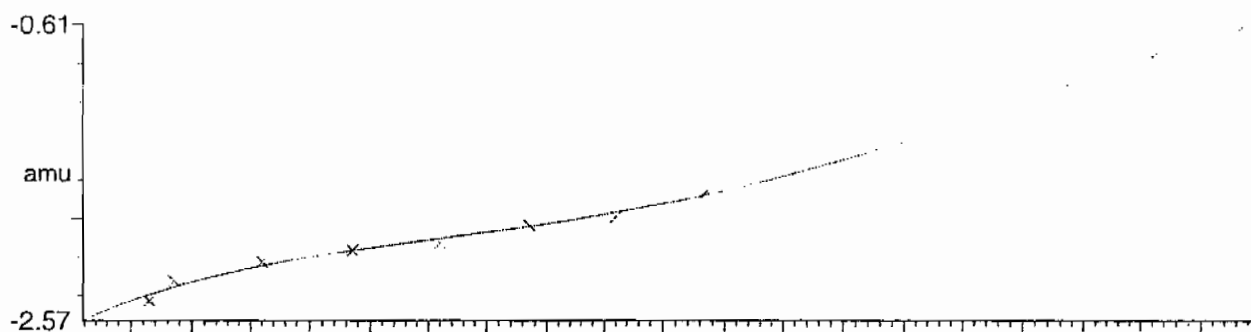
14 matches of 15 tested references



Reference file: Naics2

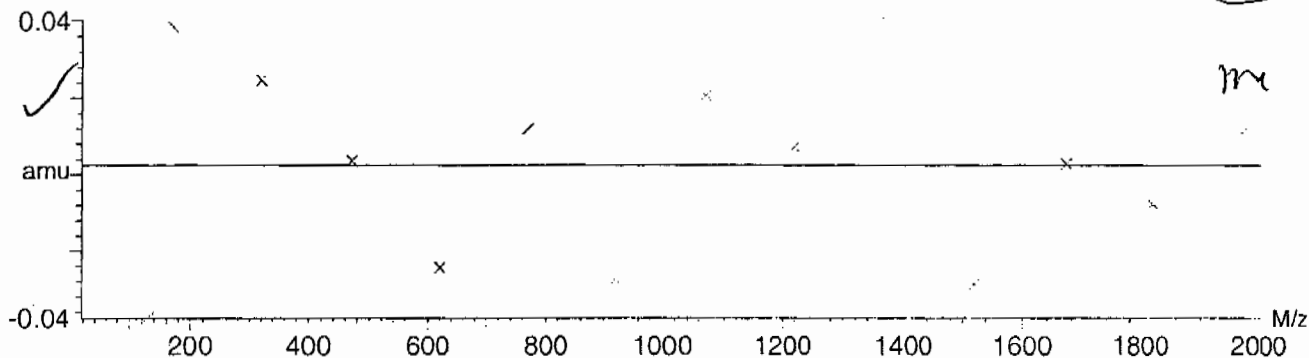


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-2.623502e-9 \pm 0.025622$



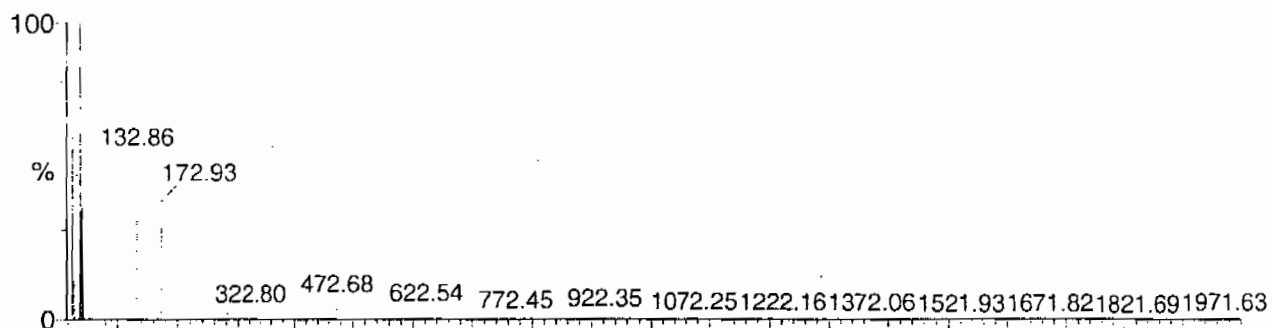
Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

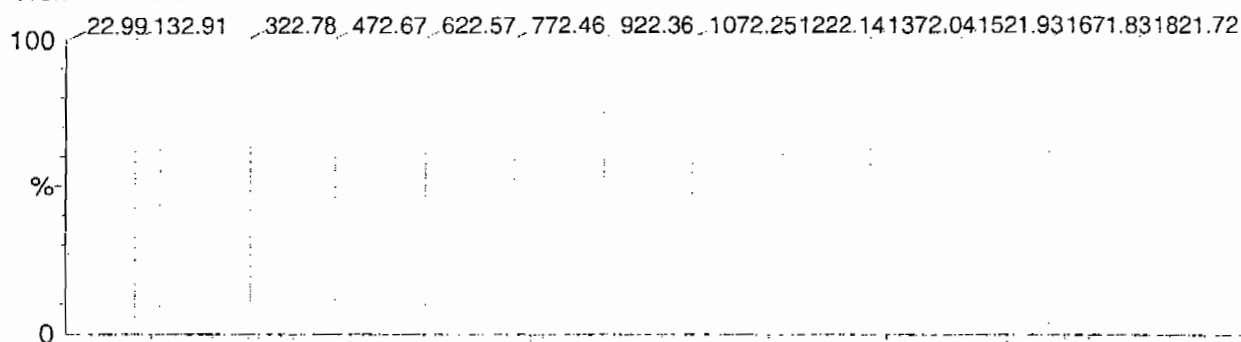
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

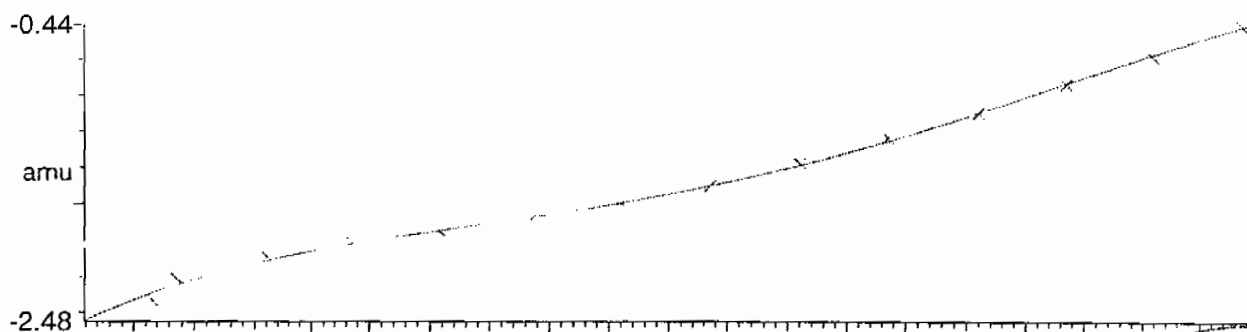
14 matches of 15 tested references



Reference file: Naics2

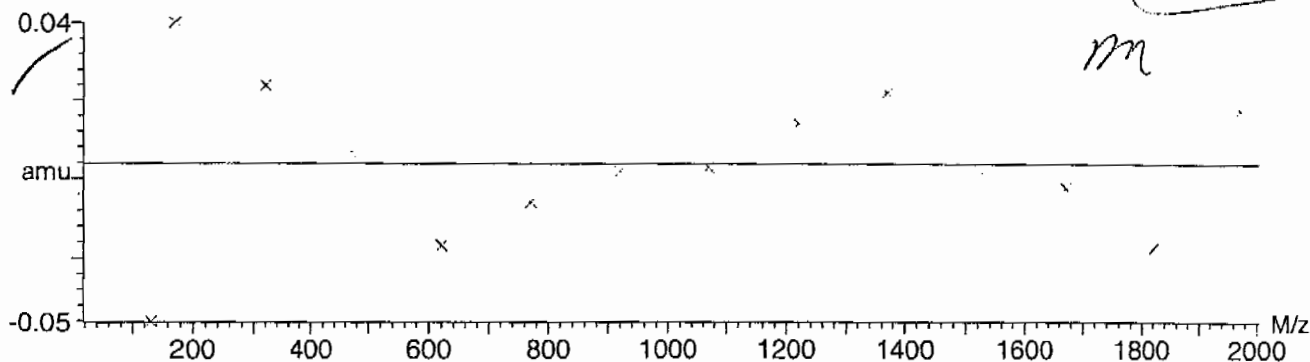


Mass difference (Raw - Ref mass)



Residuals

Mean residual = $-6.785350 \times 10^{-9} \pm 0.023134$

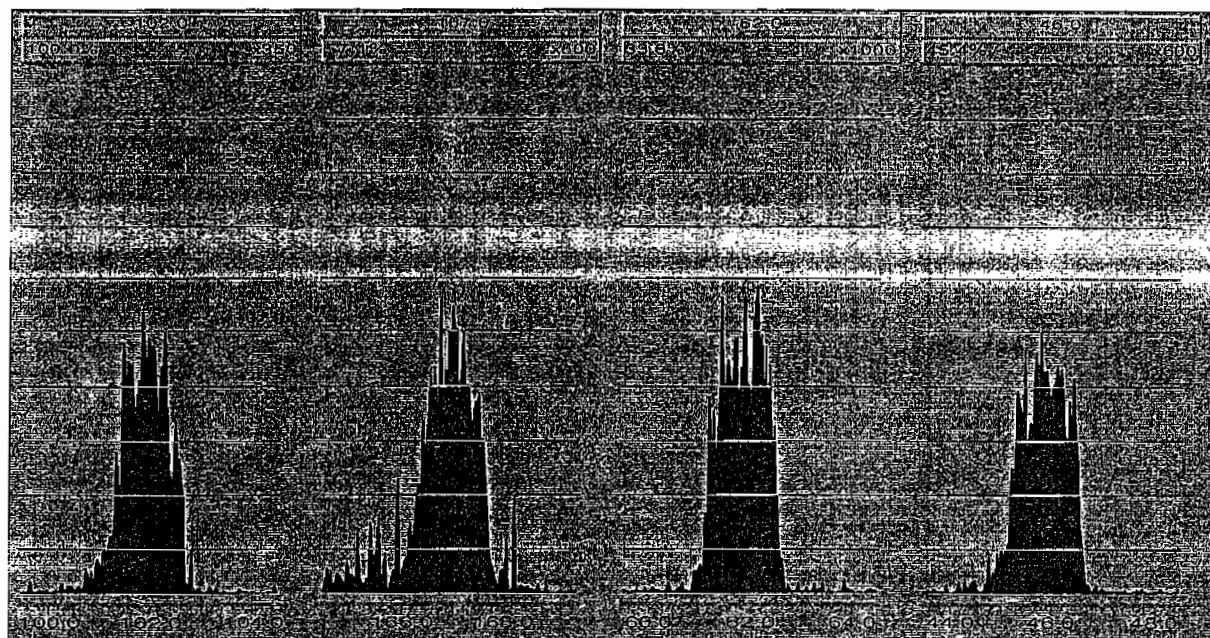


Quattro Micro Tune Parameters

Page 1

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.ipr

Printed : Mon Jan 25 11:18:26 2010



High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

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) #
			2968.4	11.902	16298.333	17.149
Upper Limit			3858.92	12.402	21187.8329	17.649
Lower Limit			2077.88	11.402	11408.8331	16.649
MB for batch 942338	29-jan-10 04:22	EXP0125182a	2704.31	11.892	14712.1	17.158
LCS for batch 942338	29-jan-10 04:52	EXP0125183a	2857.91	11.895	16103	17.161
RE15-10-7163	29-jan-10 07:49	EXP0125189a	2639.43	11.894	14105.5	17.161
RE15-10-7163(244923001MS)	29-jan-10 08:18	EXP0125190a	3015.8	11.899	16600.1	17.161
RE15-10-7163(244923001MSD)	29-jan-10 08:48	EXP0125191a	2802.85	11.894	15632.1	17.16
RE15-10-7162	29-jan-10 10:46	EXP0125195a	2702.64	11.905	15066.7	17.177
RE15-10-7161	29-jan-10 11:15	EXP0125196a	2868.49	11.894	15619.3	17.161
RE15-10-7160	29-jan-10 11:45	EXP0125197a	2775.33	11.897	13665.3	17.158
RE15-10-7174	29-jan-10 12:14	EXP0125198a	2601.73	11.894	13991.2	17.16
RE15-10-7173	29-jan-10 12:44	EXP0125199a	2686.04	11.898	14584.3	17.16
RE15-10-7175	29-jan-10 13:13	EXP0125200a	2743.44	11.895	15374.5	17.139
RE15-10-7172	29-jan-10 13:43	EXP0125201a	2803.87	11.895	15412.8	17.157
RE15-10-7218	29-jan-10 14:12	EXP0125202a	2896.08	11.921	15825.3	17.161
RE15-10-7223	29-jan-10 14:42	EXP0125203a	3093.07	11.895	14458.8	17.157

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: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923001

Sample Amount 2

Moisture: .66

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125189a

Date Analyzed: 29-JAN-10 07:49

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: Fri Jan 29 17:42:56 2010, Page 15 of 51

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125189a

Date: 29-Jan-2010

Time: 07:49:19

ID: 244923001

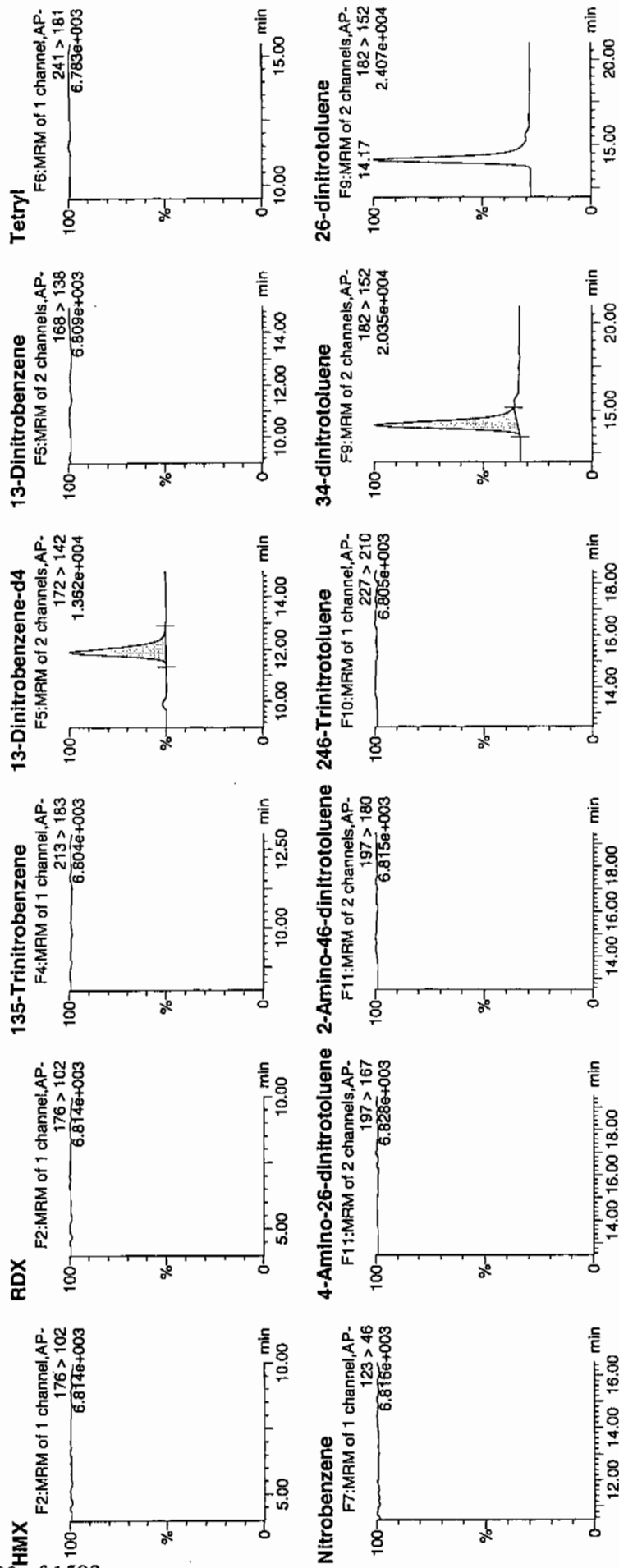
Vial: 3:2,B

1.677

1/30/10

WAV 942339 | 21 | 2020

900 of 1503



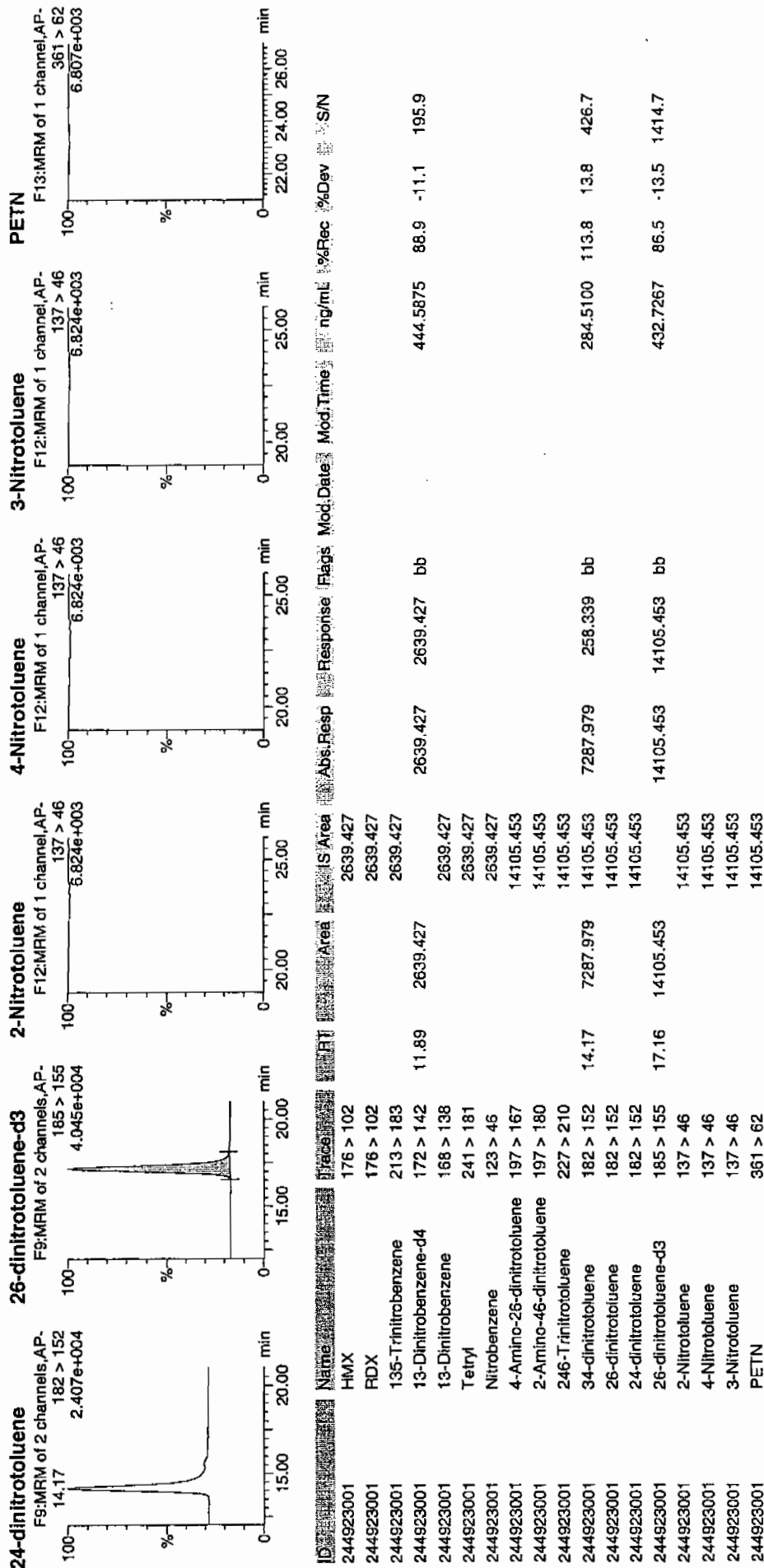
4/21/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 16 of 51

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7163

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923001

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250129.wiff

Date Analyzed: 26-JAN-10 20:03

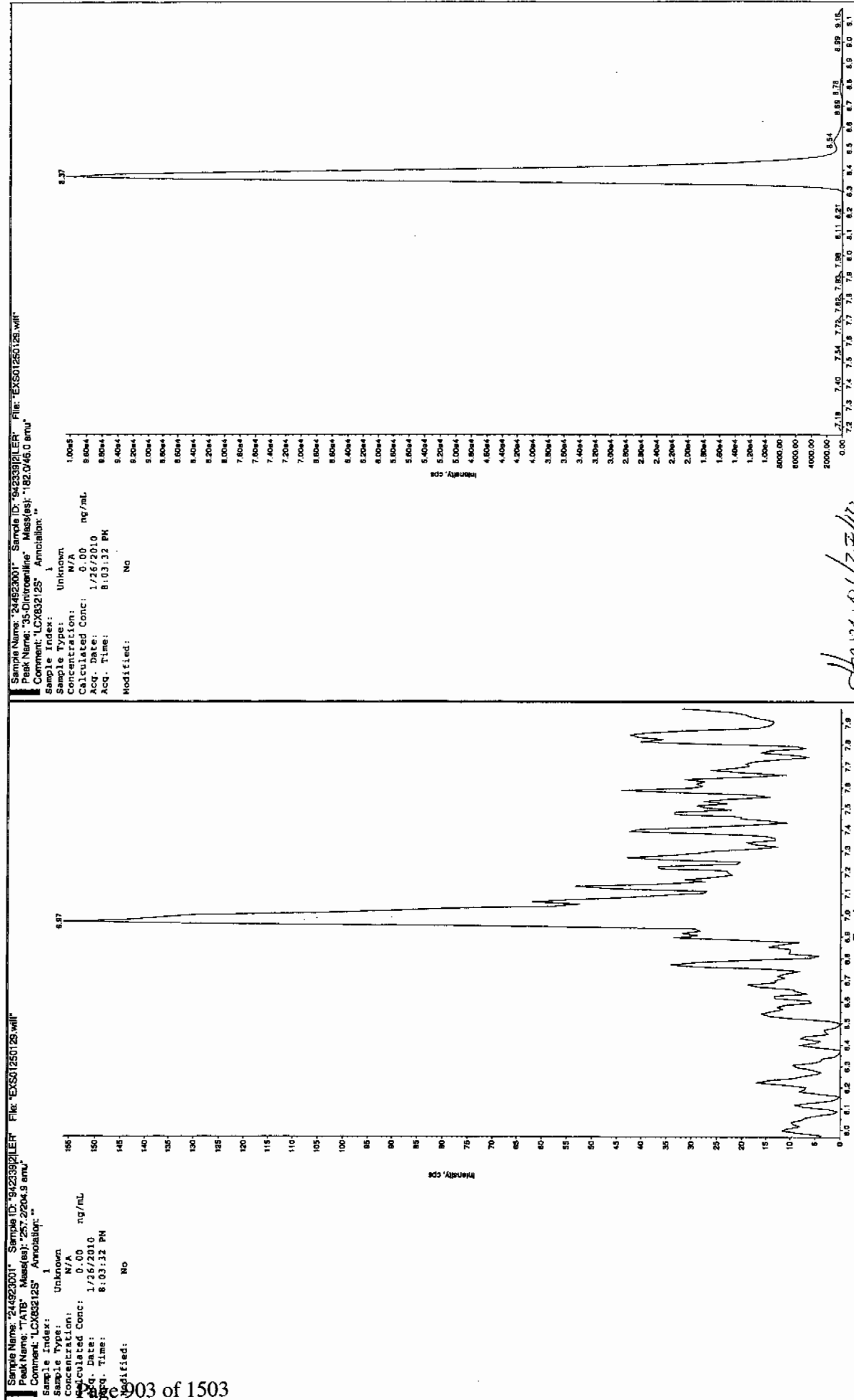
Units: ug/kg

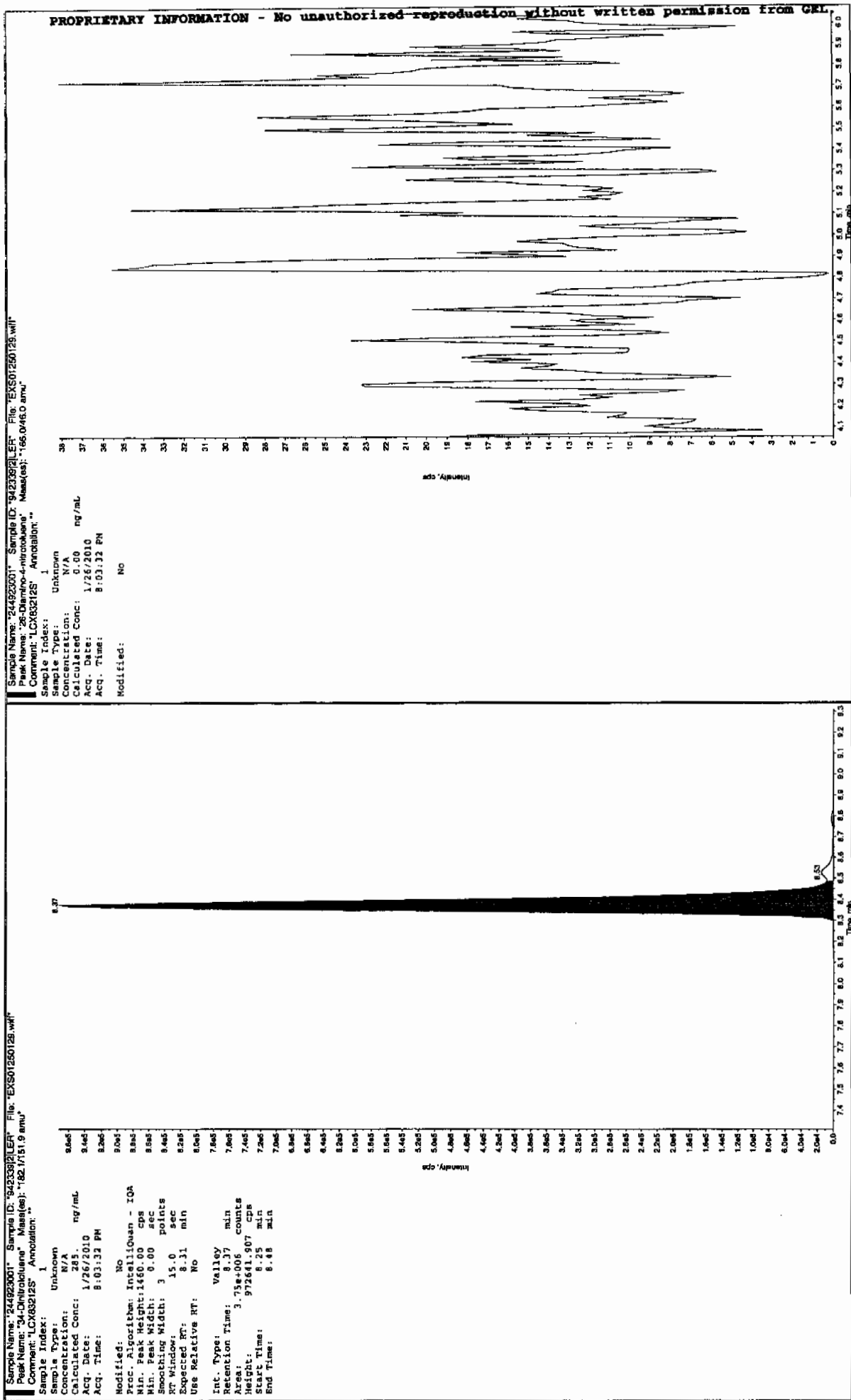
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

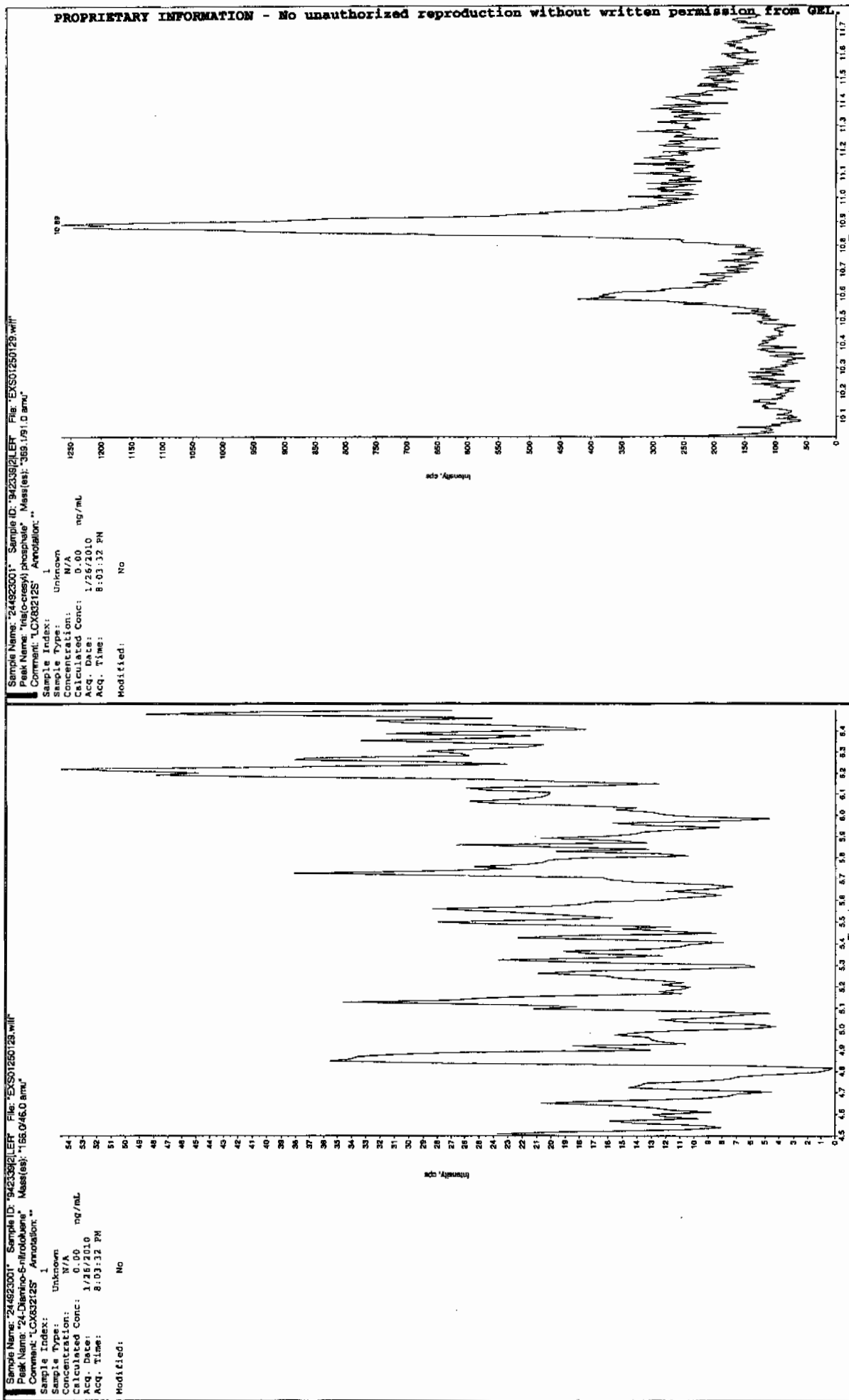
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

See 11/27/10





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7162

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923002

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125195a

Date Analyzed: 29-JAN-10 10:46

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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125195a

Date: 29-Jan-2010

Time: 10:46:15

ID: 244923002

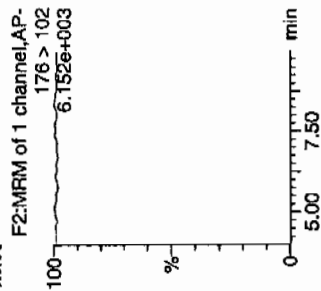
Vial: 3:2,E

not

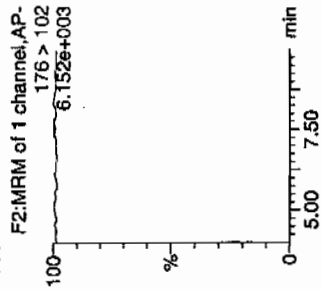
1/29/10

LAUW 942337 / 8023 / 21

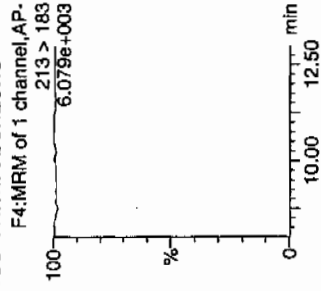
HMX



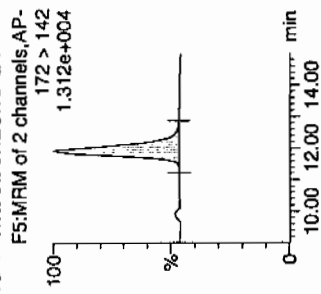
RDX



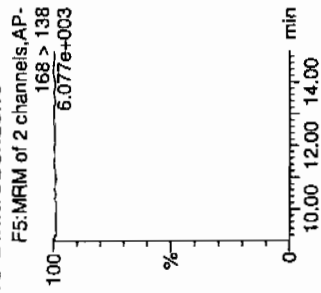
135-Trinitrobenzene



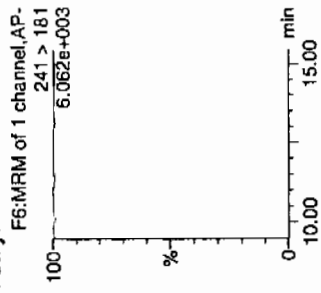
13-Dinitrobenzene-d4



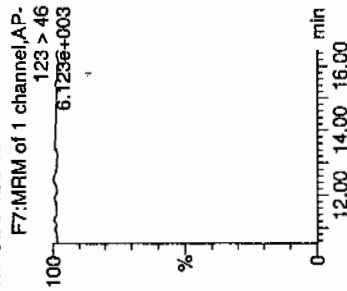
13-Dinitrobenzene



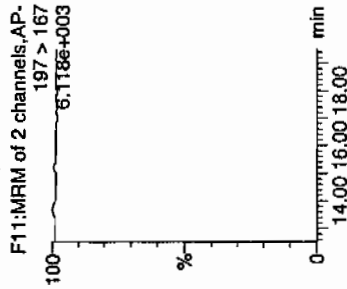
Tetryl



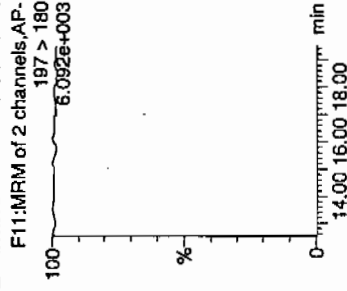
Nitrobenzene



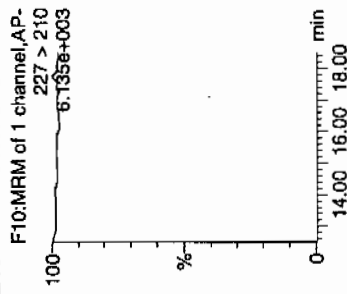
4-Amino-26-dinitrotoluene



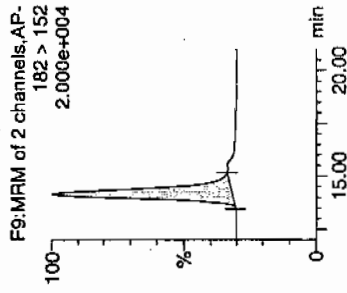
2-Amino-46-dinitrotoluene



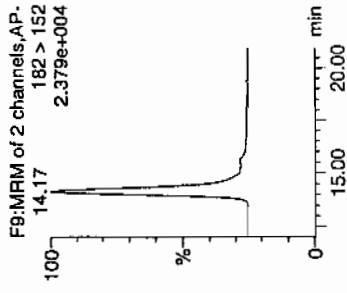
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



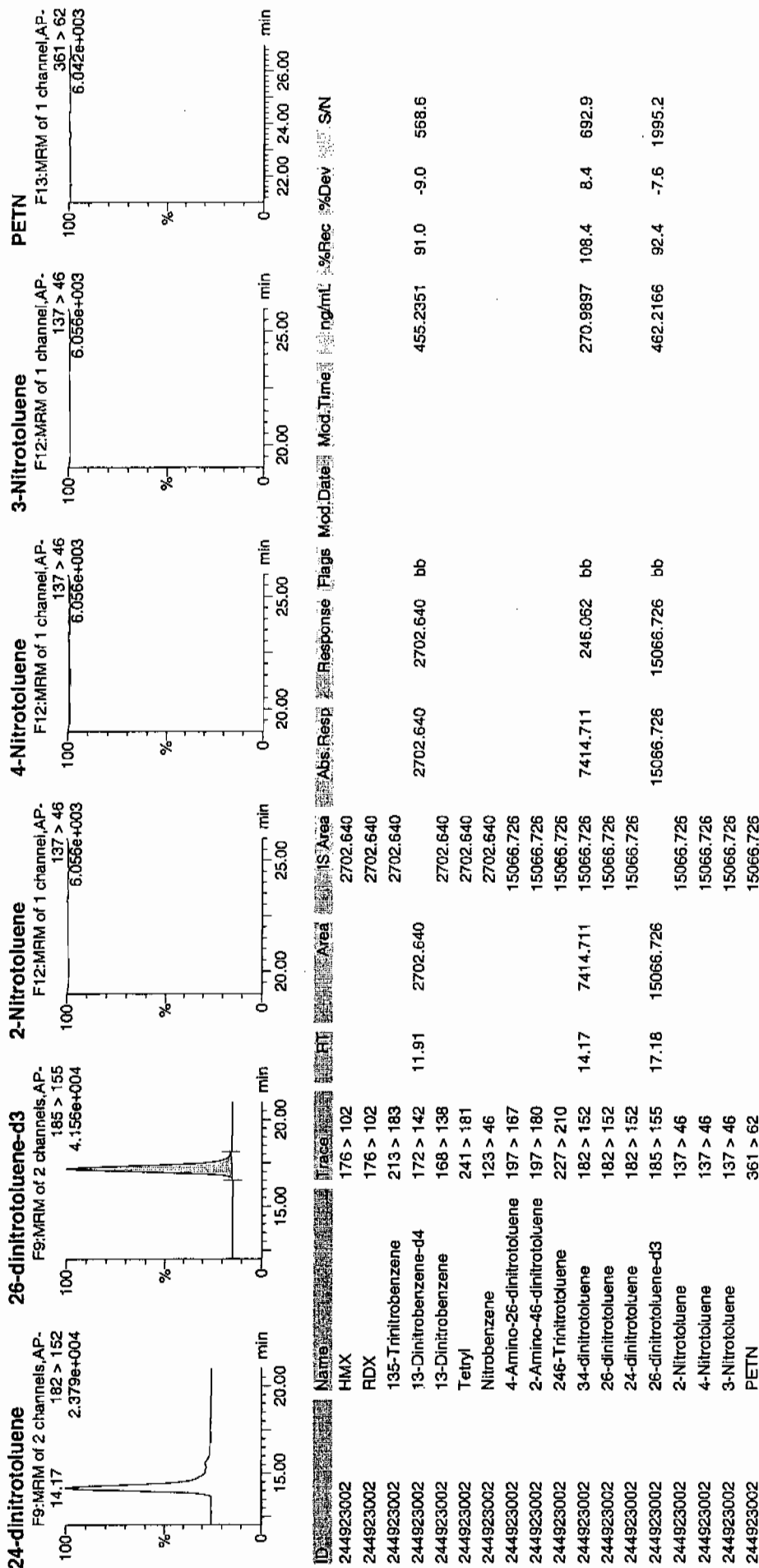
LAUW 91/21/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7162

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923002

Sample Amount 2

Moisture: 9.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250135.wiff

Date Analyzed: 26-JAN-10 21:37

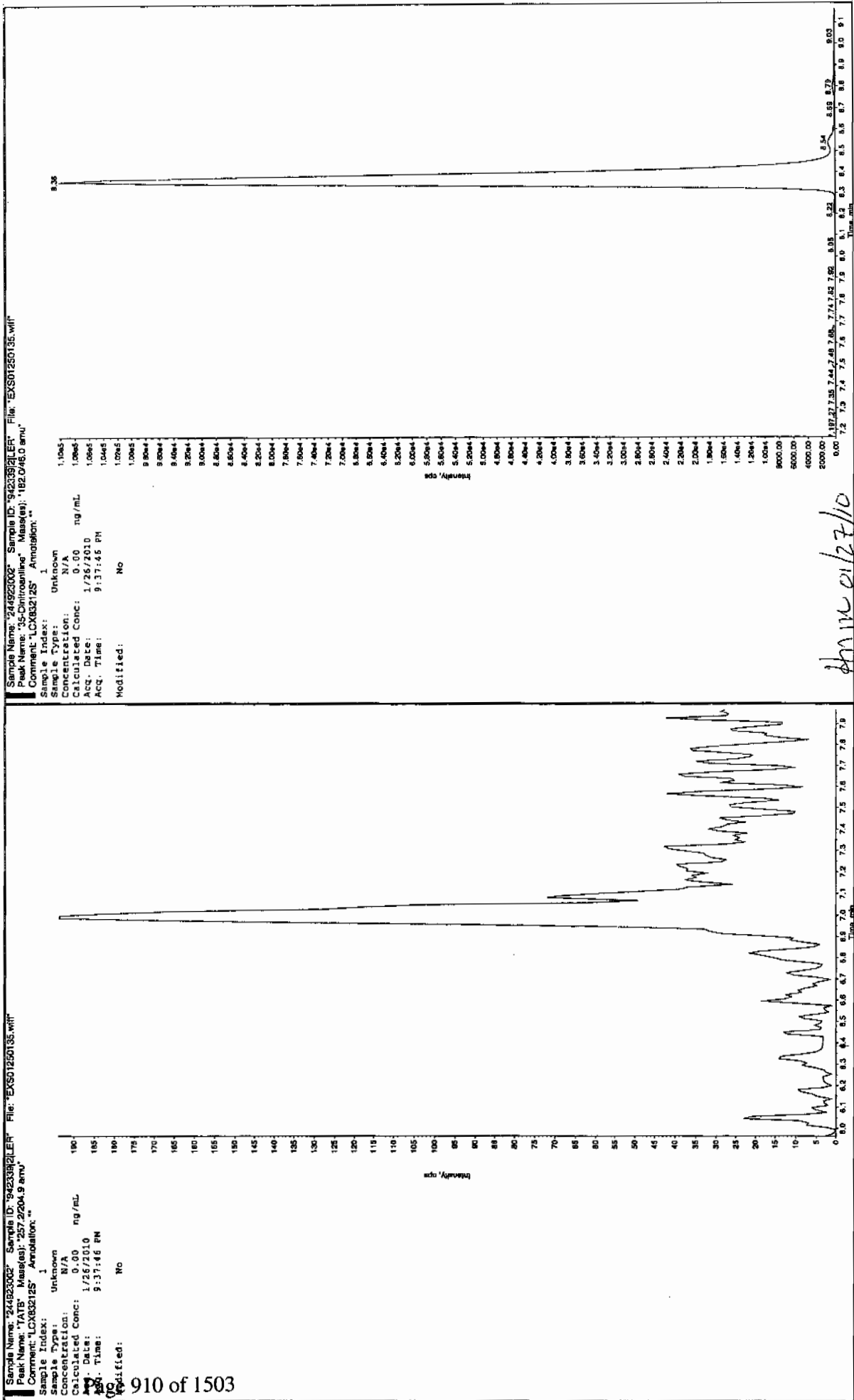
Units: ug/kg

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

*Concentration =

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

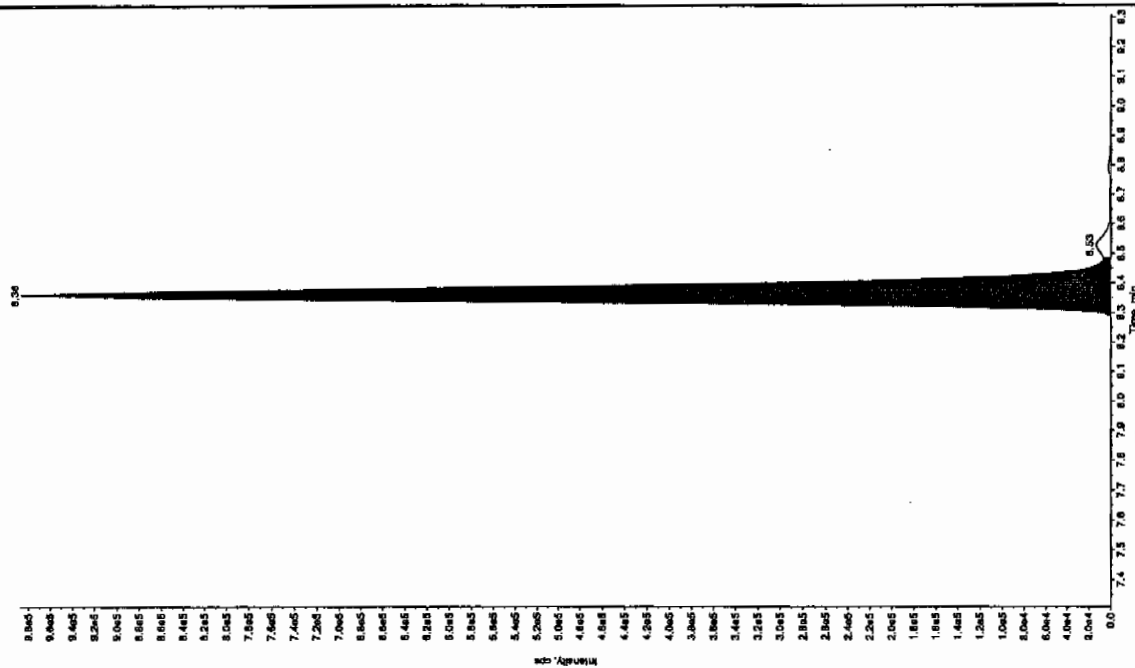
den 1/27/10



den 01/27/10

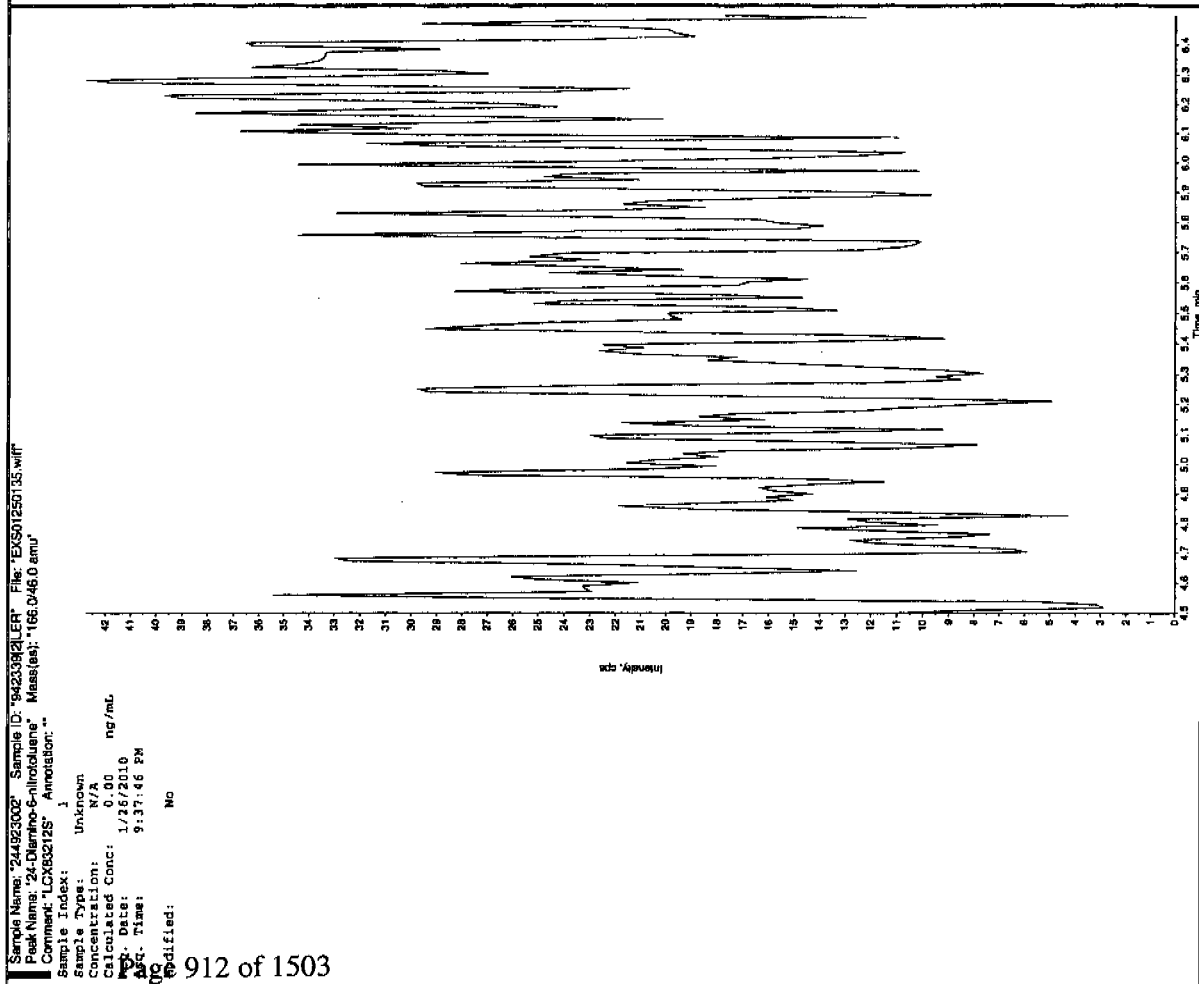
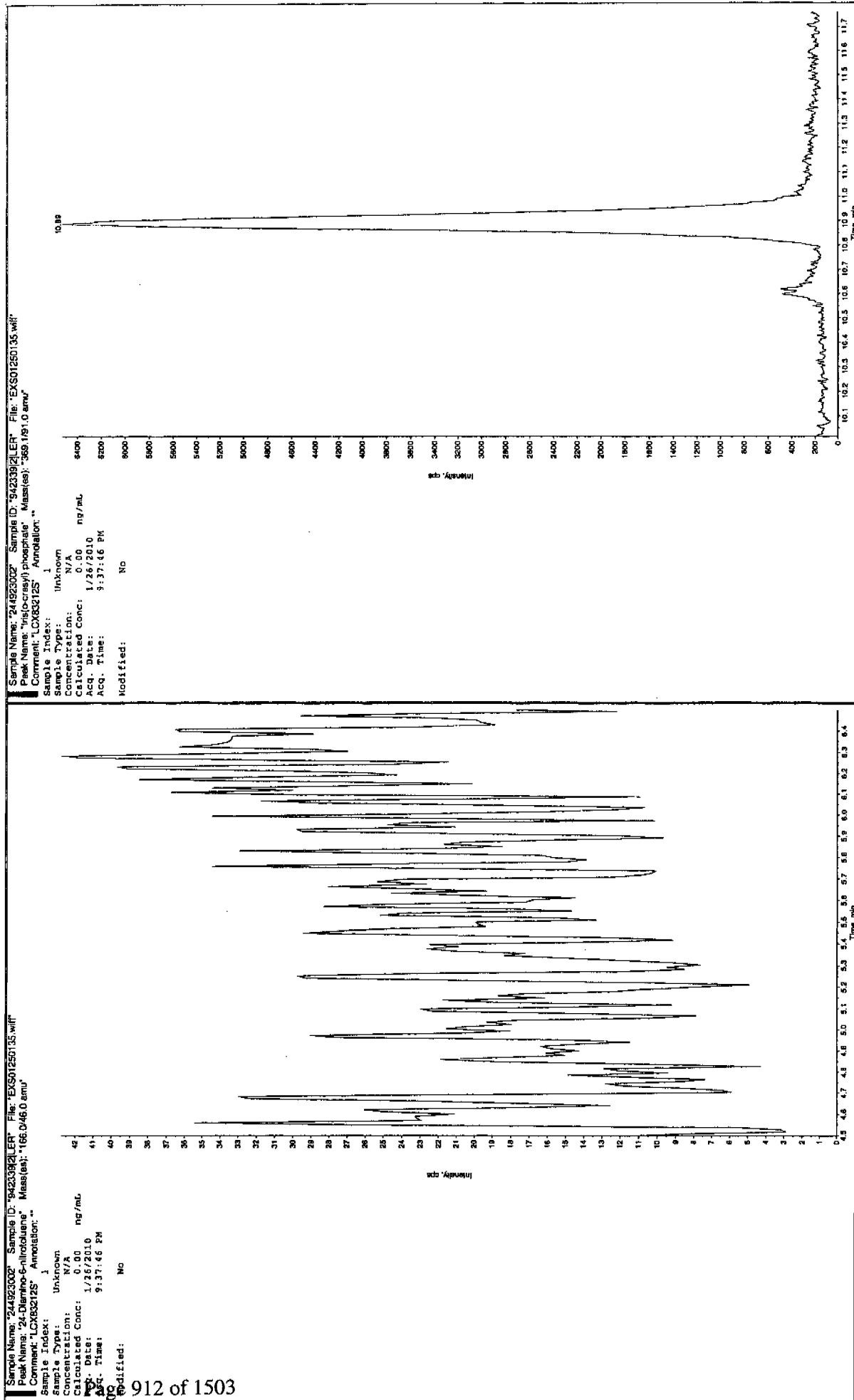
Sample Name: "2492002" Sample ID: "9423921.ER" File: "EX501250135.wif"
 Peak Name: "34-Dihydroquinone" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 9:37:46 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: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.36 min
 Area: 3.68e+006 counts
 Height: 987287.842 cps
 Start Time: 8.27 min
 End Time: 8.46 min

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7161

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125196a

Date Analyzed: 29-JAN-10 11:15

Units: ug/kg

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

*Concentration =

Instrument Value	X	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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

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Time: 11:15:47

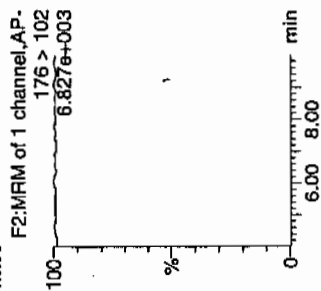
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Vial: 3:2,F

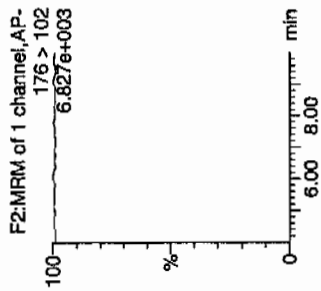
1/30/10

WAW 942339 / 12 / 12

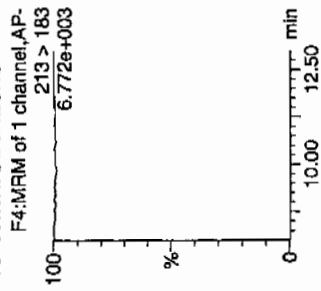
HMX



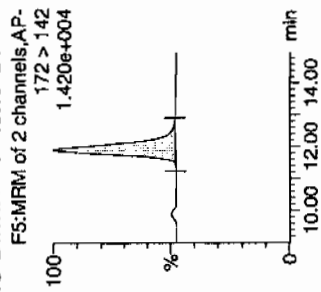
RDX



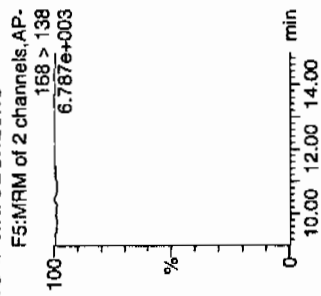
135-Trinitrobenzene



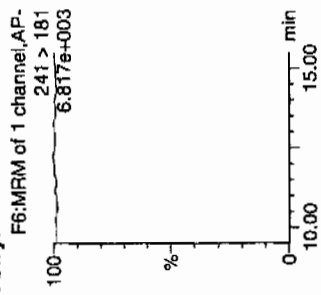
13-Dinitrobenzene-d4



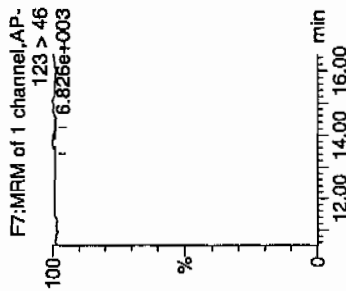
13-Dinitrobenzene



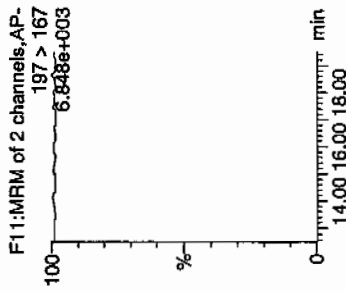
Tetryl



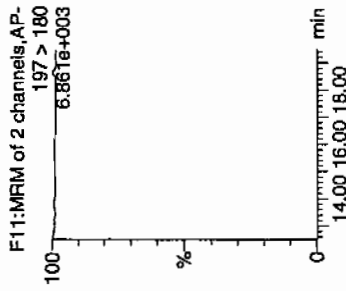
Nitrobenzene



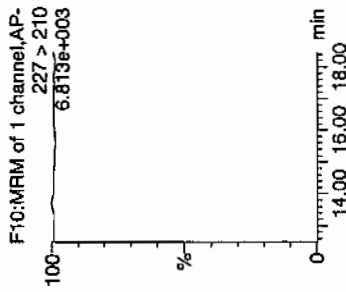
4-Amino-26-dinitrotoluene



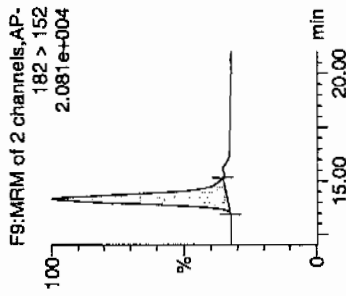
2-Amino-46-dinitrotoluene



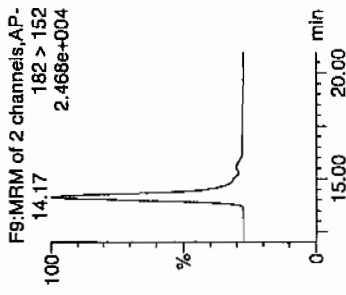
246-Trinitrotoluene



34-dinitrotoluene



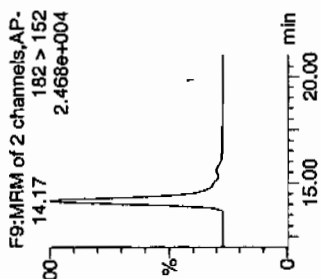
26-dinitrotoluene



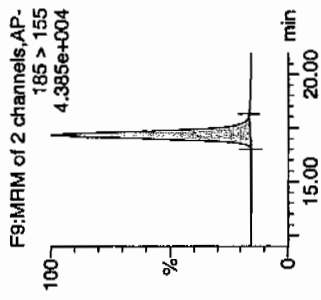
01/30/10

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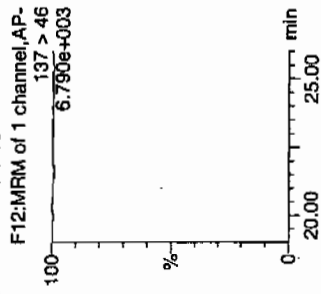
2,4-dinitrotoluene



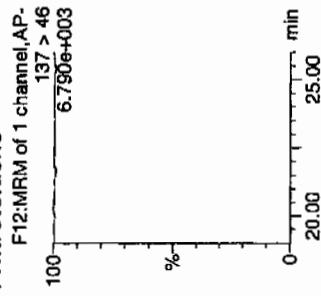
26-dinitrotoluene-d3



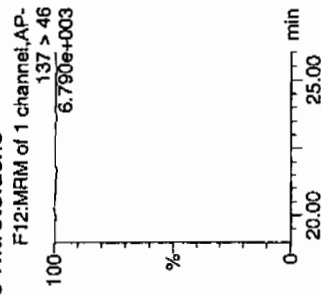
2-Nitrotoluene



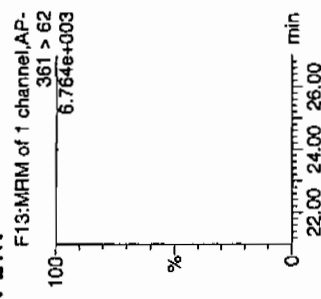
4-Nitrotoluene



3-Nitrotoluene



PETN

[illegible]

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7161

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923003

Sample Amount 2

Moisture: 10.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250136.wiff

Date Analyzed: 26-JAN-10 21:53

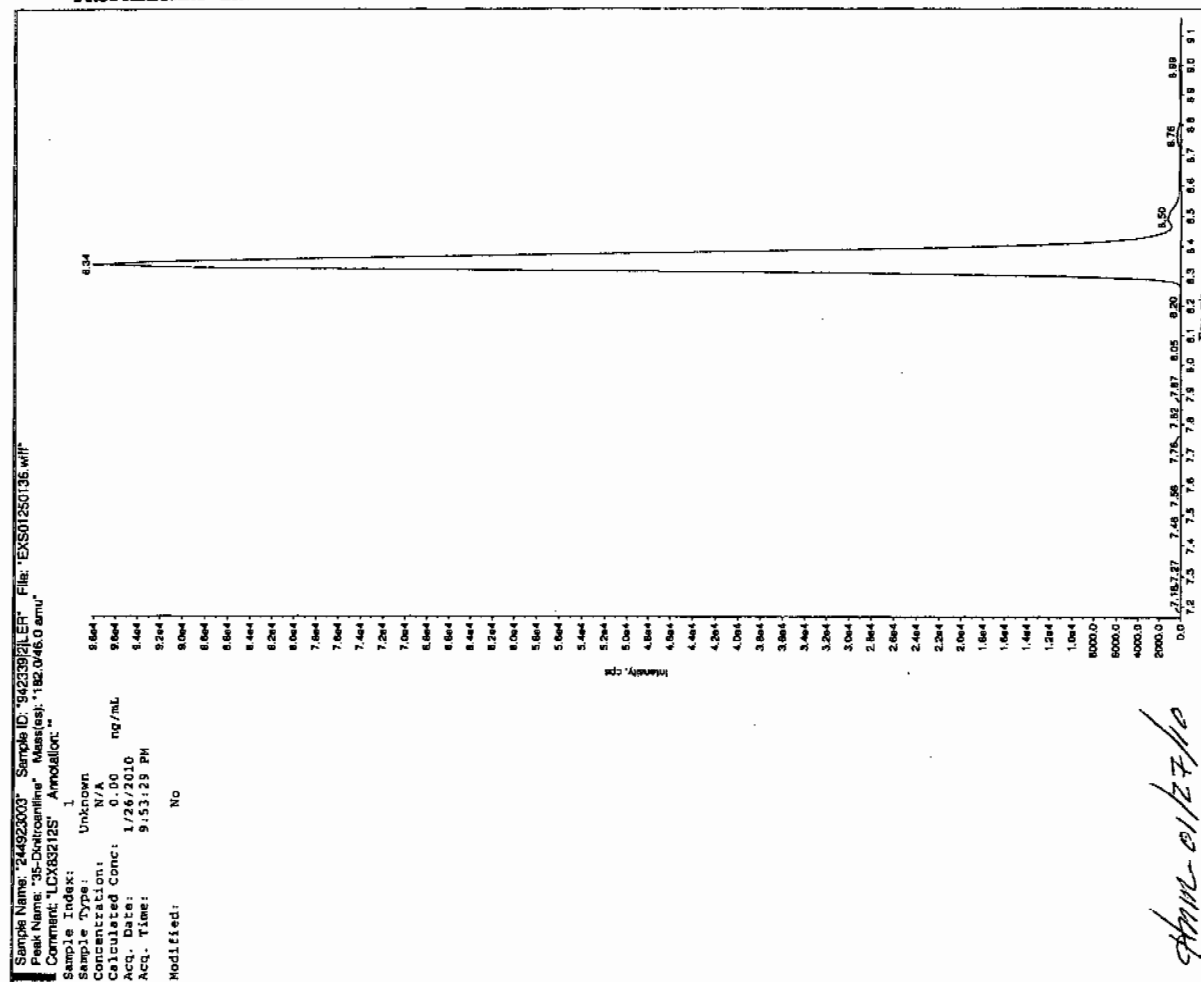
Units: ug/kg

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

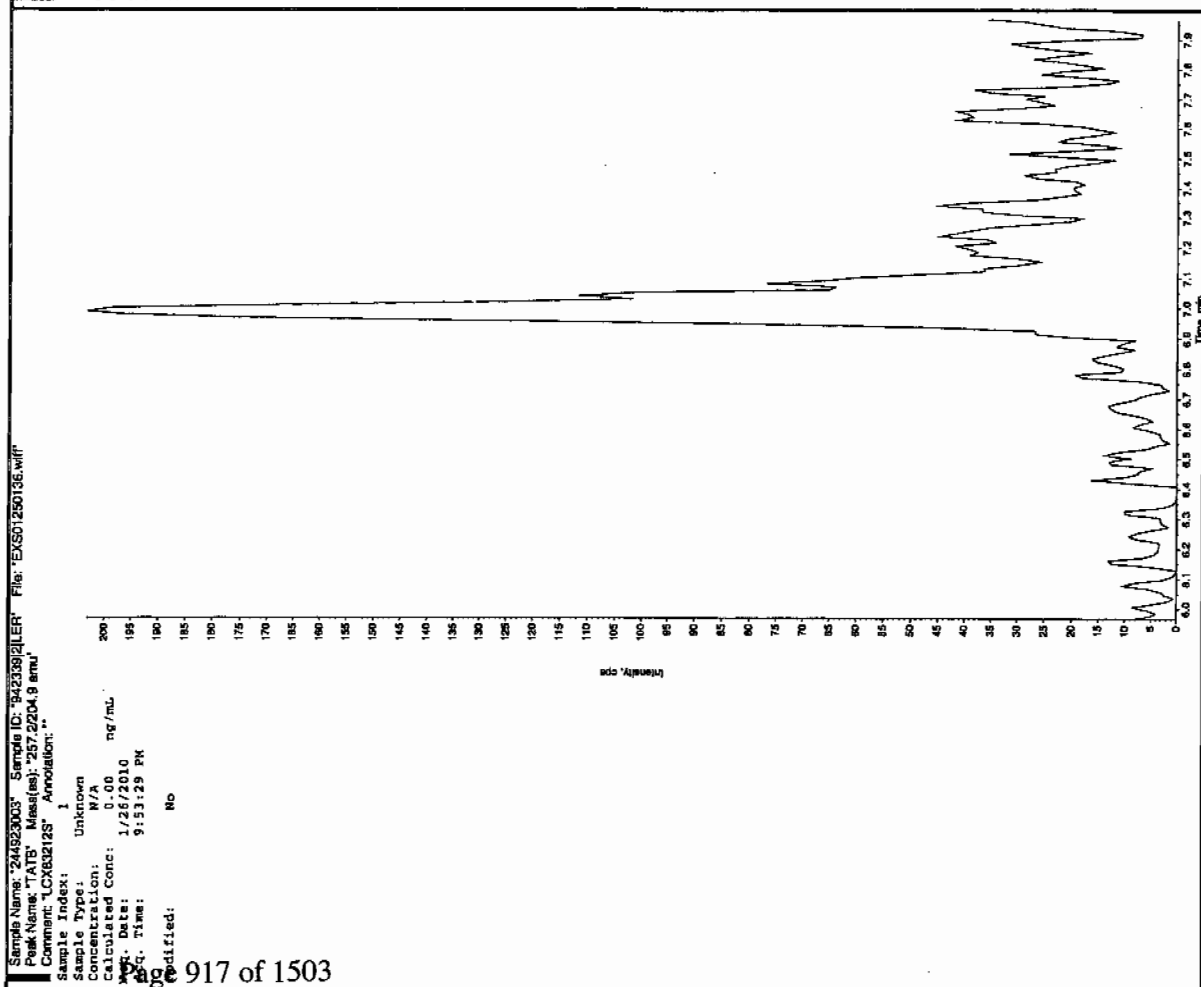
*Concentration =

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

Scan 112710



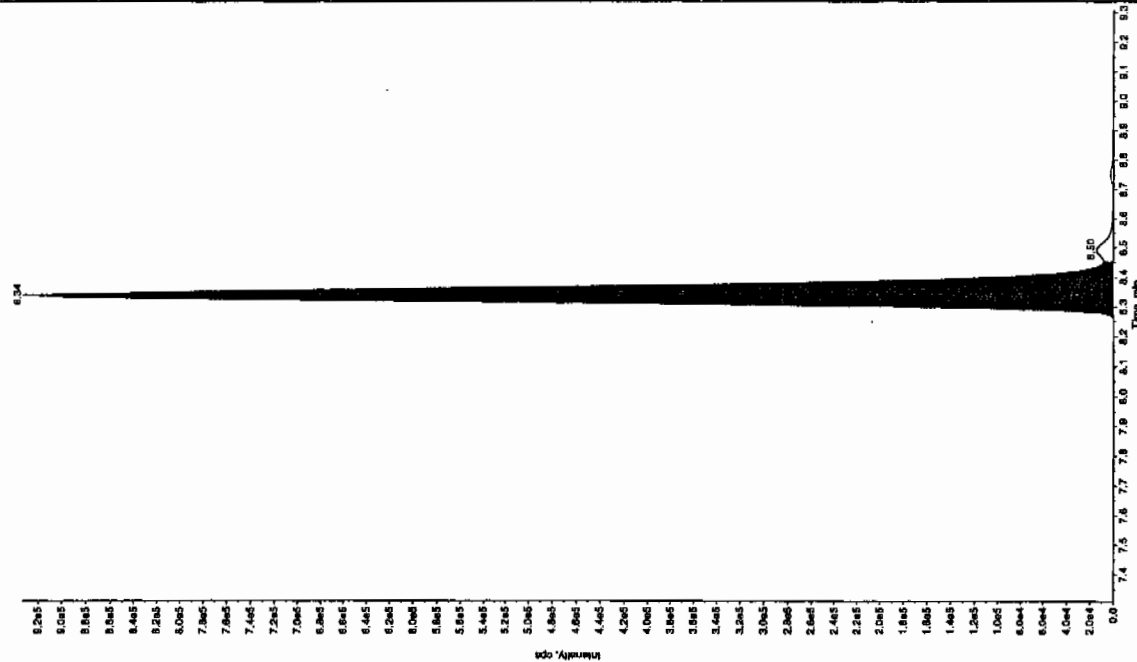
Scan 112710



917 of 1503

Sample Name: 24492003 Sample ID: 94233921ER File: EXS01250135.wif
 Peak Name: 34-Dinitrophenol Mass(es): 166.0450 amu
 Comment: LCX83212S Annotation:

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 9:53:29 PM
 Acq. Time: 9:53:29 PM
 Modified: No



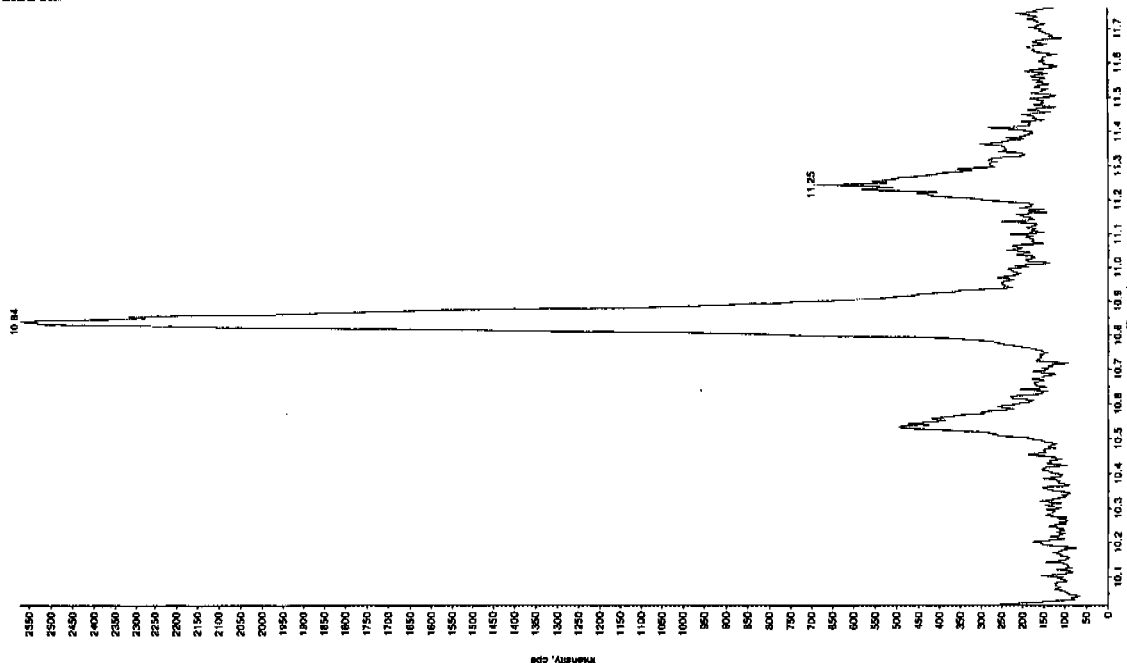
Sample Name: 24492003 Sample ID: 94233921ER File: EXS01250135.wif
 Peak Name: 34-Dinitrophenol Mass(es): 166.0450 amu
 Comment: LCX83212S Annotation:

Sample Index: 1
 Sample Type: Unknown
 Concentration: 0.00 ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 9:53:29 PM
 Acq. Time: 9:53:29 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.34 min
 Area: 3.51e+006 counts
 Height: 933518.879 cps
 Start Time: 8.25 min
 End Time: 8.45 min

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

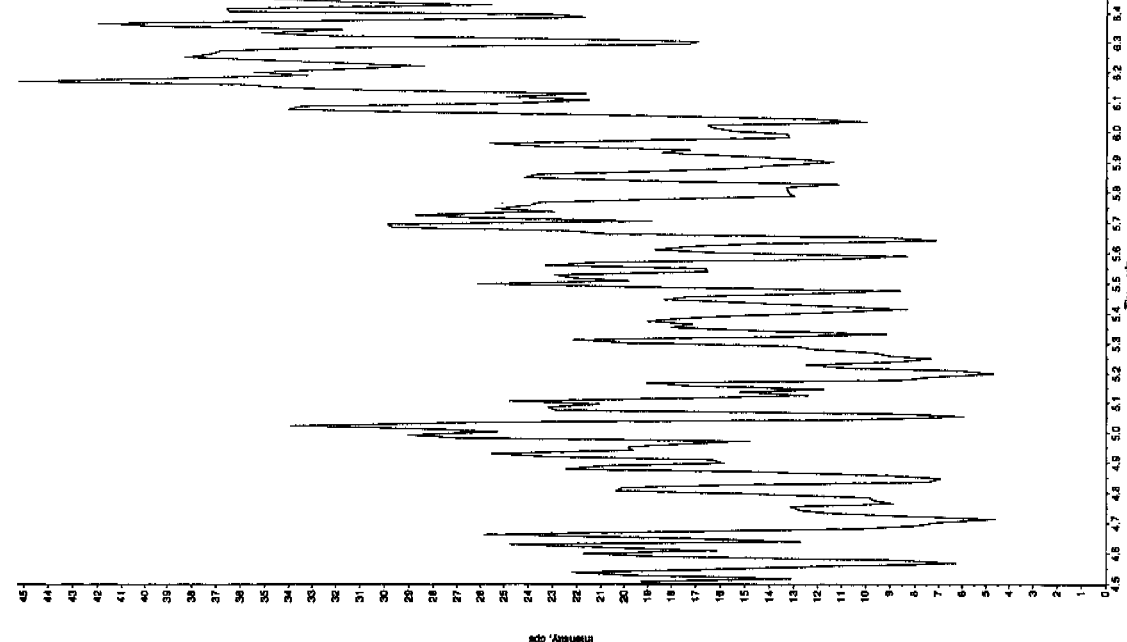
Sample Name: "244823003" Sample ID: "9423392LER" File: "EXS01250135.wif"
 Peak Name: "tris(o-cresyl) phosphite" Mass(es): "389.191.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 1/26/2010
 Acq. Time: 9:53:29 PM
 Modified: No



Sample Name: "244823003" Sample ID: "9423392LER" File: "EXS01250135.wif"
 Peak Name: "24-Dinitro-6-nitrofluorene" Mass(es): "186.046.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A ng/mL
 Calculated Conc: 0.00
 Acq. Date: 1/26/2010
 Acq. Time: 9:53:29 PM
 Modified: No



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7160

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923004

Sample Amount 2

Moisture: 20.0

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125197a

Date Analyzed: 29-JAN-10 11:45

Units: ug/kg

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

*Concentration =

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125197a

Date: 29-Jan-2010

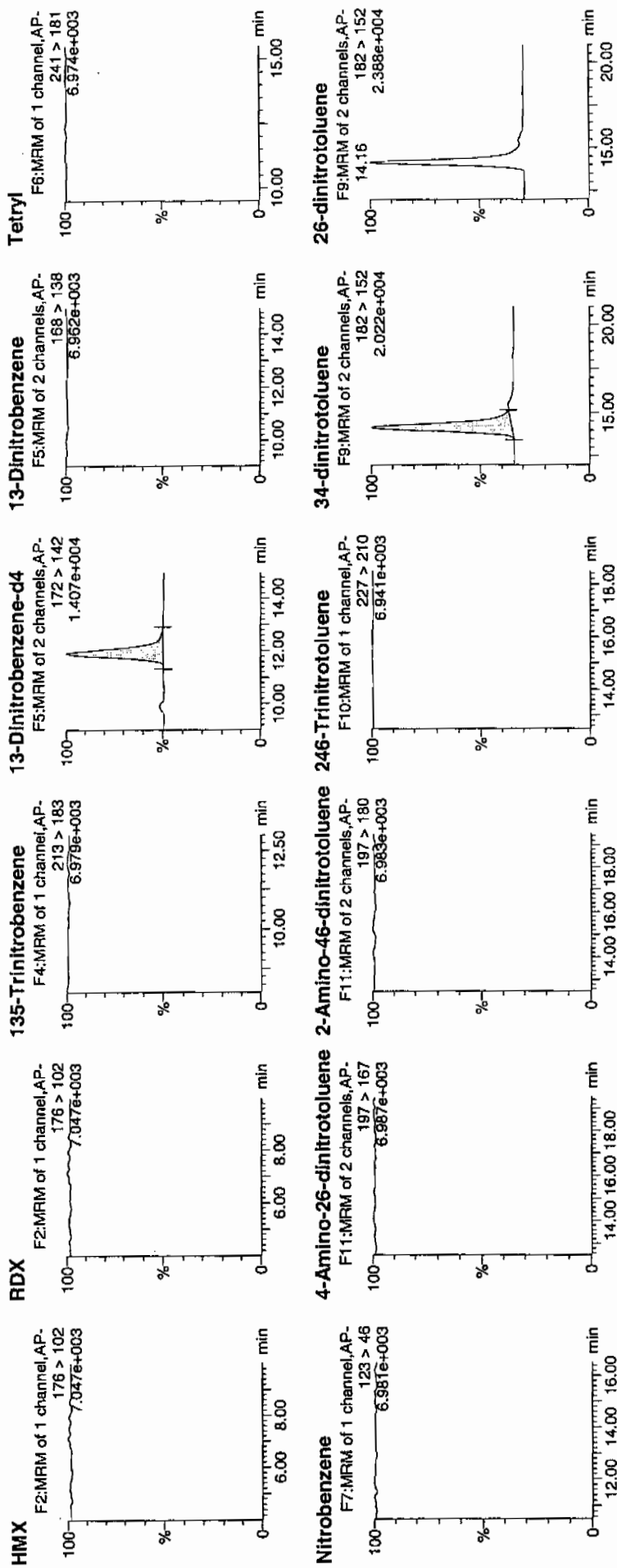
Time: 11:45:14

ID: 244923004

Vial: 3:3,A

1677
1/31/10

WAV 942339 | Source 121



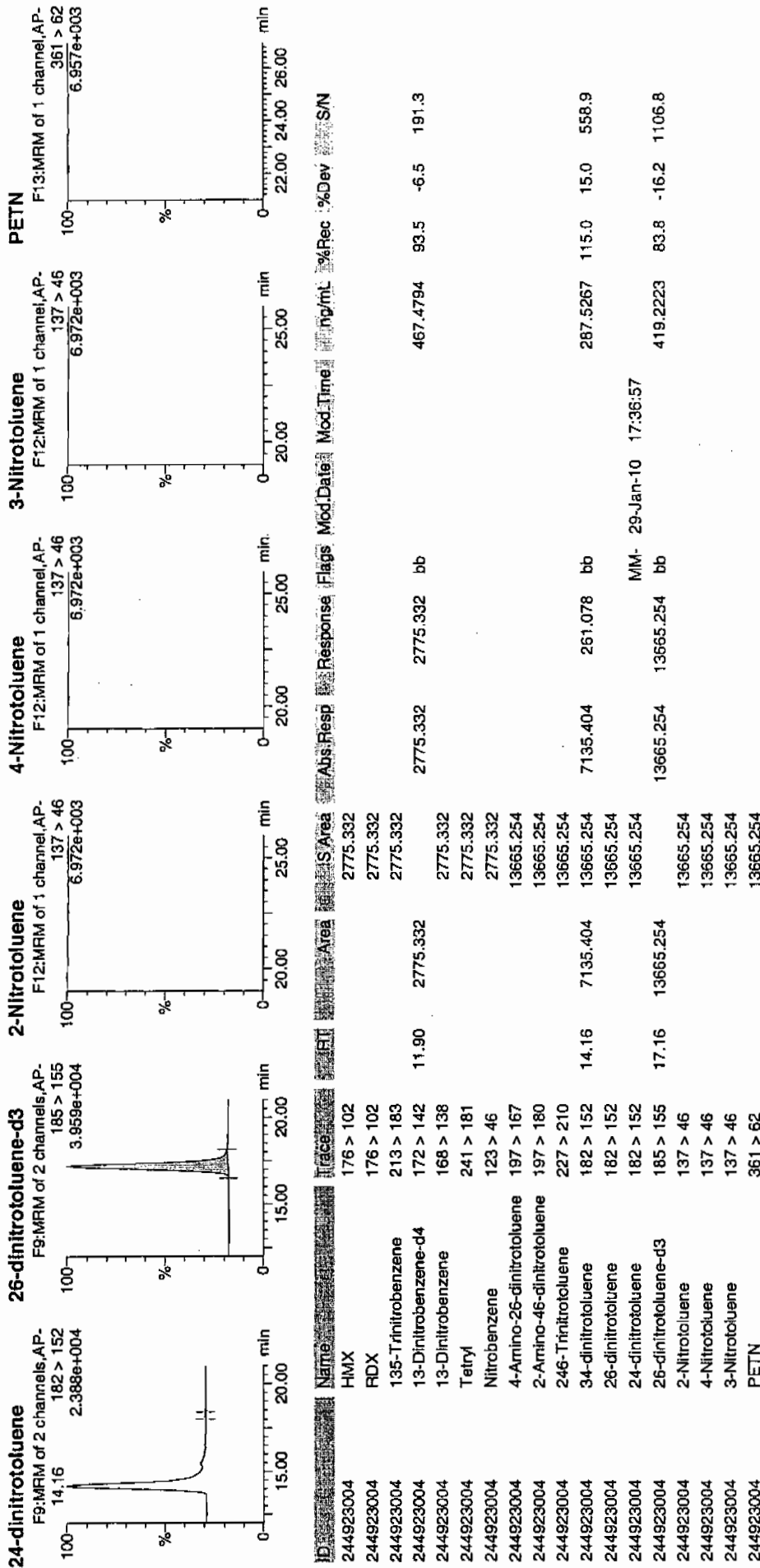
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Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 32 of 51

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7160

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923004

Sample Amount 2

Moisture: 20.0

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250137.wiff

Date Analyzed: 26-JAN-10 22:09

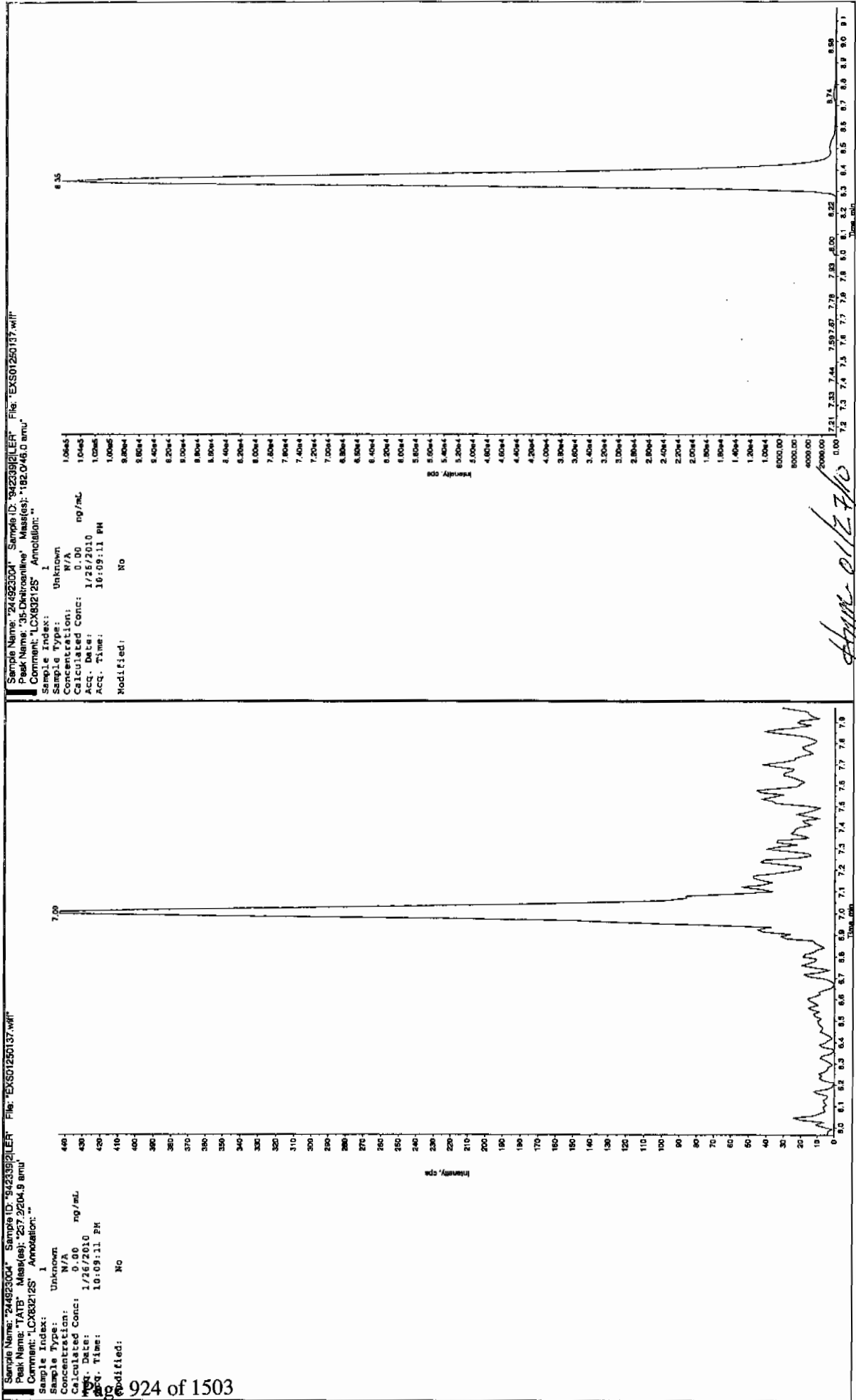
Units: ug/kg

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

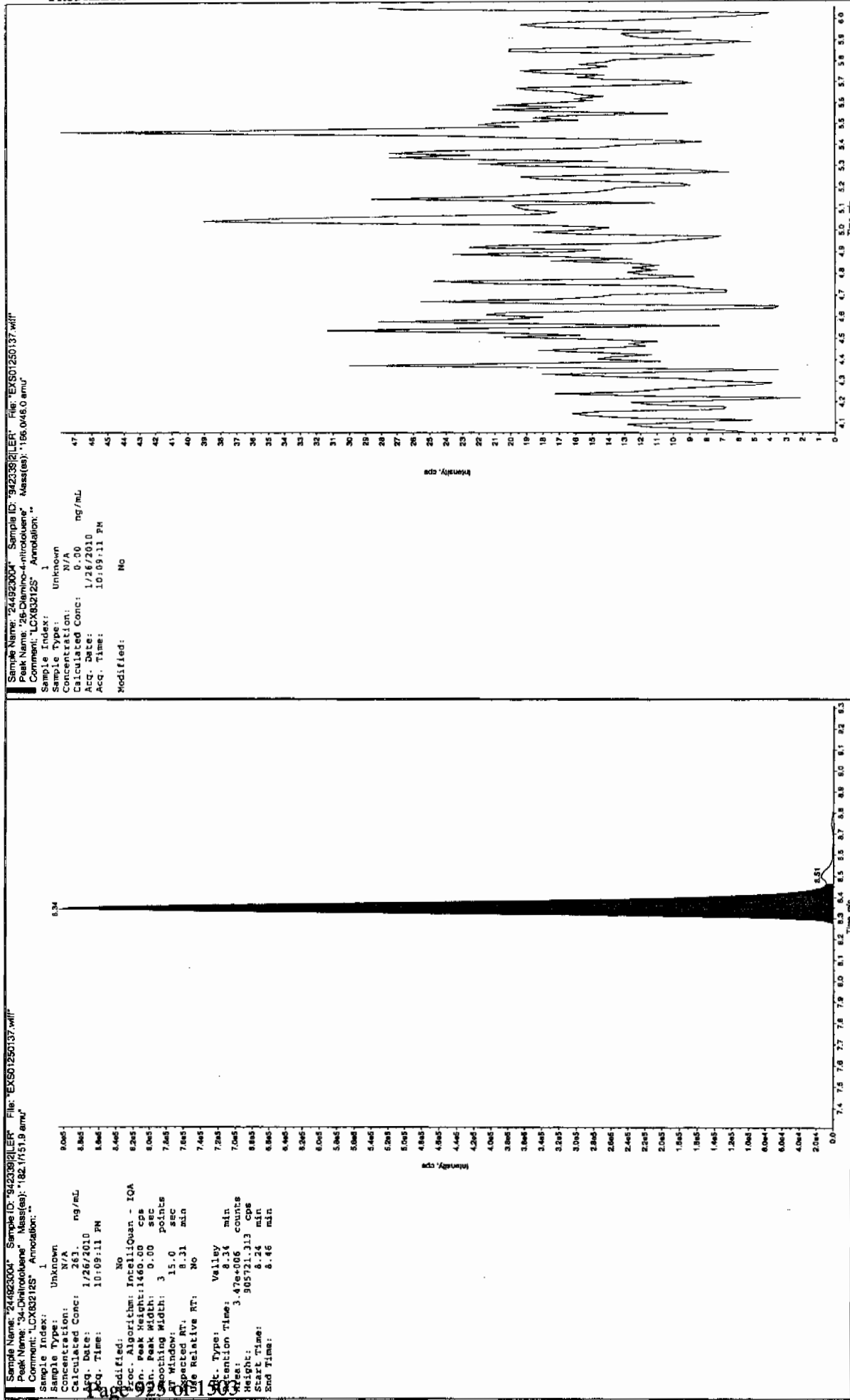
*Concentration =

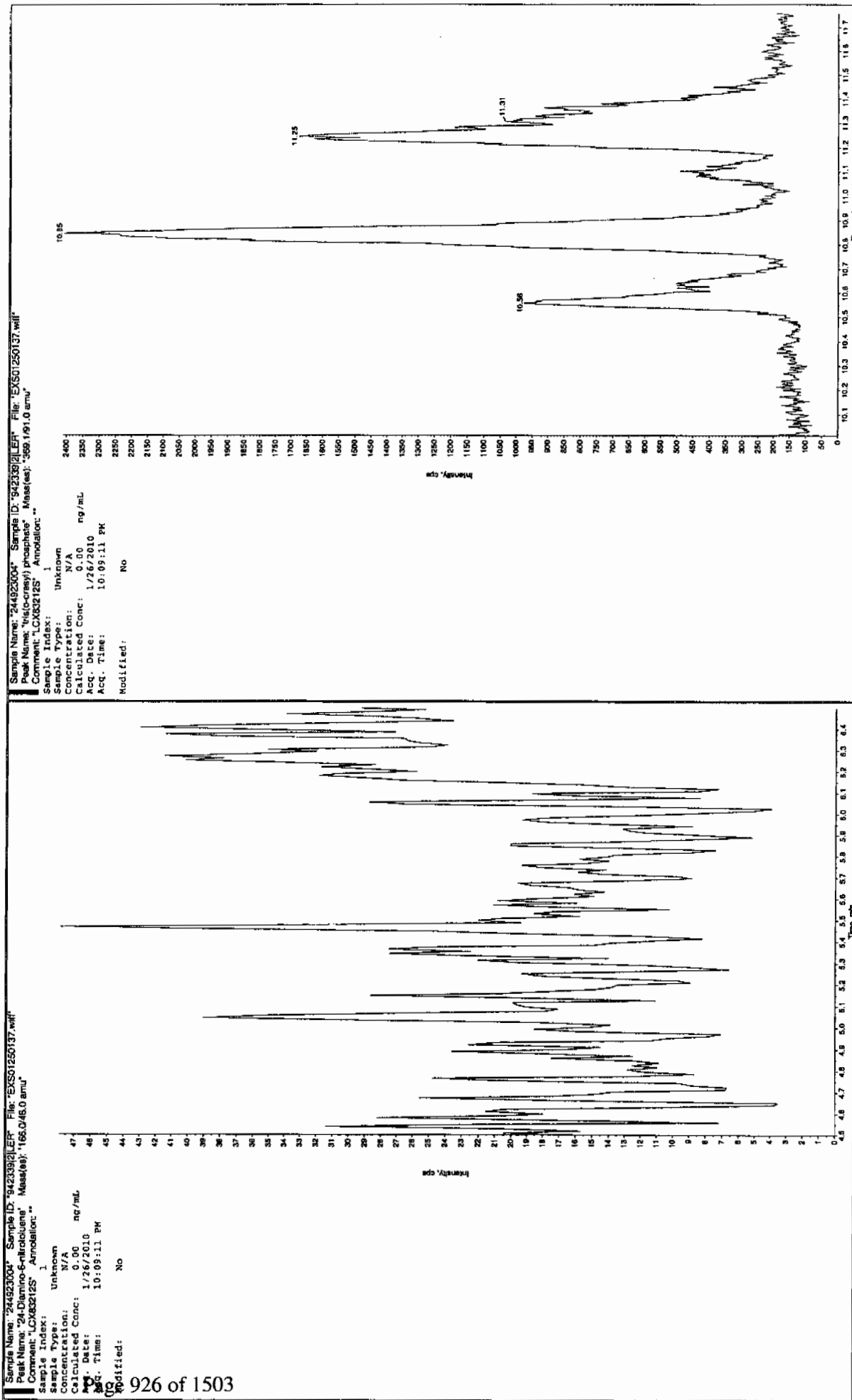
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

See 1127/10



Shimadzu 1127/10





1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7174

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923005

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125198a

Date Analyzed: 29-JAN-10 12:14

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qtd, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125198a

Date: 29-Jan-2010

Time: 12:14:44

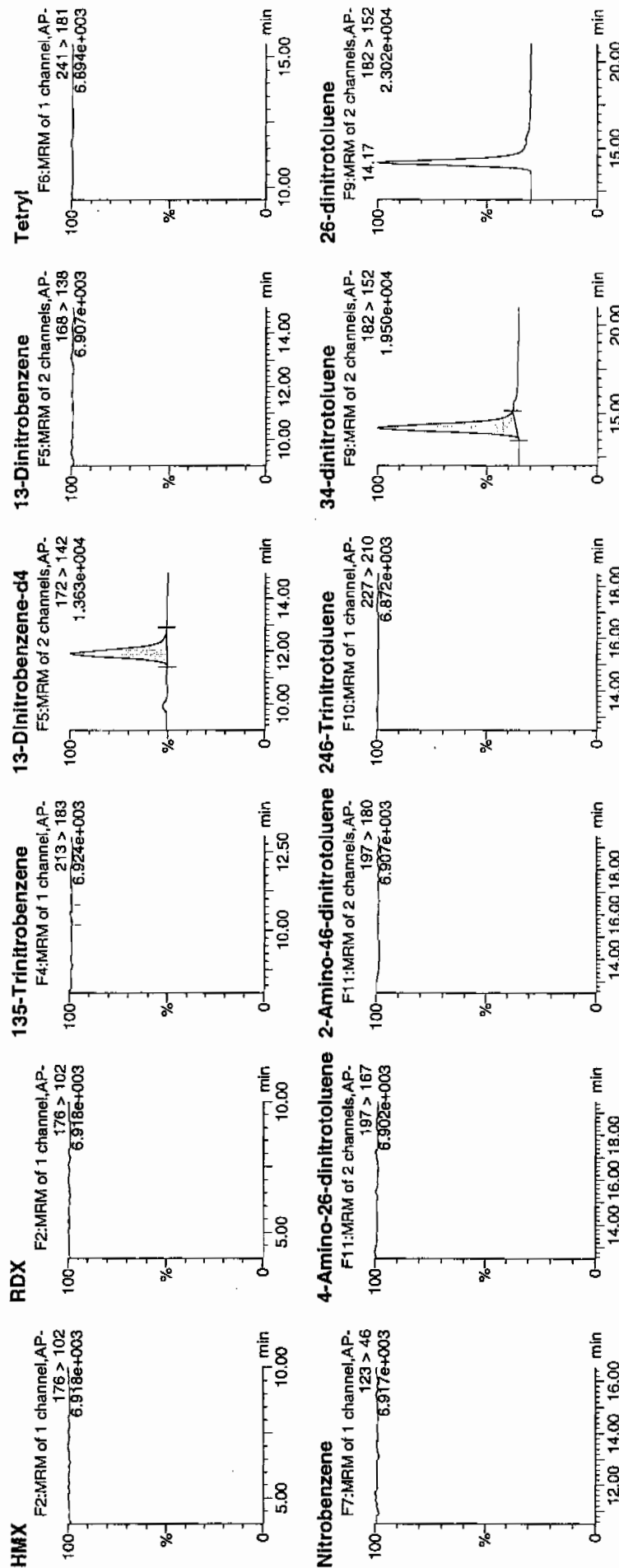
ID: 244923005

Vial: 3:3,B

1477
1/30/10

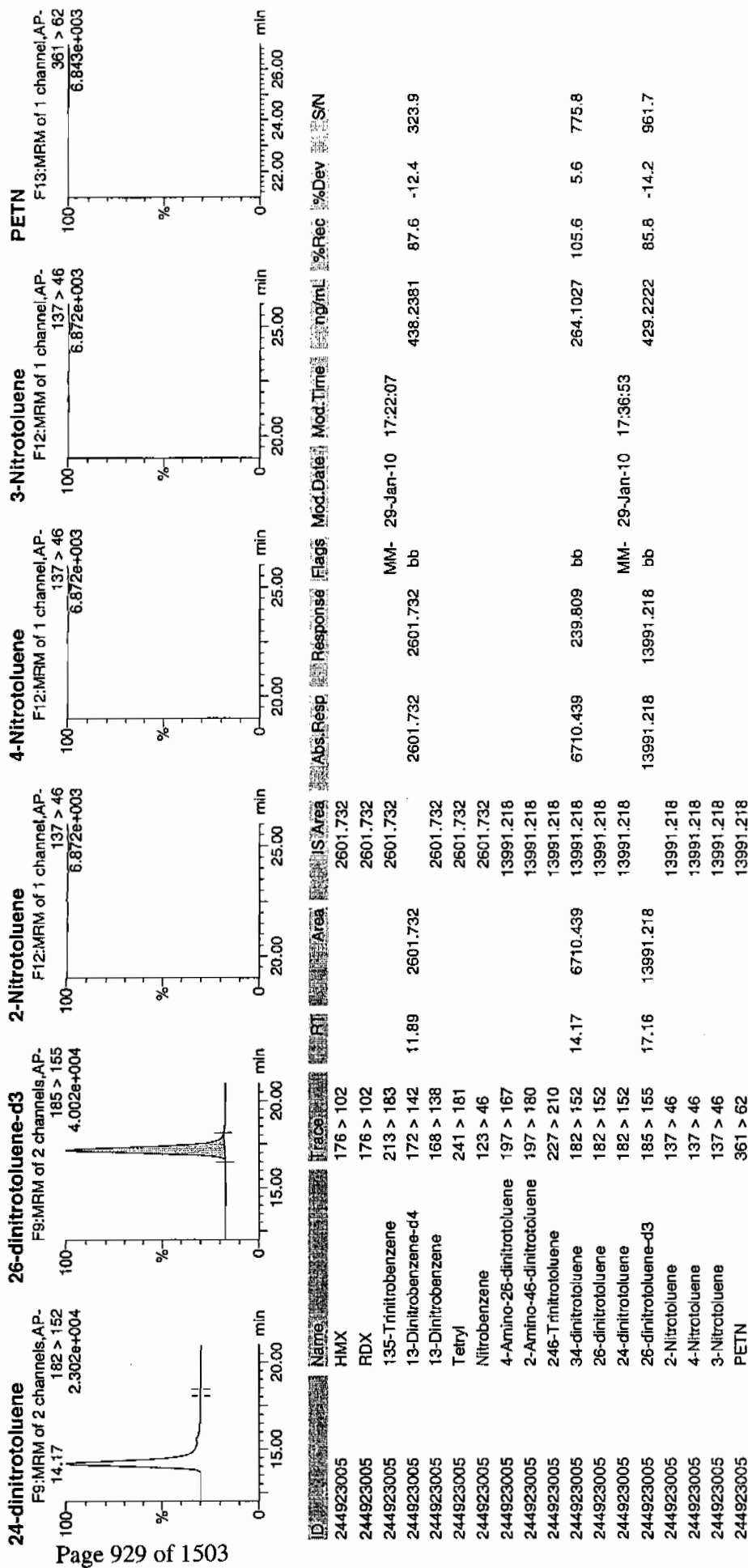
LAUC 942339 / SOLZ 21

Page 928 of 1503



Handwritten signature and date: 01/30/10

Dataset: C:\MASSLYNX\New_Exp\PRO1012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7174

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923005

Sample Amount 2

Moisture: 19.7

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250138.wiff

Date Analyzed: 26-JAN-10 22:24

Units: ug/kg

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

*Concentration =

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

See 1127110

Sample Name: "244823005" Sample ID: "942339121" File: "EXS01250138.wif"

Peak Name: "TATB" Mass(es): "257.2604.9 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

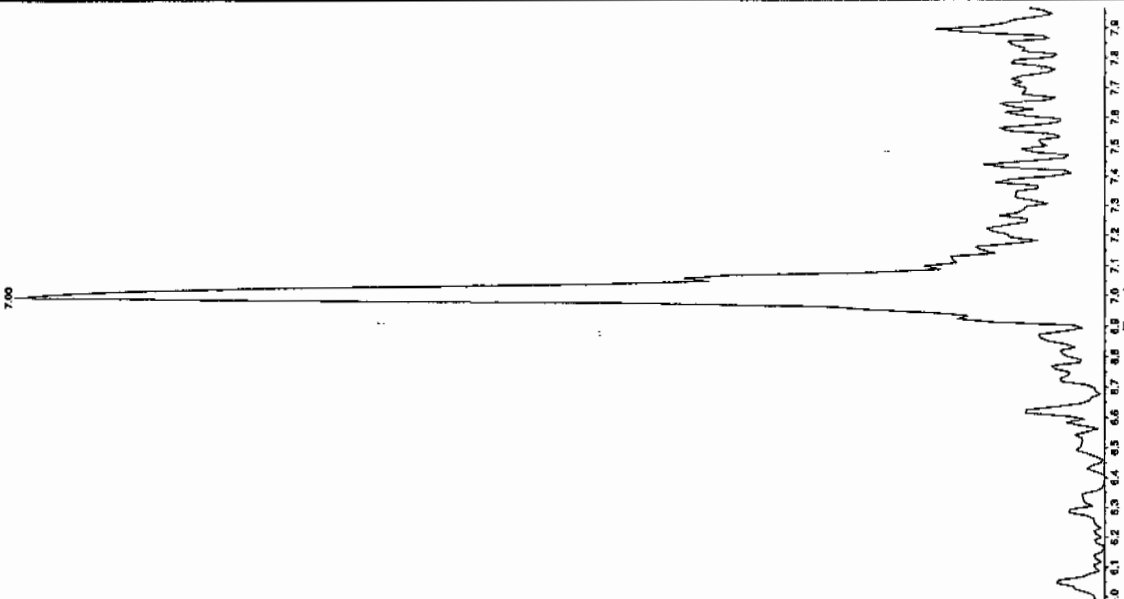
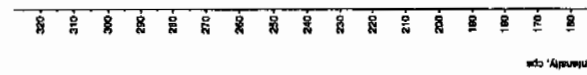
Concentration: 0.00 ng/mL

Calculated Conc: 1/26/2010

Acq. Date: 10:24:53 PM

Acq. Time: 10:24:53 PM

Modified: No



Sample Name: "244823005" Sample ID: "942339121" File: "EXS01250138.wif"

Peak Name: "35-Dinitrofluorene" Mass(es): "182.046.0 amu"

Comment: "LCX832125" Annotation: "

Sample Index: 1

Sample Type: Unknown

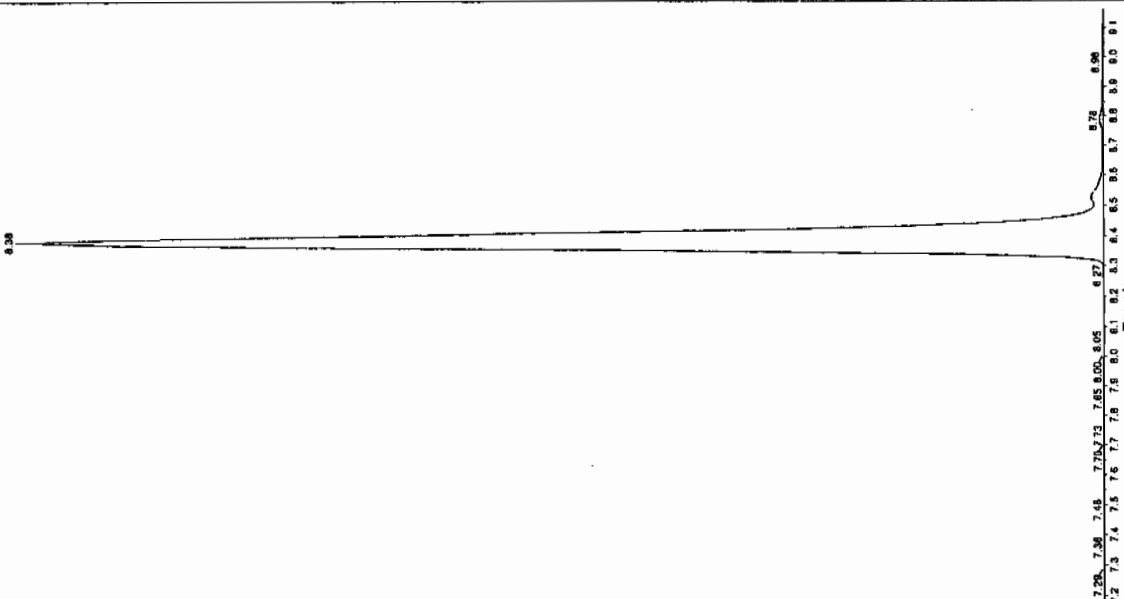
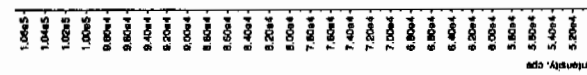
Concentration: 0.00 ng/mL

Calculated Conc: 1/26/2010

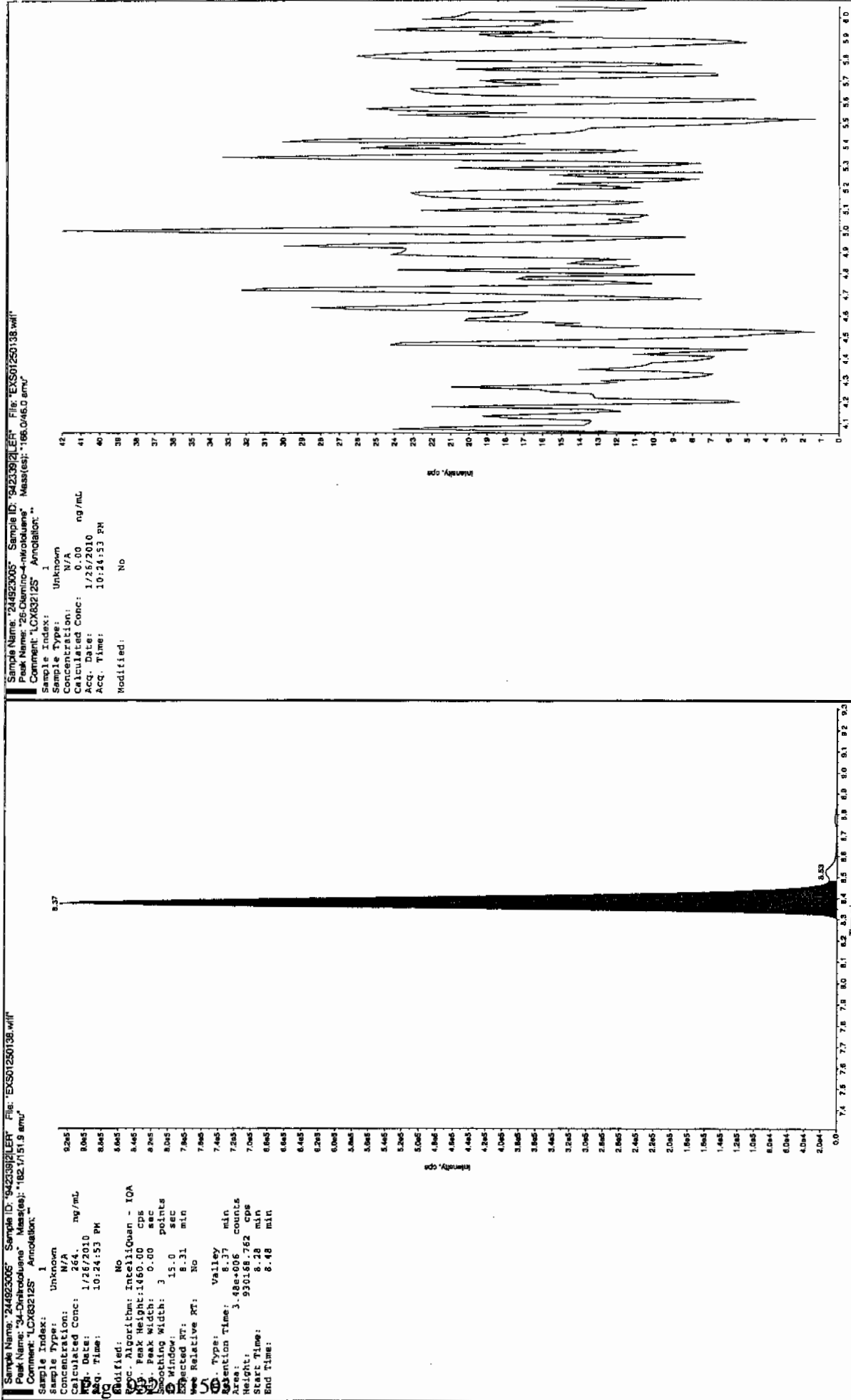
Acq. Date: 10:24:53 PM

Acq. Time: 10:24:53 PM

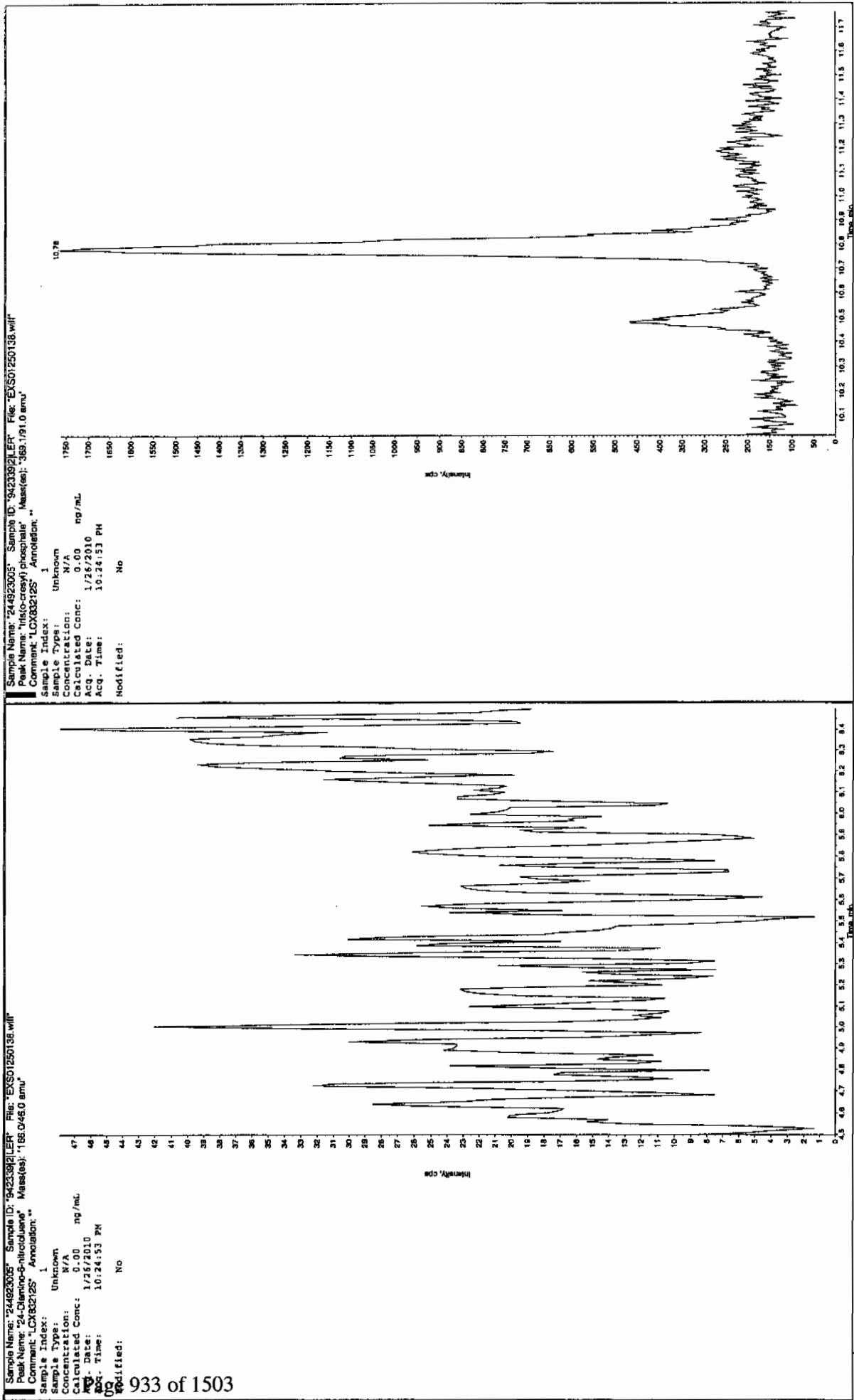
Modified: No



See 1127110



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7173

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923006

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125199a

Date Analyzed: 29-JAN-10 12:44

Units: ug/kg

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

*Concentration =

Instrument	X	Concentrated Extract Volume	X	Dilution
Value		Sample Amount		Factor

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125199a

Date: 29-Jan-2010

Time: 12:44:13

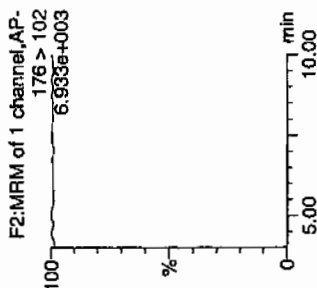
ID: 244923006

Vial: 3:3,C

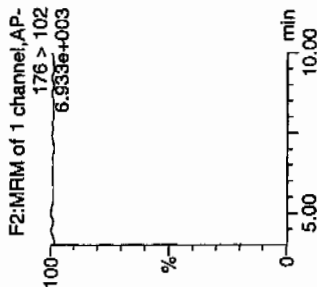
1/30/10

WAV/942339/8012/21

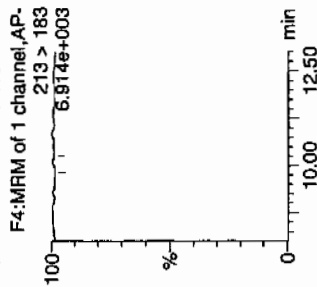
HMX



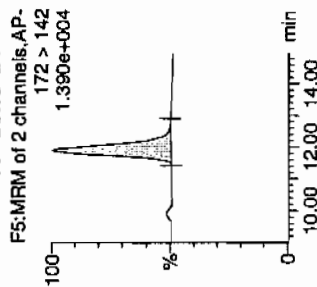
RDX



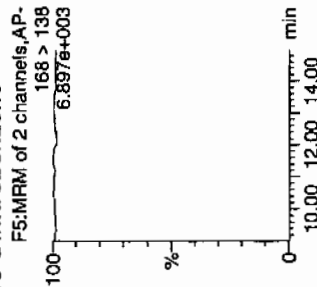
135-Trinitrobenzene



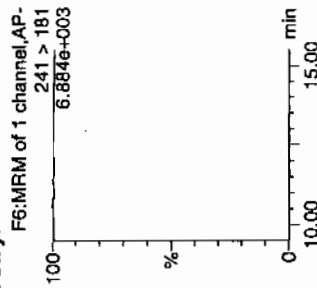
13-Dinitrobenzene-d4



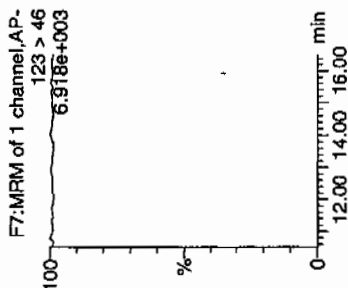
13-Dinitrobenzene



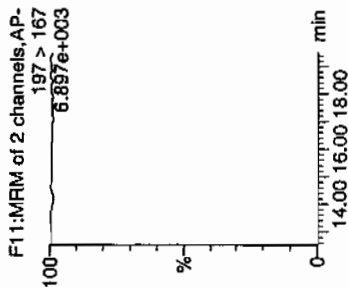
Tetryl



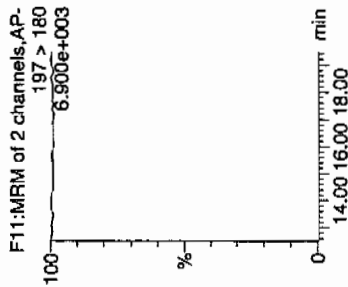
Nitrobenzene



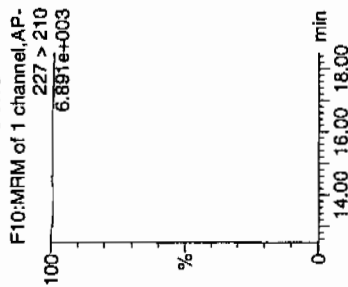
4-Amino-26-dinitrotoluene



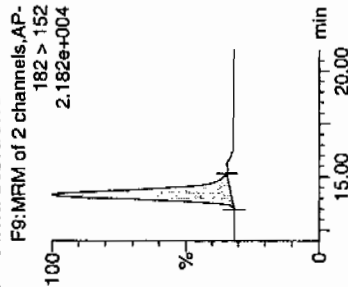
2-Amino-46-dinitrotoluene



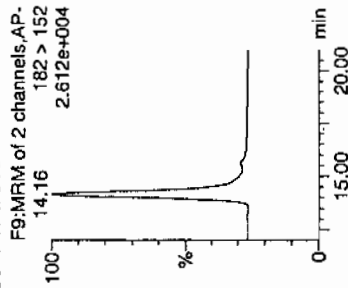
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene



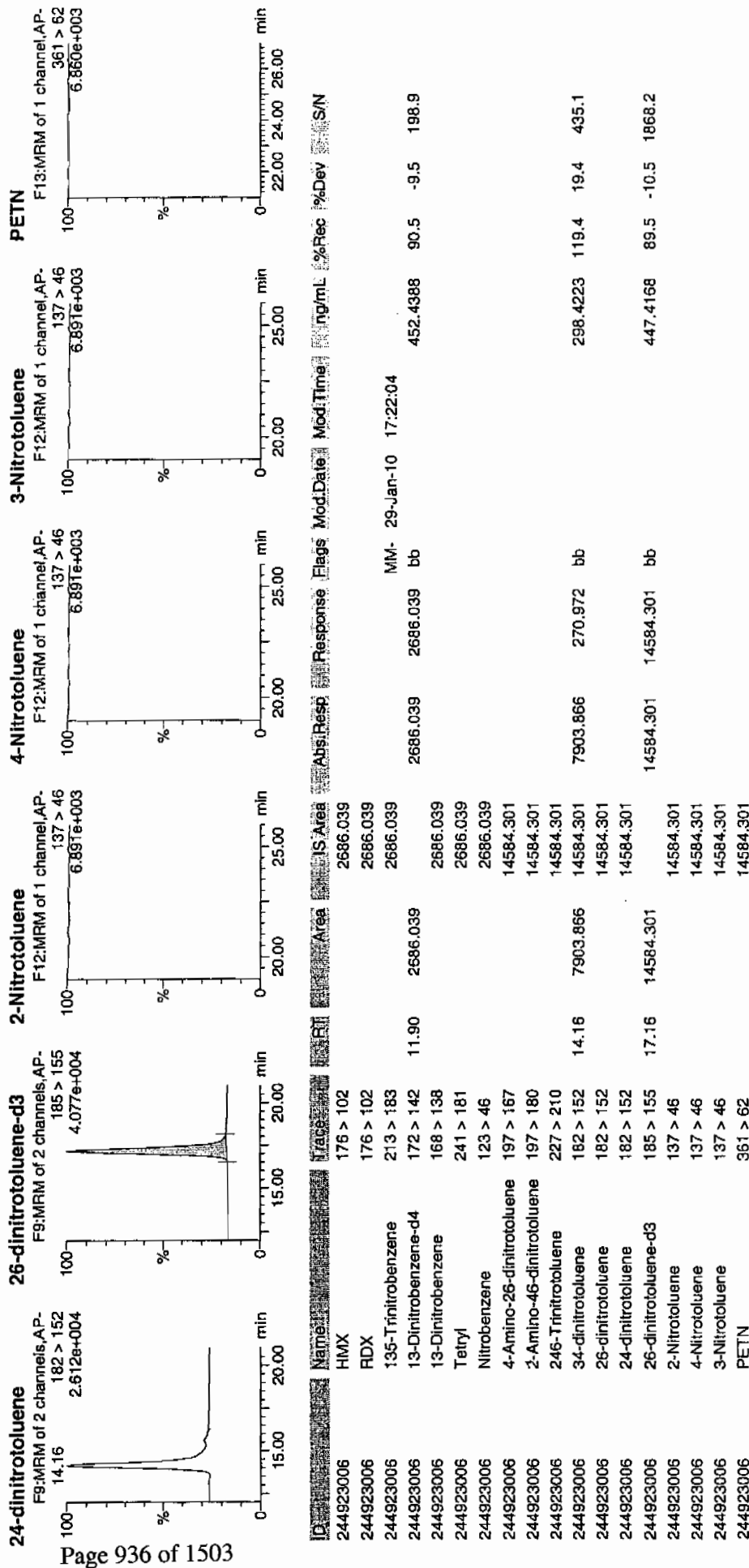
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01/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

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Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7173

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923006

Sample Amount 2

Moisture: 9.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250139.wiff

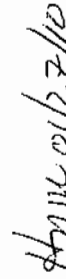
Date Analyzed: 26-JAN-10 22:40

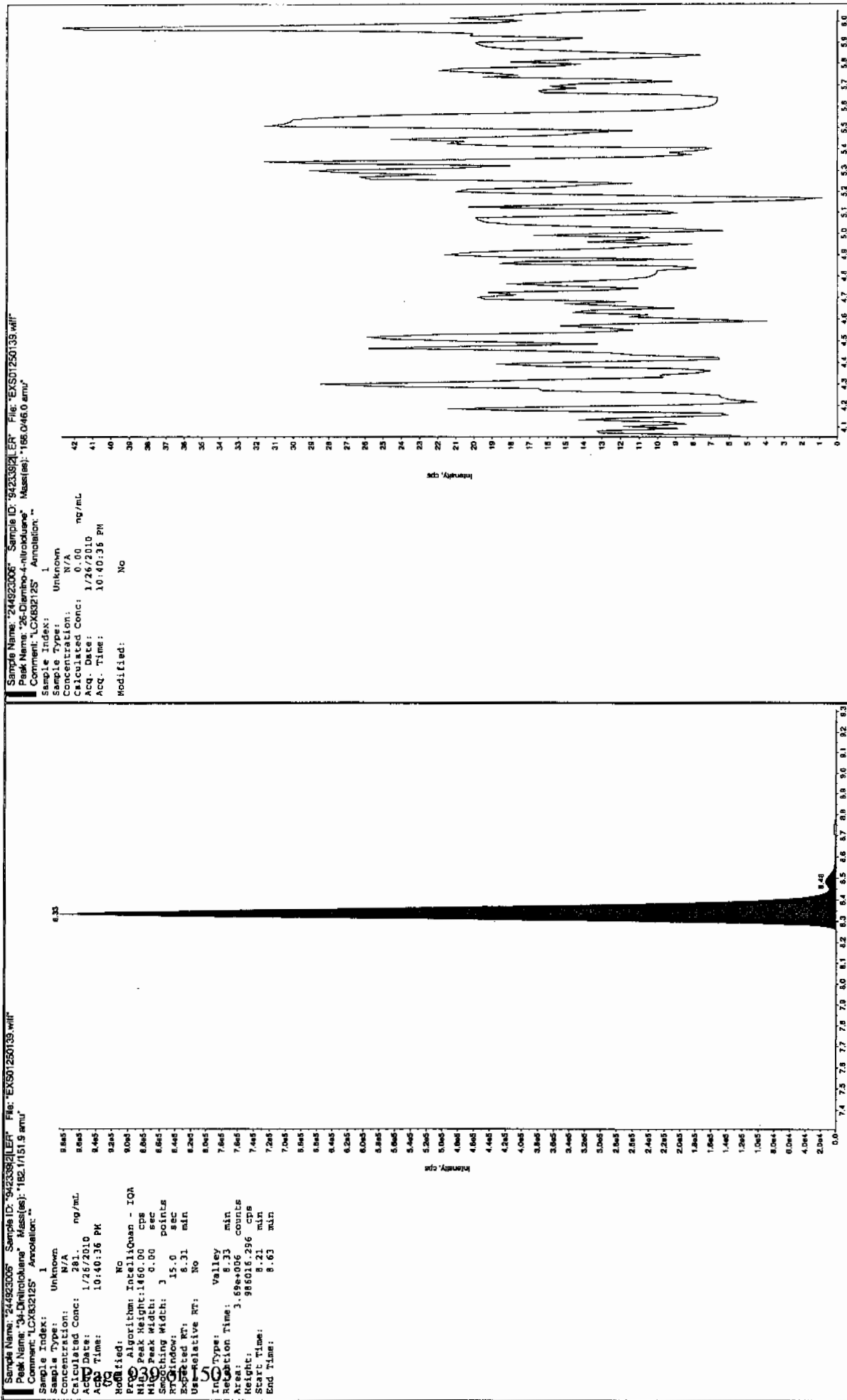
Units: ug/kg

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

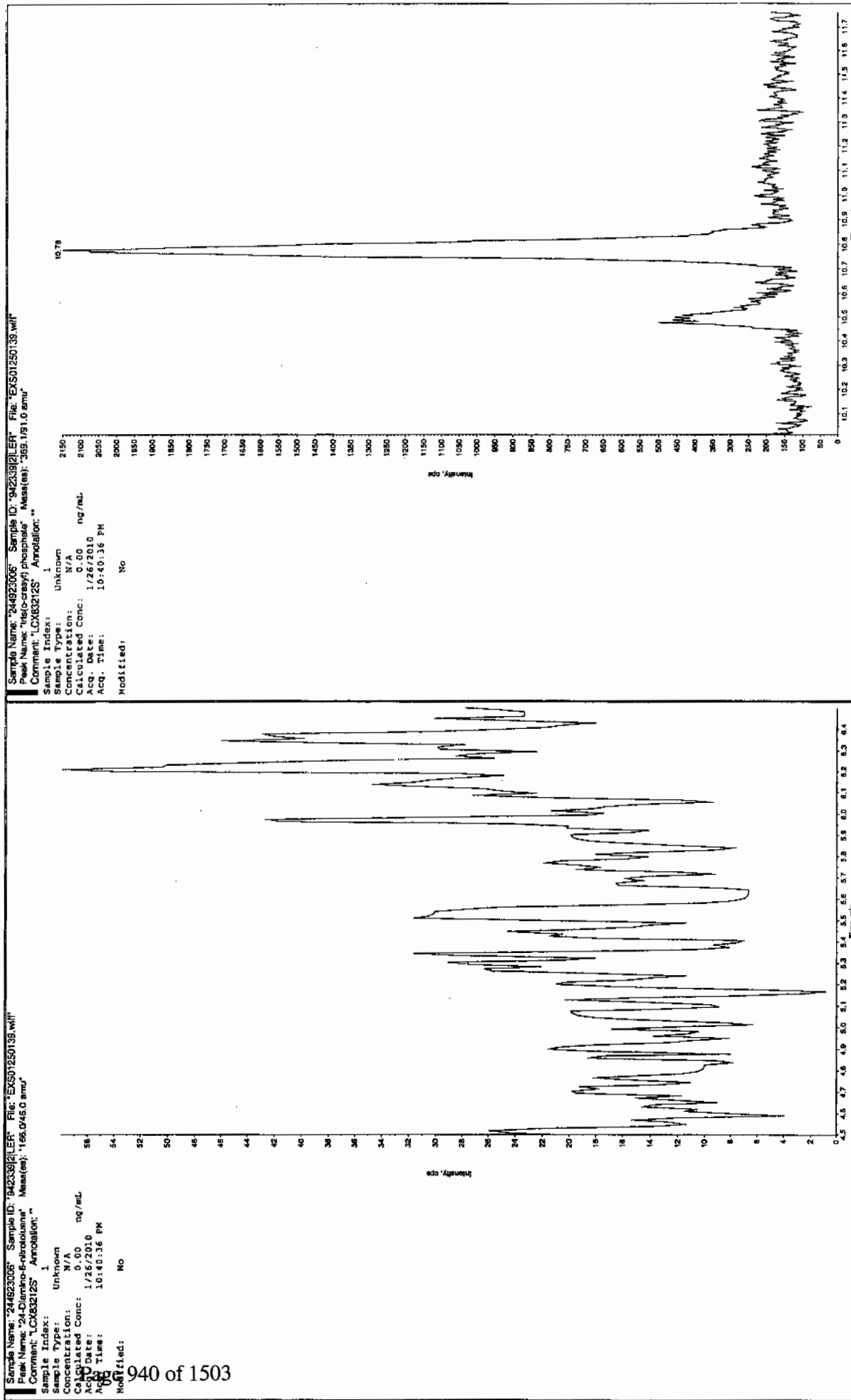
*Concentration =

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





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7175

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923007

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125200a

Date Analyzed: 29-JAN-10 13:13

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

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 37 of 51

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125200a

Date: 29-Jan-2010

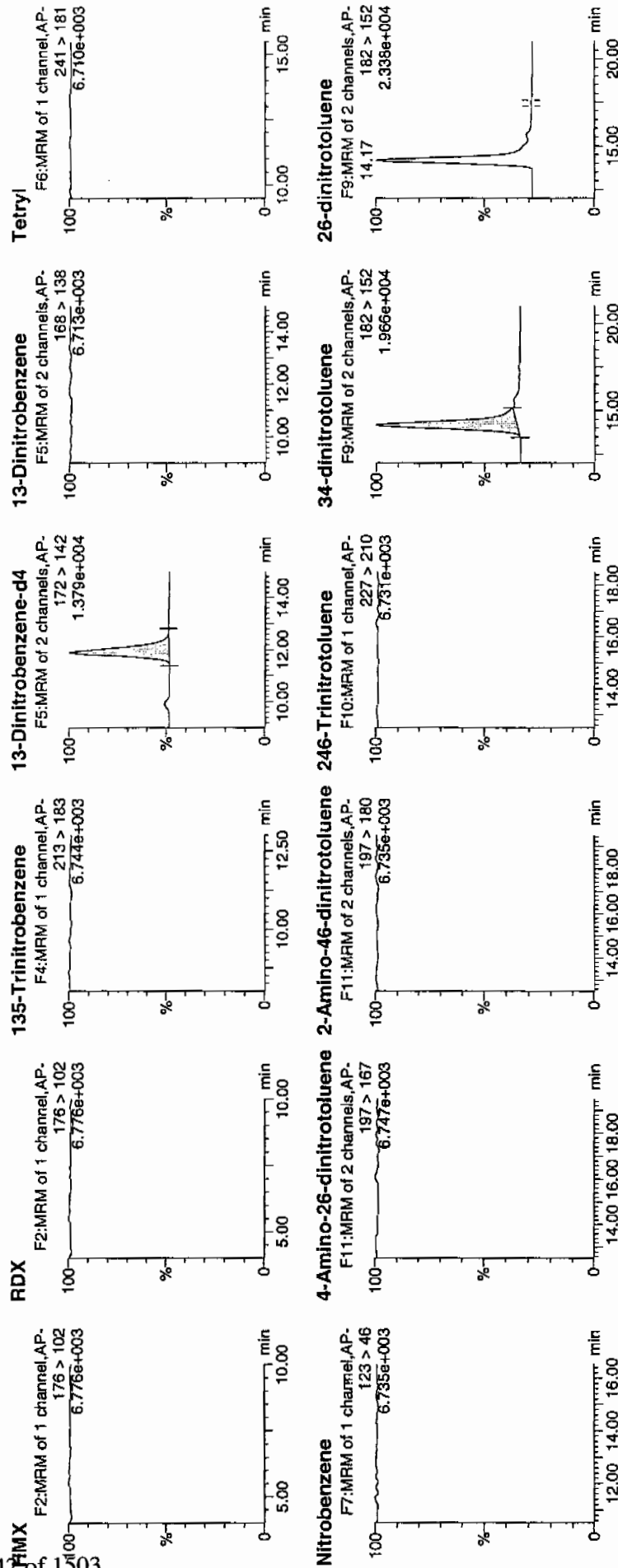
Time: 13:13:42

ID: 244923007

Vial: 3:3,D

1077
1/3/10

1442/942339/2012/2/



done
01/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 38 of 51

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

24-dinitrotoluene

F9:MRM of 2 channels,AP-

182 > 152
2.338e+004

14.17

min

20.00

15.00

0

%

100

26-dinitrotoluene-d3

F9:MRM of 2 channels,AP-

185 > 155
4.271e+004

15.00

min

20.00

15.00

0

%

100

2-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46
6.731e+003

20.00

min

25.00

20.00

0

%

100

4-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46
6.731e+003

20.00

min

25.00

20.00

0

%

100

3-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46
6.731e+003

20.00

min

25.00

20.00

0

%

100

PETN

F13:MRM of 1 channel,AP-

361 > 62
6.719e+003

22.00

min

26.00

22.00

0

%

100

min

26.00

22.00

0

%

100

min

26.00

22.00

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1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7175

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923007

Sample Amount 2

Moisture: 9.3

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250140.wiff

Date Analyzed: 26-JAN-10 22:56

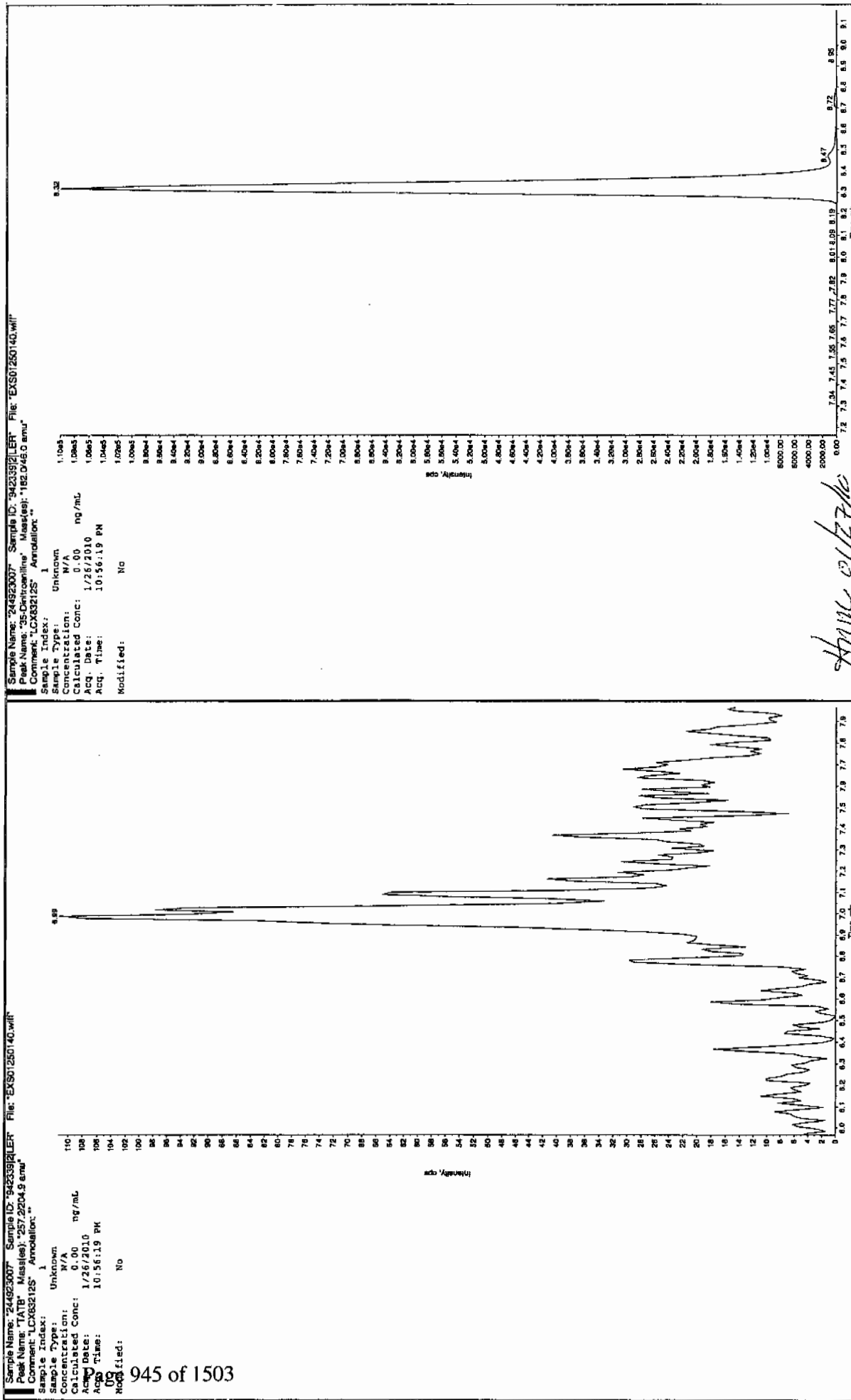
Units: ug/kg

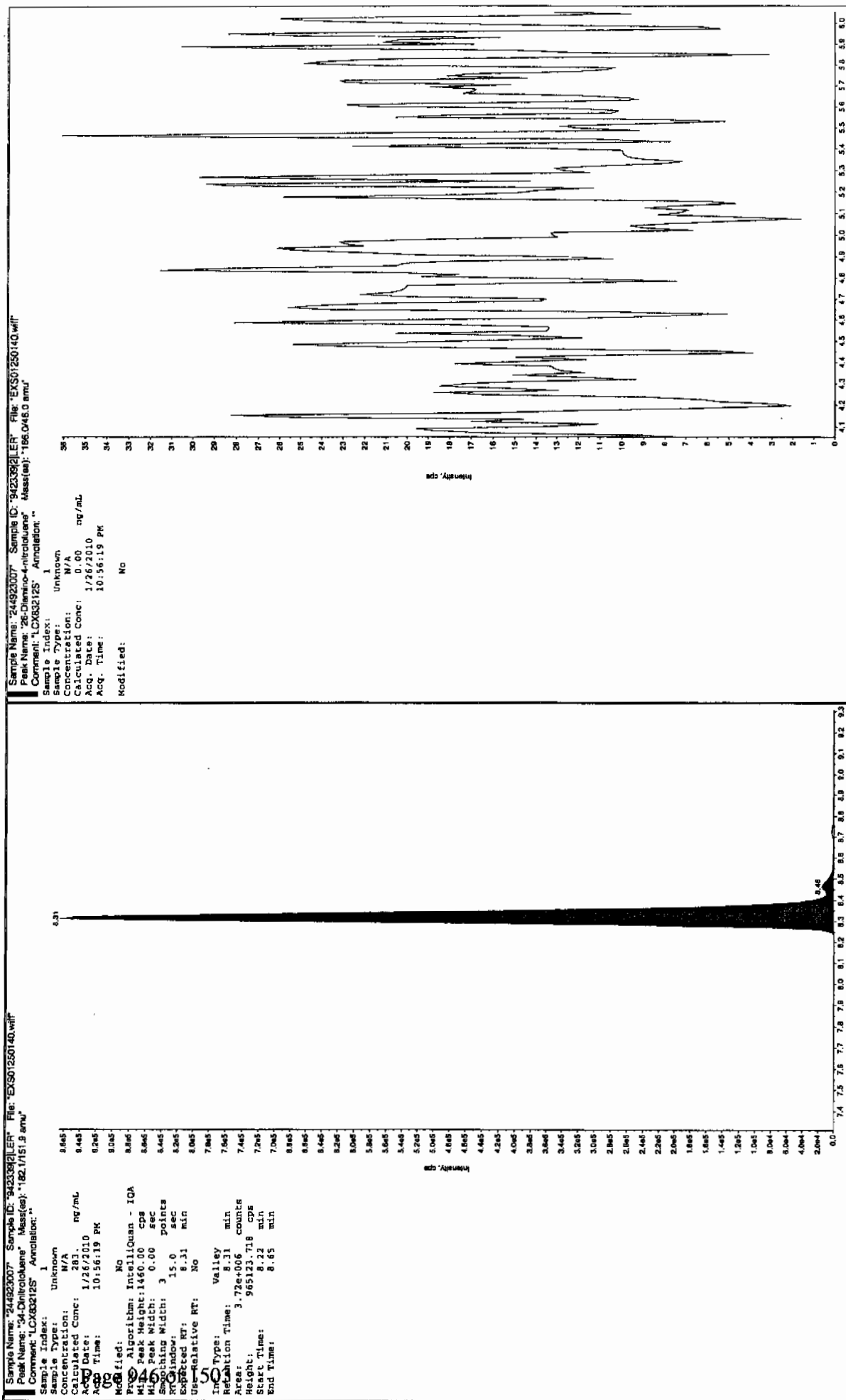
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

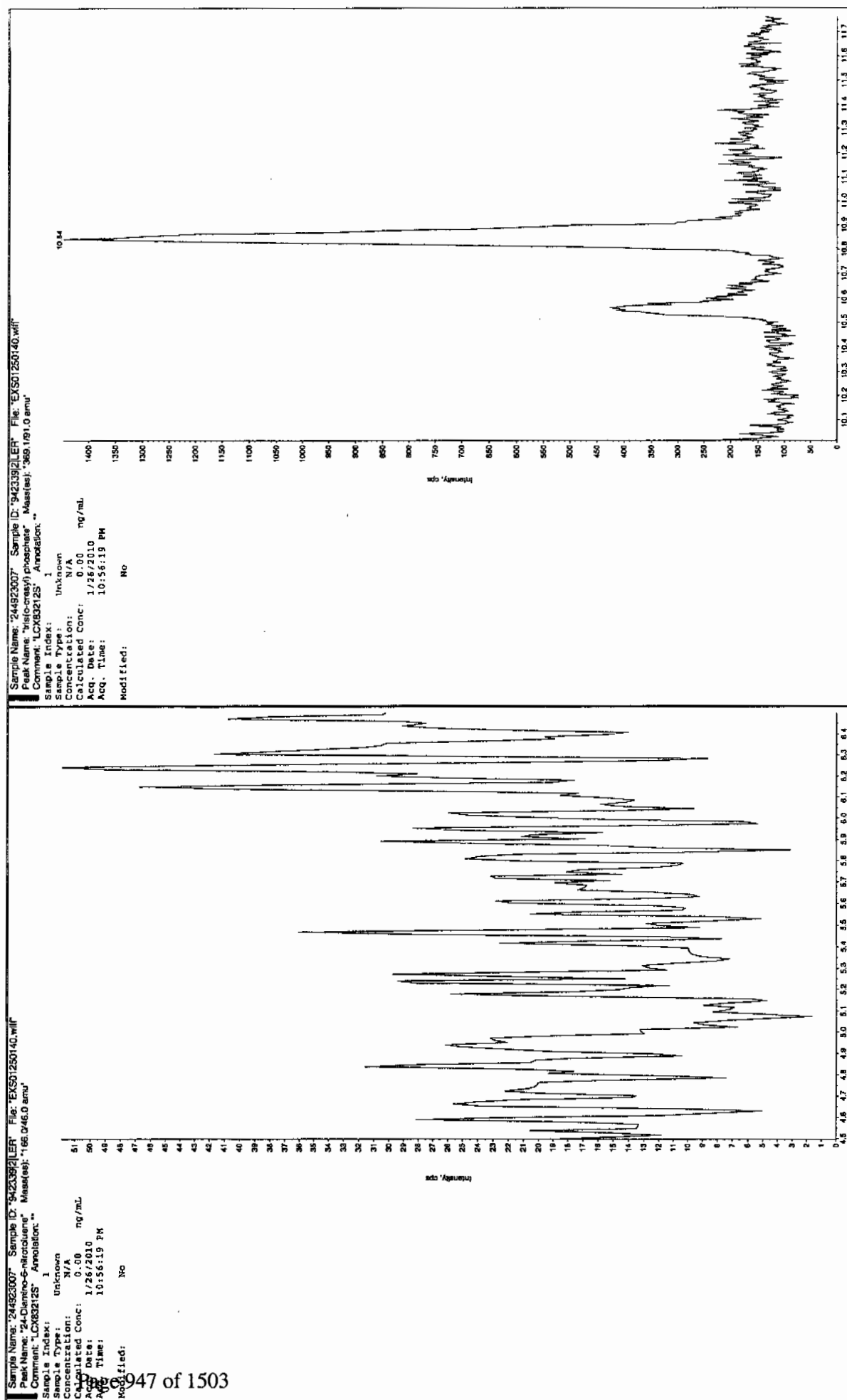
*Concentration =

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

See 1127110







1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7172

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923008

Sample Amount 2

Moisture: 21.2

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125201a

Date Analyzed: 29-JAN-10 13:43

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: Fri Jan 29 17:42:56 2010, Page 39 of 51

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0125201a

Date: 29-Jan-2010

Time: 13:43:10

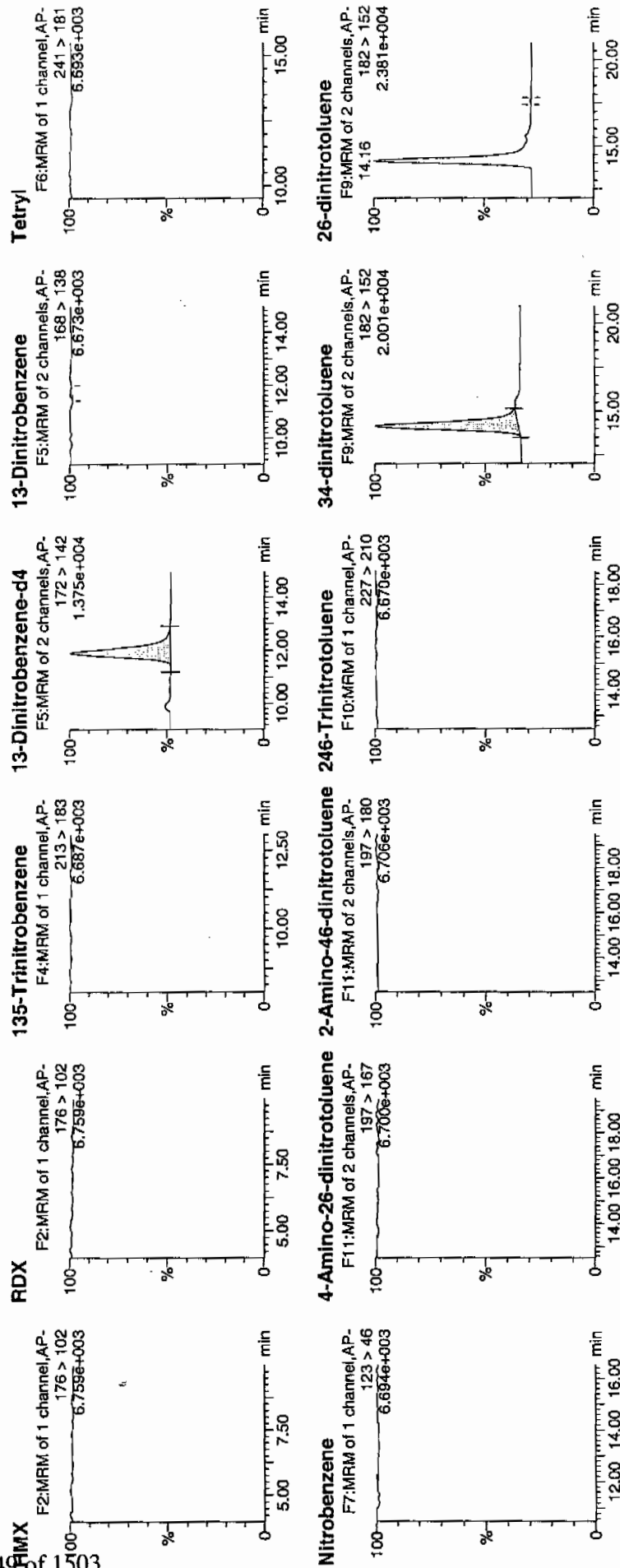
ID: 244923008

Vial: 3:3,E

11/30/10

1942339 / 2022 / 21

94 of 1503



11/30/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 40 of 51

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

24-dinitrotoluene

F9:MRM of 2 channels,AP-

182 > 152

2.381e+004

26-dinitrotoluene-d3

F9:MRM of 2 channels,AP-

185 > 155

4.332e+004

2-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

6.713e+003

4-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

6.713e+003

3-Nitrotoluene

F12:MRM of 1 channel,AP-

137 > 46

6.713e+003

PETN

F13:MRM of 1 channel,AP-

361 > 62

6.704e+003

Page 950 of 1503

ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
244923008	HMX	176 > 102		2803.869										
244923008	RDX	176 > 102		2803.869										
244923008	135-Trinitrobenzene	213 > 183		2803.869										
244923008	13-Dinitrobenzene-d4	172 > 142	11.89	2803.869		2803.869	2803.869	bb			472.2862	94.5	-5.5	140.2
244923008	13-Dinitrobenzene	168 > 138		2803.869				MM-	29-Jan-10	17:23:29				
244923008	Tetryl	241 > 181		2803.869										
244923008	Nitrobenzene	123 > 46		15412.774										
244923008	4-Amino-26-dinitrotoluene	197 > 167		15412.774										
244923008	2-Amino-46-dinitrotoluene	197 > 180		15412.774										
244923008	246-Trinitrotoluene	227 > 210		15412.774										
244923008	34-dinitrotoluene	182 > 152	14.16	7039.895	15412.774	7039.895	228.379	bb			251.5143	100.6	0.6	530.7
244923008	26-dinitrotoluene	182 > 152		15412.774				MM-	29-Jan-10	17:35:45				
244923008	24-dinitrotoluene	182 > 152		15412.774				MM-	29-Jan-10	17:36:45				
244923008	26-dinitrotoluene-d3	185 > 155	17.16	15412.774		15412.774	15412.774	bb			472.8326	94.6	-5.4	931.9
244923008	2-Nitrotoluene	137 > 46		15412.774										
244923008	4-Nitrotoluene	137 > 46		15412.774										
244923008	3-Nitrotoluene	137 > 46		15412.774										
244923008	PETN	361 > 62		15412.774										

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7172

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923008

Sample Amount 2

Moisture: 21.2

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250141.wiff

Date Analyzed: 26-JAN-10 23:12

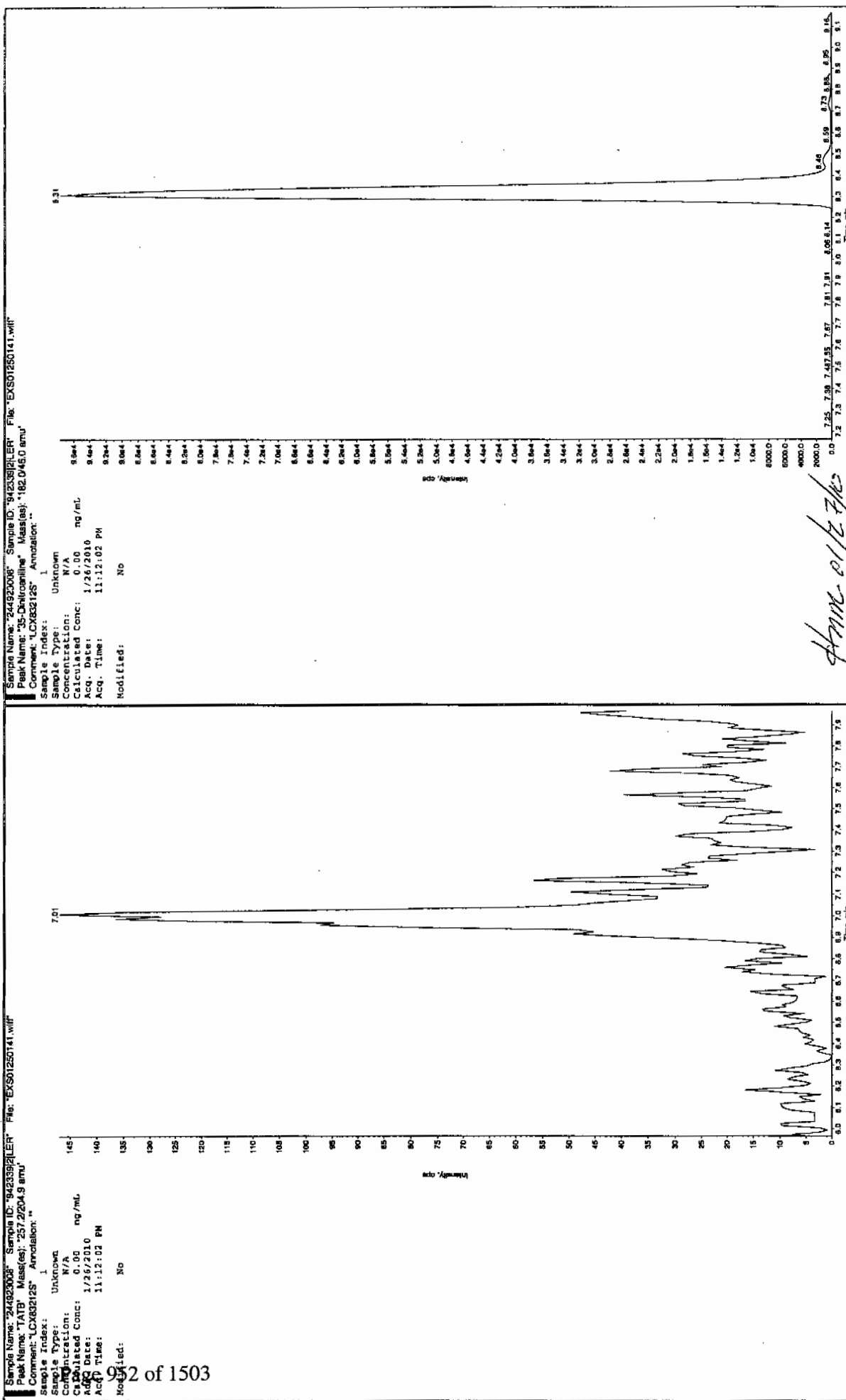
Units: ug/kg

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

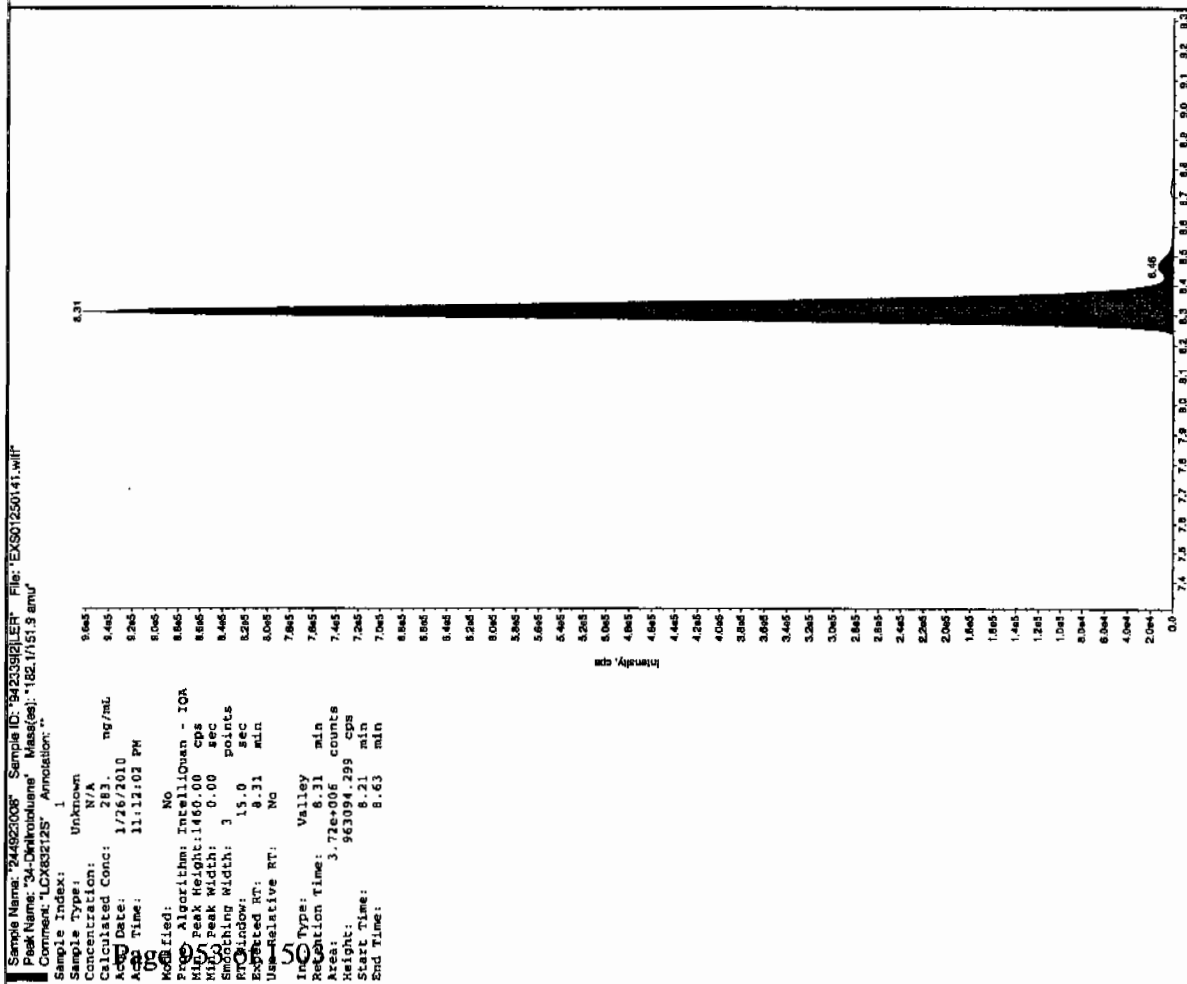
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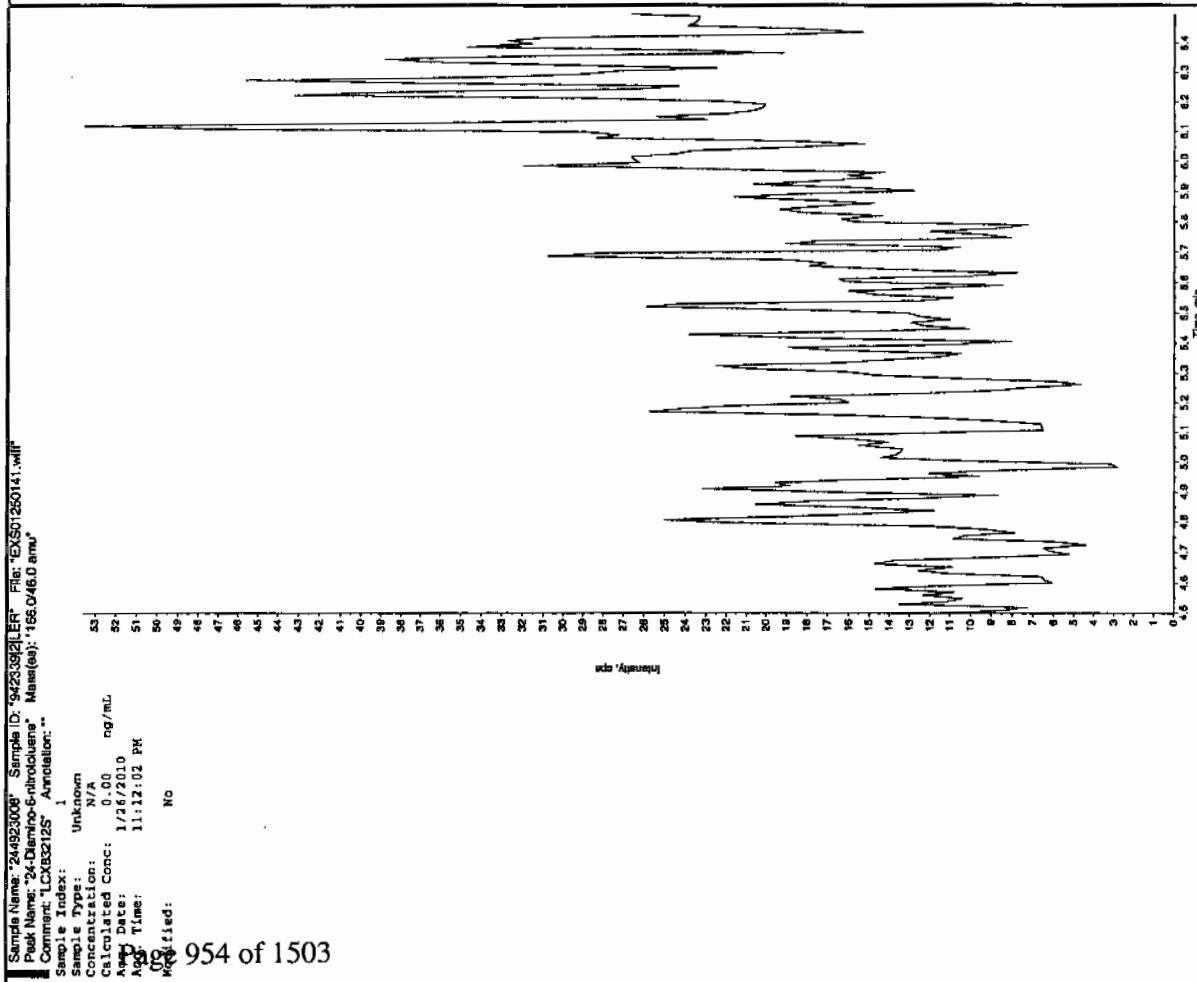
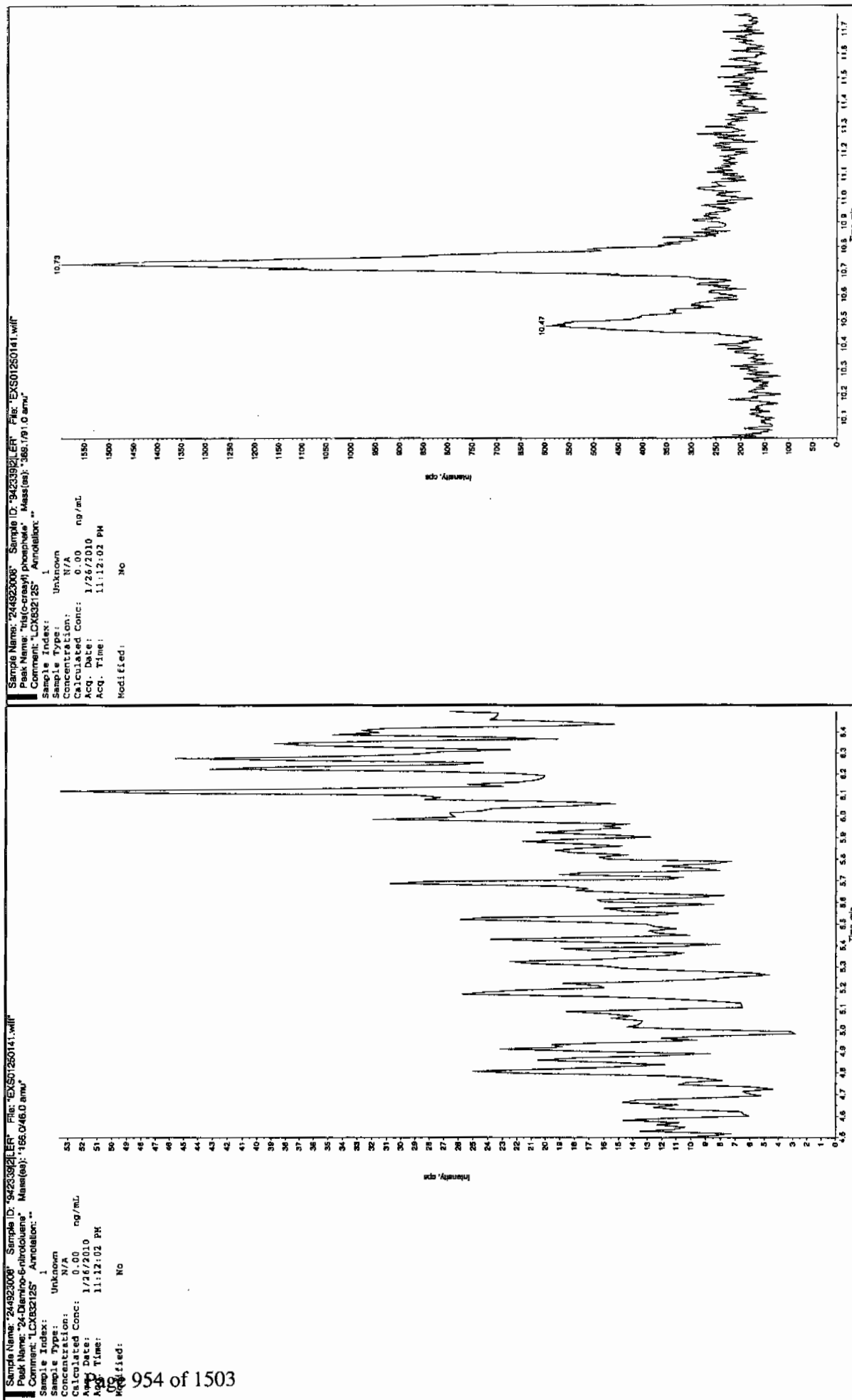
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

OK 112710



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1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7218

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923009

Sample Amount 2

Moisture: 2.2

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125202a

Date Analyzed: 29-JAN-10 14:12

Units: ug/kg

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

*Concentration =

Instrument Value	X	Concentrated Extract Volume	X	Dilution Factor
		Sample Amount		

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 41 of 51

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0125202a

Date: 29-Jan-2010

Time: 14:12:39

ID: 244923009

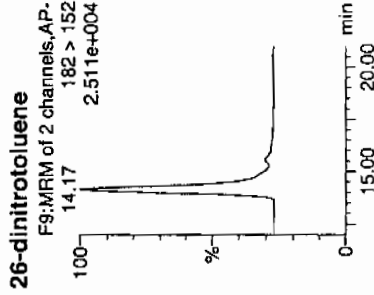
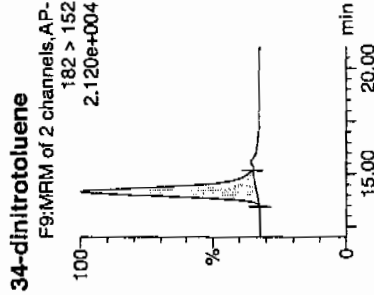
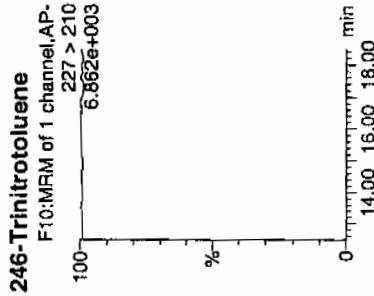
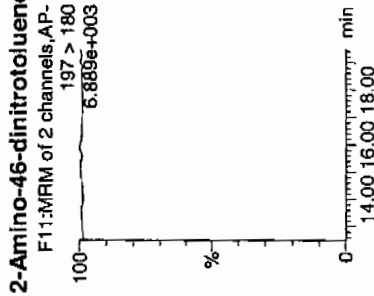
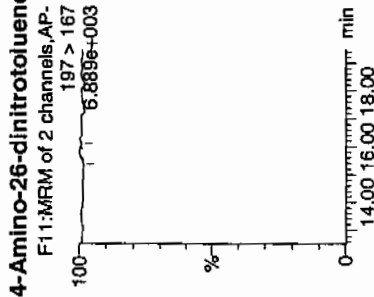
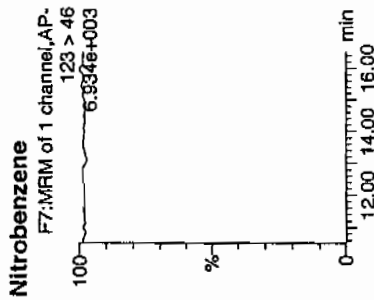
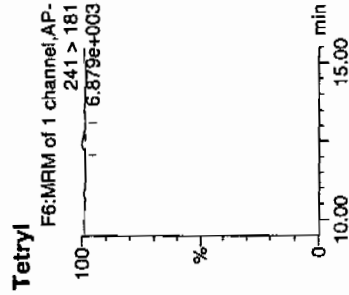
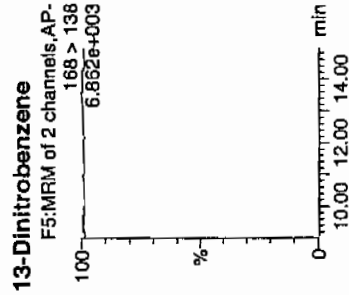
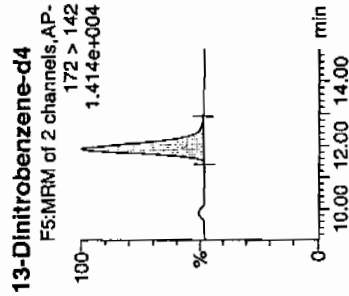
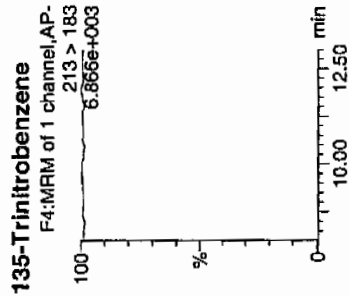
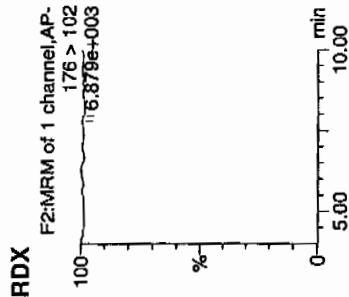
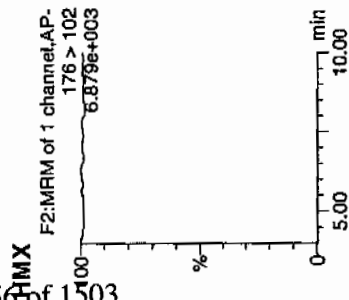
Vial: 3:3,F

1/31/10

LAUW 942339 / 21

HMZ

RDX



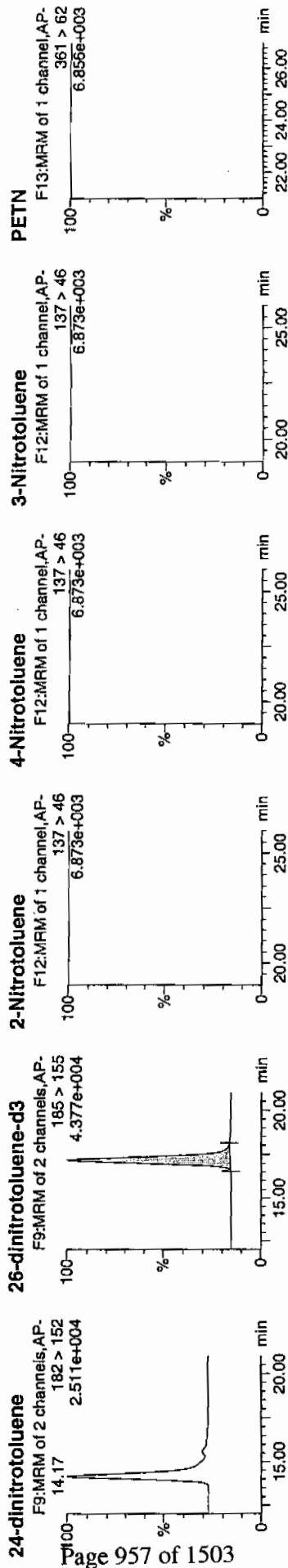
4/11/10 9/1/31/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Jan 29 17:42:56 2010, Page 42 of 51

Dataset: C:\MASSLYNX\New_Exp\PRO1012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



ID	Name	Trace	RT	Area	S Area	Abs. Resp	Response	Flags	Mod. Date	Mod. Time	ng/mL	%Rec	%Dev	SIN
244923009	HMx	176 > 102			2896.078									
244923009	RDX	176 > 102			2896.078				MM-	29-Jan-10	17:21:58			
244923009	135-Trinitrobenzene	213 > 183			2896.078									
244923009	13-Dinitrobenzene-d4	172 > 142	11.92	2896.078		2896.078	2896.078	bb			487.8180	97.6	-2.4	286.2
244923009	13-Dinitrobenzene	168 > 138			2896.078									
244923009	Tetryl	241 > 181			2896.078				MM-	29-Jan-10	17:24:22			
244923009	Nitrobenzene	123 > 46			2896.078									
244923009	4-Amino-26-dinitrotoluene	197 > 167			2896.078									
244923009	2-Amino-46-dinitrotoluene	197 > 180			15825.295				MM-	29-Jan-10	17:25:06			
244923009	246-Trinitrotoluene	227 > 210			15825.295									
244923009	34-dinitrotoluene	182 > 152	14.17	7812.326	15825.295	7812.326	246.830	bb			271.8353	108.7	8.7	460.0
244923009	26-dinitrotoluene	182 > 152			15825.295									
244923009	24-dinitrotoluene	182 > 152			15825.295									
244923009	26-dinitrotoluene-d3	185 > 155	17.16	15825.295	15825.295	15825.295	15825.295	bb			485.4880	97.1	-2.9	1174.3
244923009	2-Nitrotoluene	137 > 46			15825.295									
244923009	4-Nitrotoluene	137 > 46			15825.295									
244923009	3-Nitrotoluene	137 > 46			15825.295									
244923009	PETN	361 > 62			15825.295									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7218

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923009

Sample Amount 2

Moisture: 9.9

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250142.wiff

Date Analyzed: 26-JAN-10 23:27

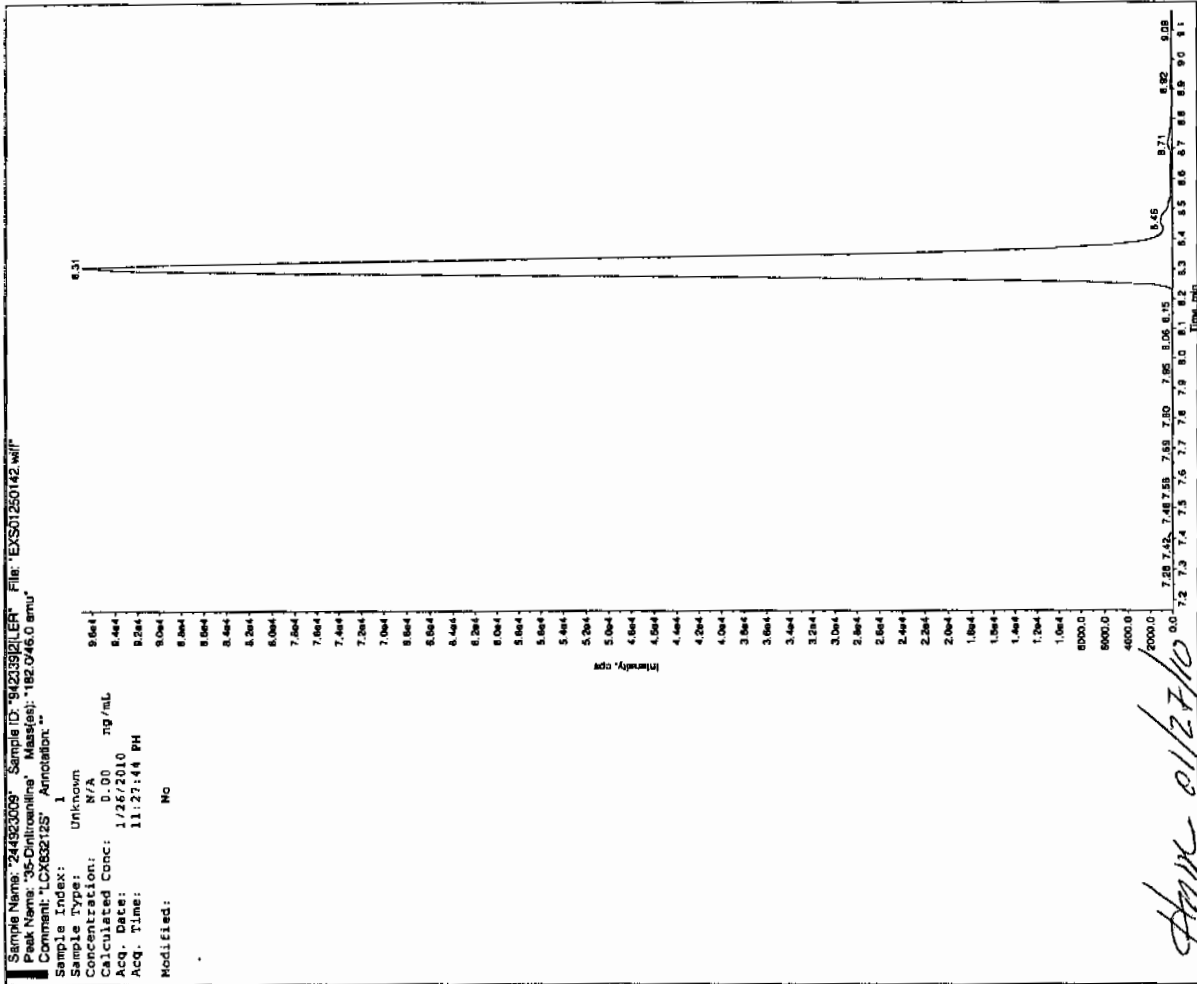
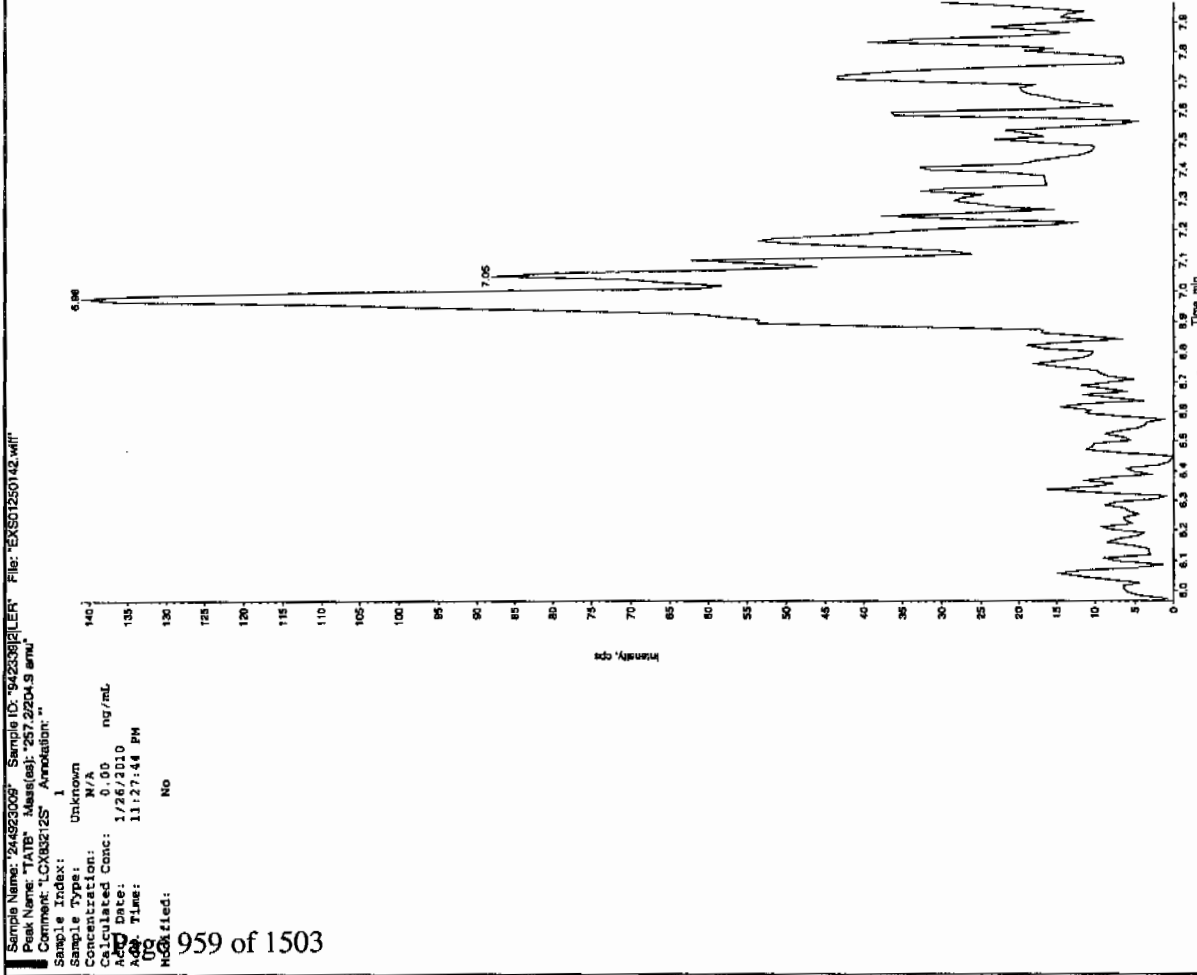
Units: ug/kg

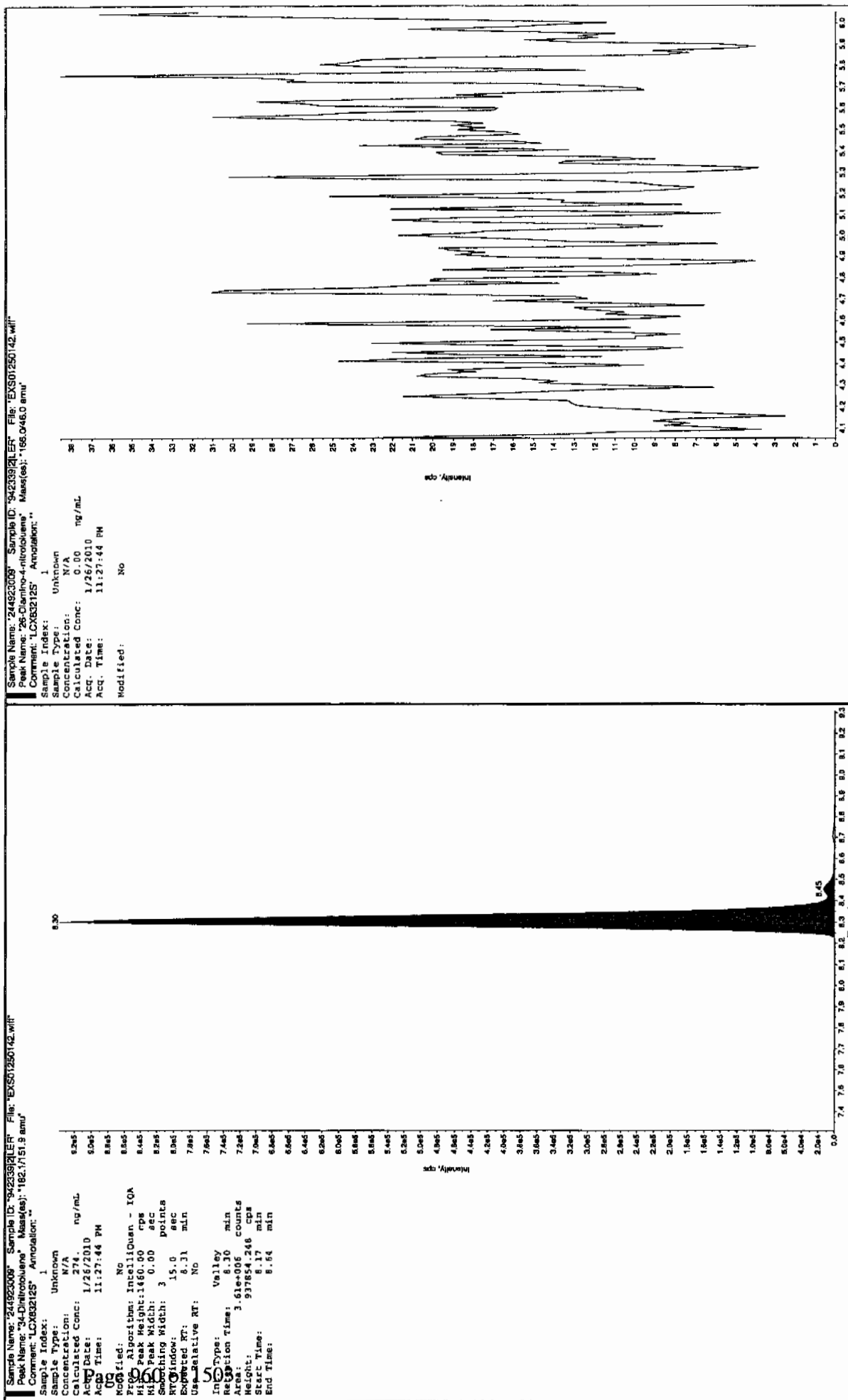
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

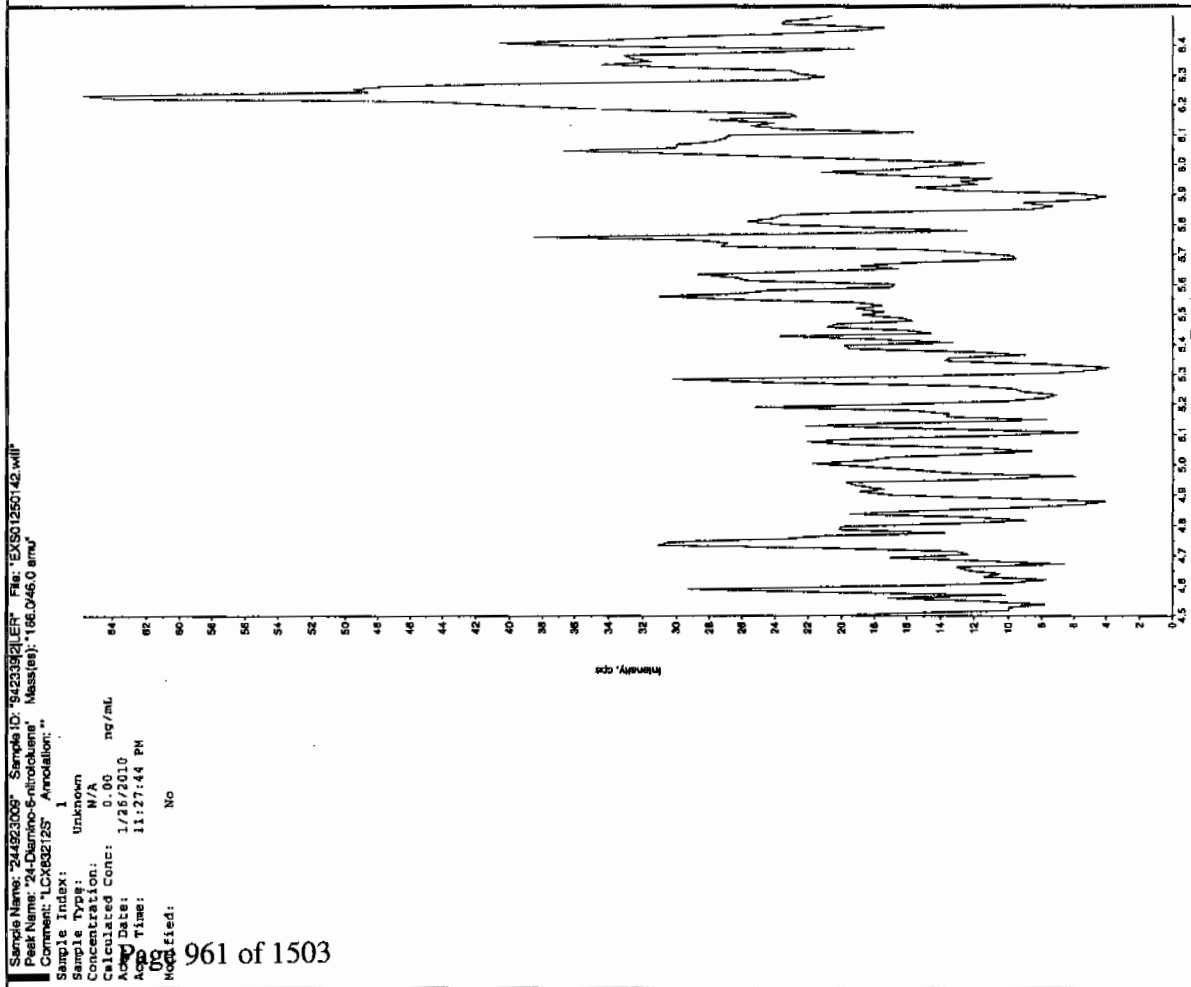
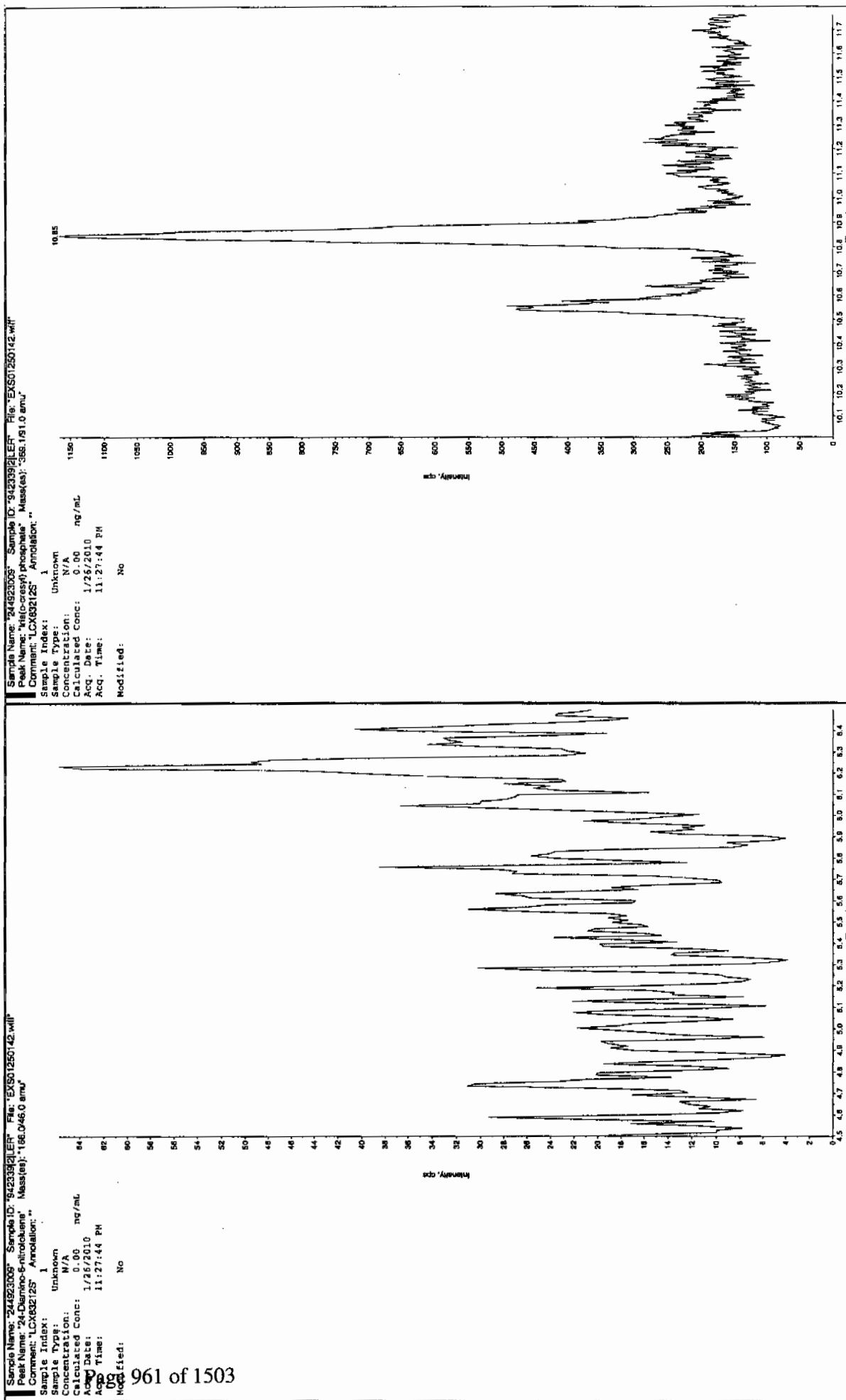
*Concentration =

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

See 1127110







1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7223

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923010

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125203a

Date Analyzed: 29-JAN-10 14:42

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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125203a

Date: 29-Jan-2010

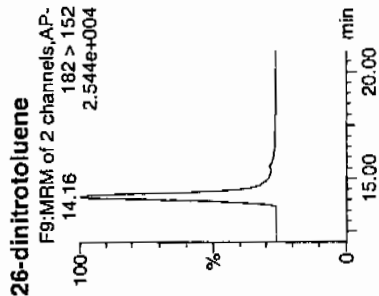
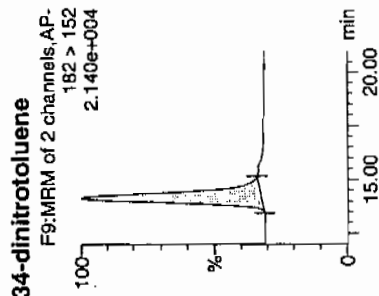
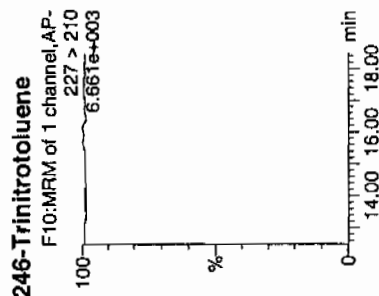
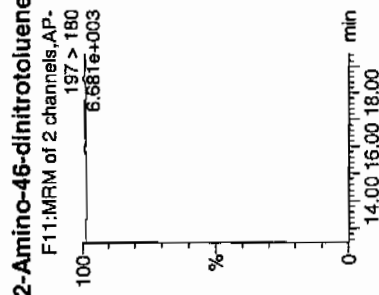
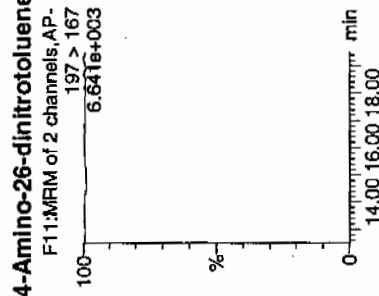
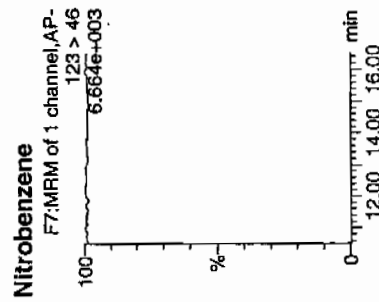
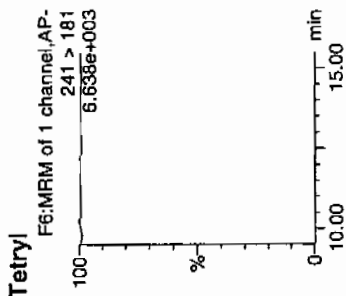
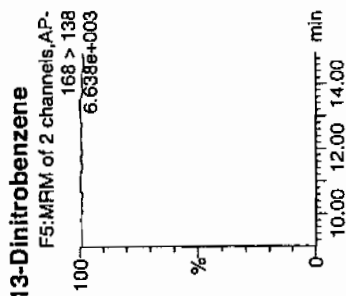
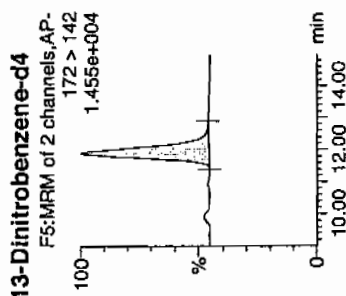
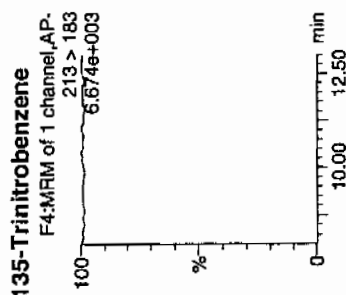
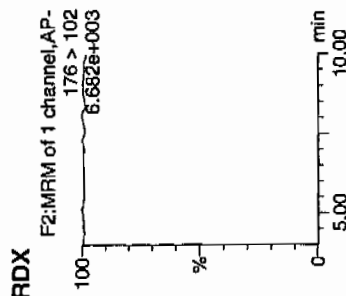
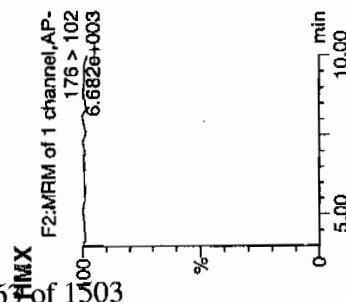
Time: 14:42:07

ID: 244923010

Vial: 3:4,A

not
1/30/10

96 of 1503
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.6626e+003

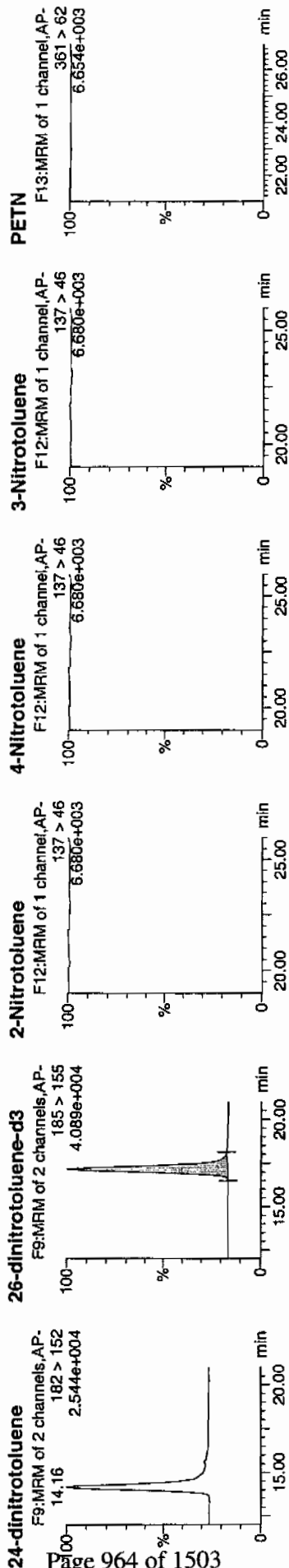


Handwritten signature and date: 1/30/10

Printed: Fri Jan 29 17:42:56 2010, Page 44 of 51

Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Flags	Mod. Date	ng/mL	%Rec	%Dev	S/N
244923010	HMX	176 > 102		3093.068	3093.068							
244923010	RDX	176 > 102		3093.068	3093.068							
244923010	135-Trinitrobenzene	213 > 183		3093.068	3093.068							
244923010	13-Dinitrobenzene-d4	172 > 142	11.89	3093.068	3093.068	3093.068	bb		520.9992	104.2	4.2	384.7
244923010	13-Dinitrobenzene	168 > 138		3093.068	3093.068							
244923010	Tetryl	241 > 181		3093.068	3093.068							
244923010	Nitrobenzene	123 > 46		3093.068	3093.068							
244923010	4-Amino-26-dinitrotoluene	197 > 167		14458.835	14458.835							
244923010	2-Amino-46-dinitrotoluene	197 > 180		14458.835	14458.835							
244923010	246-Trinitrotoluene	227 > 210		14458.835	14458.835							
244923010	34-dinitrotoluene	182 > 152	14.16	7843.346	14458.835	7843.346	bb		298.7070	119.5	19.5	1142.0
244923010	26-dinitrotoluene	182 > 152		14458.835	14458.835							
244923010	24-dinitrotoluene	182 > 152		14458.835	14458.835							
244923010	26-dinitrotoluene-d3	185 > 155	17.16	14458.835	14458.835	14458.835	bb		443.5677	88.7	-11.3	1503.7
244923010	2-Nitrotoluene	137 > 46		14458.835	14458.835							
244923010	4-Nitrotoluene	137 > 46		14458.835	14458.835							
244923010	3-Nitrotoluene	137 > 46		14458.835	14458.835							
244923010	PETN	361 > 62		14458.835	14458.835							

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7223

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 244923010

Sample Amount 2

Moisture: 10.8

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250143.wiff

Date Analyzed: 26-JAN-10 23:43

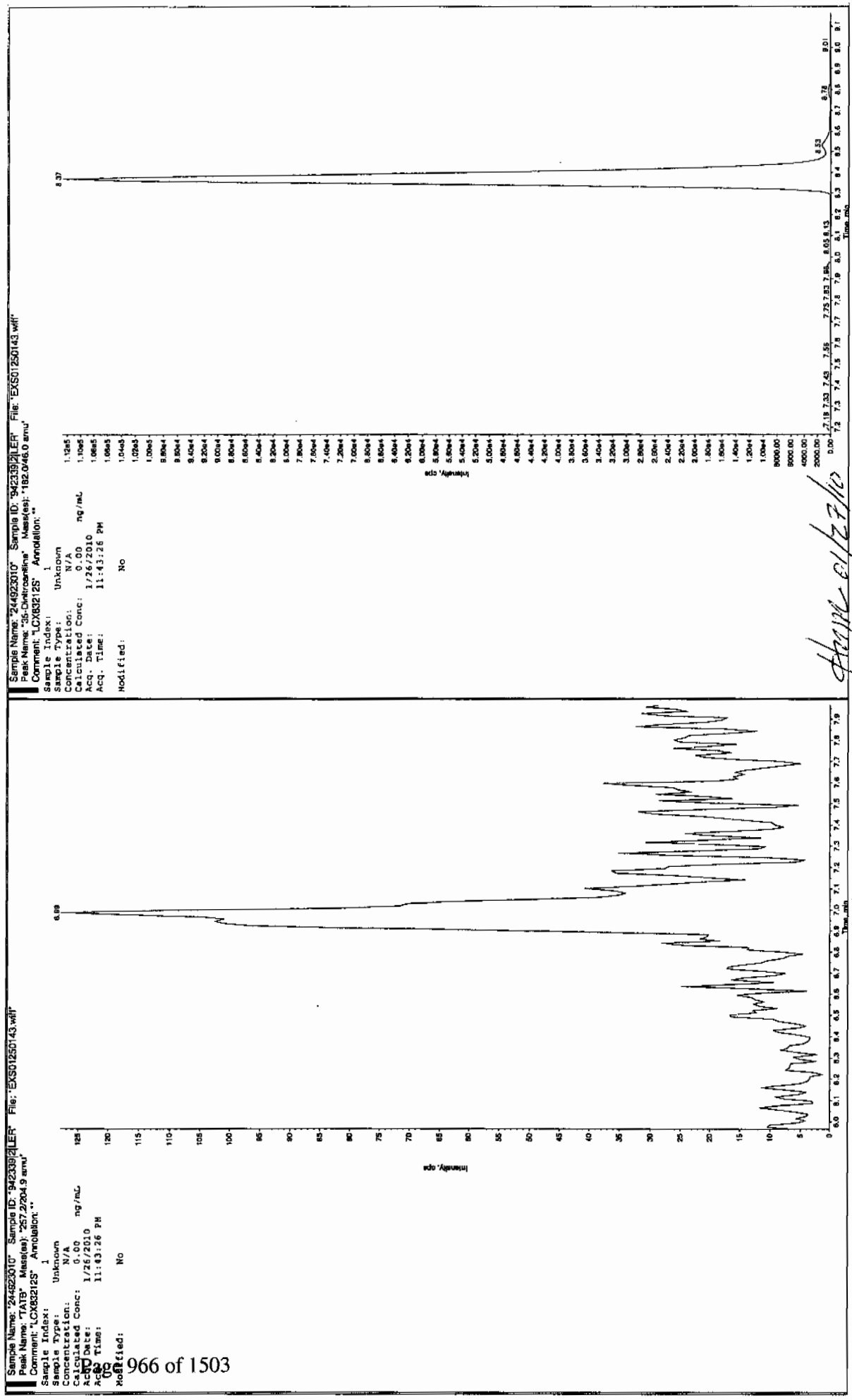
Units: ug/kg

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

*Concentration =

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

267 1127/10



Sample Name: "24923010" Sample ID: "942339[2]LER" File: "EX501250143.wit"
Peak Name: "34-Dimethylolane" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/l
Acq. Date:	1/26/2010
Acq. Time:	11:43:26 PM
Modified:	No

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	291.
Acq Date:	1/26/2010
Acq Time:	11:43:26 PM
	ng/mL

```

Ver No
Modified: NO
Proc. Algorithm: IntelliQuan - IQA
NIN: 95
Peak Height: 1460.00 cps
NIR: Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.31 min
Use-Relative RF: NO

```

```

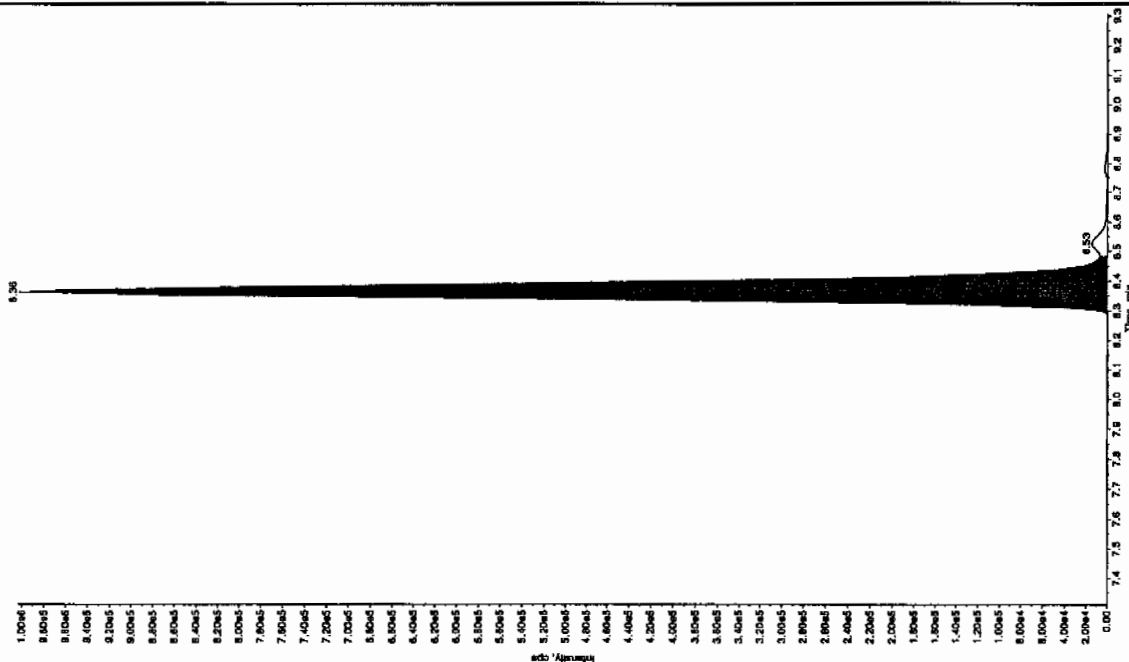
5 In@ Types: Valley
  Retention Time: 8.36 min
  Area: 3.81e+006 counts
  Height: 1003290.649 cps
  Start Time: 8.27 min
  End Time: 8.48 min

```

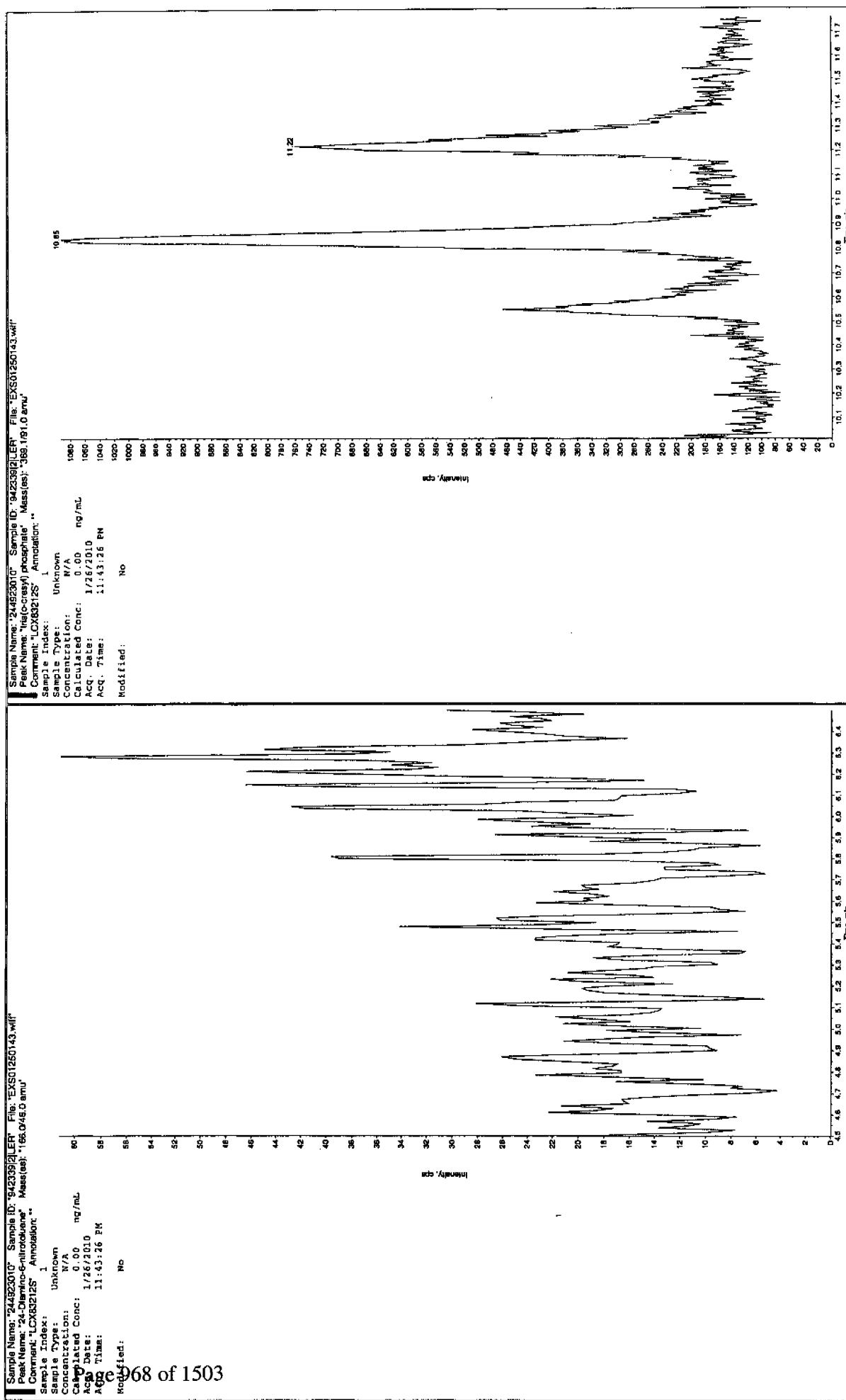
PROJECT: SUB CT-0A-E-0

0
1
3
5
6
7
8
9

100



*GEL SOP GL-0A-E-056, Method 8321A-Modified LCMSMS#4



STANDARDS DATA

SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
Primary Analytes								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
DNX	25	50	200	400	800	1000	na	600
MXN	25	50	200	400	800	1000	na	600
TNX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	na	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	25	50	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (08/09A)

Calibration Levels 8321A-Modified-EXPL.xls

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1287

Lab Code: GEL

Run Date: 25-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:		1	2	3	4	5	6	Ave RF	RSD	Q
Parname	Data File:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a			
1,3-Dinitrobenzene-d4		5.832	5.787	6.227	6.458	5.56	5.758	5.937	5.651	
2,4,6-Trinitrotoluene		.291	.314	.307	.33	.315	.35	0.318	6.37	
2,4-Dinitrotoluene		.266	.236	.248	.257	.257	.261	0.254	4.281	
2,6-Dinitrotoluene		1.098	1.063	1.109	1.102	1.101	1.136	1.102	2.135	
2,6-Dinitrotoluene-d3		32.788	34.124	32.326	33.697	32.571	30.074	32.597	4.342	
2-Amino-4,6-dinitrotoluene		.357	.34	.36	.395	.383	.411	0.374	7.093	
3,4-Dinitrotoluene		.897	.857	.859	.974	.897	.964	0.908	5.56	
4-Amino-2,6-dinitrotoluene		.224	.204	.265	.278	.276	.315	0.260	15.398	
HMX		3.197	3.208	2.918	3.261	3.211	3.241	3.173	4.004	
Nitrobenzene		.797	.997	.799	.806	.871	.858	0.855	8.992	
RDX		2.287	2.428	1.935	2.024	2.303	2.216	2.199	8.428	
Tetryl		.914	.973	.905	.866	.809	.744	0.869	9.411	
m-Dinitrobenzene		1.053	1.14	1.161	1.232	1.185	1.188	1.160	5.223	
m-Nitrotoluene		.087	.096	.092	.097	.091	.099	0.094	4.837	
o-Nitrotoluene		.167	.176	.171	.158	.159	.167	0.166	4.11	
p-Nitrotoluene		.087	.091	.082	.08	.076	.081	0.083	6.385	

Q column used to flag RSD values outside of Limit (>20%)

* Values outside of QC Limit

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1287

Lab Code: GEL

Run Date: 25-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Linear

Calibration Level:	1	2	3	4	5	6	Slope	Intercept	COD	Q
Data File:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a				
Parname										
1,3,5-Trinitrobenzene	651.953	1067.5	3665.01	7077.27	12962.6	16285.9	2.817	28.102	.999	

Linear fit: $Y=mx +b$
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)

* Values outside of QC Limit

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1287

Lab Code: GEL

Run Date: 25-JAN-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0125003a	EXP0125004a	EXP0125005a	EXP0125006a	EXP0125007a	EXP0125008a					
Parname:											
PETN	2319.71	4827.48	15533.2	25594.2	42172.6	47290	2	-0004964	47.5	.9972	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

Quantify Calibration Report

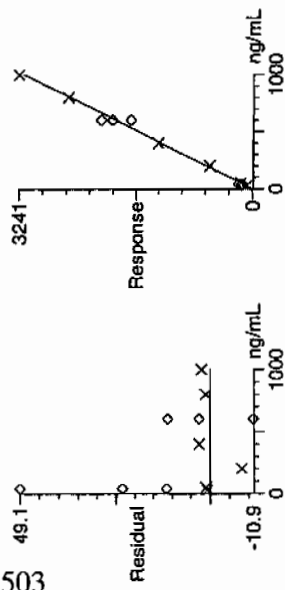
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

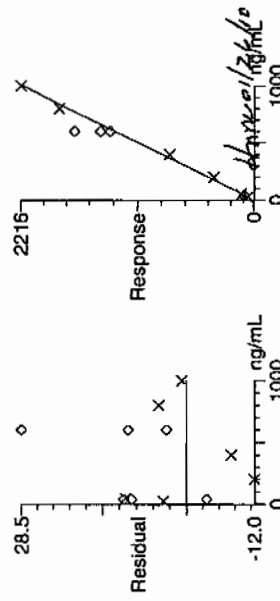
Method: C:\MASSLYNX\New_Exp.PRO\MethDB\012510expa.mdb, Time: Mon Jan 25 16:14:14 2010

Calibration: Untitled, Time: Tue Jan 26 09:24:51 2010

Compound name: HMX
 Response Factor: 3.17253
 RRF SD: 0.127021, % Relative SD: 4.00378
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



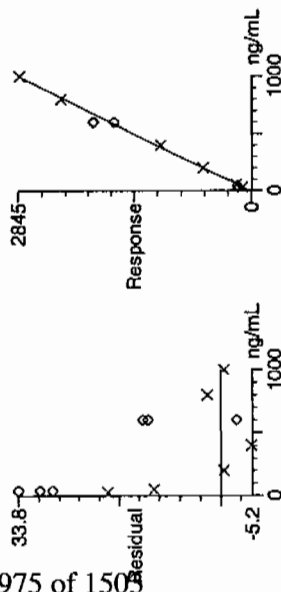
Compound name: RDX
 Response Factor: 2.1986
 RRF SD: 0.185302, % Relative SD: 8.42817
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



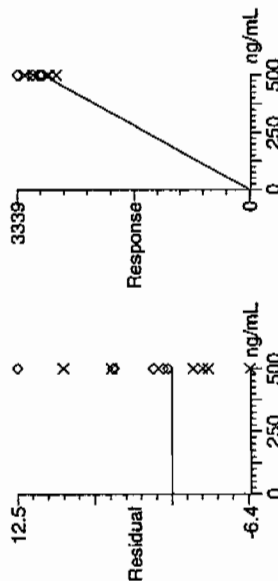
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\1012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 135-Trinitrobenzene
 Correlation coefficient: $r = 0.999489$, $r^2 = 0.998979$
 Calibration curve: $2.81694 \cdot x + 28.1015$
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: Linear, Origin: Exclude, Weighting: Null, Axis trans: None



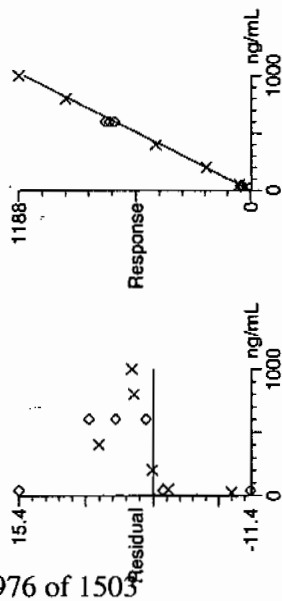
Compound name: 13-Dinitrobenzene-d4
 Response Factor: 5.9368
 RRF SD: 0.335509, % Relative SD: 5.65134
 Response type: External Std, Area
 Curve type: RF



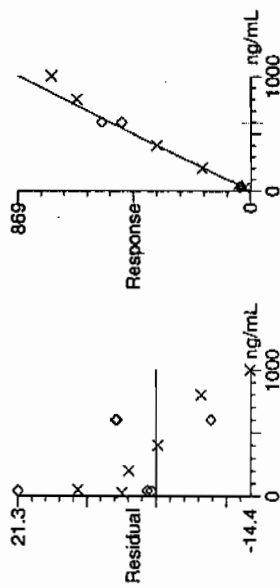
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 1,3-Dinitrobenzene
 Response Factor: 1.15998
 RRF SD: 0.0605914, % Relative SD: 5.22347
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: Tetra
 Response Factor: 0.868613
 RRF SD: 0.0817457, % Relative SD: 9.41106
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF

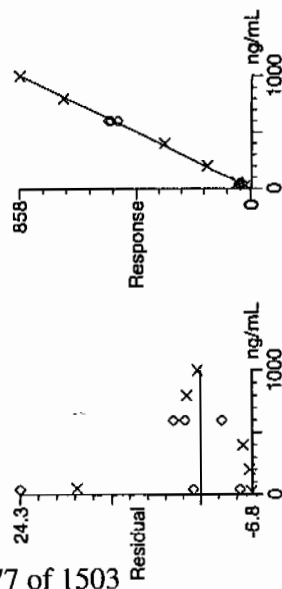


Quantify Calibration Report

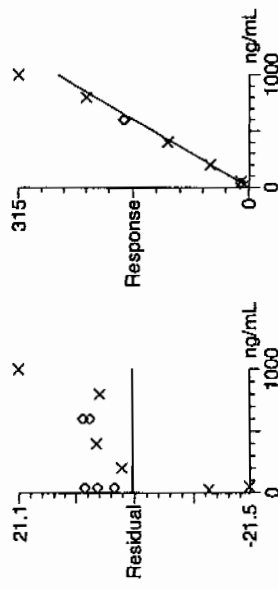
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: Nitrobenzene
 Response Factor: 0.854595
 RRF SD: 0.076847, % Relative SD: 8.99222
 Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
 Curve type: RF



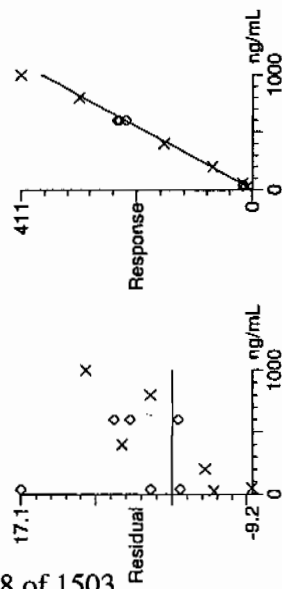
Compound name: 4-Amino-26-dinitrotoluene
 Response Factor: 0.260514
 RRF SD: 0.040113, % Relative SD: 15.3977
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



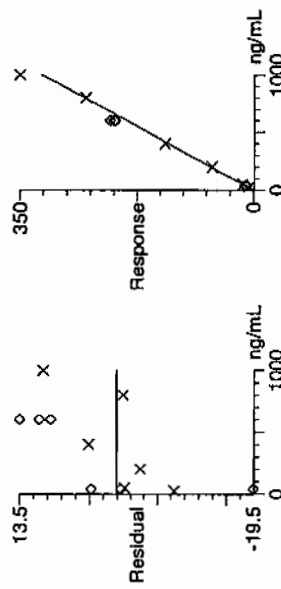
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PROV012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 2-Amino-46-dinitrotoluene
 Response Factor: 0.374285
 RRF SD: 0.0265466, % Relative SD: 7.09263
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



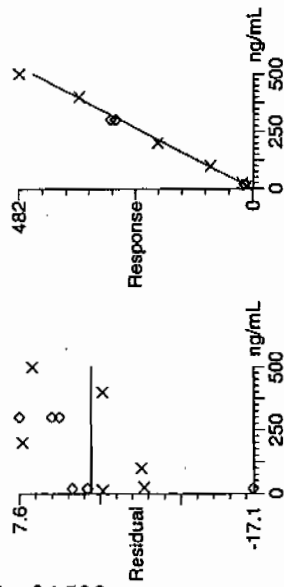
Compound name: 246-Trinitrotoluene
 Response Factor: 0.318064
 RRF SD: 0.020262, % Relative SD: 6.37043
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



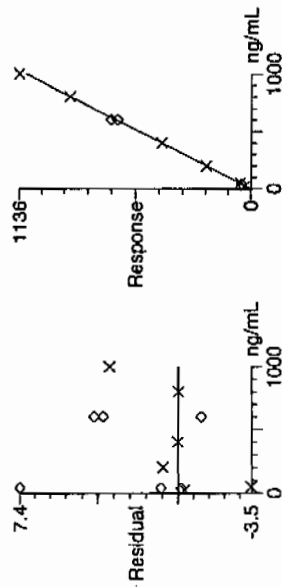
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 34-dinitrotoluene
 Response Factor: 0.908014
 RRF SD: 0.0504831, % Relative SD: 5.55973
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



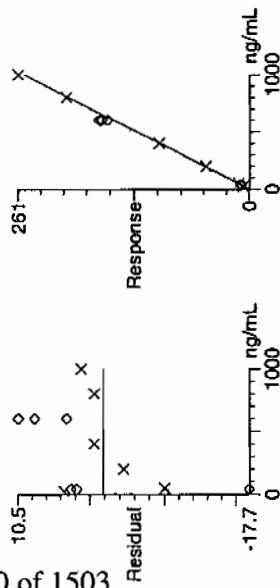
Compound name: 26-dinitrotoluene
 Response Factor: 1.10154
 RRF SD: 0.0235225, % Relative SD: 2.13541
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



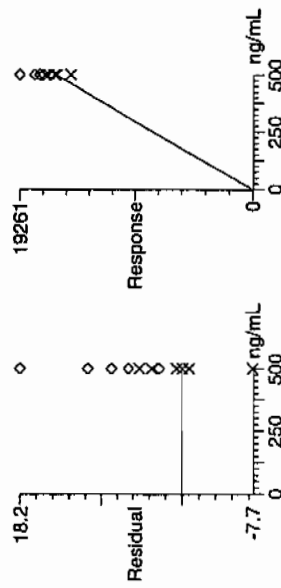
Quantify Calibration Report
 GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 24-dinitrotoluene
 Response Factor: 0.254063
 RRF SD: 0.0108762, % Relative SD: 4.28092
 Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
 Curve type: RF



Compound name: 26-dinitrotoluene-d3
 Response Factor: 32.5967
 RRF SD: 1.41533, % Relative SD: 4.34194
 Response type: External Std, Area
 Curve type: RF



Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

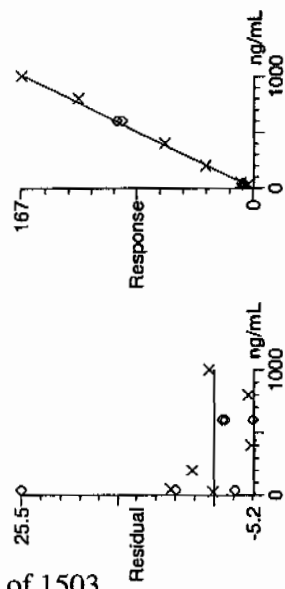
Compound name: 2-Nitrotoluene

Response Factor: 0.166303

RRF SD: 0.00683474, % Relative SD: 4.10981

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

Curve type: RF



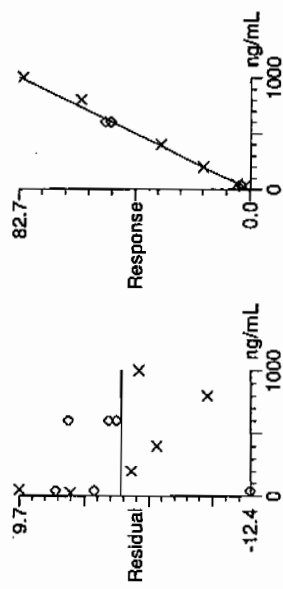
Compound name: 4-Nitrotoluene

Response Factor: 0.0826798

RRF SD: 0.00527876, % Relative SD: 6.38459

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)

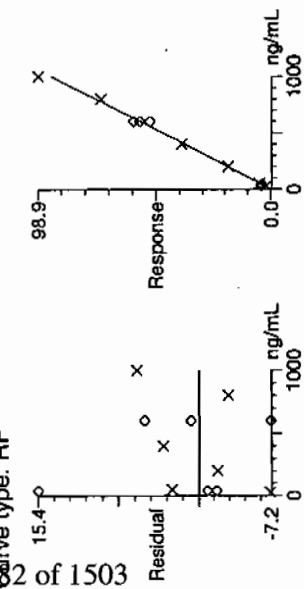
Curve type: RF



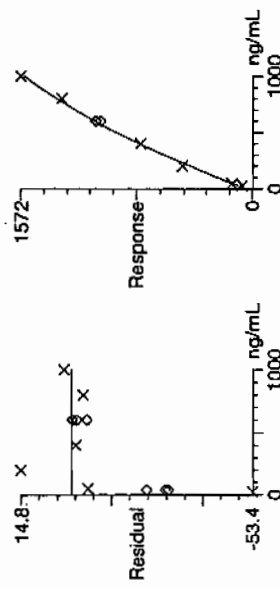
Quantify Calibration Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO1012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Compound name: 3-Nitrotoluene
Response Factor: 0.0933598
RF SD: 0.00451572, % Relative SD: 4.83691
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Coefficient of Determination: 0.997185
Calibration curve: $-0.000496352 \cdot x^2 + 1.99974 \cdot x + 47.5002$
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0125010a

Analysis Date: 25-JAN-10 15:46

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	584.029	97	
1,3-Dinitrobenzene-d4	500	523.981	105	
2,4,6-Trinitrotoluene	600	654.852	109	
2,4-Dinitrotoluene	600	662.983	110	
2,6-Dinitrotoluene	600	623.146	104	
2,6-Dinitrotoluene-d3	500	512.68	103	
2-Amino-4,6-dinitrotoluene	600	596.059	99	
3,4-Dinitrotoluene	300	322.78	108	
4-Amino-2,6-dinitrotoluene	600	646.592	108	
HMX	600	534.345	89	
Nitrobenzene	600	582.675	97	
PETN	600	572.063	95	
RDX	600	620.495	103	
Tetryl	600	550.312	92	
m-Dinitrobenzene	600	604.886	101	
m-Nitrotoluene	600	631.363	105	
o-Nitrotoluene	600	591.123	99	
p-Nitrotoluene	600	630.068	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
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0125010a

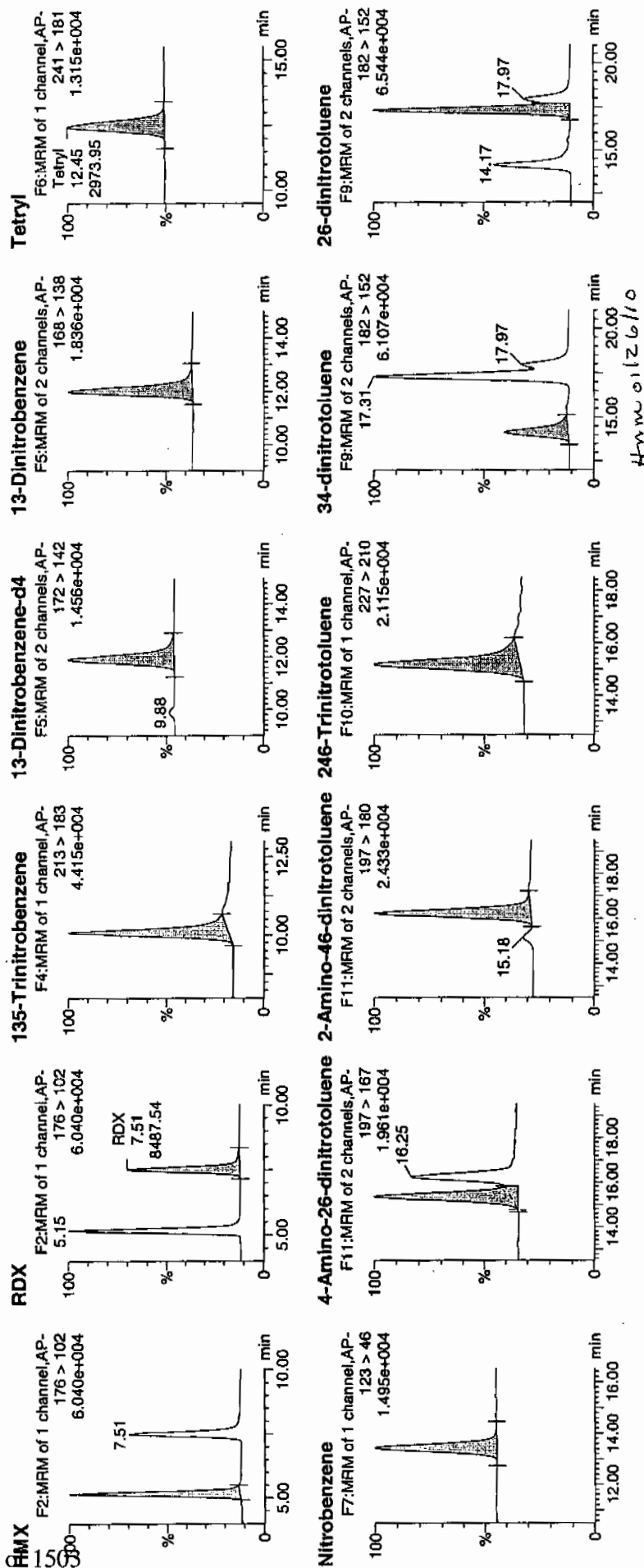
Date: 25-Jan-2010

Time: 15:46:04

ID: WXX100125-071CV

Cal: 1:1,B

1/26/10



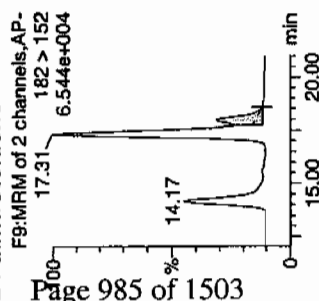
Quantity Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

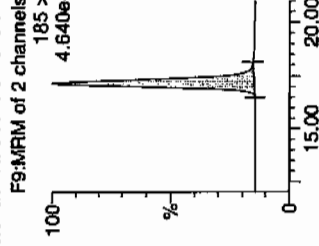
Printed: Tue Jan 26 11:27:45 2010, Page 20 of 73

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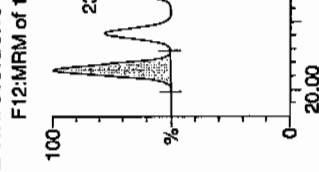
24-dinitrotoluene



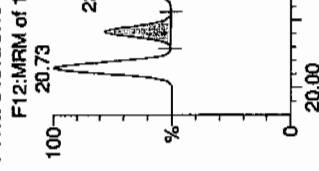
26-dinitrotoluene-d3



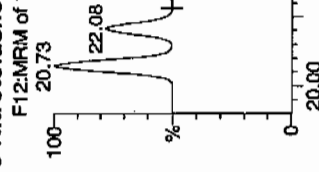
2-Nitrotoluene



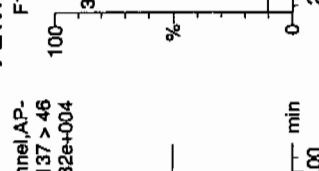
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	Area%	Response	Flags	Mod Date	Mod Time	% Norm	% Rec	% Dev	SN
WXX100125-07ICV	HMZ	176 > 102	5.15	10546.914	3110.769	10546.914	1695.226	bb		534.3448	89.1	-10.9	1064.1
WXX100125-07ICV	RDX	176 > 102	7.51	8487.540	3110.769	8487.540	1364.219	bb		620.4949	103.4	3.4	702.9
WXX100125-07ICV	135-Trinitrobenzene	213 > 183	10.07	10410.370	3110.769	10410.370	1673.279	bb		584.0293	97.3	-2.7	558.3
WXX100125-07ICV	13-Dinitrobenzene-d4	172 > 142	11.89	3110.769	3110.769	3110.769	3110.769	bb		523.9807	104.8	4.8	490.9
WXX100125-07ICV	13-Dinitrobenzene	168 > 138	12.03	4365.390	3110.769	4365.390	701.658	bb		604.8864	100.8	0.8	348.2
WXX100125-07ICV	Tetryl	241 > 181	12.45	2973.947	3110.769	2973.947	478.008	bb		550.3123	91.7	-8.3	262.3
WXX100125-07ICV	Nitrobenzene	123 > 46	13.45	3098.019	3110.769	3098.019	497.951	bb		582.6747	97.1	-2.9	191.2
WXX100125-07ICV	4-Amino-26-dinitrotoluene	197 > 167	15.35	5630.028	16711.664	5630.028	168.446	MM	26-Jan-10 09:19:00	646.5922	107.8	7.8	151.7
WXX100125-07ICV	2-Amino-46-dinitrotoluene	197 > 180	16.25	7456.607	16711.664	7456.607	223.096	bb		596.0593	99.3	-0.7	535.5
WXX100125-07ICV	246-Trinitrotoluene	227 > 210	15.21	6961.575	16711.664	6961.575	208.285	bb		654.8523	109.1	9.1	360.8
WXX100125-07ICV	34-dinitrotoluene	182 > 152	14.17	9795.994	16711.664	9795.994	293.089	bb		322.7797	107.6	7.6	214.3
WXX100125-07ICV	26-dinitrotoluene	182 > 152	17.31	22942.564	16711.664	22942.564	686.424	MM	26-Jan-10 09:21:14	623.1464	103.9	3.9	662.7
WXX100125-07ICV	24-dinitrotoluene	182 > 152	17.97	5629.797	16711.664	5629.797	168.439	MM	26-Jan-10 09:23:04	662.9825	110.5	10.5	148.9
WXX100125-07ICV	26-dinitrotoluene-d3	185 > 155	17.16	16711.664	16711.664	16711.664	16711.664	bb		512.6800	102.5	2.5	842.3
WXX100125-07ICV	2-Nitrotoluene	137 > 46	20.73	3285.697	16711.664	3285.697	98.306	bb		591.1230	98.5	-1.5	432.4
WXX100125-07ICV	4-Nitrotoluene	137 > 46	22.08	1741.151	16711.664	1741.151	52.094	bb		630.0677	105.0	5.0	238.5
WXX100125-07ICV	3-Nitrotoluene	137 > 46	23.71	1970.103	16711.664	1970.103	58.944	bb		631.3634	105.2	5.2	258.3
WXX100125-07ICV	PETN	361 > 62	24.16	34393.992	16711.664	34393.992	1029.042	bb		572.0632	95.3	-4.7	9765.3

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/25/10
 Time of Injection: 1546
 Standard Number: WXX100125-07ICV
 Data File: EXP0125010a

HMX	89.1
RDX	103.4
135-TNB	97.3
13-DNB	100.8
Tetryl	91.7
Nitrobenzene	97.1
4A-26-DNT	107.8
2A-46-DNT	99.3
246-TNT	109.1
34-DNT(surr)	107.6
26-DNT	103.9
24-DNT	110.5
2-NT	98.5
4-NT	105.0
3-NT	105.2
PETN	95.3

Total 1621.6

Average 101.4

101.4
1/26/10

ICV Limits 85-115%

CRI Limits 70-130%

CCV Limits 85-115%

No single analyte > +/- 60%

Form 6

Explosives Initial Calibration

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1287

Lab Code: GEL

Run Date: 25-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:	EXS01250003.wif	EXS01250004.wif	EXS01250005.wif	EXS01250006.wif	EXS01250007.wif	EXS01250008.wif	EXS01250009.wif					
Parname:												
2,4-Diamino-6-nitrotoluene	124000	243000	556000	1130000	1930000	2390000	4860000	-20500	2450	-0.006	.9993	
2,6-Diamino-4-nitrotoluene	196000	379000	859000	1770000	2910000	3810000	7350000	-50100	3930	-1.14	.9996	
3,4-Dinitrotoluene	318000	666000	1460000	3270000	4740000	5910000	10800000	-61500	14400	-3.5	.9975	
3,5-Dinitroaniline	504000	1060000	2200000	4760000	6820000	8600000	14400000	-27700	10200	-1.48	.9998	
TATB	71000	141000	345000	692000	1070000	1350000	2660000	-94.4	1410	-0.043	.9998	
tris(o-cresyl) phosphate	456000	2410000	5510000	10100000	15300000	19000000	29700000	-337000	23800	-4.41	.9996	

Quadratic Fit: $y = Ax^2 + Bx + C$
 where X^2 column above is coefficient A
 X column above is coefficient B
 intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)

* Values outside of QC Limit

012510ICAL

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-94.4			
a1	1.41e+003			
a2	-0.043			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.77e+004			
a1	1.02e+004			
a2	-1.48			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-6.15e+004			
a1	1.44e+004			
a2	-3.5			
Correlation coefficient 0.9975				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-5.01e+004			
a1	3.93e+003			
a2	-0.114			
Correlation coefficient 0.9996				
Use Area				

See
1/27/10

Amu 1/27/10

012510ICAL

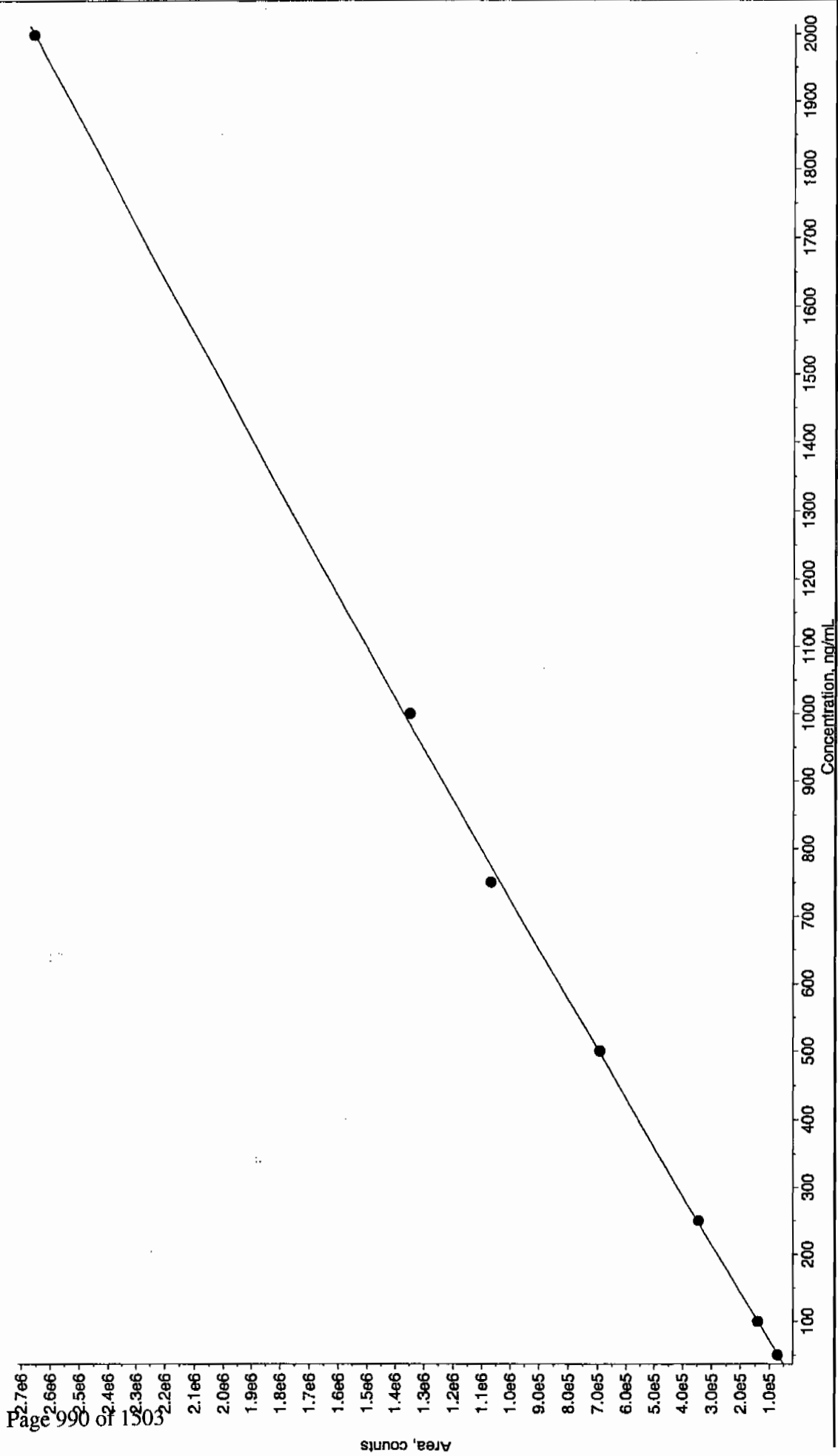
Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-2.05e+004			
a1	2.45e+003			
a2	-0.00578			
Correlation coefficient 0.9993				
Use Area				

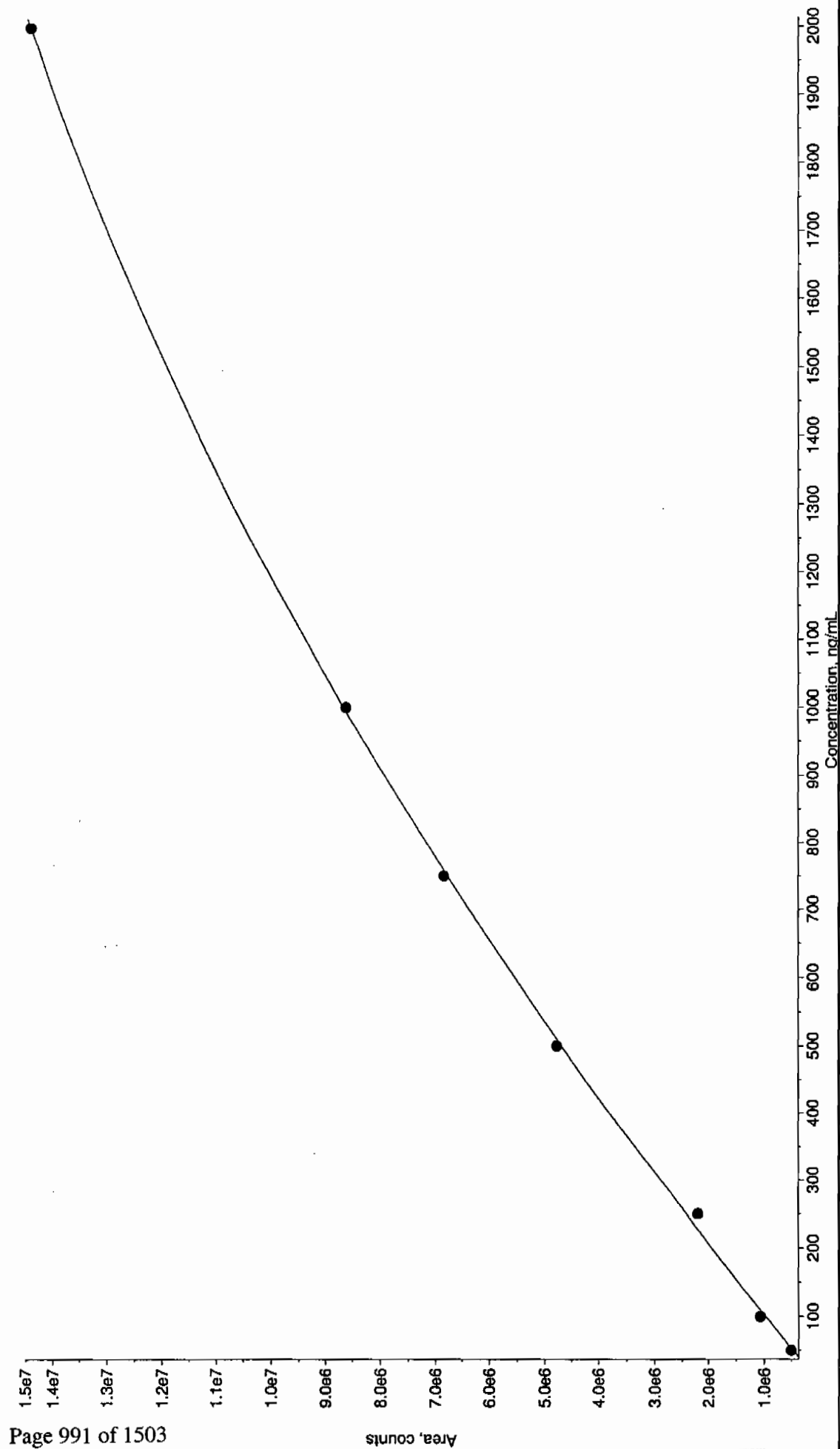
Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

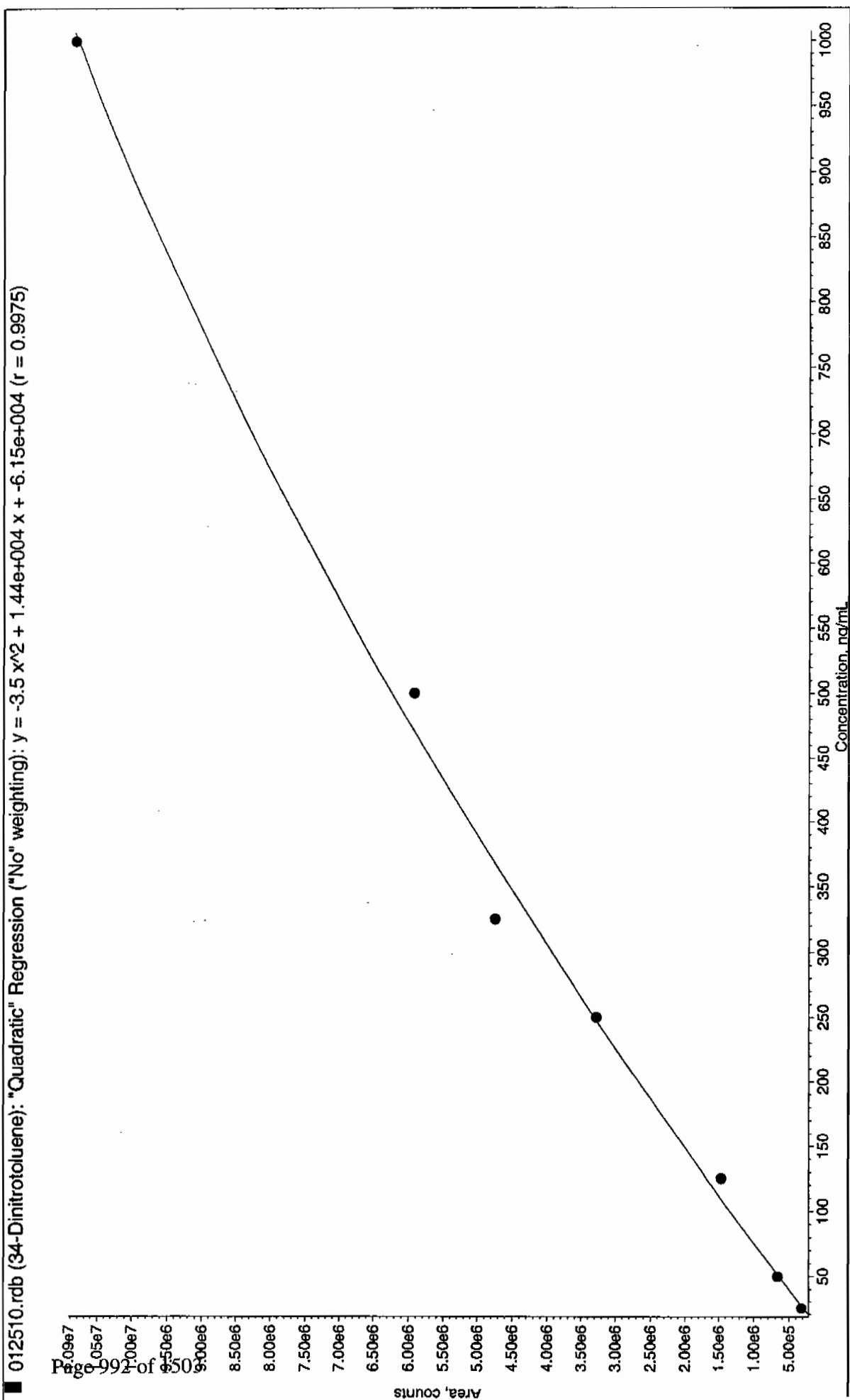
Fit	Quadratic	Weighting	None	Iterate No
a0	-3.37e+005			
a1	2.38e+004			
a2	-4.41			
Correlation coefficient 0.9996				
Use Area				

012510.rdb (TATB): "Quadratic" Regression ("No" weighting): $y = -0.043 x^2 + 1.41e+003 x + -94.4$ ($r = 0.9998$)

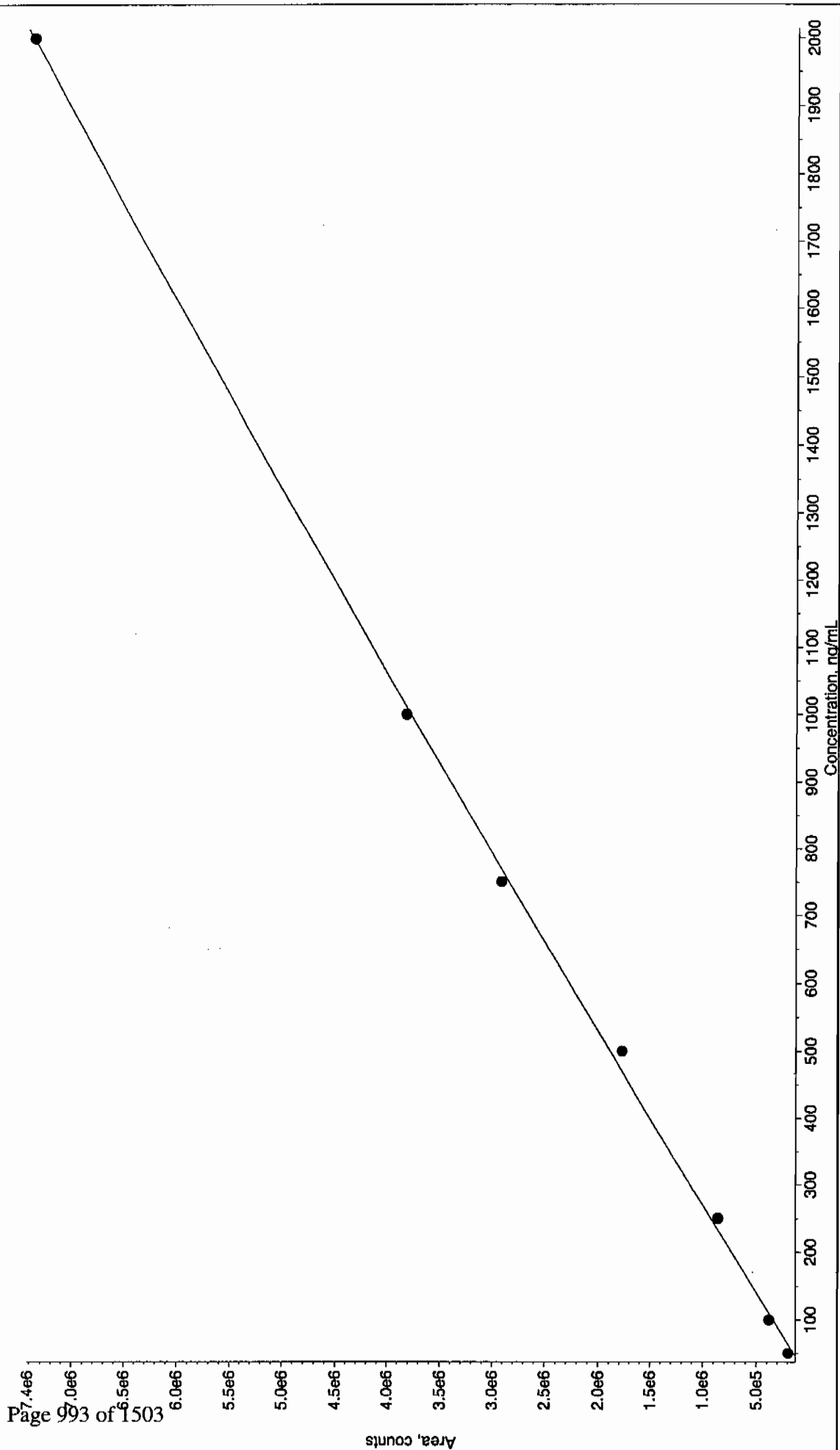


012510.rdb (35-Dinitroaniline): "Quadratic" Regression ("No" weighting): $y = -1.48 \times 10^{-4} x^2 + 1.02 \times 10^{-4} x + -2.77 \times 10^{-4}$ ($r = 0.9998$)

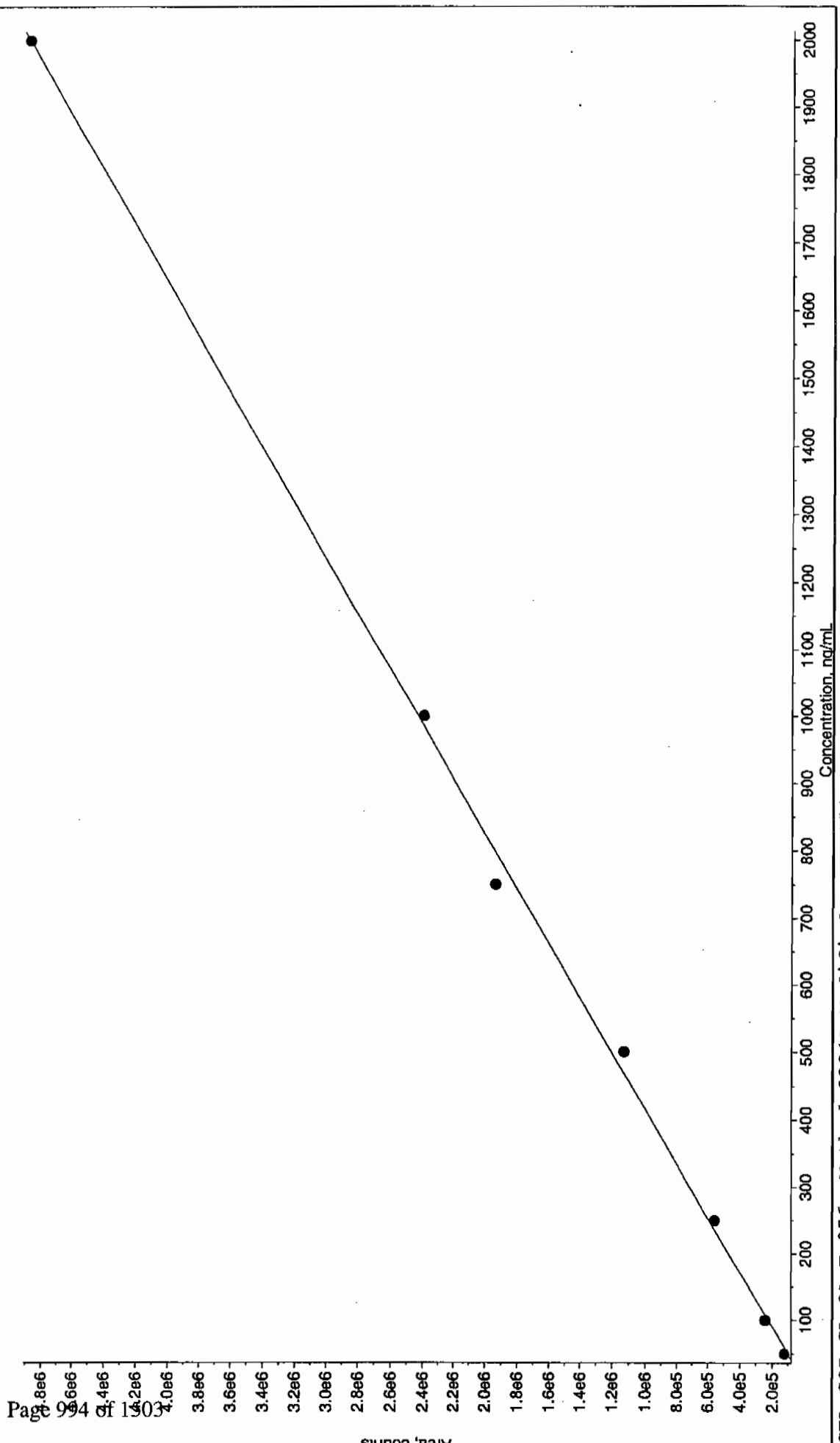




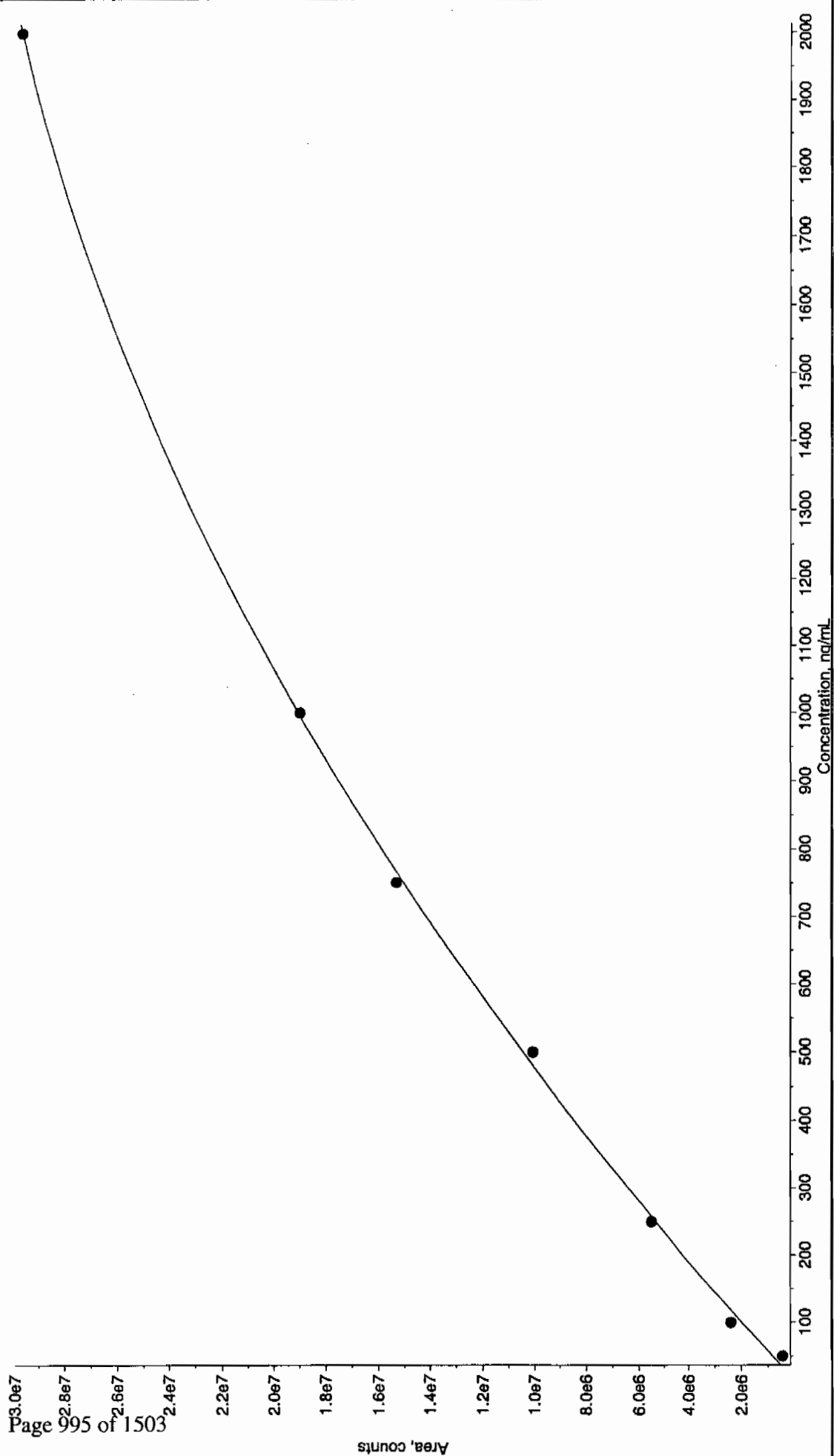
012510.rdb (26-Diamino-4-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.114 x^2 + 3.93e+003 x + -5.01e+004$ ($r = 0.9996$)



012510.rdb (24-Diamino-6-nitrotoluene): "Quadratic" Regression ("No" weighting): $y = -0.00578 x^2 + 2.45e+003 x + -2.05e+004$ ($r = 0.9993$)



012510.rdb (tris(o-cresyl) phosphate): "Quadratic" Regression ("No" weighting): $y = -4.41 x^2 + 2.38e+004 x + -3.37e+005$ ($r = 0.9996$)



7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS01250011.wiff

Analysis Date: 25-JAN-10 13:09

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	486	97	
2,6-Diamino-4-nitrotoluene	500	478	96	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	485	97	
TATB	500	478	96	
tris(o-cresyl) phosphate	500	509	102	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

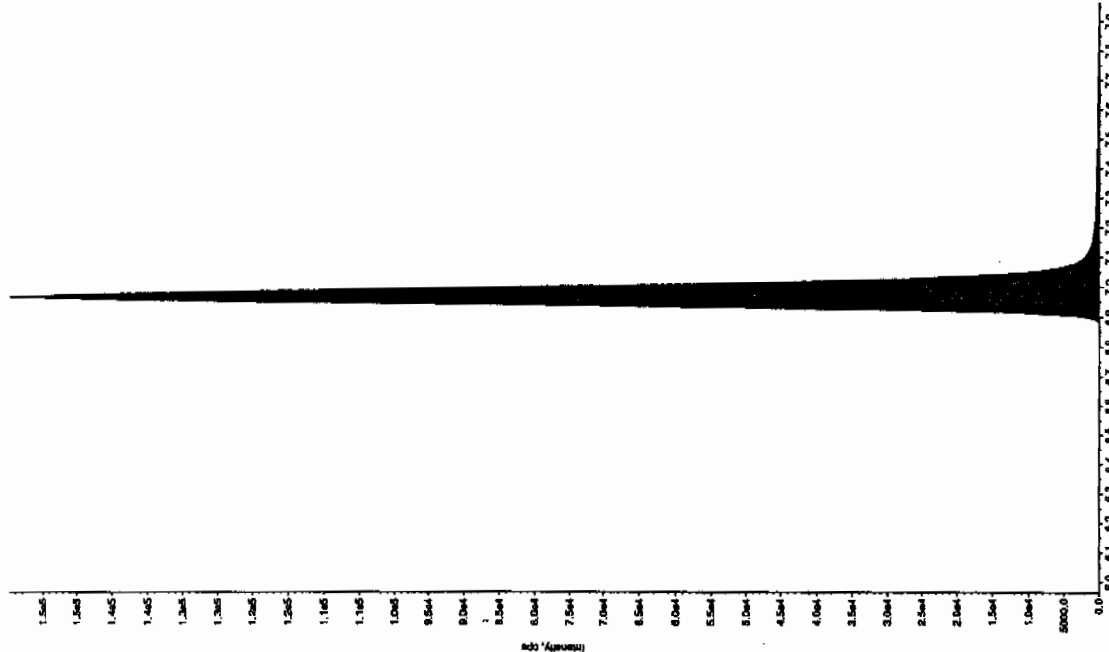
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 11/27/10

Sample Name: "WXX100125-26CV" Sample ID: "111ER" File: "EXS01250011.wif"
 Peak Name: "1A1B" Mass(es): 257.2204.9 amu
 Comment: "LCMS-EXP_C" Annotation: "

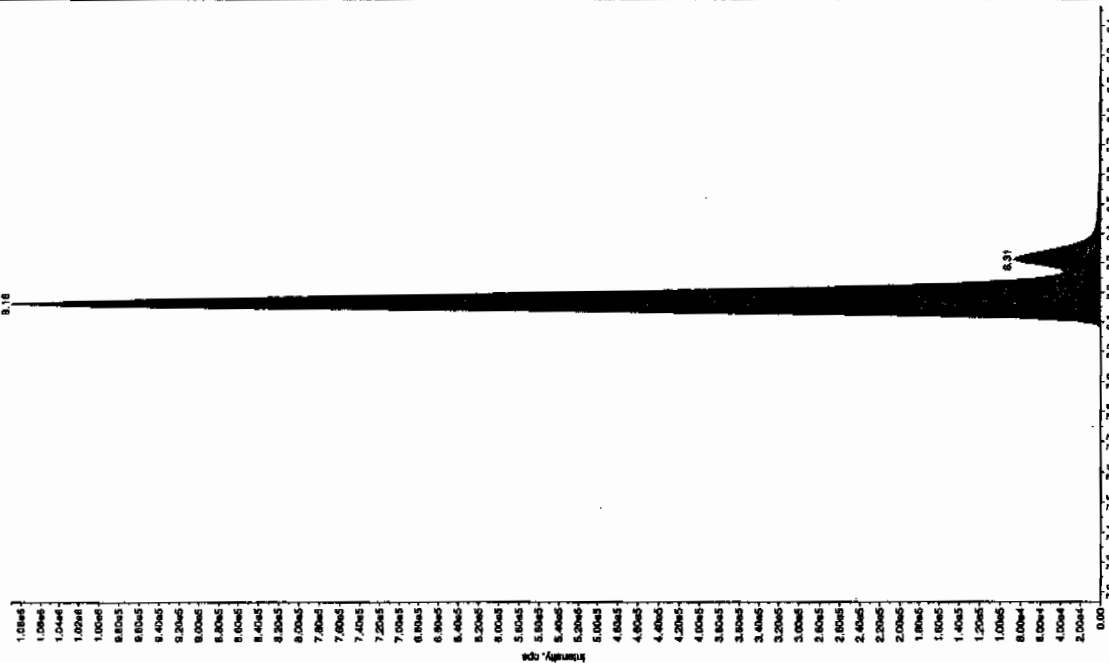
Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Acquired Conc: 1/23/2010 1:09:53 PM
 Acq Date: 1:09:53 PM
 Acq Time: 1:09:53 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.97 min
 Mass: 154739.09 counts
 Height: 6.85 min
 Start Time: 7.63 min
 End Time: 7.63 min

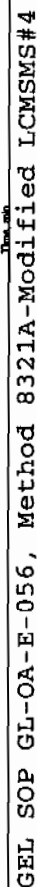


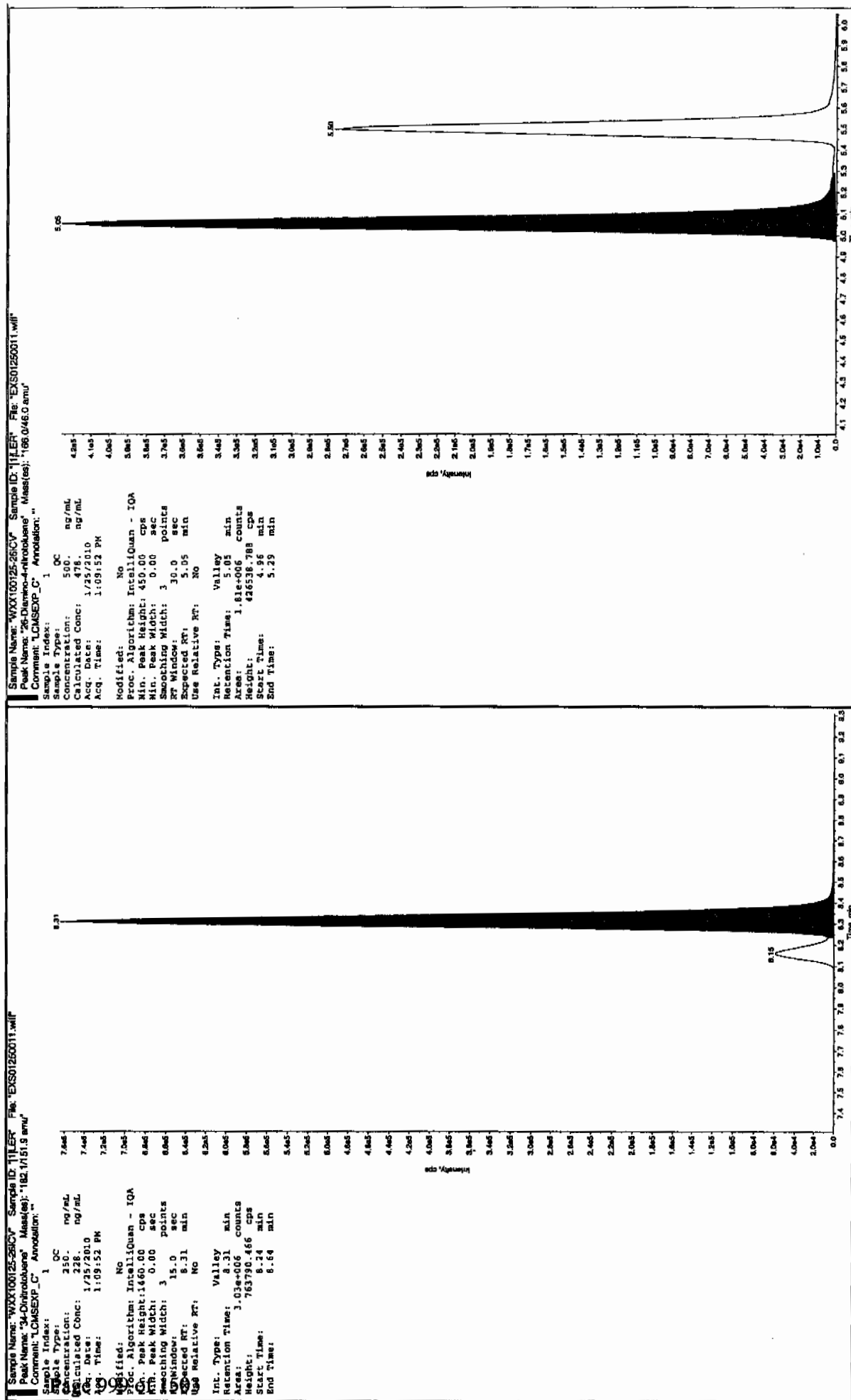
41 m 01/27/10

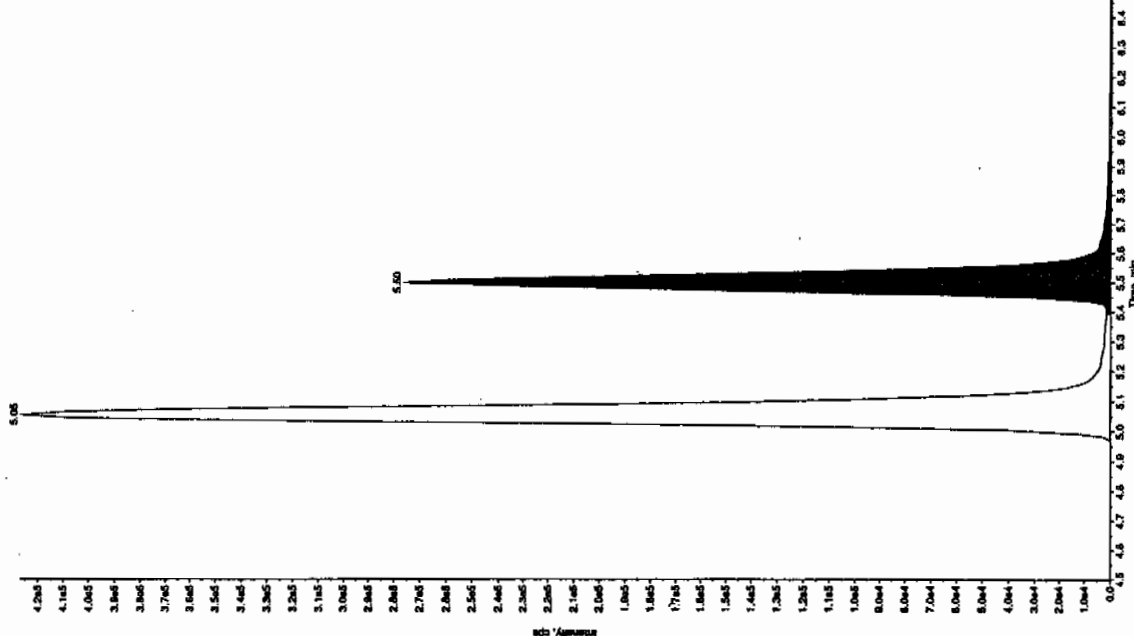
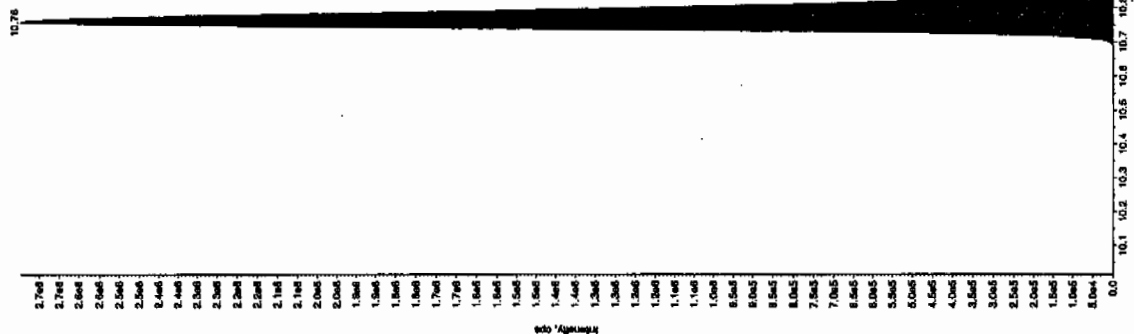
Sample Name: "WXX100125-26CV" Sample ID: "111ER" File: "EXS01250011.wif"
 Peak Name: "1A1B" Mass(es): 182.0460 amu
 Comment: "LCMS-EXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Acquired Conc: 1/23/2010 1:09:53 PM
 Acq Date: 1:09:53 PM
 Acq Time: 1:09:53 PM
 Modified: Yes
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.16 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.16 min
 Mass: 108999.845 counts
 Height: 8.05 min
 Start Time: 8.73 min
 End Time: 8.73 min









7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125012a

Analysis Date: 25-JAN-10 16:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	53.525	134	*
1,3-Dinitrobenzene-d4	500	523.569	105	
2,4,6-Trinitrotoluene	40	32.202	81	
2,4-Dinitrotoluene	40	32.904	82	
2,6-Dinitrotoluene	40	42.96	107	
2,6-Dinitrotoluene-d3	500	553.084	111	
2-Amino-4,6-dinitrotoluene	40	46.855	117	
3,4-Dinitrotoluene	20	16.575	83	
4-Amino-2,6-dinitrotoluene	40	41.308	103	
HMX	40	44.507	111	
Nitrobenzene	40	37.891	95	
PETN	40	31.16	78	
RDX	40	38.595	96	
Tetryl	40	40.286	101	
m-Dinitrobenzene	40	39.556	99	
m-Nitrotoluene	40	39.269	98	
o-Nitrotoluene	40	42.003	105	
p-Nitrotoluene	40	41.044	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

Printed: Tue Jan 26 11:27:45 2010, Page 23 of 73

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125012a

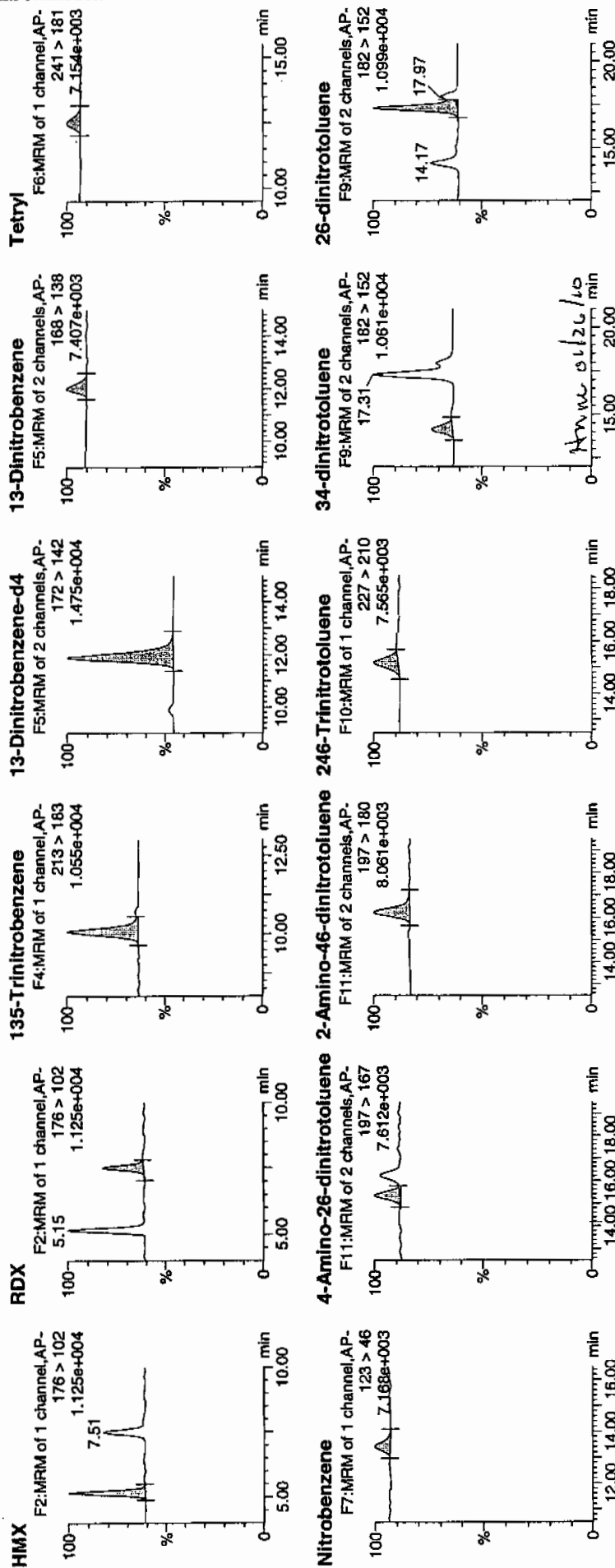
Date: 25-Jan-2010

Time: 16:45:01

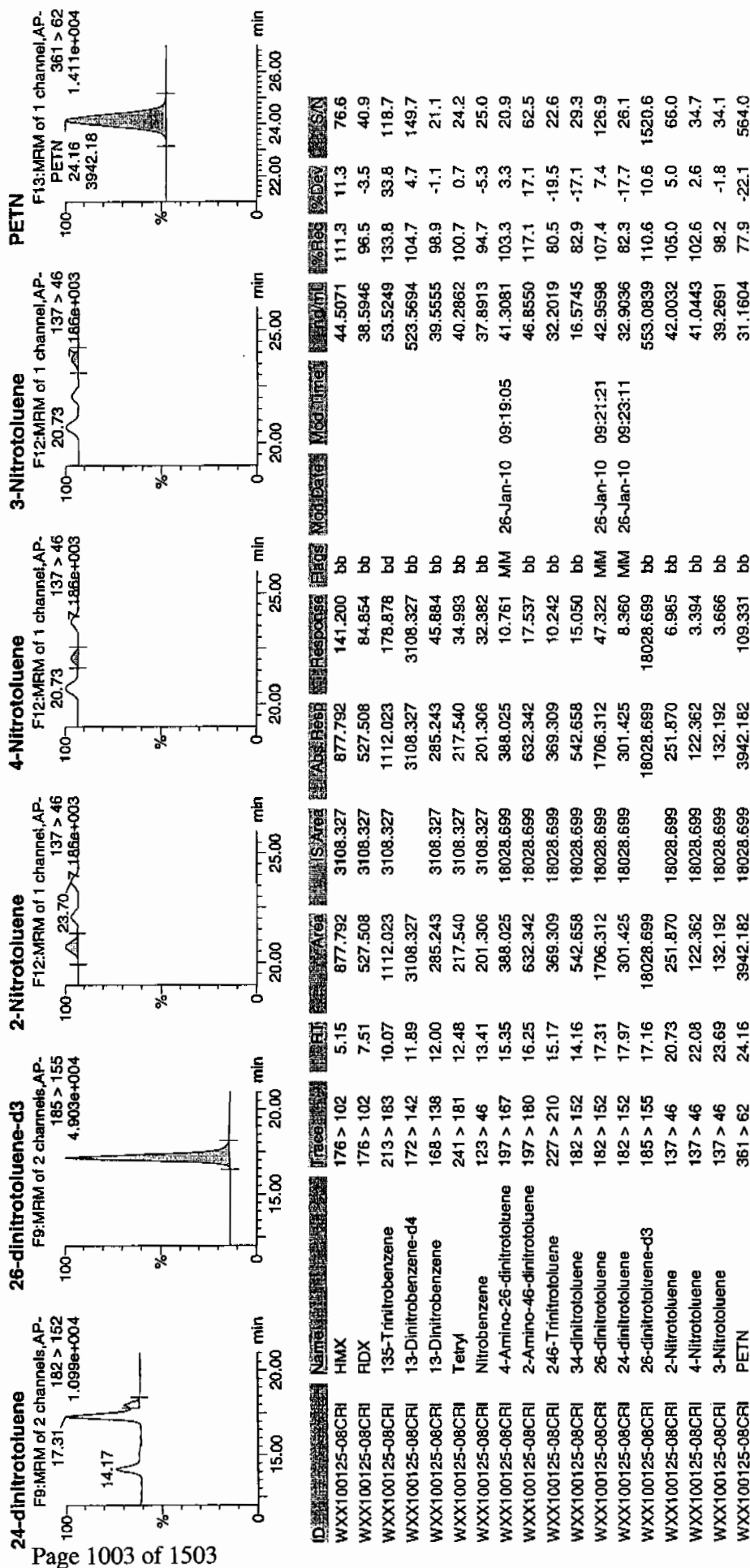
ID: WXX100125-08CRI

Vial: 1:1,C

100%
120%
140%



Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/25/10
 Time of Injection 1645
 Standard Number WXX100125-08CRI
 Data File EXP0125012a

HMX	111.3
RDX	96.5
135-TNB	133.8
13-DNB	98.9
Tetryl	100.7
Nitrobenzene	94.7
4A-26-DNT	103.3
2A-46-DNT	117.1
246-TNT	80.5
34-DNT(surr)	82.9
26-DNT	107.4
24-DNT	82.3
2-NT	105.0
4-NT	102.6
3-NT	98.2
PETN	77.9

1007
1/26/10

Total 1593.1

Average 99.6

4711 01/26/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125023a

Analysis Date: 25-JAN-10 22:09

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	671.995	112	
1,3-Dinitrobenzene-d4	500	501.648	100	
2,4,6-Trinitrotoluene	600	681.012	114	
2,4-Dinitrotoluene	600	650.509	108	
2,6-Dinitrotoluene	600	620.709	103	
2,6-Dinitrotoluene-d3	500	529.849	106	
2-Amino-4,6-dinitrotoluene	600	638.815	106	
3,4-Dinitrotoluene	300	312.536	104	
4-Amino-2,6-dinitrotoluene	600	654.415	109	
HMX	600	616.521	103	
Nitrobenzene	600	622.507	104	
PETN	600	590.603	98	
RDX	600	659.536	110	
Tetryl	600	635.812	106	
m-Dinitrobenzene	600	625.794	104	
m-Nitrotoluene	600	604.626	101	
o-Nitrotoluene	600	593.315	99	
p-Nitrotoluene	600	607.304	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\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

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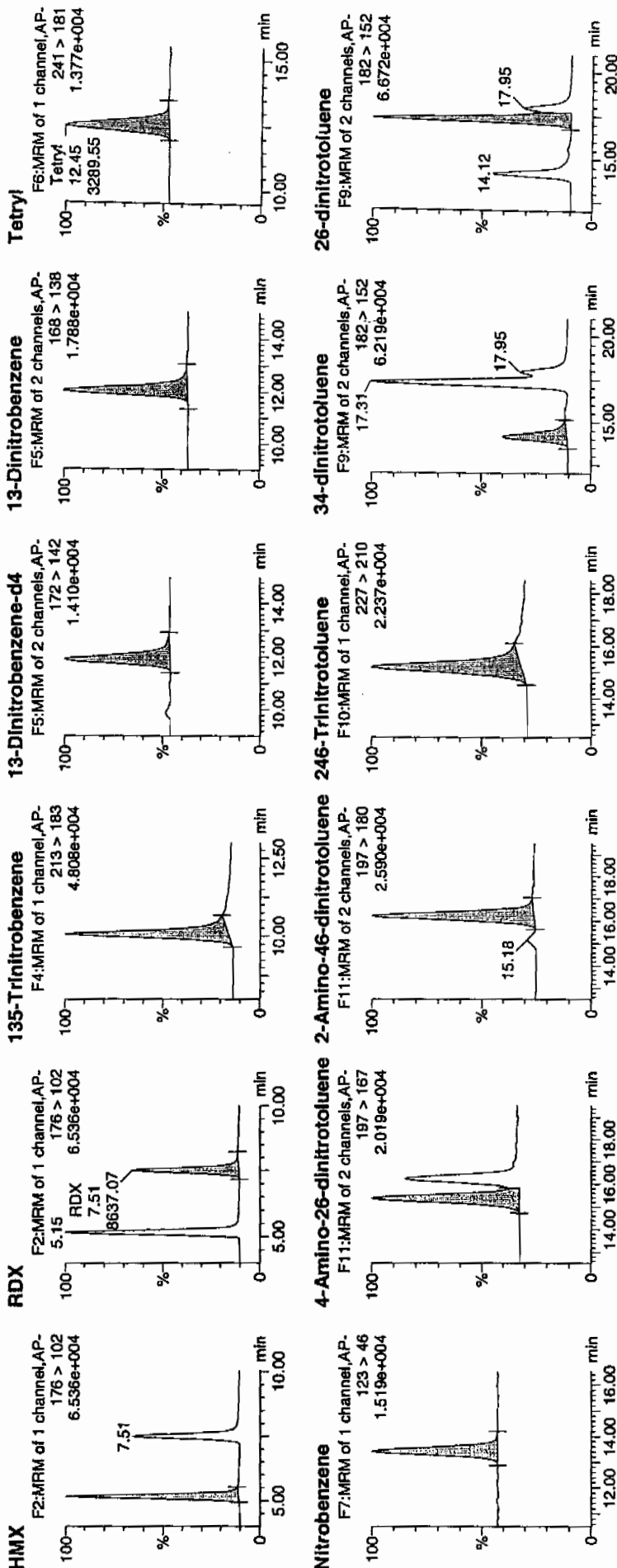
Date: 25-Jan-2010

Time: 22:09:44

ID: WXX100125-07CCV

Vial: 1:1,B

WXX
1/26/10



WXX 01/26/10

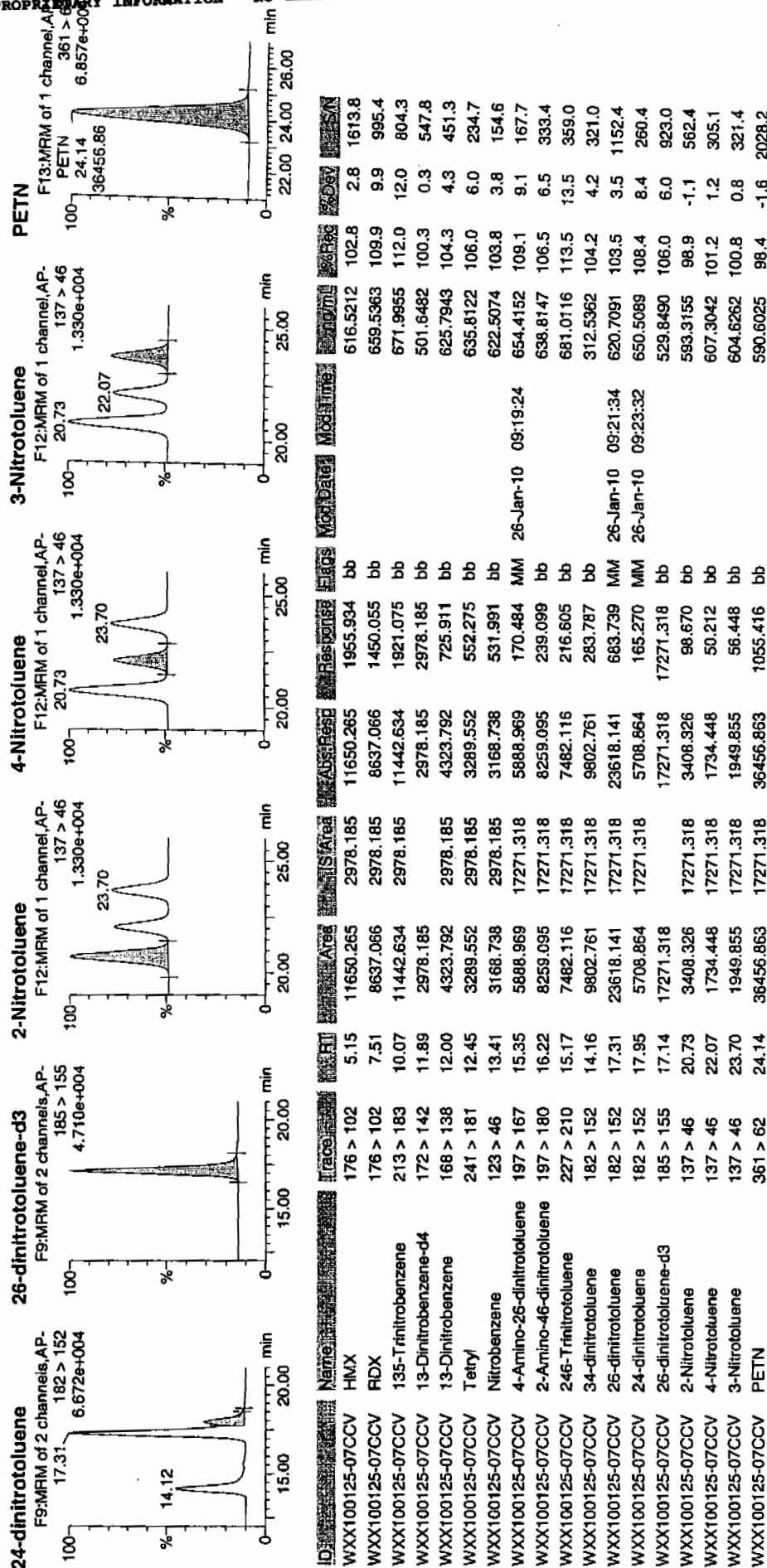
Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 46 of 73

Dataset: C:\MASSLYNX\New_Exp\PRO012510expA.qtd, Time: Tue Jan 26 09:24:51 2010

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GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/25/10
 Time of Injection: 2209
 Standard Number: WXX100125-07CCV
 Data File: EXP0125023a

HMX	102.8
RDX	109.9
135-TNB	112.0
13-DNB	104.3
Tetryl	106.0
Nitrobenzene	103.8
4A-26-DNT	109.1
2A-46-DNT	106.5
246-TNT	113.5
34-DNT(surr)	104.2
26-DNT	103.5
24-DNT	108.4
2-NT	98.9
4-NT	101.2
3-NT	100.8
PETN	98.4

*WXX
1/26/10*

Total 1683.3

Average 105.2

Handwritten: 01/26/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125025a

Analysis Date: 25-JAN-10 23:08

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.275	128	
1,3-Dinitrobenzene-d4	500	562.36	112	
2,4,6-Trinitrotoluene	40	41.402	104	
2,4-Dinitrotoluene	40	41.568	104	
2,6-Dinitrotoluene	40	40.317	101	
2,6-Dinitrotoluene-d3	500	590.895	118	
2-Amino-4,6-dinitrotoluene	40	40.944	102	
3,4-Dinitrotoluene	20	20.089	100	
4-Amino-2,6-dinitrotoluene	40	43.494	109	
HMX	40	59.635	149	*
Nitrobenzene	40	49.71	124	
PETN	40	28.625	72	
RDX	40	43.744	109	
Tetryl	40	40.54	101	
m-Dinitrobenzene	40	46.142	115	
m-Nitrotoluene	40	46.171	115	
o-Nitrotoluene	40	38.888	97	
p-Nitrotoluene	40	35.04	88	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

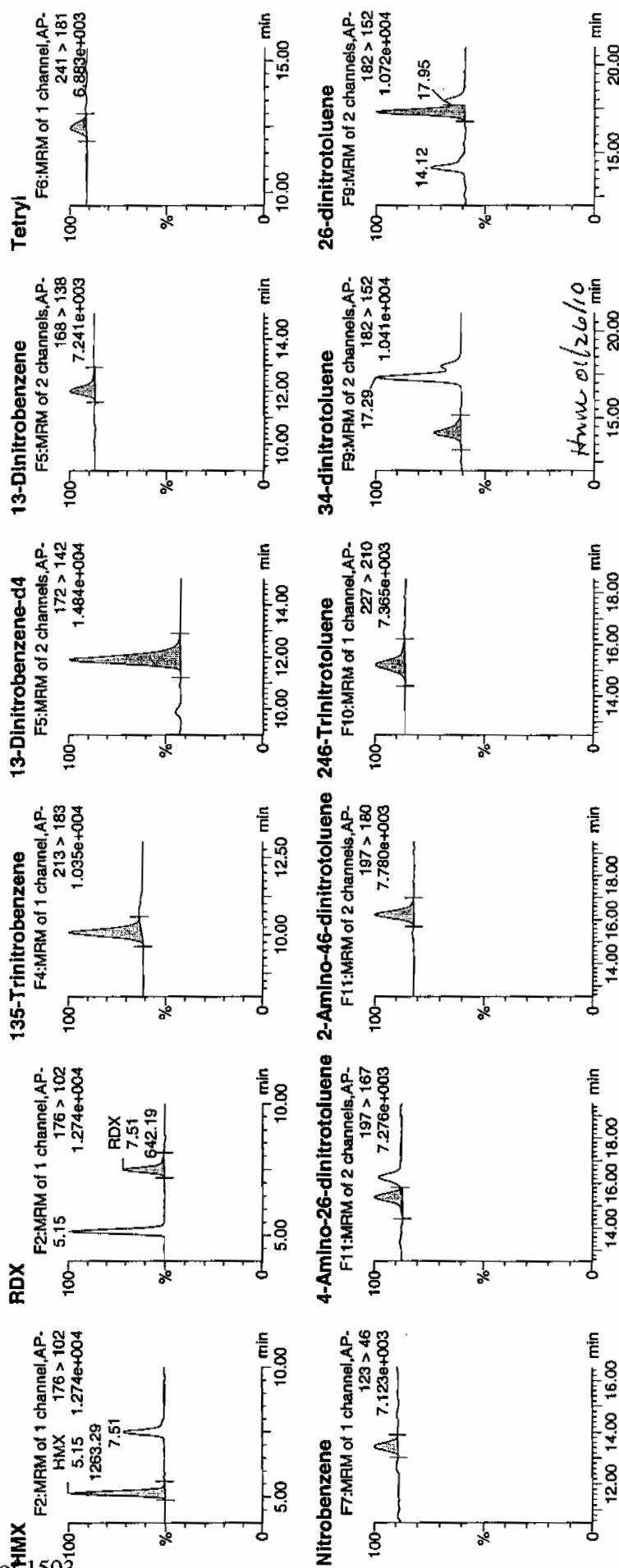
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Date: 25-Jan-2010

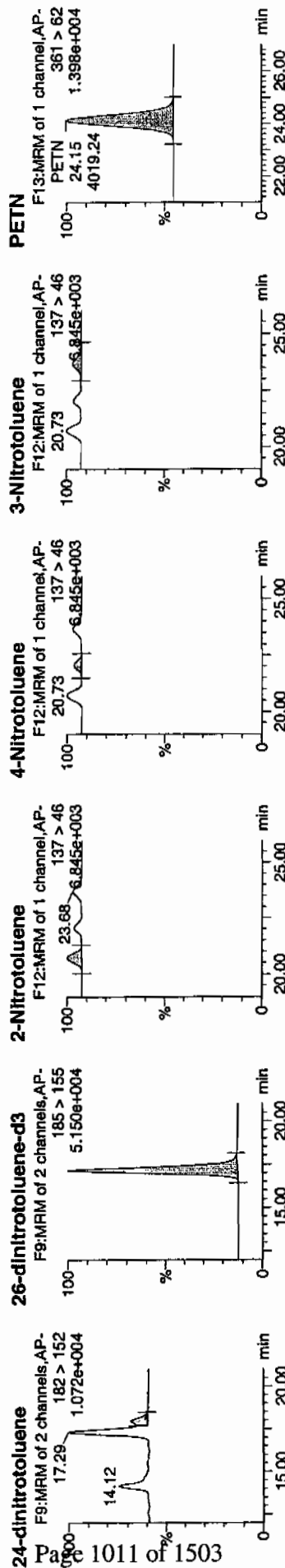
Time: 23:08:48

#ID: WXX100125-08CRI

Vial: 1:1,C



Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010



ID	Name	Trace	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area
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GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/25/10
 Time of Injection 2308
 Standard Number WXX100125-08CRI
 Data File EXP0125025a

HMX	149.1
RDX	109.4
135-TNB	128.2
13-DNB	115.4
Tetryl	101.4
Nitrobenzene	124.3
4A-26-DNT	108.7
2A-46-DNT	102.4
246-TNT	103.5
34-DNT(surr)	100.4
26-DNT	100.8
24-DNT	103.9
2-NT	97.2
4-NT	87.6
3-NT	115.4
PETN	71.6

*WTT
1/26/10*

Total 1719.3

Average 107.5

Ann 01/26/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125034a

Analysis Date: 26-JAN-10 03:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	677.094	113	
1,3-Dinitrobenzene-d4	500	507.421	101	
2,4,6-Trinitrotoluene	600	664.277	111	
2,4-Dinitrotoluene	600	626.592	104	
2,6-Dinitrotoluene	600	593.375	99	
2,6-Dinitrotoluene-d3	500	552.887	111	
2-Amino-4,6-dinitrotoluene	600	628.043	105	
3,4-Dinitrotoluene	300	310.216	103	
4-Amino-2,6-dinitrotoluene	600	653.794	109	
HMX	600	665.852	111	
Nitrobenzene	600	612.948	102	
PETN	600	598.099	100	
RDX	600	771.215	129	*
Tetryl	600	637.72	106	
m-Dinitrobenzene	600	643.843	107	
m-Nitrotoluene	600	557.007	93	
o-Nitrotoluene	600	568.991	95	
p-Nitrotoluene	600	602.81	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

Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA.qld, Time: Tue Jan 26 09:24:51 2010

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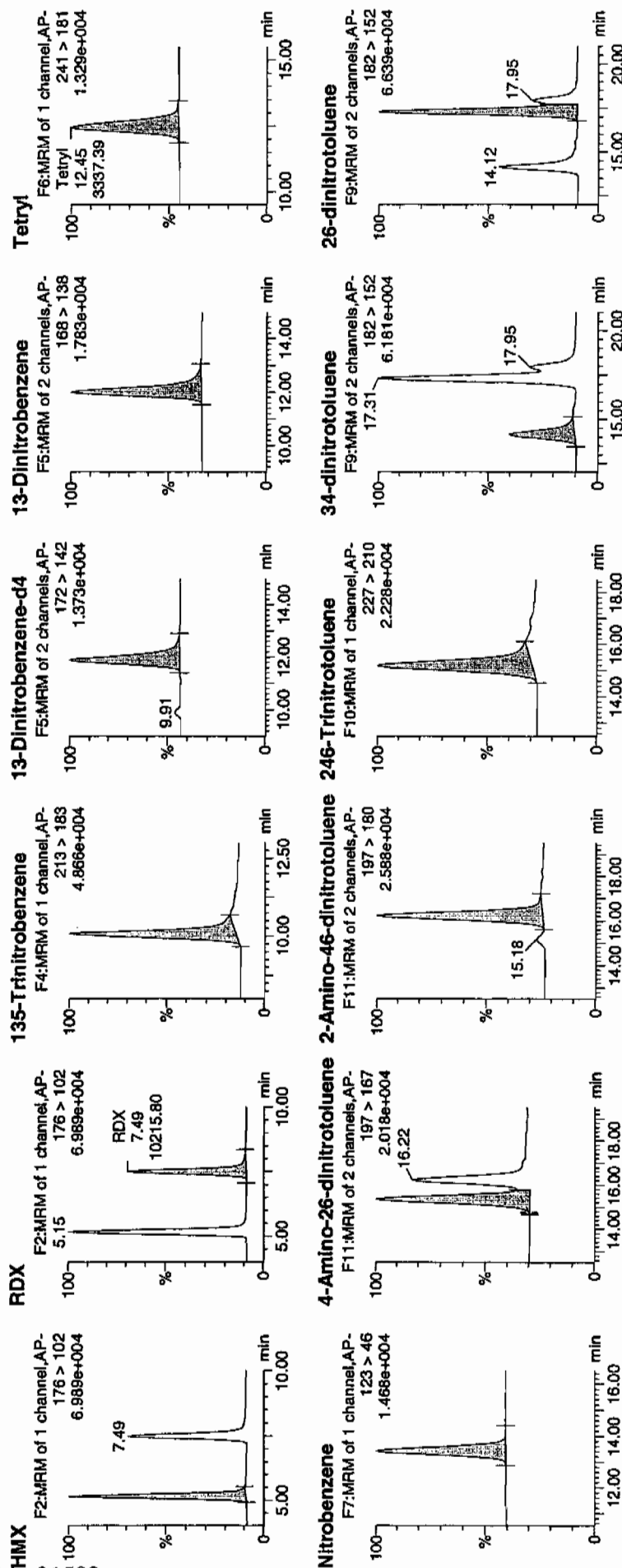
Date: 26-Jan-2010

Time: 03:34:18

ID: WXX100125-07CCV

Vial: 1:1,B

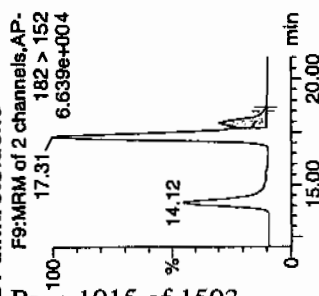
11/6/10
11/6/10



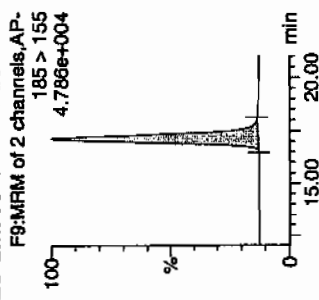
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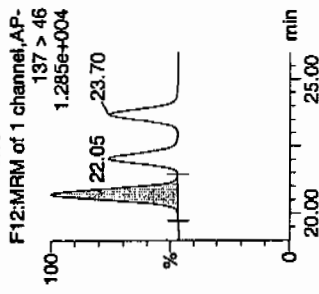
24-dinitrotoluene



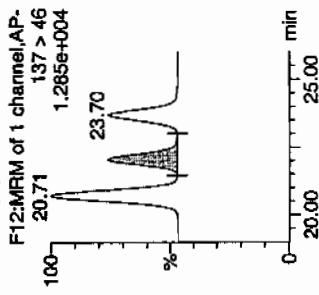
26-dinitrotoluene-d3



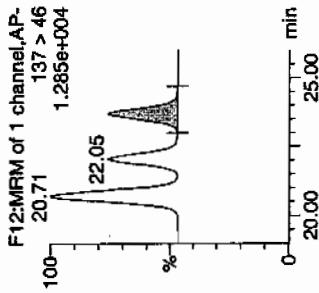
2-Nitrotoluene



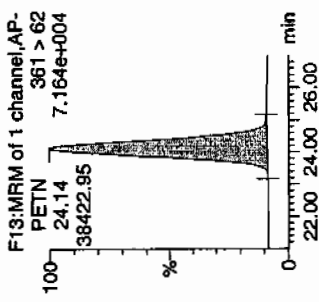
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	HTI	Area	SArea	Abs. Resp	Response	Flags	Mod.Date	Mod.time	IntmL	Rec	ModEv	SIN
WXX100125-07CCV	HMx	176 > 102	5.15	12727.260	3012.459	12727.260	2112.437	bb			665.8520	111.0	11.0	1385.6
WXX100125-07CCV	RDX	176 > 102	7.49	10215.800	3012.459	10215.800	1695.592	bb			771.2149	128.5	28.5	918.6
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	11660.856	3012.459	11660.856	1935.438	bb			677.0943	112.8	12.8	921.2
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	3012.459		3012.459	3012.459	bb			507.4213	101.5	1.5	175.5
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4499.687	3012.459	4499.687	746.846	bb			643.8425	107.3	7.3	448.1
WXX100125-07CCV	Tetryl	241 > 181	12.45	3337.394	3012.459	3337.394	553.932	bb			637.7201	106.3	6.3	329.8
WXX100125-07CCV	Nitrobenzene	123 > 46	13.41	3155.987	3012.459	3155.987	523.822	bb			612.9484	102.2	2.2	319.0
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.35	6139.198	18022.293	6139.198	170.322	MM	26-Jan-10	09:19:47	653.7944	109.0	9.0	343.5
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.22	8472.895	18022.293	8472.895	235.057	bb			628.0434	104.7	4.7	308.1
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.17	7615.592	18022.293	7615.592	211.283	bb			664.2769	110.7	10.7	340.1
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.16	10153.055	18022.293	10153.055	281.680	bb			510.2159	103.4	3.4	637.1
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	23559.799	18022.293	23559.799	653.629	MM	26-Jan-10	09:21:49	393.3752	98.9	-1.1	851.1
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.95	5738.072	18022.293	5738.072	159.194	MM	26-Jan-10	09:23:53	626.5922	104.4	4.4	187.7
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.14	18022.293		18022.293	18022.293	bb			552.8874	110.6	10.6	1407.4
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.71	3410.712	18022.293	3410.712	94.625	bb			568.9905	94.8	-5.2	584.2
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.05	1796.469	18022.293	1796.469	49.840	bb			602.8096	100.5	0.5	322.1
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.70	1874.392	18022.293	1874.392	52.002	bb			557.0068	92.8	-7.2	319.9
WXX100125-07CCV	PETN	361 > 62	24.14	38422.945	18022.293	38422.945	1065.984	bb			598.0986	99.7	-0.3	4403.3

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/26/10
 Time of Injection: 0334
 Standard Number: WXX100125-07CCV
 Data File: EXP0125034a

HMX	111.0
RDX	128.5
135-TNB	112.8
13-DNB	107.3
Tetryl	106.3
Nitrobenzene	102.2
4A-26-DNT	109.0
2A-46-DNT	104.7
246-TNT	110.7
34-DNT(surr)	103.4
26-DNT	98.9
24-DNT	104.4
2-NT	94.8
4-NT	100.5
3-NT	92.8
PETN	99.7

*not
1/26/10*

Total 1687.0

Average 105.4

from 01/26/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125036a

Analysis Date: 26-JAN-10 04:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.11	130	*
1,3-Dinitrobenzene-d4	500	503.562	101	
2,4,6-Trinitrotoluene	40	39.74	99	
2,4-Dinitrotoluene	40	41.295	103	
2,6-Dinitrotoluene	40	39.945	100	
2,6-Dinitrotoluene-d3	500	539.662	108	
2-Amino-4,6-dinitrotoluene	40	39.655	99	
3,4-Dinitrotoluene	20	20.419	102	
4-Amino-2,6-dinitrotoluene	40	42.579	106	
HMX	40	49.197	123	
Nitrobenzene	40	40.413	101	
PETN	40	28.993	72	
RDX	40	44.285	111	
Tetryl	40	48.534	121	
m-Dinitrobenzene	40	35.432	89	
m-Nitrotoluene	40	39.652	99	
o-Nitrotoluene	40	50.193	125	
p-Nitrotoluene	40	42.49	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

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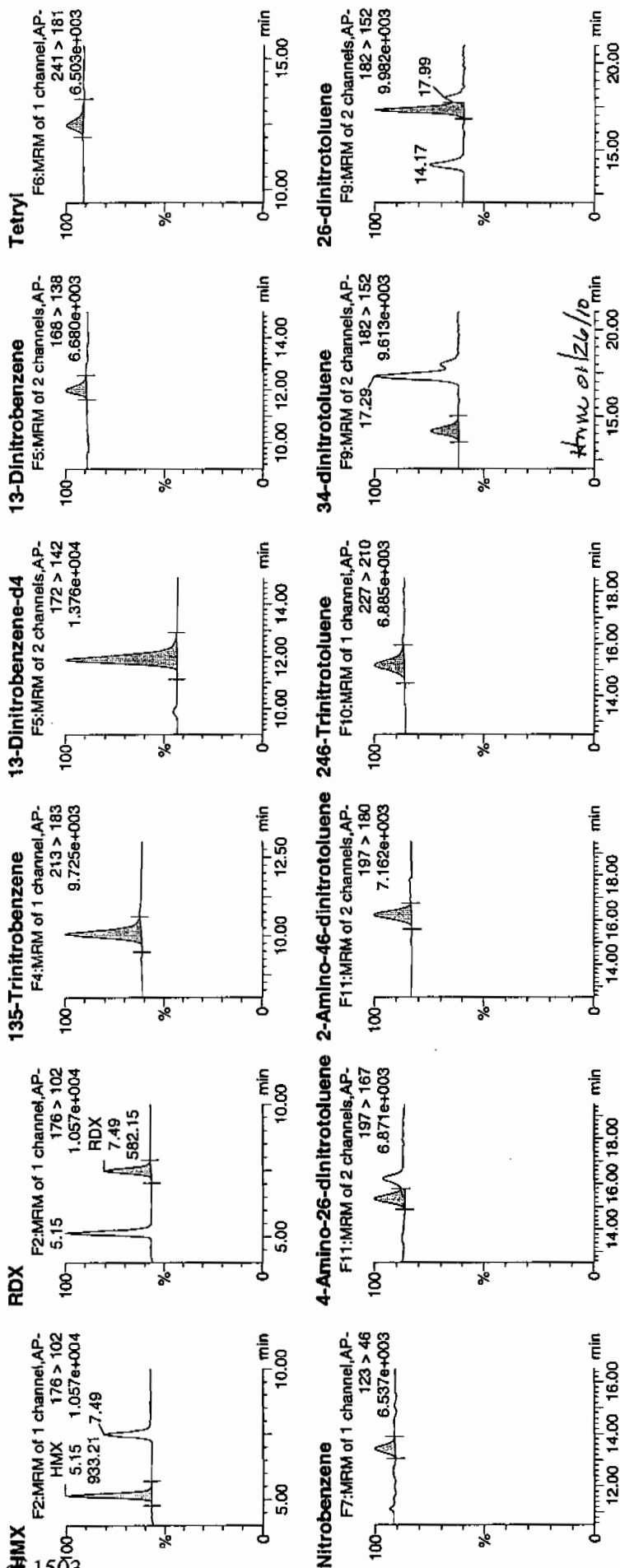
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Date: 26-Jan-2010

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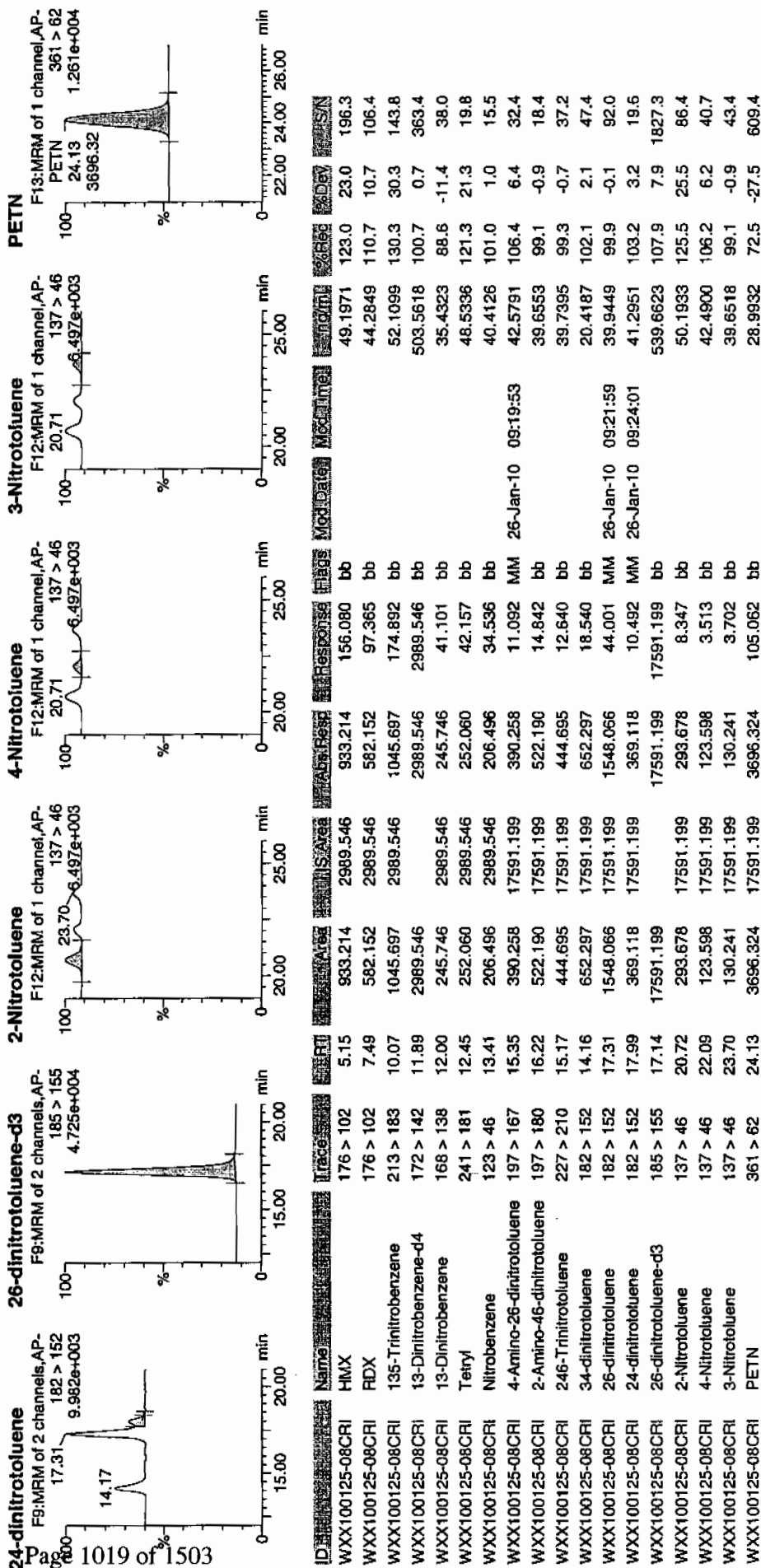
Dial: 1:1 C



Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Tue Jan 26 11:27:45 2010, Page 72 of 73

Dataset: C:\MASSLYNX\New_Exp\PRO1012510expA.qld, Time: Tue Jan 26 09:24:51 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/26/10
 Time of Injection 0433
 Standard Number WXX100125-08CRI
 Data File EXP0125036a

HMX	123.0
RDX	110.7
135-TNB	130.3
13-DNB	88.6
Tetryl	121.3
Nitrobenzene	101.0
4A-26-DNT	106.4
2A-46-DNT	99.1
246-TNT	99.3
34-DNT(surr)	102.1
26-DNT	99.9
24-DNT	103.2
2-NT	125.5
4-NT	106.2
3-NT	99.1
PETN	72.5

*not
1/26/10*

Total 1688.2

Average 105.5

Handwritten: 1/26/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125047a

Analysis Date: 26-JAN-10 09:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	646.04	108	
1,3-Dinitrobenzene-d4	500	528.635	106	
2,4,6-Trinitrotoluene	600	844.315	141	*
2,4-Dinitrotoluene	600	601.657	100	
2,6-Dinitrotoluene	600	607.414	101	
2,6-Dinitrotoluene-d3	500	552.683	111	
2-Amino-4,6-dinitrotoluene	600	622.543	104	
3,4-Dinitrotoluene	300	327.234	109	
4-Amino-2,6-dinitrotoluene	600	623.75	104	
HMX	600	662.143	110	
Nitrobenzene	600	629.393	105	
PETN	600	593.682	99	
RDX	600	700.33	117	
Tetryl	600	658.895	110	
m-Dinitrobenzene	600	616.464	103	
m-Nitrotoluene	600	578.165	96	
o-Nitrotoluene	600	560.785	93	
p-Nitrotoluene	600	573.922	96	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA1.qld; Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP_PRO\Data\EXP0125047a

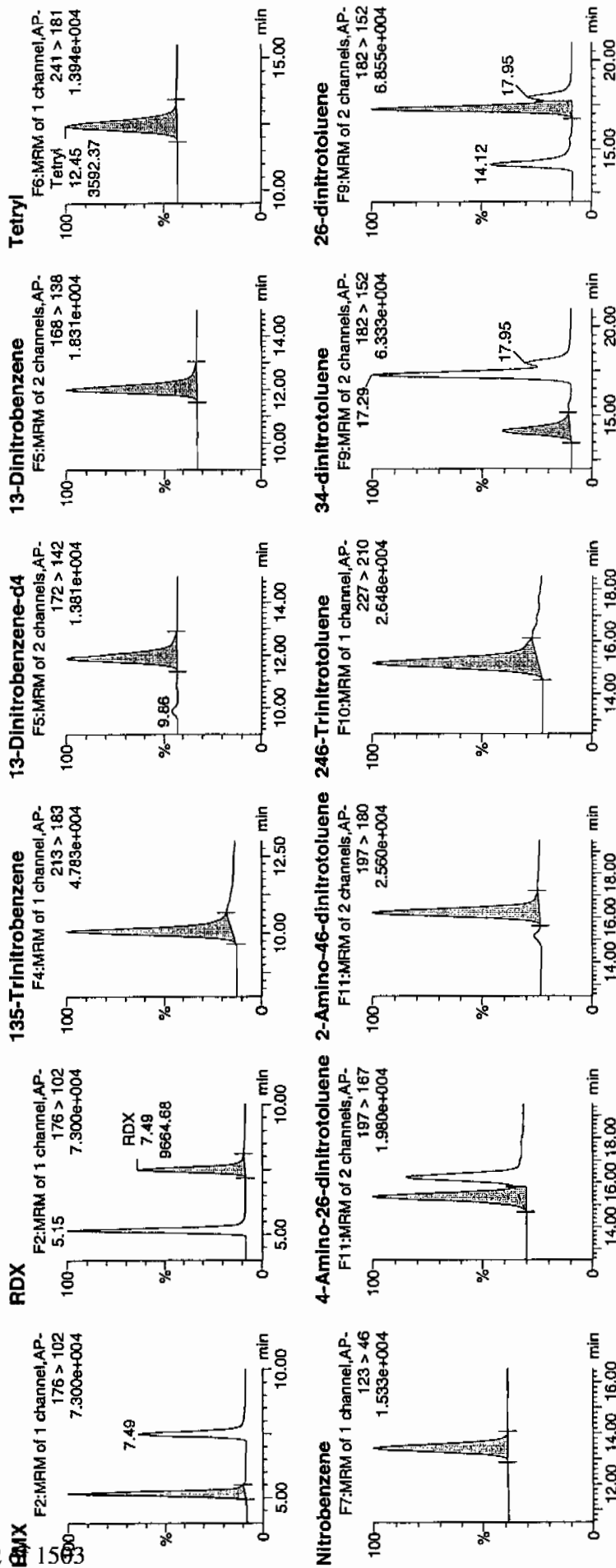
Date: 26-Jan-2010

Time: 09:58:05

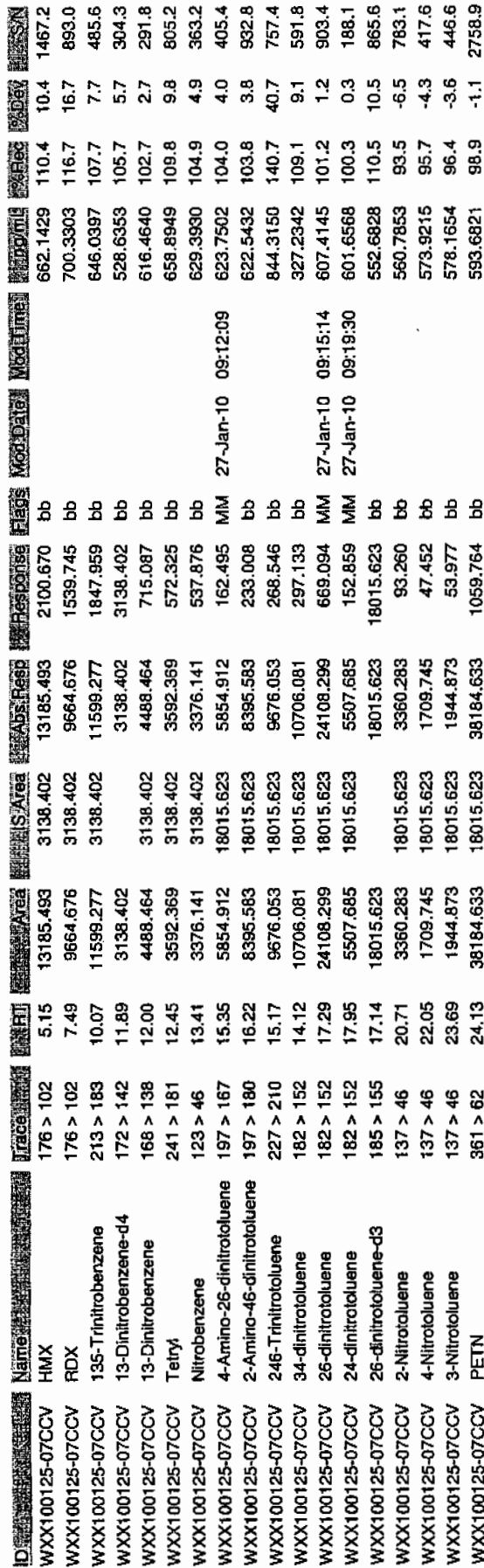
ID: WXX100125-07CCV

Ratio: 1:1,B

1/27/10



4/11/2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/26/10
 Time of Injection: 0958
 Standard Number: WXX100125-07CCV
 Data File: EXP0125047a

HMX	110.4
RDX	116.7
135-TNB	107.7
13-DNB	102.7
Tetryl	109.8
Nitrobenzene	104.9
4A-26-DNT	104.0
2A-46-DNT	103.8
246-TNT	140.7
34-DNT(surr)	109.1
26-DNT	101.2
24-DNT	100.3
2-NT	93.5
4-NT	95.7
3-NT	96.4
PETN	98.9

*WNT
1/27/10*

Total 1695.8

Average 106.0

Have 01/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125049a

Analysis Date: 26-JAN-10 10:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	44.638	112	
1,3-Dinitrobenzene-d4	500	604.504	121	
2,4,6-Trinitrotoluene	40	37.616	94	
2,4-Dinitrotoluene	40	40.509	101	
2,6-Dinitrotoluene	40	39.422	99	
2,6-Dinitrotoluene-d3	500	574.489	115	
2-Amino-4,6-dinitrotoluene	40	46.027	115	
3,4-Dinitrotoluene	20	22.575	113	
4-Amino-2,6-dinitrotoluene	40	43.635	109	
HMX	40	41.294	103	
Nitrobenzene	40	37.127	93	
PETN	40	31.781	79	
RDX	40	41.493	104	
Tetryl	40	40.973	102	
m-Dinitrobenzene	40	33.859	85	
m-Nitrotoluene	40	49.924	125	
o-Nitrotoluene	40	42.014	105	
p-Nitrotoluene	40	42.378	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

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125049a

Date: 26-Jan-2010

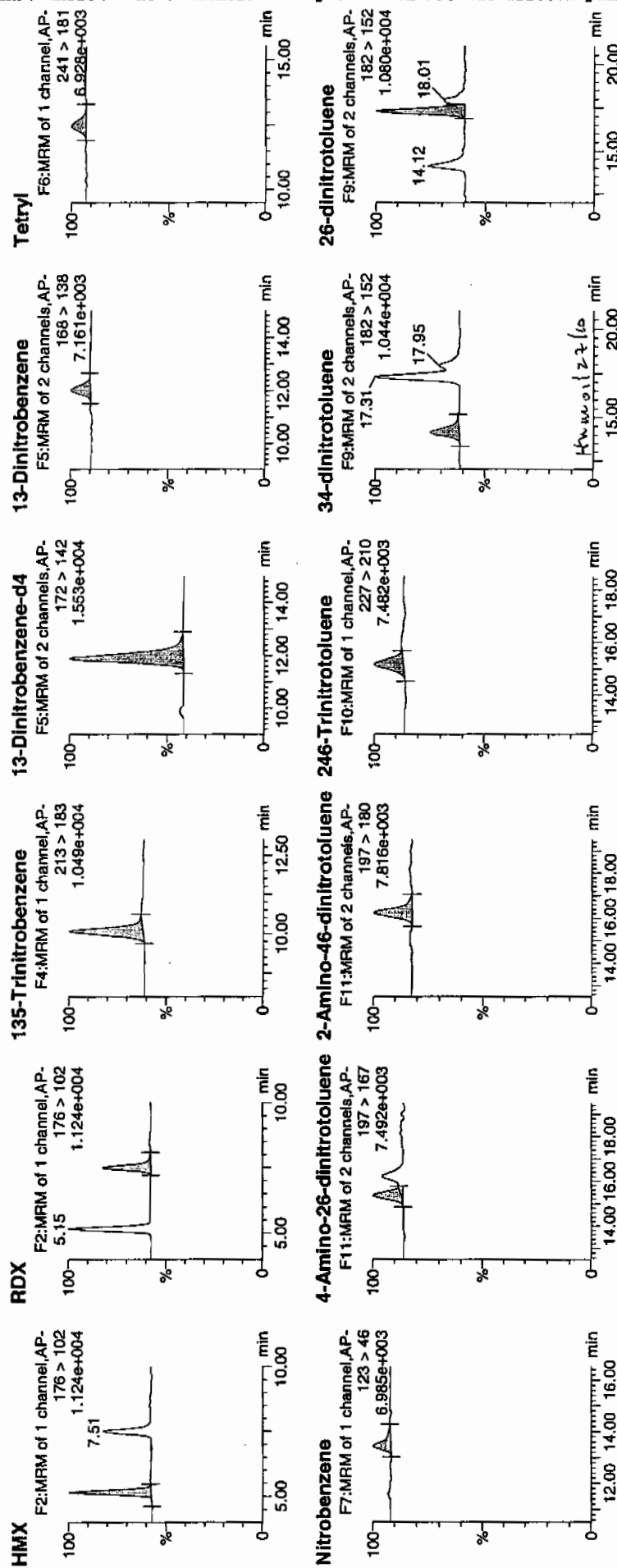
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ID: WXX100125-08CRI

Vial: 1:1,C

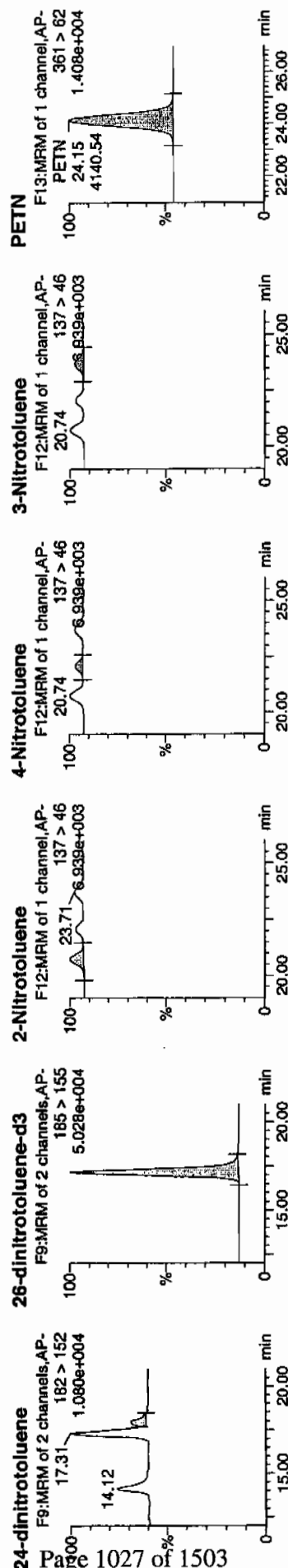
WXX
1/27/10

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Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	RT	Area	Abs Peak	Response	Flags	Mod Time	Mod Date	%Area	%Det	SN
WXX100125-08C1	HMX	176 > 102	5.15	940.323	3588.820	131.007	bb	41.2942	103.2	3.2	113.1	
WXX100125-08C1	RDX	176 > 102	7.51	654.783	3588.820	91.225	bb	41.4925	103.7	3.7	66.1	
WXX100125-08C1	135-Trinitrobenzene	213 > 183	10.07	1104.246	3588.820	153.845	bb	44.6384	111.6	11.6	145.1	
WXX100125-08C1	13-Dinitrobenzene-d4	172 > 142	11.89	3588.820	3588.820	3588.820	bb	604.5041	120.9	20.9	191.6	
WXX100125-08C1	13-Dinitrobenzene	168 > 138	12.03	281.911	3588.820	39.276	bb	33.8594	84.6	-15.4	32.1	
WXX100125-08C1	Tetryl	241 > 181	12.45	255.450	3588.820	35.590	bb	40.9730	102.4	2.4	13.0	
WXX100125-08C1	Nitrobenzene	123 > 46	13.45	227.737	3588.820	31.729	bb	37.1272	92.8	-7.2	18.7	
WXX100125-08C1	4-Amino-26-dinitrotoluene	197 > 167	15.35	425.744	18726.447	11.367	MM	43.6348	109.1	9.1	23.7	
WXX100125-08C1	2-Amino-46-dinitrotoluene	197 > 180	16.22	645.214	18726.447	17.227	bb	46.0274	115.1	15.1	51.8	
WXX100125-08C1	246-Trinitrotoluene	227 > 210	15.17	448.097	18726.447	11.964	bb	37.6160	94.0	-6.0	23.5	
WXX100125-08C1	34-dinitrotoluene	182 > 152	14.17	767.709	18726.447	20.498	bb	22.5745	112.9	12.9	30.5	
WXX100125-08C1	26-dinitrotoluene	182 > 152	17.31	1626.381	18726.447	43.425	MM	39.4216	98.6	-1.4	95.8	
WXX100125-08C1	24-dinitrotoluene	182 > 152	18.01	385.462	18726.447	10.292	MM	40.5093	101.3	1.3	19.4	
WXX100125-08C1	26-dinitrotoluene-d3	185 > 155	17.14	18726.447	18726.447	18726.447	bb	574.4894	114.9	14.9	1389.2	
WXX100125-08C1	2-Nitrotoluene	137 > 46	20.74	261.684	18726.447	6.987	bb	42.0138	105.0	5.0	60.2	
WXX100125-08C1	4-Nitrotoluene	137 > 46	22.06	131.227	18726.447	3.504	bb	42.3778	105.9	5.9	31.3	
WXX100125-08C1	3-Nitrotoluene	137 > 46	23.71	174.564	18726.447	4.661	bb	49.9240	124.8	24.8	37.1	
WXX100125-08C1	PETN	361 > 62	24.15	4140.537	18726.447	110.553	bb	31.7814	79.5	-20.5	450.9	

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/26/10
 Time of Injection 1057
 Standard Number WXX100125-08CRI
 Data File EXP0125049a

HMX	103.2
RDX	103.7
135-TNB	111.6
13-DNB	84.6
Tetryl	102.4
Nitrobenzene	92.8
4A-26-DNT	109.1
2A-46-DNT	115.1
246-TNT	94.0
34-DNT(surr)	112.9
26-DNT	98.6
24-DNT	101.3
2-NT	105.0
4-NT	105.9
3-NT	124.8
PETN	79.5

*1077
1/27/10*

Total 1644.5

Average 102.8

Hum - 01/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125060a

Analysis Date: 26-JAN-10 16:21

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	682.994	114	
1,3-Dinitrobenzene-d4	500	545.605	109	
2,4,6-Trinitrotoluene	600	697.867	116	
2,4-Dinitrotoluene	600	608.207	101	
2,6-Dinitrotoluene	600	595.1	99	
2,6-Dinitrotoluene-d3	500	562.286	112	
2-Amino-4,6-dinitrotoluene	600	657.831	110	
3,4-Dinitrotoluene	300	337.629	113	
4-Amino-2,6-dinitrotoluene	600	664.072	111	
HMX	600	707.84	118	
Nitrobenzene	600	600.429	100	
PETN	600	601.346	100	
RDX	600	753.08	126	*
Tetryl	600	642.934	107	
m-Dinitrobenzene	600	616.028	103	
m-Nitrotoluene	600	554.466	92	
o-Nitrotoluene	600	538.809	90	
p-Nitrotoluene	600	558.692	93	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 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\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125060a

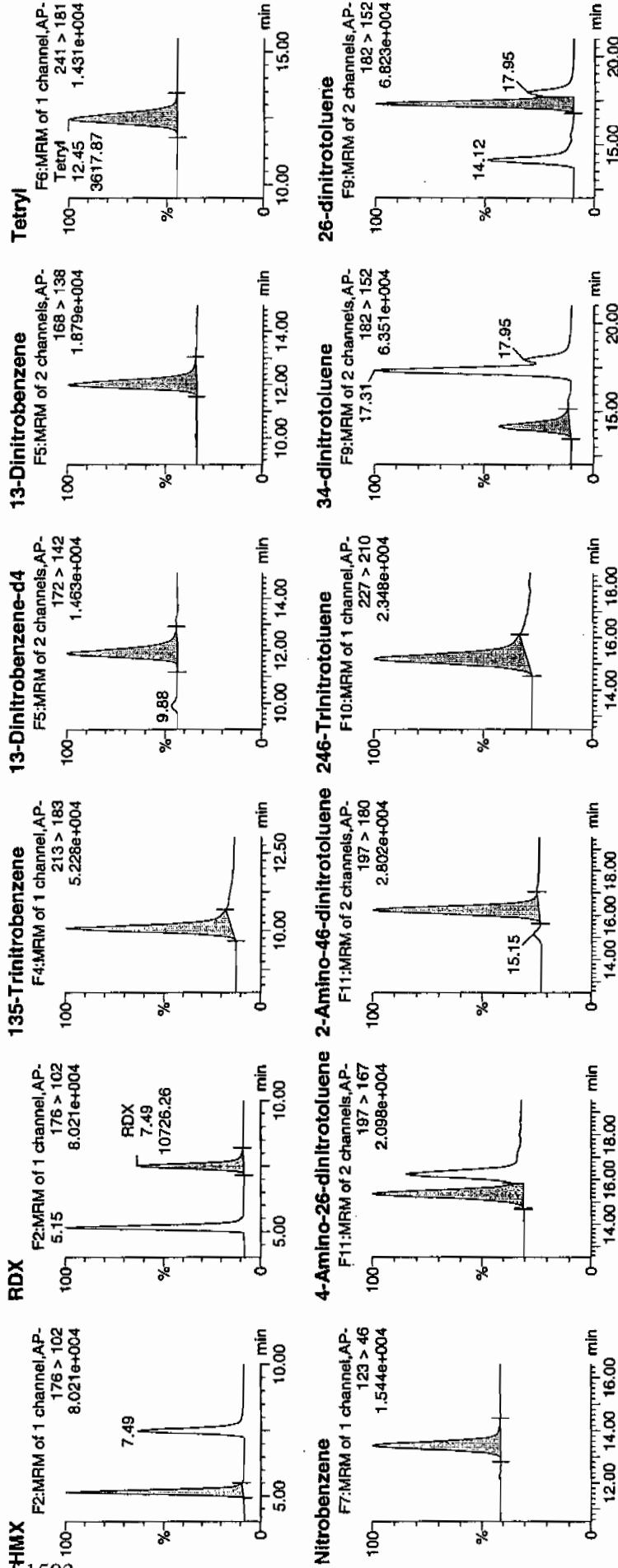
Date: 26-Jan-2010

Time: 16:21:27

ID: WXX100125-07CCV

Vial: 1:1,B

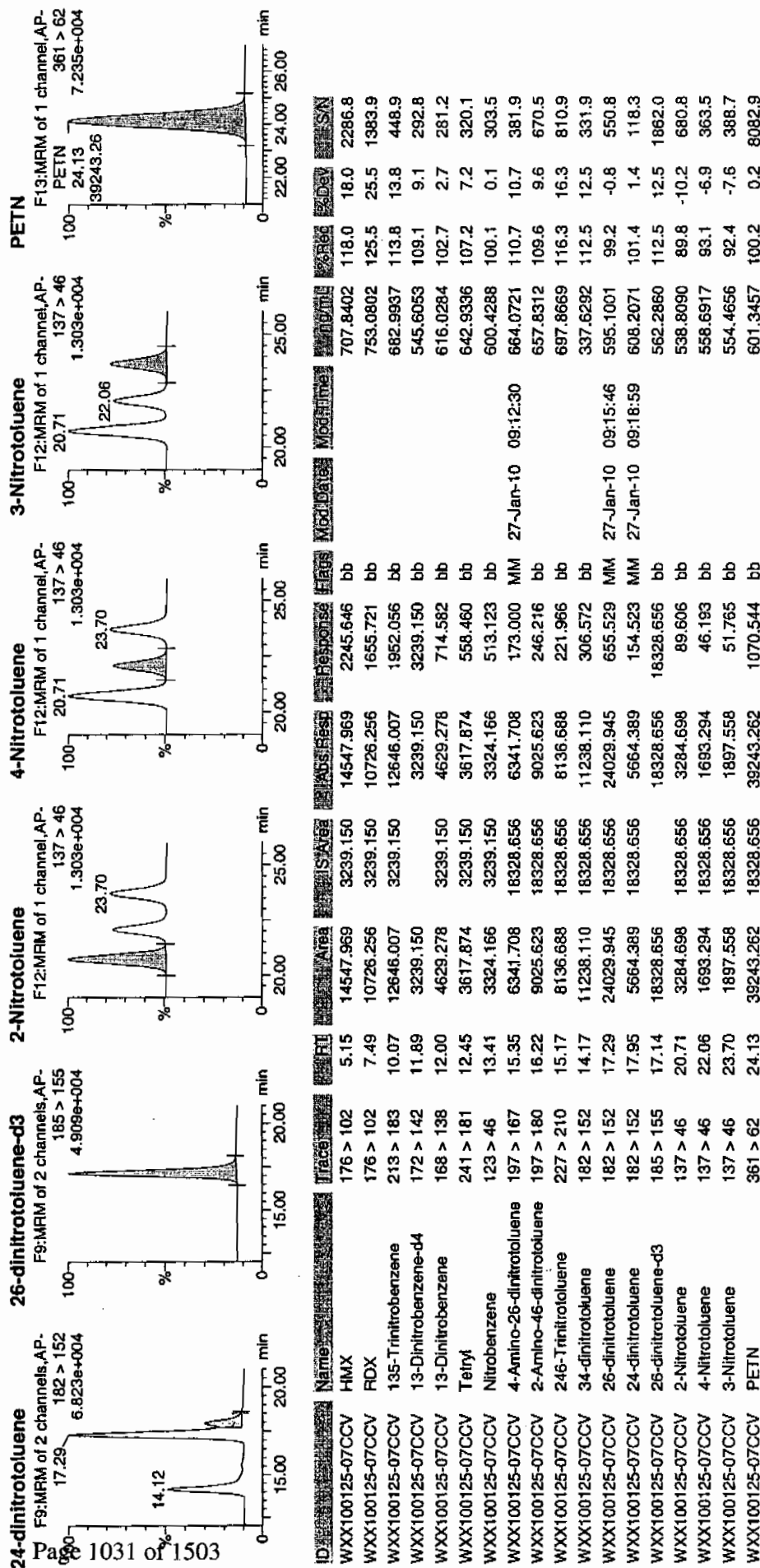
1/27/10



Handwritten note: 1/27/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/26/10
 Time of Injection: 1621
 Standard Number: WXX100125-07CCV
 Data File: EXP0125060a

HMX	118.0
RDX	125.5
135-TNB	113.8
13-DNB	102.7
Tetryl	107.2
Nitrobenzene	100.1
4A-26-DNT	110.7
2A-46-DNT	109.6
246-TNT	116.3
34-DNT(surr)	112.5
26-DNT	99.2
24-DNT	101.4
2-NT	89.8
4-NT	93.1
3-NT	92.4
PETN	100.2

*MMT
1/27/10*

Total 1692.5

Average 105.8

HMM-01/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125062a

Analysis Date: 26-JAN-10 17:20

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	51.696	129	
1,3-Dinitrobenzene-d4	500	614.783	123	
2,4,6-Trinitrotoluene	40	49.225	123	
2,4-Dinitrotoluene	40	34.729	87	
2,6-Dinitrotoluene	40	39.808	100	
2,6-Dinitrotoluene-d3	500	614.638	123	
2-Amino-4,6-dinitrotoluene	40	45.735	114	
3,4-Dinitrotoluene	20	24.671	123	
4-Amino-2,6-dinitrotoluene	40	51.11	128	
HMX	40	52.738	132	*
Nitrobenzene	40	40.221	101	
PETN	40	28.447	71	
RDX	40	50.85	127	
Tetryl	40	57.694	144	*
m-Dinitrobenzene	40	44.101	110	
m-Nitrotoluene	40	43.112	108	
o-Nitrotoluene	40	44.615	112	
p-Nitrotoluene	40	46.759	117	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

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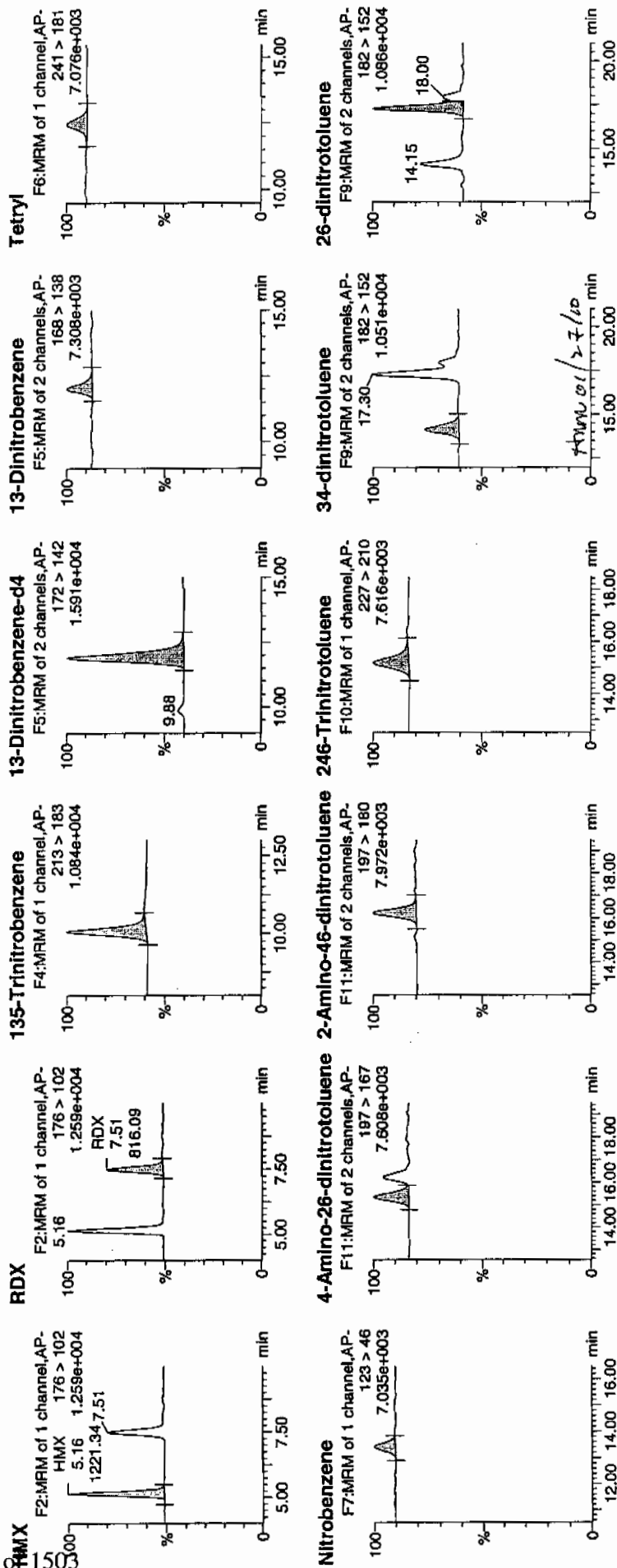
Date: 26-Jan-2010

Time: 17:20:28

ID: WXX100125-08CRI

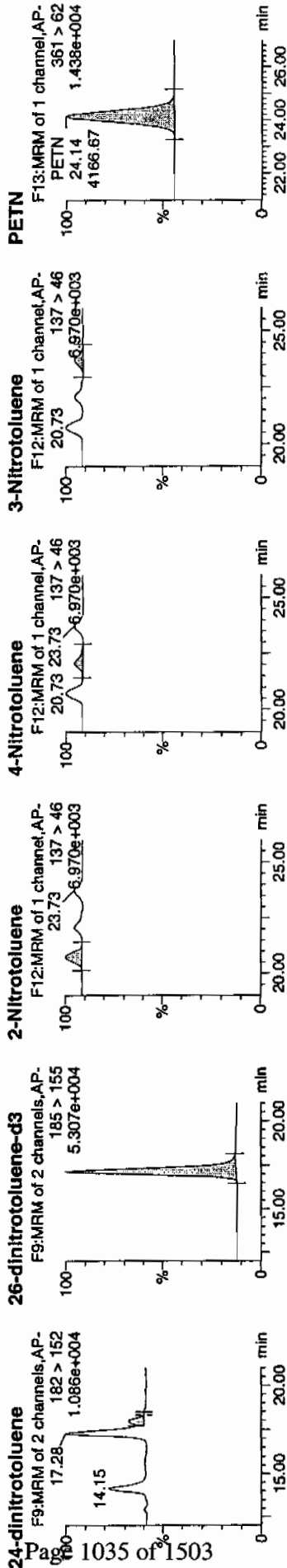
Qual: 1:1,C

MM
1/27/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	RT	Area	IS Area	Ass Resp	Response	Flag	Mod Date	Mod Time	Area	% Dev	ISN
WXX100125-08CRI	HMX	176 > 102	5.16	1221.338	3649.844	1221.338	bb			52.7382	131.8	153.9
WXX100125-08CRI	RDX	176 > 102	7.51	816.089	3649.844	816.089	bb			50.8496	127.1	88.6
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1268.148	3649.844	1268.148	bb			51.6960	129.2	136.5
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3649.844	3649.844	3649.844	bb			614.7830	123.0	630.8
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	373.422	3649.844	373.422	bb			44.1006	110.3	57.1
WXX100125-08CRI	Tetryl	241 > 181	12.45	365.812	3649.844	365.812	bb			57.6936	144.2	28.2
WXX100125-08CRI	Nitrobenzene	123 > 46	13.39	250.910	3649.844	250.910	bb			40.2211	100.6	22.6
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.34	533.527	20035.150	533.527	MM	27-Jan-10	09:12:38	51.1097	127.8	25.1
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.21	685.925	20035.150	685.925	bb			45.7353	114.3	76.5
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.20	627.366	20035.150	627.366	bb			49.2248	123.1	128.9
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.15	897.648	20035.150	897.648	bb			24.6712	123.4	52.6
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.28	1757.109	20035.150	1757.109	MM	27-Jan-10	09:15:56	39.8083	99.5	75.0
WXX100125-08CRI	24-dinitrotoluene	182 > 152	18.00	353.553	20035.150	353.553	MM	27-Jan-10	09:18:51	34.7289	86.8	15.1
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.15	20035.150	20035.150	20035.150	bb			614.6378	122.9	1178.3
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.73	297.304	20035.150	297.304	bb			44.6147	111.5	85.1
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.07	154.912	20035.150	154.912	bb			46.7588	116.9	41.2
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.73	161.279	20035.150	161.279	bb			43.1117	107.8	7.8
WXX100125-08CRI	PETN	361 > 62	24.14	4166.667	20035.150	4166.667	bb			28.4465	71.1	1101.8

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/26/10
 Time of Injection 1720
 Standard Number WXX100125-08CRI
 Data File EXP0125062a

HMX	131.8
RDX	127.1
135-TNB	129.2
13-DNB	110.3
Tetryl	144.2
Nitrobenzene	100.6
4A-26-DNT	127.8
2A-46-DNT	114.3
246-TNT	123.1
34-DNT(surr)	123.4
26-DNT	99.5
24-DNT	86.8
2-NT	111.5
4-NT	116.9
3-NT	107.8
PETN	71.1
Total	1825.4

Average

114.1

Handwritten: 1/27/10

Handwritten: 01/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125073a

Analysis Date: 26-JAN-10 22:45

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	671.694	112	
1,3-Dinitrobenzene-d4	500	508.961	102	
2,4,6-Trinitrotoluene	600	706.753	118	
2,4-Dinitrotoluene	600	643.877	107	
2,6-Dinitrotoluene	600	596.244	99	
2,6-Dinitrotoluene-d3	500	475.276	95	
2-Amino-4,6-dinitrotoluene	600	688.37	115	
3,4-Dinitrotoluene	300	342.191	114	
4-Amino-2,6-dinitrotoluene	600	691.558	115	
HMX	600	652.718	109	
Nitrobenzene	600	550.739	92	
PETN	600	648.299	108	
RDX	600	649.867	108	
Tetryl	600	631.484	105	
m-Dinitrobenzene	600	592.419	99	
m-Nitrotoluene	600	650.365	108	
o-Nitrotoluene	600	610.997	102	
p-Nitrotoluene	600	618.438	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PROV012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP\PROVData\EXP0125073a

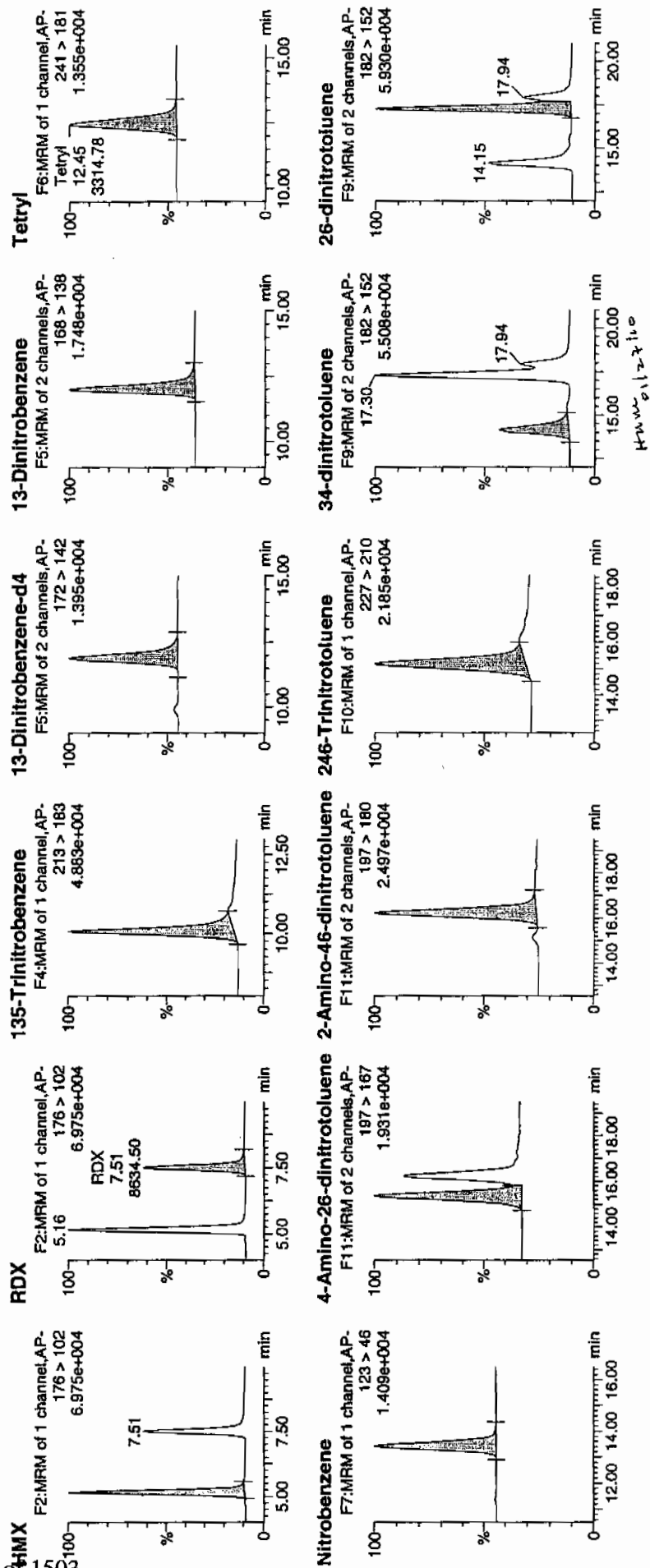
Date: 26-Jan-2010

Time: 22:45:12

ID: WXX100125-07CCV

Vial: 1:1,B

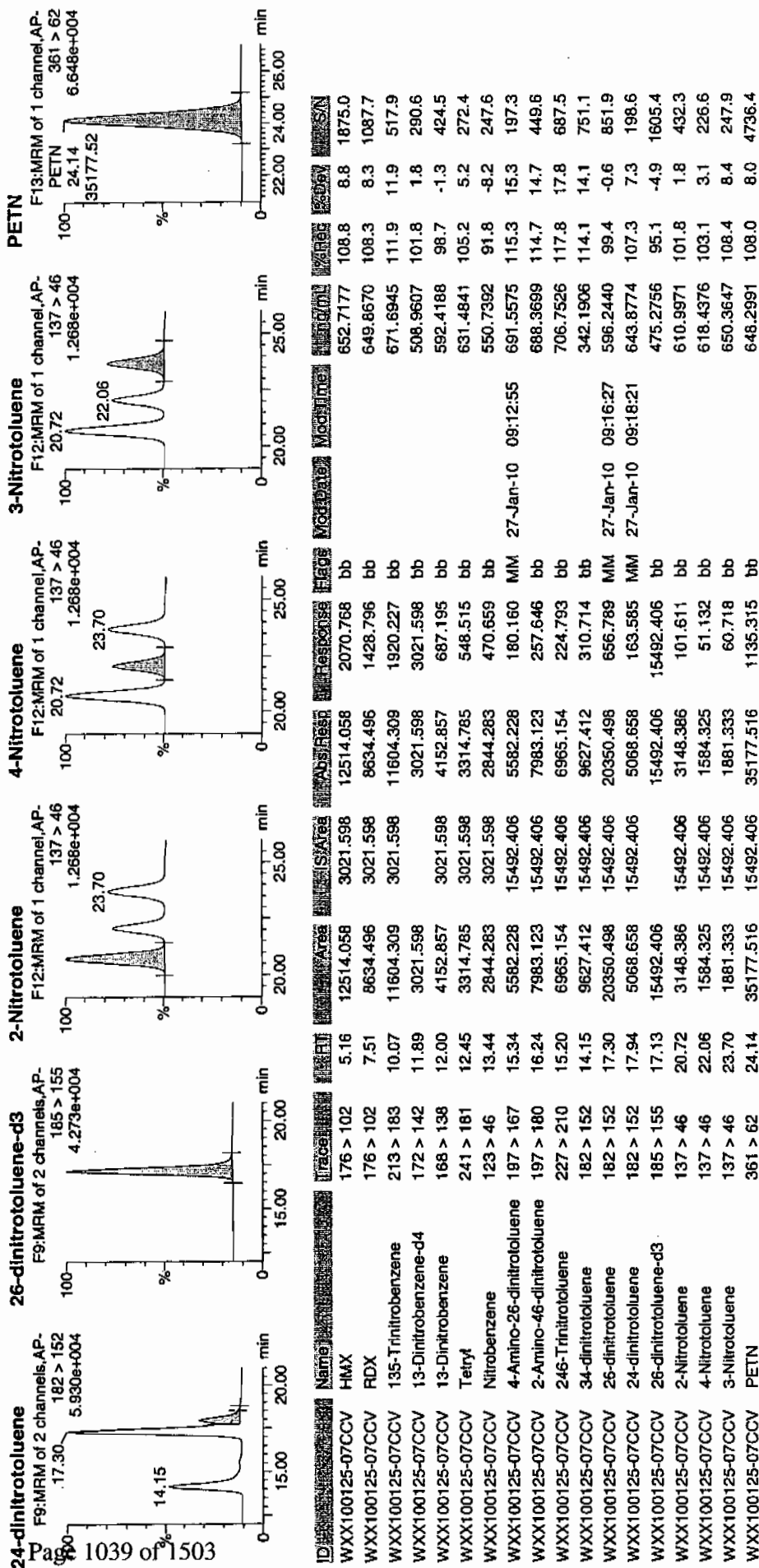
WXX
1/27/10



Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 74 of 97

Dataset: C:\MASSLYNX\New_Exp\PRO012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/26/10
 Time of Injection: 2245
 Standard Number: WXX100125-07CCV
 Data File: EXP0125073a

HMX	108.8
RDX	108.3
135-TNB	111.9
13-DNB	98.7
Tetryl	105.2
Nitrobenzene	91.8
4A-26-DNT	115.3
2A-46-DNT	114.7
246-TNT	117.8
34-DNT(surr)	114.1
26-DNT	99.4
24-DNT	107.3
2-NT	101.8
4-NT	103.1
3-NT	108.4
PETN	108.0
Total	1714.6

1/27/10

Total

1714.6

Average

107.2

1/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125075a

Analysis Date: 26-JAN-10 23:44

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	56.169	140	*
1,3-Dinitrobenzene-d4	500	483.992	97	
2,4,6-Trinitrotoluene	40	40.766	102	
2,4-Dinitrotoluene	40	35.006	88	
2,6-Dinitrotoluene	40	40.845	102	
2,6-Dinitrotoluene-d3	500	507.7	102	
2-Amino-4,6-dinitrotoluene	40	44.774	112	
3,4-Dinitrotoluene	20	23.523	118	
4-Amino-2,6-dinitrotoluene	40	43.317	108	
HMX	40	49.659	124	
Nitrobenzene	40	38.296	96	
PETN	40	36.274	91	
RDX	40	46.372	116	
Tetryl	40	44.916	112	
m-Dinitrobenzene	40	38.172	95	
m-Nitrotoluene	40	37.685	94	
o-Nitrotoluene	40	39.419	99	
p-Nitrotoluene	40	40.939	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

Printed: Wed Jan 27 09:26:20 2010, Page 77 of 97

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125075a

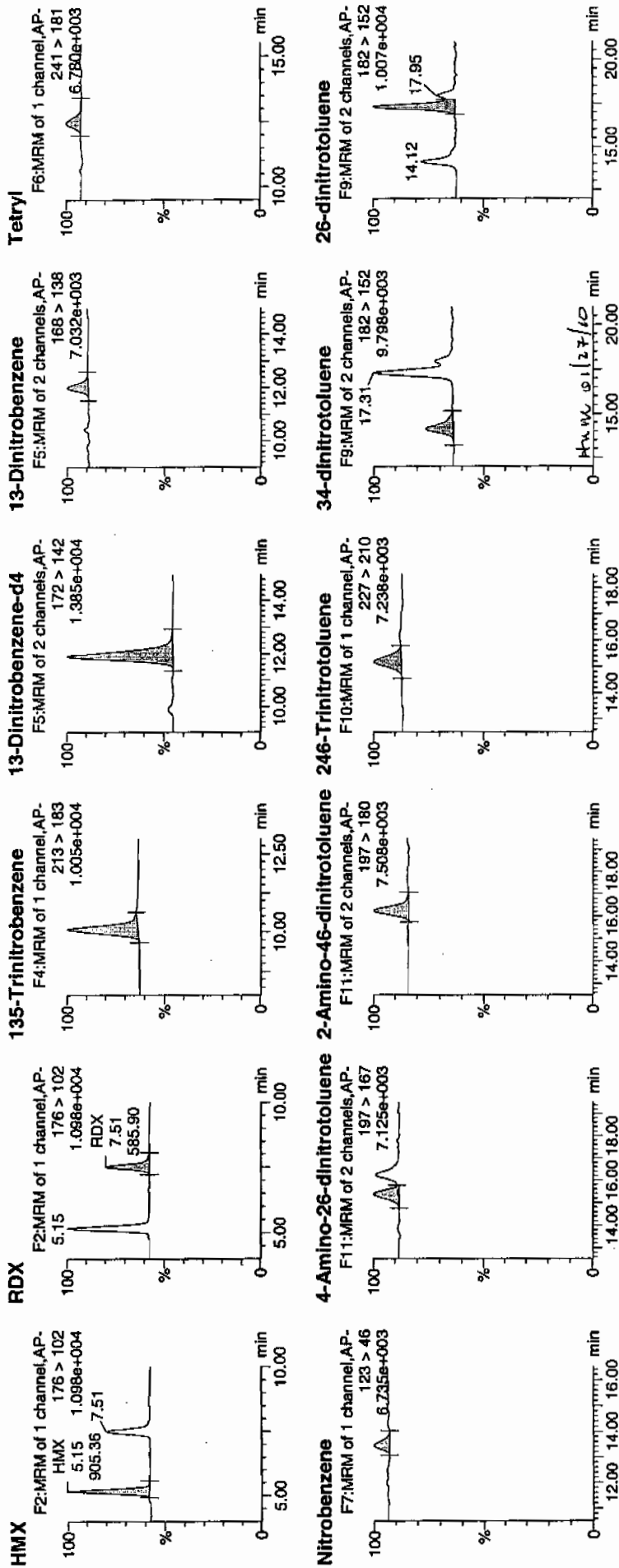
Date: 26-Jan-2010

Time: 23:44:10

ID: WXX100125-08CRI

Vial: 1:1,C

1/27/10

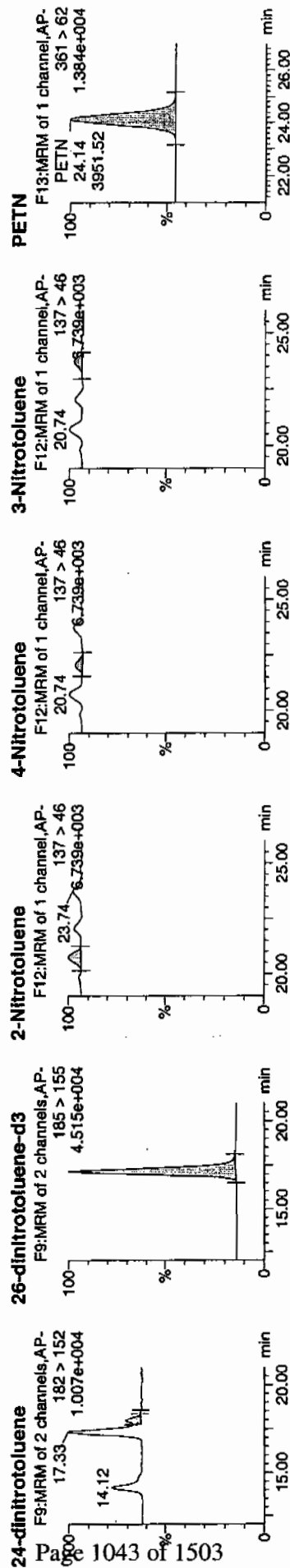


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Wed Jan 27 09:26:20 2010, Page 78 of 97

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	RT	Area	Area	Area	Response	Flags	Mod	Date	Time	Mod	Index	Req	Index	S/N
WXX100125-08CRI	HMZ	176 > 102	5.15	905.361	2873.365	905.361	157.544	bb						49.6586	124.1	312.1
WXX100125-08CRI	RDX	176 > 102	7.51	585.900	2873.365	585.900	101.954	bb						46.3721	115.9	164.6
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1070.772	2873.365	1070.772	186.327	bb						56.1693	140.4	146.0
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	2873.365	2873.365	2873.365	2873.365	bb						483.9922	96.8	191.0
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	254.457	2873.365	254.457	44.279	bb						38.1718	95.4	44.2
WXX100125-08CRI	Tetryl	241 > 181	12.45	224.208	2873.365	224.208	39.015	bb						44.9163	112.3	40.4
WXX100125-08CRI	Nitrobenzene	123 > 46	13.45	188.077	2873.365	188.077	32.728	bb						38.2961	95.7	13.5
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.39	373.508	16549.350	373.508	11.285	MM	27-Jan-10	09:13:15				43.3170	108.3	16.8
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	554.670	16549.350	554.670	16.758	bb						44.7736	111.9	62.6
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	429.161	16549.350	429.161	12.966	bb						40.7657	101.9	24.6
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.12	706.970	16549.350	706.970	21.359	bb						23.5233	117.6	23.5
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.33	1488.198	16549.350	1488.198	44.993	MM	27-Jan-10	09:16:33				40.8450	102.1	55.3
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.95	294.371	16549.350	294.371	8.894	MM	27-Jan-10	09:18:14				35.0061	87.5	12.2
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	16549.350	16549.350	16549.350	16549.350	bb						507.7005	101.5	1201.0
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.74	216.978	16549.350	216.978	6.555	bb						39.4189	98.5	24.6
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.04	112.033	16549.350	112.033	3.385	bb						40.9388	102.3	13.4
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.74	116.451	16549.350	116.451	3.518	bb						37.6853	94.2	15.0
WXX100125-08CRI	PETN	361 > 62	24.14	3951.517	16549.350	3951.517	119.386	bb						96.2742	90.7	664.9

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/26/10
 Time of Injection 2344
 Standard Number WXX100125-08CRI
 Data File EXP0125075a

HMX	124.1
RDX	115.9
135-TNB	140.4
13-DNB	95.4
Tetryl	112.3
Nitrobenzene	95.7
4A-26-DNT	108.3
2A-46-DNT	111.9
246-TNT	101.9
34-DNT(surr)	117.6
26-DNT	102.1
24-DNT	87.5
2-NT	98.5
4-NT	102.3
3-NT	94.2
PETN	90.7

Total 1698.8

Average 106.2

MAF
1/27/10

MAF 01/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125082a

Analysis Date: 27-JAN-10 03:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	646.231	108	
1,3-Dinitrobenzene-d4	500	533.587	107	
2,4,6-Trinitrotoluene	600	729.079	122	*
2,4-Dinitrotoluene	600	544.593	91	
2,6-Dinitrotoluene	600	604.575	101	
2,6-Dinitrotoluene-d3	500	492.902	99	
2-Amino-4,6-dinitrotoluene	600	713.723	119	
3,4-Dinitrotoluene	300	321.614	107	
4-Amino-2,6-dinitrotoluene	600	641.942	107	
HMX	600	657.246	110	
Nitrobenzene	600	546.972	91	
PETN	600	662.902	110	
RDX	600	625.04	104	
Tetryl	600	618.034	103	
m-Dinitrobenzene	600	604.712	101	
m-Nitrotoluene	600	620.723	103	
o-Nitrotoluene	600	528.487	88	
p-Nitrotoluene	600	627.285	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

Dataset: C:\MASSLYNX\New_Exp.PRO\1012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

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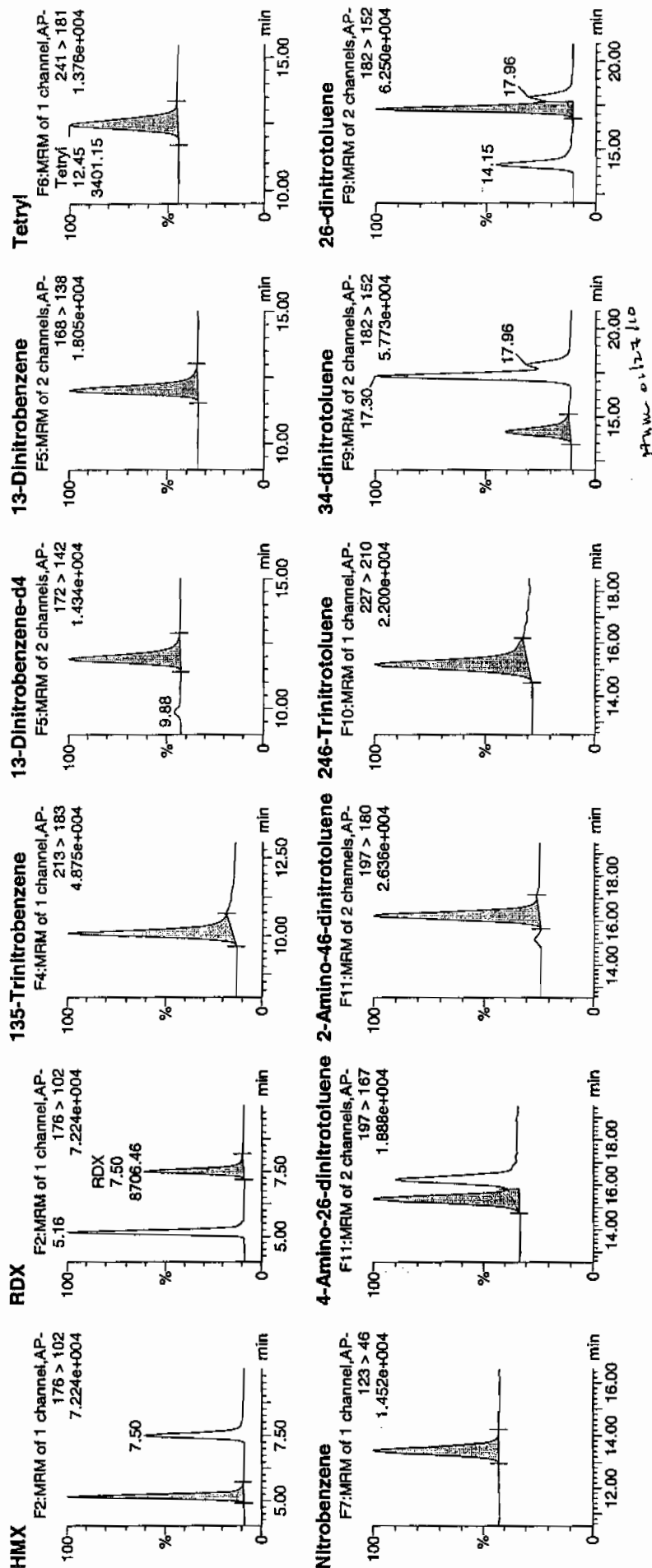
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Time: 03:10:33

ID: WXX100125-07CCV

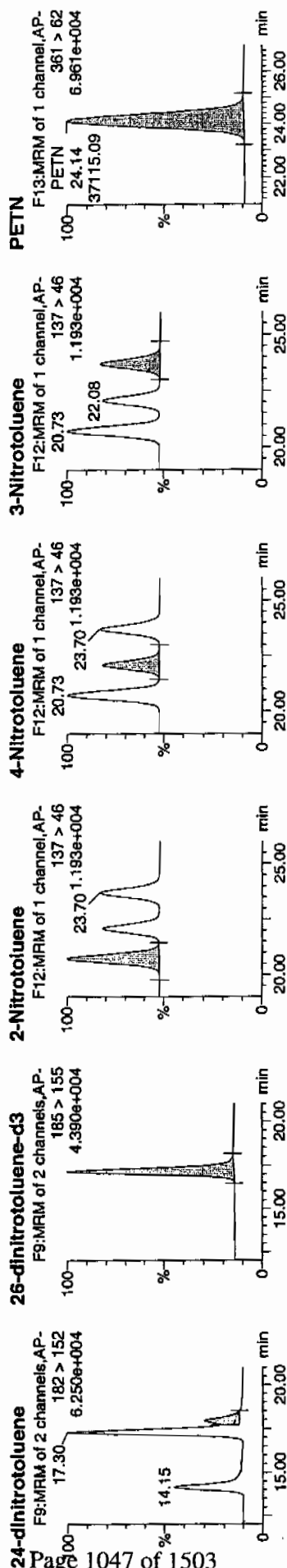
Vial: 1:1,B

WAT
1/27/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYN\New_Exp_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Indm	%Rec	%Dev	SN
WXX100125-07CCV	HMX	176 > 102	5.16	13210.575	3167.799	13210.575	2085.135	db			657.2461	109.5	9.5	2273.0
WXX100125-07CCV	RDX	176 > 102	7.50	8706.456	3167.799	8706.456	1374.212	bb			625.0402	104.2	4.2	1284.8
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	11711.343	3167.799	11711.343	1848.498	bb			646.2312	107.7	7.7	547.8
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	3167.799	3167.799	3167.799	3167.799	bb			533.5869	106.7	6.7	394.3
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4444.137	3167.799	4444.137	701.455	bb			604.7116	100.8	0.8	391.7
WXX100125-07CCV	Tetryl	241 > 181	12.45	3401.154	3167.799	3401.154	536.832	bb			618.0341	103.0	3.0	450.9
WXX100125-07CCV	Nitrobenzene	123 > 46	13.44	2961.505	3167.799	2961.505	467.439	bb			546.9715	91.2	-8.8	173.1
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.38	5373.902	16066.954	5373.902	167.235	MM	27-Jan-10	09:13:36	641.9420	107.0	7.0	218.7
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.21	8584.110	16066.954	8584.110	267.136	bb			713.7229	119.0	19.0	633.2
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.20	7451.651	16066.954	7451.651	231.894	bb			729.0789	121.5	21.5	348.9
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.15	9384.071	16066.954	9384.071	292.030	bb			321.6141	107.2	7.2	526.9
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.30	21400.100	16066.954	21400.100	665.966	MM	27-Jan-10	09:17:09	604.5749	100.8	0.8	1051.7
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.96	4446.075	16066.954	4446.075	138.361	MM	27-Jan-10	09:17:39	544.5933	90.8	-9.2	210.1
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.15	16066.954	16066.954	16066.954	16066.954	bb			492.9016	98.6	-1.4	2492.4
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.73	2824.214	16066.954	2824.214	87.889	bb			528.4867	88.1	-11.9	576.1
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.08	1666.586	16066.954	1666.586	51.864	bb			627.2846	104.5	4.5	354.1
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.70	1862.177	16066.954	1862.177	57.951	bb			620.7226	103.5	3.5	373.5
WXX100125-07CCV	PETN	361 > 62	24.14	37115.086	16066.954	37115.086	1155.013	bb			662.9021	110.5	10.5	5699.4

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/27/10
 Time of Injection: 0310
 Standard Number: WXX100125-07CCV
 Data File: EXP0125082a

HMX	109.5
RDX	104.2
135-TNB	107.7
13-DNB	100.8
Tetryl	103.0
Nitrobenzene	91.2
4A-26-DNT	107.0
2A-46-DNT	119.0
246-TNT	121.5
34-DNT(surr)	107.2
26-DNT	100.8
24-DNT	90.8
2-NT	88.1
4-NT	104.5
3-NT	103.5
PETN	110.5

*WAT
1/27/10*

Total 1669.3

Average 104.3

WAT 01/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125084a

Analysis Date: 27-JAN-10 04:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.216	131	*
1,3-Dinitrobenzene-d4	500	509.03	102	
2,4,6-Trinitrotoluene	40	49.421	124	
2,4-Dinitrotoluene	40	37.395	93	
2,6-Dinitrotoluene	40	41.302	103	
2,6-Dinitrotoluene-d3	500	549.582	110	
2-Amino-4,6-dinitrotoluene	40	41.118	103	
3,4-Dinitrotoluene	20	22.594	113	
4-Amino-2,6-dinitrotoluene	40	41.47	104	
HMX	40	49.161	123	
Nitrobenzene	40	52.118	130	*
PETN	40	34.241	86	
RDX	40	46.475	116	
Tetryl	40	57.554	144	*
m-Dinitrobenzene	40	37.685	94	
m-Nitrotoluene	40	42.967	107	
o-Nitrotoluene	40	44.801	112	
p-Nitrotoluene	40	41.318	103	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010

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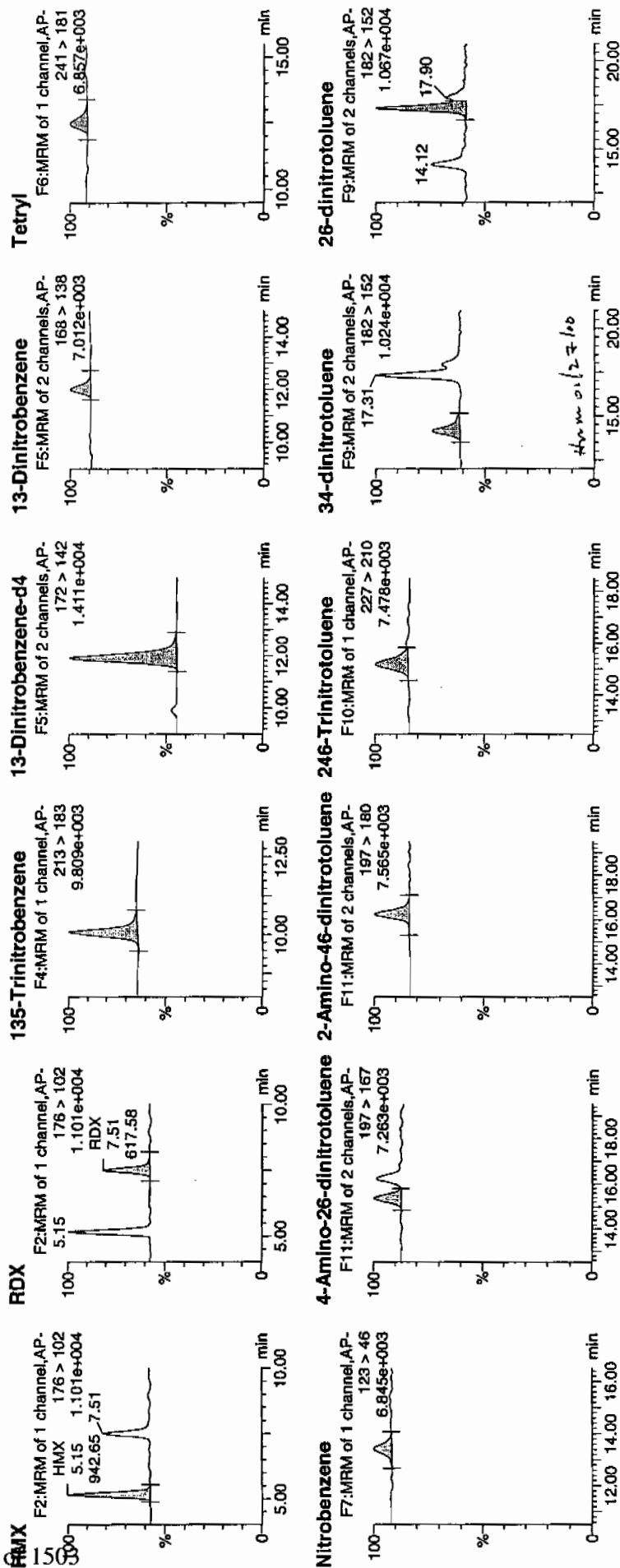
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Time: 04:09:30

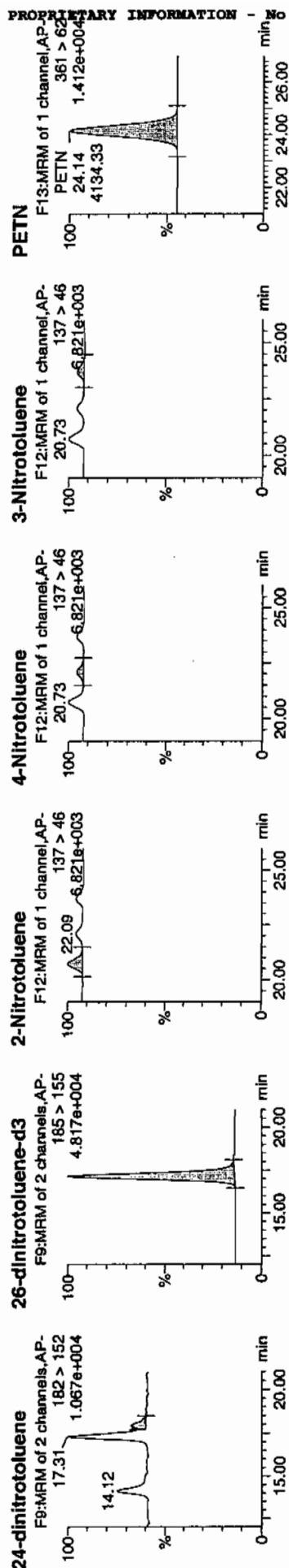
ID: WXX100125-08CRI

Val: 1:1,C

AP-1
1/27/10



Dataset: C:\MASSLYN\New_Exp.PRO\012510expA1.qld, Time: Wed Jan 27 09:20:42 2010



ID	Name	Trace	RFI	Area	SArea	AbRes	Response	Flags	ModDate	ModTime	InTime	%Res	%Dev	SN
WXX100125-08CRI	HMx	178 > 102	5.15	942.653	3022.007	942.653	155.965	bb			49.1610	122.9	22.9	128.3
WXX100125-08CRI	RDX	178 > 102	7.51	617.581	3022.007	617.581	102.181	bb			46.4753	116.2	16.2	71.2
WXX100125-08CRI	135-T-nitrobenzene	213 > 183	10.07	1058.864	3022.007	1058.864	175.192	bb			52.2164	130.5	30.5	144.7
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	3022.007		3022.007	3022.007	bb			509.0296	101.8	1.8	273.5
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	264.208	3022.007	264.208	43.714	bb			37.6850	94.2	-5.8	29.9
WXX100125-08CRI	Tetrl	241 > 181	12.48	302.151	3022.007	302.151	49.992	bb			57.5536	143.9	43.9	35.6
WXX100125-08CRI	Nitrobenzene	123 > 46	13.41	269.198	3022.007	269.198	44.540	bb			52.1178	130.3	30.3	22.6
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.35	387.081	17914.533	387.081	10.804	MM	27-Jan-10	09:13:45	41.4702	103.7	3.7	43.3
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	551.404	17914.533	551.404	15.390	bb			41.1180	102.8	2.8	26.9
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	583.193	17914.533	583.193	15.719	bd			49.4205	123.6	23.6	27.5
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	735.041	17914.533	735.041	20.515	bb			22.5935	113.0	13.0	39.3
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.31	1630.073	17914.533	1630.073	45.496	MM	27-Jan-10	09:17:20	41.3018	103.3	3.3	119.5
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.90	340.404	17914.533	340.404	9.501	MM	27-Jan-10	09:17:32	37.3954	93.5	-6.5	23.6
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	17914.533		17914.533	17914.533	bb			549.5815	109.9	9.9	578.0
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.73	266.947	17914.533	266.947	7.451	bb			44.8012	112.0	12.0	80.3
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.09	122.399	17914.533	122.399	3.416	bb			41.3183	103.3	3.3	35.6
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.69	143.723	17914.533	143.723	4.011	bb			42.9666	107.4	7.4	37.7
WXX100125-08CRI	PETN	361 > 62	24.14	4134.333	17914.533	4134.333	115.390	bb			34.2406	85.6	-14.4	2130.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/27/10
 Time of Injection 0409
 Standard Number WXX100125-08CRI
 Data File EXP0125084a

HMX	122.9
RDX	116.2
135-TNB	130.5
13-DNB	94.2
Tetryl	143.9
Nitrobenzene	130.3
4A-26-DNT	103.7
2A-46-DNT	102.8
246-TNT	123.6
34-DNT(surr)	113.0
26-DNT	103.3
24-DNT	93.5
2-NT	112.0
4-NT	103.3
3-NT	107.4
PETN	85.6
Total	1786.2

WAT
1/27/10

Average 111.6

from 01/27/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125095a

Analysis Date: 27-JAN-10 09:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	690.785	115	
1,3-Dinitrobenzene-d4	500	557.852	112	
2,4,6-Trinitrotoluene	600	694.988	116	
2,4-Dinitrotoluene	600	594.759	99	
2,6-Dinitrotoluene	600	598.981	100	
2,6-Dinitrotoluene-d3	500	502.328	100	
2-Amino-4,6-dinitrotoluene	600	696.342	116	
3,4-Dinitrotoluene	300	322.957	108	
4-Amino-2,6-dinitrotoluene	600	690.103	115	
HMX	600	748.841	125	*
Nitrobenzene	600	539.735	90	
PETN	600	692.59	115	
RDX	600	801.044	134	*
Tetryl	600	639.631	107	
m-Dinitrobenzene	600	610.103	102	
m-Nitrotoluene	600	630.246	105	
o-Nitrotoluene	600	599.552	100	
p-Nitrotoluene	600	647.051	108	

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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125095a

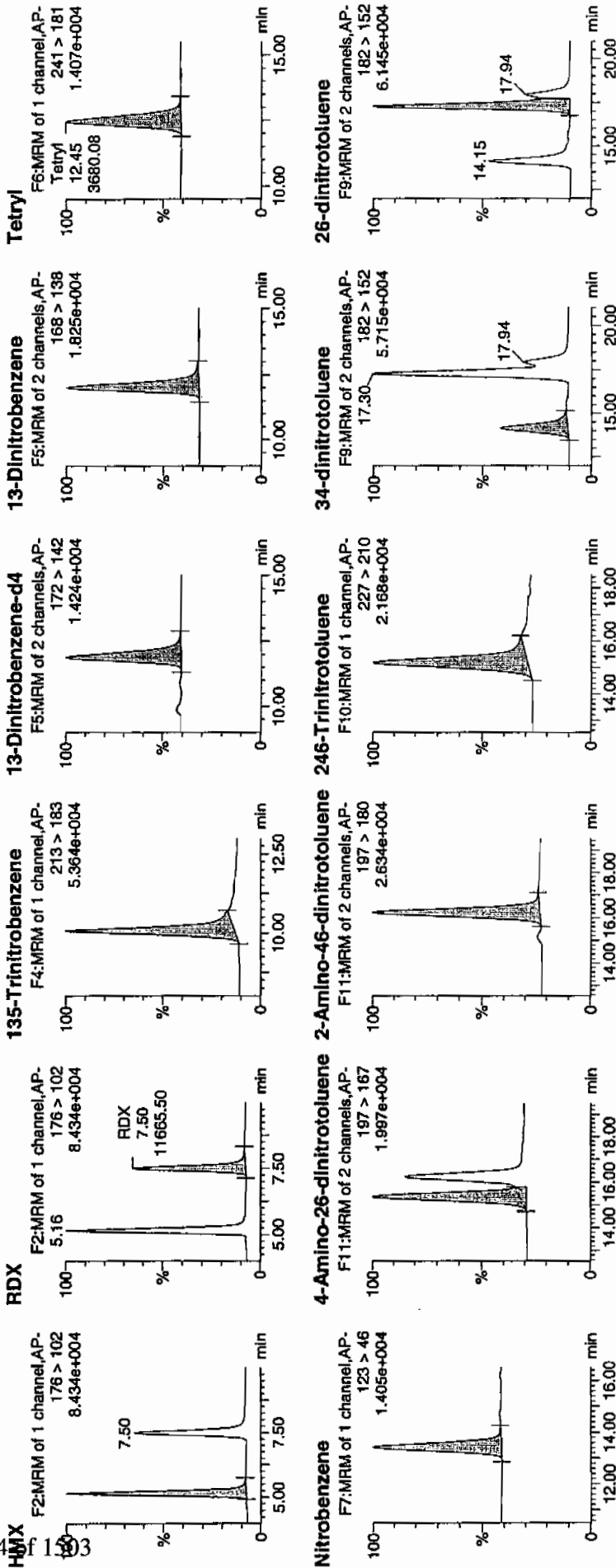
Date: 27-Jan-2010

Time: 09:34:49

ID: WXX100125-07CCV

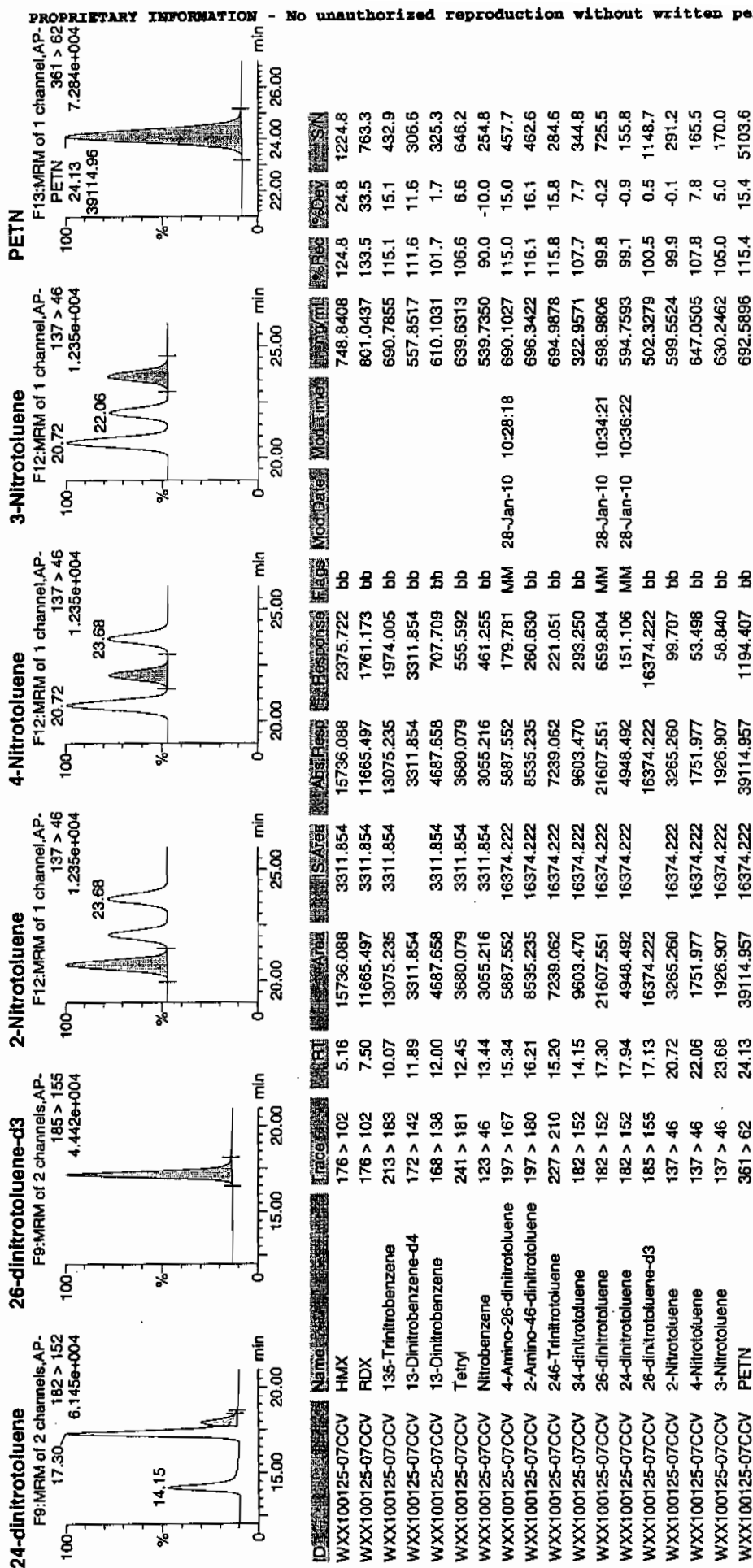
Vol: 1:1,B

54



Handwritten: 1/28/10

Dataset: C:\MASSLYNX\New_Exp\PRO1012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/27/10
 Time of Injection: 0934
 Standard Number: WXX100125-07CCV
 Data File: EXP0125095a

HMX	124.8
RDX	133.5
135-TNB	115.1
13-DNB	101.7
Tetryl	106.6
Nitrobenzene	90.0
4A-26-DNT	115.0
2A-46-DNT	116.1
246-TNT	115.8
34-DNT(surr)	107.7
26-DNT	99.8
24-DNT	99.1
2-NT	99.9
4-NT	107.8
3-NT	105.0
PETN	115.4

MTT
1/28/10

Total 1753.3

Average 109.6

done 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125097a

Analysis Date: 27-JAN-10 10:33

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.948	127	
1,3-Dinitrobenzene-d4	500	494.315	99	
2,4,6-Trinitrotoluene	40	36.387	91	
2,4-Dinitrotoluene	40	43.297	108	
2,6-Dinitrotoluene	40	40.794	102	
2,6-Dinitrotoluene-d3	500	507.664	102	
2-Amino-4,6-dinitrotoluene	40	41.899	105	
3,4-Dinitrotoluene	20	21.498	107	
4-Amino-2,6-dinitrotoluene	40	50.75	127	
HMX	40	63.85	160	*
Nitrobenzene	40	44.243	111	
PETN	40	40.486	101	
RDX	40	46.52	116	
Tetryl	40	48.725	122	
m-Dinitrobenzene	40	39.009	98	
m-Nitrotoluene	40	44.324	111	
o-Nitrotoluene	40	38.885	97	
p-Nitrotoluene	40	39.287	98	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125097a

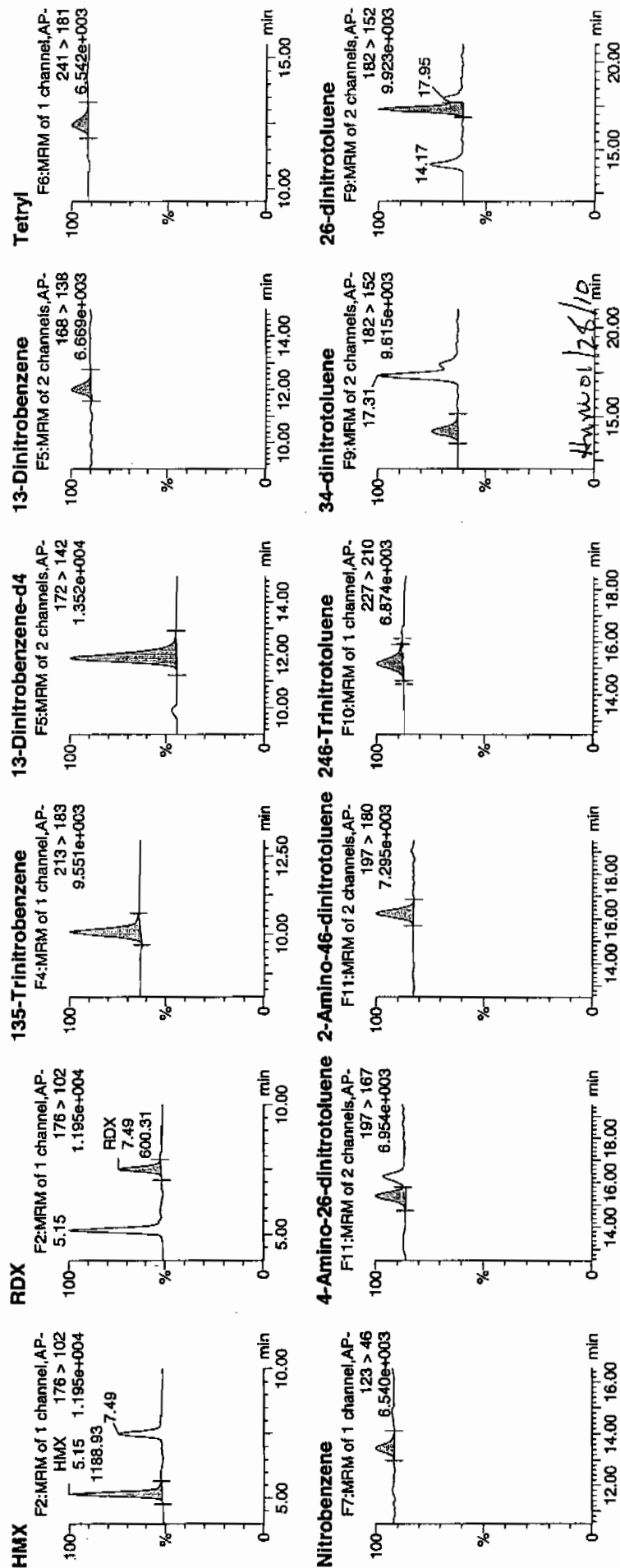
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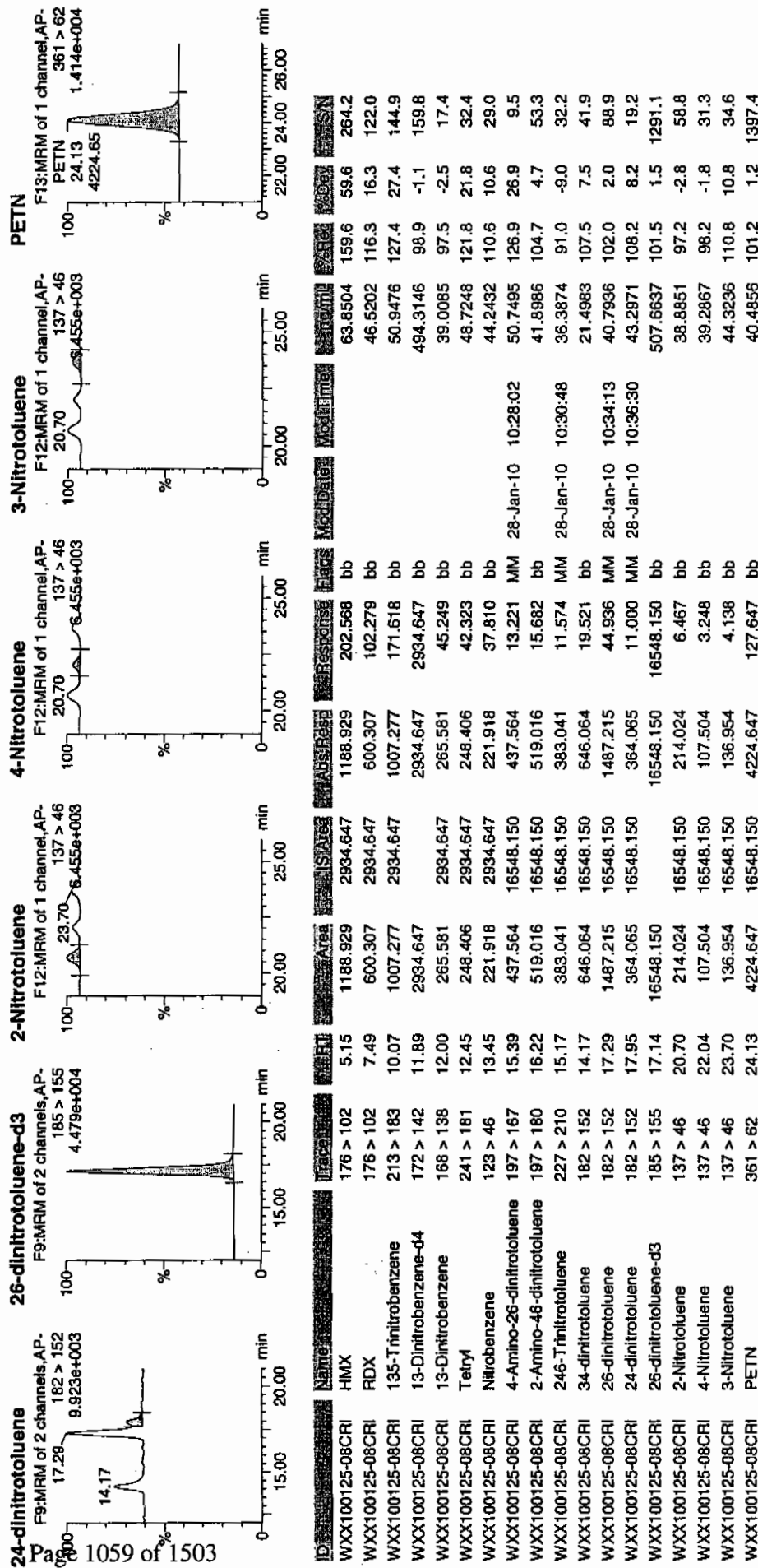
ID: WXX100125-08CRI

Vial: 1:1,C

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Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/27/10
 Time of Injection 1033
 Standard Number WXX100125-08CRI
 Data File EXP0125097a

HMX	159.6
RDX	116.3
135-TNB	127.4
13-DNB	97.5
Tetryl	121.8
Nitrobenzene	110.6
4A-26-DNT	126.9
2A-46-DNT	104.7
246-TNT	91.0
34-DNT(surr)	107.5
26-DNT	102.0
24-DNT	108.2
2-NT	97.2
4-NT	98.2
3-NT	110.8
PETN	101.2
Total	1780.9

*MTT
1/28/10*

Average	111.3	<i>done 01/28/10</i>
		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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125108a

Analysis Date: 27-JAN-10 15:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	680.256	113	
1,3-Dinitrobenzene-d4	500	550.639	110	
2,4,6-Trinitrotoluene	600	793.623	132	*
2,4-Dinitrotoluene	600	605.077	101	
2,6-Dinitrotoluene	600	604.019	101	
2,6-Dinitrotoluene-d3	500	530.816	106	
2-Amino-4,6-dinitrotoluene	600	658.199	110	
3,4-Dinitrotoluene	300	339.185	113	
4-Amino-2,6-dinitrotoluene	600	669.192	112	
HMX	600	600.388	100	
Nitrobenzene	600	537.876	90	
PETN	600	537.246	90	
RDX	600	628.942	105	
Tetryl	600	594.999	99	
m-Dinitrobenzene	600	600.852	100	
m-Nitrotoluene	600	545.465	91	
o-Nitrotoluene	600	500.166	83	
p-Nitrotoluene	600	523.635	87	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125108a

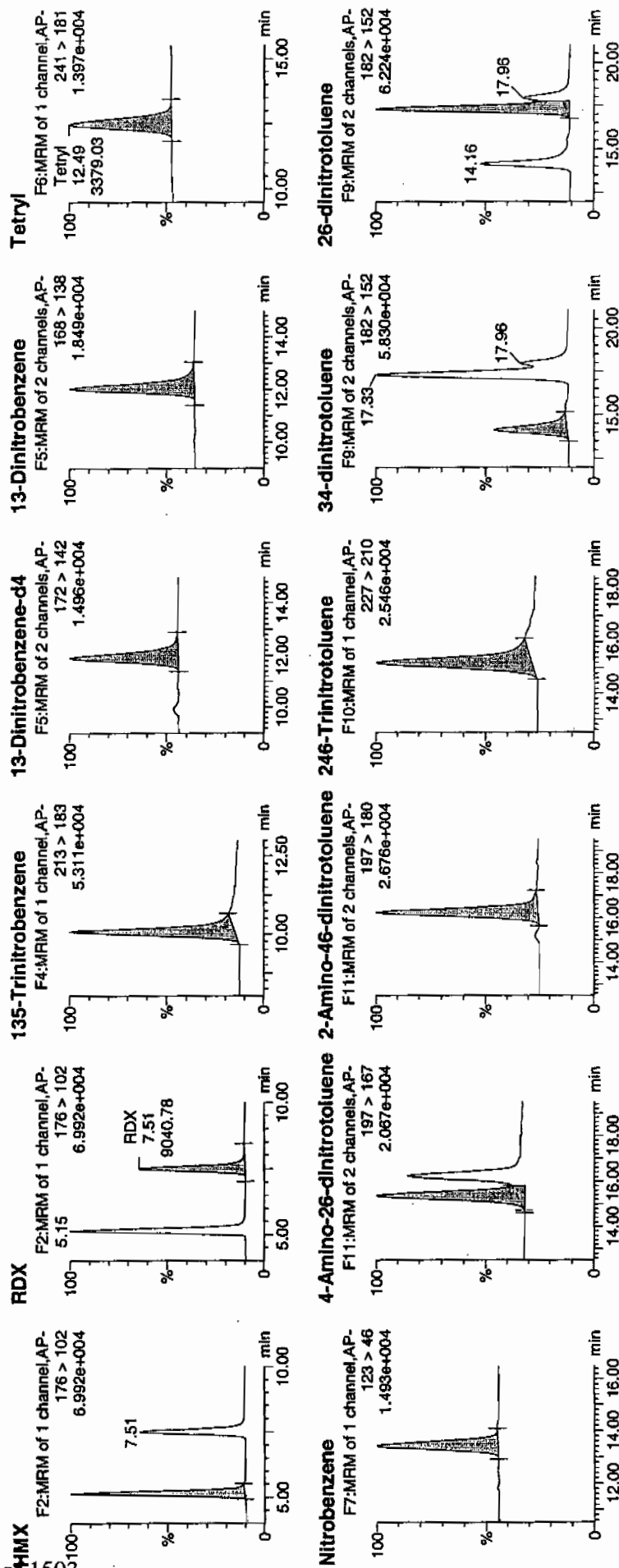
Date: 27-Jan-2010

Time: 15:58:33

ID: WXX100125-07CCV

Vial: 1:1,B

1/28/10

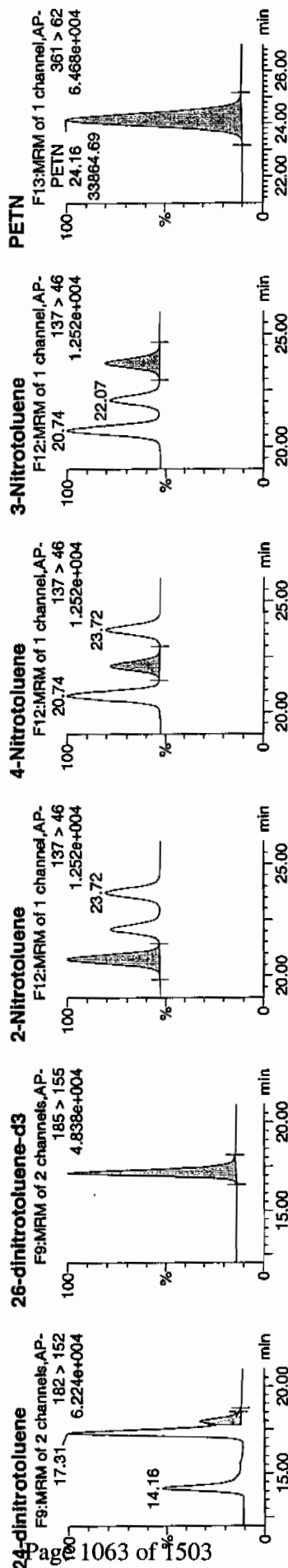


Amms 1/28/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYN\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	SAref	Abs:Ref	Response	Flag	Volume	ModDate	Area	SD	SN	
WXX100125-07CCV	HMX	176 > 102	5.15	12453.394	3269.034	12453.394	1904.751	bb			600.3883	100.1	0.1	1733.9
WXX100125-07CCV	RDX	176 > 102	7.51	9040.780	3269.034	9040.780	1382.791	bb			528.9420	104.8	4.8	1059.1
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	12712.248	3269.034	12712.248	1944.343	bb			680.2555	113.4	13.4	703.1
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.90	3269.034	3269.034	3269.034	3269.034	bb			550.6390	110.1	10.1	370.4
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.03	4556.892	3269.034	4556.892	696.978	bb			600.8524	100.1	0.1	344.9
WXX100125-07CCV	Tetryl	241 > 181	12.49	3379.031	3269.034	3379.031	516.824	bb			594.9994	99.2	-0.8	356.6
WXX100125-07CCV	Nitrobenzene	123 > 46	13.45	3005.327	3269.034	3005.327	459.666	bb			537.8760	89.6	-10.4	181.4
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.38	6032.938	17302.844	6032.938	174.334	MM	28-Jan-10	10:27:49	669.1924	111.5	11.5	135.6
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.25	8525.245	17302.844	8525.245	246.354	bb			658.1991	109.7	9.7	403.8
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.20	8735.267	17302.844	8735.267	252.423	bb			783.6230	132.3	32.3	419.6
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.16	10658.028	17302.844	10658.028	307.985	bb			339.1851	113.1	13.1	347.5
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	23025.027	17302.844	23025.027	665.354	MM	28-Jan-10	10:33:50	604.0189	100.7	0.7	504.4
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.96	5319.846	17302.844	5319.846	153.728	MM	28-Jan-10	10:36:57	605.0769	100.8	0.8	118.6
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.15	17302.844	17302.844	17302.844	17302.844	bb			530.8162	106.2	6.2	1375.2
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.74	2878.468	17302.844	2878.468	83.179	bb			500.1657	83.4	-16.6	338.1
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.07	1498.221	17302.844	1498.221	43.294	bb			523.6352	87.3	-12.7	180.6
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.72	1762.278	17302.844	1762.278	50.925	bb			545.4652	90.9	-9.1	199.8
WXX100125-07CCV	PETN	361 > 62	24.16	33864.688	17302.844	33864.688	978.587	bb			537.2463	89.5	-10.5	5249.6

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/27/10
 Time of Injection: 1558
 Standard Number: WXX100125-07CCV
 Data File: EXP0125108a

HMX	100.1
RDX	104.8
135-TNB	113.4
13-DNB	100.1
Tetryl	99.2
Nitrobenzene	89.6
4A-26-DNT	111.5
2A-46-DNT	109.7
246-TNT	132.3
34-DNT(surr)	113.1
26-DNT	100.7
24-DNT	100.8
2-NT	83.4
4-NT	87.3
3-NT	90.9
PETN	89.5

*not
1/28/10*

Total 1626.4

Average 101.7

Hmm 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125110a

Analysis Date: 27-JAN-10 16:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.299	131	*
1,3-Dinitrobenzene-d4	500	559.774	112	
2,4,6-Trinitrotoluene	40	62.349	156	*
2,4-Dinitrotoluene	40	40.315	101	
2,6-Dinitrotoluene	40	40.693	102	
2,6-Dinitrotoluene-d3	500	553.757	111	
2-Amino-4,6-dinitrotoluene	40	40.05	100	
3,4-Dinitrotoluene	20	21.774	109	
4-Amino-2,6-dinitrotoluene	40	44.776	112	
HMX	40	41.328	103	
Nitrobenzene	40	35.669	89	
PETN	40	28.542	71	
RDX	40	39.292	98	
Tetryl	40	37.065	93	
m-Dinitrobenzene	40	33.575	84	
m-Nitrotoluene	40	41.171	103	
o-Nitrotoluene	40	32.917	82	
p-Nitrotoluene	40	36.803	92	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
 GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125110a

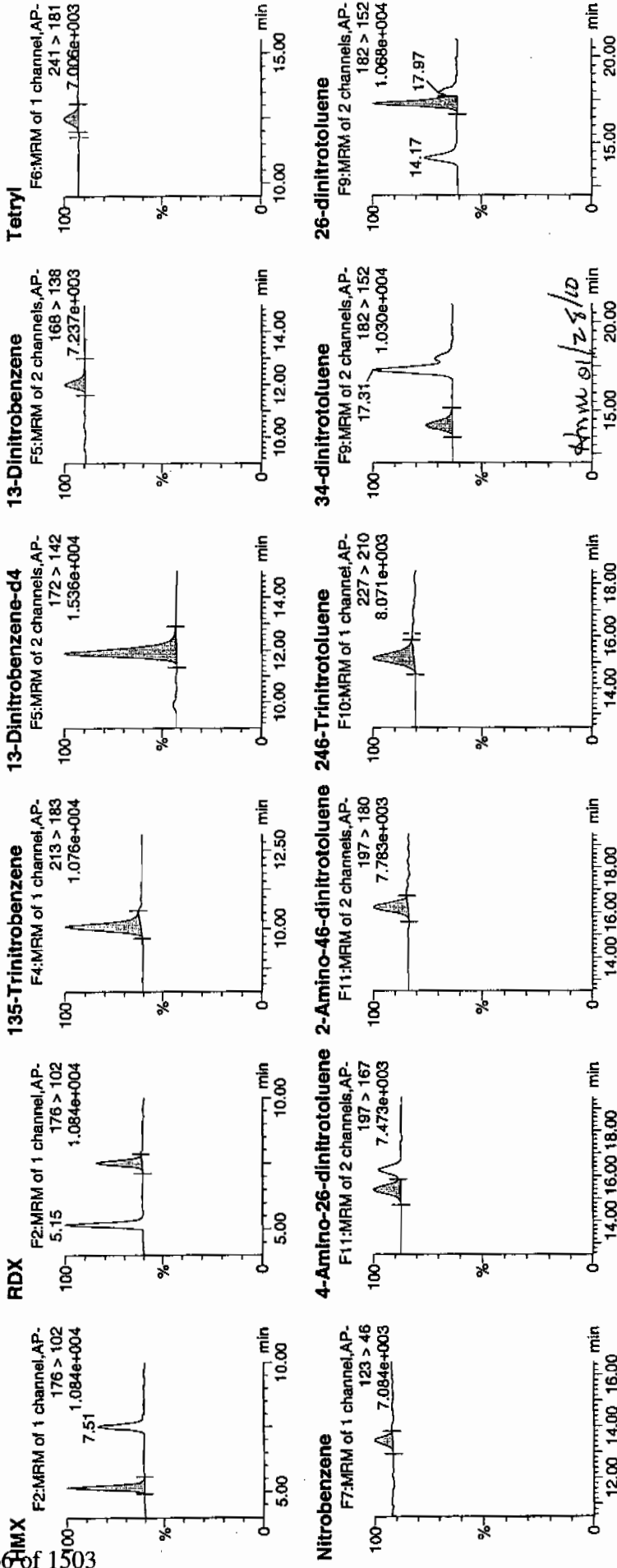
Date: 27-Jan-2010

Time: 16:57:36

ID: WXX100125-08CRI

Vial: 1:1,C

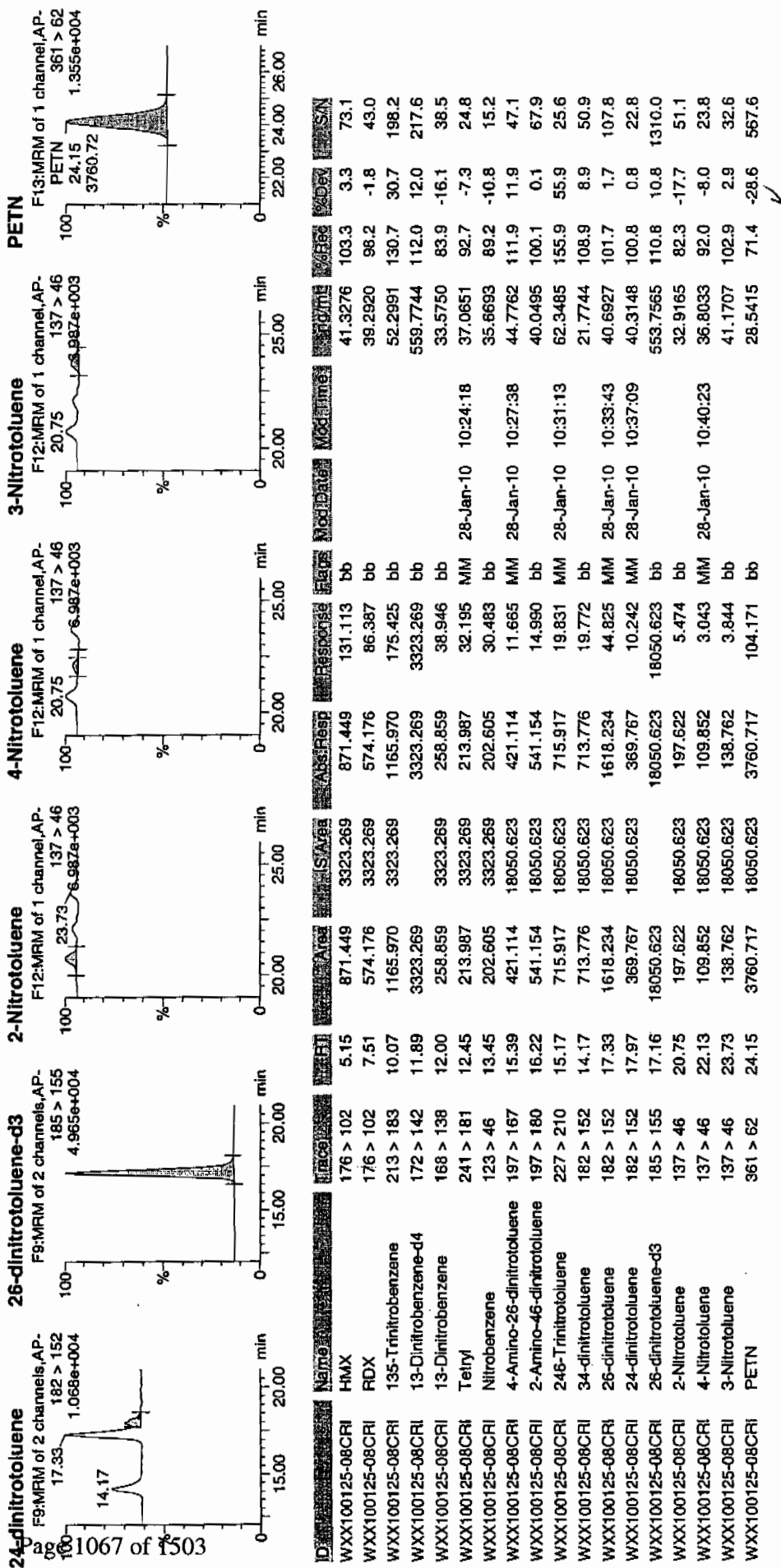
1/28/10



Quantify Sample Report GEL Laboratories, LLC / Analyst : Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 52 of 121

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/27/10
 Time of Injection 1657
 Standard Number WXX100125-08CRI
 Data File EXP0125110a

HMX	103.3
RDX	98.2
135-TNB	130.7
13-DNB	83.9
Tetryl	92.7
Nitrobenzene	89.2
4A-26-DNT	111.9
2A-46-DNT	100.1
246-TNT	155.9
34-DNT(surr)	108.9
26-DNT	101.7
24-DNT	100.8
2-NT	82.3
4-NT	92.0
3-NT	102.9
PETN	71.4

Total 1625.9

Average 101.6

*WXP
1/28/10*

done 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125116a

Analysis Date: 27-JAN-10 19:54

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	631.041	105	
1,3-Dinitrobenzene-d4	500	529.487	106	
2,4,6-Trinitrotoluene	600	716.58	119	
2,4-Dinitrotoluene	600	651.975	109	
2,6-Dinitrotoluene	600	619.509	103	
2,6-Dinitrotoluene-d3	500	468.187	94	
2-Amino-4,6-dinitrotoluene	600	700.462	117	
3,4-Dinitrotoluene	300	334.393	111	
4-Amino-2,6-dinitrotoluene	600	684.091	114	
HMX	600	616.785	103	
Nitrobenzene	600	533.559	89	
PETN	600	660.7	110	
RDX	600	635.793	106	
Tetryl	600	651.276	109	
m-Dinitrobenzene	600	592.514	99	
m-Nitrotoluene	600	522.524	87	
o-Nitrotoluene	600	557.564	93	
p-Nitrotoluene	600	549.542	92	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 63 of 121

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125116a

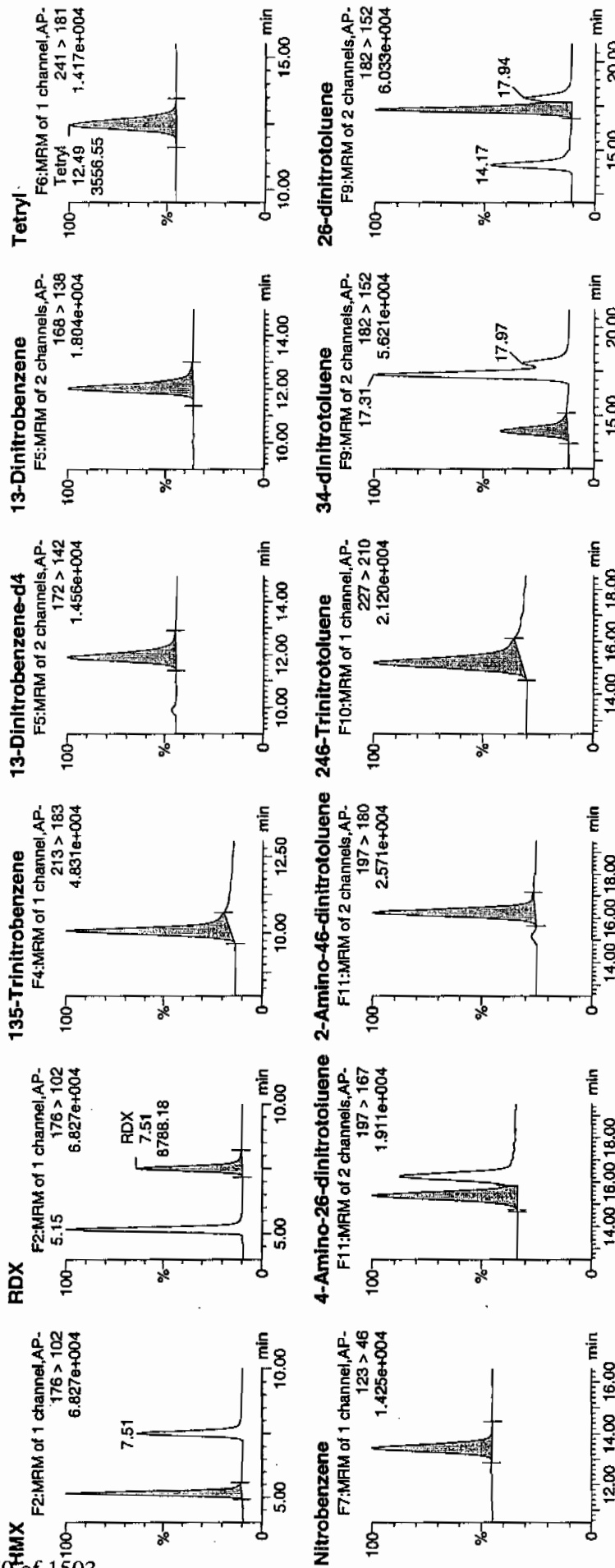
Date: 27-Jan-2010

Time: 19:54:59

ID: WXX100125-07CCV

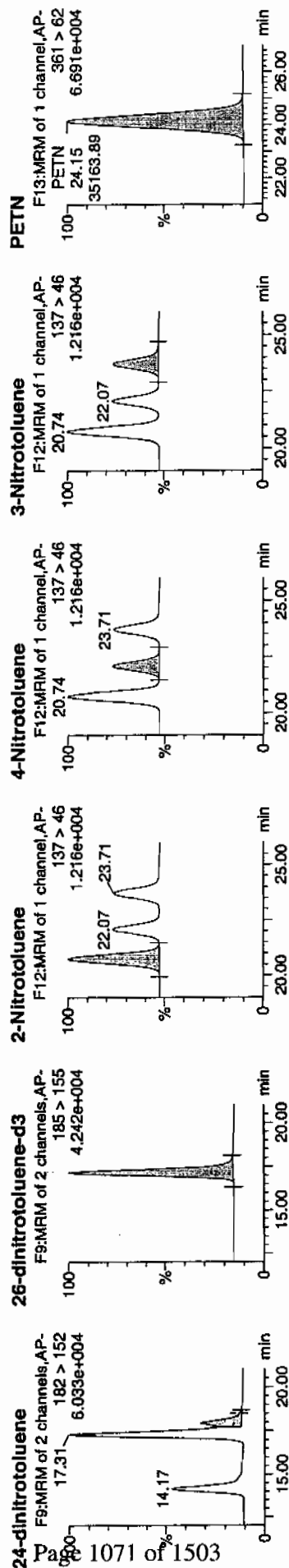
Vial: 1:1,B

1070 of 1503



Handwritten note: 01/25/10

Dataset: C:\MASSLYN\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	Area	Abundance	Response	Peak	ModTime	ModDate	ModTime	24Rec	24Rec	SN
WXX100125-07CCV	HMX	176 > 102	5.15	12302.053	3143.459	12302.053	1956.770	bb	616.7849	102.8	2.8	2098.0		
WXX100125-07CCV	RDX	176 > 102	7.51	8788.184	3143.459	8788.184	1397.852	bb	635.7926	106.0	6.0	1271.2		
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	11352.341	3143.459	11352.341	1805.708	bb	631.0410	105.2	5.2	673.6		
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.89	3143.459	3143.459	3143.459	3143.459	bb	529.4871	105.9	5.9	381.5		
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4321.038	3143.459	4321.038	687.306	bb	592.5142	98.8	-1.2	418.0		
WXX100125-07CCV	Tetryl	241 > 181	12.49	3556.552	3143.459	3556.552	565.707	bb	651.2761	108.5	8.5	328.1		
WXX100125-07CCV	Nitrobenzene	123 > 46	13.45	2866.690	3143.459	2866.690	455.977	bb	533.5594	88.9	-11.1	182.9		
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.35	5439.601	15261.352	5439.601	178.215	MM	684.0907	114.0	14.0	231.3		
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.22	8002.209	15261.352	8002.209	262.172	bb	700.4623	116.7	16.7	448.5		
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.17	6956.677	15261.352	6956.677	227.918	bb	716.5795	119.4	19.4	366.7		
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.17	9267.728	15261.352	9267.728	303.634	bb	334.3934	111.5	11.5	287.0		
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	20829.203	15261.352	20829.203	682.417	MM	619.5088	103.3	3.3	713.0		
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.94	5055.856	15261.352	5055.856	165.642	MM	651.9747	108.7	8.7	164.2		
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	15261.352	15261.352	15261.352	15261.352	bb	468.1873	93.6	-6.4	1463.8		
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.74	2830.204	15261.352	2830.204	92.725	bb	557.5640	92.9	-7.1	353.0		
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.07	1386.831	15261.352	1386.831	45.436	bb	549.5421	91.6	-8.4	180.3		
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.71	1488.980	15261.352	1488.980	48.783	bb	522.5237	87.1	-12.9	176.3		
WXX100125-07CCV	PETN	361 > 62	24.15	35163.887	15261.352	35163.887	1152.057	bb	660.7004	110.1	10.1	9730.8		

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/27/10
 Time of Injection: 1954
 Standard Number: WXX100125-07CCV
 Data File: EXP0125116a

HMX	102.8
RDX	106.0
135-TNB	105.2
13-DNB	98.8
Tetryl	108.5
Nitrobenzene	88.9
4A-26-DNT	114.0
2A-46-DNT	116.7
246-TNT	119.4
34-DNT(surr)	111.5
26-DNT	103.3
24-DNT	108.7
2-NT	92.9
4-NT	91.6
3-NT	87.1
PETN	110.1

*MTT
1/28/10*

Total 1665.5

HTM 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125118a

Analysis Date: 27-JAN-10 20:53

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	59.135	148	*
1,3-Dinitrobenzene-d4	500	488.735	98	
2,4,6-Trinitrotoluene	40	44.307	111	
2,4-Dinitrotoluene	40	35.195	88	
2,6-Dinitrotoluene	40	41.434	104	
2,6-Dinitrotoluene-d3	500	505.851	101	
2-Amino-4,6-dinitrotoluene	40	53.643	134	*
3,4-Dinitrotoluene	20	21.876	109	
4-Amino-2,6-dinitrotoluene	40	48.557	121	
HMX	40	51.45	129	
Nitrobenzene	40	35.236	88	
PETN	40	35.671	89	
RDX	40	41.584	104	
Tetryl	40	46.813	117	
m-Dinitrobenzene	40	46.88	117	
m-Nitrotoluene	40	36.119	90	
o-Nitrotoluene	40	38.379	96	
p-Nitrotoluene	40	42.922	107	

Recovery Limits:

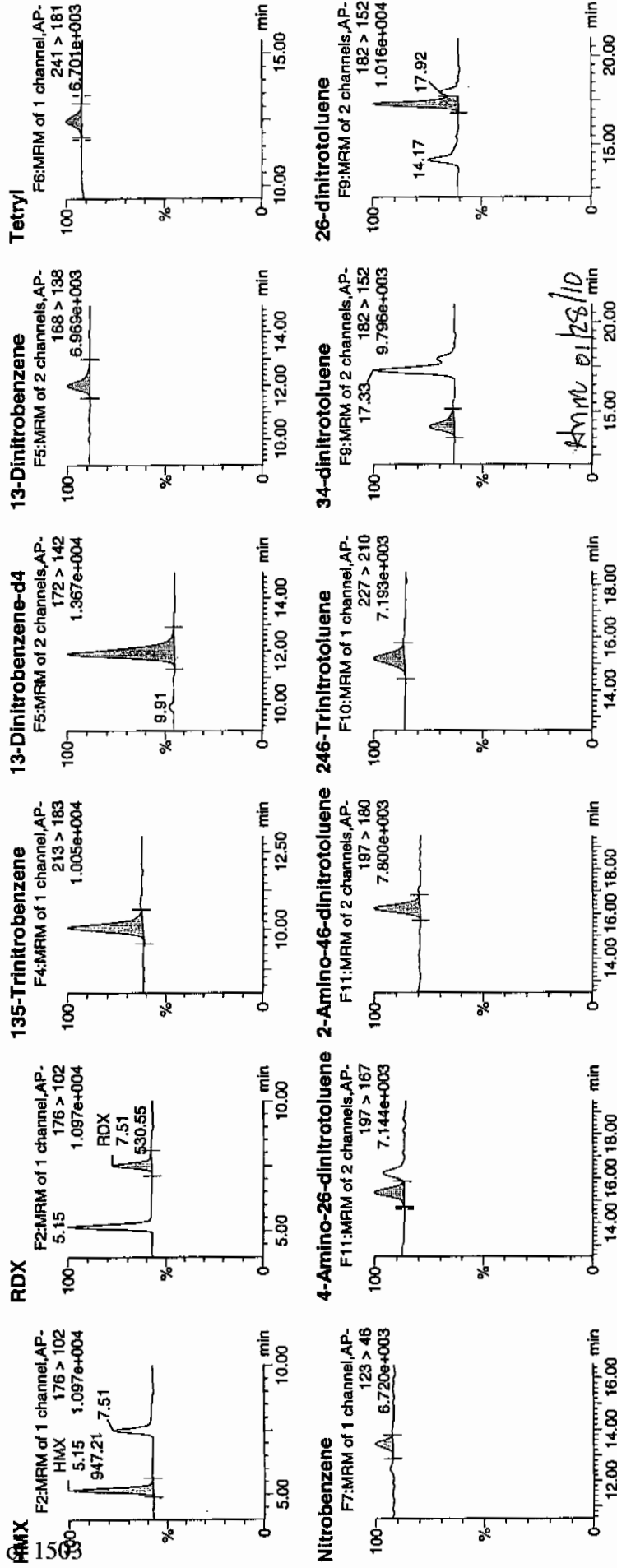
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

1/28/10

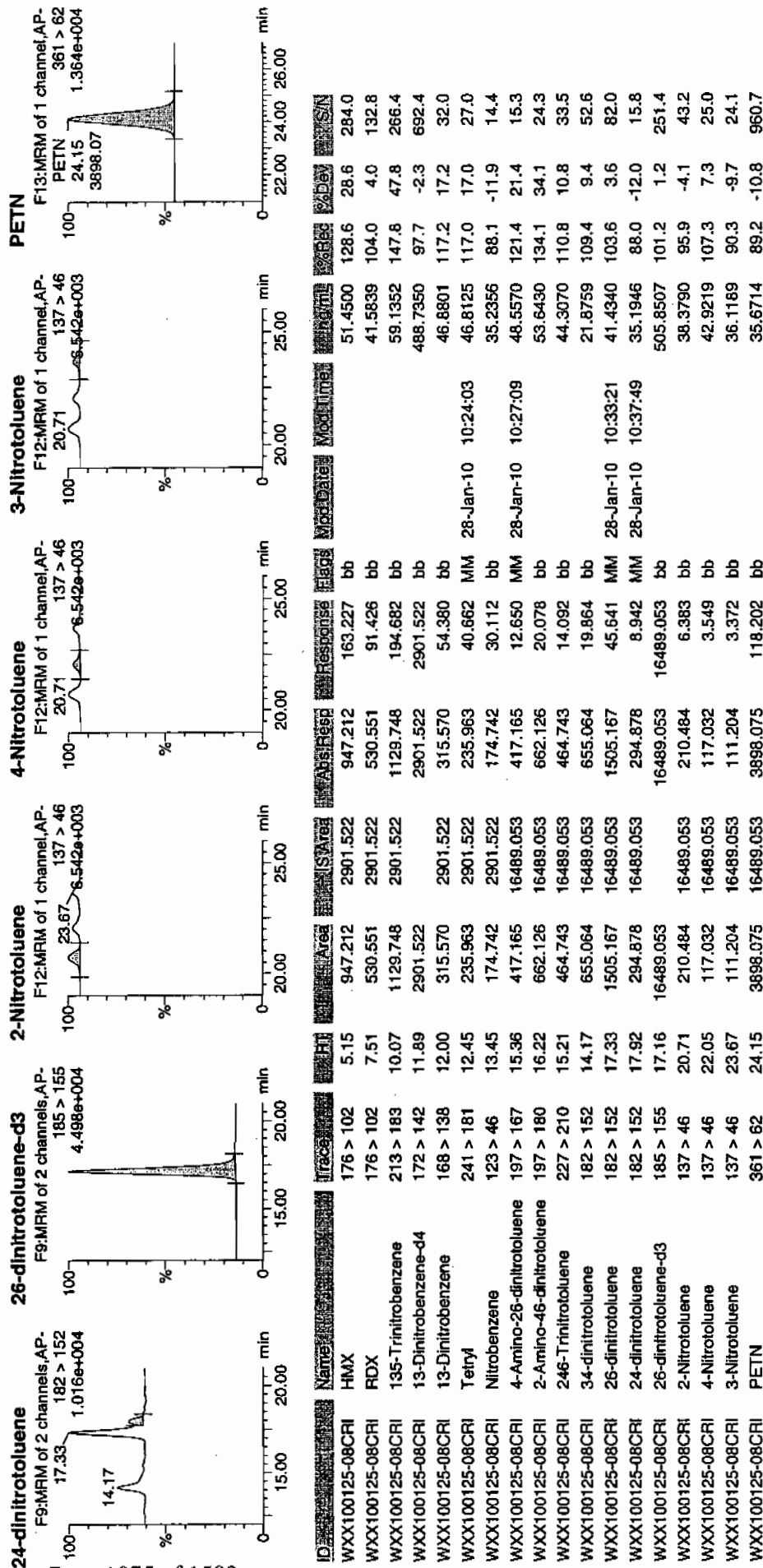


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Thu Jan 28 10:43:32 2010, Page 68 of 121

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/27/10
 Time of Injection 2053
 Standard Number WXX100125-08CRI
 Data File EXP0125118a

HMX	128.6	✓
RDX	104.0	✓
135-TNB	147.8	✓
13-DNB	117.2	
Tetryl	117.0	
Nitrobenzene	88.1	
4A-26-DNT	121.4	
2A-46-DNT	134.1	
246-TNT	110.8	
34-DNT(surr)	109.4	
26-DNT	103.6	
24-DNT	88.0	
2-NT	95.9	
4-NT	107.3	
3-NT	90.3	
PETN	89.2	

*not
1/28/10*

Total 1752.7

Average 109.5 ✓

HPM 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125129a

Analysis Date: 28-JAN-10 02:18

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	689.575	115	
1,3-Dinitrobenzene-d4	500	518.18	104	
2,4,6-Trinitrotoluene	600	645.918	108	
2,4-Dinitrotoluene	600	613.752	102	
2,6-Dinitrotoluene	600	606.783	101	
2,6-Dinitrotoluene-d3	500	513.396	103	
2-Amino-4,6-dinitrotoluene	600	630.102	105	
3,4-Dinitrotoluene	300	312.169	104	
4-Amino-2,6-dinitrotoluene	600	617.083	103	
HMX	600	648.898	108	
Nitrobenzene	600	524.48	87	
PETN	600	597.663	100	
RDX	600	756.637	126	*
Tetryl	600	672.089	112	
m-Dinitrobenzene	600	611.428	102	
m-Nitrotoluene	600	529.309	88	
o-Nitrotoluene	600	510.736	85	
p-Nitrotoluene	600	506.539	84	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125129a

Date: 28-Jan-2010

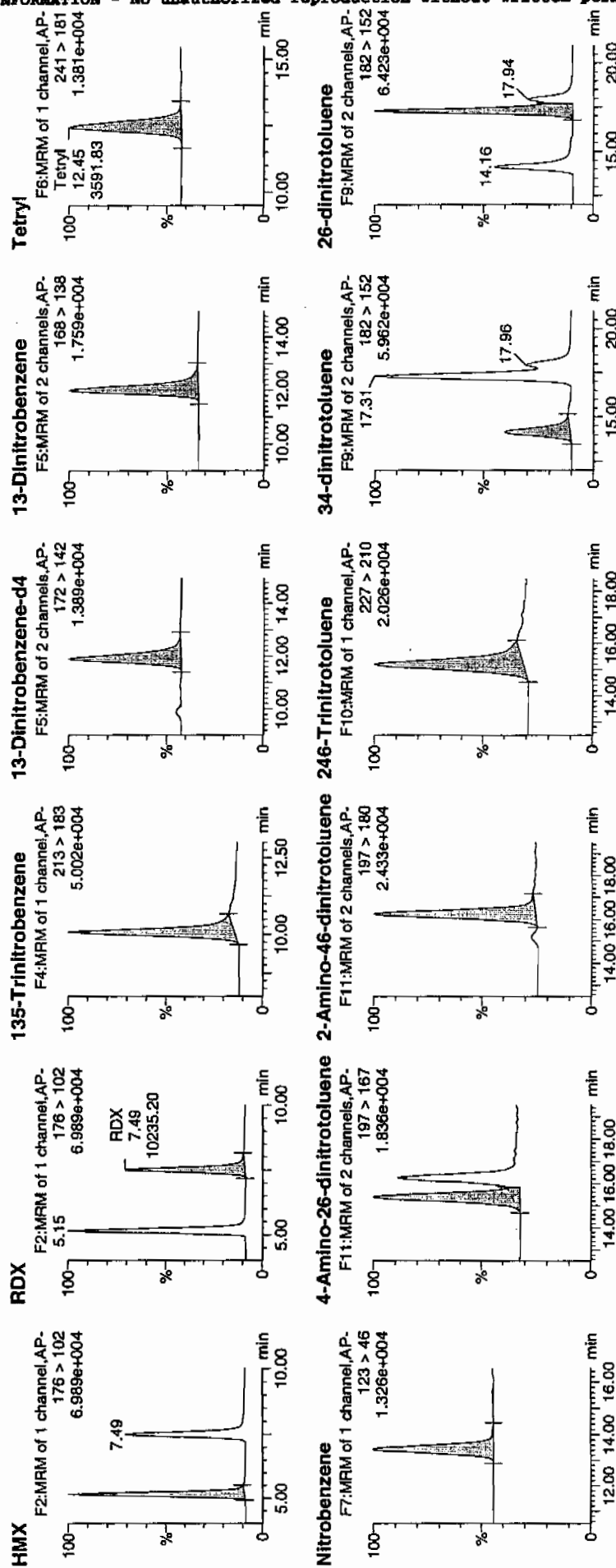
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ID: WXX100125-07CCV

Vial: 1:1,B

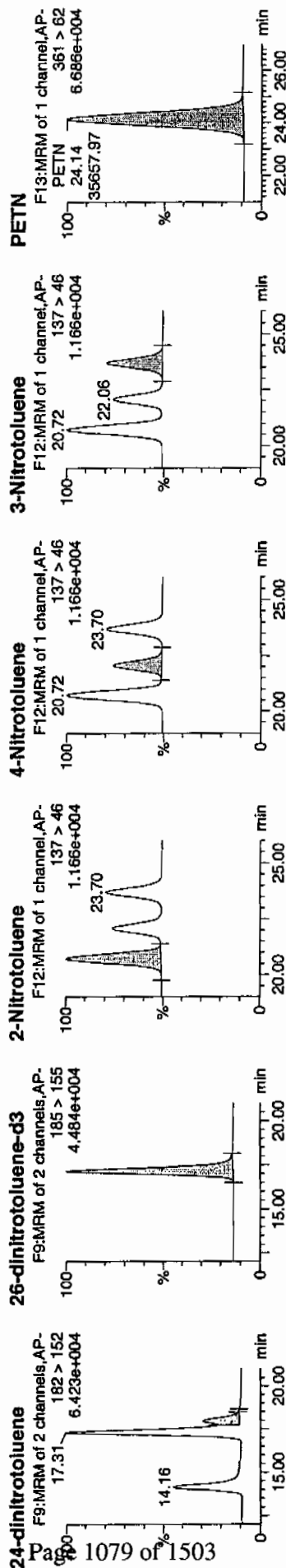
Not
 1/28/10

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Hand 01/28/10

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	IS Area	Response	Flags	Mod Date	Mod Time	Rec	Dev	SN
WXX100125-07CCV	HMX	176 > 102	5.15	12666.174	3076.330	12666.174	2058.650	bb		648.8980	108.1	8.1
WXX100125-07CCV	RDX	176 > 102	7.49	10235.204	3076.330	10235.204	1663.541	bb		756.6373	126.1	26.1
WXX100125-07CCV	135-Trinitrobenzene	213 > 183	10.07	12124.401	3076.330	12124.401	1970.595	bb		689.5748	114.9	14.9
WXX100125-07CCV	13-Dinitrobenzene-d4	172 > 142	11.90	3076.330		3076.330		bb		518.1798	103.6	3.6
WXX100125-07CCV	13-Dinitrobenzene	168 > 138	12.00	4363.751	3076.330	4363.751	709.246	bb		611.4283	101.9	1.9
WXX100125-07CCV	Tetryl	241 > 181	12.45	3591.830	3076.330	3591.830	583.785	bb		672.0887	112.0	12.0
WXX100125-07CCV	Nitrobenzene	123 > 46	13.45	2757.729	3076.330	2757.729	448.217	bb		524.4795	87.4	-12.6
WXX100125-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.35	5380.591	16735.004	5380.591	160.759	MM	28-Jan-10	10:26:28	617.0833	102.8
WXX100125-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.22	7893.479	16735.004	7893.479	235.837	bb		630.1015	105.0	5.0
WXX100125-07CCV	246-Trinitrotoluene	227 > 210	15.17	6876.185	16735.004	6876.185	205.443	bb		645.9179	107.7	7.7
WXX100125-07CCV	34-dinitrotoluene	182 > 152	14.16	9487.213	16735.004	9487.213	283.454	bb		312.1693	104.1	4.1
WXX100125-07CCV	26-dinitrotoluene	182 > 152	17.31	22371.311	16735.004	22371.311	688.399	MM	28-Jan-10	10:32:28	606.7831	101.1
WXX100125-07CCV	24-dinitrotoluene	182 > 152	17.94	5219.031	16735.004	5219.031	155.932	MM	28-Jan-10	10:38:43	613.7522	102.3
WXX100125-07CCV	26-dinitrotoluene-d3	185 > 155	17.15	16735.004		16735.004		bb		513.3960	102.7	2.7
WXX100125-07CCV	2-Nitrotoluene	137 > 46	20.72	2842.840	16735.004	2842.840	84.937	bb		510.7362	85.1	-14.9
WXX100125-07CCV	4-Nitrotoluene	137 > 46	22.06	1401.742	16735.004	1401.742	41.881	bb		506.5388	84.4	-15.6
WXX100125-07CCV	3-Nitrotoluene	137 > 46	23.70	1653.960	16735.004	1653.960	49.416	bb		529.3091	88.2	-11.8
WXX100125-07CCV	PETN	361 > 62	24.14	35657.973	16735.004	35657.973	1065.371	bb		597.6628	99.6	-0.4

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/28/10
 Time of Injection: 0218
 Standard Number: WXX100125-07CCV
 Data File: EXP0125129a

HMX	108.1
RDX	126.1
135-TNB	114.9
13-DNB	101.9
Tetryl	112.0
Nitrobenzene	87.4
4A-26-DNT	102.8
2A-46-DNT	105.0
246-TNT	107.7
34-DNT(surr)	104.1
26-DNT	101.1
24-DNT	102.3
2-NT	85.1
4-NT	84.4
3-NT	88.2
PETN	99.6

*MAT
1/28/10*

Total 1630.7

Average 101.9

HMC 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125131a

Analysis Date: 28-JAN-10 03:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	57.612	144	*
1,3-Dinitrobenzene-d4	500	504.225	101	
2,4,6-Trinitrotoluene	40	41.133	103	
2,4-Dinitrotoluene	40	36.314	91	
2,6-Dinitrotoluene	40	40.973	102	
2,6-Dinitrotoluene-d3	500	527.33	105	
2-Amino-4,6-dinitrotoluene	40	46.164	115	
3,4-Dinitrotoluene	20	19.933	100	
4-Amino-2,6-dinitrotoluene	40	41.338	103	
HMX	40	53.421	134	*
Nitrobenzene	40	45.023	113	
PETN	40	35.323	88	
RDX	40	41.603	104	
Tetryl	40	51.008	128	
m-Dinitrobenzene	40	39.957	100	
m-Nitrotoluene	40	40.221	101	
o-Nitrotoluene	40	38.017	95	
p-Nitrotoluene	40	33.311	83	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Printed: Thu Jan 28 10:43:32 2010, Page 93 of 121

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125131a

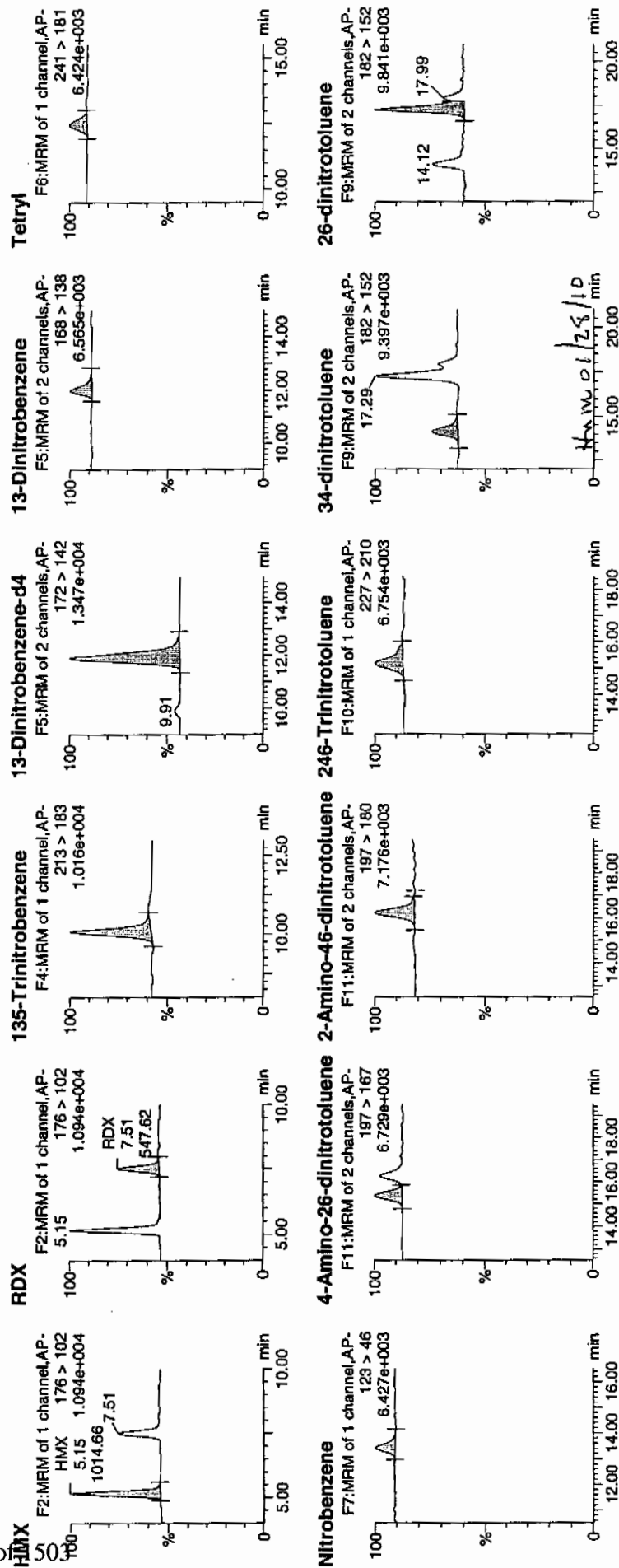
Date: 28-Jan-2010

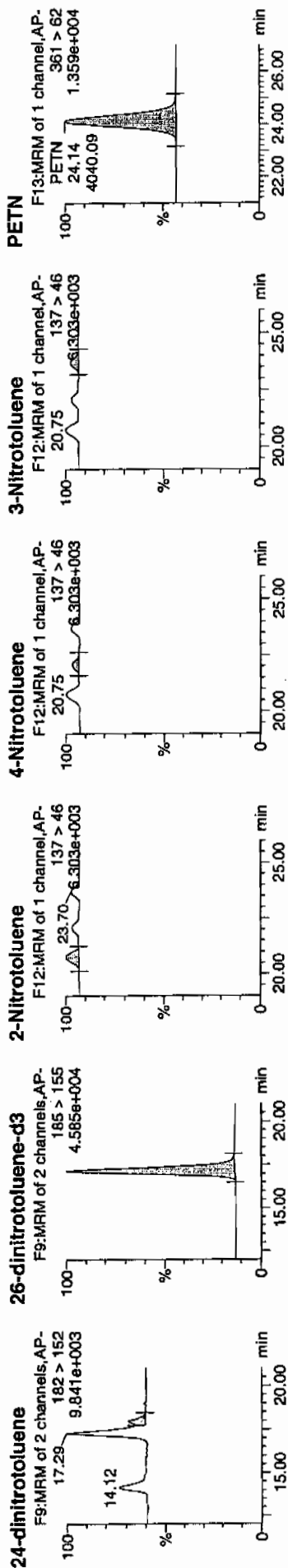
Time: 03:17:15

ID: WXX100125-08CRI

Vol: 1:1,C

1/28/10





ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Acq Date	Acq Time	Dev	SN
WXX100125-08CRI	HMX	176 > 102	5.15	1014.660	2993.482	1014.660	169.478	bb			53.4205	133.6	33.6	253.2
WXX100125-08CRI	RDX	176 > 102	7.51	547.618	2993.482	547.618	91.468	bb			41.6031	104.0	4.0	114.7
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1139.861	2993.482	1139.861	190.390	bb			57.6117	144.0	44.0	182.2
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	2993.482		2993.482	2993.482	bb			504.2248	100.8	0.8	131.0
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.00	277.495	2993.482	277.495	46.350	bb			39.9574	99.9	-0.1	28.5
WXX100125-08CRI	Tetryl	241 > 181	12.49	265.257	2993.482	265.257	44.306	bb			51.0075	127.5	27.5	22.1
WXX100125-08CRI	Nitrobenzene	123 > 46	13.41	230.358	2993.482	230.358	38.477	bb			45.0232	112.6	12.6	24.6
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.36	370.223	17189.207	370.223	10.769	MM	28-Jan-10	10:26:15	41.3378	103.3	3.3	26.2
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	594.012	17189.207	594.012	17.279	MM	28-Jan-10	10:29:52	46.1644	115.4	15.4	42.2
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.17	449.768	17189.207	449.768	13.083	bb			41.1328	102.8	2.8	50.9
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	622.242	17189.207	622.242	18.100	bb			19.9334	99.7	-0.3	35.8
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.29	1551.636	17189.207	1551.636	45.134	MM	28-Jan-10	10:32:16	40.9734	102.4	2.4	97.2
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.99	317.172	17189.207	317.172	9.226	MM	28-Jan-10	10:39:01	36.3135	90.8	-9.2	21.0
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.14	17169.207		17189.207	17189.207	bb			527.3300	105.5	5.5	1034.7
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.75	217.353	17189.207	217.353	6.322	bb			38.0172	95.0	-5.0	33.5
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.10	94.684	17189.207	94.684	2.754	bb			33.3113	83.3	-16.7	15.7
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.70	129.091	17189.207	129.091	3.755	bb			40.2208	100.6	0.6	20.0
WXX100125-08CRI	PETN	361 > 62	24.14	4040.085	17189.207	4040.085	117.518	bb			35.3233	88.3	-11.7	867.0

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/28/10
 Time of Injection 0317
 Standard Number WXX100125-08CRI
 Data File EXP0125131a

HMX	133.6
RDX	104.0
135-TNB	144.0
13-DNB	99.9
Tetryl	127.5
Nitrobenzene	112.6
4A-26-DNT	103.3
2A-46-DNT	115.4
246-TNT	102.8
34-DNT(surr)	99.7
26-DNT	102.4
24-DNT	90.8
2-NT	95.0
4-NT	83.3
3-NT	100.6
PETN	88.3

*not
1/28/10*

Total 1703.2

Average 106.5

Hmm 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125142a

Analysis Date: 28-JAN-10 08:41

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	784.323	131	*
1,3-Dinitrobenzene-d4	500	464.389	93	
2,4,6-Trinitrotoluene	600	865.486	144	*
2,4-Dinitrotoluene	600	635.609	106	
2,6-Dinitrotoluene	600	585.132	98	
2,6-Dinitrotoluene-d3	500	523.158	105	
2-Amino-4,6-dinitrotoluene	600	577.839	96	
3,4-Dinitrotoluene	300	294.928	98	
4-Amino-2,6-dinitrotoluene	600	591.279	99	
HMX	600	672.053	112	
Nitrobenzene	600	572.628	95	
PETN	600	477.341	80	*
RDX	600	583.83	97	
Tetryl	600	717.697	120	
m-Dinitrobenzene	600	626.426	104	
m-Nitrotoluene	600	536.142	89	
o-Nitrotoluene	600	479.542	80	*
p-Nitrotoluene	600	491.628	82	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 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\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010
 Printed: Thu Jan 28 10:43:32 2010, Page 115 of 121

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125142a

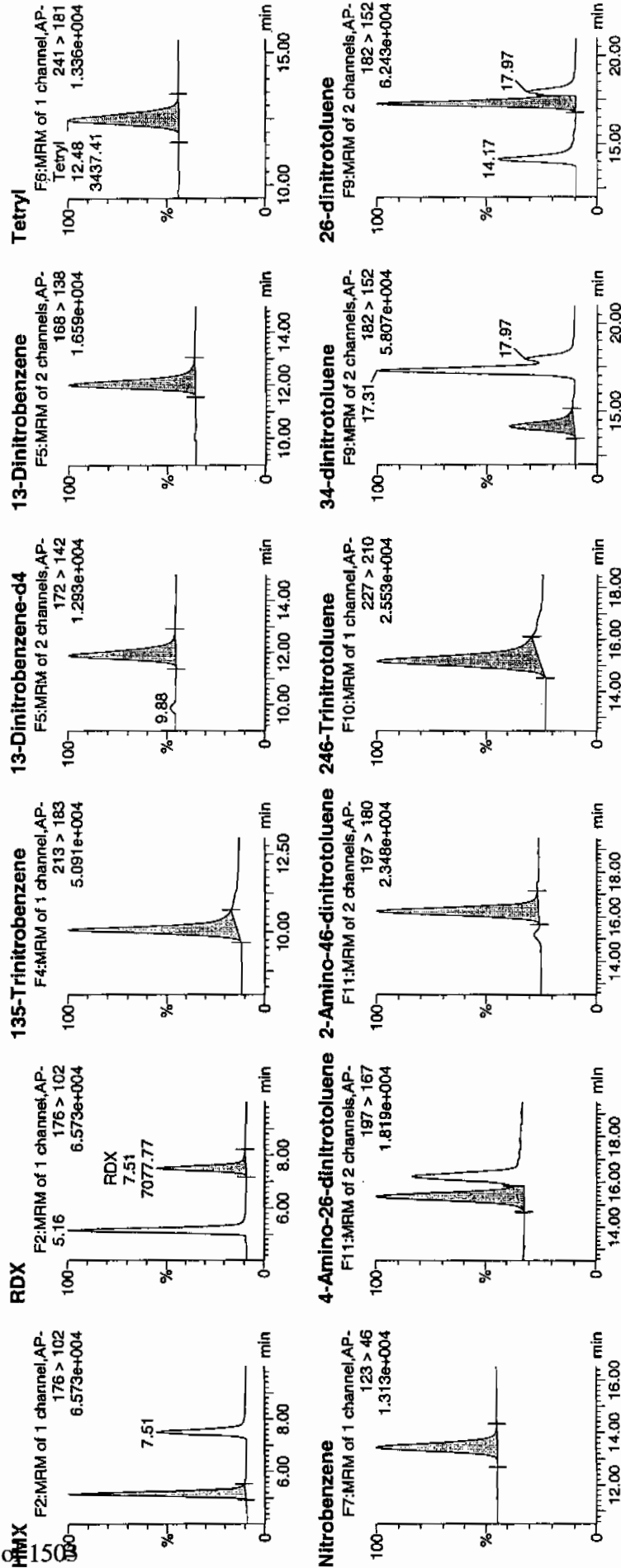
Date: 28-Jan-2010

Time: 08:41:46

ID: WXX100125-07CCV

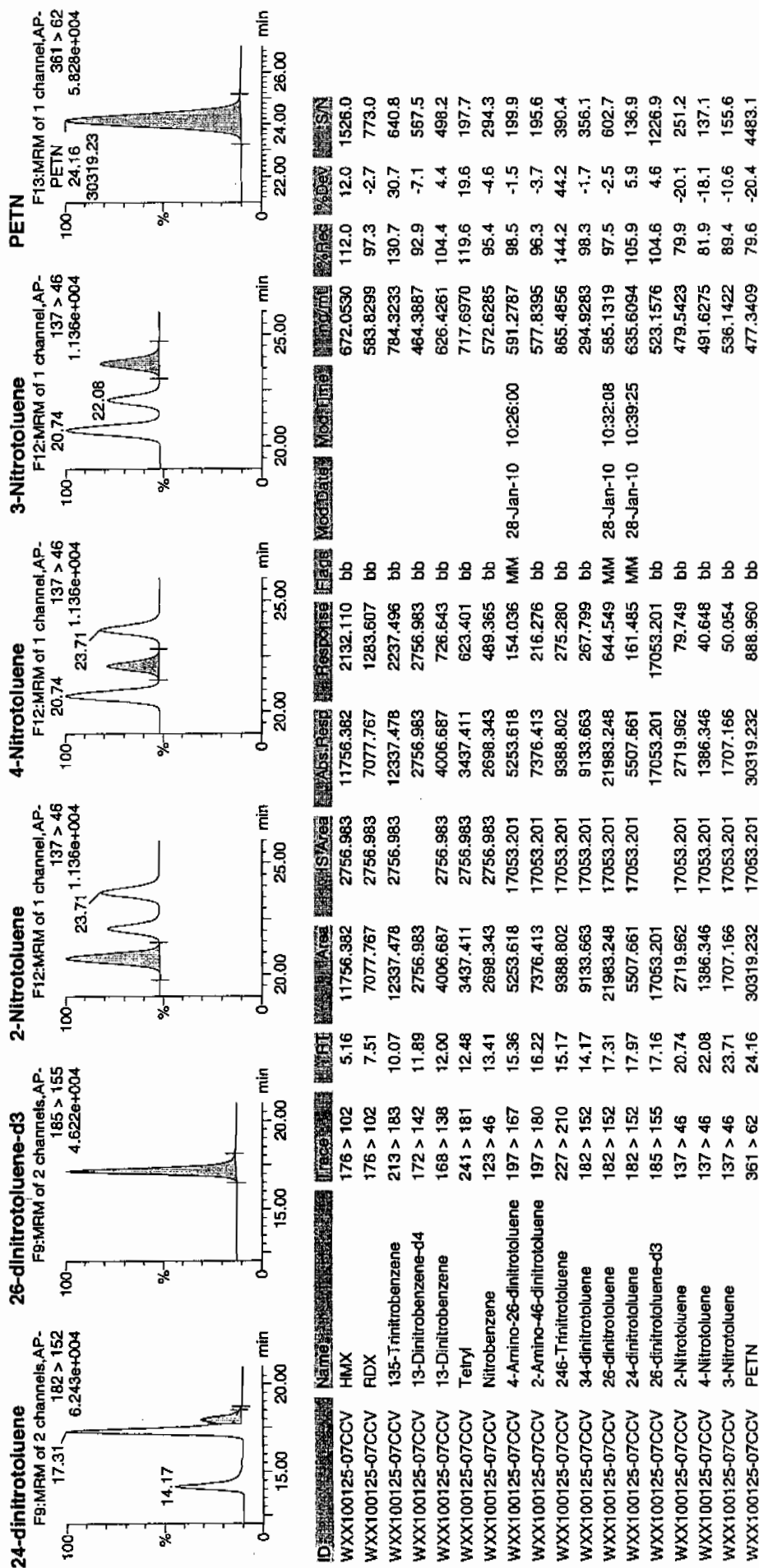
Val: 1:1,B

1/28/10



1/28/10

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/28/10
 Time of Injection: 0841
 Standard Number: WXX100125-07CCV
 Data File: EXP0125142a

HMX	112.0
RDX	97.3
135-TNB	130.7
13-DNB	104.4
Tetryl	119.6
Nitrobenzene	95.4
4A-26-DNT	98.5
2A-46-DNT	96.3
246-TNT	144.2
34-DNT(surr)	98.3
26-DNT	97.5
24-DNT	105.9
2-NT	79.9
4-NT	81.9
3-NT	89.4
PETN	79.6

*WAT
1/28/10*

Total 1630.9

Average 101.9

WAT 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125144a

Analysis Date: 28-JAN-10 09:40

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	61.574	154	*
1,3-Dinitrobenzene-d4	500	461.719	92	
2,4,6-Trinitrotoluene	40	45.81	115	
2,4-Dinitrotoluene	40	42.881	107	
2,6-Dinitrotoluene	40	40.235	101	
2,6-Dinitrotoluene-d3	500	522.309	104	
2-Amino-4,6-dinitrotoluene	40	47.484	119	
3,4-Dinitrotoluene	20	20.079	100	
4-Amino-2,6-dinitrotoluene	40	44.024	110	
HMX	40	48.62	122	
Nitrobenzene	40	34.836	87	
PETN	40	27.753	69	*
RDX	40	35.534	89	
Tetryl	40	62.477	156	*
m-Dinitrobenzene	40	42.805	107	
m-Nitrotoluene	40	30.675	77	
o-Nitrotoluene	40	30.694	77	
p-Nitrotoluene	40	31.002	78	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010

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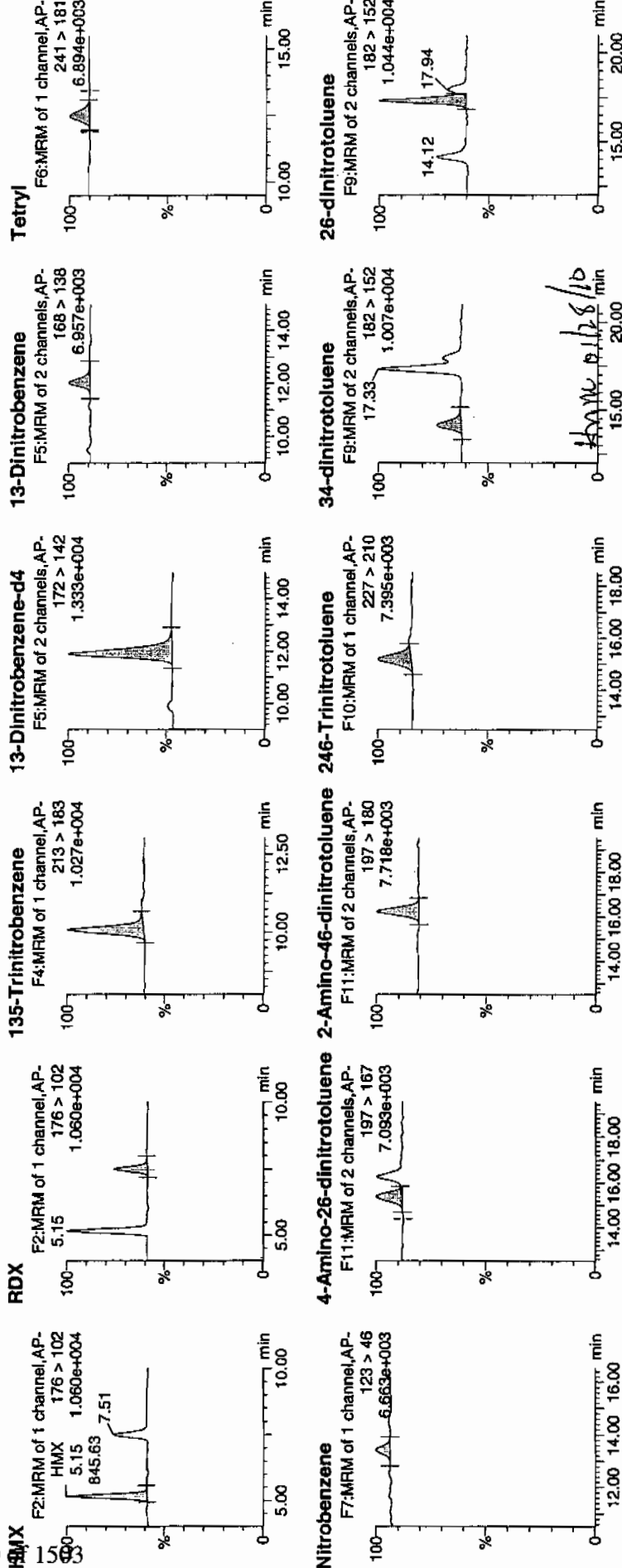
Date: 28-Jan-2010

Time: 09:40:48

ID: WXX100125-08CRI

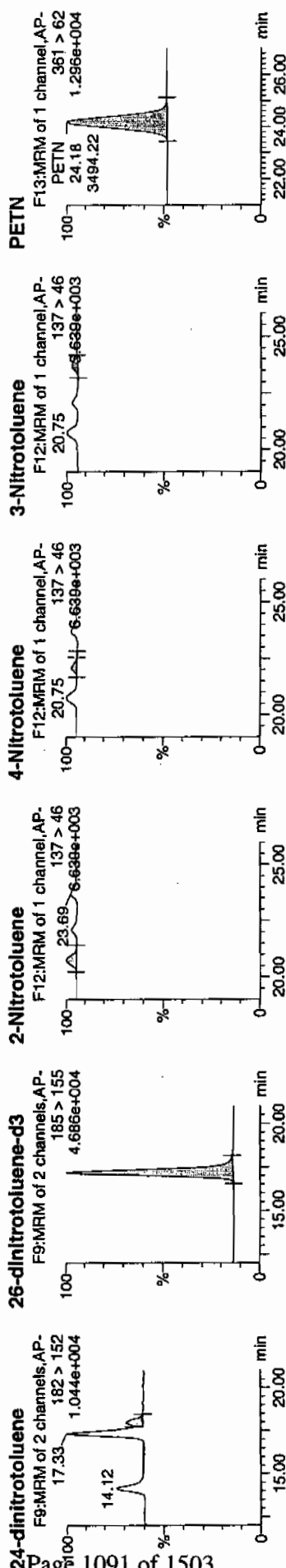
Vol: 1:1,C

11/8/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA2.qld, Time: Thu Jan 28 10:42:53 2010



ID	Name	Trace	RT	Area	IS Area	Abs. Resp	Response	Flags	Mod. Date	Mod. Time	Int. Ref	Day	SN	
WXX100125-08CRI	HMX	176 > 102	5.15	845.635	2741.132	845.635	154.249	bb			48.6202	121.6	21.6	163.8
WXX100125-08CRI	RDX	176 > 102	7.51	428.303	2741.132	428.303	78.125	bb			35.5341	88.8	-11.2	69.4
WXX100125-08CRI	135-Trinitrobenzene	213 > 183	10.07	1104.962	2741.132	1104.962	201.552	bb			61.5740	153.9	53.9	92.5
WXX100125-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	2741.132	2741.132	2741.132	2741.132	bb			461.7187	92.3	-7.7	203.3
WXX100125-08CRI	13-Dinitrobenzene	168 > 138	12.03	272.211	2741.132	272.211	49.653	bb			42.8050	107.0	7.0	12.9
WXX100125-08CRI	Tetryl	241 > 181	12.49	297.514	2741.132	297.514	54.268	MM	28-Jan-10	10:19:53	62.4772	156.2	56.2	22.3
WXX100125-08CRI	Nitrobenzene	123 > 46	13.45	163.212	2741.132	163.212	29.771	bb			34.8363	87.1	-12.9	16.3
WXX100125-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.39	390.526	17025.545	390.526	11.469	MM	28-Jan-10	10:25:52	44.0239	110.1	10.1	16.2
WXX100125-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	605.168	17025.545	605.168	17.772	bb			47.4835	118.7	18.7	51.1
WXX100125-08CRI	246-Trinitrotoluene	227 > 210	15.21	496.146	17025.545	496.146	14.571	bb			45.8104	114.5	14.5	41.5
WXX100125-08CRI	34-dinitrotoluene	182 > 152	14.17	620.833	17025.545	620.833	18.232	bb			20.0794	100.4	0.4	32.5
WXX100125-08CRI	26-dinitrotoluene	182 > 152	17.33	1509.168	17025.545	1509.168	44.321	MM	28-Jan-10	10:31:58	40.2350	100.6	0.6	88.9
WXX100125-08CRI	24-dinitrotoluene	182 > 152	17.94	370.969	17025.545	370.969	10.894	MM	28-Jan-10	10:39:38	42.8811	107.2	7.2	19.3
WXX100125-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	17025.545	17025.545	17025.545	17025.545	bb			522.3092	104.5	4.5	866.4
WXX100125-08CRI	2-Nitrotoluene	137 > 46	20.75	173.812	17025.545	173.812	5.104	bb			30.6937	76.7	-23.3	38.8
WXX100125-08CRI	4-Nitrotoluene	137 > 46	22.08	87.281	17025.545	87.281	2.563	MM	28-Jan-10	10:40:45	31.0020	77.5	-22.5	20.5
WXX100125-08CRI	3-Nitrotoluene	137 > 46	23.69	97.515	17025.545	97.515	2.864	bb			30.6747	76.7	-23.3	22.0
WXX100125-08CRI	PETN	361 > 62	24.18	3494.220	17025.545	3494.220	102.617	bb			27.7532	69.4	-30.6	580.4

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/28/10
 Time of Injection 0940
 Standard Number WXX100125-08CRI
 Data File EXP0125144a

HMX	121.6
RDX	88.8
135-TNB	153.9
13-DNB	107.0
Tetryl	156.2
Nitrobenzene	87.1
4A-26-DNT	110.1
2A-46-DNT	118.7
246-TNT	114.5
34-DNT(surr)	100.4
26-DNT	100.6
24-DNT	107.2
2-NT	76.7
4-NT	77.5
3-NT	76.7
PETN	69.4

*1077
1/28/10*

Total 1666.4

Average 104.2

1077 01/28/10
 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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125155a

Analysis Date: 28-JAN-10 15:06

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	725.492	121	*
1,3-Dinitrobenzene-d4	500	408.832	82	
2,4,6-Trinitrotoluene	600	819.036	137	*
2,4-Dinitrotoluene	600	629.825	105	
2,6-Dinitrotoluene	600	622.367	104	
2,6-Dinitrotoluene-d3	500	405.179	81	
2-Amino-4,6-dinitrotoluene	600	764.727	127	*
3,4-Dinitrotoluene	300	334.075	111	
4-Amino-2,6-dinitrotoluene	600	718.695	120	
HMX	600	688.774	115	
Nitrobenzene	600	582.995	97	
PETN	600	663.272	111	
RDX	600	691.837	115	
Tetryl	600	670.811	112	
m-Dinitrobenzene	600	632.337	105	
m-Nitrotoluene	600	632.535	105	
o-Nitrotoluene	600	594.979	99	
p-Nitrotoluene	600	603.637	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\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125155a

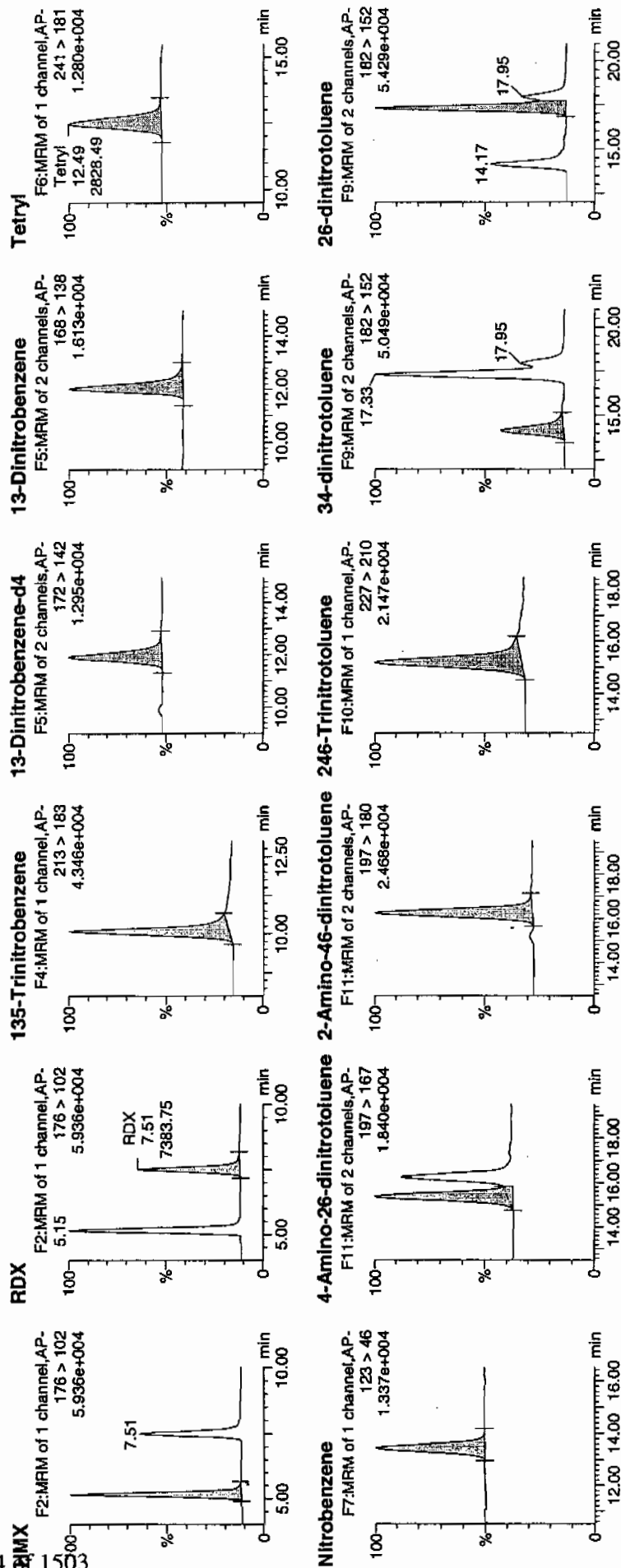
Date: 28-Jan-2010

Time: 15:06:01

ID: WXX100128-07CCV

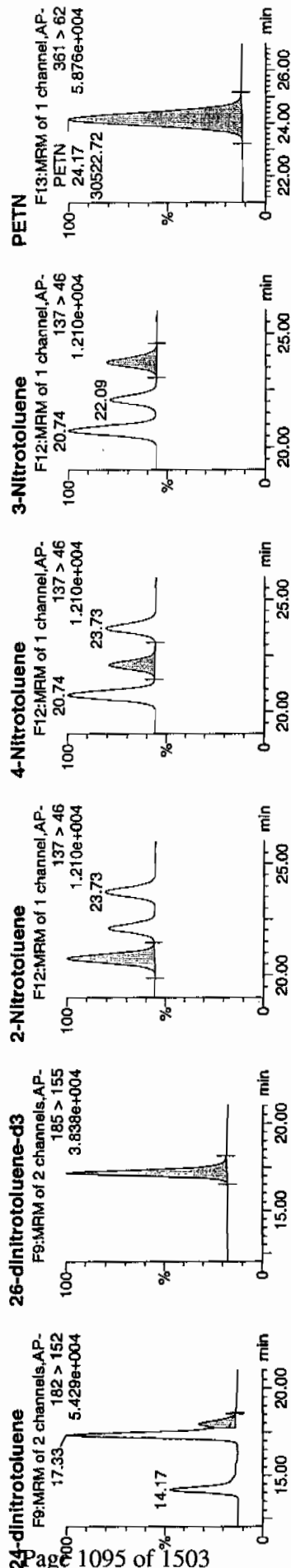
Wial: 1:1,B

1/29/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID	Name	Area	Height	Area Ratio	Height Ratio	Response	Flags	Mod	Time	Area	Height	Area Ratio	Height Ratio	SN
WXX100128-07CCV	HMX	176 > 102	5.15	10607.419	2427.153	2185.157	db			688.7736	114.8	14.8	1372.3	
WXX100128-07CCV	RDX	176 > 102	7.51	7383.747	2427.153	1521.072	bb			691.8370	115.3	15.3	809.8	
WXX100128-07CCV	135-Trinitrobenzene	213 > 183	10.07	10057.012	2427.153	2071.771	bb			725.4919	120.9	20.9	562.5	
WXX100128-07CCV	13-Dinitrobenzene	172 > 142	11.89	2427.153	2427.153	2427.153	bb			408.8318	81.8	-18.2	173.7	
WXX100128-07CCV	13-Dinitrobenzene	168 > 138	12.00	3560.633	2427.153	733.500	bb			632.3370	105.4	5.4	275.0	
WXX100128-07CCV	Teiry	241 > 181	12.49	2828.485	2427.153	582.675	bb			670.8115	111.8	11.8	264.1	
WXX100128-07CCV	Nitrobenzene	123 > 46	13.45	2418.534	2427.153	498.224	bb			582.9951	97.2	-2.8	196.5	
WXX100128-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.39	4945.668	13207.479	187.230	MM	29-Jan-10	07:08:06	718.6950	119.8	19.8	720.5	
WXX100128-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.26	7560.642	13207.479	286.226	bb			764.7274	127.5	27.5	706.0	
WXX100128-07CCV	246-Trinitrotoluene	227 > 210	15.21	6881.254	13207.479	260.506	bb			819.0364	136.5	36.5	222.8	
WXX100128-07CCV	34-dinitrotoluene	182 > 152	14.17	8012.847	13207.479	303.345	bb			334.0753	111.4	11.4	65.8	
WXX100128-07CCV	26-dinitrotoluene	182 > 152	17.33	18109.184	13207.479	685.566	MM	29-Jan-10	07:04:07	622.3674	103.7	3.7	539.1	
WXX100128-07CCV	24-dinitrotoluene	182 > 152	17.95	4226.788	13207.479	160.015	MM	29-Jan-10	07:02:07	629.8245	105.0	5.0	117.0	
WXX100128-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	13207.479	13207.479	13207.479	bb			405.1787	81.0	-19.0	1469.4	
WXX100128-07CCV	2-Nitrotoluene	137 > 46	20.74	2613.676	13207.479	98.947	bb			594.9793	99.2	-0.8	394.3	
WXX100128-07CCV	4-Nitrotoluene	137 > 46	22.09	1318.334	13207.479	49.909	bb			603.6372	100.6	0.6	208.2	
WXX100128-07CCV	3-Nitrotoluene	137 > 46	23.73	1559.891	13207.479	59.053	bb			632.5349	105.4	5.4	225.3	
WXX100128-07CCV	PETN	361 > 62	24.17	30522.725	13207.479	1155.509	bb			663.2718	110.5	10.5	4607.8	

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/28/10
 Time of Injection: 1506
 Standard Number: WXX100128-07CCV
 Data File: EXP0125155a

HMX	114.8
RDX	115.3
135-TNB	120.9
13-DNB	105.4
Tetryl	111.8
Nitrobenzene	97.2
4A-26-DNT	119.8
2A-46-DNT	127.5
246-TNT	136.5
34-DNT(surr)	111.4
26-DNT	103.7
24-DNT	105.0
2-NT	99.2
4-NT	100.6
3-NT	105.4
PETN	110.5

Total 1785.0

Average 111.6

*not
1/29/10*

Handwritten: 131/10
 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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125157a

Analysis Date: 28-JAN-10 16:05

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.507	121	
1,3-Dinitrobenzene-d4	500	499.262	100	
2,4,6-Trinitrotoluene	40	39.8	99	
2,4-Dinitrotoluene	40	33.656	84	
2,6-Dinitrotoluene	40	38.671	97	
2,6-Dinitrotoluene-d3	500	486.959	97	
2-Amino-4,6-dinitrotoluene	40	44.225	111	
3,4-Dinitrotoluene	20	20.49	102	
4-Amino-2,6-dinitrotoluene	40	43.122	108	
HMX	40	43.442	109	
Nitrobenzene	40	34.022	85	
PETN	40	28.129	70	
RDX	40	42.452	106	
Tetryl	40	53.094	133	*
m-Dinitrobenzene	40	38.088	95	
m-Nitrotoluene	40	40.962	102	
o-Nitrotoluene	40	37.089	93	
p-Nitrotoluene	40	33.466	84	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

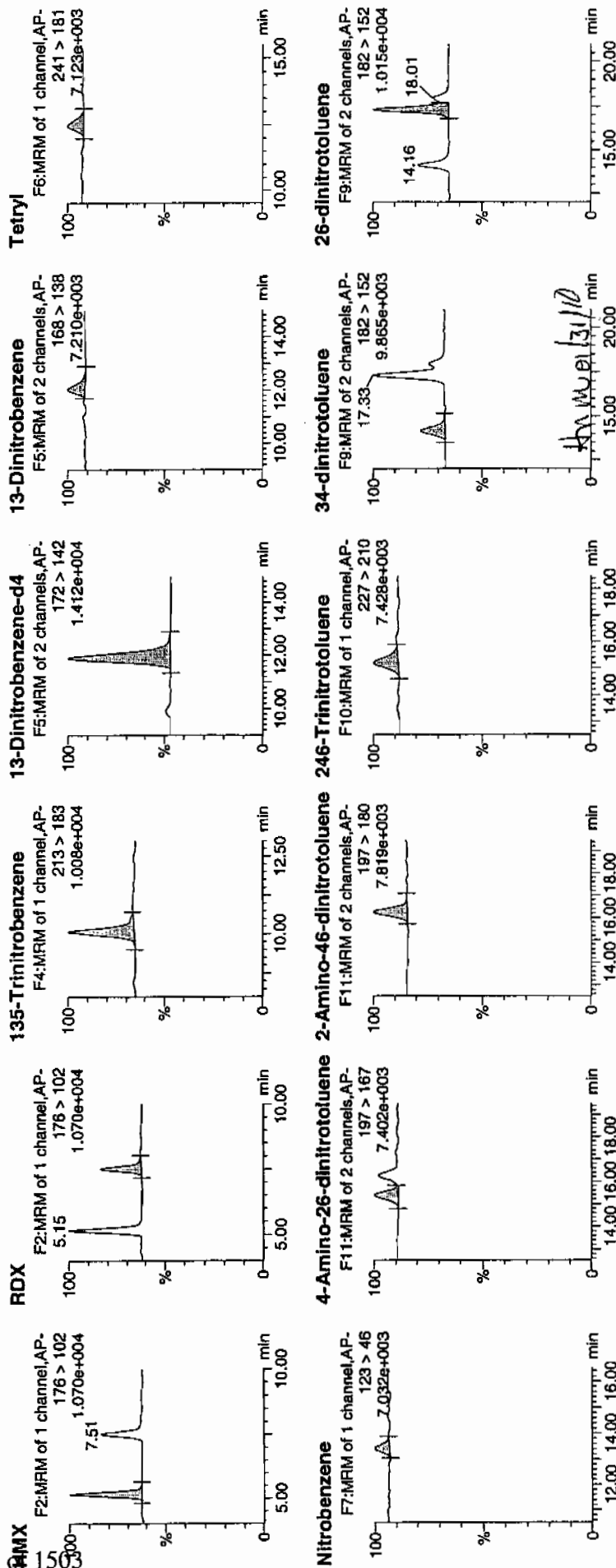
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Time: 16:05:06

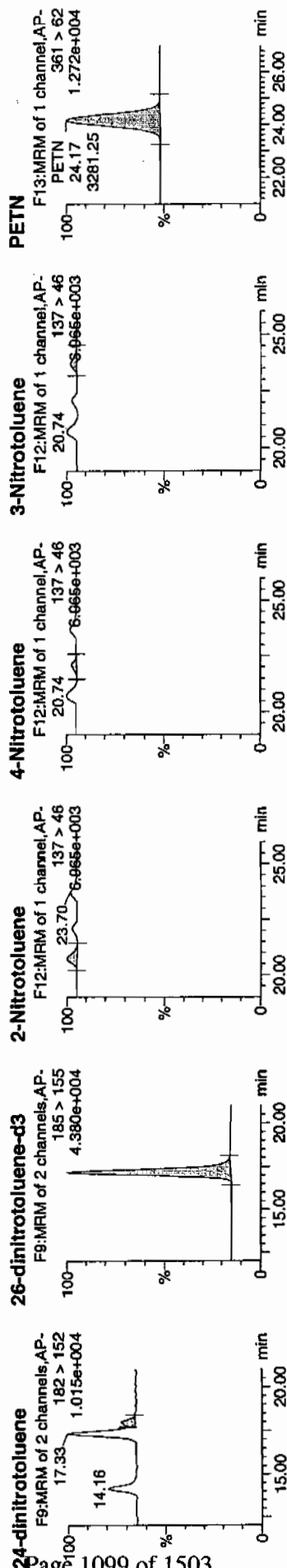
ID: WXX100128-08CRI

Cal: 1:1,C

MM
1/29/10



Dataset: C:\MASSLYNX\New Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID	Name	Trace	RI	Area	IS Area	Abs. Resd	Response	Flag	Mod. Date	Mod. Time	Norm	Resd	Dev	SN
WXX100128-08CRI	HMX	176 > 102	5.15	817.009	2964.018	817.009	137.821	bb			43.4420	108.6	8.6	176.4
WXX100128-08CRI	RDX	178 > 102	7.51	553.294	2964.018	553.294	93.335	bb			42.4521	106.1	6.1	101.1
WXX100128-08CRI	135-Trinitrobenzene	213 > 183	10.07	976.607	2964.018	976.607	164.744	bb			48.5073	121.3	21.3	54.1
WXX100128-08CRI	13-Dinitrobenzene-d4	172 > 142	11.90	2964.018		2964.018	2964.018	bb			499.2619	99.9	-0.1	433.1
WXX100128-08CRI	13-Dinitrobenzene	168 > 138	12.04	261.908	2964.018	261.908	44.181	bb			38.0878	95.2	-4.8	19.4
WXX100128-08CRI	Tetryl	241 > 181	12.49	273.391	2964.018	273.391	46.118	bb			53.0942	132.7	32.7	13.8
WXX100128-08CRI	Nitrobenzene	123 > 46	13.45	172.360	2964.018	172.360	29.075	bb			34.0224	85.1	-14.9	10.3
WXX100128-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.38	356.634	15873.256	356.634	11.234	MM	29-Jan-10	07:08:13	43.1217	107.8	7.8	26.7
WXX100128-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	525.492	15873.256	525.492	16.553	bb			44.2250	110.6	10.6	46.4
WXX100128-08CRI	246-Trinitrotoluene	227 > 210	15.20	401.877	15873.256	401.877	12.659	bb			39.8000	99.5	-0.5	26.4
WXX100128-08CRI	34-dinitrotoluene	182 > 152	14.16	590.651	15873.256	590.651	18.605	bb			20.4900	102.5	2.5	14.4
WXX100128-08CRI	26-dinitrotoluene	182 > 152	17.33	1352.340	15873.256	1352.340	42.598	MM	29-Jan-10	07:04:22	38.6712	96.7	-3.3	43.0
WXX100128-08CRI	24-dinitrotoluene	182 > 152	18.01	271.459	15873.256	271.459	8.551	MM	29-Jan-10	07:01:59	33.6584	84.1	-15.9	8.7
WXX100128-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	15873.256		15873.256	15873.256	bb			486.9593	97.4	-2.6	2345.3
WXX100128-08CRI	2-Nitrotoluene	137 > 46	20.74	195.811	15873.256	195.811	6.168	bb			37.0887	92.7	-7.3	55.7
WXX100128-08CRI	4-Nitrotoluene	137 > 46	22.11	87.841	15873.256	87.841	2.767	bb			33.4658	83.7	-16.3	28.3
WXX100128-08CRI	3-Nitrotoluene	137 > 46	23.70	121.404	15873.256	121.404	3.824	bb			40.9616	102.4	2.4	33.3
WXX100128-08CRI	PETN	361 > 62	24.17	3281.251	15873.256	3281.251	103.358	bb			28.1289	70.3	-29.7	526.1

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/28/10
 Time of Injection 1605
 Standard Number WXX100128-08CRI
 Data File EXP0125157a

HMX	108.6
RDX	106.1
135-TNB	121.3
13-DNB	95.2
Tetryl	132.7
Nitrobenzene	85.1
4A-26-DNT	107.8
2A-46-DNT	110.6
246-TNT	99.5
34-DNT(surr)	102.5
26-DNT	96.7
24-DNT	84.1
2-NT	92.7
4-NT	83.7
3-NT	102.4
PETN	70.3

WXX
1/28/10

Total 1599.3

Average 100.0

WXX 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125166a

Analysis Date: 28-JAN-10 20:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	668.964	111	
1,3-Dinitrobenzene-d4	500	501.231	100	
2,4,6-Trinitrotoluene	600	698.135	116	
2,4-Dinitrotoluene	600	613.976	102	
2,6-Dinitrotoluene	600	612.82	102	
2,6-Dinitrotoluene-d3	500	479.609	96	
2-Amino-4,6-dinitrotoluene	600	723.747	121	*
3,4-Dinitrotoluene	300	327.253	109	
4-Amino-2,6-dinitrotoluene	600	672.886	112	
HMX	600	676.021	113	
Nitrobenzene	600	540.553	90	
PETN	600	590.442	98	
RDX	600	695.663	116	
Tetryl	600	633.156	106	
m-Dinitrobenzene	600	607.58	101	
m-Nitrotoluene	600	559.459	93	
o-Nitrotoluene	600	535.969	89	
p-Nitrotoluene	600	572.193	95	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125166a

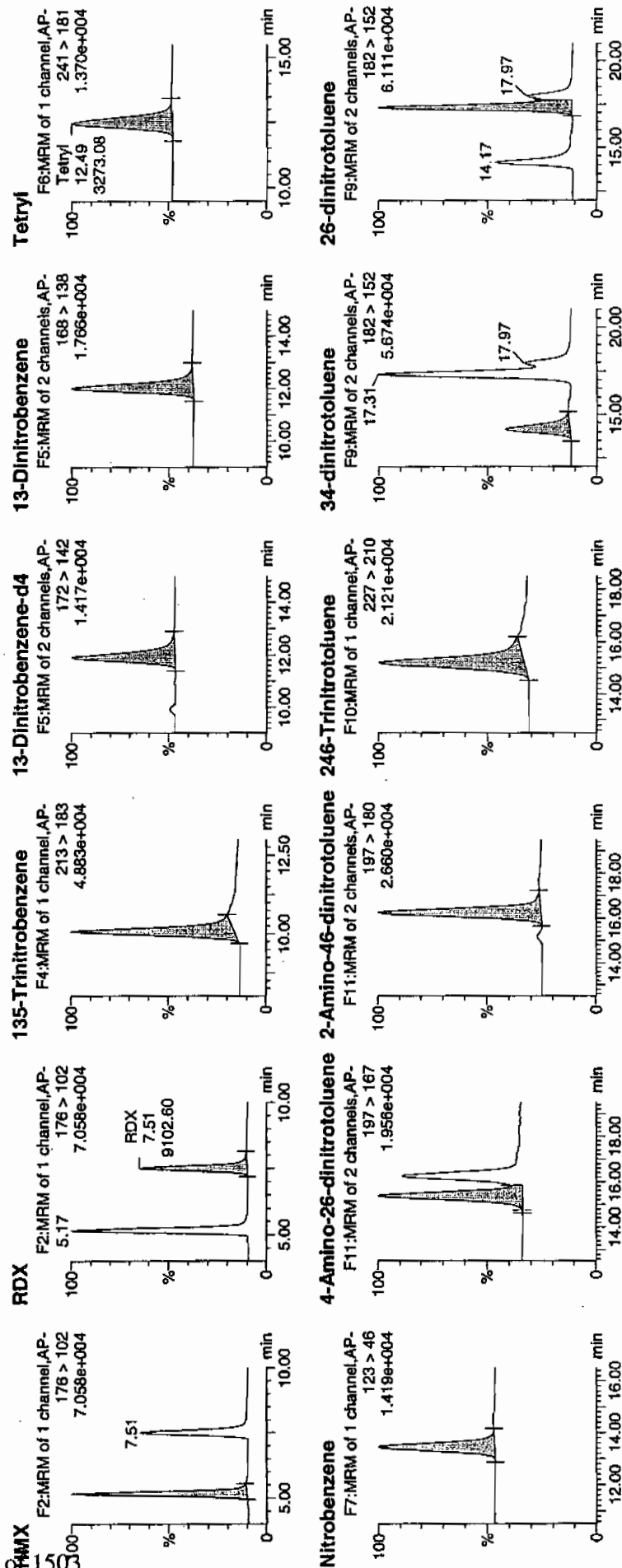
Date: 28-Jan-2010

Time: 20:30:38

ID: WXX100128-07CCV

Cal: 1:1,B

10/17
11/19/10



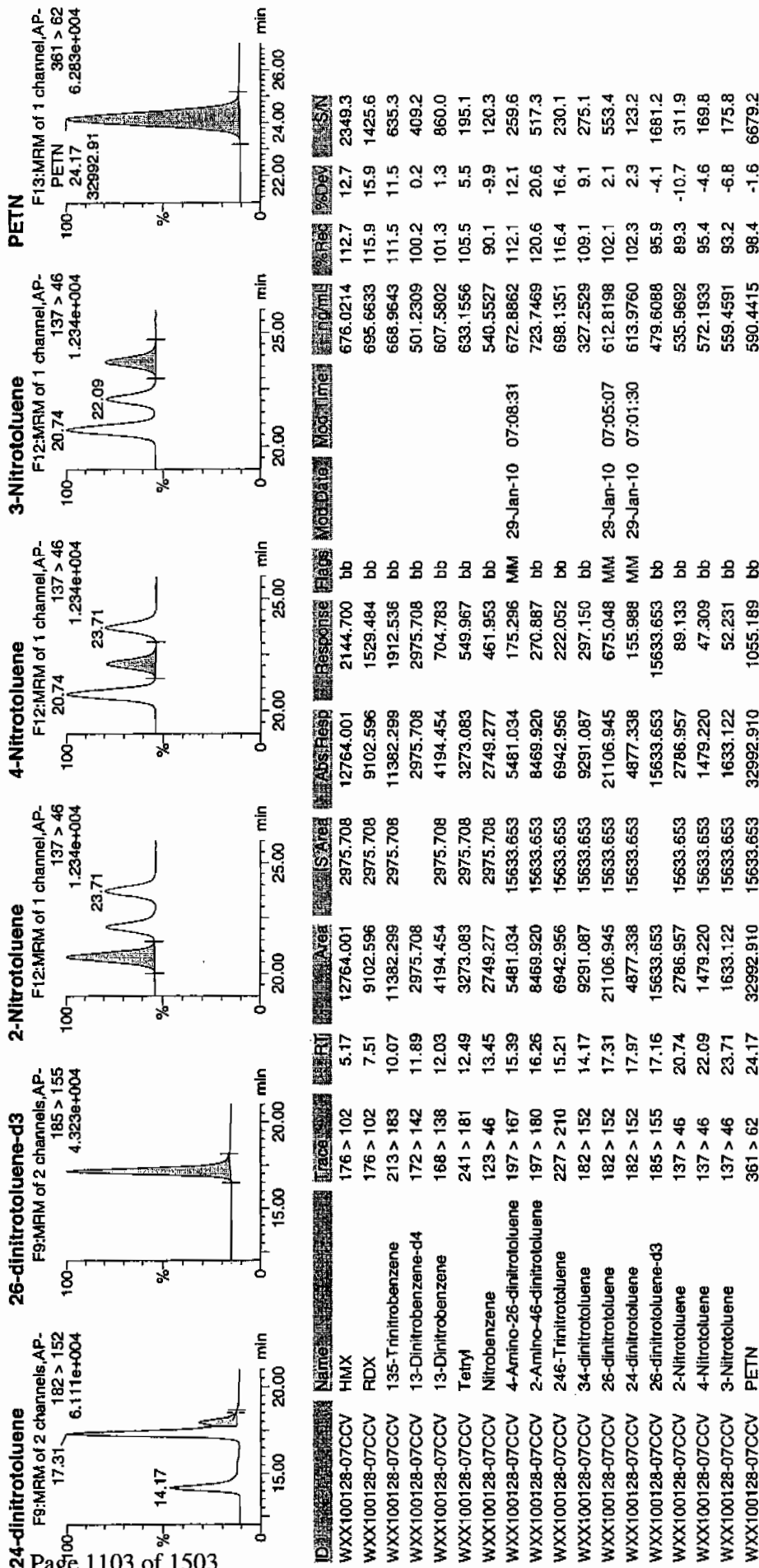
hmm 8/13/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Jan 29 07:12:59 2010, Page 44 of 75

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/28/10
 Time of Injection: 2030
 Standard Number: WXX100128-07CCV
 Data File: EXP0125166a

HMX	112.7
RDX	115.9
135-TNB	111.5
13-DNB	101.3
Tetryl	105.5
Nitrobenzene	90.1
4A-26-DNT	112.1
2A-46-DNT	120.6
246-TNT	116.4
34-DNT(surr)	109.1
26-DNT	102.1
24-DNT	102.3
2-NT	89.3
4-NT	95.4
3-NT	93.2
PETN	98.4

Handwritten:
 1147
 1/28/10

Total 1675.9

Average 104.7

Handwritten: 1147 01/28/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125168a

Analysis Date: 28-JAN-10 21:29

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	50.682	127	
1,3-Dinitrobenzene-d4	500	535.136	107	
2,4,6-Trinitrotoluene	40	40.043	100	
2,4-Dinitrotoluene	40	38.054	95	
2,6-Dinitrotoluene	40	37.555	94	
2,6-Dinitrotoluene-d3	500	534.891	107	
2-Amino-4,6-dinitrotoluene	40	38.434	96	
3,4-Dinitrotoluene	20	18.528	93	
4-Amino-2,6-dinitrotoluene	40	41.714	104	
HMX	40	44.117	110	
Nitrobenzene	40	45.833	115	
PETN	40	23.008	58	*
RDX	40	38.294	96	
Tetryl	40	34.969	87	
m-Dinitrobenzene	40	35.006	88	
m-Nitrotoluene	40	28.44	71	
o-Nitrotoluene	40	31.291	78	
p-Nitrotoluene	40	35.755	89	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125168a

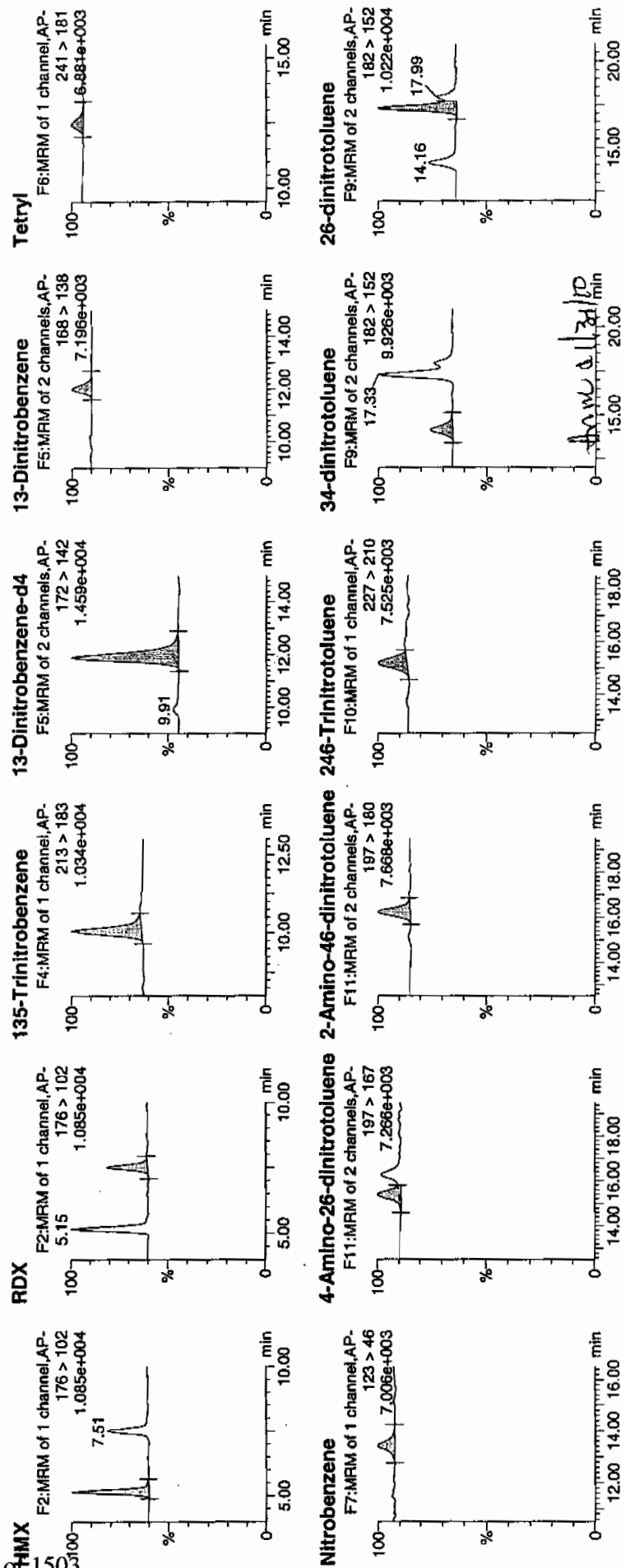
Date: 28-Jan-2010

Time: 21:29:35

ID: WXX100128-08CRI

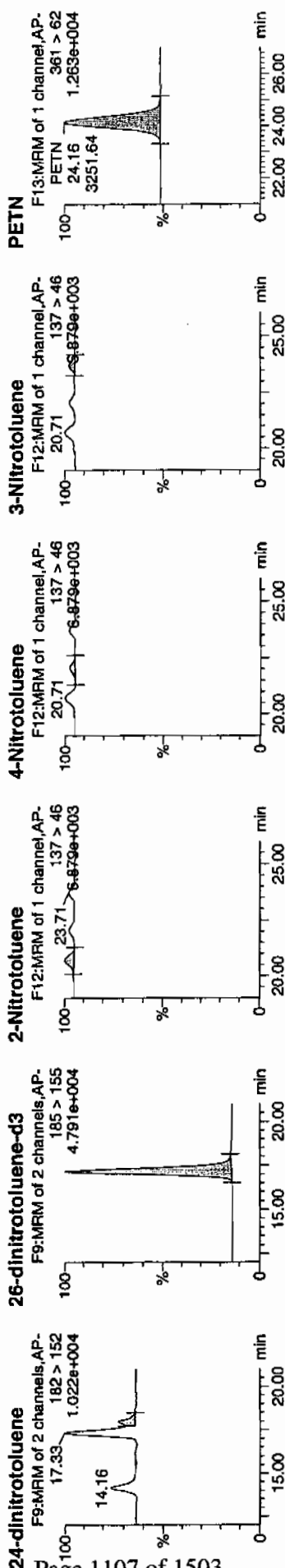
Vial: 1:1,C

1/29/10



Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID	Name	Trace	RT	Area	IS Area	Abundance	Response	Flags	Mod Date	Mod Time	Area	%Area	SN
WXX100128-08CRI	HMZ	176 > 102	5.15	889.321	3176.997	889.321	139.963	bb	44.1170	110.3	10.3	159.3	
WXX100128-08CRI	RDX	176 > 102	7.51	534.968	3176.997	534.968	84.194	bb	38.2944	95.7	-4.3	84.6	
WXX100128-08CRI	135-Trinitrobenzene	213 > 183	10.07	1085.703	3176.997	1085.703	170.869	bb	50.6818	126.7	26.7	92.2	
WXX100128-08CRI	13-Dinitrobenzene-d4	172 > 142	11.90	3176.997	3176.997	3176.997	3176.997	bb	535.1362	107.0	7.0	338.2	
WXX100128-08CRI	13-Dinitrobenzene	168 > 138	12.00	258.013	3176.997	258.013	40.606	bb	35.0061	87.5	-12.5	18.2	
WXX100128-08CRI	Tetryl	241 > 181	12.45	193.001	3176.997	193.001	30.375	bb	34.9693	87.4	-12.6	15.1	
WXX100128-08CRI	Nitrobenzene	123 > 46	13.40	248.875	3176.997	248.875	39.168	bb	45.8326	114.6	14.6	14.3	
WXX100128-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.38	378.945	17435.660	378.945	10.867	MM	41.7136	104.3	4.3	20.7	
WXX100128-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.25	501.626	17435.660	501.626	14.385	bb	38.4335	96.1	-3.9	44.4	
WXX100128-08CRI	246-Trinitrotoluene	227 > 210	15.20	444.130	17435.660	444.130	12.736	bb	40.0431	100.1	0.1	30.0	
WXX100128-08CRI	34-dinitrotoluene	182 > 152	14.16	586.664	17435.660	586.664	16.824	bb	18.5280	92.6	-7.4	9.6	
WXX100128-08CRI	26-dinitrotoluene	182 > 152	17.33	1442.559	17435.660	1442.559	41.368	MM	37.5546	93.9	-6.1	38.2	
WXX100128-08CRI	24-dinitrotoluene	182 > 152	17.99	337.142	17435.660	337.142	9.668	MM	38.0543	95.1	-4.9	8.8	
WXX100128-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	17435.660	17435.660	17435.660	17435.660	bb	534.8907	107.0	7.0	1283.8	
WXX100128-08CRI	2-Nitrotoluene	137 > 46	20.71	181.465	17435.660	181.465	5.204	bb	31.2914	78.2	-21.8	55.7	
WXX100128-08CRI	4-Nitrotoluene	137 > 46	22.06	103.088	17435.660	103.088	2.956	bb	35.7553	89.4	-10.6	30.1	
WXX100128-08CRI	3-Nitrotoluene	137 > 46	23.71	92.590	17435.660	92.590	2.655	bb	28.4404	71.1	-28.9	32.9	
WXX100128-08CRI	PETN	361 > 62	24.16	3251.640	17435.660	3251.640	93.247	bb	23.0077	57.5	-42.5	1155.1	

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/28/10
 Time of Injection 2129
 Standard Number WXX100128-08CRI
 Data File EXP0125168a

HMX	110.3
RDX	95.7
135-TNB	126.7
13-DNB	87.5
Tetryl	87.4
Nitrobenzene	114.6
4A-26-DNT	104.3
2A-46-DNT	96.1
246-TNT	100.1
34-DNT(surr)	92.6
26-DNT	93.9
24-DNT	95.1
2-NT	78.2
4-NT	89.4
3-NT	71.1
PETN	57.5

NOT
1/28/10

Total 1500.5

Average 93.8

Handwritten: 1500.5/16

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125179a

Analysis Date: 29-JAN-10 02:54

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	693.885	116	
1,3-Dinitrobenzene-d4	500	440.796	88	
2,4,6-Trinitrotoluene	600	678.239	113	
2,4-Dinitrotoluene	600	623.98	104	
2,6-Dinitrotoluene	600	604.152	101	
2,6-Dinitrotoluene-d3	500	455.229	91	
2-Amino-4,6-dinitrotoluene	600	681.159	114	
3,4-Dinitrotoluene	300	331.129	110	
4-Amino-2,6-dinitrotoluene	600	678.045	113	
HMX	600	780.078	130	*
Nitrobenzene	600	600.679	100	
PETN	600	590.757	98	
RDX	600	803.101	134	*
Tetryl	600	613.613	102	
m-Dinitrobenzene	600	661.545	110	
m-Nitrotoluene	600	558.589	93	
o-Nitrotoluene	600	541.629	90	
p-Nitrotoluene	600	563.212	94	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125179a

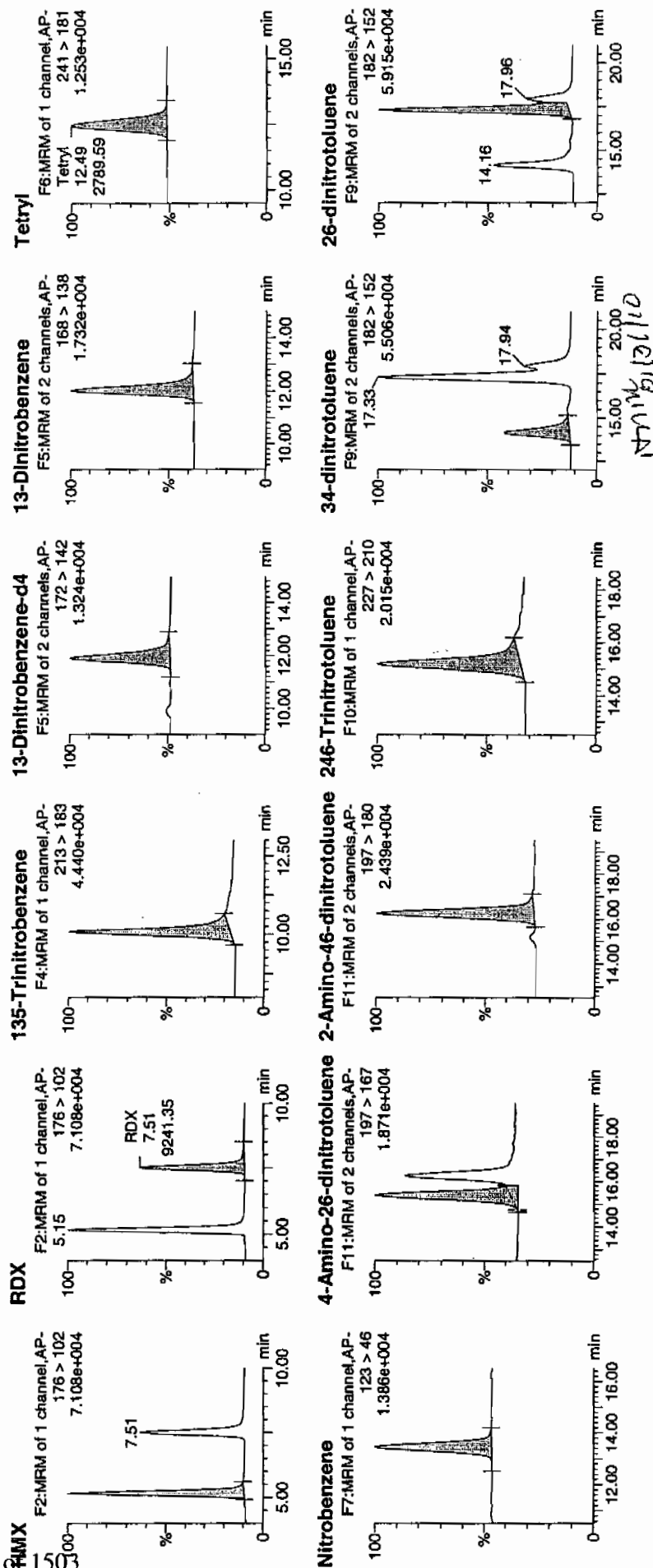
Date: 29-Jan-2010

Time: 02:54:06

ID: WXX100128-07CCV

Trial: 1:1,B

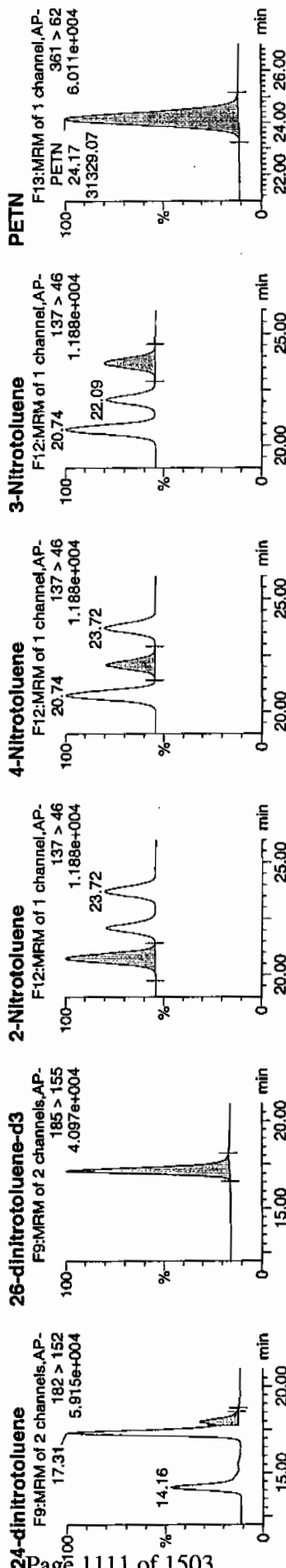
1/29/10



Printed: Fri Jan 29 07:12:59 2010, Page 70 of 75

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID#	Name	Trace	RT	Area	Std Area	Abundance	Response	Peak	Modulate	Mod Time	Int. Int.	% Rec	% Del	SN
WXX100128-07CCV	HMXX	176 > 102	5.15	12952.807	2616.915	12952.807	2474.824	bb			780.0783	130.0	30.0	684.3
WXX100128-07CCV	RDXX	176 > 102	7.51	9241.353	2616.915	9241.353	1765.696	bb			803.1009	133.9	33.9	413.1
WXX100128-07CCV	135-Trinitrobenzene	213 > 183	10.07	10377.311	2616.915	10377.311	1982.737	bb			693.8853	115.6	15.6	808.6
WXX100128-07CCV	13-Dinitrobenzene-d4	172 > 142	11.90	2616.915	2616.915	2616.915	2616.915	bb			440.7955	88.2	-11.8	833.6
WXX100128-07CCV	13-Dinitrobenzene	168 > 138	12.03	4016.339	2616.915	4016.339	767.380	bb			661.5448	110.3	10.3	431.3
WXX100128-07CCV	Tetral	241 > 181	12.49	2789.591	2616.915	2789.591	532.992	bb			613.6132	102.3	2.3	192.2
WXX100128-07CCV	Nitrobenzene	123 > 46	13.45	2686.718	2616.915	2686.718	513.337	bb			600.6789	100.1	0.1	282.8
WXX100128-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.38	5242.310	14838.964	5242.310	176.640	MM	29-Jan-10	07:09:11	678.0453	113.0	13.0	187.0
WXX100128-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.25	7566.316	14838.964	7566.316	254.948	bb			681.1595	113.5	13.5	433.3
WXX100128-07CCV	246-Trinitrotoluene	227 > 210	15.20	6402.227	14838.964	6402.227	215.724	bb			678.2394	113.0	13.0	212.5
WXX100128-07CCV	34-dinitrotoluene	182 > 152	14.16	8923.248	14838.964	8923.248	300.670	bb			331.1287	110.4	10.4	652.1
WXX100128-07CCV	26-dinitrotoluene	182 > 152	17.31	19750.691	14838.964	19750.691	665.501	bd			604.1525	100.7	0.7	950.8
WXX100128-07CCV	24-dinitrotoluene	182 > 152	17.96	4704.842	14838.964	4704.842	158.530	MM	29-Jan-10	07:00:48	623.9798	104.0	4.0	217.1
WXX100128-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	14838.964	14838.964	14838.964	14838.964	bb			455.2293	91.0	-9.0	806.2
WXX100128-07CCV	2-Nitrotoluene	137 > 46	20.74	2673.223	14838.964	2673.223	90.074	bb			541.6287	90.3	-9.7	338.8
WXX100128-07CCV	4-Nitrotoluene	137 > 46	22.09	1381.991	14838.964	1381.991	46.566	bb			563.2123	93.9	-6.1	183.2
WXX100128-07CCV	3-Nitrotoluene	137 > 46	23.72	1547.697	14838.964	1547.697	52.150	bb			558.5892	93.1	-6.9	190.3
WXX100128-07CCV	PETN	361 > 62	24.17	31329.068	14838.964	31329.068	1055.635	bb			590.7574	98.5	-1.5	11224.3

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/29/10
 Time of Injection: 0254
 Standard Number: WXX100128-07CCV
 Data File: EXP0125179a

HMX	130.0
RDX	133.9
135-TNB	115.6
13-DNB	110.3
Tetryl	102.3
Nitrobenzene	100.1
4A-26-DNT	113.0
2A-46-DNT	113.5
246-TNT	113.0
34-DNT(surr)	110.4
26-DNT	100.7
24-DNT	104.0
2-NT	90.3
4-NT	93.9
3-NT	93.1
PETN	98.5

WHT
1/29/10

Total 1722.6

Average 107.7

WHT 01/29/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125181a

Analysis Date: 29-JAN-10 03:53

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	52.245	131	*
1,3-Dinitrobenzene-d4	500	462.351	92	
2,4,6-Trinitrotoluene	40	44.081	110	
2,4-Dinitrotoluene	40	34.598	86	
2,6-Dinitrotoluene	40	40.068	100	
2,6-Dinitrotoluene-d3	500	462.209	92	
2-Amino-4,6-dinitrotoluene	40	43.63	109	
3,4-Dinitrotoluene	20	18.662	93	
4-Amino-2,6-dinitrotoluene	40	40.035	100	
HMX	40	48.55	121	
Nitrobenzene	40	38.762	97	
PETN	40	29.755	74	
RDX	40	42.988	107	
Tetryl	40	46.222	116	
m-Dinitrobenzene	40	42.28	106	
m-Nitrotoluene	40	33.043	83	
o-Nitrotoluene	40	37.281	93	
p-Nitrotoluene	40	45.498	114	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene, 2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125181a

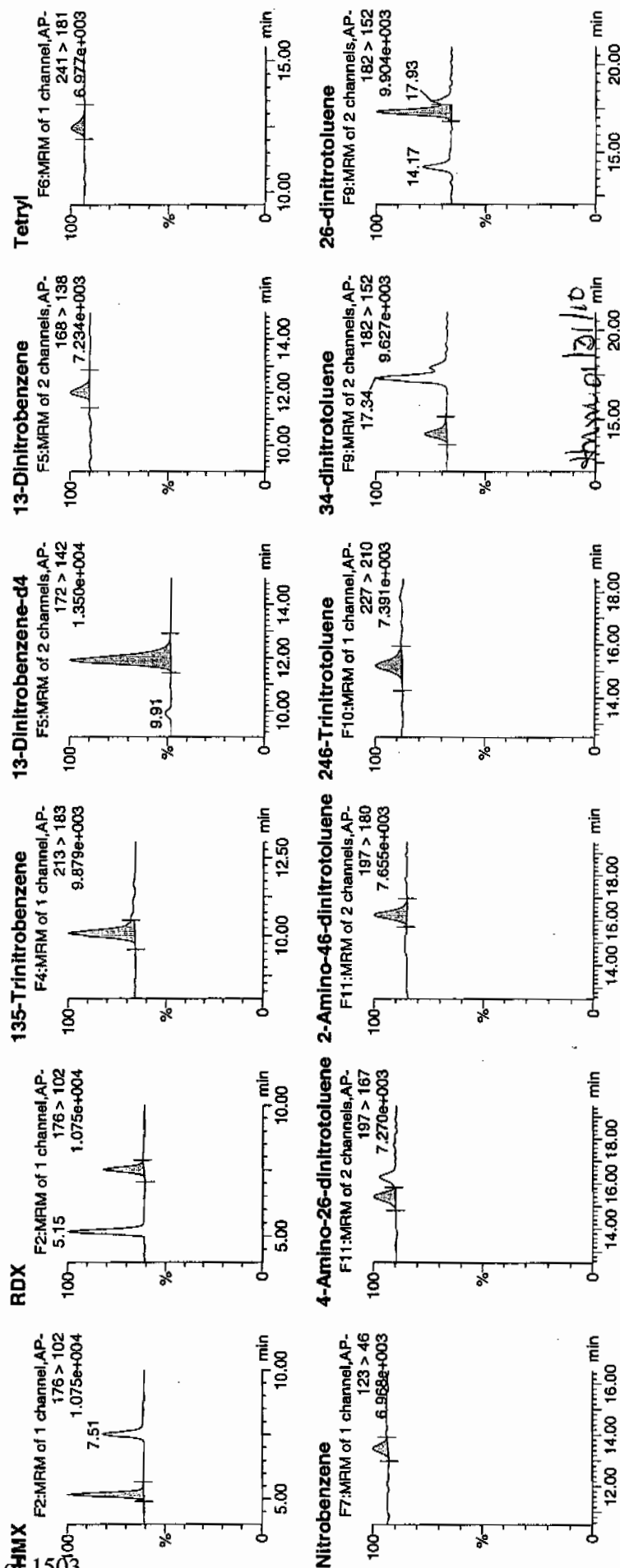
Date: 29-Jan-2010

Time: 03:53:04

ID: WXX100128-08CRI

Vial: 1:1,C

1/29/10
11:21

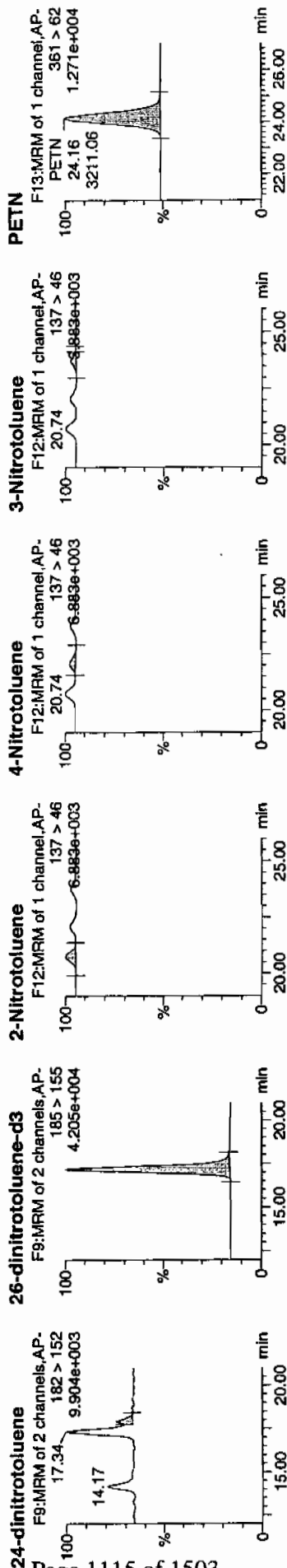


Quantify Sample Report

GEL Laboratories, LLC / Analyst: Michael A. Penny

Printed: Fri Jan 29 07:12:59 2010, Page 74 of 75

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA3.qld, Time: Fri Jan 29 07:11:03 2010



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	%Normal	%Recd	%Dev	S/N
WXX100128-08CRI	HMX	176 > 102	5.15	845.578	2744.888	845.578	154.028	bb			48.5504	121.4	21.4	155.1
WXX100128-08CRI	RDX	176 > 102	7.51	518.853	2744.888	518.853	94.513	bb			42.9877	107.5	7.5	82.7
WXX100128-08CRI	135-Trinitrobenzene	213 > 183	10.07	962.204	2744.888	962.204	175.272	bd			52.2447	130.6	30.6	214.4
WXX100128-08CRI	13-Dinitrobenzene-d4	172 > 142	11.89	2744.888		2744.888	2744.888	bb			462.3514	92.5	-7.5	364.2
WXX100128-08CRI	13-Dinitrobenzene	168 > 138	12.00	269.240	2744.888	269.240	49.044	bb			42.2799	105.7	5.7	21.5
WXX100128-08CRI	Tetryl	241 > 181	12.45	220.407	2744.888	220.407	40.149	bb			46.2216	115.6	15.6	21.2
WXX100128-08CRI	Nitrobenzene	123 > 46	13.46	181.855	2744.888	181.855	33.126	bb			38.7624	96.9	-3.1	11.4
WXX100128-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.39	314.279	15066.474	314.279	10.430	MM	29-Jan-10	07:09:24	40.0353	100.1	0.1	23.4
WXX100128-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.23	492.072	15066.474	492.072	16.330	bb			43.6300	109.1	9.1	36.4
WXX100128-08CRI	246-Trinitrotoluene	227 > 210	15.21	422.481	15066.474	422.481	14.021	bb			44.0810	110.2	10.2	20.0
WXX100128-08CRI	34-dinitrotoluene	182 > 152	14.17	510.599	15066.474	510.599	16.945	bb			18.6615	93.3	-6.7	29.2
WXX100128-08CRI	26-dinitrotoluene	182 > 152	17.34	1329.975	15066.474	1329.975	44.137	MM	29-Jan-10	07:06:11	40.0682	100.2	0.2	69.3
WXX100128-08CRI	24-dinitrotoluene	182 > 152	17.93	264.873	15066.474	264.873	8.790	MM	29-Jan-10	06:58:29	34.5983	86.5	-13.5	16.9
WXX100128-08CRI	26-dinitrotoluene-d3	185 > 155	17.16	15066.474		15066.474	15066.474	bb			462.2089	92.4	-7.6	1223.6
WXX100128-08CRI	2-Nitrotoluene	137 > 46	20.74	186.822	15066.474	186.822	6.200	bb			37.2809	93.2	-6.8	62.2
WXX100128-08CRI	4-Nitrotoluene	137 > 46	22.07	113.352	15066.474	113.352	3.762	bb			45.4976	113.7	13.7	34.8
WXX100128-08CRI	3-Nitrotoluene	137 > 46	23.76	92.956	15066.474	92.956	3.085	MM	29-Jan-10	06:57:46	33.0427	82.6	-17.4	31.5
WXX100128-08CRI	PETN	361 > 62	24.16	3211.061	15066.474	3211.061	106.563	bb			29.7551	74.4	-25.6	446.3

GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/29/10
 Time of Injection 0353
 Standard Number WXX100128-08CRI
 Data File EXP0125181a

HMX	121.4
RDX	107.5
135-TNB	130.6
13-DNB	105.7
Tetryl	115.6
Nitrobenzene	96.9
4A-26-DNT	100.1
2A-46-DNT	109.1
246-TNT	110.2
34-DNT(surr)	93.3
26-DNT	100.2
24-DNT	86.5
2-NT	93.2
4-NT	113.7
3-NT	82.6
PETN	74.4
Total	1641.0

mtf
1/29/10

Average

102.6

Handwritten: 101.3/10
 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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125192a

Analysis Date: 29-JAN-10 09:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	659.219	110	
1,3-Dinitrobenzene-d4	500	485.21	97	
2,4,6-Trinitrotoluene	600	731.351	122	*
2,4-Dinitrotoluene	600	648.963	108	
2,6-Dinitrotoluene	600	648.843	108	
2,6-Dinitrotoluene-d3	500	454.865	91	
2-Amino-4,6-dinitrotoluene	600	707.583	118	
3,4-Dinitrotoluene	300	324.482	108	
4-Amino-2,6-dinitrotoluene	600	693.561	116	
HMX	600	714.05	119	
Nitrobenzene	600	533.013	89	
PETN	600	591.612	99	
RDX	600	682.073	114	
Tetryl	600	572.478	95	
m-Dinitrobenzene	600	633.214	106	
m-Nitrotoluene	600	548.448	91	
o-Nitrotoluene	600	541.245	90	
p-Nitrotoluene	600	542.177	90	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125192a

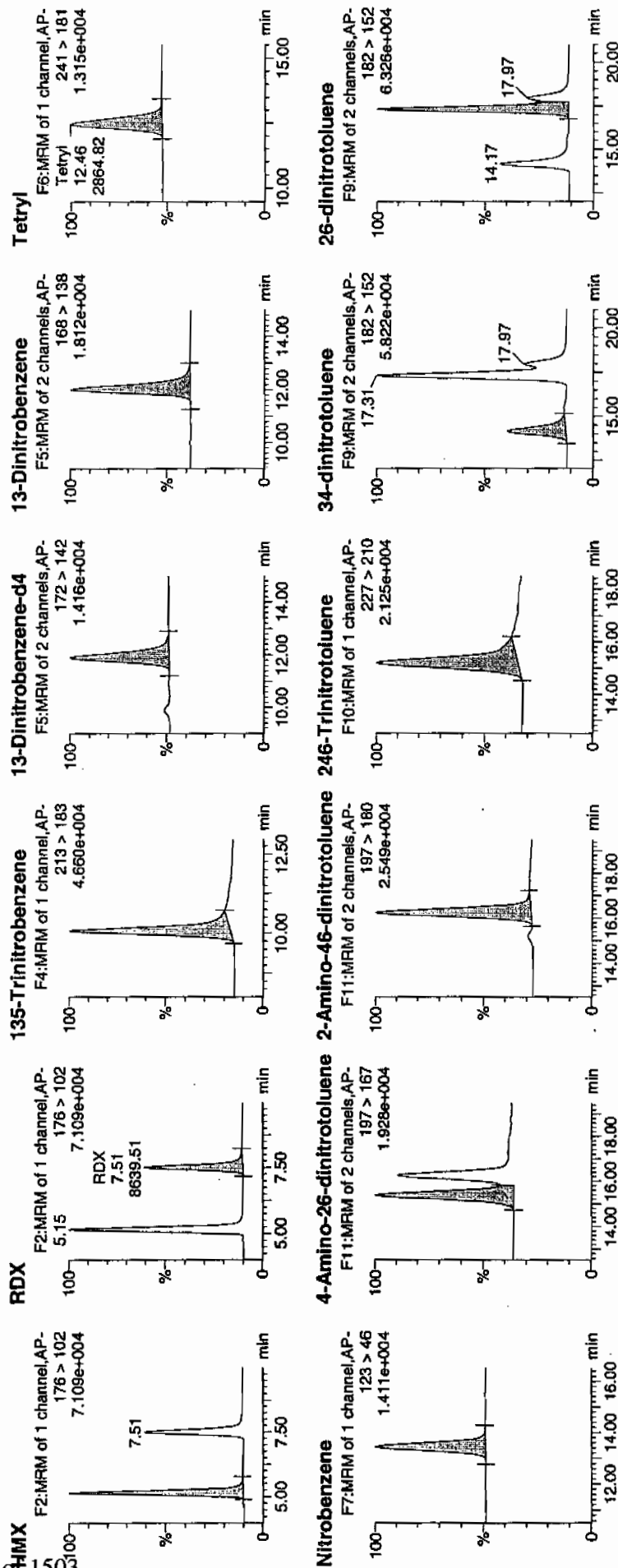
Date: 29-Jan-2010

Time: 09:17:44

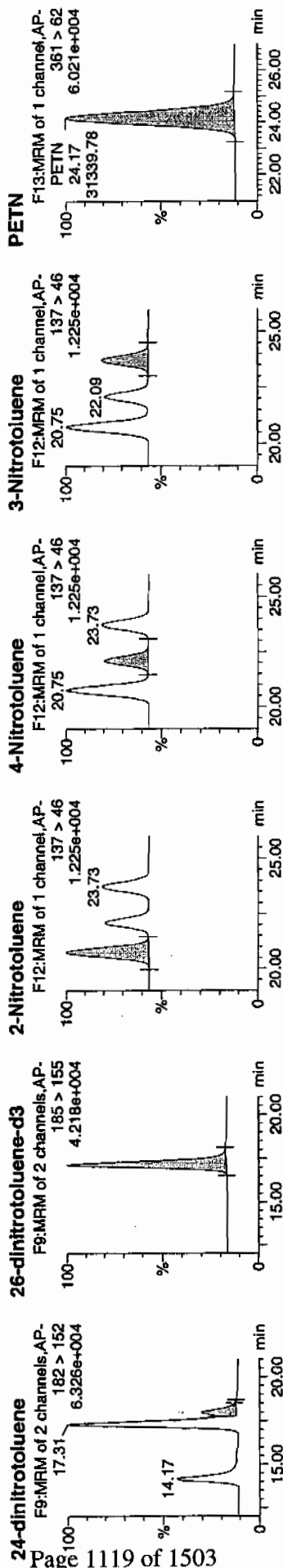
ID: WXX100128-07CCV

Vial: 1:1,B

1/2/10



1/2/10



ID	Name	Trace	RT	Area	SArea	Abs Resp	Response	Flags	Mod Date	Mod Time	Intm	%Rec	%Dev	SN
WXX100128-07CCV	HMx	176 > 102	5.15	13051.095	2880.596	13051.095	2265.346	db			714.0498	119.0	19.0	1309.8
WXX100128-07CCV	RDX	176 > 102	7.51	8639.514	2880.596	8639.514	1499.805	bb			682.0734	113.7	13.7	737.5
WXX100128-07CCV	135-Trinitrobenzene	213 > 183	10.08	10860.330	2880.596	10860.330	1885.084	bb			659.2188	109.9	9.9	322.8
WXX100128-07CCV	13-Dinitrobenzene-d4	172 > 142	11.90	2880.596		2880.596	2880.596	bb			485.2102	97.0	-3.0	301.6
WXX100128-07CCV	13-Dinitrobenzene	168 > 138	12.00	4231.698	2880.596	4231.698	734.518	bb			633.2145	105.5	5.5	401.3
WXX100128-07CCV	Tetryl	241 > 181	12.46	2864.821	2880.596	2864.821	497.262	bb			572.4781	95.4	-4.6	247.2
WXX100128-07CCV	Nitrobenzene	123 > 46	13.46	2624.280	2880.596	2624.280	455.510	bb			533.0129	88.8	-11.2	171.5
WXX100128-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.39	5357.976	14827.088	5357.976	180.682	MM	29-Jan-10	17:25:30	693.5608	115.6	15.6	187.7
WXX100128-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.25	7853.534	14827.088	7853.534	264.837	bb			707.5826	117.9	17.9	451.3
WXX100128-07CCV	246-Trinitratoluene	227 > 210	15.21	6898.045	14827.088	6898.045	232.616	bb			731.3508	121.9	21.9	203.3
WXX100128-07CCV	34-dinitrotoluene	182 > 152	14.17	8797.130	14827.088	8797.130	294.634	bb			324.4818	108.2	8.2	481.4
WXX100128-07CCV	26-dinitrotoluene	182 > 152	17.31	21194.730	14827.088	21194.730	714.730	MM	29-Jan-10	17:35:22	648.8434	108.1	8.1	733.2
WXX100128-07CCV	24-dinitrotoluene	182 > 152	17.97	4889.304	14827.088	4889.304	164.877	MM	29-Jan-10	17:37:25	648.9634	108.2	8.2	151.7
WXX100128-07CCV	26-dinitrotoluene-d3	185 > 155	17.16	14827.088		14827.088	14827.088	bb			454.8650	91.0	-9.0	1341.9
WXX100128-07CCV	2-Nitrotoluene	137 > 46	20.75	2669.191	14827.088	2669.191	90.011	bb			541.2449	90.2	-9.8	117.5
WXX100128-07CCV	4-Nitrotoluene	137 > 46	22.09	1329.311	14827.088	1329.311	44.827	bb			542.1771	90.4	-9.6	61.4
WXX100128-07CCV	3-Nitrotoluene	137 > 46	23.73	1518.382	14827.088	1518.382	51.203	bb			548.4478	91.4	-8.6	65.6
WXX100128-07CCV	PETN	361 > 62	24.17	31338.783	14827.088	31339.783	1056.842	bb			591.6116	98.6	-1.4	6152.1

GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/29/10
 Time of Injection: 0917
 Standard Number: WXX100128-07CCV
 Data File: EXP0125192a

HMX	119.0
RDX	113.7
135-TNB	109.9
13-DNB	105.5
Tetryl	95.4
Nitrobenzene	88.8
4A-26-DNT	115.6
2A-46-DNT	117.9
246-TNT	121.9
34-DNT(surr)	108.2
26-DNT	108.1
24-DNT	108.2
2-NT	90.2
4-NT	90.4
3-NT	91.4
PETN	98.6
Total	1682.8

*not
1/29/10*

Average

105.2

Handwritten: 101/29/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125194a

Analysis Date: 29-JAN-10 10:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.777	122	
1,3-Dinitrobenzene-d4	500	475.293	95	
2,4,6-Trinitrotoluene	40	42.23	106	
2,4-Dinitrotoluene	40	38.358	96	
2,6-Dinitrotoluene	40	38.828	97	
2,6-Dinitrotoluene-d3	500	454.754	91	
2-Amino-4,6-dinitrotoluene	40	47.076	118	
3,4-Dinitrotoluene	20	18.986	95	
4-Amino-2,6-dinitrotoluene	40	43.769	109	
HMX	40	45.789	114	
Nitrobenzene	40	29.921	75	
PETN	40	30.598	76	
RDX	40	42.011	105	
Tetryl	40	40.656	102	
m-Dinitrobenzene	40	41.817	105	
m-Nitrotoluene	40	34.401	86	
o-Nitrotoluene	40	34.132	85	
p-Nitrotoluene	40	32.943	82	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\1012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125194a

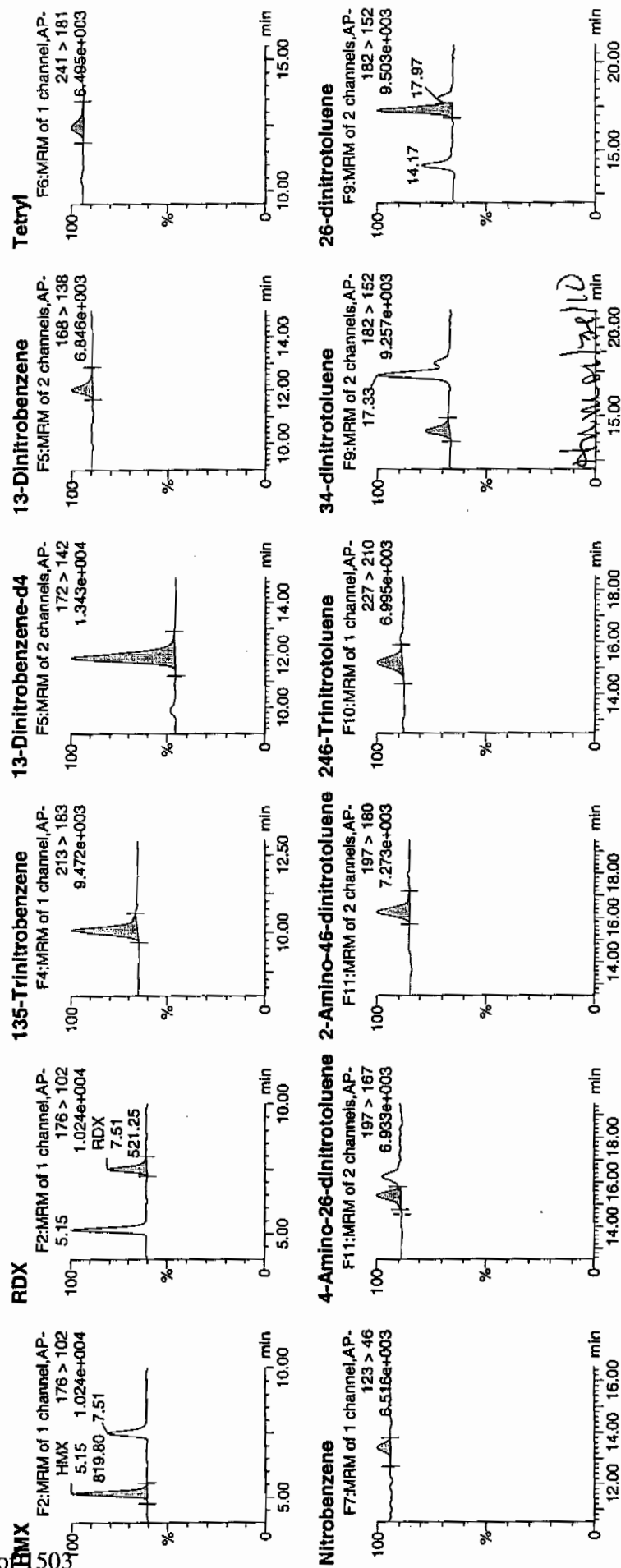
Date: 29-Jan-2010

Time: 10:16:47

ID: WXX100128-08CRI

Yali: 1:1,C

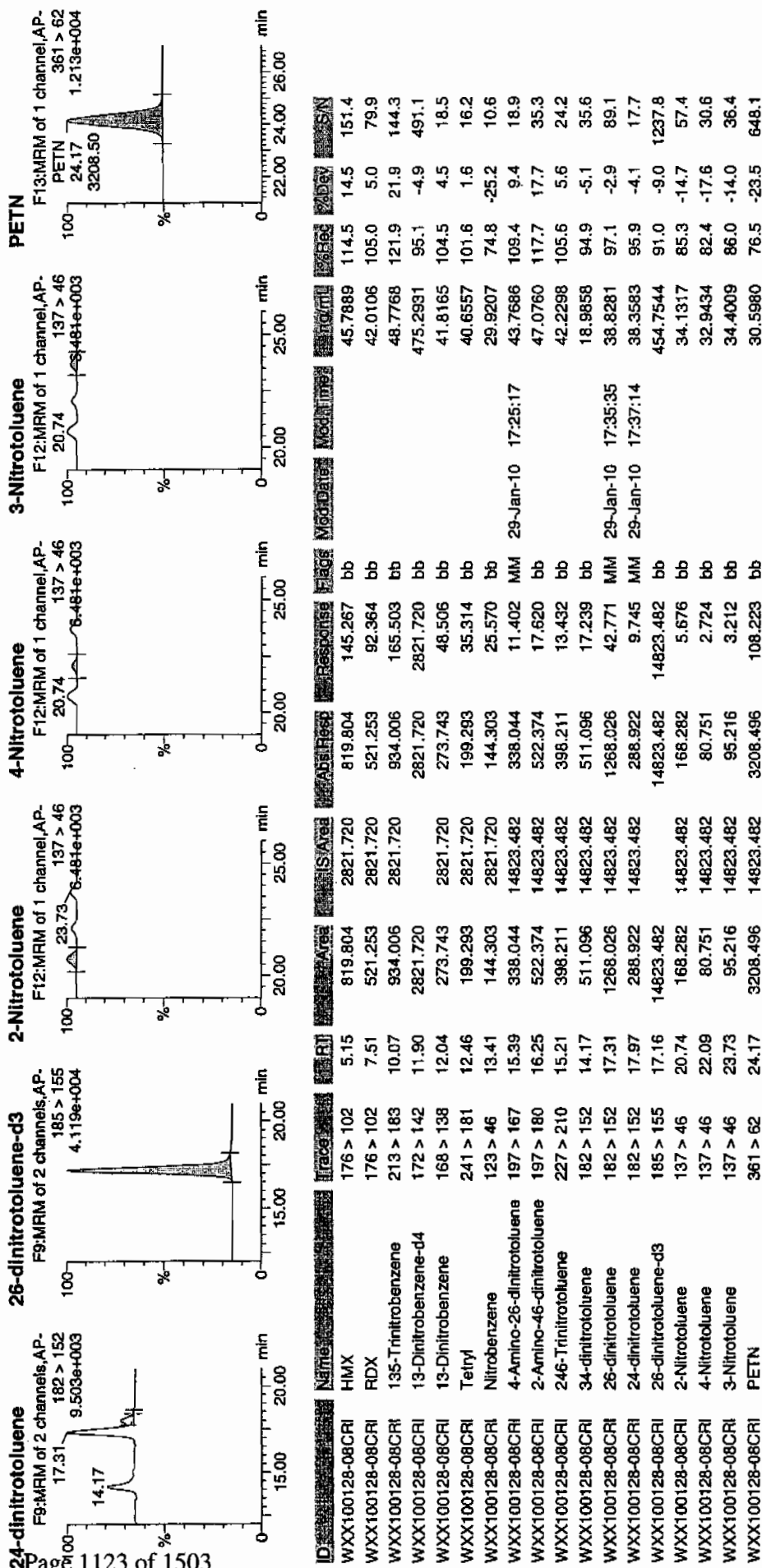
11/21/10



Printed: Fri Jan 29 17:42:56 2010, Page 26 of 51

Quantify Sample Report GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/29/10
 Time of Injection 1016
 Standard Number WXX100128-08CRI
 Data File EXP0125194a

HMX	114.5
RDX	105.0
135-TNB	121.9
13-DNB	104.5
Tetryl	101.6
Nitrobenzene	74.8
4A-26-DNT	109.4
2A-46-DNT	117.7
246-TNT	105.6
34-DNT(surr)	94.9
26-DNT	97.1
24-DNT	95.9
2-NT	85.3
4-NT	82.4
3-NT	86.0
PETN	76.5

Total 1573.1

Average 98.3

Handwritten: 100% 1/29/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0125204a

Analysis Date: 29-JAN-10 15:11

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	738.173	123	*
1,3-Dinitrobenzene-d4	500	472.42	94	
2,4,6-Trinitrotoluene	600	700.688	117	
2,4-Dinitrotoluene	600	654.353	109	
2,6-Dinitrotoluene	600	620.767	103	
2,6-Dinitrotoluene-d3	500	437.034	87	
2-Amino-4,6-dinitrotoluene	600	721.572	120	*
3,4-Dinitrotoluene	300	319.312	106	
4-Amino-2,6-dinitrotoluene	600	708.447	118	
HMX	600	717.24	120	
Nitrobenzene	600	535.048	89	
PETN	600	638.27	106	
RDX	600	747.295	125	*
Tetryl	600	591.727	99	
m-Dinitrobenzene	600	617.099	103	
m-Nitrotoluene	600	633.589	106	
o-Nitrotoluene	600	566.348	94	
p-Nitrotoluene	600	607.758	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\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0125204a

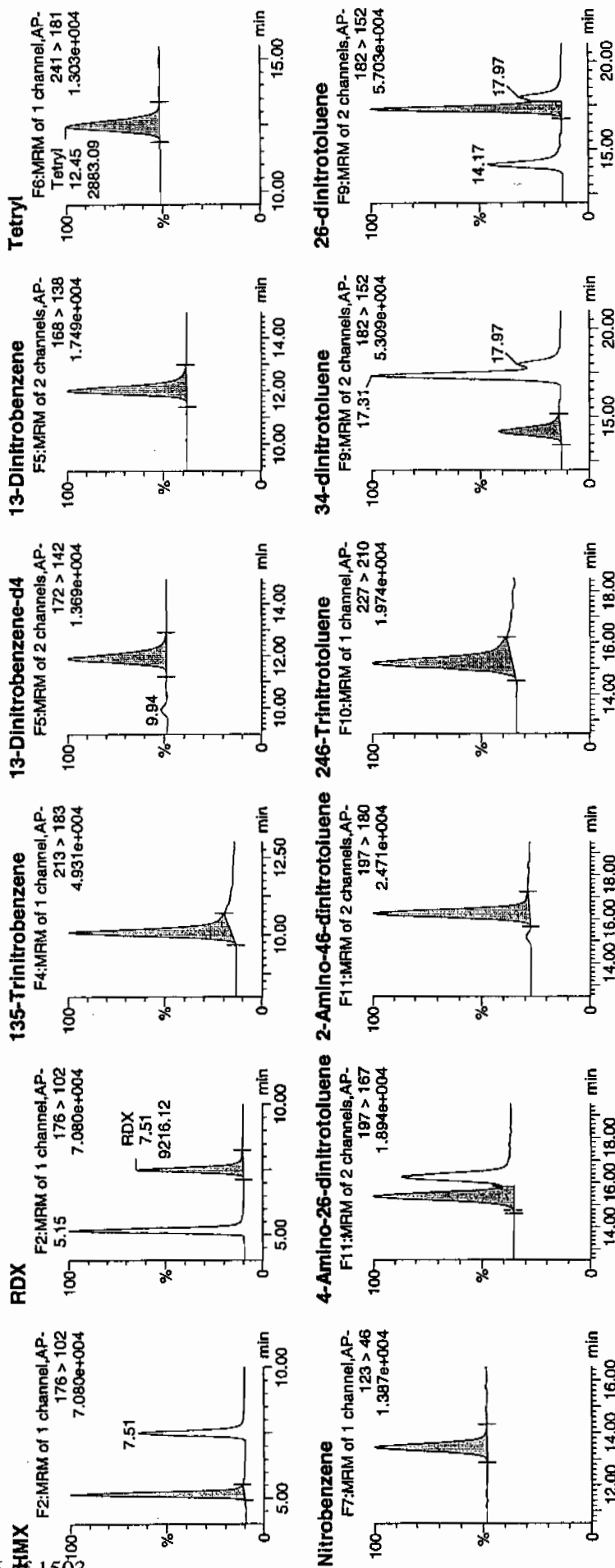
Date: 29-Jan-2010

Time: 15:11:37

ID: WXX100128-07CCV

Vial: 1:1,B

1/29/10

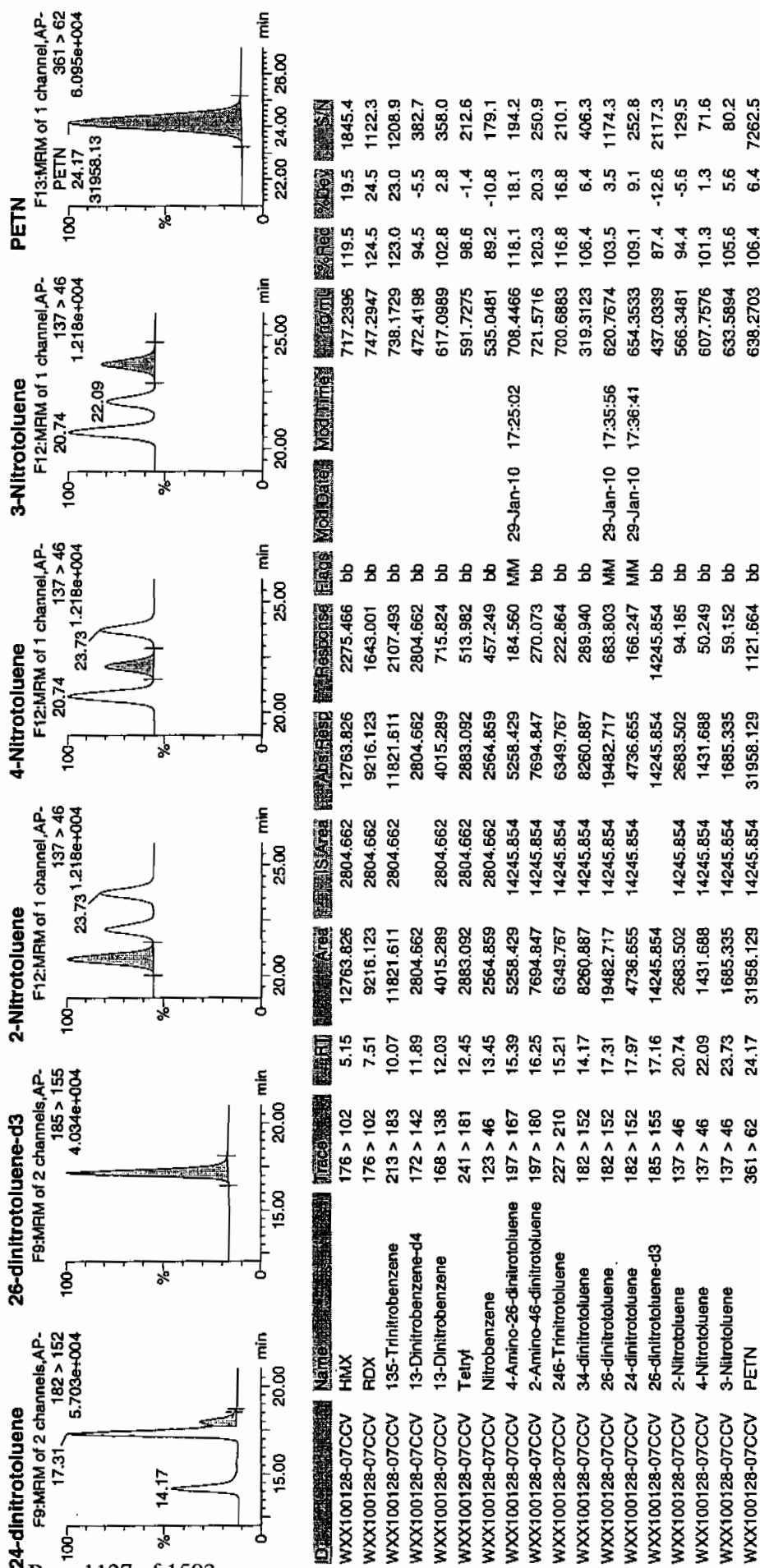


1/29/10

Printed: Fri Jan 29 17:42:56 2010, Page 46 of 51

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



GRAND MEAN AVERAGE

Vendor: Restek
 Date of Analysis: 01/29/10
 Time of Injection: 1511
 Standard Number: WXX100128-07CCV
 Data File: EXP0125204a

HMX	119.5
RDX	124.5
135-TNB	123.0
13-DNB	102.8
Tetryl	98.6
Nitrobenzene	89.2
4A-26-DNT	118.1
2A-46-DNT	120.3
246-TNT	116.8
34-DNT(surr)	106.4
26-DNT	103.5
24-DNT	109.1
2-NT	94.4
4-NT	101.3
3-NT	105.6
PETN	106.4

MTF
1/29/10

Total 1739.5

Average 108.7 ✓

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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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0125206a

Analysis Date: 29-JAN-10 16:10

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	54.269	136	*
1,3-Dinitrobenzene-d4	500	405.494	81	
2,4,6-Trinitrotoluene	40	38.033	95	
2,4-Dinitrotoluene	40	27.59	69	*
2,6-Dinitrotoluene	40	40.964	102	
2,6-Dinitrotoluene-d3	500	445.917	89	
2-Amino-4,6-dinitrotoluene	40	45.746	114	
3,4-Dinitrotoluene	20	20.457	102	
4-Amino-2,6-dinitrotoluene	40	42.305	106	
HMX	40	54.951	137	*
Nitrobenzene	40	49.324	123	
PETN	40	32.381	81	
RDX	40	42.281	106	
Tetryl	40	56.523	141	*
m-Dinitrobenzene	40	39.227	98	
m-Nitrotoluene	40	39.714	99	
o-Nitrotoluene	40	36.797	92	
p-Nitrotoluene	40	28.112	70	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst: Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125206a

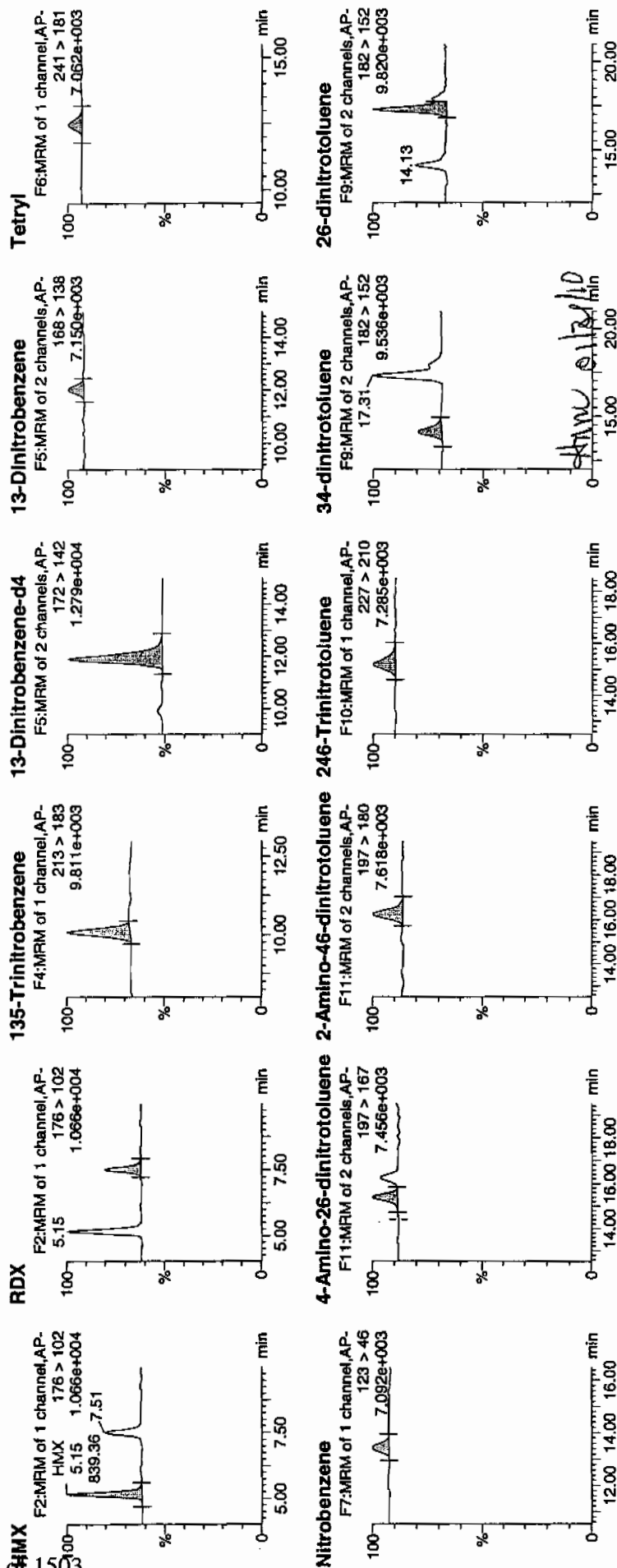
Date: 29-Jan-2010

Time: 16:10:40

ID: WXX100128-08CRI

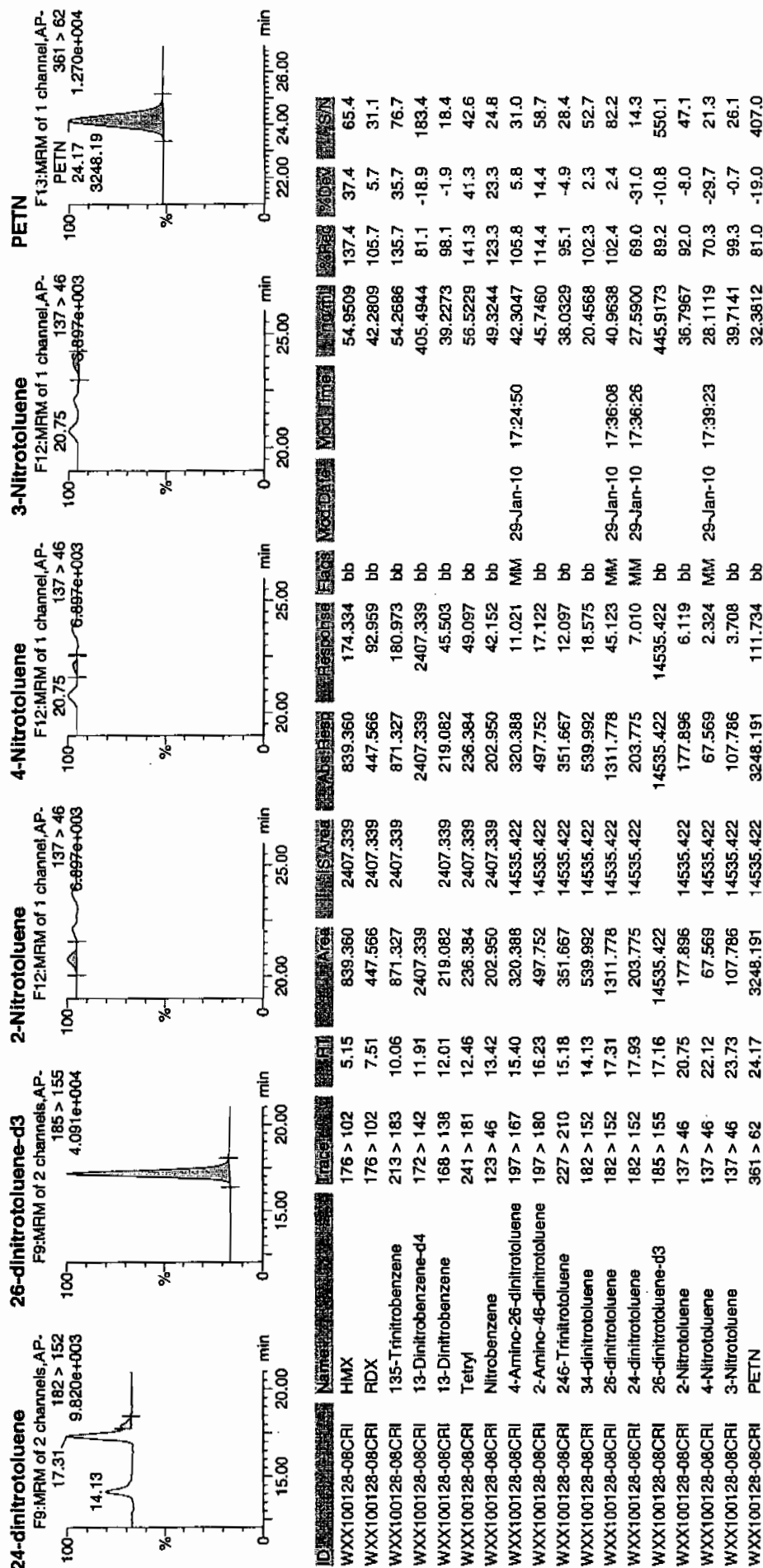
Yial: 1:1,C

1/29/10
1/29/10



Dataset: C:\MASSLYNX\New_Exp_PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

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GRAND MEAN AVERAGE

Vendor: UltraScientific
 Date of Analysis 01/29/10
 Time of Injection 1610
 Standard Number WXX100128-08CRI
 Data File EXP0125206a

HMX	137.4
RDX	105.7
135-TNB	135.7
13-DNB	98.1
Tetryl	141.3
Nitrobenzene	123.3
4A-26-DNT	105.8
2A-46-DNT	114.4
246-TNT	95.1
34-DNT(surr)	102.3
26-DNT	102.4
24-DNT	69.0
2-NT	92.0
4-NT	70.3
3-NT	99.3
PETN	81.0

1/29/10

Total 1673.1

Average 104.6

Annex 1/29/10

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): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250013.wiff

Analysis Date: 25-JAN-10 13:41

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	106	106	
3,4-Dinitrotoluene	50	46.7	94	
3,5-Dinitroaniline	100	104	104	
TATB	100	96.4	96	
tris(o-cresyl) phosphate	100	117	117	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

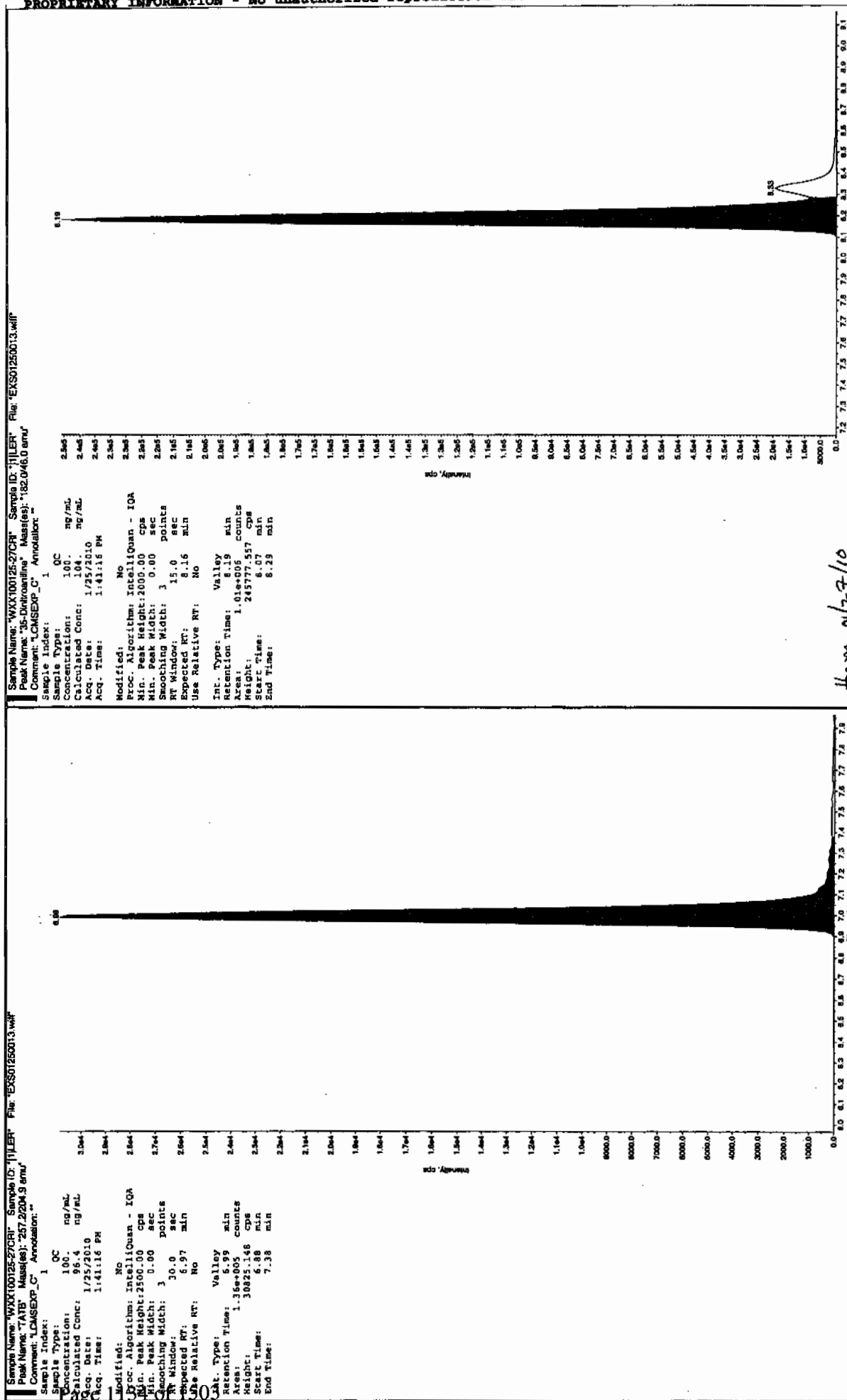
2,4-Diamino-6-nitrotoluene 50-150%

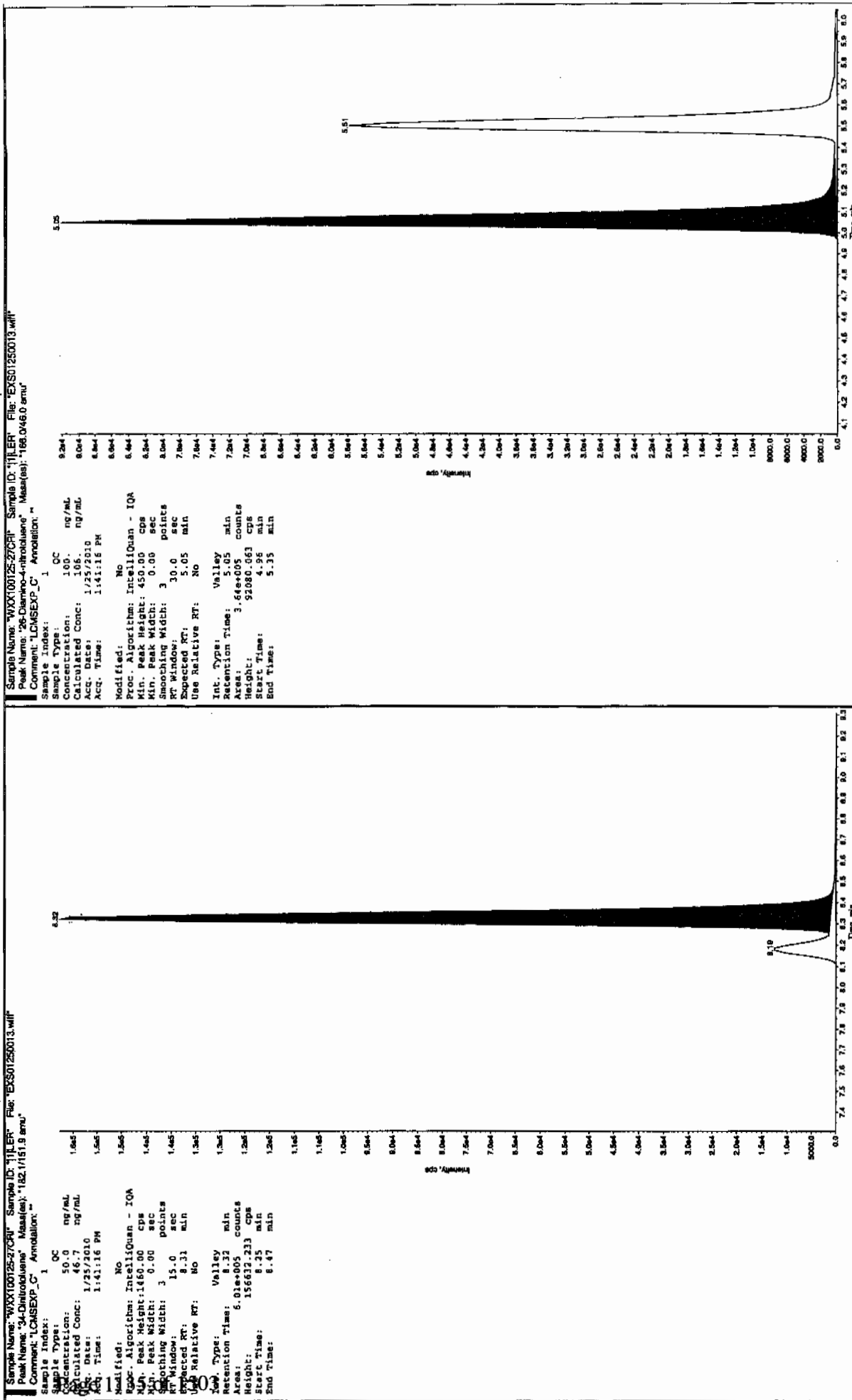
Other Target Analytes 70-130%

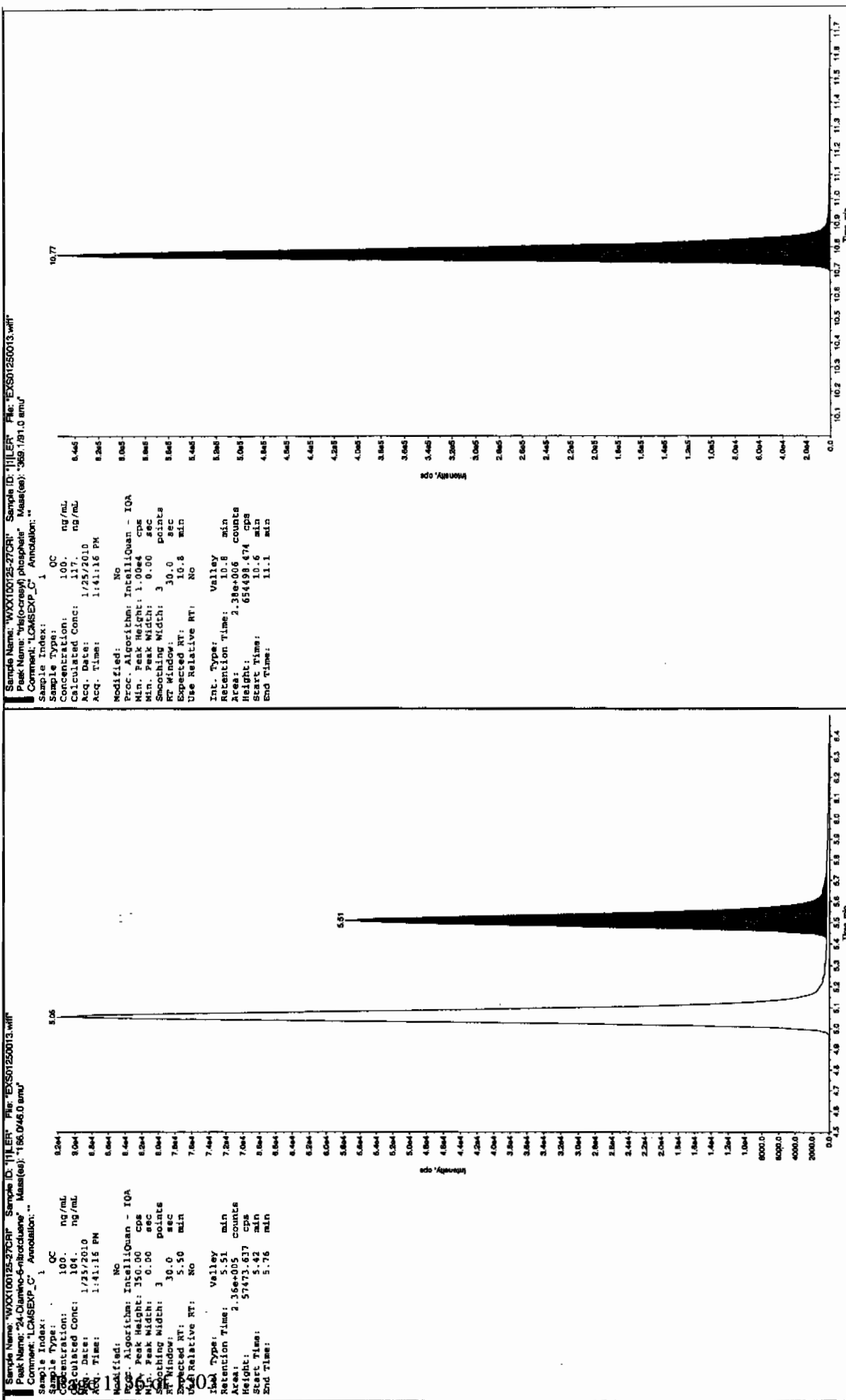
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

20x 1/27/10







7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250024.wiff

Analysis Date: 25-JAN-10 16:33

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	456	91	
2,6-Diamino-4-nitrotoluene	500	429	86	
3,4-Dinitrotoluene	250	232	93	
3,5-Dinitroaniline	500	523	105	
TATB	500	534	107	
tris(o-cresyl) phosphate	500	455	91	

Recovery Limits:

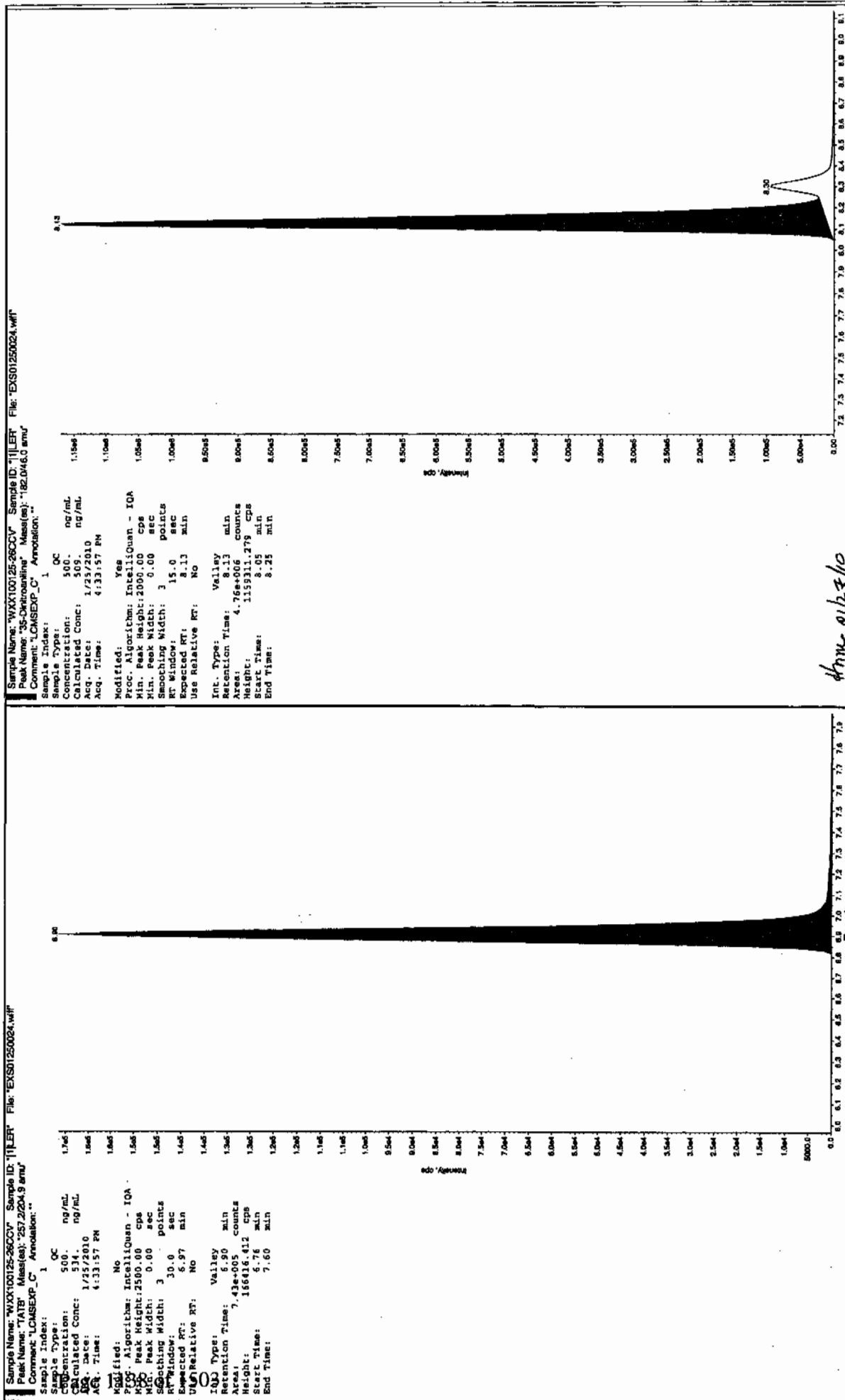
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

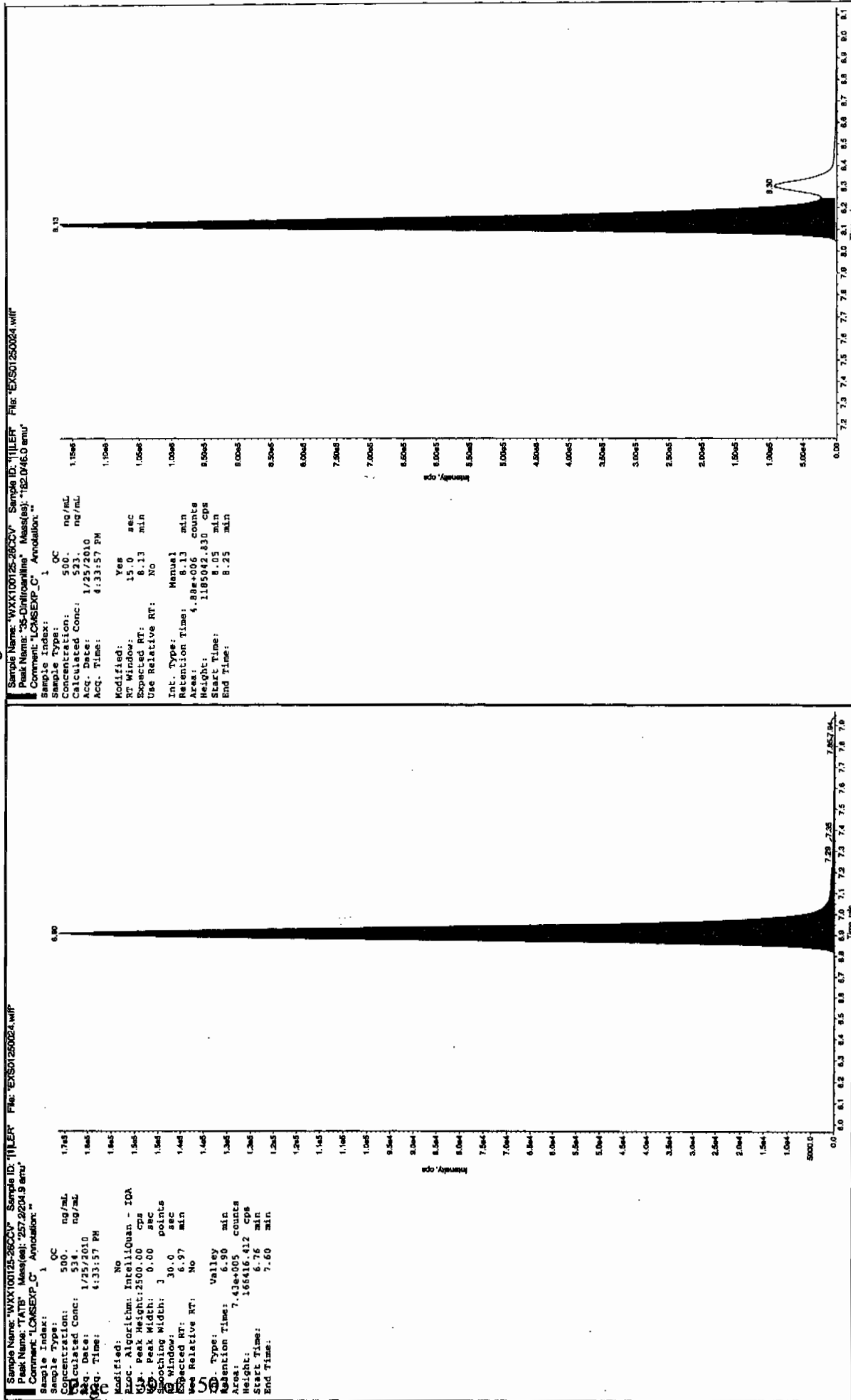
* Value outside of Recovery Limits

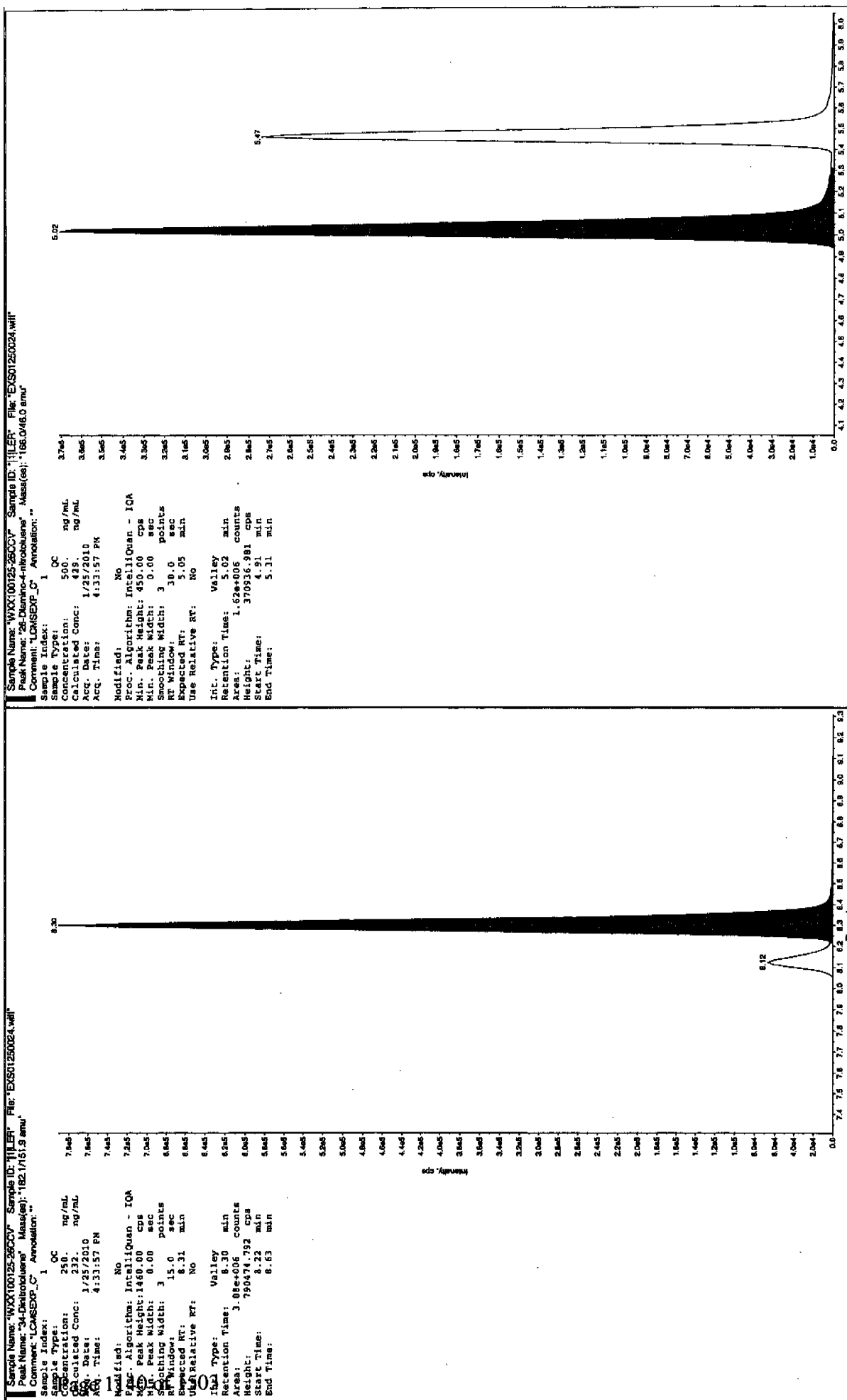
Before Scan 1127110

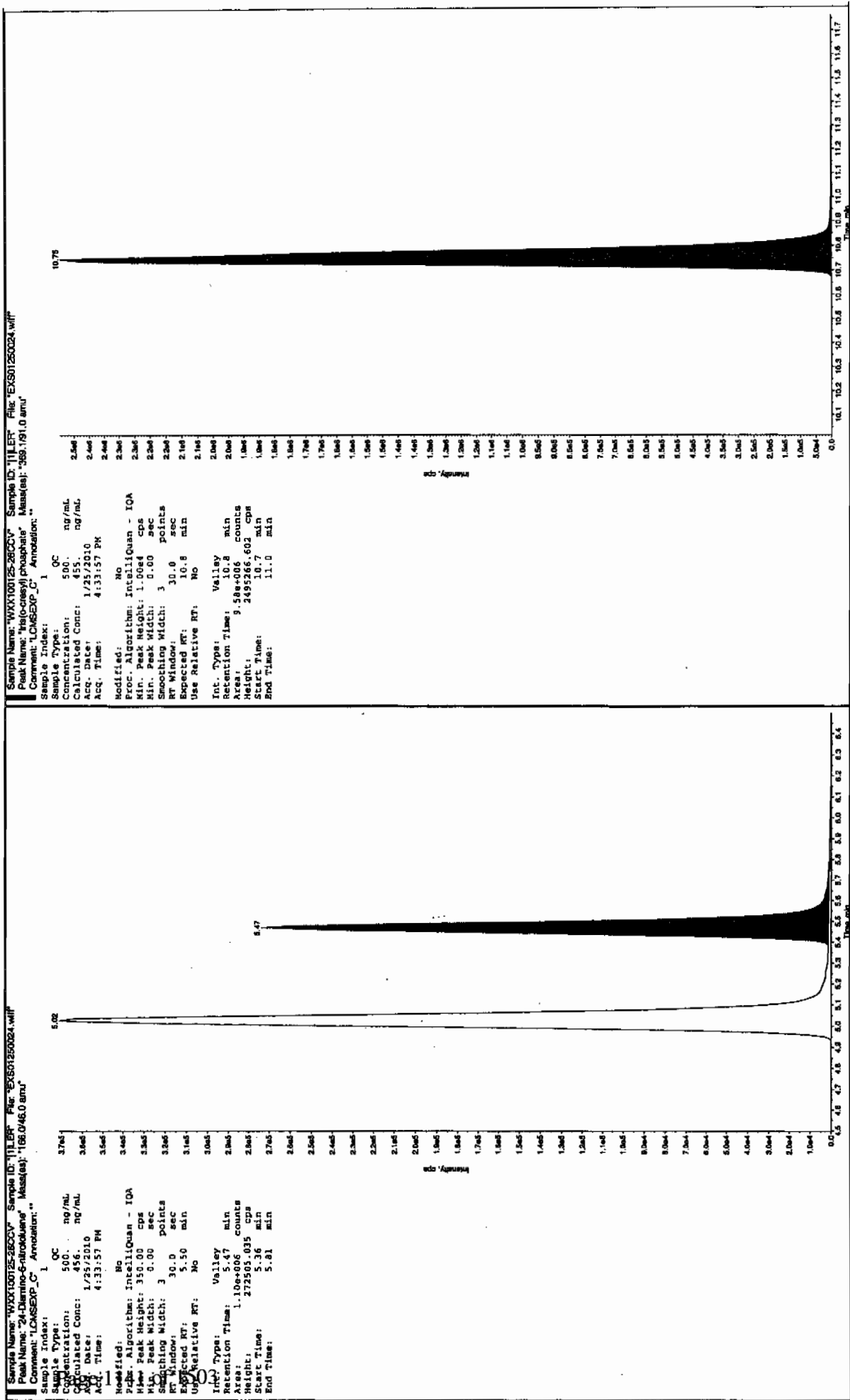


After 01/27/10

after Jan 12/10







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250026.wiff

Analysis Date: 25-JAN-10 17:05

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	46.3	93	
3,5-Dinitroaniline	100	105	105	
TATB	100	99.8	100	
tris(o-cresyl) phosphate	100	110	110	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

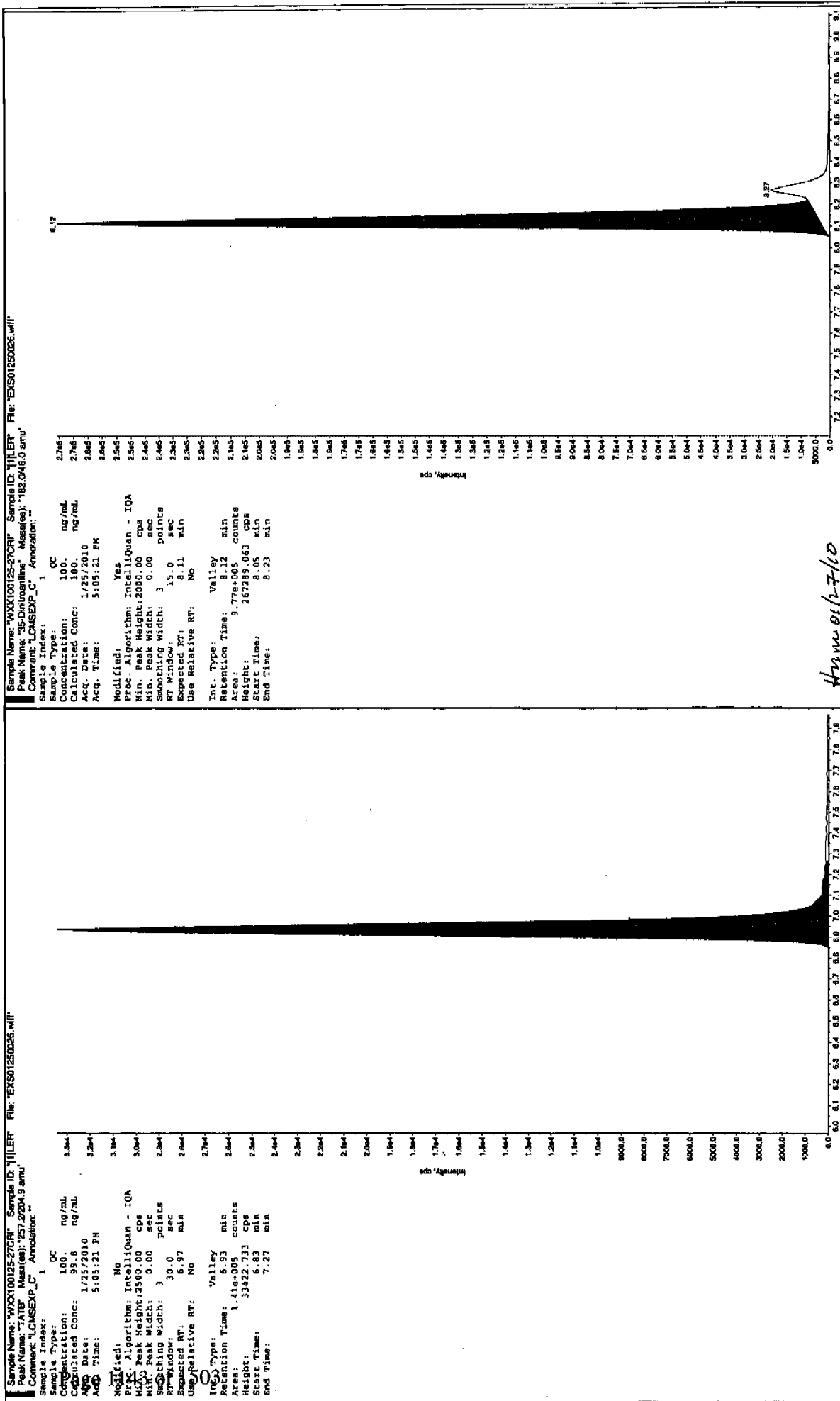
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

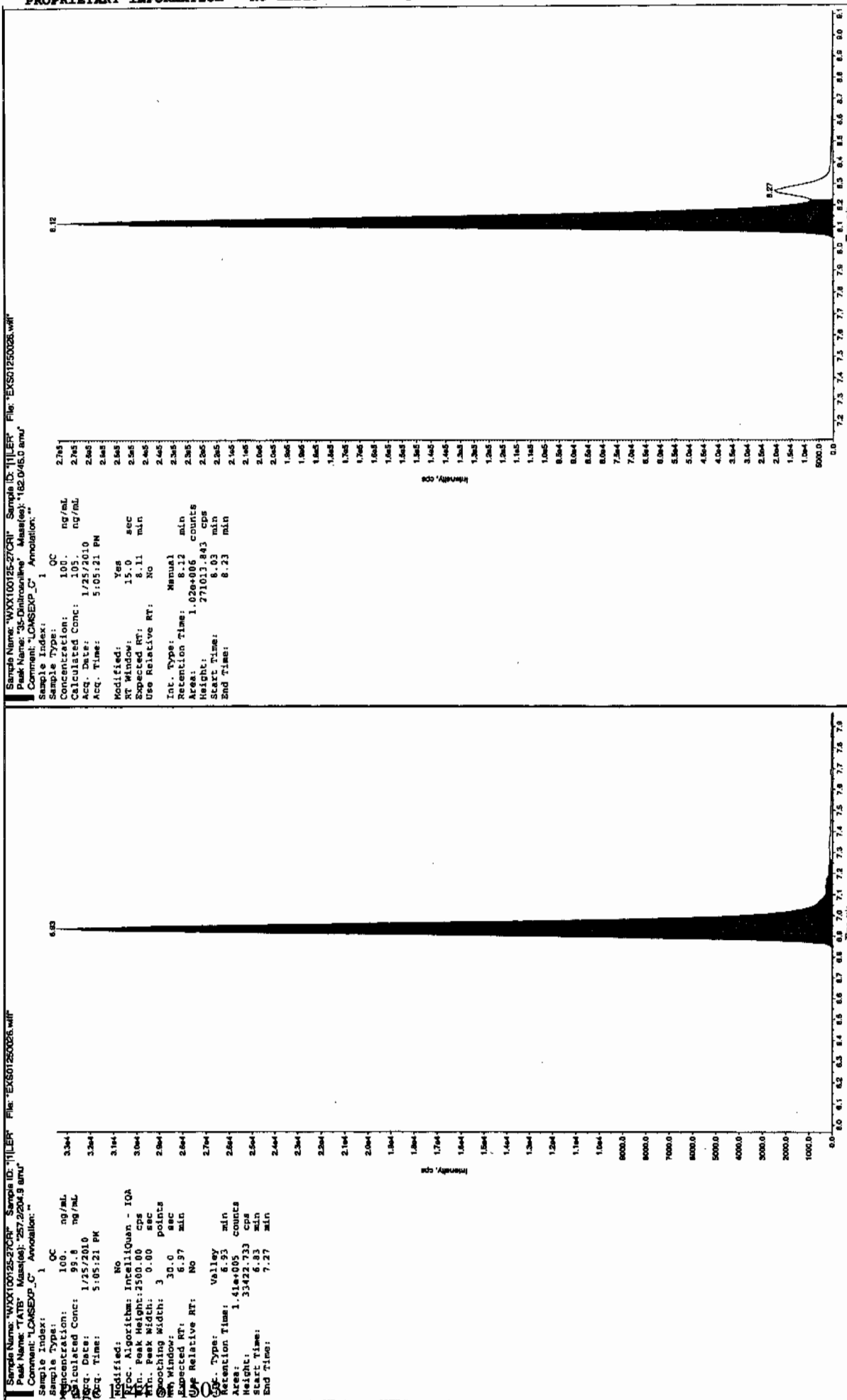
Column used to flag Recovery outside of Limits

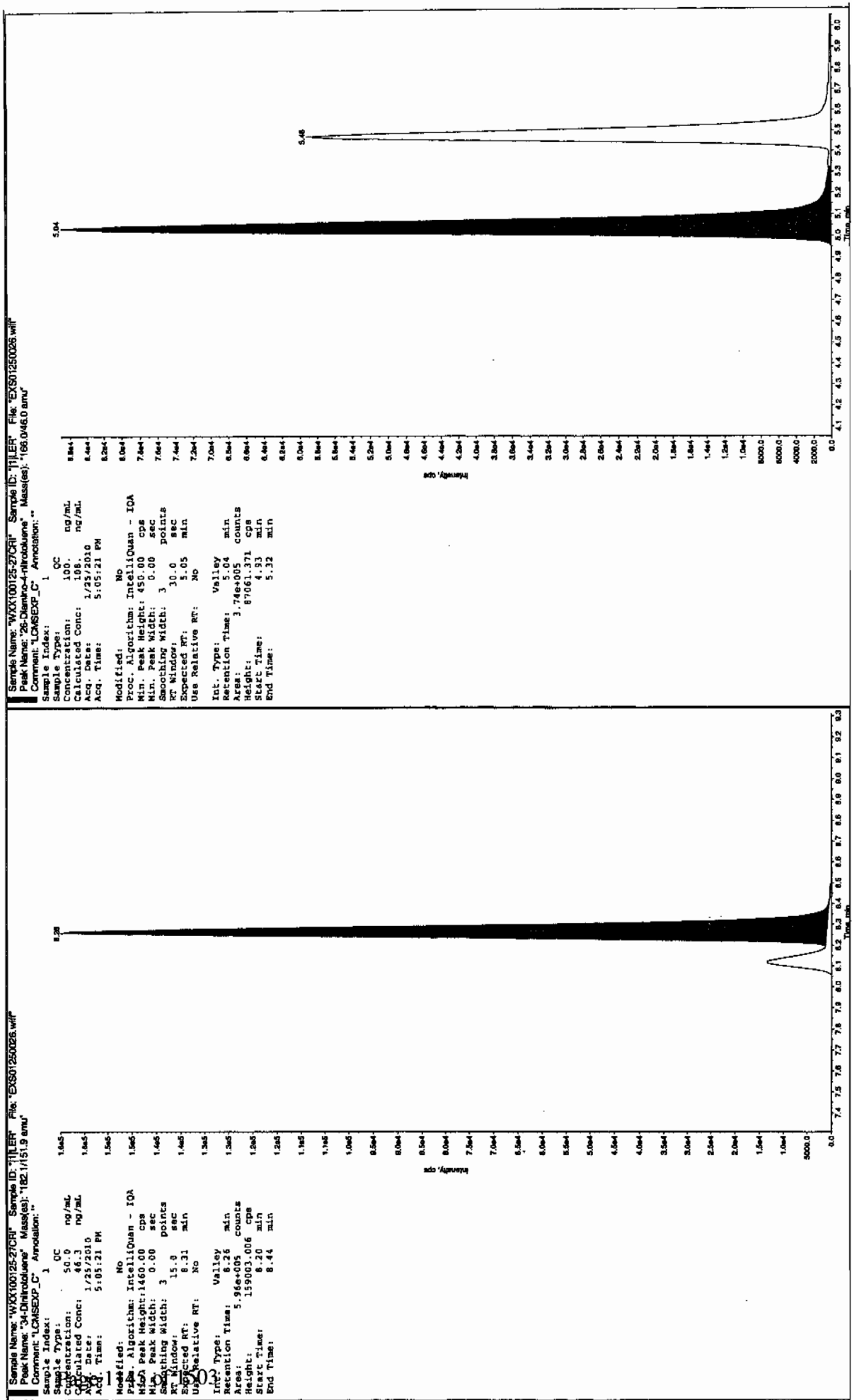
* Value outside of Recovery Limits

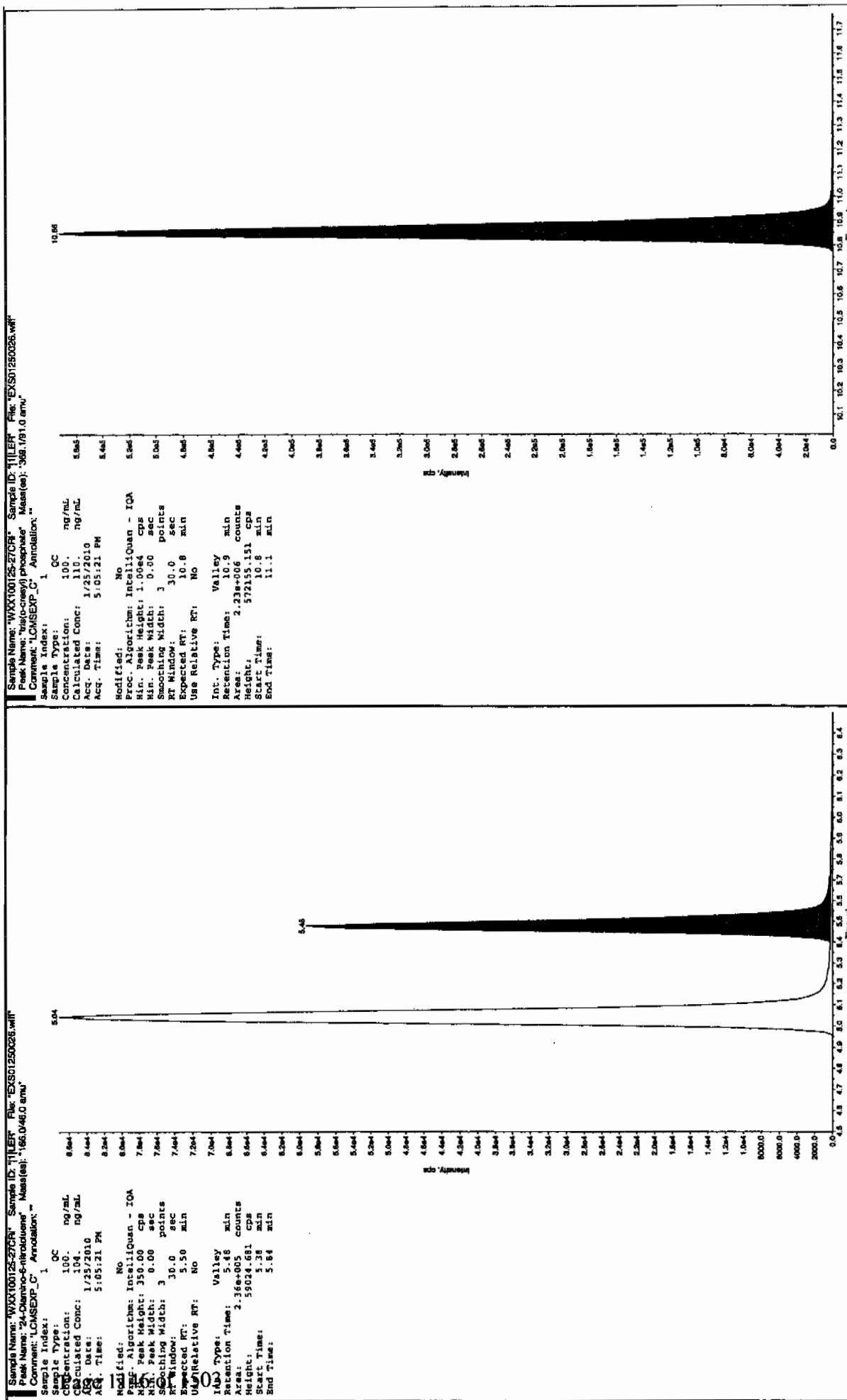
Before Scan 1127110



after scan 167/10







7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250037.wiff

Analysis Date: 25-JAN-10 19:58

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	471	94	
2,6-Diamino-4-nitrotoluene	500	433	87	
3,4-Dinitrotoluene	250	219	88	
3,5-Dinitroaniline	500	494	99	
TATB	500	508	102	
tris(o-cresyl) phosphate	500	486	97	

Recovery Limits:

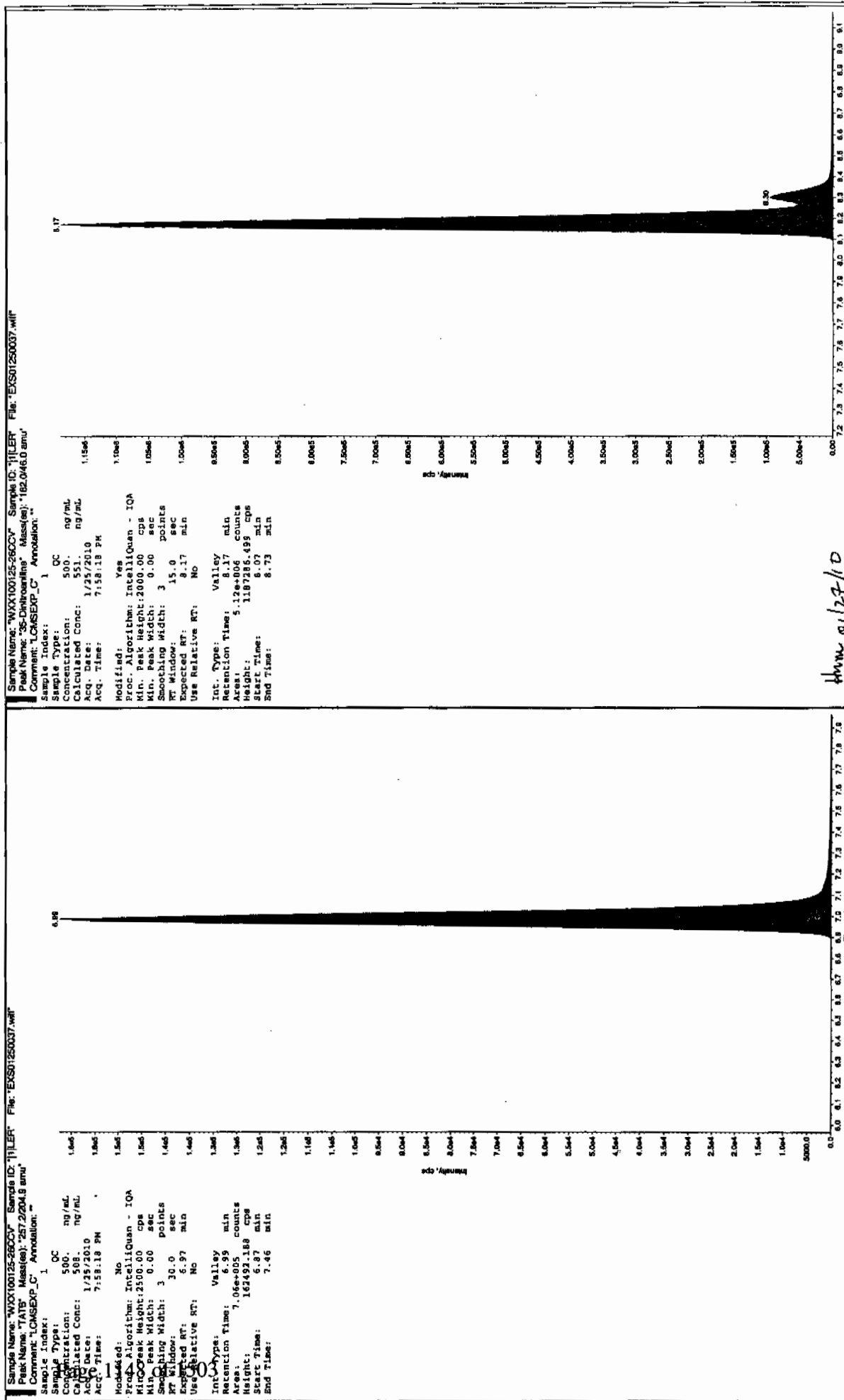
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

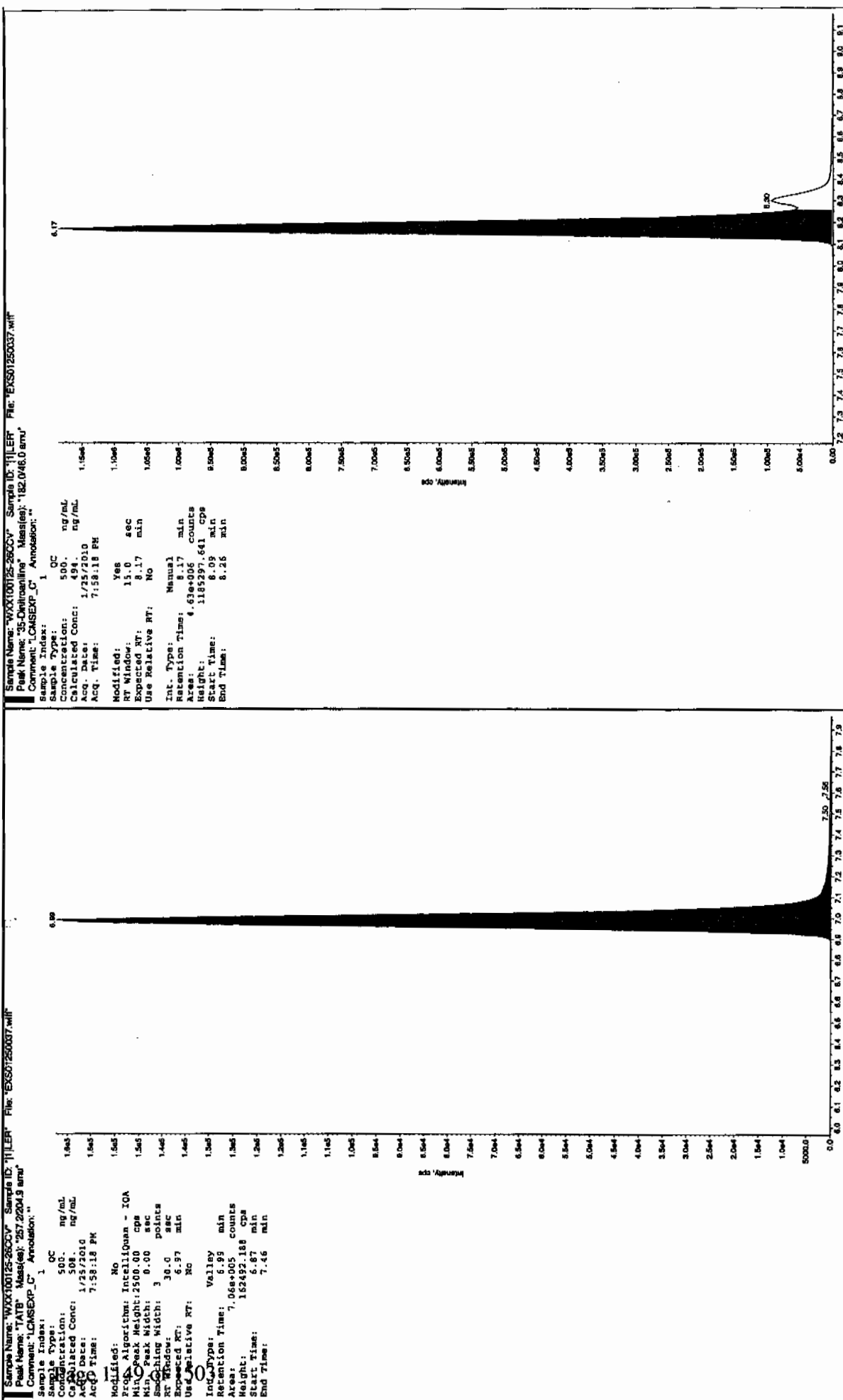
Before Run 11/27/10

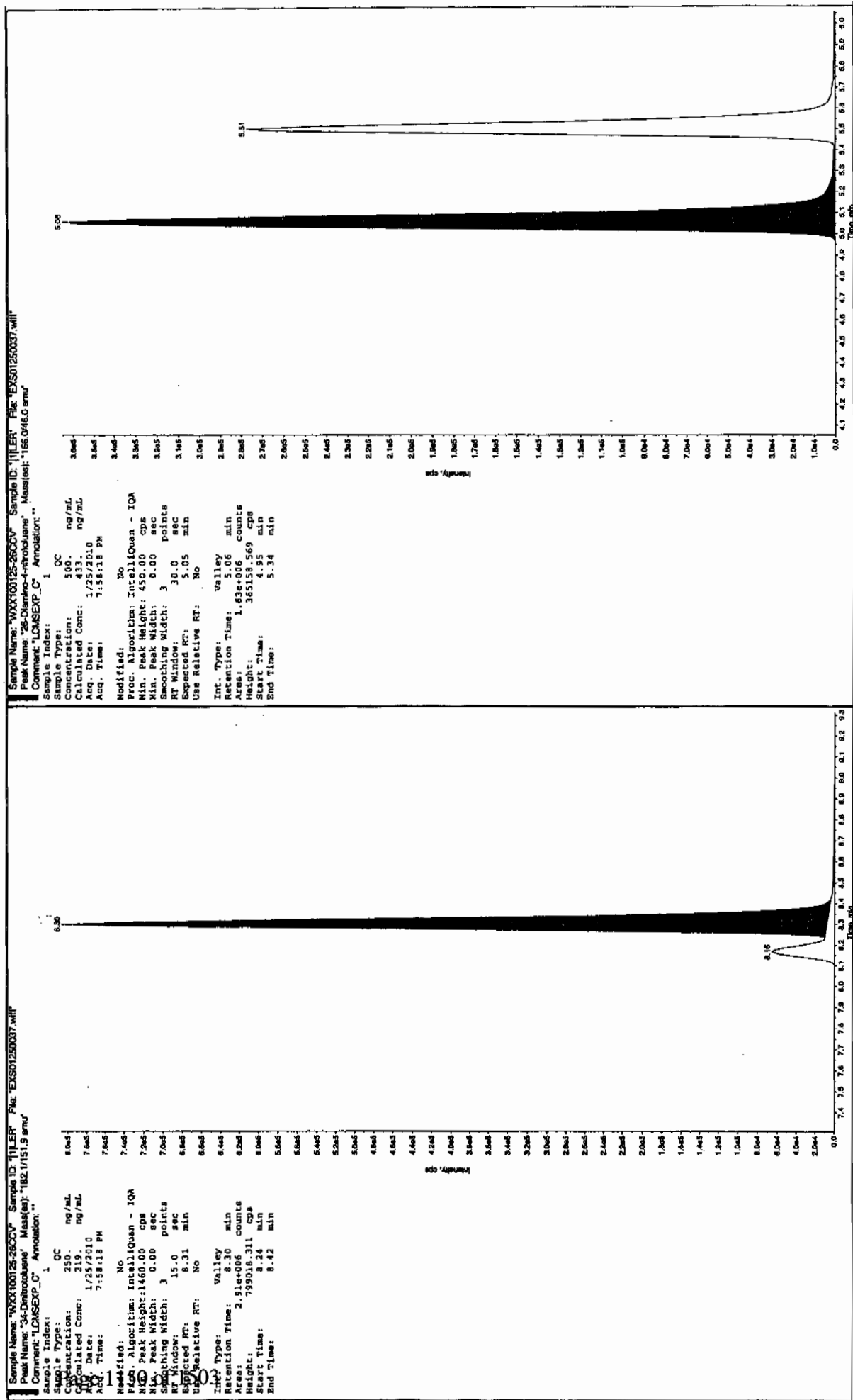


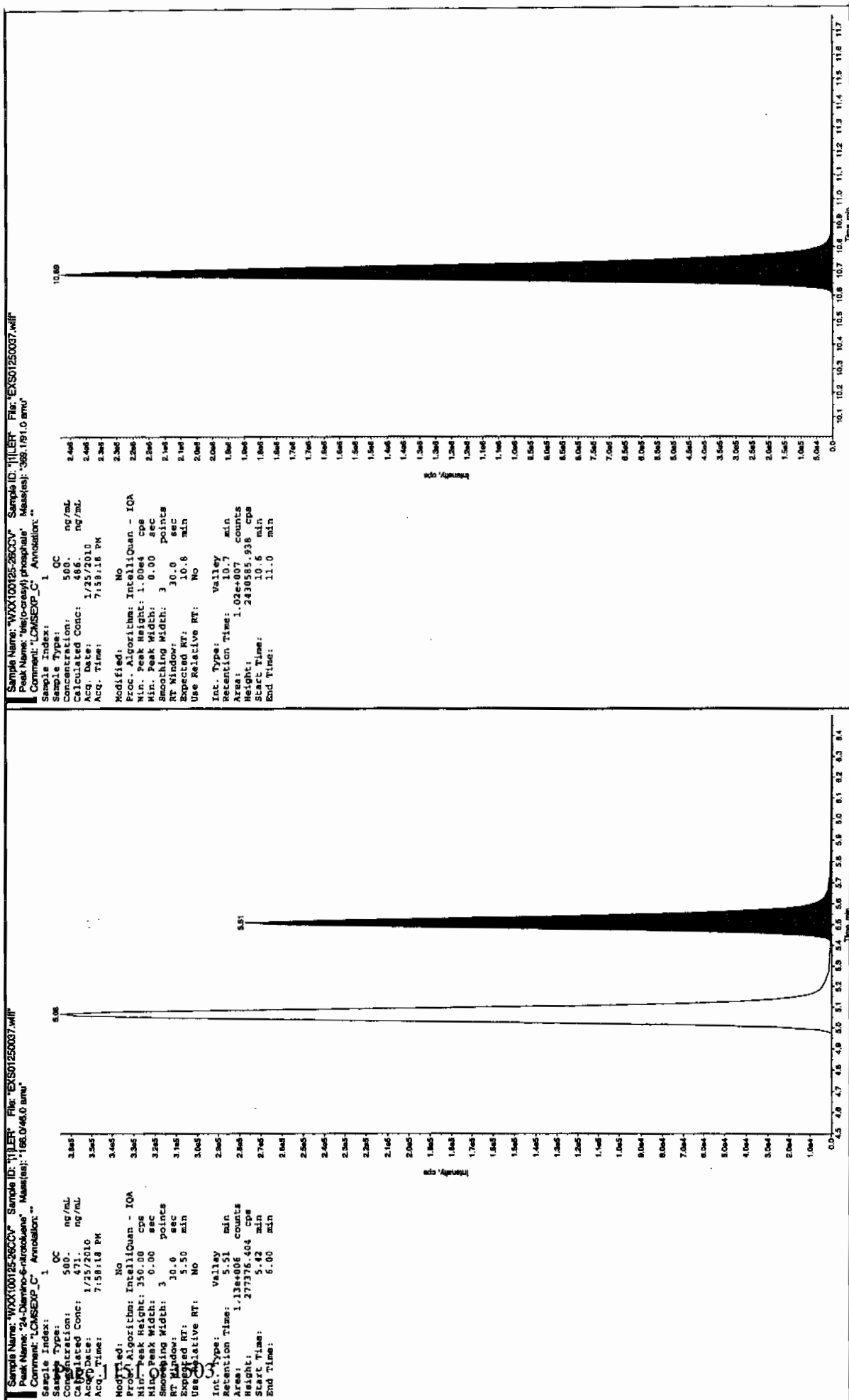
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Hum 01/27/10

after scan 1127110







7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250039.wiff

Analysis Date: 25-JAN-10 20:29

LCMSMS ID: 1358

Column ID JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	107	107	
2,6-Diamino-4-nitrotoluene	100	97.3	97	
3,4-Dinitrotoluene	50	46.6	93	
3,5-Dinitroaniline	100	104	104	
TATB	100	103	103	
tris(o-cresyl) phosphate	100	111	111	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

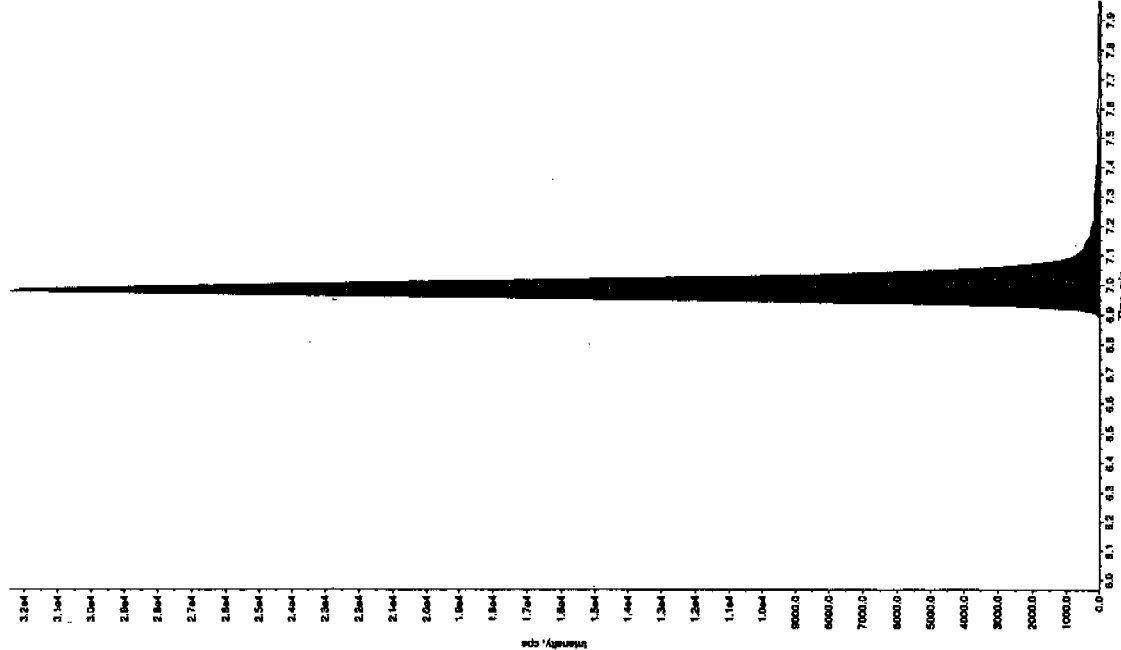
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before Jan 11/27/10

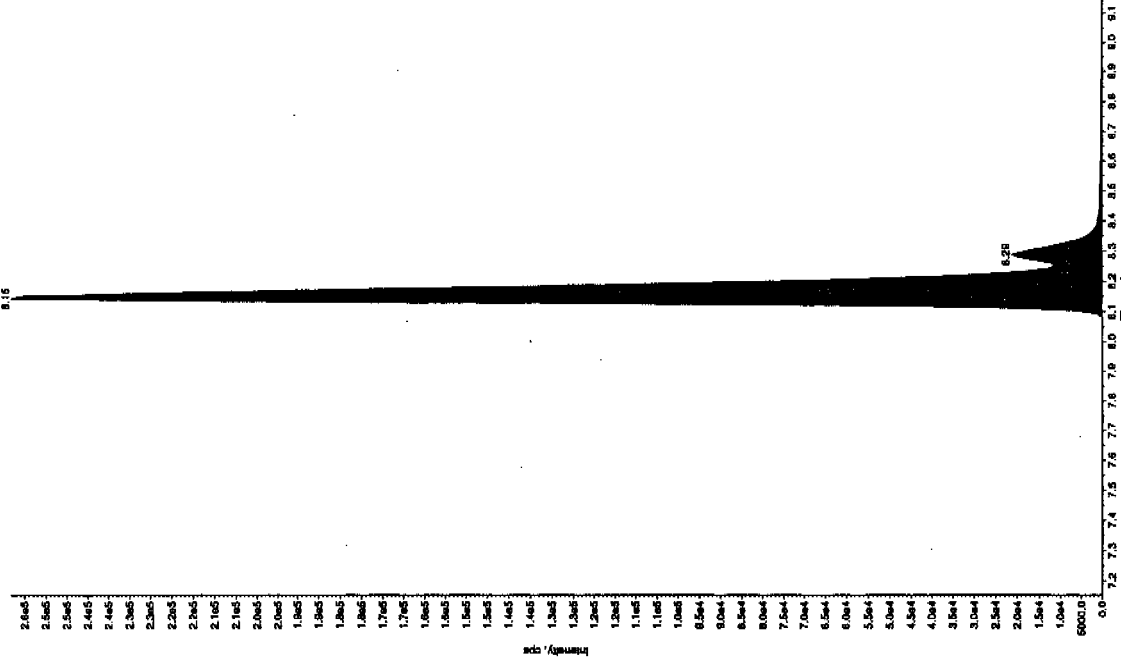
Sample Name: "WXX100125-27CR" Sample ID: "111ER" File: "EXS01250038.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 103. ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 8:29:44 PM
 Modified: No
 Proc. Algorithm: Interpolated - IOA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.98 min
 Area: 1.46e+005 counts
 Height: 3238.766 cps
 Start Time: 6.87 min
 End Time: 7.50 min



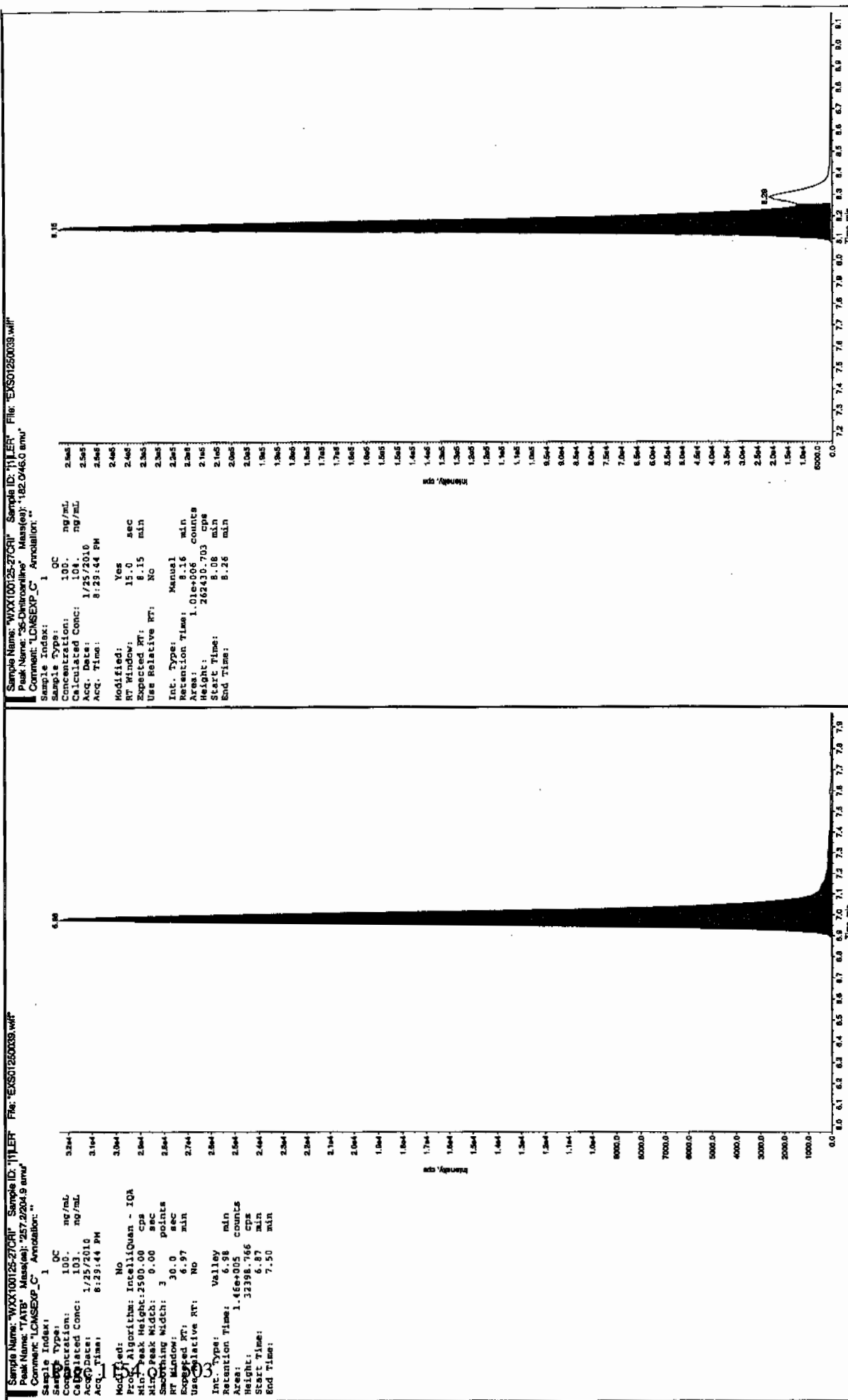
Sample Name: "WXX100125-27CR" Sample ID: "111ER" File: "EXS01250035.wif"
 Peak Name: "35-Chlorobenzene" Mass(es): "182.0465.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

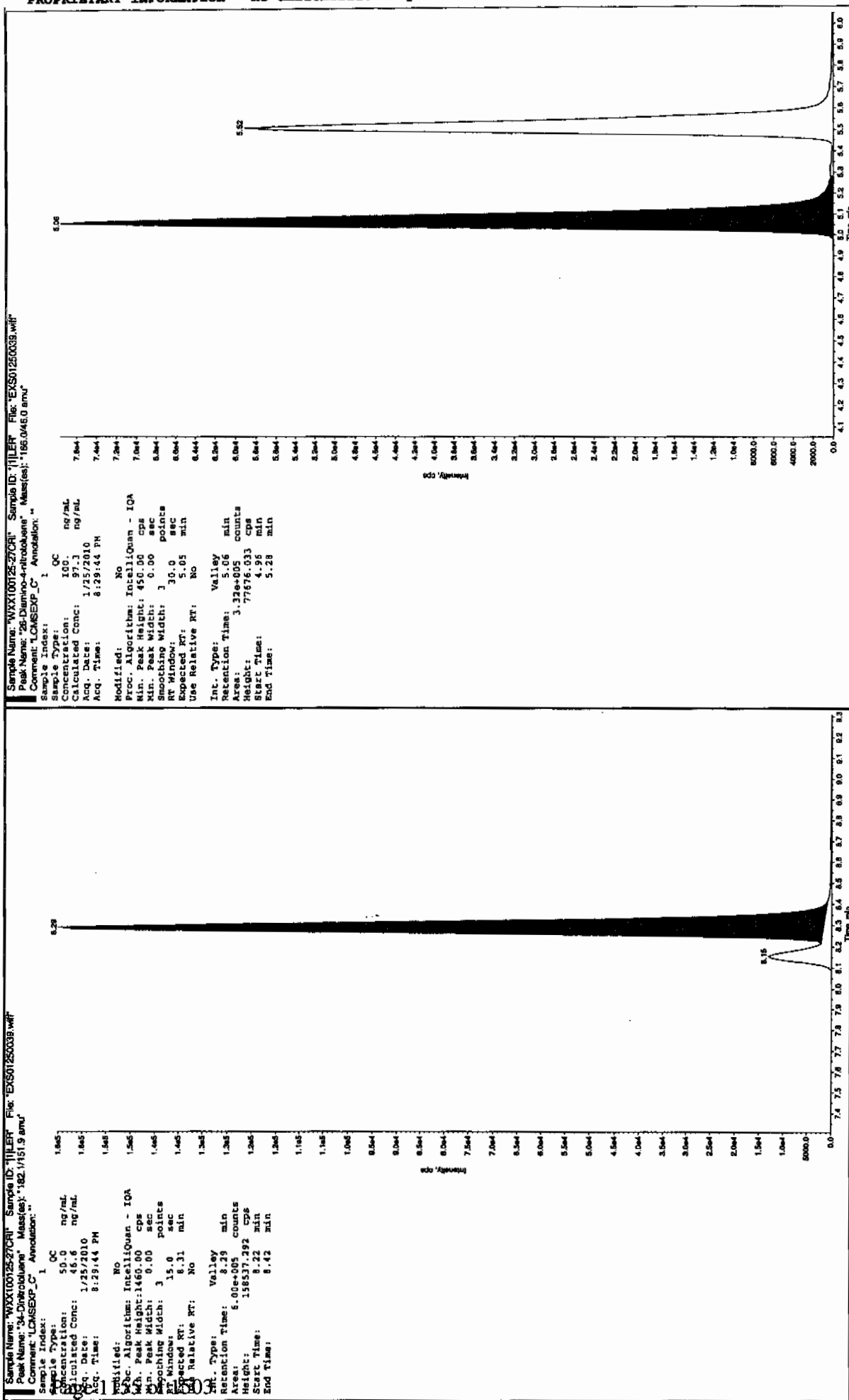
Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 114. ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 8:29:44 PM
 Modified: Yes
 Proc. Algorithm: Interpolated - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.15 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.15 min
 Area: 1.11e+006 counts
 Height: 258078.857 cps
 Start Time: 8.02 min
 End Time: 8.84 min

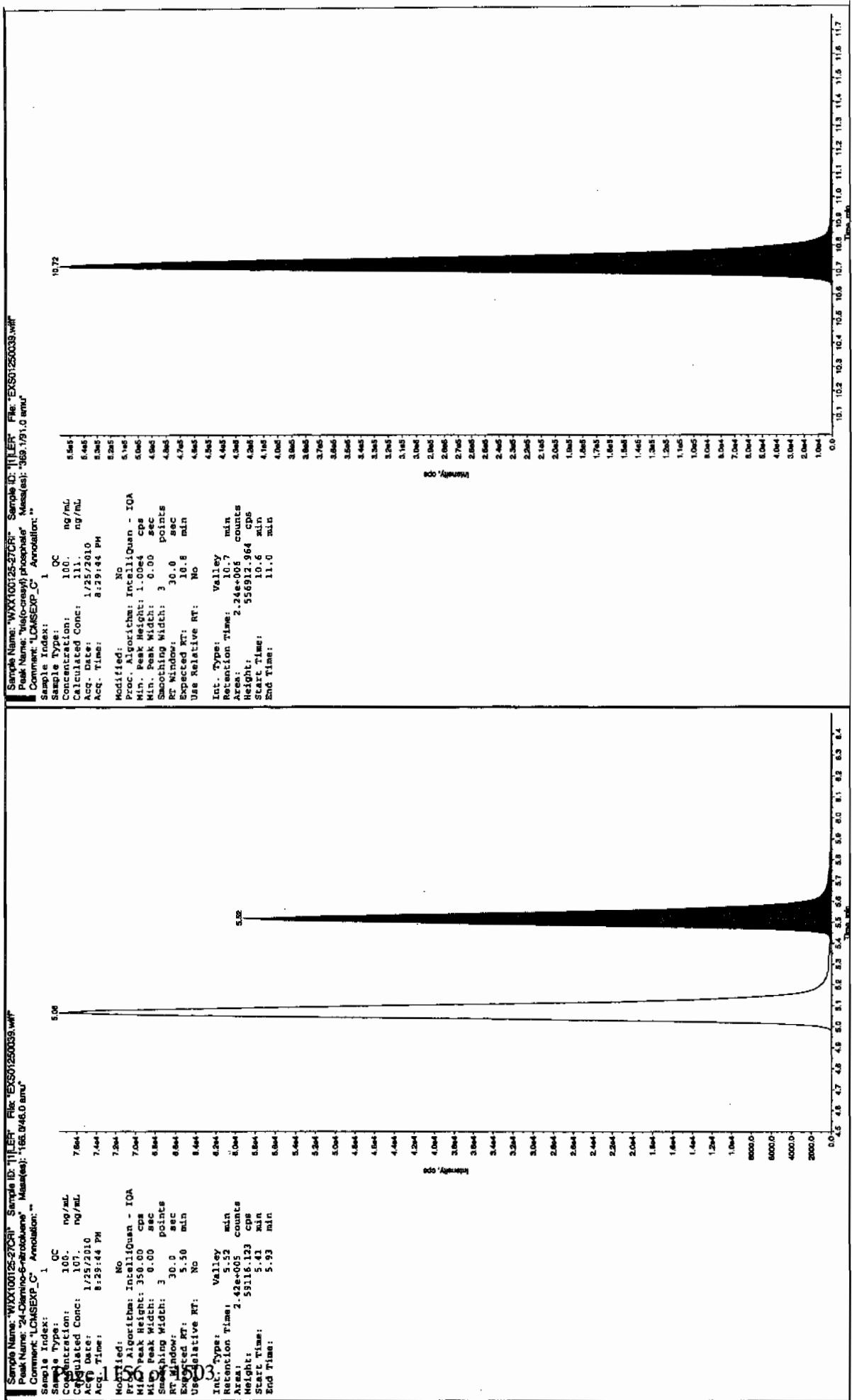


4mm.01/27/10

after 11/27/10







7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250045.wiff

Analysis Date: 25-JAN-10 22:04

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	519	104	
2,6-Diamino-4-nitrotoluene	500	503	101	
3,4-Dinitrotoluene	250	214	85	
3,5-Dinitroaniline	500	499	100	
TATB	500	482	97	
tris(o-cresyl) phosphate	500	480	96	

Recovery Limits:

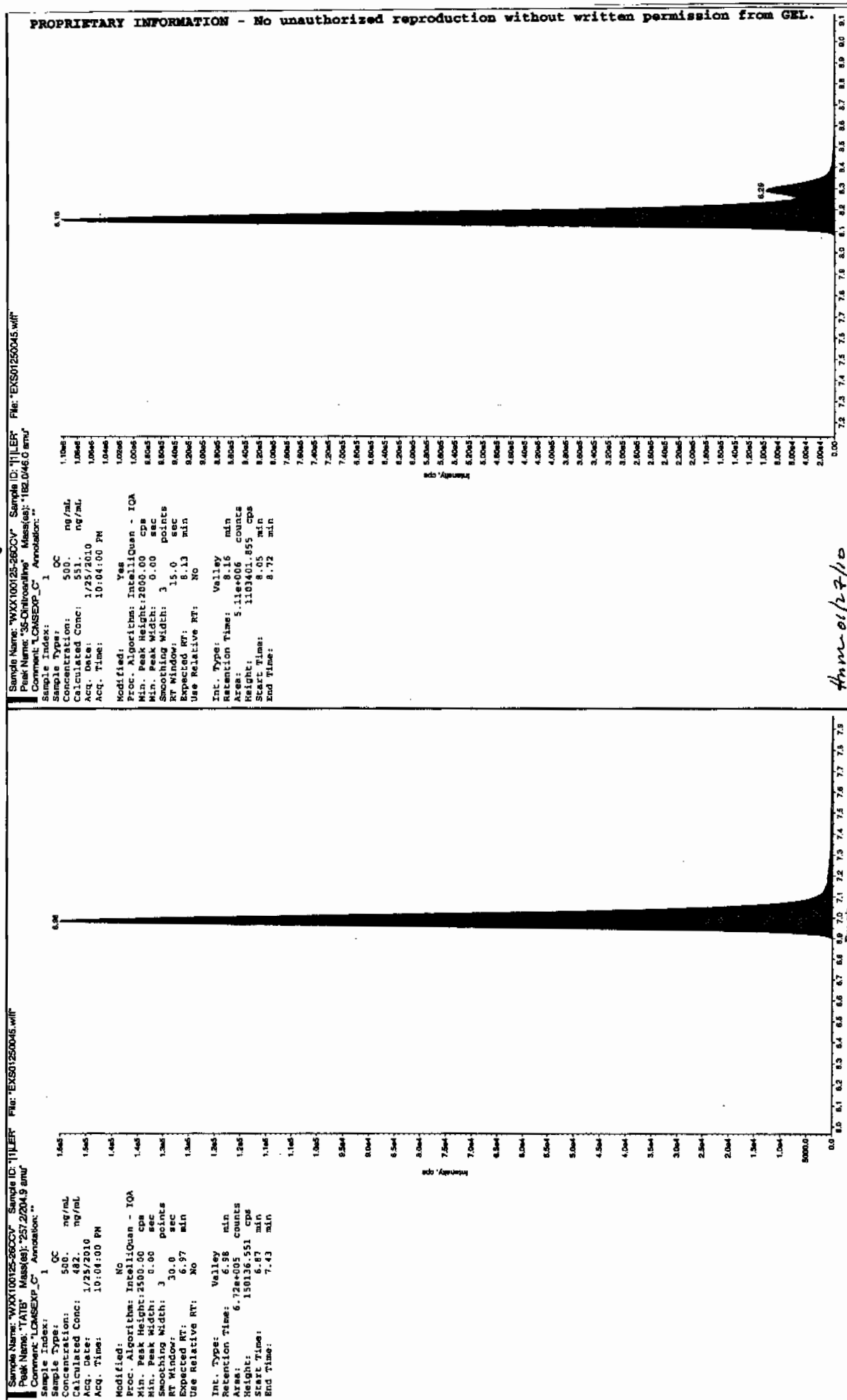
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

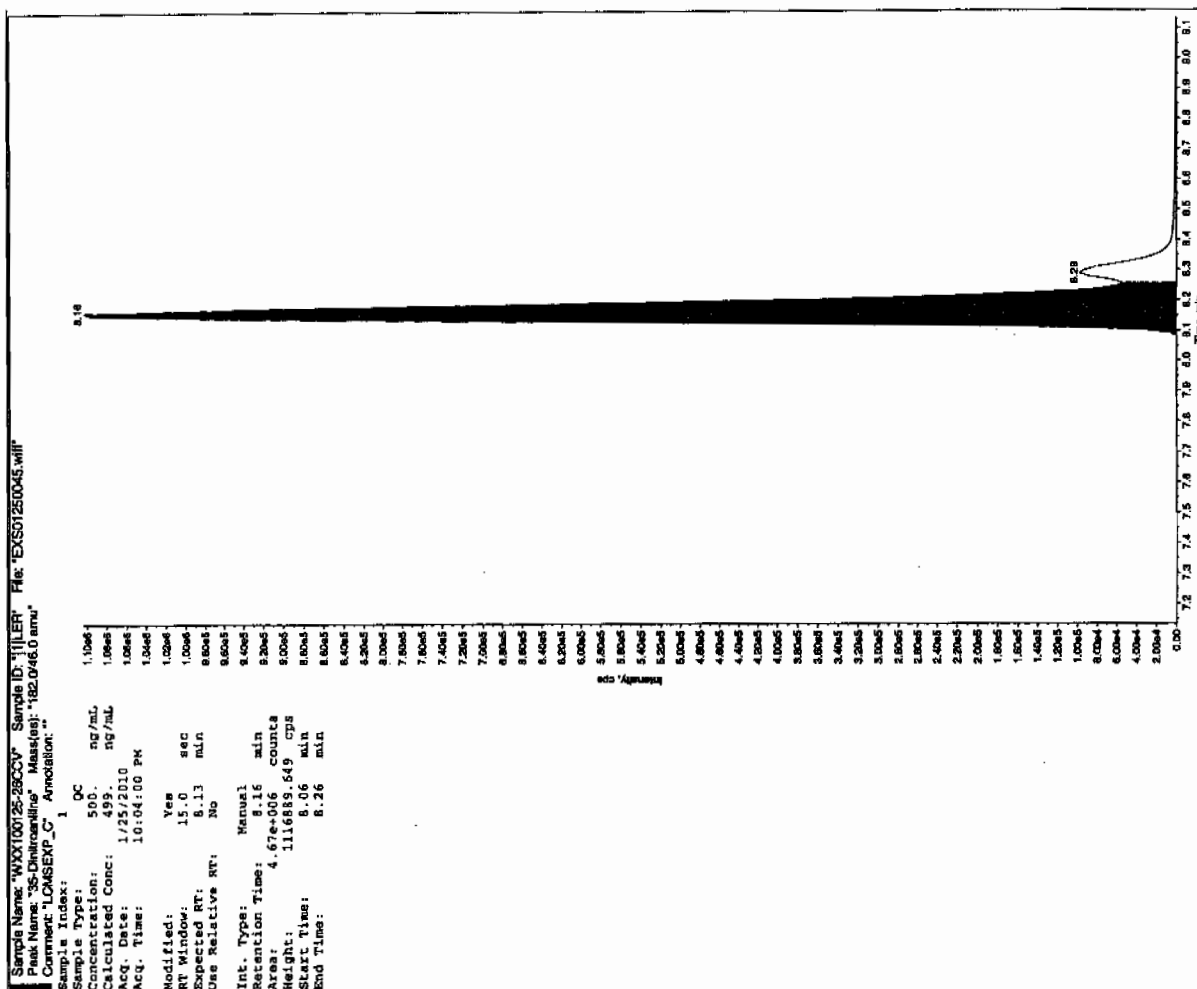
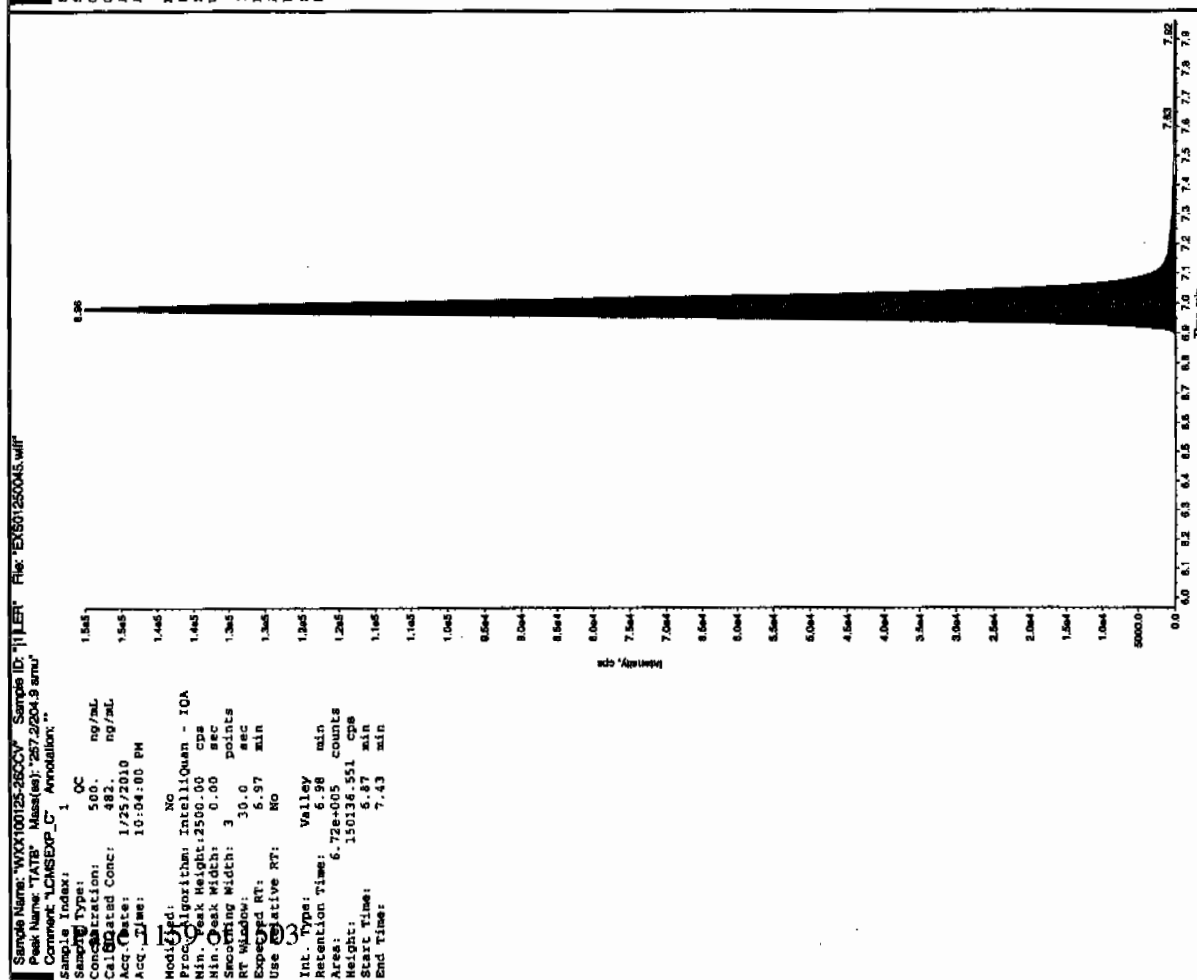
Before 12/7/10

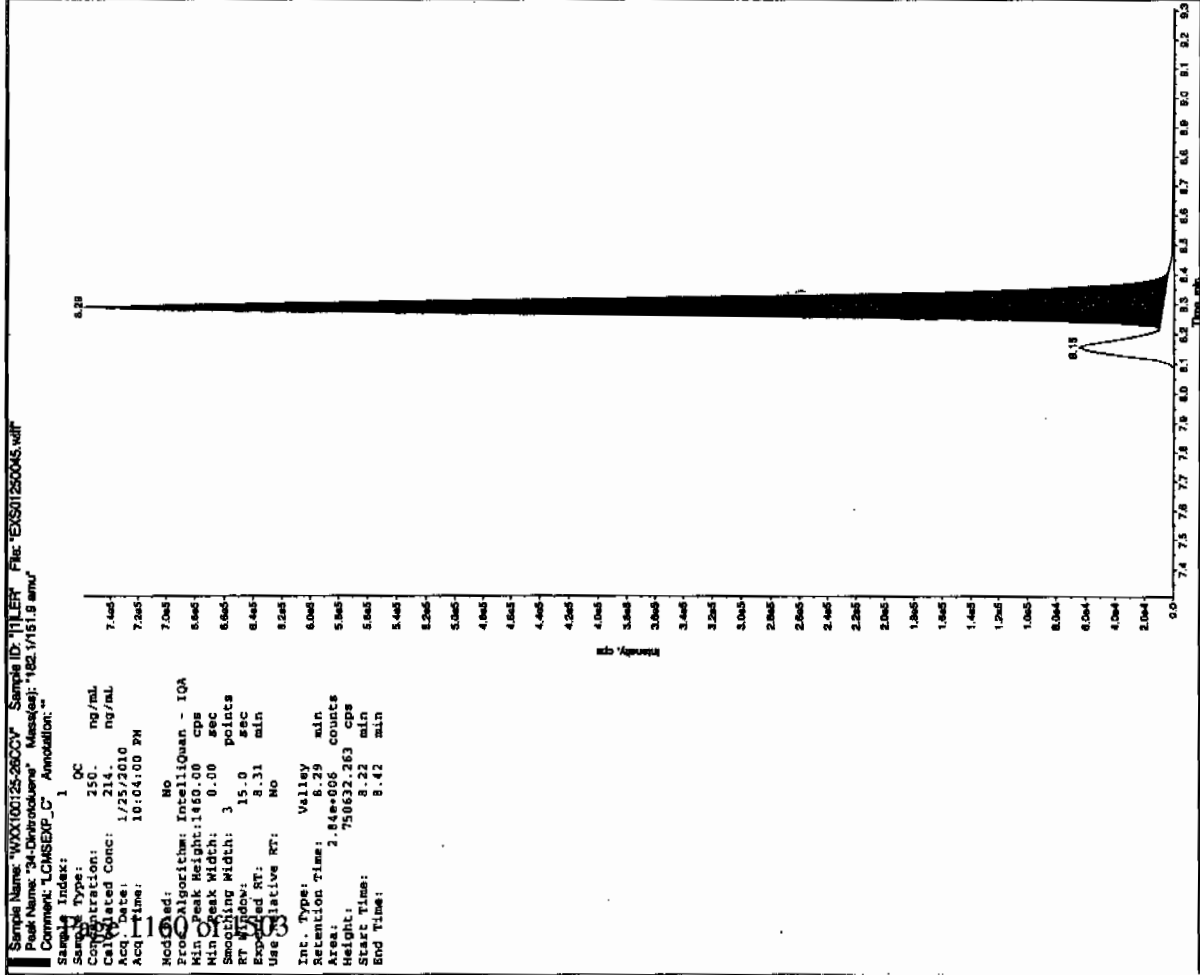


After 01/27/10

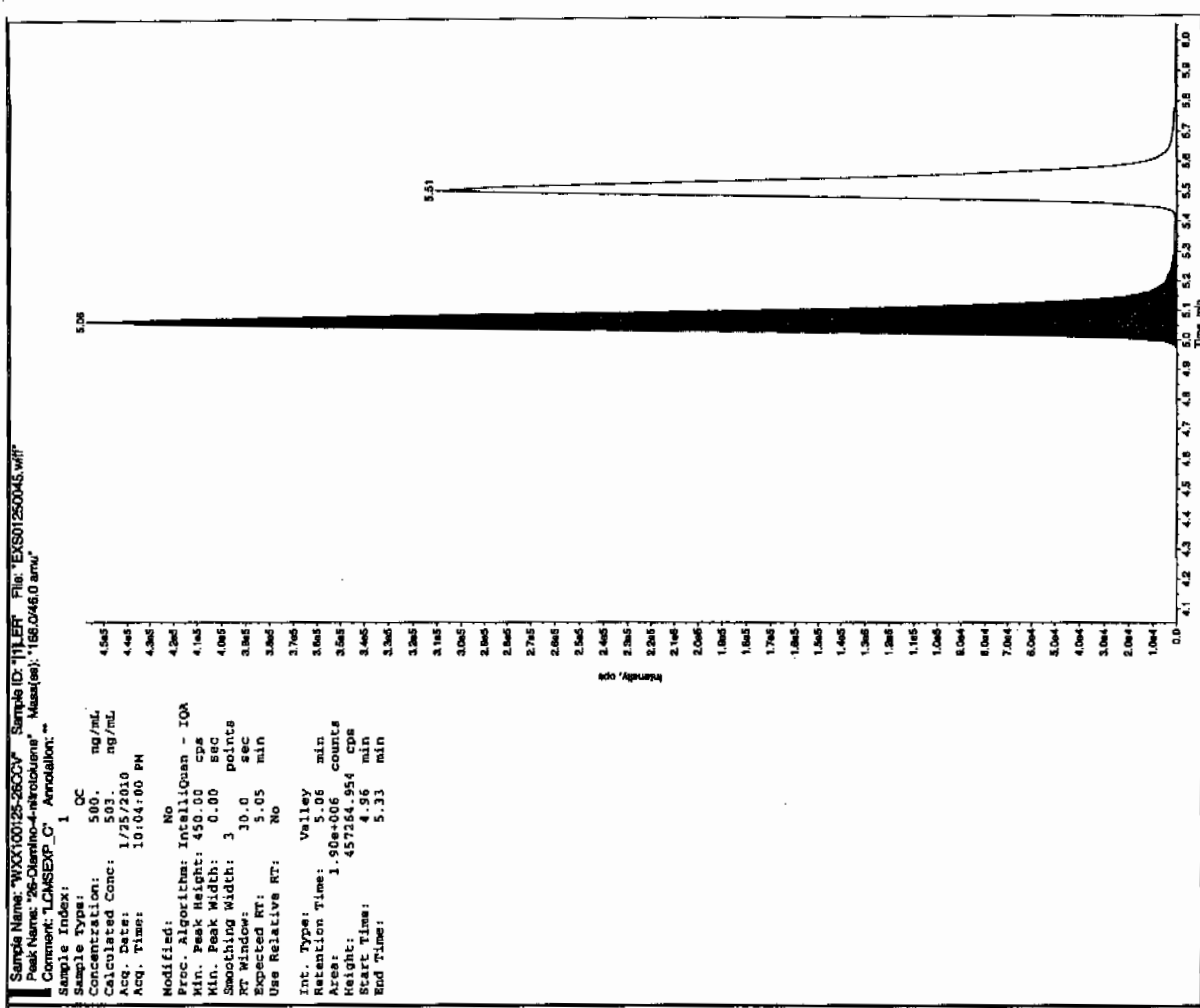
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

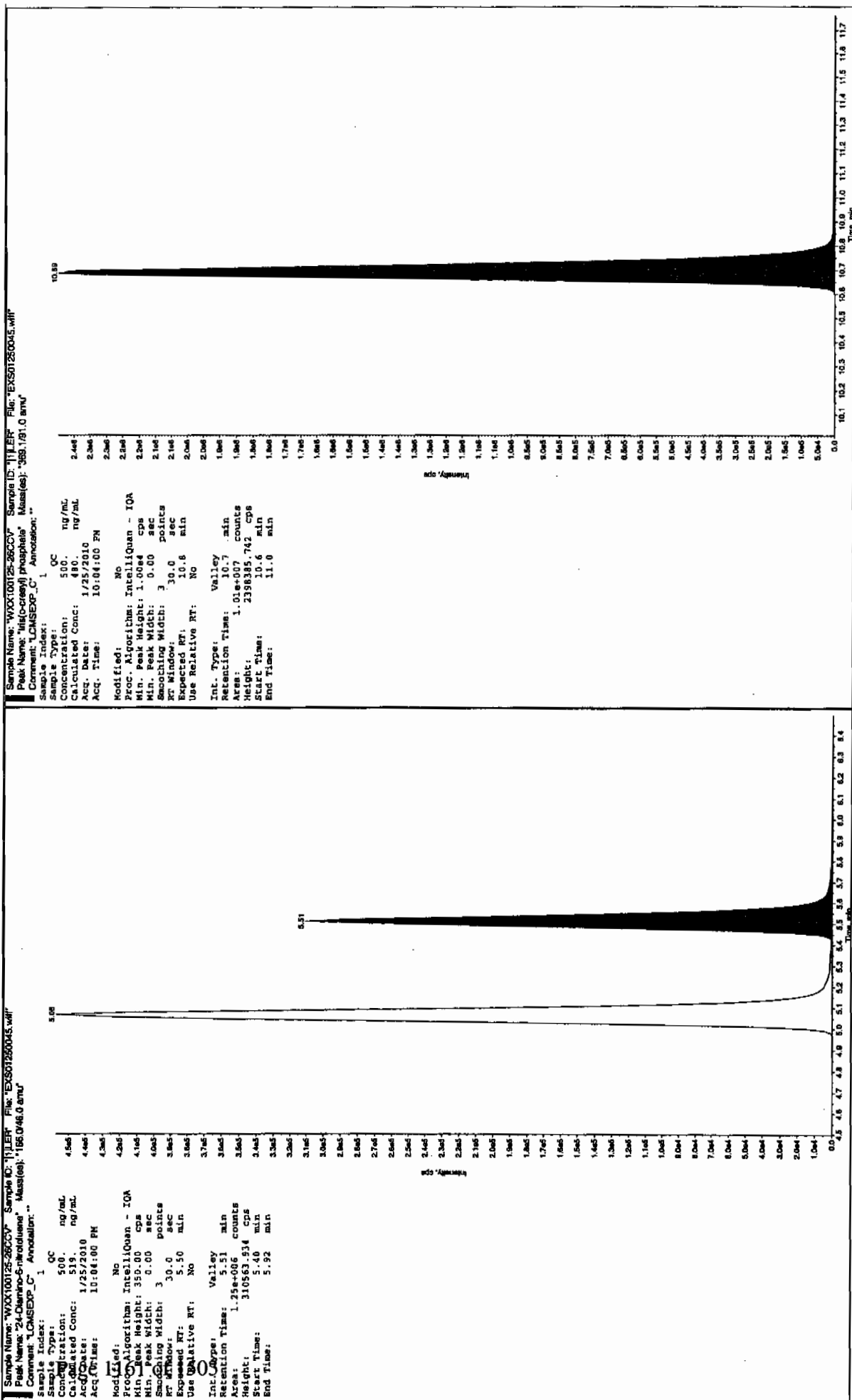
after Jan 13 2010





*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250047.wiff

Analysis Date: 25-JAN-10 22:35

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	121	121	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.2	96	
3,5-Dinitroaniline	100	102	102	
TATB	100	101	101	
tris(o-cresyl) phosphate	100	113	113	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

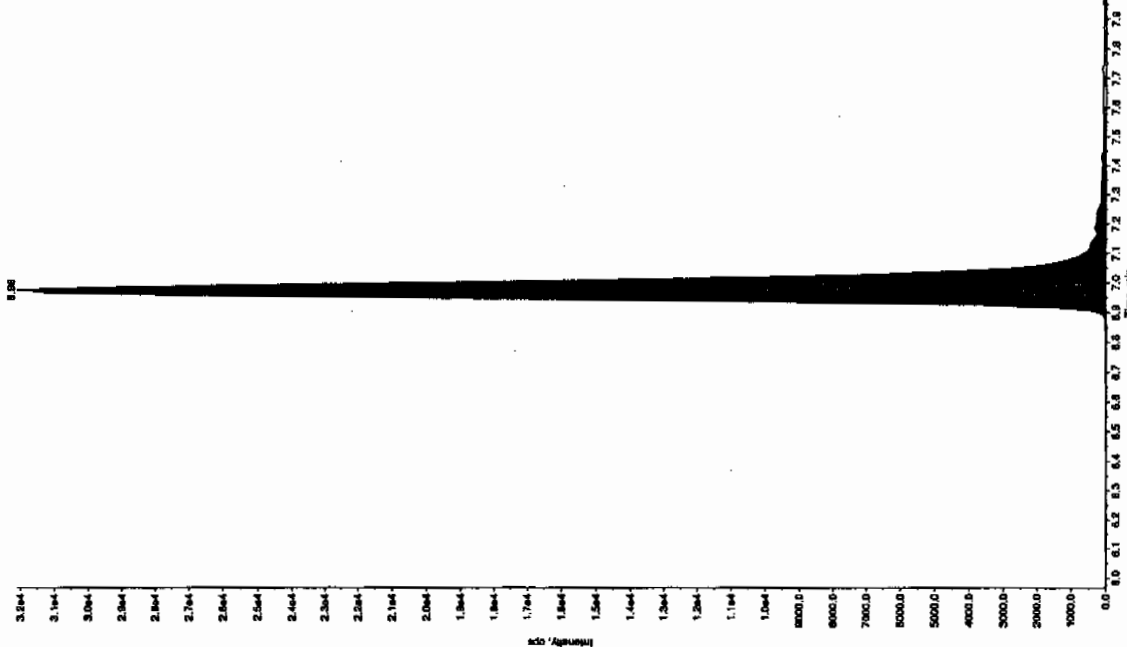
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 1/27/10

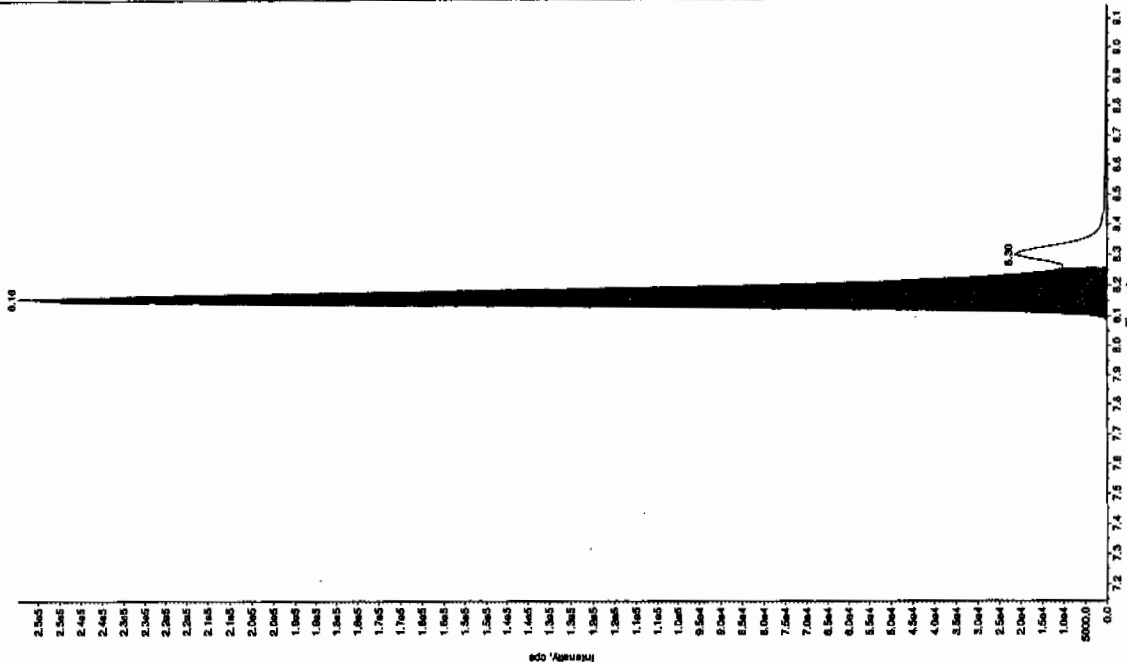
Sample Name: "WXX100125-27CR" Sample ID: "JILLER" File: "EX601250047.wif"
 Peak Name: "TATB" Mass(es): "257.2704.9 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100 ng/mL
 Calculated Conc: 101 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:35:24 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.98 min
 Area: 1.42e+005 counts
 Height: 32080.544 cps
 Start Time: 6.85 min
 End Time: 7.58 min

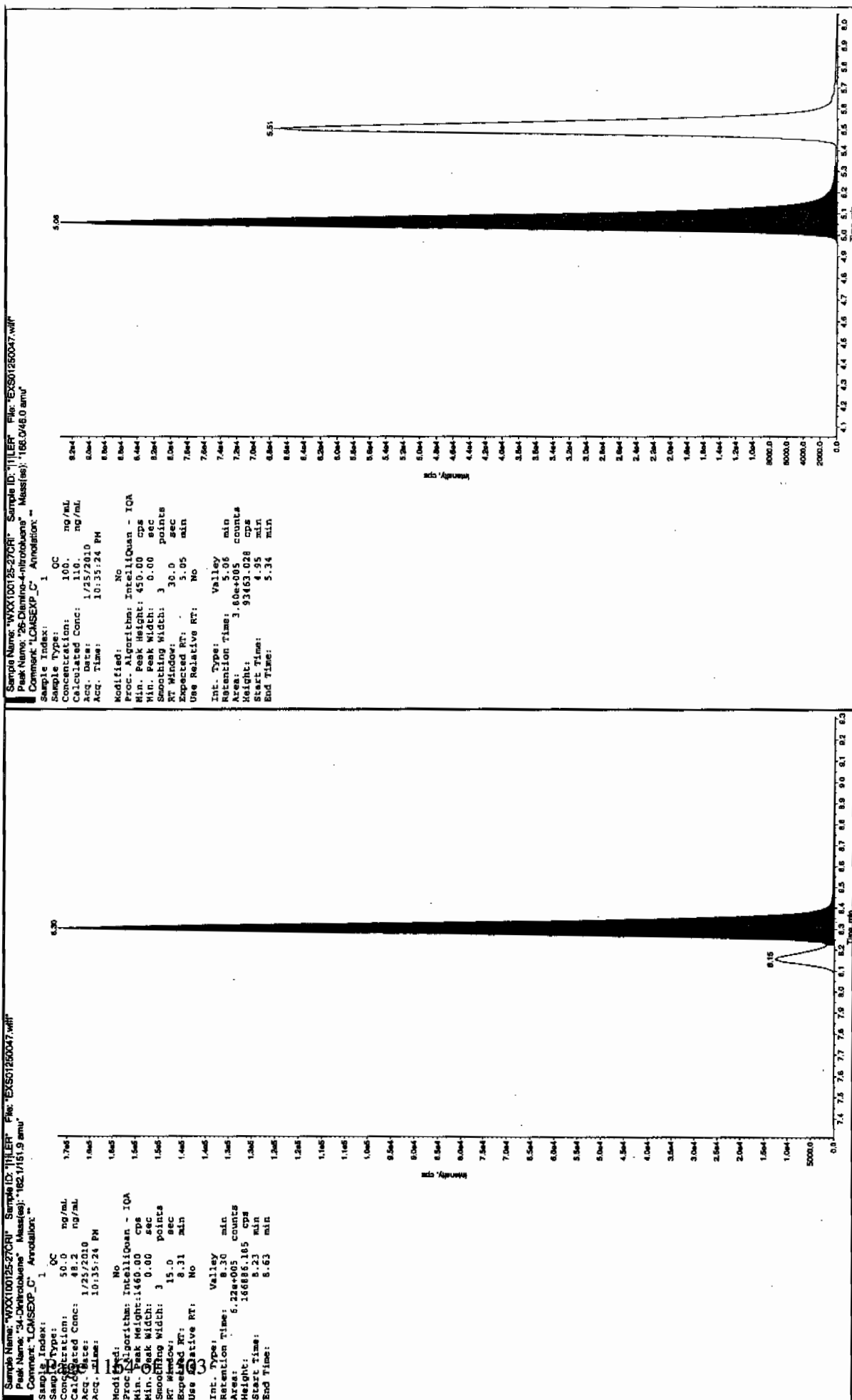


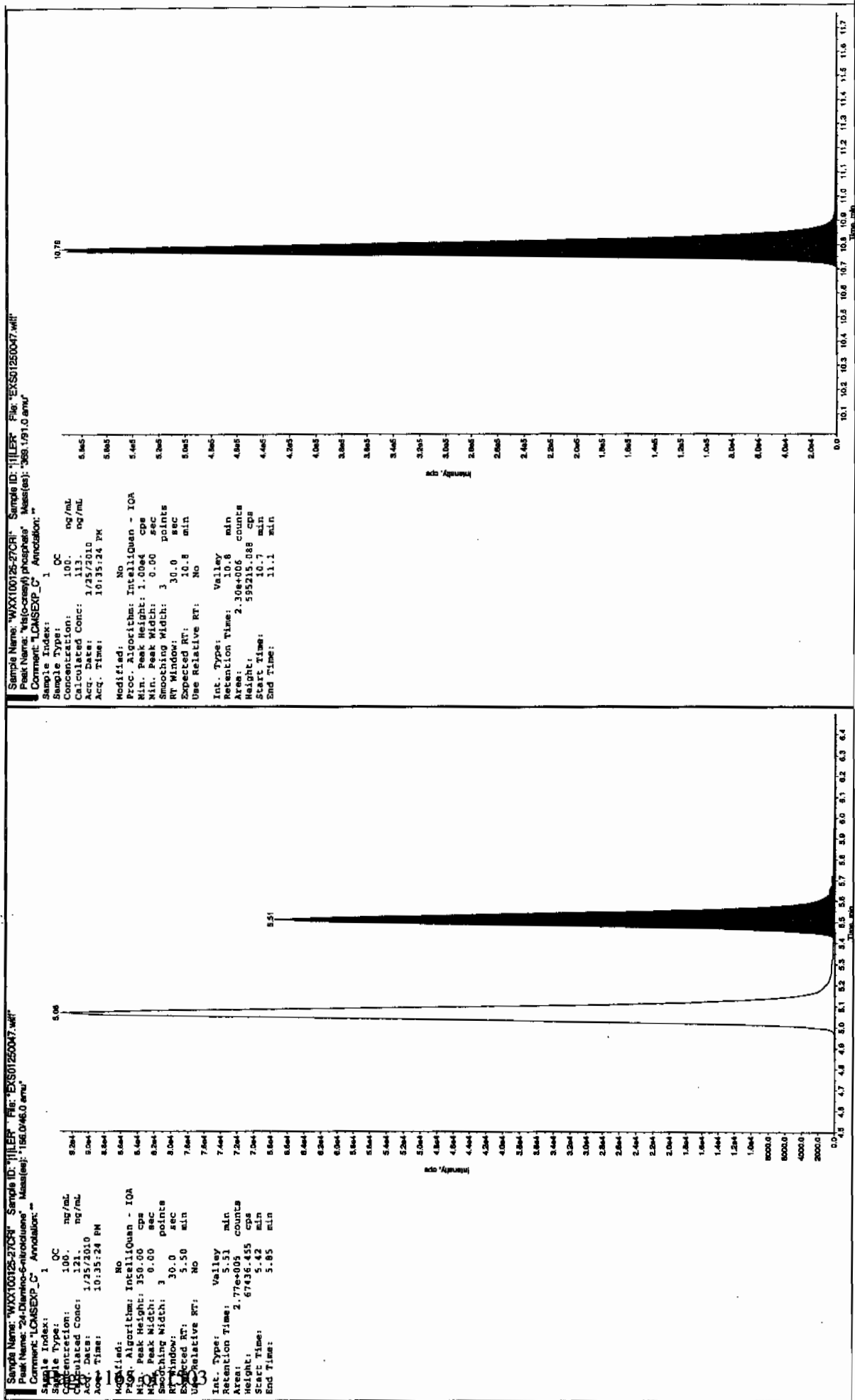
Sample Name: "WXX100125-27CR" Sample ID: "JILLER" File: "EX601250047.wif"
 Peak Name: "35-Dinitroresin" Mass(es): "182.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100 ng/mL
 Calculated Conc: 101 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 10:35:24 PM
 Modified: Yes
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.16 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.16 min
 Area: 9.95e+005 counts
 Height: 254754.374 cps
 Start Time: 8.07 min
 End Time: 8.26 min



1/27/10





7A

Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250058.wiff

Analysis Date: 26-JAN-10 01:28

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	510	102	
2,6-Diamino-4-nitrotoluene	500	472	95	
3,4-Dinitrotoluene	250	227	91	
3,5-Dinitroaniline	500	493	99	
TATB	500	507	101	
tris(o-cresyl) phosphate	500	483	97	

Recovery Limits:

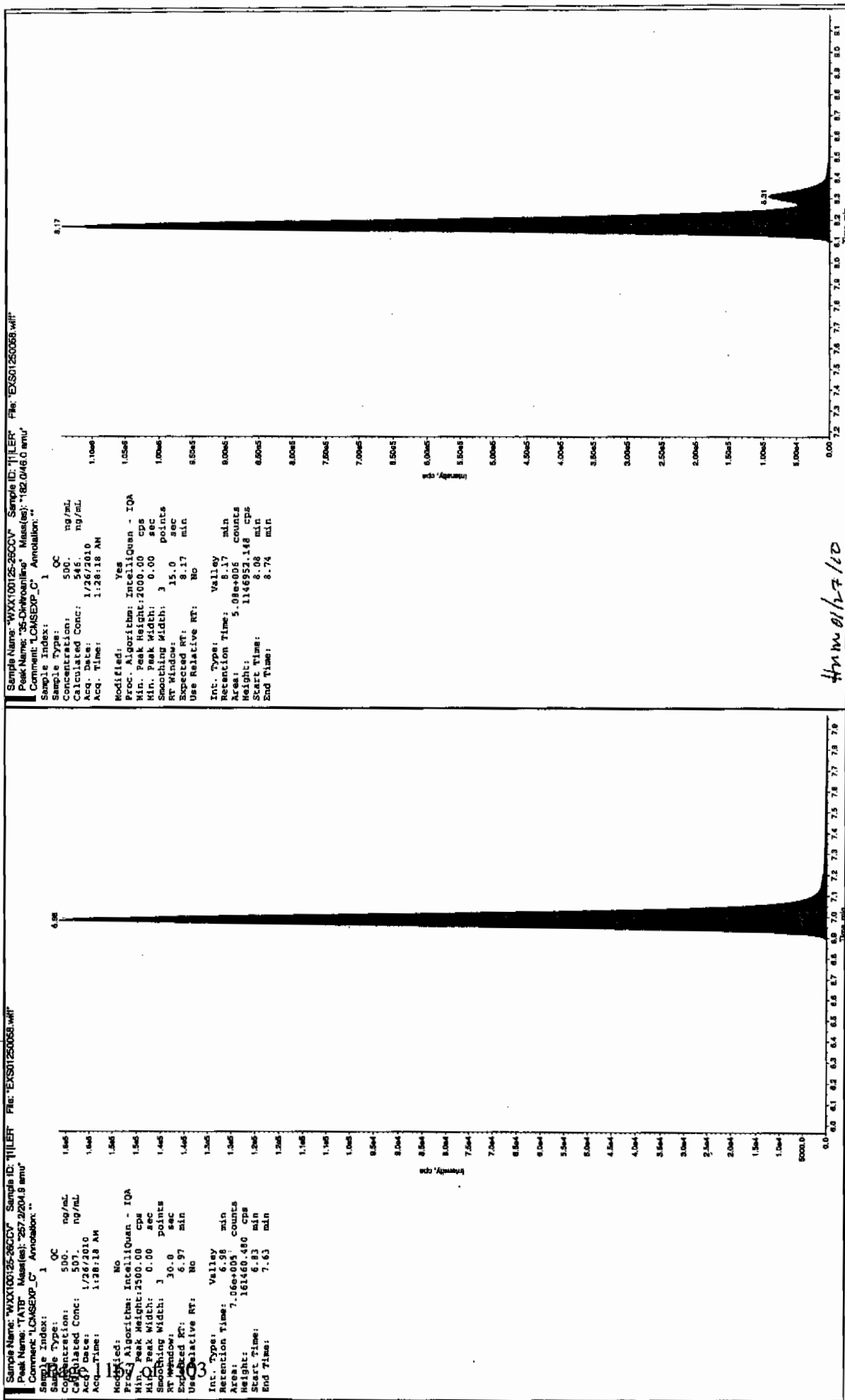
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

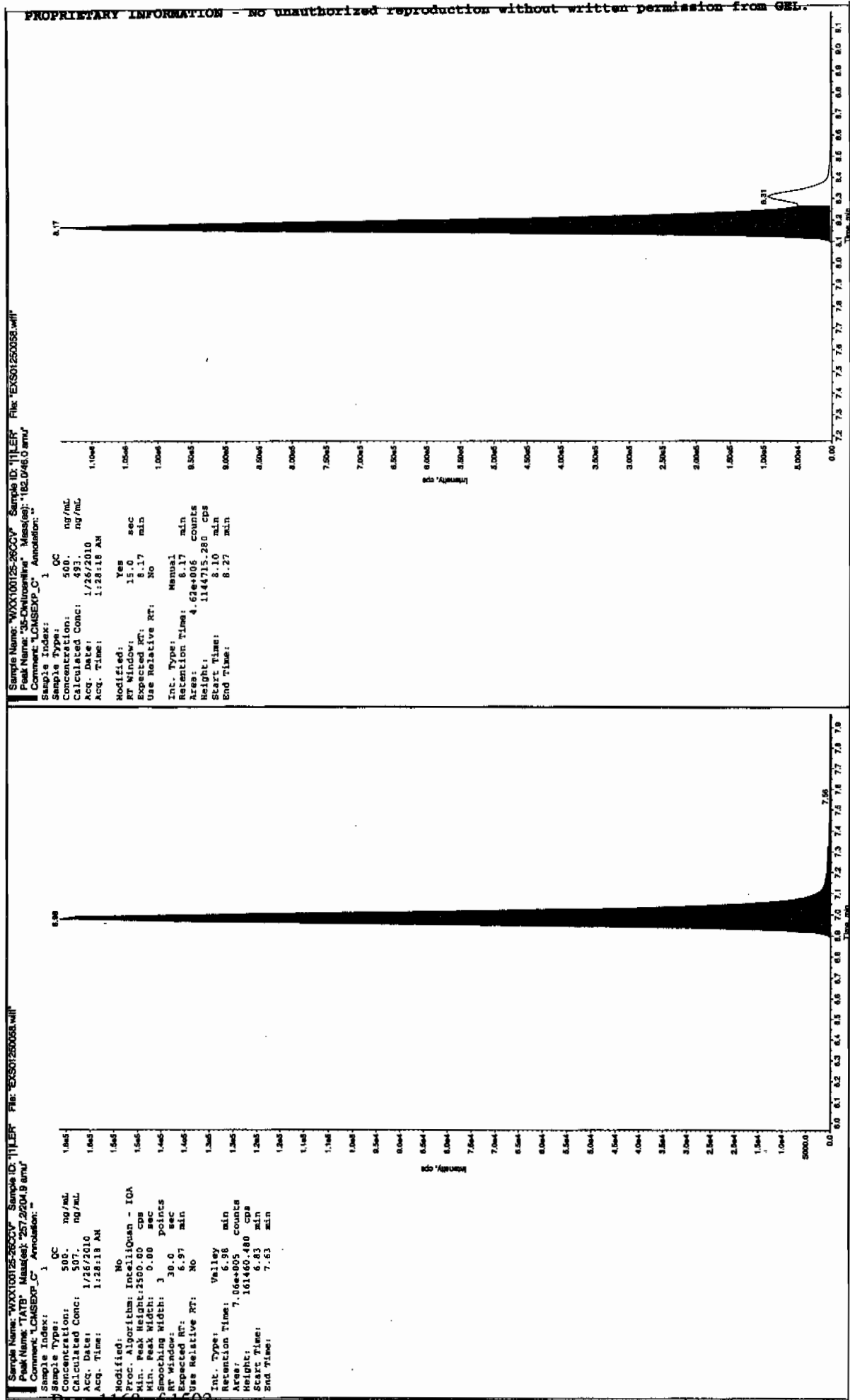
* Value outside of Recovery Limits

Before Scan 1127110

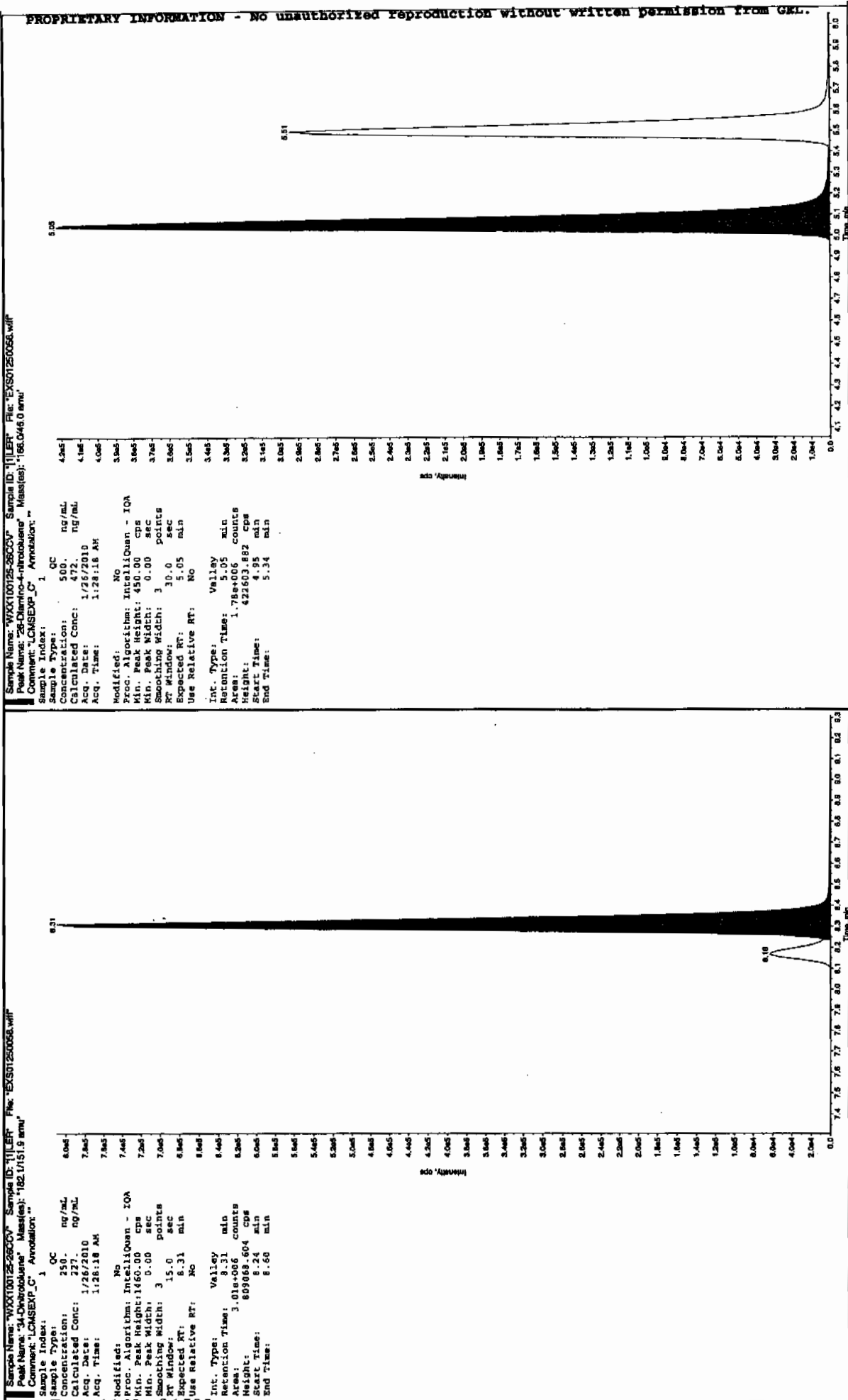


4/11/10 1/27/10

after Jan 11/27/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

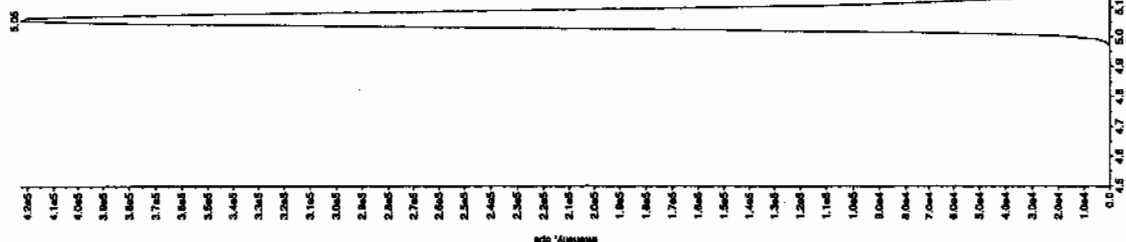
Sample Name: "WXX100125-250CV" Sample ID: "11LRF" File: "EX501250058.wif"
 Peak Name: "Is(iso-creyl) phosphate" Mass(es): "399.171.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 483. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 1:28:18 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.0e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.7 min
 Area: 1.01e+007 counts
 Height: 2359059.570 cps
 Start Time: 10.6 min
 End Time: 11.0 min



Sample Name: "WXX100125-250CV" Sample ID: "11LRF" File: "EX501250058.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "168.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 510. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 1:28:18 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.50 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.51 min
 Area: 1.21e+008 counts
 Height: 294758.667 cps
 Start Time: 5.41 min
 End Time: 6.00 min



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250060.wiff

Analysis Date: 26-JAN-10 01:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	111	111	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	47.7	95	
3,5-Dinitroaniline	100	103	103	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	112	112	

Recovery Limits:

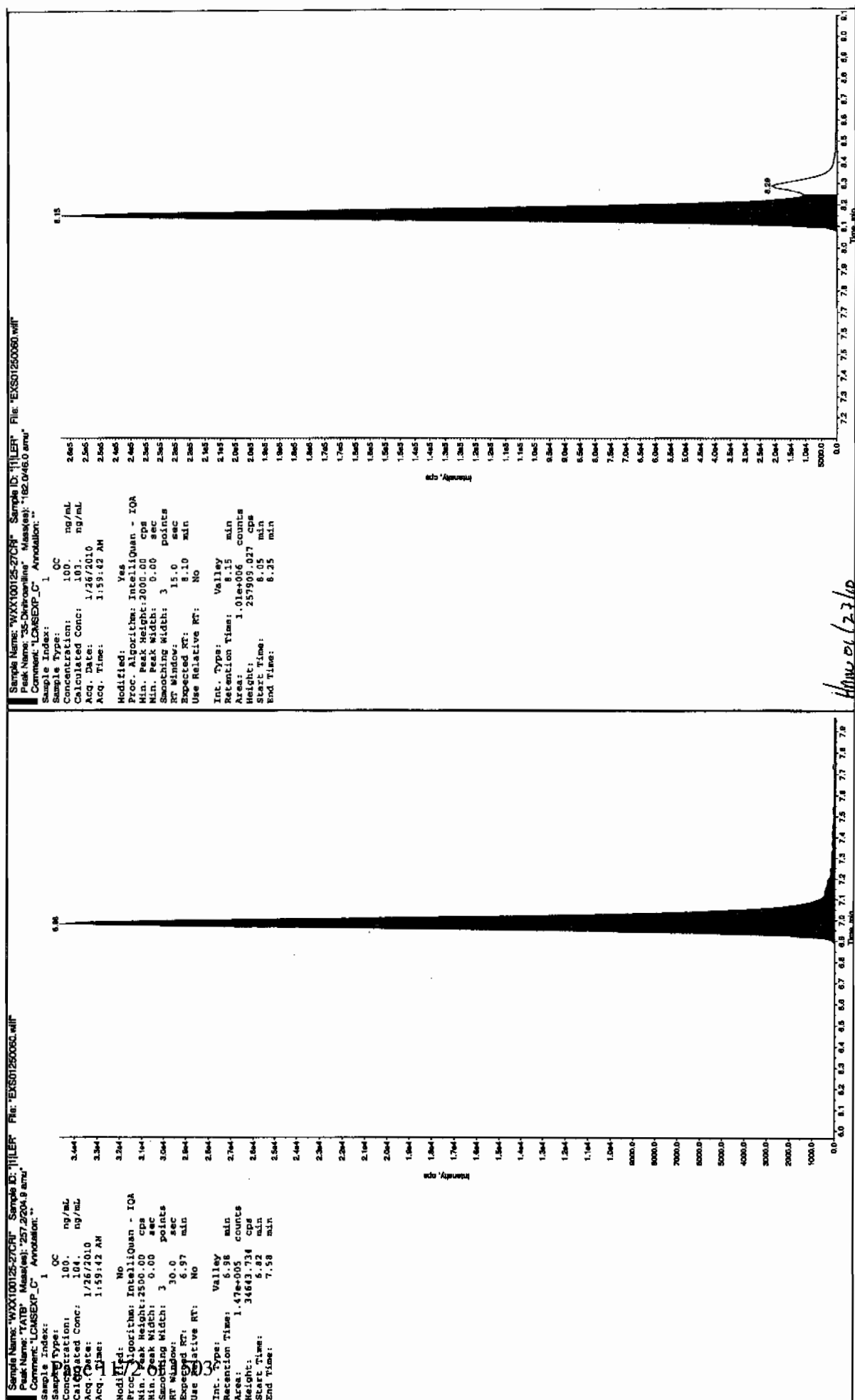
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

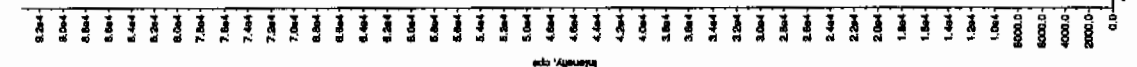
Ken 1/27/10



How 01/27/10

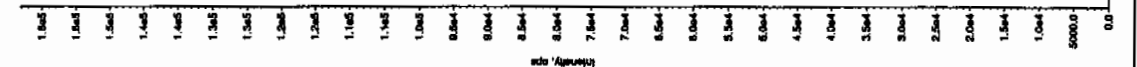
Sample Name: "WXX100125-270R" Sample ID: "1LER" File: "EXS01250060.wif"
 Peak Name: "26-Diethyl-4-nitrofluorene" Mass(es): "166.048.0 amu"
 Comment: "LCMSXP_G" Annotation: "-"

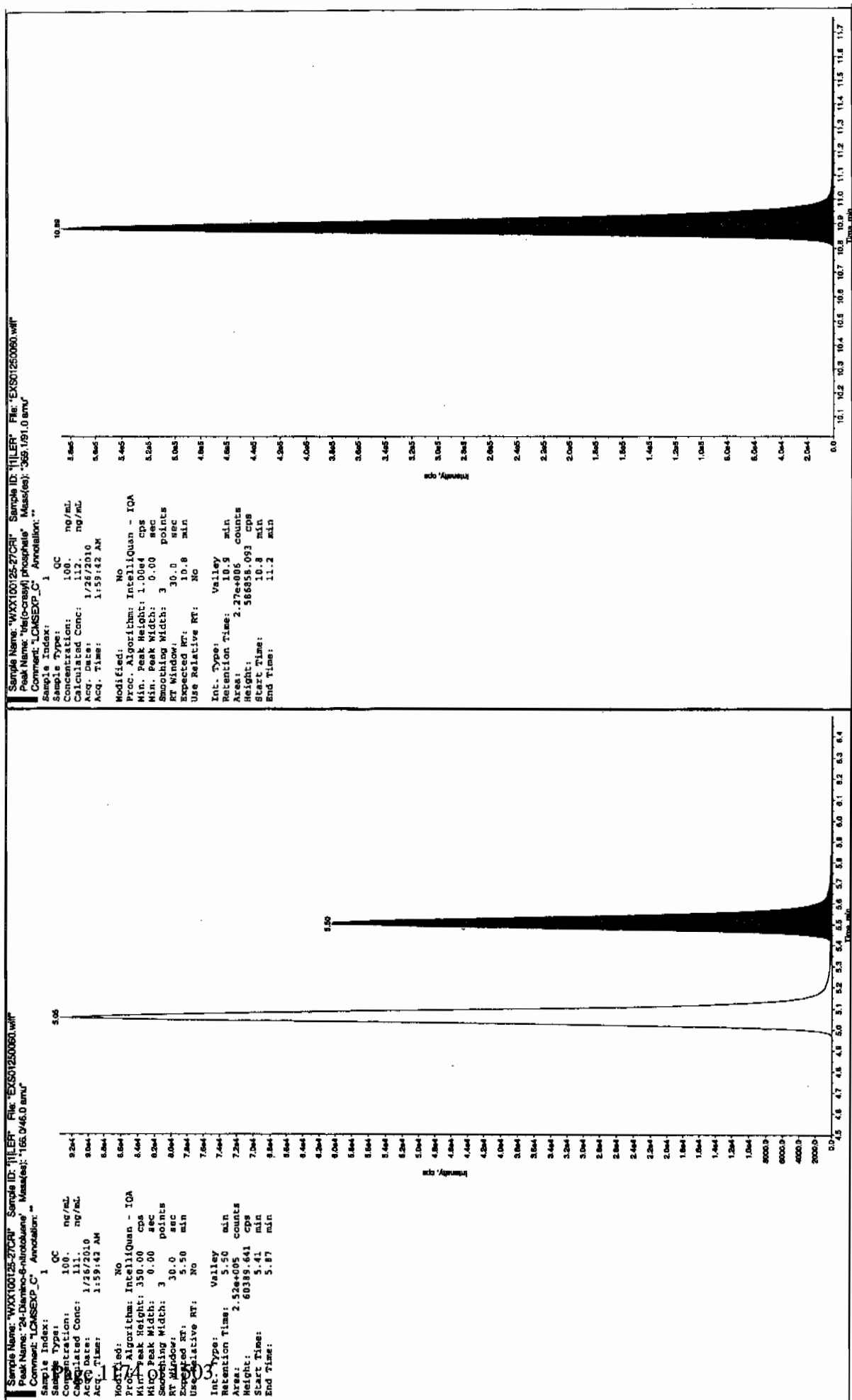
Sample Index: 1 QC
 Sample Type: 100. ng/mL
 Concentration: 100. ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 1:59:42 AM
 Acq. Time: 1:59:42 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.05 min
 Area: 3.79e+005 counts
 Height: 93515.076 cps
 Start Time: 4.94 min
 End Time: 5.33 min



Sample Name: "WXX100125-270R" Sample ID: "1LER" File: "EXS01250060.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSXP_G" Annotation: "-"

Sample Index: 1 QC
 Sample Type: 50.0 ng/mL
 Concentration: 50.0 ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 1:59:42 AM
 Acq. Time: 1:59:42 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.28 min
 Area: 6.15e+005 counts
 Height: 158187.349 cps
 Start Time: 8.14 min
 End Time: 8.60 min





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250067.wiff

Analysis Date: 26-JAN-10 03:49

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	523	105	
2,6-Diamino-4-nitrotoluene	500	495	99	
3,4-Dinitrotoluene	250	228	91	
3,5-Dinitroaniline	500	513	103	
TATB	500	525	105	
tris(o-cresyl) phosphate	500	481	96	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Before 12/10

Sample Name: WXX100125-262CV Sample ID: 111ER File: EXS0125067.wif

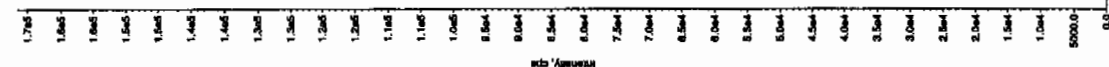
Peak Name: TATB Mass(es): 257.2204.9 amu

Comment: LCMSEXP_C Annotation:

Sample Index: 1
Sample Type: QC
Concentration: 500 ng/mL
Calculated Conc: 1/25/2010 ng/mL
Acq. Date: 3/4/91 AM
Acq. Time: 3:49:41 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 6.97 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 6.98 min
Area: 7.30e+005 counts
Height: 166532.516 cps
Start Time: 6.86 min
End Time: 7.51 min



Sample Name: WXX100125-262CV Sample ID: 111ER File: EXS0125067.wif

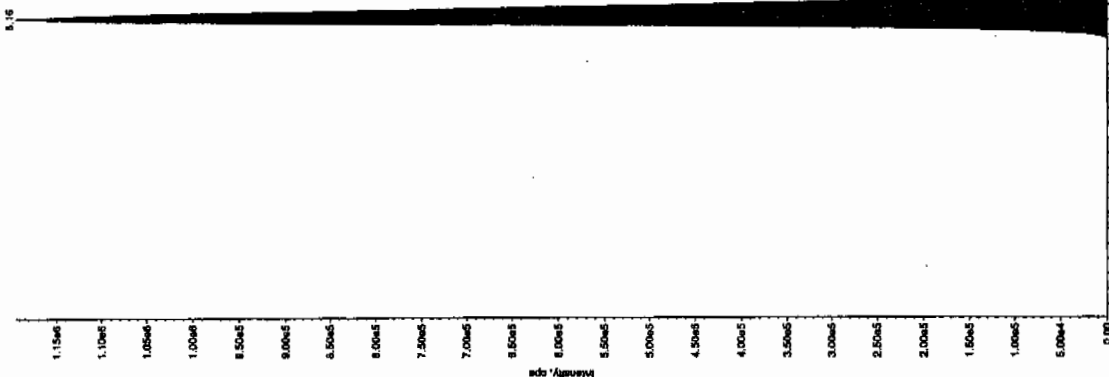
Peak Name: 35-Dinitroaniline Mass(es): 182.046.0 amu

Comment: LCMSEXP_C Annotation:

Sample Index: 1
Sample Type: QC
Concentration: 500 ng/mL
Calculated Conc: 1/26/2010 ng/mL
Acq. Date: 3/4/91 AM
Acq. Time: 3:49:41 AM

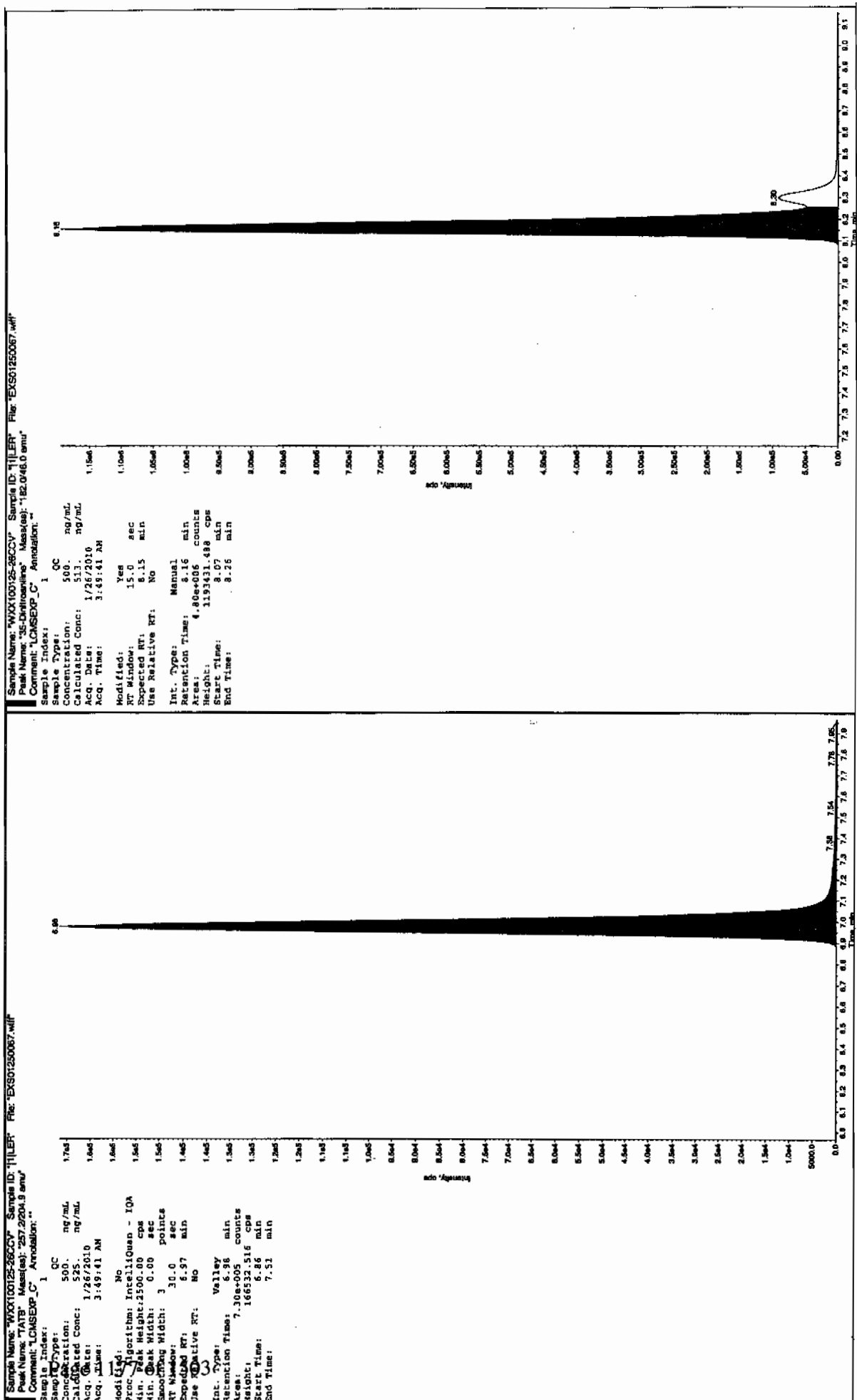
Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.15 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.16 min
Area: 5.23e+006 counts
Height: 119149.24J cps
Start Time: 8.06 min
End Time: 8.56 min



11/11/2010

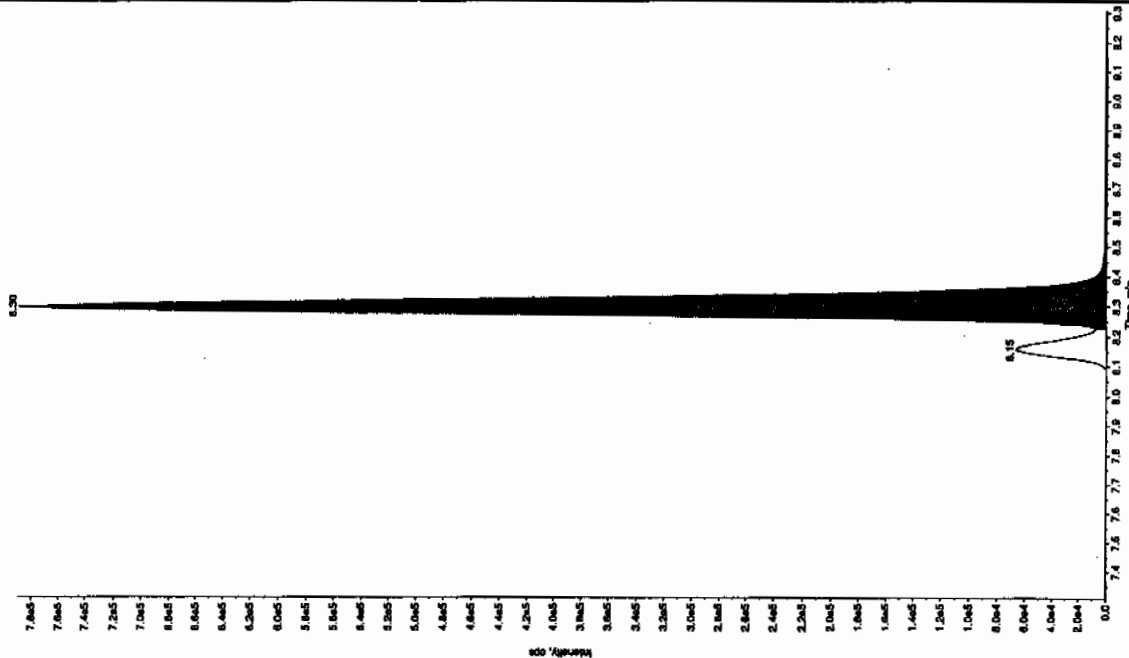
after Jan 11/27/10



GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

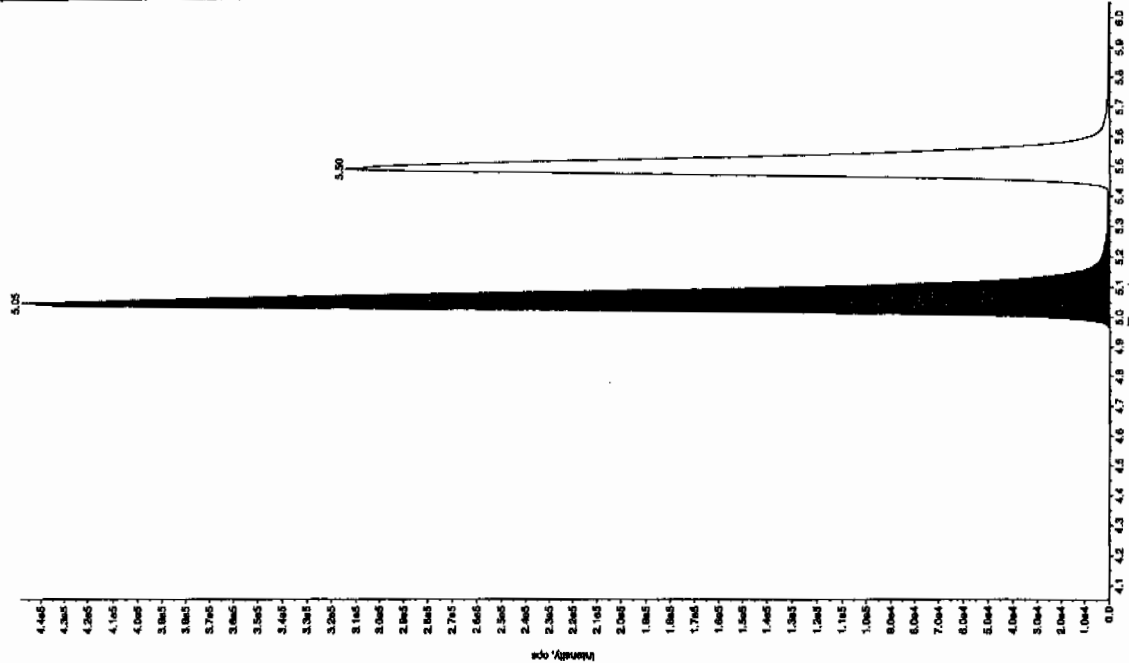
Sample Name: "WXX100125-26CQ" Sample ID: "11LRF" File: "EXS0126007.wif"
 Peak Name: "3A-Chlorobenzene" Mass(es): "182.1151.8 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 1
 Concentration: 250 ng/mL
 Calculated Conc: 228 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 3:49:41 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.30 min
 Area: 3.03e+006 counts
 Height: 789344.421 cps
 Start Time: 8.23 min
 End Time: 8.61 min



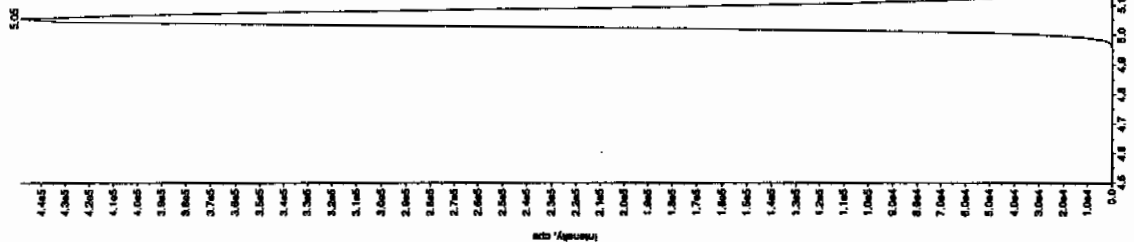
Sample Name: "WXX100125-26CQ" Sample ID: "11LRF" File: "EXS0126007.wif"
 Peak Name: "2a-Chlorobenzene" Mass(es): "166.0460 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 1
 Concentration: 500 ng/mL
 Calculated Conc: 495 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 3:49:41 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.05 min
 Area: 1.87e+006 counts
 Height: 448419.586 cps
 Start Time: 4.94 min
 End Time: 5.34 min



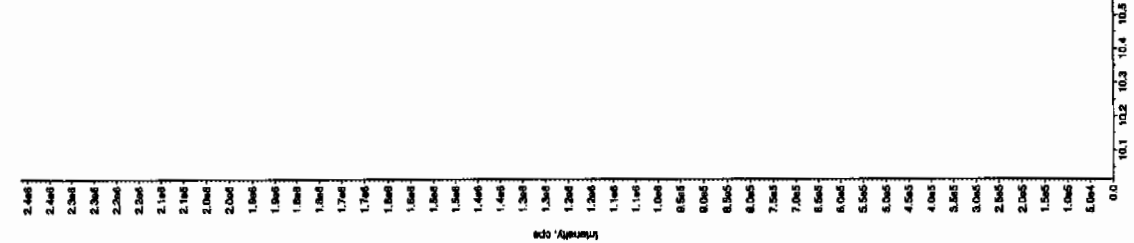
Sample Name: "WXX100125-260CV" Sample ID: "111ER" File: "EXS01250067.wif"
 Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 523. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 3:49:41 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.50 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.50 min
 Area: 1.26e+006 counts
 Height: 314159.027 cps
 Start Time: 5.41 min
 End Time: 5.94 min



Sample Name: "WXX100125-260CV" Sample ID: "111ER" File: "EXS01250067.wif"
 Peak Name: "di(ortho-cresyl) phosphate" Mass(es): "368.181.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 481. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 3:49:41 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 1.01e+007 counts
 Height: 2413636.475 cps
 Start Time: 10.7 min
 End Time: 11.1 min



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250069.wiff

Analysis Date: 26-JAN-10 04:21

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	112	112	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.2	96	
3,5-Dinitroaniline	100	108	108	
TATB	100	107	107	
tris(o-cresyl) phosphate	100	111	111	

Recovery Limits:

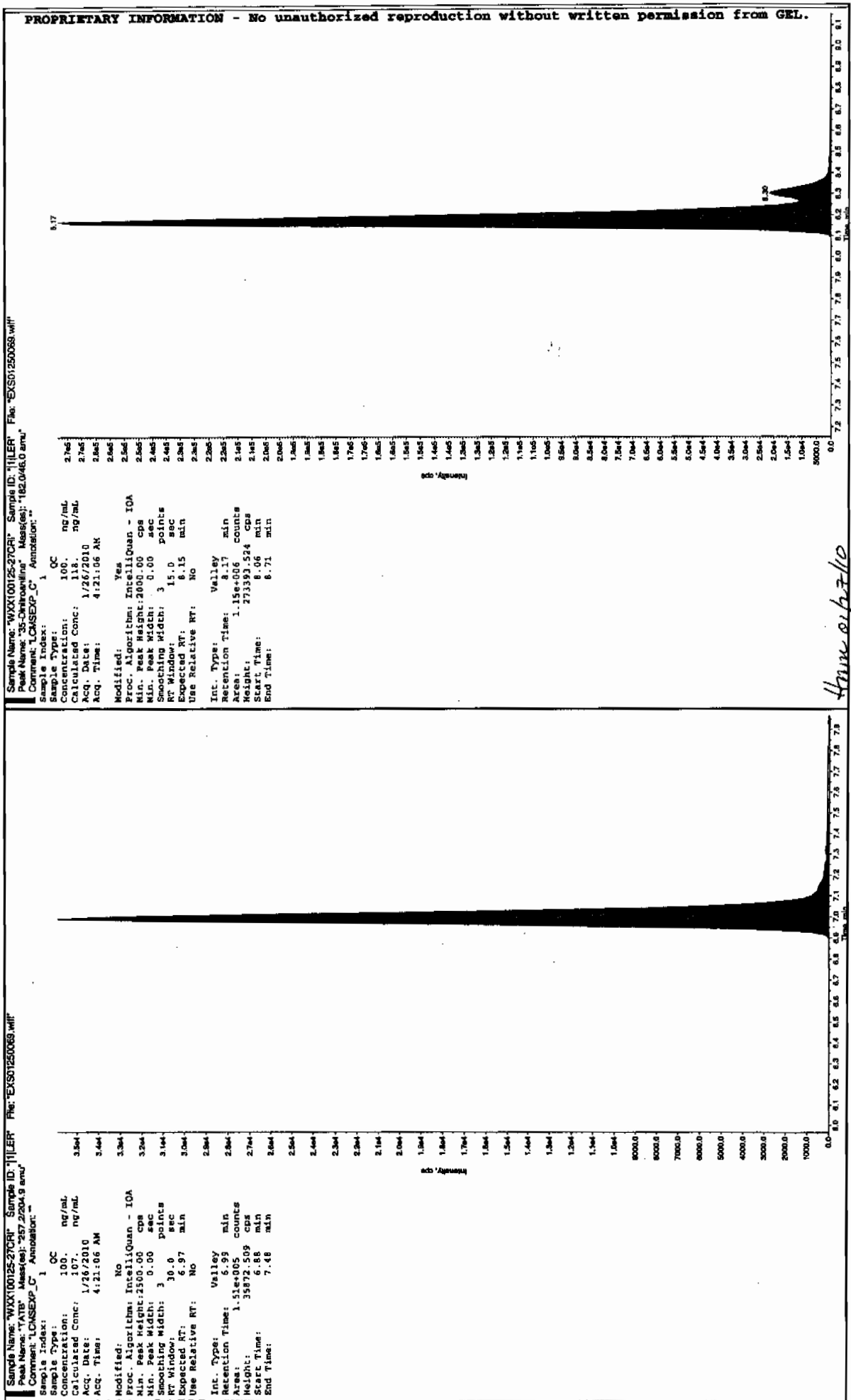
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

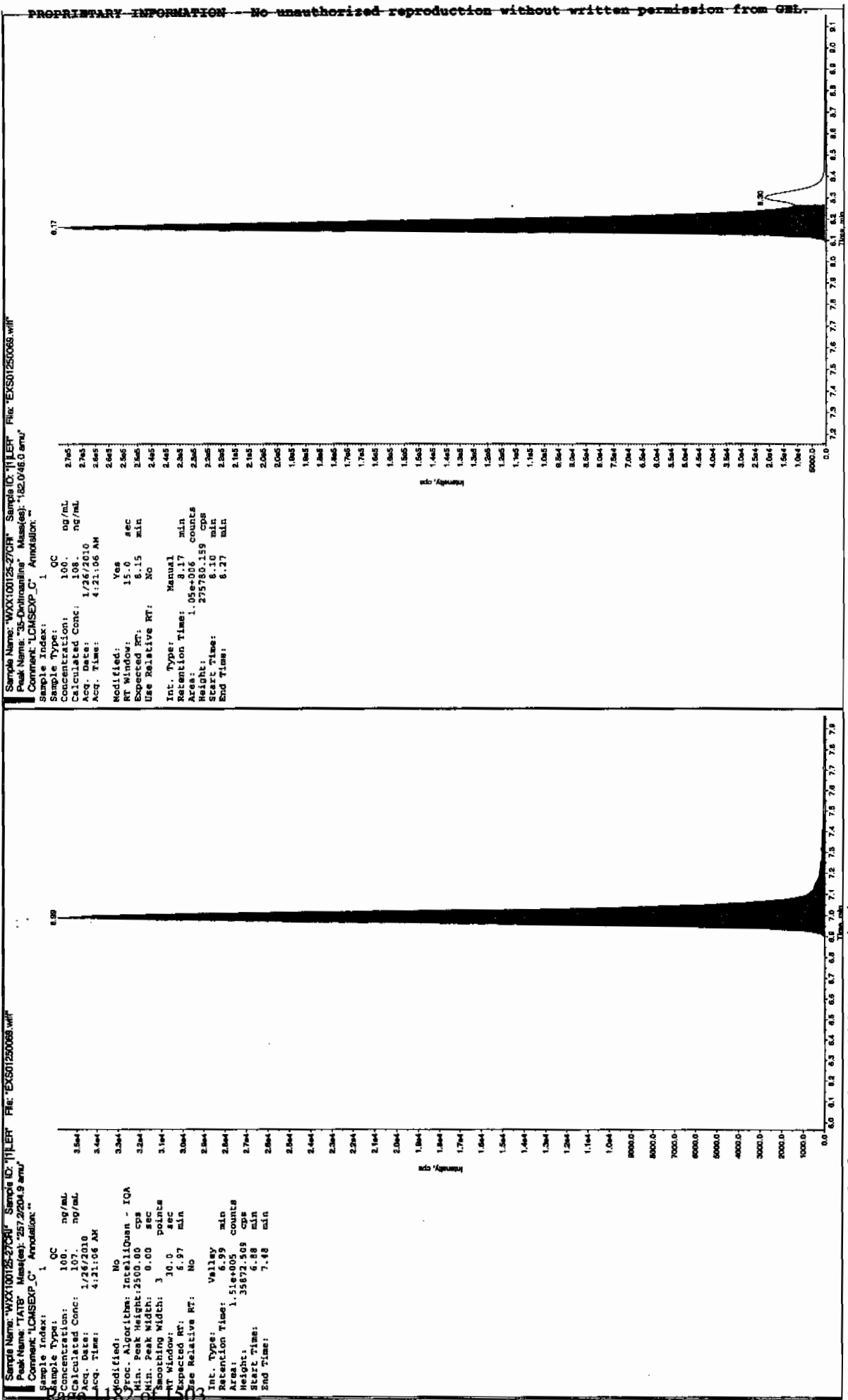
* Value outside of Recovery Limits

Before Jan 16/21/10



After Jan 16/21/10

after Jan 11/24/10



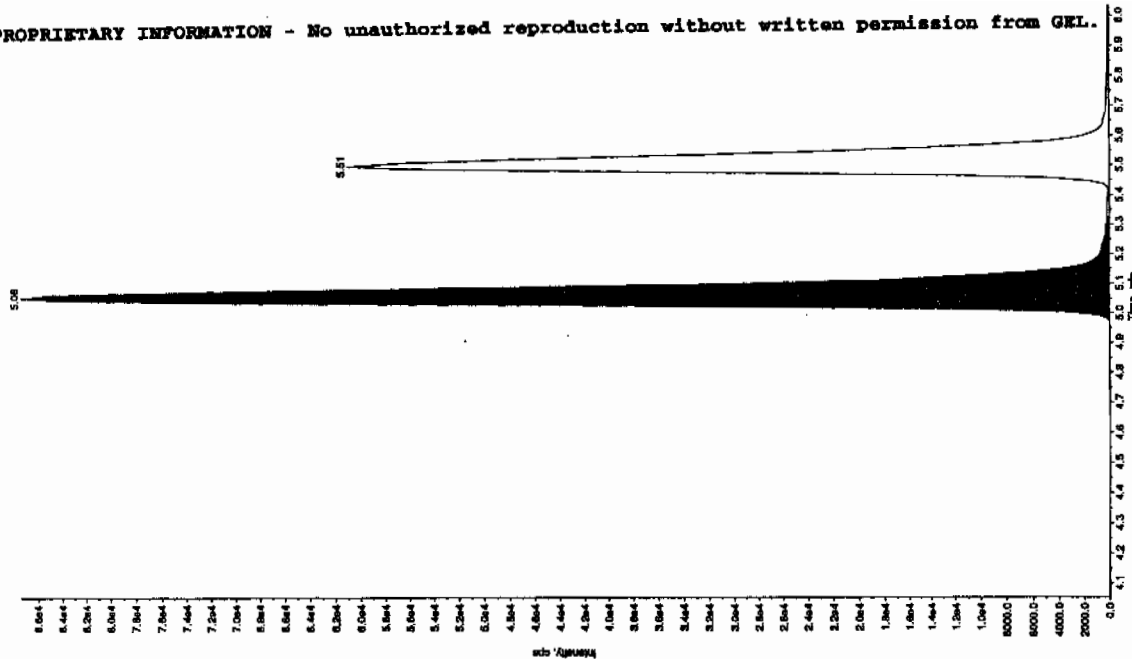
Sample Name: WXX100125-27091 Sample ID: 11111111 File: EX501250068.wif
 Peak Name: "TATB" Mass(es): 257.2204.9 amu
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 100. ng/mL
 Concentration: 108. ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 4:21:06 AM
 Acq. Time: 4:21:06 AM
 Modified: Yes
 RT Window: 15.0 sec
 Expected RT: 6.15 min
 Use Relative RT: No
 Int. Type: Manual
 Retention Time: 8.17 min
 Area: 1.05e+006 counts
 Height: 275780.159 cps
 Start Time: 6.10 min
 End Time: 6.27 min

Sample Index: 1 QC
 Sample Type: 100. ng/mL
 Concentration: 108. ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 4:21:06 AM
 Acq. Time: 4:21:06 AM
 Modified: No
 RT Window: 10.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 6.99 min
 Area: 1.51e+005 counts
 Height: 35872.509 cps
 Start Time: 6.88 min
 End Time: 7.18 min

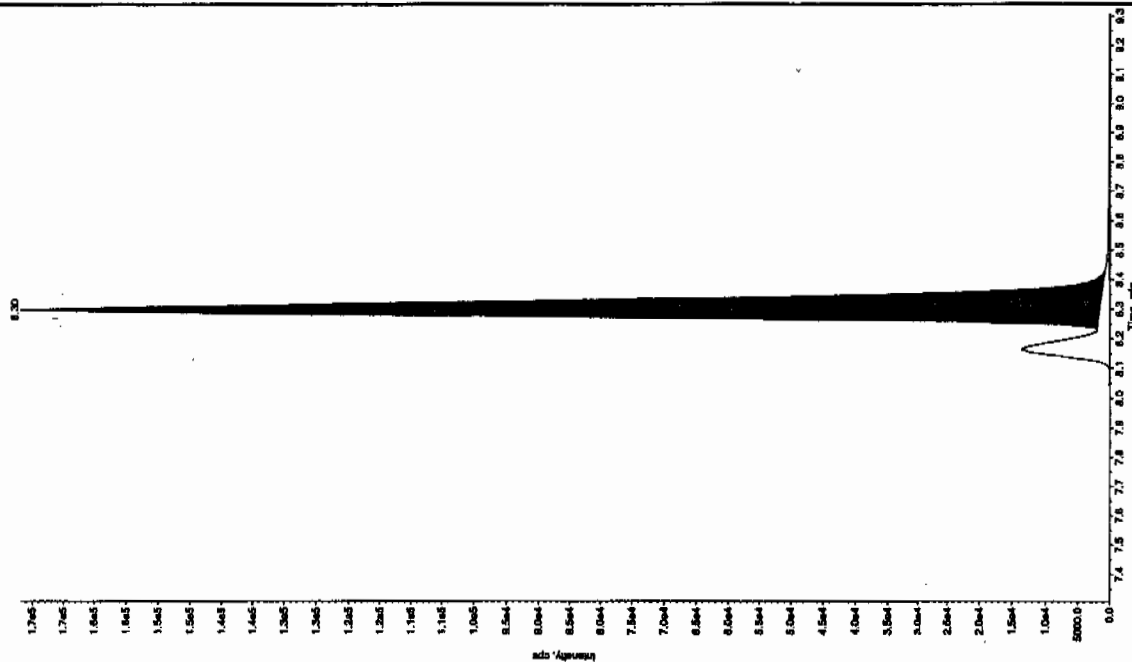
Sample Name: "WXX100125-27CPI" Sample ID: "111ER" File: "EXS01250055.wif"
 Peak Name: "26-Diethoxy-4-nitrofluorene" Mass(es): "165.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: ""

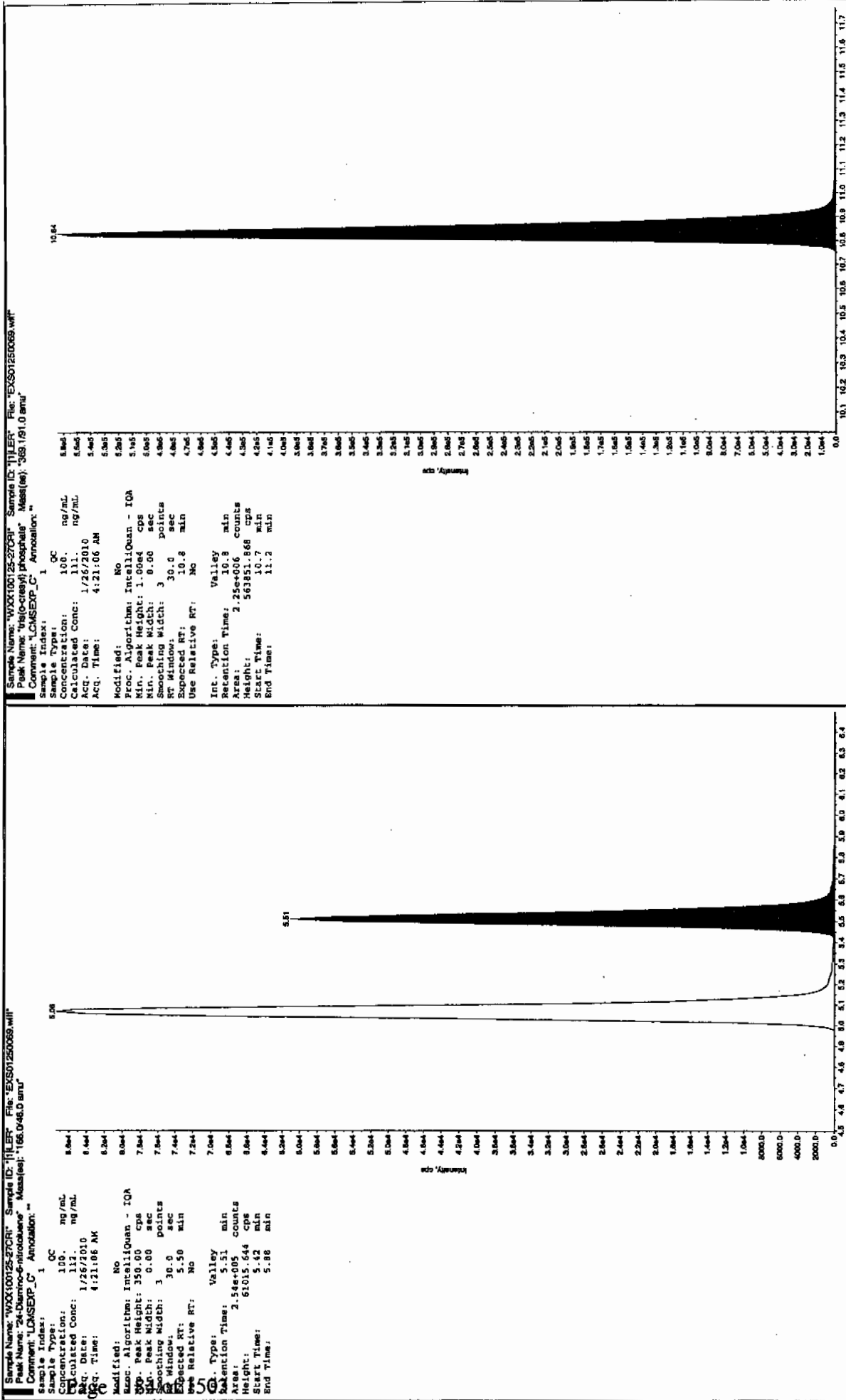
Sample Index: 1 QC
 Sample Type: Concentration: 100. ng/mL
 Calculated Conc: 116. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 4:21:06 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.06 min
 Area: 3.81e+005 counts
 Height: 87385.085 cps
 Start Time: 4.93 min
 End Time: 5.32 min



Sample Name: "WXX100125-27CPI" Sample ID: "111ER" File: "EXS01250055.wif"
 Peak Name: "34-Diethoxy-4-nitrofluorene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1 QC
 Sample Type: Concentration: 50.0 ng/mL
 Calculated Conc: 48.2 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 4:21:06 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.30 min
 Area: 6.22e+005 counts
 Height: 170236.557 cps
 Start Time: 8.23 min
 End Time: 8.43 min





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250080.wiff

Analysis Date: 26-JAN-10 07:13

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	506	101	
2,6-Diamino-4-nitrotoluene	500	493	99	
3,4-Dinitrotoluene	250	236	95	
3,5-Dinitroaniline	500	539	108	
TATB	500	538	108	
tris(o-cresyl) phosphate	500	504	101	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

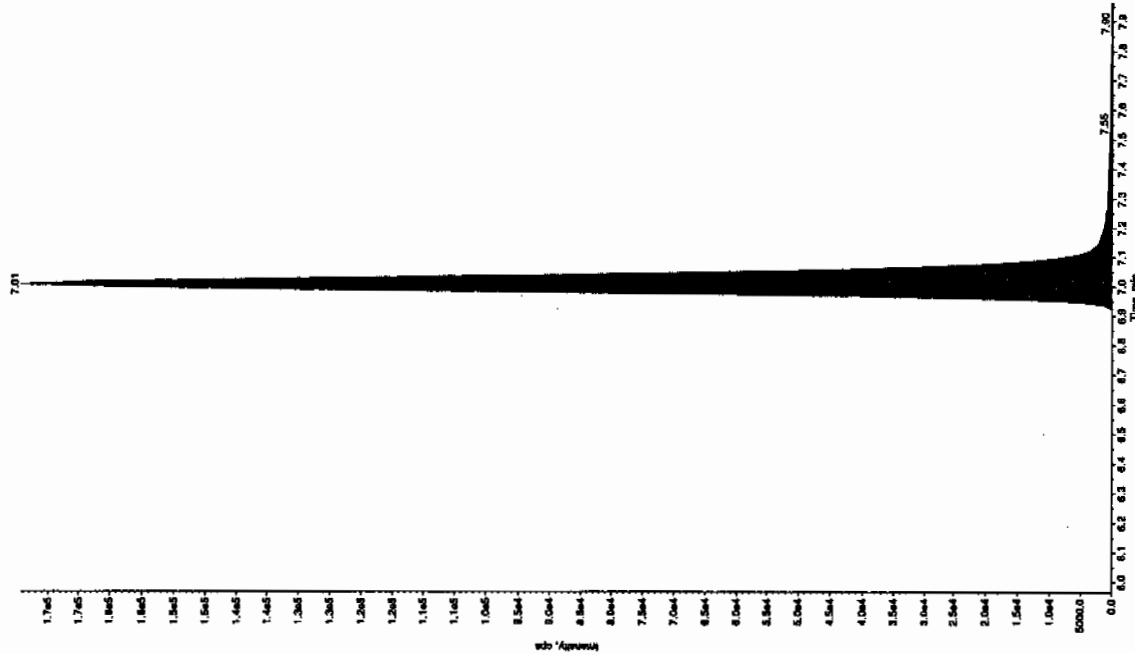
Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Sample Name: "WXX100125-250CV" Sample ID: "111LRF" File: "EX501250080.wif"
 Peak Name: "TATB" Mass(es): "257.2204.9 amu"
 Comment: "LCMSXP_C" Annotation: "

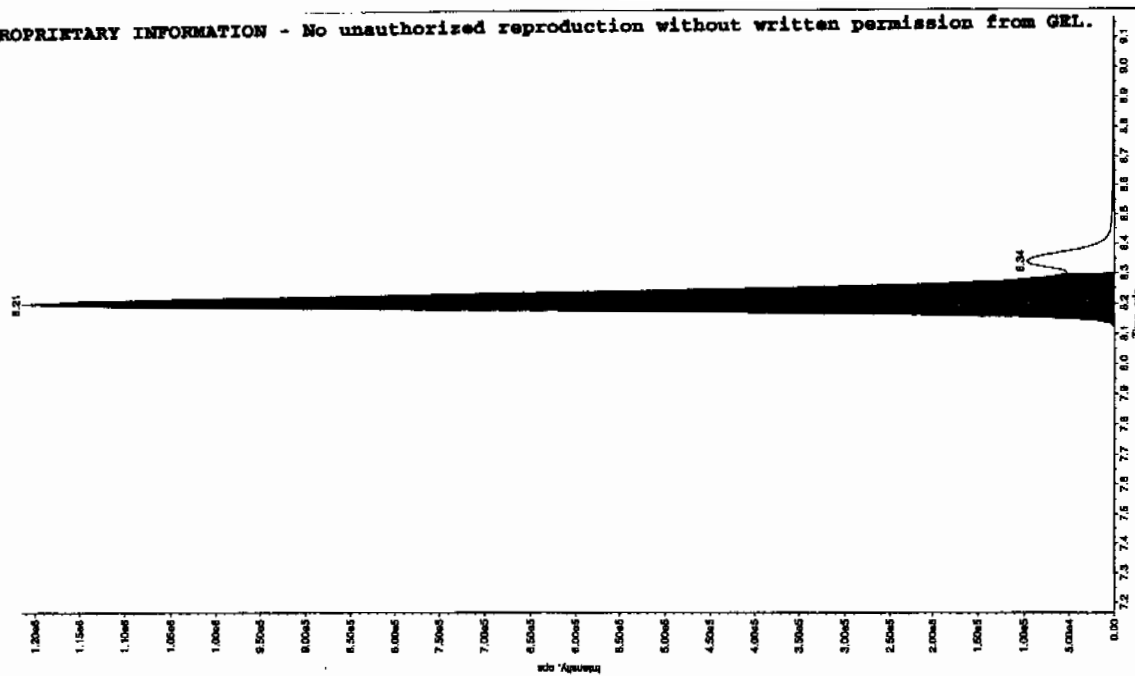
Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 538. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:13:52 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 500.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 6.97 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 7.01 min
 Area: 7.48e+005 counts
 Height: 174269.185 cps
 Start Time: 6.87 min
 End Time: 7.64 min



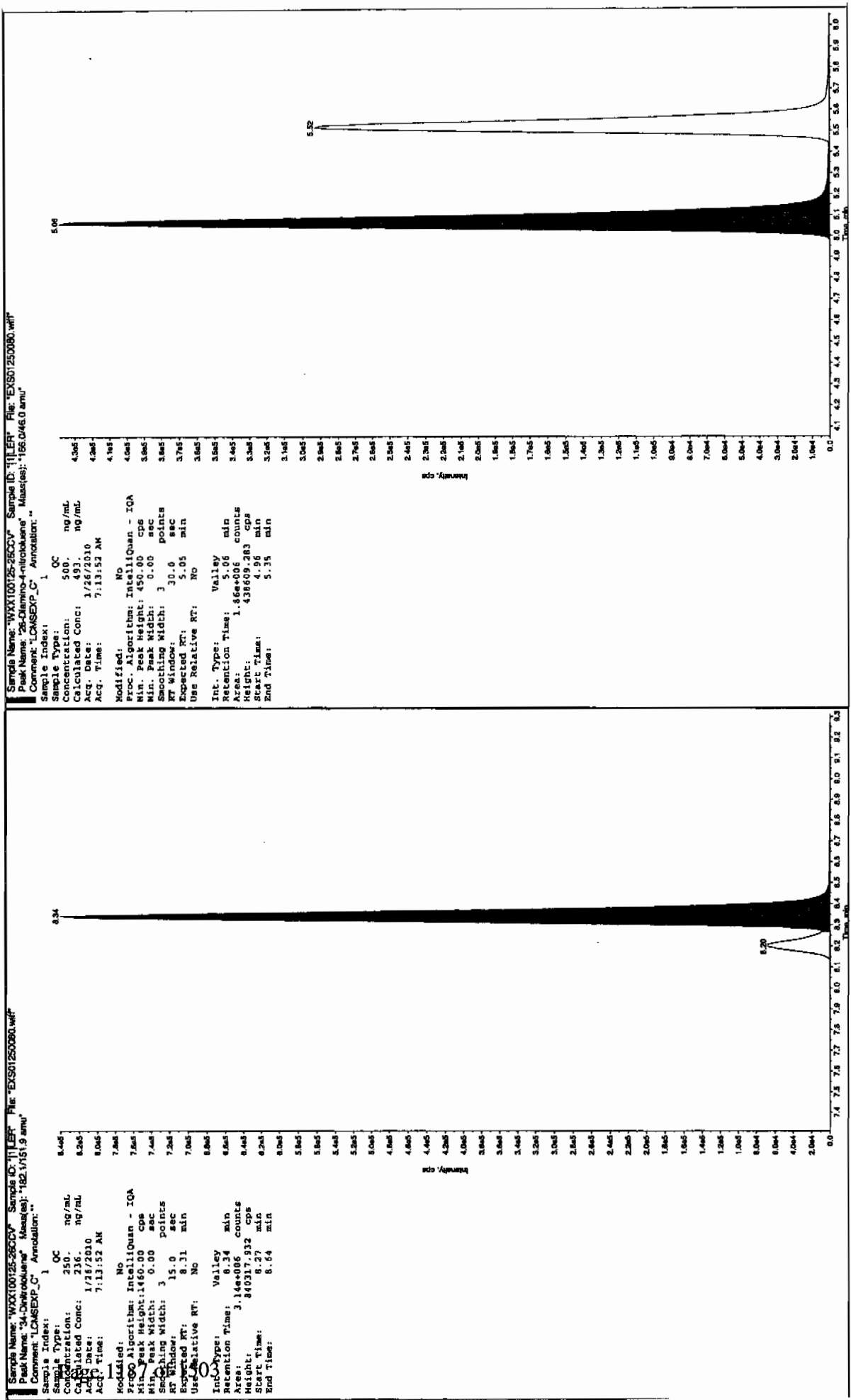
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

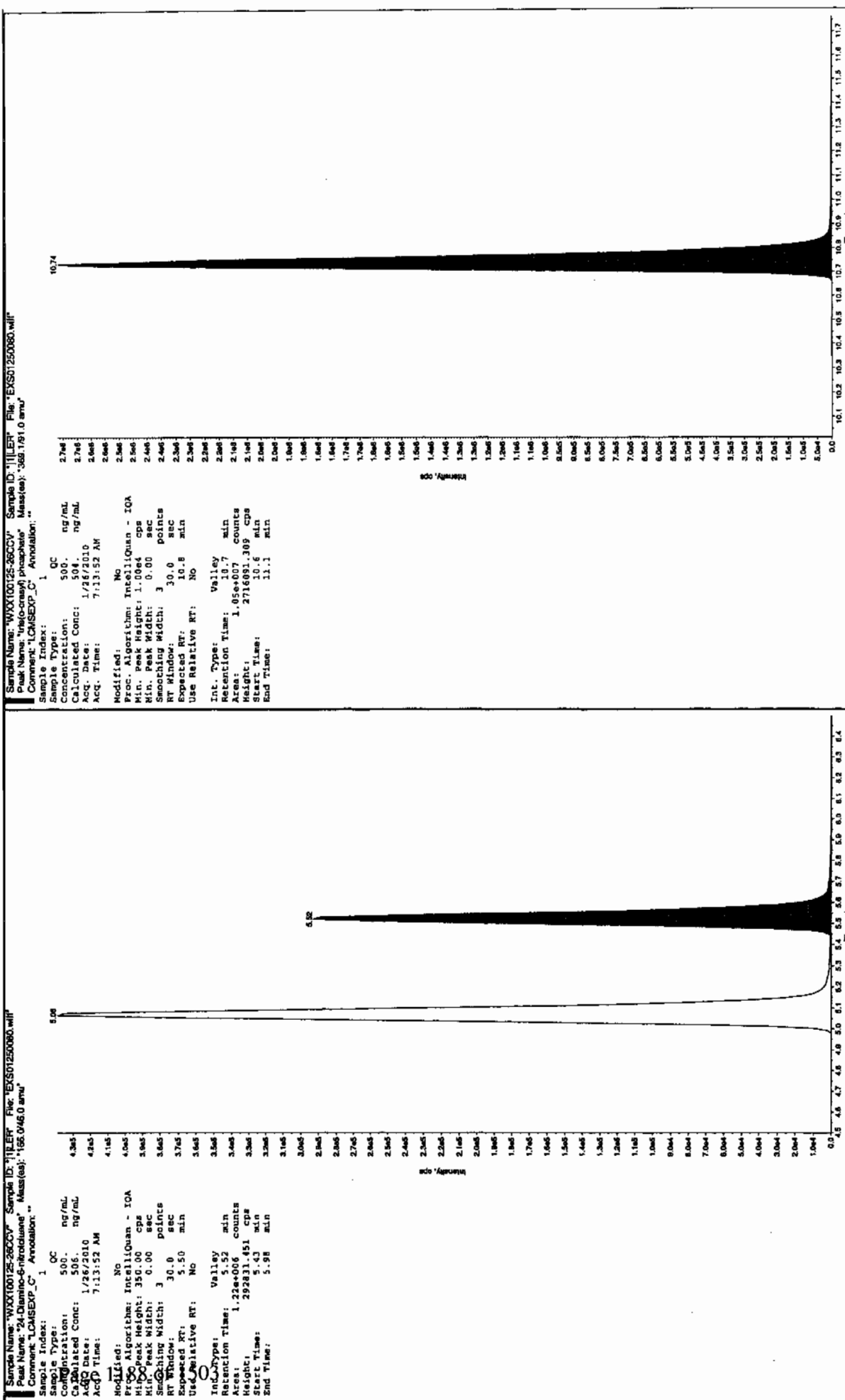
Sample Name: "WXX100125-250CV" Sample ID: "111LRF" File: "EX501250080.wif"
 Peak Name: "3S-Dinitroaniline" Mass(es): "182.046.0 amu"
 Comment: "LCMSXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 539. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 7:13:52 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 2000.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.16 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.21 min
 Area: 5.01e+006 counts
 Height: 1214258.057 cps
 Start Time: 8.09 min
 End Time: 8.30 min



Hum 01/27/10





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250082.wiff

Analysis Date: 26-JAN-10 07:45

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	111	111	
2,6-Diamino-4-nitrotoluene	100	110	110	
3,4-Dinitrotoluene	50	48.5	97	
3,5-Dinitroaniline	100	109	109	
TATB	100	110	110	
tris(o-cresyl) phosphate	100	116	116	

Recovery Limits:

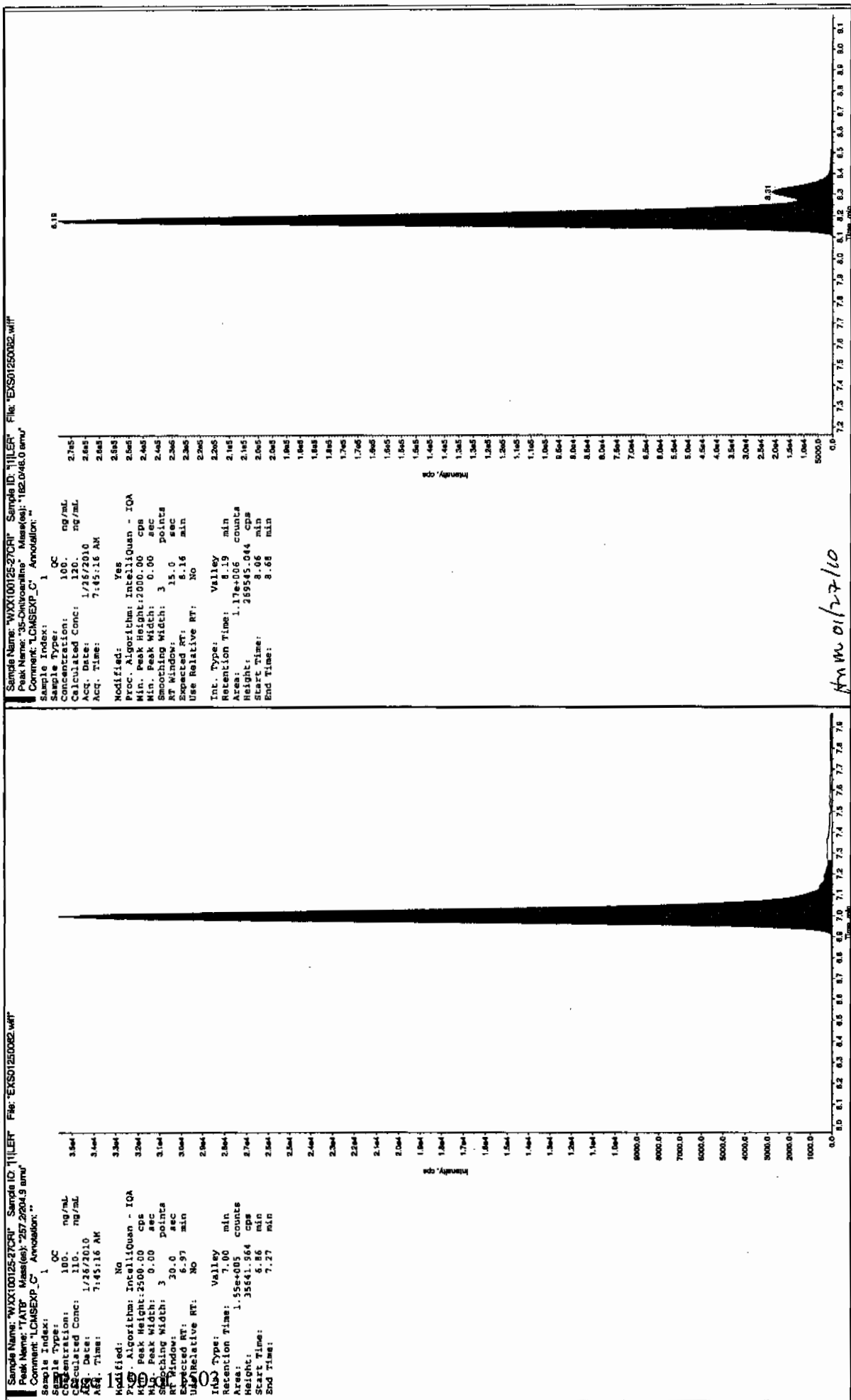
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

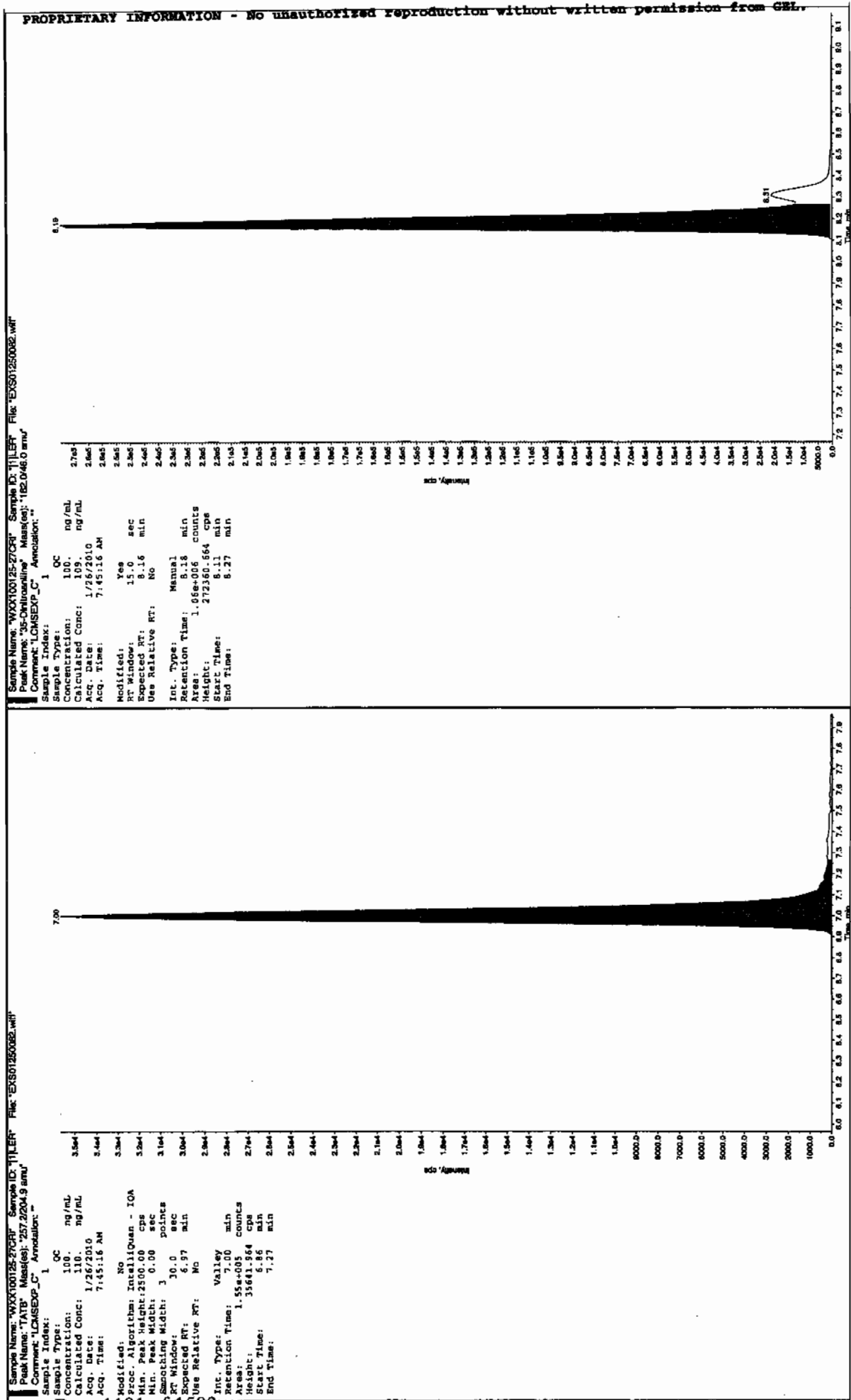
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

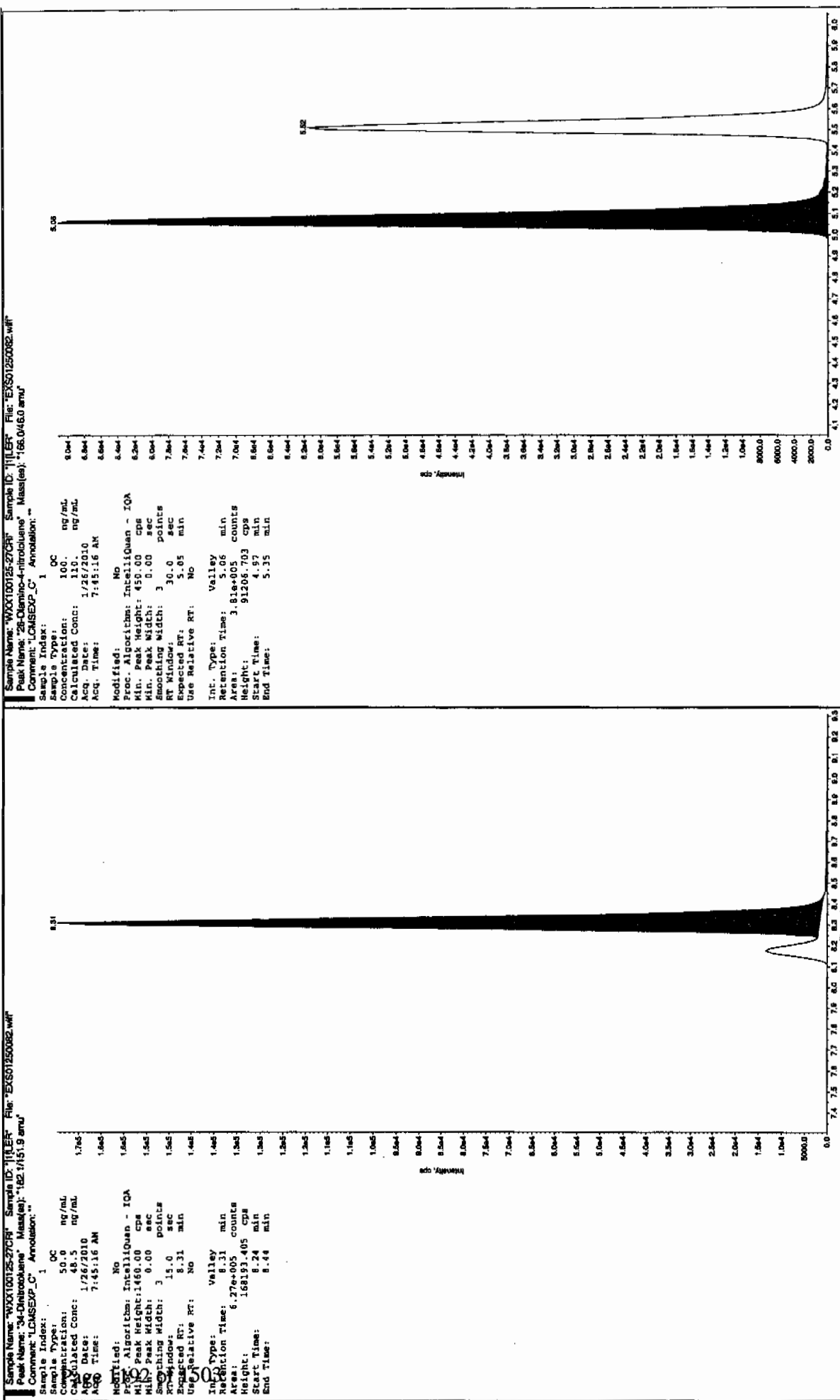
Before Scan 11/27/10

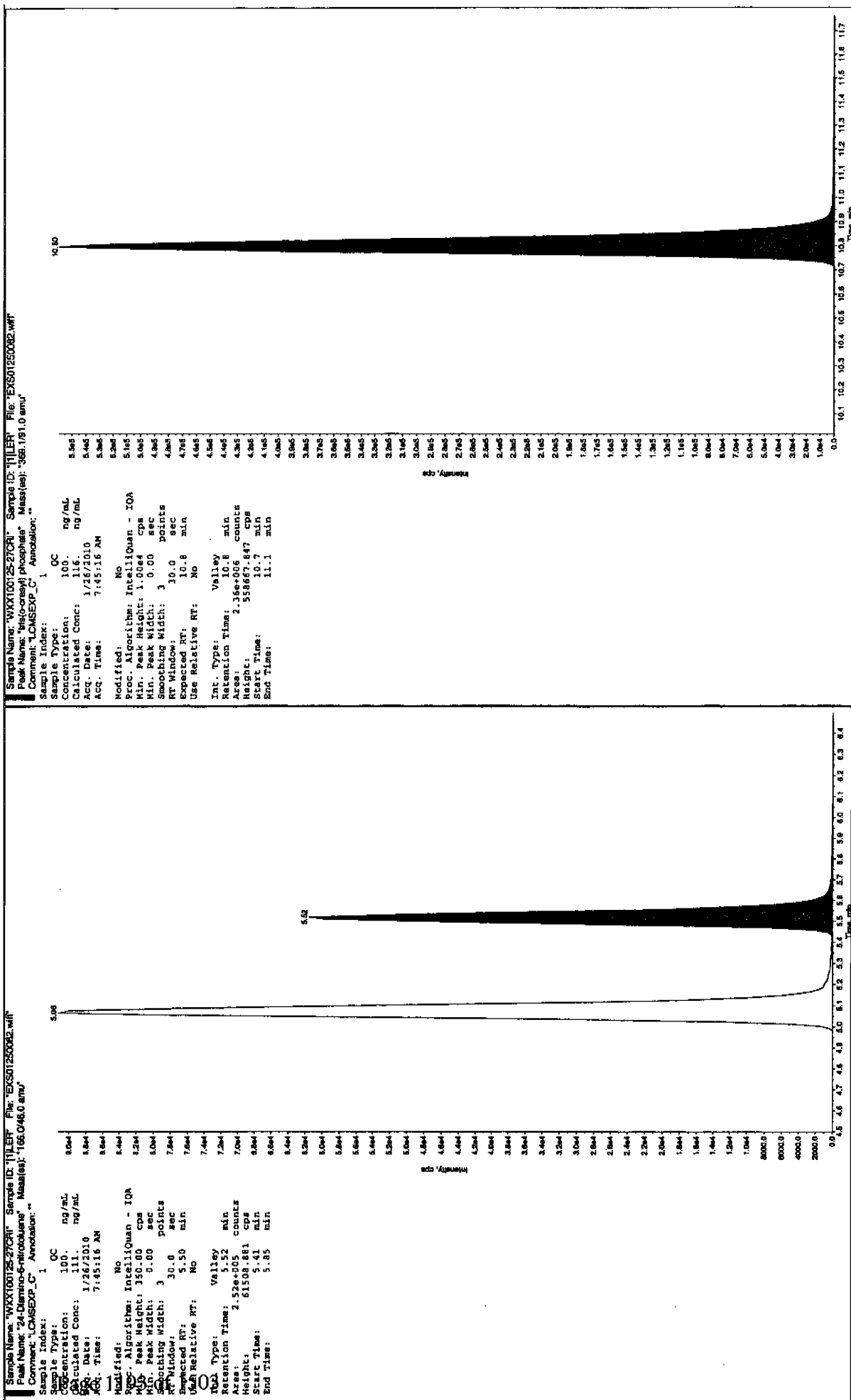


after clear 1/27/10



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250093.wiff

Analysis Date: 26-JAN-10 10:37

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	492	98	
2,6-Diamino-4-nitrotoluene	500	457	91	
3,4-Dinitrotoluene	250	226	90	
3,5-Dinitroaniline	500	545	109	
TATB	500	535	107	
tris(o-cresyl) phosphate	500	515	103	

Recovery Limits:

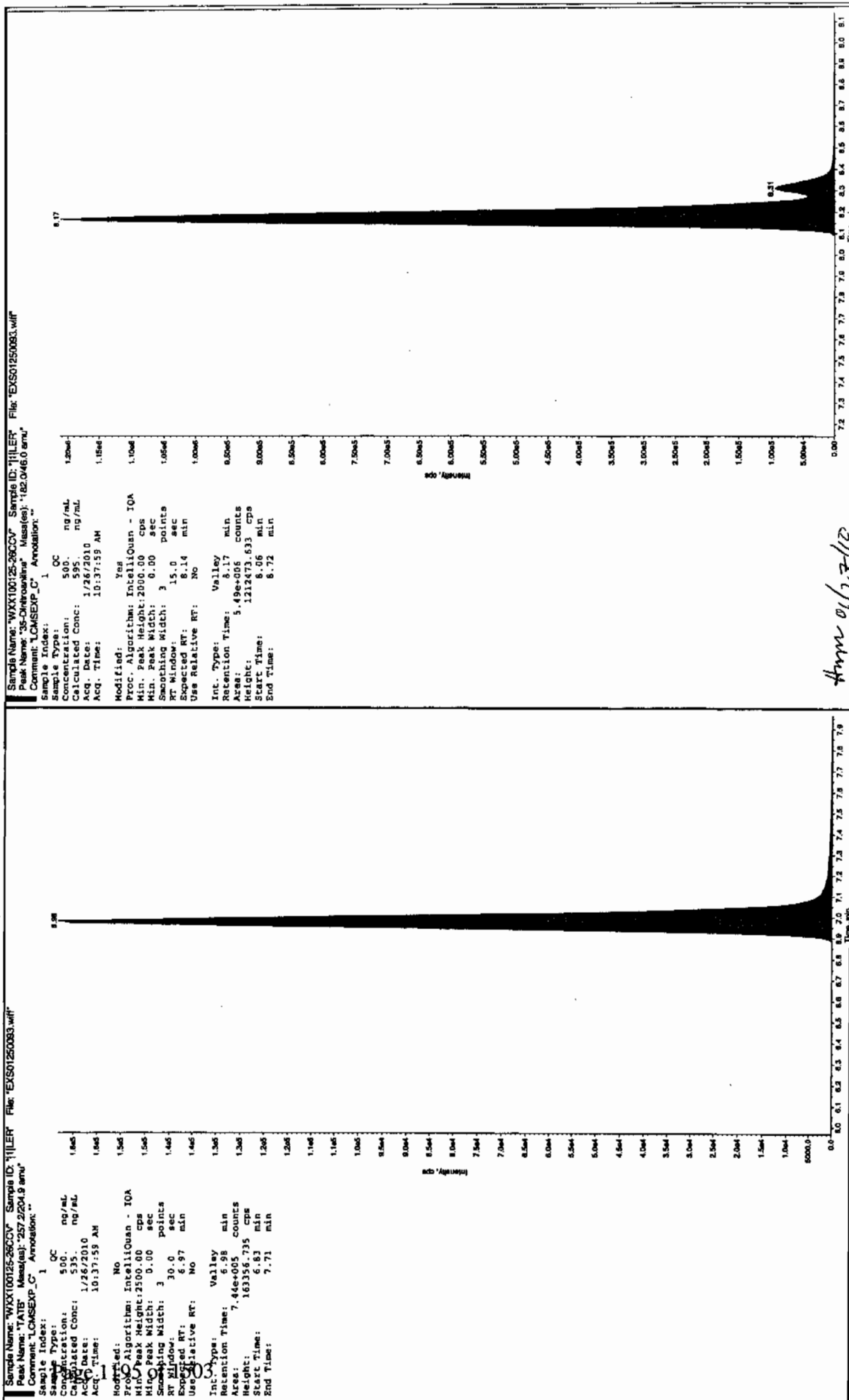
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

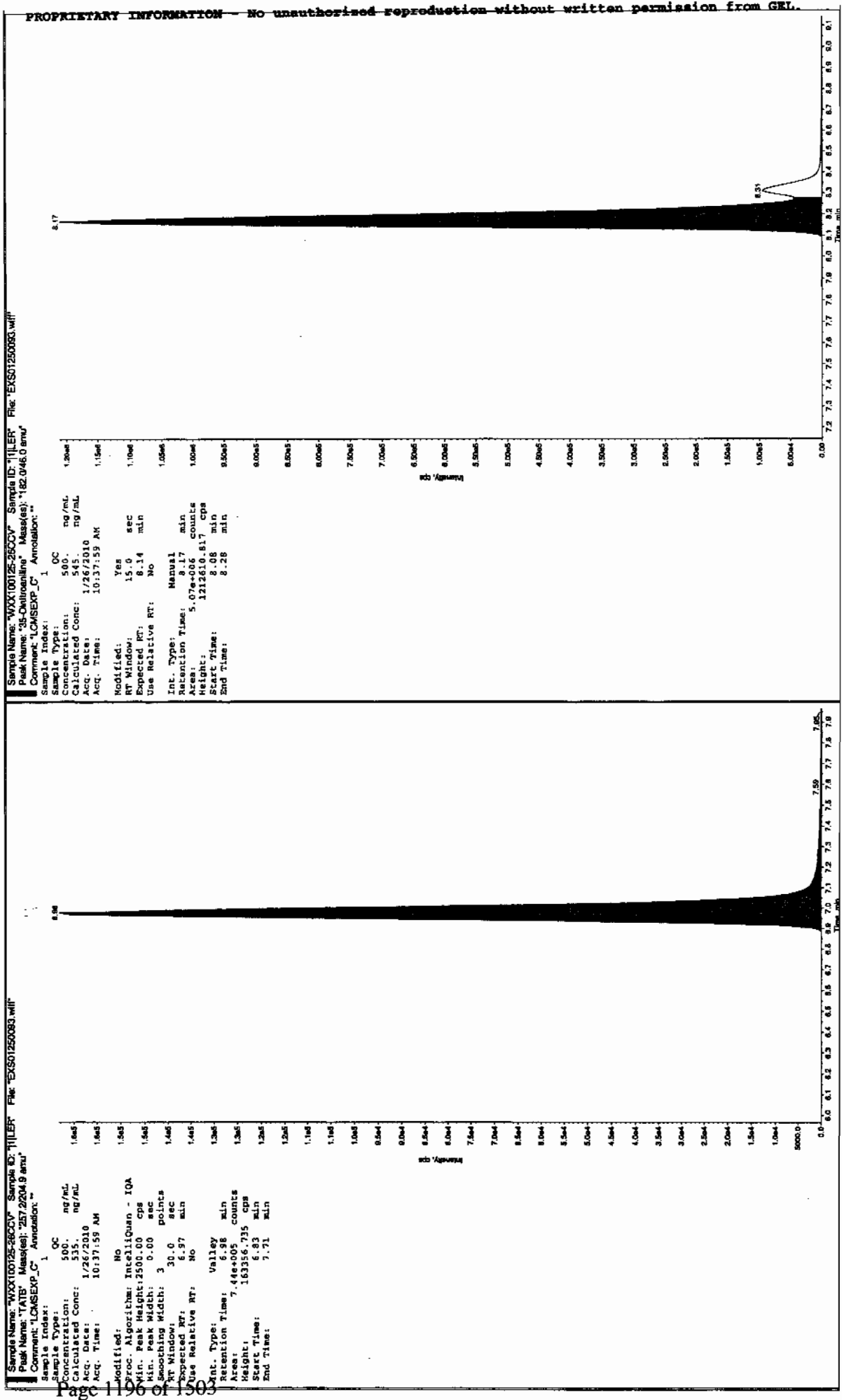
* Value outside of Recovery Limits

Before Jan 1/27/10



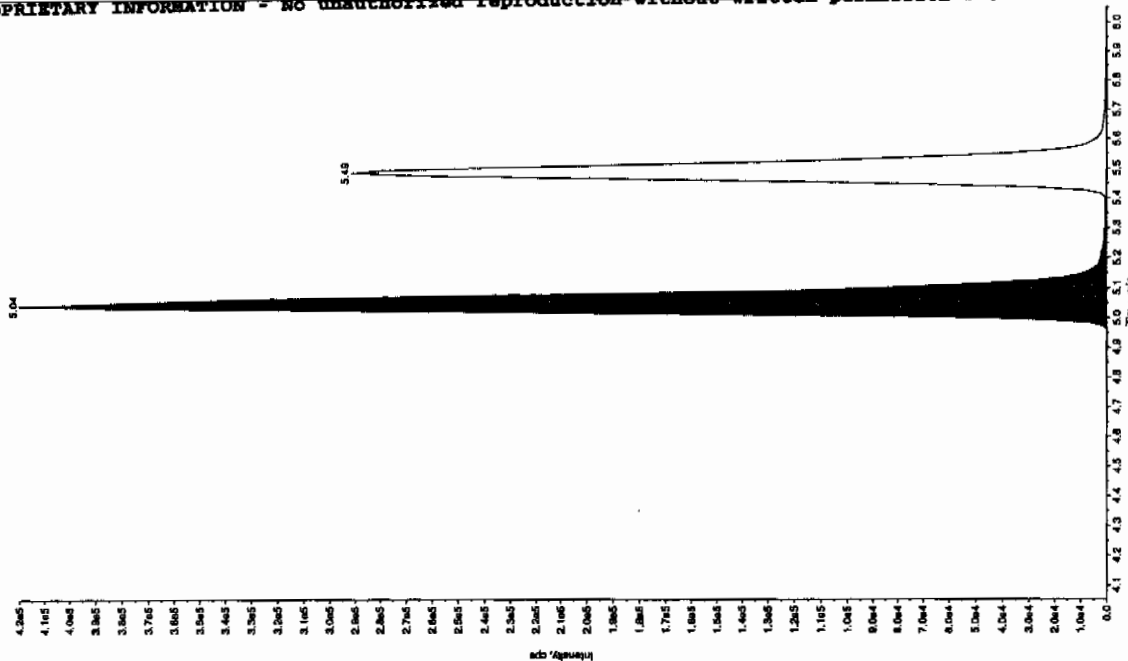
Ann 01/27/10

after scan 1127110



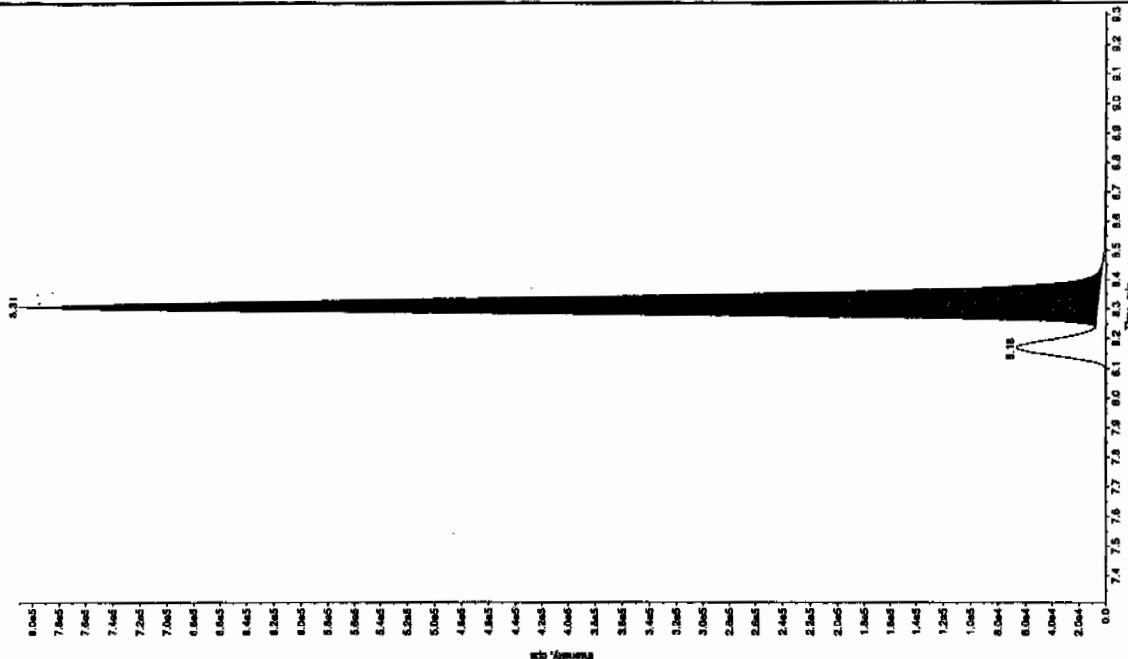
Sample Name: "WXX100125-2600V" Sample ID: "111ER" File: "EX501250093.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

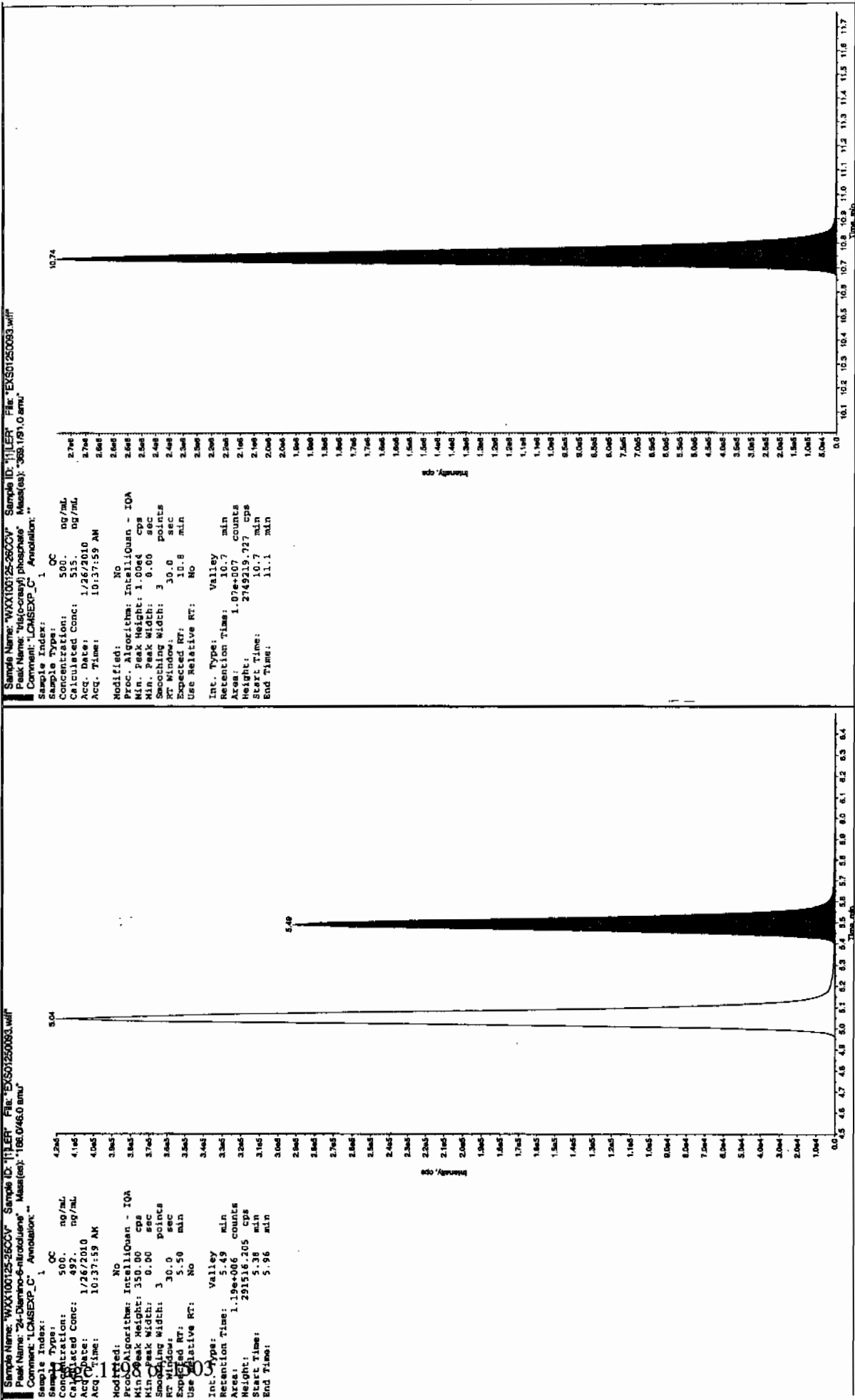
Sample Index: 1
 Sample Type: QC
 Concentration: 500 ng/mL
 Calculated Conc: 457 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 10:37:59 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.04 min
 Peak Height: 1.72e+006 counts
 Start Time: 4.93 min
 End Time: 5.12 min



Sample Name: "WXX100125-2600V" Sample ID: "111ER" File: "EX501250093.wif"
 Peak Name: "34-Dinitrobenzene" Mass(es): "182.1151.9 amu"
 Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
 Sample Type: QC
 Concentration: 250 ng/mL
 Calculated Conc: 226 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 10:37:59 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.24 min
 Peak Height: 3.00e+006 counts
 Start Time: 8.24 min
 End Time: 8.45 min





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250095.wiff

Analysis Date: 26-JAN-10 11:09

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	101	101	
2,6-Diamino-4-nitrotoluene	100	107	107	
3,4-Dinitrotoluene	50	50.1	100	
3,5-Dinitroaniline	100	110	110	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	118	118	

Recovery Limits:

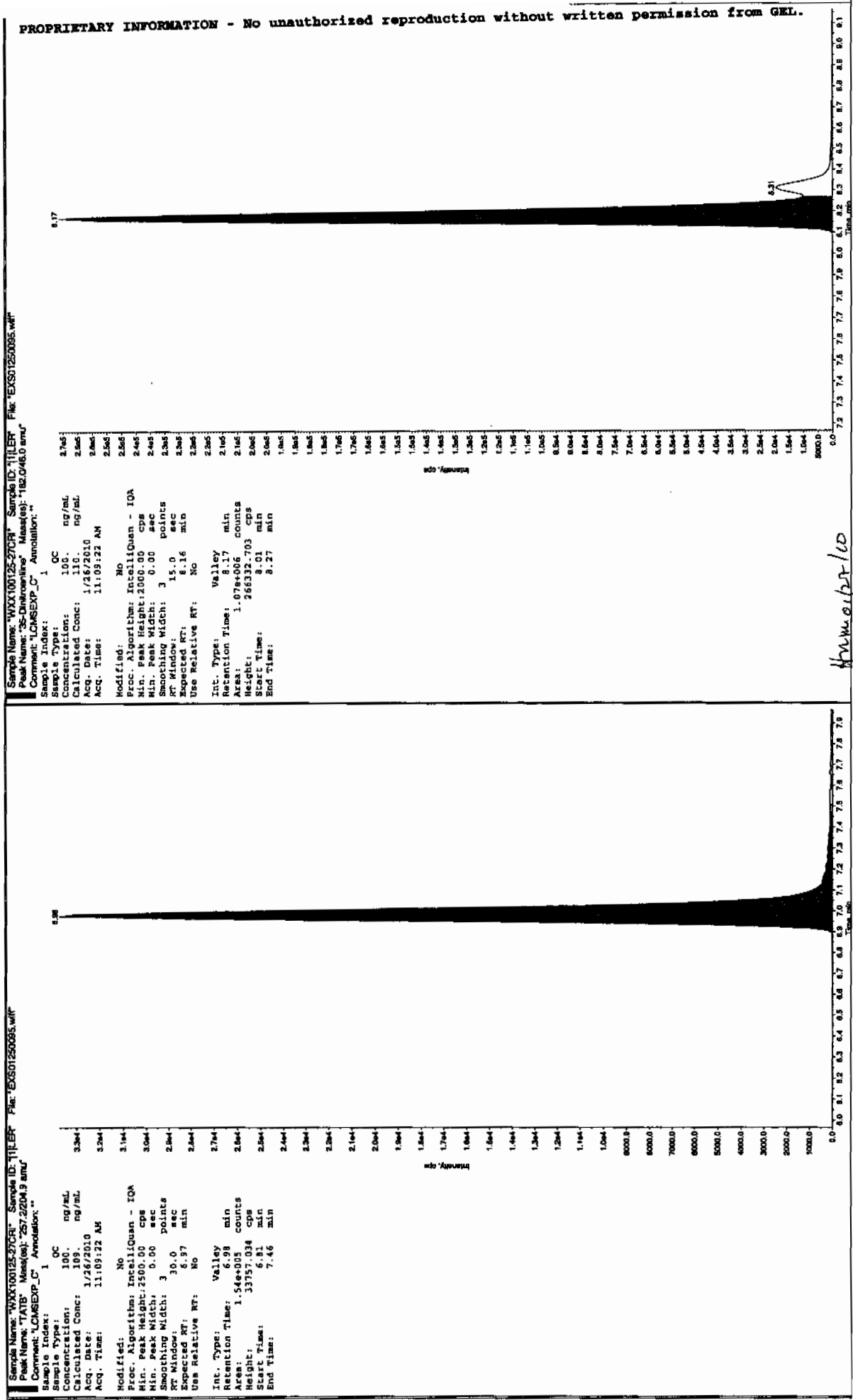
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

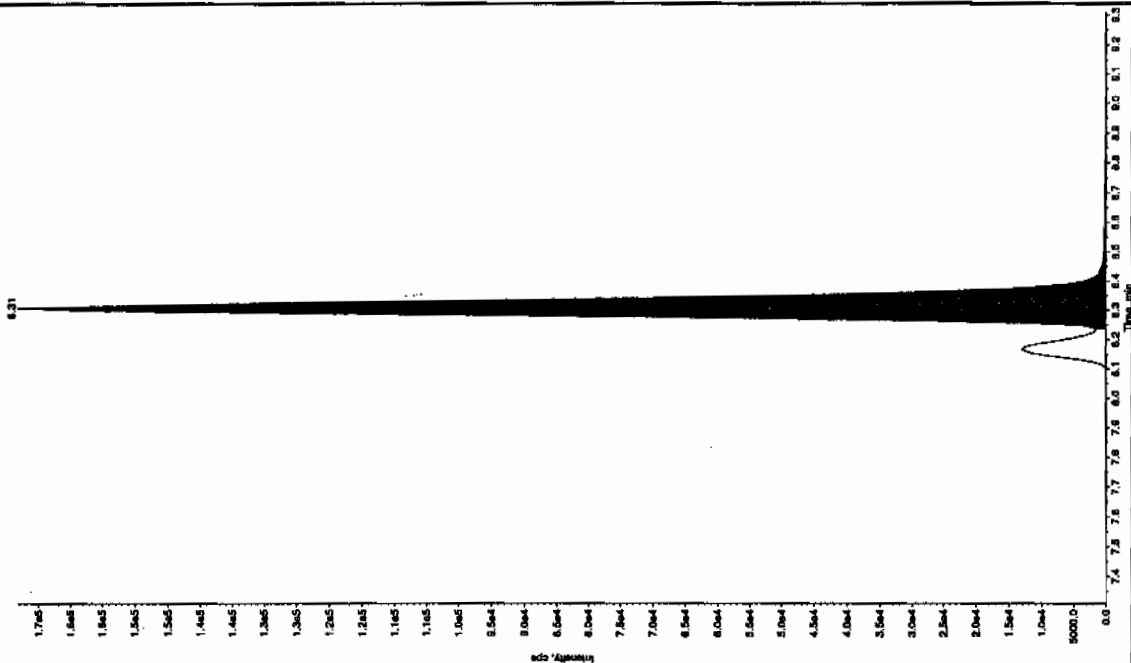
See 167110



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

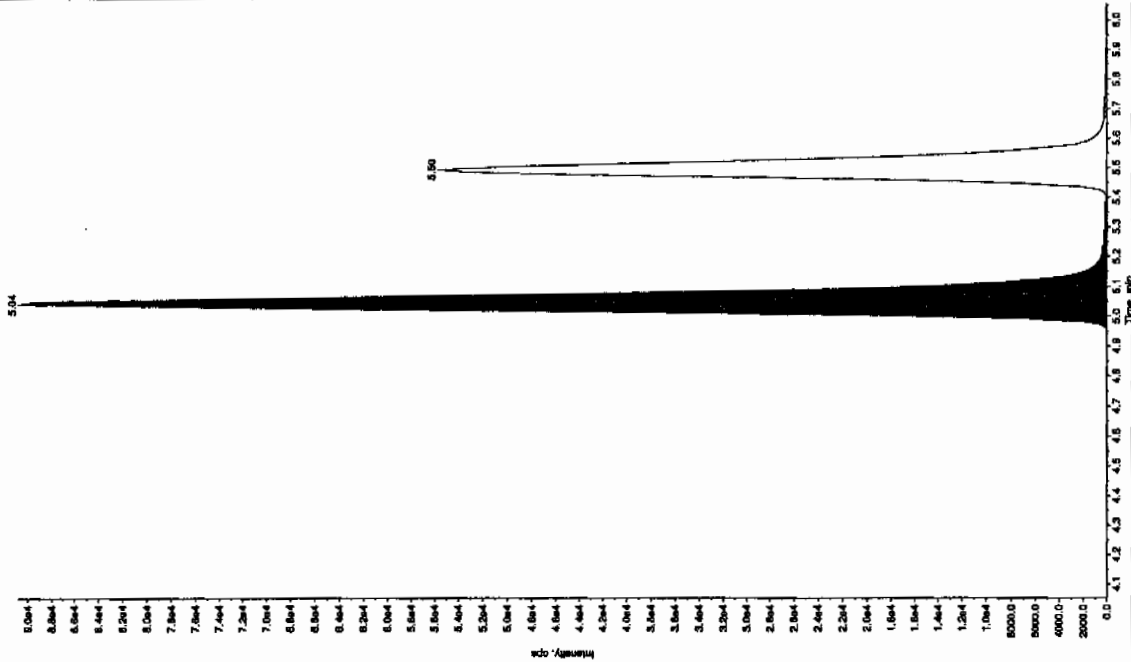
Sample Name: "WXX100125-27CR" Sample ID: "JLER" File: "EX507250065.wif"
 Peak Name: "34-Chlorobenzene" Mass(es): "(82.1715.9 amu)"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 50.0 ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 11:09:22 AM
 Acq. Time: 11:09:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - TOA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.31 min
 Area: 6.48e+005 counts
 Height: 166181.503 cps
 Start Time: 8.24 min
 End Time: 8.65 min



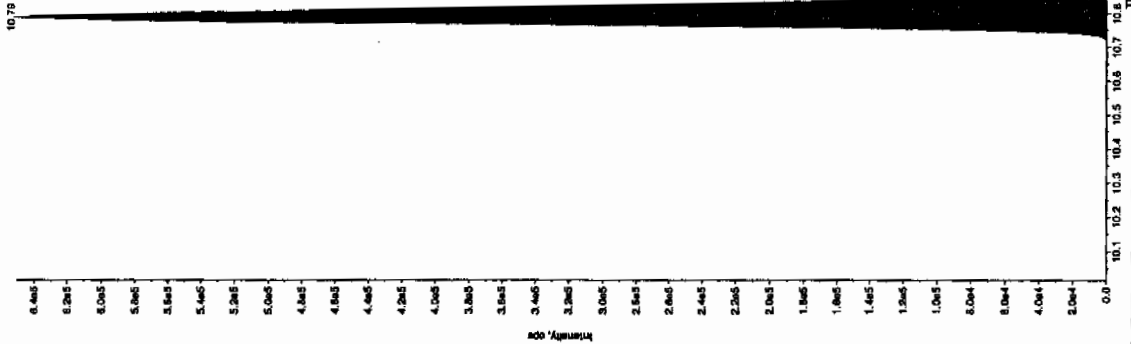
Sample Name: "WXX100125-27CR" Sample ID: "JLER" File: "EX507250065.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "(196.046.0 amu)"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 11:09:22 AM
 Acq. Time: 11:09:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - TOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.04 min
 Area: 3.68e+005 counts
 Height: 90821.419 cps
 Start Time: 4.94 min
 End Time: 5.33 min



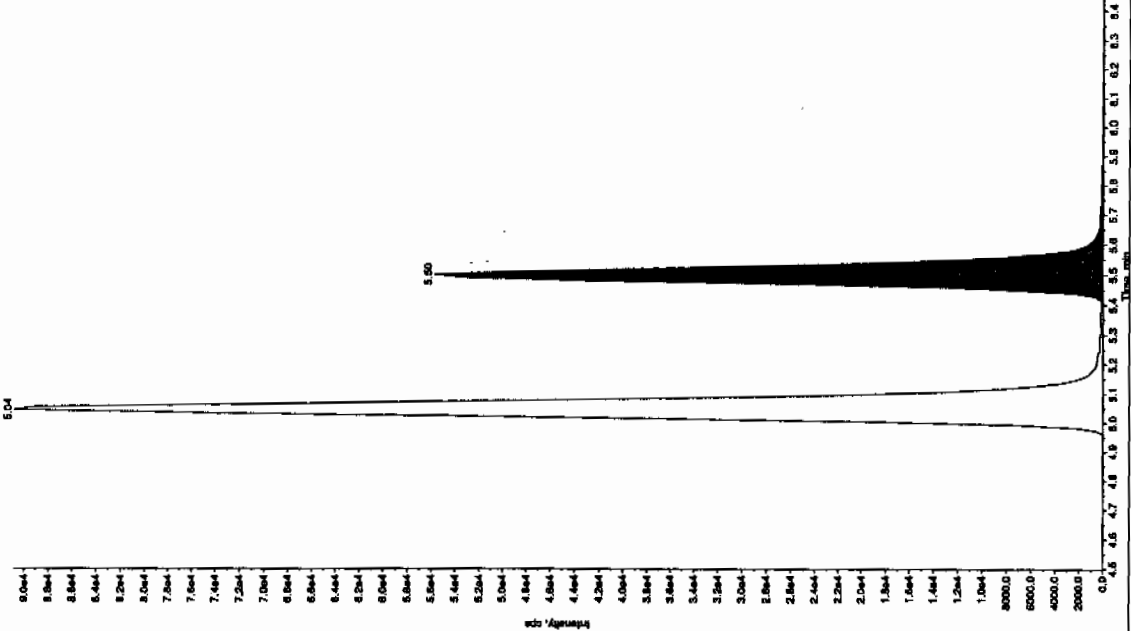
Sample Name: "WXX100125-27CR1" Sample ID: "11LER" File: "EX501250095.wif"
 Peak Name: "tri(ortho) phosphate" Mass(es): 369.191.0 amu
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 100. ng/mL
 Concentration: 100. ng/mL
 Calculated Conc: 118. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 11:09:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.8 min
 Area: 2.42e+006 counts
 Height: 650371.826 cps
 Start Time: 10.7 min
 End Time: 11.1 min



Sample Name: "WXX100125-27CR1" Sample ID: "11LER" File: "EX501250095.wif"
 Peak Name: "24-O-methyl-6-nitrochuan" Mass(es): 166.046.0 amu
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1 QC
 Sample Type: 100. ng/mL
 Concentration: 100. ng/mL
 Calculated Conc: 101. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 11:09:22 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.50 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.50 min
 Area: 2.28e+005 counts
 Height: 55690.358 cps
 Start Time: 5.38 min
 End Time: 5.69 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSSMS#4

7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250106.wiff

Analysis Date: 26-JAN-10 14:02

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	460	92	
2,6-Diamino-4-nitrotoluene	500	456	91	
3,4-Dinitrotoluene	250	219	87	
3,5-Dinitroaniline	500	505	101	
TATB	500	519	104	
tris(o-cresyl) phosphate	500	480	96	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

Sample Name: "WXX100125-260CV" Sample ID: "111ER" File: "EXS01250106.wif"

Peak Name: "3S-Dinitroarsine" Mass(es): "162.046.0 amu"

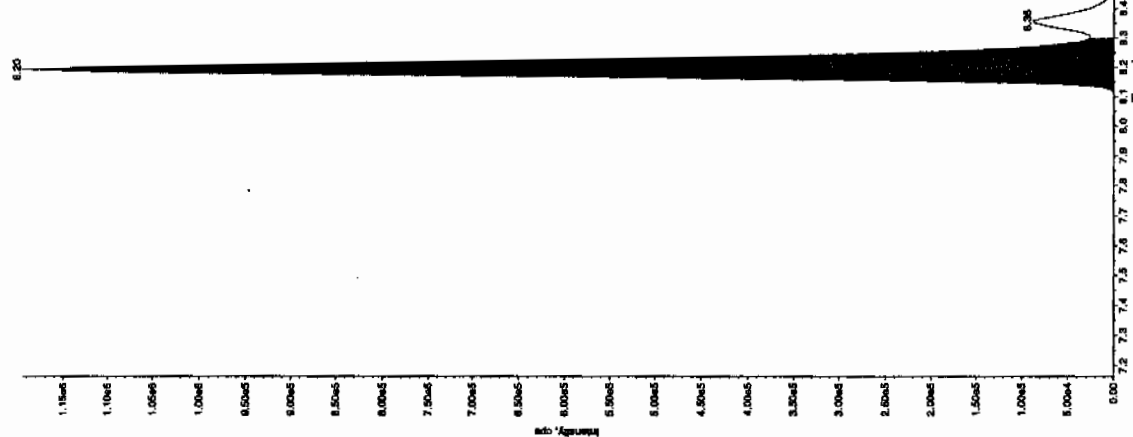
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 505. ng/mL
Acq. Date: 1/28/2010
Acq. Time: 2:02:18 PM

Modified: NO
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.16 min
Use Relative RT: NO

Int. Type: Valley
Retention Time: 8.20 min
Area: 4.72e+005 counts
Height: 1194267.700 cps
Start Time: 8.10 min
End Time: 8.30 min



Sample Name: "WXX100125-260CV" Sample ID: "111ER" File: "EXS01250106.wif"

Peak Name: "TATB" Mass(es): "257.2204.9 amu"

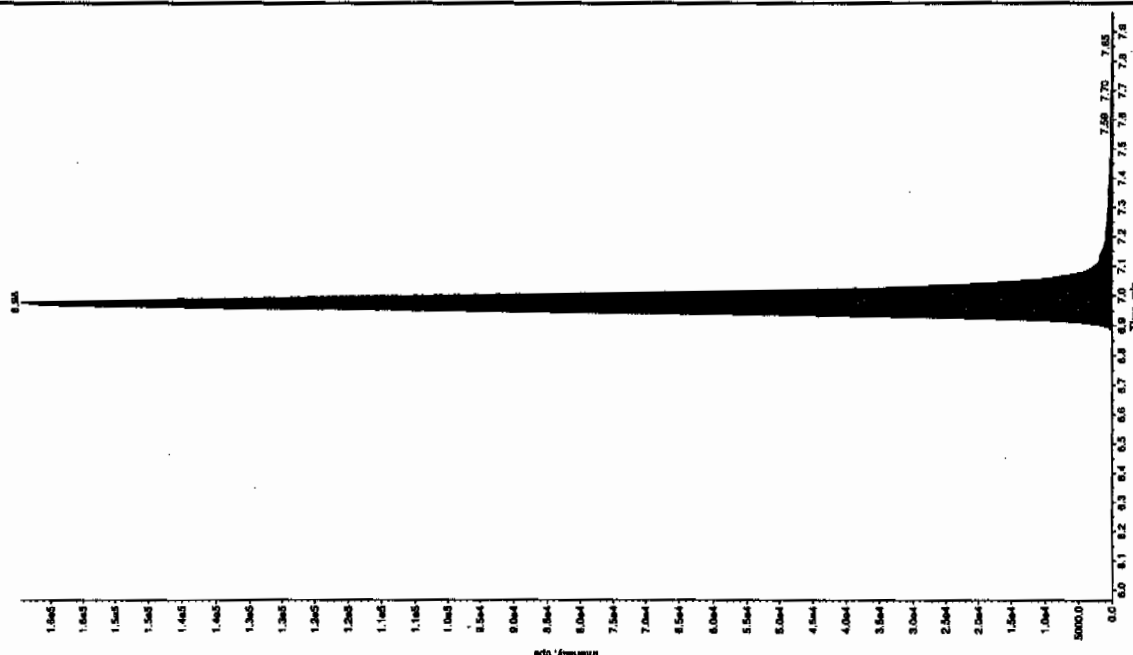
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1

Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 513. ng/mL
Acq. Date: 1/28/2010
Acq. Time: 2:02:14 PM

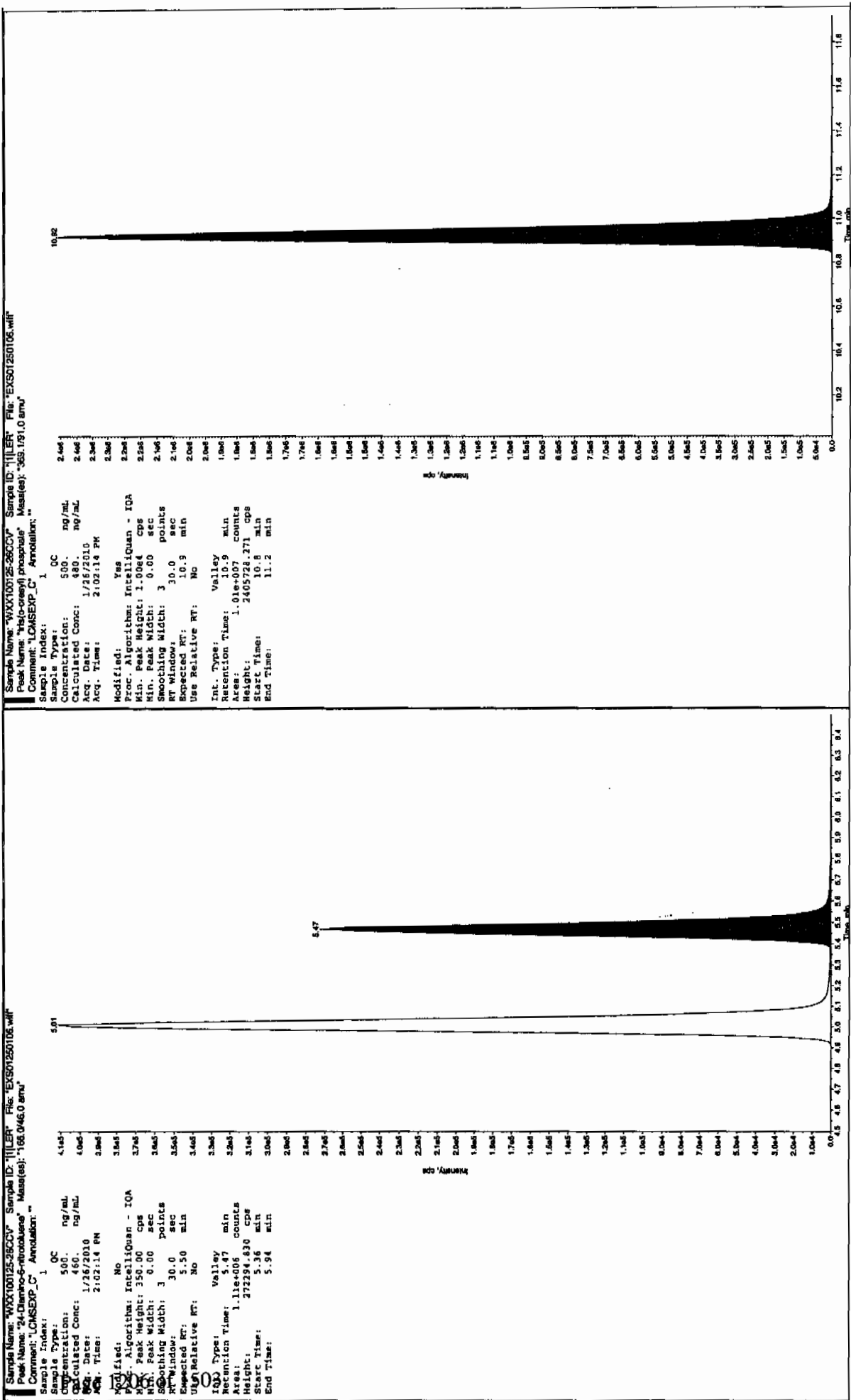
Modified: NO
Proc. Algorithm: IntelliQuan - IOA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 6.97 min
Use Relative RT: NO

Int. Type: Valley
Retention Time: 6.98 min
Area: 7.22e+005 counts
Height: 16441.925 cps
Start Time: 6.79 min
End Time: 7.50 min



Ann-01/27/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCM SMS#4



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250108.wiff

Analysis Date: 26-JAN-10 14:33

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	101	101	
2,6-Diamino-4-nitrotoluene	100	95.8	96	
3,4-Dinitrotoluene	50	46.1	92	
3,5-Dinitroaniline	100	105	105	
TATB	100	105	105	
tris(o-cresyl) phosphate	100	112	112	

Recovery Limits:

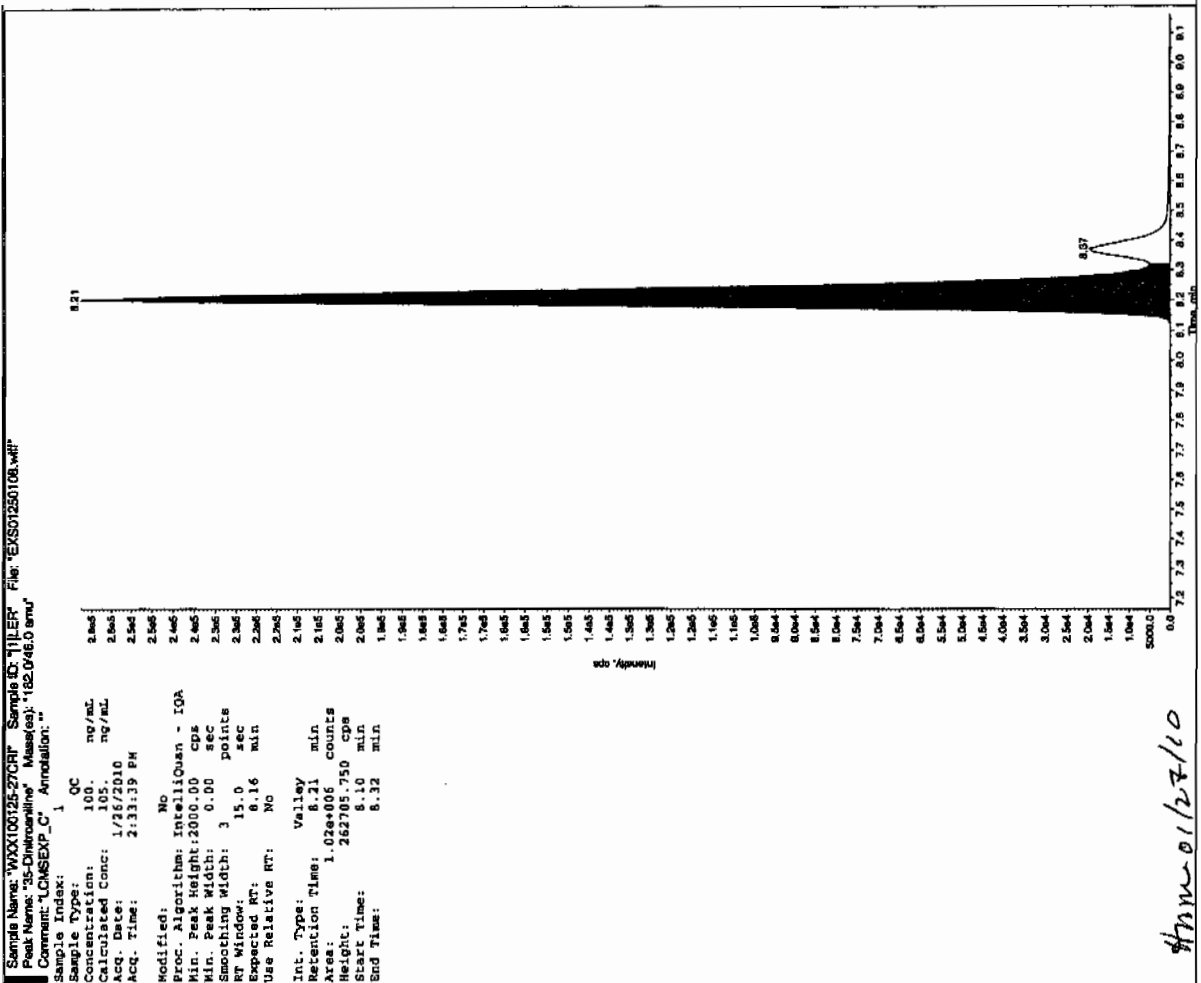
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

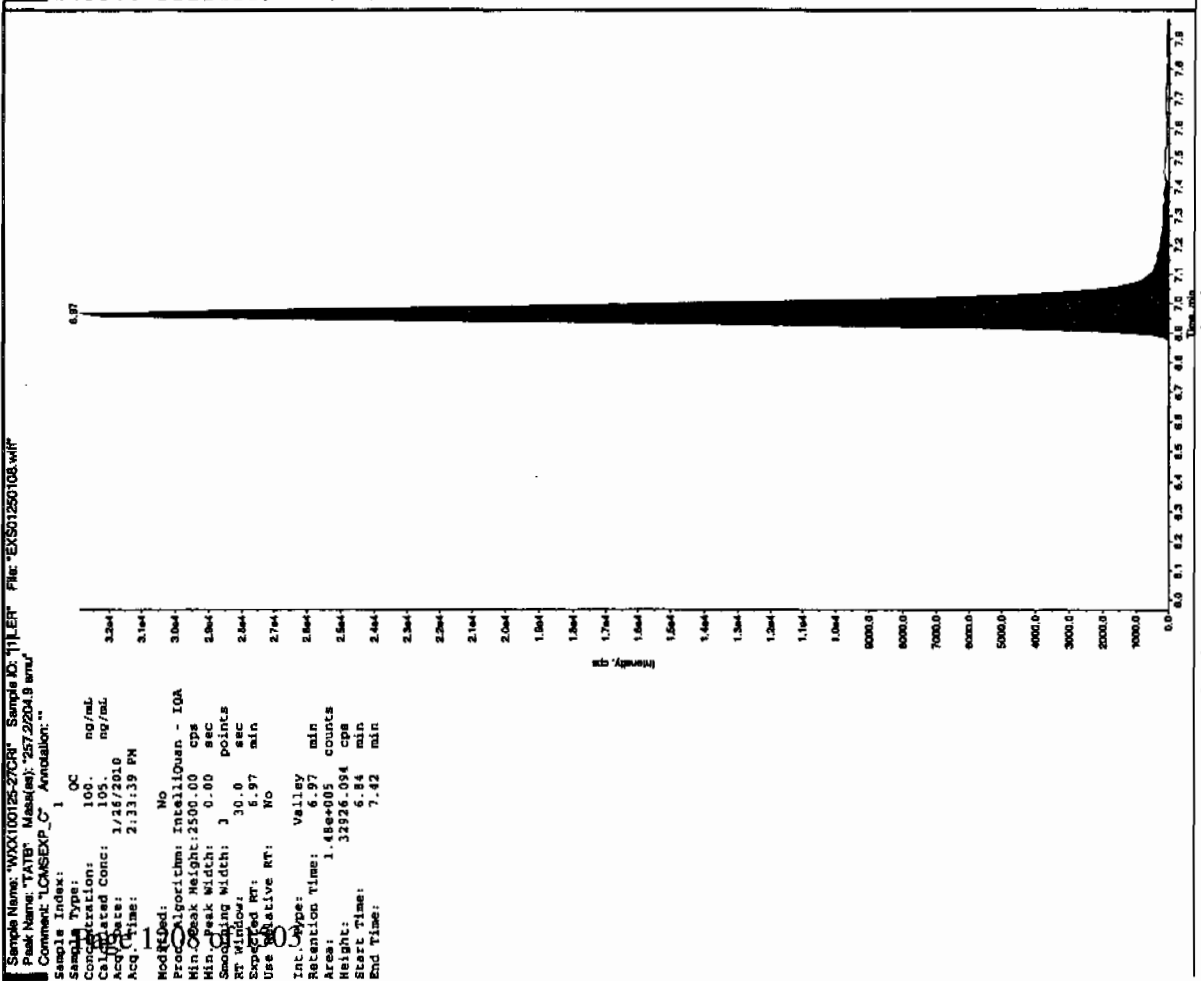
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

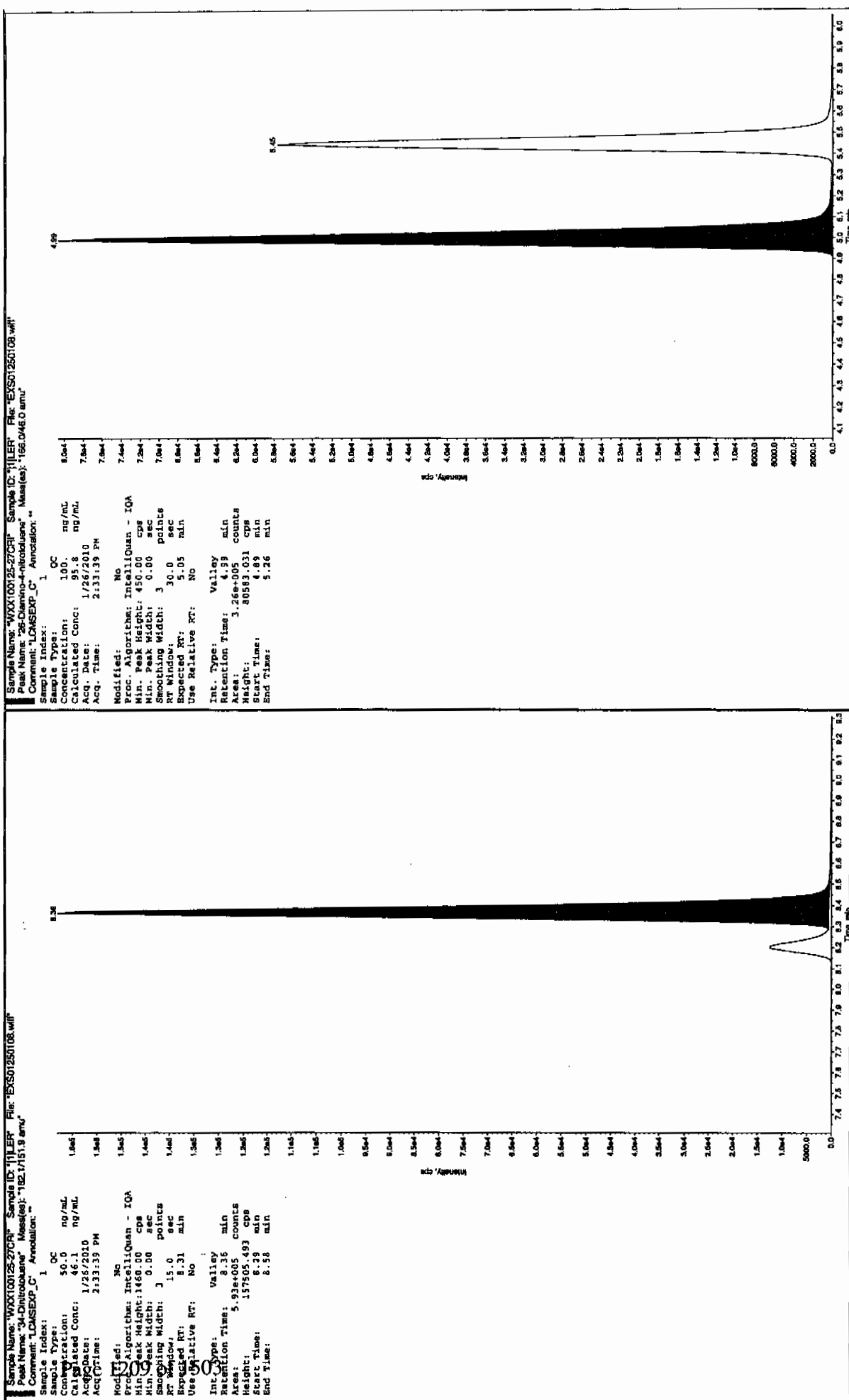
Law 1/27/10

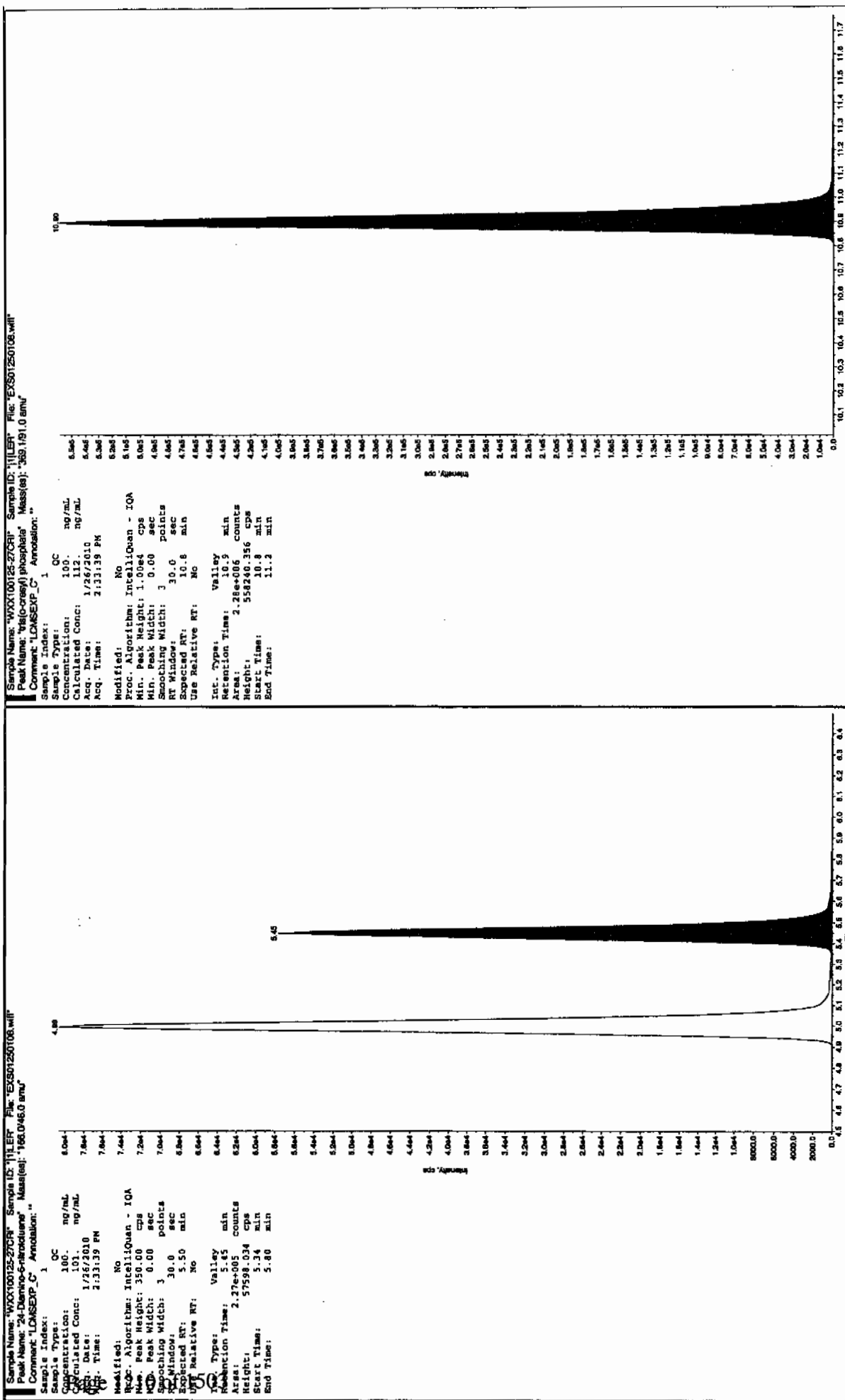


Ann-01/27/10



GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250119.wiff

Analysis Date: 26-JAN-10 17:26

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	449	90	
2,6-Diamino-4-nitrotoluene	500	446	89	
3,4-Dinitrotoluene	250	220	88	
3,5-Dinitroaniline	500	504	101	
TATB	500	488	98	
tris(o-cresyl) phosphate	500	482	96	

Recovery Limits:

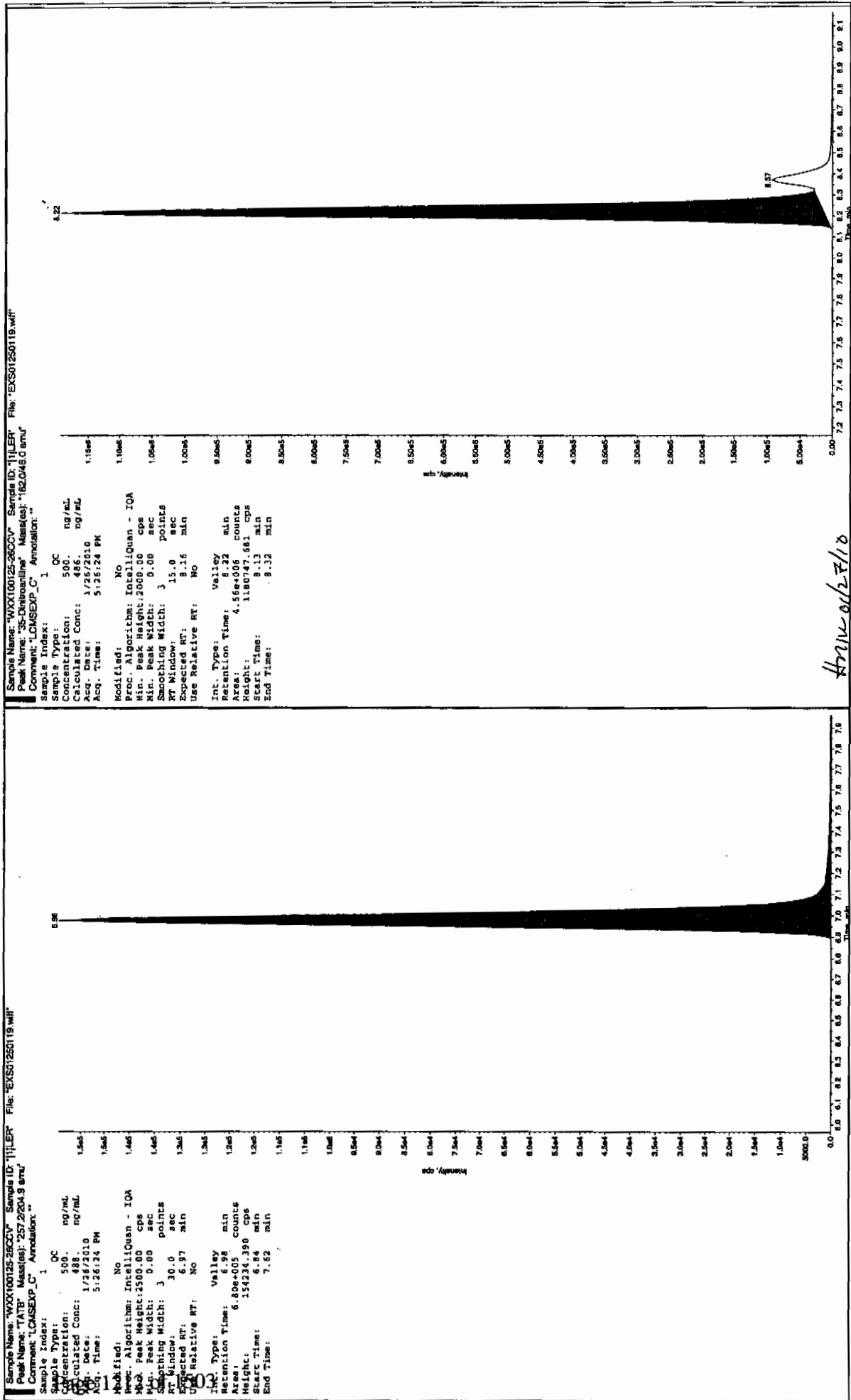
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

Column used to flag Recovery outside of Limits

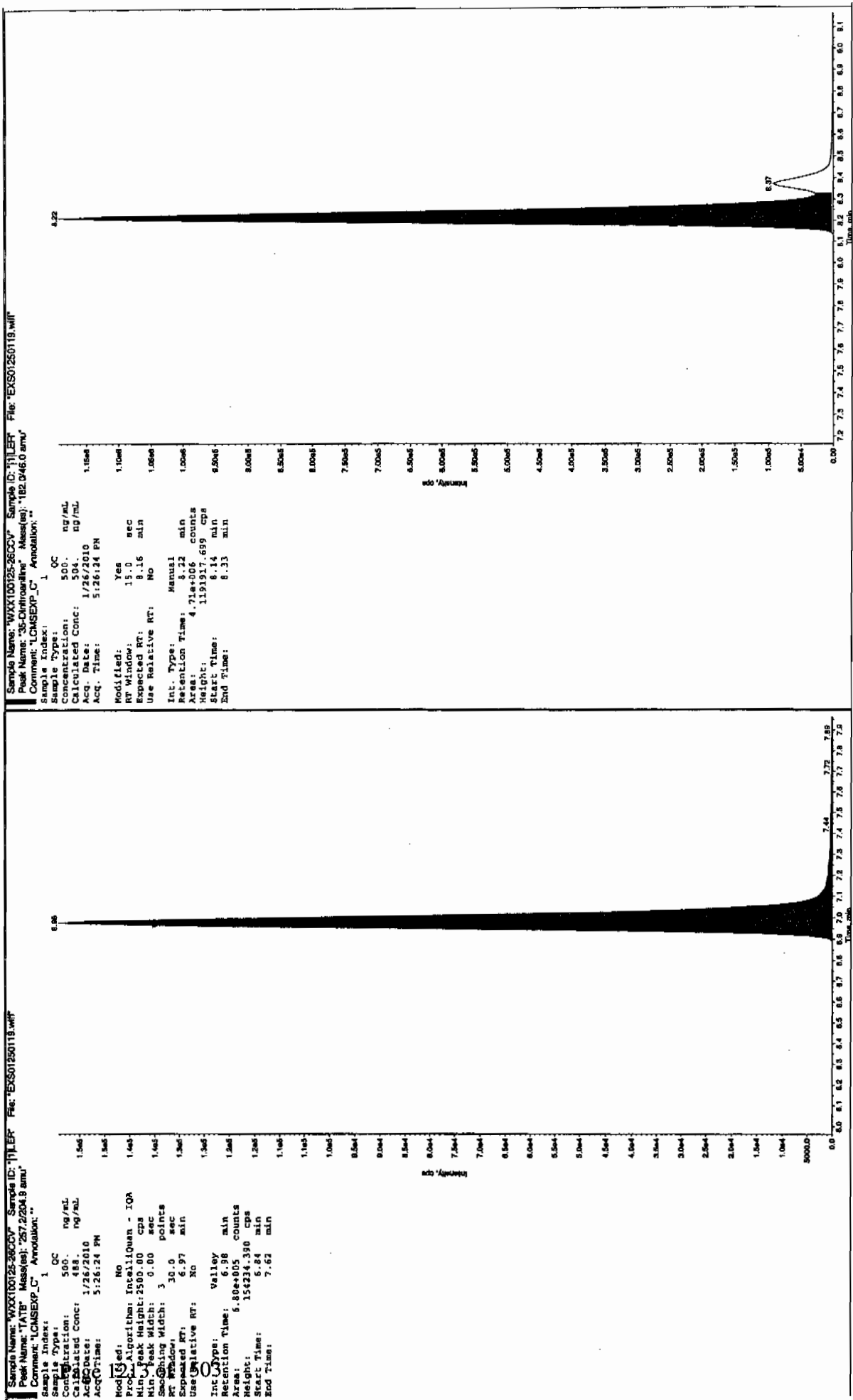
* Value outside of Recovery Limits

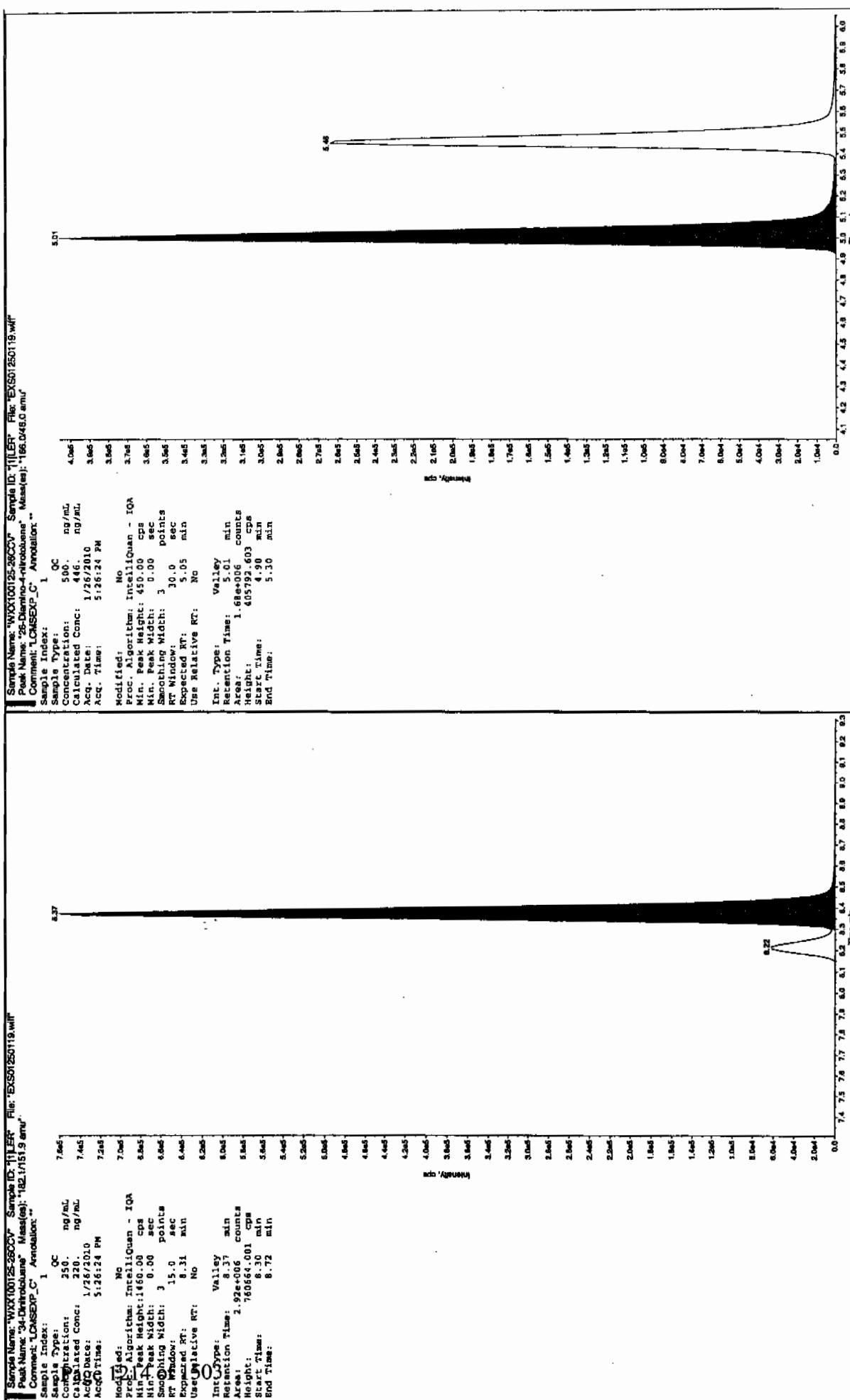
Before Scan 1127110



Arrival 1127110

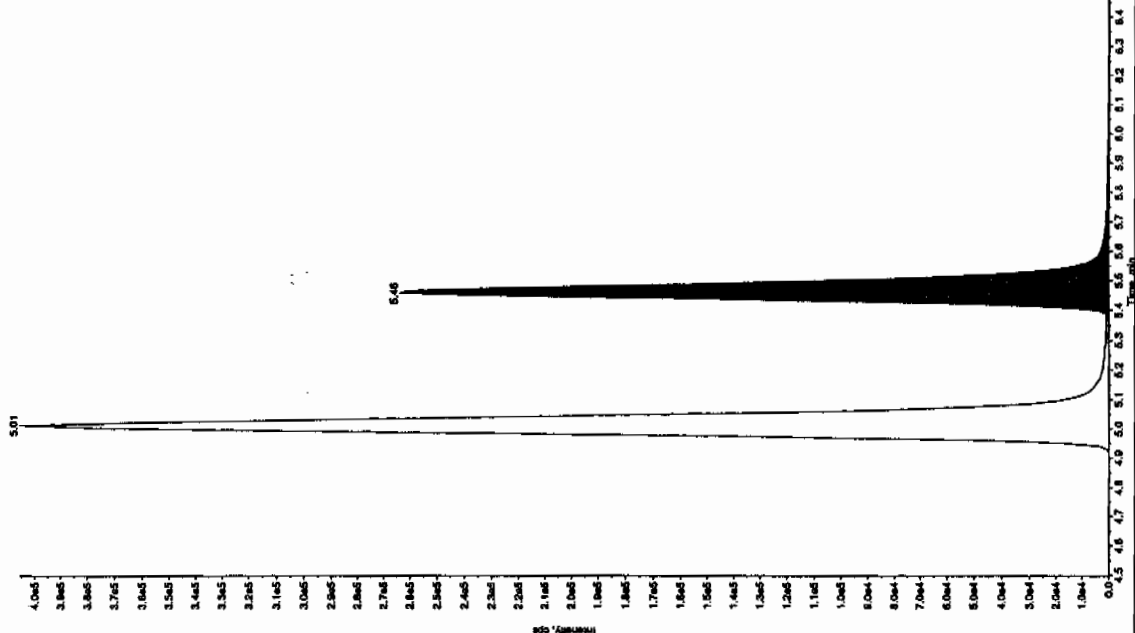
after Jan 11/27/10





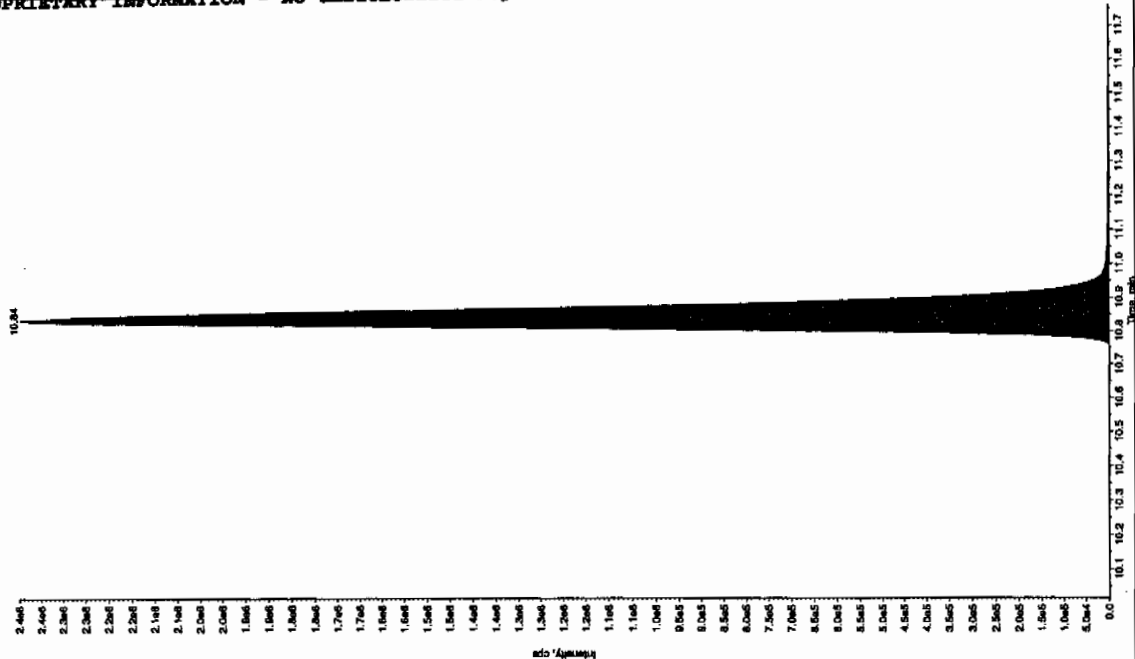
Sample Name: "WXX100125-2603V" Sample ID: "11LBR" File: "EX501250119.wif"
 Peak Name: "24-Diamino-6-nitrothiua" Mass(es): "166.046.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 449. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 5:26:24 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.50 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.46 min
 Area: 1.08e+006 counts
 Height: 263511.566 cps
 Start Time: 5.37 min
 End Time: 5.85 min



Sample Name: "WXX100125-2603V" Sample ID: "11LBR" File: "EX501250119.wif"
 Peak Name: "tris-(o-cresyl) phosphate" Mass(es): "389.1691.0 amu"
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 500. ng/mL
 Calculated Conc: 482. ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 5:26:24 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 10.8 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.6 min
 Area: 1.01e+007 counts
 Height: 2399382.813 cps
 Start Time: 10.7 min
 End Time: 11.2 min



7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250121.wiff

Analysis Date: 26-JAN-10 17:57

LCMSMS ID: 1358

Column ID: Sphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	103	103	
2,6-Diamino-4-nitrotoluene	100	99.4	99	
3,4-Dinitrotoluene	50	48.4	97	
3,5-Dinitroaniline	100	103	103	
TATB	100	104	104	
tris(o-cresyl) phosphate	100	114	114	

Recovery Limits:

3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,

2,4-Diamino-6-nitrotoluene 50-150%

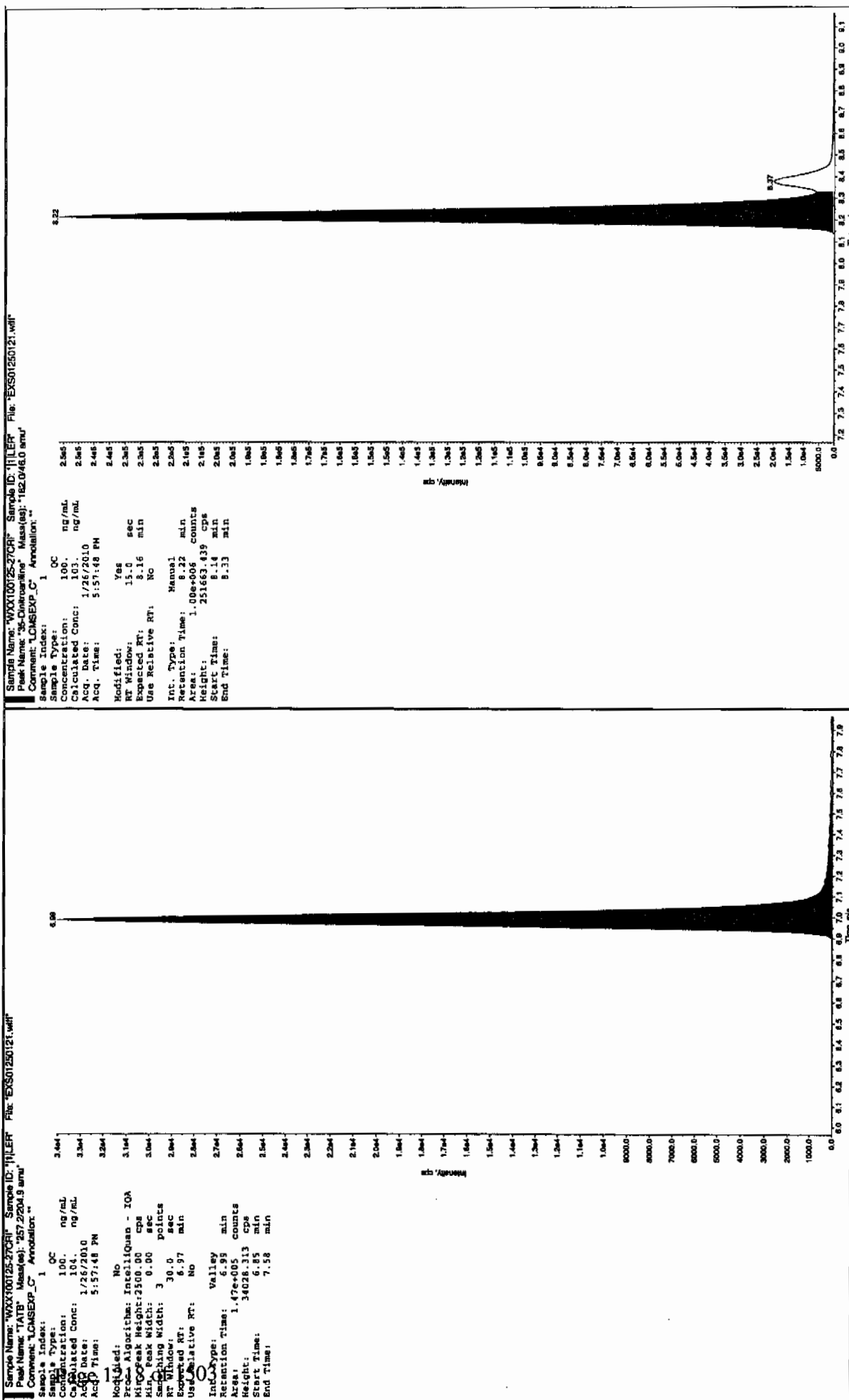
Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

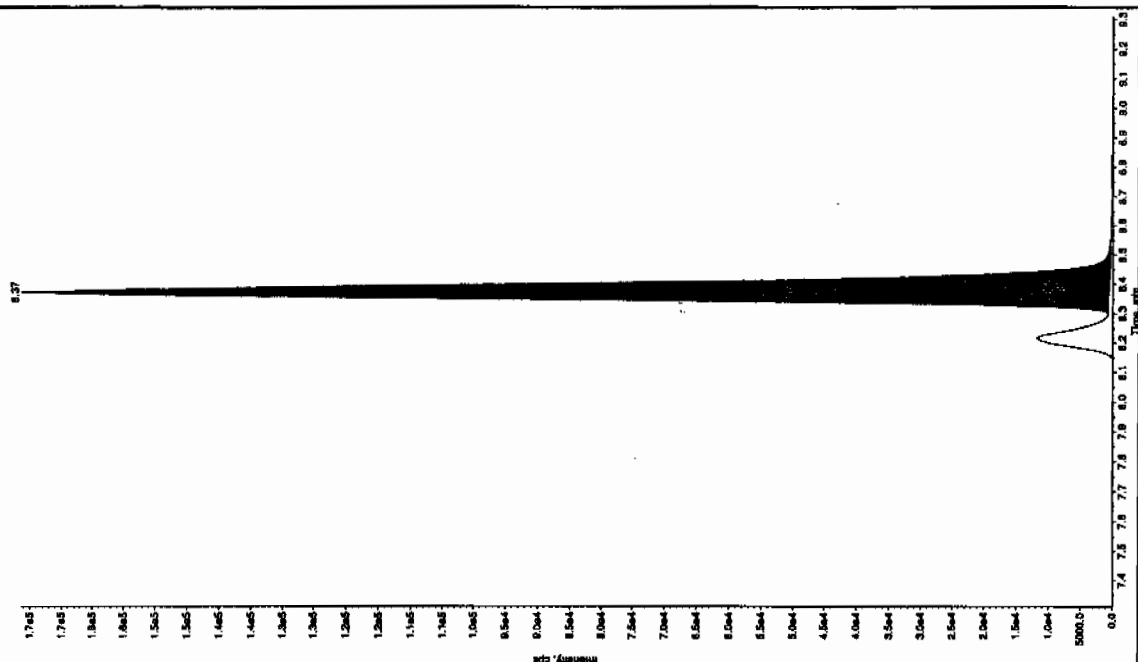


after Jan 11/27/10



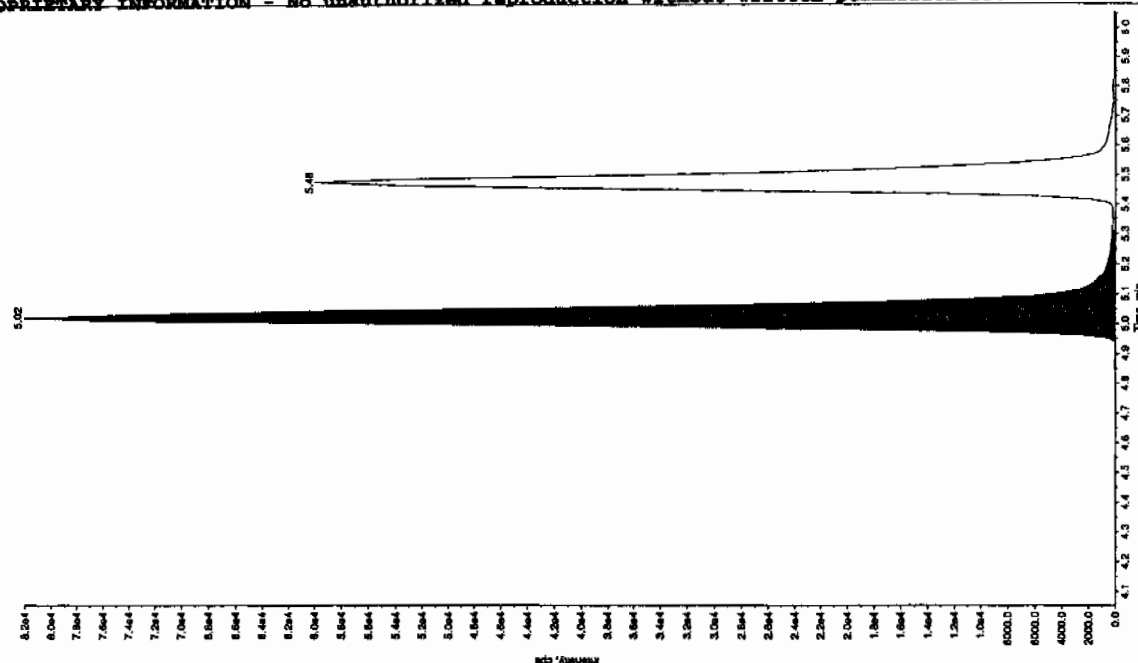
Sample Name: "WXX100125-27C1" Sample ID: "11LBR" File: "EXS01250121.wif"
 Peak Name: "34-Dinitrofluorene" Mass(es): "182.151.9 amu"
 Comment: "LCMSXP_C" Annotation: ""

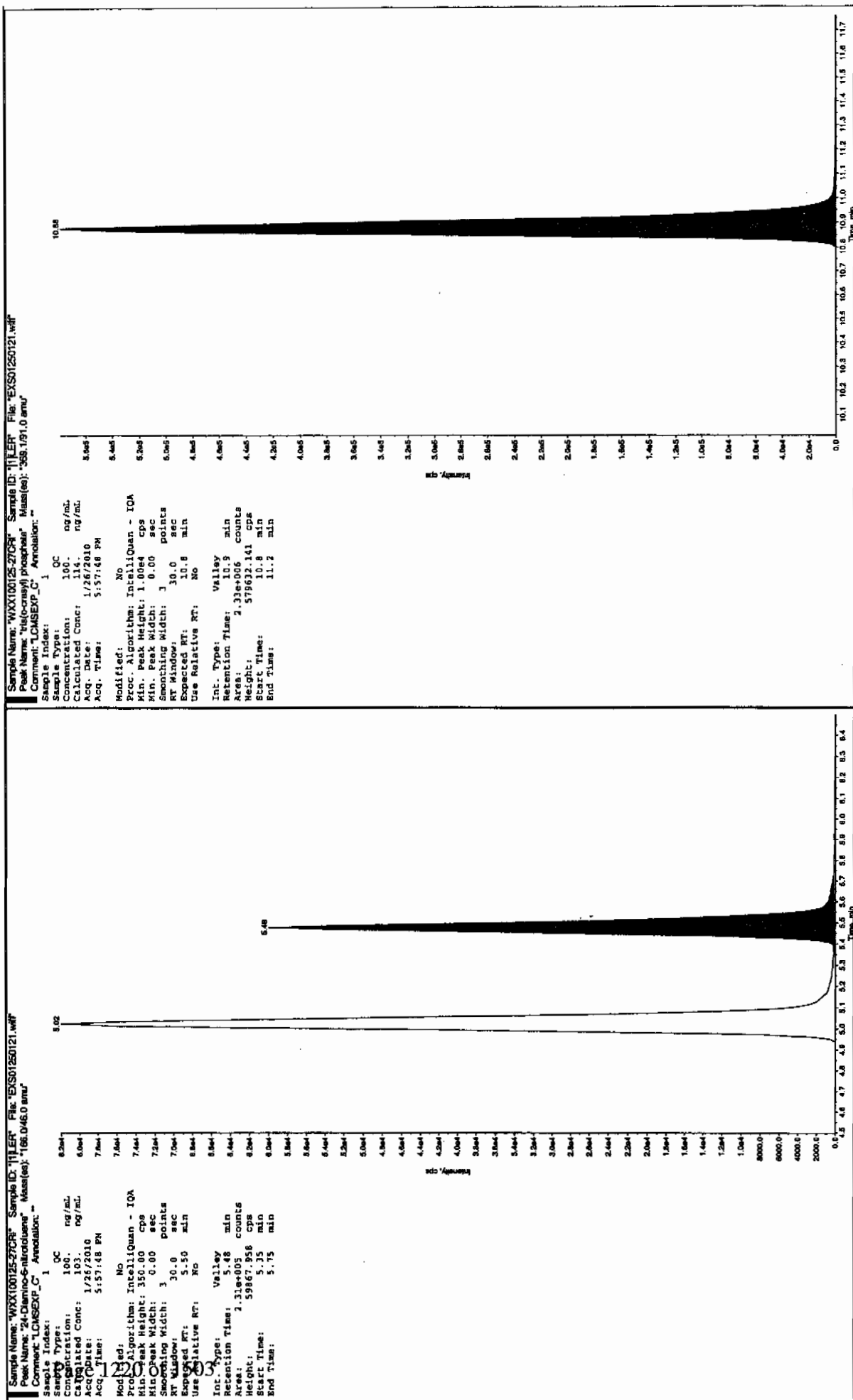
Sample Index: 1
 Sample Type: OC
 Concentration: 50.0 ng/mL
 Calculated Conc: 46.8 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 5:57:48 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1460.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 6.25e+005 counts
 Height: 17078.145 cps
 Start Time: 8.20 min
 End Time: 8.58 min



Sample Name: "WXX100125-27C1" Sample ID: "11LBR" File: "EXS01250121.wif"
 Peak Name: "25-Dinitro-4-nitrofluorene" Mass(es): "166.046.0 amu"
 Comment: "LCMSXP_C" Annotation: ""

Sample Index: 1
 Sample Type: OC
 Concentration: 100. ng/mL
 Calculated Conc: 99.4 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 5:57:48 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 3.40e+005 counts
 Height: 82078.133 cps
 Start Time: 4.92 min
 End Time: 5.31 min





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250132.wiff

Analysis Date: 26-JAN-10 20:50

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	463	93	
2,6-Diamino-4-nitrotoluene	500	476	95	
3,4-Dinitrotoluene	250	226	90	
3,5-Dinitroaniline	500	528	106	
TATB	500	555	111	
tris(o-cresyl) phosphate	500	511	102	

Recovery Limits:

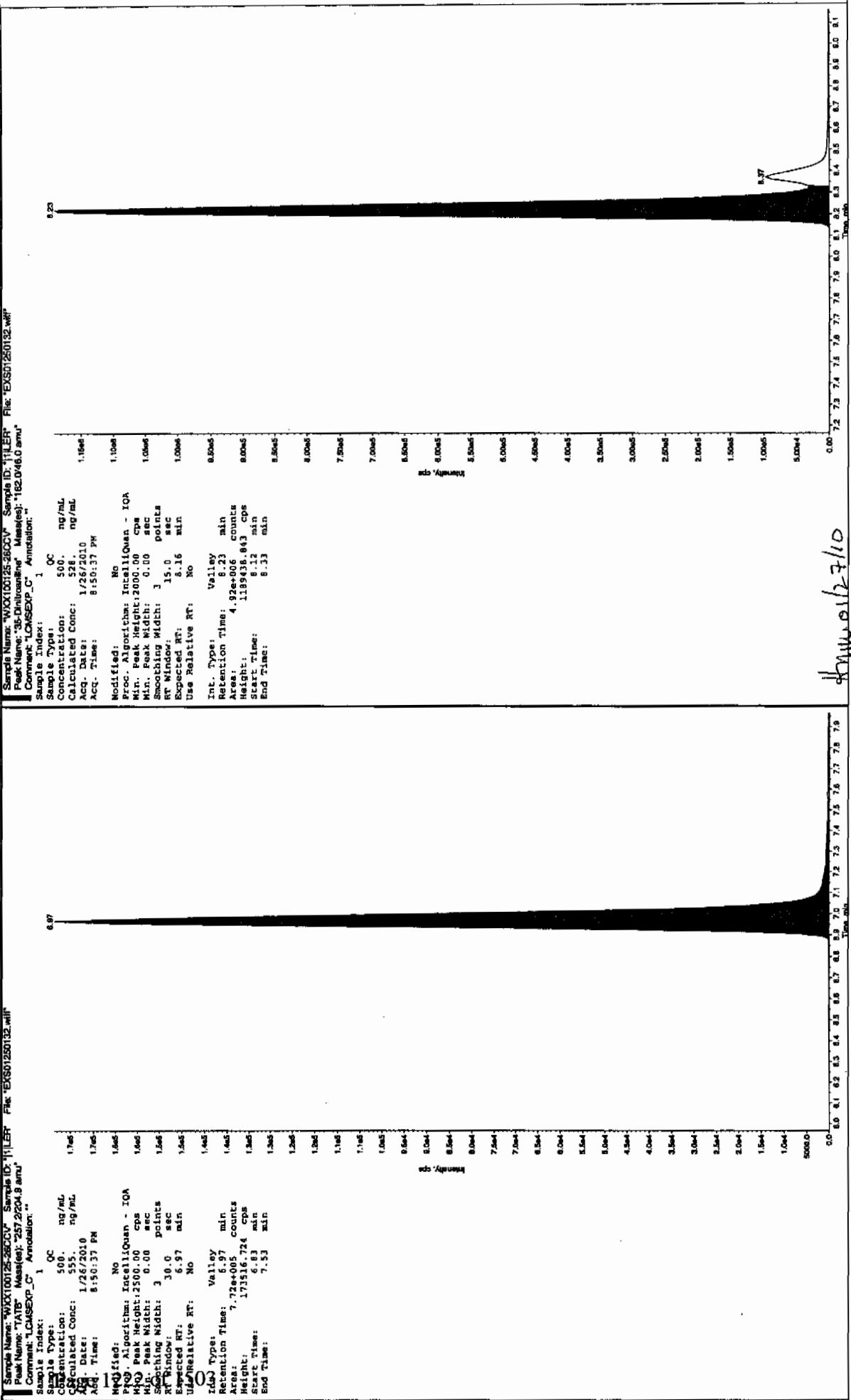
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

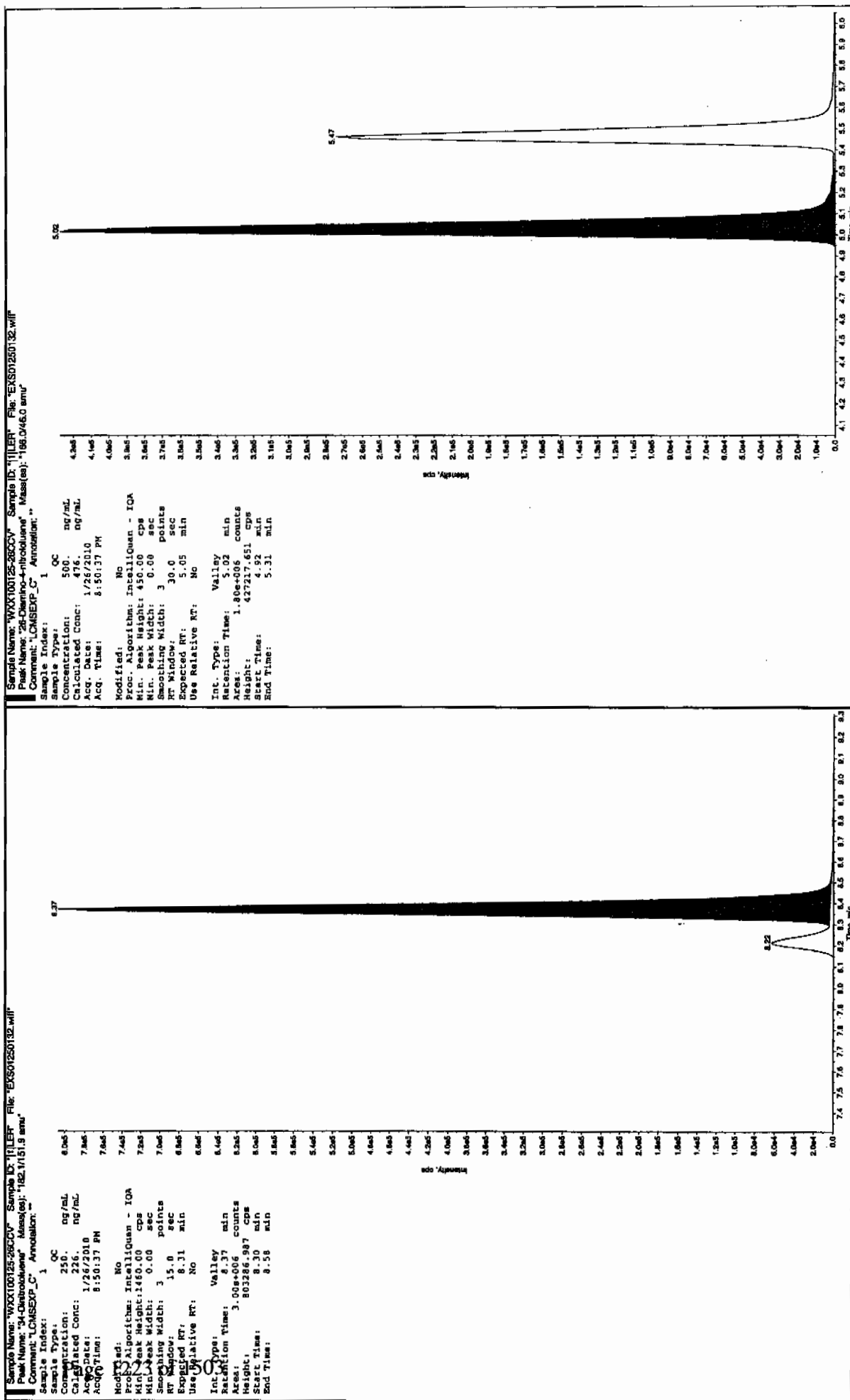
Column used to flag Recovery outside of Limits

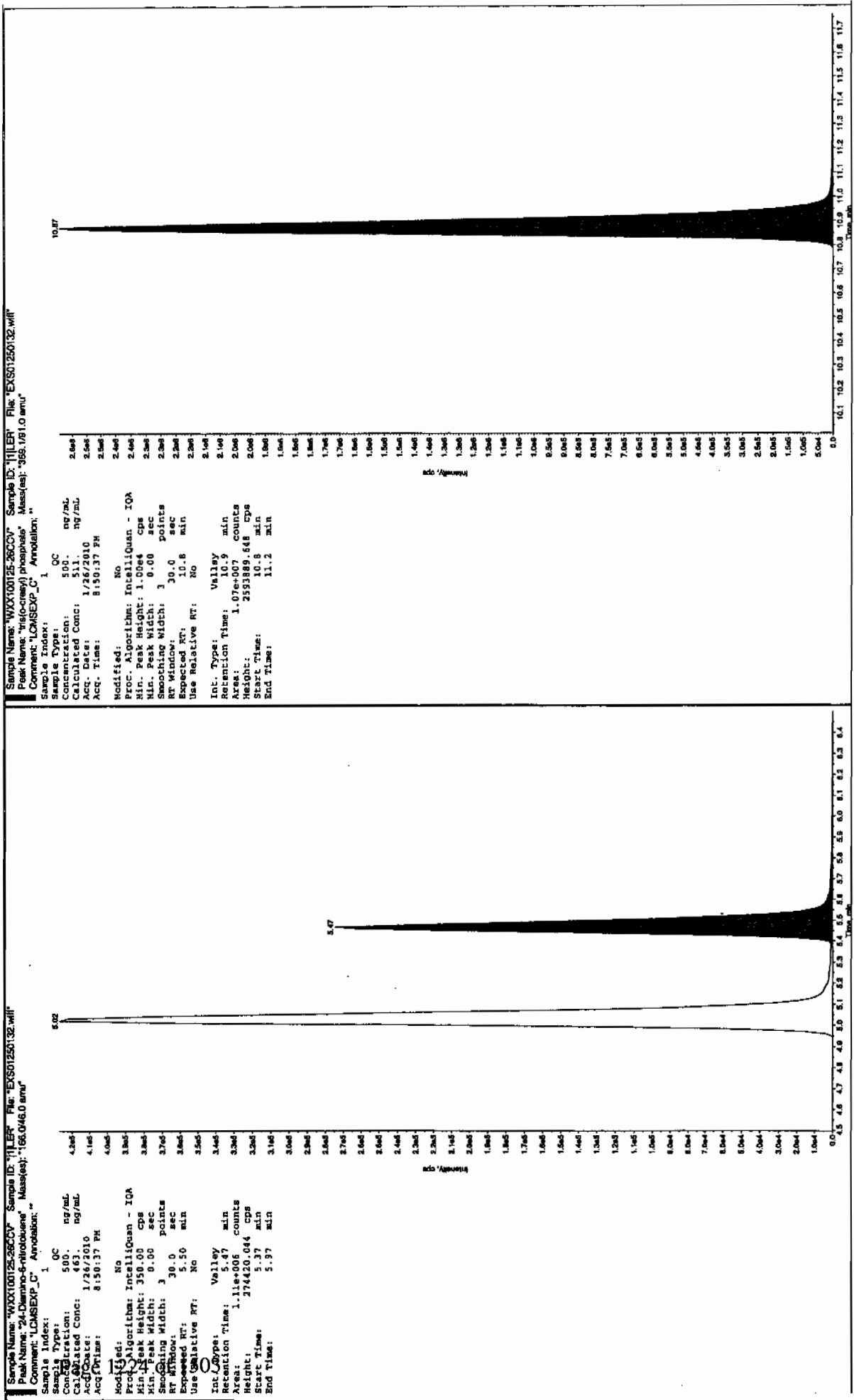
* Value outside of Recovery Limits

after 1/27/10



1/27/10





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250134.wiff

Analysis Date: 26-JAN-10 21:22

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	91	91	
2,6-Diamino-4-nitrotoluene	100	98.3	98	
3,4-Dinitrotoluene	50	47.4	95	
3,5-Dinitroaniline	100	110	110	
TATB	100	112	112	
tris(o-cresyl) phosphate	100	119	119	

Recovery Limits:

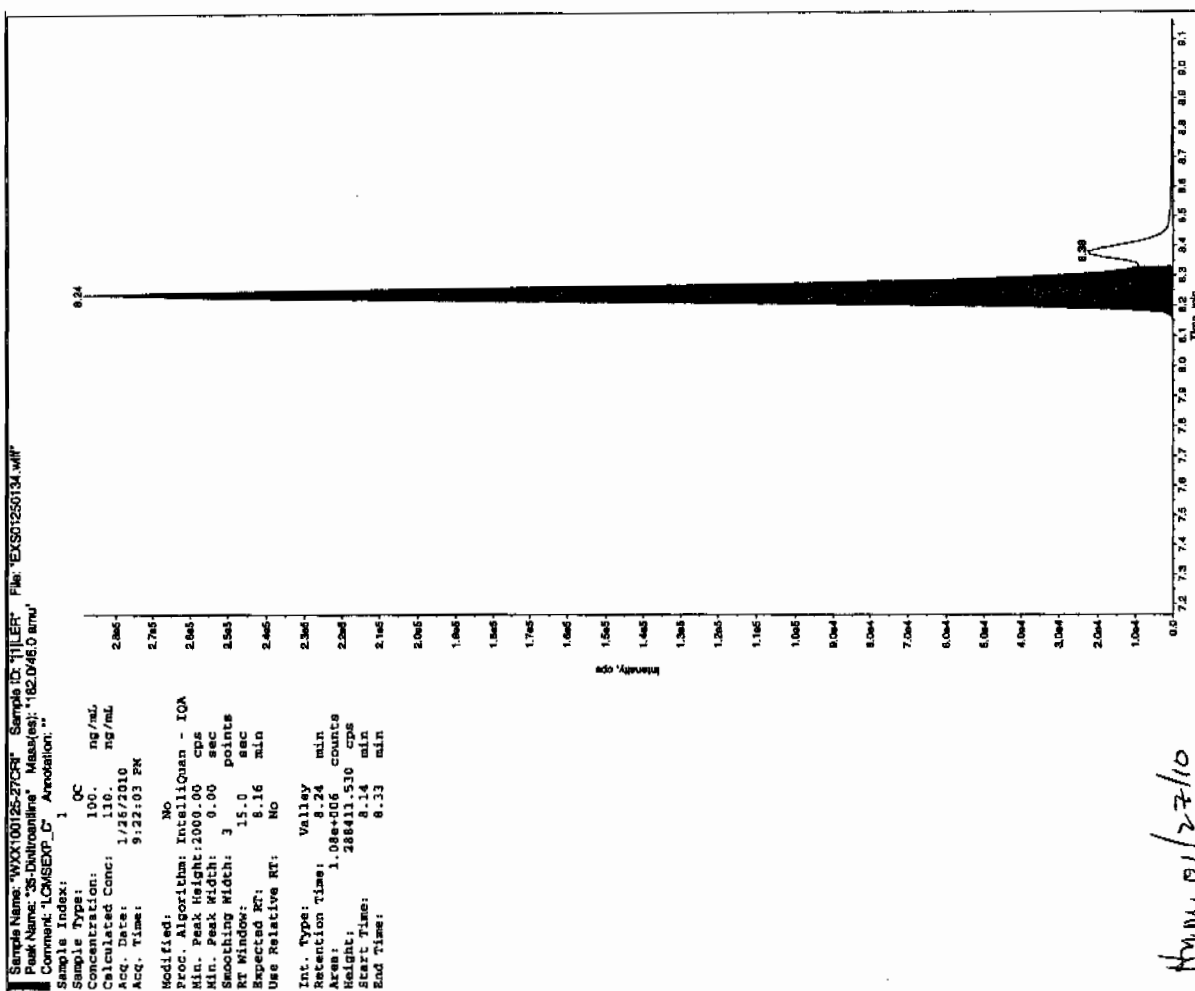
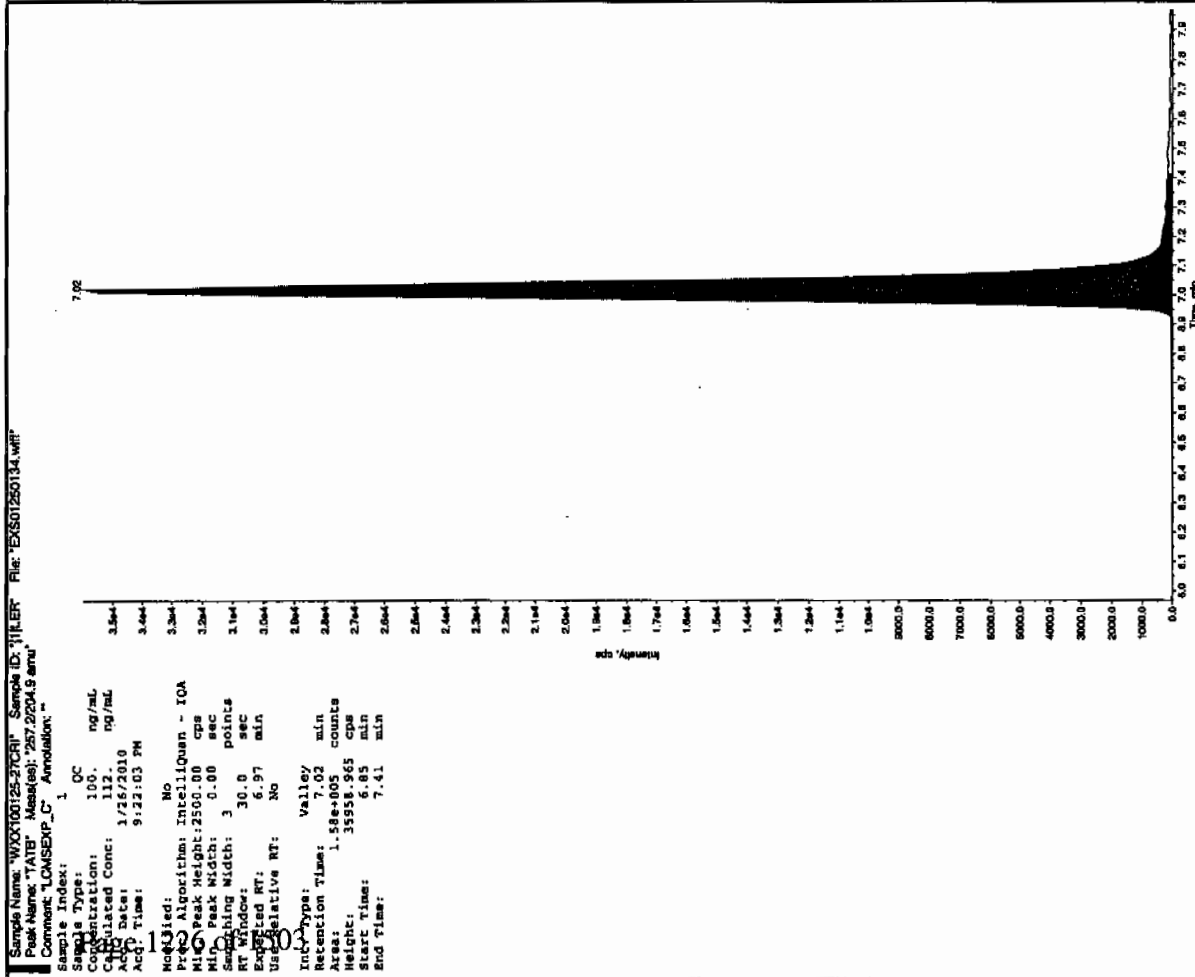
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

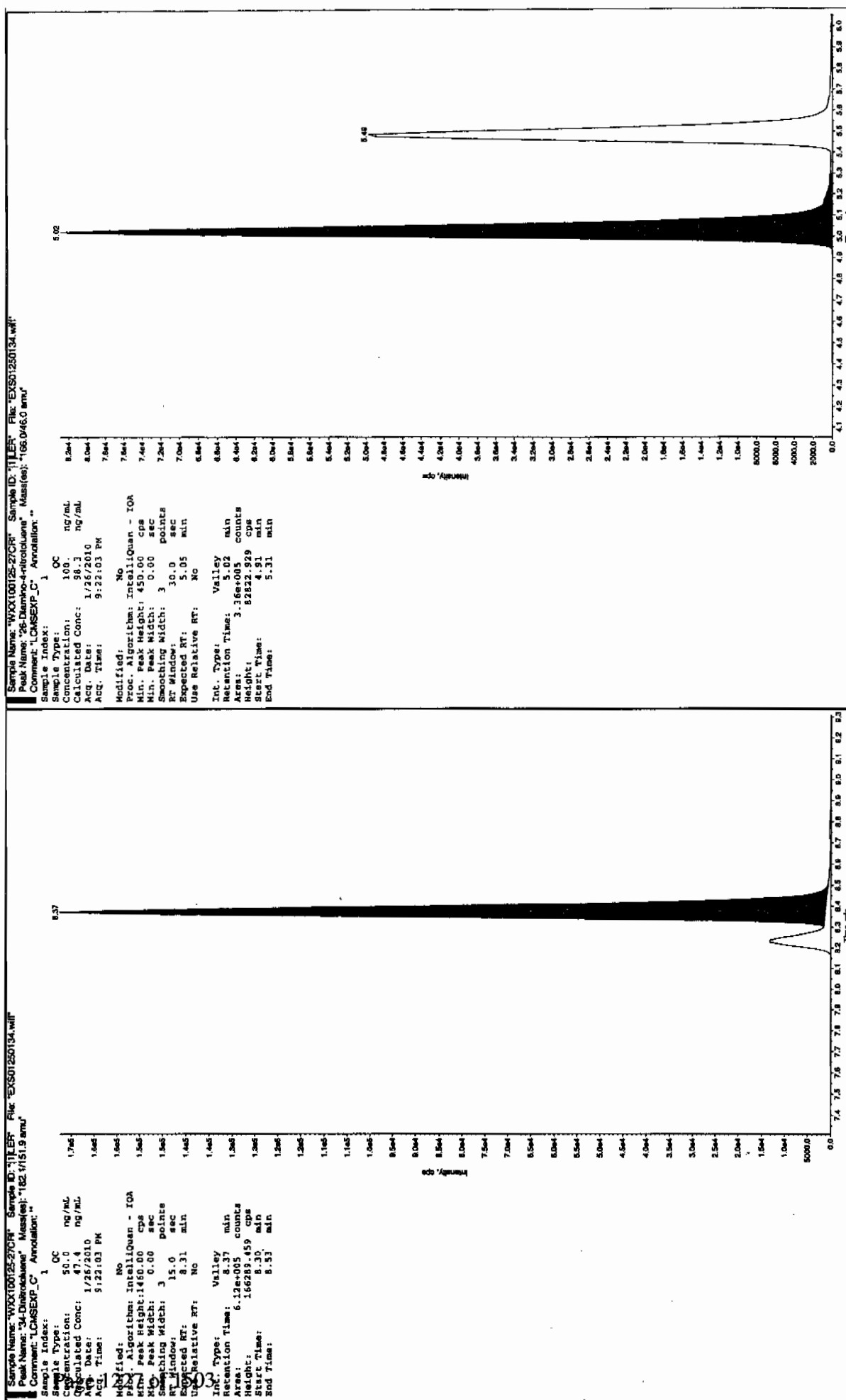
Column used to flag Recovery outside of Limits

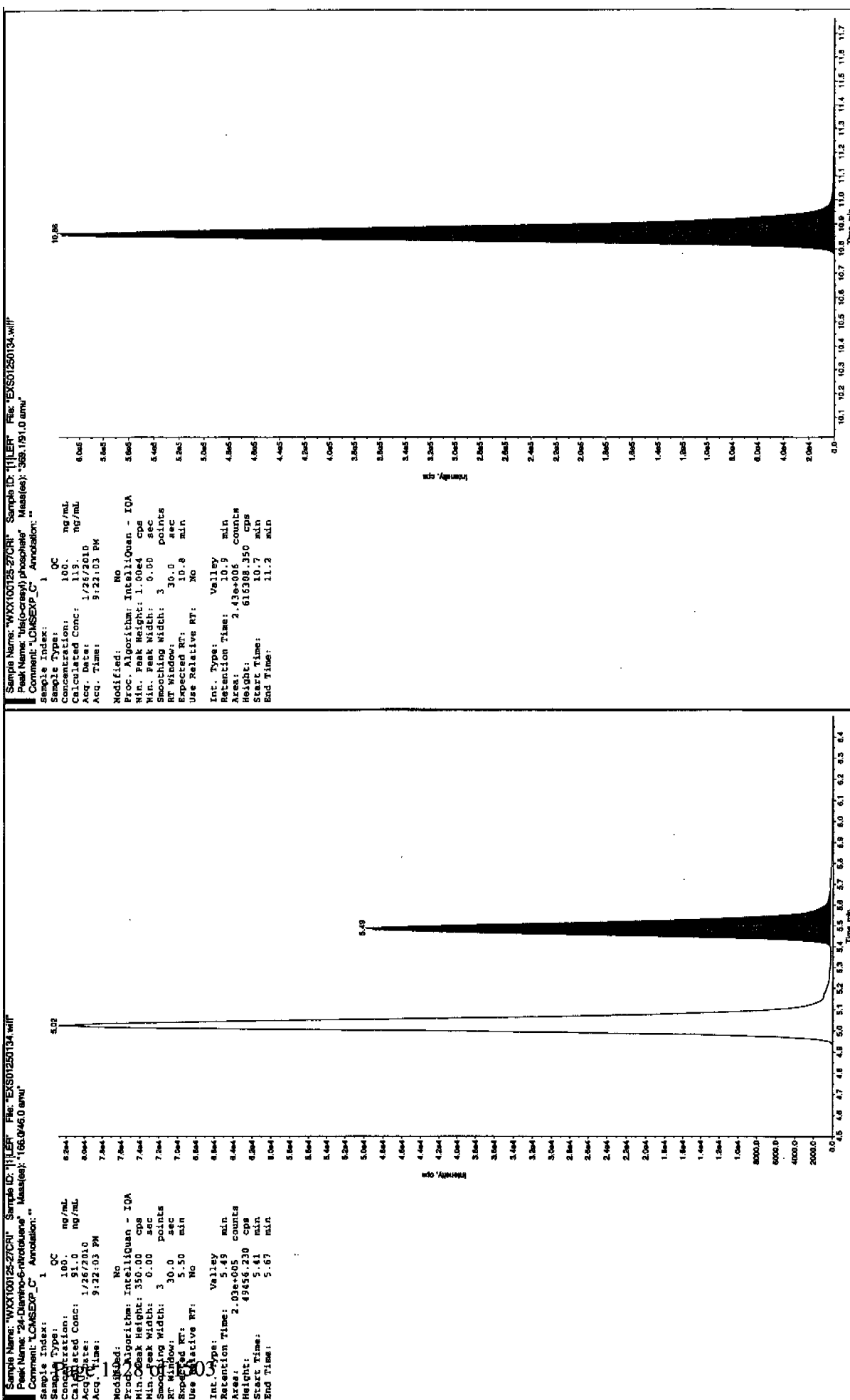
* Value outside of Recovery Limits

Car 1/27/10



Handwritten signature and date: 1/27/10





7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS01250144.wiff

Analysis Date: 26-JAN-10 23:59

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	424	85	
2,6-Diamino-4-nitrotoluene	500	442	89	
3,4-Dinitrotoluene	250	233	93	
3,5-Dinitroaniline	500	515	103	
TATB	500	558	112	
tris(o-cresyl) phosphate	500	501	100	

Recovery Limits:

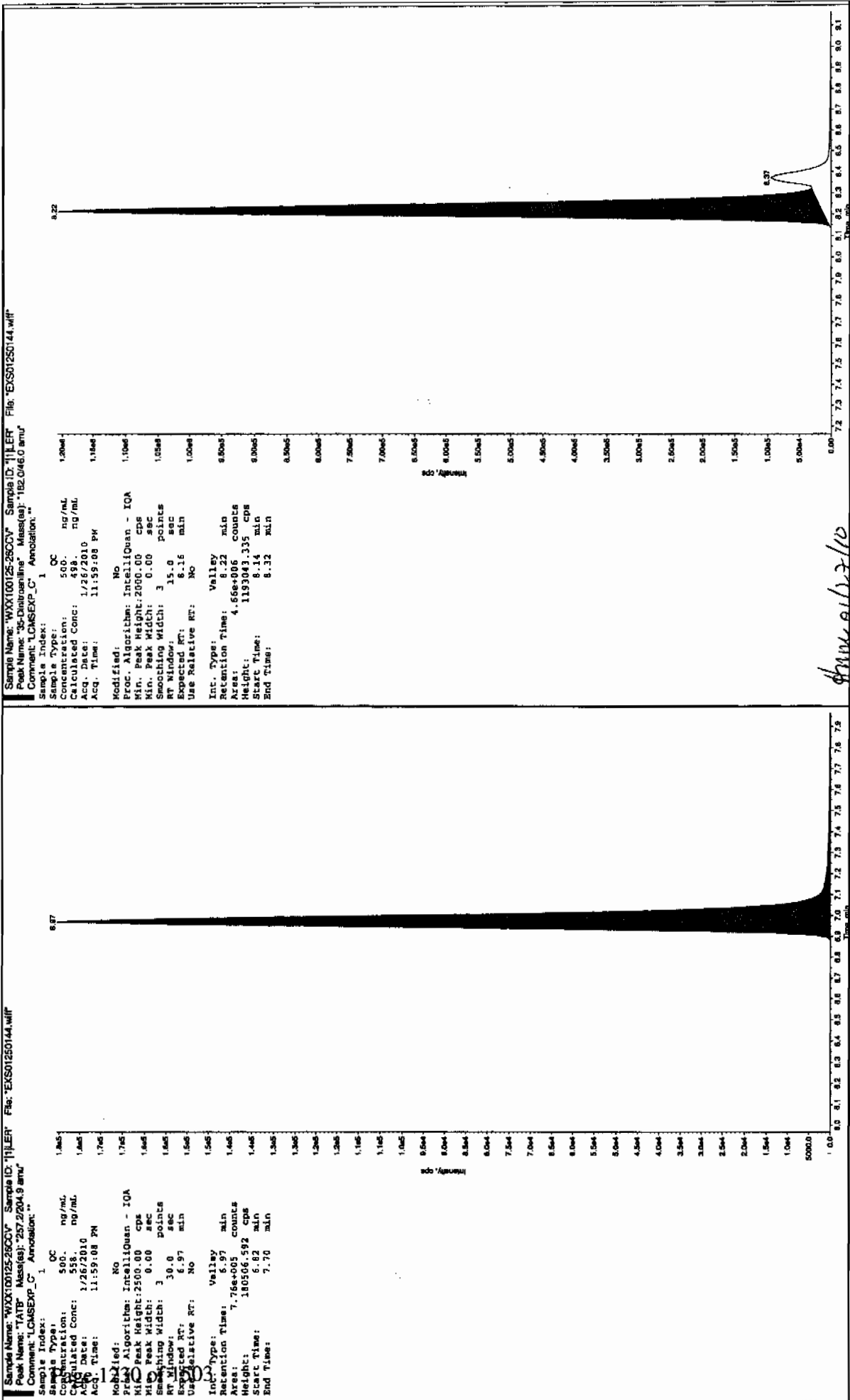
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%

Other Target Analytes 80-120%

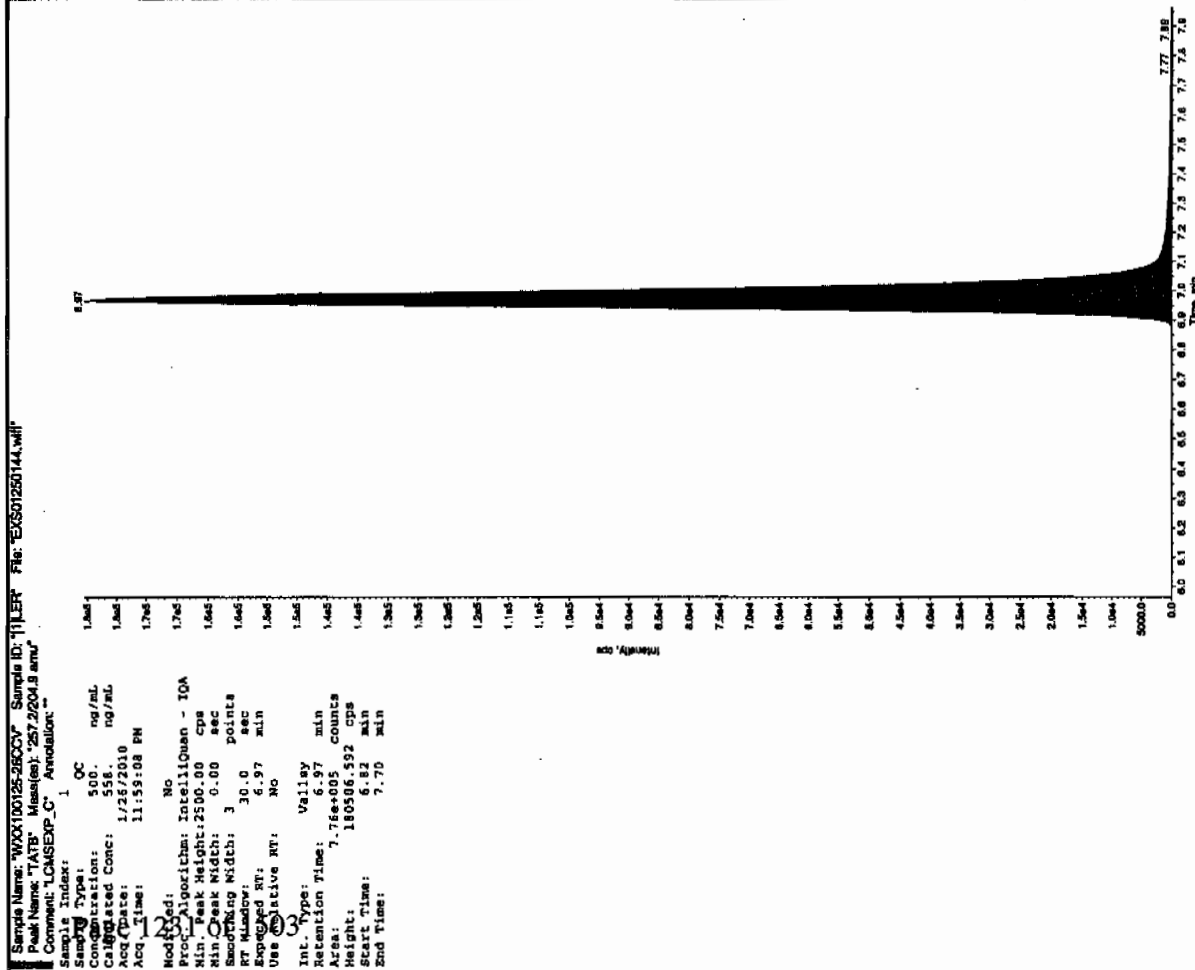
Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

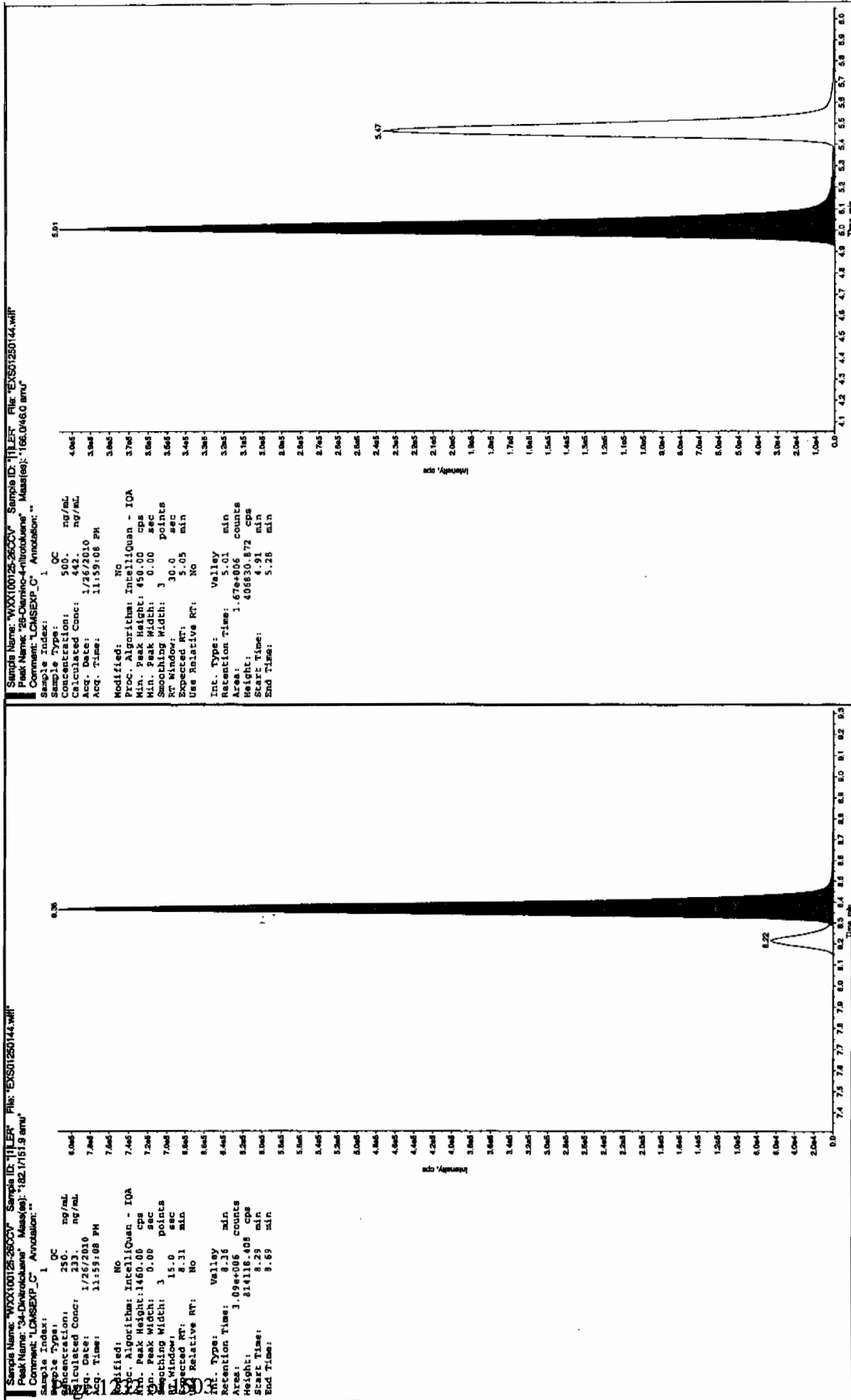
Before Jan 11/2/10

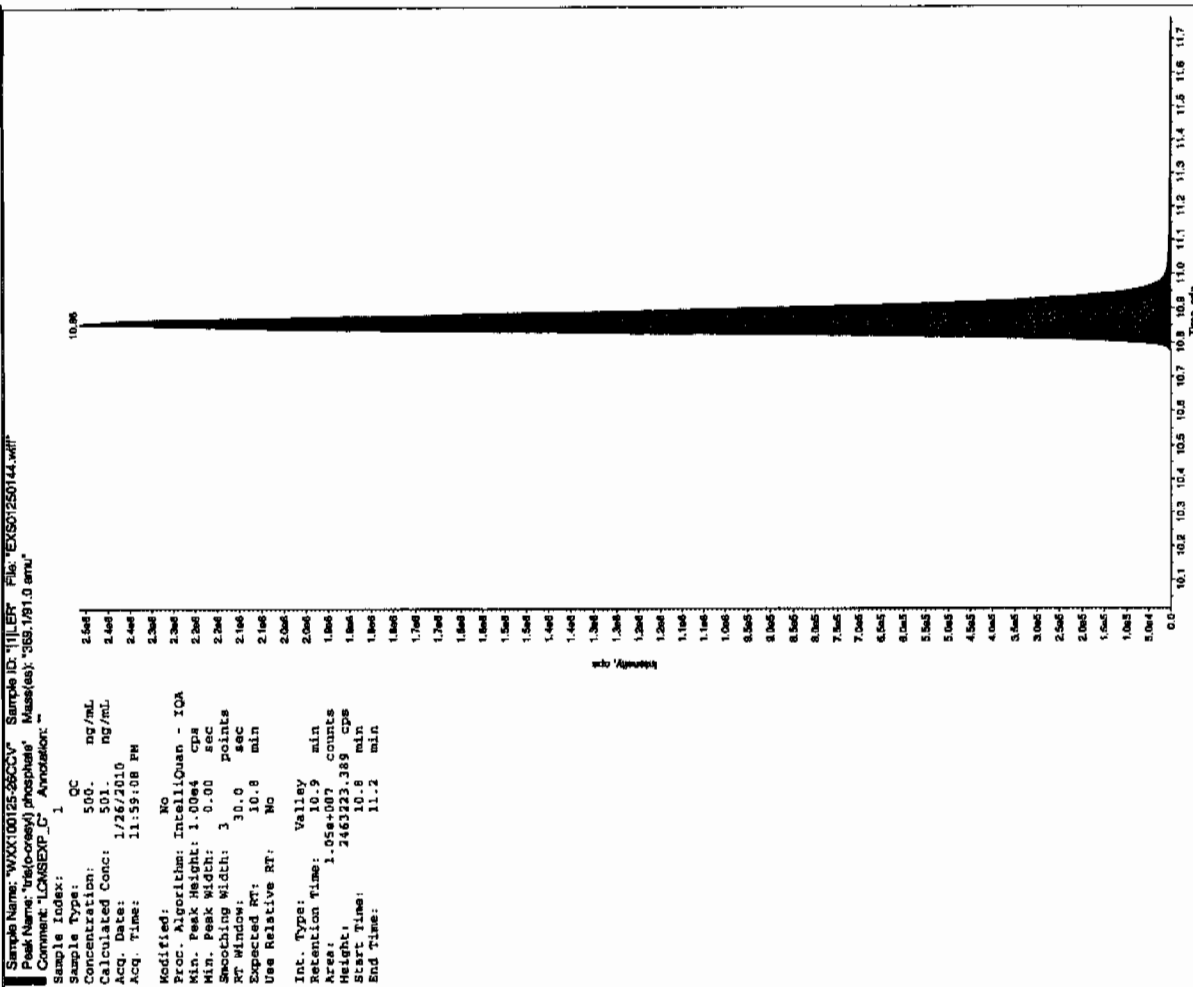
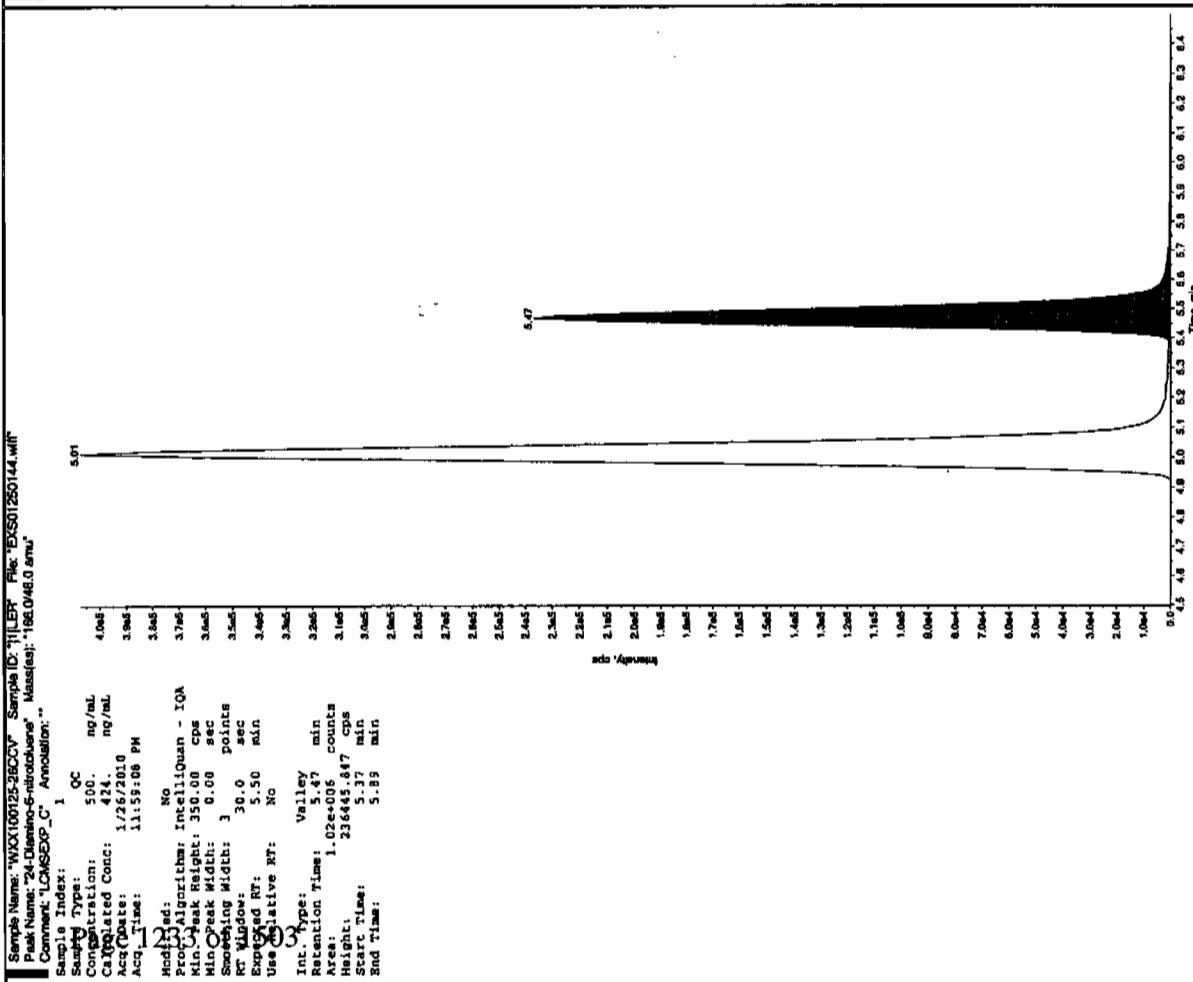


After Jan 11/2/10



GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1287

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS01250146.wiff

Analysis Date: 27-JAN-10 00:30

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	104	104	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	47.2	94	
3,5-Dinitroaniline	100	104	104	
TATB	100	109	109	
tris(o-cresyl) phosphate	100	115	115	

Recovery Limits:

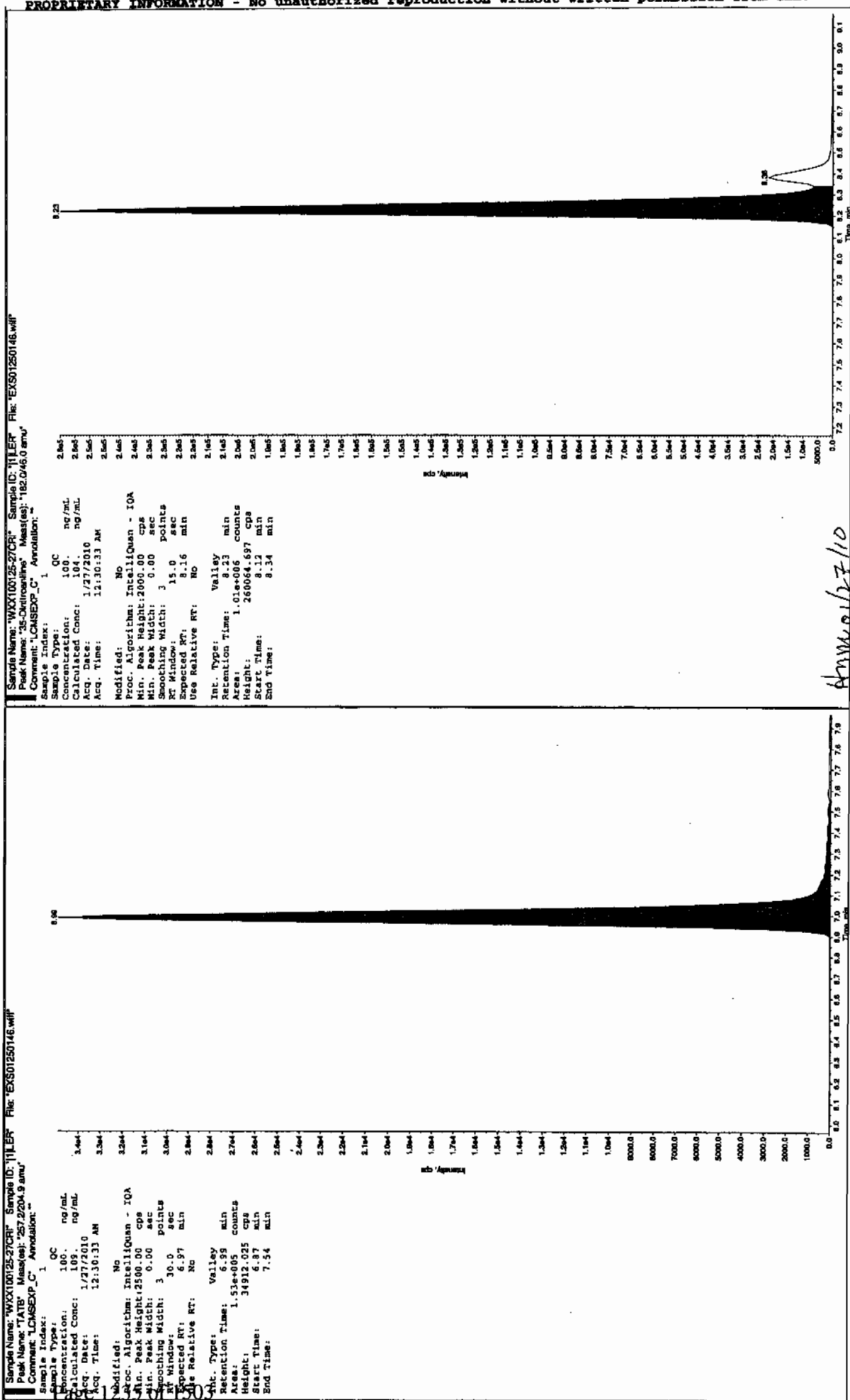
3,4-Dinitrotoluene (Surrogate), TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%

Other Target Analytes 70-130%

Column used to flag Recovery outside of Limits

* Value outside of Recovery Limits

See 1/27/10

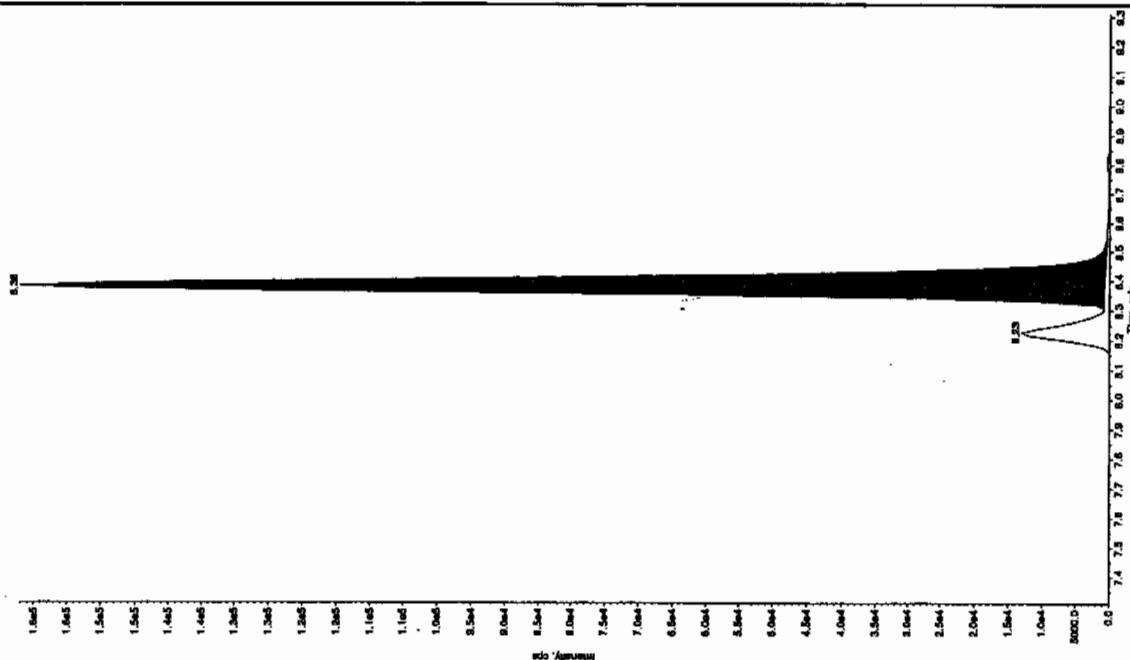


Amw 01/27/10

Sample Name: WXX100125-270R1 Sample ID: 111EP1 File: EX501250146.wif
 Peak Name: 34-Divoleuene Mass(es): 182.1151.9 amu
 Comment: LCMSSEXP_C1 Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 50.0 ng/mL
 Calculated Conc: 47.2 ng/mL
 Acq. Date: 1/27/2010
 Acq. Time: 12:30:33 AM

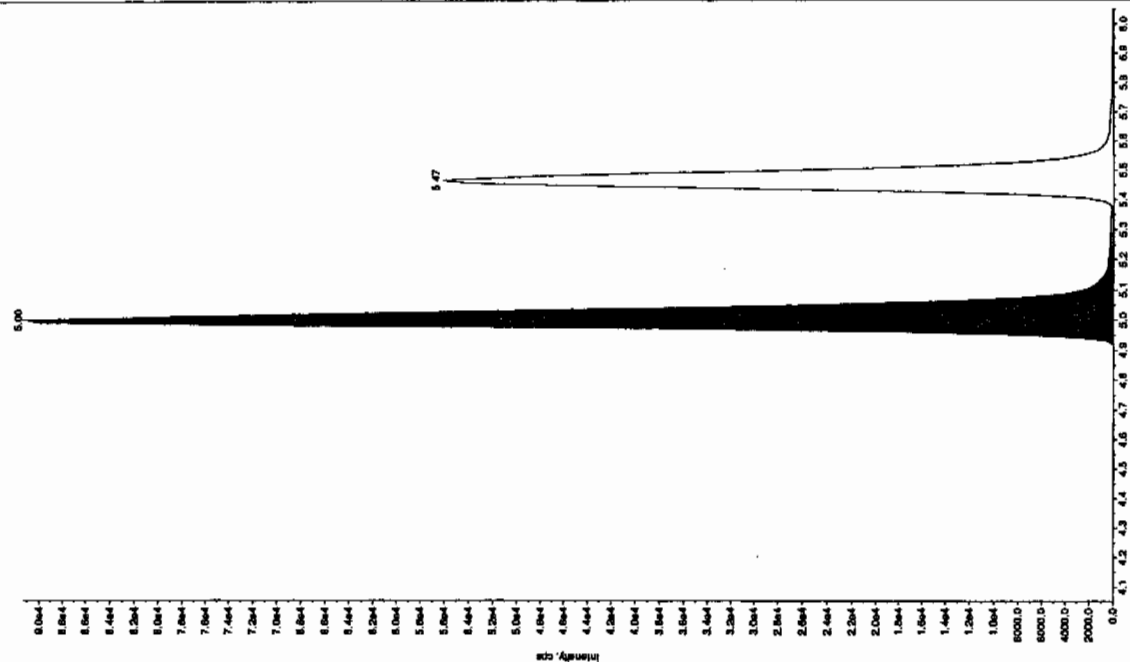
Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 1450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.38 min
 Area: 6.08e+005 counts
 Height: 161455.256 cps
 Start Time: 8.31 min
 End Time: 8.59 min



Sample Name: WXX100125-270R1 Sample ID: 111EP1 File: EX501250146.wif
 Peak Name: 26-Divoleuene Mass(es): 166.0466.0 amu
 Comment: LCMSSEXP_C1 Annotation: "

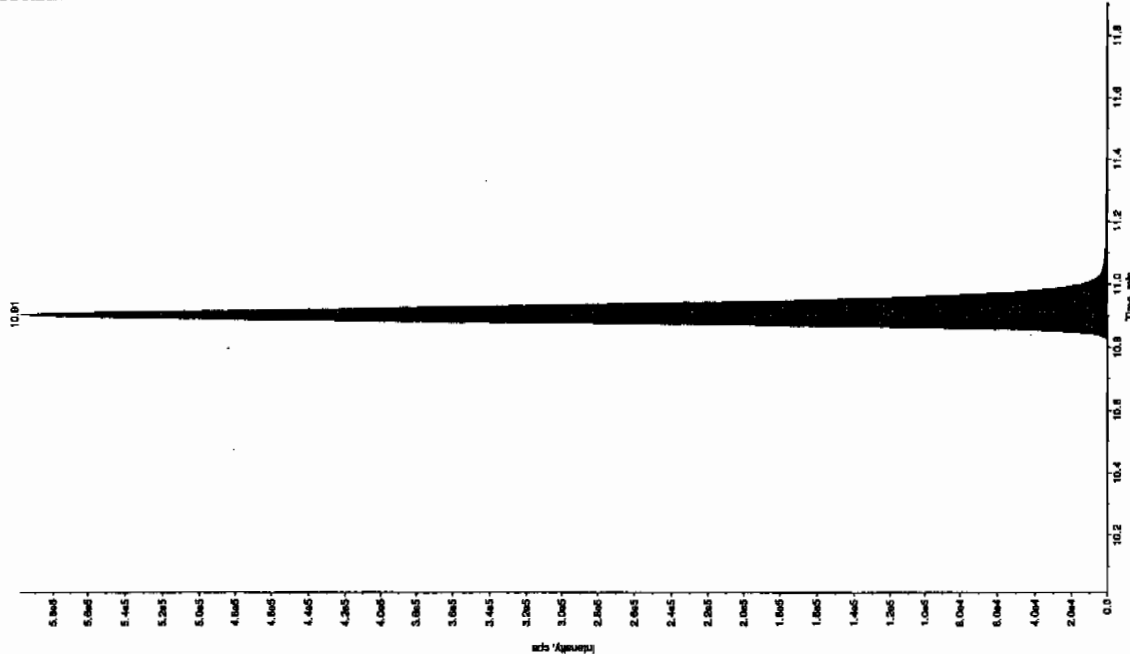
Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 108. ng/mL
 Acq. Date: 1/27/2010
 Acq. Time: 12:30:33 AM

Modified: No
 Proc. Algorithm: IntelliQuan - IOA
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.09 min
 Area: 3.73e+005 counts
 Height: 91242.876 cps
 Start Time: 4.91 min
 End Time: 5.30 min



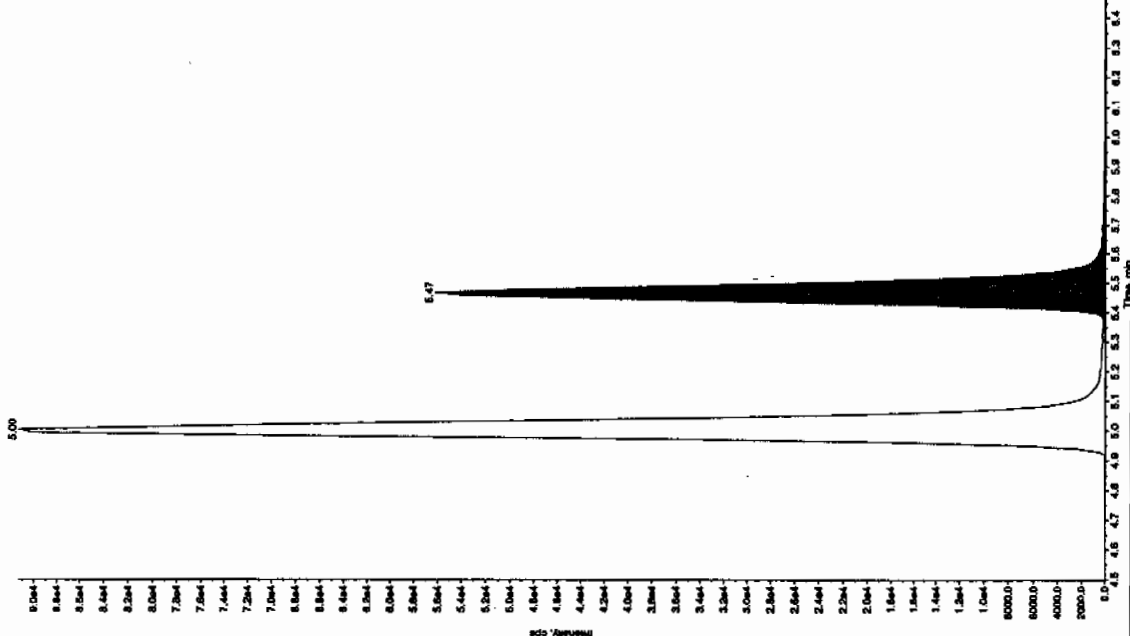
Sample Name: "WXX100125-2705" Sample ID: "111EP" File: "EX501250145.wif"
 Peak Name: "24-Diamino-6-alkatriene" Mass(es): 358.191.0 amu
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 115. ng/mL
 Acq. Date: 1/27/2010
 Acq. Time: 12:30:33 AM
 Modified: Yes
 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: 2.34e+005 counts
 Height: 598210.632 cps
 Start Time: 10.8 min
 End Time: 11.2 min



Sample Name: "WXX100125-2705" Sample ID: "111EP" File: "EX501250145.wif"
 Peak Name: "24-Diamino-6-alkatriene" Mass(es): 358.191.0 amu
 Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
 Sample Type: QC
 Concentration: 100. ng/mL
 Calculated Conc: 104. ng/mL
 Acq. Date: 1/27/2010
 Acq. Time: 12:30:33 AM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.30 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.47 min
 Area: 2.38e+005 counts
 Height: 56115.692 cps
 Start Time: 5.37 min
 End Time: 5.79 min



QUALITY CONTROL DATA

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 942338

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017308

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125182a

Date Analyzed: 29-JAN-10 04:22

Units: ug/kg

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

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\012510expa.mdb, Time: Mon Jan 25 16:14:14 2010
Calibration: C:\MASSLYNX\New_Exp.PRO\CurveDB\012510expa.cdb, Time: Tue Jan 26 09:24:52 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125182a

Date: 29-Jan-2010

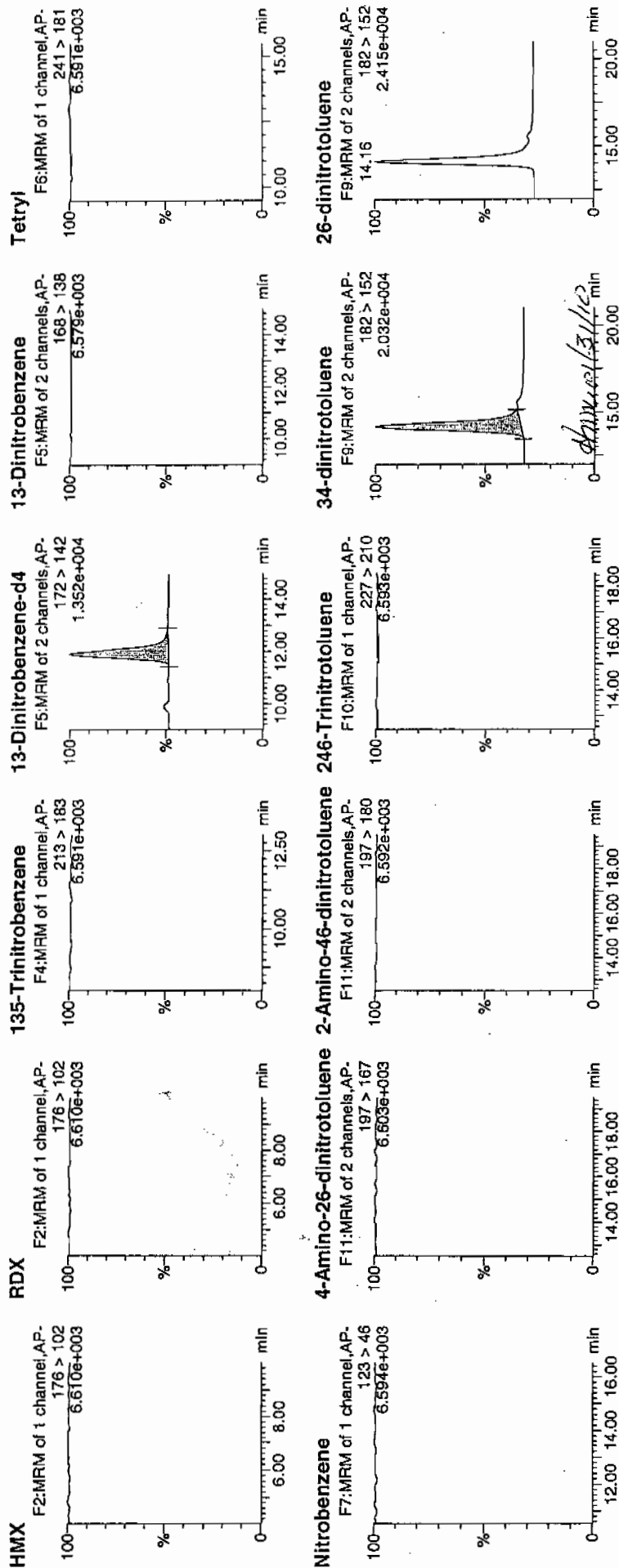
Time: 04:22:34

ID: 1202017308

Vial: 3:1,A

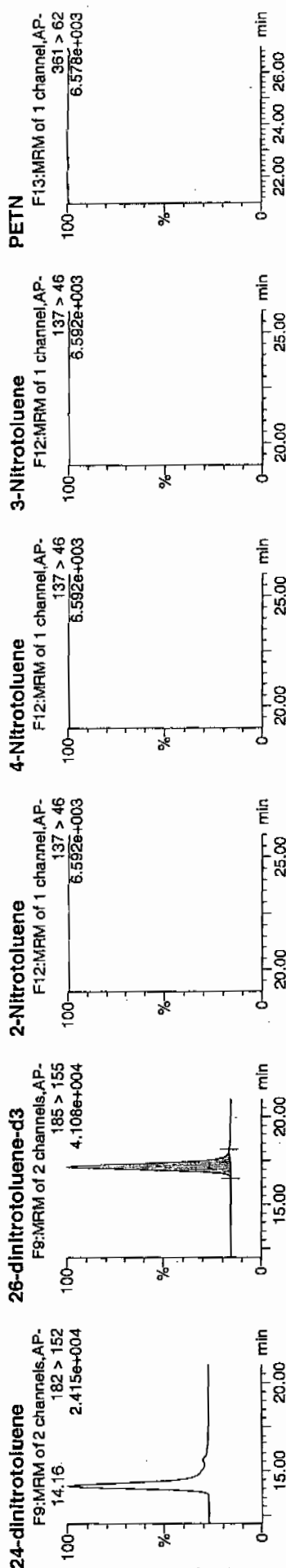
Handwritten: *WAV 942339 / 2002 / MS / 21*

Handwritten: *10077 1/30/10*



Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

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Name	RT	Area	% Area	Abs Resp	Response	Flags	Mod Data	Mod Times	Inj/mL	% Rec	% Dev	S/N
HMX	1202017308	176 > 102		2704.306								
RDX	1202017308	176 > 102		2704.306								
135-Trinitrobenzene	1202017308	213 > 183		2704.306								
13-Dinitrobenzene-d4	1202017308	172 > 142	11.89	2704.306	2704.306	bb			455.5157	91.1	-8.9	367.8
13-Dinitrobenzene	1202017308	168 > 138		2704.306								
Tetryl	1202017308	241 > 181		2704.306								
Nitrobenzene	1202017308	123 > 46		2704.306								
4-Amino-26-dinitrotoluene	1202017308	197 > 167		14712.106								
2-Amino-46-dinitrotoluene	1202017308	197 > 180		14712.106								
246-Trinitrotoluene	1202017308	227 > 210		14712.106								
34-dinitrotoluene	1202017308	182 > 152	14.16	7333.809	7333.809	bb			274.4935	109.8	9.8	235.5
26-dinitrotoluene	1202017308	182 > 152		14712.106								
24-dinitrotoluene	1202017308	182 > 152		14712.106								
26-dinitrotoluene-d3	1202017308	185 > 155	17.16	14712.106	14712.106	bb			451.3376	90.3	-9.7	1006.1
2-Nitrotoluene	1202017308	137 > 46		14712.106								
4-Nitrotoluene	1202017308	137 > 46		14712.106								
3-Nitrotoluene	1202017308	137 > 46		14712.106								
PETN	1202017308	361 > 62		14712.106								

1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 942338

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017308

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250122.wiff

Date Analyzed: 26-JAN-10 18:13

Units: ug/kg

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

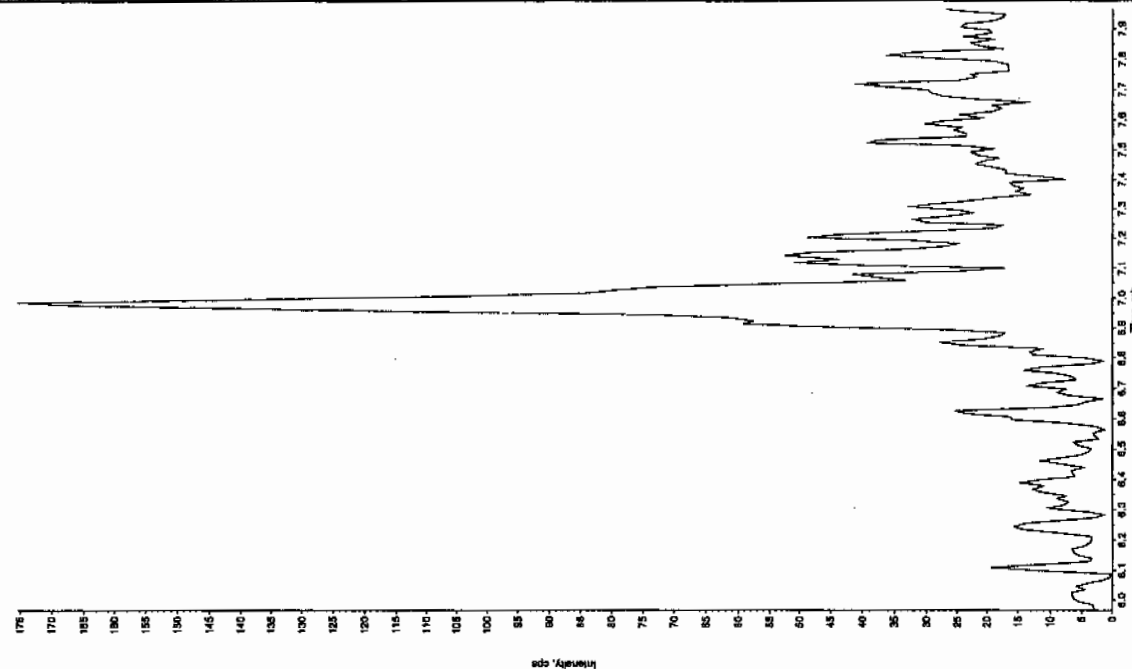
*Concentration =

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

See 1/27/10

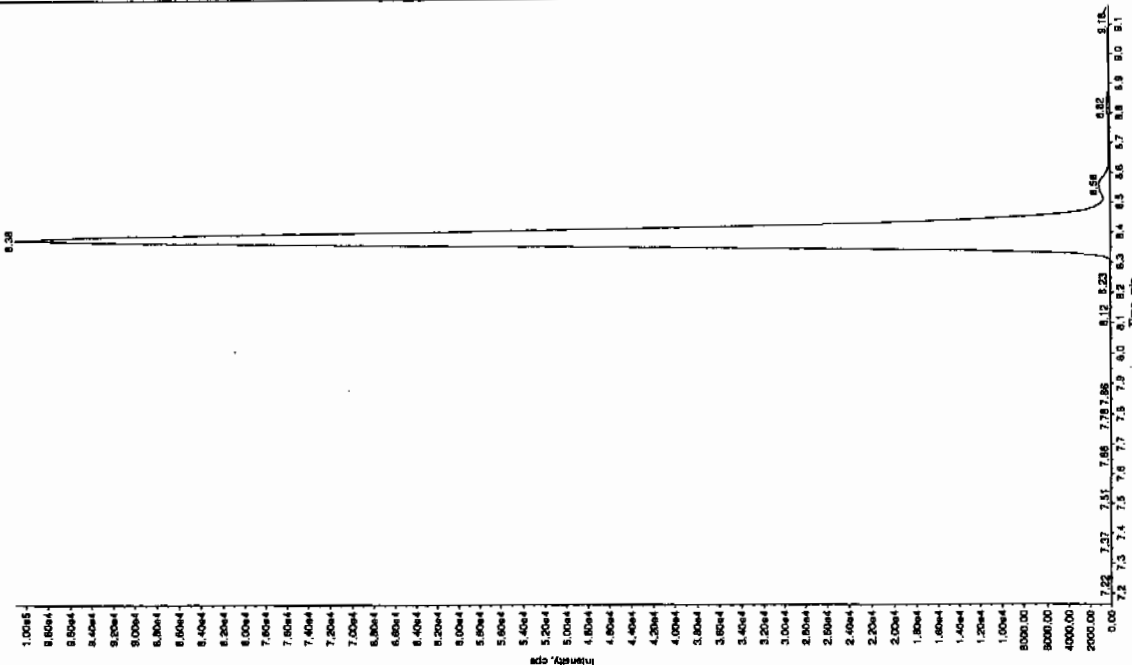
Sample Name: "1202017308" Sample ID: "94233921.1" File: "EX501250122.wif"
 Peak Name: "TAT3" Mass(es): "257.2204.8 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/26/2010
 Acq. Time: 6:13:31 PM
 Modified: No



Sample Name: "1202017308" Sample ID: "94233921.1" File: "EX501250122.wif"
 Peak Name: "3S-Dinitroglime" Mass(es): "182.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 0.00 ng/mL
 Acq. Date: 1/25/2010
 Acq. Time: 6:13:31 PM
 Modified: No

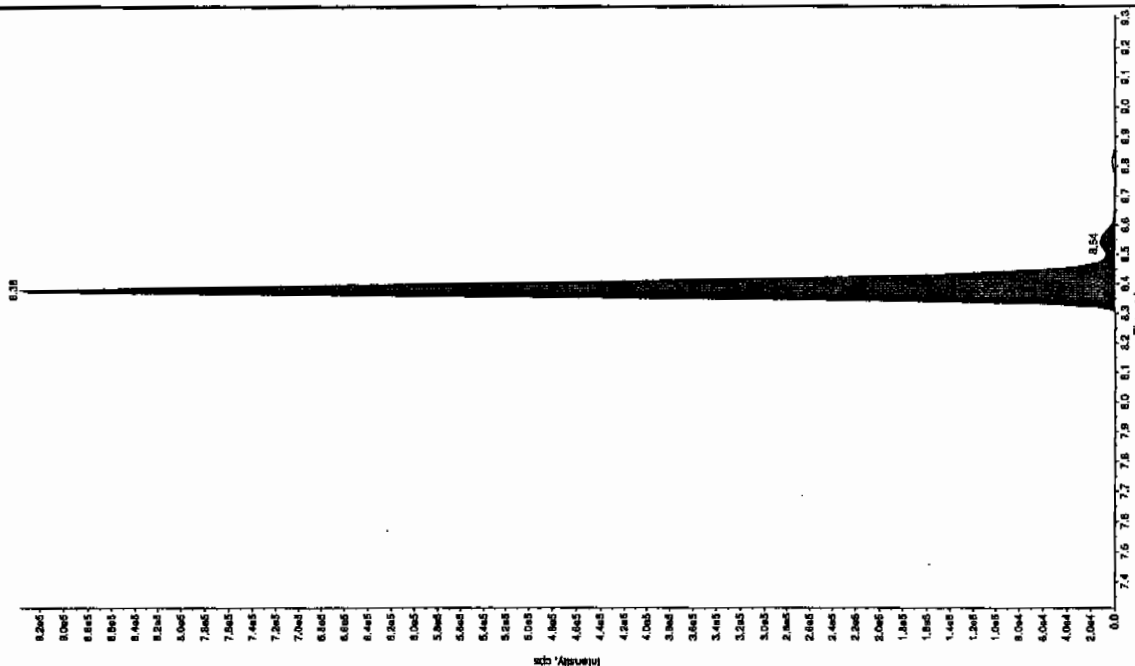


See 01/27/10

Sample Name: "1202017308" Sample ID: "94233921LER" File: "EX601250122.will"
Peak Name: "26-Diamino-4-nitrofluorene" Mass(es): "166.046.0 amu"

Comment: "LCX632125" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A ng/mL
Calculated Conc: 0.00
Acq. Date: 1/26/2010
Acq. Time: 6:13:31 PM
Modified: No

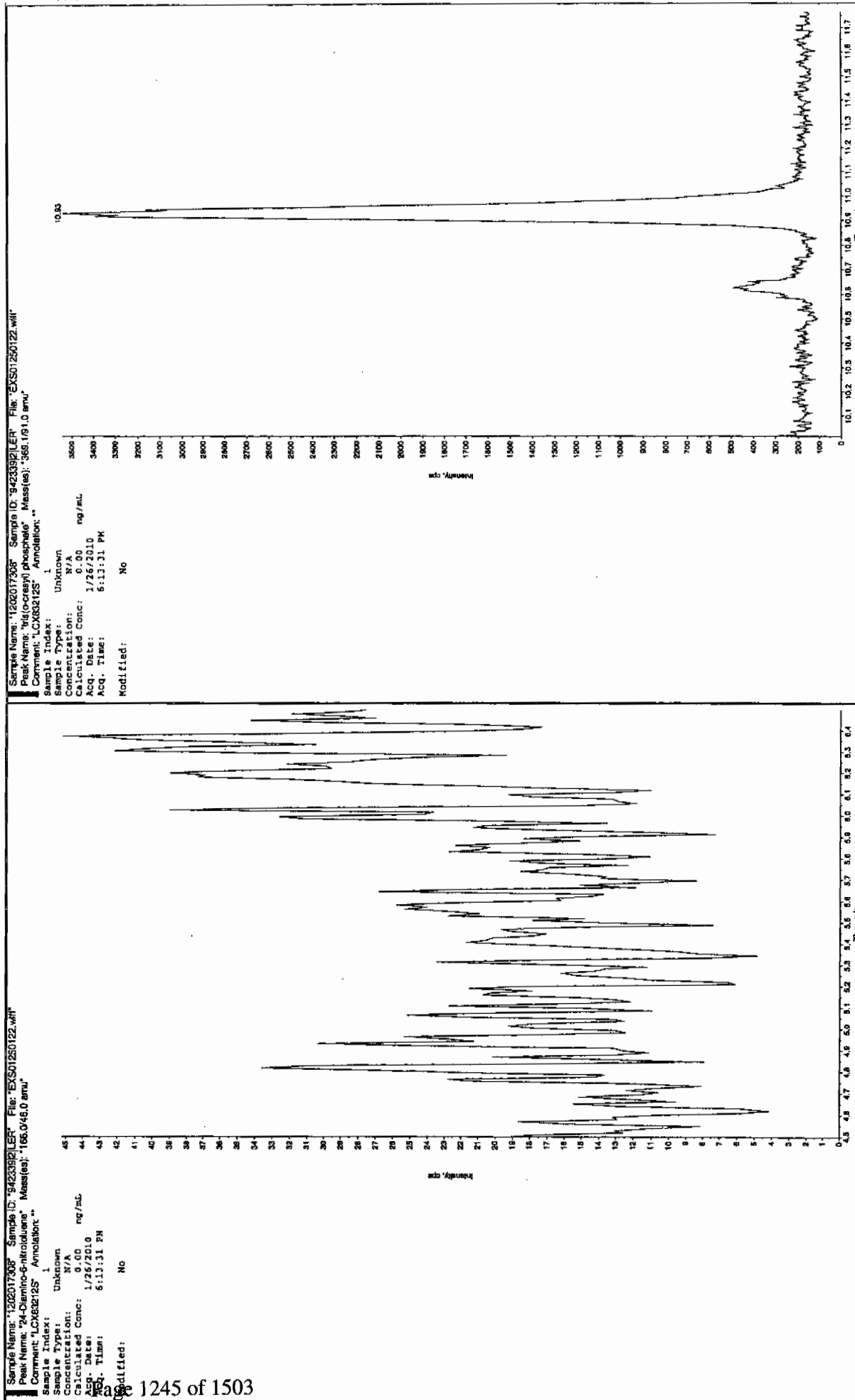


Sample Name: "1202017308" Sample ID: "94233921LER" File: "EX601250122.will"
Peak Name: "34-Dinitrofluorene" Mass(es): "182.17161.9 amu"

Comment: "LCX632125" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A ng/mL
Calculated Conc: 273.
Acq. Date: 1/26/2010
Acq. Time: 6:13:31 PM
Modified: No

Proc. Algorithm: InterQuan - 10A
Min. Peak Width: 0.00 points
Max. Peak Width: 3.00 points
Smoothing Width: 15.0 sec
RT Window: 8.11 min
Expected RT: No
Use Relative RT: No
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.60e+006 counts
Height: 93502.596 cps
Start Time: 8.28 min
End Time: 8.67 min



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 942338

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017309

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125183a

Date Analyzed: 29-JAN-10 04:52

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	4840	
121-14-2	2,4-Dinitrotoluene	4910	
121-82-4	RDX	5670	
19406-51-0	4-Amino-2,6-dinitrotoluene	5340	
2691-41-0	HMX	5080	
35572-78-2	2-Amino-4,6-dinitrotoluene	5340	
479-45-8	Tetryl	2740	
606-20-2	2,6-Dinitrotoluene	4830	
78-11-5	PETN	4720	
88-72-2	o-Nitrotoluene	4190	
98-95-3	Nitrobenzene	4260	
99-08-1	m-Nitrotoluene	4360	
99-35-4	1,3,5-Trinitrobenzene	4560	
99-65-0	m-Dinitrobenzene	4750	
99-99-0	p-Nitrotoluene	4270	

*Concentration =

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

Dataset: C:\MASSLYNX\New_Exp.PRO\12510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0125183a

Date: 29-Jan-2010

Time: 04:52:08

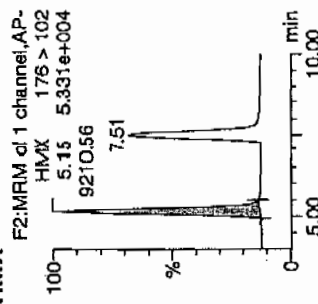
ID: 1202017309

Vial: 3:1,B

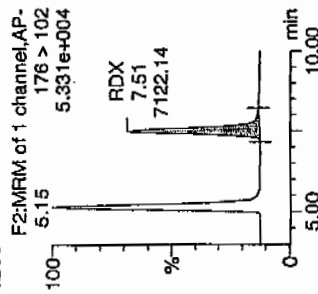
12/31/10

942339 / 8022 / 102 / 21

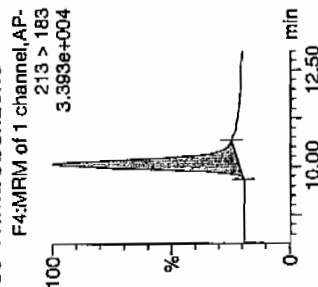
HMX



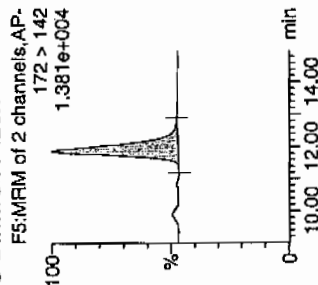
RDX



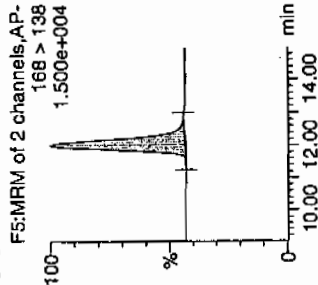
135-Trinitrobenzene



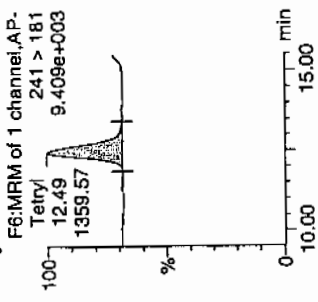
13-Dinitrobenzene-d4



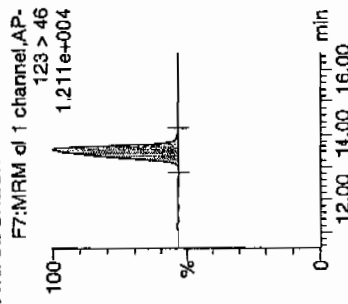
13-Dinitrobenzene



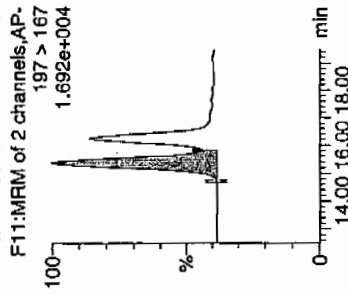
Tetryl



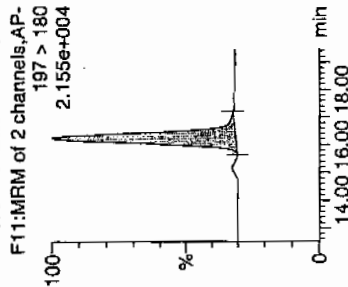
Nitrobenzene



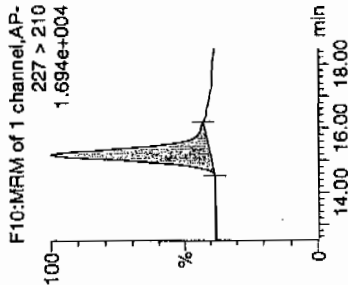
4-Amino-26-dinitrotoluene



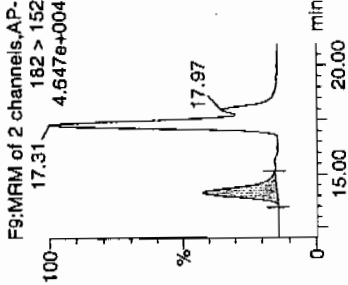
2-Amino-46-dinitrotoluene



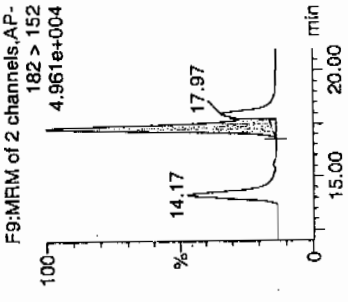
246-Trinitrotoluene



34-dinitrotoluene

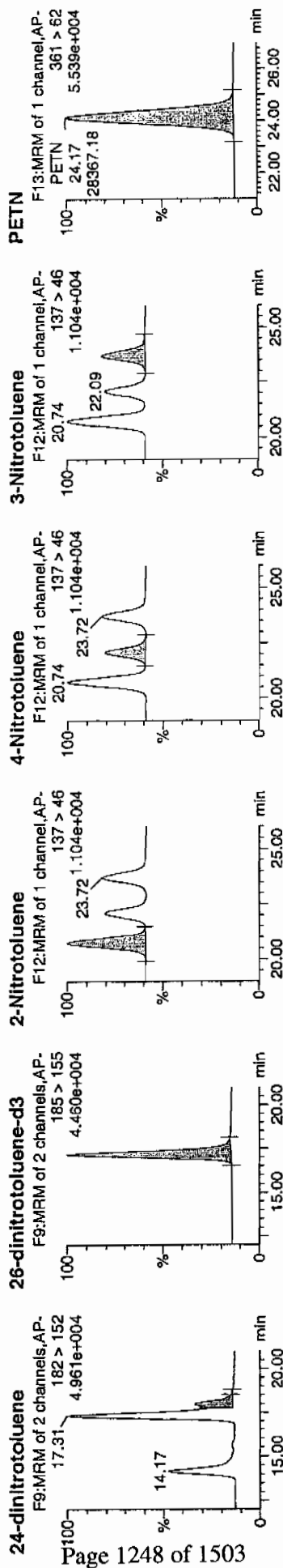


26-dinitrotoluene



chm
2/13/10

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



ID	Name	Trace	Chi	Area	Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Lang/ml	% Rec	% Dev	SN
1202017309	HMX	176 > 102	5.15	9210.562	2857.913	9210.562	1611.414	bb			507.9267	101.6	1.6	1078.6
1202017309	RDX	176 > 102	7.51	7122.144	2857.913	7122.144	1246.039	bb			566.7427	113.3	13.3	693.2
1202017309	135-Trinitrobenzene	213 > 183	10.07	7507.541	2857.913	7507.541	1313.466	bb			456.2974	91.3	-8.7	521.6
1202017309	13-Dinitrobenzene-d4	172 > 142	11.89	2857.913		2857.913	2857.913	bb			481.3894	96.3	-3.7	206.1
1202017309	13-Dinitrobenzene	168 > 138	12.03	3149.116	2857.913	3149.116	550.947	bb			474.9612	95.0	-5.0	392.7
1202017309	Tetryl	241 > 181	12.49	1359.565	2857.913	1359.565	237.860	bb			273.8386	54.8	-45.2	108.9
1202017309	Nitrobenzene	123 > 46	13.46	2080.365	2857.913	2080.365	363.966	bb			425.8929	85.2	-14.8	224.8
1202017309	4-Amino-26-dinitrotoluene	197 > 167	15.39	4482.596	16102.957	4482.596	139.185	MM	29-Jan-10	17:32:31	534.2734	106.9	6.9	94.5
1202017309	2-Amino-46-dinitrotoluene	197 > 180	16.25	6442.055	16102.957	6442.055	200.027	bb			534.4249	106.9	6.9	472.5
1202017309	246-Trinitrotoluene	227 > 210	15.21	4962.646	16102.957	4962.646	154.091	bb			484.4659	96.9	-3.1	567.0
1202017309	34-dinitrotoluene	182 > 152	14.17	7080.877	16102.957	7080.877	219.863	bb			242.1357	95.9	-3.1	308.6
1202017309	26-dinitrotoluene	182 > 152	17.31	17132.818	16102.957	17132.818	531.977	MM	29-Jan-10	17:34:54	482.9376	96.6	-3.4	402.5
1202017309	24-dinitrotoluene	182 > 152	17.97	4015.646	16102.957	4015.646	124.687	MM	29-Jan-10	17:38:11	490.7709	98.2	-1.8	90.4
1202017309	26-dinitrotoluene-d3	185 > 155	17.16	16102.957		16102.957	16102.957	bb			494.0061	98.8	-1.2	1433.1
1202017309	2-Nitrotoluene	137 > 46	20.74	2243.843	16102.957	2243.843	69.672	bb			418.9449	83.8	-16.2	367.8
1202017309	4-Nitrotoluene	137 > 46	22.09	1136.099	16102.957	1136.099	35.276	bb			426.6591	85.3	-14.7	193.8
1202017309	3-Nitrotoluene	137 > 46	23.72	1309.630	16102.957	1309.630	40.664	bb			435.5652	87.1	-12.9	207.9
1202017309	PETN	361 > 62	24.17	28367.180	16102.957	28367.180	880.807	bb			472.0066	94.4	-5.6	1783.6

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: LCS for batch 942338

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017309

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250123.wiff

Date Analyzed: 26-JAN-10 18:29

Units: ug/kg

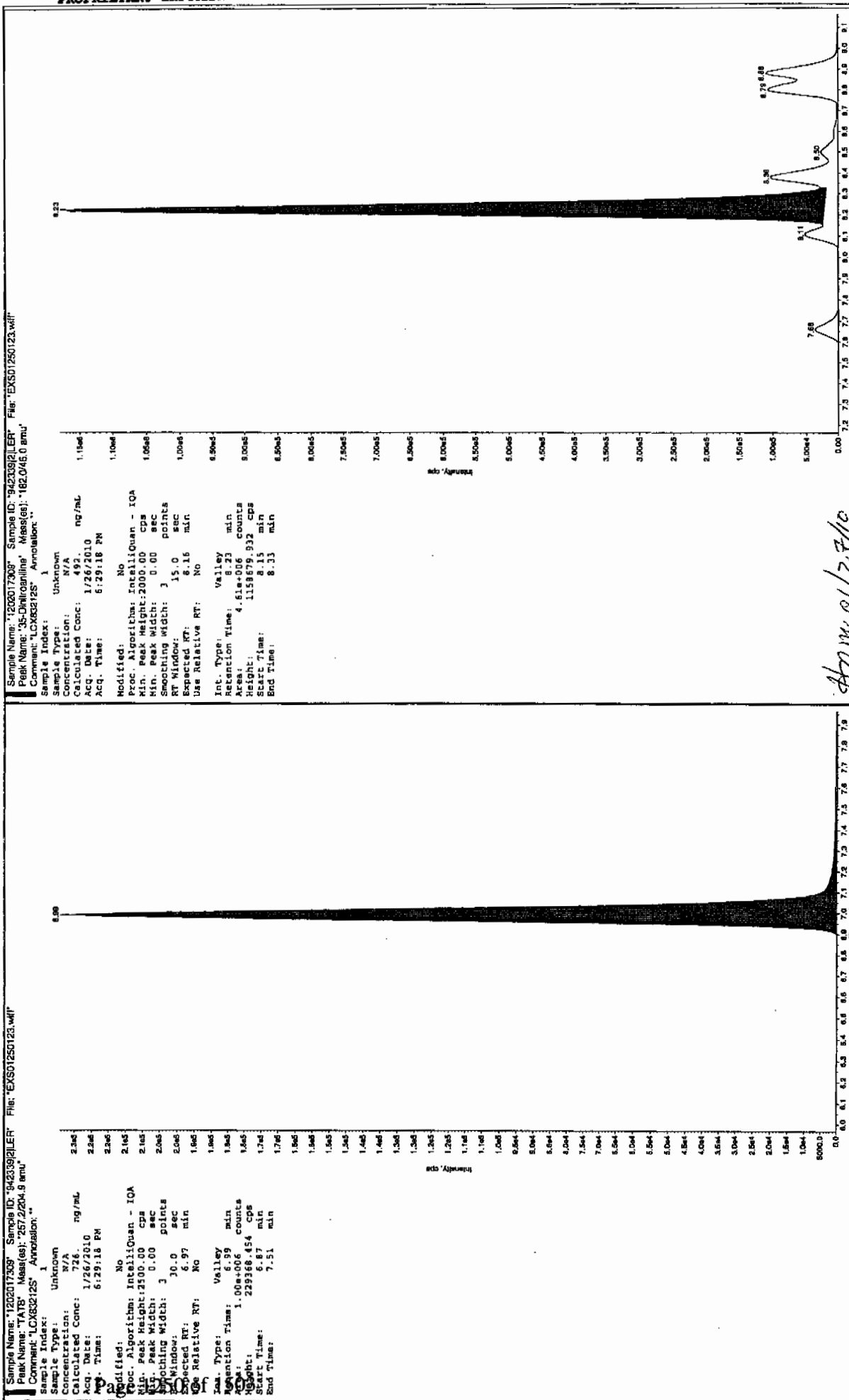
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	7260	
59229-75-3	2,6-Diamino-4-nitrotoluene	4330	
618-87-1	3,5-Dinitroaniline	5140	
6629-29-4	2,4-Diamino-6-nitrotoluene	4640	
78-30-8	tris(o-cresyl) phosphate	4890	

*Concentration =

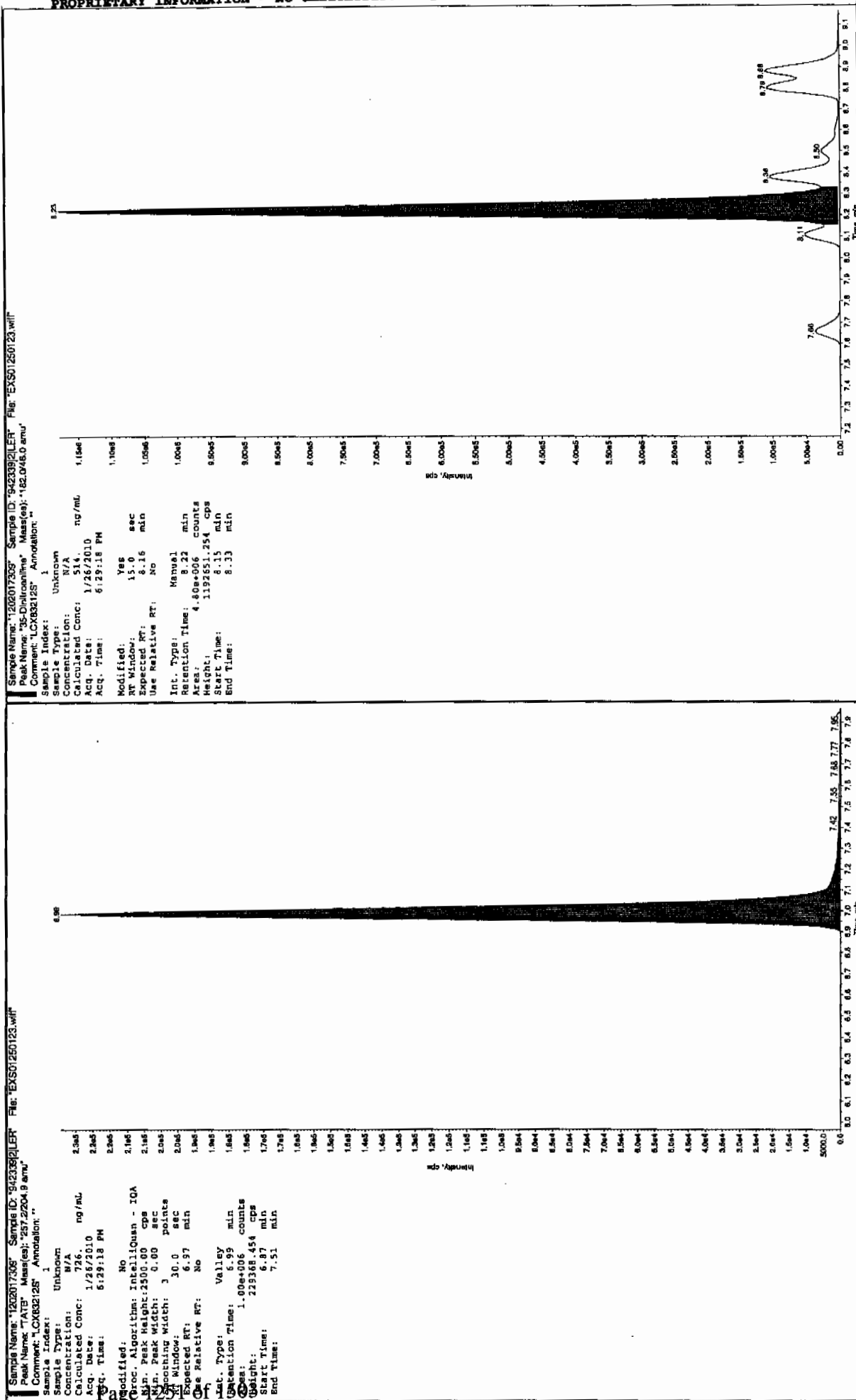
Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Sample Amount}}$ X Dilution Factor

Byou for 11/27/10

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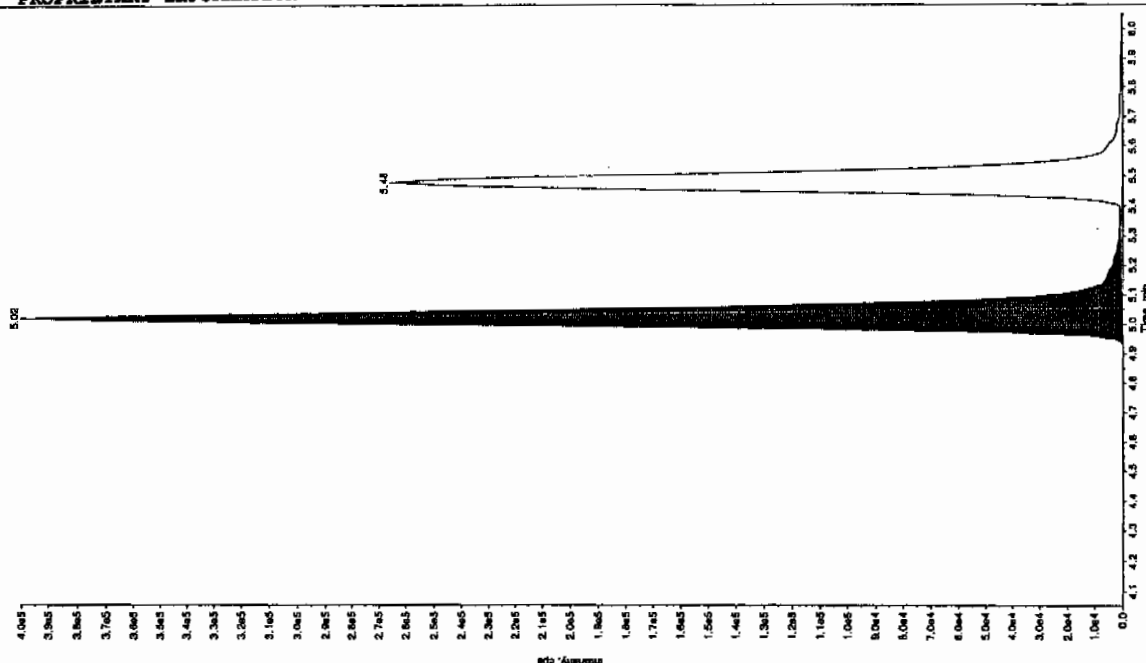


after Dec 11/27/10



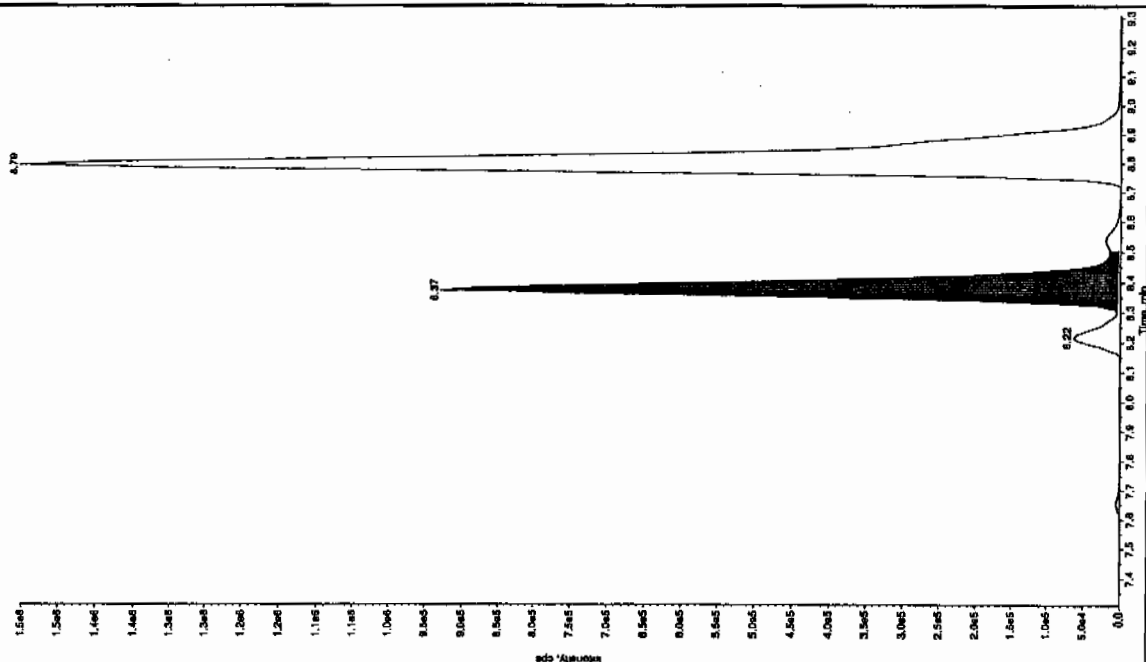
Sample Name: "1202017309" Sample ID: "9423392" File: "EX501250123.wif"
 Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.046.0 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 433 ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 6:29:18 PM
 Acq. Time: 5:29:18 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - ION
 Min. Peak Height: 450.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.05 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 5.02 min
 Area: 1.63e+006 counts
 Height: 400138.397 cps
 Start Time: 4.92 min
 End Time: 5.32 min



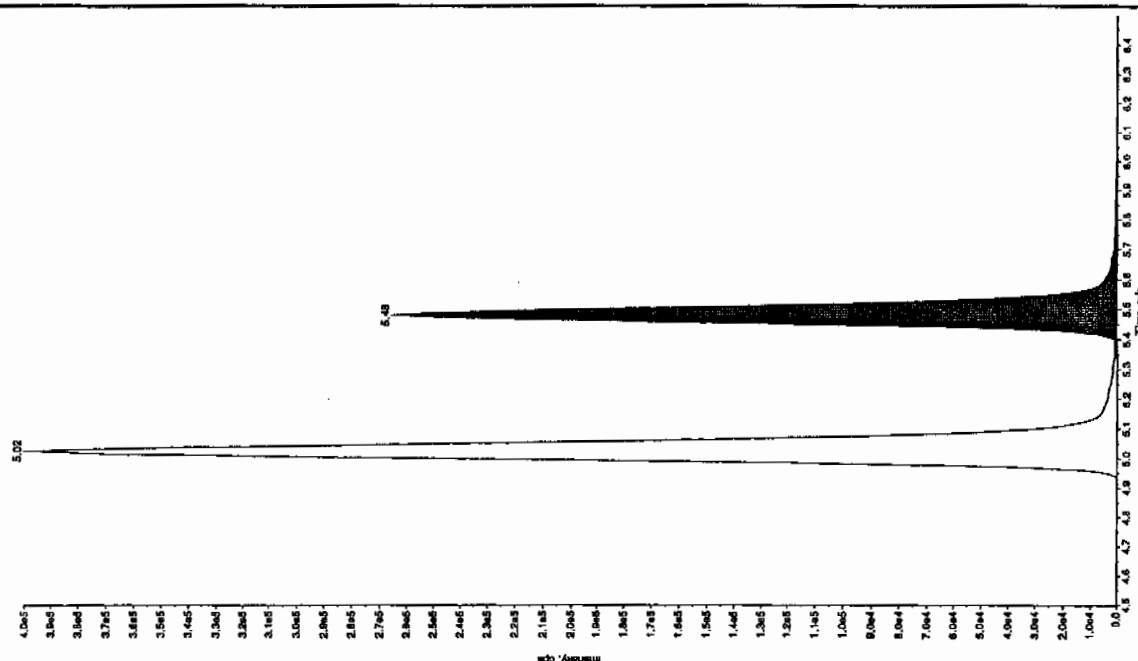
Sample Name: "1202017309" Sample ID: "9423392" File: "EX501250123.wif"
 Peak Name: "34-Chlorotoluene" Mass(es): "162.17151.9 amu"
 Comment: "LCX832125" Annotation: ""

Sample Index: 1
 Sample Type: Unknown
 Concentration: 255 ng/mL
 Calculated Conc: 1/26/2010
 Acq. Date: 6:29:18 PM
 Acq. Time: 5:29:18 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - ION
 Min. Peak Height: 1160.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 15.0 sec
 Expected RT: 8.31 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 8.37 min
 Area: 3.37e+006 counts
 Height: 924597.168 cps
 Start Time: 8.30 min
 End Time: 8.51 min



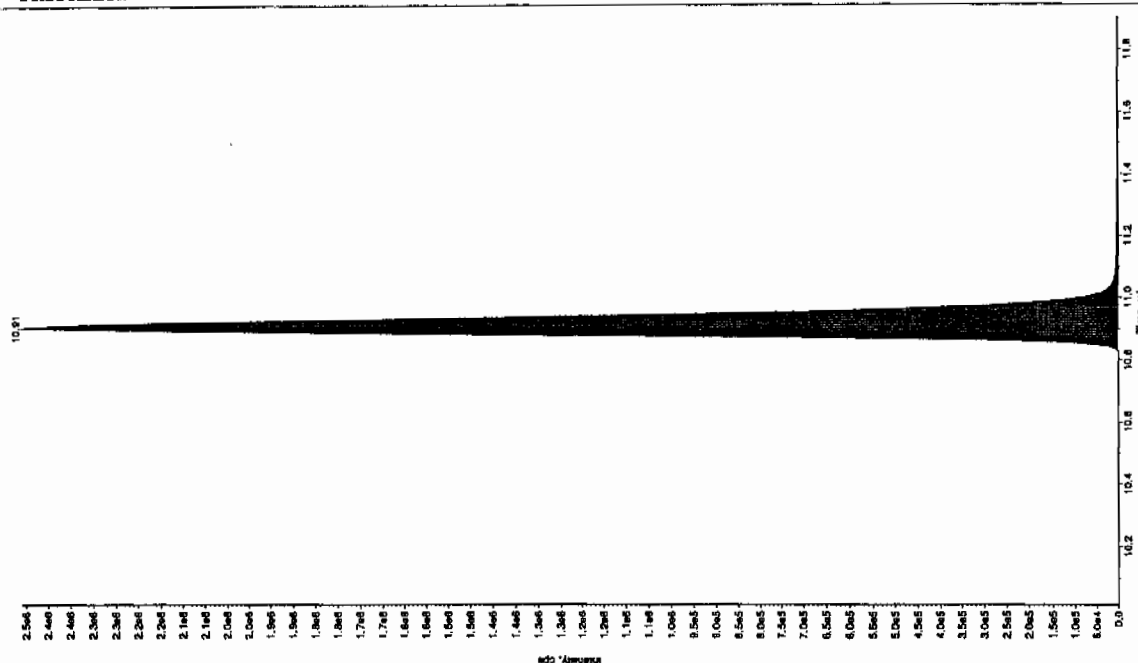
Sample Name: "1202017309" Sample ID: "94233921ER" File: "EX301250123.wif"
 Peak Name: "24-Diamino-6-nitrofluorene" Mass(es): "166.048.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/26/2010
 Acq. Date: 1/26/2010
 Acq. Time: 6:29:18 PM
 Modified: No
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 350.00 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 30.0 sec
 Expected RT: 5.50 min
 Use Relative RT: No
 Sec. Type: Valley
 Retention Time: 5.48 min
 Area: 1.12e+006 counts
 Height: 255522.980 cps
 Start Time: 5.35 min
 End Time: 5.61 min



Sample Name: "1202017309" Sample ID: "94233921ER" File: "EX301250123.wif"
 Peak Name: "bis(o-cresyl) phosphine" Mass(es): "359.151.0 amu"
 Comment: "LCX832125" Annotation: "

Sample Index: 1
 Sample Type: Unknown
 Concentration: N/A
 Calculated Conc: 1/26/2010
 Acq. Date: 1/26/2010
 Acq. Time: 6:29:18 PM
 Modified: Yes
 Proc. Algorithm: IntelliQuan - IQA
 Min. Peak Height: 1.00e4 cps
 Min. Peak Width: 0.00 sec
 Smoothing Width: 3 points
 RT Window: 10.0 sec
 Expected RT: 10.9 min
 Use Relative RT: No
 Int. Type: Valley
 Retention Time: 10.9 min
 Area: 1.03e+007 counts
 Height: 2459206.259 cps
 Start Time: 10.8 min
 End Time: 11.2 min



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7163(244923001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017310

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125190a

Date Analyzed: 29-JAN-10 08:18

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5500	
121-14-2	2,4-Dinitrotoluene	5350	
121-82-4	RDX	5220	
19406-51-0	4-Amino-2,6-dinitrotoluene	5420	
2691-41-0	HMX	5220	
35572-78-2	2-Amino-4,6-dinitrotoluene	5400	
479-45-8	Tetryl	4440	
606-20-2	2,6-Dinitrotoluene	4990	
78-11-5	PETN	4720	
88-72-2	o-Nitrotoluene	4190	
98-95-3	Nitrobenzene	4240	
99-08-1	m-Nitrotoluene	4270	
99-35-4	1,3,5-Trinitrobenzene	5180	
99-65-0	m-Dinitrobenzene	5020	
99-99-0	p-Nitrotoluene	4340	

*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: Fri Jan 29 17:42:56 2010, Page 17 of 51

Dataset: C:\MASSLYNX\New_Exp_PROJ\12510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP_PROJ\Data\EXP0125190a

Date: 29-Jan-2010

Time: 08:18:47

ID: 1202017310

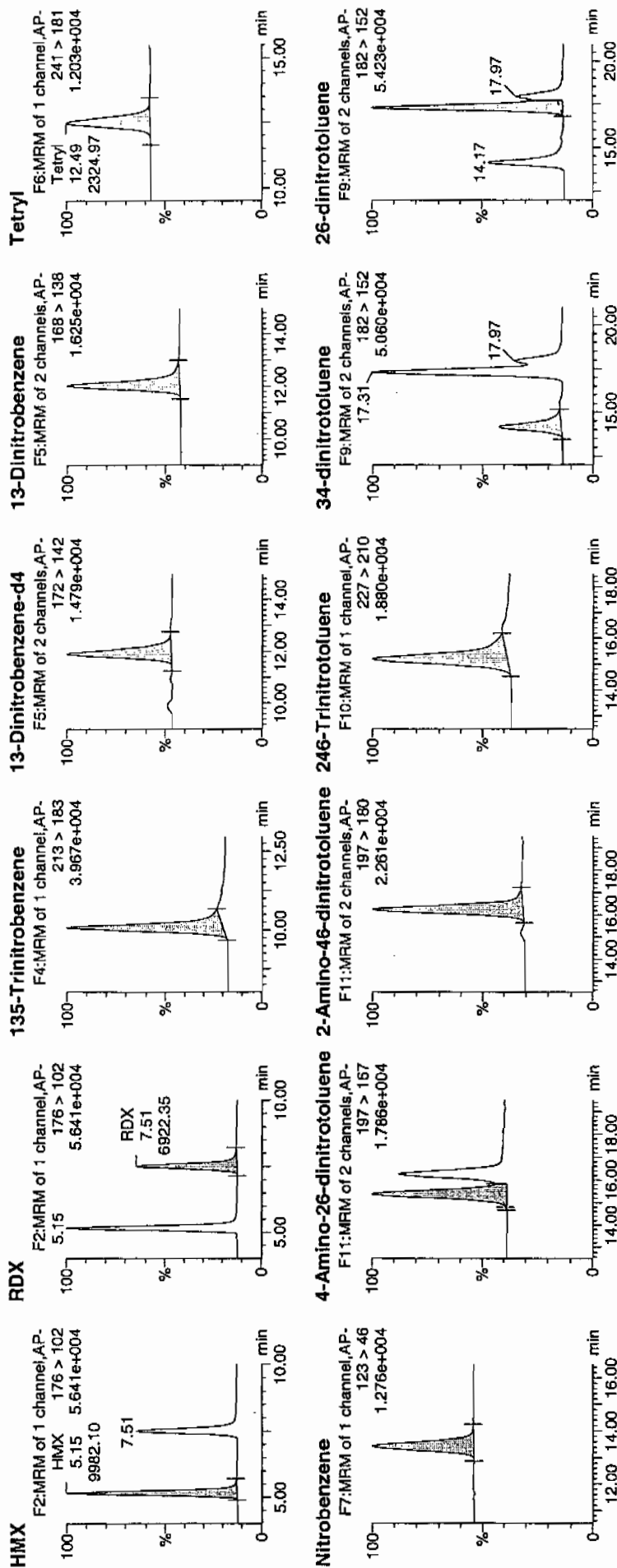
Vial: 3:2,C

1647

1/31/10

24492300102 / 21

LAU 1942339 / 8022



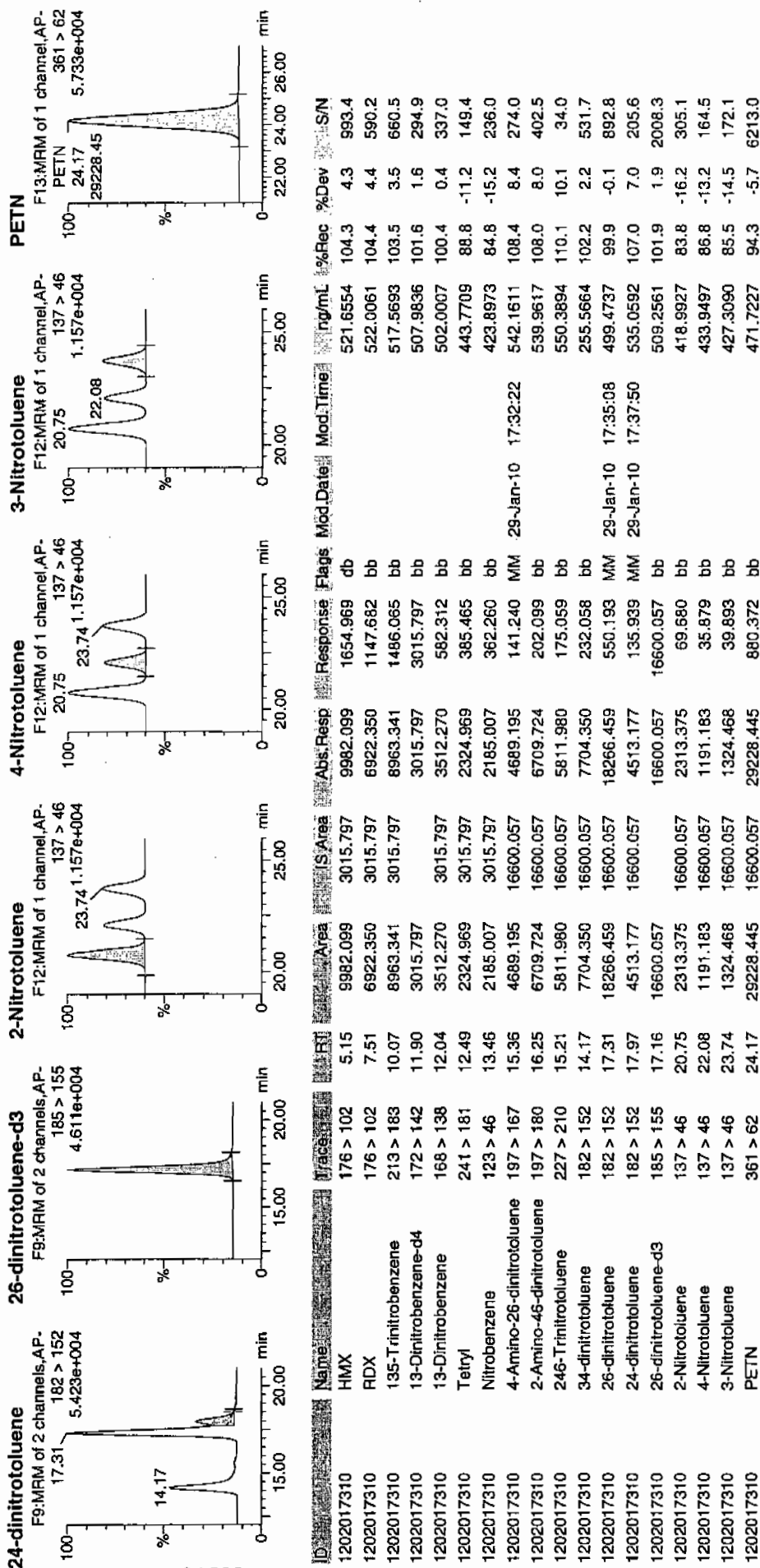
amine 1/31/10

Quantify Sample Report

GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Printed: Fri Jan 29 17:42:56 2010, Page 18 of 51



1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7163(244923001MS)

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017310

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250130.wiff

Date Analyzed: 26-JAN-10 20:19

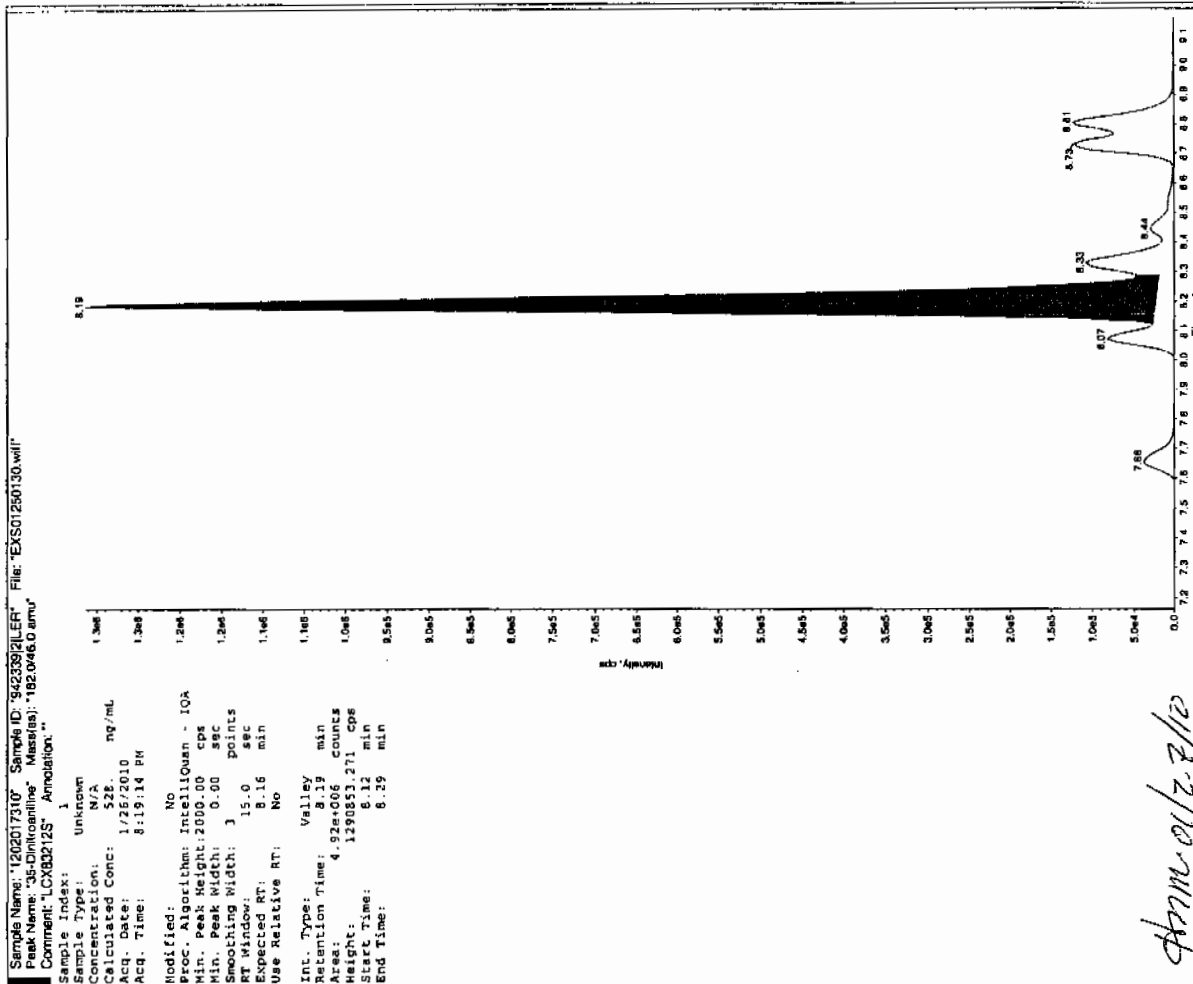
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	9590	
59229-75-3	2,6-Diamino-4-nitrotoluene	4720	
618-87-1	3,5-Dinitroaniline	5500	
6629-29-4	2,4-Diamino-6-nitrotoluene	4830	
78-30-8	tris(o-cresyl) phosphate	5370	

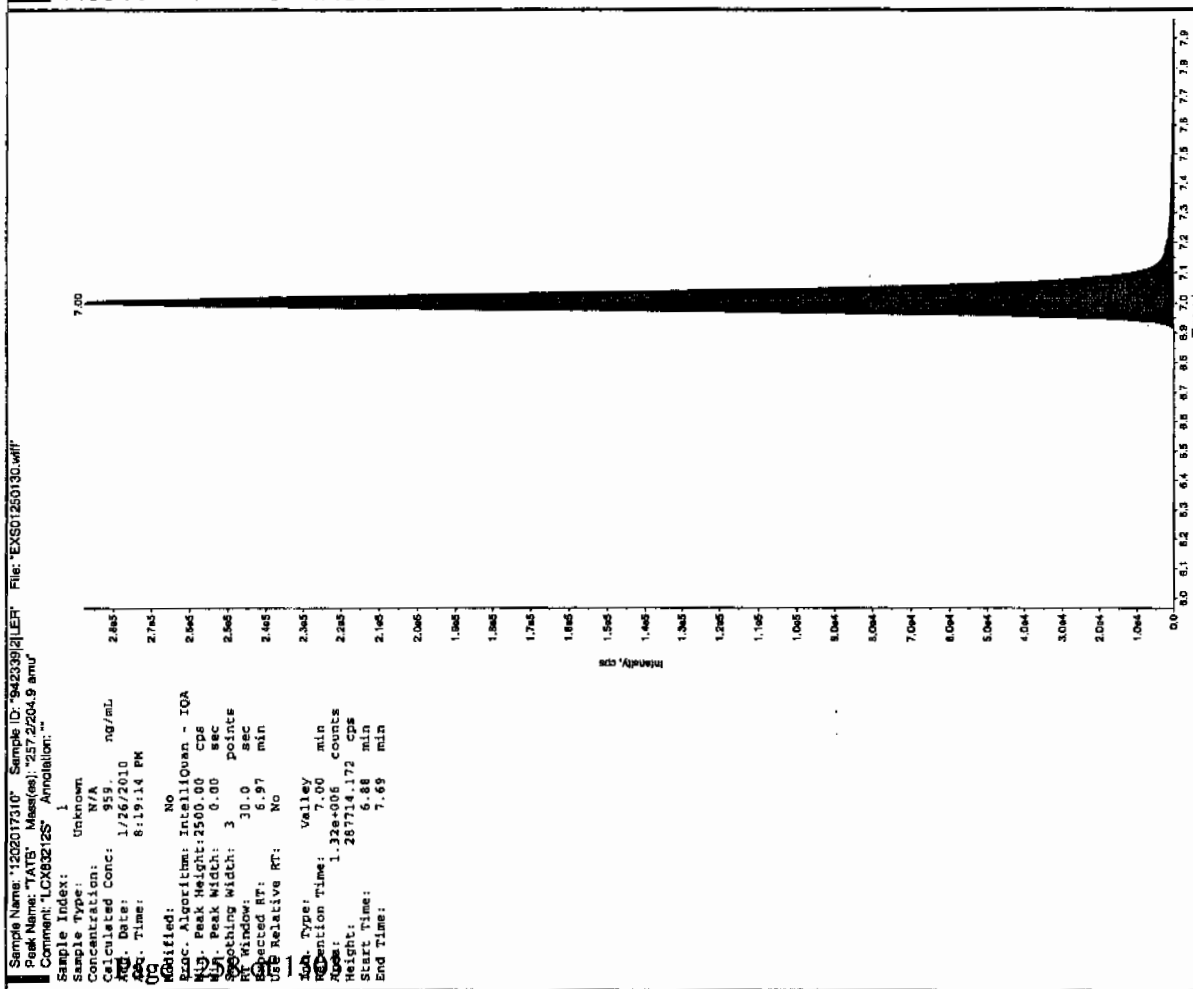
*Concentration =

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

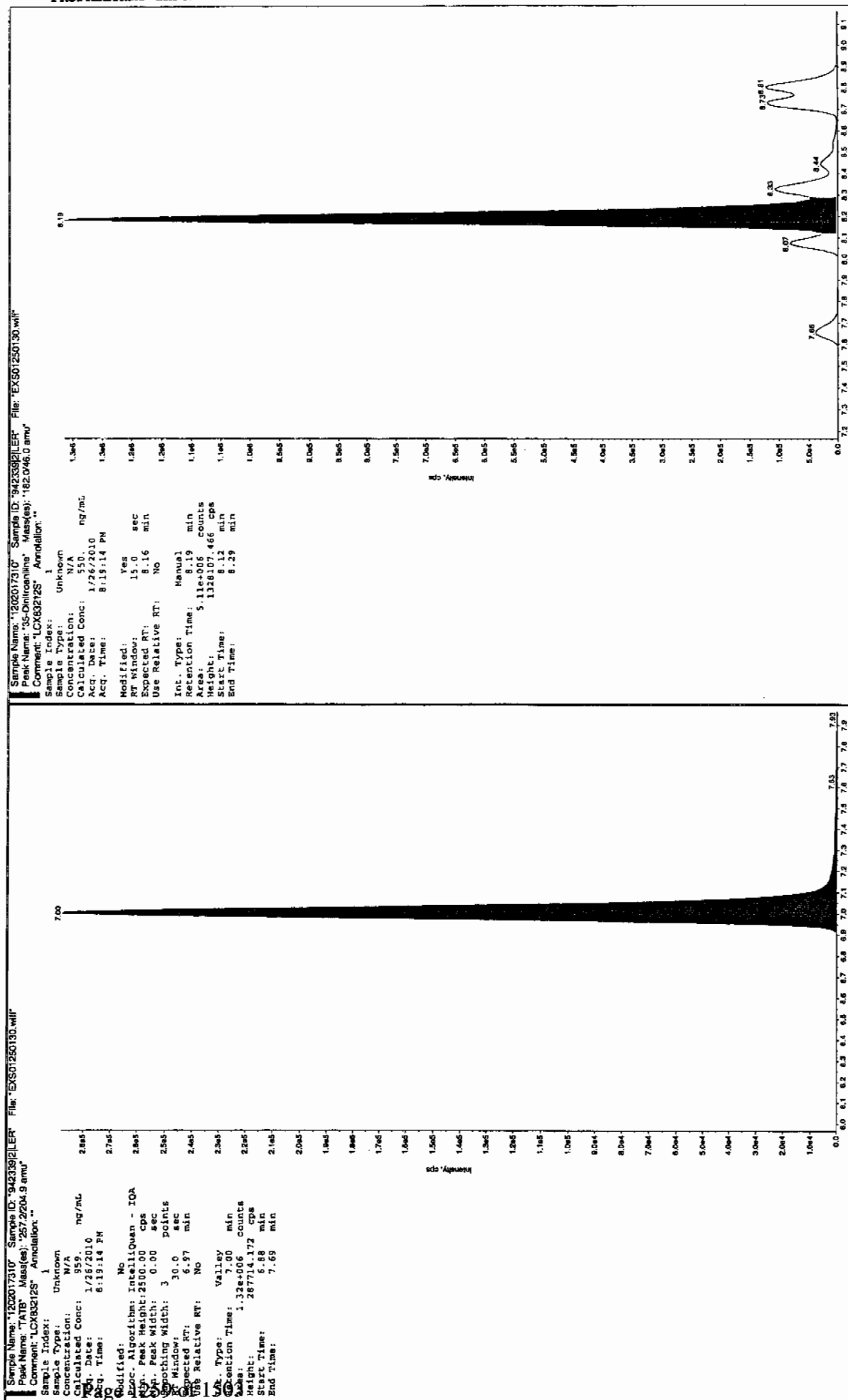
Before Scan 1127110

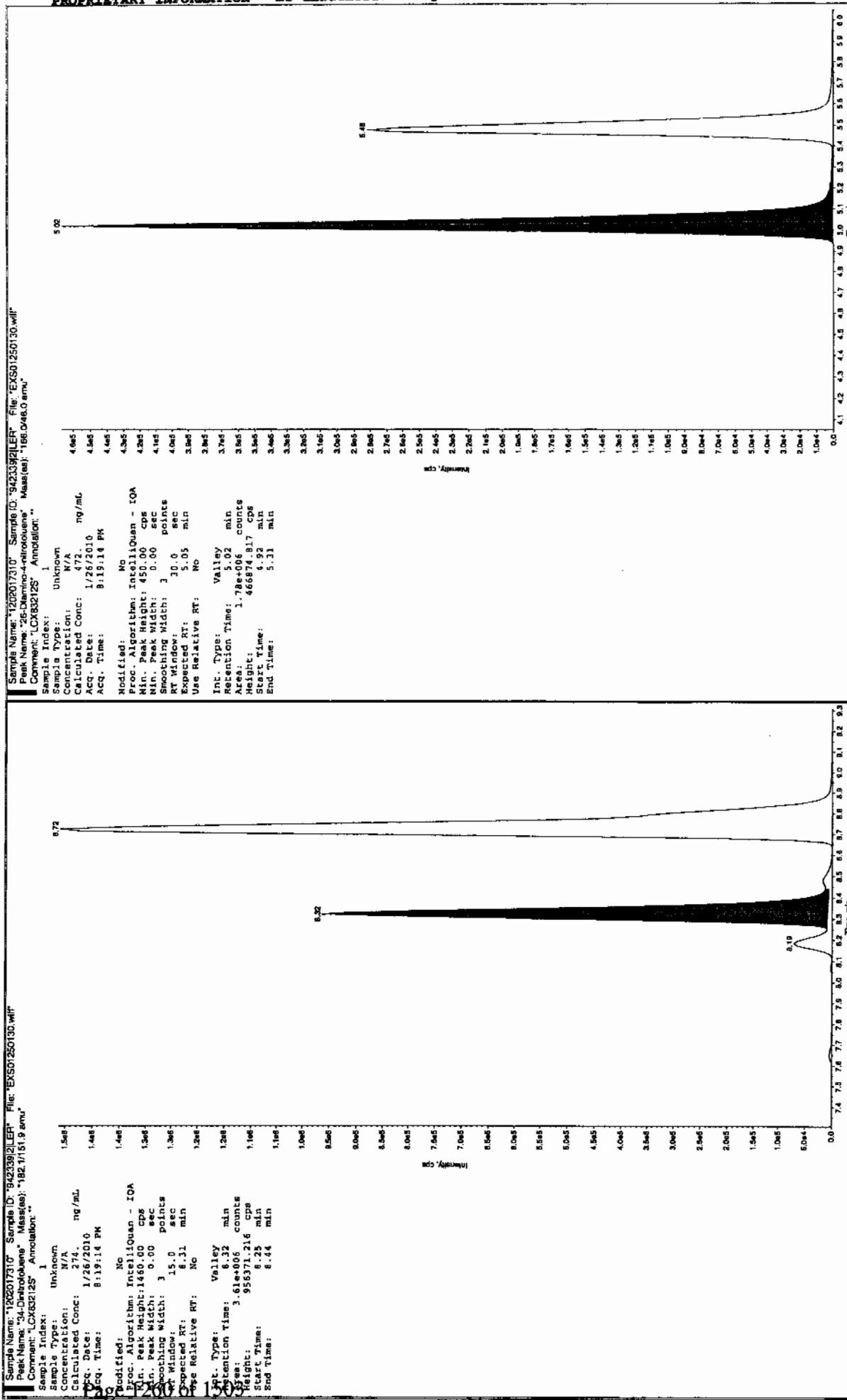


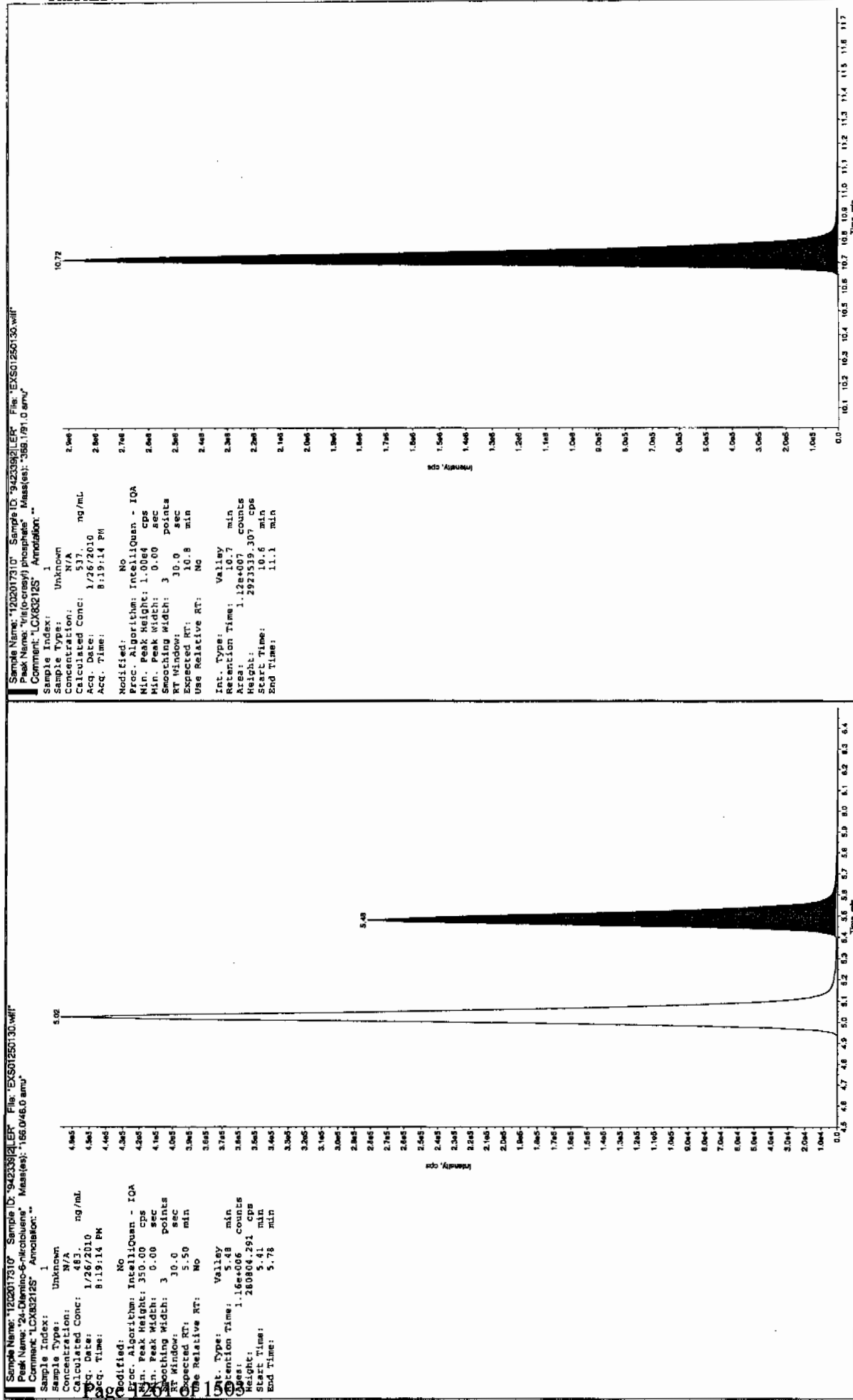
After Scan 1127110



after Jan 11/27/10







1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7163(244923001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017311

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0125191a

Date Analyzed: 29-JAN-10 08:48

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	5670	
121-14-2	2,4-Dinitrotoluene	5120	
121-82-4	RDX	5720	
19406-51-0	4-Amino-2,6-dinitrotoluene	5760	
2691-41-0	HMX	5350	
35572-78-2	2-Amino-4,6-dinitrotoluene	5780	
479-45-8	Tetryl	4380	
606-20-2	2,6-Dinitrotoluene	5140	
78-11-5	PETN	4960	
88-72-2	o-Nitrotoluene	4220	
98-95-3	Nitrobenzene	4640	
99-08-1	m-Nitrotoluene	4530	
99-35-4	1,3,5-Trinitrobenzene	5220	
99-65-0	m-Dinitrobenzene	5180	
99-99-0	p-Nitrotoluene	4390	

*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: Fri Jan 29 17:42:56 2010, Page 19 of 51

Dataset: C:\MASSLYNX\New_Exp\PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010

Name: C:\MASSLYNX\NEW_EXP\PRO\Data\EXP0125191a

Date: 29-Jan-2010

Time: 08:48:16

ID: 1202017311

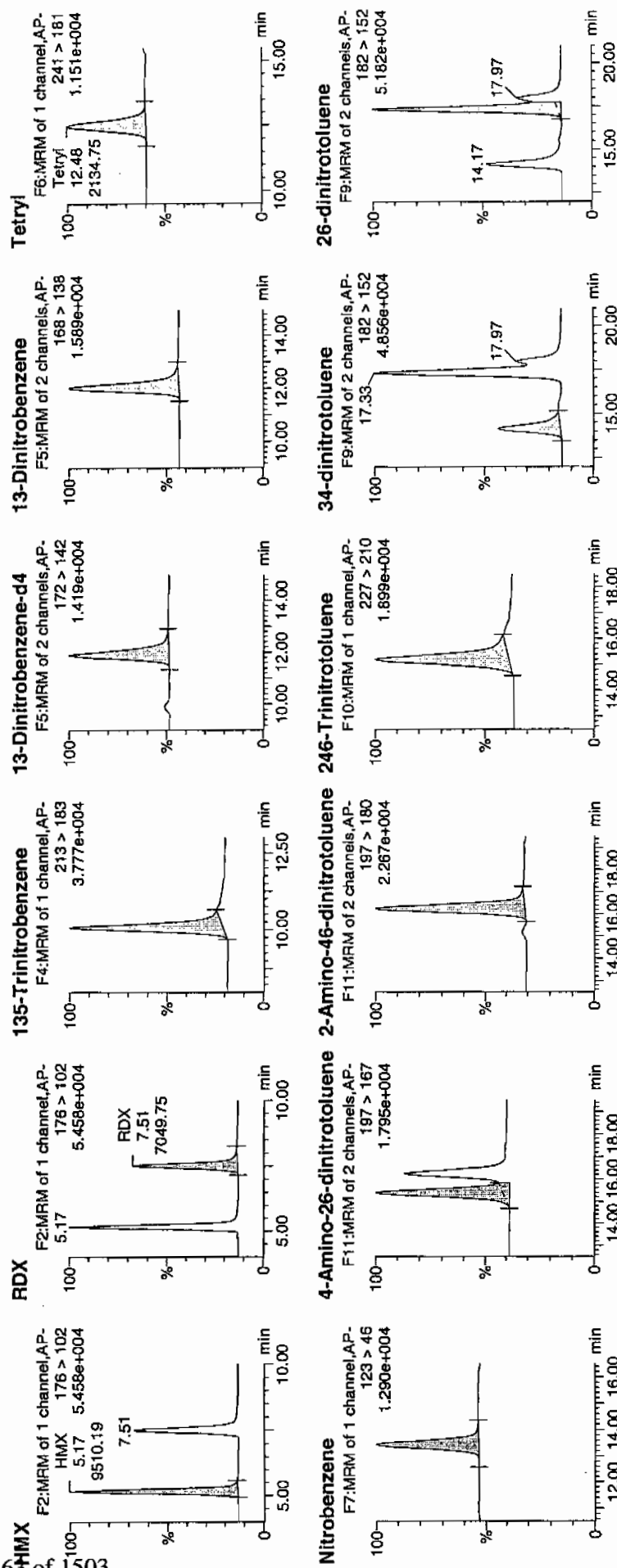
Vial: 3:2,D

11/20/10

12-1

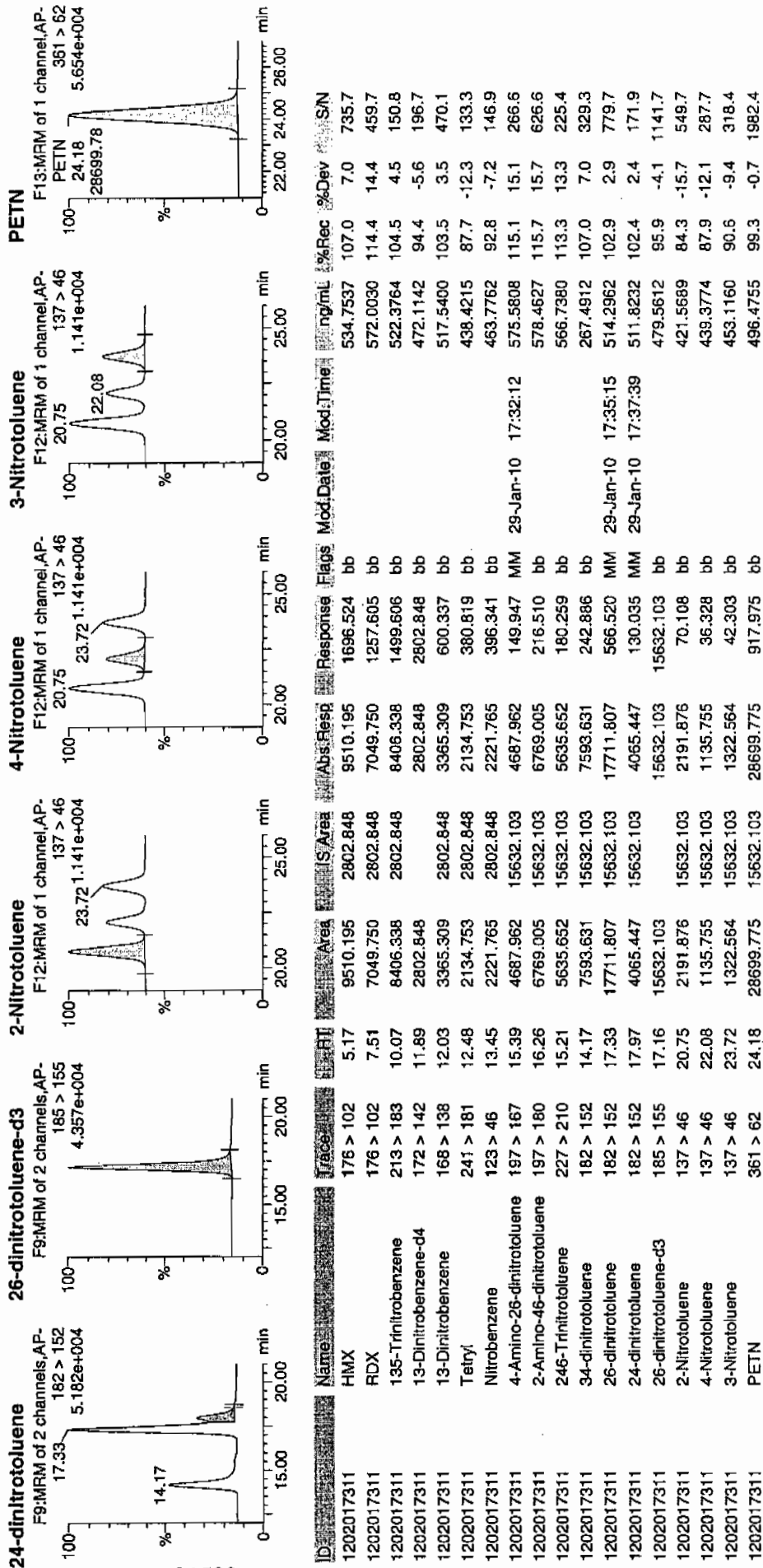
244923001 usd

Sol



477
8/1/2010

Dataset: C:\MASSLYNX\New_Exp.PRO\012510expA4.qld, Time: Fri Jan 29 17:40:23 2010



1
High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7163(244923001MSD)

Lab Code: GEL

GEL Job No (SDG) 10-1287

Matrix: SOIL

GEL Sample ID: 1202017311

Sample Amount 2

Moisture: 6.6

Amount Units g

Date Received: 16-JAN-10

Extraction Type Sonication

Extraction Batch ID: 942338

Concentrated Extract Volume (mL) 10

Date Extracted: 25-JAN-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS01250131.wiff

Date Analyzed: 26-JAN-10 20:34

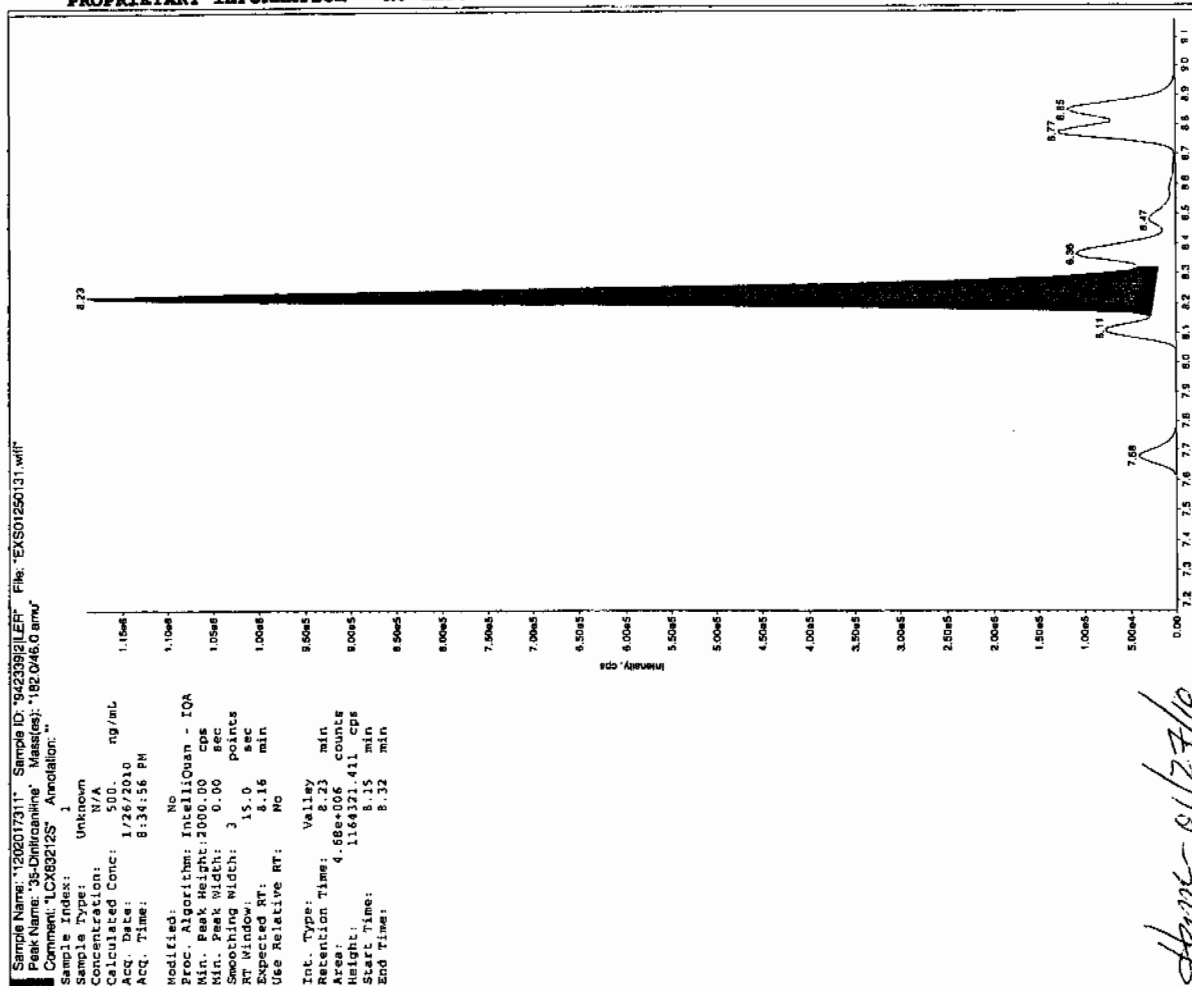
Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	9790	
59229-75-3	2,6-Diamino-4-nitrotoluene	4920	
618-87-1	3,5-Dinitroaniline	5230	
6629-29-4	2,4-Diamino-6-nitrotoluene	4570	
78-30-8	tris(o-cresyl) phosphate	5170	

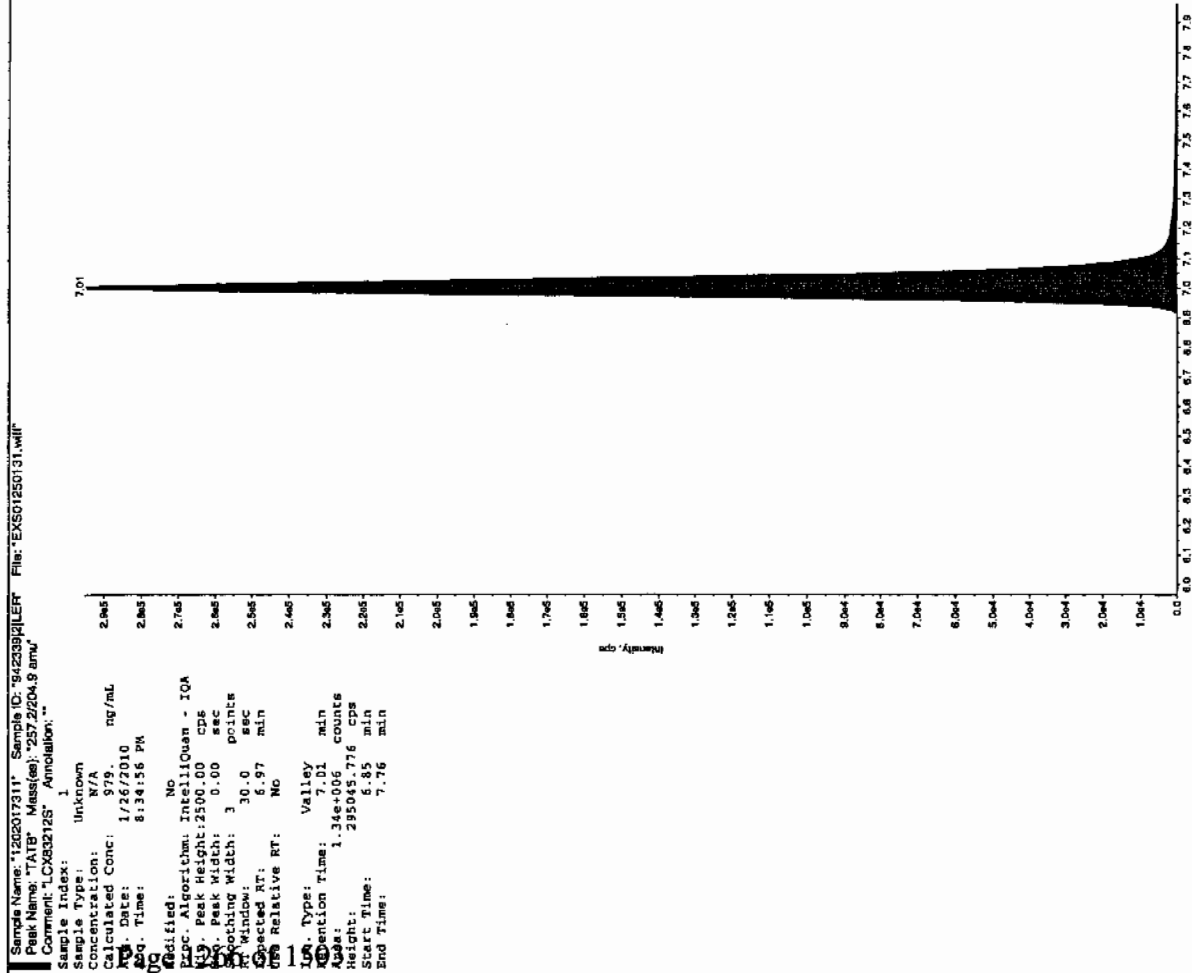
*Concentration =

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

Before Jan 12/7/10

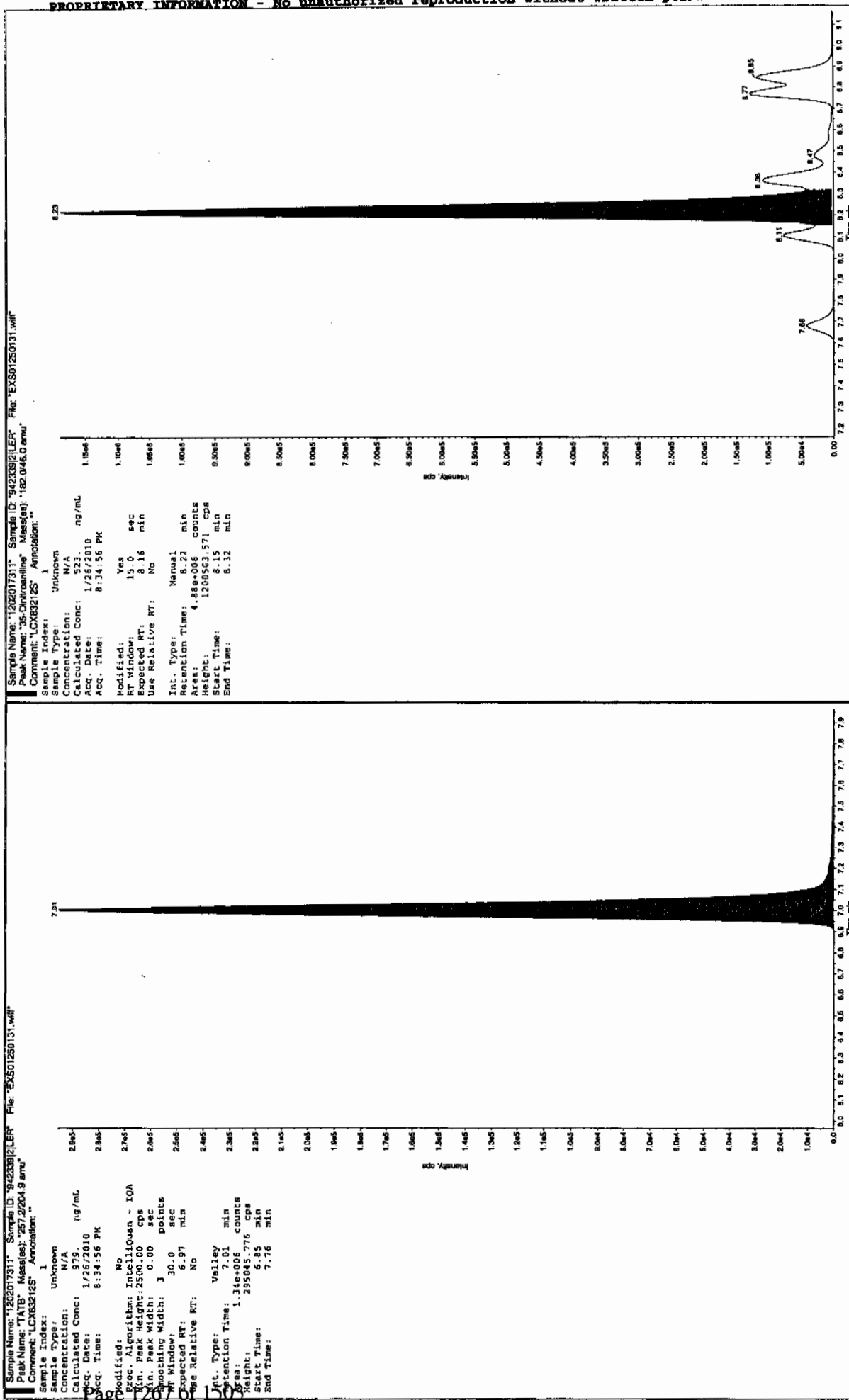


Same - 01/27/10

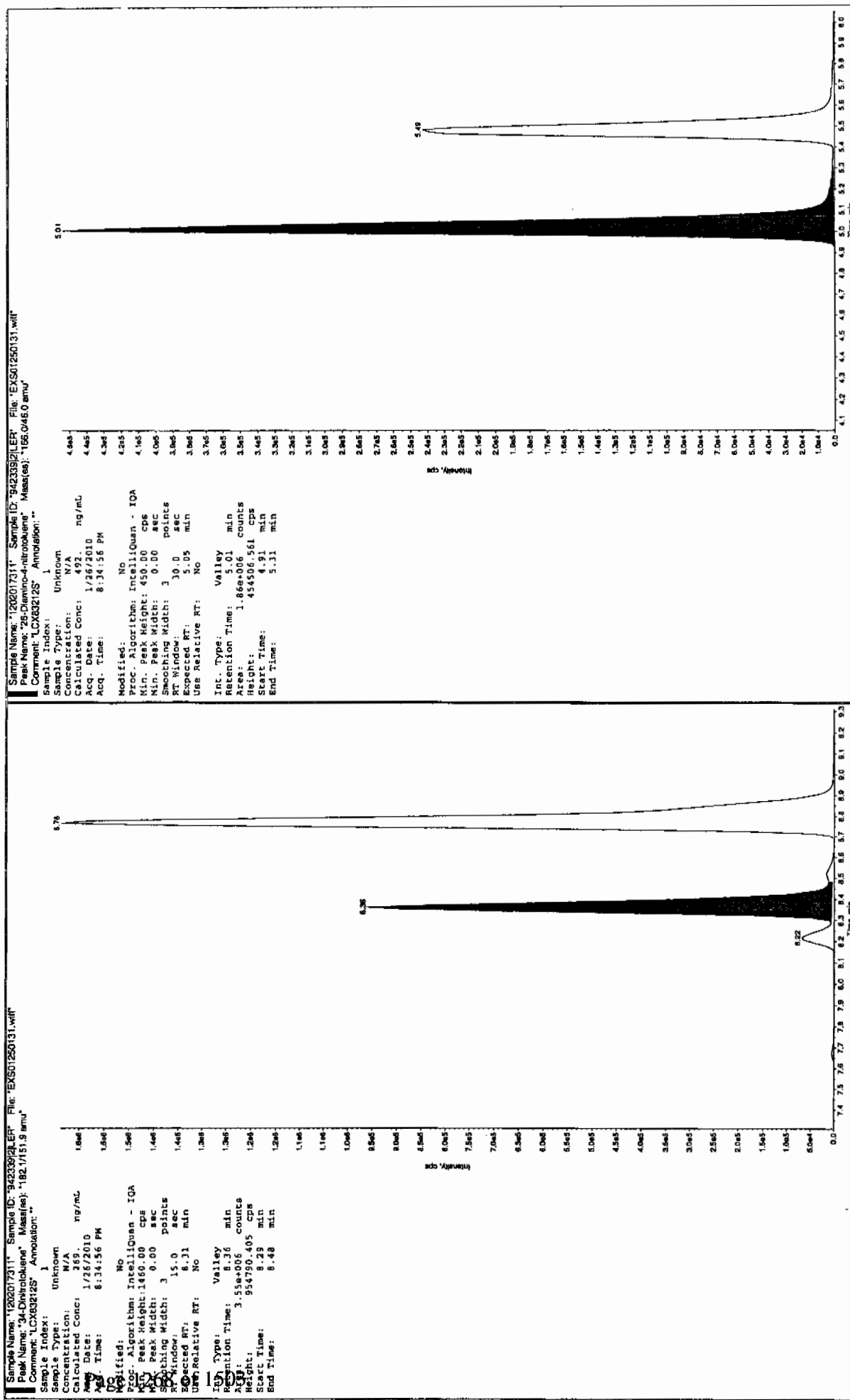


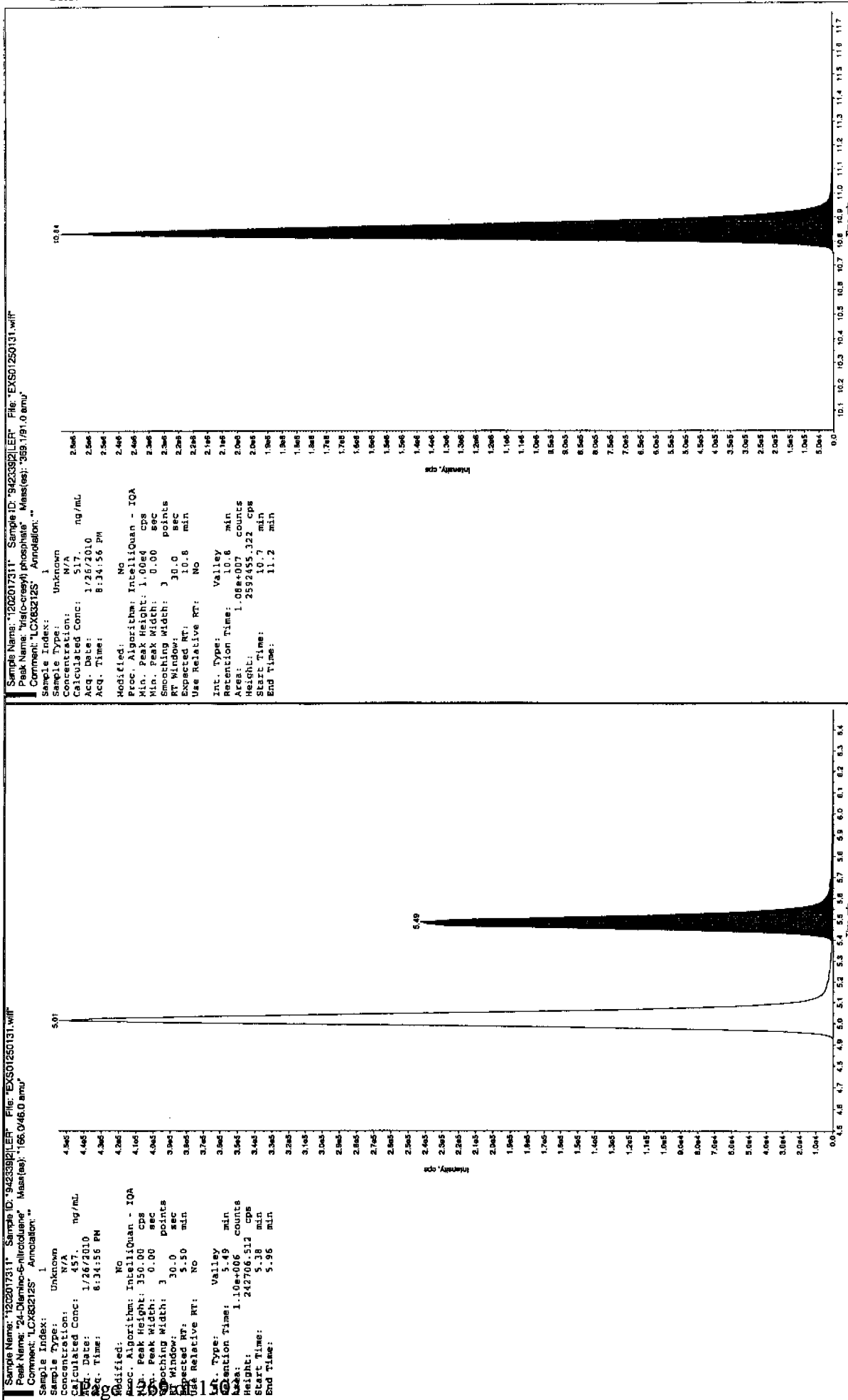
after Dec 11/27/10

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*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4





MISCELLANEOUS DATA

Prep Logbook Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 942338 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)
1202017308 MB	25-JAN-2010 14:06:57	2	10	5
1202017309 LCS	25-JAN-2010 14:06:57	2	10	5
244916002	25-JAN-2010 14:06:57	2	10	5
244916003	25-JAN-2010 14:06:57	2	10	5
244917002	25-JAN-2010 14:06:57	2	10	5
244917003	25-JAN-2010 14:06:57	2	10	5
244917004	25-JAN-2010 14:06:57	2	10	5
244923001	25-JAN-2010 14:06:57	2	10	5
1202017310 MS (244923001)	25-JAN-2010 14:06:57	2	10	5
1202017311 MSD (244923001)	25-JAN-2010 14:06:57	2	10	5
244923002	25-JAN-2010 14:06:57	2	10	5
244923003	25-JAN-2010 14:06:57	2	10	5
244923004	25-JAN-2010 14:06:57	2	10	5
244923005	25-JAN-2010 14:06:57	2	10	5
244923006	25-JAN-2010 14:06:57	2	10	5
244923007	25-JAN-2010 14:06:57	2	10	5
244923008	25-JAN-2010 14:06:57	2	10	5
244923009	25-JAN-2010 14:06:57	2	10	5
244923010	25-JAN-2010 14:06:57	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
LCS	1202017309	8321 Explosives LCS	DX091230-03	.1	mL	Final Solvent: ACN
LCS	1202017309	8321 LANL Explosives Mix 10mg/L	UXX100108-01.2	1	mL	
MS	1202017310	8321 Explosives LCS	DX091230-03	.1	mL	
MS	1202017310	8321 LANL Explosives Mix 10mg/L	UXX100108-01.2	1	mL	
MSD	1202017311	8321 Explosives LCS	DX091230-03	.1	mL	
MSD	1202017311	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: 01/25/10
 Extr. Injection Volume: 50ul
 Sequence Number: 012510expA
 Initial Calibration Date: 01/25/10
 Method: SW846 8321A-Modified
 Int. Std.: UXX091230-01.3
 Mobile Phase Lot#: 1258263, 1236350
 Standard-Samp Reagent Lot#: 1253092, 1246195
 Reviewed BY: *huyk*
 Date: *2/13/10*
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100125-07 & WXX100128-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Cilent	Comments	QC_Flag
EXP0125001a	XIBLK01	MAP	1/25/10 11:20			1		USE	B
EXP0125002a	XIBLK01	MAP	1/25/10 11:50			1		USE	B
EXP0125003a	WXXICAL-01	MAP	1/25/10 12:19			1		USE	I
EXP0125004a	WXXICAL-02	MAP	1/25/10 12:49			1		USE	I
EXP0125005a	WXXICAL-03	MAP	1/25/10 13:18			1		USE	I
EXP0125006a	WXXICAL-04	MAP	1/25/10 13:48			1		USE	I
EXP0125007a	WXXICAL-05	MAP	1/25/10 14:17			1		USE	I
EXP0125008a	WXXICAL-06	MAP	1/25/10 14:47			1		USE	I
EXP0125009a	XIBLK02	MAP	1/25/10 15:16			1		USE	B
EXP0125010a	WXXICV	MAP	1/25/10 15:46			1		USE	C
EXP0125011a	XIBLK03	MAP	1/25/10 16:15			1		USE	B
EXP0125012a	WXXCRI	MAP	1/25/10 16:45			1		USE	C
EXP0125013a	244613001	MAP	1/25/10 17:14	941662	10-1218	2	LANL	USE	S
EXP0125014a	244616002	MAP	1/25/10 17:44	941662	10-1219	2	LANL	USE	S
EXP0125015a	244616003	MAP	1/25/10 18:13	941662	10-1219	2	LANL	USE	S
EXP0125016a	244616004	MAP	1/25/10 18:43	941662	10-1219	2	LANL	USE	S
EXP0125017a	244616005	MAP	1/25/10 19:12	941662	10-1219	2	LANL	USE	S
EXP0125018a	244616006	MAP	1/25/10 19:42	941662	10-1219	2	LANL	USE	S
EXP0125019a	244620001	MAP	1/25/10 20:11	941662	10-1221	2	LANL	USE	S
EXP0125020a	244620002	MAP	1/25/10 20:41	941662	10-1221	2	LANL	USE	S
EXP0125021a	244620003	MAP	1/25/10 21:10	941662	10-1221	2	LANL	USE	S
EXP0125022a	244620004	MAP	1/25/10 21:40	941662	10-1221	2	LANL	USE	S
EXP0125023a	WXXCCV	MAP	1/25/10 22:09			1		USE	C
EXP0125024a	XIBLK04	MAP	1/25/10 22:39			1		USE	B
EXP0125025a	WXXCRI	MAP	1/25/10 23:08			1		USE	C
EXP0125026a	244620005	MAP	1/25/10 23:38	941662	10-1221	2	LANL	USE	S
EXP0125027a	244620006	MAP	1/26/10 0:07	941662	10-1221	2	LANL	USE	S
EXP0125028a	244623001	MAP	1/26/10 0:37	941662	10-1223	2	LANL	USE	S
EXP0125029a	244623002	MAP	1/26/10 1:06	941662	10-1223	2	LANL	USE	S

EXP0125030a	244623003	MAP	1/26/10 1:36	941662	10-1223	2	LANL	USE	S
EXP0125031a	244623004	MAP	1/26/10 2:05	941662	10-1223	2	LANL	USE	S
EXP0125032a	244623005	MAP	1/26/10 2:35	941662	10-1223	2	LANL	USE	S
EXP0125033a	244623006	MAP	1/26/10 3:04	941662	10-1223	2	LANL	USE	S
EXP0125034a	WXXCCV	MAP	1/26/10 3:34			1		USE	C
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EXP0125036a	WXXCRI	MAP	1/26/10 4:33			1		USE	C
EXP0125037a	1202011683	MAP	1/26/10 5:02	940071	10-1131	2	LANL	USE	S
EXP0125038a	1202011684	MAP	1/26/10 5:32	940071	10-1131	2	LANL	USE	S
EXP0125039a	244126001	MAP	1/26/10 6:01	940071	10-1131	2	LANL	USE	S
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EXP0125041a	1202011686	MAP	1/26/10 7:01	940071	10-1131	2	LANL	USE	S
EXP0125042a	244126002	MAP	1/26/10 7:30	940071	10-1131	2	LANL	USE	S
EXP0125043a	244126003	MAP	1/26/10 7:59	940071	10-1131	2	LANL	USE	S
EXP0125044a	244126004	MAP	1/26/10 8:29	940071	10-1131	2	LANL	USE	S
EXP0125045a	244126005	MAP	1/26/10 8:58	940071	10-1131	2	LANL	USE	S
EXP0125046a	244126006	MAP	1/26/10 9:28	940071	10-1131	2	LANL	USE	S
EXP0125047a	WXXCCV	MAP	1/26/10 9:58			1		USE	C
EXP0125048a	XIBLK06	MAP	1/26/10 10:27			1		USE	B
EXP0125049a	WXXCRI	MAP	1/26/10 10:57			1		USE	C
EXP0125050a	244126007	MAP	1/26/10 11:26	940071	10-1131	2	LANL	USE	S
EXP0125051a	244126008	MAP	1/26/10 11:56	940071	10-1131	2	LANL	USE	S
EXP0125052a	244126009	MAP	1/26/10 12:25	940071	10-1131	2	LANL	USE	S
EXP0125053a	244126010	MAP	1/26/10 12:55	940071	10-1131	2	LANL	USE	S
EXP0125054a	244126011	MAP	1/26/10 13:24	940071	10-1131	2	LANL	USE	S
EXP0125055a	244126012	MAP	1/26/10 13:54	940071	10-1131	2	LANL	USE	S
EXP0125056a	244126013	MAP	1/26/10 14:23	940071	10-1131	2	LANL	USE	S
EXP0125057a	244126014	MAP	1/26/10 14:53	940071	10-1131	2	LANL	USE	S
EXP0125058a	244126015	MAP	1/26/10 15:22	940071	10-1131	2	LANL	USE	S
EXP0125059a	244126016	MAP	1/26/10 15:51	940071	10-1131	2	LANL	USE	S
EXP0125060a	WXXCCV	MAP	1/26/10 16:21			1		USE	C
EXP0125061a	XIBLK07	MAP	1/26/10 16:50			1		USE	B
EXP0125062a	WXXCRI	MAP	1/26/10 17:20			1		USE	C
EXP0125063a	244126017	MAP	1/26/10 17:49	940071	10-1131	2	LANL	USE	S
EXP0125064a	244126018	MAP	1/26/10 18:19	940071	10-1131	2	LANL	USE	S
EXP0125065a	244126019	MAP	1/26/10 18:49	940071	10-1131	2	LANL	USE	S
EXP0125066a	244126020	MAP	1/26/10 19:18	940071	10-1131	2	LANL	USE	S

EXP0125067a	XIBLK08	MAP	1/26/10 19:48	940049	10-1126	1	LANL	USE	B
EXP0125068a	1202011636	MAP	1/26/10 20:17	940049	10-1126	2	LANL	USE	S
EXP0125069a	1202011639	MAP	1/26/10 20:47	940049	10-1126	2	LANL	USE	S
EXP0125070a	244137001	MAP	1/26/10 21:16	940049	10-1126	2	LANL	USE	S
EXP0125071a	244137002	MAP	1/26/10 21:46	940049	10-1126	2	LANL	USE	S
EXP0125072a	244137003	MAP	1/26/10 22:15	940049	10-1126	2	LANL	USE	S
EXP0125073a	WXXCCV	MAP	1/26/10 22:45			1		USE	C
EXP0125074a	XIBLK09	MAP	1/26/10 23:14			1		USE	B
EXP0125075a	WXXCRI	MAP	1/26/10 23:44			1		USE	C
EXP0125076a	244137004	MAP	1/27/10 0:13	940049	10-1126	2	LANL	USE	S
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EXP0125078a	244137006	MAP	1/27/10 1:12	940049	10-1126	2	LANL	USE	S
EXP0125079a	1202011637	MAP	1/27/10 1:42	940049	10-1126	2	LANL	USE	S
EXP0125080a	1202011638	MAP	1/27/10 2:11	940049	10-1126	2	LANL	USE	S
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EXP0125086a	1202011651	MAP	1/27/10 5:08	940057	10-1127	2	LANL	USE	S
EXP0125087a	244142001	MAP	1/27/10 5:38	940057	10-1127	2	LANL	USE	S
EXP0125088a	1202011652	MAP	1/27/10 6:07	940057	10-1127	2	LANL	USE	S
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EXP0125092a	244142004	MAP	1/27/10 8:06	940057	10-1127	2	LANL	USE	S
EXP0125093a	244142005	MAP	1/27/10 8:35	940057	10-1127	2	LANL	USE	S
EXP0125094a	244142006	MAP	1/27/10 9:05	940057	10-1127	2	LANL	USE	S
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EXP0125096a	XIBLK11	MAP	1/27/10 10:04			1		USE	B
EXP0125097a	WXXCRI	MAP	1/27/10 10:33			1		USE	C
EXP0125098a	244142007	MAP	1/27/10 11:03	940057	10-1127	2	LANL	USE	S
EXP0125099a	244142008	MAP	1/27/10 11:33	940057	10-1127	2	LANL	USE	S
EXP0125100a	244142009	MAP	1/27/10 12:02	940057	10-1127	2	LANL	USE	S
EXP0125101a	244142010	MAP	1/27/10 12:32	940057	10-1127	2	LANL	USE	S
EXP0125102a	244142011	MAP	1/27/10 13:01	940057	10-1127	2	LANL	USE	S
EXP0125103a	244142012	MAP	1/27/10 13:31	940057	10-1127	2	LANL	USE	S

EXP0125104a	244142013	MAP	1/27/10 14:00	940057	10-1127	2	LANL	USE	S
EXP0125105a	244142014	MAP	1/27/10 14:30	940057	10-1127	2	LANL	USE	S
EXP0125106a	244142015	MAP	1/27/10 14:59	940057	10-1127	2	LANL	USE	S
EXP0125107a	244142016	MAP	1/27/10 15:29	940057	10-1127	2	LANL	USE	S
EXP0125108a	WXXCCV	MAP	1/27/10 15:58			1		USE	C
EXP0125109a	XIBLK12	MAP	1/27/10 16:28			1		USE	B
EXP0125110a	WXXCRI	MAP	1/27/10 16:57			1		USE	C
EXP0125111a	244142017	MAP	1/27/10 17:27	940057	10-1127	2	LANL	USE	S
EXP0125112a	244142018	MAP	1/27/10 17:56	940057	10-1127	2	LANL	USE	S
EXP0125113a	244142005	MAP	1/27/10 18:26	940057	10-1127	25	LANL	USE	S
EXP0125114a	XIBLK13	MAP	1/27/10 18:55			1		USE	B
EXP0125115a	1202011638	MAP	1/27/10 19:25	940049	10-1126	2	LANL	USE	S
EXP0125116a	WXXCCV	MAP	1/27/10 19:54			1		USE	C
EXP0125117a	XIBLK14	MAP	1/27/10 20:24			1		USE	B
EXP0125118a	WXXCRI	MAP	1/27/10 20:53			1		USE	C
EXP0125119a	1202012974	MAP	1/27/10 21:23	940579	10-1160-1	2	LANL	USE	S
EXP0125120a	1202012975	MAP	1/27/10 21:52	940579	10-1160-1	2	LANL	USE	S
EXP0125121a	244210001	MAP	1/27/10 22:22	940579	10-1160-1	2	LANL	USE	S
EXP0125122a	1202012976	MAP	1/27/10 22:51	940579	10-1160-1	2	LANL	USE	S
EXP0125123a	1202012977	MAP	1/27/10 23:21	940579	10-1160-1	2	LANL	USE	S
EXP0125124a	244210002	MAP	1/27/10 23:50	940579	10-1160-1	2	LANL	USE	S
EXP0125125a	244210003	MAP	1/28/10 0:20	940579	10-1160-1	2	LANL	USE	S
EXP0125126a	244210004	MAP	1/28/10 0:49	940579	10-1160-1	2	LANL	USE	S
EXP0125127a	244210005	MAP	1/28/10 1:19	940579	10-1160-1	2	LANL	USE	S
EXP0125128a	244210006	MAP	1/28/10 1:48	940579	10-1160-1	2	LANL	USE	S
EXP0125129a	WXXCCV	MAP	1/28/10 2:18			1		USE	C
EXP0125130a	XIBLK15	MAP	1/28/10 2:47			1		USE	B
EXP0125131a	WXXCRI	MAP	1/28/10 3:17			1		USE	C
EXP0125132a	244210007	MAP	1/28/10 3:46	940579	10-1160-1	2	LANL	USE	S
EXP0125133a	244210008	MAP	1/28/10 4:16	940579	10-1160-1	2	LANL	USE	S
EXP0125134a	244210009	MAP	1/28/10 4:45	940579	10-1160-1	2	LANL	USE	S
EXP0125135a	244210010	MAP	1/28/10 5:15	940579	10-1160-1	2	LANL	USE	S
EXP0125136a	244210011	MAP	1/28/10 5:44	940579	10-1160-1	2	LANL	USE	S
EXP0125137a	244210012	MAP	1/28/10 6:14	940579	10-1160-1	2	LANL	USE	S
EXP0125138a	244210013	MAP	1/28/10 6:43	940579	10-1160-1	2	LANL	USE	S
EXP0125139a	244210014	MAP	1/28/10 7:13	940579	10-1160-1	2	LANL	USE	S
EXP0125140a	244210015	MAP	1/28/10 7:42	940579	10-1160-1	2	LANL	USE	S

EXP0125141a	244142017	MAP	1/28/10 8:12	940057	10-1127	10	LANL	USE	S
EXP0125142a	WXXCCV	MAP	1/28/10 8:41			1		USE	C
EXP0125143a	XIBLK16	MAP	1/28/10 9:11			1		USE	B
EXP0125144a	WXXCRI	MAP	1/28/10 9:40			1		USE	C
EXP0125145a	1202021910	MAP	1/28/10 10:10	944248	Various	2	LANL	USE	S
EXP0125146a	1202021911	MAP	1/28/10 10:40	944248	Various	2	LANL	USE	S
EXP0125147a	245098001	MAP	1/28/10 11:10	944248	10-1336	2	LANL	USE	S
EXP0125148a	245126002	MAP	1/28/10 11:39	944248	10-1334	2	LANL	USE	S
EXP0125149a	245126003	MAP	1/28/10 12:09	944248	10-1334	2	LANL	USE	S
EXP0125150a	245126004	MAP	1/28/10 12:38	944248	10-1334	2	LANL	USE	S
EXP0125151a	245126005	MAP	1/28/10 13:08	944248	10-1334	2	LANL	USE	S
EXP0125152a	245143002	MAP	1/28/10 13:37	944248	10-1337	2	LANL	USE	S
EXP0125153a	1202021912	MAP	1/28/10 14:07	944248	10-1337	2	LANL	USE	S
EXP0125154a	1202021913	MAP	1/28/10 14:36	944248	10-1337	2	LANL	USE	S
EXP0125155a	WXXCCV	MAP	1/28/10 15:06			1		USE	C
EXP0125156a	XIBLK17	MAP	1/28/10 15:35			1		USE	B
EXP0125157a	WXXCRI	MAP	1/28/10 16:05			1		USE	C
EXP0125158a	245143003	MAP	1/28/10 16:34	944248	10-1337	2	LANL	USE	S
EXP0125159a	XIBLK18	MAP	1/28/10 17:04			1		USE	B
EXP0125160a	1202017304	MAP	1/28/10 17:33	942337	Various	2	LANL	USE	S
EXP0125161a	1202017305	MAP	1/28/10 18:03	942337	Various	2	LANL	USE	S
EXP0125162a	244909001	MAP	1/28/10 18:32	942337	10-1279	2	LANL	USE	S
EXP0125163a	244909002	MAP	1/28/10 19:02	942337	10-1279	2	LANL	USE	S
EXP0125164a	244909003	MAP	1/28/10 19:31	942337	10-1279	2	LANL	USE	S
EXP0125165a	244909004	MAP	1/28/10 20:01	942337	10-1279	2	LANL	USE	S
EXP0125166a	WXXCCV	MAP	1/28/10 20:30			1		USE	C
EXP0125167a	XIBLK19	MAP	1/28/10 21:00			1		USE	B
EXP0125168a	WXXCRI	MAP	1/28/10 21:29			1		USE	C
EXP0125169a	244910002	MAP	1/28/10 21:59	942337	10-1281	2	LANL	USE	S
EXP0125170a	1202017306	MAP	1/28/10 22:28	942337	10-1281	2	LANL	USE	S
EXP0125171a	1202017307	MAP	1/28/10 22:58	942337	10-1281	2	LANL	USE	S
EXP0125172a	244910003	MAP	1/28/10 23:27	942337	10-1281	2	LANL	USE	S
EXP0125173a	244910004	MAP	1/28/10 23:57	942337	10-1281	2	LANL	USE	S
EXP0125174a	244910005	MAP	1/29/10 0:26	942337	10-1281	2	LANL	USE	S
EXP0125175a	244910006	MAP	1/29/10 0:56	942337	10-1281	2	LANL	USE	S
EXP0125176a	244910007	MAP	1/29/10 1:25	942337	10-1281	2	LANL	USE	S
EXP0125177a	244910008	MAP	1/29/10 1:55	942337	10-1281	2	LANL	USE	S

EXP0125178a	244910009	MAP	1/29/10 2:24	942337	10-1281	2	LANL	USE	S
EXP0125179a	WXXCCV	MAP	1/29/10 2:54			1		USE	C
EXP0125180a	XIBLK20	MAP	1/29/10 3:23			1		USE	B
EXP0125181a	WXXCRI	MAP	1/29/10 3:53			1		USE	C
EXP0125182a	1202017308	MAP	1/29/10 4:22	942339	Various	2	LANL	USE	S
EXP0125183a	1202017309	MAP	1/29/10 4:52	942339	Various	2	LANL	USE	S
EXP0125184a	244916002	MAP	1/29/10 5:21	942339	10-1284	2	LANL	USE	S
EXP0125185a	244916003	MAP	1/29/10 5:51	942339	10-1284	2	LANL	USE	S
EXP0125186a	244917002	MAP	1/29/10 6:20	942339	10-1285	2	LANL	USE	S
EXP0125187a	244917003	MAP	1/29/10 6:50	942339	10-1285	2	LANL	USE	S
EXP0125188a	244917004	MAP	1/29/10 7:19	942339	10-1285	2	LANL	USE	S
EXP0125189a	244923001	MAP	1/29/10 7:49	942339	10-1287	2	LANL	USE	S
EXP0125190a	1202017310	MAP	1/29/10 8:18	942339	10-1287	2	LANL	USE	S
EXP0125191a	1202017311	MAP	1/29/10 8:48	942339	10-1287	2	LANL	USE	S
EXP0125192a	WXXCCV	MAP	1/29/10 9:17			1		USE	C
EXP0125193a	XIBLK21	MAP	1/29/10 9:47			1		USE	B
EXP0125194a	WXXCRI	MAP	1/29/10 10:16			1		USE	C
EXP0125195a	244923002	MAP	1/29/10 10:46	942339	10-1287	2	LANL	USE	S
EXP0125196a	244923003	MAP	1/29/10 11:15	942339	10-1287	2	LANL	USE	S
EXP0125197a	244923004	MAP	1/29/10 11:45	942339	10-1287	2	LANL	USE	S
EXP0125198a	244923005	MAP	1/29/10 12:14	942339	10-1287	2	LANL	USE	S
EXP0125199a	244923006	MAP	1/29/10 12:44	942339	10-1287	2	LANL	USE	S
EXP0125200a	244923007	MAP	1/29/10 13:13	942339	10-1287	2	LANL	USE	S
EXP0125201a	244923008	MAP	1/29/10 13:43	942339	10-1287	2	LANL	USE	S
EXP0125202a	244923009	MAP	1/29/10 14:12	942339	10-1287	2	LANL	USE	S
EXP0125203a	244923010	MAP	1/29/10 14:42	942339	10-1287	2	LANL	USE	S
EXP0125204a	WXXCCV	MAP	1/29/10 15:11			1		USE	C
EXP0125205a	XIBLK22	MAP	1/29/10 15:41			1		USE	B
EXP0125206a	WXXCRI	MAP	1/29/10 16:10			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 01/25/10
 Extr. Injection Volume: 10uL
 Sequence Number: 012510exs
 Initial Calibration Date: 012510
 Method: 8321A-Modified
 Int. Std.: N/A
 Mobile Phase Lot#: 1250738, 1248467
 Standard-Samp Reagent Lot#: 1246195, 1253092
 Reviewed By: *[Signature]*
 Date: 01/27/10
 SOP: GL-OA-E-056 Rev.12
 Alt Check Std. ID: WXX100125-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS01250001.wiff	XIBLK01	LER	1/25/2010 10:28			1		USE	B
EXS01250002.wiff	XIBLK01	LER	1/25/2010 10:46			1		USE	B
EXS01250003.wiff	WXXICAL-19	LER	1/25/2010 11:02			1		USE	I
EXS01250004.wiff	WXXICAL-20	LER	1/25/2010 11:18			1		USE	I
EXS01250005.wiff	WXXICAL-21	LER	1/25/2010 11:33			1		USE	I
EXS01250006.wiff	WXXICAL-22	LER	1/25/2010 11:51			1		USE	I
EXS01250007.wiff	WXXICAL-23	LER	1/25/2010 12:07			1		USE	I
EXS01250008.wiff	WXXICAL-24	LER	1/25/2010 12:22			1		USE	I
EXS01250009.wiff	WXXICAL-25	LER	1/25/2010 12:38			1		USE	I
EXS01250010.wiff	XIBLK02	LER	1/25/2010 12:54			1		USE	B
EXS01250011.wiff	WXXICV	LER	1/25/2010 13:09			1		USE	C
EXS01250012.wiff	XIBLK03	LER	1/25/2010 13:25			1		USE	B
EXS01250013.wiff	WXXCRI	LER	1/25/2010 13:41			1		USE	C
EXS01250014.wiff	1202015503	LER	1/25/2010 13:56	941660	VARIOUS	2	LANL	USE	S
EXS01250015.wiff	1202015504	LER	1/25/2010 14:12	941660	10-1214	2	LANL	USE	S
EXS01250016.wiff	XIBLK04	LER	1/25/2010 14:28			1		USE	B
EXS01250017.wiff	1202017300	LER	1/25/2010 14:44	942335	VARIOUS	2	LANL	USE	S
EXS01250018.wiff	1202017301	LER	1/25/2010 14:59	942335	VARIOUS	2	LANL	USE	S
EXS01250019.wiff	244847001	LER	1/25/2010 15:15	942335	10-1262	2	LANL	USE	S
EXS01250020.wiff	1202017302	LER	1/25/2010 15:31	942335	10-1262	2	LANL	USE	S
EXS01250021.wiff	1202017303	LER	1/25/2010 15:46	942335	10-1262	2	LANL	USE	S
EXS01250022.wiff	244847002	LER	1/25/2010 16:02	942335	10-1262	2	LANL	USE	S
EXS01250023.wiff	244847003	LER	1/25/2010 16:18	942335	10-1262	2	LANL	DUSE-RA	S
EXS01250024.wiff	WXXCCV	LER	1/25/2010 16:33			1		USE	S
EXS01250025.wiff	XIBLK05	LER	1/25/2010 16:49			1		USE	C
EXS01250026.wiff	WXXCRI	LER	1/25/2010 17:05			1		USE	B
EXS01250027.wiff	244847004	LER	1/25/2010 17:21	942335	10-1262	2	LANL	USE	C
EXS01250028.wiff	244852001	LER	1/25/2010 17:36	942335	10-1263	2	LANL	USE	S
EXS01250029.wiff	244852002	LER	1/25/2010 17:52	942335	10-1263	2	LANL	USE	S
EXS01250030.wiff	244852003	LER	1/25/2010 18:08	942335	10-1263	2	LANL	USE	S

EXS01250031.wiff	244852004	LER	1/25/2010 18:24	942335	10-1263	2	LANL	USE	S
EXS01250032.wiff	244881001	LER	1/25/2010 18:39	942335	10-1264-1	2	LANL	USE	S
EXS01250033.wiff	244881002	LER	1/25/2010 18:55	942335	10-1264-1	2	LANL	USE	S
EXS01250034.wiff	244881003	LER	1/25/2010 19:11	942335	10-1264-1	2	LANL	USE	S
EXS01250035.wiff	244881004	LER	1/25/2010 19:26	942335	10-1264-1	2	LANL	USE	S
EXS01250036.wiff	244905001	LER	1/25/2010 19:42	942335	10-1277	2	LANL	USE	S
EXS01250037.wiff	WXXCCV	LER	1/25/2010 19:58			1		USE	C
EXS01250038.wiff	XIBLK06	LER	1/25/2010 20:14			1		USE	B
EXS01250039.wiff	WXXCRI	LER	1/25/2010 20:29			1		USE	C
EXS01250040.wiff	244905002	LER	1/25/2010 20:45	942335	10-1277	2	LANL	USE	S
EXS01250041.wiff	244905003	LER	1/25/2010 21:01	942335	10-1277	2	LANL	USE	S
EXS01250042.wiff	244905004	LER	1/25/2010 21:16	942335	10-1277	2	LANL	USE	S
EXS01250043.wiff	244905005	LER	1/25/2010 21:32	942335	10-1277	2	LANL	USE	S
EXS01250044.wiff	244905006	LER	1/25/2010 21:48	942335	10-1277	2	LANL	USE	S
EXS01250045.wiff	WXXCCV	LER	1/25/2010 22:04			1		USE	C
EXS01250046.wiff	XIBLK07	LER	1/25/2010 22:19			1		USE	B
EXS01250047.wiff	WXXCRI	LER	1/25/2010 22:35			1		USE	C
EXS01250048.wiff	1202017304	LER	1/25/2010 22:51	942337	VARIOUS	2	LANL	USE	S
EXS01250049.wiff	1202017305	LER	1/25/2010 23:06	942337	VARIOUS	2	LANL	USE	S
EXS01250050.wiff	244909001	LER	1/25/2010 23:22	942337	10-1279	2	LANL	USE	S
EXS01250051.wiff	244909002	LER	1/25/2010 23:38	942337	10-1279	2	LANL	USE	S
EXS01250052.wiff	244909003	LER	1/25/2010 23:54	942337	10-1279	2	LANL	USE	S
EXS01250053.wiff	244909004	LER	1/26/2010 0:09	942337	10-1279	2	LANL	USE	S
EXS01250054.wiff	244910002	LER	1/26/2010 0:25	942337	10-1281	2	LANL	USE	S
EXS01250055.wiff	1202017306	LER	1/26/2010 0:41	942337	10-1281	2	LANL	USE	S
EXS01250056.wiff	1202017307	LER	1/26/2010 0:56	942337	10-1281	2	LANL	USE	S
EXS01250057.wiff	244910003	LER	1/26/2010 1:12	942337	10-1281	2	LANL	USE	S
EXS01250058.wiff	WXXCCV	LER	1/26/2010 1:28			1		USE	C
EXS01250059.wiff	XIBLK08	LER	1/26/2010 1:44			1		USE	B
EXS01250060.wiff	WXXCRI	LER	1/26/2010 1:59			1		USE	C
EXS01250061.wiff	244910004	LER	1/26/2010 2:15	942337	10-1281	2	LANL	USE	S
EXS01250062.wiff	244910005	LER	1/26/2010 2:31	942337	10-1281	2	LANL	USE	S
EXS01250063.wiff	244910006	LER	1/26/2010 2:46	942337	10-1281	2	LANL	USE	S
EXS01250064.wiff	244910007	LER	1/26/2010 3:02	942337	10-1281	2	LANL	USE	S
EXS01250065.wiff	244910008	LER	1/26/2010 3:18	942337	10-1281	2	LANL	USE	S
EXS01250066.wiff	244910009	LER	1/26/2010 3:33	942337	10-1281	2	LANL	USE	S
EXS01250067.wiff	WXXCCV	LER	1/26/2010 3:49			1		USE	C

EXS01250105.wiff	244599003	LER	1/26/2010 13:46	941658	10-1210	2	LANL	USE	S
EXS01250106.wiff	WXXCCV	LER	1/26/2010 14:02			1		USE	C
EXS01250107.wiff	XIBLK13	LER	1/26/2010 14:17			1		USE	B
EXS01250108.wiff	WXXCRI	LER	1/26/2010 14:33			1		USE	C
EXS01250109.wiff	244599004	LER	1/26/2010 14:49	941658	10-1210	2	LANL	USE	S
EXS01250110.wiff	244599005	LER	1/26/2010 15:05	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250111.wiff	244599006	LER	1/26/2010 15:20	941658	10-1210	2	LANL	USE	S
EXS01250112.wiff	244599007	LER	1/26/2010 15:36	941658	10-1210	2	LANL	USE	S
EXS01250113.wiff	244599008	LER	1/26/2010 15:52	941658	10-1210	2	LANL	USE	S
EXS01250114.wiff	244599009	LER	1/26/2010 16:07	941658	10-1210	2	LANL	USE	S
EXS01250115.wiff	244599010	LER	1/26/2010 16:23	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250116.wiff	244599011	LER	1/26/2010 16:39	941658	10-1210	2	LANL	USE	S
EXS01250117.wiff	244599012	LER	1/26/2010 16:55	941658	10-1210	2	LANL	USE	S
EXS01250118.wiff	244599013	LER	1/26/2010 17:10	941658	10-1210	2	LANL	DUSE-RA	S
EXS01250119.wiff	WXXCCV	LER	1/26/2010 17:26			1		USE	C
EXS01250120.wiff	XIBLK14	LER	1/26/2010 17:42			1		USE	B
EXS01250121.wiff	WXXCRI	LER	1/26/2010 17:57			1		USE	C
EXS01250122.wiff	1202017308	LER	1/26/2010 18:13	942339	VARIOUS	2	LANL	USE	S
EXS01250123.wiff	1202017309	LER	1/26/2010 18:29	942339	VARIOUS	2	LANL	USE	S
EXS01250124.wiff	244916002	LER	1/26/2010 18:45	942339	10-1284	2	LANL	USE	S
EXS01250125.wiff	244916003	LER	1/26/2010 19:00	942339	10-1284	2	LANL	USE	S
EXS01250126.wiff	244917002	LER	1/26/2010 19:16	942339	10-1285	2	LANL	USE	S
EXS01250127.wiff	244917003	LER	1/26/2010 19:32	942339	10-1285	2	LANL	USE	S
EXS01250128.wiff	244917004	LER	1/26/2010 19:47	942339	10-1285	2	LANL	USE	S
EXS01250129.wiff	244923001	LER	1/26/2010 20:03	942339	10-1287	2	LANL	USE	S
EXS01250130.wiff	1202017310	LER	1/26/2010 20:19	942339	10-1287	2	LANL	USE	S
EXS01250131.wiff	1202017311	LER	1/26/2010 20:34	942339	10-1287	2	LANL	USE	S
EXS01250132.wiff	WXXCCV	LER	1/26/2010 20:50			1		USE	C
EXS01250133.wiff	XIBLK15	LER	1/26/2010 21:06			1		USE	B
EXS01250134.wiff	WXXCRI	LER	1/26/2010 21:22			1		USE	C
EXS01250135.wiff	244923002	LER	1/26/2010 21:37	942339	10-1287	2	LANL	USE	S
EXS01250136.wiff	244923003	LER	1/26/2010 21:53	942339	10-1287	2	LANL	USE	S
EXS01250137.wiff	244923004	LER	1/26/2010 22:09	942339	10-1287	2	LANL	USE	S
EXS01250138.wiff	244923005	LER	1/26/2010 22:24	942339	10-1287	2	LANL	USE	S
EXS01250139.wiff	244923006	LER	1/26/2010 22:40	942339	10-1287	2	LANL	USE	S
EXS01250140.wiff	244923007	LER	1/26/2010 22:56	942339	10-1287	2	LANL	USE	S
EXS01250141.wiff	244923008	LER	1/26/2010 23:12	942339	10-1287	2	LANL	USE	S

EXS01250142.wiff	244923009	LER	1/26/2010 23:27	942339	10-1287	2	LANL	USE	S
EXS01250143.wiff	244923010	LER	1/26/2010 23:43	942339	10-1287	2	LANL	USE	S
EXS01250144.wiff	WXXCCV	LER	1/26/2010 23:59			1		USE	C
EXS01250145.wiff	XIBLK16	LER	1/27/2010 0:14			1		USE	B
EXS01250146.wiff	WXXCRI	LER	1/27/2010 0:30			1		USE	C
EXS01250147.wiff	UXX100108-01.2	LER	1/27/2010 0:46	SCREEN	SOLID	2	O2SI	USE	S
EXS01250148.wiff	244599005	LER	1/27/2010 1:02	941658	10-1210	2	LANL	USE	S
EXS01250149.wiff	244599010	LER	1/27/2010 1:17	941658	10-1210	2	LANL	USE	S
EXS01250150.wiff	WXXCCV	LER	1/27/2010 1:33			1		USE	C
EXS01250151.wiff	XIBLK17	LER	1/27/2010 1:49			1		USE	B
EXS01250152.wiff	WXXCRI	LER	1/27/2010 2:04			1		USE	C

GC
SEMIVOLATILE
PCB
ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1287

Method/Analysis Information

Procedure: Analysis of Polychlorinated Biphenyls by ECD
Analytical Method: SW846 8082
Prep Method: SW846 3550B
Analytical Batch Number: 943953
Prep Batch Number: 943951

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
244923001	RE15-10-7163
244923002	RE15-10-7162
244923003	RE15-10-7161
244923004	RE15-10-7160
244923005	RE15-10-7174
244923006	RE15-10-7173
244923007	RE15-10-7175
244923008	RE15-10-7172
244923009	RE15-10-7218
244923010	RE15-10-7223
1202021249	Method Blank (MB)
1202021250	Laboratory Control Sample (LCS)
1202021251	245106001(RE15-10-7165) Matrix Spike (MS)
1202021252	245106001(RE15-10-7165) 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 for the Aroclors.

Surrogate recovery did not meet the acceptance criteria in the standards bracketing the samples in this SDG; however, this had no adverse effects on the data as the surrogate recovery was well within the acceptance range in the samples in this SDG.

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 (#10-1304) was selected for the matrix spike and matrix spike duplicate analysis. A Form III and QC raw data are included in the package summarizing the results.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications

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

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP. All sample extracts were cleaned using alumina. Additionally, copper was added to all sample extracts to remove sulfur.

Sample Dilutions

Sample 244923002 (RE15-10-7162) was diluted at 1:10 due to the presence of over-range target analytes.

Sample Re-extraction/Re-analysis

Re-extractions 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: Jinni Cao

Date: 2/12/10

Roadmap for LANL 10-1287 PCB

This roadmap was analyzed by yip00818 on 01-25-2010, 13:34.

This roadmap was reviewed by jim01140 on 01-25-2010, 15:21.

This roadmap was packaged by yml on 02-11-2010, 12:49.

This roadmap was validated by jim01140 on 02-12-2010, 08:28.

Front Sample Column

exclude	manual	datafile	smplid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbetichid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/046f4601.d	244923001	sample	22-JAN-2010	14:03	10-1287.sub	RE15-10-7163	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecd1a.i/012210.b/047f4701.d	244923002	sample	22-JAN-2010	14:16	10-1287.sub	RE15-10-7162	1.00000	943953	DUES RR 10X
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/070f7001.d	244923002	sample	22-JAN-2010	19:07	10-1287.sub	RE15-10-7162	10.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecd1a.i/012210.b/048f4801.d	244923003	sample	22-JAN-2010	14:28	10-1287.sub	RE15-10-7161	1.00000	943953	DUES RR
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/071f7101.d	244923003	sample	22-JAN-2010	19:19	10-1287.sub	RE15-10-7161	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/049f4901.d	244923004	sample	22-JAN-2010	14:41	10-1287.sub	RE15-10-7160	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/050f5001.d	244923005	sample	22-JAN-2010	14:54	10-1287.sub	RE15-10-7174	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/051f5101.d	244923006	sample	22-JAN-2010	15:06	10-1287.sub	RE15-10-7173	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/052f5201.d	244923007	sample	22-JAN-2010	15:19	10-1287.sub	RE15-10-7175	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/055f5501.d	244923008	sample	22-JAN-2010	15:57	10-1287.sub	RE15-10-7172	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/056f5601.d	244923009	sample	22-JAN-2010	16:10	10-1287.sub	RE15-10-7218	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/057f5701.d	244923010	sample	22-JAN-2010	16:22	10-1287.sub	RE15-10-7223	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smplid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbetichid	comment
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/046f4601.d	244923001	sample	22-JAN-2010	14:03	10-1287.sub	RE15-10-7163	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecd1a.i/012210.b/047f4701.d	244923002	sample	22-JAN-2010	14:16	10-1287.sub	RE15-10-7162	1.00000	943953	DUES RR 10X
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/070f7001.d	244923002	sample	22-JAN-2010	19:07	10-1287.sub	RE15-10-7162	10.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input checked="" type="checkbox"/>	N	/chem/ecd1a.i/012210.b/048f4801.d	244923003	sample	22-JAN-2010	14:28	10-1287.sub	RE15-10-7161	1.00000	943953	DUES RR
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/071f7101.d	244923003	sample	22-JAN-2010	19:19	10-1287.sub	RE15-10-7161	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/049f4901.d	244923004	sample	22-JAN-2010	14:41	10-1287.sub	RE15-10-7160	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/050f5001.d	244923005	sample	22-JAN-2010	14:54	10-1287.sub	RE15-10-7174	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/051f5101.d	244923006	sample	22-JAN-2010	15:06	10-1287.sub	RE15-10-7173	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/052f5201.d	244923007	sample	22-JAN-2010	15:19	10-1287.sub	RE15-10-7175	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ecd1a.i/012210.b/055f5501.d	244923008	sample	22-JAN-2010	15:57	10-1287.sub	RE15-10-7172	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER

<input type="checkbox"/>	N	/chem/ccd1a.v012210.b056b5601.d	244923009	sample	22-JAN-2010	16:10	10-1287.sub	RE15-10-7218	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER
<input type="checkbox"/>	N	/chem/ccd1a.v012210.b057b5701.d	244923010	sample	22-JAN-2010	16:22	10-1287.sub	RE15-10-7223	1.00000	943953	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ccd1a.i/012210.b/043f4301-1.d	1202021249	mb	22-JAN-2010	13:31	10-1287.sub	PBLK01	1.00000	943953	<input type="text"/>
<input type="checkbox"/>	N	/chem/ccd1a.i/012210.b/044f4401-1.d	1202021250	lcs	22-JAN-2010	13:42	10-1287.sub	PBLK01LCS	1.00000	943953	<input type="text"/>

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
<input type="checkbox"/>	N	/chem/ccd1a.i/012210.b/043b4301-1.d	1202021249	mb	22-JAN-2010	13:31	10-1287.sub	PBLK01	1.00000	943953	<input type="text"/>
<input type="checkbox"/>	N	/chem/ccd1a.i/012210.b/044b4401-1.d	1202021250	lcs	22-JAN-2010	13:42	10-1287.sub	PBLK01LCS	1.00000	943953	<input type="text"/>

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8082
 Inst: ECD1A.I
 Analyst: YS1
 Aliquot: 30.18 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 %Moisture: 20
 Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

Client ID: RE15-10-7160
 Batch ID: 943953
 Run Date: 01/22/2010 14:41
 Prep Date: 01/21/2010 19:38
 Data File: 049f4901.d
 049b4901.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.14	ug/kg	1.38	4.14	1
11104-28-2	Aroclor-1221	U	4.14	ug/kg	1.38	4.14	1
11141-16-5	Aroclor-1232	U	4.14	ug/kg	1.38	4.14	1
53469-21-9	Aroclor-1242	U	4.14	ug/kg	1.38	4.14	1
12672-29-6	Aroclor-1248	U	4.14	ug/kg	1.38	4.14	1
11097-69-1	Aroclor-1254		114	ug/kg	1.38	4.14	1
11096-82-5	Aroclor-1260		38.5	ug/kg	1.38	4.14	1

PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923003

Client ID: RE15-10-7161

Batch ID: 943953

Run Date: 01/22/2010 19:19

Prep Date: 01/21/2010 19:38

Data File: 071f7101.d

071b7101.d

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.1

Analyst: YS1

Aliquot: 30.03 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 10.9

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.74	ug/kg	1.24	3.74	1
11104-28-2	Aroclor-1221	U	3.74	ug/kg	1.24	3.74	1
11141-16-5	Aroclor-1232	U	3.74	ug/kg	1.24	3.74	1
53469-21-9	Aroclor-1242	U	3.74	ug/kg	1.24	3.74	1
12672-29-6	Aroclor-1248	U	3.74	ug/kg	1.24	3.74	1
11097-69-1	Aroclor-1254		5.20	ug/kg	1.24	3.74	1
11096-82-5	Aroclor-1260	J	3.30	ug/kg	1.24	3.74	1

PCB

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Certificate of Analysis

Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923002

Client ID: RE15-10-7162

Batch ID: 943953

Run Date: 01/22/2010 19:07

Prep Date: 01/21/2010 19:38

Data File: 070f7001.d

070b7001.d

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.J

Analyst: YS1

Aliquot: 30.07 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 9.7

Project: LANL01004

SOP Ref: GL-OA-F-040

Dilution: 10

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	36.8	ug/kg	12.3	36.8	1
11104-28-2	Aroclor-1221	U	36.8	ug/kg	12.3	36.8	1
11141-16-5	Aroclor-1232	U	36.8	ug/kg	12.3	36.8	1
53469-21-9	Aroclor-1242	U	36.8	ug/kg	12.3	36.8	1
12672-29-6	Aroclor-1248	U	36.8	ug/kg	12.3	36.8	1
11097-69-1	Aroclor-1254		704	ug/kg	12.3	36.8	1
11096-82-5	Aroclor-1260		258	ug/kg	12.3	36.8	1

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923001

Client ID: RE15-10-7163

Batch ID: 943953

Run Date: 01/22/2010 14:03

Prep Date: 01/21/2010 19:38

Data File: 046f4601.d

046b4601.d

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.16 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 6.6

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254		114	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260		36.9	ug/kg	1.18	3.55	1

PCB

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Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923008

Client ID: RE15-10-7172

Batch ID: 943953

Run Date: 01/22/2010 15:57

Prep Date: 01/21/2010 19:38

Data File: 055f5501.d

055b5501.d

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.1

Analyst: YS1

Aliquot: 30.01 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 21.2

Project: LANL01004

SOP Ref: GI-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.23	ug/kg	1.41	4.23	1
11104-28-2	Aroclor-1221	U	4.23	ug/kg	1.41	4.23	1
11141-16-5	Aroclor-1232	U	4.23	ug/kg	1.41	4.23	1
53469-21-9	Aroclor-1242	U	4.23	ug/kg	1.41	4.23	1
12672-29-6	Aroclor-1248	U	4.23	ug/kg	1.41	4.23	1
11097-69-1	Aroclor-1254	U	4.23	ug/kg	1.41	4.23	1
11096-82-5	Aroclor-1260	U	4.23	ug/kg	1.41	4.23	1

PCB
Certificate of Analysis
Sample Summary

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SDG Number: 10-1287
Lab Sample ID: 244923006

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2

Matrix: R
% Moisture: 9.8
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7173
Batch ID: 943953
Run Date: 01/22/2010 15:06
Prep Date: 01/21/2010 19:38
Data File: 051f5101.d
051b5101.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.67	ug/kg	1.22	3.67	1
11104-28-2	Aroclor-1221	U	3.67	ug/kg	1.22	3.67	1
11141-16-5	Aroclor-1232	U	3.67	ug/kg	1.22	3.67	1
53469-21-9	Aroclor-1242	U	3.67	ug/kg	1.22	3.67	1
12672-29-6	Aroclor-1248	U	3.67	ug/kg	1.22	3.67	1
11097-69-1	Aroclor-1254	U	3.67	ug/kg	1.22	3.67	1
11096-82-5	Aroclor-1260	U	3.67	ug/kg	1.22	3.67	1

PCB

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Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923005

Client ID: RE15-10-7174

Batch ID: 943953

Run Date: 01/22/2010 14:54

Prep Date: 01/21/2010 19:38

Data File: 050f5001.d

050b5001.d

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.05 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 19.7

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.14	ug/kg	1.38	4.14	1
11104-28-2	Aroclor-1221	U	4.14	ug/kg	1.38	4.14	1
11141-16-5	Aroclor-1232	U	4.14	ug/kg	1.38	4.14	1
53469-21-9	Aroclor-1242	U	4.14	ug/kg	1.38	4.14	1
12672-29-6	Aroclor-1248	U	4.14	ug/kg	1.38	4.14	1
11097-69-1	Aroclor-1254	U	4.14	ug/kg	1.38	4.14	1
11096-82-5	Aroclor-1260	U	4.14	ug/kg	1.38	4.14	1

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923007Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 9.3
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

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

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923009Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.11 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.69	ug/kg	1.23	3.69	1
11104-28-2	Aroclor-1221	U	3.69	ug/kg	1.23	3.69	1
11141-16-5	Aroclor-1232	U	3.69	ug/kg	1.23	3.69	1
53469-21-9	Aroclor-1242	U	3.69	ug/kg	1.23	3.69	1
12672-29-6	Aroclor-1248	U	3.69	ug/kg	1.23	3.69	1
11097-69-1	Aroclor-1254	U	3.69	ug/kg	1.23	3.69	1
11096-82-5	Aroclor-1260	U	3.69	ug/kg	1.23	3.69	1

PCB

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Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923010Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.14 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 10.8
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.72	ug/kg	1.24	3.72	1
11104-28-2	Aroclor-1221	U	3.72	ug/kg	1.24	3.72	1
11141-16-5	Aroclor-1232	U	3.72	ug/kg	1.24	3.72	1
53469-21-9	Aroclor-1242	U	3.72	ug/kg	1.24	3.72	1
12672-29-6	Aroclor-1248	U	3.72	ug/kg	1.24	3.72	1
11097-69-1	Aroclor-1254		8.00	ug/kg	1.24	3.72	1
11096-82-5	Aroclor-1260		4.20	ug/kg	1.24	3.72	2

QUALITY CONTROL SUMMARY

PCB
Surrogate Recovery Report

Page 1 of 1

SDG Number: 10-1287

Matrix Type: SOLID

CAP Column (1) : CLP1

CAP Column (2) : CLP2

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202021249	MB for batch 943951	62	59	55	56
1202021250	LCS for batch 943951	59	56	51	52
244923001	RE15-10-7163	56	53	53	55
244923004	RE15-10-7160	59	55	41	48
244923005	RE15-10-7174	59	56	40	50
244923006	RE15-10-7173	55	53	38	50
244923007	RE15-10-7175	60	58	42	55
244923008	RE15-10-7172	47	45	42	41
244923009	RE15-10-7218	54	52	55	50
244923010	RE15-10-7223	60	58	59	52
244923002	RE15-10-7162	57 D	60 D	59 D	72 D
244923003	RE15-10-7161	64	63	63	58

Surrogate

4CMX = 4cmx

DCB = Decachlorobiphenyl

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Acceptance Limits

(34%-105%)

(33%-115%)

PCB

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**Quality Control Summary
Spike Recovery Report**

SDG Number: 10-1287

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 943951

Matrix: SOIL

Lab Sample ID:1202021250

Instrument: ECD1A.I

Analysis Date: 01/22/2010 13:42

Dilution: 1

Analyst: YS1

Prep Batch II 943951

Inj. Vol: 1 uL

Batch ID: 943953

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	LCS Aroclor-1016	33.3	0.0	19.9	60	41-110
11096-82-5	LCS Aroclor-1260	33.3	0.0	21.4	64	48-110

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1304

Sample Type: Matrix Spike

Client ID: RE15-10-7165MS

Matrix: R

Lab Sample ID:1202021251

%Moisture: 19.4

Instrument: ECD1A.I

Analysis Date: 01/22/2010 16:48

Dilution: 1

Analyst: YS1

Prep Batch ID: 943951

Inj. Vol: 1 uL

Batch ID: 943953

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg	Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS Aroclor-1016	41.2	0.00 U	28.1	68	23-117
11096-82-5	MS Aroclor-1260	41.2	0.00 U	33.1	80	27-116

PCB

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Quality Control Summary
Spike Recovery Report

SDG Number: 10-1304

Sample Type: Matrix Spike Duplicate

Client ID: RE15-10-7165MSD

Matrix: R

Lab Sample ID:1202021252

%Moisture: 19.4

Instrument: ECD1A.I

Analysis Date: 01/22/2010 17:00

Dilution: 1

Analyst: YS1

Prep Batch II 943951

Inj. Vol: 1 uL

Batch ID: 943953

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	41.1	0.00 U	25.0	61	23-117	12	0-30
11096-82-5	MSD Aroclor-1260	41.1	0.00 U	28.5	69	27-116	15	0-30

Method Blank Summary

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SDG Number:	10-1287	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 943951	Instrument ID:	ECD1A.I_2	Data File:	043b4301-1.d
Lab Sample ID:	1202021249		ECD1A.I_1		043f4301-1.d
Column:	CLP2	Prep Date:	01/21/2010 19:38	Analyzed:	01/22/10 13:31
	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 943951	1202021250	044f4401-1.d 044b4401-1.d	01/22/10	1342
02 RE15-10-7163	244923001	046f4601.d 046b4601.d	01/22/10	1403
03 RE15-10-7160	244923004	049f4901.d 049b4901.d	01/22/10	1441
04 RE15-10-7174	244923005	050f5001.d 050b5001.d	01/22/10	1454
05 RE15-10-7173	244923006	051f5101.d 051b5101.d	01/22/10	1506
06 RE15-10-7175	244923007	052f5201.d 052b5201.d	01/22/10	1519
07 RE15-10-7172	244923008	055f5501.d 055b5501.d	01/22/10	1557
08 RE15-10-7218	244923009	056f5601.d 056b5601.d	01/22/10	1610
09 RE15-10-7223	244923010	057f5701.d 057b5701.d	01/22/10	1622
12 RE15-10-7162	244923002	070f7001.d 070b7001.d	01/22/10	1907
13 RE15-10-7161	244923003	071f7101.d 071b7101.d	01/22/10	1919

SAMPLE DATA

PCB

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Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923004

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Matrix: R

%Moisture: 20

Client: LANL010

Project: LANL01004

Client ID: RE15-10-7160

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 943953

Inst: ECD1A.J

Dilution: 1

Run Date: 01/22/2010 14:41

Analyst: YS1

Inj. Vol: 1 uL

Prep Date: 01/21/2010 19:38

Aliquot: 30.18 g

Final Volume: 1 mL

Data File: 049f4901.d

Column: 1 CLP1

Level: LOW

049b4901.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.14	ug/kg	1.38	4.14	1
11104-28-2	Aroclor-1221	U	4.14	ug/kg	1.38	4.14	1
11141-16-5	Aroclor-1232	U	4.14	ug/kg	1.38	4.14	1
53469-21-9	Aroclor-1242	U	4.14	ug/kg	1.38	4.14	1
12672-29-6	Aroclor-1248	U	4.14	ug/kg	1.38	4.14	1
11097-69-1	Aroclor-1254		114	ug/kg	1.38	4.14	1
11096-82-5	Aroclor-1260		38.5	ug/kg	1.38	4.14	1

Data File: /chem/ecd1a.i/012210.b/049f4901.d
Report Date: 25-Jan-2010 11:32

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/049f4901.d

Lab Smp Id: 244923004

Client Smp ID: RE15-10-7160

Inj Date : 22-JAN-2010 14:41

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |244923004|1|

Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7160|||

Comment :

Method : /chem/ecd1a.i/012210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:25 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 49

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1287.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.18000	Weight of sample extracted (g)
M	19.98660	% 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				
1.966	1.967	-0.001	46371868	118.012	4.9 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl							
			CAS #: 2051-24-3				
5.279	5.281	-0.002	27147044	82.3007	3.4 80.00- 120.00	100.00	

6 Aroclor-1254							
			CAS #: 11097-69-1				
3.268	3.270	-0.002	32083489	2569.66	106 80.00- 120.00	100.00(M)	
3.423	3.425	-0.002	43655027	2610.64	108 116.96- 156.96	136.07	
3.656	3.659	-0.003	59599454	2877.27	119 160.10- 200.10	185.76	
3.820	3.821	-0.001	38406725	2447.19	101 117.36- 157.36	119.71	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)								
3.928	3.931	-0.003	48921131	3224.33	134	110.06- 150.06	172.22	
Average of Peak Concentrations =					114			

7 Aroclor-1260					CAS #: 11096-82-5			
3.765	3.766	-0.001	27501811	1552.13	64.3	80.00- 120.00	100.00 (M)	
3.928	3.929	-0.001	48921131	1816.71	75.2	132.78- 172.78	200.91	
4.158	4.159	-0.001	6733338	415.988	17.2	71.24- 111.24	24.48	
4.300	4.302	-0.002	6694329	395.928	16.4	75.48- 115.48	24.34	
4.480	4.481	-0.001	17442649	463.093	19.2	198.43- 238.43	63.42	
Average of Peak Concentrations =					38.5			

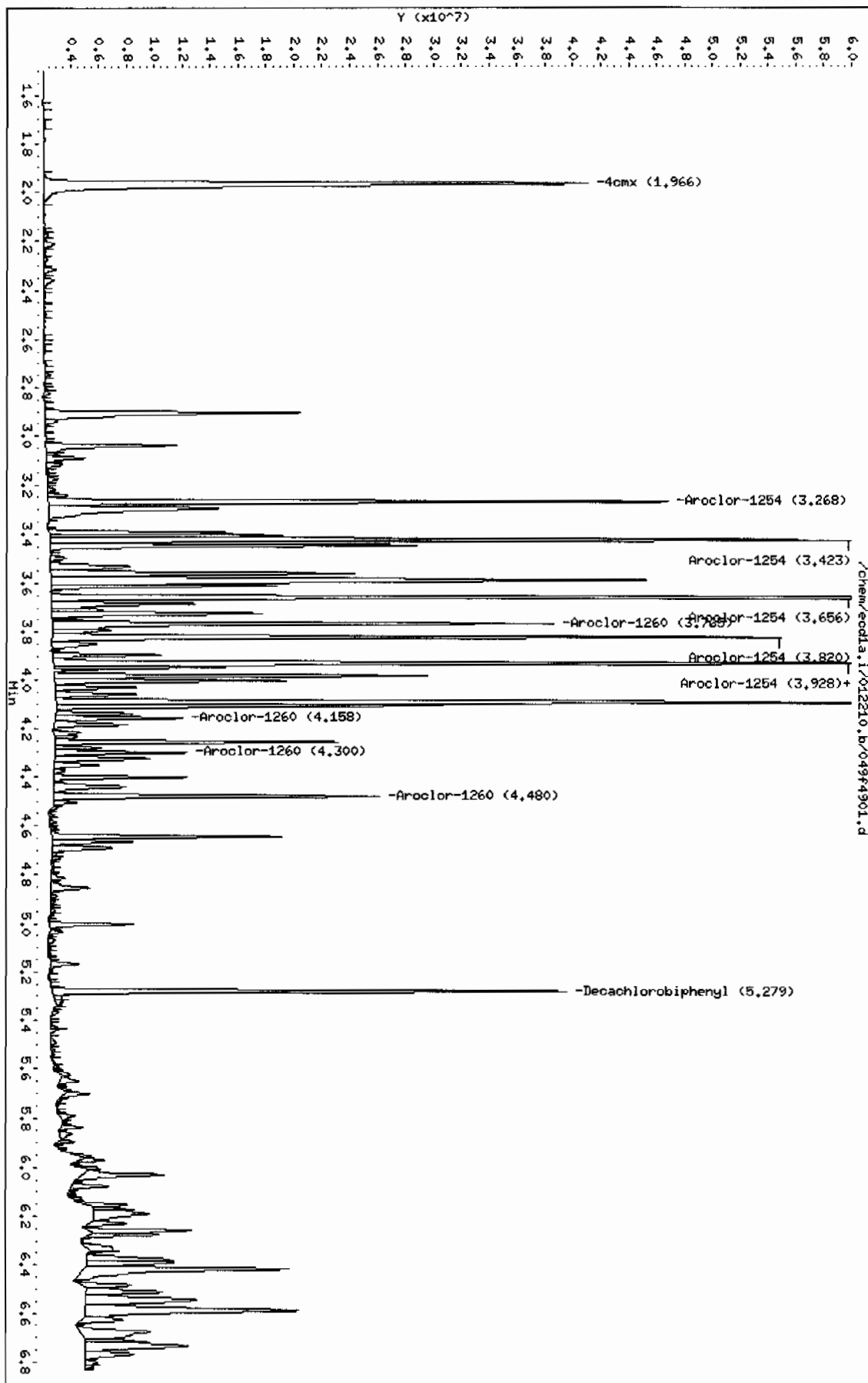
QC Flag Legend

M - Compound response manually integrated.

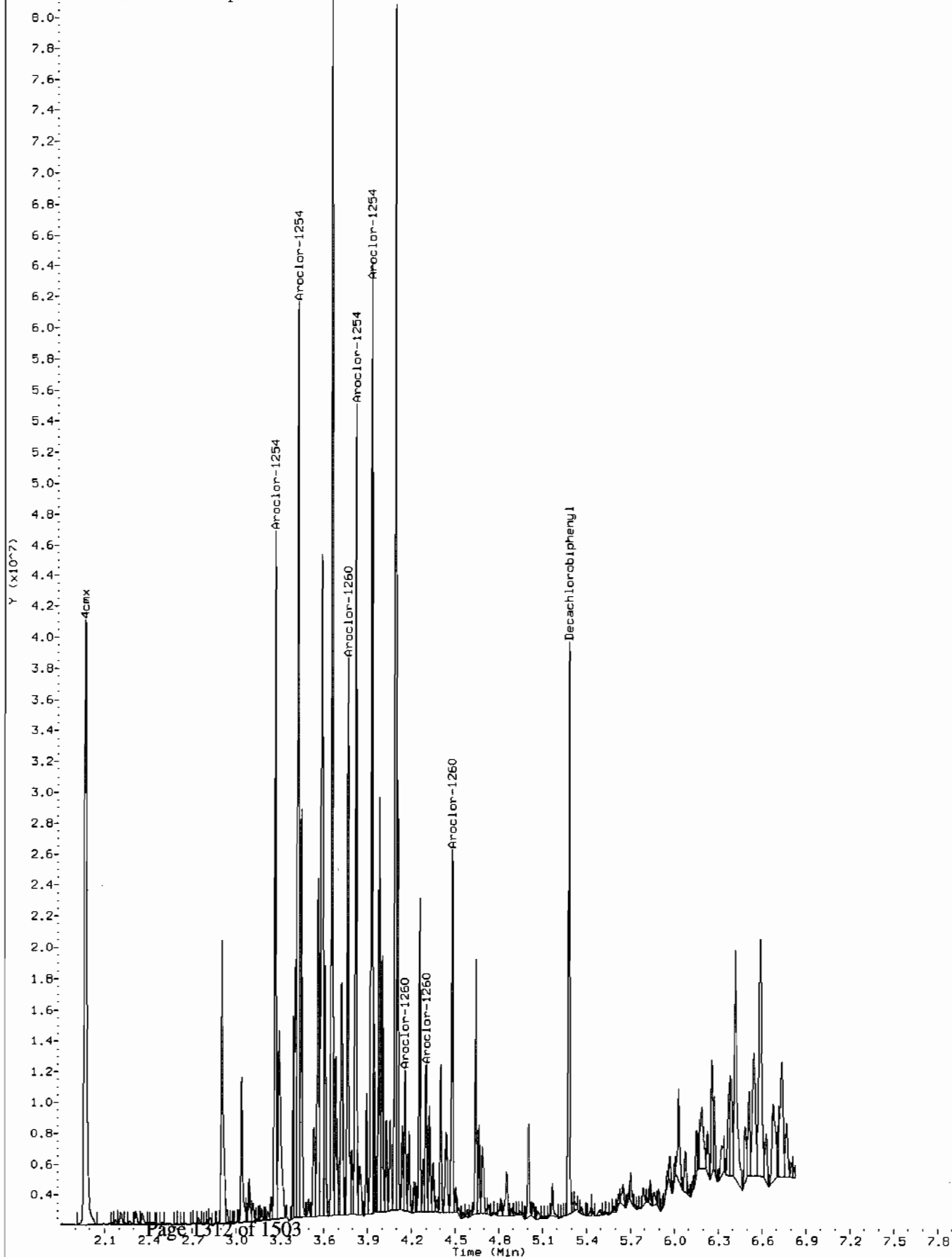
Data File: /chem/ecdl.a.i/012210.b/049f4901.d
 Date: 22-JAN-2010 14:41
 Client ID: RE15-10-7160
 Sample Info: 124492300411
 Volume Injected (uL): 1.0
 Column phase: CLP1

Instrument: ecdl.a.i
 Operator: YSL
 Column diameter: 0.25

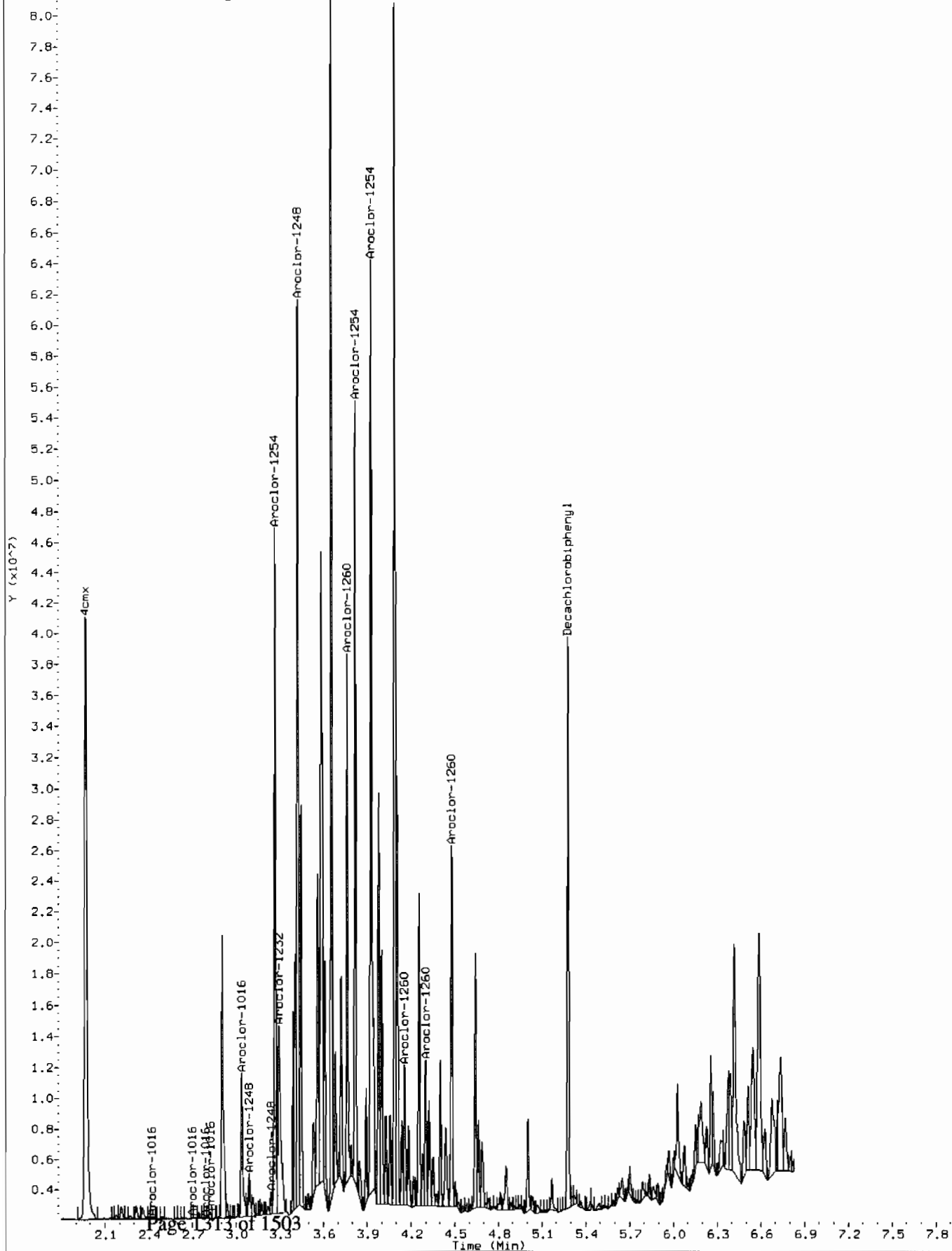
Page 1



Comment: Manually Integrated
Data File: /chem/eecdla.i/012210.b/049f4901.d
Operator: YS1
Injection Date: 22 JAN-2010 14:41
Instrument: ecdla.
Client Sample ID: RE15-10-7160



Comment: Before manual integration
Data File: /chem/ecdl1a.i/012210.b/orig-049f4901.d
Operator: YS1
Injection Date: 22 JAN-2010 14:41
Instrument: ecd1a.1
Client Sample ID: RE15-10-7160



Data File: /chem/ecdla.i/012210.b/049b4901.d
Report Date: 25-Jan-2010 11:31

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/049b4901.d
Lab Smp Id: 244923004 Client Smp ID: RE15-10-7160
Inj Date : 22-JAN-2010 14:41
Operator : YS1 Inst ID: ecdla.i
Smp Info : |244923004|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7160|||
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.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	30.18000	Weight of sample extracted (g)
M	19.98660	% 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	32204857	110.973	4.6 80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.947	5.947	0.000	23627325	96.8434	4.0 80.00- 120.00	100.00	
6 Aroclor-1254					CAS #: 11097-69-1		
3.405	3.403	0.002	9890479	1536.92	63.6 80.00- 120.00	100.00	
3.827	3.825	0.002	23675613	2048.18	84.8 156.14- 196.14	239.38	
3.944	3.941	0.003	30064920	2418.49	100 180.05- 220.05	303.98	
4.220	4.217	0.003	41466797	2456.56	102 260.81- 300.81	419.26	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)								
4.356	4.354	0.002	25514393	2051.74	85.0	190.54-	230.54	257.97
Average of Peak Concentrations *					87.1			

7 Aroclor-1260					CAS #: 11096-82-5			
4.336	4.336	0.000	19883600	1497.81	62.0	80.00-	120.00	100.00
4.461	4.461	0.000	23024686	1424.97	59.0	104.88-	144.88	115.80
4.728	4.727	0.001	8064375	645.191	26.7	74.00-	114.00	40.56
4.900	4.901	-0.001	5424977	419.607	17.4	77.33-	117.33	27.28
5.047	5.048	-0.001	13608484	478.403	19.8	199.41-	239.41	68.44
Average of Peak Concentrations =					37.0			

Data File: /chem/ecdda.i/012210.b/049b4901.d

Date : 22-JUN-2010 14:41

Client ID: RE15-10-7160

Sample Info: 1244923004111

Volume Injected (uL): 1.0

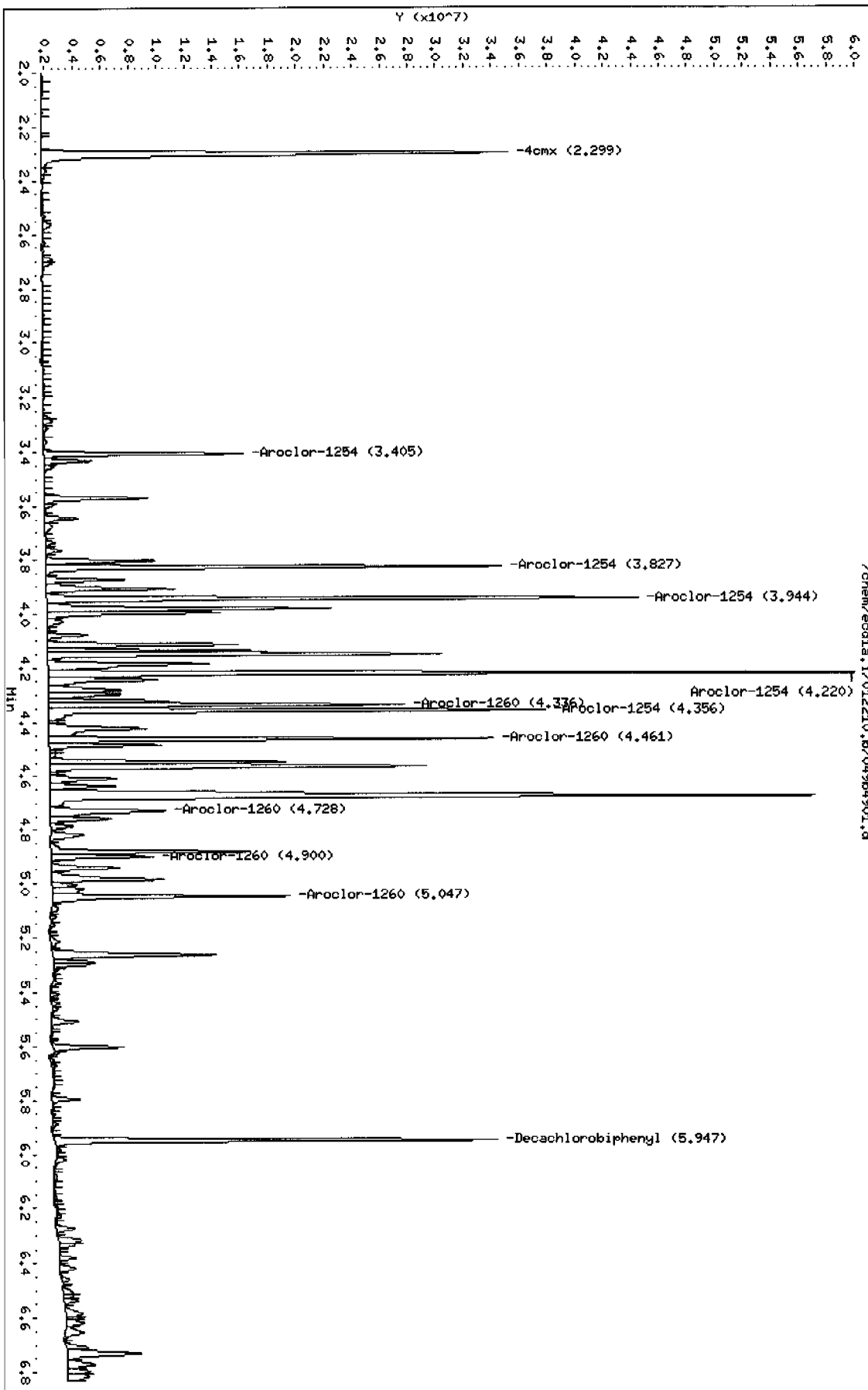
Column phase: CLP2

Instrument: ecdda.i

Operator: YS1

Column diameter: 0.25

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PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
Lab Sample ID: 244923003

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.03 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 10.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.74	ug/kg	1.24	3.74	1
11104-28-2	Aroclor-1221	U	3.74	ug/kg	1.24	3.74	1
11141-16-5	Aroclor-1232	U	3.74	ug/kg	1.24	3.74	1
53469-21-9	Aroclor-1242	U	3.74	ug/kg	1.24	3.74	1
12672-29-6	Aroclor-1248	U	3.74	ug/kg	1.24	3.74	1
11097-69-1	Aroclor-1254		5.20	ug/kg	1.24	3.74	1
11096-82-5	Aroclor-1260	J	3.30	ug/kg	1.24	3.74	1

Data File: /chem/ecdl.a.i/012210.b/071f7101.d
Report Date: 25-Jan-2010 12:01

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl.a.i/012210.b/071f7101.d
Lab Smp Id: 244923003 Client Smp ID: RE15-10-7161
Inj Date : 22-JAN-2010 19:19
Operator : YS1 Inst ID: ecdla.i
Smp Info : |244923003|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7161|||
Comment :
Method : /chem/ecdl.a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	10.89340	% 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	50522565 128.575	4.8	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.277	5.281	-0.004	41523463 125.885	4.7	80.00- 120.00	100.00

6 Aroclor-1254 CAS #: 11097-69-1						
3.267	3.270	-0.003	1485609 118.987	4.4	80.00- 120.00	100.00
3.422	3.425	-0.003	1328006 79.4170	3.0	116.96- 156.96	89.39
3.656	3.659	-0.003	3326031 160.570	6.0	160.10- 200.10	223.88
3.819	3.821	-0.002	1668846 106.335	4.0	117.36- 157.36	112.33

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)								
3.927	3.931	-0.004	3429596	226.040	8.4	110.06-	150.06	230.85
Average of Peak Concentrations =					5.2			

7 Aroclor-1260					CAS #: 11096-82-5			
3.764	3.766	-0.002	2407751	135.887	5.1	80.00-	120.00	100.00 (a)
3.927	3.929	-0.002	3429596	127.360	4.8	132.78-	172.78	142.44
4.156	4.159	-0.003	942591	58.2336	2.2	71.24-	111.24	39.15
4.300	4.302	-0.002	933706	55.2229	2.1	75.48-	115.48	38.78
4.478	4.481	-0.003	2187730	58.0830	2.2	198.43-	238.43	90.86
Average of Peak Concentrations =					3.3			

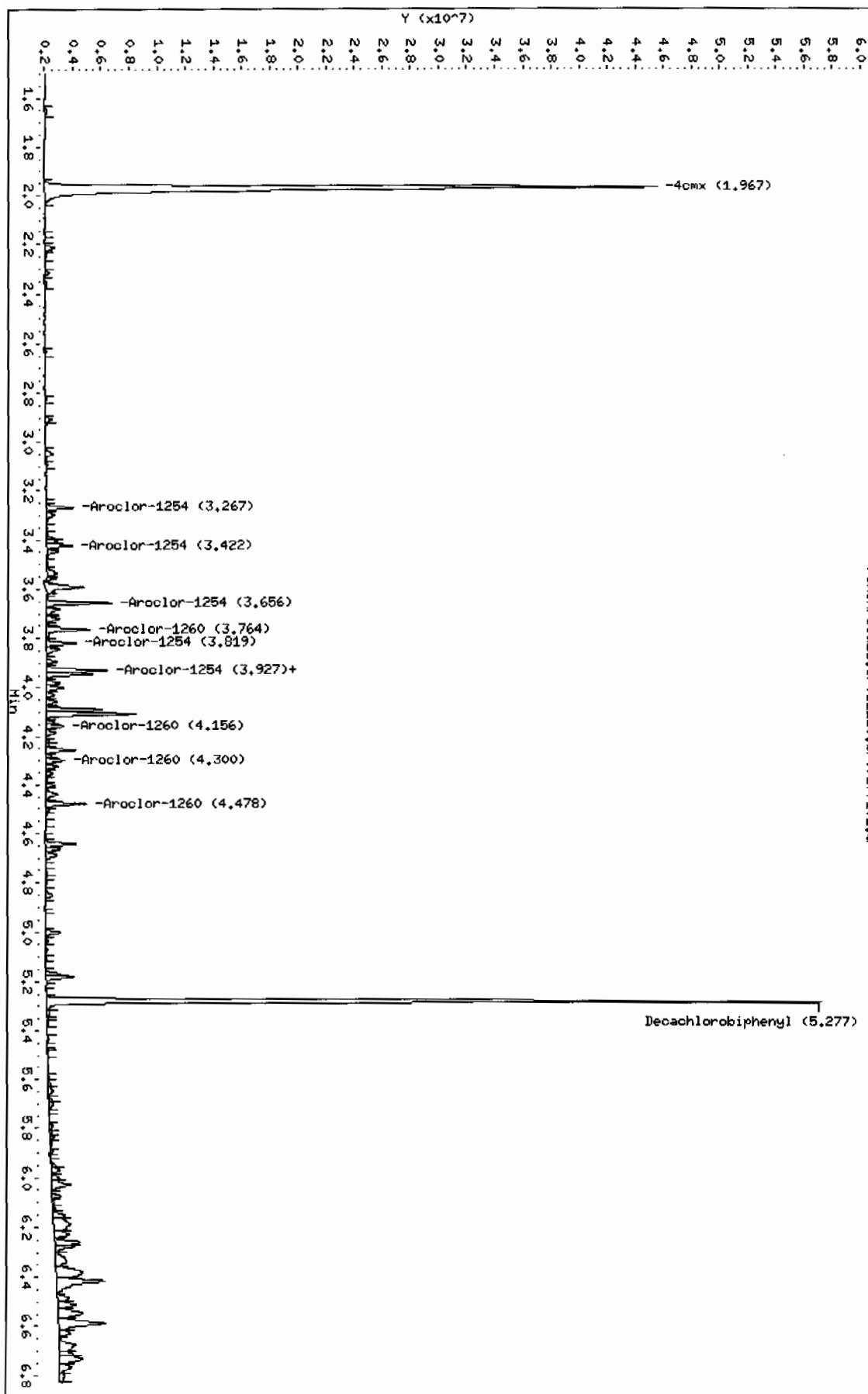
QC Flag Legend

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

Data File: /chem/eodla.i/012210.b/071f7101.d
 Date: 22-JAN-2010 19:19
 Client ID: RE15-10-7164
 Sample Info: 1244923003111
 Volume Injected (uL): 1.0
 Column phase: CLP1

Instrument: eodla.i
 Operator: YSI
 Column diameter: 0.25

/chem/eodla.i/012210.b/071f7101.d



Data File: /chem/ecdl1a.i/012210.b/071b7101.d
Report Date: 25-Jan-2010 12:00

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/012210.b/071b7101.d
Lab Smp Id: 244923003 Client Smp ID: RE15-10-7161
Inj Date : 22-JAN-2010 19:19
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923003|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7161|||
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 71
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.03000	Weight of sample extracted (g)
M	10.89340	% 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	36401149	125.433	4.7 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.946	5.947	-0.001	28458992	116.647	4.4 80.00- 120.00	100.00	

6 Aroclor-1254 CAS #: 11097-69-1							
3.404	3.403	0.001	299598	46.5557	1.7 80.00- 120.00	100.00(a)	
3.826	3.825	0.001	1032557	89.3268	3.3 156.14- 196.14	344.65	
3.943	3.941	0.002	1252021	100.715	3.8 180.05- 220.05	417.90	
4.219	4.217	0.002	2650697	157.031	5.9 260.81- 300.81	884.75	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)								
4.356	4.354	0.002	1189111	95.6225	3.6	190.54- 230.54	396.90	
Average of Peak Concentrations =					3.7			

7 Aroclor-1260					CAS #: 11096-82-5			
4.335	4.336	-0.001	2092961	157.661	5.9	80.00- 120.00	100.00 (a)	
4.460	4.461	-0.001	1663456	102.950	3.8	105.07- 145.07	79.48	
4.726	4.727	-0.001	913074	73.0506	2.7	75.65- 115.65	43.63	
4.900	4.901	-0.001	595465	46.0575	1.7	78.77- 118.77	28.45	
5.046	5.048	-0.002	1629756	57.2937	2.1	201.34- 241.34	77.87	
Average of Peak Concentrations =					3.2			

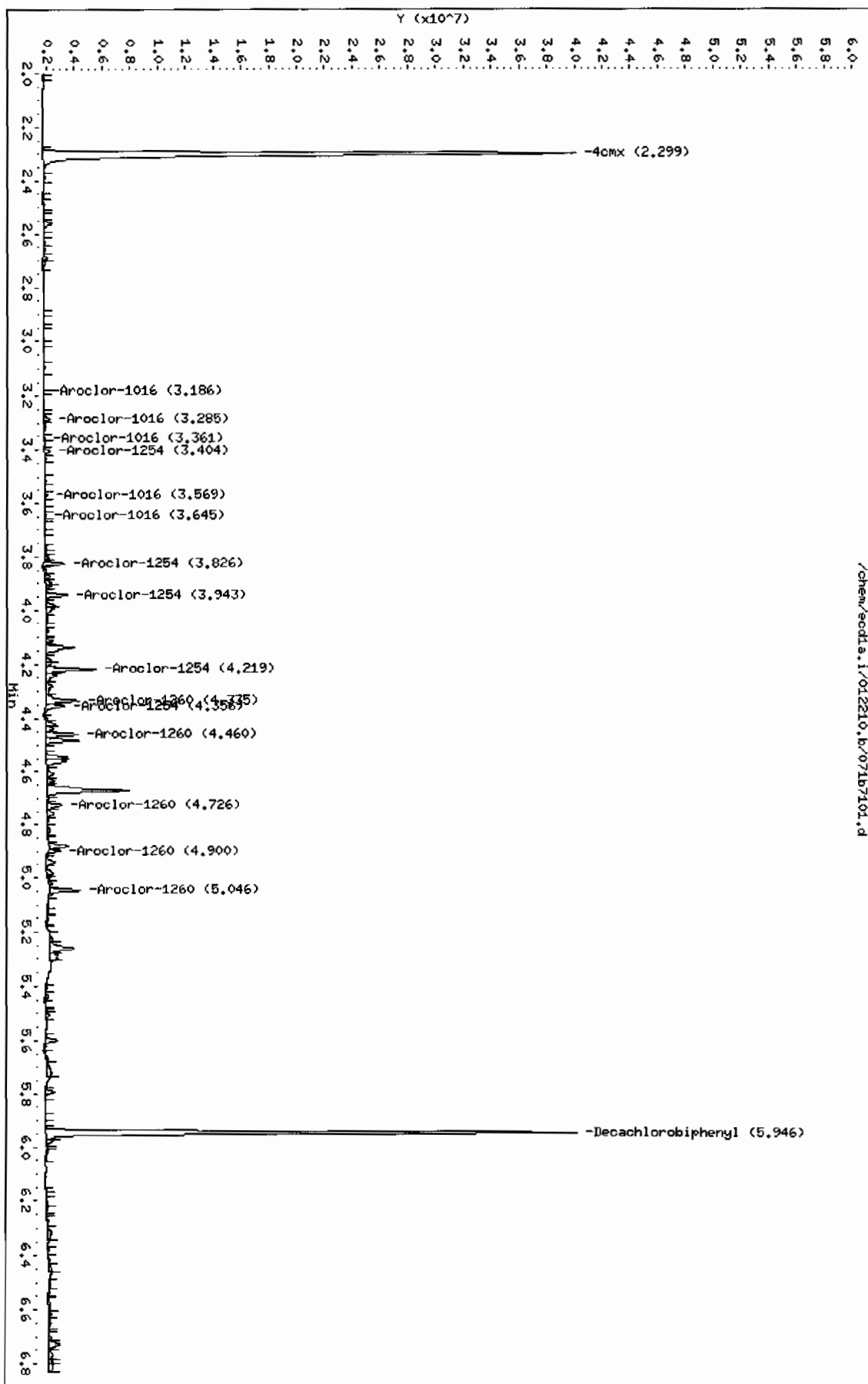
QC Flag Legend

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

Data File: /chem/eod1a.i/012210.b/071b7101.d
Date : 22-JAN-2010 19:19
Client ID: RE15-10-7161
Sample Info: 1244923003111
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25

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PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923002

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8082
 Inst: ECD1A.I
 Analyst: YS1
 Aliquot: 30.07 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 % Moisture: 9.7
 Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 10
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	36.8	ug/kg	12.3	36.8	1
11104-28-2	Aroclor-1221	U	36.8	ug/kg	12.3	36.8	1
11141-16-5	Aroclor-1232	U	36.8	ug/kg	12.3	36.8	1
53469-21-9	Aroclor-1242	U	36.8	ug/kg	12.3	36.8	1
12672-29-6	Aroclor-1248	U	36.8	ug/kg	12.3	36.8	1
11097-69-1	Aroclor-1254		704	ug/kg	12.3	36.8	1
11096-82-5	Aroclor-1260		258	ug/kg	12.3	36.8	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/070f7001.d

Lab Smp Id: 244923002

Client Smp ID: RE15-10-7162

Inj Date : 22-JAN-2010 19:07

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |244923002|10|

Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7162|||

Comment :

Method : /chem/ecd1a.i/012210.b/ECD1-F-8082-121409.m

Meth Date : 25-Jan-2010 13:49 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 70

Dil Factor: 10.00000

Integrator: Falcon

Compound Sublist: 10-1287.sub

Target Version: 3.50

Sample Matrix: Soil

Processing Host: hpc1pl

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	9.74530	% 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	4500204 11.4525	4.2	80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.277	5.281	-0.004	3922569 11.8919	4.4	80.00- 120.00	100.00
6 Aroclor-1254				CAS #: 11097-69-1		
3.267	3.270	-0.003	18446470 1477.43	544	80.00- 120.00	100.00
3.422	3.425	-0.003	28820302 1723.50	635	116.96- 156.96	156.24
3.656	3.659	-0.003	37137315 1792.87	661	160.10- 200.10	201.32
3.818	3.821	-0.003	30013809 1912.41	705	117.36- 157.36	162.71

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
--	-----	-----	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)								
3.928	3.931	-0.003	40080229	2641.64	973	110.06-	150.06	217.28
Average of Peak Concentrations =					704			

7 Aroclor-1260					CAS #: 11096-82-5			
3.764	3.766	-0.002	18141737	1023.87	377	80.00-	120.00	100.00
3.928	3.929	-0.001	40080229	1488.40	548	132.92-	172.92	220.93
4.157	4.159	-0.002	5000917	308.959	114	71.35-	111.35	27.57
4.300	4.302	-0.002	5522551	326.624	120	75.53-	115.53	30.44
4.478	4.481	-0.003	13608778	361.305	133	198.54-	238.54	75.01
Average of Peak Concentrations =					258			

Data File: /chem/eodda.i/012210.b/0707001.d

Date: 22-JAN-2010 19:07

Client ID: REIS-10-7162

Sample Info: 12449230021101

Volume Injected (uL): 1.0

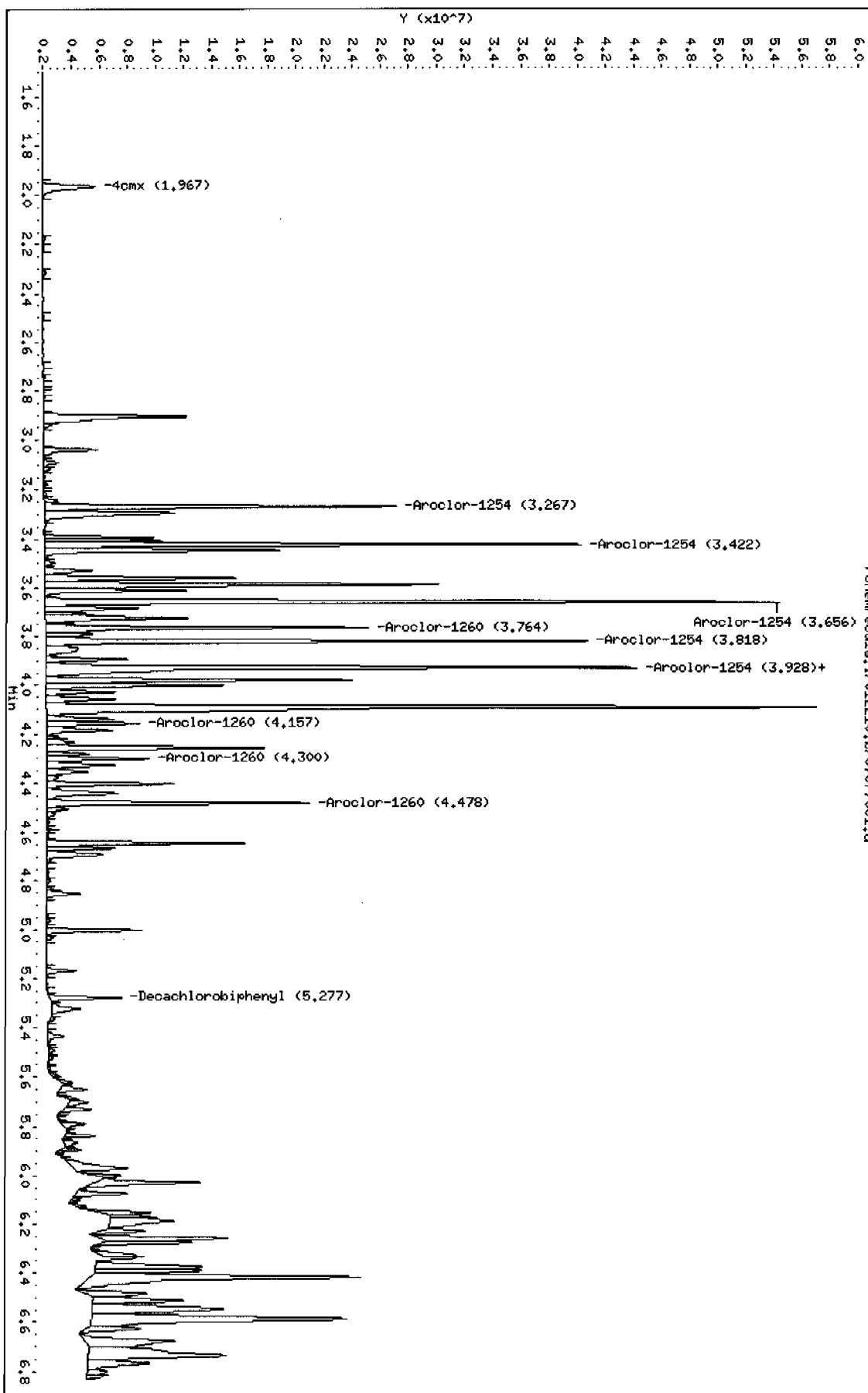
Column phase: CLP1

Instrument: eodda.i

Operator: YSA

Column diameter: 0.25

/chem/eodda.i/012210.b/0707001.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/070b7001.d
Lab Smp Id: 244923002 Client Smp ID: RE15-10-7162
Inj Date : 22-JAN-2010 19:07
Operator : YS1 Inst ID: ecdla.i
Smp Info : |244923002|10|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7162|||
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 25-Jan-2010 13:49 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 70
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 10-1287.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	10.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.07000	Weight of sample extracted (g)
M	9.74530	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
7.2	=====	=====	=====	=====	=====	=====	
\$ 11 4cmx					CAS #: 877-09-8		
2.298	2.299	-0.001	3475537 11.9762	4.4	80.00~ 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.947	5.947	0.000	3507064 14.3747	5.3	80.00~ 120.00	100.00	
6 Aroclor-1254					CAS #: 11097-69-1		
3.403	3.403	0.000	5843131 907.987	334	80.00~ 120.00	100.00	
3.826	3.825	0.001	14208820 1229.21	453	156.14~ 196.14	243.17	
3.942	3.941	0.001	20351851 1637.15	603	180.05~ 220.05	348.30	
4.218	4.217	0.001	26865501 1591.55	586	260.81~ 300.81	459.78	

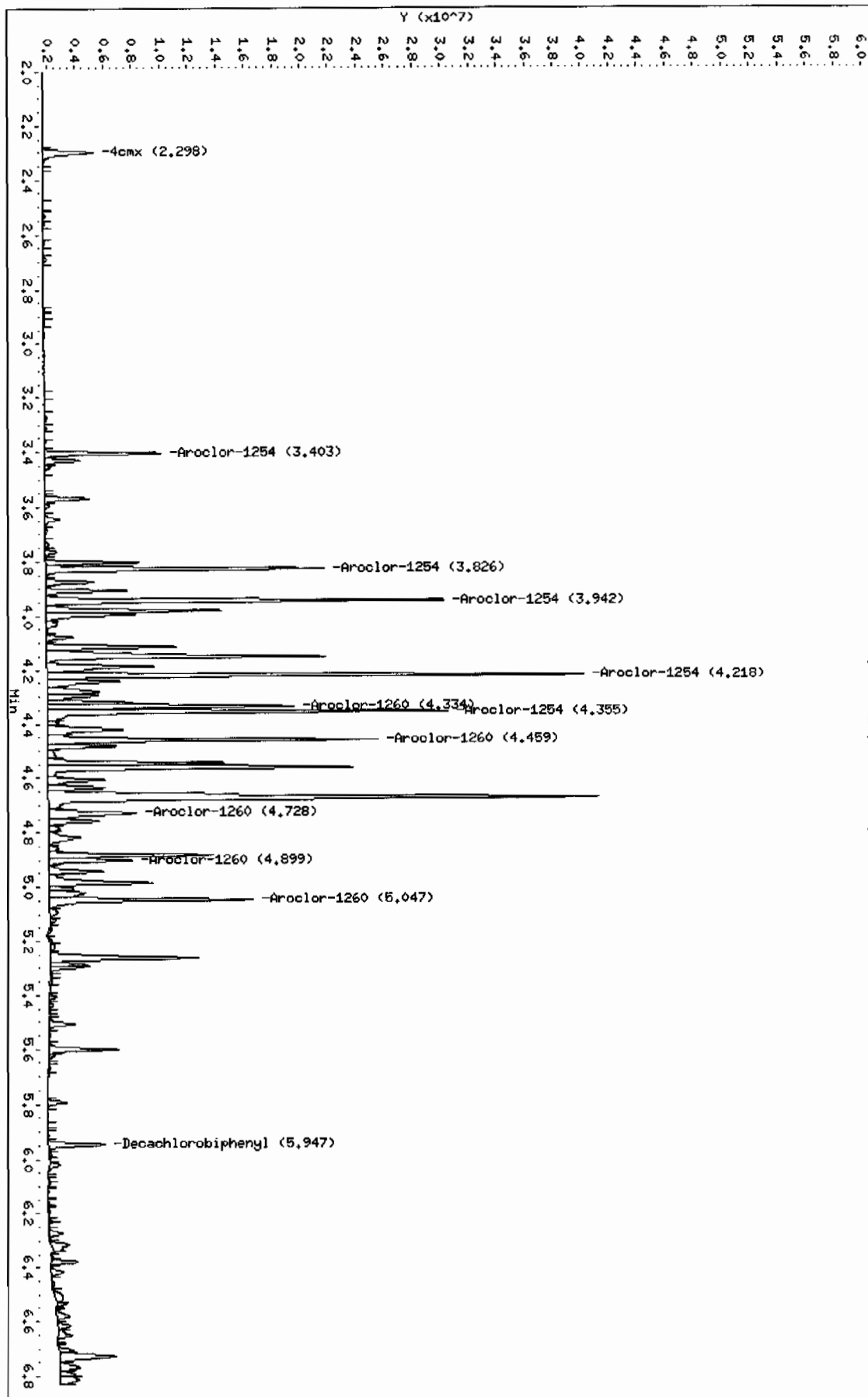
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)								
4.355	4.354	0.001	21025187	1690.74	623	190.54- 230.54	359.83	
Average of Peak Concentrations =					520			

7 Aroclor-1260					CAS #: 11096-82-5			
4.334	4.336	-0.002	13814067	1040.60	383	80.00- 120.00	100.00	
4.459	4.461	-0.002	17850959	1104.78	407	105.07- 145.07	129.22	
4.728	4.727	0.001	6658033	532.676	196	75.65- 115.65	48.20	
4.899	4.901	-0.002	4584220	354.577	131	78.77- 118.77	33.19	
5.047	5.048	-0.001	11889243	417.964	154	201.34- 241.34	86.07	
Average of Peak Concentrations =					254			

Data File: /chem/ecda.i/012210.b/07067001.d
Date: 22-JAN-2010 19:07
Client ID: RE15-10-7162
Sample Info: 1244923002101
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecda.i
Operator: YSL
Column diameter: 0.25

/chem/ecda.i/012210.b/07067001.d



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287
 Lab Sample ID: 244923001

Date Collected: 01/12/2010 12:00
 Date Received: 01/16/2010 08:55
 Client: LANL010
 Method: SW846 8082
 Inst: ECD1A.1
 Analyst: YS1
 Aliquot: 30.16 g
 Column: 1 CLP1
 2 CLP2

Matrix: R
 %Moisture: 6.6
 Project: LANL01004
 SOP Ref: GL-OA-E-040
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.55	ug/kg	1.18	3.55	1
11104-28-2	Aroclor-1221	U	3.55	ug/kg	1.18	3.55	1
11141-16-5	Aroclor-1232	U	3.55	ug/kg	1.18	3.55	1
53469-21-9	Aroclor-1242	U	3.55	ug/kg	1.18	3.55	1
12672-29-6	Aroclor-1248	U	3.55	ug/kg	1.18	3.55	1
11097-69-1	Aroclor-1254		114	ug/kg	1.18	3.55	1
11096-82-5	Aroclor-1260		36.9	ug/kg	1.18	3.55	1

Data File: /chem/ecdla.i/012210.b/046f4601.d
Report Date: 25-Jan-2010 11:30

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/012210.b/046f4601.d
Lab Smp Id: 244923001 Client Smp ID: RE15-10-7163
Inj Date : 22-JAN-2010 14:03
Operator : YS1 Inst ID: ecdla.i
Smp Info : |244923001|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7163|||
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.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	30.16000	Weight of sample extracted (g)
M	6.56910	% 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	44031373 112.055	4.0	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.282	5.281	0.001	35220741 106.777	3.8	80.00- 120.00	100.00	

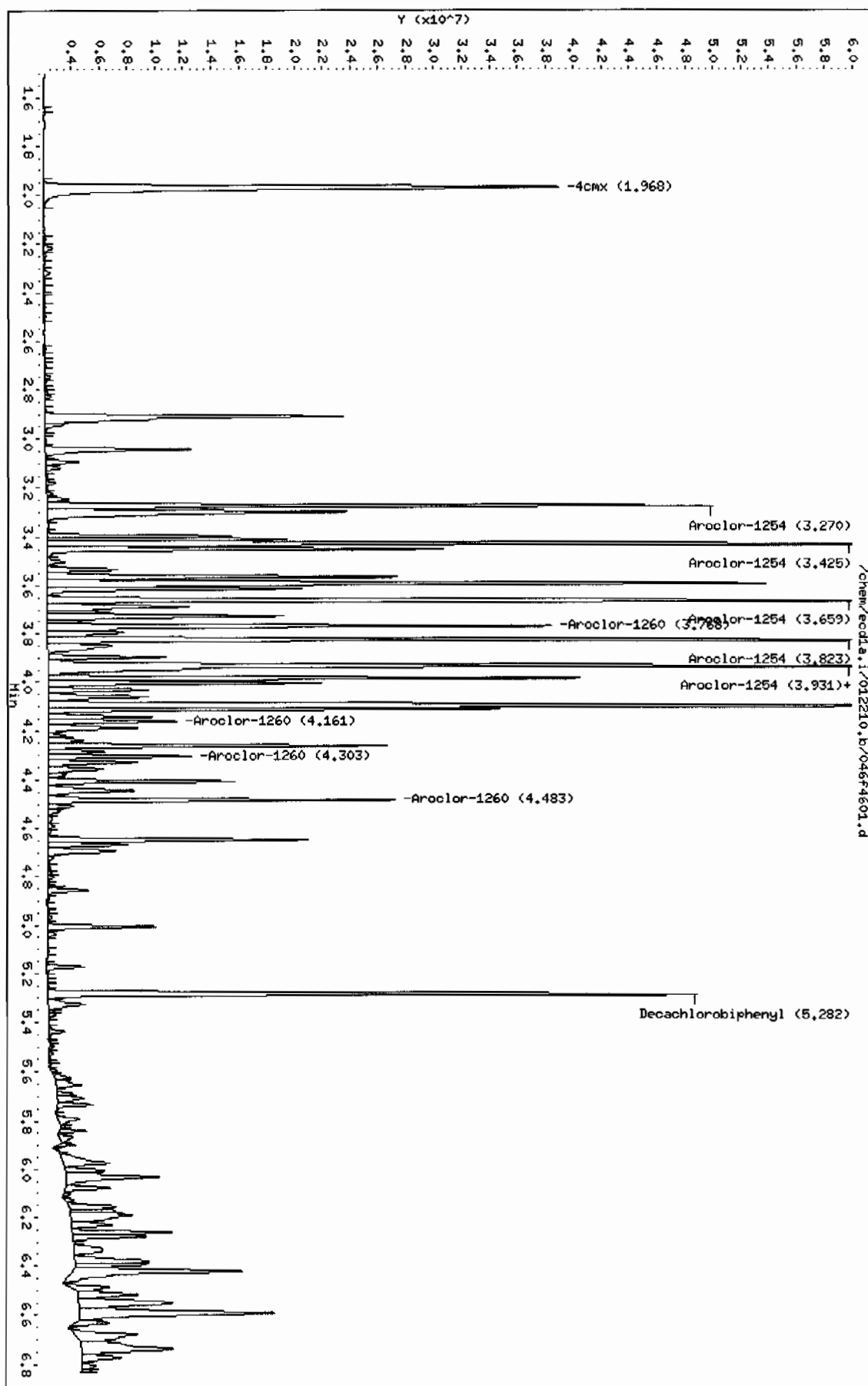
6 Aroclor-1254 CAS #: 11097-69-1							
3.270	3.270	0.000	34648751 2775.12	98.5	80.00- 120.00	100.00	
3.425	3.425	0.000	48914089 2925.14	104	116.96- 156.96	141.17	
3.659	3.659	0.000	67543019 3260.75	116	160.10- 200.10	194.94	
3.823	3.821	0.002	49656909 3164.03	112	117.36- 157.36	143.32	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)								
3.931	3.931	0.000	59549370	3924.82	139	110.06- 150.06	171.87	
Average of Peak Concentrations =					114			

7 Aroclor-1260					CAS #: 11096-82-5			
3.768	3.766	0.002	28239018	1593.74	56.6	80.00- 120.00	100.00	
3.931	3.929	0.002	59549370	2211.40	78.5	132.78- 172.78	210.88	
4.161	4.159	0.002	7024614	433.983	15.4	71.24- 111.24	24.88	
4.303	4.302	0.001	7797537	461.176	16.4	75.48- 115.48	27.61	
4.483	4.481	0.002	18639972	494.881	17.6	198.43- 238.43	66.01	
Average of Peak Concentrations =					36.9			

Data File: /chem/eodla.i/012210.b/046f4601.d
Date : 22-JAN-2010 14:03
Client ID: RE15-10-7163
Sample Info: 124492300111
Volume Injected (uL): 1.0
Column Phase: CLP1

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25



Data File: /chem/ecdl1a.i/012210.b/046b4601.d
Report Date: 25-Jan-2010 11:30

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 1NJ VOL

Data file : /chem/ecdl1a.i/012210.b/046b4601.d
Lab Smp Id: 244923001 Client Smp ID: RE15-10-7163
Inj Date : 22-JAN-2010 14:03
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923001|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7163|||
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.16000	Weight of sample extracted (g)
M	6.56910	% 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							
2.300	2.299	0.001	30898818	106.473	3.8 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.948	5.947	0.001	27008937	110.704	3.9 80.00- 120.00	100.00	

6 Aroclor-1254 CAS #: 11097-69-1							
3.407	3.403	0.004	11517596	1789.77	63.5 80.00- 120.00	100.00	
3.829	3.825	0.004	25337282	2191.94	77.8 156.14- 196.14	219.99	
3.945	3.941	0.004	32786108	2637.39	93.6 180.05- 220.05	284.66	
4.222	4.217	0.005	45812171	2713.98	96.3 260.81- 300.81	397.76	

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
-----	-----	-----	-----	-----	-----	-----
6 Aroclor-1254 (continued)						
4.358	4.354	0.004	30886761	2483.76	88.1 190.54- 230.54	268.17
Average of Peak Concentrations =				83.9		

7 Aroclor-1260				CAS #: 11096-82-5		
4.338	4.336	0.002	19691265	1483.32	52.6 80.00- 120.00	100.00
4.463	4.461	0.002	23658277	1464.19	52.0 104.88- 144.88	120.15
4.732	4.727	0.005	7501259	600.139	21.3 74.00- 114.00	38.09
4.903	4.901	0.002	5106818	394.998	14.0 77.33- 117.33	25.93
5.050	5.048	0.002	13587127	477.653	17.0 199.41- 239.41	69.00
Average of Peak Concentrations =				31.4		

Data File: /chem/eod1a.i/012210.b/046b4601.d

Date: 22-JAN-2010 14:03

Client ID: RELS-10-7163

Sample Info: 124492300111

Volume Injected (uL): 1.0

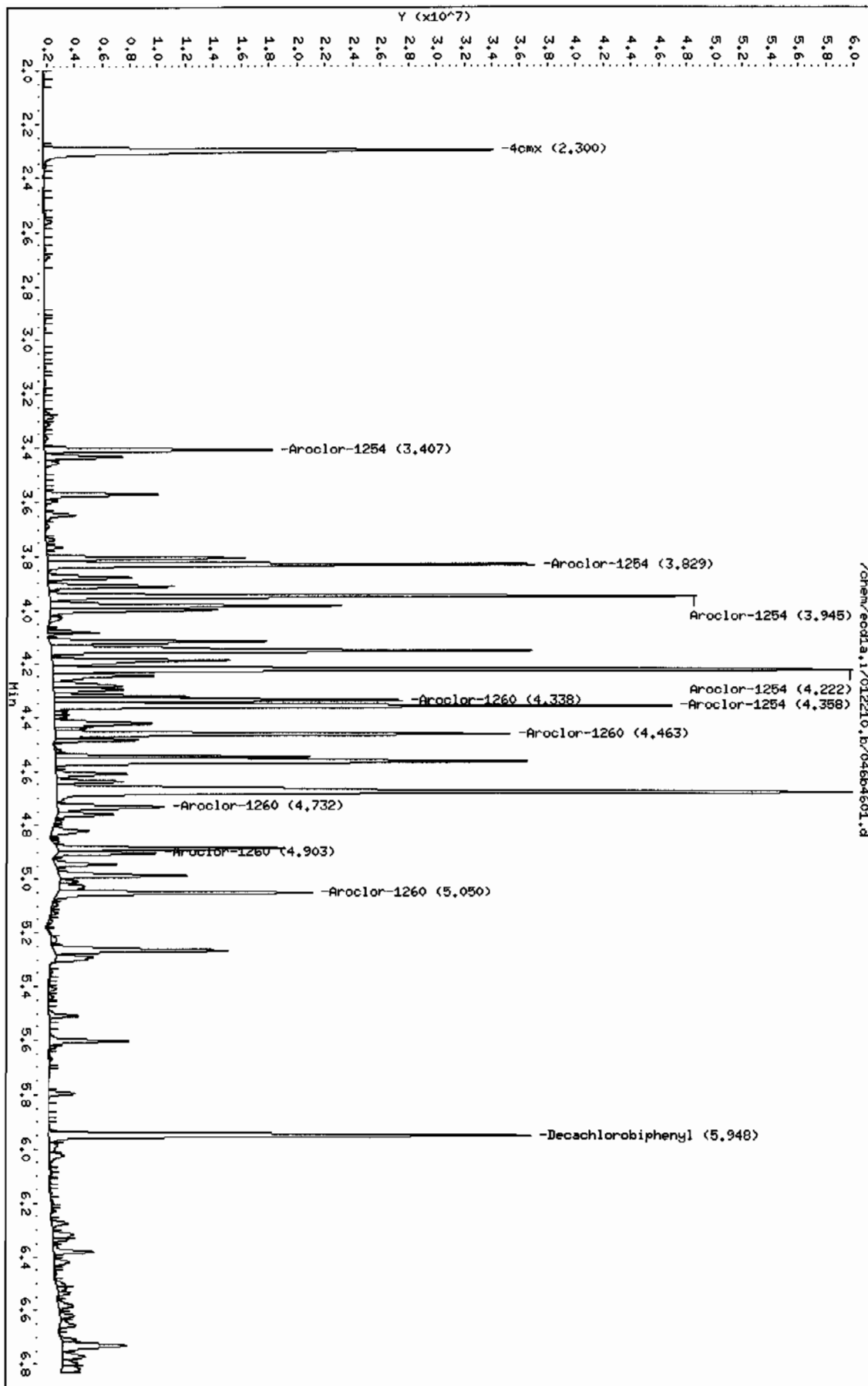
Column phase: CLP2

Instrument: eod1a.i

Operator: YSA

Column diameter: 0.25

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Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923008Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.01 g
Column: 1 CLP1
2 CLP2Matrix: R
% Moisture: 21.2
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.23	ug/kg	1.41	4.23	1
11104-28-2	Aroclor-1221	U	4.23	ug/kg	1.41	4.23	1
11141-16-5	Aroclor-1232	U	4.23	ug/kg	1.41	4.23	1
53469-21-9	Aroclor-1242	U	4.23	ug/kg	1.41	4.23	1
12672-29-6	Aroclor-1248	U	4.23	ug/kg	1.41	4.23	1
11097-69-1	Aroclor-1254	U	4.23	ug/kg	1.41	4.23	1
11096-82-5	Aroclor-1260	U	4.23	ug/kg	1.41	4.23	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/055f5501.d
Lab Smp Id: 244923008 Client Smp ID: RE15-10-7172
Inj Date : 22-JAN-2010 15:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923008|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7172|||
Comment :
Method : /chem/ecd1a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 55
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.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	21.24980	% 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	36885421 93.8695	4.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.278	5.281	-0.003	27854477 84.4454	3.6	80.00- 120.00	100.00

Data File: /chem/ecdl.a.i/012210.b/056f5501.d

Date : 22-JAN-2010 15:57

Client ID: RE15-10-7172

Sample Info: 1244923006111

Volume Injected (uL): 1.0

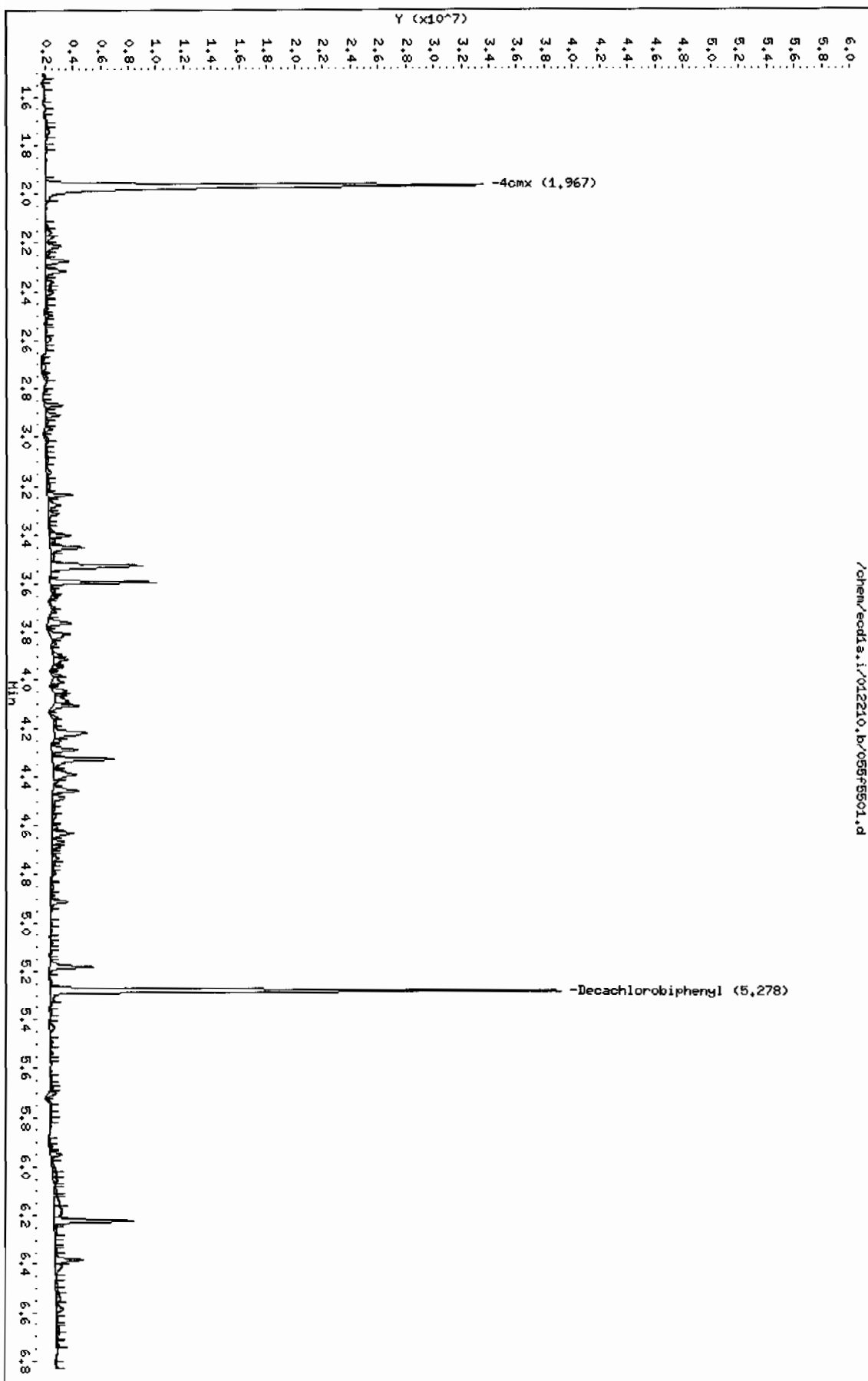
Column phase: CLP1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecd1a.i/012210.b/055b5501.d
Report Date: 25-Jan-2010 11:41

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecd1a.i/012210.b/055b5501.d
Lab Smp Id: 244923008 Client Smp ID: RE15-10-7172
Inj Date : 22-JAN-2010 15:57
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923008|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7172|||
Comment :
Method : /chem/ecd1a.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 55
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	21.24980	% 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	26371035	90.8706	3.8 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.946	5.947	-0.001	19885600	81.5069	3.4 80.00- 120.00	100.00	

Data File: /chem/eod1a.i/012210.b/055b5501.d

Date: 22-JAN-2010 15:57

Client ID: REIS-10-7172

Sample Info: 1244923008111

Volume Injected (uL): 1.0

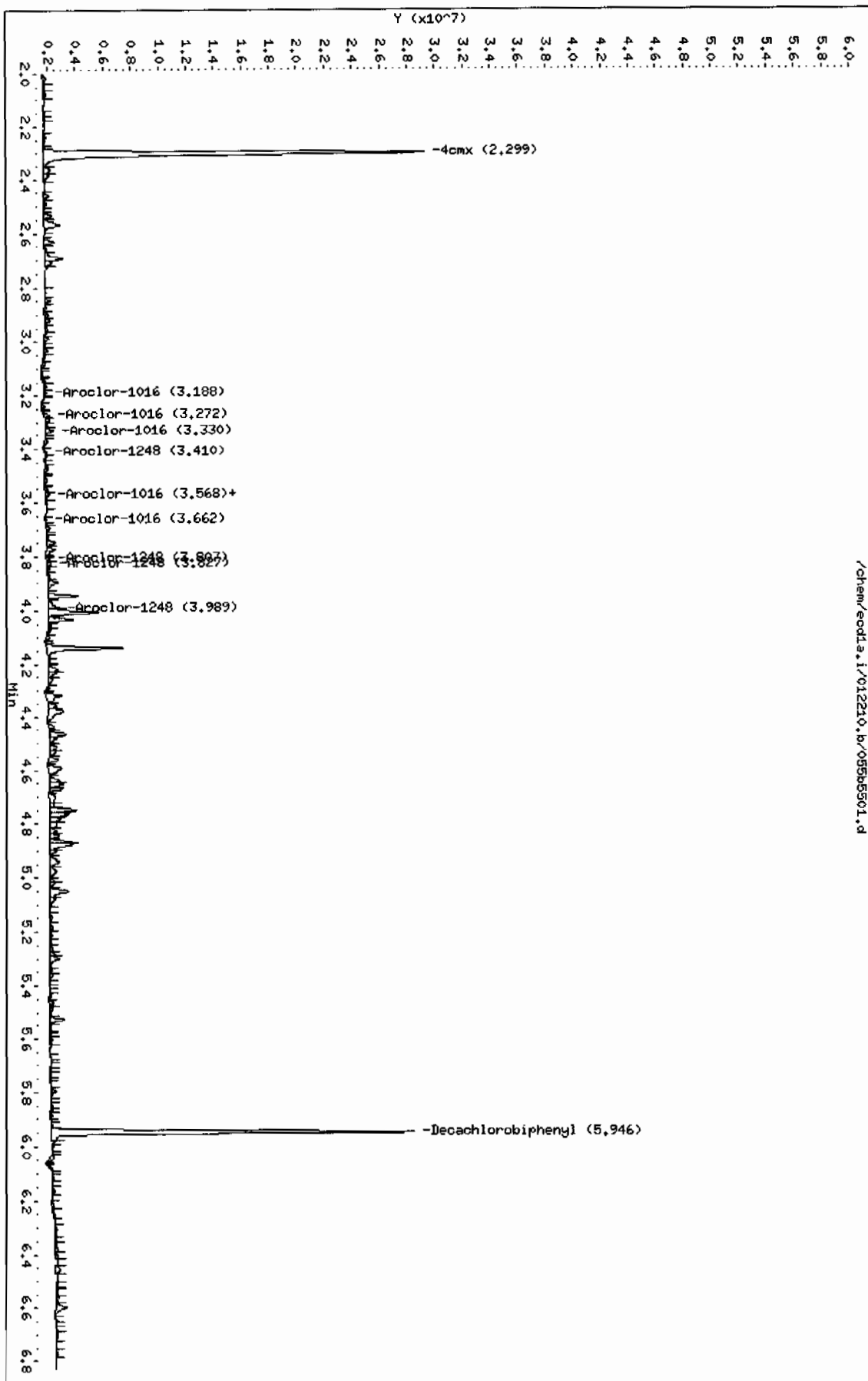
Column phase: CLP2

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

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Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923006Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.J
Analyst: YS1
Aliquot: 30.19 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 9.8
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.67	ug/kg	1.22	3.67	1
11104-28-2	Aroclor-1221	U	3.67	ug/kg	1.22	3.67	1
11141-16-5	Aroclor-1232	U	3.67	ug/kg	1.22	3.67	1
53469-21-9	Aroclor-1242	U	3.67	ug/kg	1.22	3.67	1
12672-29-6	Aroclor-1248	U	3.67	ug/kg	1.22	3.67	1
11097-69-1	Aroclor-1254	U	3.67	ug/kg	1.22	3.67	1
11096-82-5	Aroclor-1260	U	3.67	ug/kg	1.22	3.67	1

Data File: /chem/ecdl1a.i/012210.b/051f5101.d
Report Date: 25-Jan-2010 11:34

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/051f5101.d
Lab Smp Id: 244923006 Client Smp ID: RE15-10-7173
Inj Date : 22-JAN-2010 15:06
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923006|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7173|||
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 5l
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.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	30.19000	Weight of sample extracted (g)
M	9.79830	% 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	43049897	109.557	4.0 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.278	5.281	-0.003	25233397	76.4992	2.8 80.00- 120.00	100.00	

Data File: /chem/eod1a.i/012210.b/051F5101.d

Date: 22-JAN-2010 15:06

Client ID: RE15-10-7173

Sample Info: 124492300611

Volume Injected (uL): 1.0

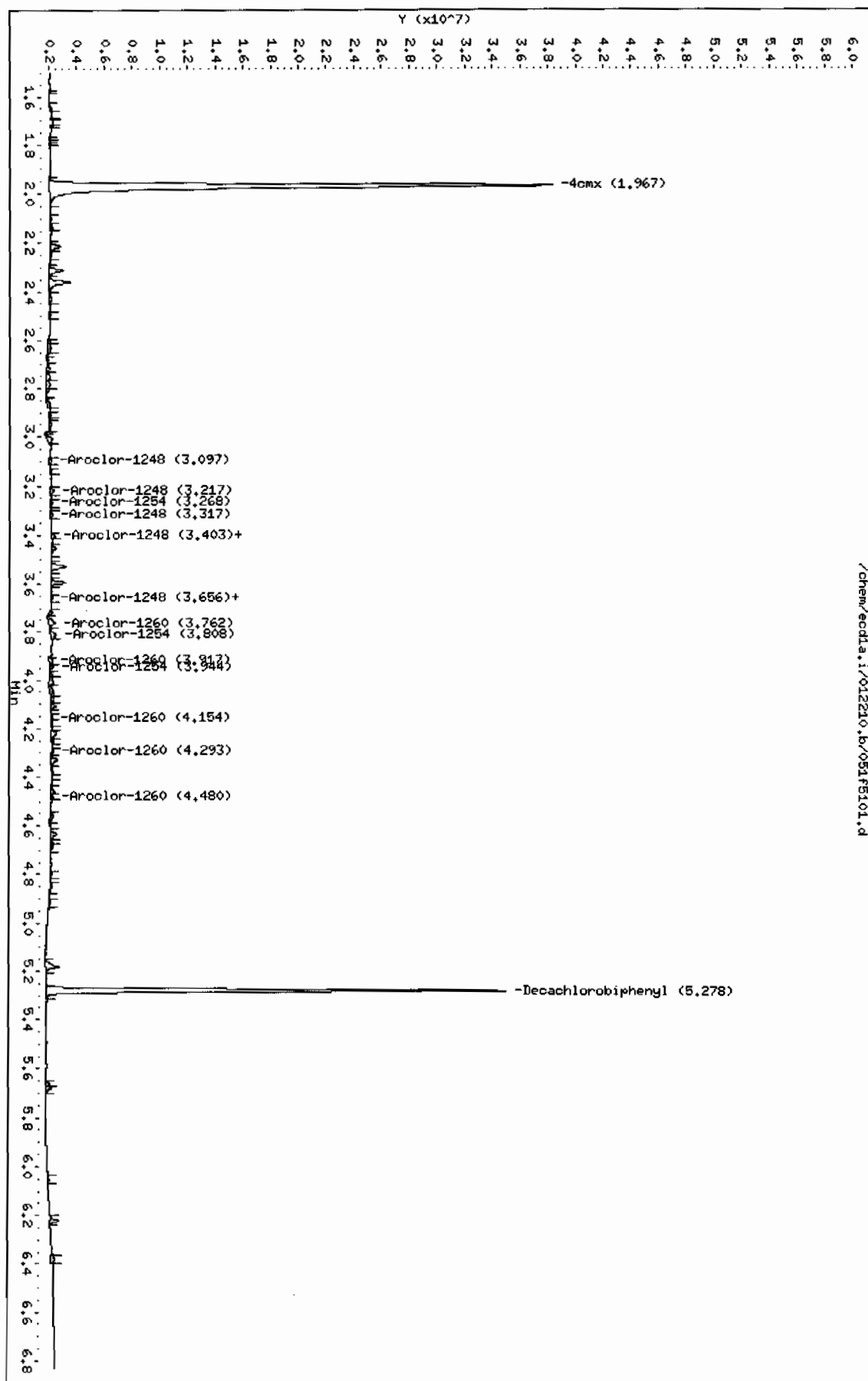
Column phase: CLP1

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdla.i/012210.b/051b5101.d
 Report Date: 25-Jan-2010 11:33

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
 Data file : /chem/ecdla.i/012210.b/051b5101.d
 Lab Smp Id: 244923006 Client Smp ID: RE15-10-7173
 Inj Date : 22-JAN-2010 15:06
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |244923006|1|
 Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7173|||
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
 Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 51
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1287.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	30.19000	Weight of sample extracted (g)
M	9.79830	% 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	30576352	105.362	3.9 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.946	5.947	-0.001	24184513	99.1272	3.6 80.00- 120.00	100.00	

Data File: /chem/eod1a.i/012210.b/051b5101.d

Date : 22-JAN-2010 15:06

Client ID: REL5-10-7173

Sample Info: 1244923006111

Volume Injected (uL): 1.0

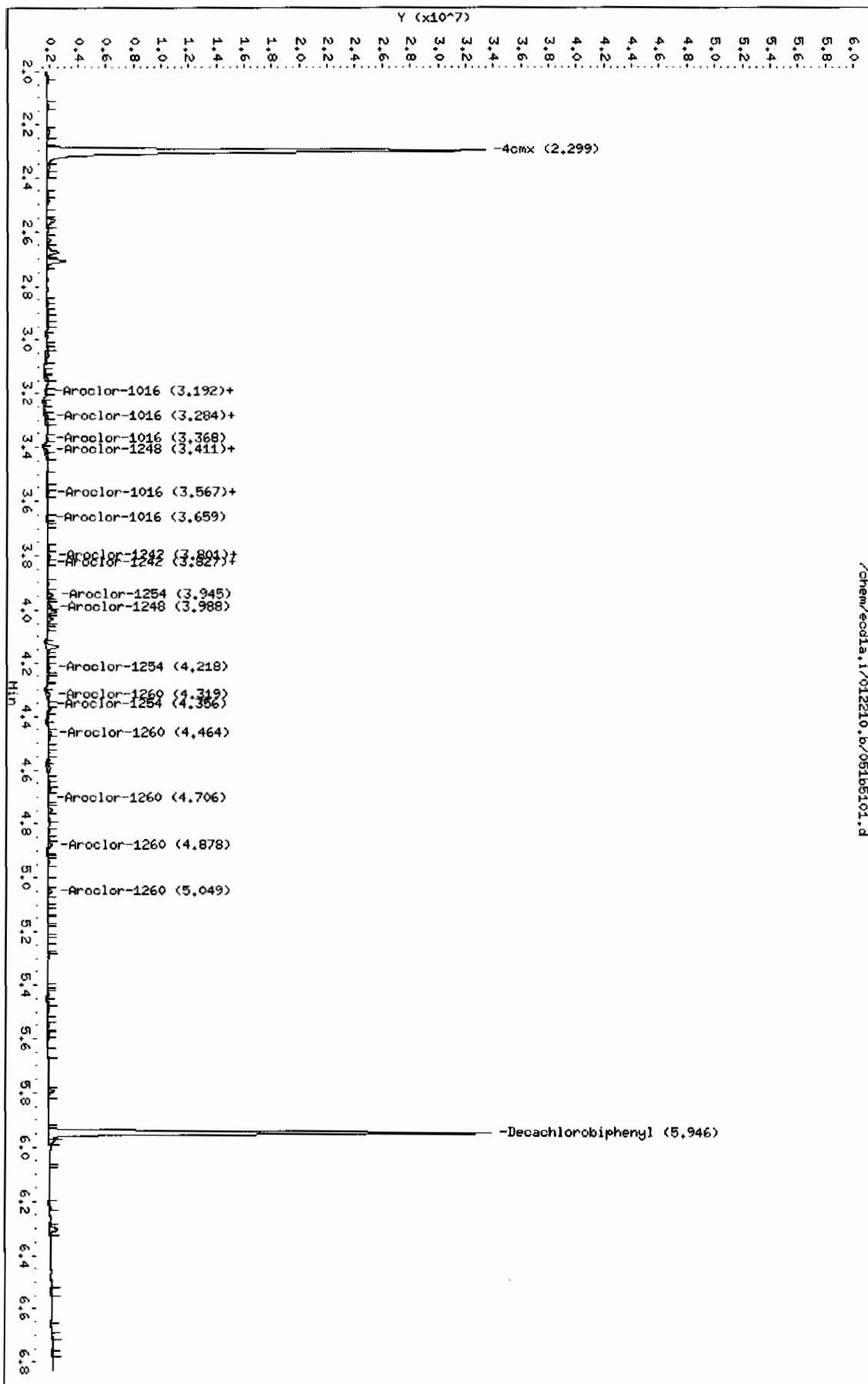
Column phase: CLP2

Instrument: eod1a.i

Operator: YS1

Column diameter: 0.25

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Certificate of Analysis
Sample SummarySDG Number: 10-1287
Lab Sample ID: 244923005Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.I
Analyst: YS1
Aliquot: 30.05 g
Column: 1 CLP1
2 CLP2Matrix: R
%Moisture: 19.7
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.14	ug/kg	1.38	4.14	1
11104-28-2	Aroclor-1221	U	4.14	ug/kg	1.38	4.14	1
11141-16-5	Aroclor-1232	U	4.14	ug/kg	1.38	4.14	1
53469-21-9	Aroclor-1242	U	4.14	ug/kg	1.38	4.14	1
12672-29-6	Aroclor-1248	U	4.14	ug/kg	1.38	4.14	1
11097-69-1	Aroclor-1254	U	4.14	ug/kg	1.38	4.14	1
11096-82-5	Aroclor-1260	U	4.14	ug/kg	1.38	4.14	1

Data File: /chem/ecd1a.i/012210.b/050f5001.d
Report Date: 25-Jan-2010 11:33

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/050f5001.d
Lab Smp Id: 244923005 Client Smp ID: RE15-10-7174
Inj Date : 22-JAN-2010 14:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923005|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7174|||
Comment :
Method : /chem/ecd1a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclpl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.05000	Weight of sample extracted (g)
M	19.68900	% 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	46053194	117.201	4.8 80.00- 120.00	100.00	

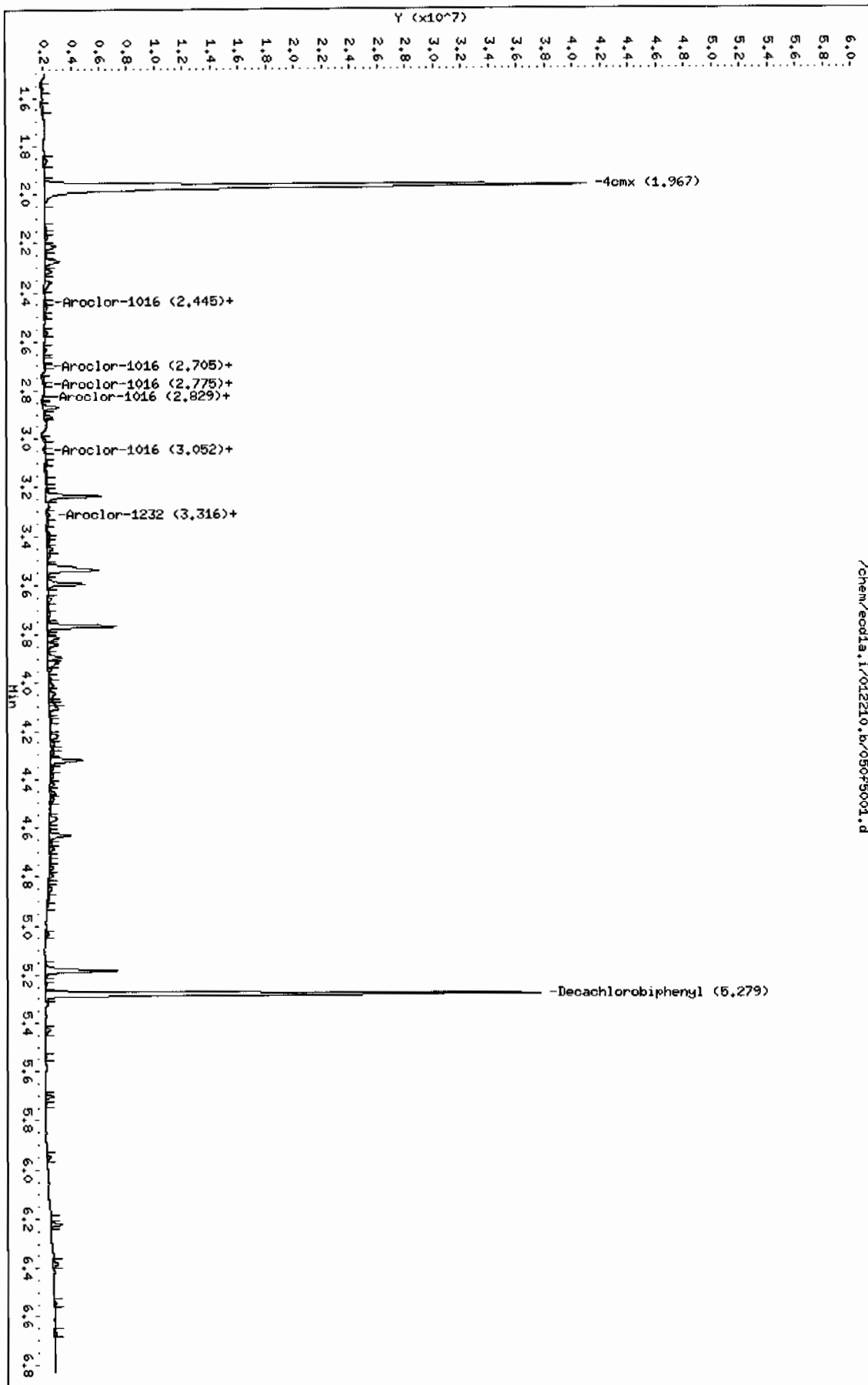
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.279	5.281	-0.002	26453774	80.1989	3.3 80.00- 120.00	100.00	

Data File: /chem/ecdl1.i/012210.b/050f5001.d
Date: 22-JAN-2010 14:54
Client ID: RE15-10-7174
Sample Info: 1244923005(1)
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecdl1.i
Operator: VSL
Column diameter: 0.25

/chem/ecdl1.i/012210.b/050f5001.d

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Data File: /chem/ecd1a.i/012210.b/050b5001.d
Report Date: 25-Jan-2010 11:32

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/050b5001.d
Lab Smp Id: 244923005 Client Smp ID: RE15-10-7174
Inj Date : 22-JAN-2010 14:54
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923005|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7174|||
Comment :
Method : /chem/ecd1a.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.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	30.05000	Weight of sample extracted (g)
M	19.68900	% 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						
2.300	2.299	0.001	32416365	111.702	4.6 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.946	5.947	-0.001	24415749	100.075	4.1 80.00- 120.00	100.00

Data File: /chem/eod1a.i/012210.b/05065001.d

Date: 22-JAN-2010 14:54

Client ID: REL5-10-7174

Sample Info: 124492300511

Volume Injected (uL): 1.0

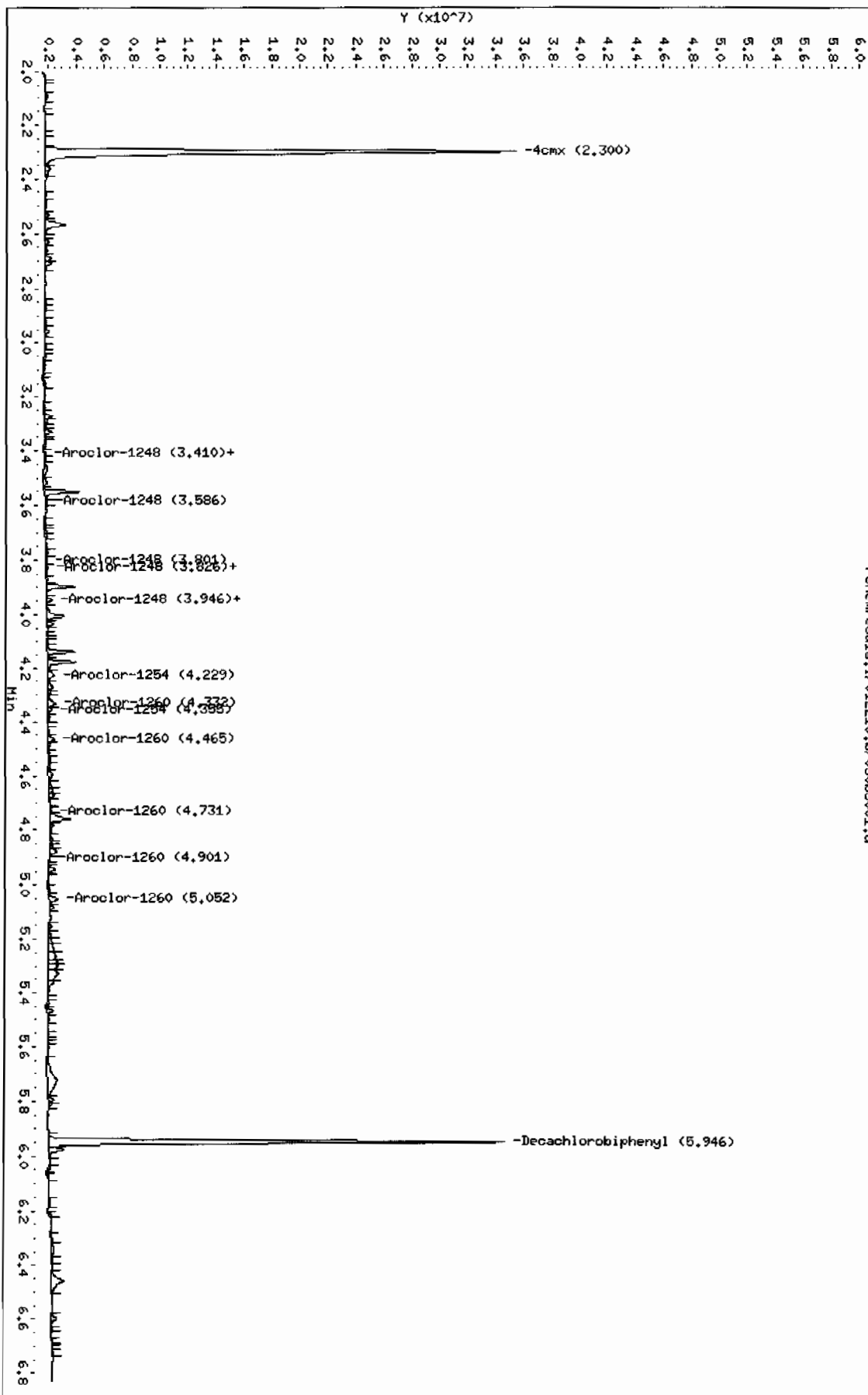
Column Phase: CLP2

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

/chem/eod1a.i/012210.b/05065001.d



PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923007

Client ID: RE15-10-7175

Batch ID: 943953

Run Date: 01/22/2010 15:19

Prep Date: 01/21/2010 19:38

Data File: 052f5201.d

052b5201.d

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.I

Analyst: YS1

Aliquot: 30.19 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 9.3

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

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

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/052f5201.d
 Lab Smp Id: 244923007 Client Smp ID: RE15-10-7175
 Inj Date : 22-JAN-2010 15:19
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |244923007|1|
 Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7175|||
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
 Meth Date : 23-Jan-2010 11:18 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 52
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1287.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	9.32970	% 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	47444870 120.742	4.4	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.279	5.281	-0.002	27938806 84.7011	3.1	80.00- 120.00	100.00

Data File: /chem/eod1a.i/012210.b/052f5201.d

Date : 22-JAN-2010 15:19

Client ID: RE15-10-7175

Sample Info: 124492300711

Volume Injected (uL): 1.0

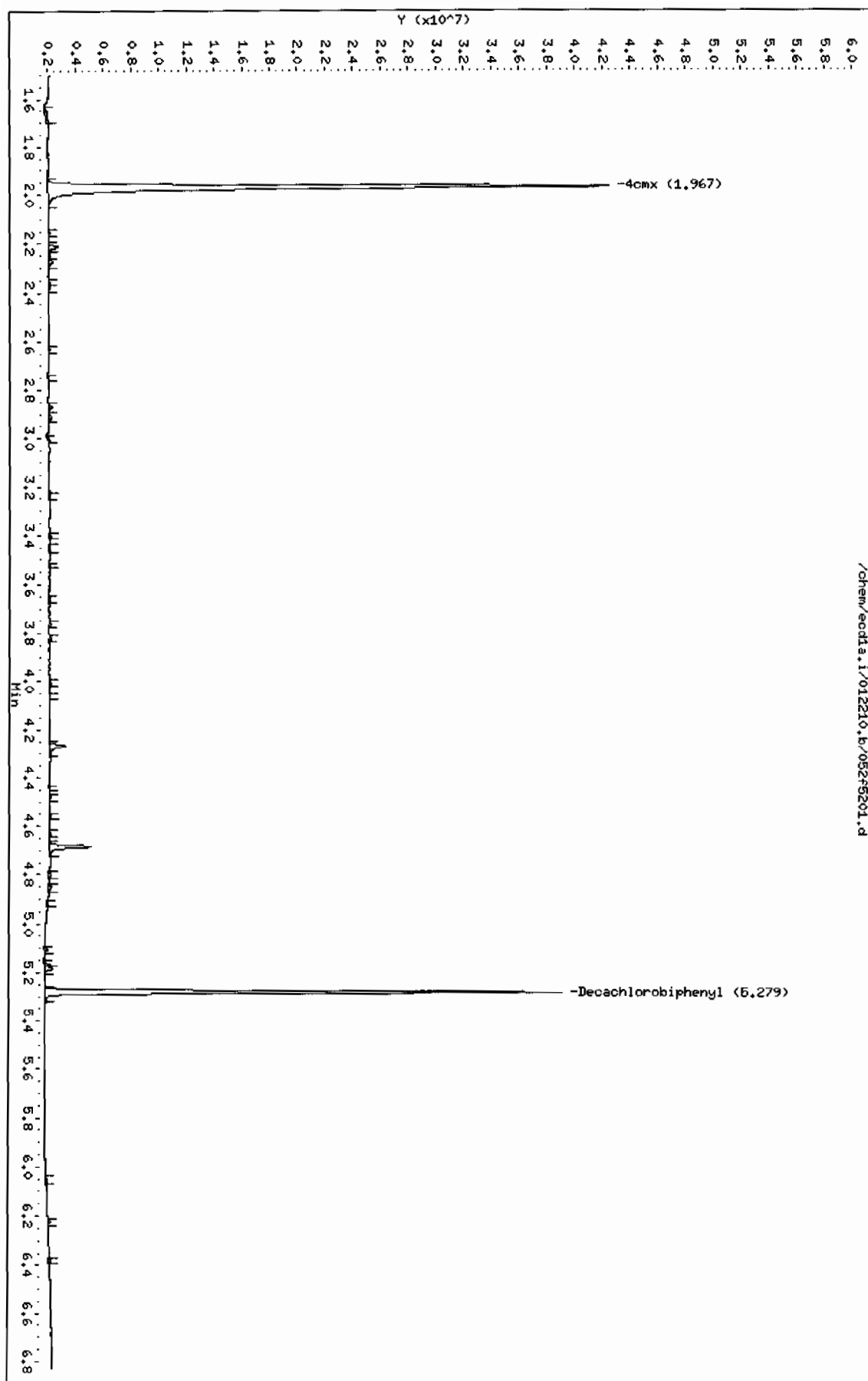
Column phase: CLP1

Instrument: eod1a.i

Operator: YSI

Column diameter: 0.25

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Data File: /chem/ecdla.i/012210.b/052b5201.d
 Report Date: 23-Jan-2010 11:20

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/052b5201.d
 Lab Smp Id: 244923007 Client Smp ID: RE15-10-7175
 Inj Date : 22-JAN-2010 15:19
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |244923007|1|
 Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7175|1|1|
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
 Meth Date : 23-Jan-2010 11:18 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 52
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1287.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1pl1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.19000	Weight of sample extracted (g)
M	9.32970	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		TARGET RANGE	RATIO
			RESPONSE (ug/L)	FINAL (ug/Kg)		
\$ 11 4cmx					CAS #: 877-09-8	
2.299	2.299	0.000	33663334	115.999	4.2 80.00- 120.00	100.00
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.947	5.947	0.000	26934271	110.398	4.0 80.00- 120.00	100.00

Data File: /chem/eod1a.i/012210.b/052b5201.d

Date: 22-JAN-2010 15:19

Client ID: RELS-10-7175

Sample Info: 1244923007111

Volume Injected (uL): 1.0

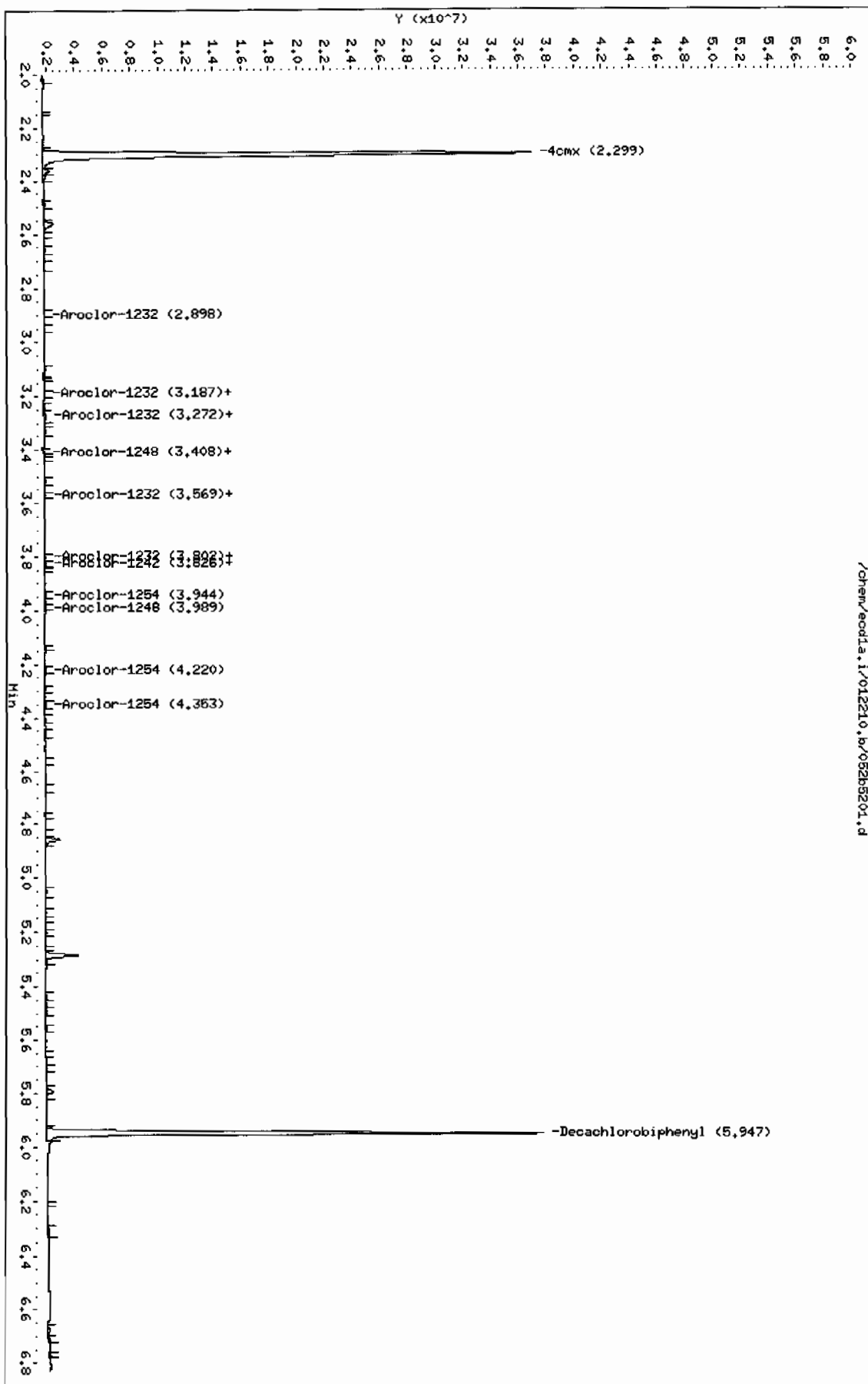
Column phase: CLP2

Instrument: eod1a.1

Operator: YSL

Column diameter: 0.25

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PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1287
Lab Sample ID: 244923009

Date Collected: 01/12/2010 12:00
Date Received: 01/16/2010 08:55
Client: LANL010
Method: SW846 8082
Inst: ECD1A.1
Analyst: YS1
Aliquot: 30.11 g
Column: 1 CLP1
2 CLP2

Matrix: R
%Moisture: 9.9
Project: LANL01004
SOP Ref: GL-OA-E-040
Dilution: 1
Inj. Vol: 1 uL
Final Volume: 1 mL
Level: LOW

Client ID: RE15-10-7218
Batch ID: 943953
Run Date: 01/22/2010 16:10
Prep Date: 01/21/2010 19:38
Data File: 056f5601.d
056b5601.d

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.69	ug/kg	1.23	3.69	1
11104-28-2	Aroclor-1221	U	3.69	ug/kg	1.23	3.69	1
11141-16-5	Aroclor-1232	U	3.69	ug/kg	1.23	3.69	1
53469-21-9	Aroclor-1242	U	3.69	ug/kg	1.23	3.69	1
12672-29-6	Aroclor-1248	U	3.69	ug/kg	1.23	3.69	1
11097-69-1	Aroclor-1254	U	3.69	ug/kg	1.23	3.69	1
11096-82-5	Aroclor-1260	U	3.69	ug/kg	1.23	3.69	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/056f5601.d
Lab Smp Id: 244923009 Client Smp ID: RE15-10-7218
Inj Date : 22-JAN-2010 16:10
Operator : YSl Inst ID: ecdla.i
Smp Info : |244923009|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7218|||
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.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	30.11000	Weight of sample extracted (g)
M	9.93460	% 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	42323406 107.709	4.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.278	5.281	-0.003	36099428 109.441	4.0	80.00- 120.00	100.00

Data File: /chem/ecdl.a.i/012210.b/056f5601.d

Date : 22-JAN-2010 16:10

Client ID: RE15-10-7218

Sample Info: 124492300911

Volume Injected (uL): 1.0

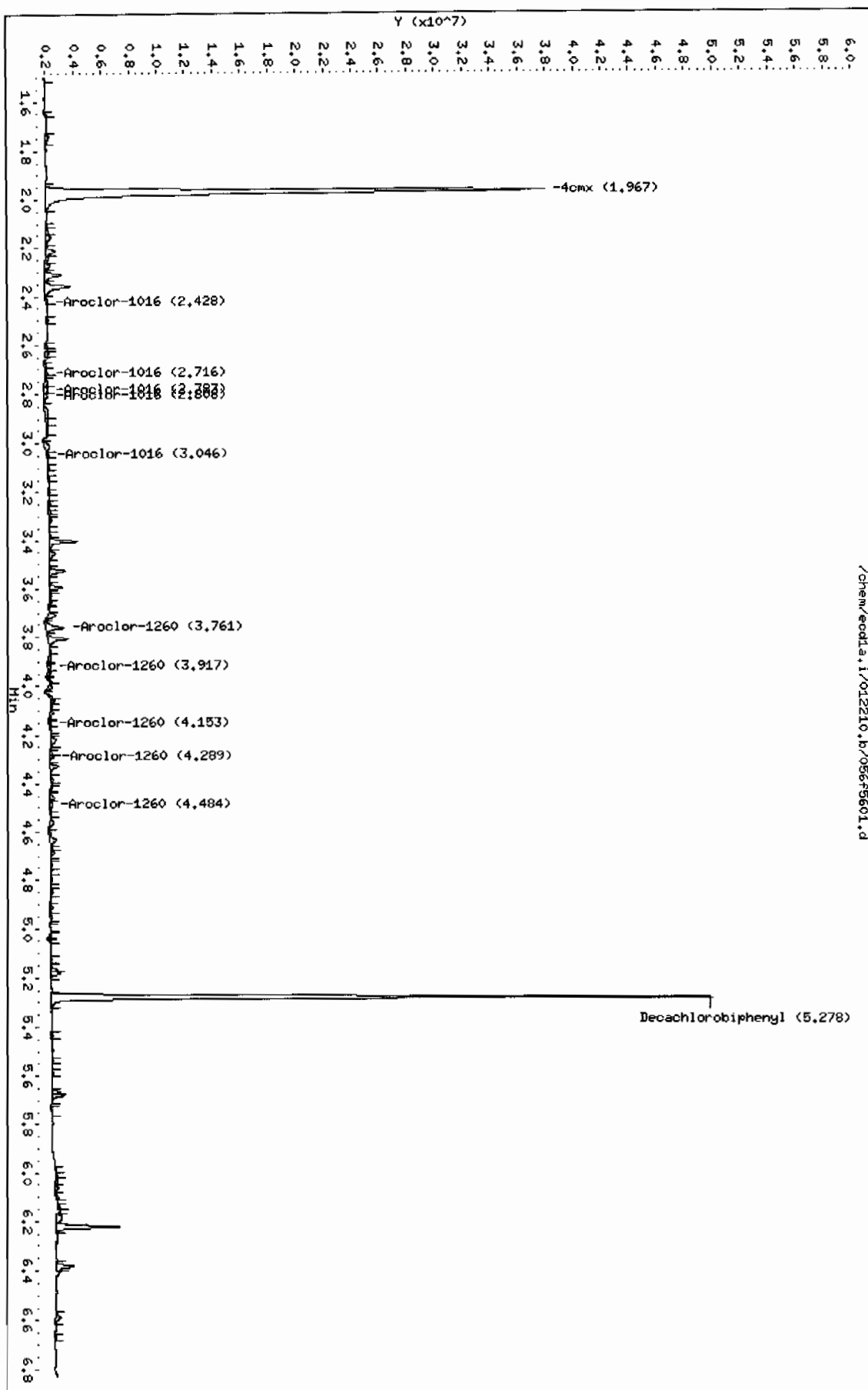
Column phase: CLP1

Instrument: ecdl.a.i

Operator: YSI

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/056b5601.d

Lab Smp Id: 244923009

Client Smp ID: RE15-10-7218

Inj Date : 22-JAN-2010 16:10

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |244923009|1|

Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7218|

Comment :

Method : /chem/ecd1a.i/012210.b/ECD1-B-8082-121409.m

Meth Date : 23-Jan-2010 11:21 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017b1701.d

Als bottle: 56

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 10-1287.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	30.11000	Weight of sample extracted (g)
M	9.93460	% 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	30273505	104.318	3.8	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.947	5.947	0.000	24561633	100.673	3.7	80.00- 120.00	100.00	

Data File: /chem/ecdl.a.i/012210.b/056b5601.d

Date : 22-JAN-2010 16:10

Client ID: RE15-10-7248

Sample Info: 124492300911

Volume Injected (uL): 1.0

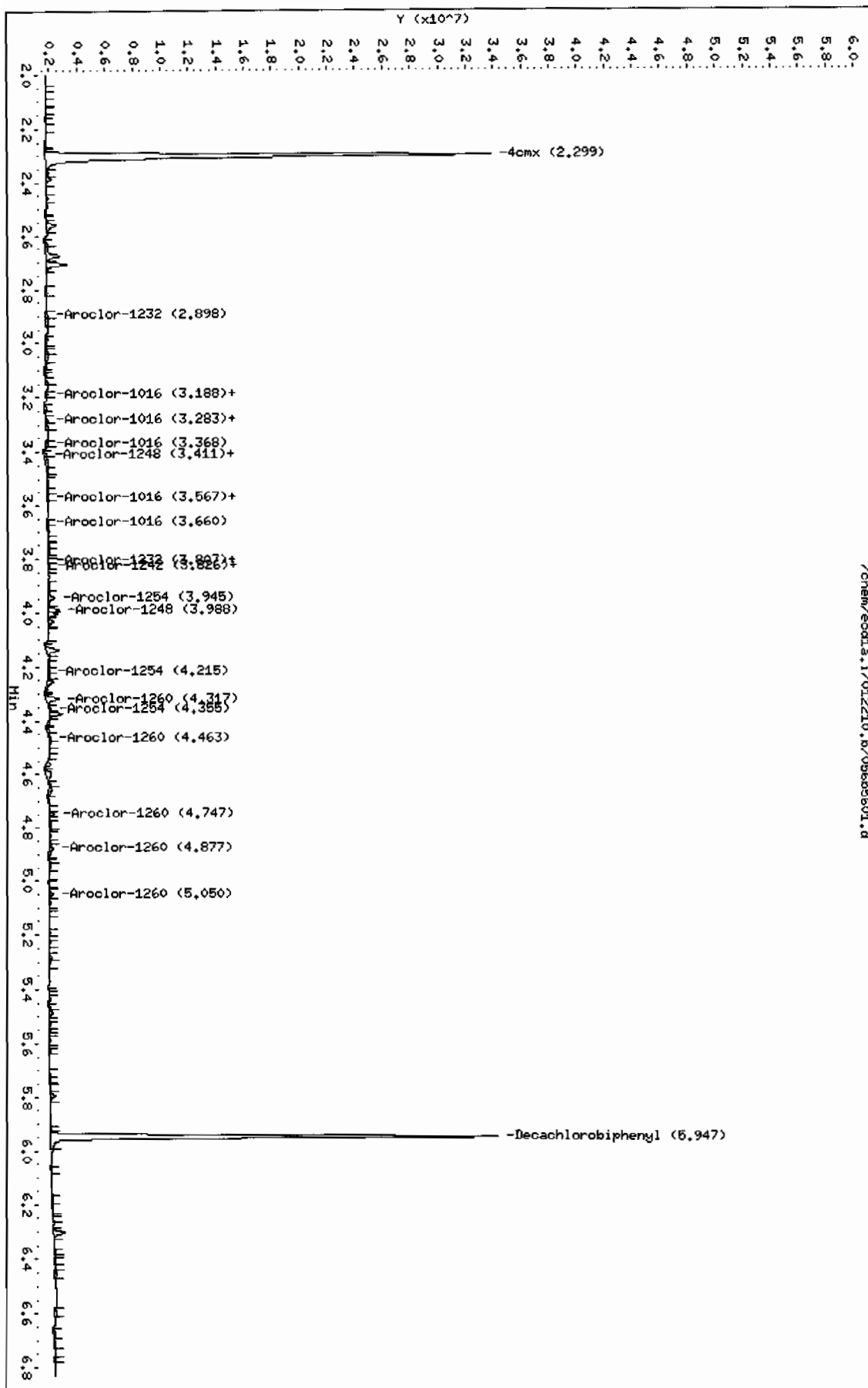
Column phase: CLP2

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

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PCB

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Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Lab Sample ID: 244923010

Client ID: RE15-10-7223

Batch ID: 943953

Run Date: 01/22/2010 16:22

Prep Date: 01/21/2010 19:38

Data File: 057f5701.d

057b5701.d

Date Collected: 01/12/2010 12:00

Date Received: 01/16/2010 08:55

Client: LANL010

Method: SW846 8082

Inst: ECD1A.J

Analyst: YSI

Aliquot: 30.14 g

Column: 1 CLP1

2 CLP2

Matrix: R

%Moisture: 10.8

Project: LANL01004

SOP Ref: GL-OA-E-040

Dilution: 1

Inj. Vol: 1 uL

Final Volume: 1 mL

Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.72	ug/kg	1.24	3.72	1
11104-28-2	Aroclor-1221	U	3.72	ug/kg	1.24	3.72	1
11141-16-5	Aroclor-1232	U	3.72	ug/kg	1.24	3.72	1
53469-21-9	Aroclor-1242	U	3.72	ug/kg	1.24	3.72	1
12672-29-6	Aroclor-1248	U	3.72	ug/kg	1.24	3.72	1
11097-69-1	Aroclor-1254		8.00	ug/kg	1.24	3.72	1
11096-82-5	Aroclor-1260		4.20	ug/kg	1.24	3.72	2

Data File: /chem/ecdla.i/012210.b/057f5701.d
Report Date: 25-Jan-2010 11:42

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/057f5701.d
Lab Smp Id: 244923010 Client Smp ID: RE15-10-7223
Inj Date : 22-JAN-2010 16:22
Operator : YSl Inst ID: ecdla.i
Smp Info : |244923010|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7223|||
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vi} * \text{Ws} * (100 - \text{M}) / 100) * \text{CpndVariable}$

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	10.77770	% 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	46813731	119.136	4.4 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.278	5.281	-0.003	38743871	117.458	4.4 80.00- 120.00	100.00	

6 Aroclor-1254 CAS #: 11097-69-1							
3.268	3.270	-0.002	2394545	191.786	7.1 80.00- 120.00	100.00	
3.423	3.425	-0.002	2695581	161.200	6.0 116.96- 156.96	112.57	
3.656	3.659	-0.003	4697112	226.761	8.4 160.10- 200.10	196.16	
3.820	3.821	-0.001	2798807	178.334	6.6 117.36- 157.36	116.88	

CONCENTRATIONS								
RT	EXP RT	DLT RT	ON-COL		FINAL	TARGET RANGE	RATIO	
			RESPONSE	(ug/L)	(ug/Kg)			
==	=====	=====	=====	=====	=====	=====	=====	
6 Aroclor-1254 (continued)								
3.928	3.931	-0.003	4795239	316.048	11.8	110.06- 150.06	200.26	
Average of Peak Concentrations =					8.0			

7 Aroclor-1260					CAS #: 11096-82-5			
3.765	3.766	-0.001	3108340	175.427	6.5	80.00- 120.00	100.00	
3.928	3.929	-0.001	4795239	178.074	6.6	132.78- 172.78	154.27	
4.158	4.159	-0.001	1078588	66.6356	2.5	71.24- 111.24	34.70	
4.300	4.302	-0.002	977080	57.7882	2.1	75.48- 115.48	31.43	
4.479	4.481	-0.002	2616419	69.4645	2.6	198.43- 238.43	84.17	
Average of Peak Concentrations =					4.1			

Data File: /chem/eodia.i/012210.b/057F5701.d

Date: 22-JAN-2010 16:22

Client ID: RE45-10-7223

Sample Info: 124492301011

Volume Injected (uL): 1.0

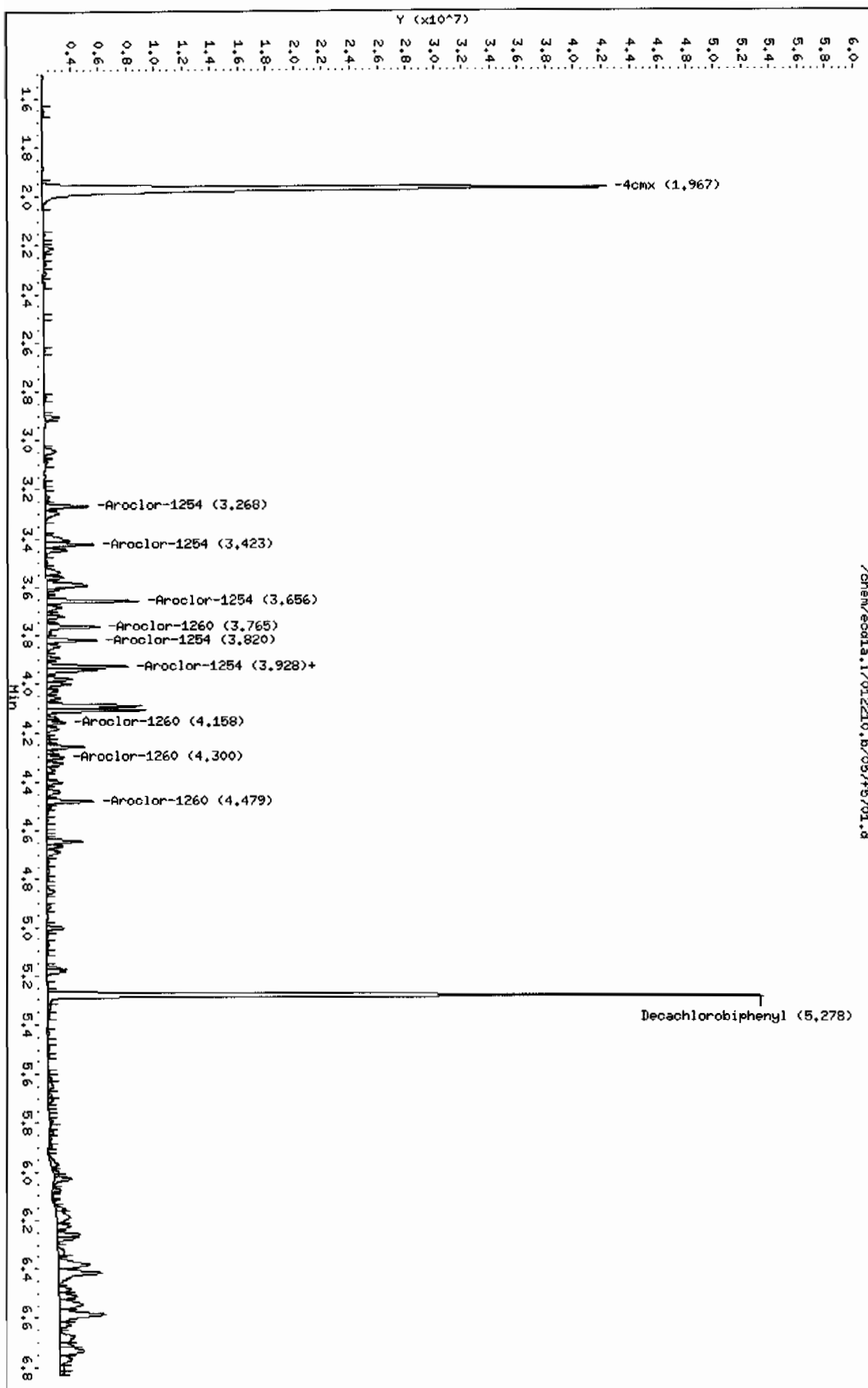
Column phase: CLP1

Instrument: eodia.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecd1a.i/012210.b/057b5701.d
Report Date: 25-Jan-2010 11:41

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/057b5701.d
Lab Smp Id: 244923010 Client Smp ID: RE15-10-7223
Inj Date : 22-JAN-2010 16:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |244923010|1|
Misc Info : |ECD82P_1S|943953|SVA|LANL|SOIL|RE15-10-7223|||
Comment :
Method : /chem/ecd1a.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 57
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.14000	Weight of sample extracted (g)
M	10.77770	% 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						
2.300	2.299	0.001	33614516	115.831	4.3 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.946	5.947	-0.001	25462981	104.367	3.9 80.00- 120.00	100.00

6 Aroclor-1254 CAS #: 11097-69-1						
3.405	3.403	0.002	616292	95.7681	3.6 80.00- 120.00	100.00
3.827	3.825	0.002	1840657	159.236	5.9 156.14- 196.14	298.67
3.944	3.941	0.003	2042998	164.343	6.1 180.05- 220.05	331.50
4.220	4.217	0.003	3560651	210.938	7.8 260.81- 300.81	577.75

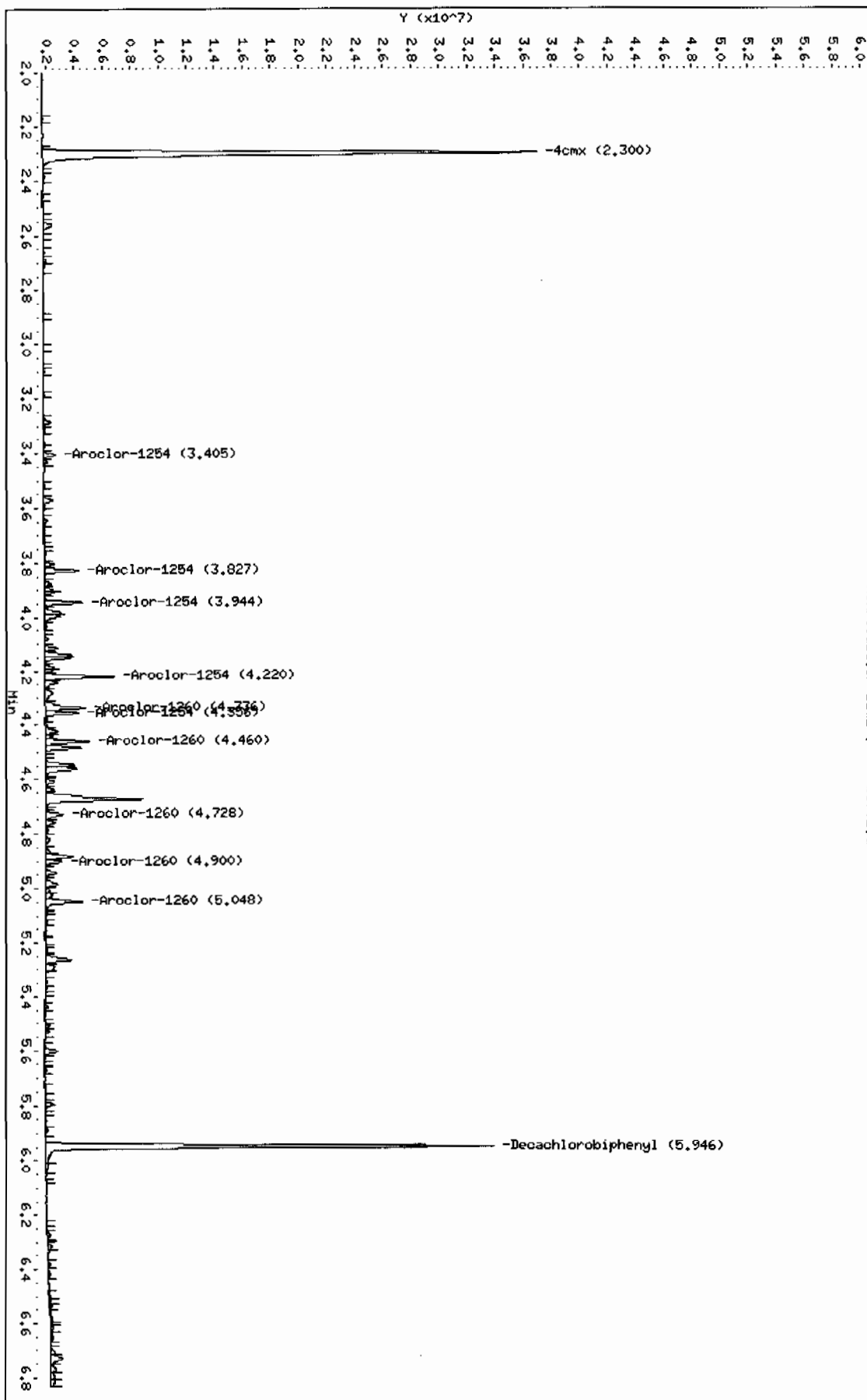
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
6 Aroclor-1254 (continued)								
4.356	4.354	0.002	1798814	144.652	5.4	190.54~	230.54	291.88
Average of Peak Concentrations =					5.8			

7 Aroclor-1260					CAS #: 11096-82-5			
4.336	4.336	0.000	2535541	191.000	7.1	80.00~	120.00	100.00
4.460	4.461	-0.001	2276448	140.887	5.2	105.68~	145.68	89.78
4.728	4.727	0.001	1147181	91.7803	3.4	75.23~	115.23	45.24
4.900	4.901	-0.001	845250	65.3777	2.4	77.61~	117.61	33.34
5.048	5.048	0.000	2090901	73.5052	2.7	198.36~	238.36	82.46
Average of Peak Concentrations =					4.2			

Data File: /chem/eod1a.i/012210.b/057b5701.d
Date: 22-JAN-2010 16:22
Client ID: RE15-10-7223
Sample Info: 124492301011
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25

/chem/eod1a.i/012210.b/057b5701.d



STANDARDS DATA

Report Date: 26-Jan-2010 14:37

Calibration History

Method : /chem/ecdla.i/012210.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/ecdla.i/012210.b/013f1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdla.i/012210.b/006f0601.d
14-DEC-2009 11:34	AR1268	/chem/ecdla.i/121409.b/040f4001.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
22-JAN-2010 09:08	AR1660	/chem/ecdla.i/012210.b/019f1901.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
14-DEC-2009 11:44	AR1268	/chem/ecdla.i/121409.b/041f4101.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
22-JAN-2010 09:19	AR1660	/chem/ecdla.i/012210.b/020f2001.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
14-DEC-2009 11:55	AR1268	/chem/ecdla.i/121409.b/042f4201.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
22-JAN-2010 09:29	AR1660	/chem/ecdla.i/012210.b/021f2101.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
22-JAN-2010 09:40	AR1660	/chem/ecdla.i/012210.b/022f2201.d
14-DEC-2009 12:06	AR1268	/chem/ecdla.i/121409.b/043f4301.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		
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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		
22-JAN-2010 18:03	AR1660	/chem/ecdla.i/012210.b/065f6501.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 19:32	AR1660	/chem/ecdla.i/012210.b/072f7201.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 15:32	AR1660	/chem/ecdla.i/012210.b/053f5301.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 13:10	AR1660	/chem/ecdla.i/012210.b/041f4101.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 11:46	AR1660	/chem/ecdla.i/012210.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 10:01	AR1660	/chem/ecdla.i/012210.b/024f2401.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 10:11	AR1268	/chem/ecdla.i/012210.b/025f2501.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 08:57	AR1262	/chem/ecdla.i/012210.b/018f1801.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 07:51	AR1221	/chem/ecdla.i/012210.b/012f1201.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 07:40	AR1232	/chem/ecdla.i/012210.b/011f1101.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 07:19	AR1232	/chem/ecdla.i/012210.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 06:37	AR1248	/chem/ecdla.i/012210.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 06:27	AR1242	/chem/ecdla.i/012210.b/004f0401.d

Ccal Level: 4 , Ccal Amount: 1000	
+=====+	+
22-JAN-2010 06:16 AR1254	/chem/ecd1a.i/012210.b/003f0301.d
+-----+	+-----+

Report Date: 26-Jan-2010 14:37

Calibration History

Method : /chem/ecdl1a.i/012210.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/ecdl1a.i/012210.b/013b1301.d
22-JAN-2010 06:48	AR1232	/chem/ecdl1a.i/012210.b/006b0601.d
14-DEC-2009 11:34	AR1268	/chem/ecdl1a.i/121409.b/040b4001.d
14-DEC-2009 09:28	AR1248	/chem/ecdl1a.i/121409.b/028b2801.d
14-DEC-2009 08:25	AR1242	/chem/ecdl1a.i/121409.b/022b2201.d
14-DEC-2009 07:22	AR1254	/chem/ecdl1a.i/121409.b/016b1601.d
22-JAN-2010 09:08	AR1660	/chem/ecdl1a.i/012210.b/019b1901.d

Cal Level: 2 , Cal Amount: 250.00000		
22-JAN-2010 08:12	AR1262	/chem/ecdl1a.i/012210.b/014b1401.d
22-JAN-2010 06:58	AR1232	/chem/ecdl1a.i/012210.b/007b0701.d
14-DEC-2009 11:44	AR1268	/chem/ecdl1a.i/121409.b/041b4101.d
14-DEC-2009 09:38	AR1248	/chem/ecdl1a.i/121409.b/029b2901.d
14-DEC-2009 08:35	AR1242	/chem/ecdl1a.i/121409.b/023b2301.d
14-DEC-2009 07:32	AR1254	/chem/ecdl1a.i/121409.b/017b1701.d
22-JAN-2010 09:19	AR1660	/chem/ecdl1a.i/012210.b/020b2001.d

Cal Level: 3 , Cal Amount: 500.00000		
22-JAN-2010 08:22	AR1262	/chem/ecdl1a.i/012210.b/015b1501.d
22-JAN-2010 07:09	AR1232	/chem/ecdl1a.i/012210.b/008b0801.d
14-DEC-2009 11:55	AR1268	/chem/ecdl1a.i/121409.b/042b4201.d
14-DEC-2009 09:49	AR1248	/chem/ecdl1a.i/121409.b/030b3001.d
14-DEC-2009 08:46	AR1242	/chem/ecdl1a.i/121409.b/024b2401.d
14-DEC-2009 07:43	AR1254	/chem/ecdl1a.i/121409.b/018b1801.d
22-JAN-2010 09:29	AR1660	/chem/ecdl1a.i/012210.b/021b2101.d

Cal Level: 4 , Cal Amount: 1000.00000		
22-JAN-2010 09:40	AR1660	/chem/ecdl1a.i/012210.b/022b2201.d
14-DEC-2009 12:37	DDTANALOGSTD	/chem/ecdl1a.i/121409.b/046b4601.d
14-DEC-2009 12:06	AR1268	/chem/ecdl1a.i/121409.b/043b4301.d
22-JAN-2010 08:36	AR1262	/chem/ecdl1a.i/012210.b/016b1601.d
14-DEC-2009 05:47	AR1221	/chem/ecdl1a.i/121409.b/007b0701.d
22-JAN-2010 07:19	AR1232	/chem/ecdl1a.i/012210.b/009b0901.d
14-DEC-2009 09:59	AR1248	/chem/ecdl1a.i/121409.b/031b3101.d
14-DEC-2009 08:56	AR1242	/chem/ecdl1a.i/121409.b/025b2501.d
14-DEC-2009 07:53	AR1254	/chem/ecdl1a.i/121409.b/019b1901.d
14-DEC-2009 12:16	AR1268	/chem/ecdl1a.i/121409.b/044b4401.d

Cal Level: 5 , Cal Amount: 4000.00000		
22-JAN-2010 08:47	AR1262	/chem/ecdl1a.i/012210.b/017b1701.d
22-JAN-2010 07:30	AR1232	/chem/ecdl1a.i/012210.b/010b1001.d
14-DEC-2009 10:10	AR1248	/chem/ecdl1a.i/121409.b/032b3201.d
14-DEC-2009 09:07	AR1242	/chem/ecdl1a.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		
22-JAN-2010 18:03	AR1660	/chem/ecd1a.i/012210.b/065b6501.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 19:32	AR1660	/chem/ecd1a.i/012210.b/072b7201.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 15:32	AR1660	/chem/ecd1a.i/012210.b/053b5301.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 11:46	AR1660	/chem/ecd1a.i/012210.b/033b3301.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 13:10	AR1660	/chem/ecd1a.i/012210.b/041b4101.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 10:11	AR1268	/chem/ecd1a.i/012210.b/025b2501.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 10:01	AR1660	/chem/ecd1a.i/012210.b/024b2401.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		
22-JAN-2010 08:57	AR1262	/chem/ecd1a.i/012210.b/018b1801.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 07:51	AR1221	/chem/ecd1a.i/012210.b/012b1201.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 07:40	AR1232	/chem/ecd1a.i/012210.b/011b1101.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 07:19	AR1232	/chem/ecd1a.i/012210.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 06:37	AR1248	/chem/ecd1a.i/012210.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 06:27	AR1242	/chem/ecd1a.i/012210.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 06:16	AR1254	/chem/ecd1a.i/012210.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
22-JAN-2010 09:50	AR1660	/chem/ecd1a.i/012210.b/023b2301.d
Ccal Level: 1346718976, Ccal Amount: 0.0		

Ccal Level: 0 , Ccal Amount: 0.0
m/ecdl1a.i/012210.b/004b0401

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
 Quant Method : ESTD Target Version : 3.50
 Last Update : 23-Jan-2010 11:25 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	2.422	2.392-2.452	1.445e+04
	2.711	2.681-2.741	1.820e+04
	2.792	2.762-2.822	1.198e+04
	2.830	2.800-2.860	7.178e+03
	3.041	3.011-3.071	9.259e+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
62 4,4-DDT	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 Aroclor-1221	2.424	2.394-2.454	6.849e+03
	2.712	2.682-2.742	8.426e+03
	2.792	2.762-2.822	5.627e+03
	3.041	3.011-3.071	3.983e+03
	3.295	3.265-3.325	3.858e+03
3 Aroclor-1232	2.423	2.393-2.453	1.166e+04
	2.711	2.681-2.741	1.345e+04
	2.830	2.800-2.860	5.506e+03
	3.040	3.010-3.070	7.245e+03
	3.294	3.264-3.324	6.811e+03
4 Aroclor-1242			

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.091	3.061-3.121	7.848e+03
	3.242	3.212-3.272	6.870e+03
	3.294	3.264-3.324	1.331e+04
	3.426	3.396-3.456	1.101e+04
	3.658	3.628-3.688	7.455e+03
6 Aroclor-1254	3.270	3.240-3.300	1.249e+04
	3.425	3.395-3.455	1.672e+04
	3.659	3.629-3.689	2.071e+04
	3.821	3.791-3.851	1.569e+04
	3.931	3.901-3.961	1.517e+04
7 Aroclor-1260	3.766	3.736-3.796	1.772e+04
	3.929	3.899-3.959	2.693e+04
	4.159	4.129-4.189	1.619e+04
	4.302	4.272-4.332	1.691e+04
	4.481	4.451-4.511	3.767e+04
8 Aroclor-1262	3.766	3.736-3.796	1.500e+04
	3.929	3.899-3.959	2.038e+04
	4.160	4.130-4.190	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	5.281	5.251-5.311	3.299e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecdl1a.i/012210.b/ECD1-B-8082-121409.m
Quant Method : ESTD Target Version : 3.50
Last Update : 25-Jan-2010 13:49 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	3.196	3.166-3.226	1.269e+04
	3.280	3.250-3.310	8.798e+03
	3.343	3.313-3.373	5.479e+03
	3.570	3.540-3.600	6.997e+03
	3.646	3.616-3.676	6.563e+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
	2.592	2.562-2.622	2.329e+03
	2.632	2.602-2.662	8.119e+03
3 Aroclor-1232	2.899	2.869-2.929	5.892e+03
	3.197	3.167-3.227	6.222e+03
	3.280	3.250-3.310	4.345e+03
	3.570	3.540-3.600	3.111e+03
4 Aroclor-1242	3.805	3.775-3.835	3.193e+03
	3.195	3.165-3.225	1.059e+04
	3.278	3.248-3.308	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/ecdl1a.i/012210.b/ECD1-B-8082-121409.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.403	3.373-3.433	8.054e+03
	3.568	3.538-3.598	9.874e+03
	3.802	3.772-3.832	1.122e+04
	3.829	3.799-3.859	1.248e+04
	3.967	3.937-3.997	1.210e+04
6 Aroclor-1254	3.403	3.373-3.433	6.435e+03
	3.825	3.795-3.855	1.156e+04
	3.941	3.911-3.971	1.243e+04
	4.217	4.187-4.247	1.688e+04
	4.354	4.324-4.384	1.244e+04
7 Aroclor-1260	4.336	4.306-4.366	1.328e+04
	4.461	4.431-4.491	1.616e+04
	4.727	4.697-4.757	1.250e+04
	4.901	4.871-4.931	1.293e+04
	5.048	5.018-5.078	2.845e+04
8 Aroclor-1262	4.461	4.431-4.491	1.356e+04
	4.727	4.697-4.757	1.889e+04
	4.901	4.871-4.931	1.747e+04
	5.049	5.019-5.079	3.453e+04
	5.262	5.232-5.292	2.487e+04
9 Aroclor-1268	5.260	5.230-5.290	4.358e+04
	5.288	5.258-5.318	4.039e+04
	5.438	5.408-5.468	3.144e+04
	5.602	5.572-5.632	1.427e+04
	5.795	5.765-5.825	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	5.947	5.917-5.977	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/ecdla.i/012210.b/ECD1-F-8082-121409.m
 Cal Date : 25-Jan-2010 13:49 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)	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/ecdl1a.i/012210.b/ECD1-F-8082-121409.m
 Cal Date : 25-Jan-2010 13:49 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/ecdl1a.i/012210.b/ECD1-B-8082-121409.m
 Cal Date : 25-Jan-2010 13:49 yip00818
 Curve Type : Average

Calibration File Names:

Level 1: /chem/ecdl1a.i/012210.b/013b1301.d
 Level 2: /chem/ecdl1a.i/012210.b/014b1401.d
 Level 3: /chem/ecdl1a.i/012210.b/015b1501.d
 Level 4: /chem/ecdl1a.i/012210.b/022b2201.d
 Level 5: /chem/ecdl1a.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	7060	6442	5919	5487	6563	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/ecd1a.i/012210.b/ECD1-B-8082-121409.m
 Cal Date : 25-Jan-2010 13:49 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

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.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 0616
 Lab File ID: 003F0301 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 0722 0804
 GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	12485.476	12690.000	0.01	1.6	15.0
(2)	16721.938	17374.914	0.01	3.9	15.0
(3)	20713.923	22847.469	0.01	10.3	15.0
(4)	15694.205	17424.694	0.01	11.0	15.0
(5)	15172.491	16498.579	0.01	8.7	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 0616
 Lab File ID: 003B0301 Init. Calib. Date(s): 12/14/09 12/14/09
 Heated Purge: (Y/N) N Init. Calib. Times: 0722 0804
 GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1254	6435.255	5974.000	0.01	-7.2	15.0
(2)	11559.316	10523.195	0.01	-9.0	15.0
(3)	12431.285	11951.498	0.01	-3.8	15.0
(4)	16880.060	16776.207	0.01	-0.6	15.0
(5)	12435.475	12578.249	0.01	1.1	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.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1001
 Lab File ID: 024F2401 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	13420.000	0.01	-7.1	15.0
(2)	18199.756	17572.663	0.01	-3.4	15.0
(3)	11983.312	11183.272	0.01	-6.7	15.0
(4)	7177.742	6767.612	0.01	-5.7	15.0
(5)	9259.441	8690.610	0.01	-6.1	15.0
Aroclor-1260	17718.759	17220.000	0.01	-2.8	15.0
(2)	26928.394	26474.572	0.01	-1.7	15.0
(3)	16186.368	15676.090	0.01	-3.2	15.0
(4)	16907.951	16450.654	0.01	-2.7	15.0
(5)	37665.571	37479.866	0.01	-0.5	15.0
4cmx	392943.52	391418.16	0.01	-0.4	15.0
Decachlorobiphenyl	329851.94	322295.41	0.01	-2.3	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1001
 Lab File ID: 024B2401 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	12160.000	0.01	-4.2	15.0
(2)	8798.138	8042.569	0.01	-8.6	15.0
(3)	5479.218	4985.923	0.01	-9.0	15.0
(4)	6997.244	6316.927	0.01	-9.7	15.0
(5)	6563.494	5936.669	0.01	-9.6	15.0
Aroclor-1260	13275.098	12550.000	0.01	-5.5	15.0
(2)	16157.966	15408.233	0.01	-4.6	15.0
(3)	12499.207	11753.882	0.01	-6.0	15.0
(4)	12928.717	12209.834	0.01	-5.6	15.0
(5)	28445.628	27606.323	0.01	-3.0	15.0
4cmx	290204.15	282542.72	0.01	-2.6	15.0
Decachlorobiphenyl	243974.44	232138.13	0.01	-4.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1310
 Lab File ID: 041F4101 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	13501.572	0.01	-6.6	15.0
(2)	18199.756	17773.752	0.01	-2.3	15.0
(3)	11983.312	11586.695	0.01	-3.3	15.0
(4)	7177.742	6957.916	0.01	-3.1	15.0
(5)	9259.441	8740.415	0.01	-5.6	15.0
Aroclor-1260	17718.759	16982.070	0.01	-4.2	15.0
(2)	26928.394	25515.240	0.01	-5.2	15.0
(3)	16186.368	15422.643	0.01	-4.7	15.0
(4)	16907.951	15634.190	0.01	-7.5	15.0
(5)	37665.571	36172.856	0.01	-4.0	15.0
4cmx	392943.52	406293.59	0.01	3.4	15.0
Decachlorobiphenyl	329851.94	266950.32	0.01	-19.1	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.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1310
 Lab File ID: 041B4101 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	12101.121	0.01	-4.6	15.0
(2)	8798.138	8017.714	0.01	-8.9	15.0
(3)	5479.218	5008.292	0.01	-8.6	15.0
(4)	6997.244	6416.766	0.01	-8.3	15.0
(5)	6563.494	5943.051	0.01	-9.4	15.0
Aroclor-1260	13275.098	11615.754	0.01	-12.5	15.0
(2)	16157.966	14604.660	0.01	-9.6	15.0
(3)	12499.207	10888.842	0.01	-12.9	15.0
(4)	12928.717	11184.302	0.01	-13.5	15.0
(5)	28445.628	25032.235	0.01	-12.0	15.0
4cmx	290204.15	283834.55	0.01	-2.2	15.0
Decachlorobiphenyl	243974.44	201663.95	0.01	-17.3	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.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1532
 Lab File ID: 053F5301 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	13362.571	0.01	-7.5	15.0
(2)	18199.756	17241.552	0.01	-5.3	15.0
(3)	11983.312	11480.294	0.01	-4.2	15.0
(4)	7177.742	6920.061	0.01	-3.6	15.0
(5)	9259.441	8799.758	0.01	-5.0	15.0
Aroclor-1260	17718.759	17442.394	0.01	-1.6	15.0
(2)	26928.394	25272.275	0.01	-6.2	15.0
(3)	16186.368	15660.231	0.01	-3.2	15.0
(4)	16907.951	16440.042	0.01	-2.8	15.0
(5)	37665.571	38025.554	0.01	1.0	15.0
4cmx	392943.52	400960.69	0.01	2.0	15.0
Decachlorobiphenyl	329851.94	236061.66	0.01	-28.4	15.0

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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.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1532
 Lab File ID: 053B5301 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	12373.583	0.01	-2.5	15.0
(2)	8798.138	8068.647	0.01	-8.3	15.0
(3)	5479.218	5003.682	0.01	-8.7	15.0
(4)	6997.244	6312.529	0.01	-9.8	15.0
(5)	6563.494	5908.539	0.01	-10.0	15.0
Aroclor-1260	13275.098	12006.645	0.01	-9.6	15.0
(2)	16157.966	15090.452	0.01	-6.6	15.0
(3)	12499.207	11433.839	0.01	-8.5	15.0
(4)	12928.717	11719.761	0.01	-9.4	15.0
(5)	28445.628	26217.967	0.01	-7.8	15.0
4cmx	290204.15	286186.57	0.01	-1.4	15.0
Decachlorobiphenyl	243974.44	203414.98	0.01	-16.6	15.0

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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.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1803
 Lab File ID: 065F6501 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	13422.083	0.01	-7.1	15.0
(2)	18199.756	17824.847	0.01	-2.0	15.0
(3)	11983.312	11540.991	0.01	-3.7	15.0
(4)	7177.742	6939.889	0.01	-3.3	15.0
(5)	9259.441	8814.664	0.01	-4.8	15.0
Aroclor-1260	17718.759	17802.673	0.01	0.5	15.0
(2)	26928.394	27224.347	0.01	1.1	15.0
(3)	16186.368	16263.101	0.01	0.5	15.0
(4)	16907.951	17007.552	0.01	0.6	15.0
(5)	37665.571	38906.081	0.01	3.3	15.0
4cmx	392943.52	403098.25	0.01	2.6	15.0
Decachlorobiphenyl	329851.94	327708.15	0.01	-0.6	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1803
 Lab File ID: 065B6501 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	12682.664	0.01	-0.0	15.0
(2)	8798.138	8253.065	0.01	-6.2	15.0
(3)	5479.218	5129.364	0.01	-6.4	15.0
(4)	6997.244	6459.361	0.01	-7.7	15.0
(5)	6563.494	6055.132	0.01	-7.7	15.0
Aroclor-1260	13275.098	12316.980	0.01	-7.2	15.0
(2)	16157.966	15404.880	0.01	-4.7	15.0
(3)	12499.207	11781.771	0.01	-5.7	15.0
(4)	12928.717	12165.182	0.01	-5.9	15.0
(5)	28445.628	27262.586	0.01	-4.2	15.0
4cmx	290204.15	288691.65	0.01	-0.5	15.0
Decachlorobiphenyl	243974.44	165954.36	0.01	-32.0	15.0

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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.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1932
 Lab File ID: 072F7201 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	13362.241	0.01	-7.5	15.0
(2)	18199.756	17710.882	0.01	-2.7	15.0
(3)	11983.312	11479.428	0.01	-4.2	15.0
(4)	7177.742	6929.826	0.01	-3.4	15.0
(5)	9259.441	8839.454	0.01	-4.5	15.0
Aroclor-1260	17718.759	17781.257	0.01	0.4	15.0
(2)	26928.394	27166.151	0.01	0.9	15.0
(3)	16186.368	16223.230	0.01	0.2	15.0
(4)	16907.951	16977.708	0.01	0.4	15.0
(5)	37665.571	38840.356	0.01	3.1	15.0
4cmx	392943.52	400176.80	0.01	1.8	15.0
Decachlorobiphenyl	329851.94	323855.46	0.01	-1.8	15.0

FORM VII PEST

FORM 7
PESTICIDE CONTINUING CALIBRATION CHECK

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1287
 Instrument ID: ECD1A Calibration Date: 01/22/10 Time: 1932
 Lab File ID: 072B7201 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	12502.844	0.01	-1.4	15.0
(2)	8798.138	8200.377	0.01	-6.8	15.0
(3)	5479.218	5096.774	0.01	-7.0	15.0
(4)	6997.244	6425.112	0.01	-8.2	15.0
(5)	6563.494	6066.096	0.01	-7.6	15.0
Aroclor-1260	13275.098	12778.668	0.01	-3.7	15.0
(2)	16157.966	15722.500	0.01	-2.7	15.0
(3)	12499.207	12057.799	0.01	-3.5	15.0
(4)	12928.717	12495.065	0.01	-3.4	15.0
(5)	28445.628	28356.561	0.01	-0.3	15.0
4cmx	290204.15	289088.07	0.01	-0.4	15.0
Decachlorobiphenyl	243974.44	219061.58	0.01	-10.2	15.0

FORM VII PEST

Data File: /chem/ecdl1a.i/012210.b/003f0301.d
Report Date: 22-Jan-2010 10:49

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/003f0301.d
Lab Smp Id: WAR091216-54 Client Smp ID: AR125401
Inj Date : 22-JAN-2010 06:16
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091216-54
Misc Info :
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 22-Jan-2010 10:49 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: kilroy

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
==	=====	=====	RESPONSE (ug/L)	(ug/L)	=====	=====
6 Aroclor-1254 CAS #: 11097-69-1						
3.270	3.270	0.000	12685738 1000.00	1020 80.00- 120.00	100.00	
3.425	3.425	0.000	17374914 1000.00	1040 116.96- 156.96	136.96	
3.659	3.659	0.000	22847469 1000.00	1100 160.10- 200.10	180.10	
3.821	3.821	0.000	17424694 1000.00	1110 117.36- 157.36	137.36	
3.931	3.931	0.000	16498579 1000.00	1090 110.06- 150.06	130.06	
Average of Peak Amounts =			1.07e+03			

Data File: /chem/ecda.i/012210.b/003f0301.d
Date : 22-JAN-2010 06:16
Client ID: AR125401
Sample Info: 1MAR091216-54

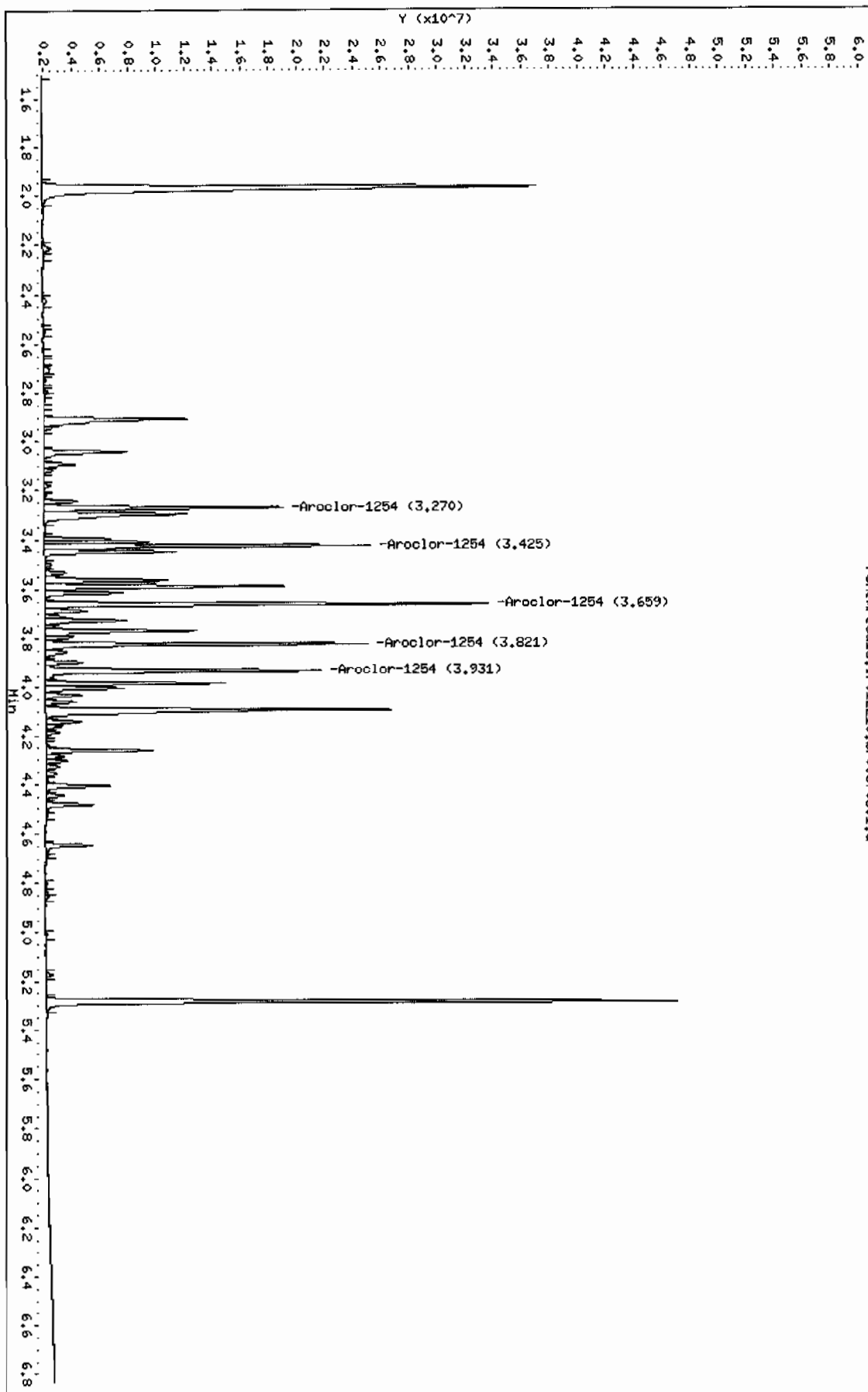
Instrument: ecda.i

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Column phase: CLP1

Operator: YS1
Column diameter: 0.25

/chem/ecda.i/012210.b/003f0301.d



Data File: /chem/ecdl1a.i/012210.b/003b0301.d
Report Date: 22-Jan-2010 10:49

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/003b0301.d

Lab Smp Id: WAR091216-54

Client Smp ID: AR125401

Inj Date : 22-JAN-2010 06:16

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091216-54

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012210.b/ECD1-B-8082-121409.m

Meth Date : 22-Jan-2010 10:49 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

Processing Host: kilroy

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			
3.406	3.403	0.003	5974221 1000.00	928	80.00- 120.00	100.00
3.828	3.825	0.003	10523195 1000.00	910	156.14- 196.14	176.14
3.945	3.941	0.004	11951498 1000.00	961	180.05- 220.05	200.05
4.221	4.217	0.004	16776207 1000.00	994	260.81- 300.81	280.81
4.357	4.354	0.003	12578249 1000.00	1010	190.54- 230.54	210.54

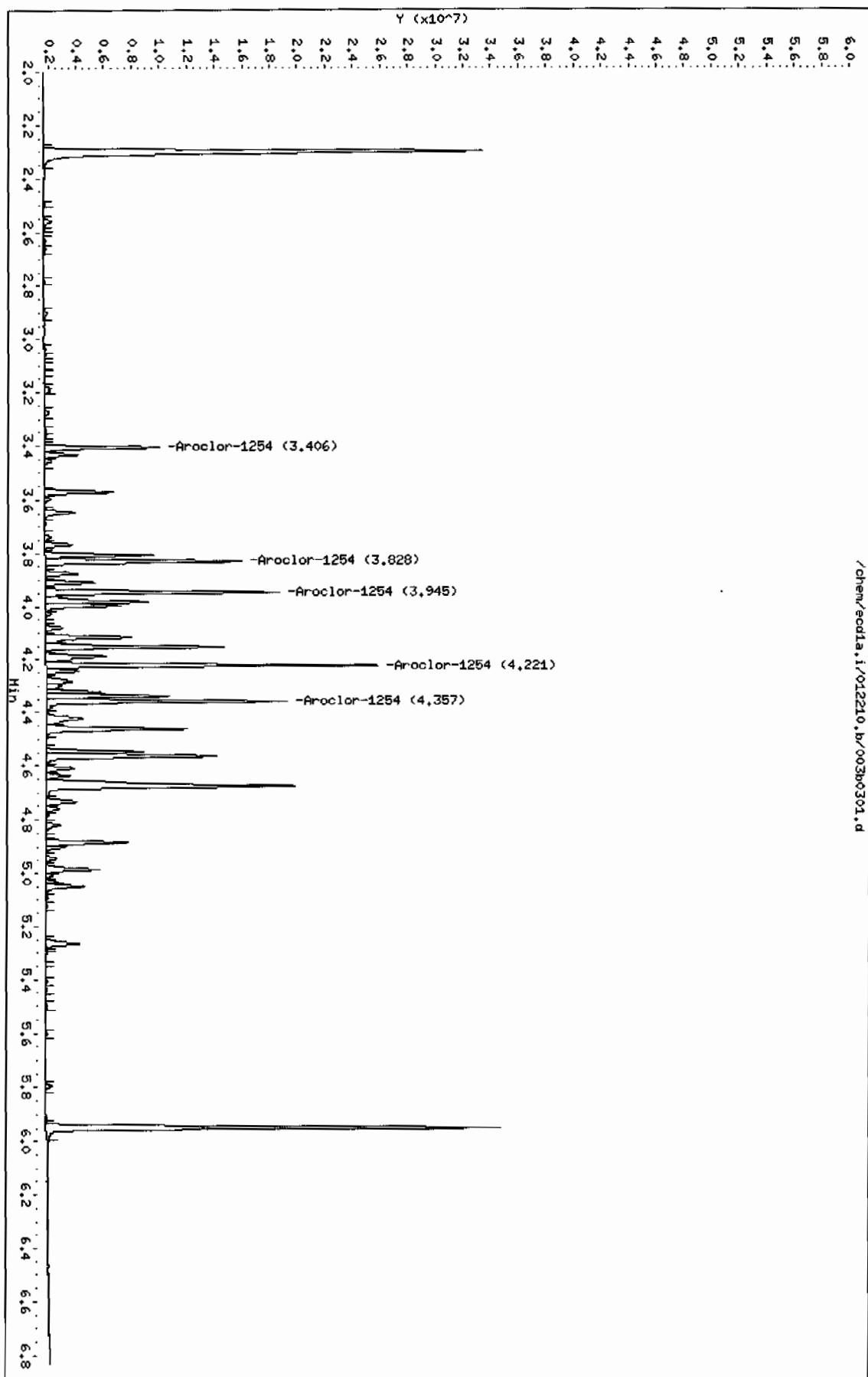
Average of Peak Amounts = 961

Data File: /chem/ecda.i/012210.b/003b0301.d
Date : 22-JAN-2010 06:16
Client ID: AR125401
Sample Info: 1MAR091216-04

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Column phase: CLP2

Instrument: ecda.i
Operator: YSL
Column diameter: 0.25



Data File: /chem/ecdl1a.i/012210.b/004f0401.d
 Report Date: 22-Jan-2010 10:49

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/004f0401.d

Lab Smp Id: WAR091217-42

Client Smp ID: AR124201

Inj Date : 22-JAN-2010 06:27

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091217-42

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m

Meth Date : 22-Jan-2010 10:49 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: kilroy

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	
2.423	2.423	0.000	11171076 1000.00	958	80.00- 120.00	100.00
2.711	2.711	0.000	14288314 1000.00	1060	107.90- 147.90	127.90
2.830	2.830	0.000	5607766 1000.00	1020	30.20- 70.20	50.20
3.040	3.040	0.000	7233165 1000.00	998	44.75- 84.75	64.75
3.294	3.294	0.000	7331777 1000.00	1080	45.63- 85.63	65.63

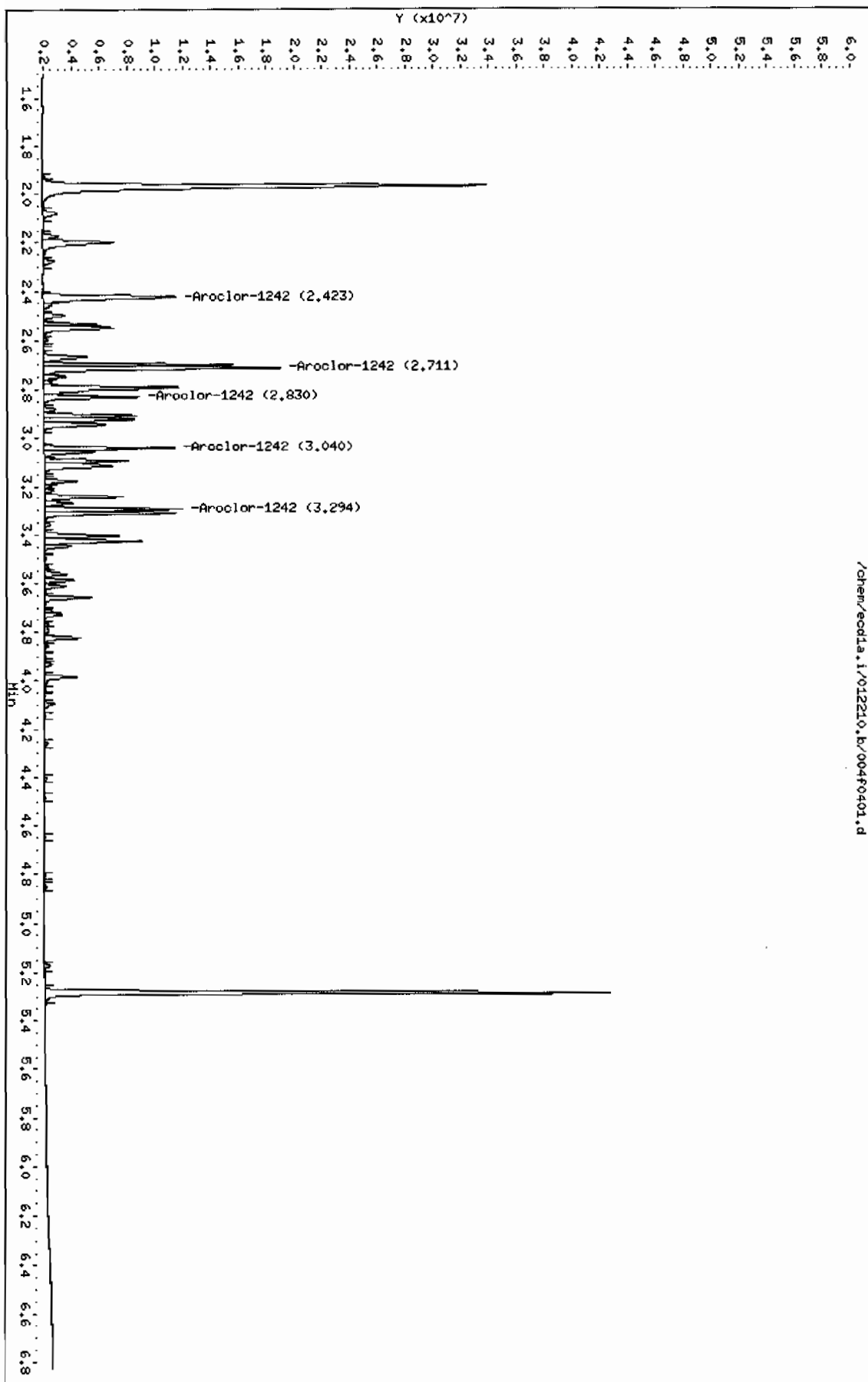
Average of Peak Amounts = 1.02e+03

Data File: /chem/eodla,i/012210,b/004f0401.d
Date : 22-JAN-2010 06:27
Client ID: AR124201
Sample Info: 1MAR091217-42

Column phase: CLP1

Instrument: eodla.i
Operator: YSL
Column diameter: 0.25

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Data File: /chem/ecdla.i/012210.b/004b0401.d
Report Date: 22-Jan-2010 10:49

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/004b0401.d
Lab Smp Id: WAR091217-42 Client Smp ID: AR124201
Inj Date : 22-JAN-2010 06:27
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR091217-42
Misc Info :
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 22-Jan-2010 10:49 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
Processing Host: kilroy

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
4	3.195	0.002	10142729	958	80.00- 120.00	100.00
3.279	3.278	0.001	6820957	847	47.25- 87.25	67.25
3.571	3.568	0.003	5573742	935	34.95- 74.95	54.95
3.804	3.802	0.002	5738851	948	36.58- 76.58	56.58
3.833	3.830	0.003	6388482	953	42.99- 82.99	62.99
Average of Peak Amounts =				928		

Data File: /chem/ecdt1a.i/012210.b/004b0401.d

Date: 22-JAN-2010 06:27

Client ID: AR124201

Sample Info: 1MAR091217-42

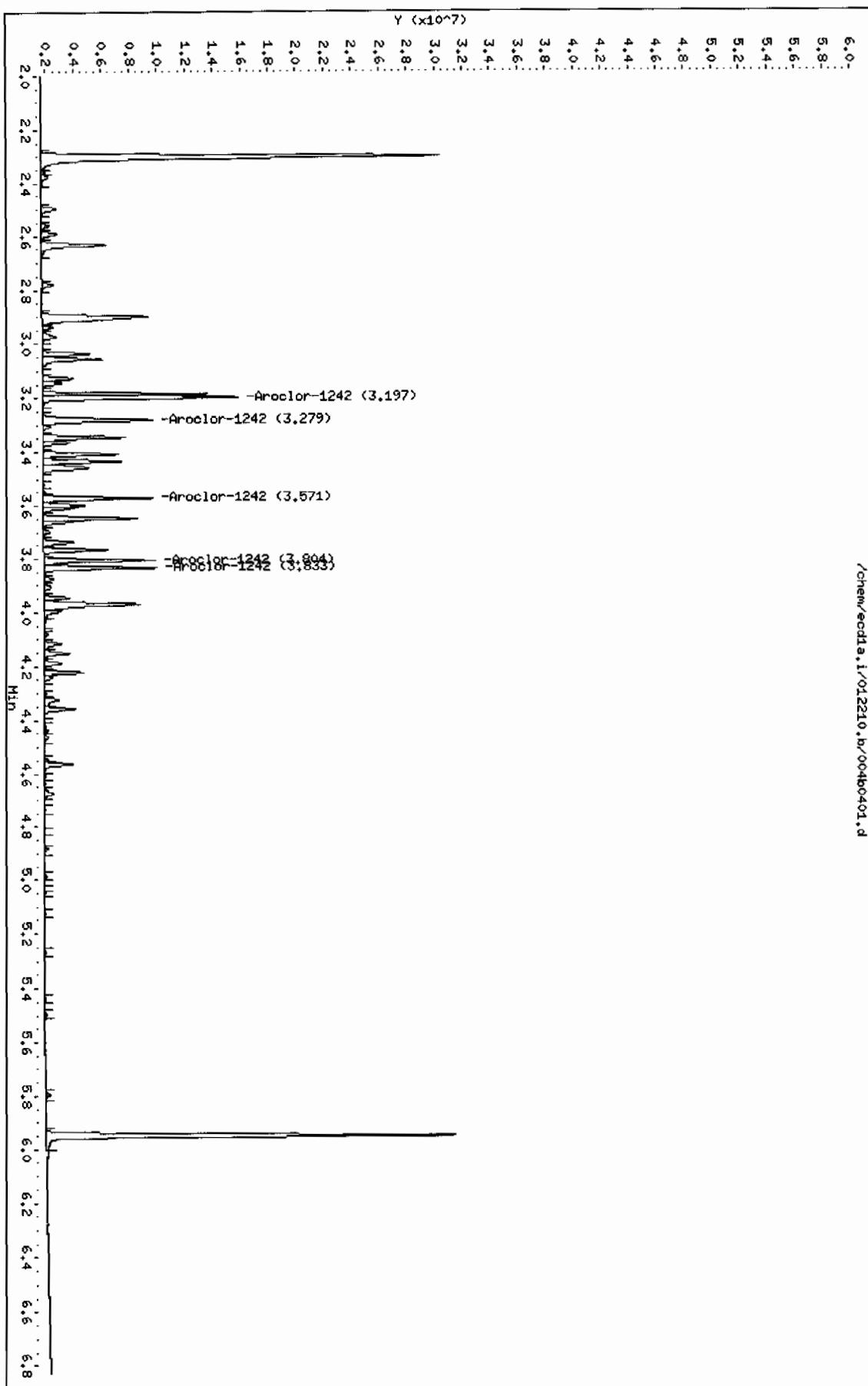
Column phase: CLP2

Instrument: ecdt1a.i

Operator: VSI

Column diameter: 0.25

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Data File: /chem/ecdl1a.i/012210.b/005f0501.d
Report Date: 22-Jan-2010 10:49

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/005f0501.d

Lab Smp Id: WAR091217-48

Client Smp ID: AR124801

Inj Date : 22-JAN-2010 06:37

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR091217-48

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m

Meth Date : 22-Jan-2010 10:49 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: kilroy

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	
3.091	3.091	0.000	8157286 1000.00	1040	80.00- 120.00	100.00
3.242	3.242	0.000	7109584 1000.00	1030	67.16- 107.16	87.16
3.294	3.294	0.000	13970810 1000.00	1050	151.27- 191.27	171.27
3.426	3.426	0.000	11186428 1000.00	1020	117.13- 157.13	137.13
3.658	3.658	0.000	7129388 1000.00	956	67.40- 107.40	87.40
Average of Peak Amounts =			1.02e+03			

Data File: /chem/ecdl1a.i/012210.b/005f0501.d

Date: 22-JAN-2010 06:37

Client ID: AR124801

Sample Info: MAR091217-48

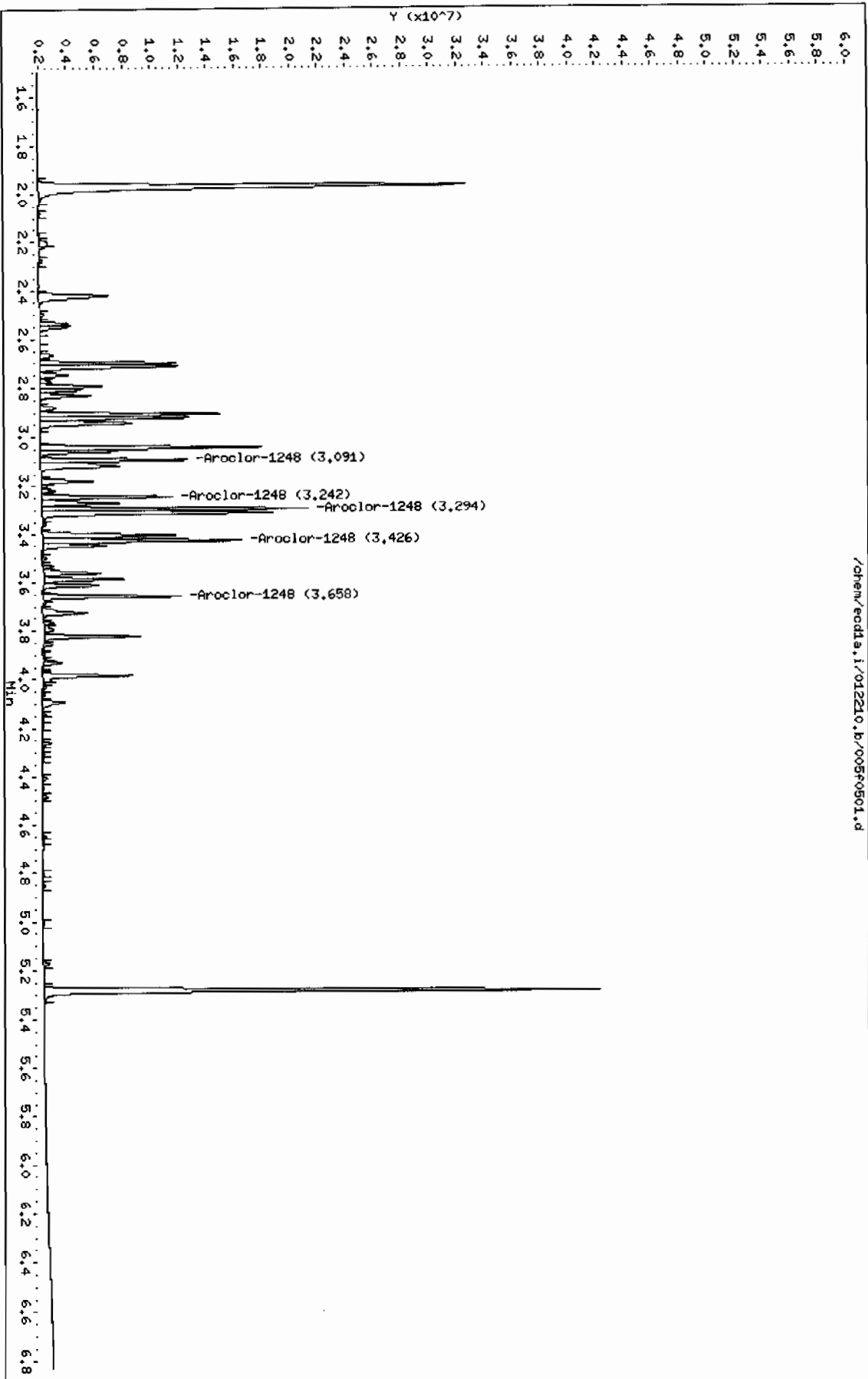
Column Phase: CLP1

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Instrument: ecdl1a.i

Operator: YS1

Column diameter: 0.25



Data File: /chem/ecdla.i/012210.b/005b0501.d
Report Date: 22-Jan-2010 10:49

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/005b0501.d
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801
Inj Date : 22-JAN-2010 06:37
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR091217-48
Misc Info :
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 22-Jan-2010 10:49 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
Processing Host: kilroy

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
3.405	3.403	0.002	7361014	1000.00	914 80.00- 120.00	100.00
3.571	3.568	0.003	9218661	1000.00	934 105.24- 145.24	125.24
3.804	3.802	0.002	10611367	1000.00	946 124.16- 164.16	144.16
3.831	3.829	0.002	11780822	1000.00	944 140.04- 180.04	160.04
3.968	3.967	0.001	11368244	1000.00	939 134.44- 174.44	154.44
Average of Peak Amounts =				935		

Data File: /chem/ecda.i/012210.b/005b0501.d

Date: 22-JAN-2010 06:37

Client ID: AR124801

Sample Info: 1MAR091217-48

Column phase: CLP2

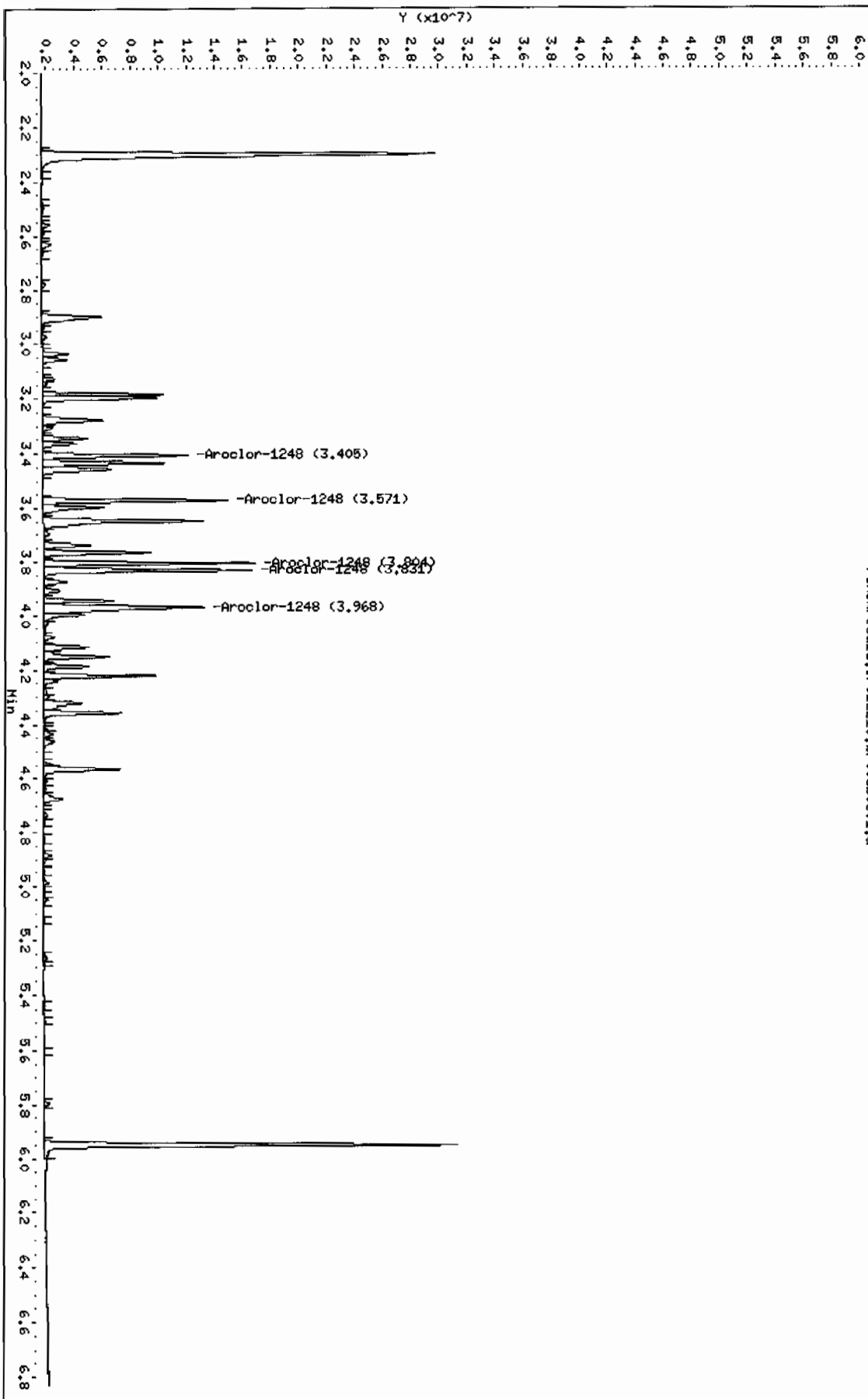
Instrument: ecda.i

Operator: YSL

Column diameter: 0.25

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/chem/ecda.i/012210.b/005b0501.d



Data File: /chem/ecdl1a.i/012210.b/011f1101.d
Report Date: 22-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/011f1101.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 22-JAN-2010 07:40
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 22-Jan-2010 10:50 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

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	
2.424	2.424	0.000	6334414 1000.00	925	80.00- 120.00	100.00
2.712	2.712	0.000	8223516 1000.00	976	109.82- 149.82	129.82
2.792	2.792	0.000	5405597 1000.00	961	65.34- 105.34	85.34
3.041	3.041	0.000	3973758 1000.00	998	42.73- 82.73	62.73
3.295	3.295	0.000	3761296 1000.00	975	39.38- 79.38	59.38
Average of Peak Amounts =				967		

Data File: /chem/eodla.i/012210.b/01f1101.d

Date : 22-JAN-2010 07:40

Client ID: AR123201

Sample Info: 1MAR100104-32

Column phase: CLP1

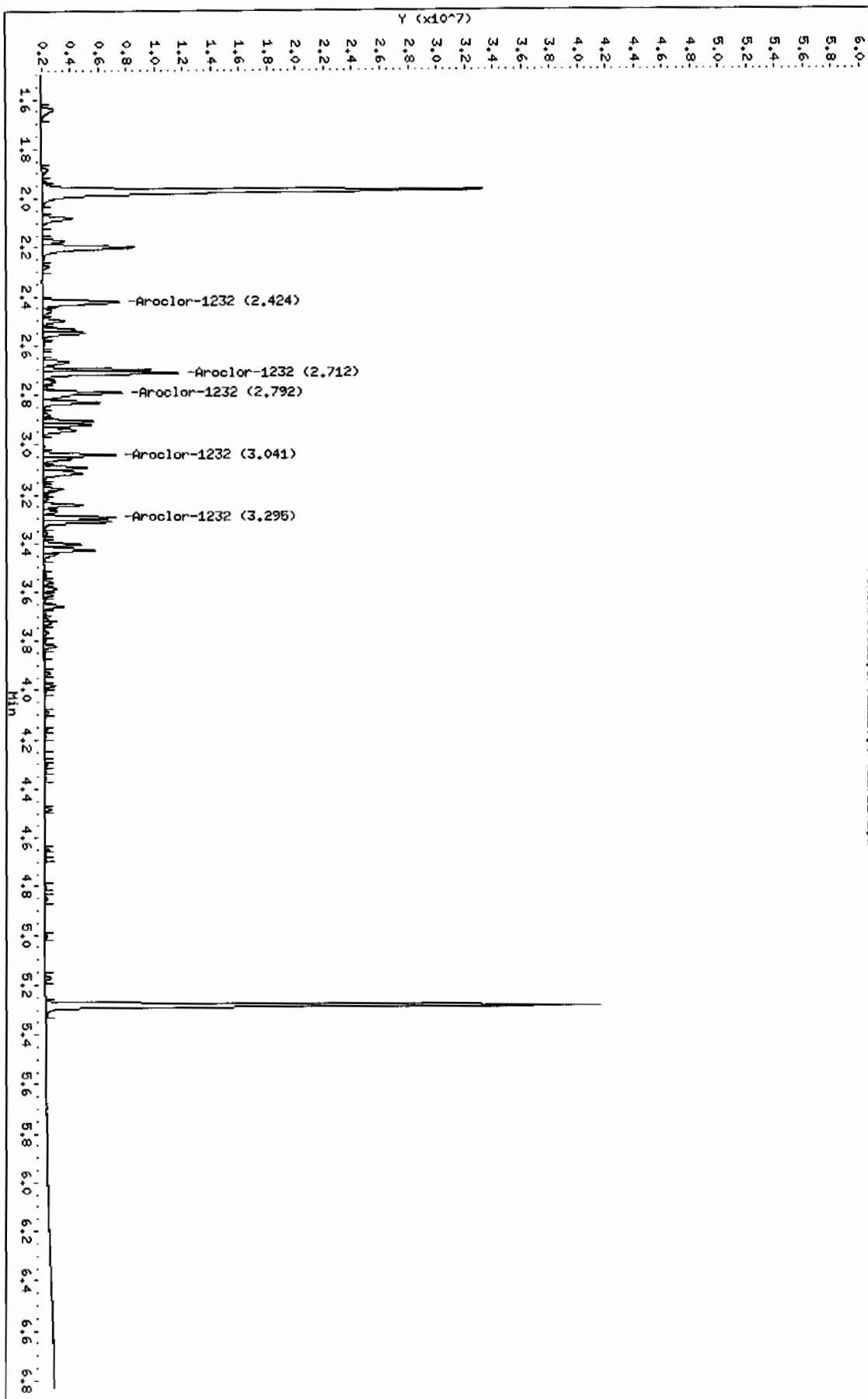
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Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/012210.b/01f1101.d



Data File: /chem/ecdla.i/012210.b/011b1101.d
Report Date: 22-Jan-2010 10:50

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/011b1101.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 22-JAN-2010 07:40
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 22-Jan-2010 10:50 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

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	
2.899	2.899	0.000	5239418 1000.00	889	80.00- 120.00	100.00
3.197	3.197	0.000	5831838 1000.00	937	91.31- 131.31	111.31
3.280	3.280	0.000	4009044 1000.00	923	56.52- 96.52	76.52
3.570	3.570	0.000	2988352 1000.00	960	37.04- 77.04	57.04
3.805	3.805	0.000	2982139 1000.00	934	36.92- 76.92	56.92
Average of Peak Amounts =				929		

Data File: /chem/ecdl1a.i/012210.b/01b1101.d

Date : 22-JAN-2010 07:40

Client ID: ARI23201

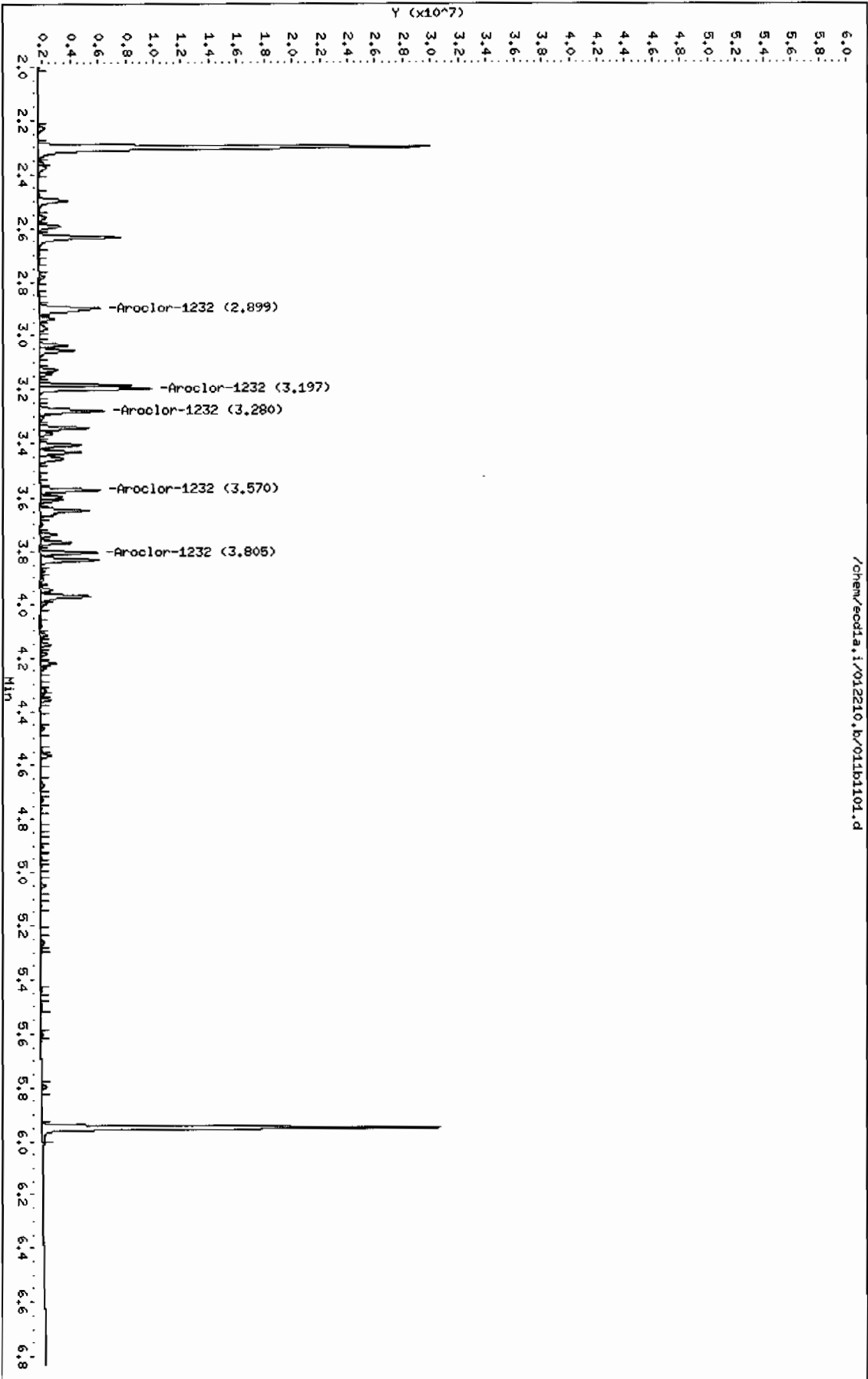
Sample Info: 1MAR100104-32

Column phase: CLP2

Instrument: ecdl1a.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdl1a.i/012210.b/012f1201.d
Report Date: 22-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/012f1201.d

Lab Smp Id: WAR100104-21

Client Smp ID: AR122101

Inj Date : 22-JAN-2010 07:51

Operator : YS1

Inst ID: ecd1a.i

Smp Info : |WAR100104-21

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m

Meth Date : 22-Jan-2010 10:51 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 12

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1221.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: kilroy

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2.081	2.081	0.000	4419201 1000.00	1030 80.00- 120.00	100.00	
2.174	2.174	0.000	2486703 1000.00	1020 36.27- 76.27	56.27	
2.200	2.200	0.000	10567195 1000.00	1030 219.12- 259.12	239.12	
Average of Peak Amounts =			1.03e+03			

Data File: /chem/ecdl.a.i/012210.b/012F1201.d

Date : 22-JAN-2010 07:51

Client ID: AR122101

Sample Info: IMR100104-21

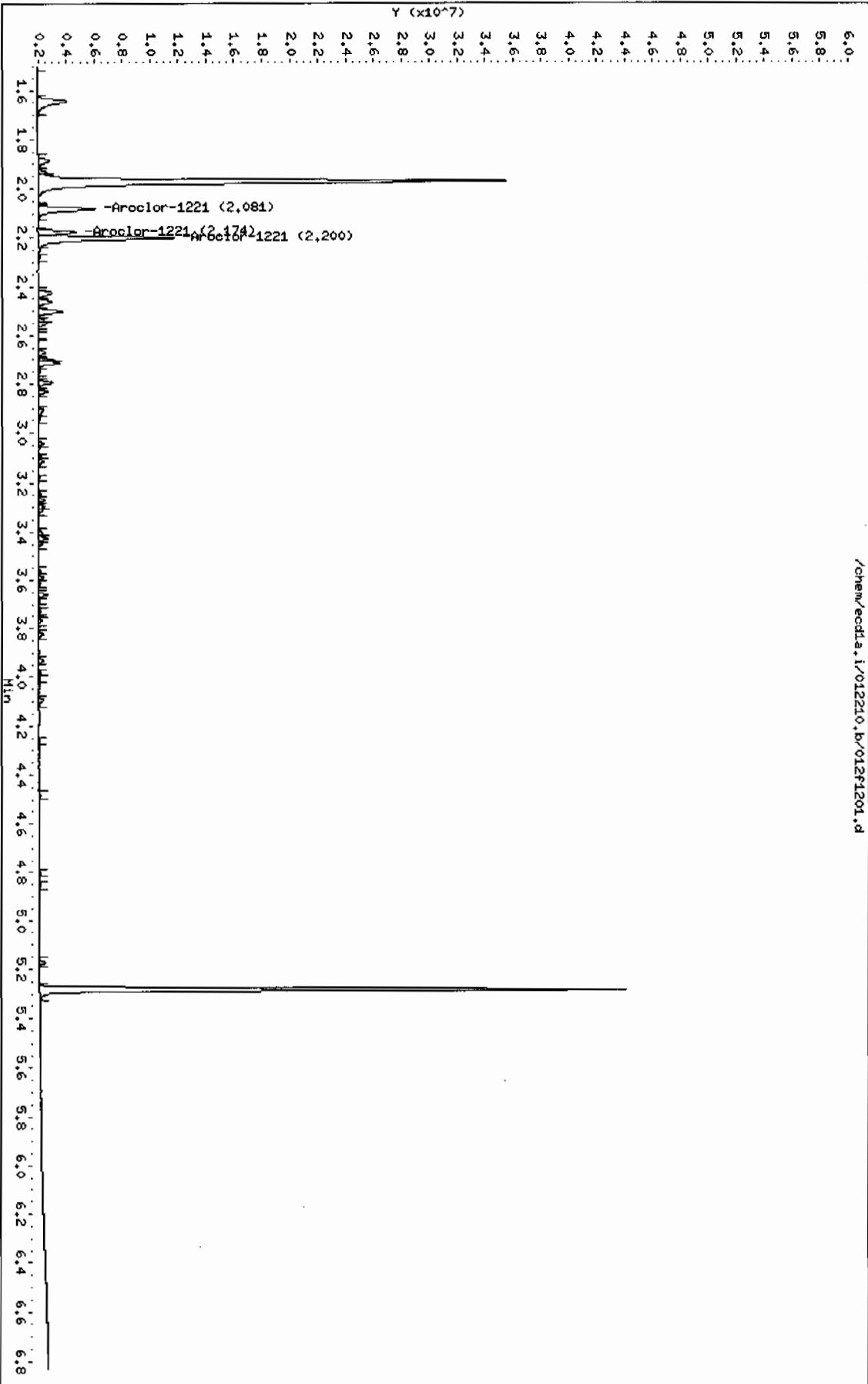
Column phase: CLP1

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Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25



Data File: /chem/ecdla.i/012210.b/012b1201.d
Report Date: 22-Jan-2010 10:51

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/012b1201.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 22-JAN-2010 07:51
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 22-Jan-2010 10:51 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: kilroy

AMOUNTS

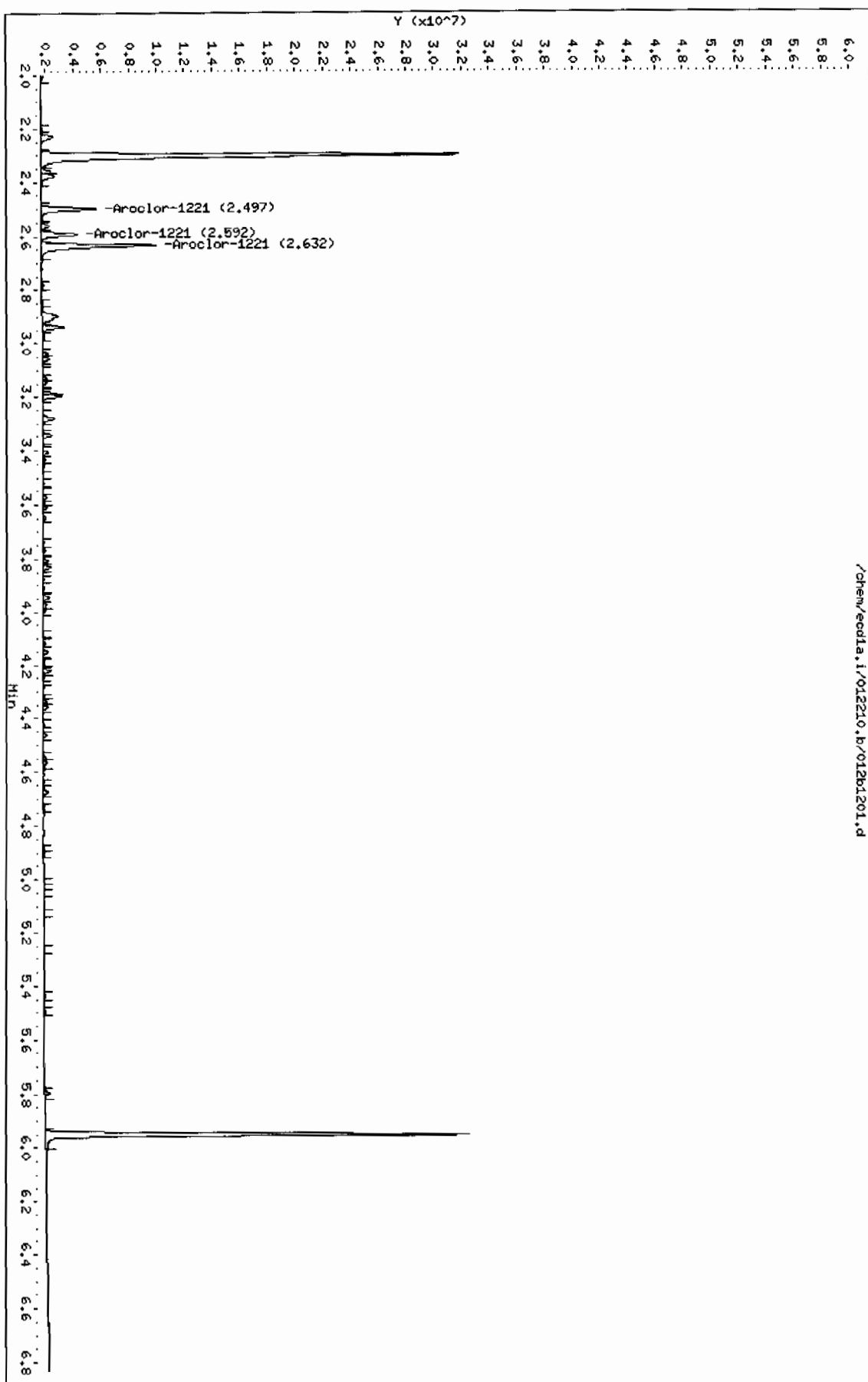
RT	EXP RT	DLT RT	RESPONSE (ug/L)	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
2	2.497	2.497	3461803	1000.00	951	80.00- 120.00	100.00
2.592	2.592	0.000	2226509	1000.00	956	44.32- 84.32	64.32
2.632	2.632	0.000	7714702	1000.00	950	202.85- 242.85	222.85
Average of Peak Amounts =				952			

Data File: /chem/ecda.i/012210.b/012b1201.d
Date: 22-JAN-2010 07:51
Client ID: AR122101
Sample Info: 1MR100104-21

Column phase: CLP2

Instrument: ecda.i
Operator: YS1
Column diameter: 0.25

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Data File: /chem/ecdla.i/012210.b/024f2401.d
 Report Date: 22-Jan-2010 11:03

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/024f2401.d
 Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001
 Inj Date : 22-JAN-2010 10:01
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100104-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
 Meth Date : 22-Jan-2010 11:00 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 24 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: kilroy

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	39141816 100.000	99.6	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.281	5.281	0.000	32229541 100.000	97.7	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
2.422	2.422	0.000	13423961 1000.00	929	80.00- 120.00	100.00	
2.711	2.711	0.000	17572663 1000.00	966	118.32- 158.32	130.91	
2.792	2.792	0.000	11183272 1000.00	933	67.45- 107.45	83.31	
2.830	2.830	0.000	6767612 1000.00	943	33.88- 73.88	50.41	
3.041	3.041	0.000	8690610 1000.00	938	48.01- 88.01	64.74	
Average of Peak Amounts =				942			

7 Aroclor-1260				CAS #: 11096-82-5			
3.766	3.766	0.000	17216636 1000.00	972	80.00- 120.00	100.00 (M)	
3.929	3.929	0.000	26474572 1000.00	983	133.39- 173.39	153.77	
4.159	4.159	0.000	15676090 1000.00	968	72.92- 112.92	91.05	
4.302	4.302	0.000	16450654 1000.00	973	78.19- 118.19	95.55	
4.481	4.481	0.000	37479866 1000.00	995	201.20- 241.20	217.70	
Average of Peak Amounts =				978			

Data File: /chem/ecdla.i/012210.b/024f2401.d
Report Date: 22-Jan-2010 11:03

Page 2

QC Flag Legend

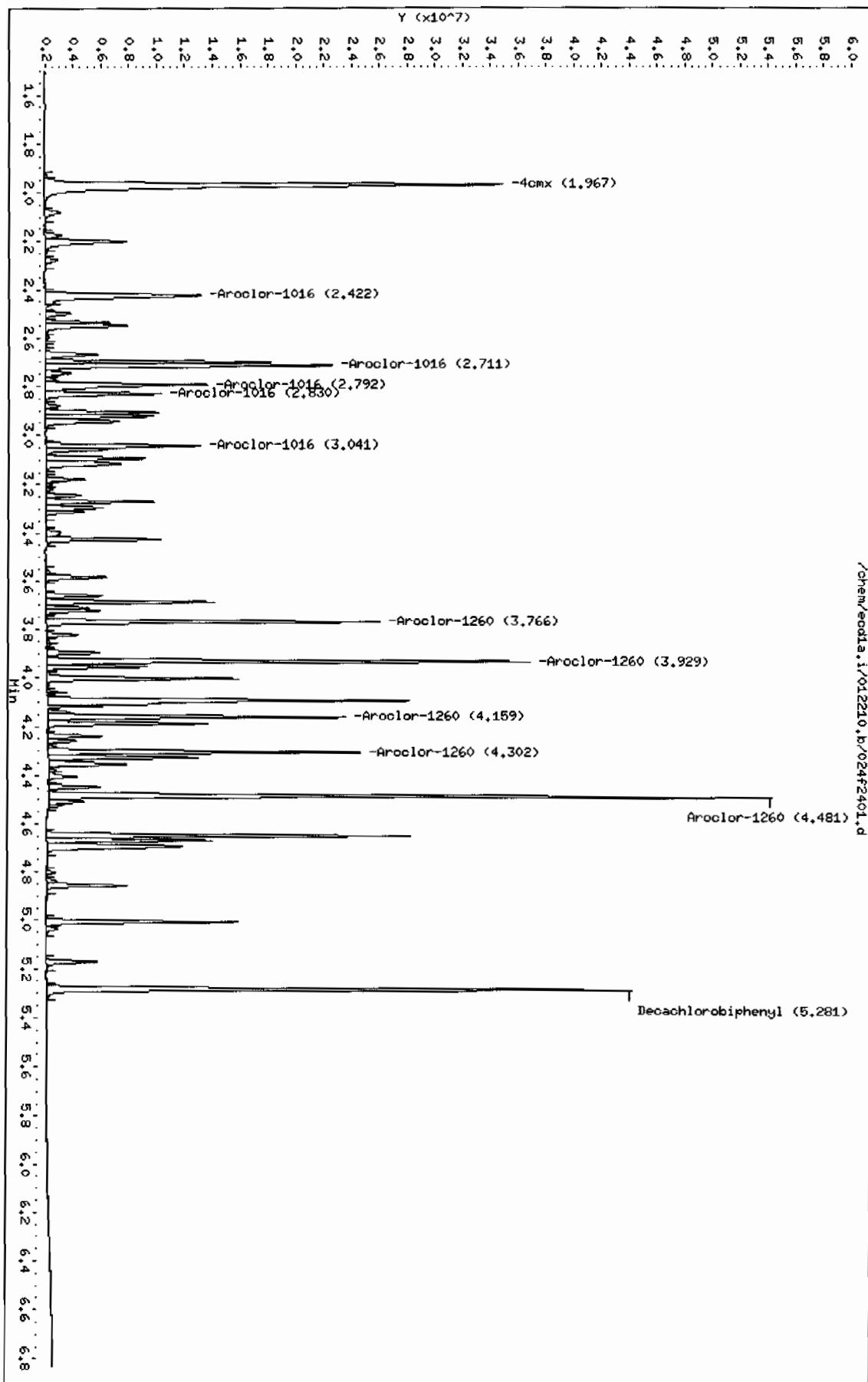
M - Compound response manually integrated.

Data File: /chem/ecda.i/012210.b/024f2401.d
Date: 22-JAN-2010 10:01
Client ID: AR166001
Sample Info: MAR100104-60 01

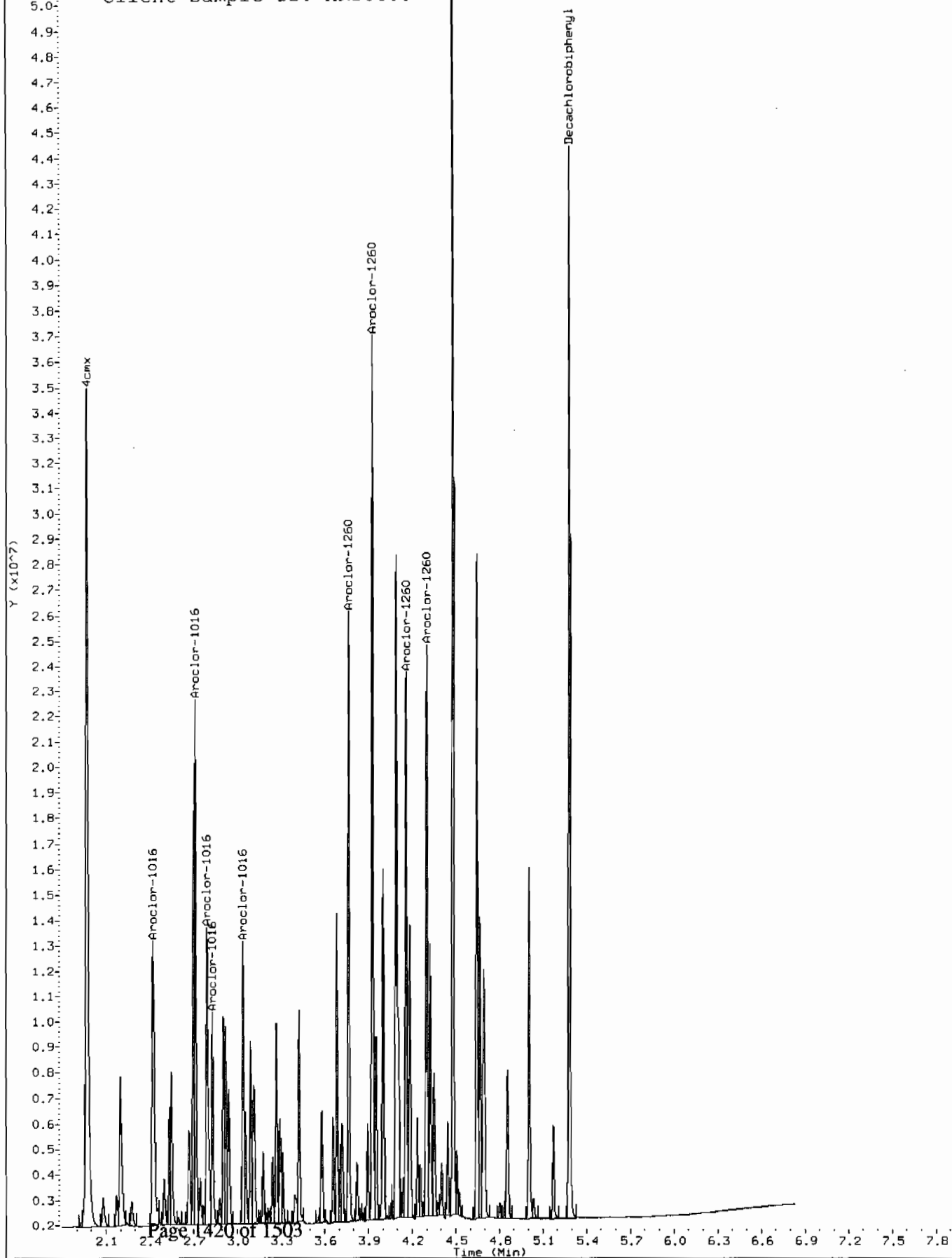
Column Phase: CLP1

Instrument: ecda.i
Operator: YSL
Column diameter: 0.25

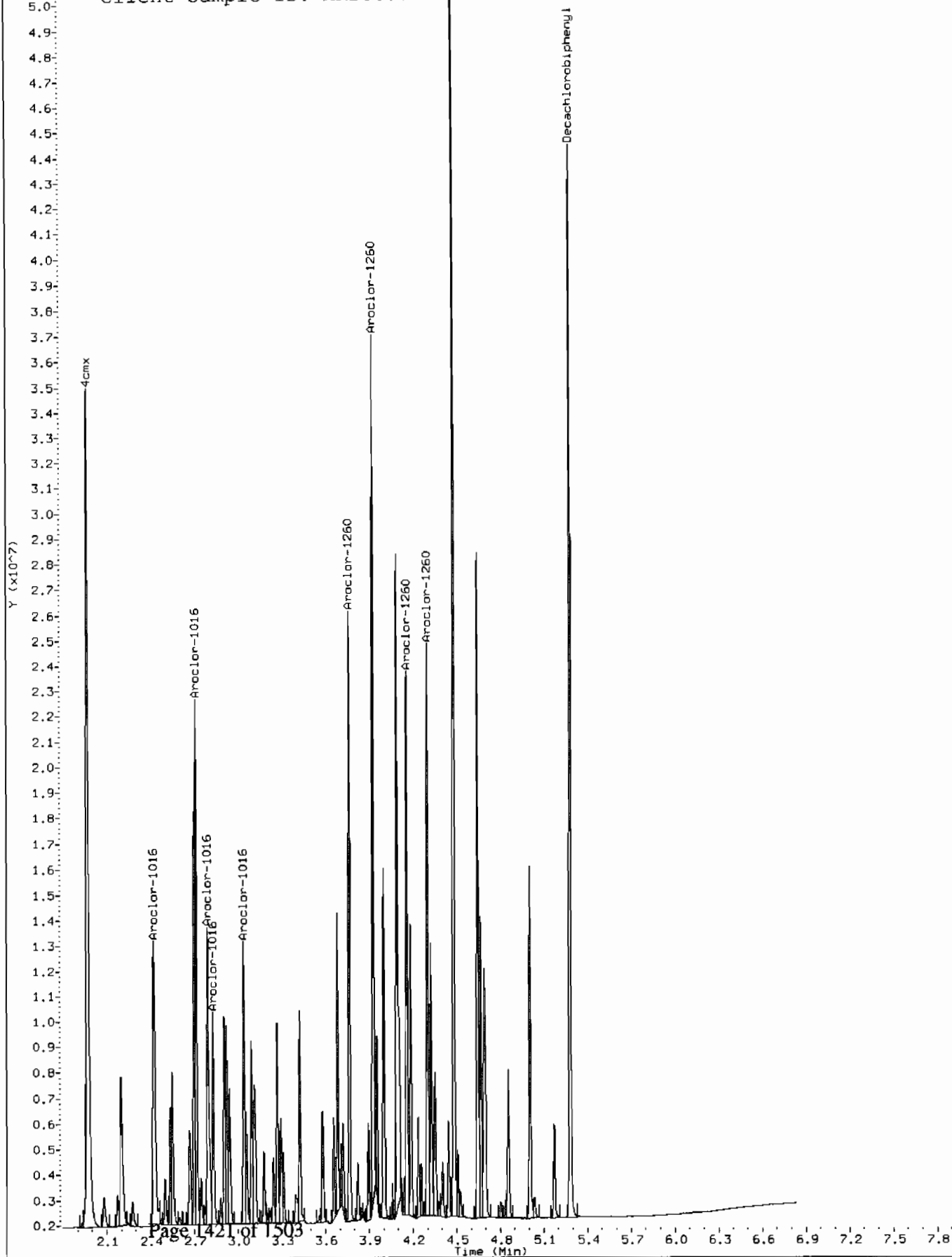
Page 1



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012210.b/024f2401.d
Operator: YS1
Injection Date: 22-JAN-2010 10:01
Instrument: ecd1a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdla.i/012210.b/orig-024f2401.d
Operator: YS1
Injection Date: 22-JAN-2010 10:01
Instrument: ecdla.i
Client Sample ID: AR166001



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/024b2401.d
 Lab Smp Id: WAR100104-60 01 Client Smp ID: AR166001
 Inj Date : 22-JAN-2010 10:01
 Operator : YSl Inst ID: ecd1a.i
 Smp Info : |WAR100104-60 01
 Misc Info :
 Comment :
 Method : /chem/ecdl1a.i/012210.b/ECD1-B-8082-121409.m
 Meth Date : 22-Jan-2010 10:53 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 24 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: kilroy

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	28254272	100.000	97.4	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.947	5.947	0.000	23213813	100.000	95.1	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2			
3.196	3.196	0.000	12155075	1000.00	958	80.00- 120.00	100.00 (M)
3.280	3.280	0.000	8042569	1000.00	914	46.17- 86.17	66.17
3.343	3.343	0.000	4985923	1000.00	910	21.02- 61.02	41.02
3.570	3.570	0.000	6316927	1000.00	903	31.97- 71.97	51.97
3.646	3.646	0.000	5936669	1000.00	904	28.84- 68.84	48.84
Average of Peak Amounts =				918			

7 Aroclor-1260				CAS #: 11096-82-5			
4.336	4.336	0.000	12548443	1000.00	945	80.00- 120.00	100.00
4.461	4.461	0.000	15408233	1000.00	954	102.79- 142.79	122.79
4.727	4.727	0.000	11753882	1000.00	940	73.67- 113.67	93.67
4.901	4.901	0.000	12209834	1000.00	944	77.30- 117.30	97.30
5.048	5.048	0.000	27606323	1000.00	970	200.00- 240.00	220.00
Average of Peak Amounts =				951			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1a.i/012210.b/024b2401.d

Date : 22-JAN-2010 10:01

Client ID: AR166001

Sample Info: IMR100104-60 01

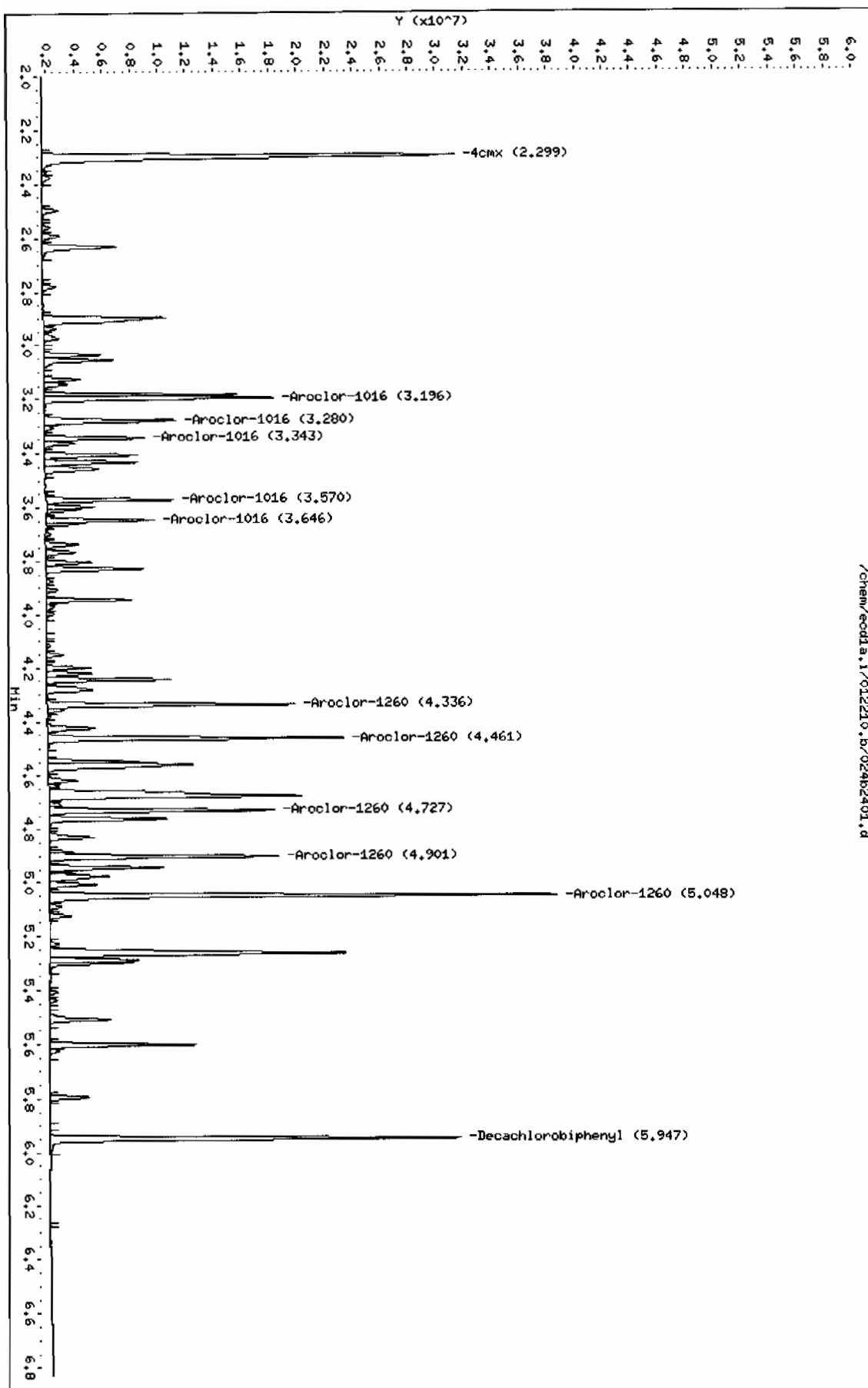
Column phase: CLP2

Instrument: ecdl1a.i

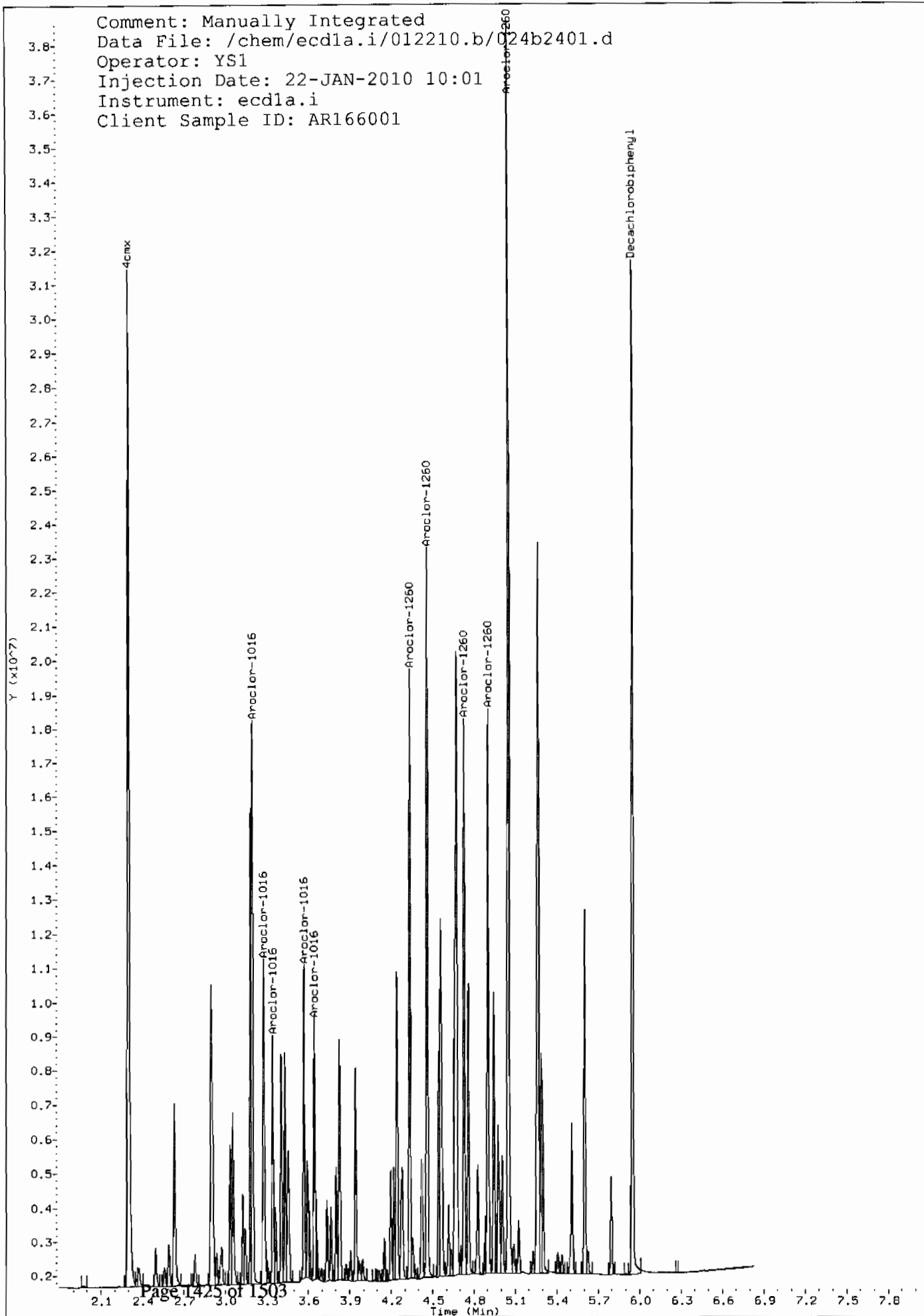
Operator: YS1

Column diameter: 0.25

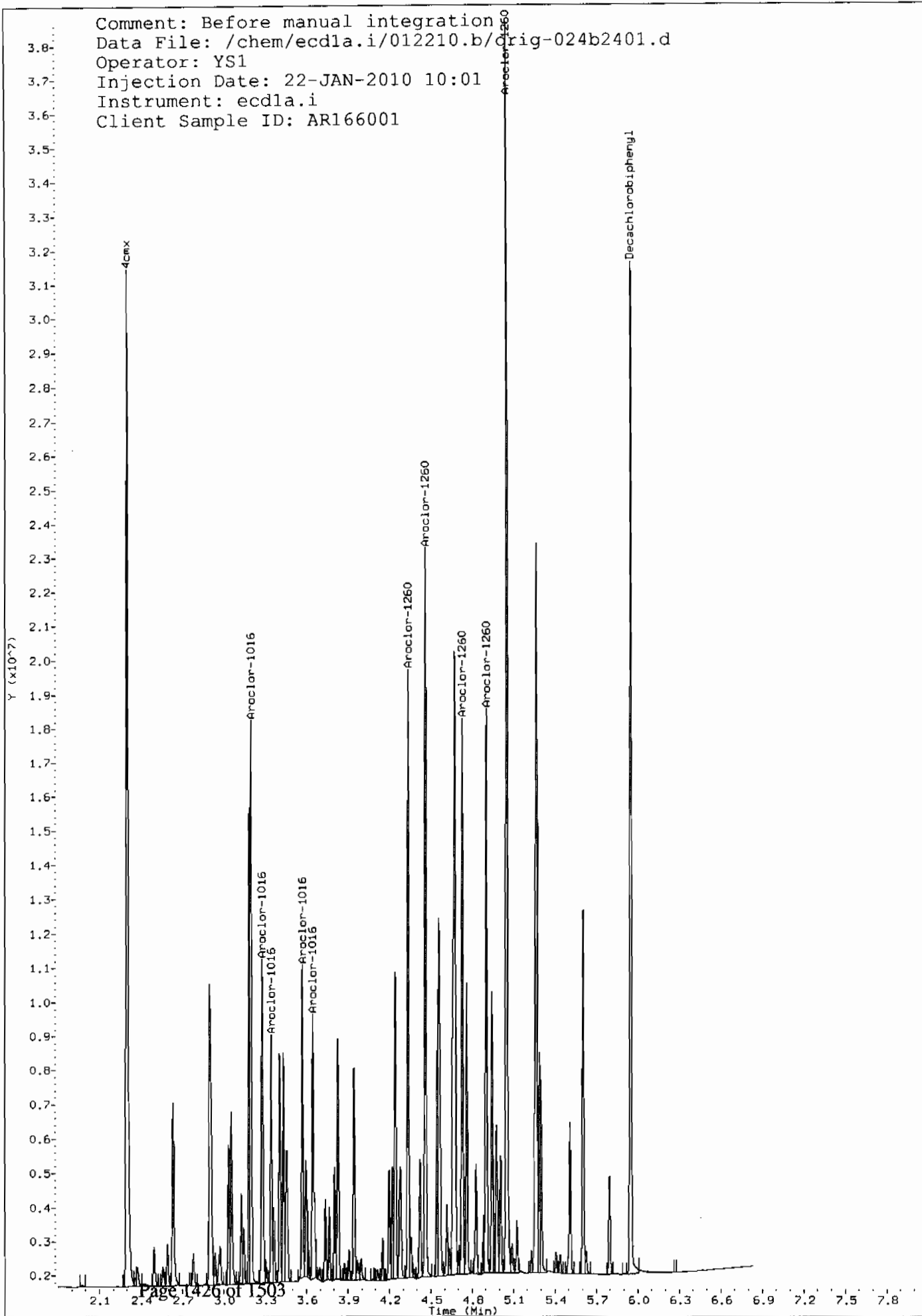
Page 1



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012210.b/024b2401.d
Operator: YS1
Injection Date: 22-JAN-2010 10:01
Instrument: ecd1a.i
Client Sample ID: AR166001



Comment: Before manual integration
Data File: /chem/ecdl1.i/012210.b/orig-024b2401.d
Operator: YS1
Injection Date: 22-JAN-2010 10:01
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/012210.b/041f4101.d

Lab Smp Id: WAR100104-60 03

Client Smp ID: AR166003

Inj Date : 22-JAN-2010 13:10

Operator : YSl

Inst ID: ecdla.i

Smp Info : |WAR100104-60 03

Misc Info :

Comment :

Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:25 yip00818

Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 41

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			
1.969	1.967	0.002	40629359 100.000	103	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.282	5.281	0.001	26695032 100.000	80.9	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
2.424	2.422	0.002	13501572 1000.00	934	80.00- 120.00	100.00	
2.713	2.711	0.002	17773752 1000.00	976	112.54- 152.54	131.64	
2.793	2.792	0.001	11586695 1000.00	967	65.91- 105.91	85.82	
2.831	2.830	0.001	6957915 1000.00	969	31.86- 71.86	51.53	
3.041	3.041	0.000	8740414 1000.00	944	46.15- 86.15	64.74	
Average of Peak Amounts =				958			

7 Aroclor-1260				CAS #: 11096-82-5			
3.768	3.766	0.002	16982070 1000.00	958	80.00- 120.00	100.00	
3.931	3.929	0.002	25515239 1000.00	948	132.78- 172.78	150.25	
4.161	4.159	0.002	15422643 1000.00	953	71.24- 111.24	90.82	
4.304	4.302	0.002	15634190 1000.00	925	75.48- 115.48	92.06	
4.483	4.481	0.002	36172855 1000.00	960	198.43- 238.43	213.01	
Average of Peak Amounts =				949			

Data File: /chem/ecdl.a.i/012210.b/041f4101.d

Date: 22-JAN-2010 13:10

Client ID: AR166003

Sample Info: 14MR100104-60 03

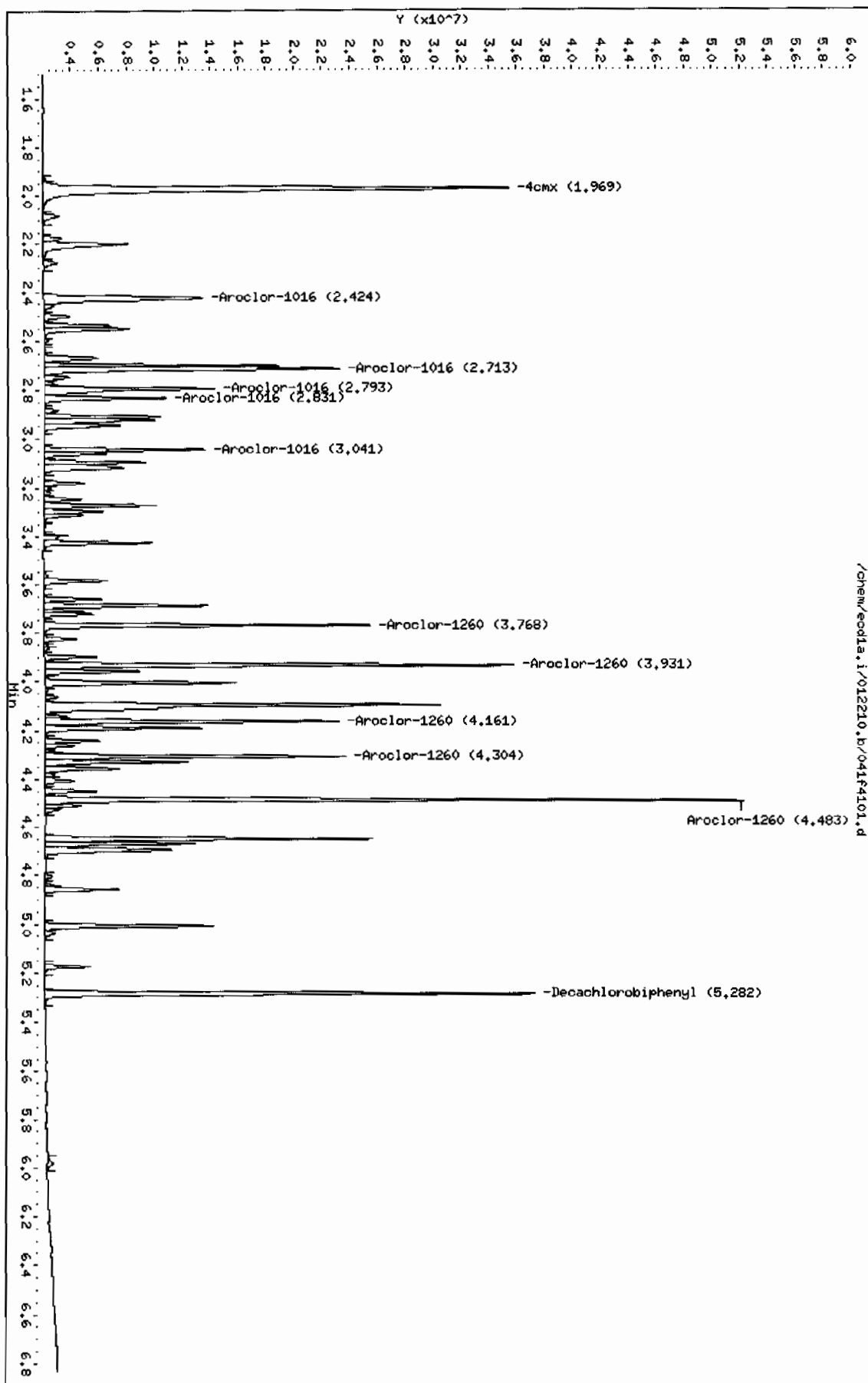
Column Phase: CLP1

Instrument: ecdl.a.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdla.i/012210.b/041b4101.d
Report Date: 25-Jan-2010 11:24

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/041b4101.d
Lab Smp Id: WAR100104-60 03 Client Smp ID: AR166003
Inj Date : 22-JAN-2010 13:10
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100104-60 03
Misc Info :
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 41 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
<hr/>						
\$ 11 4cmx				CAS #: 877-09-8		
2.301	2.299	0.002	28383455 100.000	97.8	80.00- 120.00	100.00
<hr/>						
\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.949	5.947	0.002	20166395 100.000	82.6	80.00- 120.00	100.00
<hr/>						
1 Aroclor-1016				CAS #: 12674-11-2		
3.198	3.196	0.002	12101121 1000.00	954	80.00- 120.00	100.00
3.281	3.280	0.001	8017714 1000.00	911	46.75- 86.75	66.26
3.345	3.343	0.002	5008292 1000.00	914	21.57- 61.57	41.39
3.571	3.570	0.001	6416765 1000.00	917	33.85- 73.85	53.03
3.647	3.646	0.001	5943051 1000.00	905	30.13- 70.13	49.11
Average of Peak Amounts =				920		
<hr/>						
7 Aroclor-1260				CAS #: 11096-82-5		
4.338	4.336	0.002	11615753 1000.00	875	80.00- 120.00	100.00
4.463	4.461	0.002	14604659 1000.00	904	104.88- 144.88	125.73
4.729	4.727	0.002	10888842 1000.00	871	74.00- 114.00	93.74
4.903	4.901	0.002	11184301 1000.00	865	77.33- 117.33	96.29
5.050	5.048	0.002	25032235 1000.00	880	199.41- 239.41	215.50
Average of Peak Amounts =				879		

Data File: /chem/eodt.a.i/012210.b/041b4101.d

Date : 22-JAN-2010 13:10

Client ID: AR166003

Sample Info: |MAR100104-60 03

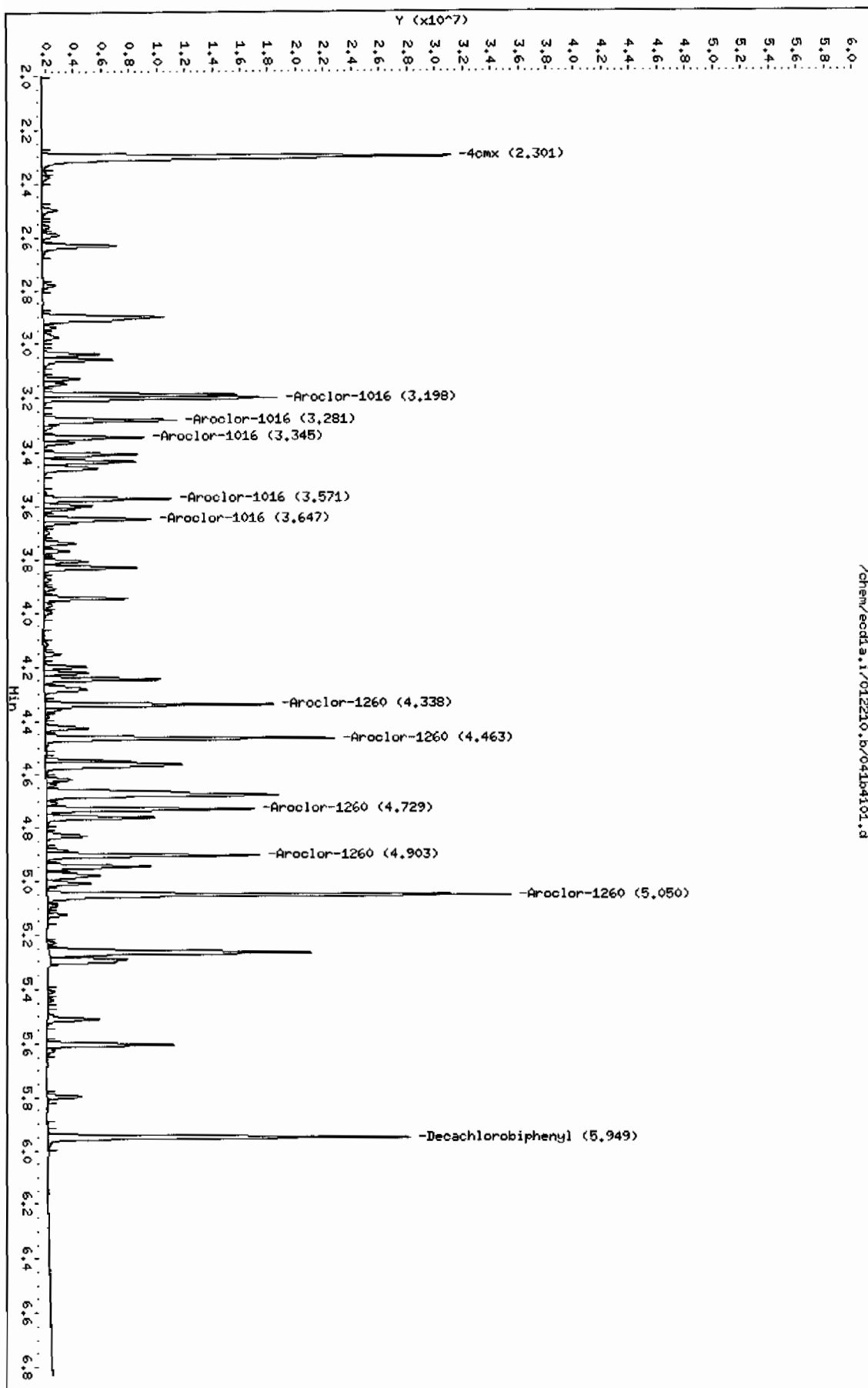
Column phase: CLP2

Instrument: eodt.a.i

Operator: YSL

Column diameter: 0.25

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Data File: /chem/ecdla.i/012210.b/053f5301.d
 Report Date: 23-Jan-2010 11:21

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/053f5301.d
 Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004
 Inj Date : 22-JAN-2010 15:32
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100104-60 04
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
 Meth Date : 23-Jan-2010 11:21 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 53 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1pl

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
---	=====	=====	RESPONSE (ug/L)	(ug/L)	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
1.967	1.967	0.000	40096069 100.000	102	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.280	5.281	-0.001	23606166 100.000	71.6	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.422	2.422	0.000	13362570 1000.00	925	80.00- 120.00	100.00
2.710	2.711	-0.001	17241551 1000.00	947	109.03- 149.03	129.03
2.791	2.792	-0.001	11480294 1000.00	958	65.91- 105.91	85.91
2.829	2.830	-0.001	6920061 1000.00	964	31.79- 71.79	51.79
3.039	3.041	-0.002	8799758 1000.00	950	45.85- 85.85	65.85
Average of Peak Amounts =				949		

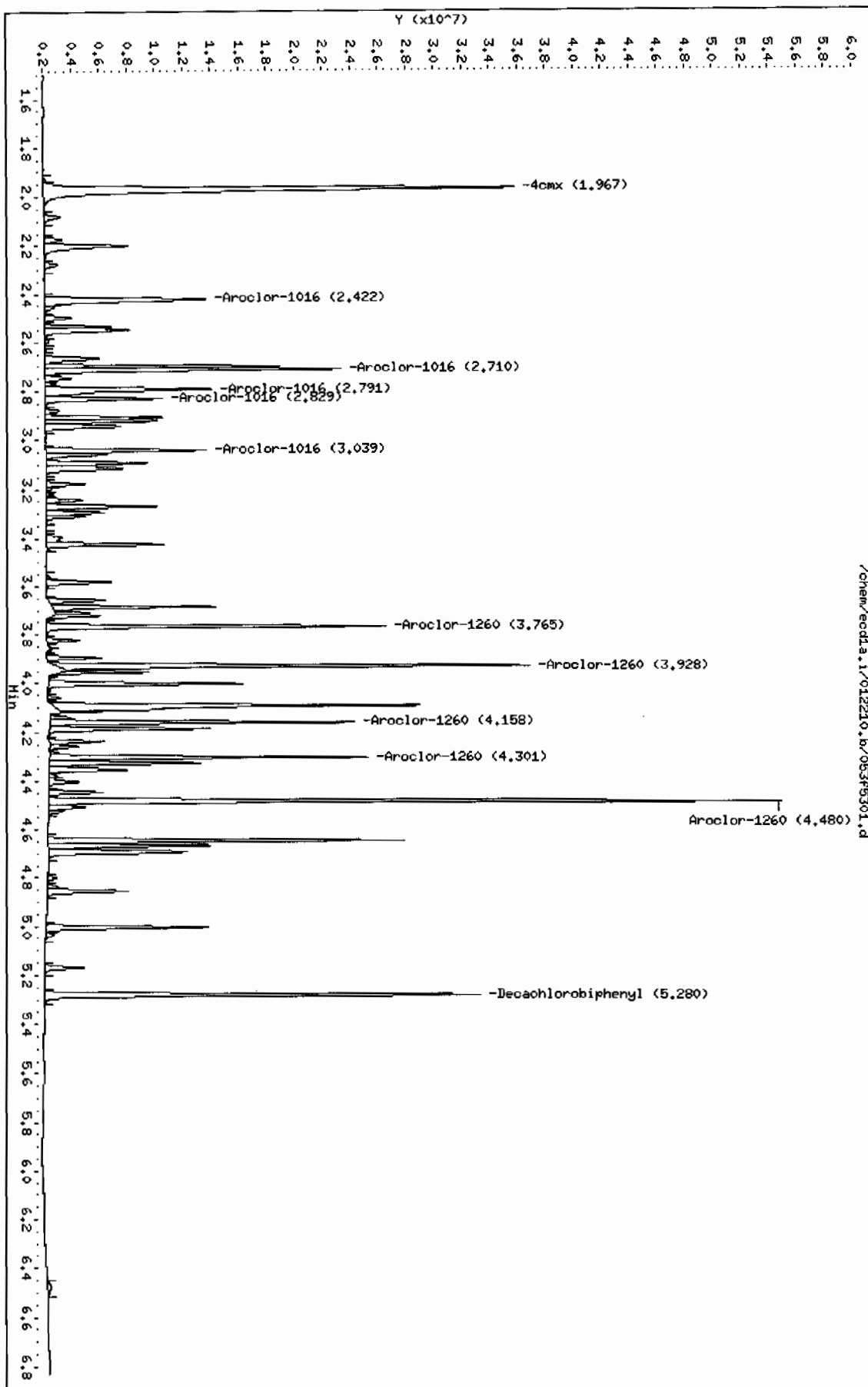
7 Aroclor-1260				CAS #: 11096-82-5		
3.765	3.766	-0.001	17442393 1000.00	984	80.00- 120.00	100.00
3.928	3.929	-0.001	25272275 1000.00	938	124.89- 164.89	144.89
4.158	4.159	-0.001	15660230 1000.00	967	69.78- 109.78	89.78
4.301	4.302	-0.001	16440041 1000.00	972	74.25- 114.25	94.25
4.480	4.481	-0.001	38025554 1000.00	1010	198.01- 238.01	218.01
Average of Peak Amounts =				974		

Data File: /chem/ecdl1.i/012210.b/053F5301.d
Date: 22-JAN-2010 15:32
Client ID: AR166004
Sample Info: 11MR100104-60 04

Column Phase: CLP1

Instrument: ecdl1.i
Operator: YSL
Column diameter: 0.25

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Data File: /chem/ecdl1.i/012210.b/053b5301.d
 Report Date: 25-Jan-2010 11:39

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/012210.b/053b5301.d
 Lab Smp Id: WAR100104-60 04 Client Smp ID: AR166004
 Inj Date : 22-JAN-2010 15:32
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100104-60 04
 Misc Info :
 Comment :
 Method : /chem/ecdl1.i/012210.b/ECD1-B-8082-121409.m
 Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 53 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	
==	=====	=====	=====	=====	=====	=====	=====
5 11 4cmx				CAS #: 877-09-8			
2.300	2.299	0.001	28618657 100.000	98.6	80.00- 120.00	100.00	

5 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.946	5.947	-0.001	20341498 100.000	83.4	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
3.196	3.196	0.000	12373583 1000.00	975	80.00- 120.00	100.00 (M)	
3.280	3.280	0.000	8068647 1000.00	917	46.75- 86.75	65.21	
3.343	3.343	0.000	5003682 1000.00	913	21.57- 61.57	40.44	
3.570	3.570	0.000	6312529 1000.00	902	33.85- 73.85	51.02	
3.646	3.646	0.000	5908538 1000.00	900	30.13- 70.13	57.71	
Average of Peak Amounts =				922			

7 Aroclor-1260				CAS #: 11096-82-5			
4.336	4.336	0.000	12006645 1000.00	904	80.00- 120.00	100.00	
4.461	4.461	0.000	15090452 1000.00	934	104.88- 144.88	125.68	
4.727	4.727	0.000	11433839 1000.00	915	74.00- 114.00	95.23	
4.901	4.901	0.000	11719761 1000.00	906	77.33- 117.33	97.61	
5.048	5.048	0.000	26217967 1000.00	922	199.41- 239.41	218.36	
Average of Peak Amounts =				916			

Data File: /chem/ecdl1a.i/012210.b/053b5301.d
Report Date: 25-Jan-2010 11:39

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QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1.i/012210.b/053b5301.d

Date: 22-JAN-2010 15:32

Client ID: PR166004

Sample Info: 146R100104-60 04

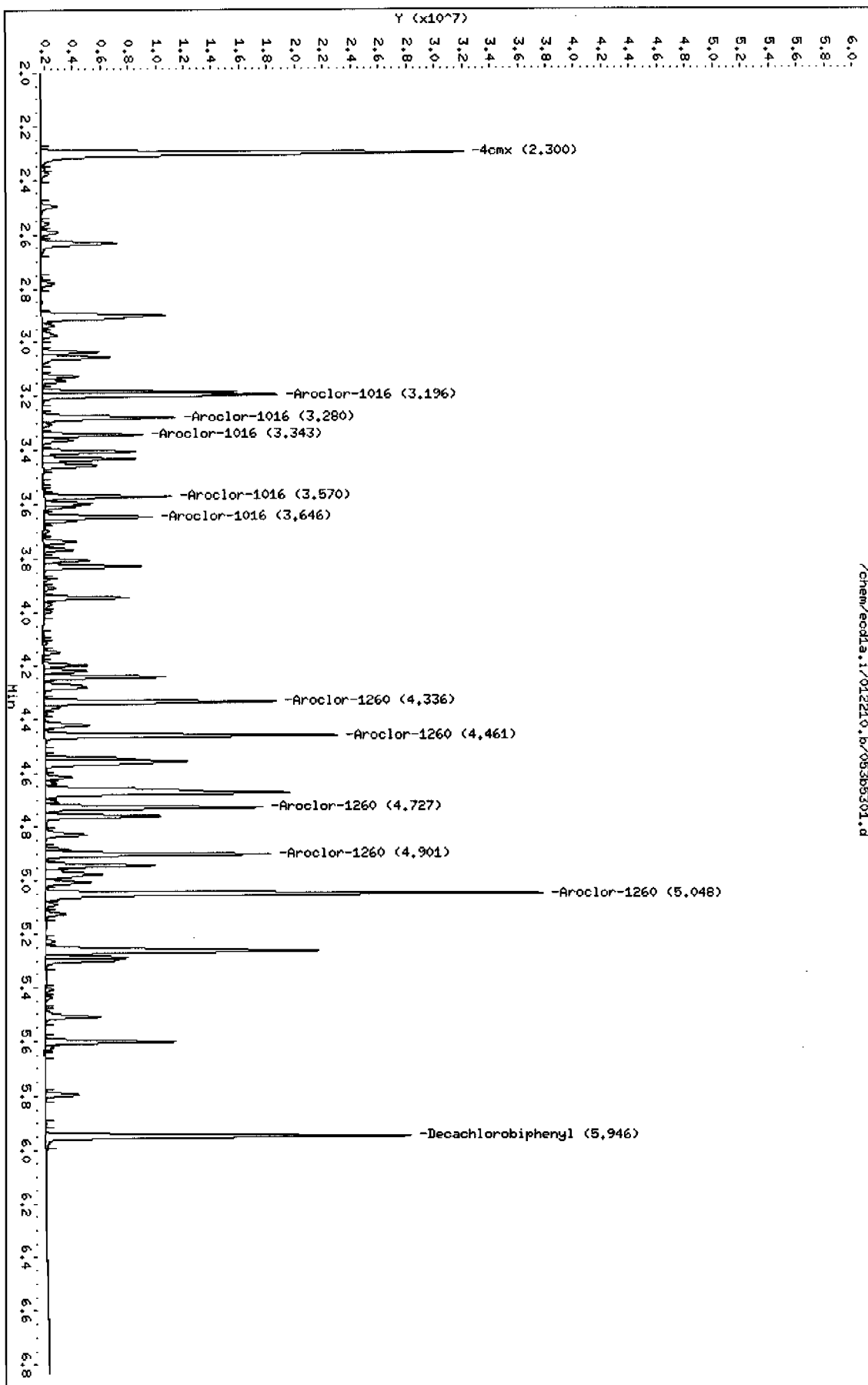
Column phase: CLP2

Instrument: ecdl1.i

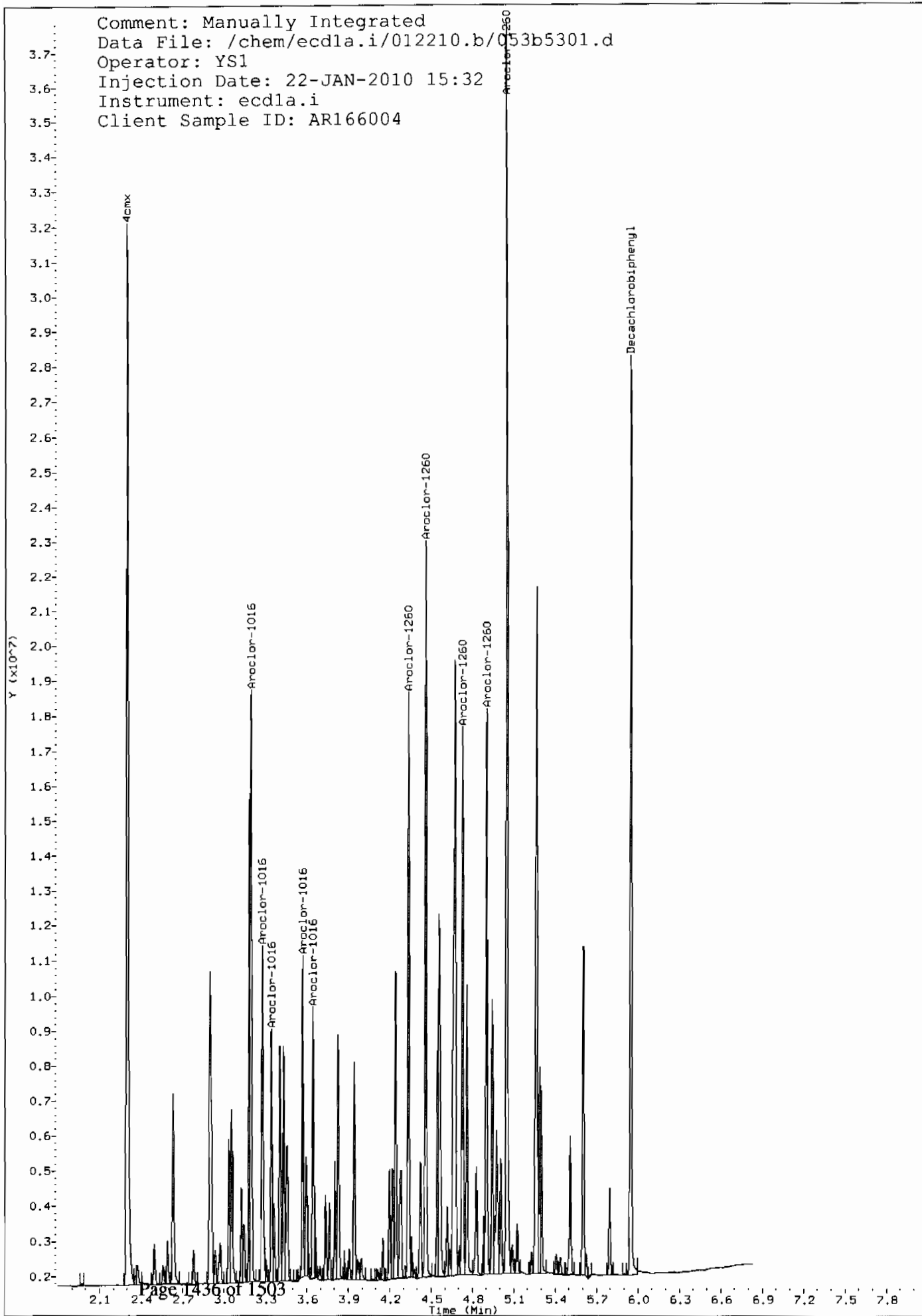
Operator: YSL

Column diameter: 0.25

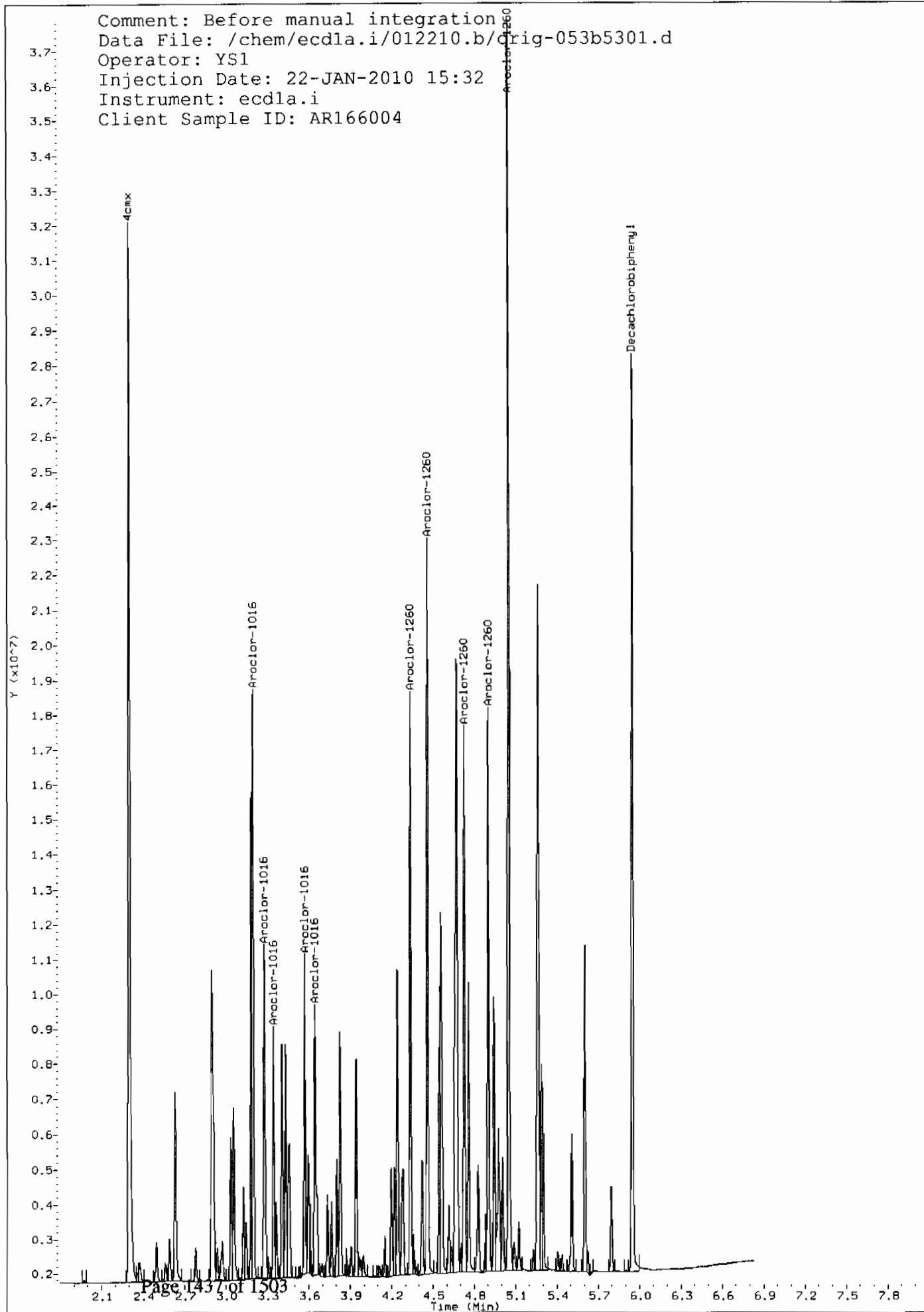
/chem/ecdl1.i/012210.b/053b5301.d



Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012210.b/053b5301.d
Operator: YS1
Injection Date: 22-JAN-2010 15:32
Instrument: ecld1a.i
Client Sample ID: AR166004



Comment: Before manual integration
Data File: /chem/ecdl1a.i/012210.b/orig-053b5301.d
Operator: YS1
Injection Date: 22-JAN-2010 15:32
Instrument: ecd1a.i
Client Sample ID: AR166004



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/065f6501.d
 Lab Smp Id: WAR100104-60 05 Client Smp ID: AR166005
 Inj Date : 22-JAN-2010 18:03
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100104-60 05
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
 Meth Date : 25-Jan-2010 13:49 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 65 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		
1.968	1.967	0.001	40309825 100.000	102	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.278	5.281	-0.003	32770815 100.000	99.4	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
2.422	2.422	0.000	13422083 1000.00	929	80.00- 120.00	100.00
2.711	2.711	0.000	17824847 1000.00	979	112.80- 152.80	132.80
2.791	2.792	-0.001	11540991 1000.00	963	65.99- 105.99	85.99
2.829	2.830	-0.001	6939889 1000.00	967	31.71- 71.71	51.71
3.039	3.041	-0.002	8814664 1000.00	952	45.67- 85.67	65.67
Average of Peak Amounts =				958		

7 Aroclor-1260				CAS #: 11096-82-5		
3.764	3.766	-0.002	17802673 1000.00	1000	80.00- 120.00	100.00
3.928	3.929	-0.001	27224347 1000.00	1010	132.92- 172.92	152.92
4.158	4.159	-0.001	16263101 1000.00	1000	71.35- 111.35	91.35
4.300	4.302	-0.002	17007552 1000.00	1000	75.53- 115.53	95.53
4.479	4.481	-0.002	38906081 1000.00	1030	198.54- 238.54	218.54
Average of Peak Amounts =				1.01e+03		

Data File: /chem/eodla.i/012210.b/065f6501.d

Date : 22-JAN-2010 18:03

Client ID: AR166005

Sample Info: IMR100104-60 05

Page 1

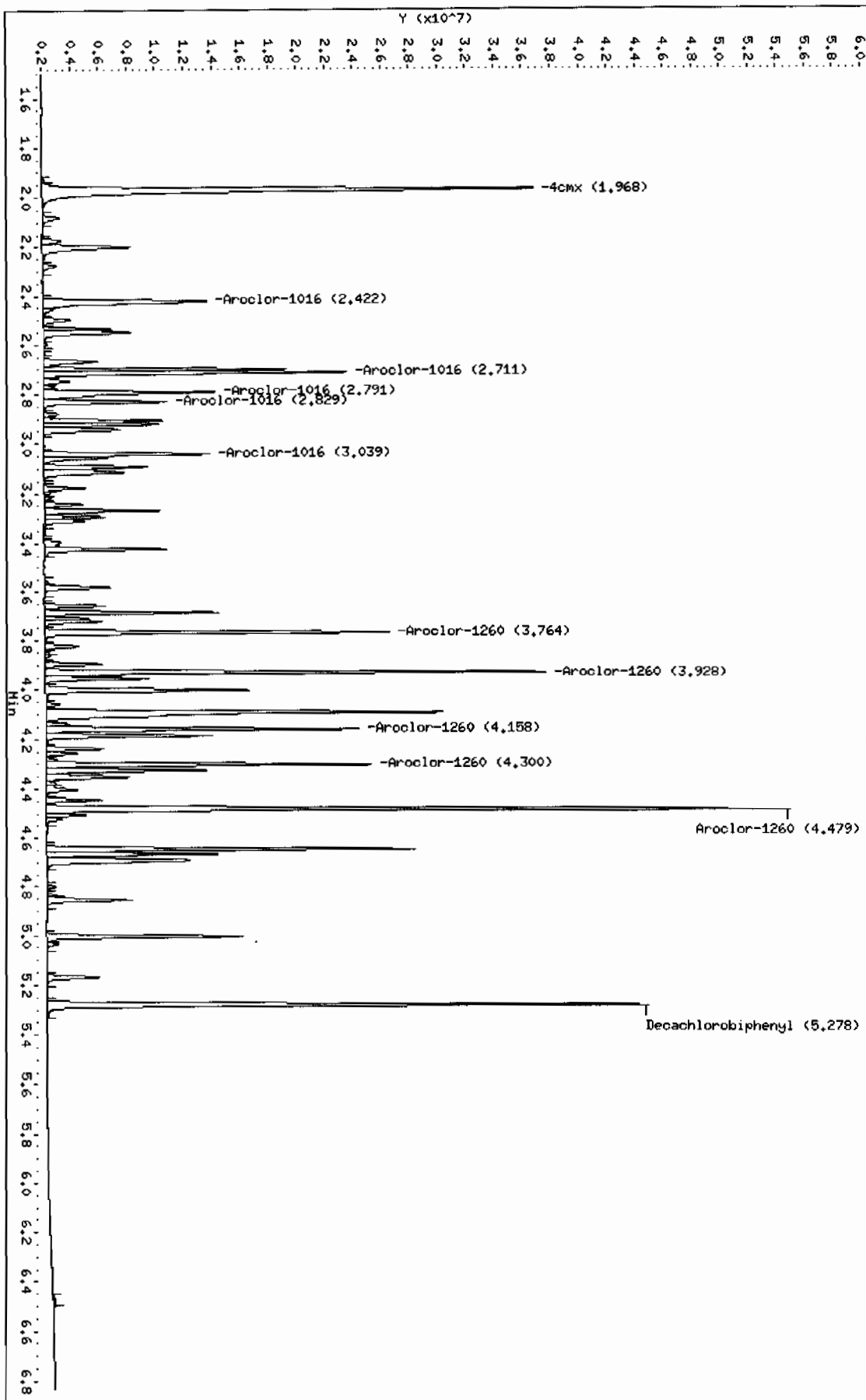
Column phase: CLP1

Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/012210.b/065f6501.d



Data File: /chem/ecdla.i/012210.b/065b6501.d
 Report Date: 25-Jan-2010 13:49

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/065b6501.d
 Lab Smp Id: WAR100104-60 05 Client Smp ID: AR166005
 Inj Date : 22-JAN-2010 18:03
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |WAR100104-60 05
 Misc Info :
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
 Meth Date : 25-Jan-2010 13:49 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 65 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	
A	=====	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8			
2.300	2.299	0.001	28869165 100.000	99.5	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3			
5.945	5.947	-0.002	16595436 100.000	68.0	80.00- 120.00	100.00	

1 Aroclor-1016				CAS #: 12674-11-2			
3.196	3.196	0.000	12682664 1000.00	1000	80.00- 120.00	100.00 (M)	
3.279	3.280	-0.001	8253065 1000.00	938	45.07- 85.07	65.07	
3.343	3.343	0.000	5129364 1000.00	936	20.44- 60.44	40.44	
3.570	3.570	0.000	6459361 1000.00	923	30.93- 70.93	50.93	
3.645	3.646	-0.001	6055132 1000.00	922	27.74- 67.74	47.74	
Average of Peak Amounts =				944			

7 Aroclor-1260				CAS #: 11096-82-5			
4.336	4.336	0.000	12316980 1000.00	928	80.00- 120.00	100.00	
4.460	4.461	-0.001	15404880 1000.00	953	105.07- 145.07	125.07	
4.726	4.727	-0.001	11781771 1000.00	943	75.65- 115.65	95.65	
4.899	4.901	-0.002	12165182 1000.00	941	78.77- 118.77	98.77	
5.047	5.048	-0.001	27262586 1000.00	958	201.34- 241.34	221.34	
Average of Peak Amounts =				945			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/eod1a.i/012210.b/065b6501.d

Date: 22-JAN-2010 18:03

Client ID: AR160005

Sample Info: IWR100104-60 05

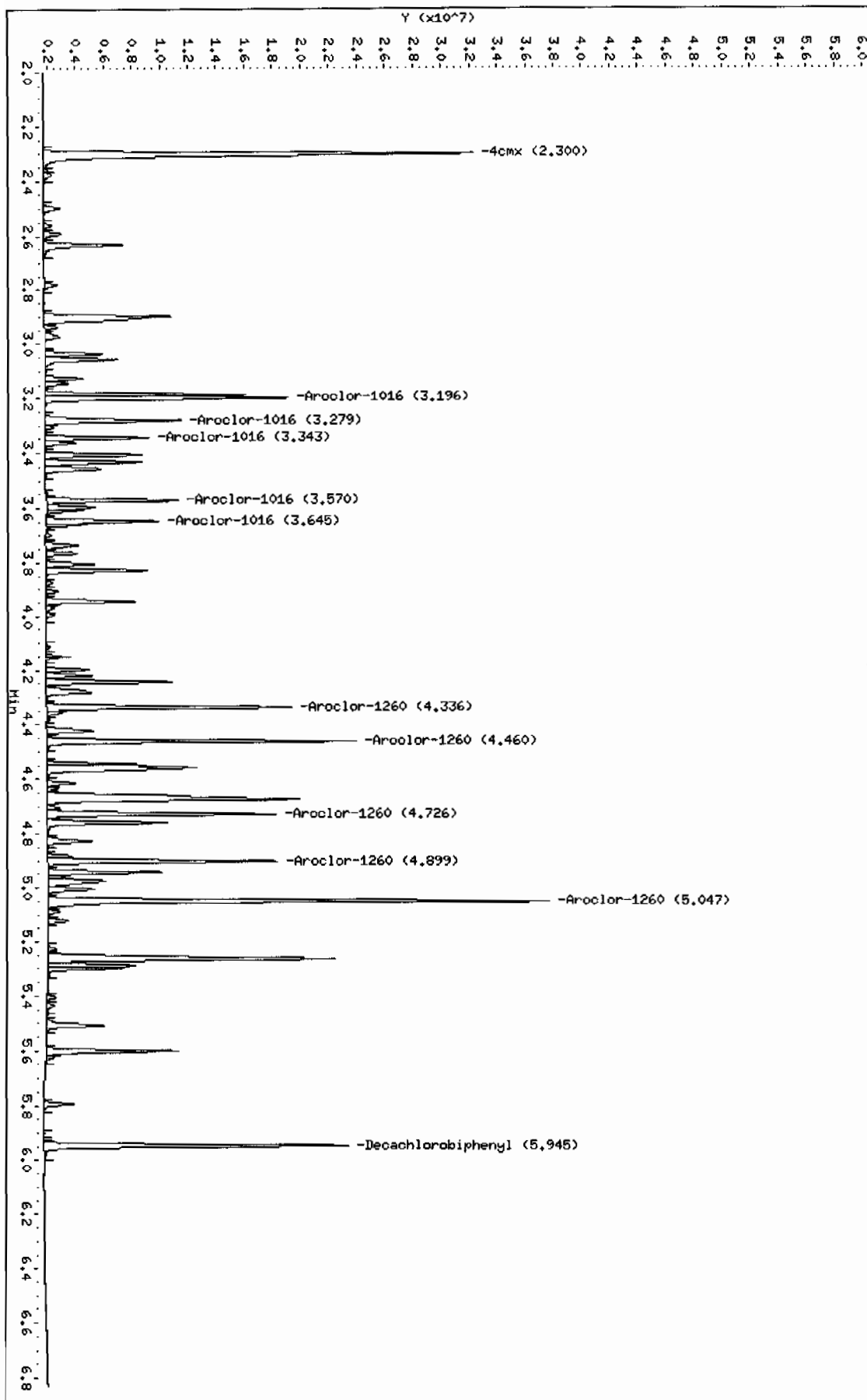
Column phase: CLP2

Instrument: eod1a.i

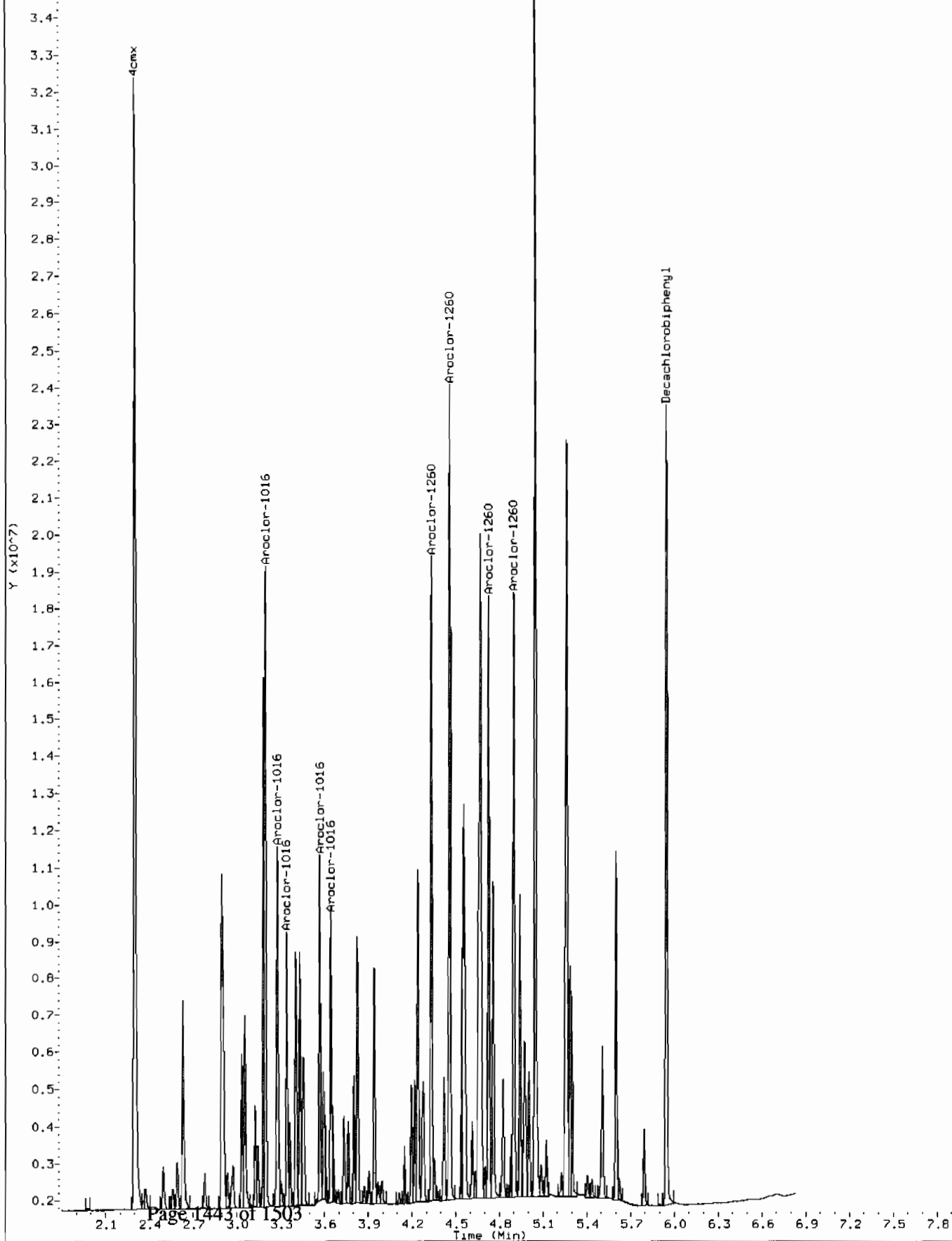
Operator: YSL

Column diameter: 0.25

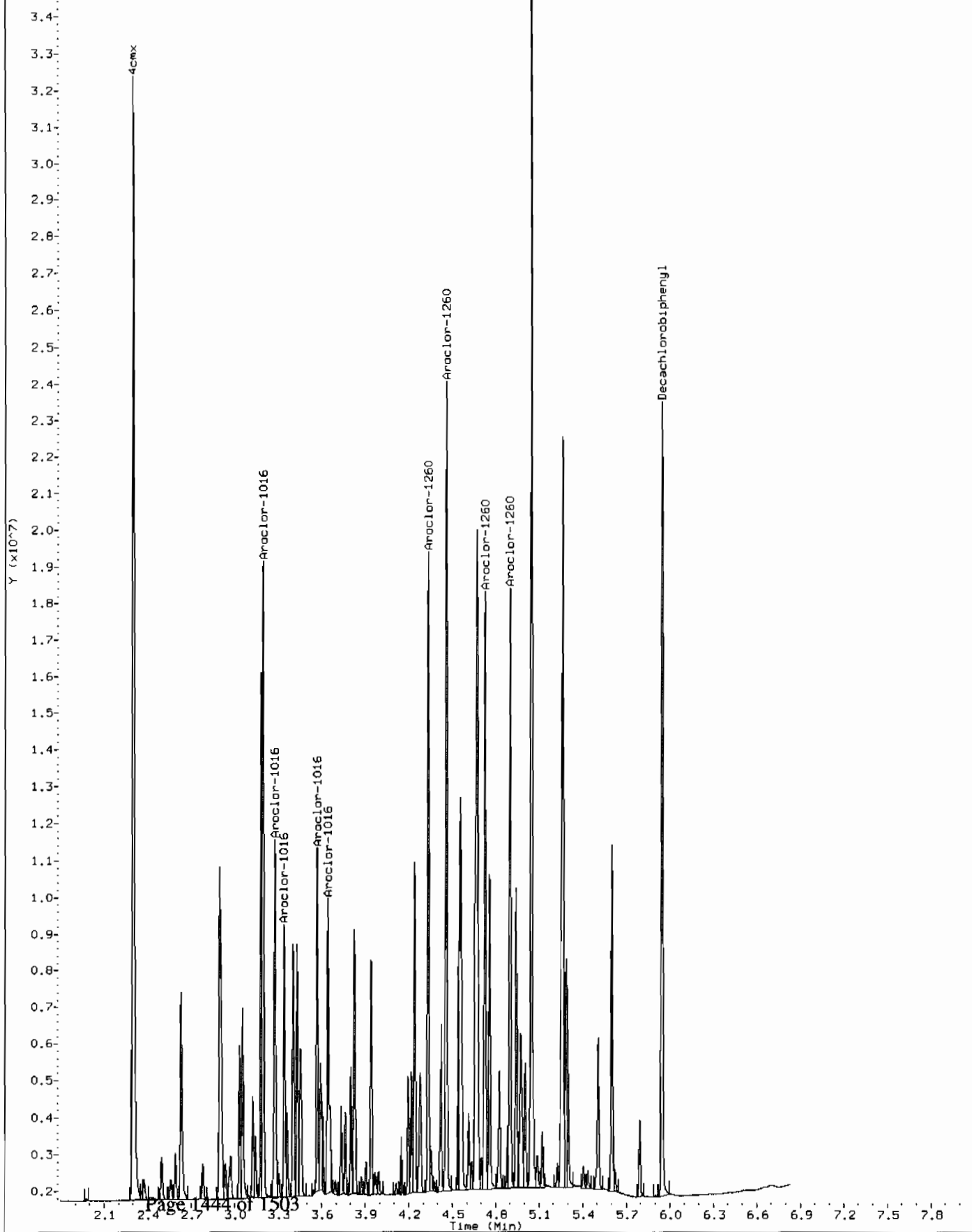
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Comment: Manually Integrated
Data File: /chem/ecdl1a.i/012210.b/65b6501.d
Operator: YS1
Injection Date: 22-JAN-2010 18:03
Instrument: ecd1a.i
Client Sample ID: AR166005



Comment: Before manual integration
Data File: /chem/ecdl1a.i/012210.b/Orig-065b6501.d
Operator: YS1
Injection Date: 22-JAN-2010 18:03
Instrument: ecd1a.i
Client Sample ID: AR166005



Data File: /chem/ecdl1a.i/012210.b/072f7201.d
Report Date: 23-Jan-2010 11:25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1a.i/012210.b/072f7201.d

Lab Smp Id: WAR100104-60 06

Client Smp ID: AR166006

Inj Date : 22-JAN-2010 19:32

Operator : YSl

Inst ID: ecd1a.i

Smp Info : |WAR100104-60 06

Misc Info :

Comment :

Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m

Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD

Cal Date : 22-JAN-2010 08:47

Cal File: 017f1701.d

Als bottle: 72

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: AR1660.sub

Target Version: 3.50

Sample Matrix: None

Processing Host: 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			
1.967	1.967	0.000	40017680	100.000	102	80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
5.278	5.281	-0.003	32385546	100.000	98.2	80.00- 120.00	100.00	

1 Aroclor-1016					CAS #: 12674-11-2			
2.421	2.422	-0.001	13362240	1000.00	925	80.00- 120.00	100.00	
2.710	2.711	-0.001	17710881	1000.00	973	112.54- 152.54	132.54	
2.790	2.792	-0.002	11479428	1000.00	958	65.91- 105.91	85.91	
2.828	2.830	-0.002	6929826	1000.00	965	31.86- 71.86	51.86	
3.038	3.041	-0.003	8839454	1000.00	955	46.15- 86.15	66.15	
Average of Peak Amounts =					955			

7 Aroclor-1260					CAS #: 11096-82-5			
3.764	3.766	-0.002	17781257	1000.00	1000	80.00- 120.00	100.00	
3.928	3.929	-0.001	27166151	1000.00	1010	132.78- 172.78	152.78	
4.158	4.159	-0.001	16223230	1000.00	1000	71.24- 111.24	91.24	
4.300	4.302	-0.002	16977707	1000.00	1000	75.48- 115.48	95.48	
4.479	4.481	-0.002	38840356	1000.00	1030	198.43- 238.43	218.43	
Average of Peak Amounts =					1.01e+03			

Data File: /chem/ecdl.a.i/012210.b/072f7201.d

Date: 22-JUN-2010 19:32

Client ID: AR166006

Sample Info: 1MAR100104-60 06

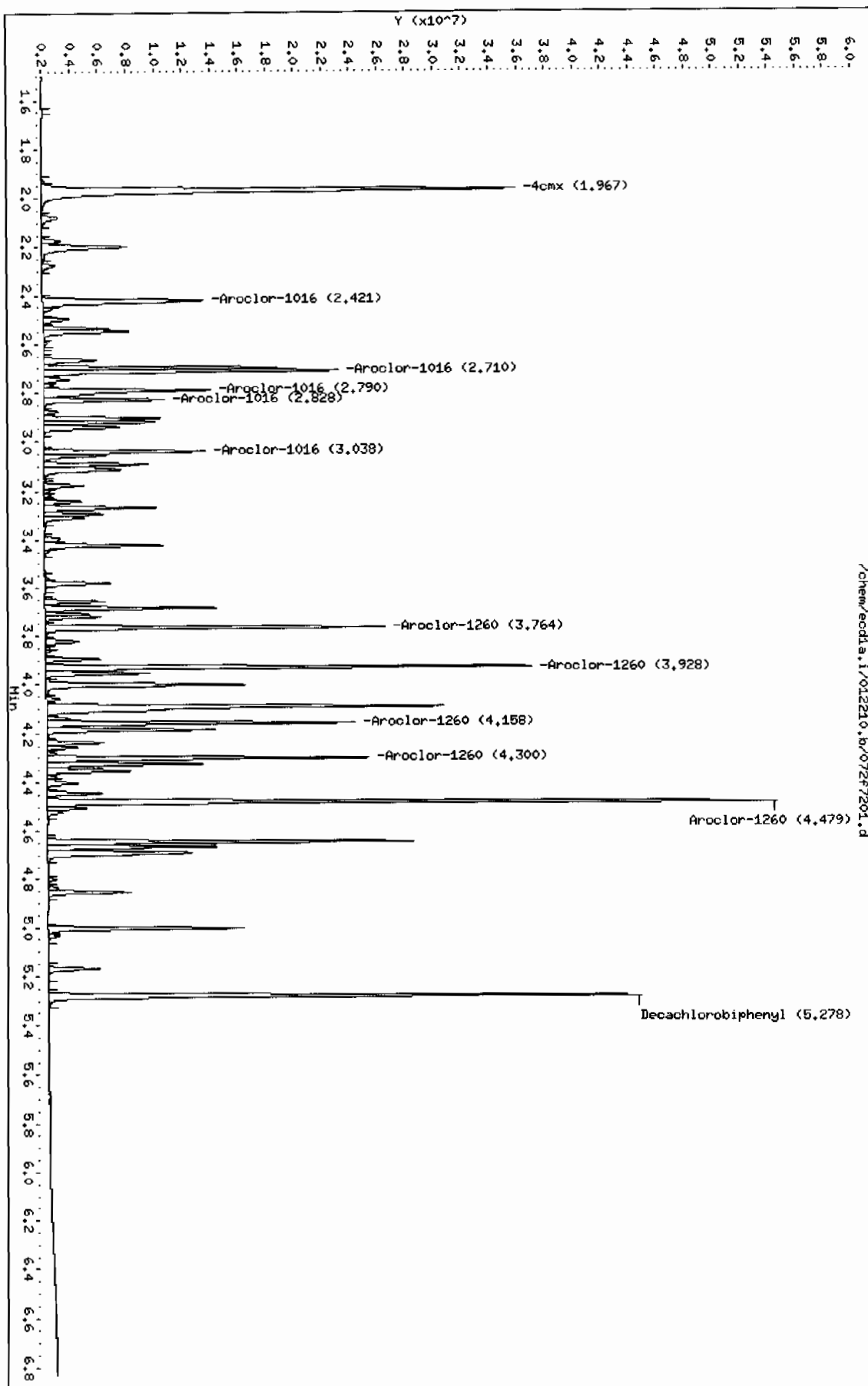
Column phase: CLP1

Instrument: ecdl.a.i

Operator: YSI

Column diameter: 0.25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/012210.b/072b7201.d
 Lab Smp Id: WAR100104-60 06 Client Smp ID: AR166006
 Inj Date : 22-JAN-2010 19:32
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |WAR100104-60 06
 Misc Info :
 Comment :
 Method : /chem/ecdl1.i/012210.b/ECD1-B-8082-121409.m
 Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 72 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: AR1660.sub
 Target Version: 3.50 Sample Matrix: None
 Processing Host: hpc1p1

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT RESPONSE (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx				CAS #: 877-09-8		
2.298	2.299	-0.001	28908807 100.000	99.6	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl				CAS #: 2051-24-3		
5.945	5.947	-0.002	21906158 100.000	89.8	80.00- 120.00	100.00

1 Aroclor-1016				CAS #: 12674-11-2		
3.195	3.196	-0.001	12502844 1000.00	985	80.00- 120.00	100.00 (M)
3.278	3.280	-0.002	8200377 1000.00	932	45.07- 85.07	65.59
3.342	3.343	-0.001	5096774 1000.00	930	20.44- 60.44	40.76
3.568	3.570	-0.002	6425112 1000.00	918	30.93- 70.93	51.39
3.644	3.646	-0.002	6066095 1000.00	924	27.74- 67.74	57.96
Average of Peak Amounts =				938		

7 Aroclor-1260				CAS #: 11096-82-5		
4.335	4.336	-0.001	12778668 1000.00	963	80.00- 120.00	100.00
4.460	4.461	-0.001	15722500 1000.00	973	105.07- 145.07	123.04
4.726	4.727	-0.001	12057799 1000.00	965	75.65- 115.65	94.36
4.900	4.901	-0.001	12495065 1000.00	966	78.77- 118.77	97.78
5.047	5.048	-0.001	28356561 1000.00	997	201.34- 241.34	221.91
Average of Peak Amounts =				973		

QC Flag Legend

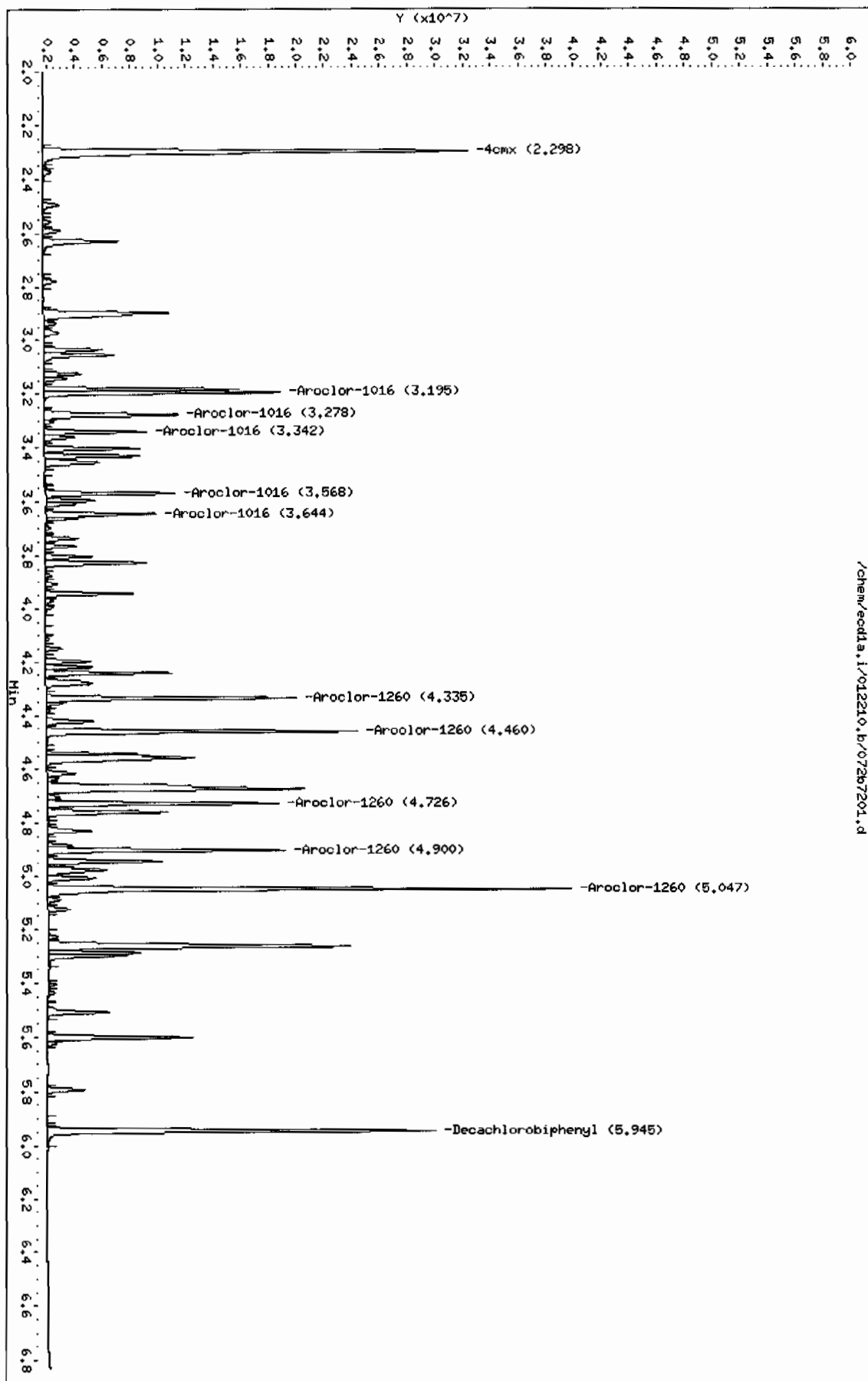
M - Compound response manually integrated.

Data File: /chem/ecdl1.i/012210.b/072b7201.d
Date: 22-JAN-2010 19:32
Client ID: AR166006
Sample Info: 14PR100104-60 06

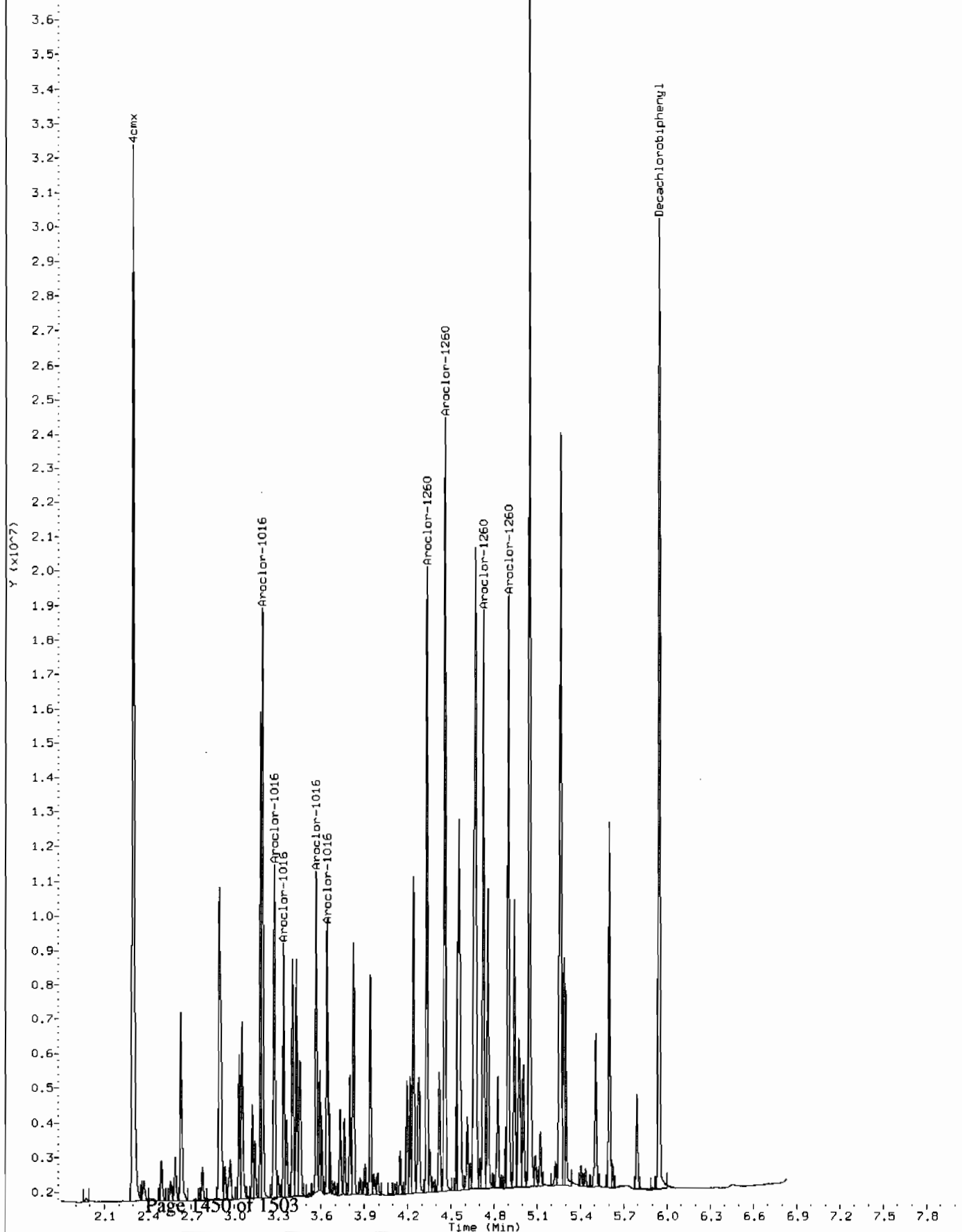
Column phase: CLP2

Instrument: ecdl1.i
Operator: YSI
Column diameter: 0.25

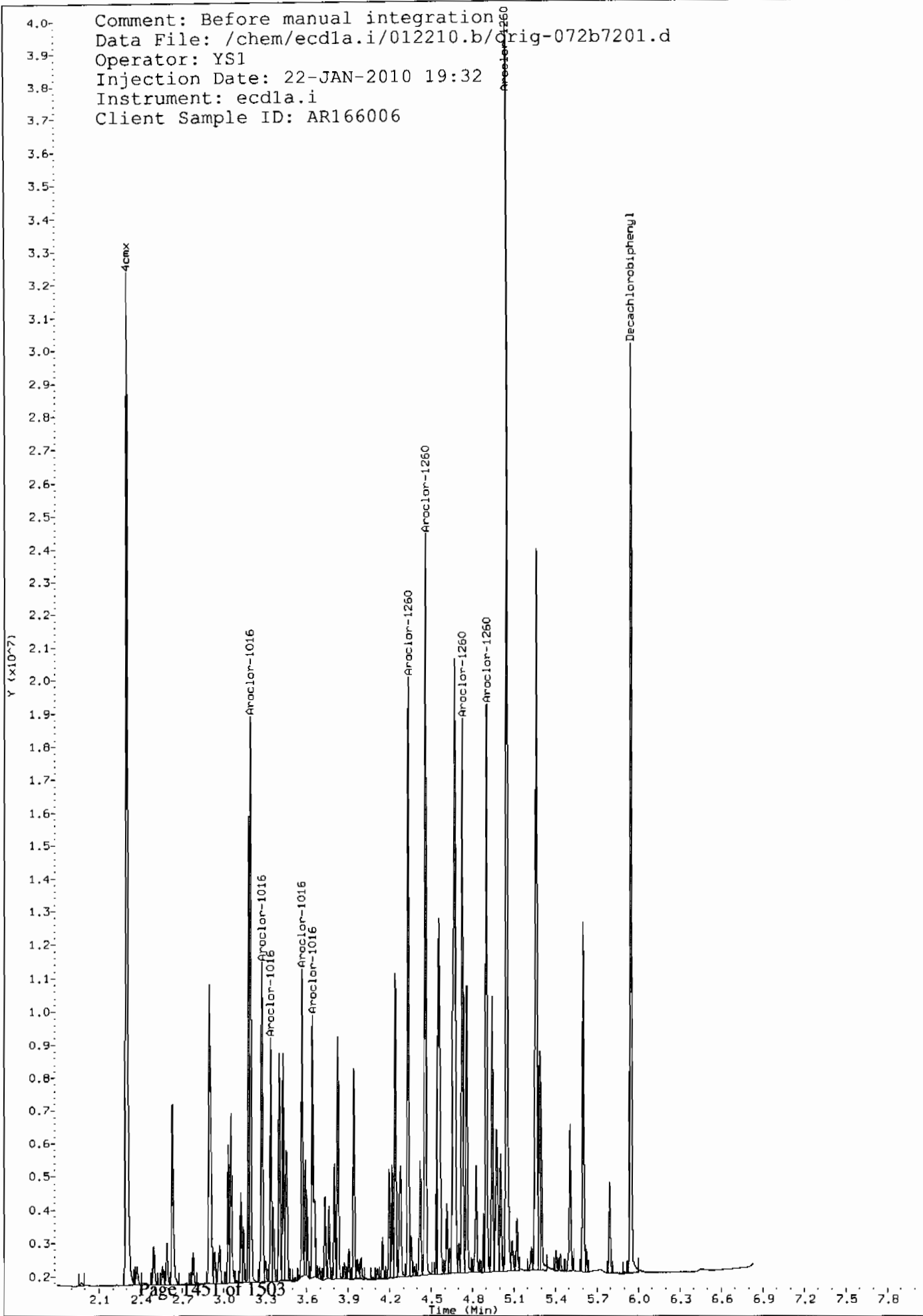
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Comment: Manually Integrated
Data File: /chem/ecdl1.i/012210.b/072b7201.d
Operator: YS1
Injection Date: 22-JAN-2010 19:32
Instrument: ecdl1.i
Client Sample ID: AR166006



Comment: Before manual integration
Data File: /chem/ecdl1a.i/012210.b/Orig-072b7201.d
Operator: YS1
Injection Date: 22-JAN-2010 19:32
Instrument: ecd1a.i
Client Sample ID: AR166006



8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1287

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 1.97				DCB: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT	#
01	PIBLK01	WAR091130-99	12/14/09	0444	1.97	5.29	
02	ZZZZZ	ZZZZZ	12/14/09	0454	1.97	5.29	
03	ZZZZZ	ZZZZZ	12/14/09	0505	1.97	5.29	
04	ZZZZZ	ZZZZZ	12/14/09	0515	1.97	5.29	
05	ZZZZZ	ZZZZZ	12/14/09	0526	1.97	5.29	
06	AR123201	WAR090930-32	12/14/09	0536	1.97	5.29	
07	AR122101	WAR090803-21	12/14/09	0547	1.97	5.29	
08	AR126201	WAR090803-62	12/14/09	0558	1.97	5.29	
09	ZZZZZ	ZZZZZ	12/14/09	0608	1.97	5.29	
10	ZZZZZ	ZZZZZ	12/14/09	0619	1.97	5.29	
11	ZZZZZ	ZZZZZ	12/14/09	0629	1.97	5.29	
12	ZZZZZ	ZZZZZ	12/14/09	0640	1.97	5.29	
13	ZZZZZ	ZZZZZ	12/14/09	0650	1.97	5.29	
14	ZZZZZ	ZZZZZ	12/14/09	0701	1.97	5.29	
15	ZZZZZ	ZZZZZ	12/14/09	0711	1.97	5.29	
16	AR125401	WAR091214-05	12/14/09	0722	1.97	5.29	
17	AR125402	WAR091214-06	12/14/09	0732	1.97	5.29	
18	AR125403	WAR091214-07	12/14/09	0743	1.97	5.29	
19	AR125404	WAR091214-08	12/14/09	0753	1.97	5.29	
20	AR125405	IAR091027-01	12/14/09	0804	1.97	5.29	
21	AR125401	WAR091102-54	12/14/09	0814	1.97	5.29	
22	AR124201	WAR091214-09	12/14/09	0825	1.97	5.29	
23	AR124202	WAR091214-10	12/14/09	0835	1.97	5.29	
24	AR124203	WAR091214-11	12/14/09	0846	1.97	5.29	
25	AR124204	WAR091214-12	12/14/09	0856	1.97	5.29	
26	AR124205	IAR0911111-0	12/14/09	0907	1.97	5.29	
27	AR124201	WAR091102-42	12/14/09	0917	1.97	5.29	
28	AR124801	WAR091214-13	12/14/09	0928	1.97	5.29	
29	AR124802	WAR091214-14	12/14/09	0938	1.97	5.29	
30	AR124803	WAR091214-15	12/14/09	0949	1.97	5.29	
31	AR124804	WAR091214-16	12/14/09	0959	1.97	5.29	
32	AR124805	IAR091027-02	12/14/09	1010	1.97	5.29	

S1 = 4cmx (QC LIMITS (+/- 0.03 MINUTES))
DCB = Decachlorobiphenyl (QC LIMITS (+/- 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.: 10-1287

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
S1 : 1.97			DCB: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #	
01	AR124801	WAR091027-48	12/14/09	1020	1.97	5.29
02	AR166001	WAR091214-01	12/14/09	1031	1.97	5.29
03	AR166002	WAR091214-02	12/14/09	1041	1.97	5.29
04	AR166003	WAR091214-03	12/14/09	1052	1.97	5.29
05	AR166004	WAR091214-04	12/14/09	1102	1.97	5.29
06	AR166005	IAR091102-01	12/14/09	1113	1.97	5.29
07	AR166001	WAR091211-60	12/14/09	1123	1.97	5.29
08	AR126801	WAR091214-17	12/14/09	1134	1.97	5.29
09	AR126802	WAR091214-18	12/14/09	1144	1.97	5.29
10	AR126803	WAR091214-19	12/14/09	1155	1.97	5.29
11	AR126804	WAR091214-20	12/14/09	1206	1.97	5.29
12	AR126805	IAR090817-02	12/14/09	1216	1.97	5.29
13	AR126801	WAR091106-68	12/14/09	1227	1.97	5.29
14	DDTANALOGSTD	WAR091020-DD	12/14/09	1237		
15	PIBLK02	WAR091130-99	12/14/09	1248	1.97	5.29
16	ZZZZZ	ZZZZZ	12/14/09	1258	1.97	5.29
17	ZZZZZ	ZZZZZ	12/14/09	1309	1.97	5.29
18	ZZZZZ	ZZZZZ	12/14/09	1319	1.97	5.29
19	ZZZZZ	ZZZZZ	12/14/09	1330	1.97	5.29
20	ZZZZZ	ZZZZZ	12/14/09	1340	1.97	5.29
21	ZZZZZ	ZZZZZ	12/14/09	1351	1.97	5.29
22	ZZZZZ	ZZZZZ	12/14/09	1403	1.97	5.29
23	ZZZZZ	ZZZZZ	12/14/09	1416	1.97	5.29
24	ZZZZZ	ZZZZZ	12/14/09	1429	1.97	5.29
25	ZZZZZ	ZZZZZ	12/14/09	1441	1.97	5.29
26	AR166002	WAR091211-60	12/14/09	1452	1.97	5.29
27	PIBLK03	WAR091130-99	12/14/09	1502	1.97	5.29
28	ZZZZZ	ZZZZZ	12/14/09	1513	1.97	5.29
29	ZZZZZ	ZZZZZ	12/14/09	1525	1.97	5.29
30	ZZZZZ	ZZZZZ	12/14/09	1538	1.97	5.29
31	ZZZZZ	ZZZZZ	12/14/09	1551	1.97	5.29
32	ZZZZZ	ZZZZZ	12/14/09	1603	1.97	5.27

S1 = 4cmx (+/- 0.03 MINUTES) QC LIMITS
DCB = Decachlorobiphenyl (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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FORM VIII PEST

OLM03.0

8D
PCB ANALYTICAL SEQUENCE

Lab Name: GENERAL ENGINEERING LAB, Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 10-1287

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 2.30			DCB: 5.94		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR091130-99	12/14/09 0444	2.30	5.95
02	ZZZZZ	ZZZZZ	12/14/09 0454	2.30	5.94
03	ZZZZZ	ZZZZZ	12/14/09 0505	2.30	5.95
04	ZZZZZ	ZZZZZ	12/14/09 0515	2.30	5.95
05	ZZZZZ	ZZZZZ	12/14/09 0526	2.30	5.95
06	AR123201	WAR090930-32	12/14/09 0536	2.30	5.95
07	AR122101	WAR090803-21	12/14/09 0547	2.30	5.95
08	AR126201	WAR090803-62	12/14/09 0558	2.30	5.94
09	ZZZZZ	ZZZZZ	12/14/09 0608	2.30	5.94
10	ZZZZZ	ZZZZZ	12/14/09 0619	2.30	5.95
11	ZZZZZ	ZZZZZ	12/14/09 0629	2.30	5.94
12	ZZZZZ	ZZZZZ	12/14/09 0640	2.30	5.94
13	ZZZZZ	ZZZZZ	12/14/09 0650	2.30	5.95
14	ZZZZZ	ZZZZZ	12/14/09 0701	2.30	5.94
15	ZZZZZ	ZZZZZ	12/14/09 0711	2.30	5.95
16	AR125401	WAR091214-05	12/14/09 0722	2.30	5.94
17	AR125402	WAR091214-06	12/14/09 0732	2.30	5.94
18	AR125403	WAR091214-07	12/14/09 0743	2.30	5.94
19	AR125404	WAR091214-08	12/14/09 0753	2.30	5.94
20	AR125405	IAR091027-01	12/14/09 0804	2.30	5.95
21	AR125401	WAR091102-54	12/14/09 0814	2.30	5.94
22	AR124201	WAR091214-09	12/14/09 0825	2.30	5.94
23	AR124202	WAR091214-10	12/14/09 0835	2.30	5.94
24	AR124203	WAR091214-11	12/14/09 0846	2.30	5.94
25	AR124204	WAR091214-12	12/14/09 0856	2.30	5.94
26	AR124205	IAR091111-0	12/14/09 0907	2.30	5.94
27	AR124201	WAR091102-42	12/14/09 0917	2.30	5.94
28	AR124801	WAR091214-13	12/14/09 0928	2.30	5.94
29	AR124802	WAR091214-14	12/14/09 0938	2.30	5.94
30	AR124803	WAR091214-15	12/14/09 0949	2.30	5.94
31	AR124804	WAR091214-16	12/14/09 0959	2.30	5.94
32	AR124805	IAR091027-02	12/14/09 1010	2.30	5.94

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.: 10-1287

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 12/14/09

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 2.30				DCB: 5.94			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	DCB RT	#
01	AR124801	WAR091027-48	12/14/09	1020	2.30	5.95	
02	AR166001	WAR091214-01	12/14/09	1031	2.30	5.94	
03	AR166002	WAR091214-02	12/14/09	1041	2.30	5.94	
04	AR166003	WAR091214-03	12/14/09	1052	2.30	5.94	
05	AR166004	WAR091214-04	12/14/09	1102	2.30	5.94	
06	AR166005	IAR091102-01	12/14/09	1113	2.30	5.94	
07	AR166001	WAR091211-60	12/14/09	1123	2.30	5.94	
08	AR126801	WAR091214-17	12/14/09	1134	2.30	5.95	
09	AR126802	WAR091214-18	12/14/09	1144	2.30	5.94	
10	AR126803	WAR091214-19	12/14/09	1155	2.30	5.94	
11	AR126804	WAR091214-20	12/14/09	1206	2.30	5.94	
12	AR126805	IAR090817-02	12/14/09	1216	2.30	5.94	
13	AR126801	WAR091106-68	12/14/09	1227	2.30	5.94	
14	DDTANALOGSTD	WAR091020-DD	12/14/09	1237			
15	PIBLK02	WAR091130-99	12/14/09	1248	2.30	5.94	
16	ZZZZZ	ZZZZZ	12/14/09	1258	2.30	5.94	
17	ZZZZZ	ZZZZZ	12/14/09	1309	2.30	5.94	
18	ZZZZZ	ZZZZZ	12/14/09	1319	2.30	5.94	
19	ZZZZZ	ZZZZZ	12/14/09	1330	2.30	5.94	
20	ZZZZZ	ZZZZZ	12/14/09	1340	2.30	5.94	
21	ZZZZZ	ZZZZZ	12/14/09	1351	2.30	5.94	
22	ZZZZZ	ZZZZZ	12/14/09	1403	2.30	5.94	
23	ZZZZZ	ZZZZZ	12/14/09	1416	2.30	5.94	
24	ZZZZZ	ZZZZZ	12/14/09	1429	2.30	5.94	
25	ZZZZZ	ZZZZZ	12/14/09	1441	2.30	5.94	
26	AR166002	WAR091211-60	12/14/09	1452	2.30	5.94	
27	PIBLK03	WAR091130-99	12/14/09	1502	2.30	5.94	
28	ZZZZZ	ZZZZZ	12/14/09	1513	2.30	5.94	
29	ZZZZZ	ZZZZZ	12/14/09	1525	2.30	5.94	
30	ZZZZZ	ZZZZZ	12/14/09	1538	2.30	5.94	
31	ZZZZZ	ZZZZZ	12/14/09	1551	2.30	5.94	
32	ZZZZZ	ZZZZZ	12/14/09	1603	2.30	5.94	

S1 = 4cmx (QC LIMITS (+/- 0.03 MINUTES))
DCB = Decachlorobiphenyl (QC LIMITS (+/- 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.: 10-1287
 GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 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: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	PIBLK01	WAR100105-99	01/22/10	0555	
02	ZZZZZ	ZZZZZ	01/22/10	0606	
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	1.96 5.28
20	AR166002	WAR100122-14	01/22/10	0919	1.96 5.28
21	AR166003	WAR100122-15	01/22/10	0929	1.96 5.28
22	AR166004	WAR100122-16	01/22/10	0940	1.96 5.28
23	AR166005	IAR100104-01	01/22/10	0950	1.96 5.28
24	AR166001	WAR100104-60	01/22/10	1001	1.96 5.28
25	AR126801	WAR100122-68	01/22/10	1011	
26	DDTANALOGSTD	WAR091219-DD	01/22/10	1022	1.96 5.28
27	PIBLK02	WAR100105-99	01/22/10	1032	1.96 5.28
28	ZZZZZ	ZZZZZ	01/22/10	1043	1.96 5.28
29	ZZZZZ	ZZZZZ	01/22/10	1055	1.96 5.28
30	ZZZZZ	ZZZZZ	01/22/10	1108	1.96 5.28
31	ZZZZZ	ZZZZZ	01/22/10	1121	1.96 5.28
32	ZZZZZ	ZZZZZ	01/22/10	1133	1.96 5.28

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.: 10-1287

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 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: 5.29			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT	#	RT
=====	=====	=====	=====	=====	=====	=====
01	AR166002	WAR100104-60	01/22/10	1146	1.96	5.27
02	PIBLK03	WAR100105-99	01/22/10	1156	1.96	5.28
03	ZZZZZ	ZZZZZ	01/22/10	1207	1.96	5.28
04	ZZZZZ	ZZZZZ	01/22/10	1217	1.96	5.28
05	ZZZZZ	ZZZZZ	01/22/10	1228	1.96	5.28
06	ZZZZZ	ZZZZZ	01/22/10	1239	1.96	5.28
07	ZZZZZ	ZZZZZ	01/22/10	1249	1.96	5.28
08	ZZZZZ	ZZZZZ	01/22/10	1300	1.96	5.28
09	AR166003	WAR100104-60	01/22/10	1310	1.96	5.28
10	PIBLK04	WAR100105-99	01/22/10	1321	1.96	5.28
11	PBLK01	1202021249	01/22/10	1331	1.96	5.28
12	PBLK01LCS	1202021250	01/22/10	1342	1.96	5.28
13	ZZZZZ	ZZZZZ	01/22/10	1353	1.96	5.28
14	RE15-10-7163	244923001	01/22/10	1403	1.96	5.28
15	ZZZZZ	ZZZZZ	01/22/10	1416	1.96	5.28
16	ZZZZZ	ZZZZZ	01/22/10	1428	1.96	5.28
17	RE15-10-7160	244923004	01/22/10	1441	1.96	5.27
18	RE15-10-7174	244923005	01/22/10	1454	1.96	5.27
19	RE15-10-7173	244923006	01/22/10	1506	1.96	5.27
20	RE15-10-7175	244923007	01/22/10	1519	1.96	5.27
21	AR166004	WAR100104-60	01/22/10	1532	1.96	5.27
22	PIBLK05	WAR100105-99	01/22/10	1544	1.96	5.27
23	RE15-10-7172	244923008	01/22/10	1557	1.96	5.27
24	RE15-10-7218	244923009	01/22/10	1610	1.96	5.27
25	RE15-10-7223	244923010	01/22/10	1622	1.96	5.27
26	ZZZZZ	ZZZZZ	01/22/10	1635	1.96	5.27
27	ZZZZZ	ZZZZZ	01/22/10	1648	1.96	5.27
28	ZZZZZ	ZZZZZ	01/22/10	1700	1.96	5.27
29	ZZZZZ	ZZZZZ	01/22/10	1713	1.96	5.27
30	ZZZZZ	ZZZZZ	01/22/10	1726	1.96	5.27
31	ZZZZZ	ZZZZZ	01/22/10	1738	1.96	5.27
31	ZZZZZ	ZZZZZ	01/22/10	1751	1.96	5.27

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.: 10-1287

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 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: 5.29			
	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	AR166005	WAR100104-60	01/22/10	1803	1.96	5.27
02	PIBLK06	WAR100105-99	01/22/10	1816	1.96	5.27
03	ZZZZZ	ZZZZZ	01/22/10	1829	1.96	5.27
04	ZZZZZ	ZZZZZ	01/22/10	1841	1.96	5.27
05	ZZZZZ	ZZZZZ	01/22/10	1854	1.96	5.27
06	RE15-10-7162	244923002	01/22/10	1907	1.96	5.27
07	RE15-10-7161	244923003	01/22/10	1919	1.96	5.27
08	AR166006	WAR100104-60	01/22/10	1932	1.96	5.27
09	PIBLK07	WAR100105-99	01/22/10	1944	1.96	5.27
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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.: 10-1287

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 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	RT #	RT #	
01 PIBLK01	WAR100105-99	01/22/10	0555	2.30	5.95	
02 ZZZZZ	ZZZZZ	01/22/10	0606			
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	2.29	5.94	
20 AR166002	WAR100122-14	01/22/10	0919	2.30	5.94	
21 AR166003	WAR100122-15	01/22/10	0929	2.30	5.94	
22 AR166004	WAR100122-16	01/22/10	0940	2.29	5.94	
23 AR166005	IAR100104-01	01/22/10	0950	2.30	5.94	
24 AR166001	WAR100104-60	01/22/10	1001	2.29	5.94	
25 AR126801	WAR100122-68	01/22/10	1011			
26 DDTANALOGSTD	WAR091219-DD	01/22/10	1022	2.30	5.94	
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

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.: 10-1287

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 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	LAB	DATE	TIME	RT	#	RT
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED			#
01	AR166002	WAR100104-60	01/22/10	1146	2.30	5.94
02	PIBLK03	WAR100105-99	01/22/10	1156	2.30	5.94
03	ZZZZZ	ZZZZZ	01/22/10	1207	2.30	5.94
04	ZZZZZ	ZZZZZ	01/22/10	1217	2.30	5.94
05	ZZZZZ	ZZZZZ	01/22/10	1228	2.30	5.94
06	ZZZZZ	ZZZZZ	01/22/10	1239	2.30	5.94
07	ZZZZZ	ZZZZZ	01/22/10	1249	2.30	5.94
08	ZZZZZ	ZZZZZ	01/22/10	1300	2.30	5.94
09	AR166003	WAR100104-60	01/22/10	1310	2.30	5.94
10	PIBLK04	WAR100105-99	01/22/10	1321	2.30	5.94
11	PBLK01	1202021249	01/22/10	1331	2.30	5.94
12	PBLK01LCS	1202021250	01/22/10	1342	2.29	5.94
13	ZZZZZ	ZZZZZ	01/22/10	1353	2.30	5.94
14	RE15-10-7163	244923001	01/22/10	1403	2.30	5.94
15	ZZZZZ	ZZZZZ	01/22/10	1416	2.30	5.94
16	ZZZZZ	ZZZZZ	01/22/10	1428	2.30	5.94
17	RE15-10-7160	244923004	01/22/10	1441	2.29	5.94
18	RE15-10-7174	244923005	01/22/10	1454	2.30	5.94
19	RE15-10-7173	244923006	01/22/10	1506	2.29	5.94
20	RE15-10-7175	244923007	01/22/10	1519	2.29	5.94
21	AR166004	WAR100104-60	01/22/10	1532	2.30	5.94
22	PIBLK05	WAR100105-99	01/22/10	1544	2.29	5.94
23	RE15-10-7172	244923008	01/22/10	1557	2.30	5.94
24	RE15-10-7218	244923009	01/22/10	1610	2.30	5.94
25	RE15-10-7223	244923010	01/22/10	1622	2.29	5.94
26	ZZZZZ	ZZZZZ	01/22/10	1635	2.30	5.94
27	ZZZZZ	ZZZZZ	01/22/10	1648	2.30	5.94
28	ZZZZZ	ZZZZZ	01/22/10	1700	2.30	5.94
29	ZZZZZ	ZZZZZ	01/22/10	1713	2.30	5.94
30	ZZZZZ	ZZZZZ	01/22/10	1726	2.30	5.94
31	ZZZZZ	ZZZZZ	01/22/10	1738	2.30	5.94
32	ZZZZZ	ZZZZZ	01/22/10	1751	2.30	5.94

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.: 10-1287

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 12/14/09 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	RT #	RT #
01	AR166005	WAR100104-60	01/22/10	1803	2.30 5.94
02	PIBLK06	WAR100105-99	01/22/10	1816	2.30 5.94
03	ZZZZZ	ZZZZZ	01/22/10	1829	2.30 5.94
04	ZZZZZ	ZZZZZ	01/22/10	1841	2.30 5.94
05	ZZZZZ	ZZZZZ	01/22/10	1854	2.30 5.94
06	RE15-10-7162	244923002	01/22/10	1907	2.29 5.94
07	RE15-10-7161	244923003	01/22/10	1919	2.30 5.94
08	AR166006	WAR100104-60	01/22/10	1932	2.30 5.94
09	PIBLK07	WAR100105-99	01/22/10	1944	2.30 5.94
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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: 10-1287

Client ID: LCS for batch 943951

Lab Sample ID: 1202021250

Data File: 044f4401.d

Data File: 044b4401.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 22-JAN-10 13:42

Analyzed: 22-JAN-10 13:42

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							3.66
Column 1	1	2.42	2.39 – 2.45	20		ug/kg	
	2	2.71	2.68 – 2.74	19.8		ug/kg	
	3	2.79	2.76 – 2.82	19.9		ug/kg	
	4	2.83	2.8 – 2.86	19.8		ug/kg	
	5	3.04	3.01 – 3.07	19.9		ug/kg	
					19.9		
Column 2	1	3.2	3.17 – 3.23	20		ug/kg	
	2	3.28	3.25 – 3.31	19.1		ug/kg	
	3	3.34	3.31 – 3.37	18.6		ug/kg	
	4	3.57	3.54 – 3.6	19.3		ug/kg	
	5	3.65	3.62 – 3.68	18.9		ug/kg	
					19.2		
Aroclor-1260							6.45
Column 1	1	3.77	3.74 – 3.8	21.3		ug/kg	
	2	3.93	3.9 – 3.96	21.2		ug/kg	
	3	4.16	4.13 – 4.19	21.4		ug/kg	
	4	4.3	4.27 – 4.33	20.9		ug/kg	
	5	4.48	4.45 – 4.51	22.1		ug/kg	
					21.4		
Column 2	1	4.34	4.31 – 4.37	19.7		ug/kg	
	2	4.46	4.43 – 4.49	20.4		ug/kg	
	3	4.73	4.7 – 4.76	19.9		ug/kg	
	4	4.9	4.87 – 4.93	20		ug/kg	
	5	5.05	5.02 – 5.08	20.4		ug/kg	
					20		

Identification Summary

Page 1 of 1

SDG Number: 10-1287

Client ID: RE15-10-7160

Lab Sample ID: 244923004

Data File: 049f4901.d

Data File: 049b4901.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 22-JAN-10 14:41

Analyzed: 22-JAN-10 14:41

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							26.5
Column 1	1	3.27	3.24 - 3.3	106		ug/kg	
	2	3.42	3.4 - 3.46	108		ug/kg	
	3	3.66	3.63 - 3.69	119		ug/kg	
	4	3.82	3.79 - 3.85	101		ug/kg	
	5	3.93	3.9 - 3.96	134		ug/kg	
					114		
Column 2	1	3.4	3.37 - 3.43	63.6		ug/kg	
	2	3.83	3.8 - 3.86	84.8		ug/kg	
	3	3.94	3.91 - 3.97	100		ug/kg	
	4	4.22	4.19 - 4.25	102		ug/kg	
	5	4.36	4.32 - 4.38	85		ug/kg	
					87.1		
Aroclor-1260							3.9
Column 1	1	3.76	3.74 - 3.8	64.3		ug/kg	
	2	3.93	3.9 - 3.96	75.2		ug/kg	
	3	4.16	4.13 - 4.19	17.2		ug/kg	
	4	4.3	4.27 - 4.33	16.4		ug/kg	
	5	4.48	4.45 - 4.51	19.2		ug/kg	
					38.5		
Column 2	1	4.34	4.31 - 4.37	62		ug/kg	
	2	4.46	4.43 - 4.49	59		ug/kg	
	3	4.73	4.7 - 4.76	26.7		ug/kg	
	4	4.9	4.87 - 4.93	17.4		ug/kg	
	5	5.05	5.02 - 5.08	19.8		ug/kg	
					37		

Identification Summary

Page 1 of 1

SDG Number: 10-1287

Client ID: RE15-10-7161

Lab Sample ID: 244923003

Data File: 071f7101.d

Data File: 071b7101.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 22-JAN-10 19:19

Analyzed: 22-JAN-10 19:19

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							34.2
Column 1	1	3.27	3.24 - 3.3	4.45		ug/kg	
	2	3.42	3.4 - 3.46	2.97		ug/kg	
	3	3.66	3.63 - 3.69	6		ug/kg	
	4	3.82	3.79 - 3.85	3.97		ug/kg	
	5	3.93	3.9 - 3.96	8.45		ug/kg	
					5.17		
Column 2	1	3.4	3.37 - 3.43	1.74		ug/kg	
	2	3.83	3.8 - 3.86	3.34		ug/kg	
	3	3.94	3.91 - 3.97	3.76		ug/kg	
	4	4.22	4.19 - 4.25	5.87		ug/kg	
	5	4.36	4.32 - 4.38	3.57		ug/kg	
					3.66		
Aroclor-1260							.511
Column 1	1	3.76	3.74 - 3.8	5.08		ug/kg	
	2	3.93	3.9 - 3.96	4.76		ug/kg	
	3	4.16	4.13 - 4.19	2.18		ug/kg	
	4	4.3	4.27 - 4.33	2.06		ug/kg	
	5	4.48	4.45 - 4.51	2.17		ug/kg	
					3.25		
Column 2	1	4.33	4.31 - 4.37	5.89		ug/kg	
	2	4.46	4.43 - 4.49	3.85		ug/kg	
	3	4.73	4.7 - 4.76	2.73		ug/kg	
	4	4.9	4.87 - 4.93	1.72		ug/kg	
	5	5.05	5.02 - 5.08	2.14		ug/kg	
					3.27		

Identification Summary

Page 1 of 1

SDG Number: 10-1287

Client ID: RE15-10-7162

Lab Sample ID: 244923002

Data File: 070f7001.d

Data File: 070b7001.d

Inst: ECD1A.I_1

Inst: ECD1A.I_2

Column: CLP1

Column: CLP2

Analyzed: 22-JAN-10 19:07

Analyzed: 22-JAN-10 19:07

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							30
Column 1	1	3.27	3.24 - 3.3	544		ug/kg	
	2	3.42	3.4 - 3.46	635		ug/kg	
	3	3.66	3.63 - 3.69	661		ug/kg	
	4	3.82	3.79 - 3.85	705		ug/kg	
	5	3.93	3.9 - 3.96	973		ug/kg	
					704		
Column 2	1	3.4	3.37 - 3.43	335		ug/kg	
	2	3.83	3.8 - 3.86	453		ug/kg	
	3	3.94	3.91 - 3.97	603		ug/kg	
	4	4.22	4.19 - 4.25	587		ug/kg	
	5	4.36	4.32 - 4.38	623		ug/kg	
					520		
Aroclor-1260							1.68
Column 1	1	3.76	3.74 - 3.8	377		ug/kg	
	2	3.93	3.9 - 3.96	548		ug/kg	
	3	4.16	4.13 - 4.19	114		ug/kg	
	4	4.3	4.27 - 4.33	120		ug/kg	
	5	4.48	4.45 - 4.51	133		ug/kg	
					259		
Column 2	1	4.33	4.31 - 4.37	383		ug/kg	
	2	4.46	4.43 - 4.49	407		ug/kg	
	3	4.73	4.7 - 4.76	196		ug/kg	
	4	4.9	4.87 - 4.93	131		ug/kg	
	5	5.05	5.02 - 5.08	154		ug/kg	
					254		

Identification Summary

Page 1 of 1

SDG Number: 10-1287

Client ID: RE15-10-7163

Lab Sample ID: 244923001

Data File: 046f4601.d

Data File: 046b4601.d

Inst: ECD1AJ_1

Inst: ECD1AJ_2

Column: CLP1

Column: CLP2

Analyzed: 22-JAN-10 14:03

Analyzed: 22-JAN-10 14:03

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							30.4
Column 1	1	3.27	3.24 – 3.3	98.5	114	ug/kg	
	2	3.43	3.4 – 3.46	104		ug/kg	
	3	3.66	3.63 – 3.69	116		ug/kg	
	4	3.82	3.79 – 3.85	112		ug/kg	
	5	3.93	3.9 – 3.96	139		ug/kg	
Column 2	1	3.41	3.37 – 3.43	63.5	83.9	ug/kg	
	2	3.83	3.8 – 3.86	77.8		ug/kg	
	3	3.95	3.91 – 3.97	93.6		ug/kg	
	4	4.22	4.19 – 4.25	96.3		ug/kg	
	5	4.36	4.32 – 4.38	88.2		ug/kg	
Aroclor-1260							16.1
Column 1	1	3.77	3.74 – 3.8	56.6	36.9	ug/kg	
	2	3.93	3.9 – 3.96	78.5		ug/kg	
	3	4.16	4.13 – 4.19	15.4		ug/kg	
	4	4.3	4.27 – 4.33	16.4		ug/kg	
	5	4.48	4.45 – 4.51	17.6		ug/kg	
Column 2	1	4.34	4.31 – 4.37	52.6	31.4	ug/kg	
	2	4.46	4.43 – 4.49	52		ug/kg	
	3	4.73	4.7 – 4.76	21.3		ug/kg	
	4	4.9	4.87 – 4.93	14		ug/kg	
	5	5.05	5.02 – 5.08	17		ug/kg	

Identification Summary

Page 1 of 1

SDG Number: 10-1287

Client ID: RE15-10-7223

Lab Sample ID: 244923010

Data File: 057f5701.d

Data File: 057b5701.d

Inst: ECD1A.J_1

Inst: ECD1A.J_2

Column: CLP1

Column: CLP2

Analyzed: 22-JAN-10 16:22

Analyzed: 22-JAN-10 16:22

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1254							32.4
Column 1	1	3.27	3.24 - 3.3	7.13		ug/kg	
	2	3.42	3.4 - 3.46	5.99		ug/kg	
	3	3.66	3.63 - 3.69	8.43		ug/kg	
	4	3.82	3.79 - 3.85	6.63		ug/kg	
	5	3.93	3.9 - 3.96	11.8		ug/kg	
					7.99		
Column 2	1	3.4	3.37 - 3.43	3.56		ug/kg	
	2	3.83	3.8 - 3.86	5.92		ug/kg	
	3	3.94	3.91 - 3.97	6.11		ug/kg	
	4	4.22	4.19 - 4.25	7.84		ug/kg	
	5	4.36	4.32 - 4.38	5.38		ug/kg	
					5.76		
Aroclor-1260							2.73
Column 1	1	3.76	3.74 - 3.8	6.52		ug/kg	
	2	3.93	3.9 - 3.96	6.62		ug/kg	
	3	4.16	4.13 - 4.19	2.48		ug/kg	
	4	4.3	4.27 - 4.33	2.15		ug/kg	
	5	4.48	4.45 - 4.51	2.58		ug/kg	
					4.07		
Column 2	1	4.34	4.31 - 4.37	7.1		ug/kg	
	2	4.46	4.43 - 4.49	5.24		ug/kg	
	3	4.73	4.7 - 4.76	3.41		ug/kg	
	4	4.9	4.87 - 4.93	2.43		ug/kg	
	5	5.05	5.02 - 5.08	2.73		ug/kg	
					4.18		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number: 10-1287

Matrix: SOIL

Lab Sample ID: 1202021249

Client Sample: QC for batch 943951

Client: LANL010

Project: QC

Client ID: MB for batch 943951

Method: SW846 8082

SOP Ref: GL-OA-E-040

Batch ID: 943953

Inst: ECD1A.I

Dilution: 1

Run Date: 01/22/2010 13:31

Analyst: VS1

Inj. Vol: 1 uL

Prep Date: 01/21/2010 19:38

Aliquot: 30 g

Final Volume: 1 mL

Data File: 043f4301-1.d

Column: 1 CLP1

Level: LOW

043b4301-1.d

2 CLP2

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.33	ug/kg	1.11	3.33	1
11104-28-2	Aroclor-1221	U	3.33	ug/kg	1.11	3.33	1
11141-16-5	Aroclor-1232	U	3.33	ug/kg	1.11	3.33	1
53469-21-9	Aroclor-1242	U	3.33	ug/kg	1.11	3.33	1
12672-29-6	Aroclor-1248	U	3.33	ug/kg	1.11	3.33	1
11097-69-1	Aroclor-1254	U	3.33	ug/kg	1.11	3.33	1
11096-82-5	Aroclor-1260	U	3.33	ug/kg	1.11	3.33	1

Data File: /chem/ecdla.i/012210.b/043f4301-1.d
Report Date: 25-Jan-2010 13:27

Page 1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/012210.b/043f4301-1.d
Lab Smp Id: 1202021249 Client Smp ID: PBLK01
Inj Date : 22-JAN-2010 13:31
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202021249|1|
Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 43 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1pl

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
\$ 11 4cmx CAS #: 877-09-8						
1.968	1.967	0.001	48649665 123.808	4.1	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.282	5.281	0.001	36275241 109.974	3.7	80.00- 120.00	100.00

Data File: /chem/ecdl1.i/012210.b/043f4301-1.d

Date: 22-JAN-2010 13:31

Client ID: PBLK01

Sample Info: 1120202124911

Volume Injected (uL): 1.0

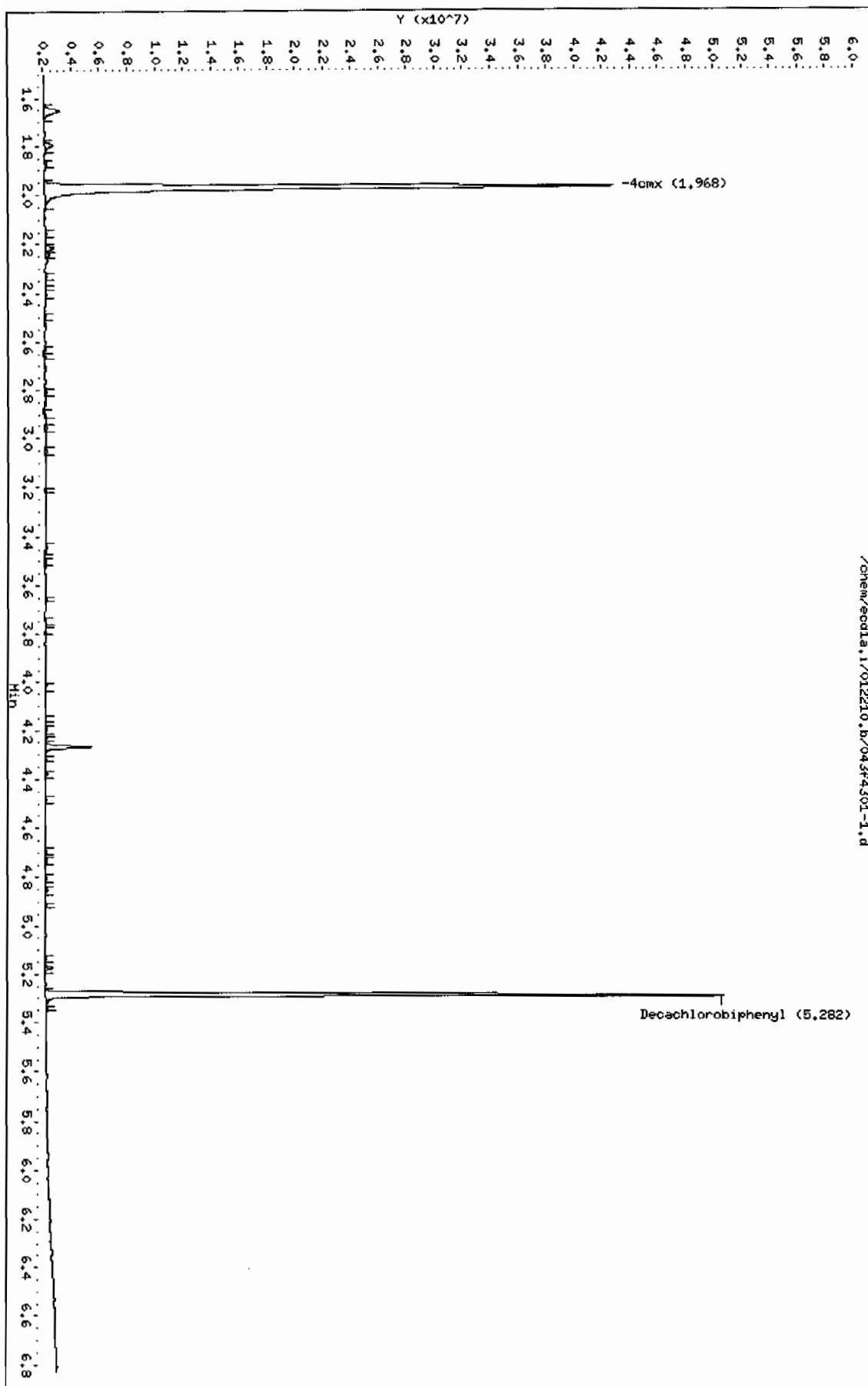
Column Phase: CLP1

Instrument: ecdl1.i

Operator: YS1

Column diameter: 0.25

Page 1



Data File: /chem/ecdl1a.i/012210.b/043b4301-1.d
Report Date: 25-Jan-2010 13:26

Page 1

GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/012210.b/043b4301-1.d
Lab Smp Id: 1202021249 Client Smp ID: PBLK01
Inj Date : 22-JAN-2010 13:31
Operator : YSl Inst ID: ecd1a.i
Smp Info : |1202021249|1|
Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 43 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS						
			ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO
=====						
\$ 11 4cmx					CAS #: 877-09-8	
2.300	2.299	0.001	34477166	118.803	4.0 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.948	5.947	0.001	27278689	111.810	3.7 80.00- 120.00	100.00

Data File: /chem/eod1a.i/012210.b/043b4301-1.d

Date : 22-JAN-2010 13:31

Client ID: PBLK01

Sample Info: 11202021249111

Volume Injected (uL): 1.0

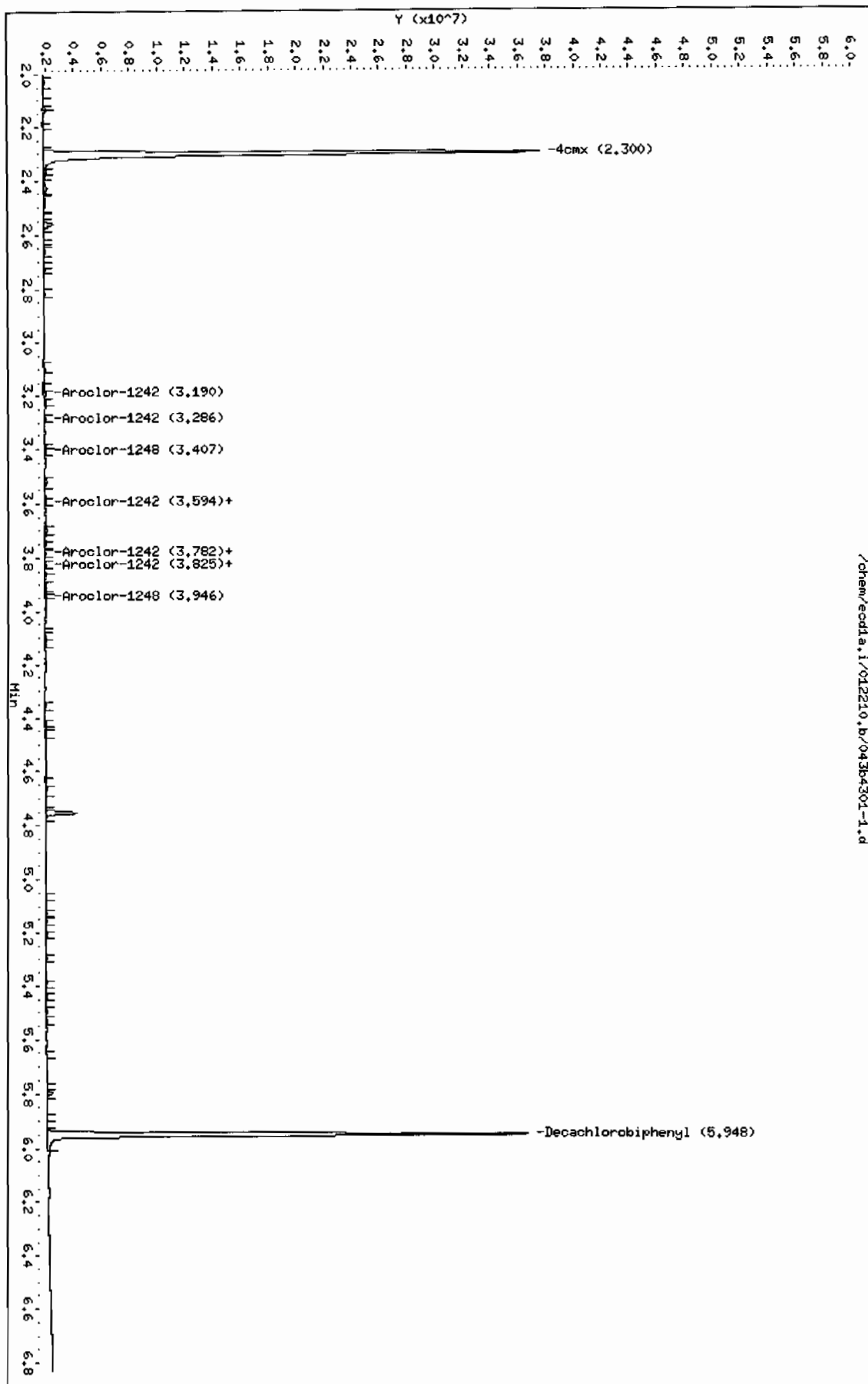
Column phase: CLP2

Instrument: eod1a.i

Operator: YSL

Column diameter: 0.25

Page 1



PCB
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: 10-1287

Lab Sample ID: 1202021250

Client Sample: QC for batch 943951

Client ID: LCS for batch 943951

Batch ID: 943953

Run Date: 01/22/2010 13:42

Prep Date: 01/21/2010 19:38

Data File: 044f4401-1.d

044b4401-1.d

Client: LANL010
 Method: SW846 8082
 Inst: ECD1A.I
 Analyst: YS1
 Aliquot: 30 g
 Column: 1 CLP1
 2 CLP2

Matrix: SOIL

Project: QC
 SOP Ref: GL-OA-E-040
 Dilution: 1
 Inj. Vol: 1 uL
 Final Volume: 1 mL
 Level: LOW

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		19.9	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		21.4	ug/kg	1.11	3.33	1

Data File: /chem/ecdl1a.i/012210.b/044f4401-1.d
Report Date: 25-Jan-2010 13:25

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/012210.b/044f4401-1.d
Lab Smp Id: 1202021250 Client Smp ID: PBLK01LCS
Inj Date : 22-JAN-2010 13:42
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202021250|1|
Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 44 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1287.sub
Target Version: 3.50 Sample Matrix: Soil
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	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	46379333 118.031	3.9	80.00- 120.00	100.00	
\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.283	5.281	0.002	33783976 102.422	3.4	80.00- 120.00	100.00	
1 Aroclor-1016					CAS #: 12674-11-2		
2.423	2.422	0.001	8679418 600.637	20.0	80.00- 120.00	100.00	
2.713	2.711	0.002	10828976 595.007	19.8	112.54- 152.54	124.77	
2.793	2.792	0.001	7167803 598.149	19.9	65.91- 105.91	82.58	
2.831	2.830	0.001	4254875 592.787	19.8	31.86- 71.86	49.02	

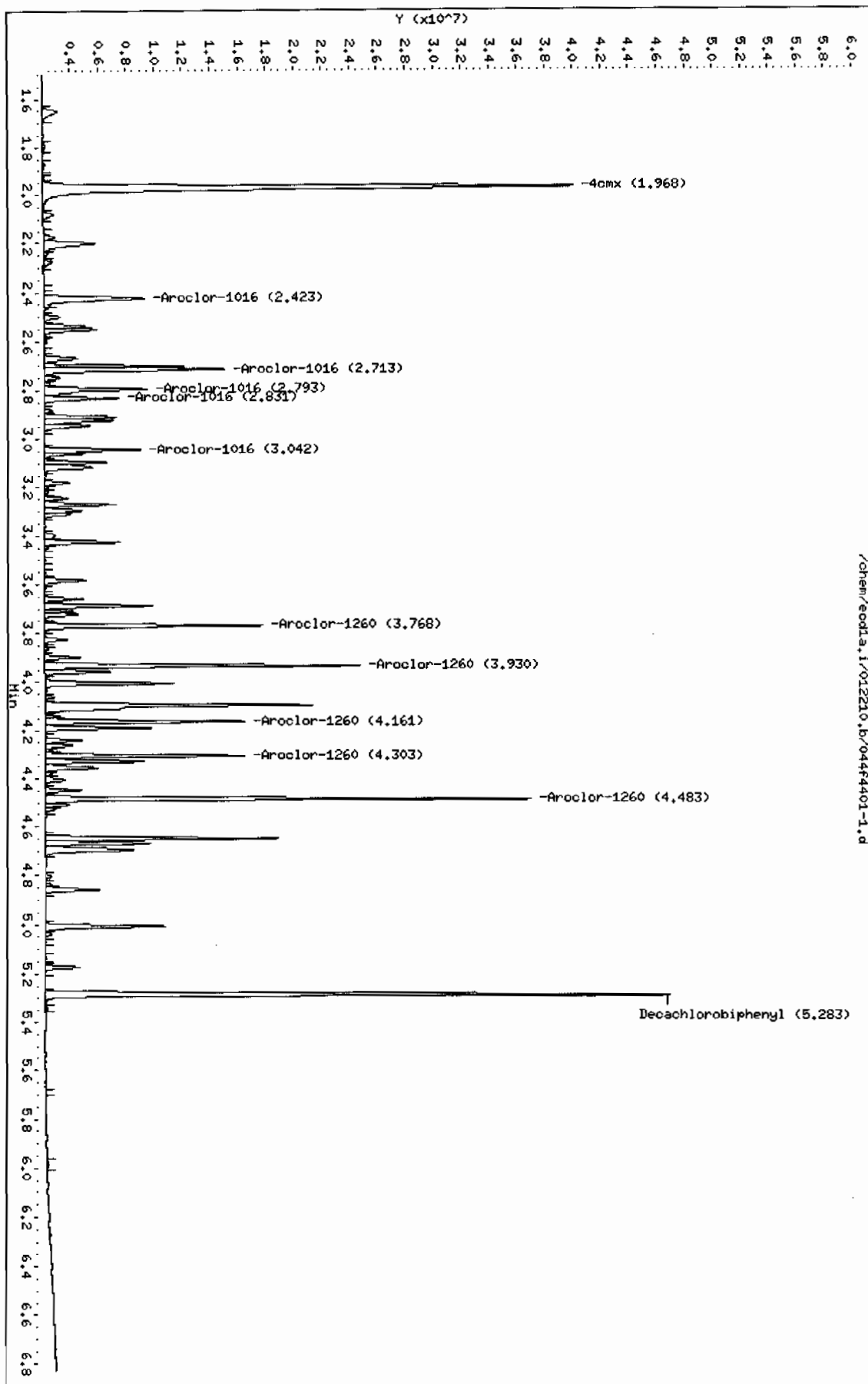
CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET	RANGE	RATIO	
==	=====	=====	=====	=====	=====	=====	=====	=====	
1 Aroclor-1016 (continued)									
3.042	3.041	0.001	5529236	597.146	19.9	46.15-	86.15	63.71	
Average of Peak Concentrations =					19.9				

7 Aroclor-1260					CAS #: 11096-82-5				
3.768	3.766	0.002	11345212	640.294	21.3	80.00-	120.00	100.00	
3.930	3.929	0.001	17139503	636.484	21.2	132.78-	172.78	151.07	
4.161	4.159	0.002	10384312	641.547	21.4	71.24-	111.24	91.53	
4.303	4.302	0.001	10593353	626.531	20.9	75.48-	115.48	93.37	
4.483	4.481	0.002	24979035	663.180	22.1	198.43-	238.43	220.17	
Average of Peak Concentrations =					21.4				

Data File: /chem/eod1a.i/012210.b/044f4401-1.d
Date : 22-JAN-2010 13:42
Client ID: PRLK01LCS
Sample Info: 120202125011
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: eod1a.i
Operator: YSL
Column diameter: 0.25

Page 1



Data File: /chem/ecdla.i/012210.b/044b4401-1.d
 Report Date: 25-Jan-2010 13:25

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/012210.b/044b4401-1.d
 Lab Smp Id: 1202021250 Client Smp ID: PBLK01LCS
 Inj Date : 22-JAN-2010 13:42
 Operator : YS1 Inst ID: ecdla.i
 Smp Info : |1202021250|1|
 Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|LCS|||
 Comment :
 Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
 Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
 Als bottle: 44 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1287.sub
 Target Version: 3.50 Sample Matrix: Soil
 Processing Host: hpc1p1

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

CONCENTRATIONS							
			ON-COL	FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)	(ug/Kg)	TARGET RANGE	RATIO	
---	-----	-----	-----	-----	-----	-----	
\$ 11 4cmx CAS #: 877-09-8 2.299 2.299 0.000 32654239 112.522 3.8 80.00- 120.00 100.00							
\$ 12 Decachlorobiphenyl CAS #: 2051-24-3 5.948 5.947 0.001 25469946 104.396 3.5 80.00- 120.00 100.00							
1 Aroclor-1016 CAS #: 12674-11-2 3.198 3.196 0.002 7595503 598.690 20.0 80.00- 120.00 100.00 3.281 3.280 0.001 5044521 573.362 19.1 45.59- 85.59 66.41 3.344 3.343 0.001 3053083 557.211 18.6 20.76- 60.76 40.20 3.572 3.570 0.002 4055838 579.634 19.3 31.39- 71.39 53.40							

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE		RATIO

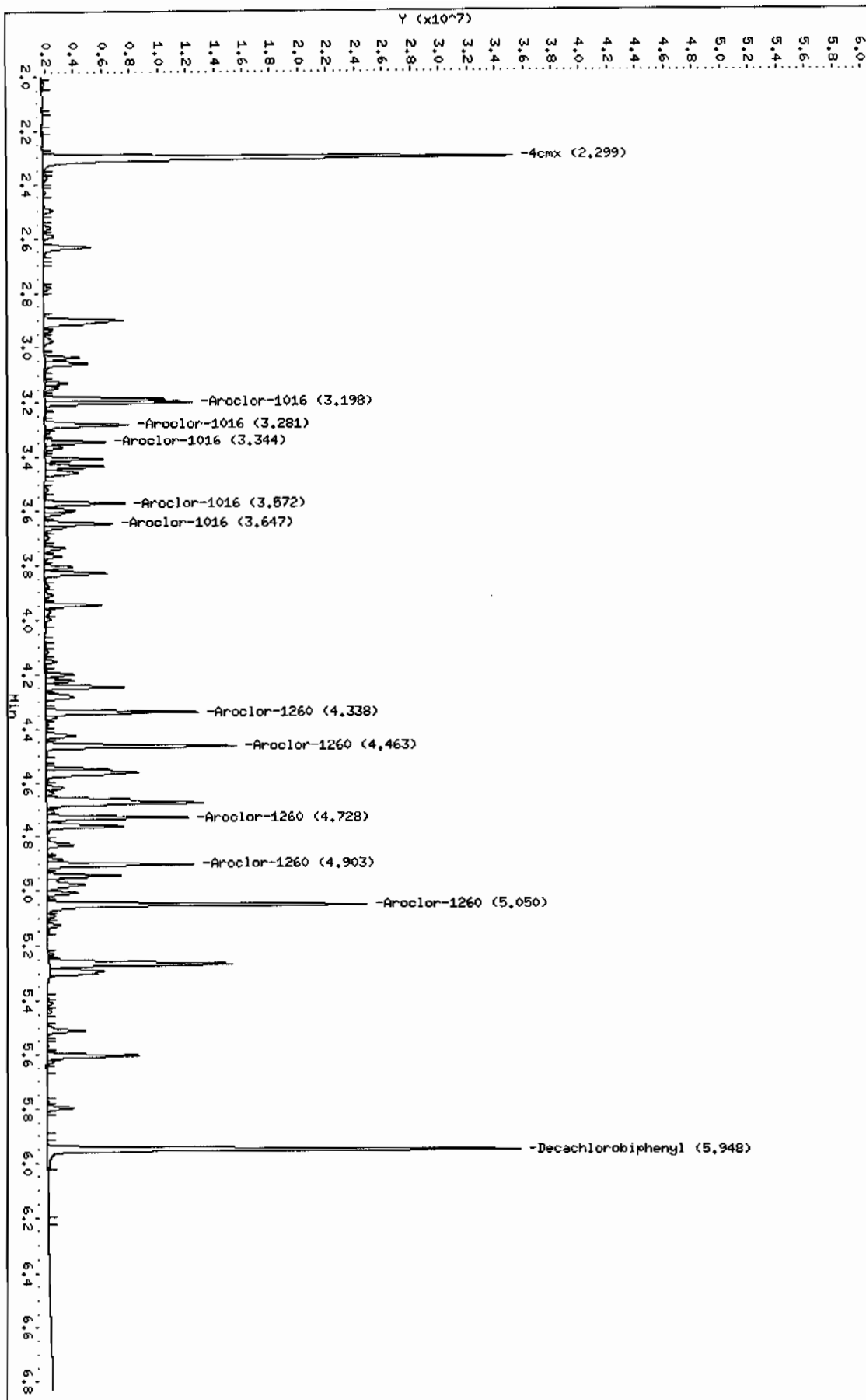
1 Aroclor-1016 (continued)								
3.647	3.646	0.001	3724434 567.447		18.9	28.52-	68.52	49.03
Average of Peak Concentrations =					19.2			

7 Aroclor-1260					CAS #: 11096-82-5			
4.338	4.336	0.002	7848647 591.231		19.7	80.00-	120.00	100.00
4.463	4.461	0.002	9870442 610.872		20.4	103.04-	143.04	125.76
4.728	4.727	0.001	7449118 595.967		19.9	74.36-	114.36	94.91
4.903	4.901	0.002	7741167 598.758		20.0	77.78-	117.78	98.63
5.050	5.048	0.002	17374164 610.785		20.4	201.91-	241.91	221.37
Average of Peak Concentrations =					20.1			

Data File: /chem/ecdda.i/012210.b/044b4401-1.d
Date: 22-JAN-2010 13:42
Client ID: PLK01LCS
Sample Info: 120202125011
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecdda.i
Operator: VSI
Column diameter: 0.25

/chem/ecdda.i/012210.b/044b4401-1.d



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 12/15/2009

METHOD: ECD1-F-8082-121409.m

OPERATOR: YS1

REVIEWED BY: _____

DATE: _____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1

SOLVENT LOT DA385
ALUMINA LOT 1230997-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/121409.b

Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1001f0101.d	WAR091130-99 01	YS1	14-DEC-2009 04:44		121409	1.0	CLEAN	
1002f0201.d	WAR091211-60 01	YS1	14-DEC-2009 04:54		121409	1.0	DOSE RE-ICAL	
1003f0301.d	WAR091102-54	YS1	14-DEC-2009 05:05		121409	1.0	DOSE RE-ICAL	
1004f0401.d	WAR091102-42	YS1	14-DEC-2009 05:15		121409	1.0	DOSE RE-ICAL	
1005f0501.d	WAR091027-48	YS1	14-DEC-2009 05:26		121409	1.0	DOSE RE-ICAL	
1006f0601.d	WAR090930-32	YS1	14-DEC-2009 05:36		121409	1.0	PATTERN ONLY	
1007f0701.d	WAR090803-2:	YS1	14-DEC-2009 05:47		121409	1.0	PATTERN ONLY	
1008f0801.d	WAR090803-62	YS1	14-DEC-2009 05:58		121409	1.0	PATTERN ONLY	
1009f0901.d	WAR091106-68	YS1	14-DEC-2009 06:08		121409	1.0	DOSE RE-ICAL	
1010f1001.d	1660-1	YS1	14-DEC-2009 06:19		121409	1.0	DOSE	
1011f1101.d	1660-2	YS1	14-DEC-2009 06:29		121409	1.0	DOSE	
1012f1201.d	1660-3	YS1	14-DEC-2009 06:40		121409	1.0	DOSE	
1013f1301.d	1660-4	YS1	14-DEC-2009 06:50		121409	1.0	DOSE	
1014f1401.d	WAR091102-01	YS1	14-DEC-2009 07:01		121409	1.0	DOSE	
1015f1501.d	WAR091211-60 01	YS1	14-DEC-2009 07:11		121409	1.0	DOSE	

Instrument Batch: /chem/ecd1a.i/121409.b

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1015f1601.d	WAR091214-05 54	YS1	14-DEC-2009 07:22	121409	1.0	ARI254 I-CAL LEVEL 1
1017f1701.d	WAR091214-06 54	YS1	14-DEC-2009 07:32	121409	1.0	ARI254 I-CAL LEVEL 2
1018f1801.d	WAR091214-07 54	YS1	14-DEC-2009 07:43	121409	1.0	ARI254 I-CAL LEVEL 3
1019f1901.d	WAR091214-08 54	YS1	14-DEC-2009 07:53	121409	1.0	ARI254 I-CAL LEVEL 4
1020f2001.d	IAR091027-01	YS1	14-DEC-2009 08:04	121409	1.0	ARI254 I-CAL LEVEL 5
1021f2101.d	WAR091102-54	YS1	14-DEC-2009 08:14	121409	1.0	PASSED ON BOTH COLUMNS
1022f2201.d	WAR091214-09 42	YS1	14-DEC-2009 08:25	121409	1.0	ARI242 I-CAL LEVEL 1
1023f2301.d	WAR091214-10 42	YS1	14-DEC-2009 08:35	121409	1.0	ARI242 I-CAL LEVEL 2
1024f2401.d	WAR091214-11 42	YS1	14-DEC-2009 08:46	121409	1.0	ARI242 I-CAL LEVEL 3
1025f2501.d	WAR091214-12 42	YS1	14-DEC-2009 08:56	121409	1.0	ARI242 I-CAL LEVEL 4
1026f2601.d	IAR091111-01	YS1	14-DEC-2009 09:07	121409	1.0	ARI242 I-CAL LEVEL 5
1027f2701.d	WAR091102-42	YS1	14-DEC-2009 09:17	121409	1.0	PASSED ON BOTH COLUMNS
1028f2801.d	WAR091214-13 48	YS1	14-DEC-2009 09:28	121409	1.0	ARI248 I-CAL LEVEL 1
1029f2901.d	WAR091214-14 48	YS1	14-DEC-2009 09:38	121409	1.0	ARI248 I-CAL LEVEL 2
1030f3001.d	WAR091214-15 48	YS1	14-DEC-2009 09:49	121409	1.0	ARI248 I-CAL LEVEL 3
1031f3101.d	WAR091214-16 48	YS1	14-DEC-2009 09:59	121409	1.0	ARI248 I-CAL LEVEL 4
1032f3201.d	IAR091027-02	YS1	14-DEC-2009 10:10	121409	1.0	ARI248 I-CAL LEVEL 5
1033f3301.d	WAR091027-48	YS1	14-DEC-2009 10:20	121409	1.0	PASSED ON BOTH COLUMNS
1034f3401.d	WAR091214-01 60	YS1	14-DEC-2009 10:31	121409	1.0	ARI660 I-CAL LEVEL 1
1035f3501.d	WAR091214-02 60	YS1	14-DEC-2009 10:41	121409	1.0	ARI660 I-CAL LEVEL 2

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Instrument Batch: /chem/ecdl.a.i/121409.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
1036f3601.d	WAR091214-03 60	YS1	14-DEC-2009 10:52	121409	1.0	ARI660	I-CAL LEVEL 3	
1037f3701.d	WAR091214-04 60	YS1	14-DEC-2009 11:02	121409	1.0	ARI660	I-CAL LEVEL 4	
1038f3801.d	IAR091102-01	YS1	14-DEC-2009 11:13	121409	1.0	ARI660	I-CAL LEVEL 5	
1039f3901.d	WAR091211-60 01	YS1	14-DEC-2009 11:23	121409	1.0	PASSED ON BOTH COLUMNS		
1040f4001.d	WAR091214-17 68	YS1	14-DEC-2009 11:34	121409	1.0	ARI268	I-CAL LEVEL :	

041f4101.d	WAR091214-18 68	YS1	14-DEC-2009 11:44		121409	1.01	ARI268 I-CAL LEVEL 2
042f4201.d	WAR091214-19 68	YS1	14-DEC-2009 11:55		121409	1.01	ARI268 I-CAL LEVEL 3
043f4301.d	WAR091214-20 68	YS1	14-DEC-2009 12:06		121409	1.01	ARI268 I-CAL LEVEL 4
044f4401.d	WAR090817-02	YS1	14-DEC-2009 12:16		121409	1.01	ARI268 I-CAL LEVEL 5
045f4501.d	WAR091106-68	YS1	14-DEC-2009 12:27		121409	1.01	PASSED ON BOTH COLUMNS
046f4601.d	WAR091020-DDT	YS1	14-DEC-2009 12:37		121409	1.01	DDT ANALOG STANDARD
047f4701.d	WAR091130-99 02	YS1	14-DEC-2009 12:48		121409	1.01	CLEAN
048f4801.d	1201991693	YS1	14-DEC-2009 12:58	931140	10-782	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	1201991694	YS1	14-DEC-2009 13:09	931140	10-782	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1242297001	YS1	14-DEC-2009 13:19	931140	10-782	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	1242297002	YS1	14-DEC-2009 13:30	931140	10-782	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	1242297003	YS1	14-DEC-2009 13:40	931140	10-782	1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	1242297004	YS1	14-DEC-2009 13:51	931140	10-782	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	1242297005	YS1	14-DEC-2009 14:03	931140	10-782	5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	1242297006	YS1	14-DEC-2009 14:16	931140	10-782	10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecdla.i/121409.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	1242297007	YS1	14-DEC-2009 14:29	931140	10-782		5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	1242297008	YS1	14-DEC-2009 14:41	931140	10-782		25.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	WAR091211-60 02	YS1	14-DEC-2009 14:52		121409	1.01		PASSED ON BOTH COLUMNS
059f5901.d	WAR091130-99 03	YS1	14-DEC-2009 15:02		121409	1.01		CLEAN
060f6001.d	1242297009	YS1	14-DEC-2009 15:13	931140	10-782		1.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1242297010	YS1	14-DEC-2009 15:25	931140	10-782		1.01LANL	DCB LOW RE
062f6201.d	1242297011	YS1	14-DEC-2009 15:38	931140	10-782		5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	1242297012	YS1	14-DEC-2009 15:51	931140	10-782		5.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1242297013	YS1	14-DEC-2009 16:03	931140	10-782		10.01LANL	UPLOAD BOTH COLUMNS, USE HIGHER

065f501.d	1242305004	Y51	14-DEC-2009 16:16	931140	10-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
066f601.d	1201991695	Y51	14-DEC-2009 16:28	931140	10-786	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
067f701.d	1201991696	Y51	14-DEC-2009 16:41	931140	10-786	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
068f801.d	1242305005	Y51	14-DEC-2009 16:53	931140	10-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
069f901.d	1242305006	Y51	14-DEC-2009 17:06	931140	10-786	5.0 LANL	UPLOAD BOTH COLUMNS, USE HIGHER
070f001.d	WAR091211-60 03	Y51	14-DEC-2009 17:19	121409	1.0	PASSED ON BOTH COLUMNS	
071f101.d	WAR091130-99 04	Y51	14-DEC-2009 17:31	121409	1.0	CLEAN	
072f201.d	1201992645	Y51	14-DEC-2009 17:44	931553	1242521	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
073f301.d	1201992646	Y51	14-DEC-2009 17:57	931553	1242521	1.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
074f401.d	1242264001	Y51	14-DEC-2009 18:09	931553	1242264	5.0 ENRG	UPLOAD BOTH COLUMNS, USE HIGHER
075f501.d	1242521001	Y51	14-DEC-2009 18:22	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER

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Instrument Batch: /chem/ecdl1.i/121409.b

076f601.d	1201992647	Y51	14-DEC-2009 18:35	931553	1242521	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
077f701.d	1201992648	Y51	14-DEC-2009 18:47	931553	1242521	5.0 QC A	UPLOAD BOTH COLUMNS, USE HIGHER
078f801.d	1242521002	Y51	14-DEC-2009 19:00	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
079f901.d	1242521003	Y51	14-DEC-2009 19:12	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
080f001.d	1242521004	Y51	14-DEC-2009 19:25	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
081f101.d	1242521005	Y51	14-DEC-2009 19:38	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
082f201.d	WAR091211-60 04	Y51	14-DEC-2009 19:50	121409	1.0	PASSED ON BOTH COLUMNS	
083f301.d	WAR091130-99 05	Y51	14-DEC-2009 20:03	121409	1.0	CLEAN	
084f401.d	1242521006	Y51	14-DEC-2009 20:15	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
085f501.d	1242521007	Y51	14-DEC-2009 20:28	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
086f601.d	1242521008	Y51	14-DEC-2009 20:41	931553	1242521	5.0 EMSC	UPLOAD BOTH COLUMNS, USE HIGHER
087f701.d	WAR091211-60 05	Y51	14-DEC-2009 20:53	121409	1.0	PASSED ON BOTH COLUMNS	
088f801.d	WAR091130-99 06	Y51	14-DEC-2009 21:06	121409	1.0	CLEAN	
089f901.d	1242297010	Y51	14-DEC-2009 21:19	931140	10-782	1.0 LANL	

090f9001.d	WAR091211-60 06	YS1	14-DEC-2009 21:31	121409	1.0	PASSED ON BOTH COLUMNS
091f9101.d	WAR091130-99 07	YS1	14-DEC-2009 21:44	121409	1.0	CLEAN
092f9201.d	1660	YS1	14-DEC-2009 21:56	121409	1.0	screen
093f9301.d	1660	YS1	14-DEC-2009 22:09	121409	1.0	screen
094f9401.d	1660	YS1	14-DEC-2009 22:22	121409	1.0	screen

Instrument Batch: /chem/ecd1a.i/121409.b

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GEL ORGANIC RUN LOG

INSTRUMENT ID: ECD1

DATE: 01/25/2010 METHOD: ECD1-F-8082-121409.m OPERATOR:YS1 REVIEWED BY: _____

DATE: _____

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/ecdl1a.i/012210.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	122-JAN-2010 05:55		012210	1.0	CLEAN	
002f0201.d	WAR100104-60 01	YS1	122-JAN-2010 06:06		012210	1.0	DOUSE RE 1-CAL	
003f0301.d	WAR091216-54	YS1	122-JAN-2010 06:16		012210	1.0	PASSED ON BOTH COLUMNS	
004f0401.d	WAR091217-42	YS1	122-JAN-2010 06:27		012210	1.0	PASSED ON BOTH COLUMNS	
005f0501.d	WAR091217-48	YS1	122-JAN-2010 06:37		012210	1.0	PASSED ON BOTH COLUMNS	
006f0601.d	WAR100122-05 32	YS1	122-JAN-2010 06:48		012210	1.0	AR1232 I-CAL LEVEL 1	
007f0701.d	WAR100122-06 32	YS1	122-JAN-2010 06:58		012210	1.0	AR1232 I-CAL LEVEL 2	
008f0801.d	WAR100122-07 32	YS1	122-JAN-2010 07:09		012210	1.0	AR1232 I-CAL LEVEL 3	
009f0901.d	WAR100122-08 32	YS1	122-JAN-2010 07:19		012210	1.0	AR1232 I-CAL LEVEL 4	
010f1001.d	WAR100104-03 32	YS1	122-JAN-2010 07:30		012210	1.0	AR1232 I-CAL LEVEL 5	
011f1101.d	WAR100104-32	YS1	122-JAN-2010 07:40		012210	1.0	PASSED ON BOTH COLUMNS	
012f1201.d	WAR100104-21	YS1	122-JAN-2010 07:51		012210	1.0	PATTERN ONLY	
013f1301.d	WAR100122-09 62	YS1	122-JAN-2010 08:01		012210	1.0	AR1262 I-CAL LEVEL 1	
014f1401.d	WAR100122-10 62	YS1	122-JAN-2010 08:12		012210	1.0	AR1262 I-CAL LEVEL 2	
015f1501.d	WAR100122-11 62	YS1	122-JAN-2010 08:22		012210	1.0	AR1262 I-CAL LEVEL 3	

Instrument Batch: /chem/ecdl1a.i/012210.b

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Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
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016f1601.d	WAR100122-12 62	YS1	22-JAN-2010 08:36		012210	1.01	AR1262 I-CAL LEVEL 4
017f1701.d	IAR100104-04 62	YS1	22-JAN-2010 08:47		012210	1.01	AR1262 I-CAL LEVEL 5
018f1801.d	WAR100104-62	YS1	22-JAN-2010 08:57		012210	1.01	PASSED ON BOTH COLUMNS
019f1901.d	WAR100122-13 60	YS1	22-JAN-2010 09:08		012210	1.01	AR1660 I-CAL LEVEL 1
020f2001.d	WAR100122-14 60	YS1	22-JAN-2010 09:19		012210	1.01	AR1660 I-CAL LEVEL 2
021f2101.d	WAR100122-15 60	YS1	22-JAN-2010 09:29		012210	1.01	AR1660 I-CAL LEVEL 3
022f2201.d	WAR100122-16 60	YS1	22-JAN-2010 09:40		012210	1.01	AR1660 I-CAL LEVEL 4
023f2301.d	IAR100104-01 60	YS1	22-JAN-2010 09:50		012210	1.01	AR1660 I-CAL LEVEL 5
024f2401.d	WAR100104-60 01	YS1	22-JAN-2010 10:01		012210	1.01	PASSED ON BOTH COLUMNS
025f2501.d	WAR100122-68	YS1	22-JAN-2010 10:11		012210	1.01	PASSED ON BOTH COLUMNS
026f2601.d	WAR091219-DDT	YS1	22-JAN-2010 10:22		012210	1.01	DDT ANALOG STANDARD
027f2701.d	WAR100105-99 02	YS1	22-JAN-2010 10:32		012210	1.01	CLEAN
028f2801.d	11202021361	YS1	22-JAN-2010 10:43	944018	SP4017	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	11202021362	YS1	22-JAN-2010 10:55	944018	SP4017	1.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	1245199001	YS1	22-JAN-2010 11:08	944018	SP4017	2.01ORNL	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	11202021363	YS1	22-JAN-2010 11:21	944018	SP4017	2.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	11202021364	YS1	22-JAN-2010 11:33	944018	SP4017	2.01QC A	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	WAR100104-60 02	YS1	22-JAN-2010 11:46		012210	1.01	PASSED ON BOTH COLUMNS
034f3401.d	WAR100105-99 03	YS1	22-JAN-2010 11:56		012210	1.01	CLEAN
035f3501.d	11202018791	YS1	22-JAN-2010 12:07	942925		1.01QC A	REPORT FROM ECD8

Instrument Batch: /chem/ecdl.a.i/012210.b Page: 2

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	11202018792	YS1	22-JAN-2010 12:17	942925		1.01QC A		REPORT FROM ECD8
037f3701.d	1243909001	YS1	22-JAN-2010 12:28	942925	2010MDLVECD11232-L	1.01QCQA		UPLOAD BOTH COLUMNS
038f3801.d	1243909002	YS1	22-JAN-2010 12:39	942925	2010MDLVECD11232-L	1.01QCQA		UPLOAD BOTH COLUMNS
039f3901.d	1243909003	YS1	22-JAN-2010 12:49	942925	2010MDLVECD11232-L	1.01QCQA		UPLOAD BOTH COLUMNS
040f4001.d	1243909004	YS1	22-JAN-2010 13:00	942925	2010MDLVECD11232-L	1.01QCQA		UPLOAD BOTH COLUMNS

041f4101.d	WAR100104-60 03	YS1	122-JAN-2010 13:10		012210	1.0	PASSED ON BOTH COLUMNS
042f4201.d	WAR100105-99 04	YS1	122-JAN-2010 13:21		012210	1.0	CLEAN
043f4301.d	1202021249	YS1	122-JAN-2010 13:31	943953	110-1274	1.0	QC A UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	1202021250	YS1	122-JAN-2010 13:42	943953	110-1274	1.0	QC A UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	1244902001	YS1	122-JAN-2010 13:53	943953	110-1274	1.0	LANE UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	1244923001	YS1	122-JAN-2010 14:03	943953	110-1287	1.0	LANL UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	1244923002	YS1	122-JAN-2010 14:16	943953	110-1287	1.0	LANL DUES RR 10X
048f4801.d	1244923003	YS1	122-JAN-2010 14:28	943953	110-1287	1.0	LANL DUES RR
049f4901.d	1244923004	YS1	122-JAN-2010 14:41	943953	110-1287	1.0	LANL UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	1244923005	YS1	122-JAN-2010 14:54	943953	110-1287	1.0	LANL UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	1244923006	YS1	122-JAN-2010 15:06	943953	110-1287	1.0	LANL UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	1244923007	YS1	122-JAN-2010 15:19	943953	110-1287	1.0	LANL UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	WAR100104-60 04	YS1	122-JAN-2010 15:32		012210	1.0	PASSED ON BOTH COLUMNS
054f5401.d	WAR100105-99 05	YS1	122-JAN-2010 15:44		012210	1.0	CLEAN
055f5501.d	1244923008	YS1	122-JAN-2010 15:57	943953	110-1287	1.0	LANL UPLOAD BOTH COLUMNS, USE HIGHER

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
056f5601.d	1244923009	YS1	122-JAN-2010 16:10	943953	110-1287	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	1244923010	YS1	122-JAN-2010 16:22	943953	110-1287	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	1245106001	YS1	122-JAN-2010 16:35	943953	110-1304	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	1202021251	YS1	122-JAN-2010 16:48	943953	110-1304	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	1202021252	YS1	122-JAN-2010 17:00	943953	110-1304	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1245106002	YS1	122-JAN-2010 17:13	943953	110-1304	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	1245106003	YS1	122-JAN-2010 17:26	943953	110-1304	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	1245106004	YS1	122-JAN-2010 17:38	943953	110-1304	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1245106005	YS1	122-JAN-2010 17:51	943953	110-1304	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

065f5501.d	WAR100104-60 05	YS1	22-JAN-2010 18:03	943953	10-1304	1.0	PASSED ON BOTH COLUMNS
066f6601.d	WAR100105-99 06	YS1	22-JAN-2010 18:16	943953	10-12210	1.0	CLEAN
067f6701.d	245106006	YS1	22-JAN-2010 18:29	943953	10-1304	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
068f6801.d	245106007	YS1	22-JAN-2010 18:41	943953	10-1304	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	245106008	YS1	22-JAN-2010 18:54	943953	10-1304	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	244923002	YS1	22-JAN-2010 19:07	943953	10-1287	10.0	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	244923003	YS1	22-JAN-2010 19:19	943953	10-1287	1.0	UPLOAD BOTH COLUMNS, USE HIGHER
072f7201.d	WAR100104-60 06	YS1	22-JAN-2010 19:32	943953	10-12210	1.0	PASSED ON BOTH COLUMNS
073f7301.d	WAR100105-99 07	YS1	22-JAN-2010 19:44	943953	10-12210	1.0	CLEAN

Instrument Batch: /chem/ecdl1a.i/012210.b

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GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/012210.b/059b5901.d
Lab Smp Id: 1202021251 Client Smp ID: RE15-10-7165MS
Inj Date : 22-JAN-2010 16:48
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202021251|1|
Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 59 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1304.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	30.13000	Weight of sample extracted (g)
M	19.44320	% 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	34171363	117.749	4.8 80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl					CAS #: 2051-24-3	
5.946	5.947	-0.001	26637523	109.182	4.5 80.00- 120.00	100.00

1 Aroclor-1016					CAS #: 12674-11-2	
3.196	3.196	0.000	8659500	682.556	28.1 80.00- 120.00	100.00 (M)
3.279	3.280	-0.001	5871067	667.308	27.5 45.59- 85.59	67.80
3.342	3.343	-0.001	3578538	653.111	26.9 20.76- 60.76	41.32
3.570	3.570	0.000	4625678	661.071	27.2 31.39- 71.39	53.42

CONCENTRATIONS									
			ON-COL		FINAL				
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO		
==	=====	=====	=====	=====	=====	=====	=====		
1 Aroclor-1016 (continued)									
3.646	3.646	0.000	4388121	668.565	27.5	28.52-	68.52	50.67	
Average of Peak Concentrations =					27.5				

7 Aroclor-1260					CAS #: 11096-82-5				
4.336	4.336	0.000	9971361	751.133	30.9	80.00-	120.00	100.00	
4.461	4.461	0.000	12782420	791.091	32.6	103.04-	143.04	128.19	
4.727	4.727	0.000	9665642	773.300	31.9	74.36-	114.36	96.93	
4.901	4.901	0.000	9686663	749.236	30.9	77.78-	117.78	97.14	
5.047	5.048	-0.001	21870263	768.844	31.7	201.91-	241.91	219.33	
Average of Peak Concentrations =					31.6				

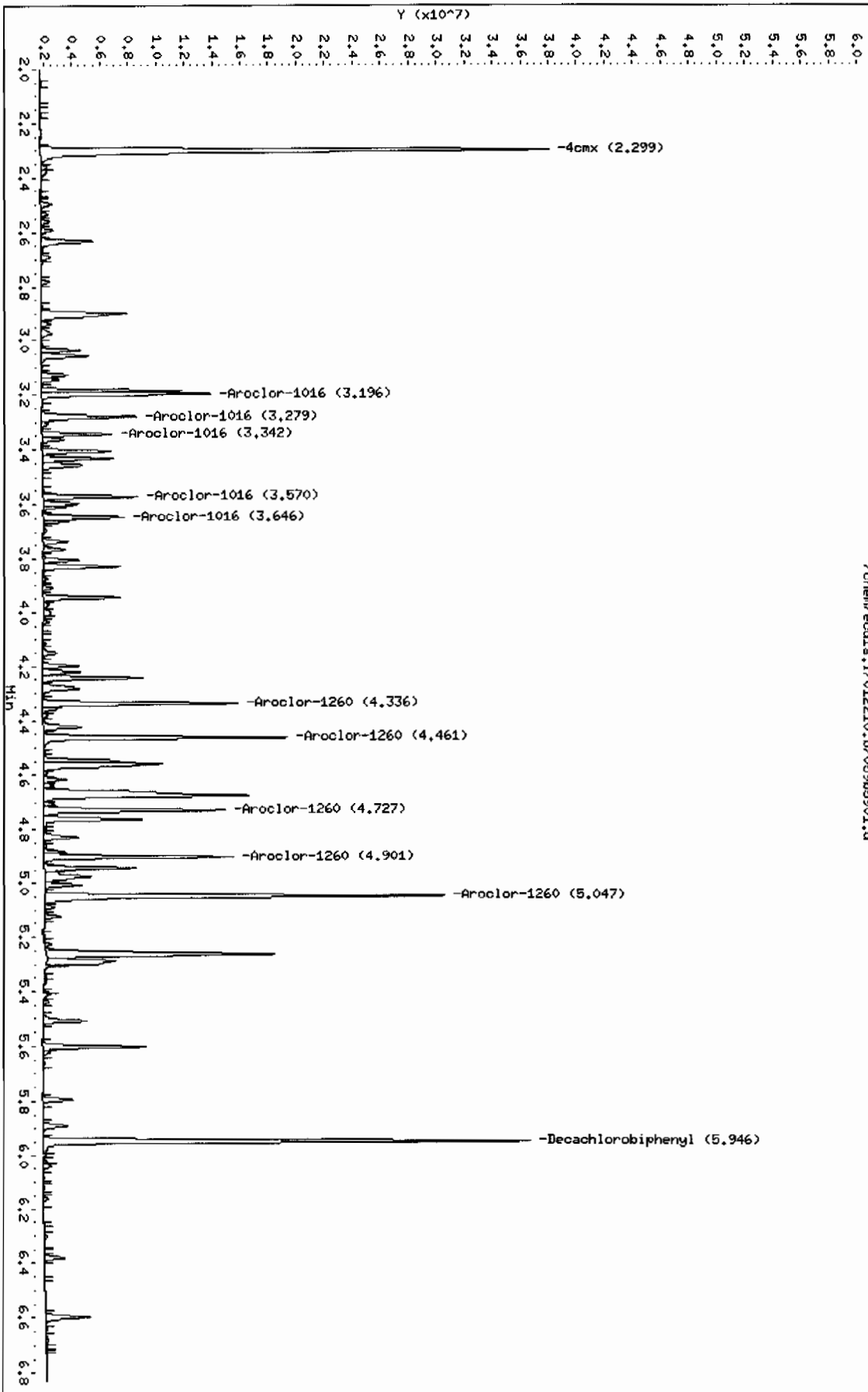
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecod1a.i/012210.b/059b5901.d
Date: 22-JUN-2010 16:48
Client ID: RE15-10-716SMS
Sample Info: 1120202125111
Volume Injected (ul): 1.0
Column phase: CLP2

Instrument: ecod1a.i
Operator: YSL
Column diameter: 0.25

/chem/ecod1a.i/012210.b/059b5901.d



Data File: /chem/ecdl1.i/012210.b/059f5901.d
 Report Date: 25-Jan-2010 13:55

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdl1.i/012210.b/059f5901.d
 Lab Smp Id: 1202021251 Client Smp ID: RE15-10-7165MS
 Inj Date : 22-JAN-2010 16:48
 Operator : YS1 Inst ID: ecd1a.i
 Smp Info : |1202021251|1|
 Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|MS|||
 Comment :
 Method : /chem/ecdl1.i/012210.b/ECD1-F-8082-121409.m
 Meth Date : 25-Jan-2010 13:49 yip00818 Quant Type: ESTD
 Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
 Als bottle: 59 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 10-1304.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	30.13000	Weight of sample extracted (g)
M	19.44320	% 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			
1.966	1.967	-0.001	47702923 121.399	5.0	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl			CAS #: 2051-24-3			
5.278	5.281	-0.003	43900109 133.090	5.5	80.00- 120.00	100.00

1 Aroclor-1016			CAS #: 12674-11-2			
2.421	2.422	-0.001	9555396 661.257	27.2	80.00- 120.00	100.00
2.711	2.711	0.000	12692705 697.411	28.7	112.80- 152.80	132.83
2.791	2.792	-0.001	8121346 677.721	27.9	65.99- 105.99	84.99
2.829	2.830	-0.001	4853703 676.216	27.9	31.71- 71.71	50.80

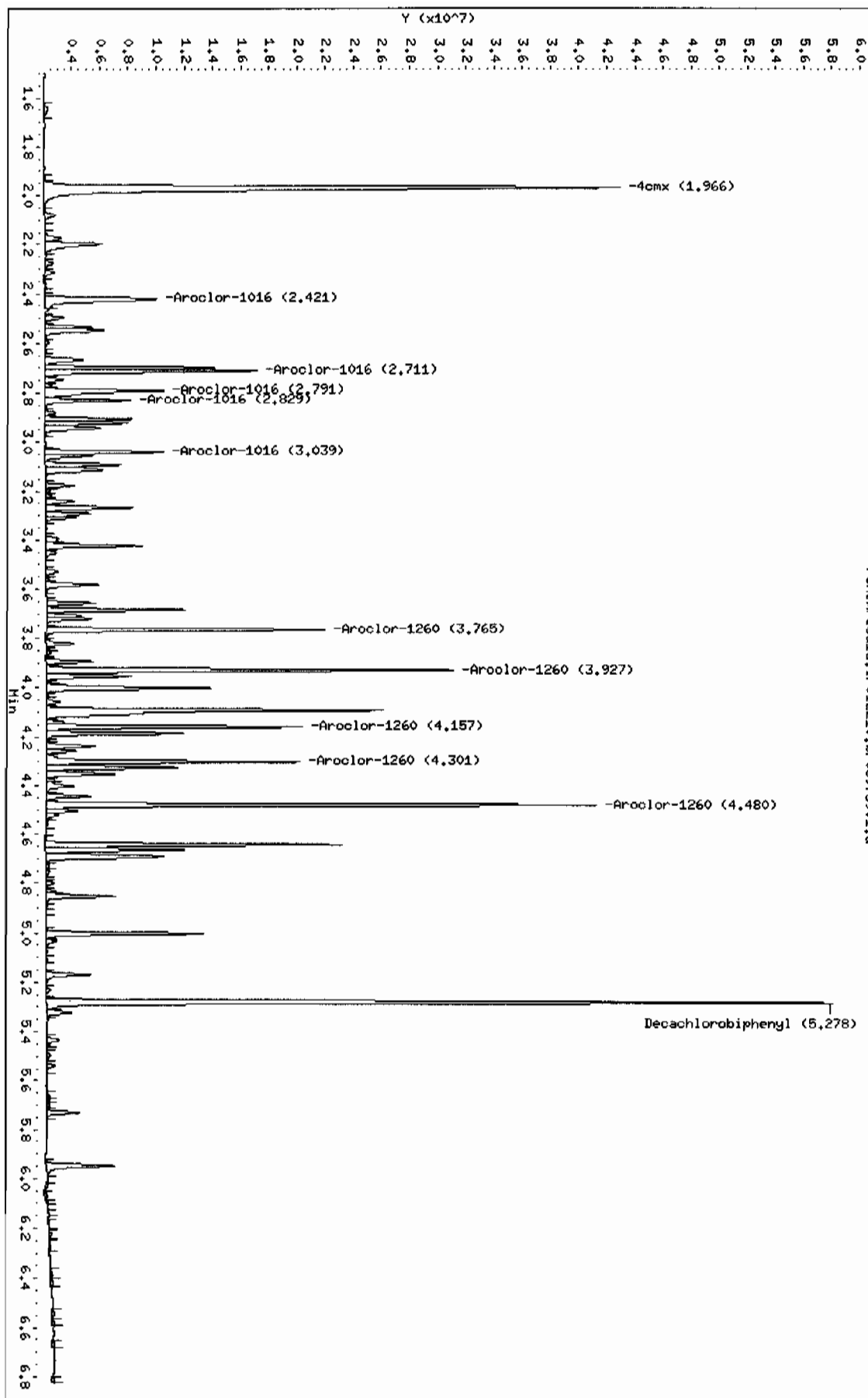
CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
1 Aroclor-1016 (continued)								
3.039	3.041	-0.002	6452620	696.869	28.7	45.67-	85.67	67.53
Average of Peak Concentrations =					28.1			

7 Aroclor-1260					CAS #: 11096-82-5			
3.765	3.766	-0.001	14186744	800.662	33.0	80.00-	120.00	100.00
3.927	3.929	-0.002	22139790	822.173	33.9	132.92-	172.92	156.06
4.157	4.159	-0.002	13183346	814.472	33.6	71.35-	111.35	92.93
4.301	4.302	-0.001	14025480	829.520	34.2	75.53-	115.53	98.86
4.480	4.481	-0.001	28260861	750.310	30.9	198.54-	238.54	199.21
Average of Peak Concentrations =					33.1			

Data File: /chem/ecd1a.i/012210.b/059f5901.d
Date : 22-JAN-2010 16:48
Client ID: RE15-10-716SMS
Sample Info: 1120202125111
Volume Injected (ul): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YSL
Column diameter: 0.25

/chem/ecd1a.i/012210.b/059f5901.d



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdla.i/012210.b/060b6001.d
Lab Smp Id: 1202021252 Client Smp ID: RE15-10-7165MSD
Inj Date : 22-JAN-2010 17:00
Operator : YS1 Inst ID: ecdla.i
Smp Info : |1202021252|1|
Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|MSD|
Comment :
Method : /chem/ecdla.i/012210.b/ECD1-B-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017b1701.d
Als bottle: 60 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1304.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	30.17000	Weight of sample extracted (g)
M	19.44320	% 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	31422656	108.278	4.4 80.00- 120.00	100.00	

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3							
5.946	5.947	-0.001	24947387	102.254	4.2 80.00- 120.00	100.00	

1 Aroclor-1016 CAS #: 12674-11-2							
3.196	3.196	0.000	7764356	611.999	25.2 80.00- 120.00	100.00	
3.279	3.280	-0.001	5270555	599.053	24.6 45.59- 85.59	67.88	
3.343	3.343	0.000	3196197	583.331	24.0 20.76- 60.76	41.16	
3.569	3.570	-0.001	4290450	613.163	25.2 31.39- 71.39	55.26	

CONCENTRATIONS								
			ON-COL		FINAL			
RT	EXP RT	DLT RT	RESPONSE (ug/L)		(ug/Kg)	TARGET RANGE	RATIO	
==	=====	=====	=====	=====	=====	-----	=====	=====
1 Aroclor-1016 (continued)								
3.645	3.646	-0.001	3961856	603.620	24.8	28.52-	68.52	51.03
Average of Peak Concentrations =					24.8			

7 Aroclor-1260					CAS #: 11096-82-5			
4.336	4.336	0.000	8661662	652.474	26.8	80.00-	120.00	100.00
4.461	4.461	0.000	10979845	679.531	28.0	103.04-	143.04	126.76
4.726	4.727	-0.001	8273835	661.949	27.2	74.36-	114.36	95.52
4.900	4.901	-0.001	8124293	628.391	25.8	77.78-	117.78	93.80
5.047	5.048	-0.001	18783836	660.342	27.2	201.91-	241.91	216.86
Average of Peak Concentrations =					27.0			

Data File: /chem/eodla.i/012210.b/0606001.d

Date: 22-JAN-2010 17:00

Client ID: RE15-10-716MSD

Sample Info: 11202021252111

Volume Injected (uL): 1.0

Column phase: CLP2

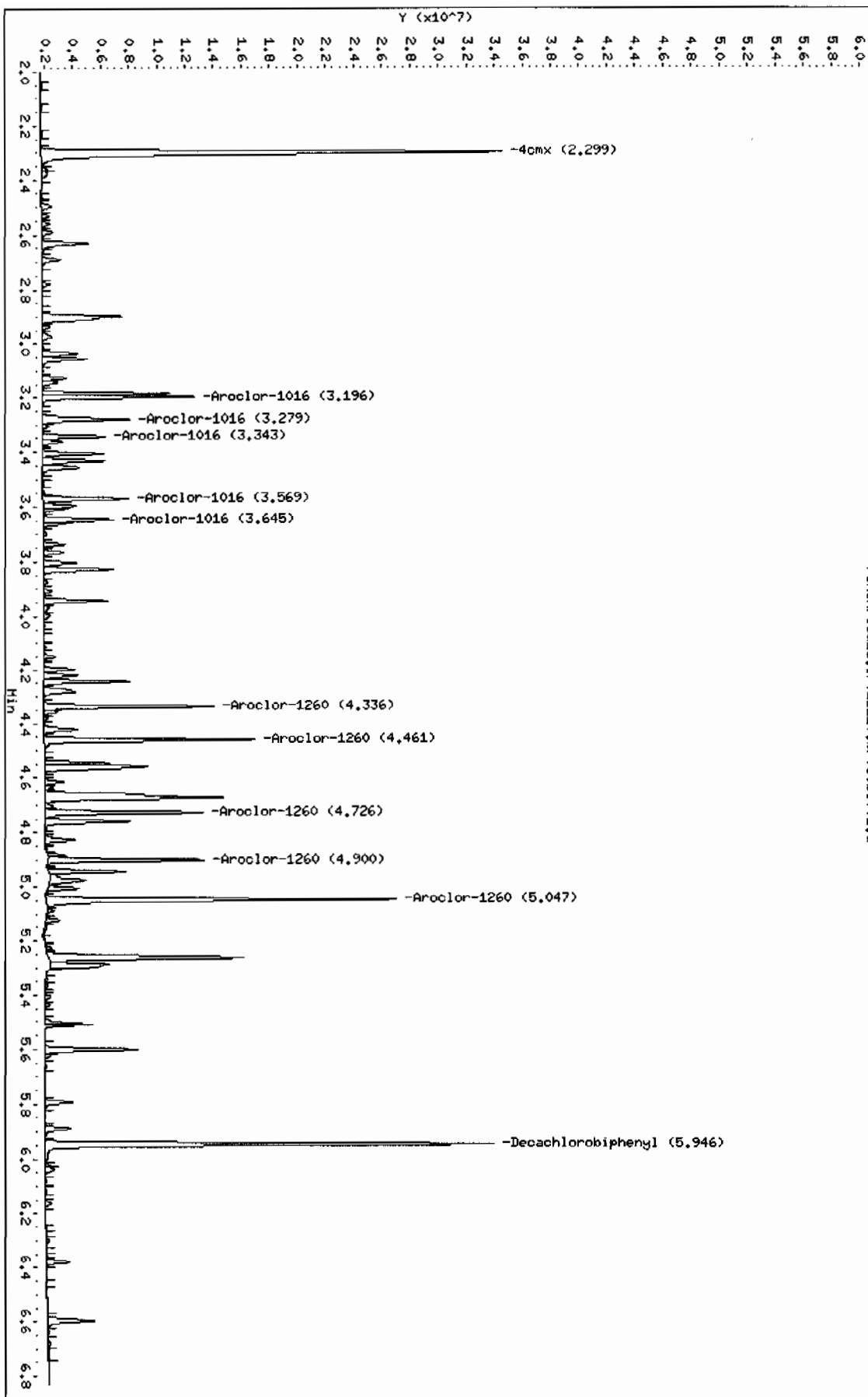
Instrument: eodla.i

Operator: YSL

Column diameter: 0.25

/chem/eodla.i/012210.b/0606001.d

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GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL
Data file : /chem/ecdl1a.i/012210.b/060f6001.d
Lab Smp Id: 1202021252 Client Smp ID: RE15-10-7165MSD
Inj Date : 22-JAN-2010 17:00
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202021252|1|
Misc Info : |ECD82P_1S|943953|SVA|QC A|SOIL|MSD|
Comment :
Method : /chem/ecdl1a.i/012210.b/ECD1-F-8082-121409.m
Meth Date : 23-Jan-2010 11:25 yip00818 Quant Type: ESTD
Cal Date : 22-JAN-2010 08:47 Cal File: 017f1701.d
Als bottle: 60 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1304.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	30.17000	Weight of sample extracted (g)
M	19.44320	% 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	43779431 111.414	4.6	80.00- 120.00	100.00

\$ 12 Decachlorobiphenyl CAS #: 2051-24-3						
5.278	5.281	-0.003	39918507 121.019	5.0	80.00- 120.00	100.00

1 Aroclor-1016 CAS #: 12674-11-2						
2.422	2.422	0.000	8633280 597.445	24.6	80.00- 120.00	100.00
2.710	2.711	-0.001	11299535 620.862	25.5	112.54- 152.54	130.88
2.790	2.792	-0.002	7255546 605.471	24.9	65.91- 105.91	84.04
2.829	2.830	-0.001	4300115 599.090	24.6	31.86- 71.86	49.81

CONCENTRATIONS									
				ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====		=====	=====	=====	=====		=====
1 Aroclor-1016 (continued)									
3.039	3.041	-0.002		5688584	614.355	25.3	46.15-	86.15	65.89
Average of Peak Concentrations =						25.0			

7 Aroclor-1260						CAS #: 11096-82-5			
3.764	3.766	-0.002		12315803	695.071	28.6	80.00-	120.00	100.00 (M)
3.927	3.929	-0.002		19168149	711.819	29.3	132.78-	172.78	155.64
4.157	4.159	-0.002		11362162	701.959	28.9	71.24-	111.24	92.26
4.300	4.302	-0.002		11876921	702.446	28.9	75.48-	115.48	96.44
4.479	4.481	-0.002		24562632	652.124	26.8	198.43-	238.43	199.44
Average of Peak Concentrations =						28.5			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecdl1.i/012210.b/060f6001.d

Date: 22-JAN-2010 17:00

Client ID: RE15-10-716MSD

Sample Info: 11202021252111

Volume Injected (uL): 1.0

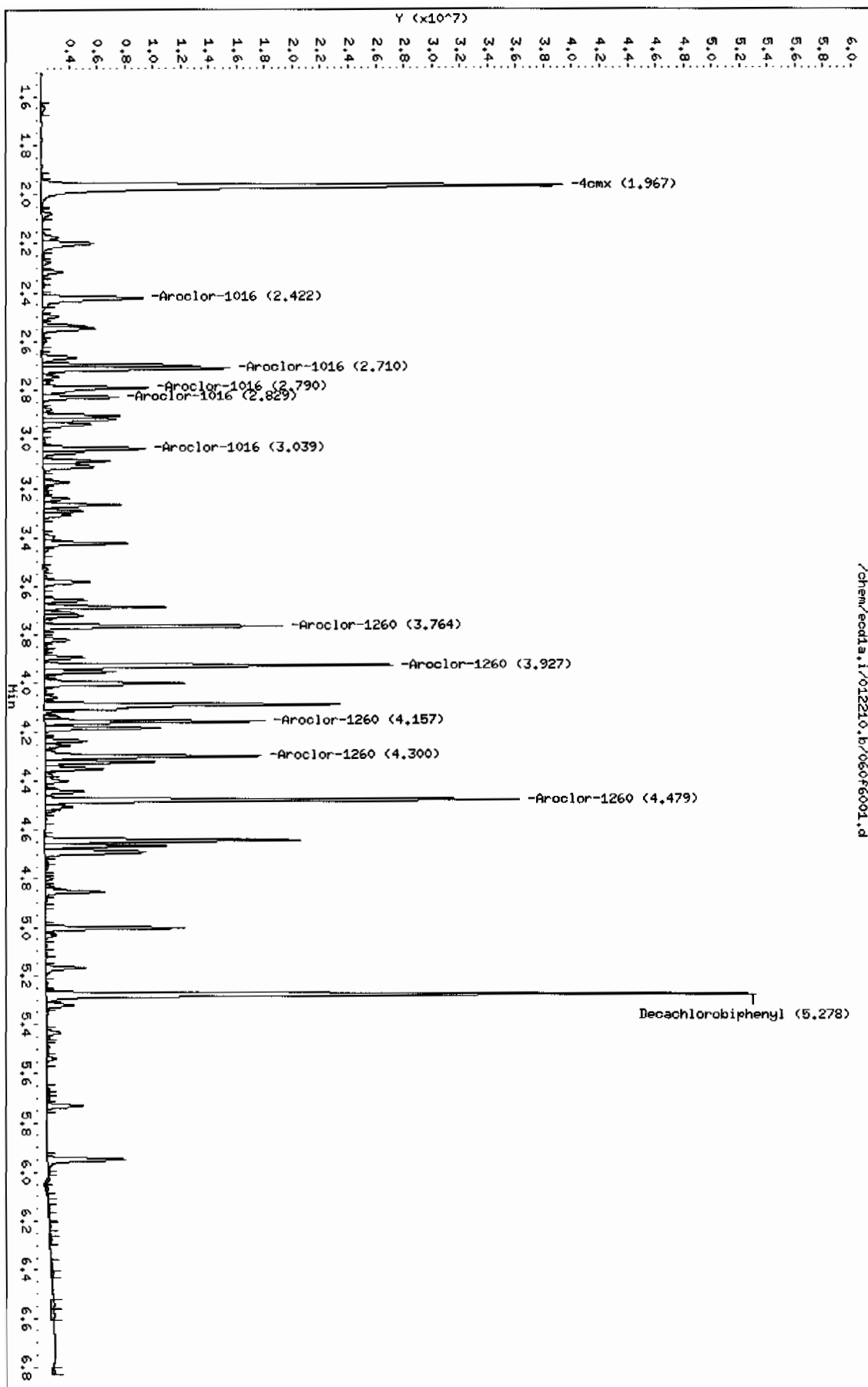
Column phase: CLP1

Instrument: ecdl1.i

Operator: YSL

Column diameter: 0.25

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Prep Logbook Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 943951
 Analyst: Andrew Schwenin
 Method: SW/846 3550B

Verified by: _____

Lab SOP: GL-OA-E-010 REV# 18
 Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Aliquot (g)	Clean Up	Prior to Clean up (mL)	Amount Cleaned (mL)	After Clean up (mL)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202021249 MB	21-JAN-2010 19:38:05	30	H2SO4/KM12	2	9	1	0.03333	
1202021250 LCS	21-JAN-2010 19:38:05	30	H2SO4/KM12	2	9	1	0.03333	
244902001	21-JAN-2010 19:38:05	30.11	H2SO4/KM12	2	9	1	0.03321	
244923001	21-JAN-2010 19:38:05	30.16	H2SO4/KM12	2	9	1	0.03316	
244923002	21-JAN-2010 19:38:05	30.07	H2SO4/KM12	2	9	1	0.03326	
244923003	21-JAN-2010 19:38:05	30.03	H2SO4/KM12	2	9	1	0.0333	
244923004	21-JAN-2010 19:38:05	30.18	H2SO4/KM12	2	9	1	0.03313	
244923005	21-JAN-2010 19:38:05	30.05	H2SO4/KM12	2	9	1	0.03328	
244923006	21-JAN-2010 19:38:05	30.19	H2SO4/KM12	2	9	1	0.03312	
244923007	21-JAN-2010 19:38:05	30.19	H2SO4/KM12	2	9	1	0.03312	
244923008	21-JAN-2010 19:38:05	30.01	H2SO4/KM12	2	9	1	0.03332	
244923009	21-JAN-2010 19:38:05	30.11	H2SO4/KM12	2	9	1	0.03321	
244923010	21-JAN-2010 19:38:05	30.14	H2SO4/KM12	2	9	1	0.03318	
245106001	21-JAN-2010 19:38:05	30.15	H2SO4/KM12	2	9	1	0.03317	
1202021251 MS (245106001)	21-JAN-2010 19:38:05	30.13	H2SO4/KM12	2	9	1	0.03319	
1202021252 MSD (245106001)	21-JAN-2010 19:38:05	30.17	H2SO4/KM12	2	9	1	0.03315	
245106002	21-JAN-2010 19:38:05	30.17	H2SO4/KM12	2	9	1	0.03315	
245106003	21-JAN-2010 19:38:05	30.15	H2SO4/KM12	2	9	1	0.03317	
245106004	21-JAN-2010 19:38:05	30.12	H2SO4/KM12	2	9	1	0.0332	
245106005	21-JAN-2010 19:38:05	30.02	H2SO4/KM12	2	9	1	0.03331	
245106006	21-JAN-2010 19:38:05	30.01	H2SO4/KM12	2	9	1	0.03332	
245106007	21-JAN-2010 19:38:05	30.02	H2SO4/KM12	2	9	1	0.03331	
245106008	21-JAN-2010 19:38:05	30.19	H2SO4/KM12	2	9	1	0.03312	
Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:		
LCS	1202021250	PCB Laboratory Control	WEI00105-07	1	mL	Clean up Date: 01/21/10		
MS	1202021251	PCB Laboratory Control	WEI00105-07	1	mL	Clean up Initials: AJS		
MSD	1202021252	PCB Laboratory Control	WEI00105-07	1	mL	Verified By: AV		
SURR	ALL	PEST LOW LEVEL SURROGATE 200 UG/L	UE091217-15	1	mL	Final Solvent: Hexane		
REGNT	ALL	1:1 sulfuric acid	1133264a	5	mL	Clean Up SOP: GL-OA-E-037		
REGNT	ALL	Hexane	1256896-B2	150	mL			
REGNT	ALL	Acetone	1256900	150	mL			
REGNT	ALL	5% Potassium Permanganate	BI202457-F	5	mL			
SOURC	ALL	SODIUM SULFATE	1256907	30	g			